

E L E K T R . S T U E C K L I S T E

*RM: 1 EINHEIT = 2.54MM

| ST. | BAUTEIL-BEZEICHNUNG | WERT/TYP | RM | HERSTELLER | LG-NR. | BEMERKUNGEN |
|-----|---|------------|----|------------|--------|---|
| 1 | R25 | 5K6 | 4 | | 10 065 | METALLSCHICHTWIDERSTAND, 0.6W/1% RASTER=4 |
| 9 | RN1, RN2, RN3, RN4, RN5 RN6, RN7, RN8, RN9 | 8X10K | | | 10 798 | 8 WIDERSTAENDE IM SIL-9-GEHAEUSE |
| 2 | ST1, ST2 | 3MST26 | | | 14 756 | 26-POLIGE 3M-STECKERLEISTE (CANNON-ZAEHLW.) |
| 2 | VG1, VG2 | VG64P | | | 14 558 | 64-POL.VG-STECKERLEISTE MIT BEF. BOHRUNGEN |
| 1 | LEITERPLATTE | FG 447.042 | | | | |

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|------------------|--------------------|-----------------------|-------------------|---------------------|------------------|
| GS1 DARMSTADT | BEZ.: CONTROL-E | NUMMER: FG 447.042 | BEARB.: GSI-SV | DATUM 2.Feb.1994 | BLATT 3 VON 3 |
|------------------|--------------------|-----------------------|-------------------|---------------------|------------------|

E L E K T R . S T U E C K L I S T E

*RM: 1 EINHEIT = 2.54MM

| ST. | BAUTEIL-BEZEICHNUNG | WERT/TYP | RM | HERSTELLER | LG-NR. | BEMERKUNGEN |
|-----|------------------------------|----------|----|------------|--------|--|
| 4 | IC1, IC3, IC7, IC8 | 74HC573 | | | 13 732 | OCTAL 3-STATE NONINVERTING D-TYPE TRANSPARENT LATC |
| 1 | IC23 | 74HC21 | | | 13 644 | 2 AND-GATTER MIT JE 4 EINGAENGEN |
| 17 | IC17, IC18, IC19, IC20, IC21 | CNY17F-4 | | SIEMENS | 13 822 | OPTOKOPLER CNY17F-4 BEST.-NR.: Q62703-N54 |
| | IC22, IC25, IC26, IC27, IC28 | | | | | |
| | IC29, IC30, IC34, IC35, IC36 | | | | | |
| | IC37, IC38 | | | | | |
| 1 | IC14 | MAX690 | | MAXIM | | PRECISION VOLTAGE MONITOR |
| 3 | IC5, IC31, IC32 | UNL2003 | | | 13 305 | 7 DARLINGTON-TREIBER |
| 4 | KURZSCHL.-BU | | | COMATEL | 16 009 | KURZSCHLUSSBUCHSE ISOLIERT MIT OEFFNUNG F. PRUEFCL |
| 4 | J1, J2, J3, J4 | JU1 | 1 | | 16 080 | COMATEL 385.0358.120.400 WW-LEISTE M. KURZSCHL.-BU |
| 5 | R22, R29, R42, R43, R44 | 10K | 4 | | 10 071 | METALLSCHICHTWIDERSTAND, 0.6W/1% RASTER=4 |
| 3 | R24, R26, R28 | 1K | 4 | | 10 047 | METALLSCHICHTWIDERSTAND, 0.6W/1% RASTER=4 |
| 21 | R1, R2, R3, R4, R5 | 2K7 | 4 | | 10 057 | METALLSCHICHTWIDERSTAND, 0.6W/1% RASTER=4 |
| | R6, R7, R8, R9, R10 | | | | | |
| | R11, R12, R13, R14, R15 | | | | | |
| | R16, R17, R18, R19, R20, R21 | | | | | |
| 2 | R23, R27 | 3K6 | 4 | | 10 060 | METALLSCHICHTWIDERSTAND, 0.6W/1% RASTER=4 |
| 17 | R30, R32, R34, R36, R38 | 470R | 4 | | 10 117 | METALLSCHICHTWIDERSTAND, 0.6W/1% RASTER=4 |
| | R40, R45, R47, R49, R51, R53 | | | | | |
| | R55, R57, R59, R61, R63, R65 | | | | | |
| 17 | R31, R33, R35, R37, R39 | 4K7 | 4 | | 10 063 | METALLSCHICHTWIDERSTAND, 0.6W/1% RASTER=4 |
| | R41, R46, R48, R50, R52 | | | | | |
| | R54, R56, R58, R60, R62 | | | | | |
| | R64, R66 | | | | | |

