

## Up-date to the service manual Studer A820 MCH

---

---

### UP-DATE Tape Deck Section 6

---

Power Supply .....	1.820.353.82
Mains Soft Start Board .....	1.820.830.84
Stabilizer $\pm$ 15V / + 24V .....	1.820.873.82
MP-Unit Tape Deck Control MCH .....	1.820.781.31
Tape Lifter Control .....	1.820.773.83
Motor Tacho .....	1.820.771.84
Spooling Motor Control .....	1.820.822.81
Power Fail Sense Board .....	1.820.869.81
Capstan Control Unit .....	1.820.764.28
Capstan Motor Drive Amplifier PCB .....	1.820.774.26/1.820.774.27
Tacho Sensor Electronics PCB .....	1.021.695.86

### UP-DATE Master Section 7

---

MP-Unit Master MCH .....	1.820.784.25
Parallel Remote Interface .....	1.820.738.85
Tape Deck Display Driver PCB .....	1.820.768.83
Tape Deck Display Driver PCB .....	1.820.768.85

### UP-DATE Audio Section 8

---

MP-Unit Audio Control .....	1.820.782.26
Communications Controller .....	1.820.718.83
Block Diagram Multichannel Bus Driver .....	1.820.723 / Page 8/27
Block Diagram Bus Converter .....	1.820.717 / Page 8/39
Basis Board Audio .....	1.820.703.81
Line Amplifier with Trafo .....	1.820.814.81
Reproduce Preamplifier 8CH .....	1.820.808.83
Time Code Read Unit .....	1.820.821.81
MP-Unit VU Panel MCH .....	1.820.783.27
Master Keyboard Audio .....	1.820.817.81
Audio Alignment Key Board .....	1.820.707.81

### UP-DATE Accessories Section 9

---

Tape Deck Remote Control Cabinet (Parallel) .....	1.328.250.81
- Tape Deck Remote Control PCB .....	1.328.251.81
Tape Deck Remote Control Module (Parallel) .....	1.328.255.81
- Connector Board .....	1.328.257.81
Varispeed for Remote Control Only .....	1.328.253.00
Varispeed Control Module .....	1.328.290.00
- Varispeed Control PCB .....	1.810.762.83
Remote Timer (RS232) .....	1.328.275.00
- CPU Board .....	1.328.276.21

<b>Remote Timer / Lap Mode Display .....</b>	<b>1.328.270.00</b>
- Stabilizer PCB .....	1.328.213.81
- Timer Driver PCB .....	1.328.272.24
<b>Remote Control Cabinet (Serial) .....</b>	<b>1.328.210.81</b>
<b>Remote Control Module (Serial) .....</b>	<b>1.328.220.81</b>
- Stabilizer PCB .....	1.328.213.81
- Remote Control Driver PCB .....	1.328.211.25
- Remote Control Display PCB .....	1.328.212.81
<b>Autolocator Module .....</b>	<b>1.328.230.82</b>
<b>Autolocator Cabinet .....</b>	<b>1.328.240.82</b>
- Stabilizer Board .....	1.328.213.81
- Pushbutton Board .....	1.328.233.82
<b>Audio Remote Control 8CH .....</b>	<b>1.328.501.00/1.328.536.00 / Page 9/65</b>
<b>Audio Remote Control 24CH .....</b>	<b>1.328.503.00/1.328.537.00 / Page 9/65</b>
- MP-Unit VU Panel .....	1.820.783.27
<b>Parallel Remote Channel Control Interface .....</b>	<b>1.328.500.00</b>
- Basis Board VU-Panel .....	1.820.705.00
- DC Converter 5,6V .....	1.820.706.00
- MP-Unit Audio Remote IF .....	1.820.787.26
- Audio Parallel Remote IF .....	1.328.506.00
- Connector Pre-Wired .....	1.328.507.00
- KB Audio Remote Par. 8CH + M .....	1.328.508.00
- KB Audio Remote Par. 8CH .....	1.328.509.00

## UP-DATE Spare Parts Section 10

---

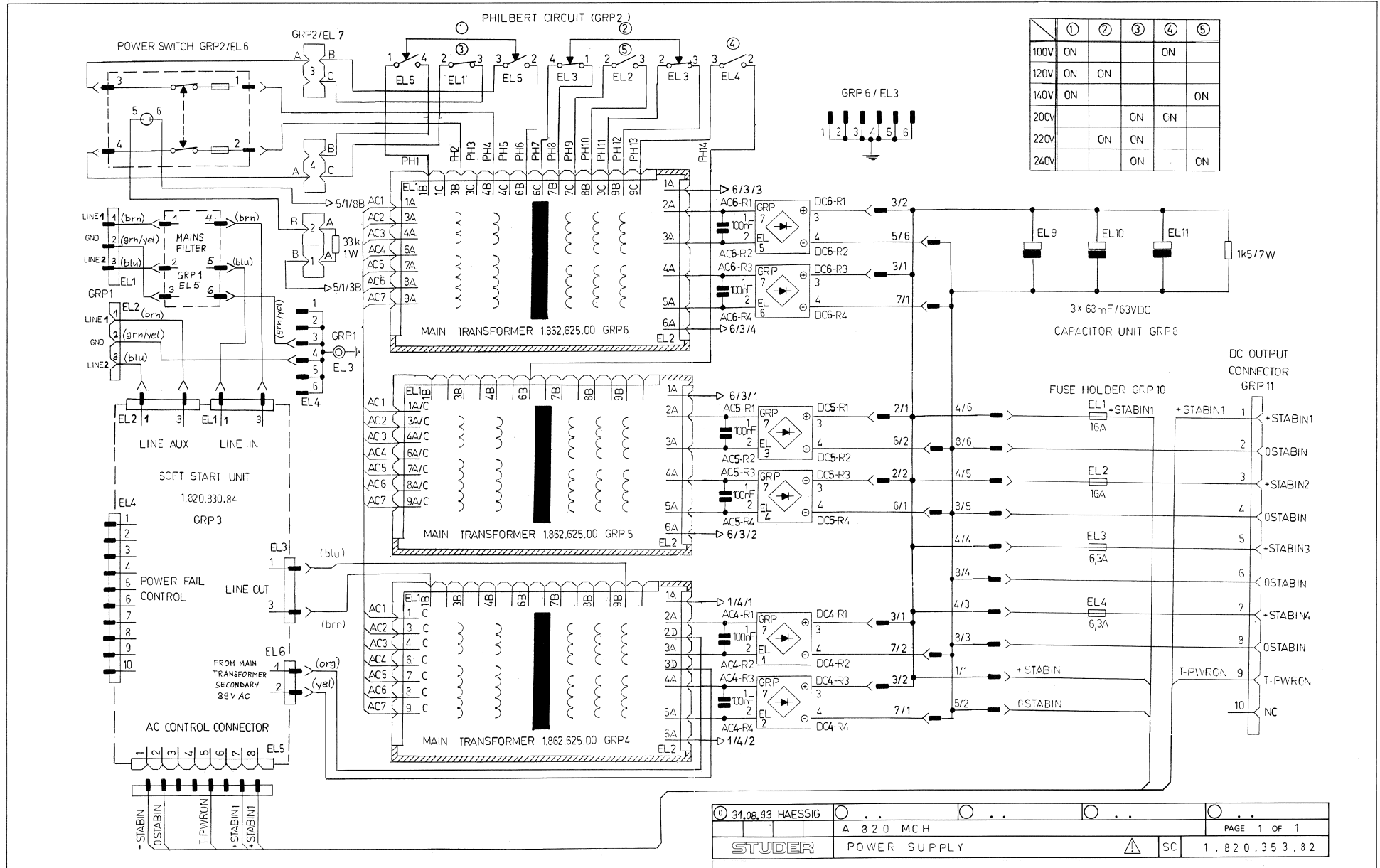
Labels Remote

Prepared and edited by:  
STUDER Professional Audio AG  
Technical Documentation  
Althardstrasse 30  
CH-8105 Regensdorf - Switzerland  
STUDER is a registered trade mark of STUDER Professional Audio AG, Regensdorf

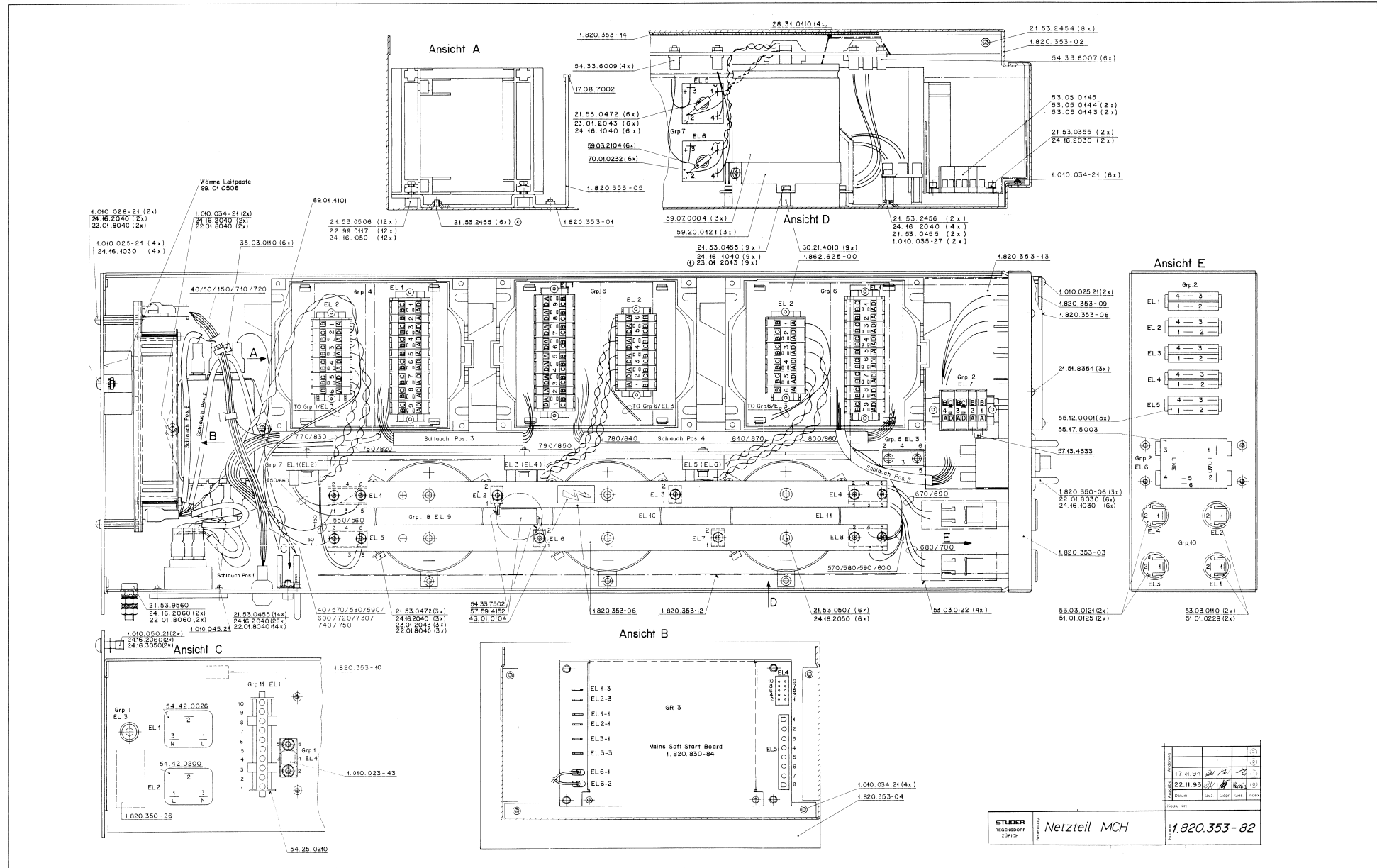
Copyright by STUDER Professional Audio AG  
Printed in Switzerland  
Order no. 10.27.3830 (Ed. 0995)

We reserve the right to make alterations

POWER SUPPLY 1.820.353.82

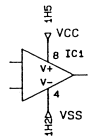
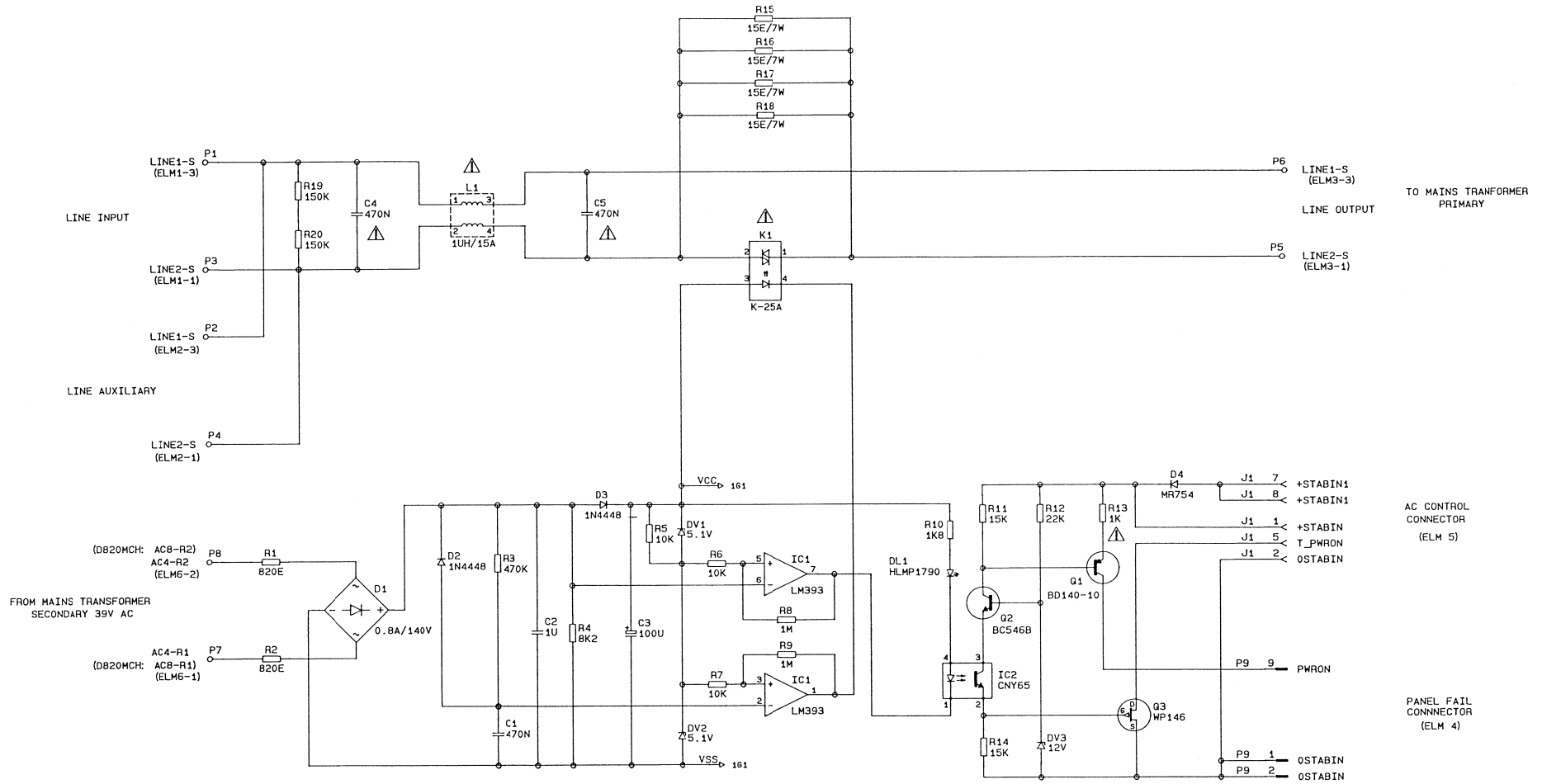


POWER SUPPLY 1.820.353.82



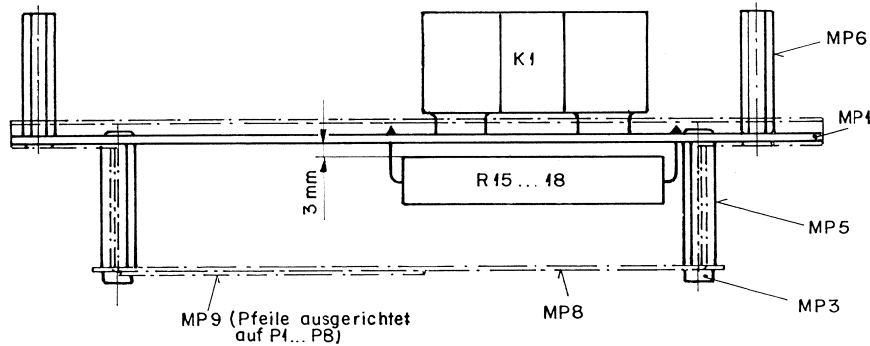
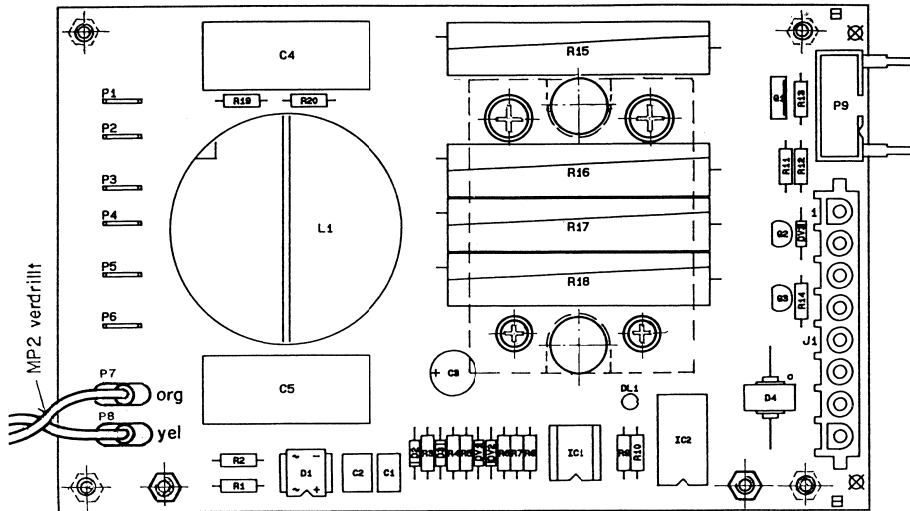


MAINS SOFT START BOARD 1.820.830.84



04.08.93	PG			
A820 MCH, A827 MCH, D820 MCH, ASY7 GRP3			PAGE 1 OF 1	
STUDER		MAINS SOFT START BOARD		SC 1.820.830.84

MAINS SOFT START BOARD 1.820.830.84



**UL approved material only**

Ad	POS.	REF.No.	DESCRIPTION	MANUFACTURER
C....1	59.06.5474	470n	5 %, 50V, PETP	
C....2	59.06.5105	1u	5 %, 50V, PETP	
C....3	59.22.5101	100u	-20 %, 25V, EI	
C....4	59.14.3474	470n	20 %, 300VAC, X2, /I\	
C....5	59.14.3474	470n	20 %, 300VAC, X2, /I\	
D....1	70.01.0216	DF 02 M	0.8 A, 200V, BRIDGE RECTIFIER	GI
D....2	50.04.0125	1N4448	0.15A, 75V, RECTIFIER	ITT,NS,Ph,R-0,Tf
D....3	50.04.0125	1N4448	0.15A, 75V, RECTIFIER	ITT,NS,Ph,R-0,Tf
D....4	50.04.0518	MK754	6 A, 400V, RECTIFIER	Mot
DL....1	50.04.2202	HUMP1790	GRN DIF, LED 3.18MM	HP,GI
DV....1	50.04.1112	5.1V	5 %, 0.5 W, Z,	ITT,Mot,Ph,Tf,SGS/Tho
DV....2	50.04.1112	5.1V	5 %, 0.5 W, Z,	ITT,Mot,Ph,Tf,SGS/Tho
DV....3	50.04.1117	12 V	5 %, 0.5 W, Z,	ITT,Mot,Ph,Tf,SGS/Tho
IC....1	50.05.0283	LM393	DIP08, DUAL COMPARATOR	NS,Ph,TI,SGS/Tho
IC....2	50.04.2148	CN165	DIL04, OPTOCOUPLER	Tf
J....1	54.25.0008	8-P	see note 1	
K....1	56.02.0201	SC842110	25 A, 250 V, Solid State Relay /I\	CELDOC
L....1	62.03.0115	1 mH	15 A, COMMON MODE, /I\	Hartmann,Sie,Tokin
MP....1	1.820.830.14	1 pce	MAIN SOFT START PCB, /I\	St
MP....2	1.820.830.93	1 pce	LL MAIN SOFT START BOARD	St
MP....3	21.39.0117	2 pcs	Z-Schr. NYLON, M3 = 6	
MP....4	43.01.0106	1 pce	ESE-Werkschild	
MP....5	1.010.022.22	2 pcs	Nietmutter, M3 = 25	St
MP....6	1.010.025.22	4 pcs	Nietmutter, M3 = 24	St
MP....7	1.820.830.01	1 pce	Nr-Etikette, 5 * 20	
MP....8	1.820.830.04	1 pce	Isolation, MAIN SOFT START BOARD	St
MP....9	1.820.830.05	1 pce	Bezeichnungsschild, Anschlusse	St
P....1	54.02.0335	1-P	STR., MALE, FLATPIN 6.3*0.8	
P....2	54.02.0335	1-P	STR., MALE, FLATPIN 6.3*0.8	
P....3	54.02.0335	1-P	STR., MALE, FLATPIN 6.3*0.8	
P....4	54.02.0335	1-P	STR., MALE, FLATPIN 6.3*0.8	
P....5	54.02.0335	1-P	STR., MALE, FLATPIN 6.3*0.8	
P....6	54.02.0335	1-P	STR., MALE, FLATPIN 6.3*0.8	
P....7	54.02.0335	1-P	STR., MALE, FLATPIN 6.3*0.8	
P....8	54.02.0335	1-P	STR., MALE, FLATPIN 6.3*0.8	
P....9	54.14.2101	10-P	see note 2	
Q....1	50.03.0452	80140-10	PNP, T0126-1	Ph,Tf,To,SGS/Tho
Q....2	50.03.0491	BCS468	NPN, T092-1	Ph,Sie
Q....3	50.03.0329	WF146	PFET, T092-6	Ph,Sie
R....1	57.11.3821	820 Ohm	1 %, 0.4W, MF	
R....2	57.11.3821	820 Ohm	1 %, 0.4W, MF	
R....3	57.11.3474	470 Kohm	1 %, 0.4W, MF	
R....4	57.11.3822	8.2 Kohm	1 %, 0.4W, MF	
R....5	57.11.3103	10 Kohm	1 %, 0.4W, MF	
R....6	57.11.3103	10 Kohm	1 %, 0.4W, MF	
R....7	57.11.3103	10 Kohm	1 %, 0.4W, MF	
R....8	57.11.3105	1 Mohm	1 %, 0.4W, MF	
R....9	57.11.3105	1 Mohm	1 %, 0.4W, MF	
R....10	57.11.3182	1.8 Kohm	1 %, 0.4W, MF	
R....11	57.11.3153	15 Kohm	1 %, 0.4W, MF	
R....12	57.11.3223	22 Kohm	1 %, 0.4W, MF	
R....13	57.19.0102	1 Kohm	5 %, 0.3W, Fusible Resistor, /I\	
R....14	57.11.3153	15 Kohm	1 %, 0.4W, MF	
R....15	57.59.6150	15 Ohm	10 %, 7 W, Wirewound Resistor with Fuse	
R....16	57.59.6150	15 Ohm	10 %, 7 W, Wirewound Resistor with Fuse	
R....17	57.59.6150	15 Ohm	10 %, 7 W, Wirewound Resistor with Fuse	
R....18	57.59.6150	15 Ohm	10 %, 7 W, Wirewound Resistor with Fuse	
R....19	57.11.3154	150 Kohm	1 %, 0.4W, MF	
R....20	57.11.3154	150 Kohm	1 %, 0.4W, MF	

Note 1 - Connector, 8 contacts:  
case: AMP Nr. 826 851-3

Note 2 - Connector, 10 contacts:  
case: Siemens Nr. V 23535 - A 2700 - A 102  
Thomas + Betts Nr. 501 - 1027 ES

MF = Metal Film, PETP = Polyesterfilm, EI = Electrolytic,

MANUFACTURER: GI=General Instruments, HP=Hewlett Packard, St=Studer, IR=International Rectifier, ITT=Intermetall, Mot=Motorola, NS=National Semiconductors, Ph=Philips, R-0=R-Ohm, SGS=SGS/Ates, Sie=Siemens, Six=Sixilcontix, Tf=Telefunken, Tho=Thomson, Ti=Texas Instruments, To=Toshiba.

1.820.830.84 MAIN SOFT START BOARD /I\ GP 93/08/0400

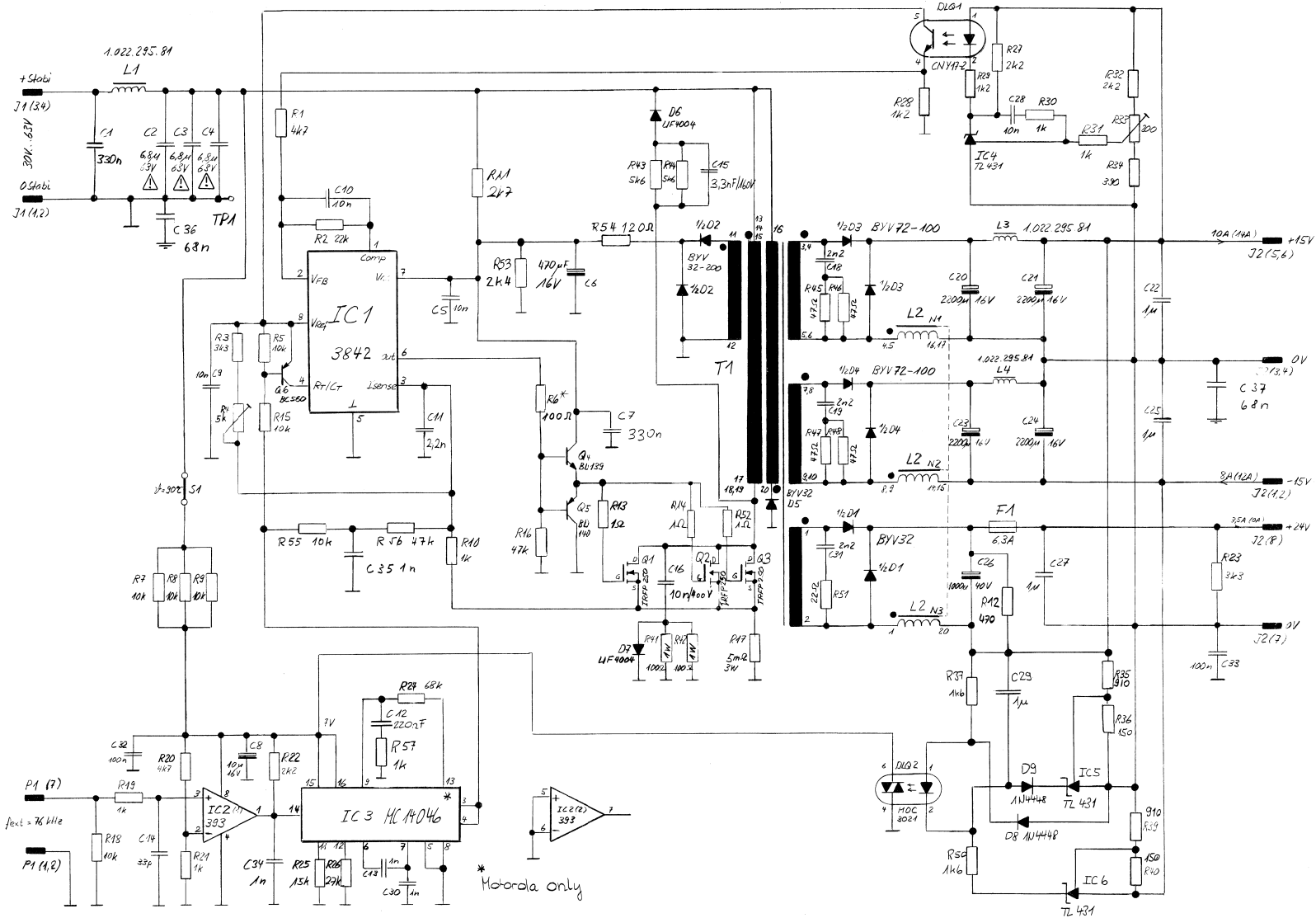
Abbildung									
Datum	8.9.93	lh	fr	gr	cl	mk			
Menge									
Klebe-fur									

STUDER  
REGENSDORF  
ZURICH

Bemerkung  
Mains Soft Start Board  
ESE

Nummer  
1.820.830-84

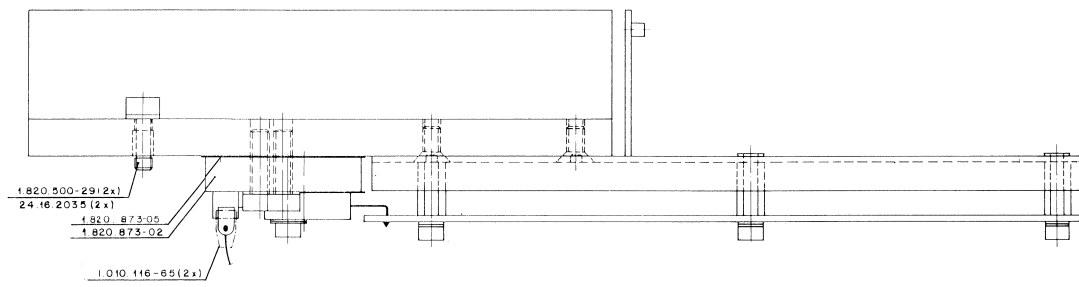
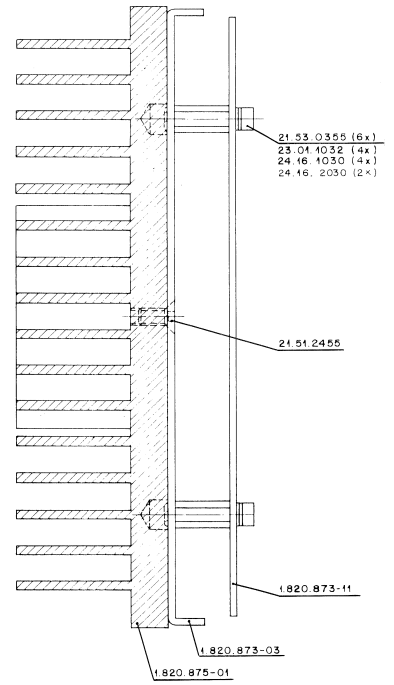
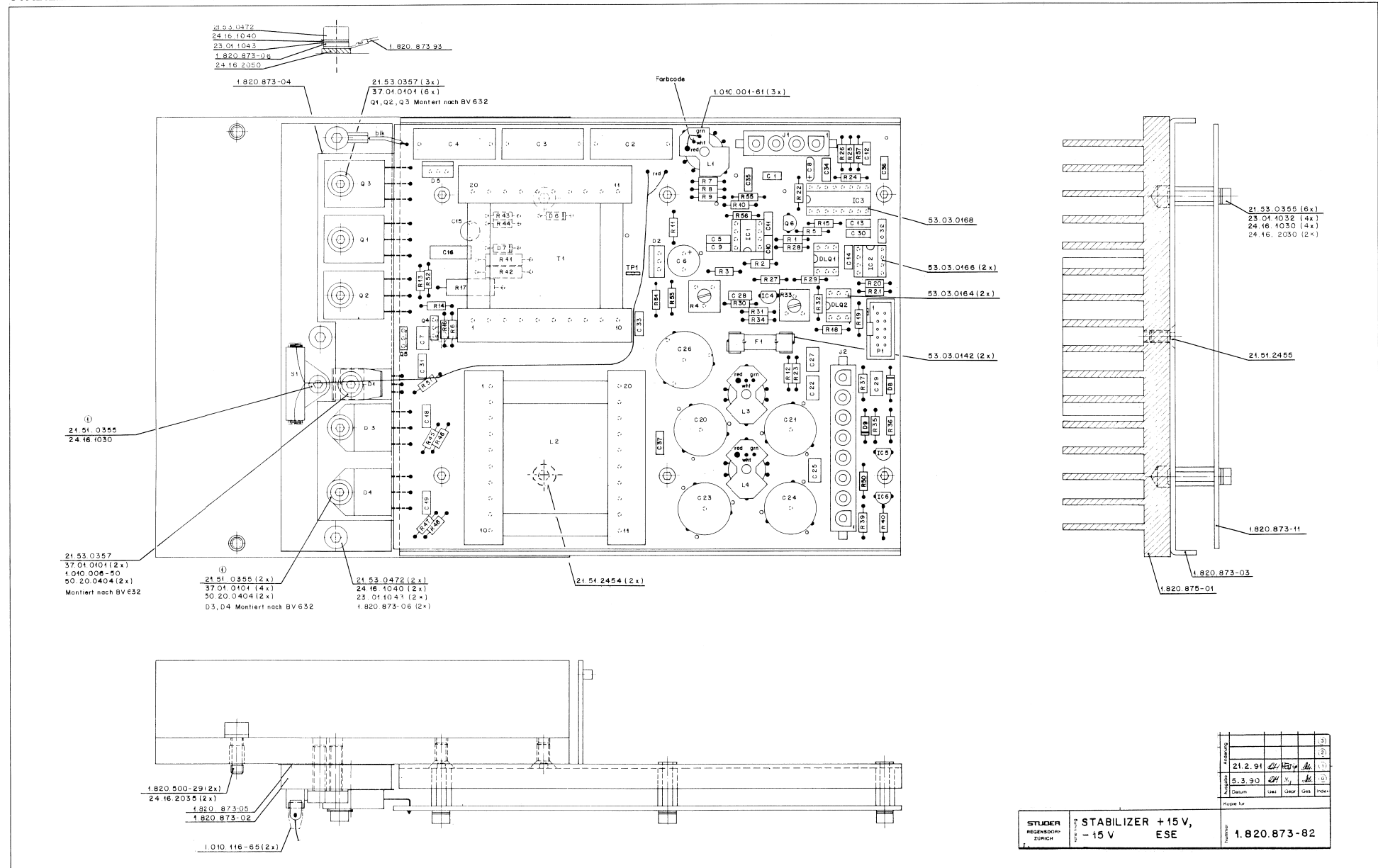
STABILIZER +/-15V / +24V 1.820.873.82



05.3.90	My		
STUDER	Stabilizer +/-15V ; +24V	1.820.873.82	PAGE 1 OF 1



STABILIZER +/-15V / +24V 1.820.873.82



Author								
Checked	21.2.91							(2)
Released	5.3.90							(1)
Drawn								(2)

STUDER REGENERATION ZÜRICH	STABILIZER +15 V, -15 V	ESE	1.820.873-82
	Puzzle für		



STABILIZER +/-15V / +24V 1.820.873.82

Ad	POS	REF.No	DESCRIPTION	MANUFACTURER	Ad	POS	REF.No	DESCRIPTION	MANUFACTURER
C.....1		59.06.0334	330 nF	10%, 63V, PETP	R....21		57.11.3102	1 kOhm	1%
C.....2		59.31.5685	6.8 uF	10%, 63V, MPETP	R....22		57.11.3222	2.2 kOhm	1%
01 C.....2		59.02.0685	6.8 uF	10%, 63V, MPC, /! \	R....23		57.11.3332	3.3 kOhm	1%
C.....3		59.31.5685	6.8 uF	10%, 63V, MPETP	R....24		57.11.3683	68 kOhm	1%
01 C.....3		59.02.0685	6.8 uF	10%, 63V, MPC, /! \	R....25		57.11.3153	15 kOhm	1%
C.....4		59.31.5685	6.8 uF	10%, 63V, MPETP	R....26		57.11.3273	27 kOhm	1%
01 C.....4		59.02.0685	6.8 uF	10%, 63V, MPC, /! \	R....27		57.11.3222	2.2 kOhm	1%
C.....5		59.06.0103	10 nF	10%, 63V, PETP	R....28		57.11.3122	1.2 kOhm	1%
C.....6		59.22.4471	470 uF	20%, 16V, EL	R....29		57.11.3122	1.2 kOhm	1%
C.....7		59.06.0334	330 nF	10%, 63V, PETP	R....30		57.11.3102	1 kOhm	1%
C.....8		59.26.2100	10 uF	20%, 16V, Sal	R....31		57.11.3102	1 kOhm	1%
C.....9		59.06.0103	10 nF	10%, 63V, PETP	R....32		57.11.3222	2.2 kOhm	1%
C.....10		59.06.0103	10 nF	10%, 63V, PETP	R....33		58.01.8201	200 Ohm	see not 3
C.....11		59.06.0222	2.2 nF	10%, 63V, PETP	R....34		57.11.3391	390 Ohm	1%
C.....12		59.06.0224	220 nF	10%, 63V, PETP	R....35		57.11.3911	190 Ohm	1%
C.....13		59.06.0102	1 nF	10%, 63V, PETP	R....36		57.11.3151	910 Ohm	1%
C.....14		59.34.2330	33 pF	5%, N150, CER	R....37		57.11.3162	1.6 kOhm	1%
C.....15		59.05.2332	3.3 nF	2.5%, 160V, PP	R....38		00.00.0000	not used	
C.....16		59.05.6103	10 nF	10%, 400V, MPP	R....39		57.11.3911	190 Ohm	1%
C.....17		00.00.0000	not used		R....40		57.11.3151	910 Ohm	1%
C.....18		59.06.0222	2.2 nF	10%, 63V, PETP	R....41		57.13.4101	100 Ohm	2%
C.....19		59.06.0222	2.2 nF	10%, 63V, PETP	R....42		57.13.4101	100 Ohm	2%
C.....20		59.28.2222	2200 uF	10%, 63V, PETP	R....43		57.11.3562	5.6 kOhm	1%
C.....21		59.28.2222	2200 uF	10%, 16V, PETP	R....44		57.11.3562	5.6 kOhm	1%
C.....22		59.06.0105	1 uF	10%, 50V, PETP	R....45		57.11.3470	47 Ohm	1%
C.....23		59.28.2222	2200 uF	20%, 16V, EL	R....46		57.11.3470	47 Ohm	1%
C.....24		59.28.2222	2200 uF	20%, 16V, EL	R....47		57.11.3470	47 Ohm	1%
C.....25		59.06.0105	1 uF	10%, 50V, PETP	R....48		57.11.3470	47 Ohm	1%
C.....26		59.28.4102	1000 uF	20%, 40V, EL	R....49		00.00.0000	not used	
C.....27		59.06.0105	1 uF	10%, 50V, PETP	R....50		57.11.3162	1.6 kOhm	1%
C.....28		59.06.0103	10 nF	10%, 63V, PETP	R....51		57.11.3220	22 Ohm	1%
C.....29		59.06.0105	1 uF	10%, 50V, PETP	R....52		57.11.3109	1 Ohm	1%
C.....30		59.06.0102	1 nF	10%, 63V, PETP	R....53		57.11.3242	2.4 kOhm	1%
C.....31		59.06.0222	2.2 nF	10%, 63V, PETP	R....54		57.11.3121	120 Ohm	1%
C.....32		59.06.0104	100 nF	10%, 63V, PETP	R....55		57.11.3103	10 kOhm	1%
C.....33		59.06.0104	100 nF	10%, 63V, PETP	R....56		57.11.3473	47 kOhm	1%
C.....34		59.32.4102	1 nF	20%, 50V, Cer	R....57		57.11.3102	1 kOhm	1%
C.....35		59.06.0102	1 nF	10%, 63V, PETP	S.....1		55.19.0005	Thermo switch, Tokin nr. OHD 3 - 90 BU	
C.....36		59.99.0246	68 nF	-20%, 63V, Cer	T.....1		1.022.299.00	Switching Power Trasformator 2 * 15 V St	
C.....37		59.99.0246	68 nF	-20%, 63V, Cer	TP....1		54.02.0320	Test Point	
D.....1		50.04.0517	BYV 32-200	Ph, Mot					
D.....2		50.04.0517	BYV 32-200	Ph, Mot					
D.....3		50.04.0522	BYW99P-100	Tho, Ph, Mot					
D.....4		50.04.0522	BYV72-100	Tho, Ph, Mot					
D.....5		50.04.0517	BYV 32-200	Ph, Mot					
D.....6		50.04.0138	UF 4004	BYN 01-400					
D.....7		50.04.0138	UF 4004	BYN 01-400					
D.....8		50.04.0125	1 N 4448	Fc,ITT,Ph,SES,Tf					
D.....9		50.04.0125	1 N 4448	Fc,ITT,Ph,SES,Tf					
DLQ...1		50.04.3200	CNV17-2	Sie					
DLQ...2		50.04.2139	MOC 3021	Mot					
F.....1		51.01.0125	Fuse 6.3A						
IC....1		50.10.0114	IP 3842N	Un,SGS					
IC....2		50.05.0283	LM 393						
IC....3		50.07.1046	MC 14046BE	Mot Only					
IC....4		50.10.0106	TL 431 CL P	Mot,TI					
IC....5		50.10.0106	TL 431 CL P	Mot,TI					
IC....6		50.10.0106	TL 431 CL P	Mot,TI					
J.....1		54.25.0004	4 cont.	AMP nr. 826848-3 or 826848-1					
J.....2		54.25.0008	8 cont.	AMP nr. 826851-3					
L.....1		1.022.295.81	Filter coil	St					
L.....2		1.022.606.00	CHOKE +15V/-15V	St					
L.....3		1.022.295.81	Filter coil	St					
L.....4		1.022.295.81	Filter coil	St					
L.....5		00.00.0000	not used						
P.....1		54.14.2001	10 cont.	see note 1					
Q.....1		50.03.1612	IRF P250	IR					
Q.....2		50.03.1612	IRF P250	IR					
Q.....3		50.03.1612	IRF P250	IR					
Q.....4		50.03.0451	BD 139	any					
Q.....5		50.03.0452	BD 140	any					
Q.....6		50.03.0496	BC 560	any					
R....1		57.11.3472	4.7 kOhm	1%					
R....2		57.11.3223	22 kOhm	1%					
R....3		57.11.3332	3.3 kOhm	1%					
R....4		58.01.8502	5 kOhm	see note 2					
R....5		57.11.3103	10 kOhm	1%					
R....6		57.11.3101	100 Ohm	1%					
R....7		57.11.3103	10 kOhm	1%					
R....8		57.11.3103	10 kOhm	1%					
R....9		57.11.3103	10 kOhm	1%					
R....10		57.11.3102	1 kOhm	1%					
R....11		57.11.3272	2.7 kOhm	1%					
R....12		57.11.3471	470 Ohm	1%					
R....13		57.11.3109	1 Ohm	1%					
R....14		57.11.3109	1 Ohm	1%					
R....15		57.11.3103	10 kOhm	1%					
R....16		57.11.3473	47 kOhm	1%					
R....17		57.56.2005	5 mOhm	5%, 3 W, Low Inductance					
R....18		57.11.3103	10 kOhm	1%					
R....19		57.11.3102	1 kOhm	1%					
R....20		57.11.3472	4.7 kOhm	1%					

(01) 03.10.91 IMPROVED HIGH FREQUENCY BEHAVIOUR.  
Increasing of safety relative to risk of fire. /! \

Note 1 - Connector, 10 contacts: Yamaichi nr. FAP-10-08-40 SS  
Burdny nr. BPH 9 B 10 B 00 GS  
3M nr. 7610-6002 VZ

Note 2 - Potentiometer, 5 kOhm: Bourns nr. 3386 F-1-502  
A. Bradley nr. E 2 B 502  
Spectrol nr. 63 M 502 T 010  
Murata nr. POT 3104 F-1-502

NOTE 3 - Potentiometer, 200 Ohm: Bourns nr. 3386 F-1-201  
A. Bradley nr. E 2 B 201  
Spectrol nr. 63 M 201 T 010  
Murata nr. POT 3104 F-1-201

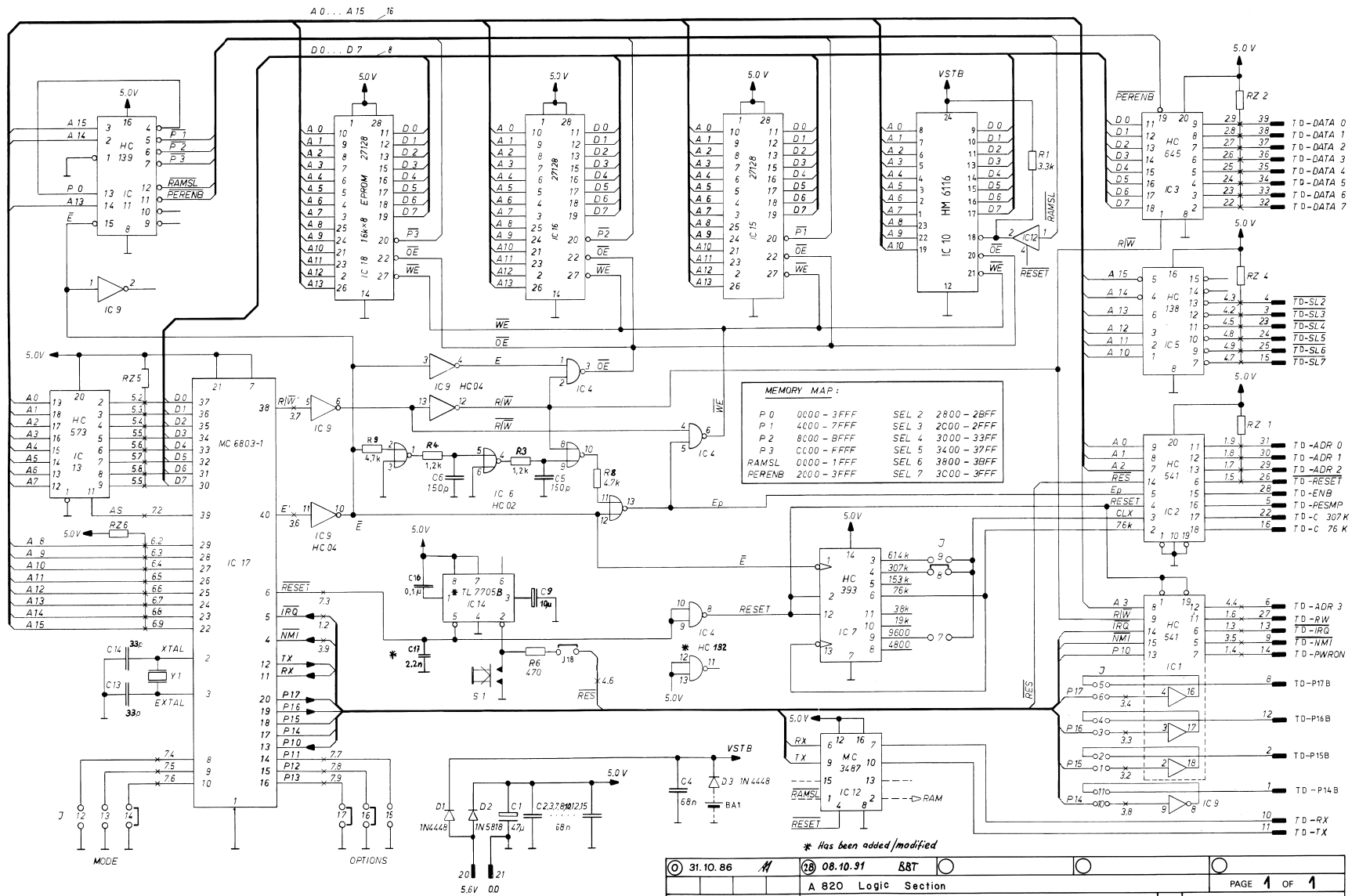
EL=Electrolytic, MPETP=Metallized Polyesterfilm, PETP=Polyesterfilm,  
MPP=Metallized Polypropylene, PP=Polypropylene, Sal=Solid aluminium,  
Cer=Ceramic, MPC=Metallized Polycarbonate film.

MANUFACTURER: Fc=Fairchild, ITT=Intermetall, IR=International Rectifier,  
Mot=Motorola, NS=National Semiconductors, Ph=Philips,  
RCA=RCA Corp. of America, Ses=Sescosem, SGS=SGS/Ates,  
Sie=Siemens, Six=Siliconix, St=Studer, Tf=Telefunken,  
Tho=Thomson CSF, TI=Texas Instruments, To=Toshiba,  
GI=General Instruments, Un=Unitrode.

1.820.873.82 STABILIZER +15V, -15V, AST90/03/0500  
1.820.873.82 STABILIZER +15V, -15V, AST91/10/0301

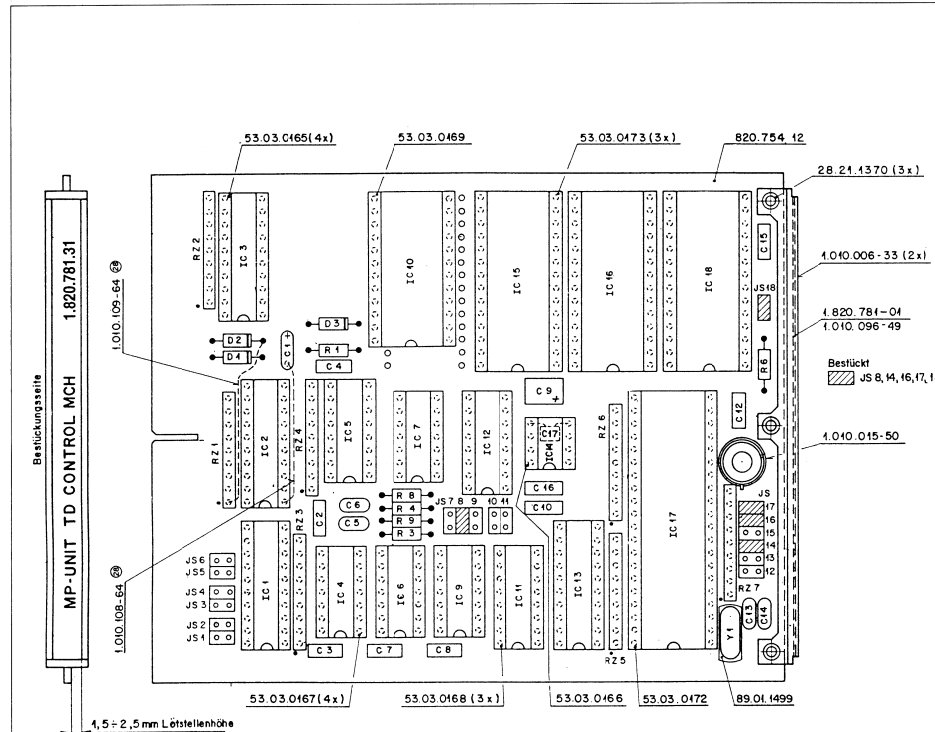
END

MP UNIT TAPE DECK CONTROL MCH 1.820.781.31





MP UNIT TAPE DECK CONTROL MCH 1.820.781.31



Schilder 43.01.0108  
und 1.01.001.xx  
aufgeklebt nach  
Fabrikationsmuster

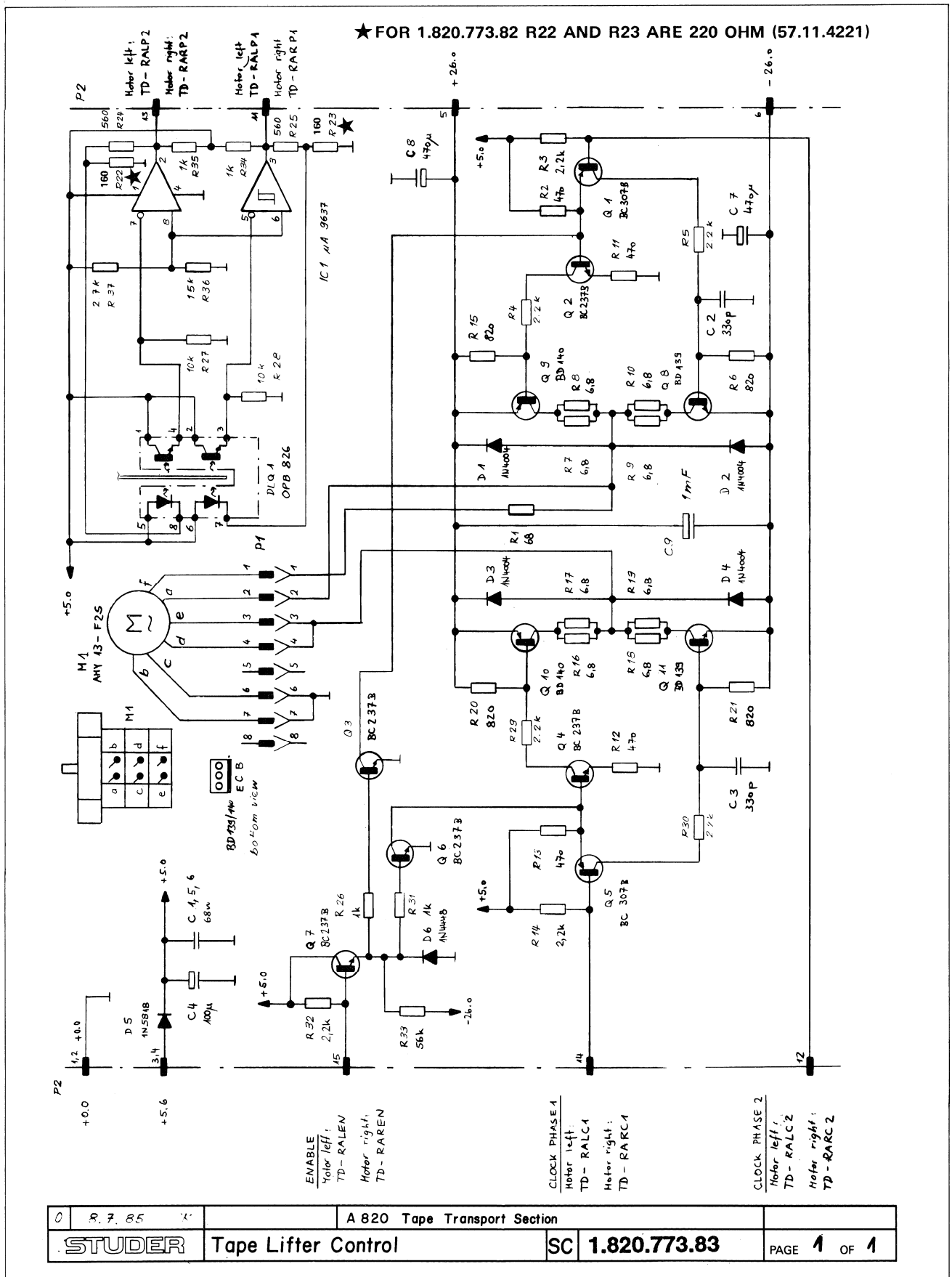
C17  
1.010.008-64 auf Lötseite  
1.010.109-64

Bestell-Nr.	Bestell-Nr.	Bestell-Nr.	Bestell-Nr.	Bestell-Nr.	Bestell-Nr.
3.12.92	28.2.92	8.10.91	3.4.91	8.1.91	6.12.89
18.9.89	45.3.89	31.8.88	13.6.88	10.6.88	

STUDER REGESBORN ZÜRICH	Bestimmung MP-UNIT TD CONTROL MCH	ESE	1.820.781.31
-------------------------------	---	-----	--------------

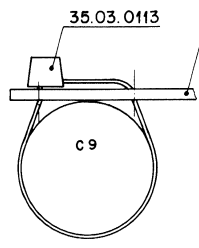
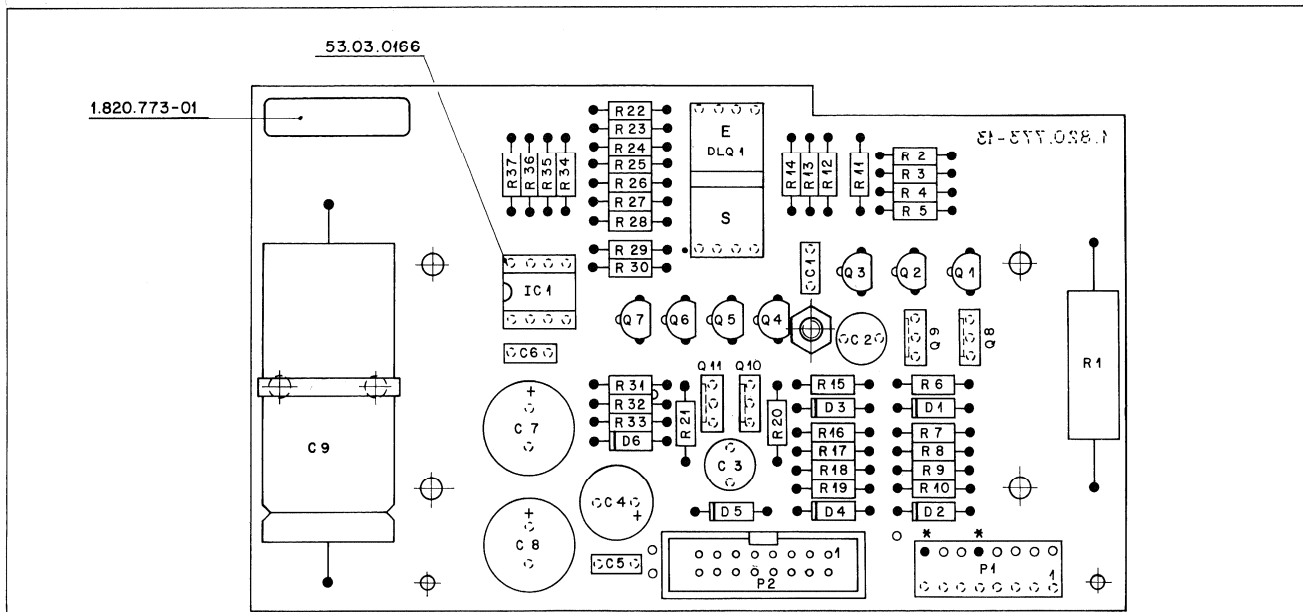
Ad.	POS.	REF.No.	DESCRIPTION	MANUFACTURER	Ad.	POS.	REF.No.	DESCRIPTION	MANUFACTURER
C.....1	59.26.0470	47 uF	20%, 6.3V, Sa1	Ph	Y.....1	89.01.0560		4.9152 Mhz, +100 ppm	
C.....2	59.06.0683	68 nF	10%, 63V, PETP		(20)	88/02/12		Software 06/88	
C.....3	59.06.0683	68 nF	10%, 63V, PETP		(21)	88/06/10		Software 22/88	
C.....4	59.06.0683	68 nF	10%, 63V, PETP		(22)	88/08/31		Software 35/88	
C.....5	59.34.7151	150 pF	2%, Ce		(23)	89/03/15		Software 20/89	
C.....6	59.34.7151	150 pF	2%, Ce		(24)	89/09/18		Software 37/89	
C.....7	59.06.0683	68 nF	10%, 63V, PETP		(25)	89/12/06		Software 48/89	
C.....8	59.06.0683	68 nF	10%, 63V, PETP		(26)	91/01/08		Software 02/91	
C.....9	59.26.2100	10 uF	20%, 16V, Sa1		(27)	91/04/03		Software 16/91	
C.....10	59.06.0683	68 nF	10%, 63V, PETP		(28)	91/10/08		Same software as 16/91 suffix (27), improved reset performance.	
C.....11	00.00.0000	not used			(29)	92/02/28		Software 10/92	
C.....12	59.06.0683	68 nF	10%, 63V, PETP		(30)	92/12/03		Software 50/92	
C.....13	59.34.2330	33 pF	5%, Ce		(31)	95/04/12		Software 15/95; Improved error handling.	
C.....14	59.34.2330	33 pF	5%, Ce						
C.....15	59.06.0683	68 nF	10%, 63V, PETP						
C.....16	59.06.0104	100 nF	10%, 63V, PETP						
C.....17	59.06.0222	2.2 nF	10%, 63V, PERP						
D.....1	50.04.0125	1N 4448		Fc,ITT,Ph,Ses,Tf					
D.....2	50.04.0512	1N 5818		Fc,ITT,Ph,Ses,Tf					
D.....3	50.04.0125	1N 4448		Fc,ITT,Ph,Ses,Tf					
IC.....1	50.17.1541	74 HC 541		Mot,NS,Ph,RCA,SGS,TI,To					
IC.....2	50.17.1541	74 HC 541		Mot,NS,Ph,RCA,SGS,TI,To					
IC.....3	50.17.1645	74 HC 645		Mot,NS,Ph,RCA,SGS,TI,To					
IC.....4	50.17.1000	74 HC 00		Mot,NS,Ph,RCA,SGS,TI,To					
IC.....5	50.17.1122	74 HC 132		Mot,NS,Ph,RCA,SGS,TI,To					
IC.....6	50.17.1138	74 HC 138		Mot,NS,Ph,RCA,SGS,TI,To					
IC.....7	50.17.1002	74 HC 02		Mot,NS,Ph,RCA,SGS,TI,To					
IC.....8	50.17.1393	74 HC 393		Mot,NS,Ph,RCA,SGS,TI,To					
IC.....9	00.00.0000	not used							
IC.....10	50.17.0004	74 HCT 04		Mot,NS,Ph,RCA,SGS,TI,To					
IC.....11	50.14.0107	MM5161P-4		MSH 5128-15					
IC.....12	50.17.1139	74 HC 139		Mot,NS,Ph,RCA,SGS,TI,To					
IC.....13	50.15.0286	MC 3487 P		DS 3487 N					
IC.....14	50.17.1573	74 HC 573		Mot,NS,Ph,RCA,SGS,TI,To					
IC.....15	50.11.0122	TL7705ACP		TI					
IC.....16	50.11.0157	TL7705BCP		TI					
IC.....17	00.00.0000	not used							
IC.....18	50.14.0125	27128		MH 48271286-30					
IC.....19	1.820.985.20			Software 06/88					
IC.....20	1.820.985.21			Software 22/88					
IC.....21	1.820.985.22			Software 35/88					
IC.....22	1.820.985.23			Software 20/89					
IC.....23	1.820.985.24			Software 37/89					
IC.....24	1.820.985.25			Software 48/89					
IC.....25	1.820.985.26			Software 02/91					
IC.....26	1.820.985.27			Software 10/92					
IC.....27	1.820.985.28			Software 15/95					
IC.....28	1.820.985.29			Software 50/92					
IC.....29	1.820.985.30			Software 15/95					
IC.....30	50.16.0107	MC6803P-1		see note 1					
IC.....31	50.14.0125	27128		MH 48271286-30					
IC.....32	1.820.985.20			Software 06/88					
IC.....33	1.820.985.21			Software 22/88					
IC.....34	1.820.985.22			Software 35/88					
IC.....35	1.820.985.23			Software 20/89					
IC.....36	1.820.985.24			Software 37/89					
IC.....37	1.820.985.25			Software 48/89					
IC.....38	1.820.985.26			Software 02/91					
IC.....39	1.820.985.27			Software 10/92					
IC.....40	1.820.985.28			Software 15/95					
IC.....41	1.820.985.29			Software 50/92					
IC.....42	1.820.985.30			Software 15/95					
IC.....43	1.820.985.31			see note 1					
JS.....1				see note 2					
JS.....2				see note 2					
JS.....3				see note 2					
JS.....4				see note 2					
JS.....5				see note 2					
JS.....6				see note 2					
JS.....7				see note 2					
JS.....8				see note 2					
JS.....9				see note 2					
JS.....10				see note 2					
JS.....11				see note 2					
JS.....12				see note 2					
JS.....13				see note 2					
JS.....14				see note 2					
JS.....15				see note 2					
JS.....16				see note 2					
JS.....17				see note 2					
JS.....18				see note 2					
R.....1	57.11.3332	3.3 kOhm	5k						
R.....2	00.00.0000	not used							
R.....3	57.11.3122	1.2 kOhm	5k						
R.....4	57.11.3122	1.2 kOhm	5k						
R.....5	00.00.0000	not used							
R.....6	57.11.3471	470 Ohm	5k						
R.....7	00.00.0000	not used							
R.....8	57.11.3472	4.7 kOhm	5k						
R.....9	57.11.3472	4.7 kOhm	5k						
RZ.....1	57.88.4332			see note 3					
RZ.....2	57.88.4332			see note 3					
RZ.....3	57.88.4332			see note 3					
RZ.....4	57.88.4332			see note 3					
RZ.....5	57.88.4332			see note 3					
RZ.....6	57.88.4332			see note 3					
RZ.....7	57.88.4332			see note 3					
S.....1	55.03.0122	Chicago Switch	34-550-001						

TAPE LIFTER CONTROL 1.820.773.83





TAPE LIFTER CONTROL 1.820.773.83



\* Codierung : Schaltdraht 64.01.0108 Ø 0,8 x 8mm  
(muss 1mm vorstehen).

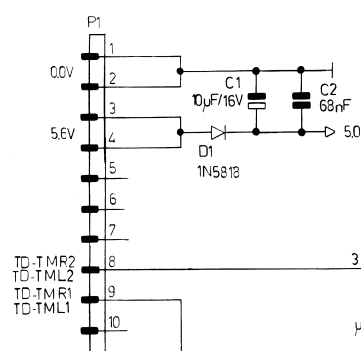
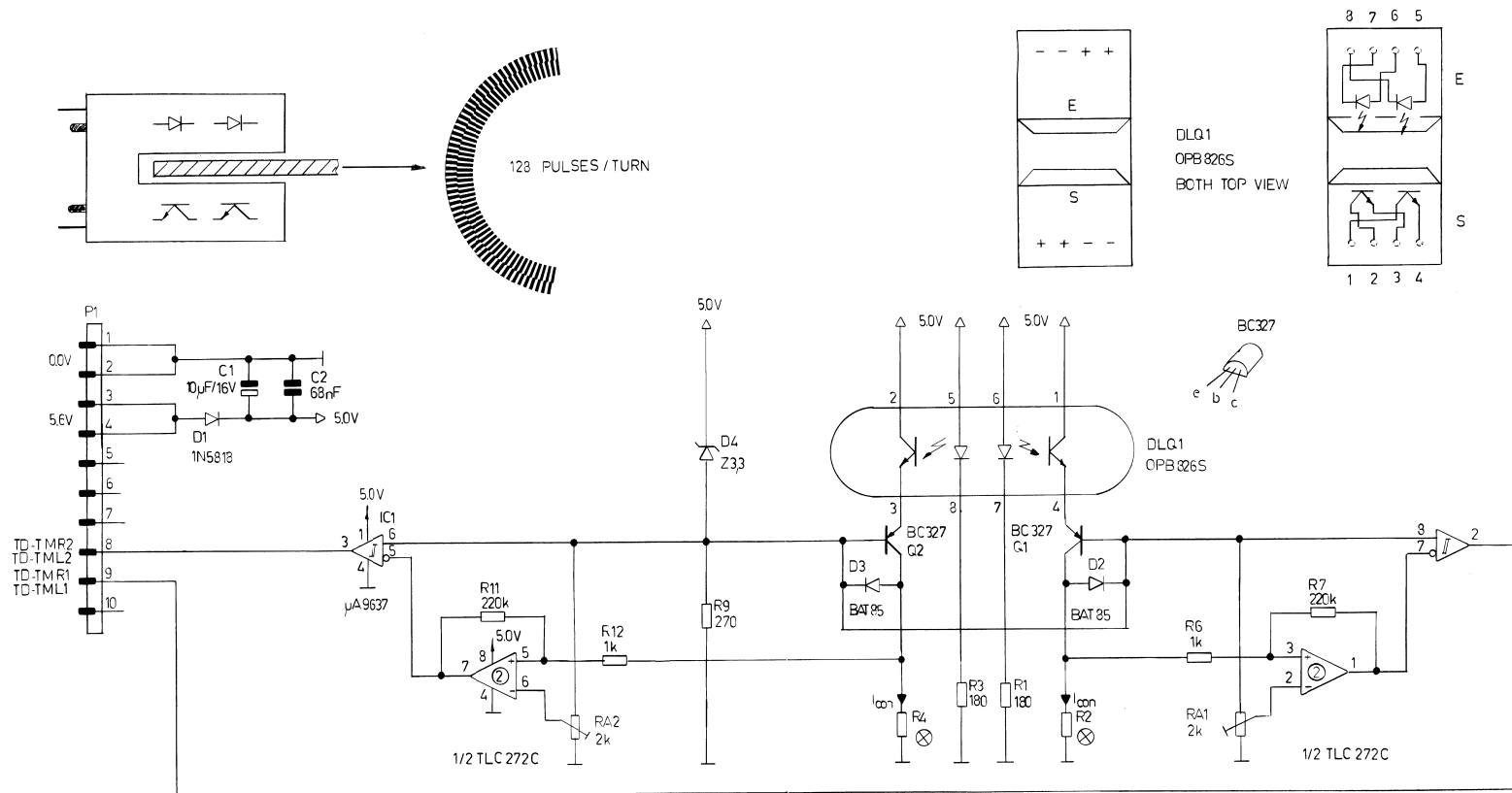
Ad	..POS..	..REF.No..	DESCRIPTION	MANUFACTURER	Ad	..POS..	..REF.No..	DESCRIPTION	MANUFACTURER
C.....1	59.06.0683	68 nF	10%, 63V, PETP		R....11	57.11.4471	470 Ohm	2%	
C.....2	59.05.2331	330 pF	2.5%, 63V, PP		R....12	57.11.4471	470 Ohm	2%	
C.....3	59.05.2331	330 pF	2.5%, 63V, PP		R....13	57.11.4471	470 Ohm	2%	
C.....4	59.22.4101	100 uF	10%, 16V, EI		R....14	57.11.4222	2.2 kOhm	2%	
C.....5	59.06.0683	68 nF	10%, 63V, PETP		R....15	57.11.4821	820 Ohm	2%	
C.....6	59.06.0683	68 nF	10%, 63V, PETP		R....16	57.11.4689	6.8 Ohm	5%	
C.....7	59.22.6471	470 uF	10%, 40V, EI		R....17	57.11.4689	6.8 Ohm	5%	
C.....8	59.22.6471	470 uF	10%, 40V, EI		R....18	57.11.4689	6.8 Ohm	5%	
C.....9	59.25.6102	1000 uF	63V, EI		R....19	57.11.4689	6.8 Ohm	5%	
D.....1	50.04.0122	1N 4001	... 1N 4004	Mot	R....20	57.11.4821	820 Ohm	2%	
D.....2	50.04.0122	1N 4001	... 1N 4004	Mot	R....21	57.11.4821	820 Ohm	2%	
D.....3	50.04.0122	1N 4001	... 1N 4004	Mot	R....22	57.11.4161	160 Ohm	2%	
D.....4	50.04.0122	1N 4001	... 1N 4004	Mot	R....23	57.11.4161	160 Ohm	2%	
D.....5	50.04.0512	1N 5818	1N 5819	Mot	R....24	57.11.4561	560 Ohm	2%	
D.....6	50.04.0125	1N 4448		Fc,ITT,Ph,Ses,Tf	R....25	57.11.4561	560 Ohm	2%	
DLQ...1	50.99.0166	OPB 826S		Op	R....26	57.11.4102	1 kOhm	2%	
IC....1	50.15.0114	uA 9637A		TI,Fc	R....27	57.11.4103	10 kOhm	2%	
P.....1	54.01.0289		see note 1		R....28	57.11.4103	10 kOhm	2%	
P.....2	54.14.2002		see note 2		R....29	57.11.4222	2.2 kOhm	2%	
Q.....1	50.03.0515	BC 307 B	BC 251 B, BC 557 B	ITT,Mot,Ph	R....30	57.11.4222	2.2 kOhm	2%	
Q.....2	50.03.0436	BC 237 B	BC 547 B, BC 550 B	ITT,Mot,Ph,Sie	R....31	57.11.4102	1 kOhm	2%	
Q.....3	50.03.0436	BC 237 B	BC 547 B, BC 550 B	ITT,Mot,Ph,Sie	R....32	57.11.4222	2.2 kOhm	2%	
Q.....4	50.03.0436	BC 237 B	BC 547 B, BC 550 B	ITT,Mot,Ph,Sie	R....33	57.11.4563	56 kOhm	2%	
Q.....5	50.03.0515	BC 307 B	BC 251 B, BC 557 B	ITT,Mot,Ph	R....34	57.11.4102	1 kOhm	2%	
Q.....6	50.03.0436	BC 237 B	BC 547 B, BC 550 B	ITT,Mot,Ph,Sie	R....35	57.11.4102	1 kOhm	2%	
Q.....7	50.03.0436	BC 237 B	BC 547 B, BC 550 B	ITT,Mot,Ph,Sie	R....36	57.11.4152	1.5 kOhm	2%	
Q.....8	50.03.0451	BD 139-10		Mot,Ph,SGS,Tf,To	R....37	57.11.4272	2.7 kOhm	2%	
Q.....9	50.03.0452	BD 140-10		Mot,Ph,SGS,Tf,To					
Q.....10	50.03.0452	BD 140-10		Mot,Ph,SGS,Tf,To					
Q....11	50.03.0451	BD 139-10		Mot,Ph,SGS,Tf,To					
R....1	57.56.5680	68 Ohm	10%, 4 W						
R....2	57.11.4471	470 Ohm	2%						
R....3	57.11.4222	2.2 kOhm	2%						
R....4	57.11.4222	2.2 kOhm	2%						
R....5	57.11.4222	2.2 kOhm	2%						
R....6	57.11.4821	820 Ohm	2%						
R....7	57.11.4689	6.8 Ohm	5%						
R....8	57.11.4689	6.8 Ohm	5%						
R....9	57.11.4689	6.8 Ohm	5%						
R....10	57.11.4689	6.8 Ohm	5%						

Note 1 - Connector: AMP Nr. --163.680-6  
 Note 2 - Connector: Yamaha Nr. FAP-16-08//4  
 Burndy Nr. BPH 9 B 16 B00 GS

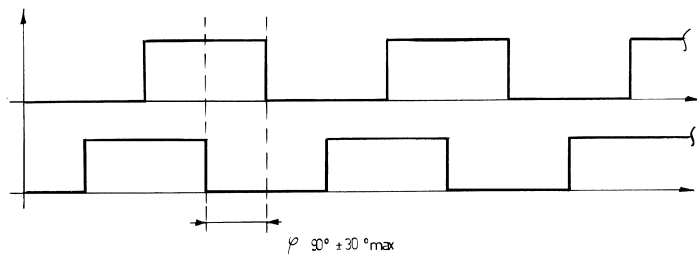
Manufacturer: Fc=Fairchild, ITT=Intermetall, Mot=Motorola, Op=Optron,  
 Ph=Philips, Ses=Sescosem, SGS=SGS/Ates, Sie=Siemens,  
 Tf=Telefunken, Ti=Texas Instruments, To=Toshiba.

