

**dietz621**

**Zentraleinheit**

**Technische Unterlagen  
621 X2**

**ANMERKUNG:**

Der Nachdruck, auch auszugsweise, ist nur mit Genehmigung der Firma DIETZ-Computer-Systeme gestattet.

Diese Beschreibung hat lediglich Informationscharakter. Gewährleistungsansprüche daraus sind ausgeschlossen. Die Sachverhalte können jederzeit ohne Ankündigung geändert werden. Diese Beschreibung ist nicht Gegenstand eines Vertrages.



# **dietz621**

## **Zentraleinheit**

### **Technische Unterlagen 621 X2**

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Telex 856770

**DIETZ** **Computer  
SYSTEME**

1 - 7908 - 04 - 055 Schutzgebühr DM 57,00

Technische Unterlagen Dietz 621 X2Systembeschreibung Hardware1. Allgemeines X22. Rechnerkern

|     |                |                        |
|-----|----------------|------------------------|
| 2.1 | Motherboard X2 | 660 610 B,C1-5,C7      |
| 2.3 | CPU            | 660 660 B,C1-7, C9-1 3 |
| 2.4 | PMM            | 660 661 B,C1-8         |
| 2.5 | IOB            | 660 665 C,D1,D4-5,D7   |
| 2.6 | MOS-Speicher   | 660 422 B              |
| 2.8 | STACK          | 660 400 1 B            |

3. Interfaceansteuerung

|     |                          |                          |
|-----|--------------------------|--------------------------|
| 3.1 | Busdurchschaltung        | 660 614 B,C1-3           |
| 3.2 | Multiinterface           | 660 620 B,C1,C4-5        |
| 3.3 | Interfaceträger          | 660 629 C<br>660 629 1 C |
| 3.4 | C-Adapter                | 660 612 B                |
| 3.5 | D-Adapter                | 660 615 B                |
| 3.6 | A-Adapter                | 660 613 B                |
| 3.8 | DC-Adapter               | 660 617 A                |
| 3.9 | Arithmetischer Prozessor | 660 670 B,C1-2           |

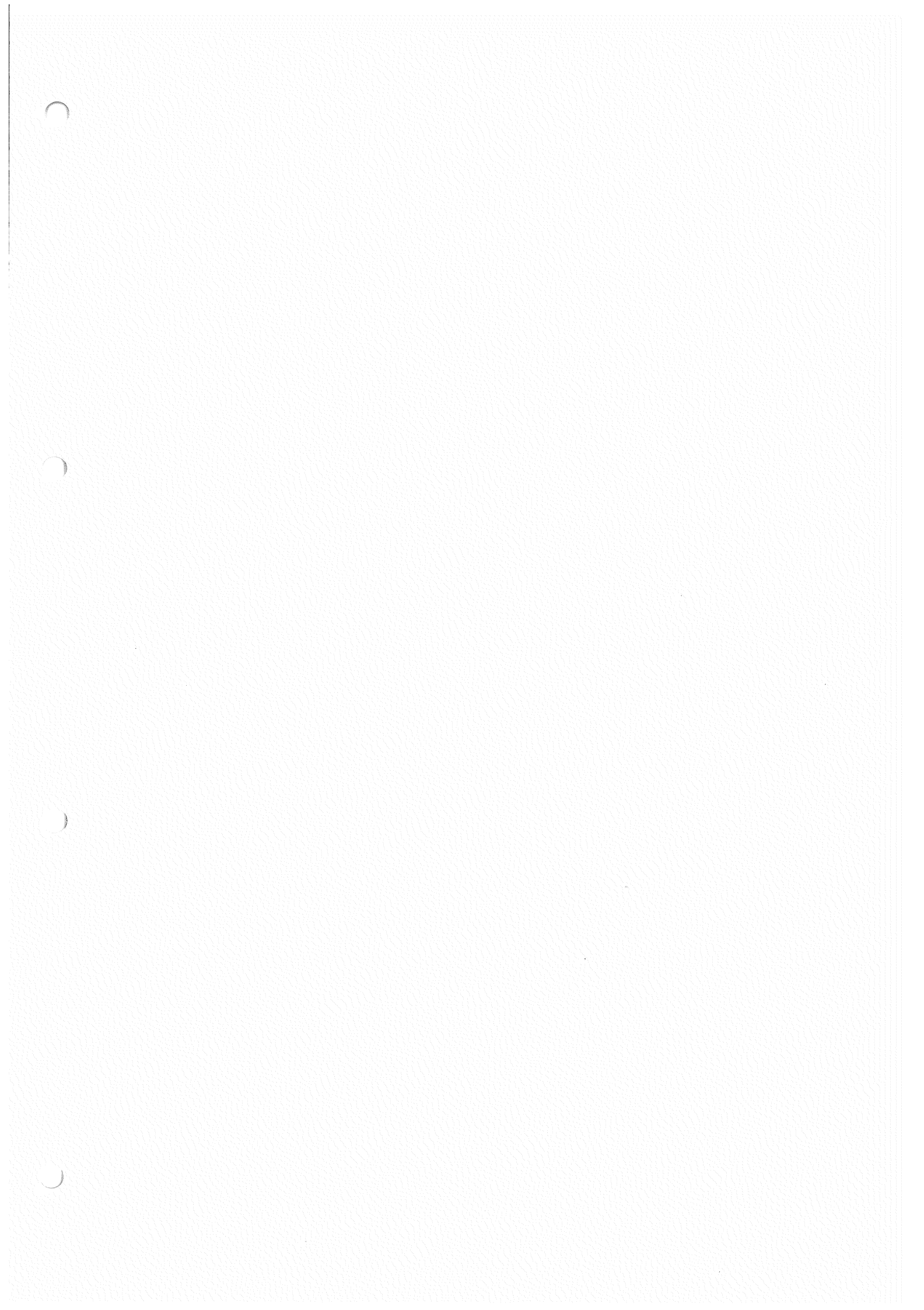
4. Bedienungskonsole

|     |                            |                               |
|-----|----------------------------|-------------------------------|
| 4.1 | Standard-Bedienungskonsole | 660 611 C,D1-3<br>660 611 1 C |
| 4.2 | Komfort-Bedienungskonsole  | 660 760 E<br>660 760 1 C      |
| 4.4 | Standard-Bootstrap         | W07 H<br>W08 E                |

5. Stromversorgung

|     |                    |               |
|-----|--------------------|---------------|
| 5.1 | Regelbaustein      | 660 201 D     |
| 5.2 | Trafoeinheit X2    | 660 211 111 B |
| 5.3 | Rechnerverdrahtung | 660 101 110   |





1. Allgemeines X2

Komponentenanordnung 621 X2

Peripherieanschlüsse 621 X2

Blockschaltbild

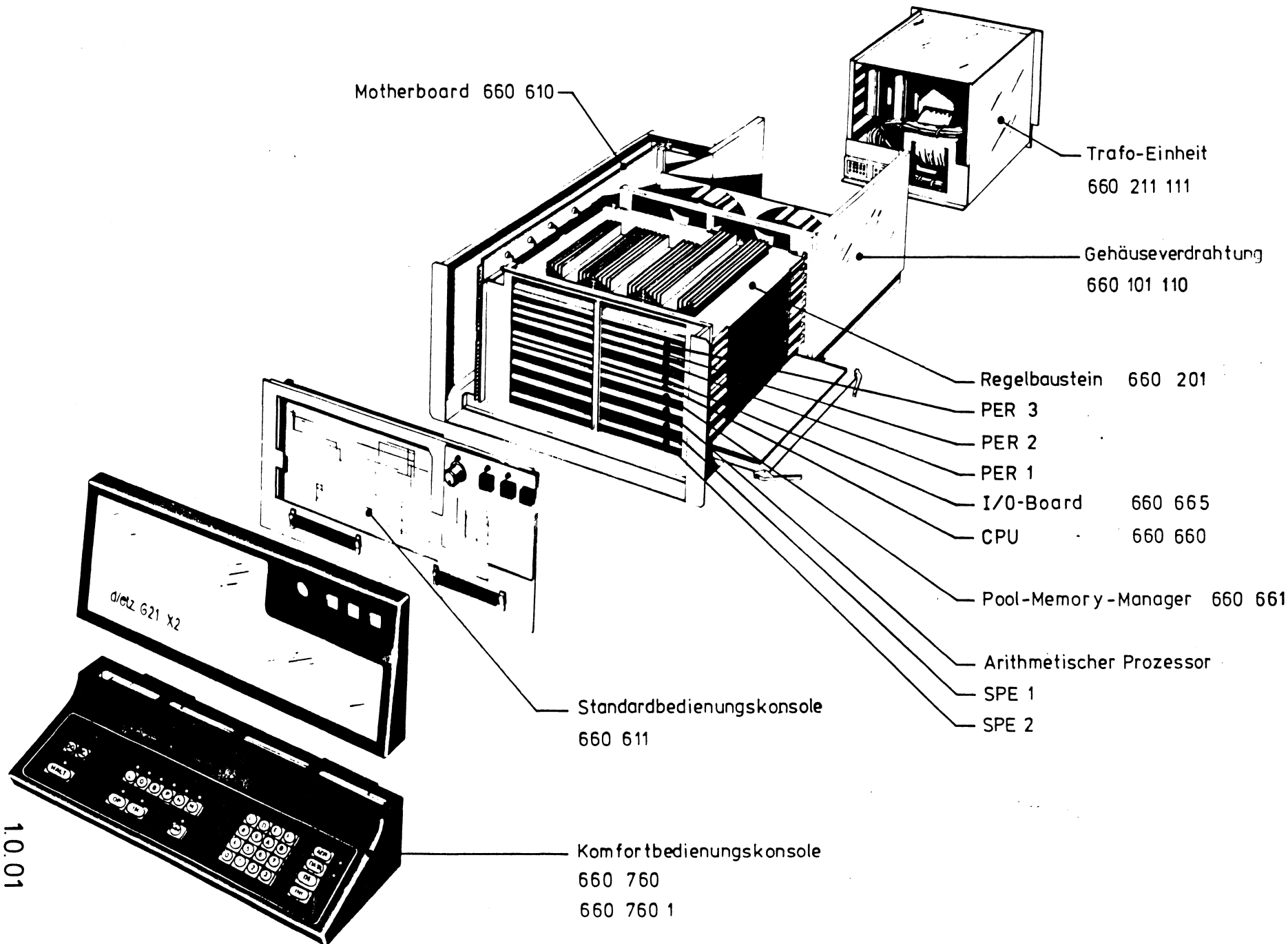
Zählweise der Stifte

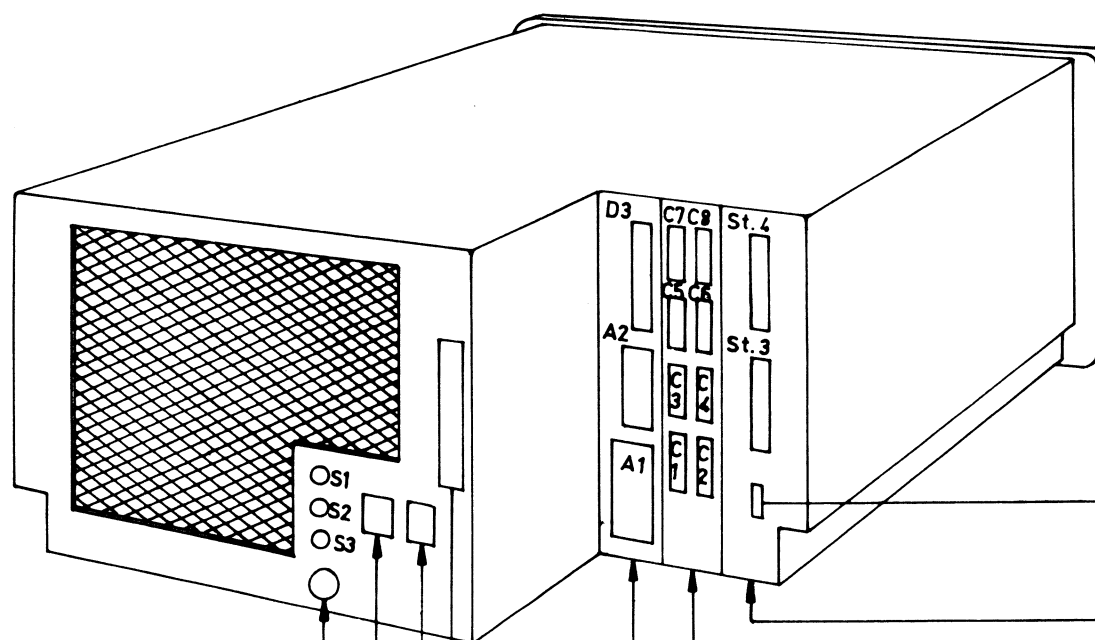
# Komponentenanzordnung 621 X 2

8.12.77

**DIETZ** Computer  
SYSTEME

1.0.01





S1 Netz 8 A

S2 Netz (geschaltet) 1 A

S3 Batterie 4 A

Rechnermasse

Masse Verteiler

Netzeingang

Netzausgang (geschaltet)

D3 PER 2

A2 PER 1, PER 2

A1 PER 1

C3, C5, C6, C7, C8 PER III

C1 V24 des I/O-Boards

C2, C4 Interface-Steckpl. I/O-Board

St 3 BUS-Kabel II

St 4 BUS-Kabel I

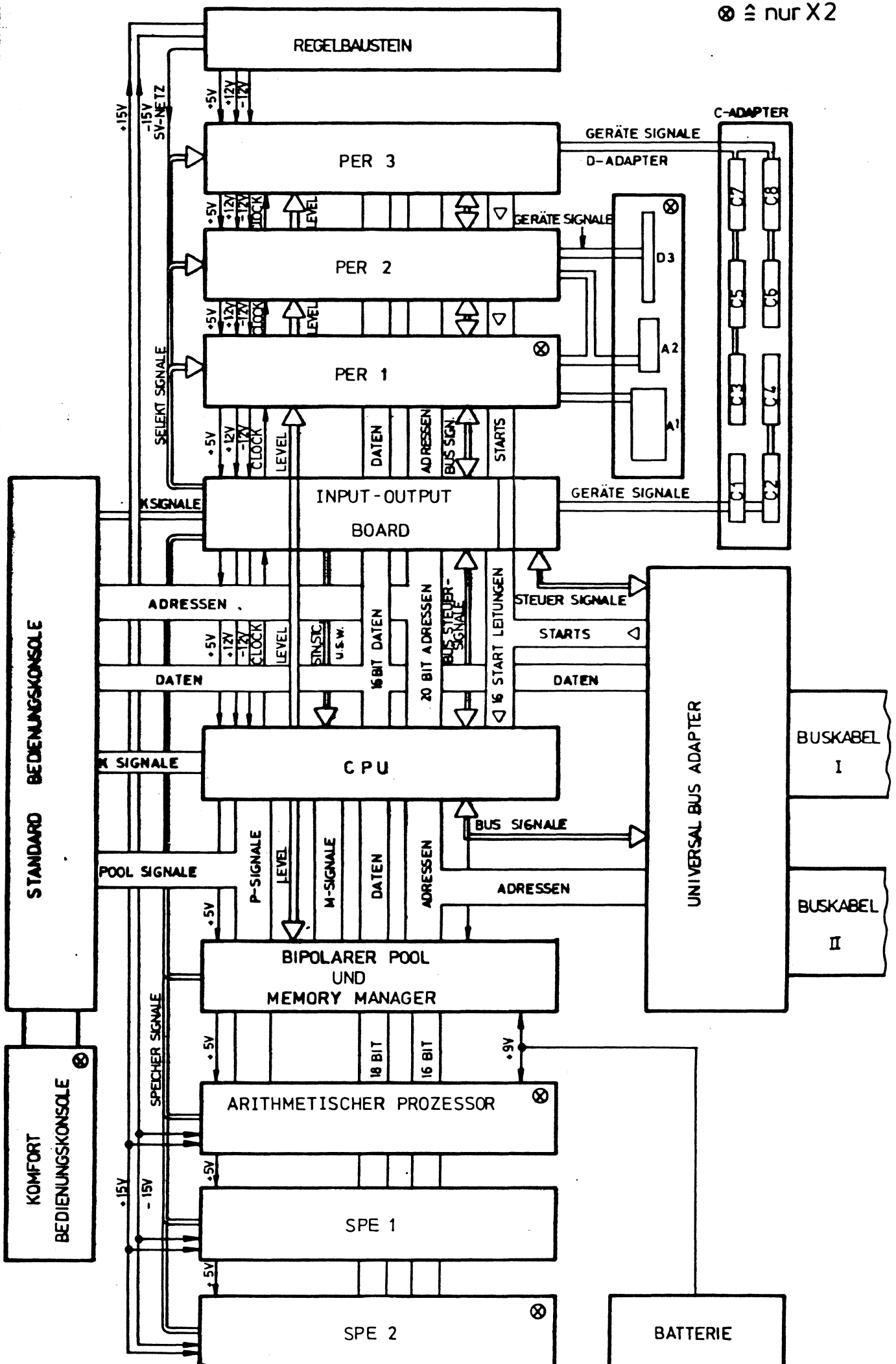
GE-GE/Q-Leitung

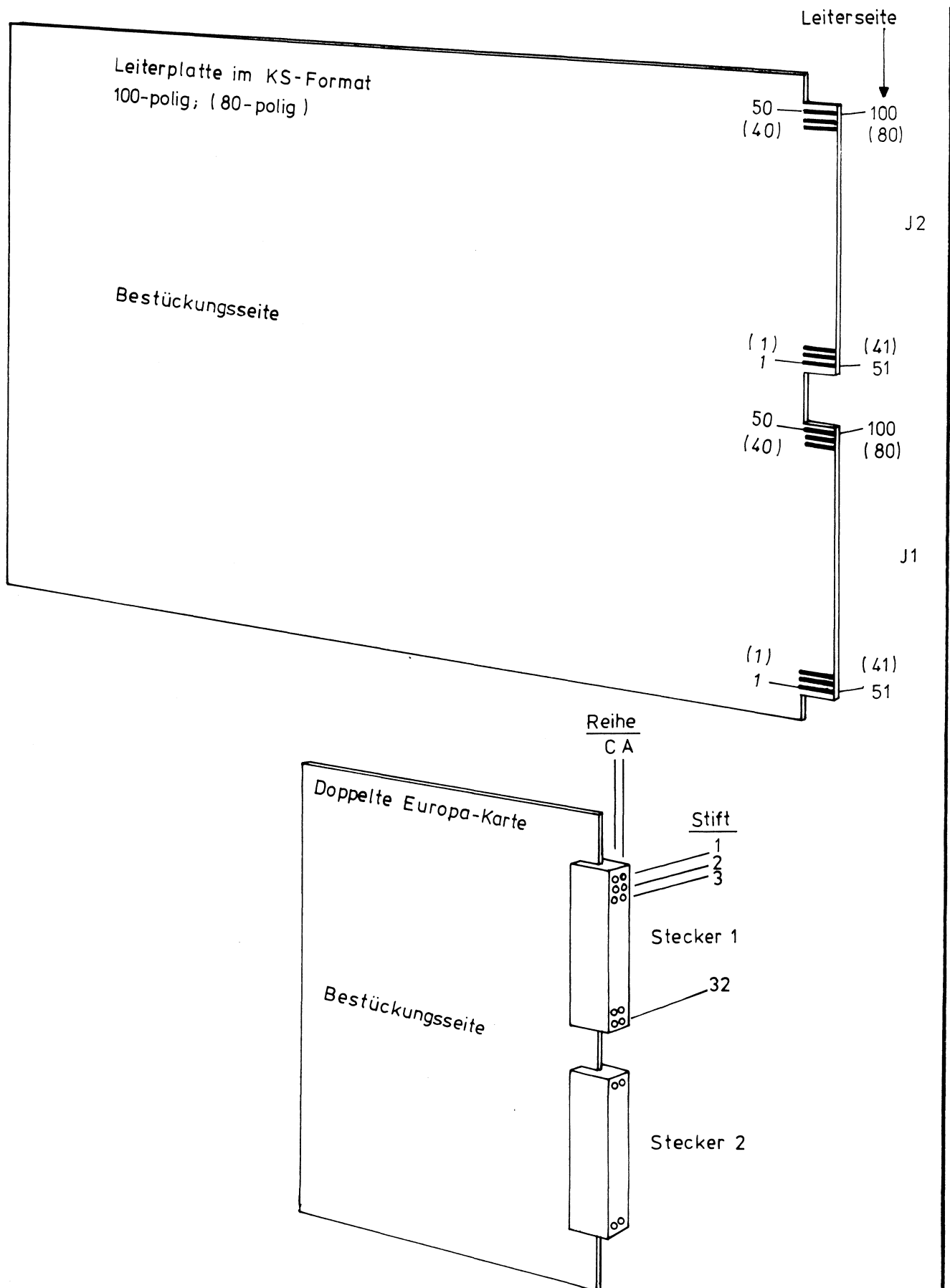
Universalbusadapter 660 614

Cannon-Adapter 660 613

D-Adapter 660 615







1.0.04

Zählweise der Stifte

**DIETZ** Computer  
SYSTEME

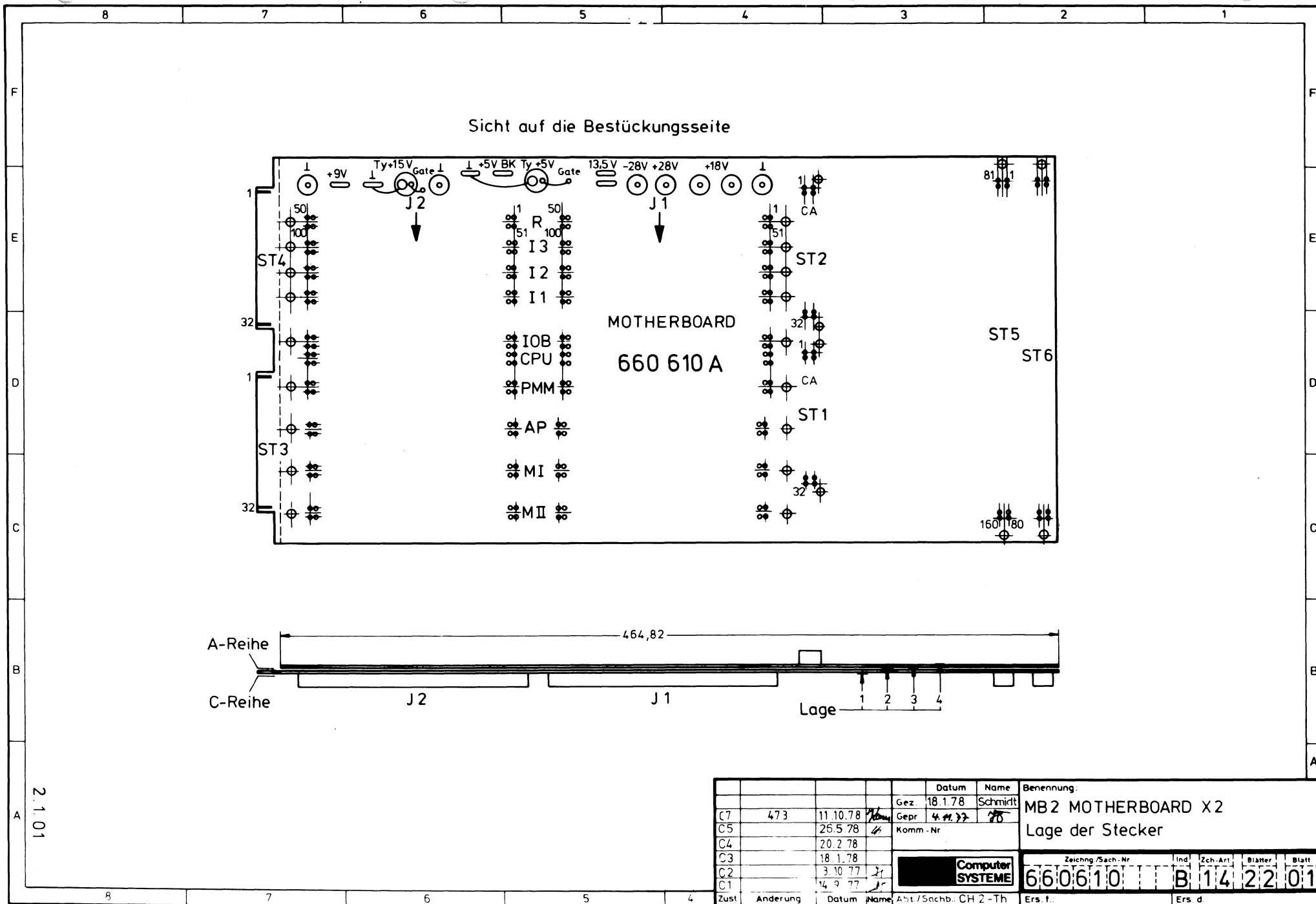
8.12.77



8.8.78

2.1 Motherboard X2

660 610 B,C1-7



|   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|
| 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
|---|---|---|---|---|---|---|---|

| STECKER J1 |                    |     |                         |
|------------|--------------------|-----|-------------------------|
| 1          | ØV                 | 51  | ØV                      |
| 2          | ØV                 | 52  | ØV                      |
| 3          | ØV                 | 53  | ØV                      |
| 4          | +18 V              | 54  | + 18V                   |
| 5          | + 18V              | 55  | + 18V                   |
| 6          | + 18V              | 56  | + 18V                   |
| 7          | + 18V              | 57  | + 18V                   |
| 8          | + 18V              | 58  | + 18V                   |
| 9          | + 18V              | 59  | + 18V                   |
| 10         | + 18V              | 60  | + 18V                   |
| 11         | + 18V              | 61  | + 18V                   |
| 12         | + 18V              | 62  | + 18V                   |
| 13         | + 18V              | 63  | + 18V                   |
| 14         | + 18V              | 64  | + 18V                   |
| 15         | + 18V              | 65  | + 18V                   |
| 16         | + 18V              | 66  | + 18V                   |
| 17         | + 18V              | 67  | + 18V                   |
| 18         | + 18V              | 68  | + 18V                   |
| 19         | + 18V              | 69  | + 18V                   |
| 20         | + 18V              | 70  | + 18V                   |
| 21         | + 18V              | 71  | + 18V                   |
| 22         | + 18V              | 72  | + 18V                   |
| 23         | + 18V              | 73  | + 18V                   |
| 24         | ØV                 | 74  | ØV                      |
| 25         | + 28V              | 75  | + 28V                   |
| 26         | + 28V              | 76  | + 28V                   |
| 27         | + 28V              | 77  | + 28V                   |
| 28         | + 28V              | 78  | + 28V                   |
| 29         | + 28V              | 79  | + 28V                   |
| 30         | + 28V              | 80  | + 28V                   |
| 31         | ØV                 | 81  | ØV                      |
| 32         | -28 V              | 82  | - 28V                   |
| 33         | - 28V              | 83  | - 28V                   |
| 34         | - 28V              | 84  | - 28V                   |
| 35         | - 28V              | 85  | - 28V                   |
| 36         | ØV                 | 86  | ØV                      |
| 37         | 13,5V <sub>1</sub> | 87  | SV-NETZ                 |
| 38         | 13,5V <sub>2</sub> | 88  | + 5 V <sub>2</sub>      |
| 39         | ØV                 | 89  | ↓ ST + 5 V <sub>2</sub> |
| 40         | G+5V               | 90  | + 5V                    |
| 41         | + 5V               | 91  | + 5V                    |
| 42         | + 5V               | 92  | + 5V                    |
| 43         | + 5V               | 93  | + 5V                    |
| 44         | + 5V               | 94  | + 5V                    |
| 45         | + 5V               | 95  | + 5V                    |
| 46         | + 5V               | 96  | + 5V                    |
| 47         | + 5V               | 97  | + 5V                    |
| 48         | + 5V               | 98  | + 5V                    |
| 49         | + 5V               | 99  | + 5V                    |
| 50         | + 5V               | 100 | + 5V                    |

| STECKER J2 |           |     |           |
|------------|-----------|-----|-----------|
| 1          | + 5V      | 51  | + S + 5V  |
| 2          | + 5V      | 52  | + 5V      |
| 3          | + 5V      | 53  | + 5V      |
| 4          | + 5V      | 54  | + 5V      |
| 5          | + 5V      | 55  | + 5V      |
| 6          | + 5V      | 56  | + 5V      |
| 7          | + 5V      | 57  | + 5V      |
| 8          | + 5V      | 58  | + 5V      |
| 9          | + 5V      | 59  | + 5V      |
| 10         | + 5V      | 60  | + 5V      |
| 11         | + 5V      | 61  | + 5V      |
| 12         | + 5V      | 62  | + 5V      |
| 13         | + 5V      | 63  | + 5V      |
| 14         | + 5V      | 64  | + 5V      |
| 15         | + 5V      | 65  | + 5V      |
| 16         | + 5V      | 66  | + 5V      |
| 17         | + 5V      | 67  | + 5V      |
| 18         | + 5V      | 68  | + 5V      |
| 19         | ØV        | 69  | ØV        |
| 20         | G+ 15V    | 70  | ⊥ S + 5V  |
| 21         | ⊥ S + 15V | 71  | + S + 15V |
| 22         | + 15V     | 72  | + 15V     |
| 23         | + 15V     | 73  | + 15V     |
| 24         | + 15V     | 74  | + 15V     |
| 25         | + 15V     | 75  | + 15V     |
| 26         | + 15V     | 76  | + 15V     |
| 27         | + 15V     | 77  | + 15V     |
| 28         | + 15V     | 78  | + 15V     |
| 29         | ØV        | 79  | ØV        |
| 30         | ØV        | 80  | ØV        |
| 31         | ⊥ S - 15V | 81  | ⊥ - 15V   |
| 32         | - 15V     | 82  | - 15V     |
| 33         | - 15V     | 83  | - 15V     |
| 34         | - 15V     | 84  | - 15V     |
| 35         | ØV        | 85  | ØV        |
| 36         | ØV        | 86  | ØV        |
| 37         | ⊥ S + 9V  | 87  | + S + 9V  |
| 38         | + 9V      | 88  | + 9V      |
| 39         | + 9V      | 89  | + 9V      |
| 40         | + 9V      | 90  | + 9V      |
| 41         | + 9V      | 91  | + 9V      |
| 42         | + 9V      | 92  | + 9V      |
| 43         | ØV        | 93  | ØV        |
| 44         | ADR-DIS   | 94  | ØV        |
| 45         | - 12V     | 95  | ⊥ S - 12V |
| 46         | - 12V     | 96  | - 12V     |
| 47         | + 12V     | 97  | ⊥ S + 12V |
| 48         | + 12V     | 98  | + 12V     |
| 49         | ØV        | 99  | ØV        |
| 50         | ØV        | 100 | ØV        |

|   |   |
|---|---|
| 8 | 7 |
|---|---|

|       |          |          |                |            |         |        |  | Datum | Name |
|-------|----------|----------|----------------|------------|---------|--------|--|-------|------|
| C7    | 473      | 11.10.78 | Haus           | Gez.       | 9.12.76 | Kibedi |  |       |      |
| C5    |          | 26.5.78  |                | Gepr.      | 4.11.77 | 78     |  |       |      |
| C4    |          | 20.2.78  |                | Komm.-Nr.  |         |        |  |       |      |
| C3    |          | 18.1.78  | L <sup>2</sup> |            |         |        |  |       |      |
| C2    |          | 3.10.77  | X              |            |         |        |  |       |      |
| C1    |          | 14.9.77  | 2f             |            |         |        |  |       |      |
| Zust. | Änderung | Datum    | Name           | Abt./Staub | CH2-Th  |        |  |       |      |

| Zeichnung / Sach.-Nr. | Ind. | Zch.-Art. | Blätter | Blatt |
|-----------------------|------|-----------|---------|-------|
| 6160610               | B    | 14        | 22      | 02    |

Ers. f. Ers. d

—

|  | 8 | 7 | 6 | 5 | 4 | Zust | Änderung | Datum   | Name | Abt / Saub | CH2- Th | Ers. f. | Ers. d. |
|--|---|---|---|---|---|------|----------|---------|------|------------|---------|---------|---------|
|  |   |   |   |   |   |      |          | 12.9.77 |      |            |         |         |         |



| STECKER J1 |         |     |          |
|------------|---------|-----|----------|
| 1          | 0V      | 51  | 0V       |
| 2          | 0V      | 52  | 0V       |
| 3          | 0V      | 53  | 0V       |
| 4          |         | 54  | I-N      |
| 5          | I-GE IN | 55  | I-GE OUT |
| 6          | I-Q OUT | 56  | I-Q IN   |
| 7          | I-S15   | 57  | I-A18    |
| 8          | I-S14   | 58  | I-A19    |
| 9          | I-S13   | 59  | I-A09    |
| 10         | I-S12   | 60  | I-A08    |
| 11         | I-S11   | 61  | I-A07    |
| 12         | I-S10   | 62  | I-A12    |
| 13         | I-S09   | 63  | I-A11    |
| 14         | I-S08   | 64  | I-A10    |
| 15         |         | 65  | I-FE     |
| 16         |         | 66  | I-A04    |
| 17         |         | 67  |          |
| 18         |         | 68  |          |
| 19         |         | 69  | I-A17    |
| 20         |         | 70  | I-A05    |
| 21         |         | 71  | I-BE     |
| 22         |         | 72  | I-A06    |
| 23         |         | 73  | I-A01    |
| 24         |         | 74  | I-A02    |
| 25         |         | 75  | I-A16    |
| 26         |         | 76  |          |
| 27         |         | 77  |          |
| 28         |         | 78  | I-A03    |
| 29         |         | 79  | I-A13    |
| 30         |         | 80  |          |
| 31         |         | 81  |          |
| 32         |         | 82  |          |
| 33         |         | 83  |          |
| 34         |         | 84  | I-A15    |
| 35         |         | 85  |          |
| 36         |         | 86  |          |
| 37         |         | 87  |          |
| 38         |         | 88  | I-A00    |
| 39         |         | 89  | I-S00    |
| 40         |         | 90  | I-S01    |
| 41         |         | 91  | I-S02    |
| 42         |         | 92  | I-S03    |
| 43         |         | 93  | I-A14    |
| 44         |         | 94  | I-S04    |
| 45         |         | 95  | I-S05    |
| 46         |         | 96  | I-S06    |
| 47         |         | 97  | I-S07    |
| 48         |         | 98  |          |
| 49         | + 5 V   | 99  | + 5V     |
| 50         | + 5V    | 100 | + 5V     |

| STECKER J2 |         |     |        |
|------------|---------|-----|--------|
| 1          | + 5V    | 51  | + 5V   |
| 2          | + 5V    | 52  | + 5V   |
| 3          |         | 53  | I-D01  |
| 4          |         | 54  | I-D00  |
| 5          |         | 55  | I-D08  |
| 6          |         | 56  | I-D18  |
| 7          |         | 57  | I-D06  |
| 8          |         | 58  | I-D07  |
| 9          |         | 59  | I-D05  |
| 10         |         | 60  | I-D04  |
| 11         |         | 61  | I-D03  |
| 12         |         | 62  | I-D02  |
| 13         |         | 63  | I-D17  |
| 14         |         | 64  |        |
| 15         |         | 65  |        |
| 16         |         | 66  | I-D16  |
| 17         |         | 67  |        |
| 18         |         | 68  | I-ADS  |
| 19         |         | 69  | AS-1   |
| 20         |         | 70  | I-D15  |
| 21         |         | 71  | AS-2   |
| 22         |         | 72  | AS-4   |
| 23         |         | 73  | AS-8   |
| 24         |         | 74  | I-D14  |
| 25         |         | 75  | I-D13  |
| 26         |         | 76  | I-FT   |
| 27         |         | 77  | I-L/S  |
| 28         |         | 78  | I-B/W  |
| 29         |         | 79  |        |
| 30         |         | 80  |        |
| 31         |         | 81  |        |
| 32         |         | 82  |        |
| 33         |         | 83  |        |
| 34         |         | 84  |        |
| 35         |         | 85  | I-D12  |
| 36         |         | 86  | FE-DIS |
| 37         |         | 87  | BE-DIS |
| 38         |         | 88  | I-D11  |
| 39         |         | 89  | I-D10  |
| 40         |         | 90  |        |
| 41         |         | 91  |        |
| 42         |         | 92  |        |
| 43         | SEL-X1  | 93  | SEL-X2 |
| 44         | ADR-DIS | 94  | CLK-40 |
| 45         | 0V      | 95  | 0V     |
| 46         | - 12V   | 96  | - 12V  |
| 47         | + 12V   | 97  | + 12V  |
| 48         | 0V      | 98  | 0V     |
| 49         | 0V      | 99  | 0V     |
| 50         | 0V      | 100 | 0V     |

Peripherie-Einbauplatz Allgemein

|                               |  |                                  |  |
|-------------------------------|--|----------------------------------|--|
| Benennung: MOTHER BOARD X1/X2 |  | Peripherie Einbauplatz Allgemein |  |
| Zeichn.-/Sach.-Nr.            |  | Blatt                            |  |
| 61601610                      |  | B17421203                        |  |
| Ers. d.                       |  | Ers. f.                          |  |
| Datum                         |  | Name                             |  |
| 9.12.76                       |  | Ki bedl                          |  |
| G.ez.                         |  | Gepr.                            |  |
| 4.11.77                       |  | 20                               |  |
| Komm.-Nr.                     |  |                                  |  |
| 11.10.78                      |  | 11                               |  |
| 26.5.78                       |  | 11                               |  |
| 20.2.78                       |  | 11                               |  |
| 18.1.78                       |  | 11                               |  |
| 3.10.77                       |  | 11                               |  |
| 14.9.77                       |  | 11                               |  |
| Datum                         |  | Name                             |  |
| 4.73                          |  |                                  |  |
| C7                            |  | C5                               |  |
| C4                            |  | C3                               |  |
| C2                            |  | C1                               |  |
| Zust.                         |  | Änderung                         |  |
| 4                             |  | 5                                |  |
| 6                             |  | 7                                |  |
| 8                             |  |                                  |  |

# I3

| ST 6 | STECKER J1 |     |            |  | ST 6 |
|------|------------|-----|------------|--|------|
| 1    | ØV         | 51  | ØV         |  |      |
| 2    | ØV         | 52  | ØV         |  |      |
| 3    | ØV         | 53  | ØV         |  |      |
| 4    |            | 54  | I-N        |  |      |
| 5    | ③ I-GE IN  | 55  | I-GE OUT ⑤ |  |      |
| 6    | ④ I-Q OUT  | 56  | I-Q IN ⑥   |  |      |
| 7    | I-S15      | 57  | I-A18      |  |      |
| 8    | I-S14      | 58  | I-A19      |  |      |
| 9    | I-S13      | 59  | I-A09      |  |      |
| 10   | I-S12      | 60  | I-A08      |  |      |
| 11   | I-S11      | 61  | I-A07      |  |      |
| 12   | I-S10      | 62  | I-A12      |  |      |
| 13   | I-S09      | 63  | I-A11      |  |      |
| 14   | I-S08      | 64  | I-A10      |  |      |
| 127  | 15         | 65  | I-FE       |  |      |
| 126  | 16         | 66  | I-A04      |  |      |
| 125  | 17         | 67  |            |  |      |
| 124  | 18         | 68  |            |  |      |
| 131  | 19         | 69  | I-A17      |  |      |
| 128  | 20         | 70  | I-A05      |  |      |
| 26   | 21         | 71  | I-BE       |  |      |
| 107  | 22         | 72  | I-A06      |  |      |
| 108  | 23         | 73  | I-A01      |  |      |
| 118  | 24         | 74  | I-A02      |  |      |
| 117  | 25         | 75  | I-A16      |  |      |
| 111  | 26         | 76  |            |  |      |
| 112  | 27         | 77  |            |  |      |
| 36   | 28         | 78  | I-A03      |  |      |
| 115  | 29         | 79  | I-A13      |  |      |
| 35   | 30         | 80  |            |  |      |
| 116  | 31         | 81  |            |  |      |
| 114  | 32         | 82  |            |  |      |
| 113  | 33         | 83  |            |  |      |
| 37   | 34         | 84  | I-A15      |  |      |
| 31   | 35         | 85  |            |  |      |
| 110  | 36         | 86  |            |  |      |
| 30   | 37         | 87  |            |  |      |
| 109  | 38         | 88  | I-A00      |  |      |
| 29   | 39         | 89  | I-S00      |  |      |
| 32   | 40         | 90  | I-S01      |  |      |
| 33   | 41         | 91  | I-S02      |  |      |
| 34   | 42         | 92  | I-S03      |  |      |
| 28   | 43         | 93  | I-A14      |  |      |
| 27   | 44         | 94  | I-S04      |  |      |
| 106  | 45         | 95  | I-S05      |  |      |
| 129  | 46         | 96  | I-S06      |  |      |
| 130  | 47         | 97  | I-S07      |  |      |
| 48   | 48         | 98  |            |  |      |
| 49   | + 5V       | 99  | + 5V       |  |      |
| 50   | + 5V       | 100 | + 5V       |  |      |

| ST 6 | STECKER J2 |     |        |  | ST 6 |
|------|------------|-----|--------|--|------|
| 1    | + 5V       | 51  | + 5V   |  |      |
| 2    | + 5V       | 52  | + 5V   |  |      |
| 18   | 3          | 53  | I-D01  |  |      |
| 19   | 4          | 54  | I-D02  |  |      |
| 20   | 5          | 55  | I-D03  |  |      |
| 21   | 6          | 56  | I-D18  |  |      |
| 22   | 7          | 57  | I-D08  |  |      |
| 23   | 8          | 58  | I-D07  |  |      |
| 24   | 9          | 59  | I-D06  |  |      |
| 25   | 10         | 60  | I-D04  |  |      |
| 81   | 11         | 61  | I-D03  |  |      |
| 83   | 12         | 62  | I-D02  |  |      |
| 85   | 13         | 63  | I-D17  |  |      |
| 87   | 14         | 64  |        |  |      |
| 89   | 15         | 65  |        |  |      |
| 91   | 16         | 66  | I-D16  |  |      |
| 93   | 17         | 67  |        |  |      |
| 95   | 18         | 68  | I-ADS  |  |      |
| 97   | 19         | 69  | AS-1   |  |      |
| 99   | 20         | 70  | I-D15  |  |      |
| 101  | 21         | 71  | AS-2   |  |      |
| 103  | 22         | 72  | AS-4   |  |      |
| 105  | 23         | 73  | AS-8   |  |      |
| 82   | 24         | 74  | I-D14  |  |      |
| 84   | 25         | 75  | I-D13  |  |      |
| 86   | 26         | 76  | I-FT   |  |      |
| 88   | 27         | 77  | I-L/S  |  |      |
| 90   | 28         | 78  | I-B/W  |  |      |
| 92   | 29         | 79  |        |  |      |
| 94   | 30         | 80  |        |  |      |
| 96   | 31         | 81  |        |  |      |
| 98   | 32         | 82  | I-D12  |  |      |
| 100  | 33         | 83  | FE-DIS |  |      |
| 102  | 34         | 84  | BE-DIS |  |      |
| 104  | 35         | 85  | I-D11  |  |      |
|      | 36         | 86  | I-D10  |  |      |
|      | 37         | 87  |        |  |      |
|      | 38         | 88  |        |  |      |
|      | 39         | 89  |        |  |      |
|      | 40         | 90  |        |  |      |
|      | 41         | 91  |        |  |      |
|      | 42         | 92  |        |  |      |
|      | 43         | 93  | SEL-32 |  |      |
|      | 44         | 94  | CLK-40 |  |      |
|      | 45         | 95  | ØV     |  |      |
|      | 46         | 96  | - 12V  |  |      |
|      | 47         | 97  | + 12V  |  |      |
|      | 48         | 98  | ØV     |  |      |
|      | 49         | 99  | ØV     |  |      |
|      | 50         | 100 | ØV     |  |      |

Peripherie-Einbauplatz I3 : Zur Aufnahme eines Multiinterfaces

Führung der Peripherie-Signale über den C-Adapter

|       |                        |                             |
|-------|------------------------|-----------------------------|
| ST C3 | 25-pol. CANNON-Stecker | ( 8 Punkte belegt (V24) )   |
| ST C5 | "                      | " ( 8 Punkte belegt (V24) ) |
| ST C6 | "                      | " ( 25 Punkte belegt )      |
| ST C7 | "                      | " ( 8 Punkte belegt (V24) ) |
| ST C8 | "                      | " ( 25 Punkte belegt )      |

Benennung: MOTHER BOARD X2  
Peripherie Einbauplatz I3

| Datum    | Name | Kibedi | Gz.     | Gepr. | Komm.-Nr. | Abt./Sachb. | CH 2-Th | Zust. | Änderung | 4 | 5 | 6 | 7 | 8 |
|----------|------|--------|---------|-------|-----------|-------------|---------|-------|----------|---|---|---|---|---|
| 9.12.76  |      |        | 4.12.76 |       |           |             |         |       |          |   |   |   |   |   |
| 11.10.78 |      |        | 26.5.78 |       |           |             |         |       |          |   |   |   |   |   |
| 26.5.78  |      |        | 20.2.78 |       |           |             |         |       |          |   |   |   |   |   |
| 18.1.78  |      |        | 3.10.77 |       |           |             |         |       |          |   |   |   |   |   |
| 3.10.77  |      |        | 14.9.77 |       |           |             |         |       |          |   |   |   |   |   |
| 14.9.77  |      |        |         |       |           |             |         |       |          |   |   |   |   |   |

# I2

## STECKER J1

|    |           |     |            |
|----|-----------|-----|------------|
| 1  | ØV        | 51  | ØV         |
| 2  | ØV        | 52  | ØV         |
| 3  | ØV        | 53  | ØV         |
| 4  |           | 54  | I-N        |
| 5  | ⑤ I-GE IN | 55  | I-GE-OUT ⑦ |
| 6  | ⑥ I-Q OUT | 56  | I-Q IN ⑧   |
| 7  | I-S15     | 57  | I-A18      |
| 8  | I-S14     | 58  | I-A19      |
| 9  | I-S13     | 59  | I-A09      |
| 10 | I-S12     | 60  | I-A08      |
| 11 | I-S11     | 61  | I-A07      |
| 12 | I-S10     | 62  | I-A12      |
| 13 | I-S09     | 63  | I-A11      |
| 14 | I-S08     | 64  | I-A10      |
| 15 |           | 65  | I-FE       |
| 16 |           | 66  | I-A04      |
| 17 |           | 67  |            |
| 18 |           | 68  |            |
| 19 |           | 69  | I-A17      |
| 20 |           | 70  | I-A05      |
| 21 |           | 71  | I-BE       |
| 22 |           | 72  | I-A06      |
| 23 |           | 73  | I-A01      |
| 24 |           | 74  | I-A02      |
| 25 |           | 75  | I-A16      |
| 26 |           | 76  |            |
| 27 |           | 77  |            |
| 28 |           | 78  | I-A03      |
| 29 |           | 79  | I-A13      |
| 30 |           | 80  |            |
| 31 | ST A3     | 81  | ST A2      |
| 32 |           | 82  |            |
| 33 |           | 83  |            |
| 34 |           | 84  | I-A15      |
| 35 |           | 85  |            |
| 36 |           | 86  |            |
| 37 |           | 87  |            |
| 38 |           | 88  | I-A00      |
| 39 |           | 89  | I-S00      |
| 40 |           | 90  | I-S01      |
| 41 |           | 91  | I-S02      |
| 42 |           | 92  | I-S03      |
| 43 |           | 93  | I-A14      |
| 44 |           | 94  | I-S04      |
| 45 |           | 95  | I-S05      |
| 46 |           | 96  | I-S06      |
| 47 |           | 97  | I-S07      |
| 48 |           | 98  |            |
| 49 | + 5V      | 99  | + 5V       |
| 50 | + 5V      | 100 | + 5V       |

## STECKER J2

|    |         |     |        |
|----|---------|-----|--------|
| 1  | + 5 V   | 51  | + 5 V  |
| 2  | + 5 V   | 52  | + 5 V  |
| 3  |         | 53  | I-D01  |
| 4  |         | 54  | I-D00  |
| 5  |         | 55  | I-D08  |
| 6  |         | 56  | I-D18  |
| 7  |         | 57  | I-D06  |
| 8  |         | 58  | I-D07  |
| 9  |         | 59  | I-D05  |
| 10 |         | 60  | I-D04  |
| 11 |         | 61  | I-D03  |
| 12 |         | 62  | I-D02  |
| 13 |         | 63  | I-D17  |
| 14 |         | 64  | M      |
| 15 |         | 65  | P      |
| 16 | ST A3   | 66  | I-D16  |
| 17 |         | 67  | H      |
| 18 |         | 68  | I-ADS  |
| 19 |         | 69  | AS-1   |
| 20 |         | 70  | I-D15  |
| 21 |         | 71  | AS-2   |
| 22 |         | 72  | AS-4   |
| 23 |         | 73  | AS-8   |
| 24 |         | 74  | I-D14  |
| 25 |         | 75  | I-D13  |
| 26 |         | 76  | IFT    |
| 27 | ST A2   | 77  | I-L/S  |
| 28 |         | 78  | I-B/W  |
| 29 |         | 79  |        |
| 30 |         | 80  | C      |
| 31 |         | 81  | ST A2  |
| 32 |         | 82  | B      |
| 33 |         | 83  | A      |
| 34 |         | 84  | F      |
| 35 |         | 85  | D      |
| 36 |         | 86  | I-D12  |
| 37 |         | 87  | FE-DIS |
| 38 |         | 88  | BE-DIS |
| 39 |         | 89  | I-D11  |
| 40 |         | 90  | I-D10  |
| 41 |         | 91  | J      |
| 42 |         | 92  | N      |
| 43 | SEL-21  | 93  | SEL-22 |
| 44 | ADR-DIS | 94  | CLK-40 |
| 45 | ØV      | 95  | ØV     |
| 46 | - 12V   | 96  | - 12V  |
| 47 | + 12V   | 97  | + 12V  |
| 48 | ØV      | 98  | ØV     |
| 49 | ØV      | 99  | ØV     |
| 50 | ØV      | 100 | ØV     |

Peripherie-Einbauplatz I2 : Zur Aufnahme von Interfaces oder Controller

Führung der Peripherie-Signale über den A-Adapter

Der Stecker ST A2 wird auch vom Einbauplatz I1 benutzt.

ST A2 : 26-poliger AMP-Stecker (25 Punkte belegt)

ST A3 : 75-poliger AMP-Stecker (60 Punkte belegt)

Benennung MOTHER BOARD X2  
Peripherie Einbauplatz I2  
Steckerpunkte bei Führung über  
A-Adapter

| Datum    | Name   | Gez. | Gedr. | Komm.-Nr. | Abt./Sachb. | CH1-Th. | Name | Datum | Änderung | Zust. | 4 | 5 | 6 | 7 | 8 |
|----------|--------|------|-------|-----------|-------------|---------|------|-------|----------|-------|---|---|---|---|---|
| 9.12.76  | Klbedi |      | 76    |           |             |         |      |       |          |       |   |   |   |   |   |
| 11.10.78 |        | 473  |       |           |             |         |      |       |          |       |   |   |   |   |   |
| 26.5.78  |        |      |       |           |             |         |      |       |          |       |   |   |   |   |   |
| 20.2.78  |        |      |       |           |             |         |      |       |          |       |   |   |   |   |   |
| 18.1.78  |        |      |       |           |             |         |      |       |          |       |   |   |   |   |   |
| 3.10.77  |        |      |       |           |             |         |      |       |          |       |   |   |   |   |   |
| 14.9.77  |        |      |       |           |             |         |      |       |          |       |   |   |   |   |   |

| Blatt | Zech.-Art | Ind. | Blatt | Ers. d. |
|-------|-----------|------|-------|---------|
| 14    | B         | 1    | 14    | 2.05    |

# I2

| ST 5 | STECKER J1  | ST 5 | ST 5         | STECKER J2 | ST 5  |
|------|-------------|------|--------------|------------|-------|
| 1    | 0V          | 51   | 0V           | 1          | +5V   |
| 2    | 0V          | 52   | 0V           | 2          | +5V   |
| 3    | 0V          | 53   | 0V           | 3          | C25   |
| 4    |             | 54   | I-N          | 4          | C26   |
| 5    | (5) I-GE IN | 55   | I-GE-OUT (7) | 5          | ST D3 |
| 6    | (6) I-Q OUT | 56   | I-Q IN (8)   | 6          | C27   |
| 7    | I-S15       | 57   | I-A18        | 7          | C28   |
| 8    | I-S14       | 58   | I-A19        | 8          | C29   |
| 9    | I-S13       | 59   | I-A09        | 9          | w     |
| 10   | I-S12       | 60   | I-A08        | 10         | v     |
| 11   | I-S11       | 61   | I-A07        | 11         | T     |
| 12   | I-S10       | 62   | I-A12        | 12         | Z     |
| 13   | I-S09       | 63   | I-A11        | 13         | X     |
| 14   | I-S08       | 64   | I-A10        | 14         | Q     |
| 15   | C3          | 65   | I-FE         | 15         | b     |
| 16   | C4          | 66   | I-A04        | 16         | W     |
| 17   | C5          | 67   | C6           | 17         | c     |
| 18   | A2          | 68   | C2           | 18         | S     |
| 19   | A3          | 69   | I-A17        | 19         | Y     |
| 20   | A4          | 70   | I-A05        | 20         | R     |
| 21   | A5          | 71   | I-BE         | 21         | C24   |
| 22   | A6          | 72   | I-A06        | 22         | C23   |
| 23   | A7          | 73   | I-A01        | 23         | C22   |
| 24   | A8          | 74   | I-A02        | 24         | ST D3 |
| 25   | A9          | 75   | I-A16        | 25         | C18   |
| 26   | A10         | 76   | C10          | 26         | C13   |
| 27   | A11         | 77   | C11          | 27         | C12   |
| 28   | A12         | 78   | I-A03        | 28         | C9    |
| 29   | A13         | 79   | I-A13        | 29         | C8    |
| 30   | A14         | 80   | C14          | 30         | C7    |
| 31   | A15         | 81   | ST D3        | 31         |       |
| 32   | A16         | 82   | C15          | 32         |       |
| 33   | A17         | 83   | C16          | 33         |       |
| 34   | A18         | 84   | C17          | 34         |       |
| 35   | A19         | 85   | I-A15        | 35         |       |
| 36   | A20         | 86   | C19          | 36         |       |
| 37   | A21         | 87   | C20          | 37         |       |
| 38   | A22         | 88   | C21          | 38         |       |
| 39   | A23         | 89   | I-A00        | 39         |       |
| 40   | A24         | 90   | I-S00        | 40         |       |
| 41   | A25         | 91   | I-S01        | 41         |       |
| 42   | A26         | 92   | I-S02        | 42         |       |
| 43   | A27         | 93   | I-S03        | 43         |       |
| 44   | A28         | 94   | I-A14        | 44         |       |
| 45   | A29         | 95   | I-S04        | 45         |       |
| 46   | A30         | 96   | I-S05        | 46         |       |
| 47   | A31         | 97   | I-S06        | 47         |       |
| 48   | C31         | 98   | I-S07        | 48         |       |
| 49   | +5V         | 99   | C30          | 49         |       |
| 50   | +5V         | 100  | +5V          | 50         |       |

Peripherie-Einbauplatz I2: Zur Aufnahme von Interfaces oder Controller

Führung der Peripherie-Signale über den D-Adapter

Der Stecker ST A2 wird auch vom Einbauplatz I1 benutzt

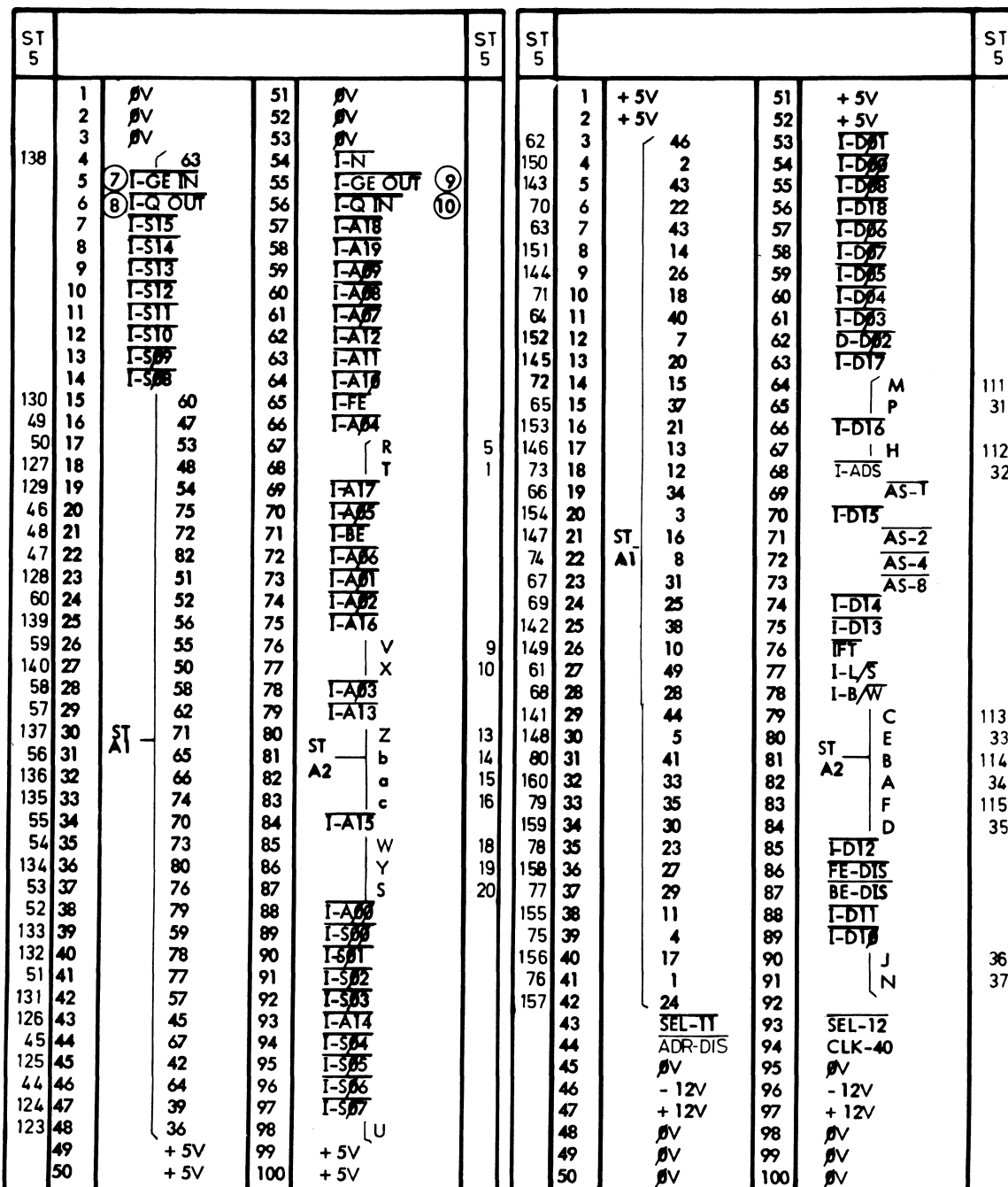
ST A2 26-poliger AMP-Stecker (25 Punkte belegt)

ST D3 64-poliger Direkte Stecker (60 Punkte belegt)

|                           |          |                           |          |                                          |           |
|---------------------------|----------|---------------------------|----------|------------------------------------------|-----------|
| Benennung MOTHER BOARD X2 |          | Peripherie Einbauplatz I2 |          | Steckerpunkte bei Führung über D-Adapter |           |
| Gez.                      | Datum    | Name                      | Klbedl   | Zeichn. Nr.                              | Blatt     |
| 11.10.78                  | 11.10.78 | 473                       | 11.10.78 | 6.6.10                                   | B14.22.06 |
| 26.5.78                   | 26.5.78  |                           | 26.5.78  |                                          |           |
| 20.2.78                   | 20.2.78  |                           | 20.2.78  |                                          |           |
| 18.1.78                   | 18.1.78  |                           | 18.1.78  |                                          |           |
| 3.10.77                   | 3.10.77  |                           | 3.10.77  |                                          |           |
| 14.9.77                   | 14.9.77  |                           | 14.9.77  |                                          |           |
| Computer SYSTEME          |          | Computer SYSTEME          |          | Computer SYSTEME                         |           |
| Name                      |          | Name                      |          | Name                                     |           |
| Abt./Sachb. CH2-Th        |          | Abt./Sachb. CH2-Th        |          | Abt./Sachb. CH2-Th                       |           |
| Datum                     |          | Datum                     |          | Datum                                    |           |
| Änderung                  |          | Änderung                  |          | Änderung                                 |           |
| Zust                      |          | Zust                      |          | Zust                                     |           |

# I2

| ST 5 | STECKER J1 |     |          |     |         |     |          |     |         |     |          |     |         |     |          |     |         |     |          |     | ST 5    |
|------|------------|-----|----------|-----|---------|-----|----------|-----|---------|-----|----------|-----|---------|-----|----------|-----|---------|-----|----------|-----|---------|
| 1    | ØV         | 51  | ØV       | 2   | ØV      | 52  | ØV       | 3   | ØV      | 53  | ØV       | 4   | ØV      | 54  | ØV       | 5   | ØV      | 55  | ØV       | 6   | ØV      |
| 5    | I-GE IN    | 56  | I-GE OUT | 7   | I-GE IN | 57  | I-GE OUT | 8   | I-GE IN | 58  | I-GE OUT | 9   | I-GE IN | 59  | I-GE OUT | 10  | I-GE IN | 60  | I-GE OUT | 11  | I-GE IN |
| 12   | I-S13      | 61  | I-S14    | 13  | I-S13   | 62  | I-S14    | 14  | I-S13   | 63  | I-S14    | 15  | I-S13   | 64  | I-S14    | 16  | I-S13   | 65  | I-S14    | 17  | I-S13   |
| 18   | I-S12      | 66  | I-S11    | 19  | I-S12   | 67  | I-S11    | 20  | I-S12   | 68  | I-S11    | 21  | I-S12   | 69  | I-S11    | 22  | I-S12   | 70  | I-S11    | 23  | I-S12   |
| 24   | I-S09      | 71  | I-S08    | 25  | I-S09   | 72  | I-S08    | 26  | I-S09   | 73  | I-S08    | 27  | I-S09   | 74  | I-S08    | 28  | I-S09   | 75  | I-S08    | 29  | I-S09   |
| 30   | I-S08      | 76  | I-S07    | 31  | I-S08   | 77  | I-S07    | 32  | I-S08   | 78  | I-S07    | 33  | I-S08   | 79  | I-S07    | 34  | I-S08   | 80  | I-S07    | 35  | I-S08   |
| 36   | C3         | 81  | C4       | 37  | C3      | 82  | C4       | 38  | C3      | 83  | C4       | 39  | C3      | 84  | C4       | 40  | C3      | 85  | C4       | 41  | C3      |
| 42   | C5         | 86  | C6       | 43  | C5      | 87  | C6       | 44  | C5      | 88  | C6       | 45  | C5      | 89  | C6       | 46  | C5      | 90  | C6       | 47  | C5      |
| 48   | A2         | 91  | A3       | 49  | A2      | 92  | A3       | 50  | A2      | 93  | A3       | 51  | A2      | 94  | A3       | 52  | A2      | 95  | A3       | 53  | A2      |
| 54   | A4         | 96  | A5       | 55  | A4      | 97  | A5       | 56  | A4      | 98  | A5       | 57  | A4      | 99  | A5       | 58  | A4      | 100 | A5       | 59  | A4      |
| 60   | A6         | 101 | A7       | 61  | A6      | 102 | A7       | 62  | A6      | 103 | A7       | 63  | A6      | 104 | A7       | 64  | A6      | 105 | A7       | 65  | A6      |
| 66   | A8         | 106 | A9       | 67  | A8      | 107 | A9       | 68  | A8      | 108 | A9       | 69  | A8      | 109 | A9       | 70  | A8      | 110 | A9       | 71  | A8      |
| 72   | A10        | 111 | A11      | 73  | A10     | 112 | A11      | 74  | A10     | 113 | A11      | 75  | A10     | 114 | A11      | 76  | A10     | 115 | A11      | 77  | A10     |
| 78   | A12        | 116 | A13      | 79  | A12     | 117 | A13      | 80  | A12     | 118 | A13      | 81  | A12     | 119 | A13      | 82  | A12     | 120 | A13      | 83  | A12     |
| 84   | A14        | 121 | A15      | 85  | A14     | 122 | A15      | 86  | A14     | 123 | A15      | 87  | A14     | 124 | A15      | 88  | A14     | 125 | A15      | 89  | A14     |
| 90   | A16        | 126 | A17      | 91  | A16     | 127 | A17      | 92  | A16     | 128 | A17      | 93  | A16     | 129 | A17      | 94  | A16     | 130 | A17      | 95  | A16     |
| 96   | A18        | 131 | A19      | 97  | A18     | 132 | A19      | 98  | A18     | 133 | A19      | 99  | A18     | 134 | A19      | 100 | A18     | 135 | A19      | 101 | A18     |
| 102  | A20        | 136 | A21      | 103 | A20     | 137 | A21      | 104 | A20     | 138 | A21      | 105 | A20     | 139 | A21      | 106 | A20     | 140 | A21      | 107 | A20     |
| 108  | A22        | 141 | A23      | 109 | A22     | 142 | A23      | 110 | A22     | 143 | A23      | 111 | A22     | 144 | A23      | 112 | A22     | 145 | A23      | 113 | A22     |
| 114  | A24        | 146 | A25      | 115 | A24     | 147 | A25      | 116 | A24     | 148 | A25      | 117 | A24     | 149 | A25      | 118 | A24     | 150 | A25      | 119 | A24     |
| 120  | A26        | 151 | A27      | 121 | A26     | 152 | A27      | 122 | A26     | 153 | A27      | 123 | A26     | 154 | A27      | 124 | A26     | 155 | A27      | 125 | A26     |
| 126  | A28        | 156 | A29      | 127 | A28     | 157 | A29      | 128 | A28     | 158 | A29      | 129 | A28     | 159 | A29      | 130 | A28     | 160 | A29      | 131 | A28     |
| 132  | A30        | 161 | A31      | 133 | A30     | 162 | A31      | 134 | A30     | 163 | A31      | 135 | A30     | 164 | A31      | 136 | A30     | 165 | A31      | 137 | A30     |
| 138  | A32        | 166 | A33      | 139 | A32     | 167 | A33      | 140 | A32     | 168 | A33      | 141 | A32     | 169 | A33      | 142 | A32     | 170 | A33      | 143 | A32     |
| 144  | A34        | 171 | A35      | 145 | A34     | 172 | A35      | 146 | A34     | 173 | A35      | 147 | A34     | 174 | A35      | 148 | A34     | 175 | A35      | 149 | A34     |
| 150  | A36        | 176 | A37      | 151 | A36     | 177 | A37      | 152 | A36     | 178 | A37      | 153 | A36     | 179 | A37      | 154 | A36     | 180 | A37      | 155 | A36     |
| 156  | A38        | 181 | A39      | 157 | A38     | 182 | A39      | 158 | A38     | 183 | A39      | 159 | A38     | 184 | A39      | 160 | A38     | 185 | A39      | 161 | A38     |
| 162  | A40        | 186 | A41      | 163 | A40     | 187 | A41      | 164 | A40     | 188 | A41      | 165 | A40     | 189 | A41      | 166 | A40     | 190 | A41      | 167 | A40     |
| 168  | A42        | 191 | A43      | 169 | A42     | 192 | A43      | 170 | A42     | 193 | A43      | 171 | A42     | 194 | A43      | 172 | A42     | 195 | A43      | 173 | A42     |
| 174  | A44        | 196 | A45      | 175 | A44     | 197 | A45      | 176 | A44     | 198 | A45      | 177 | A44     | 199 | A45      | 178 | A44     | 200 | A45      | 179 | A44     |
| 180  | A46        | 201 | A47      | 181 | A46     | 202 | A47      | 182 | A46     | 203 | A47      | 183 | A46     | 204 | A47      | 184 | A46     | 205 | A47      | 185 | A46     |
| 186  | A48        | 206 | A49      | 187 | A48     | 207 | A49      | 188 | A48     | 208 | A49      | 189 | A48     | 209 | A49      | 190 | A48     | 210 | A49      | 191 | A48     |
| 192  | A50        | 211 | A51      | 193 | A50     | 212 | A51      | 194 | A50     | 213 | A51      | 195 | A50     | 214 | A51      | 196 | A50     | 215 | A51      | 197 | A50     |
| 198  | A52        | 216 | A53      | 199 | A52     | 217 | A53      | 200 | A52     | 218 | A53      | 201 | A52     | 219 | A53      | 202 | A52     | 220 | A53      | 203 | A52     |
| 204  | A54        | 221 | A55      | 205 | A54     | 222 | A55      | 206 | A54     | 223 | A55      | 207 | A54     | 224 | A55      | 208 | A54     | 225 | A55      | 209 | A54     |
| 210  | A56        | 226 | A57      | 211 | A56     | 227 | A57      | 212 | A56     | 228 | A57      | 213 | A56     | 229 | A57      | 214 | A56     | 230 | A57      | 215 | A56     |
| 216  | A58        | 231 | A59      | 217 | A58     | 232 | A59      | 218 | A58     | 233 | A59      | 219 | A58     | 234 | A59      | 220 | A58     | 235 | A59      | 221 | A58     |
| 222  | A60        | 236 | A61      | 223 | A60     | 237 | A61      | 224 | A60     | 238 | A61      | 225 | A60     | 239 | A61      | 226 | A60     | 240 | A61      | 227 | A60     |
| 228  | A62        | 241 | A63      | 229 | A62     | 242 | A63      | 230 | A62     | 243 | A63      | 231 | A62     | 244 | A63      | 232 | A62     | 245 | A63      | 233 | A62     |
| 234  | A64        | 246 | A65      | 235 | A64     | 247 | A65      | 236 | A64     | 248 | A65      | 237 | A64     | 249 | A65      | 238 | A64     | 250 | A65      | 239 | A64     |
| 240  | A66        | 251 | A67      | 241 | A66     | 252 | A67      | 242 | A66     | 253 | A67      | 243 | A66     | 254 | A67      | 244 | A66     | 255 | A67      | 245 | A66     |
| 246  | A68        | 256 | A69      | 247 | A68     | 257 | A69      | 248 | A68     | 258 | A69      | 249 | A68     | 259 | A69      | 250 | A68     | 260 | A69      | 251 | A68     |
| 252  | A70        | 261 | A71      | 253 | A70     | 262 | A71      | 254 | A70     | 263 | A71      | 255 | A70     | 264 | A71      | 256 | A70     | 265 | A71      | 257 | A70     |
| 258  | A72        | 266 | A73      | 259 | A72     | 267 | A73      | 260 | A72     | 268 | A73      | 261 | A72     | 269 | A73      | 262 | A72     | 270 | A73      | 263 | A72     |
| 264  | A74        | 271 | A75      | 265 | A74     | 272 | A75      | 266 | A74     | 273 | A75      | 267 | A74     | 274 | A75      | 268 | A74     | 275 | A75      | 269 | A74     |
| 270  | A76        | 276 | A77      | 271 | A76     | 277 | A77      | 272 | A76     | 278 | A77      | 273 | A76     | 279 | A77      | 274 | A76     | 280 | A77      | 275 | A76     |
| 276  | A78        | 281 | A79      | 277 | A78     | 282 | A79      | 278 | A78     | 283 | A79      | 279 | A78     | 284 | A79      | 280 | A78     | 285 | A79      | 281 | A78     |
| 282  | A80        | 286 | A81      | 283 | A80     | 287 | A81      | 284 | A80     | 288 | A81      | 285 | A80     | 289 | A81      | 286 | A80     | 290 | A81      | 287 | A80     |
| 288  | A82        | 291 | A83      | 289 | A82     | 292 | A83      | 290 | A82     | 293 | A83      | 291 | A82     | 294 | A83      | 292 | A82     | 295 | A83      | 293 | A82     |
| 294  | A84        | 296 | A85      | 295 | A84     | 297 | A85      | 296 | A84     | 298 | A85      | 297 | A84     | 299 | A85      | 298 | A84     | 300 | A85      | 299 | A84     |
| 300  | A86        | 301 | A87      | 301 | A86     | 302 | A87      | 302 | A86     | 303 | A87      | 303 | A86     | 304 | A87      | 304 | A86     | 305 | A87      | 305 | A86     |
| 306  | A88        | 306 | A89      | 307 | A88     | 307 | A89      | 308 | A88     | 308 | A89      | 309 | A88     | 309 | A89      | 310 | A88     | 311 | A89      | 311 | A88     |
| 312  | A90        | 311 | A91      | 313 | A90     | 312 | A91      | 314 | A90     | 313 | A91      | 315 | A90     | 314 | A91      | 316 | A90     | 317 | A91      | 317 | A90     |
| 318  | A92        | 316 | A93      | 319 | A92     | 318 | A93      | 320 | A92     | 319 | A93      | 321 | A92     | 320 | A93      | 322 | A92     | 323 | A93      | 323 | A92     |
| 324  | A94        | 321 | A95      | 325 | A94     | 324 | A95      | 326 | A94     | 325 | A95      | 327 | A94     | 326 | A95      | 328 | A94     | 329 | A95      | 329 | A94     |
| 330  | A96        | 331 | A97      | 331 | A96     | 332 | A97      | 332 | A96     | 333 | A97      | 333 | A96     | 334 | A97      | 334 | A96     | 335 | A97      | 335 | A96     |
| 336  | A98        | 336 | A99      | 337 | A98     | 337 | A99      | 338 | A98     | 338 | A99      | 339 | A98     | 339 | A99      | 340 | A98     | 341 | A99      | 341 | A98     |
| 342  | A100       | 341 | A101     | 343 | A100    | 342 | A101     | 344 | A100    | 343 | A101     | 345 | A100    | 344 | A101     | 346 | A100    | 347 | A101     | 347 | A100    |
| 348  | A102       | 346 | A103     | 349 | A102    | 348 | A103     | 350 | A102    | 349 | A103     | 351 | A102    | 350 | A103     | 352 | A102    | 353 | A103     | 353 | A102    |
| 354  | A104       | 351 | A105     | 355 | A104    | 354 | A105     | 356 | A104    | 355 | A105     | 357 | A104    | 356 | A105     | 358 | A104    | 359 | A105     | 359 | A104    |
| 360  | A106       | 361 | A107     | 361 | A106    | 362 | A107     | 362 | A106    | 363 | A107     | 363 | A106    | 364 | A107     | 364 | A106    | 365 | A107     | 365 | A106    |
| 366  | A108       | 366 | A109     | 367 | A108    | 367 | A109     | 368 | A108    | 368 | A109     | 369 | A108    | 369 | A109     | 370 | A108    | 371 | A109     | 371 | A108    |
| 372  | A110       | 371 | A111     | 373 | A110    | 372 | A111     | 374 | A110    | 373 | A111     | 375 | A110    | 374 | A111     | 376 | A110    | 377 | A111     | 377 | A110    |
| 378  | A112       | 376 | A113     | 379 | A112    | 378 | A113     | 380 | A112    | 379 | A113     | 381 | A112    | 380 | A113     | 382 | A112    | 383 | A113     | 383 | A112    |
| 384  | A114       | 381 | A115     | 385 | A114    | 384 | A115     | 386 | A114    | 385 | A115     | 387 | A114    | 386 | A115     | 388 | A114    | 389 | A115     | 389 | A114    |
| 390  | A116       | 391 | A117     | 391 | A116    | 392 | A117     | 392 | A116    | 393 | A117     | 393 | A116    | 394 | A117     | 394 | A116    | 395 | A117     | 395 | A116    |
| 396  | A118       | 396 | A119     | 397 | A118    | 397 | A119     | 398 | A118    | 398 | A119     | 399 | A118    | 399 | A119     | 400 | A118    | 401 | A119     | 401 | A118    |
| 402  | A120       | 401 | A121     | 403 | A120    | 402 | A121     | 404 | A120    | 403 | A121     | 405 | A120    | 404 | A121     | 406 | A120    | 407 | A121     | 407 | A120    |
| 408  | A122       | 406 | A123     | 409 | A122    | 408 | A123     | 410 | A122    | 409 | A123     | 411 | A122    | 410 | A123     | 412 | A122    | 413 | A123     | 413 | A122    |
| 414  | A124       | 411 | A125     | 415 | A124    | 414 | A125     | 416 | A124    | 415 | A125     | 417 | A124    | 416 | A125     | 418 | A124    | 419 | A125     | 419 | A124    |
| 420  | A126       | 421 | A127     | 421 | A126    | 422 | A127     | 422 | A126    | 423 | A127     | 423 | A126    | 424 | A127     | 424 | A126    | 425 | A127     | 425 | A126    |



### Peripherie-Einbauplatz I 1: Zur Aufnahme von Interfaces und Controller

### Führung der Peripherie-Signale über den A- oder D-Adapter zum Stecker ST A1 und ST A2

**Der Stecker ST A2 wird auch vom Einbauplatz 12 benutzt.**

**ST A1 75-poliger AMP-Stecker (75 Punkte belegt)**

**ST A2 26-poliger AMP-Stecker (25 Punkte belegt)**

# I 1

| ST 5 | STECKER J1 |           |    |     |            |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | ST 5 |
|------|------------|-----------|----|-----|------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|------|
|      | 1          | ØV        |    | 51  | ØV         |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |      |
|      | 2          | ØV        |    | 52  | ØV         |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |      |
|      | 3          | ØV        |    | 53  | ØV         |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |      |
|      | 4          |           |    | 54  | I-N        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |      |
|      | 5          | ③ I-GE IN |    | 55  | I-GE OUT ⑤ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |      |
|      | 6          | ④ I-Q OUT |    | 56  | I-Q IN ⑥   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |      |
|      | 7          | I-S13     |    | 57  | I-A18      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |      |
|      | 8          | I-S14     |    | 58  | I-A19      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |      |
|      | 9          | I-S13     |    | 59  | I-A09      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |      |
|      | 10         | I-S12     |    | 60  | I-A08      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |      |
|      | 11         | I-S11     |    | 61  | I-A07      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |      |
|      | 12         | I-S10     |    | 62  | I-A12      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |      |
|      | 13         | I-S09     |    | 63  | I-A11      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |      |
|      | 14         | I-S08     |    | 64  | I-A10      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |      |
| 130  | 15         |           | 2  | 65  | I-FE       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |      |
| 49   | 16         |           | 3  | 66  | I-A04      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |      |
| 50   | 17         | ST C13    | 6  | 67  |            |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |      |
| 127  | 18         |           | 7  | 68  |            |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |      |
| 129  | 19         |           | 11 | 69  | I-A17      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |      |
| 46   | 20         |           | 20 | 70  | I-A05      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |      |
| 48   | 21         |           | 14 | 71  | I-BE       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |      |
| 47   | 22         |           | 2  | 72  | I-A06      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |      |
| 128  | 23         |           | 3  | 73  | I-A01      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |      |
| 60   | 24         |           | 13 | 74  | I-A02      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |      |
| 139  | 25         |           | 12 | 75  | I-A16      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |      |
| 59   | 26         |           | 6  | 76  |            |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |      |
| 140  | 27         |           | 7  | 77  |            |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |      |
| 58   | 28         |           | 24 | 78  | I-A03      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |      |
| 57   | 29         |           | 10 | 79  | I-A13      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |      |
| 137  | 30         |           | 23 | 80  |            |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |      |
| 56   | 31         |           | 11 | 81  |            |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |      |
| 136  | 32         |           | 9  | 82  |            |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |      |
| 135  | 33         |           | 8  | 83  |            |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |      |
| 55   | 34         | ST C16    | 25 | 84  | I-A15      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |      |
| 54   | 35         |           | 19 | 85  |            |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |      |
| 134  | 36         |           | 5  | 86  |            |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |      |
| 53   | 37         |           | 18 | 87  |            |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |      |
| 52   | 38         |           | 4  | 88  | I-A00      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |      |
| 133  | 39         |           | 17 | 89  | I-S05      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |      |
| 132  | 40         |           | 20 | 90  | I-S01      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |      |
| 51   | 41         |           | 21 | 91  | I-S02      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |      |
| 131  | 42         |           | 22 | 92  | I-S03      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |      |
| 126  | 43         |           | 16 | 93  | I-A14      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |      |
| 45   | 44         |           | 15 | 94  | I-S04      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |      |
| 125  | 45         |           | 1  | 95  | I-S05      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |      |
| 44   | 46         | ST C13    | 21 | 96  | I-S06      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |      |
| 124  | 47         |           | 22 | 97  | I-S07      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |      |
|      | 48         |           |    | 98  |            |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |      |
|      | 49         | + 5V      |    | 99  | + 5V       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |      |
|      | 50         | + 5V      |    | 100 | + 5V       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |      |

| ST 5 | STECKER J2 |         |    |     |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | ST 5 |
|------|------------|---------|----|-----|--------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|------|
|      | 1          | + 5V    |    | 51  | + 5V   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |      |
|      | 2          | + 5V    |    | 52  | + 5V   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |      |
|      | 3          |         | 2  | 53  | I-D01  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |      |
| 62   | 4          |         | 3  | 54  | I-D02  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |      |
| 150  | 5          | ST C15  | 6  | 55  | I-D03  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |      |
| 143  | 6          |         | 7  | 56  | I-D18  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |      |
| 70   | 7          |         | 11 | 57  | I-D08  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |      |
| 63   | 8          |         | 20 | 58  | I-D07  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |      |
| 151  | 9          |         | 21 | 59  | I-D09  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |      |
| 144  | 10         |         | 22 | 60  | I-D04  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |      |
| 71   | 11         |         | 1  | 61  | I-D05  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |      |
| 64   | 12         |         | 2  | 62  | I-D02  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |      |
| 152  | 13         |         | 3  | 63  | I-D17  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |      |
| 145  | 14         |         | 4  | 64  |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |      |
| 72   | 15         |         | 5  | 65  |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |      |
| 65   | 16         |         | 6  | 66  | I-D16  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |      |
| 153  | 17         |         | 7  | 67  |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |      |
| 146  | 18         |         | 8  | 68  | I-ADS  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |      |
| 73   | 19         |         | 9  | 69  | AS-1   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |      |
| 66   | 20         |         | 10 | 70  | I-D13  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |      |
| 154  | 21         |         | 11 | 71  | AS-2   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |      |
| 147  | 22         |         | 12 | 72  | AS-4   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |      |
| 74   | 23         | ST C18  | 13 | 73  | AS-8   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |      |
| 67   | 24         |         | 14 | 74  | I-D14  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |      |
| 69   | 25         |         | 15 | 75  | I-D13  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |      |
| 142  | 26         |         | 16 | 76  | IFT    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |      |
| 149  | 27         |         | 17 | 77  | I-L/S  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |      |
| 61   | 28         |         | 18 | 78  | I-B/W  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |      |
| 68   | 29         |         | 19 | 79  |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |      |
| 141  | 30         |         | 20 | 80  |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |      |
| 148  | 31         |         | 21 | 81  |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |      |
| 80   | 32         |         | 22 | 82  | ST C17 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |      |
| 160  | 33         |         | 23 | 83  |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |      |
| 79   | 34         |         | 24 | 84  |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |      |
| 159  | 35         |         | 25 | 85  | I-D12  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |      |
| 78   | 36         |         |    | 86  | FE-DIS |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |      |
|      | 37         |         |    | 87  | BE-DIS |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |      |
|      | 38         |         |    | 88  | I-D11  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |      |
|      | 39         |         |    | 89  | I-D10  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |      |
|      | 40         |         |    | 90  |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |      |
|      | 41         |         |    | 91  |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |      |
|      | 42         |         |    | 92  |        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |      |
|      | 43         | SEL-31  |    | 93  | SEL-32 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |      |
|      | 44         | ADR-DIS |    | 94  | CLK-40 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |      |
|      | 45         | ØV      |    | 95  | ØV     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |      |
|      | 46         | - 12V   |    | 96  | - 12V  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |      |
|      | 47         | + 12V   |    | 97  | + 12V  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |      |
|      | 48         | ØV      |    | 98  | ØV     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |      |
|      | 49         | ØV      |    | 99  | ØV     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |      |
|      | 50         | ØV      |    | 100 | ØV     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |      |

Peripherie-Einbauplatz I1: Zur Aufnahme eines Multiinterfaces oder Interface-Trägers

Führung der Peripherie-Signale über den DC-Adapter

- ST C13 25-pol. CANNON-Stecker ( 8 Punkte belegt (V24) )
- ST C15 " " " ( 8 Punkte belegt (V24) )
- ST C16 " " " ( 25 Punkte belegt )
- ST C17 " " " ( 8 Punkte belegt (V24) )
- ST C18 " " " ( 25 Punkte belegt )

|                            |          |                            |         |                                     |         |
|----------------------------|----------|----------------------------|---------|-------------------------------------|---------|
| Benennung: MOTHER BOARD X2 |          | Peripherie Einbauplatz I 1 |         | Führung der Signale über DC-Adapter |         |
| Gez                        | 21.12.77 | Kibedi                     | 29.5.78 | Komm.-Nr                            |         |
| C7                         | 4.73     | C5                         | 26.5.78 | C4                                  | 20.2.78 |
| C3                         | 18.1.78  | C2                         | 18.1.78 | C1                                  | 18.1.78 |
| Zust.                      |          | Änderung                   |         | Name                                |         |
| 4                          |          | 5                          |         | 6                                   |         |
| 7                          |          | 8                          |         | 9                                   |         |
| 10                         |          | 11                         |         | 12                                  |         |
| 13                         |          | 14                         |         | 15                                  |         |
| 16                         |          | 17                         |         | 18                                  |         |
| 19                         |          | 20                         |         | 21                                  |         |
| 22                         |          | 23                         |         | 24                                  |         |
| 25                         |          | 26                         |         | 27                                  |         |
| 28                         |          | 29                         |         | 30                                  |         |
| 31                         |          | 32                         |         | 33                                  |         |
| 34                         |          | 35                         |         | 36                                  |         |
| 37                         |          | 38                         |         | 39                                  |         |
| 40                         |          | 41                         |         | 42                                  |         |
| 43                         |          | 44                         |         | 45                                  |         |
| 46                         |          |                            |         |                                     |         |

| L                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |           | E   |            | D  |   | C  |    | B  |   | A  |    |    |   |        |    |     |   |           |    |            |   |           |    |          |   |       |    |       |   |        |    |       |   |      |    |       |    |       |    |       |    |         |    |       |    |     |    |       |    |    |    |       |    |    |    |       |    |        |    |      |    |         |    |       |    |         |    |        |  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| IOB                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    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   |       |    |    |    |    |    |    |    |    |    |    |     |    |
| <div> <div> <div> <div> <div>ST6</div> <div>STECKER J1</div> </div> <table> <tr><td>1</td><td>0V</td><td>51</td><td>0V</td></tr> <tr><td>2</td><td>0V</td><td>52</td><td>0V</td></tr> <tr><td>3</td><td>0V</td><td>53</td><td>0V</td></tr> <tr><td>4</td><td>I-GOEX</td><td>54</td><td>I-N</td></tr> <tr><td>5</td><td>① I-GE IN</td><td>55</td><td>③ I-GE OUT</td></tr> <tr><td>6</td><td>② I-Q OUT</td><td>56</td><td>④ I-Q IN</td></tr> <tr><td>7</td><td>GE-IN</td><td>57</td><td>I-AT8</td></tr> <tr><td>8</td><td>GE-OUT</td><td>58</td><td>I-AT9</td></tr> <tr><td>9</td><td>Q-IN</td><td>59</td><td>I-A05</td></tr> <tr><td>10</td><td>Q-OUT</td><td>60</td><td>I-A06</td></tr> <tr><td>11</td><td>⊥ fe/be</td><td>61</td><td>I-A07</td></tr> <tr><td>12</td><td>L/S</td><td>62</td><td>I-AT2</td></tr> <tr><td>13</td><td>BE</td><td>63</td><td>I-AT1</td></tr> <tr><td>14</td><td>FE</td><td>64</td><td>I-AT0</td></tr> <tr><td>15</td><td>DES-EX</td><td>65</td><td>I-FE</td></tr> <tr><td>16</td><td>DES-INT</td><td>66</td><td>I-A04</td></tr> <tr><td>17</td><td>EX-DADU</td><td>67</td><td>MIT -B</td></tr> <tr><td>18</td><td>INT-DADU</td><td>68</td><td>MIT -T</td></tr> <tr><td>19</td><td>GO-INT</td><td>69</td><td>I-A17</td></tr> <tr><td>20</td><td></td><td>70</td><td>I-A03</td></tr> <tr><td>21</td><td>NE</td><td>71</td><td>I-BE</td></tr> <tr><td>22</td><td>M-A01</td><td>72</td><td>I-A06</td></tr> <tr><td>23</td><td>C2.1</td><td>73</td><td>I-A01</td></tr> <tr><td>24</td><td>C4.1</td><td>74</td><td>I-A02</td></tr> <tr><td>25</td><td>C2.2</td><td>75</td><td>I-AT6</td></tr> <tr><td>26</td><td>C4.2</td><td>76</td><td>MIT -B</td></tr> <tr><td>27</td><td>C2.3</td><td>77</td><td>MIT -T</td></tr> <tr><td>28</td><td>C4.3</td><td>78</td><td>I-A03</td></tr> <tr><td>29</td><td>C2.4</td><td>79</td><td>I-AT3</td></tr> <tr><td>30</td><td>C4.4</td><td>80</td><td>MBII</td></tr> <tr><td>31</td><td>C2.5</td><td>81</td><td>GR</td></tr> <tr><td>32</td><td>C4.5</td><td>82</td><td>COOP</td></tr> <tr><td>33</td><td>C2.6</td><td>83</td><td>MBI</td></tr> <tr><td>34</td><td>C4.6</td><td>84</td><td>I-AT5</td></tr> <tr><td>35</td><td>C2.7</td><td>85</td><td>MIT</td></tr> <tr><td>36</td><td>C4.7</td><td>86</td><td>MI</td></tr> <tr><td>37</td><td>SV-NETZ</td><td>87</td><td>I-A01</td></tr> <tr><td>38</td><td>UR-START</td><td>88</td><td>I-A05</td></tr> <tr><td>39</td><td>I-S05</td><td>89</td><td></td></tr> <tr><td>40</td><td>I-S11</td><td>90</td><td></td></tr> <tr><td>41</td><td>I-S12</td><td>91</td><td>ADOP</td></tr> <tr><td>42</td><td>I-S13</td><td>92</td><td></td></tr> <tr><td>43</td><td>I-S14</td><td>93</td><td>I-AT4</td></tr> <tr><td>44</td><td>STOP</td><td>94</td><td>BCL</td></tr> <tr><td>45</td><td>STC</td><td>95</td><td>DA</td></tr> <tr><td>46</td><td>STN</td><td>96</td><td>TIOF</td></tr> <tr><td>47</td><td>STP</td><td>97</td><td>MP</td></tr> <tr><td>48</td><td>STW</td><td>98</td><td>RP</td></tr> <tr><td>49</td><td>+ 5V</td><td>99</td><td>+ 5 V</td></tr> <tr><td>50</td><td>+ 5V</td><td>100</td><td>+ 5V</td></tr> </table> </div> <div> <div> <div> <div>ST6</div> <div>STECKER J2</div> </div> <table> <tr><td>1</td><td>+ 5V</td><td>51</td><td>+ 5V</td></tr> <tr><td>2</td><td>+ 5 V</td><td>52</td><td>+ 5V</td></tr> <tr><td>3</td><td>C2.8</td><td>53</td><td>I-D01</td></tr> <tr><td>4</td><td>C4.8</td><td>54</td><td>I-D02</td></tr> <tr><td>5</td><td>C2.9</td><td>55</td><td>I-D03</td></tr> <tr><td>6</td><td>C4.9</td><td>56</td><td>I-D18</td></tr> <tr><td>7</td><td>C2.10</td><td>57</td><td>I-D06</td></tr> <tr><td>8</td><td>C4.10</td><td>58</td><td>I-D07</td></tr> <tr><td>9</td><td>C2.11</td><td>59</td><td>I-D05</td></tr> <tr><td>10</td><td>C4.11</td><td>60</td><td>I-D04</td></tr> <tr><td>11</td><td>C2.12</td><td>61</td><td>I-D03</td></tr> <tr><td>12</td><td>C4.12</td><td>62</td><td>I-D02</td></tr> <tr><td>13</td><td>C2.13</td><td>63</td><td>I-D17</td></tr> <tr><td>14</td><td>C4.13</td><td>64</td><td>C1.2</td></tr> <tr><td>15</td><td>C2.14</td><td>65</td><td>C1.3</td></tr> <tr><td>16</td><td>C4.14</td><td>66</td><td>I-D16</td></tr> <tr><td>17</td><td>C2.15</td><td>67</td><td>C1.6</td></tr> <tr><td>18</td><td>C4.15</td><td>68</td><td>C1.7</td></tr> <tr><td>19</td><td>C2.16</td><td>69</td><td>C1.11</td></tr> <tr><td>20</td><td>C4.16</td><td>70</td><td>I-D13</td></tr> <tr><td>21</td><td>C2.17</td><td>71</td><td>C1.20</td></tr> <tr><td>22</td><td>C4.17</td><td>72</td><td>C1.21</td></tr> <tr><td>23</td><td>C2.18</td><td>73</td><td>C1.22</td></tr> <tr><td>24</td><td>C4.18</td><td>74</td><td>I-D14</td></tr> <tr><td>25</td><td>C2.19</td><td>75</td><td>I-D13</td></tr> <tr><td>26</td><td>C4.19</td><td>76</td><td>IFT</td></tr> <tr><td>27</td><td>C2.20</td><td>77</td><td>I-L/S</td></tr> <tr><td>28</td><td>C4.20</td><td>78</td><td>I-B/W</td></tr> <tr><td>29</td><td>C2.21</td><td>79</td><td>C4.21</td></tr> <tr><td>30</td><td>C2.22</td><td>80</td><td>C4.22</td></tr> <tr><td>31</td><td>C2.23</td><td>81</td><td>C4.23</td></tr> <tr><td>32</td><td>C2.24</td><td>82</td><td>C4.24</td></tr> <tr><td>33</td><td>C2.25</td><td>83</td><td>C4.25</td></tr> <tr><td>34</td><td>I-ADS</td><td>84</td><td>0V X1/X2</td></tr> <tr><td>35</td><td>K-AKTIV</td><td>85</td><td>I-D12</td></tr> <tr><td>36</td><td>K-3FF</td><td>86</td><td>FE-DIS</td></tr> <tr><td>37</td><td>K-CLK</td><td>87</td><td>BE-DIS</td></tr> <tr><td>38</td><td>SEL-AP</td><td>88</td><td>I-D11</td></tr> <tr><td>39</td><td>K-B5 END</td><td>89</td><td>I-D10</td></tr> <tr><td>40</td><td>SEL PMM1</td><td>90</td><td>SEL PMM2</td></tr> <tr><td>41</td><td>SEL-32</td><td>91</td><td>SEL-3T</td></tr> <tr><td>42</td><td>SEL-22</td><td>92</td><td>SEL-2T</td></tr> <tr><td>43</td><td>SEL-Y2</td><td>93</td><td>SEL-TT</td></tr> <tr><td>44</td><td>ADR-DIS</td><td>94</td><td>CLK-40</td></tr> <tr><td>45</td><td>0V</td><td>95</td><td>0V</td></tr> <tr><td>46</td><td>- 12V</td><td>96</td><td>- 12V</td></tr> <tr><td>47</td><td>+ 12V</td><td>97</td><td>+ 12V</td></tr> <tr><td>48</td><td>0V</td><td>98</td><td>0V</td></tr> <tr><td>49</td><td>0V</td><td>99</td><td>0V</td></tr> <tr><td>50</td><td>0V</td><td>100</td><td>0V</td></tr> </table> </div> </div> </div> <div> <div> <div> <div>Benennung</div> <div>MOTHER BOARD X2</div> </div> <div> <div>Einbauplatz</div> <div>IOB</div> </div> <div> <div>Input / Output-Board</div> </div> </div> <div> <div> <div>Zeichn./Sach.-Nr.</div> <div>6606110</div> </div> <div> <div>Blatt</div> <div>14</div> </div> <div> <div>Blatt</div> <div>22</div> </div> </div> <div> <div> <div>Gez.</div> <div>19.12.77</div> </div> <div> <div>Kl. bed.</div> <div>10</div> </div></div></div></div> | 1         | 0V  | 51         | 0V | 2 | 0V | 52 | 0V | 3 | 0V | 53 | 0V | 4 | I-GOEX | 54 | I-N | 5 | ① I-GE IN | 55 | ③ I-GE OUT | 6 | ② I-Q OUT | 56 | ④ I-Q IN | 7 | GE-IN | 57 | I-AT8 | 8 | GE-OUT | 58 | I-AT9 | 9 | Q-IN | 59 | I-A05 | 10 | Q-OUT | 60 | I-A06 | 11 | ⊥ fe/be | 61 | I-A07 | 12 | L/S | 62 | I-AT2 | 13 | BE | 63 | I-AT1 | 14 | FE | 64 | I-AT0 | 15 | DES-EX | 65 | I-FE | 16 | DES-INT | 66 | I-A04 | 17 | EX-DADU | 67 | MIT -B | 18 | INT-DADU | 68 | MIT -T | 19 | GO-INT | 69 | I-A17 | 20 |  | 70 | I-A03 | 21 | NE | 71 | I-BE | 22 | M-A01 | 72 | I-A06 | 23 | C2.1 | 73 | I-A01 | 24 | C4.1 | 74 | I-A02 | 25 | C2.2 | 75 | I-AT6 | 26 | C4.2 | 76 | MIT -B | 27 | C2.3 | 77 | MIT -T | 28 | C4.3 | 78 | I-A03 | 29 | C2.4 | 79 | I-AT3 | 30 | C4.4 | 80 | MBII | 31 | C2.5 | 81 | GR | 32 | C4.5 | 82 | COOP | 33 | C2.6 | 83 | MBI | 34 | C4.6 | 84 | I-AT5 | 35 | C2.7 | 85 | MIT | 36 | C4.7 | 86 | MI | 37 | SV-NETZ | 87 | I-A01 | 38 | UR-START | 88 | I-A05 | 39 | I-S05 | 89 |  | 40 | I-S11 | 90 |  | 41 | I-S12 | 91 | ADOP | 42 | I-S13 | 92 |  | 43 | I-S14 | 93 | I-AT4 | 44 | STOP | 94 | BCL | 45 | STC | 95 | DA | 46 | STN | 96 | TIOF | 47 | STP | 97 | MP | 48 | STW | 98 | RP | 49 | + 5V | 99 | + 5 V | 50 | + 5V | 100 | + 5V | 1 | + 5V | 51 | + 5V | 2 | + 5 V | 52 | + 5V | 3 | C2.8 | 53 | I-D01 | 4 | C4.8 | 54 | I-D02 | 5 | C2.9 | 55 | I-D03 | 6 | C4.9 | 56 | I-D18 | 7 | C2.10 | 57 | I-D06 | 8 | C4.10 | 58 | I-D07 | 9 | C2.11 | 59 | I-D05 | 10 | C4.11 | 60 | I-D04 | 11 | C2.12 | 61 | I-D03 | 12 | C4.12 | 62 | I-D02 | 13 | C2.13 | 63 | I-D17 | 14 | C4.13 | 64 | C1.2 | 15 | C2.14 | 65 | C1.3 | 16 | C4.14 | 66 | I-D16 | 17 | C2.15 | 67 | C1.6 | 18 | C4.15 | 68 | C1.7 | 19 | C2.16 | 69 | C1.11 | 20 | C4.16 | 70 | I-D13 | 21 | C2.17 | 71 | C1.20 | 22 | C4.17 | 72 | C1.21 | 23 | C2.18 | 73 | C1.22 | 24 | C4.18 | 74 | I-D14 | 25 | C2.19 | 75 | I-D13 | 26 | C4.19 | 76 | IFT | 27 | C2.20 | 77 | I-L/S | 28 | C4.20 | 78 | I-B/W | 29 | C2.21 | 79 | C4.21 | 30 | C2.22 | 80 | C4.22 | 31 | C2.23 | 81 | C4.23 | 32 | C2.24 | 82 | C4.24 | 33 | C2.25 | 83 | C4.25 | 34 | I-ADS | 84 | 0V X1/X2 | 35 | K-AKTIV | 85 | I-D12 | 36 | K-3FF | 86 | FE-DIS | 37 | K-CLK | 87 | BE-DIS | 38 | SEL-AP | 88 | I-D11 | 39 | K-B5 END | 89 | I-D10 | 40 | SEL PMM1 | 90 | SEL PMM2 | 41 | SEL-32 | 91 | SEL-3T | 42 | SEL-22 | 92 | SEL-2T | 43 | SEL-Y2 | 93 | SEL-TT | 44 | ADR-DIS | 94 | CLK-40 | 45 | 0V | 95 | 0V | 46 | - 12V | 96 | - 12V | 47 | + 12V | 97 | + 12V | 48 | 0V | 98 | 0V | 49 | 0V | 99 | 0V | 50 | 0V | 100 | 0V |
| 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 0V        | 52  | 0V         |    |   |    |    |    |   |    |    |    |   |        |    |     |   |           |    |            |   |           |    |          |   |       |    |       |   |        |    |       |   |      |    |       |    |       |    |       |    |         |    |       |    |     |    |       |    |    |    |       |    |    |    |       |    |        |    |      |    |         |    |       |    |         |    |        |  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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | ① I-GE IN | 55  | ③ I-GE OUT |    |   |    |    |    |   |    |    |    |   |        |    |     |   |           |    |            |   |           |    |          |   |       |    |       |   |        |    |       |   |      |    |       |    |       |    |       |    |         |    |       |    |     |    |       |    |    |    |       |    |    |    |       |    |        |    |      |    |         |    |       |    |         |    |        |  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| 6                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      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   |       |    |    |    |    |    |    |    |    |    |    |     |    |
| 48                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 0V        | 98  | 0V         |    |   |    |    |    |   |    |    |    |   |        |    |     |   |           |    |            |   |           |    |          |   |       |    |       |   |        |    |       |   |      |    |       |    |       |    |       |    |         |    |       |    |     |    |       |    |    |    |       |    |    |    |       |    |        |    |      |    |         |    |       |    |         |    |        |  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   |       |    |    |    |    |    |    |    |    |    |    |     |    |
| 49                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 0V        | 99  | 0V         |    |   |    |    |    |   |    |    |    |   |        |    |     |   |           |    |            |   |           |    |          |   |       |    |       |   |        |    |       |   |      |    |       |    |       |    |       |    |         |    |       |    |     |    |       |    |    |    |       |    |    |    |       |    |        |    |      |    |         |    |       |    |         |    |        |  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   |       |    |    |    |    |    |    |    |    |    |    |     |    |
| 50                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 0V        | 100 | 0V         |    |   |    |    |    |   |    |    |    |   |        |    |     |   |           |    |            |   |           |    |          |   |       |    |       |   |        |    |       |   |      |    |       |    |       |    |       |    |         |    |       |    |     |    |       |    |    |    |       |    |    |    |       |    |        |    |      |    |         |    |       |    |         |    |        |  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   |       |    |    |    |    |    |    |    |    |    |    |     |    |

### 2.1.10



# CPU

## STECKER J1

|    |           |     |          |
|----|-----------|-----|----------|
| 1  | 0V        | 51  | 0V       |
| 2  | 0V        | 52  | 0V       |
| 3  | 0V        | 53  | 0V       |
| 4  | I-N       | 54  | I-S08    |
| 5  | I-GE IN   | 55  | I-S09    |
| 6  | I-Q OUT   | 56  | I-S10    |
| 7  | I-A18     | 57  | I-S15    |
| 8  | I-A19     | 58  | I-S14    |
| 9  | I-A09     | 59  | I-S13    |
| 10 | I-A08     | 60  | I-S11    |
| 11 | I-A07     | 61  | P-D10    |
| 12 | I-A12     | 62  | P-D11    |
| 13 | I-A11     | 63  | P-D12    |
| 14 | I-A10     | 64  | P-D13    |
| 15 | I-FE      | 65  | I-S12    |
| 16 | I-A04     | 66  | P-D14    |
| 17 | K-DUADR   | 67  | P-D15    |
| 18 | K-RLMR    | 68  | P-D16    |
| 19 | I-A17     | 69  | K-RMB    |
| 20 | I-A05     | 70  | P-D17    |
| 21 | I-BE      | 71  | P-D18    |
| 22 | I-A06     | 72  | P-D09    |
| 23 | I-A01     | 73  | P-D01    |
| 24 | I-A02     | 74  | P-D02    |
| 25 | I-A16     | 75  | K-SYN    |
| 26 | K-RLML    | 76  | P-D03    |
| 27 | K-RLNR    | 77  | P-D04    |
| 28 | I-A03     | 78  | P-D05    |
| 29 | I-A13     | 79  | P-D06    |
| 30 | PMM J1 80 | 80  | M-LDCL   |
| 31 | K-RLNL    | 81  | P-D07    |
| 32 | K-RSTB    | 82  | P-D08    |
| 33 | K-RS08    | 83  | P-PE     |
| 34 | I-A15     | 84  | K-PROG   |
| 35 | K-RLP     | 85  | M-GKP-EN |
| 36 | K-LOADQ   | 86  | M-RCON   |
| 37 | K-RBKC    | 87  | M-CRE    |
| 38 | I-A00     | 88  | K-RMA    |
| 39 | K-RKB     | 89  | I-S00    |
| 40 | K-RBKA    | 90  | I-S01    |
| 41 | K-RAS0    | 91  | I-S02    |
| 42 | K-RAS2    | 92  | I-S03    |
| 43 | I-A14     | 93  | K-MDIS   |
| 44 | STOP      | 94  | I-S04    |
| 45 | STC       | 95  | I-S05    |
| 46 | STN       | 96  | I-S06    |
| 47 | STP       | 97  | I-S07    |
| 48 | STW       | 98  | K-RMA    |
| 49 | + 5V      | 99  | + 5V     |
| 50 | + 5V      | 100 | + 5V     |

## STECKER J2

|    |          |     |            |
|----|----------|-----|------------|
| 1  | + 5V     | 51  | + 5V       |
| 2  | + 5V     | 52  | + 5V       |
| 3  | I-D01    | 53  | K-RREG     |
| 4  | I-D00    | 54  | M-NL7      |
| 5  | I-D08    | 55  | M-ML6      |
| 6  | I-D18    | 56  | M-ML7      |
| 7  | I-D06    | 57  | M-MMEN     |
| 8  | I-D07    | 58  | M-WMM      |
| 9  | I-D05    | 59  | M-DS-LEV   |
| 10 | I-D04    | 60  | M-MK8      |
| 11 | I-D03    | 61  | M-MK9      |
| 12 | I-D02    | 62  | M-MK10     |
| 13 | I-D17    | 63  | M-MK11     |
| 14 | K-NA     | 64  | P-A00      |
| 15 | K-B5     | 65  | M-MK12     |
| 16 | I-D16    | 66  | P-A01      |
| 17 | K-CNP    | 67  | P-A02      |
| 18 | K-MM     | 68  | P-A03      |
| 19 | I-LT     | 69  | P-A04      |
| 20 | I-D15    | 70  | P-A05      |
| 21 | I-L2     | 71  | P-A06      |
| 22 | I-L4     | 72  | M-MK13     |
| 23 | I-L8     | 73  | P-A07      |
| 24 | I-D14    | 74  | P-A08      |
| 25 | I-D13    | 75  | P-A09      |
| 26 | IFT      | 76  | K-G5       |
| 27 | I-L5     | 77  | P-A10      |
| 28 | I-B/W    | 78  | P-A11      |
| 29 | M-LDR    | 79  | P-SEL      |
| 30 | M-P4     | 80  | P-RP       |
| 31 | M-P5     | 81  | M-MK14     |
| 32 | POOL-DIS | 82  | P-RDY      |
| 33 | M-SPR8   | 83  | P-BUSY     |
| 34 | M-BUSD   | 84  | P-RWS      |
| 35 | I-D12    | 85  | M-MK15     |
| 36 | M-NL6    | 86  | PMM J2 86  |
| 37 | I-A05    | 87  | BE-DIS     |
| 38 | I-D11    | 88  | K-CPU BUSY |
| 39 | I-D10    | 89  | K-SC       |
| 40 | K-C0     | 90  | K-C2       |
| 41 | K-C1     | 91  | K-C3       |
| 42 | K-CLK 80 | 92  | CLK-CPU    |
| 43 | clk-40   | 93  | K-C4       |
| 44 | ARD-DIS  | 94  | K-C5       |
| 45 | 0V       | 95  | 0V         |
| 46 | - 12V    | 96  | - 12V      |
| 47 | + 12V    | 97  | + 12V      |
| 48 | 0V       | 98  | 0V         |
| 49 | 0V       | 99  | 0V         |
| 50 | 0V       | 100 | 0V         |