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|------------------|-----------|------------|---------|------------|---------|
| GS1 DARMSTADT | BEZ.: | NUMMER: | BEARB.: | DATUM | BLATT |
| | CONTROL-E | FG 447.042 | GSI-SV | 2.Feb.1994 | 2 VON 3 |

E L E K T R . S T U E C K L I S T E

*RM: 1 EINHEIT = 2.54MM

| ST. | BAUTEIL-BEZEICHNUNG | WERT/TYP | RM | HERSTELLER | LG-NR. | BEMERKUNGEN |
|-----|------------------------------------|----------|----|------------|--------|--|
| 4 | IC-SOCKEL | 14-POLIG | | | 13 322 | DIP14 ZUM LOETEN |
| 10 | IC-SOCKEL | 20-POLIG | | | 13 220 | ZUM LOETEN |
| 17 | IC-SOCKEL | 6-POLIG | | | 13 232 | ZUM LOETEN |
| 4 | IC-SOCKEL | 8-POLIG | | | 13 137 | ZUM LOETEN |
| 2 | LEITERPLATTENHALTER | | | | 14 471 | FUER FRONTPLATTENBEFESTIGUNG |
| 4 | MUTTERN | M2,5 | | | 62 545 | BEF. VG-LEISTE |
| 4 | ZYLINDERKOPFSCHRAUBEN | M2,5X10 | | | 62 440 | BEF. VG-LEISTE |
| 2 | CE1, CE2 | 22U | 2 | | 11 326 | TANTAL-TROPFEN-KONDENS. 22UF/35V, RM=5.08 |
| 26 | CK1, CK2, CK3, CK4, CK5 | 100N | 1 | | 11 096 | KONDENSATOR 100N RM=2.54 PLATZ 3X5MM |
| | CK6, CK7, CK8, CK9, CK10 | | | | | |
| | CK11, CK12, CK13, CK14, CK15 | | | | | |
| | CK16, CK17, CK18, CK19, CK20 | | | | | |
| | CK21, CK22, CK23, CK24, CK25, CK26 | | | | | |
| 20 | D1, D2, D5, D6, D7 | 1N4151 | 4 | | 13 001 | DIODE 1N4151, DO-35, RM=10.16MM |
| | D8, D9, D10, D11, D12 | | | | | |
| | D13, D14, D15, D16, D17 | | | | | |
| | D18, D19, D20, D21, D22 | | | | | |
| 2 | D3, D4 | BAT46 | 4 | | 13 218 | DIODE BAT46, RM=10.16 |
| 2 | MICRO-HALTER | | | WICKMANN | 17 007 | MICRO-FUSE HALTER SENKRECHT NR 19556 |
| 2 | F1, F2 | 1A0 | | | 17 028 | MICRO-FUSE SICHERUNG MIT HALTER STEHEND |
| 3 | IC9, IC10, IC13 | 6N137 | | | 13 168 | OPTOKOPPLER |
| 1 | IC24 | 74HC00 | | | 13 605 | 4 NAND-GATTER MIT JE 2 EINGAENGEN |
| 2 | IC15, IC16 | 74HC14 | | | 13 609 | SECHS INVERTIERENDE SCHMITT-TRIGGER (MINI DIP) |
| 6 | IC2, IC4, IC6, IC11, IC12, IC33 | 74HC245 | | | 13 697 | OCT BUS TRANSCEIVER 3-STATE |

| | | | | | |
|------------------|-----------|------------|---------|------------|---------|
| GS1 DARMSTADT | BEZ.: | NUMMER: | BEARB.: | DATUM | BLATT |
| | | FG 447.042 | GSI-SV | 2.Feb.1994 | 1 VON 3 |
| | CONTROL-E | | | | |

