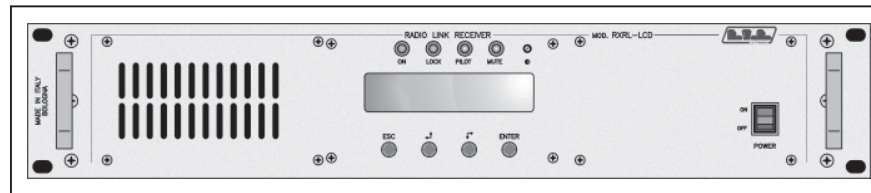


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# RXRL LCD



## User Manual

Addendum to *Volume 2: Technical Appendix*

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

Questa parte del manuale contiene aggiornamenti ai dettagli tecnici riguardanti la costruzione delle singole schede componenti il RXRL LCD. L'addendum è composto dalle seguenti sezioni:

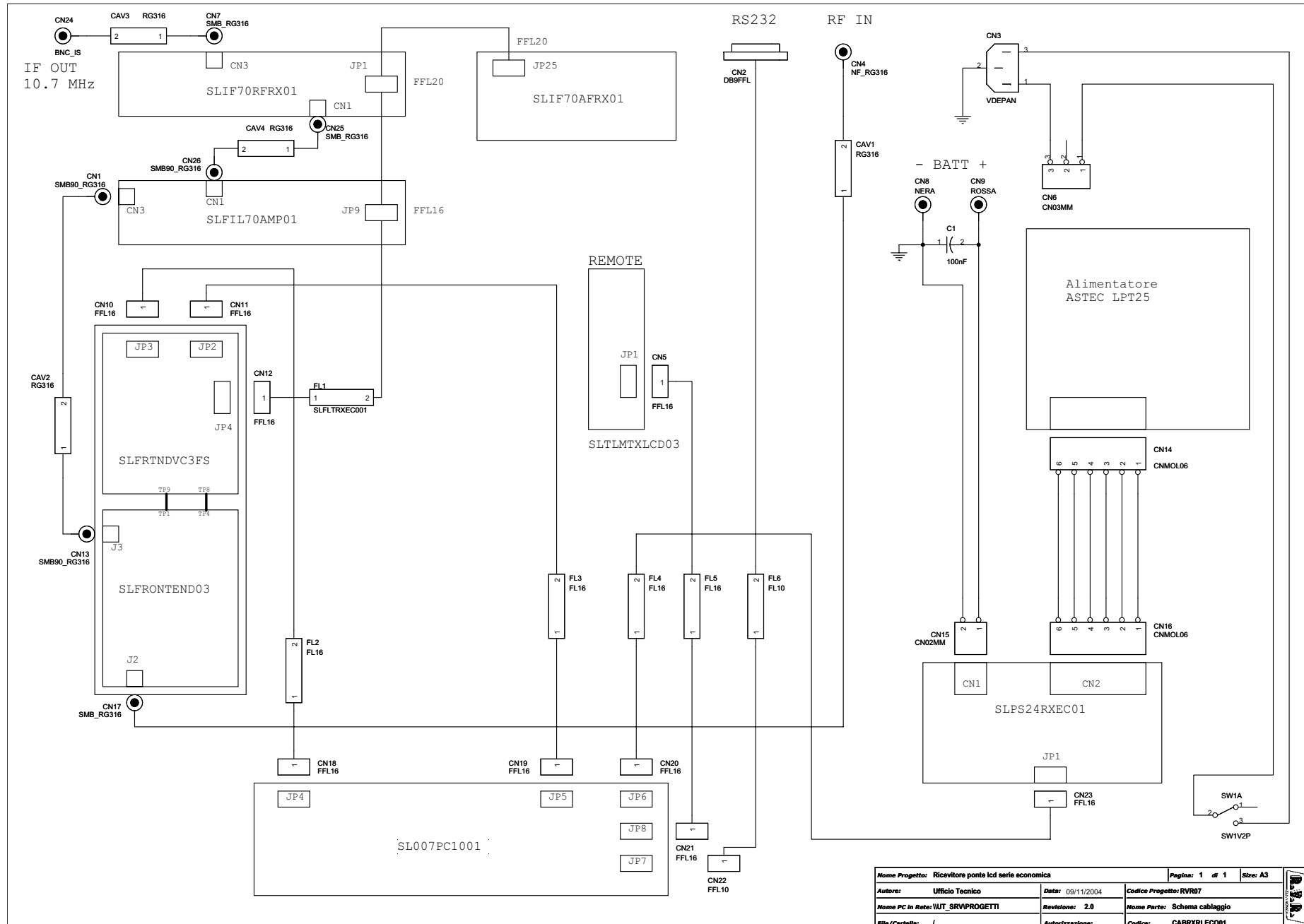
*This part of the manual contains updates to the technical details about the different boards of the RXRL LCD. This addendum is composed of the following sections:*

### RXRL LCD

Description	RVR Code	Vers.	Pages
Wiring diagrams	CABRXRLECO01	1.0	1
IF & FM Discriminator	SLIF70RFRX01	1.1	3
IF 70 MHz Audio Section	SLIF70AFRX01	1.1	8
IF 70 MHz SAW filter	SLFIL70AMP01	1.0	11
Panel Card	SL007PC1001	1.1	14
Power Supply	PSXX155UI15	1.0	17
PS Interface	SLPS24RXECO1	1.1	20
Front-End	SLFRONTEND03	1.1	22
VCO-PLL	SLFRTNDVC3FS	1.1	25
Telemetry Board	SLTLMTXLCD03	2.0	26

### Document History

Date	Version	Reason	Editor
31/08/05	1.0	Addendum to RXRL-LCD technical appendix	J.H. Berti

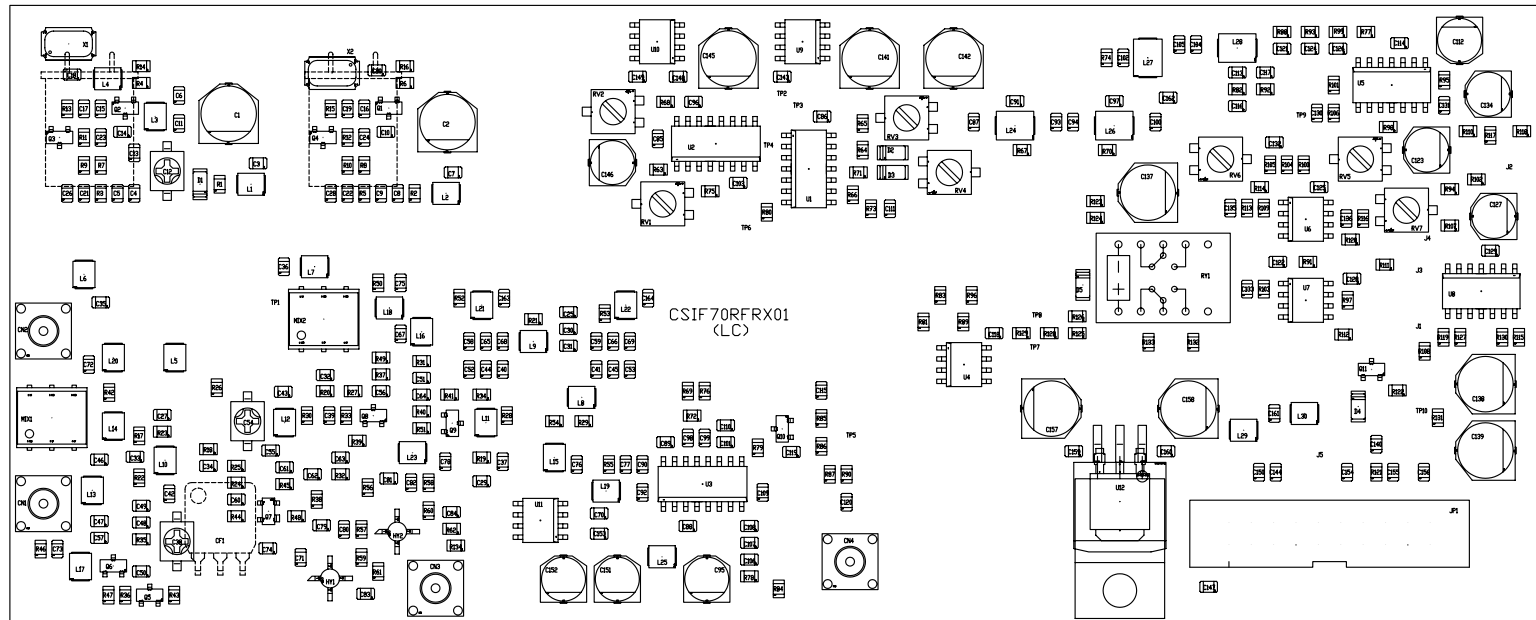


Nome Progetto: Ricevitore ponte lcd serie economica		Pagina: 1 di 1	Size: A3
Autore: Ufficio Tecnico	Data: 09/11/2004	Codice Progetto: RVR07	
Nome PC in Rete: WIT_SRV\PROGETTI	Revisione: 2.0	Nome Parte: Schema cablaggio	
File/Cartella: 1	Autorizzazione:	Codice: CABRXRLECO01	

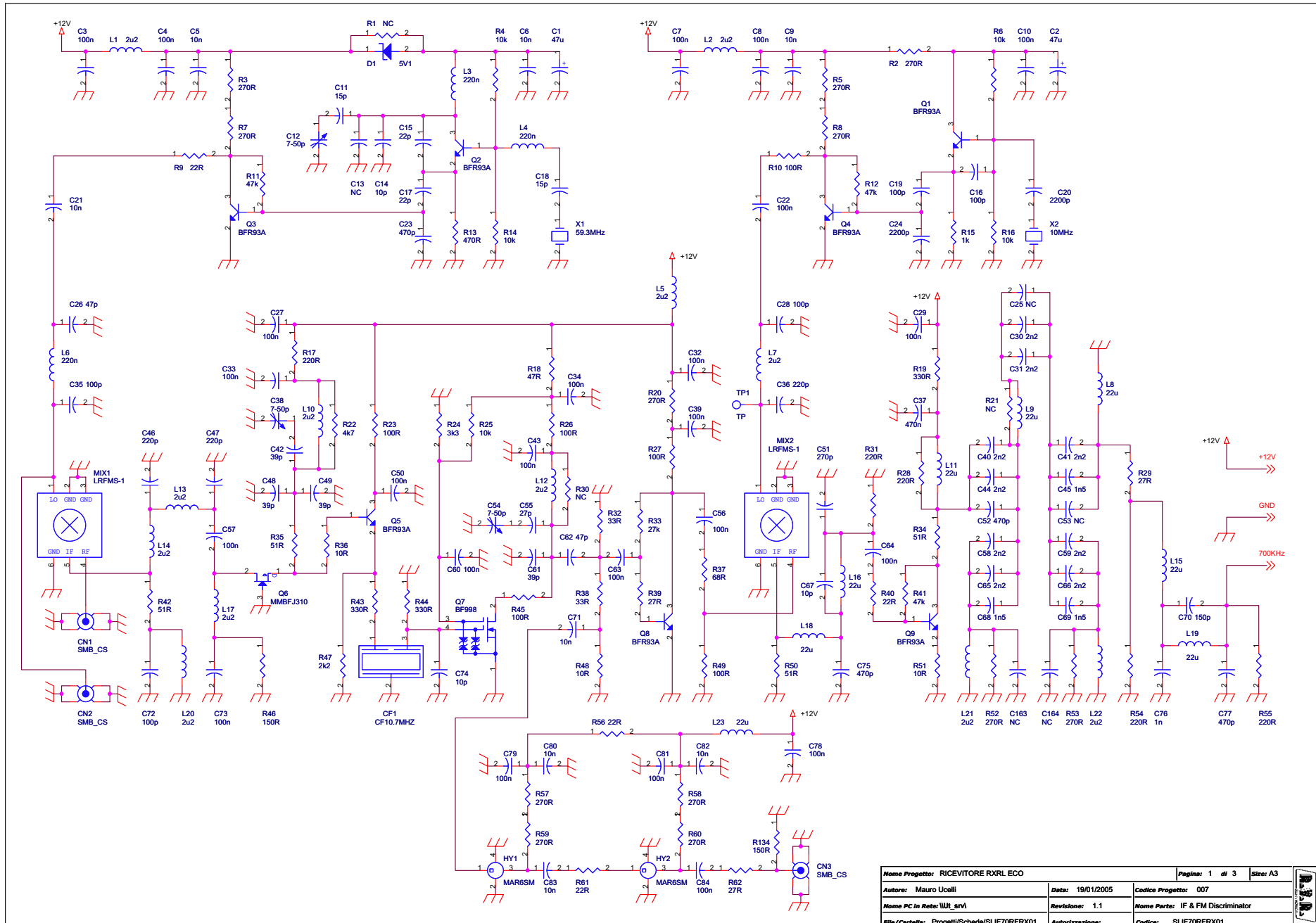
Schema cablaggio Revised: Tuesday, November 09, 2004  
 CABRXRLECO01 Revision: 2.0  
 Ricevitore ponte lcd serie economica  
 RVR07

Ufficio Tecnico

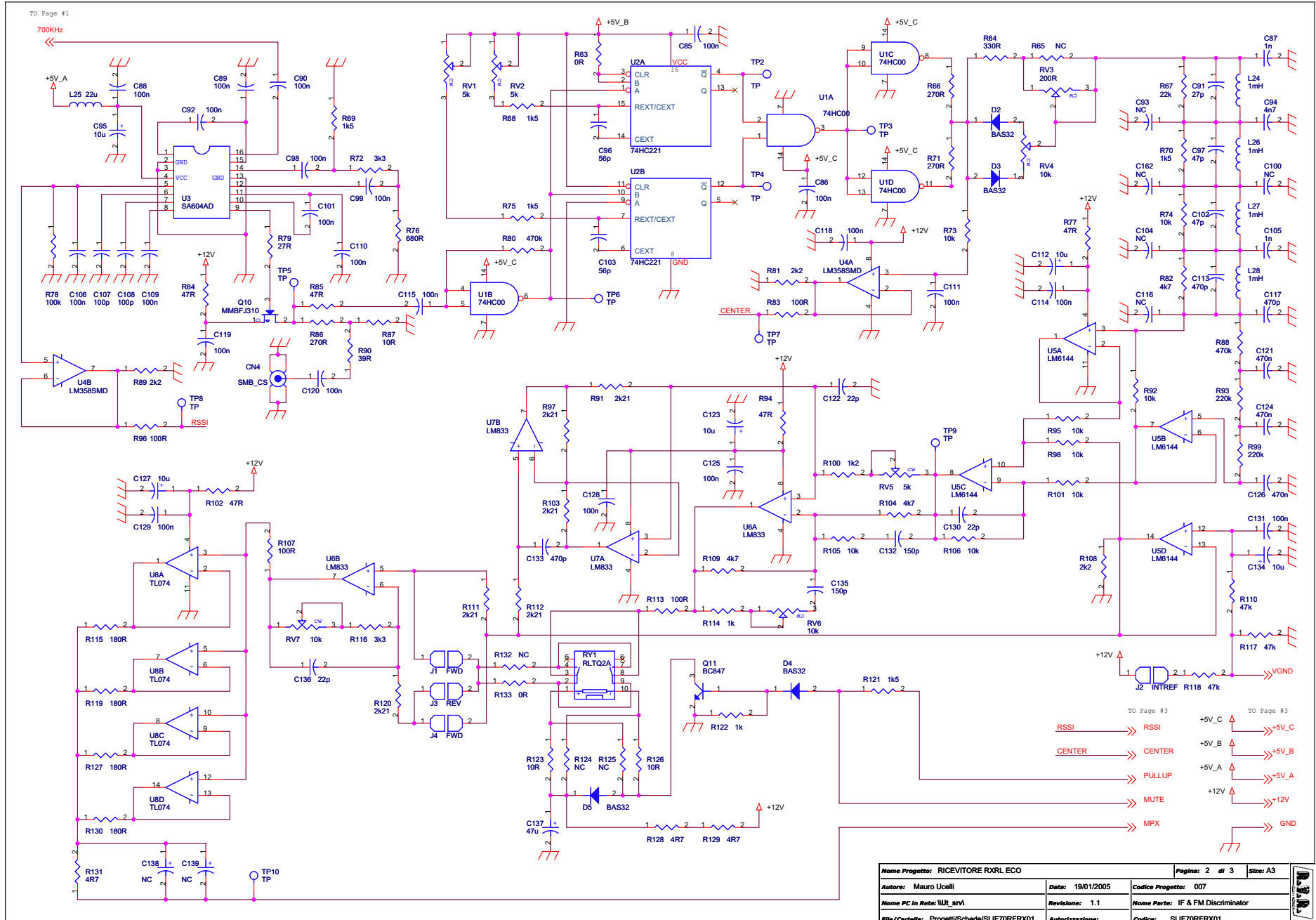
Item	Quantity	Reference	Part	Description
1	1	CAV1	RG316	Cavo RG316
2	1	CAV2	RG316	Cavo RG316 25cm
3	1	CAV3	RG316	Cavo RG316 42cm
4	1	CAV4	RG316	Cavo RG316 27cm
5	3	CN1, CN13, CN26	SMB90_RG316	Conn. SMB m. a 90° per cavo RG
6	1	CN2	DB9FFL	Conn. DB9 f vol
7	1	CN3	VDEPAN	Spina VDE da pannello
8	1	CN4	NF_RG316	Conn. N f. per RG
9	9	CN5, CN10, CN11, CN12, CN18, CN19, CN20, CN21, CN23	FFL16	Conn. flat 16 poli
10	1	CN6	CN03MM	Conn. Lumberg 3 pin m
11	3	CN7, CN17, CN25	SMB_RG316	Conn. SMB m. per cavo RG
12	1	CN8	NERA	Boccola a telaio
13	1	CN9	ROSSA	Boccola a telaio
14	2	CN14, CN16	CNMOL06	Conn. MOLEX 6 pin m
15	1	CN15	CN02MM	Conn. Lumberg 2 poli m
16	1	CN22	FFL10	Conn. flat 10 poli
17	1	CN24	BNC_IS	Conn. N f. da pannello
18	1	C1	100nF	Cond. Poliestere p 10mm
19	1	FL1	SLFLTRXEC001	Vedi doc. SLFLTRXEC001
20	4	FL2, FL3, FL4, FL5	FL16	Cavo flat 16 poli
21	1	FL6	FL10	Cavo flat 10 poli
22	1	SW1	SW1V2P	Deviatore 2V 2P

