



BLUES30NV & BLUES50NV

TECHNICAL ANNEX
VOLUME2



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Member of CISQ Federation



CERTIFIED MANAGEMENT SYSTEM
ISO 9001



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Manufactured by R.V.R. ELETTRONICA S.r.l. Italy

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 BLUES30/50NV. L'appendice è composta dalle seguenti sezioni:

This part of the manual contains the technical details about the different boards of the BLUES30/50NV. This appendix is composed of the following sections:

Description	BLUES30NV RVR Code	BLUES50NV RVR Code	Vers. Page	
Wiring Diagrams	-	-	1.8	1
Main Board	SL158MA1003	SL158MA1003	1.4	2
Stereo Coder Card	SLCTC30V03	SLCTC30V03	1.2	10
Control Card	SLCNTMOS07.50	SLCNTMOS07.50	1.3	13
PA RF Power Supply	SLPS0468R01V01	SLPS0468R01V01	1.0	16
Power Amplifier	SLRF0408R03V01	SLRF0408R03V01	1.5	18
VCO Section	SLVC0030R03V01	SLVC0030R03V01	1.3	21
Panel Card	SLPC0435R01V04	SLPC0435R01V04	1.1	23
Power Supply	KPSL2804V01A	/	1.0	26
Power Supply	/	KPSL4303V01A	1.0	29
/AESEBUBLUES Option				
AES/EBU Card	SL142MA1102	SL142MA1102	1.2	32
/TLW-BLU-E Option				
Ethernet Card	SLIN0313R02V01	SLIN0313R02V01	1.1	35

Document History

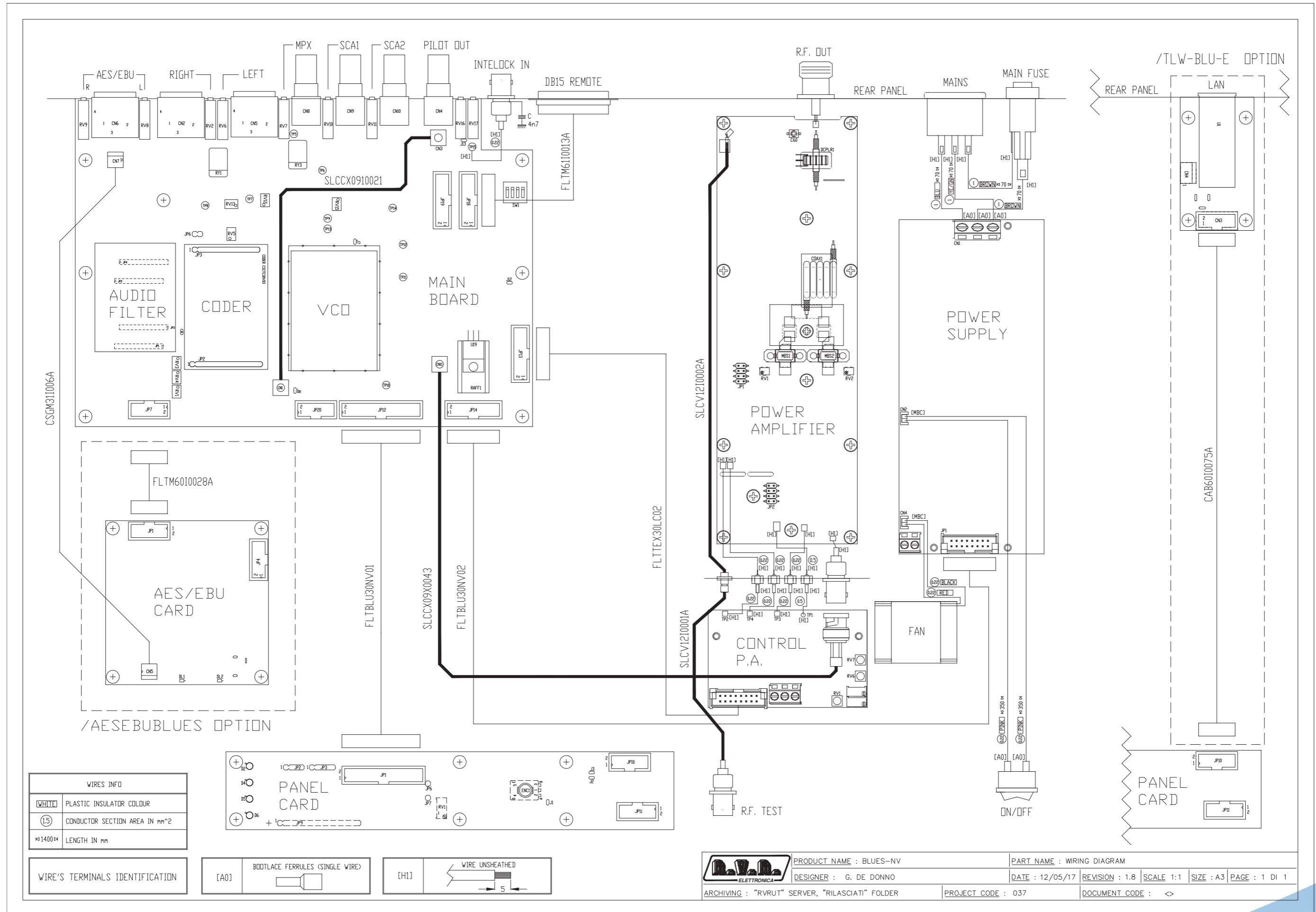
Date	Version	Reason	Code	Editor
29/11/2016	1.0	First Release (Version 3)	/	J.H. Berti
06/08/2018	1.1	Minor Update	/	J.H. Berti
23/12/2022	1.2	SL158MA1003, SLCNTMOS07.50, SLPS0468R01V01, SLRF0408R03V01, SLVC0030R03V01, SLPC0435R01V04, SL142MA1102 & SLIN0313R02V01 Update	/	J.H. Berti

BLUES30NV

BLUES50NV

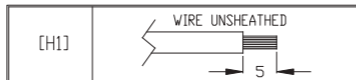
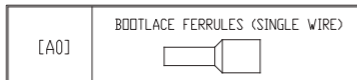
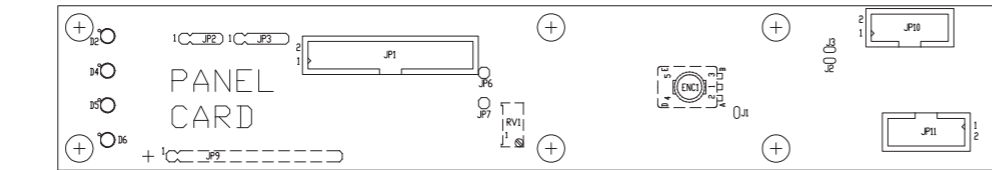
Spare Parts Name	Spare Parts Code
Fan	SP-VTL037A
RF Pallet	SP-FIN037A
MOSFET + Plate	KKTRNMRFE6VS25A
Main card	SP-MBD037A
CPU Panel + Display	SP-PAN037A
Coder Card	SP-COD057B
Switching Power Supply	KPSL2804V01A

Spare Parts Name	Spare Parts Code
Fan	SP-VTL037A
RF Pallet	SP-FIN037A
MOSFET + Plate	KKTRNMRFE6VS25A
Main card	SP-MBD037A
CPU Panel + Display	SP-PAN037A
Coder Card	SP-COD057B
Switching Power Supply	KPSL4303V01A