1.820.773.83 TAPE LIFTER CONTROL VF 91/03/2800

MOTOR TACHO 1.820.771.84



TD-TMR2  
TD-TML2  
TD-TMR1  
TD-TML1

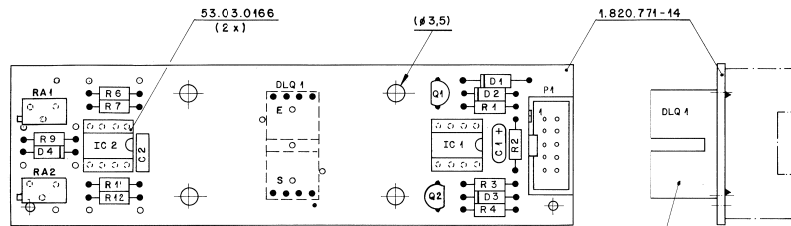


⊗ R2/R4 factory adjusted according to following table  
coupling measured without tach disk  
I<sub>con</sub> measurement R2/R4 replaced by digital milliamperemeter

I <sub>con</sub>	250µA	360µA	520µA	720µA	1.07mA	1.55mA	2.2mA	3.1mA	4.6mA	6.5mA	10mA
R2/R4	7k5	5k1	3k6	2k4	1k6	1k2	820	560	390	270	



MOTOR TACHO 1.820.771.84



43.01.0108 und Schild 1.820.771-01 aufgeklebt nach Fabrikationsmuster.

DLQ4 satt aufliegend auf Lötseite montiert. Nach der Montage, beschichtet mit Epoxid - Lack nach BV 682. Hierbei 4 Bohrungen  $\phi$  3,5 abgedeckt mit Klebband (müssen frei bleiben von Lack).

Änderung									
Datum	10.3.92	Gez.	W	Gepr.	W	Qes.		Index	

STUDER REGENSDORF ZÜRICH	Bearbeitung	<b>MOTOR TACHO BOARD ESE</b>	Nummer:	<b>1.820.771-84</b>
--------------------------------	-------------	----------------------------------	---------	---------------------

Ad ...POS. ...REF.No. ...DESCRIPTION.....MANUFACTURER

C.....1	59.26.2100	10 uF	20%, 16V, Sal	
C.....2	59.06.0683	68 nF	10%, 63V, PETP	
C.....3	00.00.0000	not used		
C.....4	00.00.0000	not used		
D.....1	50.04.0512	1N 5818	1N 5918	Mot
D.....2	50.04.0127	BAT 42	BAT 85, BAS 40-02,	Ph,Sie,Tho
D.....3	50.04.0127	BAT 42	BAT 85, BAS 40-02,	Ph,Sie,Tho
D.....4	50.04.1107	3,3V Z	82X 55-C313	ITT,Mot,Ph,Tf,Tho
DLQ....1	50.99.0166	OPB 826		Op
IC.....1	50.15.0114	uA9637ACP	9637 ATC	Fc,TI
IC.....2	50.05.0286	LM 358 N	LM 358 P	MS,Mot,S6S,TI
01 IC.....2	50.09.0122	TLC 272 C	TS 272 CN	S6S,TI
P.....1	54.14.2001	10 cont.	see note 1	
Q.....1	50.03.0351	BC 327-25		ITT,Ph,Sie
Q.....2	50.03.0351	BC 327-25		ITT,Ph,Sie
R.....1	57.11.3181	180 Ohm	1%	
R.....2	00.00.0000	factory	adjusted	
R.....3	57.11.3181	180 Ohm	1%	
R.....4	00.00.0000	factory	adjusted	
R.....5	00.00.0000	not used	1%	
R.....6	57.11.3102	1 kOhm	1%	
R.....7	57.11.3224	220 kOhm	1%	
R.....8	00.00.0000	not used		
R.....9	57.11.3271	270 Ohm	1%	
R.....10	00.00.0000	not used		
R.....11	57.11.3224	220 kOhm	1%	
R.....12	57.11.3102	1 kOhm	1%	
R.....13	00.00.0000	not used		
RA....1	58.05.0202	2 kOhm	10%, multi turn	
RA....2	58.05.0202	2 kOhm	10%, multi turn	

(01) 11.01.90 Printout error

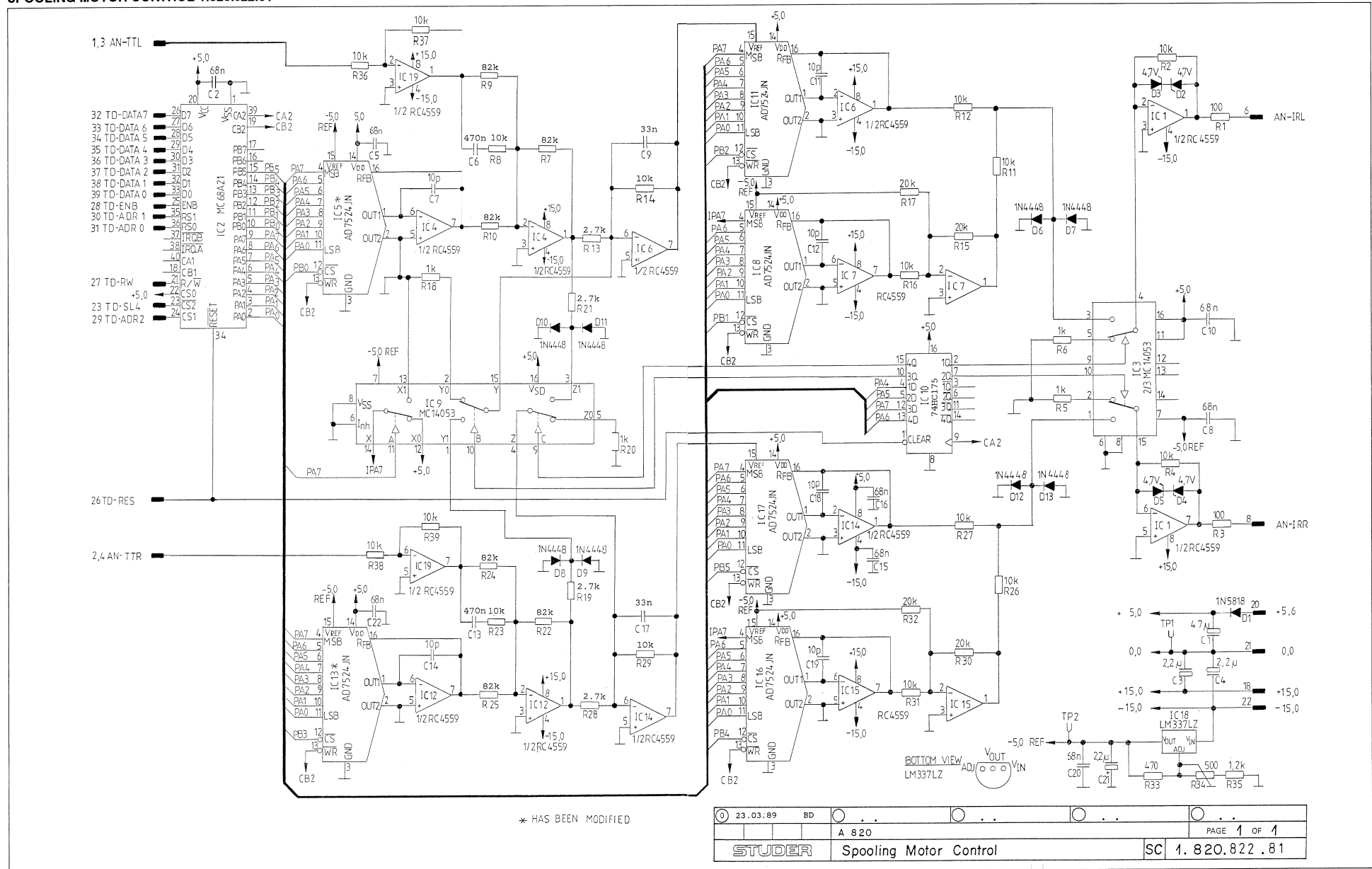
Note 1 - Connector 10 contacts:  
Yamachi nr. FAP-10-08-40SS  
Burdny nr. BPH 9 B10 800 GS  
3M nr. 7510-6002 YZ

El=Electrolytic, Sal=Solid aluminium

MANUFACTURER: F=Fairchild, ITT=Intermetall, Mot=Motorola, NS=National Semiconductor, Op=Optron, Ph=Philips, S6S=S6S/Ates, Sie=Siemens, Tf=Telefunken, Tho=Thomson, TI=Texas Instrument.

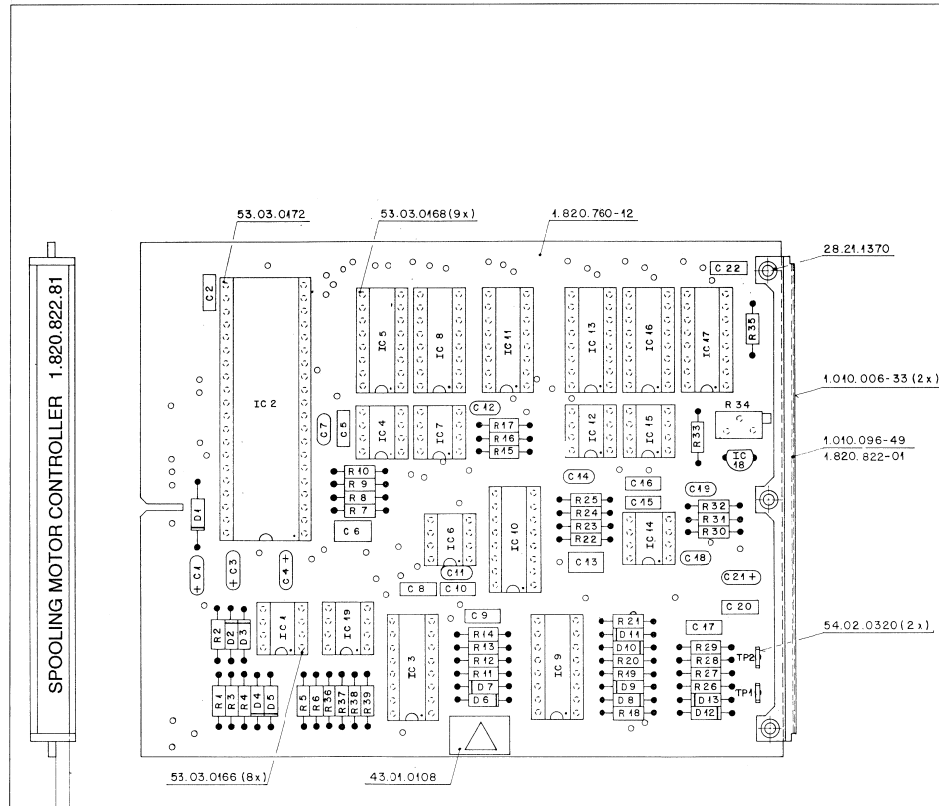
1.820.771.83	MOTOR TACHO	PZ 89/11/1500
1.820.771.83	MOTOR TACHO	PZ 90/01/1101

SPOOLING MOTOR CONTROL 1.820.822.81





SPOOLING MOTOR CONTROL 1.820.822.81

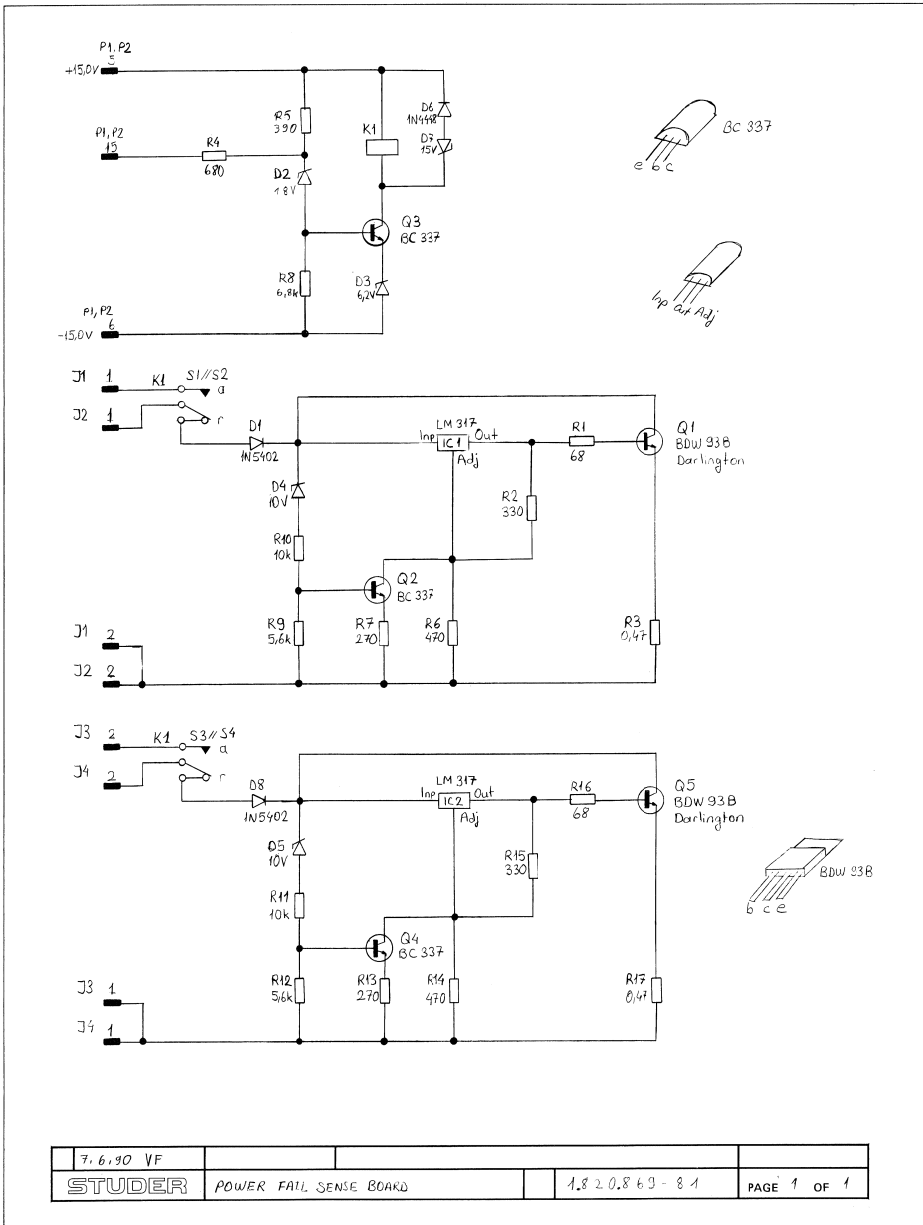


Ad	POS	REF.No	DESCRIPTION	MANUFACTURER
C....1	59.26.0470	47 uF	6.3V, Sal	
C....2	59.06.0683	68 nF		
C....3	59.26.5229	2.2 uF	25V, Sal	
C....4	59.26.5229	2.2 uF	25V, Sal	
C....5	59.06.0683	68 nF		
C....6	59.06.0474	470 nF	10%	Ce
C....7	59.34.1100	10 pF		
C....8	59.06.0683	68 nF		
C....9	59.06.0333	33 nF		
C....10	59.06.0683	68 nF	10%	Ce
C....11	59.34.1100	10 pF		
C....12	59.34.1100	10 pF		
C....13	59.06.0474	470 nF	10%	Ce
C....14	59.34.1100	10 pF		
C....15	59.06.0683	68 nF		
C....16	59.06.0683	68 nF		
C....17	59.06.0333	33 nF	10%	Ce
C....18	59.34.1100	10 pF		
C....19	59.34.1100	10 pF		
C....20	59.06.0683	68 nF		
C....21	59.26.5229	2.2 uF	25V, Sal	
C....22	59.06.0683	68 nF		
I....1	50.04.0512	1N 5818	1N 5819	Mot
I....2	50.04.1123	4.7 V, Z	BZX55C 4V7, BZX55C 4V7, ZPD 4.7 ITT, Ses	
I....3	50.04.1123	4.7 V, Z	BZX53C 4V7, BZX55C 4V7, ZPD 4.7 ITT, Ses	
I....4	50.04.1123	4.7 V, Z	BZX53C 4V7, BZX55C 4V7, ZPD 4.7 ITT, Ses	
I....5	50.04.1123	4.7 V, Z	BZX53C 4V7, BZX55C 4V7, ZPD 4.7 ITT, Ses	
I....6	50.04.0125	1N 4448		
I....7	50.04.0125	1N 4448		
I....8	50.04.0125	1N 4448		
I....9	50.04.0125	1N 4448		
I....10	50.04.0125	1N 4448		
I....11	50.04.0125	1N 4448		
I....12	50.04.0125	1N 4448		
I....13	50.04.0125	1N 4448		
IC....1	50.09.0107	RC 4559 NB	uPC 4559, slew rate min. 1.5 V/us NEC, Ra	
IC....2	50.16.0106	MC58 A 21P	S68 A 21P, F68 A 21P	AMI, Fc, Mot
IC....3	50.07.0015	MC140583CP	4053	Mot, NS, Ph, RCA, To
IC....4	50.09.0107	RC 4559 NB	uPC 4559, slew rate min. 1.5 V/us NEC, Ra	
IC....5	50.07.0002	AD 7524 JN	MP 7524 JN	ADI, MPS
IC....6	50.09.0107	RC 4559 NB	uPC 4559, slew rate min. 1.5 V/us NEC, Ra	
IC....7	50.09.0107	RC 4559 NB	uPC 4559, slew rate min. 1.5 V/us NEC, Ra	
IC....8	50.07.0002	AD 7524 JN	MP 7524 JN	ADI, MPS
IC....9	50.07.0015	MC140583CP	4053	Mot, NS, Ph, RCA, To
IC....10	50.17.1175	CD74HC175E	.. 74 HC 175	.Mot, NS, Ph, RCA, SGS, Tho, TI, To
IC....11	50.07.0002	AD 7524 JN	MP 7524 JN	ADI, MPS
IC....12	50.09.0107	RC 4559 NB	uPC 4559, slew rate min. 1.5 V/us NEC, Ra	
IC....13	50.07.0002	AD 7524 JN	MP 7524 JN	ADI, MPS
IC....14	50.09.0107	RC 4559 NB	uPC 4559, slew rate min. 1.5 V/us NEC, Ra	
IC....15	50.09.0107	RC 4559 NB	uPC 4559, slew rate min. 1.5 V/us NEC, Ra	
IC....16	50.07.0002	AD 7524 JN	MP 7524 JN	ADI, MPS
IC....17	50.07.0002	AD 7524 JN	MP 7524 JN	ADI, MPS
IC....18	50.10.0109	LM 337 LZ		NS
IC....19	50.09.0107	RC 4559 NB	uPC 4559, slew rate min. 1.5 V/us NEC, Ra	
TP....1	54.02.0320			Test point
TP....2	54.02.0320			Test point
R....1	57.11.3101	100 Ohm	1%	
R....2	57.11.3103	10 kOhm	1%	
R....3	57.11.3101	100 Ohm	1%	
R....4	57.11.3103	10 kOhm	1%	
R....5	57.11.3102	1 kOhm	1%	
R....6	57.11.3102	1 kOhm	1%	
R....7	57.11.3823	82 kOhm	1%	
R....8	57.11.3103	10 kOhm	1%	
R....9	57.11.3823	82 kOhm	1%	
R....10	57.11.3823	82 kOhm	1%	
R....11	57.11.3103	10 kOhm	1%	
R....12	57.11.3103	10 kOhm	1%	
R....13	57.11.3272	2.7 kOhm	1%	
R....14	57.11.3103	10 kOhm	1%	
R....15	57.11.3203	20 kOhm	1%	
R....16	57.11.3103	10 kOhm	1%	
R....17	57.11.3203	20 kOhm	1%	
R....18	57.11.3106	1 kOhm	1%	
R....19	57.11.3272	2.7 kOhm	1%	
R....20	57.11.3102	1 kOhm	1%	
R....21	57.11.3272	2.7 kOhm	1%	
R....22	57.11.3823	82 kOhm	1%	
R....23	57.11.3103	10 kOhm	1%	
R....24	57.11.3823	82 kOhm	1%	
R....25	57.11.3823	82 kOhm	1%	
R....26	57.11.3103	10 kOhm	1%	
R....27	57.11.3103	10 kOhm	1%	
R....28	57.11.3272	2.7 kOhm	1%	
R....29	57.11.3103	10 kOhm	1%	
R....30	57.11.3203	20 kOhm	1%	
R....31	57.11.3103	10 kOhm	1%	
R....32	57.11.3203	20 kOhm	1%	
R....33	57.11.3471	470 Ohm	1%	
R....34	58.05.0501	500 Ohm	see note 1	
R....35	57.11.3122	1.2 kOhm	1%	
R....36	57.11.3103	10 kOhm	1%	
R....37	57.11.3103	10 kOhm	1%	
R....38	57.11.3103	10 kOhm	1%	
R....39	57.11.3103	10 kOhm	1%	

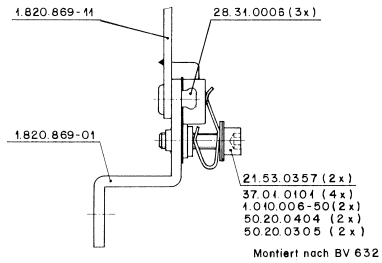
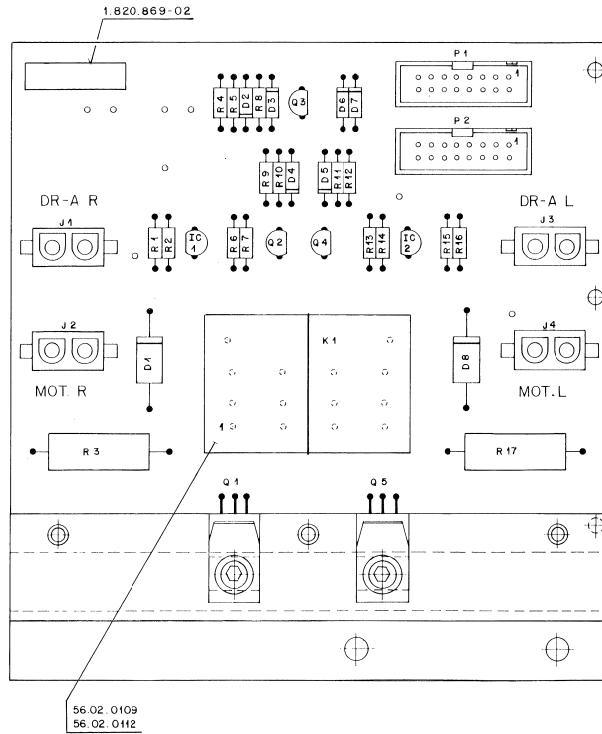
Ad	POS	REF.No	DESCRIPTION	MANUFACTURER
Note 1 - Potentiometer 500 Ohm				
Bourns nr. 3296 Z - 1 - 501				
Contelec nr. 183 XZ 501				
Spectrol nr. 68 Z 501 1 000				
Murata nr. POT 3105 Z - 1 - 501				
Ce=Ceramic, Sal=Solid aluminium				
MANUFACTURER: ADI=Analog Devices Inc., AMI=American Microsystem Inc., Fc=Fairchild, Mot=Motorola, MPS=Micropower Semicond., NEC=Nippon Electric Corp., NS=National Semiconductors, Ph=Philips, Ra=Raytheon, RCA=RCA Corp. of America, Sig=Signetics, TI=Texas Instruments				
1.820.822.81 SPOOLING MOTOR CONTROLLER BD 89/03/2300				
END				

STUDER	SPOOLING MOTOR CONTROLLER ESE		1.820.822-81
REGIONSCHWEIZ			
ZÜRICH			
Strassen-Nr.			
Postfach-Nr.			
Telefon-Nr.			
Telefax-Nr.			
Datum	Gez	Gepr	Ges
Kopie für:			
Ausgabe: <input type="checkbox"/> Anfertigung			
23.3.89			

POWER FAIL SENSE BOARD 1.820.869.81



POWER FAIL SENSE BOARD 1.820.869.81



R3, R17 distanziert montiert

Ad	..POS.	..REF.No.	DESCRIPTION	MANUFACTURER
D.....1	50.04.0507	1N 5402	1N 5403, MR 502RL	GI, Mot
D.....2	50.04.1222	18 V Z	5V, 1.3 W	ITT, Mot, Ph, Tho, Tf
D.....3	50.04.1511	5.2 V Z	8XZ 85-C602	ITT, Mot, Ph, Tf, SGS, Tho
D.....4	50.04.1114	10 V Z	8XZ 55-C10	ITT, Mot, Ph, Tho, Tf
D.....5	50.04.1114	10 V Z	8XZ 55-C10	ITT, Mot, Ph, Tho, Tf
D.....6	50.04.0225	1W 4448		Fc, ITT, Ph, Ses, Tf
D.....7	50.04.1119	15 V Z	8XZ 55-C15	ITT, Mot, Ph, Tho, Tf
D.....8	50.04.0507	1N 5402	1N 5403, MR 502RL	GI, Mot
IC....1	50.10.0108	LM 317 LZ		Mot, Nat
IC....2	50.10.0108	LM 317 LZ		Mot, Nat
J.....1	54.25.0002		see note 1	
J.....2	54.25.0002		see note 1	
J.....3	54.25.0002		see note 1	
J.....4	54.25.0002		see note 1	
K.....1	56.02.0108	24 V DC	Ly 4	Omron
P.....1	54.14.2002		see note 2	
P.....2	54.14.2002		see note 2	
Q.....1	50.03.0512	8D 899 A	8W 93 B	Mot, SGS
Q.....2	50.03.0340	8C 337-25		ITT, NS, Ph, Sie
Q.....3	50.03.0340	8C 337-25		ITT, NS, Ph, Sie
Q.....4	50.03.0340	8C 337-25		ITT, NS, Ph, Sie
Q.....5	50.03.0512	8D 899 A	8W 93 B	Mot, SGS
R.....1	57.11.3680	68 Ohm	5%	
R.....2	57.11.3331	330 Ohm	5%	
R.....3	57.56.5478	0.47 Ohm	10%, 4 Watt	
R.....4	57.11.3681	680 Ohm	5%	
R.....5	57.11.3391	390 Ohm	5%	
R.....6	57.11.3471	470 Ohm	5%	
R.....7	57.11.3271	270 Ohm	5%	
R.....8	57.11.3682	6.8 kOhm	5%	
R.....9	57.11.3682	5.6 kOhm	5%	
R.....10	57.11.3103	10 kOhm	5%	
R.....11	57.11.3103	10 kOhm	5%	
R.....12	57.11.3682	5.6 kOhm	5%	
R.....13	57.11.3271	270 Ohm	5%	
R.....14	57.11.3471	470 Ohm	5%	
R.....15	57.11.3331	330 Ohm	5%	
R.....16	57.11.3680	68 Ohm	5%	
R.....17	57.56.5478	0.47 Ohm	10%, 4 Watt	

Note 1 - Connector, 2 contacts: AMP Nr. 826846-3

Note 2 - Connector, 26 contacts: Yamachi Nr. FAP-16-08-4055  
 Burndy Nr. BPH 9 B16 800 GS  
 3M Nr. 7616-6002 VZ

MANUFACTURER: Fc=Fairchild, GI=General Instruments, ITT=Intermetal,  
 Mot=Motorola, Nat=National, NS=National Semiconductors,  
 Ph=Philips, Ses=Seacom, SGS=SGS/Ates, Sie=Siemens,  
 Tf=Telefunken, Tho=Thomson

1.820.869.81 POWER FAIL SENSE BOARD VF 90/06/0700

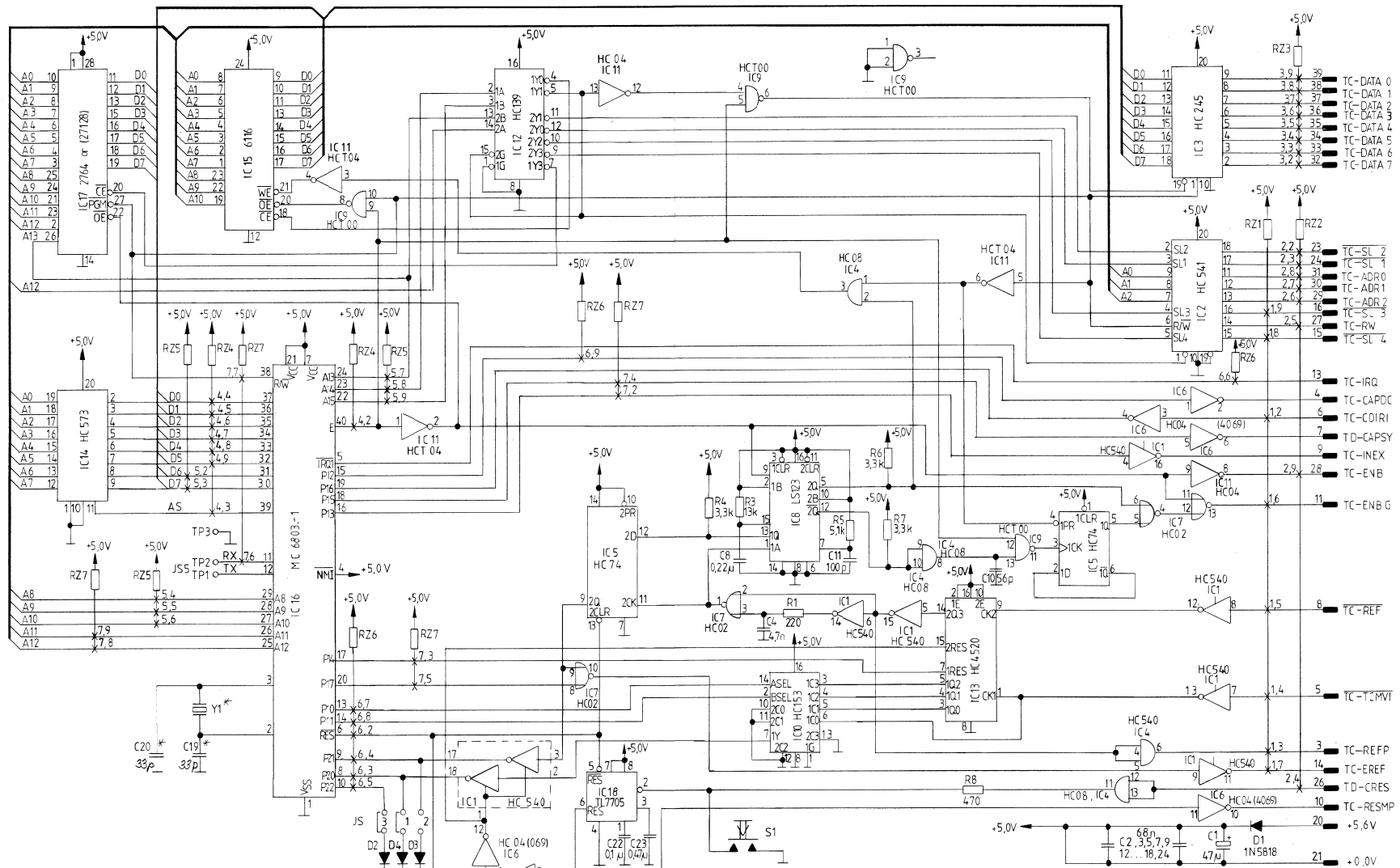
Number	7.6.90	Gez	Gepr	Gea	Index
Datum					

STUDER  
 REGENSDORF  
 ZÜRICH

Benennung  
**POWER FAIL  
 SENSE BOARD**

Number:  
**1.820.869-81**

CAPSTAN CONTROL UNIT 1.820.764.28



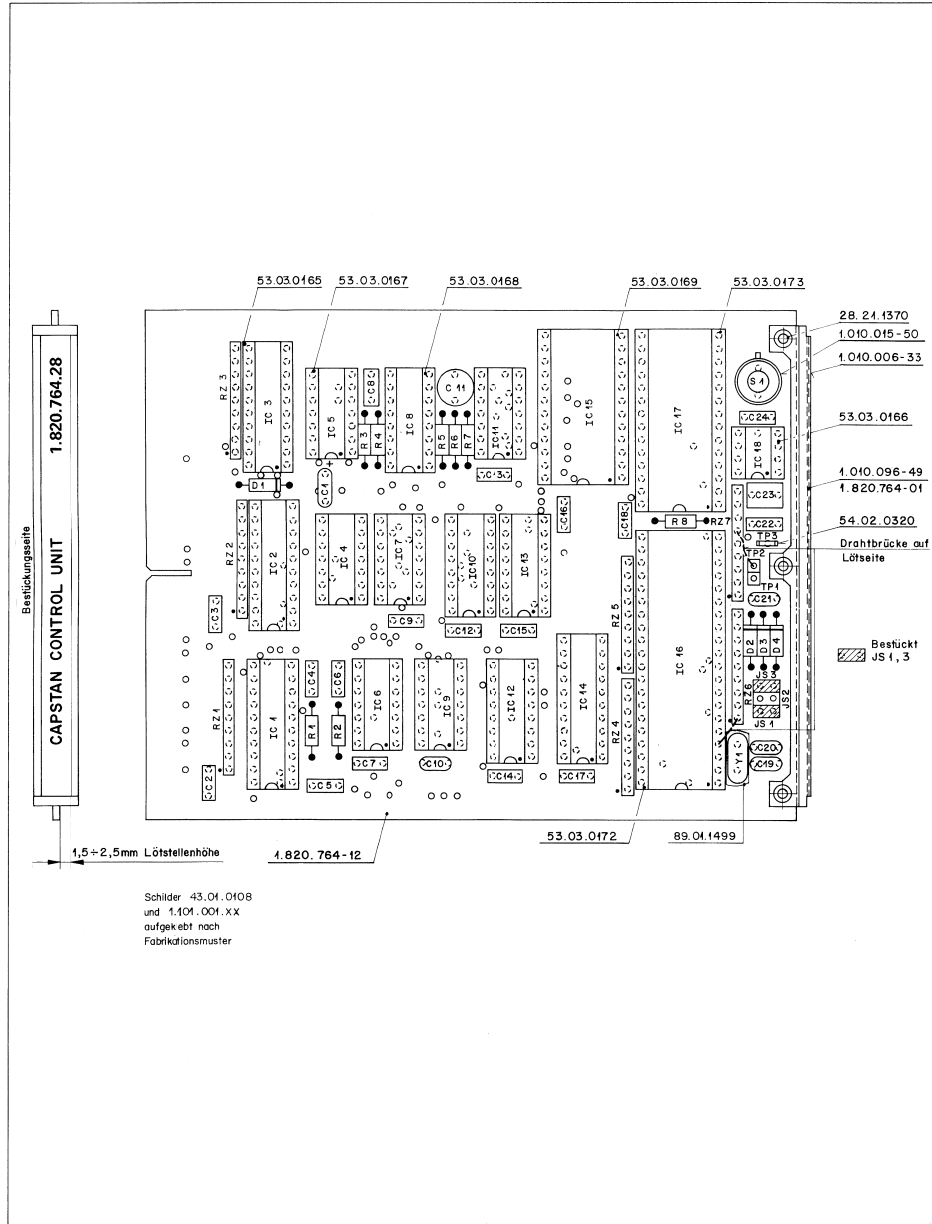
\* has been modified

02.11.84	HL	12.11.85	fw	...	...	...	...
A 820 Logic Section				PAGE 1 OF 1			
STUDER		Capstan Control Unit		ESE SC		1.820.764.28	



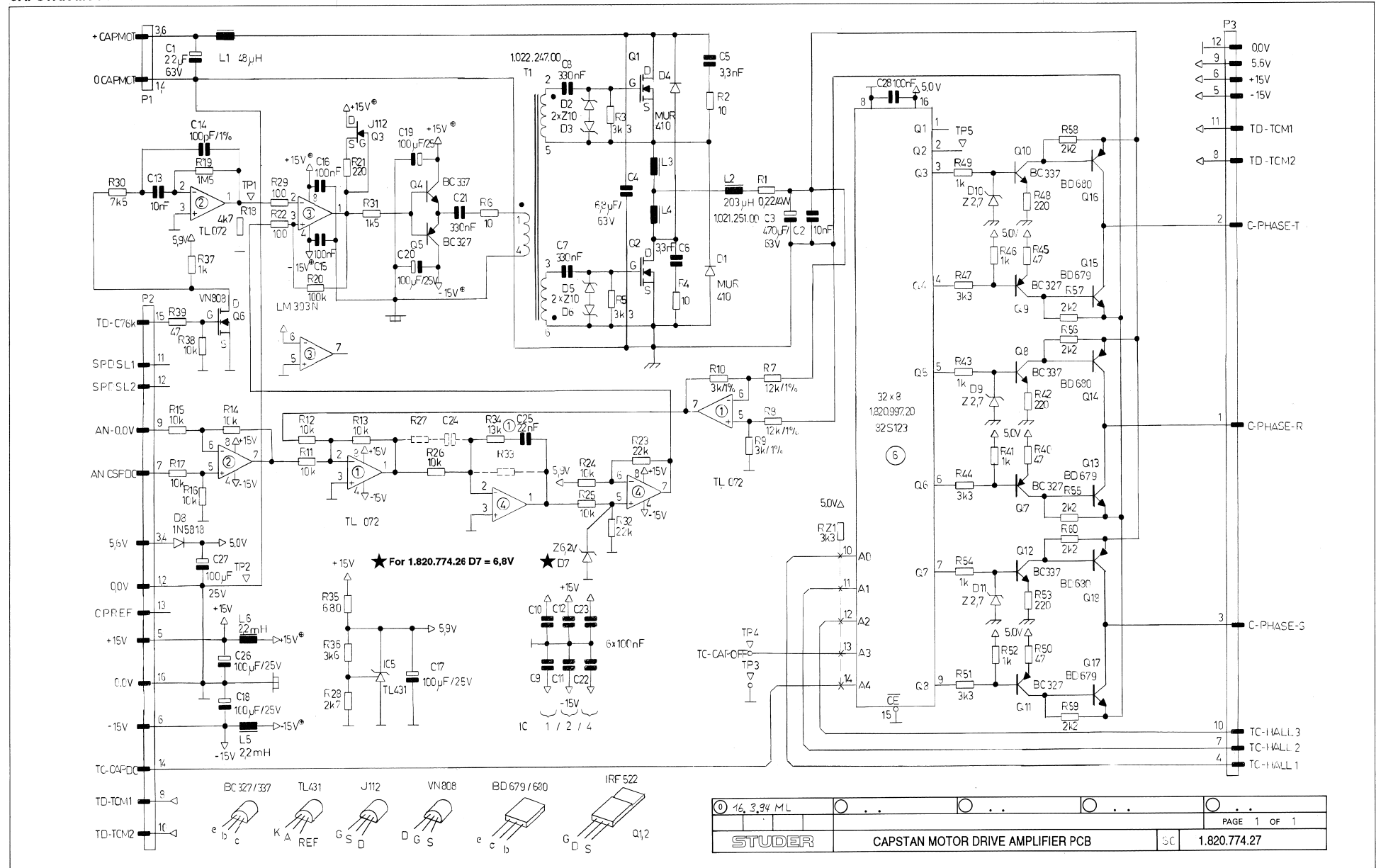


CAPSTAN CONTROL UNIT 1.820.764.28



Ad	POS.	REF.No.	DESCRIPTION	MANUFACTURER	Ad	POS.	REF.No.	DESCRIPTION	MANUFACTURER
20	C....1	59.26.0470	47 uF	20%, 6.3V					
20	C....2	59.06.0683	68 nF	20%					
20	C....3	59.06.0683	68 nF	20%					
20	C....4	59.32.2472	4.7 nF	10%					
20	C....5	59.06.0683	68 nF	20%					
20	C....6	59.32.2332	3.3 nF	10%					
20	C....7	59.06.0683	68 nF	20%					
20	C....8	59.06.3224	220 nF	5%					
20	C....9	59.06.0683	68 nF	20%					
20	C....10	59.45.4560	56 pF	10%					
20	C....11	59.05.1101	100 pF	1%					
20	C....12	59.06.0683	68 nF	20%					
20	C....13	59.06.0683	68 nF	20%					
20	C....14	59.06.0683	68 nF	20%					
20	C....15	59.06.0683	68 nF	20%					
20	C....16	59.06.0683	68 nF	20%					
20	C....17	59.06.0683	68 nF	20%					
20	C....18	59.06.0683	68 nF	20%					
20	C....19	59.45.1150	15 pF	5%					
22	C....19	59.45.2330	33 pF	5%					
20	C....20	59.45.1150	15 pF	5%					
22	C....20	59.45.2330	33 pF	5%					
20	C....21	59.32.4102	1 nF	20%					
20	C....22	59.06.0104	100 nF	10%					
20	C....23	59.06.0414	470 nF	10%					
20	C....24	59.06.0683	68 nF	20%					
20	B....1	50.04.0512	1M 5818	1M 5819					Not
20	B....2	50.04.0125	1M 4448						ITT, Ph, Ses, TI
20	B....3	50.04.0125	1M 4448						ITT, Ph, Ses, TI
20	B....4	50.04.0125	1M 4448						ITT, Ph, Ses, TI
20	IC....1	50.17.1540	74 HC 540						Ph, Mot, NS, RCA, To, TI
20	IC....2	50.17.1541	74 HC 541						Ph, Mot, NS, RCA, To, TI
20	IC....3	50.17.1245	74 HC 245						Ph, Mot, Ph, RCA, To, TI
20	IC....4	50.17.1008	74 HC 08						Ph, Mot, NS, RCA, To, TI
20	IC....5	50.17.1074	74 HC 74						Ph, Mot, NS, RCA, To, TI
20	IC....6	50.17.1004	74 HC 04						Ph, Mot, NS, RCA, To, TI
20	IC....7	50.17.1002	74 HC 02						Ph, Mot, NS, RCA, To, TI
20	IC....8	50.06.0123	74 LS 123						Ph, Mot, NS, RCA, To, TI
20	IC....9	50.17.1000	74 HC 00						Ph, Mot, NS, RCA, To, TI
20	IC....10	50.17.1153	74 HC 153						Ph, Mot, NS, RCA, To, TI
20	IC....11	50.17.0004	74 HCT 04						Ph, NS, RCA
20	IC....12	50.17.1139	74 HC 139						Ph, Mot, NS, RCA, SGS, To, TI
20	IC....13	50.07.0520	4520 BPC						Ph, Fc
20	IC....14	50.17.1113	74 HC 573						HEF 4520
20	IC....15	50.14.0107	HM6116LP-3						MSM5128-15
20	IC....16	50.16.0107	MC68036-1						HI, OKI
20	IC....17	00.00.0000							see note 1
20	IC....17	1.820.994.20	Software 13/85, Capstan Control						St
21	IC....17	1.820.994.21	Software 35/85, Capstan Control						St
22	IC....17	1.820.994.22	Software 36/86, Capstan Control						St
24	IC....17	1.820.994.23	Software 17/87, Capstan Control						St
25	IC....17	1.820.994.24	Software 22/88, Capstan Control						St
26	IC....17	1.820.994.25	Software 35/88, Capstan Control						St
27	IC....17	1.820.994.26	Software 37/89, Capstan Control						St
28	IC....17	1.820.994.27	Software 10/92, Capstan Control						St
20	IC....18	50.11.0122	TL7705ACP						TI
20	JS....1	00.00.0000							see note 2
20	JS....2	00.00.0000							see note 2
20	JS....3	00.00.0000							see note 2
20	TP....1	00.00.0000							see note 2
20	TP....2	00.00.0000							see note 2
20	TP....3	54.02.0320							Testpoint
20	R....1	57.11.4221	220 Ohm	2%					
20	R....2	57.11.4103	10 kOhm	10%					
20	R....3	57.11.3133	13 kOhm	2%					
20	R....4	57.11.4332	3.3 kOhm	10%					
20	R....5	57.11.3512	5.1 kOhm	2%					
20	R....6	57.11.4332	3.3 kOhm	10%					
20	R....7	57.11.4332	3.3 kOhm	10%					
20	R....8	57.11.4471	470 Ohm	10%					
20	RZ....1	57.88.4103	Network 8 * 10 kOhm (old part 1.010.014.57)						
20	RZ....2	57.88.4103	Network 8 * 10 kOhm (old part 1.010.014.57)						
20	RZ....3	57.88.4103	Network 8 * 10 kOhm (old part 1.010.014.57)						
20	RZ....4	57.88.4332	Network 8 * 3.3 kOhm						
20	RZ....5	57.88.4332	Network 8 * 3.3 kOhm						
20	RZ....6	57.88.4103	Network 8 * 10 kOhm (old part 1.010.014.57)						
20	RZ....7	57.88.4332	Network 8 * 3.3 kOhm						
20	S....1	55.03.0122	Switch impuls., see note 3						
20	Y....1	89.01.0553	4.9152 MHz, TD18						
22	Y....1	89.01.0560	4.9152 MHz, +- 20 ppm.						
(21)	12.08.85	software 35/85	( EPROM 16k * 8 )						
(22)	12.11.85	Improved quartz accuracy.							
(23)	18.09.86	Software 36/86							
(24)	24.04.87	Software 17/87							
(25)	10.06.88	Software 22/88							
(26)	31.08.88	Software 35/88							
(27)	15.03.89	Software 37/89							
(28)	28.02.92	Software 10/92							

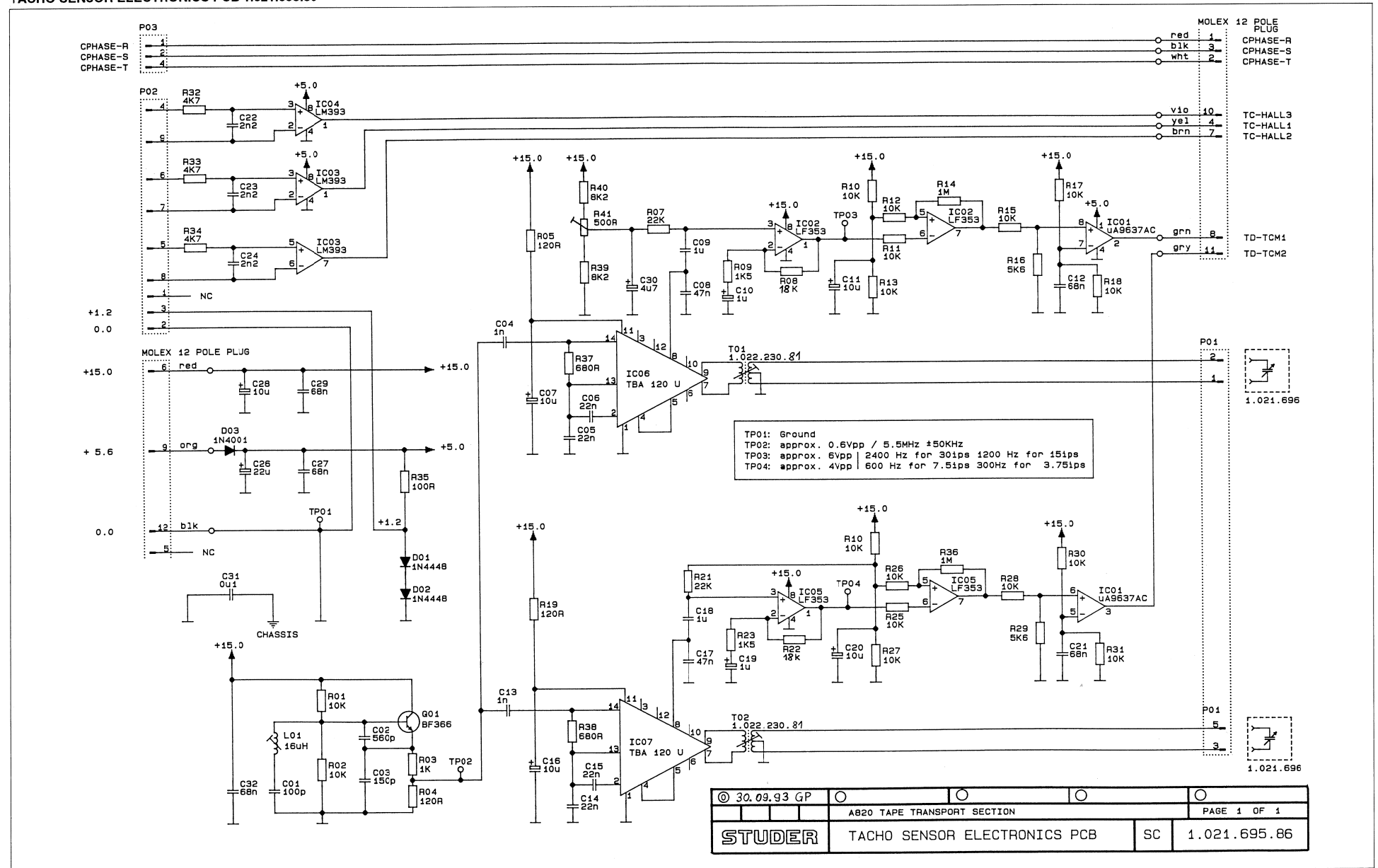
CAPSTAN MOTOR DRIVE AMPLIFIER PCB 1.820.774.26 / 1.820.774.27





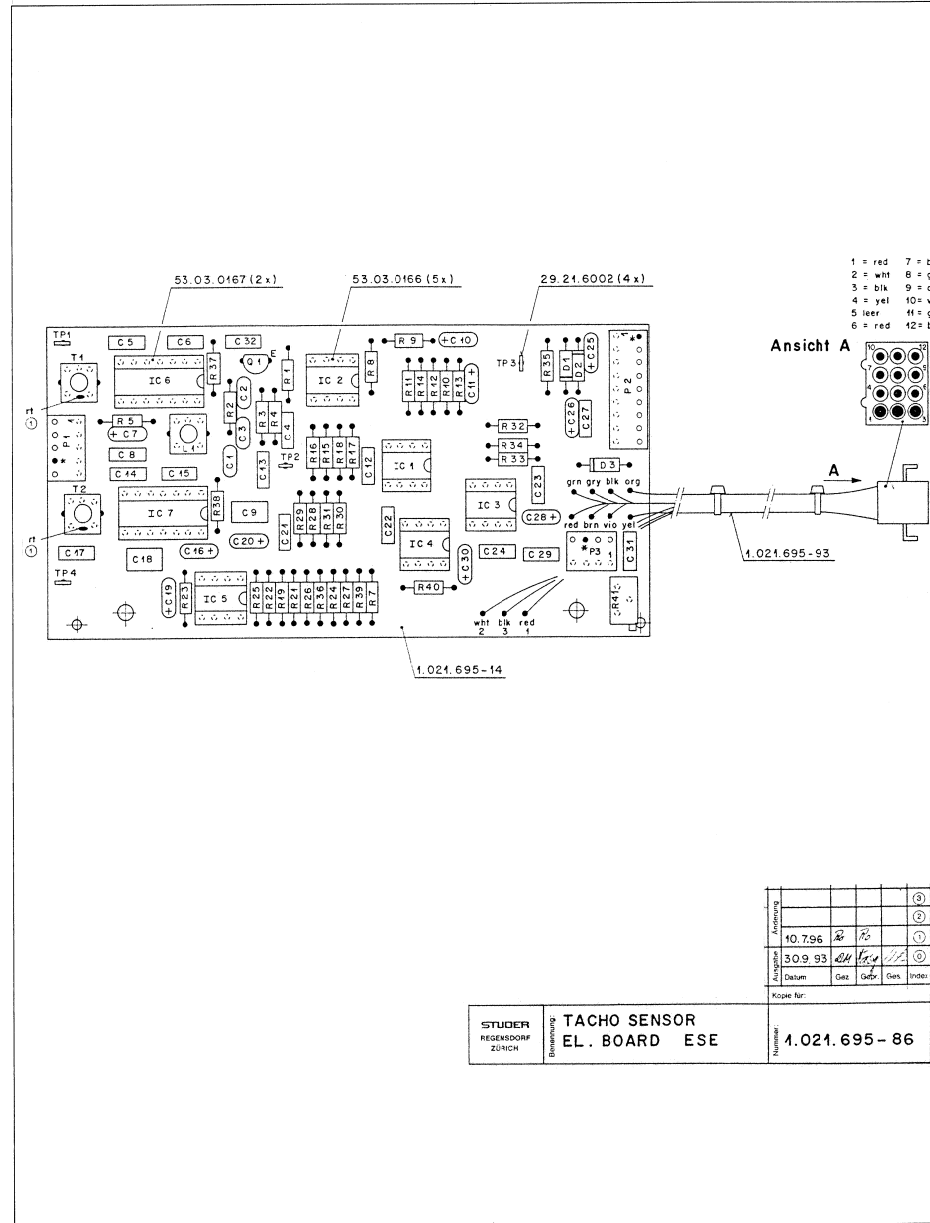


TACHO SENSOR ELECTRONICS PCB 1.021.695.86





TACHO SENSOR ELECTRONICS PCB 1.021.695.86



Idx. Pos.	Part No.	Qty.	Type/Val.	Description
0 C 1	59.34.4101	100p		CER 63V, 5%, N750
0 C 2	59.34.5561	560p		CER 63V, 5%, N1500
0 C 3	59.34.4151	150p		CER 63V, 5%, N750
0 C 4	59.06.0102	1n0		PETP, 63V, 10%, RMS
0 C 5	59.06.0223	22n		PETP, 63V, 10%, RMS
0 C 6	59.06.0223	22n		PETP, 63V, 10%, RMS
0 C 7	59.26.2100	10u		SAL, 20%, 16V
0 C 8	59.06.0473	47n		PETP, 63V, 10%, RMS
0 C 9	59.06.0105	1u0		PETP, 50V, 10%, RMS
0 C 10	59.26.9109	1u		SAL, 20%, 40V
0 C 11	59.26.2100	10u		SAL, 20%, 16V
0 C 12	59.06.0683	68n		PETP, 63V, 10%, RMS
0 C 13	59.06.0102	1n0		PETP, 63V, 10%, RMS
0 C 14	59.06.0223	22n		PETP, 63V, 10%, RMS
0 C 15	59.06.0223	22n		PETP, 63V, 10%, RMS
0 C 16	59.26.2100	10u		SAL, 20%, 16V
0 C 17	59.06.0473	47n		PETP, 63V, 10%, RMS
0 C 18	59.06.0105	1u0		PETP, 50V, 10%, RMS
0 C 19	59.26.9109	1u		SAL, 20%, 40V
0 C 20	59.26.2100	10u		SAL, 20%, 16V
0 C 21	59.06.0683	68n		PETP, 63V, 10%, RMS
0 C 22	59.06.0222	2n2		PETP, 63V, 10%, RMS
0 C 23	59.06.0222	2n2		PETP, 63V, 10%, RMS
0 C 24	59.06.0222	2n2		PETP, 63V, 10%, RMS
0 C 25	59.26.1220	22u		SAL, 20%, 10V
0 C 26	59.26.1220	22u		SAL, 20%, 10V
0 C 27	59.06.0683	68n		PETP, 63V, 10%, RMS
0 C 28	59.26.2100	10u		SAL, 20%, 16V
0 C 29	59.06.0683	68n		PETP, 63V, 10%, RMS
0 C 30	59.26.1479	4u7		SAL, 20%, 10V
0 C 31	59.06.0104	100n		PETP, 63V, 10%, RMS
0 C 32	59.06.0683	68n		PETP, 63V, 10%, RMS
0 D 1	50.04.0125		1N4448	75V, 150mA, 4ns, DO-35
0 D 2	50.04.0125		1N4448	75V, 150mA, 4ns, DO-35
0 D 3	50.04.0122		1N4001	1A, DO 41
0 IC 1	50.15.0114	9637		Dual diff Line Receiver
0 IC 2	50.09.0101	TL72		IC TL 072 CN
0 IC 3	50.05.0283	LM393		Dual Comparator
0 IC 4	50.05.0283	LM393		Dual Comparator
0 IC 5	50.09.0101	TL72		IC TL 072 CN
0 IC 6	50.11.0151	TBA120U		IC TBA 120 UVS
0 IC 7	50.11.0151	TBA120U		IC TBA 120 UVS
0 L 1	1.022.222.00	L16mH		HF-DROSSEL 16 MH
0 P 1	54.01.0288	5-P		J LEISTE 5 POL.CIS AUFST.
0 P 2	54.01.0217	9-P		J LEISTE 9 POL.CIS AUFST.
0 P 3	54.01.0241	4-P		J LEISTE 4 POL.CIS AUFST.
0 Q 1	50.03.0514	BF366		BF 366 NPN
0 R 1	57.11.3103	10k		MF, 1%, 0207
0 R 2	57.11.3103	10k		MF, 1%, 0207
0 R 3	57.11.3102	10k		MF, 1%, 0207
0 R 4	57.11.3121	12GR		MF, 1%, 0207
0 R 5	57.11.3121	12GR		MF, 1%, 0207
0 R 6		not used		not used
0 R 7	57.11.3223	22k		MF, 1%, 0207
0 R 8	57.11.3183	18k		MF, 1%, 0207
0 R 9	57.11.3152	1k5		MF, 1%, 0207
0 R 10	57.11.3103	10k		MF, 1%, 0207
0 R 11	57.11.3103	10k		MF, 1%, 0207
0 R 12	57.11.3103	10k		MF, 1%, 0207
0 R 13	57.11.3103	10k		MF, 1%, 0207
0 R 14	57.11.3105	10k		MF, 1%, 0207
0 R 15	57.11.3103	10k		MF, 1%, 0207
0 R 16	57.11.3562	5k6		MF, 1%, 0207
0 R 17	57.11.3103	10k		MF, 1%, 0207
0 R 18	57.11.3103	10k		MF, 1%, 0207
0 R 19	57.11.3121	12GR		MF, 1%, 0207
0 R 20		not used		not used
0 R 21	57.11.3223	22k		MF, 1%, 0207
0 R 22	57.11.3183	18k		MF, 1%, 0207
0 R 23	57.11.3152	1k5		MF, 1%, 0207
0 R 24	57.11.3103	10k		MF, 1%, 0207
0 R 25	57.11.3103	10k		MF, 1%, 0207
0 R 26	57.11.3103	10k		MF, 1%, 0207
0 R 27	57.11.3103	10k		MF, 1%, 0207
0 R 28	57.11.3103	10k		MF, 1%, 0207
0 R 29	57.11.3562	5k6		MF, 1%, 0207
0 R 30	57.11.3103	10k		MF, 1%, 0207

Idx. Pos.	Part No.	Qty.	Type/Val.	Description
0 R 31	57.11.3103	10k		MF, 1%, 0207
0 R 32	57.11.3472	4k7		MF, 1%, 0207
0 R 33	57.11.3472	4k7		MF, 1%, 0207
0 R 34	57.11.3472	4k7		MF, 1%, 0207
0 R 35	57.11.3101	100R		MF, 1%, 0207
0 R 36	57.11.3105	10k		MF, 1%, 0207
0 R 37	57.11.3681	680R		MF, 1%, 0207
0 R 38	57.11.3681	680R		MF, 1%, 0207
0 R 39	57.11.3822	8k2		MF, 1%, 0207
0 R 40	57.11.3822	8k2		MF, 1%, 0207
0 R 41	58.05.0501	500R		10%, 0.5W, Cermet
1 T 1	1.022.230.82		Trafo	DISKRIMINATORTRAFO
1 T 2	1.022.230.82		Trafo	DISKRIMINATORTRAFO
0 TP 1	29.21.6002	1-P		LOETOESE
0 TP 2	29.21.6002	1-P		LOETOESE
0 TP 3	29.21.6002	1-P		LOETOESE
0 TP 4	29.21.6002	1-P		LOETOESE

End of List

**Comments:**

- \* Note 1: Pot. Bourns, Nr.: 3296 Z-1-501
- \* Spectrol, Nr.: 64 Z 501 T-000
- \* Murata, Nr.: Pot 3105 Z-1-501
- \* Note 2: Plug: 5-Pin AMP. Nr.: -163.680-3
- \* Note 3: Plug: 9-Pin AMP. Nr.: -163.680-7
- \* Note 4: Plug: 3-Pin AMP. Nr.: -163.680-1
- \* CE=Ceramic, EL=Electrolytic, PETP=Polyester Film
- \* MANUFACTURER: Fc=Fairchild, G=General Instruments, ITT=Intermetall, Mot=Motorola, NS=National Semiconductors, Ph=Philips, Sie=Siemens, St=Studer, Ti=Texas Instruments
- (e1) T1+T2 -81 changed to -82

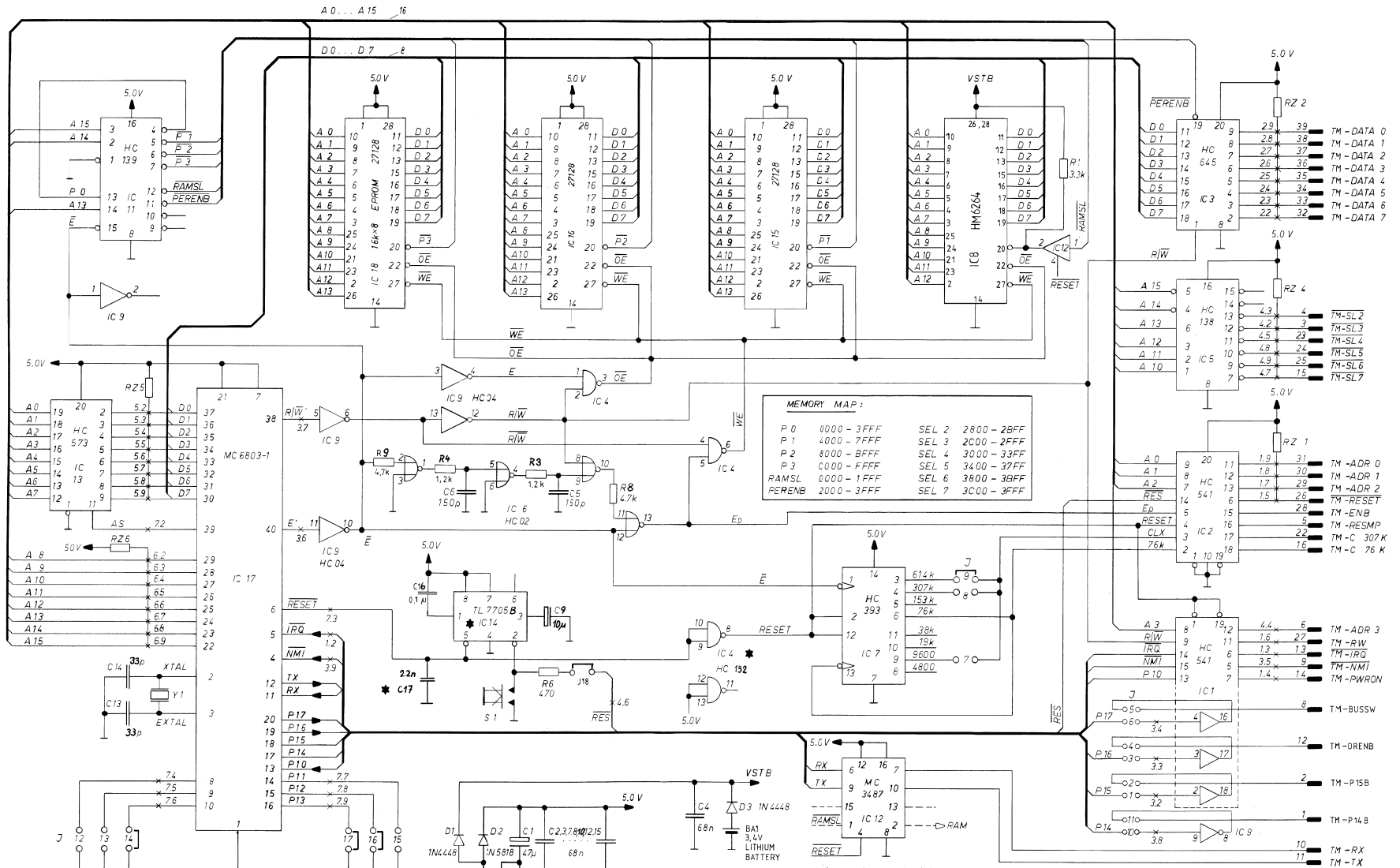
Abgegeben	Am 10.7.96	Gez. GEF	Ders. GEF	Inhalt
Kopie für:				
Nummer	1.021.695-86			

STUDER REGENSDORF ZÜRICH

EL. BOARD ESE

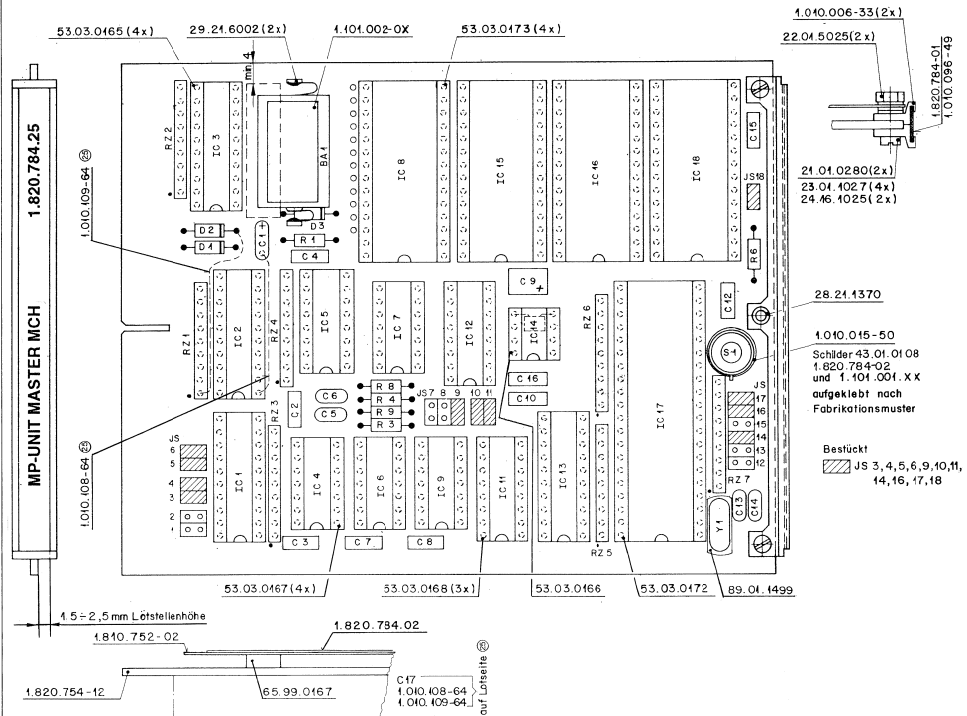
1.021.695-86

MP-UNIT MASTER MCH 1.820.784.25



MEMORY MAP :

P 0	0000 - 3FFF	SEL 2	2800 - 28FF
P 1	4000 - 7FFF	SEL 3	2C00 - 2FFF
P 2	8000 - BFFF	SEL 4	3000 - 33FF
P 3	C000 - FFFF	SEL 5	3400 - 37FF
RAMSL	0000 - 1FFF	SEL 6	3800 - 3BFF
PERENB	2000 - 3FFF	SEL 7	3C00 - 3FFF



Ad.	POS.	REF.No.	DESCRIPTION	MANUFACTURER
BA...	1	89.01.0275	Batt, Lith., 3.6V, D 14.7*25.5	
C.....	1	59.26.0470	47 uF 20%, 6.3V, Sal	Ph
C.....	2	59.06.0683	68 nF 10%, 63V, P2TP	
C.....	3	59.06.0683	68 nF 10%, 63V, P2TP	
C.....	4	59.06.0683	68 nF 10%, 63V, P2TP	
C.....	5	59.34.7151	150 pF 2%, Ca	
C.....	6	59.34.7151	150 pF 2%, Ca	
C.....	7	59.06.0683	68 nF 10%, 63V, P2TP	
C.....	8	59.06.0683	68 nF 10%, 63V, P2TP	
C.....	9	59.26.2100	10 uF 20%, 15V, Sal	
C.....	10	59.06.0683	68 nF 10%, 63V, P2TP	
C.....	11	00.00.0000	not used	
C.....	12	59.06.0683	68 nF 10%, 63V, P2TP	
C.....	13	59.34.2330	33 pF 5%, Ce	
C.....	14	59.34.2330	33 pF 5%, Ce	
C.....	15	59.06.0683	68 nF 10%, 63V, P2TP	
C.....	16	59.06.0104	100 nF 10%, 63V, P2TP	
C.....	17	59.06.0222	2.2 nF 10%, 63V, P2TP	
E.....	1	50.04.0125	IN 4448	Fc,ITT,Ph,Ses,Tf
E.....	2	50.04.0512	IN 5818	Mot
E.....	3	50.04.0125	IN 4448	Fc,ITT,Ph,Ses,Tf
IC.....	1	50.17.1541	74 HC 541	Mot,NS,Ph,RCA,SGS,TI,To
IC.....	2	50.17.1541	74 HC 541	Mot,NS,Ph,RCA,SGS,TI,To
IC.....	3	50.17.1645	74 HC 645	Mot,NS,Ph,RCA,SGS,TI,To
IC.....	4	50.17.1000	74 HC 00	Mot,NS,Ph,RCA,SGS,TI,To
IC.....	4	50.17.1132	74 HC 132	Mot,NS,Ph,RCA,SGS,TI,To
IC.....	5	50.17.1138	74 HC 138	Mot,NS,Ph,RCA,SGS,TI,To
IC.....	6	50.17.1002	74 HC 02	Mot,NS,Ph,RCA,SGS,TI,To
IC.....	7	50.17.1393	74 HC 393	Mot,NS,Ph,RCA,SGS,TI,To
IC.....	8	50.14.0133	HM6264P-15 TC 5564-15	Hi,To
IC.....	9	50.17.0004	74 HCT 04	Mot,NS,Ph,RCA,SGS,TI,To
IC.....	10	00.00.0000	not used	
IC.....	11	50.17.1139	74 HC 139	Mot,NS,Ph,RCA,SGS,TI,To
IC.....	12	50.15.0105	MC 3487 P DS 3487 N	Mot,MS
IC.....	13	50.17.1573	74 HC 573	Mot,NS,Ph,RCA,SGS,TI,To
IC.....	14	50.11.0122	TL7705ACP	TI
IC.....	14	50.11.0122	TL7705BCP	TI
IC.....	15	50.14.0125	27128	HN 4827128G-30
IC.....	15	1.820.986.20	Software 22/88	see note 1
IC.....	15	1.820.986.21	Software 35/88	see note 1
IC.....	15	1.820.986.22	Software 20/89	see note 1
IC.....	15	1.820.986.23	Software 42/90	see note 1
IC.....	15	1.820.986.24	Software 04/91	see note 1
IC.....	16	50.14.0125	27128	HN 4827128G-30
IC.....	16	1.820.986.20	Software 22/88	see note 1
IC.....	16	1.820.986.21	Software 35/88	see note 1
IC.....	16	1.820.986.22	Software 20/89	see note 1
IC.....	16	1.820.986.23	Software 42/90	see note 1
IC.....	16	1.820.986.24	Software 04/91	see note 1
IC.....	17	50.10.0107	MC6803P-1 6803P-1	Mot,Hi
IC.....	18	50.14.0125	27128	HN 4827128G-30
IC.....	18	1.820.986.20	Software 22/88	see note 1
IC.....	18	1.820.986.21	Software 35/88	see note 1
IC.....	18	1.820.986.22	Software 20/89	see note 1
IC.....	18	1.820.986.23	Software 42/90	see note 1
IC.....	18	1.820.986.24	Software 04/91	see note 1
JS.....	1		see note 2	
JS.....	2		see note 2	
JS.....	3		see note 2	
JS.....	4		see note 2	
JS.....	5		see note 2	
JS.....	6		see note 2	
JS.....	7		see note 2	
JS.....	8		see note 2	
JS.....	9		see note 2	
JS.....	10		see note 2	
JS.....	11		see note 2	
JS.....	12		see note 2	
JS.....	13		see note 2	
JS.....	14		see note 2	
JS.....	15		see note 2	
JS.....	16		see note 2	
JS.....	17		see note 2	
JS.....	18		see note 2	
WP.....	1	29.21.6002		
WP.....	2	29.21.6002		
R.....	1	57.11.2332	3.3 kOhm 5%	
R.....	2	00.00.0000	not used	
R.....	3	57.11.3122	1.2 kOhm 5%	
R.....	4	57.11.3122	1.2 kOhm 5%	
R.....	5	00.00.0000	not used	
R.....	6	57.11.3471	470 Ohm 5%	
R.....	7	00.00.0000	not used	
R.....	8	57.11.3472	4.7 kOhm 5%	
R.....	9	57.11.3472	4.7 kOhm 5%	
RZ.....	1	57.88.4332	see note 3	
RZ.....	2	57.88.4332	see note 3	
RZ.....	3	57.88.4332	see note 3	
RZ.....	4	57.88.4332	see note 3	
RZ.....	5	57.88.4332	see note 3	
RZ.....	6	57.88.4332	see note 3	
RZ.....	7	57.88.4332	see note 3	
S.....	1	55.03.0122	Chicago Switch 34-550-001	
Y.....	1	89.01.0560	4.9132 MHz, +-100 ppm	