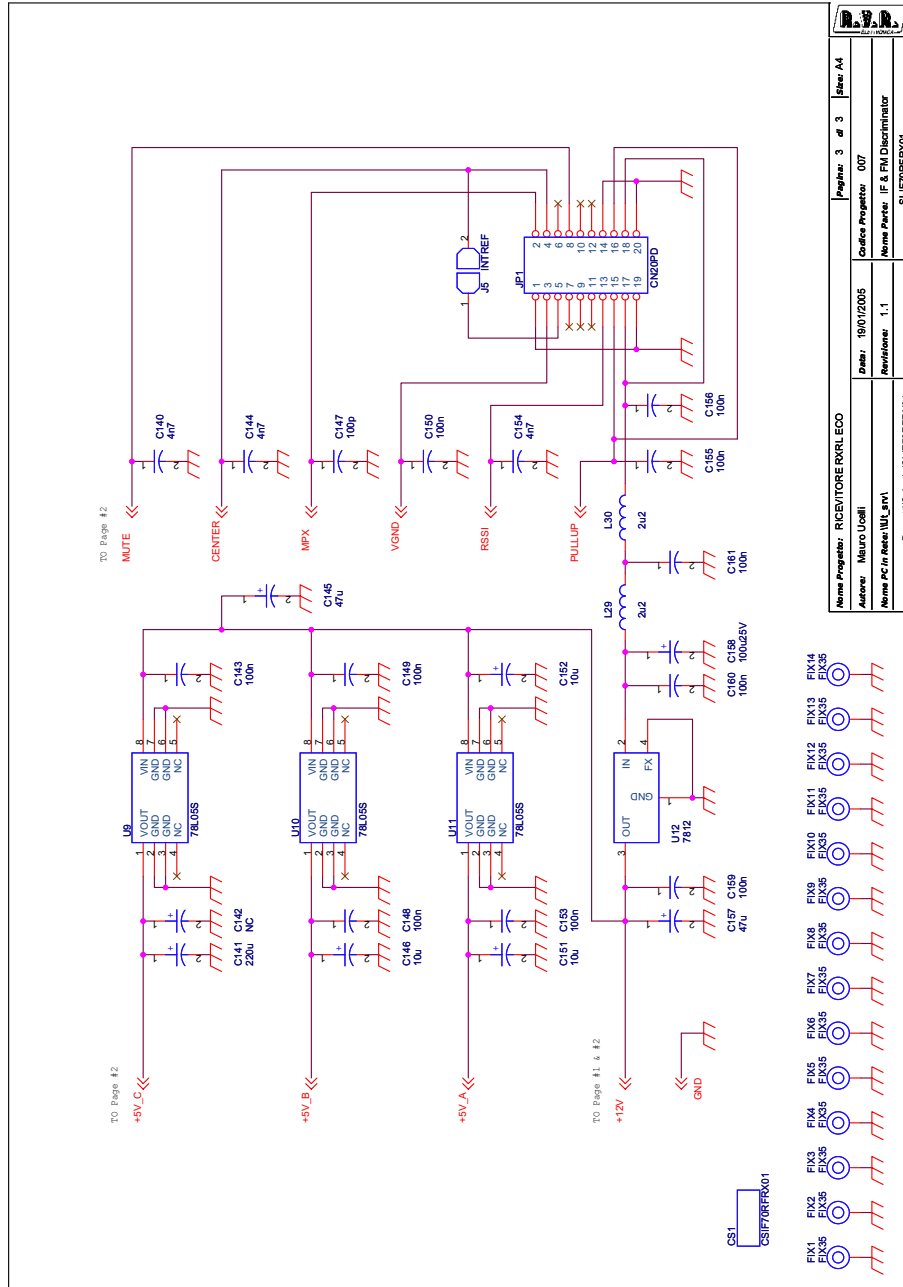


<b>D.V.R.</b> ELETTRONICA	NOME PROGETTO: RICEVITORE RXRL ECO	NOME PARTE: IF & FM DISCRIMINATOR		
	AUTORE: MAURO UCCELLI	DATA: 31/05/2004	REVISIONE: 1.0	SCALA: 2:1
ARCHIVIAZIONE ELETTRONICA: "CARTELLA PROGETTI" SU "UT_SRV"	CODICE PROGETTO: 007	CODICE DISEGNO: SLIF70RFRX01		
MATERIALE: <>	TRATTAMENTO: <>	PROFILO: <>	STATO: ESECUTIVO	



Nome Progetto: RICEVITORE RXRL ECO		Pagina: 1 di 3	Size: A3
Autore: Mauro Ucelli	Data: 19/01/2005	Codice Progetto: 007	
Nome PC in Rete: IUR_srv	Revisione: 1.1	Nome Parte: IF & FM Discriminator	
File/Cartella: Progetti/Schede/SLIF70RFRX01	Autorizzazione:	Codice: SLIF70RFRX01	





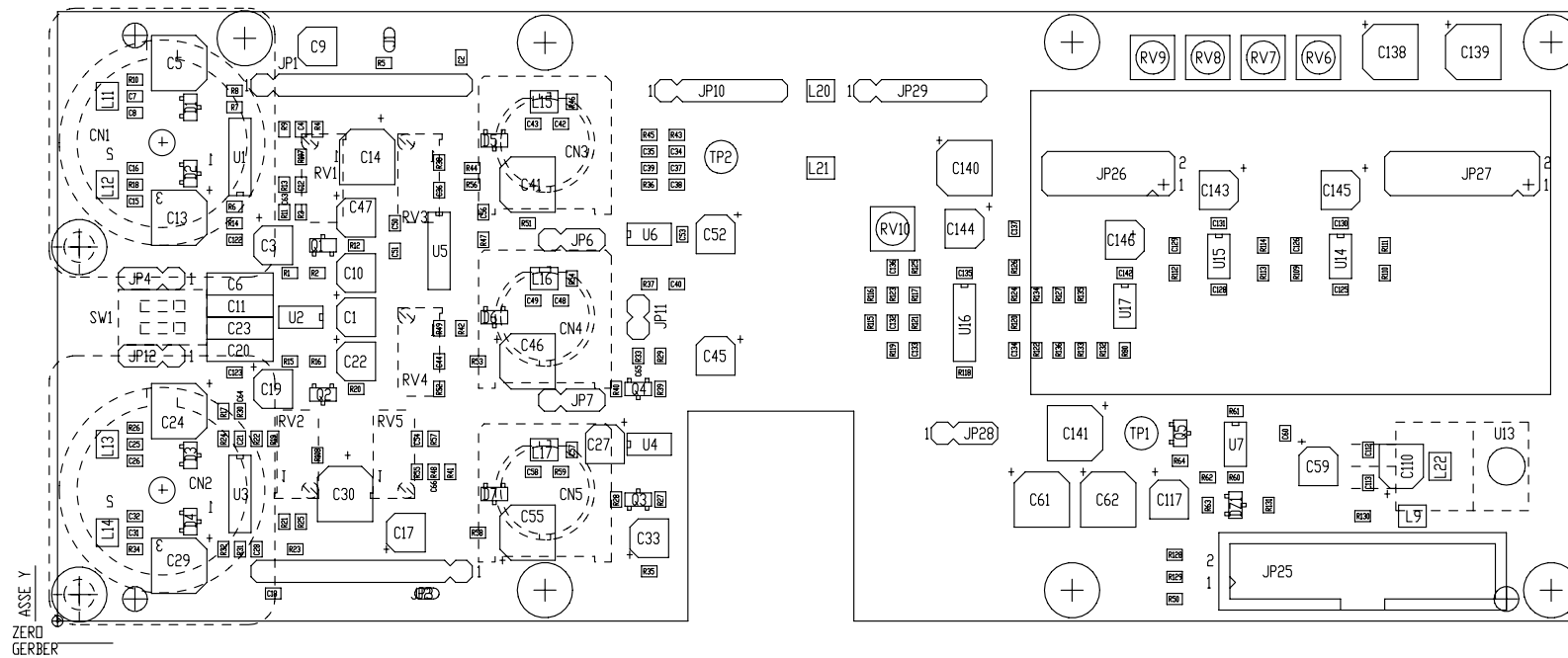
Nome Progetto: RICEVITORE RXRL EDO		Pagina: 3 di 3		Sint. A4	
Autore: Mauro Ucelli		Data: 19/01/2005		Codice Progetto: 007	
Nome PC (riferito a ULL): ULL		Revisione: 1.1		Nome parte: IF & FM Discriminator	
Firma/Genitore: Progettato/Scritto/SLIF70RFRX01		Autore/Revisione:		Codice: SLIF70RFRX01	

IF & FM Discriminator  
 SLIF70RFRX01  
 Revision: 1.1  
 Ricevitore FM  
 32  
 Mauro Ucelli  
 19/01/2005

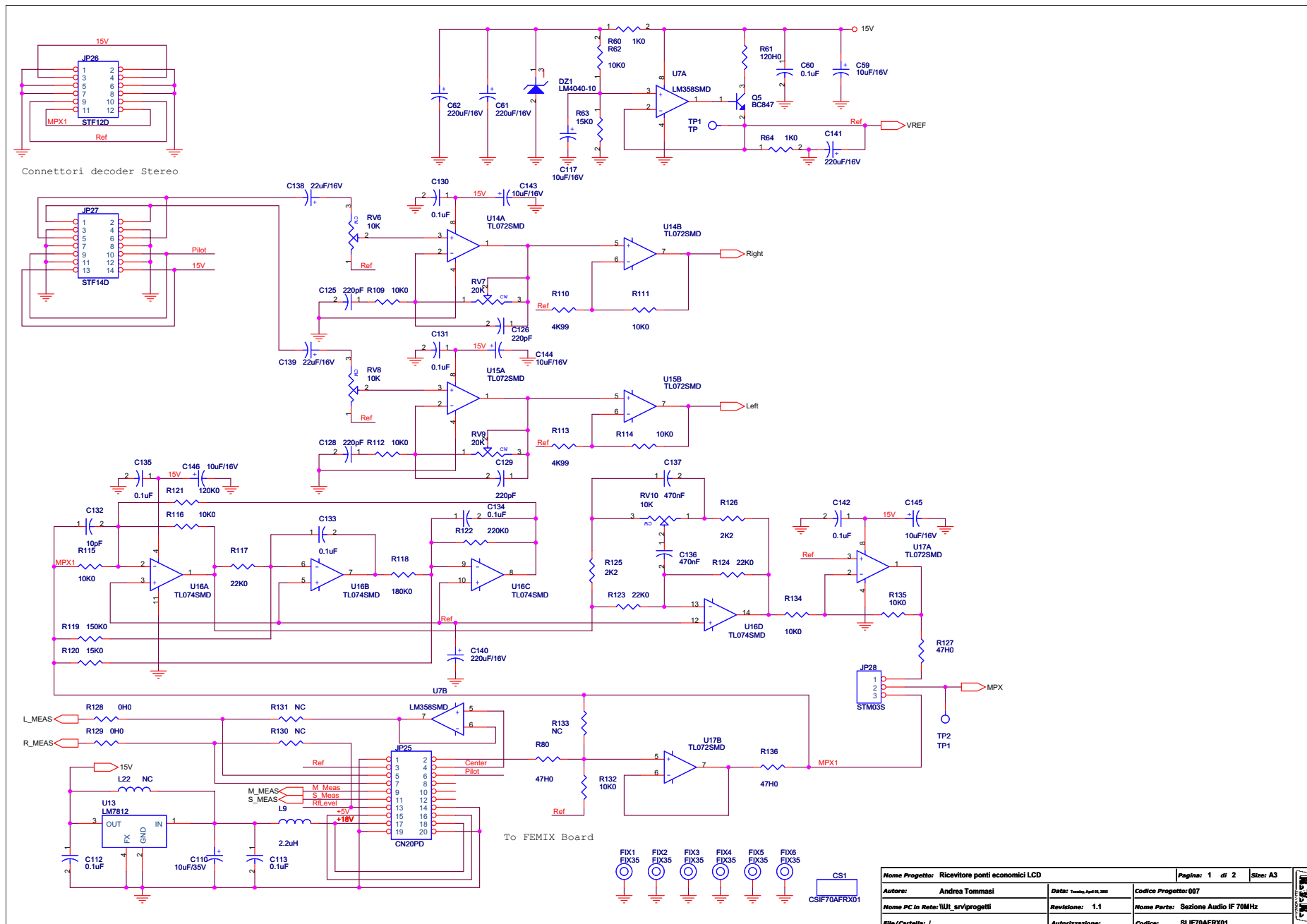
Item	Quantity	Reference	Part	Description
1	1	CF1	CF10.7MHZ	Filtro ceramico
2	4	CN1,CN2,CN3,CN4	SMB_CS	Connettore SMB cs
3	1	CS1	CSIF70RFRX01	Circuito stampato
4	5	C1,C2,C7,C8,C10,C22,C27,C29,C32,C33,C34,C39,C43,C50,C56,C57,C60,C63,C64,C73,C78,C79,C81,C84,C85,C86,C88,C89,C90,C92,C98,C99,C101,C106,C109,C110,C111,C114,C115,C118,C119,C120,C125,C128,C129,C131,C143,C148,C149,C150,C153,C155,C156,C159,C160,C161	47u 100n	Cond. Elett. SMD d. 6.3mm Cond. SMD 0805
6	8	C5,C6,C9,C21,C71,C80,C82,C83	10n	Cond. SMD 0805
7	2	C18,C11	15p	Cond. SMD 0805 COG
8	3	C12,C38,C54	7-50p	Comp. var. Murata TZB4
9	10	C13,C25,C53,C93,C100,C104,C116,C162,C163,C164	NC	Cond. SMD 0805 COG
10	3	C14,C67,C74	10p	Cond. SMD 0805 COG
11	5	C15,C17,C122,C130,C136	22p	Cond. SMD 0805 COG
12	8	C16,C19,C28,C35,C72,C107,C108,C147	100p	Cond. SMD 0805 COG
13	2	C24,C20	2200p	Cond. SMD 0805 COG
14	7	C23,C52,C75,C77,C113,C117,C133	470p	Cond. SMD 0805 COG
15	4	C26,C62,C97,C102	47p	Cond. SMD 0805 COG
16	9	C30,C31,C40,C41,C44,C58,C59,C65,C66	2n2	Cond. SMD 0805 COG
17	3	C36,C46,C47	220p	Cond. SMD 0805 COG
18	4	C37,C121,C124,C126	470n	Cond. SMD 0805
19	4	C42,C48,C49,C61	39p	Cond. SMD 0805 COG
20	3	C45,C68,C69	1n5	Cond. SMD 0805 COG
21	1	C51	270p	Cond. SMD 0805 COG
22	2	C91,C55	27p	Cond. SMD 0805 COG
23	3	C70,C132,C135	150p	Cond. SMD 0805 COG
24	3	C76,C87,C105	1n	Cond. SMD 0805 COG
25	1	C94	4n7	Cond. SMD 0805 COG
26	8	C95,C112,C123,C127,C134,C146,C151,C152	10u	Cond. Elett. SMD d. 5mm
27	2	C96,C103	56p	Cond. SMD 0805 COG
28	3	C138,C139,C142	NC	Cond. Elett. SMD d. 6.3mm
29	3	C140,C144,C154	4n7	Cond. SMD 0805
30	1	C141	220u	Cond. Elett. SMD d. 6.3mm
31	1	C158	100u25V	Cond. Elett. SMD d. 6.3mm
32	1	D1	5V1	MINIMELF SMD Zener Diode
33	4	D2,D3,D4,D5	BAS32	MINIMELF SMD Diode
34	14	FIX1, FIX2, FIX3, FIX4, FIX5, FIX6, FIX7, FIX8, FIX9, FIX10, FIX11, FIX12, FIX13,	FIX35	Foro fissaggio 3.5mm



