



PJ502C-LCD PJ702C-LCD

TECHNICAL ANNEX
VOLUME 2



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 PJ502/702LCD. L'appendice è composta dalle seguenti sezioni:

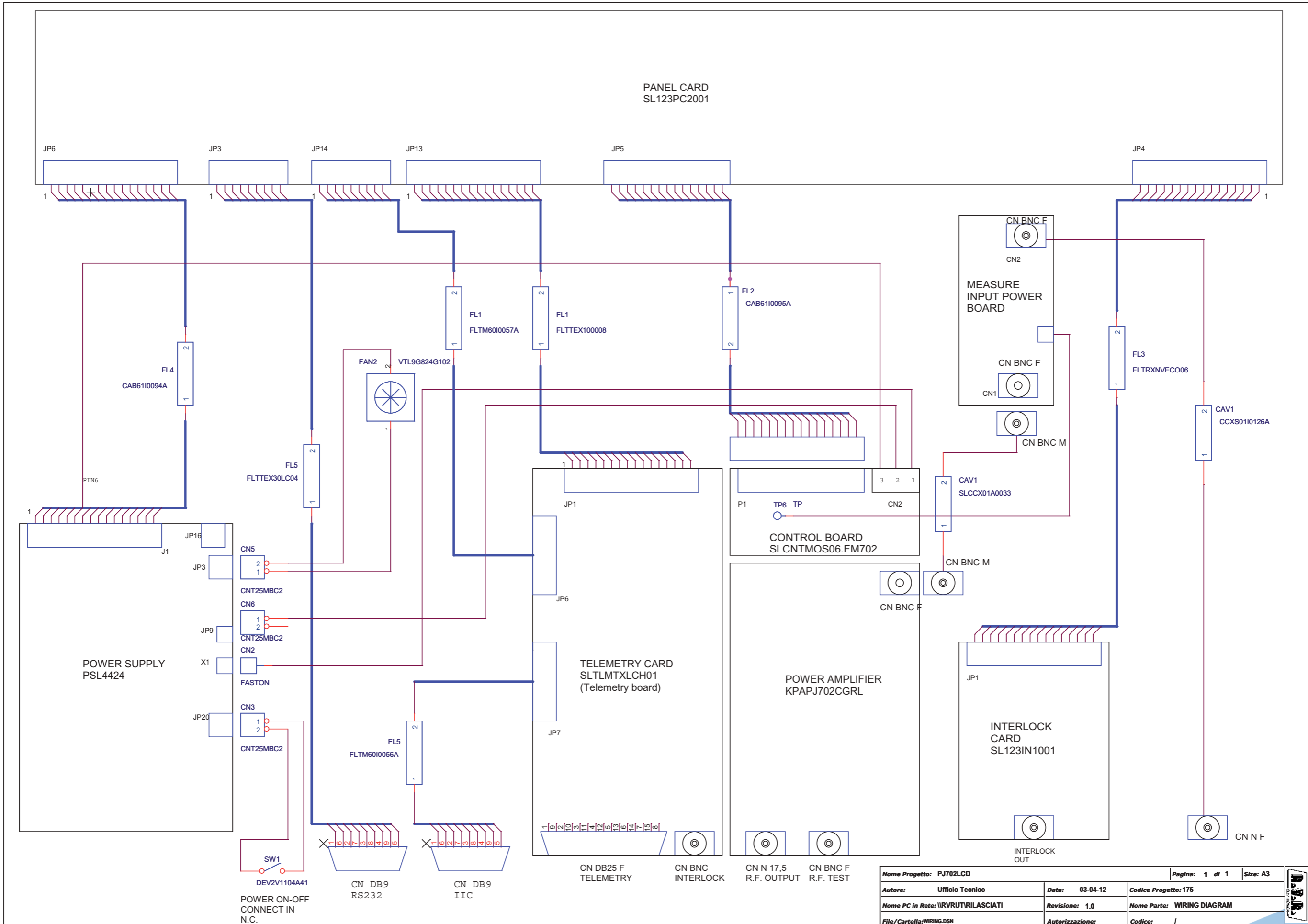
This part of the manual contains the technical details about the different boards of the PJ502/702LCD. This appendix is composed of the following sections:

Description	PJ502C-LCD/PJ702C-LCD RVR Code	Vers.Pages	
Wiring Diagram	KCABPJ702CGRL	1.0	1
Interlock Output Interface	SL123IN1001	1.0	3
Control Card	SLCNTMOS06.FM702	1.0	5
Power Amplifier	SL237RF1001	1.1	8
Input Power Measure Card	SL036MT1001	1.0	11
Low Pass Filter Card	SL175LP2001	1.2	13
Panel Card	SL123PC2001	1.0	15
Power Supply	PSL4424	1.0	18
Telemetry Card	SLTLMTXLCH01	1.0	28

Document History

Date	Version	Reason	Code	Editor
30/03/2012	1.0	First Release	/	J.H. Berti

SL123IN1001



Nome Progetto: PJ702LCD		Pagina: 1 di 1	Size: A3
Autore: Ufficio Tecnico	Data: 03-04-12	Codice Progetto: 175	
Nome PC in Rete: \VRVTR\ILASCIATI	Revisione: 1.0	Nome Parte: WIRING DIAGRAM	
File/Cartella: WIRING.DSN	Autorizzazione:	Codice: /	

SL123IN1001

WIRING DIAGRAM Revised: Tuesday, April 03, 2012

/ Revision: 1.0

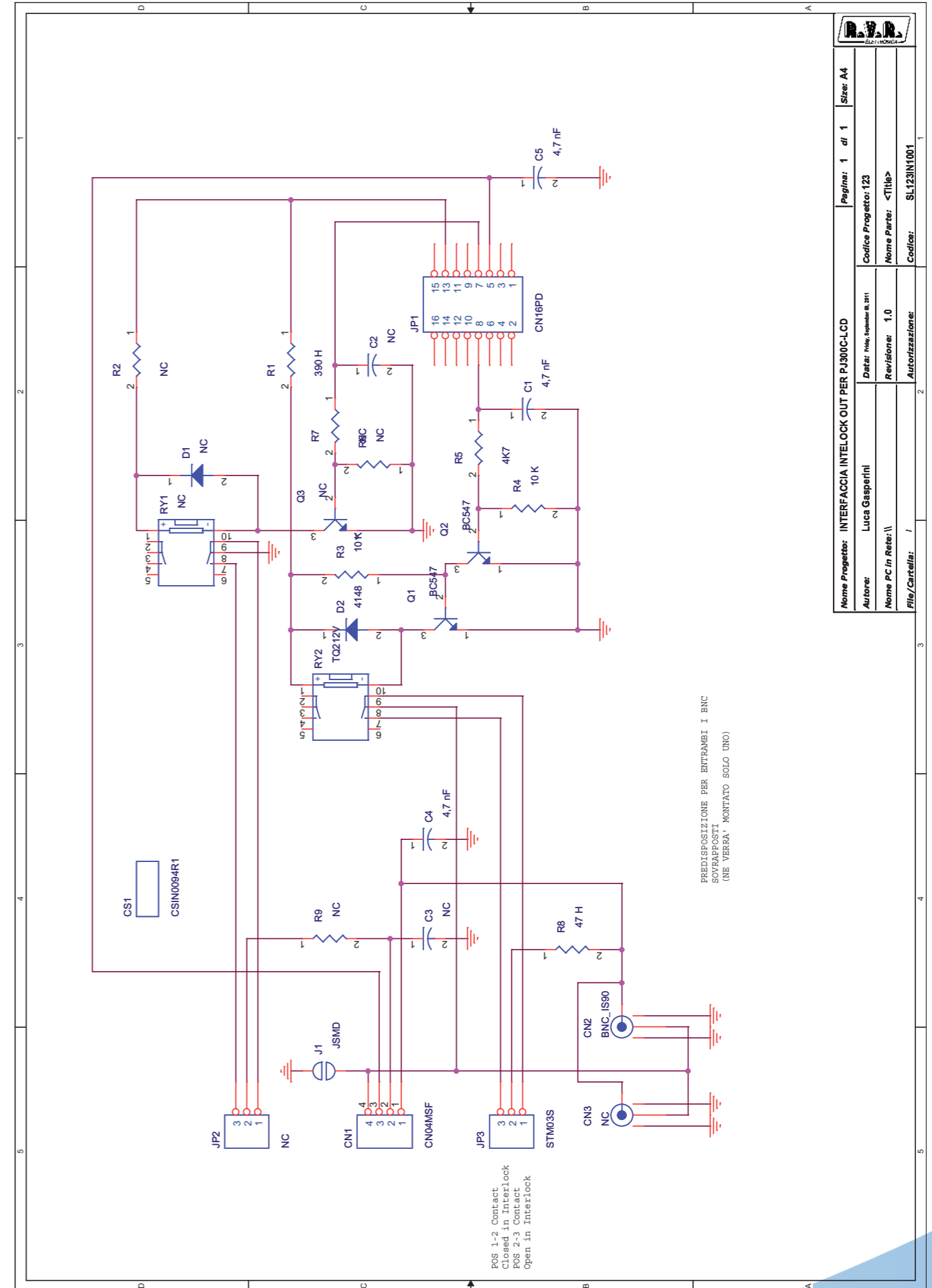
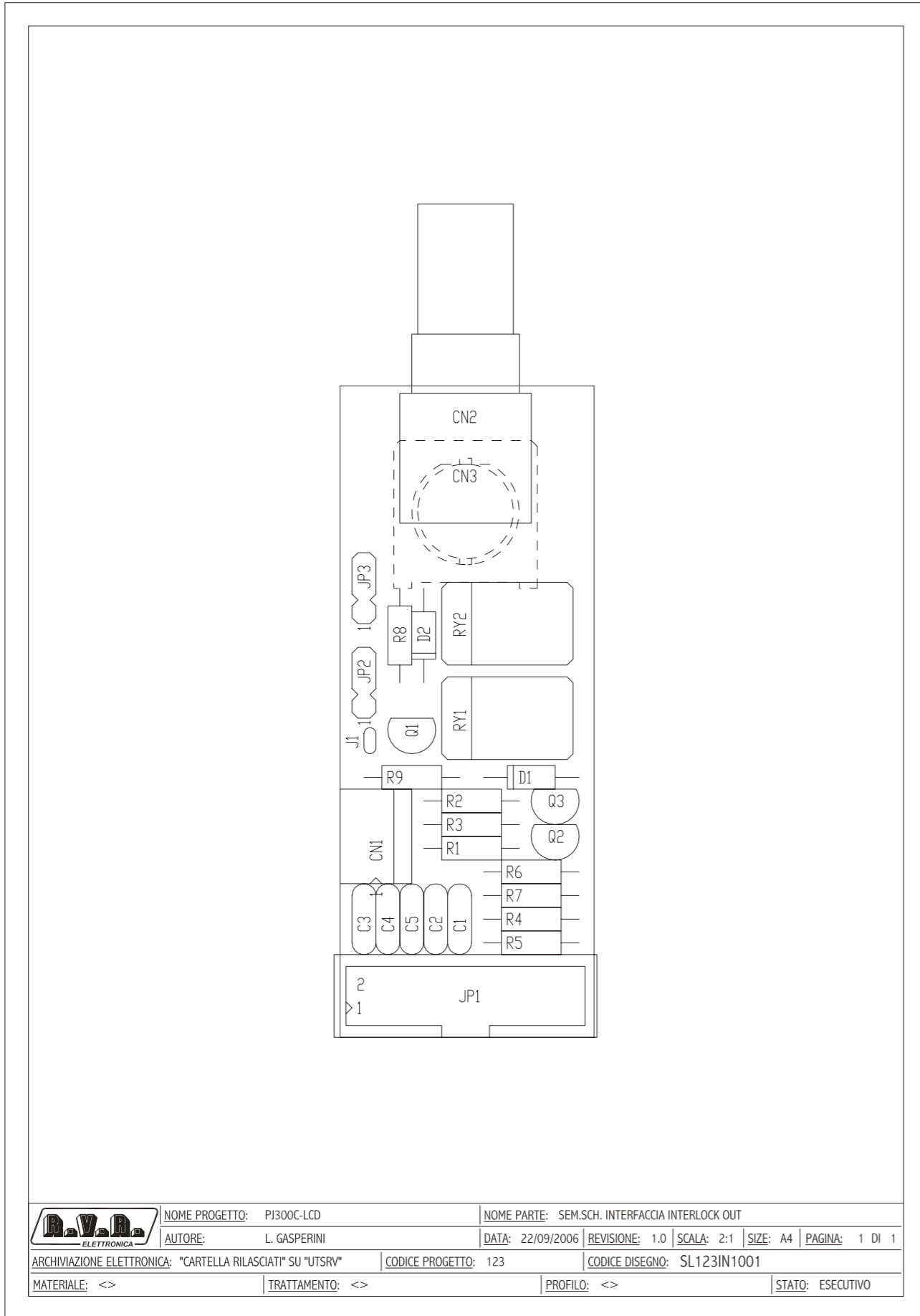
PJ702LCD

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Ufficio Tecnico

Item	Quantity	Reference	Part
1	1	CAV1	CCXS01I0126A
2	1	CAV1	SLCCX01A0033
3	1	CN2	FASTON
4	3	CN3, CN5, CN6	CNT25MBC2
5	1	FAN2	VTL9G824G102
6	1	FL1	FLTTEX100008
7	1	FL1	FLTM60I0057A
8	1	FL2	CAB61I0095A
9	1	FL3	FLTRXNVECO06
10	1	FL4	CAB61I0094A
11	1	FL5	FLTTEX30LC04
12	1	FL5	FLTM60I0056A
13	1	SW1	DEV2V1104A41
14	1	TP6	TP