Central-Prozessor Unit Einbauplatz

\* Reserve-Leitungen

Benennung: MOTHER BOARD X2  
Einbauplatz für CPU

| Name | Datum    | Gez. | Gepr. | Komm.-Nr. | Computer SYSTEME |
|------|----------|------|-------|-----------|------------------|
|      | 9.12.77  |      |       |           |                  |
|      | 11.10.78 |      |       |           |                  |
|      | 26.5.78  |      |       |           |                  |
|      | 20.2.78  |      |       |           |                  |
|      | 18.1.78  |      |       |           |                  |
|      | 3.10.77  |      |       |           |                  |
|      | 14.9.77  |      |       |           |                  |

| Zeich.-Art. | Ind. | Blatt |
|-------------|------|-------|
| B           | 14   | 22    |

# PMM

## STECKER J1

|    |          |     |           |
|----|----------|-----|-----------|
| 1  | 0V       | 51  | 0V        |
| 2  | 0V       | 52  | 0V        |
| 3  | 0V       | 53  | 0V        |
| 4  | I-N      | 54  | I-S09     |
| 5  |          | 55  | I-S10     |
| 6  |          | 56  | I-S15     |
| 7  | I-A18    | 57  | I-S14     |
| 8  | I-A19    | 58  | I-S13     |
| 9  | I-A09    | 59  | I-S12     |
| 10 | I-A08    | 60  | I-S11     |
| 11 | I-A07    | 61  | P-D10     |
| 12 | I-A12    | 62  | P-D11     |
| 13 | I-A11    | 63  | P-D12     |
| 14 | I-A10    | 64  | P-D13     |
| 15 | I-FE     | 65  | I-S08     |
| 16 | I-A04    | 66  | P-D14     |
| 17 | MII-T    | 67  | P-D15     |
| 18 | MII-T    | 68  | P-D16     |
| 19 | I-A17    | 69  | K-RMB     |
| 20 | I-A05    | 70  | P-D17     |
| 21 |          | 71  | P-D18     |
| 22 | I-A06    | 72  | P-D00     |
| 23 | I-A01    | 73  | P-D01     |
| 24 | I-A02    | 74  | P-D02     |
| 25 | I-A16    | 75  |           |
| 26 |          | 76  | P-D03     |
| 27 |          | 77  | P-D04     |
| 28 | I-A03    | 78  | P-D05     |
| 29 | I-A13    | 79  | P-D06     |
| 30 | M-LDCL   | 80  | CPU J1 30 |
| 31 |          | 81  | P-D07     |
| 32 |          | 82  | P-D08     |
| 33 |          | 83  | P-PE      |
| 34 | I-A15    | 84  |           |
| 35 | M-GKP-EN | 85  | MII       |
| 36 | M-RCON   | 86  | MI        |
| 37 | M-CRE    | 87  |           |
| 38 | I-A00    | 88  |           |
| 39 | I-S00    | 89  |           |
| 40 | I-S01    | 90  |           |
| 41 | I-S02    | 91  |           |
| 42 | I-S03    | 92  |           |
| 43 | I-A14    | 93  |           |
| 44 | I-S04    | 94  | BCL       |
| 45 | I-S05    | 95  | DA        |
| 46 | I-S06    | 96  | TTOP      |
| 47 | I-S07    | 97  | MP        |
| 48 | RMA      | 98  | RP        |
| 49 | + 5V     | 99  | + 5V      |
| 50 | + 5V     | 100 | + 5V      |

## STECKER J2

|    |           |     |            |
|----|-----------|-----|------------|
| 1  | + 5V      | 51  | + 5V       |
| 2  | + 5V      | 52  | + 5V       |
| 3  | I-D01     | 53  | K-RREG     |
| 4  | I-D00     | 54  | M-NL7      |
| 5  | I-D08     | 55  | M-ML6      |
| 6  | I-D18     | 56  | M-ML7      |
| 7  | I-D06     | 57  | M-MMEN     |
| 8  | I-D07     | 58  | M-WMM      |
| 9  | I-D05     | 59  | M-DS-L EV  |
| 10 | I-D04     | 60  | M-MK8      |
| 11 | I-D03     | 61  | M-MK9      |
| 12 | I-D02     | 62  | M-MK10     |
| 13 | I-D17     | 63  | M-MK11     |
| 14 | K-NA      | 64  | P-A00      |
| 15 | K-B5      | 65  | M-MK12     |
| 16 | I-D16     | 66  | P-A01      |
| 17 | K-CNP     | 67  | P-A02      |
| 18 | K-MM      | 68  | P-A03      |
| 19 | I-L1      | 69  | P-A04      |
| 20 | I-D15     | 70  | P-A05      |
| 21 | I-L2      | 71  | P-A06      |
| 22 | I-L4      | 72  | M-MK13     |
| 23 | I-L8      | 73  | P-A07      |
| 24 | I-D14     | 74  | P-A08      |
| 25 | I-D13     | 75  | P-A09      |
| 26 | IFT       | 76  | K-G5       |
| 27 | I-L/S     | 77  | P-A10      |
| 28 | I-B/W     | 78  | P-A11      |
| 29 | M-LDR     | 79  | P-SEL      |
| 30 | M-P 4     | 80  | P-RP       |
| 31 | M-P 5     | 81  | M-MK14     |
| 32 | POOL-DIS  | 82  | P-RDY      |
| 33 | M-SPR8    | 83  | P-BUSY     |
| 34 | M-BUSZ    | 84  | P-RWS      |
| 35 | I-D12     | 85  | M-MK15     |
| 36 | M-NL6     | 86  | CPU J2 86  |
| 37 | I-ADS     | 87  | BE-DIS     |
| 38 | I-D11     | 88  | K-CPU BUSY |
| 39 | I-D10     | 89  | K-SC       |
| 40 | SEL PMM 2 | 90  | SEL PMM 1  |
| 41 | CLK-CPU   | 91  | ADR-DIS    |
| 42 | 0V        | 92  | 0V         |
| 43 | + 5V2     | 93  | + 5 V2     |
| 44 | + 5 V2    | 94  | + 5 V2     |
| 45 | 0V        | 95  | 0V         |
| 46 | - 12V     | 96  | - 12V      |
| 47 | + 12V     | 97  | + 12 V     |
| 48 | 0V        | 98  | 0V         |
| 49 | 0V        | 99  | 0V         |
| 50 | 0V        | 100 | 0V         |

Pool und Memory-Manager Einbauplatz

★ Reserve-Leitungen

Benennung MOTHER BOARD X2  
Einbauplatz für PMM  
Pool und Memory Manager

| Gez | Datum    | Name | Kibedi | Gepr | 4.11.77 | Komm-Nr |
|-----|----------|------|--------|------|---------|---------|
| C7  | 19.12.77 |      |        |      |         |         |
| C5  | 11.10.78 |      |        |      |         |         |
| C4  | 26.5.78  |      |        |      |         |         |
| C3  | 20.2.78  |      |        |      |         |         |
| C2  | 18.1.78  |      |        |      |         |         |
| C1  | 3.10.77  |      |        |      |         |         |
|     | 14.9.77  |      |        |      |         |         |

Zeichnung / Sach-Nr  
6 6 0 6 1 0  
Blatt  
B 1 4 2 2 1 2

Computer  
SYSTEME

# M

## STECKER J1

| 621-X1 |        | KSP  | 621-X1 |       | KSP               |
|--------|--------|------|--------|-------|-------------------|
| 1      | ØV     |      | 41     | ØV    |                   |
| 2      | +5V    |      | 42     | +5V   |                   |
| 3      | -15V   |      | 43     | -15V  |                   |
| 4      | ØV     |      | 44     | ØV    |                   |
| 5      | +15V   |      | 45     | +15V  |                   |
| 6      | +5VPU  |      | 46     | I-A09 | AI08              |
| 7      | I-A 16 | TERM | 47     | I-A08 | AI07              |
| 8      |        | TERM | 48     | I-A07 | AI06              |
| 9      |        | TERM | 49     | I-A12 | AI11              |
| 10     |        | TERM | 50     | I-A11 | AI10              |
| 11     |        | TERM | 51     |       | ØV                |
| 12     |        | TERM | 52     | I-A10 | AI09              |
| 13     |        | TERM | 53     | I-A04 | AI03              |
| 14     |        | TERM | 54     |       | ØV                |
| 15     |        | TERM | 55     | I-A05 | AI04              |
| 16     |        | TERM | 56     | I-A06 | AI05              |
| 17     |        | TERM | 57     |       | ØV                |
| 18     |        | TERM | 58     | M-A01 | AI00              |
| 19     |        | TERM | 59     | I-A02 | AI01              |
| 20     |        | TERM | 60     |       | ØV                |
| 21     |        | TERM | 61     | I-A03 | AI02              |
| 22     |        | TERM | 62     | I-A13 | AI12              |
| 23     |        | TERM | 63     | GR    |                   |
| 24     |        | TERM | 64     | COOP  |                   |
| 25     |        | TERM | 65     | + 5 V | WP                |
| 26     | I-A15  | AI14 | 66     |       | ØV                |
| 27     | + 5 V  | SC   | 67     |       | ØV                |
| 28     |        | MS3  | 68     |       | DI18              |
| 29     |        | MS2  | 69     |       | DI19              |
| 30     |        | MS1  | 70     | I-A00 | AI <sub>max</sub> |
| 31     |        | BCL2 | 71     |       | D018              |
| 32     | ADOP   |      | 72     |       | D019              |
| 33     | MB X   | MB   | 73     | MX    | XAI1              |
| 34     | I-A14  | AI13 | 74     |       | XAI1              |
| 35     | BCL    | BCL1 | 75     |       | XAI2              |
| 36     | DA     |      | 76     |       | XAI2              |
| 37     | T1OP   |      | 77     | MX-I  | XAI3              |
| 38     | MP     |      | 78     |       | XAI3              |
| 39     |        | MSOP | 79     | RP    |                   |
| 40     | ØV     |      | 80     | ØV    |                   |

## STECKER J2

| 621-X1 |       | KSP  | 621-X1 |       | KSP   |
|--------|-------|------|--------|-------|-------|
| 1      | ØV    |      | 41     | ØV    |       |
| 2      |       | DI06 | 42     | I-D01 | DI01  |
| 3      |       | DI07 | 43     | I-D00 | DI00  |
| 4      |       | DI05 | 44     | I-D08 | DI08  |
| 5      |       | DI04 | 45     |       | DI17  |
| 6      | I-D06 | D006 | 46     |       | D003  |
| 7      | I-D07 | D007 | 47     |       | D002  |
| 8      | I-D05 | D005 | 48     |       | D001  |
| 9      | I-D04 | D004 | 49     |       | D000  |
| 10     | I-D03 | DI03 | 50     |       | D008  |
| 11     | I-D02 | DI02 | 51     | I-D18 | D017  |
| 12     |       | TERM | 52     | I-D17 | DI16  |
| 13     |       | TERM | 53     |       | D016  |
| 14     |       | TERM | 54     | I-D16 | D015  |
| 15     |       | TERM | 55     |       | ØV    |
| 16     |       | TERM | 56     |       | DI15  |
| 17     |       | TERM | 57     |       | DI14  |
| 18     |       | TERM | 58     | I-D15 | D014  |
| 19     |       | TERM | 59     |       | D013  |
| 20     |       | TERM | 60     |       | ØV    |
| 21     |       | TERM | 61     | I-D14 | DI13  |
| 22     |       | TERM | 62     | I-D13 | DI12  |
| 23     |       | TERM | 63     |       | D012  |
| 24     |       | TERM | 64     |       | ØV    |
| 25     |       | TERM | 65     |       | ØV    |
| 26     |       | TERM | 66     |       | ØV    |
| 27     |       | TERM | 67     |       | ØV    |
| 28     |       | TERM | 68     |       | ØV    |
| 29     |       | TERM | 69     | I-D12 | D011  |
| 30     |       | TERM | 70     |       | DI11  |
| 31     |       | TERM | 71     |       | DI10  |
| 32     |       | TERM | 72     | I-D11 | D010  |
| 33     | + 9 V | TERM | 73     |       | D009  |
| 34     | + 9 V | TERM | 74     | I-D10 | DI09  |
| 35     |       | ØV   | 75     |       | +5VPU |
| 36     | +15V  |      | 76     |       | +15V  |
| 37     | ØV    |      | 77     |       | ØV    |
| 38     | -15V  |      | 78     |       | -15V  |
| 39     | +5V   |      | 79     |       | +5V   |
| 40     | ØV    |      | 80     |       | ØV    |

Speicher-Einbauplatz Allgemein

Benennung: MOTHER BOARD X1/X2  
Speicher Einbauplatz Allgemein

| Name | Datum    | Gez. | Gepr.   | Komm.-Nr. | Alt./Sachb. | CH2.-Th. |
|------|----------|------|---------|-----------|-------------|----------|
| 7    | 11.10.78 | 7    | 26.5.78 | 20.2.78   | 18.1.78     | 3.10.77  |
| C5   |          |      |         |           |             |          |
| C4   |          |      |         |           |             |          |
| C3   |          |      |         |           |             |          |
| C2   |          |      |         |           |             |          |
| C1   |          |      |         |           |             |          |

Zeichn.-Sach.-Nr. 6160610  
Ind. 14  
Zsch.-Art. B  
Blatt 2213

# AP

## STECKER J1

### Signalnamen

621-X1

621-X1

|    |       |    |       |
|----|-------|----|-------|
| 1  | 0V    | 41 | 0V    |
| 2  | +5V   | 42 | +5V   |
| 3  | -15V  | 43 | -15V  |
| 4  | 0V    | 44 | 0V    |
| 5  | +15 V | 45 | +15 V |
| 6  |       | 46 | I-A06 |
| 7  | I-A16 | 47 | I-A08 |
| 8  | P-DI0 | 48 | I-A07 |
| 9  | P-DI1 | 49 | I-A12 |
| 10 | P-DI2 | 50 | I-A11 |
| 11 | P-DI3 | 51 | 0V    |
| 12 | P-DI4 | 52 | I-A10 |
| 13 | P-DI5 | 53 | I-A04 |
| 14 | P-DI6 | 54 | 0V    |
| 15 | P-DI7 | 55 | I-A05 |
| 16 | P-DI8 | 56 | I-A06 |
| 17 | P-DI0 | 57 | 0V    |
| 18 | P-DI1 | 58 | I-A01 |
| 19 | P-DI2 | 59 | I-A02 |
| 20 | P-DI3 | 60 | 0V    |
| 21 | P-DI4 | 61 | I-A03 |
| 22 | P-DI5 | 62 | I-A13 |
| 23 | P-DI6 | 63 |       |
| 24 | P-DI7 | 64 |       |
| 25 | P-DI8 | 65 | + 5 V |
| 26 | I-A15 | 66 | 0V    |
| 27 | + 5 V | 67 | 0V    |
| 28 |       | 68 |       |
| 29 |       | 69 |       |
| 30 |       | 70 | I-A00 |
| 31 |       | 71 |       |
| 32 | AD0P  | 72 |       |
| 33 | MBI   | 73 | MI    |
| 34 | I-A14 | 74 |       |
| 35 | BCL   | 75 |       |
| 36 | DA    | 76 | MI-0  |
| 37 | TIOF  | 77 | MI-1  |
| 38 | MP    | 78 |       |
| 39 |       | 79 | RP    |
| 40 | 0V    | 80 | 0V    |

## STECKER J2

### Signalnamen

621-X1

621-X1

|    |         |    |       |
|----|---------|----|-------|
| 1  | 0V      | 41 | 0V    |
| 2  |         | 42 | I-D01 |
| 3  |         | 43 | I-D00 |
| 4  |         | 44 | I-D08 |
| 5  |         | 45 |       |
| 6  | I-D06   | 46 |       |
| 7  | I-D07   | 47 |       |
| 8  | I-D05   | 48 |       |
| 9  | I-D04   | 49 |       |
| 10 | I-D03   | 50 |       |
| 11 | I-D02   | 51 | I-D18 |
| 12 | P-A00   | 52 | I-D17 |
| 13 | P-A01   | 53 |       |
| 14 | P-A02   | 54 | I-D16 |
| 15 | P-A03   | 55 | 0V    |
| 16 | P-A04   | 56 |       |
| 17 | P-A05   | 57 |       |
| 18 | P-A06   | 58 | I-D15 |
| 19 | P-A07   | 59 |       |
| 20 | P-A08   | 60 | 0V    |
| 21 | P-A09   | 61 | I-D14 |
| 22 | P-A10   | 62 | I-D13 |
| 23 | P-A11   | 63 |       |
| 24 | P-SEL   | 64 | 0V    |
| 25 | P-RP    | 65 | 0V    |
| 26 | P-RDY   | 66 | 0V    |
| 27 | P-BUSY  | 67 | 0V    |
| 28 | P-RWS   | 68 | 0V    |
| 29 | P-PE    | 69 | I-D12 |
| 30 | SEL-AP  | 70 |       |
| 31 | M-GKPN  | 71 |       |
| 32 | CLK-CPU | 72 | I-D11 |
| 33 | + 9V    | 73 |       |
| 34 | + 9V    | 74 | I-D10 |
| 35 | 0V      | 75 |       |
| 36 | +15V    | 76 | +15V  |
| 37 | 0V      | 77 | 0V    |
| 38 | -15V    | 78 | -15V  |
| 39 | +5V     | 79 | +5V   |
| 40 | 0V      | 80 | 0V    |

★ Signale für den Pool

Folgende Signale des AP sind auf dem Motherboard miteinander verbunden:

D100 mit D000 .... usw. bis DI17 mit D017

BCL1 mit BCL2

XAI1 mit MS1, MS2 und MS3

MOTHER BOARD X2

Einbauplatz AP

Benennung

Name

Datum

Gez

Gepr

Komm-Nr

473

11.10.78

26.5.78

20.2.78

18.1.78

3.10.77

14.9.77

2/

473

C7

C5

C4

C3

C2

C1

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**Benennung: MOTHER BOARD X2  
Speichereinbauplatz MI**

## STECKER J 2

| Signalnamen |                  |      |        |                  |                   |
|-------------|------------------|------|--------|------------------|-------------------|
| 621-X1      |                  | KSP  | 621-X1 |                  | KSP               |
| 1           | $\emptyset V$    |      | 41     | $\emptyset V$    |                   |
| 2           | +5V              |      | 42     | +5V              |                   |
| 3           | -15V             |      | 43     | -15V             |                   |
| 4           | $\emptyset V$    |      | 44     | $\emptyset V$    |                   |
| 5           | +15V             |      | 45     | +15V             |                   |
| 6           | +5VPU            |      | 46     | <del>I-A09</del> | AI08              |
| 7           | <del>I-A16</del> | TERM | 47     | <del>I-A08</del> | AI07              |
| 8           | <del>I-A07</del> | TERM | 48     | <del>I-A07</del> | AI06              |
| 9           | <del>I-A12</del> | TERM | 49     | <del>I-A12</del> | AI11              |
| 10          | <del>I-A11</del> | TERM | 50     | <del>I-A11</del> | AI10              |
| 11          | $\emptyset V$    | TERM | 51     | $\emptyset V$    |                   |
| 12          | <del>I-A10</del> | TERM | 52     | <del>I-A10</del> | AI09              |
| 13          | <del>I-A04</del> | TERM | 53     | <del>I-A04</del> | AI03              |
| 14          | <del>A04</del>   | TERM | 54     | $\emptyset V$    |                   |
| 15          | <del>I-A05</del> | TERM | 55     | <del>I-A05</del> | AI04              |
| 16          | <del>I-A06</del> | TERM | 56     | <del>I-A06</del> | AI05              |
| 17          | $\emptyset V$    | TERM | 57     | $\emptyset V$    |                   |
| 18          | <del>I-A01</del> | TERM | 58     | <del>M-A01</del> | AI00              |
| 19          | <del>I-A02</del> | TERM | 59     | <del>I-A02</del> | AI01              |
| 20          | $\emptyset V$    | TERM | 60     | $\emptyset V$    |                   |
| 21          | <del>I-A03</del> | TERM | 61     | <del>I-A03</del> | AI02              |
| 22          | <del>I-A13</del> | TERM | 62     | <del>I-A13</del> | AI12              |
| 23          | GR               | TERM | 63     | GR               |                   |
| 24          | COOP             | TERM | 64     | COOP             |                   |
| 25          | +5V              | TERM | 65     | +5V              | WP                |
| 26          | <del>I-A15</del> | AI14 | 66     | $\emptyset V$    |                   |
| 27          | +5V              | SC   | 67     | $\emptyset V$    |                   |
| 28          | MS3              |      | 68     |                  | DI18              |
| 29          | MS2              |      | 69     |                  | DI19              |
| 30          | MS1              |      | 70     | <del>I-A00</del> | AI <sub>max</sub> |
| 31          | BCL2             |      | 71     |                  | D018              |
| 32          | ADOP             |      | 72     |                  | D010              |
| 33          | MB1              | MB   | 73     | MI               | XAI1              |
| 34          | <del>I-A14</del> | AI13 | 74     |                  | XAI1              |
| 35          | BCL1             | BCL1 | 75     |                  | XAI2              |
| 36          | DA               |      | 76     | <del>MI-0</del>  | XAI2              |
| 37          | TIOP             |      | 77     | MI-1             | XAI3              |
| 38          | MP               |      | 78     |                  | XAI3              |
| 39          | MSOP             |      | 79     | RP               |                   |
| 40          | $\emptyset V$    |      | 80     |                  |                   |

| Signalnamen |               |        |               |
|-------------|---------------|--------|---------------|
| 621-X1      | KSP           | 621-X1 | KSP           |
| 1           | $\emptyset V$ | 41     | $\emptyset V$ |
| 2           | D106          | 42     | I-D01         |
| 3           | D107          | 43     | I-D00         |
| 4           | D105          | 44     | I-D08         |
| 5           | D104          | 45     |               |
| 6           | I-D06         | 46     | D003          |
| 7           | I-D07         | 47     | D002          |
| 8           | I-D05         | 48     | D001          |
| 9           | I-D04         | 49     | D000          |
| 10          | I-D03         | 50     | D008          |
| 11          | I-D02         | 51     | I-D18         |
| 12          | TERM          | 52     | I-D17         |
| 13          | TERM          | 53     |               |
| 14          | TERM          | 54     | I-D16         |
| 15          | $\emptyset V$ | 55     | $\emptyset V$ |
| 16          | TERM          | 56     |               |
| 17          | TERM          | 57     |               |
| 18          | I-D15         | 58     | I-D15         |
| 19          | TERM          | 59     |               |
| 20          | $\emptyset V$ | 60     | $\emptyset V$ |
| 21          | I-D14         | 61     | I-D14         |
| 22          | I-D13         | 62     | I-D13         |
| 23          | TERM          | 63     |               |
| 24          | $\emptyset V$ | 64     | $\emptyset V$ |
| 25          | $\emptyset V$ | 65     | $\emptyset V$ |
| 26          | $\emptyset V$ | 66     | $\emptyset V$ |
| 27          | $\emptyset V$ | 67     | $\emptyset V$ |
| 28          | $\emptyset V$ | 68     | $\emptyset V$ |
| 29          | TERM          | 69     | I-D12         |
| 30          | TERM          | 70     |               |
| 31          | TERM          | 71     |               |
| 32          | TERM          | 72     | I-D11         |
| 33          | + 9 V         | 73     |               |
| 34          | + 9 V         | 74     | I-D10         |
| 35          | $\emptyset V$ | 75     | +5VPU         |
| 36          | +15V          | 76     | +15V          |
| 37          | $\emptyset V$ | 77     | $\emptyset V$ |
| 38          | -15V          | 78     | -15V          |
| 39          | +5V           | 79     | +5 V          |
| 40          | $\emptyset V$ | 80     | $\emptyset V$ |

XAI1 mit MS1, MS2 und MS3

[illegible]

# M II

## STECKER J1

| Signalnamen |            |        |                         |
|-------------|------------|--------|-------------------------|
| 621-X1      | KSP        | 621-X1 | KSP                     |
| 1           | 0V         | 41     | 0V                      |
| 2           | +5V        | 42     | +5V                     |
| 3           | -15V       | 43     | -15V                    |
| 4           | 0V         | 44     | 0V                      |
| 5           | +15V       | 45     | +15V                    |
| 6           | +5VPU      | 46     | I-A09 AI08              |
| 7           | I-A16 TERM | 47     | I-A08 AI07              |
| 8           | I-A07 TERM | 48     | I-A07 AI06              |
| 9           | I-A12 TERM | 49     | I-A12 AI11              |
| 10          | I-A11 TERM | 50     | I-A11 AI10              |
| 11          | 0V TERM    | 51     | 0V                      |
| 12          | I-A10 TERM | 52     | I-A10 AI09              |
| 13          | I-A04 TERM | 53     | I-A04 AI03              |
| 14          | 0V TERM    | 54     | 0V                      |
| 15          | I-A05 TERM | 55     | I-A05 AI04              |
| 16          | I-A06 TERM | 56     | I-A06 AI05              |
| 17          | 0V TERM    | 57     | 0V                      |
| 18          | M-A01 TERM | 58     | M-A01 AI00              |
| 19          | I-A02 TERM | 59     | I-A02 AI01              |
| 20          | 0V TERM    | 60     | 0V                      |
| 21          | I-A03 TERM | 61     | I-A03 AI02              |
| 22          | I-A13 TERM | 62     | I-A13 AI12              |
| 23          | GR TERM    | 63     | GR                      |
| 24          | COOP TERM  | 64     | COOP                    |
| 25          | +5V TERM   | 65     | +5V WP                  |
| 26          | I-A15 AI14 | 66     | 0V                      |
| 27          | +5V SC     | 67     | 0V                      |
| 28          | MS3        | 68     | DI18                    |
| 29          | MS2        | 69     | DI19                    |
| 30          | MS1        | 70     | I-A00 AI <sub>max</sub> |
| 31          | BCL2       | 71     | D018                    |
| 32          | ADOP       | 72     | D019                    |
| 33          | MB II MB   | 73     | MII XA11                |
| 34          | I-A14 AI13 | 74     | XA11                    |
| 35          | BCL BCL1   | 75     | XA12                    |
| 36          | DA         | 76     | MII -0 XA12             |
| 37          | TIOP       | 77     | MII -1 XA13             |
| 38          | MP         | 78     | XA13                    |
| 39          | MSOP       | 79     | RP                      |
| 40          | 0V         | 80     | 0V                      |

## STECKER J2

| Signalnamen |             |        |            |
|-------------|-------------|--------|------------|
| 621-X1      | KS          | 621-X1 | KSP        |
| 1           | 0V          | 41     | 0V         |
| 2           | DI06        | 42     | I-D01 DI01 |
| 3           | DI07        | 43     | I-D00 DI00 |
| 4           | DI05        | 44     | I-D08 DI08 |
| 5           | DI04        | 45     | DI17       |
| 6           | I-D06 D006  | 46     | D003       |
| 7           | I-D07 D007  | 47     | D002       |
| 8           | I-D05 D005  | 48     | D001       |
| 9           | I-D04 D004  | 49     | D000       |
| 10          | I-D03 D003  | 50     | D008       |
| 11          | I-D02 D002  | 51     | I-D18 DI17 |
| 12          | TERM        | 52     | I-D17 DI16 |
| 13          | TERM        | 53     | D016       |
| 14          | TERM        | 54     | I-D16 D015 |
| 15          | 0V TERM     | 55     | 0V         |
| 16          | TERM        | 56     | DI15       |
| 17          | TERM        | 57     | DI14       |
| 18          | I-D15 TERM  | 58     | I-D15 D014 |
| 19          | TERM        | 59     | D013       |
| 20          | 0V TERM     | 60     | 0V         |
| 21          | I-D14 TERM  | 61     | I-D14 DI13 |
| 22          | I-D13 TERM  | 62     | I-D13 DI12 |
| 23          | I-L/S TERM  | 63     | D012       |
| 24          | 0V TERM     | 64     | 0V         |
| 25          | 0V TERM     | 65     | 0V         |
| 26          | 0V TERM     | 66     | 0V         |
| 27          | 0V TERM     | 67     | 0V         |
| 28          | 0V TERM     | 68     | 0V         |
| 29          | SEL-AP TERM | 69     | I-D12 D011 |
| 30          | TERM        | 70     | DI11       |
| 31          | TERM        | 71     | DI10       |
| 32          | TERM        | 72     | I-D11 D010 |
| 33          | +9V TERM    | 73     | D009       |
| 34          | +9V TERM    | 74     | I-D10 DI09 |
| 35          | 0V          | 75     | +5VPU      |
| 36          | +15V        | 76     | +15V       |
| 37          | 0V          | 77     | 0V         |
| 38          | -15V        | 78     | -15V       |
| 39          | +5V         | 79     | +5V        |
| 40          | 0V          | 80     | 0V         |

\* Signal für den arithmetischen Prozessor

Folgende Signale des Speichers sind auf dem Motherboard miteinander verbunden :

DI00 mit D000 .... usw. bis DI17 mit D017

BCL1 mit BCL2

XA11 mit MS1, MS2 und MS3

MOTHER BOARD X2

Speichereinbauplatz MII

| Datum    | Name | Klbedi | Gepr | Komm-Nr. |
|----------|------|--------|------|----------|
| 14.10.76 |      |        |      |          |
| 4.11.77  |      |        |      |          |
| 11.10.78 |      |        |      |          |
| 26.5.78  |      |        |      |          |
| 20.2.78  |      |        |      |          |
| 18.1.78  |      |        |      |          |
| 3.10.77  |      |        |      |          |
| 14.9.77  |      |        |      |          |

Zeichn./Sach-Nr. B 14 22 16  
Blatt 1  
Ers. d.

| STECKER 1 |                  |   |                  |
|-----------|------------------|---|------------------|
|           | A                | B | C                |
| 1         | + 5V             |   | + 5V             |
| 2         | + 5V             |   | <del>I-S07</del> |
| 3         | + 5V             |   | <del>I-S06</del> |
| 4         | + 5V             |   | <del>I-S05</del> |
| 5         | + 5V             |   | <del>I-S04</del> |
| 6         | + 5V             |   | <del>I-S00</del> |
| 7         | I-G0-EX          |   | <del>I-S01</del> |
| 8         |                  |   | <del>I-S02</del> |
| 9         | BE DIS           |   | <del>I-S08</del> |
| 10        |                  |   | <del>I-S11</del> |
| 11        | 0V               |   | <del>I-S12</del> |
| 12        |                  |   | <del>I-S09</del> |
| 13        |                  |   | <del>I-S10</del> |
| 14        |                  |   | <del>I-S15</del> |
| 15        |                  |   | <del>I-S14</del> |
| 16        |                  |   | <del>I-S13</del> |
| 17        |                  |   | <del>I-S03</del> |
| 18        |                  |   | <del>I-D05</del> |
| 19        |                  |   | <del>I-D07</del> |
| 20        |                  |   | <del>I-D06</del> |
| 21        |                  |   | <del>I-D04</del> |
| 22        |                  |   | <del>I-D03</del> |
| 23        |                  |   | <del>I-D02</del> |
| 24        |                  |   | <del>I-D01</del> |
| 25        |                  |   | <del>I-D00</del> |
| 26        |                  |   | <del>I-D17</del> |
| 27        |                  |   | <del>I-D16</del> |
| 28        |                  |   | <del>I-D15</del> |
| 29        | 0V               |   | <del>I-D14</del> |
| 30        | <del>I-D12</del> |   | <del>I-D13</del> |
| 31        | <del>I-D10</del> |   | <del>I-D11</del> |
| 32        | 0V               |   | 0V               |

| STECKER 2 |                    |   |                     |
|-----------|--------------------|---|---------------------|
|           | A                  | B | C                   |
| 1         | + 5V               |   | + 5V                |
| 2         | + 5V               |   | <del>AS-8</del>     |
| 3         | + 5V               |   | <del>AS-4</del>     |
| 4         | + 5V               |   | <del>AS-2</del>     |
| 5         | + 5V               |   | <del>AS-1</del>     |
| 6         | + 5V               |   | <del>I-ABS</del>    |
| 7         | <del>I-GEIN</del>  |   |                     |
| 8         | <del>I-QOUT</del>  |   |                     |
| 9         |                    |   |                     |
| 10        | <del>I-BE</del>    |   | <del>I-L/S</del>    |
| 11        | <del>I-FE</del>    |   | <del>I-B/W</del>    |
| 12        | <del>I-QOUT</del>  |   | <del>I-A02</del>    |
| 13        | <del>I-A01</del>   |   | <del>I-A06</del>    |
| 14        | <del>I-A05</del>   |   | <del>I-A17</del>    |
| 15        | <del>I-A04</del>   |   | <del>I-A10</del>    |
| 16        | <del>I-A11</del>   |   | <del>I-A12</del>    |
| 17        | <del>I-A07</del>   |   | <del>I-A08</del>    |
| 18        | <del>I-A09</del>   |   | <del>I-N</del>      |
| 19        | <del>I-A18</del>   |   | <del>I-A19</del>    |
| 20        | <del>I-A16</del>   |   | <del>I-A03</del>    |
| 21        | <del>I-A13</del>   |   | <del>I-A15</del>    |
| 22        | <del>I-A00</del>   |   | <del>I-A14</del>    |
| 23        |                    |   |                     |
| 24        | <del>NE</del>      |   | <del>I-STPX</del>   |
| 25        | <del>G0-INT</del>  |   | <del>MP</del>       |
| 26        | <del>EX-DADU</del> |   | <del>INT-DADU</del> |
| 27        | <del>DES-EX</del>  |   | <del>DES-INT</del>  |
| 28        | <del>BE</del>      |   | <del>FE</del>       |
| 29        | <del>I-Fe/be</del> |   | <del>L/S</del>      |
| 30        | <del>Q-IN</del>    |   | <del>Q-OUT</del>    |
| 31        | <del>GE-IN</del>   |   | <del>GE-OUT</del>   |
| 32        | 0V                 |   | 0V                  |

1  
2

10

An Stecker 2 Wrapstifte

A 23 ... bis A 32 und

C 23 ... bis C 32 kürzen

|                                                                                     |          |          |                     |                                                                    |       |
|-------------------------------------------------------------------------------------|----------|----------|---------------------|--------------------------------------------------------------------|-------|
| C7 473                                                                              |          | 11.10.78 | Gez. 11.1.77 Kibedi | Benennung MOTHER BOARD X2                                          |       |
| C5                                                                                  |          | 26.5.78  | Gepr. 4.11.77 70    | Signale zum Universal BUS Adapter                                  |       |
| C4                                                                                  |          | 20.2.78  | M. 11               |                                                                    |       |
| C3                                                                                  |          | 18.1.78  |                     |                                                                    |       |
| C2                                                                                  |          | 3.10.77  |                     |                                                                    |       |
| C1                                                                                  |          | 14.9.77  |                     |                                                                    |       |
| Zust.                                                                               | Anderung | Datum    | Name                | Abt. / Sache CH2-Th                                                |       |
|  |          |          |                     | Zeichnung / Sach-Nr. 660610 Ind. B Zch-Art. 14 Blätter 22 Blatt 17 |       |
|                                                                                     |          |          |                     | Ers f                                                              | Ers d |

| STECKER 3 |        |  |         |
|-----------|--------|--|---------|
|           | A      |  | C       |
| 1         | 0 V    |  | 0 V     |
| 2         |        |  |         |
| 3         | K-GS   |  |         |
| 4         | K-RLMR |  |         |
| 5         | K-RMA  |  | K-DUADR |
| 6         | K-PROG |  |         |
| 7         | BE-DIS |  | K-RMB   |
| 8         | P-A01  |  | P-A00   |
| 9         | P-A03  |  | P-A02   |
| 10        | P-A05  |  | P-A04   |
| 11        | P-A07  |  | P-A06   |
| 12        | P-A09  |  | P-A08   |
| 13        | P-A11  |  | P-A10   |
| 14        | P-RP   |  | P-SEL   |
| 15        | P-BUSY |  | P-RDY   |
| 16        | P-D03  |  | P-RWS   |
| 17        | P-D05  |  | P-D04   |
| 18        | P-D07  |  | P-D06   |
| 19        | P-D01  |  | P-D02   |
| 20        | P-D17  |  | P-D00   |
| 21        | P-D15  |  | P-D16   |
| 22        | P-D13  |  | P-D14   |
| 23        | P-D11  |  | P-D12   |
| 24        | 0 V    |  | P-D10   |
| 25        | I-D17  |  | I-D02   |
| 26        | I-D15  |  | I-D16   |
| 27        | I-D06  |  | I-D10   |
| 28        | I-D05  |  | I-D07   |
| 29        | I-D03  |  | I-D04   |
| 30        | I-D01  |  | I-D14   |
| 31        | I-D13  |  | I-D00   |
| 32        | I-D11  |  | I-D12   |

| STECKER 4 |            |  |          |
|-----------|------------|--|----------|
|           | A          |  | C        |
| 1         | + 5V       |  | + 5V     |
| 2         | I-A18      |  | I-A19    |
| 3         | I-A09      |  | I-A08    |
| 4         | I-A07      |  | I-A12    |
| 5         | I-A11      |  | I-A04    |
| 6         | I-A10      |  | I-N      |
| 7         | I-A06      |  | I-A01    |
| 8         | I-A02      |  | I-L/S    |
| 9         | I-A16      |  | I-A03    |
| 10        | I-A13      |  | I-A15    |
| 11        | I-A00      |  | I-A14    |
| 12        | I-A05      |  | I-A17    |
| 13        | K-SYN      |  | K-RLML   |
| 14        | K-RLNR     |  | K-RLNL   |
| 15        | K-RS1B     |  | K-RS08   |
| 16        | UR-STAR    |  | I-S00    |
| 17        | K-RLP      |  | K-STOP   |
| 18        | K-STP      |  | K-STW    |
| 19        | K-LOADG    |  | K-RBKC   |
| 20        | K-RBKB     |  | K-RBKA   |
| 21        | K-MDT5     |  |          |
| 22        | K-RAS0     |  | K-RAS2   |
| 23        | K-RREG     |  | K-NA     |
| 24        | K-BS       |  | K-CNP    |
| 25        | I-ADS      |  | K-MM     |
| 26        | K-AKTIV    |  | K-3FFF   |
| 27        | K-CLK      |  | K-BS-END |
| 28        | K-CPU BUSY |  | K-SC     |
| 29        | K-C0       |  | K-C2     |
| 30        | K-C1       |  | K-C3     |
| 31        | CLK-80     |  | CLK CPU  |
| 32        | K-C4       |  | K-C5     |

\* Reserve-Leitungen

|      |     |          |     |             |          |           |                               |  |       |  |  |  |  |
|------|-----|----------|-----|-------------|----------|-----------|-------------------------------|--|-------|--|--|--|--|
|      |     |          |     | Datum       | Name     | Benennung |                               |  |       |  |  |  |  |
| C7   | 473 | 11.10.78 | Kau | Gez         | 25.10.76 | Kibedi    | MOTHER BOARD X2               |  |       |  |  |  |  |
| C5   |     | 26.5.78  | 26  | Gep         | 4.11.77  | 78        | Signale zur Bedienungskonsole |  |       |  |  |  |  |
| C4   |     | 20.2.78  |     | Komm-Nr     |          |           |                               |  |       |  |  |  |  |
| C3   |     | 18.1.78  | 10  |             |          |           |                               |  |       |  |  |  |  |
| C2   |     | 3.10.77  | 4   |             |          |           |                               |  |       |  |  |  |  |
| C1   |     | 14.9.77  | 21  |             |          |           |                               |  |       |  |  |  |  |
| Zust |     |          |     | Anderung    |          | Datum     | Name                          |  |       |  |  |  |  |
|      |     |          |     | Abt / Sachz |          | CH2-Th    | Ers f                         |  | Ers d |  |  |  |  |
|      |     |          |     |             |          |           |                               |  |       |  |  |  |  |

**DIETZ** Computer  
SYSTEME

Zeichnung / Sach-Nr. Ind. Zch-Art. Blätter Blatt  
660610 B 14 22 18



## STECKER 6

| ST<br>6 | CANNON-<br>STECKER | ST<br>6 | CANNON-<br>STECKER | ST<br>6 | CANNON-<br>STECKER | ST<br>6 | CANNON-<br>STECKER |
|---------|--------------------|---------|--------------------|---------|--------------------|---------|--------------------|
| 1       | C7.2               | 41      | frei               | 81      | C8.1               | 121     | frei               |
| 2       | C7.3               | 42      | frei               | 82      | C8.14              | 122     | frei               |
| 3       | C7.6               | 43      | frei               | 83      | C8.2               | 123     | frei               |
| 4       | C7.7               | 44      | frei               | 84      | C8.15              | 124     | C3.7               |
| 5       | C7.11              | 45      | frei               | 85      | C8.3               | 125     | C3.6               |
| 6       | C7.20              | 46      | frei               | 86      | C8.16              | 126     | C3.3               |
| 7       | C7.21              | 47      | frei               | 87      | C8.4               | 127     | C3.2               |
| 8       | C7.22              | 48      | frei               | 88      | C8.17              | 128     | C3.20              |
| 9       | frei               | 49      | frei               | 89      | C8.5               | 129     | C3.21              |
| 10      | frei               | 50      | frei               | 90      | C8.18              | 130     | C3.22              |
| 11      | frei               | 51      | C4.14              | 91      | C8.6               | 131     | C3.11              |
| 12      | frei               | 52      | C4.15              | 92      | C8.19              | 132     | C4.1               |
| 13      | frei               | 53      | C4.16              | 93      | C8.7               | 133     | C4.2               |
| 14      | frei               | 54      | C4.17              | 94      | C8.20              | 134     | C4.3               |
| 15      | frei               | 55      | C4.18              | 95      | C8.8               | 135     | C4.4               |
| 16      | frei               | 56      | C4.19              | 96      | C8.21              | 136     | C4.5               |
| 17      | frei               | 57      | C4.20              | 97      | C8.9               | 137     | C4.6               |
| 18      | C5.2               | 58      | C4.21              | 98      | C8.22              | 138     | C4.7               |
| 19      | C5.3               | 59      | C4.22              | 99      | C8.10              | 139     | C4.8               |
| 20      | C5.6               | 60      | C4.23              | 100     | C8.23              | 140     | C4.9               |
| 21      | C5.7               | 61      | C4.24              | 101     | C8.11              | 141     | C4.10              |
| 22      | C5.11              | 62      | C4.25              | 102     | C8.24              | 142     | C4.11              |
| 23      | C5.20              | 63      | C1.11              | 103     | C8.12              | 143     | C4.12              |
| 24      | C5.21              | 64      | C1.7               | 104     | C8.25              | 144     | C4.13              |
| 25      | C5.22              | 65      | C1.6               | 105     | C8.13              | 145     | frei               |
| 26      | C6.14              | 66      | C1.3               | 106     | C6.1               | 146     | C2.8               |
| 27      | C6.15              | 67      | C1.2               | 107     | C6.2               | 147     | C2.7               |
| 28      | C6.16              | 68      | C1.20              | 108     | C6.3               | 148     | C2.6               |
| 29      | C6.17              | 69      | C1.21              | 109     | C6.4               | 149     | C2.5               |
| 30      | C6.18              | 70      | C1.22              | 110     | C6.5               | 150     | C2.4               |
| 31      | C6.19              | 71      | C2.14              | 111     | C6.6               | 151     | C2.3               |
| 32      | C6.20              | 72      | C2.15              | 112     | C6.7               | 152     | C2.2               |
| 33      | C6.21              | 73      | C2.18              | 113     | C6.8               | 153     | C2.1               |
| 34      | C6.22              | 74      | C2.19              | 114     | C6.9               | 154     | C2.16              |
| 35      | C6.23              | 75      | C2.20              | 115     | C6.10              | 155     | C2.17              |
| 36      | C6.24              | 76      | C2.21              | 116     | C6.11              | 156     | C2.9               |
| 37      | C6.25              | 77      | C2.22              | 117     | C6.12              | 157     | C2.10              |
| 38      | frei               | 78      | C2.23              | 118     | C6.13              | 158     | C2.11              |
| 39      | frei               | 79      | C2.24              | 119     | frei               | 159     | C2.12              |
| 40      | frei               | 80      | C.225              | 120     | frei               | 160     | C2.13              |

|       |          |          |      |                       |                 |                            |
|-------|----------|----------|------|-----------------------|-----------------|----------------------------|
|       |          |          |      | Datum                 | Name            | Bemerkung                  |
| C7    | 473      | 11.10.78 | Hann | Gez.                  | 25.10.76 Kibedi | MOTHER BOARD X2            |
| C5    |          | 26.5.78  | H    | Gepr.                 | 4.11.77 H       | Signale über Stecker 6 zum |
| C4    |          | 20.2.78  |      | Namen                 | H               | C-Adapter                  |
| C3    |          | 18.1.78  | L    |                       |                 |                            |
| C2    |          | 3.10.77  | J    |                       |                 |                            |
| C1    |          | 14.9.77  | H    |                       |                 |                            |
| Zust. | Anderung | Datum    | Name | Abt. / Suchz. CH2-Th. |                 | Ers. I                     |
|       |          |          |      |                       |                 | Ers. d.                    |

# STECKER 5

| ST<br>5 | AMP-<br>STECKER | ST<br>5 | AMP-<br>STECKER | ST<br>5 | AMP-<br>STECKER | ST<br>5 | AMP-<br>STECKER |
|---------|-----------------|---------|-----------------|---------|-----------------|---------|-----------------|
| 1       | A3.35           | 41      | A2.c            | 81      | A3.39           | 121     | A2.W            |
| 2       | A3.42           | 42      | A2.y            | 82      | A3.45           | 122     | A2.5            |
| 3       | A3.54           | 43      | A2.4            | 83      | A3.48           | 123     | A1.36           |
| 4       | A3.41           | 44      | A1.64           | 84      | A3.51           | 124     | A1.39           |
| 5       | A3.47           | 45      | A1.67           | 85      | A3.57           | 125     | A1.42           |
| 6       | A3.62           | 46      | A1.75           | 86      | A3.60           | 126     | A1.45           |
| 7       | A3.58           | 47      | A1.82           | 87      | A3.64           | 127     | A1.48           |
| 8       | A3.55           | 48      | A1.72           | 88      | A3.53           | 128     | A1.51           |
| 9       | A3.52           | 49      | A1.47           | 89      | A3.59           | 129     | A1.54           |
| 10      | A3.49           | 50      | A1.53           | 90      | A3.63           | 130     | A.160           |
| 11      | A3.46           | 51      | A1.77           | 91      | A3.56           | 131     | A.157           |
| 12      | A3.43           | 52      | A1.79           | 92      | A3.50           | 132     | A1.78           |
| 13      | A3.40           | 53      | A1.76           | 93      | A3.44           | 133     | A1.59           |
| 14      | A3.37           | 54      | A1.73           | 94      | A3.38           | 134     | A1.80           |
| 15      | A3.34           | 55      | A1.70           | 95      | A3.32           | 135     | A1.74           |
| 16      | A3.31           | 56      | A1.65           | 96      | A3.26           | 136     | A1.66           |
| 17      | A3.28           | 57      | A1.62           | 97      | A3.20           | 137     | A1.71           |
| 18      | A3.25           | 58      | A1.58           | 98      | A3.13           | 138     | A1.63           |
| 19      | A3.22           | 59      | A1.55           | 99      | A3.5            | 139     | A1.56           |
| 20      | A3.18           | 60      | A1.52           | 100     | A3.10           | 140     | A1.50           |
| 21      | A3.15           | 61      | A1.49           | 101     | A3.2            | 141     | A1.44           |
| 22      | A3.12           | 62      | A1.46           | 102     | A3.16           | 142     | A1.38           |
| 23      | A3.8            | 63      | A1.43           | 103     | A3.7            | 143     | A1.32           |
| 24      | A3.4            | 64      | A1.40           | 104     | A3.14           | 144     | A1.26           |
| 25      | A3.1            | 65      | A1.37           | 105     | A3.11           | 145     | A1.20           |
| 26      | A3.23           | 66      | A1.34           | 106     | A3.21           | 146     | A 1.13          |
| 27      | A3.29           | 67      | A1.31           | 107     | A3.24           | 147     | A1.16           |
| 28      | A3.3            | 68      | A1.28           | 108     | A3.27           | 148     | A1.5            |
| 29      | A3.17           | 69      | A1.25           | 109     | A3.33           | 149     | A1.10           |
| 30      | A3.30           | 70      | A1.22           | 110     | A3.36           | 150     | A1.2            |
| 31      | A2.P            | 71      | A1.18           | 111     | A2.M            | 151     | A1.14           |
| 32      |                 | 72      | A1.15           | 112     | A2.H            | 152     | A1.7            |
| 33      | A2.E            | 73      | A1.12           | 113     | A2.C            | 153     | A1.21           |
| 34      | A2.A            | 74      | A1.8            | 114     | A2.B            | 154     | A1.3            |
| 35      | A2.D            | 75      | A1.4            | 115     | A2.F            | 155     | A1.11           |
| 36      | A2.J            | 76      | A1.1            | 116     | A2.L            | 156     | A1.17           |
| 37      | A2.N            | 77      | A1.29           | 117     | A2.R            | 157     | A1.24           |
| 38      | A2.T            | 78      | A1.23           | 118     | A2.V            | 158     | A1.27           |
| 39      | A2.X            | 79      | A1.35           | 119     | A2.Z            | 159     | A1.30           |
| 40      | A2.b            | 80      | A1.41           | 120     | A2.6            | 160     | A1.33           |

|      |  |          |          |       |                                                                                     |      |          |      |        |                                           |  |  |  |                 |         |         |       |
|------|--|----------|----------|-------|-------------------------------------------------------------------------------------|------|----------|------|--------|-------------------------------------------|--|--|--|-----------------|---------|---------|-------|
| C7   |  | 473      | 11.10.78 | John  | Datum                                                                               |      | 25.10.76 | Name | Kibedi | Benennung                                 |  |  |  | MOTHER BOARD X2 |         |         |       |
| C5   |  |          | 26.5.78  | John  | Gez                                                                                 |      | 4.11.77  |      | 78     | Signale über Stecker 5 zum<br>A - Adapter |  |  |  |                 |         |         |       |
| C4   |  |          | 20.2.78  |       | Gepr                                                                                |      |          |      |        |                                           |  |  |  |                 |         |         |       |
| C3   |  |          | 18.1.78  | John  | Komm-Nr                                                                             |      |          |      |        | Zzeichnung / Sach-Nr                      |  |  |  | Ind             | Zch-Art | Blätter | Blatt |
| C2   |  |          | 3.10.77  | John  |  |      |          |      |        | 660610                                    |  |  |  | B               | 14      | 22      | 20    |
| C1   |  |          | 14.9.77  | John  |                                                                                     |      |          |      |        | Apt / Sachb CH2-Th.                       |  |  |  | Ers f           |         |         |       |
| Zust |  | Änderung |          | Datum |                                                                                     | Name |          |      |        |                                           |  |  |  |                 |         |         |       |

# STECKER 5

| ST 5 | Direkter Stecker | ST 5 | Direkter Stecker | ST 5 | Direkter Stecker | ST 5 | Direkter Stecker |
|------|------------------|------|------------------|------|------------------|------|------------------|
| 1    | D3.C2            | 41   | A2.c             | 81   | D3.A2            | 121  | A2.W             |
| 2    | D3.C3            | 42   | A2.y             | 82   | D3.A3            | 122  | A2.S             |
| 3    | D3.C4            | 43   | A2.w             | 83   | D3.A4            | 123  | A1.36            |
| 4    | D3.C5            | 44   | A1.64            | 84   | D3.A5            | 124  | A1.39            |
| 5    | D3.C6            | 45   | A1.67            | 85   | D3.A6            | 125  | A1.42            |
| 6    | D3.C7            | 46   | A1.75            | 86   | D3.A7            | 126  | A1.45            |
| 7    | D3.C8            | 47   | A1.82            | 87   | D3.A8            | 127  | A1.48            |
| 8    | D3.C9            | 48   | A1.72            | 88   | D3.A9            | 128  | A1.51            |
| 9    | D3.C10           | 49   | A1.47            | 89   | D3.A10           | 129  | A1.54            |
| 10   | D3.C11           | 50   | A1.53            | 90   | D3.A11           | 130  | A1.60            |
| 11   | D3.C12           | 51   | A1.77            | 91   | D3.A12           | 131  | A1.57            |
| 12   | D3.C13           | 52   | A1.79            | 92   | D3.A13           | 132  | A1.78            |
| 13   | D3.C14           | 53   | A1.76            | 93   | D3.A14           | 133  | A1.59            |
| 14   | D3.C15           | 54   | A1.73            | 94   | D3.A15           | 134  | A1.80            |
| 15   | D3.C16           | 55   | A1.70            | 95   | D3.A16           | 135  | A1.74            |
| 16   | D3.C17           | 56   | A1.65            | 96   | D3.A17           | 136  | A1.66            |
| 17   | D3.C18           | 57   | A1.62            | 97   | D3.A18           | 137  | A1.71            |
| 18   | D3.C19           | 58   | A1.58            | 98   | D3.A19           | 138  | A1.63            |
| 19   | D3.C20           | 59   | A1.55            | 99   | D3.A20           | 139  | A1.56            |
| 20   | D3.C21           | 60   | A1.52            | 100  | D3.A21           | 140  | A1.50            |
| 21   | D3.C22           | 61   | A1.49            | 101  | D3.A22           | 141  | A1.44            |
| 22   | D3.C23           | 62   | A1.46            | 102  | D3.A23           | 142  | A1.38            |
| 23   | D3.C24           | 63   | A1.43            | 103  | D3.A24           | 143  | A1.32            |
| 24   | D3.C25           | 64   | A1.40            | 104  | D3.A25           | 144  | A1.26            |
| 25   | D3.C26           | 65   | A1.37            | 105  | D3.A26           | 145  | A1.20            |
| 26   | D3.C27           | 66   | A1.34            | 106  | D3.A27           | 146  | A1.13            |
| 27   | D3.C28           | 67   | A1.31            | 107  | D3.A28           | 147  | A1.16            |
| 28   | D3.C29           | 68   | A1.28            | 108  | D3.A29           | 148  | A1.5             |
| 29   | D3.C30           | 69   | A1.25            | 109  | D3.A30           | 149  | A1.10            |
| 30   | D3.C31           | 70   | A1.22            | 110  | D3.A31           | 150  | A1.2             |
| 31   | A2.P             | 71   | A1.18            | 111  | A2.M             | 151  | A1.14            |
| 32   | .                | 72   | A1.15            | 112  | A2.H             | 152  | A1.7             |
| 33   | A2.E             | 73   | A1.12            | 113  | A2.C             | 153  | A1.21            |
| 34   | A2.A             | 74   | A1.8             | 114  | A2.B             | 154  | A1.3             |
| 35   | A2.D             | 75   | A1.4             | 115  | A2.F             | 155  | A1.11            |
| 36   | A2.J             | 76   | A1.1             | 116  | A2.L             | 156  | A1.17            |
| 37   | A2.N             | 77   | A1.29            | 117  | A2.R             | 157  | A1.24            |
| 38   | A2.T             | 78   | A1.23            | 118  | A2.V             | 158  | A1.27            |
| 39   | A2.X             | 79   | A1.35            | 119  | A2.Z             | 159  | A1.30            |
| 40   | A2.b             | 80   | A1.41            | 120  | A2.Q             | 160  | A1.33            |

|      |          |          |      |                                                                                     |  |                     |  |                                      |         |         |       |    |
|------|----------|----------|------|-------------------------------------------------------------------------------------|--|---------------------|--|--------------------------------------|---------|---------|-------|----|
|      |          |          |      | Datum                                                                               |  | Name                |  | Benennung MOTHER BOARD X2            |         |         |       |    |
|      |          |          |      | Gez 9.11.76                                                                         |  | Kibedi              |  | Signale über Stecker 5 zum D-Adapter |         |         |       |    |
|      |          |          |      | Gepr 4.11.77                                                                        |  | 78                  |  |                                      |         |         |       |    |
|      |          |          |      | Komm. Nr.                                                                           |  |                     |  |                                      |         |         |       |    |
| C7   | 473      | 11.10.78 | Kun  |  |  | Zeichnung / Sach-Nr |  | Ind                                  | Zch-Art | Blätter | Blatt |    |
| C5   |          | 26.5.78  | 24   |                                                                                     |  | 660610              |  |                                      | B       | 14      | 22    | 21 |
| C4   |          | 20.2.78  |      |                                                                                     |  |                     |  |                                      |         |         |       |    |
| C3   |          | 18.1.78  | Ne   |                                                                                     |  |                     |  |                                      |         |         |       |    |
| C2   |          | 3.10.77  | 4    |                                                                                     |  |                     |  |                                      |         |         |       |    |
| C1   |          | 14.9.77  | 47   |                                                                                     |  |                     |  |                                      |         |         |       |    |
| Zust | Änderung | Datum    | Name | Abt. / Sachb. CH2-Th                                                                |  | Ers. f.             |  | Ers. d.                              |         |         |       |    |

# STECKER 5

| ST 5 | Direkter Stecker | ST 5 | Direkter Stecker | ST 5 | Direkter Stecker | ST 5 | Direkter Stecker |
|------|------------------|------|------------------|------|------------------|------|------------------|
| 1    | D3.C2            | 41   |                  | 81   | D3.A2            | 121  |                  |
| 2    | D3.C3            | 42   |                  | 82   | D3.A3            | 122  |                  |
| 3    | D3.C4            | 43   |                  | 83   | D3.A4            | 123  |                  |
| 4    | D3.C5            | 44   | C13.21           | 84   | D3.A5            | 124  | C13.22           |
| 5    | D3.C6            | 45   | C16.15           | 85   | D3.A6            | 125  | C16.1            |
| 6    | D3.C7            | 46   | C13.20           | 86   | D3.A7            | 126  | C16.16           |
| 7    | D3.C8            | 47   | C16.2            | 87   | D3.A8            | 127  | C13.7            |
| 8    | D3.C9            | 48   | C16.14           | 88   | D3.A9            | 128  | C16.3            |
| 9    | D3.C10           | 49   | C13.3            | 89   | D3.A10           | 129  | C13.11           |
| 10   | D3.C11           | 50   | C13.6            | 90   | D3.A11           | 130  | C13.2            |
| 11   | D3.C12           | 51   | C16.21           | 91   | D3.A12           | 131  | C16.22           |
| 12   | D3.C13           | 52   | C16.4            | 92   | D3.A13           | 132  | C16.20           |
| 13   | D3.C14           | 53   | C16.18           | 93   | D3.A14           | 133  | C16.17           |
| 14   | D3.C15           | 54   | C16.19           | 94   | D3.A15           | 134  | C16.5            |
| 15   | D3.C16           | 55   | C16.25           | 95   | D3.A16           | 135  | C16.8            |
| 16   | D3.C17           | 56   | C16.11           | 96   | D3.A17           | 136  | C16.9            |
| 17   | D3.C18           | 57   | C16.10           | 97   | D3.A18           | 137  | C16.23           |
| 18   | D3.C19           | 58   | C16.24           | 98   | D3.A19           | 138  |                  |
| 19   | D3.C20           | 59   | C16.6            | 99   | D3.A20           | 139  | C16.12           |
| 20   | D3.C21           | 60   | C16.13           | 100  | D3.A21           | 140  | C16.7            |
| 21   | D3.C22           | 61   | C18.17           | 101  | D3.A22           | 141  | C18.19           |
| 22   | D3.C23           | 62   | C15.2            | 102  | D3.A23           | 142  | C18.15           |
| 23   | D3.C24           | 63   | C15.11           | 103  | D3.A24           | 143  | C15.6            |
| 24   | D3.C25           | 64   | C18.1            | 104  | D3.A25           | 144  | C15.21           |
| 25   | D3.C26           | 65   | C18.5            | 105  | D3.A26           | 145  | C18.3            |
| 26   | D3.C27           | 66   | C18.9            | 106  | D3.A27           | 146  | C18.7            |
| 27   | D3.C28           | 67   | C18.13           | 107  | D3.A28           | 147  | C18.11           |
| 28   | D3.C29           | 68   | C18.18           | 108  | D3.A29           | 148  | C18.20           |
| 29   | D3.C30           | 69   | C18.14           | 109  | D3.A30           | 149  | C18.16           |
| 30   | D3.C31           | 70   | C15.7            | 110  | D3.A31           | 150  | C15.3            |
| 31   |                  | 71   | C15.22           | 111  |                  | 151  | C15.20           |
| 32   |                  | 72   | C18.4            | 112  |                  | 152  | C18.2            |
| 33   | C17.3            | 73   | C18.8            | 113  | C17.2            | 153  | C18.6            |
| 34   | C17.7            | 74   | C18.12           | 114  | C17.6            | 154  | C18.10           |
| 35   | C17.20           | 75   |                  | 115  | C17.11           | 155  |                  |
| 36   | C17.21           | 76   |                  | 116  |                  | 156  |                  |
| 37   | C17.22           | 77   |                  | 117  |                  | 157  |                  |
| 38   |                  | 78   | C18.25           | 118  |                  | 158  |                  |
| 39   |                  | 79   | C18.23           | 119  |                  | 159  | C18.24           |
| 40   |                  | 80   | C18.21           | 120  |                  | 160  | C18.22           |

|      |  |          |          |                                                                                                           |                        |       |         |          |
|------|--|----------|----------|-----------------------------------------------------------------------------------------------------------|------------------------|-------|---------|----------|
| C7   |  | 473      | 11.10.78 | <div>Gez 21.12.77 Schmidt</div> <div>Gepr 29.5.78 78</div> <div>Komm-Nr</div> <div>Computer SYSTEME</div> | Benennung              |       |         |          |
| C5   |  |          | 26.5.78  |                                                                                                           | MOTHER BOARD X2        |       |         |          |
| C4   |  |          | 20.2.78  |                                                                                                           | Signale über Stecker 5 |       |         |          |
| C3   |  |          | 18.1.78  |                                                                                                           | zum DC-Adapter         |       |         |          |
| C2   |  |          | 18.1.78  |                                                                                                           |                        |       |         |          |
| C1   |  |          | 18.1.78  | Zeichnung / Sach-Nr                                                                                       |                        | Ind   | Zch. An | Blätter  |
| Zust |  | Anderung | Datum    | Name                                                                                                      | 660610                 |       | B       | 14 22 22 |
|      |  |          |          | Abt / Sachb. CH2 - Th.                                                                                    | Ers f                  | Ers d |         |          |



2.3 CPU

660 660 B, C1-7, C9-13

Stromlaufplan

Anhang

Blockschaltbild CPU

Blockschaltbild Mikroschrittsteuerung

Tabelle: Befehle-Mikroschritte

Tabelle: Mikroschritte-ROM-Signale

PLA-Tabelle

ROM-Tabelle

Signalkatalog ROM-Signale

# CPU

## STECKER J1

|    |         |     |          |
|----|---------|-----|----------|
| 1  | 0V      | 51  | 0V       |
| 2  | 0V      | 52  | 0V       |
| 3  | 0V      | 53  | 0V       |
| 4  | I-N     | 54  | I-S08    |
| 5  | I-GE IN | 55  | I-S09    |
| 6  | I-Q OUT | 56  | I-S10    |
| 7  | I-A18   | 57  | I-S15    |
| 8  | I-A19   | 58  | I-S14    |
| 9  | I-A09   | 59  | I-S13    |
| 10 | I-A08   | 60  | I-S11    |
| 11 | I-A07   | 61  | P-D10    |
| 12 | I-A12   | 62  | P-D11    |
| 13 | I-A11   | 63  | P-D12    |
| 14 | I-A10   | 64  | P-D13    |
| 15 | I-FE    | 65  | I-S12    |
| 16 | I-A04   | 66  | P-D14    |
| 17 | K-DUADR | 67  | P-D15    |
| 18 | K-RLMR  | 68  | P-D16    |
| 19 | I-A17   | 69  | K-RMB    |
| 20 | I-A05   | 70  | P-D17    |
| 21 | I-BE    | 71  | P-D18    |
| 22 | I-A06   | 72  | P-D00    |
| 23 | I-A01   | 73  | P-D01    |
| 24 | I-A02   | 74  | P-D02    |
| 25 | I-A16   | 75  | K-SYN    |
| 26 | K-RLML  | 76  | P-D03    |
| 27 | K-RLNR  | 77  | P-D04    |
| 28 | I-A03   | 78  | P-D05    |
| 29 | I-A13   | 79  | P-D06    |
| 30 |         | 80  | M-LDCL   |
| 31 | K-RLNL  | 81  | P-D07    |
| 32 | K-RS1B  | 82  | P-D08    |
| 33 | K-RS0B  | 83  | P-PE     |
| 34 | I-A15   | 84  | K-PROG   |
| 35 | K-RLP   | 85  | M-GKP-EN |
| 36 | K-LOADQ | 86  | M-RCON   |
| 37 | K-RBKC  | 87  | M-CRE    |
| 38 | I-A00   | 88  | K-RMA    |
| 39 | K-RBKB  | 89  | I-S00    |
| 40 | K-RBKA  | 90  | I-S01    |
| 41 | K-RAS0  | 91  | I-S02    |
| 42 | K-RAS2  | 92  | I-S03    |
| 43 | I-A14   | 93  | K-MDIS   |
| 44 | STOP    | 94  | I-S04    |
| 45 | STC     | 95  | I-S05    |
| 46 | STN     | 96  | I-S06    |
| 47 | STP     | 97  | I-S07    |
| 48 | STV     | 98  |          |
| 49 | + 5V    | 99  | + 5V     |
| 50 | + 5V    | 100 | - 5V     |

## STECKER J2

|    |          |     |            |
|----|----------|-----|------------|
| 1  | + 5V     | 51  | + 5V       |
| 2  | + 5V     | 52  | + 5V       |
| 3  | I-D01    | 53  | K-RREG     |
| 4  | I-D00    | 54  | M-NL7      |
| 5  | I-D08    | 55  | M-ML6      |
| 6  | I-D18    | 56  | M-ML7      |
| 7  | I-D06    | 57  | M-MMEN     |
| 8  | I-D07    | 58  | M-WMM      |
| 9  | I-D05    | 59  | M-DS-LEV   |
| 10 | I-D04    | 60  | M-MK8      |
| 11 | I-D03    | 61  | M-MK9      |
| 12 | I-D02    | 62  | M-MK10     |
| 13 | I-D17    | 63  | M-MK11     |
| 14 | K-NA     | 64  | P-A00      |
| 15 | K-B5     | 65  | M-MK12     |
| 16 | I-D16    | 66  | P-A01      |
| 17 | K-CNP    | 67  | P-A02      |
| 18 | K-MM     | 68  | P-A03      |
| 19 | I-L1     | 69  | P-A04      |
| 20 | I-D15    | 70  | P-A05      |
| 21 | I-L2     | 71  | P-A06      |
| 22 | I-L4     | 72  | M-MK13     |
| 23 | I-L8     | 73  | P-A07      |
| 24 | I-D14    | 74  | P-A08      |
| 25 | I-D13    | 75  | P-A09      |
| 26 | IFT      | 76  | K-G5       |
| 27 | I-L/5    | 77  | P-A10      |
| 28 | I-B/W    | 78  | P-A11      |
| 29 | M-LDR    | 79  | P-SEL      |
| 30 | M-P4     | 80  | P-RP       |
| 31 | M-P5     | 81  | M-MK14     |
| 32 | POOL-DIS | 82  | P-RDY      |
| 33 | M-SPRB   | 83  | P-BUSY     |
| 34 | M-BUSD   | 84  | P-RWS      |
| 35 | I-D12    | 85  | M-MK15     |
| 36 | M-NL6    | 86  |            |
| 37 | I-ADS    | 87  | BE-DIS     |
| 38 | I-D11    | 88  | K-CPU BUSY |
| 39 | I-D10    | 89  | K-SC       |
| 40 | K-C0     | 90  | K-C2       |
| 41 | K-C1     | 91  | K-C3       |
| 42 | K-CLK 80 | 92  | CLK-CPU    |
| 43 | clk-40   | 93  | K-C4       |
| 44 | CLK-40   | 94  | K-C5       |
| 45 | 0V       | 95  | 0V         |
| 46 | - 12V    | 96  | - 12V      |
| 47 | + 12V    | 97  | + 12V      |
| 48 | 0V       | 98  | 0V         |
| 49 | 0V       | 99  | 0V         |
| 50 | 0V       | 100 | 0V         |

## Steckerbelegung

Benennung  
CPU

Datum  
10.6.77

Gepr.  
24.4.79

Komm. Nr.

Name

Datum

Änderung

Zust.

Abt./Sachb.

CH2 - Th

Ers. t

Ers. d

Computer  
SYSTEME

Zeichn. Sach. Nr.

Ind.

Zch. Art.

Blatt

B 01 17 01

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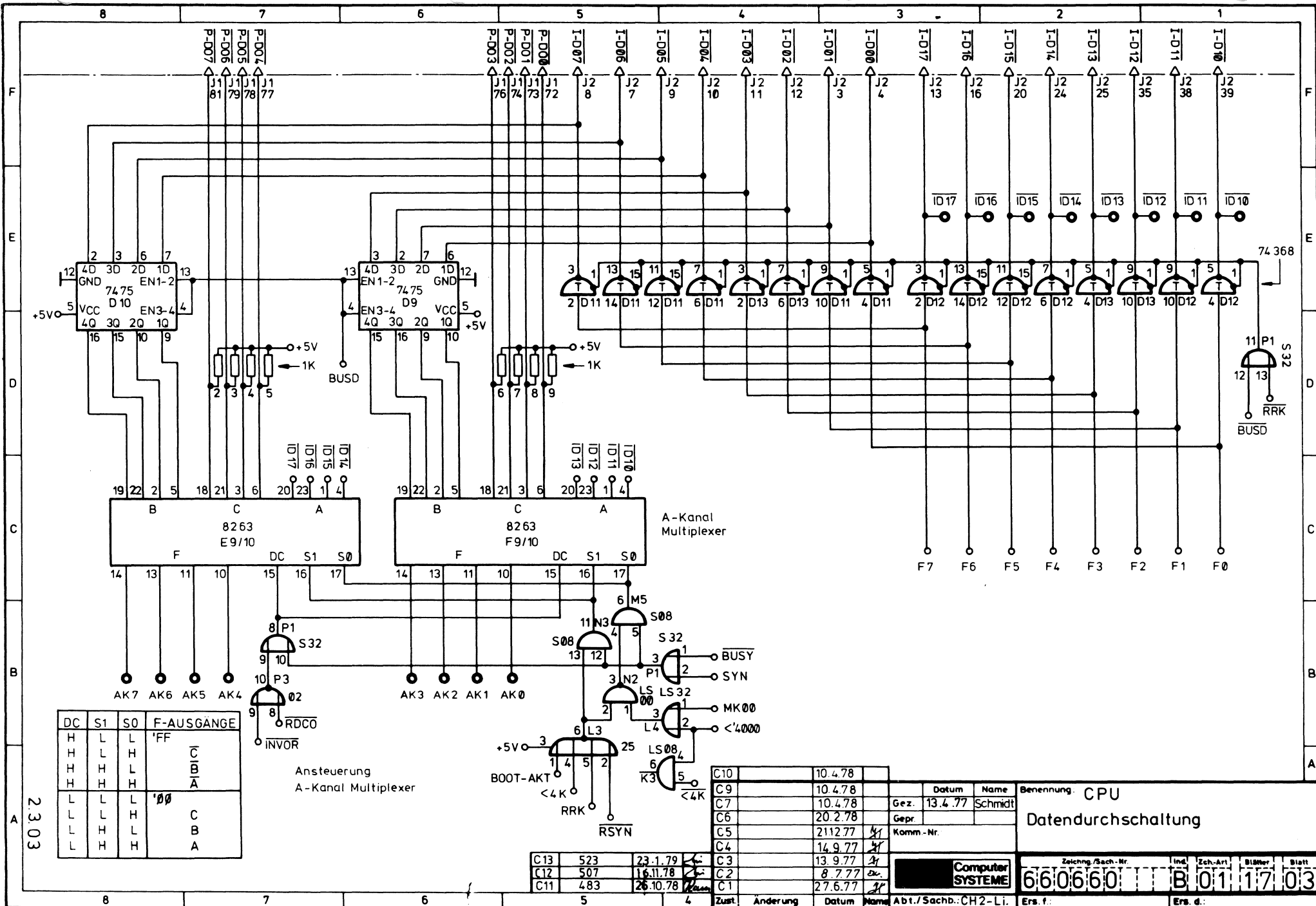
660660

660660

660660







| DC | S1 | S0 | F-AUSGÄNGE |
|----|----|----|------------|
| H  | L  | L  | 'FF        |
| H  | L  | L  | C          |
| H  | L  | L  | B          |
| H  | L  | L  | A          |
| L  | L  | L  | '00        |
| L  | L  | L  | C          |
| L  | L  | L  | B          |
| L  | L  | L  | A          |

Ansteuerung  
A-Kanal Multiplexer

A-Kanal  
Multiplexer

|     |          |  |
|-----|----------|--|
| C10 | 10.4.78  |  |
| C9  | 10.4.78  |  |
| C7  | 10.4.78  |  |
| C6  | 20.2.78  |  |
| C5  | 21.12.77 |  |
| C4  | 14.9.77  |  |
| C3  | 13.9.77  |  |
| C2  | 8.7.77   |  |
| C1  | 27.6.77  |  |

| Datum   | Name    | Benennung |
|---------|---------|-----------|
| 13.4.77 | Schmidt | CPU       |
| Gez.    | Gepr.   | Komm.-Nr. |
|         |         |           |

| Benennung CPU       |          |           |         |
|---------------------|----------|-----------|---------|
| Datendurchschaltung |          |           |         |
| Zeichn./Sach.-Nr.   | Ind.     | Zch.-Art. | Blätter |
| 660660              |          | B 01      | 17 03   |
| Computer SYSTEME    |          | Ers. d.:  |         |
| Zust.               | Änderung | Datum     | Name    |
|                     |          |           |         |

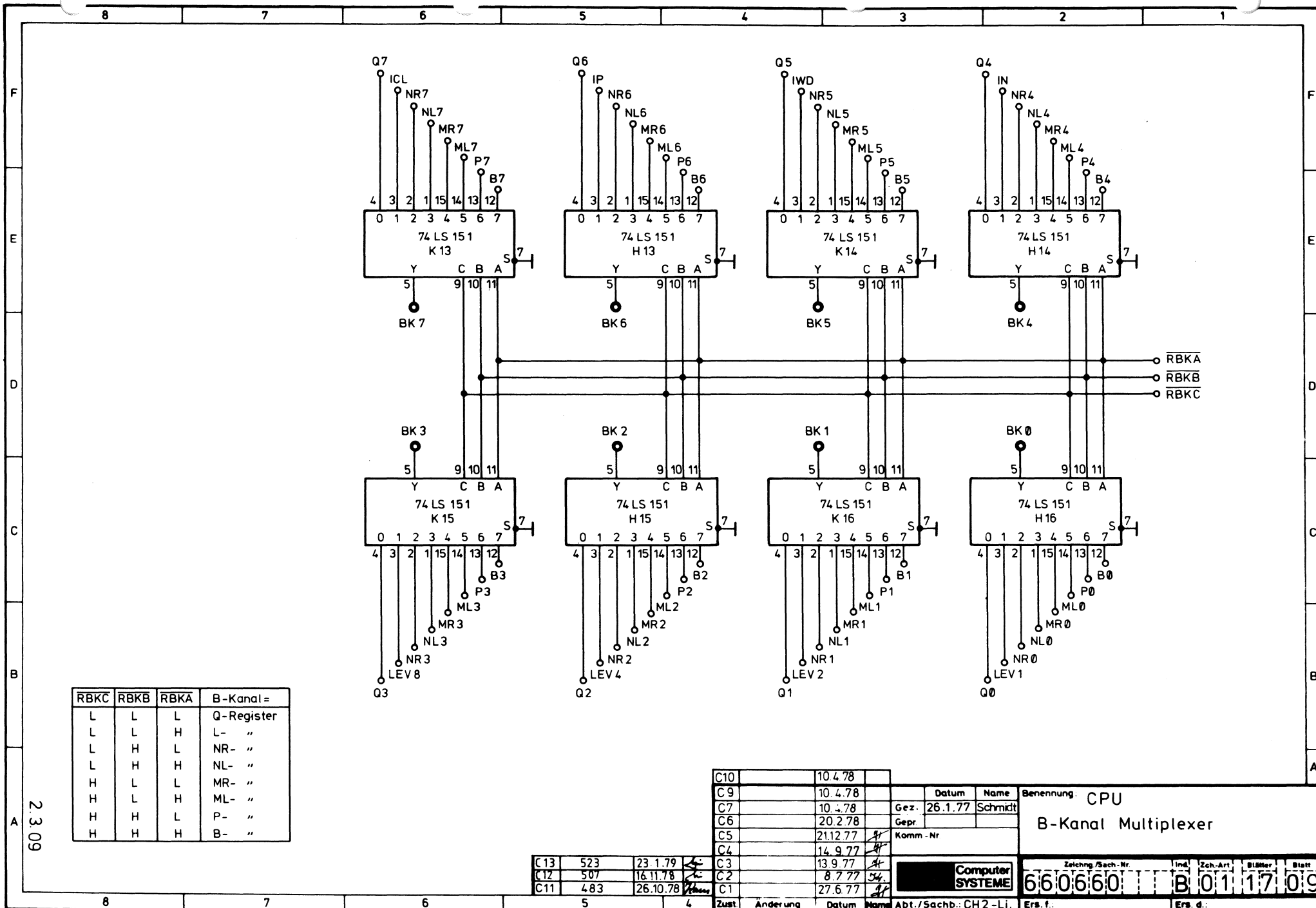








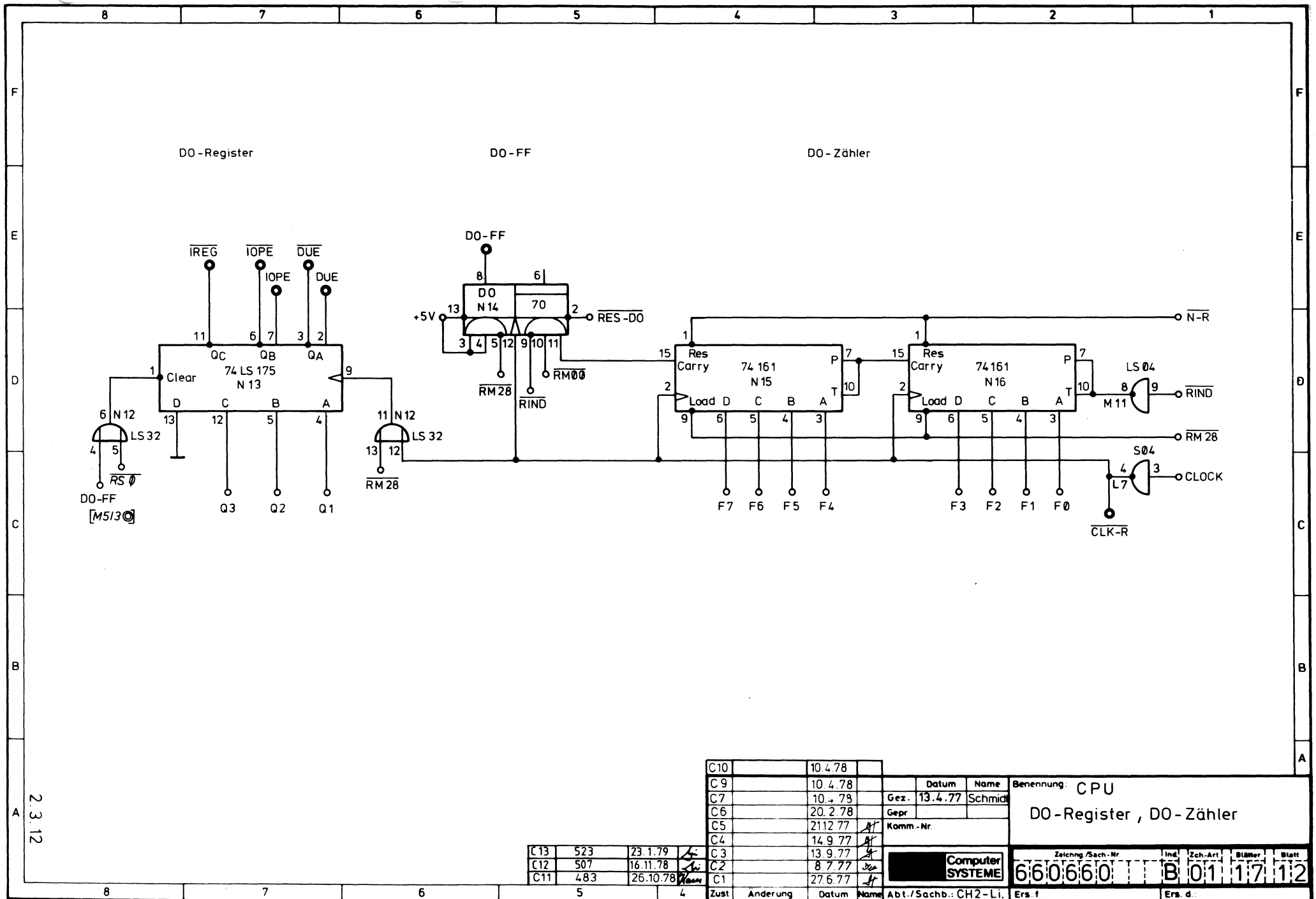




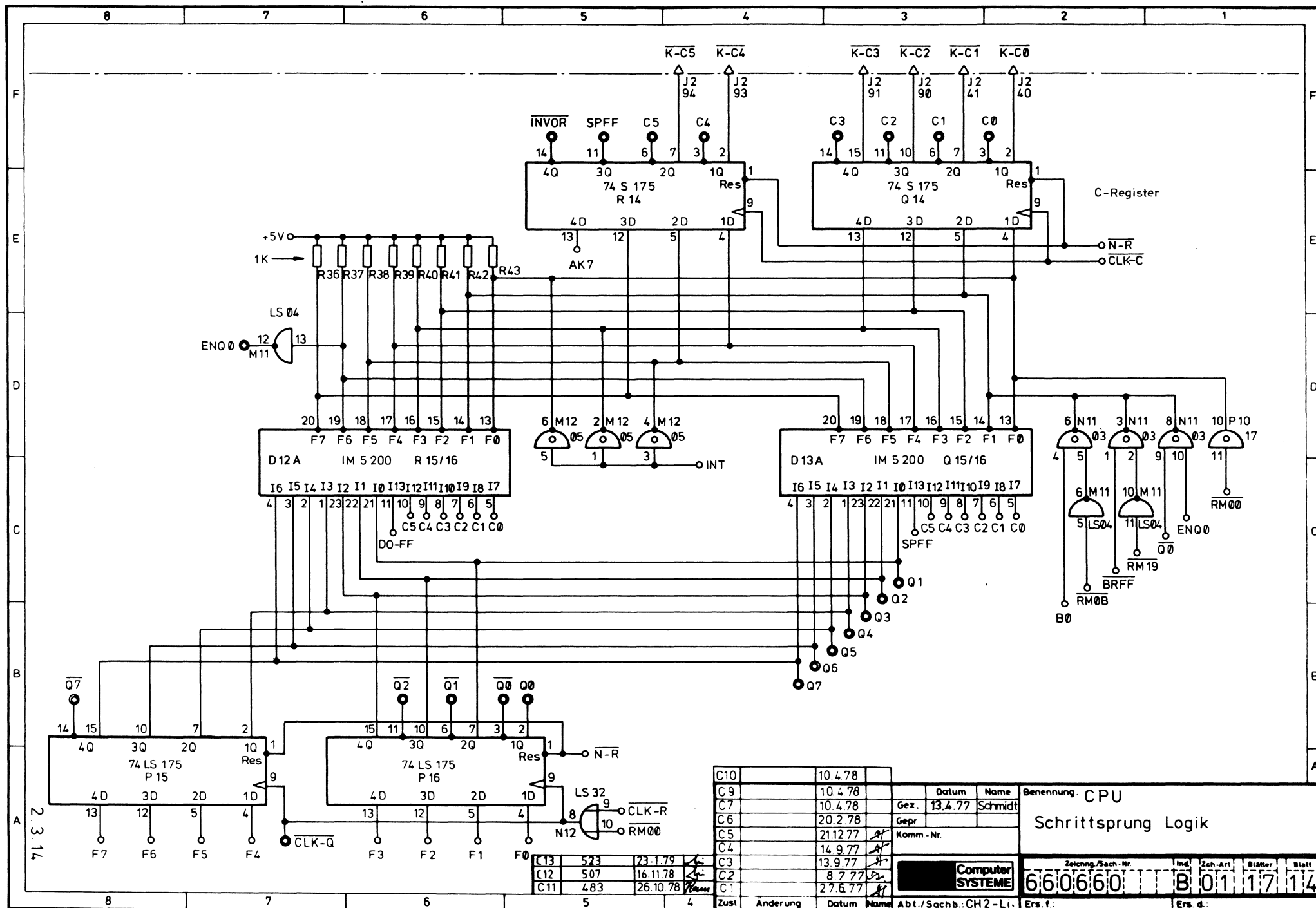


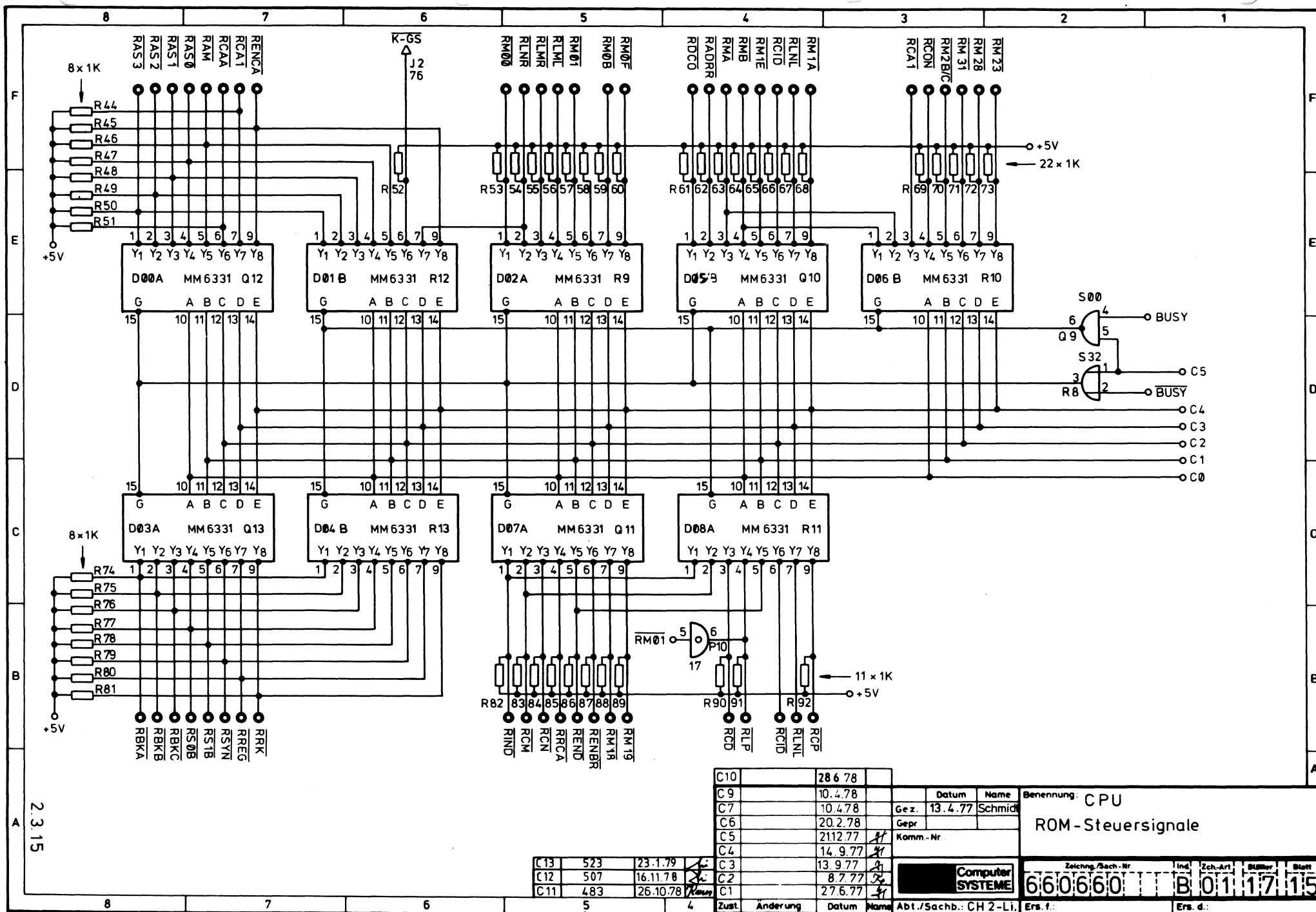


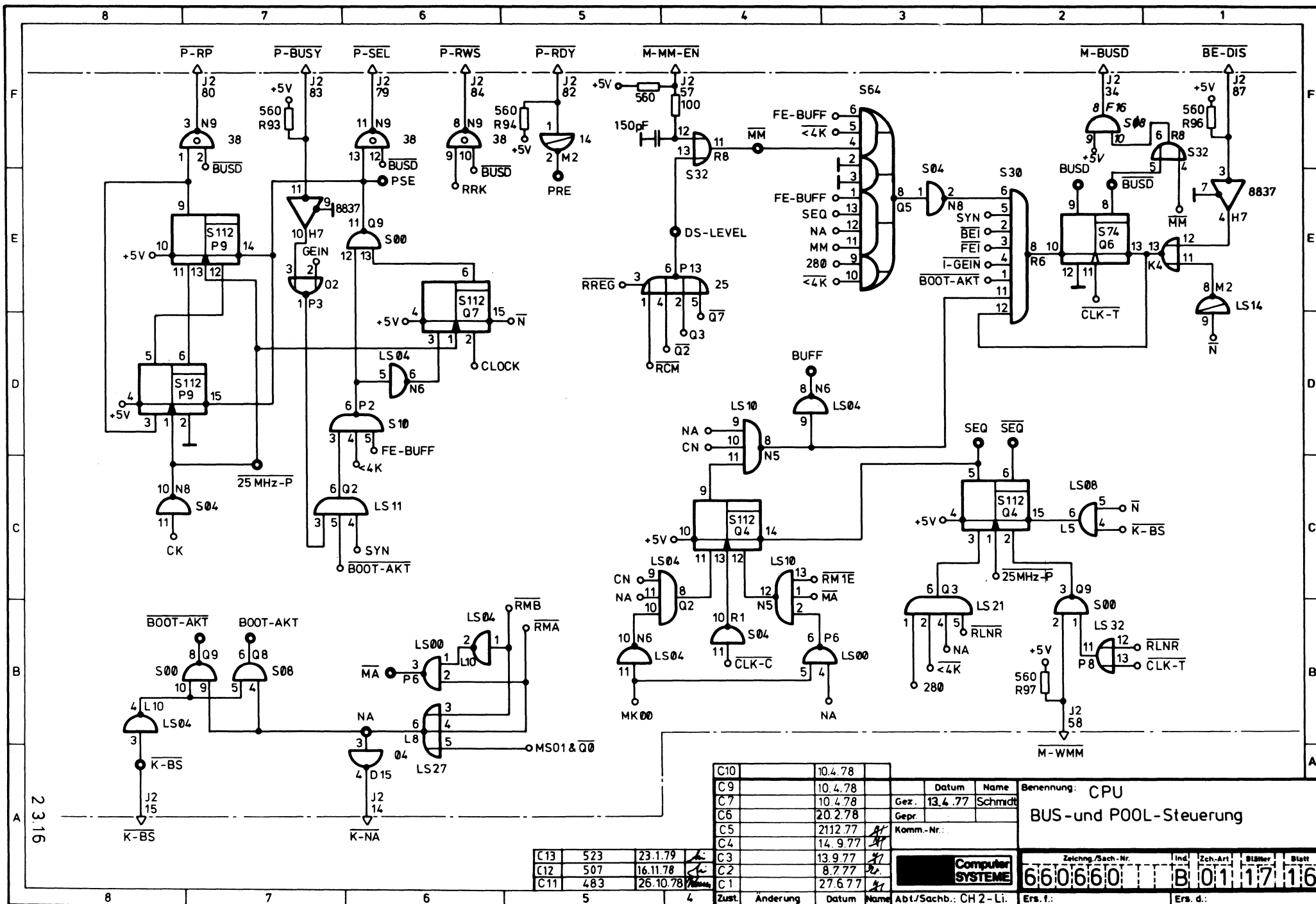








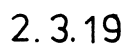


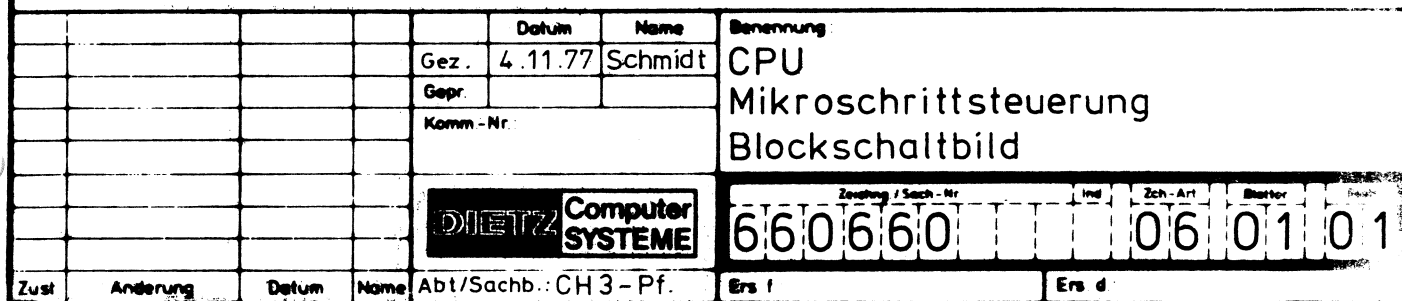












| H EXA  | SYMB | Q Register<br>76543210 | $\langle N \rangle \rightarrow Q, N+1, \text{CARRY-FF1}=\emptyset, \text{CARRY-FF2}=1$ | $\langle N \rangle \rightarrow P, N+1$ (bei geradem Befehlsbyte '02 $\rightarrow P$ ) | $\langle L \rangle \rightarrow \langle P \rangle$ | $\langle N \rangle \rightarrow MR, N+1$ | $\langle N \rangle \rightarrow ML, N+1$ | $\langle P \rangle \rightarrow B$ | $\langle N \rangle + \langle NR \rangle \rightarrow MR, u \rightarrow \text{CARRY-FF1}$ | $\langle NL \rangle + u \rightarrow ML, N+1$ | $\langle N \rangle \rightarrow B, N+1$ | $\langle B \rangle + \langle MR \rangle \rightarrow MR, u \rightarrow \text{CARRY-FF1}$ | $\langle B \rangle + 1 \rightarrow B$ | $\langle B \rangle + \langle ML \rangle \rightarrow ML$ | $\langle ML \rangle + u \rightarrow ML$ | $\langle P \rangle + C. \rightarrow B$ , bei Inkrement Brauch ist C.=1 | CONTROL | $\langle \text{SWITCH} \rangle \rightarrow \langle P \rangle, \langle P+1 \rangle$ | CNP-Register = $\emptyset$ | SHIFT-right B-Register | $\langle B \rangle \rightarrow \langle P \rangle, \langle P-1 \rangle$ | SHIFT-left B-Register | $\langle B \rangle \rightarrow \langle P \rangle, \langle P+1 \rangle$ | $\langle P \rangle \rightarrow \text{Do-Zähler}, Q3 \rightarrow \text{IREG}, Q2 \rightarrow \text{IOPE}, Q1 \rightarrow \text{DUE}, \text{DoFF}=1$ | '00 $\rightarrow P$ | $\langle NR \rangle \rightarrow \langle P \rangle, P+1$ | $\langle NL \rangle \rightarrow \langle P \rangle$ | '00 $\rightarrow P$ | $\langle P \rangle \rightarrow NR, P+1$ | $\langle P \rangle \rightarrow NL$ |  |   |
|--------|------|------------------------|----------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------|-----------------------------------------|-----------------------------------------|-----------------------------------|-----------------------------------------------------------------------------------------|----------------------------------------------|----------------------------------------|-----------------------------------------------------------------------------------------|---------------------------------------|---------------------------------------------------------|-----------------------------------------|------------------------------------------------------------------------|---------|------------------------------------------------------------------------------------|----------------------------|------------------------|------------------------------------------------------------------------|-----------------------|------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|---------------------------------------------------------|----------------------------------------------------|---------------------|-----------------------------------------|------------------------------------|--|---|
| 00     | NOP  |                        | •                                                                                      | •                                                                                     |                                                   |                                         |                                         |                                   |                                                                                         |                                              |                                        |                                                                                         |                                       |                                                         |                                         |                                                                        | •       | •                                                                                  |                            |                        |                                                                        |                       |                                                                        |                                                                                                                                                    |                     |                                                         |                                                    |                     |                                         |                                    |  | • |
| 01     | SEL  | 0                      | •                                                                                      | •                                                                                     |                                                   |                                         |                                         |                                   |                                                                                         |                                              |                                        |                                                                                         |                                       |                                                         |                                         |                                                                        | •       | •                                                                                  |                            |                        |                                                                        |                       |                                                                        |                                                                                                                                                    |                     |                                                         |                                                    |                     |                                         |                                    |  | • |
| 02     | HLT  | 1                      | •                                                                                      | •                                                                                     |                                                   |                                         |                                         |                                   |                                                                                         |                                              |                                        |                                                                                         |                                       |                                                         |                                         |                                                                        | •       | •                                                                                  |                            |                        |                                                                        |                       |                                                                        |                                                                                                                                                    |                     |                                                         |                                                    |                     |                                         |                                    |  | • |
| 03     | HSL  | 10                     | •                                                                                      | •                                                                                     |                                                   |                                         |                                         |                                   |                                                                                         |                                              |                                        |                                                                                         |                                       |                                                         |                                         |                                                                        | •       | •                                                                                  |                            |                        |                                                                        |                       |                                                                        |                                                                                                                                                    |                     |                                                         |                                                    |                     |                                         |                                    |  | • |
| 04     | ECL  | 2                      | •                                                                                      | •                                                                                     |                                                   |                                         |                                         |                                   |                                                                                         |                                              |                                        |                                                                                         |                                       |                                                         |                                         |                                                                        | •       | •                                                                                  |                            |                        |                                                                        |                       |                                                                        |                                                                                                                                                    |                     |                                                         |                                                    |                     |                                         |                                    |  | • |
| 05     | ESL  | 2 0                    | •                                                                                      | •                                                                                     |                                                   |                                         |                                         |                                   |                                                                                         |                                              |                                        |                                                                                         |                                       |                                                         |                                         |                                                                        | •       | •                                                                                  |                            |                        |                                                                        |                       |                                                                        |                                                                                                                                                    |                     |                                                         |                                                    |                     |                                         |                                    |  | • |
| 06     | EHT  | 21                     | •                                                                                      | •                                                                                     |                                                   |                                         |                                         |                                   |                                                                                         |                                              |                                        |                                                                                         |                                       |                                                         |                                         |                                                                        | •       | •                                                                                  |                            |                        |                                                                        |                       |                                                                        |                                                                                                                                                    |                     |                                                         |                                                    |                     |                                         |                                    |  | • |
| 07     | EHS  | 210                    | •                                                                                      | •                                                                                     |                                                   |                                         |                                         |                                   |                                                                                         |                                              |                                        |                                                                                         |                                       |                                                         |                                         |                                                                        | •       | •                                                                                  |                            |                        |                                                                        |                       |                                                                        |                                                                                                                                                    |                     |                                                         |                                                    |                     |                                         |                                    |  | • |
| 08     | DCL  | 3                      | •                                                                                      | •                                                                                     |                                                   |                                         |                                         |                                   |                                                                                         |                                              |                                        |                                                                                         |                                       |                                                         |                                         |                                                                        | •       | •                                                                                  |                            |                        |                                                                        |                       |                                                                        |                                                                                                                                                    |                     |                                                         |                                                    |                     |                                         |                                    |  | • |
| 10     | &    | 4 (0)                  | •                                                                                      | •                                                                                     |                                                   |                                         |                                         |                                   |                                                                                         |                                              |                                        |                                                                                         |                                       |                                                         |                                         |                                                                        |         |                                                                                    |                            |                        |                                                                        |                       |                                                                        |                                                                                                                                                    | •                   |                                                         |                                                    |                     |                                         |                                    |  |   |
| 12     | *    | 4 1(0)                 | •                                                                                      | •                                                                                     |                                                   |                                         |                                         |                                   |                                                                                         |                                              |                                        |                                                                                         |                                       |                                                         |                                         |                                                                        |         |                                                                                    |                            |                        |                                                                        |                       |                                                                        |                                                                                                                                                    | •                   |                                                         |                                                    |                     |                                         |                                    |  |   |
| 14     | > &  | 4 2 (0)                | •                                                                                      | •                                                                                     |                                                   |                                         |                                         |                                   |                                                                                         |                                              |                                        |                                                                                         |                                       |                                                         |                                         |                                                                        |         |                                                                                    |                            |                        |                                                                        |                       |                                                                        |                                                                                                                                                    | •                   |                                                         |                                                    |                     |                                         |                                    |  |   |
| 16     | > *  | 4 21(0)                | •                                                                                      | •                                                                                     |                                                   |                                         |                                         |                                   |                                                                                         |                                              |                                        |                                                                                         |                                       |                                                         |                                         |                                                                        |         |                                                                                    |                            |                        |                                                                        |                       |                                                                        |                                                                                                                                                    | •                   |                                                         |                                                    |                     |                                         |                                    |  |   |
| 18     | < &  | 43 (0)                 | •                                                                                      | •                                                                                     |                                                   |                                         |                                         |                                   |                                                                                         |                                              |                                        |                                                                                         |                                       |                                                         |                                         |                                                                        |         |                                                                                    |                            |                        |                                                                        |                       |                                                                        |                                                                                                                                                    | •                   |                                                         |                                                    |                     |                                         |                                    |  |   |
| 1A     | < *  | 43 1(0)                | •                                                                                      | •                                                                                     |                                                   |                                         |                                         |                                   |                                                                                         |                                              |                                        |                                                                                         |                                       |                                                         |                                         |                                                                        |         |                                                                                    |                            |                        |                                                                        |                       |                                                                        |                                                                                                                                                    | •                   |                                                         |                                                    |                     |                                         |                                    |  |   |
| 1C     | = &  | 432 (0)                | •                                                                                      | •                                                                                     |                                                   |                                         |                                         |                                   |                                                                                         |                                              |                                        |                                                                                         |                                       |                                                         |                                         |                                                                        |         |                                                                                    |                            |                        |                                                                        |                       |                                                                        |                                                                                                                                                    | •                   |                                                         |                                                    |                     |                                         |                                    |  |   |
| 1E     | = *  | 4321(0)                | •                                                                                      | •                                                                                     |                                                   |                                         |                                         |                                   |                                                                                         |                                              |                                        |                                                                                         |                                       |                                                         |                                         |                                                                        |         |                                                                                    |                            |                        |                                                                        |                       |                                                                        |                                                                                                                                                    | •                   |                                                         |                                                    |                     |                                         |                                    |  |   |
| 22     | GS   | 5 1(0)                 | •                                                                                      | •                                                                                     |                                                   |                                         |                                         |                                   |                                                                                         |                                              |                                        |                                                                                         |                                       |                                                         |                                         |                                                                        |         |                                                                                    |                            |                        |                                                                        |                       |                                                                        |                                                                                                                                                    |                     |                                                         |                                                    |                     |                                         |                                    |  |   |
| 24     | GL   | 5 3 (0)                | •                                                                                      | •                                                                                     | •                                                 |                                         |                                         |                                   |                                                                                         |                                              |                                        |                                                                                         |                                       |                                                         |                                         |                                                                        |         |                                                                                    |                            |                        |                                                                        |                       |                                                                        |                                                                                                                                                    |                     |                                                         |                                                    |                     |                                         |                                    |  |   |
| 28     | SRO  | 5 3 (0)                | •                                                                                      | •                                                                                     |                                                   |                                         |                                         |                                   | •                                                                                       |                                              |                                        |                                                                                         |                                       |                                                         |                                         |                                                                        |         |                                                                                    |                            |                        |                                                                        |                       |                                                                        |                                                                                                                                                    |                     |                                                         |                                                    |                     |                                         |                                    |  |   |
| 2A     | SRC  | 5 3 1(0)               | •                                                                                      | •                                                                                     |                                                   |                                         |                                         |                                   | •                                                                                       |                                              |                                        |                                                                                         |                                       |                                                         |                                         |                                                                        |         |                                                                                    |                            |                        |                                                                        |                       |                                                                        |                                                                                                                                                    |                     |                                                         |                                                    |                     |                                         |                                    |  |   |
| 2C     | SLO  | 5 32 (0)               | •                                                                                      | •                                                                                     |                                                   |                                         |                                         |                                   | •                                                                                       |                                              |                                        |                                                                                         |                                       |                                                         |                                         |                                                                        |         |                                                                                    |                            |                        |                                                                        |                       |                                                                        |                                                                                                                                                    |                     |                                                         |                                                    |                     |                                         |                                    |  |   |
| 2E     | SLC  | 5 321(0)               | •                                                                                      | •                                                                                     |                                                   |                                         |                                         |                                   | •                                                                                       |                                              |                                        |                                                                                         |                                       |                                                         |                                         |                                                                        |         |                                                                                    |                            |                        |                                                                        |                       |                                                                        |                                                                                                                                                    |                     |                                                         |                                                    |                     |                                         |                                    |  |   |
| 2.3 21 |      |                        |                                                                                        |                                                                                       |                                                   |                                         |                                         |                                   |                                                                                         |                                              |                                        |                                                                                         |                                       |                                                         |                                         |                                                                        |         |                                                                                    |                            |                        |                                                                        |                       |                                                                        |                                                                                                                                                    |                     |                                                         |                                                    |                     |                                         |                                    |  |   |

#### Besonderheiten beim Level-Wechsel

##### Mikroschritt

- 29 Instruktionszählerstand aus dem N-Register  
 2A in die POOL-Register 00 und 01  
 2B

##### LEVEL-Wechsel (neuer Wert in das L-Register)

- 2C Instruktionszählerstand aus den POOL-  
 2D Registern 00 und 01 in das N-Register  
 2E  
 2F ENDE

Wird, bedingt durch eine Änderung im Start-Register der Level-Logik, durch die Prioritätslogik dem L-Register ein neuer Wert angegeben, wird nach Beendigung eines Befehls (ENDE) nicht wie sonst MS00, sondern MS29 aufgerufen.

Der eigentliche Levelwechsel (neuen Level in das L-Register laden) erfolgt erst nach dem Speichern des alten N-Registerstandes (MS 29 bis 2B). In den Mikroschritten 2C bis 2E wird dann der neue Instruktionszählerstand aus dem POOL in das N-Register geholt. Mikroschritt 2F beendet den Vorgang.