	FIX14						
35	2 HY1, HY2	MAR6SM	Ibrido MAR/ERA	83	1 R100	1k2	Res. SMD 0805
36	1 JP1	CN20PD	Connettore 20 poli Flat cs	84	4 R115, R119, R127, R130	180R	Res. SMD 0805
37	2 J4, J1	FWD		85	3 R128, R129, R131	4R7	Res. SMD 0805
38	2 J5, J2	INTREF		86	10 TP1, TP2, TP3, TP4, TP5, TP6, TP7, TP8, TP9, TP10	TP	Test point
39	1 J3	REV		87	1 U1	74HC00	Quad NAND SMD SO14
40	14 L1, L2, L5, L7, L10, L12, L13, L14, L17, L20, L21, L22, L29, L30	2u2	Induttanza SMD 3225 (1210)	88	1 U2	74HC221	
				89	1 U3	SA604AD	FM receiver SMD SO20
41	3 L3, L4, L6	220n	Induttanza SMD 3225 (1210)	90	1 U4	LM358SMD	Dual Op. SMD SO8
42	9 L8, L9, L11, L15, L16, L18, L19, L23, L25	22u	Induttanza SMD 3225 (1210)	91	1 U5	LM6144	Quad Op. SMD SO14
				92	2 U7, U6	LM833	Dual Op. SMD SO8
43	4 L24, L26, L27, L28	1mH	Induttanza SMD 4532 (1812)	93	1 U8	TL074	Quad Op. SMD SO14
44	2 MIX1, MIX2	LRFMS-1	Mixer SMD serie RSM	94	3 U9, U10, U11	78L05S	Stabilizzatore SMD SO8
45	7 Q1, Q2, Q3, Q4, Q5, Q8, Q9	BFR93A	Trans. NPN SOT23	95	1 U12	7812	Stabilizzatore 1A SMD 2DT
46	2 Q10, Q6	MMBFJ310	Trans. FET SOT23	96	1 X1	59.3MHz	Quarzo HC18
47	1 Q7	BF998	Trans. FET dual gate SOT143	97	1 X2	10MHz	Quarzo HC18
48	1 Q11	BC847	Trans. NPN SOT23				
49	3 RV1, RV2, RV5	5k	Trimmer SMD				
50	1 RV3	200R	Trimmer SMD				
51	3 RV4, RV6, RV7	10k	Trimmer SMD				
52	1 RY1	RLTQ2A	Rele' TQ2				
53	7 R1, R21, R30, R65, R124, R125, R132	NC	Res. SMD 0805				
54	15 R2, R3, R5, R7, R8, R20, R52, R53, R57, R58, R59, R60, R66, R71, R86	270R	Res. SMD 0805				
55	13 R4, R6, R14, R16, R25, R73, R74, R92, R95, R98, R101, R105, R106	10k	Res. SMD 0805				
56	4 R9, R40, R56, R61	22R	Res. SMD 0805				
57	10 R10, R23, R26, R27, R45, R49, R83, R96, R107, R113	100R	Res. SMD 0805				
58	6 R11, R12, R41, R110, R117, R118	47k	Res. SMD 0805				
59	1 R13	470R	Res. SMD 0805				
60	3 R15, R114, R122	1k	Res. SMD 0805				
61	5 R17, R28, R31, R54, R55	220R	Res. SMD 0805				
62	6 R18, R77, R84, R85, R94, R102	47R	Res. SMD 0805				
63	4 R19, R43, R44, R64	330R	Res. SMD 0805				
64	4 R22, R82, R104, R109	4k7	Res. SMD 0805				
65	3 R24, R72, R116	3k3	Res. SMD 0805				
66	4 R29, R39, R62, R79	27R	Res. SMD 0805				
67	2 R38, R32	33R	Res. SMD 0805				
68	1 R33	27k	Res. SMD 0805				
69	4 R34, R35, R42, R50	51R	Res. SMD 0805				
70	6 R36, R48, R51, R87, R123, R126	10R	Res. SMD 0805				
71	1 R37	68R	Res. SMD 0805				
72	2 R46, R134	150R	Res. SMD 0805				
73	4 R47, R81, R89, R108	2k2	Res. SMD 0805				
74	2 R63, R133	0R	Res. SMD 0805				
75	1 R67	22k	Res. SMD 0805				
76	5 R68, R69, R70, R75, R121	1k5	Res. SMD 0805				
77	1 R76	680R	Res. SMD 0805				
78	1 R78	100k	Res. SMD 0805				
79	2 R88, R80	470k	Res. SMD 0805				
80	1 R90	39R	Res. SMD 0805				
81	6 R91, R97, R103, R111, R112, R120	2k21	Res. SMD 0805				
82	2 R99, R93	220k	Res. SMD 0805				



<b>D.V.A.</b> ELETTRONICA	NOME PROGETTO: Ricevitore ponti economici LCD	NOME PARTE: Sezione Audio IF 70MHz
	AUTORE: Andrea Tommasi	DATA: 22/03/2005   REVISIONE: 1.1   SCALA: 2:1   SIZE: A3   PAGINA: 1 DI 1
ARCHIVIAZIONE ELETTRONICA: "CARTELLA PROGETTI" SU "UT_SRV"	CODICE PROGETTO: 007	CODICE DISEGNO: SLIF70AFRX01
MATERIALE: <>	TRATTAMENTO: <>	PROFILO: <>   STATO: ESECUTIVO



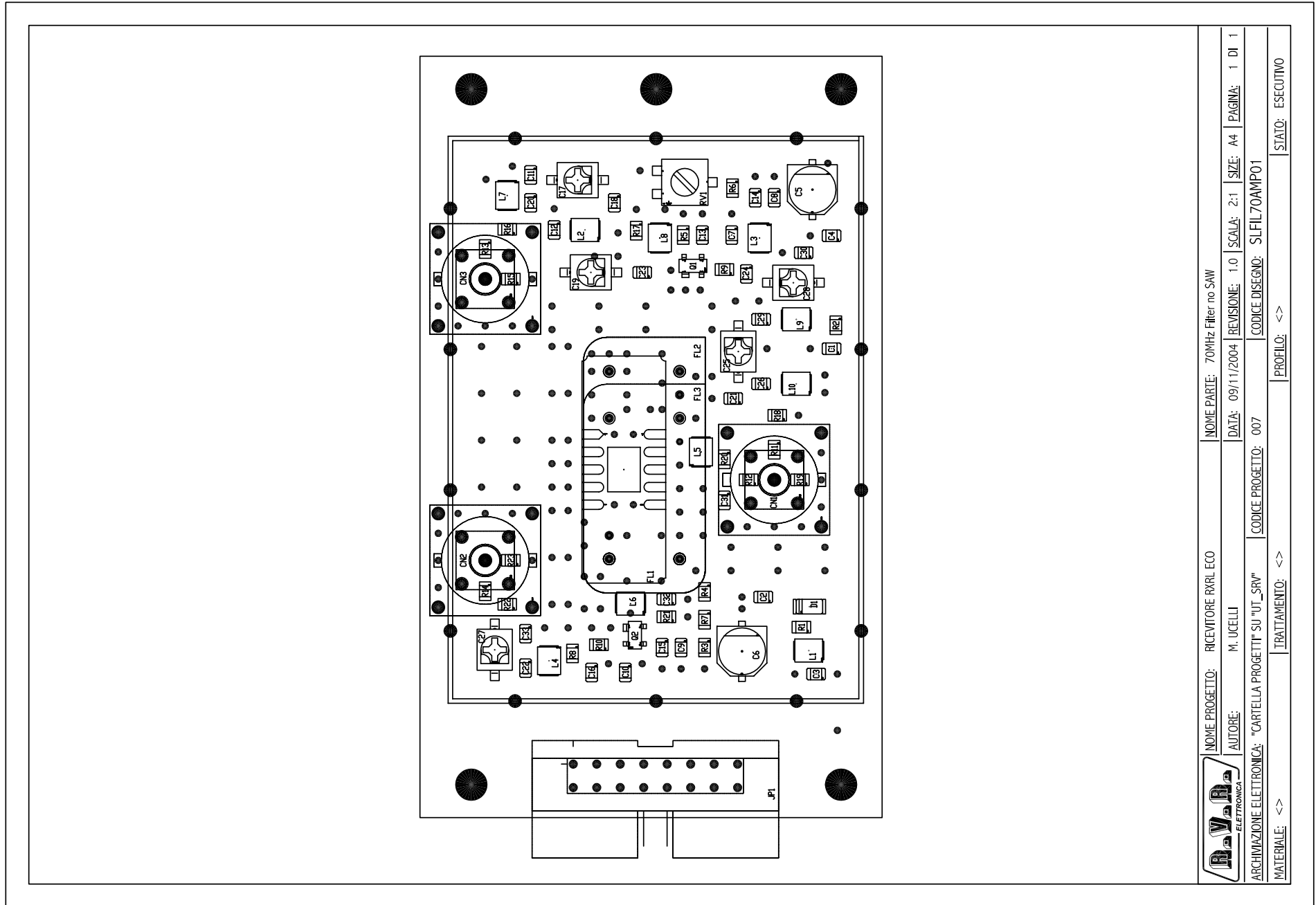
Sezione Audio IF 70MHz Revised: Tuesday, April 05, 2005  
 SLIF70AFRX01 Revision: 1.1  
 Ricevitore ponti economici LCD

7  
 Andrea Tommasi

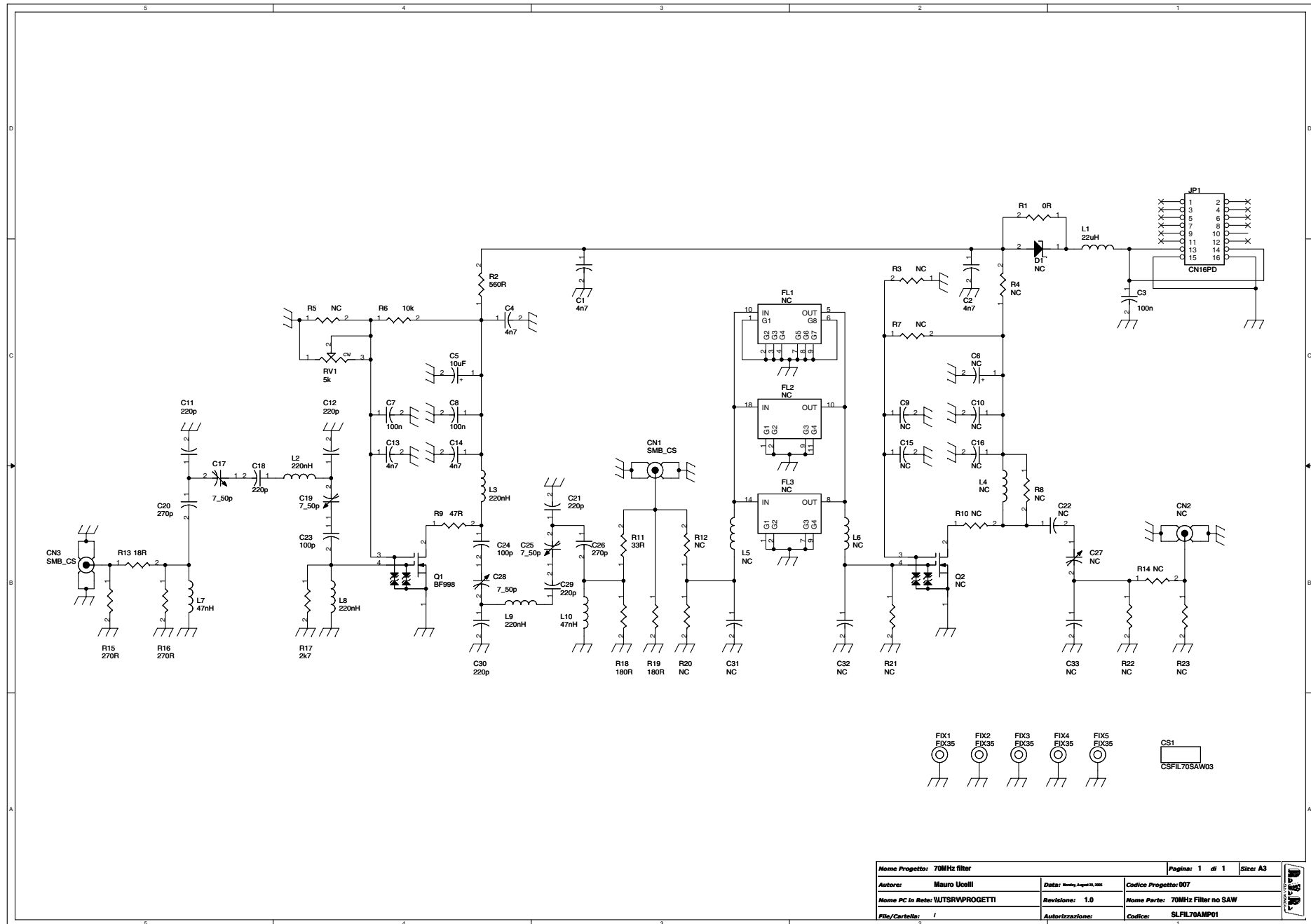
Item	Quantity	Reference	Part	Description	Note
1	2	CN1, CN2	XLRMCSD	Connettore XLR mas. cs	
2	3	CN3, CN4, CN5	BNC_IS	Connettore BNC metallico	
3	1	CS1	CSIF70AFRX01	Circuito stampato	
4	18	C1, C3, C9, C10, C17, C19, C22, C27, C33, C45, C47, C52, C59, C117, C143, C144, C145, C146	10uF/16V	Cond. Elett. SMD d. 4mm	
5	13	C2, C18, C51, C53, C60, C112, C113, C130, C131, C133, C134, C135, C142	0.1uF	Cond. SMD 0805	
6	2	C4, C21	22pF	Cond. SMD 0805	
7	7	C5, C13, C14, C24, C29, C30, C41	100uF/16V	Cond. Elett. SMD d. 6.3mm	
8	2	C6, C20	4.7nF	Cond. Poliestere p 5mm	
9	14	C7, C8, C15, C16, C25, C26, C31, C32, C42, C43, C48, C49, C57, C58	27pF	Cond. SMD 0805	
10	2	C11, C23	10nF	Cond. Poliestere p 5mm	
11	3	C12, C28, C132	10pF	Cond. SMD 0805	
12	6	C34, C35, C37, C38, C39, C40	1nF	Cond. SMD 0805	
13	3	C36, C44, C54	4.7pF	Cond. SMD 0805	
14	6	C46, C55, C61, C62, C140, C141	220uF/16V	Cond. Elett. SMD d. 6.3mm	
15	1	C50	270pF	Cond. SMD 0805	
16	3	C56, C122, C123	330pF	Cond. SMD 0805	
17	4	C63, C64, C65, C66	1uF	Cond. SMD 0805	
18	1	C110	10uF/35V	Cond. Elett. SMD d. 5mm	
19	4	C126, C126, C128, C129	220pF	Cond. SMD 0805	
20	2	C136, C137	470nF	Cond. SMD 0805	
21	2	C138, C139	22uF/16V	Cond. Elett. SMD d. 6.3mm	
22	1	DZ1	LM4040-10	Diodi Zener SMD SOT23	
23	7	D1, D2, D3, D4, D5, D6, D7	BAV99	Doppio Diode SMD SOT23	
24	9	FIX1, FIX2, FIX3, FIX4, FIX5, FIX6, FIX7, FIX8, FIX9	FIX35	Foro fissaggio 3.5mm	
25	2	JP1, JP3	STF10S	Strip femmina 10 pin	Nota1
26	5	JP4, JP6, JP7, JP12, JP28	STM03S	Strip maschio 3 pin	
27	1	JP10	STF06S	Strip femmina 6 pin	
28	1	JP11	STM02S	Strip maschio 2 pin	
29	7	JP18, JP19, JP20, JP21, JP22, JP23, JP24	JUM	Ponticello Jumper	
30	1	JP25	CN20PD	Connettore 20 poli Fiat cs	
31	1	JP26	STF12D	Strip femmina 12 pin doppia fila	
32	1	JP27	STF14D	Strip femmina 14 pin doppia fila	
33	1	JP29	STM06S	Strip maschio 6 pin	
34	2	J1, J2	J5MD	Pad SMD a saldare	
35	10	L9, L11, L12, L13, L14, L15, L16, L17, L20, L21	2.2uH	Induttanza SMD 3225 (1210)	
36	1	L22	NC	Induttanza SMD 3225 (1210)	
37	4	Q1, Q2, Q3, Q4	BC857	Trans. PNP SOT23	
38	1	Q5	BC847	Trans. NPN SOT23	
39	2	RV1, RV2	50K	Trimmer Rg V 3296W	
40	3	RV3, RV4, RV5	20K	Trimmer Rg V 3296W	
41	3	RV6, RV8, RV10	10K	Trimmer SMD	
42	2	RV7, RV9	20K	Trimmer SMD	
43	30	R1, R7, R9, R10, R13, R15, R18, R22, R25, R26, R27, R31, R34, R39, R42, R46, R52, R54, R57, R59, R62, R109, R111, R112, R114, R115, R116, R132, R134, R135	10K0	Res. SMD 0805	
44	4	R2, R16, R28, R40	100K0	Res. SMD 0805	
45	4	R3, R17, R29, R41	47K0	Res. SMD 0805	
46	4	R4, R19, R47, R51	1K8	Res. SMD 0805	
47	2	R5, R23	1M0	Res. SMD 0805	
48	4	R6, R21, R110, R113	4K99	Res. SMD 0805	
49	7	R8, R14, R24, R32, R44, R53, R58	22H0	Res. SMD 0805	
50	7	R11, R30, R33, R48, R130, R131, R133	NC	Res. SMD 0805	
51	4	R12, R20, R35, R50	18K2	Res. SMD 0805	
52	2	R36, R37	8K2	Res. SMD 0805	
53	3	R38, R49, R55	3K16	Res. SMD 0805	
54	2	R43, R45	1K5	Res. SMD 0805	
55	1	R56	390H0	Res. SMD 0805	
56	2	R60, R64	1K0	Res. SMD 0805	
57	1	R61	120H0	Res. SMD 0805	
58	2	R63, R120	15K0	Res. SMD 0805	
59	3	R60, R127, R136	47H0	Res. SMD 0805	
60	2	R107, R108	75K	Res. SMD 0805	
61	3	R117, R123, R124	22K0	Res. SMD 0805	
62	1	R118	180K0	Res. SMD 0805	
63	1	R119	150K0	Res. SMD 0805	
64	1	R121	120K0	Res. SMD 0805	
65	1	R122	220K0	Res. SMD 0805	
66	2	R125, R126	2K2	Res. SMD 0805	
67	2	R128, R129	0H0	Res. SMD 0805	