Ad.	POS.	REF.No.	DESCRIPTION	MANUFACTURER
(20)	88/06/10	Software 22/88		
(21)	88/08/31	Software 35/88		
(22)	89/03/15	Software 20/89		
(23)	90/09/21	Software 42/90		
(24)	91/01/18	Software 04/91		
(25)	91/10/08	Same software as 04/91 suffix (24), improved reset performance.		
Note 1 - IC15/16/18	: Software in set available only.			
Note 2 - Contact pin:	Studer	Nr. 54.01.0020		
	Berg	Nr. 75.160.102-36		
	Philips	Nr. 2422 025 89303		
Bridge:	Studer	Nr. 54.01.0021		
	Berg	Nr. 65.474.001		
	Philips	Nr. 2422 024 88003		
Note 3 - Network:	8 * 3.3 kOhm, 5%			
	Sicovent Nr. C09 x 3.3 k J			
	Ineltro Nr. R88 3.3 k 5%			
Ce=Ceramic, Sal=Solid Aluminium, PETP=Polyesterfilm.				
MANUFACTURER:	fc=Fairchild, hi=Hitachi, itt=Intermetall, Mot=Motorola,			
	NS=National Semiconductors, ON=ONi, Ph=Philips,			
	Ses=Sescom, Tf=Telefunken, TI=Texas Instruments.			
1.820.784.00	MP-UNIT MASTER MCH	80	86/10/3100	
1.820.784.00	MP-UNIT MASTER MCH	80	86/06/1020	
1.820.784.00	MP-UNIT MASTER MCH	80	86/08/3121	
1.820.784.00	MP-UNIT MASTER MCH	80	89/03/1522	
1.820.784.00	MP-UNIT MASTER MCH	80	90/09/2123	
1.820.784.00	MP-UNIT MASTER MCH	80	91/01/1824	
1.820.784.00	MP-UNIT MASTER MCH	80	91/10/0825	
END				

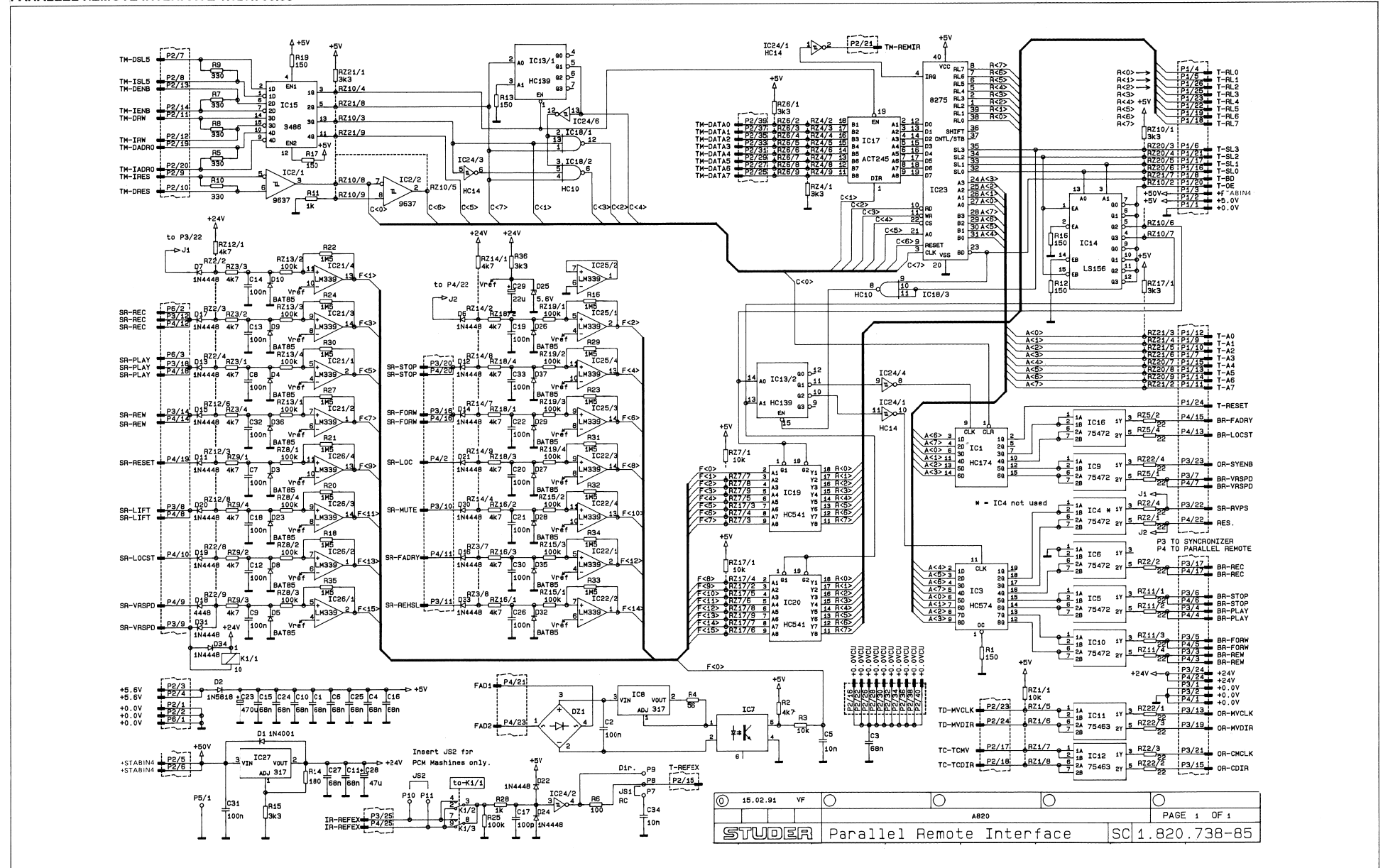
Part No.	Rev.	Status	Appr.
8.10.91	81	38T	
18.1.91	81	2b	
21.9.90	81	2b	
15.3.89	81		
31.8.88	81		
10.6.88	81		
7.11.86	81		
15.3.89	81		
31.8.88	81		
10.6.88	81		
7.11.86	81		
15.3.89	81		
31.8.88	81		
10.6.88	81		
7.11.86	81		
15.3.89	81		
31.8.88	81		
10.6.88	81		
7.11.86	81		

STUDER  
REGENSDORF  
ZÜRICH

MP-UNIT MASTER MCH  
ESE

1.820.784.25

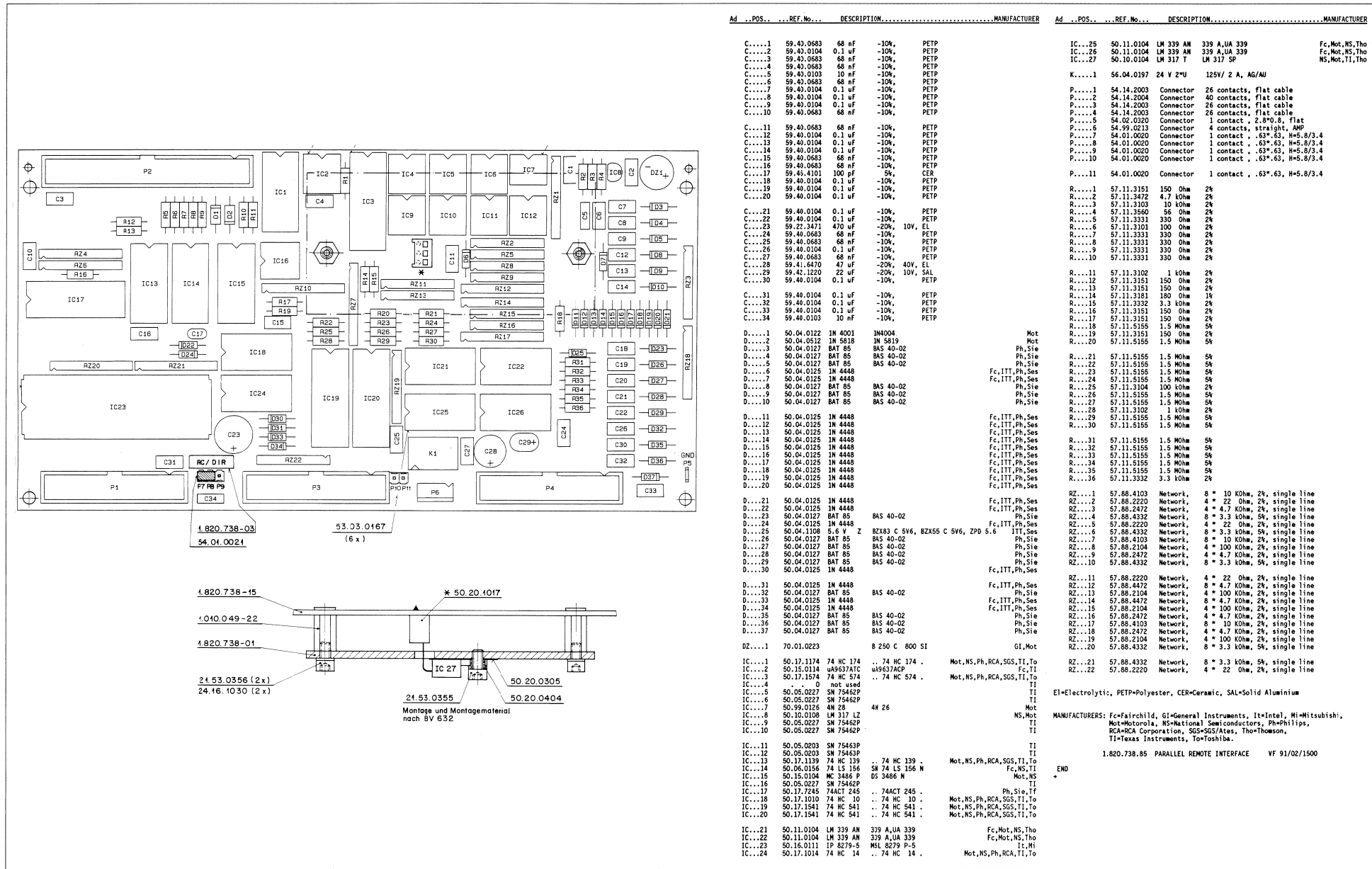
PARALLEL REMOTE INTERFACE 1.820.738.85



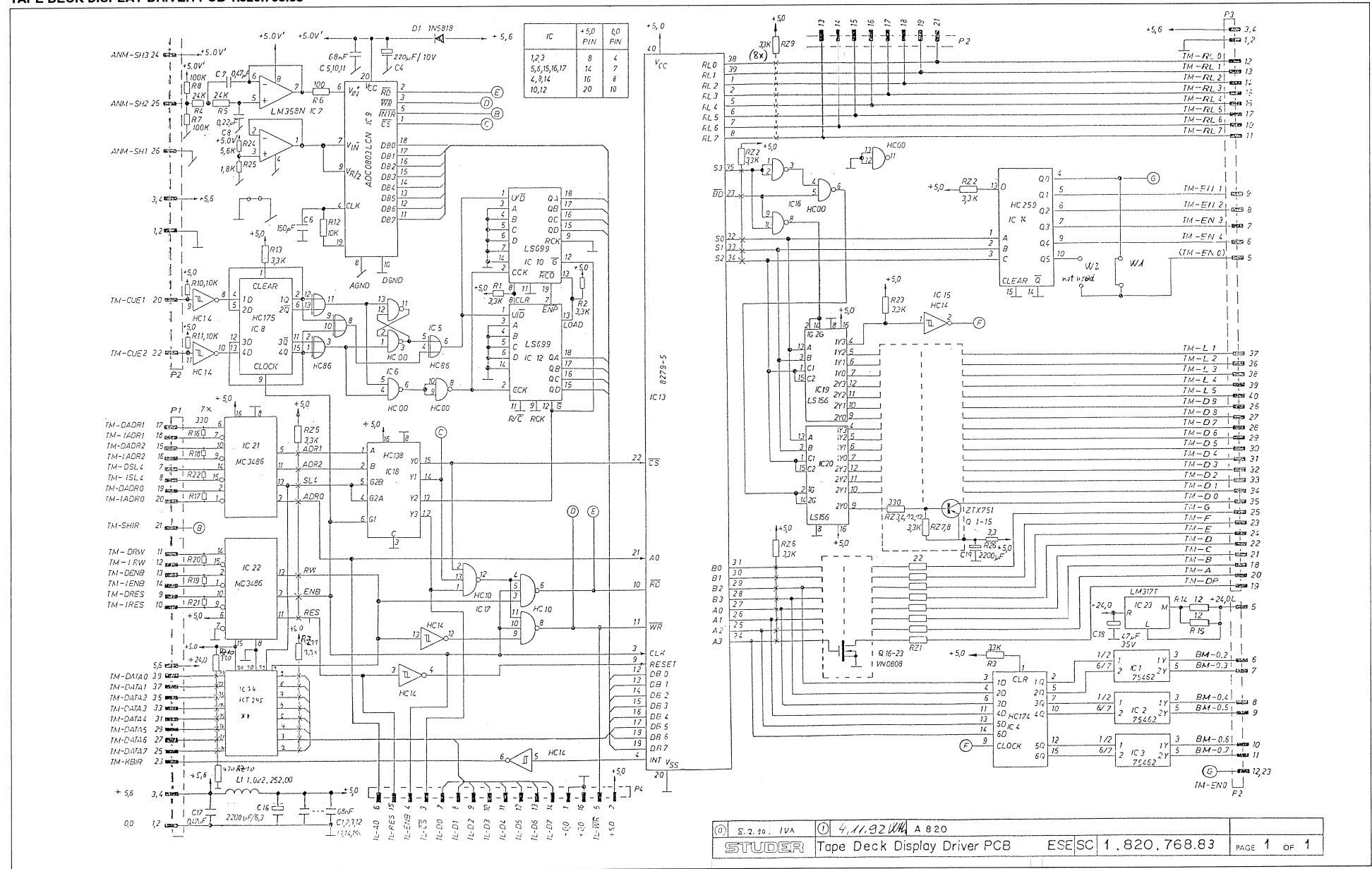




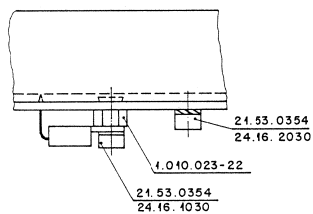
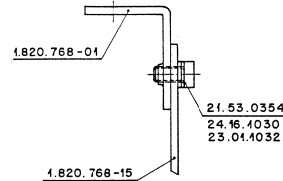
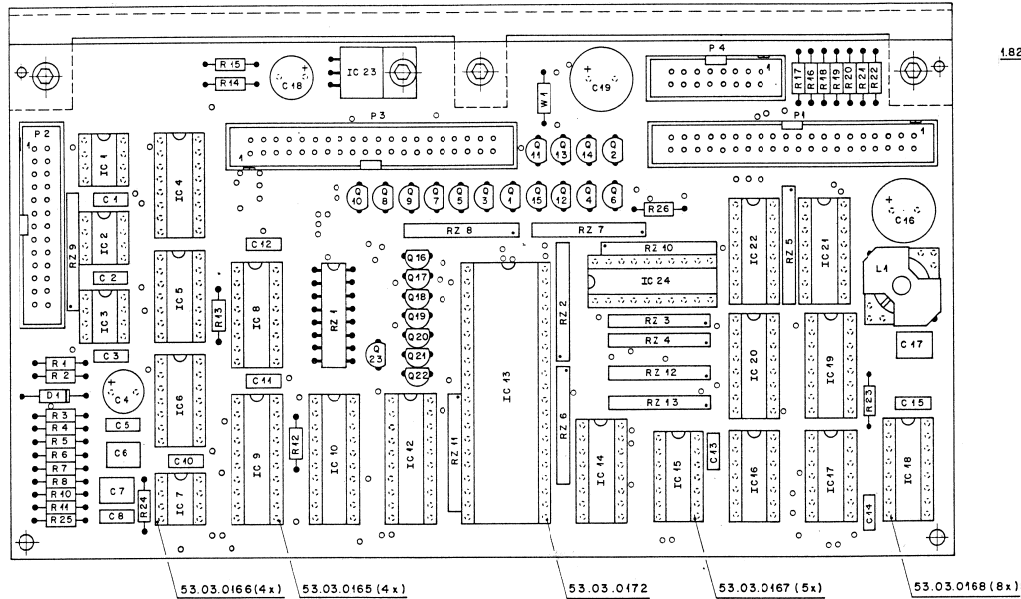
PARALLEL REMOTE INTERFACE 1.820.738.85



TAPE DECK DISPLAY DRIVER PCB 1.820.768.83



TAPE DECK DISPLAY DRIVER PCB 1.820.768.83



STUOER  
REGENSDORF  
ZURICH

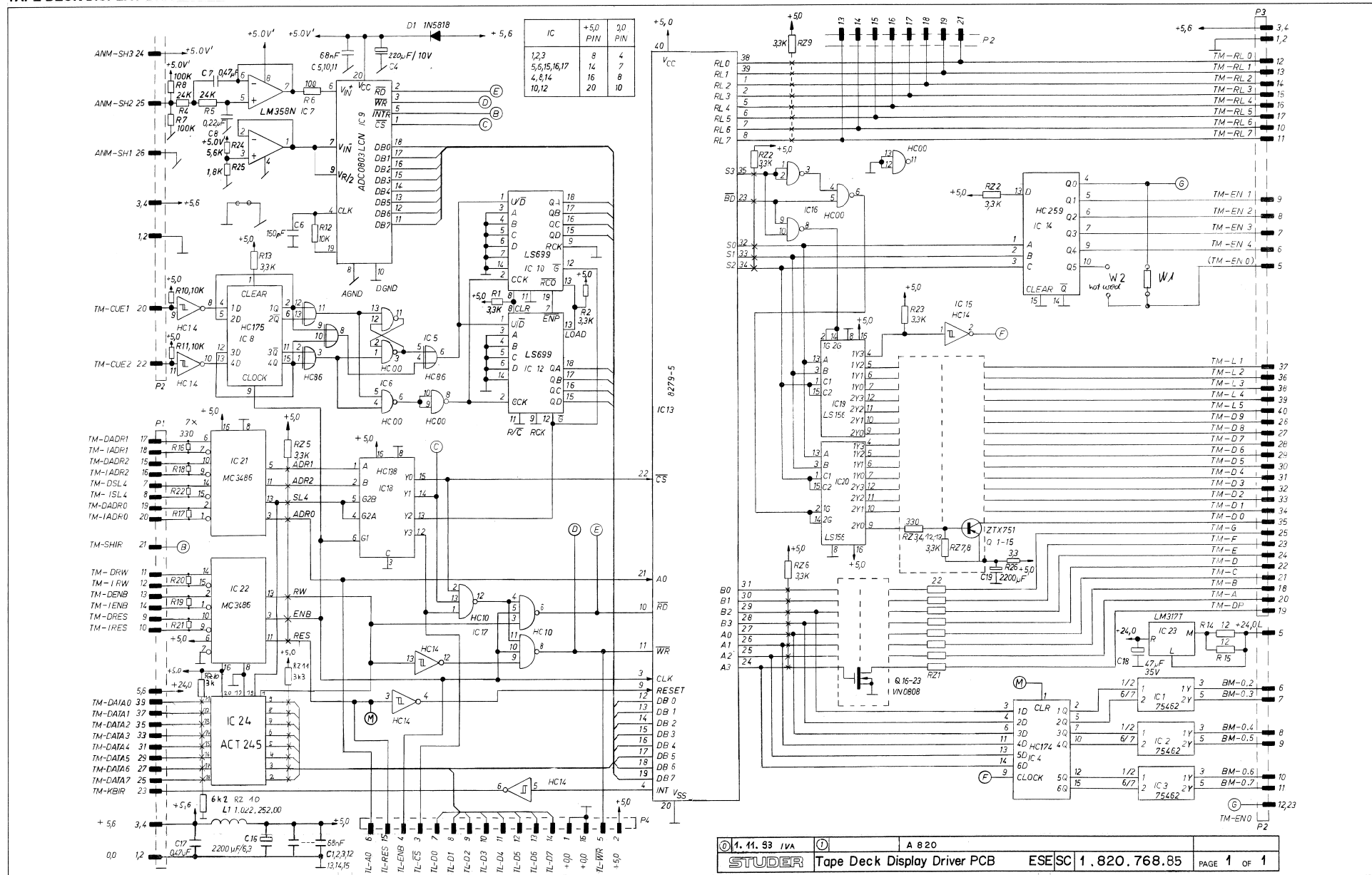
TAPE DECK  
DISPLAY DRIVER ESE

1.820.768-83

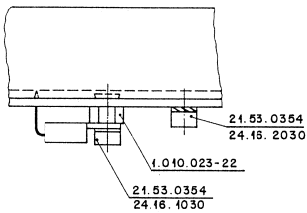
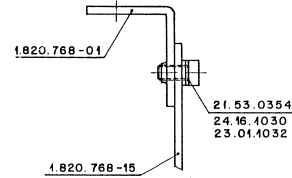
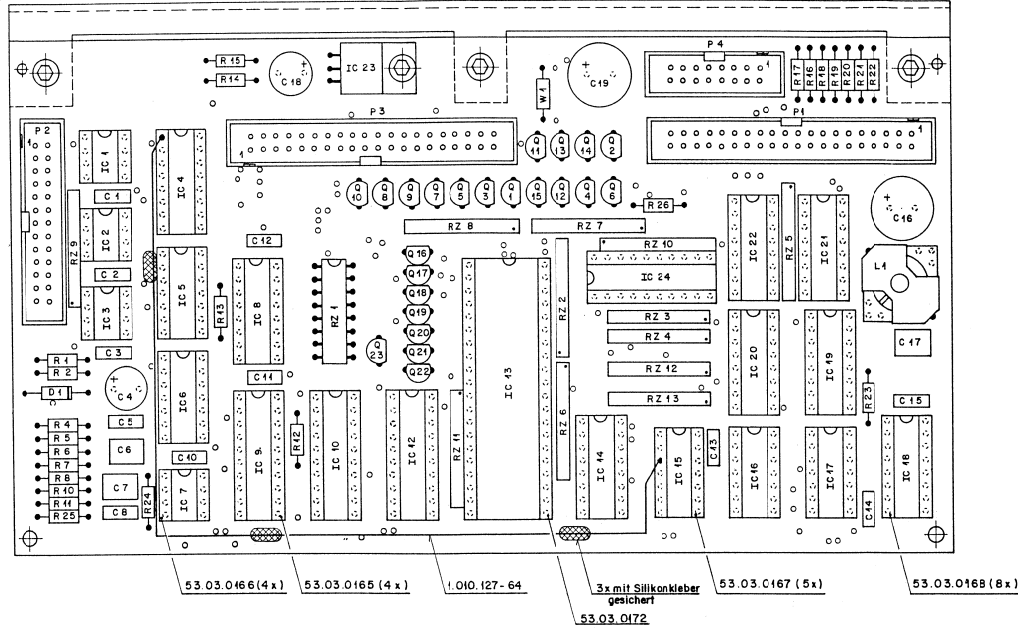
Ad	POS.	REF.No.	DESCRIPTION	MANUFACTURER
IC...11	00.00.0000		not used	
IC...12	50.06.0699		74 LS 699	Mot,NS,TI
IC...13	50.16.0111		1P 8279-5 M S L 8279 P-5	It,NI
IC...14	50.17.1259		74 HC 259	Mot,NS,Ph,RCA,SGS,TI,To
IC...15	50.17.1014		74 HC 14	Mot,NS,Ph,RCA,TI,To
IC...16	50.17.1000		74 HC 00	Mot,NS,Ph,RCA,SGS,TI,To
IC...17	50.17.1010		74 HC 10	Mot,NS,Ph,RCA,TI,To
IC...18	50.17.1138		74 HC 138	Mot,NS,Ph,RCA,SGS,TI,To
IC...19	50.06.0156		74 LS 156	Fc,NS,TI
IC...20	50.06.0156		74 LS 156	Fc,NS,TI
IC...21	50.15.0104		MC 3486 P DS 3486 N	Mot,NS
IC...22	50.15.0104		MC 3486 P DS 3486 N	Mot,NS
IC...23	50.10.0104		LM 317 T ...KC...SP	Mot,NS,SGS,Tho,TI
IC...24	50.17.7245		..74 ACT 245	RCA,FA
L.....1	1.022.252.00		0.32 mH Filter Coil	St
P.....1	54.14.2004		Connector 40 contacts, flat cable	
P.....2	54.14.2003		Connector 26 contacts, flat cable	
P.....3	54.14.2004		Connector 40 contacts, flat cable	
P.....4	54.14.2002		Connector 16 contacts, flat cable	
Q.....1	50.03.0352		ZTX 751 S	Fe
Q.....2	50.03.0352		ZTX 751 S	Fe
Q.....3	50.03.0352		ZTX 751 S	Fe
Q.....4	50.03.0352		ZTX 751 S	Fe
Q.....5	50.03.0352		ZTX 751 S	Fe
Q.....6	50.03.0352		ZTX 751 S	Fe
Q.....7	50.03.0352		ZTX 751 S	Fe
Q.....8	50.03.0352		ZTX 751 S	Fe
Q.....9	50.03.0352		ZTX 751 S	Fe
Q.....10	50.03.0352		ZTX 751 S	Fe
Q.....11	50.03.0352		ZTX 751 S	Fe
Q.....12	50.03.0352		ZTX 751 S	Fe
Q.....13	50.03.0352		ZTX 751 S	Fe
Q.....14	50.03.0352		ZTX 751 S	Fe
Q.....15	50.03.0352		ZTX 751 S	Fe
Q.....16	50.03.1505		VN 0808M	Fe,Six
Q.....17	50.03.1505		VN 0808M	Fe,Six
Q.....18	50.03.1505		VN 0808M	Fe,Six
Q.....19	50.03.1505		VN 0808M	Fe,Six
Q.....20	50.03.1505		VN 0808M	Fe,Six
Q.....21	50.03.1505		VN 0808M	Fe,Six
Q.....22	50.03.1505		VN 0808M	Fe,Six
Q.....23	50.03.1505		VN 0808M	Fe,Six
R.....1	57.11.3332		3.3 kOhm 2%	
R.....2	57.11.3332		3.3 kOhm 2%	
R.....3	57.11.3332		3.3 kOhm 2%	
R.....4	57.11.3103		24 kOhm 1%	
R.....5	57.11.3243		24 kOhm 1%	
R.....6	57.11.3101		100 Ohm 2%	
R.....7	57.11.3104		100 kOhm 2%	
R.....8	57.11.3104		100 Ohm 2%	
R.....9	57.11.3103		10 kOhm 2%	
R.....10	57.11.3103		10 kOhm 2%	
R.....11	57.11.3103		10 kOhm 2%	
R.....12	57.11.3103		10 kOhm 2%	
R.....13	57.11.3332		3.3 kOhm 2%	
R.....14	57.11.3120		12 Ohm 2%	
R.....15	57.11.3120		12 Ohm 2%	
R.....16	57.11.3331		330 Ohm 2%	
R.....17	57.11.3331		330 Ohm 2%	
R.....18	57.11.3331		330 Ohm 2%	
R.....19	57.11.3331		330 Ohm 2%	
R.....20	57.11.3331		330 Ohm 2%	
R.....21	57.11.3331		330 Ohm 2%	
R.....22	57.11.3331		330 Ohm 2%	
R.....23	57.11.3332		3.3 kOhm 2%	
R.....24	57.11.3562		5.6 kOhm 1%	
R.....25	57.11.3182		1.8 kOhm 1%	
R.....26	57.11.3339		3.3 kOhm 2%	
RZ...1	57.88.3220		Network, 8 * 22 Ohm, 2%, OIL 16	
RZ...2	57.88.4332		Network, 8 * 3.3 kOhm, 5%, SIP 9	
RZ...3	57.88.2331		Network, 4 * 330 Ohm, 2%, SIP 8	
RZ...4	57.88.2331		Network, 4 * 330 Ohm, 2%, SIP 8	
RZ...5	57.88.4332		Network, 8 * 3.3 kOhm, 5%, SIP 9	
RZ...6	57.88.4332		Network, 8 * 3.3 kOhm, 5%, SIP 9	
RZ...7	57.88.4332		Network, 8 * 3.3 kOhm, 5%, SIP 9	
RZ...8	57.88.4332		Network, 8 * 3.3 kOhm, 5%, SIP 9	
RZ...9	57.88.4332		Network, 8 * 3.3 kOhm, 5%, SIP 9	
RZ...10	57.80.4001		Network, 8 * 470/330 Ohm, 2%, SIP10	
RZ...11	57.88.4332		Network, 8 * 3.3 kOhm, 2%, SIP 9	
RZ...12	57.88.2331		Network, 4 * 330 Ohm, 2%, SIP 8	
RZ...13	57.88.2331		Network, 4 * 330 Ohm, 2%, SIP 8	
W.....1	57.11.3000		0 Ohm Resistor or insulated wire bridge	
W.....2	57.00.0000		not used	
D.....1	50.04.0512		1N 5818 1N 5819	Mot
IC...1	50.05.0227		SN 75462P SN 75462 JG, SN 75472P	TI
IC...2	50.05.0227		SN 75462P SN 75462 JG, SN 75472P	TI
IC...3	50.05.0227		SN 75462P SN 75462 JG, SN 75472P	TI
IC...4	50.17.1174		74 HC 174	Not,NS,Ph,RCA,SGS,TI,To
IC...5	50.17.1086		74 HC 86	Not,NS,Ph,RCA,TI,To
IC...6	50.17.1000		74 HC 00	Mot,NS,Ph,RCA,TI,To
IC...7	50.05.0286		LM 358 N LM 358 P	Not,NS,TI
IC...8	50.17.1175		74 HC 175	Not,NS,Ph,SGS,TI,To
IC...9	50.07.0029		ADCC8031CN	Is,NS
IC...10	50.06.0699		74 LS 699	Not,NS,TI

Author	
Checked	14.12.89
Design	
Exec	
Draw	
Knowl	

TAPE DECK DISPLAY DRIVER PCB 1.820.768.85



TAPE DECK DISPLAY DRIVER PCB 1.820.768.85



Ad	POS	REF.No	DESCRIPTION	MANUFACTURER
IC...11	00.00.0000		not used	
IC...12	50.06.0699		74 LS 699	Mot.NS, TI
IC...13	50.16.0111		IP 8279-5 M 5 L 8279 P-5	IC, WI
IC...14	50.17.1259		74 HC 259	Mot.NS, Ph, RCA, SGS, TI, To
IC...15	50.17.1014		74 HC 14	Mot.NS, Ph, RCA, TI, To
IC...16	50.17.1000		74 HC 00	Mot.NS, Ph, RCA, SGS, TI, To
IC...17	50.17.1010		74 HC 10	Mot.NS, Ph, RCA, TI, To
IC...18	50.17.1138		74 HC 138	Mot.NS, Ph, RCA, SGS, TI, To
IC...19	50.06.0156		74 LS 156	Fc, NS, TI
IC...20	50.06.0156		74 LS 156	Fc, NS, TI

Ad	POS	REF.No	DESCRIPTION	MANUFACTURER
IC...21	50.15.0104		MC 3486 P DS 3486 N	Mot.NS
IC...22	50.15.0104		MC 3486 P DS 3486 N	Mot.NS
IC...23	50.10.0104		LM 317 T ...KC...SP	Mot.NS, SGS, Tho, TI, RCA, FA
IC...24	50.17.7245		.. 74 ACT 245	
L....1	1.022.252.00		0.32 mH Filter Coil	St
P....1	54.14.2004		Connector 40 contacts, flat cable	
P....2	54.14.2003		Connector 26 contacts, flat cable	
P....3	54.14.2004		Connector 40 contacts, flat cable	
P....4	54.14.2002		Connector 16 contacts, flat cable	

Q....1	50.03.0352	ZTX 751 S	Fe
Q....2	50.03.0352	ZTX 751 S	Fe
Q....3	50.03.0352	ZTX 751 S	Fe
Q....4	50.03.0352	ZTX 751 S	Fe
Q....5	50.03.0352	ZTX 751 S	Fe
Q....6	50.03.0352	ZTX 751 S	Fe
Q....7	50.03.0352	ZTX 751 S	Fe
Q....8	50.03.0352	ZTX 751 S	Fe
Q....9	50.03.0352	ZTX 751 S	Fe
Q....10	50.03.0352	ZTX 751 S	Fe

Q....11	50.03.0352	ZTX 751 S	Fe
Q....12	50.03.0352	ZTX 751 S	Fe
Q....13	50.03.0352	ZTX 751 S	Fe
Q....14	50.03.0352	ZTX 751 S	Fe
Q....15	50.03.0352	ZTX 751 S	Fe
Q....16	50.03.1505	VN 0808M	Fe, SiX
Q....17	50.03.1505	VN 0808M	Fe, SiX
Q....18	50.03.1505	VN 0808M	Fe, SiX
Q....19	50.03.1505	VN 0808M	Fe, SiX
Q....20	50.03.1505	VN 0808M	Fe, SiX

R....1	57.11.3332	3.3 kOhm 2%	
R....2	57.11.3332	3.3 kOhm 2%	
R....3	00.00.0000	not used	
R....4	57.11.3243	24 kOhm 1%	
R....5	57.11.3243	24 kOhm 1%	
R....6	57.11.3101	100 Ohm 2%	
R....7	57.11.3104	100 kOhm 2%	
R....8	57.11.3104	100 kOhm 2%	
R....9	57.11.3103	10 kOhm 2%	
R....10	57.11.3103	10 kOhm 2%	
R....11	57.11.3103	10 kOhm 2%	
R....12	57.11.3103	10 kOhm 2%	
R....13	57.11.3332	3.3 kOhm 2%	
R....14	57.11.3120	12 Ohm 2%	
R....15	57.11.3120	12 Ohm 2%	
R....16	57.11.3331	330 Ohm 2%	
R....17	57.11.3331	330 Ohm 2%	
R....18	57.11.3331	330 Ohm 2%	
R....19	57.11.3331	330 Ohm 2%	
R....20	57.11.3331	330 Ohm 2%	

R....21	57.11.3331	330 Ohm 2%	
R....22	57.11.3331	330 Ohm 2%	
R....23	57.11.3332	3.3 kOhm 2%	
R....24	57.11.3562	5.6 kOhm 1%	
R....25	57.11.3182	1.8 kOhm 1%	
R....26	57.11.3339	3.3 kOhm 2%	

RZ...1	57.88.3220	Network, 8 * 22 Ohm, 2%, DIL 16	
RZ...2	57.88.4332	Network, 8 * 3.3 kOhm, 5%, SIP 9	
RZ...3	57.88.2331	Network, 4 * 330 Ohm, 2%, SIP 8	
RZ...4	57.88.2331	Network, 4 * 330 Ohm, 2%, SIP 8	
RZ...5	57.88.4332	Network, 8 * 3.3 kOhm, 5%, SIP 9	
RZ...6	57.88.4332	Network, 8 * 3.3 kOhm, 5%, SIP 9	
RZ...7	57.88.4332	Network, 8 * 3.3 kOhm, 5%, SIP 9	
RZ...8	57.88.4332	Network, 8 * 3.3 kOhm, 5%, SIP 9	
RZ...9	57.88.4332	Network, 8 * 3.3 kOhm, 5%, SIP 9	
RZ...10	57.80.4007	Network, 8 * 3.0/6.2 kOhm 2%, SIP10	
RZ...11	57.88.4332	Network, 8 * 3.3 kOhm, 2%, SIP 9	
RZ...12	57.88.2331	Network, 4 * 330 Ohm, 2%, SIP 8	
RZ...13	57.88.2331	Network, 4 * 330 Ohm, 2%, SIP 8	

W....1	57.11.3000	0 Ohm Resistor or insulated wire bridge	
W....2	00.00.0000	not used	

El=Electrolytic, PET=Polyester, PP=Polypropylene  
 MANUFACTURERS: Fc=Fairchild, Fe=Ferranti, Is=Intersil, It=Intel, M=Motorola, NS=National Semiconductors, Ph=Philips, RCA=RCA Corporation, SGS=SGS/Ates, SiX=Siliconix, St=Studer, Tho=Thomson, TI=Texas Instruments, To=Toshiba.

Ad	POS	REF.No	DESCRIPTION	MANUFACTURER
----	-----	--------	-------------	--------------

C....1	59.06.0683	68 nF	-10%, 63V, PETP	
C....2	59.06.0683	68 nF	-10%, 63V, PETP	
C....3	59.06.0683	68 nF	-10%, 63V, PETP	
C....4	59.22.3221	220 uF	-20%, 10V, EI	
C....5	59.06.0683	68 nF	-10%, 63V, PETP	
C....6	59.05.2151	150 pF	2.5%, NP	
C....7	59.06.0474	470 nF	-20%, 63V, PETP	
C....8	59.06.0224	220 nF	-20%, 63V, PETP	
C....10	59.06.0683	68 nF	-10%, 63V, PETP	

C....11	59.06.0683	68 nF	-10%, 63V, PETP	
C....12	59.06.0683	68 nF	-10%, 63V, PETP	
C....13	59.06.0683	68 nF	-10%, 63V, PETP	
C....14	59.06.0683	68 nF	-10%, 63V, PETP	
C....15	59.06.0683	68 nF	-10%, 63V, PETP	
C....16	59.22.2222	2200 uF	-20%, 6.3V, EI	
C....17	59.06.0474	470 nF	-10%, 63V, PETP	
C....18	59.22.6470	47 uF	-10%, 40V, EI	
C....19	59.22.2222	2200 uF	-20%, 6.3V, EI	

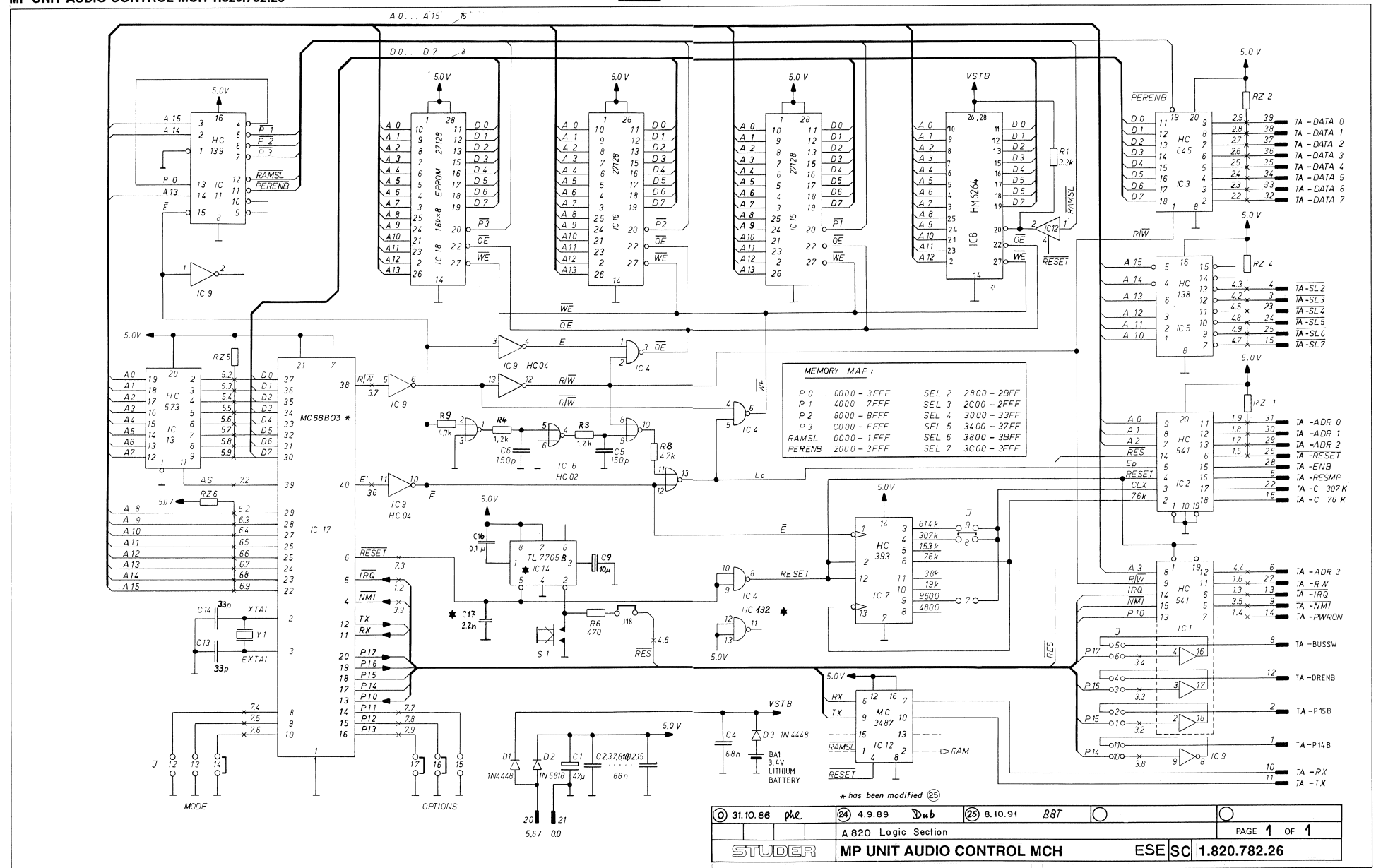
D....1	50.04.0512	1N 5818	1N 5819	Mot
IC....1	50.05.0227	SN 75462P	SN 75462 JG, SN 75472P	TI
IC....2	50.05.0227	SN 75462P	SN 75462 JG, SN 75472P	TI
IC....3	50.05.0227	SN 75462P	SN 75462 JG, SN 75472P	TI
IC....4	50.17.1174	74 HC 174		Mot.NS, Ph, RCA, SGS, TI, To
IC....5	50.17.1085	74 HC 86		Mot.NS, Ph, RCA, TI, To
IC....6	50.17.1000	74 HC 00		Mot.NS, Ph, RCA, TI, To
IC....7	50.05.0285	LM 358 N	LM 358 P	Mot.NS, TI
IC....8	50.17.1175	74 HC 175		Mot.NS, Ph, SGS, TI, To
IC....9	50.07.0029	ADC0801LM		IS, NS
IC....10	50.06.0699	74 LS 699		Mot.NS, TI

STUDER  
 REGENBOGEN  
 ZÜRICH  
 TAPE DECK  
 DISPLAY DRIVER ESE  
 1.820.768-85

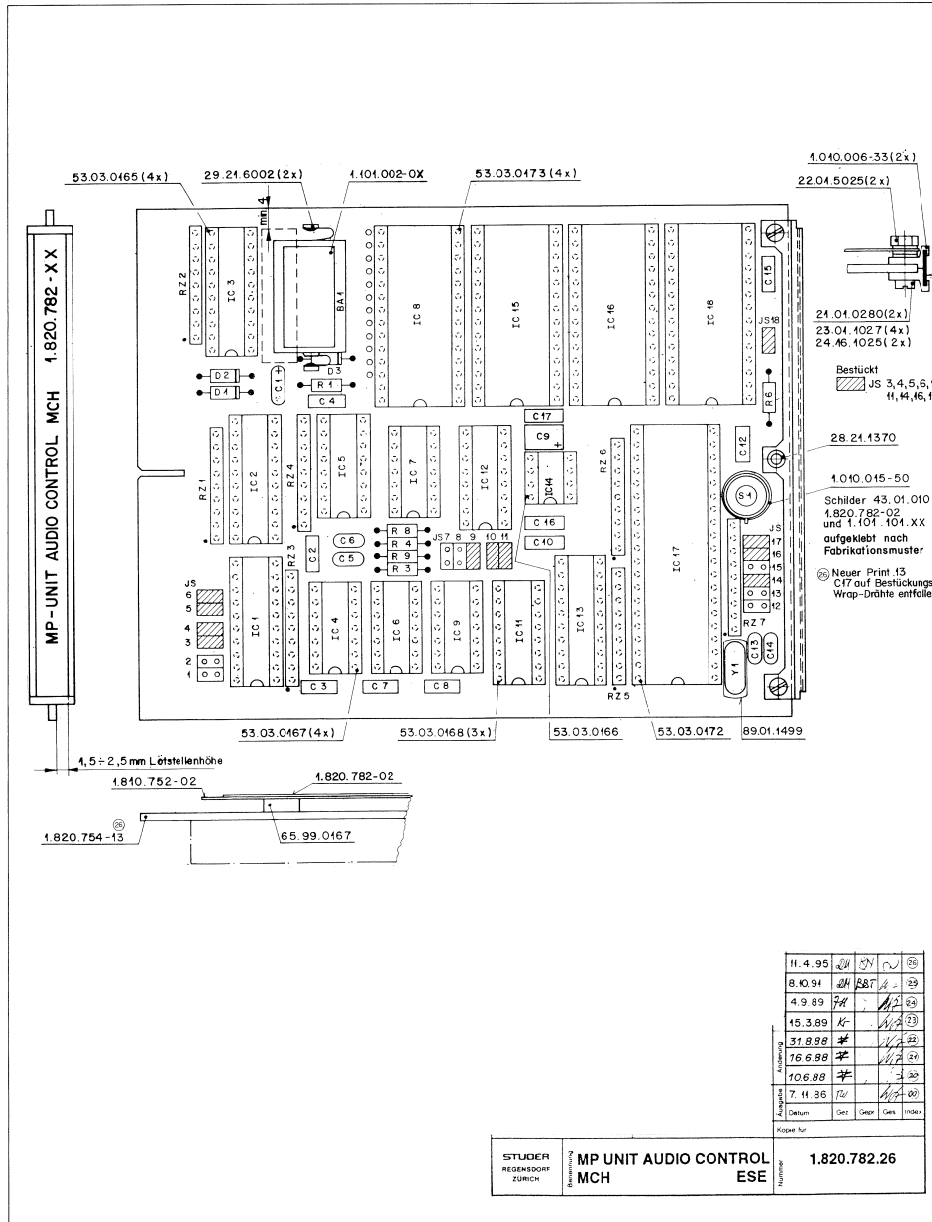
Freigegeben	Konzipiert	Gezeichnet	Geprüft	Gezeichnet	Geprüft

Freigegeben	Datum	Gez.	Gepr.	Gez.	Inhalt
	1.11.95				

MP UNIT AUDIO CONTROL MCH 1.820.782.26



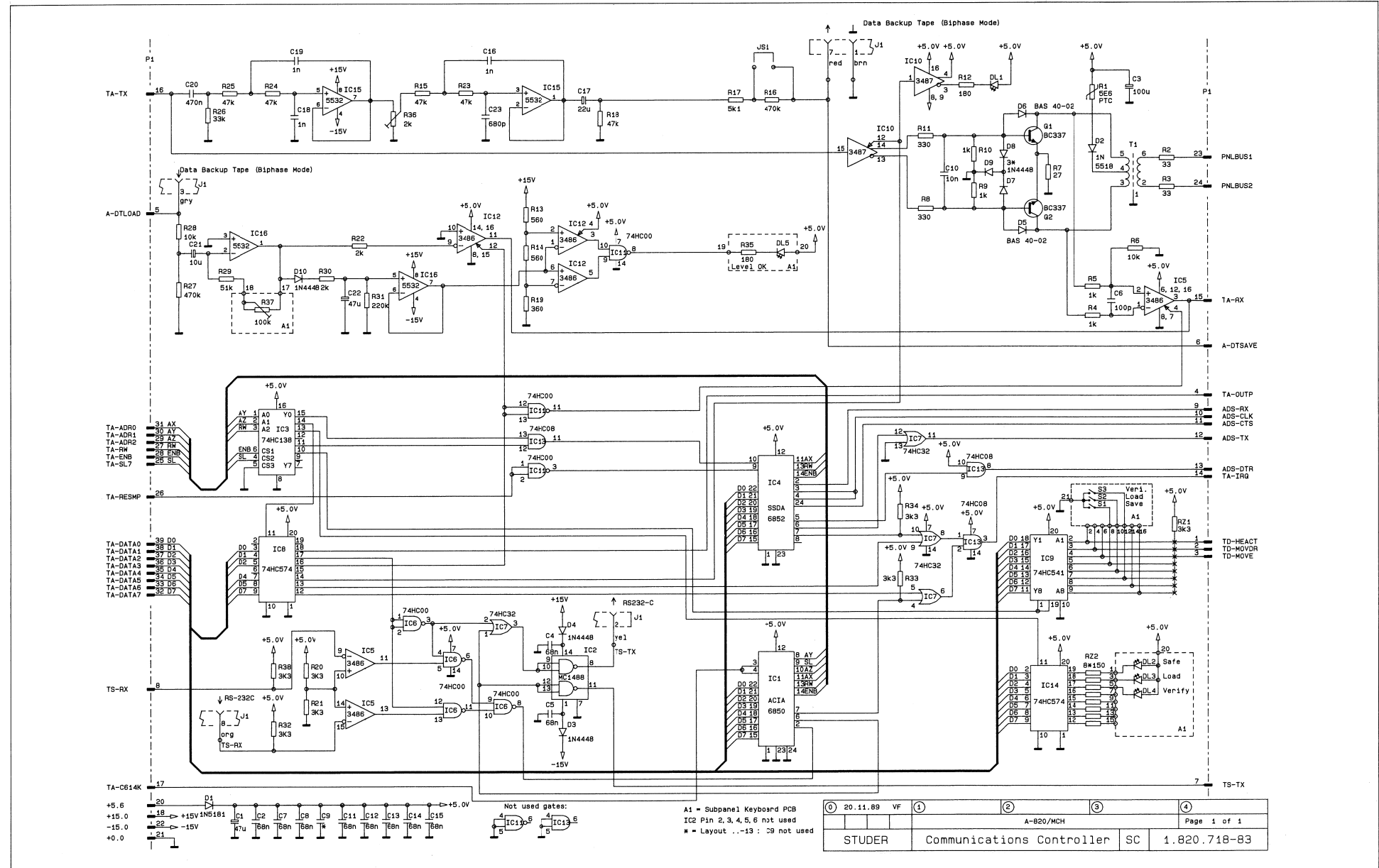
MP UNIT AUDIO CONTROL MCH 1.820.782.26



Id	POS.	REF.No.	DESCRIPTION	MANUFACTURER
BA...	1	89.01.0275	Batt, Lith., 3.6V, D 14.7*25.5	
C....	1	59.26.0470	47 uF 20%, 63V, Sa1	Ph
C....	2	59.06.0683	68 nF 10%, 63V, PETP	
C....	3	59.06.0683	68 nF 10%, 63V, PETP	
C....	4	59.06.0683	68 nF 10%, 63V, PETP	
C....	5	59.34.7151	150 pF 2%, Ce	
C....	6	59.34.7151	150 pF 2%, Ce	
C....	7	59.06.0683	68 nF 10%, 63V, PETP	
C....	8	59.06.0683	68 nF 10%, 63V, PETP	
C....	9	59.26.0100	10 nF 20%, 16V, Sa1	
C....	10	59.06.0683	68 nF 10%, 63V, PETP	
C....	11	00.00.0000	not used	
C....	12	59.06.0683	68 nF 10%, 63V, PETP	
C....	13	59.34.2330	33 pF 5%, Ce	
C....	14	59.34.2330	33 pF 5%, Ce	
C....	15	59.06.0683	68 nF 10%, 63V, PETP	
C....	16	59.06.0104	100 nF 10%, 63V, PETP	
C....	17	59.06.0222	2.2 nF 10%, 63V, PETP	
D....	1	50.04.0125	1N 4448	Fc,ITT,Ph,Ses,Tf
D....	2	50.04.0312	1N 5318	Mot
D....	3	50.04.0125	1N 4448	Fc,ITT,Ph,Ses,Tf
IC....	1	50.17.1541	74 HC 541	Mot,NS,Ph,RCA,SGS,TT,To
IC....	2	50.17.1541	74 HC 541	Mot,NS,Ph,RCA,SGS,TT,To
IC....	3	50.17.1645	74 HC 645	Mot,NS,Ph,RCA,SGS,TT,To
IC....	4	50.17.1000	74 HC 00	Mot,NS,Ph,RCA,SGS,TT,To
IC....	4	50.17.1132	74 HC 132	Mot,NS,Ph,RCA,SGS,TT,To
IC....	5	50.17.1138	74 HC 138	Mot,NS,Ph,RCA,SGS,TT,To
IC....	6	50.17.1002	74 HC 02	Mot,NS,Ph,RCA,SGS,TT,To
IC....	7	50.17.1393	74 HC 393	Mot,NS,Ph,RCA,SGS,TT,To
IC....	8	50.14.0133	HM264P-15 TC 5564-15	Hi,To
IC....	9	50.17.0004	74 HCT 04	Mot,NS,Ph,RCA,SGS,TT,To
IC....	10	00.00.0000	not used	
IC....	11	50.17.1139	74 HC 139	Mot,NS,Ph,RCA,SGS,TT,To
IC....	12	50.15.0105	MC 3487 P DS 3487 N	Mot,NS
IC....	13	50.17.1573	74 HC 573	Mot,NS,Ph,RCA,SGS,TT,To
IC....	14	50.11.0122	1U7056CP	TI
IC....	14	1.820.782-02	1U7056CP	TI
IC....	15	50.14.0125	27128 1N 4827128G-30	Hi,It
IC....	15	1.820.987.20	27128 Software 22/88	see note 1
IC....	15	1.820.987.21	27128 Software 24/88	see note 1
IC....	15	1.820.987.22	27128 Software 35/88	see note 1
IC....	15	1.820.987.23	27128 Software 20/89	see note 1
IC....	15	1.820.987.24	27128 Software 41/90	see note 1
IC....	16	50.14.0125	27128 1N 4827128G-30	Hi,It
IC....	16	1.820.987.20	27128 Software 22/88	see note 1
IC....	16	1.820.987.21	27128 Software 24/88	see note 1
IC....	16	1.820.987.22	27128 Software 35/88	see note 1
IC....	16	1.820.987.23	27128 Software 20/89	see note 1
IC....	16	1.820.987.24	27128 Software 41/90	see note 1
IC....	17	50.16.0130	MC6803P-1 6803P-L	Mot,Hi
IC....	17	50.16.0130	MC6803P	MC6803S
IC....	18	50.14.0125	27128 1N 4827128G-30	Hi,It
IC....	18	1.820.987.20	27128 Software 22/88	see note 1
IC....	18	1.820.987.21	27128 Software 24/88	see note 1
IC....	18	1.820.987.22	27128 Software 35/88	see note 1
IC....	18	1.820.987.23	27128 Software 20/89	see note 1
IC....	18	1.820.987.24	27128 Software 41/90	see note 1
JS....	1	54.01.0021		see note 2
JS....	2	54.01.0021		see note 2
JS....	3	54.01.0021		see note 2
JS....	4	54.01.0021		see note 2
JS....	5	54.01.0021		see note 2
JS....	6	54.01.0021		see note 2
JS....	7	54.01.0021		see note 2
JS....	8	54.01.0021		see note 2
JS....	9	54.01.0021		see note 2
JS....	10	54.01.0021		see note 2
JS....	11	54.01.0021		see note 2
JS....	12	54.01.0021		see note 2
JS....	13	54.01.0021		see note 2
JS....	14	54.01.0021		see note 2
JS....	15	54.01.0021		see note 2
JS....	16	54.01.0021		see note 2
JS....	17	54.01.0021		see note 2
JS....	18	54.01.0021		see note 2
MP....	1	29.21.6002		
MP....	2	29.21.6002		
R....	1	57.11.3332	3.3 kOhm 5%	
R....	2	00.00.0000	not used	
R....	3	57.11.3122	1.2 kOhm 5%	
R....	4	57.11.3122	1.2 kOhm 5%	
R....	5	00.00.0000	not used	
R....	6	57.11.3471	470 Ohm 5%	
R....	7	00.00.0000	not used	
R....	8	57.11.3472	4.7 kOhm 5%	
R....	9	57.11.3472	4.7 kOhm 5%	
RZ....	1	57.88.4332		see note 3
RZ....	2	57.88.4332		see note 3
RZ....	3	57.88.4332		see note 3
RZ....	4	57.88.4332		see note 3
RZ....	5	57.88.4332		see note 3
RZ....	6	57.88.4332		see note 3
RZ....	7	57.88.4332		see note 3
S....	1	55.03.0122	Chicago Switch 34-550-001	

Ad	POS.	REF.No.	DESCRIPTION	MANUFACTURER
Y....	1	89.01.0560	4.9152 Mhz, 4-100 ppm	
(20)	88/06/10	Software 22/88		
(21)	88/06/16	Software 24/88		
(22)	88/08/31	Software 35/88		
(23)	89/03/15	Software 20/89		
(24)	90/09/20	Software 41/90		
(25)	91/10/08	Same software as 41/90 suffix (24), improved reset performance.		
Note 1 - IC15/16/18 : Software in set available only.				
Note 2 - Contact pin:				
	Stud	Nr. 54.01.0020		
	Berg	Nr. 75 160-102-36		
	Philips	Nr. 2422 025 89303		
	Bridge:	Philips Nr. 54.01.0021		
	Berg	Nr. 65 474-001		
	Philips	Nr. 2422 024 88003		
Note 3 - Network: 8 * 3.3 kOhm, 5% Sicovend Nr. C09 x 3.3 k J Ineltro Nr. R88 3.3 k 5%				
Ce=Ceramic, Sa=Solid Aluminium, PETP=Polyesterfilm.				
MANUFACTURER: Fc=Fairchild, Hi=Hitachi, ITT=Intermetall, Mot=Motorola, NS=National Semiconductors, Ok=OKI, Ph=Philips, Ses=Siemens, Tf=Telefunken, TI=Texas Instruments.				
	1.820.782.00	MP-UNIT AUDIO CONTROL MCH	80 84/10/2100	
	1.820.782.00	MP-UNIT AUDIO CONTROL MCH	80 88/06/1020	
	1.820.782.00	MP-UNIT AUDIO CONTROL MCH	80 88/06/1621	
	1.820.782.00	MP-UNIT AUDIO CONTROL MCH	80 88/08/3122	
	1.820.782.00	MP-UNIT AUDIO CONTROL MCH	80 89/03/1523	
	1.820.782.00	MP-UNIT AUDIO CONTROL MCH	28 90/09/2024	
	1.820.782.00	MP-UNIT AUDIO CONTROL MCH	88791/10/0825	
END				

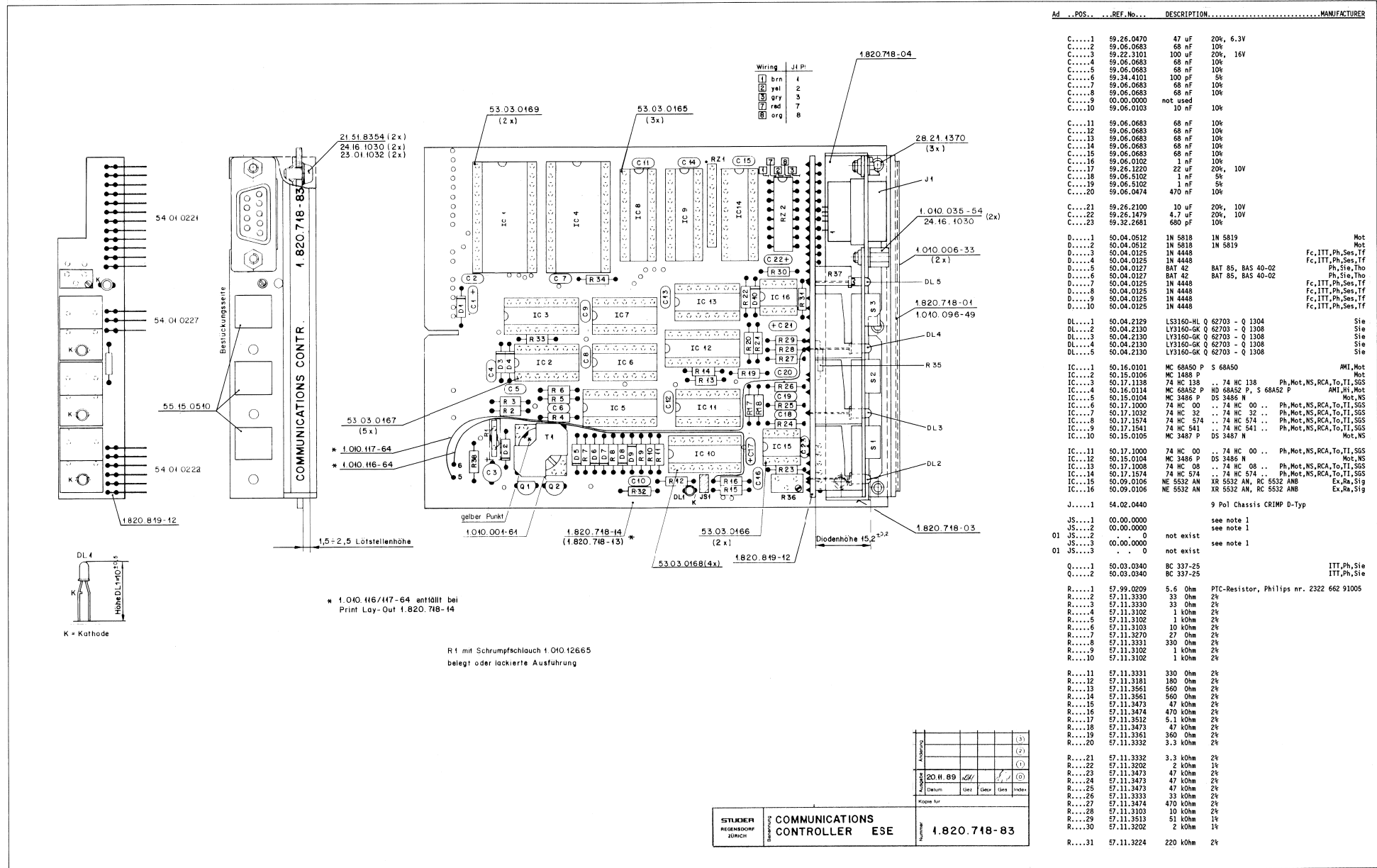
COMMUNICATIONS CONTROLLER 1.820.718.83







COMMUNICATIONS CONTROLLER 1.820.718.83



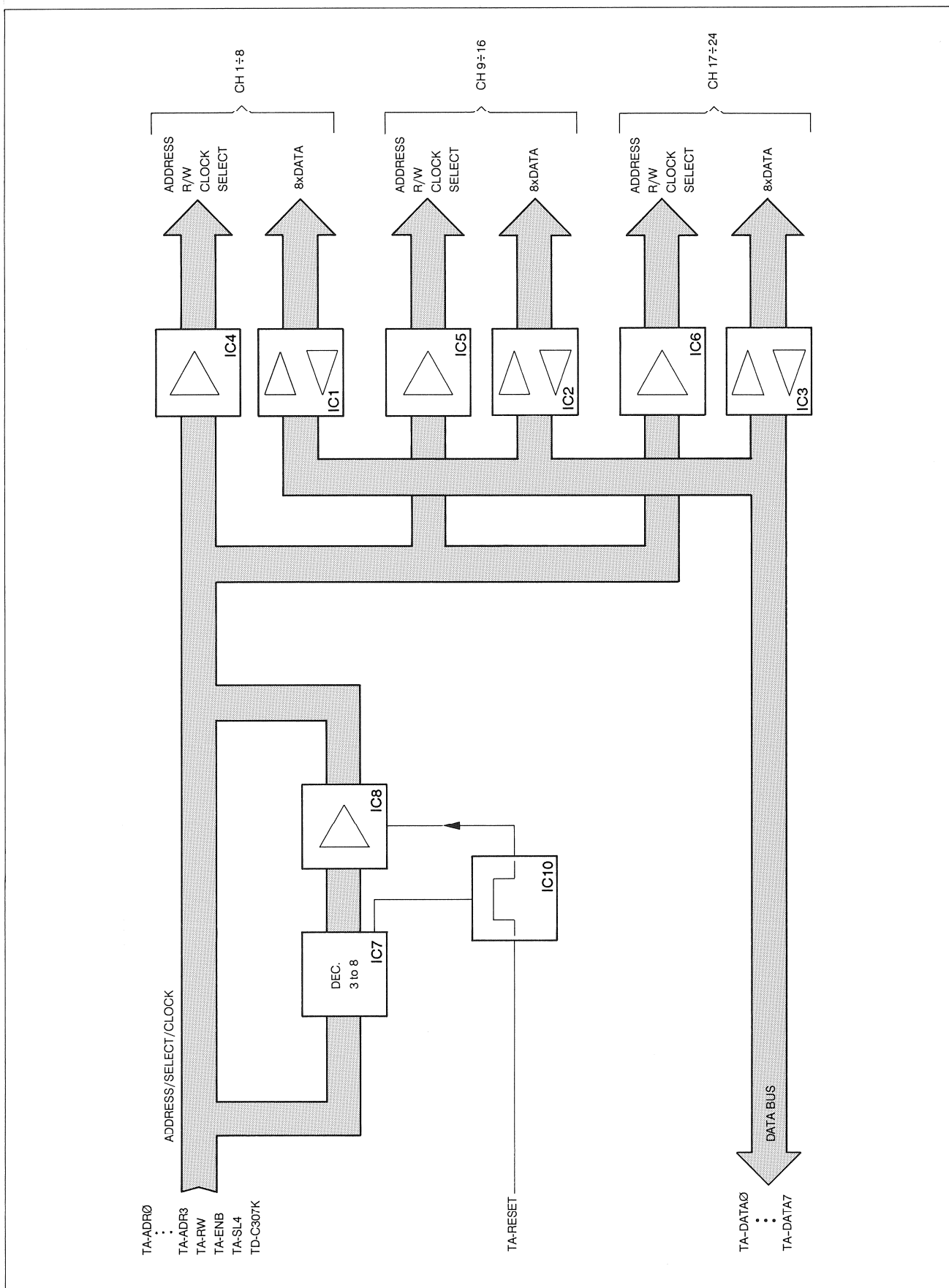
Ad	POS	REF.No	DESCRIPTION	MANUFACTURER
C....1	59.26.0470	47 uF	20%, 6.3V	
C....2	59.06.0683	68 nF	10%	
C....3	59.22.3101	100 uF	20%, 16V	
C....4	59.06.0683	68 nF	10%	
C....5	59.06.0683	68 nF	10%	
C....6	59.34.4101	100 pF	5%	
C....7	59.06.0683	68 nF	10%	
C....8	59.06.0683	68 nF	10%	
C....9	00.00.0000	not used		
C....10	59.06.0103	10 nF	10%	
C....11	59.06.0683	68 nF	10%	
C....12	59.06.0683	68 nF	10%	
C....13	59.06.0683	68 nF	10%	
C....14	59.06.0683	68 nF	10%	
C....15	59.06.0683	68 nF	10%	
C....16	59.06.0102	1 nF	10%	
C....17	59.26.1220	22 uF	20%, 10V	
C....18	59.06.5102	1 nF	5%	
C....19	59.06.5102	1 nF	5%	
C....20	59.06.0474	470 nF	10%	
C....21	59.26.2100	10 uF	20%, 10V	
C....22	59.26.1479	4.7 uF	20%, 10V	
C....23	59.32.2681	680 pF	10%	
D....1	50.04.0512	1N 5818	1N 5818	Mot
D....2	50.04.0512	1N 5818	1N 5818	Mot
D....3	50.04.0105	IN 4448	IN 4448	Fc,ITT,Ph,Ses,TF
D....4	50.04.0125	IN 4448	IN 4448	Fc,ITT,Ph,Ses,TF
D....5	50.04.0127	BAT 42	BAT 85, BAS 40-02	Ph,Sie,Tho
D....6	50.04.0127	BAT 42	BAT 85, BAS 40-02	Ph,Sie,Tho
D....7	50.04.0125	IN 4448	IN 4448	Fc,ITT,Ph,Ses,TF
D....8	50.04.0125	IN 4448	IN 4448	Fc,ITT,Ph,Ses,TF
D....9	50.04.0125	IN 4448	IN 4448	Fc,ITT,Ph,Ses,TF
D....10	50.04.0125	IN 4448	IN 4448	Fc,ITT,Ph,Ses,TF
DL...1	50.04.2129	LY3160-HL Q	62703 - Q 1304	Sie
DL...2	50.04.2130	LY3160-GK Q	62703 - Q 1308	Sie
DL...3	50.04.2130	LY3160-GK Q	62703 - Q 1308	Sie
DL...4	50.04.2130	LY3160-GK Q	62703 - Q 1308	Sie
DL...5	50.04.2130	LY3160-GK Q	62703 - Q 1308	Sie
IC....1	50.16.0101	MC 68450 P	S 68450	AMI,Mot
IC....2	50.15.0106	MC 3486 P	DS 3486 P	Mot
IC....3	50.17.1138	74 HC 138	.. 74 HC 138	Ph,Mot,NS,RCA,To,TT,SGS
IC....4	50.16.0114	MC 68452 P	HD 68452 P, S 68452 P	AMI,Mot
IC....5	50.15.0106	MC 3486 P	DS 3486 P	Mot,NS
IC....6	50.17.1000	74 HC 00	.. 74 HC 00	Ph,Mot,NS,RCA,To,TT,SGS
IC....7	50.17.1032	74 HC 32	.. 74 HC 32	Ph,Mot,NS,RCA,To,TT,SGS
IC....8	50.17.1574	74 HC 574	.. 74 HC 574	Ph,Mot,NS,RCA,To,TT,SGS
IC....9	50.17.1541	74 HC 541	.. 74 HC 541	Ph,Mot,NS,RCA,To,TT,SGS
IC....10	50.15.0105	MC 3487 P	DS 3487 P	Mot,NS
IC....11	50.17.1000	74 HC 00	.. 74 HC 00	Ph,Mot,NS,RCA,To,TT,SGS
IC....12	50.15.0104	MC 3486 P	DS 3486 P	Mot,NS
IC....13	50.17.1008	74 HC 08	.. 74 HC 08	Ph,Mot,NS,RCA,To,TT,SGS
IC....14	50.17.1574	74 HC 574	.. 74 HC 574	Ph,Mot,NS,RCA,To,TT,SGS
IC....15	50.09.0106	NE 5532 AN	KR 5532 AN, RC 5532 ANB	Ex,Ra,Sig
IC....16	50.09.0106	NE 5532 AN	KR 5532 AN, RC 5532 ANB	Ex,Ra,Sig
J....1	54.02.0440		9 Pol Chassis CRIMP D-Type	
JS....1	00.00.0000		see note 1	
JS....2	00.00.0000		see note 1	
JS....3	0		not exist	
JS....4	00.00.0000		see note 1	
JS....5	0		not exist	
Q....1	50.03.0340	BC 337-25		ITT,Ph,Sie
Q....2	50.03.0340	BC 337-25		ITT,Ph,Sie
R....1	57.99.0209	5.6 Ohm	PTC-Resistor, Philips nr. 2322 662 91005	
R....2	57.11.3330	33 Ohm	2%	
R....3	57.11.3330	33 Ohm	2%	
R....4	57.11.3102	1 kOhm	2%	
R....5	57.11.3102	1 kOhm	2%	
R....6	57.11.3103	10 kOhm	2%	
R....7	57.11.3270	27 Ohm	2%	
R....8	57.11.3331	330 Ohm	2%	
R....9	57.11.3102	1 kOhm	2%	
R....10	57.11.3102	1 kOhm	2%	
R....11	57.11.3331	330 Ohm	2%	
R....12	57.11.3181	180 Ohm	2%	
R....13	57.11.3561	560 Ohm	2%	
R....14	57.11.3561	560 Ohm	2%	
R....15	57.11.3473	47 kOhm	2%	
R....16	57.11.3474	470 kOhm	2%	
R....17	57.11.3512	5.1 kOhm	2%	
R....18	57.11.3473	47 kOhm	2%	
R....19	57.11.3561	560 Ohm	2%	
R....20	57.11.3332	3.3 kOhm	2%	
R....21	57.11.3332	3.3 kOhm	2%	
R....22	57.11.3202	2 kOhm	1%	
R....23	57.11.3473	47 kOhm	2%	
R....24	57.11.3473	47 kOhm	2%	
R....25	57.11.3473	47 kOhm	2%	
R....26	57.11.3333	33 kOhm	2%	
R....27	57.11.3474	470 kOhm	2%	
R....28	57.11.3103	10 kOhm	2%	
R....29	57.11.3513	51 kOhm	1%	
R....30	57.11.3202	2 kOhm	1%	
R....31	57.11.3224	220 kOhm	2%	