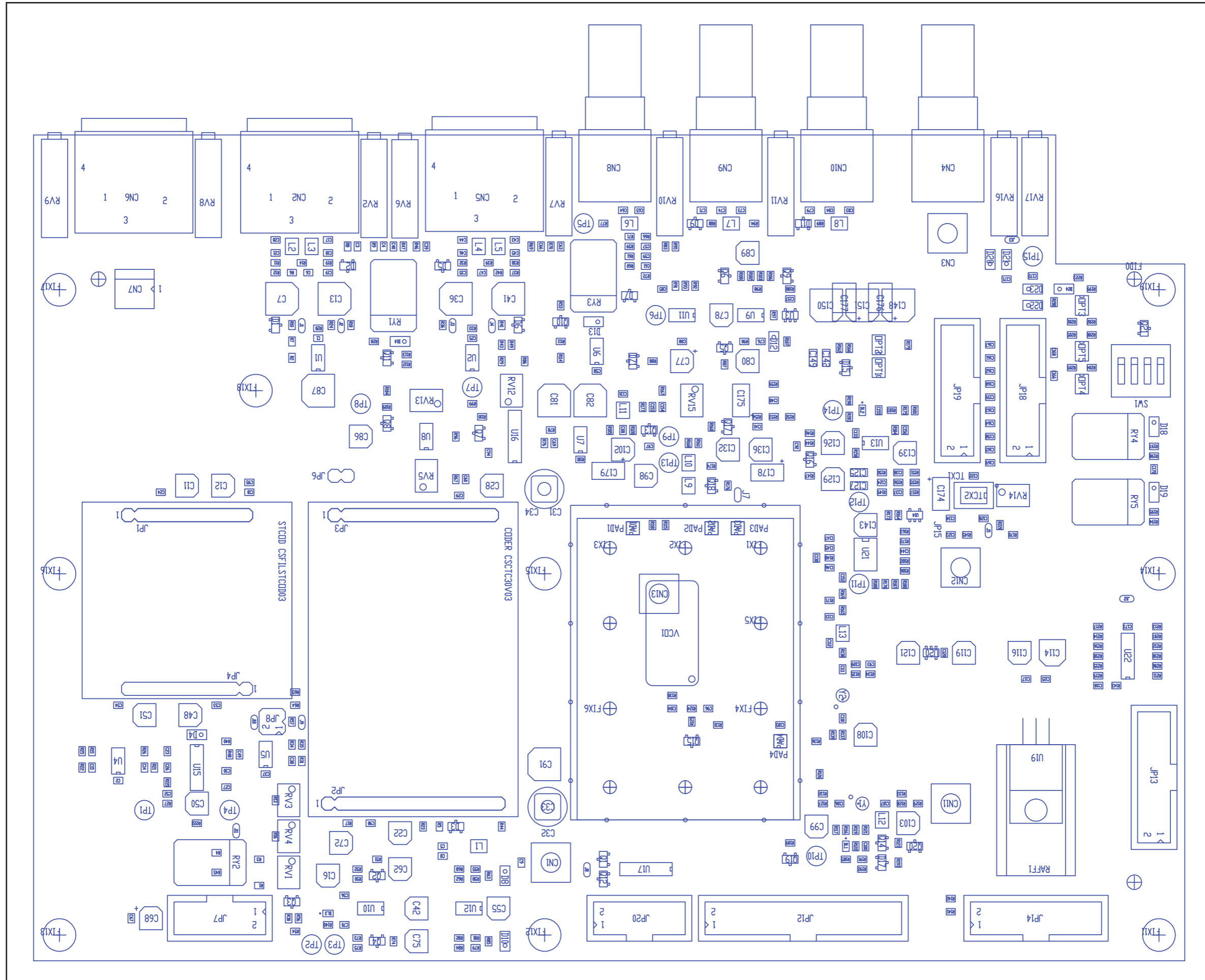


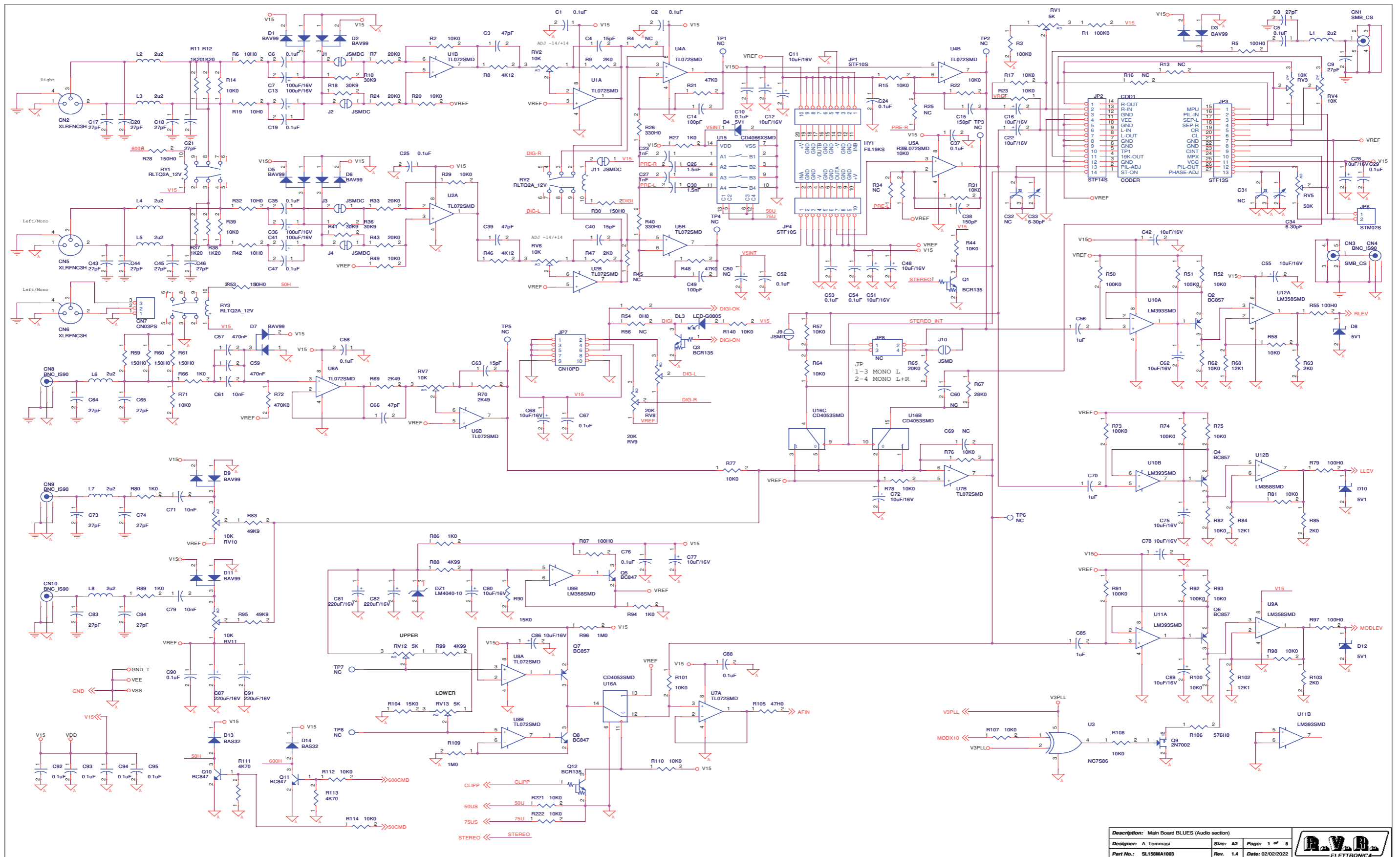
WIRES INFO	
WHITE	PLASTIC INSULATOR COLOUR
15	CONDUCTOR SECTION AREA IN mm ²
H1400E	LENGTH IN mm

WIRE'S TERMINALS IDENTIFICATION

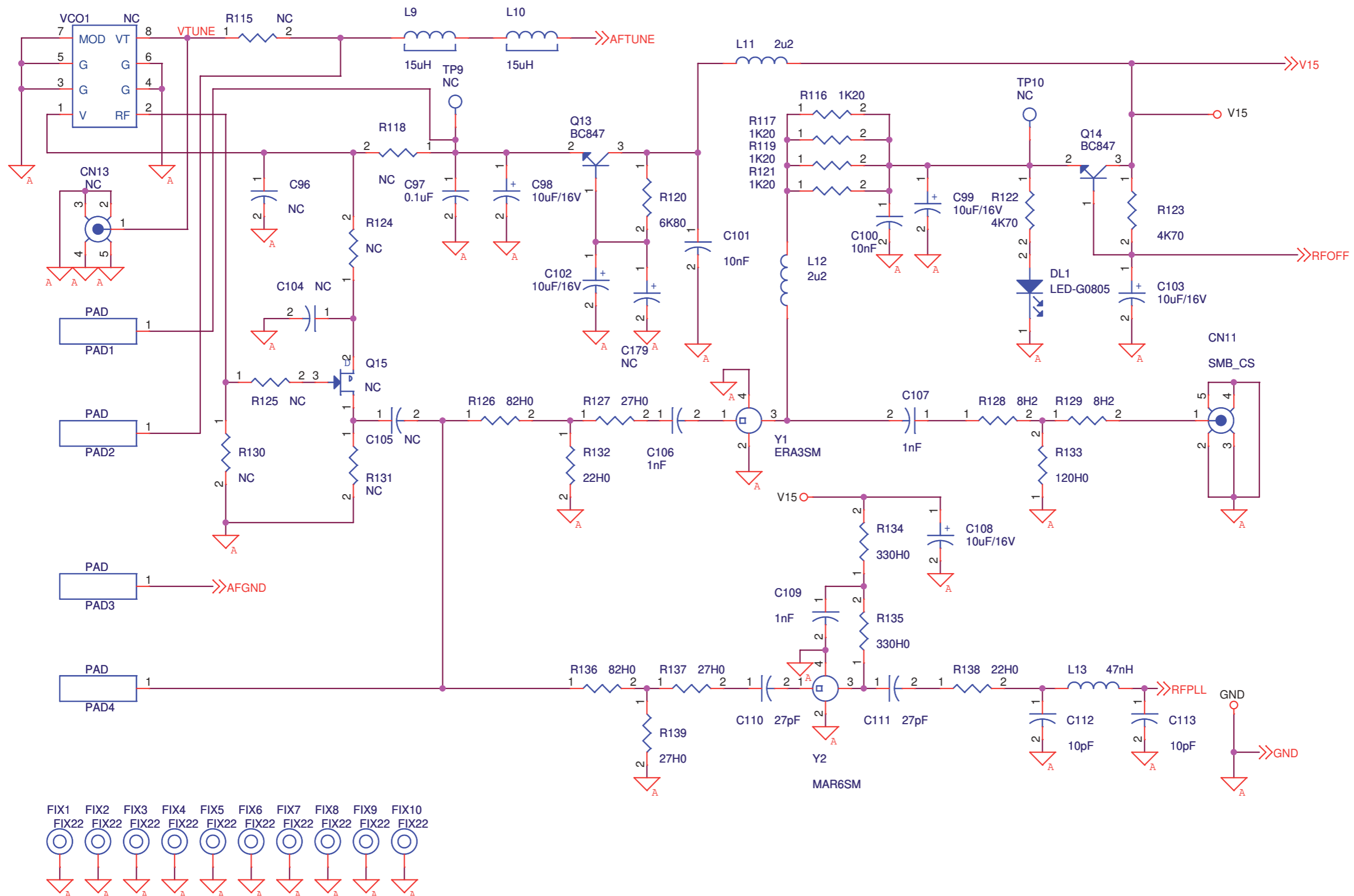


PRODUCT NAME : BLUES-NV	PART NAME : WIRING DIAGRAM
DESIGNER : G. DE DONNO	DATE : 12/05/17 REVISION : 1.8 SCALE 1:1 SIZE A3 PAGE : 1 DI 1
ARCHIVING : "RVTR" SERVER, "RILASCIATI" FOLDER	PROJECT CODE : 037 DOCUMENT CODE : <



