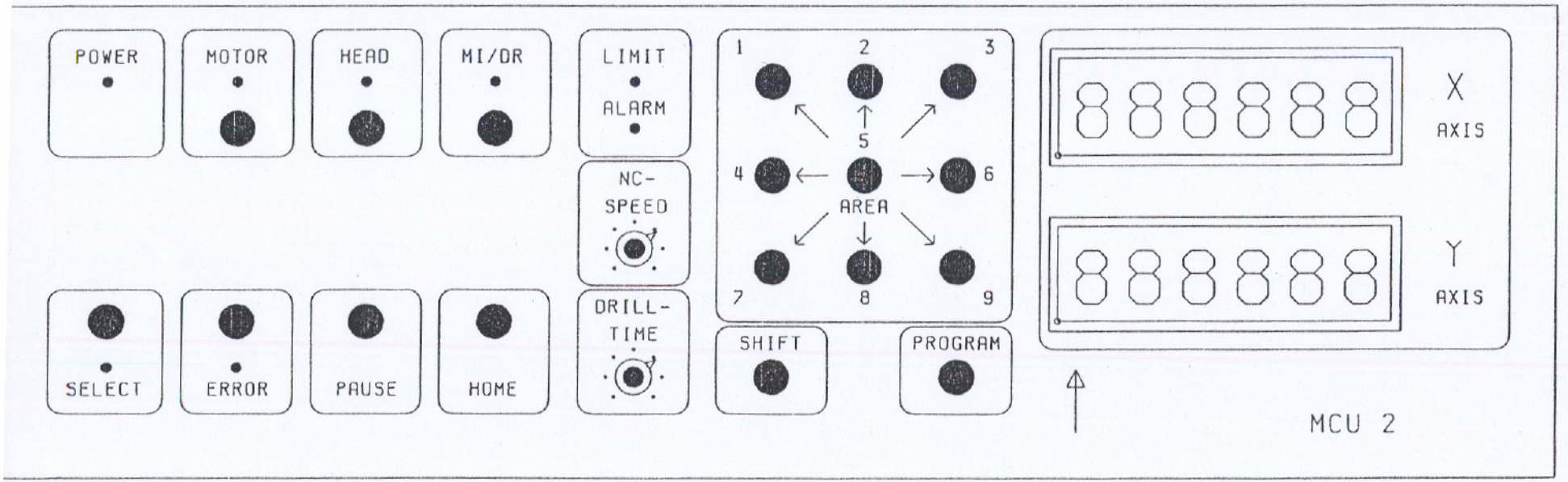
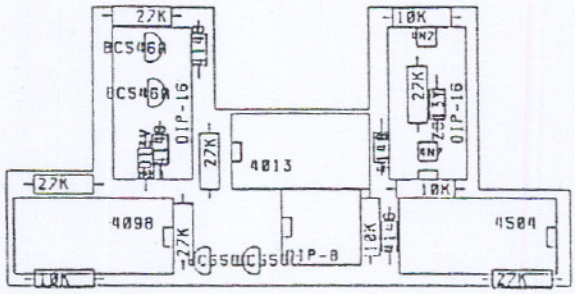
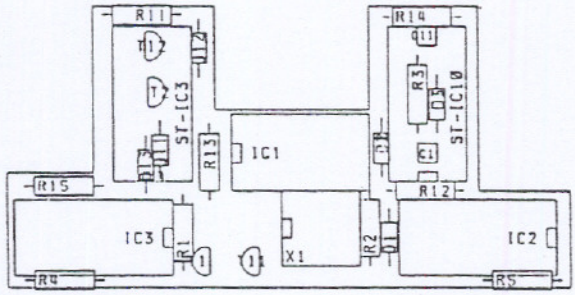
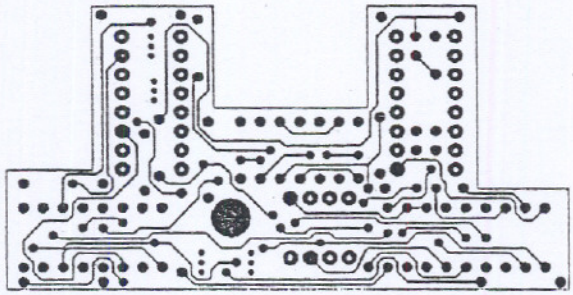
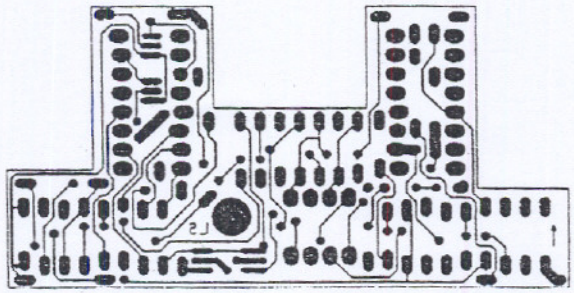
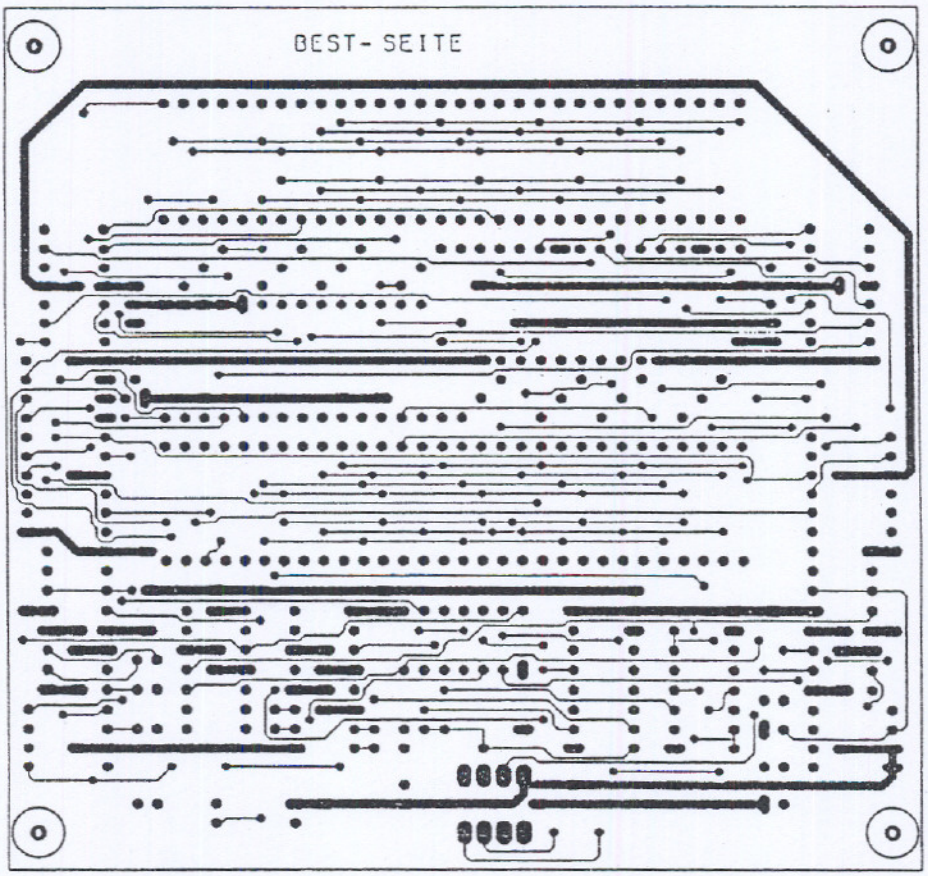

POWER
MOTOR
HEAD
MI/DR
LIMIT
ALARM
NC-
SPEED
DRILL-
TIME
SELECT
ERROR
PAUSE
HOME
1
2
3
4
5
6
7
8
9
AREA
SHIFT
PROGRAM
X
AXIS
Y
AXIS
MCU 2

