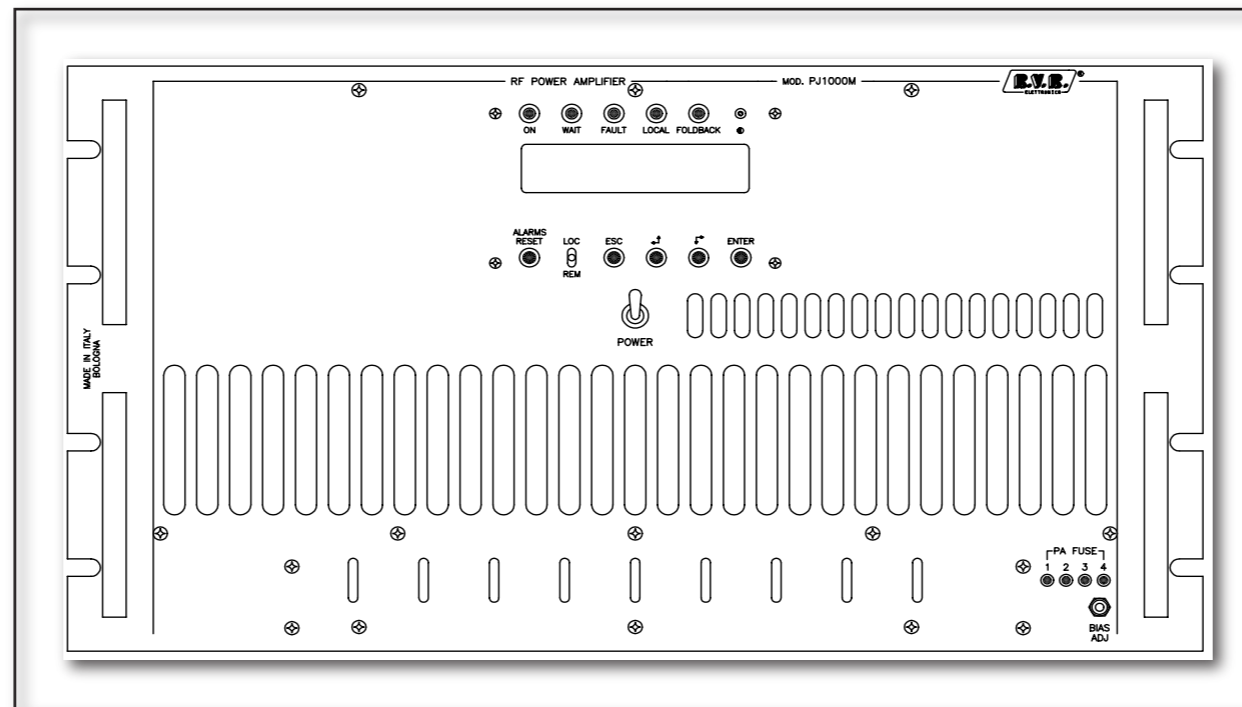

PJ1000M



User Manual Volume 2: Technical Appendix

Appendix A Piani di montaggio, schemi elettrici, liste componenti / *Component layouts, schematics, bills of material*

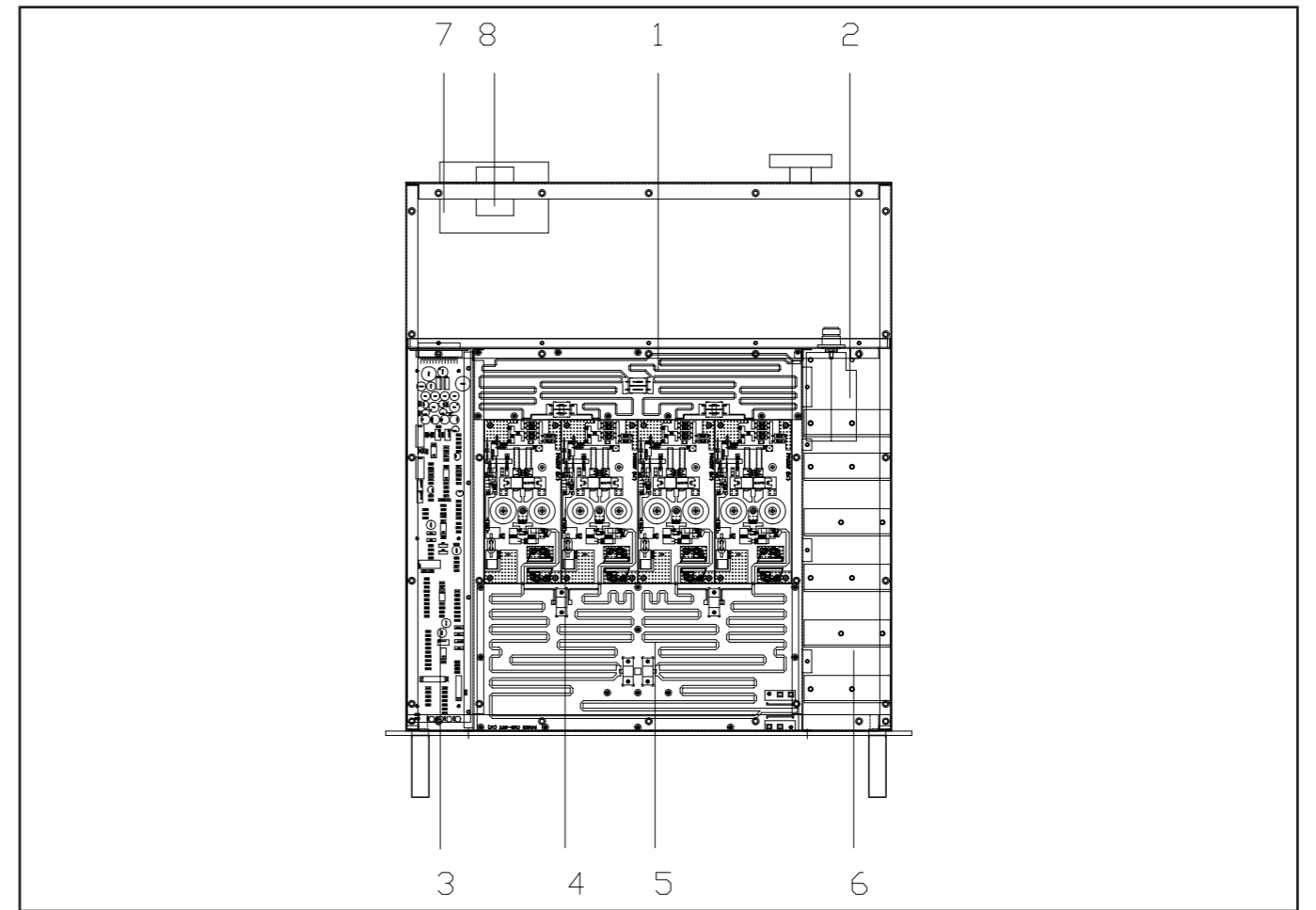
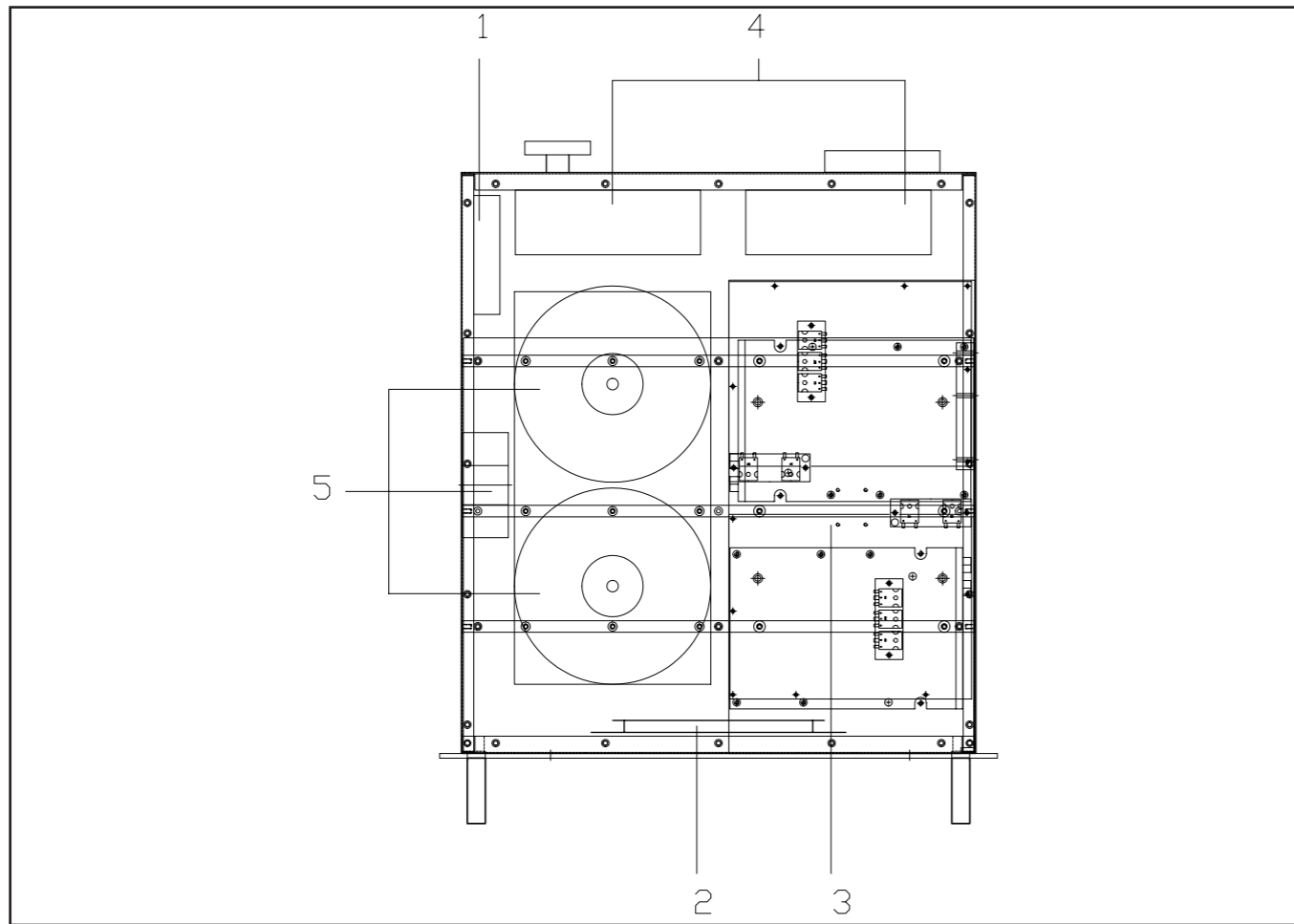
Questa parte del manuale contiene i dettagli tecnici riguardanti la costruzione delle singole schede componenti il PJ1000M. L'appendice è composta dalle seguenti sezioni:

This part of the manual contains the technical details about the different boards of the PJ1000M. This appendix is composed of the following sections:

Description	RVR Code	Vers.	Page
Boards Identification	/	/	1
Wiring diagrams	KCABPJ1KMLCD	2.2	2
R.F. Power Amplifier Module	SL042RF1001	1.1	7
Wilkinson "4-Way" Splitter Card	SLSPPJ1KMLCD	2.1	9
Wilkinson "4-Way" Combiner Card	CSCMB-OUT/A	2.0	11
CPU Section	PROTPJ-HCLD	3.0	13
LPF + Directional Coupler	SLLPFPJ1KSTR	2.0	19
Switching Power Supply	PSSW5040	2.0	22
Soft Start Card	SLSOFTSTR	2.0	29
Bias Control Card	SLCTRLPJ1KLC	2.0	31
CPU Section Adaptor Board	SLADPCNP RTPJ	2.1	35
Pass-Through Board	SLFILPJ1KM	2.0	37

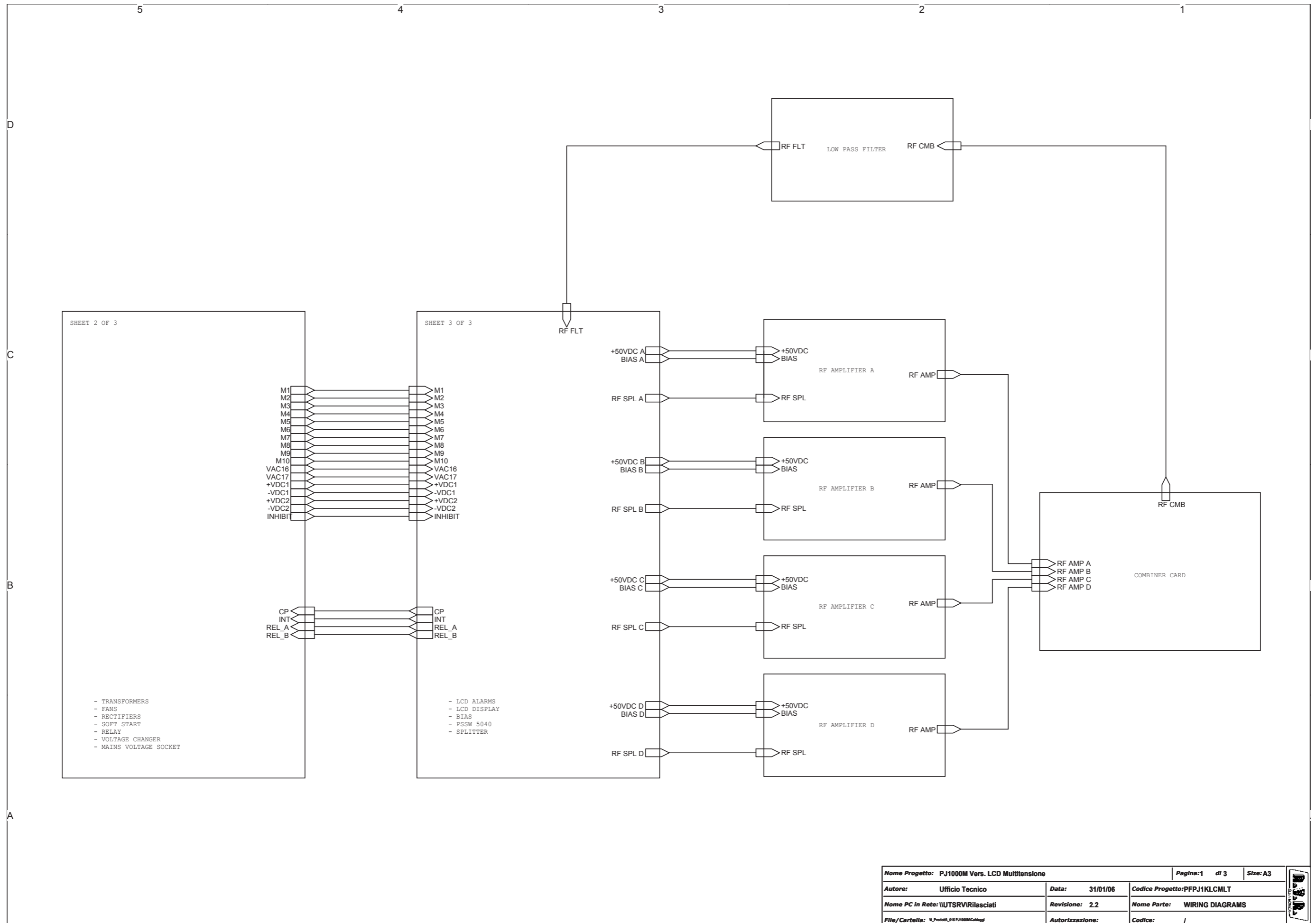
Document History

Date	Version	Reason	Code	Editor
02/07/03	2.0	First Release in A3 Format	N.D.	G. De Donno
04/09/03	2.1	Minor Corrections	N.D.	J.H. Berti
16/09/03	2.2	Add SLFILPJ1KM Board Informations	N.D.	J.H. Berti
12/12/05	2.3	Wiring Diagrams Update	N.D.	J.H. Berti
01/02/06	2.4	SL042RF1001 board upgrade	RM0206	J.H. Berti



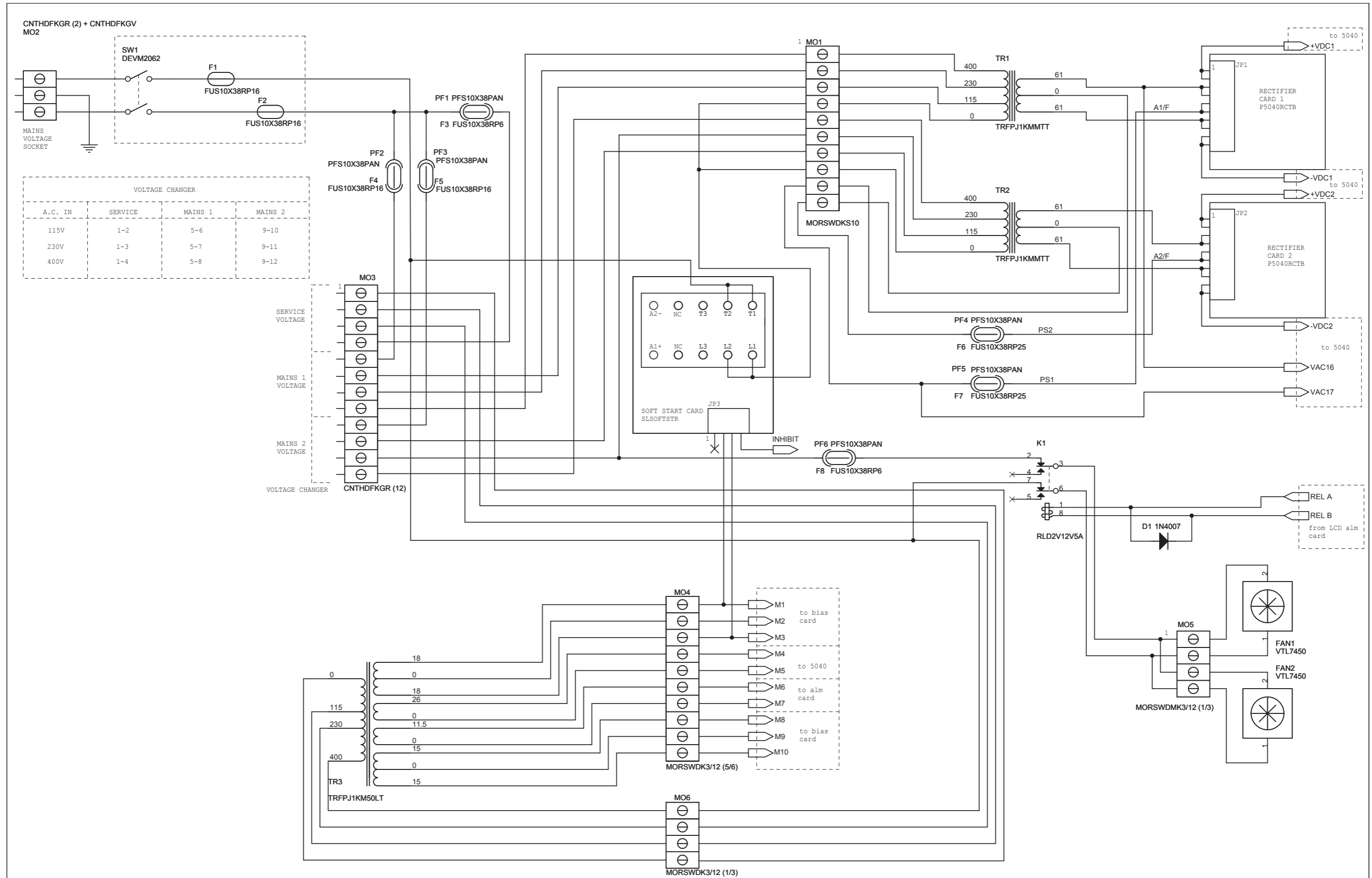
- [1] Soft Start Card (SLSOFTSTR)
- [2] CPU Section (PROTPJ-HCLD)
- [3] Switching Power Supply (PSSW5040)
- [4] Cooling Fan (2x VTL7450)
- [5] Transformer (1x TRFPJ1KM50LT + 2x TRFPJ1KMMTT)

- [1] Wilkinson "4-Way" Splitter Card (SLSPJ1KMLCD)
- [2] Directional Coupler (SLLPFPJ1KSTR)
- [3] Bias Control Card (SLCTRLPJ1KLC)
- [4] R.F. Power Amplifier Module (SL042RF1001)
- [5] Wilkinson "4-Way" Combiner Card (CSCMB-OUT/A)
- [6] Low Pass Filter (SLLPFPJ1KSTR)
- [7] Voltage changer
- [8] Mains voltage box