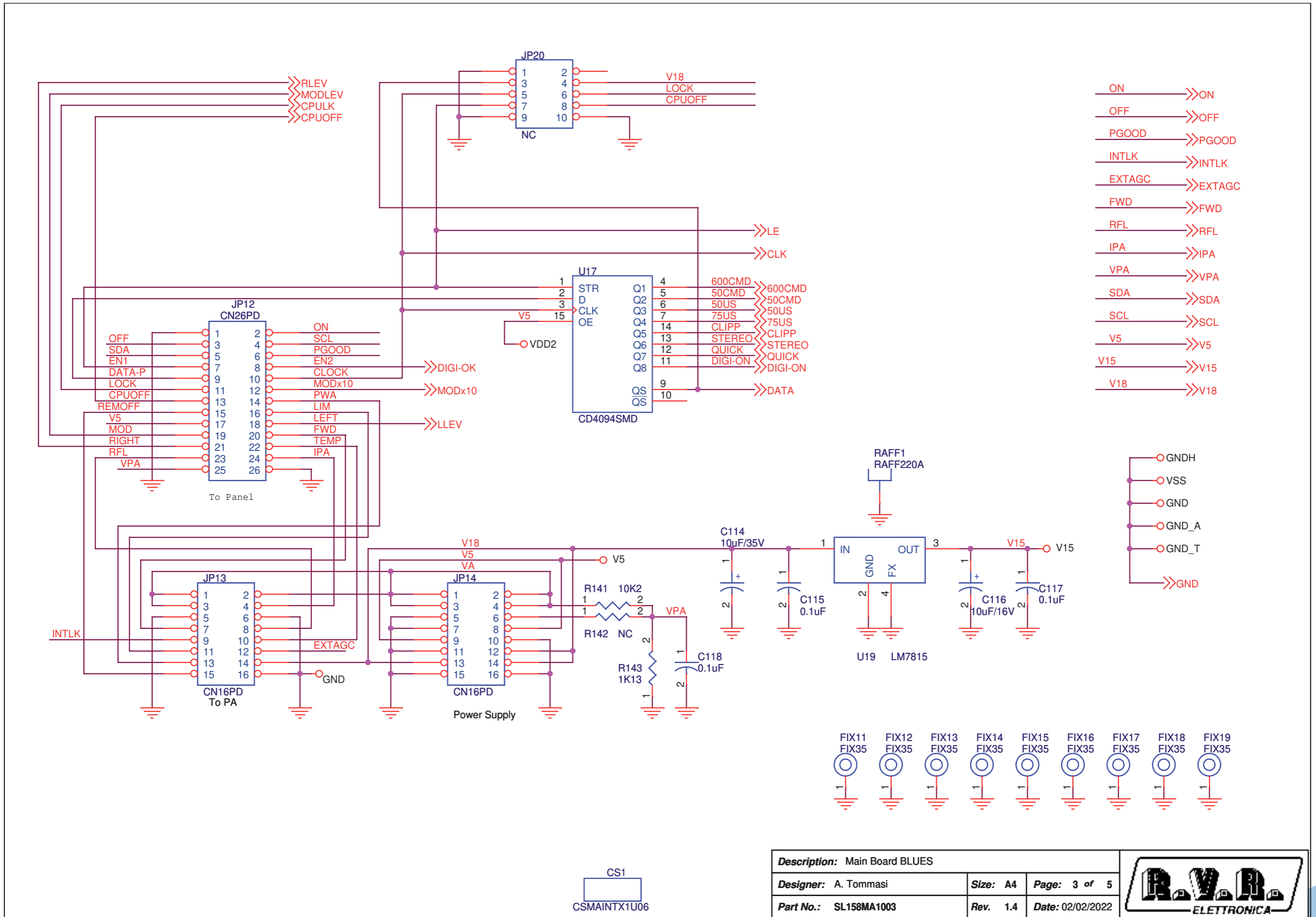


Posizionare sotto la scheda VCO

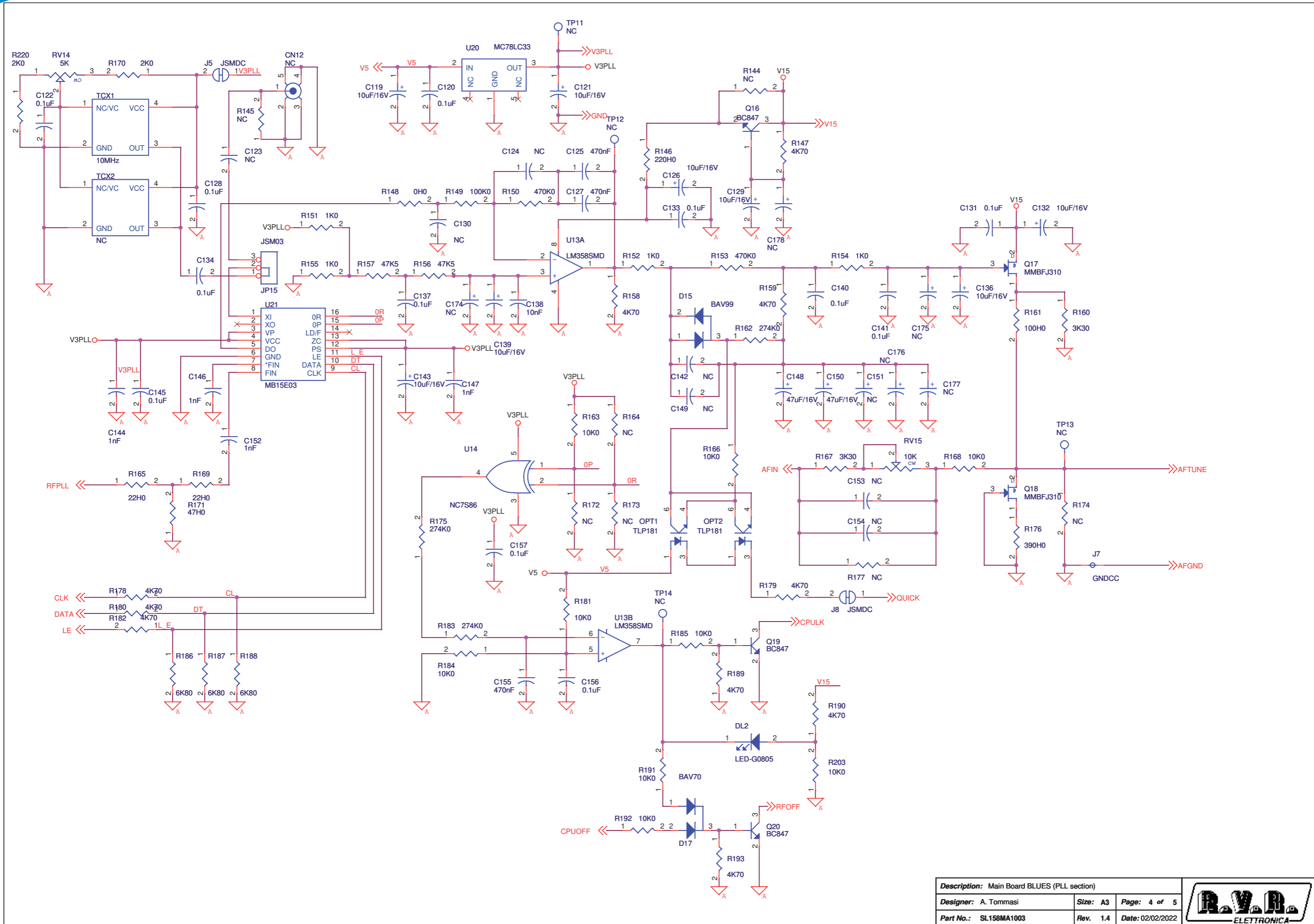


Description: Main Board BLUES (VCO-Driver section)		
Designer: A. Tommasi	Size: A4	Page: 2 of 5
Part No.: SL158MA1003	Rev.: 1.4	Date: 02/02/2022





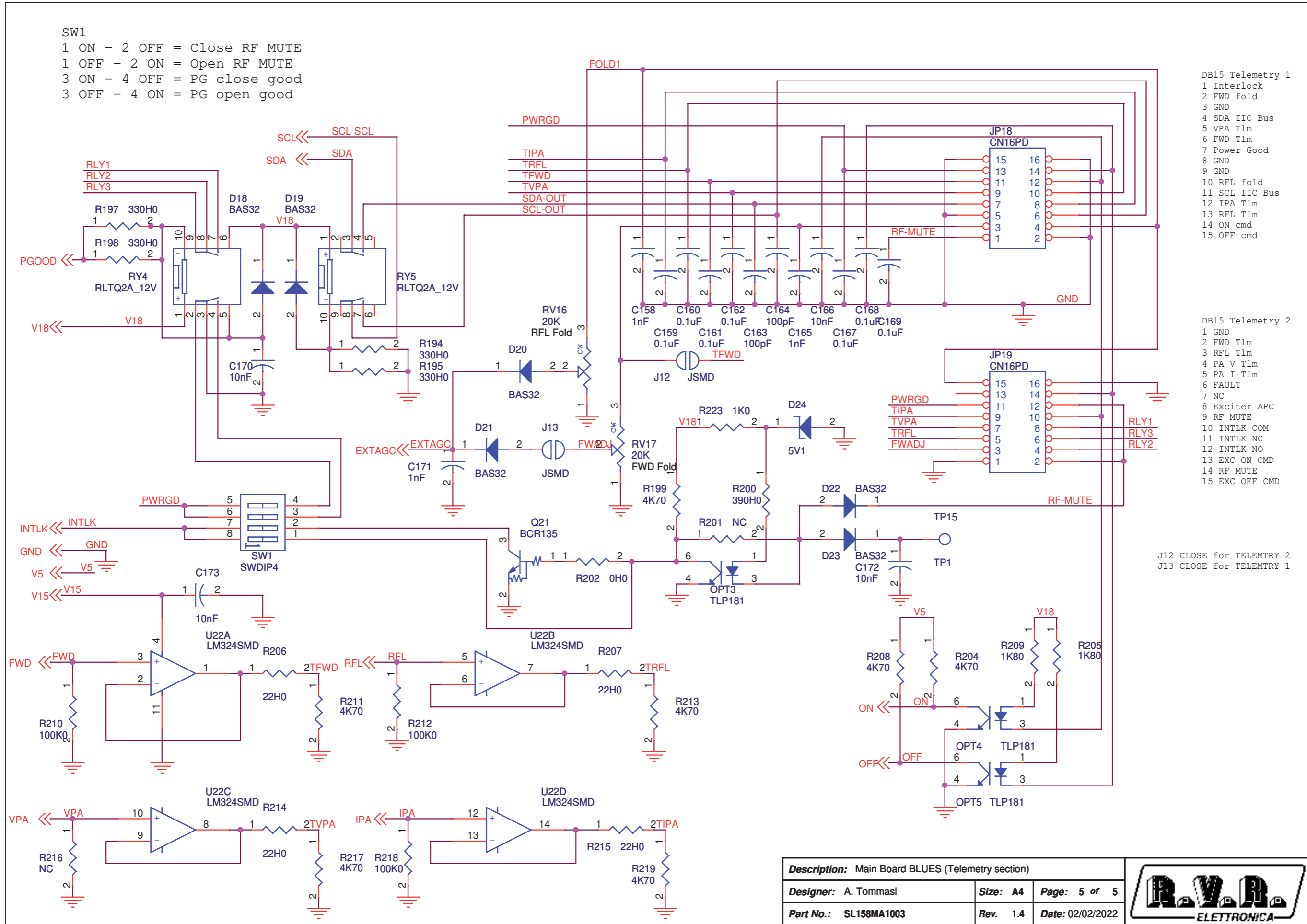
SL158MA1003



Description: Main Board BLUES (PLL section)		
Designer: A. Tommasi	Size: A3	Page: 4 of 5
Part No.: SL158MA1003	Rev. 1.4	Date: 02/02/2022



SL158MA1003



SW1
 1 ON - 2 OFF = Close RF MUTE
 1 OFF - 2 ON = Open RF MUTE
 3 ON - 4 OFF = PG close good
 3 OFF - 4 ON = PG open good

DB15 Telemetry 1
 1 Interlock
 2 FWD fold
 3 GND
 4 SDA IIC Bus
 5 VPA Tlm
 6 FWD Tlm
 7 Power Good
 8 GND
 9 GND
 10 RFL fold
 11 SCL IIC Bus
 12 IPA Tlm
 13 RFL Tlm
 14 ON cmd
 15 OFF cmd

DB15 Telemetry 2
 1 GND
 2 FWD Tlm
 3 RFL Tlm
 4 PA V Tlm
 5 PA I Tlm
 6 FAULT
 7 NC
 8 Exciter APC
 9 RF MUTE
 10 INTLK COM
 11 INTLK NC
 12 INTLK NO
 13 EXC ON CMD
 14 RF MUTE
 15 EXC OFF CMD

J12 CLOSE for TELEMTRY 2
 J13 CLOSE for TELEMTRY 1

Description: Main Board BLUES (Telemetry section)		
Designer: A. Tommasi	Size: A4	Page: 5 of 5
Part No.: SL158MA1003	Rev.: 1.4	Date: 02/02/2022



SL158MA1003

Main Board BLUES Revised: 02/02/2022
 SL158MA1003 Revision: 1.4
 A. Tommasi

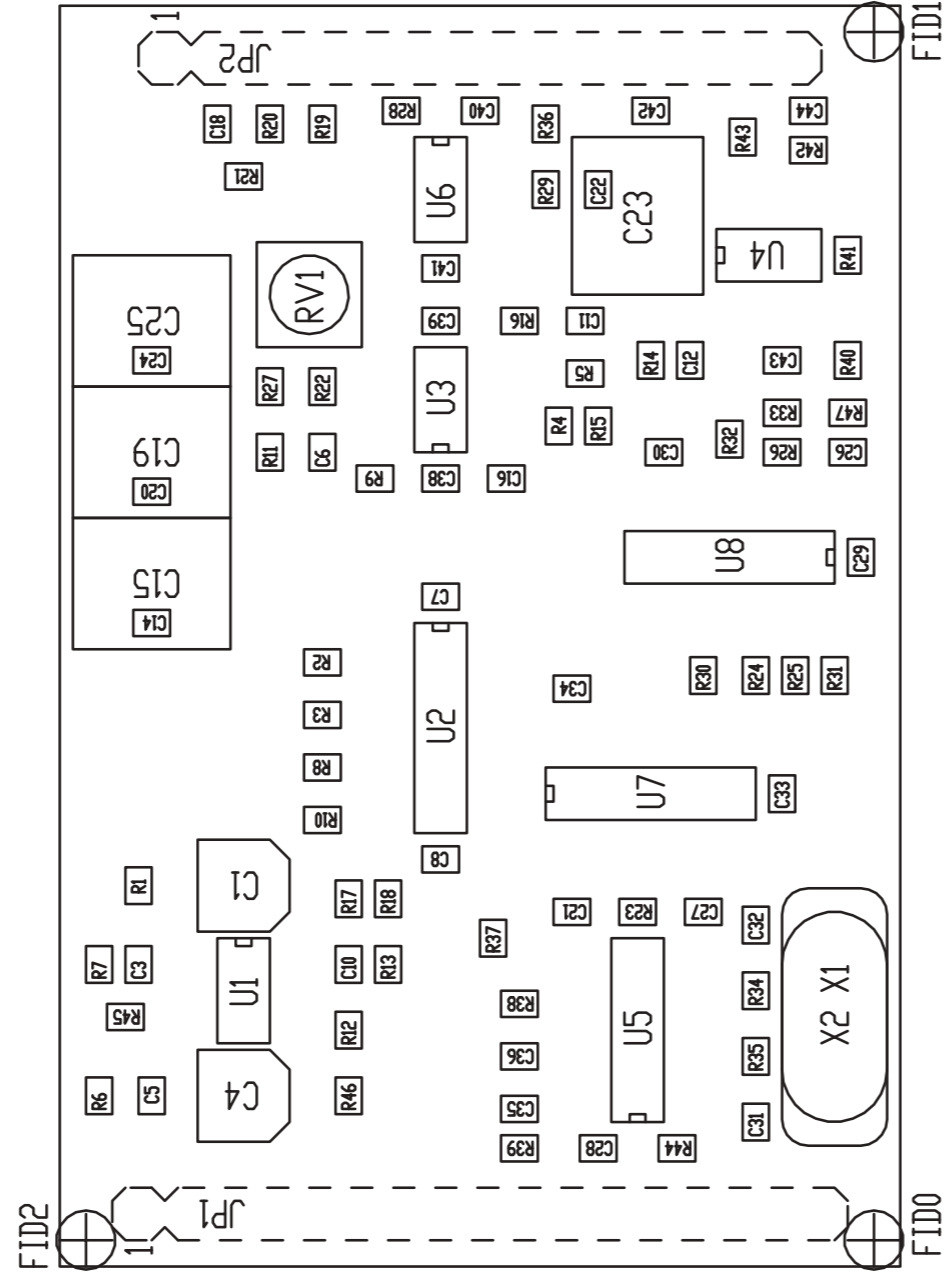
Item	Quantity	Reference	Part	Description
1	3	CN1,CN3,CN11	SMB_CS	Connettore SMB cs
2	3	CN2,CN5,CN6	XLRFC3H	Connettore XLR NC3 femm. cs 90°
3	4	CN4,CN8,CN9,CN10	BNC_IS90	Connettore BNC metallico 90°
4	1	CN7	CN03PS	Connettore 3 poli Mascon
5	2	CN12,CN13	NC	Connettore SMB cs
6	1	COD1	CODER	Coder stereo IRV30CT
7	1	CS1	CSMAINTX1U06	Circuito stampato
8	47	C1,C2,C5,C6,C10,C19,C24,C25,C29,C35,C37,C47,C52,C53,C54,C58,C67,C76,C88,C90,C92,C93,C94,C95,C97,C115,C117,C118,C120,C122,C128,C131,C133,C134,C137,C140,C141,C145,C156,C157,C159,C160,C161,C162,C167,C168,C169	0.1uF	Cond. SMD 0805
9	3	C3,C39,C66	47pF	Cond. SMD 0805
10	3	C4,C40,C63	15pF	Cond. SMD 0805
11	4	C7,C13,C36,C41	100uF/16V	Cond. Elett. SMD d. 6.3mm
12	18	C8,C9,C17,C18,C20,C21,C43,C44,C45,C46,C64,C65,C73,C74,C83,C84,C110,C111	27pF	Cond. SMD 0805
13	32	C11,C12,C16,C22,C28,C42,C48,C51,C55,C62,C68,C72,C75,C77,C78,C80,C86,C89,C98,C99,C102,C103,C108,C116,C119,C121,C126,C129,C132,C136,C139,C143	10uF/16V	Cond. Elett. SMD d. 4mm
14	4	C14,C49,C163,C164	100pF	Cond. SMD 0805
15	2	C15,C38	150pF	Cond. SMD 0805
16	2	C23,C27	1nF	Cond. SMD 0805 COG
17	2	C26,C30	1.5nF	Cond. SMD 0805 COG
18	2	C31,C32	NC	Comp. ceramico dia. 7mm
19	2	C33,C34	6-30pF	Comp. var. Murata TZB4A
20	1	C50	NC	Cond. Elett. SMD d. 4mm
21	3	C56,C70,C85	1uF	Cond. SMD 0805
22	3	C57,C59,C155	470nF	Cond. SMD 0805
23	10	C60,C69,C96,C104,C105,C123,C124,C130,C153,C154	NC	Cond. SMD 0805
24	10	C61,C71,C79,C100,C101,C138,C166,C170,C172,C173	10nF	Cond. SMD 0805
25	4	C81,C82,C87,C91	220uF/16V	Cond. Elett. SMD d. 6.3mm
26	10	C106,C107,C109,C144,C146,C147,C152,C158,C165,C171	1nF	Cond. SMD 0805
27	2	C112,C113	10pF	Cond. SMD 0805
28	1	C114	10uF/35V	Cond. Elett. SMD d. 5mm
29	2	C125,C127	470nF	Cond. SMD 1206
30	2	C142,C149	NC	Cond. SMD 1206
31	2	C148,C150	47uF/16V	Cond. Elett. SMD d. 6.3mm
32	1	C151	NC	Cond. Elett. SMD d. 6.3mm