SL123IN1001



SL123IN1001

Scheda Interfaccia Interlock Out Revised: Thursday, July 27, 2006

SL123IN1001 Revision: 1.0

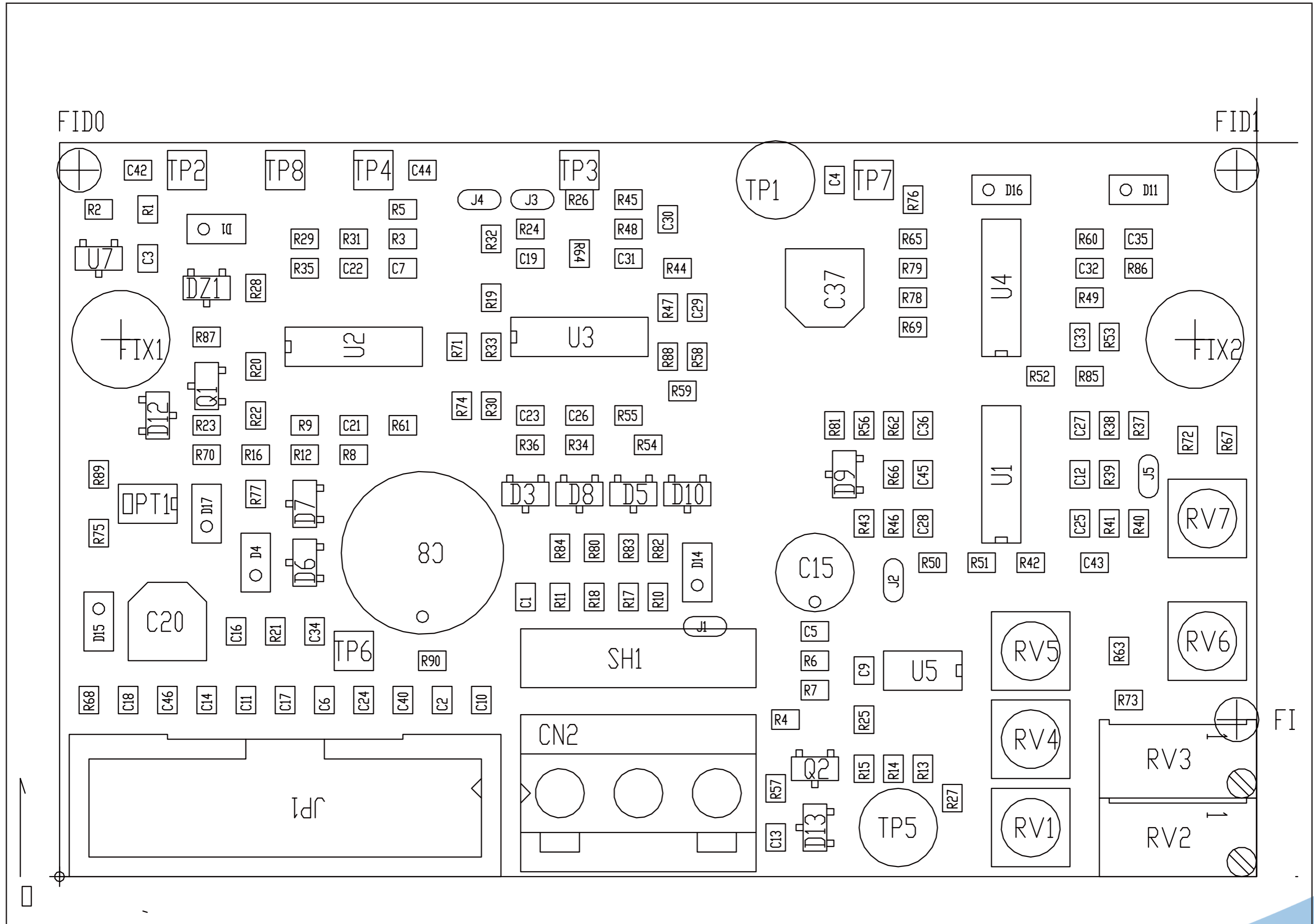
INTERFACCIA INTELOCK OUT PER PJ300C-LCD

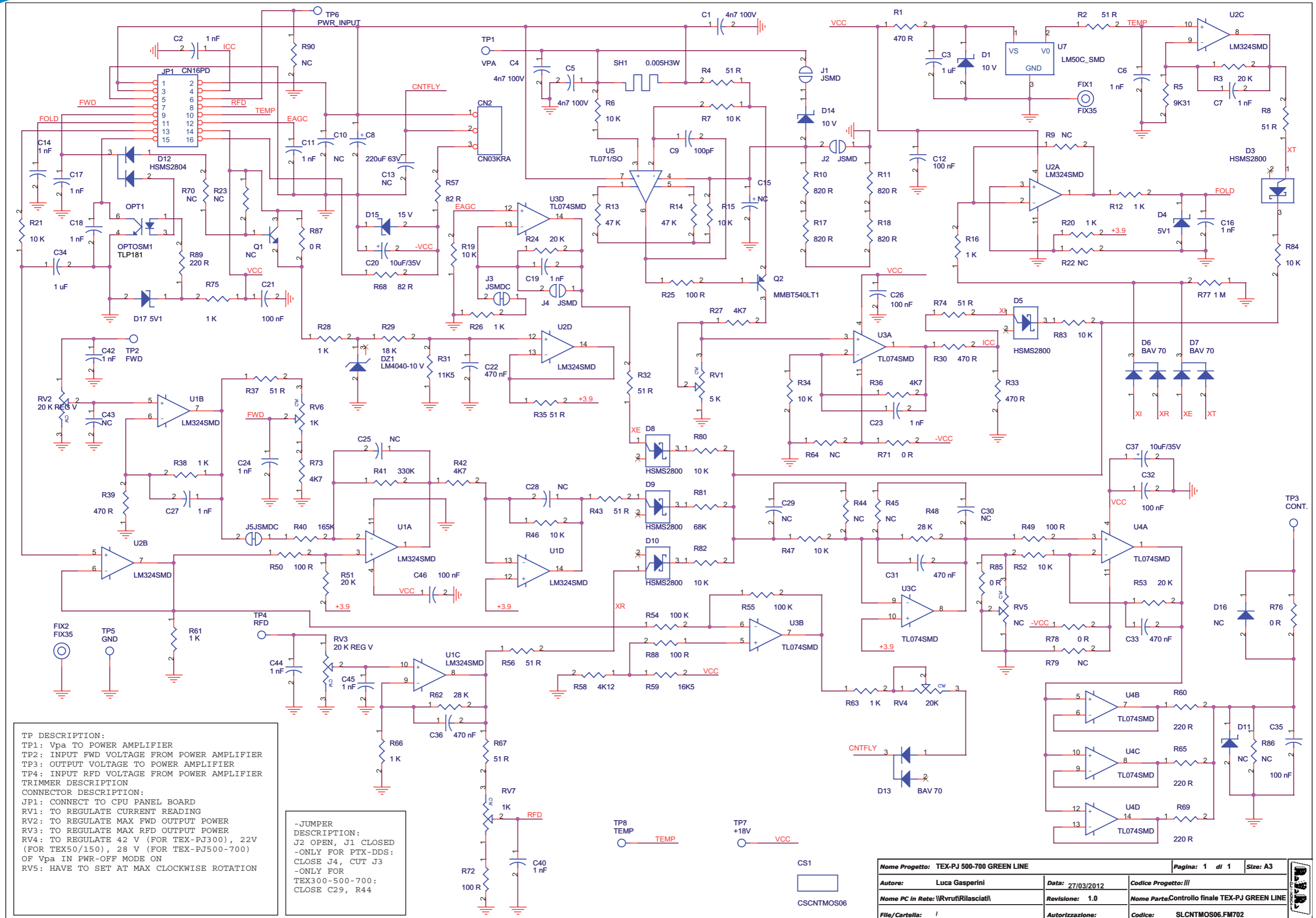
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Luca Gasperini

Item	Quantity	Reference	Part	{DESCRIPTION}
1	1	CN1	CN04MSF	STRIP M 4 PIN CNTSTM40SDA
2	1	CN2	BNC_IS90	BNC 90 CNTBNCFCSMA
3	11	RY1, D1, R2, JP2, C2, Q3, CN3, C3, R6, R7, R9	NC	
4	1	CS1	CSIN0094R1	CS CSIN0094R1
5	3	C1, C4, C5	4,7 nF	COND. CERAMICO CKM472KC600P
6	1	D2	4148	DIODO SILICIO DIS1N4148
7	1	JP1	CN16PD	CONN. 16 FLAT CS CNTMCS16A
8	1	JP3	STM03S	STRIP M 3 PIN CNTSTM40SDA
9	1	J1	J5MD	
10	2	Q1, Q2	BC547	NPN TRANSISTOR TRNBC547
11	1	RY2	TQ212V	RELAY 12 V 2VV RLD2V12V05AM
12	1	R1	390 H	RES 1/4 W RSM1/4F0390H
13	2	R3, R4	10 K	RES 1/4 W RSM1/4F0010K
14	1	R5	4K7	RES 1/4 W RSM1/4F004K7
15	1	R8	47 H	RES 1/4 W RSM1/4F0047H

SLCNTMOS06.FM702





TP DESCRIPTION:
 TP1: Vpa TO POWER AMPLIFIER
 TP2: INPUT FWD VOLTAGE FROM POWER AMPLIFIER
 TP3: OUTPUT VOLTAGE TO POWER AMPLIFIER
 TP4: INPUT RFD VOLTAGE FROM POWER AMPLIFIER
 TRIMMER DESCRIPTION:
 CONNECTOR DESCRIPTION:
 JP1: CONNECT TO CPU PANEL BOARD
 RV1: TO REGULATE CURRENT READING
 RV2: TO REGULATE MAX FWD OUTPUT POWER
 RV3: TO REGULATE MAX RFD OUTPUT POWER
 RV4: TO REGULATE 42 V (FOR TEX-PJ300), 22V (FOR TEX50/150), 28 V (FOR TEX-PJ500-700) OF Vpa IN PWR-OFF MODE ON
 RV5: HAVE TO SET AT MAX CLOCKWISE ROTATION

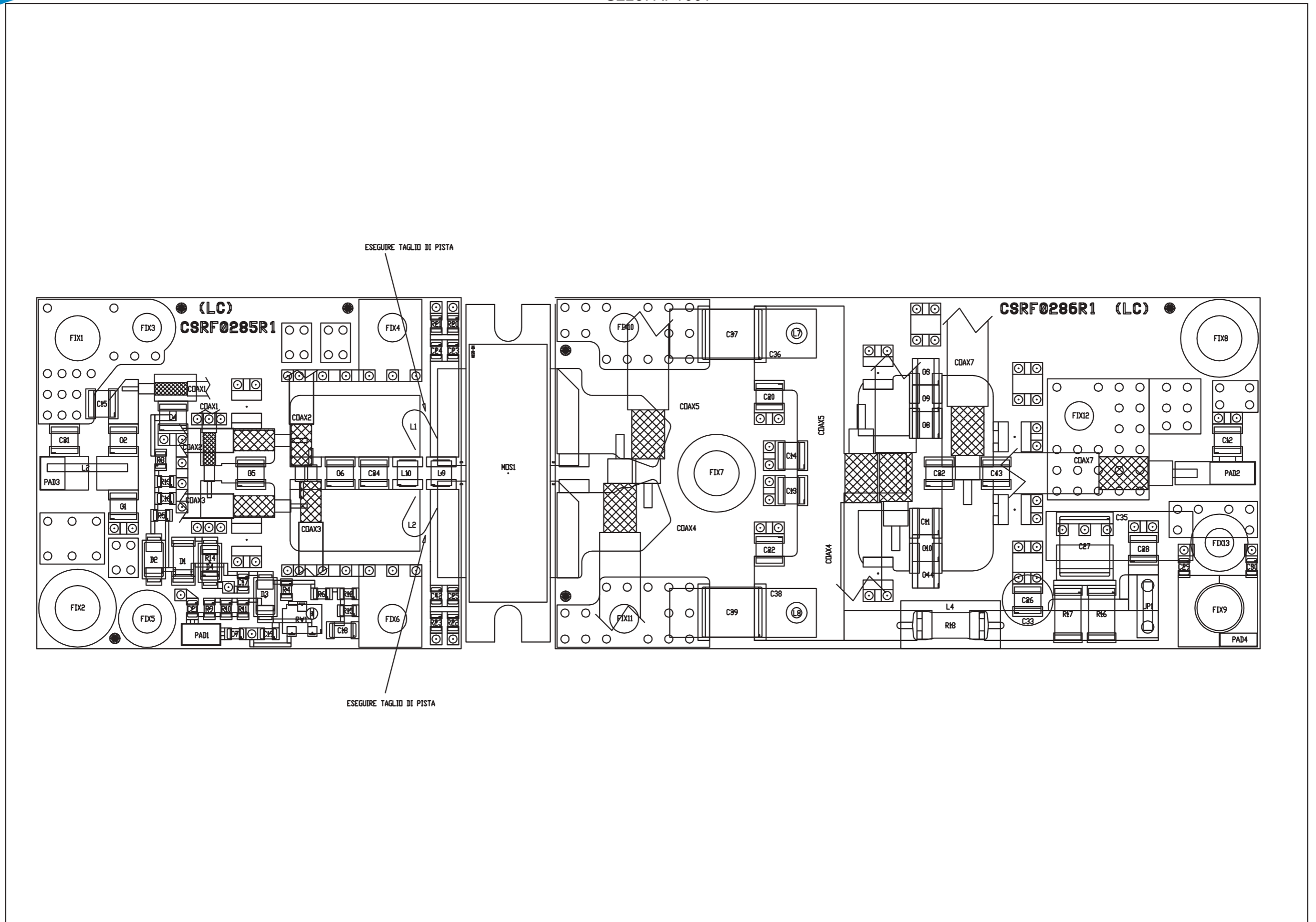
-JUMPER DESCRIPTION:
 J2 OPEN, J1 CLOSED
 -ONLY FOR PTX-DDS:
 CLOSE J4, CUT J3
 -ONLY FOR TEX300-500-700:
 CLOSE C29, R44

Nome Progetto: TEX-PJ 500-700 GREEN LINE	Pagina: 1 di 1	Size: A3
Autore: Luca Gasperini	Data: 27/03/2012	Codice Progetto: III
Nome PC in Rete: \\Rvru\Relasciati	Revisione: 1.0	Nome Parte/Controllo finale TEX-PJ GREEN LINE
File/Cartella: I	Autorizzazione:	Codice: SLCNTMOS06.FM702

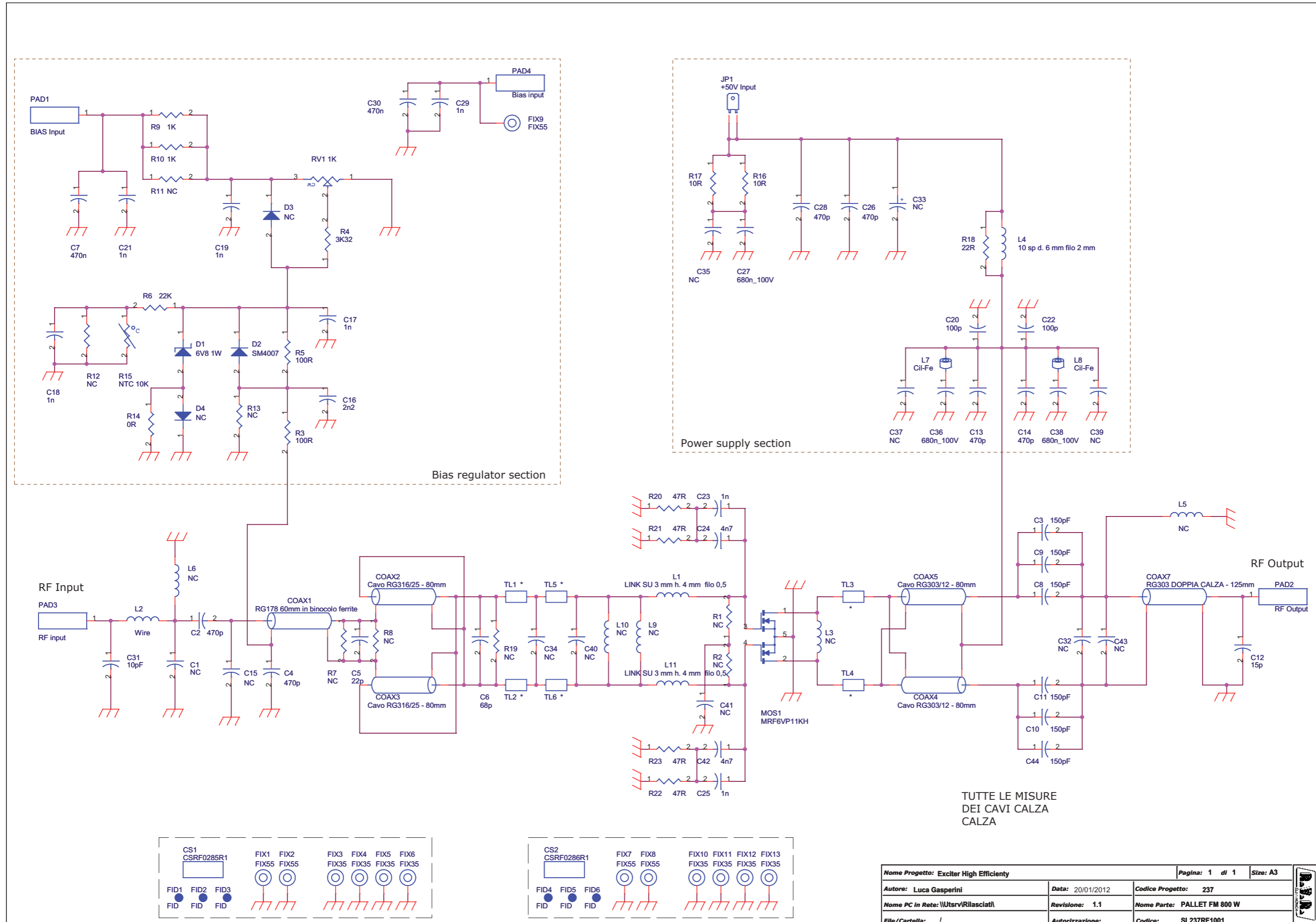
SLCNTMOS06.FM702

Controllo finale MOS TEX-PJ 2U Revised: 27/03/2012
 SLCNTMOS06.FM702 Revision: 1.0
 TEX-PJ 500-700 LCD 2U
 Luca Gasperini