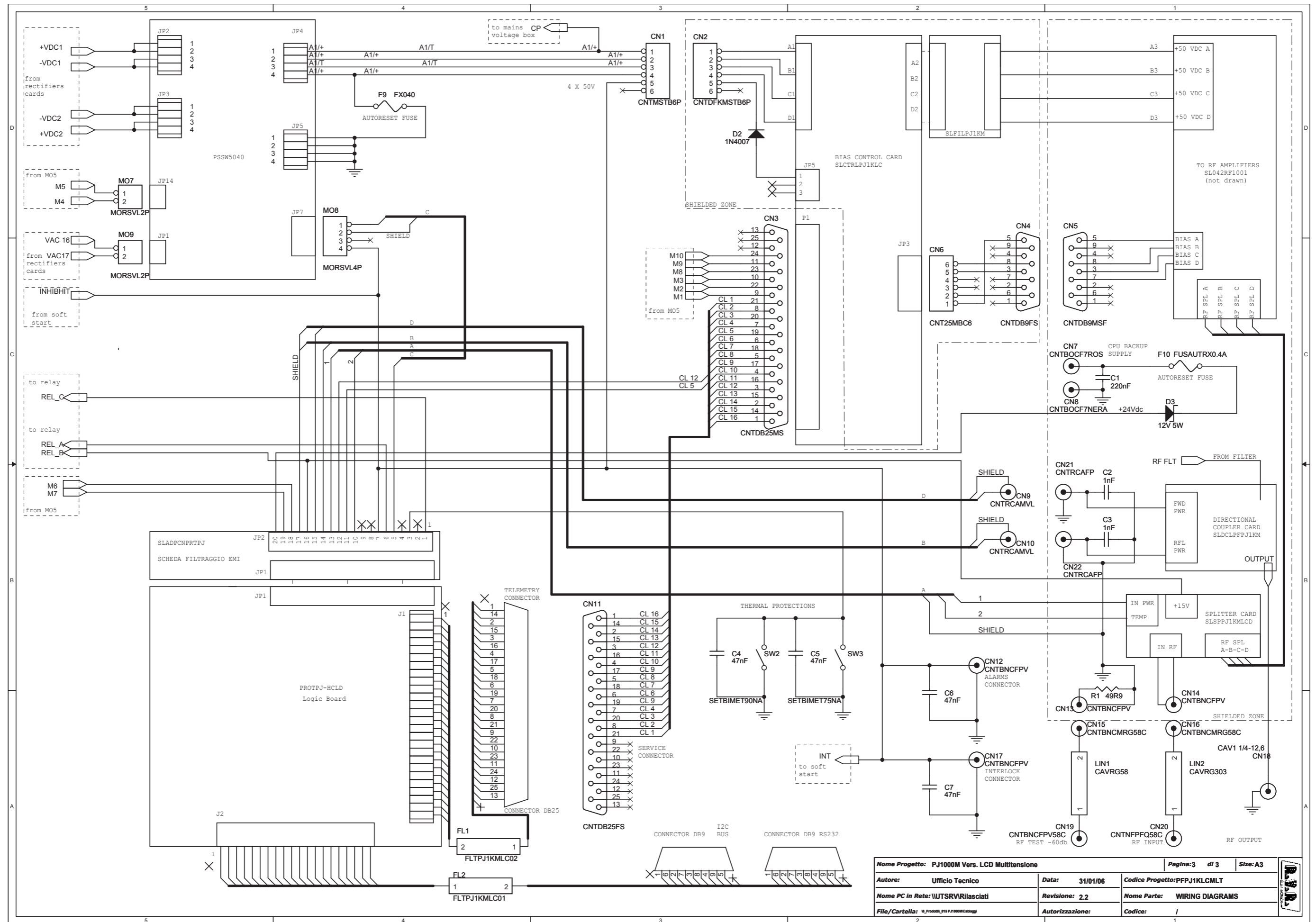


Nome Progetto: PJ1000M Vers. LCD Multitensione		Pagina: 1 di 3	Size: A3
Autore: Ufficio Tecnico	Data: 31/01/06	Codice Progetto: PFPJ1KLCMLT	
Nome PC in Rete: \UTSRV\Rilasciati	Revisione: 2.2	Nome Parte: WIRING DIAGRAMS	
File/Cartella: _Prodotto_BIS_PJ1000M\Cablogg	Autorizzazione:	Codice: /	

Wiring Diagram
KCABPJ1KMLCD



Nome Progetto: PJ1000M Vers. LCD Multitensione		Pagina: 2 di 3	Size: A3
Autore: Ufficio Tecnico	Data: 31/01/06	Codice Progetto: PFPJ1KLCMLT	
Nome PC in Rete: WJTSRVIRilasciati	Revisione: 2.2	Nome Parte: WIRING DIAGRAMS	
File/Cartella: \R_Prodotto_015_PJ1000M\Cablogg	Autorizzazione:	Codice: /	