33	4	C174,C175,C178,C179	NC	Cond. Elett. SMD tant. size C
34	2	C176,C177	NC	Cond. Elett. SMD tant. size D
35	3	DL1,DL2,DL3	LED-G0805	LED SMD 0805
36	1	DZ1	LM4040-10	Diodi Zener SMD SOT23
37	9	D1,D2,D3,D5,D6,D7,D9,D11,D15	BAV99	Doppio Diodo SMD SOT23
38	5	D4,D8,D10,D12,D24	5V1	MINIMELF SMD Zener Diode
39	8	D13,D14,D18,D19,D20,D21,D22,D23	BAS32	MINIMELF SMD Diode
40	1	D17	BAV70	Doppio Diodo SMD SOT23
41	10	FIX1,FIX2,FIX3,FIX4,FIX5,FIX6,FIX7,FIX8,FIX9,FIX10	FIX22	Foro fissaggio 2.2mm
42	9	FIX11,FIX12,FIX13,FIX14,FIX15,FIX16,FIX17,FIX18,FIX19	FIX35	Foro fissaggio 3.5mm
43	1	HY1	FIL19KS	
44	2	JP1,JP4	STF10S	Strip femmina 10 pin
45	1	JP2	STF14S	Strip femmina 14 pin
46	1	JP3	STF13S	Strip femmina 13 pin
47	1	JP6	STM02S	Strip maschio 2 pin
48	1	JP7	CN10PD	Connettore 10 poli Flat cs
49	1	JP8	NC	Strip maschio 2+2 pin
50	1	JP12	CN26PD	Connettore 26 poli Flat cs
51	4	JP13,JP14,JP18,JP19	CN16PD	Conn.M.C.S.Dritto 16P alette
52	1	JP15	JSM03	Pad SMD a saldare a 2 pos.
53	1	JP20	NC	Connettore 10 poli Flat cs con alette
54	7	J1,J2,J3,J4,J5,J8,J11	JSMDC	Pad SMD a saldare chiuso
55	1	J7	GNDCC	Non e' un componente
56	4	J9,J10,J12,J13	JSM	Pad SMD a saldare
57	10	L1,L2,L3,L4,L5,L6,L7,L8,L11,L12	2u2	Induttanza SMD 3225 (1210)
58	2	L9,L10	15uH	Induttanza SMD 3225 (1210) Schermata
59	1	L13	47nH	Induttanza SMD 3225 (1210)
60	5	OPT1,OPT2,OPT3,OPT4,OPT5	TLP181	Optoisolatore SMD SO6
61	4	PAD1,PAD2,PAD3,PAD4	PAD	Pad a saldare 2.5x2.5 mm
62	4	Q1,Q3,Q12,Q21	BCR135	Trans./Res. NPN SOT23
63	4	Q2,Q4,Q6,Q7	BC857	Trans. PNP SOT23
64	9	Q5,Q8,Q10,Q11,Q13,Q14,Q16,Q19,Q20	BC847	Trans. NPN SOT23
65	1	Q9	2N7002	Trans. FET SOT23
66	1	Q15	NC	Trans. FET SOT23
67	2	Q17,Q18	MMBFJ310	Trans. FET SOT23
68	1	RAFF1	RAFF220A	Dissipatore TO220 25x15 scasso
69	4	RV1,RV12,RV13,RV14	5K	Trimmer Rg V 3269W SMD
70	5	RV2,RV6,RV7,RV10,RV11	10K	Trimmer Rg H 3006
71	3	RV3,RV4,RV15	10K	Trimmer Rg V 3269W SMD
72	1	RV5	50K	Trimmer Rg V 3269W SMD
73	4	RV8,RV9,RV16,RV17	20K	Trimmer Rg H 3006
74	5	RY1,RY2,RY3,RY4,RY5	RLTQ2A_12V	Rele' TQ2
75	12	R1,R3,R50,R51,R73,R74,R91,R92,R149,R210,R212,R218	100K0	Res. SMD 0805
76	46	R2,R14,R15,R17,R20,R22,R23,R29,R31,R35,R39,R44,R49,R52,R57,R58,R62,R64,R71,R75,R76,R77,R78,R81,	10K0	Res. SMD 0805

SL158MA1003

	R82,R93,R98,R100,R101, R107,R108,R110,R112,R114, R140,R163,R166,R168,R181, R184,R185,R191,R192,R203, R221,R222		
77	23 R4,R13,R16,R25,R34,R45, R56,R115,R118,R124,R125, R130,R131,R142,R144,R145, R164,R172,R173,R174,R177, R201,R216	NC	Res. SMD 0805
78	6 R5,R55,R79,R87,R97,R161	100H0	Res. SMD 0805
79	4 R6,R19,R32,R42	10H0	Res. SMD 0805
80	5 R7,R24,R33,R43,R65	20K0	Res. SMD 0805
81	2 R8,R46	4K12	Res. SMD 0805
72	7 R9,R47,R63,R85,R103,R170, R220	2K0	Res. SMD 0805
83	4 R10,R18,R36,R41	30K9	Res. SMD 0805
84	8 R11,R12,R37,R38,R116, R117,R119,R121	1K20	Res. SMD 0805
85	2 R21,R48	47K0	Res. SMD 0805
86	8 R26,R40,R134,R135,R194, R195,R197,R198	330H0	Res. SMD 0805
87	11 R27,R66,R80,R86,R89,R94, R151,R152,R154,R155,R223	1K0	Res. SMD 0805
88	6 R28,R30,R53,R59,R60,R61	150H0	Res. SMD 0805
89	3 R54,R148,R202	0H0	Res. SMD 0805
90	1 R67	28K0	Res. SMD 0805
91	3 R68,R84,R102	12K1	Res. SMD 0805
92	2 R69,R70	2K49	Res. SMD 0805
93	3 R72,R150,R153	470K0	Res. SMD 0805
94	2 R83,R95	49K9	Res. SMD 0805
95	2 R88,R99	4K99	Res. SMD 0805
96	2 R90,R104	15K0	Res. SMD 0805
97	2 R96,R109	1M0	Res. SMD 0805
98	2 R105,R171	47H0	Res. SMD 0805
99	1 R106	576H0	Res. SMD 0805
100	21 R111,R113,R122,R123,R147, R158,R159,R178,R179,R180, R182,R189,R190,R193,R199, R204,R208,R211,R213,R217, R219	4K70	Res. SMD 0805
101	4 R120,R186,R187,R188	6K80	Res. SMD 0805
102	2 R126,R136	82H0	Res. SMD 0805
103	3 R127,R137,R139	27H0	Res. SMD 0805
104	2 R128,R129	8H2	Res. SMD 0805
105	8 R132,R138,R165,R169,R206, R207,R214,R215	22H0	Res. SMD 0805
106	1 R133	120H0	Res. SMD 0805
107	1 R141	10K2	Res. SMD 0805
108	1 R143	1K13	Res. SMD 0805
109	1 R146	220H0	Res. SMD 0805
110	2 R156,R157	47K5	Res. SMD 0805
111	2 R160,R167	3K30	Res. SMD 0805
112	3 R162,R175,R183	274K0	Res. SMD 0805
113	2 R176,R200	390H0	Res. SMD 0805
114	2 R205,R209	1K80	Res. SMD 0805
115	1 SW1	SWDIP4	Dip switch 4 vie

116	1 TCX1	10MHz	TCXO SMD 5x3.2mm
117	1 TCX2	NC	TCXO SMD 7x5.2mm
118	14 TP1,TP2,TP3,TP4,TP5,TP6, TP7,TP8,TP9,TP10,TP11, TP12,TP13,TP14	NC	Test point
119	1 TP15	TP1	Test point
120	7 U1,U2,U4,U5,U6,U7,U8	TL072SMD	Dual Op. SMD SO8
121	2 U3,U14	NC7S86	XOR Port
122	3 U9,U12,U13	LM358SMD	Dual Op. SMD SO8
123	2 U10,U11	LM393SMD	Dual Comp. SMD SO8
124	1 U15	CD4066XSMD	Analog Switch SMD SO14
125	1 U16	CD4053SMD	Analog Switch SMD SO16
126	1 U17	CD4094SMD	Shift Reg. SMD SO16
127	1 U19	LM7815	Stabilizzatore TO220
128	1 U20	MC78LC33	Stab. SMD SOT23-5
129	1 U21	MB15E03	Integrated PLL
130	1 U22	LM324SMD	Quad Op. SMD SO14
131	1 VCO1	NC	VCO SKY 8 pin FVC7MD
132	1 Y1	ERA3SM	Ibrido MAR/ERA
133	1 Y2	MAR6SM	Ibrido MAR/ERA