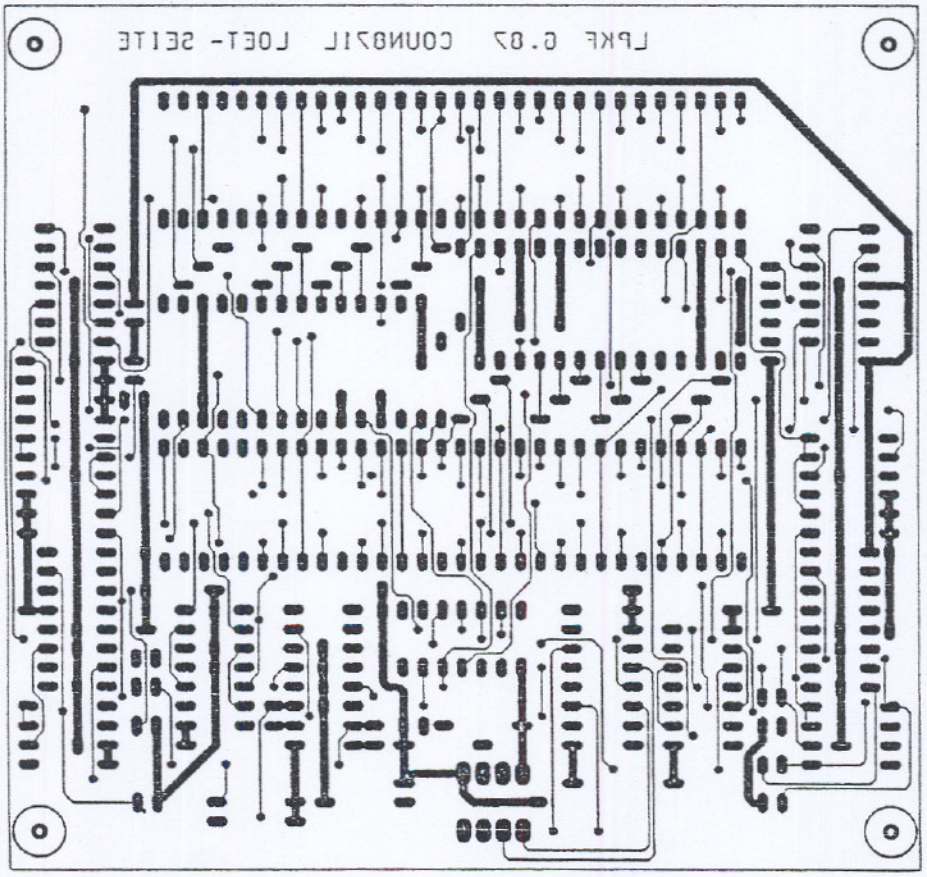

27K
BC546A
BC546A
DIP-16
27K
4013
10K
DIP-16
27K
10K
4098
27K
DIP-8
10K
4504
10K
27K

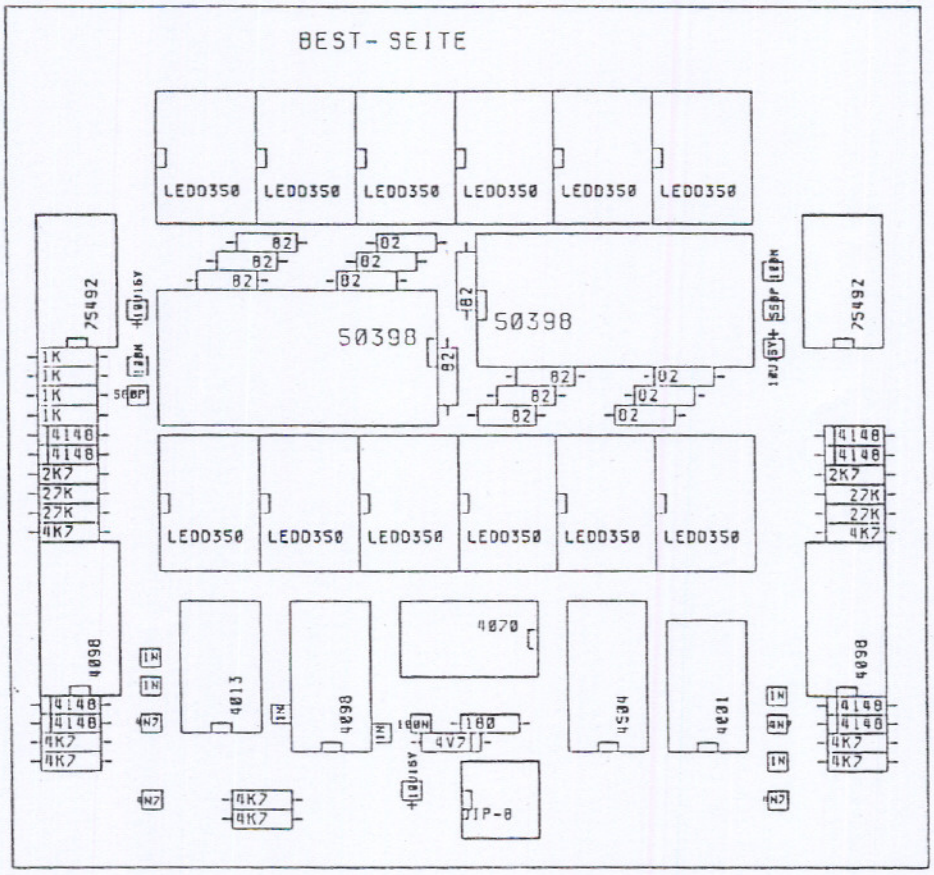

R11
ST-IC3
R13
IC1
R14
R3
ST-IC10
R15
R12
IC3
R1
X1
R2
IC2
R4
R5

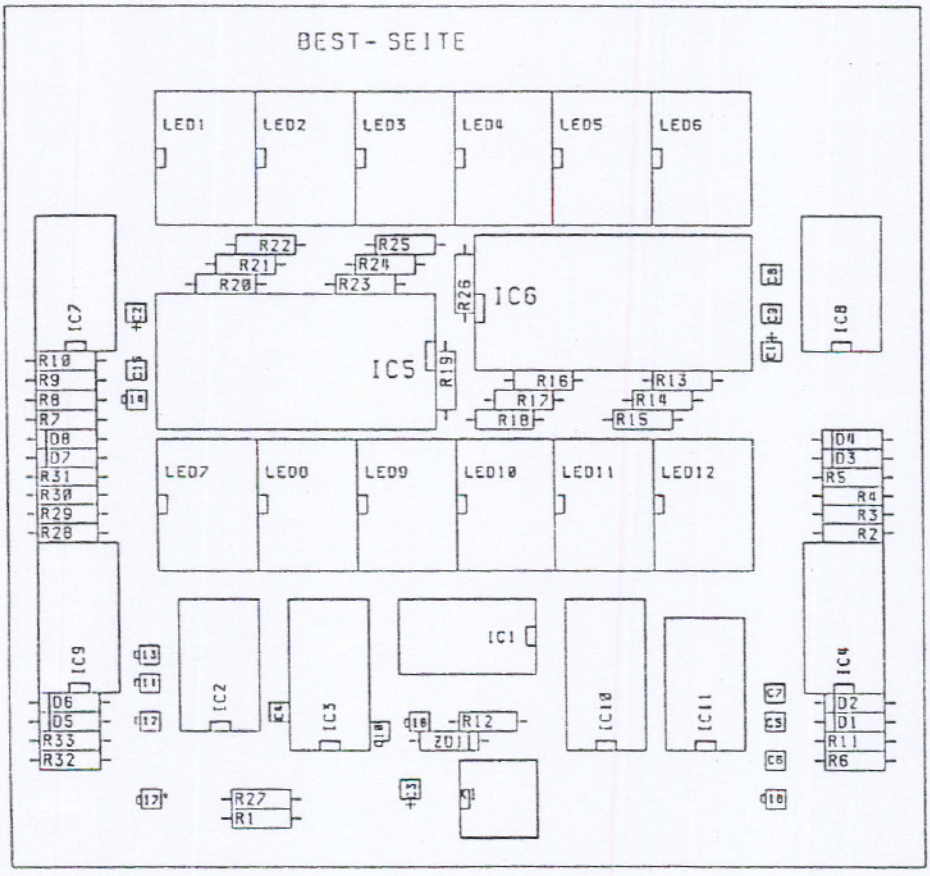


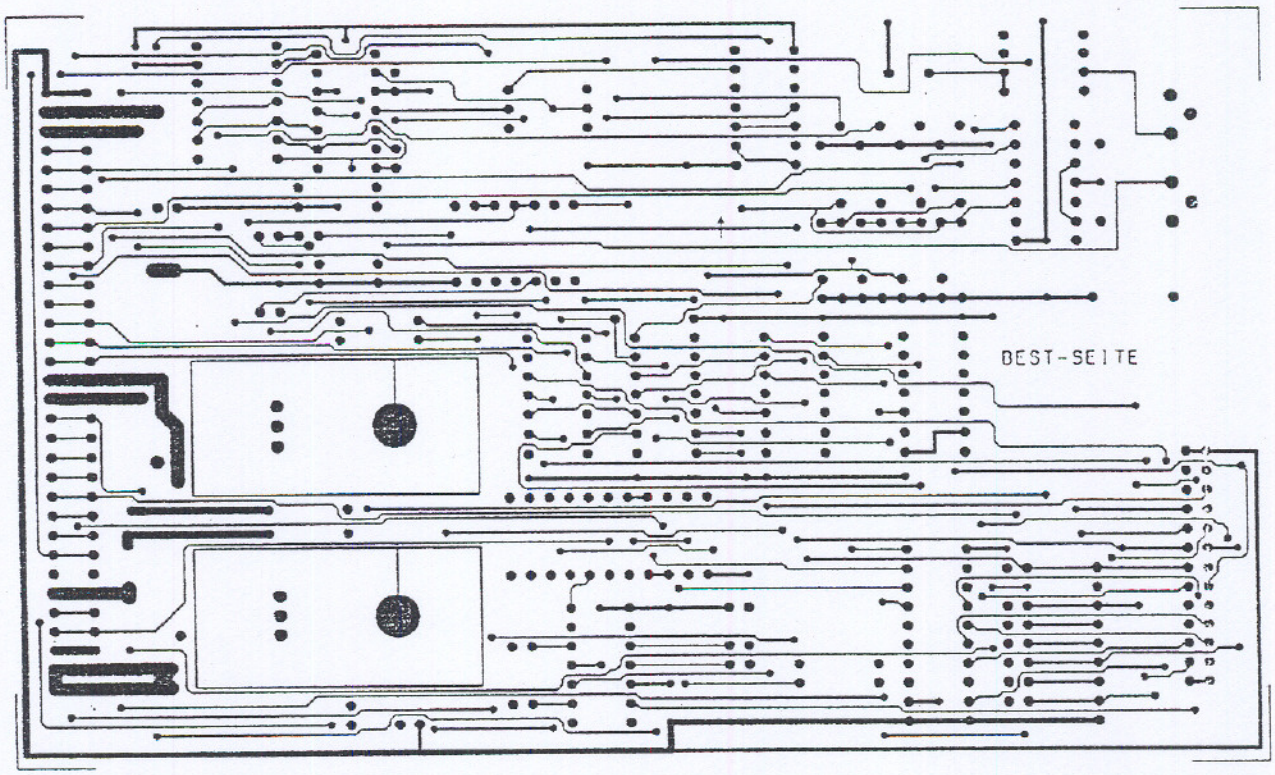


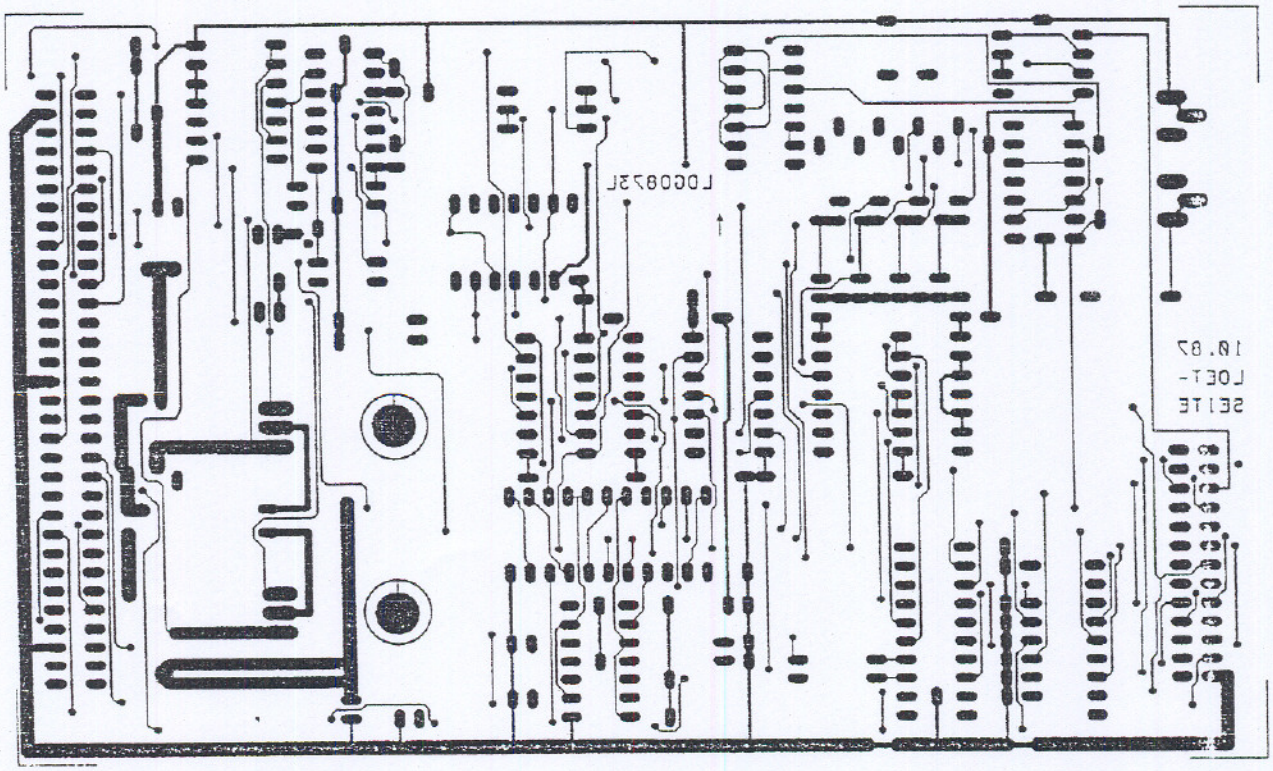

BEST- SEITE


LPKF 0.07 COUNB7IL LOET- SEITE

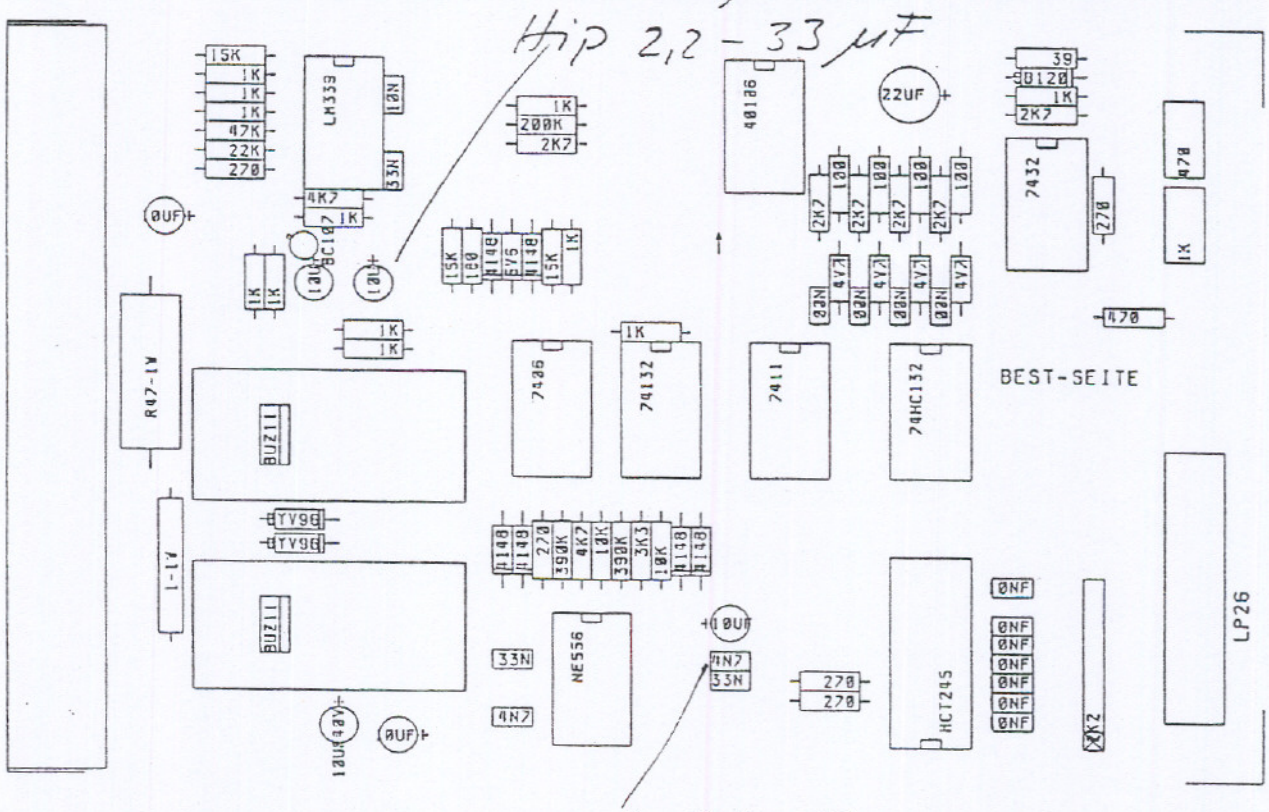

BEST- SEITE
LED0350
LED0350
LED0350
LED0350
LED0350
LED0350
82
82
82
02
02
02
50398
50398
82
82
82
82
02
02
02
02
75492
75492
1K
1K
1K
1K
4148
4148
2K7
27K
27K
4K7
4148
4148
2K7
27K
27K
4K7
LED0350
LED0350
LED0350
LED0350
LED0350
LED0350
4098
4098
4148
4148
4K7
4K7
4148
4148
4K7
4K7
4013
4093
4070
4584
4031
100
4V7
IP-8
4K7
4K7


BEST- SEITE
LED1
LED2
LED3
LED4
LED5
LED6
R22
R21
R20
R25
R24
R23
R26
IC6
IC5
R19
R16
R17
R18
R13
R14
R15
IC7
IC8
R10
R9
R8
R7
D8
D7
R31
R30
R29
R28
LED7
LED8
LED9
LED10
LED11
LED12
D4
D3
R5
R4
R3
R2
IC9
IC4
D6
D5
R33
R32
IC2
IC3
IC1
IC10
IC11
R12
ZD1
D2
D1
R11
R6
R27
R1