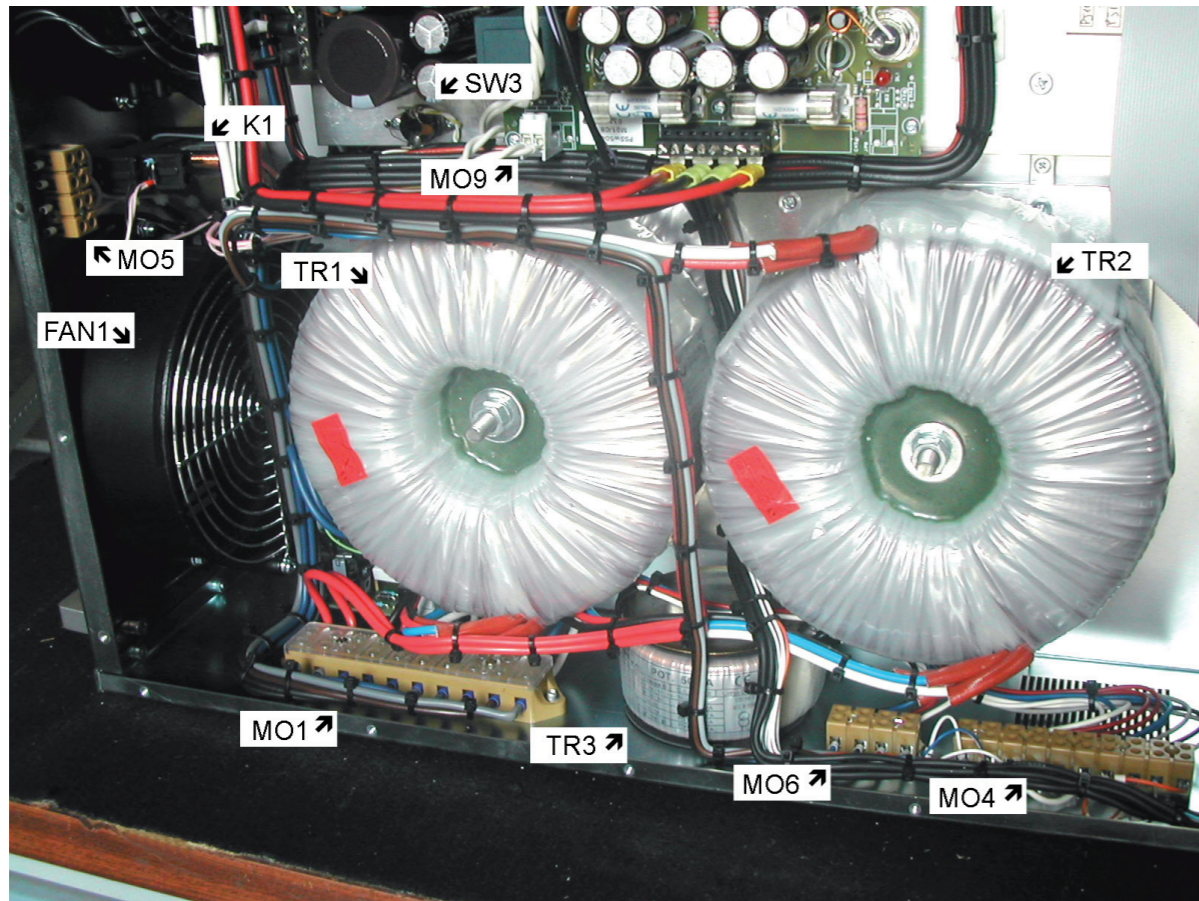


Photo 1

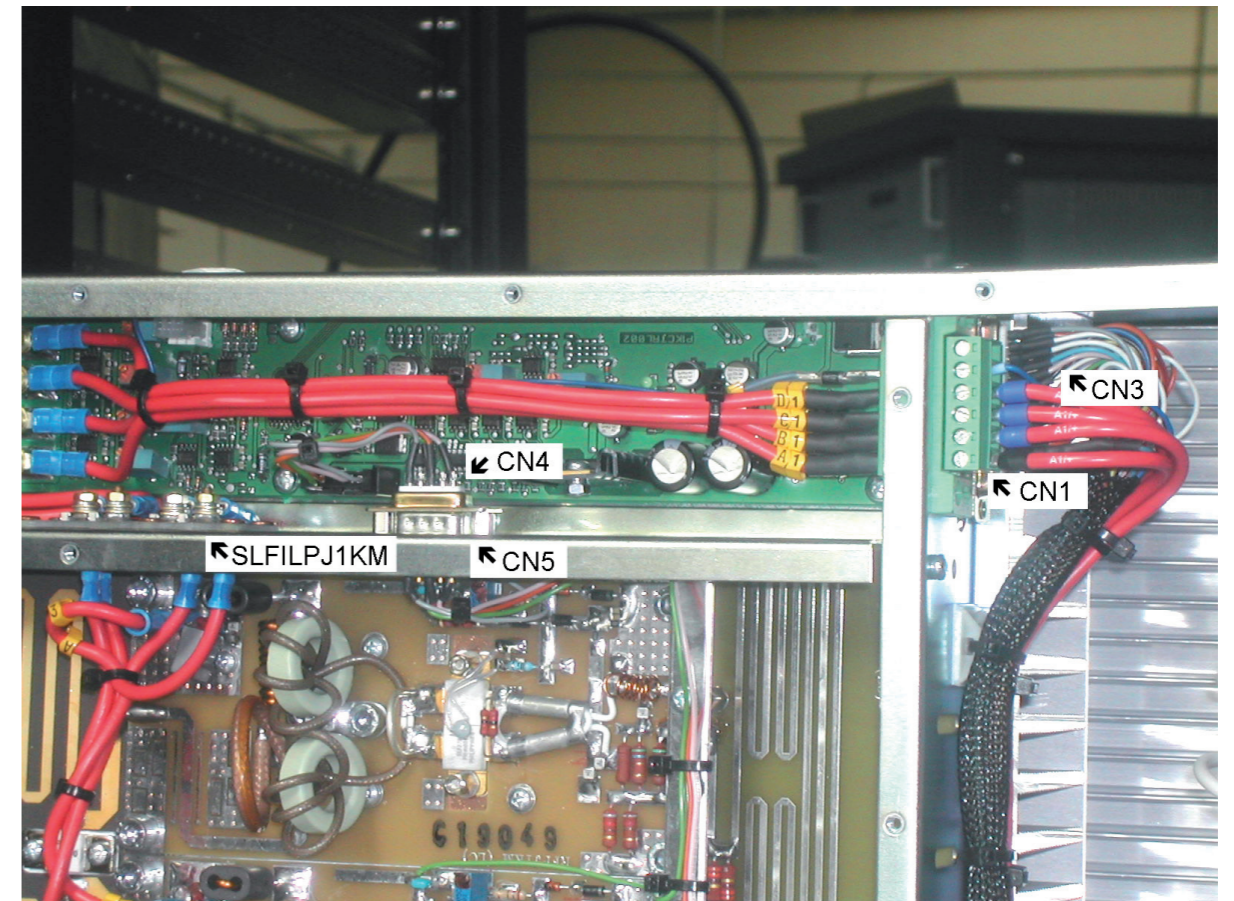


Photo 3

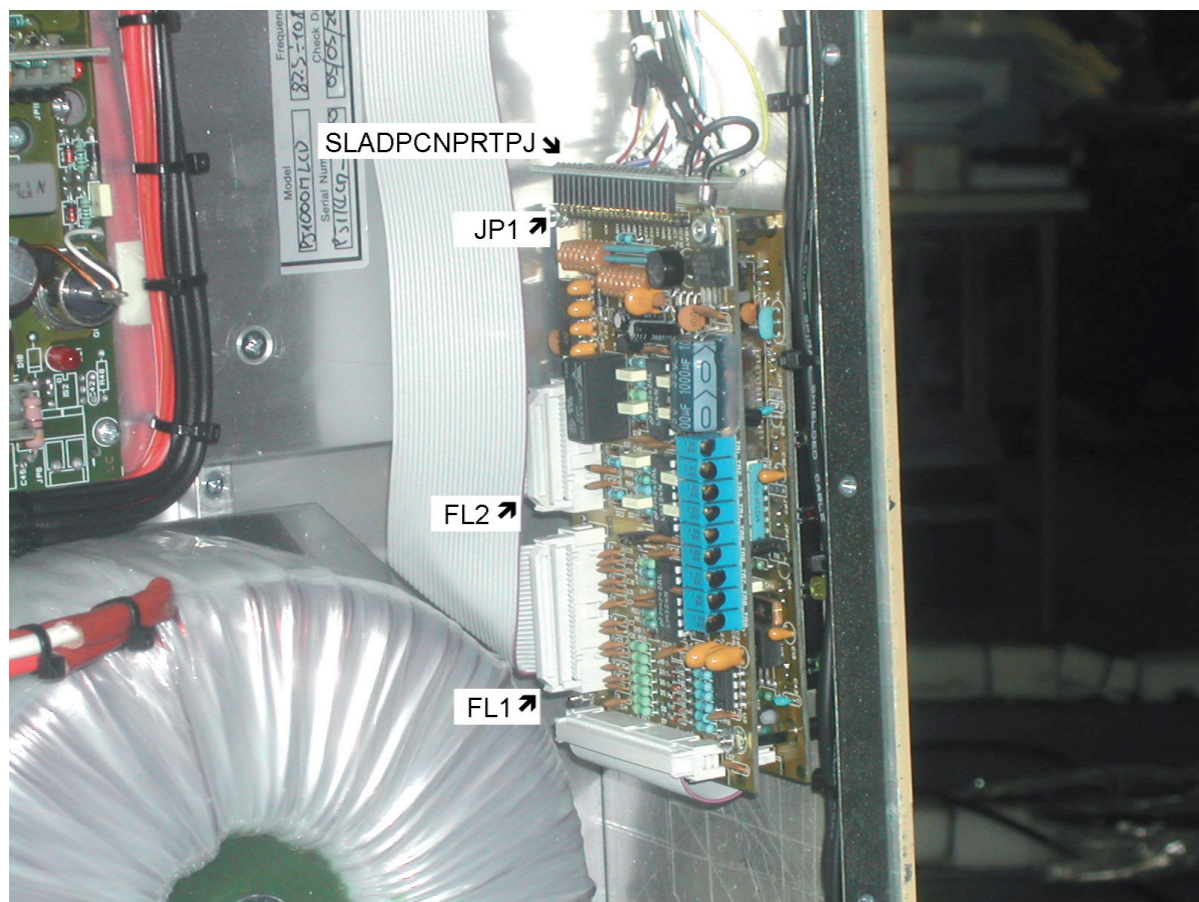


Photo 2

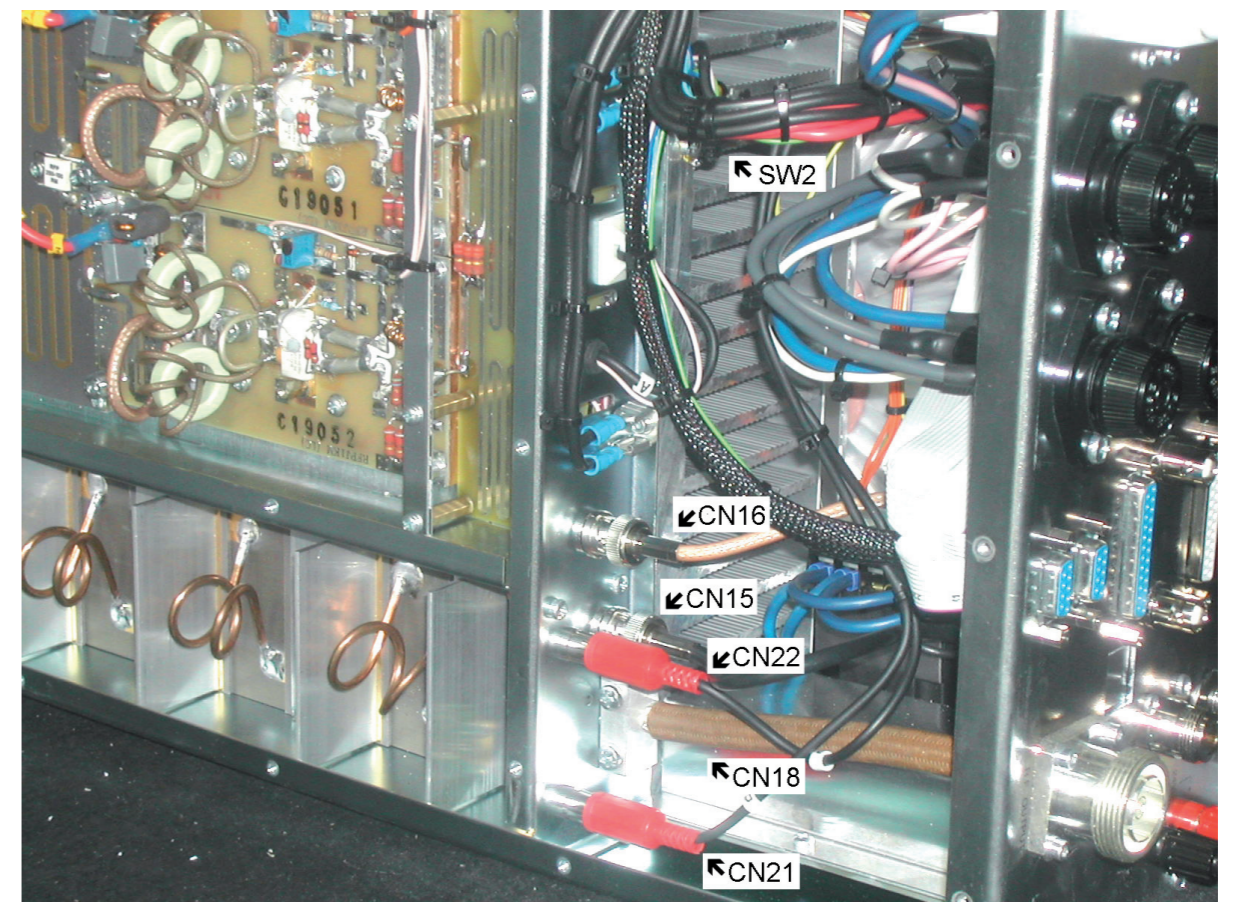


Photo 4

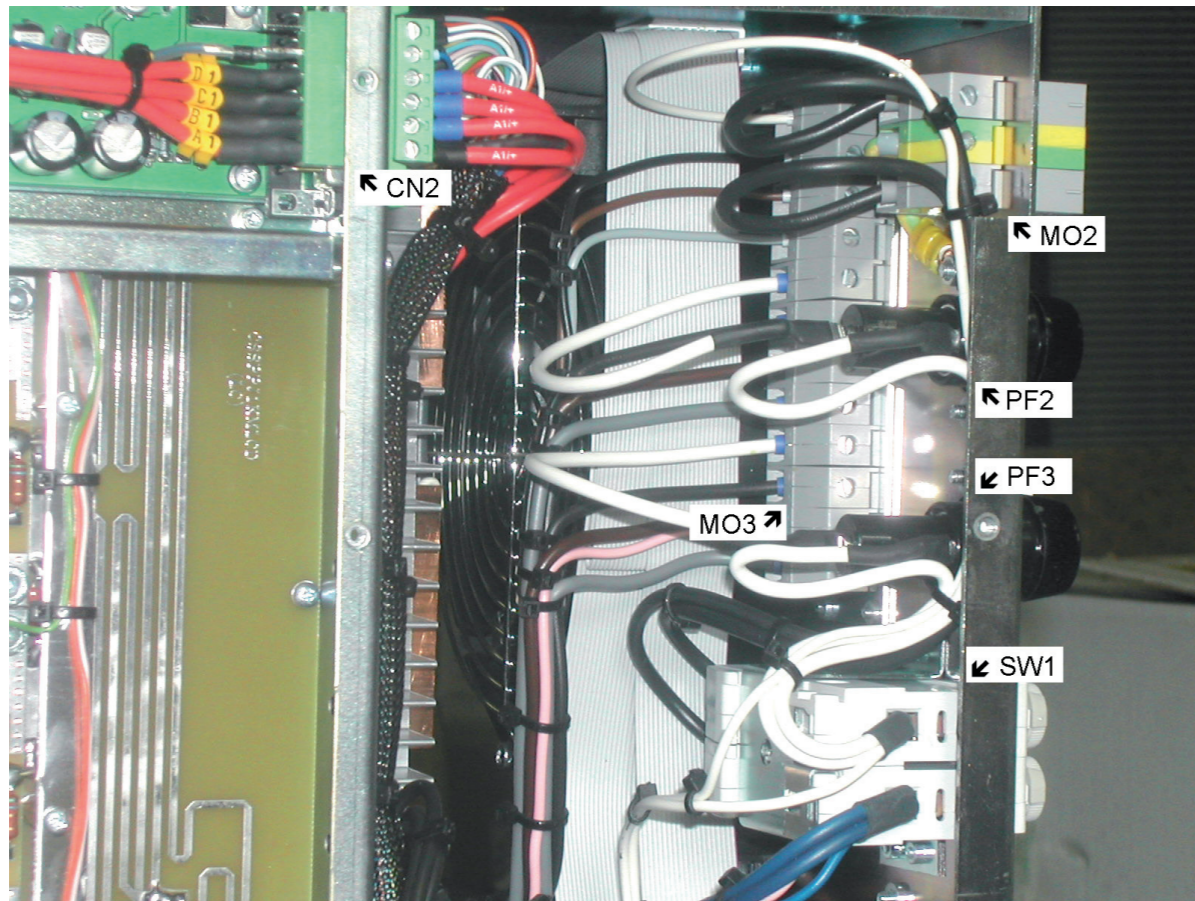


Photo 5

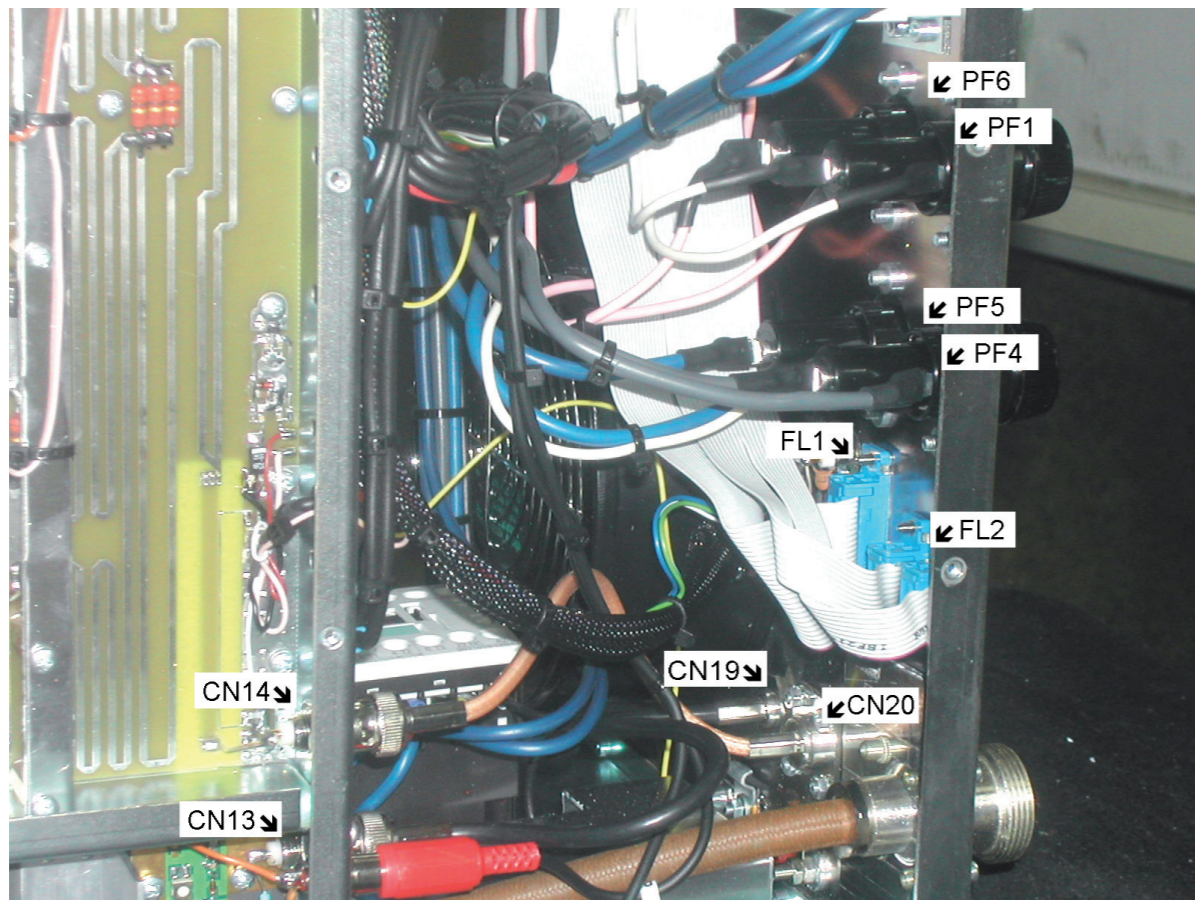
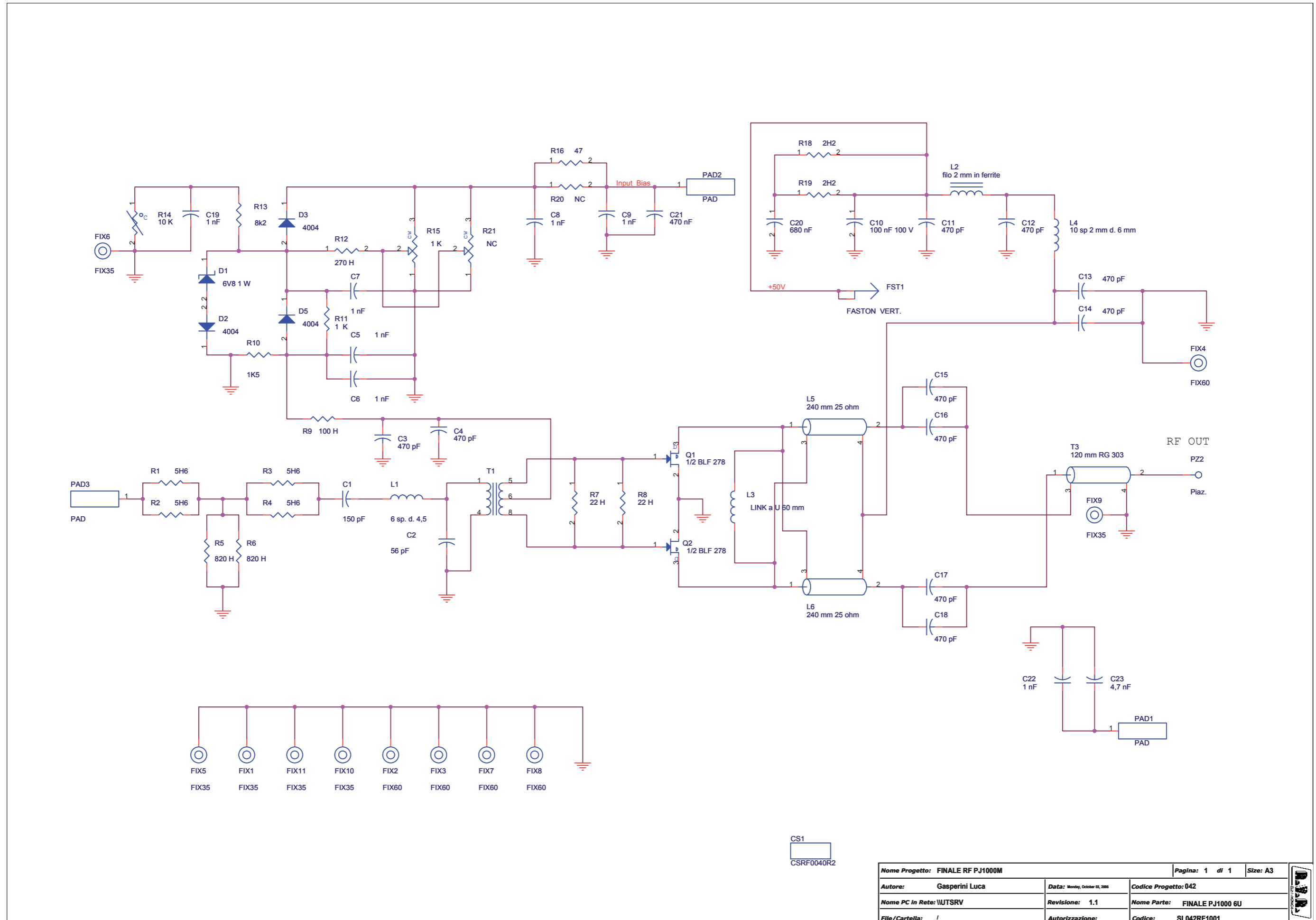


Photo 6

PJ1000M Vers. LCD Multitensione
Revised: 31/01/2006
Revision: 2.2

Item	Quantity	Reference	Part
1	1	CN1	CNTMSTB6P
2	1	CN2	CNTDFKMSTB6P
3	1	CN3	CNTDB25MS
4	1	CN4	CNTDB9FS
5	1	CN5	CNTDB9MSF
6	1	CN6	CNT25MBC6
7	1	CN7	CNTBOCF7ROS
8	1	CN8	CNTBOCF7NERA
9	2	CN9, CN10	CNTRCAMVL
10	1	CN11	CNTDB25FS
11	4	CN12, CN13, CN14, CN17	CNTBNCFPV
12	2	CN15, CN16	CNTBNCMRG58C
13	1	CN18	CAV1 1/4-12.6
14	1	CN19	CNTBNCFPV58C
15	1	CN20	CNTNFPFQ58C
16	2	CN21, CN22	CNTRCAFP
17	1	C1	220nF
18	2	C2, C3	1nF
19	4	C4, C5, C6, C7	47nF
20	2	D1, D2	1N4007
21	1	D3	12V 5W
22	2	FAN1, FAN2	VTL7450
23	1	FL1	FLTPJ1KMLC02
24	1	FL2	FLTPJ1KMLC01
25	4	F1, F2, F4, F5	FUS10X38RP16
26	2	F3, F8	FUS10X38RP6
27	2	F6, F7	FUS10X38RP25
28	1	F9	FX040
29	1	F10	FUSAUTRX0.4A
30	1	K1	RLD2V12V5A
31	1	LIN1	CAVRG58
32	1	LIN2	CAVRG303
33	1	MO1	MORSWDKS10
34	1	MO2	CNTHDFKGR (2) + CNTHDFKGV
35	1	MO3	CNTHDFKGR (12)
36	1	MO4	MORSWDK3/12 (5/6)
37	1	MO5	MORSWDMK3/12 (1/3)
38	1	MO6	MORSWDK3/12 (1/3)
39	2	MO7, MO9	MORSVL2P
40	1	MO8	MORSVL4P
41	6	PF1, PF2, PF3, PF4, PF5, PF6	PFS10X38PAN
42	1	R1	49R9
43	1	SW1	DEVM2062
44	1	SW2	SETBIMET90NA
45	1	SW3	SETBIMET75NA
46	2	TR1, TR2	TRFPJ1KMMTT
47	1	TR3	TRFPJ1KM50LT



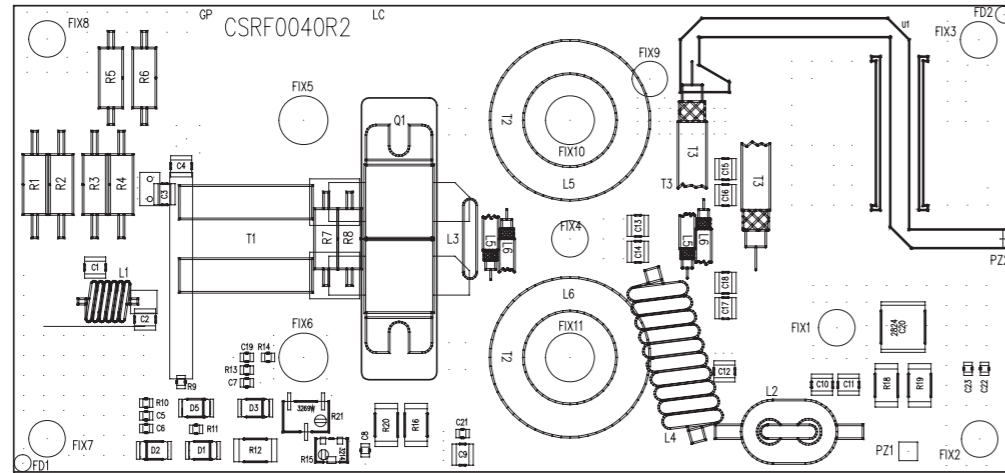
CS1
CSR0040R2

Nome Progetto: FINALE RF PJ1000M		Pagina: 1 di 1	Size: A3
Autore: Gasperini Luca	Data: Monday, October 03, 2006	Codice Progetto: 042	
Nome PC in Rete: \WTSRV	Revisione: 1.1	Nome Parte: FINALE PJ1000 6U	
File/Cartella: /	Autorizzazione:	Codice: SL042RF1001	

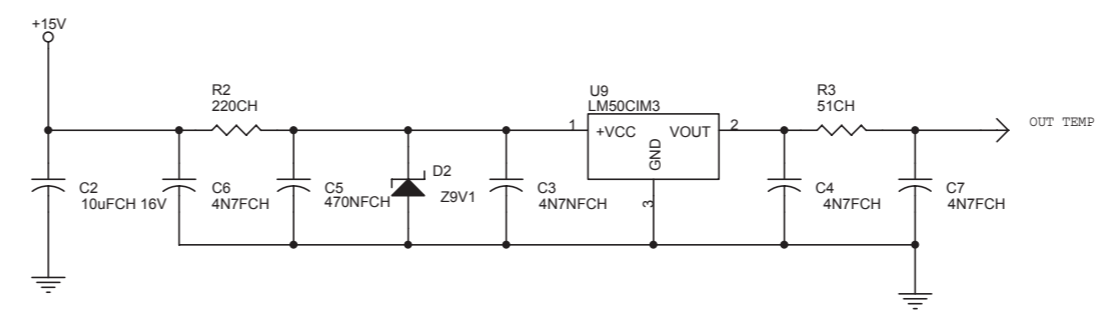
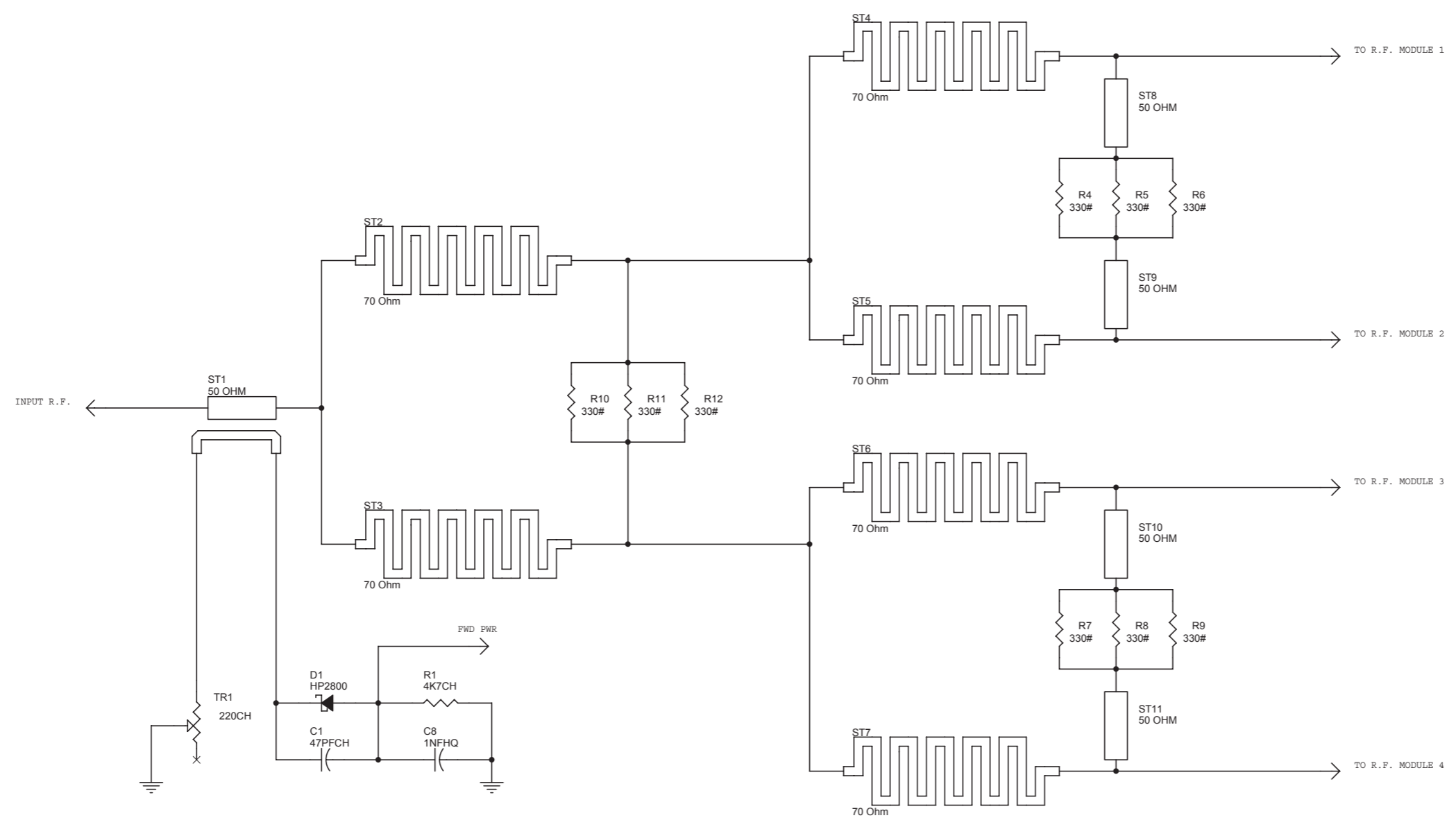
FINALE PJ1000 6U Revised: 03/10/2005
Revision: 1.1
SL042RF1001

Gasperini Luca

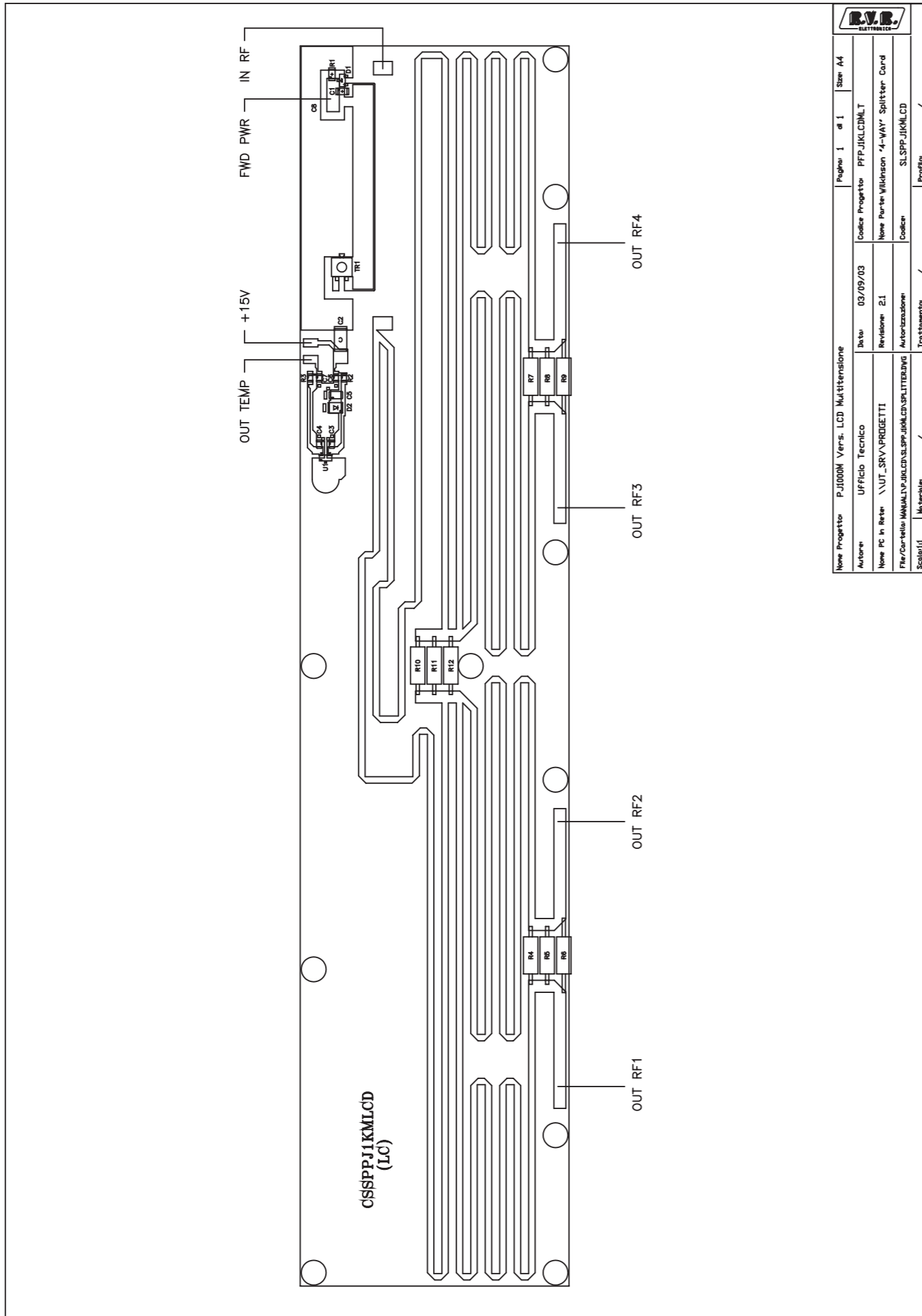
Item	Quantity	Reference	Part	(description)	Codice AS 400
1	1	C1	150 pF	Cond. SMD 1212 HQ	CHQ151JA301A
2	1	C2	56 pF	Cond. SMD 1212 HQ	CHQ560JA501
3	10	C3, C4, C11, C12, C13, C14, C15, C16, C17, C18	470 pF	Cond. SMD 1212 HQ	CHQ471JA201
4	6	C5, C6, C7, C8, C19, C22	1 nF	Cond. SMD 0805	CCC085102JNC
5	1	C9	1 nF	Cond. SMD 1212 HQ	CHQ102JA151A
6	1	C10	100 nF 100 V	Cond. ceramico multistrato p 5mm	CMS104MC101
7	1	C20	680 nF	Cond. SMD 2824	CPE684K1010
8	1	C21	470 nF	Cond. SMD 0805	CCC085474KXB
9	1	C23	4,7 nF	Cond. SMD 0805	CCC085472KXC
10	1	D1	6V8 1 W	MINIMELF SMD Zener Diode	DIZ6V8MELF
11	3	D2, D3, D5	4004	MELF SMD Diode	DIS4007SMA
12	6	FIX1, FIX5, FIX6, FIX9, FIX10, FIX11	FIX35	Foro fissaggio 3.5mm	
13	5	FIX2, FIX3, FIX4, FIX7, FIX8	FIX60	Foro fissaggio 6mm	
14	1	FST1	FASTON VERT.		
15	1	L1	6 sp. d. 4,5	Induttanza cilindrica	
16	1	L2	filo 2 mm in ferrite		
17	1	L3	LINK a U 60 mm	Induttanza cilindrica	
18	1	L4	10 sp 2 mm d. 6 mm	Induttanza cilindrica	
19	2	L5, L6	240 mm 25 ohm		
20	3	PAD1, PAD2, PAD3	PAD		
21	1	PZ2	Piaz.		
22	2	Q2, Q1	1/2 BLF 278	Trans. FET SOT23	TRNBLF278
23	4	R1, R2, R3, R4	5H6	Res. 2W	RSM002J005H6
24	1	R5, R6	820 H	Res. 2W	RSM002J0820H
25	2	R8, R7	22 H	Res. 1W	RSM001J0022H
26	1	R9	100 H	Res. SMD 0805 1%	RCH085J0100H
27	1	R10	1K5	Res. SMD 0805 1%	RCH085F001K5
28	1	R11	1 K	Res. SMD 0805 1%	RCH085F0001K
29	1	R12	270 H	Res. SMD 2512 1%	RCH200J0270H
30	1	R13	8k2	Res. SMD 0805 1%	RCH085F08K25
31	1	R14	10 K	Res. NTC SMD 0805	RNTC085K103K
32	1	R15	1 K	Trimmer 3269	RVT3269WK001
33	1	R16	47	Res. SMD 2512 1%	RCH252J0047H
34	2	R19, R18	2H2	Res. SMD 2512 1%	RCH252J002H2
35	1	R20	NC	Res. SMD 2512 1%	
36	1	R21	NC	Trimm. multi SMD PVG5 Murata	
37	1	T1			
38	1	T3	120 mm RG 303		
39	1	CS1	CSRF0040R2		CSRF0040R2