NOME PROGETTO: PTX-LCD

NOME PARTE: CODER CARD

AUTORE: A. TOMMASI

PAGINA: 1 DI 1

SCALE: 2:1

REVISIONE: 1.0

SIZE: A4

ARCHIVIAZIONE ELETTRONICA: \\VRUT\

CODICE PROGETTO: 011

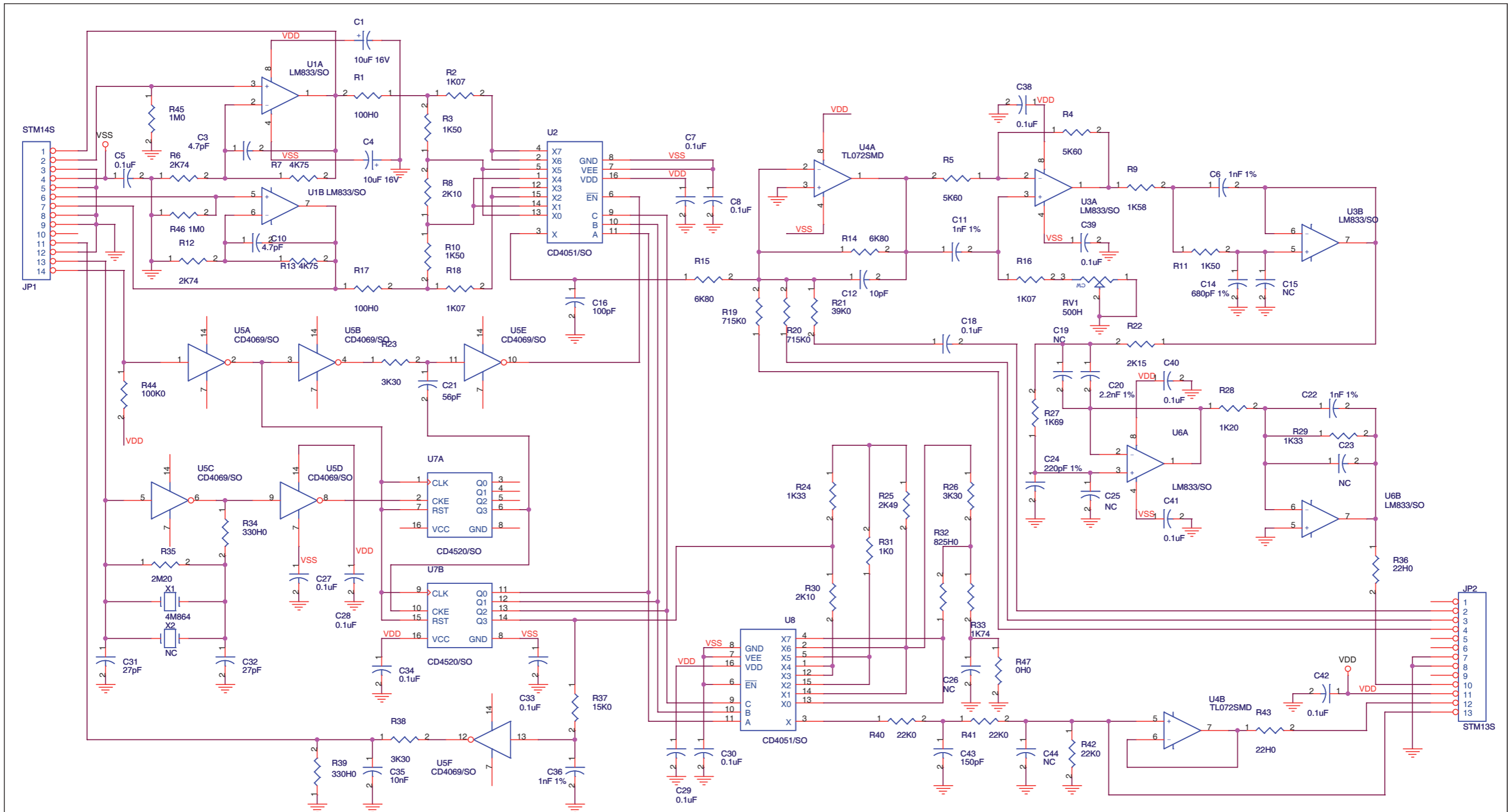
CODICE DISEGNO: SLCTC30V03

MATERIALE: TRATTAMENTO:

PROFILO:

STATO: ESECUTIVO

SLCTC30V03



CS1
CSCTC30V03

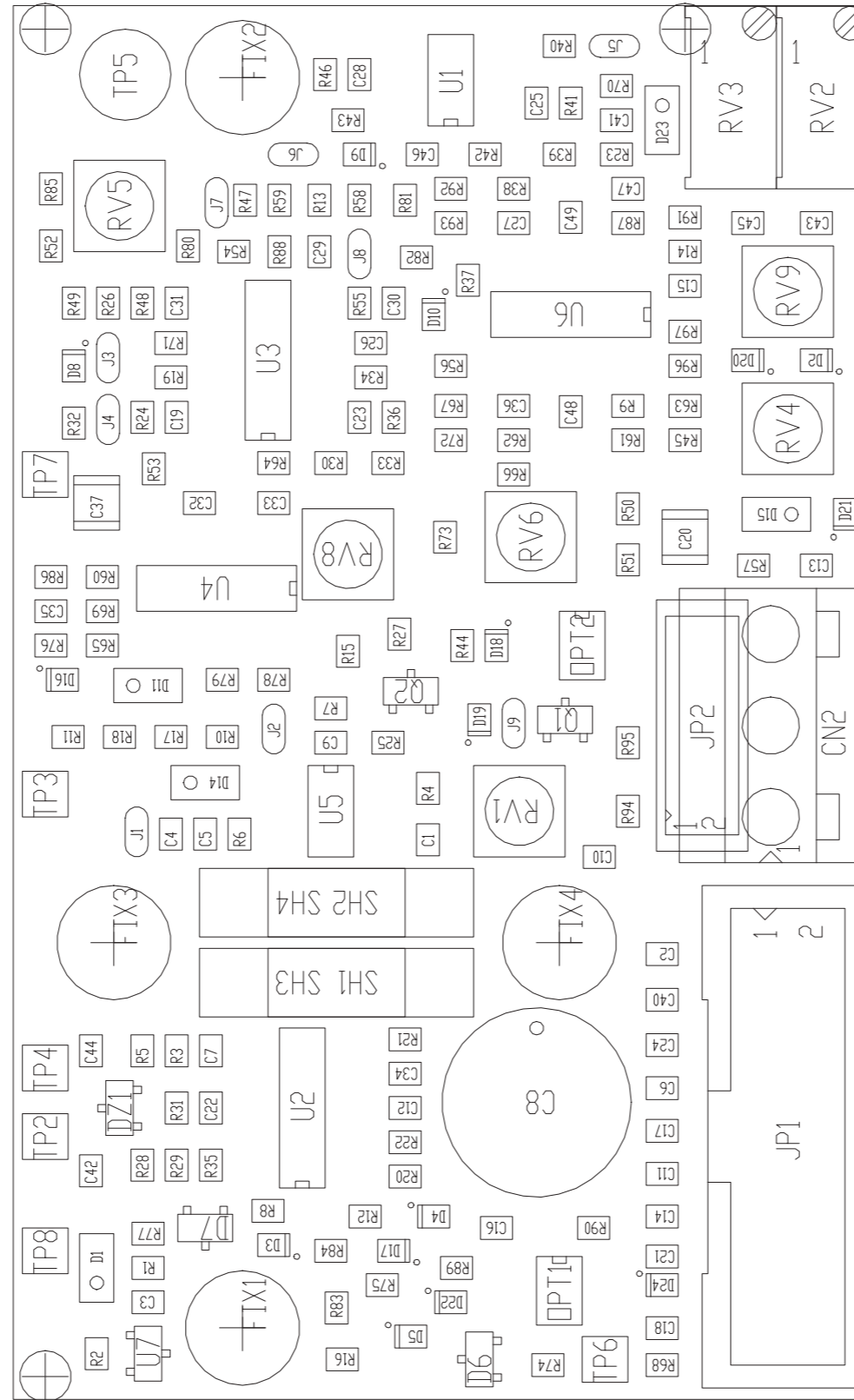
Description: Coder Card		
Designer: A. Tommasi	Size: A3	Page: 1 of 1
Part No.: SLCTC30V03	Rev. 1.2	Date: 26/01/2015



SLCTC30V03

Coder Card Revised: 26/01/2015
 SLCTC30V03 Revision: 1.2
 A. Tommasi

Item	Q.ty	Reference	Part	Description
1	1	CS1	CSCCTC30V03	Circuito stampato
2	2	C1, C4	10uF 16V	Cond. Elett. SMD d. 4mm
3	2	C3, C10	4.7pF	Cond. SMD 0805
4	15	C5, C7, C8, C18, C27, C28, C29, C30, C33, C34, C38, C39, C40, C41, C42	0.1uF	Cond. SMD 0805
5	4	C6, C11, C22, C36	1nF 1%	Cond. SMD 0805 COG
6	1	C12	10pF	Cond. SMD 0805
7	1	C14	680pF 1%	Cond. SMD 0805 COG
8	4	C15, C19, C23, C25	NC	Cond. Poliestere p 5mm (5*7mm)
9	1	C16	100pF	Cond. SMD 0805
10	1	C20	2.2nF 1%	Cond. SMD 0805 COG
11	1	C21	56pF	Cond. SMD 0805
12	1	C24	220pF 1%	Cond. SMD 0805 COG
13	1	C26	NC	Cond. SMD 0805
14	2	C31, C32	27pF	Cond. SMD 0805
15	1	C35	10nF	Cond. SMD 0805
16	1	C43	150pF	Cond. SMD 0805
17	1	C44	NC	Cond. SMD 0805
18	1	JP1	STM14S	Strip maschio 14 pin
19	1	JP2	STM13S	Strip maschio 13 pin
20	1	RV1	500H	Trimmer SMD
21	2	R1, R17	100H0	Res. SMD 0805
22	3	R2, R16, R18	1K07	Res. SMD 0805
23	3	R3, R10, R11	1K50	Res. SMD 0805
24	2	R4, R5	5K60	Res. SMD 0805
25	2	R6, R12	2K74	Res. SMD 0805
26	2	R7, R13	4K75	Res. SMD 0805
27	2	R8, R30	2K10	Res. SMD 0805
28	1	R9	1K58	Res. SMD 0805
29	2	R14, R15	6K80	Res. SMD 0805
30	2	R19, R20	715K0	Res. SMD 0805
31	1	R21	39K0	Res. SMD 0805
32	1	R22	2K15	Res. SMD 0805
33	3	R23, R26, R38	3K30	Res. SMD 0805
34	2	R24, R29	1K33	Res. SMD 0805
35	1	R25	2K49	Res. SMD 0805
36	1	R27	1K69	Res. SMD 0805
37	1	R28	1K20	Res. SMD 0805
38	1	R31	1K0	Res. SMD 0805
39	1	R32	825H0	Res. SMD 0805
40	1	R33	1K74	Res. SMD 0805
41	2	R34, R39	330H0	Res. SMD 0805
42	1	R35	2M20	Res. SMD 0805
43	2	R36, R43	22H0	Res. SMD 0805
44	1	R37	15K0	Res. SMD 0805
45	3	R40, R41, R42	22K0	Res. SMD 0805
46	1	R44	100K0	Res. SMD 0805
47	2	R45, R46	1M0	Res. SMD 0805
48	1	R47	0H0	Res. SMD 0805
49	3	U1, U3, U6	LM833/SO	Dual Op. SMD SO8
50	2	U2, U8	CD4051/SO	Analog Switch SMD SO16
51	1	U4	TL072SMD	Dual Op. SMD SO8
52	1	U5	CD4069/SO	Hex inverter SO14
53	1	U7	CD4520/SO	Dual binary counter
54	1	X1	4M864	Quarzo SMD HC49SMD
55	1	X2	NC	Quarzo HC18



PRODUCT NAME : TEX

DESIGNER : FRANCESCHI A.