BEST-SEITE

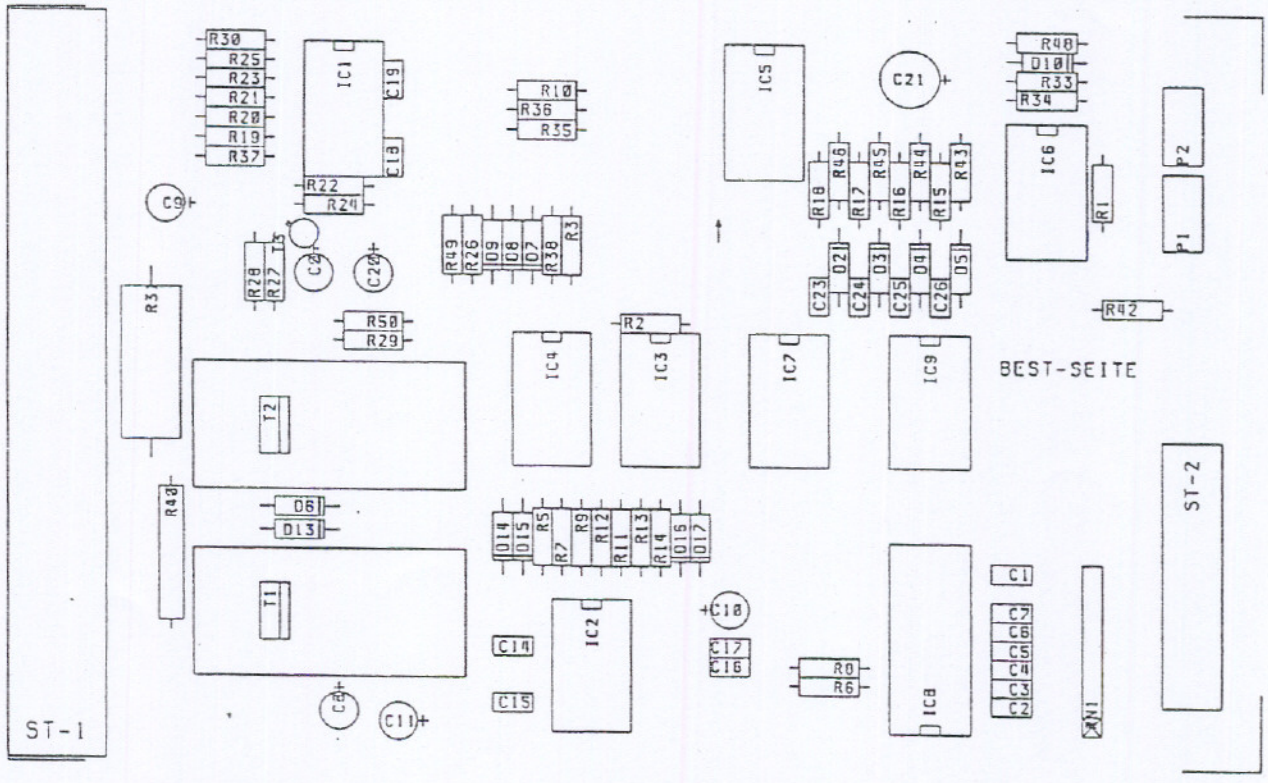

LOCOBAZL
10.87
LOET-
SEITE

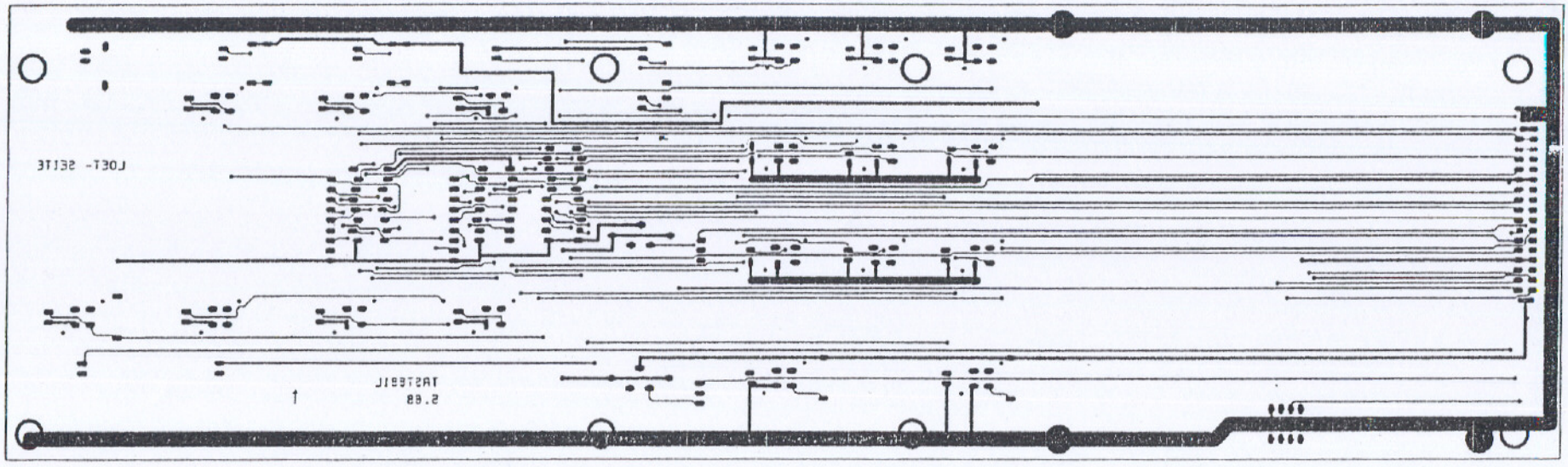
LC 10µF
Hip 2,2 – 33 µF

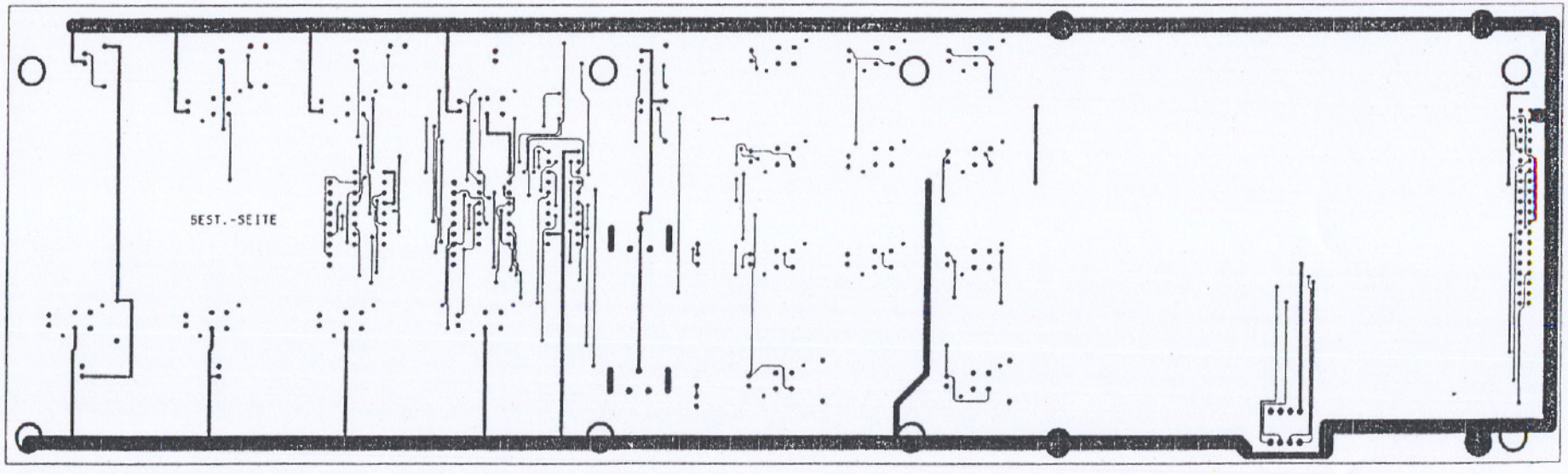


LC

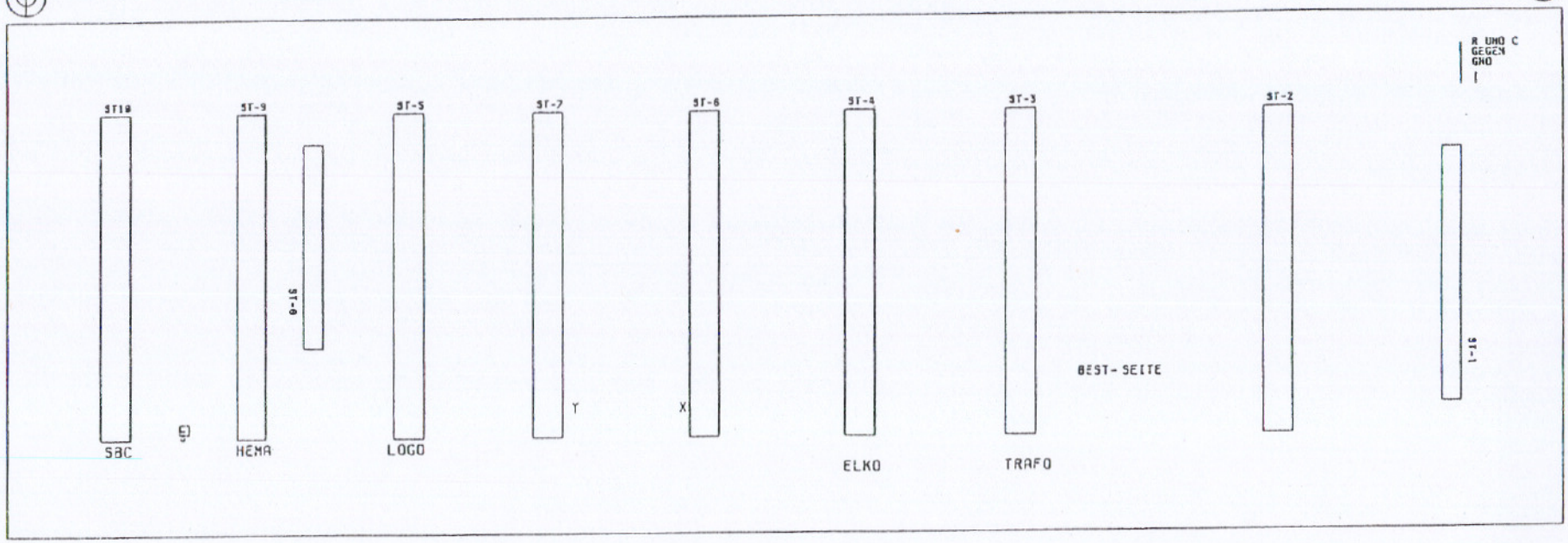
LC 22nF
Hip 4,7nF

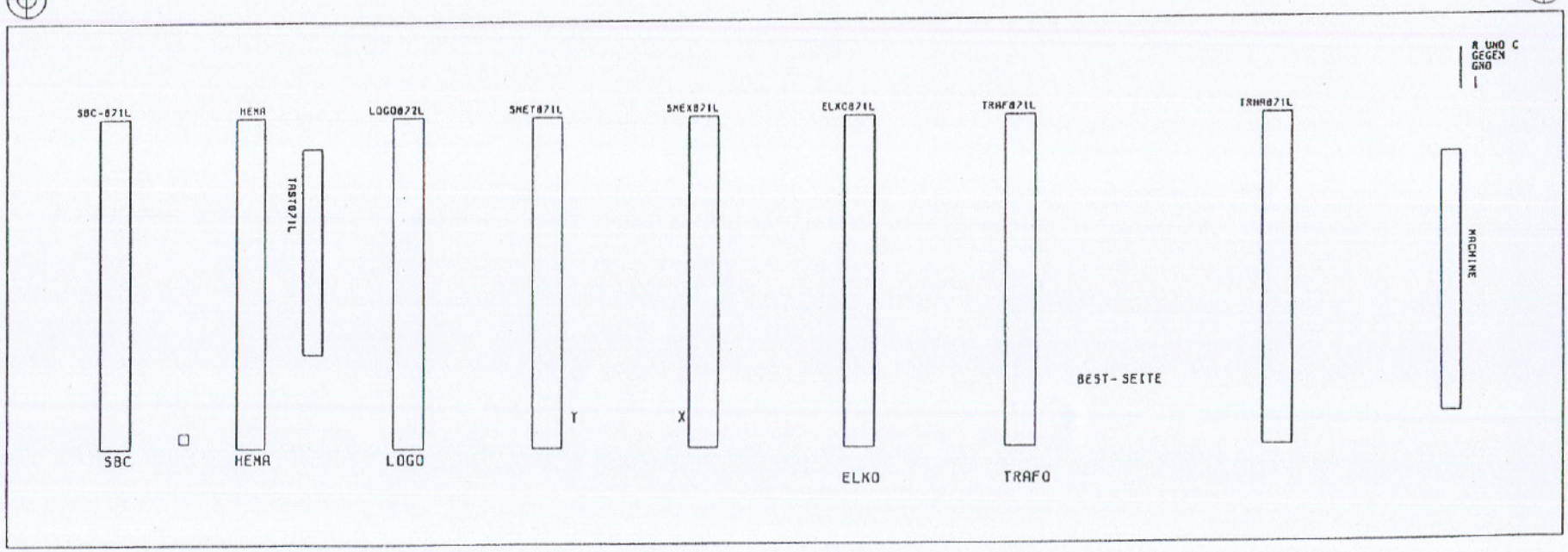


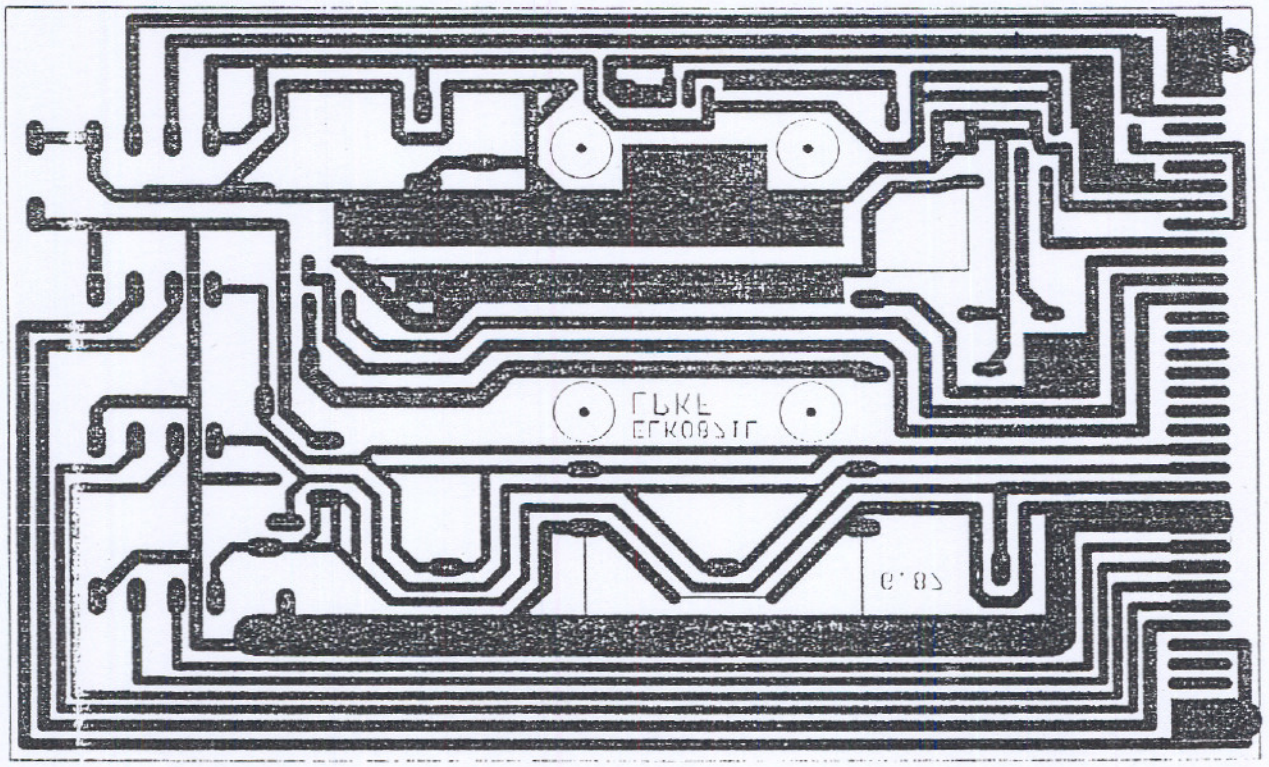

LOET- SEITE
TASTBILD
S.88

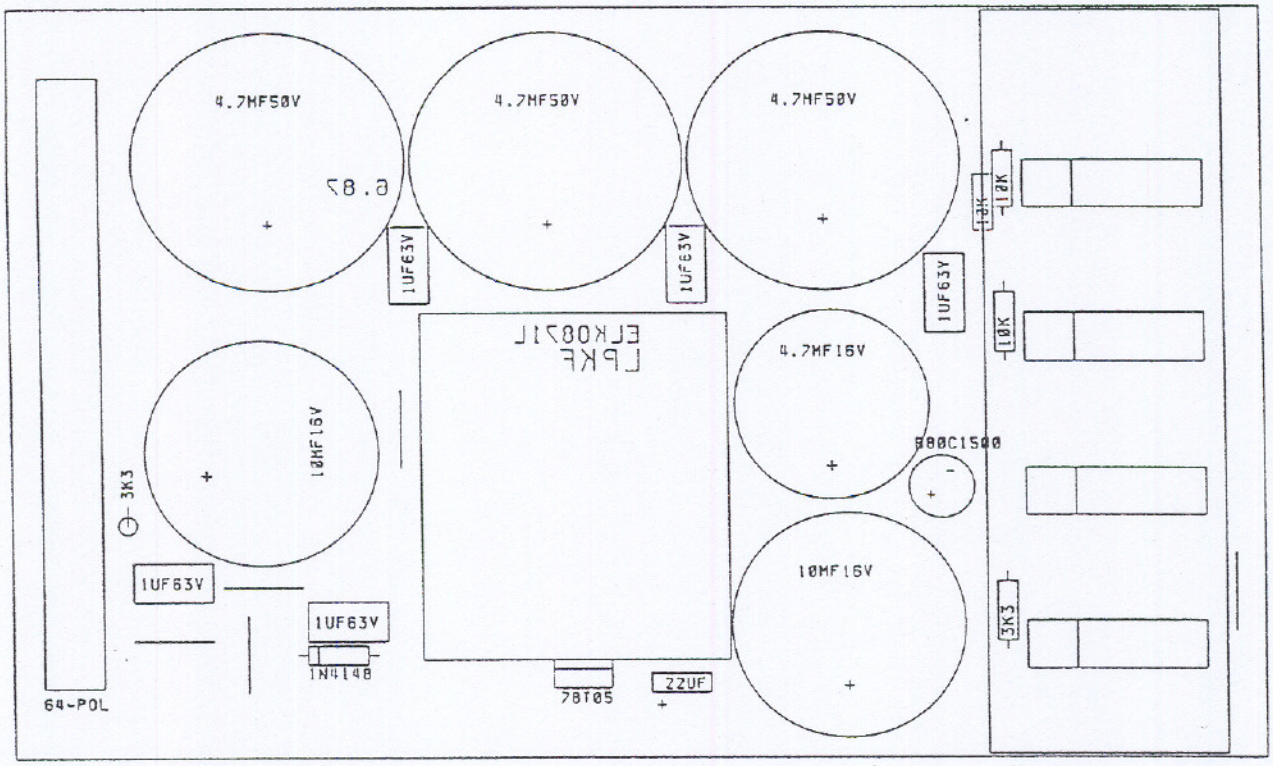

BEST.-SEITE

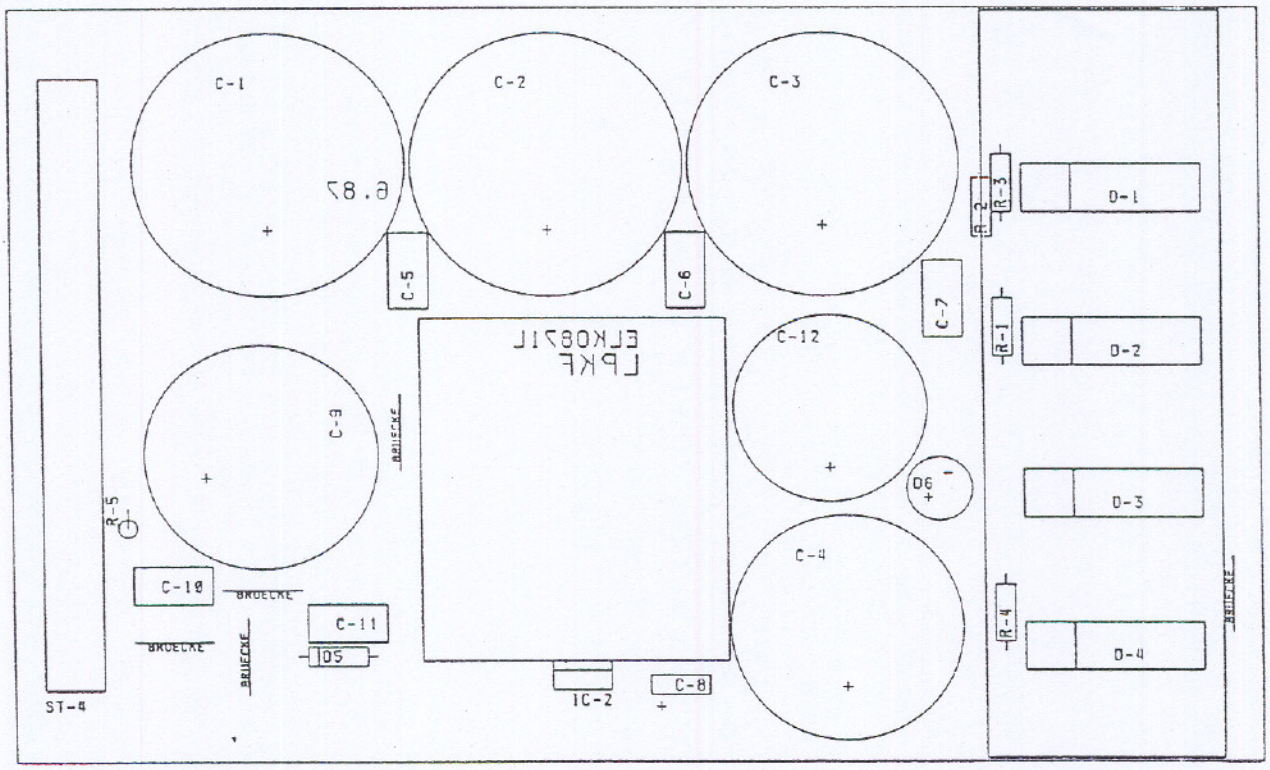
BEST.-SEITE
ST-1
TASTB71L
220K
47K
GRUEN
GELB

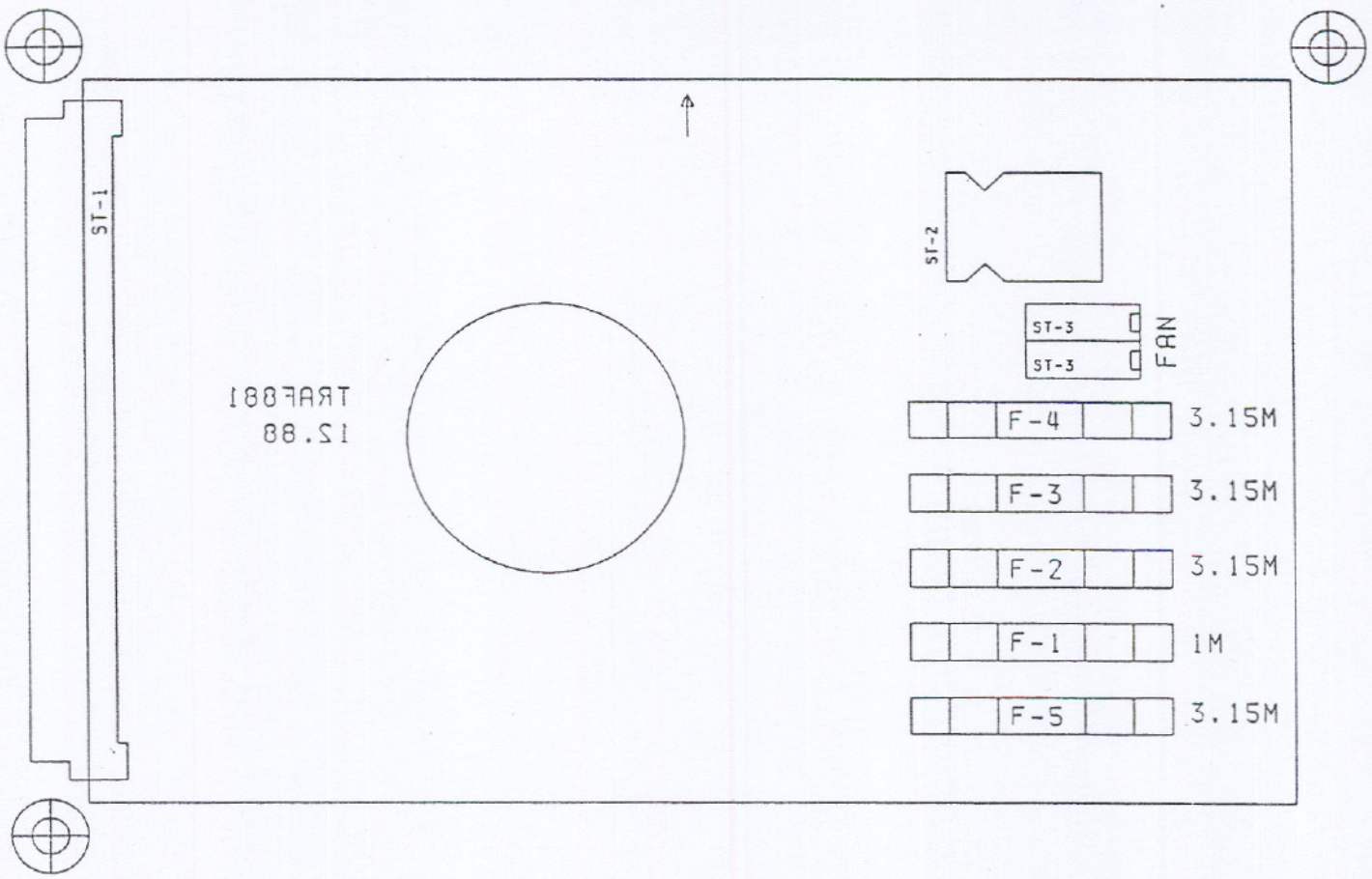

R UND C
GEGEN
GND
ST10
ST-9
ST-5
ST-7
ST-6
ST-4
ST-3
ST-2
ST-8
ST-1
BEST- SEITE
Y
X
SBC
HEMA
LOGO
ELKO
TRAFO

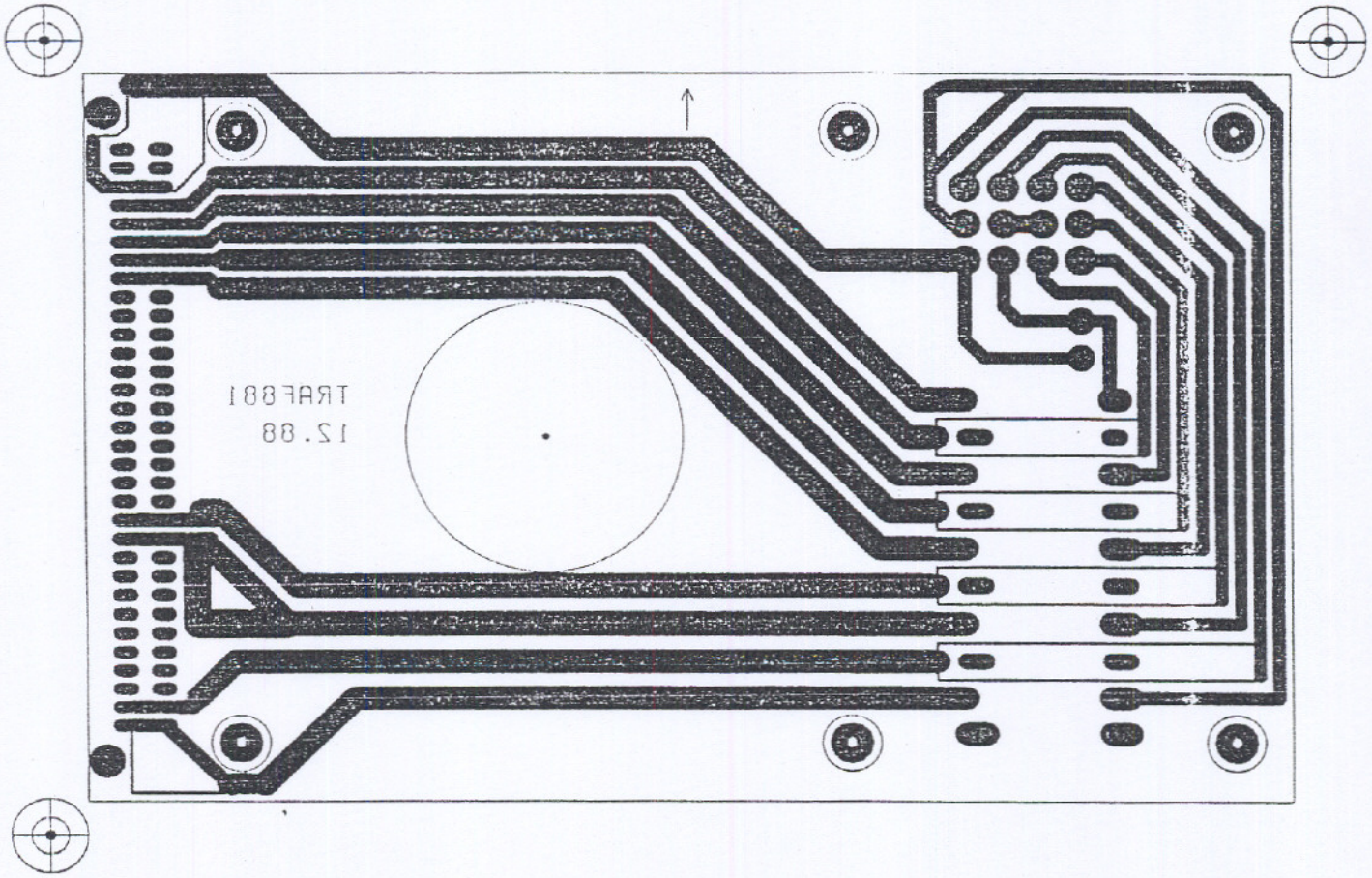

R UND C
GEGEN
GND
SBC-871L
HEMA
LOGO872L
SMET871L
SMEX871L
ELKO871L
TRAF871L
IRNA871L
TAST871L
MACHINE
BEST- SEITE
Y
X
SBC
HEMA
LOGO
ELKO
TRAFO



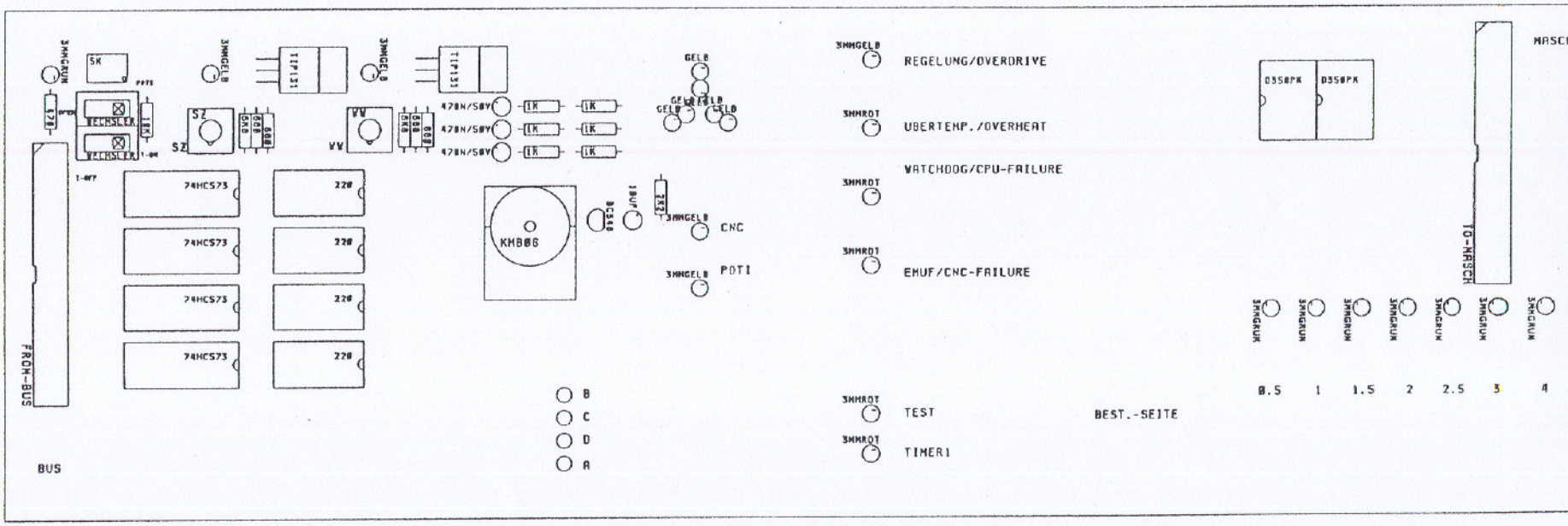

4.7MF50V
4.7MF50V
4.7MF50V
1UF63V
1UF63V
1UF63V
10K
10K
10K
4.7MF16V
10MF16V
10MF16V
3K3
3K3
1UF63V
1UF63V
1N4148
78T05
22UF
64-POL

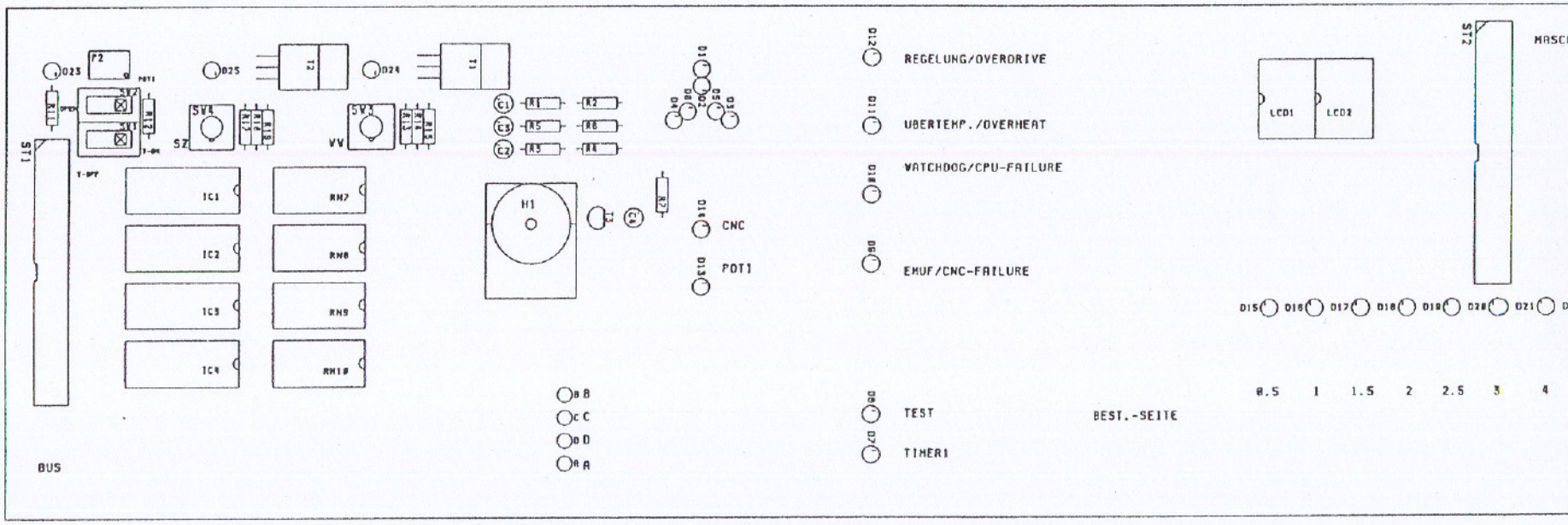

C-1
C-2
C-3
C-5
C-6
C-7
C-12
C-9
C-4
C-10
C-11
C-8
D-1
D-2
D-3
D-4
R-1
R-2
R-3
R-4
R-5
D5
IC-2
ST-4
BRUECKE
BRUECKE
BRUECKE
BRUECKE
BRUECKE