Item	Quantity	Reference	Part	Description	Note
68	1	SW1	SWDIP2	Dip switch 2 vie	
69	1	TP1	TP	Test point	
70	1	TP2	TP1	Test point	
71	4	U1, U3, U5, U16	TL074SMD	Quad Op. SMD SO14	
72	2	U2, U4	LM393SMD	Dual Comp. SMD SO8	
73	4	U6, U14, U15, U17	TL072SMD	Dual Op. SMD SO8	
74	1	U7	LM358SMD	Dual Op. SMD SO8	
75	1	U13	LM7812	Stabilizzatore TO220	

Nota1 JP1 non viene montato. Il filtro si salda direttamente sul CS

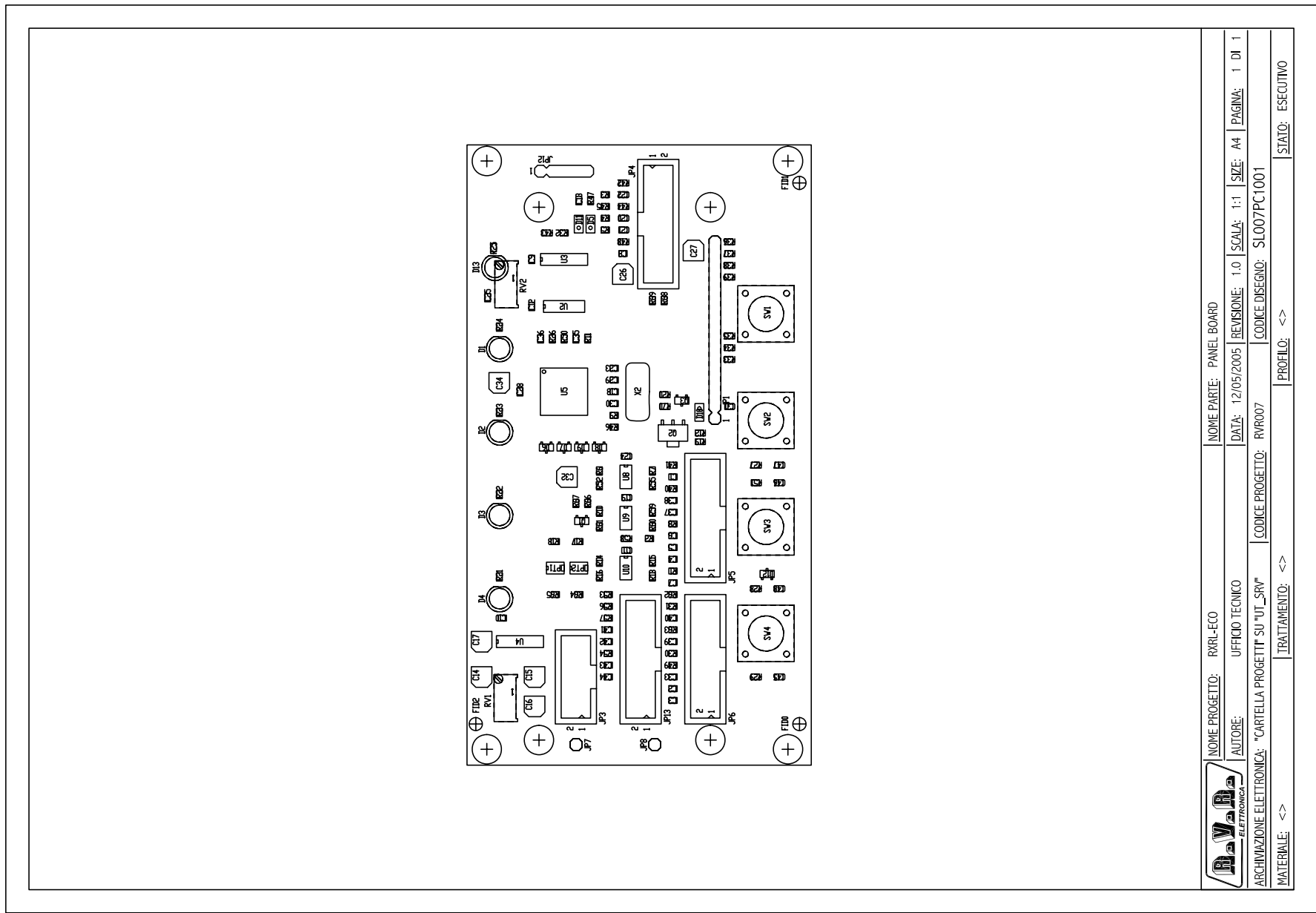


	NOME PROGETTO: RICEVITORE RXRL ECO	NOME PARTE: 70MHz Filter no SAW
AUTORE: M. UCCELLI	DATA: 09/11/2004	REVISIONE: 1.0
ARCHIVIAZIONE ELETTRONICA: "CARTELLA PROGETTI" SU "UT_SRV"	CODICE PROGETTO: 007	CODICE DISEGNO: SLFIL70AMP01
MATERIALE: <>	TRATTAMENTO: <>	PROFILO: <>
		STATO: ESECUTIVO
		SCALE: 2:1
		SIZE: A4
		PAGINA: 1 DI 1



70MHz Filter no SAW  
 SLFIL70AMP01  
 Revision: 1.0  
 70MHz filter  
 Mauro Ucelli  
 18/10/2004

Item	Quantity	Reference	Part	Description
1	2	CN3,CN1	SMB_CS	Connettore SMB cs
2	1	CN2	NC	Connettore SMB cs
3	1	CS1	CSFIL70SAW03	Circuito stampato
4	5	C1,C2,C4,C13,C14	4n7	Cond. SMD 0805
5	3	C3,C7,C8	100n	Cond. SMD 0805
6	1	C5	10uF	Cond. Elett. SMD d. 5mm
7	1	C6	NC	Cond. Elett. SMD d. 5mm
8	4	C9,C10,C15,C16	NC	Cond. SMD 0805
9	6	C11,C12,C18,C21,C29,C30	220p	Cond. SMD 0805 COG
10	4	C17,C19,C25,C28	7_50p	Comp. var. Murata TZB4
11	2	C20,C26	270p	Cond. SMD 0805 COG
12	4	C22,C31,C32,C33	NC	Cond. SMD 0805 COG
13	2	C23,C24	100p	Cond. SMD 0805 COG
14	1	C27	NC	Comp. var. Murata TZB4
15	1	D1	NC	MINIMELF SMD Zener Diode
16	5	FIX1,FIX2,FIX3,FIX4,FIX5	FIX35	Foro fissaggio 3.5mm
17	1	FL1	NC	Filtro SAW SMD
18	1	FL2	NC	Filtro SAW DIL18
19	1	FL3	NC	Filtro SAW DIL14
20	1	JP1	CN16PD	Connettore 16 poli Flat cs
21	1	L1	22uH	Induttanza SMD 3225 (1210)
22	4	L2,L3,L8,L9	220nH	Induttanza SMD 3225 (1210)
23	3	L4,L5,L6	NC	Induttanza SMD 3225 (1210)
24	2	L7,L10	47nH	Induttanza SMD 3225 (1210)
25	1	Q1	BF998	Trans. FET dual gate SOT143
26	1	Q2	NC	Trans. FET dual gate SOT143
27	1	RV1	5k	Trimmer SMD
28	1	R1	0R	Res. SMD 0805
29	1	R2	560R	Res. SMD 0805
30	12	R3,R4,R5,R7,R8,R10,R12, R14,R20,R21,R22,R23	NC	Res. SMD 0805
31	1	R6	10k	Res. SMD 0805
32	1	R9	47R	Res. SMD 0805
33	1	R11	33R	Res. SMD 0805
34	1	R13	18R	Res. SMD 0805
35	2	R15,R16	270R	Res. SMD 0805
36	1	R17	2k7	Res. SMD 0805
37	2	R18,R19	180R	Res. SMD 0805



	NOME PROGETTO: RXRL-ECO	NOME PARTE: PANEL BOARD
AUTORE: UFFICIO TECNICO	DATA: 12/05/2005	REVISIONE: 1.0
ARCHIVIAZIONE ELETTRONICA: "CARTELLA PROGETTI" SU "UT_SRV"	CODICE PROGETTO: RVR007	CODICE DISEGNO: SL007PC1001
MATERIALE: < >	TRATTAMENTO: < >	STATO: ESECUTIVO





SCHEDA PANNELLO RXRL-ECO  
 SL007PC1001 Revision: 1.1  
 DATA 12/05/2005

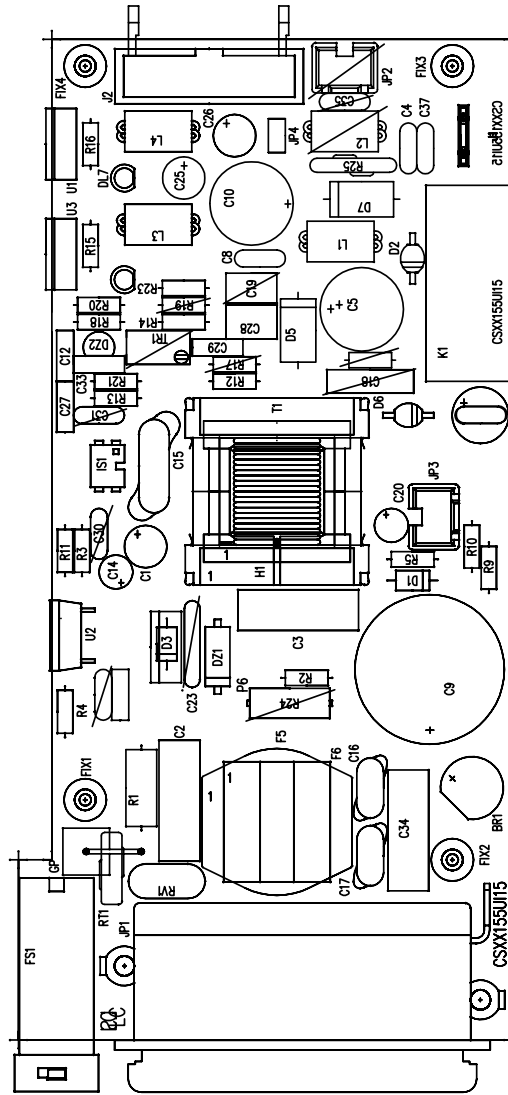
Item	Quantity	Reference	Part	Description	
1	23	C1,C2,C3,C4,C5,C6,C7,C8,C9,C10,C11,C12,C13,C18,C19,C24,C25,C28,C30,C31,C33,C35,C36	0.1uF	Cond. SMD 0805	
2	8	C14,C15,C16,C17,C26,C27,C32,C34	10uF/16V	Cond. Elett. SMD d. 4mm	
3	15	C20,C21,C22,C37,C38,C39,C40,C41,C42,C43,C44,C45,C46,C47,C48	1nF	Cond. SMD 0805	
4	2	C23,C29	15pF	Cond. SMD 0805	
5	3	D1,D2,D3	LED-G5	LED dia. 5mm	<b>Nota 1</b>
6	1	D4	LED-Y5	LED dia. 5mm	<b>Nota 1</b>
7	1	D5	BAS32	MINIMELF SMD Diode	
8	4	D6,D7,D8,D9	HSMS2804	Doppio Diodo SMD SOT23	
9	2	D10,D11	5V1	MINIMELF SMD Zener Diode	
10	1	D12	NC	Doppio Diodo SMD SOT23	
11	1	D13	NC	LED dia. 5mm	
12	8	FIX1, FIX2, FIX3, FIX4, FIX5, FIX6, FIX7, FIX8	FIX35	Foro fissaggio 3.5mm	
13	1	JP1	STM16S	Strip maschio 16 pin	<b>Nota 2</b>
14	1	JP3	CN10PD	Connettore 10 poli Flat cs	
15	4	JP4, JP5, JP6, JP13	CN16PD	Connettore 16 poli Flat cs	
16	2	JP7, JP8	NC	Strip femmina 1 pin	<b>Nota 3</b>
17	1	JP12	STM05S	Strip maschio 5 pin	
18	2	OPT2, OPT1	SFH690	Optoisolatore SMD SO6	
19	1	Q1	BC847	Trans. NPN SOT23	
20	1	Q2	NC	Trans. FET SOT223	
21	1	Q3	BC817	Trans. NPN SOT23	
22	1	RV1	10K	Trimmer Rg V 3296W	<b>Nota 1</b>
23	1	RV2	NC	Trimmer Rg V 3296W	
24	6	R1,R2,R11,R25,R49,R68	NC	Res. SMD 0805	
25	8	R3,R4,R5,R6,R7,R8,R9,R10	1K0	Res. SMD 0805	
26	2	R19,R12	4H70	Res. SMD 0805	
27	2	R13,R16	100H0	Res. SMD 0805	
28	2	R14,R15	330H0	Res. SMD 0805	
29	18	R17,R18,R27,R28,R29,R33,R34,R35,R36,R37,R38,R39,R48,R54,R57,R60,R63,R66	4K7	Res. SMD 0805	
30	1	R20	10K0	Res. SMD 0805	
31	6	R21,R22,R23,R24,R64,R65	1K8	Res. SMD 0805	
32	1	R26	4K75	Res. SMD 0805	
33	4	R30,R31,R51,R69	0H	Res. SMD 0805	
34					
35	11	R32,R40,R41,R42,R43,R44,R45,R46,R47,R67,R70	10K	Res. SMD 0805	
36	1	R50	22K	Res. SMD 0805	
37	4	R52,R55,R58,R61	100K	Res. SMD 0805	
38	4	R53,R56,R59,R62	22H	Res. SMD 0805	
39	4	SW1,SW2,SW3,SW4	PULCS1	Pulsante cs	<b>Nota 1</b>