Item	Quantity	Reference	Part	Description
1	1	CN2	CN03KRA	Conn. tipo KRA a 3 poli
2	1	CS1	CSCNTMOS06	Circuito stampato
3	3	C1, C4, C5	4n7 100V	Cond. SMD 0805
4	16	C2, C6, C7, C11, C14, C16, C17, C18, C19, C23, C24, C27, C40, C42, C44, C45	1 nF	Cond. SMD 0805
5	2	C3, C34	1 uF	Cond. SMD 0805
6	1	C8	220uF 63V	Cond. Elettr. Dia 10 P5.08
7	1	C9	100pF	Cond. SMD 0805
8	7	C10, C13, C25, C28, C29, C30, C43	NC	Cond. SMD 0805
9	6	C12, C21, C26, C32, C35, C46	100 nF	Cond. SMD 0805
10	1	C15	NC	Cond. Elettr. Dia 5 P2.54
11	2	C20, C37	10uF/35V	
12	4	C22, C31, C33, C36	470 nF	Cond. SMD 0805
13	1	DZ1	LM4040-10 V	Diodi Zener SMD SOT23
14	2	D1, D14	10 V	MINIMELF SMD Zener Diode
15	5	D3, D5, D8, D9, D10	HSMS2800	Diodo Shottky SOT23
16	2	D4, D17	5V1	MINIMELF SMD Zener Diode
17	3	D6, D7, D13	BAV 70	Doppio Diodo SMD SOT23
18	1	D11	NC	MINIMELF SMD Zener Diode
19	1	D12	HSMS2804	Doppio Diodo SMD SOT23
20	1	D15	15 V	MINIMELF SMD Zener Diode
21	1	D16	NC	MINIMELF SMD Diode
22	2	FIX1, FIX2	FIX35	Foro fissaggio 3.5mm
23	1	JP1	CN16PD	Connettore 16 poli Flat cs
24	2	J1, J2	J5MD	Pad SMD a saldare
25	2	J3, J5	J5MDC	
26	1	J4	J5MD	
27	1	OPT1	OPTOSM1	Optoisolatore SMD SO6
28	1	Q1	NC	Trans. NPN SOT23
29	1	Q2	MMBT540LT1	Trans. PNP SOT23
30	1	RV1	5 K	Trimmer SMD
31	2	RV2, RV3	20 K REG V	Trimmer Rg V 3296W
32	1	RV4	20K	Trimmer SMD
33	1	RV5	NC	Trimmer SMD
34	2	RV6, RV7	1K	Trimmer SMD
35	4	R1, R30, R33, R39	470 R	Res. SMD 0805
36	10	R2, R4, R8, R32, R35, R37, R43, R56, R67, R74	51 R	Res. SMD 0805
37	4	R3, R24, R51, R53	20 K	Res. SMD 0805
38	1	R5	9K31	Res. SMD 0805
39	13	R6, R7, R15, R19, R21, R34, R46, R47, R52, R80, R82, R83, R84	10 K	Res. SMD 0805
40	9	R9, R22, R23, R44, R45, R64, R70, R79, R86	NC	Res. SMD 0805
41	4	R10, R11, R17, R18	820 R	Res. SMD 0805
42	10	R12, R16, R20, R26, R28, R38, R61, R63, R66, R75	1 K	Res. SMD 0805
43	2	R13, R14	47 K	Res. SMD 0805
44	5	R25, R49, R50, R72, R88	100 R	Res. SMD 0805
45	4	R27, R36, R42, R73	4K7	Res. SMD 0805
46	1	R29	18 K	Res. SMD 0805
47	1	R31	11K5	Res. SMD 0805
48	1	R40	165K	Res. SMD 0805
49	1	R41	330K	Res. SMD 0805
50	2	R48, R62	28 K	Res. SMD 0805
51	2	R54, R55	100 K	Res. SMD 0805
52	2	R57, R68	82 R	Res. SMD 0805
53	1	R58	4K12	Res. SMD 0805
54	4	R60, R65, R69, R89	220 R	Res. SMD 0805
55	5	R71, R76, R78, R85, R87	0 R	Res. SMD 0805
56	1	R77	1 M	Res. SMD 0805
57	1	R90	NC	
58	1	SH1	0.005H3W	Shunt passo 15.2mm fori 2mm
59	1	TP1	VPA	Foro dia. 2mm
60	1	TP2	FPD	Foro dia. 1mm
61	1	TP3	CONT.	Foro dia. 1mm
62	1	TP4	FPD	Foro dia. 1mm
63	1	TP5	GND	Foro dia. 2mm
64	1	TP6	PWR_INPUT	Foro dia. 1mm
65	1	TP7	+18V	Foro dia. 1mm
66	1	TP8	TEMP	Foro dia. 1mm
67	2	U1, U2	LM324SMD	Quad Op. SMD SO14
68	2	U3, U4	TL074SMD	Quad Op. SMD SO14
69	1	U5	TL071/SO	Dual Op. SMD SO8
70	1	U7	LM50C_SMD	Temperature sensor
71	1	R59	16K5	Res. SMD 0805
72	1	R81	68K	Res. SMD 0805



SL237RF1001

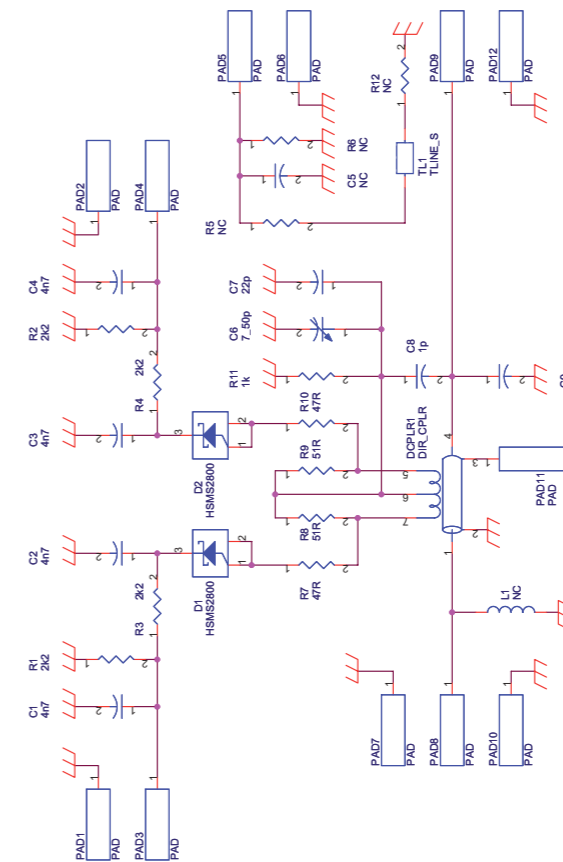
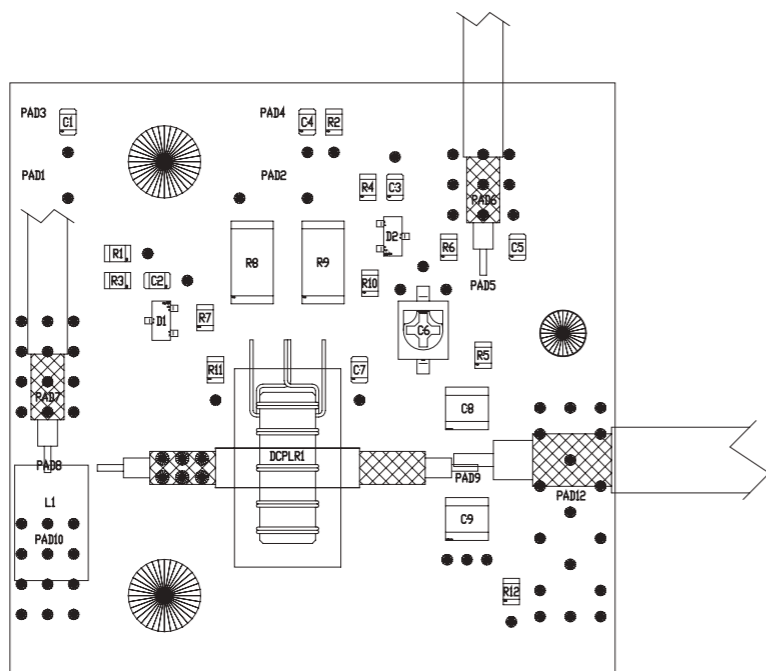


SL237RF1001

PALLET FM 800 W Revised: 20/01/2012
 SL237RF1001 Revision: 1.1
 Exciter High Efficiency
 237
 Luca Gasperini

Item	Quantity	Reference	Part	(description)
1	1	COAX1	RG178 60mm in binocolo ferrite	Cavo RG178 60mm calza/calza in binocolo ferrite (73mm tot.)
2	2	COAX2, COAX3	Cavo RG316/25 - 80mm	Cavo RG316/25 80mm calza/calza (91mm tot.)
3	2	COAX5, COAX4	Cavo RG303/12 - 80mm	Cavo RG303/12 80mm calza/calza (98mm tot.)
4	1	COAX7	RG142 DOPPIA CALZA - 125mm	Cavo RG142 125mm calza/calza (147mm tot.) Vedi Info COAX7.pdf
5	1	CS1	CSRF0285R1	Circuito stampato
6	1	CS2	CSRF0286R1	Circuito stampato
7	1	C1	NC	Cond. SMD 0805
8	2	C2, C4	470p	Cond. SMD 1212 HQ
9	4	C13, C14, C26, C28	470p	Cond. SMD 1212 HQ
10	1	C30	470n	Cond. SMD 0805
11	1	C5	22p	Cond. SMD 1212 HQ
12	1	C6	68p	Cond. SMD 1212 HQ
13	2	C7	470n	Cond. SMD 0805
14	6	C3, C44, C8, C9, C10, C11	150pF	Cond. SMD 1212 HQ
15	1	C12	15p	Cond. SMD 1212 HQ
16	5	C15, C32, C34, C40, C43	NC	Cond. SMD 1212 HQ
17	1	C16	2n2	Cond. SMD 0805 COG
18	5	C17, C19, C21, C23, C25	1n	Cond. SMD 0805
19	1	C18	1n	Cond. SMD 1206
20	2	C22, C20	100p	Cond. SMD 1212 HQ
21	2	C42, C24	4n7	Cond. SMD 0805
22	1	C27	680nF 100V	Cond. SMD 2824
23	1	C31	10pF	Cond. SMD 1212 HQ
24	1	C29	1n	Cond. SMD 0805
25	3	C36, C38	680n_100V	Cond. Poliestere p 10mm
26	2	C37, C39	NC	Cond. Poliestere p 15mm
27	1	C41	NC	Cond. multistrato p 5mm
28	1	D1	6V8 1W	MELF SMD Zener Diode
29	1	D2	SM4007	Diode SMD cont. SMA
30	2	D4, D3	NC	Diode SMD cont. SMA
31	6	FID1, FID2, FID3, FID4, FID5, FID6	FID	Fiducial CS
32	5	FIX1, FIX2, FIX7, FIX8, FIX9	FIX55	Foro fissaggio 5.5mm
33	8	FIX3, FIX4, FIX5, FIX6, FIX10, FIX11, FIX12, FIX13	FIX35	Foro fissaggio 3.5mm
34	1	JP1	+50V Input	Faston da CS p. 5.08
35	2	L11, L1	LINK SU 3 mm h. 4 mm filo 0,5	LINK su 3 mm h. 4 mm filo 0,5
36	1	L2	Wire	Filo R. Arg. 1mm lung. 10mm
37	1	L3	NC	
38	1	L4	10 sp d. 6 mm filo 2 mm	10spire filo R. Smalt. 2mm Avvolte su 6mm includente R18 all'interno
39	2	L5, L9	NC	
40	1	L6	NC	
41	2	L7, L8	Cil-Fe	Cilindretto di ferrite
42	1	L10	NC	Ind. SMD 1008
43	1	MOS1	MRF6VP11KH	PP Power mosfet RF
44	2	PAD4, PAD1	BIAS Input	
45	1	PAD2	RF Output	
46	1	PAD3	RF input	
47	1	RV1	1K	Trimm. multi SMD PVG5 Murata
48	5	R1, R2, R7, R8, R19	NC	Res. 2W
49	2	R3, R5	100R	Res. SMD 0805 1%
50	1	R4	3K32	Res. SMD 0805 1%
51	1	R6	22K	Res. SMD 0805 1%
52	2	R10, R9	1K	Res. SMD 0805 1%
53	3	R11, R12, R13	NC	Res. SMD 0805 1%
54	1	R14	0R	Res. SMD 1206 1%
55	1	R15	NTC 10K	Res. NTC SMD 0805
56	2	R17, R16	10R	Res. SMD 2512 5%
57	1	R18	22R	Res. 2W
58	4	R20, R21, R22, R23	47R	Res. SMD 0805 1%
59	6	TL1, TL2, TL3, TL4, TL5, TL6	*	Linea strip CS
60	1		Ferrite balun	Ferrite balun

SL036MT1001



Nome Progetto: Driver PJ2000	Page: 1	# 1	Size: A3
Autore: Mauro Lucifora	Nome Progetto: 036		
Nome PC in Rete: IUTRIPROGETTI	Data: 13/09/05		
File/Caricelli: 1	Revisione: 1.0		
	Nome Parte: Input Power Measure		
	Codice: SL036MT1001		