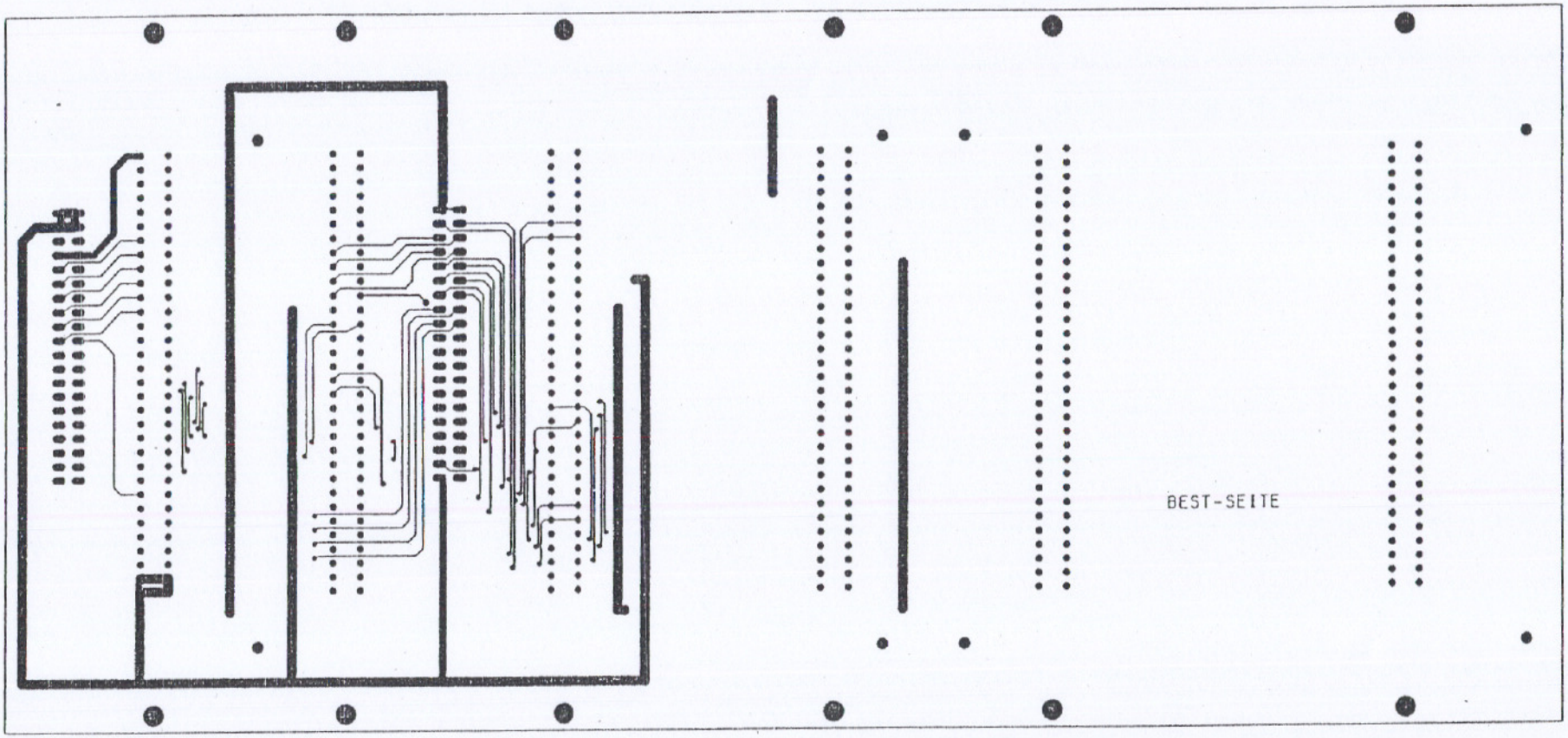

ST-1
ST-2
ST-3
ST-3
FAN
F-4
3.15M
F-3
3.15M
F-2
3.15M
F-1
1M
F-5
3.15M
TRAF881
12.88


TRAF881
12.88

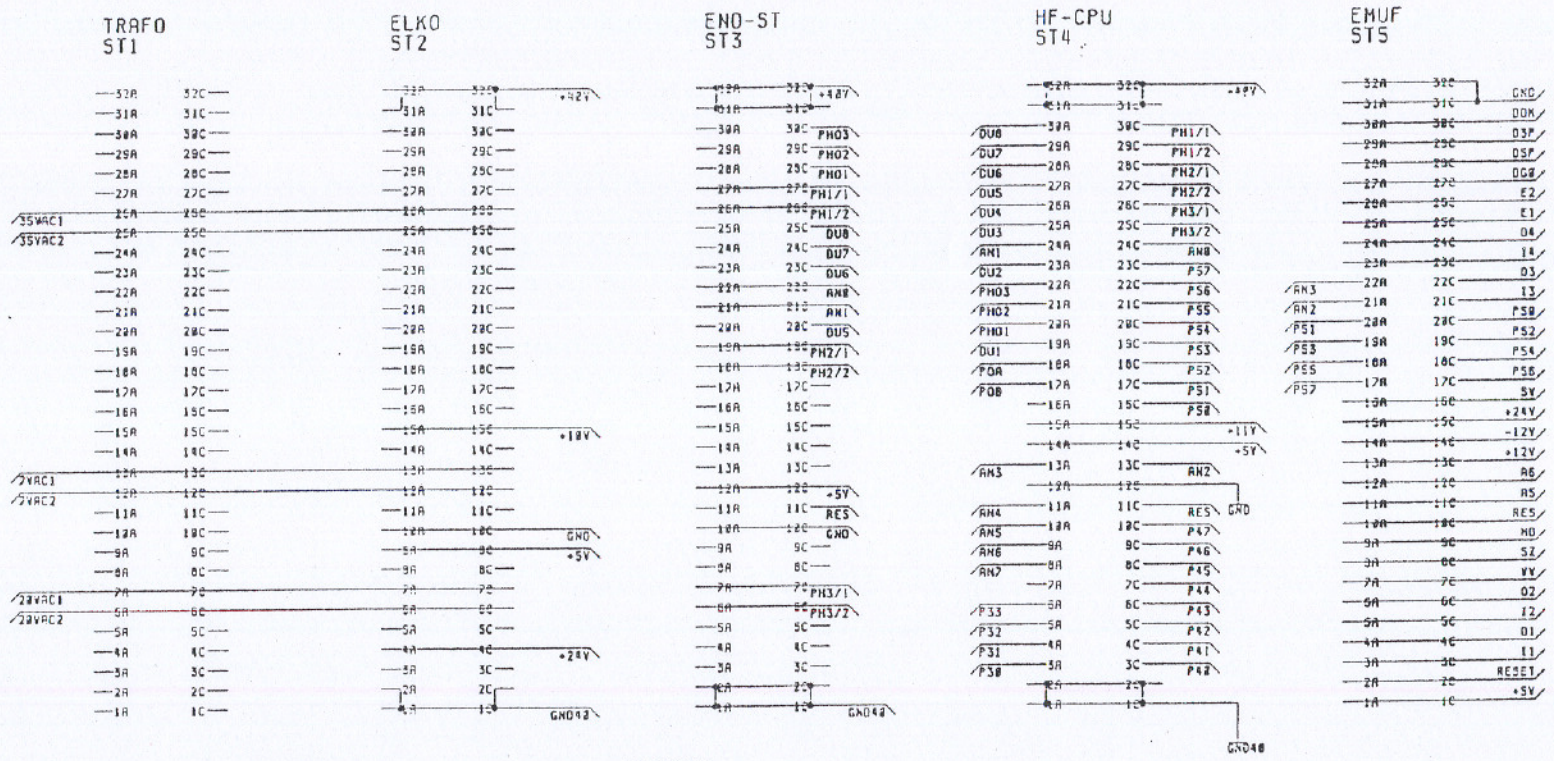
LPKF
TRHA8711

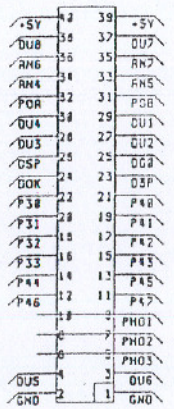

3MMGRUN
5K
POTI
WECHSLER
WECHSLER
1-ON
1-OFF
470
10K
3MMGELB
TIP131
3MMGELB
TIP131
SZ
SZ
VV
VV
470N/50V
470N/50V
470N/50V
1K
1K
1K
1K
GELB
GELB
GELB
GELB
GELB
74HCS73
74HCS73
74HCS73
74HCS73
220
220
220
220
KMB06
BC548
10UF
2K2
3MMGELB
CNC
3MMGELB
POTI
FROM-BUS
BUS
B
C
D
A
3MMGELB
REGELUNG/OVERDRIVE
3MMROT
UBERTEMP./OVERHEAT
WATCHDOG/CPU-FAILURE
3MMROT
3MMROT
EMUF/CNC-FAILURE
3MMROT
TEST
3MMROT
TIMER1
BEST.-SEITE
BC558PK
BC558PK
TO-MASCH
3MMGRUN
3MMGRUN
3MMGRUN
3MMGRUN
3MMGRUN
3MMGRUN
3MMGRUN
0.5
1
1.5
2
2.5
3
4

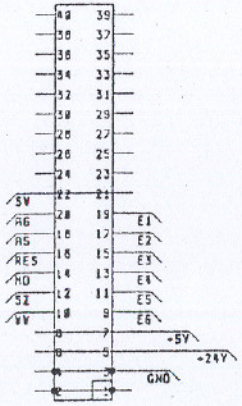

REGELUNG/OVERDRIVE
UBERTEMP./OVERHEAT
WATCHDOG/CPU-FAILURE
EMUF/CNC-FAILURE
CNC
POT1
TEST
TIMER1
BEST.-SEITE
BUS
ST1
ST2
LCD1
LCD2
H1
IC1
IC2
IC3
IC4
RN7
RN8
RN9
RN10
0.5
1
1.5
2
2.5
3
4


BEST-SEITE

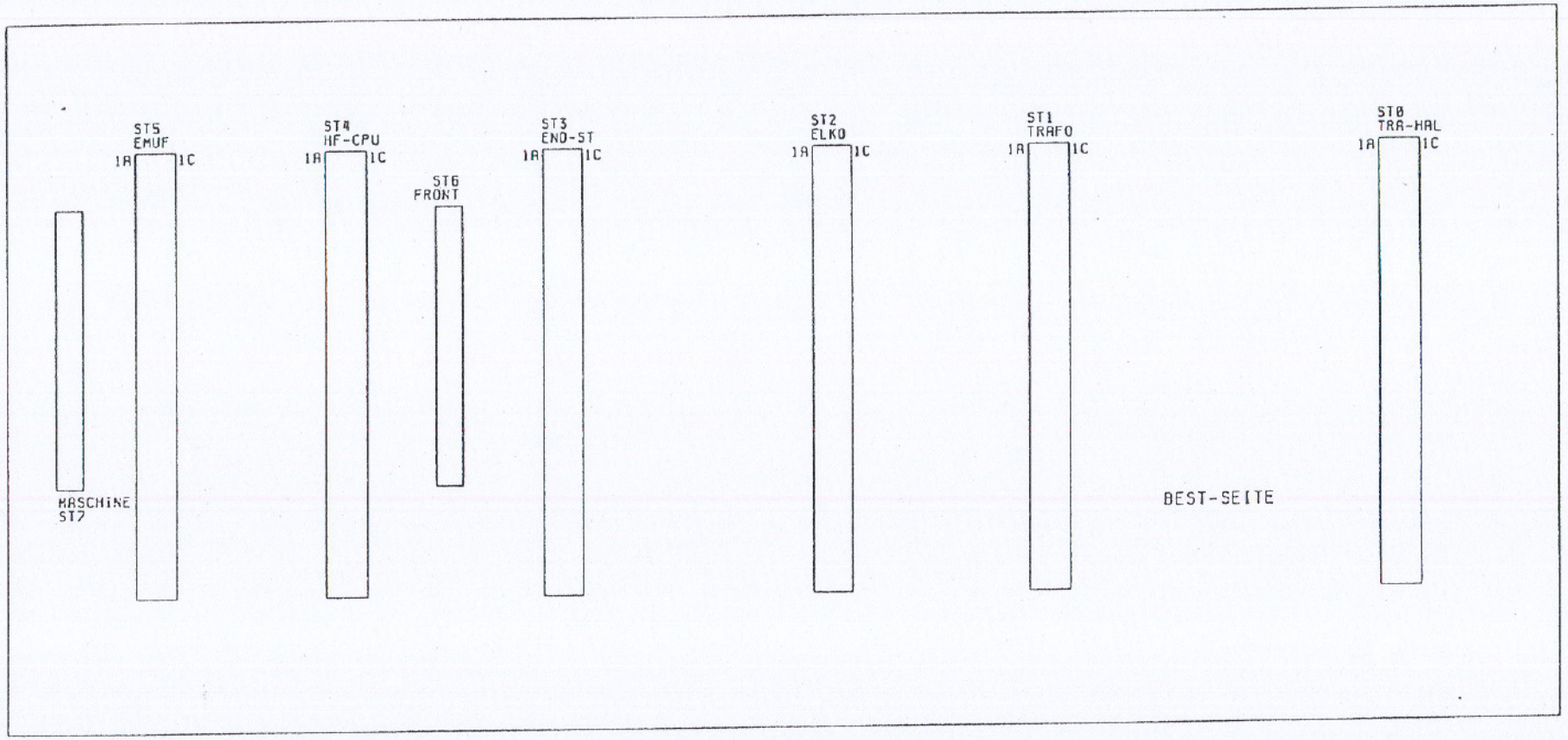
EMUF
HF-CPU
HF-END
ELKO
TRAFO
TRA-HA
MASCH
FRONT
HF8U831
4.89
LOET-SEITE

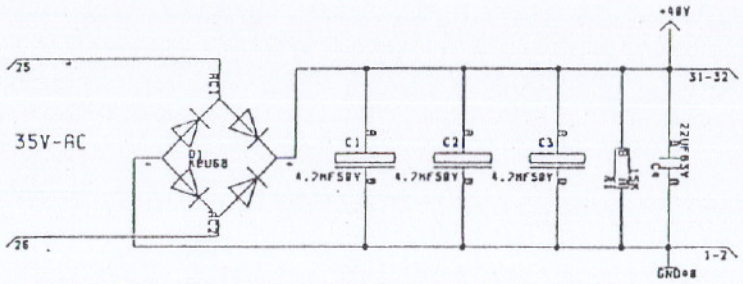


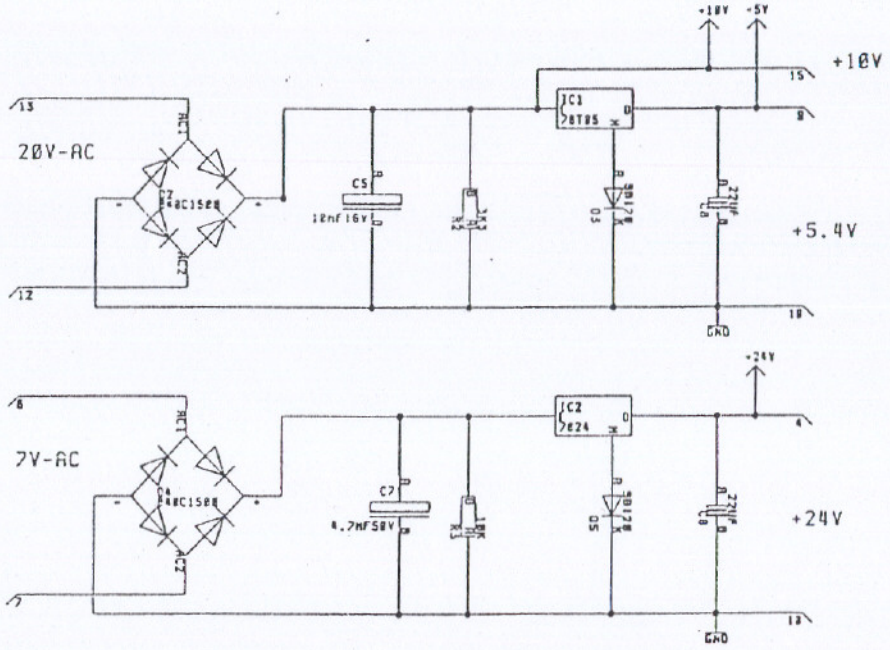




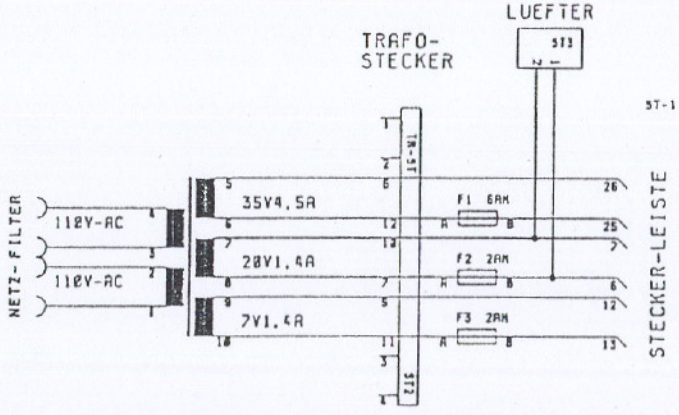
LPKF	HFBU881D
6.5.88	
PLOCK	
MIELENTZ	


MASCHINE
ST7
ST5
EMUF
1A
1C
ST4
HF-CPU
1A
1C
ST6
FRONT
ST3
END-ST
1A
1C
ST2
ELKO
1A
1C
ST1
TRAFO
1A
1C
BEST-SEITE
ST0
TRA-HAL
1A
1C