• • DO-SCHLEIFE



| HEXA | SYMB      | Q-Register<br>76543210 | 00                                                                             | 01                                                                                           | 02                                                | 03 | 04                                      | 05                                      | 06                                | 07                                                                                      | 08                                                     | 09 | 0A                                     | 0B                                                                                      | 0C                                    | 0D                                                      | 0E                                       | 0F                                                                            | 1A                                       | 1B                                            | 30                                                    | 31                                                    | 32                                                         | 33                                                       | 34                                                       | 35                                                       | 36                                       | 37                                                       | 38                                                      | 39                                                 | 3A                                  | 3B                                  |
|------|-----------|------------------------|--------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|---------------------------------------------------|----|-----------------------------------------|-----------------------------------------|-----------------------------------|-----------------------------------------------------------------------------------------|--------------------------------------------------------|----|----------------------------------------|-----------------------------------------------------------------------------------------|---------------------------------------|---------------------------------------------------------|------------------------------------------|-------------------------------------------------------------------------------|------------------------------------------|-----------------------------------------------|-------------------------------------------------------|-------------------------------------------------------|------------------------------------------------------------|----------------------------------------------------------|----------------------------------------------------------|----------------------------------------------------------|------------------------------------------|----------------------------------------------------------|---------------------------------------------------------|----------------------------------------------------|-------------------------------------|-------------------------------------|
|      |           |                        | $\langle N \rangle \rightarrow Q, N+1 \text{ CARRY-FFI}=0, \text{CARRY-FFI}=1$ | $\langle N \rangle \rightarrow P, N+1 \text{ (bei geradem Befehlsbyte '02' } \rightarrow P)$ | $\langle L \rangle \rightarrow \langle P \rangle$ |    | $\langle N \rangle \rightarrow MR, N+1$ | $\langle N \rangle \rightarrow ML, N+1$ | $\langle P \rangle \rightarrow B$ | $\langle N \rangle + \langle NR \rangle \rightarrow MR, U \rightarrow \text{CARRY-FFI}$ | $\langle NL \rangle \rightarrow U \rightarrow ML, N+1$ |    | $\langle N \rangle \rightarrow B, N+1$ | $\langle B \rangle + \langle MR \rangle \rightarrow MR, U \rightarrow \text{CARRY-FFI}$ | $\langle B \rangle + 1 \rightarrow B$ | $\langle B \rangle + \langle ML \rangle \rightarrow ML$ | $\langle ML \rangle + C. \rightarrow ML$ | $\langle B \rangle + C. \rightarrow B, \text{ bei Inkrement-Branch ist C.}=1$ | $\langle M \rangle \rightarrow B, (M+1)$ | $\langle N \rangle \rightarrow B, N+1, (N+1)$ | $\langle P \rangle + \langle B \rangle \rightarrow B$ | $\langle P \rangle - \langle B \rangle \rightarrow B$ | $\langle P \rangle \wedge \langle B \rangle \rightarrow B$ | $\langle P \rangle \vee \langle B \rangle \rightarrow B$ | $\langle P \rangle \neq \langle B \rangle \rightarrow B$ | $\langle B \rangle \rightarrow \langle P \rangle, (P+1)$ | $\langle P \rangle \rightarrow B, (P+1)$ | $\langle B \rangle \rightarrow \langle M \rangle, (M+1)$ | $\langle NR \rangle \rightarrow \langle P \rangle, P+1$ | $\langle NL \rangle \rightarrow \langle P \rangle$ | $\langle MR \rangle \rightarrow NR$ | $\langle ML \rangle \rightarrow NL$ |
| 80   | LDC       | 7 00                   | •                                                                              | •                                                                                            |                                                   |    |                                         |                                         |                                   |                                                                                         |                                                        |    |                                        |                                                                                         |                                       |                                                         |                                          |                                                                               |                                          |                                               |                                                       |                                                       |                                                            |                                                          |                                                          |                                                          |                                          |                                                          |                                                         |                                                    |                                     |                                     |
| 82   | LDX       | 7 10                   | •                                                                              | •                                                                                            |                                                   |    |                                         |                                         |                                   |                                                                                         |                                                        |    | •                                      | •                                                                                       | •                                     | •                                                       | •                                        |                                                                               | •                                        |                                               |                                                       |                                                       |                                                            |                                                          |                                                          |                                                          |                                          |                                                          |                                                         |                                                    |                                     |                                     |
| 84   | LDR       | 7 21                   | •                                                                              | •                                                                                            |                                                   |    | •                                       |                                         |                                   |                                                                                         |                                                        |    |                                        |                                                                                         |                                       |                                                         |                                          |                                                                               | •                                        |                                               |                                                       |                                                       |                                                            |                                                          |                                                          |                                                          |                                          |                                                          |                                                         |                                                    |                                     |                                     |
| 86   | LDR, ind. | 7 20                   | •                                                                              | •                                                                                            |                                                   |    | •                                       |                                         |                                   |                                                                                         |                                                        |    | •                                      | •                                                                                       | •                                     | •                                                       | •                                        |                                                                               | •                                        |                                               |                                                       |                                                       |                                                            |                                                          |                                                          |                                                          |                                          |                                                          |                                                         |                                                    |                                     |                                     |
| 88   | LDL       | 7 30                   | •                                                                              | •                                                                                            |                                                   |    |                                         |                                         | •                                 | •                                                                                       |                                                        |    |                                        |                                                                                         |                                       |                                                         |                                          |                                                                               | •                                        |                                               |                                                       |                                                       |                                                            |                                                          |                                                          |                                                          |                                          |                                                          |                                                         |                                                    |                                     |                                     |
| 8A   | LDL, ind. | 7 31                   | •                                                                              | •                                                                                            |                                                   |    |                                         |                                         | •                                 | •                                                                                       |                                                        |    | •                                      | •                                                                                       | •                                     | •                                                       | •                                        |                                                                               | •                                        |                                               |                                                       |                                                       |                                                            |                                                          |                                                          |                                                          |                                          |                                                          |                                                         |                                                    |                                     |                                     |
| 8C   | LDA       | 7 20                   | •                                                                              | •                                                                                            |                                                   |    | •                                       | •                                       |                                   |                                                                                         |                                                        |    |                                        |                                                                                         |                                       |                                                         |                                          |                                                                               | •                                        |                                               |                                                       |                                                       |                                                            |                                                          |                                                          |                                                          |                                          |                                                          |                                                         |                                                    |                                     |                                     |
| 8E   | LDA, ind. | 7 321                  | •                                                                              | •                                                                                            |                                                   |    | •                                       | •                                       |                                   |                                                                                         |                                                        |    | •                                      | •                                                                                       | •                                     | •                                                       | •                                        |                                                                               | •                                        |                                               |                                                       |                                                       |                                                            |                                                          |                                                          |                                                          |                                          |                                                          |                                                         |                                                    |                                     |                                     |
| 90   | ADC       | 7 40                   | •                                                                              | •                                                                                            |                                                   |    |                                         |                                         |                                   |                                                                                         |                                                        |    |                                        |                                                                                         |                                       |                                                         |                                          |                                                                               | •                                        |                                               |                                                       |                                                       |                                                            |                                                          |                                                          |                                                          |                                          |                                                          |                                                         |                                                    |                                     |                                     |
| 92   | ADX       | 7 41                   | •                                                                              | •                                                                                            |                                                   |    |                                         |                                         |                                   |                                                                                         |                                                        |    | •                                      | •                                                                                       | •                                     | •                                                       | •                                        |                                                                               | •                                        |                                               |                                                       |                                                       |                                                            |                                                          |                                                          |                                                          |                                          |                                                          |                                                         |                                                    |                                     |                                     |
| 94   | ADR       | 7 420                  | •                                                                              | •                                                                                            |                                                   |    | •                                       |                                         |                                   |                                                                                         |                                                        |    |                                        |                                                                                         |                                       |                                                         |                                          |                                                                               | •                                        |                                               |                                                       |                                                       |                                                            |                                                          |                                                          |                                                          |                                          |                                                          |                                                         |                                                    |                                     |                                     |
| 96   | ADR, ind. | 7 21                   | •                                                                              | •                                                                                            |                                                   |    | •                                       |                                         |                                   |                                                                                         |                                                        |    | •                                      | •                                                                                       | •                                     | •                                                       | •                                        |                                                                               | •                                        |                                               |                                                       |                                                       |                                                            |                                                          |                                                          |                                                          |                                          |                                                          |                                                         |                                                    |                                     |                                     |
| 98   | ADL       | 7 430                  | •                                                                              | •                                                                                            |                                                   |    |                                         |                                         | •                                 | •                                                                                       |                                                        |    |                                        |                                                                                         |                                       |                                                         |                                          |                                                                               | •                                        |                                               |                                                       |                                                       |                                                            |                                                          |                                                          |                                                          |                                          |                                                          |                                                         |                                                    |                                     |                                     |
| 9A   | ADL, ind. | 7 431                  | •                                                                              | •                                                                                            |                                                   |    |                                         |                                         | •                                 | •                                                                                       |                                                        |    | •                                      | •                                                                                       | •                                     | •                                                       | •                                        |                                                                               | •                                        |                                               |                                                       |                                                       |                                                            |                                                          |                                                          |                                                          |                                          |                                                          |                                                         |                                                    |                                     |                                     |
| 9C   | ADA       | 7 432                  | •                                                                              | •                                                                                            |                                                   |    | •                                       | •                                       |                                   |                                                                                         |                                                        |    | •                                      | •                                                                                       | •                                     | •                                                       | •                                        |                                                                               | •                                        |                                               |                                                       |                                                       |                                                            |                                                          |                                                          |                                                          |                                          |                                                          |                                                         |                                                    |                                     |                                     |
| 9E   | ADA, ind. | 7 4321                 | •                                                                              | •                                                                                            |                                                   |    | •                                       | •                                       |                                   |                                                                                         |                                                        |    | •                                      | •                                                                                       | •                                     | •                                                       | •                                        |                                                                               | •                                        |                                               |                                                       |                                                       |                                                            |                                                          |                                                          |                                                          |                                          |                                                          |                                                         |                                                    |                                     |                                     |
| A0   | SBC       | 7 50                   | •                                                                              | •                                                                                            |                                                   |    |                                         |                                         |                                   |                                                                                         |                                                        |    |                                        |                                                                                         |                                       |                                                         |                                          |                                                                               | •                                        |                                               |                                                       |                                                       |                                                            |                                                          |                                                          |                                                          |                                          |                                                          |                                                         |                                                    |                                     |                                     |
| A2   | SBX       | 7 51                   | •                                                                              | •                                                                                            |                                                   |    |                                         |                                         |                                   |                                                                                         |                                                        |    | •                                      | •                                                                                       | •                                     | •                                                       | •                                        |                                                                               | •                                        |                                               |                                                       |                                                       |                                                            |                                                          |                                                          |                                                          |                                          |                                                          |                                                         |                                                    |                                     |                                     |
| A4   | SBR       | 7 520                  | •                                                                              | •                                                                                            |                                                   |    | •                                       |                                         |                                   |                                                                                         |                                                        |    |                                        |                                                                                         |                                       |                                                         |                                          |                                                                               | •                                        |                                               |                                                       |                                                       |                                                            |                                                          |                                                          |                                                          |                                          |                                                          |                                                         |                                                    |                                     |                                     |
| A6   | SBR, ind. | 7 521                  | •                                                                              | •                                                                                            |                                                   |    | •                                       |                                         |                                   |                                                                                         |                                                        |    | •                                      | •                                                                                       | •                                     | •                                                       | •                                        |                                                                               | •                                        |                                               |                                                       |                                                       |                                                            |                                                          |                                                          |                                                          |                                          |                                                          |                                                         |                                                    |                                     |                                     |
| A8   | SBL       | 7 530                  | •                                                                              | •                                                                                            |                                                   |    |                                         |                                         | •                                 | •                                                                                       |                                                        |    |                                        |                                                                                         |                                       |                                                         |                                          |                                                                               | •                                        |                                               |                                                       |                                                       |                                                            |                                                          |                                                          |                                                          |                                          |                                                          |                                                         |                                                    |                                     |                                     |
| AA   | SBL, ind. | 7 31                   | •                                                                              | •                                                                                            |                                                   |    |                                         |                                         | •                                 | •                                                                                       |                                                        |    | •                                      | •                                                                                       | •                                     | •                                                       | •                                        |                                                                               | •                                        |                                               |                                                       |                                                       |                                                            |                                                          |                                                          |                                                          |                                          |                                                          |                                                         |                                                    |                                     |                                     |
| AC   | SBA       | 7 532                  | •                                                                              | •                                                                                            |                                                   |    | •                                       | •                                       |                                   |                                                                                         |                                                        |    |                                        |                                                                                         |                                       |                                                         |                                          |                                                                               | •                                        |                                               |                                                       |                                                       |                                                            |                                                          |                                                          |                                                          |                                          |                                                          |                                                         |                                                    |                                     |                                     |
| AE   | SBA, ind. | 7 5321                 | •                                                                              | •                                                                                            |                                                   |    | •                                       | •                                       |                                   |                                                                                         |                                                        |    | •                                      | •                                                                                       | •                                     | •                                                       | •                                        |                                                                               | •                                        |                                               |                                                       |                                                       |                                                            |                                                          |                                                          |                                                          |                                          |                                                          |                                                         |                                                    |                                     |                                     |
| B0   | ANC       | 7 540                  | •                                                                              | •                                                                                            |                                                   |    |                                         |                                         |                                   |                                                                                         |                                                        |    |                                        |                                                                                         |                                       |                                                         |                                          |                                                                               | •                                        |                                               |                                                       |                                                       |                                                            |                                                          |                                                          |                                                          |                                          |                                                          |                                                         |                                                    |                                     |                                     |
| B2   | ANX       | 7 541                  | •                                                                              | •                                                                                            |                                                   |    |                                         |                                         |                                   |                                                                                         |                                                        |    | •                                      | •                                                                                       | •                                     | •                                                       | •                                        |                                                                               | •                                        |                                               |                                                       |                                                       |                                                            |                                                          |                                                          |                                                          |                                          |                                                          |                                                         |                                                    |                                     |                                     |
| B4   | ANR       | 7 5420                 | •                                                                              | •                                                                                            |                                                   |    | •                                       |                                         |                                   |                                                                                         |                                                        |    |                                        |                                                                                         |                                       |                                                         |                                          |                                                                               | •                                        |                                               |                                                       |                                                       |                                                            |                                                          |                                                          |                                                          |                                          |                                                          |                                                         |                                                    |                                     |                                     |
| B6   | ANR, ind. | 7 5421                 | •                                                                              | •                                                                                            |                                                   |    | •                                       |                                         |                                   |                                                                                         |                                                        |    | •                                      | •                                                                                       | •                                     | •                                                       | •                                        |                                                                               | •                                        |                                               |                                                       |                                                       |                                                            |                                                          |                                                          |                                                          |                                          |                                                          |                                                         |                                                    |                                     |                                     |
| B8   | ANL       | 7 5430                 | •                                                                              | •                                                                                            |                                                   |    |                                         |                                         | •                                 | •                                                                                       |                                                        |    |                                        |                                                                                         |                                       |                                                         |                                          |                                                                               | •                                        |                                               |                                                       |                                                       |                                                            |                                                          |                                                          |                                                          |                                          |                                                          |                                                         |                                                    |                                     |                                     |
| BA   | ANL, ind. | 7 5431                 | •                                                                              | •                                                                                            |                                                   |    |                                         |                                         | •                                 | •                                                                                       |                                                        |    | •                                      | •                                                                                       | •                                     | •                                                       | •                                        |                                                                               | •                                        |                                               |                                                       |                                                       |                                                            |                                                          |                                                          |                                                          |                                          |                                                          |                                                         |                                                    |                                     |                                     |
| BC   | ANA       | 7 54320                | •                                                                              | •                                                                                            |                                                   |    | •                                       | •                                       |                                   |                                                                                         |                                                        |    |                                        |                                                                                         |                                       |                                                         |                                          |                                                                               | •                                        |                                               |                                                       |                                                       |                                                            |                                                          |                                                          |                                                          |                                          |                                                          |                                                         |                                                    |                                     |                                     |
| BE   | ANA, ind. | 7 54321                | •                                                                              | •                                                                                            |                                                   |    | •                                       | •                                       |                                   |                                                                                         |                                                        |    | •                                      | •                                                                                       | •                                     | •                                                       | •                                        |                                                                               | •                                        |                                               |                                                       |                                                       |                                                            |                                                          |                                                          |                                                          |                                          |                                                          |                                                         |                                                    |                                     |                                     |

2.3.23

• • DO-SCHLEIFE

• 2-BYTE-INDEX



| HEXA | SYMB      | Q-Register<br>76543210 | $\emptyset\emptyset \langle N \rangle \rightarrow Q, N+1, \text{CARRY} - \text{FF1} = \emptyset, \text{CARRY} - \text{FF2} = 1$<br>$\emptyset 1 \langle N \rangle \rightarrow P, N+1$ (bei geradem Befehlsbyte ' $\emptyset 2 \rightarrow P$ ')<br>$\emptyset 2 \langle L \rangle \rightarrow \langle P \rangle$<br>$\emptyset 3$<br>$\emptyset 4 \langle N \rangle \rightarrow \text{MR}, N+1$<br>$\emptyset 5 \langle N \rangle \rightarrow \text{ML}, N+1$<br>$\emptyset 6 \langle P \rangle \rightarrow B$<br>$\emptyset 7 \langle P \rangle + \langle \text{NR} \rangle \rightarrow \text{MR}, u \rightarrow \text{CARRY} - \text{FF1}$<br>$\emptyset 8 \langle \text{NL} \rangle + u \rightarrow \text{ML}, N+1$<br>$\emptyset 9$<br>$\emptyset A \langle N \rangle \rightarrow B, N+1$<br>$\emptyset B \langle P \rangle + \langle \text{MR} \rangle \rightarrow \text{MR}, u \rightarrow \text{CARRY} - \text{FF1}$<br>$\emptyset C \langle B \rangle + 1 \rightarrow B$<br>$\emptyset D \langle P \rangle + \langle \text{ML} \rangle \rightarrow \text{ML}$<br>$\emptyset E \langle \text{ML} \rangle + C \rightarrow \text{ML}$<br>$\emptyset F \langle P \rangle + C \rightarrow B$ , bei Inkrement-Branch ist C. = 1 | $1A \langle M \rangle \rightarrow B, (M+1)$<br>$1B \langle N \rangle \rightarrow B, N+1, (N+1)$<br>$30 \langle P \rangle + \langle B \rangle \rightarrow B$<br>$31 \langle P \rangle - \langle B \rangle \rightarrow B$<br>$32 \langle P \rangle \wedge \langle B \rangle \rightarrow B$<br>$33 \langle P \rangle \vee \langle B \rangle \rightarrow B$<br>$34 \langle P \rangle \neq \langle B \rangle \rightarrow B$<br>$35 \langle B \rangle \rightarrow \langle P \rangle, (P+1)$<br>$36 \langle P \rangle \rightarrow B, (P+1)$<br>$37 \langle B \rangle \rightarrow \langle M \rangle, (M+1)$<br>$38 \langle \text{NR} \rangle \rightarrow \langle P \rangle, P+1$<br>$39 \langle \text{NL} \rangle \rightarrow \langle P \rangle$<br>$3A \langle \text{MR} \rangle \rightarrow \text{NR}$<br>$3B \langle \text{ML} \rangle \rightarrow \text{NL}$ |
|------|-----------|------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| F0   |           | 7654                   | • •                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| F1   |           | 7654 (0)               | • •                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| F2   | JPX       | 7654 1                 | • •                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | • •                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| F3   | CSX       | 7654 1(0)              | • •                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | • •                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| F4   | JPR       | 7654 2                 | • •                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | • •                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| F5   |           | 7654 2 (0)             | • •                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | • •                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| F6   | JPR, ind. | 7654 21                | • •                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | • •                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| F7   |           | 7654 21(0)             | • •                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | • •                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| F8   | JPL       | 76543                  | • •                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | • •                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| F9   | CSL       | 76543 (0)              | • •                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | • •                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| FA   | JPL, ind. | 76543 1(0)             | • •                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | • •                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| FB   | CSL, ind. | 76543 1(0)             | • •                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | • •                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| FC   | JPA       | 765432                 | • •                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | • •                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| FD   | CSA       | 765432 (0)             | • •                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | • •                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| FE   | JPA, ind. | 7654321                | • •                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | • •                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| FF   | CSA, ind. | 7654321(0)             | • •                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | • •                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |

◦ 2-BYTE-INDEX







| PLA I |        | EINGÄNGE |     |     |     |    |    |    |    |    |    |    |    |    |    |    | AUSGÄNGE A=L |      |    |    |    |    |    |    |  |  |
|-------|--------|----------|-----|-----|-----|----|----|----|----|----|----|----|----|----|----|----|--------------|------|----|----|----|----|----|----|--|--|
| D12A  |        | I13      | I12 | I11 | I10 | I9 | I8 | I7 | I6 | I5 | I4 | I3 | I2 | I1 | I0 |    | F7           | F6   | F5 | F4 | F3 | F2 | F1 | F0 |  |  |
| 0     |        | H        | H   | H   | H   | H  | H  |    | H  | -  | -  | H  | L  | L  | H  |    | A            | -    | -  | A  | A  | -  | A  | -  |  |  |
| 1     |        |          | L   | L   | L   | L  | L  |    | L  | -  | -  | L  | L  | L  |    |    | -            | -    | A  | A  | -  | -  | -  |    |  |  |
| 2     |        | -        | L   | L   | L   | L  | L  | H  | L  | L  | H  | L  | L  | L  | H  |    | -            | -    | -  | -  | -  | A  | -  |    |  |  |
| 3     |        | -        | L   | L   | L   | L  | L  | H  | L  | L  | H  | L  | L  | L  |    |    | -            | -    | -  | -  | -  | A  | -  |    |  |  |
| 4     |        | -        | L   | L   | L   | L  | L  | H  | L  | L  | H  | L  | H  | L  |    |    | -            | -    | -  | -  | A  | A  | -  |    |  |  |
| 5     |        | -        | L   | L   | L   | L  | H  | L  | L  | L  | H  | L  | H  | L  |    |    | A            | -    | -  | A  | -  | -  | -  |    |  |  |
| 6     |        | -        | L   | L   | L   | H  | L  |    | L  | L  | H  | L  | H  | L  |    |    | A            | -    | -  | A  | A  | -  | -  |    |  |  |
| 7     |        | -        | H   | L   | L   | H  | L  |    | L  | L  | H  | L  | H  | L  |    |    | A            | -    | -  | A  | -  | A  | A  |    |  |  |
| 8     |        | -        | H   | L   | L   | H  | L  |    | L  | L  | H  | L  | H  | L  |    |    | -            | -    | -  | A  | -  | A  | A  |    |  |  |
| 9     |        | -        | L   | L   | L   | L  | L  |    | L  | L  | L  | L  | -  | -  | -  |    | -            | -    | -  | -  | -  | -  | -  |    |  |  |
| 10    |        | -        | L   | L   | L   | L  | L  | H  | L  | H  | L  | L  | -  | -  | -  |    | -            | -    | -  | A  | A  | A  | A  |    |  |  |
| 11    |        | -        | L   | L   | L   | L  | L  | H  | L  | H  | L  | L  | -  | H  | -  |    | -            | -    | -  | -  | A  | -  | -  |    |  |  |
| 12    |        | -        | L   | L   | L   | L  | L  | H  | L  | H  | -  | H  | -  | -  | -  |    | -            | -    | -  | A  | A  | A  | A  |    |  |  |
| 13    |        | -        | L   | L   | L   | H  | L  |    | L  | H  | -  | -  | -  | H  | -  |    | -            | -    | -  | -  | A  | A  | A  |    |  |  |
| 14    |        | -        | L   | L   | L   | L  | L  | H  | L  | H  | H  | -  | -  | H  | -  |    | -            | -    | -  | -  | A  | -  | -  |    |  |  |
| 15    |        | -        | L   | L   | L   | L  | L  | H  | L  | H  | H  | -  | -  | L  | -  |    | -            | -    | -  | -  | A  | A  | A  |    |  |  |
| 16    |        | -        | L   | H   | L   | L  | L  |    | L  | H  | L  | L  | -  | L  | H  |    | A            | -    | -  | -  | A  | A  | A  |    |  |  |
| 17    |        | -        | L   | L   | H   | H  | H  |    | L  | H  | -  | -  | -  | H  |    |    | A            | -    | -  | -  | -  | -  | -  |    |  |  |
| 18    |        | -        | L   | L   | H   | H  | H  | H  | L  | H  | L  | L  | -  | H  | L  |    | A            | -    | -  | -  | A  | -  | -  |    |  |  |
| 19    |        | -        | L   | H   | L   | L  | L  | L  | L  | H  | L  | L  | -  | H  | H  |    | A            | A    | -  | -  | A  | -  | -  |    |  |  |
| 20    |        | -        | L   | L   | H   | H  | H  | H  | L  | H  | L  | H  | -  | L  | L  |    | A            | A    | -  | -  | -  | A  | -  |    |  |  |
| 21    |        | -        | L   | H   | L   | H  | H  | H  | L  | H  | L  | H  | -  | L  | H  |    | A            | -    | -  | -  | -  | A  | -  |    |  |  |
| 22    |        | -        | L   | L   | H   | H  | H  | H  | L  | H  | L  | H  | -  | L  | L  |    | A            | -    | -  | -  | -  | -  | A  |    |  |  |
| 23    |        | -        | L   | H   | L   | L  | L  | L  | L  | H  | L  | H  | -  | H  | H  |    | A            | -    | -  | -  | -  | -  | A  |    |  |  |
| 24    |        | -        | L   | L   | H   | H  | H  | H  | L  | H  | H  | L  | -  | L  | L  |    | A            | -    | -  | -  | A  | -  | -  |    |  |  |
| 25    |        | -        | L   | H   | L   | L  | L  | L  | L  | H  | H  | L  | -  | L  | H  |    | A            | A    | -  | -  | -  | A  | -  |    |  |  |
| 26    |        | -        | L   | L   | H   | H  | H  | H  | L  | H  | H  | L  | -  | H  | L  |    | A            | -    | -  | -  | -  | A  | A  |    |  |  |
| 27    |        | -        | L   | H   | L   | L  | L  | L  | L  | H  | H  | L  | -  | H  | H  |    | A            | -    | -  | -  | -  | A  | A  |    |  |  |
| 28    |        | -        | L   | L   | H   | H  | H  | H  | L  | H  | H  | H  | -  | L  | L  |    | A            | -    | -  | -  | A  | A  | -  |    |  |  |
| 29    |        | -        | L   | H   | L   | L  | L  | L  | L  | H  | H  | H  | -  | L  | H  |    | A            | -    | -  | -  | A  | A  | -  |    |  |  |
| 30    |        | -        | L   | L   | H   | H  | H  | H  | L  | H  | H  | H  | -  | H  | L  |    | A            | -    | -  | -  | A  | -  | A  |    |  |  |
| 31    |        | -        | L   | H   | L   | L  | L  | L  | L  | H  | H  | H  | -  | H  | H  |    | A            | -    | -  | -  | A  | -  | A  |    |  |  |
| 32    |        | -        | H   | L   | L   | L  | L  | H  | L  | L  | L  | L  | -  | -  | -  |    | -            | -    | -  | A  | -  | A  | A  | A  |  |  |
| 33    |        | -        | L   | L   | H   | H  | H  | H  | L  | H  | L  | L  | -  | L  | L  |    | A            | -    | -  | -  | A  | -  | A  | A  |  |  |
| 34    |        | -        | L   | L   | H   | H  | L  | L  | L  | H  | -  | -  | -  | -  | -  |    | -            | -    | -  | -  | A  | A  | -  |    |  |  |
| 35    |        | -        | L   | H   | H   | H  | L  | L  | L  | H  | -  | -  | -  | -  | -  |    | -            | -    | -  | -  | A  | A  | -  |    |  |  |
| 36    |        | -        | H   | L   | H   | H  | H  | H  | L  | L  | L  | L  | -  | -  | -  |    | -            | -    | -  | A  | -  | -  | -  |    |  |  |
| 37    |        | -        | H   | L   | L   | L  | L  | L  | L  | L  | H  | L  | L  | L  | H  |    | -            | -    | -  | A  | -  | -  | -  |    |  |  |
| 38    |        | -        | H   | L   | L   | L  | L  | L  | L  | L  | H  | L  | L  | L  | H  |    | -            | -    | -  | A  | -  | -  | -  |    |  |  |
| 39    |        | -        | L   | L   | L   | L  | L  | L  | L  | L  | L  | L  | L  | L  | L  |    | -            | -    | -  | A  | -  | -  | A  |    |  |  |
| 40    |        | H        | H   | L   | L   | H  | L  | H  | L  | L  | H  | L  | H  | L  | -  |    | -            | -    | -  | -  | -  | A  | A  | -  |  |  |
| 41    |        | H        | H   | L   | L   | H  | H  | H  | L  | L  | H  | L  | H  | H  | -  |    | -            | -    | -  | -  | -  | A  | A  | -  |  |  |
| 42    |        | H        | H   | L   | L   | H  | L  | L  | L  | H  | -  | -  | -  | -  | -  |    | -            | -    | -  | -  | A  | A  | A  |    |  |  |
| 43    |        | H        | H   | L   | L   | H  | L  | L  | L  | H  | -  | -  | -  | L  | L  | L  | A            | -    | -  | -  | -  | A  | A  | A  |  |  |
| 44    |        | H        | H   | L   | L   | H  | L  | L  | H  | -  | -  | -  | -  | H  | -  | -  | A            | -    | -  | -  | -  | A  | -  | -  |  |  |
| 45    |        | H        | H   | L   | L   | H  | H  | H  | H  | H  | H  | L  | -  | -  | -  |    | -            | -    | -  | -  | A  | A  | -  | -  |  |  |
| 46    |        | H        | L   | L   | L   | L  | L  | L  | L  | L  | L  | L  | -  | L  | H  | L  | -            | -    | -  | -  | A  | -  | -  | A  |  |  |
| 47    |        | H        | L   | L   | L   | L  | L  | L  | L  | -  | -  | -  | -  | L  | H  | -  | A            | -    | -  | -  | A  | -  | -  | A  |  |  |
|       | 2.3.28 | DO-FF    | C5  | C4  | C3  | C2 | C1 | C0 | Q7 | Q6 | Q5 | Q4 | Q3 | Q2 | Q1 | Q0 | HD5+5        | Q0N3 | C5 | C4 | C3 | C2 | C1 | C0 |  |  |

[illegible]

| ROM D00A |    |    |    |    |    |    |  |  |              |             |             |            |             |             |             |             |
|----------|----|----|----|----|----|----|--|--|--------------|-------------|-------------|------------|-------------|-------------|-------------|-------------|
|          |    | C4 | C3 | C2 | C1 | C0 |  |  | <u>RENCA</u> | <u>RCA1</u> | <u>RCA0</u> | <u>RAM</u> | <u>RAS0</u> | <u>RAS1</u> | <u>RAS2</u> | <u>RAS3</u> |
|          | EN | E  | D  | C  | B  | A  |  |  | Y8           | Y7          | Y6          | Y5         | Y4          | Y3          | Y2          | Y1          |
| 00       | L  | L  | L  | L  | L  | L  |  |  | H            | H           | H           | H          | H           | H           | H           | H           |
| 01       | L  | L  | L  | L  | L  | L  |  |  | H            | H           | H           | H          | H           | H           | H           | H           |
| 02       | L  | L  | L  | L  | L  | H  |  |  | H            | H           | H           | H          | L           | H           | L           | H           |
| 03       | L  | L  | L  | L  | L  | H  |  |  | H            | H           | H           | H          | H           | H           | H           | H           |
| 04       | L  | L  | L  | L  | H  | L  |  |  | H            | H           | H           | H          | H           | H           | H           | H           |
| 05       | L  | L  | L  | L  | H  | L  |  |  | H            | H           | H           | H          | H           | H           | H           | H           |
| 06       | L  | L  | L  | L  | H  | H  |  |  | H            | H           | H           | H          | H           | H           | H           | H           |
| 07       | L  | L  | L  | L  | H  | H  |  |  | L            | H           | H           | L          | H           | L           | L           | H           |
| 08       | L  | L  | L  | H  | L  | L  |  |  | L            | L           | H           | L          | H           | L           | L           | H           |
| 09       | L  | L  | L  | H  | L  | L  |  |  | H            | H           | H           | H          | H           | H           | H           | H           |
| 0A       | L  | L  | L  | H  | L  | H  |  |  | H            | H           | H           | H          | H           | H           | H           | H           |
| 0B       | L  | L  | L  | H  | L  | H  |  |  | L            | H           | H           | L          | H           | L           | L           | H           |
| 0C       | L  | L  | L  | H  | H  | L  |  |  | H            | H           | L           | L          | H           | L           | L           | H           |
| 0D       | L  | L  | L  | H  | H  | L  |  |  | H            | H           | H           | L          | H           | L           | L           | H           |
| 0E       | L  | L  | L  | H  | H  | H  |  |  | L            | L           | H           | L          | H           | L           | L           | H           |
| 0F       | L  | L  | L  | H  | H  | H  |  |  | L            | H           | H           | L          | L           | L           | L           | L           |
| 10       | L  | L  | H  | L  | L  | L  |  |  | H            | H           | H           | H          | L           | H           | L           | L           |
| 11       | L  | L  | H  | L  | L  | L  |  |  | H            | H           | H           | H          | L           | L           | H           | L           |
| 12       | L  | L  | H  | L  | L  | H  |  |  | H            | H           | H           | L          | L           | H           | H           | L           |
| 13       | L  | L  | H  | L  | L  | H  |  |  | H            | H           | H           | H          | L           | L           | H           | L           |
| 14       | L  | L  | H  | L  | H  | L  |  |  | H            | H           | H           | H          | L           | L           | H           | L           |
| 15       | L  | L  | H  | L  | H  | L  |  |  | H            | H           | H           | H          | L           | L           | L           | H           |
| 16       | L  | L  | H  | L  | H  | H  |  |  | H            | H           | H           | H          | L           | L           | L           | H           |
| 17       | L  | L  | H  | L  | H  | H  |  |  | H            | H           | H           | H          | H           | L           | H           | L           |
| 18       | L  | L  | H  | H  | L  | L  |  |  | H            | H           | H           | H          | H           | L           | H           | L           |
| 19       | L  | L  | H  | H  | L  | L  |  |  | H            | H           | H           | H          | H           | H           | H           | H           |
| 1A       | L  | L  | H  | H  | L  | H  |  |  | H            | H           | H           | H          | H           | H           | H           | H           |
| 1B       | L  | L  | H  | H  | L  | H  |  |  | H            | H           | H           | H          | H           | H           | H           | H           |
| 1C       | L  | L  | H  | H  | H  | L  |  |  | L            | H           | H           | L          | H           | L           | L           | H           |
| 1D       | L  | L  | H  | H  | H  | L  |  |  | H            | L           | H           | L          | H           | L           | L           | H           |
| 1E       | L  | L  | H  | H  | H  | H  |  |  | H            | H           | H           | H          | H           | H           | H           | H           |
| 1F       | L  | L  | H  | H  | H  | H  |  |  | H            | H           | H           | H          | H           | H           | H           | H           |
| Input    |    |    |    |    |    |    |  |  | Output       |             |             |            |             |             |             |             |

2.3.29

|       |           |       |      |                                                                                     |         |                     |
|-------|-----------|-------|------|-------------------------------------------------------------------------------------|---------|---------------------|
|       |           |       |      | Datum                                                                               | Name    | Benennung           |
|       |           |       |      | Gez.                                                                                |         | CPU                 |
|       |           |       |      | Gepr.                                                                               |         | Romtabelle ROM D00A |
|       |           |       |      | Komm.-Nr.                                                                           |         |                     |
|       |           |       |      |  |         |                     |
|       |           |       |      | Zeichnng./Saech. Nr.                                                                | Ins.    | Zch. Art.           |
|       |           |       |      | 660660                                                                              |         | 280901              |
| Zust. | Aenderung | Datum | Name | Abt./Sachb.                                                                         | Ers. f. | Ers. d.             |

| ROM D01 B |    |    |    |    |    |    |  |        |      |      |     |      |      |      |      |
|-----------|----|----|----|----|----|----|--|--------|------|------|-----|------|------|------|------|
|           |    | C4 | C3 | C2 | C1 | C0 |  | RENCA  | RLNA | K-GS | RAM | RSAD | RSA1 | RSA2 | RSA3 |
|           | EN | E  | D  | C  | B  | A  |  | Y8     | Y7   | Y6   | Y5  | Y4   | Y3   | Y2   | Y1   |
| 00        | L  | L  | L  | L  | L  | L  |  | H      | H    | H    | H   | H    | H    | H    | H    |
| 01        | L  | L  | L  | L  | L  | H  |  | H      | H    | H    | H   | H    | H    | L    | L    |
| 02        | L  | L  | L  | L  | H  | L  |  | H      | H    | L    | H   | H    | H    | H    | H    |
| 03        | L  | L  | L  | L  | H  | H  |  | H      | H    | H    | H   | H    | H    | H    | H    |
| 04        | L  | L  | L  | H  | L  | L  |  | H      | H    | H    | H   | H    | H    | H    | H    |
| 05        | L  | L  | L  | H  | L  | H  |  | H      | H    | H    | H   | L    | H    | L    | H    |
| 06        | L  | L  | L  | H  | H  | L  |  | H      | H    | H    | H   | H    | H    | H    | H    |
| 07        | L  | L  | L  | H  | H  | H  |  | H      | H    | H    | H   | L    | H    | L    | H    |
| 08        | L  | L  | H  | L  | L  | L  |  | H      | H    | H    | H   | H    | L    | H    | L    |
| 09        | L  | L  | H  | L  | L  | H  |  | H      | H    | H    | H   | H    | H    | L    | L    |
| 0A        | L  | L  | H  | L  | H  | L  |  | H      | H    | H    | H   | H    | H    | L    | L    |
| 0B        | L  | L  | H  | L  | H  | H  |  | H      | H    | H    | H   | L    | H    | L    | H    |
| 0C        | L  | L  | H  | H  | L  | L  |  | H      | H    | H    | H   | H    | H    | L    | L    |
| 0D        | L  | L  | H  | H  | L  | H  |  | H      | H    | H    | H   | H    | H    | H    | H    |
| 0E        | L  | L  | H  | H  | H  | L  |  | H      | H    | H    | H   | H    | H    | H    | H    |
| 0F        | L  | L  | H  | H  | H  | H  |  | H      | H    | H    | H   | H    | H    | H    | H    |
| 10        | L  | H  | L  | L  | L  | L  |  | L      | H    | H    | L   | H    | L    | L    | H    |
| 11        | L  | H  | L  | L  | L  | H  |  | L      | H    | H    | L   | L    | H    | H    | L    |
| 12        | L  | H  | L  | L  | H  | L  |  | H      | H    | H    | H   | H    | L    | H    | H    |
| 13        | L  | H  | L  | L  | H  | H  |  | H      | H    | H    | H   | L    | H    | H    | H    |
| 14        | L  | H  | L  | H  | L  | L  |  | H      | H    | H    | H   | L    | H    | H    | L    |
| 15        | L  | H  | L  | H  | L  | H  |  | H      | H    | H    | H   | L    | H    | L    | H    |
| 16        | L  | H  | L  | H  | H  | L  |  | H      | H    | H    | H   | H    | H    | H    | H    |
| 17        | L  | H  | L  | H  | H  | H  |  | H      | H    | H    | H   | L    | H    | L    | H    |
| 18        | L  | H  | H  | L  | L  | L  |  | H      | H    | H    | H   | L    | H    | L    | H    |
| 19        | L  | H  | H  | L  | L  | H  |  | H      | H    | H    | H   | L    | H    | L    | H    |
| 1A        | L  | H  | H  | L  | H  | L  |  | H      | H    | H    | H   | L    | H    | L    | H    |
| 1B        | L  | H  | H  | L  | H  | H  |  | H      | H    | H    | H   | L    | H    | L    | H    |
| 1C        | L  | H  | H  | H  | L  | L  |  | H      | H    | H    | H   | H    | H    | H    | H    |
| 1D        | L  | H  | H  | H  | L  | H  |  | H      | H    | H    | H   | H    | H    | H    | H    |
| 1E        | L  | H  | H  | H  | H  | L  |  | H      | H    | H    | H   | H    | H    | H    | H    |
| 1F        | L  | H  | H  | H  | H  | H  |  | H      | H    | H    | H   | H    | H    | H    | H    |
| Input     |    |    |    |    |    |    |  | Output |      |      |     |      |      |      |      |

2.3.30

|       |           |       |      |                                                                                     |      |                      |  |      |             |         |       |  |  |  |  |
|-------|-----------|-------|------|-------------------------------------------------------------------------------------|------|----------------------|--|------|-------------|---------|-------|--|--|--|--|
|       |           |       |      | Datum                                                                               | Name | Benennung            |  |      |             |         |       |  |  |  |  |
|       |           |       |      | Gez.                                                                                |      | CPU                  |  |      |             |         |       |  |  |  |  |
|       |           |       |      | Gepr.                                                                               |      | Romtabelle ROM D01 B |  |      |             |         |       |  |  |  |  |
|       |           |       |      | Komm.-Nr.                                                                           |      |                      |  |      |             |         |       |  |  |  |  |
|       |           |       |      |  |      | Zeichn./Bauh.-Nr.    |  | Ind. | Zeich.-Art. | Blatt   | Blatt |  |  |  |  |
|       |           |       |      |                                                                                     |      | 660660               |  |      | 28          | 09      | 02    |  |  |  |  |
| Zust. | Aenderung | Datum | Name | Abt./Sachb.                                                                         |      | Ers. f.              |  |      |             | Ers. d. |       |  |  |  |  |

| ROM D02A |    |    |    |    |    |    |  |                   |                   |    |                   |                   |                   |                   |                   |
|----------|----|----|----|----|----|----|--|-------------------|-------------------|----|-------------------|-------------------|-------------------|-------------------|-------------------|
|          |    | C4 | C3 | C2 | C1 | C0 |  | $\overline{RM0F}$ | $\overline{RM0B}$ | -  | $\overline{RM01}$ | $\overline{RLM1}$ | $\overline{RLM0}$ | $\overline{RLN0}$ | $\overline{RM00}$ |
|          | EN | E  | D  | C  | B  | A  |  | Y8                | Y7                | Y6 | Y5                | Y4                | Y3                | Y2                | Y1                |
| 00       | L  | L  | L  | L  | L  | L  |  | H                 | H                 | H  | H                 | H                 | H                 | H                 | L                 |
| 01       | L  | L  | L  | L  | L  | H  |  | H                 | H                 | H  | L                 | H                 | H                 | H                 | H                 |
| 02       | L  | L  | L  | L  | H  | L  |  | H                 | H                 | L  | H                 | H                 | H                 | H                 | H                 |
| 03       | L  | L  | L  | L  | H  | H  |  | H                 | H                 | H  | H                 | H                 | H                 | H                 | H                 |
| 04       | L  | L  | L  | H  | L  | L  |  | H                 | H                 | H  | H                 | H                 | L                 | H                 | H                 |
| 05       | L  | L  | L  | H  | L  | H  |  | H                 | H                 | H  | H                 | L                 | H                 | H                 | H                 |
| 06       | L  | L  | L  | H  | H  | L  |  | H                 | H                 | H  | H                 | H                 | H                 | H                 | H                 |
| 07       | L  | L  | L  | H  | H  | H  |  | H                 | H                 | H  | H                 | H                 | L                 | H                 | H                 |
| 08       | L  | L  | H  | L  | L  | L  |  | H                 | H                 | H  | H                 | L                 | H                 | H                 | H                 |
| 09       | L  | L  | H  | L  | L  | H  |  | H                 | H                 | H  | H                 | H                 | H                 | H                 | H                 |
| 0A       | L  | L  | H  | L  | H  | L  |  | H                 | H                 | H  | H                 | H                 | H                 | H                 | H                 |
| 0B       | L  | L  | H  | L  | H  | H  |  | H                 | L                 | H  | H                 | H                 | L                 | H                 | H                 |
| 0C       | L  | L  | H  | H  | L  | L  |  | H                 | H                 | H  | H                 | H                 | H                 | H                 | H                 |
| 0D       | L  | L  | H  | H  | L  | H  |  | H                 | H                 | H  | H                 | L                 | H                 | H                 | H                 |
| 0E       | L  | L  | H  | H  | H  | L  |  | H                 | H                 | H  | H                 | L                 | H                 | H                 | H                 |
| 0F       | L  | L  | H  | H  | H  | H  |  | L                 | H                 | H  | H                 | H                 | H                 | H                 | H                 |
| 10       | L  | H  | L  | L  | L  | L  |  | H                 | H                 | H  | H                 | H                 | H                 | H                 | H                 |
| 11       | L  | H  | L  | L  | L  | H  |  | H                 | H                 | H  | H                 | H                 | H                 | H                 | H                 |
| 12       | L  | H  | L  | L  | H  | L  |  | H                 | H                 | H  | H                 | H                 | H                 | H                 | H                 |
| 13       | L  | H  | L  | L  | H  | H  |  | H                 | H                 | H  | H                 | H                 | H                 | H                 | H                 |
| 14       | L  | H  | L  | H  | L  | L  |  | H                 | H                 | H  | H                 | H                 | H                 | H                 | H                 |
| 15       | L  | H  | L  | H  | L  | H  |  | H                 | H                 | H  | H                 | H                 | H                 | H                 | H                 |
| 16       | L  | H  | L  | H  | H  | L  |  | H                 | H                 | H  | H                 | H                 | H                 | H                 | H                 |
| 17       | L  | H  | L  | H  | H  | H  |  | H                 | H                 | H  | H                 | H                 | H                 | H                 | H                 |
| 18       | L  | H  | H  | L  | L  | L  |  | H                 | H                 | H  | H                 | H                 | H                 | H                 | H                 |
| 19       | L  | H  | H  | L  | L  | H  |  | H                 | H                 | H  | H                 | H                 | H                 | H                 | H                 |
| 1A       | L  | H  | H  | L  | H  | L  |  | H                 | H                 | H  | H                 | H                 | H                 | H                 | H                 |
| 1B       | L  | H  | H  | L  | H  | H  |  | H                 | H                 | H  | H                 | H                 | H                 | H                 | H                 |
| 1C       | L  | H  | H  | H  | L  | L  |  | H                 | H                 | H  | H                 | H                 | H                 | L                 | H                 |
| 1D       | L  | H  | H  | H  | L  | H  |  | H                 | H                 | H  | H                 | H                 | H                 | H                 | H                 |
| 1E       | L  | H  | H  | H  | H  | L  |  | H                 | H                 | H  | H                 | H                 | H                 | H                 | H                 |
| 1F       | L  | H  | H  | H  | H  | H  |  | H                 | H                 | H  | H                 | H                 | H                 | H                 | H                 |
| Input    |    |    |    |    |    |    |  | Output            |                   |    |                   |                   |                   |                   |                   |

2.3.31

|       |          |       |      |                                                                                     |         |                               |
|-------|----------|-------|------|-------------------------------------------------------------------------------------|---------|-------------------------------|
|       |          |       |      | Datum                                                                               | Name    | Benennung                     |
|       |          |       |      | Gez.                                                                                |         | CPU                           |
|       |          |       |      | Gepr.                                                                               |         | Romtabelle ROM D02A           |
|       |          |       |      | Komm.-Nr.                                                                           |         |                               |
|       |          |       |      |  |         | Zeichnung Sach.-Nr.<br>660660 |
|       |          |       |      |                                                                                     |         | Zsch.-Art.<br>28              |
|       |          |       |      |                                                                                     |         | Blätter<br>09                 |
|       |          |       |      |                                                                                     |         | Blatt<br>03                   |
| Zust. | Änderung | Datum | Name | Abt./Sachb.                                                                         | Ers. f. | Ers. d.                       |

# ROM D03A

|       |    | C4 | C3 | C2 | C1 | C0 |  | RRK    | RREG | RSYN | RS1B | RS0B | RBKS | RBKB | RBKA |
|-------|----|----|----|----|----|----|--|--------|------|------|------|------|------|------|------|
|       | EN | E  | D  | C  | B  | A  |  | Y8     | Y7   | Y6   | Y5   | Y4   | Y3   | Y2   | Y1   |
| 00    | L  | L  | L  | L  | L  | L  |  | H      | H    | L    | H    | H    | H    | H    | H    |
| 01    | L  | L  | L  | L  | L  | H  |  | H      | H    | L    | H    | H    | H    | H    | H    |
| 02    | L  | L  | L  | L  | H  | L  |  | L      | L    | L    | H    | H    | L    | L    | H    |
| 03    | L  | L  | L  | L  | H  | H  |  | H      | H    | H    | H    | H    | H    | H    | H    |
| 04    | L  | L  | L  | H  | L  | L  |  | H      | H    | L    | H    | L    | H    | L    | L    |
| 05    | L  | L  | L  | H  | L  | H  |  | H      | H    | L    | H    | H    | H    | H    | H    |
| 06    | L  | L  | L  | H  | H  | L  |  | H      | L    | L    | L    | L    | H    | H    | H    |
| 07    | L  | L  | L  | H  | H  | H  |  | H      | H    | L    | H    | H    | L    | H    | L    |
| 08    | L  | L  | H  | L  | L  | L  |  | H      | H    | H    | H    | H    | L    | H    | H    |
| 09    | L  | L  | H  | L  | L  | H  |  | H      | H    | H    | H    | H    | H    | H    | H    |
| 0A    | L  | L  | H  | L  | H  | L  |  | H      | H    | L    | L    | L    | H    | H    | H    |
| 0B    | L  | L  | H  | L  | H  | H  |  | H      | L    | L    | H    | H    | H    | L    | L    |
| 0C    | L  | L  | H  | H  | L  | L  |  | H      | H    | H    | L    | L    | H    | H    | H    |
| 0D    | L  | L  | H  | H  | L  | H  |  | H      | L    | L    | H    | H    | H    | L    | H    |
| 0E    | L  | L  | H  | H  | H  | L  |  | H      | H    | H    | H    | H    | H    | L    | H    |
| 0F    | L  | L  | H  | H  | H  | H  |  | H      | L    | L    | L    | L    | H    | H    | H    |
| 10    | L  | H  | L  | L  | L  | L  |  | L      | L    | L    | H    | H    | H    | H    | H    |
| 11    | L  | H  | L  | L  | L  | H  |  | H      | L    | L    | H    | H    | H    | H    | H    |
| 12    | L  | H  | L  | L  | H  | L  |  | H      | H    | L    | H    | H    | H    | H    | H    |
| 13    | L  | H  | L  | L  | H  | H  |  | H      | L    | L    | H    | H    | H    | H    | H    |
| 14    | L  | H  | L  | H  | L  | L  |  | H      | H    | L    | H    | H    | H    | H    | H    |
| 15    | L  | H  | L  | H  | L  | H  |  | H      | L    | L    | H    | H    | H    | H    | H    |
| 16    | L  | H  | L  | H  | H  | L  |  | H      | L    | H    | H    | H    | H    | H    | H    |
| 17    | L  | H  | L  | H  | H  | H  |  | H      | H    | H    | H    | H    | H    | H    | H    |
| 18    | L  | H  | H  | L  | L  | L  |  | H      | H    | H    | H    | H    | H    | H    | H    |
| 19    | L  | H  | H  | L  | L  | H  |  | H      | H    | H    | H    | H    | H    | H    | H    |
| 1A    | L  | H  | H  | L  | H  | L  |  | H      | H    | L    | L    | L    | H    | H    | H    |
| 1B    | L  | H  | H  | L  | H  | H  |  | H      | H    | L    | L    | L    | H    | H    | H    |
| 1C    | L  | H  | H  | H  | L  | L  |  | H      | H    | L    | H    | H    | L    | H    | L    |
| 1D    | L  | H  | H  | H  | L  | H  |  | H      | H    | H    | H    | H    | L    | H    | H    |
| 1E    | L  | H  | H  | H  | H  | L  |  | H      | H    | H    | H    | H    | H    | H    | H    |
| 1F    | L  | H  | H  | H  | H  | H  |  | H      | H    | H    | H    | H    | H    | H    | H    |
| Input |    |    |    |    |    |    |  | Output |      |      |      |      |      |      |      |

2.3.32

|       |          |       |      |             |  |                        |  |        |  |                      |  |      |          |         |       |
|-------|----------|-------|------|-------------|--|------------------------|--|--------|--|----------------------|--|------|----------|---------|-------|
|       |          |       |      |             |  | Datum                  |  | Name   |  | Benennung            |  |      |          |         |       |
|       |          |       |      |             |  | Gez.                   |  |        |  | CPU                  |  |      |          |         |       |
|       |          |       |      |             |  | Gepr.                  |  |        |  | Romtabelle ROM D03 B |  |      |          |         |       |
|       |          |       |      |             |  | Kornn.-Nr.             |  |        |  |                      |  |      |          |         |       |
|       |          |       |      |             |  | DIETZ Computer SYSTEME |  |        |  | Zeichn./Sech.-Nr.    |  | Ind. | Seh.-Art | Bildder | Blatt |
|       |          |       |      |             |  |                        |  | 660660 |  |                      |  | 28   | 09       | 04      |       |
| Zust. | Änderung | Datum | Name | Abt./Sachb. |  | Ers. f.                |  |        |  | Ers. d.              |  |      |          |         |       |

| ROM D04 B |    |    |    |    |    |    |  |  |            |             |             |             |             |             |             |             |
|-----------|----|----|----|----|----|----|--|--|------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
|           |    | C4 | C3 | C2 | C1 | C0 |  |  | <u>RRK</u> | <u>RREG</u> | <u>RSYN</u> | <u>RS1B</u> | <u>RS0B</u> | <u>RBKC</u> | <u>RBKB</u> | <u>RBKA</u> |
|           | EN | E  | D  | C  | B  | A  |  |  | Y8         | Y7          | Y6          | Y5          | Y4          | Y3          | Y2          | Y1          |
| 00        | L  | L  | L  | L  | L  | L  |  |  | H          | H           | H           | H           | H           | H           | H           | H           |
| 01        | L  | L  | L  | L  | L  | H  |  |  | H          | L           | L           | H           | H           | H           | H           | H           |
| 02        | L  | L  | L  | L  | L  | H  |  |  | L          | L           | L           | H           | H           | H           | H           | H           |
| 03        | L  | L  | L  | L  | H  | H  |  |  | H          | H           | H           | H           | H           | H           | H           | H           |
| 04        | L  | L  | L  | H  | L  | L  |  |  | H          | H           | H           | L           | H           | H           | H           | H           |
| 05        | L  | L  | L  | H  | L  | H  |  |  | L          | L           | L           | H           | H           | H           | H           | H           |
| 06        | L  | L  | L  | H  | H  | L  |  |  | H          | H           | H           | H           | L           | H           | H           | H           |
| 07        | L  | L  | L  | H  | H  | H  |  |  | L          | L           | L           | H           | H           | H           | H           | H           |
| 08        | L  | L  | H  | L  | L  | L  |  |  | H          | H           | H           | H           | H           | H           | H           | L           |
| 09        | L  | L  | H  | L  | L  | H  |  |  | H          | H           | H           | H           | H           | H           | H           | L           |
| 0A        | L  | L  | H  | L  | H  | L  |  |  | L          | L           | L           | H           | H           | L           | H           | L           |
| 0B        | L  | L  | H  | L  | H  | H  |  |  | L          | L           | L           | H           | H           | L           | H           | H           |
| 0C        | L  | L  | H  | H  | L  | L  |  |  | H          | H           | H           | H           | H           | H           | H           | H           |
| 0D        | L  | L  | H  | H  | L  | H  |  |  | H          | L           | L           | H           | H           | H           | H           | H           |
| 0E        | L  | L  | H  | H  | H  | L  |  |  | H          | L           | L           | H           | H           | H           | H           | H           |
| 0F        | L  | L  | H  | H  | H  | H  |  |  | H          | H           | H           | H           | H           | H           | H           | H           |
| 10        | L  | H  | L  | L  | L  | L  |  |  | H          | L           | L           | L           | L           | H           | H           | H           |
| 11        | L  | H  | L  | L  | L  | H  |  |  | H          | L           | L           | L           | L           | H           | H           | H           |
| 12        | L  | H  | L  | L  | H  | L  |  |  | H          | L           | L           | L           | L           | H           | H           | H           |
| 13        | L  | H  | L  | L  | H  | H  |  |  | H          | L           | L           | L           | L           | H           | H           | H           |
| 14        | L  | H  | L  | H  | L  | L  |  |  | H          | L           | L           | L           | L           | H           | H           | H           |
| 15        | L  | H  | L  | H  | L  | H  |  |  | L          | L           | L           | H           | H           | H           | H           | H           |
| 16        | L  | H  | L  | H  | H  | L  |  |  | H          | L           | L           | L           | L           | H           | H           | H           |
| 17        | L  | H  | L  | H  | H  | H  |  |  | L          | H           | L           | H           | H           | H           | H           | H           |
| 18        | L  | H  | H  | L  | L  | L  |  |  | L          | L           | L           | H           | H           | L           | H           | L           |
| 19        | L  | H  | H  | L  | L  | H  |  |  | L          | L           | L           | H           | H           | L           | H           | H           |
| 1A        | L  | H  | H  | L  | H  | L  |  |  | H          | H           | H           | H           | H           | H           | L           | L           |
| 1B        | L  | H  | H  | L  | H  | H  |  |  | H          | H           | H           | H           | H           | H           | L           | H           |
| 1C        | L  | H  | H  | H  | L  | L  |  |  | H          | H           | H           | H           | H           | H           | H           | H           |
| 1D        | L  | H  | H  | H  | L  | H  |  |  | H          | H           | H           | H           | H           | H           | H           | H           |
| 1E        | L  | H  | H  | H  | H  | L  |  |  | H          | H           | H           | H           | H           | H           | H           | H           |
| 1F        | L  | H  | H  | H  | H  | H  |  |  | H          | H           | H           | H           | H           | H           | H           | H           |
| Input     |    |    |    |    |    |    |  |  | Output     |             |             |             |             |             |             |             |

2.3.33

|       |          |       |      |                                                                                     |         |                      |     |          |         |       |
|-------|----------|-------|------|-------------------------------------------------------------------------------------|---------|----------------------|-----|----------|---------|-------|
|       |          |       |      | Datum                                                                               | Name    | Benennung            |     |          |         |       |
|       |          |       |      | Gez.                                                                                |         | CPU                  |     |          |         |       |
|       |          |       |      | Gepr                                                                                |         | Romtabelle ROM D04 B |     |          |         |       |
|       |          |       |      | Komm.-Nr                                                                            |         |                      |     |          |         |       |
|       |          |       |      |  |         | Zeichng./Bsch.-Nr    | Ind | Zch.-Art | Blätter | Blatt |
|       |          |       |      |                                                                                     |         | 660660               |     | 28       | 09      | 05    |
| Zust. | Änderung | Datum | Name | Abt./Sachb.                                                                         | Ers. f. | Ers. d.              |     |          |         |       |

| ROM D05A |    |    |    |    |    |    |  |             |             |             |             |            |            |              |             |
|----------|----|----|----|----|----|----|--|-------------|-------------|-------------|-------------|------------|------------|--------------|-------------|
|          |    | C4 | C3 | C2 | C1 | C0 |  | <u>RM1A</u> | <u>RLNL</u> | <u>RCID</u> | <u>RM1E</u> | <u>RMB</u> | <u>RMA</u> | <u>RADRR</u> | <u>RDC0</u> |
|          | EN | E  | D  | C  | B  | A  |  | Y8          | Y7          | Y6          | Y5          | Y4         | Y3         | Y2           | Y1          |
| 00       | L  | L  | L  | L  | L  | L  |  | H           | H           | H           | H           | L          | L          | H            | H           |
| 01       | L  | L  | L  | L  | L  | H  |  | H           | H           | H           | H           | L          | L          | H            | H           |
| 02       | L  | L  | L  | L  | H  | L  |  | H           | H           | H           | H           | H          | L          | H            | H           |
| 03       | L  | L  | L  | L  | H  | H  |  | H           | H           | H           | H           | H          | H          | H            | H           |
| 04       | L  | L  | L  | H  | L  | L  |  | H           | H           | H           | H           | L          | L          | H            | H           |
| 05       | L  | L  | L  | H  | L  | H  |  | H           | H           | H           | H           | L          | L          | H            | H           |
| 06       | L  | L  | L  | H  | H  | L  |  | H           | H           | H           | H           | H          | L          | H            | H           |
| 07       | L  | L  | L  | H  | H  | H  |  | H           | H           | H           | H           | L          | L          | L            | H           |
| 08       | L  | L  | H  | L  | L  | L  |  | H           | H           | H           | H           | H          | H          | H            | L           |
| 09       | L  | L  | H  | L  | L  | H  |  | H           | H           | H           | H           | H          | H          | H            | H           |
| 0A       | L  | L  | H  | L  | H  | L  |  | H           | H           | H           | H           | L          | L          | H            | H           |
| 0B       | L  | L  | H  | L  | H  | H  |  | H           | H           | H           | H           | H          | H          | L            | H           |
| 0C       | L  | L  | H  | H  | L  | L  |  | H           | H           | H           | H           | H          | H          | H            | H           |
| 0D       | L  | L  | H  | H  | L  | H  |  | H           | H           | H           | H           | H          | H          | L            | H           |
| 0E       | L  | L  | H  | H  | H  | L  |  | H           | H           | H           | H           | H          | H          | H            | H           |
| 0F       | L  | L  | H  | H  | H  | H  |  | H           | H           | H           | H           | H          | L          | H            | H           |
| 10       | L  | H  | L  | L  | L  | L  |  | H           | H           | H           | H           | H          | L          | H            | H           |
| 11       | L  | H  | L  | L  | L  | H  |  | H           | H           | H           | H           | L          | H          | H            | H           |
| 12       | L  | H  | L  | L  | H  | L  |  | H           | H           | H           | H           | L          | L          | H            | H           |
| 13       | L  | H  | L  | L  | H  | H  |  | H           | H           | H           | H           | L          | H          | H            | H           |
| 14       | L  | H  | L  | H  | L  | L  |  | H           | H           | H           | H           | L          | L          | H            | H           |
| 15       | L  | H  | L  | H  | L  | H  |  | H           | H           | H           | H           | L          | H          | H            | H           |
| 16       | L  | H  | L  | H  | H  | L  |  | H           | H           | H           | H           | L          | L          | H            | H           |
| 17       | L  | HL | L  | H  | H  | H  |  | H           | H           | H           | H           | H          | H          | H            | H           |
| 18       | L  | H  | H  | L  | L  | L  |  | H           | H           | H           | H           | H          | H          | H            | H           |
| 19       | L  | H  | H  | L  | L  | H  |  | H           | H           | L           | H           | H          | H          | H            | H           |
| 1A       | L  | H  | H  | L  | H  | L  |  | L           | H           | H           | H           | L          | H          | H            | H           |
| 1B       | L  | H  | H  | L  | H  | H  |  | H           | H           | H           | H           | L          | L          | H            | H           |
| 1C       | L  | H  | H  | H  | L  | L  |  | H           | H           | H           | H           | L          | L          | L            | H           |
| 1D       | L  | H  | H  | H  | L  | H  |  | H           | L           | H           | H           | H          | H          | H            | L           |
| 1E       | L  | H  | H  | H  | H  | L  |  | H           | H           | H           | L           | H          | H          | H            | H           |
| 1F       | L  | H  | H  | H  | H  | H  |  | H           | H           | H           | H           | H          | H          | H            | H           |
| Input    |    |    |    |    |    |    |  | Output      |             |             |             |            |            |              |             |

2.3.34

|       |          |       |      |                        |         |                     |     |
|-------|----------|-------|------|------------------------|---------|---------------------|-----|
|       |          |       |      | Datum                  | Name    | Benennung:          |     |
|       |          |       |      | Gez.                   |         | CPU                 |     |
|       |          |       |      | Gepr.                  |         | Romtabelle ROM D05A |     |
|       |          |       |      | Komm.-Nr.              |         |                     |     |
|       |          |       |      | DIETZ Computer SYSTEME |         | Zeichn./Sach.-Nr.   | 100 |
|       |          |       |      |                        |         | 28                  | 09  |
|       |          |       |      |                        |         | 06                  | 06  |
| Zust. | Änderung | Datum | Name | Abt./Sachb.            | Ers. f. | Ers. d.             |     |



| ROM D06 B |    |    |    |    |    |    |   |        |       |       |          |      |      |     |     |
|-----------|----|----|----|----|----|----|---|--------|-------|-------|----------|------|------|-----|-----|
|           |    | C4 | C3 | C2 | C1 | C0 |   | RM 23  | RM 28 | RM 31 | RM 2 B/C | RCON | RCA1 | RMA | RMB |
|           | EN | E  | D  | C  | B  | A  |   | Y8     | Y7    | Y6    | Y5       | Y4   | Y3   | Y2  | Y1  |
| 00        | L  | L  | L  | L  | L  | L  |   | H      | H     | H     | H        | L    | H    | H   | H   |
| 01        | L  | L  | L  | L  | L  | L  | H | H      | H     | H     | H        | H    | H    | H   | L   |
| 02        | L  | L  | L  | L  | L  | H  | L | H      | H     | H     | H        | H    | H    | L   | H   |
| 03        | L  | L  | L  | L  | L  | H  | H | L      | H     | H     | H        | H    | H    | H   | H   |
| 04        | L  | L  | L  | L  | H  | L  | L | H      | H     | H     | H        | H    | H    | H   | H   |
| 05        | L  | L  | L  | L  | H  | L  | H | H      | H     | H     | H        | H    | H    | L   | H   |
| 06        | L  | L  | L  | L  | H  | H  | L | H      | H     | H     | H        | H    | H    | H   | H   |
| 07        | L  | L  | L  | L  | H  | H  | H | H      | H     | H     | H        | H    | H    | L   | H   |
| 08        | L  | L  | L  | H  | L  | L  | L | H      | L     | H     | H        | H    | H    | H   | H   |
| 09        | L  | L  | L  | H  | L  | L  | H | H      | H     | H     | H        | H    | H    | H   | H   |
| 0A        | L  | L  | L  | H  | L  | H  | L | H      | H     | H     | H        | H    | H    | L   | H   |
| 0B        | L  | L  | L  | H  | L  | H  | H | H      | H     | H     | L        | H    | H    | L   | H   |
| 0C        | L  | L  | L  | H  | H  | L  | L | H      | H     | H     | L        | H    | H    | H   | H   |
| 0D        | L  | L  | L  | H  | H  | L  | H | H      | H     | H     | H        | H    | H    | L   | H   |
| 0E        | L  | L  | L  | H  | H  | H  | L | H      | H     | H     | H        | H    | H    | L   | H   |
| 0F        | L  | L  | L  | H  | H  | H  | H | H      | H     | H     | H        | H    | H    | H   | H   |
| 10        | L  | L  | H  | L  | L  | L  | L | H      | H     | H     | H        | H    | L    | L   | H   |
| 11        | L  | L  | H  | L  | L  | L  | H | H      | H     | L     | H        | H    | L    | L   | H   |
| 12        | L  | L  | H  | L  | L  | H  | L | H      | H     | H     | H        | H    | H    | L   | H   |
| 13        | L  | L  | H  | L  | L  | H  | H | H      | H     | H     | H        | H    | H    | L   | H   |
| 14        | L  | L  | H  | L  | H  | L  | L | H      | H     | H     | H        | H    | H    | L   | H   |
| 15        | L  | L  | H  | L  | H  | L  | H | H      | H     | H     | H        | H    | H    | L   | H   |
| 16        | L  | L  | H  | L  | H  | H  | L | H      | H     | H     | H        | H    | H    | H   | L   |
| 17        | L  | L  | H  | L  | H  | H  | H | H      | H     | H     | H        | H    | H    | L   | H   |
| 18        | L  | L  | H  | H  | L  | L  | L | H      | H     | H     | H        | H    | H    | H   | H   |
| 19        | L  | L  | H  | H  | L  | L  | H | H      | H     | H     | H        | H    | H    | H   | H   |
| 1A        | L  | L  | H  | H  | L  | H  | L | H      | H     | H     | H        | H    | H    | H   | H   |
| 1B        | L  | L  | H  | H  | L  | H  | H | H      | H     | H     | H        | H    | H    | H   | H   |
| 1C        | L  | L  | H  | H  | H  | L  | L | H      | H     | H     | H        | H    | H    | H   | H   |
| 1D        | L  | L  | H  | H  | H  | L  | H | H      | H     | H     | H        | H    | H    | H   | H   |
| 1E        | L  | L  | H  | H  | H  | H  | L | H      | H     | H     | H        | H    | H    | H   | H   |
| 1F        | L  | L  | H  | H  | H  | H  | H | H      | H     | H     | H        | H    | H    | H   | H   |
| Input     |    |    |    |    |    |    |   | Output |       |       |          |      |      |     |     |

2.3.35

|       |          |       |      |                                                                                     |         |                      |
|-------|----------|-------|------|-------------------------------------------------------------------------------------|---------|----------------------|
|       |          |       |      | Datum                                                                               | Name    | Benennung            |
|       |          |       |      | Gez                                                                                 |         | CPU                  |
|       |          |       |      | Gepr                                                                                |         |                      |
|       |          |       |      | Komm - Nr                                                                           |         | Romtabelle ROM D06 B |
|       |          |       |      |  |         |                      |
|       |          |       |      |                                                                                     |         |                      |
|       |          |       |      | Zeichnung / Zeich - Nr                                                              | Ind     | Zeich - Art          |
|       |          |       |      | 660660                                                                              |         | 28                   |
|       |          |       |      |                                                                                     |         | 09                   |
|       |          |       |      |                                                                                     |         | 07                   |
| Zust. | Änderung | Datum | Name | Abt./Sachb.                                                                         | Ers. f. | Ers. d.              |

| ROM D07A |    |    |    |    |    |    |  |             |             |              |             |             |            |            |             |
|----------|----|----|----|----|----|----|--|-------------|-------------|--------------|-------------|-------------|------------|------------|-------------|
|          |    | C4 | C3 | C2 | C1 | C0 |  | <u>RM19</u> | <u>RM18</u> | <u>RENBR</u> | <u>REND</u> | <u>RRCA</u> | <u>RCN</u> | <u>RCM</u> | <u>RIND</u> |
|          | EN | E  | D  | C  | B  | A  |  | Y8          | Y7          | Y6           | Y5          | Y4          | Y3         | Y2         | Y1          |
| 00       | L  | L  | L  | L  | L  | L  |  | H           | H           | H            | H           | L           | H          | H          | H           |
| 01       | L  | L  | L  | L  | L  | H  |  | H           | H           | H            | H           | H           | H          | L          | H           |
| 02       | L  | L  | L  | L  | H  | L  |  | H           | H           | H            | H           | H           | H          | H          | H           |
| 03       | L  | L  | L  | L  | H  | H  |  | L           | H           | H            | H           | H           | H          | H          | H           |
| 04       | L  | L  | L  | H  | L  | L  |  | H           | H           | H            | H           | H           | H          | H          | H           |
| 05       | L  | L  | L  | H  | L  | H  |  | H           | H           | H            | H           | H           | H          | L          | H           |
| 06       | L  | L  | L  | H  | H  | L  |  | H           | H           | H            | H           | H           | H          | H          | H           |
| 07       | L  | L  | L  | H  | H  | H  |  | H           | H           | H            | H           | H           | H          | L          | H           |
| 08       | L  | L  | H  | L  | L  | L  |  | H           | L           | H            | H           | H           | H          | H          | H           |
| 09       | L  | L  | H  | L  | L  | H  |  | H           | H           | H            | H           | H           | H          | H          | H           |
| 0A       | L  | L  | H  | L  | H  | L  |  | H           | H           | H            | H           | H           | H          | L          | H           |
| 0B       | L  | L  | H  | L  | H  | H  |  | H           | H           | H            | L           | H           | H          | L          | H           |
| 0C       | L  | L  | H  | H  | L  | L  |  | H           | H           | H            | L           | H           | H          | H          | H           |
| 0D       | L  | L  | H  | H  | L  | H  |  | H           | H           | H            | H           | H           | H          | L          | H           |
| 0E       | L  | L  | H  | H  | H  | L  |  | H           | H           | H            | H           | H           | H          | L          | H           |
| 0F       | L  | L  | H  | H  | H  | H  |  | H           | H           | H            | H           | H           | H          | H          | H           |
| 10       | L  | H  | L  | L  | L  | L  |  | H           | H           | H            | H           | H           | L          | L          | H           |
| 11       | L  | H  | L  | L  | L  | H  |  | H           | H           | L            | H           | H           | L          | L          | H           |
| 12       | L  | H  | L  | L  | H  | L  |  | H           | H           | H            | H           | H           | H          | L          | H           |
| 13       | L  | H  | L  | L  | H  | H  |  | H           | H           | H            | H           | H           | H          | L          | H           |
| 14       | L  | H  | L  | H  | L  | L  |  | H           | H           | H            | H           | H           | H          | L          | H           |
| 15       | L  | H  | L  | H  | L  | H  |  | H           | H           | H            | H           | H           | H          | L          | H           |
| 16       | L  | H  | L  | H  | H  | L  |  | H           | H           | H            | H           | H           | H          | L          | H           |
| 17       | L  | H  | L  | H  | H  | H  |  | H           | H           | H            | H           | H           | H          | H          | L           |
| 18       | L  | H  | H  | L  | L  | L  |  | H           | H           | H            | H           | H           | H          | L          | H           |
| 19       | L  | H  | H  | L  | L  | H  |  | H           | H           | H            | H           | H           | H          | L          | H           |
| 1A       | L  | H  | H  | L  | H  | L  |  | H           | H           | H            | H           | H           | H          | H          | H           |
| 1B       | L  | H  | H  | L  | H  | H  |  | H           | H           | H            | H           | H           | H          | H          | H           |
| 1C       | L  | H  | H  | H  | L  | L  |  | H           | H           | H            | H           | H           | H          | H          | H           |
| 1D       | L  | H  | H  | H  | L  | H  |  | H           | H           | H            | H           | H           | H          | H          | H           |
| 1E       | L  | H  | H  | H  | H  | L  |  | H           | H           | H            | H           | H           | H          | H          | H           |
| 1F       | L  | H  | H  | H  | H  | H  |  | H           | H           | H            | H           | H           | H          | H          | H           |
| Input    |    |    |    |    |    |    |  | Output      |             |              |             |             |            |            |             |

2.3.36

|       |          |       |                                                                                     |             |                   |                     |      |             |       |       |
|-------|----------|-------|-------------------------------------------------------------------------------------|-------------|-------------------|---------------------|------|-------------|-------|-------|
|       |          |       |                                                                                     | Datum       | Name              | Benennung           |      |             |       |       |
|       |          |       | Gez.                                                                                |             |                   | CPU                 |      |             |       |       |
|       |          |       | Gepr.                                                                               |             |                   | Romtabelle ROM D07A |      |             |       |       |
|       |          |       | Komm.-Nr.                                                                           |             |                   |                     |      |             |       |       |
|       |          |       |  |             | Zeichn./Bsch.-Nr. |                     | Ind. | Zeich.-Art. | Blatt | Blatt |
|       |          |       |                                                                                     |             | 660660            |                     | 28   | 09          | 08    |       |
| Zust. | Änderung | Datum | Name                                                                                | Abt./Sachb. | Ers. f.           | Ers. d.             |      |             |       |       |

| ROM D08A |    |                |                |                |                |                |  |                         |                          |                          |                          |                         |                         |                         |                          |
|----------|----|----------------|----------------|----------------|----------------|----------------|--|-------------------------|--------------------------|--------------------------|--------------------------|-------------------------|-------------------------|-------------------------|--------------------------|
|          |    | C <sub>4</sub> | C <sub>3</sub> | C <sub>2</sub> | C <sub>1</sub> | C <sub>0</sub> |  | $\overline{\text{RCP}}$ | $\overline{\text{RLNL}}$ | $\overline{\text{RCID}}$ | $\overline{\text{REND}}$ | $\overline{\text{RCP}}$ | $\overline{\text{RCD}}$ | $\overline{\text{RCM}}$ | $\overline{\text{RIND}}$ |
|          | EN | E              | D              | C              | B              | A              |  | Y8                      | Y7                       | Y6                       | Y5                       | Y4                      | Y3                      | Y2                      | Y1                       |
| 00       | L  | L              | L              | L              | L              | L              |  | H                       | H                        | H                        | H                        | H                       | H                       | H                       | H                        |
| 01       | L  | L              | L              | L              | L              | H              |  | H                       | H                        | H                        | H                        | H                       | H                       | H                       | H                        |
| 02       | L  | L              | L              | L              | H              | L              |  | H                       | H                        | L                        | L                        | H                       | H                       | H                       | H                        |
| 03       | L  | L              | L              | L              | H              | H              |  | H                       | H                        | H                        | L                        | H                       | H                       | H                       | H                        |
| 04       | L  | L              | L              | H              | L              | L              |  | H                       | H                        | H                        | H                        | H                       | H                       | H                       | H                        |
| 05       | L  | L              | L              | H              | L              | H              |  | H                       | H                        | L                        | L                        | H                       | L                       | H                       | L                        |
| 06       | L  | L              | L              | H              | H              | L              |  | H                       | H                        | H                        | H                        | H                       | H                       | H                       | H                        |
| 07       | L  | L              | L              | H              | H              | H              |  | H                       | H                        | L                        | L                        | H                       | H                       | H                       | L                        |
| 08       | L  | L              | H              | L              | L              | L              |  | H                       | H                        | H                        | H                        | H                       | H                       | H                       | H                        |
| 09       | L  | L              | H              | L              | L              | H              |  | H                       | H                        | H                        | H                        | L                       | H                       | H                       | H                        |
| 0A       | L  | L              | H              | L              | H              | L              |  | L                       | H                        | H                        | H                        | H                       | H                       | H                       | H                        |
| 0B       | L  | L              | H              | L              | H              | H              |  | H                       | H                        | H                        | H                        | H                       | H                       | H                       | H                        |
| 0C       | L  | L              | H              | H              | L              | L              |  | H                       | H                        | H                        | H                        | L                       | H                       | H                       | H                        |
| 0D       | L  | L              | H              | H              | L              | H              |  | L                       | H                        | H                        | H                        | H                       | H                       | H                       | H                        |
| 0E       | L  | L              | H              | H              | H              | L              |  | H                       | L                        | H                        | H                        | H                       | H                       | H                       | H                        |
| 0F       | L  | L              | H              | H              | H              | H              |  | H                       | H                        | H                        | L                        | H                       | H                       | H                       | L                        |
| 10       | L  | H              | L              | L              | L              | L              |  | H                       | H                        | H                        | H                        | H                       | H                       | H                       | H                        |
| 11       | L  | H              | L              | L              | L              | H              |  | H                       | H                        | H                        | L                        | H                       | H                       | H                       | H                        |
| 12       | L  | H              | L              | L              | H              | L              |  | H                       | H                        | H                        | H                        | H                       | H                       | H                       | H                        |
| 13       | L  | H              | L              | L              | H              | H              |  | H                       | H                        | H                        | H                        | H                       | H                       | H                       | H                        |
| 14       | L  | H              | L              | H              | L              | L              |  | H                       | H                        | H                        | H                        | H                       | H                       | H                       | H                        |
| 15       | L  | H              | L              | H              | L              | H              |  | H                       | H                        | L                        | L                        | H                       | H                       | H                       | L                        |
| 16       | L  | H              | L              | H              | H              | L              |  | H                       | H                        | L                        | H                        | H                       | H                       | H                       | H                        |
| 17       | L  | H              | L              | H              | H              | H              |  | H                       | H                        | H                        | L                        | H                       | H                       | L                       | L                        |
| 18       | L  | H              | H              | L              | L              | L              |  | L                       | H                        | H                        | H                        | H                       | H                       | H                       | H                        |
| 19       | L  | H              | H              | L              | L              | H              |  | H                       | H                        | H                        | H                        | H                       | H                       | H                       | H                        |
| 1A       | L  | H              | H              | L              | H              | L              |  | H                       | H                        | H                        | H                        | H                       | H                       | H                       | H                        |
| 1B       | L  | H              | H              | L              | H              | H              |  | H                       | L                        | H                        | L                        | H                       | H                       | H                       | H                        |
| 1C       | L  | H              | H              | H              | L              | L              |  | H                       | H                        | H                        | H                        | H                       | H                       | H                       | H                        |
| 1D       | L  | H              | H              | H              | L              | H              |  | H                       | H                        | H                        | H                        | H                       | H                       | H                       | H                        |
| 1E       | L  | H              | H              | H              | H              | L              |  | H                       | H                        | H                        | H                        | H                       | H                       | H                       | H                        |
| 1F       | L  | H              | H              | H              | H              | H              |  | H                       | H                        | H                        | H                        | H                       | H                       | H                       | H                        |

2.3.37

|       |          |  |       |      |                                                                                     |      |                       |  |         |      |           |       |
|-------|----------|--|-------|------|-------------------------------------------------------------------------------------|------|-----------------------|--|---------|------|-----------|-------|
|       |          |  |       |      | Datum                                                                               | Name | Benennung             |  |         |      |           |       |
|       |          |  |       |      | Gez.                                                                                |      | CPU                   |  |         |      |           |       |
|       |          |  |       |      | Gepr.                                                                               |      | Romtabelle ROM D08A   |  |         |      |           |       |
|       |          |  |       |      | Komm. - Nr.                                                                         |      |                       |  |         |      |           |       |
|       |          |  |       |      |  |      | Zeichnung / Sach.-Nr. |  | Ind.    | Zch. | Blatt Nr. | Blatt |
|       |          |  |       |      |                                                                                     |      | 660660                |  |         |      | 28        | 09    |
| Zust. | Änderung |  | Datum | Name | Abt./Sachb.                                                                         |      | Ers. f.               |  | Ers. d. |      |           |       |

| Signalname        | ROM-Nr. | Bedeutung                                                                                                                                                                                         |
|-------------------|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| $\overline{RM0F}$ | 3       | wird in <u>MS 0F</u> erzeugt. $\overline{RM0F}$ schaltet beiddn Increment Branch Befehlen das Carry FF auf den Carry Eingang der ALU. Das Carry FF 1 wird im gleichen Mikroschritt zurückgesetzt. |
| $\overline{RM18}$ | 8       | wird in <u>MS 18</u> erzeugt und schaltet das Bit 7 vom B-Kanal auf den Branch FF. Im Ruhezustand wird der A = B Ausgang der ALU auf das Branch-FF geschaltet.                                    |
| $\overline{RM19}$ | 8       | wird in <u>MS 19</u> erzeugt. $\overline{RM19}$ steuert in Abhängigkeit vom Branch FF den Ablauf der Mikroschritte bei den Conditional Branch Befehlen.                                           |
| $\overline{RM1E}$ | 6       | wird in <u>MS 1E</u> erzeugt. $\overline{RM1E}$ schaltet das Sequenz FF aus.                                                                                                                      |
| $\overline{RM23}$ | 7       | wird in <u>MS 23</u> erzeugt. $\overline{RM23}$ setzt das CNP-Register zurück.                                                                                                                    |
| $\overline{RM28}$ | 7       | wird in <u>MS 28</u> erzeugt. $\overline{RM28}$ setzt das DO-FF, den DO-Zähler und das DO-Register.                                                                                               |

2.3.38

CPU Signalkatalog ROM-Signale

**DIETZ** Computer  
SYSTEME

6.12.77

CH2 - Li.

660 660 01

Bl.-Z.: 6

Bl.-Nr.: 1

| Signalname               | ROM-Nr. | Bedeutung                                                                                                                                                                                                                                                                                                                     |
|--------------------------|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| $\overline{\text{RSYN}}$ | 4/5     | hält bei BUS- und POOL-Zugriffen das Timing an.                                                                                                                                                                                                                                                                               |
| $\overline{\text{RREG}}$ | 4/5     | POOL-Zugriff                                                                                                                                                                                                                                                                                                                  |
| $\overline{\text{RRK}}$  | 4/5     | gibt bei BUS- und POOL-Zugriffen die Richtung an.<br>High $\hat{=}$ load, low $\hat{=}$ store.                                                                                                                                                                                                                                |
| $\overline{\text{RM00}}$ | 3       | <u>Mikroschritt 00</u> . $\overline{\text{RM00}}$ wird in Mikroschritt 00 erzeugt und schaltet in der Schrittsprunglogik den Mikroschritt 01 ein. Durch $\overline{\text{RM00}}$ wird außerdem das Q-Register geladen und einige Register und FF zurückgesetzt (M-Reg., DO-Reg. Carry-FF, Übertrag FF des B-Reg.)             |
| $\overline{\text{RM01}}$ | 3       | wird in <u>Mikroschritt 01</u> erzeugt. Durch $\overline{\text{RM01}}$ wird das ROM-Signal $\overline{\text{RLP}}$ erzeugt. $\overline{\text{RM01}}$ wird in Verbindung mit Bit 00 des Q-Registers benutzt, um die Arbeitsregisteradresse zu lesen (BUS-Zugriff), oder eine '02 (Arbeitsregister = 0) in das P-Reg. zu laden. |
| $\overline{\text{RM0B}}$ | 3       | wird in <u>Mikroschritt 0B</u> erzeugt. $\overline{\text{RM0B}}$ steuert die Mikroschrittfolge bei den ind Befehlen. 1 Byte oder 2 Byte Index.                                                                                                                                                                                |

2.3.39

|                               |         |            |                                  |            |
|-------------------------------|---------|------------|----------------------------------|------------|
| CPU Signalkatalog ROM-Signale |         |            | <b>DIETZ</b> Computer<br>SYSTEME |            |
| CH2-Li.                       | 6.12.77 |            |                                  |            |
|                               |         |            |                                  |            |
|                               |         | 660 660 01 | Bl.-Z.: 6                        | Bl.-Nr.: 2 |

| Signalname               | ROM-Nr. | Bedeutung                                                                                                                                                                                                                                                        |
|--------------------------|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| $\overline{\text{RCN}}$  | 8       | <u>C</u> ount-Signal für das <u>N</u> -Register                                                                                                                                                                                                                  |
| $\overline{\text{RCM}}$  | 8/9     | <u>C</u> ount-Signal für das <u>M</u> -Register                                                                                                                                                                                                                  |
| $\overline{\text{RCP}}$  | 9       | <u>C</u> ount-Signal für das <u>P</u> -Register                                                                                                                                                                                                                  |
| $\overline{\text{RCID}}$ | 6/9     | inkrementiert das P-Register, wenn das IREG-FF im DO-Register gesetzt ist (inkrementieren Registeradresse).                                                                                                                                                      |
| $\overline{\text{RIND}}$ | 8       | <u>i</u> nkrementiert den <u>D</u> O-Zähler                                                                                                                                                                                                                      |
| $\overline{\text{REND}}$ | 8/9     | wird im letzten Mikroschritt jedes Befehls erzeugt. Wenn $\overline{\text{REND}}$ aktiv ist, und das DO-FF nicht gesetzt ist, wird ein Ebenenwechsel zugelassen oder der Rechner kann bei eingelegter HALT-Taste gestoppt werden.                                |
| $\overline{\text{RCON}}$ | 7       | Wird in den Controll-Befehlen erzeugt und steuert die Level-Logik. $\overline{\text{RCON}}$ setzt Starts im S-Register zurück (Bef. HLT). $\overline{\text{RCON}}$ setzt Starts im S-Register (Bef. SEL). Setzt das Disable FF (DCL) oder setzt es zurück (ECL). |
| $\overline{\text{RDCO}}$ | 6       | Durch das Signal $\overline{\text{RDCO}}$ werden die Daten am A-Kanal invertiert, wenn das Vorzeichen FF INVOP gesetzt ist. RDCO erzeugt im Adreßrechnungsteil der Bef. am A-Kanal eine -1 ('FF) oder eine $\emptyset$ .                                         |

2.3.40

|                               |         |            |                                   |            |
|-------------------------------|---------|------------|-----------------------------------|------------|
| CPU Signalkatalog ROM-Signale |         |            | <b>DIETZ Computer<br/>SYSTEME</b> |            |
| CH 2 - Li.                    | 6.12.77 |            |                                   |            |
|                               |         |            |                                   |            |
|                               |         | 660 660 01 | Bl.-Z.: 6                         | Bl.-Nr.: 3 |

| Signalname                              | ROM-Nr.                                 | Bedeutung                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                          |                                         |          |   |   |                |   |   |                                                          |   |   |                                                           |   |   |       |
|-----------------------------------------|-----------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|-----------------------------------------|----------|---|---|----------------|---|---|----------------------------------------------------------|---|---|-----------------------------------------------------------|---|---|-------|
| $\overline{\text{RENBR}}$               | 8                                       | <u>E</u> nable Signal für das <u>B</u> ranch FF                                                                                                                                                                                                                                                                                                                                                                                                                               |                          |                                         |          |   |   |                |   |   |                                                          |   |   |                                                           |   |   |       |
| $\overline{\text{RBKA}}$                | 4/5                                     | <u>B</u> - <u>K</u> anal Multiplexer Select Signal <u>A</u>                                                                                                                                                                                                                                                                                                                                                                                                                   |                          |                                         |          |   |   |                |   |   |                                                          |   |   |                                                           |   |   |       |
| $\overline{\text{RBKB}}$                | 4/5                                     | <u>B</u> - <u>K</u> anal Multiplexer Select Signal <u>B</u>                                                                                                                                                                                                                                                                                                                                                                                                                   |                          |                                         |          |   |   |                |   |   |                                                          |   |   |                                                           |   |   |       |
| $\overline{\text{RBKC}}$                | 4/5                                     | <u>B</u> - <u>K</u> anal Multiplexer Select Signal <u>C</u>                                                                                                                                                                                                                                                                                                                                                                                                                   |                          |                                         |          |   |   |                |   |   |                                                          |   |   |                                                           |   |   |       |
| $\overline{\text{RMA}}$                 | 6/7                                     | <u>M</u> -Kanal Multiplexer Select Signal <u>A</u>                                                                                                                                                                                                                                                                                                                                                                                                                            |                          |                                         |          |   |   |                |   |   |                                                          |   |   |                                                           |   |   |       |
| $\overline{\text{RMB}}$                 | 6/7                                     | <u>M</u> -Kanal Multiplexer Select Signal <u>B</u><br>$\overline{\text{RMA}}$ und $\overline{\text{RMB}}$ steuern den M-Kanal Multiplexer und schalten das adreßgebende Register auf den M-Kanal.                                                                                                                                                                                                                                                                             |                          |                                         |          |   |   |                |   |   |                                                          |   |   |                                                           |   |   |       |
| $\overline{\text{RLNR}}$                | 2/3                                     | Load-Signal für das NR-Register                                                                                                                                                                                                                                                                                                                                                                                                                                               |                          |                                         |          |   |   |                |   |   |                                                          |   |   |                                                           |   |   |       |
| $\overline{\text{RLNL}}$                | 9                                       | Load-Signal für das NL-Register                                                                                                                                                                                                                                                                                                                                                                                                                                               |                          |                                         |          |   |   |                |   |   |                                                          |   |   |                                                           |   |   |       |
| $\overline{\text{RLMR}}$                | 3                                       | Load-Signal für das MR-Register                                                                                                                                                                                                                                                                                                                                                                                                                                               |                          |                                         |          |   |   |                |   |   |                                                          |   |   |                                                           |   |   |       |
| $\overline{\text{RLML}}$                | 3                                       | Load-Signal für das ML-Register                                                                                                                                                                                                                                                                                                                                                                                                                                               |                          |                                         |          |   |   |                |   |   |                                                          |   |   |                                                           |   |   |       |
| $\overline{\text{RLP}}$                 | 9                                       | Load-Signal für das P-Register<br>Wenn eines der Signale $\overline{\text{RLNR}}$ - $\overline{\text{RLP}}$ aktiv ist, werden die Daten vom F-Kanal in das entsprechende Register übernommen.                                                                                                                                                                                                                                                                                 |                          |                                         |          |   |   |                |   |   |                                                          |   |   |                                                           |   |   |       |
| $\overline{\text{RSTB}}$                | 4/5                                     | <u>S</u> 1 Steuersignal für das <u>B</u> -Register                                                                                                                                                                                                                                                                                                                                                                                                                            |                          |                                         |          |   |   |                |   |   |                                                          |   |   |                                                           |   |   |       |
| $\overline{\text{RS}\emptyset\text{B}}$ | 4/5                                     | <u>S</u> $\emptyset$ Steuersignal für das <u>B</u> -Register                                                                                                                                                                                                                                                                                                                                                                                                                  |                          |                                         |          |   |   |                |   |   |                                                          |   |   |                                                           |   |   |       |
|                                         |                                         | <table> <tr> <th><math>\overline{\text{RSTB}}</math></th><th><math>\overline{\text{RS}\emptyset\text{B}}</math></th><th>Funktion</th></tr> <tr> <td>H</td><td>H</td><td>keine Funktion</td></tr> <tr> <td>H</td><td>L</td><td>links schieben <math>\text{B}\emptyset \rightarrow \text{B1}</math></td></tr> <tr> <td>L</td><td>H</td><td>rechts schieben <math>\text{B1} \rightarrow \text{B}\emptyset</math></td></tr> <tr> <td>L</td><td>L</td><td>laden</td></tr> </table> | $\overline{\text{RSTB}}$ | $\overline{\text{RS}\emptyset\text{B}}$ | Funktion | H | H | keine Funktion | H | L | links schieben $\text{B}\emptyset \rightarrow \text{B1}$ | L | H | rechts schieben $\text{B1} \rightarrow \text{B}\emptyset$ | L | L | laden |
| $\overline{\text{RSTB}}$                | $\overline{\text{RS}\emptyset\text{B}}$ | Funktion                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                          |                                         |          |   |   |                |   |   |                                                          |   |   |                                                           |   |   |       |
| H                                       | H                                       | keine Funktion                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                          |                                         |          |   |   |                |   |   |                                                          |   |   |                                                           |   |   |       |
| H                                       | L                                       | links schieben $\text{B}\emptyset \rightarrow \text{B1}$                                                                                                                                                                                                                                                                                                                                                                                                                      |                          |                                         |          |   |   |                |   |   |                                                          |   |   |                                                           |   |   |       |
| L                                       | H                                       | rechts schieben $\text{B1} \rightarrow \text{B}\emptyset$                                                                                                                                                                                                                                                                                                                                                                                                                     |                          |                                         |          |   |   |                |   |   |                                                          |   |   |                                                           |   |   |       |
| L                                       | L                                       | laden                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                          |                                         |          |   |   |                |   |   |                                                          |   |   |                                                           |   |   |       |

2.3.41

CPU Signalkatalog ROM-Signale

**DIETZ** Computer  
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6.12.77

CH 2 - Li.

660 660 01

Bl.-Z.: 6

Bl.-Nr.: 4

| Signalname         | ROM-Nr. | Bedeutung                                                                                                                                                                                                                                                                               |
|--------------------|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| $\overline{RAS0}$  | 1/2     | <u>ALU</u> -Steuersignal <u>S0</u>                                                                                                                                                                                                                                                      |
| $\overline{RAS1}$  | 1/2     | <u>ALU</u> -Steuersignal <u>S1</u>                                                                                                                                                                                                                                                      |
| $\overline{RAS2}$  | 1/2     | <u>ALU</u> -Steuersignal <u>S2</u>                                                                                                                                                                                                                                                      |
| $\overline{RAS3}$  | 1/2     | <u>ALU</u> -Steuersignal <u>S3</u>                                                                                                                                                                                                                                                      |
| $\overline{RAM}$   | 1/2     | <u>ALU Mode</u> -Signal bewirkt eine Umschaltung<br>logisch/arithmetische Funktion                                                                                                                                                                                                      |
| $\overline{RCAA}$  | 1       | erzeugt ein <u>Carry</u> -Signal am Eingang der <u>ALU</u>                                                                                                                                                                                                                              |
| $\overline{RCA1}$  | 1       | schaltet den Ausgang des Carry FF auf den<br>Carry-Eingang der ALU                                                                                                                                                                                                                      |
| $\overline{RENCA}$ | 1/2     | <u>Enable</u> -Signal für das <u>Carry</u> FF. Wenn $\overline{RENCA}$ low<br>ist und das DUE-FF im DO-Register (Überlauf wird<br>berücksichtigt) gesetzt ist oder das ROM-Signal<br>$\overline{RADRR}$ low ist, übernimmt das Carry-FF die Infor-<br>mation vom Carry Ausgang der ALU. |
| $\overline{RADRR}$ | 6       | Wird im <u>Adreßrechnungsteil</u> der Befehle benutzt,<br>um das Carry FF freizugeben.                                                                                                                                                                                                  |
| $\overline{RRCA}$  | 8       | Setzt das Carry FF synchron zurück                                                                                                                                                                                                                                                      |

2.3.42

CPU Signalkatalog ROM-Signale



6.12.77

CH2-Li.