40	1	U2	7406SMD	Hex inv OC SMD SO14
41	1	U3	4094SMD	Shift Reg. SMD SO16
42	1	U4	MAX232SMD	RS232 Driver SMD SO16
43	1	U5	PIC18F452	TQFP44 SMD Microprocessor
44	2	U9,U8	LM358SMD	Dual Op. SMD SO8
45	1	U10	82B715SO	IIC Bus driver SMD SO8
46	1	X2	Q4M	Quarzo SMD HC49SMD

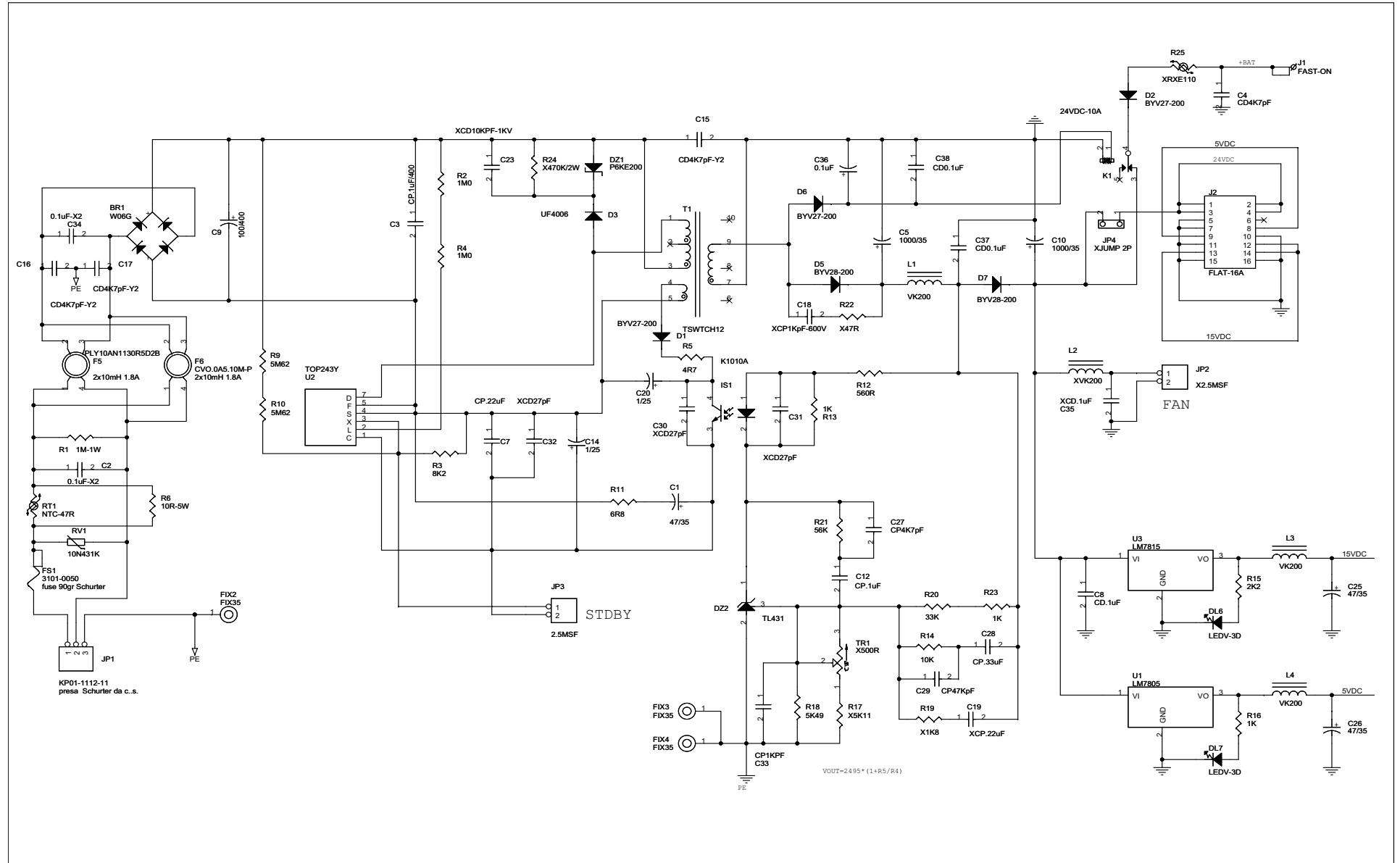
**Nota 1** Montare lato saldature

**Nota 2** Montare lato sald. Per collegare il display

**Nota 3** Non servono neanche per I TEX per il display con 16 pin i pin 15-16 sono gli stessi



	NOME PROGETTO: RXRL LCD	NOME PARTE: PIANO DI MONTAGGIO FLY15
AUTORE: UFFICIO TECNICO	DATA: 30/08/2005	REVISIONE: 1.0
ARCHIVIAZIONE ELETTRONICA: "CARTELLA PROGETTI" SU "UT_SRV"	CODICE PROGETTO: RVR07	SCALA: 1:1
MATERIALE: <>	TRATTAMENTO: <>	PROFILO: <>
		STATO: <>
		SIZE: A4
		PAGINA: 1 DI 1
		CODICE DISEGNO: PSXX155UI15



Nome Progetto: <b>RXRL-LCD</b>		Pagina: 1 di 1	Size: A3
Autore: <b>GRIPTECH</b>	Data: <b>20/11/2003</b>	Codice Progetto: <b>FLY15</b>	
Nome PC in Rete: <b>WUTSRVPROGETTI\Rilasciati</b>	Revisione: <b>1.0</b>	Nome Parte: <b>POWER SUPPLY 5-16V 15W</b>	
File/Cartella: <b>U_SCHIEDIPROJETTI\00115\PSXX15UI15_01.DSN</b>	Autorizzazione:	Codice: <b>PSXX15UI15</b>	

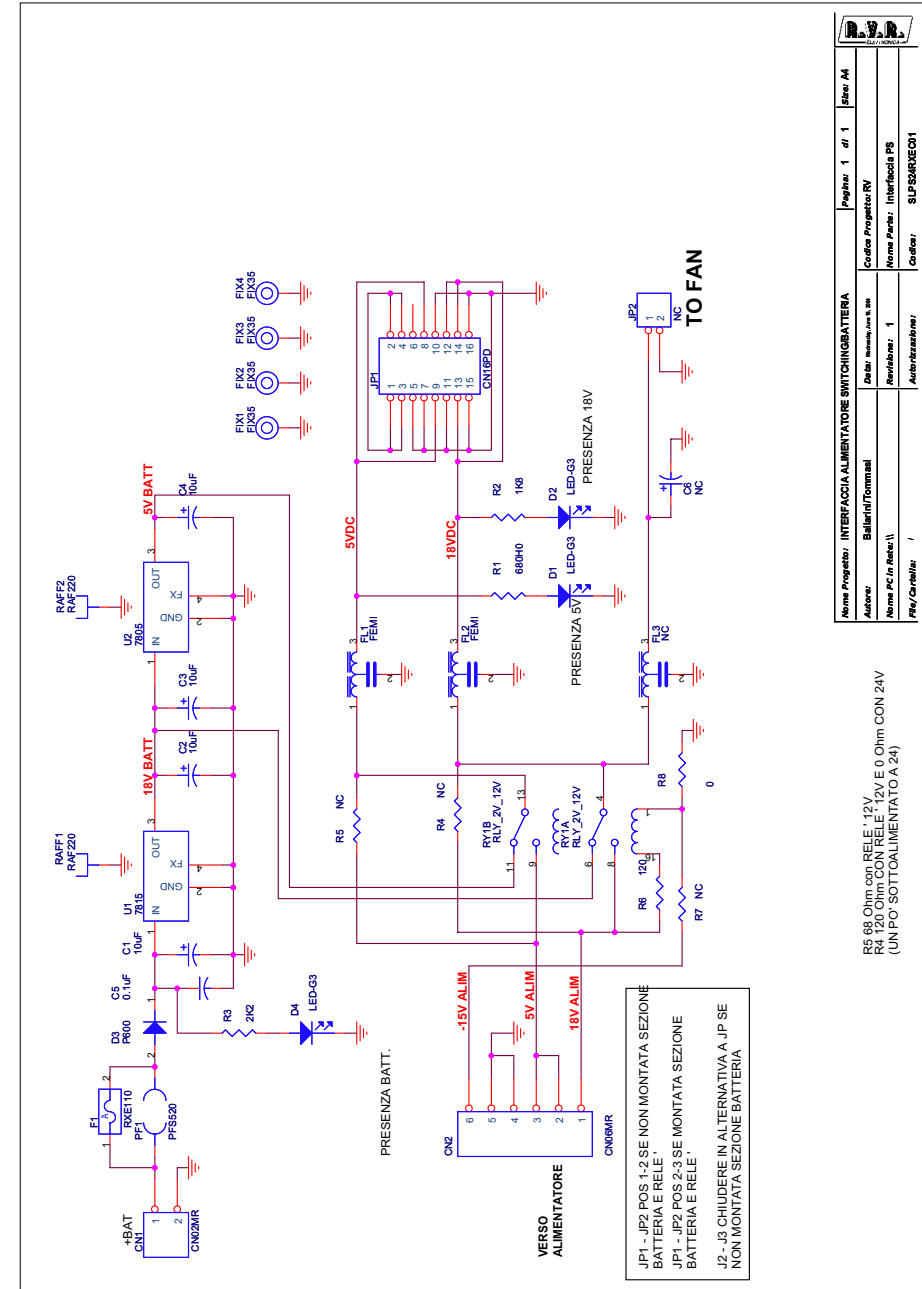
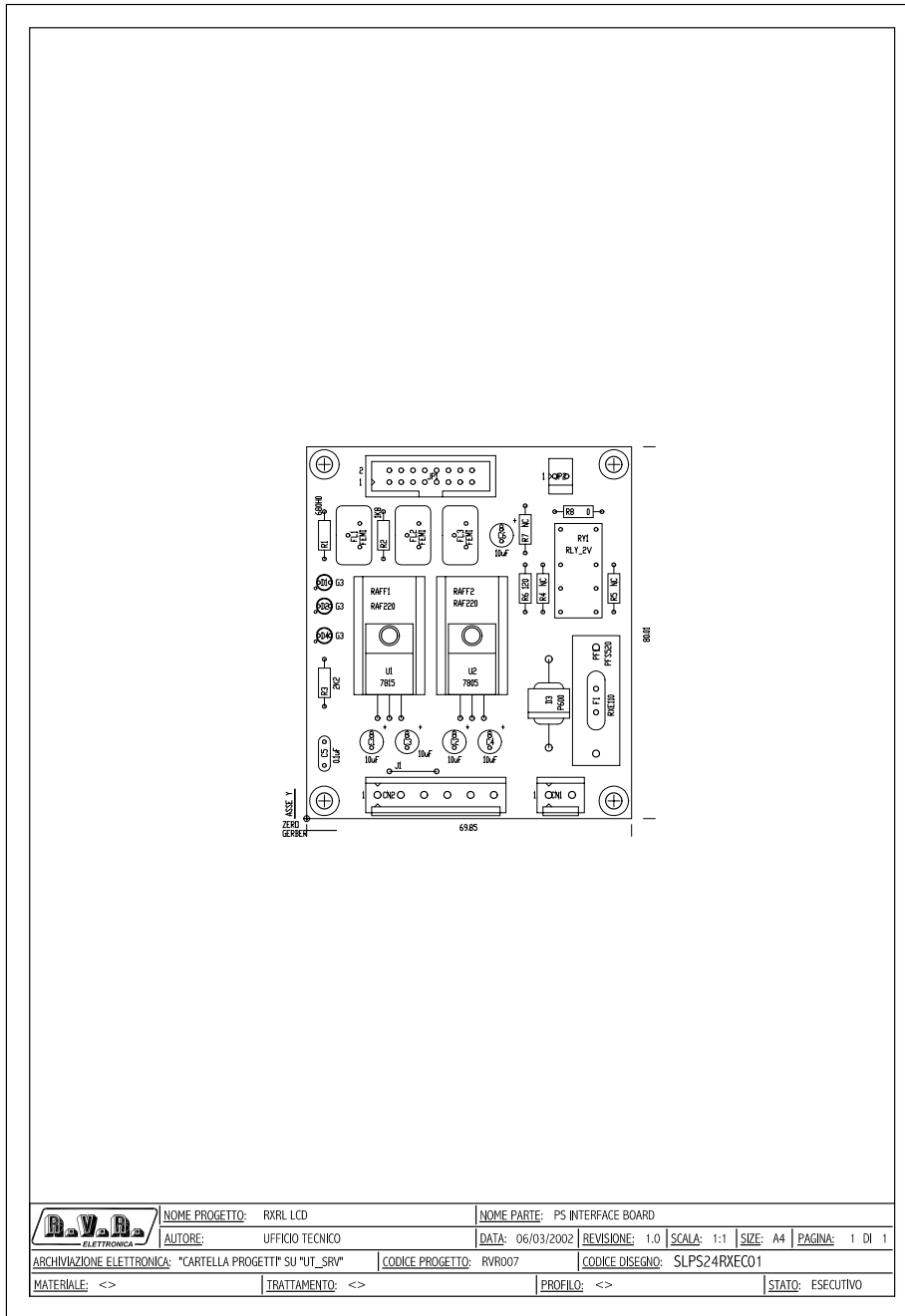
PSXX155UI15

Revised: Tuesday, August 30, 2005

Revision:

Item	Quantity	Reference	Part
1	1	BR1	W06G
2	3	C1, C25, C26	47/35
3	2	C2, C34	0.1uF-X2
4	1	C3	CP.1uF/400
5	1	C4	CD4K7pF
6	2	C5, C10	1000/35
7	1	C7	CP.22uF
8	1	C8	CD.1uF
9	1	C9	100/400
10	1	C12	CP.1uF
11	2	C14, C20	1/25
12	3	C15, C16, C17	CD4K7pF-Y2
13	1	C18	XCP1KpF-600V
14	1	C19	XCP.22uF
15	1	C23	XCD10KPF-1KV
16	1	C27	CP4K7pF
17	1	C28	CP.33uF
18	1	C29	CP47KpF
19	3	C30, C31, C32	XCD27pF
20	1	C35	XCD.1uF
21	1	C36	0.1uF
22	2	C37, C38	CD0.1uF
23	2	DL6, DL7	LEDV-3D
24	1	DZ1	P6KE200
25	1	DZ2	TL431
26	3	D1, D2, D6	BYV27-200
27	1	D3	UF4006
28	2	D5, D7	BYV28-200
29	1	FS1	3101-0050
30	1	F5	PLY10AN1130R5D2B
31	1	F6	CVO.0A5.10M-P
32	1	JP1	KP01-1112-11
33	1	JP2	X2.5MSF
34	1	JP3	2.5MSF
35	1	J1	FAST-ON
36	1	J2	FLAT-16A
37	1	K1	24VDC-10A
38	3	L1, L3, L4	VK200
39	1	L2	XVK200
40	1	RT1	NTC-47R
41	1	RV1	10N431K
42	1	R1	1M-1W
43	2	R2, R4	1M0
44	1	R3	8K2
45	1	R5	4R7
46	2	R9, R10	5M62
47	1	R11	6R8
48	1	R12	560R
49	2	R13, R16	1K

Item	Quantity	Reference	Part
50	1	R14	10K
51	1	R15	2K2
52	1	R17	X5K11
53	1	R18	5K49
54	1	R19	X1K8
55	1	R20	33K
56	1	R21	56K
57	1	R22	X47R
58	1	R24	X470K/2W
59	1	R25	XRXE110
60	1	TR1	X500R
61	1	U1	LM7805
62	1	U2	TOP243Y
63	1	U3	LM7815



		Nome Progetto: INTERFACCIA ALIMENTATORE SWITCHING/BATTERIA	Page: 1 di 1	Size: A4
Autore: Ufficio Tecnico		Codice Progetto: RY		
Nome NC (in nero):		Numero: 1		
File/Carrello:		Autore/Revisione:		
		Nome Parte: Interfaccia PS		
		Codice: SLPS24RXECO1		