	NOME PROGETTO: REVISIONE FINALE RF PJ1000M 6U	NOME PARTE: FINALE RF	
	AUTORE: GASPERINI	DATA: 03/08/2005	REVISIONE: 1.0
ARCHIVIAZIONE ELETTRONICA: "CARTELLA PROGETTI" SU "UT_SRV"	CODICE PROGETTO: 042	CODICE DISEGNO: SL042RF1001	SCALA: 1:1
MATERIALE: <>	TRATTAMENTO: <>	PROFILO: <>	PAGINA: 1 DI 1
			STATO: PROGETTUALE



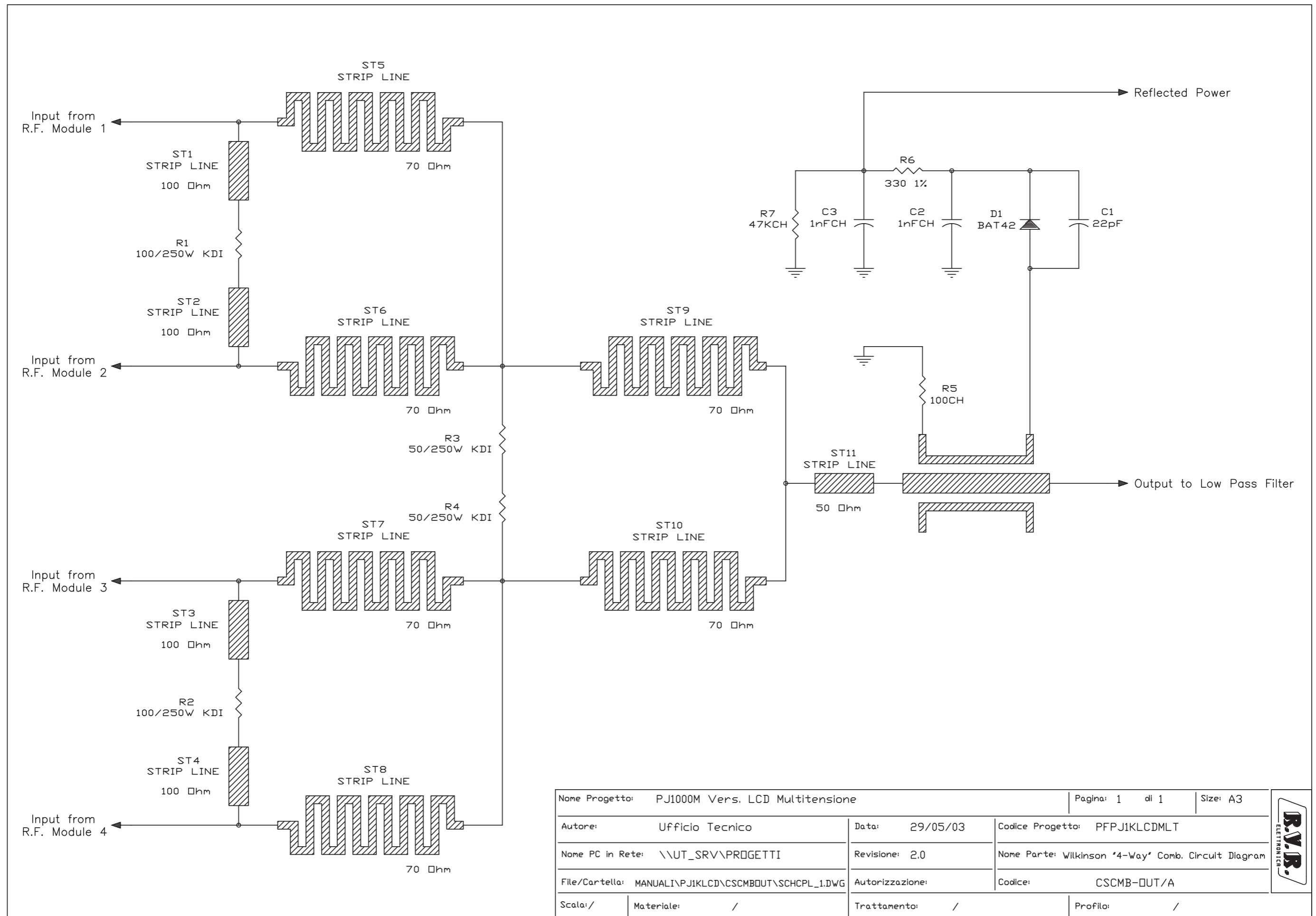
Nome Progetto: PJ1000M Vers. LCD Multitensione		Pagina: 1 di 1		Size: A3
Autore: Ufficio Tecnico	Data: 03/09/03	Codice Progetto: PFPJ1KLCMLT		
Nome PC in Rete: \IUT_SRV\PROGETTI		Revisione: 2.1	Nome Parte: Wilkinson "4-WAY" Splitter Card	
File/Cartella: \MANUAL\PJ1KMLCD\SLSPPJ1KMLCD\SPPLITTER.DSN		Autorizzazione:	Codice: SLSPPJ1KMLCD	



Nome Progetto	PJ1000M Vers. LCD Multistensione	Pagina	1	di	1	Size	A4
Autore	Ufficio Tecnico	Codea Progetto	PFPJKMLCDMLT				
Nome PC in Rete	\\UT_SRV\PROGETTI	Data	03/09/03				
File/Carrello	MANUAL\PJ1000M\SLSPPJ1KMLCD\SLPJTTR1.DWG	Revisione	2.1				
Scala [1]	Metri	Autore	None Furto Wilkinson "4-WAY" Splitter Card				
		Trattamento	/				
		Profilo	/				

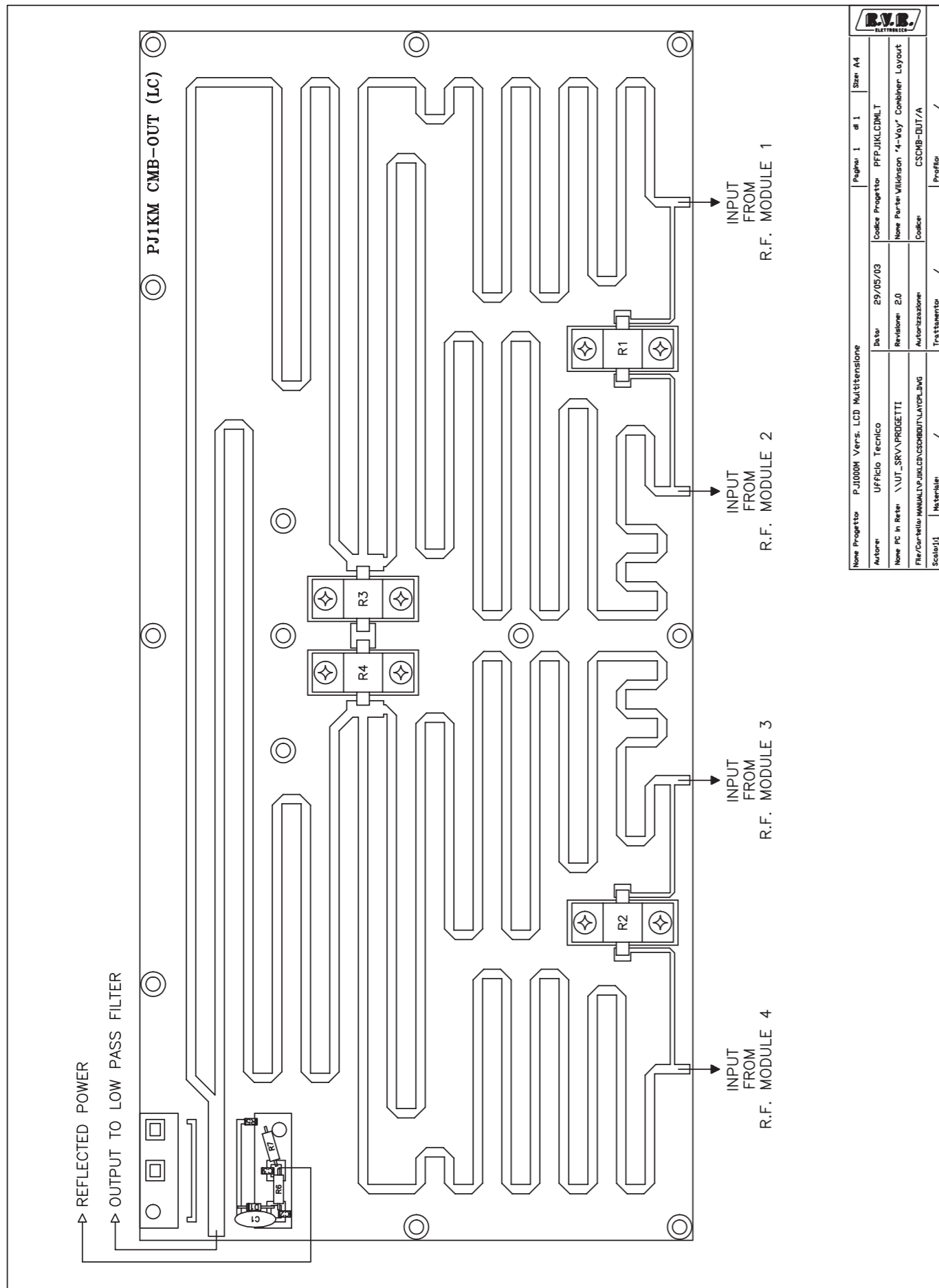
Wilkinson "4-Way" Splitter Card
SLSPPJ1KMLCD
Version: 2.1 Date: 03/09/03

Item	Q.ty	Reference	Part	DESCRIPTION
1	1	R1	4K7CH	CHIP RESISTOR 0805
2	1	R2	220CH	CHIP RESISTOR 0805
3	1	R3	51CH	CHIP RESISTOR 0805
4	9	R4,R5,R5,R7,R8, R9,R10,R11,R12	330 2W	RESISTOR 2W
5	2	TR1	220CH	TRIMMER SMD G4BT TOKO'S
6	1	C1	47PFCH	CHIP CAPACITOR 0805
7	1	C2	10uFCH 16V	TANTALIUM CHIP CAPACITOR
8	1	C5	470NFCH	CHIP CAPACITOR 1206
9	4	C3,C4,C6,C7	4N7FCH	CHIP CAPACITOR 0805
10	1	D1	HP2800	DIODE SMD SOT23
11	1	D2	Z9V1	ZENER DIODE
12	1	U1	LM50CIM3	TEMPERATURE SENSOR
13	1	C8	1NFHQ	CHIP CAPACITOR HQ



Nome Progetto: PJ1000M Vers. LCD Multitensione		Pagina: 1 di 1	Size: A3
Autore: Ufficio Tecnico	Data: 29/05/03	Codice Progetto: PFPJ1KLCDMLT	
Nome PC in Rete: \\UT_SRV\PROGETTI	Revisione: 2.0	Nome Parte: Wilkinson "4-Way" Comb. Circuit Diagram	
File/Cartella: MANUALI\PJ1KLCD\CSCMBOUT\SCHCPL_1.DWG	Autorizzazione:	Codice: CSCMB-OUT/A	
Scala: /	Materiale: /	Trattamento: /	Profilo: /

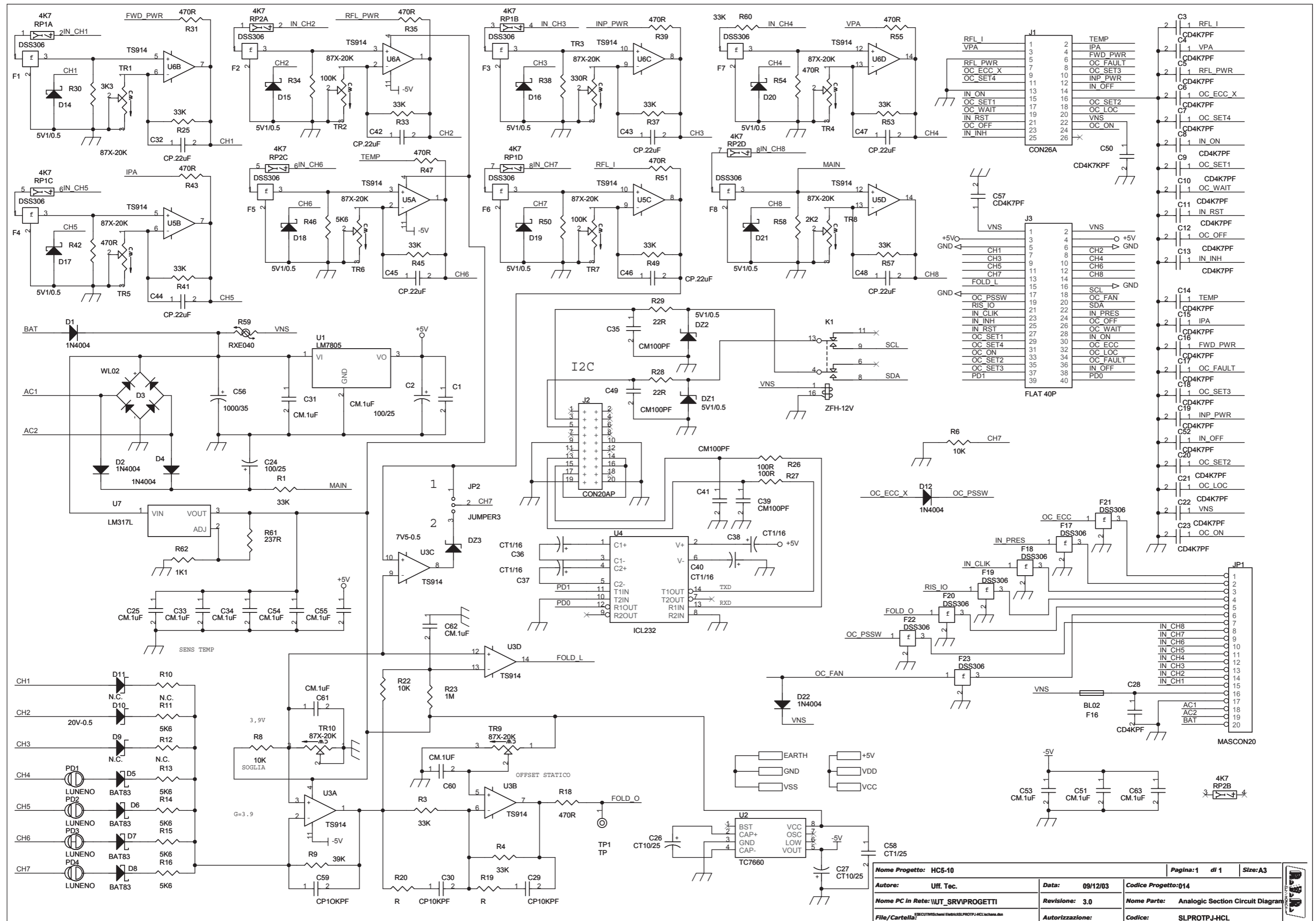




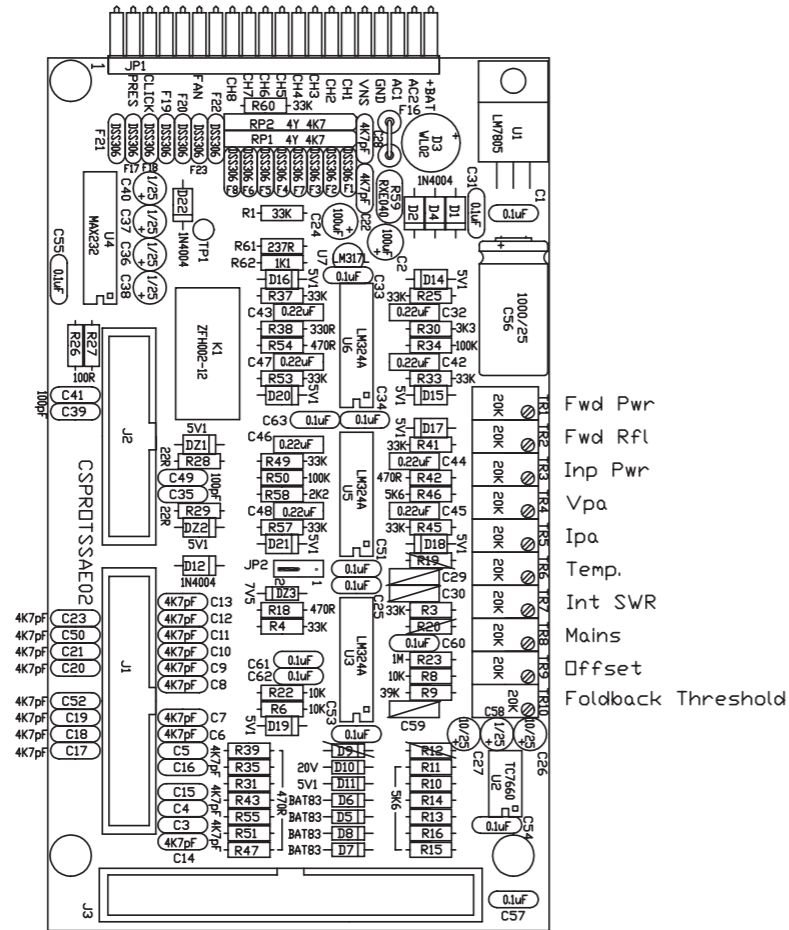
Nome Progetto	PJ1000M Vers. LCD Multitermine	Figlio	di 1	Size	A4
Autore	UFFICIO Tecnico	Data	29/05/03	Coilce Progetto	FPFJKLDMILT
Nome PC in Rete	\\UT_SRV\PROGETTI	Revisione	2.0	Nome Parte	Wilkinson "4-Way" Combiner Layout
File/Carrello	MANUAL\PJ1000M\CSCMBOUT\LAYOUT_LING	Autore/Revisione		Coilce	CSCMB-OUT/A
Scala	1:1	Materiali	/	Profilo	/

Combiner Card Circuit Diagram
PJ1K CMB-OUT
Versione:1,0
20/04/2001

Item	Quantity	Reference	Part	DESCRIPTION
1	2	R3,R4	50/250W KDI	RESISTENZA KDI 250W
2	1	R5	100CH	CHIP RESISTOR 1206 5%
3	2	R1,R2	100/250W KDI	RESISTENZA KDI 250W
4	1	R6	330 1%	RESISTOR 1/4W 5%
5	1	R7	47KCH	RESISTOR 1/4W 5%
6	1	C1	22PF	CERAMIC CAPACITOR NP0
7	2	C2,C3	1NFCH	CERAMIC HIGH Q
8	1	D1	BAT42	HOT CARRIER DIODE
9	12	ST1,ST2,ST3,ST4,ST5, ST6,ST7,ST8,ST9,ST10, ST11,ST12	STRIP LINE	STRIP LINE



Nome Progetto: HC5-10	Pagina: 1 di 1	Size: A3
Autore: Uff. Tec.	Data: 09/12/03	Codice Progetto: 014
Nome PC in Rete: \UT_SRV\PROGETTI	Revisione: 3.0	Nome Parte: Analogic Section Circuit Diagram
File/Cartella: E:\CUT\TMS\circuit\Elctro\SS\PROTPJ-HCL\schma.dwg	Autorizzazione:	Codice: SLPROTPJ-HCL