660 660 01

Bl.-Z.: 6

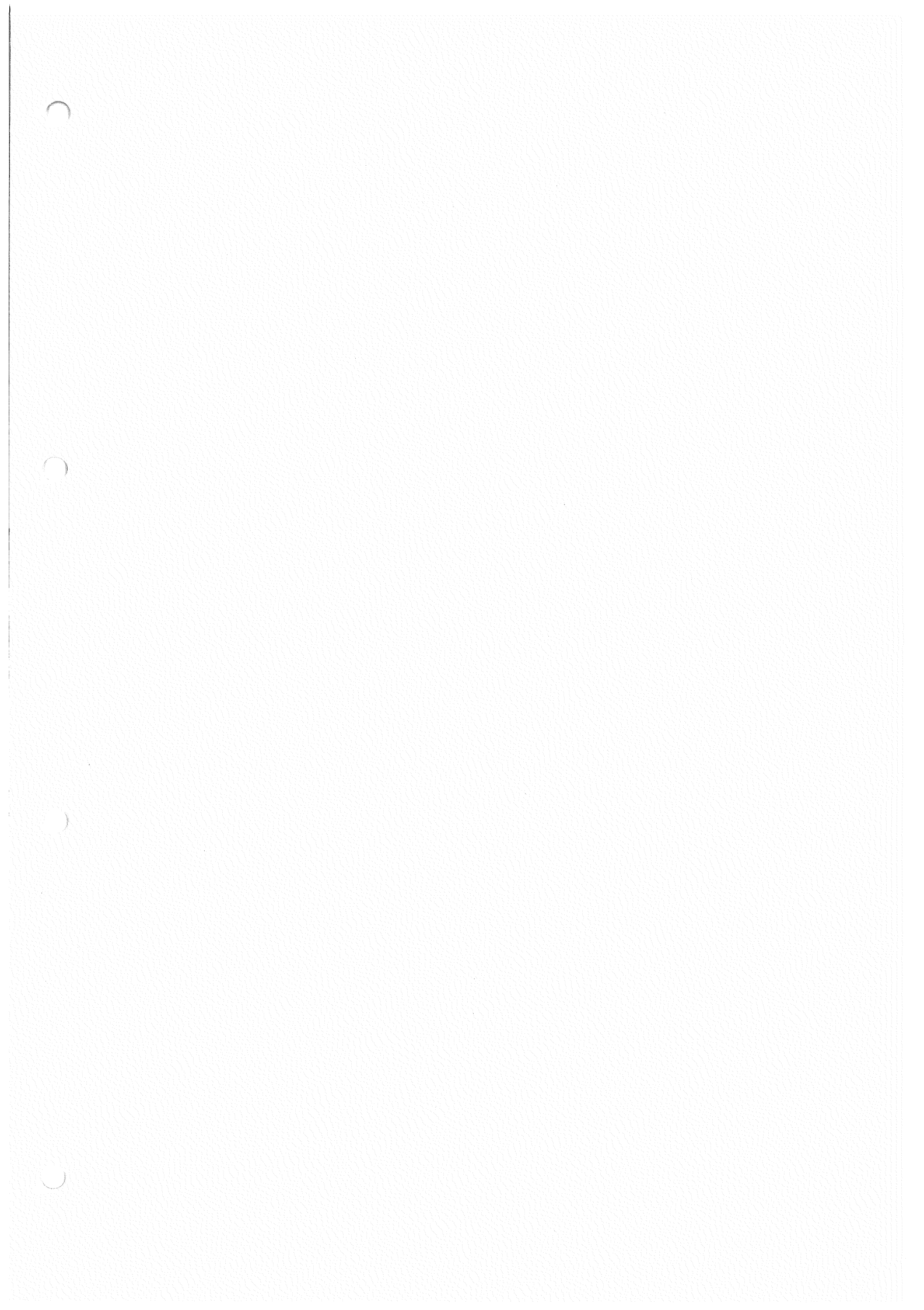
Bl.-Nr.: 5



| Signalname                 | ROM-Nr. | Bedeutung                                                                                                                                                                                                                                                            |
|----------------------------|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| $\overline{\text{RM2B/C}}$ | 7       | wird in <u>MS 2B</u> und in <u>MS 2C</u> erzeugt. Die Mikroschritte MS 2B und MS2C laufen beim Ebenenwechsel ab. In MS 2B und 2C wird das Level-Register geladen. Wenn MS 2B oder MS 2C ablaufen, kann das Interrupt FF und das Start-Register nicht gesetzt werden. |
| $\overline{\text{RM3I}}$   | 7       | wird in <u>MS 3I</u> erzeugt. In MS 3I wird der Ausgang des Carry FF 2 auf den Carry-Eingang der ALU geschaltet. Wenn im DO-Register das DUE-FF gesetzt ist (Übertrag wird berücksichtigt), wird das Carry FF2 in MS 3I mit der CPU-Clock synchron zurückgesetzt.    |

2.3.43

|                               |         |            |                                   |            |
|-------------------------------|---------|------------|-----------------------------------|------------|
| CPU Signalkatalog ROM-Signale |         |            | <b>DIETZ Computer<br/>SYSTEME</b> |            |
| CH2-Li.                       | 6.12.77 |            |                                   |            |
|                               |         |            |                                   |            |
|                               |         | 660 660 01 | Bl.-Z.: 6                         | Bl.-Nr.: 6 |



8.8.78

2.4 PMM

660 661 B, C 1-8

Stromlaufplan

# PMM

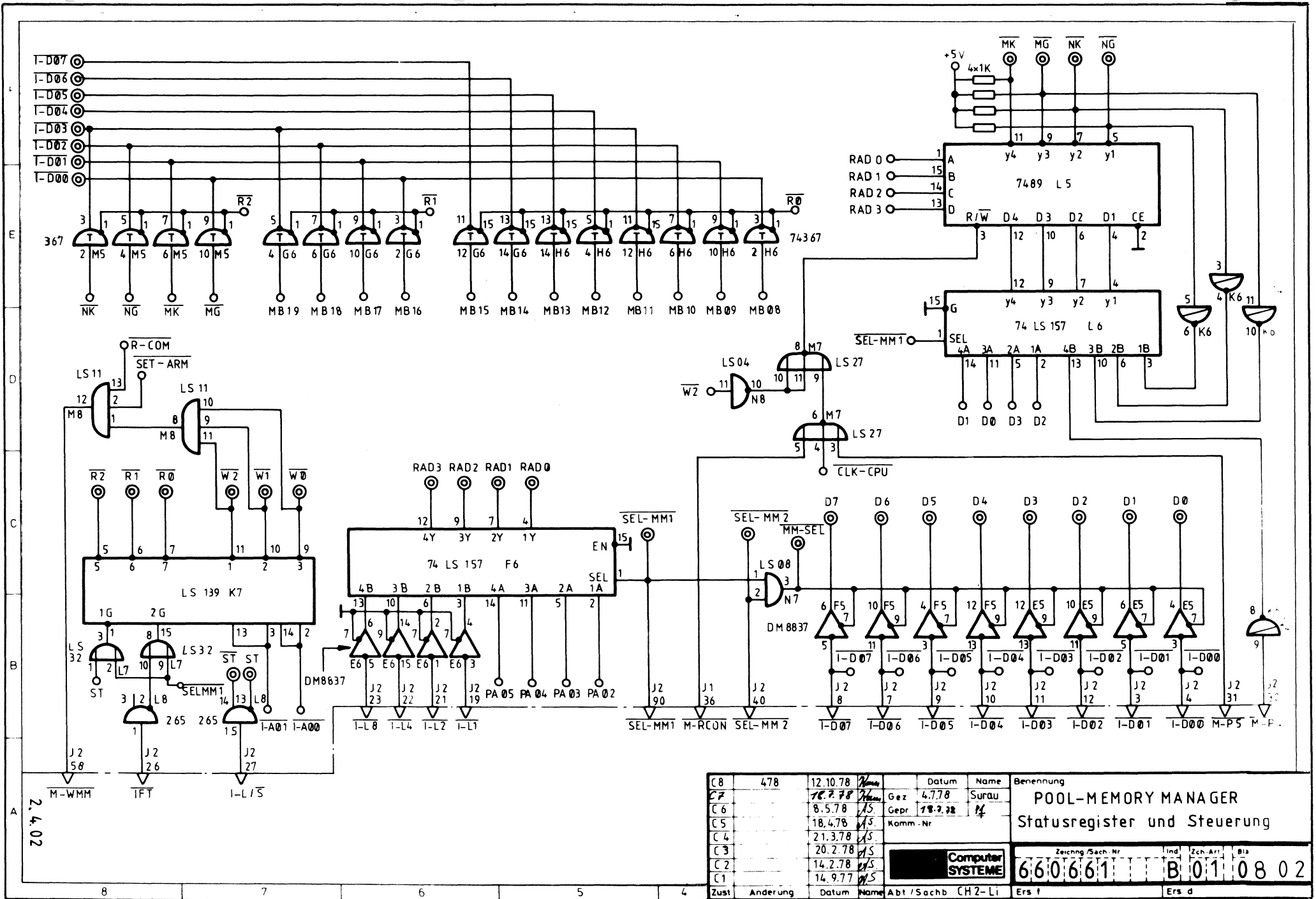
## STECKER J1

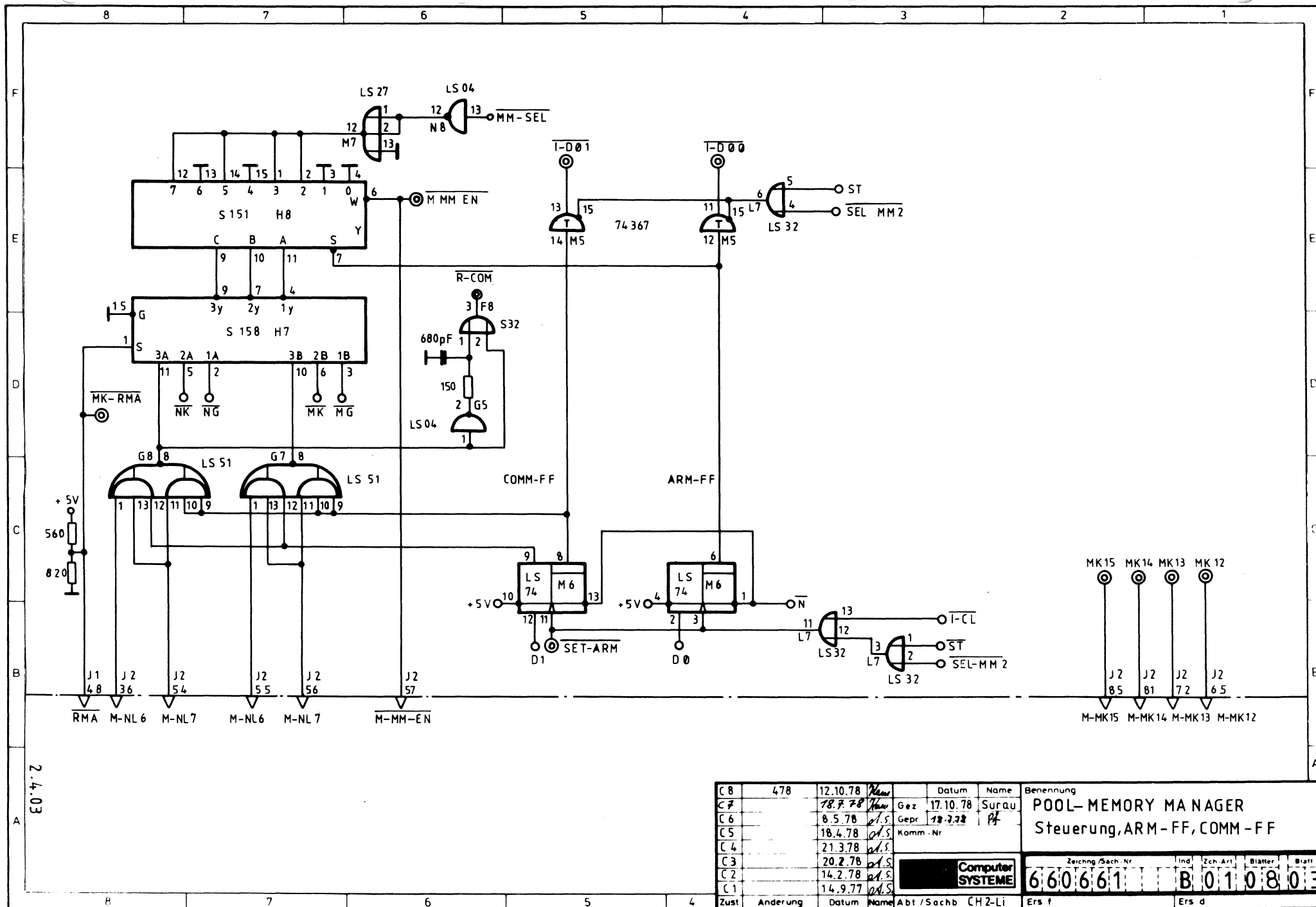
|    |  |    |
|----|--|----|
| 1  |  | 2V |
| 2  |  | 0V |
| 3  |  | 0V |
| 4  |  |    |
| 5  |  |    |
| 6  |  |    |
| 7  |  |    |
| 8  |  |    |
| 9  |  |    |
| 10 |  |    |
| 11 |  |    |
| 12 |  |    |
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| 44 |  |    |
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| 46 |  |    |
| 47 |  |    |
| 48 |  |    |
| 49 |  |    |
| 50 |  |    |

## STECKER J2

|    |                      |     |                   |
|----|----------------------|-----|-------------------|
| 1  | +5V                  | 51  | +5V               |
| 2  | +5V                  | 52  | +5V               |
| 3  | I-D01                | 53  |                   |
| 4  | I-D00                | 54  | M-NL7             |
| 5  |                      | 55  | M-ML6             |
| 6  |                      | 56  | M-ML7             |
| 7  | I-D06                | 57  | M-MMEN            |
| 8  | I-D07                | 58  | M-WMM             |
| 9  | I-D05                | 59  | M-DS-IEV          |
| 10 | I-D04                | 60  | M-MK8             |
| 11 | I-D03                | 61  | M-MK9             |
| 12 | I-D02                | 62  | M-MK10            |
| 13 |                      | 63  | M-MK11            |
| 14 |                      | 64  | P-A00             |
| 15 |                      | 65  | M-MK12            |
| 16 |                      | 66  | P-A01             |
| 17 |                      | 67  | P-A02             |
| 18 | K-MM                 | 68  | P-A03             |
| 19 | I-L1                 | 69  | P-A04             |
| 20 |                      | 70  | P-A05             |
| 21 | I-L2                 | 71  | P-A06             |
| 22 | I-L4                 | 72  | M-MK13            |
| 23 | I-L8                 | 73  | P-A07             |
| 24 |                      | 74  | P-A08             |
| 25 |                      | 75  | P-A09             |
| 26 | IFT                  | 76  | K-GS              |
| 27 | I-L/3                | 77  | P-A10             |
| 28 |                      | 78  | P-A11             |
| 29 | M-LDR                | 79  | P-SIL             |
| 30 | M-P4                 | 80  | P-RF              |
| 31 | M-P5                 | 81  | M-MK14            |
| 32 | POOL-DIS             | 82  | P-RDY             |
| 33 | M-SPRB               | 83  | P-BUSY            |
| 34 | M-BUSZ               | 84  | P-RWS             |
| 35 |                      | 85  | M-MK15            |
| 36 | M-NL6                | 86  |                   |
| 37 | T-ADS                | 87  |                   |
| 38 |                      | 88  | K-CPU BUSY        |
| 39 |                      | 89  |                   |
| 40 | SEL PMM 2            | 90  | SEL PMM 1         |
| 41 | CLK-CPU              | 91  | CLK-40            |
| 42 | 0V                   | 92  | 0V                |
| 43 | ST + 5V <sub>2</sub> | 93  | + 5V <sub>2</sub> |
| 44 | + 5V <sub>2</sub>    | 94  | + 5V <sub>2</sub> |
| 45 | 0V                   | 95  | 0V                |
| 46 | -12V                 | 96  | -12V              |
| 47 | +12V                 | 97  | +12V              |
| 48 | 0V                   | 98  | 0V                |
| 49 | 0V                   | 99  | 0V                |
| 50 | 0V                   | 100 | 0V                |

|                             |  |          |  |          |        |        |           |             |         |          |         |        |  |        |  |       |  |           |  |      |  |
|-----------------------------|--|----------|--|----------|--------|--------|-----------|-------------|---------|----------|---------|--------|--|--------|--|-------|--|-----------|--|------|--|
| Benennung                   |  | Name     |  | Datum    | Gez.   | Gepr.  | Komm.-Nr. | Zust.       |         | Änderung |         | 4      |  | 5      |  | 6     |  | 7         |  | 8    |  |
| PMM Pool und Memory Manager |  | Surrau   |  | 12.10.78 | 7.7.78 | 8.5.78 | 18.4.78   | 21.3.78     | 20.2.78 | 14.2.78  | 14.9.77 |        |  |        |  |       |  |           |  |      |  |
| Steckerbelegung             |  |          |  |          |        |        |           |             |         |          |         |        |  |        |  |       |  |           |  |      |  |
| Computer SYSTEME            |  |          |  |          |        |        |           |             |         |          |         |        |  |        |  |       |  |           |  |      |  |
| Zust.                       |  | Änderung |  | Datum    |        | Name   |           | Abt./Sachb. |         | CH-2-Fh  |         | Ers. f |  | Ers. d |  | Blatt |  | Zus. Art. |  | Ind. |  |
| 6                           |  | 6        |  | 6        |        | 6      |           | 6           |         | 6        |         | 6      |  | 6      |  | 6     |  | 6         |  | 6    |  |
| 0                           |  | 0        |  | 0        |        | 0      |           | 0           |         | 0        |         | 0      |  | 0      |  | 0     |  | 0         |  | 0    |  |

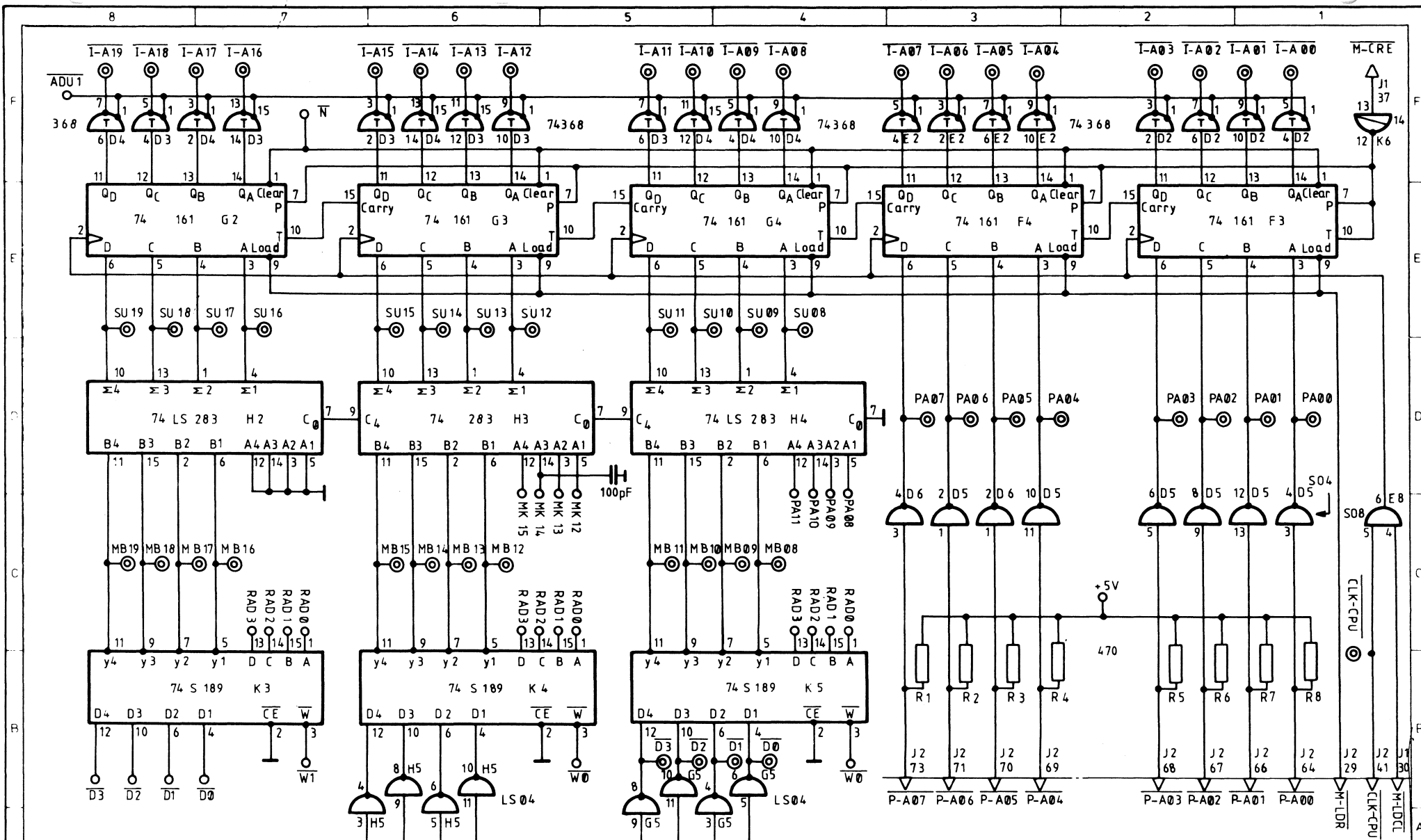




|      |          |          |      |             |         |                            |
|------|----------|----------|------|-------------|---------|----------------------------|
| C 8  | 478      | 12.10.78 | Hand | Datum       | Name    | Benennung                  |
| C 7  |          | 18.7.78  | Hand | Gez         | Surau   | POOL-MEMORY MANAGER        |
| C 6  |          | 8.5.78   | Hand | Gepr        | 18.7.78 | Steuerung, ARM-FF, COMM-FF |
| C 5  |          | 18.4.78  | Hand | Komm-Nr     |         |                            |
| C 4  |          | 21.3.78  | Hand |             |         |                            |
| C 3  |          | 20.2.78  | Hand |             |         |                            |
| C 2  |          | 14.2.78  | Hand |             |         |                            |
| C 1  |          | 14.9.77  | Hand |             |         |                            |
| Zust | Änderung | Datum    | Name | Abt / Sachb | CH2-Li  | Ers f                      |
|      |          |          |      |             |         | Ers d                      |

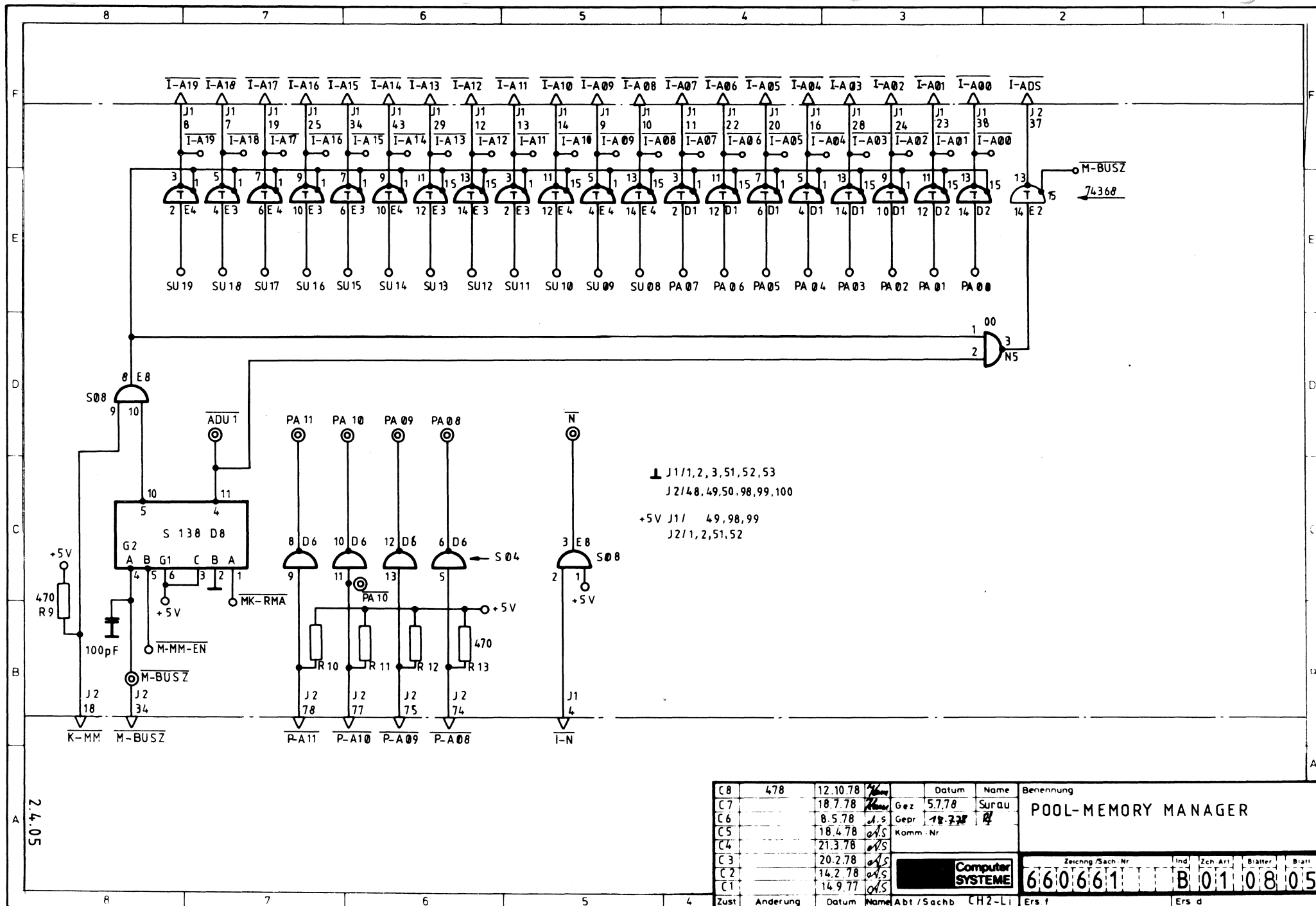
Computer  
SYSTEME

Zeichnung / Sach-Nr  
660661  
Ind  
B  
Zch-Art  
01  
Blätter  
08  
Blatt  
03

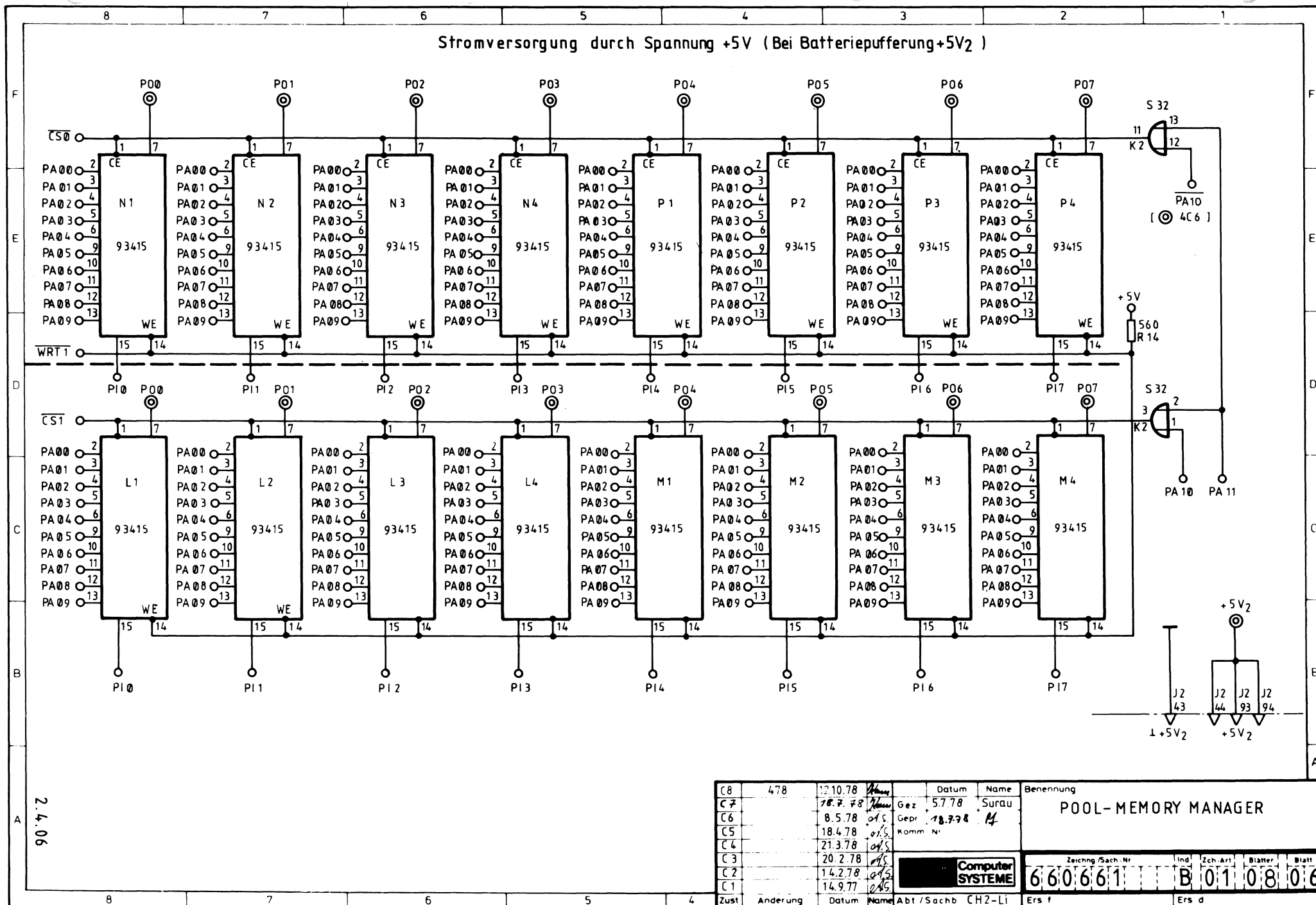


|                  |          |          |      |             |         |                  |
|------------------|----------|----------|------|-------------|---------|------------------|
| C8               | 478      | 12.10.78 | Man  | Datum       | Name    | Benennung        |
| C7               |          | 18.7.78  | Man  | Gez         | 6.7.78  | Surau            |
| C6               |          | 8.5.78   | Man  | Gepr        | 18.7.78 |                  |
| C5               |          | 18.4.78  | Man  | Komm. Nr    |         |                  |
| C4               |          | 21.3.78  | Man  |             |         |                  |
| C3               |          | 20.2.78  | Man  |             |         |                  |
| C2               |          | 14.2.78  | Man  |             |         |                  |
| C1               |          | 14.9.78  | Man  |             |         |                  |
| Zust             | Änderung | Datum    | Name | Abt./Sachb. | CH2-Li  | Ers f            |
|                  |          |          |      |             |         | Ers d            |
| Computer SYSTEME |          |          |      |             |         | Zeichn./Sach. Nr |
| 6 60 6 61        |          |          |      |             |         | Ind              |
| B 0 1 0 8 0 4    |          |          |      |             |         | Blatt            |

2.4.04







|      |          |          |      |             |         |           |
|------|----------|----------|------|-------------|---------|-----------|
| C8   | 478      | 12.10.78 | Hand | Datum       | Name    | Benennung |
| C7   |          | 18.7.78  | Hand | Gez.        | Surau   |           |
| C6   |          | 8.5.78   | Hand | Gepr.       | 18.7.78 |           |
| C5   |          | 18.4.78  | Hand | Komm. Nr.   |         |           |
| C4   |          | 21.3.78  | Hand |             |         |           |
| C3   |          | 20.2.78  | Hand |             |         |           |
| C2   |          | 14.2.78  | Hand |             |         |           |
| C1   |          | 14.9.77  | Hand |             |         |           |
| Zust | Änderung | Datum    | Name | Abt./Sachb. | CH2-Li  | Ers f     |
|      |          |          |      |             |         | Ers d     |

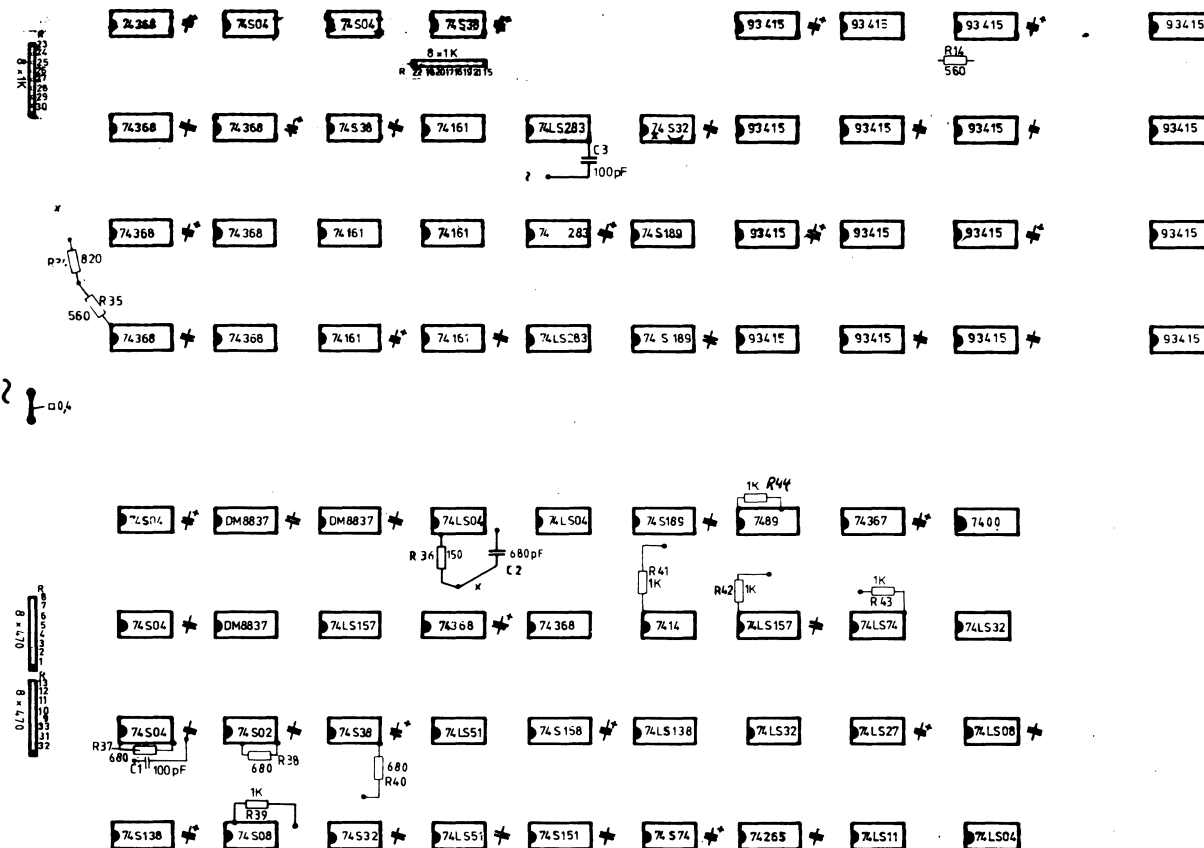
  

|                  |  |                  |      |           |         |       |
|------------------|--|------------------|------|-----------|---------|-------|
| Computer SYSTEME |  | Zeichn./Sach-Nr. | Ind. | Zch.-Art. | Blätter | Blatt |
| 660661           |  | B010806          |      |           |         |       |

**POOL-MEMORY MANAGER**



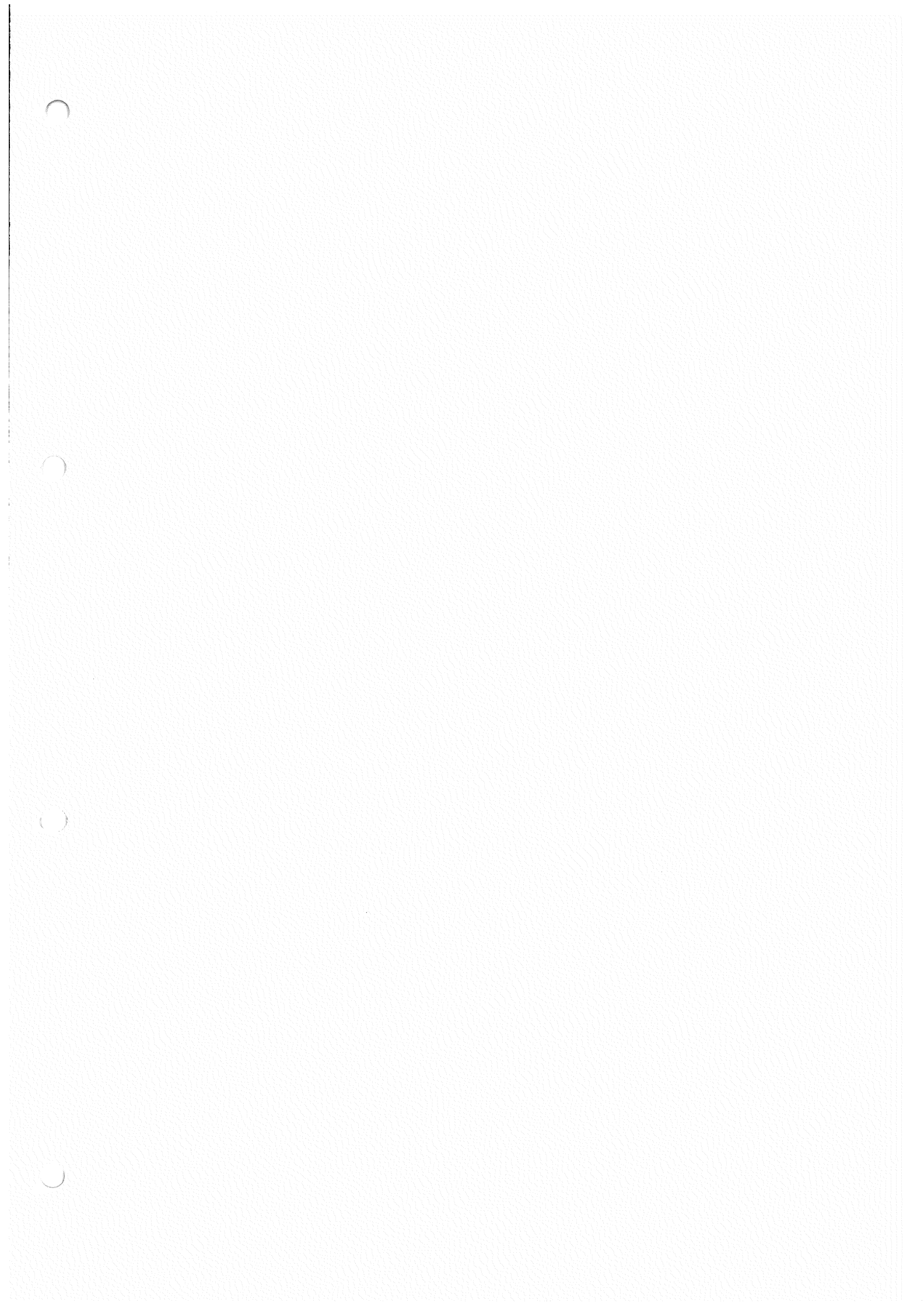
2.4.08



Bauhöhe Best.- Seite mm ☐ abkleben  
Leit.- Seite mm ☐ trennen  
☐ nach U.S. Wäsche einsetzen  
☐ auf der Lötseite bestücken

0.1 µF / 12 V Sperrschicht 10 µF / 16 V Tantal

|      |          |          |      |              |             |            |
|------|----------|----------|------|--------------|-------------|------------|
| C8   | 478      | 11.10.78 | 1977 | Datum        | Name        | Benennung  |
| C7   | 431      | 18.7.78  | Gez  | 30.9.77      | Krauß       | AUFBAUPLAN |
| C6   |          | 5.7.78   | Gepr | 22.7.77      |             | PMM        |
| C5   |          | 18.4.78  | Gepr |              |             |            |
| C4   |          | 29.3.78  | Gepr |              |             |            |
| C3   |          | 21.3.78  | Gepr |              |             |            |
| C2   |          | 21.9.77  | Gepr |              |             |            |
| C1   |          | 15.9.77  | Gepr |              |             |            |
| Zust | Änderung | Datum    | Name | Abt. / Sachb | CH2 - Lickf | Ers f      |
|      |          |          |      |              |             | Ers d      |



2.5 I/O-Board

660 665 C , D1 , D4-5 , D7

Stromlaufplan

Anhang

Strukturbild I/O-Board

Blockschaltbild Teilnehmeranschaltung

ROM-Tabellen

Signalnamenkatalog

Hardwareprogrammierung

# IOB

## STECKER J1

|    |           |     |          |
|----|-----------|-----|----------|
| 1  | 0V        | 51  | 0V       |
| 2  | 0V        | 52  | 0V       |
| 3  | 0V        | 53  | 0V       |
| 4  | I-GO EX   | 54  | I-NI     |
| 5  | I-GE IN   | 55  | I-GE OUT |
| 6  | I-Q OUT   | 56  | I-Q IN   |
| 7  | GE-IN     | 57  | I-A18    |
| 8  | GE-OUT    | 58  | I-A19    |
| 9  | Q-IN      | 59  | I-A09    |
| 10 | Q-OUT     | 60  | I-A08    |
| 11 | I fe / be | 61  | I-A07    |
| 12 | L/S       | 62  | I-A12    |
| 13 | BE        | 63  | I-A11    |
| 14 | FE        | 64  | I-A10    |
| 15 | DES-EX    | 65  | I-FE     |
| 16 | DES-INT   | 66  | I-A04    |
| 17 | EX-DADU   | 67  | MI-0     |
| 18 | INT-DADU  | 68  | MI-1     |
| 19 | GO-INT    | 69  | I-A17    |
| 20 |           | 70  | I-A05    |
| 21 | NE        | 71  | I-BE     |
| 22 | M-A01     | 72  | I-A06    |
| 23 | C2.1      | 73  | I-A01    |
| 24 | C4.1      | 74  | I-A02    |
| 25 | C2.2      | 75  | I-A16    |
| 26 | C4.2      | 76  | MI-0     |
| 27 | C2.3      | 77  | MI-1     |
| 28 | C4.3      | 78  | I-A03    |
| 29 | C2.4      | 79  | I-A13    |
| 30 | C4.4      | 80  | MBII     |
| 31 | C2.5      | 81  | GR       |
| 32 | C4.5      | 82  | COOP     |
| 33 | C2.6      | 83  | MBI      |
| 34 | C4.6      | 84  | I-A15    |
| 35 | C2.7      | 85  | MI       |
| 36 | C4.7      | 86  | MI       |
| 37 | SV-NETZ   | 87  |          |
| 38 | UR-START  | 88  | I-A00    |
| 39 | I-S00     | 89  |          |
| 40 | I-S11     | 90  |          |
| 41 | I-S12     | 91  | ADOP     |
| 42 | I-S13     | 92  | DS-DIS   |
| 43 | I-S14     | 93  | I-A14    |
| 44 | STOP      | 94  | BCL      |
| 45 | STC       | 95  | DA       |
| 46 | STN       | 96  | TIOP     |
| 47 | STP       | 97  | RF       |
| 48 | STV       | 98  | RF       |
| 49 | + 5V      | 99  | + 5V     |
| 50 | + 5V      | 100 | + 5V     |

## STECKER J2

|    |          |     |          |
|----|----------|-----|----------|
| 1  | + 5V     | 51  | 0V       |
| 2  | + 5V     | 52  | + 5V     |
| 3  | C 2.8    | 53  | I-D01    |
| 4  | C4.8     | 54  | I-D00    |
| 5  | C 2.9    | 55  | I-D08    |
| 6  | C4.9     | 56  | I-D18    |
| 7  | C 2.10   | 57  | I-D06    |
| 8  | C4.10    | 58  | I-D07    |
| 9  | C 2.11   | 59  | I-D05    |
| 10 | C4.11    | 60  | I-D04    |
| 11 | C 2.12   | 61  | I-D03    |
| 12 | C4.12    | 62  | I-D02    |
| 13 | C 2.13   | 63  | I-D17    |
| 14 | C4.13    | 64  | C1.2     |
| 15 | C 2.14   | 65  | C1.3     |
| 16 | C4.14    | 66  | I-D16    |
| 17 | C 2.15   | 67  | C1.6     |
| 18 | C4.15    | 68  | C1.7     |
| 19 | C 2.16   | 69  | C1.11    |
| 20 | C4.16    | 70  | I-D15    |
| 21 | C 2.17   | 71  | C1.20    |
| 22 | C4.17    | 72  | C1.21    |
| 23 | C 2.18   | 73  | C1.22    |
| 24 | C4.18    | 74  | I-D14    |
| 25 | C 2.19   | 75  | I-D13    |
| 26 | C4.19    | 76  | IFT      |
| 27 | C 2.20   | 77  | I-L/S    |
| 28 | C4.20    | 78  | I-B/W    |
| 29 | C 2.21   | 79  | C4.21    |
| 30 | C 2.22   | 80  | C4.22    |
| 31 | C 2.23   | 81  | C4.23    |
| 32 | C 2.24   | 82  | C4.24    |
| 33 | C 2.25   | 83  | C4.25    |
| 34 | I-ADS    | 84  | SV X1 X2 |
| 35 | K-AKTIV  | 85  | I-D12    |
| 36 | K-3FFF   | 86  | I-D10    |
| 37 | K-CLK    | 87  | I-D11    |
| 38 | SEL-AP   | 88  | INT      |
| 39 | K-BS END | 89  | I-M0     |
| 40 | SEL-PMM1 | 90  | SEL-PMM2 |
| 41 | SEL-32   | 91  | SEL-01   |
| 42 | SEL-22   | 92  | SEL-02   |
| 43 | SEL-12   | 93  | SEL-11   |
| 44 | ADR-DIS  | 94  | CLK-40   |
| 45 |          | 95  |          |
| 46 | -12V     | 96  | 0V       |
| 47 | + 12V    | 97  | 0V       |
| 48 | 0V       | 98  | 0V       |
| 49 | 0V       | 99  | 0V       |
| 50 | 0V       | 100 | 0V       |

IOB INPUT/OUTPUT-BOARD

Steckerbelegung

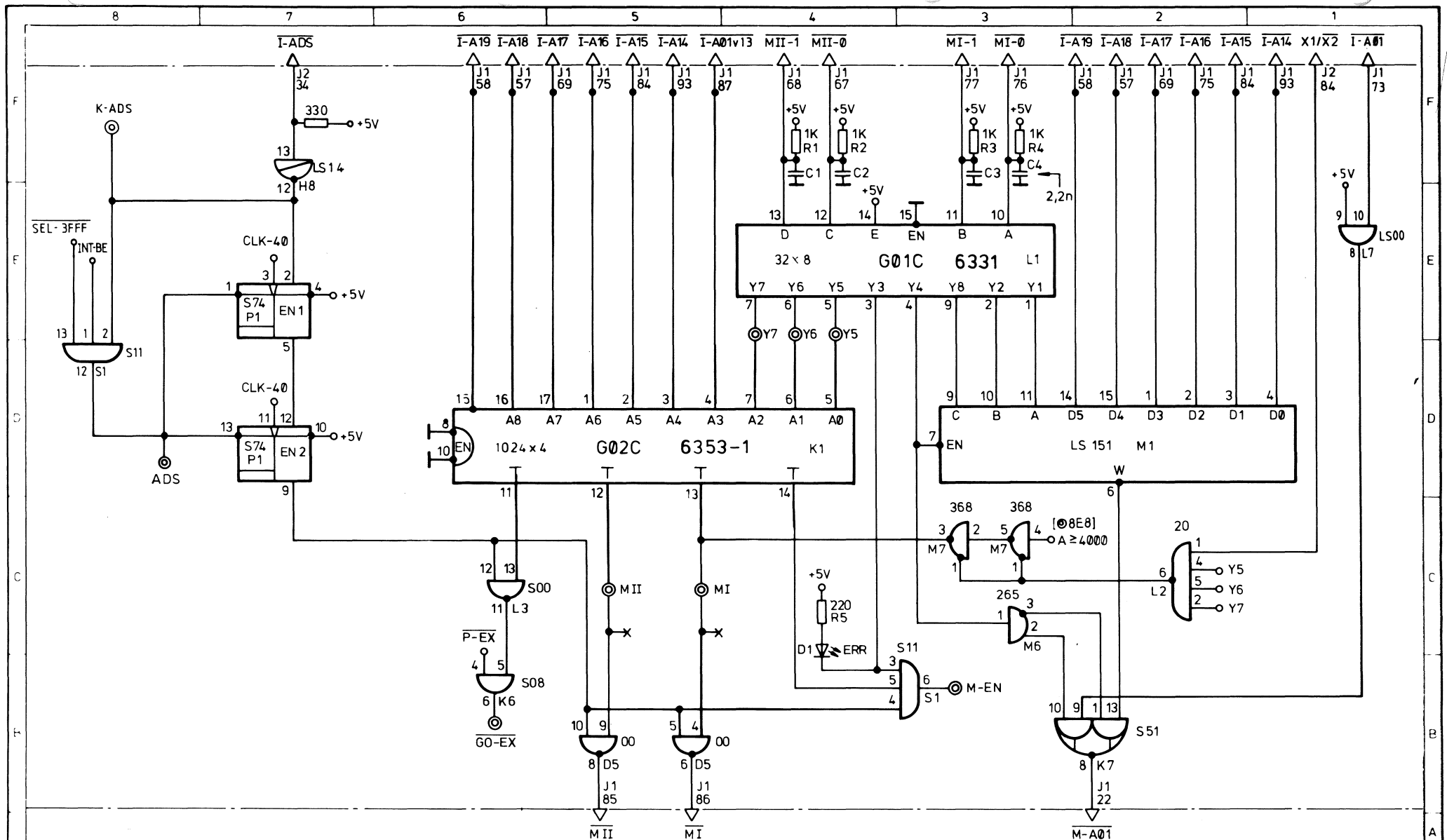
660665 C 01 12 01

|             |         |         |          |           |                  |                    |        |
|-------------|---------|---------|----------|-----------|------------------|--------------------|--------|
| Bezeichnung | 12.1.78 | Schmidt | 31.10.78 | W. Müller | Computer SYSTEME | Abt./Suchb. CH2-In | Ers. 2 |
| D7          | 538     | 16.3.79 | D5       | 524       | 23.1.79          | D4                 | 484    |
|             |         | 202.78  |          |           | 31.10.78         | D1                 |        |

Input, Output - Board Einbauplatz: Auf dem IOB befindet sich ein Interface-Steckplatz zur Aufnahme eines beliebigen 25-pol. Input/Output-Adapters sowie ein V24-Konsolgerät-Interface.

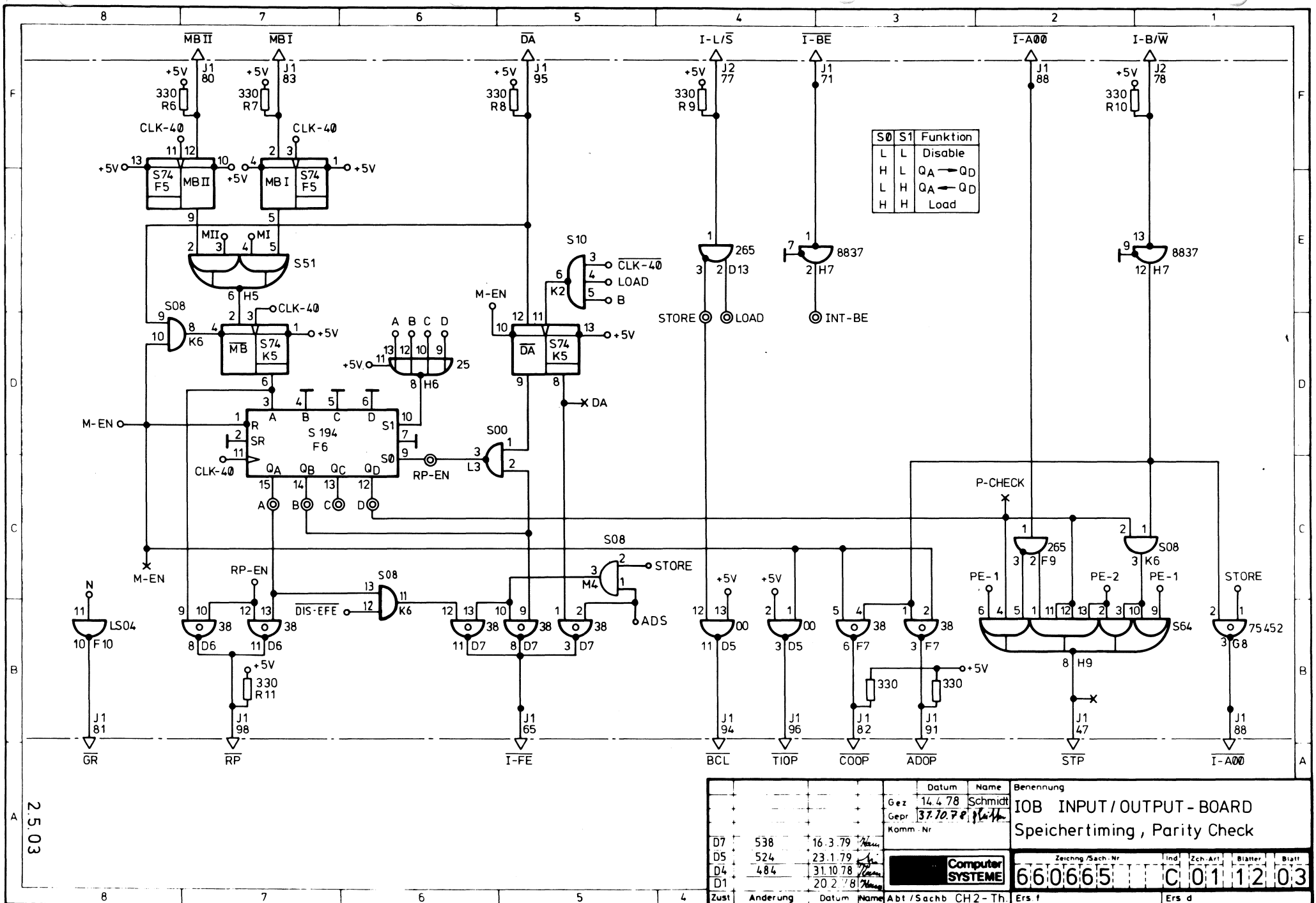
Führung der Peripherie-Signale über den C-Adapter

|       |                                                 |
|-------|-------------------------------------------------|
| ST C1 | 25-pol. CANNON-Stecker (8 Punkte belegt (V 24)) |
| ST C2 | 25-pol. " (25)                                  |
| ST C4 | 25-pol. " (25)                                  |



| Gez      |          |          | Datum    | Name        | Benennung              |
|----------|----------|----------|----------|-------------|------------------------|
| 64.78    |          |          | 6.4.78   | Schmidt     | IOB INPUT/OUTPUT-BOARD |
| 27.11.78 |          |          | 27.11.78 | Maier       | Speichermodulewahl     |
| Komm-Nr  |          |          |          |             |                        |
| 07       | 538      | 16.3.79  |          |             |                        |
| 05       | 524      | 23.1.79  |          |             |                        |
| 04       | 484      | 31.10.78 |          |             |                        |
| 01       |          | 20.2.78  |          |             |                        |
| Zust     | Änderung | Datum    | Name     | Abt./Sachb. | CH2-Th                 |
| Ers f    |          |          |          |             |                        |
| Ers d    |          |          |          |             |                        |

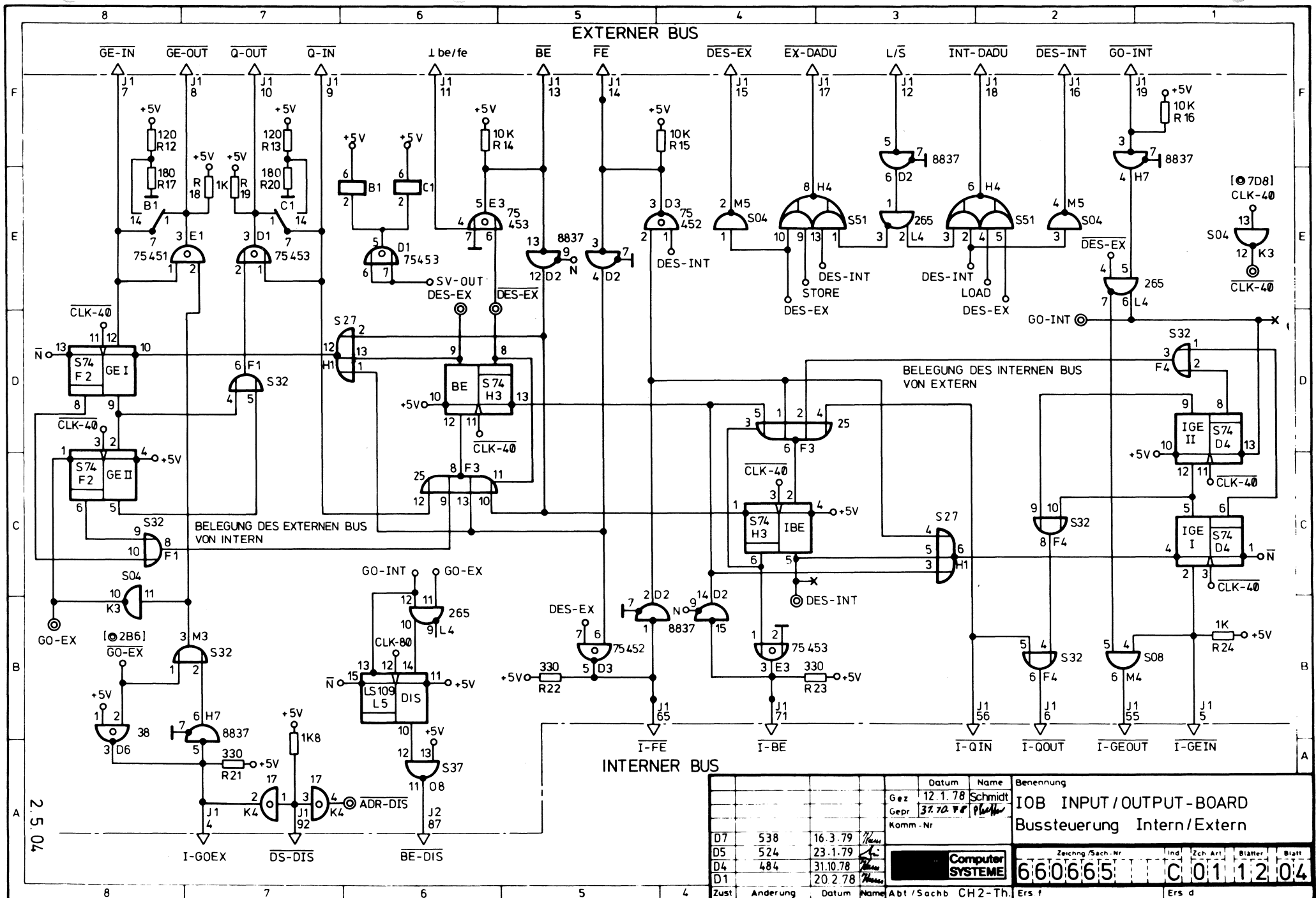
2.5.02



2.5.03

|                       |      |          |         |                              |  |
|-----------------------|------|----------|---------|------------------------------|--|
| Gez. 14.4.78          |      | Datum    | Name    | Benennung                    |  |
| Gepr. 37.10.78        |      |          | Schmidt | IOB INPUT/OUTPUT - BOARD     |  |
| Komm. Nr.             |      |          |         | Speichertiming, Parity Check |  |
| D7                    | 538  | 16.3.79  |         | Zeichnung/Sach. Nr.          |  |
| D5                    | 524  | 23.1.79  |         | Ind.                         |  |
| D4                    | 484  | 31.10.78 |         | Zch. Art.                    |  |
| D1                    |      | 20.2.78  |         | Blätter                      |  |
| Zust.                 | Ande | Datum    | Name    | Blatt                        |  |
| Abt./Sachb. CH2 - Th. |      | Ers. 1   |         | Ers. d                       |  |

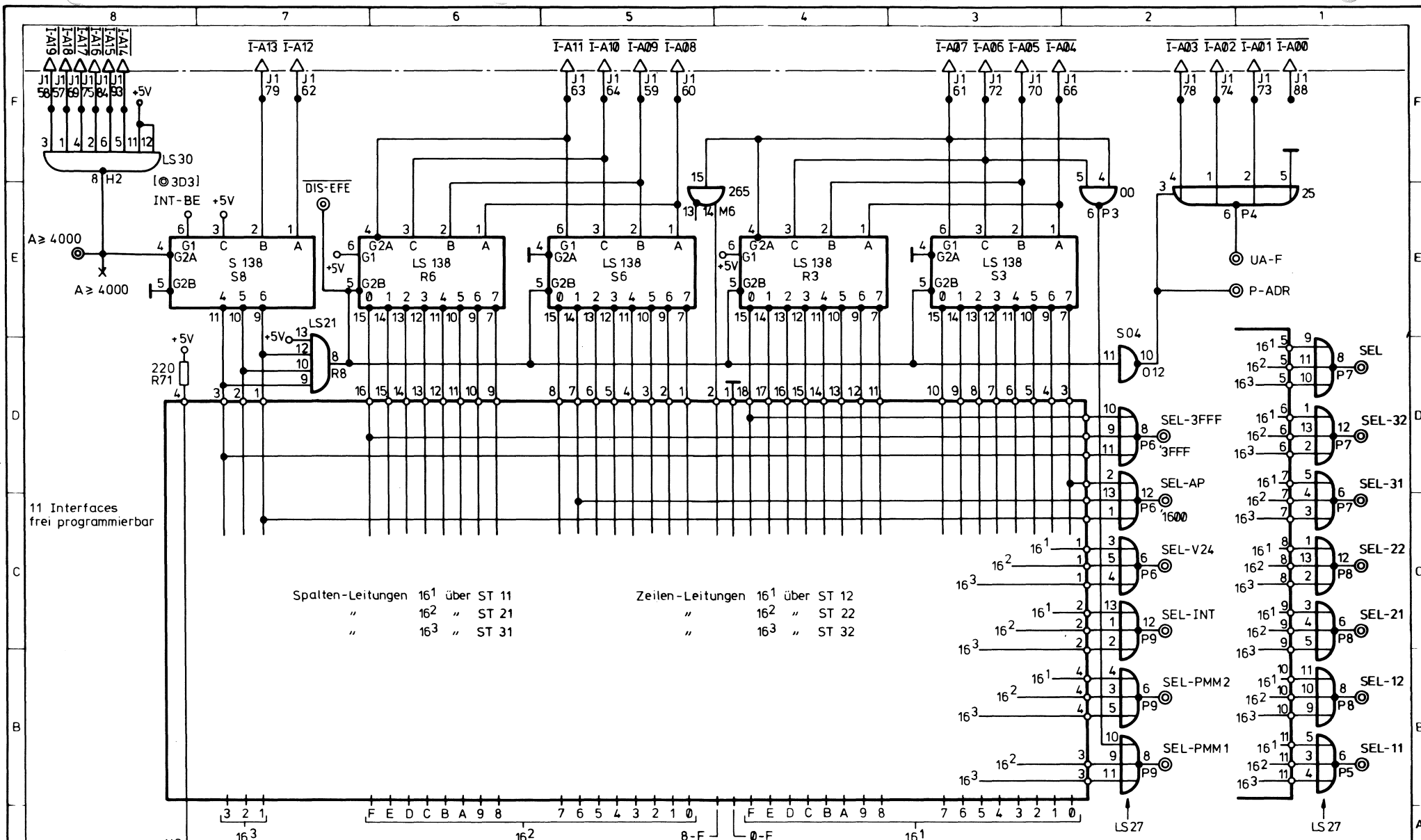












11 Interfaces  
frei programmierbar

Spalten-Leitungen 16<sup>1</sup> über ST 11  
 " 16<sup>2</sup> " ST 21  
 " 16<sup>3</sup> " ST 31

Zeilen-Leitungen 16<sup>1</sup> über ST 12  
 " 16<sup>2</sup> " ST 22  
 " 16<sup>3</sup> " ST 32

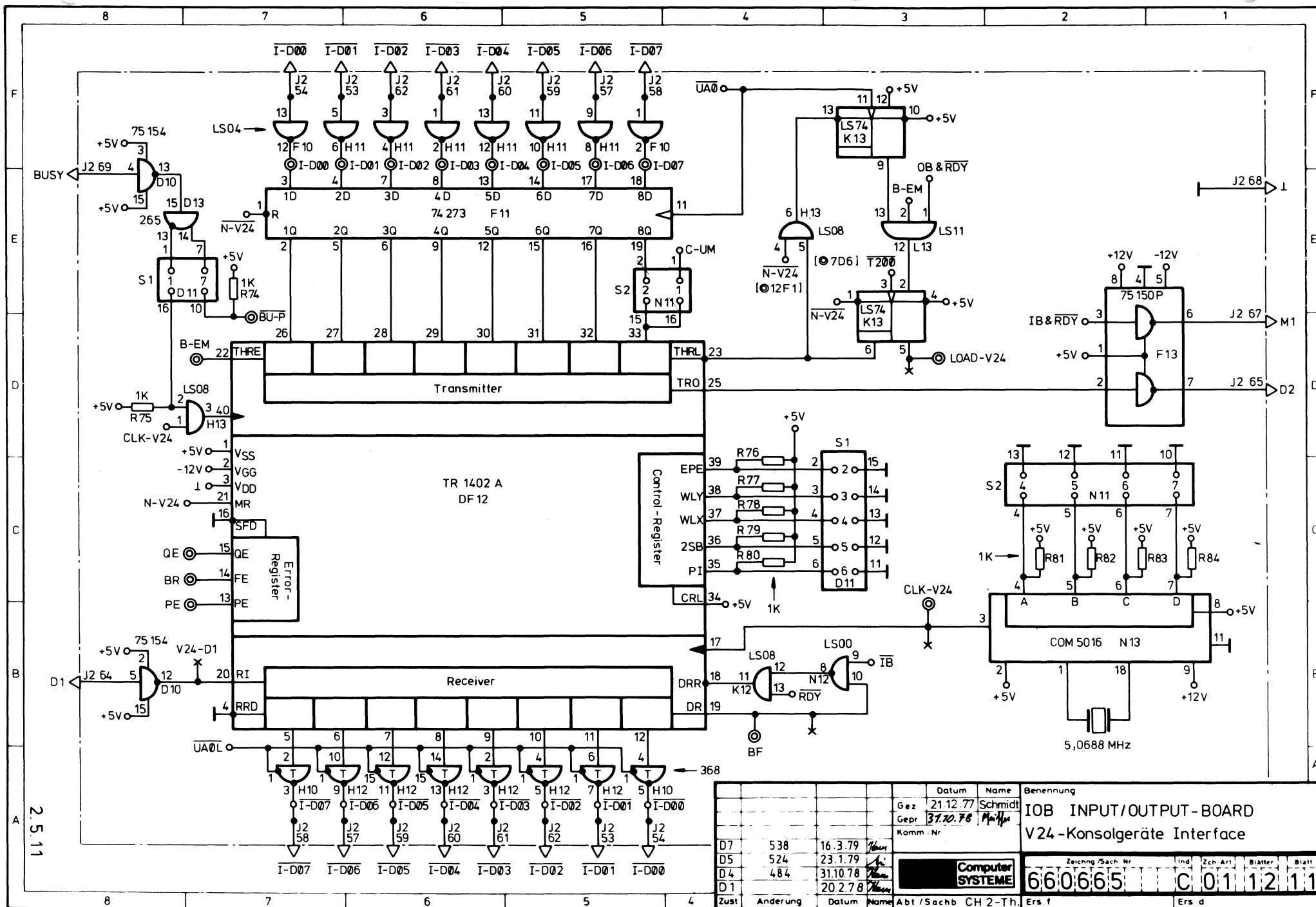
nicht benutzte Selekte  
auf +5V programmieren

|                                            |     |          |          |                  |         |                   |                        |  |
|--------------------------------------------|-----|----------|----------|------------------|---------|-------------------|------------------------|--|
| Gez 21.12.77 Schmidt                       |     |          | Datum    |                  | Name    |                   | Benennung              |  |
| Gepr 31.10.78                              |     |          | 31.10.78 |                  | Platzer |                   | IOB INPUT/OUTPUT-BOARD |  |
| Komm Nr                                    |     |          |          |                  |         |                   | Device Selektor        |  |
| 07                                         | 538 | 16.3.79  | Klaus    |                  |         |                   |                        |  |
| 05                                         | 524 | 23.1.79  | Klaus    |                  |         |                   |                        |  |
| 04                                         | 484 | 31.10.78 | Klaus    |                  |         |                   |                        |  |
| 01                                         |     | 20.2.78  | Klaus    |                  |         |                   |                        |  |
| Zust Änderung Datum Name Abt./Sachb CH2-Th |     |          |          | Computer SYSTEME |         | Zeichnung/Sach-Nr |                        |  |
|                                            |     |          |          | 660665           |         | Ind C 01 12 08    |                        |  |
| Ers f                                      |     |          |          | Ers d            |         |                   |                        |  |

2.5.08





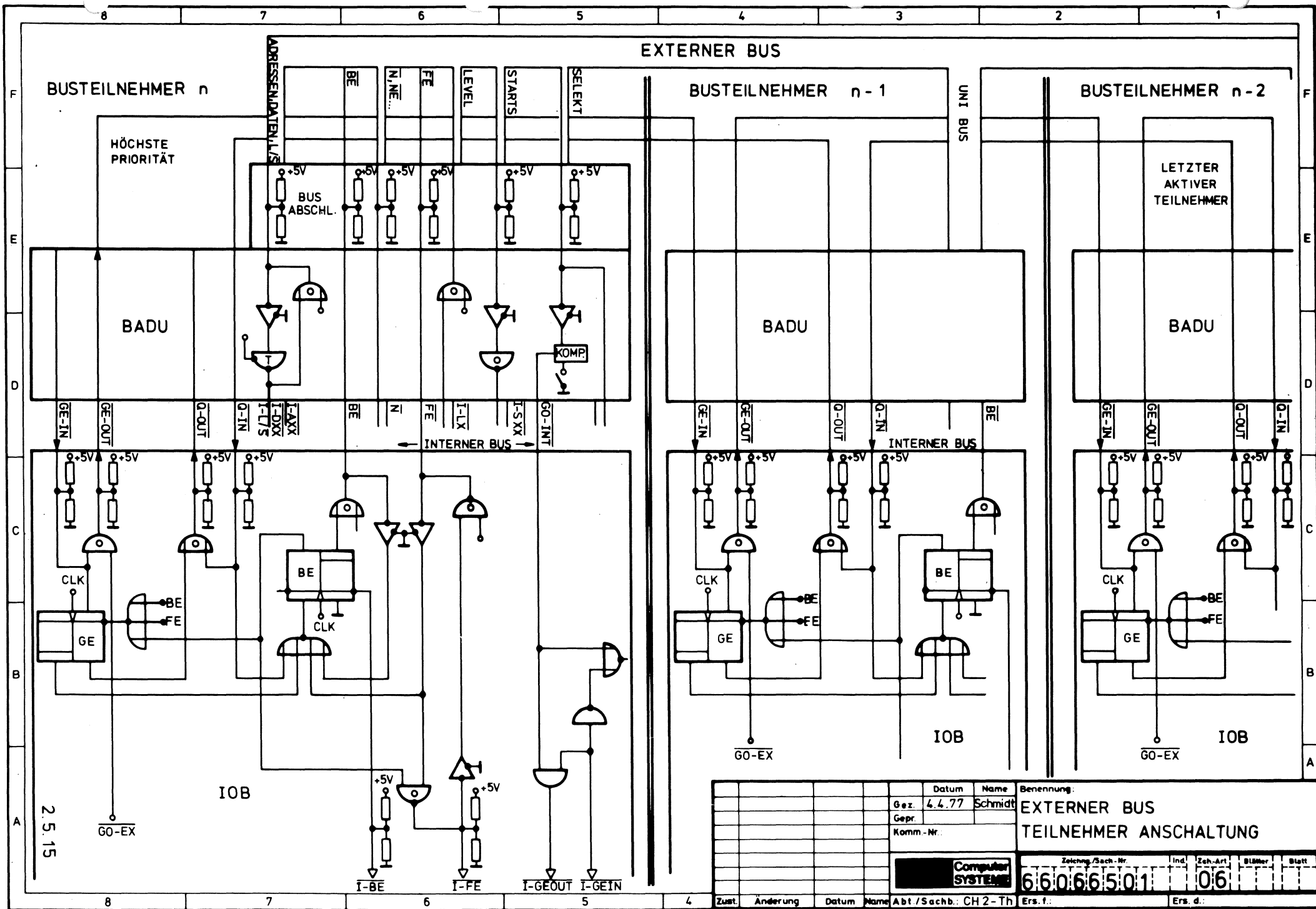












# ROM 1 Nr G01C

|    |    |   |       |       |      |      | ADR ROM2       |                |                |                |                |                |                |                |
|----|----|---|-------|-------|------|------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
|    |    |   | MII-1 | MII-0 | MI-1 | MI-0 | C-MUX          | A2             | A1             | A0             | MI ≠ MII       | ERROR          | B-MUX          | A-MUX          |
|    | EN | E | D     | C     | B    | A    | Y <sub>8</sub> | Y <sub>7</sub> | Y <sub>6</sub> | Y <sub>5</sub> | Y <sub>4</sub> | Y <sub>3</sub> | Y <sub>2</sub> | Y <sub>1</sub> |
| 00 |    | L | L     | L     | L    | L    |                |                |                |                |                |                |                |                |
| 01 |    | L | L     | L     | L    |      |                |                |                |                |                |                |                |                |
| 02 |    | L | L     | L     |      | L    |                |                |                |                |                |                |                |                |
| 03 |    | L | L     | L     |      |      |                |                |                |                |                |                |                |                |
| 04 |    | L | L     |       | L    | L    |                |                |                |                |                |                |                |                |
| 05 |    | L | L     |       | L    |      |                |                |                |                |                |                |                |                |
| 06 |    | L | L     |       |      | L    |                |                |                |                |                |                |                |                |
| 07 |    | L | L     |       |      |      |                |                |                |                |                |                |                |                |
| 08 |    | L |       | L     | L    | L    |                |                |                |                |                |                |                |                |
| 09 |    | L |       | L     | L    |      |                |                |                |                |                |                |                |                |
| 0A |    | L |       | L     |      | L    |                |                |                |                |                |                |                |                |
| 0B |    | L |       | L     |      |      |                |                |                |                |                |                |                |                |
| 0C |    | L |       |       | L    | L    |                |                |                |                |                |                |                |                |
| 0D |    | L |       |       | L    |      |                |                |                |                |                |                |                |                |
| 0E |    | L |       |       |      | L    |                |                |                |                |                |                |                |                |
| 0F |    | L |       |       |      |      |                |                |                |                |                |                |                |                |
| 10 |    |   | L     | L     | L    | L    | L              |                |                |                | L              |                | L              |                |
| 11 |    |   | L     | L     | L    |      |                |                |                |                |                | L              |                |                |
| 12 |    |   | L     | L     | L    |      |                |                |                |                |                | L              |                |                |
| 13 |    |   | L     | L     |      |      |                |                |                |                |                |                |                |                |
| 14 |    |   | L     |       | L    | L    | L              |                | L              |                |                |                |                |                |
| 15 |    |   | L     |       | L    |      | L              |                |                | L              |                |                | L              |                |
| 16 |    |   | L     |       |      | L    |                |                |                |                |                | L              |                |                |
| 17 |    |   | L     |       |      |      |                |                |                |                |                | L              |                |                |
| 18 |    |   |       | L     | L    | L    |                |                |                |                |                |                |                |                |
| 19 |    |   |       | L     | L    |      | L              |                | L              |                |                |                |                |                |
| 1A |    |   |       | L     |      | L    | L              | L              |                |                | L              |                | L              |                |
| 1B |    |   |       | L     |      |      |                |                |                |                |                | L              |                |                |
| 1C |    |   |       |       | L    | L    | L              | L              |                | L              |                |                |                |                |
| 1D |    |   |       |       | L    |      | L              | L              | L              |                |                |                |                |                |
| 1E |    |   |       |       |      | L    | L              |                |                |                |                |                |                |                |
| 1F |    |   |       |       |      |      | L              |                |                |                |                | L              |                |                |

Input

Output

Signale aktiv Low

| Speicherbestückung |    |
|--------------------|----|
| MII                | MI |
|                    |    |
|                    |    |
|                    |    |
|                    |    |
| 32                 | 64 |
| 32                 | 32 |
|                    |    |
|                    |    |
|                    |    |
|                    |    |
| 64                 | 64 |
|                    |    |
|                    |    |
|                    |    |
| 32                 | 64 |
| 32                 | 32 |
|                    |    |
|                    |    |
|                    |    |
|                    |    |
| 16                 | 32 |
| 16                 | 16 |
|                    |    |
|                    |    |
|                    | 64 |
|                    | 32 |
|                    | 16 |

|                  |          |                   |      |                          |                   |
|------------------|----------|-------------------|------|--------------------------|-------------------|
| Datum            |          | Name              |      | Benennung:               |                   |
| Gez.             | 23.1.78  | Schmidt           |      | IOB INPUT/OUTPUT-BOARD   |                   |
| Gepr.            |          |                   |      | Romtabelle ROM1 Nr. G01C |                   |
| Komm.-Nr.:       |          |                   |      |                          |                   |
| Computer SYSTEME |          | Zeichn./Sach.-Nr. |      | Ind.                     | Zeh.-Art.         |
|                  |          | 660665            |      | C                        | 28                |
|                  |          |                   |      | Blätter                  | Blatt             |
|                  |          |                   |      | 03                       | 01                |
| Zust.            | Änderung | Datum             | Name | Abt./Sachb.: CH2 - Th.   | Ers. f.: Ers. d.: |

[illegible]

| L     |          |    |    |    |    |    |    |    |    | E           |   |   |   |   |  |  |  |  |  | D                             |  |    |          |    |      |    |    |    |    | C     |    |   |   |   |             |   |   |   |   | B      |  |  |    |    |    |    |    |    |    | A  |    |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  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| Signalname             | Bedeutung                 | Quelle | Senke | Funktion                                                                                                                                                                                                 |
|------------------------|---------------------------|--------|-------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| A <del>4000</del>      | Speicheradresse           |        |       | Kommt, wenn eine Speicheradresse auf den internen Bus geschaltet wird. Das Signal wird aus den Adressen $\overline{I-A14} \dots \overline{I-A19}$ generiert.                                             |
| $A01, \overline{A01}$  |                           |        |       | Wird aus dem Adressbit $\overline{I-A01}$ generiert und für die Zeit der Speicheransteuerung festgehalten. Wird beim Speicherinterleaving zur Selektion benutzt.                                         |
| A, B, C, D             |                           |        |       | Werden zur Nullabfrage des Schieberegisters im Speichertiming benutzt.                                                                                                                                   |
| BS-END                 | Bootstrap Ende            |        |       | Wird durch Setzen des Bit $2^2$ der Adresse '3FFF erzeugt. (Letzter Befehl im Bootstrap-Programm) Schaltet in der Bedienungskonsole den Schalter BS automatisch aus und startet den Rechner auf Ebene 0. |
| CLK-40                 | Clock                     |        |       | Symetrischer 25 MHz Takt ( $T = 40$ ns). Wird auf der CPU erzeugt und im Timing des IOB benutzt.                                                                                                         |
| CLK-80                 | Clock                     |        |       | Symetrischer Takt ( $T = 80$ ). Wird auf dem IOB durch Teilen der CLK-40 erzeugt.                                                                                                                        |
| DS-SEL                 | Device-Selektor<br>Selekt |        |       | Wird erzeugt, wenn eine auf dem Device-Selektor programmierte Adresse angesprochen wird (nur Meßp.).                                                                                                     |
| $\overline{GO-EX}$     | Gehe nach Extern          |        |       | Wird erzeugt, wenn eine Peripherie- oder Speicheradresse angesprochen wird, die sich nicht im Gehäuse befindet.<br>Meldet ein Gewünscht für den externen Bus an.                                         |
| INT-BE                 | Internes Belegt           |        |       | Wird aus $\overline{I-BE}$ erzeugt und innerhalb des IOB an verschiedenen Stellen benutzt.                                                                                                               |
| LOAD                   |                           |        |       | Wird aus $\overline{I-L/\overline{S}}$ erzeugt und dient zur Generierung des Signals $\overline{INT-DADU}$ sowie der Umschaltung des Parity Generator/Checker.                                           |
| $\overline{LOAD-3FFF}$ | Laden Register<br>'3FFF   |        |       | Wird aus $\overline{SEL-3FFF}$ und $\overline{I-L/\overline{S}}$ erzeugt und schaltet das Register '3FFF auf den Bus.                                                                                    |
| M-EN                   | Memory Enable             |        |       | Wird aus $\overline{MI}, \overline{MII}, \overline{MIII}$ oder $\overline{SEL-AP}$ erzeugt, gibt das Speichertiming frei und schaltet die Signale zum Speicher durch.                                    |
| $MI \neq MII$          | MI ungleich MII           |        |       | Wird je nach Speicherkonfiguration statisch erzeugt. Disable für den Adressmultiplexer (Interleaving) der Speichermodulanwahl.                                                                           |
| $\overline{NETZ}$      | Netzausfall               |        |       | Wird aus $\overline{NE}$ oder $\overline{SV-NETZ}$ erzeugt.<br>Startet das Netzausfall/Netzwiederkehr-Timing.<br>Signal ist im Ruhezustand (Rechner EIN) High.                                           |
| P-ADR                  | Peripherie-<br>Adresse    |        |       | Wird aktiv, wenn eine Peripherie-Adresse angesprochen wird. Startet das Device-Selektor Timing                                                                                                           |
| PE-1                   | Parity Error              |        |       | Wird bei Parityfehler der Bits $\overline{I-D00} \dots \overline{I-D08}$ erzeugt und mit dem Signal P-CHECK abgetastet.                                                                                  |
| PE-2                   | Parity Error              |        |       | Wird bei Parityfehler der Bits $\overline{I-D10} \dots \overline{I-D18}$ erzeugt und mit dem Signal P-CHECK abgetastet.                                                                                  |
| P-CHECK                | Parity Check              |        |       | Wird vom Speichertiming nach Empfang des Signals DA erzeugt und taktet die Signale PE-1 und PE-2 (Meßpunkt).                                                                                             |
| $\overline{P-EX}$      | Peripherie<br>Extern      |        |       | Wird erzeugt, wenn die CPU eine Peripherie-Adresse aufschaltet, die nicht auf dem Device-Selektor programmiert ist.                                                                                      |

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|------------------------|--|-------------|--|------------------------|--|
| Datum                  |  | Name        |  | Benennung              |  |
| 25.4.77                |  | Kibedi      |  | IOB Input/Output-Board |  |
| Gepr.                  |  |             |  | Signalnamen intern     |  |
| Komm.-Nr.              |  |             |  |                        |  |
| Zust.                  |  | Änderung    |  | Datum                  |  |
| Name                   |  | Abt./Sachb. |  | CH 2-Th                |  |
| DIETZ Computer SYSTEME |  | 660665910   |  | 27 02 01               |  |
| Ers. f.                |  | Ers. d.     |  |                        |  |



| Signalname        | Bedeutung   | Quelle | Senke | Funktion                                                                                                                                                                             |
|-------------------|-------------|--------|-------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <u>P-CLEAR</u>    | Power Clear |        |       | Wird zur Nullstellung des Netzausfall/Netzwiederkehr-Timings benutzt. Bleibt bis ca. 10 $\mu$ s nach Einschalten der +5V Low.                                                        |
| RES-Uhr           | Reset Uhr   |        |       | Wird vom Netzausfall/Netzwiederkehr-Timing sowie vom UHR-Flip Flop erzeugt. Setzt die Uhr auf Null.                                                                                  |
| RP-EN             | RP-Enable   |        |       | Verhindert einen $\overline{RP}$ , wenn $\overline{MB}$ des selektierten Speichers wieder High wird (lange Busbelegung durch Bedienungskonsole).                                     |
| STORE             |             |        |       | Wird aus $I-L/\overline{S}$ erzeugt und dient zur Generierung des Signals EX-DADU.                                                                                                   |
| <u>STORE-3FFF</u> |             |        |       | Wird aus $\overline{SEL-3FFF}$ und $\overline{IFT}$ erzeugt. Lädt das Register '3FFF.                                                                                                |
| SV-OUT            |             |        |       | Wird vom SV-Flip Flop erzeugt und im Netzausfall/Netzwiederkehr-Timing verwendet. Das Signal ist während der Netzeinschaltung und während der Rettungsroutine bei Netzausfall aktiv. |
| <u>SEL-3FFF</u>   |             |        |       | Wird vom Device Selektor erzeugt, wenn die Adresse '3FFF angesprochen wird.                                                                                                          |
| T-1000            |             |        |       | Asymetrischer 1 MHz Takt ( $T=1000$ ns). Wird auf dem IOB an mehreren Stellen als Takt verwendet.                                                                                    |
| T-10 000          |             |        |       | Asymetrischer 100 KHz Takt ( $T=10$ $\mu$ s). Wird von der Watch Dog bei Belegung des externen Bus verwendet (FE Erzeugung erst nach ca. 400 $\mu$ s).                               |
| <u>UR-START</u>   |             |        |       | Kommt bei Rechnerstart durch das Netzwiederkehr-Timing.                                                                                                                              |
| <u>UHR</u>        |             |        |       | Wird vom UHR-Flip Flop erzeugt. Gibt die Echtzeituhr frei.                                                                                                                           |
| U-INT             |             |        |       | Kommt, wenn die programmierte Zeit abgelaufen ist, und erzeugt einen Interrupt.                                                                                                      |
| 80 $\mu$ s        |             |        |       | Wird vom Uhr-Teiler abgeleitet und dient im Netzwiederkehr-Timing der Verzögerung des Rechnerstarts (nach Wegschalten von MemoryProtekt).                                            |
| 10 ms             |             |        |       | Wird vom Uhr-Teiler abgeleitet. Zeit für die Rettungsroutine beim Netzausfall.                                                                                                       |
| 800 ms            |             |        |       | Wird vom Uhr-Teiler abgeleitet und dient im Netzwiederkehr-Timing dem verzögerten Ausschalten von Memory Protekt und Wegnehmen der Nullstellung.                                     |

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|-----------------|--|-----------|--|--------|--|-----------|--|------------------------|--|
| Zust            |  | Anderung  |  | Datum  |  | Name      |  | Abt/Sachb. CH2 - Th    |  |
| Gez.            |  | 25.4.77   |  | Kibedi |  | Benennung |  | IOB Input/Output-Board |  |
| Gepr            |  |           |  |        |  |           |  | Signalnamen intern     |  |
| Komm-Nr         |  |           |  |        |  |           |  |                        |  |
| Zeichn./Sach-Nr |  | 660665910 |  | Ind    |  | Zch. Art  |  | Blatt                  |  |
| Blatt           |  | 27        |  | 02     |  | 02        |  |                        |  |
| Ers f           |  |           |  | Ers d  |  |           |  |                        |  |

| Signalname                                              | Bedeutung                       | Quelle | Senken | Funktion                                                                                                                                                                                                                                    |
|---------------------------------------------------------|---------------------------------|--------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| $\overline{\text{ADOP}}$                                | Wortumschaltung                 |        |        | Signal zum Speicher. Schaltet den Speicher auf Wortzugriff um.                                                                                                                                                                              |
| $\overline{\text{BCL}}$                                 |                                 |        |        | Signal zum Speicher. Schaltet den Speicher auf Lesen.                                                                                                                                                                                       |
| $\overline{\text{BE}}$                                  | Belegt                          |        |        | Belegt Signal des externen Bus.                                                                                                                                                                                                             |
| $\overline{\text{BE-DIS}}$                              | Belegt Disable                  |        |        | Wird erzeugt, wenn ein Teilnehmer vom externen Bus den internen Bus belegen möchte und gleichzeitig ein Teilnehmer vom internen den externen. Mit $\overline{\text{BE-DIS}}$ wird dem internen Teilnehmer die interne Busbelegung entzogen. |
| $\overline{\text{COOP}}$                                | Wortumschaltung                 |        |        | Signal zum Speicher. Schaltet den Speicher auf Wortzugriff um.                                                                                                                                                                              |
| $\overline{\text{DA}}$                                  | Daten verfügbar                 |        |        | Signal vom Speicher. Kommt, wenn die aus dem Speicher gelesenen Daten zur Verfügung stehen.                                                                                                                                                 |
| $\overline{\text{DES-EX}}$                              | Datensenke Extern               |        |        | Signal zur BADU. Wird von der Bussteuerung erzeugt und schaltet die Adressleitungen des internen Bus auf den externen Bus.                                                                                                                  |
| $\overline{\text{DES-INT}}$                             | Datensenke Intern               |        |        | Signal zur BADU. Wird von der Bussteuerung erzeugt und schaltet die Adressleitungen des externen Bus auf den internen Bus.                                                                                                                  |
| $\overline{\text{EX-DADU}}$                             | Datendurchschaltung nach Extern |        |        | Signal zum BADU. Wird von der Bussteuerung erzeugt und schaltet die Datenleitungen des internen Bus auf den externen Bus.                                                                                                                   |
| $\overline{\text{FE}}$                                  | Fertig                          |        |        | Fertig Signal des externen Bus.                                                                                                                                                                                                             |
| $\overline{\text{FE-DIS}}$                              | Fertig Disable                  |        |        | Gehäuse-internes Signal. Kann von jedem I-Platz erzeugt werden. Verhindert oder verzögert im gesetzten Zustand die Fertigmeldung durch den Device Selektor.                                                                                 |
| $\overline{\text{GO-INT}}$                              | Gehenauch Intern                |        |        | Signal von der BADU. Leitet eine Belegung des internen Bus ein.                                                                                                                                                                             |
| $\overline{\text{GR}}$                                  | General Reset                   |        |        | Signal zum Speicher. Absolute Nullstellung des Speichers.                                                                                                                                                                                   |
| $\overline{\text{GE-IN}}$                               | Gewünscht höherer Priorität     |        |        | Signal des externen bus. Kommt vom Busteilnehmer mit nächst höherer Priorität. Wird dort als $\overline{\text{GE-OUT}}$ erzeugt.                                                                                                            |
| $\overline{\text{GE-OUT}}$                              | Gewünscht Anmelden              |        |        | Signal des externen Bus. Geht zum Busteilnehmer mit nächst niedrigerer Priorität. Wird dort als $\overline{\text{GE-IN}}$ empfangen.                                                                                                        |
| $\overline{\text{I-A0}} \dots \overline{\text{I-A19}}$  |                                 |        |        | Adressleitungen des internen Bus. Werden zu allen Einbauplätzen des Gehäuses geführt.                                                                                                                                                       |
| $\overline{\text{I-BE}}$                                |                                 |        |        | Belegt Signal des internen Bus.                                                                                                                                                                                                             |
| $\overline{\text{I-B/W}}$                               | Byte/Wort Umschaltung           |        |        | Signal des internen Bus. Muß bei Wortzugriff zum Speicher auf LOW geschaltet werden.                                                                                                                                                        |
| $\overline{\text{I-D00}} \dots \overline{\text{I-D18}}$ |                                 |        |        | Datenleitungen des internen Bus. Werden zu allen Einbauplätzen des Gehäuses geführt.                                                                                                                                                        |
| $\overline{\text{I-FE}}$                                |                                 |        |        | Fertig-Signal des internen Bus.                                                                                                                                                                                                             |
| $\overline{\text{IFT}}$                                 | Interface Takt                  |        |        | Wird vom Device Selektro bei Store erzeugt und zu allen I-Plätzen geführt.                                                                                                                                                                  |

2.5.21

|                     |  |                                |  |                                    |  |
|---------------------|--|--------------------------------|--|------------------------------------|--|
| Gez. 25.4.77        |  | Name Kibedi                    |  | Benennung IOB Input / Output-Board |  |
| Gepr.               |  | Komm.-Nr.                      |  | Signalnamen am Stecker             |  |
| Computer SYSTEME    |  | Zeichnung / Sach-Nr. 660665920 |  | Ind. 27 03 01                      |  |
| Abt./Sachb. CH2- Th |  | Ers. f.                        |  | Ers. d.                            |  |

| Signalname                                                                       | Bedeutung                       | Quelle | Senke | Funktion                                                                                                                                                                                                                                                                            |
|----------------------------------------------------------------------------------|---------------------------------|--------|-------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| $\overline{I-GEIN}$                                                              | Gewünscht höherer Priorität     |        |       | Signal des internen Bus. Kommt vom Einbauplatz mit nächst höherer Priorität. Wird dort als $\overline{I-GEOUT}$ erzeugt.                                                                                                                                                            |
| $\overline{I-GEOUT}$                                                             | Gewünscht Anmelden              |        |       | Signal des internen Bus. Geht zum Einbauplatz mit nächst niedrigerer Priorität.                                                                                                                                                                                                     |
| $I-GOEX$                                                                         | GO Extern                       |        |       | Signal des verlängerten internen Bus (P-Bus, privater externer Bus). Wird erzeugt, wenn sich die angesprochene Adresse nicht im CPU-Gehäuse befindet. Erst wenn das Signal von allen Teilnehmern nach High geschaltet wurde, kann die Belegung des externen Bus (UNI-Bus) erfolgen. |
| $\overline{INT-DADU}$                                                            | Datendurchsch. nach Intern      |        |       | Signal zur BADU. Wird von der Bussteuerung erzeugt und schaltet die Datenleitungen des externen Bus auf den internen Bus.                                                                                                                                                           |
| $I-L/\overline{S}$                                                               | Richtungskennzeichen LOAD/STORE |        |       | Signal des internen Bus. Muß bei STORE-Befehlen auf LOW geschaltet werden.                                                                                                                                                                                                          |
| $\overline{I-QIN}$                                                               | Quittung Empfangen              |        |       | Signal des internen Bus. Kommt vom Einbauplatz mit nächst niedrigerer Priorität. Wird dort als $\overline{I-QOUT}$ erzeugt.                                                                                                                                                         |
| $\overline{I-QOUT}$                                                              | Quittung Senden                 |        |       | Signal des internen Bus. Geht zum Einbauplatz mit nächst höherer Priorität. Wird dort als $\overline{I-QIN}$ empfangen.                                                                                                                                                             |
| $\overline{I-STPX}$                                                              | Start Parity Extern             |        |       | Signal des externen Bus. Wird bei Parity-Fehlern eines externen Speichermoduls erzeugt.                                                                                                                                                                                             |
| $\overline{I-S00} \dots \overline{I-S15}$                                        |                                 |        |       | Startleitungen des internen Bus. Werden zu allen I-Plätzen geführt und enden auf der CPU.                                                                                                                                                                                           |
| $\overline{K-BS-END}$                                                            | Bootstrap Ende                  |        |       | Signal zur Bedienungskonsole. Wird durch Setzen des Bit 2 <sup>2</sup> der Adresse '3FFF aktiv.                                                                                                                                                                                     |
| $\overline{K-BE}$                                                                | Konsole Belegt                  |        |       | Signal von der Bedienungskonsole. Wird bei einem Buszugriff der Bedienungskonsole aktiv. Erzeugt auf dem IOB $\overline{I-BE}$ .                                                                                                                                                    |
| $\overline{M-A01}$                                                               | Memory Adr. A01                 |        |       | Leitung zu den Speicherplätzen M1 und M2. Auf diese Leitung wird beim Speicherinterleaving je nach Speichergröße ein bestimmtes Adressbit geschaltet.                                                                                                                               |
| $\overline{MB1}, \overline{MB2}$                                                 | Memory Busy                     |        |       | Signal vom Speicher. Kommt, wenn der jeweilige Speicher aktiv ist. Wird im Speichertiming verwendet.                                                                                                                                                                                |
| $\overline{MP}$                                                                  | Memory Protekt                  |        |       | Signal zum Speicher. Wird vom Netzausfall/Netz-wiederkehr-Timing erzeugt. Absoluter Speicherschutz.                                                                                                                                                                                 |
| $\overline{M1} \dots \overline{M2}$                                              | Memory Selekt                   |        |       | Signal zu den einzelnen Speicherplätzen M1...M2. Je nach aufgeschalteter Speicheradresse wird von der Speichermodulanwahl eins der drei Signale erzeugt.                                                                                                                            |
| $\overline{M1-0}$<br>$\overline{M1-1}$<br>$\overline{M2-0}$<br>$\overline{M2-1}$ | Speicherkapazität               |        |       | Je zwei Signale von jedem Speicherplatz. Teilen der Speichermodulanwahl mit, welche Speicherkapazität das eingesteckte Modul besitzt (0, 16, 32 oder 64 K)                                                                                                                          |
|                                                                                  |                                 |        |       |                                                                                                                                                                                                                                                                                     |

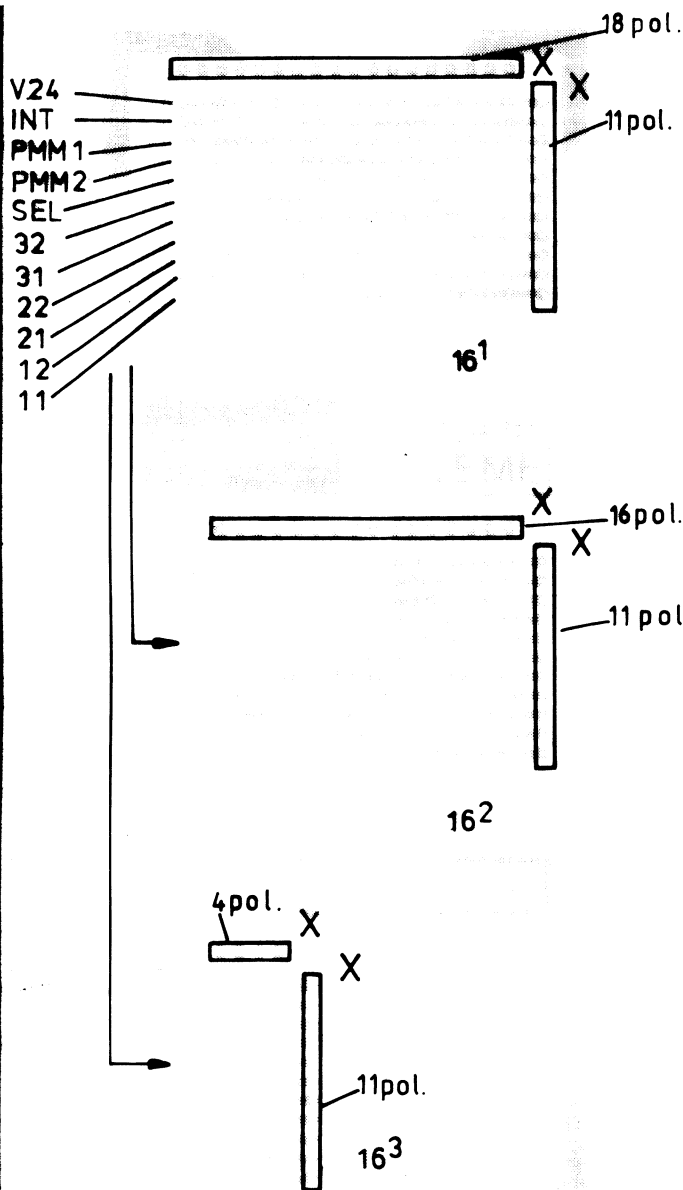
2.5.22

|                  |          |                  |      |                        |          |
|------------------|----------|------------------|------|------------------------|----------|
| Datum            |          | Name             |      | Benennung              |          |
| Gez:             | 25.4.77  | Kibedi           |      | IOB Input/Output-Board |          |
| Gepr             |          |                  |      | Signalnamen am Stecker |          |
| Komm-Nr          |          |                  |      |                        |          |
| Computer SYSTEME |          | Zeichn./Sach.-Nr |      | Ind                    | Zch.-Art |
|                  |          | 660665920        |      | 27                     | 03       |
|                  |          |                  |      | 02                     |          |
| Zust             | Änderung | Datum            | Name | Abt/Sachb. CH2-Th      | Ers d    |

| Signalname                                     | Bedeutung                            | Quelle | Senke | Funktion                                                                                                                                                                                               |
|------------------------------------------------|--------------------------------------|--------|-------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| $\overline{NE}$                                | Netzausfall                          |        |       | Signal des externen Bus. Wird von Geräten am externen Bus bei Stromausfall erzeugt.                                                                                                                    |
| $\overline{Q-IN}$                              | Quittung Empfangen                   |        |       | Signal des externen Bus. Kommt vom Busteilnehmer mit nächst niedrigerer Priorität. Wird dort als $\overline{Q-OUT}$ erzeugt.                                                                           |
| $\overline{Q-OUT}$                             | Quittung Senden                      |        |       | Signal des externen Bus. Geht zum Busteilnehmer mit nächst höherer Priorität. Wird dort als $\overline{Q-IN}$ empfangen.                                                                               |
| $\overline{RP}$                                |                                      |        |       | Signal zum Speicher. Startsignal, wird vom Speichertiming erzeugt.                                                                                                                                     |
| $\overline{SV-NETZ}$                           | Interner Stromvers.-ausfall          |        |       | Signal vom Regelbaustein. Wird HIGH, nachdem alle Spannungen ihren Sollwert erreicht haben. Wird LOW, sobald die Netzspannung 198 V unterschreitet. Startet das Netzausfall/Netzwiederkehr-Timing.     |
| $\overline{SEL-AP}$                            | Selekt Arithmetischer Prozessor      |        |       | Signal zum Einbauplatz MIII. Wird vom Device Selektor erzeugt, wenn die Adresse des Arithmetischen Prozessors angesprochen wird. Startet das Speichertiming und nicht das Timing des Device-Selektors. |
| $\overline{SEL-PMM1}$<br>$\overline{SEL-PMM2}$ | Selekt Memory Manager                |        |       | Signale zum Einbauplatz PMM. Werden vom Device Selektor erzeugt, wenn die jeweilige programmierte Adresse angesprochen wird.                                                                           |
| $\overline{SEL-I1}$<br>$\overline{SEL-I2}$     | Selekt 1 Platz 1<br>Selekt 2 Platz 1 |        |       | Signale zum Einbauplatz I1. Werden vom Device Selektor erzeugt.                                                                                                                                        |
| $\overline{SEL-I2}$<br>$\overline{SEL-I2}$     | Selekt 1 Platz 2<br>Selekt 2 Platz 2 |        |       | Signale zum Einbauplatz I2. Werden vom Device Selektor erzeugt.                                                                                                                                        |
| $\overline{SEL-I3}$<br>$\overline{SEL-I3}$     | Selekt 1 Platz 3<br>Selekt 2 Platz 3 |        |       | Signale zum Einbauplatz I3. Werden vom Device Selektor erzeugt.                                                                                                                                        |
| $\overline{STOP}$                              |                                      |        |       | Signal zur CPU. Wird vom Netzausfall-Timing erzeugt. Hält nach Beendigung der Rettungsroutine den Rechner an.                                                                                          |
| $\overline{STC}$                               | Start durch Clock                    |        |       | Signal zur CPU. Wird periodisch von der Echtzeituhr erzeugt. Startet die CNP-Ebene.                                                                                                                    |
| $\overline{STP}$                               | Start durch Parity Fehler            |        |       | Signal zur CPU. Wird bei einem Parity-Fehler erzeugt. Startet die CNP-Ebene.                                                                                                                           |
| $\overline{STN}$                               | Start durch Netzausfall              |        |       | Signal zur CPU. Wird bei einem Netzausfall erzeugt. Startet die CNP-Ebene.                                                                                                                             |
| $\overline{STW}$                               | Start durch Watch-Dog                |        |       | Signal zur CPU. Wird bei einem Busfehler erzeugt. Startet die CNP-Ebene.                                                                                                                               |
| $\overline{TIOp}$                              | Datendurchschaltung                  |        |       | Signal zum Speicher. Wird vom Speichertiming erzeugt und schaltet die Datenleitungen des Speichers auf den internen Bus.                                                                               |
| $\overline{WP}$                                | Write Protekt                        |        |       | Signal zum Speicher. Schreibschutz des Speichers.                                                                                                                                                      |
| $X1/\overline{X2}$                             |                                      |        |       | Signal ist bei Benutzung des IOB im 621- X1 High und dient zur Ansteuerung des Speichermoduls mittels A $\geq$ 4000 ohne Benutzung der ROMs 1 bis 3.                                                   |

2.5.23

|                   |          |        |                        |                    |                   |
|-------------------|----------|--------|------------------------|--------------------|-------------------|
| Datum             |          | Name   |                        | Benennung          |                   |
| Gez.              | 25.4.77  | Kibedi | IOB Input/Output-Board |                    |                   |
| Gepr.             |          |        | Signalnamen am Stecker |                    |                   |
| Komm.-Nr.         |          |        |                        |                    |                   |
| Computer SYSTEME  |          |        |                        |                    |                   |
| Zeichn./Sach.-Nr. |          | Ind.   | Zeich.-Art.            | Blatt Nr.          | Blatt             |
| 660665920         |          | 27     | 03                     | 03                 |                   |
| Zust.             | Änderung | Datum  | Name                   | Abt./Sachb. CH2-Th | Ers. f. / Ers. d. |



## Adressprogrammierungsfeld auf dem I/O Board (STACK 660 665 1)

V24: V24-Konsolgeräte-Interface auf dem IOB

INT: Steckplatz für ein wählbares Standard-Einkarteninterface

SEL: nicht belegt

PMM1

PMM2: Signale zum PMM Adr.

32, 31: Signale zum Interf.-Steckerpl. 3

22, 21: Signale zum Interf. Steckerpl. 2

12, 11: Signale zum Interf. Steckerpl. 1

X AMP-Buchsenleiste  
2-826 044-0

Bauhöhe Best.- Seite 10 mm

Leit.- Seite 2 mm

0.1  $\mu$  F / 12 V  
Sperrschicht

10  $\mu$  F / 16 V  
Tantal

- ☐ abkleben
- ☐ trennen
- ☐ nach U.S. Wäsche einsetzen
- ☐ auf der Lötseite bestücken

|       |          |       |      |                       |         |                     |                                                       |         |         |       |
|-------|----------|-------|------|-----------------------|---------|---------------------|-------------------------------------------------------|---------|---------|-------|
|       |          |       |      | Datum                 | Name    | Benennung           | BESTÜCKUNG                                            |         |         |       |
|       |          |       |      | Gez.                  | 24.1.78 | Uranse              | DSP<br>Device-Selektor-Programmierungsfeld<br>für IOB |         |         |       |
|       |          |       |      | Gepr.                 | 2.1.78  | Uranse              |                                                       |         |         |       |
|       |          |       |      | Gepr.                 | 10.2.78 | Uranse              |                                                       |         |         |       |
|       |          |       |      | Komm.-Nr.             |         |                     |                                                       |         |         |       |
|       |          |       |      | Computer<br>SYSTEME   |         | Zeichnung / Sach-Nr | Ind                                                   | Zch-Art | Blätter | Blatt |
|       |          |       |      |                       |         | 6606651             | A                                                     | 16      | 01      | 01    |
| Zust. | Änderung | Datum | Name | Abt. / Sachb. CH2-TH. |         |                     | Ers. f.                                               | Ers. d. |         |       |

Programmierfeld für Uhrstart (Platz P10)

| Brücke | Uhrstart |
|--------|----------|
| 1 - 20 | 1 ms     |
| 2 - 19 | 10 ms    |
| 3 - 18 | 100 ms   |
| 4 - 17 | 1 s      |

Schalter S3 für Rückmeldung (Platz B6)

| Schalterstellung | Rückmeldung                          |
|------------------|--------------------------------------|
| 1                | $\overline{1 - S\emptyset\emptyset}$ |
| 2                | $\overline{1 - S11}$                 |
| 3                | $\overline{1 - S12}$                 |
| 4                | $\overline{1 - S13}$                 |
| 5                | $\overline{1 - S14}$                 |

Schalter S3 für Starts (Platz B6)

| Schalterstellung | START                                |
|------------------|--------------------------------------|
| 0                | $\overline{1 - S\emptyset\emptyset}$ |
| 9                | $\overline{1 - S\emptyset1}$         |
| 8                | $\overline{1 - S\emptyset6}$         |
| 7                | $\overline{1 - S13}$                 |
| 6                | $\overline{1 - S14}$                 |

# INPUT-OUTPUT-BOARD 660 665

| S1      | EIN                                           | AUS                               |
|---------|-----------------------------------------------|-----------------------------------|
| 1       | Betrieb mit BUSY-Leitung für MM/Tally-Drucker | keine Funktion                    |
| 2       | ODD-Parity                                    | EVEN-Parity                       |
| 3,4     | Wortlänge siehe Tabelle 1 rechts              |                                   |
| 5       | 1 Stopbit                                     | 2 Stopbits                        |
| 6       | mit Parity-Bit                                | ohne Parity-Bit                   |
| 7       | Betrieb mit BUSY-Leitung für Philips-Drucker  | keine Funktion                    |
| 8       | Wartezeit zugelassen                          | Wartezeit nicht zugelassen        |
| S2      |                                               |                                   |
| 1       | 8 Datenbit $\hat{=}$ Code-Umschaltung         | keine Funktion                    |
| 2       | 8 Datenbit $\hat{=}$ Bit 7 Datenregister      | keine Funktion                    |
| 3       | frei                                          |                                   |
| 4,5,6,7 | Baudrate siehe Tabelle 2 rechts               |                                   |
| 8       | mit Betriebsbereitschaftsabfrage              | ohne Betriebsbereitschaftsabfrage |

Tabelle 1/Wortlänge

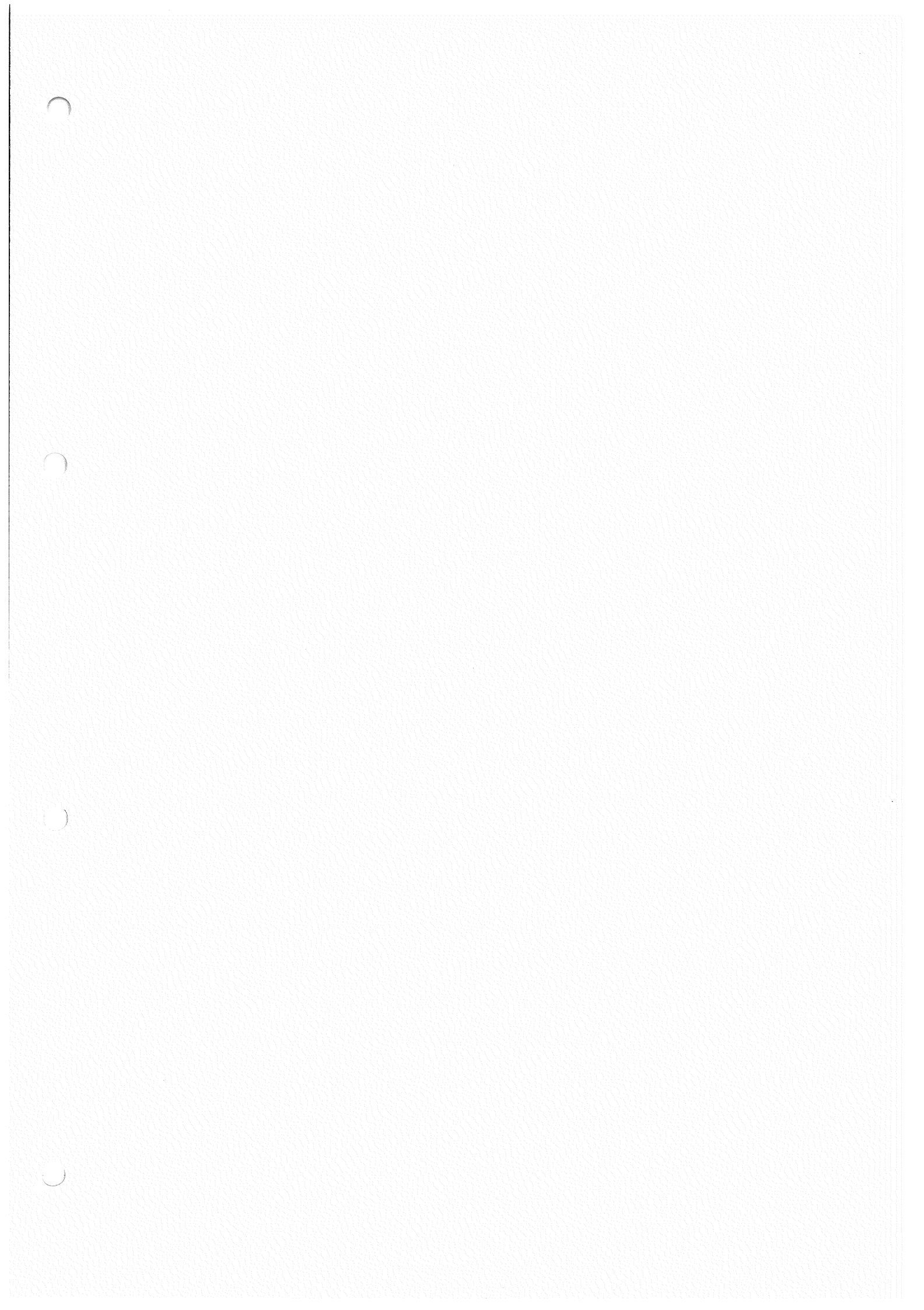
| Schalter |     | Anzahl der Datenbits |
|----------|-----|----------------------|
| 3        | 4   |                      |
| EIN      | EIN | 5                    |
| AUS      | EIN | 6                    |
| EIN      | AUS | 7                    |
| AUS      | AUS | 8                    |

Tabelle 2/Baud-Rate

| Baud-Rate | Schalter |     |     |     |
|-----------|----------|-----|-----|-----|
|           | 7        | 6   | 5   | 4   |
| 50        | EIN      | EIN | EIN | EIN |
| 75        | EIN      | EIN | EIN | AUS |
| 110       | EIN      | EIN | AUS | EIN |
| 134,5     | EIN      | EIN | AUS | AUS |
| 150       | EIN      | AUS | EIN | EIN |
| 300       | EIN      | AUS | EIN | AUS |
| 600       | EIN      | AUS | AUS | EIN |
| 1200      | EIN      | AUS | AUS | AUS |
| 1800      | AUS      | EIN | EIN | EIN |
| 2000      | AUS      | EIN | EIN | AUS |
| 2400      | AUS      | EIN | AUS | EIN |
| 3600      | AUS      | EIN | AUS | AUS |
| 4800      | AUS      | AUS | EIN | EIN |
| 7200      | AUS      | AUS | EIN | AUS |
| 9600      | AUS      | AUS | AUS | EIN |
| 19200     | AUS      | AUS | AUS | AUS |

Zeitkonstante für Wartezeit:  $T = 0,7 \cdot R19 \cdot C19$

| Schalter | Platz |
|----------|-------|
| S1       | D11   |
| S2       | N11   |





8.8.78

2.6 MOS-Speicher X2

660 422 B

# MOS-Speicher 64 K

| Stecker J1 |      |    |      |
|------------|------|----|------|
| 1          | 0V   | 41 | 0V   |
| 2          | +5V  | 42 | +5V  |
| 3          |      | 43 |      |
| 4          | 0V   | 44 | 0V   |
| 5          |      | 45 |      |
| 6          |      | 46 | AI09 |
| 7          |      | 47 | AI08 |
| 8          |      | 48 | AI07 |
| 9          |      | 49 | AI12 |
| 10         |      | 50 | AI11 |
| 11         |      | 51 | 0V   |
| 12         |      | 52 | AI10 |
| 13         |      | 53 | AI04 |
| 14         |      | 54 | 0V   |
| 15         |      | 55 | AI05 |
| 16         |      | 56 | AI06 |
| 17         |      | 57 | 0V   |
| 18         |      | 58 | AI01 |
| 19         |      | 59 | AI02 |
| 20         |      | 60 | 0V   |
| 21         |      | 61 | AI03 |
| 22         |      | 62 | AI13 |
| 23         |      | 63 | GR   |
| 24         |      | 64 | COOP |
| 25         |      | 65 |      |
| 26         | AI15 | 66 | 0V   |
| 27         |      | 67 | 0V   |
| 28         | MS1  | 68 |      |
| 29         | MS2  | 69 |      |
| 30         | MS3  | 70 | AI00 |
| 31         | BCL2 | 71 |      |
| 32         |      | 72 |      |
| 33         | MB   | 73 | XAI1 |
| 34         | AI14 | 74 | XAI1 |
| 35         | BCL1 | 75 | XAI2 |
| 36         | DA   | 76 | XAI2 |
| 37         | TIOP | 77 | XAI3 |
| 38         | MP   | 78 | XAI3 |
| 39         |      | 79 | RP   |
| 40         | 0V   | 80 | 0V   |

| Stecker J2 |      |    |      |
|------------|------|----|------|
| 1          | 0V   | 41 | 0V   |
| 2          | DI06 | 42 | DI01 |
| 3          | DI07 | 43 | DI00 |
| 4          | DI05 | 44 | DI08 |
| 5          | DI04 | 45 | DI17 |
| 6          | DO06 | 46 | DO03 |
| 7          | DO07 | 47 | DO02 |
| 8          | DO05 | 48 | DO01 |
| 9          | DO04 | 49 | DO00 |
| 10         | DI03 | 50 | DO08 |
| 11         | DI02 | 51 | DO17 |
| 12         |      | 52 | DI16 |
| 13         |      | 53 | DO16 |
| 14         |      | 54 | DO15 |
| 15         |      | 55 | 0V   |
| 16         |      | 56 | DI15 |
| 17         |      | 57 | DI14 |
| 18         |      | 58 | DO14 |
| 19         |      | 59 | DO13 |
| 20         |      | 60 | 0V   |
| 21         |      | 61 | DI13 |
| 22         |      | 62 | DI12 |
| 23         |      | 63 | DI12 |
| 24         |      | 64 | 0V   |
| 25         |      | 65 | 0V   |
| 26         |      | 66 | 0V   |
| 27         |      | 67 | 0V   |
| 28         |      | 68 | 0V   |
| 29         |      | 69 | DO11 |
| 30         |      | 70 | DI11 |
| 31         |      | 71 | DI10 |
| 32         |      | 72 | DO10 |
| 33         | +9V  | 73 | DO09 |
| 34         | +9V  | 74 | DI09 |
| 35         | 0V   | 75 |      |
| 36         | +15V | 76 | +15V |
| 37         | 0V   | 77 | 0V   |
| 38         |      | 78 |      |
| 39         | +5V  | 79 | +5V  |
| 40         | 0V   | 80 | 0V   |