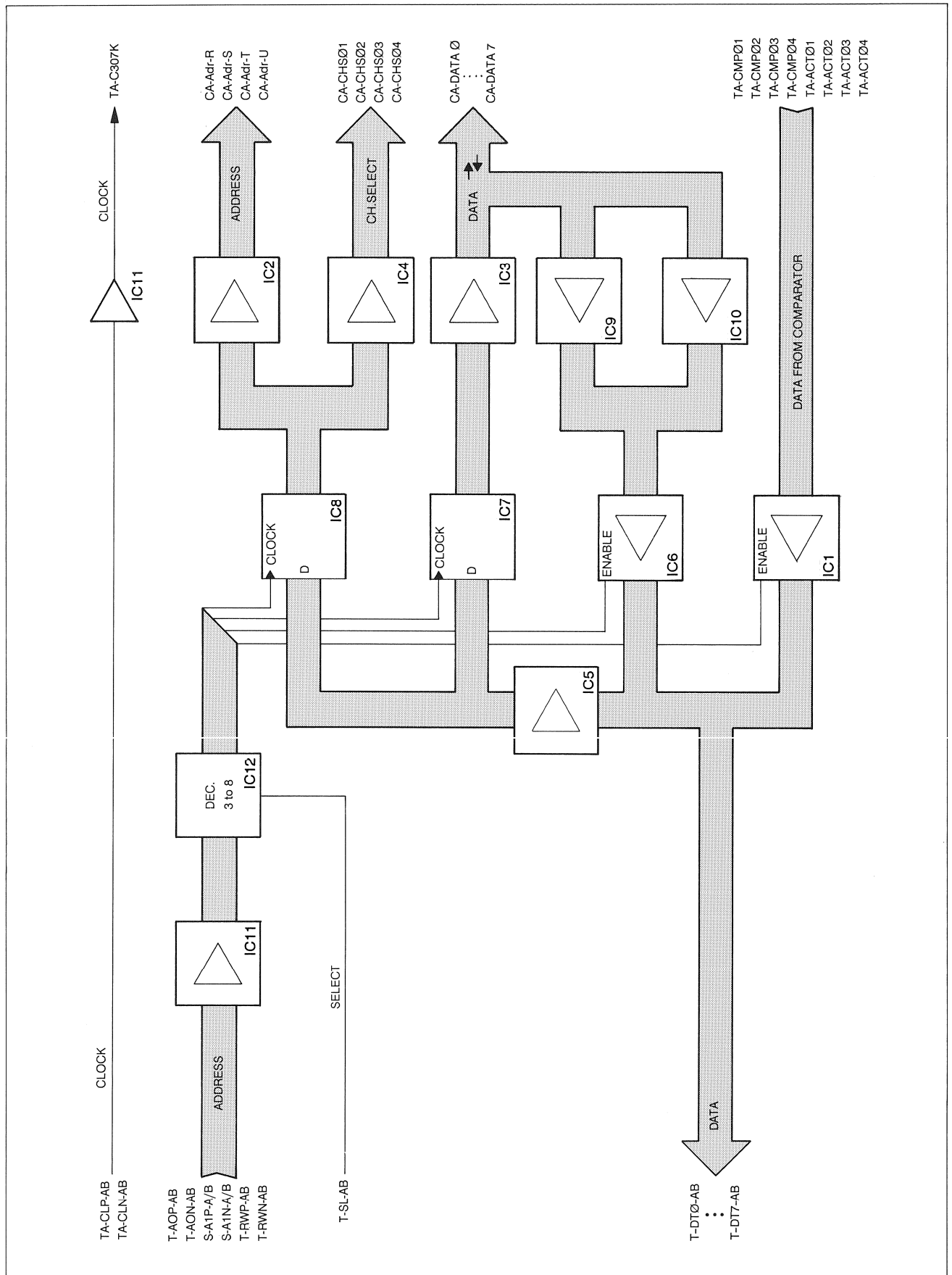
COMMUNICATIONS CONTROLLER 1.820.718.83

Ad	..POS..	...REF.No...	DESCRIPTION.....	MANUFACTURER
R....32	57.11.3332	3.3 kOhm	2%	
R....33	57.11.3332	3.3 kOhm	2%	
R....34	57.11.3332	3.3 kOhm	2%	
R....35	57.11.3181	180 Ohm	2%	
R....36	58.05.1202	2 kOhm	see note 2	
R....37	58.05.1104	100 kOhm	see note 2	
R....38	57.11.3332	3.3 kOhm	2%	
S.....1	55.15.0501		see note 3	
S.....2	55.15.0501		see note 3	
S.....3	55.15.0501		see note 3	
RZ....1	57.88.4332		see note 4	
RZ....2	57.88.3151		see note 5	
T.....1	1.022.223.00	Studio Bus Transformer		St
(01) 31.05.90 Correction of a mistake in document.				
Note 1 - contact pins:	Studer nr.	54.01.0020		
	Berg nr.	75 160-102-36		
	Philips nr.	2422 025 89303		
bridge:	Studer nr.	54.01.0021		
	Berg nr.	65 474-001		
	Philips nr.	2422 024 88003		
Note 2 - Potentiometer, 2 kOhm:	Bourns nr.	3296 Y - 1 - 202		
	Spectrol nr.	64 Y 202 T 000		
	Murata nr.	POT 3105 Y - 1 - 202		
	Contelec nr.	183 WZ 202		
Note 3 - Push Button switch:	Schadow serie	SERU		
Button:	Studer nr.	55.15.0510		
	Schadow serie	SRHKL		
Note 4 - Network 8 * 3.3 kOhm, 5%, single line:	A. Bradley nr.	909 A 332		
	Beckmann nr.	L - 09 - 1 - R 3.3 k		
	Bourns nr.	4609 M - 101 - 332		
	Dale nr.	CSC 09 A 01 - 332 G		
	Sprague nr.	256 C J 332 X2 PD		
	Tama nr.	MRG C 09 X 3.3 kOhm G		
	Vitrom nr.	F9E 3.3 kOhm 2%		
Note 5 - Network 8 * 150 Ohm, 5%, DIL 16:	A. Bradley nr.	316 B 151		
	Beckmann nr.	898 - 3 - R 150 F		
	Bourns nr.	4116 R-001 - 151		
	Dale nr.	MOP 1603 - 151 G		
	Sprague nr.	916 C 151 X2 SR		
	TRW nr.	1999 - 01 - 1500 - G		
MANUFACTURER: AMI=American Microsystem Inc., Ex=Exar, Fc=Fairchild, Hi=Hitachi, IIT=Intermetall, Mot=Motorola, NS=National Semiconductors, Ph=Philips, Ra=Raytheon, RCA=RCA Corp. of America, Ses=Sescosem, SGS=SGS/Ates, Sie=Siemens, Sig=Signetics, St=Studer, Tf=Telefunken, Tho=Thomson CSF, TI=Texas Instruments, To=Toshiba.				
1.820.718.83	COMMUNICATIONS CONTROLLER			VF 89/11/2000
1.820.718.83	COMMUNICATIONS CONTROLLER			VF 90/05/3101

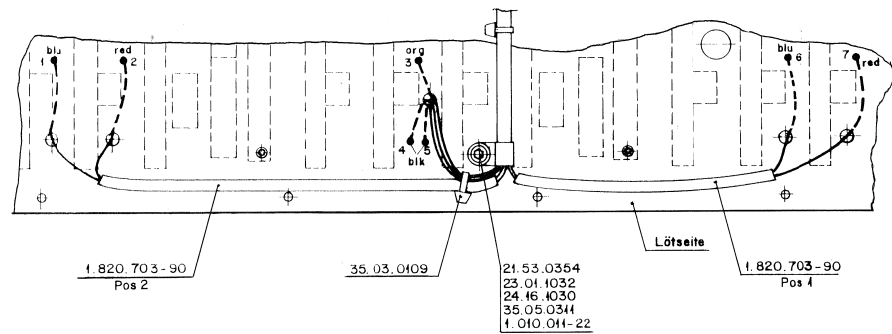
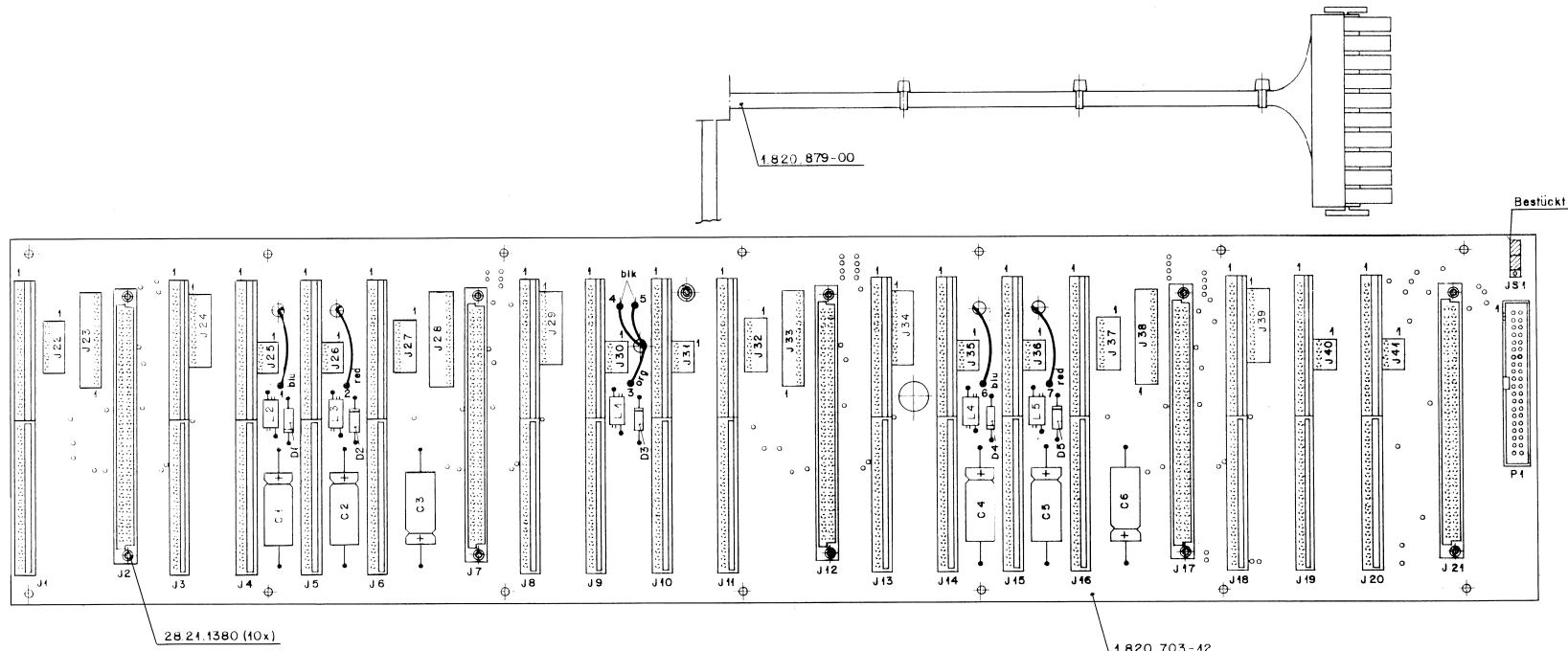
**BLOCK DIAGRAM**  
Multichannel Bus Driver 1.820.723



**BLOCK DIAGRAM**  
Bus Converter 1.820.717



BASIS BOARD AUDIO 1.820.703.81



Anforderung		Zustellung	
3.5.90	WA	WA	(2)
28.2.90	WA	WA	(1)
28.2.90	WA	WA	(1)
28.2.90	WA	WA	(1)

STUDER  
REGENBOGEN  
ZÜRICH

Produkt: BASIS BOARD  
AUDIO 4 CH

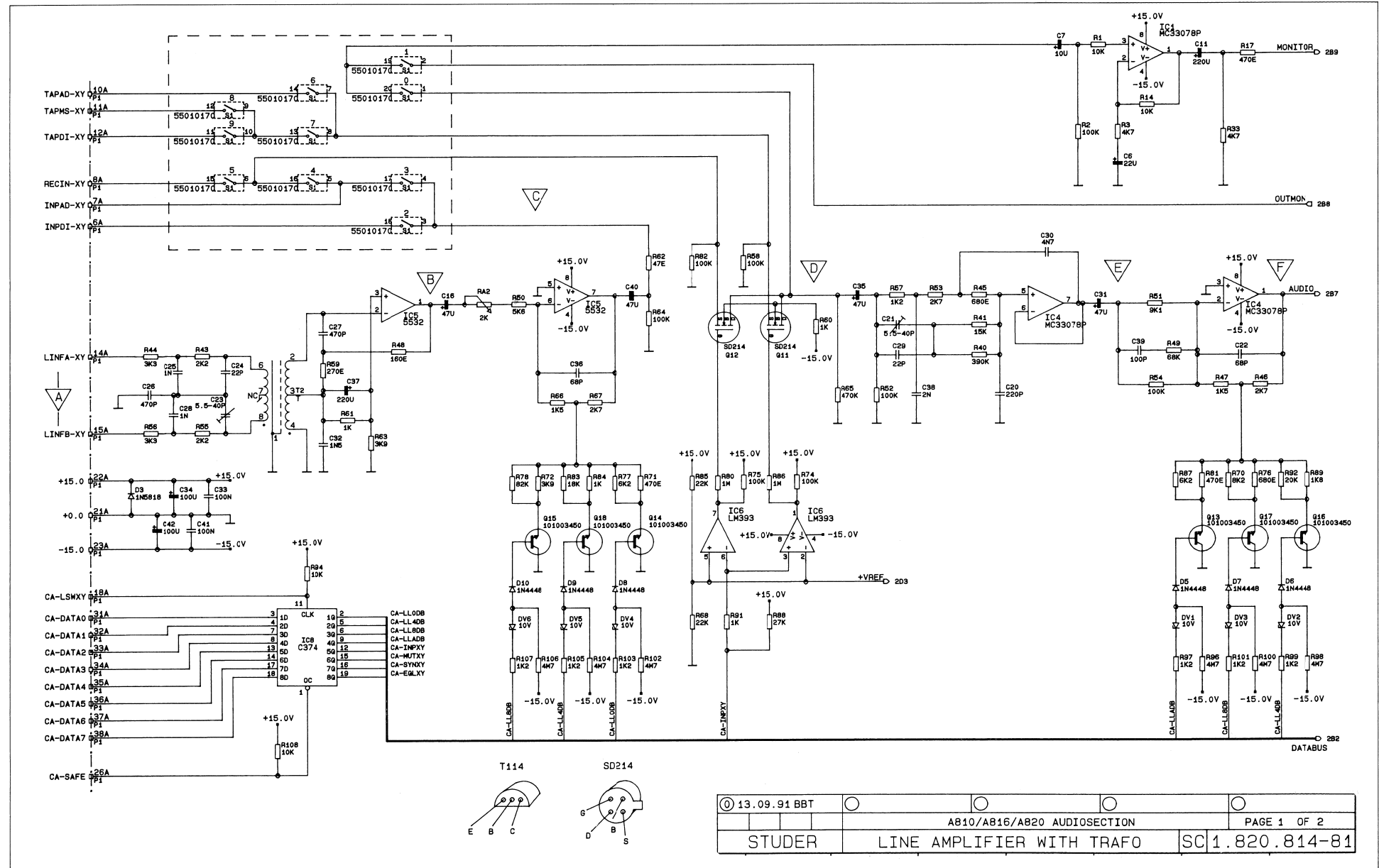
Nummer: 1.820.703-81

## BASIS BOARD AUDIO 1.820.703.81

Ad	POS.	REF. No.	DESCRIPTION	MANUFACTURER
C....1	99.25.1102	1000 uF	-10%, 6.3V, E1	
C....2	99.25.3471	470 uF	-10%, 16V, E1	
C....3	99.25.3471	470 uF	-10%, 16V, E1	
C....4	99.25.1102	1000 uF	-10%, 6.3V, E1	
C....5	99.25.3471	470 uF	-10%, 16V, E1	
C....6	99.25.3471	470 uF	-10%, 16V, E1	
D....1	50.04.0122	1N 4001	...1N 4004	ITT, Mot
D....2	50.04.0122	1N 4001	...1N 4004	ITT, Mot
D....3	50.04.1503	7.5 V Z	BZX 85 C 7V5	Ses
D....4	50.04.0122	1N 4001	...1N 4004	ITT, Mot
D....5	50.04.0122	1N 4001	...1N 4004	ITT, Mot
J....1	54.10.2015	Connectors	18 + 20 contacts, SEE NOTE 1	
J....2	54.11.2005	Connector	2 * 32 contacts, Euro, print	
J....3	54.10.2015	Connectors	18 + 20 contacts, SEE NOTE 1	
J....4	54.10.2015	Connectors	18 + 20 contacts, SEE NOTE 1	
J....5	54.10.2015	Connectors	18 + 20 contacts, SEE NOTE 1	
J....6	54.10.2015	Connectors	18 + 20 contacts, SEE NOTE 1	
J....7	54.11.2005	Connector	2 * 32 contacts, Euro, print	
J....8	54.10.2015	Connectors	18 + 20 contacts, SEE NOTE 1	
J....9	54.10.2015	Connectors	18 + 20 contacts, SEE NOTE 1	
J....10	54.10.2015	Connectors	18 + 20 contacts, SEE NOTE 1	
J....11	54.10.2015	Connectors	18 + 20 contacts, SEE NOTE 1	
J....12	54.11.2005	Connector	2 * 32 contacts, Euro, print	
J....13	54.10.2015	Connectors	18 + 20 contacts, SEE NOTE 1	
J....14	54.10.2015	Connectors	18 + 20 contacts, SEE NOTE 1	
J....15	54.10.2015	Connectors	18 + 20 contacts, SEE NOTE 1	
J....16	54.10.2015	Connectors	18 + 20 contacts, SEE NOTE 1	
J....17	54.11.2005	Connector	2 * 32 contacts, Euro, print	
J....18	54.10.2015	Connectors	18 + 20 contacts, SEE NOTE 1	
J....19	54.10.2015	Connectors	18 + 20 contacts, SEE NOTE 1	
J....20	54.10.2015	Connectors	18 + 20 contacts, SEE NOTE 1	
J....21	54.11.2005	Connector	2 * 32 contacts, Euro, print	
J....22	54.01.0263	Connector	7 contacts, CIS	
J....23	54.01.0299	Connector	13 contacts, CIS	
J....24	54.01.0242	Connector	10 contacts, CIS	
J....25	54.01.0298	Connector	4 contacts, CIS	
J....26	54.01.0298	Connector	4 contacts, CIS	
J....27	54.01.0263	Connector	7 contacts, CIS	
J....28	54.01.0299	Connector	13 contacts, CIS	
J....29	54.01.0242	Connector	10 contacts, CIS	
J....30	54.01.0298	Connector	4 contacts, CIS	
J....31	54.01.0298	Connector	4 contacts, CIS	
J....32	54.01.0263	Connector	7 contacts, CIS	
J....33	54.01.0299	Connector	13 contacts, CIS	
J....34	54.01.0242	Connector	10 contacts, CIS	
J....35	54.01.0298	Connector	4 contacts, CIS	
J....36	54.01.0298	Connector	4 contacts, CIS	
J....37	54.01.0263	Connector	7 contacts, CIS	
J....38	54.01.0299	Connector	13 contacts, CIS	
J....39	54.01.0242	Connector	10 contacts, CIS	
J....40	54.01.0298	Connector	4 contacts, CIS	
J....41	54.01.0298	Connector	4 contacts, CIS	
JS....1	54.01.0020	Jumper unit	SEE NOTE 2	
L....1	62.01.0115	HF-coil,	Philips nr. 4312 020 36700	
L....2	62.01.0115	HF-coil,	Philips nr. 4312 020 36700	
L....3	62.01.0115	HF-coil,	Philips nr. 4312 020 36700	
L....4	62.01.0115	HF-coil,	Philips nr. 4312 020 36700	
L....5	62.01.0115	HF-coil,	Philips nr. 4312 020 36700	
P....1	54.14.2004	Connector	40 contacts, flat cable	
P....2	54.25.0310	Connector	10 contacts, SEE NOTE 3	
Note 1 - 2 connectors, 18 contacts:	Studer nr.	54.10.2015		
	Burndy nr.	GCSB 18 50 19 V1 K5		
20 contacts:	Studer nr.	54.10.2026		
	Burndy nr.	GCSB 20 50 V1 K5		
Note 2 - contact pin (5 pieces):	Studer nr.	54.01.0020		
	Berg nr.	75 160-102-36		
	Philips nr.	2422 025 89303		
bridge (2 pieces):	Studer nr.	54.01.0021		
	Berg nr.	05 474-001		
	Philips nr.	2422 024 88003		
Note 3 - connector, 10 contacts, case:	Studer nr.	54.25.0310		
	AMP nr.	926302-3		
	pin:	Studer nr. 54.25.0401		
	AMP nr.	926887-1		
E1=Electrolytic				
MANUFACTURER: ITT=ITT Intermetall, Mot=Motorola, Ses=Sescosem.				
1.820.703.81 BASIS BOARD AUDIO 4 CH				1VA90/03/1300

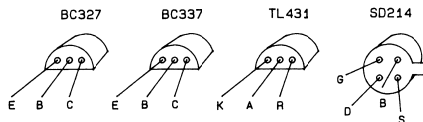
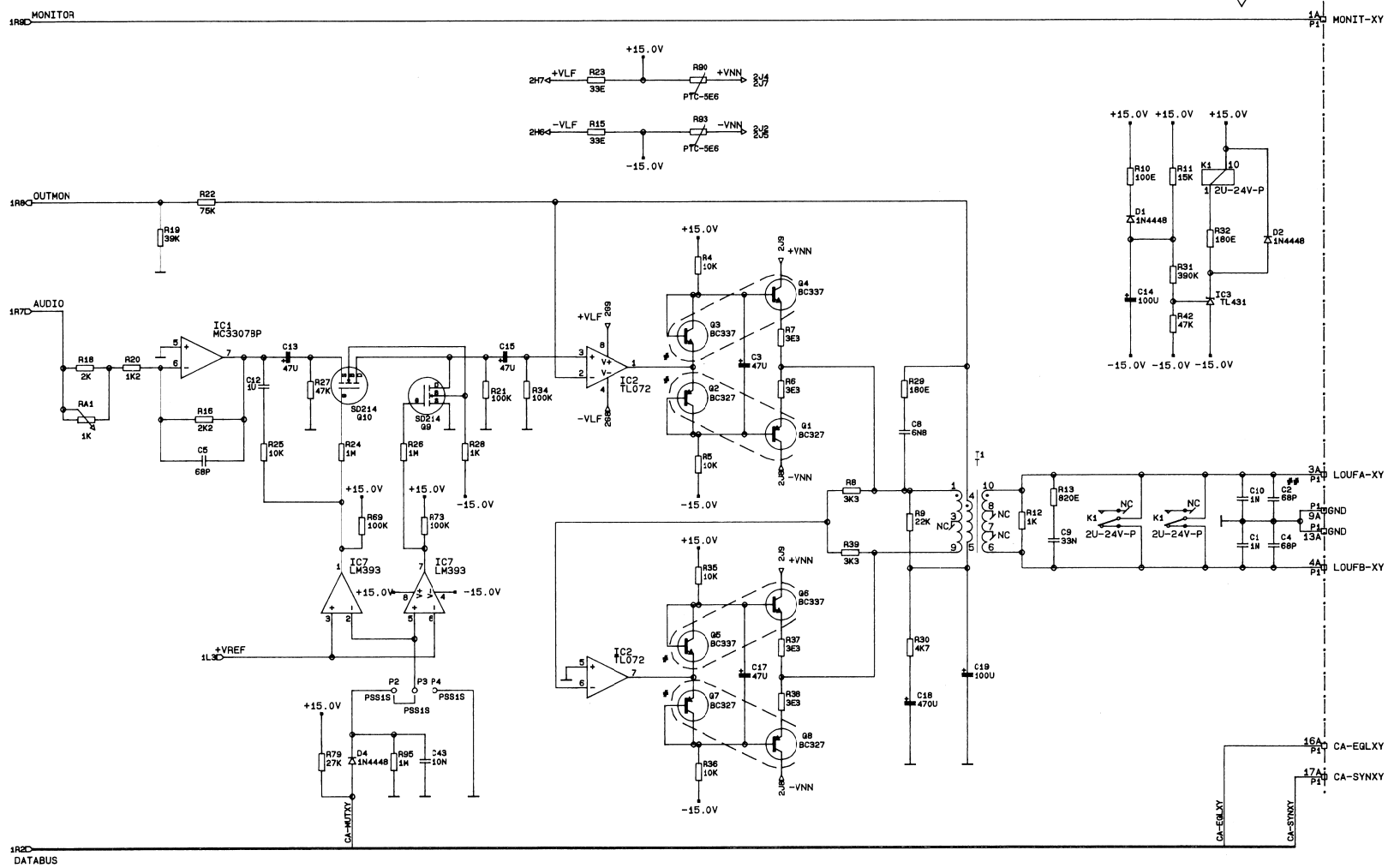


LINE AMPLIFIER WITH TRAF0 1.820.814.81



© 13.09.91 BBT		
STUDER	A810/A816/A820 AUDIOSECTION	PAGE 1 OF 2
	LINE AMPLIFIER WITH TRAF0	SC 1.820.814-81

LINE AMPLIFIER WITH TRAF0 1.820.814.81



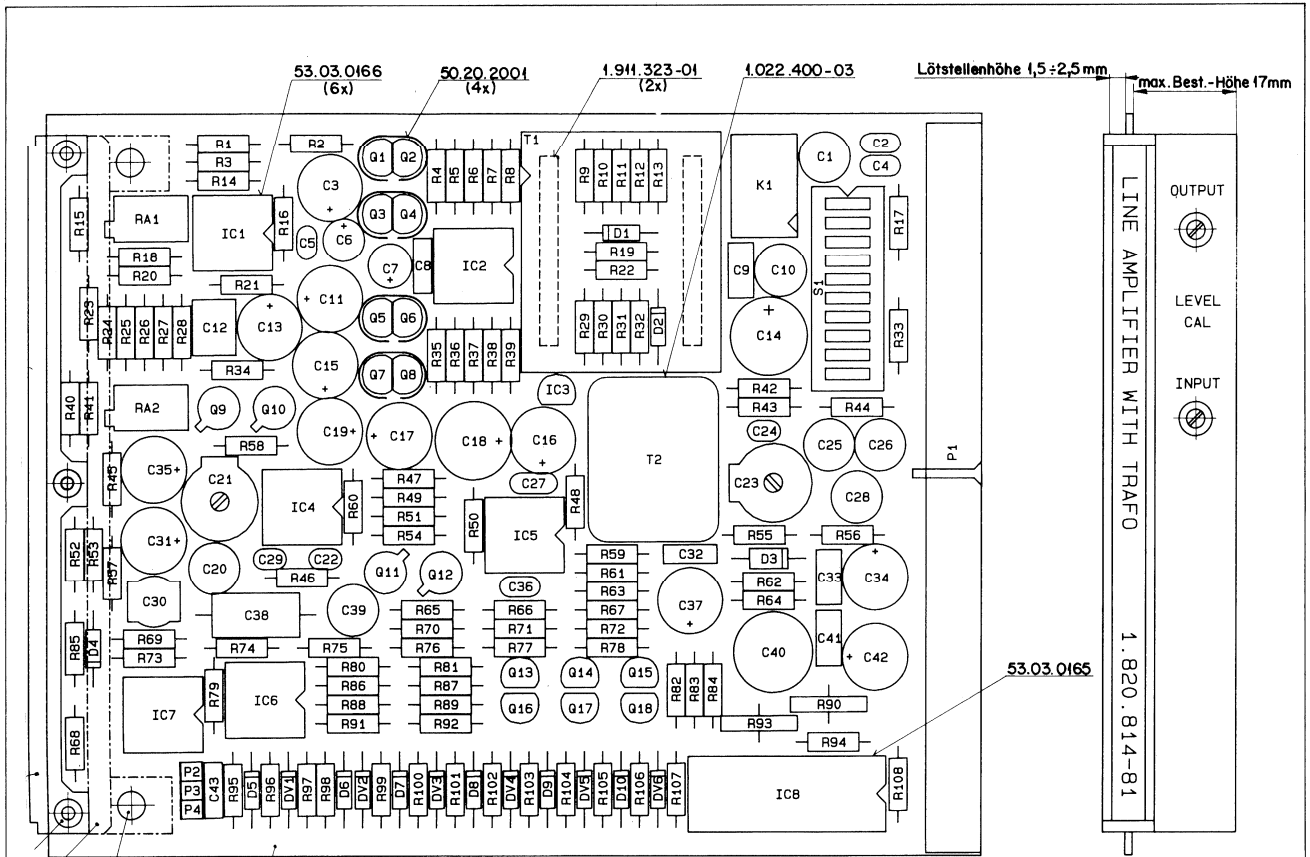
\* VBE MATCHED AND THERM. COUPLED  
 \*\* C2 NOT USED

13.09.91 BBT			
STUDER		A810/A816/A820 AUDIOSECTION	PAGE 2 OF 2
LINE AMPLIFIER WITH TRAF0		SC 1.820.814-81	





LINE AMPLIFIER WITH TRAF0 1.820.814.81



Ad	..POS..	..REF.No..	DESCRIPTION	MANUFACTURER	Ad	..POS..	..REF.No..	DESCRIPTION	MANUFACTURER
C.....1	59.05.1102	1 nF	1%, 630V, PP		D.....1	50.04.0125	1N 4448		Fc,ITT,Ph,Tf
C.....2	00.00.0000	not used			D.....2	50.04.0125	1N 4448		Fc,ITT,Ph,Tf
C.....3	59.22.4470	47 uF	-20%, 16V, EL		D.....3	50.04.0512	1N 5818	1N 5819	Mot
C.....4	59.34.2680	68 pF	5%, CER		D.....4	50.04.0125	1N 4448		Fc,ITT,Ph,Tf
C.....5	59.34.4680	68 pF	5%, CER		D.....5	50.04.0125	1N 4448		Fc,ITT,Ph,Tf
C.....6	59.22.5220	22 uF	-20%, 25V, EL		D.....6	50.04.0125	1N 4448		Fc,ITT,Ph,Tf
C.....7	59.22.6100	10 uF	-20%, 35V, EL		D.....7	50.04.0125	1N 4448		Fc,ITT,Ph,Tf
C.....8	59.06.0682	6.8 nF	10%, 63V, PETP		D.....8	50.04.0125	1N 4448		Fc,ITT,Ph,Tf
C.....9	59.06.0333	33 nF	10%, 63V, PETP		D.....9	50.04.0125	1N 4448		Fc,ITT,Ph,Tf
C.....10	59.05.1102	1 nF	1%, 630V, PP		D.....10	50.04.0125	1N 4448		Fc,ITT,Ph,Tf
01 C.....11	59.22.3221	220 uF	-20%, 10V, EL		DV....1	50.04.1114	10 V	5%, 0.4 W, Z	ITT,Mot,Ph,Tf,SGS
C.....12	00.00.0000	not used			DV....2	50.04.1114	10 V	5%, 0.4 W, Z	ITT,Mot,Ph,Tf,SGS
C.....13	59.22.4470	47 uF	-20%, 16V, EL		DV....3	50.04.1114	10 V	5%, 0.4 W, Z	ITT,Mot,Ph,Tf,SGS
C.....14	59.22.6101	100 uF	-20%, 40V, EL		DV....4	50.04.1114	10 V	5%, 0.4 W, Z	ITT,Mot,Ph,Tf,SGS
C.....15	59.22.4470	47 uF	-20%, 16V, EL		DV....5	50.04.1114	10 V	5%, 0.4 W, Z	ITT,Mot,Ph,Tf,SGS
C.....16	59.22.4470	47 uF	-20%, 16V, EL		DV....6	50.04.1114	10 V	5%, 0.4 W, Z	ITT,Mot,Ph,Tf,SGS
C.....17	59.22.4470	47 uF	-20%, 16V, EL		IC....1	50.09.0117	MC 33078P		Mot
C.....18	59.22.2471	470 uF	-20%, 6.3V, EL		IC....2	50.09.0101	TL 072 CP		Mot,Ti,NS,SGS
C.....19	59.22.4101	100 uF	-20%, 16V, EL		IC....3	50.10.0106	TL 431CLP		Mot,Ti
C.....20	59.05.1221	220 pF	1%, 630V, PP		IC....4	50.09.0117	MC 33078P		Mot
C.....21	59.18.0108	5.5-40 pF	100V, TRI		IC....5	50.09.0106	NE 5532AN	XR 5532 AN	Ex,Sig,Ra
C.....22	59.34.4680	68 pF	5%, CER		IC....6	50.05.0283	LM 393 ..	TDB 0193 DP	Fa,Sig
C.....23	59.18.0108	5.5-40 pF	100V, TRI		IC....7	50.05.0283	LM 393 ..	TDB 0193 DP	Fa,Sig
C.....24	59.34.2220	22 pF	5%, CER		IC....8	50.07.0003	MM74C374N		NS
C.....25	59.05.1102	1 nF	1%, 630V, PP		J.....1	54.01.0021	Jumper		
C.....26	59.05.2471	470 pF	2.5%, 630V, PP		K.....1	56.04.0197	24 V 2*U	125V/ 2 A, AG/AU	SDS
C.....27	59.34.5471	470 pF	5%, CER		P.....2	54.01.0020	Connector	contact pin .63*.63, H=5.8/3.4	
C.....28	59.05.1102	1 nF	1%, 630V, PP		P.....3	54.01.0020	Connector	contact pin .63*.63, H=5.8/3.4	
C.....29	59.34.2220	22 pF	5%, CER		P.....4	54.01.0020	Connector	contact pin .63*.63, H=5.8/3.4	
C.....30	59.05.1472	4.7 nF	1%, 63V, PP		Q.....1	50.03.0625	BC 327	E 6310, see note 2	Sie
C.....31	59.22.4470	47 uF	-20%, 16V, EL		Q.....2	50.03.0625	BC 327	E 6310, see note 2	Sie
C.....32	59.06.0152	1.5 nF	10%, 63V, PETP		Q.....3	50.03.0516	BC 337	E 6310, see note 2	Sie
C.....33	59.06.0104	100 nF	10%, 63V, PETP		Q.....4	50.03.0516	BC 337	E 6310, see note 2	Sie
C.....34	59.22.5101	100 uF	-20%, 25V, EL		Q.....5	50.03.0516	BC 337	E 6310, see note 2	Sie
C.....35	59.22.4470	47 uF	-20%, 16V, EL		Q.....6	50.03.0516	BC 337	E 6310, see note 2	Sie
C.....36	59.34.2680	68 pF	5%, CER		Q.....7	50.03.0625	BC 327	E 6310, see note 2	Sie
C.....37	59.22.3221	220 uF	-20%, 10V, EL		Q.....8	50.03.0625	BC 327	E 6310, see note 2	Sie
C.....38	59.12.7202	2 nF	1%, 63V, PS		Q.....9	50.11.0106	SD 214-DE		Ph,Six
C.....39	59.05.1101	100 pF	1%, 630V, PP		Q.....10	50.11.0106	SD 214-DE		Ph,Six
C.....40	59.99.0401	47 uF	-10%, 16V, ELBIP						
C.....41	59.06.0104	100 nF	10%, 63V, PETP						
C.....42	59.22.5101	100 uF	-20%, 25V, EL						
C.....43	59.06.5103	10 nF	5%, 63V, PETP						



LINE AMPLIFIER WITH TRAF0 1.820.814.81

Ad	..POS..	..REF.No..	DESCRIPTION.....	MANUFACTURER	Ad	..POS..	..REF.No..	DESCRIPTION.....	MANUFACTURER
Q....11	50.11.0106		SD 214-DE	Ph,Six	R....81	57.11.3471	470 Ohm	1% 0207	MF
Q....12	50.11.0106		SD 214-DE	Ph,Six	R....82	57.11.3104	100 kOhm	10%, 0207	MF
Q....13	1.010.034.50		Q, NPN	see note 1	R....83	57.11.3183	18 kOhm	5%, 0207	MF
Q....14	1.010.034.50		Q, NPN	see note 1	R....84	57.11.3102	1 kOhm	1%, 0207	MF
Q....15	1.010.034.50		Q, NPN	see note 1	R....85	57.11.3223	22 kOhm	10%, 0207	MF
Q....16	1.010.034.50		Q, NPN	see note 1	R....86	57.11.3105	1 MOhm	10%, 0207	MF
Q....17	1.010.034.50		Q, NPN	see note 1	R....87	57.11.3622	6.2 kOhm	5%, 0207	MF
Q....18	1.010.034.50		Q, NPN	see note 1	R....88	57.11.3273	27 kOhm	10%, 0207	MF
R....1	57.11.3103		10 kOhm	5%, 0207	R....89	57.11.3182	1.8 kOhm	1%, 0207	MF
R....2	57.11.3104		100 kOhm	1%, 0207	R....90	57.99.0209	5.6 Ohm		PTC
R....3	57.11.3472		4.7 kOhm	1%, 0207	R....91	57.11.3102	1 kOhm	10%, 0207	MF
R....4	57.11.3103		10 kOhm	5%, 0207	R....92	57.11.3203	20 kOhm	5%, 0207	MF
R....5	57.11.3103		10 kOhm	5%, 0207	R....93	57.99.0209	5.6 Ohm		PTC
R....6	57.11.3339		3.3 Ohm	1%, 0207	R....94	57.11.3103	10 kOhm	10%, 0207	MF
R....7	57.11.3339		3.3 Ohm	1%, 0207	R....95	57.11.3105	1 MOhm	10%, 0207	MF
R....8	57.11.3332		3.3 kOhm	1%, 0207	R....96	57.11.5475	4.7 MOhm	10%, 0207	MF
R....9	57.11.3223		22 kOhm	1%, 0207	R....97	57.11.3122	1.2 kOhm	10%, 0207	MF
R....10	57.11.3101		100 Ohm	5%, 0207	R....98	57.11.5475	4.7 MOhm	10%, 0207	MF
R....11	57.11.3153		15 kOhm	5%, 0207	R....99	57.11.3122	1.2 kOhm	10%, 0207	MF
R....12	57.11.3102		1 kOhm	5%, 0207	R...100	57.11.5475	4.7 MOhm	10%, 0207	MF
R....13	57.11.3821		820 Ohm	5%, 0207	R...101	57.11.3122	1.2 kOhm	10%, 0207	MF
R....14	57.11.3103		10 kOhm	1%, 0207	R...102	57.11.5475	4.7 MOhm	10%, 0207	MF
R....15	57.11.3330		33 Ohm	5%, 0207	R...103	57.11.3122	1.2 kOhm	10%, 0207	MF
R....16	57.11.3222		2.2 kOhm	5%, 0207	R...104	57.11.5475	4.7 MOhm	10%, 0207	MF
R....17	57.11.3471		470 Ohm	5%, 0207	R...105	57.11.3122	1.2 kOhm	10%, 0207	MF
R....18	57.11.3202		2 kOhm	1%, 0207	R...106	57.11.5475	4.7 MOhm	10%, 0207	MF
R....19	57.11.3393		39 kOhm	1%, 0207	R...107	57.11.3122	1.2 kOhm	10%, 0207	MF
R....20	57.11.3122		1.2 kOhm	5%, 0207	R...108	57.11.3103	10 kOhm	10%, 0207	MF
R....21	57.11.3104		100 kOhm	5%, 0207	RA....1	58.05.0102	1 kOhm	10%, .5 W	PMG
R....22	57.11.3753		75 kOhm	1%, 0207	RA....2	58.05.0202	2 kOhm	10%, .5 W	PMG
R....23	57.11.3330		33 Ohm	5%, 0207	S.....1	55.01.0170	DIL-Switch	10*A, Print	
R....24	57.11.3105		1 MOhm	10%, 0207	T.....1	1.022.362.00		LINE OUTPUT TRAF0 1:1,46	
R....25	00.00.0000		not used		T.....2	1.022.454.00		INPUT TRAF0 1:0,175	
R....26	57.11.3105		1 MOhm	10%, 0207					
R....27	57.11.3473		47 kOhm	5%, 0207					
R....28	57.11.3102		1 kOhm	10%, 0207					
R....29	57.11.3181		180 Ohm	5%, 0207					
R....30	57.11.3472		4.7 kOhm	5%, 0207					
R....31	57.11.3394		390 kOhm	10%, 0207					
R....32	57.11.3181		180 Ohm	10%, 0207					
R....33	57.11.3472		4.7 kOhm	5%, 0207					
R....34	57.11.3104		100 kOhm	5%, 0207					
R....35	57.11.3103		10 kOhm	5%, 0207					
R....36	57.11.3103		10 kOhm	5%, 0207					
R....37	57.11.3339		3.3 Ohm	1%, 0207					
R....38	57.11.3339		3.3 Ohm	1%, 0207					
R....39	57.11.3332		3.3 kOhm	1%, 0207					
R....40	57.11.3394		390 kOhm	1%, 0207					
R....41	57.11.3153		15 kOhm	1%, 0207					
R....42	57.11.3473		47 kOhm	10%, 0207					
R....43	57.11.3222		2.2 kOhm	1%, 0207					
R....44	57.11.3332		3.3 kOhm	1%, 0207					
R....45	57.11.3681		680 Ohm	1%, 0207					
R....46	57.11.3272		2.7 kOhm	1%, 0207					
R....47	57.11.3152		1.5 kOhm	1%, 0207					
R....48	57.11.3161		160 Ohm	5%, 0207					
R....49	57.11.3683		68 kOhm	1%, 0207					
R....50	57.11.3562		5.6 kOhm	5%, 0207					
R....51	57.11.3912		9.1 kOhm	1%, 0207					
R....52	57.11.3104		100 kOhm	1%, 0207					
R....53	57.11.3272		2.7 kOhm	1%, 0207					
R....54	57.11.3104		100 kOhm	5%, 0207					
R....55	57.11.3222		2.2 kOhm	1%, 0207					
R....56	57.11.3332		3.3 kOhm	1%, 0207					
R....57	57.11.3122		1.2 kOhm	1%, 0207					
R....58	57.11.3104		100 kOhm	10%, 0207					
R....59	57.11.3271		270 Ohm	5%, 0207					
R....60	57.11.3102		1 kOhm	10%, 0207					
R....61	57.11.3102		1 kOhm	5%, 0207					
R....62	57.11.3470		47 Ohm	10%, 0207					
R....63	57.11.3392		3.9 kOhm	5%, 0207					
R....64	57.11.3104		100 kOhm	10%, 0207					
R....65	57.11.3474		470 kOhm	10%, 0207					
R....66	57.11.3152		1.5 kOhm	1%, 0207					
R....67	57.11.3272		2.7 kOhm	1%, 0207					
R....68	57.11.3223		22 kOhm	10%, 0207					
R....69	57.11.3104		100 kOhm	10%, 0207					
R....70	57.11.3822		8.2 kOhm	5%, 0207					
R....71	57.11.3471		470 Ohm	1%, 0207					
R....72	57.11.3392		3.9 kOhm	1%, 0207					
R....73	57.11.3104		100 kOhm	10%, 0207					
R....74	57.11.3104		100 kOhm	10%, 0207					
R....75	57.11.3104		100 kOhm	10%, 0207					
R....76	57.11.3681		680 Ohm	1%, 0207					
R....77	57.11.3622		6.2 kOhm	5%, 0207					
R....78	57.11.3823		82 kOhm	5%, 0207					
R....79	57.11.3273		27 kOhm	10%, 0207					
R....80	57.11.3105		1 MOhm	10%, 0207					

(01) 90/02/03 Removed R\*C network for faster mute switching.

Note 1 - BC 337 E selected for inverse mode (IBC = 3 mA)  
UCE < 0.7 mV, IE 0 mA. UCE < 25 mV, IE 4 mA.

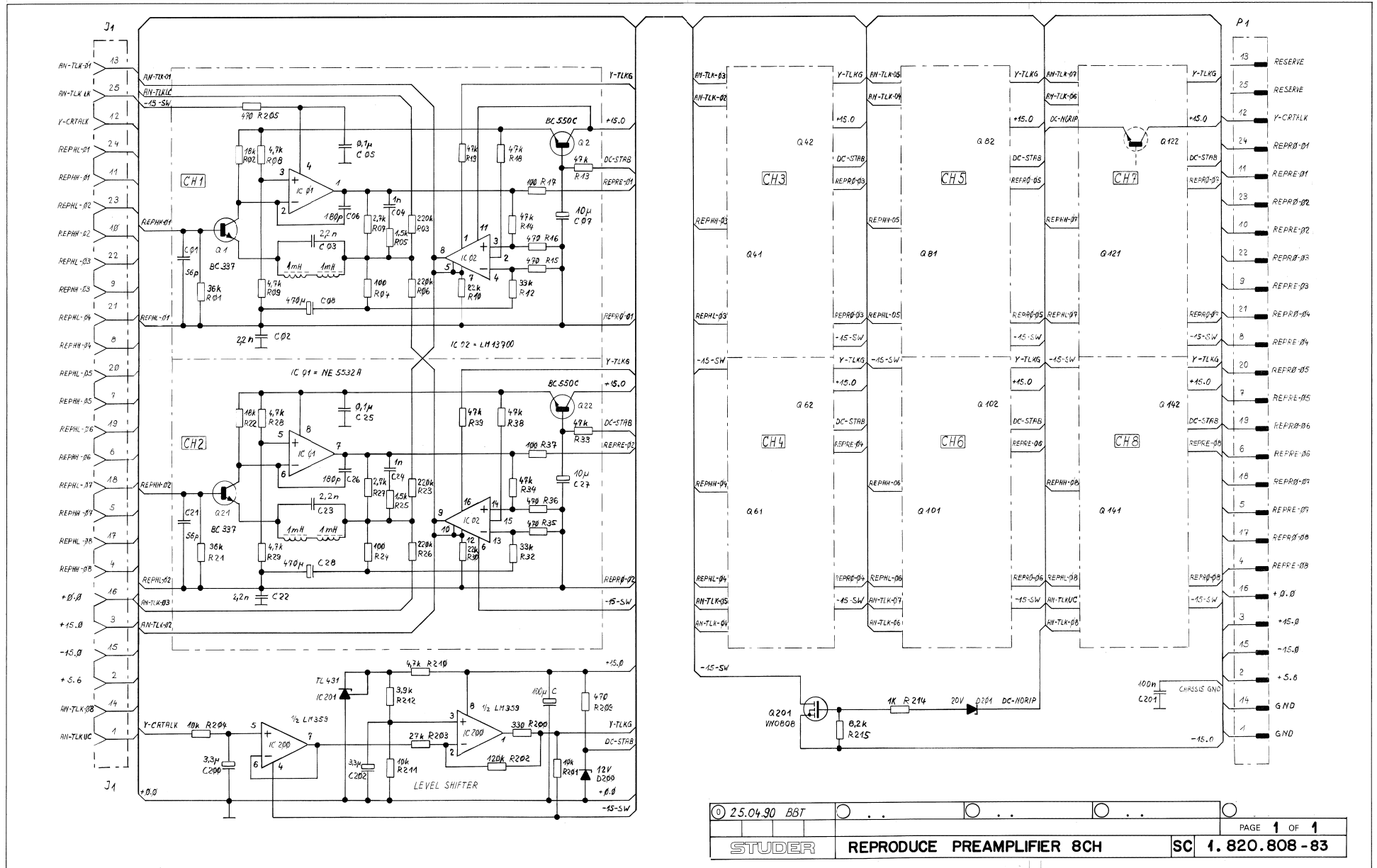
Note 2 - Q1-Q2, Q3-Q4, Q5-Q6, Q7-Q8 matched and thermally coupled with 50.20.2001.

Cer=Ceramic, ElBip=Electrolytic Bipolar,  
El=Electrolytic, Sal=Solid aluminum.

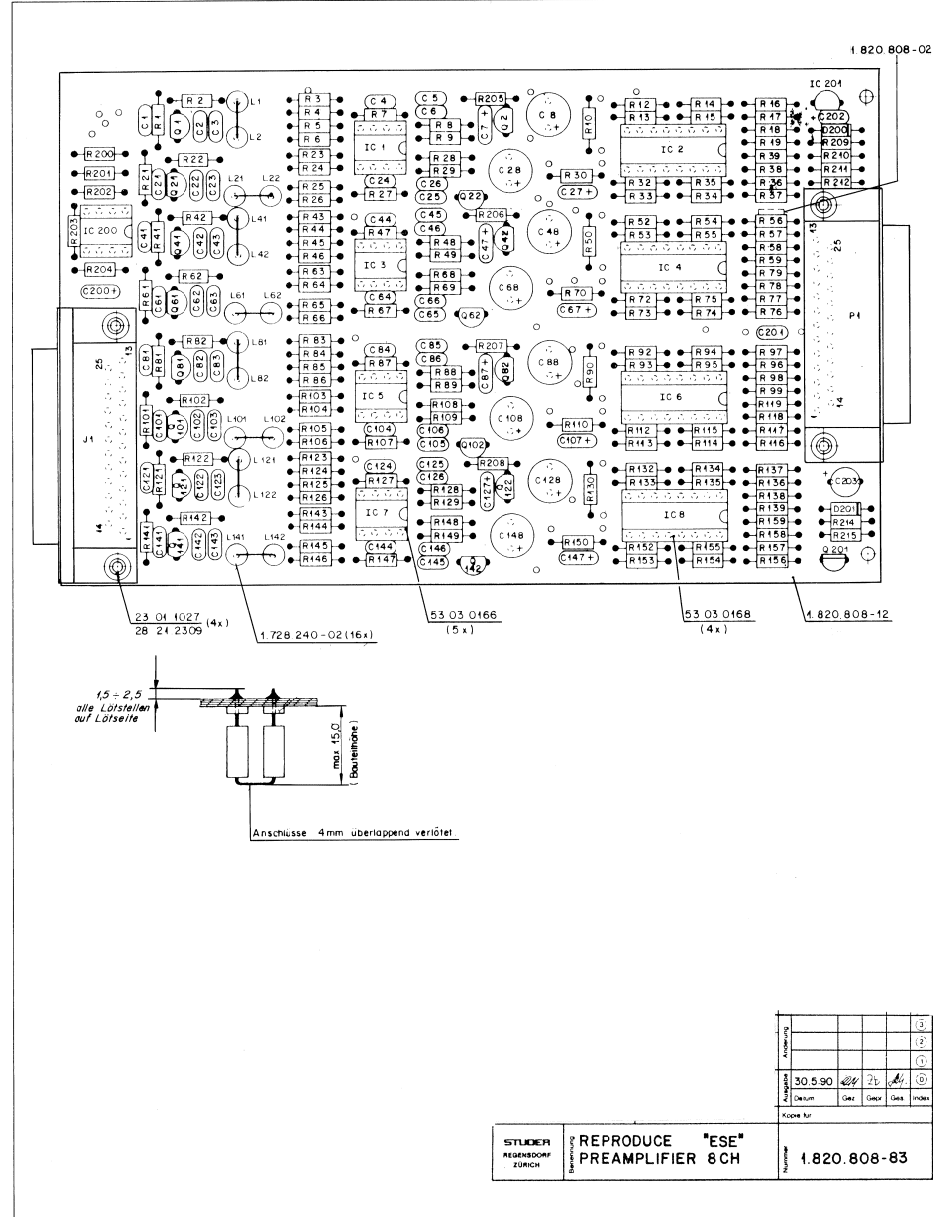
MANUFACTURER: Ex=Exar, Fas=Faselec, Fc=Fairchild, GI=General Instruments,  
ITT=Intermetall, Mot=Motorola, NS=National Semicond.,  
Ph=Philips, Ra=Raytheon, RCA=Radio Corp. of America,  
Ses=Sesocosem, Sie=Siemens, Sig=Signetics, SGS=SGS/Ates,  
St=Studer, Six=Siliconix, TS=Teledyne Semiconductors,  
Tf=Telefunken, TI=Texas Instruments.

1.820.814.81 LINE AMPLIFIER WITH TRAF0 BBT91/10/0200  
1.820.814.81 LINE AMPLIFIER WITH TRAF0 BBT92/02/0301

REPRODUCE PREAMPLIFIER 8CH 1.820.808.83



REPRODUCE PREAMPLIFIER 8CH 1.820.808.83



Ad	POS	REF.No.	DESCRIPTION	MANUFACTURER	Ad	POS	REF.No.	DESCRIPTION	MANUFACTURER	
C...	01	59.34.4560	56 pF	5k, Cer	L...	81	62.01.0128	1 mH 10%	Del,Gow	
C...	02	59.06.0222	2.2 nF	10k, 63V, PETP	L...	82	62.01.0128	1 mH 10%	Del,Gow	
C...	03	59.06.0102	2.2 nF	10k, 63V, PETP	L...	101	62.01.0128	1 mH 10%	Del,Gow	
C...	04	59.06.0104	1 nF	10k, 63V, PETP	L...	102	62.01.0128	1 mH 10%	Del,Gow	
C...	05	59.06.0104	100 nF	10k, 63V, PETP	L...	121	62.01.0128	1 mH 10%	Del,Gow	
C...	06	59.34.4181	180 pF	5k, Cer	L...	122	62.01.0128	1 mH 10%	Del,Gow	
C...	07	59.26.2100	10 uF	20%, 16V, Sal	L...	141	62.01.0128	1 mH 10%	Del,Gow	
C...	08	59.22.3471	470 uF	-20%, 6.3V, EI	L...	142	62.01.0128	1 mH 10%	Del,Gow	
C...	21	59.34.4560	56 pF	5k, Cer	L...	211	62.01.0128	1 mH 10%	Del,Gow	
C...	22	59.06.0222	2.2 nF	10k, 63V, PETP	L...	212	62.01.0128	1 mH 10%	Del,Gow	
C...	23	59.06.0222	2.2 nF	10k, 63V, PETP	P...	01	54.13.0013	25 cont. D-Type, AMP NR. 164 494-1		
C...	24	59.06.0102	1 nF	10k, 63V, PETP	Q...	01	50.03.0516	BC 337 E	Sie	
C...	25	59.06.0104	100 nF	10k, 63V, PETP	Q...	02	50.03.0407	BC 550 C BC 109 C	Ph,Sie	
C...	26	59.34.4181	180 pF	5k, Cer	Q...	21	50.03.0516	BC 337 E	Sie	
C...	27	59.26.2100	10 uF	20%, 16V, Sal	Q...	22	50.03.0407	BC 550 C BC 109 C	Ph,Sie	
C...	28	59.22.3471	470 uF	-20%, 6.3V, EI	Q...	41	50.03.0516	BC 337 E	Sie	
C...	41	59.34.4560	56 pF	5k, Cer	Q...	42	50.03.0407	BC 550 C BC 109 C	Ph,Sie	
C...	42	59.06.0222	2.2 nF	10k, 63V, PETP	Q...	61	50.03.0516	BC 337 E	Sie	
C...	43	59.06.0222	2.2 nF	10k, 63V, PETP	Q...	62	50.03.0407	BC 550 C BC 109 C	Ph,Sie	
C...	44	59.06.0102	1 nF	10k, 63V, PETP	Q...	81	50.03.0516	BC 337 E	Sie	
C...	45	59.06.0104	100 nF	10k, 63V, PETP	Q...	82	50.03.0407	BC 550 C BC 109 C	Ph,Sie	
C...	46	59.34.4181	180 pF	5k, Cer	Q...	101	50.03.0516	BC 337 E	Sie	
C...	47	59.26.2100	10 uF	20%, 16V, Sal	Q...	102	50.03.0407	BC 550 C BC 109 C	Ph,Sie	
C...	48	59.22.3471	470 uF	-20%, 6.3V, EI	Q...	121	50.03.0516	BC 337 E	Sie	
C...	61	59.34.4560	56 pF	5k, Cer	Q...	122	50.03.0407	BC 550 C BC 109 C	Ph,Sie	
C...	62	59.06.0222	2.2 nF	10k, 63V, PETP	Q...	141	50.03.0516	BC 337 E	Sie	
C...	63	59.06.0222	2.2 nF	10k, 63V, PETP	Q...	142	50.03.0407	BC 550 C BC 109 C	Ph,Sie	
C...	64	59.06.0102	1 nF	10k, 63V, PETP	Q...	200	00.00.0000	not used		
C...	65	59.06.0104	100 nF	10k, 63V, PETP	Q...	201	50.03.1505	VM 0808	Six,Fe	
C...	66	59.34.4181	180 pF	5k, Cer	R...	01	57.11.3363	36 kOhm 1%		
C...	67	59.26.2100	10 uF	20%, 16V, Sal	R...	02	57.11.3183	18 kOhm 2%		
C...	68	59.22.3471	470 uF	-20%, 6.3V, EI	R...	03	57.11.3224	220 kOhm 5%		
C...	81	59.34.4560	56 pF	5k, Cer	R...	04	57.11.3101	100 Ohm 2%		
C...	82	59.06.0222	2.2 nF	10k, 63V, PETP	R...	05	57.11.3152	1.5 kOhm 2%		
C...	83	59.06.0222	2.2 nF	10k, 63V, PETP	R...	06	57.11.3224	220 kOhm 5%		
C...	84	59.06.0102	1 nF	10k, 63V, PETP	R...	07	57.11.3272	2.7 kOhm 1%		
C...	85	59.06.0104	100 nF	10k, 63V, PETP	R...	08	57.11.3472	4.7 kOhm 2%		
C...	86	59.34.4181	180 pF	5k, Cer	R...	09	57.11.3472	4.7 kOhm 2%		
C...	87	59.26.2100	10 uF	20%, 16V, Sal	R...	10	57.11.3223	22 kOhm 2%		
C...	88	59.22.3471	470 uF	-20%, 6.3V, EI	R...	11	00.00.0000	not used		
C...	101	59.34.4560	56 pF	5k, Cer	R...	12	57.11.3333	33 kOhm 5%		
C...	102	59.06.0222	2.2 nF	10k, 63V, PETP	R...	13	57.11.3473	47 kOhm 2%		
C...	103	59.06.0222	2.2 nF	10k, 63V, PETP	R...	14	57.11.3473	47 kOhm 2%		
C...	104	59.06.0102	1 nF	10k, 63V, PETP	R...	15	57.11.3471	470 Ohm 2%		
C...	105	59.06.0104	100 nF	10k, 63V, PETP	R...	16	57.11.3471	470 Ohm 2%		
C...	106	59.34.4181	180 pF	5k, Cer	R...	17	57.11.3101	100 Ohm 2%		
C...	107	59.26.2100	10 uF	20%, 16V, Sal	R...	18	57.11.3473	47 kOhm 2%		
C...	108	59.22.3471	470 uF	-20%, 6.3V, EI	R...	19	57.11.3473	47 kOhm 2%		
C...	141	59.34.4560	56 pF	5k, Cer	R...	21	57.11.3363	36 kOhm 1%		
C...	142	59.06.0222	2.2 nF	10k, 63V, PETP	R...	22	57.11.3183	18 kOhm 2%		
C...	143	59.06.0222	2.2 nF	10k, 63V, PETP	R...	23	57.11.3224	220 kOhm 5%		
C...	144	59.06.0102	1 nF	10k, 63V, PETP	R...	24	57.11.3101	100 Ohm 1%		
C...	145	59.06.0104	100 nF	10k, 63V, PETP	R...	25	57.11.3152	1.5 kOhm 2%		
C...	146	59.34.4181	180 pF	5k, Cer	R...	26	57.11.3224	220 kOhm 5%		
C...	147	59.26.2100	10 uF	20%, 16V, Sal	R...	27	57.11.3272	2.7 kOhm 1%		
C...	148	59.22.3471	470 uF	-20%, 6.3V, EI	R...	28	57.11.3472	4.7 kOhm 2%		
C...	200	59.26.2339	3.3 uF	20%, 16V, Sal	R...	29	57.11.3472	4.7 kOhm 2%		
C...	201	59.06.0104	100 nF	10k, 63V, PETP	R...	30	57.11.3223	22 kOhm 2%		
C...	202	59.26.2339	3.3 uF	20%, 16V, Sal	R...	31	00.00.0000	not used		
C...	203	59.22.3101	100 uF	20%, 6.3V, EI	R...	32	57.11.3333	33 kOhm 5%		
D...	200	50.04.1117	12 V Z	BZX 55 C12	ITT, Mot, Ph, Tl, Tho	R...	33	57.11.3473	47 kOhm 2%	
D...	201	50.04.1109	20 V Z	BZX 55 C20	ITT, Mot, Ph, Tl, Tho	R...	34	57.11.3473	47 kOhm 2%	
IC...	01	50.09.0106	NE5532AN	XR5532AN	Ex, Sig, Ra	R...	35	57.11.3471	470 Ohm 2%	
IC...	02	50.09.0112	LM13700N	NE5517N, XR13600CP	Ex, NS, Sig	R...	36	57.11.3471	470 Ohm 2%	
IC...	03	50.09.0106	NE5532AN	XR5532AN	Ex, Sig, Ra	R...	37	57.11.3101	100 Ohm 2%	
IC...	04	50.09.0112	LM13700N	NE5517N, XR13600CP	Ex, NS, Sig	R...	38	57.11.3473	47 kOhm 2%	
IC...	05	50.09.0106	NE5532AN	XR5532AN	Ex, Sig, Ra	R...	39	57.11.3473	47 kOhm 2%	
IC...	06	50.09.0112	LM13700N	NE5517N, XR13600CP	Ex, NS, Sig	R...	41	57.11.3363	36 kOhm 1%	
IC...	07	50.09.0106	NE5532AN	XR5532AN	Ex, Sig, Ra	R...	42	57.11.3183	18 kOhm 2%	
IC...	08	50.09.0112	LM13700N	NE5517N, XR13600CP	Ex, NS, Sig	R...	43	57.11.3224	220 kOhm 5%	
IC...	200	50.09.0107	RC4559NB	UPC 4559	NEC, Ra	R...	44	57.11.3101	100 Ohm 1%	
IC...	201	50.10.0106	TL431CLP		Mot, TI	R...	45	57.11.3152	1.5 kOhm 2%	
J...	01	54.13.0003	25 CONT.	D-TYPE, AMP NR. 164 802-1		R...	46	57.11.3224	220 kOhm 5%	
L...	01	62.01.0128	1 mH 10%			R...	47	57.11.3272	2.7 kOhm 1%	
L...	02	62.01.0128	1 mH 10%			R...	48	57.11.3472	4.7 kOhm 2%	
L...	21	62.01.0128	1 mH 10%			R...	49	57.11.3472	4.7 kOhm 2%	
L...	22	62.01.0128	1 mH 10%			R...	50	57.11.3223	22 kOhm 2%	
L...	41	62.01.0128	1 mH 10%			R...	51	00.00.0000	not used	
L...	42	62.01.0128	1 mH 10%			R...	52	57.11.3333	33 kOhm 5%	
L...	61	62.01.0128	1 mH 10%			R...	53	57.11.3473	47 kOhm 2%	
L...	62	62.01.0128	1 mH 10%			R...	54	57.11.3473	47 kOhm 2%	



REPRODUCE PREAMPLIFIER 8CH 1.820.808.83

Ad	..POS..	..REF.No..	DESCRIPTION.....	MANUFACTURER	Ad	..POS..	..REF.No..	DESCRIPTION.....	MANUFACTURER
R....63	57.11.3224	220	kOhm	5%	R...202	57.11.3124	120	kOhm	2%
R....64	57.11.3101	100	Ohm	1%	R...203	57.11.3273	27	kOhm	2%
R....65	57.11.3152	1.5	kOhm	2%	R...204	57.11.3103	10	kOhm	2%
R....66	57.11.3224	220	kOhm	5%	R...205	57.11.3471	470	Ohm	2%
R....67	57.11.3272	2.7	kOhm	1%	R...206	57.11.3471	470	Ohm	2%
R....68	57.11.3472	4.7	kOhm	2%	R...207	57.11.3471	470	Ohm	2%
R....69	57.11.3472	4.7	kOhm	2%	R...208	57.11.3471	470	Ohm	2%
R....70	57.11.3223	22	kOhm	2%	R...209	57.11.3471	470	Ohm	2%
R....71	00.00.0000		not used		R...210	57.11.3472	4.7	kOhm	2%
R....72	57.11.3333	33	kOhm	5%	R...211	57.11.3103	10	kOhm	1%
R....73	57.11.3473	47	kOhm	2%	R...212	57.11.3392	3.9	kOhm	1%
R....74	57.11.3473	47	kOhm	2%	R...213	00.00.0000		not used	
R....75	57.11.3471	470	Ohm	2%	R...214	57.11.3102	1	kOhm	2%
R....76	57.11.3471	470	Ohm	2%	R...215	57.11.3822	8.2	kOhm	2%
R....77	57.11.3101	100	Ohm	2%					
R....78	57.11.3473	47	kOhm	2%					
R....79	57.11.3473	47	kOhm	2%					
R....81	57.11.3363	36	kOhm	1%					
R....82	57.11.3183	18	kOhm	2%					
R....83	57.11.3224	220	kOhm	5%					
R....84	57.11.3101	100	Ohm	1%					
R....85	57.11.3152	1.5	kOhm	2%					
R....86	57.11.3224	220	kOhm	5%					
R....87	57.11.3272	2.7	kOhm	1%					
R....88	57.11.3472	4.7	kOhm	2%					
R....89	57.11.3472	4.7	kOhm	2%					
R....90	57.11.3223	22	kOhm	2%					
R....91	00.00.0000		not used						
R....92	57.11.3333	33	kOhm	5%					
R....93	57.11.3473	47	kOhm	2%					
R....94	57.11.3473	47	kOhm	2%					
R....95	57.11.3471	470	Ohm	2%					
R....96	57.11.3471	470	Ohm	2%					
R....97	57.11.3101	100	Ohm	2%					
R....98	57.11.3473	47	kOhm	2%					
R....99	57.11.3473	47	kOhm	2%					
R...101	57.11.3363	36	kOhm	1%					
R...102	57.11.3183	18	kOhm	2%					
R...103	57.11.3224	220	kOhm	5%					
R...104	57.11.3101	100	Ohm	1%					
R...105	57.11.3152	1.5	kOhm	2%					
R...106	57.11.3224	220	kOhm	5%					
R...107	57.11.3272	2.7	kOhm	1%					
R...108	57.11.3472	4.7	kOhm	2%					
R...109	57.11.3472	4.7	kOhm	2%					
R...110	57.11.3223	22	kOhm	2%					
R...111	00.00.0000		not used						
R...112	57.11.3333	33	kOhm	5%					
R...113	57.11.3473	47	kOhm	2%					
R...114	57.11.3473	47	kOhm	2%					
R...115	57.11.3471	470	Ohm	2%					
R...116	57.11.3471	470	Ohm	2%					
R...117	57.11.3101	100	Ohm	2%					
R...118	57.11.3473	47	kOhm	2%					
R...119	57.11.3473	47	kOhm	2%					
R...121	57.11.3363	36	kOhm	1%					
R...122	57.11.3183	18	kOhm	2%					
R...123	57.11.3224	220	kOhm	5%					
R...124	57.11.3101	100	Ohm	1%					
R...125	57.11.3152	1.5	kOhm	2%					
R...126	57.11.3224	220	kOhm	5%					
R...127	57.11.3272	2.7	kOhm	1%					
R...128	57.11.3472	4.7	kOhm	2%					
R...129	57.11.3472	4.7	kOhm	2%					
R...130	57.11.3223	22	kOhm	2%					
R...131	00.00.0000		not used						
R...132	57.11.3333	33	kOhm	5%					
R...133	57.11.3473	47	kOhm	2%					
R...134	57.11.3473	47	kOhm	2%					
R...135	57.11.3471	470	Ohm	2%					
R...136	57.11.3471	470	Ohm	2%					
R...137	57.11.3101	100	Ohm	2%					
R...138	57.11.3473	47	kOhm	2%					
R...139	57.11.3473	47	kOhm	2%					
R...141	57.11.3363	36	kOhm	1%					
R...142	57.11.3183	18	kOhm	2%					
R...143	57.11.3224	220	kOhm	5%					
R...144	57.11.3101	100	Ohm	1%					
R...145	57.11.3152	1.5	kOhm	2%					
R...146	57.11.3224	220	kOhm	5%					
R...147	57.11.3272	2.7	kOhm	1%					
R...148	57.11.3472	4.7	kOhm	2%					
R...149	57.11.3472	4.7	kOhm	2%					
R...150	57.11.3223	22	kOhm	2%					
R...151	00.00.0000		not used						
R...152	57.11.3333	33	kOhm	5%					
R...153	57.11.3473	47	kOhm	2%					
R...154	57.11.3473	47	kOhm	2%					
R...155	57.11.3471	470	Ohm	2%					
R...156	57.11.3471	470	Ohm	2%					
R...157	57.11.3101	100	Ohm	2%					
R...158	57.11.3473	47	kOhm	2%					
R...159	57.11.3473	47	kOhm	2%					
R...200	57.11.3331	330	Ohm	5%					
R...201	57.11.3103	10	kOhm	5%					

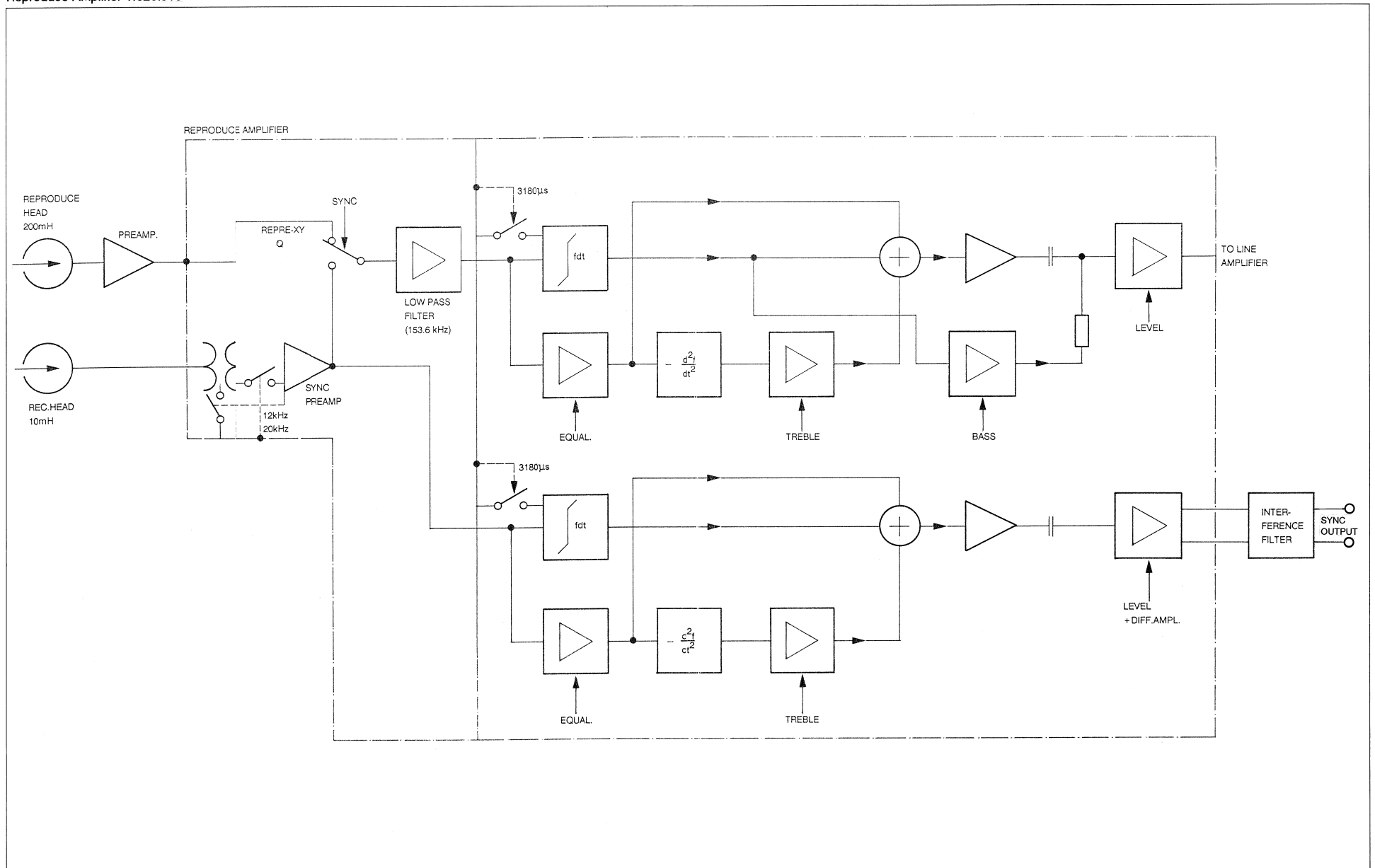
Cer=Ceramic, El=Electrolytic, Sal=Solid aluminium, PETP=Polyesterfilm.