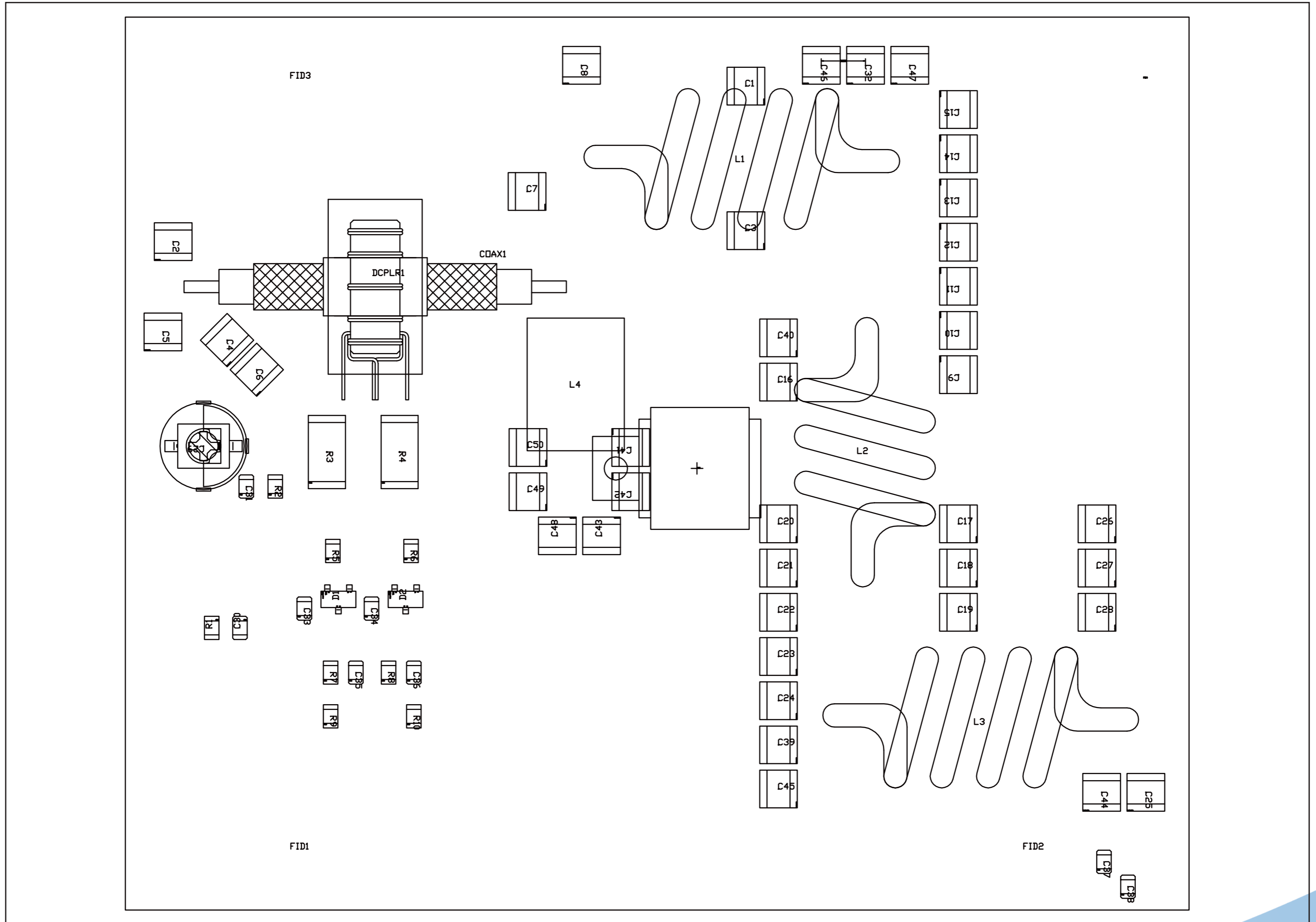
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	AUTORE: UCELLI	DATA: 13/09/2005
		REVISIONE: 1.0
		SCALA: 1:1
		SIZE: A4
		PAGINA: 1 DI 1
ARCHIVIAZIONE ELETTRONICA: "CARTELLA PROGETTI" SU "UT_SRV"	CODICE PROGETTO: 036	CODICE DISEGNO: SL036MT1001
MATERIALE: <>	TRATTAMENTO: <>	PROFILO: <>
		STATO: PROGETTUALE

SL036MT1001

Input Power Measure
SL036MT1001
Revision: 1.0
Driver PJ2000
036
Mauro Ucelli
13/09/2005

Item	Quantity	Reference	Part	Description	Code1
1	1	CS1	CSMT0067R1		CSMT0067R1
2	4	C1,C2,C3,C4	4n7	Cond. SMD 0805	CCC085472KXC
3	1	C5	NC	Cond. SMD 0805 COG	
4	1	C6	7_50p	Comp. var. Murata TZB4A	CVF500D4,5SM
5	1	C7	22p	Cond. SMD 0805	CCC085220JCC
6	1	C8	1p	Cond. SMD 1212 HQ	CHQ010CA501
7	1	C9	NC	Cond. SMD 1212 HQ	
8	1	DCPLR1	DIR_CPLR	Accopp. direz.	KITFTR1010SP
9	2	D2,D1	HSMS2800	Diodo Shottky SOT23	DISHSMS2800
10	4	FID1,FID2,FID3,FID4	FID		
11	1	L1	NC	Induttanza cilindrica	
12	12	PAD1,PAD2,PAD3,PAD4,PAD5, PAD6,PAD7,PAD8,PAD9, PAD10,PAD11,PAD12	PAD		
13	4	R1,R2,R3,R4	2k2	Res. SMD 0805	RCH085F002K2
14	3	R5,R6,R12	NC	Res. SMD 0805	
15	2	R10,R7	47R	Res. SMD 0805	RCH085F0047H
16	2	R9,R8	51R	Res. SMD 2512 1%	RCH252J0051H
17	1	R11	1k	Res. SMD 0805	RCH085F0001K
18	1	TL1	TLINE_S	Linea strip CS	

SL175LP2001

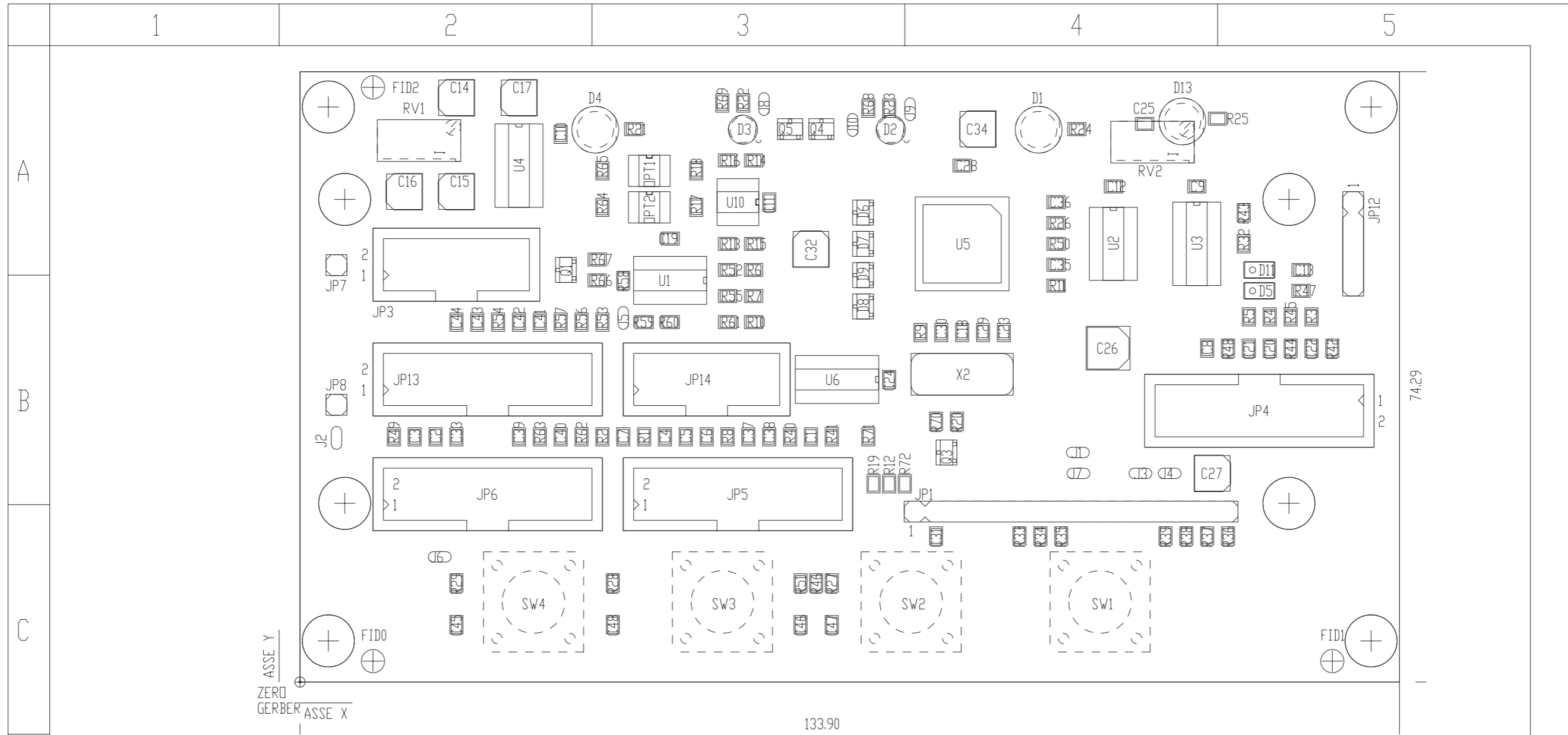


SL175LP2001

LPF 700W compact Revised: Friday, January 20, 2012
 SL175LP2001 Revision: 1.2
 TEX702 GREEN LINE
 175
 Luca Gasperini

Item	Quantity	Reference	Part	(description)
1	1	CS1	CSLP0187R2	Circuito stampato
2	2	C1, C3	1,5pF	Cond. SMD 1212 HQ
3	5	C2, C7, C43, C46, C47	NC	Cond. SMD 1212 HQ
4	3	C4, C5, C6	1pF	Cond. SMD 1212 HQ
5	23	C7, C9, C10, C11, C12, C13, C14, C15, C16, C17, C18, C19, C20, C21, C22, C23, C24, C25, C27, C28, C39, C40, C44	8,2pF	Cond. SMD 1212 HQ
6	1	C29	5-30pF	Comp. var. Murata TZB4
7	1	C30	100pF	Cond. SMD 0805 COG
8	1	C31	NC	Cond. SMD 0805 COG
9	4	C33, C34, C35, C36	4n7	Cond. SMD 0805
10	2	C37, C38	1n	Cond. SMD 0805
11	2	C41, C42	6,8pF	Cond. SMD 1212 HQ
12	1	DCPLR1	DIR_CPLR	Accopp. direz.
13	2	D2, D1	HSMS2800	DIODO HOT CARRIER
14	7	FIX1, FIX2, FIX3, FIX4, FIX5, FIX6, FIX7	FIX35	Foro fissaggio 3.5mm
15	2	L1, L3	3 sp su d. 10 filo da 2 mm	Bobina
16	1	L2	3 sp su d. 9 filo da 2 mm	Bobina
17	3	C32, C26, C45	4,7 pF	Cond. SMD 1212 HQ
18	1	L4	2 sp su d. 4,5 filo da 1 mm	Bobina
19	1	PAD1	OUT	
20	1	PAD2	INP	
21	1	PAD3	RF SNIFFER	
22	1	PAD4	FWD	
23	1	PAD5	REF	
24	1	PD1	*	
25	1	R1	51R	Res. SMD 0805
26	3	R2, R9, R10	1K0	Res. SMD 0805
27	2	R4, R3	51R	Res. SMD 2512 1%
28	2	R6, R5	47H0	Res. SMD 0805
29	2	R7, R8	4K7	Res. SMD 0805
30	1	COAX1	RG303	CAVO SCHERMATO

SL123PC2001



DATA RILASCIO: 16/3/06

REV:

DIS. S.POL.
CTR. A2
LATO PIANO DI MONTAGGIO
VISTA LATO COMPONENTI

DIM.SCHEDA: VEDI QUOTE
TRATT: STANDARD COSTRUTTORE

DENOMINAZIONE
SCHEDA PANEL BOARD

MAT: FR4-74 1.6mm Cu 35um
VISTA POSITIVA

CODICE
CSPANTXLC005

RVR ELETTRONICA S.P.A.

SCALA 1:1

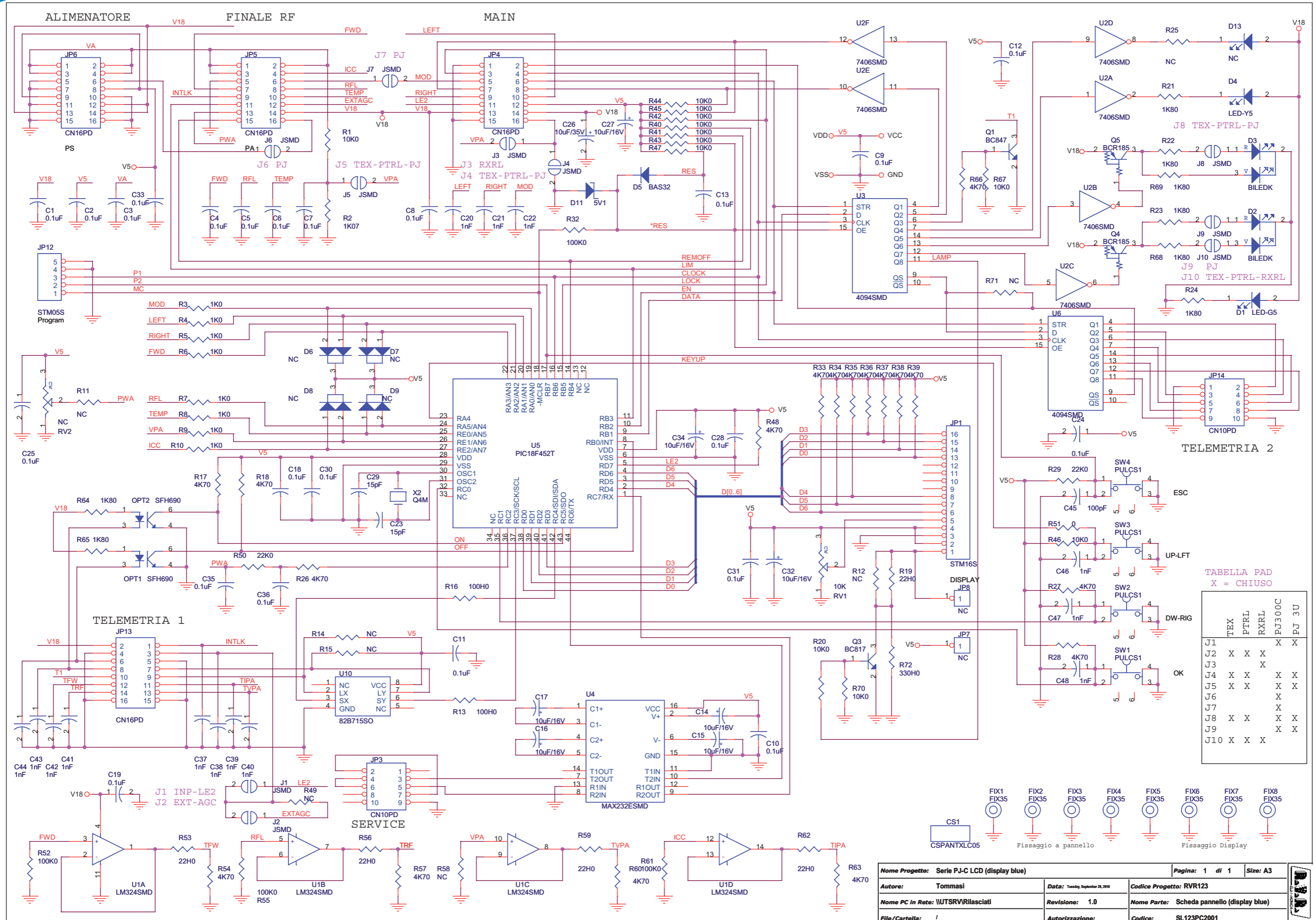


TABELLA PAD
X = CHIUSO

	TEX	PTRL	RXRL	PJ300C	PJ	3U
J1	X	X	X		X	X
J2	X	X	X			
J3	X	X	X		X	X
J4	X	X	X		X	X
J5	X	X	X		X	X
J6					X	X
J7					X	X
J8	X	X	X		X	X
J9	X	X	X		X	X
J10	X	X	X		X	X