M E C H . S T U E C K L I S T E

*RM: 1 EINHEIT = 2.54MM

| ST. | BAUTEIL-BEZEICHNUNG | WERT/TYP | RM | HERSTELLER | LG-NR. | BEMERKUNGEN |
|-----|---------------------|-----------|----|------------|--------|-----------------------------------|
| 13 | SCHALTER | 1 POL. UM | | C&K | 15 070 | 1 POL. UMSCHALTER |
| 1 | SCHALTER | 2 POL. UM | | C&K | 15 071 | 2 POL. UMSCHALTER |
| 1 | TASTER | 1 POL. UM | | C&K | 15 014 | 1 POL. TASTER (UM) |
| 14 | LEUCHTDIODEN | GRUEN | | | 13 821 | LED 2mA GRUEN 3mm |
| 4 | LEUCHTDIODEN | ROT | | | 13 819 | LED 2mA ROT 3mm |
| 3 | LEUCHTDIODEN | GELB | | | 13 820 | LED 2mA GELB 3mm |
| 21 | CLIPSE F. LED | | | | | CLIPSE 3mm |
| 1 | FRONTPLATTE | 14TE/6HE | | SCHROFF | | BEARBEITUNG NACH ZEICHNUNG |
| 1 | GRIFF | 14TE | | SCHROFF | | FUER FRONTPLATTE (ALU) |
| 1 | KASSETTE | 14TE/6HE | | SCHROFF | | CADMIERT (FMV) BEST.NR. 20810-202 |
| 1 | GRIFF (METALL) | 14TE | | SCHROFF | | GRAPHIERT (CONTROL) |

| | | | |
|-----------|----------------|---------|---------------|
| BEZ.: | FRONTPLATTE | BEARB.: | GSI/GL. |
| DARMSTADT | CONTROLEINHEIT | DATUM | 16. MAR. 1993 |
| GSI | | BLATT | 1 VON 1 |
| NUMMER: | FG 447.040 | | |

Datum: 01-OCT-1993/D.Loos

F 447 / Schnelle Schottky-Messung

Relais-Buchsen-Belegung

2 x 7 polige Binder-Buchse:

| Pin | Bezeichnung | Signal-Zustand |
|-----|--------------|-------------------|
| 1 | + 5 Volt/Out | |
| 2 | +24 Volt/Out | |
| 3 | GND | |
| 4 | Ext-REL.1 | H=RES / L=NONRES* |
| 5 | Ext-REL.2 | H=RES / L=NONRES* |
| 6 | Ext-REL.3 | H=RES / L=NONRES* |
| 7 | Ext-REL.4 | H=RES / L=NONRES* |

Datum: 16-AUG-1993/D.Loos

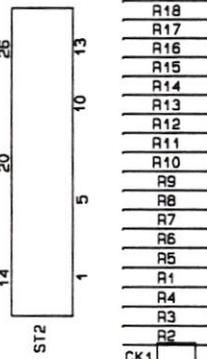
F 447 / Schnelle Schottky-Messung

Remote-Buchsen-Belegung

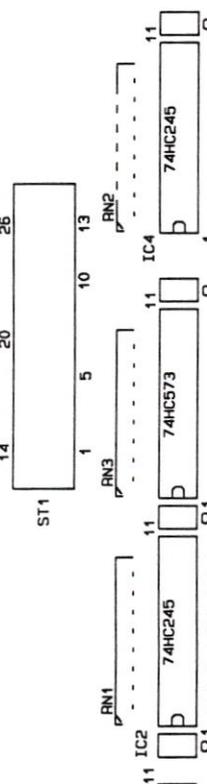
25 polige Cannon-Buchse:

| Pin | Bezeichnung | Signal-Zustand |
|-----|---------------------------|------------------------------------|
| 1 | Netzkarte Pin 10 | |
| 2 | Status-Bit/Netzteile | H=Ein / L=Aus |
| 3 | GND /In-Extern | Ein/Netzkarte |
| 4 | GND | |
| 5 | REM/MAN*/Status | H=MAN* / L=REM |
| 6 | OVERANGE/Status Σ | H=OVER Σ */ L=OVER Σ |
| 7 | NC | |
| 8 | DAC-Remote 2 ₄ | |
| 9 | DAC-Remote 2 ₂ | |
| 10 | DAC-Remote 2 ₀ | |
| 11 | RES/NONRES* | H=NONRES*/ L=RES |
| 12 | TEST/SIG* | H=TEST / L=SIG* |
| 13 | DIFF/POST A | H= 0dB / L= 30dB |
| 14 | Netzkarte Pin 12 | |
| 15 | +5- +24 Volt/In-Extern | Ein/Netzkarte |
| 16 | +5 Volt/Out | |
| 17 | REM/CLK ∇ | |
| 18 | OVERANGE/Status Δ | H=OVER Δ */ L=OVER Δ |
| 19 | NC | |
| 20 | DAC-Remote 2 ₅ | |
| 21 | DAC-Remote 2 ₃ | |
| 22 | DAC-Remote 2 ₁ | |
| 23 | Sum-POST A | H= 0dB / L= 30dB |
| 24 | HC-LOAD/LC-LOAD* | H=HC-LOAD/ L=LC-LOAD* |
| 25 | BROADB/HPASS* | H=BROADB / L=HPASS* |