MANUFACTURERS: Del=Delevar, Ex=Exar, Fe=Ferranti, Gow=Gowanda, ITT=Intermetall, Mot=Motorola, NEC=Nippon Electric Corp., NS=National Semiconductors, Ph=Philips, Ra=Raytheon, Sie=Siemens, Sig=Signetics, Six=Siliconix, Tf=Telefunken, Tho=Thomson-CSF, TI=Texas Instruments.

1.820.808.83 REPRODUCE PREAMPLIFIER 8 CH BBT90/05/3000

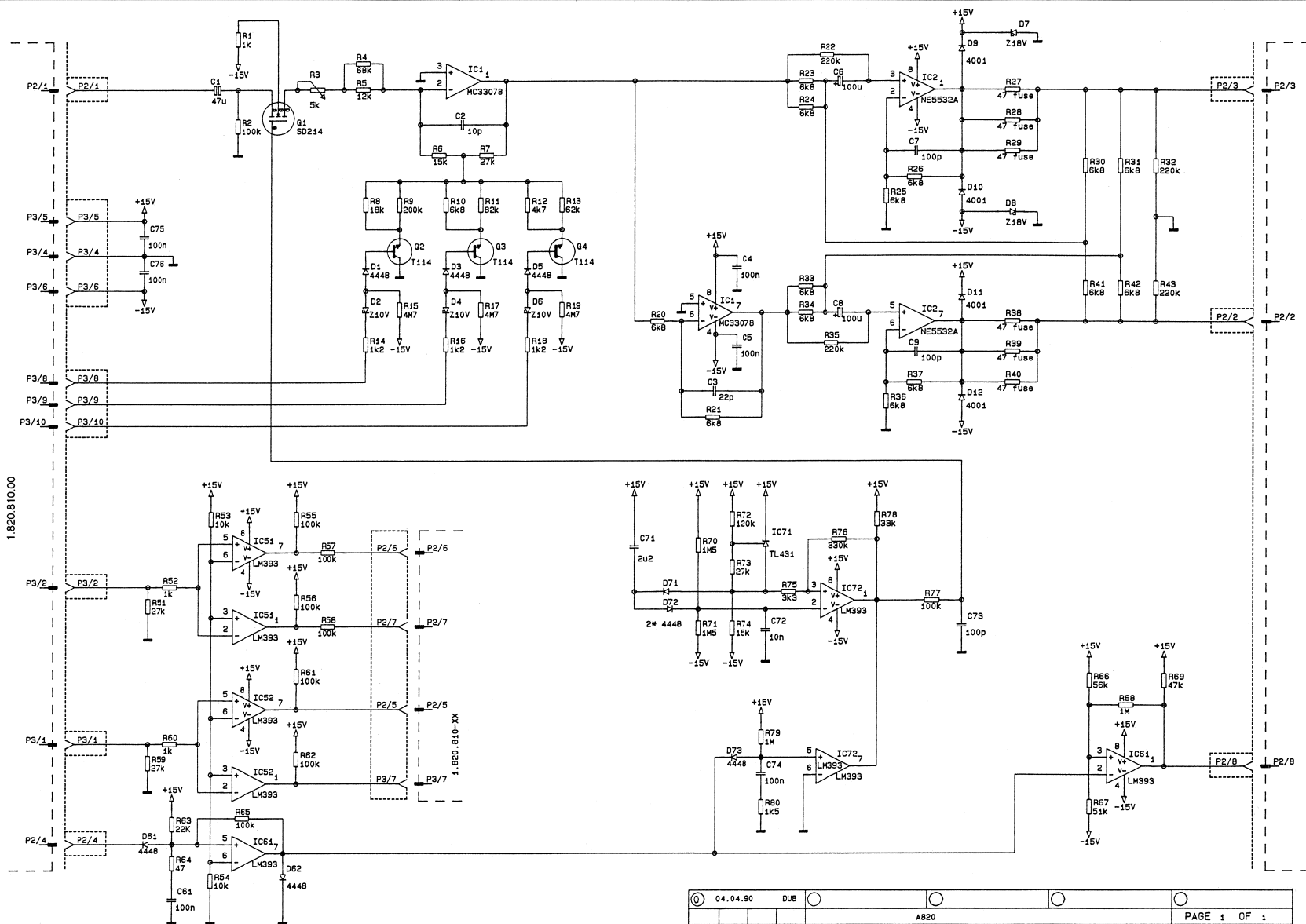
# STUDER A820 MCH MKII

## BLOCK DIAGRAM Reproduce Amplifier 1.820.810



STUDER A820 MCH MKII

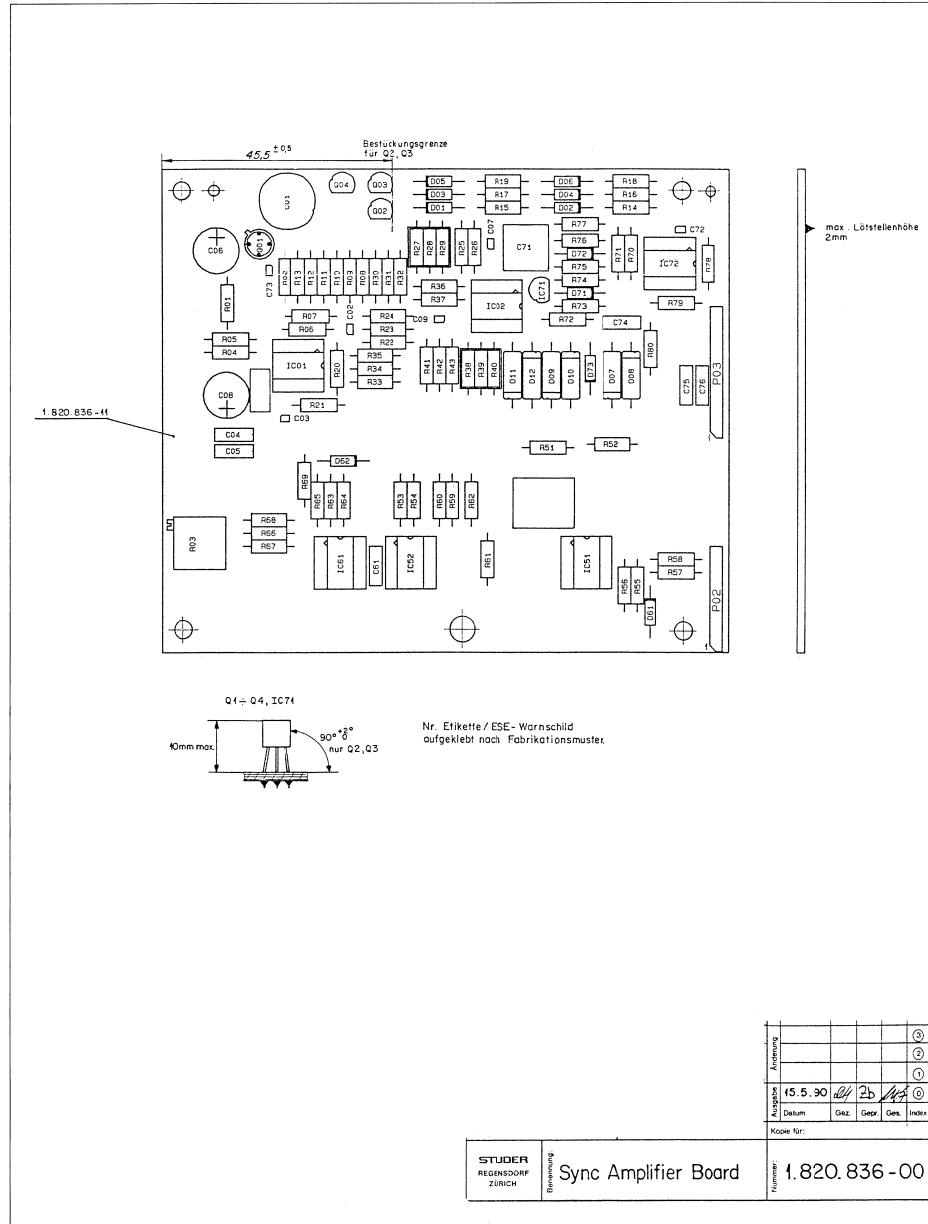
REPRODUCE AMPLIFIER 1.820.810.00  
 - Synchronizer Amplifier Board 1.820.836.00



04.04.90	DUB				
A820			PAGE 1 OF 1		
STUDER SYNC AMPLIFIER BOARD				SC 1.820.836-00	

# STUDER A820 MCH MKII

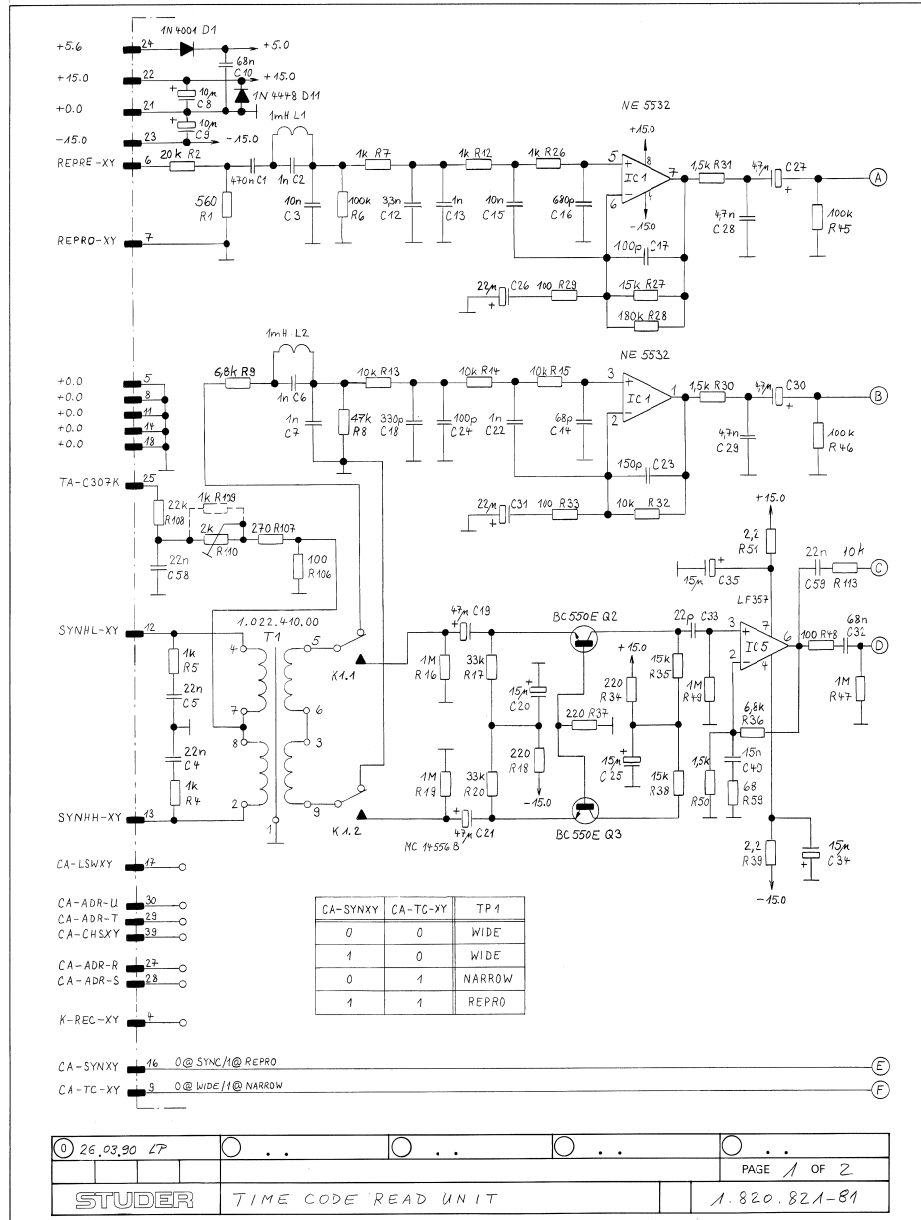
## REPRODUCE AMPLIFIER 1.820.810.00 - Synchronizer Amplifier Board 1.820.836.00



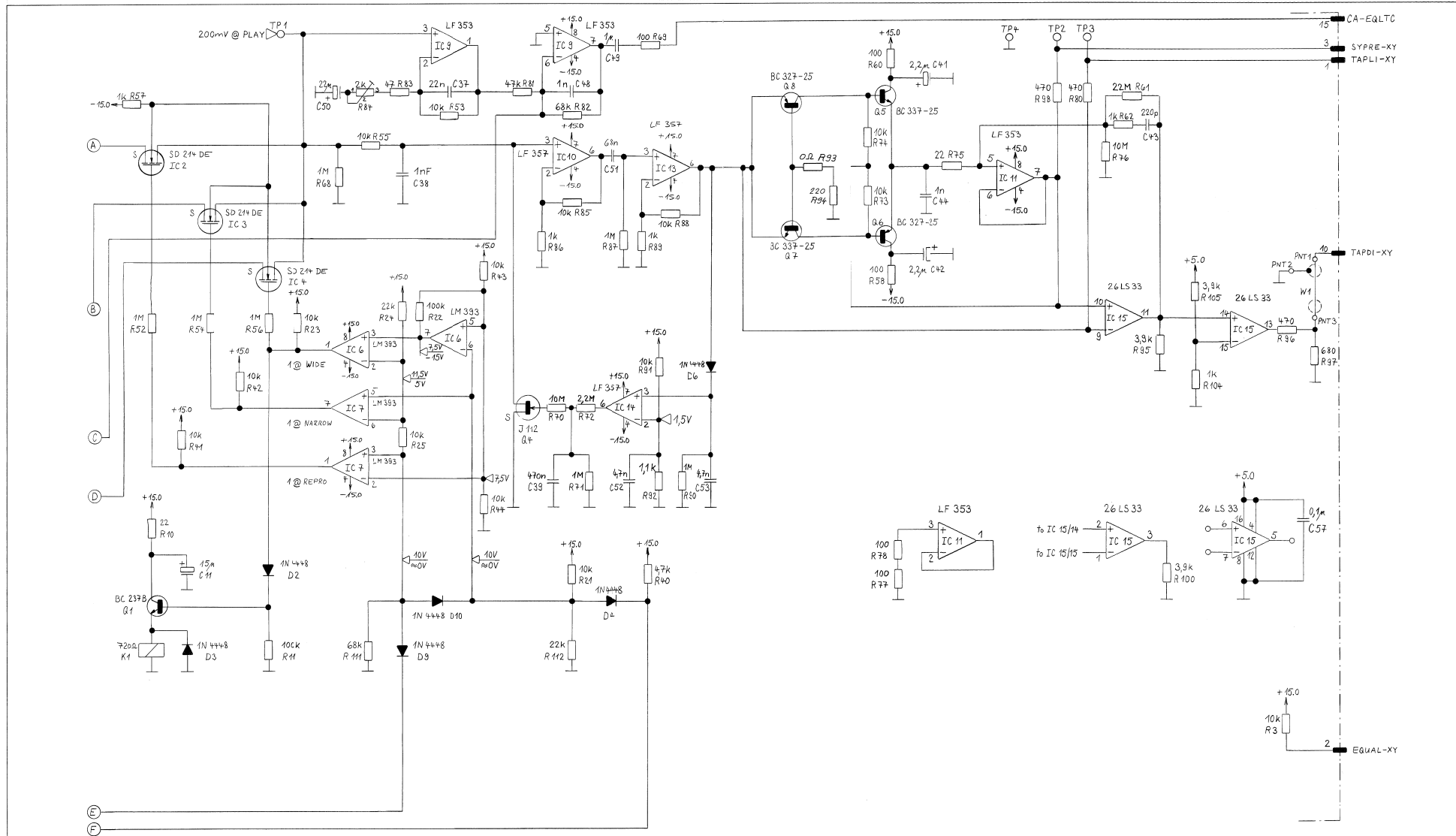
Ad	POS.	REF.No.	DESCRIPTION	MANUFACTURER	Ad	POS.	REF.No.	DESCRIPTION	MANUFACTURER
C....1	59.99.0401	47 uF	-20%, 16V, EI bipolar		R....53	57.11.3103	10 kOhm	5%	
C....2	59.60.0100	10 pF	5%, 63V, Cer SMD		R....54	57.11.3103	10 kOhm	5%	
C....3	59.60.0220	22 pF	5%, 63V, Cer SMD		R....55	57.11.3104	100 kOhm	5%	
C....4	59.06.0104	100 nF	10% 50V, PETF		R....56	57.11.3104	100 kOhm	5%	
C....5	59.06.0104	100 nF	10% 50V, PETF		R....57	57.11.3104	100 kOhm	5%	
C....6	59.22.4101	100 uF	-20%, 16V, EI		R....58	57.11.3104	100 kOhm	5%	
C....7	59.60.0101	100 pF	5%, 63V, Cer SMD		R....59	57.11.3273	27 kOhm	5%	
C....8	59.22.4101	100 uF	-20%, 16V, EI		R....60	57.11.3102	1.0 kOhm	5%	
C....9	59.60.0101	100 pF	5%, 63V, Cer SMD		R....61	57.11.3104	100 kOhm	5%	
C....61	59.06.5104	100 nF	5% 63V, PETF		R....62	57.11.3104	100 kOhm	5%	
C....71	59.06.5225	2.2 uF	5% 50V, PETF		R....63	57.11.3223	22 kOhm	2%	
C....72	59.60.1103	10 nF	10% 63V, Cer SMD		R....64	57.11.3470	47 Ohm	5%	
C....73	59.60.0101	100 pF	5%, 63V, Cer SMD		R....65	57.11.3104	100 kOhm	5%	
C....74	59.06.5104	100 nF	5% 63V, PETF		R....66	57.11.3563	56 kOhm	2%	
C....75	59.06.0104	100 nF	10% 50V, PETF		R....67	57.11.3513	51 kOhm	1%	
C....76	59.06.0104	100 nF	10%, 50V, PETF		R....68	57.11.3105	1.0 MOhm	5%	
0....1	50.04.0125	1M 4448			R....69	57.11.3473	47 kOhm	5%	
0....2	50.04.1114	10V	5% 0.4W		R....70	57.11.5155	1.5 MOhm	5%	
0....3	50.04.0125	1M 4448			R....71	57.11.5155	1.5 MOhm	5%	
0....4	50.04.1114	10V	5% 0.4W		R....72	57.11.3124	120 kOhm	5%	
0....5	50.04.0125	1M 4448			R....73	57.11.3273	27 kOhm	5%	
0....6	50.04.1114	10V	5% 0.4W		R....74	57.11.3153	15 kOhm	5%	
0....7	50.04.1222	18V	5% 1.3W		R....75	57.11.3332	3.3 kOhm	5%	
0....8	50.04.1222	18V	5% 1.3W		R....76	57.11.3334	330 kOhm	5%	
0....9	50.04.0122	1M 4001			R....77	57.11.3104	100 kOhm	5%	
0....10	50.04.0122	1M 4001			R....78	57.11.3333	33 kOhm	5%	
0....11	50.04.0122	1M 4001			R....79	57.11.3105	1.0 MOhm	5%	
0....12	50.04.0122	1M 4001			R....80	57.11.3152	1.5 kOhm	5%	
0....61	50.04.0125	1M 4448			Note 1 - Contact pin: Studer 54.01.0020, Berg 75 160-102-36				
0....62	50.04.0125	1M 4448			Bridge: Studer 54.01.0021, Philips 2422 024 88003				
0....71	50.04.0125	1M 4448			PETP=Polyesterfilm, Sa=Solid-Aluminum, Cer=Ceramic PS=Polystyrol, PP=Polypropylen, EI=Electrolytic, MPC=Metallized Polycarbonate				
0....72	50.04.0125	1M 4448			MANUFACTURER: ADI=Analog Devices Inc., Ex=Exar, F=fairchild,				
0....73	50.04.0125	1M 4448			Mot=Motorola, MpS=Micropower Semiconductors,				
IC...1	50.09.0117	MC33078		Mot					
IC...2	50.09.0106	NE5532AN	XR5532AN, 5532ANB	Sig,Ex,Ra					
IC...51	50.05.0283	LM393N		NS, TI					
IC...52	50.05.0283	LM393N		NS, TI	1.820.836.00 SYNC AMPLIFIER RGR90/05/0800				
IC...61	50.05.0283	LM393N		NS, TI	+				
IC...71	50.10.0106	TL431 CLP							
IC...72	50.05.0283	LM393N							
C....1	50.11.0106	S0214		DE	IS0214				
C....2	1.010.034.50	T114			Ph, Six				
C....3	1.010.034.50	T114							
C....4	1.010.034.50	T114							
F....1	57.11.3102	1.0 kOhm	5%						
F....2	57.11.3104	100 kOhm	5%						
F....3	58.05.2502	5.0 kOhm	10%	Potentiometer	20 turns				
F....4	57.11.3683	68 kOhm	5%						
F....5	57.11.3123	32 kOhm	1%						
F....6	57.11.3153	15 kOhm	1%						
F....7	57.11.3273	27 kOhm	1%						
F....8	57.11.3183	18 kOhm	1%						
F....9	57.11.3204	200 kOhm	5%						
R....10	57.11.3682	6.8 kOhm	1%						
R....11	57.11.3823	82 kOhm	5%						
R....12	57.11.3472	4.7 kOhm	1%						
R....13	57.11.3623	62 kOhm	5%						
R....14	57.11.3122	1.2 kOhm	5%						
R....15	57.11.5475	4.7 MOhm	5%						
R....16	57.11.3122	1.2 kOhm	5%						
R....17	57.11.5475	4.7 MOhm	5%						
R....18	57.11.3122	1.2 kOhm	5%						
R....19	57.11.5475	4.7 MOhm	5%						
R....20	57.99.0250	6.8 kOhm	0.1%						
R....21	57.99.0250	6.8 kOhm	0.1%						
R....22	57.11.3224	220 kOhm	5%						
R....23	57.99.0250	6.8 kOhm	0.1%						
R....24	57.99.0250	6.8 kOhm	0.1%						
R....25	57.99.0250	6.8 kOhm	0.1%						
R....26	57.99.0250	6.8 kOhm	0.1%						
R....27	57.19.0470	47 Ohm	5%	Fuse Res					
R....28	57.19.0470	47 Ohm	5%	Fuse Res					
R....29	57.19.0470	47 Ohm	5%	Fuse Res					
R....30	57.99.0250	6.8 kOhm	0.1%						
R....31	57.99.0250	6.8 kOhm	0.1%						
R....32	57.11.3224	220 kOhm	5%						
R....33	57.99.0250	6.8 kOhm	0.1%						
R....34	57.99.0250	6.8 kOhm	0.1%						
R....35	57.11.3224	220 kOhm	5%						
R....36	57.99.0250	6.8 kOhm	0.1%						
R....37	57.99.0250	6.8 kOhm	0.1%						
R....38	57.19.0470	47 Ohm	5%	Fuse Res					
R....39	57.19.0470	47 Ohm	5%	Fuse Res					
R....40	57.19.0470	47 Ohm	5%	Fuse Res					
R....41	57.99.0250	6.8 kOhm	0.1%						
R....42	57.99.0250	6.8 kOhm	0.1%						
R....43	57.11.3224	220 kOhm	5%						
R....51	57.11.3273	27 kOhm	5%						
R....52	57.11.3102	1.0 kOhm	5%						



TIME CODE READ UNIT 1.820.821.81



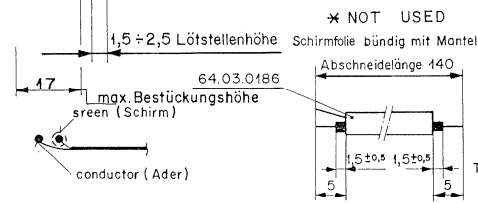
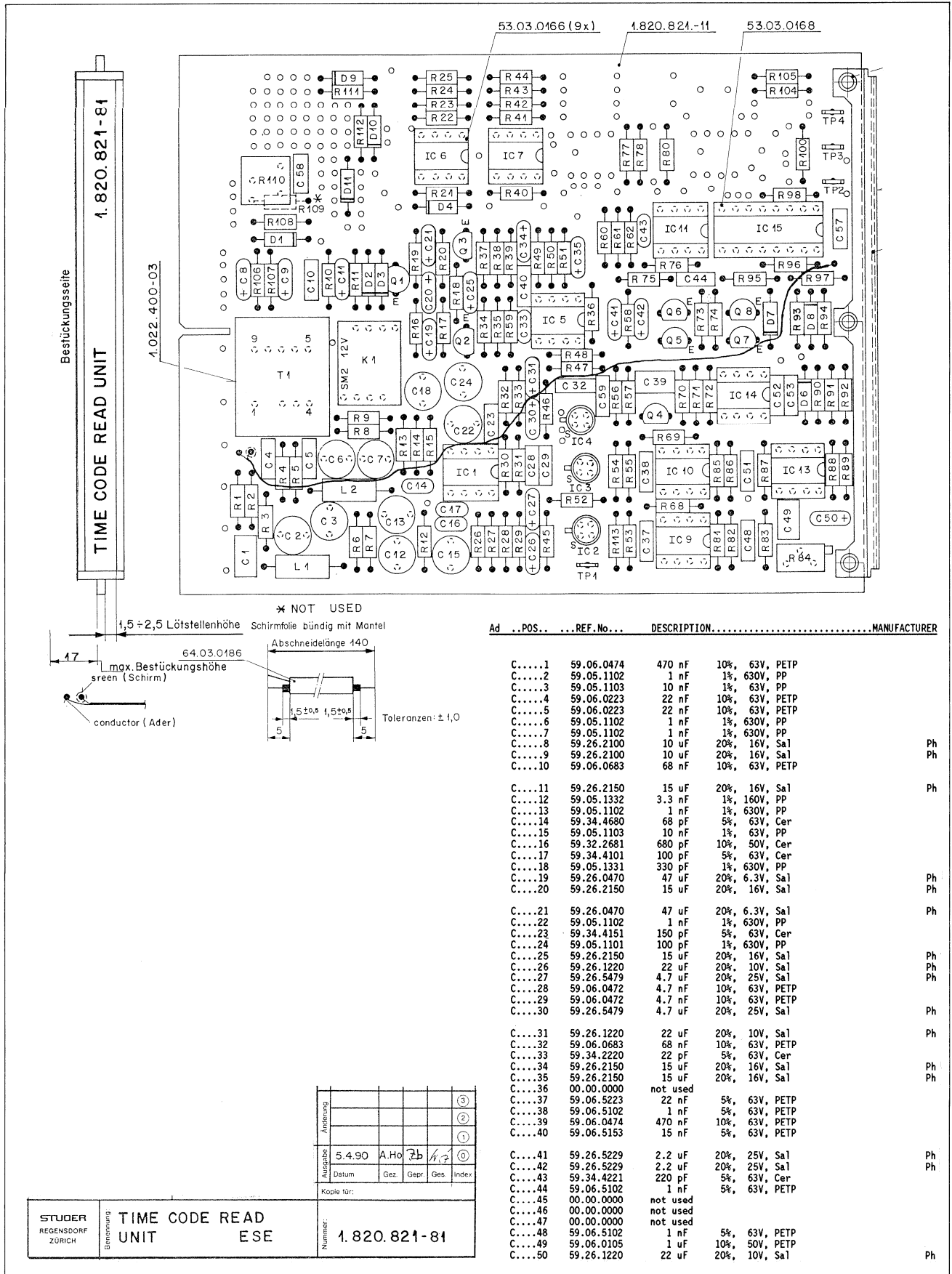
TIME CODE READ UNIT 1.820.821.81



① 26,0330 LP	...	...	...	...
STUDER				TIME CODE READ UNIT
				PAGE 2 OF 2
				1.820.821-81



TIME CODE READ UNIT 1.820.821.81



\* NOT USED

Ad ...POS... REF.No... DESCRIPTION.....MANUFACTURER

Ad	POS	REF.No	DESCRIPTION	MANUFACTURER
C.....1		59.06.0474	470 nF 10%, 63V, PETP	
C.....2		59.05.1102	1 nF 1%, 630V, PP	
C.....3		59.05.1103	10 nF 1%, 63V, PP	
C.....4		59.06.0223	22 nF 10%, 63V, PETP	
C.....5		59.06.0223	22 nF 10%, 63V, PETP	
C.....6		59.05.1102	1 nF 1%, 630V, PP	
C.....7		59.05.1102	1 nF 1%, 630V, PP	
C.....8		59.26.2100	10 uF 20%, 16V, SaI	Ph
C.....9		59.26.2100	10 uF 20%, 16V, SaI	Ph
C.....10		59.06.0683	68 nF 10%, 63V, PETP	
C.....11		59.26.2150	15 uF 20%, 16V, SaI	Ph
C.....12		59.05.1332	3.3 nF 1%, 160V, PP	
C.....13		59.05.1102	1 nF 1%, 630V, PP	
C.....14		59.34.4680	68 pF 5%, 63V, Cer	
C.....15		59.05.1103	10 nF 1%, 63V, PP	
C.....16		59.32.2681	680 pF 10%, 50V, Cer	
C.....17		59.34.4101	100 pF 5%, 63V, Cer	
C.....18		59.05.1331	330 pF 1%, 630V, PP	
C.....19		59.26.0470	47 uF 20%, 6.3V, SaI	Ph
C.....20		59.26.2150	15 uF 20%, 16V, SaI	Ph
C.....21		59.26.0470	47 uF 20%, 6.3V, SaI	Ph
C.....22		59.05.1102	1 nF 1%, 630V, PP	
C.....23		59.34.4151	150 pF 5%, 63V, Cer	
C.....24		59.05.1101	100 pF 1%, 630V, PP	
C.....25		59.26.2150	15 uF 20%, 16V, SaI	Ph
C.....26		59.26.1220	22 uF 20%, 10V, SaI	Ph
C.....27		59.26.5479	4.7 uF 20%, 25V, SaI	Ph
C.....28		59.06.0472	4.7 nF 10%, 63V, PETP	
C.....29		59.06.0472	4.7 nF 10%, 63V, PETP	
C.....30		59.26.5479	4.7 uF 20%, 25V, SaI	Ph
C.....31		59.26.1220	22 uF 20%, 10V, SaI	Ph
C.....32		59.06.0683	68 nF 10%, 63V, PETP	
C.....33		59.34.2220	22 pF 5%, 63V, Cer	
C.....34		59.26.2150	15 uF 20%, 16V, SaI	Ph
C.....35		59.26.2150	15 uF 20%, 16V, SaI	Ph
C.....36		00.00.0000	not used	
C.....37		59.06.5223	22 nF 5%, 63V, PETP	
C.....38		59.06.5102	1 nF 5%, 63V, PETP	
C.....39		59.06.0474	470 nF 10%, 63V, PETP	
C.....40		59.06.5153	15 nF 5%, 63V, PETP	
C.....41		59.26.5229	2.2 uF 20%, 25V, SaI	Ph
C.....42		59.26.5229	2.2 uF 20%, 25V, SaI	Ph
C.....43		59.34.4221	220 pF 5%, 63V, Cer	
C.....44		59.06.5102	1 nF 5%, 63V, PETP	
C.....45		00.00.0000	not used	
C.....46		00.00.0000	not used	
C.....47		00.00.0000	not used	
C.....48		59.06.5102	1 nF 5%, 63V, PETP	
C.....49		59.06.0105	1 uF 10%, 50V, PETP	
C.....50		59.26.1220	22 uF 20%, 10V, SaI	Ph

Ausgaben		Änderung		Datum		Gez.		Gepr.		Ges.		Index	
5.4.90	A.Ho	2b											

STUDER REGENSDORF ZÜRICH

Bestückungsseite

TIME CODE READ UNIT ESE

Nummer: 1.820.821-81

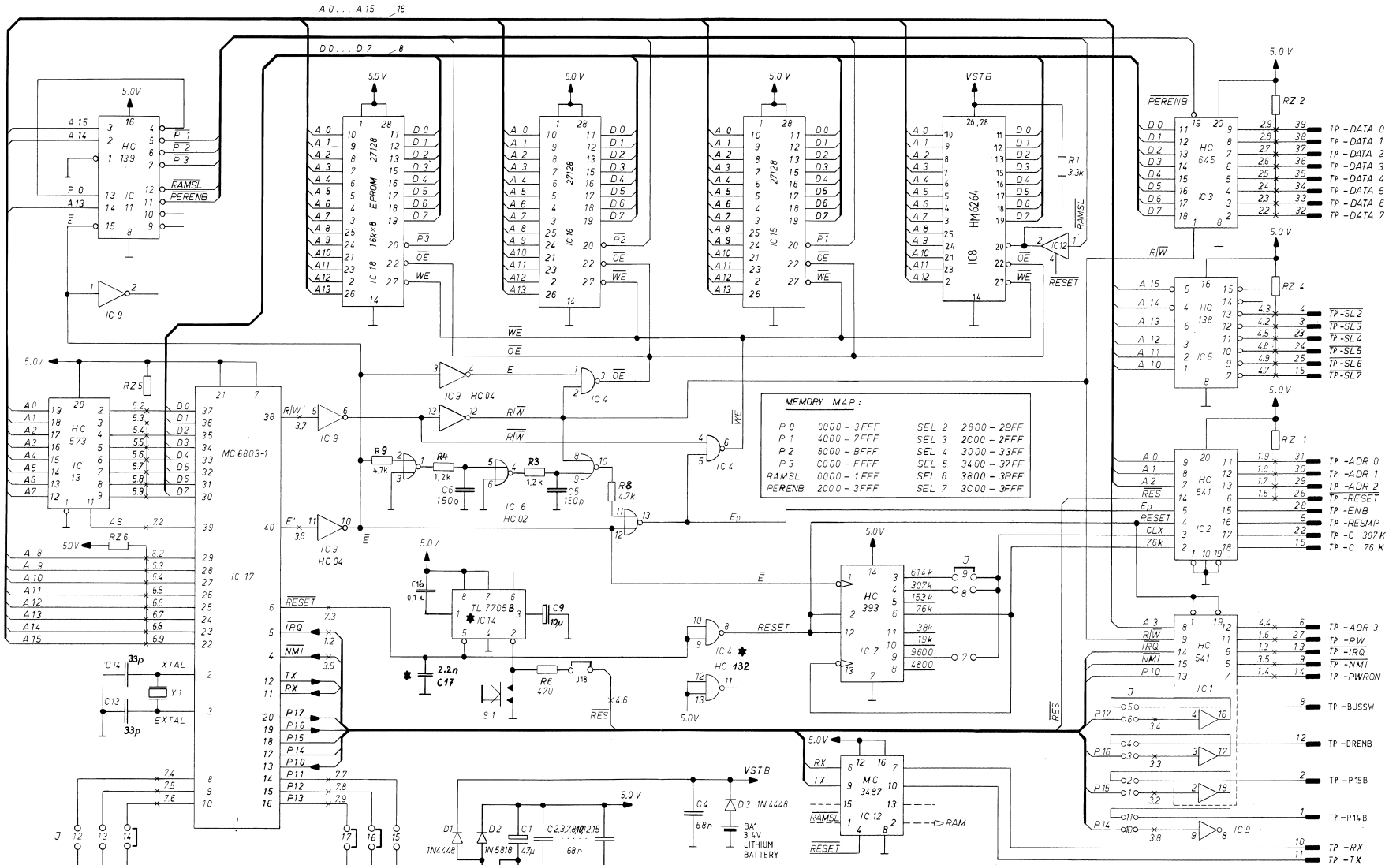
Kopie für:



TIME CODE READ UNIT 1.820.821.81

Ad	..POS..	..REF.No..	DESCRIPTION	MANUFACTURER	Ad	..POS..	..REF.No..	DESCRIPTION	MANUFACTURER
C...	51	59.06.0683	68 nF	10%, 63V, PETP	R...	47	57.11.3105	1 MOhm	5%
C...	52	59.06.0472	4.7 nF	10%, 63V, PETP	R...	48	57.11.3101	100 Ohm	5%
C...	53	59.06.0472	4.7 nF	10%, 63V, PETP	R...	49	57.11.3105	1 MOhm	5%
C...	55	00.00.0000	not used		R...	50	57.11.3152	1.5 kOhm	2%
C...	56	00.00.0000	not used		R...	51	57.11.3229	2.2 Ohm	5%
C...	57	59.06.0104	100 nF	10%, 63V, PETP	R...	52	57.11.3105	1 MOhm	5%
C...	58	59.06.0223	22 nF	10%, 63V, PETP	R...	53	57.11.3103	10 kOhm	5%
C...	59	59.06.0223	22 nF	10%, 63V, PETP	R...	54	57.11.3105	1 MOhm	5%
D....	1	50.04.0122	1N 4001	(-4004) GI,Mot,ITT	R...	55	57.11.3103	10 kOhm	2%
D....	2	50.04.0125	1N 4448	Fc,ITT,Ph,SES,Tf	R...	56	57.11.3105	1 MOhm	5%
D....	3	50.04.0125	1N 4448	Fc,ITT,Ph,SES,Tf	R...	57	57.11.3102	1 kOhm	5%
D....	4	50.04.0125	1N 4448	Fc,ITT,Ph,SES,Tf	R...	58	57.11.3101	100 Ohm	5%
D....	5	00.00.0000	not used		R...	59	57.11.3680	68 Ohm	2%
D....	6	50.04.0125	1N 4448	Fc,ITT,Ph,SES,Tf	R...	60	57.11.3101	100 Ohm	5%
D....	7	00.00.0000	not used		R...	61	57.11.6226	22 MOhm	10%
D....	8	00.00.0000	not used		R...	62	57.11.3102	1 kOhm	5%
D....	9	50.04.0125	1N 4448	Fc,ITT,Ph,SES,Tf	R...	63	00.00.0000	not used	
D....	10	50.04.0125	1N 4448	Fc,ITT,Ph,SES,Tf	R...	64	00.00.0000	not used	
D....	11	50.04.0125	1N 4448	Fc,ITT,Ph,SES,Tf	R...	65	00.00.0000	not used	
IC....	1	50.09.0106	NE5532AN	XR5532AN, 5532ANB Sig,Ex,Ra	R...	66	00.00.0000	not used	
IC....	2	50.11.0106	SD 214DE	BSD 214 Ph,Six	R...	67	00.00.0000	not used	
IC....	3	50.11.0106	SD 214DE	BSD 214 Ph,Six	R...	68	57.11.3105	1 MOhm	5%
IC....	4	50.11.0106	SD 214DE	BSD 214 Ph,Six	R...	69	57.11.3101	100 Ohm	5%
IC....	5	50.09.0110	LF 357BN	Slew Rate >40V/us Studer	R...	70	57.11.5106	10 MOhm	10%
IC....	6	50.05.0283	LM 393N	LM 393 NS,Tho,TI	R...	71	57.11.3105	1 MOhm	5%
IC....	7	50.05.0283	LM 393N	LM 393 NS,Tho,TI	R...	72	57.11.5225	2.2 MOhm	5%
IC....	8	00.00.0000	not used		R...	73	57.11.3103	10 kOhm	5%
IC....	9	50.09.0101	LF 353N	TL 072 CP NS,Tho,TI	R...	74	57.11.3103	10 kOhm	5%
IC....	10	50.09.0110	LF 357BN	Slew Rate >40V/us Studer	R...	75	57.11.3220	22 Ohm	5%
IC....	11	50.09.0101	LF 353N	TL 072 CP NS,Tho,TI	R...	76	57.11.5106	10 MOhm	10%
IC....	12	00.00.0000	not used		R...	77	57.11.3101	100 Ohm	5%
IC....	13	50.09.0110	LF 357BN	Slew Rate >40V/us Studer	R...	78	57.11.3101	100 Ohm	5%
IC....	14	50.09.0110	LF 357BN	Slew Rate >40V/us Studer	R...	79	00.00.0000	not used	
IC....	15	50.15.0109	AM26LS33PC	DS26LS33CN AMD,NS	R...	80	57.11.3471	470 Ohm	5%
K....	1	56.04.0171	SM D1012	12V 2*U, 100V/0.5A AG/AU ITT	R...	81	57.11.3473	47 kOhm	5%
L....	1	62.01.0128	1mH	Gowanda nr. 17-104, Delevan nr. 1641-105	R...	82	57.11.3683	68 kOhm	5%
L....	2	62.01.0128	1mH	Gowanda nr. 17-104, Delevan nr. 1641-105	R...	83	57.11.3470	47 Ohm	5%
TP....	1	54.02.0320		Testpoint	R...	84	58.05.0202	2 kOhm	See note 1
TP....	2	54.02.0320		Testpoint	R...	85	57.11.3103	10 kOhm	5%
TP....	3	54.02.0320		Testpoint	R...	86	57.11.3102	1 kOhm	5%
TP....	4	54.02.0320		Testpoint	R...	87	57.11.3105	1 MOhm	5%
Q....	1	50.03.0436	BC 237B	BC 547B, BC 550B ITT,Mot,Ph,Sie	R...	88	57.11.3103	10 kOhm	5%
Q....	2	50.03.0407	BC 550C	Ph,Sie	R...	89	57.11.3102	1 kOhm	5%
Q....	3	50.03.0407	BC 550C	Ph,Sie	R...	90	57.11.3105	1 MOhm	5%
Q....	4	50.03.0350	J 112	Mot	R...	91	57.11.3103	10 kOhm	5%
Q....	5	50.03.0340	BC 337-25	ITT,NS,Ph,Sie	R...	92	57.11.3112	1.1 kOhm	5%
Q....	6	50.03.0351	BC 327-25	ITT,Ph,Sie	R...	93	57.11.3000	0 Ohm	
Q....	7	50.03.0340	BC 337-25	ITT,NS,Ph,Sie	R...	94	57.11.3221	220 Ohm	5%
Q....	8	50.03.0351	BC 327-25	ITT,Ph,Sie	R...	95	57.11.3392	3.9 kOhm	5%
R....	1	57.11.3561	560 Ohm	2%	R...	96	57.11.3471	470 Ohm	5%
R....	2	57.11.3203	20 kOhm	2%	R...	97	57.11.3681	680 Ohm	5%
R....	3	57.11.3103	10 kOhm	5%	R...	98	57.11.3471	470 Ohm	5%
R....	4	57.11.3102	1 kOhm	5%	R...	99	00.00.0000	not used	
R....	5	57.11.3102	1 kOhm	5%	R...	100	57.11.3392	3.9 kOhm	5%
R....	6	57.11.3104	100 kOhm	1%	R...	101	00.00.0000	not used	
R....	7	57.11.3102	1 kOhm	1%	R...	102	00.00.0000	not used	
R....	8	57.11.3473	47 kOhm	2%	R...	103	00.00.0000	not used	
R....	9	57.11.3682	6.8 kOhm	2%	R...	104	57.11.3102	1 kOhm	5%
R....	10	57.11.3220	22 Ohm	5%	R...	105	57.11.3392	3.9 kOhm	5%
R....	11	57.11.3104	100 kOhm	5%	R...	106	57.11.3101	100 Ohm	5%
R....	12	57.11.3102	1 kOhm	1%	R...	107	57.11.3271	270 Ohm	5%
R....	13	57.11.3103	10 kOhm	1%	R...	108	57.11.3223	22 kOhm	5%
R....	14	57.11.3103	10 kOhm	1%	R...	109	00.00.0000	not used	
R....	15	57.11.3103	10 kOhm	1%	R...	110	58.01.8202	2 kOhm	10% , See note 2
R....	16	57.11.3105	1 MOhm	5%	R...	111	57.11.3683	68 kOhm	5%
R....	17	57.11.3333	33 kOhm	1%	R...	112	57.11.3223	22 kOhm	5%
R....	18	57.11.3221	220 Ohm	5%	R...	113	57.11.3103	10 kOhm	5%
R....	19	57.11.3105	1 MOhm	5%	T....	1	1.022.410.00		Studer
R....	20	57.11.3333	33 kOhm	1%	Note 1 - 2 kOhm Potentiometer, 22-turn: Bourns nr. 3296 Z - 1 - 202 Contelec nr. 183 XZ 202 Murata nr. POT 3105 Z - 1 -202 Spectrol nr. 64 Z 202 T 000				
R....	21	57.11.3103	10 kOhm	5%	Note 2 - 2 kOhm Potentiometer: A.Bradley nr. E 2B 202 Bourns nr. 3386 F-1- 202 Spectrol nr. 63 M 202 T010 Murata nr. POT 3104 F-1-202				
R....	22	57.11.3104	100 kOhm	5%	Cer=Ceramic, PETP=Polyesterfilm, Sal=Solid Aluminium, PP=Polypropylen				
R....	23	57.11.3103	10 kOhm	5%	MANUFACTURER: AMD=Advenced Micro Devices, Ex=Exar, Fc=Fairchild, GI=General Instruments, ITT=Intermetall, Mot=Motorola, NS=National Semiconductors, Ph=Philips, Ses=Sescosem, Sie=Siemens, Sig=Signetics, Tf=Telefunken, Tho=Thomson, TI=Texas Instruments				
R....	24	57.11.3223	22 kOhm	5%	1.820.821.81 TIME CODE READ UNIT LP 90/04/0500				
R....	25	57.11.3103	10 kOhm	5%					
R....	26	57.11.3102	1 kOhm	1%					
R....	27	57.11.3153	15 kOhm	1%					
R....	28	57.11.3184	180 kOhm	5%					
R....	29	57.11.3101	100 Ohm	1%					
R....	30	57.11.3152	1.5 kOhm	5%					
R....	31	57.11.3152	1.5 kOhm	5%					
R....	32	57.11.3103	10 kOhm	1%					
R....	33	57.11.3101	100 Ohm	1%					
R....	34	57.11.3221	220 Ohm	5%					
R....	35	57.11.3153	15 kOhm	1%					
R....	36	57.11.3682	6.8 kOhm	2%					
R....	37	57.11.3221	220 Ohm	5%					
R....	38	57.11.3153	15 kOhm	1%					
R....	39	57.11.3229	2.2 Ohm	5%					
R....	40	57.11.3472	4.7 kOhm	5%					
R....	41	57.11.3103	10 kOhm	5%					
R....	42	57.11.3103	10 kOhm	5%					
R....	43	57.11.3103	10 kOhm	5%					
R....	44	57.11.3103	10 kOhm	5%					
R....	45	57.11.3104	100 kOhm	5%					
R....	46	57.11.3104	100 kOhm	5%					

MP UNIT VU PANEL MCH 1.820.783.27

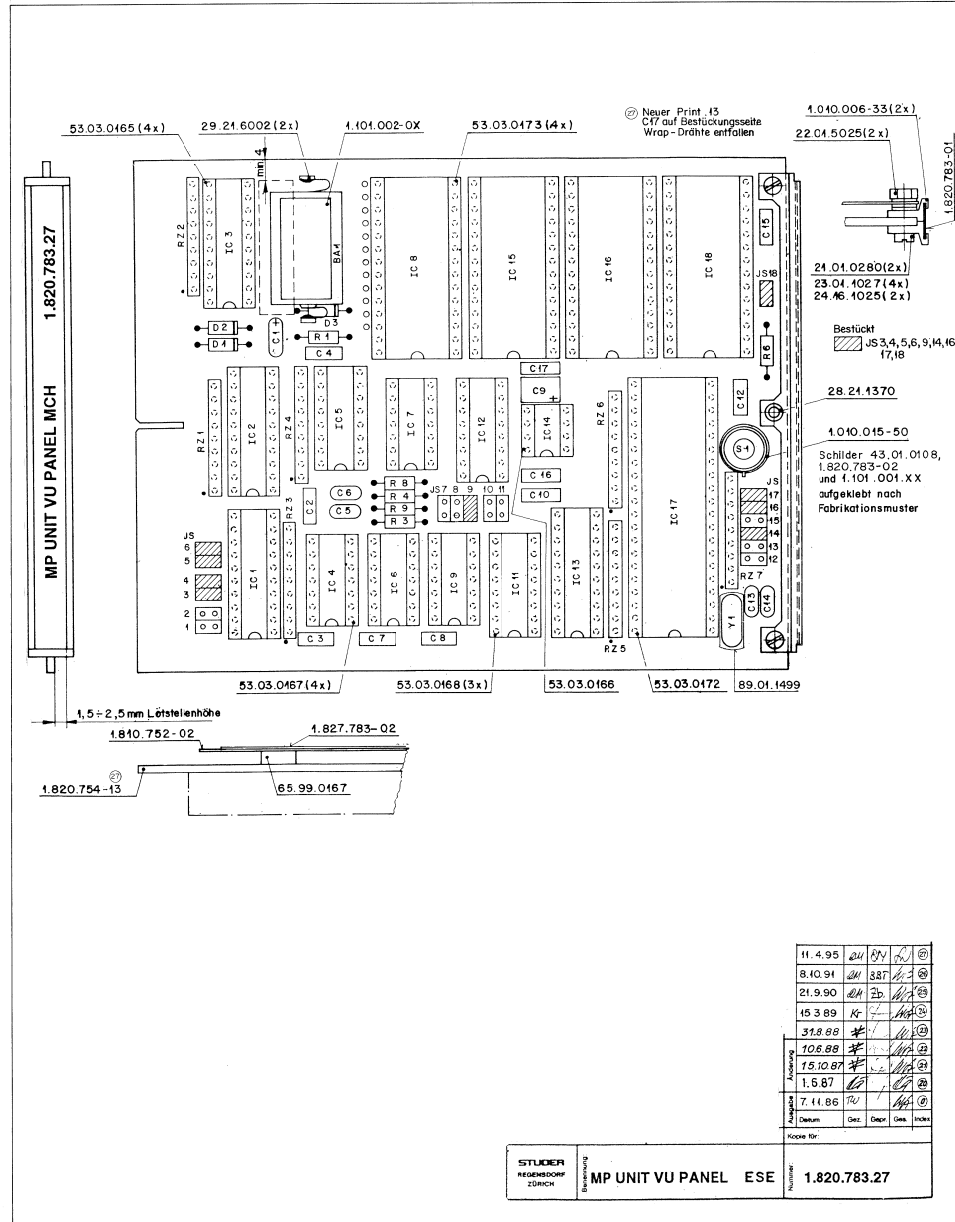


\* Has been added/changed

© 31.10.86	pl	26 08.10.91	BBT		
A 820 Logic Section				PAGE 1 OF 1	
STUDER			MP UNIT VU PANEL MCH		ESE/SC 1.820.783.27

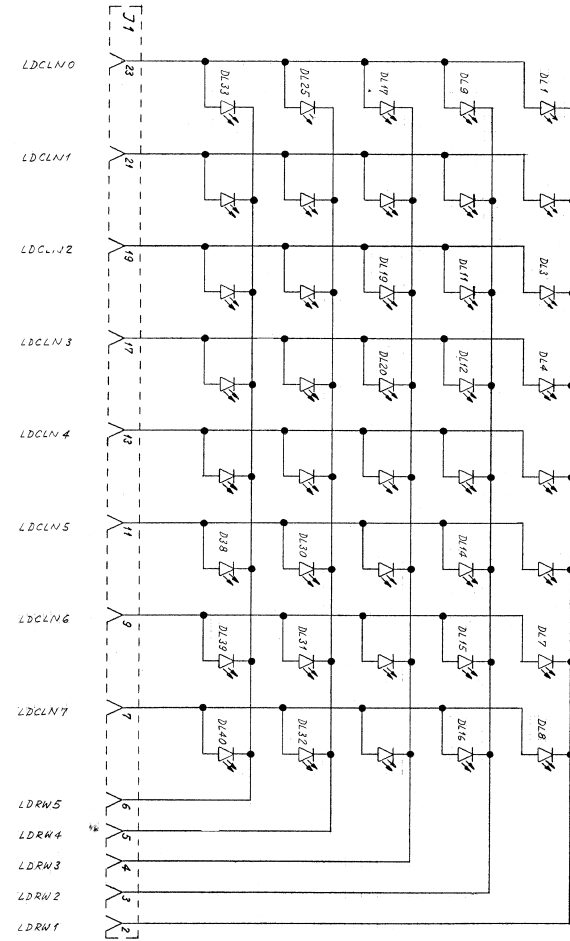
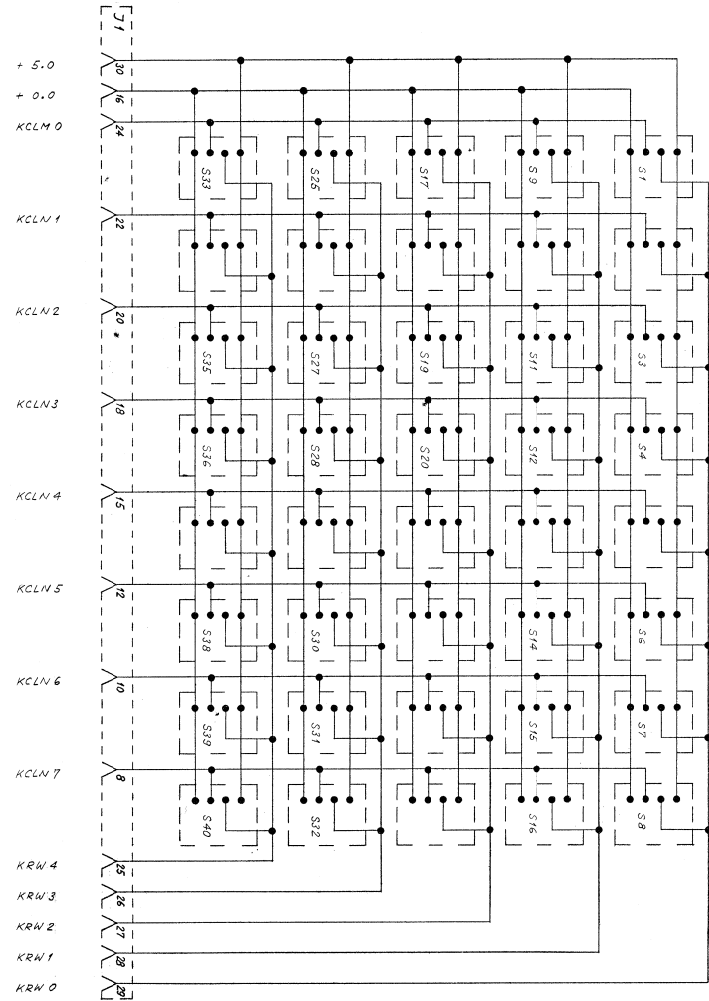


MP UNIT VU PANEL MCH 1.820.783.27



Ad	POS.	REF.No.	DESCRIPTION	MANUFACTURER	Ad	POS.	REF.No.	DESCRIPTION	MANUFACTURER
BA	...	89.01.0275	Batt, Lith., 3.6V, D 14.7*25.5		(23)	88/08/31	Software 35/88		
C	...	59.26.0470	47 uF 20%, 6.3V, Sal	Ph	(24)	89/03/15	Software 20/89		
C	...	59.06.0683	68 nF 10%, 63V, PETF		(25)	90/09/21	Software 42/90		
C	...	59.06.0683	68 nF 10%, 63V, PETF		(26)	91/10/08	Same software as 42/90 suffix (25), improved reset performance.		
C	...	59.34.7151	150 pF 2%, Ce		Note 1 - Contact pin:	Studer	Nr. 54.01.0020		
C	...	59.34.7151	150 pF 2%, Ce		Berg	Nr. 75.160.102-36			
C	...	59.06.0683	68 nF 10%, 63V, PETF		Philips	Nr. 2422 025 68303			
C	...	59.06.0683	68 nF 10%, 63V, PETF		Studer	Nr. 54.01.0021			
C	...	59.26.2100	10 uF 20%, 16V, Sal		Berg	Nr. 65.474-001			
C	...	59.06.0683	68 nF 10%, 63V, PETF		Philips	Nr. 2422 024 68003			
C	...	00.00.0000	not used		Note 2 - Network:	8 * 3.3 kOhm, 5k			
C	...	59.06.0683	68 nF 10%, 63V, PETF		Sicovend	Nr. C09 x 3.3 k J			
C	...	59.34.2330	33 pF 5%, Ce		Ineltro	Nr. R88 3.3 k 5k			
C	...	59.34.2330	33 pF 5%, Ce		Ce=Ceramic, Sal=Solid Aluminium, PETF=Polyesterfilm.				
C	...	59.06.0683	68 nF 10%, 63V, PETF		MANUFACTURER: f=Fairchild, hi=Hitachi, ITT=Intermetal, Mot=Motorola,				
C	...	59.06.0104	100 nF 10%, 63V, PETF		NS=National Semiconductors, ON=ONI, Ph=Philips,				
C	...	59.06.0222	2.2 nF 10%, 63V, PETF		Ses=Sesocesa, Tf=Telefunken, TI=Texas Instruments.				
I	...	50.04.0125	IN 4448	Fc,ITT,Ph,Ses,Tf	1.820.783.00	MP-UNIT VU PANEL MCH	BD 86/10/3100		
I	...	50.04.0512	IN 5818	Mot	1.820.783.00	MP-UNIT VU PANEL MCH	BD 87/06/0120		
I	...	50.04.0125	IN 4448	Fc,ITT,Ph,Ses,Tf	1.820.783.00	MP-UNIT VU PANEL MCH	BD 87/10/1521		
I	...	50.17.1541	74 HC 541	Mot,NS,Ph,RCA,SGS, TI, To	1.820.783.00	MP-UNIT VU PANEL MCH	BD 88/06/1022		
I	...	50.17.1541	74 HC 541	Mot,NS,Ph,RCA,SGS, TI, To	1.820.783.00	MP-UNIT VU PANEL MCH	BD 88/08/3123		
I	...	50.17.1645	74 HC 645	Mot,NS,Ph,RCA,SGS, TI, To	1.820.783.00	MP-UNIT VU PANEL MCH	BD 89/03/1524		
I	...	50.17.1000	74 HC 00	Mot,NS,Ph,RCA,SGS, TI, To	1.820.783.00	MP-UNIT VU PANEL MCH	ZS 90/09/2125		
I	...	50.17.1132	74 HC 132	Mot,NS,Ph,RCA,SGS, TI, To	1.820.783.00	MP-UNIT VU PANEL MCH	BB791/10/0826		
I	...	50.17.1138	74 HC 138	Mot,NS,Ph,RCA,SGS, TI, To					
I	...	50.17.1002	74 HC 02	Mot,NS,Ph,RCA,SGS, TI, To					
I	...	50.17.1393	74 HC 393	Mot,NS,Ph,RCA,SGS, TI, To					
I	...	50.14.0133	50.14.0133 TC 5564-15	HW624P-15					
I	...	50.17.0004	74 HCT 04	Mot,NS,Ph,RCA,SGS, TI, To					
I	...	not used	not used						
I	...	50.17.1139	74 HC 139	Mot,NS,Ph,RCA,SGS, TI, To					
I	...	50.15.0105	MC 3487 P DS 3487 N	Mot,NS					
I	...	50.17.1513	74 HC 573	Mot,NS,Ph,RCA,SGS, TI, To					
I	...	50.11.0122	TL1705ACP	TI					
I	...	50.11.0157	TL1705BCP	TI					
I	...	00.00.0000	not used						
I	...	50.14.0125	27128	HN 1827128G-30					
I	...	1.820.988.20	Software 22/87	St					
I	...	1.820.988.21	Software 41/87	St					
I	...	00.00.0000	not used						
I	...	50.16.0107	MC6803P-1 6803P-L	Mot,Hi					
I	...	50.14.0125	27128	HN 1827128G-30					
I	...	1.820.988.20	Software 22/87	St					
I	...	1.820.988.21	Software 41/87	St					
I	...	1.820.988.22	Software 22/88	St					
I	...	1.820.988.23	Software 35/88	St					
I	...	1.820.988.24	Software 20/89	St					
I	...	1.820.988.25	Software 42/90	St					
JS	...	see note 1	see note 1						
JS	...	see note 1	see note 1						
JS	...	see note 1	see note 1						
JS	...	see note 1	see note 1						
JS	...	see note 1	see note 1						
JS	...	see note 1	see note 1						
JS	...	see note 1	see note 1						
JS	...	see note 1	see note 1						
JS	...	see note 1	see note 1						
JS	...	see note 1	see note 1						
JS	...	see note 1	see note 1						
MP	...	29.21.6002	29.21.6002						
MP	...	00.00.0000	not used						
R	...	57.11.4332	3.3 kOhm 5k						
R	...	57.11.4122	1.2 kOhm 5k						
R	...	57.11.4122	1.2 kOhm 5k						
R	...	00.00.0000	not used						
R	...	57.11.4471	470 Ohm 5k						
R	...	00.00.0000	not used						
R	...	57.11.4472	4.7 kOhm 5k						
R	...	57.11.4472	4.7 kOhm 5k						
RZ	...	57.88.4332	see note 2						
RZ	...	57.88.4332	see note 2						
RZ	...	57.88.4332	see note 2						
RZ	...	57.88.4332	see note 2						
RZ	...	57.88.4332	see note 2						
RZ	...	57.88.4332	see note 2						
RZ	...	57.88.4332	see note 2						
S	...	55.03.0122	Chicago Switch 34-550-001						
Y	...	89.01.0560	4.9152 Mhz, +/-100 ppm						
(20)	87/06/01	Software 22/87							
(21)	87/10/15	Software 41/87							
(22)	88/06/10	Software 22/88							

MASTER KEYBOARD AUDIO 1.820.817.81



MASTER KEYBOARD AUDIO 1.820.817.81

**DL 1-40** (DL 1, DL 3, DL 4, DL 7, DL 8, DL 9, DL 11, DL 12, DL 14, DL 15, DL 16, DL 17, DL 19, DL 20, DL 25, DL 27, DL 28, DL 30, DL 31, DL 32, DL 33, DL 35, DL 36, DL 38, DL 39, DL 40)

**S 1-40** (S 4, S 3, S 4, S 6, S 7, S 8, S 9, S 11, S 12, S 14, S 15, S 16, S 17, S 19, S 20, S 25, S 27, S 28, S 30, S 31, S 32, S 33, S 35, S 36, S 38, S 39, S 40)

**Parts List:**

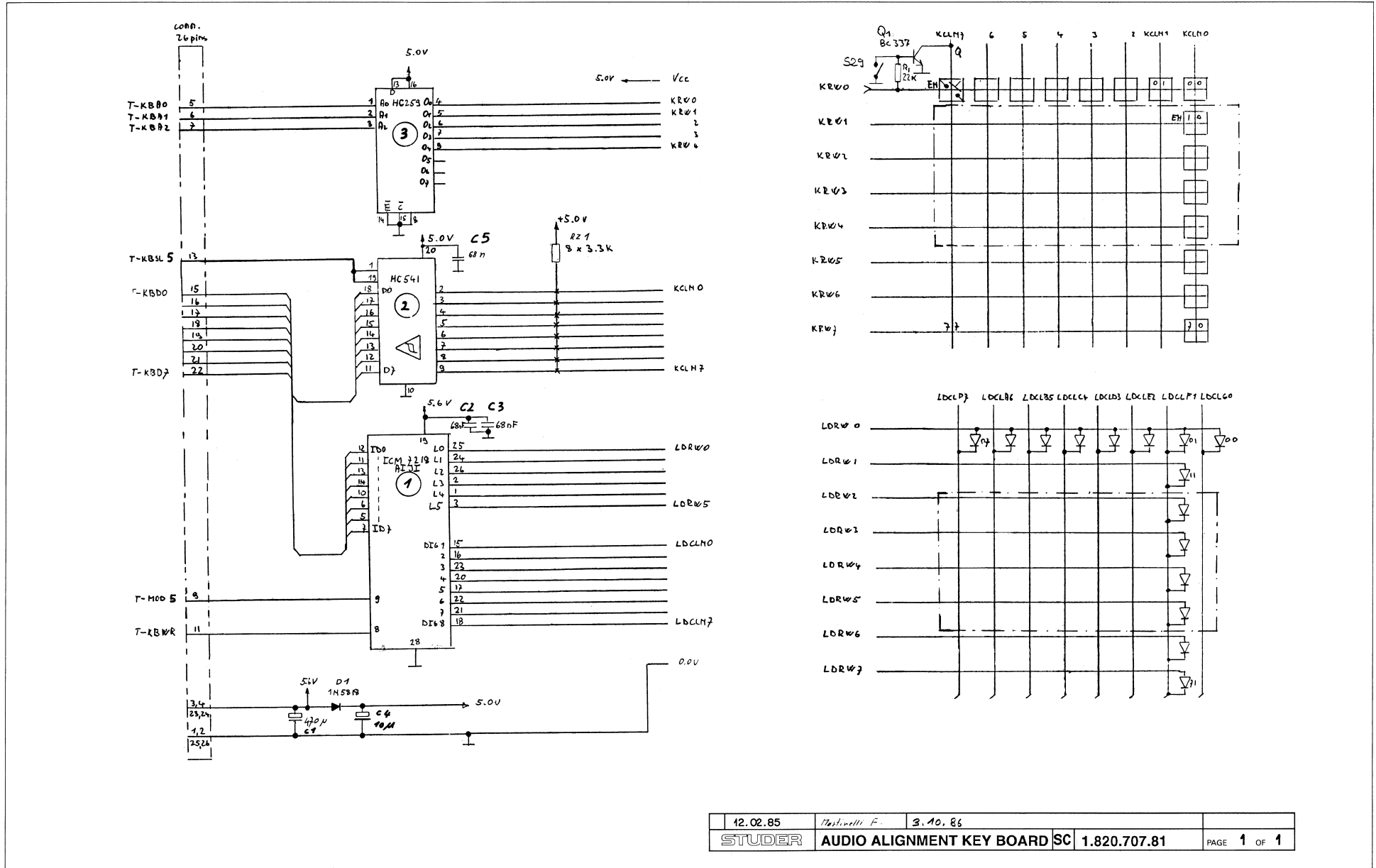
Ad	POS.	REF. No.	DESCRIPTION	MANUFACTURER
DL...	35	50.04.2152	HIMP-1440	HP
DL...	36	50.04.2152	HIMP-1440	HP
DL...	37	00.00.0000	not used	
DL...	38	50.04.2152	HIMP-1440	HP
DL...	39	50.04.2152	HIMP-1440	HP
DL...	40	50.04.2152	HIMP-1440	HP
J.....	1	54.01.0245	30 cont. AMP nr. 1-163.661-4 ( 2 pieces )	
S.....	1	55.03.0261	TTL-switch 1 * open collector, Rafi nr. 3.13001.110	
S.....	2	00.00.0000	not used	
S.....	3	55.03.0261	TTL-switch 1 * open collector, Rafi nr. 3.13001.110	
S.....	4	55.03.0261	TTL-switch 1 * open collector, Rafi nr. 3.13001.110	
S.....	5	00.00.0000	not used	
S.....	6	55.03.0261	TTL-switch 1 * open collector, Rafi nr. 3.13001.110	
S.....	7	55.03.0261	TTL-switch 1 * open collector, Rafi nr. 3.13001.110	
S.....	8	55.03.0261	TTL-switch 1 * open collector, Rafi nr. 3.13001.110	
S.....	9	55.03.0261	TTL-switch 1 * open collector, Rafi nr. 3.13001.110	
S.....	10	00.00.0000	not used	
S.....	11	55.03.0261	TTL-switch 1 * open collector, Rafi nr. 3.13001.110	
S.....	12	55.03.0261	TTL-switch 1 * open collector, Rafi nr. 3.13001.110	
S.....	13	00.00.0000	not used	
S.....	14	55.03.0261	TTL-switch 1 * open collector, Rafi nr. 3.13001.110	
S.....	15	55.03.0261	TTL-switch 1 * open collector, Rafi nr. 3.13001.110	
S.....	16	55.03.0261	TTL-switch 1 * open collector, Rafi nr. 3.13001.110	
S.....	17	55.03.0261	TTL-switch 1 * open collector, Rafi nr. 3.13001.110	
S.....	18	00.00.0000	not used	
S.....	19	55.03.0261	TTL-switch 1 * open collector, Rafi nr. 3.13001.110	
S.....	20	55.03.0261	TTL-switch 1 * open collector, Rafi nr. 3.13001.110	
S.....	21	00.00.0000	not used	
S.....	22	00.00.0000	not used	
S.....	23	00.00.0000	not used	
S.....	24	00.00.0000	not used	
S.....	25	55.03.0261	TTL-switch 1 * open collector, Rafi nr. 3.13001.110	
S.....	26	00.00.0000	not used	
S.....	27	55.03.0261	TTL-switch 1 * open collector, Rafi nr. 3.13001.110	
S.....	28	55.03.0261	TTL-switch 1 * open collector, Rafi nr. 3.13001.110	
S.....	29	00.00.0000	not used	
S.....	30	55.03.0261	TTL-switch 1 * open collector, Rafi nr. 3.13001.110	
S.....	31	55.03.0261	TTL-switch 1 * open collector, Rafi nr. 3.13001.110	
S.....	32	55.03.0261	TTL-switch 1 * open collector, Rafi nr. 3.13001.110	
S.....	33	55.03.0261	TTL-switch 1 * open collector, Rafi nr. 3.13001.110	
S.....	34	00.00.0000	not used	
S.....	35	55.03.0261	TTL-switch 1 * open collector, Rafi nr. 3.13001.110	
S.....	36	55.03.0261	TTL-switch 1 * open collector, Rafi nr. 3.13001.110	
S.....	37	00.00.0000	not used	
S.....	38	55.03.0261	TTL-switch 1 * open collector, Rafi nr. 3.13001.110	
S.....	39	55.03.0261	TTL-switch 1 * open collector, Rafi nr. 3.13001.110	
S.....	40	55.03.0261	TTL-switch 1 * open collector, Rafi nr. 3.13001.110	
SMP...	1	55.03.0382	Colourfield, green, with LED opening	
SMP...	2	00.00.0000	not used	
SMP...	3	55.03.0384	Colourfield, white, with LED opening	
SMP...	4	55.03.0384	Colourfield, white, with LED opening	
SMP...	5	00.00.0000	not used	
SMP...	6	55.03.0374	Colourfield, white, without LED opening	
SMP...	7	55.03.0384	Colourfield, white, with LED opening	
SMP...	8	55.03.0384	Colourfield, white, with LED opening	
SMP...	9	55.03.0385	Colourfield, grey, with LED opening	
SMP...	10	00.00.0000	not used	
SMP...	11	55.03.0384	Colourfield, white, with LED opening	
SMP...	12	55.03.0384	Colourfield, white, with LED opening	
SMP...	13	00.00.0000	not used	
SMP...	14	55.03.0384	Colourfield, white, with LED opening	
SMP...	15	55.03.0384	Colourfield, white, with LED opening	
SMP...	16	55.03.0384	Colourfield, white, with LED opening	
SMP...	17	55.03.0384	Colourfield, white, with LED opening	
SMP...	18	00.00.0000	not used	
SMP...	19	55.03.0384	Colourfield, white, with LED opening	
SMP...	20	55.03.0384	Colourfield, white, with LED opening	
SMP...	21	00.00.0000	not used	
SMP...	22	00.00.0000	not used	
SMP...	23	00.00.0000	not used	
SMP...	24	00.00.0000	not used	
SMP...	25	55.03.0361	Colourfield, yellow, with LED opening	
SMP...	26	00.00.0000	not used	
SMP...	27	55.03.0384	Colourfield, white, with LED opening	
SMP...	28	55.03.0384	Colourfield, white, with LED opening	
SMP...	29	00.00.0000	not used	
SMP...	30	55.03.0384	Colourfield, white, with LED opening	
SMP...	31	55.03.0384	Colourfield, white, with LED opening	
SMP...	32	55.03.0384	Colourfield, white, with LED opening	
SMP...	33	55.03.0384	Colourfield, white, with LED opening	
SMP...	34	00.00.0000	not used	
SMP...	35	55.03.0384	Colourfield, white, with LED opening	
SMP...	36	55.03.0384	Colourfield, white, with LED opening	
SMP...	37	00.00.0000	not used	
SMP...	38	55.03.0384	Colourfield, white, with LED opening	
SMP...	39	55.03.0384	Colourfield, white, with LED opening	
SMP...	40	55.03.0384	Colourfield, white, with LED opening	

MANUFACTURER: HP=Hewlett Packard.