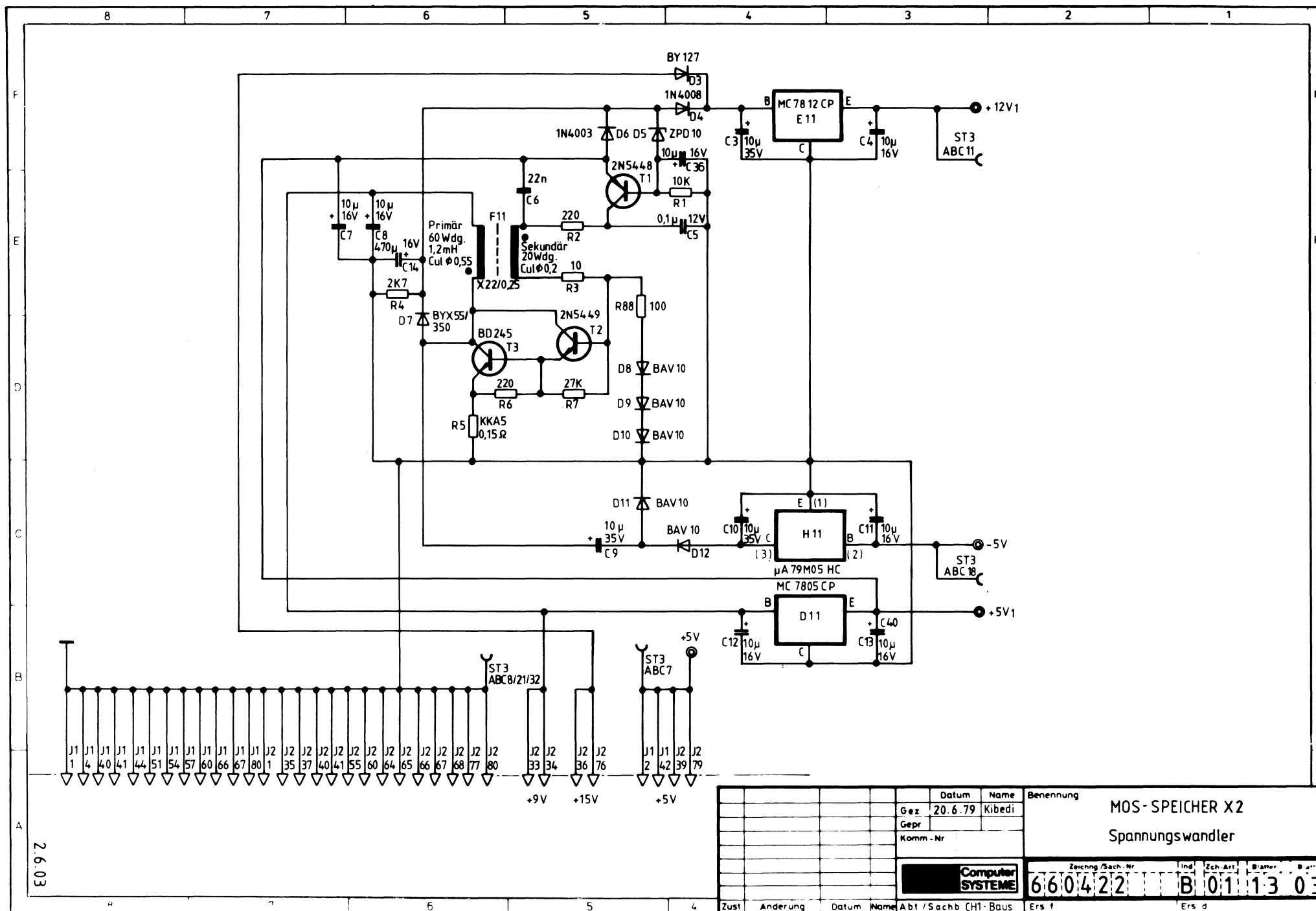
64 K MOS-SPEICHER  
Steckerbelegung

Datum: 20.6.79  
Name: Kibedi  
Sez: 20.6.79  
Komm. Nr: 74

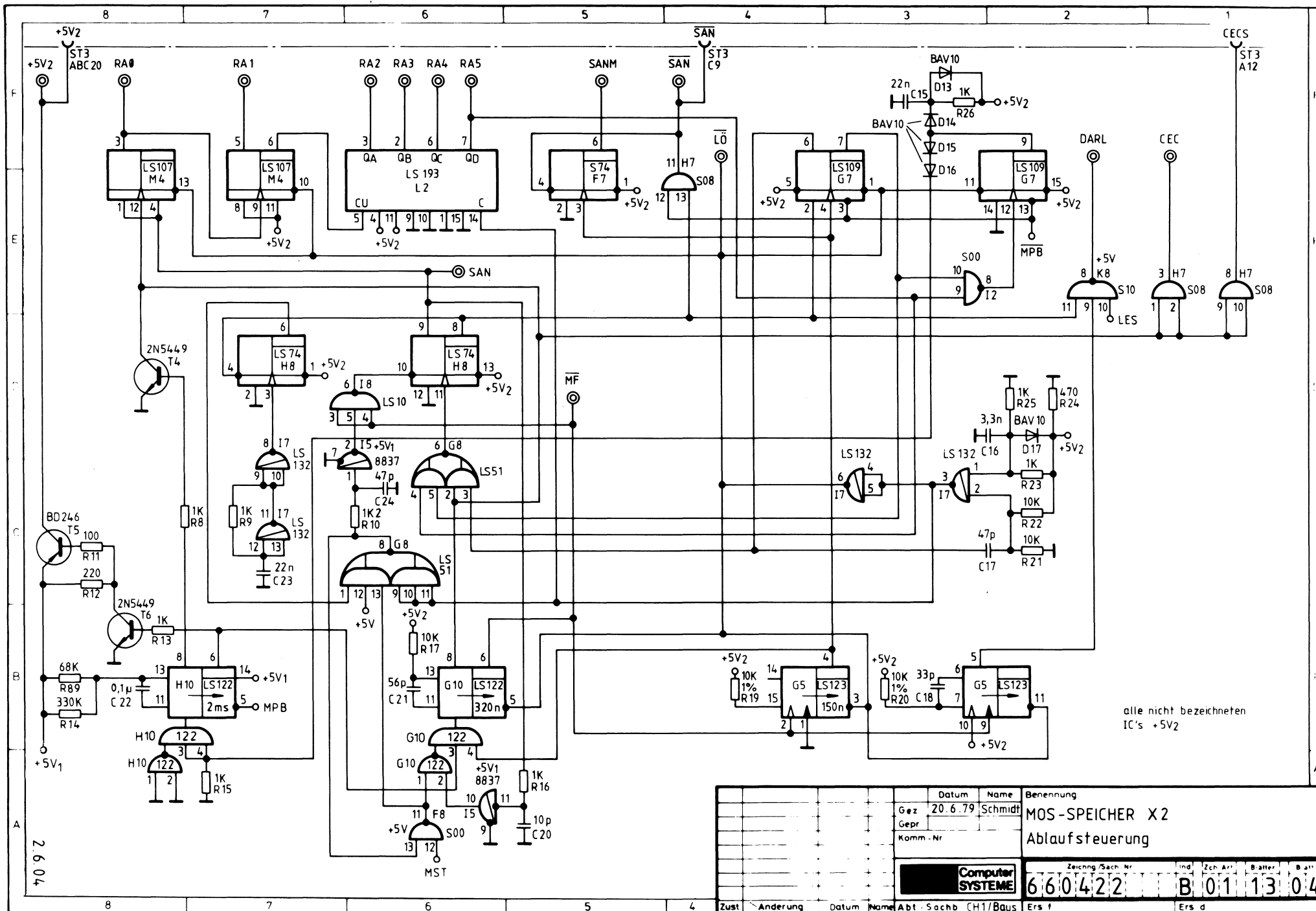
Computer  
SYSTEME

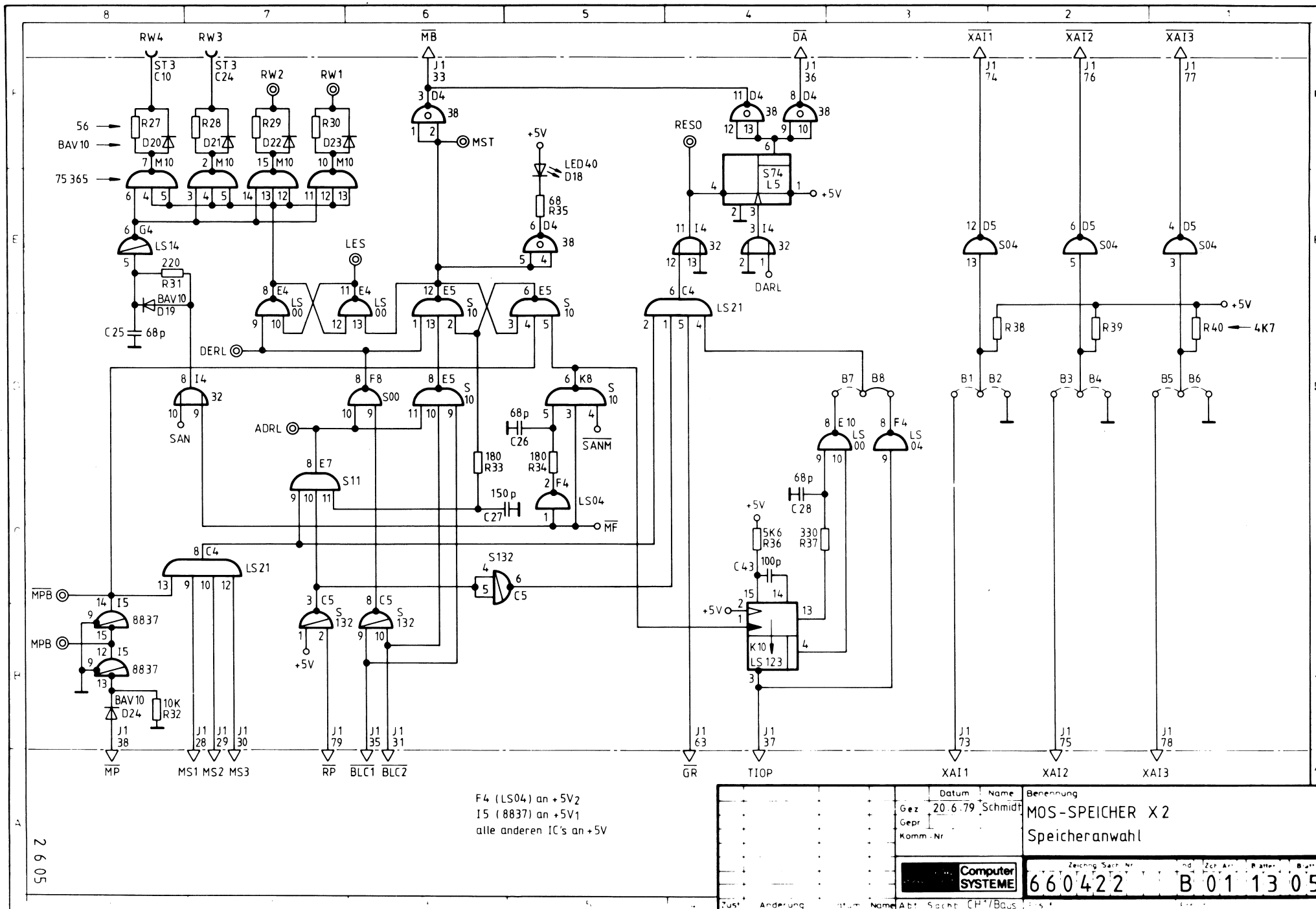
660422 B 01 13 01

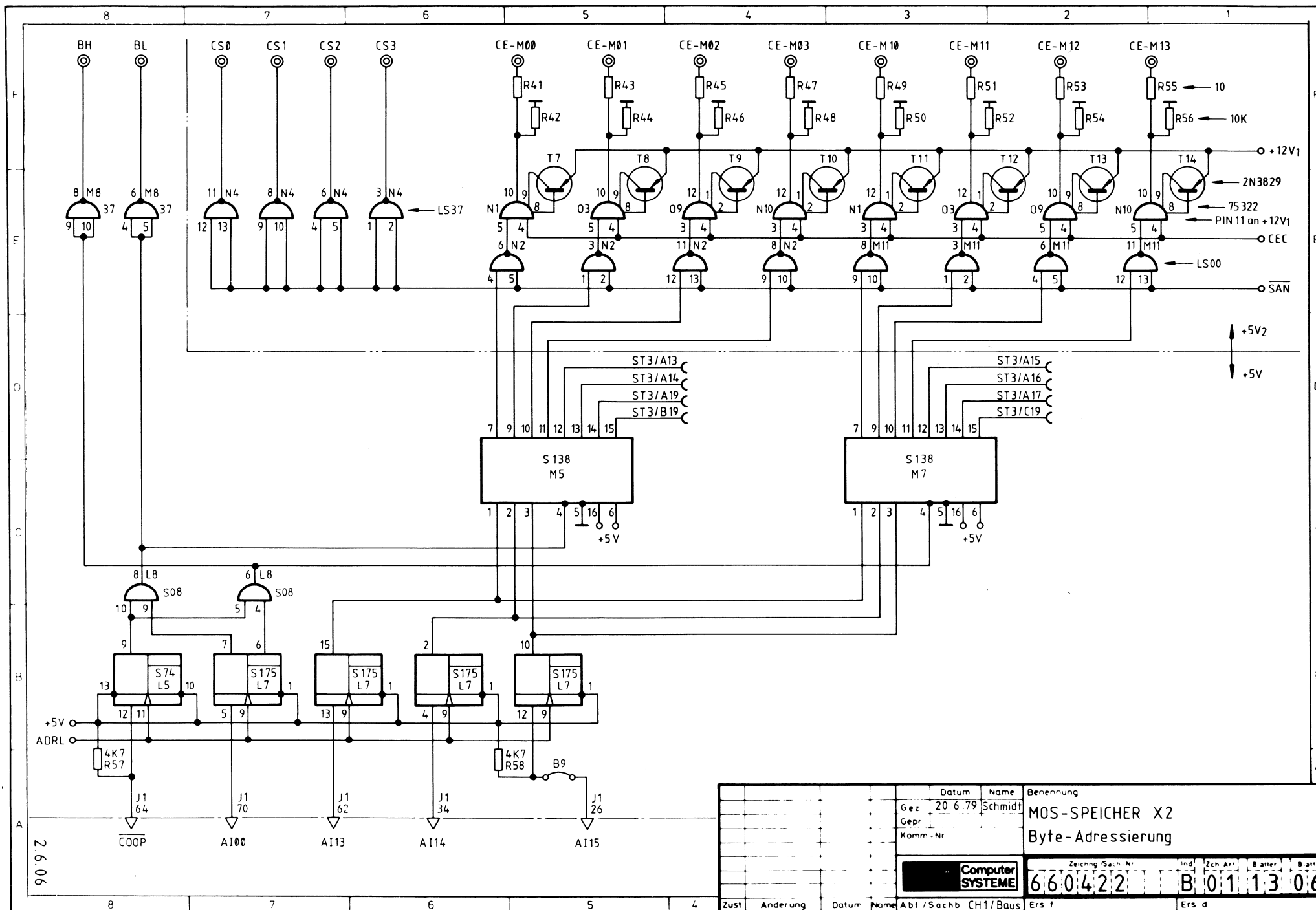


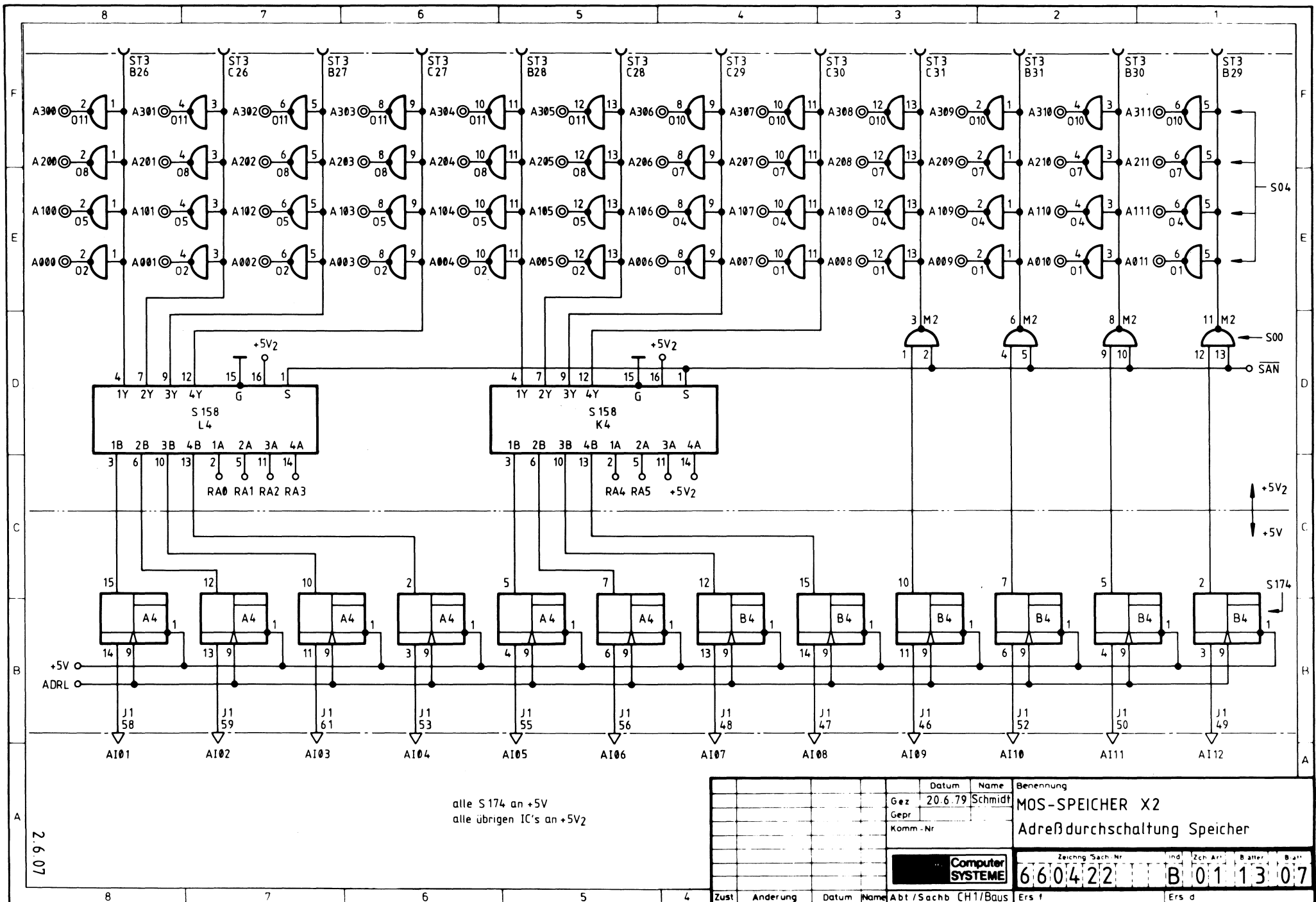


|                      |         |          |                  |          |
|----------------------|---------|----------|------------------|----------|
| Datum                |         | Name     | Benennung        |          |
| Gez                  | 20.6.79 | Kibedi   | MOS-SPEICHER X2  |          |
| Gepr                 |         |          | Spannungswandler |          |
| Komm - Nr            |         |          |                  |          |
| Computer SYSTEME     |         |          |                  |          |
| Zeichnung / Sach-Nr  |         | Ind      | Zch-Art          | Blatt-Nr |
| 660422               |         | B        | 01               | 13       |
| Abt / Sachb (H1-Baus |         | Ers f    | Ers d            |          |
| Zust                 |         | Änderung | Datum            |          |
|                      |         |          |                  |          |

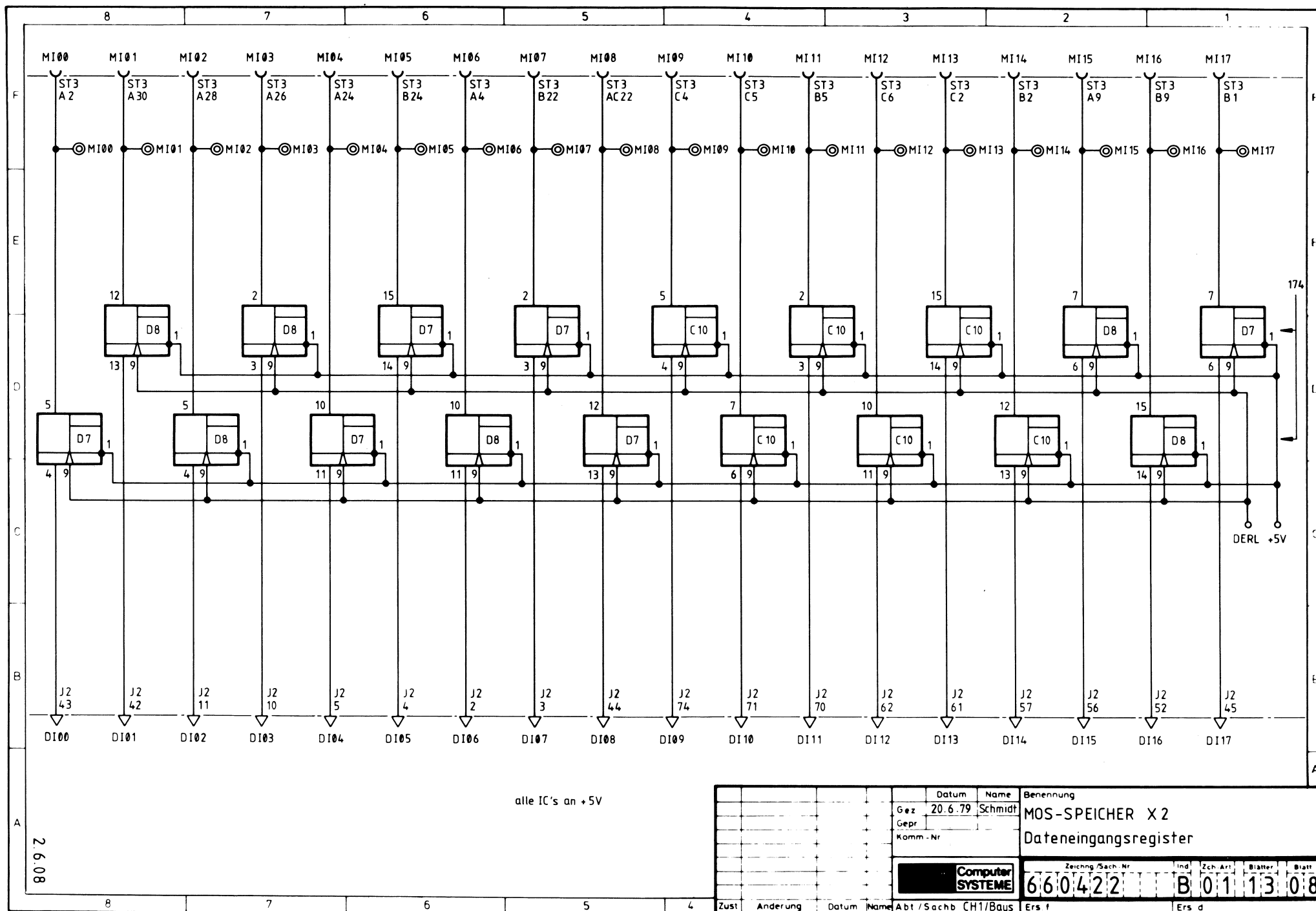






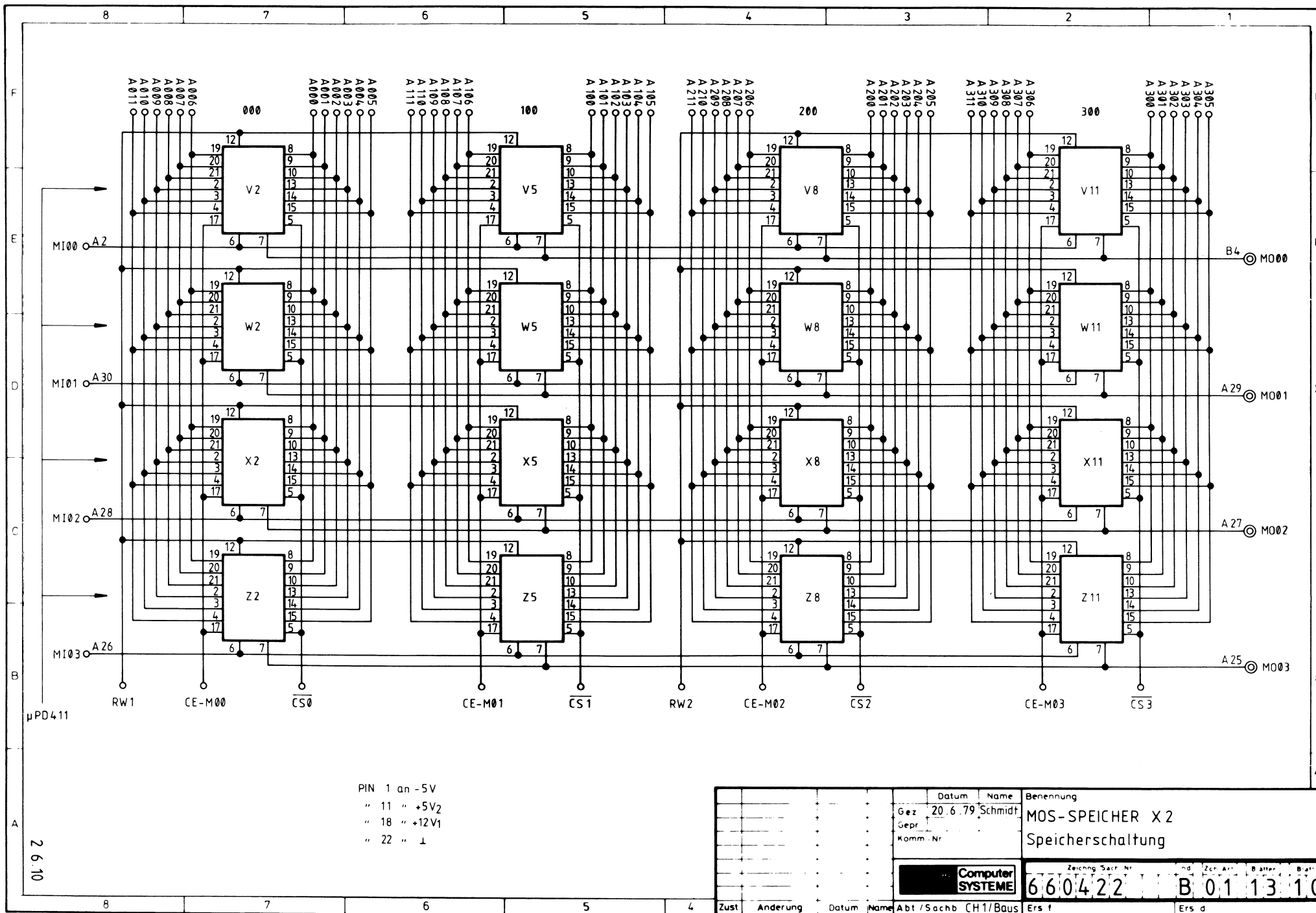






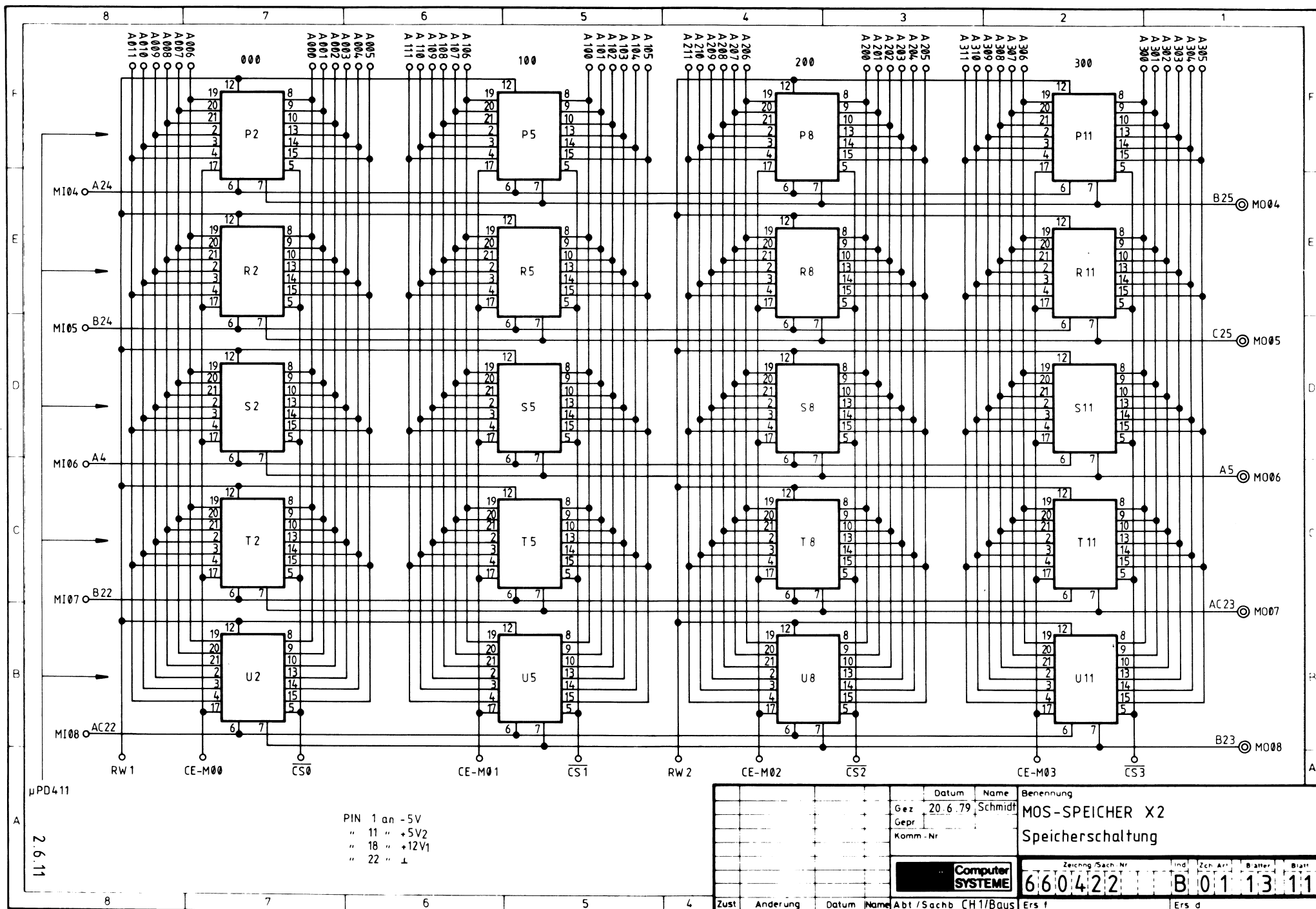
|                  |  |                      |                       |
|------------------|--|----------------------|-----------------------|
| Datum            |  | Name                 | Benennung             |
| 20.6.79          |  | Schmidt              | MOS-SPEICHER X2       |
| Gez              |  |                      | Dateneingangsregister |
| Gepr             |  |                      |                       |
| Komm-Nr          |  |                      |                       |
| Computer SYSTEME |  | Zeichn./Sach-Nr      | Ind                   |
| 660422           |  | B01                  | 113                   |
| Zust             |  | Änderung             | Blatt                 |
| Datum            |  | Abt./Sachb. CH1/Baus | Ers f                 |
|                  |  |                      | Ers d                 |

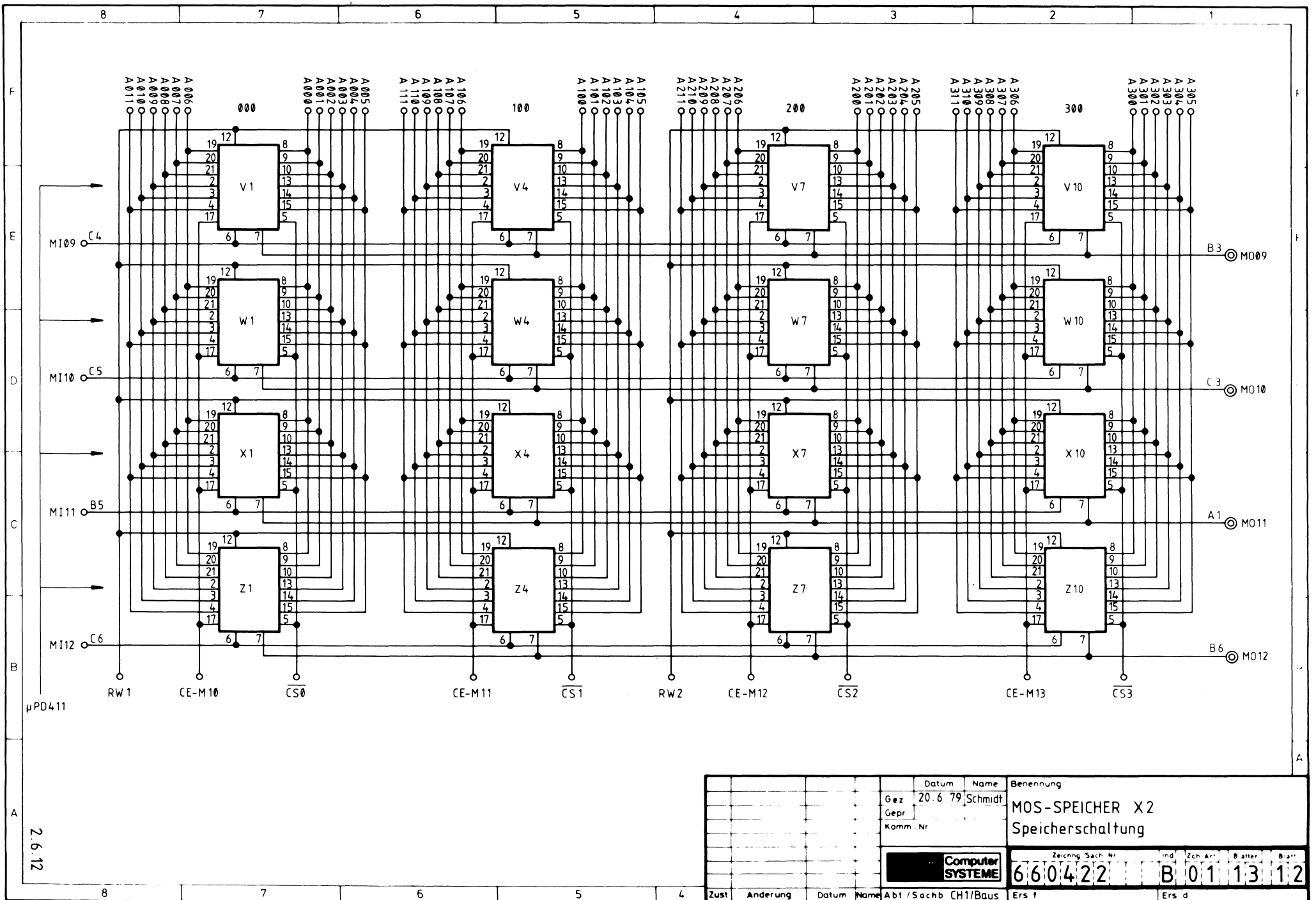




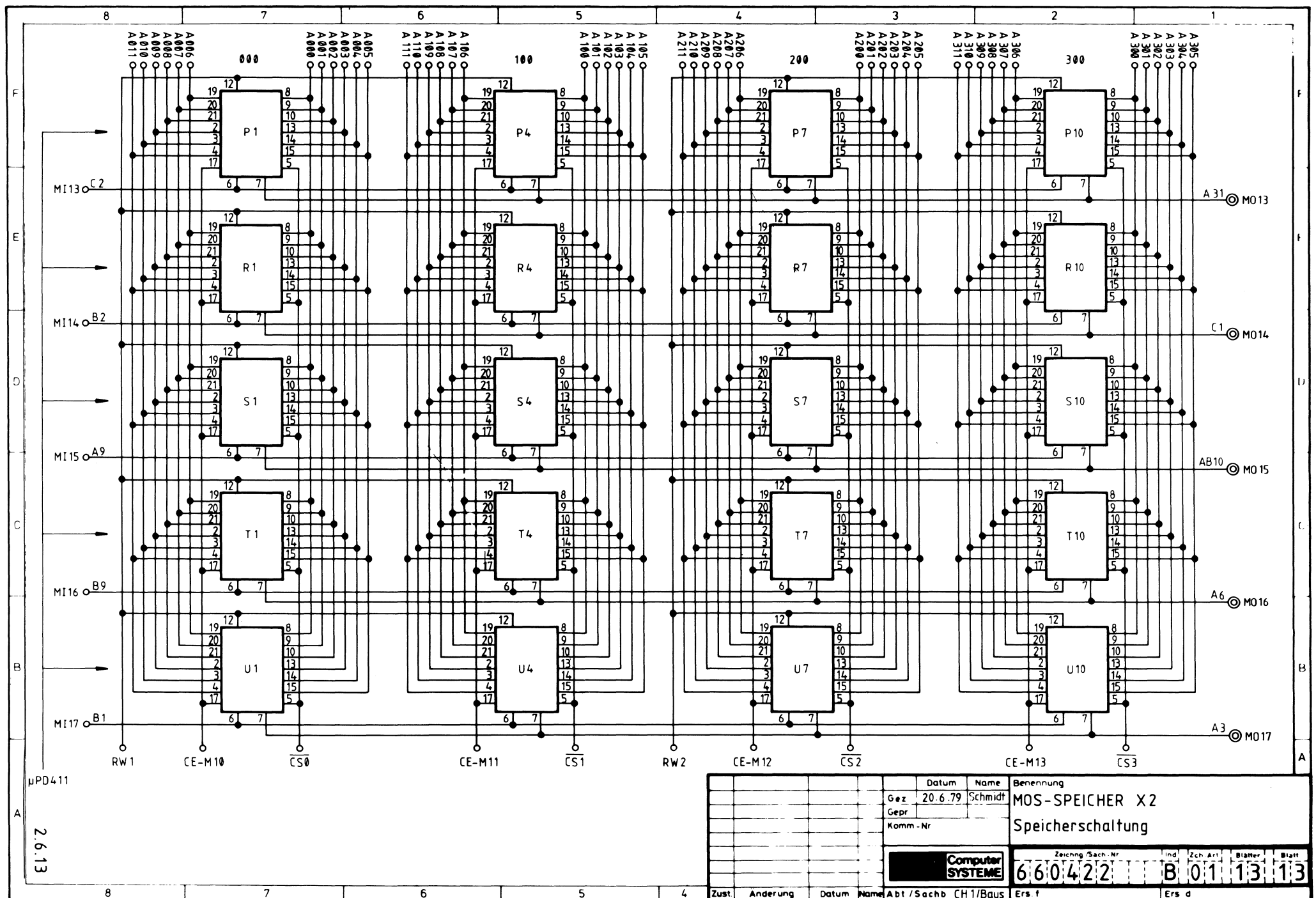
PIN 1 an -5V  
 " 11 " +5V2  
 " 18 " +12V1  
 " 22 " ⊥

| Datum            |          | Name              | Benennung            |
|------------------|----------|-------------------|----------------------|
| Gez              | 20.6.79  | Schmidt           | MOS-SPEICHER X2      |
| Gepr             |          |                   | Speicherschaltung    |
| Komm-Nr          |          |                   |                      |
| Computer SYSTEME |          | Zeichn. Sacr. Nr. | Ind. Zeich. Nr.      |
| 6.604.22         |          | B.01              | 13.10                |
| Zust.            | Änderung | Datum             | Name                 |
|                  |          |                   | Abt./Sachb. CH1/Baus |
|                  |          |                   | Ers. f.              |
|                  |          |                   | Ers. d.              |





|                   |  |          |           |         |
|-------------------|--|----------|-----------|---------|
| Datum             |  | Name     | Benennung |         |
| Gez.              |  | 20.6.79  | Schmidt   |         |
| Gepr.             |  |          |           |         |
| Komm.-Nr.         |  |          |           |         |
| Computer SYSTEME  |  |          |           |         |
| Zust.             |  | Anderung | Datum     | Name    |
| Abt./Sachb.       |  | CH1/Baus | Ers f     | Ers d   |
| Zeichn. Sach. Nr. |  | Ind.     | Zch. Art. | Batter. |
| 660422            |  | B        | 01        | 13 12   |



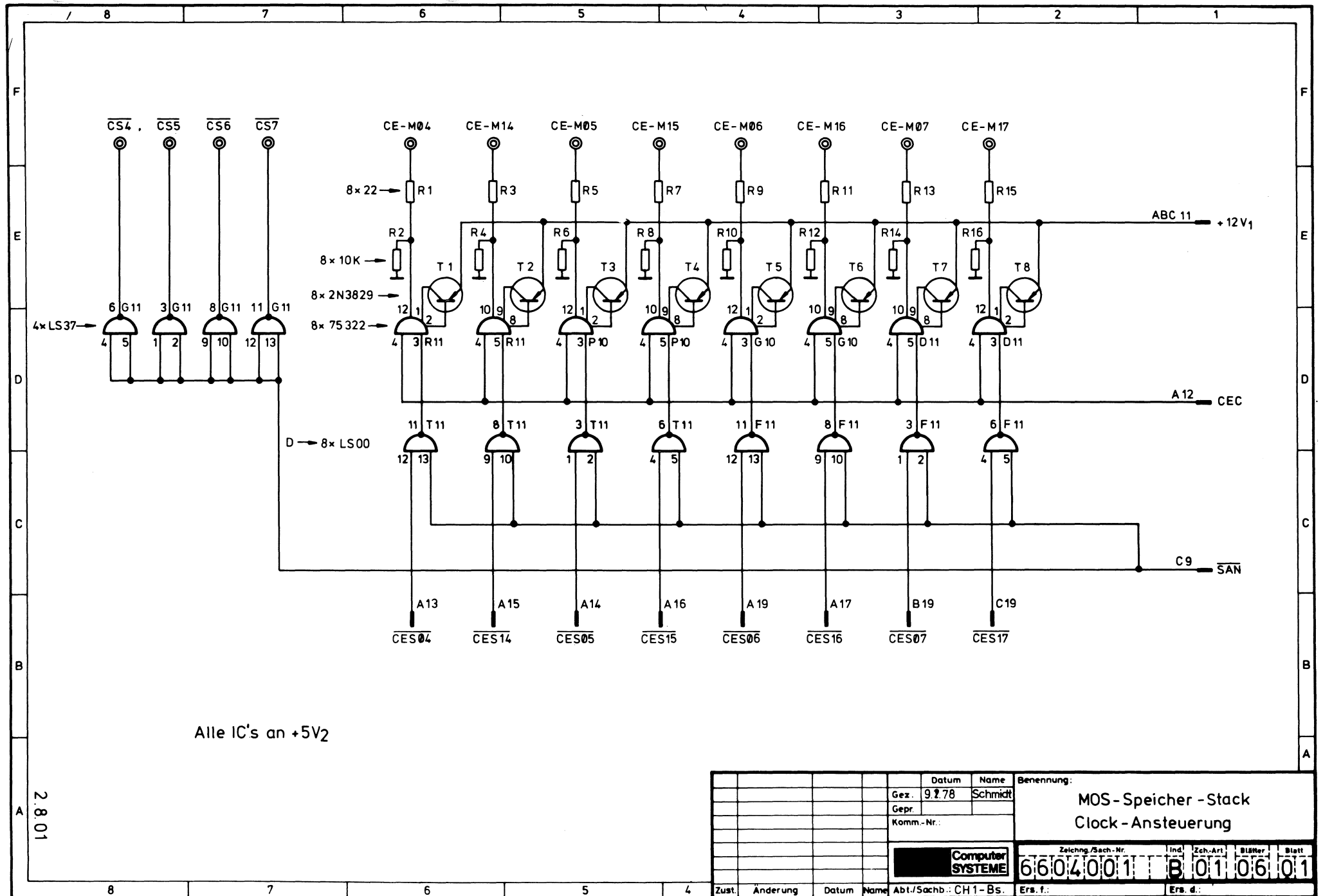


14.02.78

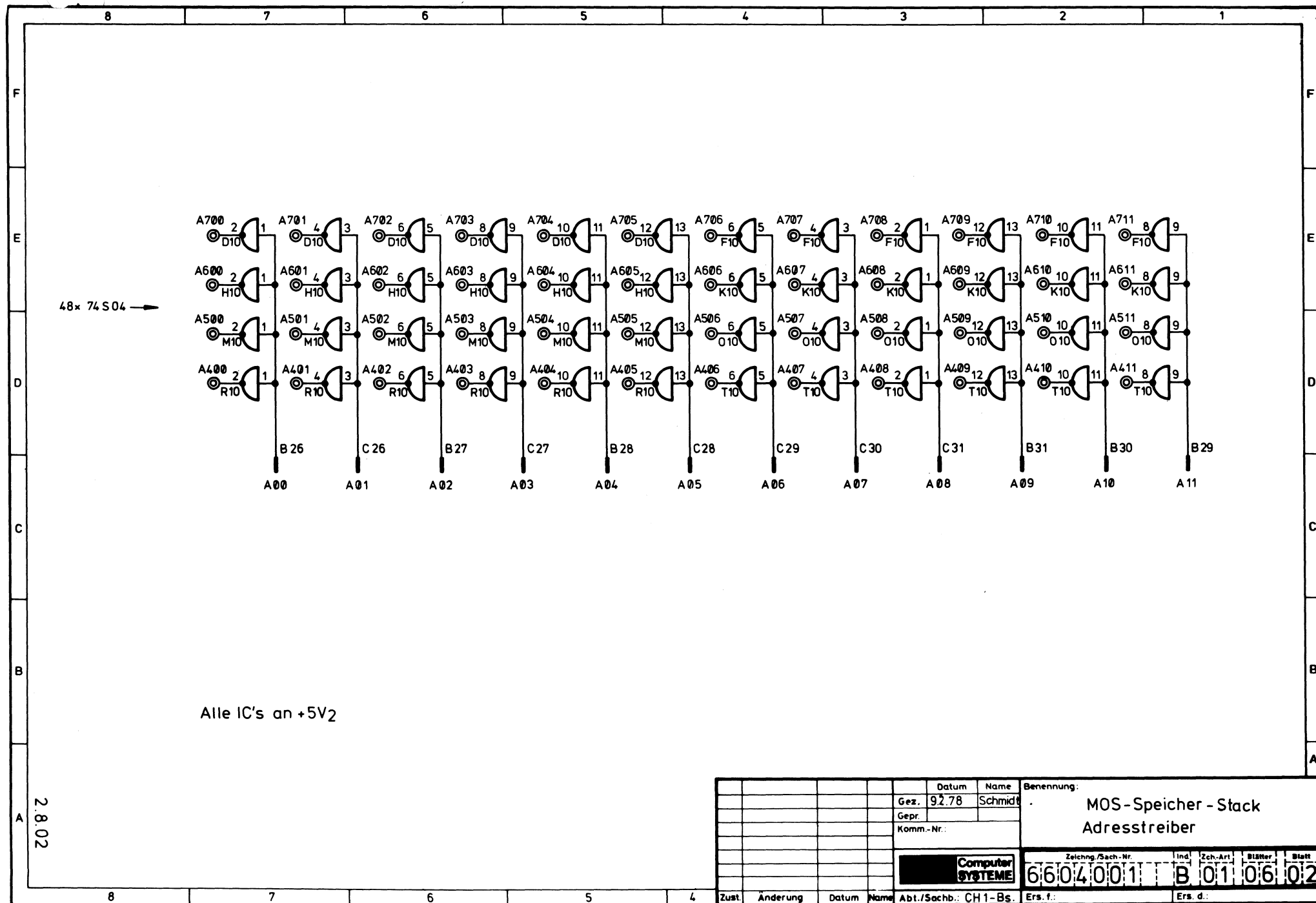
2.8 STACK

660 400 1 B

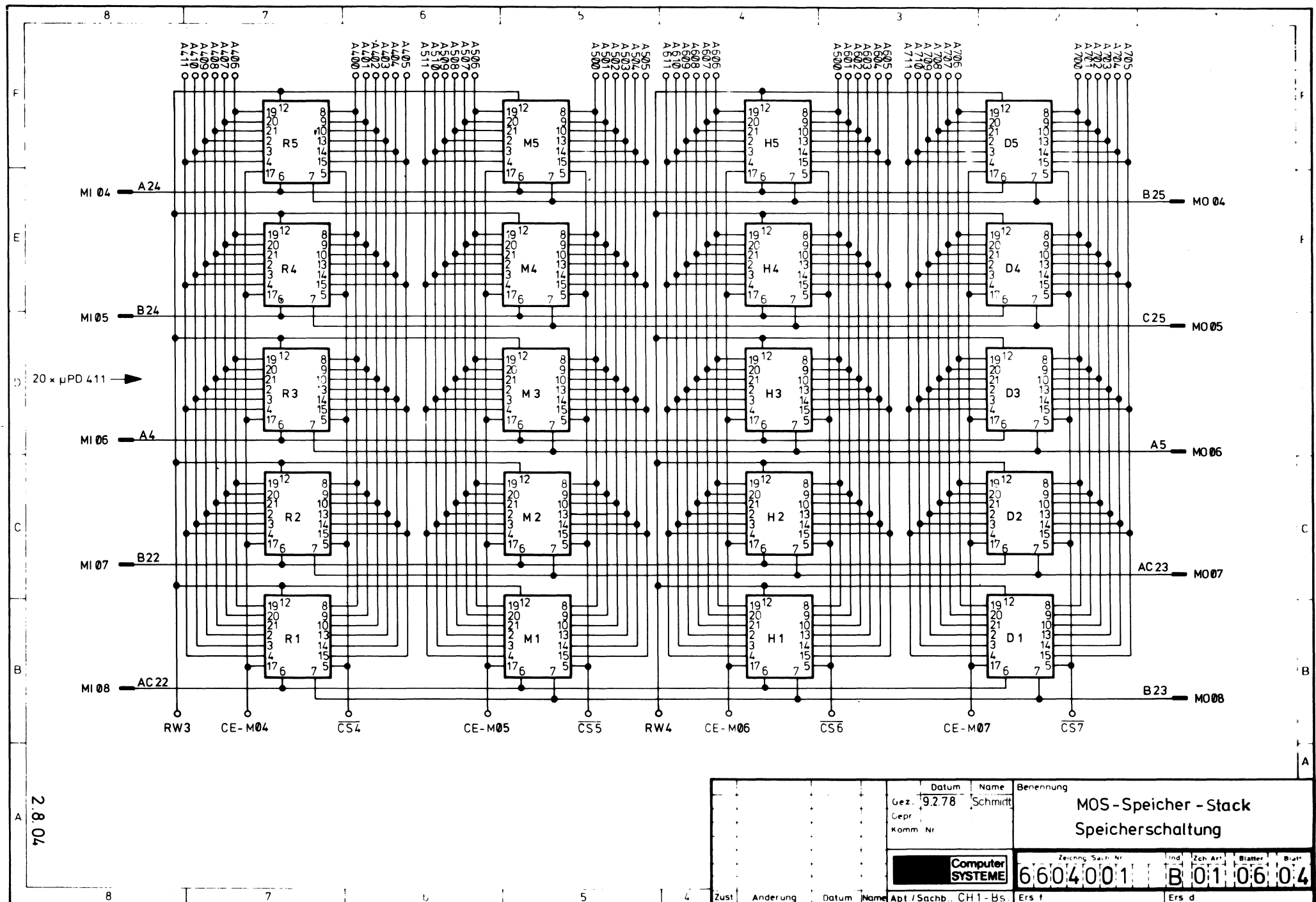


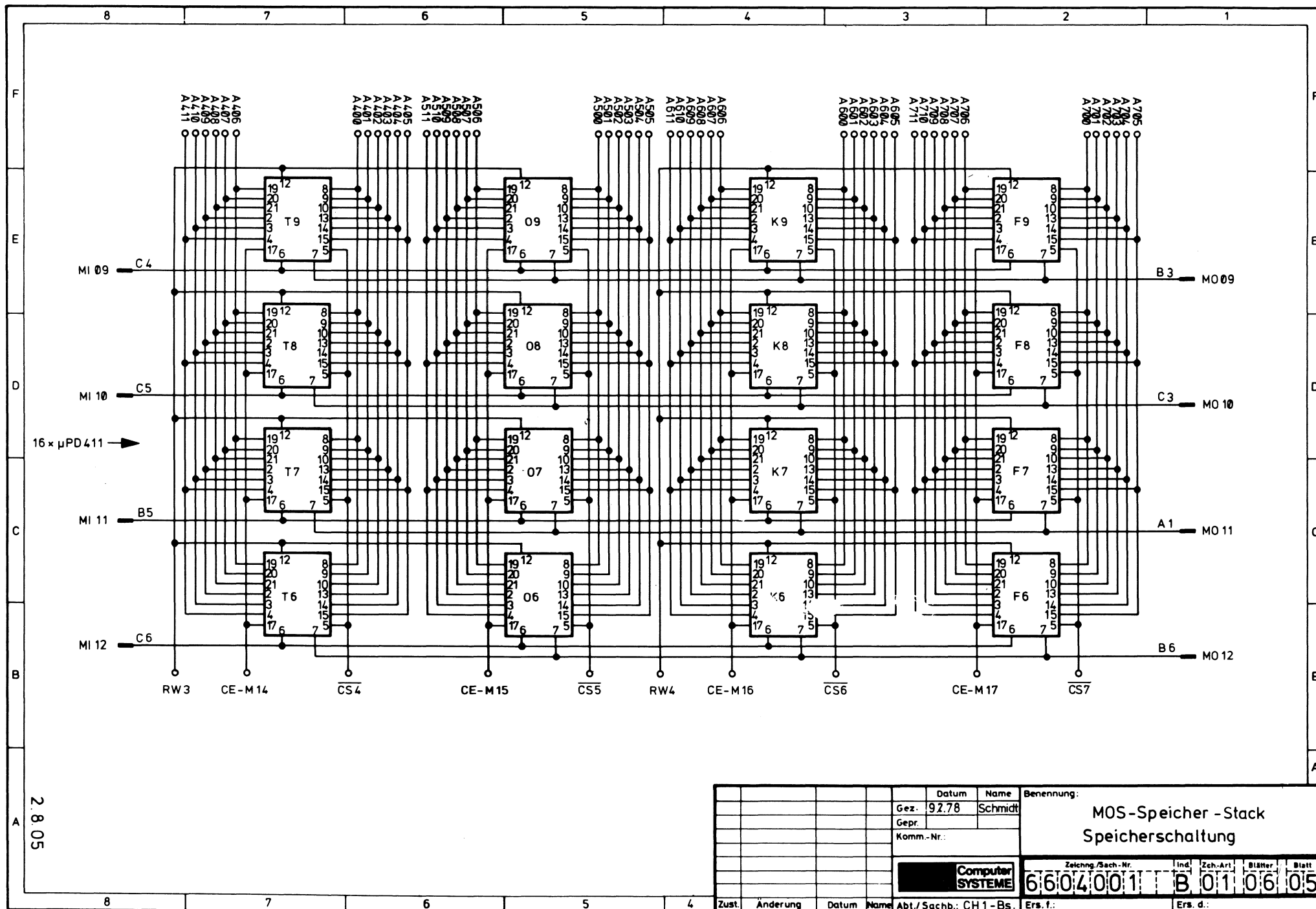


|       |          |       |      |                      |                                                                                       |        |            |                                               |  |      |           |         |       |
|-------|----------|-------|------|----------------------|---------------------------------------------------------------------------------------|--------|------------|-----------------------------------------------|--|------|-----------|---------|-------|
|       |          |       |      |                      | Datum                                                                                 | Name   | Benennung: |                                               |  |      |           |         |       |
|       |          |       |      |                      | Gez.                                                                                  | 9.2.78 | Schmidt    | MOS - Speicher - Stack<br>Clock - Ansteuerung |  |      |           |         |       |
|       |          |       |      |                      | Gepr.                                                                                 |        |            |                                               |  |      |           |         |       |
|       |          |       |      |                      | Komm.-Nr.:                                                                            |        |            |                                               |  |      |           |         |       |
|       |          |       |      |                      |                                                                                       |        |            |                                               |  |      |           |         |       |
|       |          |       |      |                      |  |        |            |                                               |  |      |           |         |       |
|       |          |       |      |                      |                                                                                       |        |            | Zeichn./Sach.-Nr.                             |  | Ind. | Zch.-Art. | Blätter | Blatt |
|       |          |       |      |                      |                                                                                       |        |            | 6604001                                       |  | 8    | 01        | 06      | 01    |
| Zust. | Änderung | Datum | Name | Abt./Sachb.: CH1-Bs. |                                                                                       |        | Ers.f.:    |                                               |  |      | Ers.d.:   |         |       |

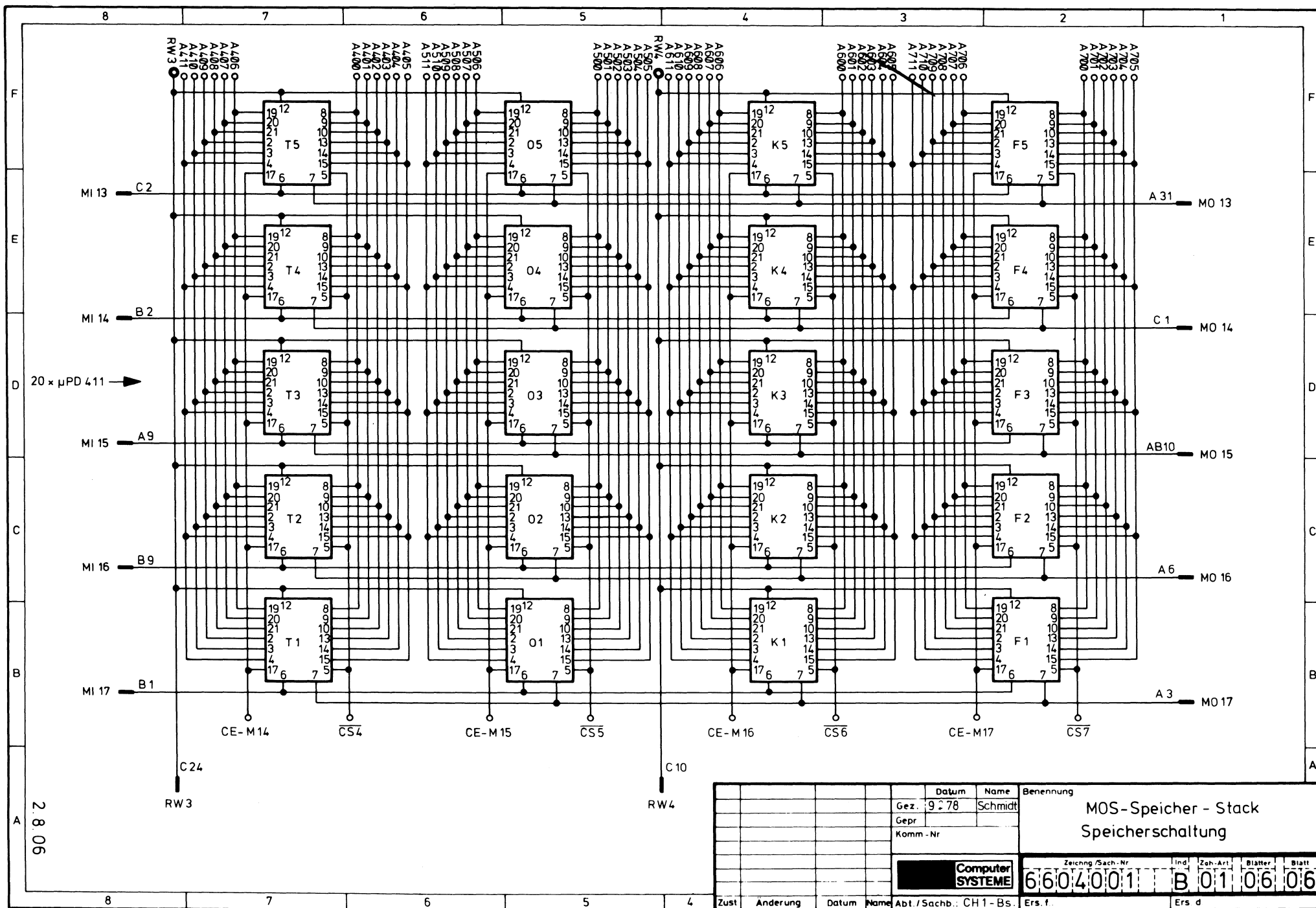




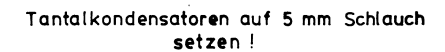




|                  |          |                   |      |                       |           |
|------------------|----------|-------------------|------|-----------------------|-----------|
| Datum            |          | Name              |      | Benennung:            |           |
| Gez. 92.78       |          | Schmidt           |      | MOS-Speicher - Stack  |           |
| Gepr.            |          |                   |      | Speicherschaltung     |           |
| Komm.-Nr.:       |          |                   |      |                       |           |
| Computer SYSTEME |          | Zeichn./Sach.-Nr. |      | Ind.                  | Zch.-Art. |
|                  |          | 6604001           |      | B                     | 01        |
|                  |          |                   |      | Blätter               | Blatt     |
|                  |          |                   |      | 06                    | 05        |
| Zust.            | Änderung | Datum             | Name | Abt./Sachb.: CH 1-Bs. | Ers. f.:  |
|                  |          |                   |      |                       | Ers. d.:  |



**Vor dem Bestücken der MOS-IC's Kurzschlußstecker aufsetzen!**



— IC's :  $\mu$ PD 411 (auf MOS-IC  
Einlötplatz bestücken!).

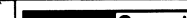
4 Stück Distanzbuchse (17 mm lang)  
660 400 110 B  
befestigen mit Senkschraube  
M 3x6

ACHTUNG!  
Alle IC'S auf Abstand bringen

Leit.- Seite mm

 10  $\mu$  F / 16 V  
Tantal

- ☐ abkleben
- ☐ trennen
- ☐ nach U.S. Wäsche einsetzen
- ☐ auf der Lötseite bestücken

|       |          |       |      |                        |                                                                                       |          |                       |                      |  |         |           |         |       |
|-------|----------|-------|------|------------------------|---------------------------------------------------------------------------------------|----------|-----------------------|----------------------|--|---------|-----------|---------|-------|
|       |          |       |      |                        | Datum                                                                                 | Name     | Benennung: BESTÜCKUNG |                      |  |         |           |         |       |
|       |          |       |      |                        | Gez.                                                                                  | 16.12.77 | Urangel               | Speicher Zusatzk.    |  |         |           |         |       |
|       |          |       |      |                        | Gepr.                                                                                 | 22.11.77 | Fidel                 |                      |  |         |           |         |       |
|       |          |       |      |                        | Gepr.                                                                                 |          |                       |                      |  |         |           |         |       |
|       |          |       |      |                        | Komm.-Nr.                                                                             |          |                       |                      |  |         |           |         |       |
|       |          |       |      |                        |  |          |                       | Zeichnung / Sach-Nr. |  | Ind.    | Zch.-Art. | Blätter | Blatt |
|       |          |       |      |                        |                                                                                       |          |                       | 6604001              |  | B       | 02        | 01      | 01    |
| Zust. | Änderung | Datum | Name | Abt. / Sachb. CH1-Baus |                                                                                       |          | Ers. f.               |                      |  | Ers. d. |           |         |       |





3.1 BUS- Durchschaltung

660 614 B, C1-3

Stromlaufplan

Hardwareprogrammierung

# SIGNALE VOM INTERNEN BUS

# SIGNALE VOM EXTERNEN - BUS

## KABEL II

## KABEL I

| Stecker 1 |        |   |       |
|-----------|--------|---|-------|
|           | A      | B | C     |
| 1         | +5V    |   | +5V   |
| 2         | +5V    |   | I-S07 |
| 3         | +5V    |   | I-S06 |
| 4         | +5V    |   | I-S05 |
| 5         | +5V    |   | I-S04 |
| 6         | +5V    |   | I-S03 |
| 7         | GO-EX  |   | I-S01 |
| 8         | GO-EX  |   | I-S02 |
| 9         | BE-DIS |   | I-S08 |
| 10        | BE-DIS |   | I-S11 |
| 11        | 0V     |   | I-S12 |
| 12        |        |   | I-S09 |
| 13        |        |   | I-S10 |
| 14        |        |   | I-S15 |
| 15        |        |   | I-S14 |
| 16        |        |   | I-S13 |
| 17        |        |   | I-S03 |
| 18        |        |   | I-D05 |
| 19        |        |   | I-D07 |
| 20        |        |   | I-D06 |
| 21        |        |   | I-D04 |
| 22        |        |   | I-D03 |
| 23        |        |   | I-D02 |
| 24        |        |   | I-D01 |
| 25        |        |   | I-D00 |
| 26        |        |   | I-D17 |
| 27        |        |   | I-D16 |
| 28        |        |   | I-D15 |
| 29        | 0V     |   | I-D14 |
| 30        | I-D12  |   | I-D13 |
| 31        | I-D10  |   | I-D11 |
| 32        | 0V     |   | 0V    |

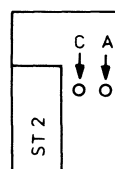
| Stecker 2 |         |   |          |
|-----------|---------|---|----------|
|           | A       | B | C        |
| 1         | +5V     |   | +5V      |
| 2         | +5V     |   |          |
| 3         | +5V     |   |          |
| 4         | +5V     |   |          |
| 5         | +5V     |   |          |
| 6         | +5V     |   | I-ADS    |
| 7         |         |   | Res 2    |
| 8         |         |   | GO-EX    |
| 9         |         |   | BE-DIS   |
| 10        |         |   | I-L/S    |
| 11        |         |   | I-B/W    |
| 12        |         |   | I-A02    |
| 13        | I-A01   |   | I-A06    |
| 14        | I-A05   |   | I-A17    |
| 15        | I-A04   |   | I-A10    |
| 16        | I-A11   |   | I-A12    |
| 17        | I-A07   |   | I-A08    |
| 18        | I-A09   |   | N        |
| 19        | I-A18   |   | I-A19    |
| 20        | I-A16   |   | I-A03    |
| 21        | I-A13   |   | I-A15    |
| 22        | I-A00   |   | I-A14    |
| 23        |         |   | I-STPX   |
| 24        | NE      |   | MP       |
| 25        | GE-INT  |   | INT-DADU |
| 26        | EXDADU  |   | DES-INT  |
| 27        | DE-EX   |   | FE       |
| 28        | BE      |   | L/S      |
| 29        | I fe/be |   | Q-OUT    |
| 30        | Q-IN    |   | GE-OUT   |
| 31        | GE-IN   |   |          |
| 32        | 0V      |   | 0V       |

| Stecker 3 |       |       |       |
|-----------|-------|-------|-------|
|           | A     | B     | C     |
| 1         | D17   | I d17 | I d17 |
| 2         | D16   | I d16 | I d16 |
| 3         | D15   | I d15 | I d15 |
| 4         | D14   | I d14 | I d14 |
| 5         | S13   | 0V    | 0V    |
| 6         | S13   | S14   | S14   |
| 7         | S11   | S12   | S12   |
| 8         | S09   | S10   | S10   |
| 9         | STPX  | S08   | S08   |
| 10        | N     | I n   | I n   |
| 11        | MP    | I mp  | I mpo |
| 12        | FE    | I fe  | I fe  |
| 13        | NE    | I ne  | I ne  |
| 14        | BE    | I be  | I be  |
| 15        | L/S   | I L/S | I L/S |
| 16        | D10   | I d10 | I d10 |
| 17        | D07   | I d07 | I d07 |
| 18        | D06   | I d06 | I d06 |
| 19        | D05   | I d05 | I d05 |
| 20        | D04   | I d04 | I d04 |
| 21        | D03   | I d03 | I d03 |
| 22        | D02   | I d02 | I d02 |
| 23        | D01   | I d01 | I d01 |
| 24        | D00   | I d00 | I d00 |
| 25        | S07   | 0V    | 0V    |
| 26        | S05   | S06   | S06   |
| 27        | S03   | S04   | S04   |
| 28        | S01   | S02   | S02   |
| 29        | 0V    | S00   | S00   |
| 30        | I d13 | +5V   | D13   |
| 31        | I d12 | +5V   | D12   |
| 32        | I d11 | +5V   | D11   |

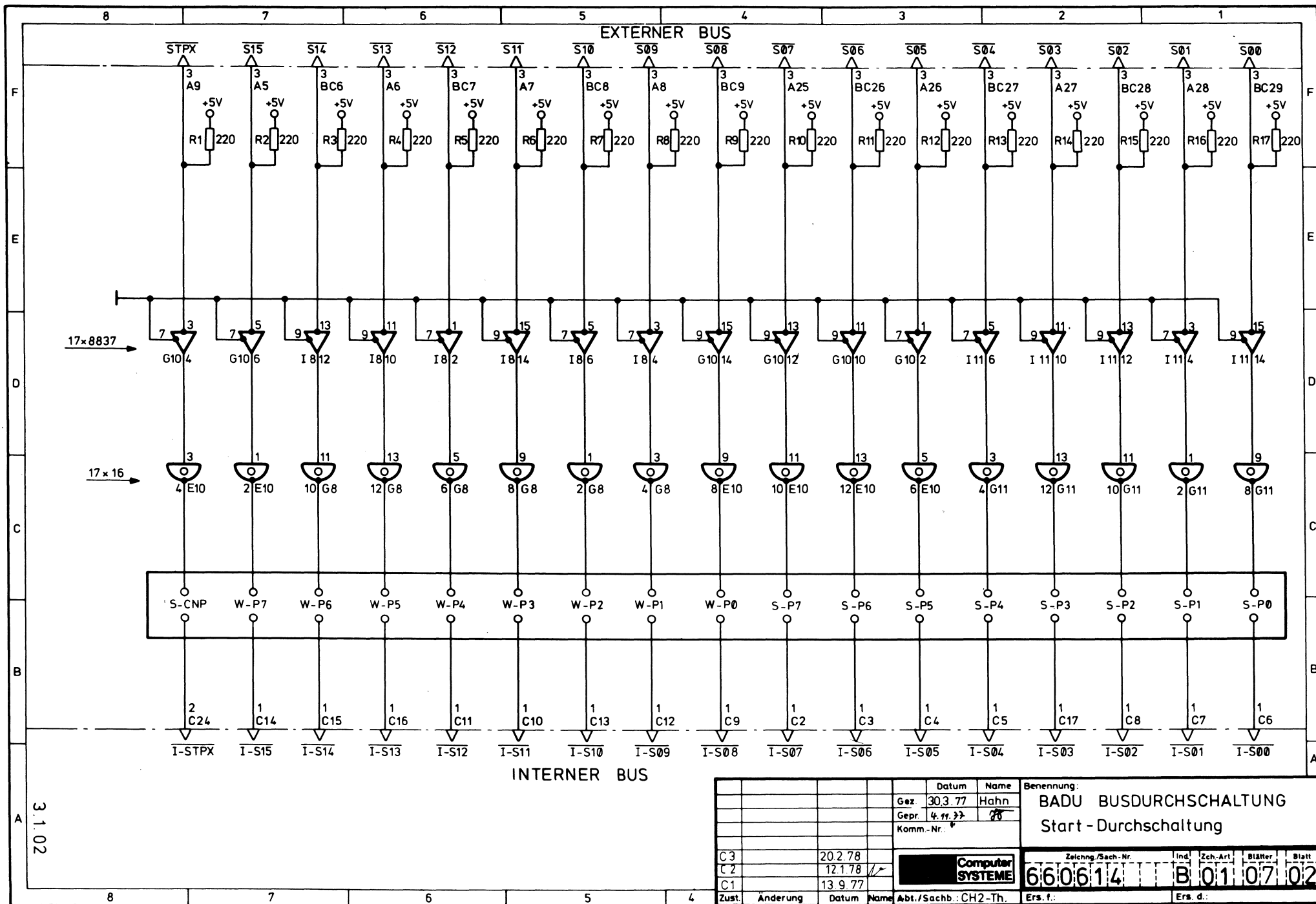
| Stecker 4 |        |         |         |
|-----------|--------|---------|---------|
|           | A      | B       | C       |
| 1         | 0V     | 0V      | 0V      |
| 2         | AS8    | I as8   | I as8   |
| 3         | AS4    | I as4   | I as4   |
| 4         | B/W    | I b/w   | I b/w   |
| 5         | GO-EX  | I goex  | I goex  |
| 6         | BE-DIS | I bedis | I bedis |
| 7         | RES 2  | I res 2 | I res 2 |
| 8         | I-ADS  | I ads   | I ads   |
| 9         | A19    | I a19   | I a19   |
| 10        | A18    | I a18   | I a18   |
| 11        | A17    | I a17   | I a17   |
| 12        | A16    | I a15   | I a16   |
| 13        | A15    | I a15   | I a15   |
| 14        | A14    | I a14   | I a14   |
| 15        | A13    | I a13   | I a13   |
| 16        | A12    | I a12   | I a12   |
| 17        | A11    | I a11   | I a11   |
| 18        | A10    | I a10   | I a10   |
| 19        | A09    | I a09   | I a09   |
| 20        | A08    | I a08   | I a08   |
| 22        | A07    | I a07   | I a07   |
| 23        | A06    | I a06   | I a06   |
| 24        | A05    | I a05   | I a05   |
| 25        | A04    | I a04   | I a04   |
| 26        | A03    | I a03   | I a03   |
| 27        | A02    | I a02   | I a02   |
| 28        | A01    | I a01   | I a01   |
| 29        | A00    | I a00   | I a00   |
| 29        | 0V     | 0V      | 0V      |
| 30        | AS2    | +5V     | I as2   |
| 31        | AS1    | +5V     | I as1   |
| 32        | 0V     | +5V     | 0V      |

VORSICHT I A und C-Reihe sind getauscht

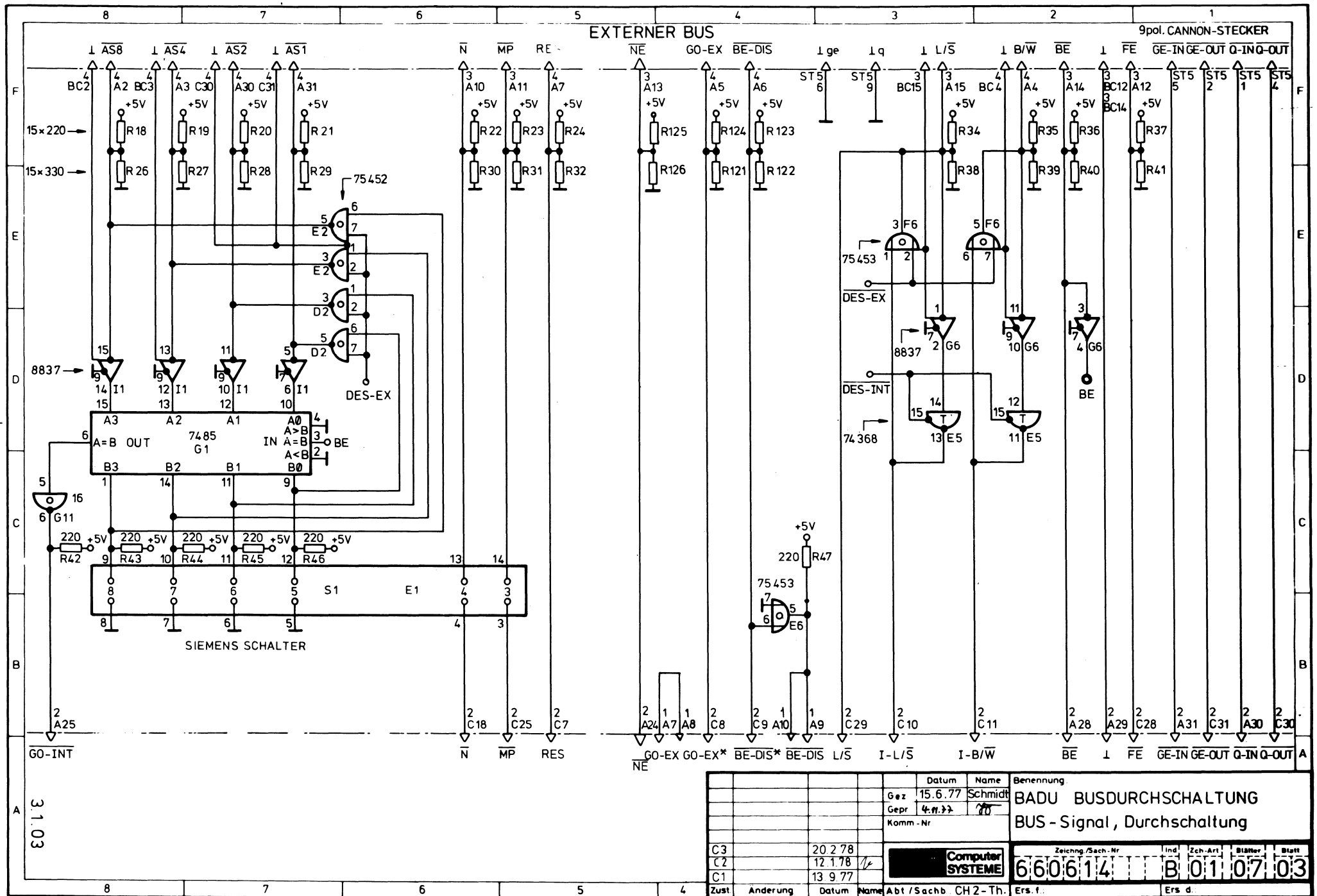
| Stecker 5 |        |
|-----------|--------|
| 1         | Q-IN   |
| 2         | GE-OUT |
| 3         |        |
| 4         | Q-OUT  |
| 5         | GE-IN  |
| 6         | I ge   |
| 7         |        |
| 8         |        |
| 9         | I q    |



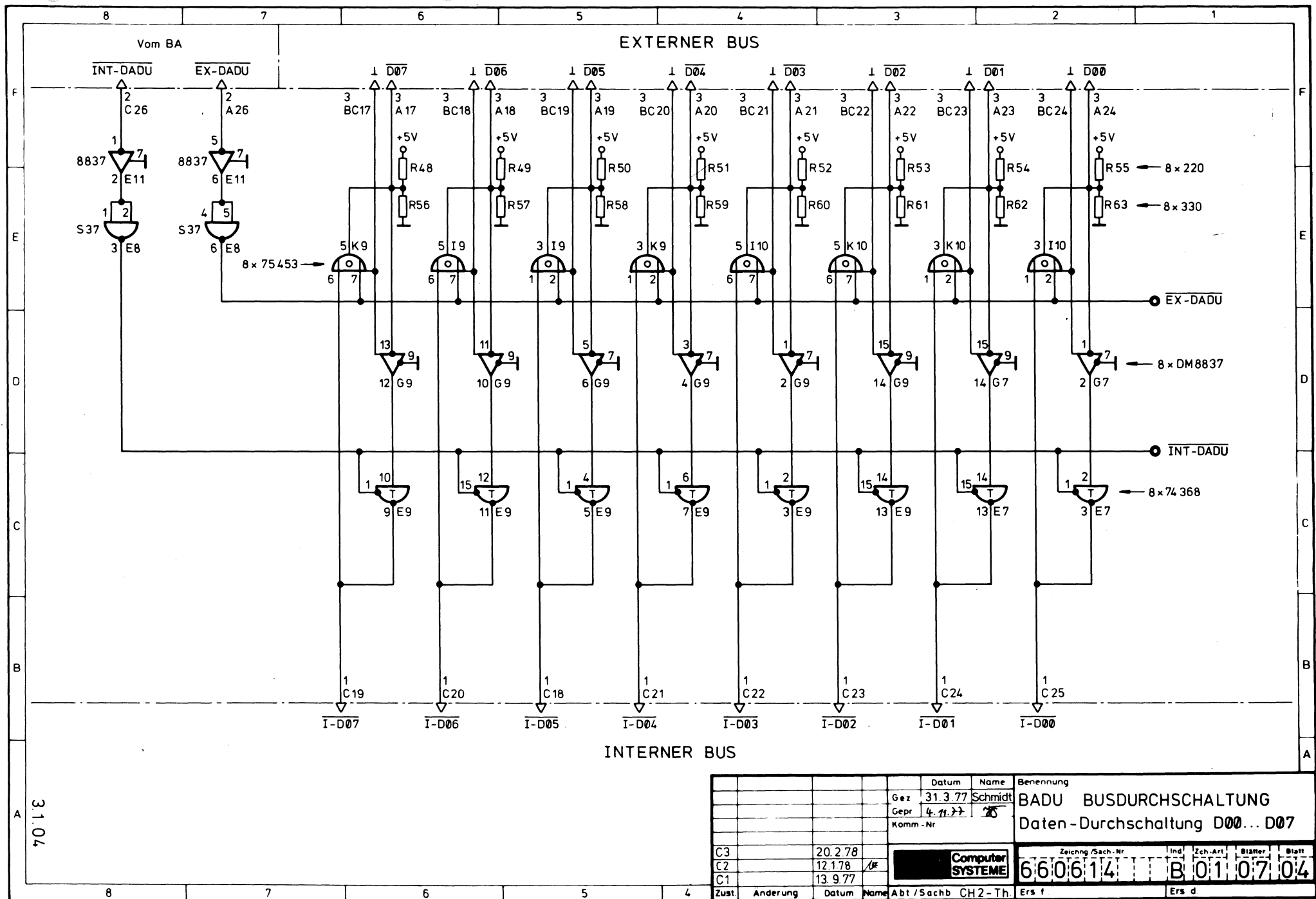
|                  |          |                                                                  |      |                        |                   |
|------------------|----------|------------------------------------------------------------------|------|------------------------|-------------------|
| Datum            |          | Name                                                             |      | Benennung              |                   |
| Gez.             | 31.1.77  | Hahn                                                             |      | BADU Busdurchschaltung |                   |
| Gepr.            | 4.11.77  | 78                                                               |      | Steckerbelegung        |                   |
| Komm.-Nr.        |          |                                                                  |      |                        |                   |
| C3               | 20.2.78  |                                                                  |      |                        |                   |
| C2               | 12.1.78  |                                                                  |      |                        |                   |
| C1               | 13.9.77  |                                                                  |      |                        |                   |
| Zust.            | Änderung | Datum                                                            | Name | Abt./Sachb.: CH2-Th.   | Ers. f.: Ers. d.: |
| Computer SYSTEME |          | Zeichn./Sach.-Nr. 660614 Ind. B Zch.-Art. 01 Blätter 07 Blatt 01 |      |                        |                   |



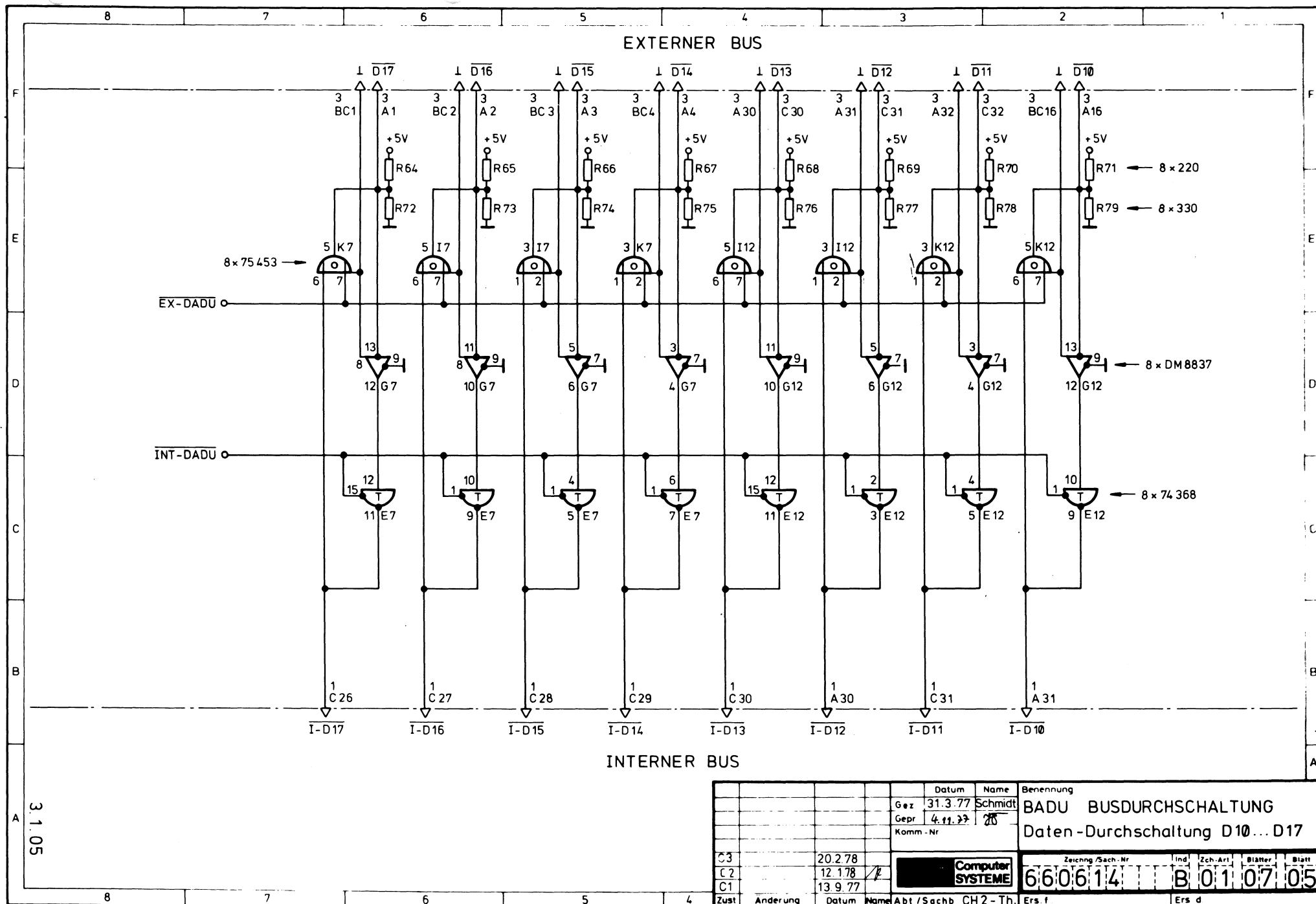
|               |          |       |      |                            |                   |
|---------------|----------|-------|------|----------------------------|-------------------|
| Datum         |          | Name  |      | Benennung:                 |                   |
| Gez. 30.3.77  |          | Hahn  |      | BADU BUSDURCHSCHALTUNG     |                   |
| Gepr. 4.11.77 |          | 28    |      | Start - Durchschaltung     |                   |
| Komm.-Nr.:    |          |       |      |                            |                   |
| C3            | 20.2.78  |       |      |                            |                   |
| C2            | 12.1.78  |       |      |                            |                   |
| C1            | 13.9.77  |       |      |                            |                   |
| Zust.         | Änderung | Datum | Name | Abt./Sachb.: CH2-TH.       | Ers. f.: Ers. d.: |
|               |          |       |      | Computer SYSTEME           |                   |
|               |          |       |      | Zeichn./Sach.-Nr. 660614   |                   |
|               |          |       |      | Ind. Zeh.-Art. Blatt Blatt |                   |
|               |          |       |      | B 01 07 02                 |                   |

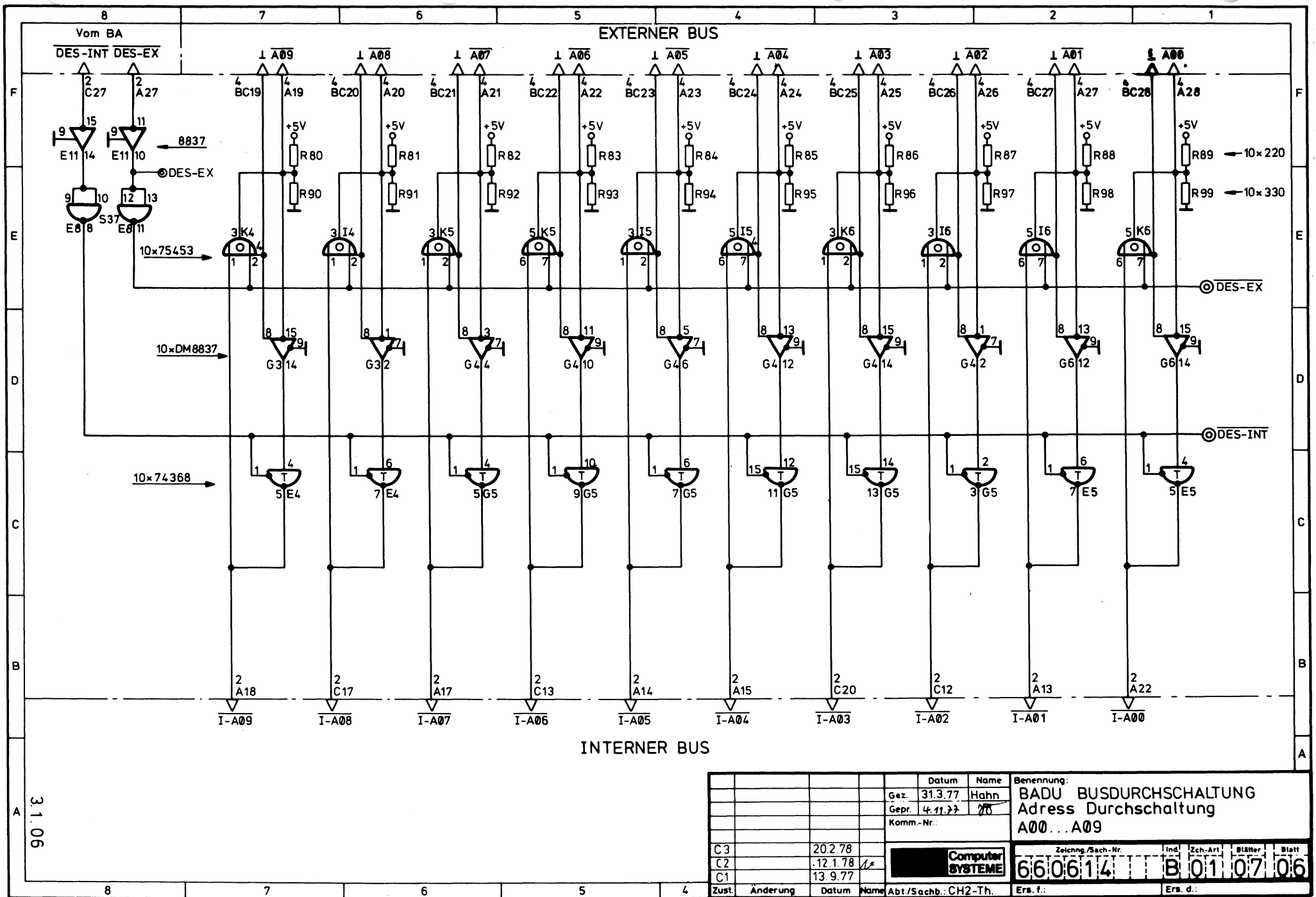


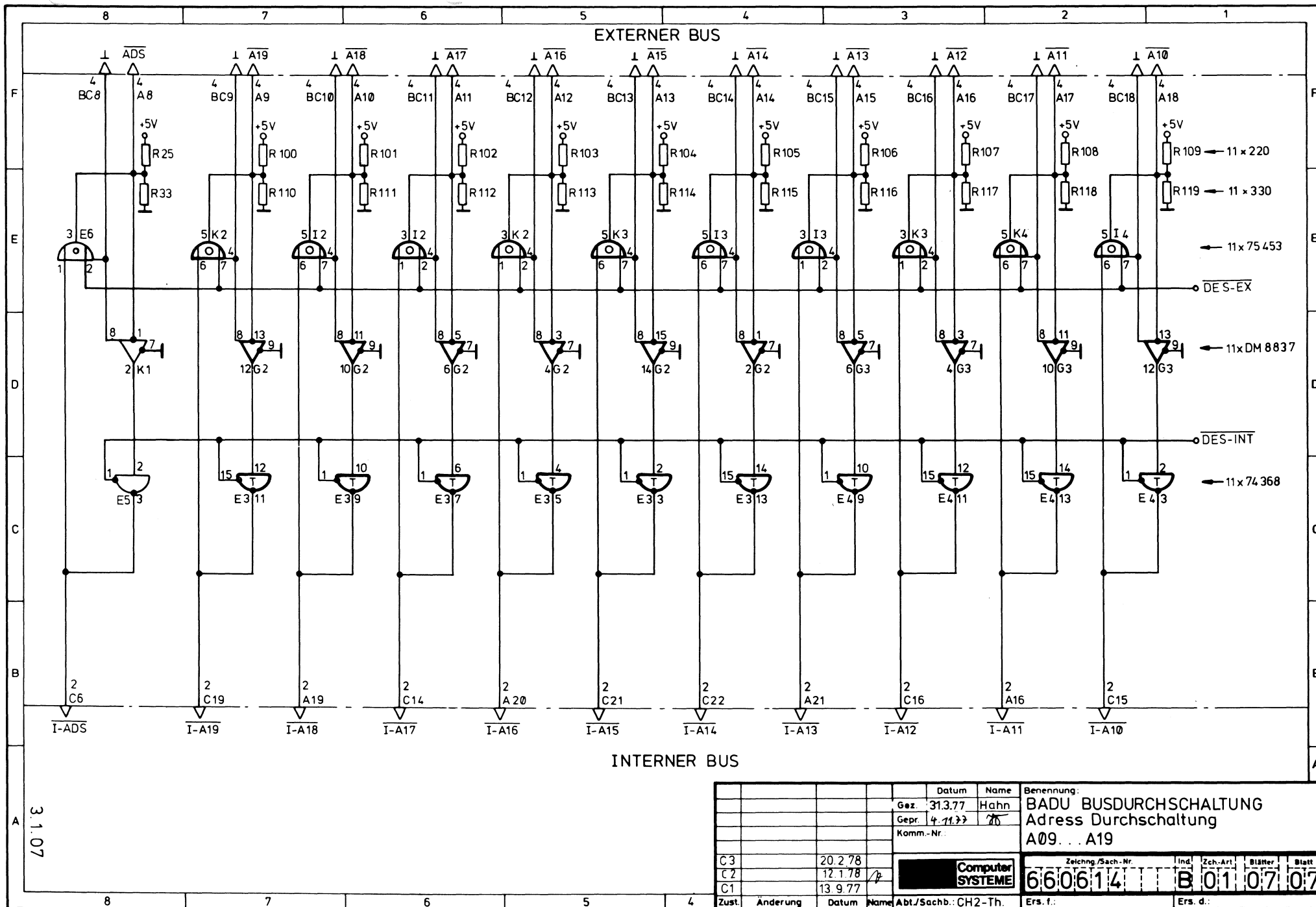
|           |         |          |                              |  |            |  |
|-----------|---------|----------|------------------------------|--|------------|--|
| Datum     |         | Name     | Benennung                    |  |            |  |
| Gez       | 15.6.77 | Schmidt  | BADU BUSDURCHSCHALTUNG       |  |            |  |
| Gepr      | 4.11.77 |          | BUS - Signal, Durchschaltung |  |            |  |
| Komm - Nr |         |          |                              |  |            |  |
| C3        | 20.2.78 |          | Zeichn./Sach-Nr              |  |            |  |
| C2        | 12.1.78 |          | Ind                          |  |            |  |
| C1        | 13.9.77 |          | Zch-Art                      |  |            |  |
| Zust      |         | Änderung | Datum                        |  | Name       |  |
|           |         |          | Abt./Sachb.                  |  | CH 2 - Th. |  |
|           |         |          | Ers. f.                      |  | Ers. d.    |  |
|           |         |          | Computer                     |  | SYSTEME    |  |
|           |         |          | 660614                       |  | B 01 07 03 |  |



|           |          |         |      |                                                          |          |
|-----------|----------|---------|------|----------------------------------------------------------|----------|
| Datum     |          | Name    |      | Benennung                                                |          |
| Gez       | 31.3.77  | Schmidt |      | BADU BUSDURCHSCHALTUNG<br>Daten-Durchschaltung D00...D07 |          |
| Gepr      | 4.11.77  |         |      |                                                          |          |
| Komm - Nr |          |         |      |                                                          |          |
| C3        | 20.2.78  |         |      | Zeichn / Sach - Nr                                       | Ind      |
| C2        | 12.1.78  |         |      | Zch - Art                                                | Blätter  |
| C1        | 13.9.77  |         |      | Blatt                                                    | Blatt    |
| Zust.     | Änderung | Datum   | Name | Abt / Sachb                                              | CH2 - Th |
|           |          |         |      | Ers f                                                    | Ers d    |







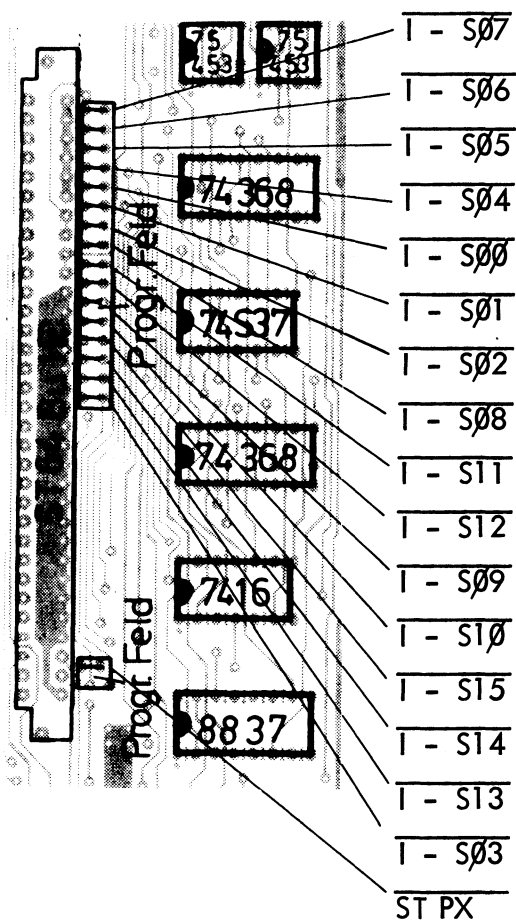


## BUS DURCHSCHALTUNG 660 614

### Schalter S1 (Platz E1 auf der Leiterseite)

|   |                   |                  |
|---|-------------------|------------------|
| 1 | frei              |                  |
| 2 | frei              |                  |
| 3 | $\overline{MP}$   |                  |
| 4 | $\overline{N}$    |                  |
| 5 | $\overline{A S1}$ | } Gehäuseadresse |
| 6 | $\overline{A S2}$ |                  |
| 7 | $\overline{A S4}$ |                  |
| 8 | $\overline{A S8}$ |                  |

### Programmierfeld für Startdurchschaltung



Leiterseitig einsetzen

Bauhöhe 7,7 mm  
Sperrschicht  
und Tantal auf  
5 mm Schlauch  
setzen.

Stecker nicht  
annieten

Zusammen mit Steckerblech  
nach Zeichn. 660 100 053  
einlöten

Stecker nicht  
annieten

Zusammen mit  
Steckblech ein-  
löten

Vorsicht Sonderleiste

Programmierbrücken von der  
Leiterseite bestücken.

Drahtbrücken einlöten

☐ abkleben  
☐ trennen

☐ nach U.S. Wäsche einsetzen  
☐ auf der Lötseite bestücken

$\text{---} \text{||} \text{---}$  0,1  $\mu$  F / 12 V  
Sperrschicht

$\text{---} \text{||} \text{---}$  10  $\mu$  F / 16 V  
Tantal

BUS DURCHSCHALTUNG

LP.Nr.: 660 614 000 B

Gezeichnet 9.1.78 Flemmig

Geprüft 10.1.78

Bearbeiter  
CH 2-Thon.