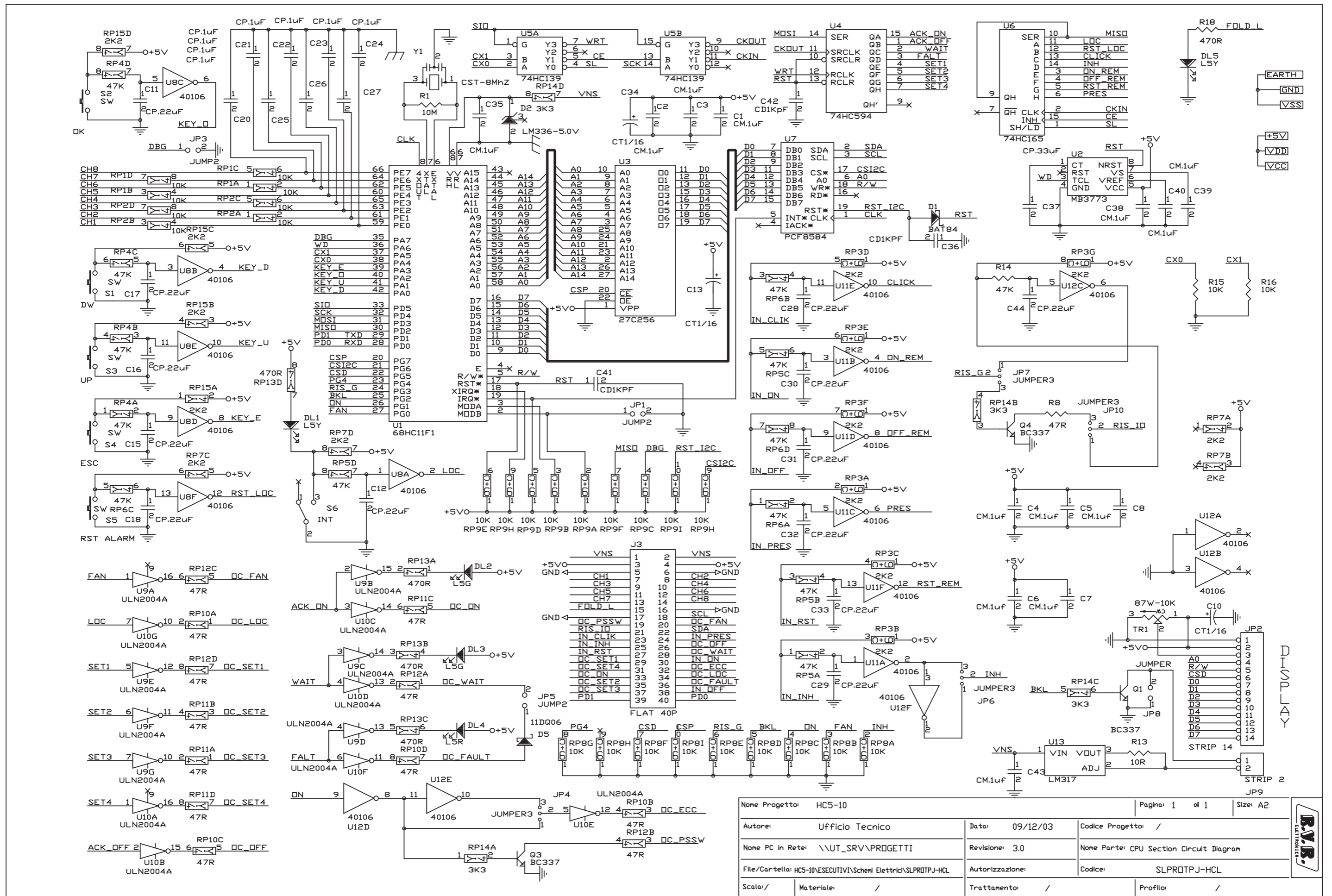


CPU Analog Section
SLPROTPJ-HCL
Version: 2.2 Date: 04/09/03

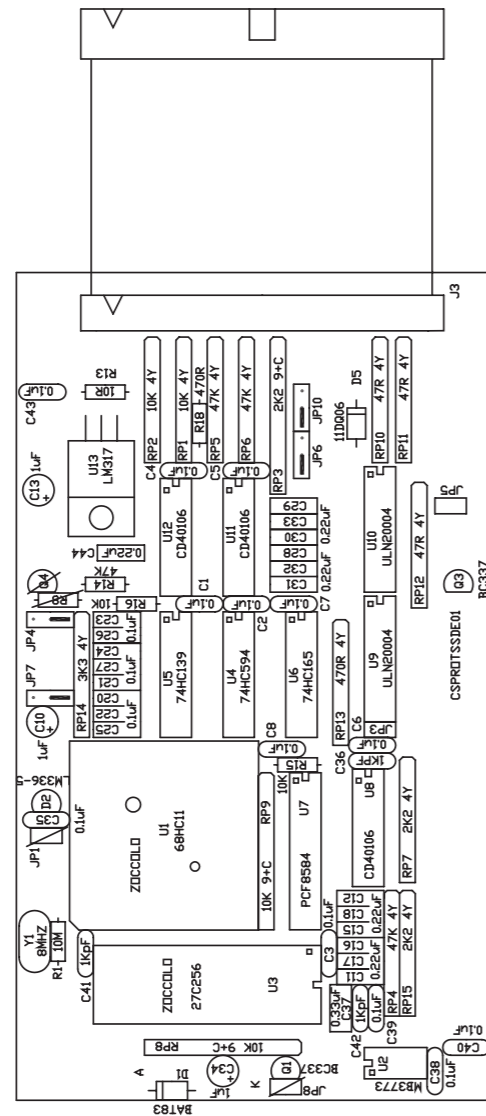
Item	Q.ty	Reference	Part
1	13	C1,C25,C31,C33,C34,C51,C53,C54,C55,C60,C61,C62,C63	CM.1uF
2	2	C24,C2	100/25
3	23	C3,C4,C5,C6,C7,C8,C9,C10,C11,C12,C13,C14,C15,C16,C17,C18,C19,C20,C21,C22,C23,C52,C57	CD4K7PF
4	2	C26,C27	CT10/25
5	1	C28	CD4KPF
7	8	C32, C42, C43, C44, C45, C46, C47, C48	CP.22uF
8	4	C35, C39, C41, C49	CM100PF
9	4	C36, C37, C38, C40	CT1/16
10	1	C50	CD4K7KPF
11	1	C56	1000/35
12	1	C58	CT1/25
13	1	C59	CP10KPF
14	10	DZ1, DZ2, D14, D15, D16, D17, D18, D19, D20, D21	5V1/0.5
15	1	DZ3	7V5-0.5
16	5	D1, D2, D4, D12, D22	1N4004
17	1	D3	WL02
18	4	D5, D6, D7, D8	BAT83
19	4	R10, R12, D9, D11	N.C.
20	1	D10	20V-0.5
21	15	F1, F2, F3, F4, F5, F6, F7, F8, F17, F18, F19, F20, F21, F22, F23	DSS306
22	1	F16	BL02
23	1	JP1	MASCON20
24	1	JP2	JUMPER3
25	1	J1	CON26A
26	1	J2	CON20AP
27	1	J3	FLAT 40P
28	1	K1	ZFH-12V
29	4	PD1, PD2, PD3, PD4	LUNENO
30	2	RP1, RP2	4K7
31	12	R1, R3, R4, R25, R33, R37, R41, R45, R49, R53, R57, R60	33K
32	3	R6, R8, R22	10K
33	1	R9	39K
34	6	R11, R13, R14, R15, R16, R46	5K6
35	10	R18, R31, R35, R39, R42, R43, R47, R51, R54, R55	470R
36	2	R19, R20	R
37	1	R23	1M
38	2	R26, R27	100R
39	2	R28, R29	22R
40	1	R30	3K3
41	2	R50, R34	100K
42	1	R38	330R
43	1	R58	2K2
44	1	R59	RXE040
45	1	R61	237R
46	1	R62	1K1
47	1	TP1	TP

R.V.R. ELETTRONICA	NOME PROGETTO: HC5-10	NOME PARTE: Analogic Section Component Layout			
	AUTORE: GP - Rev.: J. Berti	DATA: 11/02/2004	REVISIONE: 2.0	SCALA: 1:1	SIZE: A4 PAGINA: 1 DI 1
ARCHIVIAZIONE ELETTRONICA: "CARTELLA PROGETTI" SU "UT_SVR"	CODICE PROGETTO: 014	CODICE DISEGNO: PROTPJ-HCLCD			
MATERIALE: FR4-74 1.6mm Cu 35um	TRATTAMENTO: STANDARD COSTRUTTORE	PROFILO: Positivo	STATO: ESECUTIVO		

5	1	C28	CD4KPF
7	8	C32, C42, C43, C44, C45, C46, C47, C48	CP.22uF
48	10	TR1, TR2, TR3, TR4, TR5, TR6, TR7, TR8, TR9, TR10	87X-20K
49	1	U1	LM7805
50	1	U2	TC7660
51	3	U3, U5, U6	TS914
52	1	U4	ICL232
53	1	U7	LM317L



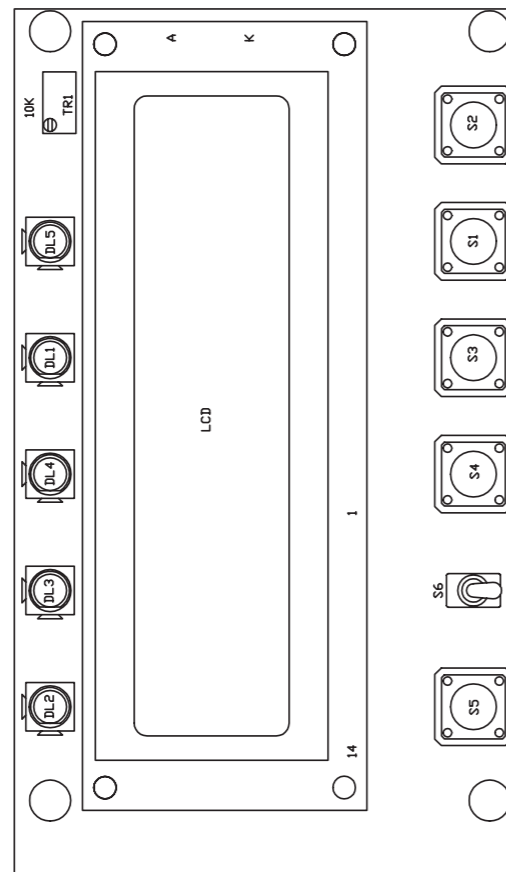
Nome Progetto: HC5-10		Pagina: 1 di 1		Size: A2	
Autore: Ufficio Tecnico		Data: 09/12/03		Codice Progetto: /	
None PC in Rete: \\UT_SRV\PROGETTI		Revisione: 3,0		Nome Parte: CPU Section Circuit Diagram	
File/Cartella: HC5-10\SECUTIV\Scemi Elettrici\SLPROTPJ-HCL		Autorizzazione:		Codice: SLPROTPJ-HCL	
Scala: /	Materiale: /	Trattamento: /	Profilo: /		



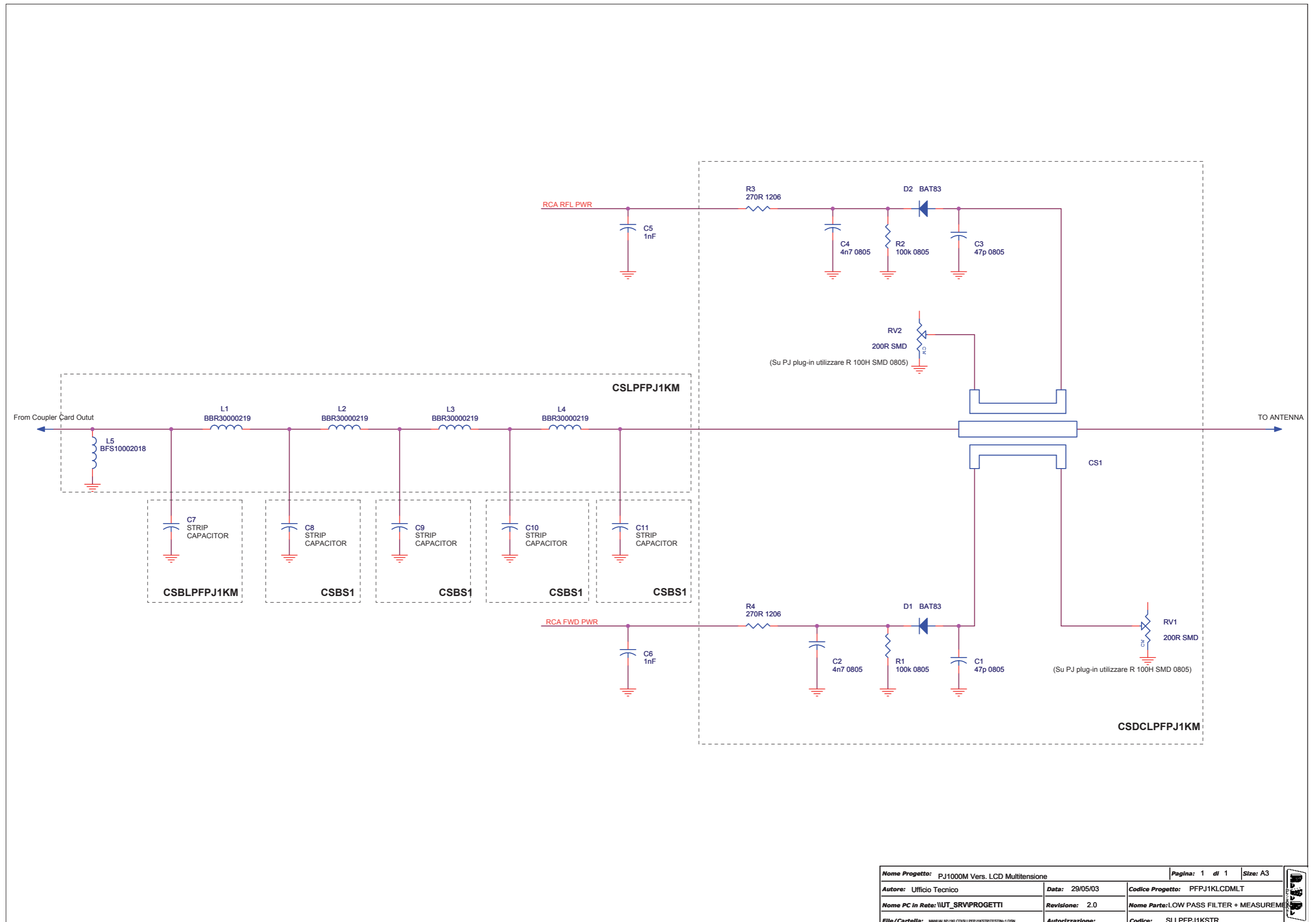
Scheda CPU
SLPROTPJ-HCL
Versione: 2.2

Item	Q.ty	Reference	Description
1	13	C1,C2,C3,C4,C5,C6,C7,C8,C35,C38,C39,C40,C43	CM.1UF
2	3	C10,C13,C34	CT1/16
3	13	C11,C12,C15,C16,C17,C18,C28,C29,C30,C31,C32,C33,C44	CP.22UF
4	8	C20,C21,C22,C23,C24,C25,C26,C27	CP.1UF
5	3	C36, C41, C42	CD1KPF
7	2	DL1, DL5	L5Y
8	2	DL2, DL3	L5G
9	1	DL4	L5R
10	1	D1	BAT84
11	1	D2	LM336-5.0V
12	1	D5	11DQ06
13	3	JP1, JP3, JP5	JUMP2
14	1	JP2	STRIP 14
15	4	JP4, JP6, JP7, JP10	JUMPER3
16	1	JP8	JUMPER
17	1	JP9	STRIP 2
18	1	J3	FLAT 40P
19	3	Q1, Q3, Q4	BC337
20	6	RP1, RP2, RP8, RP9, R15, R16	10K
21	3	RP3, RP7, RP15	2K2
22	4	RP4, RP5, RP6, R14	47K
23	4	R8, RP10, RP11, RP12	47R
24	2	RP13, R18	470R
25	1	RP14	3K3
26	1	R1	10M
27	1	R13	10R
28	5	S1, S2, S3, S4, S5	SW
29	1	S6	INT
30	1	TR1	87W-10K
31	1	U1	68HC11F1
32	1	U2	MB3773
33	1	U3	27C256
34	1	U4	74HC594
35	1	U5	74HC139
36	1	U6	74HC165
37	1	U7	PCF8584
38	3	U8, U11, U12	40106
39	2	U9, U10	ULN2004A
40	1	U13	LM317
41	1	Y1	CST-8MHZ

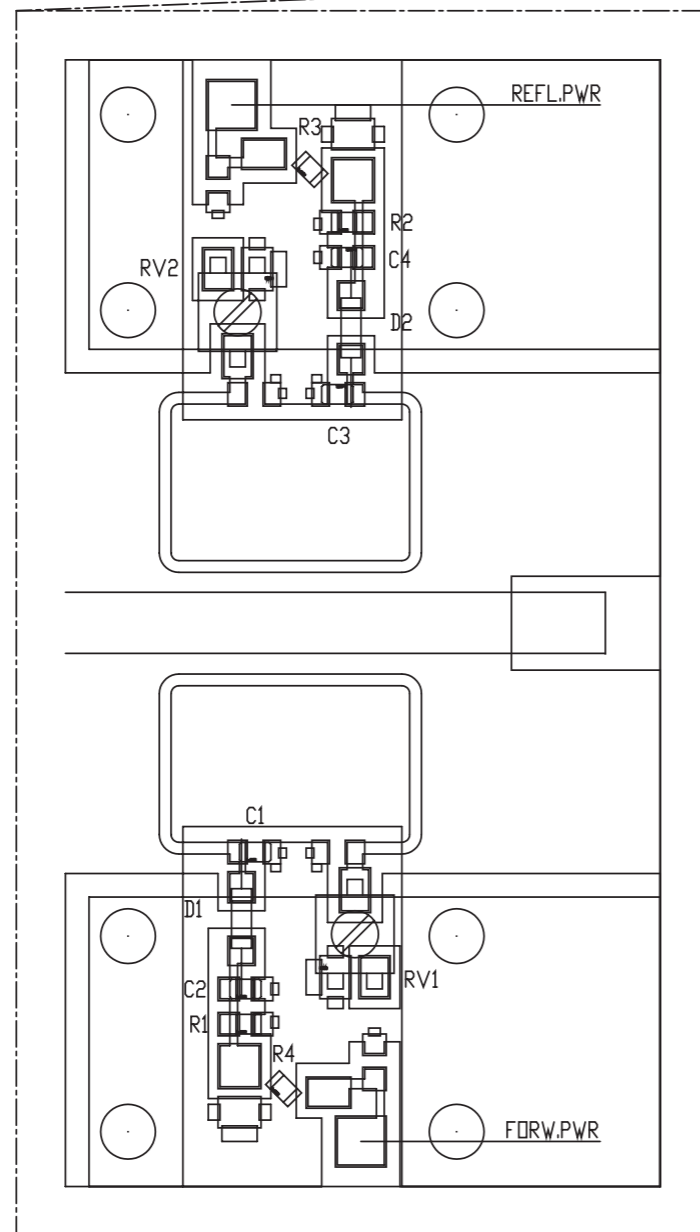
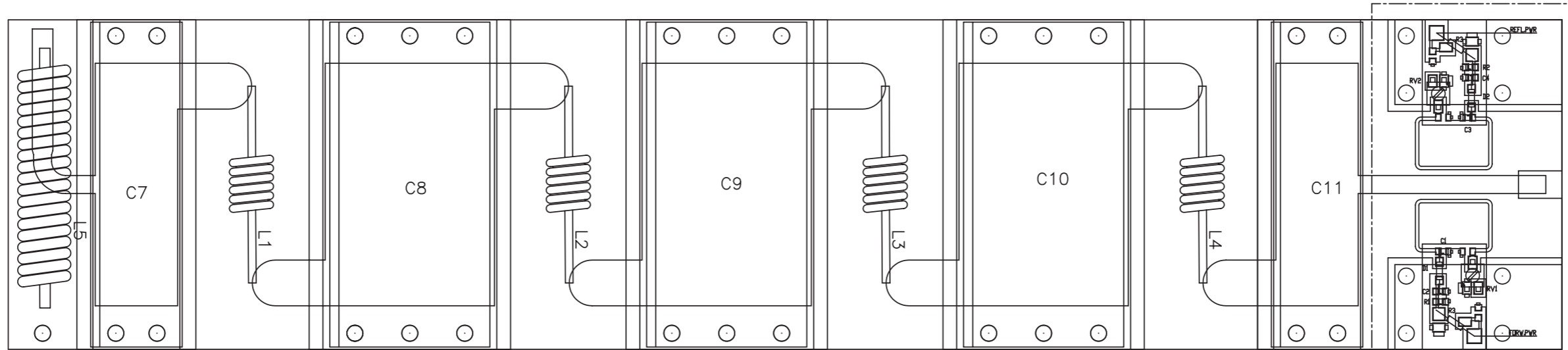
NOME PROGETTO: HCS-10	NOME PARTE: LCD Alarms Card Layout
AUTORE: GP - Rev.: J. Berti	DATA: 11/02/2004 REVISIONE: 1.0 SCALA: 1:1 SIZE: A4 PAGINA: 1 DI 1
ARCHIVIAZIONE ELETTRONICA: "CARTELLA PROGETTI" SU "UT_SRV"	CODICE PROGETTO: 014 CODICE DISEGNO: SLPROTPJ-HCL
MATERIALE: FR4-74 1.6mm Cu 35um	TRATTAMENTO: STANDARD COSTRUTTORE PROFILO: Positivo STATO: ESECUTIVO