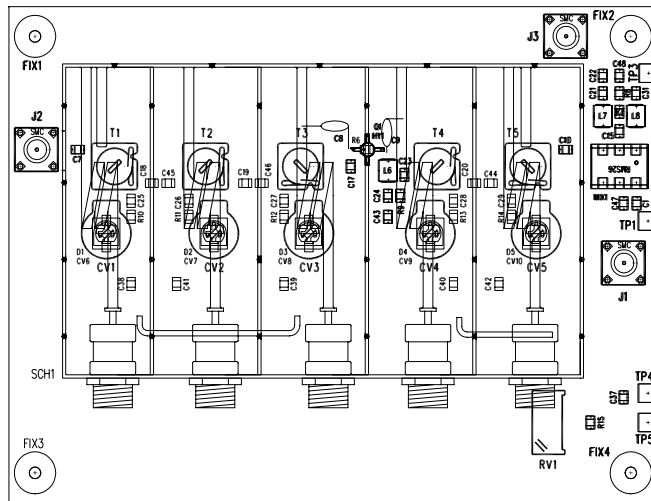
R5 68 Ohm con RELE - 12V  
 R4 120 Ohm CON RELE - 12V E 0 Ohm CON 24V  
 (UN PO' SOTTOALIMENTATO A 24)

Interfaccia PS Revised: Monday, December 23, 2002  
 SLPS24RXECO1 Revision: 1

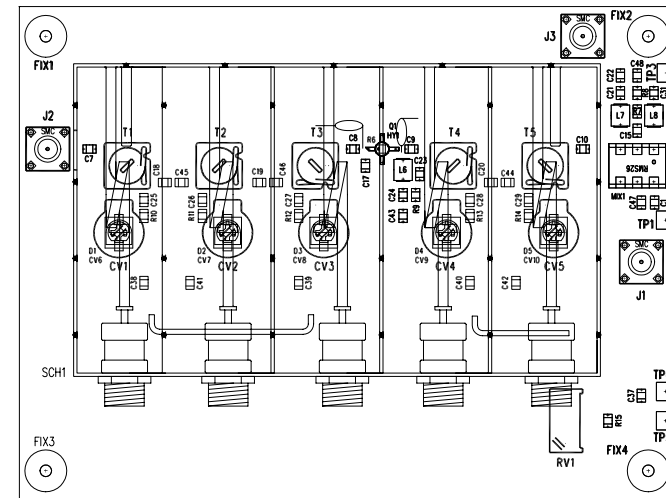
INTERFACCIA ALIMENTATORE SWITCHING/BATTERIA  
 RV

Ballarini/Tommasi

Item	Quantity	Reference	Part/Description
1	1	CN1	CN02MR Connettore Lumberg p. 5mm 2 pin
2	1	CN2	CN06MR Connettore Lumberg p. 5mm 6 pin
3	4	C1,C2,C3,C4	10uF Cond. Elettr. Vert.
4	1	C5	0.1uF Cond. ceramico p 5mm
5	1	C6	NC Cond. Elettr. Vert.
6	3	D1,D2,D4	LED-G3 LED dia. 3mm Verde
7	1	D3	P600 Diode plastico P600
8	4	FIX1,FIX2,FIX3,FIX4	FIX35 Foro fissaggio
9	2	FL2,FL1	FEMI Filtro EMI Murata DSS310
10	1	FL3	NC Filtro EMI Murata DSS310
11	1	F1	RXE110 Fusibile autorip.
12	1	JP1	CN16PD Connettore 16 poli Flat cs
13	1	JP2	NC Connettore 2 poli Panduit
14	1	PF1	PFS520 Portafusibile 5x20
15	2	RAFF2,RAFF1	RAF220 Dissipatore TO220
16	1	RY1	RLY_2V_12V Rele' tipo Feme serie TF a 12V
17	1	R1	680H0 Res. 1/4W
18	1	R2	1K8 Res. 1/4W
19	1	R3	2K2 Res. 1/4W
20	3	R4,R5,R7	NC Res. 1/4W
21	1	R6	120H Res. 1/4W
22	1	R8	0H Res. 1/4W
23	1	U1	LM7815 Stabilizzatore TO220
24	1	U2	LM7805 Stabilizzatore TO220

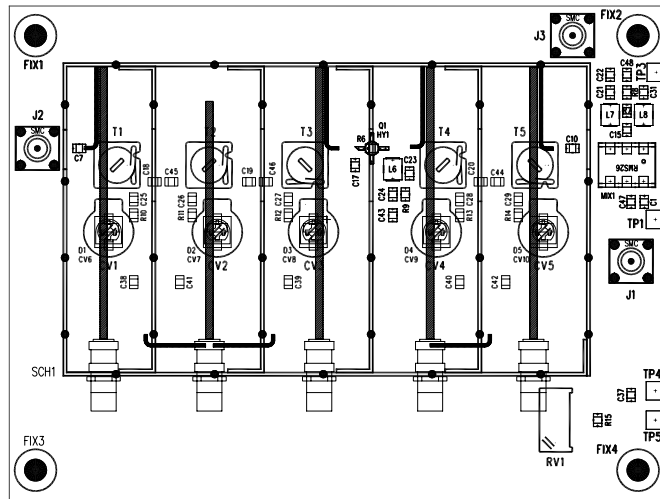


	NOME PROGETTO:	RXRL LCD	NOME PARTE: FRONTEND BOARD 200MHz									
	AUTORE:	GP STUDIO	DATA:	04/08/03	REVISIONE:	1.1	SCALA:	xx	SIZE:	A4	PAGINA:	1 DI 4
	CODICE PROGETTO:	RVRO7	CODICE DISEGNO:		CSFRONTEND03	ARCHIVIAZIONE ELETTRONICA: "CARTELLA PROGETTI" SU "UT_SRV"						
	MATERIALE:	FR4 1.6mm Cu 35um	TRATTAMENTO:		STANDARD COSTRUTTORE	PROFILO:		<>	STATO:			<>

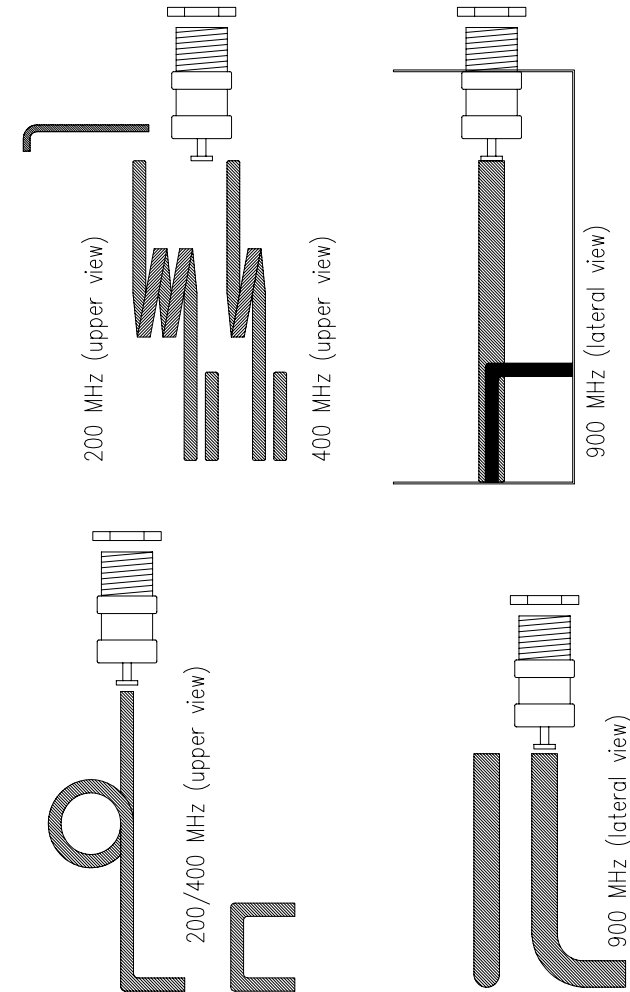


	NOME PROGETTO:	RXRL LCD	NOME PARTE: FRONTEND BOARD 400MHz									
	AUTORE:	GP STUDIO	DATA:	04/08/03	REVISIONE:	1.1	SCALA:	xx	SIZE:	A4	PAGINA:	2 DI 4
	CODICE PROGETTO:	RVRO7	CODICE DISEGNO:		CSFRONTEND03	ARCHIVIAZIONE ELETTRONICA: "CARTELLA PROGETTI" SU "UT_SRV"						
	MATERIALE:	FR4 1.6mm Cu 35um	TRATTAMENTO:		STANDARD COSTRUTTORE	PROFILO:		<>	STATO:			<>

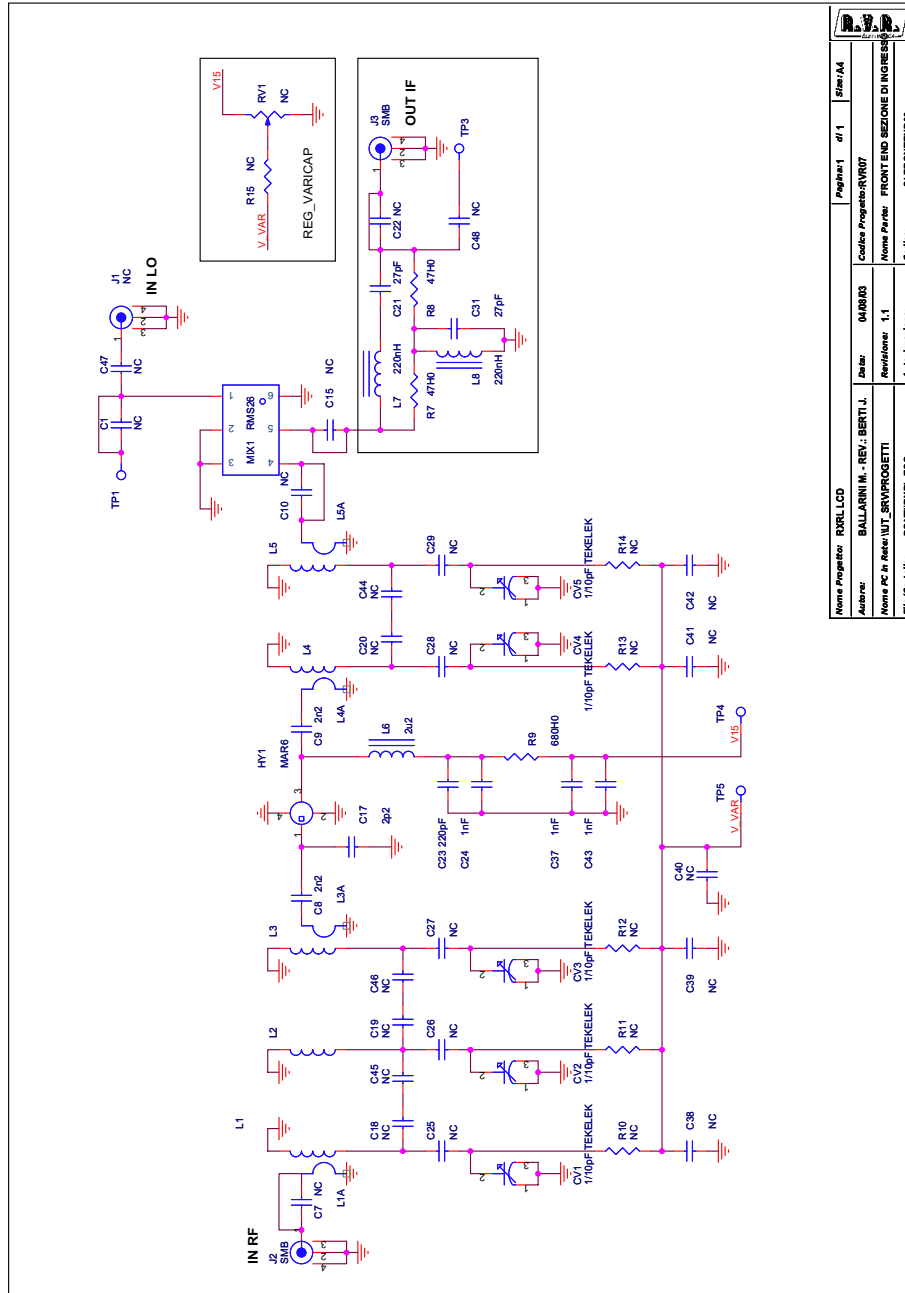




	NOME PROGETTO: RXRL LCD	NOME PARTE: FRONTEND BOARD 900MHz
	AUTORE: GP STUDIO	DATA: 04/08/03 REVISIONE: 1.1 SCALA: xx SIZE: A4 PAGINA: 3 DI 4
	CODICE PROGETTO: RV07	CODICE DISEGNO: CSFRONTEND03
	ARCHIVIAZIONE ELETTRONICA: "CARTELLA PROGETTI" SU "UT_SRV"	
MATERIALE: FR4 1.6mm Cu 35um	TRATTAMENTO: STANDARD COSTRUTTORE	PROFILO: <> STATO: <>



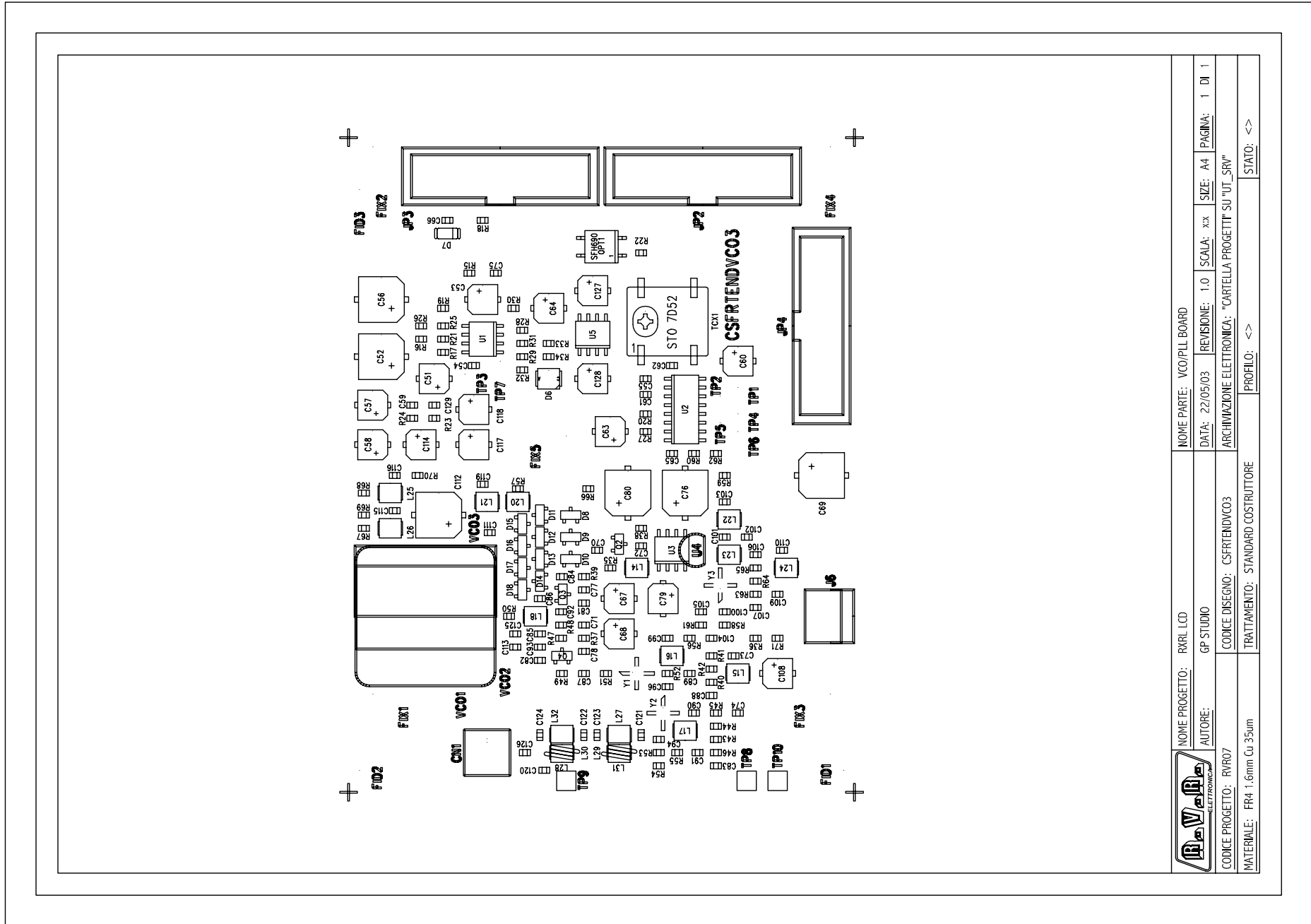
	NOME PROGETTO: RXRL LCD	NOME PARTE: Particolare bobine 200-400-900MHz
	AUTORE: GP STUDIO	DATA: 04/08/03 REVISIONE: 1.1 SCALA: xx SIZE: A4 PAGINA: 4 DI 4
	CODICE PROGETTO: RV07	CODICE DISEGNO: CSFRONTEND03
	ARCHIVIAZIONE ELETTRONICA: "CARTELLA PROGETTI" SU "UT_SRV"	
MATERIALE: FR4 1.6mm Cu 35um	TRATTAMENTO: STANDARD COSTRUTTORE	PROFILO: <> STATO: <>