ELKO-KARTE

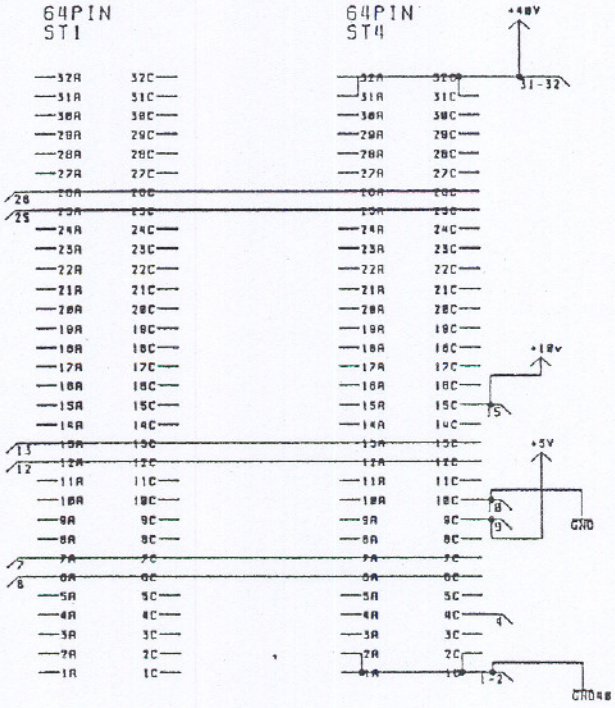


TRAFO-KARTE

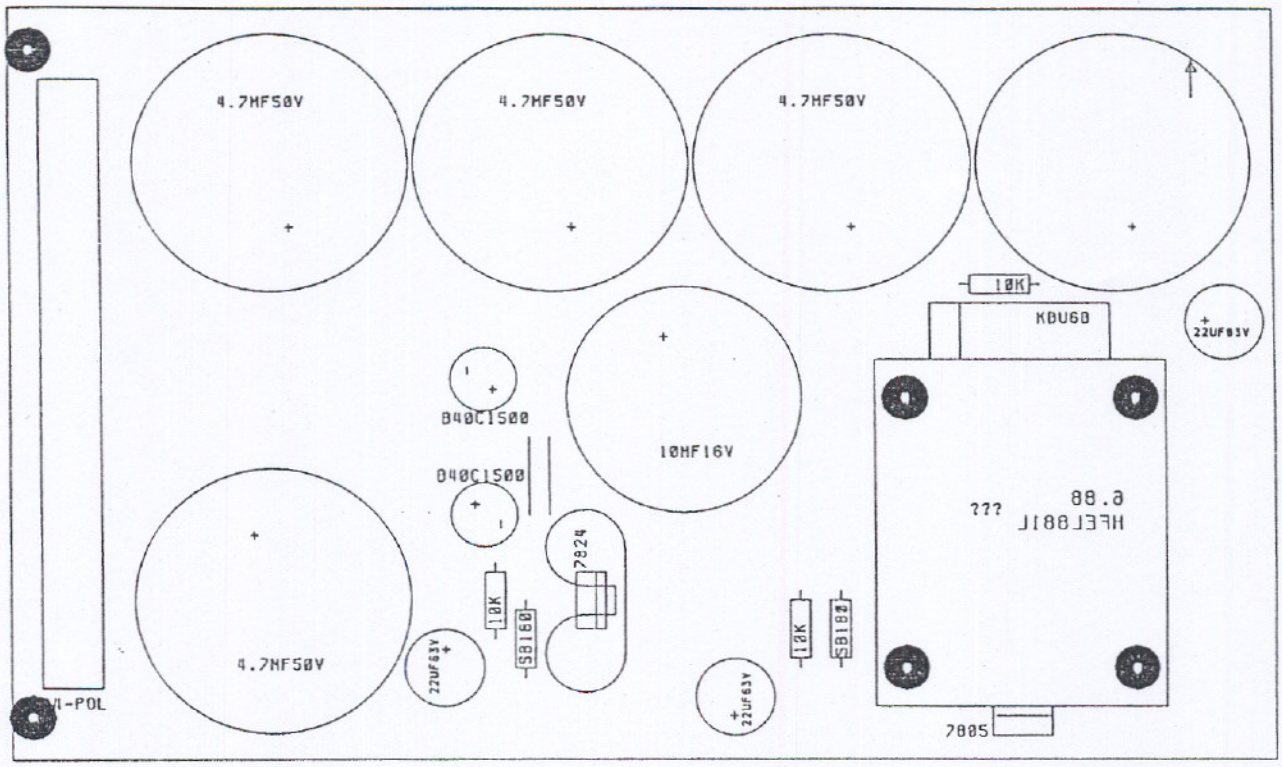
KANE881D KAVOANST

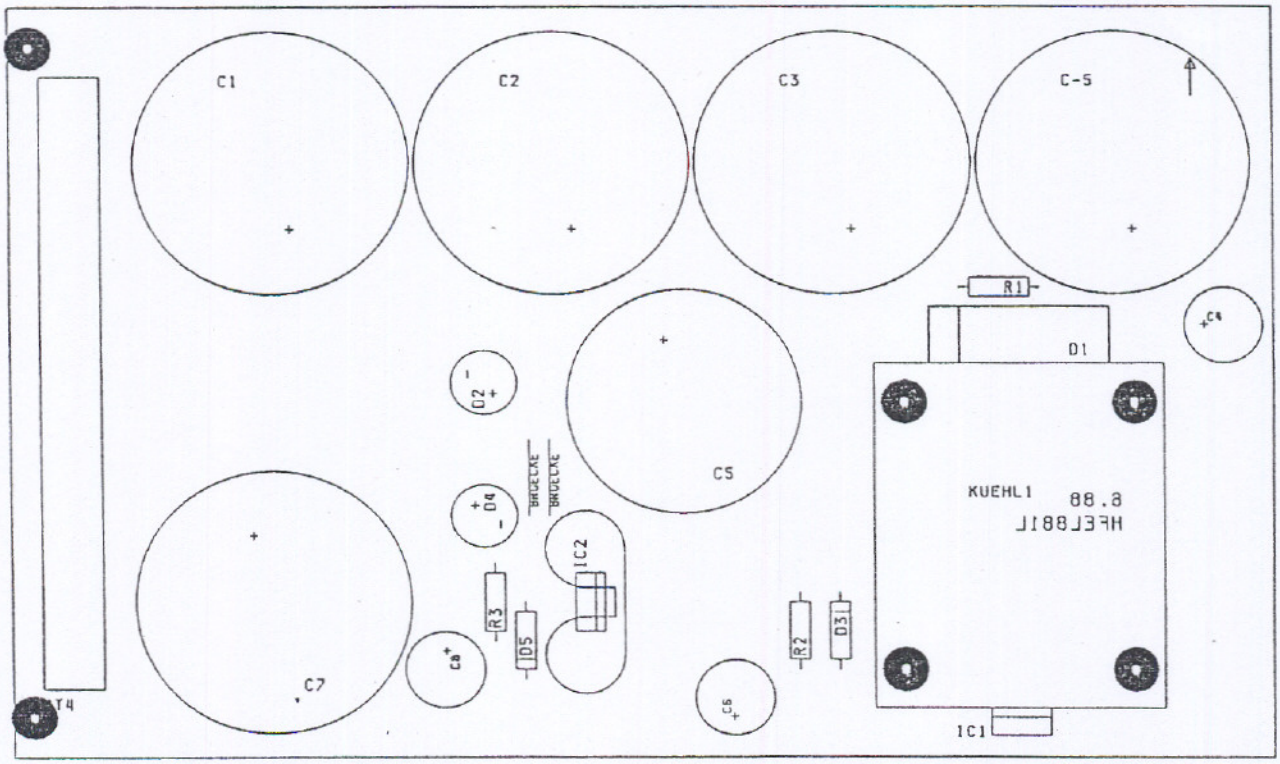
15.02.88

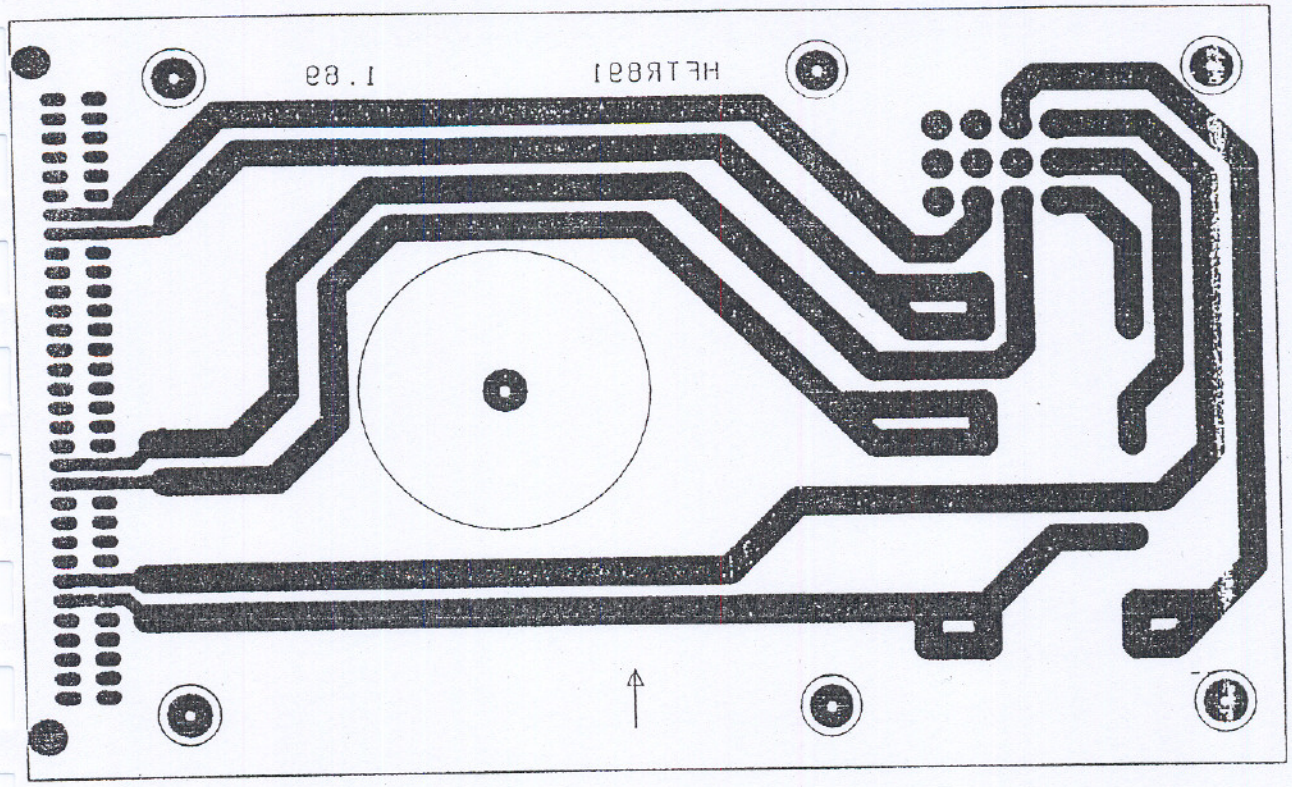
TRAF871L ELKO871L

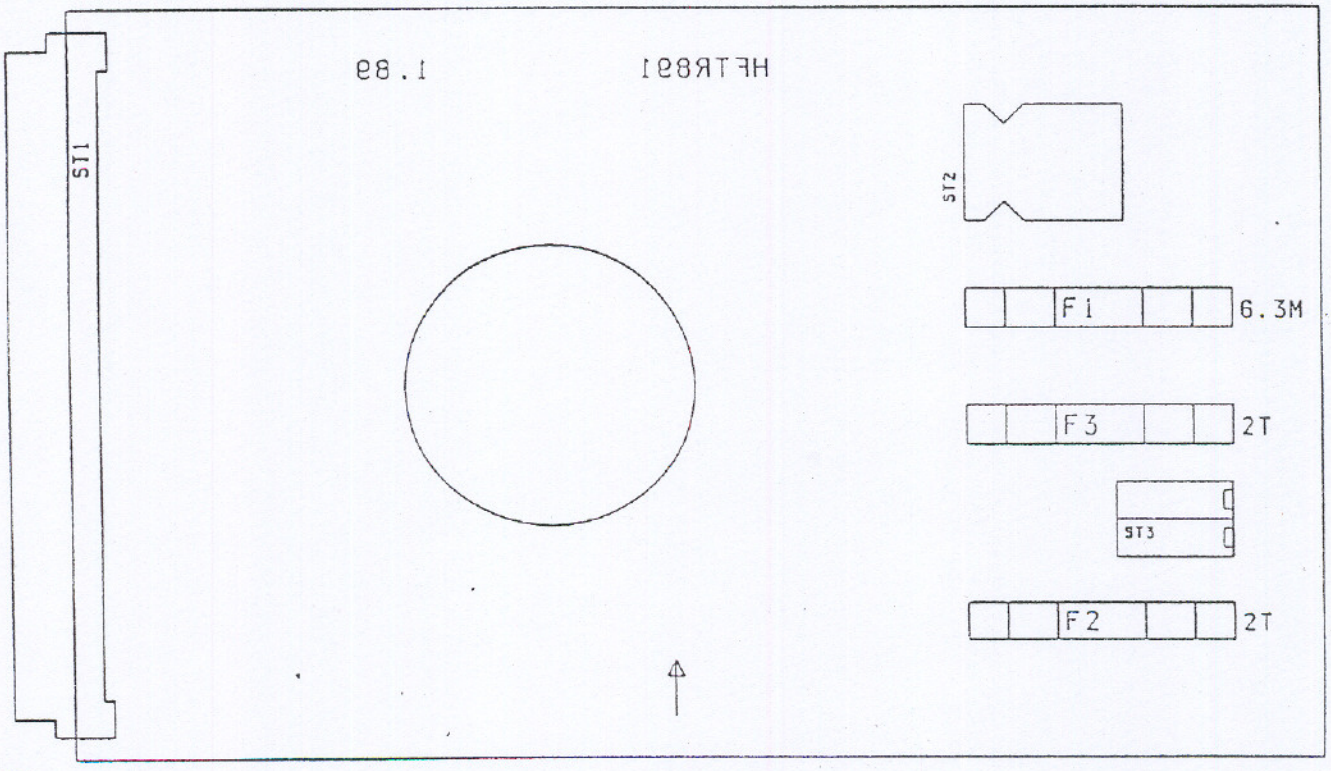


6.00
INCLOUD

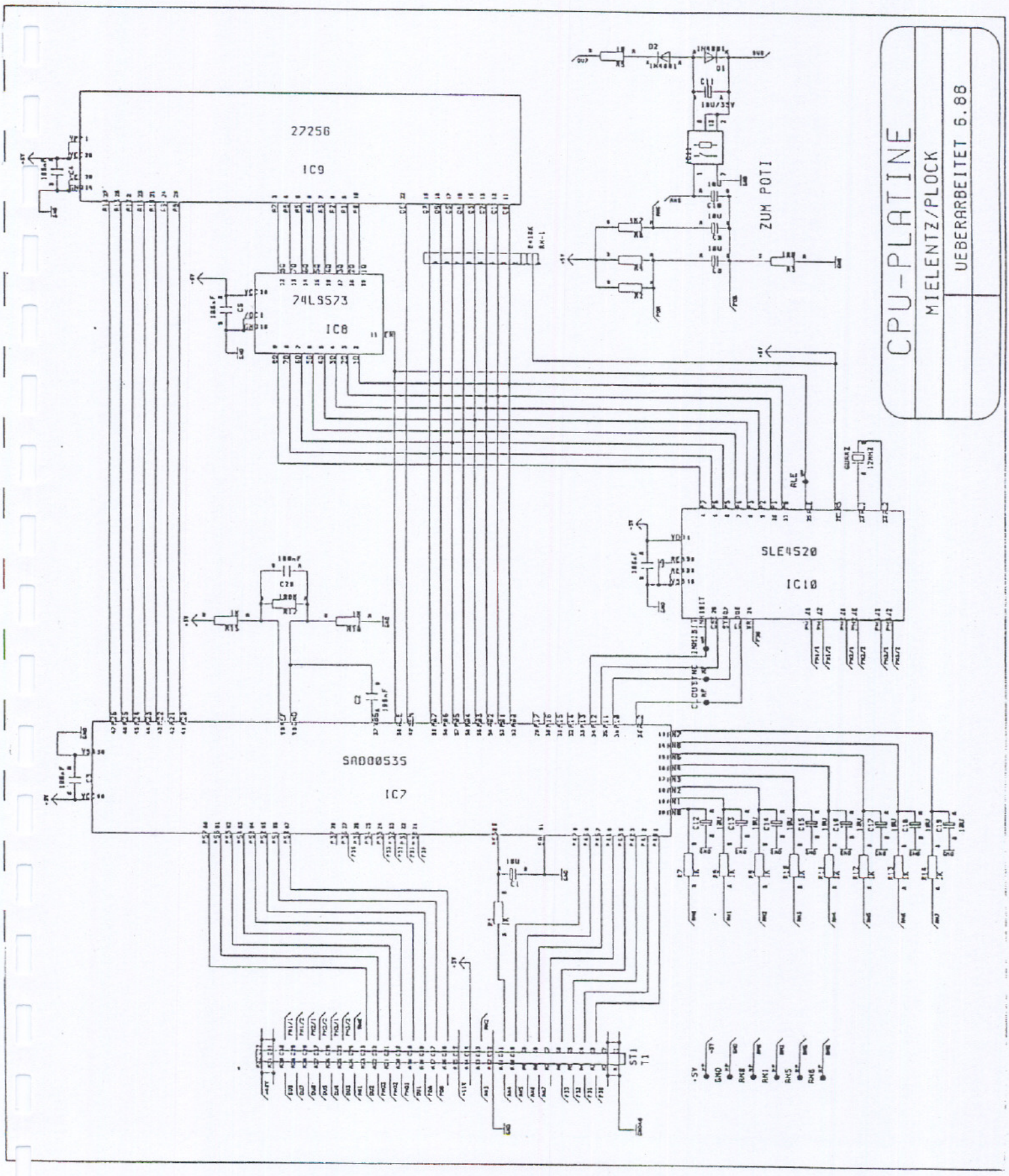

4.7MF50V
4.7MF50V
4.7MF50V
10K
KBU60
22UF63V
B40C1500
10MF16V
B40C1500
???
7824
10K
SB160
10K
SB180
4.7MF50V
22UF63V
22UF63V
7805