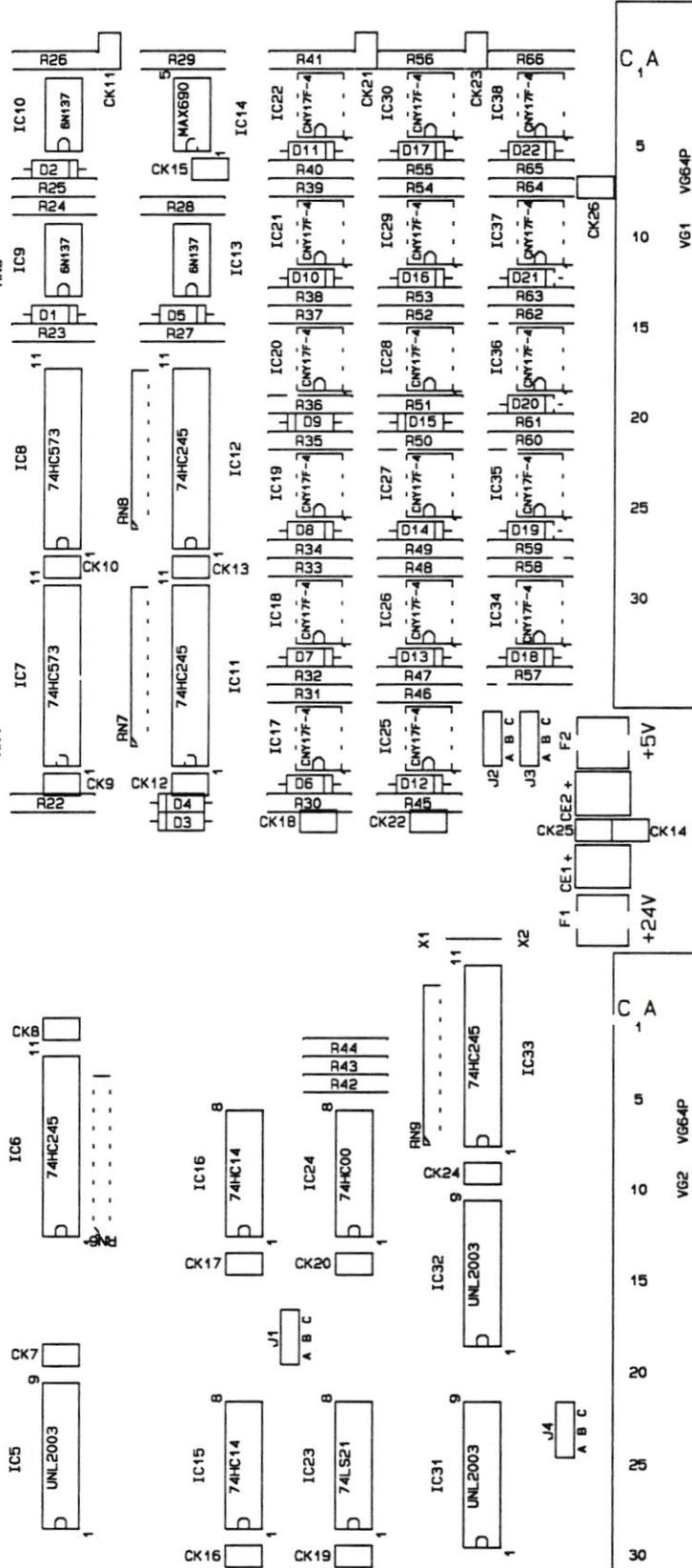
STECKER FUER LED



STECKER FUER SCHALTER



GSI/SV FG 447.042 BEST.-SEITE

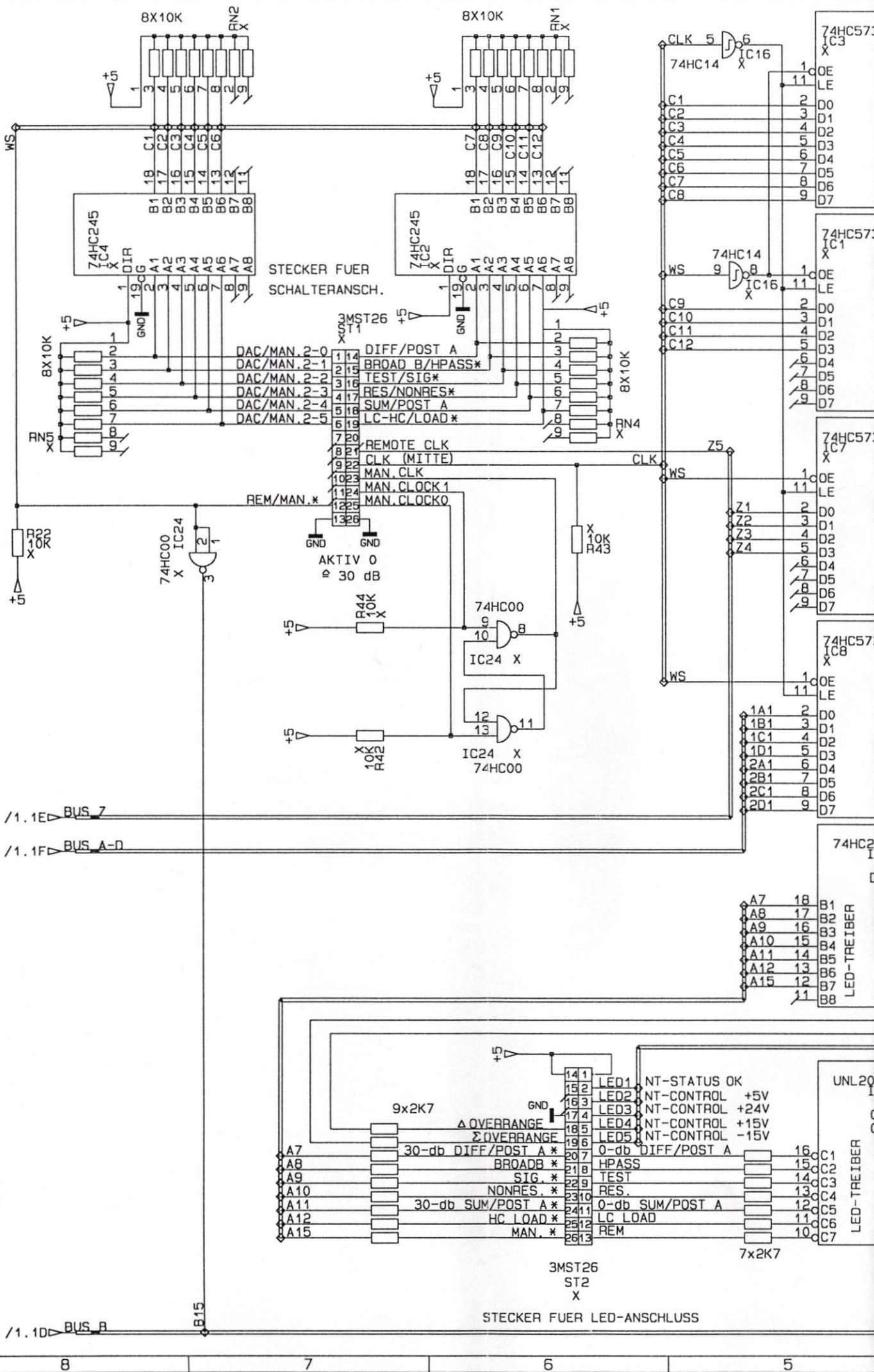


M E C H . S T U E C K L I S T E

*RM: 1 EINHEIT = 2.54MM

| ST. | BAUTEIL-BEZEICHNUNG | WERT/TYP | RM | HERSTELLER | LG-NR. | BEMERKUNGEN |
|------|--------------------------|---------------|----|------------|--------|-----------------------------------|
| 13 | SCHALTER | 1 POL. UM | | C&K | 15 070 | 1 POL. UMSCHALTER |
| 1 | SCHALTER | 2 POL. UM | | C&K | 15 071 | 2 POL. UMSCHALTER |
| 1 | TASTER | 1 POL. UM | | C&K | 15 014 | 1 POL. TASTER (UM) |
| 14 | LEUCHTDIODEN | GRUEN | | | 13 821 | LED 2mA GRUEN 3mm |
| 4 | LEUCHTDIODEN | ROT | | | 13 819 | LED 2mA ROT 3mm |
| 3 | LEUCHTDIODEN | GELB | | | 13 820 | LED 2mA GELB 3mm |
| 21 | CLIPSE FUER LED's | | | | | CLIPSE 3mm |
| 1 | FRONTPLATTE | 14TE/6HE | | | | BEARBEITUNG NACH ZEICHNUNG |
| 2 | KREUZSCHLITZSCHRAUBEN | M2, 5X10 | | | | FUER FRONTPLATTEN BEFESTIGUNG |
| 1 | KASSETTE | 14TE/6HE | | | | CADMIERT (FMV) BEST.NR. 20810-202 |
| 1 | KASSETTEN-GRIFF (METALL) | 14TE | | | | GRAPHIERT (CONTROL) |
| | SCHRUMPFSCHLAUCH | 3/64" = 1,2mm | | | 12 047 | FUER LED's |
| | LOETDRAHT VERSILBERT | 1mm | | | 12 031 | FUER LED's UND SCHALTER |
| 2 | PFOSTENVERBINDER | 26 POL. | | 3M | 14 613 | |
| 0,3m | FLACHBAND - KABEL | 26 POL. | | 3M | | |