	NOME PROGETTO: HCS-10	NOME PARTE: CPU Display Section Component Layout			
	AUTORE: GP - Rev.: J. Berti	DATA: 11/02/2004	REVISIONE: 2.0	SCALA: 1:1	SIZE: A4
ARCHIVIAZIONE ELETTRONICA: "CARTELLA PROGETTI" SU "UT_SRV"	CODICE PROGETTO: 014	CODICE DISEGNO: PROTPJ-HCLCD			
MATERIALE: FR4-74 1.6mm Cu 35um	TRATTAMENTO: STANDARD COSTRUTTORE	PROFILO: Positivo	STATO: ESECUTIVO		



Nome Progetto: PJ1000M Vers. LCD Multitensione		Pagina: 1 di 1	Size: A3
Autore: Ufficio Tecnico	Data: 29/05/03	Codice Progetto: PFPJ1KLCMLT	
Nome PC in Rete: \WUT_SRVPROGETTI	Revisione: 2.0	Nome Parte: LOW PASS FILTER + MEASUREM	
File/Cartella: MANUALPJ1000\CSLPPFPJ1KSTR\TESTR-1.DSN	Autorizzazione:	Codice: SLLPFPJ1KSTR	



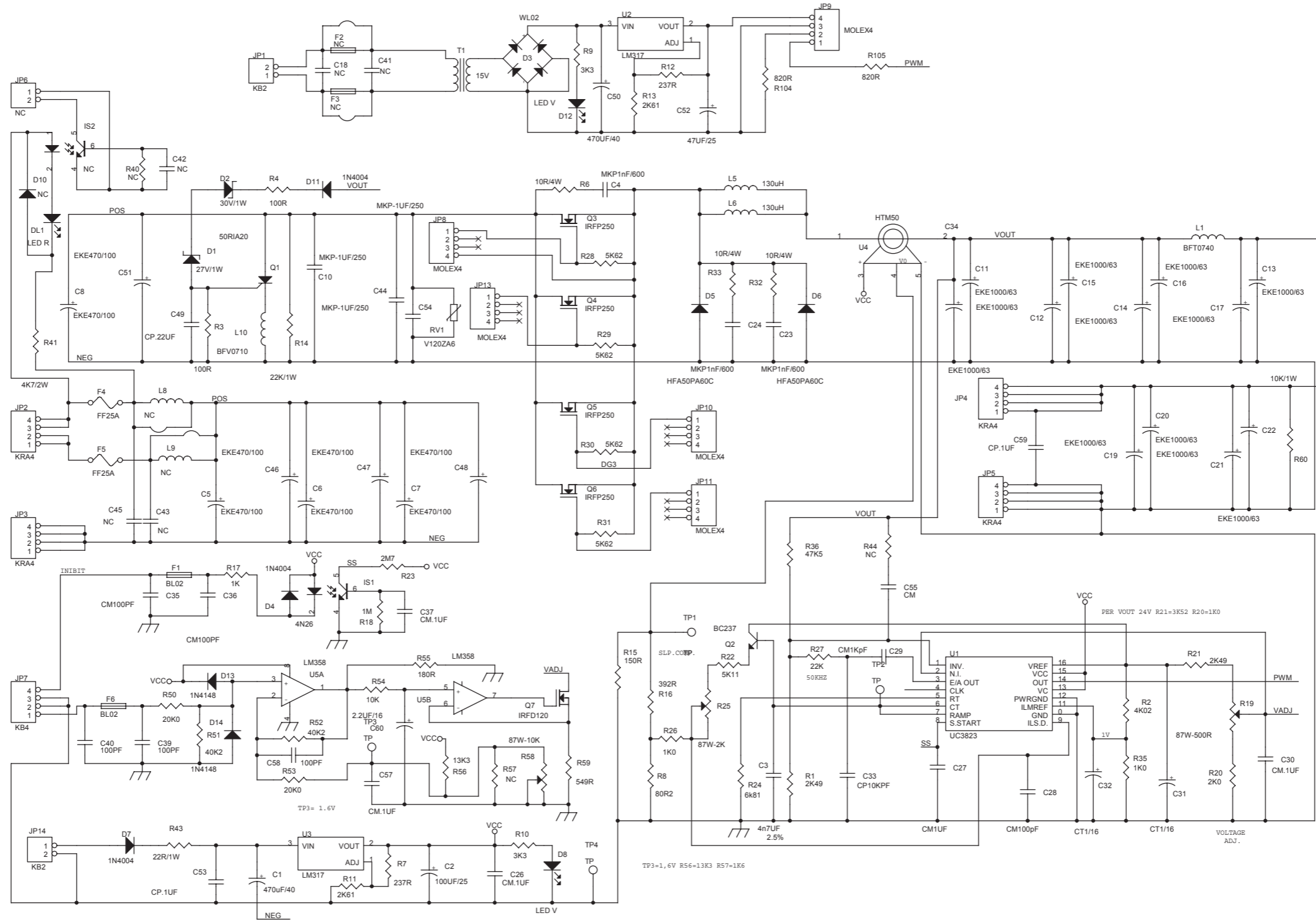
Nome Progetto: PJ1000M Vers. LCD Multitensione		Pagina: 1 di 1	Size: A3
Autore: Ufficio Tecnico	Data: 04/09/03	Codice Progetto: PFPJ1KLCDMLT	
Nome PC in Rete: \\UT_SRV\PROGETTI	Revisione: 2.2	Nome Parte: LPF PASS FILTER + DIRECTIONAL COUPLER	
File/Cartella: MANUAL\PJ1KLCD\SLPFPJ1KSTR\LPF100MHZ_2.DWG	Autorizzazione:	Codice: SLLPFPJ1KSTR	
Scala: /	Materiale: /	Trattamento: /	Profilo: /



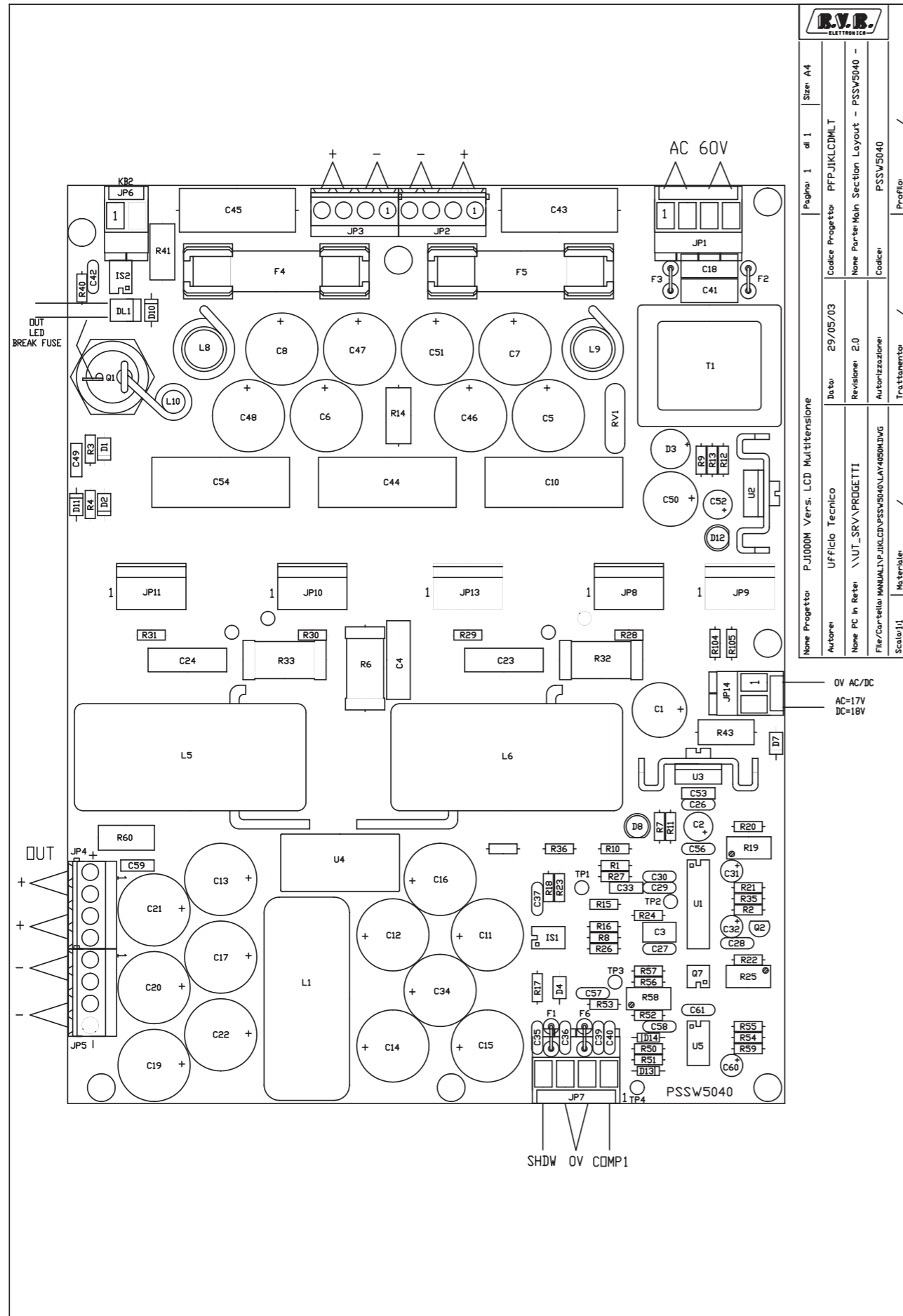
LOW PASS FILTER
SLLPFPJ1KSTR
Revision: 2.0

Item	Q.ty	Reference	Part	Note
1	1	L5	BFS10002018	
2	1	CS1	CSDRCPJ1KM	
3	2	C3,C1	47p 0805	
4	2	C4,C2	4n7 0805	
5	2	C5,C6	1nF	
6	2	C7,C11	27pFTFL	
7	3	C8,C9,C10	54pFTFL	
8	2	D2,D1	BAT83	
9	4	L1,L2,L3,L4	BBR30000219	
10	2	RV2,RV1	200R SMD	NOTA_1
11	2	R2,R1	100k 0805	
12	2	R3,R4	270R 1206	

NOTA_1 (Su PJ plug-in utilizzare R 100H SMD 0805)



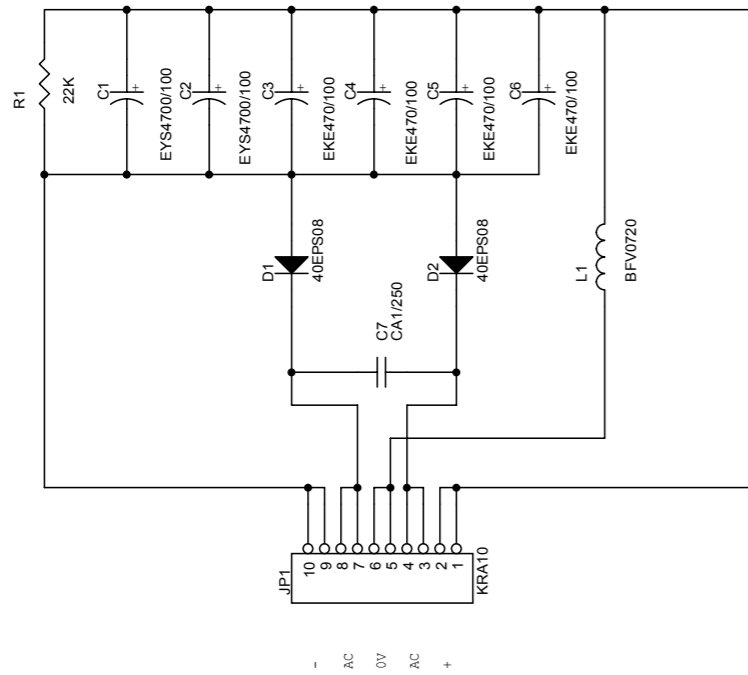
Nome Progetto:	PJ1000M Vers. LCD Multistensione	Pagina:	1 di 1	Size:	Custom
Autore:	Ufficio Tecnico	Data:	29/05/03	Codice Progetto:	PFJ1KLCOMLT
Nome PC in Rete:	WUT_SRV\PROGETTI	Revisione:	2.0	Nome Parte:	Main Section PSSW5040
File/Carta/la:	MANUAL\PJ1KLC\DPSSW5040\PSW5040.DSN	Autorizzazione:		Codice:	PSSW5040



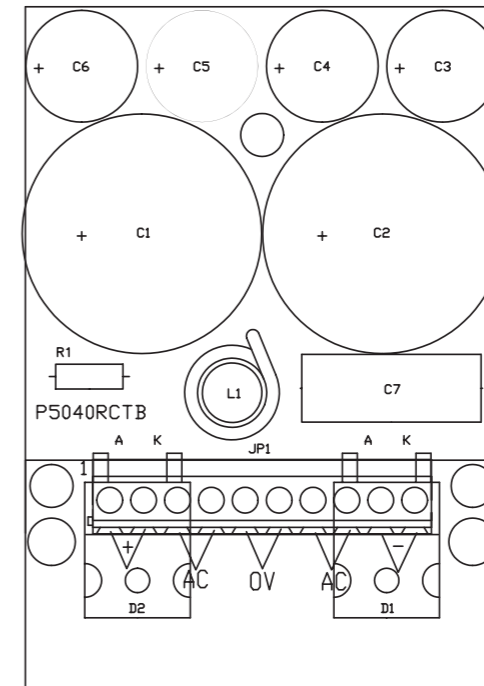
POWER SUPPLY main card
PSSW5040
Versione: 2.0

Item	Quantity	Reference	Part
1	4	Q3, Q4, Q5, Q6	IRFP250
2	2	C1, C50	470UF/40
3	1	C2	100UF/25
4	1	C3	4n7UF
5	3	C4, C23, C24	MKP1nF/600
6	8	C5, C6, C7, C8, C46, C47, C48, C51	EKE470/100
7	3	C10, C44, C54	MKP-1UF/250
8	12	C11, C12, C13, C14, C15, C16, C17, C19, C20, C21, C22, C34	EKE1000/63
9	12	IS2, F2, F3, L8, L9, D10, C18, R40, C42, R44, C45, R57	NC
10	4	C26, C30, C37, C57	CM.1UF
11	1	C27	CM1UF
12	3	C28, C35, C36	CM100PF
13	1	C29	CM1KpF
14	2	C31, C32	CT1/16
15	1	C33	CP10KPF
16	3	C39, C40, C58	100PF
17	3	JP6, C41, C43	NC
18	1	C49	CP.22UF
19	1	C52	47UF/25
20	2	C53, C59	CP.1UF
21	1	C55	CM
22	1	C60	2.2UF/16
23	1	DL1	LED R
24	1	D1	27V/1W
25	1	D2	30V/1W
26	1	D3	WL02
27	3	D4, D7, D11	1N4004
28	2	D6, D5	HFA50PA60C
29	2	D12, D8	LED V
30	2	D13, D14	1N4148
31	2	F6, F1	BL02
32	2	F4, F5	FF25A
33	1	IS1	4N26
34	2	JP1, JP14	KB2
35	4	JP2, JP3, JP4, JP5	KRA4
36	1	JP7	KB4
37	5	JP8, JP9, JP10, JP11, JP13	MOLEX4
38	1	JP12	JUMPER2
39	1	L1	BFT0740
40	2	L5, L6	130uH
41	1	L10	BFV0710
42	1	Q1	50RIA20
43	1	Q2	BC237
44	1	Q7	IRFD120
45	1	RV1	V120ZA6
46	2	R21, R1	2K49
47	1	R2	4K02
48	2	R3, R4	100R

49	3 R6,R32,R33	10R/4W
50	2 R7,R12	237R
51	1 R8	80R2
52	2 R9,R10	3K3
53	2 R11,R13	2K61
54	1 R14	22K/1W
55	1 R15	150R
56	1 R16	392R
57	1 R17	1K
58	1 R18	1M
59	1 R19	87W-500R
60	1 R20	2K0
61	1 R22	5K11
62	1 R23	2M7
63	1 R24	6k81
64	1 R25	87W-2K
65	2 R35,R26	1K0
66	1 R27	22K
67	4 R28,R29,R30,R31	5K62
68	1 R36	47K5
69	1 R41	4K7/2W
70	1 R43	22R/1W
71	2 R50,R53	20K0
72	2 R51,R52	40K2
73	1 R54	10K
74	1 R55	180R
75	1 R56	13K3
76	1 R58	87W-10K
77	1 R59	549R
78	1 R60	10K/1W
79	2 R105,R104	820R
80	4 TP1,TP2,TP3,TP4	TP
81	1 T1	15V
82	1 U1	UC3823
83	2 U3,U2	LM317
84	1 U4	HTM50
85	1 U5	LM358



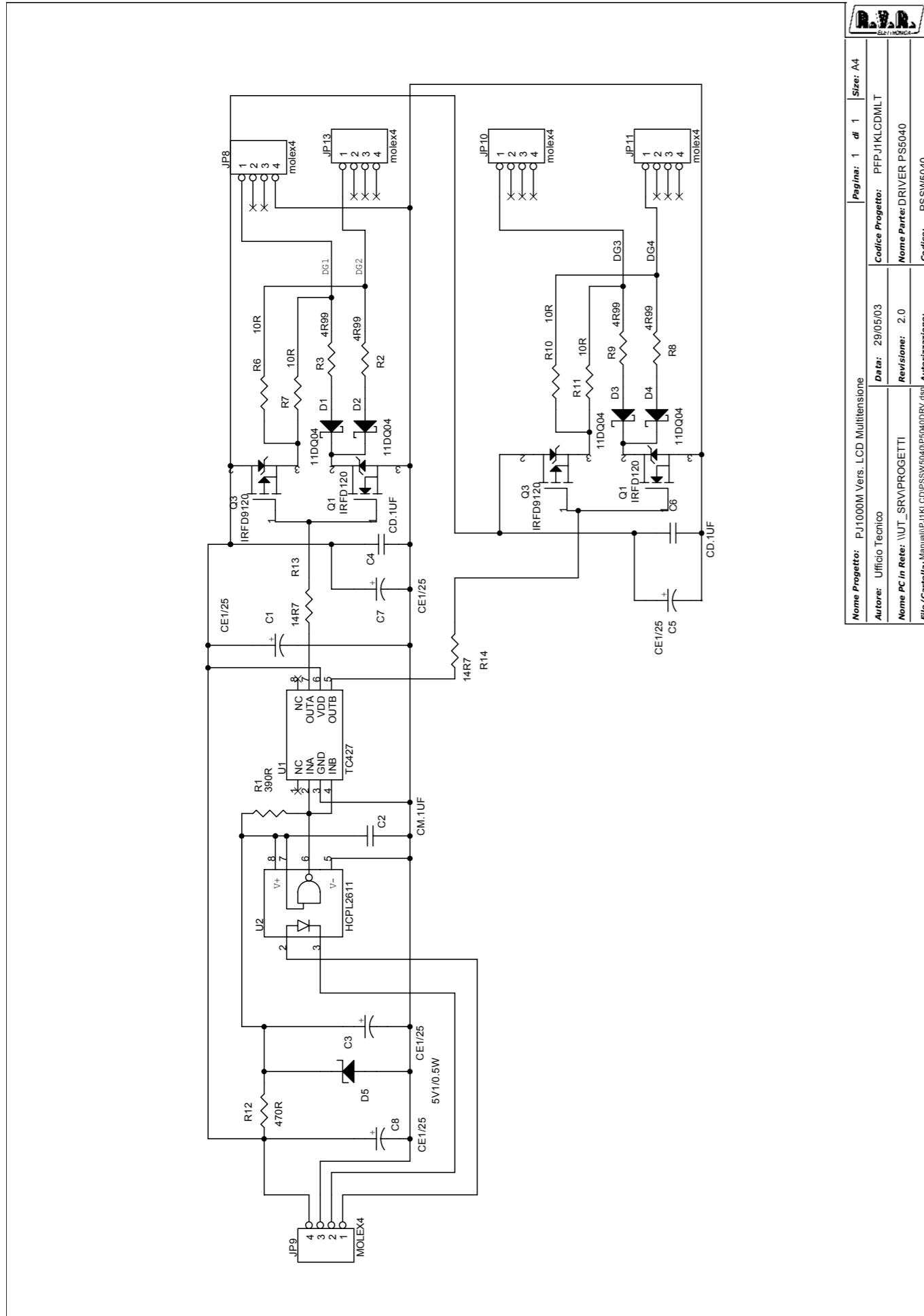
R.V.R. ELETTRONICA	
Nome Progetto: P.J1000M Vers. LCD Multistensione	Pagina: 1 di 1
Autore: Ufficio Tecnico	Steer: A4
Nome PC in Rete: \\UT_SRV\PROGETTI	Codice Progetto: PFPJIKLCDMLT
File/Cartella: Manuali\PJIKLCD\PSSW5040\P5040RCT.dsn	Nome Parte: RECTIFIER SECTION PSSW5040
Revisione: 2.0	Codice: PSSW5040
Autore: P.J1000M Vers. LCD Multistensione	