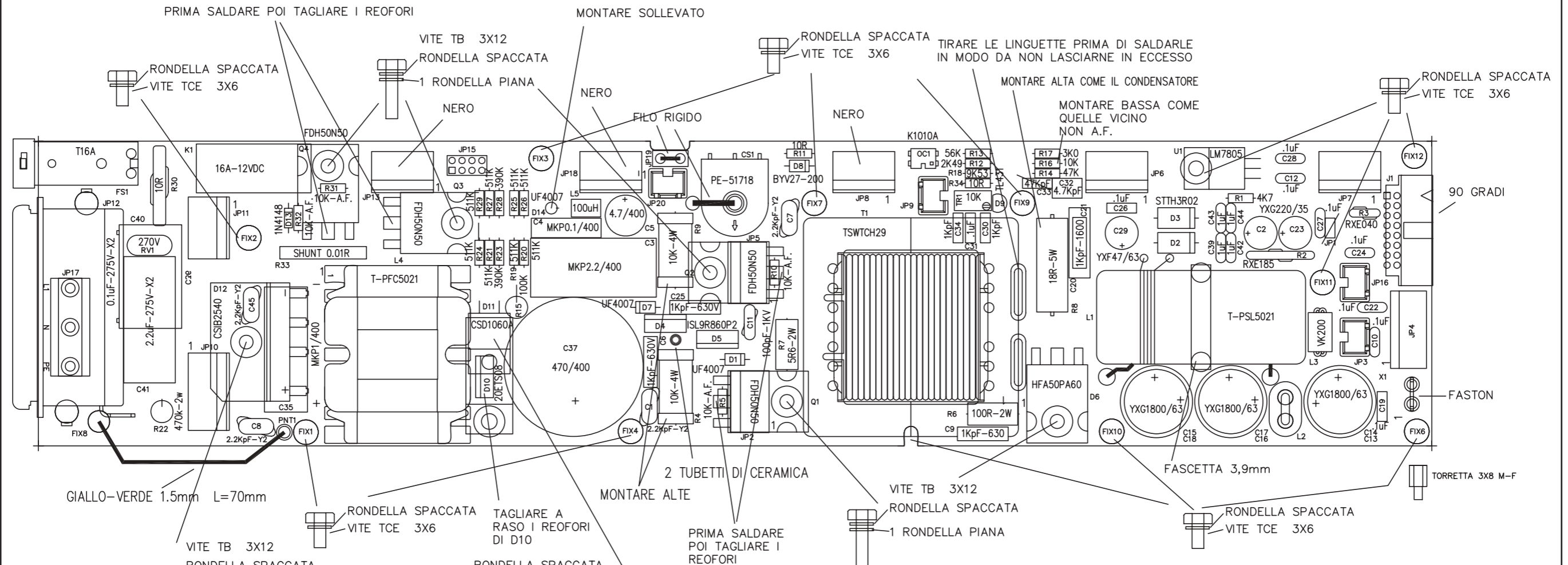
Nome Progetto: Serie PJ-C LCD (display blue)	Pagina: 1 di 1	Size: A3
Autore: Tommasi	Data: Tuesday, September 28, 2010	Codice Progetto: RVR123
Nome PC in Rete: \UTSRV\RIIasciati	Revisione: 1.0	Nome Parte: Scheda pannello (display blue)
File/Cartella: /	Autorizzazione:	Codice: SL123PC2001

SL123PC2001

Scheda pannello serie PJ-C LCD - SL123PC2001
 28/09/2010 Revision: 1.0
 Serie PJ-C LCD
 RVR123
 Tommasi

Item	Quantity	Reference	Part	Description	Code
1	1	CS1	CSPANTXLC05	Circuito stampato	CSPANTXLC05
2	23	C1,C2,C3,C4,C5,C6,C7,C8, C9,C10,C11,C12,C13,C18, C19,C24,C25,C28,C30,C31, C33,C35,C36	0.1uF	Cond. SMD 0805	CCC085104KXC
3	7	C14,C15,C16,C17,C27,C32, C34	10uF/16V	Cond. Elett. SMD d. 4mm	CES106A160
4	14	C20,C21,C22,C37,C38,C39, C40,C41,C42,C43,C44,C46, C47,C48	1nF	Cond. SMD 0805	CCC085102KXC
5	2	C23,C29	15pF	Cond. SMD 0805	CCC085150JCC
6	1	C26	10uF/35V	Cond. Elett. SMD d. 5mm	CES106B350
7	1	C45	100pF	Cond. SMD 0805	CCC085101JCC
8	1	D1	LED-G5	LED Verde dia. 5mm	LEDV05
9	2	D2,D3	BILEDK	Doppio led V-R 5mm Catodo com.	LEDB05
10	1	D4	LED-Y5	LED Giallo dia. 5mm	LEDG05
11	1	D5	BAS32	MINIMELF SMD Diode	DISBAS32MINI
12	4	D6,D7,D8,D9	NC	Doppio Diodo SMD SOT23	
13	1	D11	5V1	MINIMELF SMD Zener Diode	DIZ5V1MINI
14	1	D13	NC	LED Giallo dia. 5mm	
15	8	FIX1, FIX2, FIX3, FIX4, FIX5, FIX6, FIX7, FIX8	FIX35	Foro fissaggio 3.5mm	
16	1	JP1	STM16S	Strip maschio 16 pin	Stecca tagliata
17	2	JP3, JP14	CN10PD	Connettore 10 poli Flat cs	CNTMCS10A
18	4	JP4, JP5, JP6, JP13	CN16PD	Connettore 16 poli Flat cs	CNTMCS16A
19	2	JP7, JP8	NC		
20	1	JP12	STM05S	Strip maschio 5 pin	Stecca tagliata
21	10	J1, J2, J3, J4, J5, J6, J7, J8, J9, J10	JSMD	Pad SMD a saldare	
22	2	OPT1, OPT2	TLP181	Optoisolatore SMD SO6	LEDTLP181
23	1	Q1	BC847	Trans. NPN SOT23	TRNBC847
24	1	Q3	BC817	Trans. NPN SOT23	TRNBC817
25	2	Q4, Q5	BCR185	Trans./Res. PNP SOT23	TRNBCR185
26	1	RV1	10K	Trimmer Rg O 3386X	RVT3386XK010
27	1	RV2	NC	Trimmer Rg V 3296W	
28	12	R1, R20, R40, R41, R42, R43, R44, R45, R46, R47, R67, R70	10K0	Res. SMD 0805 1%	RCH085F0010K
29	1	R2	1K07	Res. SMD 0805 1%	RCH085F01K07
30	8	R3, R4, R5, R6, R7, R8, R9, R10	1K0	Res. SMD 0805 1%	RCH085F0001K
31	8	R11, R12, R14, R15, R25, R49, R58, R71	NC	Res. SMD 0805 1%	
33	2	R13, R16	100H0	Res. SMD 0805 1%	RCH085F0100H
34	1	R72	330H0	Res. SMD 0805 1%	RCH085F0330H
35	18	R17, R18, R26, R27, R28, R33, R34, R35, R36, R37, R38, R39, R48, R54, R57, R60, R63, R66	4K70	Res. SMD 0805 1%	RCH085F004K7
36	8	R21, R22, R23, R24, R64, R65, R68, R69	1K80	Res. SMD 0805 1%	RCH085F001K8
37	2	R29, R50	22K0	Res. SMD 0805 1%	RCH085F0022K
38	4	R32, R52, R55, R61	100K0	Res. SMD 0805 1%	RCH085F0100K
39	1	R51	0H0	Res. SMD 0805 1%	RCH085F0000H
40	5	R19, R53, R56, R59, R62	22H0	Res. SMD 0805 1%	RCH085F0022H
41	4	SW1, SW2, SW3, SW4	PULCS1	Pulsante cs	PLC1V1M000M
42	1	U1	LM324SMD	Quad Op. SMD SO14	CILLM324SMD
43	1	U2	7406SMD	Hex inv OC SMD SO14	CID7406SMD
44	2	U3, U6	4094SMD	Shift Reg. SMD SO16	CIDCD4094SMD
45	1	U4	MAX232ESMD	RS232 Driver SMD SO16	CIDMX232CSES
46	1	U5	PIC18F452T	TQFP44 SMD Microprocessor	CIDPIC18F452
47	1	U10	82B715SO	IIC Bus driver SMD SO8	CID82B715S
48	1	X2	Q4M	Quarzo SMD HC49SMD	QRZ000004MC

PIANO DI MONTAGGIO PSL5021 POWER



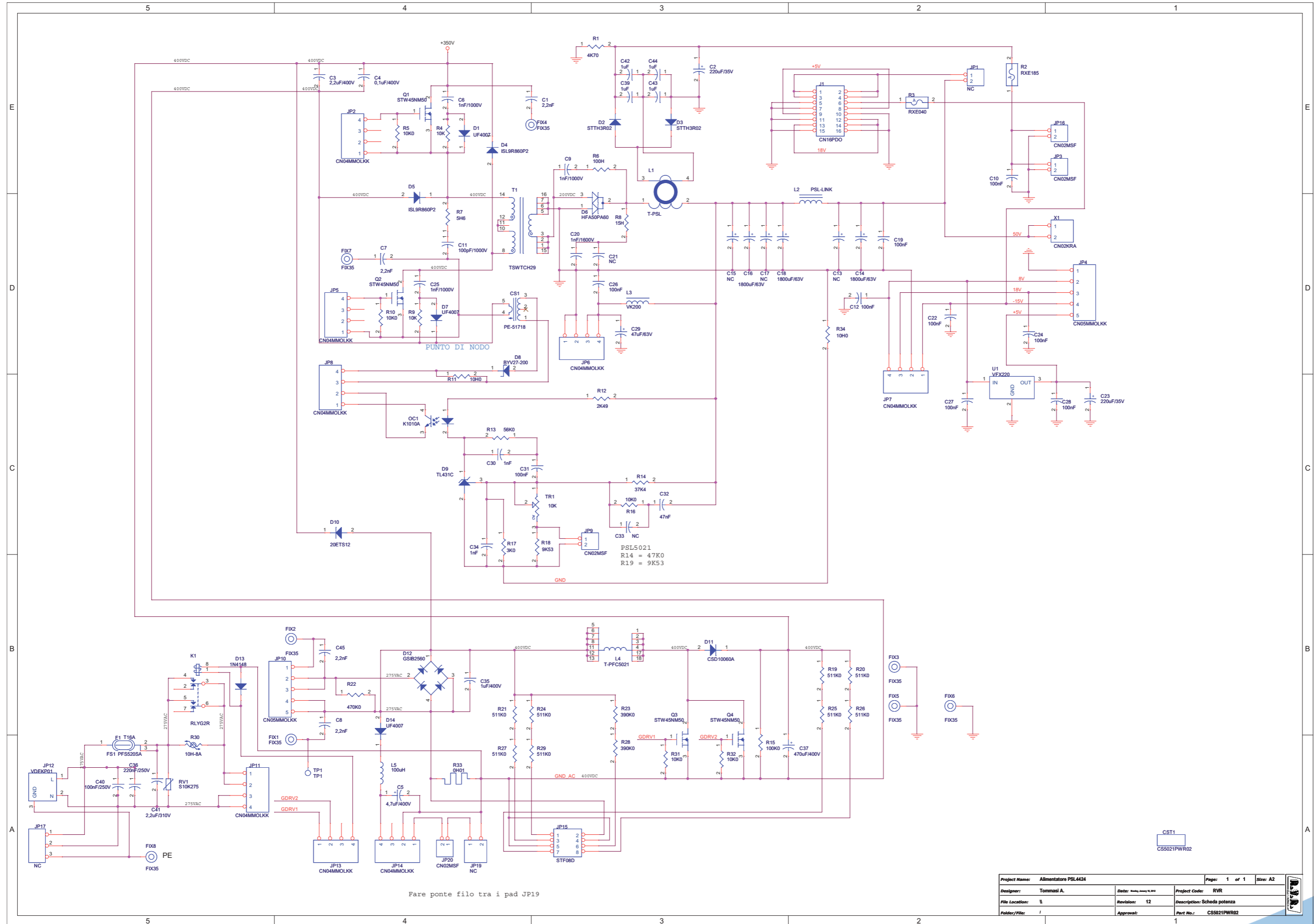
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NOTE:

SOTTO AI MOSFET E ALL'HFA:GRASSO E 1 MICA SARCON 20GHR
 SOTTO AL DIODO GRASSO CONDUTTIVO
 MICA SARCON ADESIVA SOTTO AL DIODO

ARCHIVIO:	X:\WORKDWG\
TITLE	CS5021PWR02.dwg
DOCUMENT NUMBER	PSL5021 PWR
DATE	1 DICEMBRE 2010

PSL4424



Project Name:	Alimentatore PSL4424	Page:	1 of 1	Size:	A2
Designer:	Tommasi A.	Date:	2012/03/30	Project Code:	RVR
File Location:	\\	Revision:	12	Description:	Scheda potenza
Folder/File:	/	Approval:		Part No.:	CS5021PWR02

PSL4424

Scheda potenza Revised: Friday, January 13, 2012
CS5021PWR02 Revision: 12

Alimentatore PSL4424
RVR

Tommasi A.

Bill Of Page1

Item	Quantity	Reference	Part	Description
1	2	JP10,JP4	CN05MMOLKK	Conn. Molex maschio serie KK p 3.96
2	8	JP2,JP5,JP6,JP7,JP8,JP11,JP13,JP14	CN04MMOLKK	Conn. Molex maschio serie KK p 3.96
3	1	CST1	CS5021PWR02	Circuito stampato
4	1	CS1	PE-51718	Inductor current sense
5	4	C1,C7,C8,C45	2,2nF	Cond. ceramico p 7mm Y2
6	2	C2,C23	220uF/35V	Cond. Elettr. Dia 8 P3 105°C
7	1	C3	2,2uF/400V	Cond. Poli. p 27mm
8	1	C4	0,1uF/400V	Cond. Poliestere p 15mm
9	1	C5	4,7uF/400V	Cond. Elettr. Dia 10 P5.08-105°C
10	3	C6,C9,C25	1nF/1000V	Cond. Poliestere p 10mm
11	6	C10,C12,C22,C24,C27,C28	100nF	Cond. ceramico p 5mm
12	1	C11	100pF/1000V	Cond. ceramico p 5mm alta tensione
13	3	C13,C15,C17	NC	Cond. Elettr. Dia 18 P7 105°C
14	3	C14,C16,C18	1800uF/63V	Cond. Elettr. Dia 18 P7 105°C
15	3	C19,C26,C31	100nF	Cond. Poliestere p 5mm
16	1	C20	1nF/1600V	Cond. Poliestere p 15mm
17	1	C21	NC	Cond. Poliestere p 10mm
18	1	C29	47uF/63V	Cond. Elettr. Dia 6.5 P2.54 105°C
19	2	C30,C34	1nF	Cond. Poliestere p 5mm
20	1	C32	47nF	Cond. Poliestere p 5mm (5*7mm)
21	1	C33	NC	Cond. Poliestere p 5mm
22	1	C35	1uF/400V	Cond. Poli. p 27mm
23	1	C36	220nF/250V	Cond. Poli. p 22mm X2
24	1	C37	470uF/400V	Cond. Elettr. Dia 35 P10 105°C
25	4	C39,C42,C43,C44	1uF	Cond. ceramico p 5mm
26	1	C40	100nF/250V	Cond. Poliestere p 15mm X2
27	1	C41	2,2uF/310V	Cond. Poli. p 27mm X2
28	2	D1,D7,D14	UF4007	Diode plastico DO41
29	2	D2,D3	STTH3R02	Diode Ultrafast DO201
30	2	D4,D5	ISL9R860P2	Diode Stealth TO220
31	1	D6	HFA50PA60	Doppio Diode TO217
32	1	D8	BYV27-200	Diode shottky SOD57
33	1	D9	TL431C	TO92 Reference
34	1	D10	20ETS08	Diode TO220
35	1	D11	CSD10060A	Diode Zero recovery TO220-2
36	1	D12	GSIB2560	Ponte diodi GSIB-5S
37	1	D13	1N4148	Diode in vetro DO35
38	8	FIX1,FIX2,FIX3,FIX4,FIX5,FIX6,FIX7,FIX8	FIX35	Foro fissaggio 3.5mm
39	1	FS1	PFS520SA	Portafusibile 5x20
40	1	F1	T16A	Fusibile Ritardato 5x20mm
41	1	JP1	NC	Strip maschio 2 pin