| | | | | | | | | | | |
|---------------|-------|--------------------------------|---------|------------|---------|--------|-------|-----------|-------|---------|
| GSI DARMSTADT | BEZ.: | FRONTPLATTE CONTROL-EINHEIT | NUMMER: | FG 447.042 | BEARB.: | GS1/GL | DATUM | 06-APR-94 | BLATT | 1 VON 1 |
|---------------|-------|--------------------------------|---------|------------|---------|--------|-------|-----------|-------|---------|



3MST26

| | | |
|----|----|----------------|
| 1 | 14 | DIFF/POST A |
| 2 | 15 | BROAD B/HPASS* |
| 3 | 16 | TEST/SIG* |
| 4 | 17 | RES/NONRES* |
| 5 | 18 | SUM/POST A |
| 6 | 19 | LC-HC/LOAD* |
| 7 | 20 | REMOTE CLK |
| 8 | 21 | CLK (MITTE) |
| 9 | 22 | MAN. CLK |
| 10 | 23 | MAN. CLOCK 1 |
| 11 | 24 | MAN. CLOCK 0 |
| 12 | 25 | |
| 13 | 26 | |

LED-TREIBER

| | | |
|-----|----|----|
| A7 | 18 | B1 |
| A8 | 17 | B2 |
| A9 | 16 | B3 |
| A10 | 15 | B4 |
| A11 | 14 | B5 |
| A12 | 13 | B6 |
| A15 | 12 | B7 |
| | 11 | B8 |

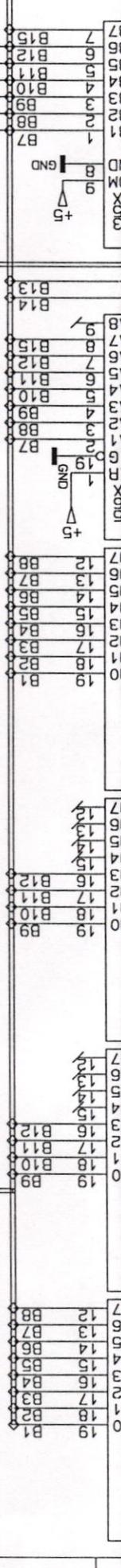
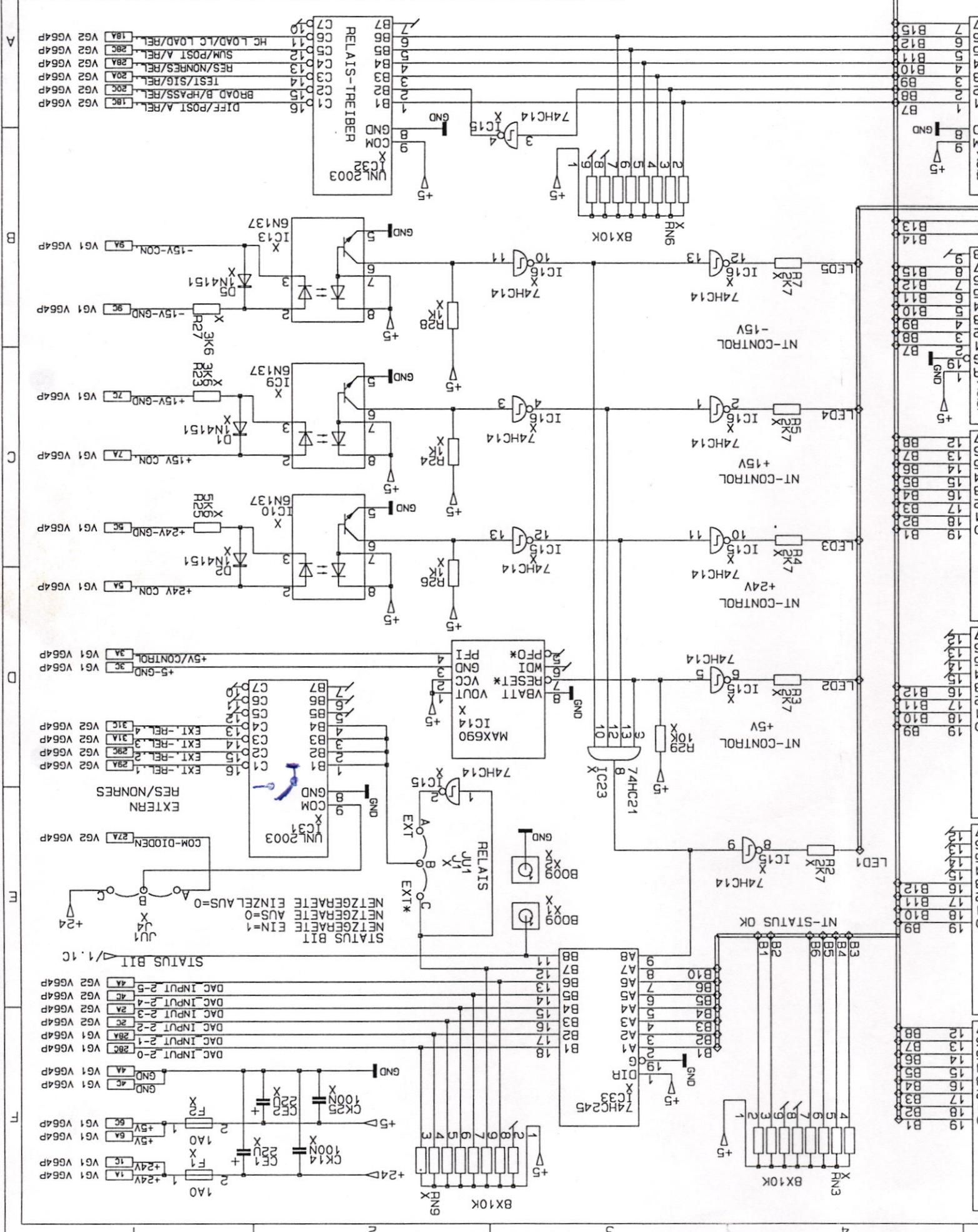
STECKER FUER LED-ANSCHLUSS