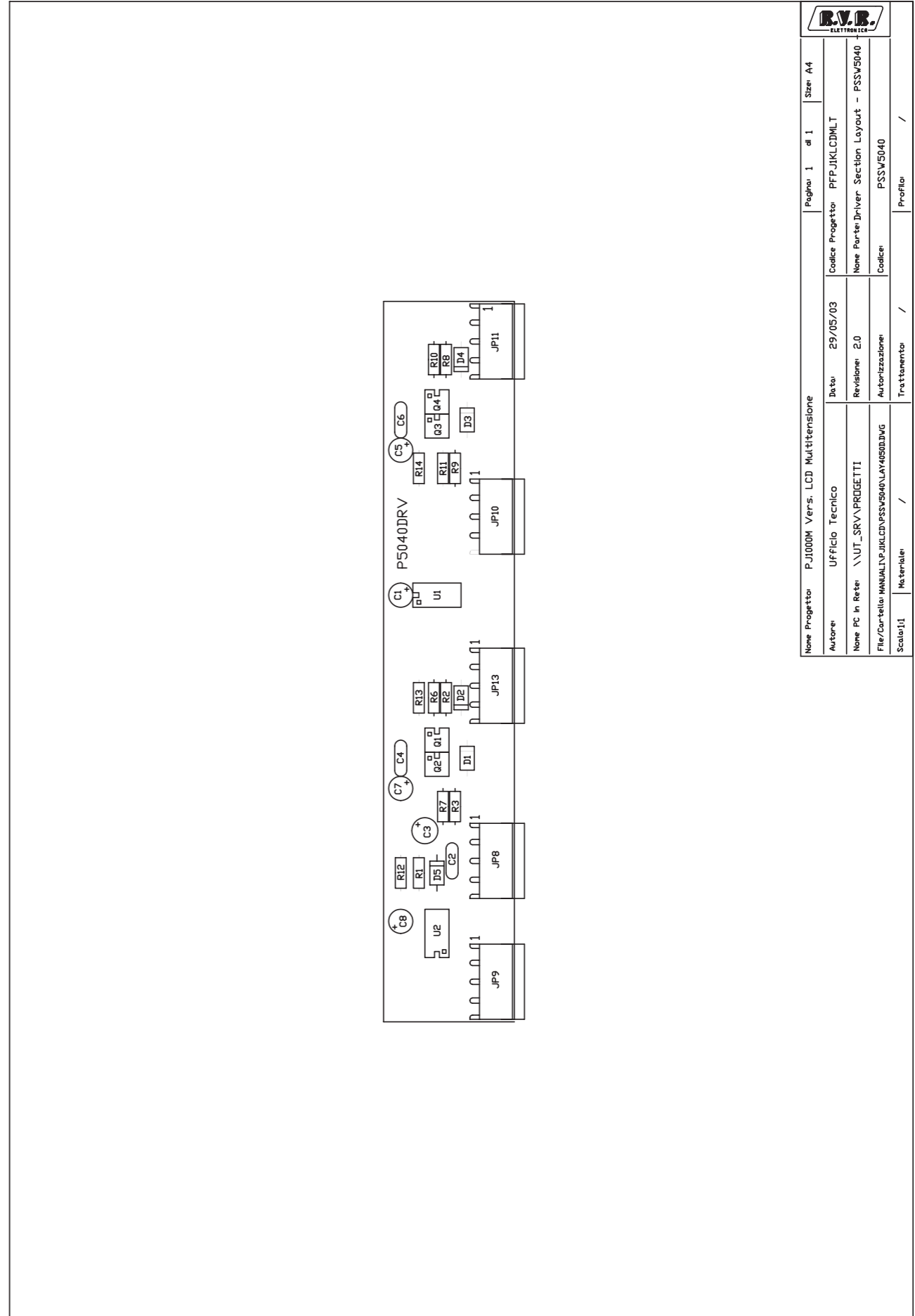
R.V.R. ELETTRONICA	
Nome Progetto: P.J1000M Vers. LCD Multistensione	
Autore: Ufficio Tecnico	Pagina: 1 di 1
Nome PC in Rete: \\UT_SRV\PROGETTI	Steer: A4
File/Cartella: Manuali\PJIKLCD\PSSW5040\P5040RCT.dsn	Codice Progetto: PFPJIKLCDMLT
Revisione: 2.0	Nome Parte: Rectifier Section Layout - PSSW5040
Autore: P.J1000M Vers. LCD Multistensione	Codice: PSSW5040
Trattamento: /	Profilo: /

RECTIFIER SECTION PSSW5040
PSSW5040
Versione: 2.0

Item	Quantity	Reference	Part
1	2	C1,C2	EYS4700/100
2	4	C3,C4,C5,C6	EKE470/100
3	1	C7	CA1/250
4	2	D1,D2	40EPS08
5	1	JP1	KRA10
6	1	L1	BFV0720
7	1	R1	22K



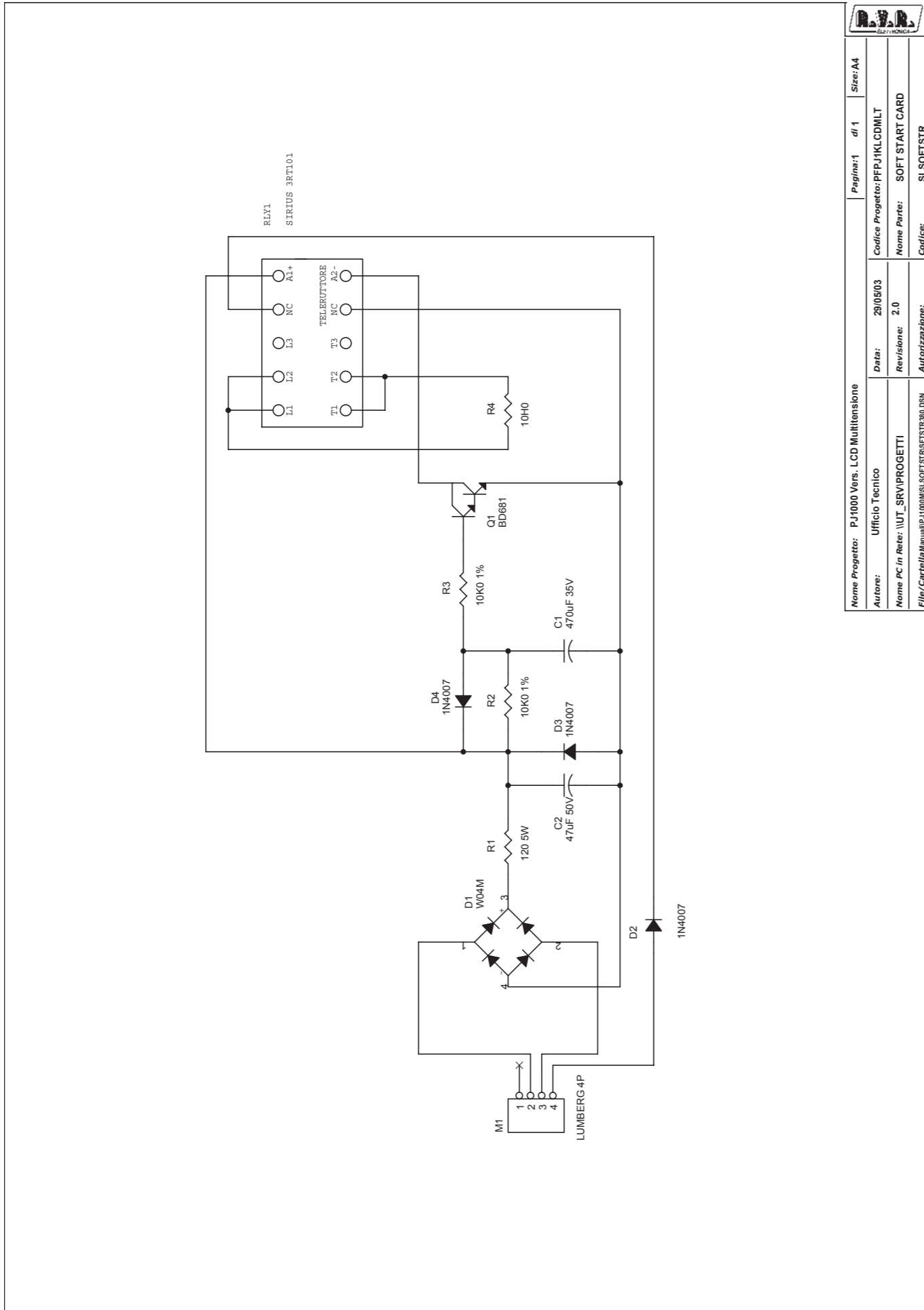
Nome Progetto: PJ1000M Vers. LCD Multilensione		Pagina: 1 di 1		Size: A4	
Autore: Ufficio Tecnico		Data: 29/05/03		Codice Progetto: PFPJKLCDMLT	
Nome PC in Rete: \\UT_SRV\PROGETTI		Revisione: 2.0		Nome Parte: DRIVER PS5040	
File/Cartella: \Manual\PJKLCD\PSSW5040\PS5040DRV.dwg		Autorizzazione:		Codice: PSSW5040	



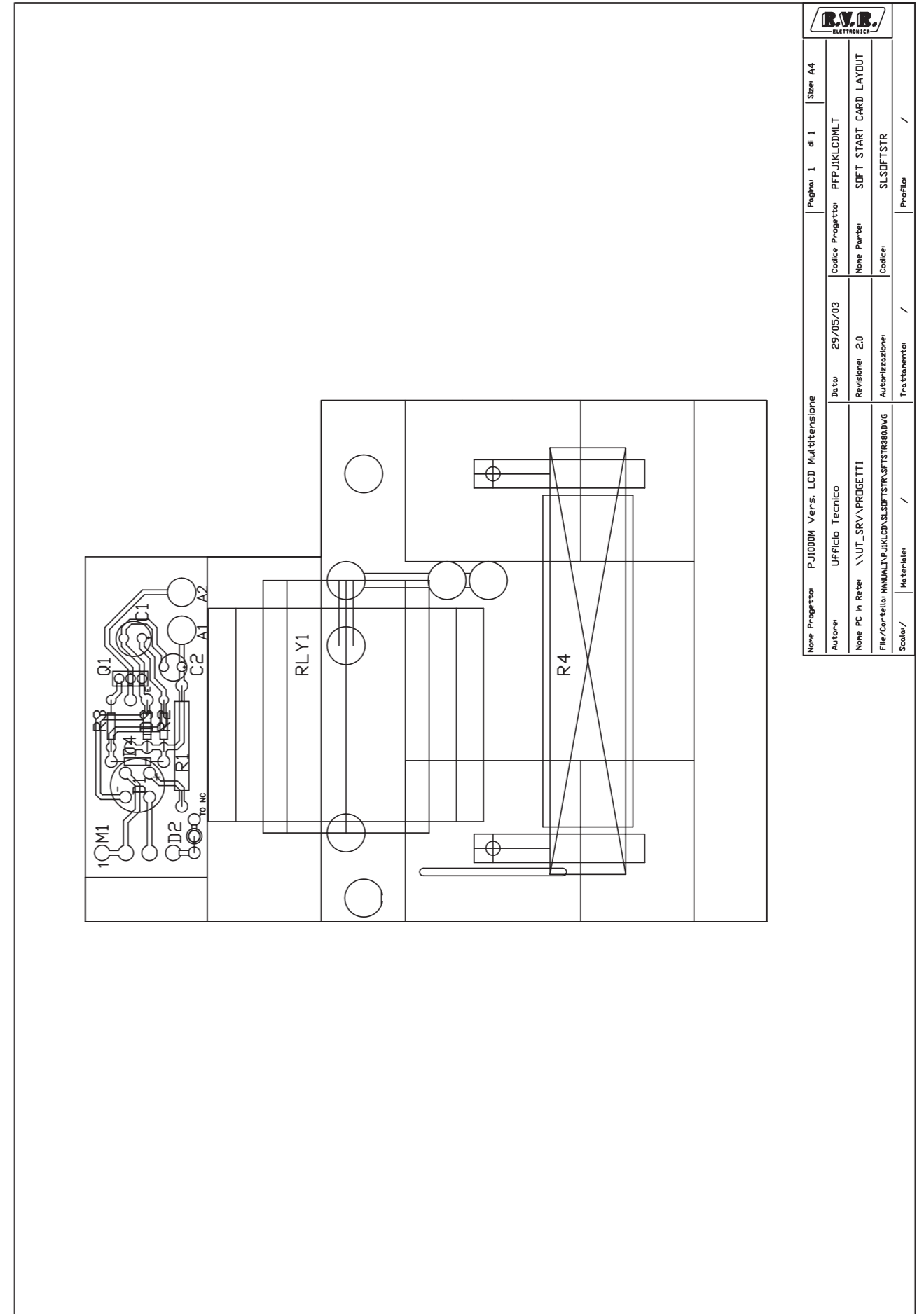
Nome Progetto: PJ1000M Vers. LCD Multilensione		Pagina: 1 di 1		Size: A4	
Autore: Ufficio Tecnico		Data: 29/05/03		Codice Progetto: PFPJKLCDMLT	
Nome PC in Rete: \\UT_SRV\PROGETTI		Revisione: 2.0		Nome Parte: Driver Section Layout - PSSW5040	
File/Cartella: \Manual\PJKLCD\PSSW5040\A46500.DWG		Autorizzazione:		Codice: PSSW5040	
Scala: 1:1		Materiale: /		Trattamento: /	
				Profilo: /	

DRIVER PSSW5040
PSSW5040
Versione: 2.0

Item	Quantity	Reference	Part
1	4	C1,C5,C7,C8	CE1/25
2	1	C2	CM.1UF
3	1	C3	47UF/25
4	2	C4,C6	CD.1UF
5	4	D1,D2,D3,D4	11DQ04
6	1	D5	5V1/0.5W
7	5	JP8,JP9,JP10,JP11,JP13	MOLEX4
8	2	Q1,Q4	IRFD120
9	2	Q2,Q3	IRFD9120
10	1	R1	390R
11	4	R2,R3,R8,R9	4R99
12	4	R6,R7,R10,R11	10R
13	1	R12	470R
14	2	R13,R14	14R7
15	1	U1	TC427
16	1	U2	HCPL2611



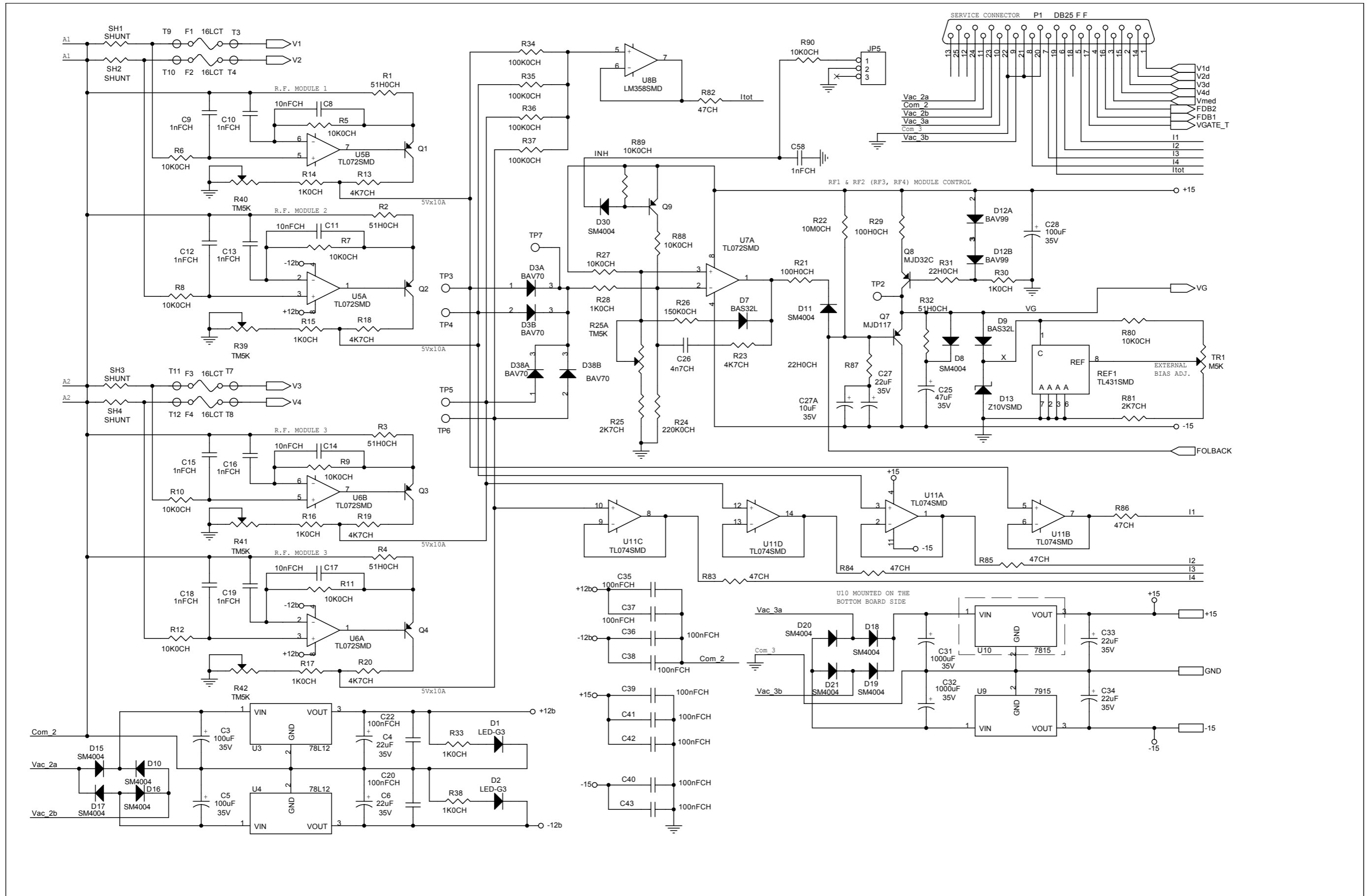
Nome Progetto: PJ1000M Vers. LCD Multitensione		Pagina: 1	di 1	Str: A4
Autore: Ufficio Tecnico		Data: 29/05/03	Codice Progetto: PFPJKLCDMLT	
Nome PC in Rete: \\UT_SRV\PROGETTI		Revisione: 2.0	Nome Parte: SOFT START CARD	
File/Cartella/Manual/PJ1000MSLSOFTSTR/SOFTSTR300.DSN		Autore: PFPJKLCDMLT	Codice: SLSOFTSTR	



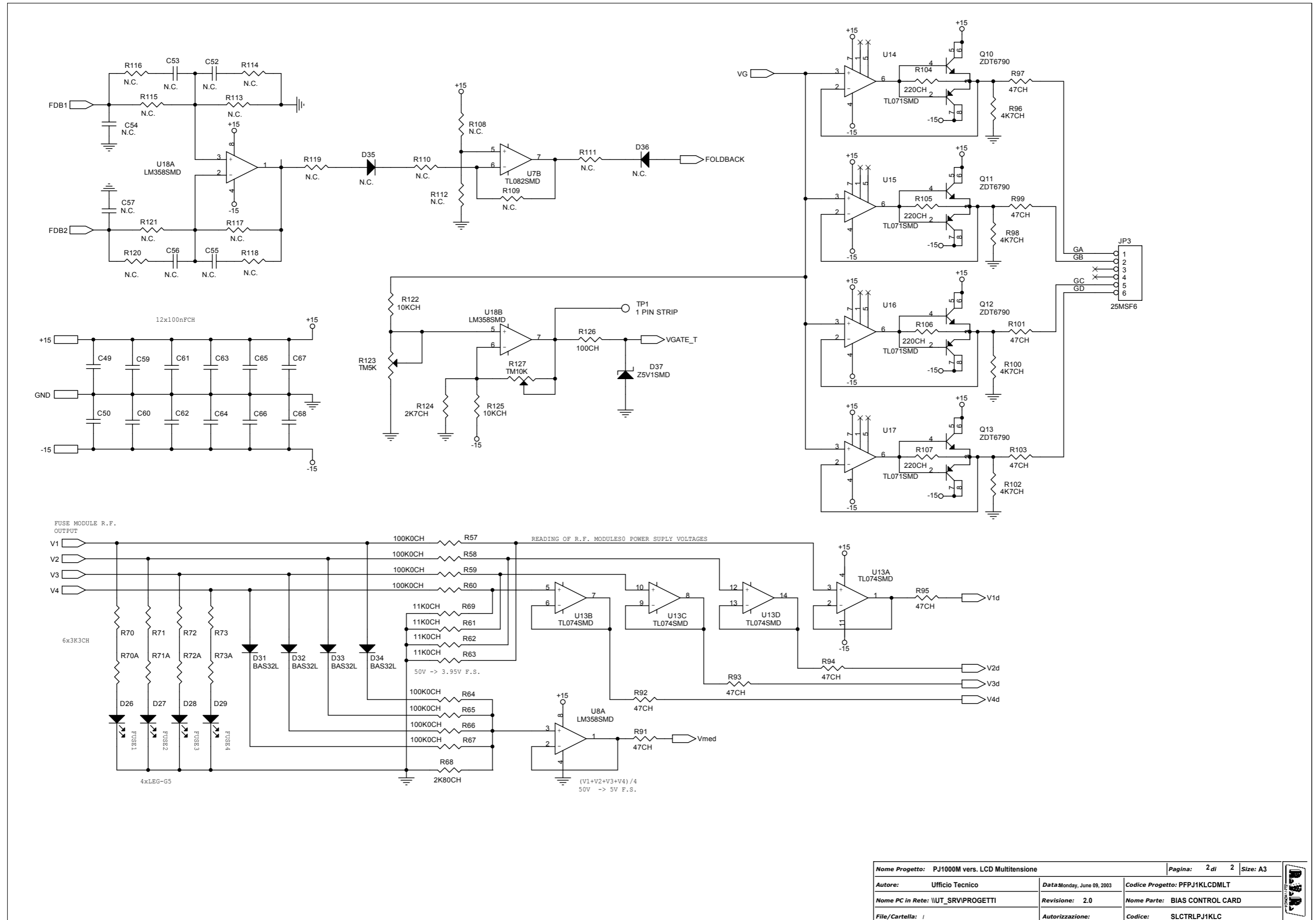
Nome Progetto: PJ1000M Vers. LCD Multitensione		Pagina: 1	di 1	Str: A4
Autore: Ufficio Tecnico		Data: 29/05/03	Codice Progetto: PFPJKLCDMLT	
Nome PC in Rete: \\UT_SRV\PROGETTI		Revisione: 2.0	Nome Parte: SOFT START CARD LAYOUT	
File/Cartella: MANUAL/PJ1000MSLSOFTSTR/SOFTSTR300.DWG		Autore: PFPJKLCDMLT	Codice: SLSOFTSTR	
Scala: /	Materiale: /	Titolante: /	Profilo: /	