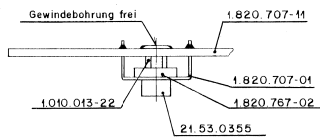
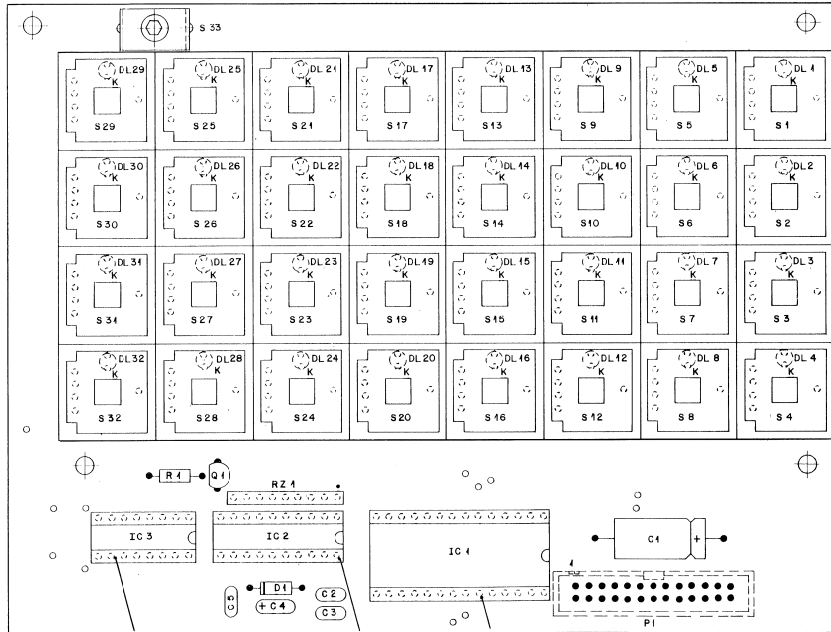
1.820.817.81 MASTER KEYBOARD AUDIO BD 87/08/2000



AUDIO ALIGNMENT KEY BOARD 1.820.707.81



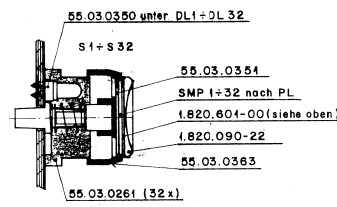
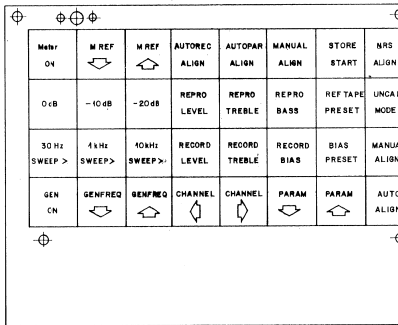
AUDIO ALIGNMENT KEY BOARD 1.820.707.81



K = Kathode  
DL 1 + DL 32



Tasten-Beschriftung M 4:4



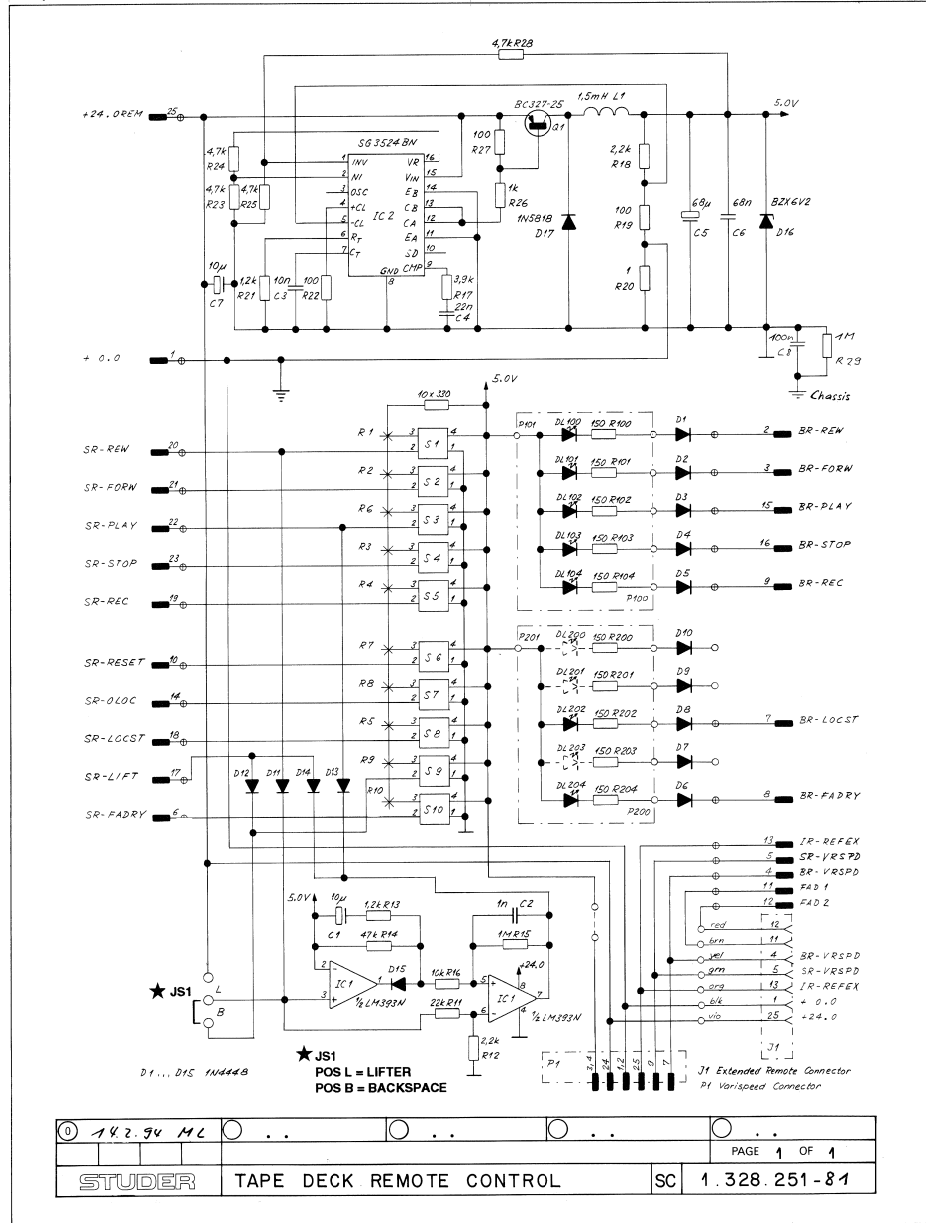
Ad ..POS...REF.No... DESCRIPTION.....MANUFACTURER

Ad	POS	REF.No	DESCRIPTION	MANUFACTURER
R	....1	57.11.4223	22k Ohm 2%	
RZ	....1	57.88.4332	see note 2	
S	....1	55.03.0261	TTL-switch	1 * open collector, Rafi nr. 3.13001.110
S	....2	55.03.0261	TTL-switch	1 * open collector, Rafi nr. 3.13001.110
S	....3	55.03.0261	TTL-switch	1 * open collector, Rafi nr. 3.13001.110
S	....4	55.03.0261	TTL-switch	1 * open collector, Rafi nr. 3.13001.110
S	....5	55.03.0261	TTL-switch	1 * open collector, Rafi nr. 3.13001.110
S	....6	55.03.0261	TTL-switch	1 * open collector, Rafi nr. 3.13001.110
S	....7	55.03.0261	TTL-switch	1 * open collector, Rafi nr. 3.13001.110
S	....8	55.03.0261	TTL-switch	1 * open collector, Rafi nr. 3.13001.110
S	....9	55.03.0261	TTL-switch	1 * open collector, Rafi nr. 3.13001.110
S	....10	55.03.0261	TTL-switch	1 * open collector, Rafi nr. 3.13001.110
S	....11	55.03.0261	TTL-switch	1 * open collector, Rafi nr. 3.13001.110
S	....12	55.03.0261	TTL-switch	1 * open collector, Rafi nr. 3.13001.110
S	....13	55.03.0261	TTL-switch	1 * open collector, Rafi nr. 3.13001.110
S	....14	55.03.0261	TTL-switch	1 * open collector, Rafi nr. 3.13001.110
S	....15	55.03.0261	TTL-switch	1 * open collector, Rafi nr. 3.13001.110
S	....16	55.03.0261	TTL-switch	1 * open collector, Rafi nr. 3.13001.110
S	....17	55.03.0261	TTL-switch	1 * open collector, Rafi nr. 3.13001.110
S	....18	55.03.0261	TTL-switch	1 * open collector, Rafi nr. 3.13001.110
S	....19	55.03.0261	TTL-switch	1 * open collector, Rafi nr. 3.13001.110
S	....20	55.03.0261	TTL-switch	1 * open collector, Rafi nr. 3.13001.110
S	....21	55.03.0261	TTL-switch	1 * open collector, Rafi nr. 3.13001.110
S	....22	55.03.0261	TTL-switch	1 * open collector, Rafi nr. 3.13001.110
S	....23	55.03.0261	TTL-switch	1 * open collector, Rafi nr. 3.13001.110
S	....24	55.03.0261	TTL-switch	1 * open collector, Rafi nr. 3.13001.110
S	....25	55.03.0261	TTL-switch	1 * open collector, Rafi nr. 3.13001.110
S	....26	55.03.0261	TTL-switch	1 * open collector, Rafi nr. 3.13001.110
S	....27	55.03.0261	TTL-switch	1 * open collector, Rafi nr. 3.13001.110
S	....28	55.03.0261	TTL-switch	1 * open collector, Rafi nr. 3.13001.110
S	....29	55.03.0261	TTL-switch	1 * open collector, Rafi nr. 3.13001.110
S	....30	55.03.0261	TTL-switch	1 * open collector, Rafi nr. 3.13001.110
S	....31	55.03.0261	TTL-switch	1 * open collector, Rafi nr. 3.13001.110
S	....32	55.03.0261	TTL-switch	1 * open collector, Rafi nr. 3.13001.110
S	....33	00.00.0000	see note 3	
SMP	...1	55.03.0381	Colourfield, yellow, with LED opening	
SMP	...2	55.03.0381	Colourfield, yellow, with LED opening	
SMP	...3	55.03.0381	Colourfield, yellow, with LED opening	
SMP	...4	55.03.0381	Colourfield, yellow, with LED opening	
SMP	...5	55.03.0383	Colourfield, red, with LED opening	
SMP	...6	55.03.0385	Colourfield, grey, with LED opening	
SMP	...7	55.03.0385	Colourfield, grey, with LED opening	
SMP	...8	55.03.0374	Colourfield, white, without LED opening	
SMP	...9	55.03.0384	Colourfield, white, with LED opening	
SMP	...10	55.03.0380	Colourfield, blue, with LED opening	
SMP	...11	55.03.0380	Colourfield, blue, with LED opening	
SMP	...12	55.03.0374	Colourfield, white, without LED opening	
SMP	...13	55.03.0384	Colourfield, white, with LED opening	
SMP	...14	55.03.0380	Colourfield, blue, with LED opening	
SMP	...15	55.03.0380	Colourfield, blue, with LED opening	
SMP	...16	55.03.0374	Colourfield, white, without LED opening	
SMP	...17	55.03.0384	Colourfield, white, with LED opening	
SMP	...18	55.03.0380	Colourfield, blue, with LED opening	
SMP	...19	55.03.0380	Colourfield, blue, with LED opening	
SMP	...20	55.03.0374	Colourfield, white, without LED opening	
SMP	...21	55.03.0372	Colourfield, green, without LED opening	
SMP	...22	55.03.0382	Colourfield, green, with LED opening	
SMP	...23	55.03.0382	Colourfield, green, with LED opening	
SMP	...24	55.03.0372	Colourfield, green, without LED opening	
SMP	...25	55.03.0372	Colourfield, green, without LED opening	
SMP	...26	55.03.0382	Colourfield, green, with LED opening	
SMP	...27	55.03.0382	Colourfield, green, with LED opening	
SMP	...28	55.03.0372	Colourfield, green, without LED opening	
SMP	...29	55.03.0382	Colourfield, green, with LED opening	
SMP	...30	55.03.0382	Colourfield, green, with LED opening	
SMP	...31	55.03.0382	Colourfield, green, with LED opening	
SMP	...32	55.03.0382	Colourfield, green, with LED opening	
Note 1 - Connector, 26 contacts: Yamachi nr. FAP-26-08-40SS Burdny nr. 895 9 826 800 GS 3M nr. 7626-6002 VZ				
Note 2 - Network 8 * 3.3 kOhm, 5k, single line: Allen Bradley nr. 909 A 332 Beckmann nr. L - 09 - 1 - R 3.3 k Bouris nr. 4609 H - 101 - 332 Dale nr. CSC 09 A 01 - 332 G Sprague nr. 256 C J 332 X2 PD Tama nr. HSC 09 3 3.3 kOhm G Vitrom nr. F9E 3.3 kOhm 2%				
Note 3 - Switch set: Contact bow Studer nr. 1.820.707.01 Insulator sleeve Studer nr. 1.820.767.02 Rivet nut Studer nr. 1.010.013.22 Screw Studer nr. 21.53.0355				
MANUFACTURER: N=Newlet Packard, I=Intersil, M=Maxim, Mot=Motorola, NS=National Semiconductors, Ph=Philips, RCA=RCA Corporation of America, SGS=SGS/Ates, TI=Texas Instruments, To=Toshiba.				
1.820.707.81 AUDIO ALIGNMENT KEY BOARD BD 07/08/2000				

Ad	POS	REF.No	DESCRIPTION	MANUFACTURER
C	....1	59.25.1471	470 uF 10%, 6V	
C	....2	59.06.0683	68 nF 10%	
C	....3	59.06.0683	68 nF 10%	
C	....4	59.26.1100	10 uF 20%, 10V	
C	....5	59.06.0683	68 nF 10%	
I	....1	50.04.0512	1N 5818 1N 5819	Mot
DL	...1	50.04.2152	HLMF-1440	HP
DL	...2	50.04.2152	HLMF-1440	HP
DL	...3	50.04.2152	HLMF-1440	HP
DL	...4	50.04.2152	HLMF-1440	HP
DL	...5	50.04.2152	HLMF-1440	HP
DL	...6	50.04.2152	HLMF-1440	HP
DL	...7	50.04.2152	HLMF-1440	HP
DL	...8	not used		HP
DL	...9	50.04.2152	HLMF-1440	HP
DL	...10	50.04.2152	HLMF-1440	HP
DL	...11	50.04.2152	HLMF-1440	HP
DL	...12	not used		HP
DL	...13	50.04.2152	HLMF-1440	HP
DL	...14	50.04.2152	HLMF-1440	HP
DL	...15	50.04.2152	HLMF-1440	HP
DL	...16	not used		HP
DL	...17	50.04.2152	HLMF-1440	HP
DL	...18	50.04.2152	HLMF-1440	HP
DL	...19	50.04.2152	HLMF-1440	HP
DL	...20	not used		HP
DL	...21	not used		HP
DL	...22	50.04.2152	HLMF-1440	HP
DL	...23	50.04.2152	HLMF-1440	HP
DL	...24	not used		HP
DL	...25	not used		HP
DL	...26	50.04.2152	HLMF-1440	HP
DL	...27	50.04.2152	HLMF-1440	HP
DL	...28	not used		HP
DL	...29	50.04.2152	HLMF-1440	HP
DL	...30	50.04.2152	HLMF-1440	HP
DL	...31	50.04.2152	HLMF-1440	HP
DL	...32	50.04.2152	HLMF-1440	HP
I	....1	50.07.0035	1CM 7218	Is, M
I	....2	50.17.1541	74 HC 541	Mot, NS, Ph, RCA, SGS, TI, To
I	....3	50.17.1259	74 HC 259	Mot, NS, Ph, RCA, SGS, TI, To
R	....1	54.14.2003	see note 1	
Q	....1	50.03.0340	8C 337 B	

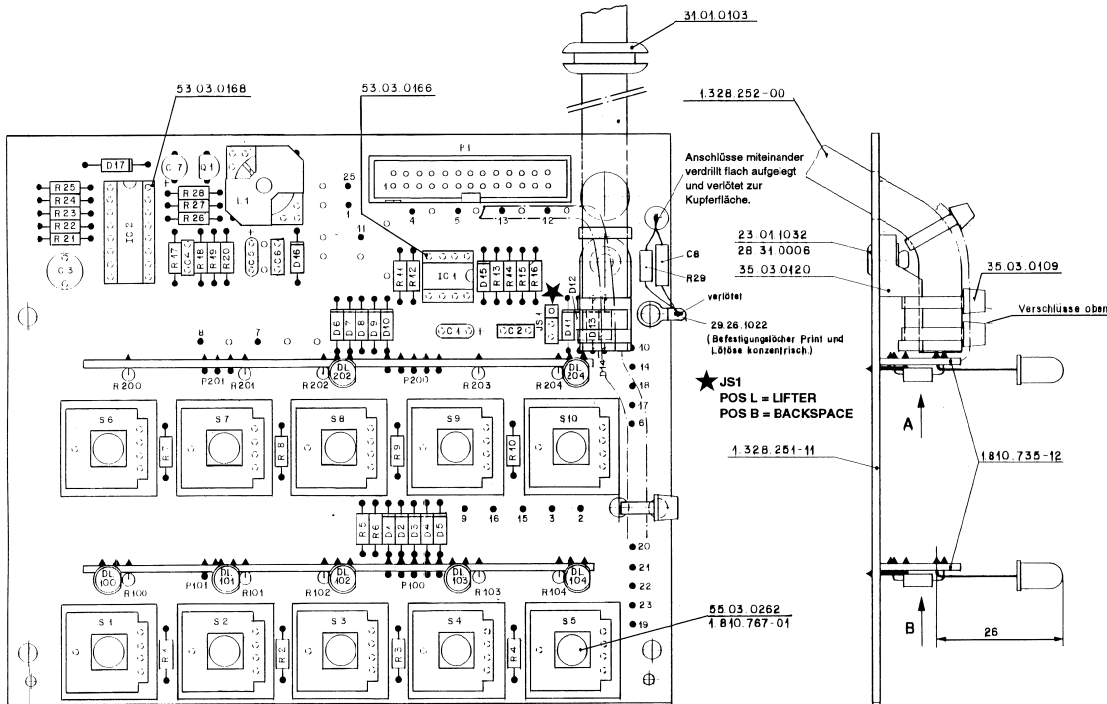
STUDER REGENBOGEN ZÜRICH		AUDIO ALIGNMENT KEY BOARD ESE		1.820.707-81	
20887 A Ho		Kopie ID:			
Datum		Gez.		Druck	

TAPE DECK REMOTE CONTROL CABINET (PARALLEL) 1.328.250.81  
 - Tape Deck Remote Control PCB 1.328.251.81

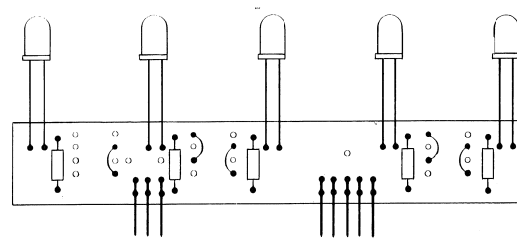


TAPE DECK REMOTE CONTROL CABINET (PARALLEL) 1.328.250.81

- Tape Deck Remote Control PCB 1.328.251.81



Anschlüsse miteinander verdreht flach aufgeegnet und verlötet zur Kupferfläche.  
 23 01 1032  
 28 34 0006  
 35 03 0120  
 verschl. 29 28 1022 (Belastungslöcher Print und Lötlöse konzentrisch)  
 ★ JS1 POS L = LIFTER POS B = BACKSPACE  
 1 328 251-11  
 55 03 0262  
 1 810 767-01



Ansicht A + B  
 A nur 2 DL und 2 Drahtbrücken bestückt.

26.194	24	24	24	24
Datum	Gez.	Gez.	Gez.	Gez.

ESTLICHEF REGENBOGEN ZÜRICH  
**TAPE DECK REMOTE CONTROL BOARD ESE**  
 1.328.251-81

Ad . POS . . . REF.No . . . DESCRIPTION . . . . . MANUFACTURER

DL..201			not used		
DL..202	50.04.2112	MW533	CM4-5848, HUMP-3401	CM,GI,HP	
DL..203			not used		
DL..204	50.04.2112	MW533	CM4-5848, HUMP-3401	CM,GI,HP	
IC....1	50.05.0283	LM393N		NS,Tho,TT	SG
IC....2	50.05.0279	SG35248N			
JS....1			See note 1		
L....1	1.022.197.00		1.5 mH	St	
P....1	54.14.2003		26 cont.	See note 2	
P...100	54.01.0269		5 cont.	AMP Nr. 163.740-3	
P...101	54.01.0227		3 cont.	AMP Nr. 163.740-1	
P...200	54.01.0269		5 cont.	AMP Nr. 163.740-3	
P...201	54.01.0227		3 cont.	AMP Nr. 163.740-1	
Q....1	50.03.0351	BC327-25		ITT,Ph,Sie	
R....1	57.11.3331	330 Ohm			
R....2	57.11.3331	330 Ohm			
R....3	57.11.3331	330 Ohm			
R....4	57.11.3331	330 Ohm			
R....5	57.11.3331	330 Ohm			
R....6	57.11.3331	330 Ohm			
R....7	57.11.3331	330 Ohm			
R....8	57.11.3331	330 Ohm			
R....9	57.11.3331	330 Ohm			
R....10	57.11.3331	330 Ohm			
R....11	57.11.3223	22 kOhm			
R....12	57.11.3222	2.2 kOhm			
R....13	57.11.3122	1.2 kOhm			
R....14	57.11.3473	47 kOhm			
R....15	57.11.3105	1 MOhm			
R....16	57.11.3103	10 kOhm			
R....17	57.11.3392	3.3 kOhm			
R....18	57.11.3222	2.2 kOhm			
R....19	57.11.3101	100 Ohm			
R....20	57.11.3109	1 Ohm			
R....21	57.11.3122	1.2 kOhm			
R....22	57.11.3101	100 Ohm			
R....23	57.11.3472	4.7 kOhm			
R....24	57.11.3472	4.7 kOhm			
R....25	57.11.3472	4.7 kOhm			
R....26	57.11.3102	1 kOhm			
R....27	57.11.3101	100 Ohm			
R....28	57.11.3472	4.7 kOhm			
R....29	57.11.3105	1 MOhm			
R...100	57.11.3151	150 Ohm			
R...101	57.11.3151	150 Ohm			
R...102	57.11.3151	150 Ohm			
R...103	57.11.3151	150 Ohm			
R...104	57.11.3151	150 Ohm			
R...200	57.11.3151	150 Ohm			
R...201	57.11.3151	150 Ohm			
R...202	57.11.3151	150 Ohm			
R...203	57.11.3151	150 Ohm			
R...204	57.11.3151	150 Ohm			

Ad . POS . . . REF.No . . . DESCRIPTION . . . . . MANUFACTURER

C....1	59.26.2100	10 uF	20%, 16V, Sel	Ph	
C....2	59.06.3102	1 nF	5%, PETP		
C....3	59.05.1103	10 nF	1%, Pp		
C....4	59.06.0223	22 nF	10%, PETP	Ph	
C....5	59.26.0680	68 uF	20%, 6.3V, Sel		
C....6	59.06.0683	68 nF	20%, PETP		
C....7	59.22.6100	10 uF	-10%, 40V, El		
C....8	59.03.2104	100 nF	35V/us		
D....1	50.04.0125	1N4448		Fc,ITT,Ph,Ses,Tf	
D....2	50.04.0125	1N4448		Fc,ITT,Ph,Ses,Tf	
D....3	50.04.0125	1N4448		Fc,ITT,Ph,Ses,Tf	
D....4	50.04.0125	1N4448		Fc,ITT,Ph,Ses,Tf	
D....5	50.04.0125	1N4448		Fc,ITT,Ph,Ses,Tf	
D....6	50.04.0125	1N4448		Fc,ITT,Ph,Ses,Tf	
D....7	50.04.0125	1N4448		Fc,ITT,Ph,Ses,Tf	
D....8	50.04.0125	1N4448		Fc,ITT,Ph,Ses,Tf	
D....9	50.04.0125	1N4448		Fc,ITT,Ph,Ses,Tf	
D....10	50.04.0125	1N4448		Fc,ITT,Ph,Ses,Tf	
D....11	50.04.0125	1N4448		Fc,ITT,Ph,Ses,Tf	
D....12	50.04.0125	1N4448		Fc,ITT,Ph,Ses,Tf	
D....13	50.04.0125	1N4448		Fc,ITT,Ph,Ses,Tf	
D....14	50.04.0125	1N4448		Fc,ITT,Ph,Ses,Tf	
D....15	50.04.0125	1N4448		Fc,ITT,Ph,Ses,Tf	
D....16	50.04.1118	6.2 V Z	BZ63C 6.2, BZ55C 6.2, ZPD 6.2	ITT,Ses	
D....17	50.04.0512	1N5619		Met	
DL..100	50.04.2112	MW533	CM4-5848, HUMP-3401	CM,GI,HP	
DL..101	50.04.2112	MW533	CM4-5848, HUMP-3401	CM,GI,HP	
DL..102	50.04.2112	MW533	CM4-5848, HUMP-3401	CM,GI,HP	
DL..103	50.04.2112	MW533	CM4-5848, HUMP-3401	CM,GI,HP	
DL..104	50.04.2111	MW533	CM4-2848, HUMP-3301	CM,GI,HP	
DL..200			not used		

S....1 - - - See note 3  
 S....2 - - - See note 3  
 S....3 - - - See note 3  
 S....4 - - - See note 3  
 S....5 - - - See note 3  
 S....6 - - - See note 3  
 S....7 - - - See note 3  
 S....8 - - - See note 3  
 S....9 - - - See note 3  
 S....10 - - - See note 3

Note 1 - Contact pin: Studer 54.01.0020, Berg 75 160-102-36  
 Bridge: Studer 54.01.0021, Phillips 2422 024 88003

Note 2 - Connector: Yamachi FAP-26-08/4, Burndy BPH 9 B 26 800 GS

Note 3 - Switch: Studer 55.03.0261, Rafi 3.13001.110  
 Extender: Studer 55.03.0262, Rafi 5.55101.690

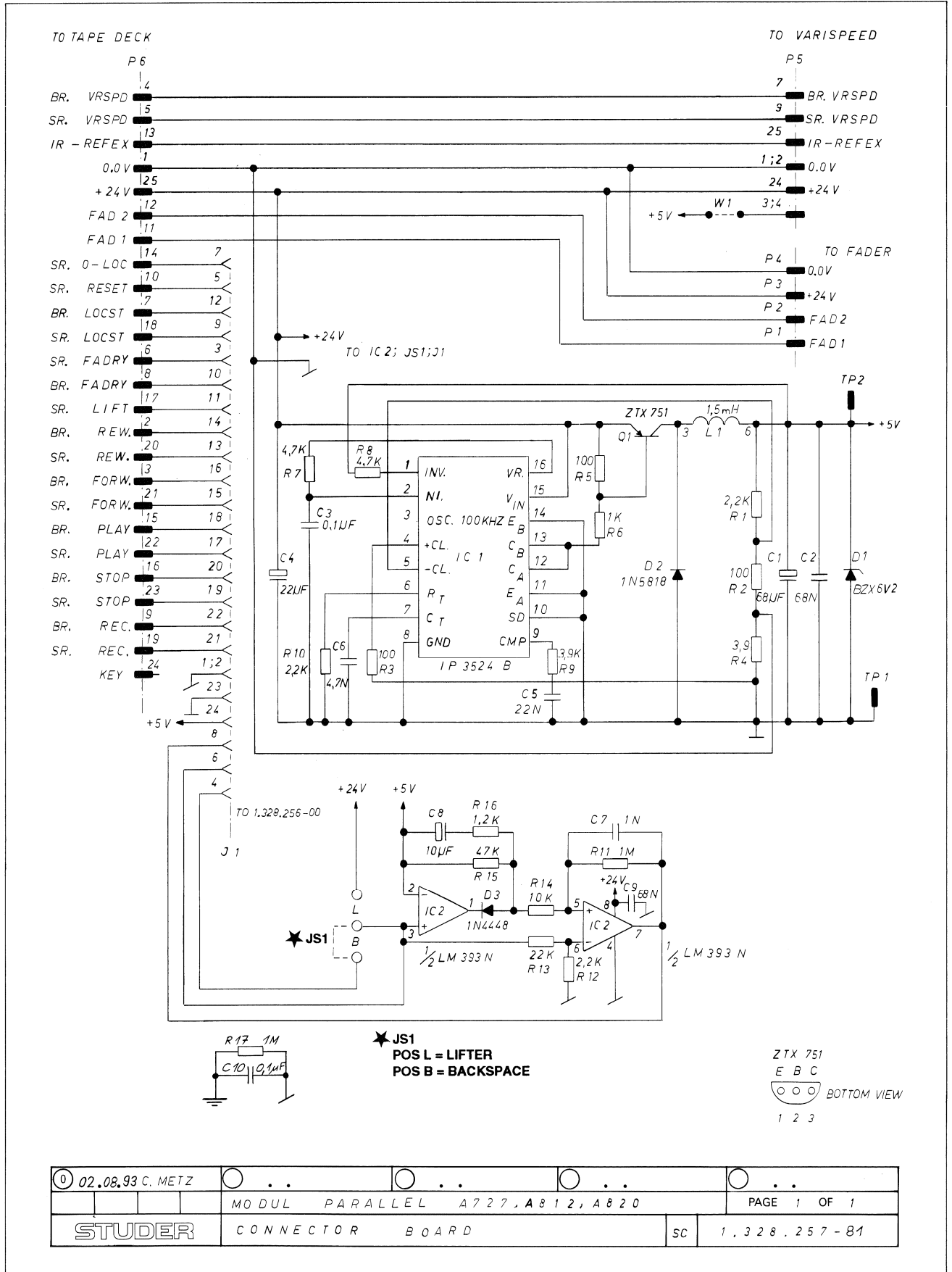
C=Ceramic, El=Electrolytic, Sal=Solid aluminium,  
 PETP=Polyesterfilm, Pp=Polypropylen.

MANUFACTURER: CM=Chicago Miniatur, Fc=Fairchild,  
 GI=General Instruments, HP=Hewlett Packard,  
 ITT=Intermetall, Mot=Motorola,  
 NS=National Semiconductors, Ph=Phillips, Ses=Secosem,  
 SG=Silicon General, Sie=Siemens, St=Studer, Tho=Thomson,  
 TI=Texas Instruments, Tf=Telefunken.

1.328.251.81 TAPE DECK REMOTE CONTROL ML 94/01/2600

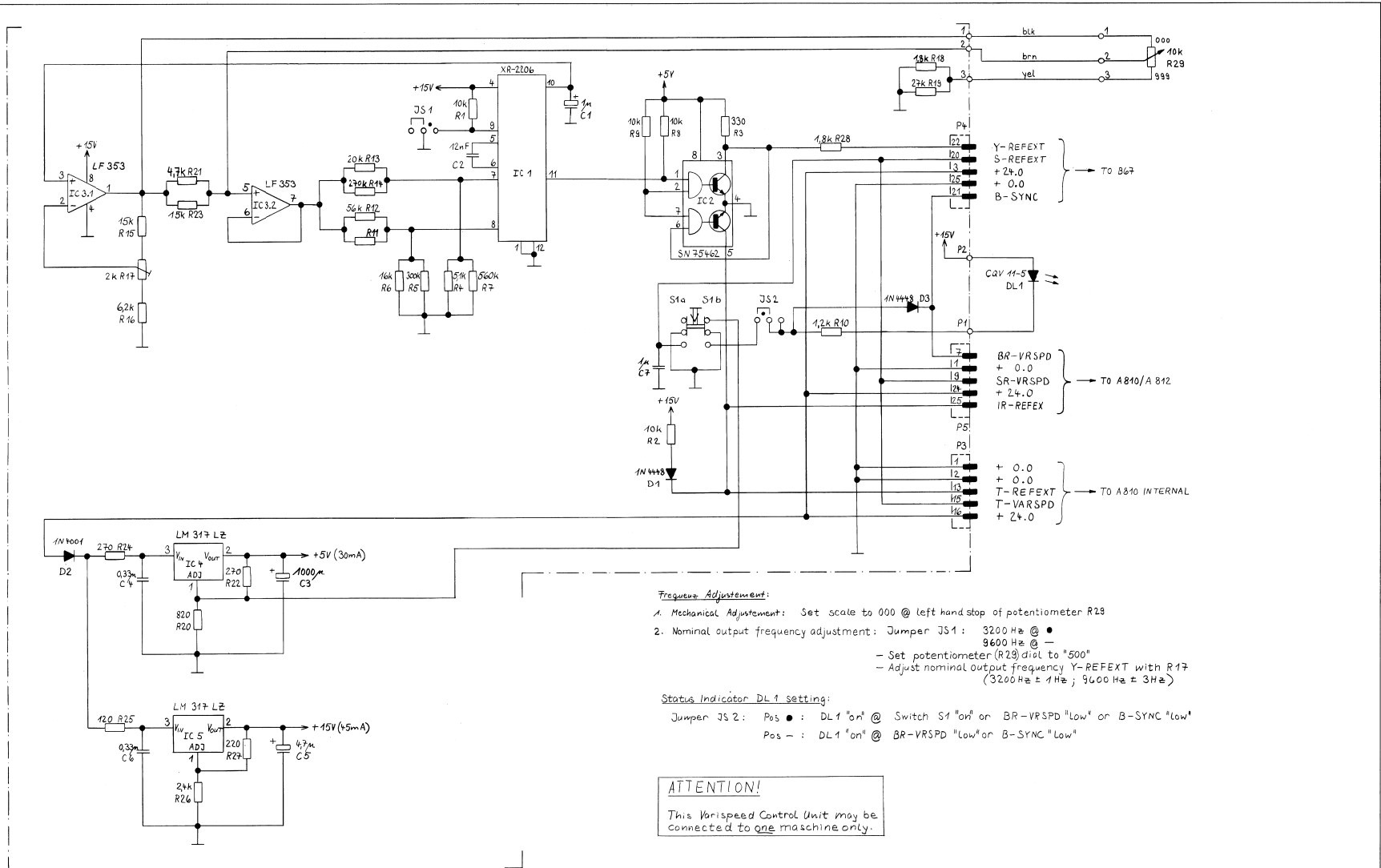
END

TAPE DECK REMOTE CONTROL MODULE (PARALLEL) 1.328.255.81  
 - Connector Board 1.328.257.81





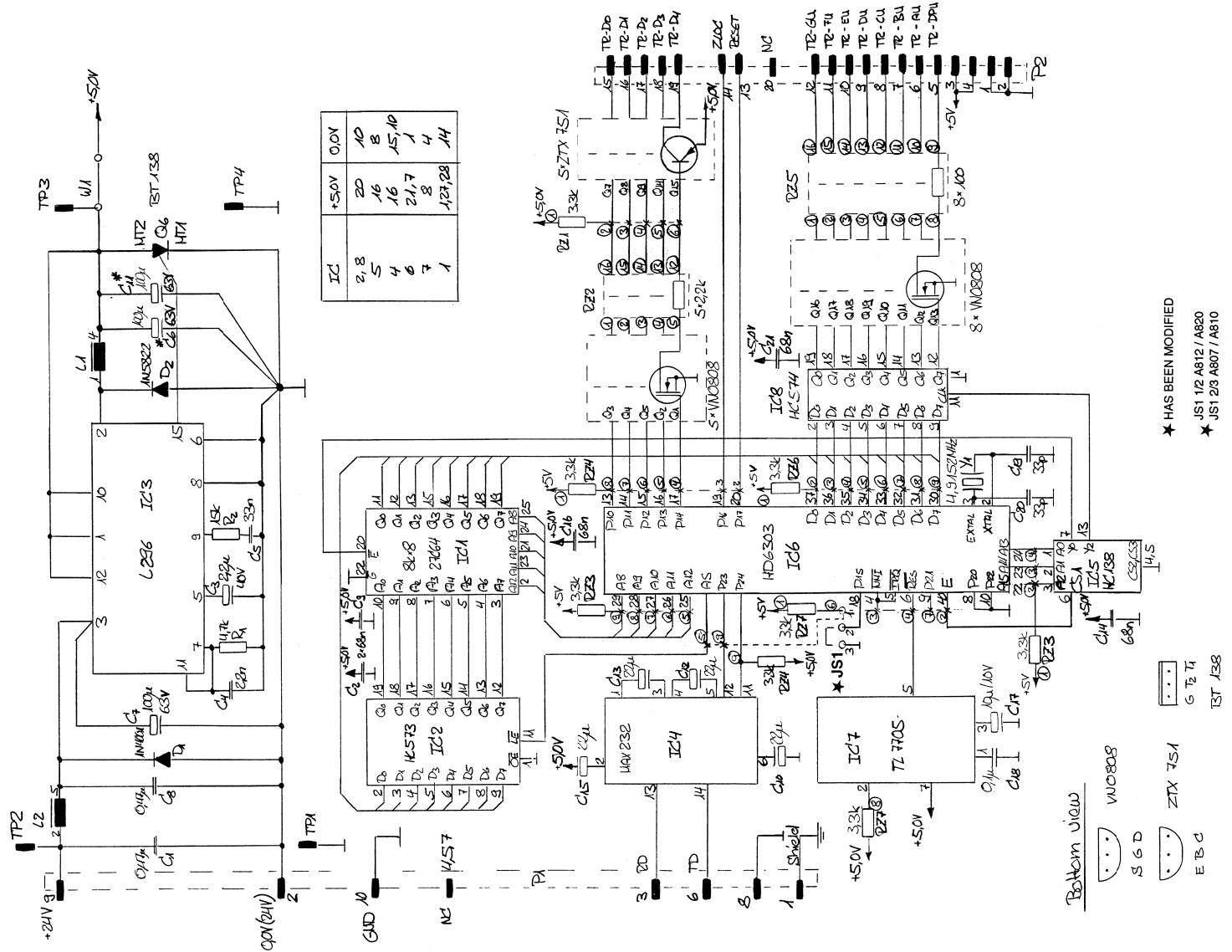
VARISPEED FOR REMOTE CONTROL ONLY 1.328.253.00  
 VARISPEED CONTROL MODULE 1.328.290.00  
 Varispeed Control PCB 1.810.762.83







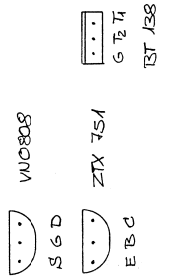
REMOTE TIMER (RS 232) 1.328.275.00  
 - CPU Board 1.328.276.21



IC	+50V	0.0V
2, 8	20	10
5	16	8
4	16	15, 10
7	21, 7	1
1	8	4
	12, 28	14

★ HAS BEEN MODIFIED  
 ★ JS1 1/2 A812 / A820  
 ★ JS1 2/3 A807 / A810

Bottom view



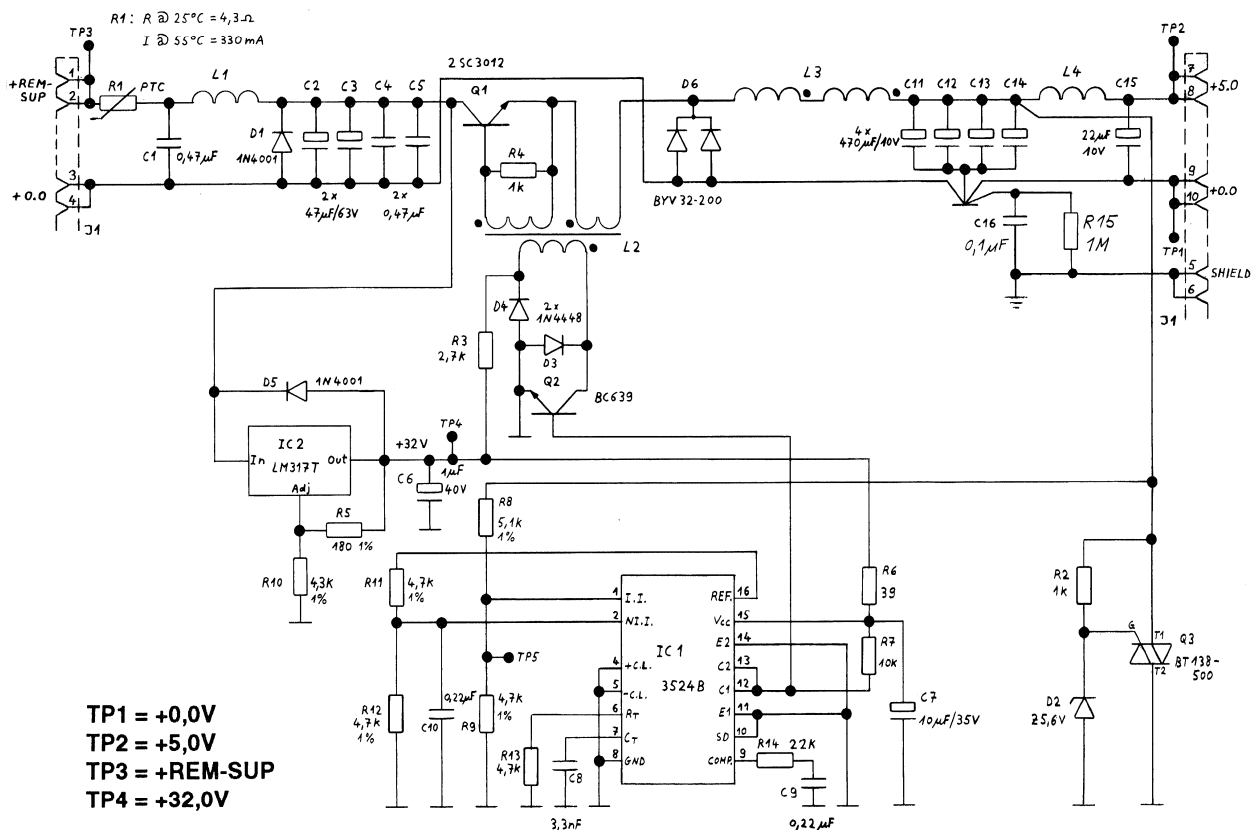
0 2710387	1 Rec	0610297	Rec	...	...	...	PAGE 1 OF 1
STUDER				CPU BOARD			
				1.328.276.21			



REMOTE TIMER / LAP MODE DISPLAY 1.328.270.00  
 - Stabilizer PCB 1.328.213.81

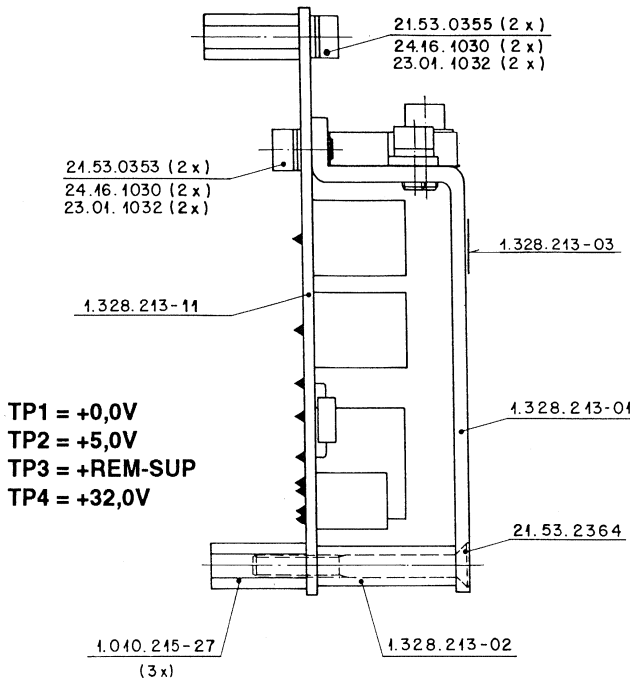
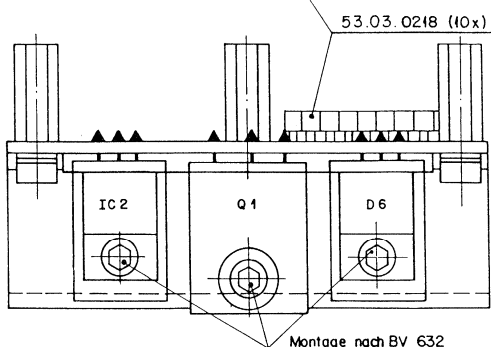
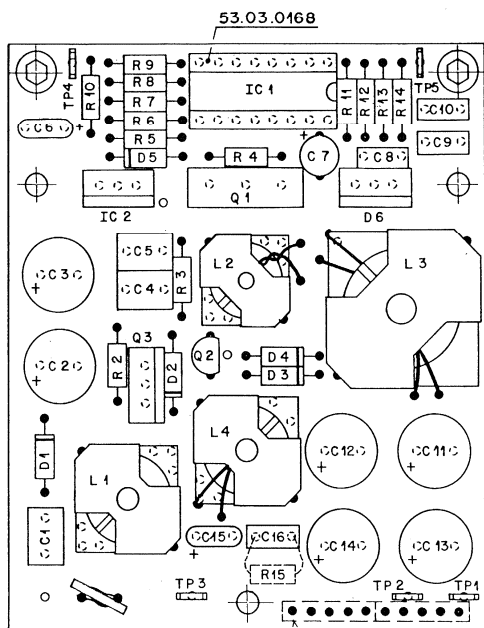


- L1 : 1.022.252.00
- L2 : 1.022.274.00
- L3 : 1.022.217.00
- L4 : 1.022.202.00



24 10 85 CHE	.	.	.	.
A820/A812			PAGE 1 OF 1	
STUDER	STABILIZER BOARD		SC	1.328.213.81

REMOTE TIMER / LAP MODE DISPLAY 1.328.270.00  
 - Stabilizer PCB 1.328.213.81



TP1 = +0,0V  
 TP2 = +5,0V  
 TP3 = +REM-SUP  
 TP4 = +32,0V

Änderung									
Ausgabe	24.10.91	7/1							
Datum	Gez	Gepr	Ges	Index					

STUDER REGENSDORF ZÜRICH	Benennung	STABILIZER BOARD ESE	Nummer	1.328.213-81
Kopie für:				

Ad	..POS..	REF.No...	DESCRIPTION	MANUFACTURER
C.....1	59.06.0474	0.47 uF	10%, PETP	
C.....2	59.22.8470	47 uF	20%, 63V, EL	
C.....3	59.22.8470	47 uF	20%, 63V, EL	
C.....4	59.06.0474	0.47 uF	10%, PETP	
C.....5	59.06.0474	0.47 uF	10%, PETP	
C.....6	59.26.9109	1 uF	20%, 40V, SAL	
C.....7	59.22.6100	10 uF	-20%, 35V, EL	
C.....8	59.06.0332	3300 pF	10%, PETP	
C.....9	59.06.0224	0.22 uF	10%, PETP	
C.....10	59.06.0224	0.22 uF	10%, PETP	
C....11	59.22.3471	470 uF	-20%, 10V, EL	
C....12	59.22.3471	470 uF	-20%, 10V, EL	
C....13	59.22.3471	470 uF	-20%, 10V, EL	
C....14	59.22.3471	470 uF	-20%, 10V, EL	
C....15	59.26.1220	22 uF	20%, 10V, SAL	
C....16	59.06.0104	0.1 uF	10%, 50V, PETP	
D.....1	50.04.0122	1N 4001		Mot
D.....2	50.04.1108	5.6 V	BZX83 C 5V6, BZX55 C 5V6, ZPD 5.6 Ses,ITT	
D.....3	50.04.0125	1N 4448		Fc,ITT,Ph,Ses
D.....4	50.04.0125	1N 4448		Fc,ITT,Ph,Ses
D.....5	50.04.0122	1N 4001		Mot
D.....6	50.04.0517	BYV32-200		Mot,Ph
IC....1	50.05.0279	SG 3524BN		SG
IC....2	50.10.0104	LM 317T	LM 317 SP	Tho,Mot,NS,TI
J.....1	00.00.0000		see note 1	
L.....1	1.022.252.00	0.32 mH	Filter Coil	St
L.....2	1.022.224.00		Power Supply Transformer	St
L.....3	1.022.217.00	46 uH	HF-Coil, 5A	St
L.....4	1.022.202.00	16.9 mH	Filter Coil	St
Q.....1	50.03.0517	2 SC 3012	NPN	NEC
Q.....2	50.03.0551	BC 639	NPN	Mot,Ph
Q.....3	50.99.0106	T 2800	400V, 8A, Triac	Ph

Ad	..POS..	REF.No...	DESCRIPTION	MANUFACTURER
R.....1	57.92.1331		PTC	see note 2
R.....2	57.11.3102		1 kOhm	1%
R.....3	57.11.3272		2.7 kOhm	1%
R.....4	57.11.3102		1 kOhm	1%
R.....5	57.11.3181		180 Ohm	1%
R.....6	57.11.3390		39 Ohm	1%
R.....7	57.11.3103		10 kOhm	1%
R.....8	57.11.3512		5.1 kOhm	1%
R.....9	57.11.3472		4.7 kOhm	1%
R.....10	57.11.3432		4.3 kOhm	1%
R....11	57.11.3472		4.7 kOhm	1%
R....12	57.11.3472		4.7 kOhm	1%
R....13	57.11.3472		4.7 kOhm	1%
R....14	57.11.3223		22 kOhm	1%
R....15	57.11.3105		1 MOhm	1%
TP....1	54.02.0320		Test Point	
TP....2	54.02.0320		Test Point	
TP....3	54.02.0320		Test Point	
TP....4	54.02.0320		Test Point	
TP....5	54.02.0320		Test Point	

EL=Electrolytic, SAL=Solid Aluminium, PETP=Polyester

MANUFACTURERS: Fc=Fairchild, ITT=Intermetall, Mot=Motorola, NEC=Nippon Electric Corp., NS=National Semiconductors, Ph=Philips, Ses=Sescosem, SG=Silicon General, St=Studer Tho=Thomson, TI=Texas Instruments

Note 1 - Connector: 10 pieces Studer Nr.53.03.0218

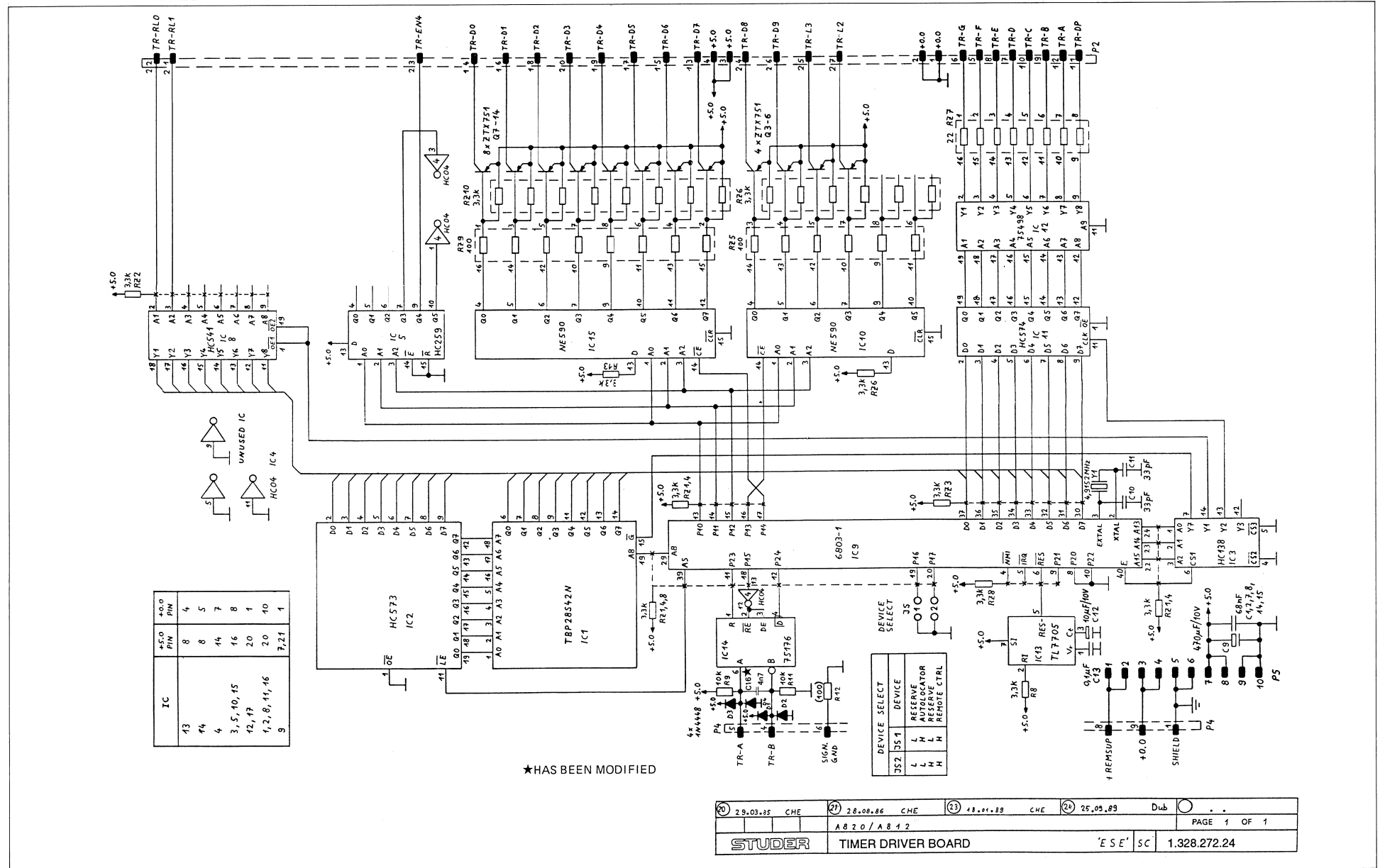
Note 2 - PTC Thermistor: R @ 25 degree Celsius = 4.7 Ohm  
 I @ 55 degree Celsius = 330 mA

Philips Nr.2322 663 13311

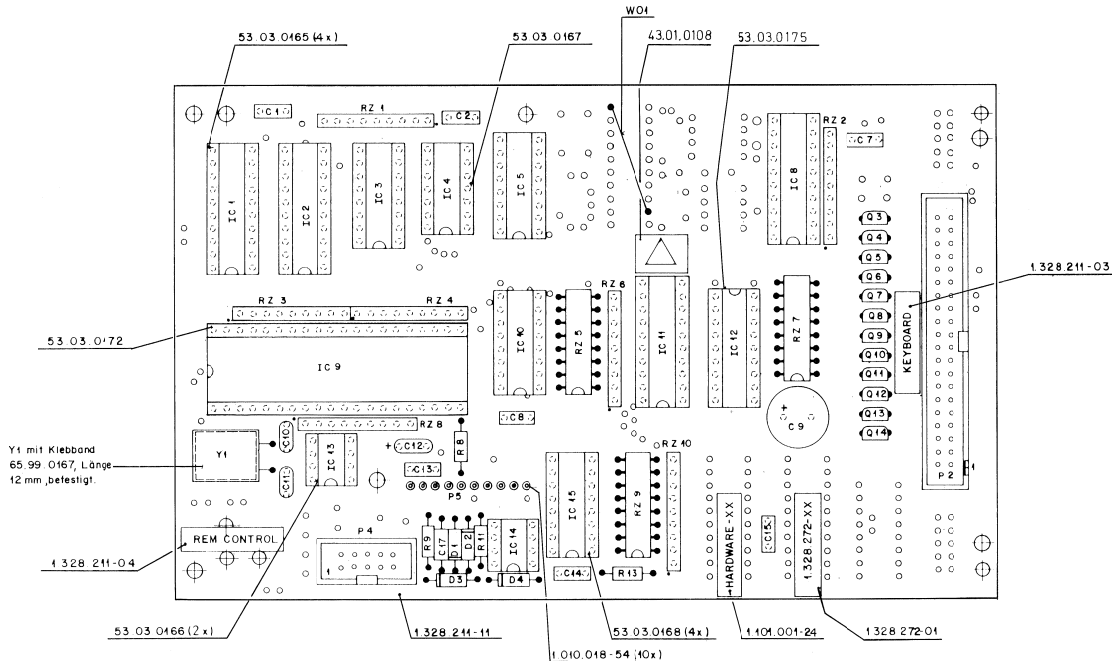
1.328.213.81 STABILIZER BOARD B091/10/2400

REMOTE TIMER / LAP MODE DISPLAY 1.328.270.00

- Timer Driver PCB 1.328.272.24



REMOTE TIMER / LAP MODE DISPLAY 1.328.270.00  
 - Timer Driver PCB 1.328.272.24



Y1 mit Klebband  
 65.99.0167, Länge  
 12 mm, befestigt.

Ad	POS.	REF.No.	DESCRIPTION	MANUFACTURER
C....1		59.06.0683	68 nF 10%, 63V, PETP	
C....2		59.06.0683	68 nF 10%, 63V, PETP	
C....7		59.06.0683	68 nF 10%, 63V, PETP	
C....8		59.06.0683	68 nF 10%, 63V, PETP	
C....9		59.22.3471	470 uF <math>\pm 20%</math>, 10V, EI	
C....10		59.34.2330	33 pF 5%, N150, Cer	
C....11		59.34.2330	33 pF 5%, N150, Cer	
C....12		59.26.1100	10 uF 20%, 10V, Sa1	
C....13		59.06.0104	100 nF 10%, 63V, PETP	
C....14		59.06.0683	68 nF 10%, 63V, PETP	
C....15		59.06.0683	68 nF 10%, 63V, PETP	
C....16		59.03.2472	4.7 nF 10%, 63V, PETP	
D....1		50.04.0125	1N 4448	Fc,ITT,Ph.Ses,Tf
D....2		50.04.0125	1N 4448	Fc,ITT,Ph.Ses,Tf
D....3		50.04.0125	1N 4448	Fc,ITT,Ph.Ses,Tf
D....4		50.04.0125	1N 4448	Fc,ITT,Ph.Ses,Tf
IC....1		1.328.999.22	Software 29/87 REM-CTR. DRIVER	St
IC....2		50.17.1573	74 HC 573 .. 74 HC 573	Mot,NS,Ph,RCA,SGS,TL,To
IC....3		50.17.1138	74 HC 138 .. 74 HC 138	Mot,NS,Ph,RCA,SGS,TL,To
IC....4		50.17.1004	74 HC 04 .. 74 HC 04	Mot,NS,Ph,RCA,TL,To
IC....5		50.17.1259	74 HC 259 .. 74 HC 259	Mot,NS,Ph,RCA,SGS,TL,To
IC....8		50.17.1541	74 HC 541 .. 74 HC 541	Mot,NS,Ph,RCA,SGS,TL,To
IC....9		50.16.0107	MC 6803P-1 HD 6803P-1	Hi,Mot
IC....10		50.15.0102	NE 590 N	St
IC....11		50.17.1564	74 HC 564 .. 74 HC 564	Mot,NS,Ph,RCA,TL
IC....12		50.15.0118	UMC-2954	Sp
IC....13		50.11.0122	TL7705ACP	TI
IC....14		50.15.0115	SN 75176AP	NS,TL
IC....15		50.15.0102	NE 590 N	St
P....2				see note 3
P....4				see note 2
P....5				see note 4
Q....2		50.03.0352	ZTX 751 S	Fe
Q....4		50.03.0352	ZTX 751 S	Fe
Q....5		50.03.0352	ZTX 751 S	Fe
Q....6		50.03.0352	ZTX 751 S	Fe
Q....7		50.03.0352	ZTX 751 S	Fe
Q....8		50.03.0352	ZTX 751 S	Fe
Q....9		50.03.0352	ZTX 751 S	Fe
Q....10		50.03.0352	ZTX 751 S	Fe
Q....11		50.03.0352	ZTX 751 S	Fe
Q....12		50.03.0352	ZTX 751 S	Fe
Q....13		50.03.0352	ZTX 751 S	Fe
Q....14		50.03.0352	ZTX 751 S	Fe
R....8		57.11.4332	3.3 kOhm 2%	
R....9		57.11.4103	10 kOhm 2%	
R....10		57.11.4102	1 kOhm 2%	
R....10		00.00.0000	not used	replaced by C16
R....11		57.11.4103	10 kOhm 2%	
R....12		00.00.0000	not used	
R....13		57.11.4332	3.3 kOhm 2%	
RZ....1		57.88.4332	Network, 8 * 3.3 kOhm, 2%, single line	
RZ....2		57.88.4332	Network, 8 * 3.3 kOhm, 2%, single line	
RZ....3		57.88.4332	Network, 8 * 3.3 kOhm, 2%, single line	
RZ....4		57.88.4332	Network, 8 * 3.3 kOhm, 2%, single line	
RZ....5		57.88.3101	Network, 8 * 100 Ohm, 5%, DIL 16	
RZ....6		57.88.4332	Network, 8 * 3.3 kOhm, 2%, single line	
RZ....7		57.88.3220	Network, 8 * 22 Ohm, 5%, DIL 16	
RZ....8		57.88.4332	Network, 8 * 3.3 kOhm, 2%, single line	
RZ....9		57.88.3101	Network, 8 * 100 Ohm, 5%, DIL 16	
RZ....10		57.88.4332	Network, 8 * 3.3 kOhm, 2%, single line	
W.....1		1.010.108.64	Wrap wire, D = 0.255, L = 80 MM.	St.
Y....1		89.01.0560	4.9152 Mhz $\pm 100$ ppm, Nymph Nr. TD 18/NMP 049	

Index (01) : Wrap Wire #1.010.108.64 introduced at 18.01.89.  
 (20) 23.04.85 : PCB lay-out -11  
 (21) 01.12.86 : IC 12 (SN 75498 N) delivered for spare purpose only.  
 New devices IC 11 and IC 12.  
 (22) 08.12.86 : Extended AutoLocator Key Board.  
 (23) 05.06.87 : Software 29/87  
 (23.1) 18.01.89 : Wire bridge W01  
 (24) 25.09.89 : Improved noise suppression on differential line.

Note 2 - Connector: 10 Contacts  
 Studer Nr. 54.14.2001  
 Yamachi Nr. FAP-10-08/4  
 Burndy Nr. BPH 7 B 10 800 GS

Note 3 - Connector: 40 Contacts  
 Studer Nr. 54.14.2004  
 Yamachi Nr. FAP-40-08/4  
 Burndy Nr. BPH 9 B 40 800 GS

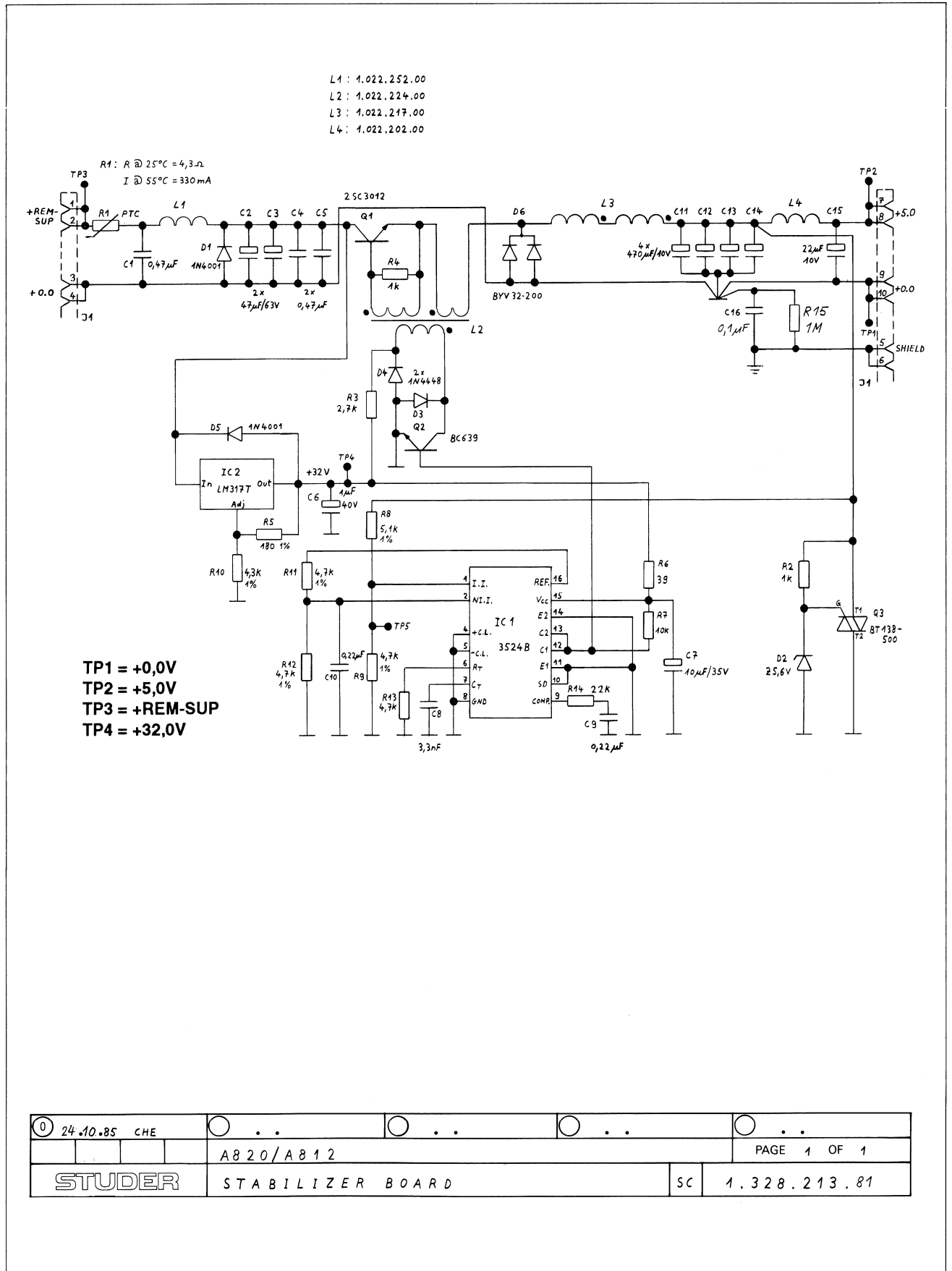
Note 4 - Connector: 10 Pieces  
 Studer Nr. 1.010.018.54

Cer=Ceramic, El=Electrolytic, PETP=Polyester film, Sa1=Solid aluminium.  
 MANUFACTURERS: Fc=Fairchild, Fw=Ferranti, Hi=Hitachi, Is=Intersil,  
 ITT=Intermettal, Mot=Motorola, NS=National Semiconductors  
 Ph=Phillips, RCA=HCA Corporation, Ses=Season, SGS=SGS/Ates,  
 Sig=Signetics, Sp=Sprague, St=Studer, Tf=Telefunken,  
 TI=Texas Instruments, To=Toshiba.