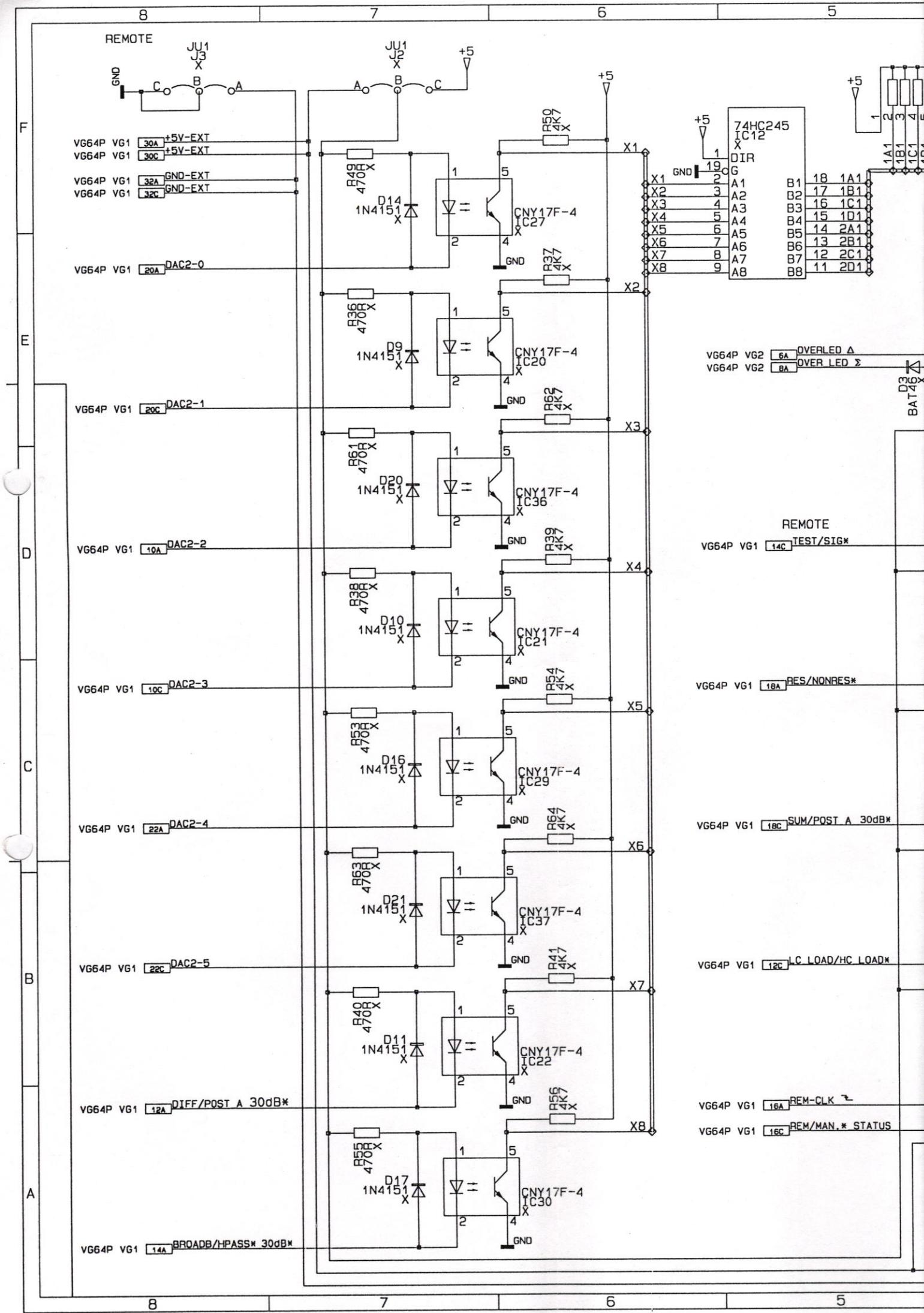
| | | | |
|----|----|---------|-----------------|
| 14 | 1 | LED1 | NT-STATUS OK |
| 15 | 2 | LED2 | NT-CONTROL +5V |
| 16 | 3 | LED3 | NT-CONTROL +24V |
| 17 | 4 | LED4 | NT-CONTROL +15V |
| 18 | 5 | LED5 | NT-CONTROL -15V |
| 19 | 6 | 0-db | DIFF/POST A |
| 20 | 7 | HPASS | |
| 21 | 8 | TEST | |
| 22 | 9 | RES. | |
| 23 | 10 | 0-db | SUM/POST A |
| 24 | 11 | LC LOAD | |
| 25 | 12 | REM | |
| 26 | 13 | | |