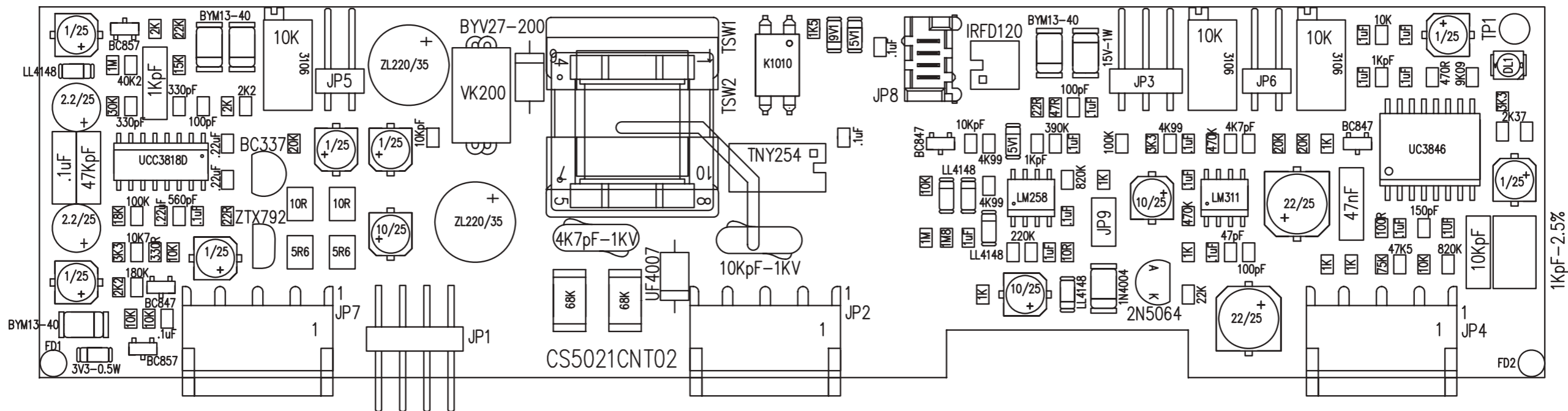
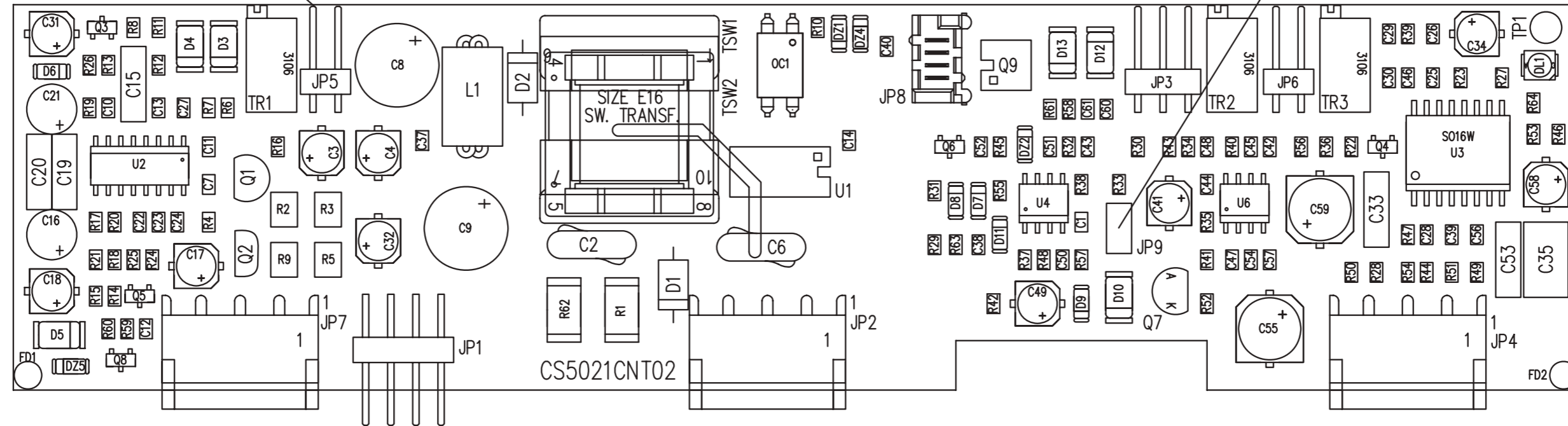
42	4	JP3,JP9,JP16,JP20	CN02MSF	Connettore 2 poli Lumberg MSF p 2.5mm
43	1	JP12	VDEKP01	Conn. VDE con interruttore
44	1	JP15	STF08D	Strip femmina 4+4 pin
45	1	JP17	NC	Conn. tipo KRA a 3 poli p 10mm
46	1	JP19	NC	Conn. tipo KRA a 2 poli
47	1	J1	CN16PDO	Conn.M.C.S.90° 16P alette.
48	1	K1	RLYG2R	Rele' OMRON G2R-1
49	1	L1	T-PSL	Trasf. Ventole PSL
50	1	L2	PSL-LINK	Ind. Link PSL
51	1	L3	VK200	Induttanza cilindrica VK200
52	1	L4	T-PFC5021	Induttanza PFC PSL5021
53	1	L5	100uH	Induttanza Neosid
54	1	OC1	K1010A	Optoisolatore DIP4
55	4	Q1,Q2,Q3,Q4	STW45NM50	
56	1	RV1	S10K275	Varistor dia. 10mm
57	1	R1	4K70	Res. 1/4W 1%
58	1	R2	RXE185	Fusibile autorip. RXE p5mm
59	1	R3	RXE040	Fusibile autorip. RXE p5mm
60	2	R4,R9	10K	Res. filo 5W
61	4	R5,R10,R31,R32	10K0	Res. 1W Antifiamma
62	1	R6	100H	Res. strato 2W
63	1	R7	5H6	Res. strato 2W
64	1	R8	15H	Res. filo 5W
65	2	R11,R34	10H0	Res. 1/4W 1%
66	1	R12	2K49	Res. 1/4W 1%
67	1	R13	56K0	Res. 1/4W 1%
68	1	R14	37K4	Res. 1/4W 1%
69	1	R15	100K0	Res. strato 2W
70	1	R16	10K0	Res. 1/4W 1%
71	1	R17	3K0	Res. 1/4W 1%
72	1	R18	9K53	Res. 1/4W 1%
73	8	R19,R20,R21,R24,R25,R26,R27,R29	511K0	Res. 1/4W 1%
74	1	R22	470K0	Res. strato 2W
75	2	R23,R28	390K0	Res. 1/4W 1%
76	1	R30	10H-8A	Res. NTC di potenza p 6mm
77	1	R33	0H01	Shunt OAR 5W
78	1	TP1	TP1	Test point
79	1	TR1	10K	Trimmer Rg V 3296W
80	1	T1	TSWTCH29	Trasf. switching Tisci xx
81	1	U1	LM7805	Stabilizzatore TO220
82	1	X1	FSTCS	Faston da CS

PSL4424

PIANO DI MONTAGGIO PSL5021 CNT

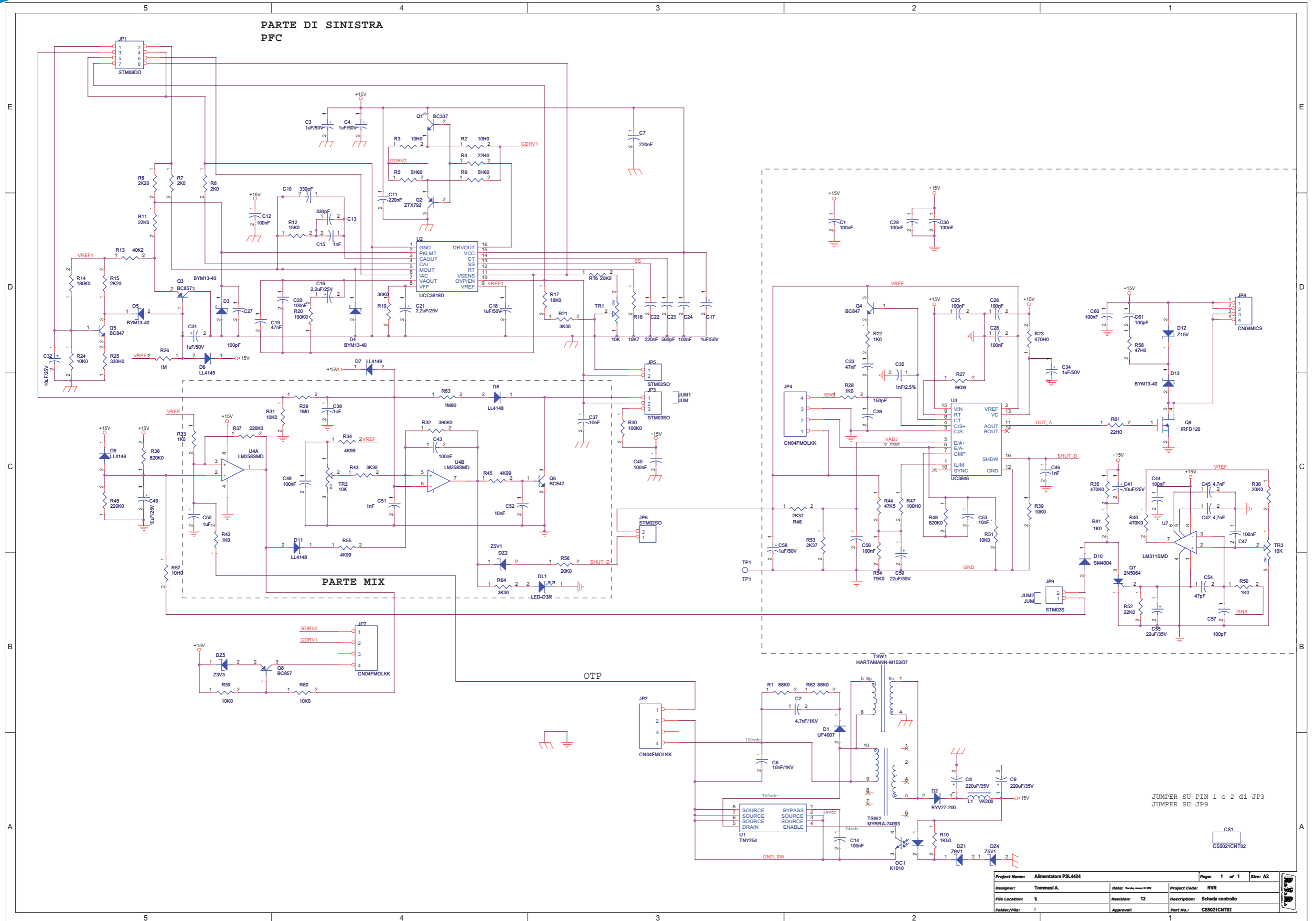
MONTARE JUMPER

MONTARE JUMPER



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TITLE CS5021CNT02.dwg	
DOCUMENT NUMBER PSL5021 CNT	REV2
DATE: 31 MARZO 2011	

PSL4424



JUMPER SU PIN 1 e 2 di JP3
JUMPER SU JP9

Project Name:	Alimentatore PSL4424	Page:	1 of 1	Size:	A2
Designer:	Tommasi A.	Date:	12/03/2012	Project Code:	RVR
File Location:	\\	Revision:	12	Description:	Scheda controllo
Folder/File:	/	Approvato:		Part No.:	CS5021CNT02

PSL4424

Scheda controllo Revised: Thursday, January 12, 2012
CS5021CNT02 Revision: 12

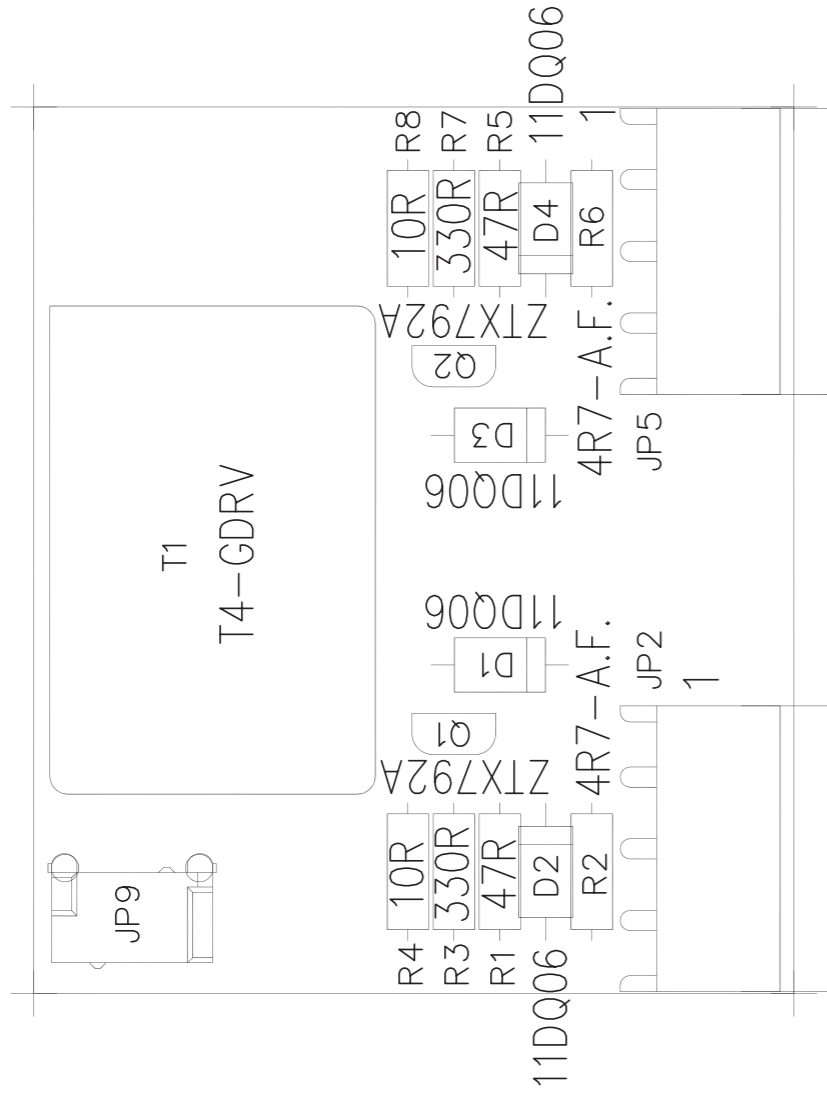
Alimentatore PSL4424
RVR

Item	Quantity	Reference	Part	Description
1	1	CS1	CS5021CNT02	Circuito stampato
2	16	C1,C12,C14,C24,C25,C26,C28,C29,C30,C40,C43,C44,C47,C48,C56,C60	100nF	Cond. SMD 0805
3	1	C2	4,7nF/1KV	Cond. ceramico p 5mm alta tensione
4	7	C3,C4,C17,C18,C31,C34,C58	1uF/50V	Cond. Elett. SMD d. 4mm
5	1	C6	10nF/1KV	Cond. ceramico p 5mm alta tensione
6	3	C7,C11,C22	220nF	Cond. SMD 0805
7	2	C8,C9	220uF/35V	Cond. Elett. Dia 8 P5 105°C
8	2	C10,C13	330pF	Cond. SMD 0805
9	1	C15	1nF	Cond. Poliestere p 5mm
10	2	C16,C21	2,2uF/25V	Cond. Elett. Tant. p. 2.5mm
11	2	C19,C33	47nF	Cond. Poliestere p 5mm
12	1	C20	100nF	Cond. Poliestere p 5mm
13	1	C23	560pF	Cond. SMD 0805
14	3	C27,C57,C61	100pF	Cond. SMD 0805
15	3	C32,C41,C49	10uF/25V	Cond. Elett. SMD d. 4mm
16	1	C35	1nF/2.5%	Cond. Poliestere p 5mm (5*7mm)
17	2	C37,C52	10nF	Cond. SMD 0805
18	2	C38,C50	1uF	Cond. SMD 0805
19	1	C39	150pF	Cond. SMD 0805
20	2	C42,C45	4,7nF	Cond. SMD 0805
21	2	C46,C51	1nF	Cond. SMD 0805
22	1	C53	10nF	Cond. Poliestere p 5mm
23	1	C54	47pF	Cond. SMD 0805
24	2	C55,C59	22uF/35V	Cond. Elett. SMD d. 6.3mm
25	1	DL1	LED-D3R	LED SMD PLCC2
26	1	DZ1	Z9V1	MINIMELF SMD Zener Diode
27	2	DZ2,DZ4	Z5V1	MINIMELF SMD Zener Diode
28	1	DZ5	Z3V3	MINIMELF SMD Zener Diode
29	1	D1	UF4007	Diode plastico DO41
30	1	D2	BYV27-200	Diode in vetro SOD57
31	4	D3,D4,D5,D13	BYM13-40	Diode shottky MELF
32	5	D6,D7,D8,D9,D11	LL4148	MINIMELF SMD Diode
33	1	D10	SM4004	MELF SMD Diode
34	1	D12	Z15V	MELF SMD Zener Diode
35	1	JP1	STM08DO	Strip maschio 4+4 pin 90°
36	3	JP2,JP4,JP7	CN04FMOLKK	Conn. Molex femm. serie KK p 3.96
37	1	JP3	STM03SO	Strip maschio 3 pin a 90°
38	2	JP5,JP6	STM02SO	Strip maschio 2 pin a 90°
39	1	JP8	CN04MICS	Conn. Lumberg MICS
40	1	JP9	STM02S	Strip maschio 2 pin
41	2	JUM1,JUM2	JUM	Ponticello Jumper
42	1	L1	VK200	Induttanza cilindrica VK200
43	1	OC1	K1010	Optoisolatore DIP4
44	1	Q1	BC337	Trans. NPN TO92
45	1	Q2	ZTX792	Trans. PNP TO92
46	2	Q3,Q8	BC857	Trans. PNP SOT23
47	3	Q4,Q5,Q6	BC847	Trans. NPN SOT23
48	1	Q7	2N5064	TO92 SCR
49	1	Q9	IRFD120	Trans. FET N DIL4