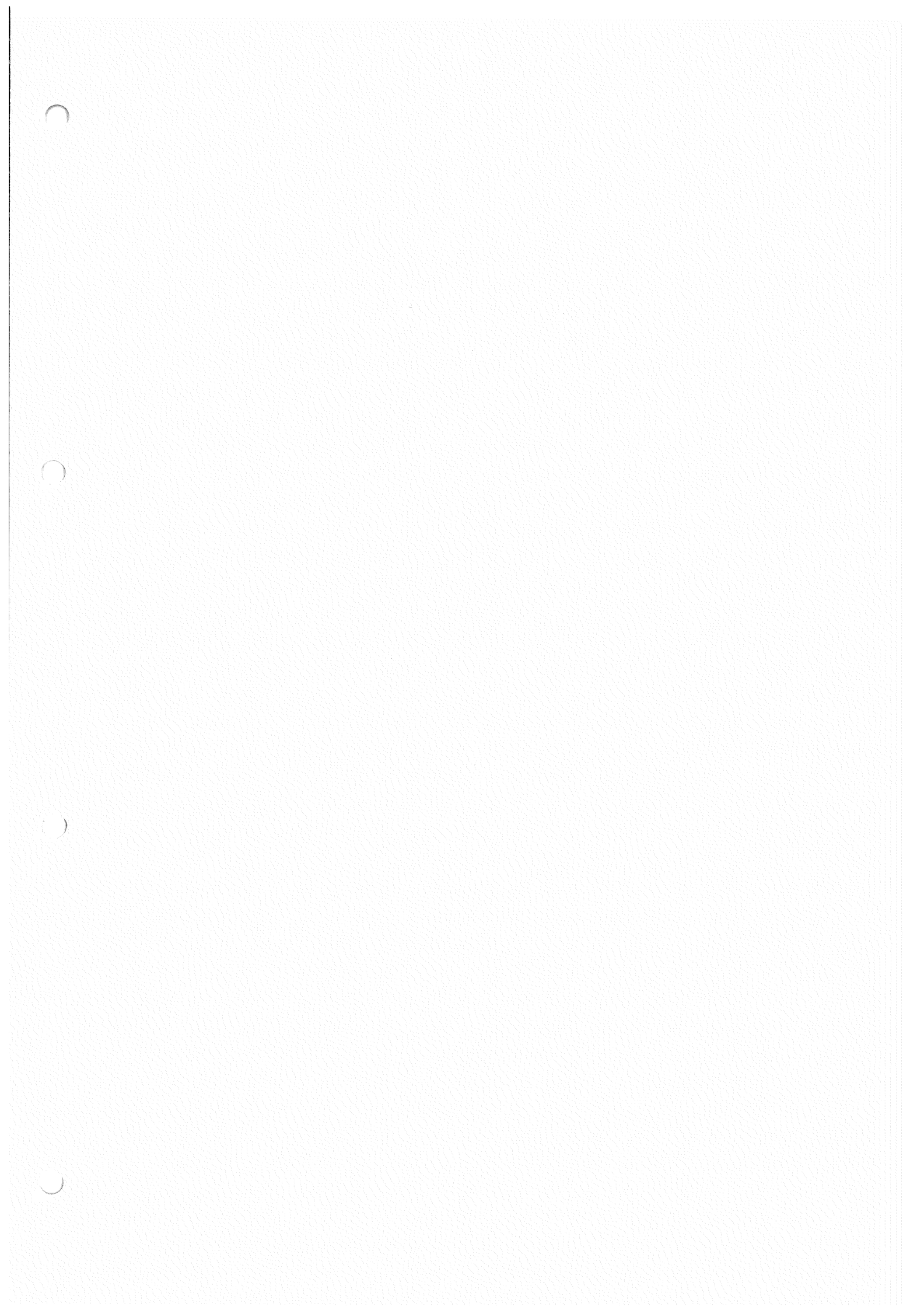
BESTÜCKUNG

660 614 B.C1-3

DIETZ

Computer  
SYSTEME

3.1.09



3.2 Multiinterface

660 620 B, C1, C4-5

Stromlaufplan

ROM-Tabelle

Hardwareprogrammierung

|   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|
| 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| 8 |   |   |   |   |   |   |   |

|   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|
| 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| 8 |   |   |   |   |   |   |   |

|   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|
| 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| 8 |   |   |   |   |   |   |   |

|   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|
| 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| 8 |   |   |   |   |   |   |   |

|   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|
| 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| 8 |   |   |   |   |   |   |   |

|   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|
| 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| 8 |   |   |   |   |   |   |   |

|   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|
| 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| 8 |   |   |   |   |   |   |   |

|   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|
| 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| 8 |   |   |   |   |   |   |   |

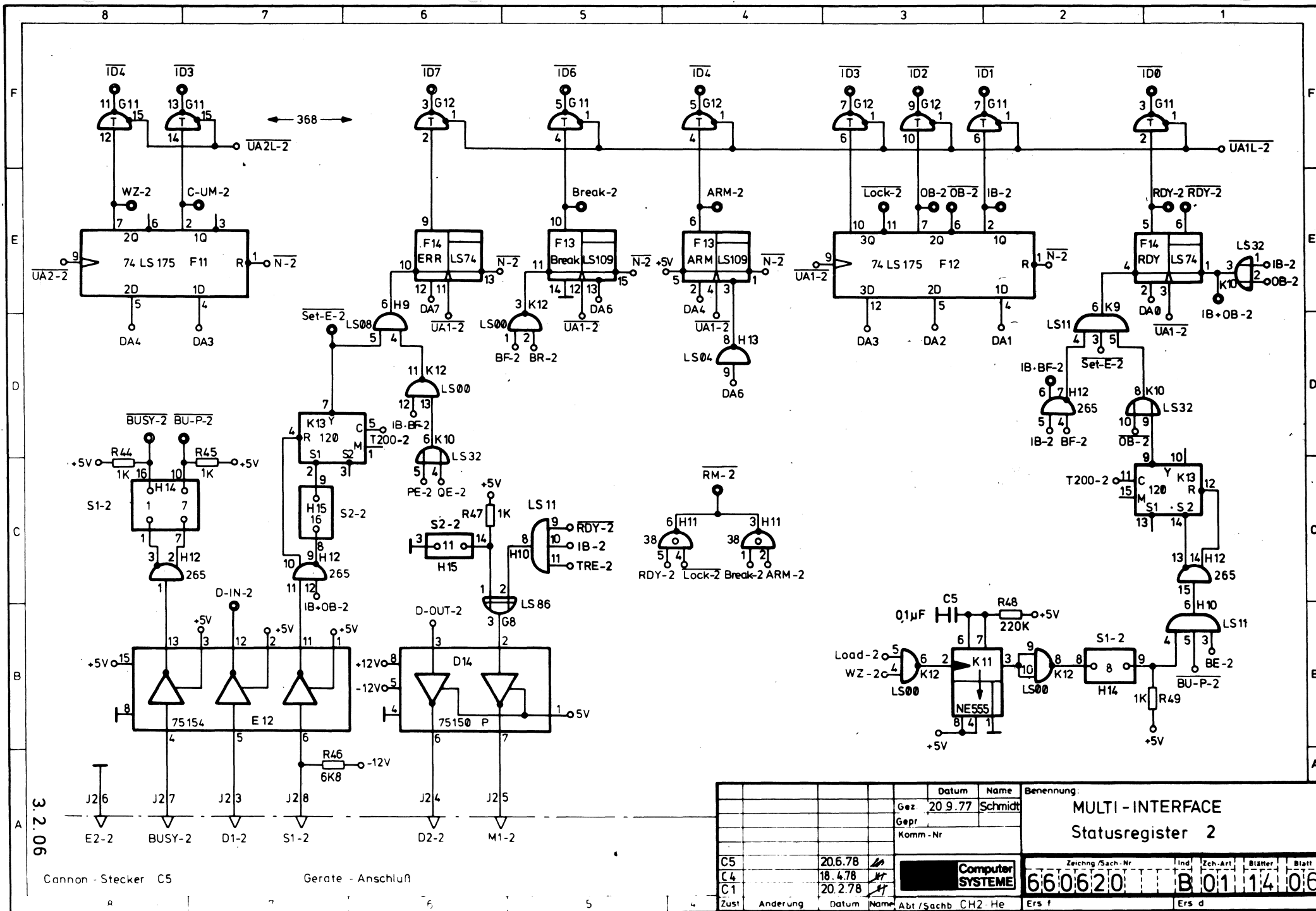


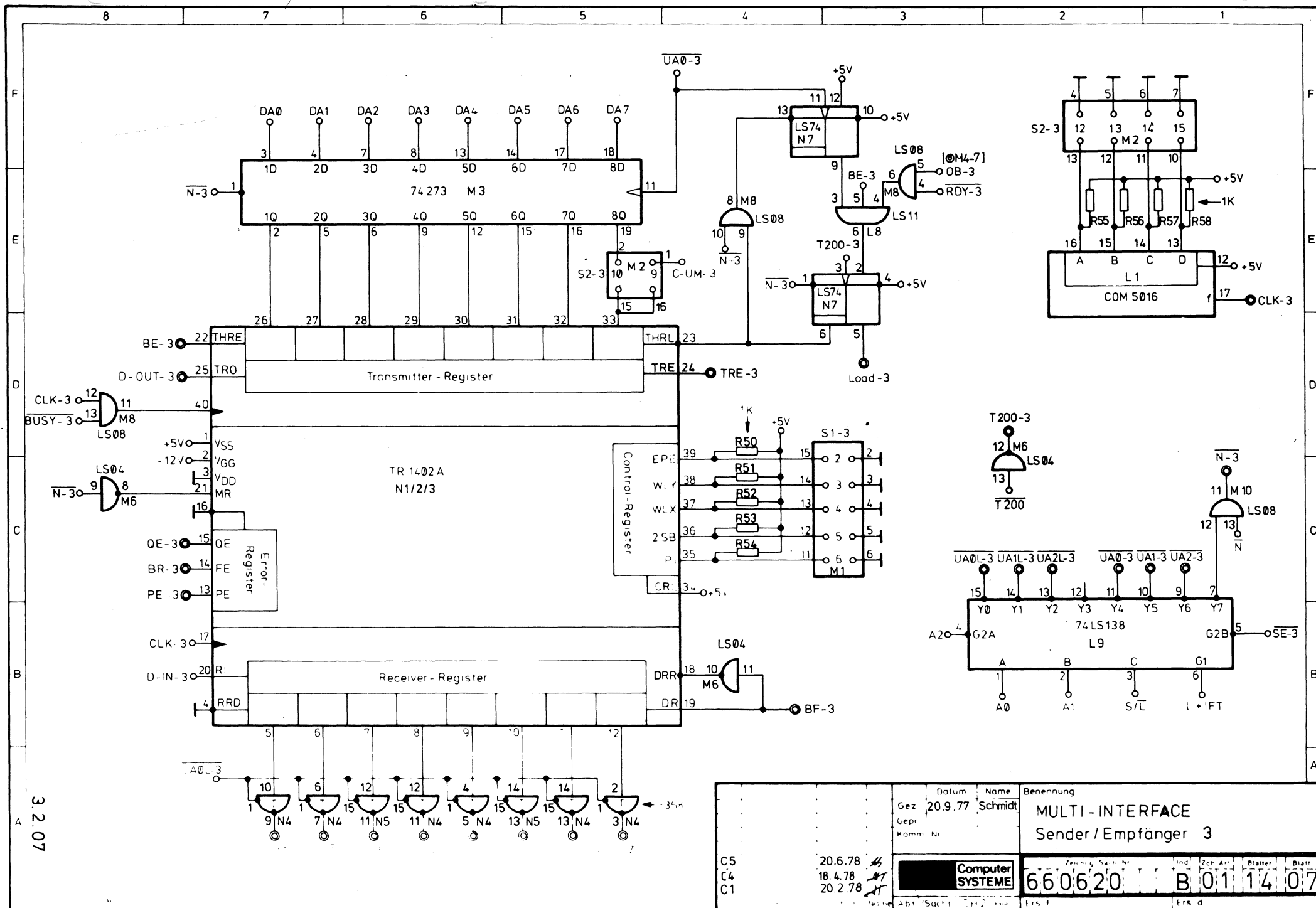




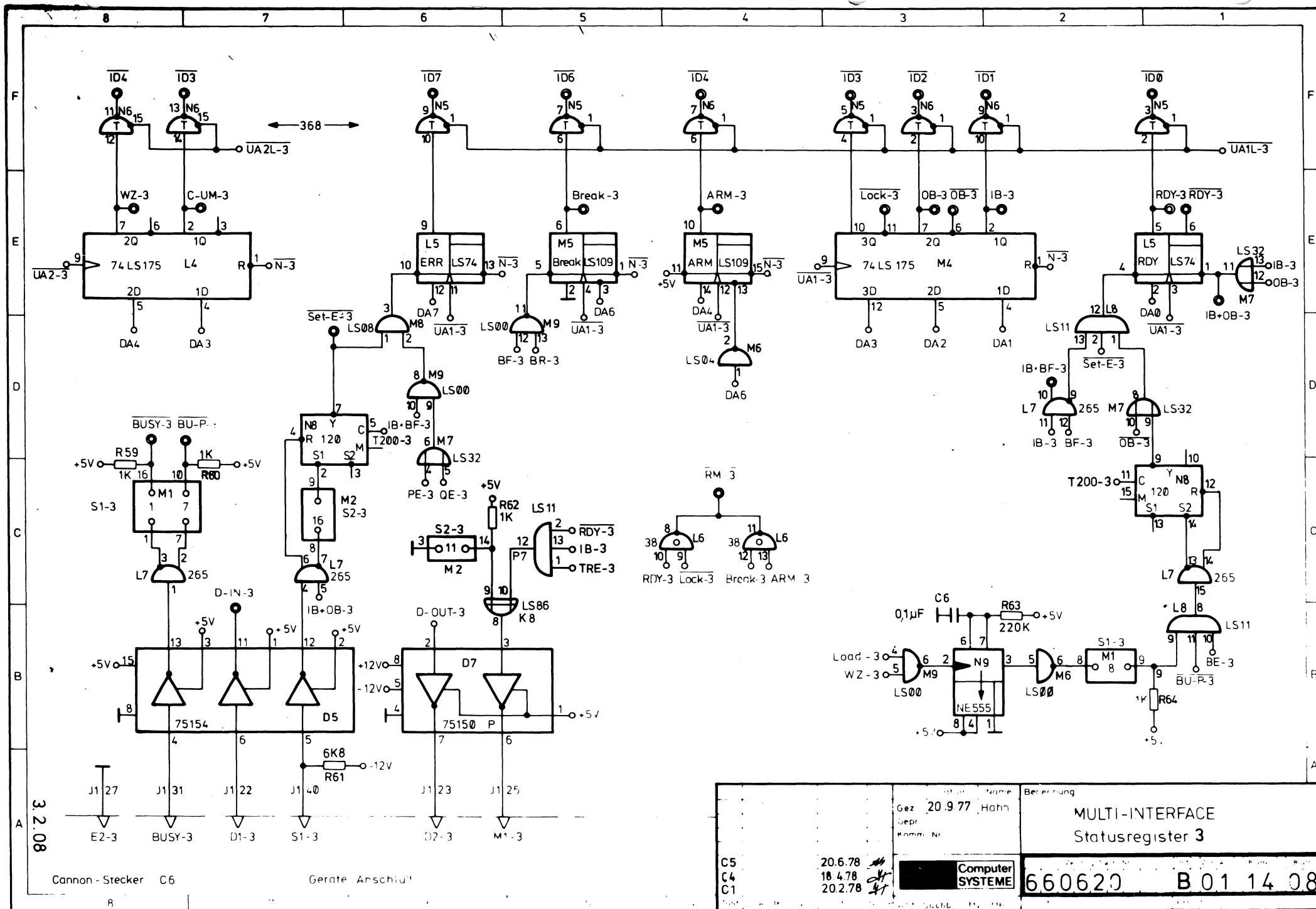


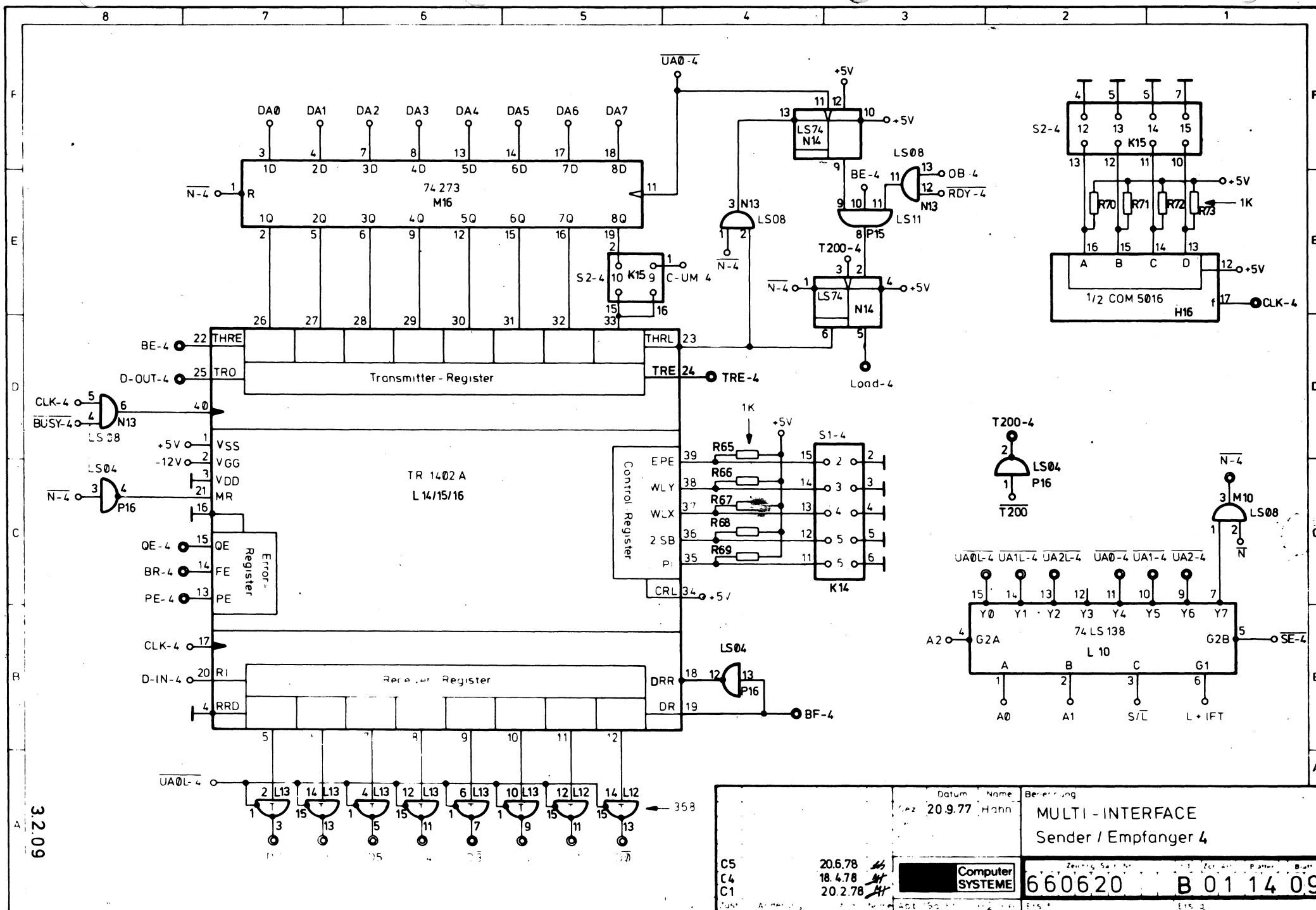






|                  |         |            |                    |
|------------------|---------|------------|--------------------|
| Gez.             | Datum   | Name       | Benennung          |
| Gepr.            | 20.9.77 | Schmidt    | MULTI-INTERFACE    |
| Komm. Nr.        |         |            | Sender/Empfänger 3 |
| C5               | 20.6.78 |            |                    |
| C4               | 18.4.78 |            |                    |
| C1               | 20.2.78 |            |                    |
| Computer SYSTEME |         | Zeich. Nr. | Ind.               |
|                  |         | 660620     | B 01               |
|                  |         | Blatt      | Blatt              |
|                  |         | 14         | 07                 |
|                  |         | Ers. f.    | Ers. d.            |



















| ROM T06B |                            |                          |                          |                          |                          |                          |  |    |    |                             |                          |                          |                          |                          |                          |
|----------|----------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--|----|----|-----------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
|          | $\overline{\text{SEL-X1}}$ | $\overline{\text{I-BE}}$ | $\overline{\text{IA07}}$ | $\overline{\text{IA06}}$ | $\overline{\text{IA05}}$ | $\overline{\text{IA04}}$ |  |    |    | $\overline{\text{ADR-DIS}}$ | $\overline{\text{SE-5}}$ | $\overline{\text{SE-4}}$ | $\overline{\text{SE-3}}$ | $\overline{\text{SE-2}}$ | $\overline{\text{SE-1}}$ |
|          | EN                         | E                        | D                        | C                        | B                        | A                        |  | Y8 | Y7 | Y6                          | Y5                       | Y4                       | Y3                       | Y2                       | Y1                       |
| 00       | L                          | L                        | L                        | L                        | L                        | L                        |  | H  | H  | L                           | H                        | H                        | H                        | H                        | H                        |
| 01       | L                          | L                        | L                        | L                        | L                        | H                        |  | H  | H  | L                           | H                        | H                        | H                        | H                        | H                        |
| 02       | L                          | L                        | L                        | L                        | H                        | H                        |  | H  | H  | L                           | H                        | H                        | H                        | H                        | H                        |
| 03       | L                          | L                        | L                        | L                        | H                        | H                        |  | H  | H  | L                           | H                        | H                        | H                        | H                        | H                        |
| 04       | L                          | L                        | L                        | H                        | L                        | L                        |  | H  | H  | L                           | H                        | H                        | H                        | H                        | H                        |
| 05       | L                          | L                        | L                        | H                        | L                        | H                        |  | H  | H  | L                           | H                        | H                        | H                        | H                        | H                        |
| 06       | L                          | L                        | L                        | H                        | H                        | L                        |  | H  | H  | H                           | L                        | H                        | H                        | H                        | H                        |
| 07       | L                          | L                        | L                        | H                        | H                        | H                        |  | H  | H  | H                           | H                        | L                        | H                        | H                        | H                        |
| 08       | L                          | L                        | H                        | L                        | L                        | L                        |  | H  | H  | H                           | H                        | H                        | L                        | H                        | H                        |
| 09       | L                          | L                        | H                        | L                        | L                        | H                        |  | H  | H  | H                           | H                        | H                        | H                        | L                        | H                        |
| 0A       | L                          | L                        | H                        | L                        | H                        | L                        |  | H  | H  | H                           | H                        | H                        | H                        | H                        | L                        |
| 0B       | L                          | L                        | H                        | L                        | H                        | H                        |  | H  | H  | L                           | H                        | H                        | H                        | H                        | H                        |
| 0C       | L                          | L                        | H                        | H                        | L                        | L                        |  | H  | H  | L                           | H                        | H                        | H                        | H                        | H                        |
| 0D       | L                          | L                        | H                        | H                        | L                        | H                        |  | H  | H  | L                           | H                        | H                        | H                        | H                        | H                        |
| 0E       | L                          | L                        | H                        | H                        | H                        | L                        |  | H  | H  | L                           | H                        | H                        | H                        | H                        | H                        |
| 0F       | L                          | L                        | H                        | H                        | H                        | H                        |  | H  | H  | L                           | H                        | H                        | H                        | H                        | H                        |
| 10       | L                          | H                        | L                        | L                        | L                        | L                        |  | H  | H  | H                           | H                        | H                        | H                        | H                        | H                        |
| 11       | L                          | H                        | L                        | L                        | L                        | H                        |  | H  | H  | H                           | H                        | H                        | H                        | H                        | H                        |
| 12       | L                          | H                        | L                        | L                        | H                        | L                        |  | H  | H  | H                           | H                        | H                        | H                        | H                        | H                        |
| 13       | L                          | H                        | L                        | L                        | H                        | H                        |  | H  | H  | H                           | H                        | H                        | H                        | H                        | H                        |
| 14       | L                          | H                        | L                        | H                        | L                        | L                        |  | H  | H  | H                           | H                        | H                        | H                        | H                        | H                        |
| 15       | L                          | H                        | L                        | H                        | L                        | H                        |  | H  | H  | H                           | H                        | H                        | H                        | H                        | H                        |
| 16       | L                          | H                        | L                        | H                        | H                        | L                        |  | H  | H  | H                           | H                        | H                        | H                        | H                        | H                        |
| 17       | L                          | H                        | L                        | H                        | H                        | H                        |  | H  | H  | H                           | H                        | H                        | H                        | H                        | H                        |
| 18       | L                          | H                        | H                        | L                        | L                        | L                        |  | H  | H  | H                           | H                        | H                        | H                        | H                        | H                        |
| 19       | L                          | H                        | H                        | L                        | L                        | H                        |  | H  | H  | H                           | H                        | H                        | H                        | H                        | H                        |
| 1A       | L                          | H                        | H                        | L                        | H                        | L                        |  | H  | H  | H                           | H                        | H                        | H                        | H                        | H                        |
| 1B       | L                          | H                        | H                        | L                        | H                        | H                        |  | H  | H  | H                           | H                        | H                        | H                        | H                        | H                        |
| 1C       | L                          | H                        | H                        | H                        | L                        | L                        |  | H  | H  | H                           | H                        | H                        | H                        | H                        | H                        |
| 1D       | L                          | H                        | H                        | H                        | L                        | H                        |  | H  | H  | H                           | H                        | H                        | H                        | H                        | H                        |
| 1E       | L                          | H                        | H                        | H                        | H                        | L                        |  | H  | H  | H                           | H                        | H                        | H                        | H                        | H                        |
| 1F       | L                          | H                        | H                        | H                        | H                        | H                        |  | H  | H  | H                           | H                        | H                        | H                        | H                        | H                        |

|       |          |  |       |                               |             |                      |  |      |           |         |       |
|-------|----------|--|-------|-------------------------------|-------------|----------------------|--|------|-----------|---------|-------|
|       |          |  |       | Datum                         | Name        | Benennung:           |  |      |           |         |       |
|       |          |  |       | Gez.                          |             | MULTI-INTERFACE      |  |      |           |         |       |
|       |          |  |       | Gepr.                         |             | Romtabelle ROM T06 B |  |      |           |         |       |
|       |          |  |       | Komm.-Nr.                     |             |                      |  |      |           |         |       |
|       |          |  |       | <b>DIETZ Computer SYSTEME</b> |             | Zeichn./Sach.-Nr.    |  | Ind. | Zch.-Art. | Blätter | Blatt |
|       |          |  |       |                               |             | 660620               |  |      | 28        | 01      | 01    |
| Zust. | Änderung |  | Datum | Name                          | Abt./Sachb. | Ers. f.              |  |      | Ers. d.   |         |       |

### Programmierfeld für Ebenenstart auf dem Multi-Interface

Platz D1

$\overline{RM1}$ ,  $\overline{RM2}$ ,  $\overline{RM3}$ ,  $\overline{RM4}$ ,  $\overline{RM5}$  V-24-Interface

$\overline{RM6}$  Leser-Interface

Rückmeldung auf Ebene 00 - 15.

### Adreßentschlüsselung auf dem Multi-Interface

Die Entschlüsselung der Adressbits 4-7 für das Leser-Interface erfolgt auf dem I/O-Board.

Die Entschlüsselung der Adressbits 4-7 für die fünf V24-Interfaces übernimmt ein 32 x 8 Bit Prom MM6330.

#### Ready Scanner

| S3 (D8) | EIN                                  | AUS                  |
|---------|--------------------------------------|----------------------|
| 1,2,3,4 | Ready Scanner Nr.<br>siehe Tabelle 3 |                      |
| 5       | frei                                 |                      |
| 6       | Nur für<br>Prüfzwecke                | Betriebs-<br>zustand |
| 7       | Ready Scan.<br>EIN                   | Ready Scan.<br>AUS   |
| 8       | Leser EIN                            | Leser AUS            |

Tabelle 3/Ready Scanner

| RS.Nr. | Schalter |     |     |     |
|--------|----------|-----|-----|-----|
|        | 1        | 2   | 3   | 4   |
| 1      | EIN      | EIN | EIN | EIN |
| 2      | AUS      | EIN | EIN | EIN |

# MULTI-INTERFACE 660 620

| S1 - X             | EIN                                                        | AUS                               |
|--------------------|------------------------------------------------------------|-----------------------------------|
| 1                  | Betrieb mit BUSY-Leitung für MM/Tally-Drucker              | keine Funktion                    |
| 2                  | ODD-Parity                                                 | EVEN-Parity                       |
| 3,4                | Wortlänge siehe Tabelle 1 rechts                           |                                   |
| 5                  | 1 Stopbit                                                  | 2 Stopbits                        |
| 6                  | mit Parity-Bit                                             | ohne Parity-Bit                   |
| 7                  | Betrieb mit BUSY-Leitung für Philips-Drucker               | keine Funktion                    |
| 8                  | Wartezeit zugelassen                                       | Wartezeit nicht zugelassen        |
| S2 - X             |                                                            |                                   |
| 1(9)               | 8 Datenbit $\hat{=}$ Code-Umschaltung                      | keine Funktion                    |
| 2(10)              | 8 Datenbit $\hat{=}$ Bit 7 Datenregister                   | keine Funktion                    |
| 3(11)              | M1 nicht inventiert<br>M1 $\hat{=}$ Rechner empfangsbereit | M1 inventiert                     |
| 4,5,6,7<br>(12-15) | Baudrate siehe Tabelle 2 rechts                            |                                   |
| 8(16)              | mit Betriebsbereitschaftsabfrage                           | ohne Betriebsbereitschaftsabfrage |

Tabelle 1/Wortlänge

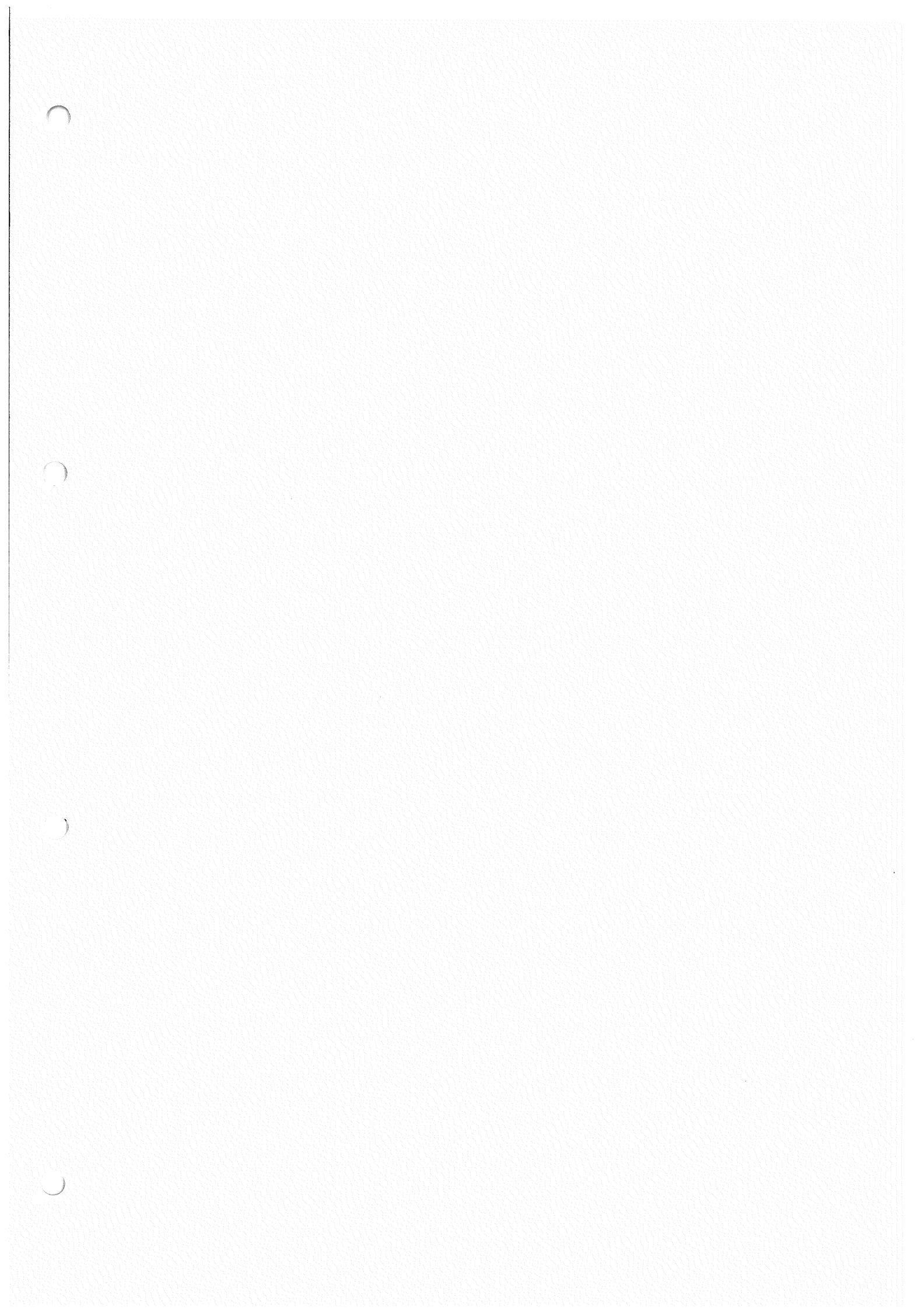
| Schalter<br>3 | 4   | Anzahl der<br>Datenbits |
|---------------|-----|-------------------------|
| EIN           | EIN | 5                       |
| AUS           | EIN | 6                       |
| EIN           | AUS | 7                       |
| AUS           | AUS | 8                       |

Tabelle 2/Baud-Rate

| Baud-Rate | Schalter<br>7(15) 6(14) 5(13) 4(12) |     |     |     |
|-----------|-------------------------------------|-----|-----|-----|
| 50        | EIN                                 | EIN | EIN | EIN |
| 75        | EIN                                 | EIN | EIN | AUS |
| 110       | EIN                                 | EIN | AUS | EIN |
| 134,5     | EIN                                 | EIN | AUS | AUS |
| 150       | EIN                                 | AUS | EIN | EIN |
| 300       | EIN                                 | AUS | EIN | AUS |
| 600       | EIN                                 | AUS | AUS | EIN |
| 1200      | EIN                                 | AUS | AUS | AUS |
| 1800      | AUS                                 | EIN | EIN | EIN |
| 2000      | AUS                                 | EIN | EIN | AUS |
| 2400      | AUS                                 | EIN | AUS | EIN |
| 3600      | AUS                                 | EIN | AUS | AUS |
| 4800      | AUS                                 | AUS | EIN | EIN |
| 7200      | AUS                                 | AUS | EIN | AUS |
| 9600      | AUS                                 | AUS | AUS | EIN |
| 19200     | AUS                                 | AUS | AUS | AUS |

Zeitkonstante für Wartezeit:  $T = 0,7 \cdot R19 \cdot C19$

| Schalter | Platz |
|----------|-------|
| S1 - 1   | K1    |
| S2 - 1   | K2    |
| S1 - 2   | H14   |
| S2 - 2   | H15   |
| S1 - 3   | M1    |
| S2 - 3   | M2    |
| S1 - 4   | K14   |
| S2 - 4   | K15   |
| S1 - 5   | Q3    |
| S2 - 5   | Q4    |



14.2.78

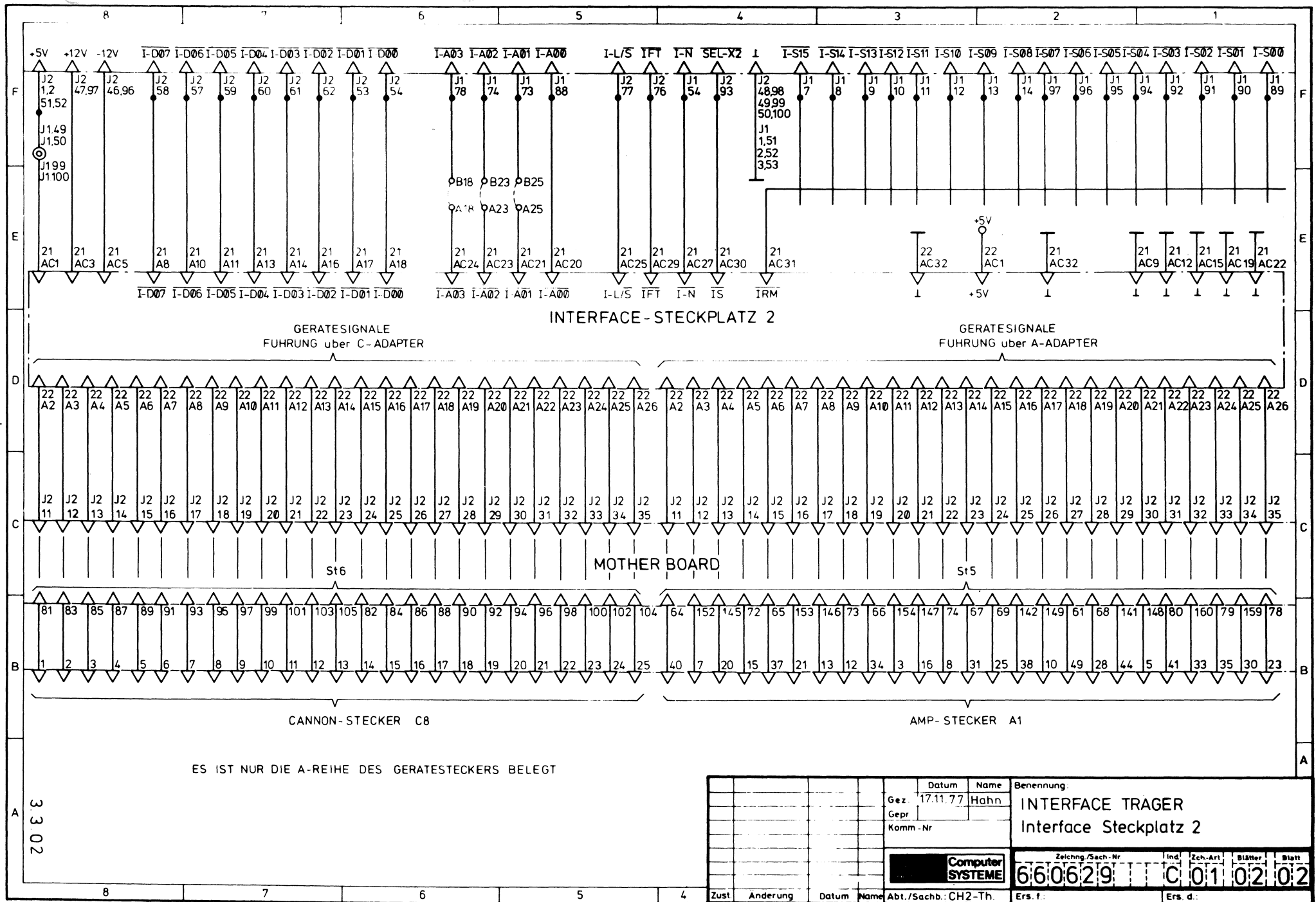
3.3 Interfaceträger

660 629 C

660 629 1 C







|                  |          |                   |      |                        |          |
|------------------|----------|-------------------|------|------------------------|----------|
| Datum            |          | Name              |      | Benennung              |          |
| 17.11.77         |          | Hahn              |      | INTERFACE TRAGER       |          |
| Gez.             |          |                   |      | Interface Steckplatz 2 |          |
| Gepr.            |          |                   |      |                        |          |
| Komm.-Nr.        |          |                   |      |                        |          |
| Computer SYSTEME |          | Zeichn./Sach.-Nr. |      | Ind.                   |          |
| 660629           |          | C 01              |      | 02 02                  |          |
| Zust.            | Änderung | Datum             | Name | Abt./Sachb.: CH2-Th.   | Ers. f.: |
|                  |          |                   |      |                        | Ers. d.: |

mit PAMPAS-Folie abkleben

AMP-St

St 64 Bu 10

J2

St 64 Bu 10

St 64 Bu 10

St 64 Bu 10

PAMPAS-Folie unter Stecker kleben  
(Leiterseite 1 cm umkleben)

660 629 000 C

DIETZ Computer SYSTEME

B-Seite

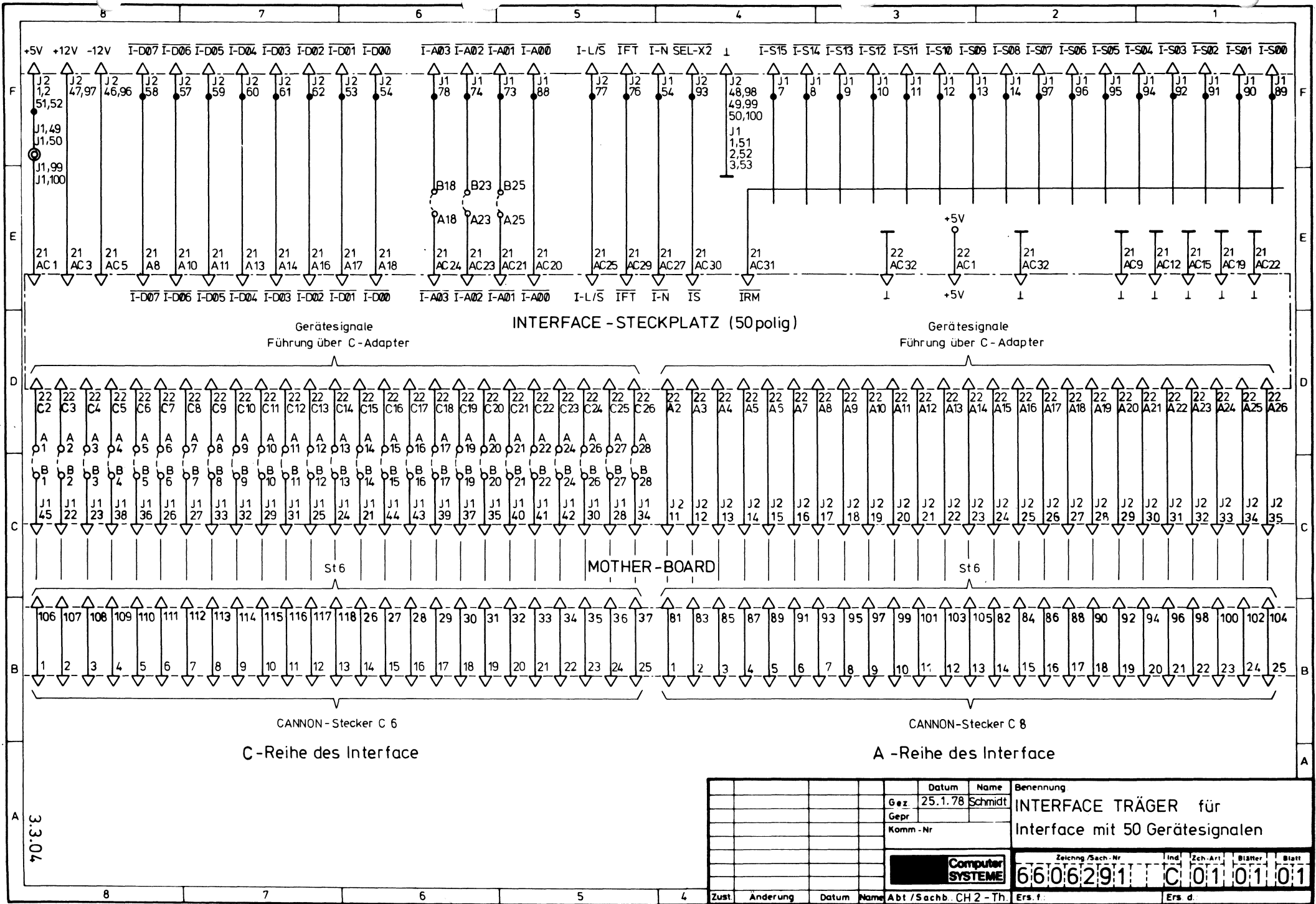
660 629 000 C

mit PAMPAS-Folie abkleben

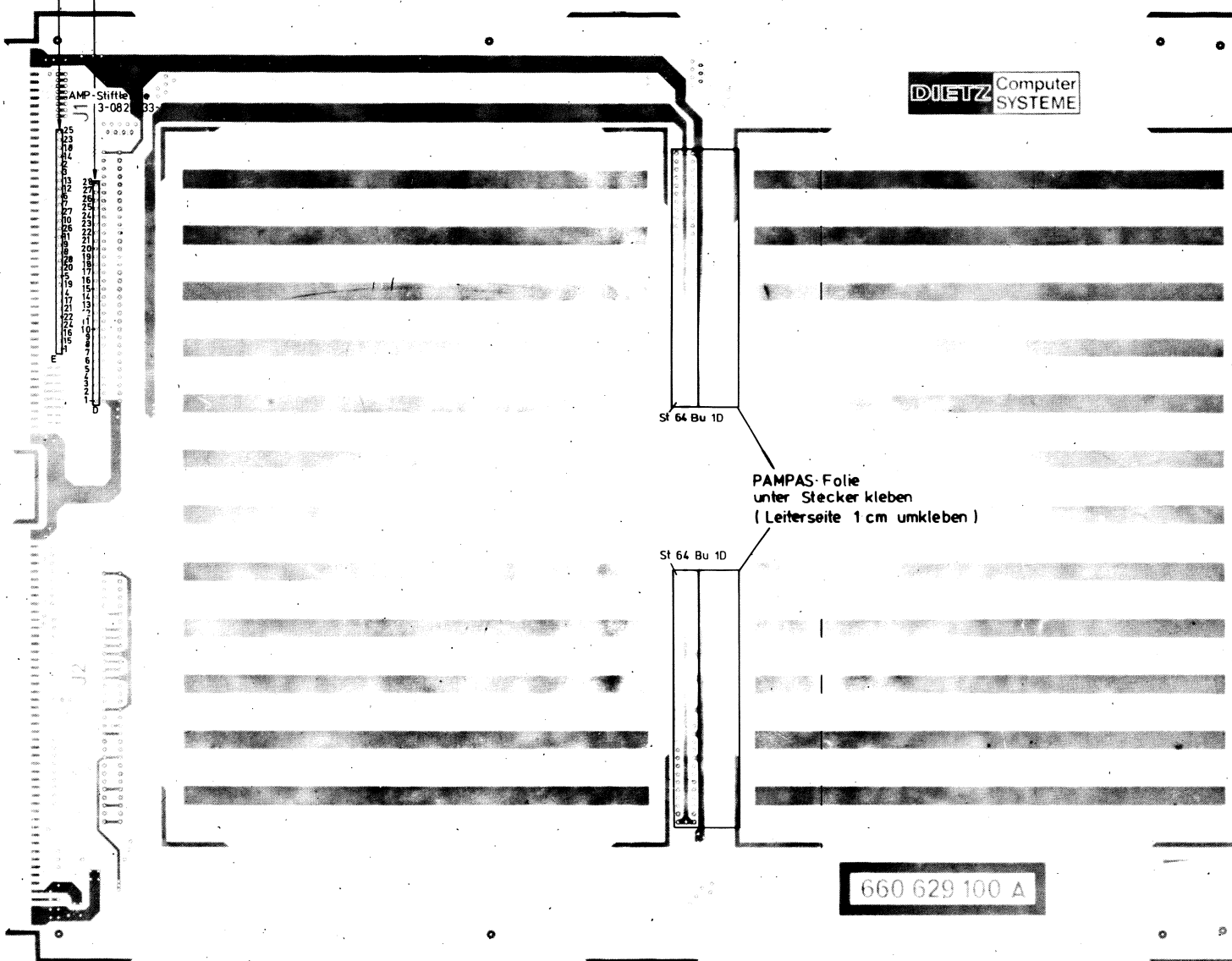
- ☐ abkleben
- ☐ trennen
- ☐ nach U.S. Wäsche einsetzen
- ☐ auf der Lötseite bestücken

|                                                                                     |                                   |                                                                                     |                             |
|-------------------------------------------------------------------------------------|-----------------------------------|-------------------------------------------------------------------------------------|-----------------------------|
|  | 0.1 $\mu$ F / 12 V<br>Sparschicht |  | 10 $\mu$ F / 16 V<br>Tantal |
|-------------------------------------------------------------------------------------|-----------------------------------|-------------------------------------------------------------------------------------|-----------------------------|

|  |  |  |                     |        |                         |      |             |           |       |
|--|--|--|---------------------|--------|-------------------------|------|-------------|-----------|-------|
|  |  |  | Datum               | Name   | Benennung               |      |             |           |       |
|  |  |  | Gez. 17.4.78        | Kibedi | BESTÜCKUNG              |      |             |           |       |
|  |  |  | Gepr. 25.11.77      | Kia    | Interfaceträger         |      |             |           |       |
|  |  |  | Gepr.               |        |                         |      |             |           |       |
|  |  |  | Komm.-Nr.           |        |                         |      |             |           |       |
|  |  |  | Computer<br>SYSTEME |        | Zzeichnung / Zeich.-Nr. | Ind. | Zeich.-Art. | Best.-Nr. | Blatt |
|  |  |  |                     | 660629 | C                       | 02   | 01          | 01        |       |



Stifte mit gleichen Zahlen in Wire-Wrap-Verdrahtung verbinden



Bestücken der Leiterplatte mit Verstärkung nach Zeichnung 660 100 082

Bauhöhe Best.- Seite mm

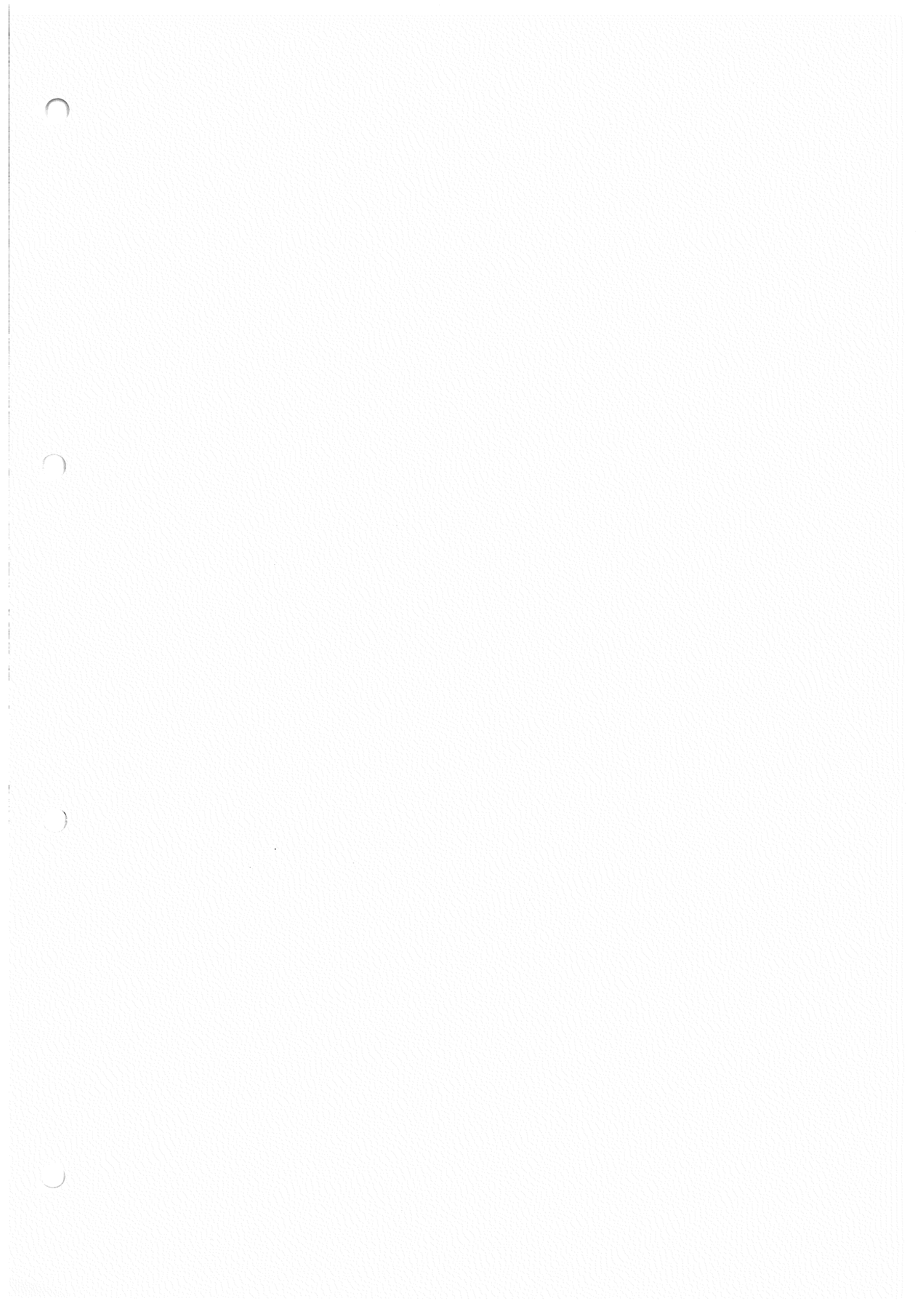
Leit.- Seite mm

- ☐ abkleben
- ☐ trennen
- ☐ nach U.S. Wäsche einsetzen
- ☐ auf der Lötseite bestücken

0.1 µF / 12 V  
Spannungsfest

10 µF / 16 V  
Tantal

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|---------|--------------------|---------|--------------------|---------|--------------------|---------|--------------------|
| 1       | C7.2               | 41      | frei               | 81      | C8.1               | 121     | frei               |
| 2       | C7.3               | 42      | frei               | 82      | C8.14              | 122     | frei               |
| 3       | C7.6               | 43      | frei               | 83      | C8.2               | 123     | frei               |
| 4       | C7.7               | 44      | frei               | 84      | C8.15              | 124     | C3.7               |
| 5       | C7.11              | 45      | frei               | 85      | C8.3               | 125     | C3.6               |
| 6       | C7.20              | 46      | frei               | 86      | C8.16              | 126     | C3.3               |
| 7       | C7.21              | 47      | frei               | 87      | C8.4               | 127     | C3.2               |
| 8       | C7.22              | 48      | frei               | 88      | C8.17              | 128     | C3.20              |
| 9       | frei               | 49      | frei               | 89      | C8.5               | 129     | C3.21              |
| 10      | frei               | 50      | frei               | 90      | C8.18              | 130     | C3.22              |
| 11      | frei               | 51      | C4.14              | 91      | C8.6               | 131     | C3.11              |
| 12      | frei               | 52      | C4.15              | 92      | C8.19              | 132     | C4.1               |
| 13      | frei               | 53      | C4.16              | 93      | C8.7               | 133     | C4.2               |
| 14      | frei               | 54      | C4.17              | 94      | C8.20              | 134     | C4.3               |
| 15      | frei               | 55      | C4.18              | 95      | C8.8               | 135     | C4.4               |
| 16      | frei               | 56      | C4.19              | 96      | C8.21              | 136     | C4.5               |
| 17      | frei               | 57      | C4.20              | 97      | C8.9               | 137     | C4.6               |
| 18      | C5.2               | 58      | C4.21              | 98      | C8.22              | 138     | C4.7               |
| 19      | C5.3               | 59      | C4.22              | 99      | C8.10              | 139     | C4.8               |
| 20      | C5.6               | 60      | C4.23              | 100     | C8.23              | 140     | C4.9               |
| 21      | C5.7               | 61      | C4.24              | 101     | C8.11              | 141     | C4.10              |
| 22      | C5.11              | 62      | C4.25              | 102     | C8.24              | 142     | C4.11              |
| 23      | C5.20              | 63      | C1.11              | 103     | C8.12              | 143     | C4.12              |
| 24      | C5.21              | 64      | C1.7               | 104     | C8.25              | 144     | C4.13              |
| 25      | C5.22              | 65      | C1.6               | 105     | C8.13              | 145     | frei               |
| 26      | C6.14              | 66      | C1.3               | 106     | C6.1               | 146     | C2.8               |
| 27      | C6.15              | 67      | C1.2               | 107     | C6.2               | 147     | C2.7               |
| 28      | C6.16              | 68      | C1.20              | 108     | C6.3               | 148     | C2.6               |
| 29      | C6.17              | 69      | C1.21              | 109     | C6.4               | 149     | C2.5               |
| 30      | C6.18              | 70      | C1.22              | 110     | C6.5               | 150     | C2.4               |
| 31      | C6.19              | 71      | C2.14              | 111     | C6.6               | 151     | C2.3               |
| 32      | C6.20              | 72      | C2.15              | 112     | C6.7               | 152     | C2.2               |
| 33      | C6.21              | 73      | C2.18              | 113     | C6.8               | 153     | C2.1               |
| 34      | C6.22              | 74      | C2.19              | 114     | C6.9               | 154     | C2.16              |
| 35      | C6.23              | 75      | C2.20              | 115     | C6.10              | 155     | C2.17              |
| 36      | C6.24              | 76      | C2.21              | 116     | C6.11              | 156     | C2.9               |
| 37      | C6.25              | 77      | C2.22              | 117     | C6.12              | 157     | C2.10              |
| 38      | frei               | 78      | C2.23              | 118     | C6.13              | 158     | C2.11              |
| 39      | frei               | 79      | C2.24              | 119     | frei               | 159     | C2.12              |
| 40      | frei               | 80      | C.225              | 120     | frei               | 160     | C2.13              |

|      |          |                                                                                     |          |                      |  |                                                  |  |       |         |       |       |
|------|----------|-------------------------------------------------------------------------------------|----------|----------------------|--|--------------------------------------------------|--|-------|---------|-------|-------|
|      |          | Datum                                                                               |          | Name                 |  | Benennung<br><b>C-ADAPTER</b><br>Steckerbelegung |  |       |         |       |       |
|      |          | Gez                                                                                 | 25.10.76 | Kibedi               |  |                                                  |  |       |         |       |       |
|      |          | Gepr                                                                                | 14.11.77 | 76                   |  |                                                  |  |       |         |       |       |
|      |          | Komm.-Nr.                                                                           |          |                      |  |                                                  |  |       |         |       |       |
|      |          |  |          |                      |  | Zeichnung / Sach-Nr.                             |  | Ind   | Zch-Art | Blatt | Blatt |
|      |          |                                                                                     |          |                      |  | 660612                                           |  | B     | 14      | 01    | 01    |
| Zust | Anderung | Datum                                                                               | Name     | Abt / Sachb. CH2-Th. |  | Ers f                                            |  | Ers d |         |       |       |



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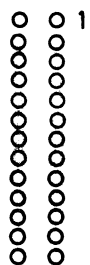
|       |          |       |      |                     |           |                      |                  |         |         |         |       |
|-------|----------|-------|------|---------------------|-----------|----------------------|------------------|---------|---------|---------|-------|
|       |          |       |      | Datum               | Name      | Benennung: C-ADAPTER |                  |         |         |         |       |
|       |          |       |      | Gez                 | 31.1.77   | Hahn                 | Lage der Stecker |         |         |         |       |
|       |          |       |      | Gepr                | 4. 11. 77 | 70                   |                  |         |         |         |       |
|       |          |       |      | Komm.-Nr.           |           |                      |                  |         |         |         |       |
|       |          |       |      | Computer<br>SYSTEME |           | Zeichnung / Sach-Nr  |                  | Ind     | Zch-Art | Blätter | Blatt |
|       |          |       |      |                     |           | 660612               |                  | B       |         | 01      | 01    |
| Zust. | Anderung | Datum | Name | Abt. / Sachb.       |           | Ers. f.              |                  | Ers. d. |         |         |       |

# STECKER 5

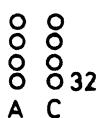
| ST<br>5 | Direkter<br>Stecker | ST<br>5 | Direkter<br>Stecker | ST<br>5 | Direkter<br>Stecker | ST<br>5 | Direkter<br>Stecker |
|---------|---------------------|---------|---------------------|---------|---------------------|---------|---------------------|
| 1       | D3.C2               | 41      | A2.c                | 81      | D3.A2               | 121     | A2.W                |
| 2       | D3.C3               | 42      | A2.y                | 82      | D3.A3               | 122     | A2.S                |
| 3       | D3.C4               | 43      | A2.w                | 83      | D3.A4               | 123     | A1.36               |
| 4       | D3.C5               | 44      | A1.64               | 84      | D3.A5               | 124     | A1.39               |
| 5       | D3.C6               | 45      | A1.67               | 85      | D3.A6               | 125     | A1.42               |
| 6       | D3.C7               | 46      | A1.75               | 86      | D3.A7               | 126     | A1.45               |
| 7       | D3.C8               | 47      | A1.82               | 87      | D3.A8               | 127     | A1.48               |
| 8       | D3.C9               | 48      | A1.72               | 88      | D3.A9               | 128     | A1.51               |
| 9       | D3.C10              | 49      | A1.47               | 89      | D3.A10              | 129     | A1.54               |
| 10      | D3.C11              | 50      | A1.53               | 90      | D3.A11              | 130     | A1.60               |
| 11      | D3.C12              | 51      | A1.77               | 91      | D3.A12              | 131     | A1.57               |
| 12      | D3.C13              | 52      | A1.79               | 92      | D3.A13              | 132     | A1.78               |
| 13      | D3.C14              | 53      | A1.76               | 93      | D3.A14              | 133     | A1.59               |
| 14      | D3.C15              | 54      | A1.73               | 94      | D3.A15              | 134     | A1.80               |
| 15      | D3.C16              | 55      | A1.70               | 95      | D3.A16              | 135     | A1.74               |
| 16      | D3.C17              | 56      | A1.65               | 96      | D3.A17              | 136     | A1.66               |
| 17      | D3.C18              | 57      | A1.62               | 97      | D3.A18              | 137     | A1.71               |
| 18      | D3.C19              | 58      | A1.58               | 98      | D3.A19              | 138     | A1.63               |
| 19      | D3.C20              | 59      | A1.55               | 99      | D3.A20              | 139     | A1.56               |
| 20      | D3.C21              | 60      | A1.52               | 100     | D3.A21              | 140     | A1.50               |
| 21      | D3.C22              | 61      | A1.49               | 101     | D3.A22              | 141     | A1.44               |
| 22      | D3.C23              | 62      | A1.46               | 102     | D3.A23              | 142     | A1.38               |
| 23      | D3.C24              | 63      | A1.43               | 103     | D3.A24              | 143     | A1.32               |
| 24      | D3.C25              | 64      | A1.40               | 104     | D3.A25              | 144     | A1.26               |
| 25      | D3.C26              | 65      | A1.37               | 105     | D3.A26              | 145     | A1.20               |
| 26      | D3.C27              | 66      | A1.34               | 106     | D3.A27              | 146     | A1.13               |
| 27      | D3.C28              | 67      | A1.31               | 107     | D3.A28              | 147     | A1.16               |
| 28      | D3.C29              | 68      | A1.28               | 108     | D3.A29              | 148     | A1.5                |
| 29      | D3.C30              | 69      | A1.25               | 109     | D3.A30              | 149     | A1.10               |
| 30      | D3.C31              | 70      | A1.22               | 110     | D3.A31              | 150     | A1.2                |
| 31      | A2.P                | 71      | A1.18               | 111     | A2.M                | 151     | A1.14               |
| 32      |                     | 72      | A1.15               | 112     | A2.H                | 152     | A1.7                |
| 33      | A2.E                | 73      | A1.12               | 113     | A2.C                | 153     | A1.21               |
| 34      | A2.A                | 74      | A1.8                | 114     | A2.B                | 154     | A1.3                |
| 35      | A2.D                | 75      | A1.4                | 115     | A2.F                | 155     | A1.11               |
| 36      | A2.J                | 76      | A1.1                | 116     | A2.L                | 156     | A1.17               |
| 37      | A2.N                | 77      | A1.29               | 117     | A2.R                | 157     | A1.24               |
| 38      | A2.T                | 78      | A1.23               | 118     | A2.V                | 158     | A1.27               |
| 39      | A2.X                | 79      | A1.35               | 119     | A2.Z                | 159     | A1.30               |
| 40      | A2.b                | 80      | A1.41               | 120     | A2.Q                | 160     | A1.33               |

|      |          |                        |      |                     |  |                              |         |
|------|----------|------------------------|------|---------------------|--|------------------------------|---------|
|      |          | Datum                  |      | Name                |  | Benennung                    |         |
|      |          | Gez 9.11.76            |      | Kibedi              |  | D-ADAPTER<br>Steckerbelegung |         |
|      |          | Gepr 4.11.77           |      | 70                  |  |                              |         |
|      |          | Kommission             |      |                     |  |                              |         |
|      |          | DIETZ Computer SYSTEME |      | Zeichnung / Sach-Nr |  | Ind                          | Zch-Art |
|      |          |                        |      | 660615              |  | B                            | 14      |
|      |          |                        |      |                     |  | Blatt                        | Blatt   |
|      |          |                        |      |                     |  | 01                           | 01      |
| Zust | Anderung | Datum                  | Name | Abt / Sachb CH2-Th  |  | Ers f                        | Ers d   |

Sicht auf die Bestückungsseite



D3 Direkt-Stecker  
64 polig



A2 AMP-Stecker  
26 polig



A1



ST5

80

|      |  |          |  |                     |  |      |  |                           |  |         |  |
|------|--|----------|--|---------------------|--|------|--|---------------------------|--|---------|--|
|      |  |          |  | Datum               |  | Name |  | Benennung: D-ADAPTER      |  |         |  |
|      |  |          |  | Gez 31.1.77         |  | Hahn |  | Lage der Stecker          |  |         |  |
|      |  |          |  | Gepr 4.11.77        |  | 70   |  |                           |  |         |  |
|      |  |          |  | Komm.-Nr.           |  |      |  |                           |  |         |  |
|      |  |          |  | Computer<br>SYSTEME |  |      |  | Zeichnung / Sach-Nr       |  |         |  |
|      |  |          |  |                     |  |      |  | 660615                    |  |         |  |
|      |  |          |  |                     |  |      |  | Ind Zch-Art Blätter Blatt |  |         |  |
|      |  |          |  |                     |  |      |  | B 01 01                   |  |         |  |
| Zust |  | Änderung |  | Datum               |  | Name |  | Abt / Sachb.              |  | Ers. f. |  |
|      |  |          |  |                     |  |      |  |                           |  | Ers. d. |  |

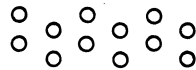
# STECKER 5

| ST<br>5 | AMP-<br>STECKER | ST<br>5 | AMP-<br>STECKER | ST<br>5 | AMP-<br>STECKER | ST<br>5 | AMP-<br>STECKER |
|---------|-----------------|---------|-----------------|---------|-----------------|---------|-----------------|
| 1       | A3.35           | 41      | A2.c            | 81      | A3.39           | 121     | A2.W            |
| 2       | A3.42           | 42      | A2.y            | 82      | A3.45           | 122     | A2.5            |
| 3       | A3.54           | 43      | A2.4            | 83      | A3.48           | 123     | A1.36           |
| 4       | A3.41           | 44      | A1.64           | 84      | A3.51           | 124     | A1.39           |
| 5       | A3.47           | 45      | A1.67           | 85      | A3.57           | 125     | A1.42           |
| 6       | A3.62           | 46      | A1.75           | 86      | A3.60           | 126     | A1.45           |
| 7       | A3.58           | 47      | A1.82           | 87      | A3.64           | 127     | A1.48           |
| 8       | A3.55           | 48      | A1.72           | 88      | A3.53           | 128     | A1.51           |
| 9       | A3.52           | 49      | A1.47           | 89      | A3.59           | 129     | A1.54           |
| 10      | A3.49           | 50      | A1.53           | 90      | A3.63           | 130     | A.160           |
| 11      | A3.46           | 51      | A1.77           | 91      | A3.56           | 131     | A.157           |
| 12      | A3.43           | 52      | A1.79           | 92      | A3.50           | 132     | A1.78           |
| 13      | A3.40           | 53      | A1.76           | 93      | A3.44           | 133     | A1.59           |
| 14      | A3.37           | 54      | A1.73           | 94      | A3.38           | 134     | A1.80           |
| 15      | A3.34           | 55      | A1.70           | 95      | A3.32           | 135     | A1.74           |
| 16      | A3.31           | 56      | A1.65           | 96      | A3.26           | 136     | A1.66           |
| 17      | A3.28           | 57      | A1.62           | 97      | A3.20           | 137     | A1.71           |
| 18      | A3.25           | 58      | A1.58           | 98      | A3.13           | 138     | A1.63           |
| 19      | A3.22           | 59      | A1.55           | 99      | A3.5            | 139     | A1.56           |
| 20      | A3.18           | 60      | A1.52           | 100     | A3.10           | 140     | A1.50           |
| 21      | A3.15           | 61      | A1.49           | 101     | A3.2            | 141     | A1.44           |
| 22      | A3.12           | 62      | A1.46           | 102     | A3.16           | 142     | A1.38           |
| 23      | A3.8            | 63      | A1.43           | 103     | A3.7            | 143     | A1.32           |
| 24      | A3.4            | 64      | A1.40           | 104     | A3.14           | 144     | A1.26           |
| 25      | A3.1            | 65      | A1.37           | 105     | A3.11           | 145     | A1.20           |
| 26      | A3.23           | 66      | A1.34           | 106     | A3.21           | 146     | A 1.13          |
| 27      | A3.29           | 67      | A1.31           | 107     | A3.24           | 147     | A1.16           |
| 28      | A3.3            | 68      | A1.28           | 108     | A3.27           | 148     | A1.5            |
| 29      | A3.17           | 69      | A1.25           | 109     | A3.33           | 149     | A1.10           |
| 30      | A3.30           | 70      | A1.22           | 110     | A3.36           | 150     | A1.2            |
| 31      | A2.P            | 71      | A1.18           | 111     | A2.M            | 151     | A1.14           |
| 32      |                 | 72      | A1.15           | 112     | A2.H            | 152     | A1.7            |
| 33      | A2.E            | 73      | A1.12           | 113     | A2.C            | 153     | A1.21           |
| 34      | A2.A            | 74      | A1.8            | 114     | A2.B            | 154     | A1.3            |
| 35      | A2.D            | 75      | A1.4            | 115     | A2.F            | 155     | A1.11           |
| 36      | A2.J            | 76      | A1.1            | 116     | A2.L            | 156     | A1.17           |
| 37      | A2.N            | 77      | A1.29           | 117     | A2.R            | 157     | A1.24           |
| 38      | A2.T            | 78      | A1.23           | 118     | A2.V            | 158     | A1.27           |
| 39      | A2.X            | 79      | A1.35           | 119     | A2.Z            | 159     | A1.30           |
| 40      | A2.b            | 80      | A1.41           | 120     | A2.a            | 160     | A1.33           |

|      |          |                           |      |                      |  |                                            |         |         |       |
|------|----------|---------------------------|------|----------------------|--|--------------------------------------------|---------|---------|-------|
|      |          | Datum                     |      | Name                 |  | Benennung<br>A- ADAPTER<br>Steckerbelegung |         |         |       |
|      |          | Gez                       |      | Kibedi               |  |                                            |         |         |       |
|      |          | Gepr                      |      | 4.11.77 70           |  |                                            |         |         |       |
|      |          | Name                      |      |                      |  |                                            |         |         |       |
|      |          | DIETZ Computer<br>SYSTEME |      | Zeichnung / Sach-Nr  |  | Ind                                        | Zch-Art | Blätter | Blatt |
|      |          |                           |      | 660613               |  | B                                          | 14      | 01      | 01    |
| Zust | Anderung | Datum                     | Name | Abt / Sachb CH2- Th. |  | Ers f                                      |         | Ers d   |       |

Sicht auf die Bestückungsseite

1



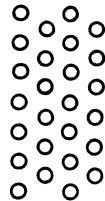
A3

AMP-Stecker  
75 polig

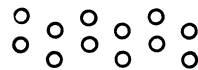


A2

AMP-Stecker  
26 polig



ST5



A1

AMP-Stecker  
75 polig



80

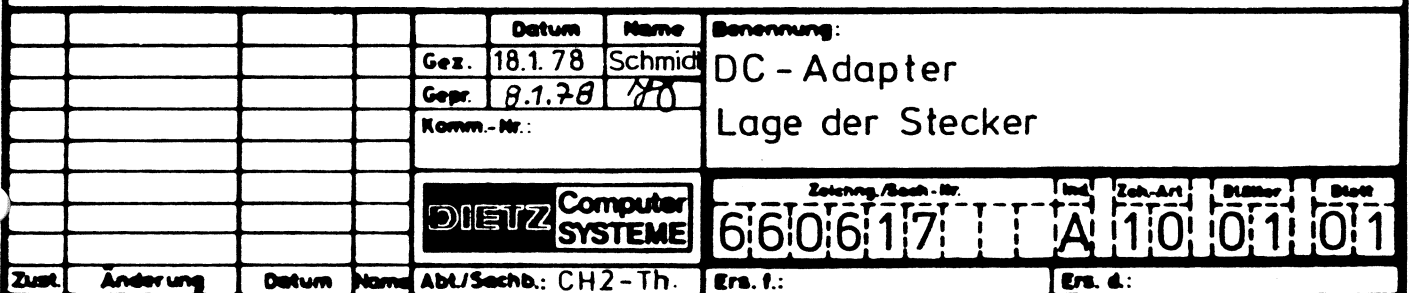
|       |          |       |      |                     |         |                      |                  |        |         |         |       |
|-------|----------|-------|------|---------------------|---------|----------------------|------------------|--------|---------|---------|-------|
|       |          |       |      | Datum               | Name    | Benennung: A-ADAPTER |                  |        |         |         |       |
|       |          |       |      | Gez                 | 31.1.77 | Hahn                 | Lage der Stecker |        |         |         |       |
|       |          |       |      | Gepr                | 4.11.77 | <i>[Signature]</i>   |                  |        |         |         |       |
|       |          |       |      | Komm.-Nr.           |         |                      |                  |        |         |         |       |
|       |          |       |      | Computer<br>SYSTEME |         | Zeichnung / Sach-Nr  |                  | Ind    | Zch-Art | Blätter | Blatt |
|       |          |       |      |                     |         | 660613               |                  | B      |         | 01      | 01    |
| Zust. | Änderung | Datum | Name | Abt. / Sachb        |         | Ers f.               |                  | Ers d. |         |         |       |

3.6.02

# STECKER 5

| ST 5 | Direkter Stecker | ST 5 | Direkter Stecker | ST 5 | Direkter Stecker | ST 5 | Direkter Stecker |
|------|------------------|------|------------------|------|------------------|------|------------------|
| 1    | D3.C2            | 41   |                  | 81   | D3.A2            | 121  |                  |
| 2    | D3.C3            | 42   |                  | 82   | D3.A3            | 122  |                  |
| 3    | D3.C4            | 43   |                  | 83   | D3.A4            | 123  |                  |
| 4    | D3.C5            | 44   | C13.21           | 84   | D3.A5            | 124  | C13.22           |
| 5    | D3.C6            | 45   | C16.15           | 85   | D3.A6            | 125  | C16.1            |
| 6    | D3.C7            | 46   | C13.20           | 86   | D3.A7            | 126  | C16.16           |
| 7    | D3.C8            | 47   | C16.2            | 87   | D3.A8            | 127  | C13.7            |
| 8    | D3.C9            | 48   | C16.14           | 88   | D3.A9            | 128  | C16.3            |
| 9    | D3.C10           | 49   | C13.3            | 89   | D3.A10           | 129  | C13.11           |
| 10   | D3.C11           | 50   | C13.6            | 90   | D3.A11           | 130  | C13.2            |
| 11   | D3.C12           | 51   | C16.21           | 91   | D3.A12           | 131  | C16.22           |
| 12   | D3.C13           | 52   | C16.4            | 92   | D3.A13           | 132  | C16.20           |
| 13   | D3.C14           | 53   | C16.18           | 93   | D3.A14           | 133  | C16.17           |
| 14   | D3.C15           | 54   | C16.19           | 94   | D3.A15           | 134  | C16.5            |
| 15   | D3.C16           | 55   | C16.25           | 95   | D3.A16           | 135  | C16.8            |
| 16   | D3.C17           | 56   | C16.11           | 96   | D3.A17           | 136  | C16.9            |
| 17   | D3.C18           | 57   | C16.10           | 97   | D3.A18           | 137  | C16.23           |
| 18   | D3.C19           | 58   | C16.24           | 98   | D3.A19           | 138  |                  |
| 19   | D3.C20           | 59   | C16.6            | 99   | D3.A20           | 139  | C16.12           |
| 20   | D3.C21           | 60   | C16.13           | 100  | D3.A21           | 140  | C16.7            |
| 21   | D3.C22           | 61   | C18.17           | 101  | D3.A22           | 141  | C18.19           |
| 22   | D3.C23           | 62   | C15.2            | 102  | D3.A23           | 142  | C18.15           |
| 23   | D3.C24           | 63   | C15.11           | 103  | D3.A24           | 143  | C15.6            |
| 24   | D3.C25           | 64   | C18.1            | 104  | D3.A25           | 144  | C15.21           |
| 25   | D3.C26           | 65   | C18.5            | 105  | D3.A26           | 145  | C18.3            |
| 26   | D3.C27           | 66   | C18.9            | 106  | D3.A27           | 146  | C18.7            |
| 27   | D3.C28           | 67   | C18.13           | 107  | D3.A28           | 147  | C18.11           |
| 28   | D3.C29           | 68   | C18.18           | 108  | D3.A29           | 148  | C18.20           |
| 29   | D3.C30           | 69   | C18.14           | 109  | D3.A30           | 149  | C18.16           |
| 30   | D3.C31           | 70   | C15.7            | 110  | D3.A31           | 150  | C15.3            |
| 31   |                  | 71   | C15.22           | 111  |                  | 151  | C15.20           |
| 32   |                  | 72   | C18.4            | 112  |                  | 152  | C18.2            |
| 33   | C17.3            | 73   | C18.8            | 113  | C17.2            | 153  | C18.6            |
| 34   | C17.7            | 74   | C18.12           | 114  | C17.6            | 154  | C18.10           |
| 35   | C17.20           | 75   |                  | 115  | C17.11           | 155  |                  |
| 36   | C17.21           | 76   |                  | 116  |                  | 156  |                  |
| 37   | C17.22           | 77   |                  | 117  |                  | 157  |                  |
| 38   |                  | 78   | C18.25           | 118  |                  | 158  |                  |
| 39   |                  | 79   | C18.23           | 119  |                  | 159  | C18.24           |
| 40   |                  | 80   | C18.21           | 120  |                  | 160  | C18.22           |

|       |          |              |      |                          |  |                            |  |         |         |         |       |
|-------|----------|--------------|------|--------------------------|--|----------------------------|--|---------|---------|---------|-------|
|       |          | Datum        |      | Name                     |  | Benennung:                 |  |         |         |         |       |
|       |          | Gez 5.12.77  |      | Schmidt                  |  | DC-ADAPTER Steckerbelegung |  |         |         |         |       |
|       |          | Gepr 5.12.77 |      | KZ                       |  |                            |  |         |         |         |       |
|       |          | Komm.-Nr.    |      |                          |  |                            |  |         |         |         |       |
|       |          | Nr.          |      | Computer SYSTEME         |  | Zeichnung / Zeich-Nr       |  | Ind     | Zch-Art | Blätter | Blatt |
|       |          |              |      |                          |  | 660617                     |  | A       | 01      | 01      | 01    |
| Zust. | Änderung | Datum        | Name | Abt. / Sachb. CH 1 - KZ. |  | Ers. f.                    |  | Ers. d. |         |         |       |



C

C

C

C



### 3.9    Arithmetischer Prozessor

660 670 B,C1-2

Beschreibung

Blockschaltbild

Stromlaufplan

Bestückung

ROM Tabelle

Signalkatalog

## 1.0 Allgemeines

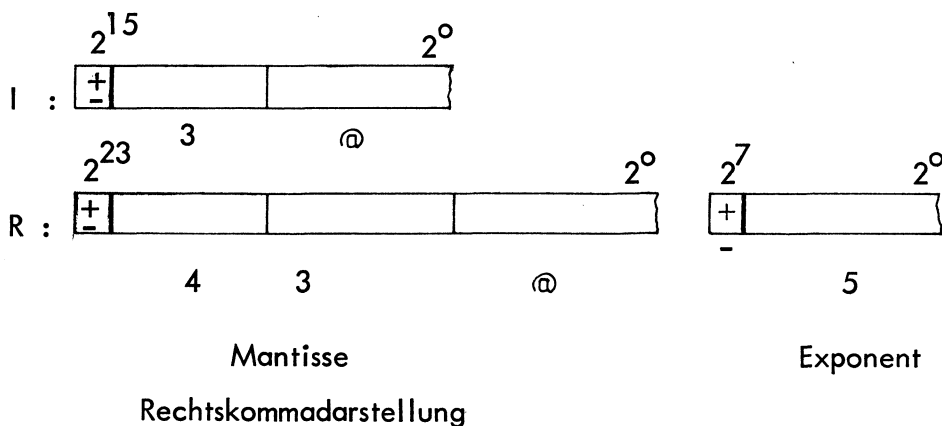
Die Funktionen des Arithmetik-Prozessors (AP) sind in den Befehlsvorrat des 621 X2 eingebunden; der AP wird aktiviert durch den Maschinen-code 'ØC (ein noch freier Code der Gruppe Steuerbefehle), holt sich dann Operanden und Betriebsart im direkten Poolzugriff, führt die Betriebsart aus und legt Ergebnis und Fehlerwort wiederum im direkten Poolzugriff ab. Die CPU geht während dieser Zeit in den Wartezustand, so daß kein Ebenenwechsel oder erneuter Zugriff zum AP erfolgen kann.

Operanden, Ergebnisse und Parameter wie Betriebsart und Fehlerwort sind entsprechend dem Einsprung in die Software-Arithmetik den Registern @ bis '11 und '19 zugeordnet.

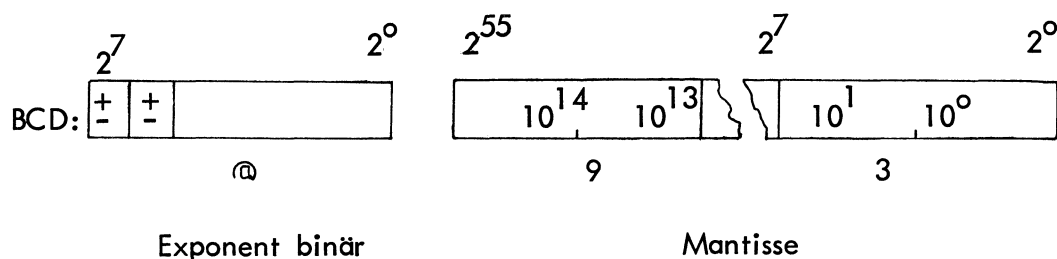
| Register       | @     | 3 | 4    | 5 | 6    | 7 | 8 | 9 | A     | B | C | D | E | F | 10 | 11 |
|----------------|-------|---|------|---|------|---|---|---|-------|---|---|---|---|---|----|----|
| Integer 16 bit | I     | 1 | Rest |   |      |   |   |   | I     | 2 |   |   |   |   |    |    |
| Integer 32 bit | ID1   |   |      |   | Rest |   |   |   | I     |   | D | 2 |   |   |    |    |
| Real 32 bit    | R 1   |   |      |   |      |   |   |   | R     |   | 2 |   |   |   |    |    |
| Real 64 bit    | D 1   |   |      |   |      |   |   |   | D 2   |   |   |   |   |   |    |    |
| BCD            | BCD 1 |   |      |   |      |   |   |   | BCD 2 |   |   |   |   |   |    |    |

Mit Ausnahme der BCD-Operanden sind alle Zahlendarstellungen der Zweierkomplementarithmetik angepaßt, die Dezimalzahlen sind nach Betrag und Vorzeichen dargestellt.

Zahlenformate:



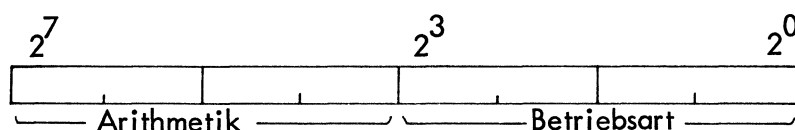
Die Zahlenformate für 32 bit-Festkommazahlen (ID) und 64 bit-Gleitkommazahlen sind analog zu den Formaten I und R. Die angegebenen Registerzuordnungen beziehen sich auf den 1. Operanden und gelten für Operand 2 sinngemäß



2<sup>6</sup> = Signum Exponent

2<sup>7</sup> = Signum Mantisse

In Register '19 wird die Betriebsart übergeben:



0 : 16 bit Integer  
1 : 32 bit Integer  
2 : 32 bit Real  
3 : 64 bit Real  
4 : BCD

0 : +  
1 : -  
2 : \*  
3 : /

Nach Ausführung der Betriebsart steht im Register '7E das Fehlerwort:

'00 : fehlerfrei  
'55 : Überlauf  
'56 : Operation nicht durchführbar  
'57 : Hardware nicht funktionsbereit (time out)

Die folgenden Rechenzeiten des AP beinhalten das Holen der Operanden, die Ausführungszeit und das Ablegen des Ergebnisses und des Fehlerwortes im Pool. Die Operanden können anormalisiert sein, das Ergebnis ist normalisiert. Wenn bei Addition und Subtraktion beide Operanden den Exponent Null haben, wird das Ergebnis auch mit Exponent Null ausgegeben, sofern der Exponent Null bleiben kann.

Die Rechenzeiten dieses speziellen Falles (Operand A, Operand B, Ergebnis alle Exponent = Null) sind kürzer.

|                | + -        | x           | /           |
|----------------|------------|-------------|-------------|
| 16 bit Integer | 5 $\mu$ s  | 10 $\mu$ s  | 11 $\mu$ s  |
| 32 bit Integer | 7 $\mu$ s  | 29 $\mu$ s  | 25 $\mu$ s  |
| 32 bit Real    | 30 $\mu$ s | 40 $\mu$ s  | 38 $\mu$ s  |
| 64 bit Real    | 62 $\mu$ s | 125 $\mu$ s | 100 $\mu$ s |

Alle Angaben sind maximale Ausführungszeiten einschließlich Normieren der Operanden und des Ergebnisses.

Wenn der AP durch einen Fehler zu lange rechnen sollte, wird er durch eine Überwachungsschaltung gestoppt und ein Pool-Parity-Error zur CPU gemeldet.

Die Interface-Adresse '160 X wird auch von dem AP benutzt. X steht für Ø bis F, es wird aber immer dasselbe Register angesprochen.

Die Bits 7, 6 und 5 können beschrieben und die Bits 7, 6 und 4 können gelesen werden. Die Bits haben folgende Bedeutung:

Das Register '160 X ist von der Bedienungskonsole nur lesbar aber nicht setz- oder löschar.

Die CPU kann aber dieses Register lesen und setzen.

- Bit 7      Wird von der internen Zeitüberwachungsschaltung des AP gesetzt, wenn durch einen Hardware-Fehler ein Pool-Parity-Error durch den AP generiert wurde. Man kann hier abfragen, ob der Error vom AP kam. Das Bit muß anschließend zurückgesetzt werden.
- Bit 6      Wird zu Testzwecken gesetzt, um den AP auf Einzelschrittbetrieb umzustellen. Dann müssen die Pooldaten über Testsockel simuliert werden.
- Bit 5      Löst die Ausführung eines Mikroprogrammschrittes aus.

Bit 4                      Zeigt bei Einzelschrittbetrieb an, ob AP gerade rechnet  
oder schon fertig ist und steht.

Mit den Schaltern SB1 und SB8, IC-Steckplatz A18 wird die maximale Rechenzeit bis zum Ansprechen der Zeitüberwachungsschaltung eingestellt. Die Zeiten der einzelnen Schalter sind dann zu berücksichtigen, wenn sie auf OFF stehen. Die Zeiten addieren sind.

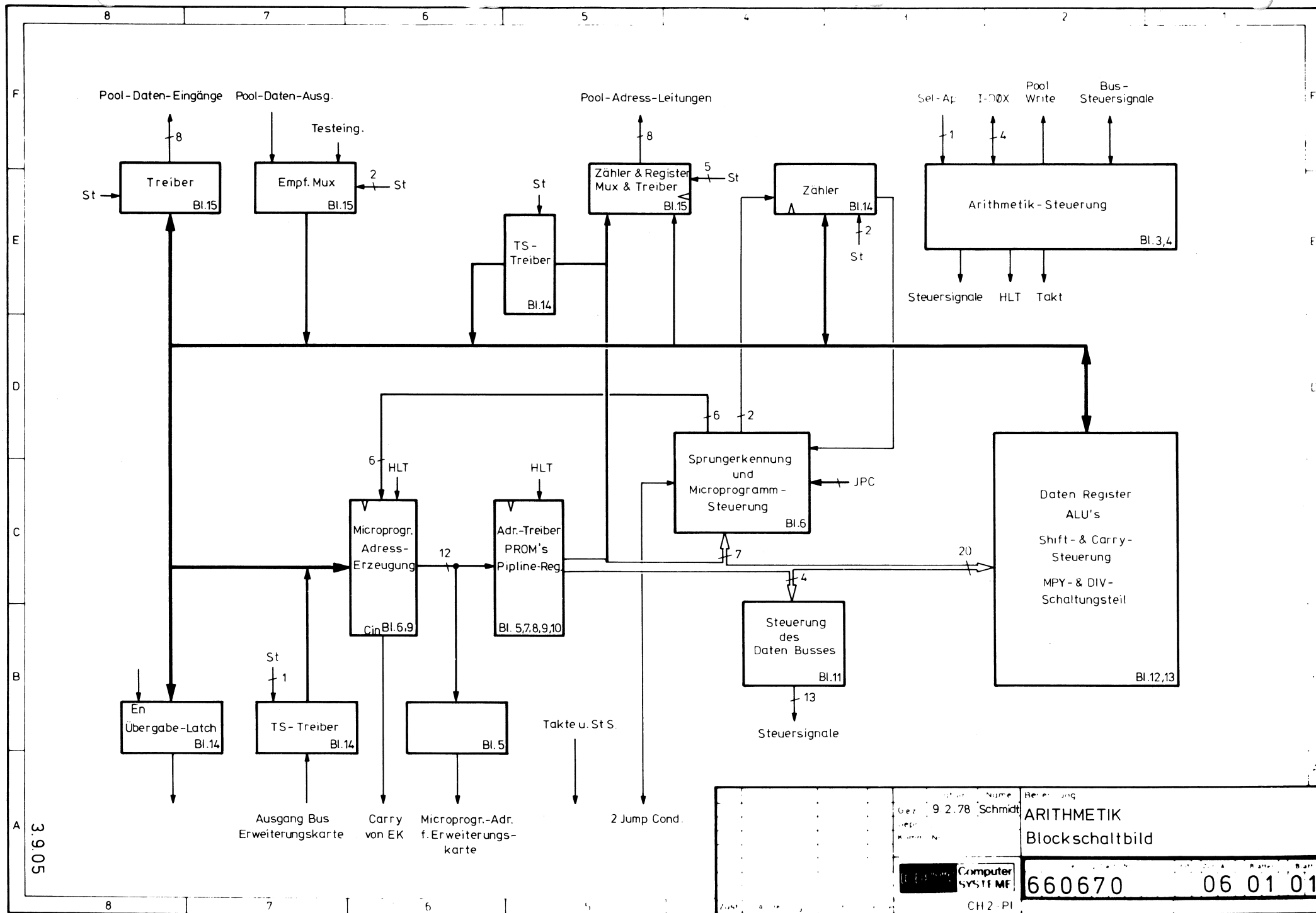
|                  |                  |
|------------------|------------------|
| SB 1 = 84    us  | SB 5 = 2,6 ms    |
| SB 2 = 1,3 ms    | SB 6 = 168    us |
| SB 3 = 42    us  | SB 7 = 5,2 ms    |
| SB 4 = 660    us | SB 8 = 336    us |

Für den Grundausbau müssen alle Schalter bis auf SB 6 ON sein.

Mit den Schaltern SA5, SA6 und SA7, IC-Steckplatz B17 wird angegeben, ob nur der Grundausbau vorliegt (alle Schalter geschlossen) oder nicht. SA7 muß geöffnet werden, wenn die ROM-Adressen '400 bis '7FF bestückt sind; SA6 wenn die Adressen '800 bis 'BFF und SA5 wenn die Adressen 'C00 bis 'FFF bestückt sind.

Wenn Schalter SA4 ON ist, wird jeder Zyklus mit Poolzugriff um 40 ns verlängert.

Für die Grundversion sind die Schalter SA5 bis SA7 auf ON und der Schalter SA4 auf OFF zu stellen.



|          |         |      |         |             |                 |
|----------|---------|------|---------|-------------|-----------------|
| Gez.     | 9.2.78  | Name | Schmidt | Bezeichnung | ARITHMETIK      |
| Proj.    |         |      |         |             | Blockschaltbild |
| Computer | SYSTEME |      |         |             |                 |
| 660670   |         |      |         |             | 06 01 01        |
| CH 2-PI  |         |      |         |             |                 |

# AP

## STECKER J1

|      |          |      |          |
|------|----------|------|----------|
| 1    | 0V       | 41   | 0V       |
| 2    | + 5 V    | 42   | + 5 V    |
| 3    | -15V     | 43   | -15V     |
| 4    | 0V       | 44   | 0V       |
| 5    | +15V     | 45   | +15V     |
| 6    | + 5 V RU | 46   | I-A09    |
| 7    | I-A16    | 47   | I-A08    |
| 8 *  | P-DI 0   | 48   | I-A07    |
| 9 *  | P-DI 1   | 49   | I-A12    |
| 10 * | P-DI 2   | 50   | I-A11    |
| 11 * | P-DI3    | 51   | 0V       |
| 12 * | P-DI4    | 52   | I-A10    |
| 13 * | P-DI5    | 53   | I-A04    |
| 14 * | P-DI6    | 54   | 0V       |
| 15 * | P-DI7    | 55   | I-A05    |
| 16   | P-DI8    | 56   | I-A06    |
| 17 * | P-DO0    | 57   | 0V       |
| 18 * | P-DO1    | 58   | I-A01    |
| 19 * | P-DO2    | 59   | I-A02    |
| 20 * | P-DO3    | 60   | 0V       |
| 21 * | P-DO4    | 61   | I-A03    |
| 22 * | P-DO5    | 62   | I-A13    |
| 23 * | P-DO6    | 63 * | GR       |
| 24 * | P-DO7    | 64   | COOP     |
| 25   | P-DO8    | 65   | + 5 V WP |
| 26   | I-A15    | 66   | 0V       |
| 27   | + 5 V    | 67   | 0V       |
| 28   | MI       | 68   |          |
| 29   | MI       | 69   |          |
| 30   | MI       | 70   | I-A00    |
| 31   |          | 71   |          |
| 32   | ADOP     | 72   |          |
| 33   | MBI      | 73   | MI       |
| 34   | I-A14    | 74   |          |
| 35   | BCL      | 75   |          |
| 36   | DA       | 76   | MI-0     |
| 37   | TIOP     | 77   | MI-1     |
| 38   | MP       | 78   |          |
| 39   |          | 79   | RP       |
| 40   | 0V       | 80   | 0V       |

## STECKER J2

|      |           |    |          |
|------|-----------|----|----------|
| 1    | 0V        | 41 | 0V       |
| 2 *  | I-D06     | 42 | I-D01    |
| 3 *  | I-D07     | 43 | I-D00    |
| 4 *  | I-D05     | 44 | I-D08    |
| 5 *  | I-D04     | 45 | I-D18    |
| 6 *  | I-D06     | 46 | I-D03    |
| 7 *  | I-D07     | 47 | I-D02    |
| 8 *  | I-D05     | 48 | I-D01    |
| 9 *  | I-D04     | 49 | I-D00    |
| 10   | I-D03     | 50 | I-D08    |
| 11   | I-D02     | 51 | I-D18    |
| 12 * | P-A00     | 52 | I-D17    |
| 13 * | P-A01     | 53 | I-D17    |
| 14 * | P-A02     | 54 | I-D16    |
| 15 * | P-A03     | 55 | 0V       |
| 16 * | P-A04     | 56 | I-D16    |
| 17 * | P-A05     | 57 | I-D15    |
| 18 * | P-A06     | 58 | I-D15    |
| 19 * | P-A07     | 59 | I-D14    |
| 20   | P-A08     | 60 | 0V       |
| 21   | P-A09     | 61 | I-D14    |
| 22   | P-A10     | 62 | I-D13    |
| 23   | P-A11     | 63 | I-D13    |
| 24   | P-SEL     | 64 | 0V       |
| 25 * | P-RP      | 65 | 0V       |
| 26   | P-RDY     | 66 | 0V       |
| 27 * | P-BUSY    | 67 | 0V       |
| 28 * | P-RWS     | 68 | 0V       |
| 29 * | P-PE      | 69 | I-D12    |
| 30 * | SEL-AP    | 70 | I-D12    |
| 31 * | M-GKP-EN  | 71 | I-D11    |
| 32 * | K-CLK-CPU | 72 | I-D11    |
| 33   | + 9 V     | 73 | I-D10    |
| 34   | + 9 V     | 74 | I-D10    |
| 35   | 0V        | 75 | + 5 V PU |
| 36   | + 15 V    | 76 | + 15 V   |
| 37   | 0V        | 77 | 0V       |
| 38   | - 15 V    | 78 | - 15 V   |
| 39   | + 5 V     | 79 | + 5 V    |
| 40   | 0V        | 80 | 0V       |

\* Von der Arithmetik belegt !

Benennung  
ARITHMETIK  
Steckerbelegung

Datum  
6.1.78  
Gez.  
Gepr.  
Komm.-Nr.

Computer  
SYSTEME

Zust.  
C2  
C1

Abt./Sachb.  
CH2-Pl.

Ind.  
Zch.-Art.  
Blätter

Blatt  
B 01

Ers. d.  
Ers. f.

3.9.06

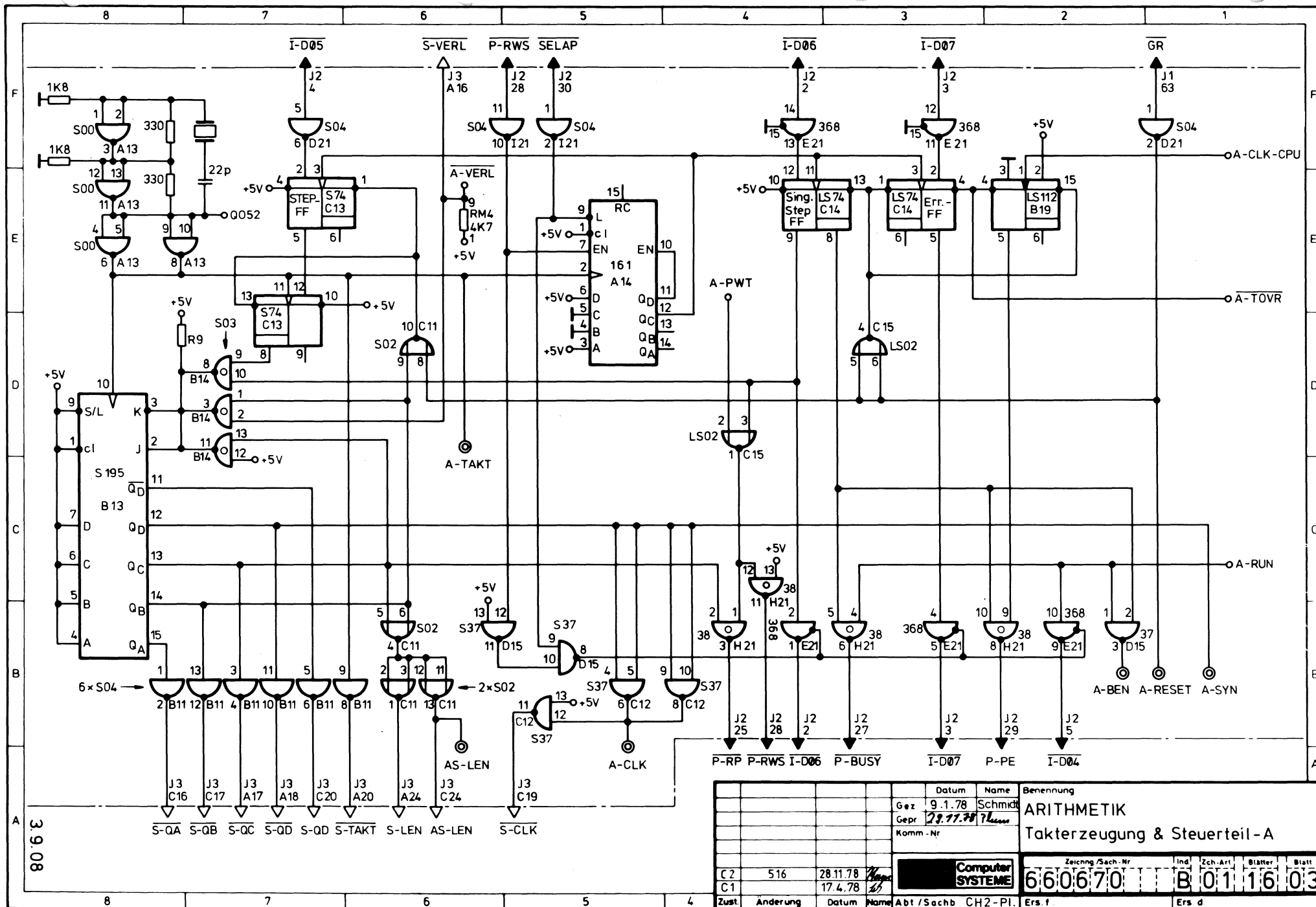
# J3 (Anschluß f. Sandwich)

| Reihe A |         |                                 | Reihe C |        |                               |
|---------|---------|---------------------------------|---------|--------|-------------------------------|
| 1       | GND     |                                 | 1       | GND    |                               |
| 2       | GND     |                                 | 2       | GND    |                               |
| 3       | VCC     |                                 | 3       | VCC    |                               |
| 4       | VCC     |                                 | 4       | VCC    |                               |
| 5       | VCC     |                                 | 5       | VCC    |                               |
| 6       | S-DI5   | Dateneingang von Arithmetik E   | 6       | S-DO5  | Datenausgang von Arithmetik A |
| 7       | S-DO7   | Datenausgang von Arithmetik A   | 7       | S-DI7  | Dateneingang von Arithmetik E |
| 8       | S-DI6   | Dateneingang von Arithmetik E   | 8       | S-DO6  | Datenausgang von Arithmetik A |
| 9       | S-DO4   | Datenausgang von Arithmetik A   | 9       | S-DI4  | Dateneingang von Arithmetik E |
| 10      | GND     |                                 | 10      | GND    |                               |
| 11      | VCC     |                                 | 11      | VCC    |                               |
| 12      | S-DO2   | Datenausgang von Arithmetik A   | 12      | S-DI2  | Dateneingang von Arithmetik E |
| 13      | S-DI3   | Dateneingang von Arithmetik E   | 13      | S-DO3  | Datenausgang von Arithmetik A |
| 14      | S-DO1   | Datenausgang von Arithmetik A   | 14      | S-DI1  | Dateneingang von Arithmetik E |
| 15      | S-DI0   | Dateneingang von Arithmetik E   | 15      | S-DO0  | Datenausgang von Arithmetik A |
| 16      | S-VERL  | Taktzyklusverlängerung E (o.C.) | 16      | S-QA   | Ausgang Shift-Reg. S195 AP    |
| 17      | S-QC    | Ausgang Shift-Reg. S195 AP      | 17      | S-QB   | Ausgang Shift-Reg. S195 AP    |
| 18      | S-QD    | Ausgang Shift-Reg. S195 AP      | 18      | S-HLT  | HALT (Rechng. beendet) AU     |
| 19      | S-JPC 2 | Jump Condition v. Sandw. E      | 19      | S-CLK  | System Clock AP               |
| 20      | S-Takt  | Oszillator-Takt AP              | 20      | S-QD   | Ausgang Shift-Reg. S195 AU    |
| 21      | S-JPC 1 | Jump Condition v. Sandw. E      | 21      | S-CIN  | Carry Input Sequencer E       |
| 22      | GND     |                                 | 22      | GND    |                               |
| 23      | VCC     |                                 | 23      | VCC    |                               |
| 24      | S-LEN   | Latchenable AP                  | 24      | AS-LEN | Latchenable AU                |
| 25      | S-R7    | ROM Adresse 7 AP                | 25      | S-R0   | ROM Adresse 0 AP              |
| 26      | S-R6    | ROM Adresse 6 AP                | 26      | S-R1   | ROM Adresse 1 AP              |
| 27      | S-R4    | ROM Adresse 4 AP                | 27      | S-R3   | ROM Adresse 3 AP              |
| 28      | S-R5    | ROM Adresse 5 AP                | 28      | S-R2   | ROM Adresse 2 AP              |
| 29      | S-R9    | ROM Adresse 9 AP                | 29      | S-R8   | ROM Adresse 8 AP              |
| 30      | S-RA    | ROM Adresse A AP                | 30      | S-RB   | ROM Adresse B AP              |
| 31      | GND     |                                 | 31      | GND    |                               |
| 32      | GND     |                                 | 32      | GND    |                               |

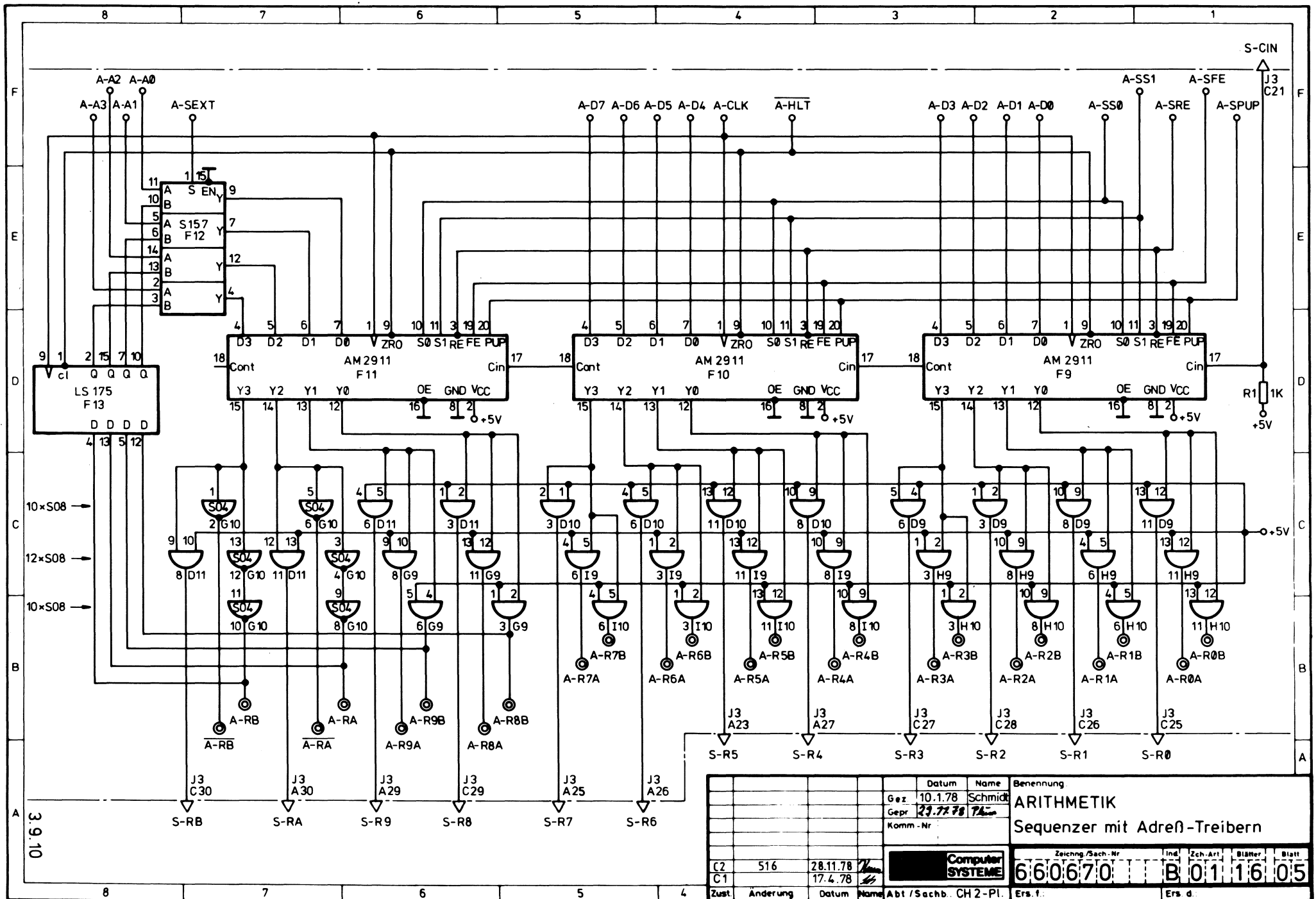
AP = Ausgang gepuffert  
AU = Ausgang ungepuffert

|                                     |  |                  |  |           |         |           |           |
|-------------------------------------|--|------------------|--|-----------|---------|-----------|-----------|
| Benennung                           |  | Name             |  | Datum     | Gez.    | Gepr.     | Komm.-Nr. |
| ARITHMETIK                          |  | Schmidt          |  | 6.1.78    | 17.7.78 | 17.7.78   |           |
| Anschlußbelegung f. Sandwich-St. J3 |  | Computer SYSTEME |  |           |         |           |           |
| Zeichn. Nach-Nr.                    |  | Blatt-Nr.        |  | Blatt-Nr. |         | Blatt-Nr. |           |
| 660670                              |  | B 0116           |  | B 0116    |         | B 0116    |           |
| Ers. 1                              |  | Ers. 1           |  | Ers. 1    |         | Ers. 1    |           |

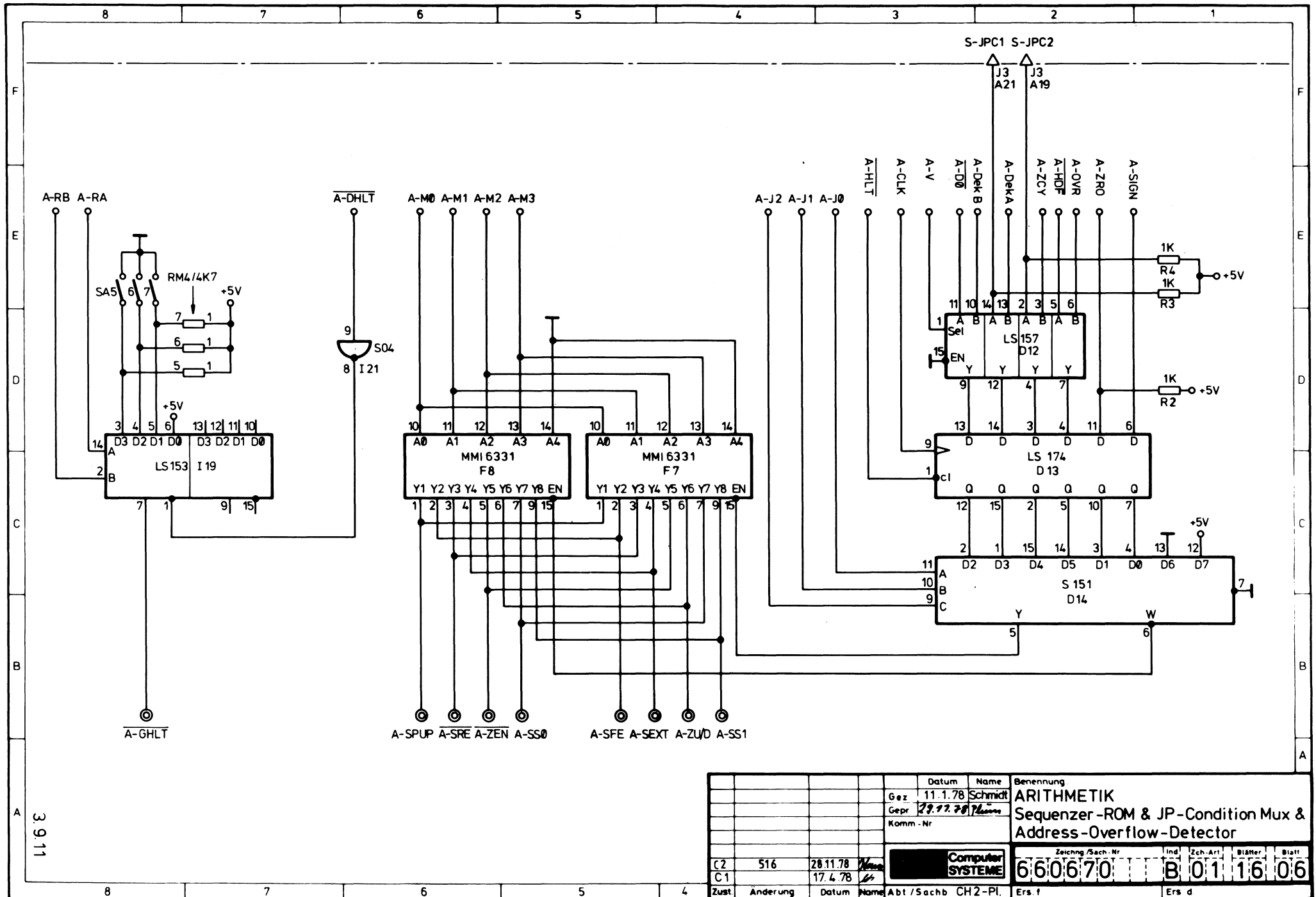


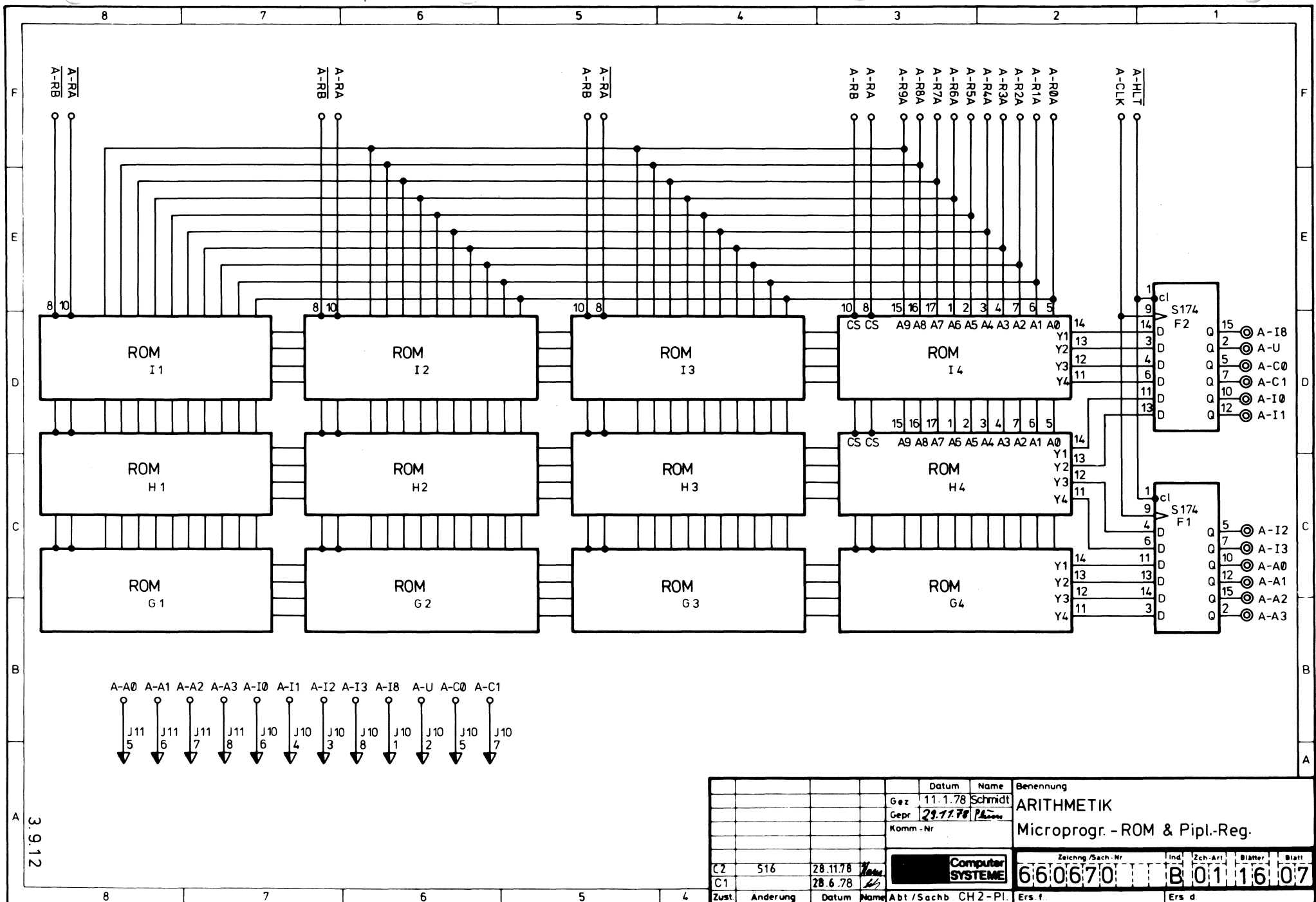


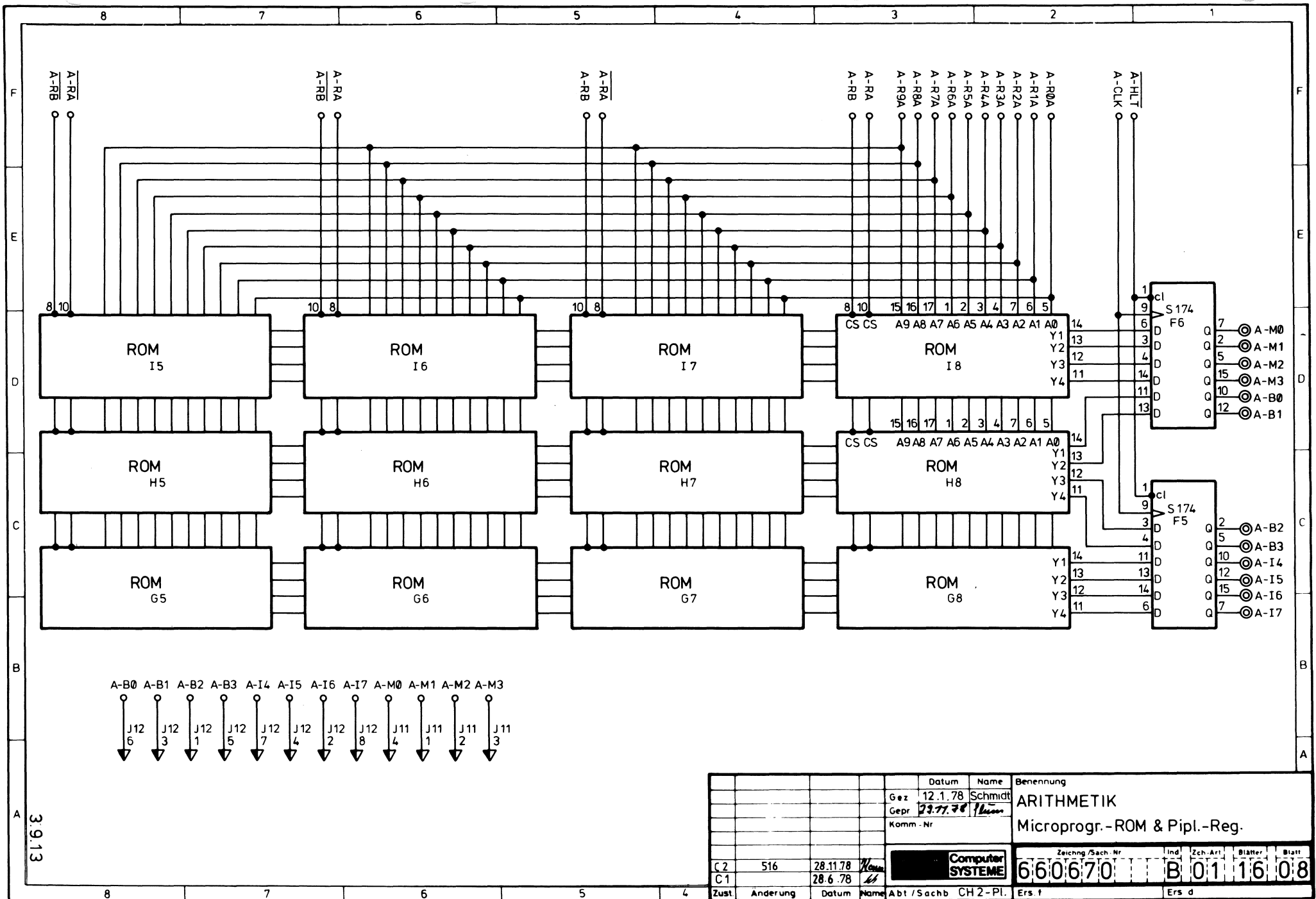


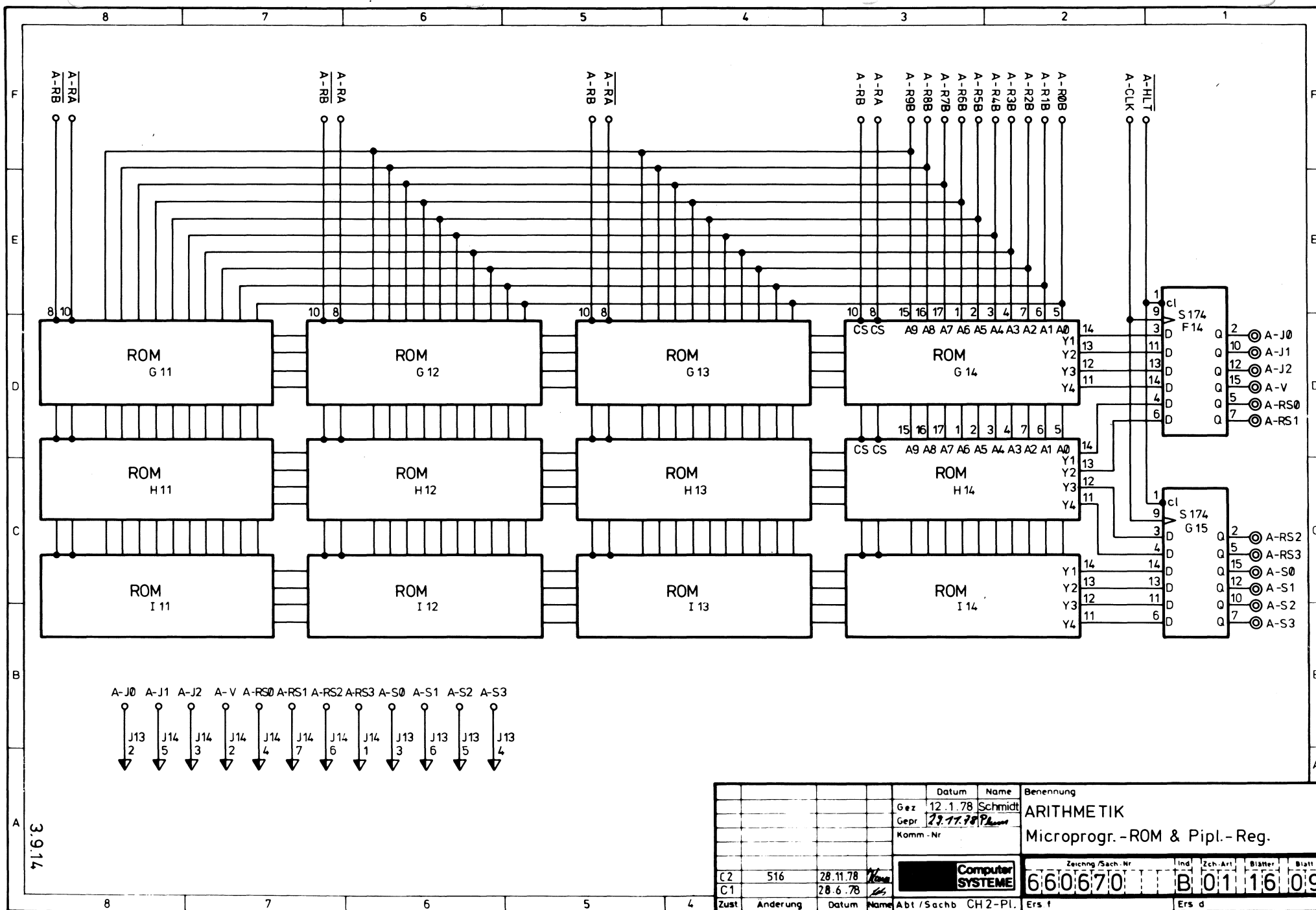


| Gez.             |          | Datum   | Name     | Benennung                    |
|------------------|----------|---------|----------|------------------------------|
| Gepr.            |          | 10.1.78 | Schmidt  | ARITHMETIK                   |
| Komm.-Nr.        |          | 23.7778 |          | Sequencer mit Adreß-Treibern |
| C2               |          | 516     | 28.11.78 |                              |
| C1               |          | 17.4.78 |          |                              |
| Zust.            | Änderung | Datum   | Name     | Abt./Sachb. CH 2-Pl.         |
| Computer SYSTEME |          | 660670  | B 01     | 16 05                        |
| Ers. f.          |          | Ers. d. |          |                              |