STUDER REGENSDORF ZÜRICH		TIMER DRIVER BOARD		ESE		1.328.272-24	
Approved		Checked		Released		Released	
Date	25.9.89	Case		Color		Color	
Model		Case		Color		Color	

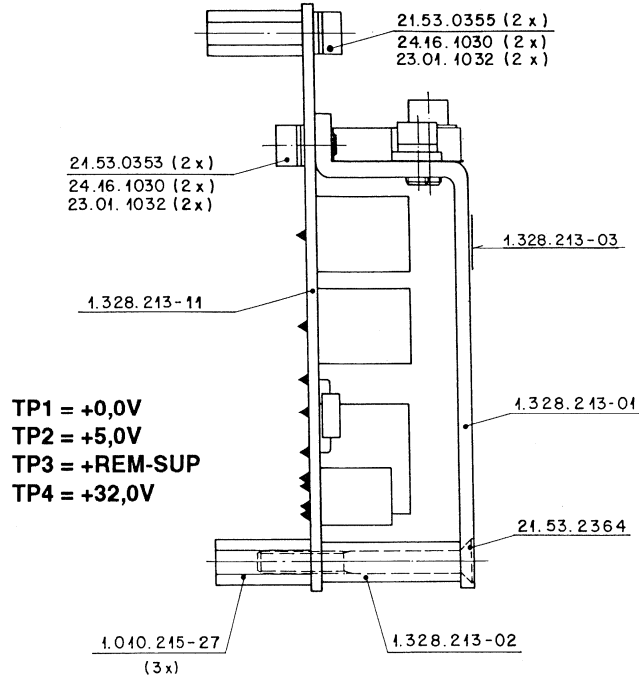
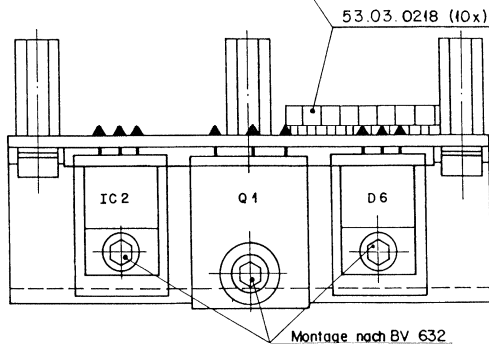
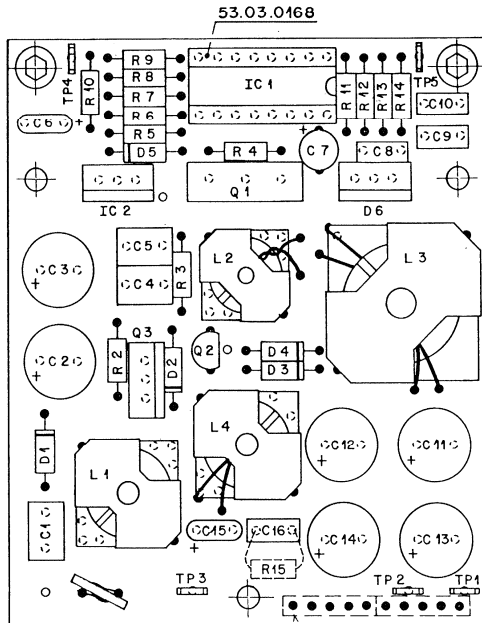
Ad	POS.	REF.No.	DESCRIPTION	MANUFACTURER
1.328.272.00			TIMER DRIVER BOARD	SU 85/04/2300
1.328.272.00			TIMER DRIVER BOARD	SU 85/04/2320
1.328.272.00			TIMER DRIVER BOARD	BD 86/12/0121
1.328.272.00			TIMER DRIVER BOARD	BD 86/12/0822
1.328.272.00			TIMER DRIVER BOARD	CM 89/01/1823
1.328.272.00			TIMER DRIVER BOARD	DU889/09/2524

REMOTE CONTROL CABINET (SERIAL) 1.328.210.81  
 REMOTE CONTROL MODULE (SERIAL) 1.328.220.81  
 - Stabilizer PCB 1.328.213.81



24.10.85 CHE				
A820/A812			PAGE 1 OF 1	
STUDER	STABILIZER BOARD		SC	1.328.213.81

**REMOTE CONTROL CABINET (SERIAL) 1.328.210.81**  
**REMOTE CONTROL MODULE (SERIAL) 1.328.220.81**  
 - Stabilizer PCB 1.328.213.81



**TP1 = +0,0V**  
**TP2 = +5,0V**  
**TP3 = +REM-SUP**  
**TP4 = +32,0V**

Änderung									
Ausgabe	24.10.91	PH							
Datum	Gez	Gepr	Gez	Index					

STUDER REGENSDORF ZÜRICH	Benennung <b>STABILIZER BOARD ESE</b>	Nummer <b>1.328.213-81</b>
--------------------------------	--	-------------------------------

Ad	POS.	REF.No.	DESCRIPTION	MANUFACTURER
C.....1	59.06.0474	0.47 uF	10%, PETP	
C.....2	59.22.8470	47 uF	20%, 63V, EL	
C.....3	59.22.8470	47 uF	20%, 63V, EL	
C.....4	59.06.0474	0.47 uF	10%, PETP	
C.....5	59.06.0474	0.47 uF	10%, PETP	
C.....6	59.26.9109	1 uF	20%, 40V, SAL	
C.....7	59.22.6100	10 uF	-20%, 35V, EL	
C.....8	59.06.0332	3300 pF	10%, PETP	
C.....9	59.06.0224	0.22 uF	10%, PETP	
C.....10	59.06.0224	0.22 uF	10%, PETP	
C....11	59.22.3471	470 uF	-20%, 10V, EL	
C....12	59.22.3471	470 uF	-20%, 10V, EL	
C....13	59.22.3471	470 uF	-20%, 10V, EL	
C....14	59.22.3471	470 uF	-20%, 10V, EL	
C....15	59.26.1220	22 uF	20%, 10V, SAL	
C....16	59.06.0104	0.1 uF	10%, 50V, PETP	
D.....1	50.04.0122	1N 4001		Mot
D.....2	50.04.1108	5.6 V	BZX83 C 5V6, BZX55 C 5V6, ZPD 5.6 Ses,ITT	
D.....3	50.04.0125	1N 4448		Fc,ITT,Ph,Ses
D.....4	50.04.0125	1N 4448		Fc,ITT,Ph,Ses
D.....5	50.04.0122	1N 4001		Mot
D.....6	50.04.0517	BYV32-200		Mot,Ph
IC....1	50.05.0279	SG 3524BN		SG
IC....2	50.10.0104	LM 317T		Tho,Mot,NS,TI
J.....1	00.00.0000	see note 1		
L....1	1.022.252.00	0.32 mH	Filter Coil	St
L....2	1.022.224.00		Power Supply Transformer	St
L....3	1.022.217.00	46 uH	HF-Coil, 5A	St
L....4	1.022.202.00	16.9 mH	Filter Coil	St
Q....1	50.03.0517	2 SC 3012	NPN	NEC
Q....2	50.03.0551	BC 639	NPN	Mot,Ph
Q....3	50.99.0106	T 2800	400V, 8A, Triac	Ph

Ad	POS.	REF.No.	DESCRIPTION	MANUFACTURER
R....1	57.92.1331	PTC	see note 2	Ph
R....2	57.11.3102	1 kOhm	1%	
R....3	57.11.3272	2.7 kOhm	1%	
R....4	57.11.3102	1 kOhm	1%	
R....5	57.11.3181	180 Ohm	1%	
R....6	57.11.3390	39 Ohm	1%	
R....7	57.11.3103	10 kOhm	1%	
R....8	57.11.3512	5.1 kOhm	1%	
R....9	57.11.3472	4.7 kOhm	1%	
R....10	57.11.3432	4.3 kOhm	1%	
R....11	57.11.3472	4.7 kOhm	1%	
R....12	57.11.3472	4.7 kOhm	1%	
R....13	57.11.3472	4.7 kOhm	1%	
R....14	57.11.3223	22 kOhm	1%	
R....15	57.11.3105	1 MOhm	1%	
TP....1	54.02.0320	Test Point		
TP....2	54.02.0320	Test Point		
TP....3	54.02.0320	Test Point		
TP....4	54.02.0320	Test Point		
TP....5	54.02.0320	Test Point		

EL=Electrolytic, SAL=Solid Aluminium, PTP=Polyester

MANUFACTURERS: Fc=Fairchild, ITT=Intermetall, Mot=Motorola, NEC=Nippon Electric Corp., NS=National Semiconductors, Ph=Philips, Ses=Sescosem, SG=Silicon General, St=Studer Tho=Thomson, TI=Texas Instruments

Note 1 - Connector: 10 pieces Studer Nr.53.03.0218

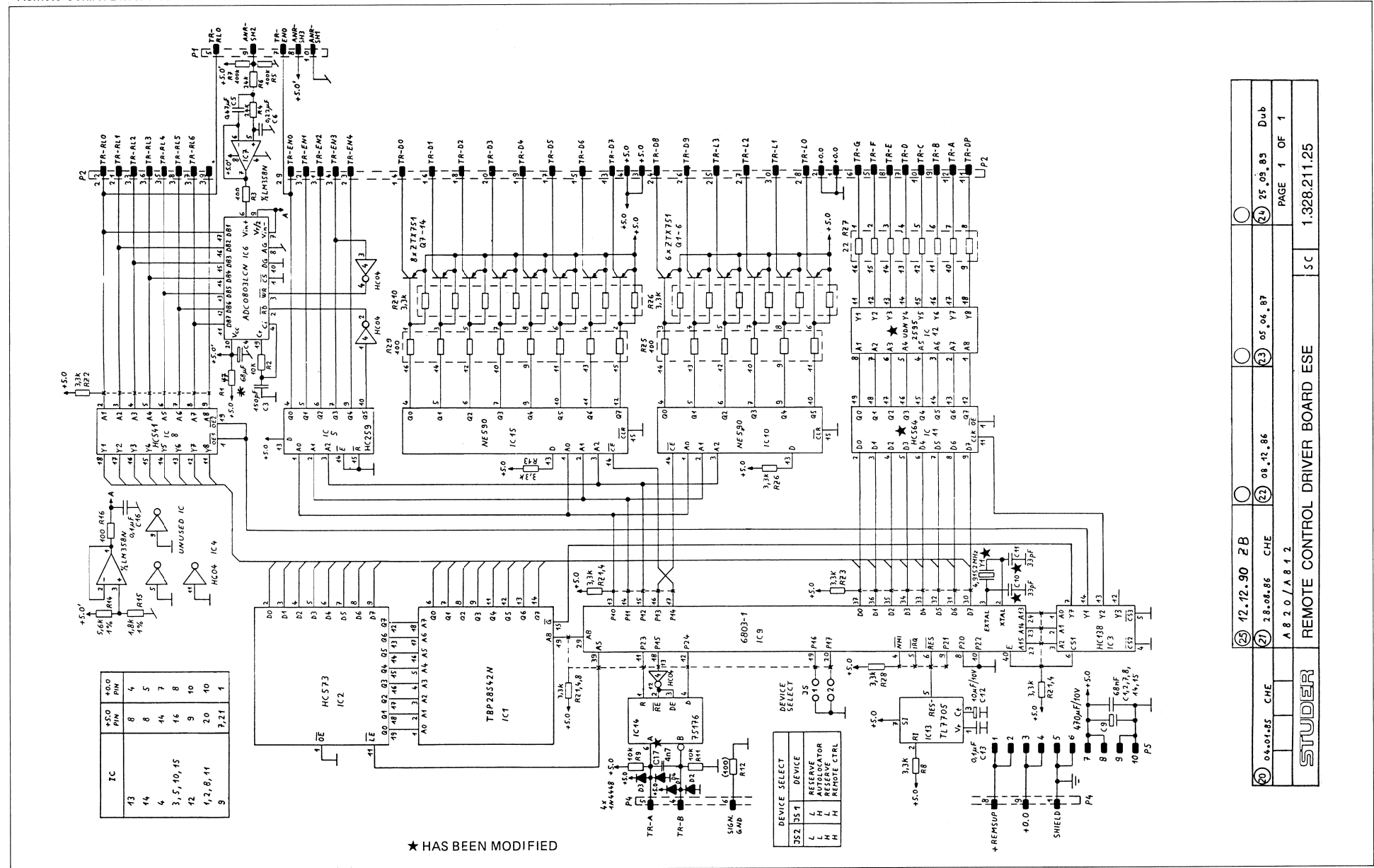
Note 2 - PTC Thermistor: R @ 25 degree Celsius = 4.7 Ohm  
I @ 55 degree Celsius = 330 mA

Philips Nr.2322 663 13311

1.328.213.81 STABILIZER BOARD BD91/10/2400



REMOTE CONTROL CABINET (SERIAL) 1.328.210.81  
 REMOTE CONTROL MODULE (SERIAL) 1.328.220.81  
 - Remote Control Driver PCB 1.328.211.25



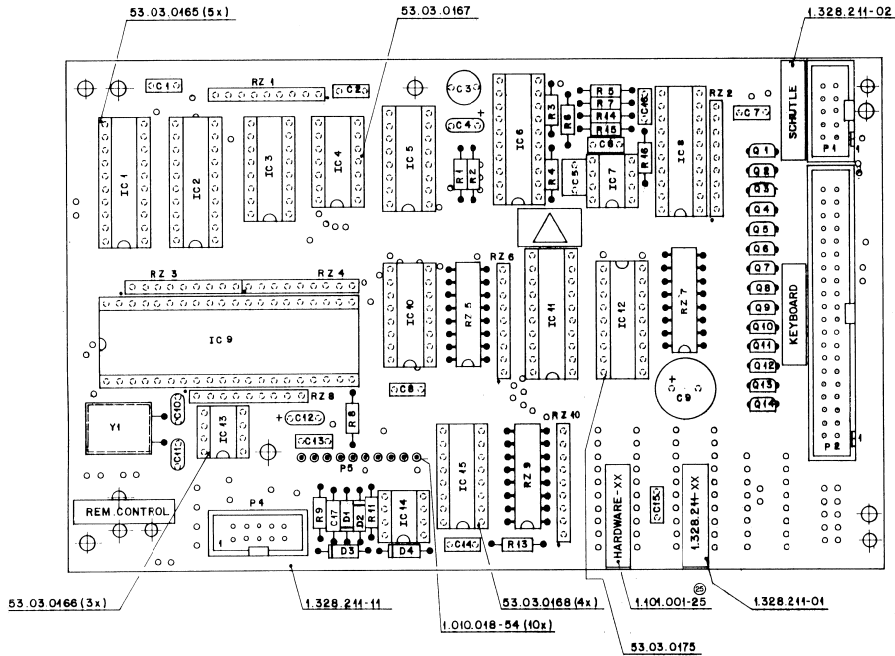
IC	+5.0V PIN	+10.0V PIN	IC PIN
43	8	4	
44	8	5	
4	4	7	
3, 5, 10, 15	16	8	
42	9	10	
1, 2, 8, 11	20	10	
	7, 21	1	

DS2 DS1	DEVICE
L	RESERVE
L	AUTOLOGATOR
H	REMOTE CTRL

20	06.01.85	CHE		25	12.90	ZB		26	05.06.87		
				21	28.08.86	CHE		23	08.12.86		
A 8 2 0 / A B 1 2											
STUDEER											
REMOTE CONTROL DRIVER BOARD ESE											
SC											
1.328.211.25											

PAGE 1 OF 1

REMOTE CONTROL CABINET (SERIAL) 1.328.210.81  
 REMOTE CONTROL MODULE (SERIAL) 1.328.220.81  
 - Remote Control Driver PCB 1.328.211.25



Ref. No.	QTY	UNIT	REVISION
12.12.90	2	2b	20
25.9.89	1	1	20
5.6.87	1	1	20
9.12.86	1	1	20
1.12.86	1	1	20
2.5.86	1	1	20

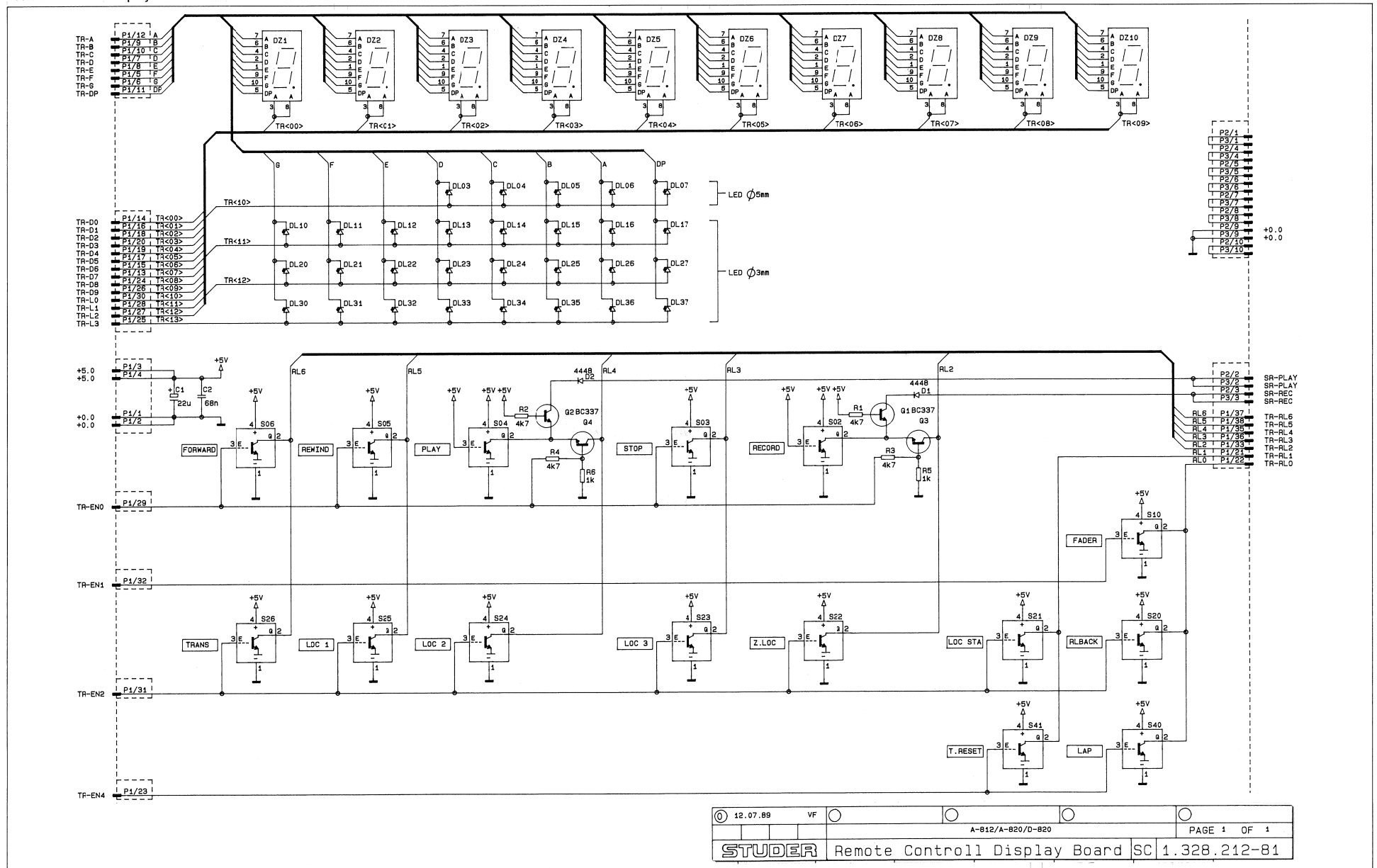
STUDER	REMOTE CONTROL DRIVER BOARD ESE	1.328.211.25
--------	---------------------------------	--------------

Ad	POS.	REF.No.	DESCRIPTION	MANUFACTURER
20	C....1	59.06.0683	68 nF	10%, 63V, PETP
20	C....2	59.06.0683	68 nF	10%, 63V, PETP
20	C....3	59.05.2151	150 pF	2.5%, 30V, PP
20	C....4	59.26.0650	68 uF	20%, 6.3V, Sa1
20	C....5	59.06.0474	470 nF	10%, 63V, PETP
20	C....6	59.06.0224	220 nF	10%, 63V, PETP
20	C....7	59.06.0683	68 nF	10%, 63V, PETP
20	C....8	59.06.0683	68 nF	10%, 63V, PETP
20	C....9	59.22.3471	470 uF	-20%, 10V, EI
20	C....10	59.34.2220	22 pF	5%, N150, Cer
21	C....10	59.34.2330	33 pF	5%, N150, Cer
20	C....11	59.34.2220	22 pF	5%, N150, Cer
21	C....11	59.34.2330	33 pF	5%, N150, Cer
20	C....12	59.26.1100	10 uF	20%, 10V, Sa1
20	C....13	59.06.0104	100 nF	10%, 63V, PETP
20	C....14	59.06.0683	68 nF	10%, 63V, PETP
20	C....15	59.06.0683	68 nF	10%, 63V, PETP
20	C....16	59.06.0104	100 nF	10%, 63V, PETP
24	C....17	59.03.2472	4.7 nF	10%, 63V, PETP
20	D....1	50.04.0125	1N 4448	Fc,ITT,Ph,Ses,Tf
20	D....2	50.04.0125	1N 4448	Fc,ITT,Ph,Ses,Tf
20	D....3	50.04.0125	1N 4448	Fc,ITT,Ph,Ses,Tf
20	D....4	50.04.0125	1N 4448	Fc,ITT,Ph,Ses,Tf
IC....1	50.14.0120	TBP2842N	Software 13/85	TI
22	IC....1	1.328.999.20	Software 50/86	St
23	IC....1	1.328.999.21	Software 50/87	St
20	IC....2	50.17.1573	74 HC 573	Mot,NS,Ph,RCA,SGS,TI,To
20	IC....3	50.17.1138	74 HC 138	Mot,NS,Ph,RCA,SGS,TI,To
20	IC....4	50.17.1004	74 HC 04	Mot,NS,Ph,RCA,SGS,TI,To
20	IC....5	50.17.1259	74 HC 259	Mot,NS,Ph,RCA,SGS,TI,To
20	IC....6	50.07.0022	ADUM318N	Is,MS
20	IC....7	50.05.0286	LM 358 N	Mot,NS,II
20	IC....8	50.17.1541	74 HC 541	Mot,NS,Ph,RCA,SGS,TI,To
20	IC....9	50.16.0107	MC 6803P-1	Ht,Mot
20	IC....10	50.15.0102	NE 590 N	Sig
20	IC....11	50.17.1574	74 HC 574	Mot,NS,Ph,RCA,SGS,TI,To
21	IC....11	50.17.1564	74 HC 564	Mot,NS,Ph,RCA,II
20	IC....12	50.15.0113	SN 75498 N	TI
21	IC....12	50.15.0112	U0N-595A	Sp
20	IC....13	50.11.0122	TL705ACP	TI
20	IC....14	50.15.0115	SN 75176AP	DS 3695 N
20	IC....15	50.15.0102	NE 590 N	NS,II
20	IC....16	not used		Sig
20	IC....17	not used		
20	P....1	not used	see note 2	
20	P....2	not used	see note 3	
20	P....3	not used	see note 2	
20	P....4	not used	see note 3	
20	P....5	not used	see note 4	
20	Q....1	50.03.0352	ZTX 751 S	Fe
20	Q....2	50.03.0352	ZTX 751 S	Fe
20	Q....3	50.03.0352	ZTX 751 S	Fe
20	Q....4	50.03.0352	ZTX 751 S	Fe
20	Q....5	50.03.0352	ZTX 751 S	Fe
20	Q....6	50.03.0352	ZTX 751 S	Fe
20	Q....7	50.03.0352	ZTX 751 S	Fe
20	Q....8	50.03.0352	ZTX 751 S	Fe
20	Q....9	50.03.0352	ZTX 751 S	Fe
20	Q....10	50.03.0352	ZTX 751 S	Fe
20	Q....11	50.03.0352	ZTX 751 S	Fe
20	Q....12	50.03.0352	ZTX 751 S	Fe
20	Q....13	50.03.0352	ZTX 751 S	Fe
20	Q....14	50.03.0352	ZTX 751 S	Fe
20	R....1	57.11.3100	10 Ohm	2%
25	R....1	57.11.3470	47 Ohm	2%
20	R....2	57.11.3103	10 kOhm	2%
20	R....3	57.11.3101	100 Ohm	2%
20	R....4	57.11.3243	24 kOhm	1%
20	R....5	57.11.3104	100 kOhm	2%
20	R....6	57.11.3243	24 kOhm	1%
20	R....7	57.11.3104	100 kOhm	2%
20	R....8	57.11.3332	3.3 kOhm	2%
20	R....9	57.11.3103	10 kOhm	2%
20	R....10	57.11.3102	1 kOhm	2%
24	R....10	not used	replaced by C17	
20	R....11	57.11.3103	10 kOhm	2%
20	R....12	not used		
20	R....13	57.11.3332	3.3 kOhm	2%
20	R....14	57.11.3562	5.6 kOhm	1%
20	R....15	57.11.3182	1.8 kOhm	1%
20	R....16	57.11.3101	100 Ohm	2%
20	RZ....1	57.88.4332	Network, 8 * 3.3 kOhm, 5%, single line	
20	RZ....2	57.88.4332	Network, 8 * 3.3 kOhm, 5%, single line	
20	RZ....3	57.88.4332	Network, 8 * 3.3 kOhm, 5%, single line	
20	RZ....4	57.88.4332	Network, 8 * 3.3 kOhm, 5%, single line	
20	RZ....5	57.88.3101	Network, 8 * 100 Ohm, 2%, DIL 16	
20	RZ....6	57.88.4332	Network, 8 * 3.3 kOhm, 5%, single line	
20	RZ....7	57.88.3220	Network, 8 * 22 Ohm, 2%, DIL 16	
20	RZ....8	57.88.4332	Network, 8 * 3.3 kOhm, 5%, single line	
20	RZ....9	57.88.3101	Network, 8 * 100 Ohm, 2%, DIL 16	
20	RZ....10	57.88.4332	Network, 8 * 3.3 kOhm, 5%, single line	
20	RZ....11	not used		
20	Y....1	89.01.0553	4.9152 Mhz +/-100 ppm, Nymph Nr. TD 18/NMP 049	

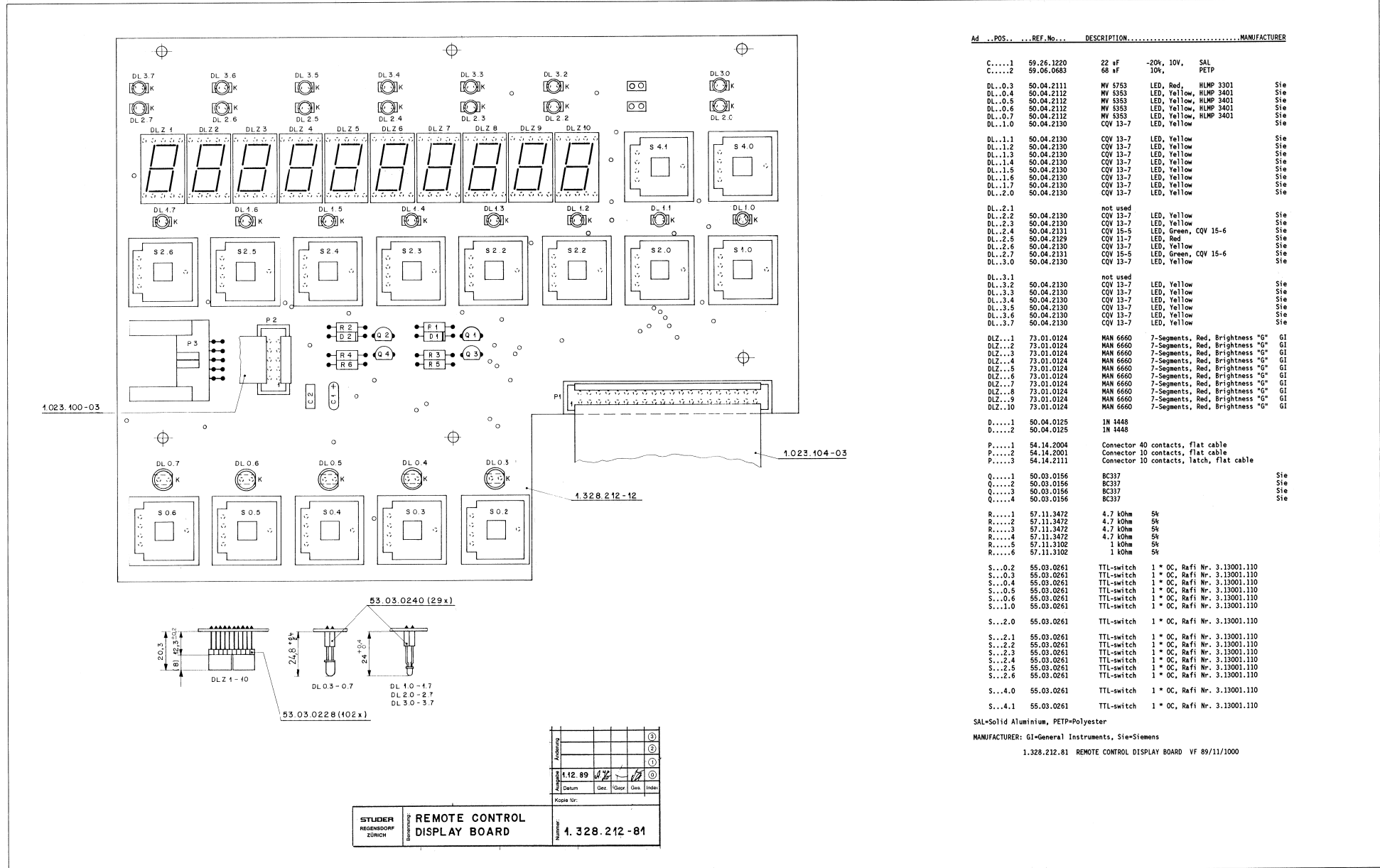
Ad	POS.	REF.No.	DESCRIPTION	MANUFACTURER
21	Y....1	89.01.0560	HC-49/V 4.9152 Mhz, +/-20ppm Quarz AG,ITT,Saronix	
(20)	01.02.85		PCB lay-out -11.	
(21)	01.12.86		IC12-SN75498N delivered for spare purpose only, new devices IC11 and IC12	
			VI, C10, C11 improved accuracy of quartz frequency.	
(22)	08.12.86		Extended Autolocator key Board.	
(23)	05.06.87		Software 29/87.	
(24)	25.09.89		Improved noise suppression on differential line.	
(25)	12.12.90		Ripple on AD-converter supply reduced.	
Note 2	-	Connector: 10 Contacts	Student Nr. 54.14.2001 Yamachi Nr. FAP-10-08//A Burdny Nr. BPH 7 B 10 800 GS	
Note 3	-	Connector: 40 Contacts	Student Nr. 54.14.2004 Yamachi Nr. FAP-40-08//A Burdny Nr. BPH 9 B 40 800 GS	
Note 4	-	Connector: 10 Pieces	Student Nr. 1.010.018.54	
			Cer=Ceramic, El=Electrolytic, PETP=Polyester Film, PP=Polypropylen, Sa1=Solid Aluminium.	
			MANUFACTURERS: Fc=Fairchild, Fe=Ferranti, H=hitachi, Is=Intersil, ITI=Intermetall, Mot=Motorola, NS=National Semiconductors, Ph=Philips, RCA=RCA Corporation, Sen=Senescon, SGS=SGS/Ates, Sig=Signetics, Sp=Sprague, St=Studer, Tf=Telefunken, Ti=Texas Instruments, To=Toshiba.	
			1.328.211.00 REMOTE CONTROL DRIVER BOARD	BD 85/02/0100
			1.328.211.00 REMOTE CONTROL DRIVER BOARD	BD 85/02/0120
			1.328.211.00 REMOTE CONTROL DRIVER BOARD	BD 86/12/0121
			1.328.211.00 REMOTE CONTROL DRIVER BOARD	BD 86/12/0822
			1.328.211.00 REMOTE CONTROL DRIVER BOARD	BD 87/06/0523
			1.328.211.00 REMOTE CONTROL DRIVER BOARD	VF 89/09/2524
			1.328.211.00 REMOTE CONTROL DRIVER BOARD	ZB 89/12/1225

END

REMOTE CONTROL CABINET (SERIAL) 1.328.210.81  
REMOTE CONTROL MODULE (SERIAL) 1.328.220.81  
- Remote Control Display PCB 1.328.212.81



REMOTE CONTROL CABINET (SERIAL) 1.328.210.81  
 REMOTE CONTROL MODULE (SERIAL) 1.328.220.81  
 - Remote Control Display PCB 1.328.212.81

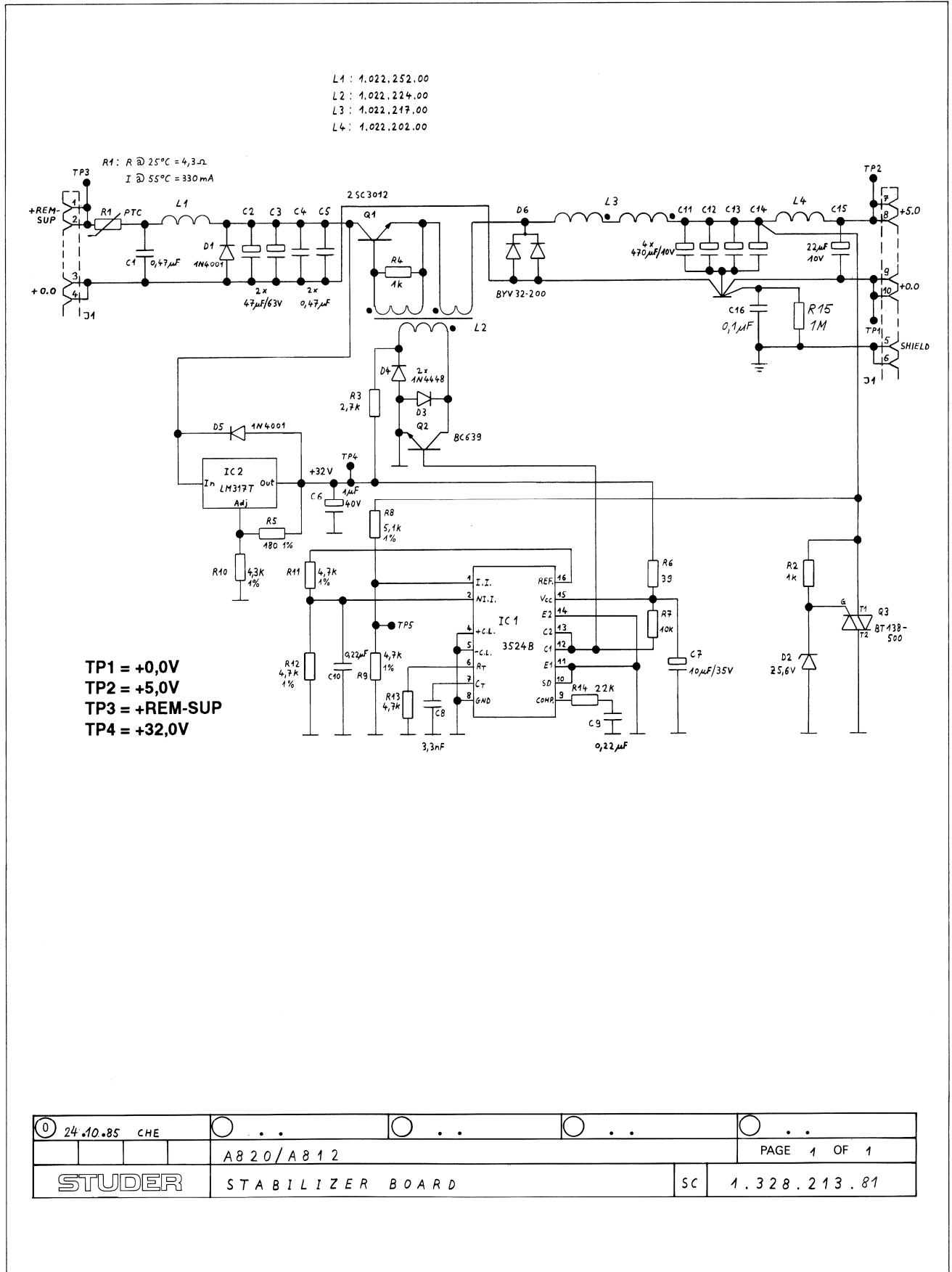


Ad	POS.	REF.No.	DESCRIPTION	MANUFACTURER
C....1		59.26.1220	22 µF	-20%, 10V, SAL
C....2		59.06.0683	68 µF	10%, PETP
DL..0.3		50.04.2111	MV 5753	LED, Red, HLM 3301
DL..0.4		50.04.2112	MV 5353	LED, Yellow, HLM 3401
DL..0.5		50.04.2112	MV 5353	LED, Yellow, HLM 3401
DL..0.6		50.04.2112	MV 5353	LED, Yellow, HLM 3401
DL..0.7		50.04.2112	MV 5353	LED, Yellow, HLM 3401
DL..1.0		50.04.2130	CQV 13-7	LED, Yellow
DL..1.1		50.04.2130	CQV 13-7	LED, Yellow
DL..1.2		50.04.2130	CQV 13-7	LED, Yellow
DL..1.3		50.04.2130	CQV 13-7	LED, Yellow
DL..1.4		50.04.2130	CQV 13-7	LED, Yellow
DL..1.5		50.04.2130	CQV 13-7	LED, Yellow
DL..1.6		50.04.2130	CQV 13-7	LED, Yellow
DL..1.7		50.04.2130	CQV 13-7	LED, Yellow
DL..2.0		50.04.2130	CQV 13-7	LED, Yellow
DL..2.1			not used	
DL..2.2		50.04.2130	CQV 13-7	LED, Yellow
DL..2.3		50.04.2130	CQV 13-7	LED, Yellow
DL..2.4		50.04.2131	CQV 15-5	LED, Green, CQV 15-6
DL..2.5		50.04.2129	CQV 11-7	LED, Red
DL..2.6		50.04.2130	CQV 13-7	LED, Yellow
DL..2.7		50.04.2131	CQV 15-5	LED, Green, CQV 15-6
DL..3.0		50.04.2130	CQV 13-7	LED, Yellow
DL..3.1			not used	
DL..3.2		50.04.2130	CQV 13-7	LED, Yellow
DL..3.3		50.04.2130	CQV 13-7	LED, Yellow
DL..3.4		50.04.2130	CQV 13-7	LED, Yellow
DL..3.5		50.04.2130	CQV 13-7	LED, Yellow
DL..3.6		50.04.2130	CQV 13-7	LED, Yellow
DL..3.7		50.04.2130	CQV 13-7	LED, Yellow
DLZ...1		73.01.0124	MAN 6660	7-Segments, Red, Brightness "G" GI
DLZ...2		73.01.0124	MAN 6660	7-Segments, Red, Brightness "G" GI
DLZ...3		73.01.0124	MAN 6660	7-Segments, Red, Brightness "G" GI
DLZ...4		73.01.0124	MAN 6660	7-Segments, Red, Brightness "G" GI
DLZ...5		73.01.0124	MAN 6660	7-Segments, Red, Brightness "G" GI
DLZ...6		73.01.0124	MAN 6660	7-Segments, Red, Brightness "G" GI
DLZ...7		73.01.0124	MAN 6660	7-Segments, Red, Brightness "G" GI
DLZ...8		73.01.0124	MAN 6660	7-Segments, Red, Brightness "G" GI
DLZ...9		73.01.0124	MAN 6660	7-Segments, Red, Brightness "G" GI
DLZ...10		73.01.0124	MAN 6660	7-Segments, Red, Brightness "G" GI
D.....1		50.04.0125	IN 1448	
D.....2		50.04.0125	IN 1448	
P.....1		54.14.2004	Connector 40 contacts, flat cable	
P.....2		54.14.2001	Connector 10 contacts, flat cable	
P.....3		54.14.2111	Connector 10 contacts, latch, flat cable	
Q.....1		50.03.0156	BC337	Sie
Q.....2		50.03.0156	BC337	Sie
Q.....3		50.03.0156	BC337	Sie
Q.....4		50.03.0156	BC337	Sie
R.....1		57.11.3472	4.7 kOhm	5%
R.....2		57.11.3472	4.7 kOhm	5%
R.....3		57.11.3472	4.7 kOhm	5%
R.....4		57.11.3472	4.7 kOhm	5%
R.....5		57.11.3102	1 kOhm	5%
R.....6		57.11.3102	1 kOhm	5%
S...0.2		55.03.0261	TTL-switch	1 * OC, Rafi Nr. 3.13001.110
S...0.3		55.03.0261	TTL-switch	1 * OC, Rafi Nr. 3.13001.110
S...0.4		55.03.0261	TTL-switch	1 * OC, Rafi Nr. 3.13001.110
S...0.5		55.03.0261	TTL-switch	1 * OC, Rafi Nr. 3.13001.110
S...0.6		55.03.0261	TTL-switch	1 * OC, Rafi Nr. 3.13001.110
S...1.0		55.03.0261	TTL-switch	1 * OC, Rafi Nr. 3.13001.110
S...2.0		55.03.0261	TTL-switch	1 * OC, Rafi Nr. 3.13001.110
S...2.1		55.03.0261	TTL-switch	1 * OC, Rafi Nr. 3.13001.110
S...2.2		55.03.0261	TTL-switch	1 * OC, Rafi Nr. 3.13001.110
S...2.3		55.03.0261	TTL-switch	1 * OC, Rafi Nr. 3.13001.110
S...2.4		55.03.0261	TTL-switch	1 * OC, Rafi Nr. 3.13001.110
S...2.5		55.03.0261	TTL-switch	1 * OC, Rafi Nr. 3.13001.110
S...2.6		55.03.0261	TTL-switch	1 * OC, Rafi Nr. 3.13001.110
S...4.0		55.03.0261	TTL-switch	1 * OC, Rafi Nr. 3.13001.110
S...4.1		55.03.0261	TTL-switch	1 * OC, Rafi Nr. 3.13001.110

SAL=Solid Aluminium, PETP=Polyester  
 MANUFACTURER: GI=General Instruments, Sie=Siemens  
 1.328.212.81 REMOTE CONTROL DISPLAY BOARD VF 89/11/1000

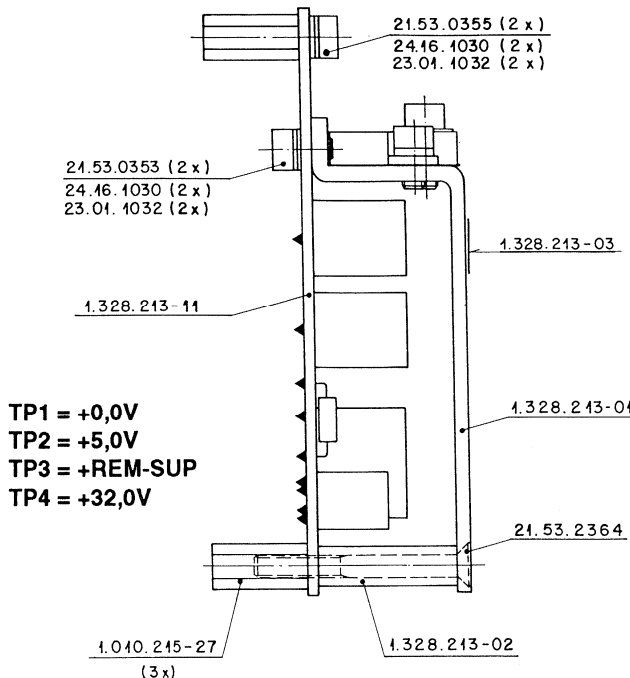
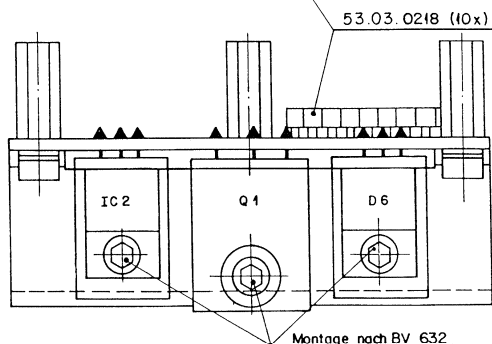
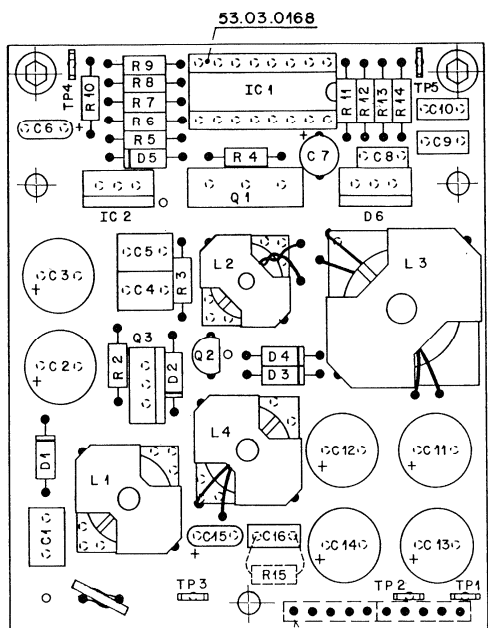
STUDER REGENSDORFF ZÜRICH	Bezeichnung: <b>REMOTE CONTROL DISPLAY BOARD</b>	Number: <b>1.328.212-81</b>
---------------------------------	---	--------------------------------

**AUTOLOCATOR MODULE 1.328.230.82**  
**AUTOLOCATOR CABINET 1.328.240.82**  
 - Stabilizer Board 1.328.213.81



24.10.85 CHE									
A820/A812				PAGE 1 OF 1					
STUDER		STABILIZER BOARD				SC	1.328.213.81		

**AUTOLOCATOR MODULE 1.328.230.82**  
**AUTOLOCATOR CABINET 1.328.240.82**  
 - Stabilizer Board 1.328.213.81



TP1 = +0,0V  
 TP2 = +5,0V  
 TP3 = +REM-SUP  
 TP4 = +32,0V

Änderung					③
					②
					①
Ausgabe	24.10.91	PH			④
Datum	Gez	Gesw	Ges	Index	

STUDER REGENSDORF ZÜRICH	Benennung <b>STABILIZER BOARD ESE</b>	Nummer <b>1.328.213-81</b>
--------------------------------	--	-------------------------------

Ad ..POS... REF.No... DESCRIPTION.....MANUFACTURER

C....1	59.06.0474	0.47 uF	10%,	PETP	
C....2	59.22.8470	47 uF	20%,	63V, EL	
C....3	59.22.8470	47 uF	20%,	63V, EL	
C....4	59.06.0474	0.47 uF	10%,	PETP	
C....5	59.06.0474	0.47 uF	10%,	PETP	
C....6	59.26.9109	1 uF	20%,	40V, SAL	
C....7	59.22.6100	10 uF	-20%,	35V, EL	
C....8	59.06.0332	3300 pF	10%,	PETP	
C....9	59.06.0224	0.22 uF	10%,	PETP	
C....10	59.06.0224	0.22 uF	10%,	PETP	
C....11	59.22.3471	470 uF	-20%,	10V, EL	
C....12	59.22.3471	470 uF	-20%,	10V, EL	
C....13	59.22.3471	470 uF	-20%,	10V, EL	
C....14	59.22.3471	470 uF	-20%,	10V, EL	
C....15	59.26.1220	22 uF	20%,	10V, SAL	
C....16	59.06.0104	0.1 uF	10%,	50V, PETP	
D....1	50.04.0122	1N 4001			Mot
D....2	50.04.1108	5.6 V		BZX83 C 5V6, BZX55 C 5V6, ZPD 5.6 Ses,ITT	Mot,Ph
D....3	50.04.0125	1N 4448			Fc,ITT,Ph,Ses
D....4	50.04.0125	1N 4448			Fc,ITT,Ph,Ses
D....5	50.04.0122	1N 4001			Mot
D....6	50.04.0517	BYV32-200			Mot,Ph
IC....1	50.05.0279	SG 3524BN			SG
IC....2	50.10.0104	LM 317T			Tho,Mot,NS,TI
J....1	00.00.0000			see note 1	
L....1	1.022.252.00	0.32 mH		Filter Coil	St
L....2	1.022.224.00			Power Supply Transformer	St
L....3	1.022.217.00	46 uH		HF-Coil, 5A	St
L....4	1.022.202.00	16.9 mH		Filter Coil	St
Q....1	50.03.0517	2 SC 3012		NPN	NEC
Q....2	50.03.0551	BC 639		NPN	Mot,Ph
Q....3	50.99.0106	T 2800		400V, 8A, Triac	Ph

Ad ..POS... REF.No... DESCRIPTION.....MANUFACTURER

R....1	57.92.1331	PTC		see note 2	Ph
R....2	57.11.3102	1	kOhm	1%	
R....3	57.11.3272	2.7	kOhm	1%	
R....4	57.11.3102	1	kOhm	1%	
R....5	57.11.3181	180	Ohm	1%	
R....6	57.11.3390	39	Ohm	1%	
R....7	57.11.3103	10	kOhm	1%	
R....8	57.11.3512	5.1	kOhm	1%	
R....9	57.11.3472	4.7	kOhm	1%	
R....10	57.11.3432	4.3	kOhm	1%	
R....11	57.11.3472	4.7	kOhm	1%	
R....12	57.11.3472	4.7	kOhm	1%	
R....13	57.11.3472	4.7	kOhm	1%	
R....14	57.11.3223	22	kOhm	1%	
R....15	57.11.3105	1	MOhm	1%	
TP....1	54.02.0320			Test Point	
TP....2	54.02.0320			Test Point	
TP....3	54.02.0320			Test Point	
TP....4	54.02.0320			Test Point	
TP....5	54.02.0320			Test Point	

EL=Electrolytic, SAL=Solid Aluminium, PETP=Polyester

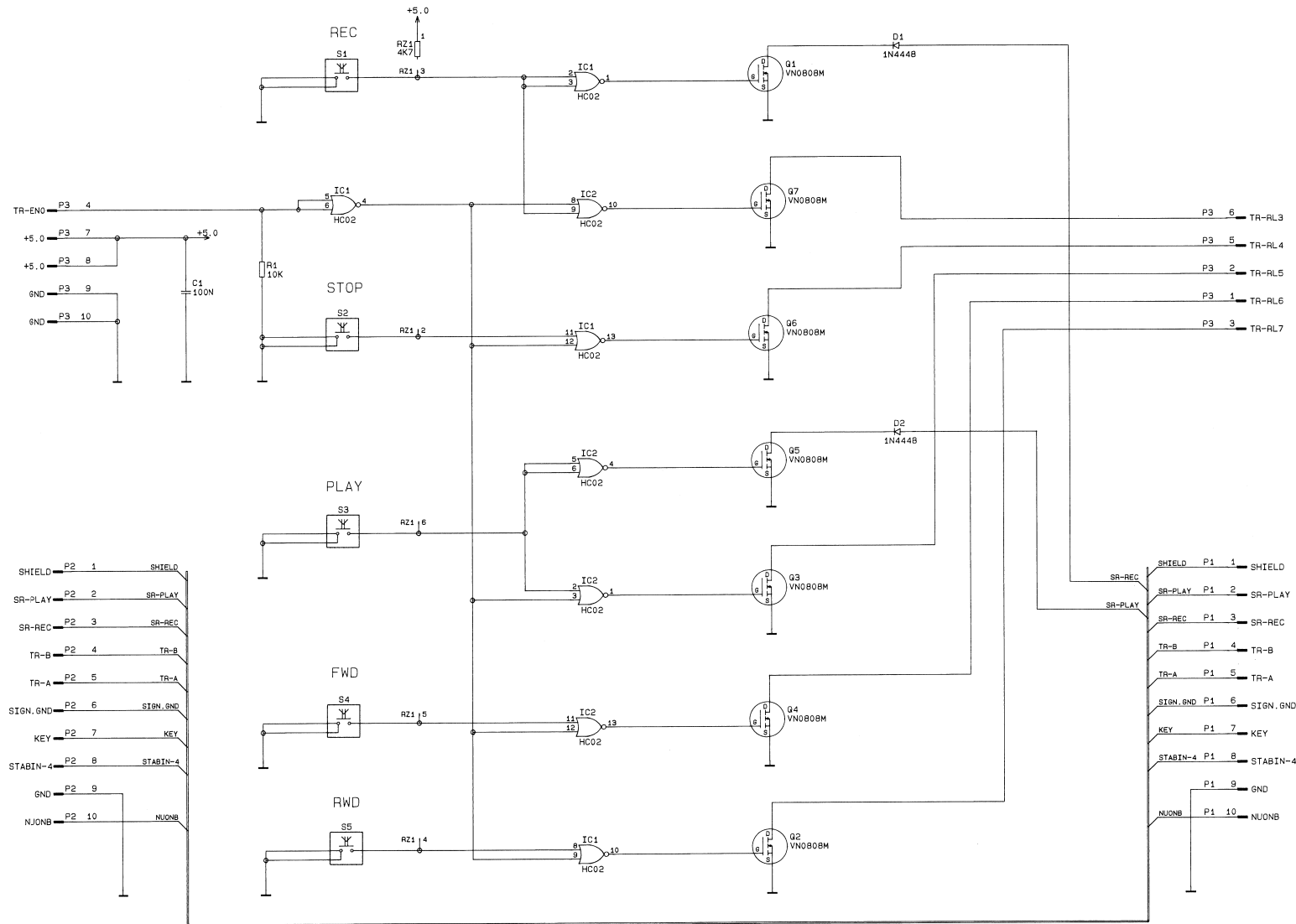
MANUFACTURERS: Fc=Fairchild, ITT=Intermetall, Mot=Motorola, NEC=Nippon Electric Corp., NS=National Semiconductors, Ph=Philips, Ses=Sescosem, SG=Silicon General, St=Studer Tho=Thomson, TI=Texas Instruments

Note 1 - Connector: 10 pieces Studer Nr.53.03.0218  
 Note 2 - PTC Thermistor: R @ 25 degree Celsius = 4.7 Ohm  
 I @ 55 degree Celsius = 330 mA

Philips Nr.2322 663 13311

1.328.213.81 STABILIZER BOARD BD91/10/2400

AUTOLOCATOR MODULE 1.328.230.82  
AUTOLOCATOR CABINET 1.328.240.82  
Pushbutton Board 1.328.233.82

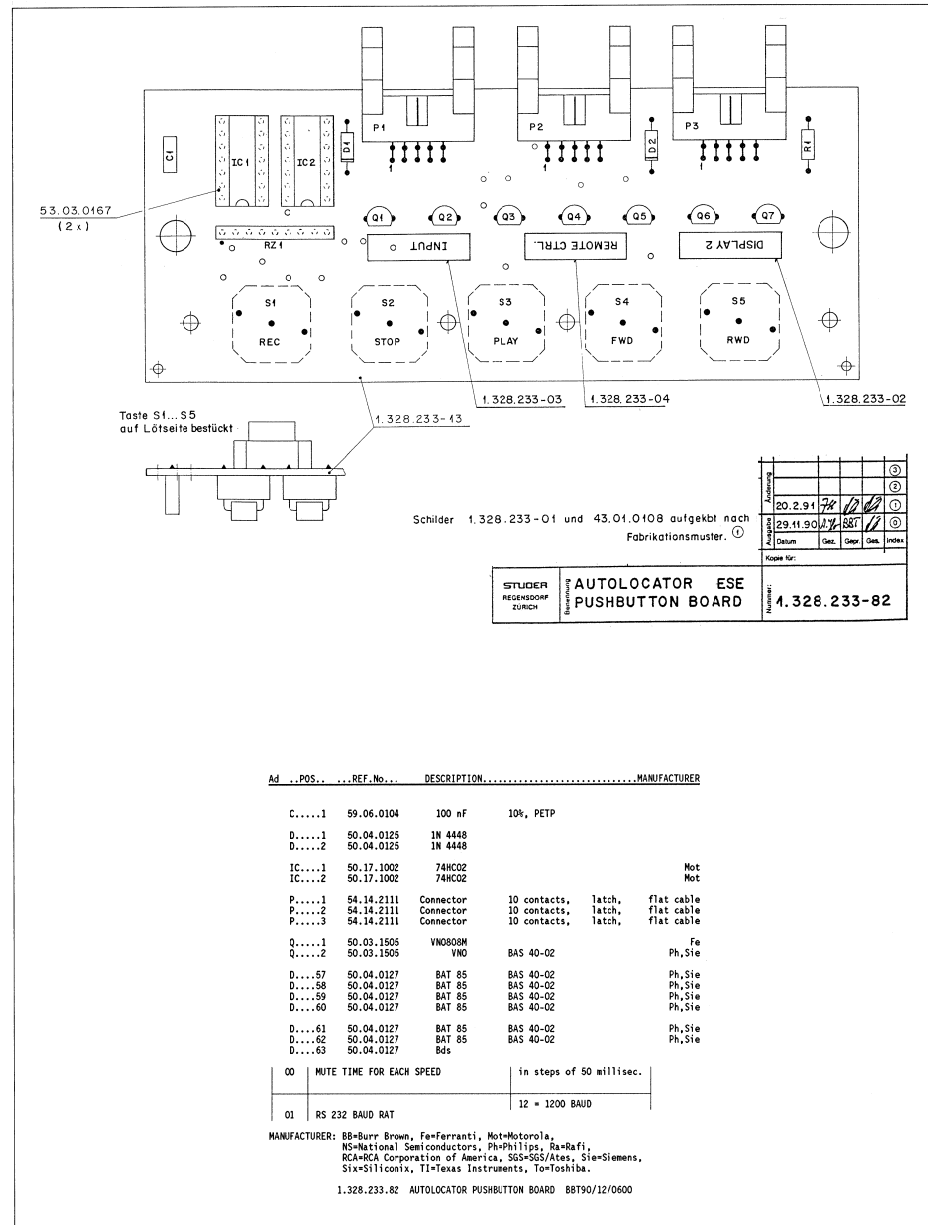


© 22.10.90 BBT		PAGE 1 OF 1	
STUDER		AUTOLOCATOR PUSHBUTTON BOARD SC 1.328.233-82	

**AUTOLOCATOR MODULE 1.328.230.82**

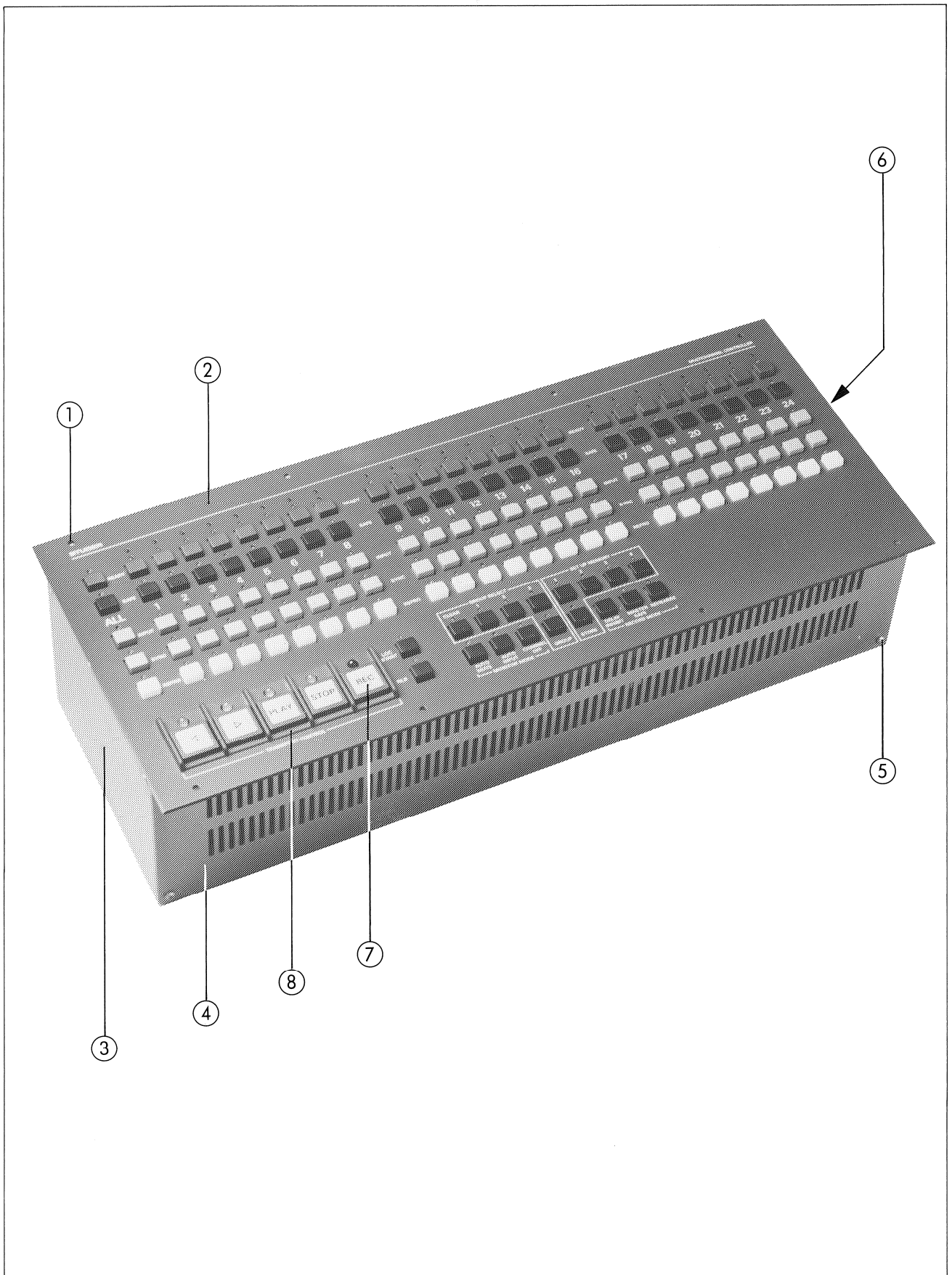
**AUTOLOCATOR CABINET 1.328.240.82**

**- Pushbutton Board 1.328.233.82**





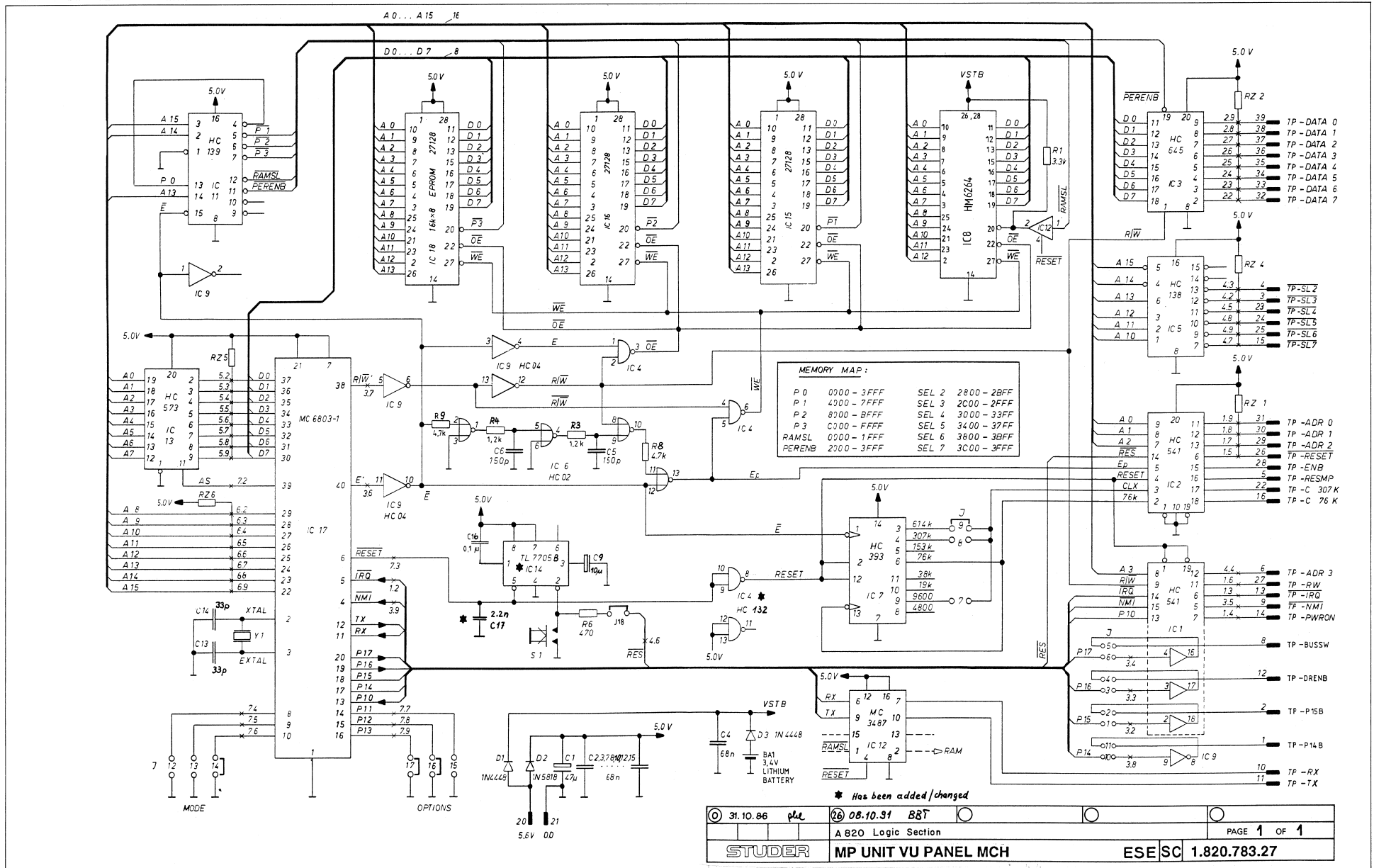
AUDIO REMOTE CONTROL 8CH 1.328.501.00 / 1.328.536.00  
AUDIO REMOTE CONTROL 24CH 1.328.503.00 / 1.328.537.00



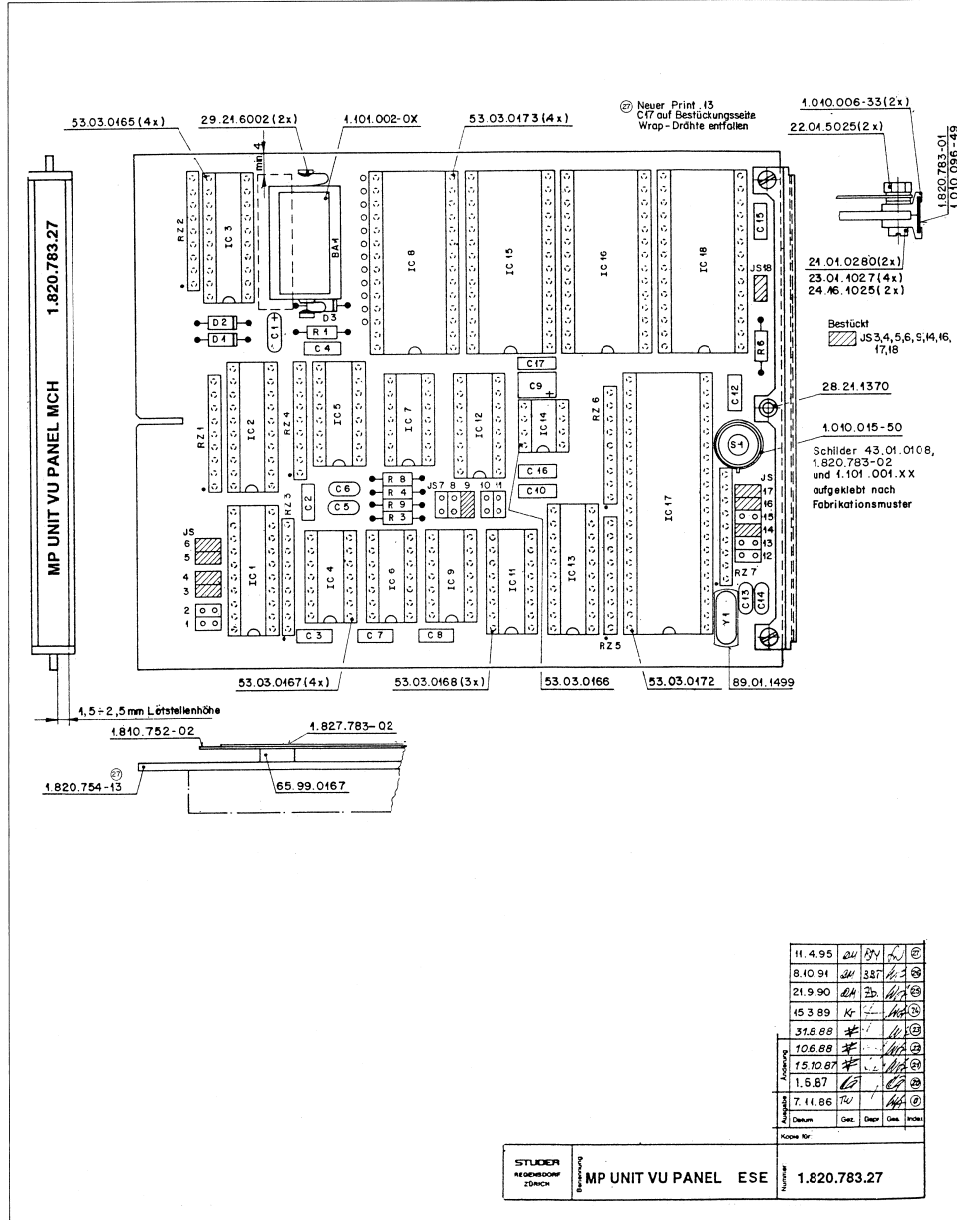
**AUDIO REMOTE CONTROL 8CH 1.328.501.00 / 1.328.536.00**  
**AUDIO REMOTE CONTROL 24CH 1.328.503.00 / 1.328.537.00**

Pos	Qty	Order No.	Part Name / Specification	Order No.
*		1.328.501.00 1.328.503.00	AUDIO REMOTE CTR. MODUL 8CH AUDIO REMOTE CTR. MODUL 24CH	1.328.536.00 1.328.537.00
	5		Self-adhesive labels: see section 10	
	1	1.820.706.00	DC-Converter 5,6V	1.820.706.00
	1	1.820.705.00	Basis Board VU-Panel	1.820.705.00
	1	1.820.783.24	MPU VU-Panel MCH	1.820.783.26
*	1 1	1.328.510.00 1.328.504.00	Key Board 8CH Key Board 24CH	1.328.510.00 1.328.504.81
	1	1.328.505.00	Key Board Driver	1.328.505.00
1	8	1.010.025.21	Oval head allen screw blk, M3x6	1.010.025.21
* 2	1	1.328.501.01 1.328.503.01	Front cover 8CH Front cover 24CH	1.328.501.01 1.328.503.01
3	1	1.328.503.03	Box for Remote	1.328.523.03
4	1	1.328.503.05	Cover for electronics	1.328.523.05
5	7	21.51.8354	Oval head allen screw Ni, M3x6	21.51.8354
6	1	1.328.507.00	Socket prewired compl.	1.328.507.00
7	5	1.011.210.01	Push button	1.011.210.01
8	1 1	1.810.300.03 1.810.300.06	Push button housing Dumping strip	1.810.300.03 1.810.300.06

AUDIO REMOTE CONTROL 8CH 1.328.501.00 / 1.328.536.00  
AUDIO REMOTE CONTROL 24CH 1.328.503.00 / 1.328.537.00  
· MP Unit VU Panel 1.820.783.27



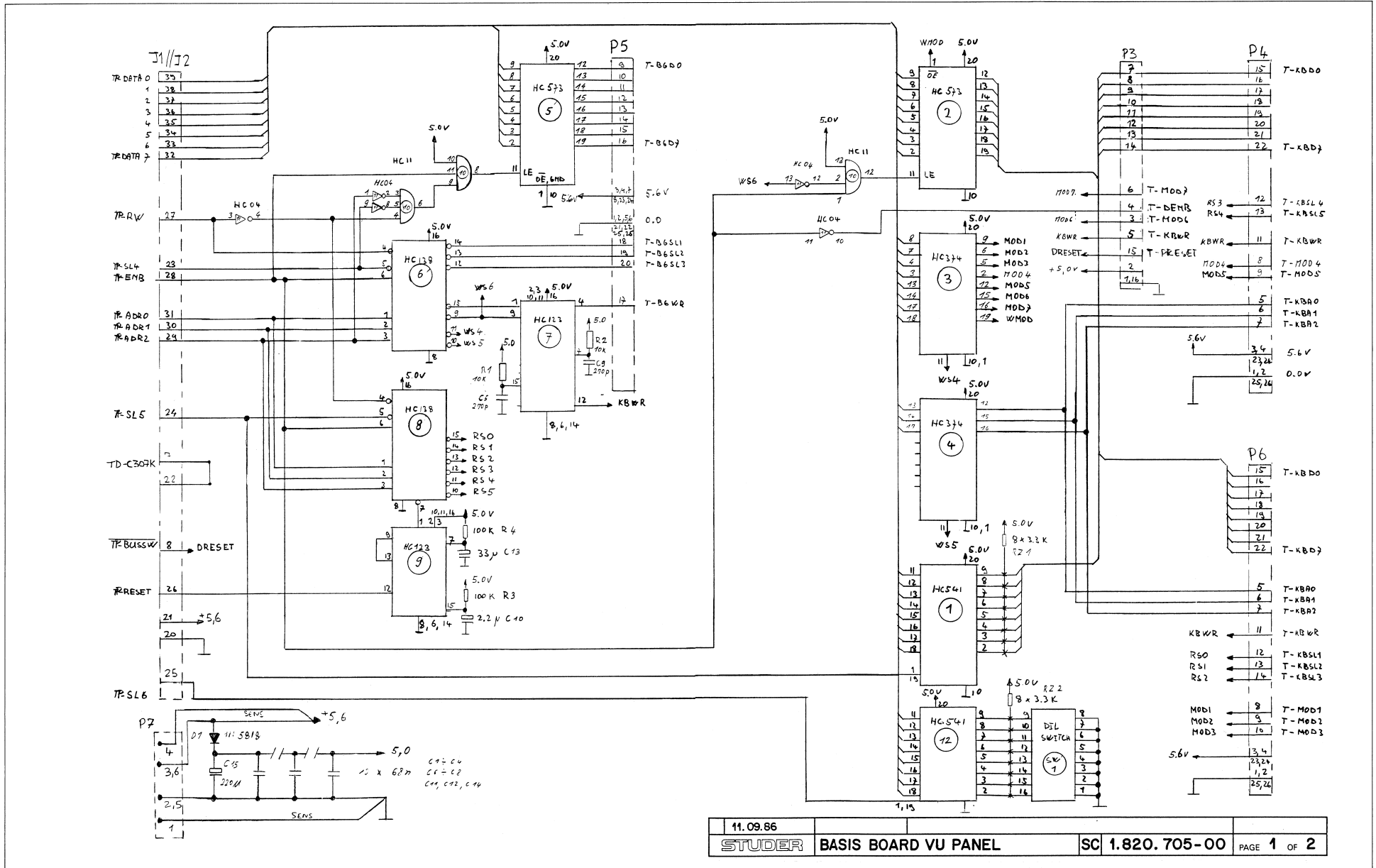
AUDIO REMOTE CONTROL 8CH 1.328.501.00 / 1.328.536.00  
 AUDIO REMOTE CONTROL 24CH 1.328.503.00 / 1.328.537.00  
 - MP Unit VU Panel 1.820.783.27



Ad	POS.	REF.No.	DESCRIPTION	MANUFACTURER
BA...	1	89.01.0275	Batt, Lith., 3.6V, D 14.7*25.5	
C....1	1	59.26.0470	47 uF 20%, 6.3V, Sal	Ph
C....2	1	59.06.0683	68 nF 10%, 63V, PETP	
C....3	1	59.06.0683	68 nF 10%, 63V, PETP	
C....4	1	59.06.0683	68 nF 10%, 63V, PETP	
C....5	1	59.34.7151	150 pF 2%	
C....6	1	59.34.7151	150 pF 2%	
C....7	1	59.06.0683	68 nF 10%, 63V, PETP	
C....8	1	59.06.0683	68 nF 10%, 63V, PETP	
C....9	1	59.26.2100	10 uF 20%, 16V, Sal	
C....10	1	59.06.0683	68 nF 10%, 63V, PETP	
C....11	1	00.00.0000	not used	
C....12	1	59.06.0683	68 nF 10%, 63V, PETP	
C....13	1	59.34.2330	33 pF 5%, Ce	
C....14	1	59.34.2330	33 pF 5%, Ce	
C....15	1	59.06.0683	68 nF 10%, 63V, PETP	
C....16	1	59.06.0104	100 nF 10%, 63V, PETP	
C....17	1	59.06.0222	2.2 nF 10%, 63V, PETP	
B....1	1	50.04.0125	1N 4448	Fc,ITT,Ph,Ses,Tf
B....2	1	50.04.0512	1N 5818	Mot
B....3	1	50.04.0125	1N 4448	Fc,ITT,Ph,Ses,Tf
IC....1	1	50.17.1541	74 HC 541	Mot,NS,Ph,RCA,SGS,Ti,To
IC....2	1	50.17.1541	74 HC 541	Mot,NS,Ph,RCA,SGS,Ti,To
IC....3	1	50.17.1645	74 HC 646	Mot,NS,Ph,RCA,SGS,Ti,To
IC....4	1	50.17.1000	74 HC 00	Mot,NS,Ph,RCA,SGS,Ti,To
IC....5	1	50.17.1132	74 HC 132	Mot,NS,Ph,RCA,SGS,Ti,To
IC....6	1	50.17.1138	74 HC 138	Mot,NS,Ph,RCA,SGS,Ti,To
IC....7	1	50.17.1002	74 HC 02	Mot,NS,Ph,RCA,SGS,Ti,To
IC....8	1	50.17.1393	74 HC 393	Mot,NS,Ph,RCA,SGS,Ti,To
IC....9	1	50.14.0153	HM6249-15	Mot,NS,Ph,RCA,SGS,Ti,To
IC....10	1	50.17.0004	74 HCT 04	Mot,NS,Ph,RCA,SGS,Ti,To
IC....11	1	50.17.1139	74 HC 139	Mot,NS,Ph,RCA,SGS,Ti,To
IC....12	1	50.15.0105	MC 3487 P	Mot,NS
IC....13	1	50.17.1573	74 HC 573	Mot,NS,Ph,RCA,SGS,Ti,To
IC....14	1	50.11.0122	TL7056CP	TI
IC....15	1	50.11.0157	TL7056CP	TI
IC....16	1	00.00.0000	not used	
IC....17	1	50.14.0125	50.14.0125	Hi,It
IC....18	1	1.820.988.20	HN 48271286-30	Software 22/87
IC....19	1	1.820.988.21	Software 41/87	St
IC....20	1	00.00.0000	not used	
IC....21	1	50.16.0107	MC6803P-1	Mot,Hi
IC....22	1	50.14.0125	50.14.0125	Hi,It
IC....23	1	1.820.988.20	HN 48271286-30	Software 22/87
IC....24	1	1.820.988.21	Software 41/87	St
IC....25	1	1.820.988.22	Software 22/88	St
IC....26	1	1.820.988.23	Software 35/88	St
IC....27	1	1.820.988.24	Software 20/89	St
IC....28	1	1.820.988.25	Software 42/90	St
JS....1	1		see note 1	
JS....2	1		see note 1	
JS....3	1		see note 1	
JS....4	1		see note 1	
JS....5	1		see note 1	
JS....6	1		see note 1	
JS....7	1		see note 1	
JS....8	1		see note 1	
JS....9	1		see note 1	
JS....10	1		see note 1	
JS....11	1		see note 1	
JS....12	1		see note 1	
JS....13	1		see note 1	
JS....14	1		see note 1	
JS....15	1		see note 1	
JS....16	1		see note 1	
JS....17	1		see note 1	
JS....18	1		see note 1	
MP....1	1	29.21.6002		
MP....2	1	29.21.6002		
R....1	1	57.11.4332	3.3 kOhm 5%	
R....2	1	00.00.0000	not used	
R....3	1	57.11.4122	1.2 kOhm 5%	
R....4	1	57.11.4122	1.2 kOhm 5%	
R....5	1	00.00.0000	not used	
R....6	1	57.11.4471	470 Ohm 5%	
R....7	1	00.00.0000	not used	
R....8	1	57.11.4472	4.7 kOhm 5%	
R....9	1	57.11.4472	4.7 kOhm 5%	
RZ....1	1	57.88.4332	see note 2	
RZ....2	1	57.88.4332	see note 2	
RZ....3	1	57.88.4332	see note 2	
RZ....4	1	57.88.4332	see note 2	
RZ....5	1	57.88.4332	see note 2	
RZ....6	1	57.88.4332	see note 2	
RZ....7	1	57.88.4332	see note 2	
S....1	1	55.03.0122	Chicago Switch 34-550-001	
Y....1	1	89.01.0560	4.9152 MHz, +100 ppm	