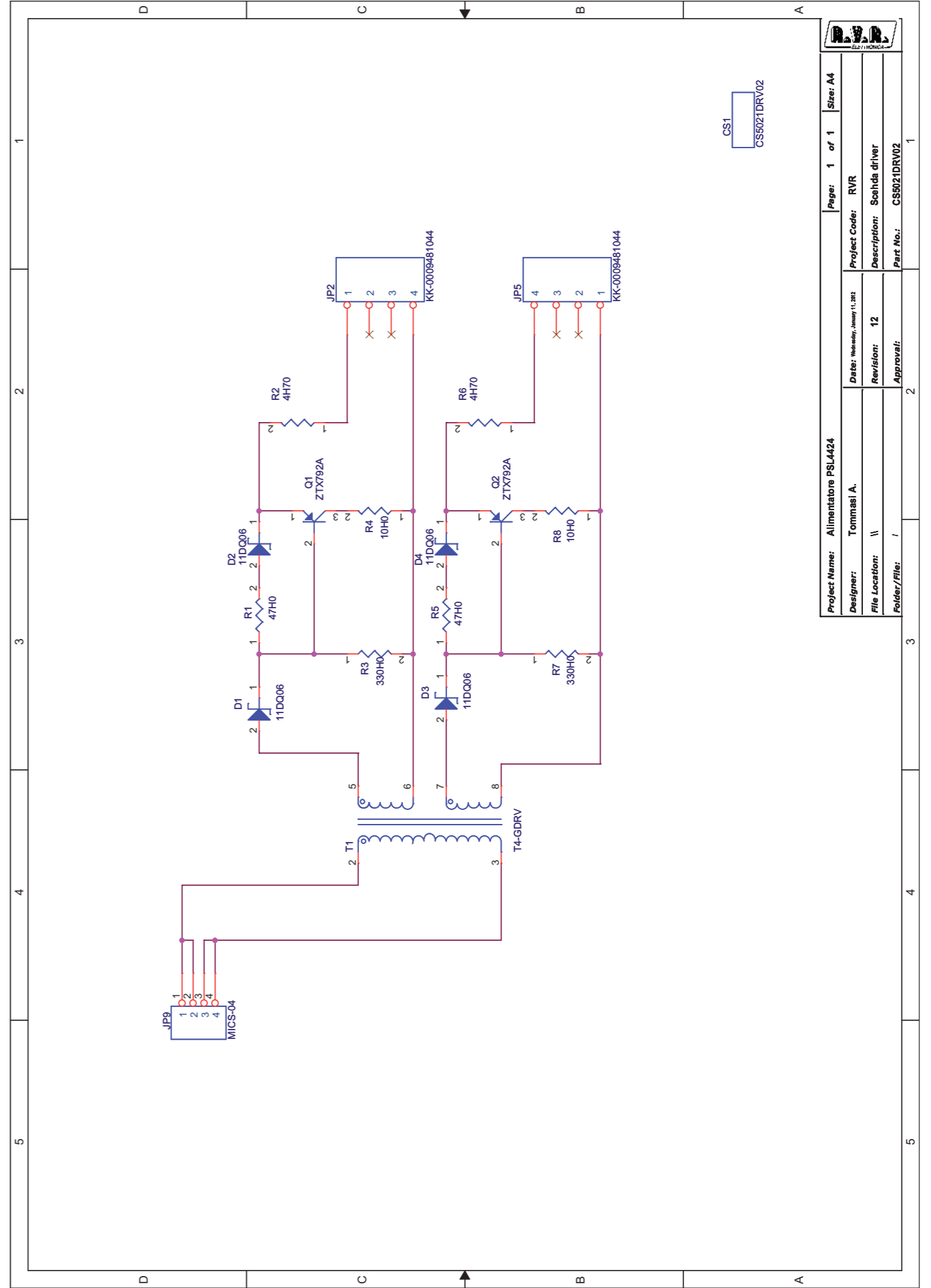
50	2 R1,R62	68K0	Res. SMD 2512 1%
51	2 R2,R3	10H0	Res. SMD 1210
52	2 R4,R61	22H0	Res. SMD 0805
53	2 R5,R9	5H60	Res. SMD 1210
54	2 R6,R15	2K20	Res. SMD 0805
55	2 R7,R8	2K0	Res. SMD 0805
56	1 R10	1K50	Res. SMD 0805
57	2 R11,R52	22K0	Res. SMD 0805
58	1 R12	15K0	Res. SMD 0805
59	1 R13	40K2	Res. SMD 0805
60	1 R14	180K0	Res. SMD 0805
61	3 R16,R36,R56	20K0	Res. SMD 0805
62	1 R17	18K0	Res. SMD 0805
63	1 R18	10K7	Res. SMD 0805
64	1 R19	30K0	Res. SMD 0805
65	2 R20,R30	100K0	Res. SMD 0805
66	3 R21,R43,R64	3K30	Res. SMD 0805
67	6 R22,R28,R33,R41,R42,R50	1K0	Res. SMD 0805
68	1 R23	470H0	Res. SMD 0805
69	6 R24,R31,R39,R51,R59,R60	10K0	Res. SMD 0805
70	1 R25	330H0	Res. SMD 0805
71	2 R26,R29	1M0	Res. SMD 0805
72	1 R27	9K09	Res. SMD 0805
73	1 R32	390K0	Res. SMD 0805
74	1 R34,R45,R55	4K99	Res. SMD 0805
75	3 R35,R40	470K0	Res. SMD 0805
76	2 R37,R48	220K0	Res. SMD 0805
77	2 R38,R49	820K0	Res. SMD 0805
78	2 R44	47K5	Res. SMD 0805
79	1 R46,R53	2K37	Res. SMD 0805
80	2 R47	100H0	Res. SMD 0805
81	1 R54	75K0	Res. SMD 0805
82	1 R57	10H0	Res. SMD 0805
83	1 R58	47H0	Res. SMD 0805
84	1 R63	1M80	Res. SMD 0805
85	1 TP1	TP1	Test point
86	1 TR1,TR2,TR3	10K	Trimmer Rg H 3296X
87	3 TSW1	HARTAMANN-M153/07	
88	1 TSW2	MYRRA-74093	
89	1 U1	TNY254	Switching controller
90	1 U2	UCC3818D	Power Factor controller
91	1 U3	UC3846	Switching controller
92	1 U4	LM258SMD	Dual Op. SMD SO8
93	1 U7	LM311SMD	Comp. SMD SO8

PSL4424

PIANO DI MONTAGGIO PSL5021 DRV



ARCHIVIO: X:\WORKDWG\
TITLE CS5021DRV02.dwg
DOCUMENT NUMBER PSL5021 DRV
DATE: 13 APRILE 2009
REV2



Project Name: Alimentatore PSL4424		Page: 1 of 1	Size: A4
Designer: Tommasi A.	Date: Venerdì, 11.04.2009	Project Code: RVR	
File Location: \\	Revision: 12	Description: Scheda driver	
Folder/File: /	Approval:	Part No.: CS5021DRV02	

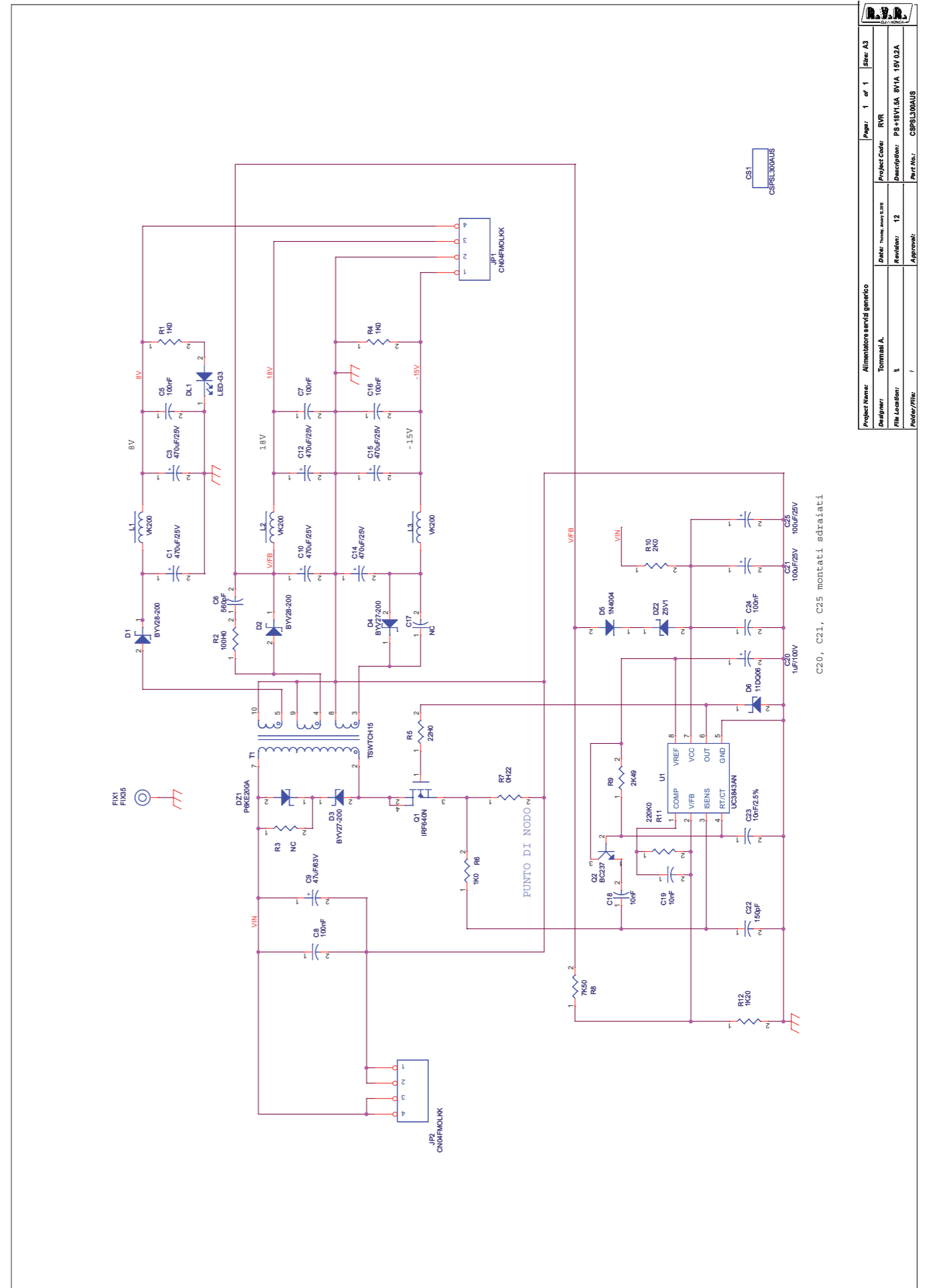
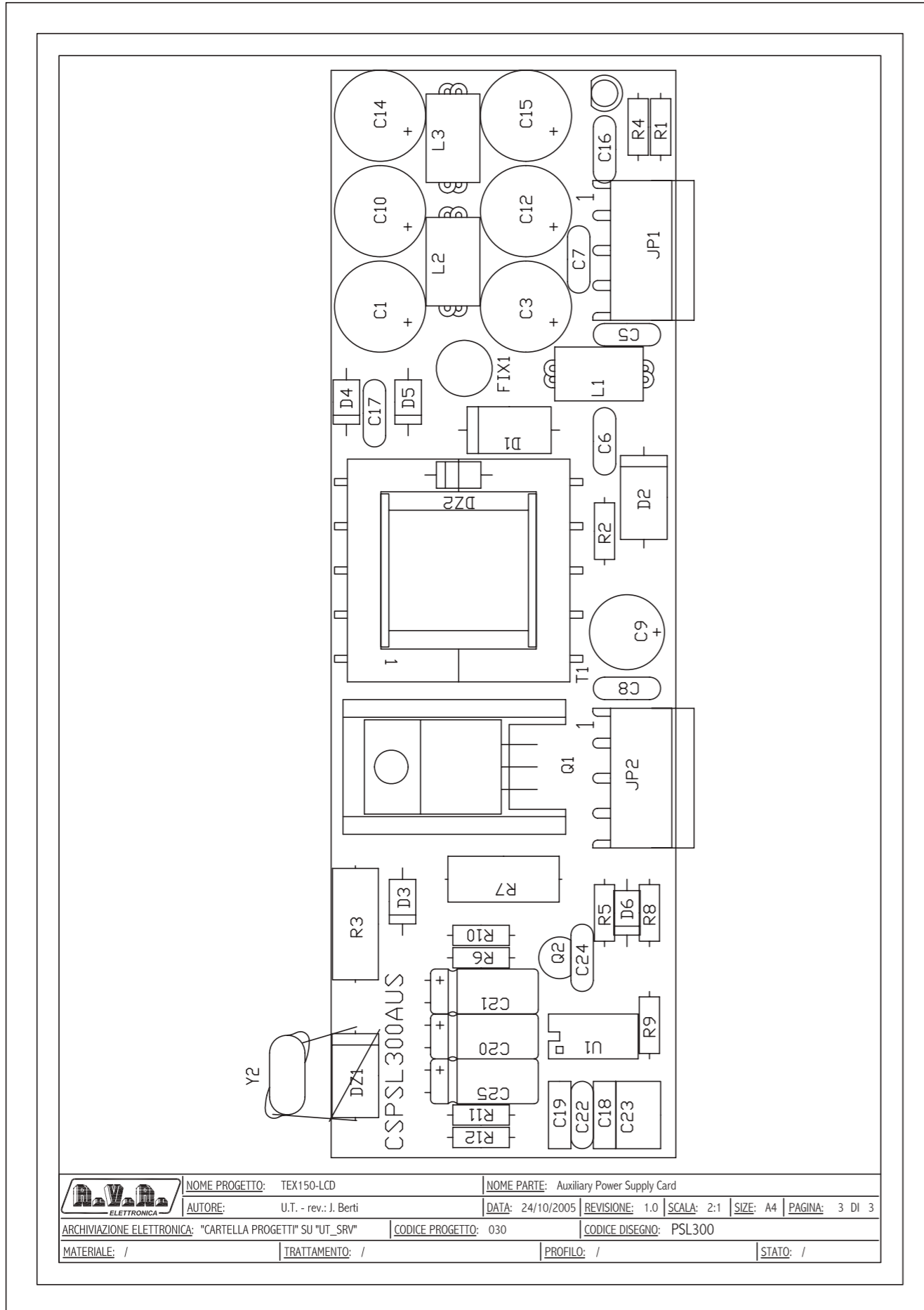
PSL4424