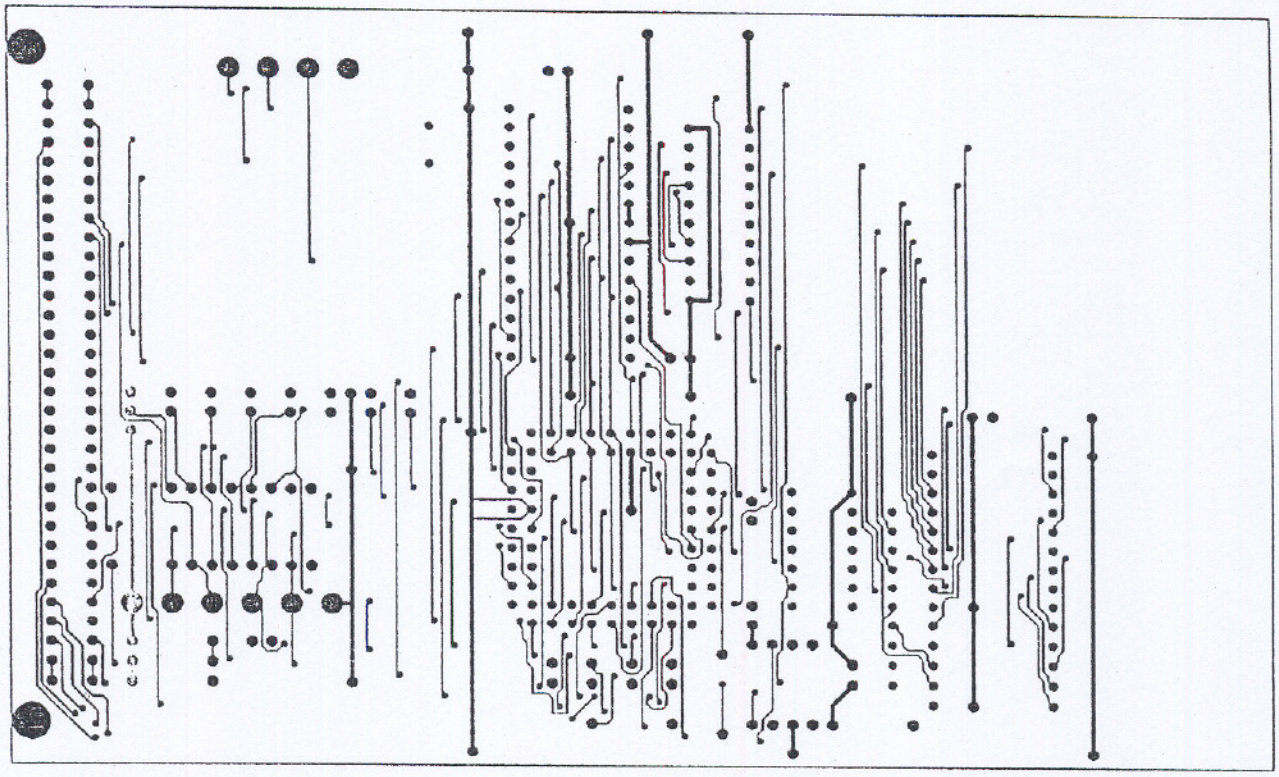

C1
C2
C3
C-5
R1
C4
D1
D2
C5
KUEHL1
D4
IC2
R3
D5
C8
R2
D3
C7
C6
IC1

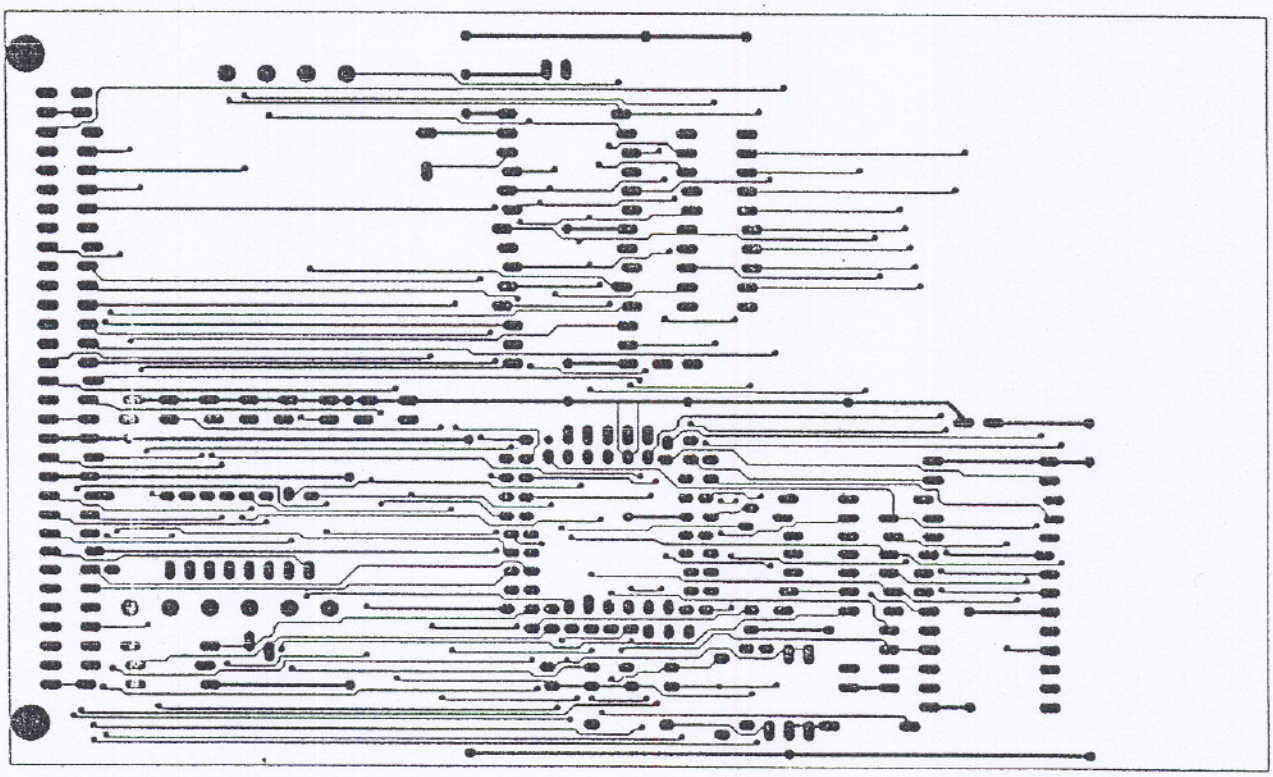

HFTR891
1.89

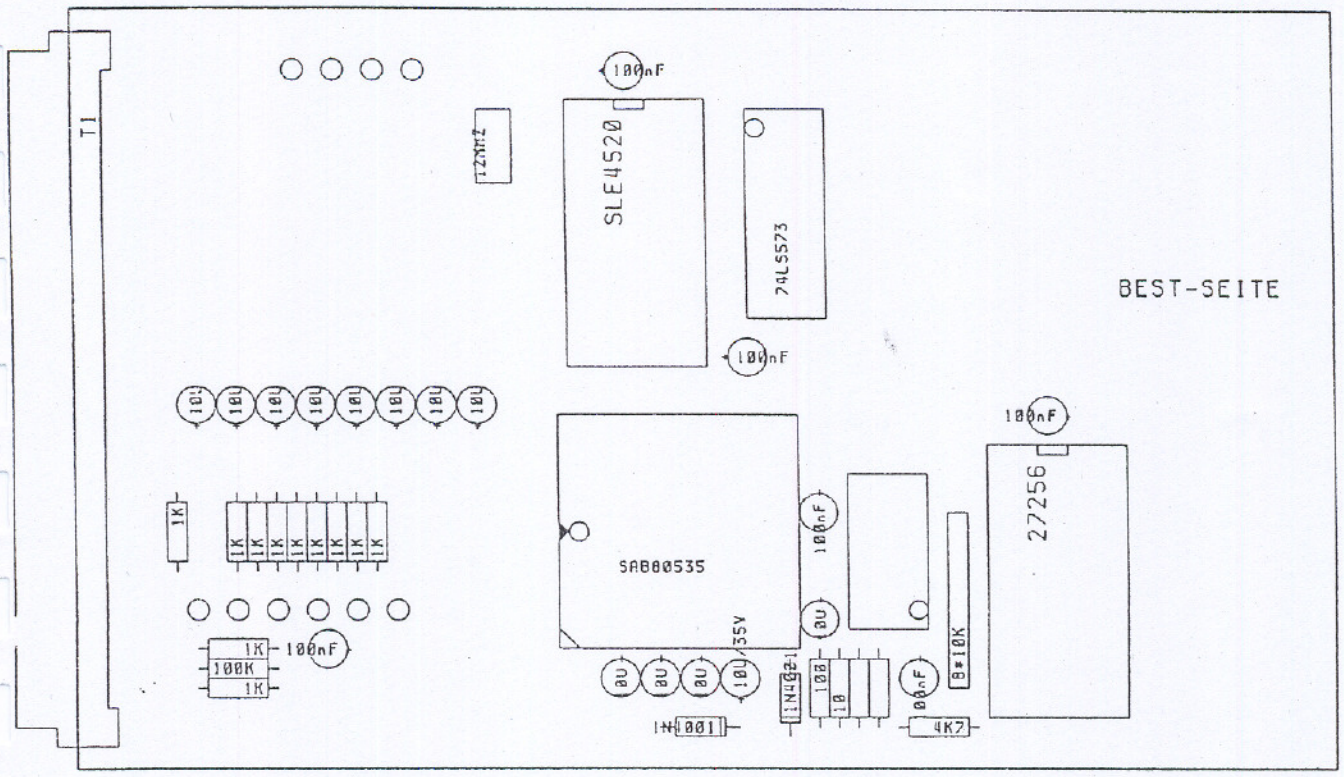

HFTR891
1.89
ST1
ST2
F1
6.3M
F3
2T
ST3
F2
2T

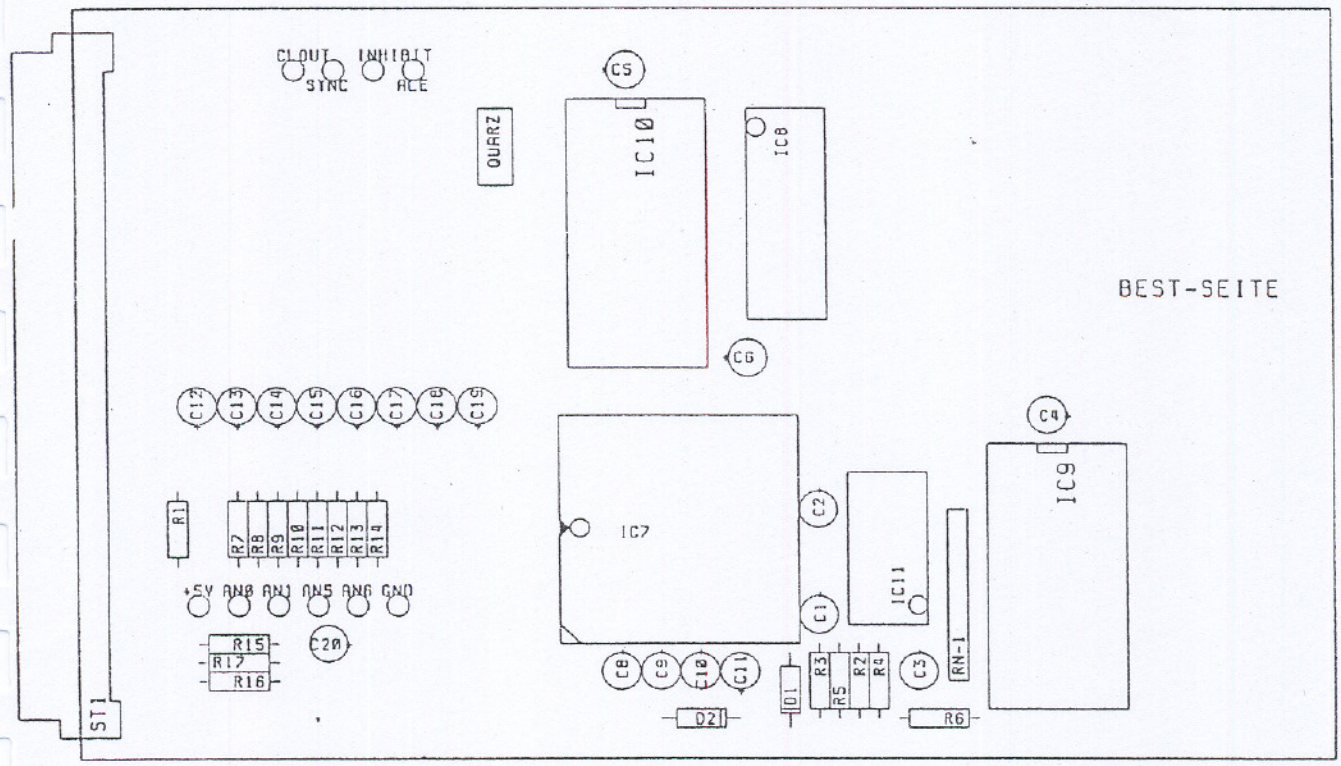
LPKF
TRHA8711

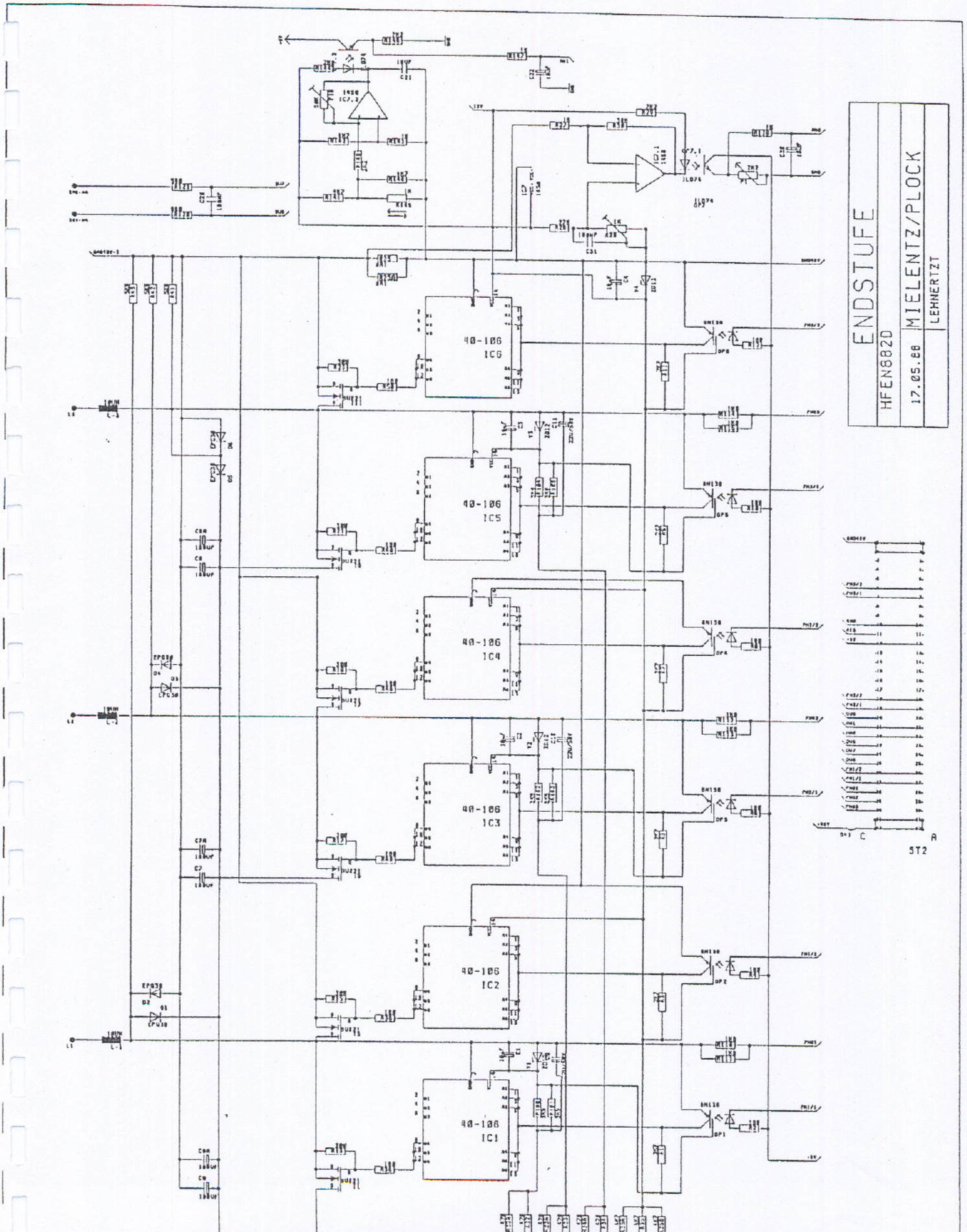

CPU-PLATINE
MIELENTZ/PLOCK
UEBERARBEITET 6.88
27256
IC9
74LS573
IC8
ZUM POTI
SLE4520
IC10
SA00535
IC7
ALE
CLOUTSYNC
GND
ST1

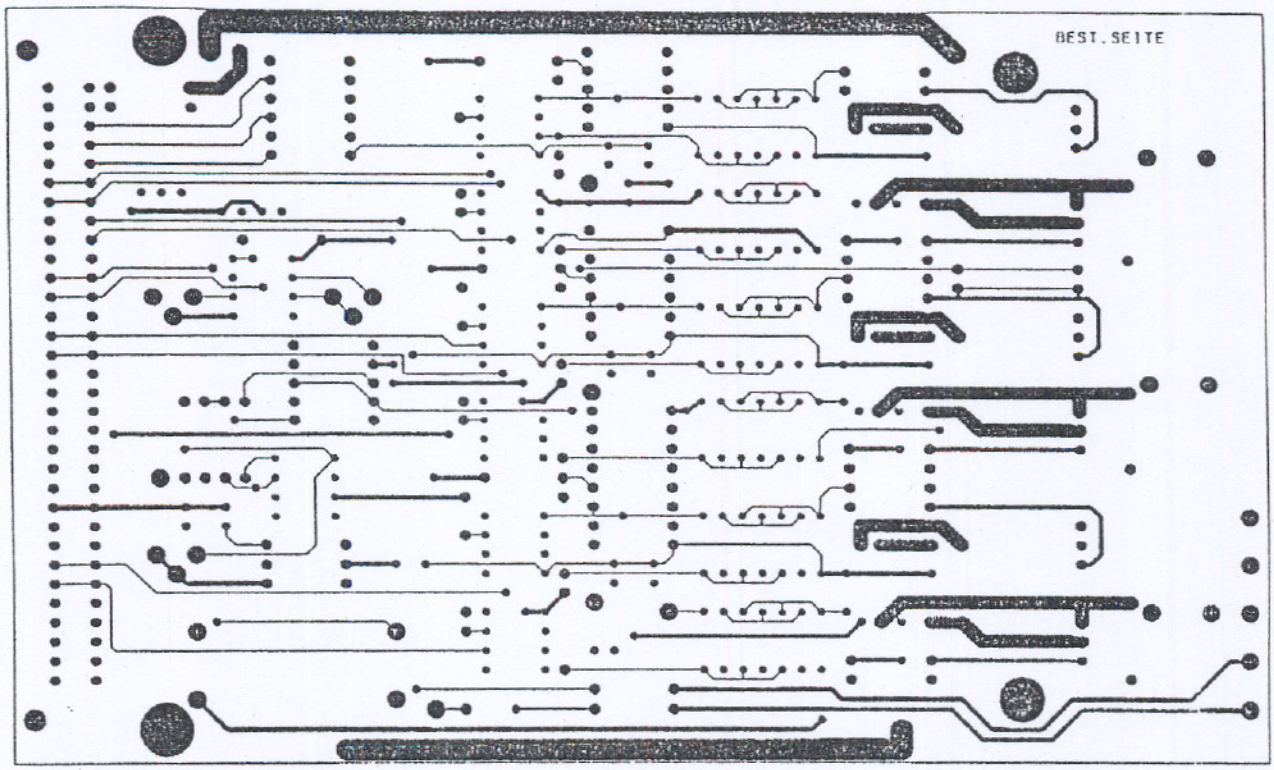


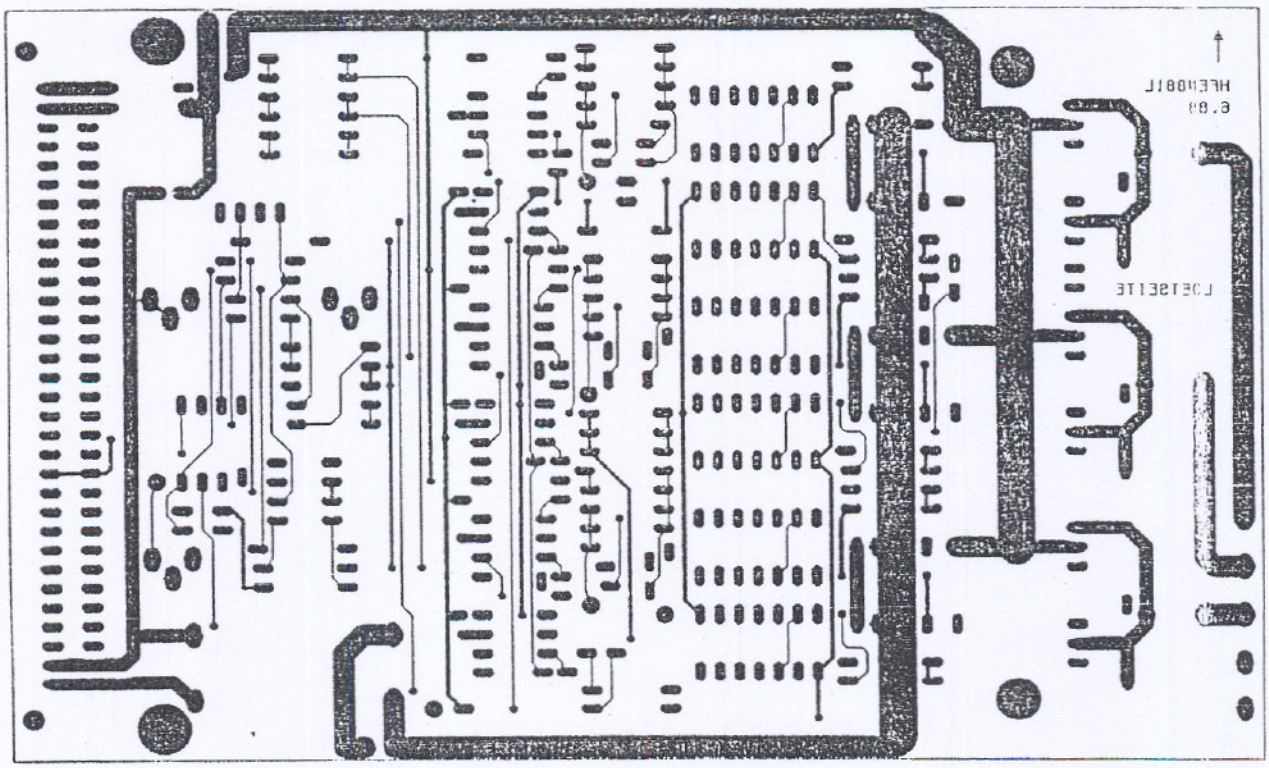


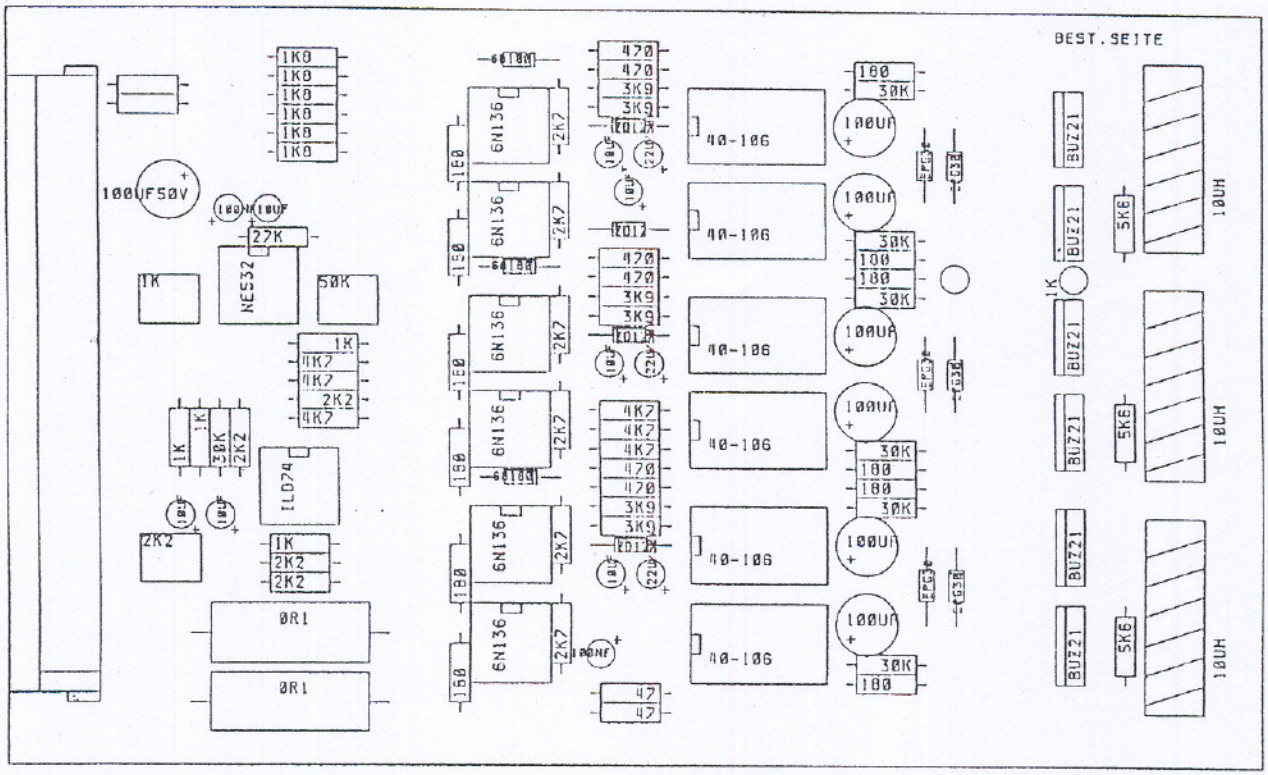

T1
100nF
12MHz
SLE4520
74LS573
BEST-SEITE
10µ
1K
SAB80535
35V
27256
8*10K
4K7
1N4148
100
10
1N4001
100K

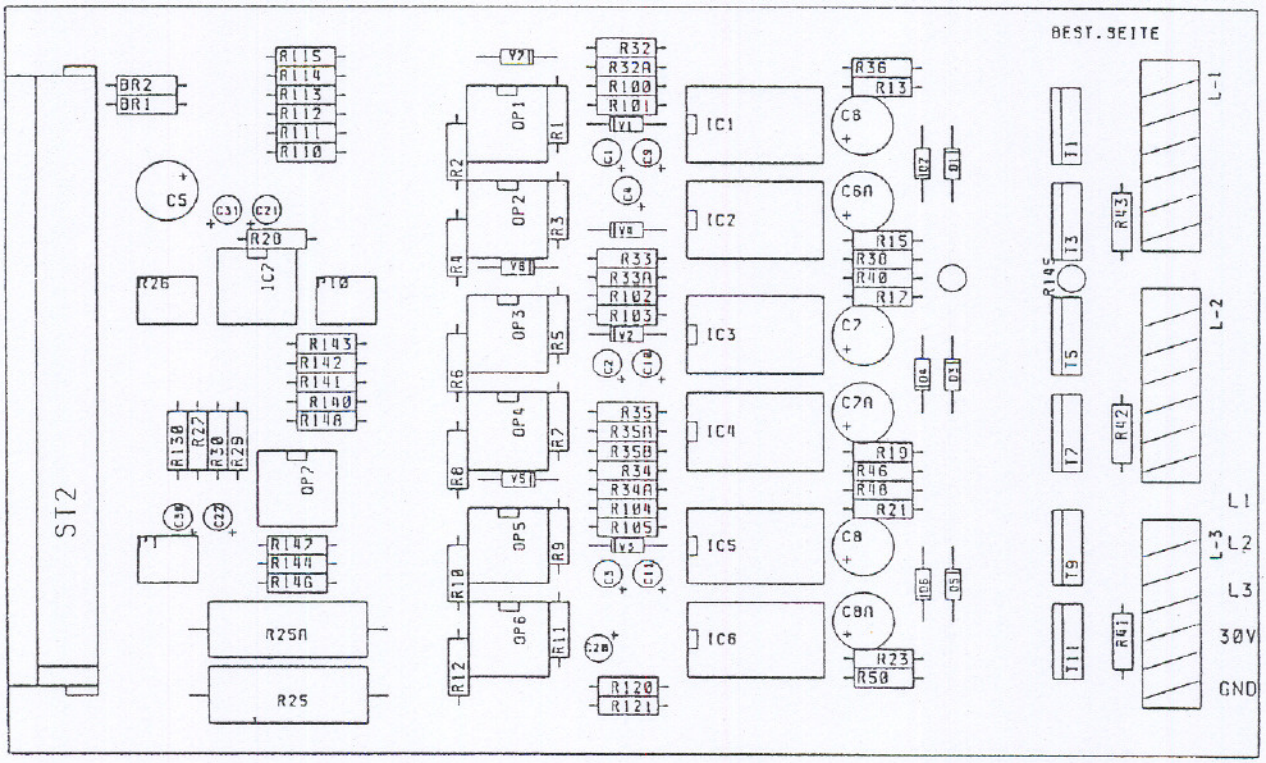

CLOUT
INHIBIT
SYNC
ACE
QUARZ
C5
IC10
IC8
BEST-SEITE
C6
C12
C13
C14
C15
C16
C17
C18
C19
C4
IC9
IC7
C2
IC11
C1
R1
R7
R8
R9
R10
R11
R12
R13
R14
+5V
AN8
AN1
AN5
AN6
GND
R15
R17
R16
C20
C8
C9
C10
C11
D1
R3
R5
R2
R4
C3
RN-1
D2
R6
ST1

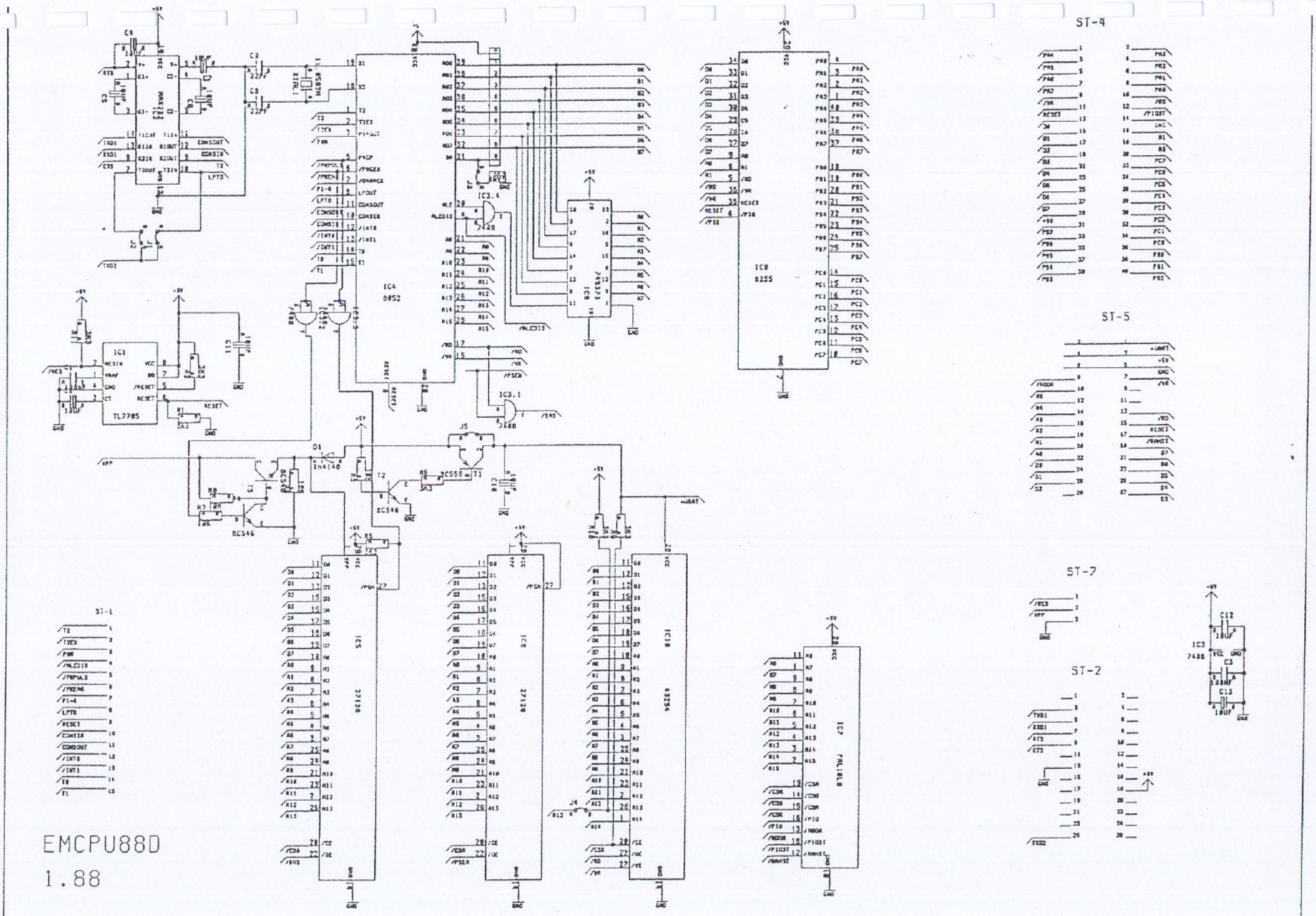

ENDSTUFE
HFEN882D
17.05.88
MIELENTZ/PLOCK
LEHNERTZT
40-106
IC6
40-106
IC5
40-106
IC4
40-106
IC3
40-106
IC2
40-106
IC1
ST2