ARCHIVING : "RVURT" SERVER, "RILASCIATI" FOLDER

PART NAME : CNTMOS PA RF R:07

DATE : 18/05/16

REVISION : 1.0

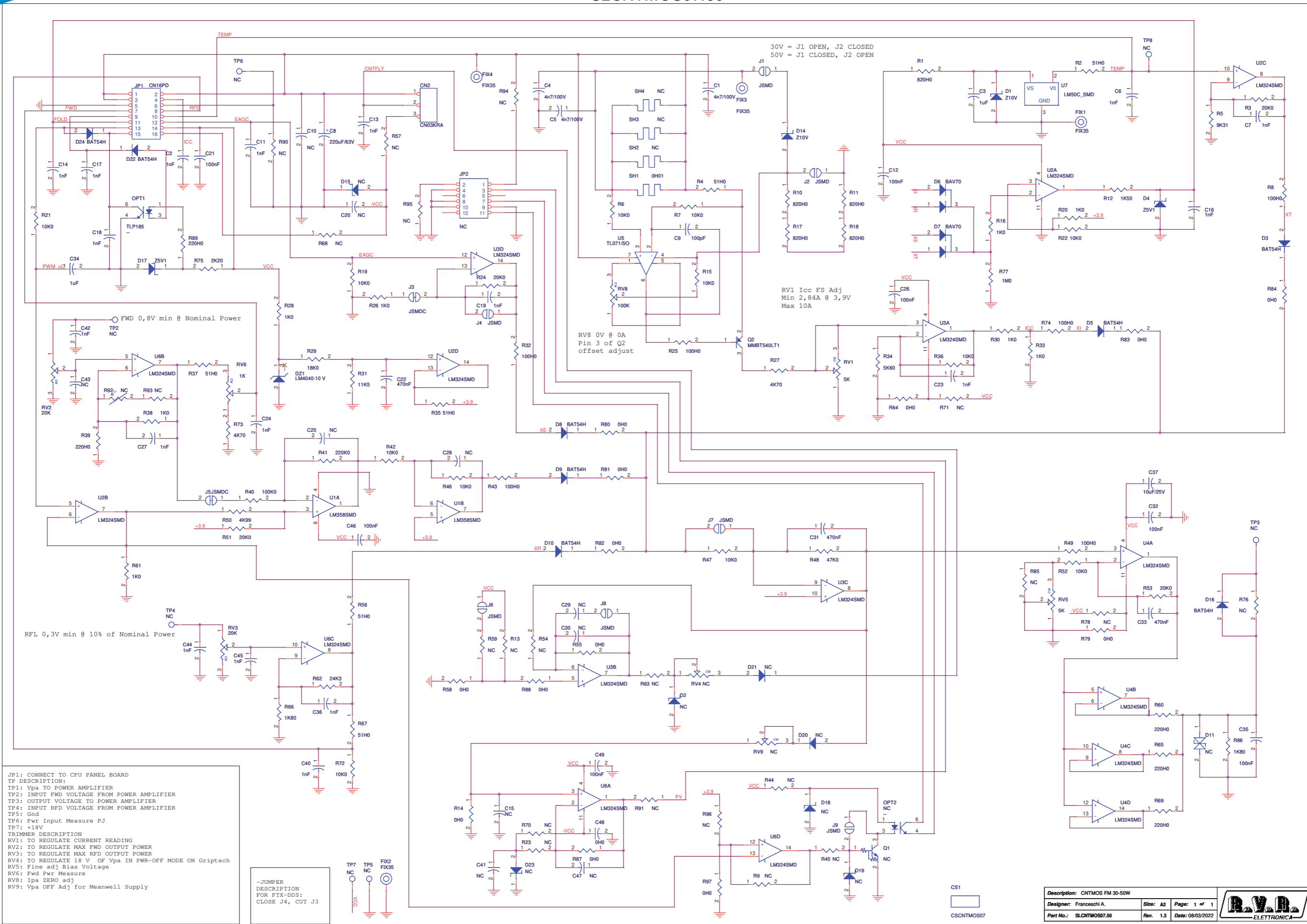
SCALE : 1:1

SIZE : A4

PAGE : 1

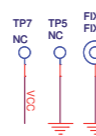
DI 1

DOCUMENT CODE : SLCNTMOS07.**



J1: CONNECT TO CPU PANEL BOARD
 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
 TP5: Gnd
 TP6: Pwr Input Measure PJ
 TP7: +18V
 TRIMMER DESCRIPTION
 RV1: TO REGULATE CURRENT READING
 RV2: TO REGULATE MAX FWD OUTPUT POWER
 RV3: TO REGULATE MAX RFD OUTPUT POWER
 RV4: TO REGULATE 18 V OF Vpa IN PWR-OFF MODE ON Griptech
 RV5: Fine adj Bias Voltage
 RV6: Fwd Pwr Measure
 RV8: Ipa ZERO adj
 RV9: Vpa OFF Adj for Meanwell Supply

-JUMPER DESCRIPTION FOR FIX-DDS: CLOSE J4, CUT J3



CS1
 CSCNTMOS07

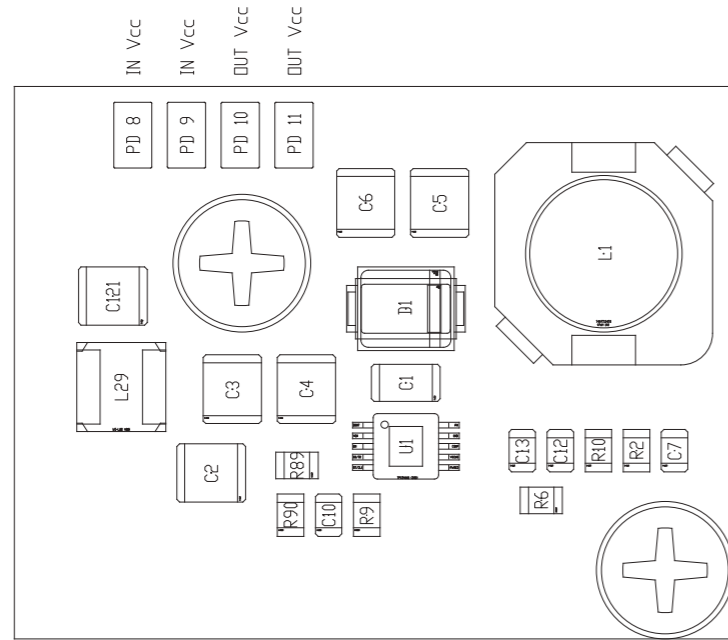
Description: CNTMOS FM 30-50W			
Designer: Francschi A.	Size: A2	Page: 1 of 1	
Part No.: SLCNTMOS07.50	Rev. 1.3	Date: 08/03/2022	

SLCNTMOS07.50

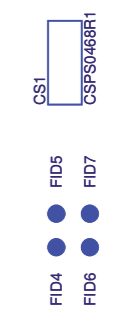
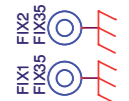
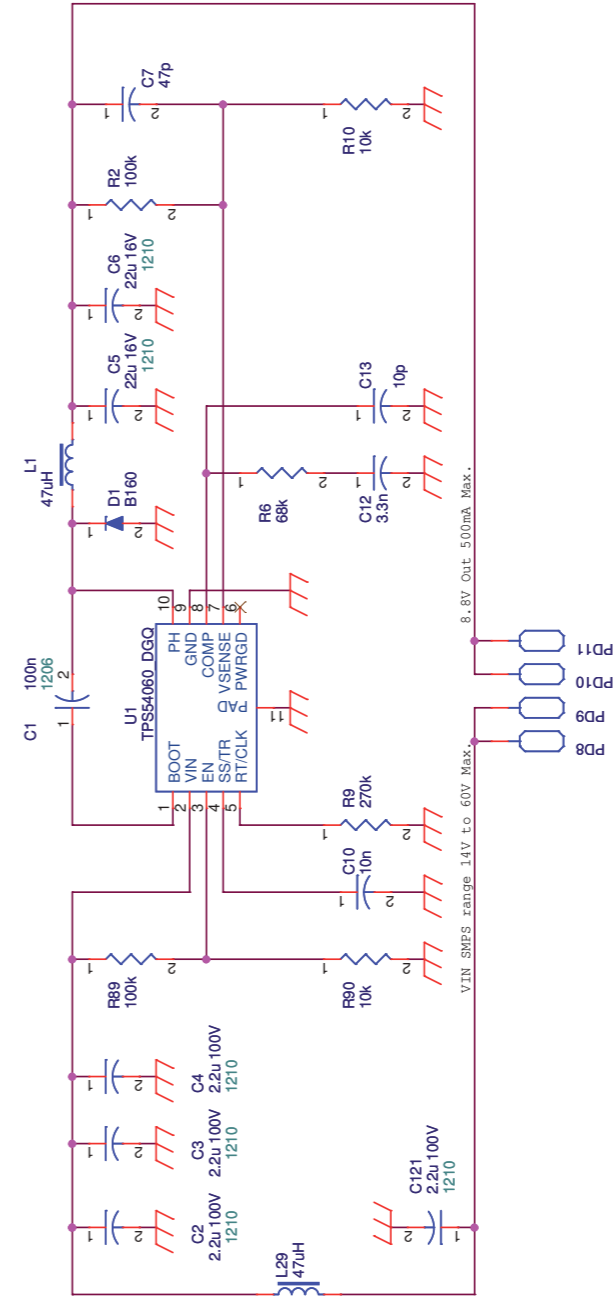
CNTMOS FM 30-50W Revised: Tuesday, March 08, 2022
 SLCNTMOS07.50 Revision: 1.3
 Franceschi A.

Item	Quantity	Reference	Part	Description
1	1	CN2	CN03KRA	Conn. tipo KRA a 3 poli
2	1	CS1	CSCNTMOS07	Circuito stampato
3	3	C1, C4, C5	4n7/100V	Cond. SMD 0805
4	18	C2, C6, C7, C11, C13, C14, C16, C17, C18, C19, C23, C24, C27, C36, C40, C42, C44, C45	1nF	Cond. SMD 0805
5	2	C3, C34	1uF	Cond. SMD 0805
6	1	C8	220uF/63V	Cond. Elettr. Dia 10 P5.08
7	1	C9	100pF	Cond. SMD 0805
8	9	C10, C15, C25, C28, C29, C30, C41, C43, C47	NC	Cond. SMD 0805
9	7	C12, C21, C26, C32, C35, C46, C49	100nF	Cond. SMD 0805
10	1	C20	NC	Cond. SMD 1210
11	3	C22, C31, C33	470nF	Cond. SMD 0805
12	1	C37	10uF/25V	Cond. SMD 1210
13	1	C48	0H0	Cond. SMD 0805
14	1	D21	LM4040-10 V	Diodi Zener SMD SOT23
15	2	D1, D14	Z10V	MINIMELF SMD Zener Diode
16	3	D2, D18, D19	NC	SOD323 Zener Diode
17	8	D3, D5, D8, D9, D10, D16, D22, D24	BAT54H	SOD323 SMD Diode
18	2	D4, D17	Z5V1	SOD323 Zener Diode
19	2	D6, D7	BAV70	Doppio Diode SMD SOT23
20	1	D11	NC	Transzorb SMA
21	2	D15, D23	NC	MINIMELF SMD Zener Diode
22	2	D20, D21	NC	SOD323 SMD Diode
23	4	FIX1, FIX2, FIX3, FIX4	FIX35	Foro fissaggio 3.5mm
24	1	JP1	CN16PD	Conn.M.C.S.Dritto 16P alette.
25	1	JP2	NC	Conn. 12 poli DF11 12pin p. 2mm
26	7	J1, J2, J4, J6, J7, J8, J9	J5MD	Pad SMD a saldare
27	2	J3, J5	J5MDC	Pad SMD a saldare chiuso
28	1	OPT1	TLP185	Optocoupler SMD SO6
29	1	OPT2	NC	Optocoupler SMD SO6
30	1	Q1	NC	Trans./Res. NPN SOT23
31	1	Q2	MMBT540LT1	Trans. PNP SOT23
32	2	RV1, RV5	5K	Trimmer SMD
33	2	RV2, RV3	20K	Trimmer Rg V 3296W
34	2	RV4, RV9	NC	Trimmer SMD
35	1	RV6	1K	Trimmer SMD
36	1	RV8	100K	Trimmer SMD
37	5	R1, R10, R11, R17, R18	820H0	Res. SMD 0805 1%
38	6	R2, R4, R35, R37, R56, R67	51H0	Res. SMD 0805 1%
39	4	R3, R24, R51, R53	20K0	Res. SMD 0805 1%
40	1	R5	9K31	Res. SMD 0805 1%
41	12	R6, R7, R15, R19, R21, R22, R36, R42, R46, R47, R52, R72	10K0	Res. SMD 0805 1%
42	6	R8, R25, R32, R43, R49, R74	100H0	Res. SMD 0805 1%
43	21	R9, R13, R23, R44, R45, R54, R57, R59, R63, R68, R70, R71, R76, R78, R85, R90, R91, R93, R94, R95, R96	NC	Res. SMD 0805 1%
44	1	R12	1K50	Res. SMD 0805 1%
45	13	R14, R55, R58, R64, R79, R80, R81, R82, R83, R84, R87, R88, R97	0H0	Res. SMD 0805 1%
46	8	R16, R20, R26, R28, R30, R33, R38, R61	1K0	Res. SMD 0805 1%
47	2	R27, R73	4K70	Res. SMD 0805 1%
48	1	R29	18K0	Res. SMD 0805 1%
49	1	R31	11K5	Res. SMD 0805 1%
50	1	R34	5K60	Res. SMD 0805 1%
51	5	R39, R60, R65, R69, R89	220H0	Res. SMD 0805 1%
52	1	R40	100K0	Res. SMD 0805 1%
53	1	R41	220K0	Res. SMD 0805 1%
54	1	R48	47K0	Res. SMD 0805 1%
55	1	R50	4K99	Res. SMD 0805 1%
56	1	R62	24K3	Res. SMD 0805 1%
57	2	R66, R86	1K80	Res. SMD 0805 1%
58	1	R75	2K20	Res. SMD 0805 1%
59	1	R77	1M0	Res. SMD 0805 1%
60	1	R92	NC	Res. NTC SMD 0805
61	1	SH1	0H01	Shunt passo 15.2mm fori 2mm
62	1	SH2	NC	Shunt passo 15.2mm fori 2mm
63	2	SH3, SH4	NC	Shunt SMD 2512
64	6	TP2, TP3, TP4, TP6, TP7, TP8	NC	Foro dia. 1mm
65	1	TP5	NC	Foro dia. 2mm