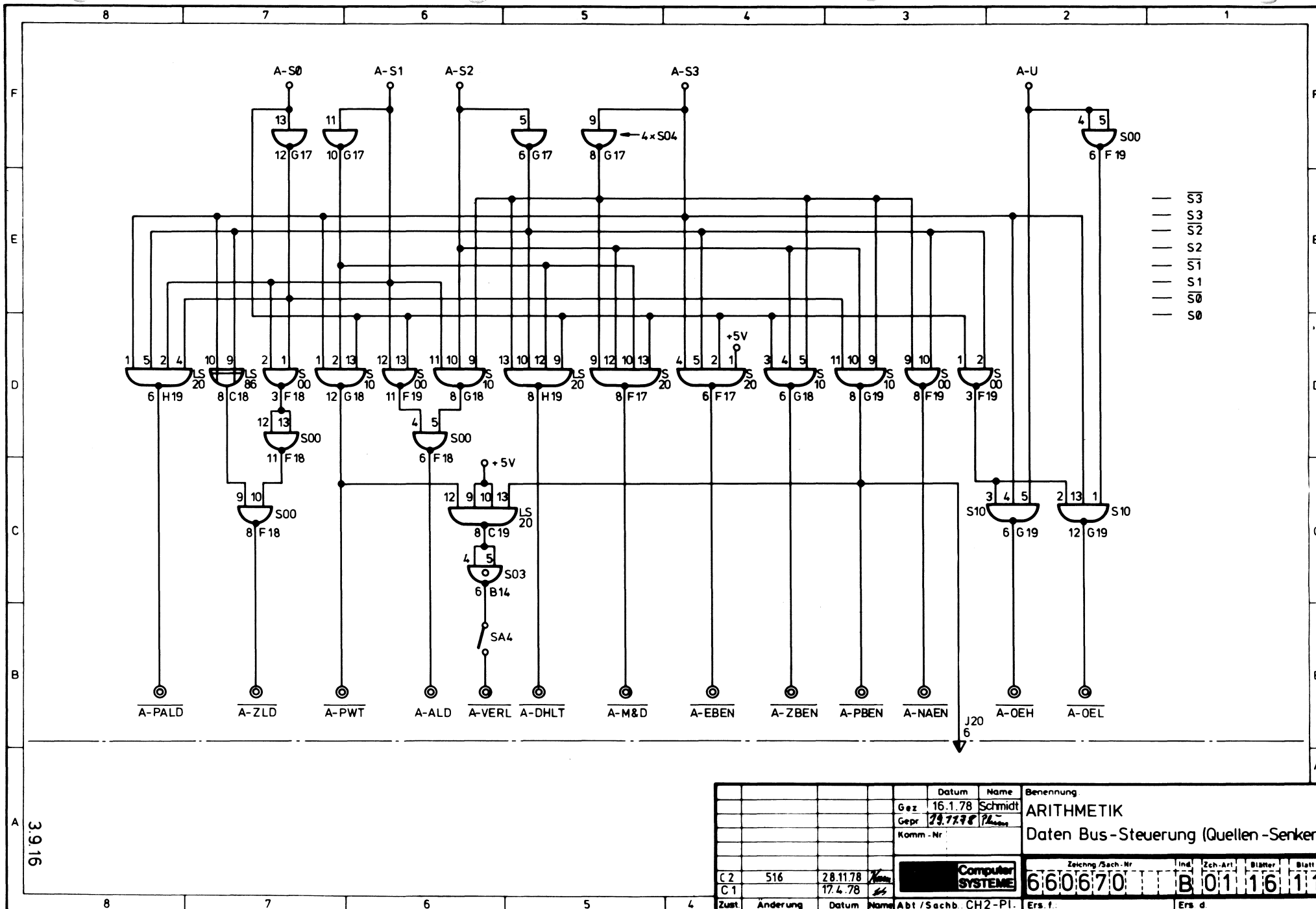


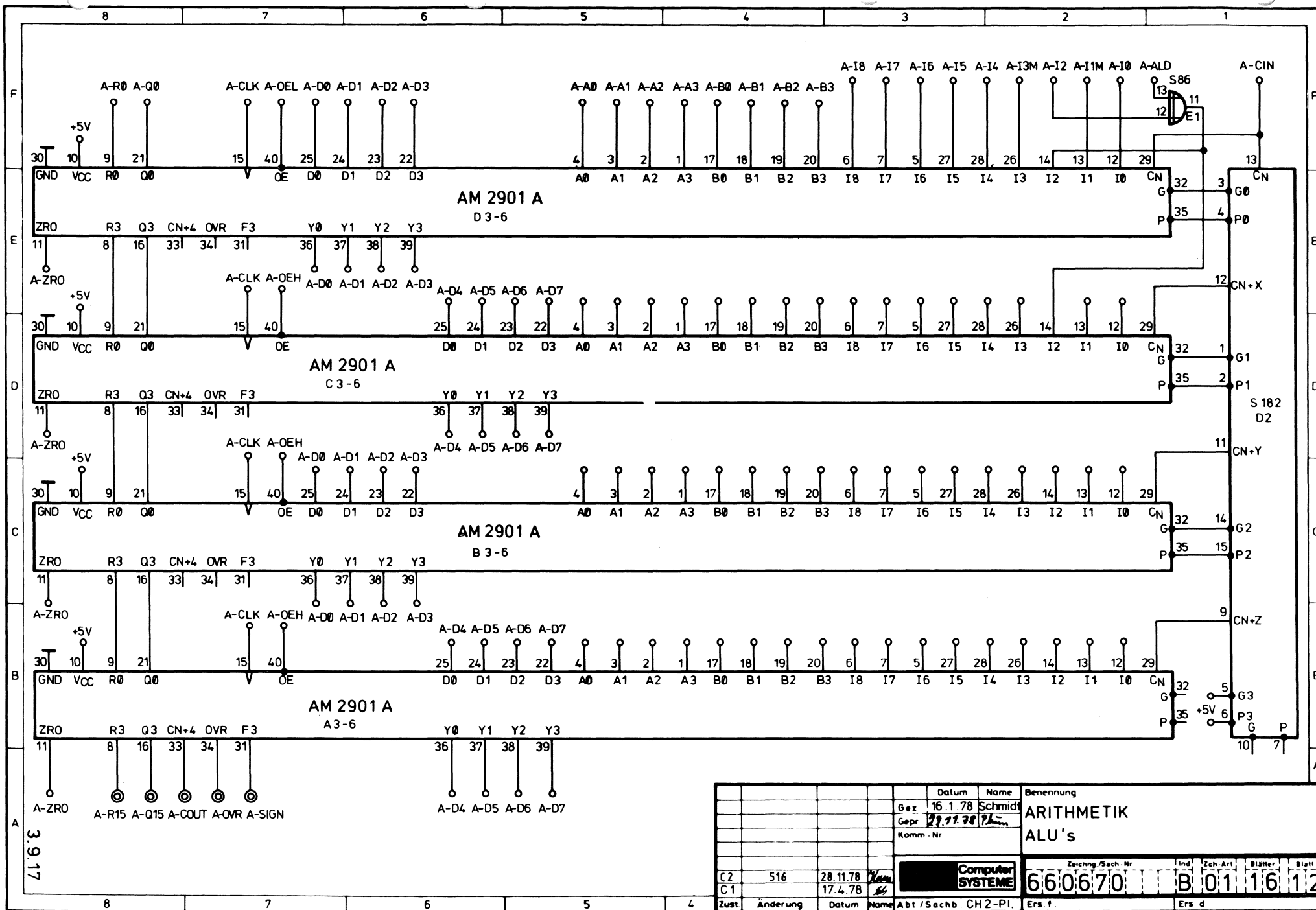




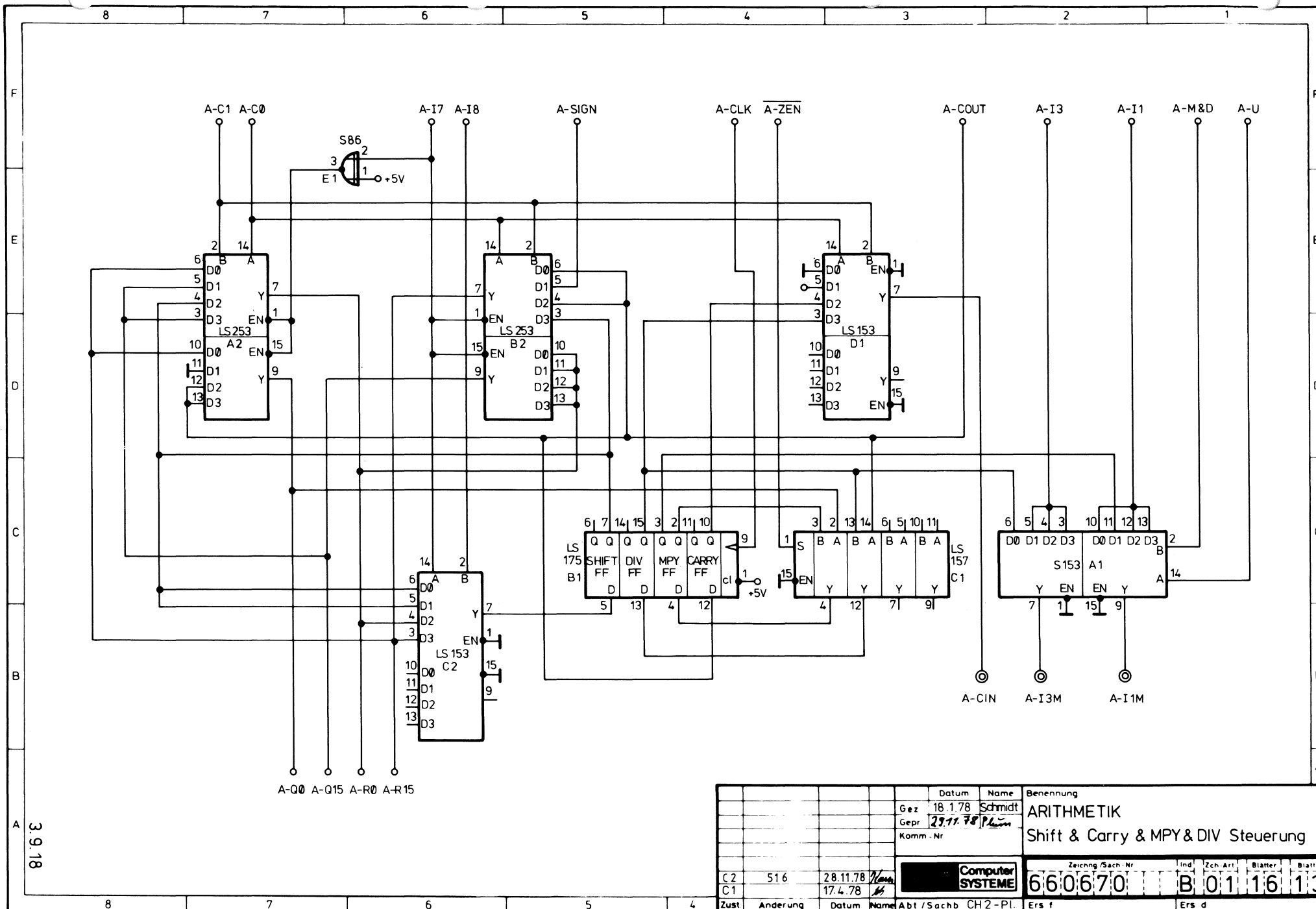






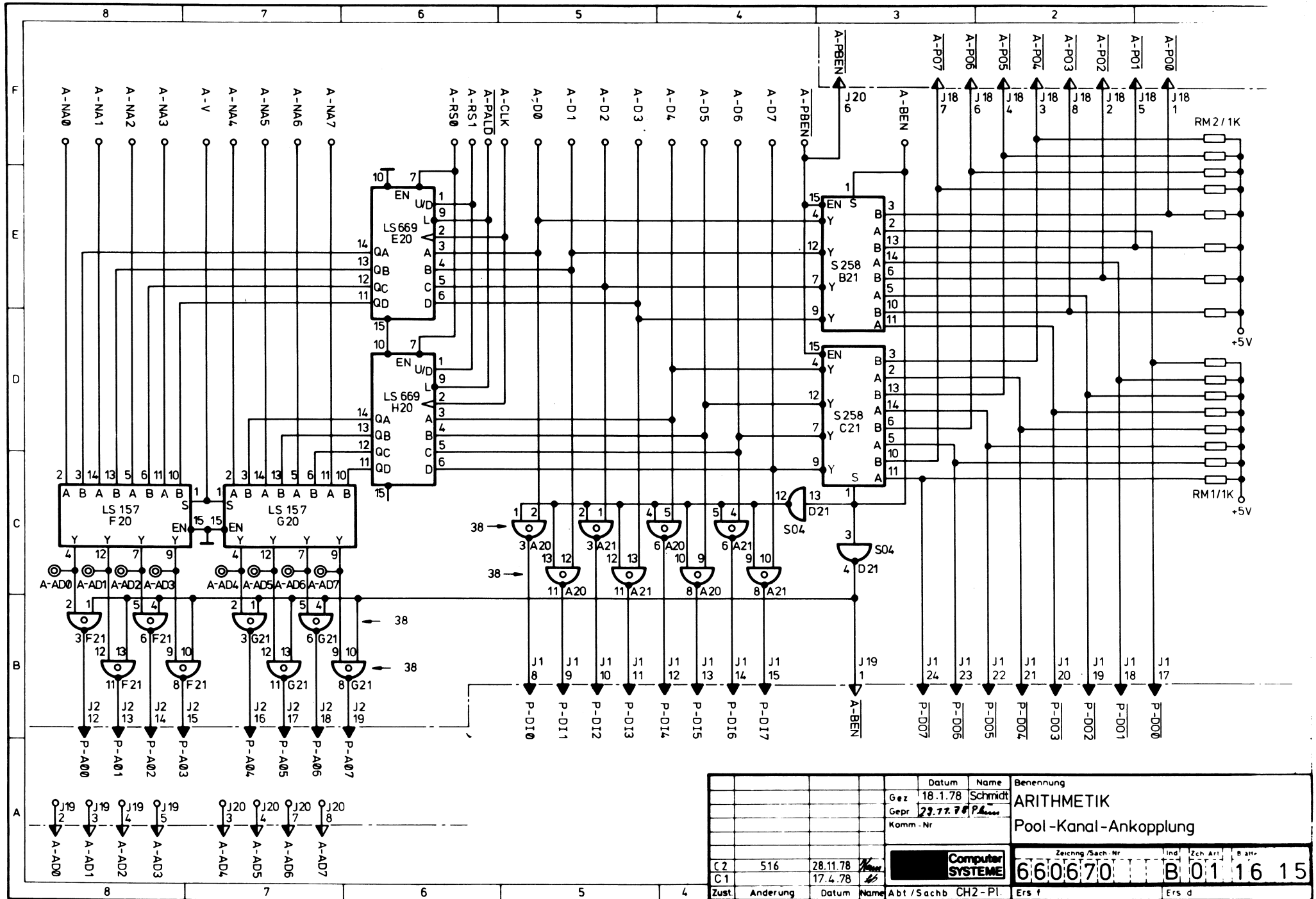


|           |          |           |          |            |                 |
|-----------|----------|-----------|----------|------------|-----------------|
| Datum     |          | Name      |          | Benennung  |                 |
| Gez       | 16.1.78  | Schmidt   |          | ARITHMETIK |                 |
| Gepr      | 29.11.78 | Plum      |          | ALU's      |                 |
| Komm - Nr |          |           |          |            |                 |
| C2        |          | 516       | 28.11.78 | Computer   | Zeichn./Sach-Nr |
| C1        |          |           | 17.4.78  | SYSTEME    | Ind             |
| Zust      |          | Aenderung | Datum    | Name       | Zch-Art         |
|           |          |           |          | Abt./Sachb | Blätter         |
|           |          |           |          | CH2-Pl.    | Blatt           |
|           |          |           |          | Ers f      | Ers d           |





3.9.20



|      |           |                  |      |                       |            |
|------|-----------|------------------|------|-----------------------|------------|
|      |           | Datum            | Name | Benennung             |            |
| Gez  | 18.1.78   | Schmidt          |      | ARITHMETIK            |            |
| Gepr | 22.7.78   | P. Schneider     |      | Pool-Kanal-Ankopplung |            |
|      |           | Komm-Nr          |      |                       |            |
|      |           | Computer SYSTEME |      |                       |            |
| C2   | 516       | 28.11.78         |      | Zeichnung/Sach-Nr     | Ind        |
| C1   |           | 17.4.78          |      | 660670                | B 01 16 15 |
| Zust | Aenderung | Datum            | Name | Abt/Sachb             | CH2-PI     |
|      |           | Ers f            |      | Ers d                 |            |

| J10 |      |           |             |
|-----|------|-----------|-------------|
| 1   | A-I8 | Alu-FKT   | Sel. 8      |
| 2   | A-U  | Steuerbit | MPY&DIV&Out |
| 3   | A-I2 | Alu-FKT   | Sel. 2      |
| 4   | A-I1 | Alu-FKT   | Sel. 1      |
| 5   | A-C0 | Alu-Carry | Sel. 0      |
| 6   | A-I0 | Alu-FKT   | Sel. 0      |
| 7   | A-C1 | Alu-Carry | Sel. 1      |
| 8   | A-I3 | Alu-FKT   | Sel. 3      |

| J11 |      |                |   |
|-----|------|----------------|---|
| 1   | A-M1 | Mode Sel.      | 1 |
| 2   | A-M2 | Mode Sel.      | 2 |
| 3   | A-M3 | Mode Sel.      | 3 |
| 4   | A-M0 | Mode Sel.      | 0 |
| 5   | A-A0 | A-Operand Sel. | 0 |
| 6   | A-A1 | A-Operand Sel. | 1 |
| 7   | A-A2 | A-Operand Sel. | 2 |
| 8   | A-A3 | A-Operand Sel. | 3 |

| J12 |      |                |        |
|-----|------|----------------|--------|
| 1   | A-B2 | B-Operand Sel. | 2      |
| 2   | A-I6 | Alu-FKT        | Sel. 6 |
| 3   | A-B1 | B-Operand Sel. | 1      |
| 4   | A-I5 | Alu-FKT        | Sel. 5 |
| 5   | A-B3 | B-Operand Sel. | 3      |
| 6   | A-B0 | B-Operand Sel. | 0      |
| 7   | A-I4 | Alu-FKT        | Sel. 4 |
| 8   | A-I7 | Alu-FKT        | Sel. 7 |

| J13 |       |                     |   |
|-----|-------|---------------------|---|
| 1   | VCC   |                     |   |
| 2   | A-J0  | Jump.Condition Sel. | 0 |
| 3   | A-S0  | Bus-Steuerung Sel.  | 0 |
| 4   | A-S3  | Bus-Steuerung Sel.  | 3 |
| 5   | A-S2  | Bus-Steuerung Sel.  | 2 |
| 6   | A-S1  | Bus-Steuerung Sel.  | 1 |
| 7   | A-NA7 | Next-Adress Bit     | 7 |
| 8   | GND   |                     |   |

| J14 |       |                      |   |
|-----|-------|----------------------|---|
| 1   | A-RS3 | Reserve Bit          | 3 |
| 2   | A-V   | Steuerbit f. JPCond. |   |
| 3   | A-J2  | Jump Condition       |   |
| 4   | A-RS0 | Reserve Bit          | 0 |
| 5   | A-J1  | Jump Condition       |   |
| 6   | A-RS2 | Reserve Bit          | 2 |
| 7   | A-RS1 | Reserve Bit          | 1 |
| 8   | GND   |                      |   |

| J15 |       |                  |   |
|-----|-------|------------------|---|
| 1   | A-HLT | Rechnung beendet |   |
| 2   | A-NA5 | Next Adress Bit  | 5 |
| 3   | A-NA6 | Next Adress Bit  | 6 |
| 4   | A-NA3 | Next Adress Bit  | 3 |
| 5   | A-NA2 | Next Adress Bit  | 2 |
| 6   | A-NA1 | Next Adress Bit  | 1 |
| 7   | A-NA4 | Next Adress Bit  | 4 |
| 8   | A-NA0 | Next Adress Bit  | 0 |

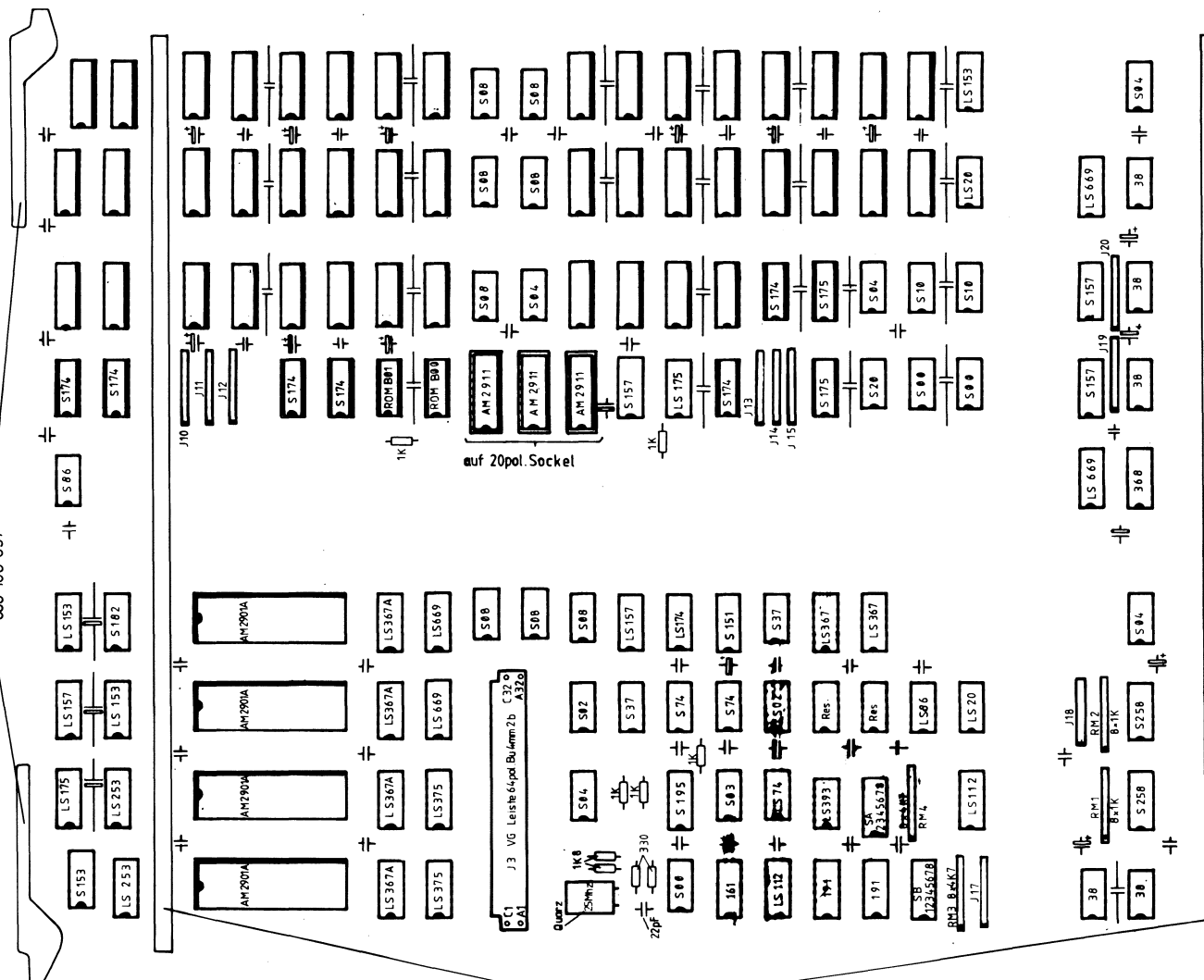
| J17 |      |           |       |
|-----|------|-----------|-------|
| 1   | A-D2 | Daten Bus | Bit 2 |
| 2   | A-D0 | Daten Bus | Bit 0 |
| 3   | A-D1 | Daten Bus | Bit 1 |
| 4   | A-D3 | Daten Bus | Bit 3 |
| 5   | A-D6 | Daten Bus | Bit 6 |
| 6   | A-D4 | Daten Bus | Bit 4 |
| 7   | A-D5 | Daten Bus | Bit 5 |
| 8   | A-D7 | Daten Bus | Bit 7 |

| J18 |       |                          |  |
|-----|-------|--------------------------|--|
| 1   | A-PO0 | Pool Data Out Simulation |  |
| 2   | A-PO2 | Pool Data Out Simulation |  |
| 3   | A-PO4 | Pool Data Out Simulation |  |
| 4   | A-PO5 | Pool Data Out Simulation |  |
| 5   | A-PO1 | Pool Data Out Simulation |  |
| 6   | A-PO6 | Pool Data Out Simulation |  |
| 7   | A-PO7 | Pool Data Out Simulation |  |
| 8   | A-PO3 | Pool Data Out Simulation |  |

| J19 |       |                    |   |
|-----|-------|--------------------|---|
| 1   | A-BEN | Pool Buffer Enable |   |
| 2   | A-AD0 | Pool Adresse       | 0 |
| 3   | A-AD1 | Pool Adresse       | 1 |
| 4   | A-AD2 | Pool Adresse       | 2 |
| 5   | A-AD3 | Pool Adresse       | 3 |
| 6   |       |                    |   |
| 7   | GND   |                    |   |
| 8   | GND   |                    |   |

| J20 |        |                    |   |
|-----|--------|--------------------|---|
| 1   |        |                    |   |
| 2   |        |                    |   |
| 3   | A-AD4  | Pool Adresse       | 4 |
| 4   | A-AD5  | Pool Adresse       | 5 |
| 5   |        |                    |   |
| 6   | A-PBEN | Pool Buffer Enable |   |
| 7   | A-AD6  | Pool Adresse       | 6 |
| 8   | A-AD7  | Pool Adresse       | 7 |

| Benennung        |          |  |  |
|------------------|----------|--|--|
| Name             | Schmidt  |  |  |
| Datum            | 13.6.78  |  |  |
| Gez.             | 21.7.78  |  |  |
| Gepr.            | 21.7.78  |  |  |
| Komm.-Nr.        |          |  |  |
| Computer SYSTEME |          |  |  |
| Name             | CH2-PL   |  |  |
| Datum            | 28.11.78 |  |  |
| Gez.             | 17.4.78  |  |  |
| Gepr.            |          |  |  |
| Änderung         |          |  |  |
| Zust.            |          |  |  |
| Ers. 1           |          |  |  |
| Ers. 2           |          |  |  |
| Ers. 3           |          |  |  |
| Ers. 4           |          |  |  |
| Ers. 5           |          |  |  |
| Ers. 6           |          |  |  |
| Ers. 7           |          |  |  |
| Ers. 8           |          |  |  |



IC - Fassung

IC - Fassung

IC -Fassung

-Leiterplattenstrebe 660 100 043

| Bauhöhe | Best.- Seite | mm |
|---------|--------------|----|
|---------|--------------|----|

Leit.- Seite mm

01 µF / 12 V  
Sperrschicht

 10  $\mu$  F / 16 V  
Tantal

- ☐ abkleben
- ☐ trennen
- ☐ nach U.S. Wäsche einsetzen
- ☐ auf der Lötseite bestücken

ROM-BESTÜCKUNG  
( Standardausführung )

Platz 

|    | G   | H   | I   |
|----|-----|-----|-----|
| 1  |     |     |     |
| 2  |     |     |     |
| 3  |     |     |     |
| 4  | B02 | B04 | B06 |
| 5  |     |     |     |
| 6  |     |     |     |
| 7  |     |     |     |
| 8  | B05 | B03 | B07 |
| 9  |     |     |     |
| 10 |     |     |     |
| 11 |     |     |     |
| 12 |     |     |     |
| 13 |     |     |     |
| 14 | B08 |     | B09 |
| 15 |     |     |     |
| 16 |     |     |     |
| 17 |     |     |     |
| 18 |     | B10 | B11 |

[illegible][illegible]

|      |          |       |      |                                                                                     |  |         |  |                                 |  |       |           |            |           |
|------|----------|-------|------|-------------------------------------------------------------------------------------|--|---------|--|---------------------------------|--|-------|-----------|------------|-----------|
|      |          |       |      | Datum                                                                               |  | Name    |  | Benennung                       |  |       |           |            |           |
|      |          |       |      | Gez. 2.5.78                                                                         |  | Schmidt |  | Arithmetik Sequenzer Mode ROM's |  |       |           |            |           |
|      |          |       |      | Gepr                                                                                |  |         |  |                                 |  |       |           |            |           |
|      |          |       |      | Kamm - Nr                                                                           |  |         |  |                                 |  |       |           |            |           |
|      |          |       |      |  |  |         |  | Zeichn. / Sach - Nr             |  | Ind   | Zch - Art | Char - Art | Char - Nr |
|      |          |       |      |                                                                                     |  |         |  | 660670                          |  |       |           |            |           |
| Zust | Anderung | Datum | Name | Abt./Sachb.: CH2 - Pl.                                                              |  |         |  | Ers f                           |  | Ers d |           |            |           |



Erklärung: Alle Signalnamen, die mit A- beginnen, sind interne Signalnamen des A.P.  
 Alle Signalnamen, die mit S- beginnen, sind Signale zu und von der Sandwich-Karte.  
 Alle anderen Signale sind vom Motherboard des X2

| Signalname            | Bedeutung                         | Quelle   | Senke                    | Funktion                                                                                                                                                                       |
|-----------------------|-----------------------------------|----------|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| A-A $\emptyset$ ...3  | A-Operand                         | 7        | 5,7,12                   | Anwahl des Slice-Registers, das als A-Operand dienen soll, und 4 oberen Adressbits bei Sprüngen mit Adresserweiterungen.                                                       |
| A-AD $\emptyset$ ...3 | Pool-Adresse Bit $\emptyset$ ...7 | 15       | 15                       | Ausgänge des Pool-Adress-Multiplexers, vor dem Pool Adresstreiber wird für Simulation des Pools beim Test benötigt                                                             |
| A-ALD                 | Slice-Laden                       | 11       | 12                       | Die Slices sollen als Daten-Senke arbeiten                                                                                                                                     |
| A-B $\emptyset$ ...3  | B-Operand                         | 8        | 8,12                     | Anwahl des Slice-Registers, das als B-Operand und als Ergebnis-Register dienen soll.                                                                                           |
| A-BE N                | Poolkanal-Buffer-Enable           | 3        | 4,15                     | Bewirkt die Durchschaltung der Pool-Daten und -Adressen auf Kanäle und setzt den Zähler der Zeitüberwachung zurück. Beim Einzelschrittbetrieb kommt das Signal nicht mit high. |
| A-C $\emptyset$ ...1  | Carry $\emptyset$ ...1            | 7        | 7,13                     | Steuert den Carry-Eingang des Slices und die Kettung der Register beim Schieben.                                                                                               |
| A-C IN                | Carry Input                       | 13       | 12                       | Carry-Eingang der Slices                                                                                                                                                       |
| A-CLK                 | Clock                             | 3        | 5,6,7,8,9,10,12,13,14,15 | Allgemeiner Takt des AP, bei 25 MHz Quarz 120 ns high und 80 ns low, er kann mit A-VERL um einen 40 ns Zyklus verlängert werden.                                               |
| A-CLK-CPU             |                                   | 4        | 3                        | CPU-Takt                                                                                                                                                                       |
| A-COUT                | Carry Output                      | 12       | 13                       | Carry Ausgang des Slices                                                                                                                                                       |
| A-D $\emptyset$ ...7  | Daten Bus Bit $\emptyset$ ...7    | 12,14,15 | 5,6,12,14,15             | Interner Datenbus                                                                                                                                                              |
| A-DEK A               | Dekoder A                         | 14       | 6                        | Erkennung, ob das Byte auf dem Daten-Bus normiert ist.                                                                                                                         |
| A-DEK B               | Dekoder B                         | 14       | 6                        | Erkennung, ob das Byte auf dem Daten-Bus nach einem Links-Shift normiert ist.                                                                                                  |
| A-D HLT               | Dekoder Halt                      | 11       | 6                        | Wenn S-Feld des Microbefehls gleich 1 ist, kommt das Signal mit low und bewirkt Stop des AP.                                                                                   |
| A-E BEN               | Erweiterungskarten-Buffer-Enable  | 11       | 14                       | Durchschaltung der Daten vom Sandwich-Datenbus zum internen Datenbus des AP.                                                                                                   |
| A-G HLT               | Gated-Halt                        | 6        | 4                        | A-DHLT mit Adressüberschreitungserkennung verknüpftes Signal zum Stop des AP.                                                                                                  |

3.9.24

|           |  |          |  |        |  |                     |  |                                                    |  |            |  |
|-----------|--|----------|--|--------|--|---------------------|--|----------------------------------------------------|--|------------|--|
| Zust.     |  | Änderung |  | Datum  |  | Name                |  | Abt./Sachb.                                        |  | CH 2- Plum |  |
| Gez.      |  | 10.3.78  |  | Kibedi |  | Benennung           |  | SIGNALNAMENKATALOG<br>des<br>Arithmetik Prozessors |  |            |  |
| Gepr.     |  |          |  |        |  | Computer<br>SYSTEME |  | 660670 B 27 05 01                                  |  |            |  |
| Komm.-Nr. |  |          |  |        |  | Ers. f.             |  | Ers. d.                                            |  |            |  |

| Signalname              | Bedeutung                       | Quelle | Senke        | Funktion                                                                                                                                                                   |
|-------------------------|---------------------------------|--------|--------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <u>A-HDF</u>            | Digh Digit F                    | 14     | 6            | Signal geht nach low, wenn die oberen 4 Bit des internen Datenbusses high sind (DB = 'FX)                                                                                  |
| <u>A-HLT</u>            | Halt                            | 4      | 5,6,7,8,9,10 | Halt-Signal zum Löschen des Pipeline-Registers und des Sprungbedingungs-Registers sowie Nullsetzen der Sequenzerausgänge                                                   |
| A-I $\emptyset$ ...8    | Slice-Funktion $\emptyset$ ...8 | 7,8    | 7,8,12,13    | Steuerung der Slice-Funktionen                                                                                                                                             |
| A-I1M                   | Slice-Fkt.1 modifiziert         | 13     | 12           | A-I1 kann bei MPY über Mux geändert werden.                                                                                                                                |
| A-I3M                   | Slice-Fkt. 2 modifiziert        | 13     | 12           | A-I2 kann bei DIV über Mux geändert werden.                                                                                                                                |
| A-I $\emptyset$ ...2    | Jump-Condition                  | 8      | 6,8          | Steuerung des Sprungbedingungs-Multiplexers                                                                                                                                |
| A-M $\emptyset$ ...3    | Mode-Sequenzner                 | 8      | 6,8          | Steuerung des Sequenzer-Modes über ROM's 6331                                                                                                                              |
| A-M&D                   | Multiply und Divide             | 11     | 13           | Signal kommt mit high, wenn MPY oder DIV-Funktion ausgeführt werden soll, d.h. S-Feld gleich 5                                                                             |
| A-NA $\emptyset$ ...7   | Next-Address                    | 10     | 10,14,15     | Konstanten-Feld des Microbefehles. Es kann auf den internen Datenbus aufgeschaltet werden, um als Konstante oder Sprungziel zu dienen. Außerdem kann es Pool-Adresse sein. |
| <u>A-NAEN</u>           | Next-Address-Enable             | 11     | 14           | Steuersignal für die Durchschaltung des NA-Feldes auf den internen Daten-Bus.                                                                                              |
| <u>A-OEH</u>            | Slice-Output-Enable-High Byte   | 11     | 12           | Durchschaltung des oberen Slice-Daten-Bytes auf Daten-Bus                                                                                                                  |
| <u>A-OEL</u>            | Slice-Output-Enable-Low-Byte    | 11     | 12           | Durchschaltung des unteren Slice-Daten-Bytes auf Daten-Bus                                                                                                                 |
| A-OVR                   | Slice-Overflow                  | 12     | 6            | Overflow-Signal der Slices                                                                                                                                                 |
| <u>A-PALD</u>           | Pool-Address-Load               | 11     | 15           | Signal zum Laden des Pool-Adressregisters                                                                                                                                  |
| <u>A-PBEN</u>           | Pool-Buffer-Enable              | 11     | 15           | Signal schaltet die vom Pool kommenden Daten zum internen Datenbus durch.                                                                                                  |
| A-PO $\emptyset$ ...7   | Pool-Out                        | 15     | 15           | Eingang für Pool-Ausgangsdaten beim Einzelschritt Test                                                                                                                     |
| <u>A-PWT</u>            | Pool-Write                      | 11     | 3            | Dekodiertes S-Feld, wenn im Pool geschrieben werden soll.                                                                                                                  |
| A-Q $\emptyset$ + A-Q15 | Q-Reg.-Shift I/O's              | 12/13  | 12/13        | Schiebe Übertrags-Ein/Ausgänge des Q-Registers                                                                                                                             |
| A-R $\emptyset$ + A-R15 | Reg.-Shift I/O's                | 12/13  | 12/13        | Schiebe-Übertrags-Ein/Ausgänge der internen Register                                                                                                                       |
| A Reset                 | Reset                           | 3      | 4            | Rückstell-Signal wird aus dem GR abgeleitet                                                                                                                                |

3.9 25

|           |  |          |  |       |  |        |  |                                                                                                                 |  |
|-----------|--|----------|--|-------|--|--------|--|-----------------------------------------------------------------------------------------------------------------|--|
| Zust.     |  | Änderung |  | Datum |  | Name   |  | Abt/Sachb. CH2-Plum                                                                                             |  |
|           |  |          |  |       |  |        |  |                                                                                                                 |  |
| Gez.      |  | 10.3.78  |  | Name  |  | Kibedi |  | Benennung                                                                                                       |  |
| Gepr.     |  |          |  |       |  |        |  | SIGNALNAMENKATALOG                                                                                              |  |
| Komm. Nr. |  |          |  |       |  |        |  | des                                                                                                             |  |
|           |  |          |  |       |  |        |  | Arithmetik Prozessors                                                                                           |  |
|           |  |          |  |       |  |        |  | <div style="display: flex; justify-content: space-between;"> <span>660670</span> <span>B 27 05 02</span> </div> |  |
|           |  |          |  |       |  |        |  | <div style="display: flex; justify-content: space-between;"> <span>Ers. f</span> <span>Ers. d</span> </div>     |  |

| Signalname             | Bedeutung                        | Quelle | Senke      | Funktion                                                                                                                                                           |
|------------------------|----------------------------------|--------|------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| A-RUN                  | RUN                              | 4      | 3          | Signal kommt mit $\overline{M-GKP-EN}$ und $\overline{K-CLK-CPU}$ und zeigt einen Start des AP an. Es erzeugt das $\overline{P-BUSY}$ Signal zum Anhalten der CPU. |
| A- <del>R</del> A...9A | ROM-Adressen A Bit 0...9         | 5      | 7/8        | Über S08 entkoppelte ROM-Adressen aus den Sequenzern, die eine ROM-Gruppe treiben.                                                                                 |
| A- <del>R</del> B...9B | ROM-Adressen B Bit 0...9         | 5      | 9/10       | Über S08 entkoppelte ROM-Adressen, die die ROM-Gruppe B (G,H,I,K und L) treiben.                                                                                   |
| A-RA                   | ROM-Adresse A (2 <sup>10</sup> ) | 5      | 6/7/8/9/10 | Oberen 2 Bit der ROM-Adressen. Sie selektieren                                                                                                                     |
| A-RA                   |                                  |        | 7/8/9/10   |                                                                                                                                                                    |
| A-RB                   | ROM-Adresse B (2 <sup>11</sup> ) | 5      | 6/7/8/9/10 | der vorhandenen 1 K-ROM-Bänke.                                                                                                                                     |
|                        |                                  |        | 7/8/9/10   |                                                                                                                                                                    |
| A-RS0...3              | Reserve-Bits                     | 9      | 9/15       | Reserve-Steuerbits (Grundausführung nicht bestückt). Sie steuern auch die Zählfunktionen des Pool-Adress-Registers.                                                |
| A-S0...3               | Steuerung Quellen & Senken       | 9      | 9/11       | Steuerung des Datenflusses über den internen Daten-Bus. Auch Stop und MPY&DIV Funktionssteuerung.                                                                  |
| A-SEXT                 | Sequenzer Extended Address       | 6      | 5          | Steuert die Umschaltung des Adressmultiplexers für die oberen 4 Adressbits der Sequenzereingänge                                                                   |
| AS-LEN                 | AP-Sandwich-Latch-Enable         | 3      | 15         | Steuersignal lädt den Inhalt des internen Busses in die Übergabelatches für den Sandwichbus.                                                                       |
| A-SFE                  | Sequenzer-File-Enable            | 6      | 5          | Steuerbit für Sequenzer-internen Stack                                                                                                                             |
| A-SPUP                 | Sequenzer-Push-Pop               | 6      | 5          | Steuerung von Push oder Pop des Sequenzer Stacks                                                                                                                   |
| $\overline{A-SRE}$     | Sequenzer-Register-Enable        | 6      | 5          | Signal lädt Daten von D-Eingängen in Register der Sequenzer                                                                                                        |
| A-SS0...1              | Sequenzer-Source-Select          | 6      | 5          | Signale wählen die adressgebende Quelle aus                                                                                                                        |
| A-SYN                  | Synchronisations-Takt            | 3      | 6          | 200 ns Takt, der versetzt zum AP-Takt läuft. Er synchronisiert den asynchronen Start durch die CPU mit den internen 200 ns-Rastern.                                |
| A-TAKT                 | TAKT                             | 3      | 4          | Oszillatorakt 40 ns für Zeitüberwachungsschaltung                                                                                                                  |
| A-TOVR                 | Time Over Run                    | 4      | 3          | Ausgangs-Signal der Zeitüberwachungsschaltung                                                                                                                      |
| A-U                    | Steuerbit                        | 7      | 7/11/13    | Steuert Auswahl von MPY oder DIV und ob oberes oder unteres Byte aus Slices zum Daten-Bus durchgeschaltet wird.                                                    |

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|                      |      |              |        |                       |
|----------------------|------|--------------|--------|-----------------------|
| Gez. 10.3.78         |      | Datum        | Name   | Benennung             |
| Gepr.                |      |              | Kibedi | SIGNALNAMENKATALOG    |
| Komm.-Nr.            |      |              |        | des                   |
|                      |      |              |        | Arithmetik Prozessors |
| Computer SYSTEME     |      | Seitungs-Nr. | nd.    | Seitungs-Nr.          |
|                      |      | 660670       | B      | 27 05 03              |
| Abt./Sachb. CHZ-Plum | Ers. | Ers d.       |        |                       |

| Signalname               | Bedeutung              | Quelle | Senke | Funktion                                                                                                                         |
|--------------------------|------------------------|--------|-------|----------------------------------------------------------------------------------------------------------------------------------|
| A-ZBEN                   | Zähler Buffer Enable   | 11     | 14    | Durchschalten des Zählerinhaltes auf internem Datenbus                                                                           |
| A-ZCY                    | Zähler Carry           | 14     | 6     | Übertragsausgang des Zählers zum Sprung Multiplexer                                                                              |
| A-ZEN                    | Zähler-Count-Enable    | 6      | 14    | Zählfreigabe des Zählers                                                                                                         |
| A-ZLD                    | Zähler-Load            | 11     | 14    | Laden der Daten vom Bus in Zähler                                                                                                |
| A-ZRO                    | Slice-Zero             | 12     | 6     | Signal bedeutet, daß das letzte Operations-ergebnis der Slices Null war                                                          |
| A-ZU/D                   | Zähler-Up/Down         | 6      | 14    | Richtungssteuerung des Zählers                                                                                                   |
| $\overline{GR}$          | General Reset          | 3      | 3     | Rückstellsignal des Rechners                                                                                                     |
| $\overline{I-D} 4...7$   | Data-Bus-CPU           | 3      | 3     | Interner Rechner-Datenbus für Datenverkehr mit Peripherie und Speicher und Controllern                                           |
| $\overline{K-CLK-CPU}$   | Clock-CPU              | 4      | 4     | CPU-Takt                                                                                                                         |
| $\overline{M-GKP-EN}$    | GKP-Enable             | 4      | 4     | Signal kommt mit low, wenn CPU den Befehl $\emptyset C$ erkennt.                                                                 |
| $\overline{P-A} 00...07$ | Pool-Address 0...7     | 15     | 15    | Pool-Adresskanal                                                                                                                 |
| $\overline{P-BUSY}$      | Pool-Busy              | 3      | 3     | Signal wird vom AP während der Rechnung erzeugt, um die CPU anzuhalten.                                                          |
| $\overline{P-DI} 0...7$  | Pool-Data-Input        | 15     | 15    | Datenkanal zum Pool                                                                                                              |
| $\overline{P-DO} 0...7$  | Pool-Data-Output       | 15     | 15    | Datenkanal vom Pool                                                                                                              |
| $\overline{P-PE}$        | Pool-Parity-Error      | 5      | 3     | Wenn die Zeitüberwachung eine Rechnung beendet, wird über P-PE dem Rechner mitgeteilt, daß ein unrichtes Ergebnis im Pool steht. |
| $\overline{P-RP}$        | Pool-Strobe            | 3      | 3     | Der AP macht mit diesem Signal Schreibimpulse zum PMM.                                                                           |
| $\overline{P-RWS}$       | Pool-Read-Write-Select | 3      | 3     | Steuerung für Schreiben und Lesen auf Interface-Register                                                                         |
| SEL-AP                   | Select-AP              | 3      | 3     | Select-Signal für Interface-Register                                                                                             |

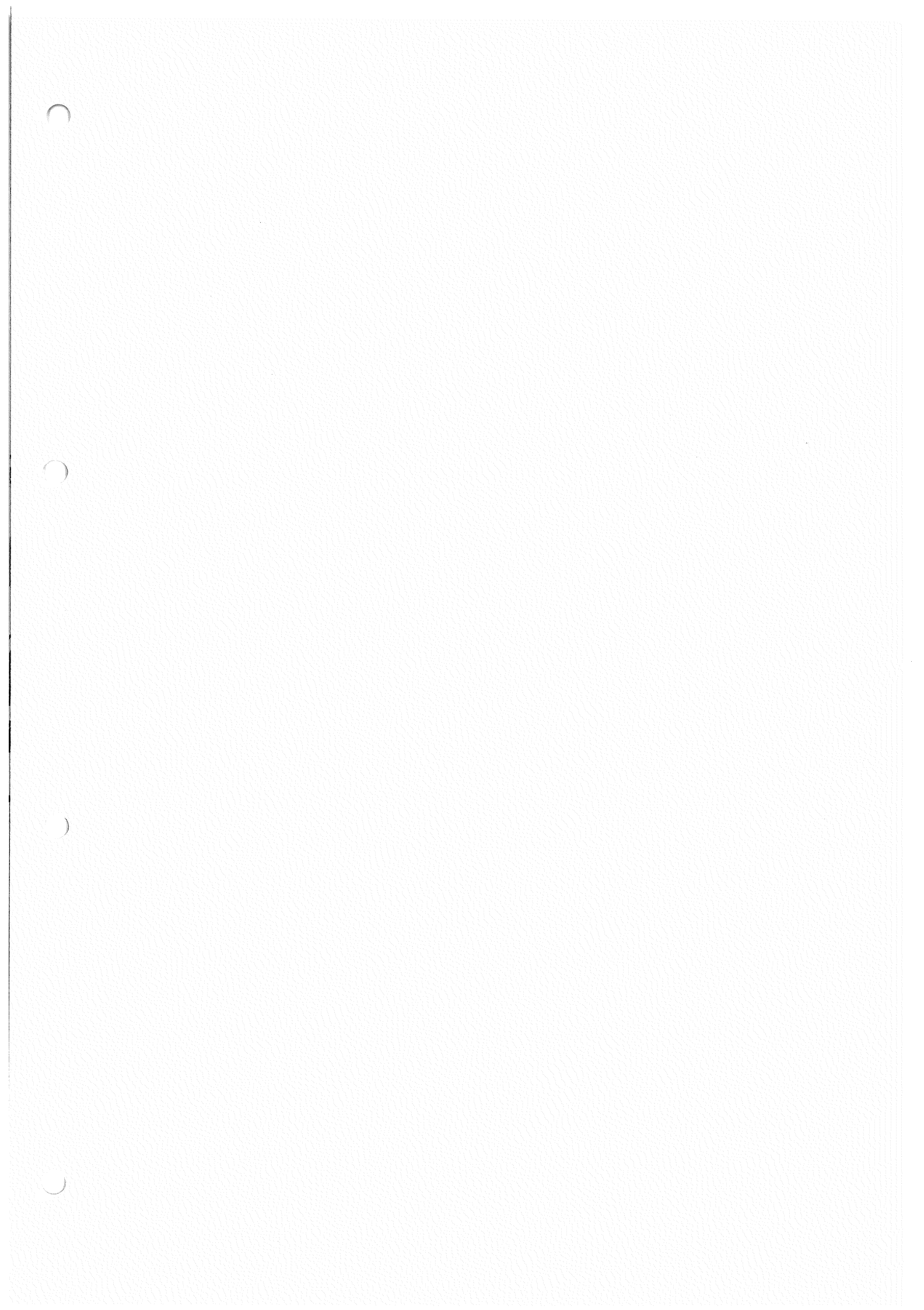
3.9.27

|           |  |          |  |        |  |                  |  |                                                        |  |
|-----------|--|----------|--|--------|--|------------------|--|--------------------------------------------------------|--|
| Zust.     |  | Änderung |  | Datum  |  | Name             |  | Abt/Sachb. CH2-Plum                                    |  |
| Gez.      |  | 10.3.78  |  | Kibedi |  | Computer SYSTEME |  | Benennung SIGNALNAMENKATALOG des Arithmetik Prozessors |  |
| Gepr.     |  |          |  |        |  |                  |  | 660670 B 27 05 04                                      |  |
| Komm.-Nr. |  |          |  |        |  |                  |  | Ers. d.                                                |  |

| Signalname           | Bedeutung                       | Quelle | Senke | Funktion                                                                                                              |
|----------------------|---------------------------------|--------|-------|-----------------------------------------------------------------------------------------------------------------------|
| S-CIN                | Sequenz-Carry-Input             | 5      | 5     | Carry-Eingang der Sequenzer vom Sandwich kommend kann mit Low ein Inkrementieren des Microprogrammzählers verhindern. |
| <u>S-CLK</u>         | Sandwich-Clock                  | 3      | 3     | 200 ns Clock zum Sandwich                                                                                             |
| <u>S-HLT</u>         | Sandwich-Halt                   | 4      | 4     | Halt-Signal für Sandwich                                                                                              |
| S-LEN                | Sandwich-Latch-Enable           | 3      | 3     | Steuersignal für Übergabe Latches des Daten-Busses                                                                    |
| S-R $\emptyset$ ...B | ROM-Adressen- $\emptyset$ bis B | 5      | 5     | ROM-Adressen Bit $\emptyset$ bis B                                                                                    |
| <u>S-QA</u> ...QD    | Shift-Reg.-Ausgang A...D        | 3      | 3     | Ausgänge des Takterzeugungs-Schiebe-Registers                                                                         |
| S-QD                 | Shift-Reg.-Ausgang D            | 3      | 3     |                                                                                                                       |
| S-TAKT               |                                 | 3      | 3     | AP-Takt von 200 ns                                                                                                    |
| <u>S-VERL</u>        | Verlängerung des Zyklus         | 3/11   | 3     | Ein Low-Signal verlängert den AP-Zyklus um 40 ns                                                                      |

3.9.28

|                                                                  |  |                                                                                  |  |
|------------------------------------------------------------------|--|----------------------------------------------------------------------------------|--|
| Datum: 10.3.78<br>Name: Kibedi<br>Gez.:<br>Gepr.:<br>Komm. Nr.:  |  | Benennung: SIGNALNAMENKATALOG<br>des<br>Arithmetik Prozessors                    |  |
| Änderung: _____ Datum: _____ Name: _____<br>Abt./Sachb. CHZ-Plum |  | Zeichnung nach Nr.: 660670<br>und Ziffern: B 27 05 05<br>Ers: _____ Ers d: _____ |  |



4.1 Standardbedienungskonsole

660 611 C, D1-3

Stromlaufplan

Standardbedienungskonsole X2

Schalterträger

660 611 1 C

# BEDIENUNGSKONSOLE

# MOTHERBOARD

## STECKER 1

|    | A       | C        |
|----|---------|----------|
| 1  | L       | CLK-2    |
| 2  | M       | HLT-SA   |
| 3  | N       | HLT-SR   |
| 4  | P       | K-3FFF   |
| 5  | LEVEL   | Z0       |
| 6  | CT      | B        |
| 7  | C5      | K-CNP    |
| 8  | C3      | CLK-8000 |
| 9  | ZI      | HLD-D    |
| 10 | MM      | OP       |
| 11 | C0      | BEF      |
| 12 | C4      | STOP-ADR |
| 13 | C2      | DE&DATA  |
| 14 | CPU-REG | SC-IMP   |
| 15 | TAKT    | POOL     |
| 16 | SC-T    | FP-AKTIV |
| 17 | DE&DATA | PER-MEM  |
| 18 | GO-T    | IN       |
| 19 | Z3      | Q        |
| 20 | MDIS    |          |
| 21 | +5V     | +5V      |
| 22 | +5V     | +5V      |
| 23 | +5V     | +5V      |
| 24 | +5V     | +5V      |
| 25 | 0V      | 0V       |
| 26 | 0V      | 0V       |
| 27 | 0V      | 0V       |
| 28 | 0V      | 0V       |
| 29 | 0V      | 0V       |
| 30 | 13 V1   | 13 V1    |
| 31 | 13 V2   | 13 V2    |
| 32 | 0V      | 0V       |

## STECKER 2

|    | A     | C      |
|----|-------|--------|
| 1  | P-D05 | I-A05  |
| 2  | P-D04 | I-A17  |
| 3  | P-D03 | I-A06  |
| 4  | P-D02 | I-A14  |
| 5  | P-D07 | I-A13  |
| 6  | P-D06 | I-A15  |
| 7  | P-D01 | I-A16  |
| 8  | P-D08 | I-A03  |
| 9  | P-D17 | I-A02  |
| 10 | P-D16 | I-A06  |
| 11 | P-D15 | I-A01  |
| 12 | P-D14 | I-A18  |
| 13 | P-D13 | I-A11  |
| 14 | P-D12 | I-A-04 |
| 15 | P-D11 | I-A05  |
| 16 | P-D10 | I-A12  |
| 17 | I-D02 | I-A09  |
| 18 | I-D17 | I-A08  |
| 19 | I-D16 | I-A18  |
| 20 | I-D15 | I-A19  |
| 21 | I-D18 | P-A11  |
| 22 | I-D06 | P-A10  |
| 23 | I-D07 | P-A09  |
| 24 | I-D05 | P-A08  |
| 25 | I-D04 | P-A07  |
| 26 | I-D03 | P-A06  |
| 27 | I-D14 | P-A05  |
| 28 | I-D01 | P-A04  |
| 29 | I-D00 | P-A03  |
| 30 | I-D13 | P-A02  |
| 31 | I-D12 | P-A01  |
| 32 | I-D11 | P-A00  |

## STECKER 3

|    | A      | C       |
|----|--------|---------|
| 1  | 0V     | 0V      |
| 2  |        |         |
| 3  | K-GS   |         |
| 4  | K-RLMR |         |
| 5  | K-RMA  | K-DUADR |
| 6  | K-PROG |         |
| 7  |        | K-RMB   |
| 8  | P-A01  | P-A00   |
| 9  | P-A03  | P-A02   |
| 10 | P-A05  | P-A04   |
| 11 | P-A07  | P-A06   |
| 12 | P-A09  | P-A08   |
| 13 | P-A11  | P-A10   |
| 14 | P-RP   | P-SEL   |
| 15 | P-BUSY | P-RDY   |
| 16 | P-D03  | P-RWS   |
| 17 | P-D05  | P-D04   |
| 18 | P-D07  | P-D06   |
| 19 | P-D01  | P-D02   |
| 20 | P-D17  | P-D08   |
| 21 | P-D15  | P-D16   |
| 22 | P-D13  | P-D14   |
| 23 | P-D11  | P-D12   |
| 24 | 0V     | P-D09   |
| 25 | I-D17  | I-D02   |
| 26 | I-D15  | I-D16   |
| 27 | I-D06  | I-D18   |
| 28 | I-D05  | I-D07   |
| 29 | I-D03  | I-D04   |
| 30 | I-D01  | I-D14   |
| 31 | I-D13  | I-D00   |
| 32 | I-D11  | I-D12   |

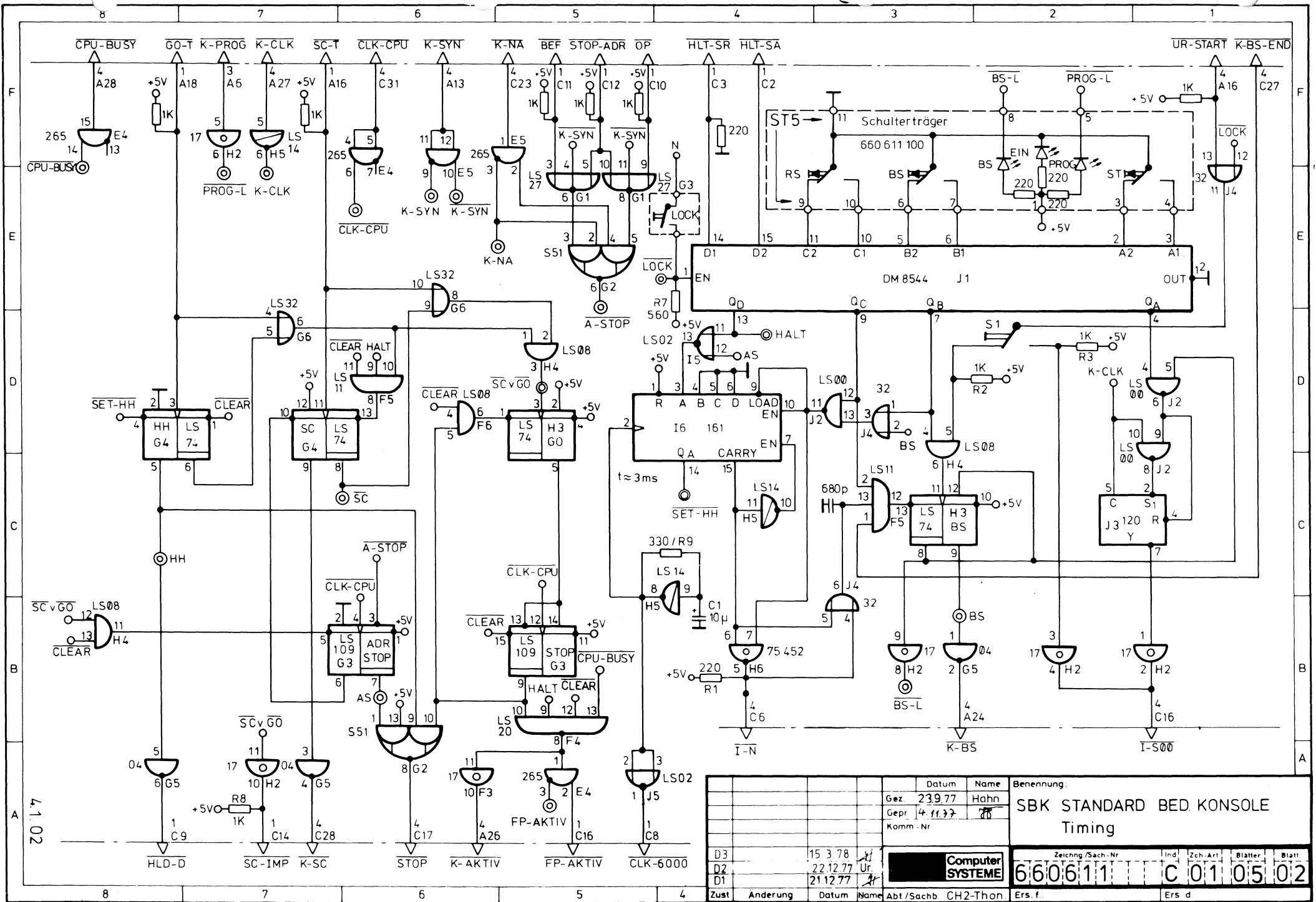
## Stecker 4

|    | A         | C         |
|----|-----------|-----------|
| 1  | +5V       | +5V       |
| 2  | I-A18     | I-A19     |
| 3  | I-A09     | I-A08     |
| 4  | I-A07     | I-A12     |
| 5  | I-A11     | I-A04     |
| 6  | I-A10     | I-N       |
| 7  | I-A06     | I-A01     |
| 8  | I-A02     | I-L/S     |
| 9  | I-A16     | I-A03     |
| 10 | I-A13     | I-A15     |
| 11 | I-A08     | I-A14     |
| 12 | I-A05     | I-A17     |
| 13 | K-SYN     | K-RLML    |
| 14 | K-RLNR    | K-RLNL    |
| 15 | K-RS1B    | K-RS0B    |
| 16 | UR-START  | I-S00     |
| 17 | K-RLP     | K-STOP    |
| 18 | K-STP     | K-STW     |
| 19 | K-LOADQ   | K-RBKC    |
| 20 | K-RBKB    | K-RBKA    |
| 21 | K-MDIS    | CPU JT 98 |
| 22 | K-RAS0    | K-RAS2    |
| 23 | K-RREG    | K-NA      |
| 24 | TS        | K-CNP     |
| 25 | K-BE      | K-MM      |
| 26 | K-AKTIV   | K-3FFF    |
| 27 | K-CLK     | K-B5 END  |
| 28 | K-CPUBUSY | K-SC      |
| 29 | K-C0      | K-C2      |
| 30 | K-CT      | K-C3      |
| 31 | CLK-80    | K-CLKCPU  |
| 32 | K-C4      | K-C5      |

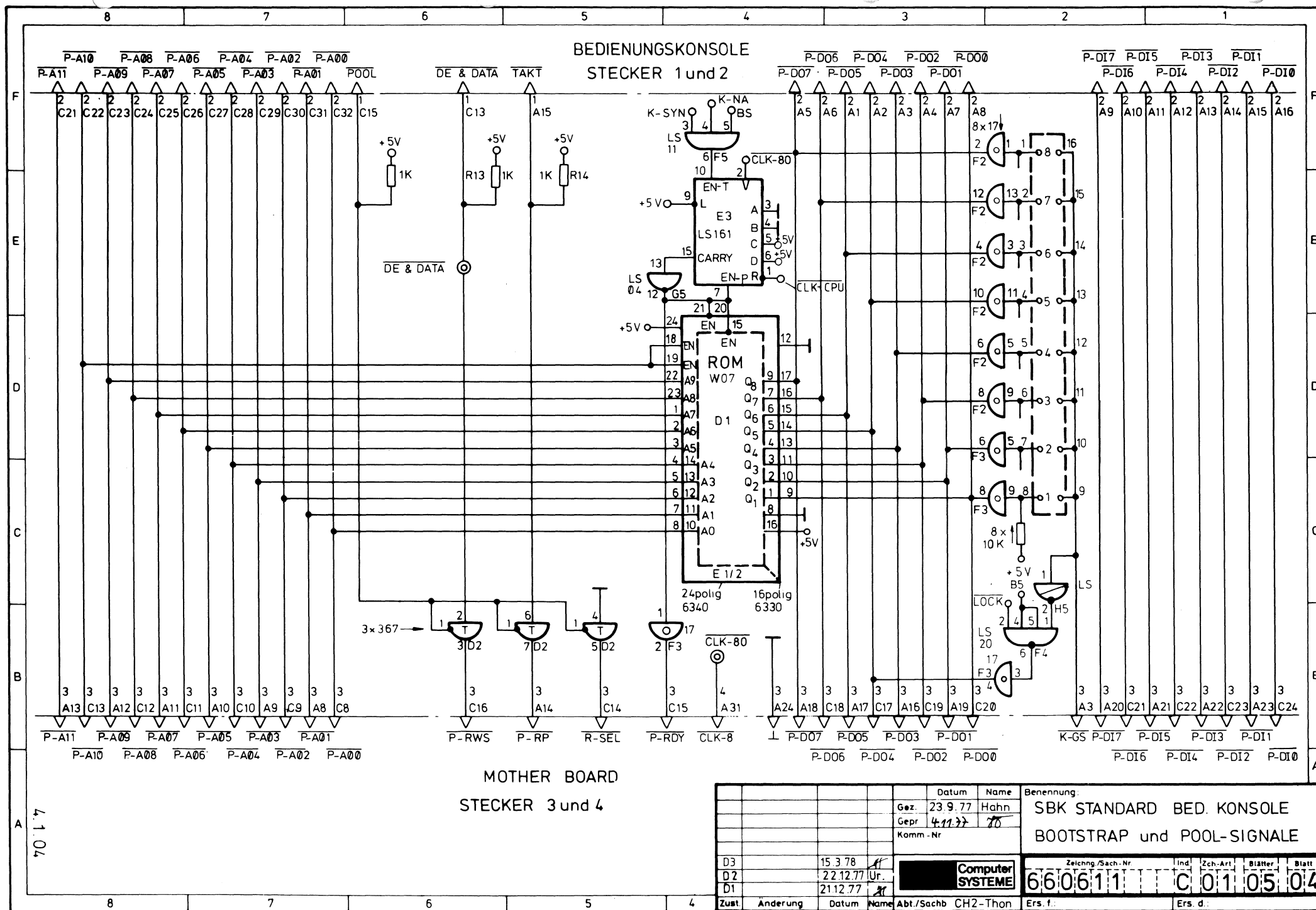
4.1.01

|           |          |         |                     |                           |         |
|-----------|----------|---------|---------------------|---------------------------|---------|
| Datum     |          | Name    |                     | Benennung:                |         |
| Gez       | 23.9.77  | Schmidt |                     | SBK STANDARD BED. KONSOLE |         |
| Gepr      | 4.11.77  |         |                     | Steckerbelegung           |         |
| Komm.-Nr. |          |         |                     |                           |         |
| D3        | 15.3.78  | 41      | Computer<br>SYSTEME | Zeichn./Sach.-Nr.         | Ind.    |
| D2        | 22.12.77 | 11      |                     | Zch.-Art                  | Blätter |
| D1        | 21.12.77 | 41      |                     | Blatt                     |         |
| Zust.     | Änderung | Datum   | Name                | Abt./Sachb.: CH 2-Th      | Ers. f. |
|           |          |         |                     | Ers. d.                   |         |



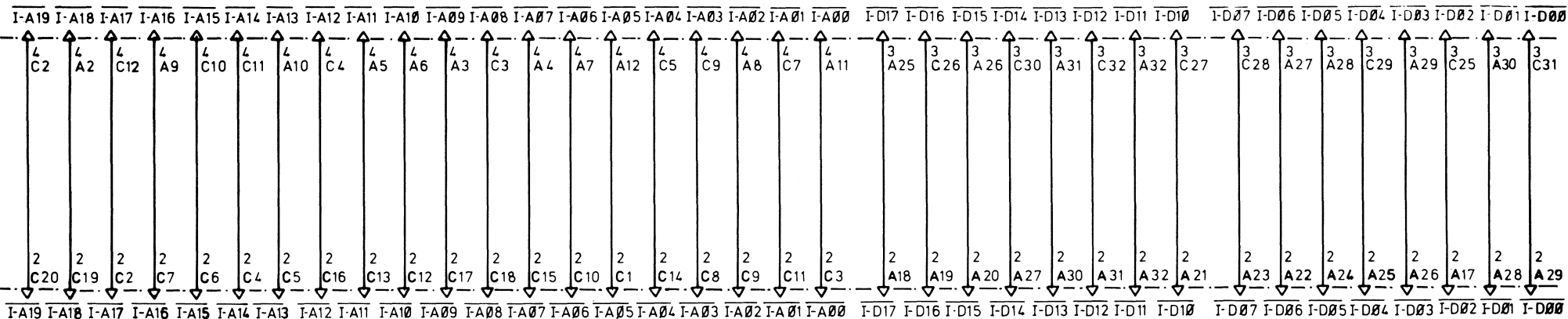




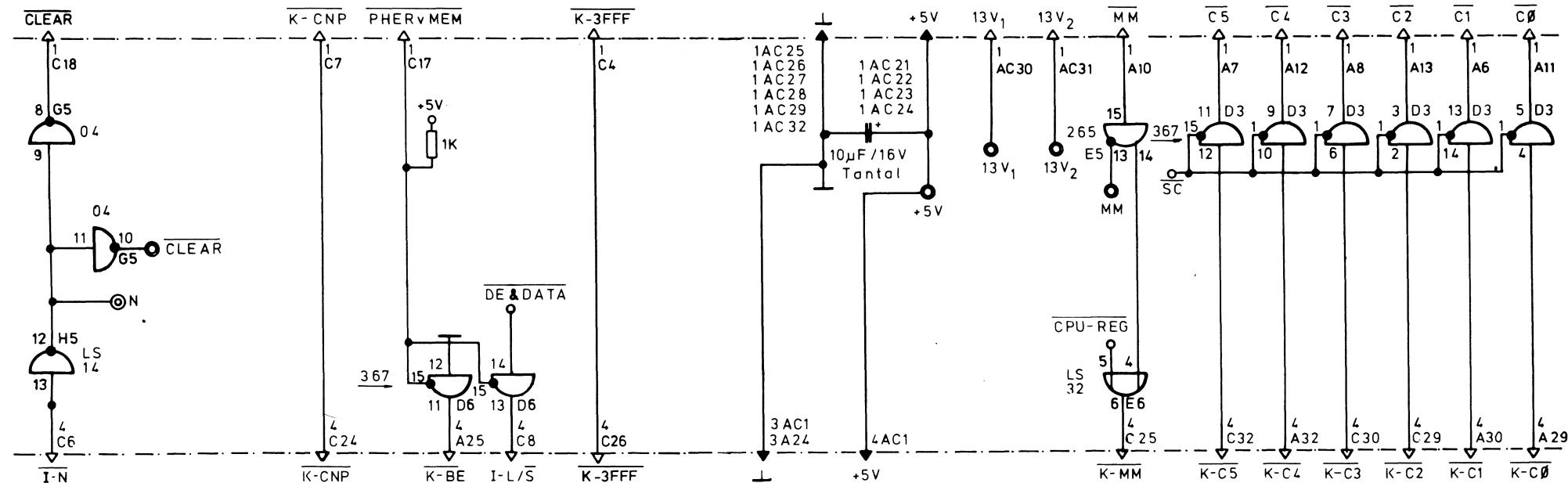


|       |          |           |      |                                                         |         |
|-------|----------|-----------|------|---------------------------------------------------------|---------|
|       |          | Datum     | Name | Benennung                                               |         |
| Gez.  | 23.9.77  | Hahn      |      | SBK STANDARD BED. KONSOLE<br>BOOTSTRAP und POOL-SIGNALE |         |
| Gepr. | 4.11.77  | 70        |      |                                                         |         |
|       |          | Komm - Nr |      |                                                         |         |
| D3    | 15.3.78  | Ur.       |      | Zeichn./Sach-Nr                                         | Ind     |
| D2    | 22.12.77 | Ur.       |      | Zch-Art                                                 | Blätter |
| D1    | 21.12.77 | Ur.       |      | Blatt                                                   | Blatt   |
| Zust. | Änderung | Datum     | Name | Abt./Sachb                                              | Ers. f. |
|       |          |           |      | CH2-Thon                                                | Ers. d. |

# Motherboard Stecker 3 und 4



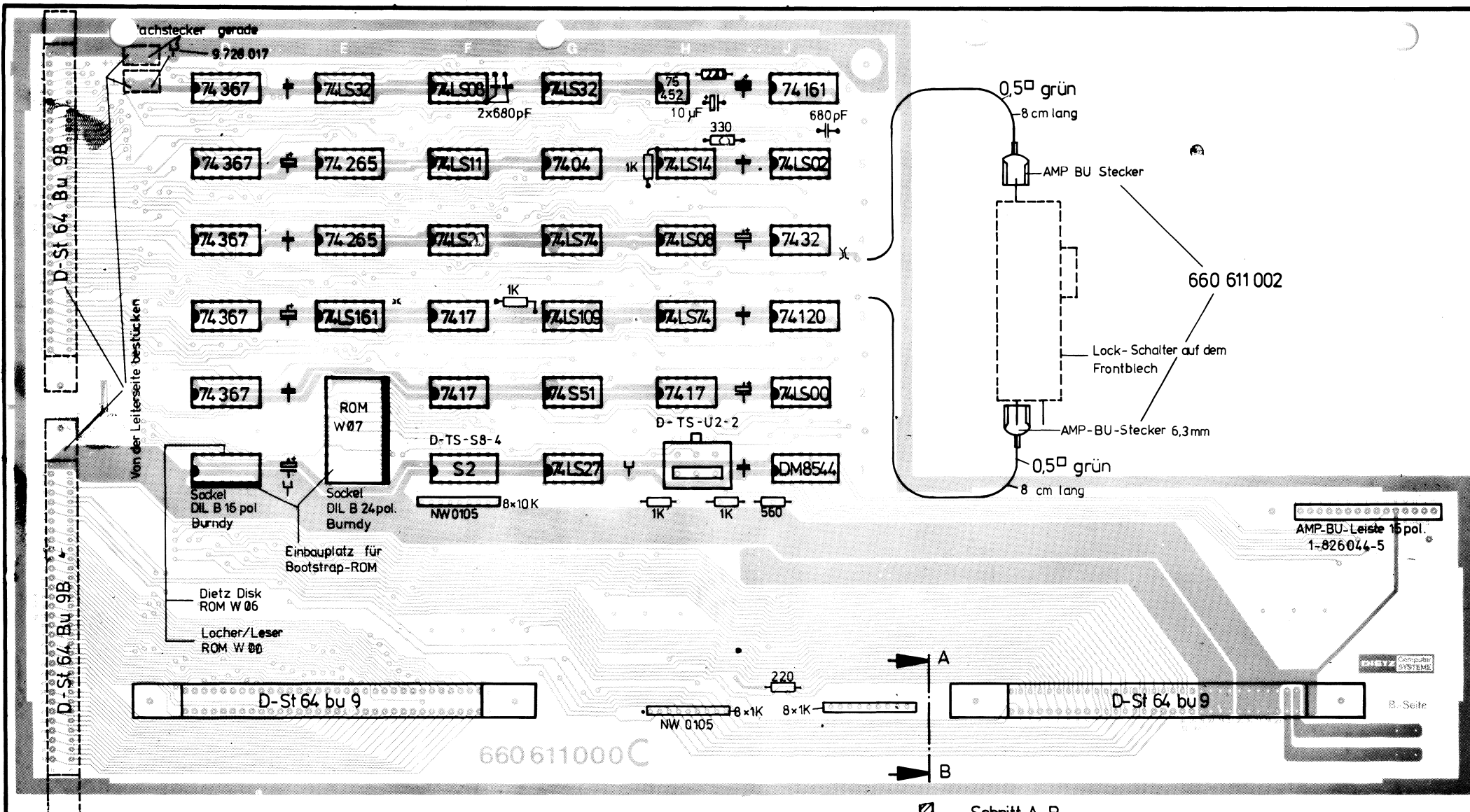
## BEDIENUNGSKONSOLE Stecker 1 und 2



## Motherboard Stecker 3 und 4

| Datum      |          | Name                | Benennung:               |            |
|------------|----------|---------------------|--------------------------|------------|
| Gez.       | 23.9.77  | Kibedi              | SBK STANDARD BED.KONSOLE |            |
| Gepr.      | 4.11.77  | 70                  | Signal Durchschaltung    |            |
| Komm.-Nr.: |          |                     |                          |            |
| D3         | 15.3.78  | 44                  | Zeichn./Sach.-Nr.        | Ind.       |
| D2         | 22.12.77 | 04                  | Zch.-Art                 | Blätter    |
| D1         | 21.12.77 | 41                  | 660611                   | C 01 05 05 |
| Zust.      | Änderung | Datum               | Name                     | Ers.f.:    |
|            |          | Computer SYSTEME    |                          | Ers.d.:    |
|            |          | Abt./Sachb.CH2-Thon |                          |            |

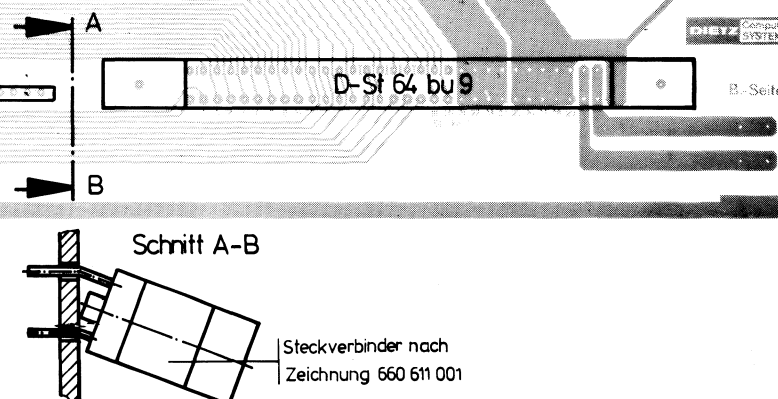
4.1.05



## Achtung:

Es darf nur 1 ROM eingebaut werden.  
Entweder 16pol. oder 24pol.

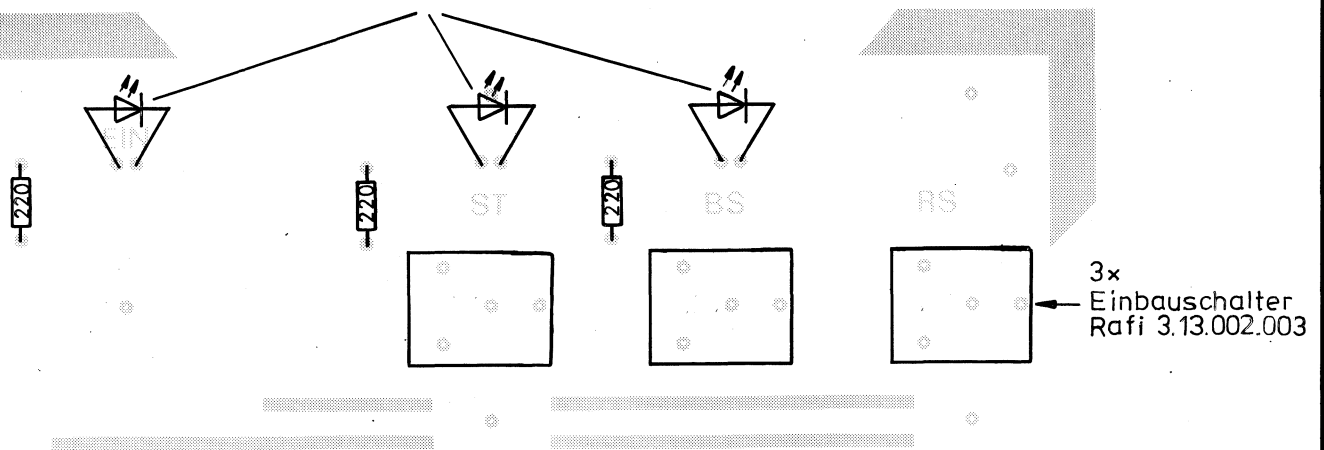
- Bauhöhe** Best.- Seite mm 10,2 ☐ abkleben  
Leit.- Seite mm 2,0 ☐ trennen  
☐ nach U.S. Wäsche einsetzen  
☐ auf der Lötseite bestücken
- ☒ 0,1 µF / 12 V Sperrschicht ☒ 10 µF / 16 V Tantal



|       |          |       |      | Datum                        | Name    | Benennung                    |
|-------|----------|-------|------|------------------------------|---------|------------------------------|
|       |          |       |      | Gez. 1.12.77                 | Flemmig | SBK Standard Bed. Konsole X2 |
|       |          |       |      | Gepr. 21.9.77                | 78      |                              |
|       |          |       |      | Gepr. 22.9.77                | 78      | Bestückungsplan              |
|       |          |       |      | Komm.-Nr.                    |         |                              |
| D3    | 17.3.78  | 78    |      |                              |         |                              |
| D2    | 29.12.77 | 78    |      |                              |         |                              |
| D1    | 21.12.77 | 78    |      |                              |         |                              |
| Zust. | Änderung | Datum | Name | Art./Sachb. CW 2             | Thema   | Frei f.                      |
|       |          |       |      | Computer SYSTEME             |         |                              |
|       |          |       |      | Zeichnung / Sach-Nr.         |         |                              |
|       |          |       |      | 660 611 1                    |         |                              |
|       |          |       |      | Ind. Zch.-Art. Blätter Blatt |         |                              |
|       |          |       |      | C 02 01 01                   |         |                              |



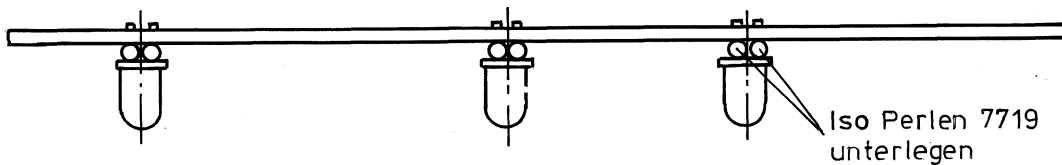
Leuchtdioden rot  
HP 5082-465570



660 611 100 C

DIETZ

S15 15 pol. Stiftleiste AMP  
1-82 5 435-5



- ☐ abkleben
- ☐ nach U.S. Wäsche einsetzen
- ☐ trennen
- ☐ auf der Lötseite bestücken

Schalterträger X2

LP.Nr.: 660 611 100 C 4.1.08

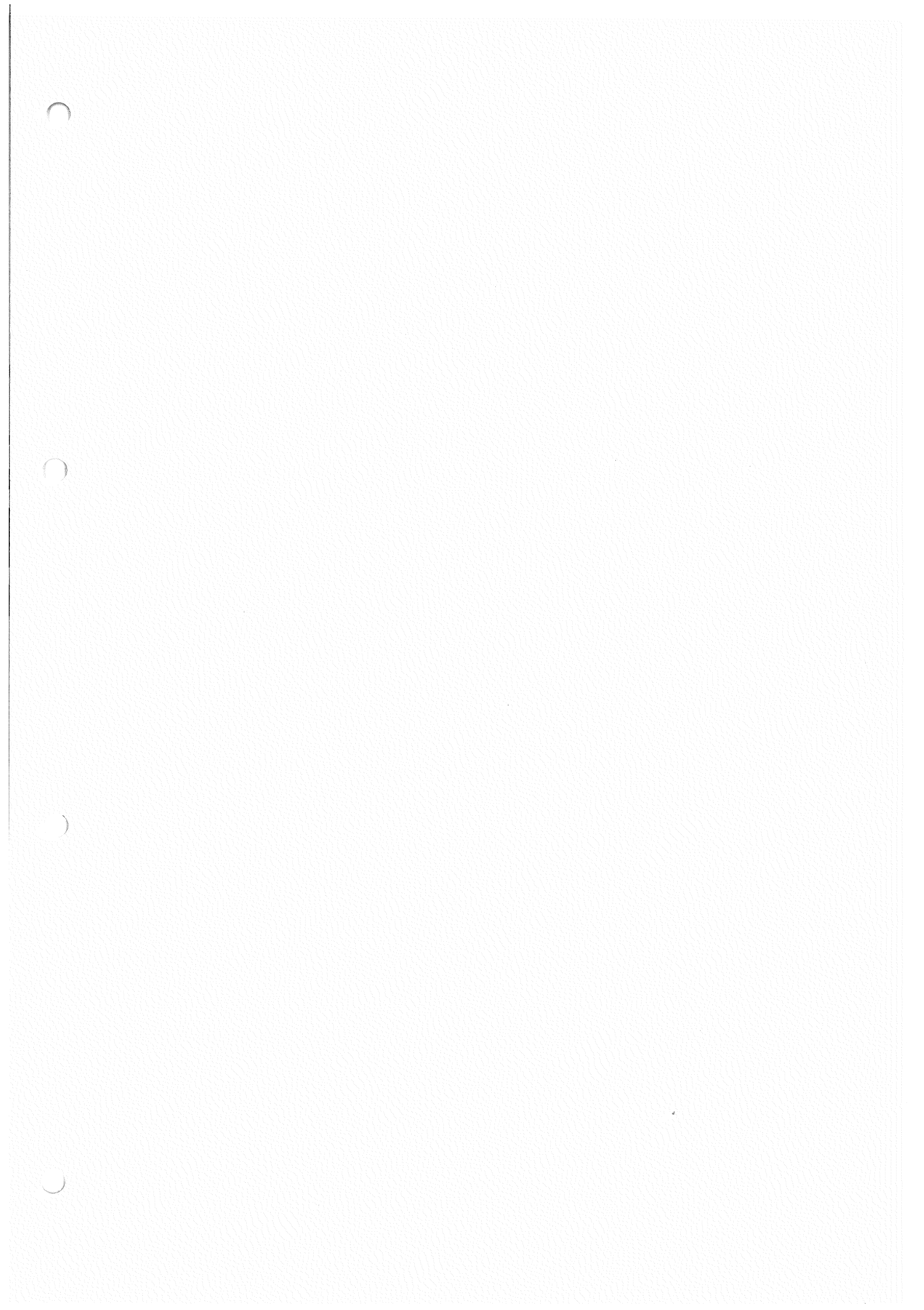
|            |             |
|------------|-------------|
| Gezeichnet | 21.3.77 H   |
| Geprüft    | 4.11.77 78  |
| Bearbeiter | 1 23.3.77 H |
| CH2-Th     | 2 27.4.77 H |

BESTÜCKUNG

660 611 1 C

DIETZ

Computer  
SYSTEME





4.2 Komfortbedienungskonsole X2

660 760 E

660 760 I C

## STANDARD BED. KONSOLE

## STECKER 1

|    | A       | C        |
|----|---------|----------|
| 1  | L       | CLK-2    |
| 2  | M       | HLT-SA   |
| 3  | N       | HLT-SR   |
| 4  | P       | K-3FF    |
| 5  | LEVEL   | ZP       |
| 6  | CT      | B        |
| 7  | C3      | K-CNP    |
| 8  | C3      | CLK-3000 |
| 9  | ZT      | HLD-D    |
| 10 | MM      | OP       |
| 11 | C3      | DEF      |
| 12 | C4      | STOP-ADR |
| 13 | C2      | DE&DATA  |
| 14 | CPU-REG | SC-IMP   |
| 15 | TAKT    | POOL     |
| 16 | SC-T    | FP-AKTIV |
| 17 | DE&DATA | PHRGMEM  |
| 18 | GO-T    | CLEAR    |
| 19 | Z3      | Q        |
| 20 | MDIS    |          |
| 21 | +5V     | +5V      |
| 22 | +5V     | +5V      |
| 23 | +5V     | +5V      |
| 24 | +5V     | +5V      |
| 25 | 0V      | 0V       |
| 26 | 0V      | 0V       |
| 27 | 0V      | 0V       |
| 28 | 0V      | 0V       |
| 29 | 0V      | 0V       |
| 30 |         |          |
| 31 |         |          |
| 32 |         |          |

## STECKER 2

|    | A     | C     |
|----|-------|-------|
| 1  | P-D05 | I-A05 |
| 2  | P-D04 | I-A17 |
| 3  | P-D03 | I-A00 |
| 4  | P-D02 | I-A14 |
| 5  | P-D01 | I-A13 |
| 6  | P-D06 | I-A15 |
| 7  | P-D07 | I-A16 |
| 8  | P-D08 | I-A03 |
| 9  | P-D17 | I-A02 |
| 10 | P-D16 | I-A06 |
| 11 | P-D13 | I-A01 |
| 12 | P-D14 | I-A10 |
| 13 | P-D13 | I-A11 |
| 14 | P-D12 | I-A04 |
| 15 | P-D11 | I-A07 |
| 16 | P-D10 | I-A12 |
| 17 | I-D02 | I-A09 |
| 18 | I-D17 | I-A08 |
| 19 | I-D16 | I-A18 |
| 20 | I-D13 | I-A19 |
| 21 | I-D10 | P-A11 |
| 22 | I-D06 | P-A10 |
| 23 | I-D07 | P-A09 |
| 24 | I-D08 | P-A08 |
| 25 | I-D04 | P-A07 |
| 26 | I-D03 | P-A06 |
| 27 | I-D14 | P-A05 |
| 28 | I-D01 | P-A04 |
| 29 | I-D00 | P-A03 |
| 30 | I-D13 | P-A02 |
| 31 | I-D12 | P-A01 |
| 32 | I-D11 | P-A00 |

## BK-SCHALTERTRÄGER

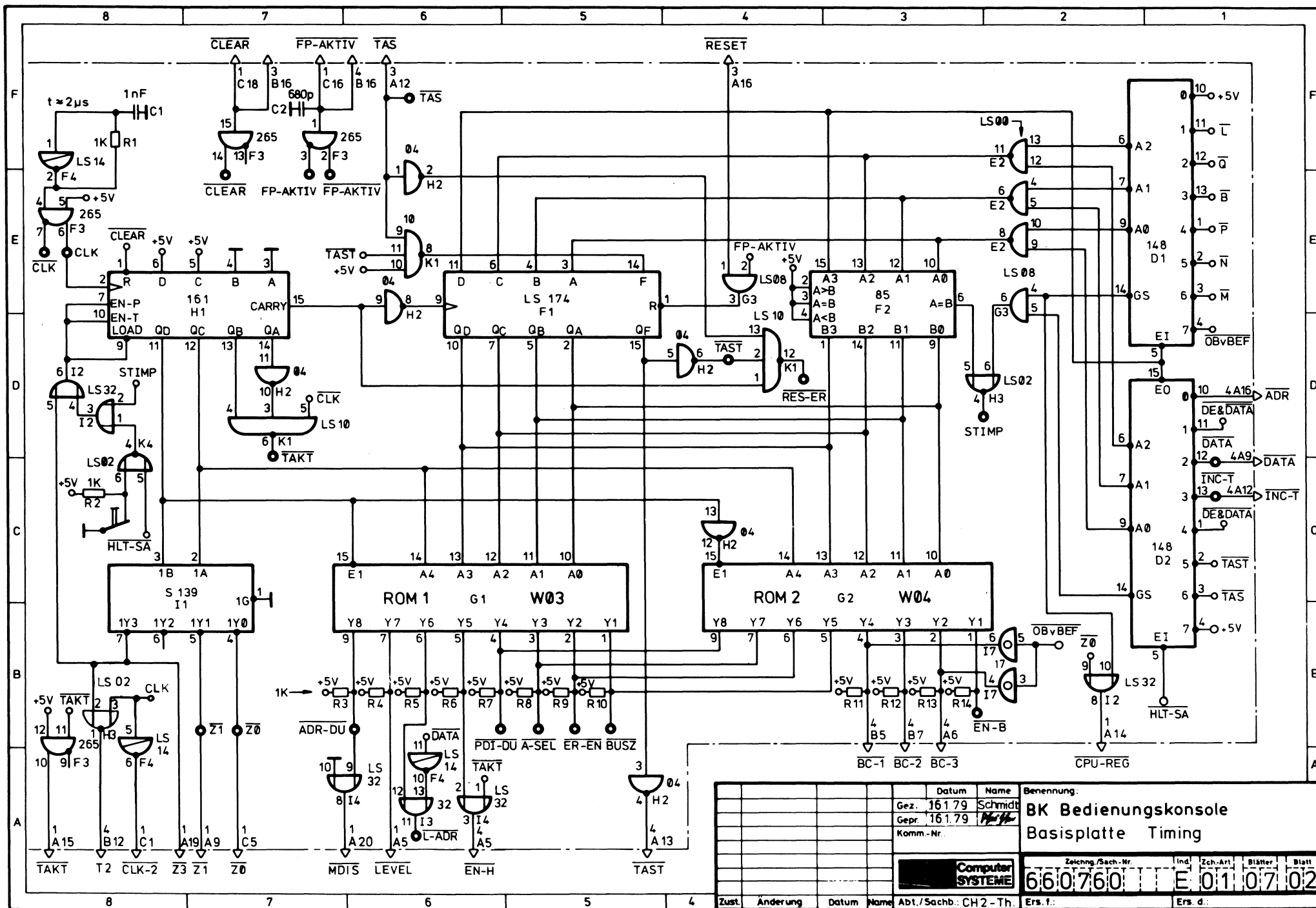
## STECKER 3

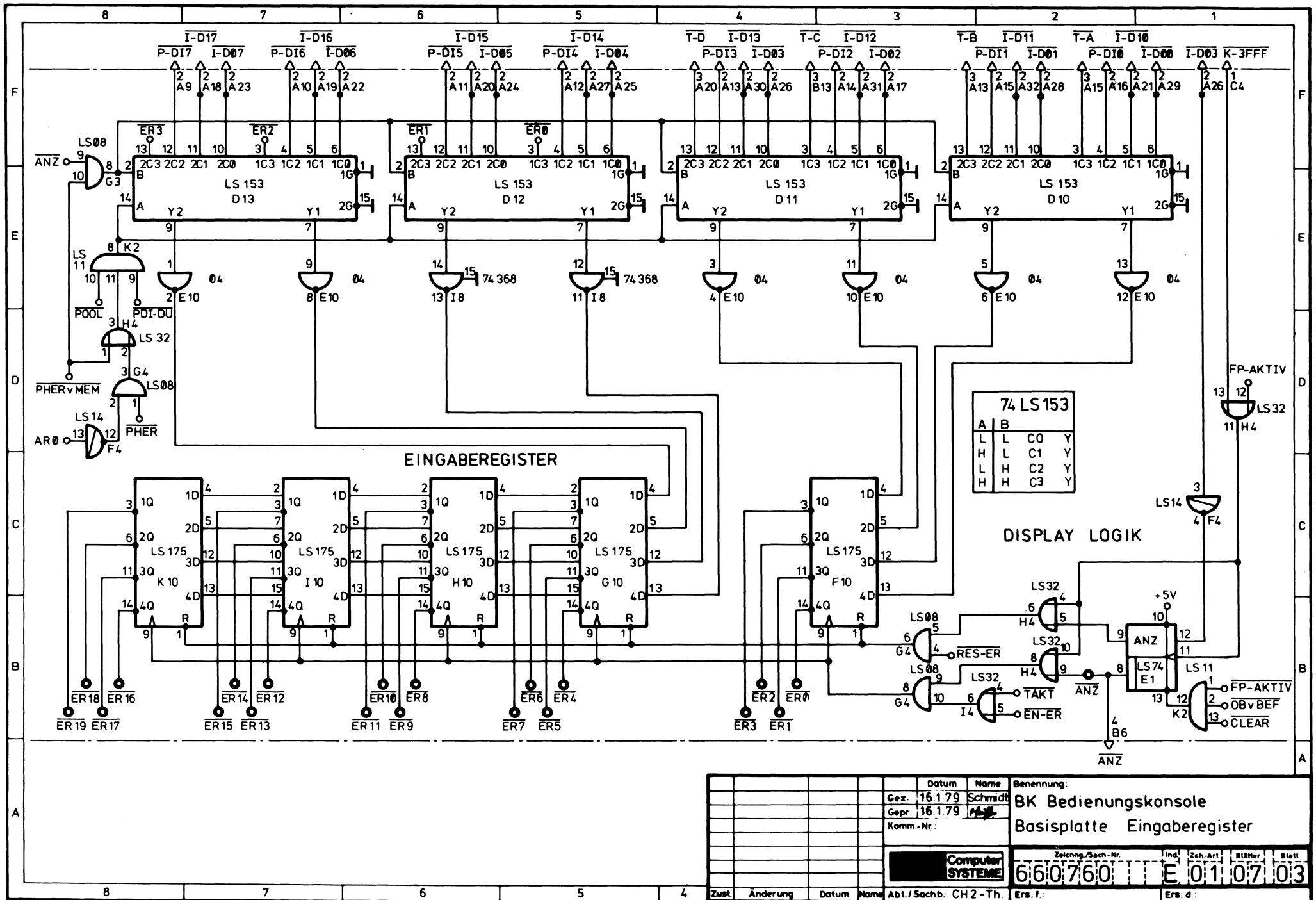
|    | A     | B        |
|----|-------|----------|
| 1  | +5V   | +5V      |
| 2  | +5V   | +5V      |
| 3  | AK2   | AK1      |
| 4  | AK0   | AK3      |
| 5  | AK6   | AK5      |
| 6  | AK4   | AK7      |
| 7  | AK10  | AK9      |
| 8  | AK8   | AK11     |
| 9  | AK14  | AK13     |
| 10 | AK12  | AK15     |
| 11 | AK19  | AK18     |
| 12 | TAS   | AK16     |
| 13 | T-B   | T-C      |
| 14 | K-CNP | AK17     |
| 15 | T-A   | CLK-3000 |
| 16 | RESET | CLEAR    |
| 17 | -     | -        |
| 18 | SC-T  | GO-T     |
| 19 | HLT-D | HLT-SA   |
| 20 | T-D   | HLT-SR   |
| 21 | C4    | C3       |
| 22 | C2    | C3       |
| 23 | CT    | CT       |
| 24 | 0V    | 0V       |
| 25 | 0V    | 0V       |

## STECKER 4

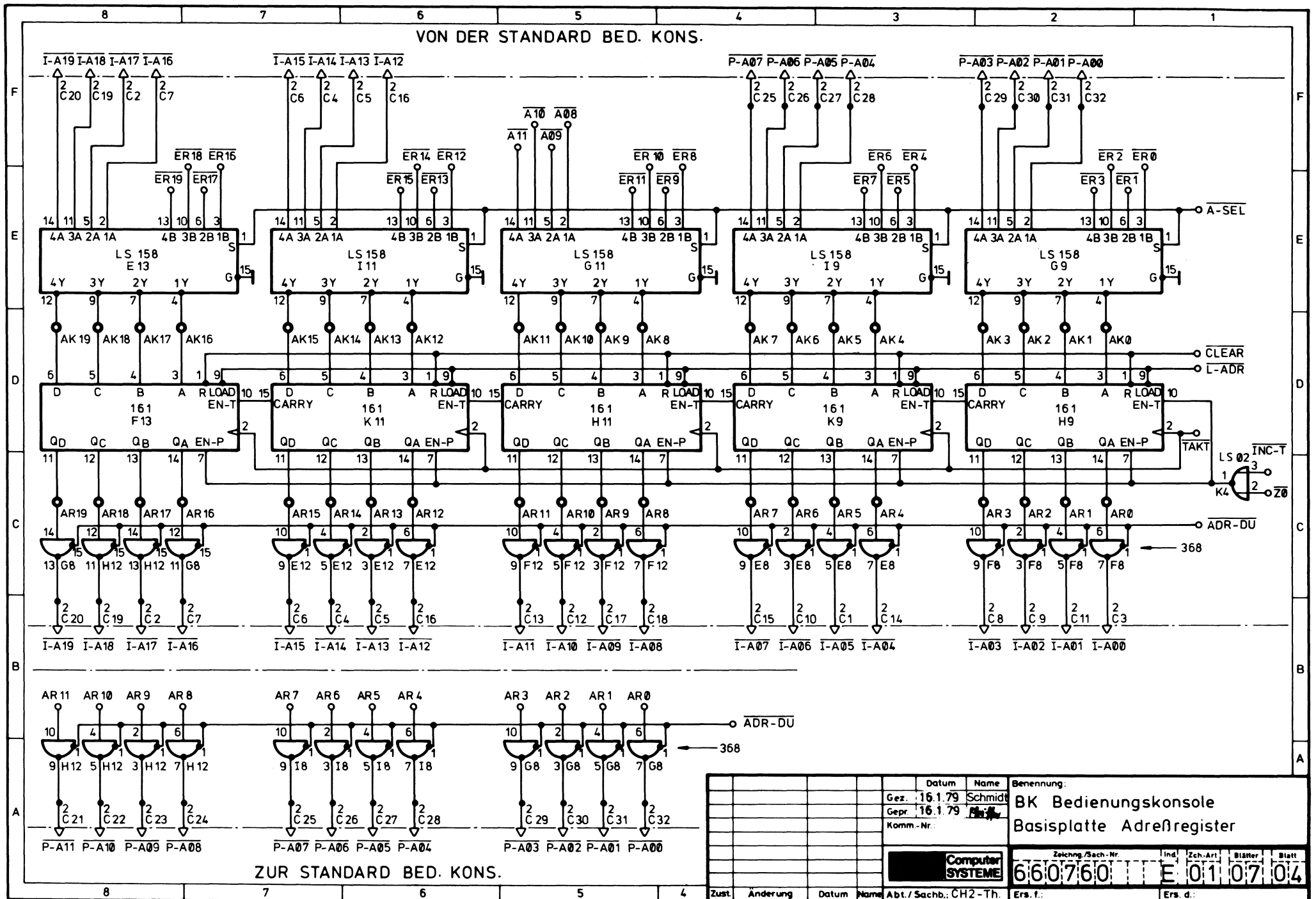
|    | A       | B        |
|----|---------|----------|
| 1  | 0V      | 0V       |
| 2  | 0V      | 0V       |
| 3  | -       | -        |
| 4  | -       | -        |
| 5  | EN-H    | BC-T     |
| 6  | BC-3    | ANZ      |
| 7  | -       | BC-2     |
| 8  | -       | -        |
| 9  | DATA    | -        |
| 10 | -       | -        |
| 11 | -       | MM       |
| 12 | INC-T   | T2       |
| 13 | TAST    | -        |
| 14 | OP      | DEF      |
| 15 | DE&DATA | DE&DATA  |
| 16 | ADR     | FP-AKTIV |
| 17 | N       | M        |
| 18 | L       | L        |
| 19 | L       | L        |
| 20 | 21      | 21       |
| 21 | 23      | 23       |
| 22 | 23      | 23       |
| 23 | 23      | 23       |
| 24 | +5V     | +5V      |
| 25 | +5V     | +5V      |

|                  |          |                          |      |                                 |                   |
|------------------|----------|--------------------------|------|---------------------------------|-------------------|
| Gez. 16.1.79     |          | Name Kibedi              |      | Benennung: BK Bedienungskonsole |                   |
| Gepr. 16.1.79    |          | Komm.-Nr.                |      | Basisplatte: Steckerbelegung    |                   |
| Computer SYSTEME |          | Zeichn./Sach.-Nr. 660760 |      | Ind. Ech.-Art. Blatt 01 07 01   |                   |
| Zust.            | Änderung | Datum                    | Name | Abt./Sachb. CH2-Th              | Ers. f.: Ers. d.: |