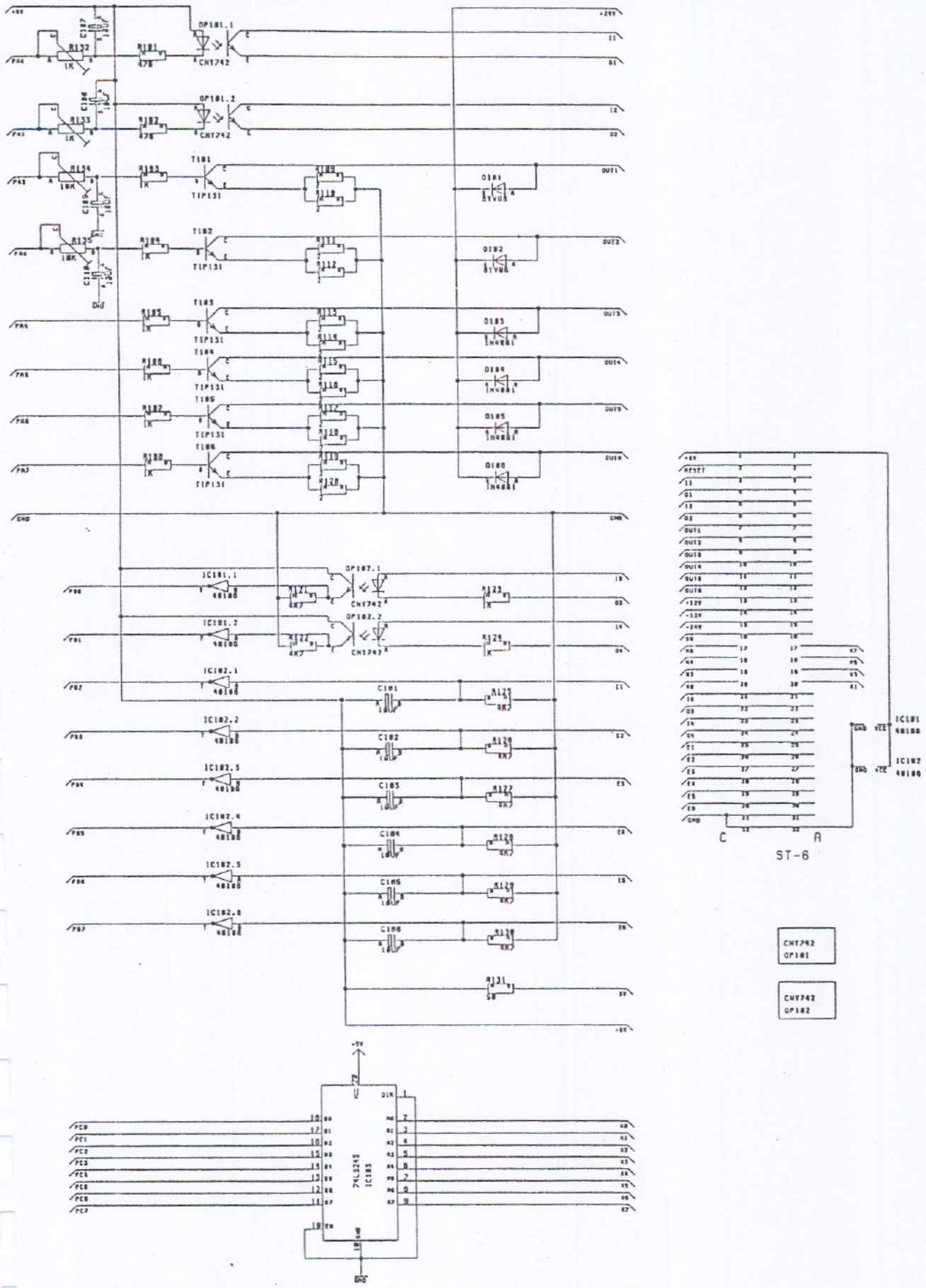

BEST.SEITE



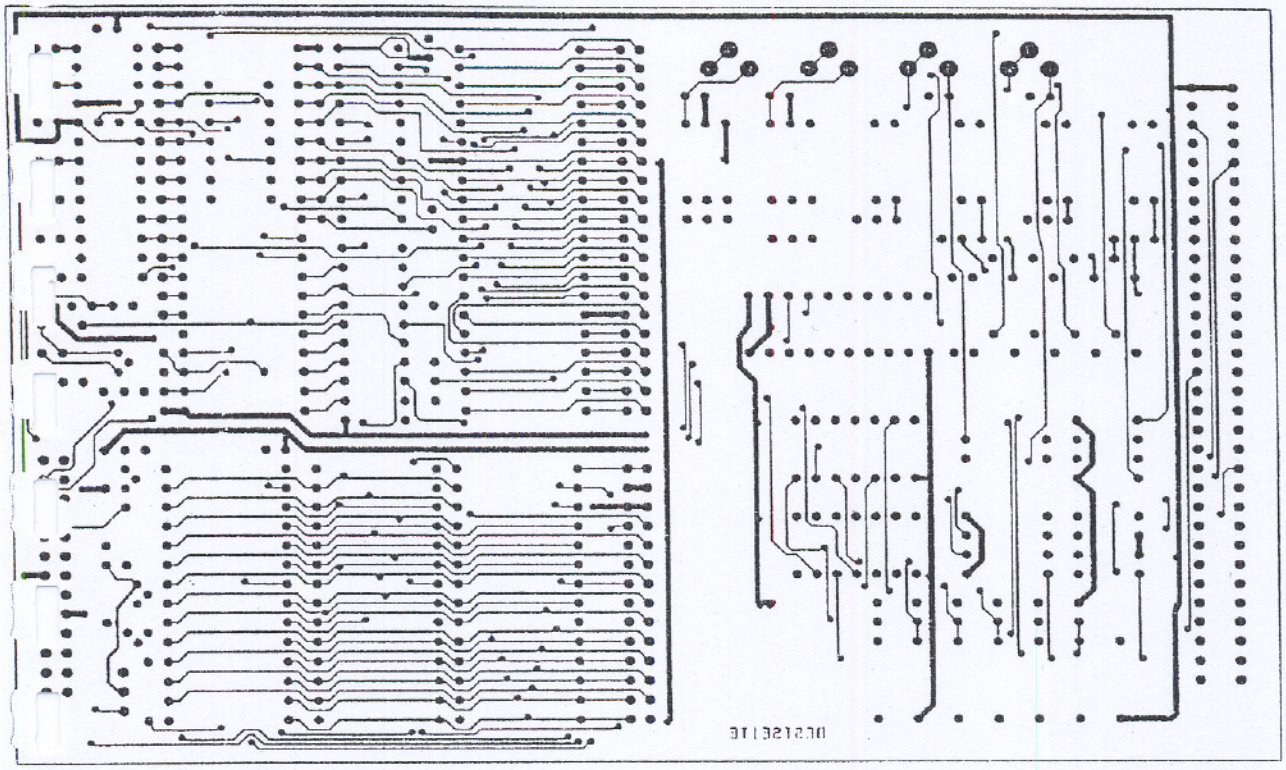

BEST.SEITE
1K0
100UF50V
22K
NE532
50K
1K
4K7
2K2
ILD74
ZK2
0R1
6N136
2K7
470
3K9
40-106
100
30K
100UF
BUZ21
5K6
10UH

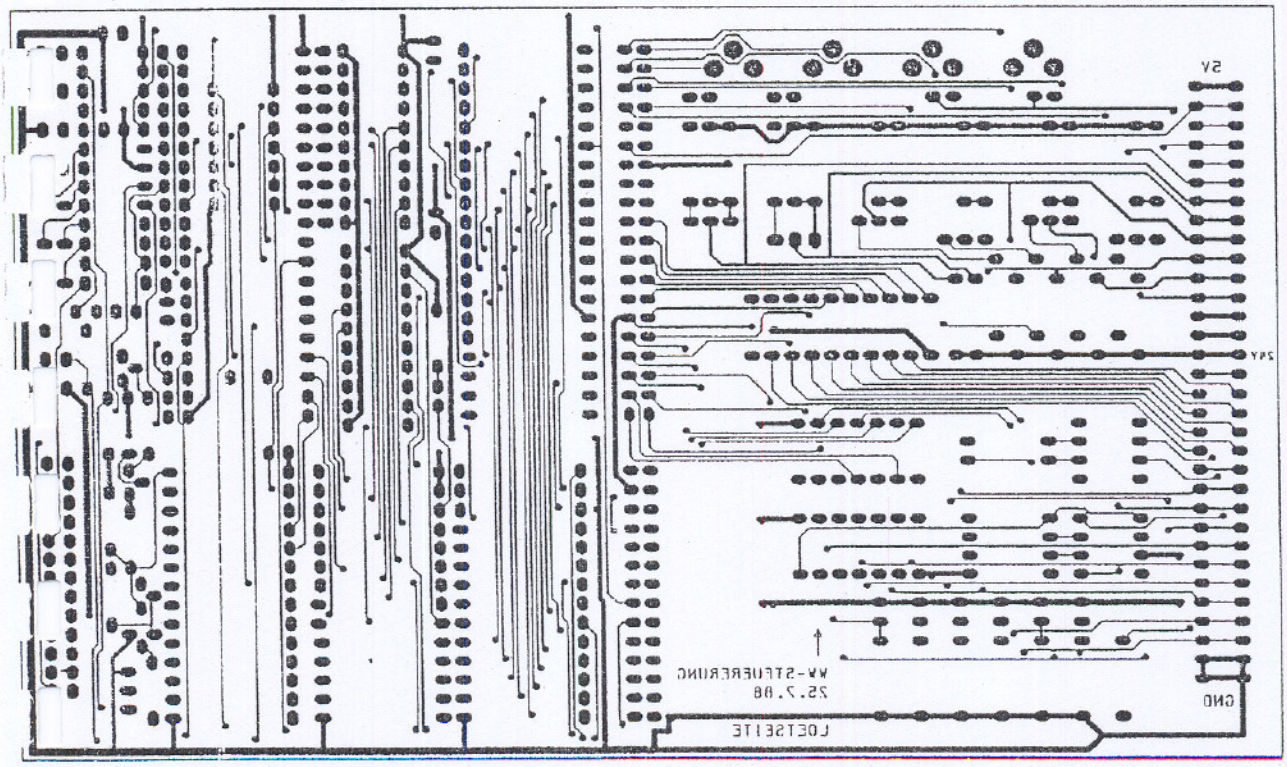

BEST.SEITE
ST2
0R2
0R1
R115
R114
R113
R112
R111
R110
C5
R20
IC7
R26
R10
R143
R142
R141
R140
R148
R130
R22
R30
R29
OP7
R147
R144
R146
R25A
R25
OP1
OP2
OP3
OP4
OP5
OP6
R32
R32A
R100
R101
R33
R33A
R102
R103
R35
R35A
R35B
R34
R34A
R104
R105
R120
R121
IC1
IC2
IC3
IC4
IC5
IC6
R36
R13
C8
C6A
R15
R30
R40
R17
C7
C7A
R19
R46
R48
R21
C8A
R23
R50
T1
T3
T5
T7
T9
T11
R43
R42
R41
R145
L-1
L-2
L-3
L1
L2
L3
30V
GND

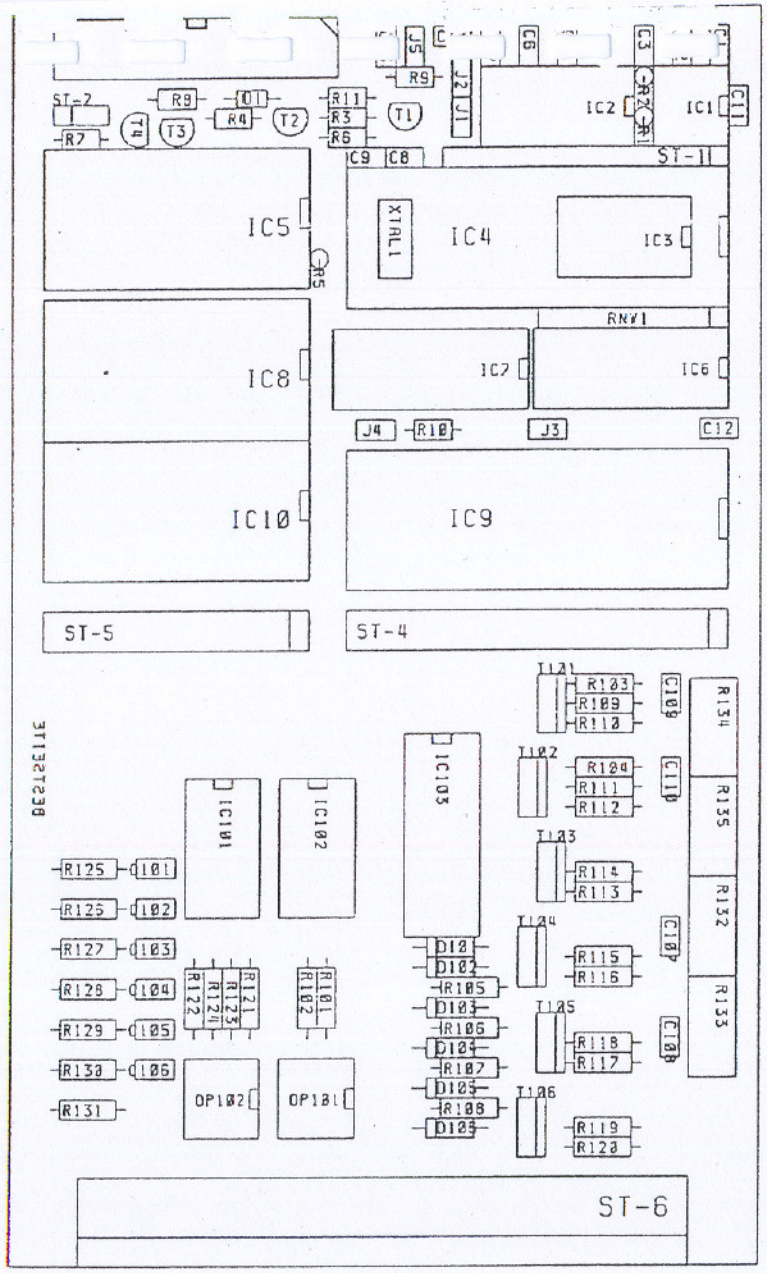

ST-4
ST-5
ST-7
ST-2
ST-1
IC4
8052
IC9
8255
IC1
TL7705
IC5
27128
IC6
27128
IC8
62256
IC7
PAL16L8
IC3.4
IC3.1
IC3
7438
IC12
IC13
J5
J4
T1
T2
BC546
BC556
D1
1N4148
EMCPU88D
1.88