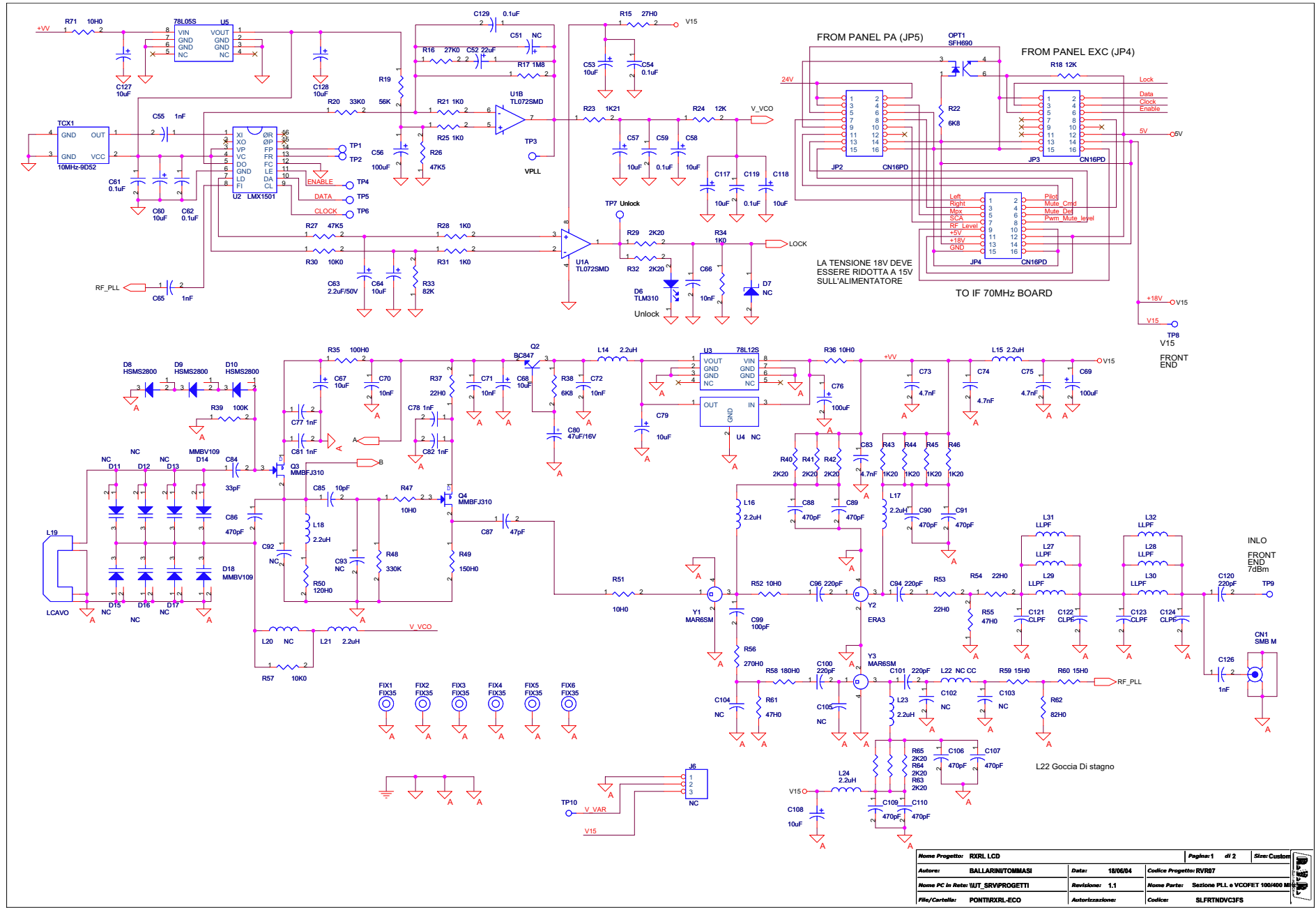


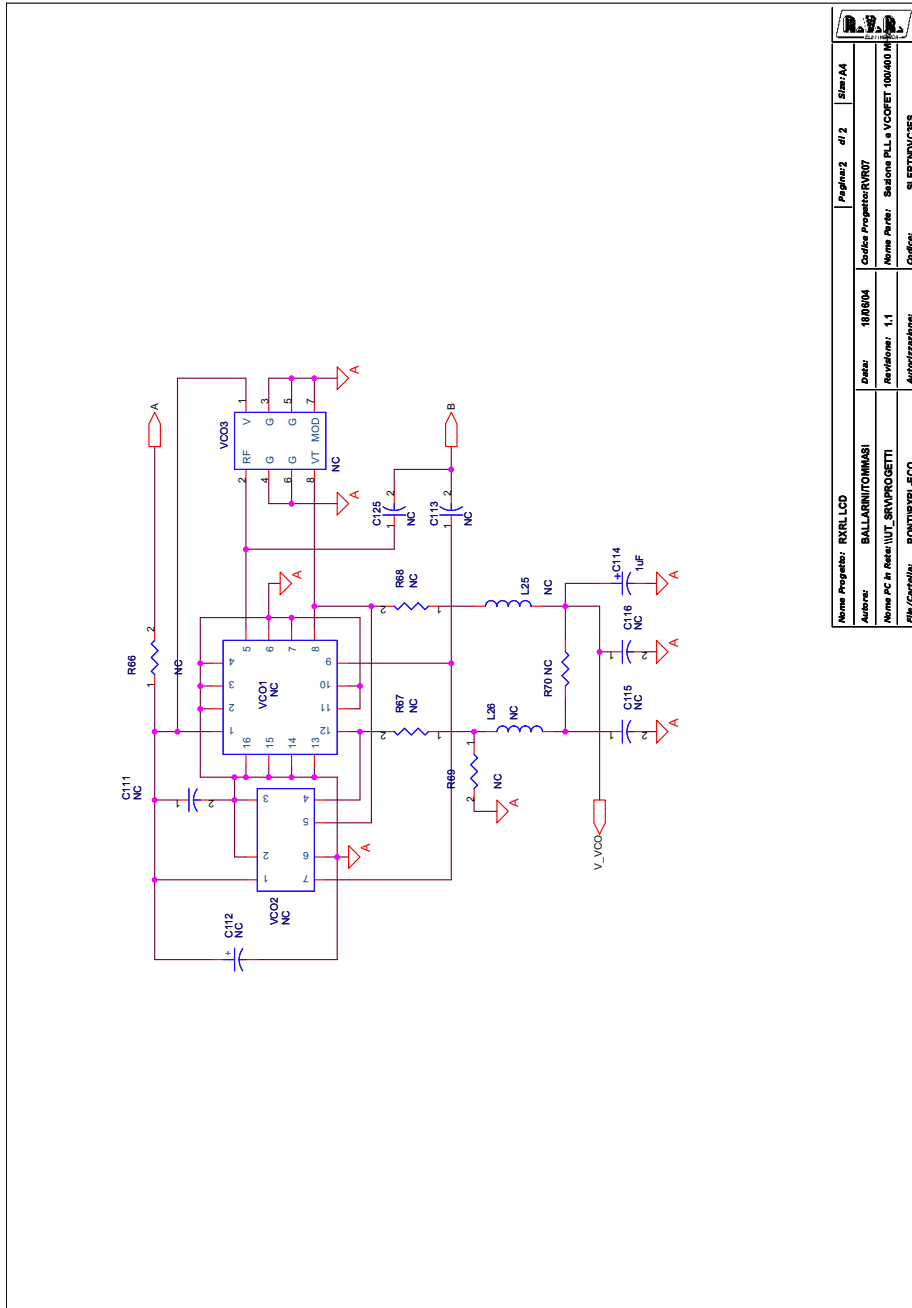
Nome Progetto:	RXRLCD	Page:	1	di:	1	Struttura:	
Autore:	BALLARINI M. - REV. BERTI I.	Data:	04/08/03	Codice Progetto:	RVR07		
Nome PC in Rete:	WUT_SRVPROGETTI	Revisione:	1,1	Nome File:	FRONT_END_SEZIONE_DI_INGRESSO		
File/Caricab:	PONTIRXRL-ECO	Autore/revisione:		Codice:	SLFRONTEND03		

Scheda Front End SLFRONTEND03  
 Revised: 04/08/2003  
 Revision: 1,1

Item	Quantity	Reference	Part	Description
1	5	CV1, CV2, CV3, CV4, CV5	1/10pF TEKELEK	Vedere
2	31	RV1, J1, C1, C7, R10, C10, R11, R12, R13, R14, R15, C15, C18, C19, C20, C22, C25, C26, C27, C28, C29, C38, C39, C40, C41, C42, C44, C45, C46, C47, C48	NC	
3	2	C8, C9	2n2	Ceramic capacitor
4	1	C17	2p2	Cond. SMD size 0805
5	2	C21, C31	27pF	Cond. SMD size 0805
6	1	C23	220pF	Cond. SMD size 0805
7	3	C24, C37, C43	1nF	Cond. SMD size 0805
8	1	HY1	MAR06	Hybrid MAR
9	2	J2, J3	SMB	Conn. SMB da CS
10	4	L1A, L3A, L4A, L5A	LINK	
11	5	L1, L2, L3, L4, L5	IND	
12	1	L6	2u2	Impedenza SMD 3,2x2,5mm
13	2	L7, L8	220nH	Impedenza SMD 3,2x2,5mm
14	1	MIX1	RMS26	Mixer SMD
15	2	R7, R8	47H0	Res. SMD 0805
16	1	R9	680H0	Res. SMD 0805
17	4	TP1, TP3, TP4, TP5	PIAZZOLA A SALD.	







Nome Progetto:	RXRL LCD	Argomento:	df 2	Size:	A4
Autore:	BALLARINI TOMMASI	Codice Progetto:	RVR07		
Nome PC o Rete:	WPT_SRVPROGETTI	Data:	18/08/04		
File/Cartella:	PONTIRXRL-ECO	Revisione:	1.1	Nome File o VCOFET:	1004001.m
				Codice:	SLFRTNDV3CFS

Rev.: 1,1 18/06/04  
 SLFRTNDV3CFS  
 Scheda VCOPLL per ricevitore del ponte versione economica  
 Versione con VCO a FET per frequenze fino a 400 MHz  
 Ballarini

Item	Quantity	Reference	Part	Description
1	1	CN1	SMB M.	Connettore SMB cs
2	1	C51	NC	Cond. Elett. SMD d. 4mm
3	1	C52	22uF/16V	Cond. Elett. SMD d. 6.3mm
4	13	C53,C57,C58,C60,C64,C67,C68,C79,C108,C117,C118,C127,C128	10uF/16V	Cond. Elett. SMD d. 4mm
5	6	C54,C59,C61,C62,C119,C129	0.1uF	Cond. SMD 0805
6	6	C55,C65,C77,C78,C81,C82,C126	1nF	Cond. SMD 0805
7	3	C56,C69,C76	100uF/16V	Cond. Elett. SMD d. 6.3mm
8	1	C63	2.2uF/50V	Cond. Elett. SMD d. 4mm
9	4	C66,C70,C71,C72	10nF	Cond. SMD 0805
10	4	C73,C74,C75,C83	4.7nF	Cond. SMD 0805
11	1	C80	47uF/16V	Cond. Elett. SMD d. 5mm
12	1	C84	33pF	Cond. SMD 0805
13	1	C85	10pF	Cond. SMD 0805
14	9	C86,C88,C89,C90,C91,C106,C107,C109,C110	470pF	Cond. SMD 0805
15	1	C87	47pF	Cond. SMD 0805
16	12	C92,C93,C102,C103,C104,C105,C111,C113,C115,C116,C125	NC	Cond. SMD 0805
17	5	C94,C96,C100,C101,C120	220pF	Cond. SMD 0805
18	1	C99	100pF	Cond. SMD 0805
19	1	C112	NC	Cond. Elett. SMD d. 5mm
20	1	C114	1uF/50V	Cond. Elett. SMD d. 4mm
21	4	C121,C122,C123,C124	CLPF	Cond. SMD 0805 <b>Nota 1</b>
22	1	D6	TLM310	LED SMD PLCC2
23	1	D7	NC	MINIMELF SMD Zener Diode
24	3	D8,D9,D10	HSMS2800	Diode SMD SOT23
25	6	D11,D12,D13,D15,D16,D17	NC	Diode Varicap SMD SOT23
26	2	D18,D14	MMBV109	Diode Varicap SMD SOT23 <b>Nota 2</b>
27	6	FIX1, FIX2, FIX3, FIX4, FIX5, FIX6	FIX35	Foro fissaggio 3.5mm
28	3	JP2,JP3,JP4	CN16PD	Connettore 16 poli Flat cs
29	1	J6	NC	Connettore 3 poli Panduit
30	8	L14,L15,L16,L17,L18,L21,L23,L24	2.2uH	Induttanza SMD 3225 (1210)
31	1	L19	LCAVO	Induttanza a cavo RG <b>Nota 3</b>
32	3	L20,L25,L26	NC	Induttanza SMD 3225 (1210)
33	1	L22	NC CC	Induttanza SMD 3225 (1210) <b>Nota 4</b>
34	6	L27,L28,L29,L30,L31,L32	LLPF	Induttanza SMD 3225 (1210) <b>Nota 5</b>
35	1	OPT1	SFH690	Optoisolatore SMD SO6
36	1	Q2	BC847	Trans. NPN SOT23
37	2	Q3,Q4	MMBFJ310	Trans. FET SOT23
38	1	R15	27H0	Res. SMD 0805

39	1 R16	27K0	Res. SMD 0805	Fino a 400 MHz	47nH	47nH	NC
40	1 R17	1M8	Res. SMD 0805	Fino a 400 MHz	22nH	NC	NC
41	2 R18,R24	12K	Res. SMD 0805	Fino a 900 MHz	22nH	22nH	NC
42	1 R19	56K	Res. SMD 0805	Fino a 900 MHz	10nH	NC	NC
43	1 R20	33K0	Res. SMD 0805				
44	5 R21,R25,R28,R31,R34	1K0	Res. SMD 0805				
45	2 R38,R22	6K8	Res. SMD 0805				
46	1 R23	1K21	Res. SMD 0805				
47	2 R27,R26	47K5	Res. SMD 0805				
48	8 R29,R32,R40,R41,R42,R63, R64,R65	2K20	Res. SMD 0805				
49	2 R57,R30	10K0	Res. SMD 0805				
50	1 R33	82K	Res. SMD 0805				
51	1 R35	100H0	Res. SMD 0805				
52	5 R36,R47,R51,R52,R71	10H0	Res. SMD 0805				
53	3 R37,R53,R54	22H0	Res. SMD 0805				
54	1 R39	100K	Res. SMD 0805				
55	4 R43,R44,R45,R46	1K20	Res. SMD 0805				
56	1 R48	330K	Res. SMD 0805				
57	1 R49	150H0	Res. SMD 0805				
58	1 R50	120H0	Res. SMD 0805				
59	2 R55,R61	47H0	Res. SMD 0805				
60	1 R56	270H0	Res. SMD 0805				
61	1 R58	180H0	Res. SMD 0805				
62	2 R59,R60	15H0	Res. SMD 0805				
63	1 R62	82H0	Res. SMD 0805				
64	5 R66,R67,R68,R69,R70	NC	Res. SMD 0805				
65	1 TCX1	10MHz 9D52	TCXO SMD 1ppm				
66	7 TP1,TP2,TP3,TP4,TP5,TP6, TP7	TP1	Test point				
67	3 TP8,TP9,TP10	PIAZZOLA A SALD.					
68	1 U1	TL072SMD	Dual Op. SMD SO8				
69	1 U2	LMX1501	Integrated PLL				
70	1 U3	78L12S	Stabilizzatore SMD SO8				
71	1 U4	NC	Stabilizzatore TO92				
72	1 U5	78L05S	Stabilizzatore SMD SO8				
73	1 VCO1	NC	VCO SKY 16 pin SDVC				
74	1 VCO2	NC	VCO SKY 7 pin FVC7MD				
75	1 VCO3	NC	VCO SKY 8 pin FVC7MD				
76	2 Y3,Y1	MAR6SM	Ibrido MAR/ERA				
77	1 Y2	ERA3	Ibrido MAR/ERA				