SOFT-START CARD
SLSOFTSTR
Version:2.0

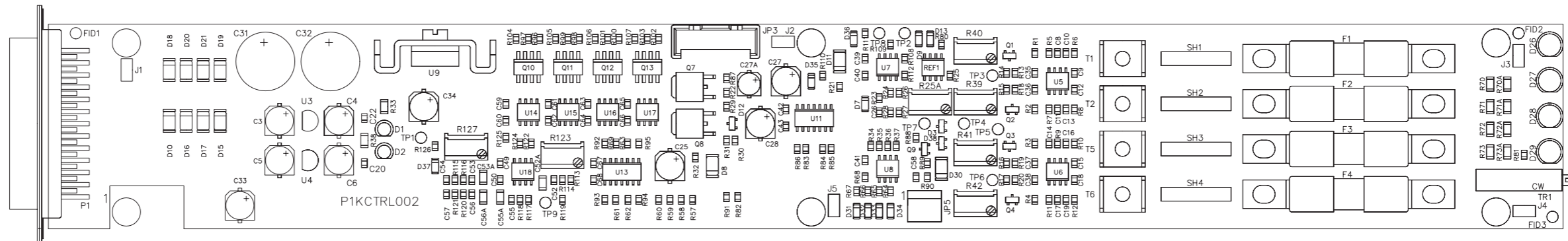
Item	Q.ty	Reference	Part
1	3	D2, D3, D4	1N4007
2	2	R2, R3	10K0 1%
3	1	R4	10H0
4	1	C1	470uF 35V
5	1	C2	47uF 50V
6	1	D1	W04M
7	1	M1	LUMBERG 4P
8	1	Q1	BD681
9	1	R1	120 5W
10	1	RLY1	SIRIUS 3RT101



Nome Progetto: PJ1000M vers. LCD Multitensione		Pagina: 1 di 2		Size: A3
Autore: Ufficio Tecnico	Data: Monday, June 09, 2003	Codice Progetto: PFPJ1KLCMLT		
Nome PC in Rete: \UT_SRVPROGETTI	Revisione: 2.0	Nome Parte: BIAS CONTROL CARD		
File/Cartella: /	Autorizzazione:	Codice: SLCTRLPJ1KLC		



Nome Progetto: PJ1000M vers. LCD Multitensione		Pagina: 2 di 2		Size: A3
Autore: Ufficio Tecnico	Data: Monday, June 09, 2003	Codice Progetto: PFPJ1KLCMLT		
Nome PC in Rete: \UT_SRV\PROGETTI	Revisione: 2.0	Nome Parte: BIAS CONTROL CARD		
File/Cartella: /	Autorizzazione:	Codice: SLCTRLPJ1KLC		

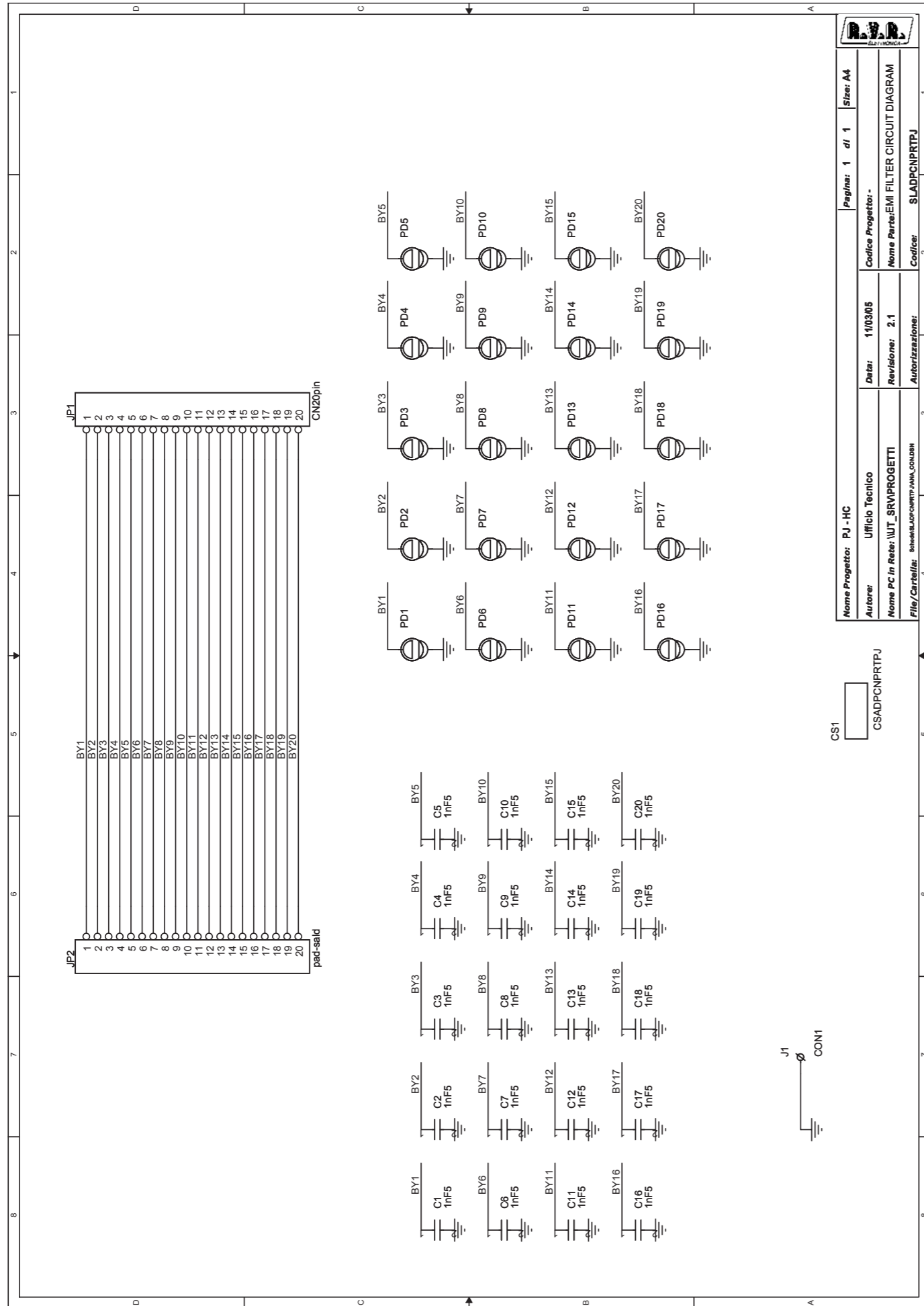


Nome Progetto: PJ1000M Vers. LCD Multitensione		Pagina: 1 di 1	Size: A3
Autore: Ufficio Tecnico	Data: 29/05/03	Codice Progetto: PFPJ1KLCMLT	
Nome PC in Rete: \\UT_SRV\PROGETTI	Revisione: 2.0	Nome Parte: BIAS CONTROL CARD LAYOUT	
File/Cartella: MANUALI\PJ1KLCD\SLCTRLPJ1KLC\LAYBIAS2.DWG	Autorizzazione:	Codice: SLCTRLPJ1KLC	
Scala: /	Materiale: /	Trattamento: /	

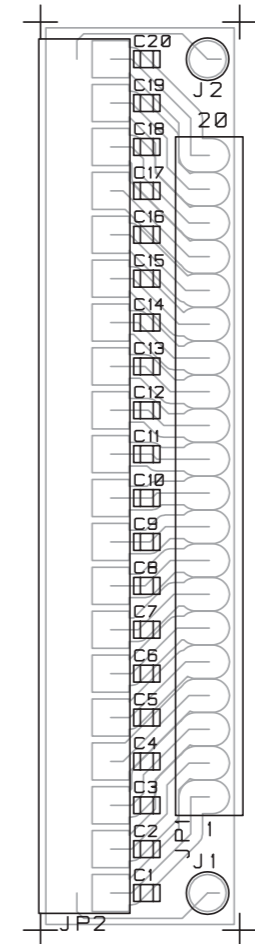
BIAS CONTROL CARD
SLCTRLPJ1KLC
Revision:2.0

Item	Quantity	Reference	Part	DESCRIPTION
1	2	R31,R87	22H0CH	CHIP RESISTOR 1%
2	14	R82,R83,R84,R85,R86,R91, R92,R93,R94,R95,R97,R99, R101,R103	47CH	CHIP RESISTOR 1/4W
3	5	R1,R2,R3,R4,R32	51H0CH	CHIP RESISTOR 1%
4	2	R21,R29	100H0CH	CHIP RESISTOR 1%
5	1	R126	100CH	CHIP RESISTOR
6	4	R104,R105,R106,R107	220CH	CHIP RESISTOR
7	6	R14,R15,R16,R17,R28,R30,	1K0CH	CHIP RESISTOR 1%
8	3	R25,R81,R124	2K74CH	CHIP RESISTOR 1%
9	1	R68	2K80CH	CHIP RESISTOR 1%
10	8	R70A,R70,R71A,R71,R72A, R72,R73A,R73	3K32CH	CHIP RESISTOR 1%
11	4	R96,R98,R100,R102	4K7CH	CHIP RESISTOR
12	5	R13,R18,R19,R20,R23	4K75CH	CHIP RESISTOR 1%
13	13	R5,R6,R7,R8,R9,R10,R11, R12,R27,R80,R88,R89,R90	10K0CH	CHIP RESISTOR 1%
14	2	R122,R125	10KCH	CHIP RESISTOR
15	4	R61,R62,R63,R69	11K0CH	CHIP RESISTOR 1%
16	12	R34,R35,R36,R37,R57,R58, R59,R60,R64,R65,R66,R67	100K0CH	CHIP RESISTOR
17	1	R26	150K0CH	CHIP RESISTOR 1%
18	1	R24	221K0CH	CHIP RESISTOR 1%
19	1	R22	10M0CH	CHIP RESISTOR 1%
20	1	TR1	M5K	TRIMMER MULTIGIRI
21	6	R25A,R39,R40,R41,R42, R123	TM5K	TRIMMER MUTLIGIRI
22	1	R127	TM10K	TRIMMER MULTIGIRI
23	9	C9,C10,C12,C13,C15,C16, C18,C19,C58	1NFCH	CERAMIC CHIP CAPACITOR
24	1	C26	4N7CH	CERAMIC CHIP CAPACITOR
25	4	C8,C11,C14,C17	10NFCH	CERAMIC CHIP CAPACITOR
26	23	C20,C22,C35,C36,C37,C38, C39,C40,C41,C42,C43,C49, C50,C59,C60,C61,C62,C63, C64,C65,C66,C67,C68	100NFCH	CERAMIC CHIP CAPACITOR
27	1	C27A	10UF	ELECTROLYTIC CAPACITOR
28	5	C4,C6,C27,C33,C34	22UF	ELECTROLYTIC CAPACITOR
29	1	C25	47UF	ELECTROLYTIC CAPACITOR
30	3	C3,C5,C28	100UF	ELECTROLYTIC CAPACITOR
31	2	C31,C32	1000UF	ELECTROLYTIC CAPACITOR
32	9	TP1,TP2,TP3,TP4,TP5,TP6, TP7,TP8,TP9	1 PIN STRIP	STRIP M 1 PIN
33	1	JP5	3 PIN STRIP	STRIP M P 2.54 3 PIN
34	1	JP3	25MSF6	MINIMODUL CONNECTOR 2.5MM 6P
35	4	SH1,SH2,SH3,SH4	SHUNT	SHUNT CURRENT
36	1	P1	DB25 F F	CONN. F 25 FILTRATO MURATA
37	6	D7,D9,D31,D32,D33,D34BAS32L	CHIP	SILICON DIODE
38	2	D3,D38	BAV70	DUAL COMM. SWITH. CAT. DIODE
39	1	D12	BAV99	DUAL SERIES. SWITH. DIODE
40	11	D8,D10,D11,D15,D16,D17, D18,D19,D20,D21,D30	SM4004	SILICON DIODE 400V SMD
41	2	D1,D2	LED-G3	GREEN LED DIODE 3mm

42	4	D26,D27,D28,D29	LED-G5	GREEN LED DIODE
43	1	D37	Z5V1SMD	ZENER DIODE 5.1V 0.4W SMD
44	1	D13	Z10VSMD	ZENER DIODE 10V 0.4W SMD
45	1	U3	78L12	POS. STABILIZER 100mA
46	1	U4	79L12	NEG. STABILIZER 100mA
47	1	U10		7815 POS. STABILIZER 1A
48	1	U9		7915 NEG. STABILIZER 1A
49	1	REF1	TL431SMD	VOLT. PREC. REFER. SMD
50	5	Q1,Q2,Q3,Q4,Q9	MMBT5401LT1	PNP HIGH VOLT. TRANSISTOR
51	1	Q7	MJD117	PNP BIPOLAR POWER TRANS.
52	1	Q8	MJD32C	PNP BIPOLAR POWER TRANS.
53	4	Q10,Q11,Q12,Q13	ZDT6790	COMPLEM. MED. PWR HG. TRANS.
54	2	U8,U18	LM358SMD	DUOBLE OP. AMP. SMD
55	3	U5,U6,U7	TL082SMD	DOUBLE OP. AMP. SMD
56	4	U14,U15,U16,U17	TL071SMD	SINGLE OP. AMP.
57	2	U11,U13	TL084SMD	QUAD OP. AMP. SMD
58	12	T1,T2,T3,T4,T5,T6,T7,T8, T9,T10,T11,T12	TORRETTA	TORRETTA ESAGONALE
59	22	D35,D36,C52,C53,C54,C55, C56,C57,R108,R109,R110, R111,R112,R113,R114,R115, R116,R117,R118,R119,R120, R121	N.C.	NOT CONNECTED
60	2	R33,R38	1K0CH	CHIP RESISTOR
61	4	F1,F2,F3,F4	16LCT	BOLT-IN MOUNTED FUSES 16LCT



R.V.R. ELETTRONICA	
Nome Progettore: PJ - HC	Pagina: 1 di 1 Size: A4
Autore: Ufficio Tecnico	Codice Progettore: 110305
Nome PC In Rete: \UT_SRV\PROGETTI	Nome Parte/EMI FILTER CIRCUIT DIAGRAM
File/Cartella: sbaas\ascomp\jank\conzn	Revisione: 2.1
	Autore/Revisione: SLADPCCNPRTPJ



R.V.R. ELETTRONICA	
Nome Progetto: HC3 LCD	Pagina: 1 di 1 Size: A4
Autore: Ufficio Tecnico	Codice Progettore: PFC3/LCD
Nome PC In Rete: \UT_SRV\PROGETTI	Nome Parte: EMI FILTER COMPONENT LAYOUT
File/Cartella: MANUALE\HC3\SLADPCCNPRTPJ\EMIDVG	Revisione: 2.0
Scala: /	Autore/Revisione: SLADPCCNPRTPJ
	Titolare /

EMI FILTER CIRCUIT DIAGRAM Revised: Friday, March 11, 2005

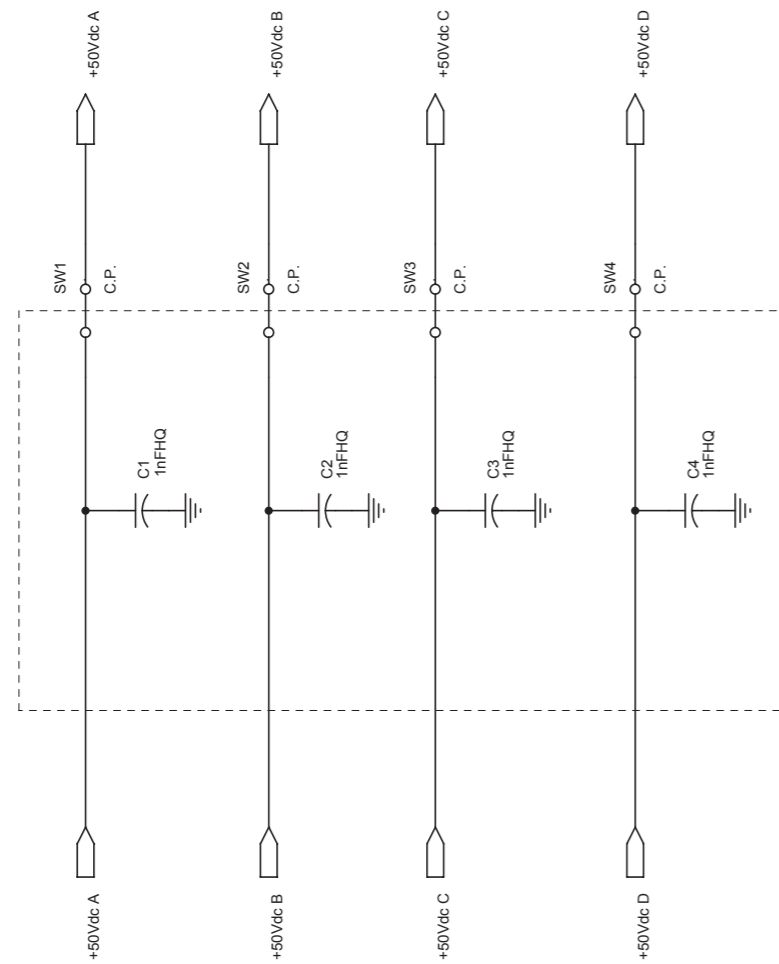
SLADPCNPRTPJ Revision: 2.1

PJ - HC

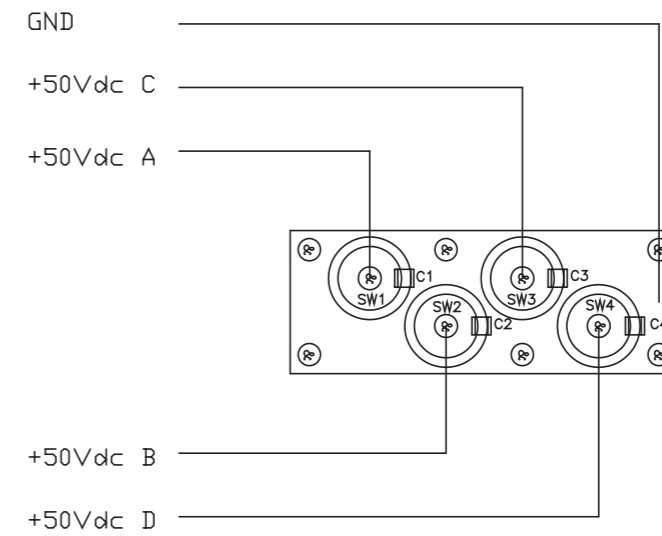
-

Ufficio Tecnico

Item	Quantity	Reference	Part	Description
1	1	CS1	CSADPCNPRTPJ	Circuito stampato
2	20	C1, C2, C3, C4, C5, C6, C7, C8, C9, C10, C11, C12, C13, C14, C15, C16, C17, C18, C19, C20	1nF5	Cond. ceramico 0805 X7R
3	1	JP1	CN20pin	Conn. strippato femm. 20pin tornita
4	1	JP2	pad-sald	Pad a saldare
5	1	J1	CON1	Pad a saldare
6	20	PD1, PD2, PD3, PD4, PD5, PD6, PD7, PD8, PD9, PD10, PD11, PD12, PD13, PD14, PD15,		Pad a saldare



Nome Progetto: HC5-10		Pagina: 1 di 1		Size: A4
Autore: Ufficio Tecnico		Data: 29/10/03	Codice Progetto: 014	
Nome PC in Rete: \\\UT_SRV\PROGETTI		Revisione: 2.0	Nome Parte: SCHEDA PASSA PARETE	
File/ Cartella: \CS-10\SLFILPJ1KM\CSFILPS.dsn		Autorizzazione: SLFILPJ1KM		



R.V.R. ELETTRONICA	NOME PROGETTO: HC5-10	NOME PARTE: WALK-THROUGH BOARD			
	AUTORE: GP - Rev.: J. Berti	DATA: 11/02/2004	REVISIONE: 1.0	SCALA: 1:1	SIZE: A4
ARCHIVIAZIONE ELETTRONICA: "CARTELLA PROGETTI" SU "UT_SRV"		CODICE PROGETTO: 014	CODICE DISEGNO: SLFILPJ1KM		
MATERIALE: FR4-74 1.6mm Cu 35um	TRATTAMENTO: STANDARD COSTRUTTORE	PROFILO: Positivo	STATO: ESECUTIVO		

SCHEDA PASSA PARETE Revised: Oct 30, 2003
SLFILPJ1KM Revision: 2.0
HC5-10

Item	Quantity	Reference	Part
1	4	C1, C2, C3, C4	1nFHQ
2	4	SW1, SW2, SW3, SW4	C.P.