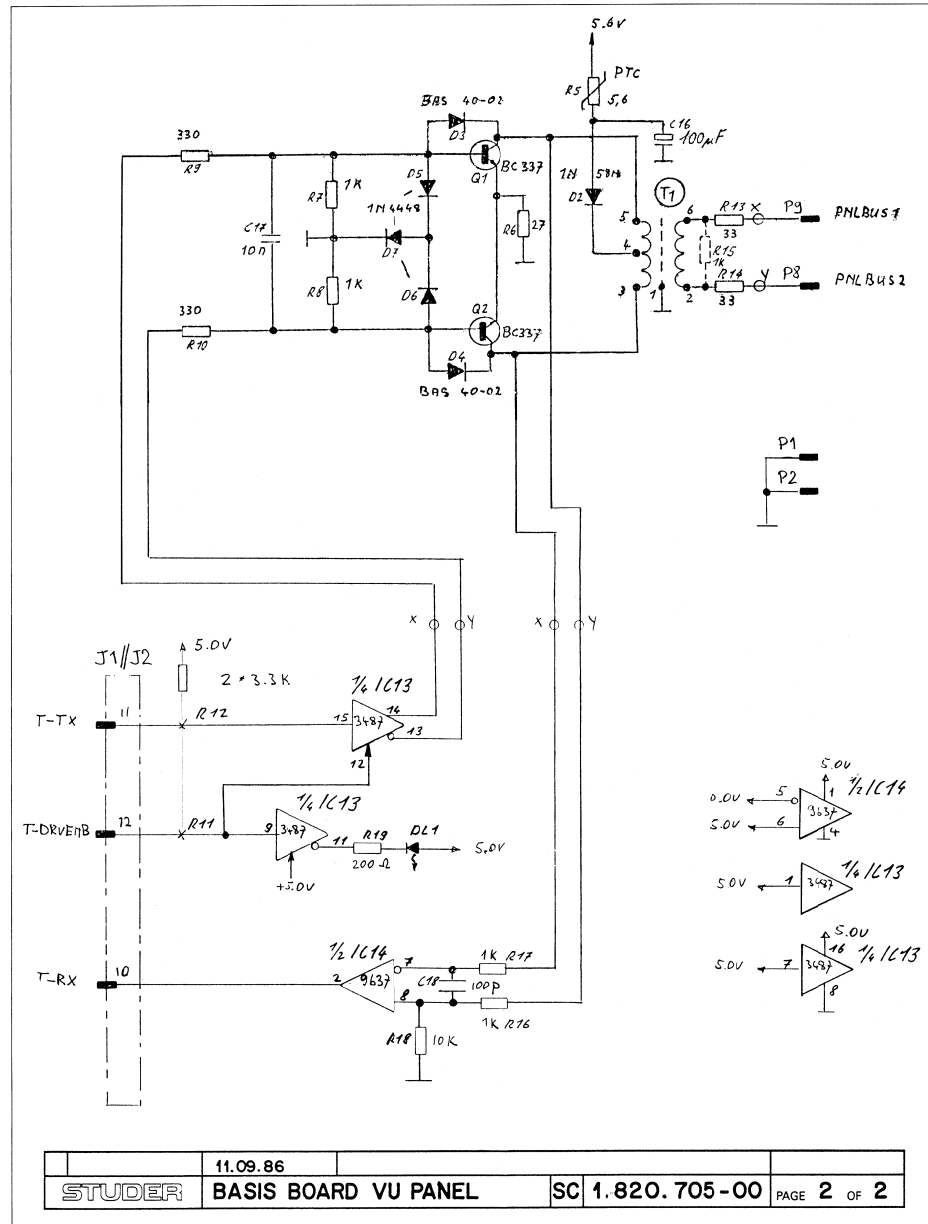
Ad	POS.	REF.No.	DESCRIPTION	MANUFACTURER
(23)	88/08/31	Software 35/88		
(24)	89/03/15	Software 20/89		
(25)	90/09/21	Software 42/90		
(26)	91/10/08	Same software as 42/90 suffix (25), improved reset performance.		
Note 1 - Contact pin:				
Bridge:				
Note 2 - Network:				
Ce=Ceramic, Sal=Solid Aluminium, PEP=Polyesterfilm.				
MANUFACTURER: fc=Fairchild, Hi=Hitachi, ITT=Intermetall, Mot=Motorola, NS=National Semiconductors, OK=OKI, Ph=Philips, Ses=Sesocsson, TI=Telefunken, TI=Texas Instruments.				
1.820.783.00	MP-UNIT VU PANEL MCH	BD 86/10/3100		
1.820.783.00	MP-UNIT VU PANEL MCH	BD 87/06/0100		
1.820.783.00	MP-UNIT VU PANEL MCH	BD 87/10/1521		
1.820.783.00	MP-UNIT VU PANEL MCH	BD 88/06/1022		
1.820.783.00	MP-UNIT VU PANEL MCH	BD 88/08/3123		
1.820.783.00	MP-UNIT VU PANEL MCH	BD 89/03/1524		
1.820.783.00	MP-UNIT VU PANEL MCH	ZB 90/09/2125		
1.820.783.00	MP-UNIT VU PANEL MCH	BBT91/10/0826		
END				

PARALLEL REMOTE CHANNEL CONTROL INTERFACE 1.328.500.00  
 Basis Board VU Panel 1.820.705.00



PARALLEL REMOTE CHANNEL CONTROL INTERFACE 1.328.500.00

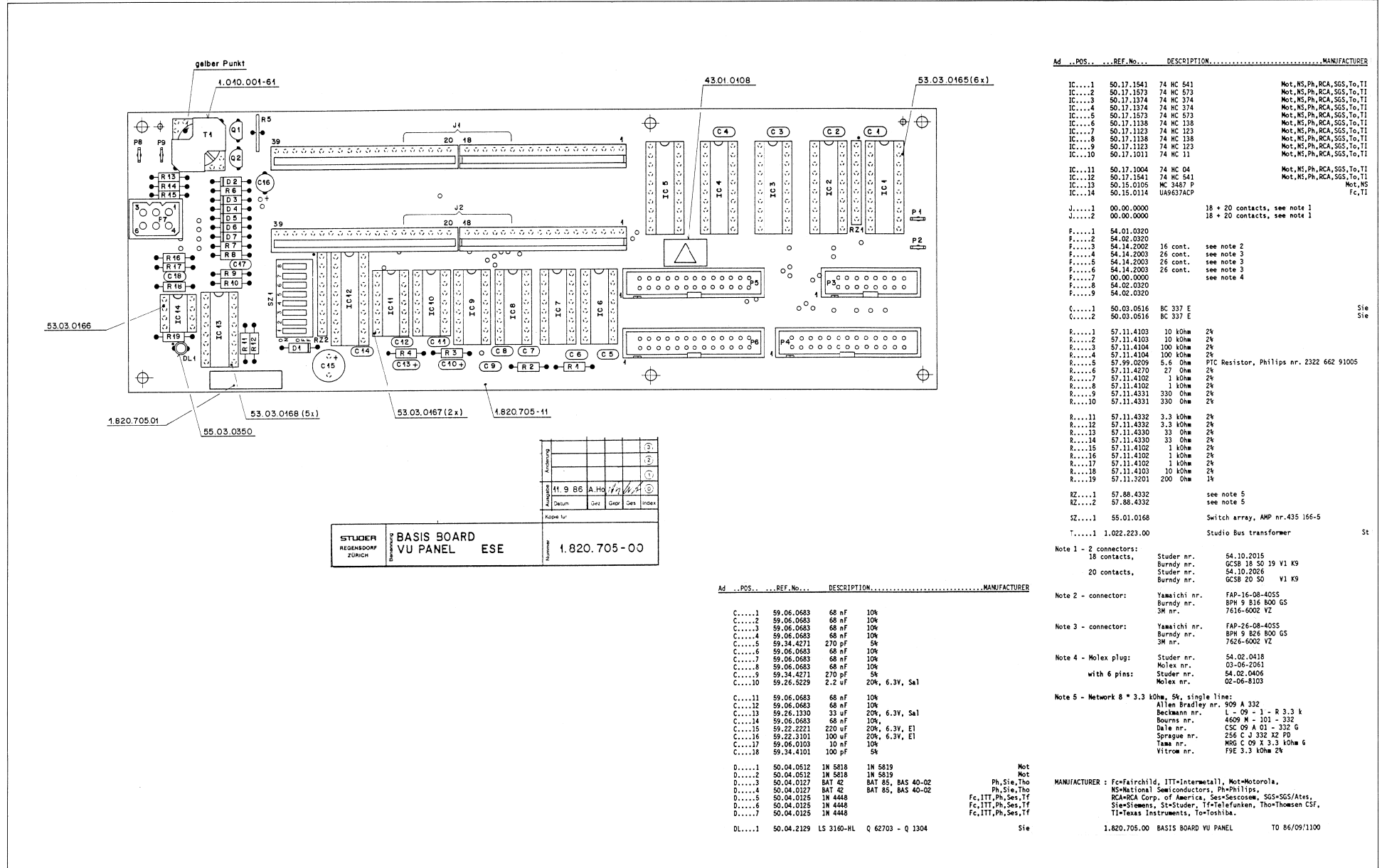
- Basis Board VU Panel 1.820.705.00



	11.09.86		
STUDER	BASIS BOARD VU PANEL	SC 1.820.705-00	PAGE 2 OF 2

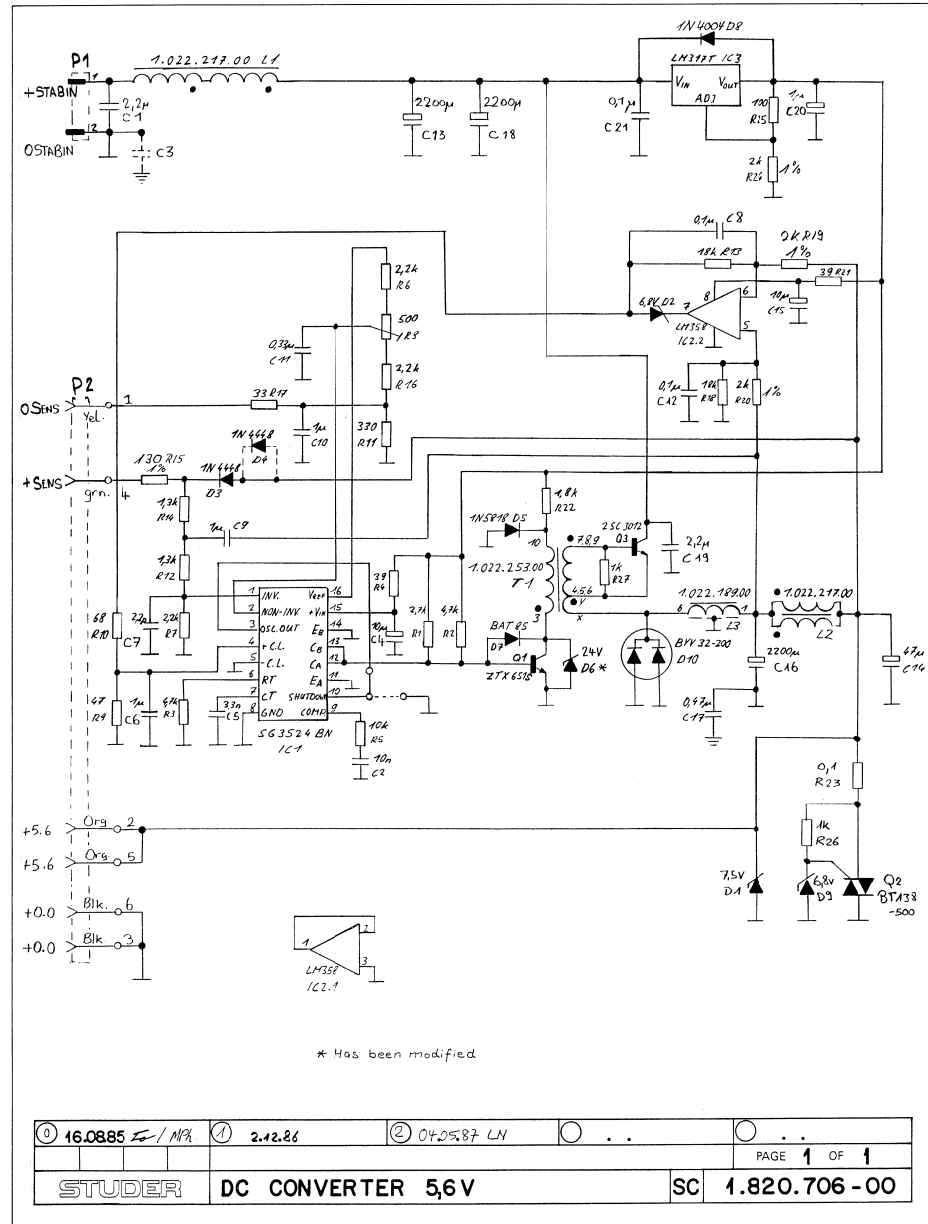
PARALLEL REMOTE CHANNEL CONTROL INTERFACE 1.328.500.00

- Basis Board VU Panel 1.820.705.00



PARALLEL REMOTE CHANNEL CONTROL INTERFACE 1.328.500.00

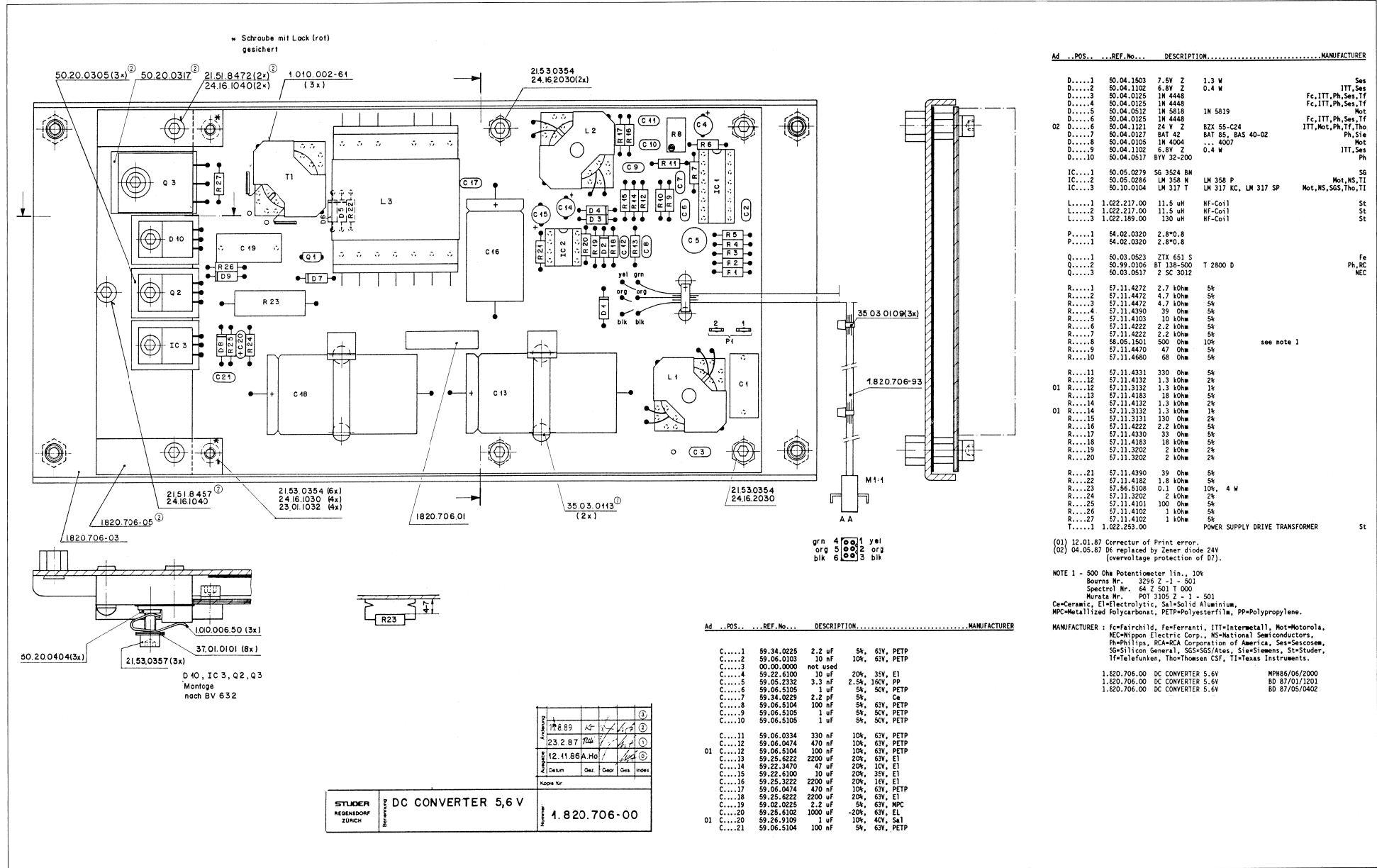
- DC CONVERTER 5,6V 1.820.706.00





PARALLEL REMOTE CHANNEL CONTROL INTERFACE 1.328.500.00

- DC CONVERTER 5,6V 1.820.706.00



Ad	POS.	REF.No.	DESCRIPTION	MANUFACTURER
D.....1	50.04.1503	7.5V Z	1.3 W	Ses
D.....2	50.04.1102	6.8V Z	0.4 W	ITT, Ses
D.....3	50.04.0125	1M 4448		Fc, ITT, Ph, Ses, Tf
D.....4	50.04.0125	1M 4448		Fc, ITT, Ph, Ses, Tf
D.....5	50.04.0512	1M 5818	1M 5819	Mot
D.....6	50.04.0125	1M 4448		Fc, ITT, Ph, Ses, Tf
D.....7	50.04.0127	BAT 42	82X 55-C24	ITT, Mot, Ph, Tf, Tho
D.....8	50.04.0105	1M 4004	BAT 85, BAS 40-02	Ph, Sie
D.....9	50.04.1102	6.8V Z	.. 4007	Mot
D.....10	50.04.0517	BYV 32-200		ITT, Ses
IC.....1	80.05.0279	SG 3524 BN		SG
IC.....2	50.05.0286	LM 358 N	LM 358 P	Mot, NS, TI
IC.....3	50.10.0104	LM 317 T	LM 317 KC, LM 317 SP	Mot, NS, SGS, Tho, TI
L.....1	1.022.217.00	11.5 uH	HF-Coil	St
L.....2	1.022.217.00	11.5 uH	HF-Coil	St
L.....3	1.022.189.00	130 uH	HF-Coil	St
P.....1	54.02.0320	2.8*0.8		
P.....1	54.02.0320	2.8*0.8		
Q.....1	50.03.0523	ZTX 651 S		Ph
Q.....2	50.99.0106	BT 138-500	T 2800 D	Ph, RC
Q.....3	50.03.0537	2 SC 3012		NEC
R.....1	57.11.4272	2.7 kOhm	5%	
R.....2	57.11.4472	4.7 kOhm	5%	
R.....3	57.11.4472	4.7 kOhm	5%	
R.....4	57.11.4390	39 Ohm	5%	
R.....5	57.11.4103	10 kOhm	5%	
R.....6	57.11.4222	2.2 kOhm	5%	
R.....7	57.11.4222	2.2 kOhm	5%	
R.....8	58.05.1501	500 Ohm	10%	
R.....9	57.11.4470	47 Ohm	5%	
R.....10	57.11.4660	68 Ohm	5%	
R.....11	57.11.4331	330 Ohm	5%	
R.....12	57.11.4132	1.3 kOhm	2%	
R.....12	57.11.3132	1.3 kOhm	1%	
R.....13	57.11.4183	18 kOhm	5%	
R.....14	57.11.4132	1.3 kOhm	2%	
R.....14	57.11.3132	1.3 kOhm	1%	
R.....15	57.11.3131	130 Ohm	2%	
R.....16	57.11.4222	2.2 kOhm	5%	
R.....17	57.11.4330	33 Ohm	5%	
R.....18	57.11.4183	18 kOhm	5%	
R.....19	57.11.3202	2 kOhm	2%	
R.....20	57.11.3202	2 kOhm	2%	
R.....21	57.11.4390	39 Ohm	5%	
R.....22	57.11.4182	1.8 kOhm	5%	
R.....23	57.56.5108	0.1 Ohm	10%	
R.....24	57.11.3202	2 kOhm	2%	
R.....25	57.11.4101	100 Ohm	5%	
R.....26	57.11.4102	1 kOhm	5%	
R.....27	57.11.4102	1 kOhm	5%	
T.....1	1.022.253.00		POWER SUPPLY DRIVE TRANSFORMER	St

(01) 12.01.87 Corrector of Print error.  
 (02) 04.05.87 D6 replaced by Zener diode 24V (overvoltage protection of D7).

NOTE 1 - 500 Ohm Potentiometer 11n., 10%  
 Bourma Nr. 3295 Z - 1 - 501  
 Spectrol Nr. 64 2 501 T 000  
 Murata Nr. POT 3105 Z - 1 - 501

Ce=Ceramic, El=Electrolytic, Sal=Solid Aluminium

MPC=Metallized Polycarbonat, PET=Polyesterfilm, PP=Polypropylene.

MANUFACTURER : Icf=Fairchild, Fef=Ferranti, ITT=Intermetall, Mot=Motorola, NEC=Nippon Electric Corp., Nch=National Semiconductors, Ph=Philips, RCA=RCA Corporation of America, Ses=Secosem, SG=Silicon General, SGS=SGS/Ates, Sie=Siemens, St=Studer, Tf=Telefunken, Tho=Thomson CSF, Ti=Texas Instruments.

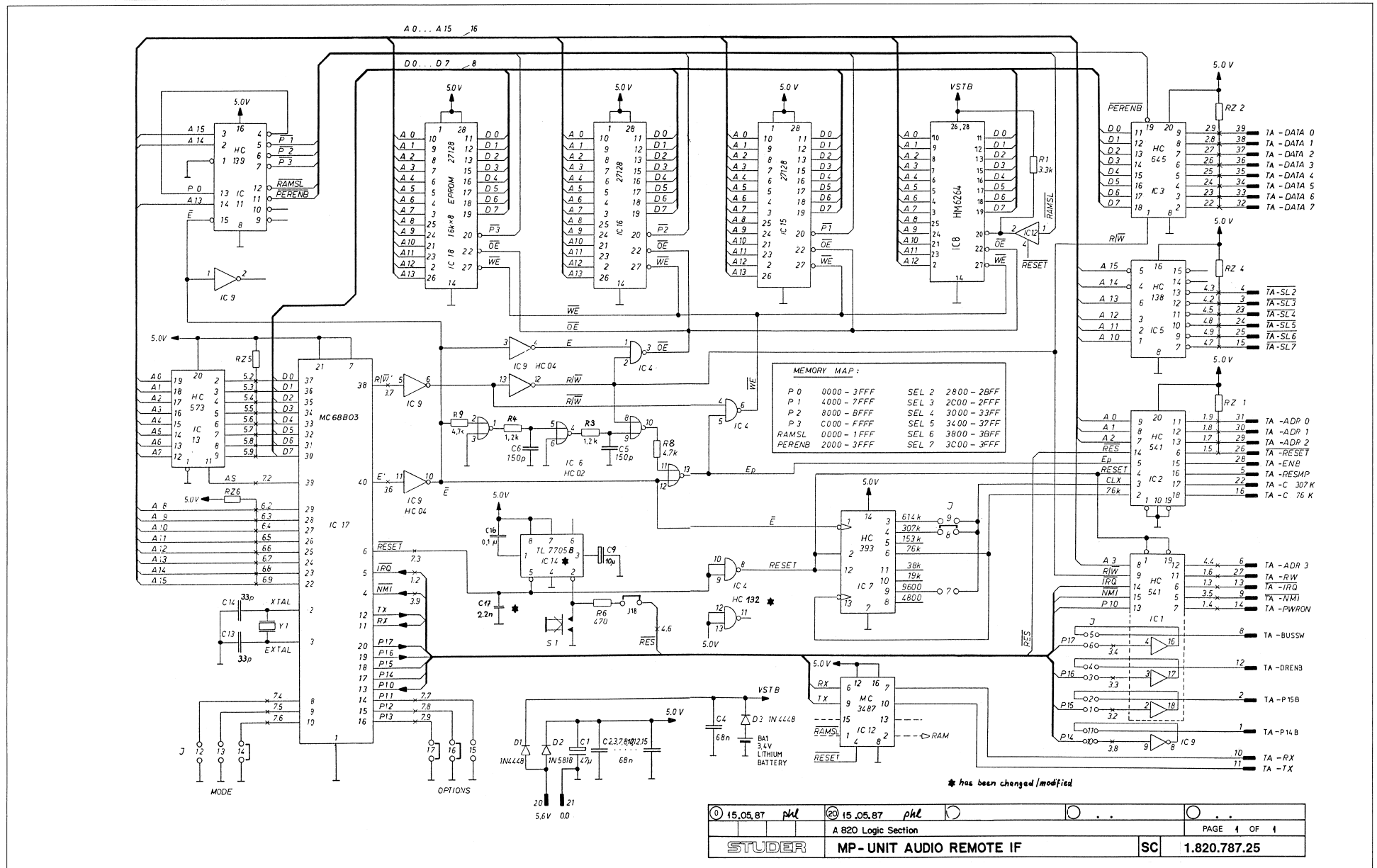
1.820.706.00	DC CONVERTER 5,6V	MPH86/06/2000
1.820.706.00	DC CONVERTER 5,6V	BD 87/01/2201
1.820.706.00	DC CONVERTER 5,6V	BD 87/05/0402

Ad	POS.	REF.No.	DESCRIPTION	MANUFACTURER
C.....1	59.34.0225	2.2 uF	5%, 63V, PETP	
C.....2	59.06.0103	10 nF	10%, 63V, PETP	
C.....3	00.00.0000	not used		
C.....4	59.22.6100	10 uF	20%, 35V, EI	
C.....5	59.05.2332	3.3 nF	2.5%, 360V, PP	
C.....6	59.06.5105	1 uF	5%, 50V, PETP	
C.....7	59.34.0229	2.2 pF	5%, Ce	
C.....8	59.06.5104	100 nF	5%, 63V, PETP	
C.....9	59.06.5105	1 uF	5%, 50V, PETP	
C.....10	59.06.5105	1 uF	5%, 50V, PETP	
C.....11	59.06.0334	330 nF	10%, 63V, PETP	
C.....12	59.06.0474	470 nF	10%, 63V, PETP	
C.....12	59.06.5104	100 nF	10%, 63V, PETP	
C.....13	59.25.6222	2200 uF	20%, 63V, EI	
C.....14	59.22.3470	47 uF	20%, 10V, EI	
C.....15	59.22.6100	10 uF	20%, 35V, EI	
C.....16	59.25.3222	2200 uF	20%, 10V, EI	
C.....17	59.06.0474	470 nF	10%, 63V, PETP	
C.....18	59.25.6222	2200 uF	20%, 63V, EI	
C.....19	59.02.0225	2.2 uF	5%, 63V, MPC	
C.....20	59.25.6102	1000 uF	-20%, 63V, EL	
C.....20	59.26.9109	1 uF	10%, 40V, Sal	
C.....21	59.06.5104	100 nF	5%, 63V, PETP	

17.8.89	12	12	12	12	12	12	12	12	12
23.2.87	12	12	12	12	12	12	12	12	12
12.11.85A.Ho	12	12	12	12	12	12	12	12	12
Datum	Gez	Gepr	Gepr	Gepr	Gepr	Gepr	Gepr	Gepr	Gepr

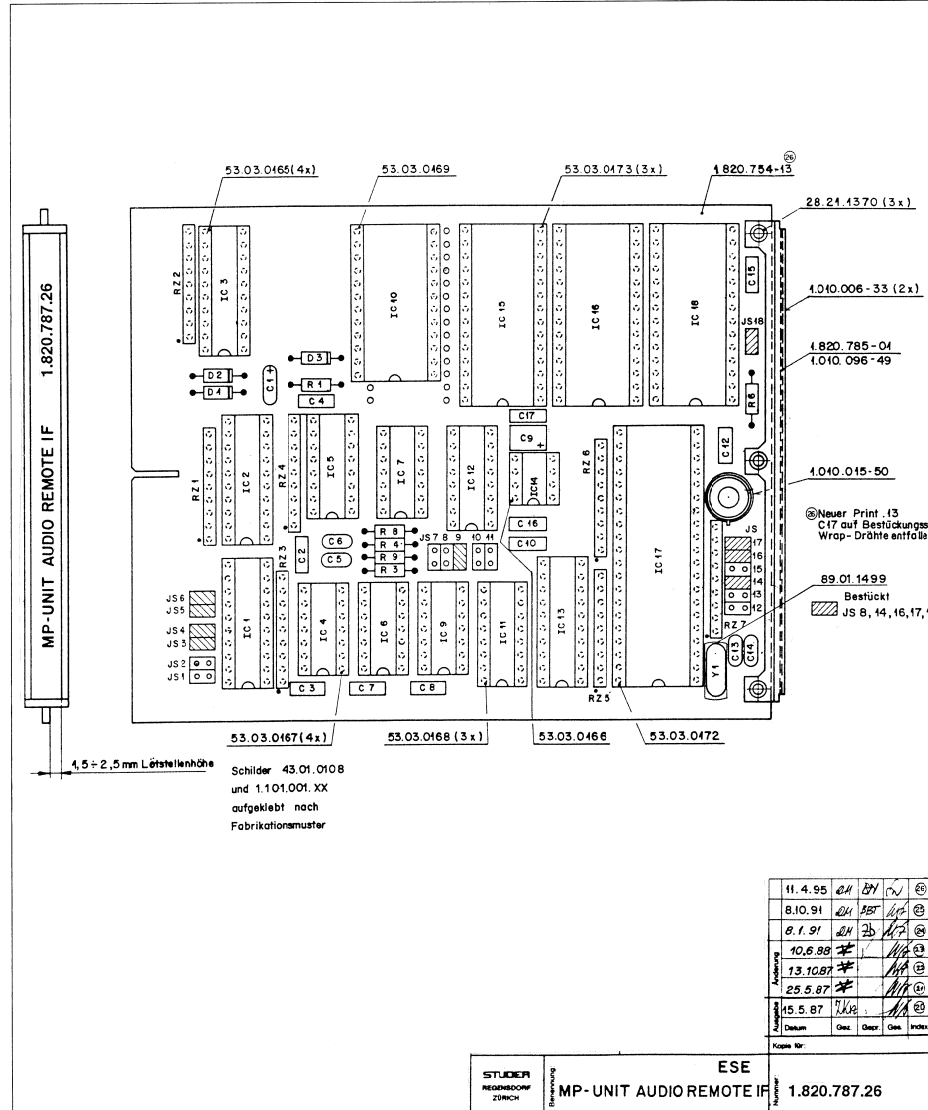
STUDER REGENSDORF ZÜRICH	Bezeichnung <b>DC CONVERTER 5,6 V</b>	Nr. <b>1.820.706-00</b>
--------------------------------	--	----------------------------

PARALLEL REMOTE CHANNEL CONTROL INTERFACE 1.328.500.00  
 - MP Unit Audio Remote IF 1.820.787.25



PARALLEL REMOTE CHANNEL CONTROL INTERFACE 1.328.500.0

- MP Unit Audio Remote IF 1.820.787.26

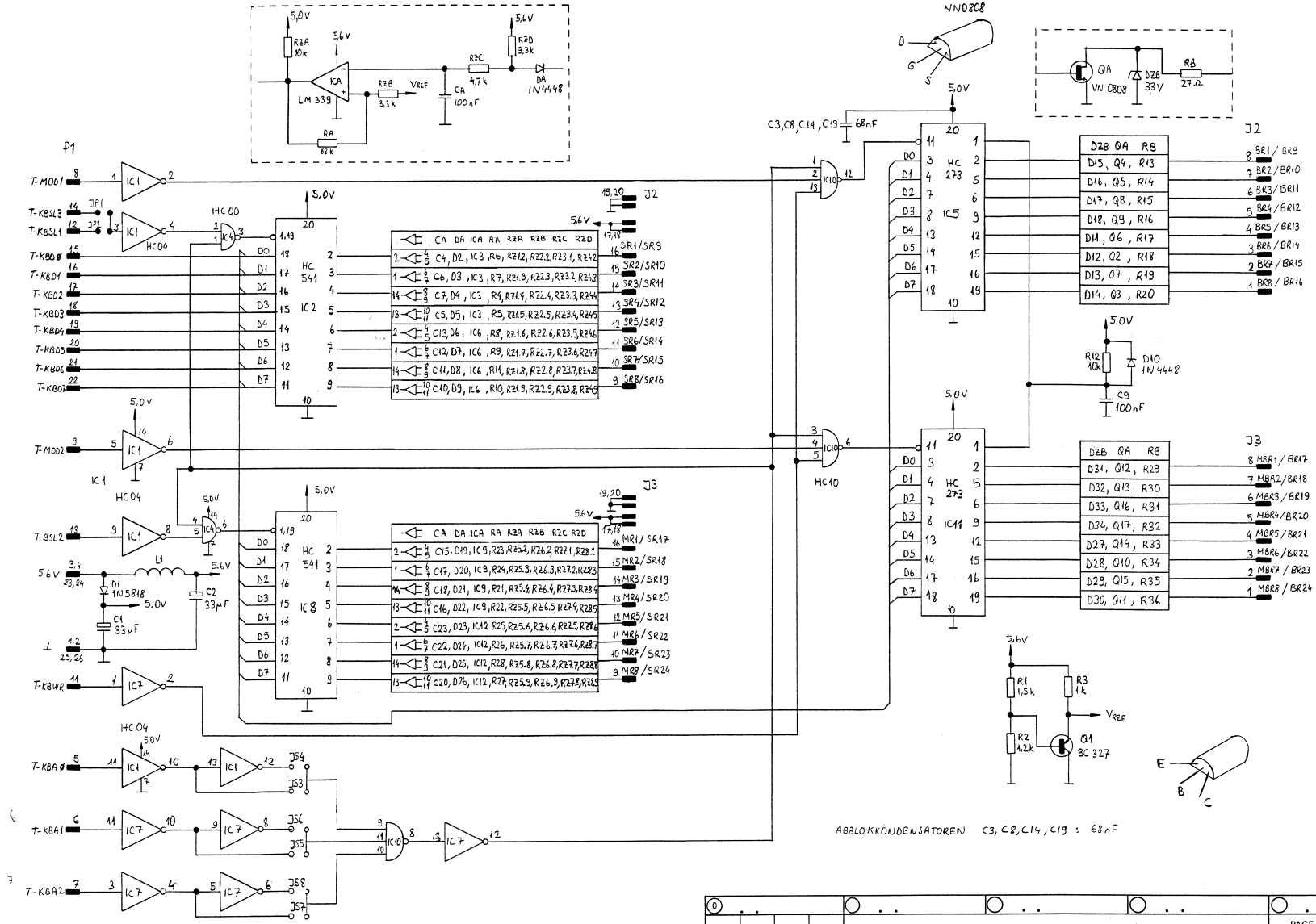


Ad	POS	REF.No	DESCRIPTION	MANUFACTURER
C....1	59.26.0470	47 uF	20%, 6.3V, Sal	Ph
C....2	59.06.0683	68 nF	10%, 63V, PEP	
C....3	59.06.0683	68 nF	10%, 63V, PEP	
C....4	59.06.0683	68 nF	10%, 63V, PEP	
C....5	59.34.7151	150 pF	2%, Ce	
C....6	59.34.7151	150 pF	2%, Ce	
C....7	59.06.0683	68 nF	10%, 63V, PEP	
C....8	59.06.0683	68 nF	10%, 63V, PEP	
C....9	59.26.2100	10 uF	20%, 16V, Sal	
C....10	59.06.0683	68 nF	10%, 63V, PEP	
C....11	00.00.0000	not used		
C....12	59.06.0683	68 nF	10%, 63V, PEP	
C....13	59.34.2330	33 pF	5%, Ce	
C....14	59.34.2330	33 pF	5%, Ce	
C....15	59.06.0683	68 nF	10%, 63V, PEP	
C....16	59.06.0104	100 nF	10%, 63V, PEP	
C....17	59.06.0222	2.2 nF	10%, 63V, PEP	
D....1	50.04.0125	IN 4448		Fc,ITT,Ph,Ses,Tf
D....2	50.04.0512	IN 5818		Mot
D....3	50.04.0125	IN 4448		Fc,ITT,Ph,Ses,Tf
IC....1	50.17.1541	74 HC 541		Mot,NS,Ph,RCA,SGS,TI,To
IC....2	50.17.1541	74 HC 541		Mot,NS,Ph,RCA,SGS,TI,To
IC....3	50.17.1645	74 HC 645		Mot,NS,Ph,RCA,SGS,TI,To
IC....4	50.17.1020	74 HC 00		Mot,NS,Ph,RCA,SGS,TI,To
IC....5	50.17.1132	74 HC 132		Mot,NS,Ph,RCA,SGS,TI,To
IC....6	50.17.1138	74 HC 138		Mot,NS,Ph,RCA,SGS,TI,To
IC....7	50.17.1002	74 HC 02		Mot,NS,Ph,RCA,SGS,TI,To
IC....8	50.17.1393	74 HC 393		Mot,NS,Ph,RCA,SGS,TI,To
IC....9	00.00.0000	not used		Mot,NS,Ph,RCA,SGS,TI,To
IC....10	50.17.0004	74 HCT 04		Hi,OKI
IC....11	50.17.1139	74 HC 139		Mot,NS,Ph,RCA,SGS,TI,To
IC....12	50.15.0105	MC 3487 P		DS 3487 N
IC....13	50.17.1573	74 HC 573		Mot,NS,Ph,RCA,SGS,TI,To
IC....14	50.11.0122	TL7705ACP		TI
IC....15	50.00.0157	TL7705BGP		TI
IC....16	00.00.0000	not used		TI
IC....17	50.16.0107	MC6803P-1		6803P-1
IC....18	50.14.0125	27128		HN 48271286-30
IC....19	1.820.984.20			Software 20/87
IC....20	1.820.984.21			Software 21/87
IC....21	1.820.984.22			Software 41/87
IC....22	1.820.984.23			Software 22/88
IC....23	1.820.984.24			Software 02/91
JS....1	00.00.0000			see note 1
JS....2				see note 1
JS....3				see note 1
JS....4				see note 1
JS....5				see note 1
JS....6				see note 1
JS....7				see note 1
JS....8				see note 1
JS....9				see note 1
JS....10				see note 1
JS....11				see note 1
JS....12				see note 1
JS....13				see note 1
JS....14				see note 1
JS....15				see note 1
JS....16				see note 1
JS....17				see note 1
JS....18				see note 1
R....1	57.11.3332	3.3 kOhm	5%	
R....2	00.00.0000	not used		
R....3	57.11.3122	1.2 kOhm	5%	
R....4	57.11.3122	1.2 kOhm	5%	
R....5	00.00.0000	not used		
R....6	57.11.3471	470 Ohm	5%	
R....7	00.00.0000	not used		
R....8	57.11.3472	4.7 kOhm	5%	
R....9	57.11.3472	4.7 kOhm	5%	
RZ....1	57.88.4332			see note 2
RZ....2	57.88.4332			see note 2
RZ....3	57.88.4332			see note 2
RZ....4	57.88.4332			see note 2
RZ....5	57.88.4332			see note 2
RZ....6	57.88.4332			see note 2
RZ....7	57.88.4332			see note 2
S....1	55.03.0122	Chicago Switch	34-550-001	
Y....1	89.01.0560		4.9152 MHz, +100 ppm	

Ad	POS	REF.No	DESCRIPTION	MANUFACTURER
Bridge:			Philips Nr. 2422 025 89303	
			Studer Nr. 54.01.0021	
			Berg Nr. 65 474-001	
			Philips Nr. 2422 024 88003	
Note 2 - Network:			8 * 3.3 kOhm, 5%	
			Sicovend Nr. C09 x 3.3 k J	
			Ineltro Nr. R88 3.3 k 5%	
Ce=Ceramic, Sal=Solid Aluminium, PETP=Polyesterfilm.				
MANUFACTURER:			Fc=Fairchild, Hi=Hitachi, ITT=Intermetall, Mot=Motorola, NS=National Semiconductors, OK=OKI, Ph=Philips, Ses=Sesocsem, Tf=Telefunken, TI=Texas Instruments.	
			1.820.787.00 MP-UNIT REMOTE IF	BD 87/05/1500
			1.820.787.00 MP-UNIT REMOTE IF	BD 87/05/1520
			1.820.787.00 MP-UNIT REMOTE IF	BD 87/05/2521
			1.820.787.00 MP-UNIT REMOTE IF	BD 87/10/1322
			1.820.787.00 MP-UNIT REMOTE IF	BD 88/05/1023
			1.820.787.00 MP-UNIT REMOTE IF	Z8 91/01/0824
			1.820.787.00 MP-UNIT REMOTE IF	BBT91/10/0825
END				

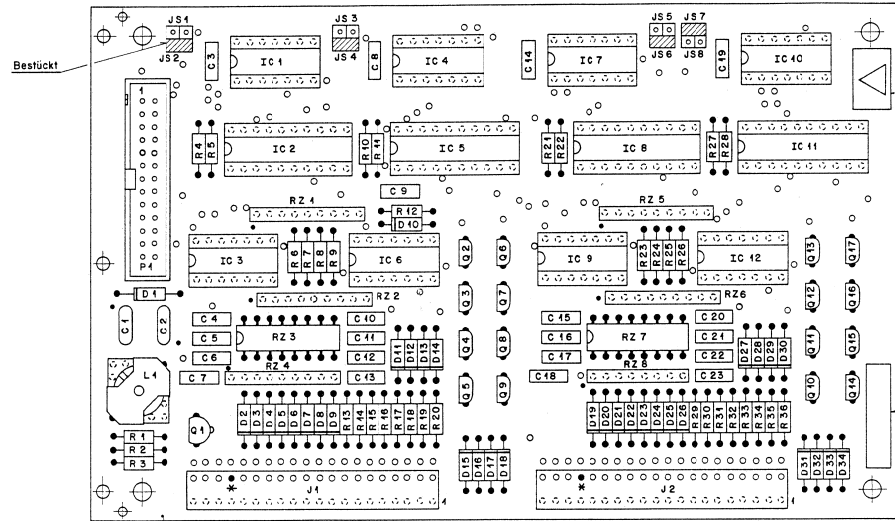
PARALLEL REMOTE CHANNEL CONTROL INTERFACE 1.328.500.00

- Audio Parallel Remote IF 1.328.506.00



STUDER		AUDIO PARALLEL REMOTE I.F.		PAGE 1 OF 1	
				1.328.506.00	

PARALLEL REMOTE CHANNEL CONTROL INTERFACE 1.328.500.00  
- Audio Parallel Remote IF 1.328.506.00



\* Codierung Schalldraht 6.4.01.0108  $\phi$  0,8 x 8mm  
(muss 4mm vorstehen)

STUDER REGENSDORF ZÜRICH	AUDIO PARALLELE REMOTE IF 'ESE'	Teilenummer: 1.328.506-00
--------------------------------	------------------------------------	------------------------------

Ad	POS	REF.No	DESCRIPTION	MANUFACTURER	Ad	POS	REF.No	DESCRIPTION	MANUFACTURER
C.....1	59.26.1330	33 uF	20%, 10V, SAL	Ph, Ri	Q.....12	50.03.1505	VN 0808M	VN 0808 MTR, 2VN 0108A	Fe, Six
C.....2	59.26.1330	33 uF	20%, 10V, SAL	Ph, Ri	Q.....13	50.03.1505	VN 0808M	VN 0808 MTR, 2VN 0108A	Fe, Six
C.....3	59.06.0683	68 nF	10%, PETP		Q.....14	50.03.1505	VN 0808M	VN 0808 MTR, 2VN 0108A	Fe, Six
C.....4	59.06.0104	100 nF	10%, PETP		Q.....15	50.03.1505	VN 0808M	VN 0808 MTR, 2VN 0108A	Fe, Six
C.....5	59.06.0104	100 nF	10%, PETP		Q.....16	50.03.1505	VN 0808M	VN 0808 MTR, 2VN 0108A	Fe, Six
C.....6	59.06.0104	100 nF	10%, PETP		Q.....17	50.03.1505	VN 0808M	VN 0808 MTR, 2VN 0108A	Fe, Six
C.....7	59.06.0104	100 nF	10%, PETP		R.....1	57.11.4152	1.5 kOhm	5%	
C.....8	59.06.0683	68 nF	10%, PETP		R.....2	57.11.4122	1.2 kOhm	5%	
C.....9	59.06.0104	100 nF	10%, PETP		R.....3	57.11.4102	1 kOhm	5%	
C.....10	59.06.0104	100 nF	10%, PETP		R.....4	57.11.4683	68 kOhm	5%	
C.....11	59.06.0104	100 nF	10%, PETP		R.....5	57.11.4683	68 kOhm	5%	
C.....12	59.06.0104	100 nF	10%, PETP		R.....6	57.11.4683	68 kOhm	5%	
C.....13	59.06.0104	100 nF	10%, PETP		R.....7	57.11.4683	68 kOhm	5%	
C.....14	59.06.0683	68 nF	10%, PETP		R.....8	57.11.4683	68 kOhm	5%	
C.....15	59.06.0104	100 nF	10%, PETP		R.....9	57.11.4683	68 kOhm	5%	
C.....16	59.06.0104	100 nF	10%, PETP		R.....10	57.11.4683	68 kOhm	5%	
C.....17	59.06.0104	100 nF	10%, PETP		R.....11	57.11.4683	68 kOhm	5%	
C.....18	59.06.0104	100 nF	10%, PETP		R.....12	57.11.4103	10 kOhm	5%	
C.....19	59.06.0683	68 nF	10%, PETP		R.....13	57.11.4270	27 Ohm	5%	
C.....20	59.06.0104	100 nF	10%, PETP		R.....14	57.11.4270	27 Ohm	5%	
C.....21	59.06.0104	100 nF	10%, PETP		R.....15	57.11.4270	27 Ohm	5%	
C.....22	59.06.0104	100 nF	10%, PETP		R.....16	57.11.4270	27 Ohm	5%	
C.....23	59.06.0104	100 nF	10%, PETP		R.....17	57.11.4270	27 Ohm	5%	
D.....1	50.04.0512	1N 5818	1N 5819	Mo	R.....18	57.11.4270	27 Ohm	5%	
D.....2	50.04.0125	1N 4448		Fc, ITT, Ph, Ses, Tf	R.....19	57.11.4270	27 Ohm	5%	
D.....3	50.04.0125	1N 4448		Fc, ITT, Ph, Ses, Tf	R.....20	57.11.4270	27 Ohm	5%	
D.....4	50.04.0125	1N 4448		Fc, ITT, Ph, Ses, Tf	R.....21	57.11.4683	68 kOhm	5%	
D.....5	50.04.0125	1N 4448		Fc, ITT, Ph, Ses, Tf	R.....22	57.11.4683	68 kOhm	5%	
D.....6	50.04.0125	1N 4448		Fc, ITT, Ph, Ses, Tf	R.....23	57.11.4683	68 kOhm	5%	
D.....7	50.04.0125	1N 4448		Fc, ITT, Ph, Ses, Tf	R.....24	57.11.4683	68 kOhm	5%	
D.....8	50.04.0125	1N 4448		Fc, ITT, Ph, Ses, Tf	R.....25	57.11.4683	68 kOhm	5%	
D.....9	50.04.0125	1N 4448		Fc, ITT, Ph, Ses, Tf	R.....26	57.11.4683	68 kOhm	5%	
D.....10	50.04.0125	1N 4448		Fc, ITT, Ph, Ses, Tf	R.....27	57.11.4683	68 kOhm	5%	
D.....11	50.04.1127	33 V Z	BZX 55-C33	ITT, Mot, Ph, Tf, Tho	R.....28	57.11.4683	68 kOhm	5%	
D.....12	50.04.1127	33 V Z	BZX 55-C33	ITT, Mot, Ph, Tf, Tho	R.....29	57.11.4270	27 Ohm	5%	
D.....13	50.04.1127	33 V Z	BZX 55-C33	ITT, Mot, Ph, Tf, Tho	R.....30	57.11.4270	27 Ohm	5%	
D.....14	50.04.1127	33 V Z	BZX 55-C33	ITT, Mot, Ph, Tf, Tho	R.....31	57.11.4270	27 Ohm	5%	
D.....15	50.04.1127	33 V Z	BZX 55-C33	ITT, Mot, Ph, Tf, Tho	R.....32	57.11.4270	27 Ohm	5%	
D.....16	50.04.1127	33 V Z	BZX 55-C33	ITT, Mot, Ph, Tf, Tho	R.....33	57.11.4270	27 Ohm	5%	
D.....17	50.04.1127	33 V Z	BZX 55-C33	ITT, Mot, Ph, Tf, Tho	R.....34	57.11.4270	27 Ohm	5%	
D.....18	50.04.1127	33 V Z	BZX 55-C33	ITT, Mot, Ph, Tf, Tho	R.....35	57.11.4270	27 Ohm	5%	
D.....19	50.04.0125	1N 4448		Fc, ITT, Ph, Ses, Tf	R.....36	57.11.4270	27 Ohm	5%	
D.....20	50.04.0125	1N 4448		Fc, ITT, Ph, Ses, Tf	RZ.....1	57.88.4103	R-Network 8*10 kOhm SIP 9 5%		
D.....21	50.04.0125	1N 4448		Fc, ITT, Ph, Ses, Tf	RZ.....2	57.88.4332	R-Network 8*3,3 kOhm SIP 9 5%		
D.....22	50.04.0125	1N 4448		Fc, ITT, Ph, Ses, Tf	RZ.....3	57.88.3472	R-Network 8*4,7 kOhm DIL 16 5%		
D.....23	50.04.0125	1N 4448		Fc, ITT, Ph, Ses, Tf	RZ.....4	57.88.4332	R-Network 8*3,3 kOhm SIP 9 5%		
D.....24	50.04.0125	1N 4448		Fc, ITT, Ph, Ses, Tf	RZ.....5	57.88.4103	R-Network 8*10 kOhm SIP 9 5%		
D.....25	50.04.0125	1N 4448		Fc, ITT, Ph, Ses, Tf	RZ.....6	57.88.4332	R-Network 8*3,3 kOhm SIP 9 5%		
D.....26	50.04.0125	1N 4448		Fc, ITT, Ph, Ses, Tf	RZ.....7	57.88.3472	R-Network 8*4,7 kOhm DIL 16 5%		
D.....27	50.04.1127	33 V Z	BZX 55-C33	ITT, Mot, Ph, Tf, Tho	RZ.....8	57.88.4332	R-Network 8*5,3 kOhm SIP 9 5%		
D.....28	50.04.1127	33 V Z	BZX 55-C33	ITT, Mot, Ph, Tf, Tho					
D.....29	50.04.1127	33 V Z	BZX 55-C33	ITT, Mot, Ph, Tf, Tho					
D.....30	50.04.1127	33 V Z	BZX 55-C33	ITT, Mot, Ph, Tf, Tho					
D.....31	50.04.1127	33 V Z	BZX 55-C33	ITT, Mot, Ph, Tf, Tho					
D.....32	50.04.1127	33 V Z	BZX 55-C33	ITT, Mot, Ph, Tf, Tho					
D.....33	50.04.1127	33 V Z	BZX 55-C33	ITT, Mot, Ph, Tf, Tho					
D.....34	50.04.1127	33 V Z	BZX 55-C33	ITT, Mot, Ph, Tf, Tho					
IC.....1	50.17.1004	.. 74 HC 04 ..	Mot, NS, Ph, RCA, SGS, TI, To						
IC.....2	50.17.1541	.. 74 HCS41 ..	Mot, NS, Ph, RCA, SGS, TI, To						
IC.....3	50.11.0104	LM 339 N	uA 339 PC	Fc, Mot, NS					
IC.....4	50.17.1000	.. 74 HC 00 ..	Mot, NS, Ph, RCA, SGS, TI, To						
IC.....5	50.17.1273	.. 74 HC273 ..	Mot, NS, Ph, RCA, SGS, TI, To						
IC.....6	50.11.0104	LM 339 N	uA 339 PC	Fc, Mot, NS					
IC.....7	50.17.1004	.. 74 HC 04 ..	Mot, NS, Ph, RCA, SGS, TI, To						
IC.....8	50.17.1541	.. 74 HCS41 ..	Mot, NS, Ph, RCA, SGS, TI, To						
IC.....9	50.11.0104	LM 339 N	uA 339 PC	Fc, Mot, NS					
IC.....10	50.17.1010	.. 74 HC 10 ..	Mot, NS, Ph, RCA, SGS, TI, To						
IC.....11	50.17.1273	.. 74 HC273 ..	Mot, NS, Ph, RCA, SGS, TI, To						
IC.....12	50.11.0104	LM 339 N	uA 339 PC	Fc, Mot, NS					
JS.....1	00.00.0000	see note 1							
JS.....2	00.00.0000	see note 1							
JS.....3	00.00.0000	see note 1							
JS.....4	00.00.0000	see note 1							
JS.....5	00.00.0000	see note 1							
JS.....6	00.00.0000	see note 1							
JS.....7	00.00.0000	see note 1							
JS.....8	00.00.0000	see note 1							
L.....1	1.166.154.00			St					
F.....1	54.14.2003	see note 2							
F.....2	54.01.0226	see note 3							
F.....3	54.01.0226	see note 3							
Q.....1	50.03.0351	BC 327-25		ITT, Ph, Sie					
Q.....2	50.03.1505	VN 0808M	VN 0808 MTR, 2VN 0108A	Fc, Six					
Q.....3	50.03.1505	VN 0808M	VN 0808 MTR, 2VN 0108A	Fc, Six					
Q.....4	50.03.1505	VN 0808M	VN 0808 MTR, 2VN 0108A	Fc, Six					
Q.....5	50.03.1505	VN 0808M	VN 0808 MTR, 2VN 0108A	Fc, Six					
Q.....6	50.03.1505	VN 0808M	VN 0808 MTR, 2VN 0108A	Fc, Six					
Q.....7	50.03.1505	VN 0808M	VN 0808 MTR, 2VN 0108A	Fc, Six					
Q.....8	50.03.1505	VN 0808M	VN 0808 MTR, 2VN 0108A	Fc, Six					
Q.....9	50.03.1505	VN 0808M	VN 0808 MTR, 2VN 0108A	Fc, Six					
Q.....10	50.03.1505	VN 0808M	VN 0808 MTR, 2VN 0108A	Fc, Six					
Q.....11	50.03.1505	VN 0808M	VN 0808 MTR, 2VN 0108A	Fc, Six					

Note 1 - Contact pin, 2 pieces : Studer nr. 54.01.0020  
Berg nr. 75 160-100-36  
Philips nr. 2422 025 89303  
Studer nr. 54.01.0021  
Berg nr. 65 474-001  
Philips nr. 2422 024 88003

Note 2 - Connector, 26 contacts: Yamaha nr. FAP-16-08-4055  
Burdny nr. 8PH 9 816 800 GS  
3M nr. 7616-6002 VZ

Note 3 - Connector, 20 Contacts: AMP nr. 1-163.680-9

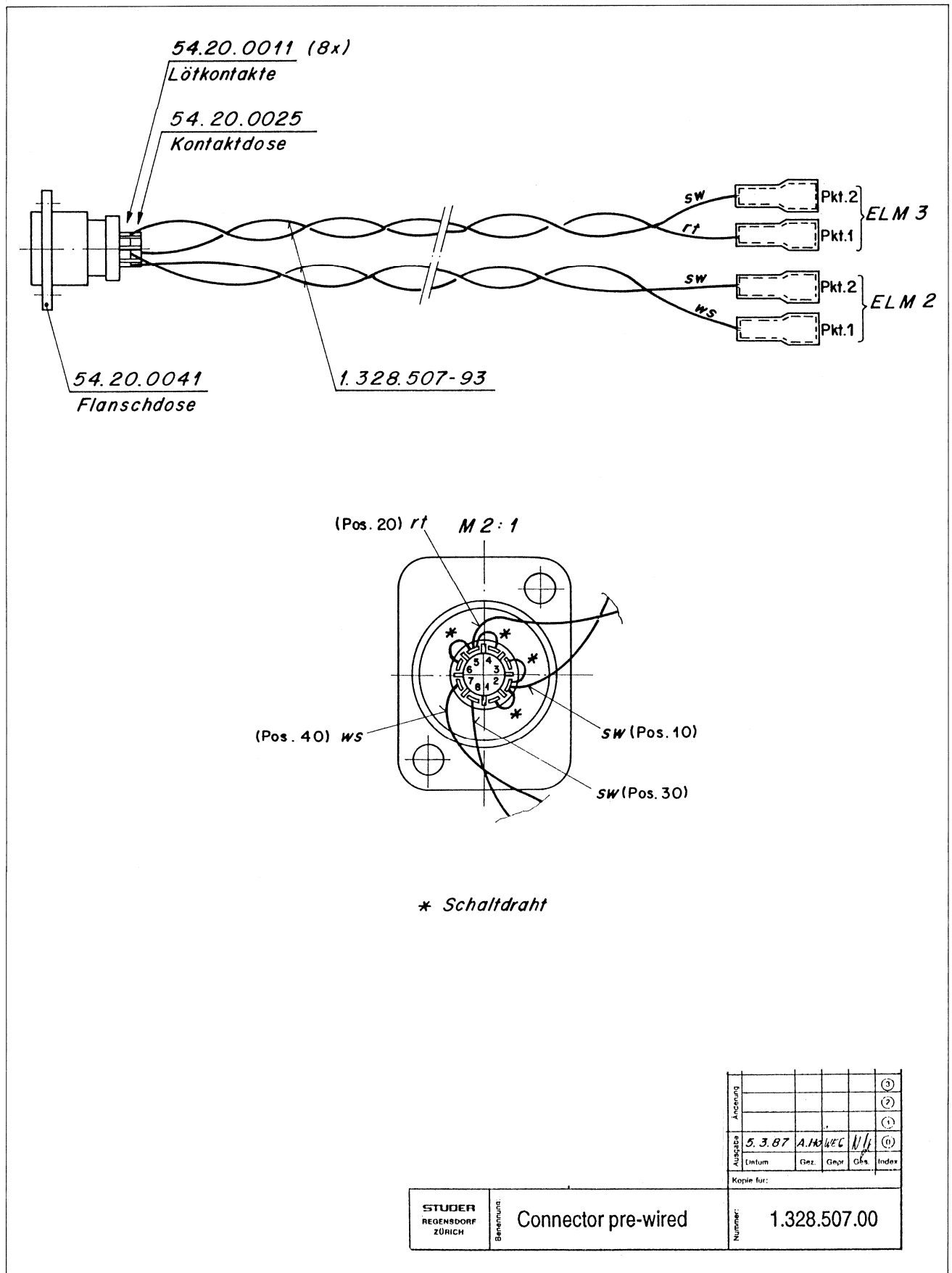
Sal=Solid Aluminium, PETP=Polyesterfilm.

MANUFACTURER: Fc=Fairchild, ITT=Intermetal, Mot=Motorola, Ph=Philips, RCA=Radio Corporation of America, Ri=Rifa, SGS=SGS/Ates, Sie=Siemens, Six=Siliconix, Tf=Telexfunken, Tho=Thomson, TI=Texas Instrument, To= Toshiba

1.328.506.00 AUDIO PARALLELE REMOTE IF BD 87/03/3100

PARALLEL REMOTE CHANNEL CONTROL INTERFACE 1.328.500.00

- Connector Pre-Wired 1.328.507.00



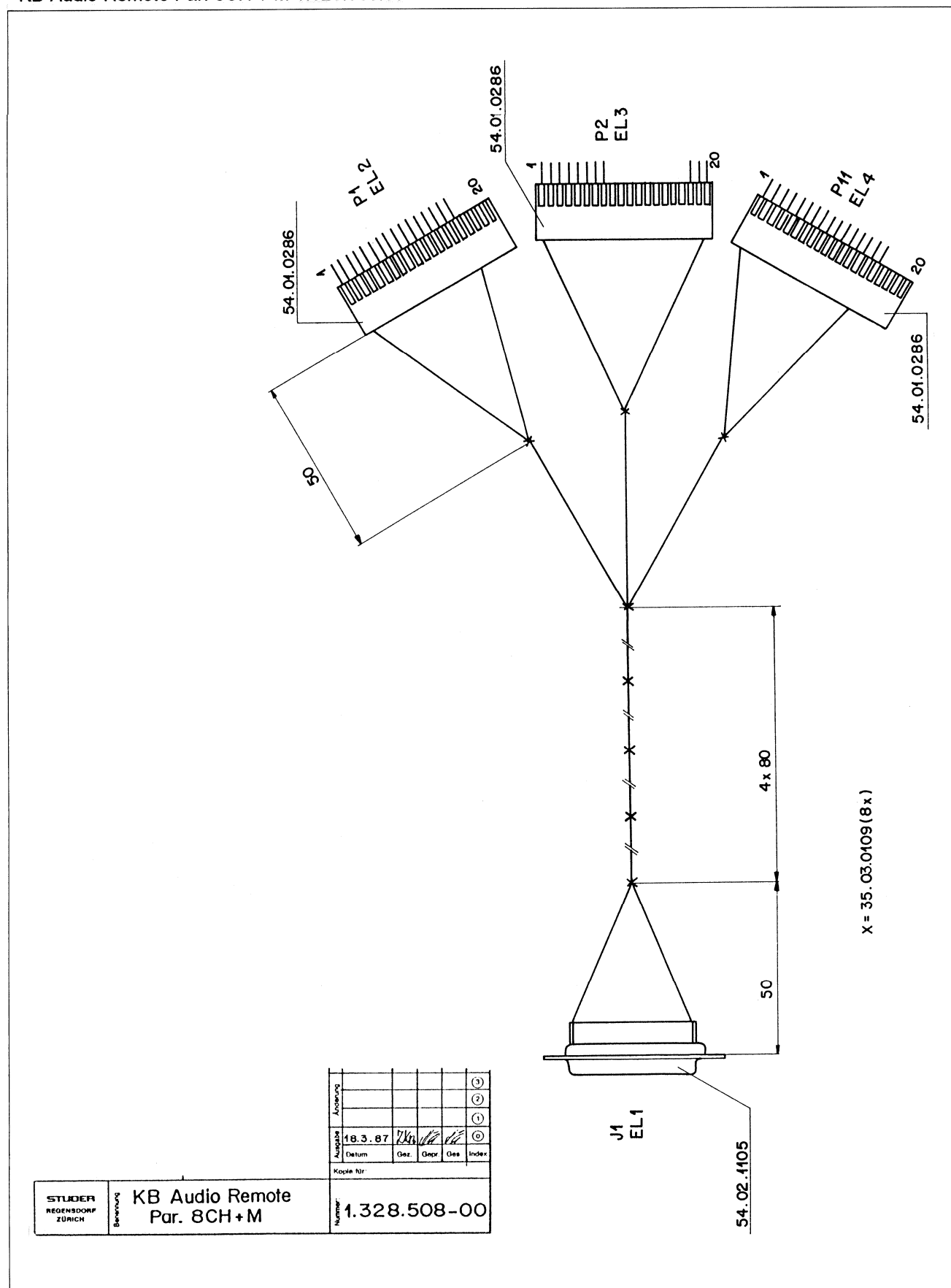
Anwendung					①
					②
					③
Ausgabe	5.3.87	A.H.	WEC	N/A	④
	Unum	Gez.	Gpr.	Gés.	Index

Kopie für:

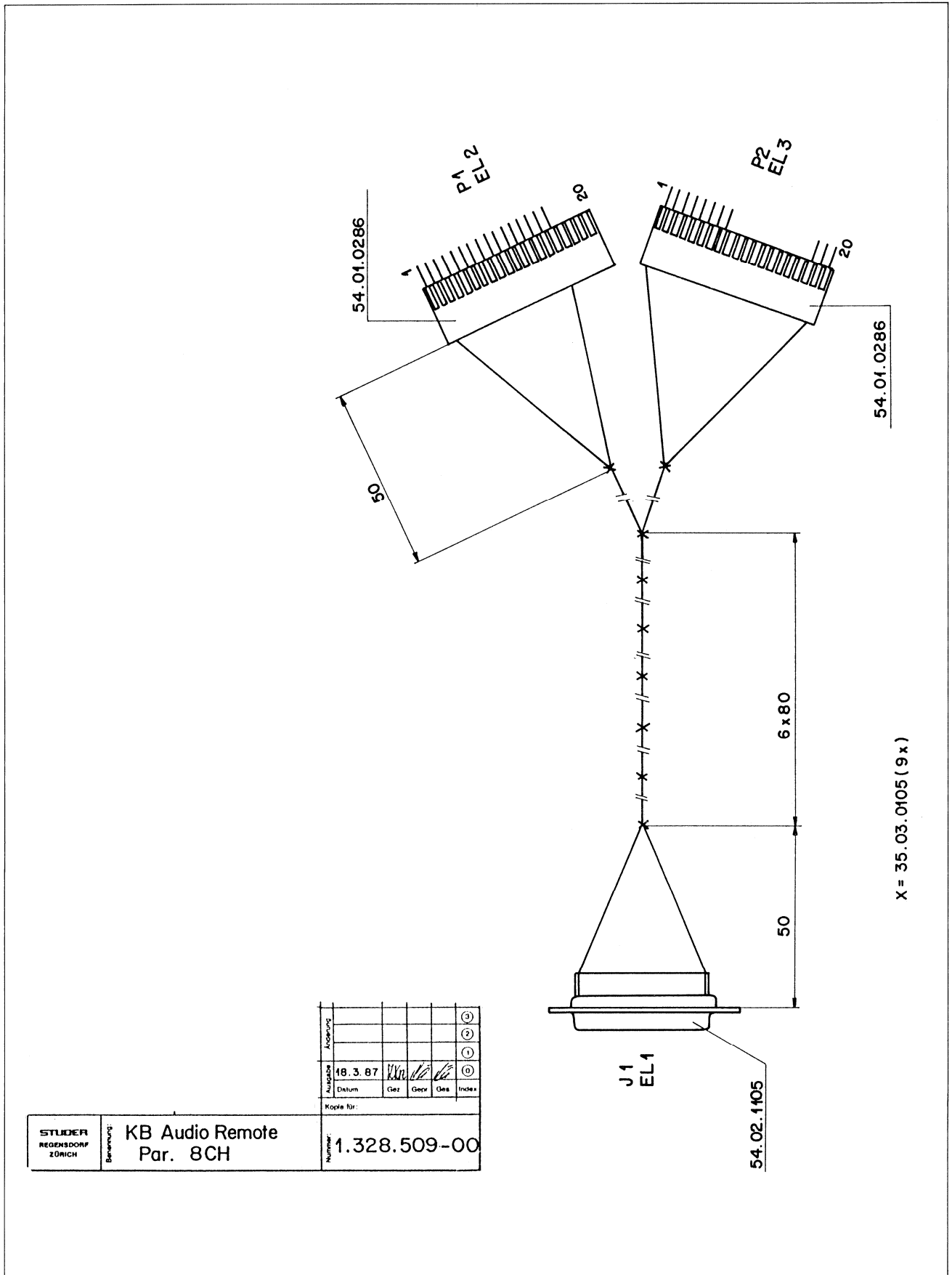
STUDER REGENSDORF ZÜRICH	Benennung: Connector pre-wired	Nummer: 1.328.507.00
--------------------------------	-----------------------------------	-------------------------

PARALLEL REMOTE CHANNEL CONTROL INTERFACE 1.328.500.00

- KB Audio Remote Par. 8CH + M 1.328.508.00



PARALLEL REMOTE CHANNEL CONTROL INTERFACE 1.328.500.00  
 - KB Audio Remote Par. 8CH 1.328.509.00













STUDER REGENSDORF ZÜRICH	Bezeichnung: KB Audio Remote Par. 8CH	Nummer: 1.328.509-00	Kopie für:				
			Hersteller	Datum	Gez	Gepr	Gez
		18.3.87					



LABELS REMOTE

<b>LIFTER</b>	1.011.210.07	<b>LOC 1</b>	1.011.210.17	<b>ROLL BACK</b>	1.011.210.29	<b>SPOT ERASE</b>	1.011.211.42
<b>LOC START</b>	1.011.210.08	<b>LOC 2</b>	1.011.210.18	<b>RLB PLAY</b>	1.011.210.30	<b>FADER START</b>	1.011.210.43
<b>FADER</b>	1.011.210.09	<b>LOC 3</b>	1.011.210.19	<b>RLB REC</b>	1.011.210.31	<b>LAP</b>	1.011.210.44
<b>VARI SPEED</b>	1.011.210.10	<b>LOC 4</b>	1.011.210.20	<b>SET ADDR</b>	1.011.210.32	<b>BACK SPACE</b>	1.011.210.45
<b>REM CONTR</b>	1.011.210.11	<b>LOC 5</b>	1.011.210.23	<b>SET VARI</b>	1.011.210.33	<b>HOLD</b> <small>REV PLAY</small>	1.011.210.46
<b>TAPE DUMP</b>	1.011.210.13	<b>WATCH</b>	1.011.210.24	<b>SET TIMER</b>	1.011.210.34	<b>SPEED SELECT</b>	1.011.210.48
<b>RESET TIMER</b>	1.011.210.14	<b>TRANS</b>	1.011.210.25	<b>REHEA</b>	1.011.210.35	<b>TRANS</b> <small>REV PLAY</small>	1.011.210.50
<b>ZERO LOC</b>	1.011.210.15	<b>REV PLAY</b>	1.011.210.28	<b>LIBR WIND</b>	1.011.210.42	<b>HOLD</b>	1.011.210.54

	1.011.210.02	<p>Transparent labels for: Tape deck remote control modul 1.328.255.00</p>    	1.328.256.02	
	1.011.210.02			
<b>PLAY</b>	1.011.210.03		  	1.328.255.03
<b>STOP</b>	1.011.210.04			
<b>REC</b>	1.011.210.05			1.010.023.43

<input type="radio"/> 15 IPS	<input type="radio"/> 30 IPS	<input type="radio"/> SAFE	<input type="radio"/> STEREO	<input type="radio"/> CCIR	<input type="radio"/> TAPE A	<input type="radio"/> REMOTE
<input type="radio"/> 7.5 IPS	<input type="radio"/> 3.75 IPS	<input type="radio"/> VARISPEED	<input type="radio"/> MONO	<input type="radio"/> NAB	<input type="radio"/> TAPE B	<input type="radio"/> FADER
<p>MODE    HOURS    MINUTES    SECONDS    110    FRAMES</p>						

1.820.012.01

0	1	2	3	4	5	6	7	8	9	±	CLEAR
---	---	---	---	---	---	---	---	---	---	---	-------

1.328.358.04