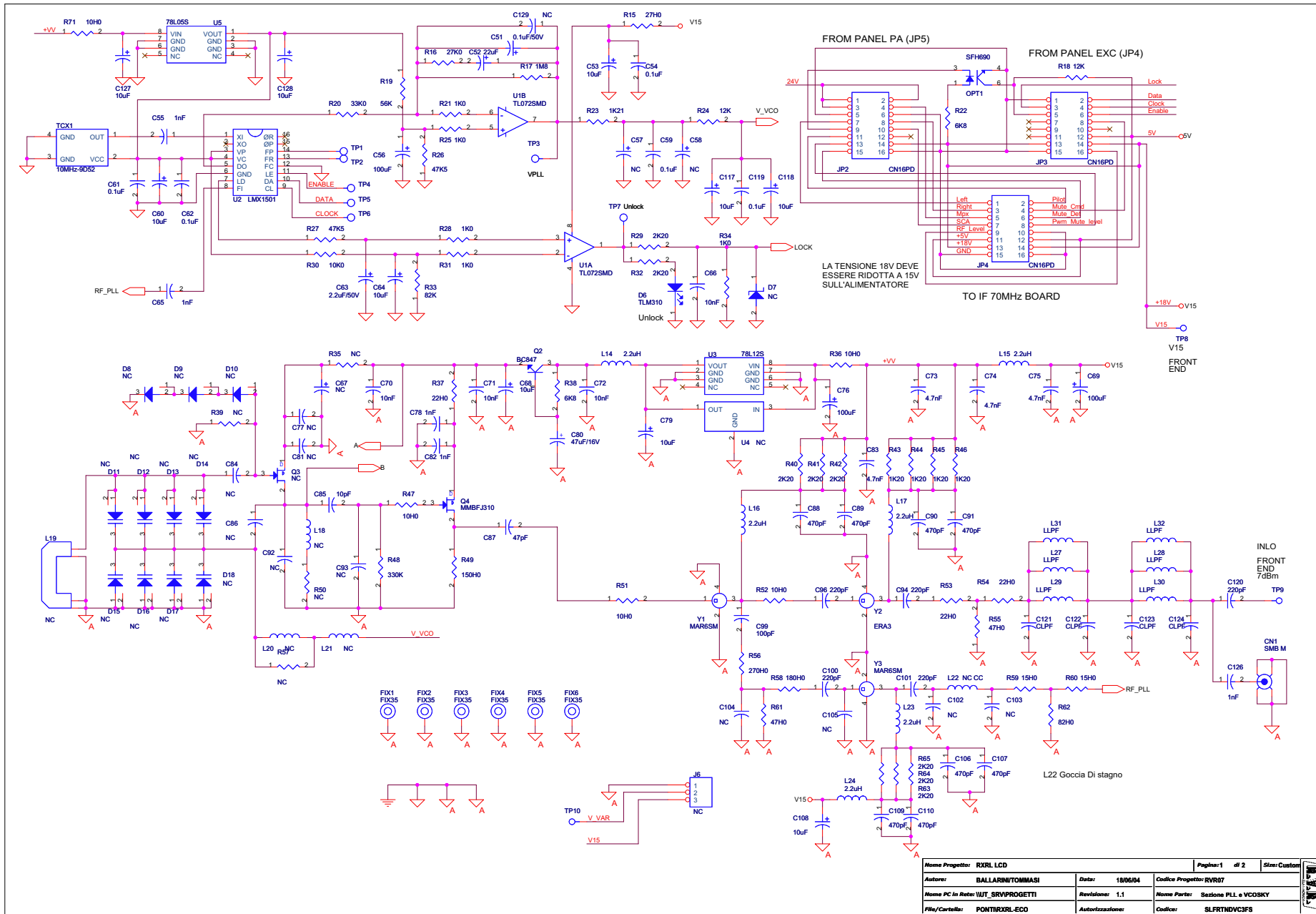
**Nota 1** Valori dipendenti dalla frequenza C121,C122,C123,C124  
 Fino a 400 MHz 6.8 pF  
 Fino a 900 MHz 2.2pF

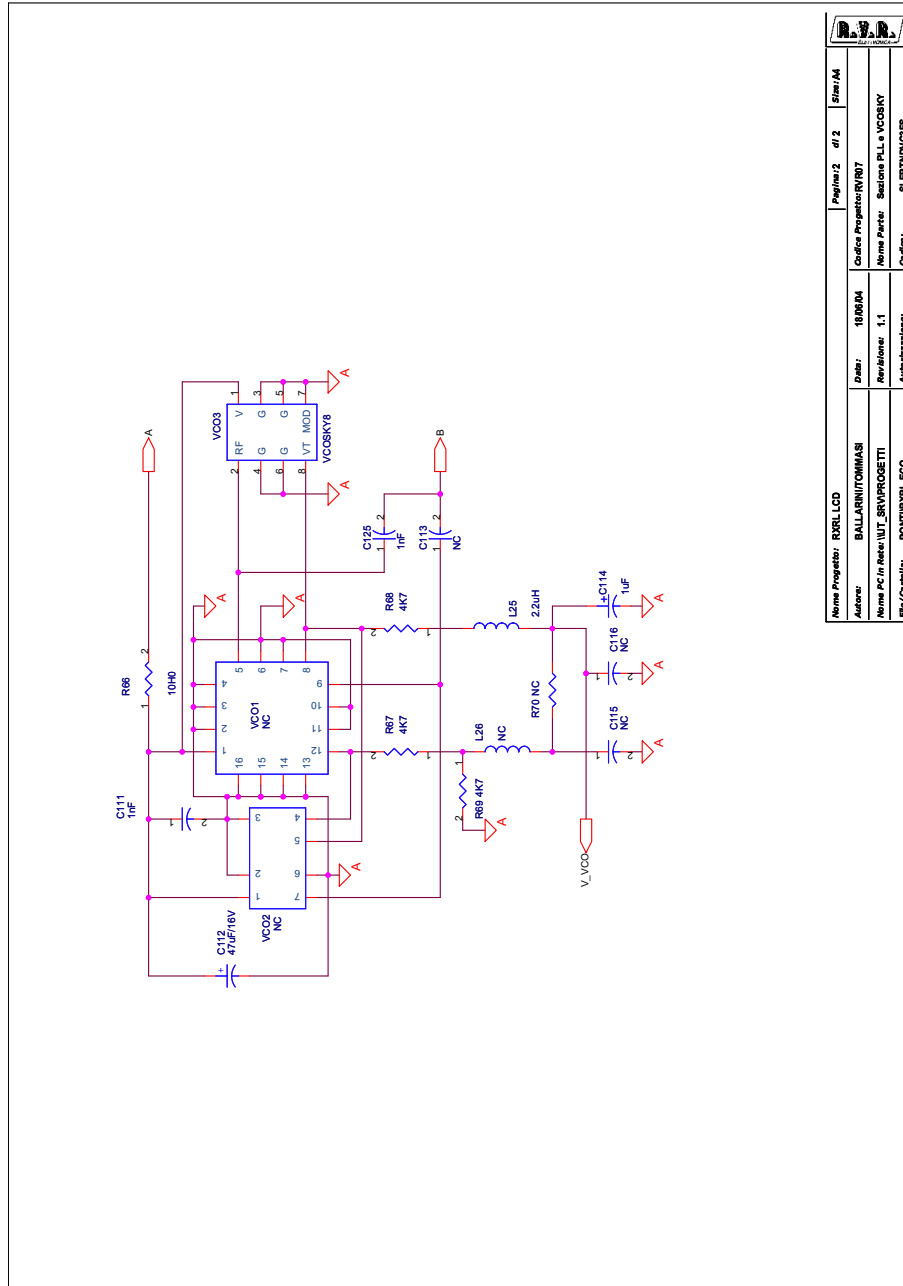
**Nota 2** Montare solo questi due varicap sempre nel modello a FET

**Nota 3** Valori dipendenti dalla frequenza  
 Frequenza fino a 250 MHz Lunghezza calza 40 mm  
 Frequenza fino a 400 MHz

**Nota 4** Fare corto circuito a goccia di stagno

**Nota 5** Valori dipendenti dalla frequenza con le seguenti possibilità  
 L27,L28 L31,L32 L29,L30





Nome Progetto: RXRL LCD		Pagina: 2 di 2	Struttura
Codice Progetto: R07			
Numero: 10804	Nome Parte: Sezione P.L. a VCO&Y		
Nome PC in Rete: MIT_SERVERBETTI	Revisione: 1.1		
File Correlati: POINTTOURL.SCO		Autore/Revisione: SLFRTNDVC3FS	

Rev.: 1,1 18/06/04  
 SLFRTNDVC3FS  
 Scheda VCOPLL per ricevitore del ponte versione economica  
 Versione con VCO SKY  
 Ballarini

Item	Quantity	Reference	Part	Description
1	1	CN1	SMB M.	Connettore SMB cs
2	1	C51	0.1uF/50V	Cond. Elett. SMD d. 4mm
3	1	C52	22uF/16V	Cond. Elett. SMD d. 6.3mm
4	10	C53,C60,C64,C68,C79,C108,C117,C118,C127,C128	10uF/16V	Cond. Elett. SMD d. 4mm
5	5	C54,C59,C61,C62,C119	0.1uF	Cond. SMD 0805
6	6	C55,C65,C78,C82,C111,C126,C125	1nF	Cond. SMD 0805
7	3	C56,C69,C76	100uF	Cond. Elett. SMD d. 6.3mm
8	3	C57,C58,C67	NC	Cond. Elett. SMD d. 4mm
9	1	C63	2.2uF/50V	Cond. Elett. SMD d. 4mm
10	4	C66,C70,C71,C72	10nF	Cond. SMD 0805
11	4	C73,C74,C75,C83	4.7nF	Cond. SMD 0805
12	15	C77,C81,C84,C86,C92,C93,C102,C103,C104,C105,C113,C115,C116,C129	NC	Cond. SMD 0805
13	2	C112,C80	47uF/16V	Cond. Elett. SMD d. 5mm
14	1	C85	10pF	Cond. SMD 0805
15	1	C87	47pF	Cond. SMD 0805
16	8	C88,C89,C90,C91,C106,C107,C109,C110	470pF	Cond. SMD 0805
17	5	C94,C96,C100,C101,C120	220pF	Cond. SMD 0805
18	1	C99	100pF	Cond. SMD 0805
19	1	C114	1uF	Cond. Elett. SMD d. 4mm
20	4	C121,C122,C123,C124	CLPF	Cond. SMD 0805
21	1	D6	TLM310	LED SMD PLCC2
22	1	D7	NC	MINIMELF SMD Zener Diode
23	3	D8,D9,D10	NC	Diode SMD SOT23
24	8	D11,D12,D13,D14,D15,D16,D17,D18	NC	Diode Varicap SMD SOT23
25	6	FIX1,FIX2,FIX3,FIX4,FIX5,FIX6	FIX35	Foro fissaggio 3.5mm
26	3	JP2,JP3,JP4	CN16PD	Connettore 16 poli Flat cs
27	1	J6	NC	Connettore 3 poli Panduit
28	7	L14,L15,L16,L17,L23,L24,L25	2.2uH	Induttanza SMD 3225 (1210)
29	4	L18,L20,L21,L26	NC	Induttanza SMD 3225 (1210)
30	1	L19	NC	Induttanza a cavo RG
31	1	L22	NC CC	Induttanza SMD 3225 (1210)
32	6	L27,L28,L29,L30,L31,L32	LLPF	Induttanza SMD 3225 (1210)
33	1	OPT1	SFH690	Optoisolatore SMD SO6
34	1	Q2	BC847	Trans. NPN SOT23
35	1	Q3	NC	Trans. FET SOT23
36	1	Q4	MMBFJ310	Trans. FET SOT23
37	1	R15	27H0	Res. SMD 0805
38	1	R16	27K0	Res. SMD 0805

Nota 1

Nota 2  
 Nota 3



39	1 R17	1M8	Res. SMD 0805	
40	2 R18,R24	12K	Res. SMD 0805	
41	1 R19	56K	Res. SMD 0805	
42	1 R20	33K0	Res. SMD 0805	
43	5 R21,R25,R28,R31,R34	1K0	Res. SMD 0805	
44	2 R38,R22	6K8	Res. SMD 0805	
45	1 R23	1K21	Res. SMD 0805	
46	2 R27,R26	47K5	Res. SMD 0805	
47	8 R29,R32,R40,R41,R42,R63, R64,R65	2K20	Res. SMD 0805	
48	1 R30	10K0	Res. SMD 0805	
49	1 R33	82K	Res. SMD 0805	
50	5 R35,R39,R50,R57,R70	NC	Res. SMD 0805	
51	6 R36,R47,R51,R52,R66,R71	10H0	Res. SMD 0805	
52	3 R37,R53,R54	22H0	Res. SMD 0805	
53	4 R43,R44,R45,R46	1K20	Res. SMD 0805	
54	1 R48	330K	Res. SMD 0805	
55	1 R49	150H0	Res. SMD 0805	
56	2 R55,R61	47H0	Res. SMD 0805	
57	1 R56	270H0	Res. SMD 0805	
58	1 R58	180H0	Res. SMD 0805	
59	2 R59,R60	15H0	Res. SMD 0805	
60	1 R62	82H0	Res. SMD 0805	
61	3 R67,R68,R69	4K7	Res. SMD 0805	
62	1 TCX1	10MHz 9D52	TCXO SMD 1ppm	
63	7 TP1,TP2,TP3,TP4,TP5,TP6, TP7	TP1	Test point	
64	3 TP8,TP9,TP10	PIAZZOLA A SALD.		
65	1 U1	TL072SMD	Dual Op. SMD SO8	
66	1 U2	LMX1501	Integrated PLL	
67	1 U3	78L12S	Stabilizzatore SMD SO8	
68	1 U4	NC	Stabilizzatore TO92	
69	1 U5	78L05S	Stabilizzatore SMD SO8	
70	1 VCO1	NC	VCO SKY 16 pin SDVC	
71	1 VCO2	NC	VCO SKY 7 pin FVC7MD	
72	1 VCO3	VCOSKY8	VCO SKY 8 pin FVC7MD	<b>Nota 4</b>
73	2 Y3, Y1	MAR6SM	Ibrido MAR/ERA	
74	1 Y2	ERA3	Ibrido MAR/ERA	

**Nota 1** Valori dipendenti dalla frequenza C121,C122,C123,C124  
 Fino a 400 MHz 6.8 pF  
 Fino a 900 MHz 2.2pF

**Nota 2** Fare corto circuito a goccia di stagno

**Nota 3** Valori dipendenti dalla frequenza con le seguenti possibilità

	L27,L28	L31,L32	L29,L30
Fino a 400 MHz	47nH	47nH	NC
Fino a 400 MHz	22nH	NC	NC
Fino a 900 MHz	22nH	22nH	NC
Fino a 900 MHz	10nH	NC	NC

**Nota 4** VCO SKY FVC7MD 8 pin a seconda della frequenza



Telemetry board Revised: Wednesday, February 25, 2004

 SLTLMTXLCD03 Revision: 02  
 TEX-LCD/RXRL-LCD/PTRL-LCD

RVRD

Andrea Tommasi

Item	Quantity	Reference	Part	Description
1	1	CN1	DB15F50	Connettore DB15 femm. cs 90°
2	1	CN2	BNC_IS90	Connettore BNC metallico 90°
3	1	CS1	CSTLMTXLCD02	Circuito stampato
4	6	C1, C2, C3, C4, C5, C6	0.1uF	Cond. ceramico p.5mm
5	2	C7, C8	100pF	Cond. ceramico p.5mm
6	7	C9, C10, C11, C12, C13, C14, C15	10nF	Cond. ceramico p.5mm
7	4	D1, D2, D5, D6	1N4148	Diodi in vetro DO35
8	2	D3, D4	BAT83	Diodi Hot carrier DO35
9	1	JP1	CN16PD	Connettore 16 poli Flat cs
10	1	JP2	STM05S	Strip maschio 3 pin
11	1	JP3	STM05S	Strip maschio 5 pin
12	2	JP4, JP5	JUM	Ponticello Jumper <b>Nota 1</b>
13	2	RV1, RV2	20K	Trimmer Rg H 3006
14	2	RV2, RY1	RLTQ2A_12V	Rese* 10Ω
15	2	R1, R2	150	Res. 1/4W

**Nota 1** Inserire i jumper in posizione:  
 2-3 in JP2  
 1-2 in JP3