SLPS0468R01V01



DESCRIPTION : POWER SUPPLY PA RF 50W 50V	PART_CODE : SLPS0468R01V**
DESIGNER : FRANCESCHI A.	DATE: 19/04/2017
	REVISION: 1.0
	SCALE: 3:1
	SIZE: A4
	PAGINA: 1 DI 1

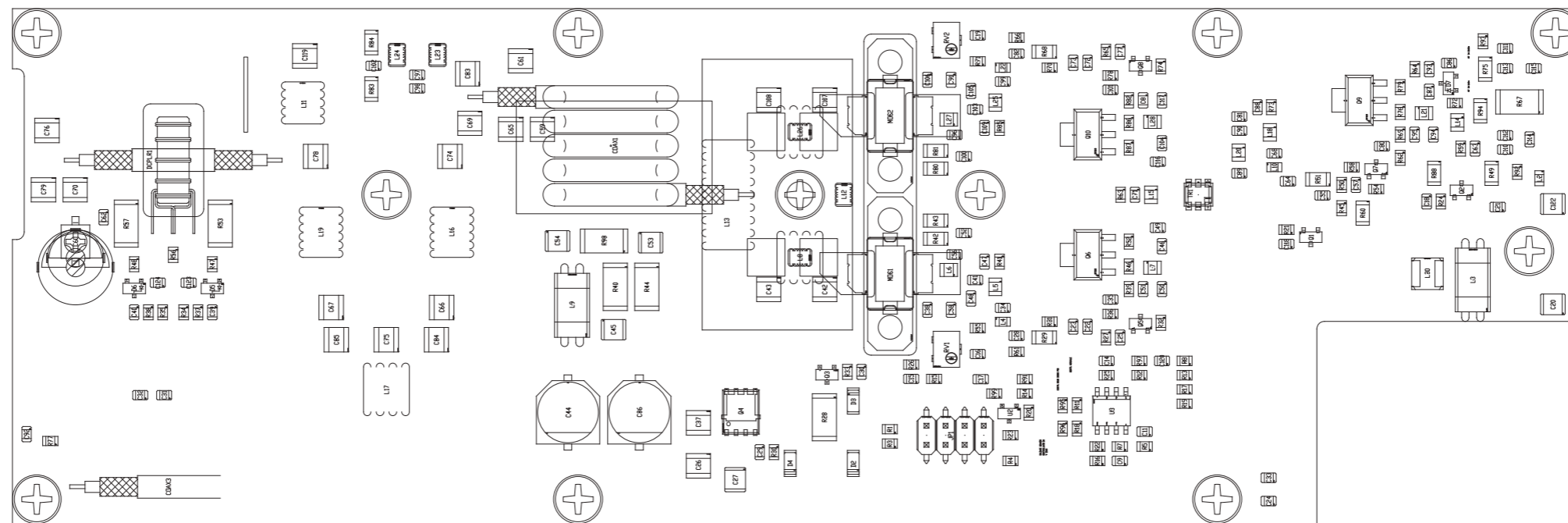


Description: POWER SUPPLY PA RF 50W 50V	
Designer: Franceschi A.	Size: A4
Part No.: SLPS0468R01V01	Rev. 1.0
Page: 1 of 1	Date: 19/04/2017

SLPS0468R01V01

POWER SUPPLY PA RF 50W 50V
 SLPS0468R01V01
 Revision: 1.0
 Franceschi A.
 19/04/2017

Item	Quantity	Reference	Part	Description
3	1	CS1	CSPS0468R1	Circuito stampato PA
5	1	C1	100n	Cond. SMD 1206
6	4	C2,C3,C4,C121	2.2u 100V	Capacitor SMD 1210 MLCC X7R 100V
7	2	C5,C6	22u 16V	Capacitor SMD 1210 MLCC X7R 16V
8	1	C7	47p	Cond. SMD 0805 COG
9	1	C10	10n	SMD 0805 MLCC X7R
11	1	C12	3.3n	SMD 0805 MLCC X7R
12	1	C13	10p	Cond. SMD 0805 COG
45	1	D1	B160	SMA Size SCHOTTKY Diode
51	4	FID4,FID5,FID6,FID7	FID	Fiducial CS
52	2	FIX1,FIX2	FIX35	
57	1	L1	47uH	PWR Ind Wurth E 7447713470
73	1	L29	47uH	PWR Ind WE 74404042470
75	4	PD8,PD9,PD10,PD11	PAD	Pad for connection
84	2	R2,R89	100k	Res. SMD 0805
88	1	R6	68k	Res. SMD 0805
91	1	R9	270k	Res. SMD 0805
92	2	R10,R90	10k	Res. SMD 0805
130	1	U1	TPS54060_DGQ	Step-Down DC2DC Converter



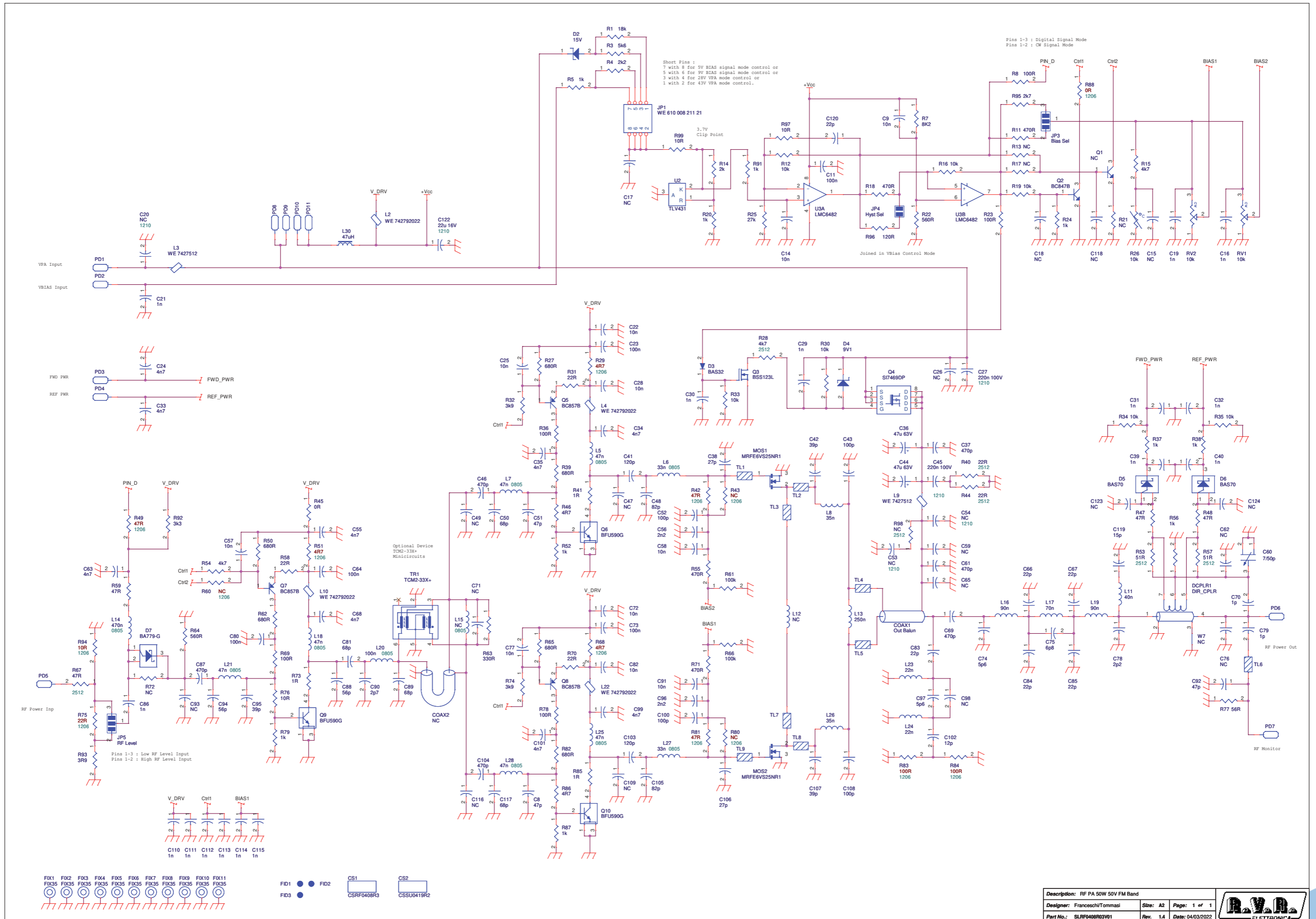
DESCRIPTION : RF PA 50W 50V FM BAND

PART CODE : SLRF0408R03V01

DESIGNER : FRANCESCHI A.