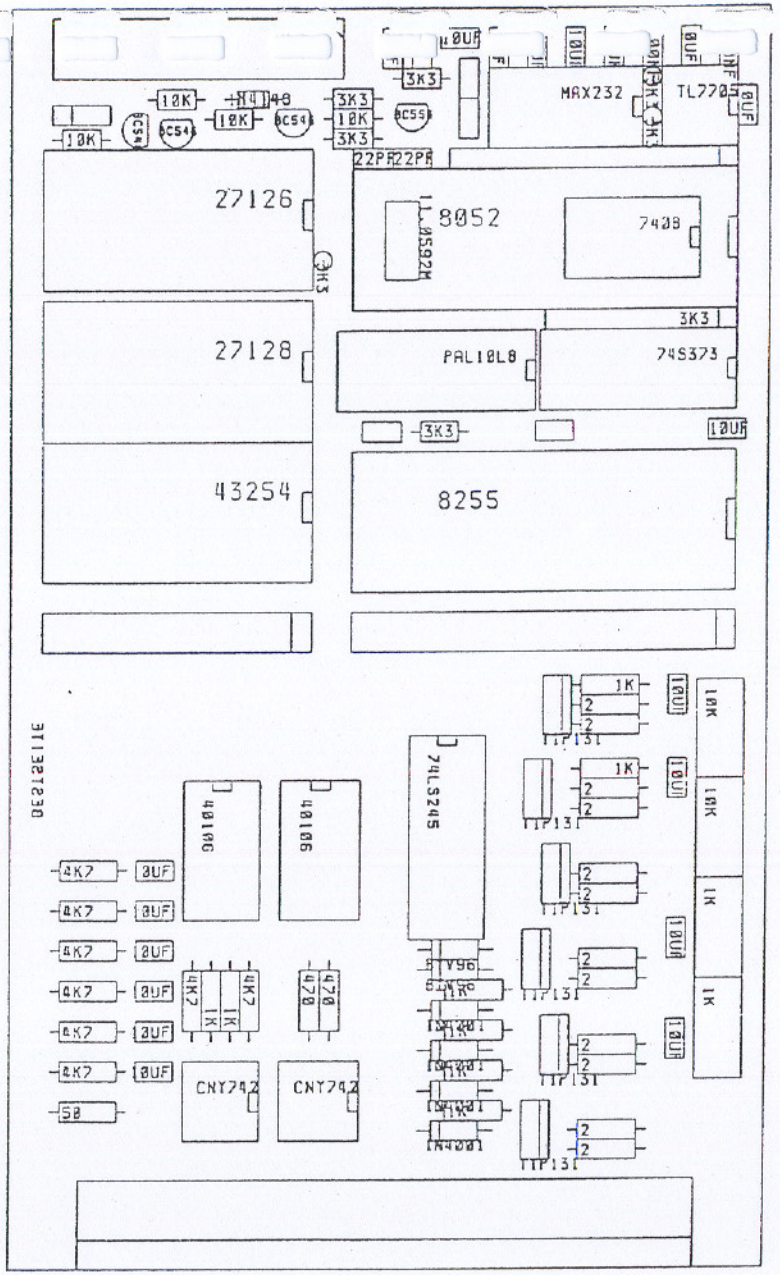


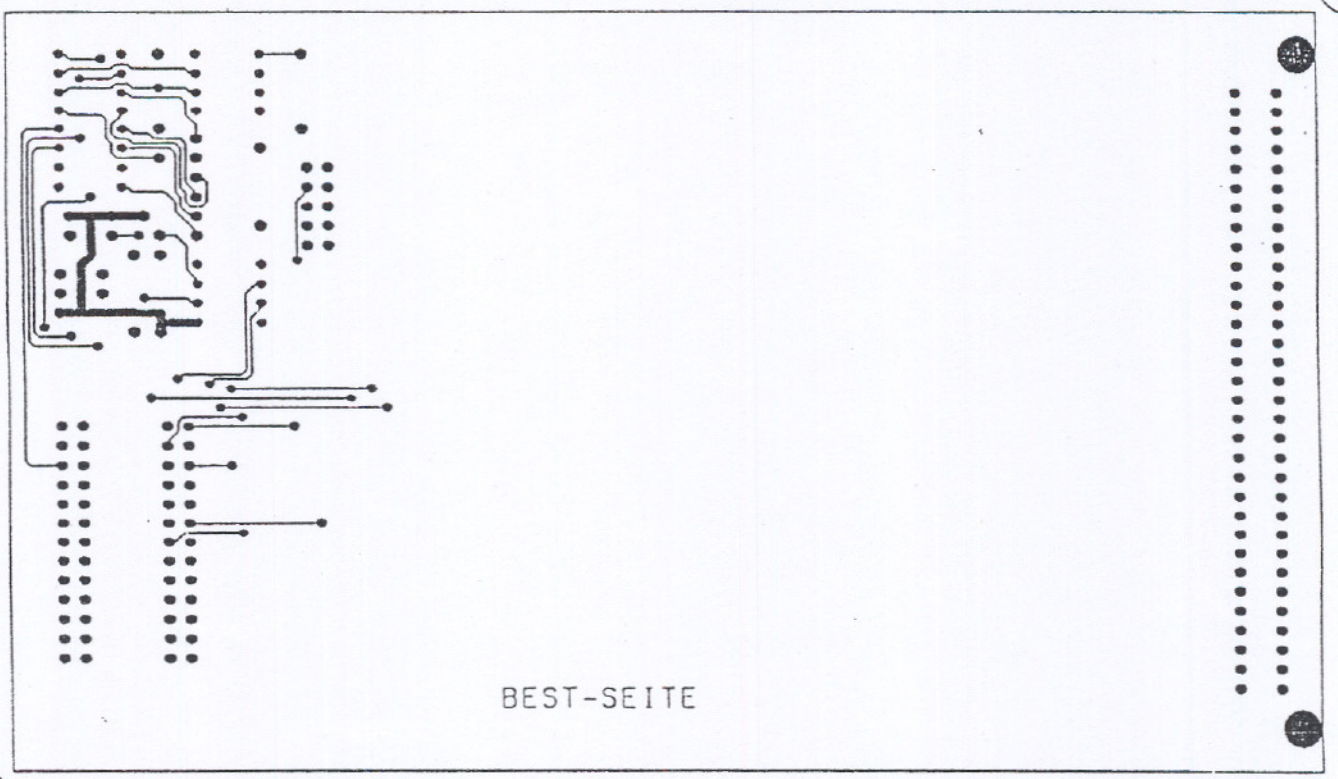
MUF-INTERFACE VERSION 1.1 4.5.88

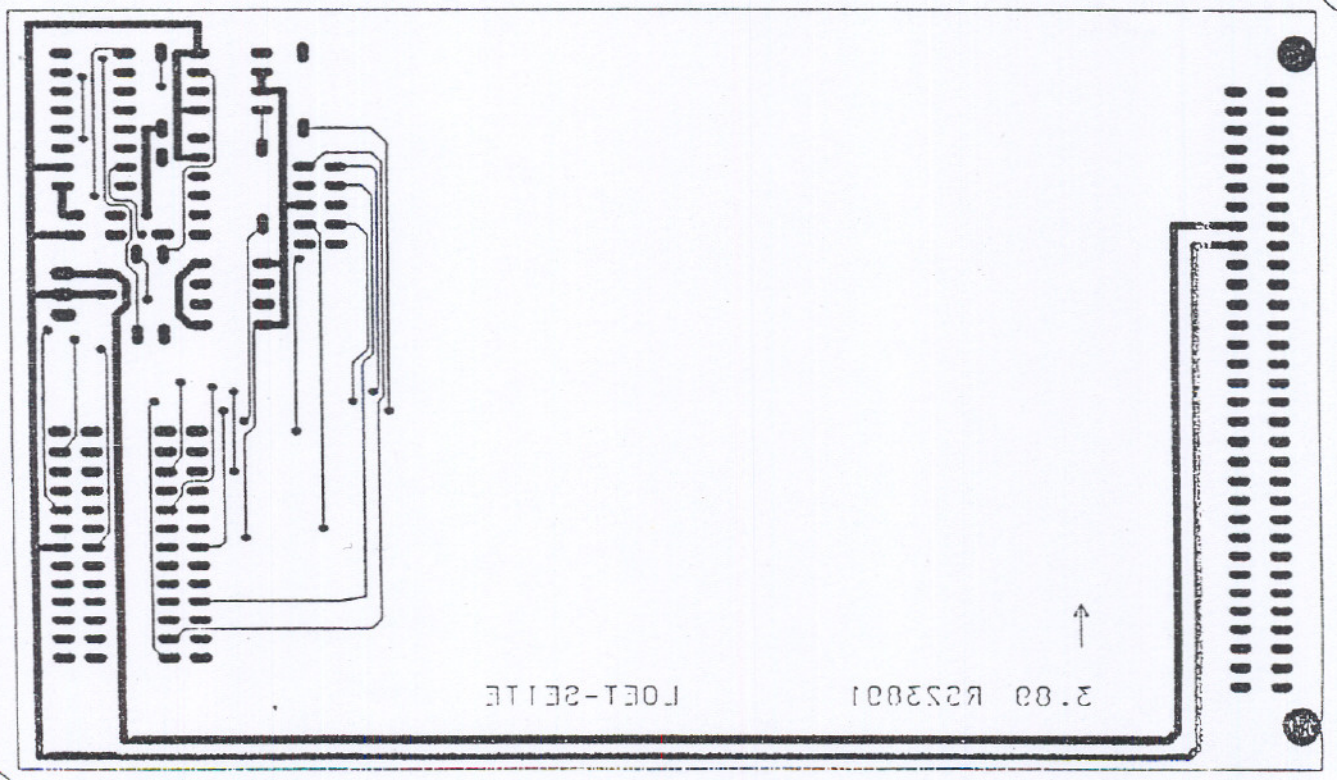

DEISEITE

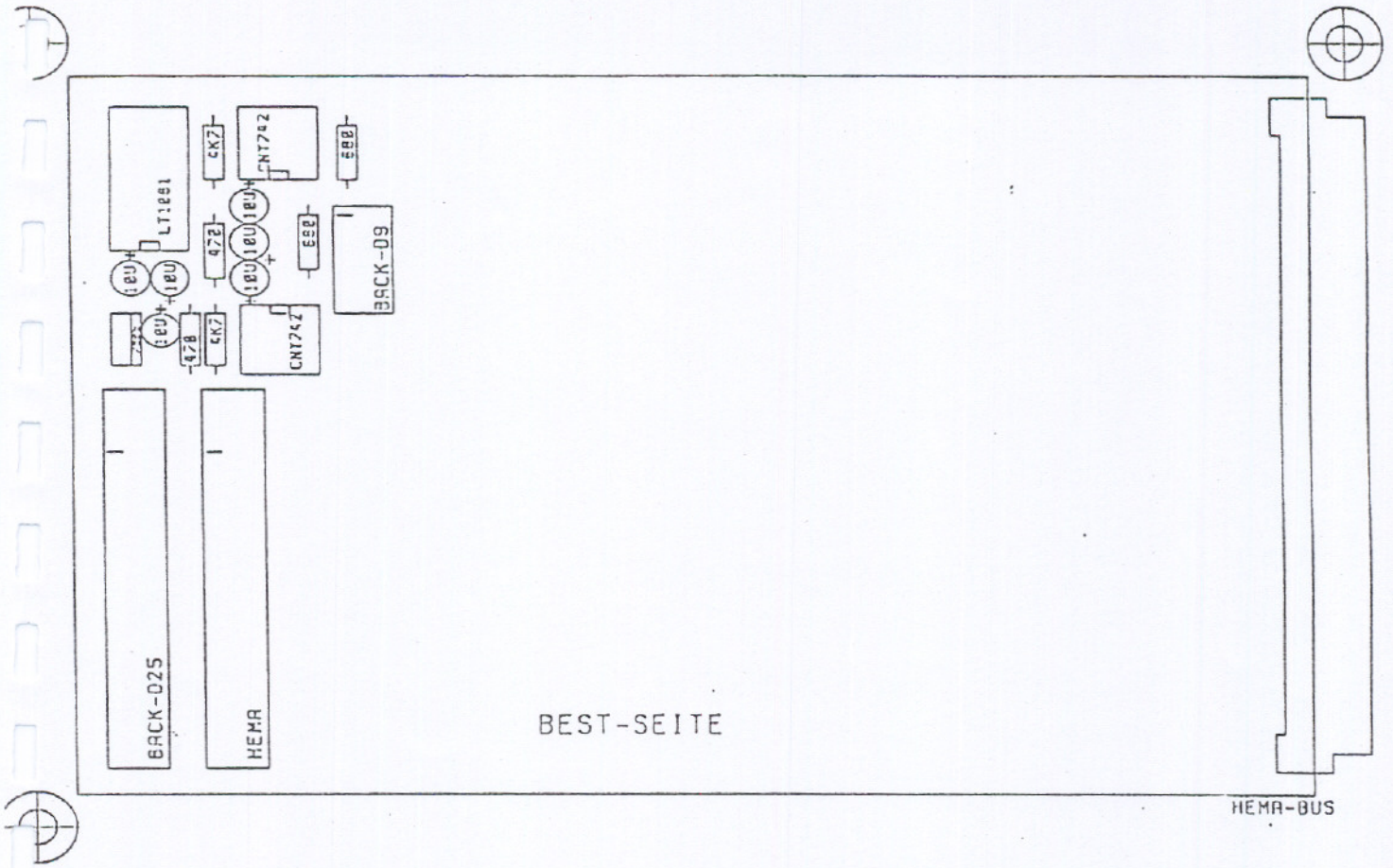

5V
2MV
GND
WW-STEUERRUNG
25.2.88
LOETSEITE

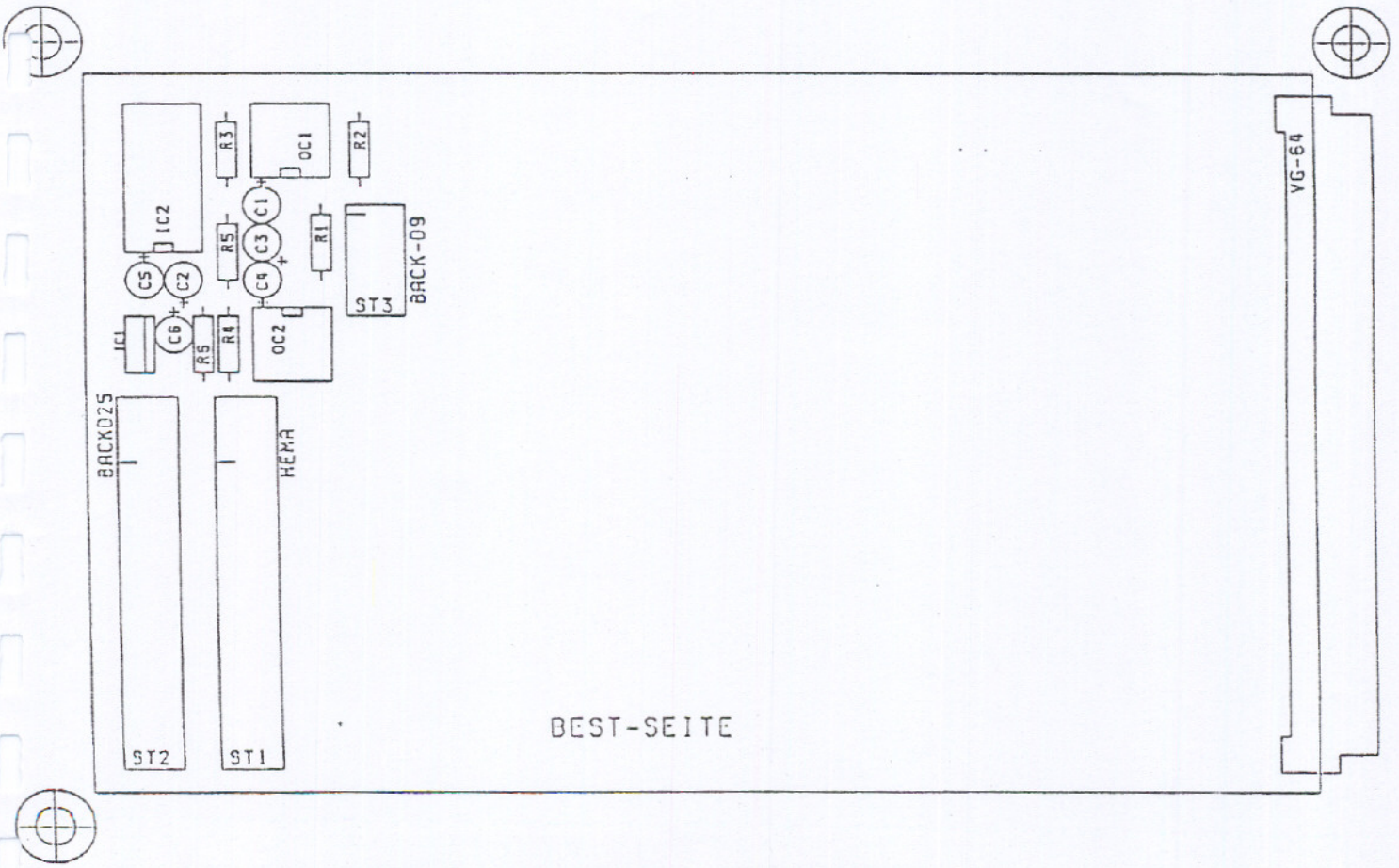

ST-2
R9
Q1
R11
R3
R6
R4
T2
T1
T3
R7
J5
R9
J2
J1
C6
C3
C2
R2
R1
IC2
IC1
C11
C9
C8
ST-1
IC5
R5
XTAL1
IC4
IC3
RNW1
IC8
IC7
IC6
J4
R10
J3
C12
IC10
IC9
ST-5
ST-4
T101
R103
R109
R110
C109
T102
R104
R111
R112
C110
T103
R114
R113
T104
R115
R116
C107
T105
R118
R117
C108
T106
R119
R120
R134
R135
R132
R133
IC103
D101
D102
R105
D103
R106
D104
R107
D105
R108
D106
IC101
IC102
R125
101
R126
102
R127
103
R128
104
R129
105
R130
106
R131
R122
R121
R123
R124
R101
R102
OP102
OP101
ST-6
DE21321E

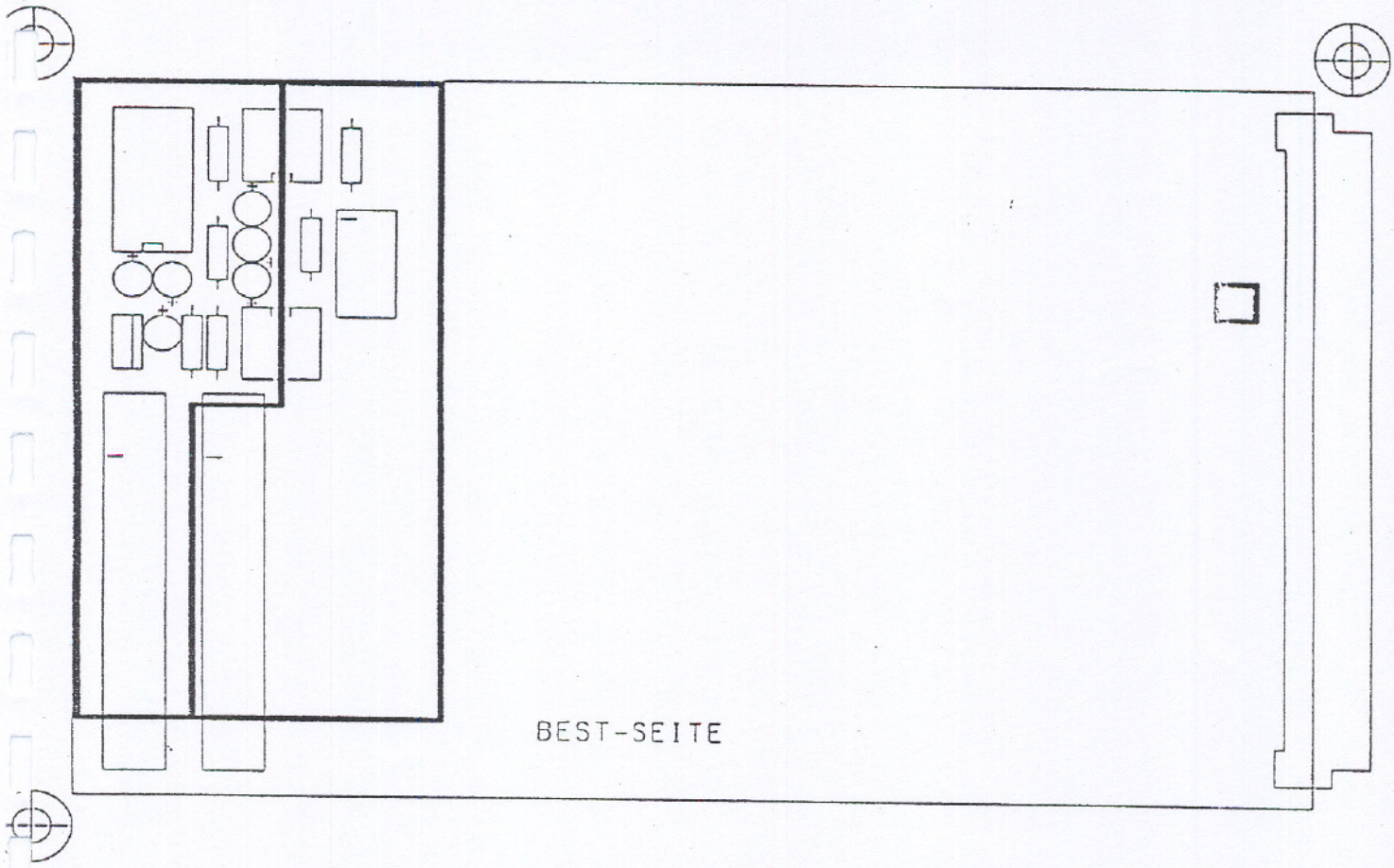

10UF
10UF
8UF
3K3
MAX232
TL7705
8UF
10K
R4
10K
3K3
10K
3K3
BC548
BC548
BC548
BC548
10K
22PF
22PF
27126
8052
7408
11.0592M
3K3
27128
PAL10L8
74S373
3K3
10UF
43254
8255
1K
10UF
10K
10K
1K
1K
74LS245
4010G
4010G
4K7
8UF
4K7
8UF
4K7
8UF
4K7
8UF
4K7
8UF
4K7
8UF
4K7
1K
4K7
1K
470
470
CNY74-2
CNY74-2
5B
DE21321E

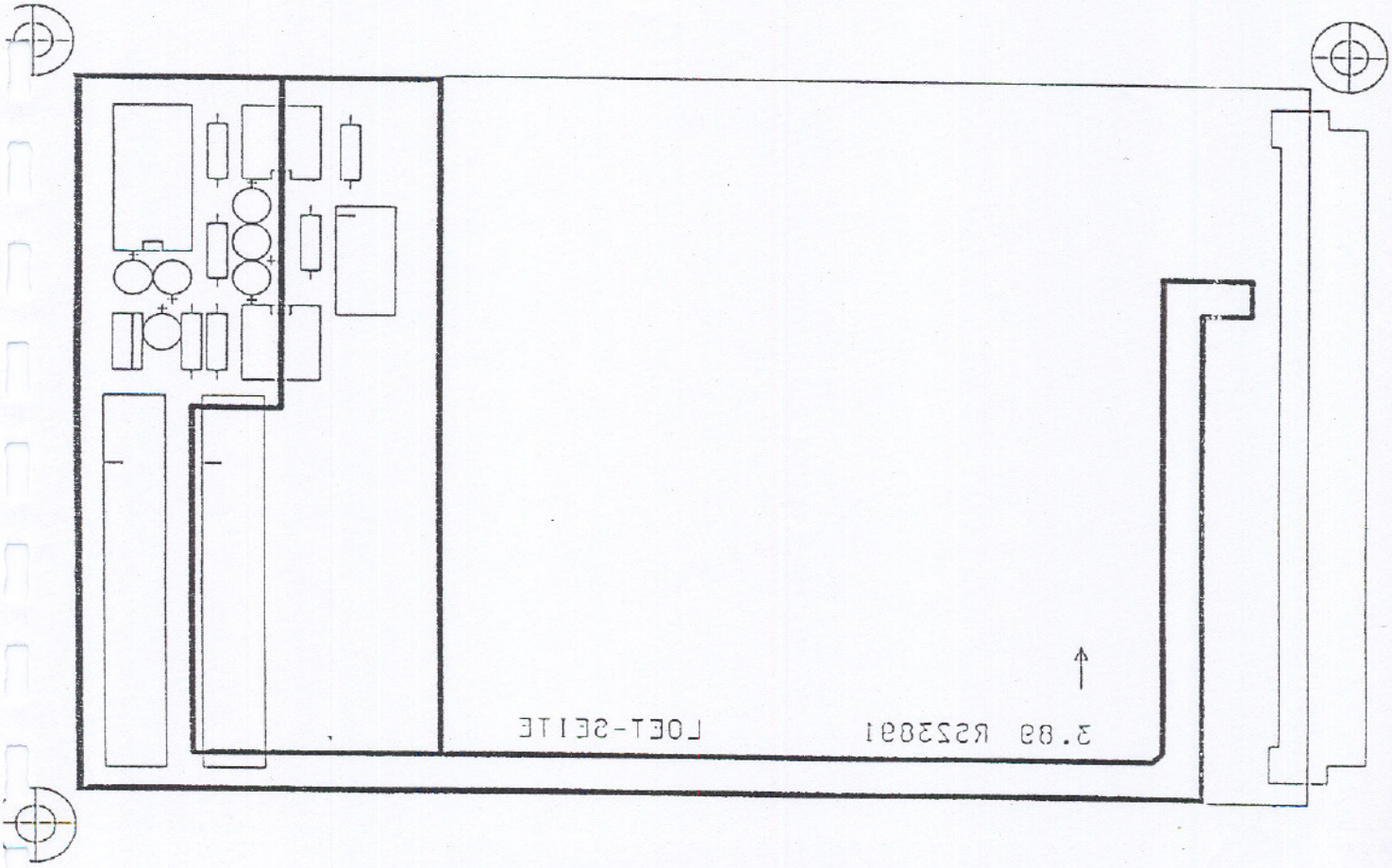

BEST-SEITE

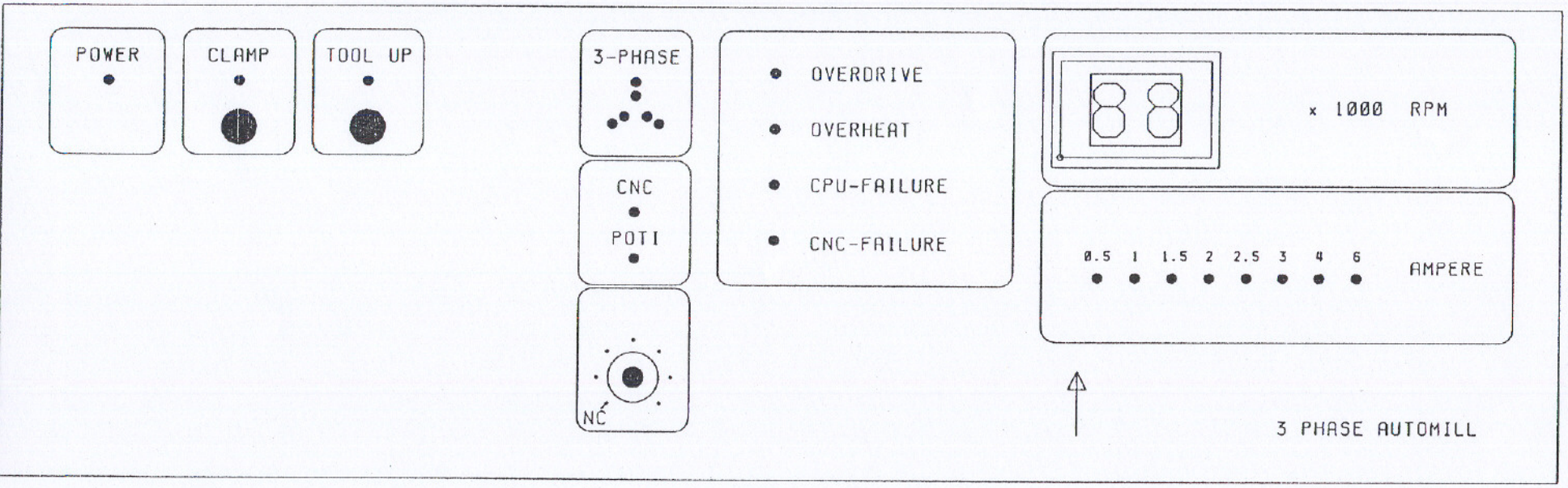

LOET-SEITE
3.89 R52301

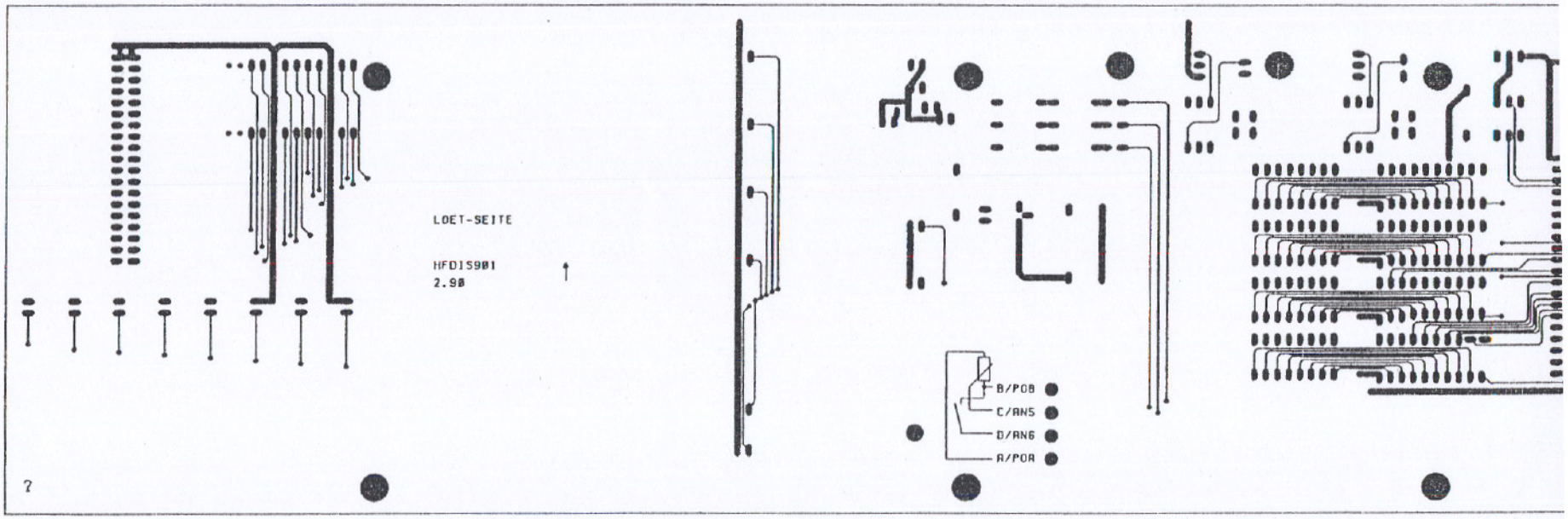

LT1281
4K7
CNT742
100
BACK-09
BACK-D25
HEMA
BEST-SEITE
HEMA-BUS


IC2
R3
OC1
R2
C1
C3
C4
R5
R1
C5
C2
C6
IC1
R6
R4
OC2
ST3
BACK-09
BACKD25
HEMA
ST2
ST1
BEST-SEITE
VG-64


BEST-SEITE


LOET-SEITE
3.89 RS23891


POWER
CLAMP
TOOL UP
3-PHASE
CNC
POTI
NC
OVERDRIVE
OVERHEAT
CPU-FAILURE
CNC-FAILURE
x 1000 RPM
0.5 1 1.5 2 2.5 3 4 6
AMPERE
3 PHASE AUTOMILL


LOET-SEITE
HFDIS901
2.90
B/P08
C/AN5
D/AN6
A/P0A
?