/1.1E BUS_7
/1.1F BUS_A-D

/1.1D BUS_B

| | | | | | | | | | |
|------------|--|----------------|--|-----------------|--|--------------|--|-------|--|
| MASSTAB | | CON | | CONTROL-EINHEIT | | BLATT 2 | | VON 2 | |
| NAME | | DATUM | | ENTW. L00S | | BEARB. VOLTZ | | GEPÄ. | |
| DARMASTADT | | 20.01.94 | | DEC.93 | | 20.01.94 | | | |
| VERS. | | FG 447.042.010 | | | | | | | |





- VG64P VG1 30A +5V-EXT
- VG64P VG1 30C +5V-EXT
- VG64P VG1 32A GND-EXT
- VG64P VG1 32C GND-EXT
- VG64P VG1 20A DAC2-0
- VG64P VG1 20C DAC2-1
- VG64P VG1 10A DAC2-2
- VG64P VG1 10C DAC2-3
- VG64P VG1 22A DAC2-4
- VG64P VG1 22C DAC2-5
- VG64P VG1 12A DIFF/POST A 30dB*
- VG64P VG1 14A BROADB/HPASS* 30dB*

74HC245 IC12

| | |
|-----|----|
| DIR | 1 |
| G | 2 |
| A1 | 3 |
| A2 | 4 |
| A3 | 5 |
| A4 | 6 |
| A5 | 7 |
| A6 | 8 |
| A7 | 9 |
| A8 | 10 |
| B1 | 11 |
| B2 | 12 |
| B3 | 13 |
| B4 | 14 |
| B5 | 15 |
| B6 | 16 |
| B7 | 17 |
| B8 | 18 |
| 1A1 | 19 |
| 1B1 | 20 |
| 1C1 | 21 |
| 1D1 | 22 |

- VG64P VG2 6A OVERLED Δ
- VG64P VG2 8A OVER LED Σ
- VG64P VG1 14C TEST/SIG*
- VG64P VG1 18A RES/NONRES*
- VG64P VG1 18C SUM/POST A 30dB*
- VG64P VG1 12C LC LOAD/HC LOAD*
- VG64P VG1 16A REM-CLK
- VG64P VG1 16C REM/MAN.* STATUS

| | | | |
|-----------------|----------------|----------------------|--|
| GSI - DARMSTADT | | VERS. FG 447.042.010 | |
| GEPR. | | | |
| BEARB. | VOLTZ 20.01.94 | | |
| ENTW. | LOOS DEC.93 | | |
| NAME | DATUM | | |
| CON | | CONTROL-EINHEIT | |
| MASSSTAB | | BLATT 1 VON 2 | |