Scehda driver Revised: Wednesday, January 11, 2012
 CS5021DRV02 Revision: 12

Alimentatore PSL4424
 RVR

Item	Quantity	Reference	Part	Description
1	1	CS1	CS5021DRV02	Circuito stampato
2	4	D1,D2,D3,D4	11DQ06	Diodo shottky DO41G
3	2	JP2,JP5	KK-0009481044	Conn. Molex femm. serie KK p 3.96
4	1	JP9	MICS-04	Conn. Lumberg MICS
5	2	Q1,Q2	ZTX792A	Trans. PNP TO92
6	2	R1,R5	47H0	Res. 1/4W 1%
7	2	R2,R6	4H70	Res. 1W 5%Antifiamma
8	2	R3,R7	330H0	Res. 1/4W 1%
9	2	R4,R8	10H0	Res. 1/4W 1%
10	1	T1	T4-GDRV	Gate driver transformer

PSL4424



Project Name:	Alimentazione scheda generico	Page:	1	of	1	Issue:	A3
Designer:	Tommali A.	Project Code:	RVR				
File Location:	1	Description:	PS-18V/15A, BV/A, 18V/0.2A				
Author/Title:	1	Revision:	12				
Approval:		Part No.:	CSPSL300AUS				

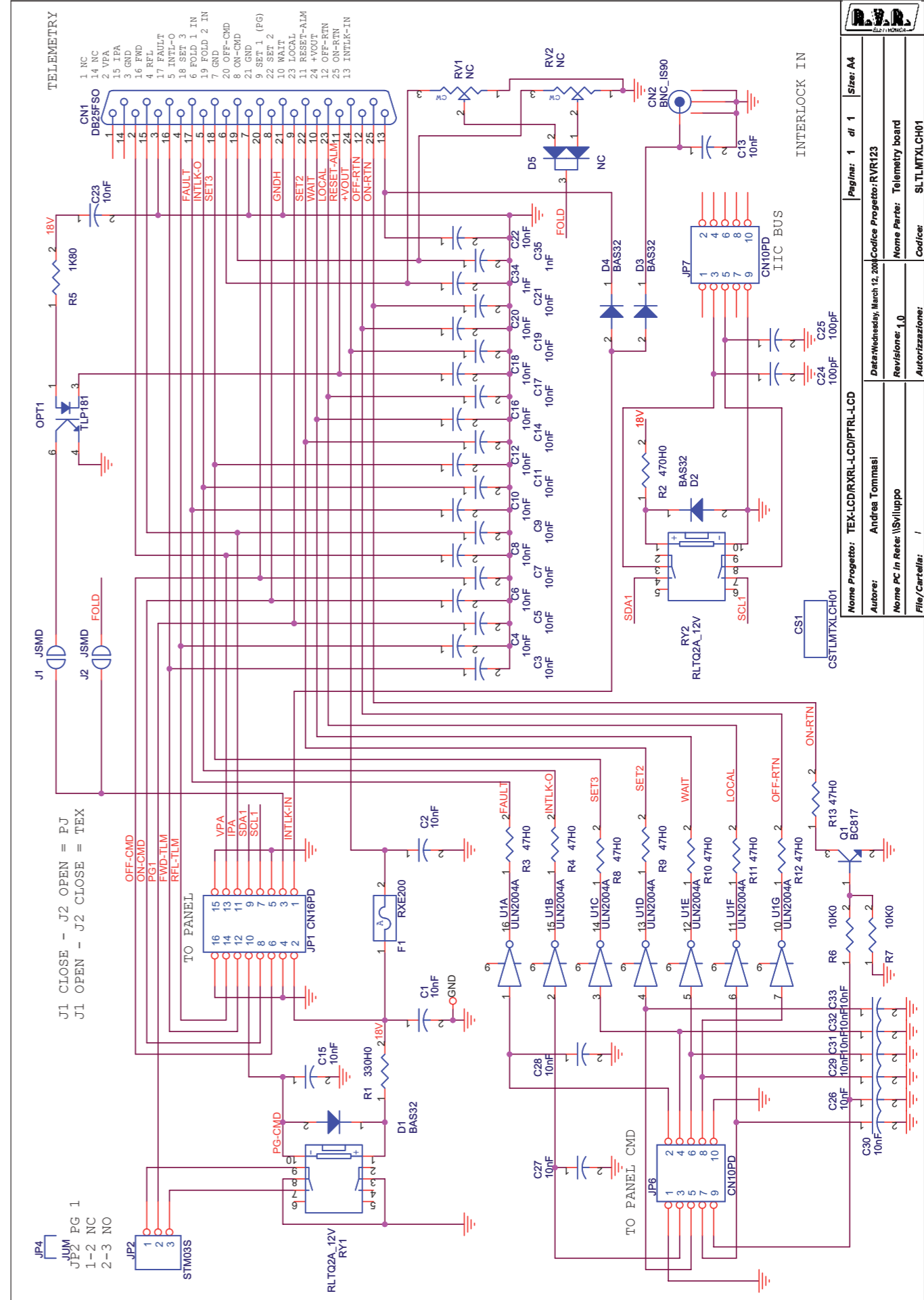
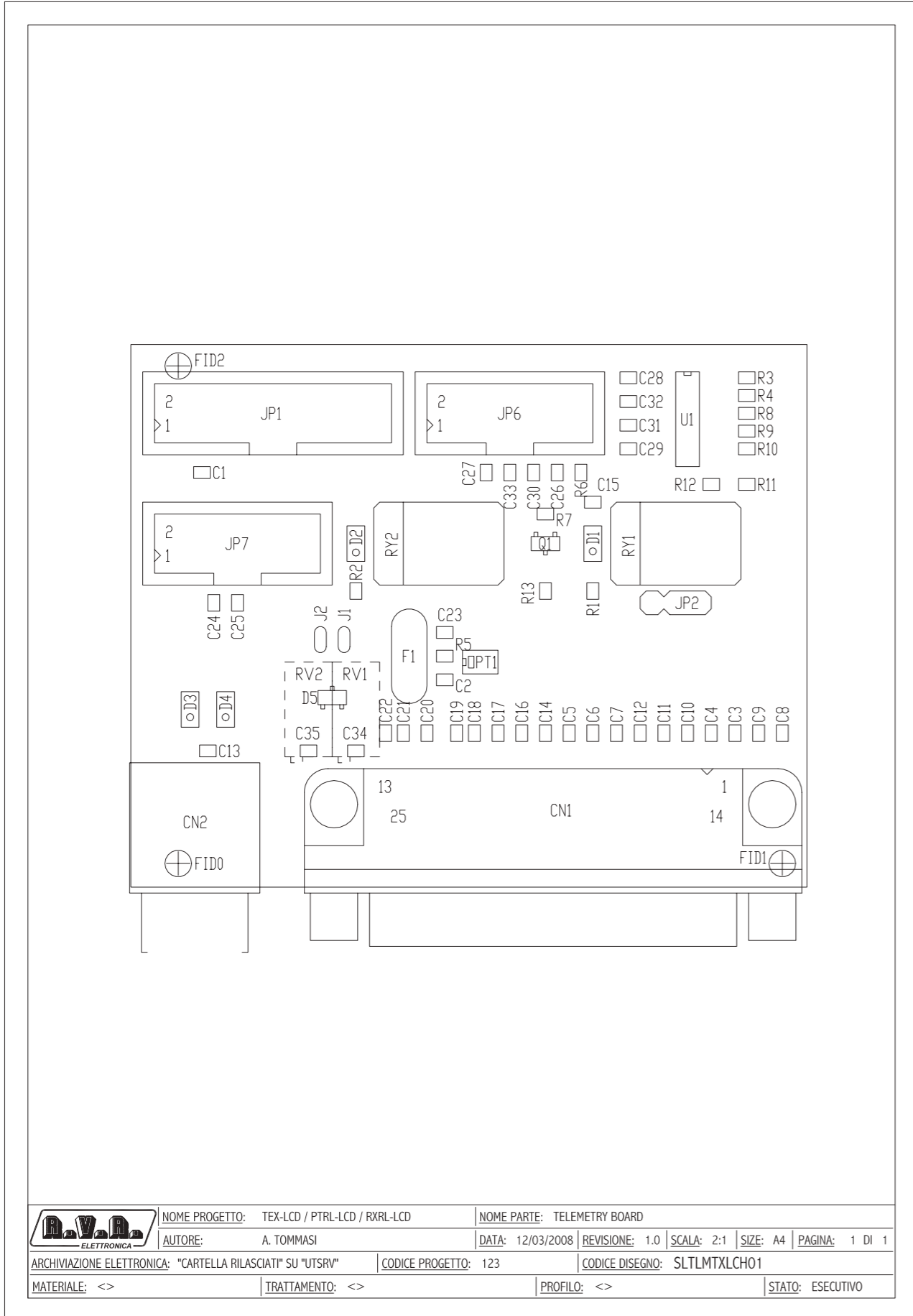
PSL4424

PS +18V1.5A 8V1A 15V 0.2A Revised: Thursday, January 12, 2012
 CSPSL300AUS Revision: 12

Alimentatore servizi generico
 RVR

Item	Quantity	Reference	Part	Description
1	1	CS1	CSPSL300AUS	Circuito stampato
2	6	C1,C3,C10,C12,C14,C15	470uF/25V	Cond. Elettr. Dia 10 P5.08-105°C
3	4	C5,C7,C16,C24	100nF	Cond. ceramico p 5mm
4	1	C6	560pF	Cond. ceramico p 5mm
5	1	C8	100nF	Cond. Poliestere p 5mm
6	1	C9	47uF/63V	Cond. Elettr. Dia 6.5 P2.54 105°C
7	1	C17	NC	Cond. ceramico p 5mm
8	2	C18,C19	10nF	Cond. ceramico p 5mm
9	1	C20	1uF/100V	Cond. Elettr. Dia 5 P2.54
10	2	C21,C25	100uF/25V	Cond. Elettr. Dia 5 P2.54
11	1	C22	150pF	Cond. ceramico p 5mm
12	1	C23	10nF/2.5%	Cond. Poliestere p 5mm (5*7mm)
13	1	DL1	LED-G3	LED Verde dia. 3mm
14	1	DZ1	P6KE200A	5W Transient Voltage Supp.
15	1	DZ2	Z5V1	1W Zener Diode
16	2	D1,D2	BYV28-200	Diodo shottky SOD64
17	2	D3,D4	BYV27-200	Diodo shottky SOD57
18	1	D5	1N4004	Diodo plastico DO41
19	1	D6	11DQ06	Diodo shottky DO41G
20	1	FIX1	FIX35	Foro fissaggio 3.5mm
21	2	JP1,JP2	CN04FMOLKK	Conn. Molex femm. serie KK p 3.96
22	3	L1,L2,L3	VK200	Induttanza cilindrica VK200
23	1	Q1	IRF640N	Trans. FET N TO220
24	1	Q2	BC237	Trans. NPN TO92
25	3	R1,R4,R6	1K0	Res. 1/4W 1%
26	1	R2	100H0	Res. 1/4W 1%
27	1	R3	NC	Res. 1/4W 1%
28	1	R5	22H0	Res. 1/4W 1%
29	1	R7	0H22	Res. strato 2W
30	1	R8	7K50	Res. 1/4W 1%
31	1	R9	2K49	Res. 1/4W 1%
32	1	R10	2K0	Res. 1/4W 1%
33	1	R11	220K0	Res. 1/4W 1%
34	1	R12	1K20	Res. 1/4W 1%
35	1	T1	TSWTCH15	Trasf. switching Tisci15
36	1	U1	UC3843AN	SO8 Switching controller

SLTLMTXLCH01



	NOME PROGETTO: TEX-LCD / PTRL-LCD / RXRL-LCD	NOME PARTE: TELEMETRY BOARD
	AUTORE: A. TOMMASI	DATA: 12/03/2008
ARCHIVIAZIONE ELETTRONICA: "CARTELLA RILASCIATI" SU "UTSRV"	CODICE PROGETTO: 123	CODICE DISEGNO: SLTLMTXLCH01
MATERIALE: <>	TRATTAMENTO: <>	PROFILO: <>
		STATO: ESECUTIVO

Nome Progetto: TEX-LCD/RXRL-LCD/PTRL-LCD	Pagina: 1 di 1	Size: A4
Autore: Andrea Tommasi	Data: Wednesday, March 12, 2008	Codice Progetto: RVR123
Nome PC in Rete: USV/luppo	Revisione: 1.0	Nome Parte: Telemetry board
File/Cartella: /	Autore/Revisione:	Codice: SLTLMTXLCH01

SLTLMTXLCH01

Telemetry board Revised: March, June 12, 2008
 SLTLMTXLCH01 Revision: 1.0
 TEX-LCD/RXRL-LCD/PTRL-LCD
 RVR123
 Andrea Tommasi

Item	Quantity	Reference	Part	Description
1	1	CN1	DB25FSO	Connettore DB25 femm. cs 90°
2	1	CN2	BNC_IS90	Connettore BNC metallico 90°
3	1	CS1	CSTLMTXLCH01	Circuito stampato
4	31	C1,C2,C3,C4,C5,C6,C7,C8, C9,C10,C11,C12,C13,C14, C15,C16,C17,C18,C19,C20, C21,C22,C23,C26,C27,C28, C29,C30,C31,C32,C33	10nF	Cond. SMD 0805
5	2	C24,C25	100pF	Cond. SMD 0805
6	2	C34,C35	1nF	Cond. SMD 0805
7	4	D1,D2,D3,D4	BAS32	MINIMELF SMD Diode
8	1	D5	NC	Doppio Diodo SMD SOT23
9	1	F1	RXE200	Fusibile autorip. 7mm
10	1	JP1	CN16PD	Connettore 16 poli Flat cs
11	1	JP2	STM03S	Strip maschio 3 pin
12	1	JP4	JUM	Ponticello Jumper
13	2	JP6,JP7	CN10PD	Connettore 10 poli Flat cs
14	2	J1,J2	JSMD	Pad SMD a saldare
15	1	OPT1	TLP181	Optoisolatore SMD SO6
16	1	Q1	BC817	Trans. NPN SOT23
17	2	RV1,RV2	NC	Trimmer Rg H 3296X
18	2	RY1,RY2	RLTQ2A_12V	Rele' TQ2
19	1	R1	330H0	Res. SMD 0805 1%
20	1	R2	470H0	Res. SMD 0805 1%
21	8	R3,R4,R8,R9,R10,R11,R12, R13	47H0	Res. SMD 0805 1%
22	1	R5	1K80	Res. SMD 0805 1%
23	2	R6,R7	10K0	Res. SMD 0805 1%
24	1	U1	ULN2004A	Seven Inv. Buffer OC