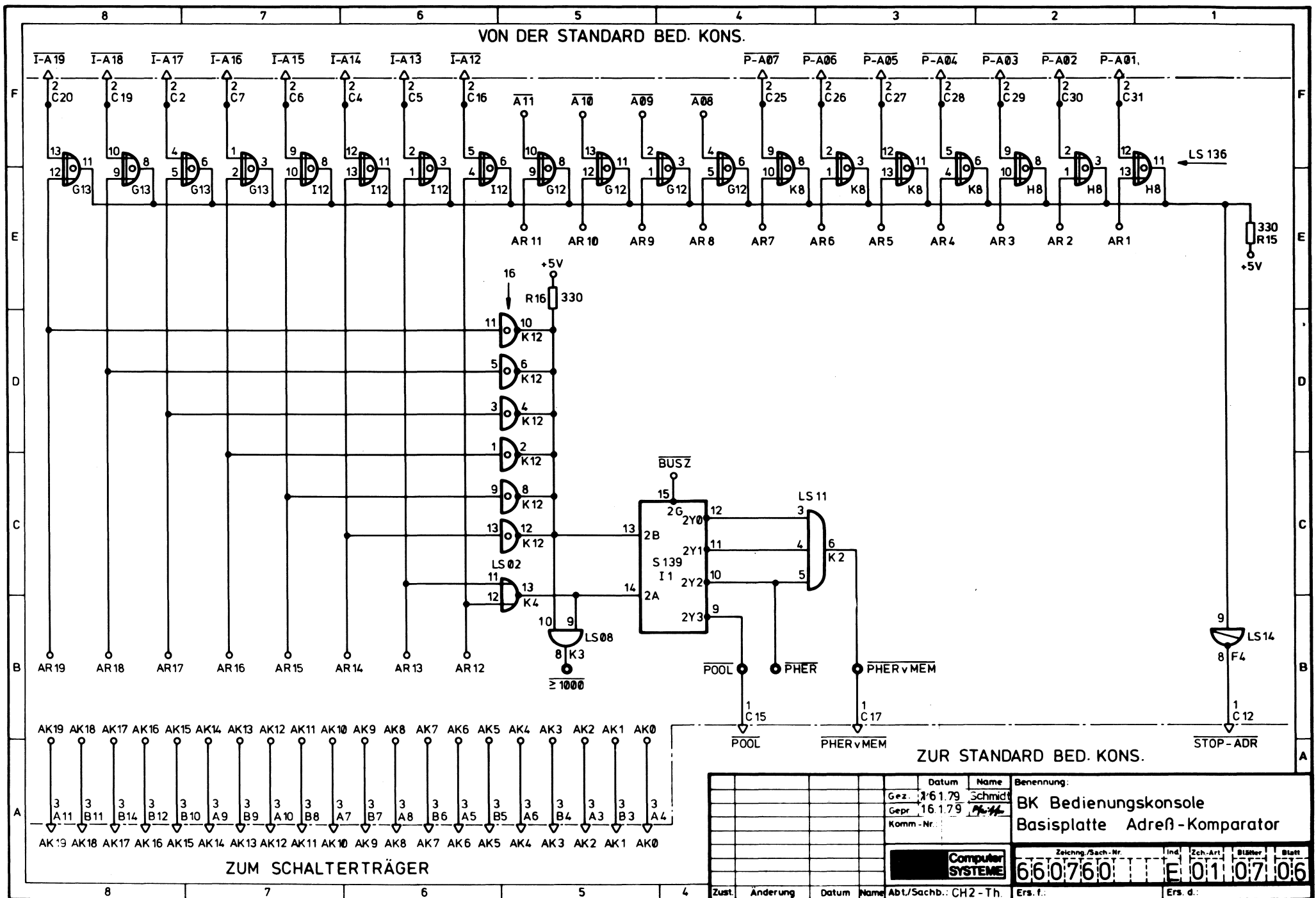


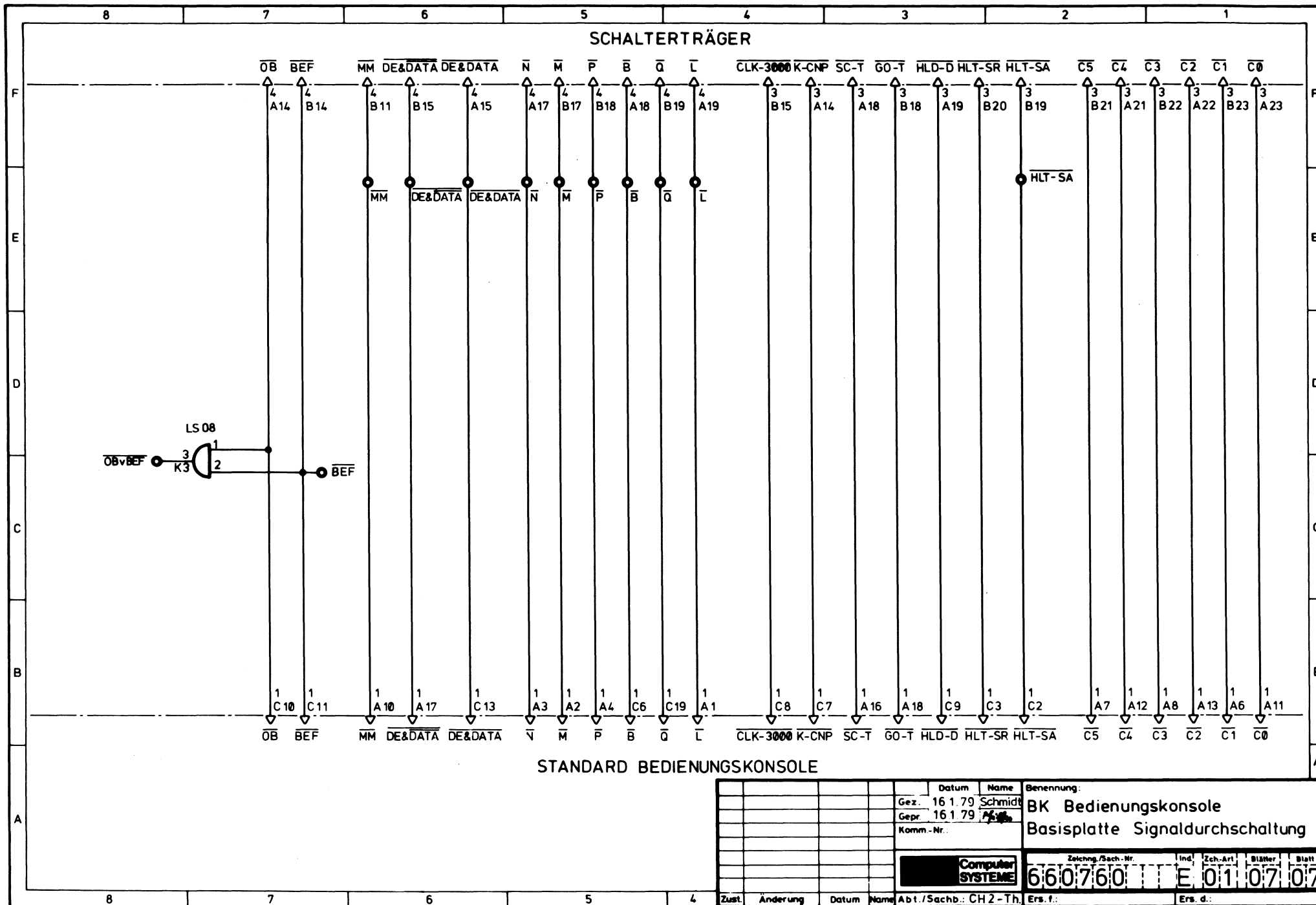


4.2.04



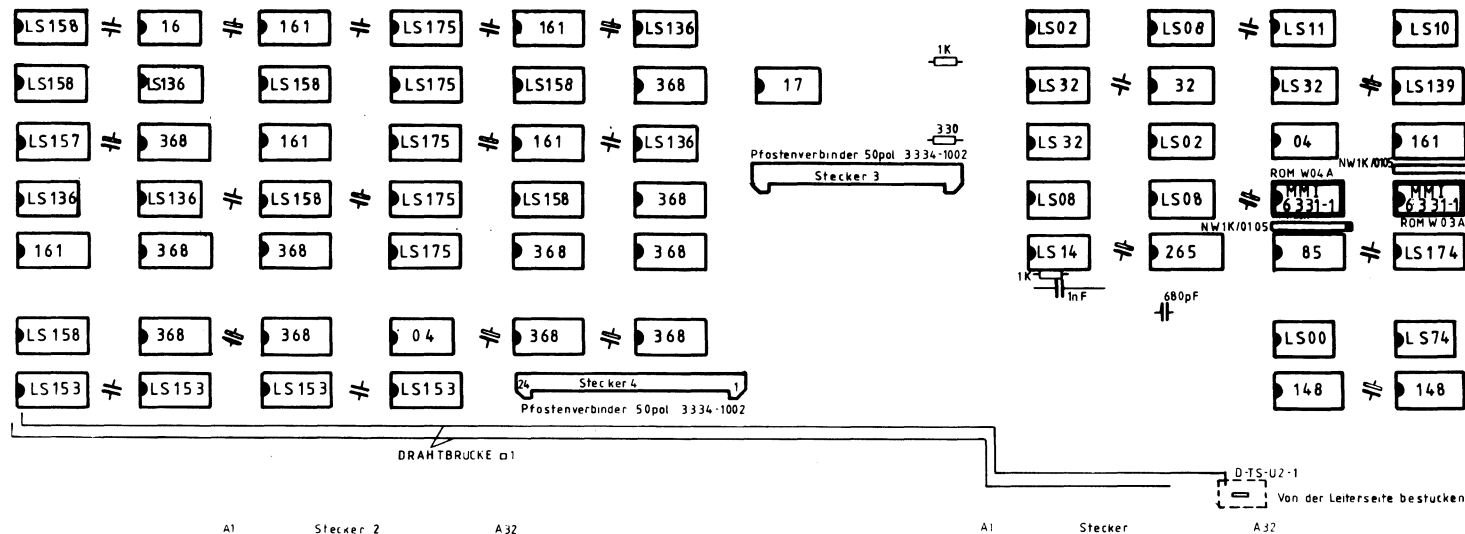












4 2 09

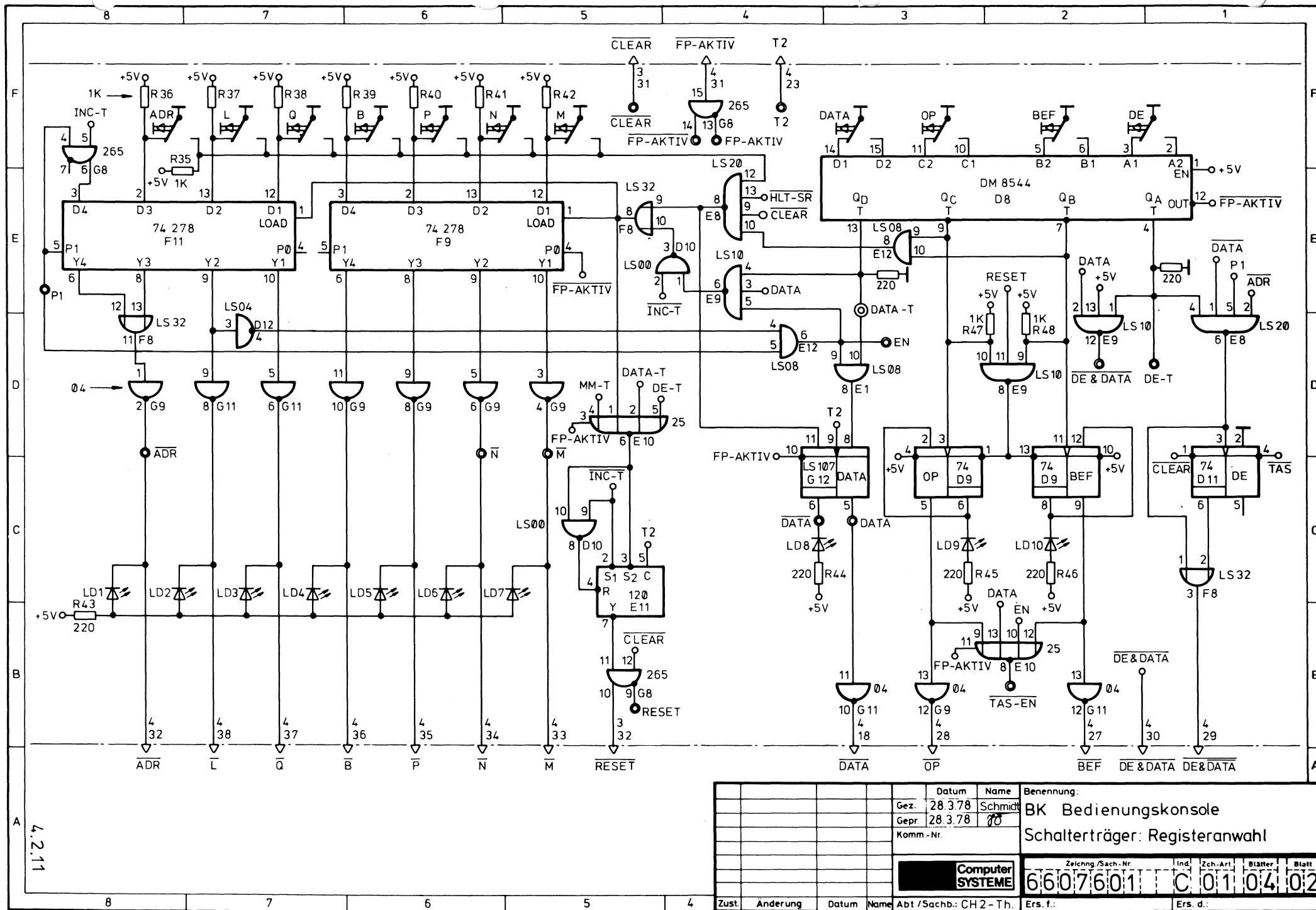
Bauhöhe Best.- Seite mm ☐ abkleben  
Leit.- Seite mm ☐ trennen  
Pluspol ☐ nach U.S. Wasche einsetzen  
Tantal ☐ auf der Lötseite bestücken

| Datum            | Name       | Benennung                     |
|------------------|------------|-------------------------------|
| 26.10.78         | Kalpak     | BESTÜCKUNGSPLAN               |
|                  |            | Bedienungskonsolle Basiskarte |
| Zeichnung        | Seite      | End                           |
| 660760           | E 02 01 01 |                               |
| Computer SYSTEMS |            |                               |
| Änderung         | Datum      | Name                          |
|                  |            |                               |

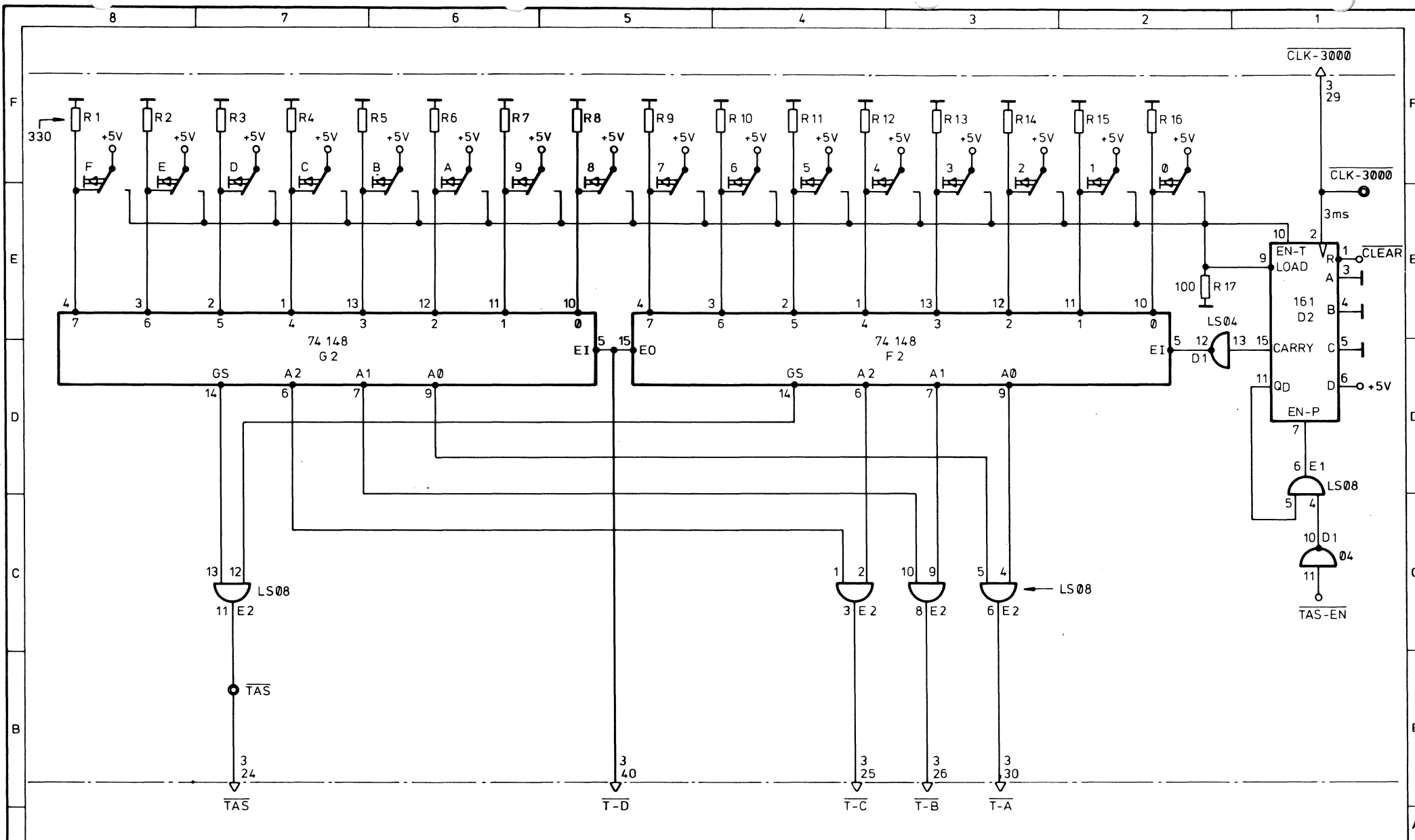
| Stecker 3 |          |
|-----------|----------|
| 1         | +5V      |
| 2         | +5V      |
| 3         | +5V      |
| 4         | +5V      |
| 5         | AK1      |
| 6         | AK2      |
| 7         | AK3      |
| 8         | AK0      |
| 9         | AK5      |
| 10        | AK6      |
| 11        | AK7      |
| 12        | AK4      |
| 13        | AK9      |
| 14        | AK10     |
| 15        | AK11     |
| 16        | AK8      |
| 17        | AK13     |
| 18        | AK14     |
| 19        | AK15     |
| 20        | AK12     |
| 21        | AK18     |
| 22        | AK19     |
| 23        | AK16     |
| 24        | TAS      |
| 25        | T-C      |
| 26        | T-B      |
| 27        | AK-17    |
| 28        | K-CNP    |
| 29        | CLK-3000 |
| 30        | T-A      |
| 31        | CLEAR    |
| 32        | RESET    |
| 33        | -        |
| 34        | -        |
| 35        | GO-T     |
| 36        | SC-T     |
| 37        | HLT-SA   |
| 38        | HLT-D    |
| 39        | HLT-SR   |
| 40        | T-D      |
| 41        | C5       |
| 42        | C4       |
| 43        | C3       |
| 44        | C2       |
| 45        | CT       |
| 46        | C0       |
| 47        | 0V       |
| 48        | 0V       |
| 49        | 0V       |
| 50        | 0V       |

| Stecker 4 |                             |
|-----------|-----------------------------|
| 1         | 0V                          |
| 2         | 0V                          |
| 3         | 0V                          |
| 4         | 0V                          |
| 5         | -                           |
| 6         | -                           |
| 7         | -                           |
| 8         | -                           |
| 9         | BC-T                        |
| 10        | EN-H                        |
| 11        | ANZ                         |
| 12        | BC-3                        |
| 13        | BC-2                        |
| 14        | -                           |
| 15        | -                           |
| 16        | -                           |
| 17        | -                           |
| 18        | DATA                        |
| 19        | -                           |
| 20        | -                           |
| 21        | MM                          |
| 22        | -                           |
| 23        | T2                          |
| 24        | INC-T                       |
| 25        | -                           |
| 26        | TAST                        |
| 27        | BEF                         |
| 28        | OP                          |
| 29        | DE&DATA                     |
| 30        | DE&DATA                     |
| 31        | FP AKTIV                    |
| 32        | ADR                         |
| 33        | M                           |
| 34        | N                           |
| 35        | P                           |
| 36        | B                           |
| 37        | Q                           |
| 38        | L                           |
| 39        | 2 <sub>1</sub> <sup>0</sup> |
| 40        | 2 <sub>1</sub> <sup>0</sup> |
| 41        | 2 <sub>2</sub> <sup>0</sup> |
| 42        | 2 <sub>3</sub> <sup>0</sup> |
| 43        | 2 <sub>4</sub> <sup>0</sup> |
| 44        | 2 <sub>5</sub> <sup>0</sup> |
| 45        | 2 <sub>6</sub> <sup>0</sup> |
| 46        | 2 <sub>7</sub> <sup>0</sup> |
| 47        | +5V                         |
| 48        | +5V                         |
| 49        | +5V                         |
| 50        | +5V                         |

|                                 |  |        |  |              |         |          |           |
|---------------------------------|--|--------|--|--------------|---------|----------|-----------|
| Benennung                       |  | Name   |  | Datum        | Gez.    | Gepr.    | Komm.-Nr. |
| BK Bedienungskonsole            |  | Kibedi |  | 28.3.78      | 28.3.78 | 28       |           |
| Schalterträger: Steckerbelegung |  |        |  |              |         |          |           |
| Zeich.-Nr.                      |  | Ind.   |  | Zch.-Art.    |         | Blatt    |           |
| 6607601                         |  | C      |  | 01           |         | 0401     |           |
| Computer SYSTEME                |  |        |  | Abt./ Sachb. |         | CH2 - Th |           |
| Zust.                           |  |        |  | Änderung     |         | Datum    |           |
| 4                               |  |        |  | 5            |         | 6        |           |
| 7                               |  |        |  | 8            |         | 9        |           |
| Ers f                           |  |        |  | Ers d        |         | Ers t    |           |



|  |  |  |  |                        |          |                   |                                |
|--|--|--|--|------------------------|----------|-------------------|--------------------------------|
|  |  |  |  | Datum                  | Name     | Benennung:        |                                |
|  |  |  |  | Gez.                   | 28.3.78  | Schmidt           | BK Bedienungskonsole           |
|  |  |  |  | Gepr.                  | 28.3.78  | 70                | Schalterträger: Registeranwahl |
|  |  |  |  | Komm.-Nr.              |          |                   |                                |
|  |  |  |  | Computer SYSTEME       |          | Zeichn./Sach.-Nr. | Ind.                           |
|  |  |  |  |                        |          | 6607601           | C 01 04 02                     |
|  |  |  |  | Zust.                  | Änderung | Datum             | Name                           |
|  |  |  |  | Abt./Sachb.: CH2 - Th. |          | Ers. f.:          | Ers. d.:                       |



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|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|----|

4.2.12









8.8.78

4.4 Standard-Bootstrap

W07H

W08E

|   |   |    |                                                              |   |   |   |   |   |   |
|---|---|----|--------------------------------------------------------------|---|---|---|---|---|---|
|   | 8 | 7  | 6                                                            | 5 | 4 | 3 | 2 | 1 |   |
| F |   |    |                                                              |   |   |   |   |   | F |
|   |   | 0  |                                                              |   |   |   |   |   |   |
|   |   | 1  |                                                              |   |   |   |   |   |   |
|   |   | 2  |                                                              |   |   |   |   |   |   |
|   |   | 3  |                                                              |   |   |   |   |   |   |
|   |   | 4  | *****                                                        |   |   |   |   |   |   |
|   |   | 5  | * B O O T S T R A P X 1 / X 2 *                              |   |   |   |   |   |   |
|   |   | 6  | * *                                                          |   |   |   |   |   |   |
|   |   | 7  | *****                                                        |   |   |   |   |   |   |
|   |   | 8  |                                                              |   |   |   |   |   |   |
|   |   | 9  | START BOOTSTRAP:                                             |   |   |   |   |   |   |
|   |   | 10 | A) DURCH TASTE "BS"                                          |   |   |   |   |   |   |
| E |   | 11 | B) DURCH NETZWIEDERKEHR WENN SCHALTER AUF                    |   |   |   |   |   | E |
|   |   | 12 | SBK IN STELLUNG BS UND NETZSCH. AUF "LOCK"                   |   |   |   |   |   |   |
|   |   | 13 | SCHALTERSATZ ODER DIALOG-EINGABE:                            |   |   |   |   |   |   |
|   |   | 14 | DIT 7 = 1 : HEBT DIALOGFUNKTION AUF                          |   |   |   |   |   |   |
|   |   | 15 | BIT 6 = 1 : OHNE REGENERIEREN                                |   |   |   |   |   |   |
|   |   | 16 | BIT 5 = 1 : REGENERIEREN OHNE MEMORY-MANAGER                 |   |   |   |   |   |   |
|   |   | 17 | BIT 4 = 1 : DIALOG (AUSGABE "***", EING. PLATTEN-TYP)        |   |   |   |   |   |   |
|   |   | 18 | DIT 3 = 1 : BOOTSTRAP FWP 9,6                                |   |   |   |   |   |   |
|   |   | 19 | BIT 2 = 1 : Z. ZT. FREI                                      |   |   |   |   |   |   |
|   |   | 20 | DIT 1 = 1 : BOOTSTRAP DIETZ-DISK                             |   |   |   |   |   |   |
| D |   | 21 | BIT 0 : 0 = UNIT 0, 1 = UNIT 1                               |   |   |   |   |   | D |
|   |   | 22 |                                                              |   |   |   |   |   |   |
|   |   | 23 |                                                              |   |   |   |   |   |   |
|   |   | 24 | AUFGABE DES PROGRAMMS:                                       |   |   |   |   |   |   |
|   |   | 25 |                                                              |   |   |   |   |   |   |
|   |   | 26 | 1. REGENERIEREN POOL UND SPEICHER WENN SCHALTER 6 = 0        |   |   |   |   |   |   |
|   |   | 27 | SCHREIBEN POOL: '00 (4 K), SCHREIBEN SPEICHER: '02           |   |   |   |   |   |   |
|   |   | 28 | 2. KONTROLL-LESEN POOL UND SPEICHER (PRUEFUNG NUR AUF        |   |   |   |   |   |   |
|   |   | 29 | PARITY OK)                                                   |   |   |   |   |   |   |
|   |   | 30 | 3. WENN PARITY OK: AUSGABE "OK", WEITER MIT BOOTSTRAP        |   |   |   |   |   |   |
| C |   | 31 | BEI PARITY-FEHLER: AUSGABE "NO". MOEGLICHE ABFRAGEN:         |   |   |   |   |   | C |
|   |   | 32 | REGISTER 4,5 + <'1300, '1301> (WENN MM BENUTZT) = AN-        |   |   |   |   |   |   |
|   |   | 33 |                                                              |   |   |   |   |   |   |
|   |   | 34 | FANGSADRESSE EINES 256-BYTE-BLOCKS IN DEM DER PARITY-        |   |   |   |   |   |   |
|   |   | 35 | FEHLER AUFTRAT.                                              |   |   |   |   |   |   |
|   |   | 36 | 4. AUFRUF DER EINZELNEN BOOTSTRAP-PROGRAMME MIT SCHALTER-    |   |   |   |   |   |   |
|   |   | 37 | SATZ (BITS SIEHE OBEN) ODER UEDER KONSOLGERAET               |   |   |   |   |   |   |
| B |   | 38 | 0000 COM , " B O O T S T R A P X 1 / X 2 W 0 7 H 781103 ***" |   |   |   |   |   | B |
|   |   |    |                                                              |   |   |   |   |   |   |
| A |   |    |                                                              |   |   |   |   |   | A |

4.4.01

|  |  |  |  |                             |          |                    |         |
|--|--|--|--|-----------------------------|----------|--------------------|---------|
|  |  |  |  |                             |          |                    |         |
|  |  |  |  | Datum                       | Name     | Benennung:         |         |
|  |  |  |  | Bearb.                      |          | BOOTSTAP ROM X1/X2 |         |
|  |  |  |  | Gepr.                       |          |                    |         |
|  |  |  |  | Komm.-Nr.                   |          |                    |         |
|  |  |  |  | <b>Computer<br/>SYSTEME</b> |          | Zeichng./Sach.-Nr. | Ind.    |
|  |  |  |  |                             |          | Zch.-Art.          | Blätter |
|  |  |  |  |                             |          |                    | Blatt   |
|  |  |  |  |                             |          | W:07               | H:06    |
|  |  |  |  |                             |          |                    | 0:1     |
|  |  |  |  | Zust.                       | Änderung | Datum              | Name    |
|  |  |  |  | Urspr.                      |          | Ers. f.            | Ers. d. |





|   | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
|---|---|---|---|---|---|---|---|---|
| F |   |   |   |   |   |   |   |   |
| E |   |   |   |   |   |   |   |   |
| D |   |   |   |   |   |   |   |   |
| C |   |   |   |   |   |   |   |   |
| B |   |   |   |   |   |   |   |   |
| A |   |   |   |   |   |   |   |   |

|     |            |           |                      |             |                                    |  |  |  |
|-----|------------|-----------|----------------------|-------------|------------------------------------|--|--|--|
| 134 |            | S         |                      |             |                                    |  |  |  |
| 135 |            |           | LESER - BOOTSTRAP    |             |                                    |  |  |  |
| 136 |            |           |                      |             |                                    |  |  |  |
| 137 | 40F8 BS :  | STAD,@    | , '0780              | 1E EC 80 07 |                                    |  |  |  |
| 138 | 40FC       | LDR ,@    | , MKSW               | 84 FE       |                                    |  |  |  |
| 139 | 40FE BS1 : | ANC ,@    | , 'OF                | 80 OF       |                                    |  |  |  |
| 140 | 4100       | LDC ,21   | , -5                 | 81 15 FB    | WIEDERHOLUNG BEI ERROR             |  |  |  |
| 141 | 4103       | BNZ ,@    | , BDD                | 48 23       |                                    |  |  |  |
| 142 |            |           |                      |             |                                    |  |  |  |
| 143 | 4105       | LDC ,5    | , 6                  | 81 05 06    | LESER-BS                           |  |  |  |
| 144 | 4108 LBS : | LDC ,@    | , '1A                | 80 1A       |                                    |  |  |  |
| 145 | 410A       | STA ,@    | , '1011              | EC 11 10    |                                    |  |  |  |
| 146 | 410D HLT : | LDAD,@    | , '1010              | 1E 8C 10 10 |                                    |  |  |  |
| 147 | 4111       | BZC ,3    | , 1 ,HLT             | 61 03 01 F9 | ? READY                            |  |  |  |
| 148 | 4115       | BNEC,@    | , 'FF ,DAT           | 58 FF 05    | ? RUBOUT                           |  |  |  |
| 149 | 4118       | BEC ,5    | , 6 ,LBS             | 51 05 06 ED |                                    |  |  |  |
| 150 | 411C DAT : | STX ,@    | , 5                  | E2 05       |                                    |  |  |  |
| 151 | 411E       | INZ ,5    | , ,LBS               | 4B 05 EB    |                                    |  |  |  |
| 152 | 4121       | LDC ,5    | , '10                | 81 05 10    | KONSTANTE FUER "ALTEN" LADER       |  |  |  |
| 153 | 4124       | JPA ,     | , END1               | FC 07 00    | NACH AUSSCHALTEN BS WEITER BEI 'OC |  |  |  |
| 154 |            |           |                      |             |                                    |  |  |  |
| 155 |            |           |                      |             |                                    |  |  |  |
| 156 |            |           |                      |             |                                    |  |  |  |
| 157 |            |           | BOOTSTRAP DIETZ-DISK |             |                                    |  |  |  |
| 158 | 4127 BDD : | BNZC,@    | , 'OC ,BW9           | 68 OC 6C    | ? BIT 1 = DIETZ-DISK               |  |  |  |
| 159 | 412A       | ANC ,@    | , 1                  | 80 01       |                                    |  |  |  |
| 160 | 412C       | 3 %SLD ,@ |                      | 11 03 2C    |                                    |  |  |  |
| 161 | 412F       | STR ,@    | , 3                  | E4 03       | MERKEN FUER UNIT 0 ODER 1          |  |  |  |
| 162 | 4131 AO :  | LDC ,@    | , 0                  | 80 00       | DIETZ - DISK READY ?               |  |  |  |
| 163 | 4133       | STAD,@    | , '1A00              | 1E EC 00 1A |                                    |  |  |  |
| 164 | 4137       | LDA ,@    | , '1A03              | 8C 03 1A    |                                    |  |  |  |
| 165 | 413A       | BDC ,@    | , 1 ,AO              | 70 01 F5    | ? UNIT READY                       |  |  |  |
| 166 | 413D       | CSL ,4    | , STAD               | F9 04 35    |                                    |  |  |  |

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|-------|-----------|-------|------|-------------|---------|---------|
| Zust. | Aenderung | Datum | Name | Abt./Sachb. | Ers.f.: | Ers.d.: |
|       |           |       |      |             |         |         |

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|-------------------|--|------|-------------|---------------------|-------|
| Datum             |  | Name |             | Benennung:          |       |
|                   |  |      |             | BOOTSTRAP ROM X1/X2 |       |
| Gez.              |  |      |             |                     |       |
| Gepr.             |  |      |             |                     |       |
| Komm.-Nr.         |  |      |             |                     |       |
| Computer SYSTEME  |  |      |             |                     |       |
| Zeichng./Sach-Nr. |  | Ind. | Zeich.-Art. | Blätter             | Blatt |
| W:07              |  | H    |             | 0:6                 | 0:4   |





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*                               *
*  D O O T S T R A P  X 1/X 2  *
*                               *
*****

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START BOOTSTRAP:

- A) DURCH TASTE "BS"  
 B) DURCH NETZWIEDERKEHR WENN SCHALTER AUF  
 SBK IN STELLUNG BS UND NETZSCH. AUF "LOCK"

SCHALTERSATZ ODER DIALOG-EINGABE:

```

BIT 7 = 1 : HEBT DIALOGFUNKTION AUF
BIT 6 = 1 : OHNE REGENERIEREN
BIT 5 = 1 : REGENERIEREN OHNE MEMORY-MANAGER
BIT 4 = 1 : DIALOG (AUSGABE "***", EING. PLATTEN-TYP)
BIT 3 = 1 : BOOTSTRAP FWP 9,6
BIT 3+2=1 : BOOTSTRAP FLOPPY (IBM-KOMP.)
BIT 3+1=1 : BOOTSTRAP 60 MBYTE
BIT 2 = 1 : BOOTSTRAP 2,4 MBYTE/12 SLOTS
BIT 1 = 1 : BOOTSTRAP DIETZ-DISK
BIT 0      : 0 = UNIT 0, 1 = UNIT 1

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AUFGABE DES PROGRAMMS:

1. REGENERIEREN POOL UND SPEICHER WENN SCHALTER 6 = 0  
 SCHREIBEN POOL: '00 (4 K), SCHREIBEN SPEICHER: '02
2. KONTROLL-LESEN POOL UND SPEICHER (PRUEFUNG NUR AUF  
 PARITY OK)
3. WENN PARITY OK: AUSGABE "OK", WEITER MIT BOOTSTRAP  
 BEI PARITY-FEHLER: AUSGABE "NO". MOEGLICHE ABFRAGEN:

REGISTER 4,5 + <'1300, '1301> (WENN MM BENUTZT) = AN-  
 FANGSADRESSE EINES 256-BYTE-BLOCKS IN DEM DER PARITY-  
 FEHLER AUFTRET.

4. AUFRUF DER EINZELNEN BOOTSTRAP-PROGRAMME MIT SCHALTER-  
 SATZ (BITS SIEHE OBEN) ODER UEDER KONSOLGERAET

33  
 34  
 35  
 36  
 37  
 38  
 39  
 40 0000

COM , " D O O T S T R A P X 1 / X 2 W O B E 790601 \*\*\*"

|                     |  |                   |  |                     |  |           |  |             |  |        |  |        |  |
|---------------------|--|-------------------|--|---------------------|--|-----------|--|-------------|--|--------|--|--------|--|
| Datum               |  | Name              |  | Benennung:          |  |           |  |             |  |        |  |        |  |
| Gez.                |  |                   |  | BOOTSTRAP ROM X1/X2 |  |           |  |             |  |        |  |        |  |
| Gepr.               |  |                   |  |                     |  |           |  |             |  |        |  |        |  |
| Komm.-Nr.           |  |                   |  |                     |  |           |  |             |  |        |  |        |  |
| Zust.               |  | Änderung          |  | Datum               |  | Name      |  | Abt./Sachb. |  | Ers.f. |  | Ers.d. |  |
| Computer<br>SYSTEME |  | Zeichn./Sach.-Nr. |  | Ind.                |  | Zch.-Art. |  | Blätter     |  | Blatt  |  |        |  |
| W 0 8               |  | E                 |  | 0 8                 |  | 0 1       |  |             |  |        |  |        |  |

4.4.07



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| E |   |   |   |   |   |   |   |   |
| D |   |   |   |   |   |   |   |   |
| C |   |   |   |   |   |   |   |   |
| B |   |   |   |   |   |   |   |   |
| A |   |   |   |   |   |   |   |   |

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4.4.80

8

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41      S
42 * 00FF MKMM : Q , 'FF
43 * 00FE MKSW : Q , 'FE
44 * 1300 MM0 : 2 *Q , '1300
45 * 1340 MM40 : 2 *Q , '1340
46 * 3FFF CLOCK : 2 *Q , '3FFF
47 * CON : 7 *Q , '01000020000102
48 0000 JPA , @ , ANF FC 0C 40
49 0003 END : STL F, @ , AN1 1F 03 EB 06 JPA NACH PROGRAMMANFANG
50 0007 END1 : LDC , @ , 4 80 04
51 0009 AN0 : STA , @ , CLOCK EC FF 3F AUSASCHALTEN BOOTSTRAP
52 * 000C AN1 : 2 *Q , AN0 +3
53 * 400C CADR : 2 *Q , AN1 + '4000
54
55
56 400C D , CADR
57 400C ANF : GS , @ 22
58 400D STR , @ , MKSW E4 FE
59 400F BNP , @ , , REG 4C 34 ? KEIN DIALOG
60 4011 BNOC , @ , '10 , REG 78 10 31 ? DIALOG
61 DIALOG, AUSGABE "":
62 4014 DIA : 3=&LDC , @ , 'FF3AA 1D 03 80 AA 3A "":
        FF
63 401A CSA , 6 , TTY FD 06 FB 41
64 401E DIA3 : CSL , 8 , DIA0 F9 08 40
65 4021 SBC , @ , '30 A0 30
66 4023 BNP , @ , , DIA 4C F0 ? < "O"
67 4025 SBC , @ , 10 A0 0A
68 4027 BNP , @ , , DIA4 4C 0B ? > "9"
69 4029 SBC , @ , 7 A0 07
70 402D BNP , @ , , DIA 4C EB ? < "A"
71 402D SBC , @ , 6 A0 06
72 402F BP , @ , , DIA 44 E4 ? > "F"

73 4031 ADC , @ , 6 90 06
74 4033 DIA4 : ADC , @ , 10 90 0A
75 4035 INZ , 4 , , DIA2 4B 04 08 ? 2. ZEICHEN
76 4038 4 &SLO , @ 11 04 2C
77 403B STR , @ , MKSW E4 FE
78 403D JPL , , , DIA3 F8 E0
79 403F DIA2 : ANC , @ , 'OF B0 OF
80 4041 ORR , MKSW , @ C5 FE 02
          
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| Gez.                                                           |          | Datum |       | Name |             | Benennung:                 |
|----------------------------------------------------------------|----------|-------|-------|------|-------------|----------------------------|
|                                                                |          |       |       |      |             |                            |
| Gepr.                                                          |          |       |       |      |             |                            |
| Komm.-Nr.                                                      |          |       |       |      |             | <b>BOOTSTRAP ROM X1/X2</b> |
| <div style="text-align: center;"><b>Computer SYSTEME</b></div> |          |       |       |      |             |                            |
| Zeichn./Sach-Nr.                                               |          |       |       |      |             |                            |
| Ind. Zch.-Art. Blätter Blatt                                   |          |       |       |      |             |                            |
| W018 E 08 02                                                   |          |       |       |      |             |                            |
| Zust.                                                          | Änderung |       | Datum | Name | Abt./Sachb. | Ers.f.: Ers.d.:            |



|  | 8   | 7          | 6 | 5                      | 4 | 3        | 2              | 1                                  |
|--|-----|------------|---|------------------------|---|----------|----------------|------------------------------------|
|  |     |            |   | MEMORY-MANAGER-ROUTINE |   |          |                |                                    |
|  | 122 |            |   |                        |   | 49 FF 04 |                | ? MM VORHANDEN                     |
|  | 123 | 40B3 MMR   | : | BNZ ,MKMM              | , | MMR1     |                |                                    |
|  | 124 | 40B6       |   | BNP ,5                 | , | MMR2     | 4D 05 12       | ? ADDR. >'7FFF BEI MM              |
|  | 125 | 40B9 MMR1  | : | INZ ,5                 | , | MMR4     | 4D 05 1D       | INDEXREG. HOEHERWERTIG             |
|  | 126 | 40BC       |   | JPX ,                  | , | 10       | F2 0A          |                                    |
|  | 127 | 40BE MMR10 | : | 7=&LDC ,@              | , | CON      | 1D 07 80 02 01 |                                    |
|  |     |            |   |                        |   |          | 00 20 00 00 01 |                                    |
|  | 128 | 40C8       |   | JPX ,                  | , | 10       | F2 0A          |                                    |
|  | 129 | 40CA MMR2  | : | 2<*SBC ,6              | , | -1       | 1A A1 06 FF    | INDEX MM                           |
|  | 130 | 40CE       |   | STAF ,6                | , | MM0      | 1F 03 ED 06 00 | BASISREG. + STATUS MG              |
|  |     |            |   |                        |   |          | 13             |                                    |
|  | 131 | 40D4       |   | STA ,3                 | , | MM40     | ED 03 40 13    |                                    |
|  | 132 | 40D8 MMR4  | : | JPA ,                  | , | -7 ,10   | FE F9 FF 0A    | 7 BYTE ZURUECK                     |
|  | 133 | 40DC RDPO1 | : | STAD ,@                | , | '0780    | 1E EC 80 07    |                                    |
|  | 134 | 40E0       |   | 2<&LDC ,4              | , | 0        | 18 81 04 00    | LESEN POOL                         |
|  | 135 | 40E4 RDP   | : | 256>&LDC ,@            | , | 4        | 15 00 82 04    |                                    |
|  | 136 | 40E8       |   | INEC ,5                | , | 8 ,RDP   | 5B 05 08 F9    | ? 2K GELESEN                       |
|  | 137 | 40EC       |   | CSL ,10                | , | MMR10    | F9 0A D0       |                                    |
|  | 138 | 40EF RDS   | : | 256>&LDC ,@            | , | 4        | 15 00 82 04    |                                    |
|  | 139 | 40F3       |   | CSL ,10                | , | MMR      | F9 0A BE       |                                    |
|  | 140 | 40F6 OK    | : | ADC ,5                 | , | '20      | 91 05 20       |                                    |
|  | 141 | 40F9       |   | BEC ,5                 | , | '40 ,RDS | 51 05 40 F3    | ? SPEICHER 2000                    |
|  | 142 | 40FD       |   | LDCD ,@                | , | '4BCF    | 1E 80 CF 4B    | AUSGABE "OK"                       |
|  | 143 | 4101       |   | CSA ,6                 | , | TTY      | FD 06 F8 41    |                                    |
|  | 144 | 4105       |   | BNZ ,MKMM              | , | BS'      | 49 FF A3       | ? MEMORY-MANAGER                   |
|  | 145 | 4108       |   | STA ,MKMM              | , | MM40     | ED FF 40 13    |                                    |
|  | 146 | 410C       |   | JPL ,                  | , | BS'      | F8 9D          |                                    |
|  | 147 |            |   | S                      |   |          |                |                                    |
|  | 148 |            |   | LESER - BOOTSTRAP      |   |          |                |                                    |
|  | 149 |            |   |                        |   |          |                |                                    |
|  | 150 | 410E BS    | : | STAD ,@                | , | '0780    | 1E EC 80 07    |                                    |
|  | 151 | 4112       |   | LDR ,@                 | , | MKSW     | 84 FE          |                                    |
|  | 152 | 4114 BS1   | : | ANC ,@                 | , | '0F      | 80 0F          |                                    |
|  | 153 | 4116       |   | LDC ,21                | , | -5       | 81 15 FB       | WIEDERHOLUNG BEI ERROR             |
|  | 154 | 4119       |   | BNZ ,@                 | , | BDD      | 4B 23          |                                    |
|  | 155 |            |   |                        |   |          |                |                                    |
|  | 156 | 411B       |   | LDC ,5                 | , | 6        | 81 05 06       | LESER-BS                           |
|  | 157 | 411E LBS   |   | LDC ,@                 | , | '1A      | 80 1A          |                                    |
|  | 158 | 4120       |   | STA ,@                 | , | '1011    | EC 11 10       |                                    |
|  | 159 | 4123 HLT   |   | LDAD ,@                | , | '1010    | 1E 8C 10 10    |                                    |
|  | 160 | 4127       |   | BZC ,3                 | , | 1 ,HLT   | 61 03 01 F9    | ? READY                            |
|  | 161 | 4129       |   | BNEC ,@                | , | 'FF ,DAT | 58 FF 05       | ? RUBOUT                           |
|  | 162 | 412E       |   | BEC ,5                 | , | 6 ,LBS   | 51 05 06 ED    |                                    |
|  | 163 | 4132 DAT   |   | STX ,@                 | , | 5        | E2 05          |                                    |
|  | 164 | 4134       |   | INZ ,5                 | , | LBS      | 4B 05 E8       |                                    |
|  | 165 | 4137       |   | LDC ,5                 | , | '10      | 81 05 10       | KONSTANTE FUER "ALTEN" LADER       |
|  | 166 | 413A       |   | JPA ,                  | , | END1     | FC 07 00       | NACH AUSSCHALTEN BS WEITER BEI '0C |
|  | 167 |            |   |                        |   |          |                |                                    |
|  | 168 |            |   |                        |   |          |                |                                    |
|  | 169 |            |   |                        |   |          |                |                                    |

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|  |  | Datum     |  | Name |  | Benennung:          |  |
|  |  | Gez.      |  |      |  | BOOTSTRAP ROM X1/X2 |  |
|  |  | Gepr.     |  |      |  |                     |  |
|  |  | Komm.-Nr. |  |      |  |                     |  |
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|-------------------|----------|-------|-----------|---------------------|---------|
| Datum             |          | Name  |           | Benennung:          |         |
| Gez.              |          |       |           | BOOTSTRAP ROM X1/X2 |         |
| Gepr.             |          |       |           |                     |         |
| Komm.-Nr.         |          |       |           |                     |         |
| Zeichn./Sach.-Nr. |          | Ind.  | Zch.-Art. | Blätter             | Blatt   |
| W/08              |          |       | E         | 08                  | 04      |
| Zust.             | Änderung | Datum | Name      | Abt./Sachb.         | Ers. f. |
|                   |          |       |           |                     | Ers. d. |

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| B |   |   |   |   |   |   |   |   |
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|       |            |   |           |                                      |                |  |                                             |  |
|-------|------------|---|-----------|--------------------------------------|----------------|--|---------------------------------------------|--|
| 170   |            |   |           | BOOTSTRAP DIETZ-DISK                 |                |  |                                             |  |
| 171   | 413D BDD   | : | BNZC ,@   | , 'OC , DW9                          | 68 0C 6D       |  | ? BIT 1 = DIETZ-DISK                        |  |
| 172   | 4140       |   | ANC ,@    | , 1                                  | 80 01          |  |                                             |  |
| 173   | 4142       |   | 3 &SLO ,@ |                                      | 11 03 2C       |  |                                             |  |
| 174   | 4145       |   | STR ,@    | , 3                                  | E4 03          |  | MERKEN FUER UNIT 0 ODER 1                   |  |
| 175   | 4147 A0    | : | LDC ,@    | , 0                                  | 80 00          |  | DIETZ - DISK READY ?                        |  |
| 176   | 4149       |   | STAD ,@   | , '1A00                              | 1E EC 00 1A    |  |                                             |  |
| 177   | 414D       |   | LDA ,@    | , '1A03                              | 8C 03 1A       |  |                                             |  |
| 178   | 4150       |   | B0C ,@    | , 1 , A0                             | 70 01 F5       |  | ? UNIT READY                                |  |
| 179   | 4153       |   | CSL ,@    | , STAD                               | F9 02 35       |  |                                             |  |
| 180   |            |   |           | DISK-LEVEL                           |                |  |                                             |  |
| 181   | 4156 DDL   | : | LDC ,3    | , 0                                  | 81 03 00       |  |                                             |  |
| 182   | 4159       |   | LDA ,@    | , '1A03                              | 8C 03 1A       |  |                                             |  |
| 183   | 415C       |   | STA ,3    | , '1A02                              | ED 03 02 1A    |  |                                             |  |
| 184   | 4160       |   | BZC ,@    | , 3 , A1                             | 60 03 13       |  | ? ERROR                                     |  |
| 185   | 4163       |   | HSL ,0    |                                      | 03 00          |  |                                             |  |
| 186   | 4165       |   | JPL ,     | , DDL                                | F8 F0          |  |                                             |  |
| 187   | 4167 ADD   | : | LDC ,@    | , 2                                  | 80 02          |  |                                             |  |
| 188   | 4169       |   | STA ,@    | , '1A02                              | EC 02 1A       |  |                                             |  |
| 189   | 416C       |   | HLT       |                                      | 02             |  |                                             |  |
| 190   | 416D       |   | INZ ,21   | , , ADD                              | 4B 15 F8       |  | ? 5* WIEDERHOLUNG BEI ERROR                 |  |
| 191   | 4170 DDE   | : | 2C&LDC ,@ | , 'C5                                | 18 80 C5       |  | ERROR, AUSGABE "DD"                         |  |
| 192   | 4173 ERRA  | : | JPL ,     | , FEH1                               | F8 2E          |  |                                             |  |
| 193   | 4175 A1    | : | 3=&LDC ,3 | , CDD                                | 1D 03 81 03 1F |  | ANF. -ADR. BOOTSTRAP IM POOL + ADR. FUER JP |  |
| 194   | 417C A10   | : | LDA ,@    | , '1A04                              | 8C 04 1A       |  |                                             |  |
| 195   | 417F       |   | STX ,@    | , 5                                  | E2 05          |  |                                             |  |
| 196   | 4181       |   | INEC ,5   | , '9E , A10                          | 5B 05 9E F8    |  |                                             |  |
| 197   | 4185 END   | : | LDC ,@    | , 'FC                                | 80 FC          |  | JPA                                         |  |
| 198   | 4187       |   | JPA ,     | , END                                | FC 03 00       |  |                                             |  |
| 199 * | CDD        | : | 3 *Q ,    | , '1E001F                            |                |  | ADR. '001F FUER JP + '1E                    |  |
| 200   |            |   |           |                                      |                |  |                                             |  |
| 201   |            |   |           | S                                    |                |  |                                             |  |
| 202   |            |   |           | STARTADRESSEN FUER DISK-LEVEL SETZEN |                |  |                                             |  |
| 203   | 418A STAD  | : | 2C&LDC ,4 | , 0                                  | 18 81 04 00    |  |                                             |  |
| 204   | 418E STAD1 | : | STXD ,@   | , , 4                                | 1E E2 04       |  |                                             |  |
| 205   | 4191       |   | ADCD ,4   | , 12B                                | 1E 91 04 80 00 |  |                                             |  |
| 206   | 4196       |   | BNEC ,5   | , 8 , STAD1                          | 59 05 08 F5    |  | ? POOL-ENDE                                 |  |
| 207   | 419A       |   | JPA ,     | , 17 , @                             | FE 11 00 02    |  | DISK-LEVEL UEBERSPRINGEN                    |  |
| 208   |            |   |           |                                      |                |  |                                             |  |
| 209   |            |   |           |                                      |                |  |                                             |  |
| 210   |            |   |           | FEHLERAUSGANG                        |                |  |                                             |  |
| 211   | 419E FEH   | : | LD0D ,@   | , 'CF4E                              | 1E 80 4E CF    |  | FEHLER, AUSGABE "NO"                        |  |
| 212   | 41A2 FEH1  | : | CSL ,6    | , TTY                                | F9 06 54       |  |                                             |  |
| 213   | 41A5       |   | CSA ,8    | , DIA0                               | FD 08 60 40    |  |                                             |  |
| 214   | 41A9 DIA   | : | JPA ,     | , DIA                                | FC 14 40       |  |                                             |  |

|           |          |                   |      |                     |           |
|-----------|----------|-------------------|------|---------------------|-----------|
| Datum     |          | Name              |      | Benennung:          |           |
| Gez.      |          |                   |      | BOOTSTRAP ROM X1/X2 |           |
| Gepr.     |          |                   |      |                     |           |
| Komm.-Nr. |          |                   |      |                     |           |
| Computer  |          | Zeichn./Sach.-Nr. |      | Ind.                | Zch.-Art. |
| SYSTEME   |          | W08               |      | E                   | 08 05     |
| Zust.     | Änderung | Datum             | Name | Abt./Sachb.         | Ers. f.   |
|           |          |                   |      |                     | Ers. d.   |

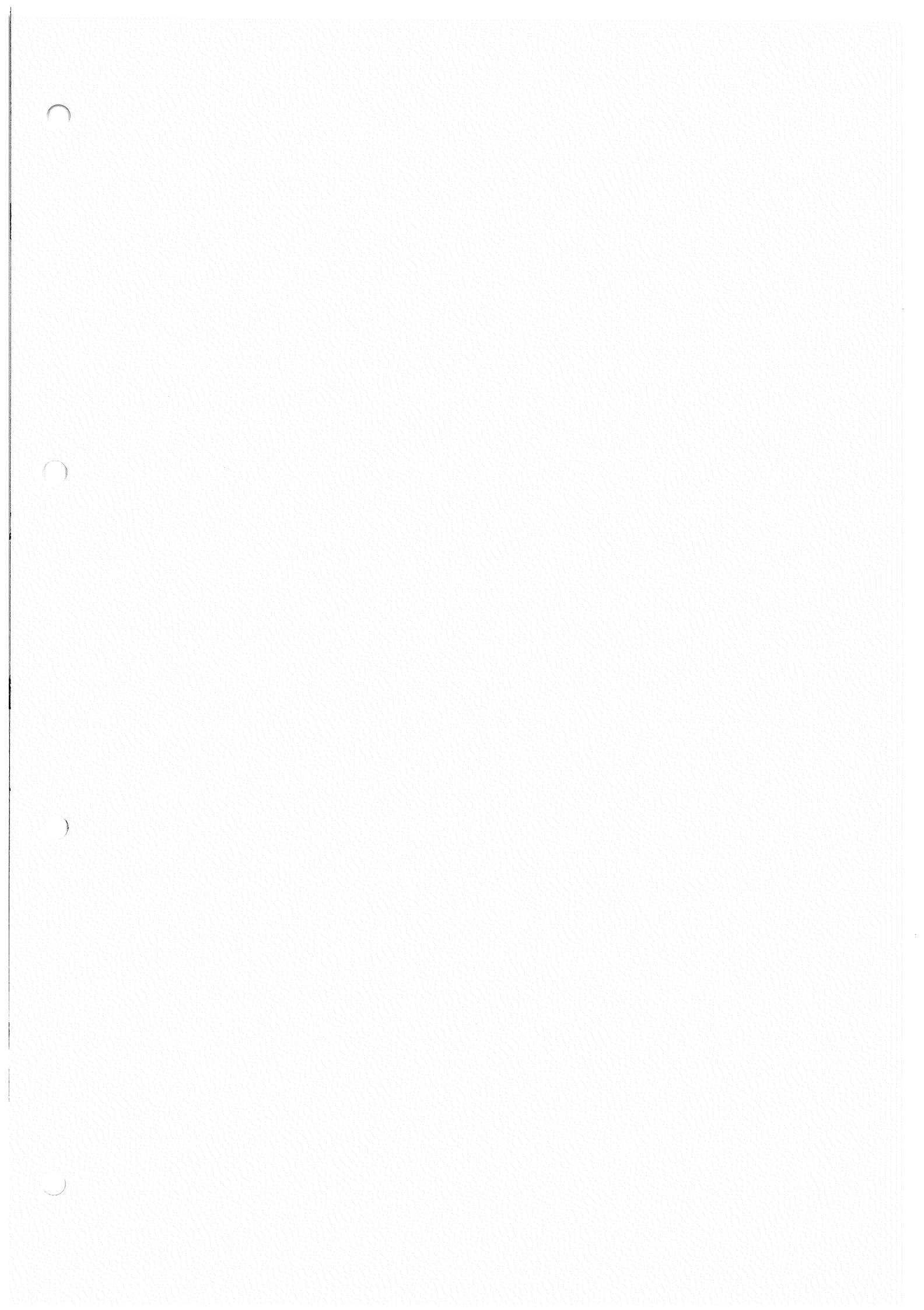


|        | 8 | 7     | 6            | 5                                   | 4              | 3 | 2 | 1                |   |
|--------|---|-------|--------------|-------------------------------------|----------------|---|---|------------------|---|
| F      |   |       |              |                                     |                |   |   |                  | F |
|        |   | 258   |              | S                                   |                |   |   |                  |   |
|        |   | 259   |              | BOOTSTRAP 60 MBYTE-DISK             |                |   |   |                  |   |
|        |   | 260   | 4219 WP60 :  | BNZC , @ , 4 , WP24                 | 68 04 50       |   |   | ? BIT 4 = WP 2,4 |   |
|        |   | 261   | 421C         | ANC , @ , 1                         | 80 01          |   |   |                  |   |
|        |   | 262   | 421E         | STR , @ , 20                        | E4 14          |   |   | UNIT MERKEN      |   |
|        |   | 263   | 4220 WP601 : | LDC , @ , 1                         | 80 01          |   |   |                  |   |
|        |   | 264   | 4222         | STA , @ , '1820                     | EC 20 18       |   |   | RESET            |   |
|        |   | 265   | 4225         | STA , 20 , '1825                    | ED 14 25 18    |   |   | UNIT SELECT      |   |
|        |   | 266   | 4229         | LDC , @ , '18                       | 80 18          |   |   | RESTORE + LOCK   |   |
|        |   | 267   | 422B         | STA , @ , '1829                     | EC 29 18       |   |   |                  |   |
|        |   | 268   | 422E WP602 : | LDA , @ , '1829                     | 8C 29 18       |   |   |                  |   |
| E      |   | 269   | 4231         | BZC , @ , 1 , WP602                 | 60 01 FB       |   |   | ? READY          | E |
|        |   | 270   | 4234         | LDA , @ , '182B                     | 8C 2B 18       |   |   |                  |   |
|        |   | 271   | 4237         | BDC , @ , 1 , WP601                 | 70 01 E7       |   |   | ? UNIT READY     |   |
|        |   | 272   | 423A         | CSA , @ , STAD                      | FD 02 BA 41    |   |   |                  |   |
|        |   | 273   |              | DISK - LEVEL                        |                |   |   |                  |   |
|        |   | 274   | 423E WP60L : | LDC , 3 , 0                         | 81 03 00       |   |   |                  |   |
|        |   | 275   | 4241         | LDA , @ , '1829                     | 8C 29 18       |   |   |                  |   |
|        |   | 276   | 4244         | STA , 3 , '1829                     | ED 03 29 18    |   |   |                  |   |
|        |   | 277   | 424B         | BP , @ , , WPE'                     | 44 20          |   |   | ? ERROR          |   |
|        |   | 278   | 424A         | HSL , 0                             | 03 00          |   |   |                  |   |
| D      |   | 279   | 424C         | JPL , , WP60L                       | FB F1          |   |   |                  | D |
|        |   | 280   | 424E         | V                                   |                |   |   |                  |   |
|        |   | 281 * | CON60 :      | 9 *Q , '020040000031000000          |                |   |   |                  |   |
|        |   | 282   | 424F         | 9=%LDC , @ , CON60                  | 1D 09 80 00 00 |   |   |                  |   |
|        |   |       |              |                                     | 00 31 00 00 40 |   |   |                  |   |
|        |   |       |              |                                     | 00 02          |   |   |                  |   |
|        |   | 283   | 425B         | LDR , 6 , 20                        | 85 06 14       |   |   | UNIT             |   |
|        |   | 284   | 425E         | 9=%STA , @ , '1821                  | 1D 09 EC 21 18 |   |   |                  |   |
|        |   | 285   | 4263         | HLT                                 | 02             |   |   |                  |   |
|        |   | 286   | 4264         | INZ , 21 , , WP601                  | 4B 15 BA       |   |   | ? 5* WIEDERHOLT  |   |
| C      |   | 287   | 4267         | JPL , , ERR                         | FB 83          |   |   |                  | C |
|        |   | 288   | 4269 WPE'    | JPL , , WPE                         | FB 87          |   |   |                  |   |
|        |   | 289   |              | S                                   |                |   |   |                  |   |
|        |   | 290   |              | BOOTSTRAP 2,4 MBYTE DISK (12 SLOTS) |                |   |   |                  |   |
|        |   | 291   | 426B WP24 :  | BNOC , @ , 6 , FLOP                 | 78 06 4D       |   |   |                  |   |
|        |   | 292   | 426E WP241 : | ANC , @ , 1                         | 80 01          |   |   |                  |   |
|        |   | 293   | 4270         | 6 %SLO , @ ,                        | 11 06 2C       |   |   |                  |   |
|        |   | 294   | 4273         | STR , @ , 20                        | E4 14          |   |   | UNIT MERKEN      |   |
|        |   | 295   | 4275         | STA , @ , '1804                     | EC 04 18       |   |   |                  |   |
|        |   | 296   | 427B WP242 : | LDC , @ , '88                       | 80 88          |   |   | RESTORE + LOCK   |   |
|        |   | 297   | 427A         | STA , @ , '1807                     | EC 07 18       |   |   |                  |   |
|        |   | 298   | 427D WP244 : | LDA , @ , '1807                     | 8C 07 18       |   |   |                  |   |
|        |   | 299   | 4280         | BZC , @ , 1 , WP244                 | 60 01 FB       |   |   | ? READY          |   |
|        |   | 300   | 4283         | LDA , @ , '180B                     | 8C 0B 18       |   |   |                  |   |
|        |   | 301   | 4286         | BDC , @ , '10 , WP242               | 70 10 F0       |   |   | ? DRIVE READY    |   |
|        |   | 302   | 4289         | CSA , @ , STAD                      | FD 02 BA 41    |   |   |                  |   |
| A      |   |       |              |                                     |                |   |   |                  | A |
| 4.4.13 |   |       |              |                                     |                |   |   |                  |   |
|        | 8 | 7     | 6            | 5                                   | 4              |   |   |                  |   |

|                   |          |       |           |                     |         |         |  |
|-------------------|----------|-------|-----------|---------------------|---------|---------|--|
| Datum             |          | Name  |           | Benennung:          |         |         |  |
| Gez.              |          | Gepr. |           | BOOTSTRAP ROM X1/X2 |         |         |  |
| Komm.-Nr.         |          |       |           |                     |         |         |  |
| Zeichn./Sach.-Nr. |          | Ind.  | Zch.-Art. | Blätter             | Blatt   |         |  |
| W:0:8             |          | E     |           | 0:8                 | 0:7     |         |  |
| Zust.             | Änderung | Datum | Name      | Abt./Sachb.         | Ers. f. | Ers. d. |  |

Computer  
SYSTEME

|   | 8       | 7            | 6                       | 5              | 4                            | 3 | 2 | 1 |
|---|---------|--------------|-------------------------|----------------|------------------------------|---|---|---|
| F | 303     |              | DISK - LEVEL            |                |                              |   |   |   |
|   | 304     | 428D WP24L : | LDC ,3 ,0               | B1 03 00       |                              |   |   |   |
|   | 305     | 4290         | LDA ,@ , '1808          | 8C 08 18       |                              |   |   |   |
|   | 306     | 4293         | STA ,3 , '1807          | ED 03 07 18    |                              |   |   |   |
|   | 307     | 4297         | BZC ,@ , '78 , WPE'     | 60 78 D0       | ? ERROR                      |   |   |   |
|   | 308     | 429A         | HSL ,0                  | 03 00          |                              |   |   |   |
|   | 309     | 429C         | JPL , , WP24L           | FB F0          |                              |   |   |   |
|   | 310 *   | CON24 :      | 7 *G , '020B0000004000  |                |                              |   |   |   |
|   | 311     | 429E         | 7=&LDC ,@ , CON24       | 1D 07 80 00 40 |                              |   |   |   |
|   |         |              |                         | 00 00 00 08 02 |                              |   |   |   |
|   | 312     | 42A8         | LDR ,5 ,20              | B5 05 14       | UNIT                         |   |   |   |
|   | 313     | 42AD         | 7=&STA ,@ , '1801       | 1D 07 EC 01 18 |                              |   |   |   |
|   | 314     | 42B0         | HLT                     | 02             |                              |   |   |   |
|   | 315     | 42B1         | INZ ,21 , , WP242       | 4B 15 C5       | ? 5* WIEDERHOLT              |   |   |   |
| E | 316     | 42B4         | JPA , , ERR             | FC EB 41       |                              |   |   |   |
|   | 317     | 42B7 XX :    | JPA , , DIA             | FC 14 40       |                              |   |   |   |
|   | 318     |              | S                       |                |                              |   |   |   |
|   | 319     |              | BOOTSTRAP FLOPPY - DISK |                |                              |   |   |   |
|   | 320     | 42BA FLOP :  | BNZC,@ ,2 ,XX           | 68 02 FB       |                              |   |   |   |
|   | 321     | 42BD         | 7 &SLO ,@ ,             | 11 07 2C       | UNIT = BIT 7                 |   |   |   |
|   | 322     | 42C0         | STR ,@ ,20              | E4 14          |                              |   |   |   |
|   | 323     | 42C2         | STA ,@ , '1A02          | EC 02 1A       |                              |   |   |   |
|   | 324     | 42C5 FLOP2 : | LDA ,@ , '1A03          | 8C 03 1A       |                              |   |   |   |
|   | 325     | 42C8         | BNP ,@ , , FLOP2        | 4C FC          | ? BUSY                       |   |   |   |
| D | 326     | 42CA         | CSA ,@ , STAD           | FD 02 BA 41    |                              |   |   |   |
|   | 327     |              | DISK-LEVEL FLOPPY       |                |                              |   |   |   |
|   | 328     | 42CE FLOP6 : | LDC ,3 ,0               | B1 03 00       |                              |   |   |   |
|   | 329     | 42D1         | LDA ,@ , '1A04          | 8C 04 1A       |                              |   |   |   |
|   | 330     | 42D4         | STA ,3 , '1A03          | ED 03 03 1A    |                              |   |   |   |
|   | 331     | 42D8         | BEC ,@ ,1 , FLOP12      | 50 01 39       | ? OPERATION COMPLETE         |   |   |   |
|   | 332     | 42DD FLOP7 : | HSL ,0                  | 03 00          |                              |   |   |   |
|   | 333     | 42DD         | JPL , , FLOP6           | FB F0          |                              |   |   |   |
| C | 334 *   | CON26 :      | 6 *G , '4000D0020100    |                |                              |   |   |   |
|   | 335     | 42DF         | 6=&LDC ,@ , CON26       | 1D 06 80 00 01 |                              |   |   |   |
|   |         |              |                         | 02 D0 00 40    |                              |   |   |   |
|   | 336     | 42EB         | ORR ,3 ,20              | C5 03 14       | UNIT                         |   |   |   |
|   | 337     | 42EB FLOP8 : | STAF,@ , '1A01          | 1F 03 EC 01 1A | SPUR, SEKTOR, STATUS (READ)  |   |   |   |
|   | 338     | 42FO         | HLT                     | 02             |                              |   |   |   |
|   | 339     | 42F1         | INZ ,21 , , FLOP2       | 4B 15 D2       | ? 5* WIEDERHOLT (BEI FEHLER) |   |   |   |
|   | 340     | 42F4         | JPA , , ERR             | FC EB 41       |                              |   |   |   |
|   | 341     |              | DATEN -->> '4000        |                |                              |   |   |   |
|   | 342     | 42F7 FLOP10: | 12B<&LDA ,12B , '1A05   | 19 80 8D 80 05 |                              |   |   |   |
|   |         |              |                         | 1A             |                              |   |   |   |
| B | 343     | 42FD         | 12B=&STX ,12B , ,6      | 1D 80 E3 80 06 |                              |   |   |   |
|   | 344     | 4302         | ADCD ,6 ,128            | 1E 91 06 80 00 |                              |   |   |   |
|   | 345     | 4307         | ADC ,5 ,1               | 91 05 01       |                              |   |   |   |
|   | 346     | 430A         | INOC ,3 ,27 , FLOP8     | 7B 03 1B DE    | ? 26 SEKTOREN (=1 SPUR)      |   |   |   |
|   | 347     | 430E         | ANC ,3 , 'B1            | B1 03 81       |                              |   |   |   |
|   | 348     | 4311         | INZ ,@ , , FLOP8        | 4A D9          |                              |   |   |   |
|   | 349     | 4313 FLOP12: | LDA ,@ ,5               | 8C 05 00       |                              |   |   |   |
|   | 350     | 4316         | BZ ,@ , , FLOP14        | 40 0B          | ? ENDE                       |   |   |   |
|   | 351     | 4318         | LDOD ,@ , FLOP10        | 1E 80 F7 42    |                              |   |   |   |
|   | 352     | 431C         | STAD ,@ ,0              | 1E EC 00 00    |                              |   |   |   |
|   | 353     | 4320         | JPL , , FLOP7           | FB DA          |                              |   |   |   |
| A | 354     | 4322 FLOP14: | JPA , , WPE             | FC F1 41       |                              |   |   |   |
|   | FEHLER: | 0            |                         |                |                              |   |   |   |





14.2.78

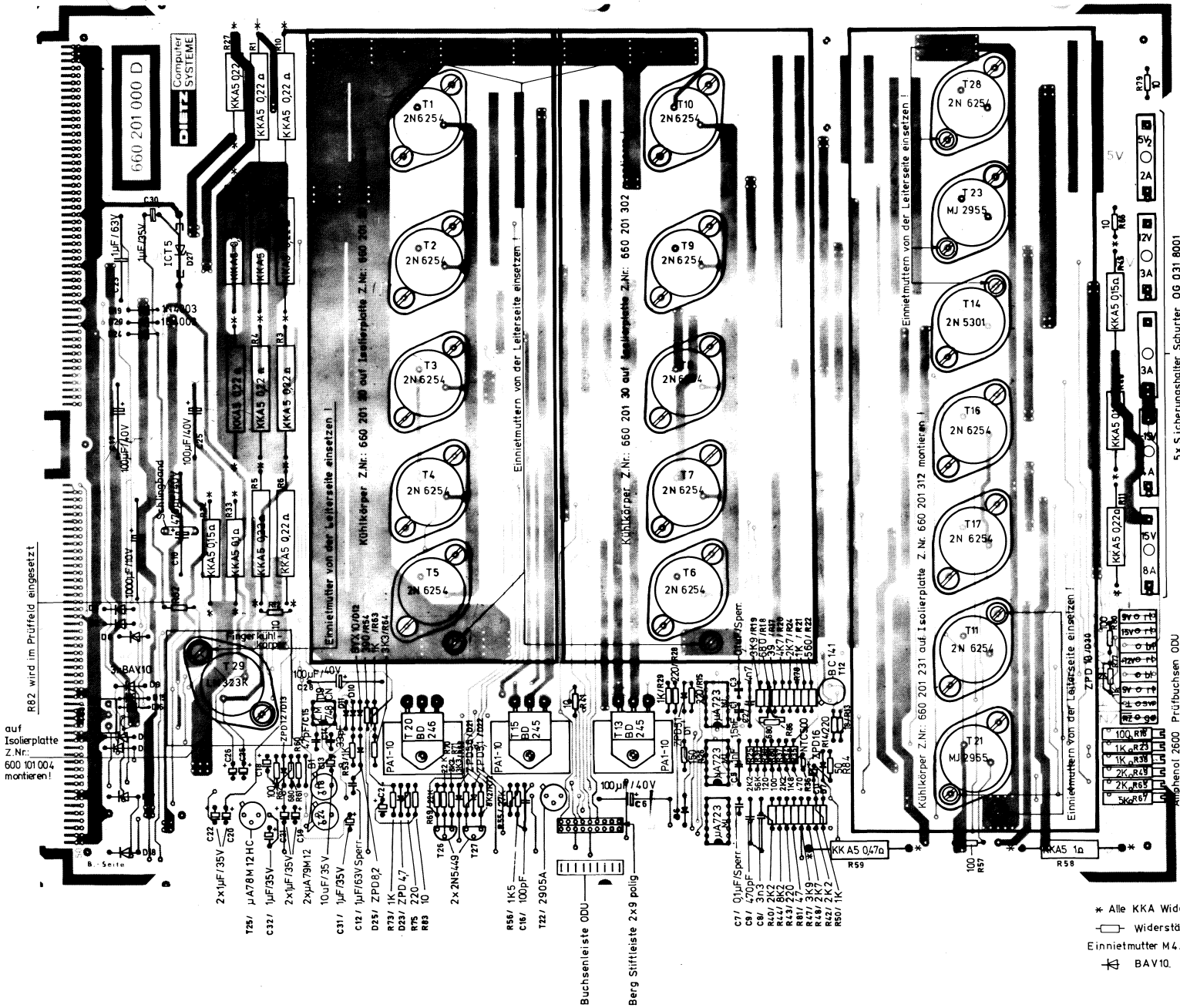
5.1 Regelbaustein

660 201 D

| J1 |                    |     |                    |
|----|--------------------|-----|--------------------|
| 1  | ØV                 | 51  | ØV                 |
| 2  | ØV                 | 52  | ØV                 |
| 3  | ØV                 | 53  | ØV                 |
| 4  | +18V               | 54  | +18V               |
| 5  | +18V               | 55  | +18V               |
| 6  | +18V               | 56  | +18V               |
| 7  | +18V               | 57  | +18V               |
| 8  | +18V               | 58  | +18V               |
| 9  | +18V               | 59  | +18V               |
| 10 | +18V               | 60  | +18V               |
| 11 | +18V               | 61  | +18V               |
| 12 | +18V               | 62  | +18V               |
| 13 | +18V               | 63  | +18V               |
| 14 | +18V               | 64  | +18V               |
| 15 | +18V               | 65  | +18V               |
| 16 | +18V               | 66  | +18V               |
| 17 | +18V               | 67  | +18V               |
| 18 | +18V               | 68  | +18V               |
| 19 | +18V               | 69  | +18V               |
| 20 | +18V               | 70  | +18V               |
| 21 | +18V               | 71  | +18V               |
| 22 | +18V               | 72  | +18V               |
| 23 | +18V               | 73  | +18V               |
| 24 | ØV                 | 74  | ØV                 |
| 25 | +28V               | 75  | +28V               |
| 26 | +28V               | 76  | +28V               |
| 27 | +28V               | 77  | +28V               |
| 28 | +28V               | 78  | +28V               |
| 29 | +28V               | 79  | +28V               |
| 30 | +28V               | 80  | +28V               |
| 31 | ØV                 | 81  | ØV                 |
| 32 | -28V               | 82  | -28V               |
| 33 | -28V               | 83  | -28V               |
| 34 | -28V               | 84  | -28V               |
| 35 | -28V               | 85  | -28V               |
| 36 | ØV                 | 86  | ØV                 |
| 37 | 13,5V <sub>1</sub> | 87  | SV-NETZ            |
| 38 | 13,5V <sub>2</sub> | 88  | +5V <sub>2</sub>   |
| 39 | ØV                 | 89  | 1S+5V <sub>2</sub> |
| 40 | G+5V               | 90  | +5V                |
| 41 | +5V                | 91  | +5V                |
| 42 | +5V                | 92  | +5V                |
| 43 | +5V                | 93  | +5V                |
| 44 | +5V                | 94  | +5V                |
| 45 | +5V                | 95  | +5V                |
| 46 | +5V                | 96  | +5V                |
| 47 | +5V                | 97  | +5V                |
| 48 | +5V                | 98  | +5V                |
| 49 | +5V                | 99  | +5V                |
| 50 | +5V                | 100 | +5V                |

| J2 |        |     |        |
|----|--------|-----|--------|
| 1  | +5V    | 51  | +S+5V  |
| 2  | +5V    | 52  | +5V    |
| 3  | +5V    | 53  | +5V    |
| 4  | +5V    | 54  | +5V    |
| 5  | +5V    | 55  | +5V    |
| 6  | +5V    | 56  | +5V    |
| 7  | +5V    | 57  | +5V    |
| 8  | +5V    | 58  | +5V    |
| 9  | +5V    | 59  | +5V    |
| 10 | +5V    | 60  | +5V    |
| 11 | +5V    | 61  | +5V    |
| 12 | +5V    | 62  | +5V    |
| 13 | +5V    | 63  | +5V    |
| 14 | +5V    | 64  | +5V    |
| 15 | +5V    | 65  | +5V    |
| 16 | +5V    | 66  | +5V    |
| 17 | +5V    | 67  | +5V    |
| 18 | +5V    | 68  | +5V    |
| 19 | ØV     | 69  | ØV     |
| 20 | G+15V  | 70  | 1S+5V  |
| 21 | 1S+15V | 71  | +S+15V |
| 22 | +15V   | 72  | +15V   |
| 23 | +15V   | 73  | +15V   |
| 24 | +15V   | 74  | +15V   |
| 25 | +15V   | 75  | +15V   |
| 26 | +15V   | 76  | +15V   |
| 27 | +15V   | 77  | +15V   |
| 28 | +15V   | 78  | +15V   |
| 29 | ØV     | 79  | ØV     |
| 30 | ØV     | 80  | ØV     |
| 31 | 1S-15V | 81  | S-15V  |
| 32 | -15V   | 82  | -15V   |
| 33 | -15V   | 83  | -15V   |
| 34 | -15V   | 84  | -15V   |
| 35 | ØV     | 85  | ØV     |
| 36 | ØV     | 86  | ØV     |
| 37 | 1S+9V  | 87  | +S+9V  |
| 38 | +9V    | 88  | +9V    |
| 39 | +9V    | 89  | +9V    |
| 40 | +9V    | 90  | +9V    |
| 41 | +9V    | 91  | +9V    |
| 42 | +9V    | 92  | +9V    |
| 43 | ØV     | 93  | ØV     |
| 44 | ØV     | 94  | ØV     |
| 45 | -12V   | 95  | 1S-12V |
| 46 | -12V   | 96  | -12V   |
| 47 | +12V   | 97  | 1S+12V |
| 48 | +12V   | 98  | +12V   |
| 49 | ØV     | 99  | ØV     |
| 50 | ØV     | 100 | ØV     |

|                         |  |                  |  |                 |  |                 |  |
|-------------------------|--|------------------|--|-----------------|--|-----------------|--|
| Gez. 22.12.77           |  | Datum            |  | Name            |  | Benennung       |  |
|                         |  | Uransel          |  | Stromversorgung |  | Steckerbelegung |  |
| Komm. Nr.               |  | Computer SYSTEME |  | 660201          |  | D 01 10 01      |  |
| Abt./Sachb.: CH 1-Schra |  | Ers. f           |  | Ers. d          |  |                 |  |



\* Alle KKA Widerstände auf Abstand montieren: mit Keramikröhrchen !

—  Widerstände werden im Prüffeld eingesetzt.

Einnietmutter M4/1,5 / MS x 20 Max.

 BAV10.

| Bauhöhe | Best.- Seite | mm |
|---------|--------------|----|
|---------|--------------|----|

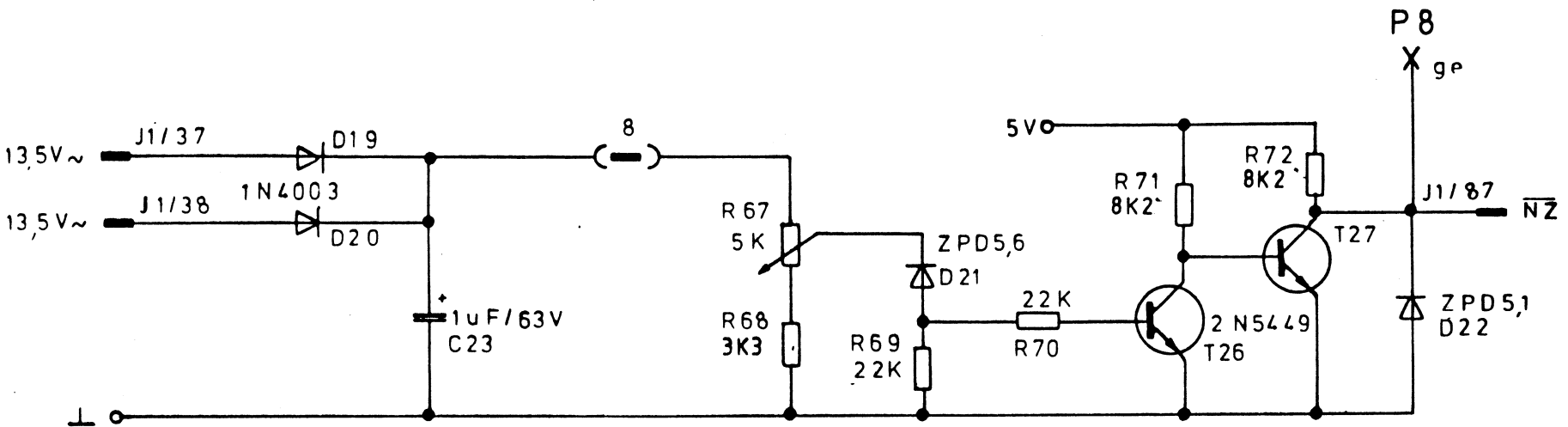
Leit.- Seite mm

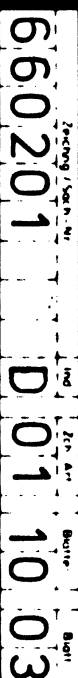
**Sperrschicht**

 10  $\mu$  F / 16 V  
Tantal

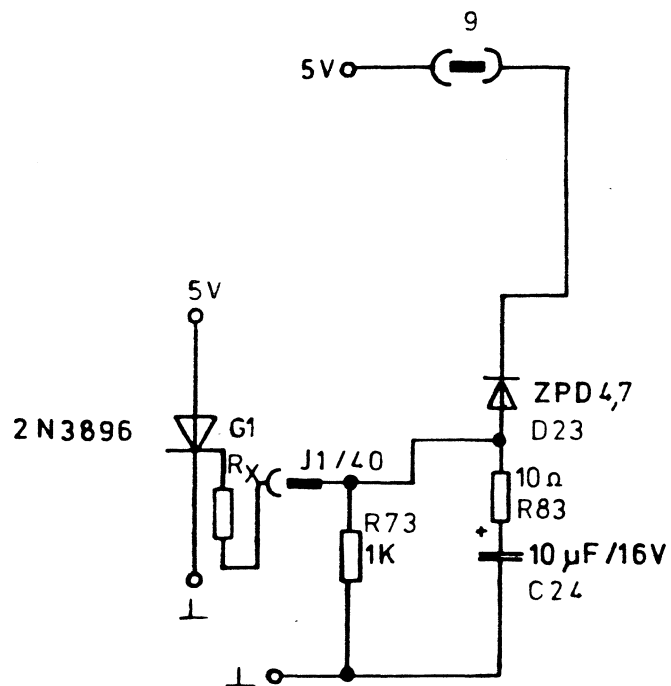
- ☐ abkleben
- ☐ trennen
- ☐ nach U.S. Wäsche einsetzen
- ☐ auf der Lötseite bestücken

|                                                                                       |  |                |  |                                                                                                 |  |  |  |
|---------------------------------------------------------------------------------------|--|----------------|--|-------------------------------------------------------------------------------------------------|--|--|--|
| Datum<br>20.12.77                                                                     |  | Name<br>Kibedi |  | Benennung<br>AUFBAUPLAN                                                                         |  |  |  |
| Gez.<br>Gepr.<br>Gepr.                                                                |  |                |  | Regelbaustein Stv X2                                                                            |  |  |  |
| Komm.-Nr.                                                                             |  |                |  |                                                                                                 |  |  |  |
|  |  |                |  | Zeichnung / Sach-Nr.    Ind.    Zch.-Art    Blätter    Blatt<br><b>660201</b> <b>D 01 10 02</b> |  |  |  |



|                                                                                  |  |          |  |                                                                                   |  |               |          |                      |  |
|----------------------------------------------------------------------------------|--|----------|--|-----------------------------------------------------------------------------------|--|---------------|----------|----------------------|--|
| Zust                                                                             |  | Änderung |  | Datum                                                                             |  | Name          |          | Benennung            |  |
|                                                                                  |  |          |  |                                                                                   |  | Gez. 22.12.77 | Uransele | Stromversorgung 6602 |  |
|                                                                                  |  |          |  |                                                                                   |  | Gepr          |          | Regelbaustein        |  |
|                                                                                  |  |          |  |                                                                                   |  | Komm.-Nr      |          | NZ-Erzeugung         |  |
|  |  |          |  |  |  |               |          |                      |  |
| Abt./Sachb. CH1-Schrd.                                                           |  |          |  | Ers. d.                                                                           |  |               |          |                      |  |

J2/19,29,30,35,36,43,44,49,50 / J1/1...3,24,31,36,39  
J2/69,79,80,85,86,93,94,99,100 / J1/51...53,74,81,86



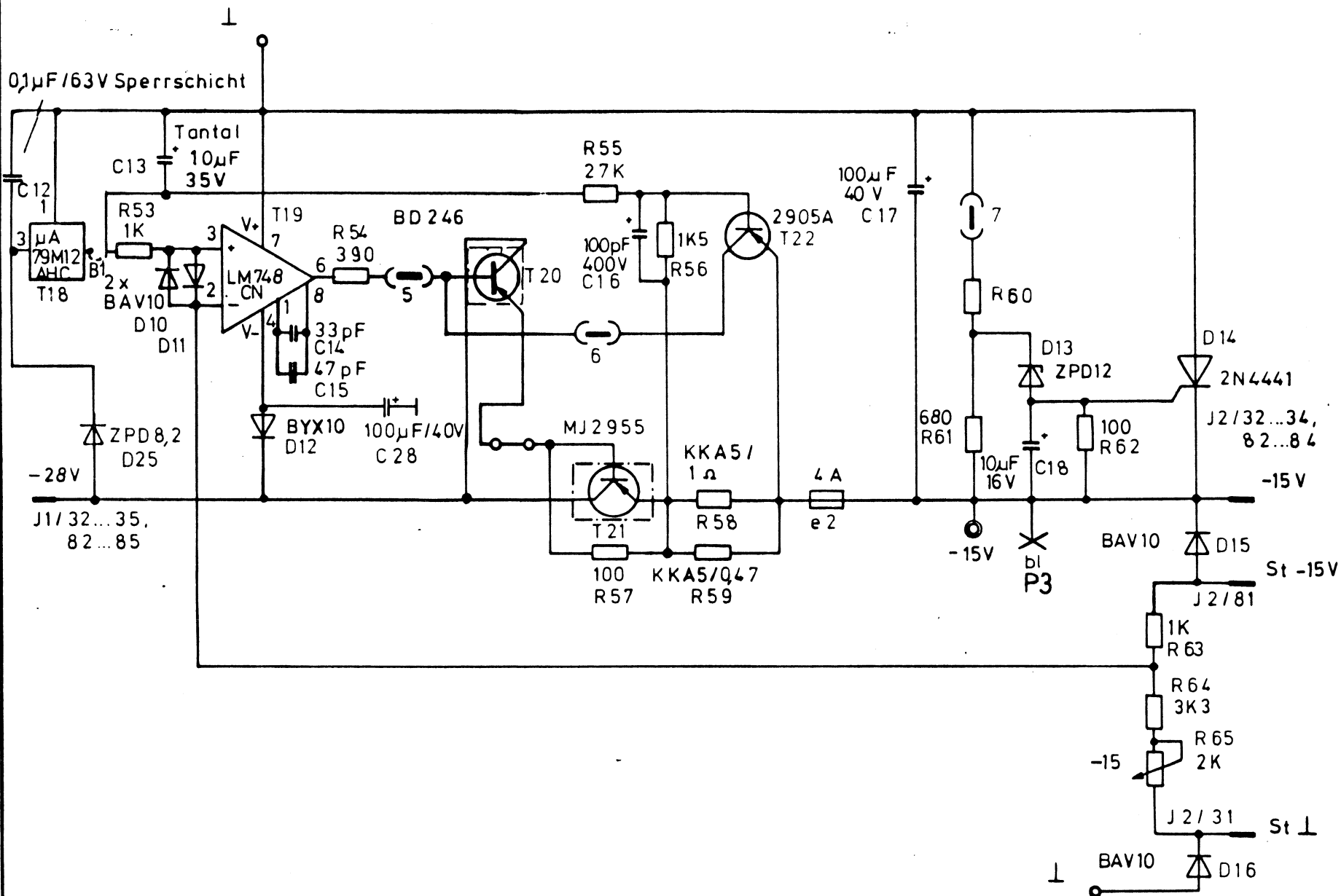
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|-----------|--|--|-------------|--|---------------------|--|------------------------|--|-------|--|
|           |  |  | Datum       |  | Name                |  | Benennung              |  |       |  |
| Gez.      |  |  | 22 12 77    |  | Uransel             |  | Stromversorgung 6602   |  |       |  |
| Gepr.     |  |  |             |  |                     |  | Regelbaustein          |  |       |  |
| Komm. Nr. |  |  |             |  |                     |  | Überspannungsschutz 5V |  |       |  |
|           |  |  |             |  | Zeichn. / Sach. Nr. |  | ind.                   |  |       |  |
|           |  |  |             |  | 660201              |  | D 01                   |  | 10 05 |  |
|           |  |  |             |  |                     |  |                        |  |       |  |
| Zust.     |  |  | Abt./Sachb. |  | CH1-Schra.          |  | Ers. d.                |  |       |  |
| Änderung  |  |  | Datum       |  | Name                |  | Ers. d.                |  |       |  |

[illegible]

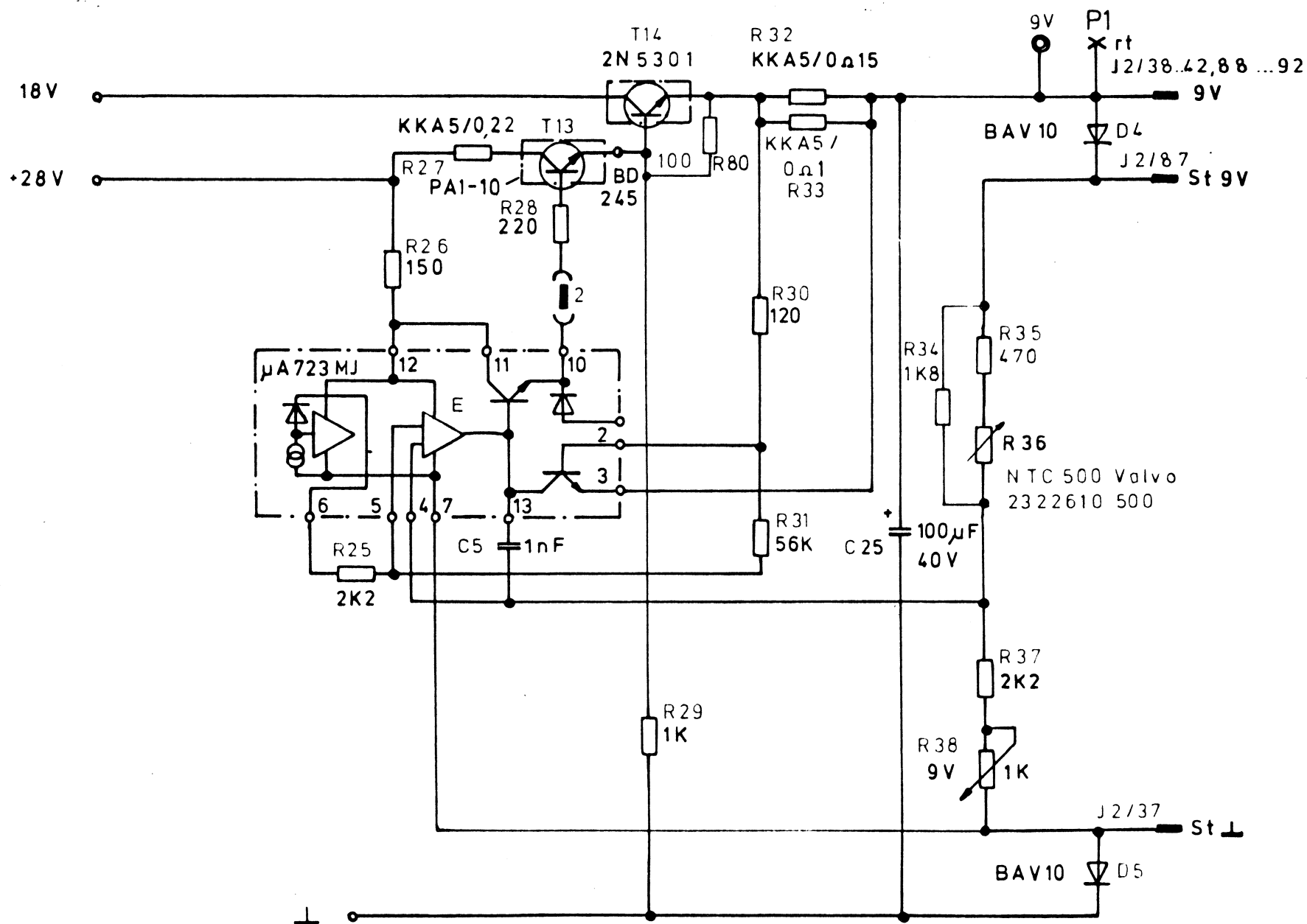
|       |          |           |          |                                       |
|-------|----------|-----------|----------|---------------------------------------|
|       |          | Datum     | Name     | Bemennung                             |
|       |          | 22.12.77  | Uranseil | Stromversorgung 6602<br>Regelbaustein |
|       |          | Gepr.     |          | -15V / 2A                             |
|       |          | Komm.-Nr. |          | 5.1.07                                |
|       |          |           |          |                                       |
|       |          |           |          |                                       |
|       |          |           |          |                                       |
|       |          |           |          |                                       |
| Zust. | Änderung | Datum     | Name     | Ers. i                                |
|       |          |           |          | Ers. d                                |

DIETZ Computer SYSTEME

|        |            |
|--------|------------|
| 660201 | D 01 10 07 |
|--------|------------|





[illegible]

9V

2A

e5

Tantal  
10µF/16V

C25

T29

LM  
323 K

Tantal  
10µF/16V

C26

R82

+5V<sub>2</sub> J1-88

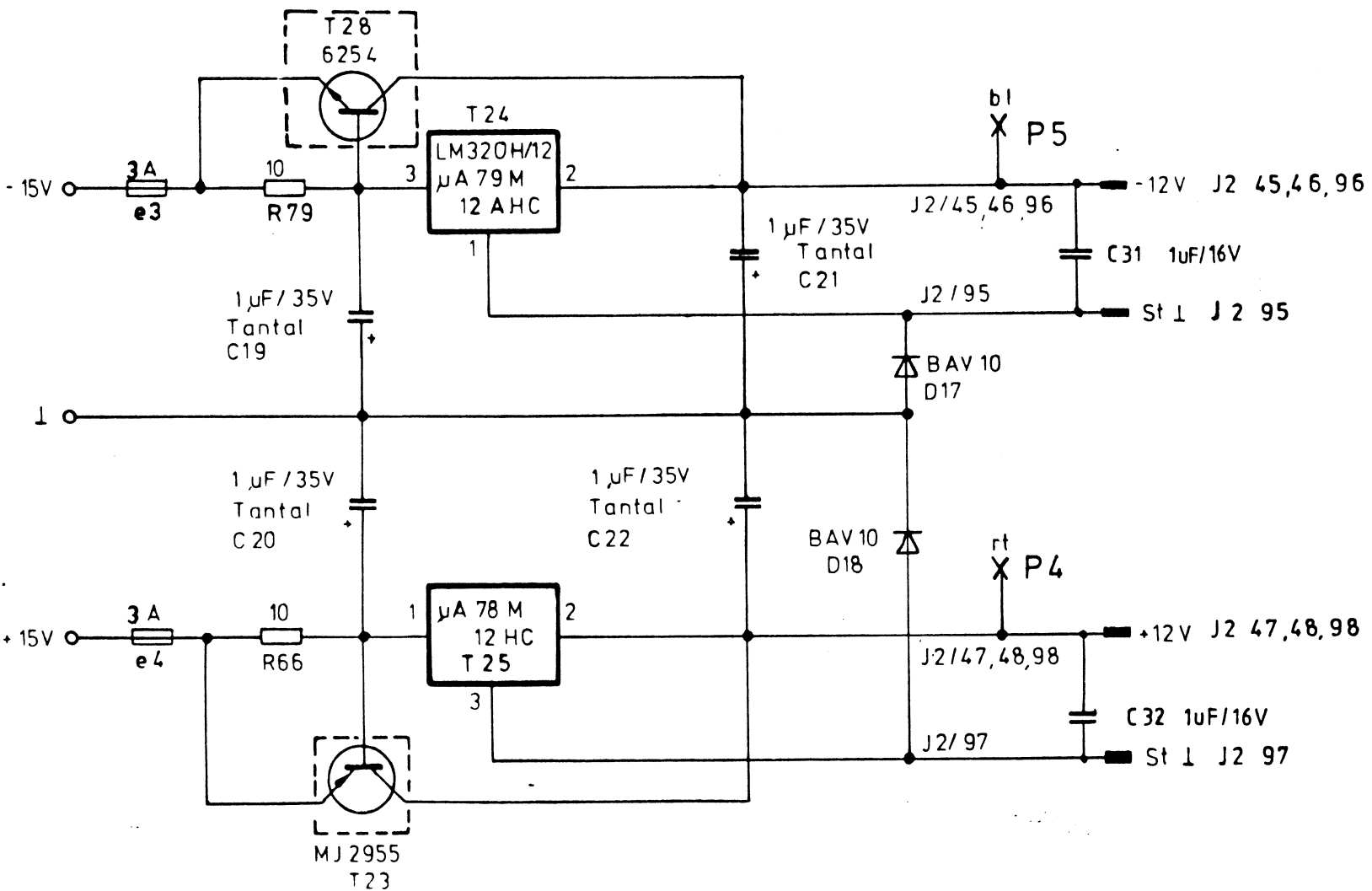
+5V<sub>1</sub> J1-89

St ⊥

C30  
1µF/16V

BAV10  
D24

|                   |          |               |        |                                                                                     |  |                                                                                                                                                                                                              |  |                   |    |          |        |       |           |  |      |    |    |
|-------------------|----------|---------------|--------|-------------------------------------------------------------------------------------|--|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-------------------|----|----------|--------|-------|-----------|--|------|----|----|
|                   |          | Datum         |        | Name                                                                                |  | Benennung                                                                                                                                                                                                    |  |                   |    |          |        |       |           |  |      |    |    |
|                   |          | Gez. 22.12.77 |        | Uransel                                                                             |  | Stromversorgung 621 X 2                                                                                                                                                                                      |  |                   |    |          |        |       |           |  |      |    |    |
|                   |          | Gepr          |        |                                                                                     |  | Regelbaustein                                                                                                                                                                                                |  |                   |    |          |        |       |           |  |      |    |    |
|                   |          | Komm - Nr     |        |                                                                                     |  | +5V <sub>2</sub> / 1,6A                                                                                                                                                                                      |  |                   |    |          |        |       |           |  |      |    |    |
|                   |          |               |        |                                                                                     |  | 5.1.09                                                                                                                                                                                                       |  |                   |    |          |        |       |           |  |      |    |    |
|                   |          |               |        |  |  | <table border="1"> <tr> <td>Zeichn.-Sach.-Nr.</td> <td>nd</td> <td>Ich.-Art</td> <td>Heiter</td> <td>Blatt</td> </tr> <tr> <td>6.6.0.201</td> <td></td> <td>D 01</td> <td>10</td> <td>09</td> </tr> </table> |  | Zeichn.-Sach.-Nr. | nd | Ich.-Art | Heiter | Blatt | 6.6.0.201 |  | D 01 | 10 | 09 |
| Zeichn.-Sach.-Nr. | nd       | Ich.-Art      | Heiter | Blatt                                                                               |  |                                                                                                                                                                                                              |  |                   |    |          |        |       |           |  |      |    |    |
| 6.6.0.201         |          | D 01          | 10     | 09                                                                                  |  |                                                                                                                                                                                                              |  |                   |    |          |        |       |           |  |      |    |    |
| Zust              | Änderung | Datum         | Name   | Abt./Sachb.: CH1-Schra.                                                             |  | Ers 1                                                                                                                                                                                                        |  |                   |    |          |        |       |           |  |      |    |    |
|                   |          |               |        |                                                                                     |  | Ers d                                                                                                                                                                                                        |  |                   |    |          |        |       |           |  |      |    |    |



22.12.77/Uransel

Stromversorgung 6602  
Regelbaustein

±12V/1,0A/X1/±12V/3A/X2

Computer  
SYSTEME

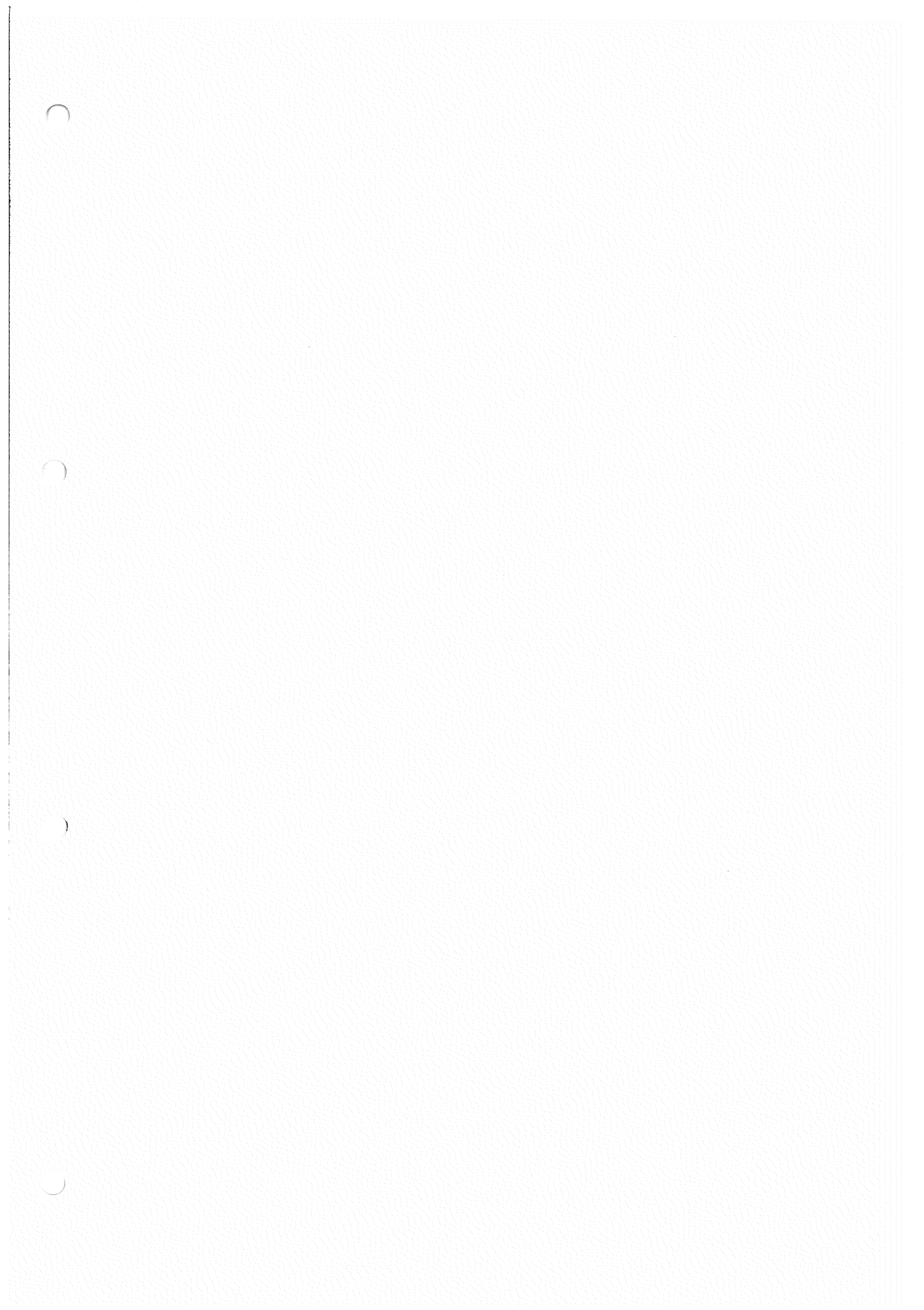
660201

D 01 10 10

CH-Schr

F 5 1

E 5 d



14.2.78

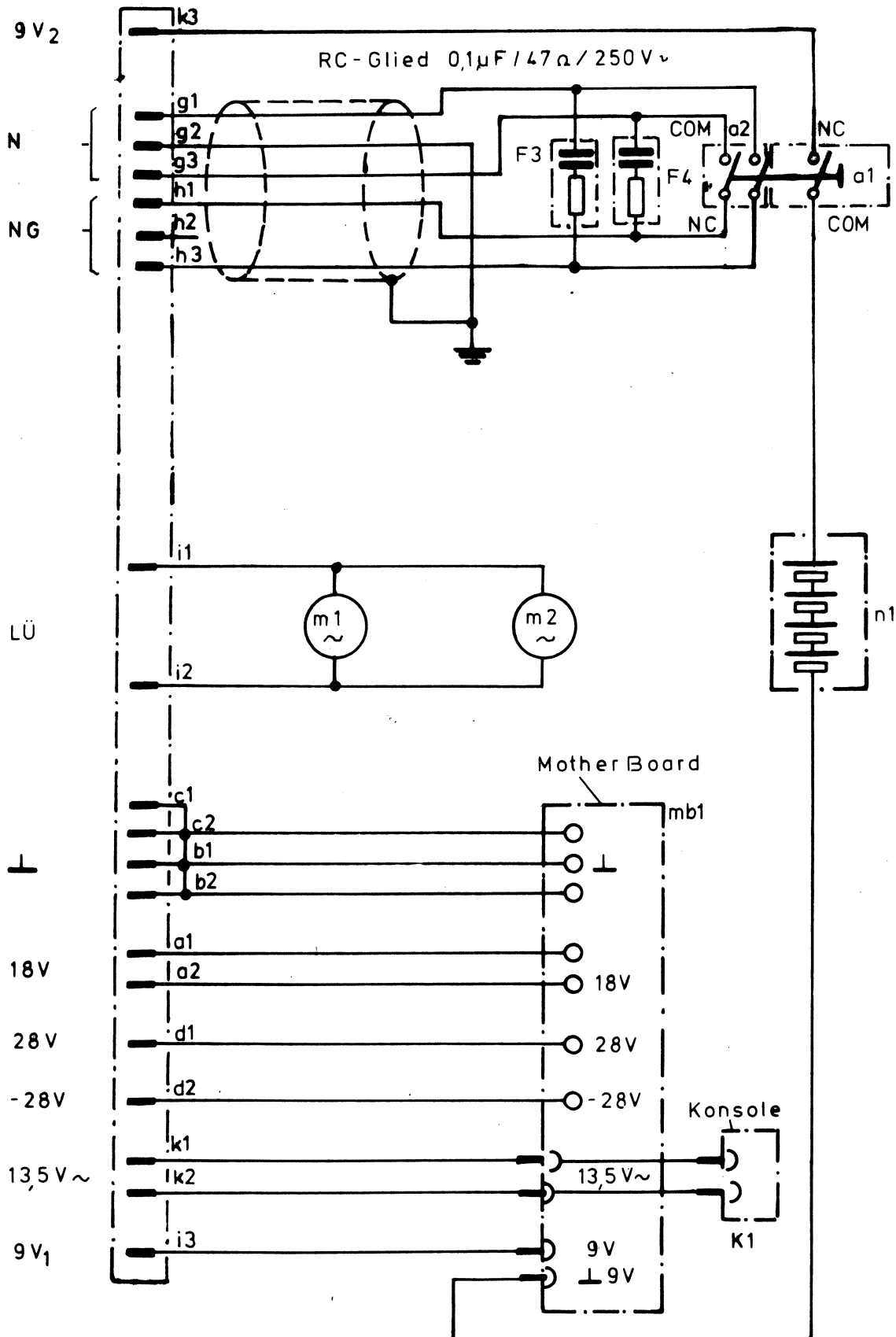
5.2 Trafoeinheit X2

660 211 111 B

5.3 RechnerverdrahtungX2

660 101 110 B





|                |  |              |  |                        |  |                                     |  |
|----------------|--|--------------|--|------------------------|--|-------------------------------------|--|
|                |  | Datum        |  | Name                   |  | Benennung                           |  |
|                |  | Gez. 12.5.77 |  | Kibedi                 |  | Rechnergehäuse<br>Verdrahtung 660 2 |  |
|                |  | Gepr         |  |                        |  |                                     |  |
|                |  | Komm-Nr      |  |                        |  |                                     |  |
|                |  |              |  | DIETZ Computer SYSTEME |  | Zeichn / Sach-Nr                    |  |
|                |  |              |  |                        |  | Ind                                 |  |
|                |  |              |  |                        |  | Zch- Art                            |  |
|                |  |              |  |                        |  | Blätter                             |  |
|                |  |              |  |                        |  | Blatt                               |  |
|                |  |              |  |                        |  | 660101110B 01 01 01                 |  |
| Zust. Änderung |  | Datum        |  | Name                   |  | Abt/Sachb. CH2-Schr.                |  |
|                |  |              |  |                        |  | Ers f                               |  |
|                |  |              |  |                        |  | Ers d                               |  |



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**DIETZ** Computer  
SYSTEME