DATE: 19/04/2017 | REVISION: 1.0 | SCALE: 1:1 | SIZE: A4 | PAGINA: 1 DI 1

SLRF0408R03V01



SLRF0408R03V01

RF PA 50W 50V FM Band Revised: 04/03/2022
 SLRF0408R03V01 Revision: 1.5
 Franceschi/Tommasi

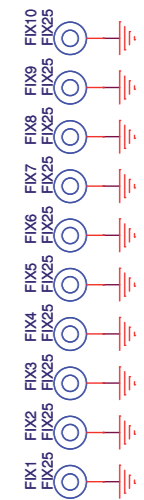
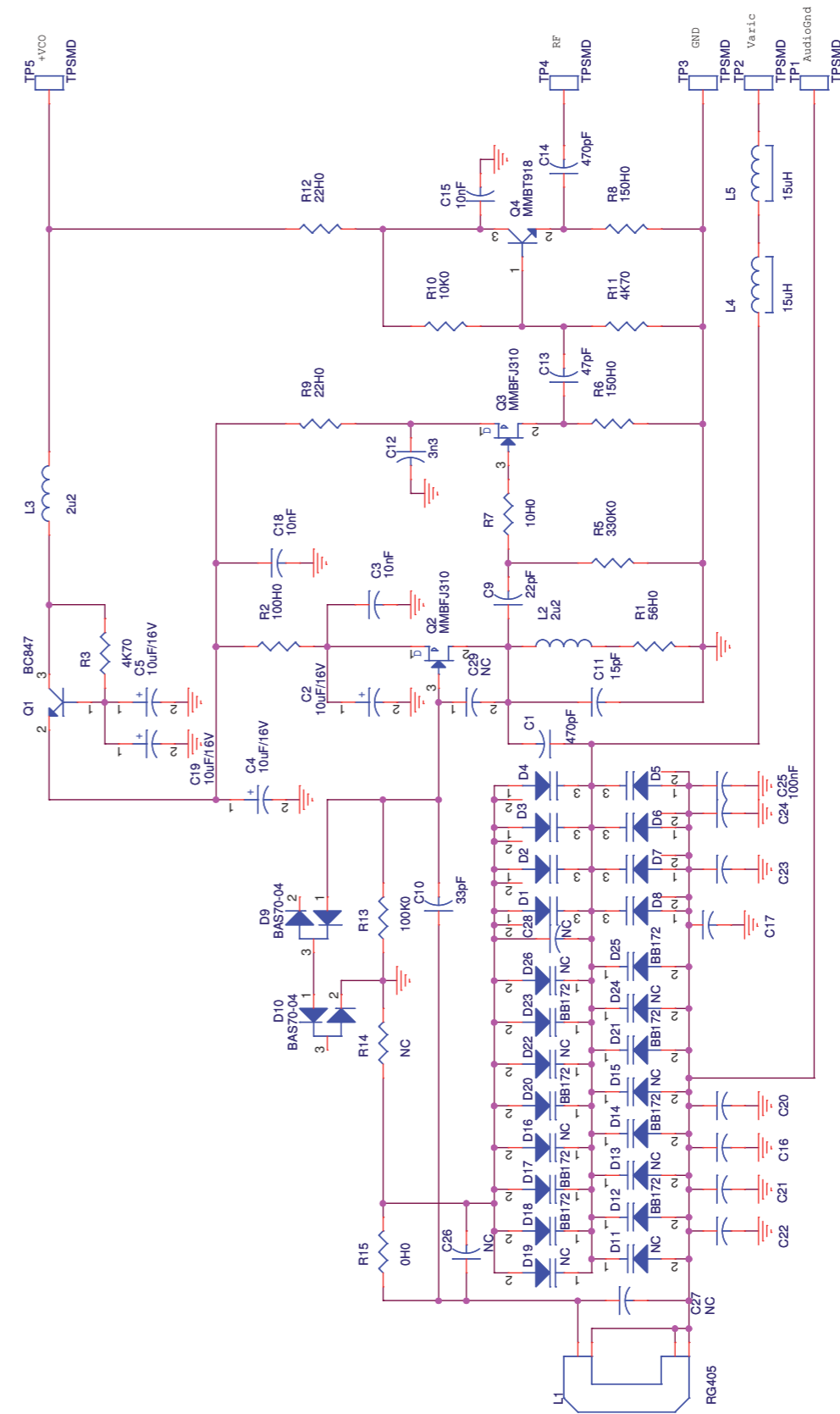
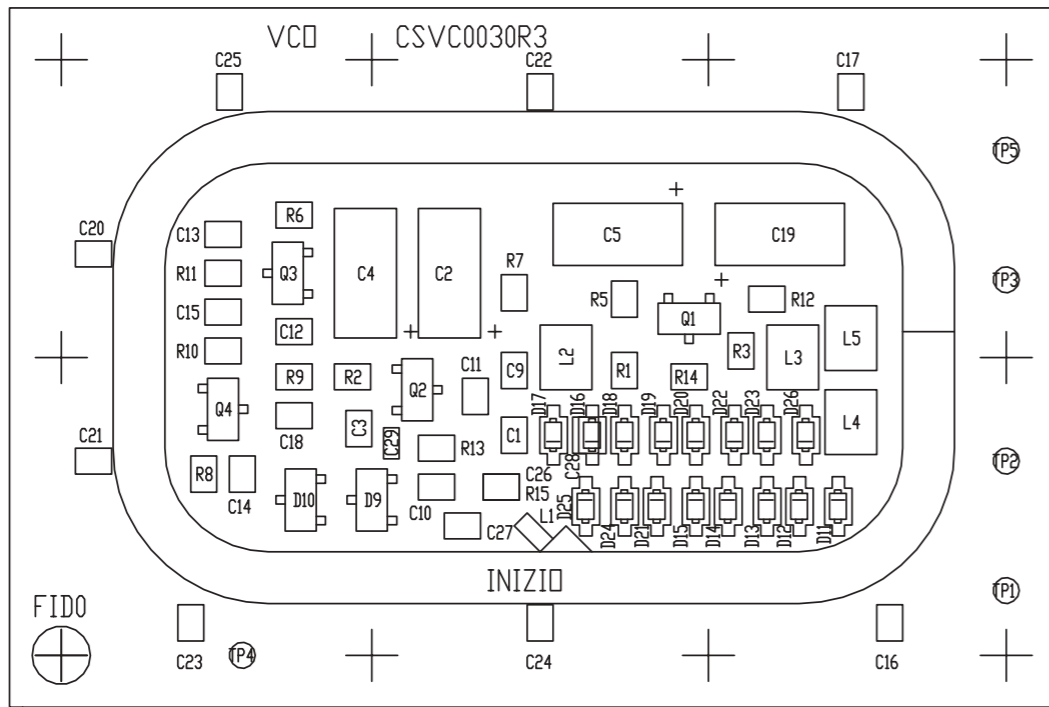
Item	Quantity	Reference	Part	Description
1	1	COAX1	Out Balun	Coax Cable RG316 50-Ohm Length 125mm Shield to Shield
2	1	COAX2	NC	Coax Cable RG178 Length 125mm Shield to Shield Wrapped a
3	1	CS1	CSRF0408R3	Circuito stampato PA
4	1	C52	CSSU0419R2	Circuito stampato Balun RG316-50
5	3	C8, C51, C92	47p	Cond. SMD 0805 COG
6	11	C9, C14, C22, C25, C28, C57, C58, C72, C77, C82, C91	10n	SMD 0805 MLCC X7R
7	5	C11, C23, C64, C73, C80	100n	SMD 0805 MLCC X7R
8	13	C15, C17, C18, C47, C49, C62, C71, C93, C109, C116, C118, C123, C124	NC	Cond. SMD 0805 COG
9	16	C16, C19, C21, C29, C30, C31, C32, C39, C40, C86, C110, C111, C112, C113, C114, C115	1n	Cond. SMD 0805 COG
10	3	C20, C53, C54	NC	Capacitor SMD 1210 MLCC X7R 100V
11	9	C24, C33, C34, C35, C55, C63, C68, C99, C101	4n7	SMD 0805 MLCC X7R
12	4	C26, C59, C65, C76	NC	Cond. SMD 1212 HQ
13	2	C27, C45	220n 100V	Capacitor SMD 1210 MLCC X7R 100V
14	2	C36, C44	47u 63V	Cond. Elett. SMD d. 8mm
15	3	C37, C61, C69	470p	Cond. SMD 1212 HQ
16	2	C38, C106	27p	Cond. SMD 0805 COG
17	2	C41, C103	120p	Cond. SMD 0805 COG
18	2	C42, C107	39p	Cond. SMD 1212 HQ
19	2	C43, C108	100p	Cond. SMD 1212 HQ
20	3	C46, C87, C104	470p	Cond. SMD 0805 COG
21	2	C48, C105	82p	Cond. SMD 0805 COG
22	4	C50, C81, C89, C117	68p	Cond. SMD 0805 COG
23	2	C52, C100	100p	Cond. SMD 0805 COG
24	2	C56, C96	2n2	SMD 0805 MLCC X7R
25	1	C60	7/50p	Adj. Cap 7 / 50pF
26	5	C66, C67, C83, C84, C85	22p	Cond. SMD 1212 HQ
27	2	C70, C79	1p	Cond. SMD 1212 HQ
28	1	C74	5p6	Cond. SMD 1212 HQ
29	1	C75	6p8	Cond. SMD 1212 HQ
30	1	C78	2p2	Cond. SMD 1212 HQ
31	2	C88, C94	56p	Cond. SMD 0805 COG
32	1	C90	2p7	Cond. SMD 0805 COG
33	1	C95	39p	Cond. SMD 0805 COG
34	1	C97	5p6	Cond. SMD 0805 COG
35	1	C98	NC	Cond. SMD 0805 COG
36	1	C102	12p	Cond. SMD 0805 COG
37	1	C119	15p	Cond. SMD 1212 HQ
38	1	C120	22p	Cond. SMD 0805 COG
39	1	C122	22u 16V	Capacitor SMD 1210 MLCC X7R 16V
40	1	DCPLR1	DIR_CPLR	Toroidal Directional Coupler
41	1	D2	15V	MINIMELF SMD Zener Diode
42	1	D3	BAS32	Minimelf Diode
43	1	D4	9V1	MINIMELF SMD Zener Diode
44	2	D5, D6	BAS70	Hot Carrier Schottky Diode
45	1	D7	BA779-G	SOT23 Pin Diode
46	3	FID1, FID2, FID3	FID	Fiducial CS
47	11	FIX1, FIX2, FIX3, FIX4, FIX5, FIX6, FIX7, FIX8, FIX9, FIX10, FIX11	FIX35	
48	1	JP1	WE 610 008 211 21	2.54mm DUAL SMT PIN HEADER (4+4)
49	1	JP3		Bias Sel
50	1	JP4		Hyst Sel
51	1	JP5		RF Level
52	4	L2, L4, L10, L22	WE 742792022	Ferrite Bead
53	2	L3, L9	WE 7427512	Ferrite Bead
54	6	L5, L7, L18, L21, L25, L28	47n	Induttanza SMD HQ 2012 Wirewound (0805)
55	2	L6, L27	33n	Induttanza SMD HQ 2012 Wirewound (0805)
56	2	L8, L26	35n	4 spire filo 1mm R.Arg avvolte su D.3.5 lungh 9 mm
57	1	L11	40n	4 spire filo 1mm R.Arg avvolte su D.4 lungh 5.5 mm
58	1	L12	NC	Induttanza cilindrica
59	1	L13	250n	15 spire filo 0.8mm R. Smaltato avvolte su D.3.5 in modo cor
60	1	L14	470n	Induttanza SMD HQ 2012 Wirewound (0805)
61	1	L15	NC	Induttanza SMD HQ 2012 (0805)

Item	Quantity	Reference	Part	Description
77	1	Q2	BSS123L	SOT23 NMOS
78	2	Q3, Q4	SI7469DP	P-Channel 80-V (D-S) MOSFET
79	2	RV1, RV2	10k	Trimmer SMD V 3314
80	1	R1	18k	0805 SMD res.
81	1	R2	5k6	0805 SMD res.
82	2	R3, R46	2k2	0805 SMD res.
83	4	R4, R12, R16, R58	1k0	0805 SMD res.
84	1	R5	8k2	0805 SMD res.
85	4	R6, R19, R72, R81	100R	0805 SMD res.
86	3	R7, R8, R79	10R	0805 SMD res.
87	4	R9, R13, R24, R29	10k	0805 SMD res.
88	3	R10, R14, R53	470R	0805 SMD res.
89	1	R11	2k	0805 SMD res.
90	1	R15	2k7	0805 SMD res.
91	1	R17	27k	0805 SMD res.
92	2	R18, R69	560R	0805 SMD res.
93	1	R20	120R	0805 SMD res.
94	1	R21	6k8	0805 SMD res.
95	1	R23	4k7	2512 1% SMD res.
96	9	R22, R25, R26, R27, R28, R32, R60, R64, R70	NC	0805 SMD res.
97	3	R30, R39, R50	15k	0805 SMD res.
98	2	R31, R48	3k3	0805 SMD res.
99	2	R33, R34	0R	0805 SMD res.
100	2	R35, R56	4k99	0805 SMD res.
101	1	R36	33k	0805 SMD res.
102	1	R37	39k	0805 SMD res.
103	4	R38, R47, R51, R57	47R	0805 SMD res.
104	4	R40, R41, R55, R59	3R3	2512 1% SMD res.
105	2	R42, R52	51R	2512 1% SMD res.
106	1	R43	22R 2W	2W resistor
107	2	R44, R45	10k	NTC resistor SMD 0805
108	1	R49	100R	2512 1% SMD res.
109	2	R54, R75	220k	0805 SMD res.
110	1	R61	4R7	1206 SMD res.
111	2	R62, R73	150R	2512 1% SMD res.
112	1	R63	22R	0805 SMD res.
113	1	R65	100R	1206 SMD res.
114	1	R66	100k	0805 SMD res.
115	1	R67	22R	2512 1% SMD res.
116	1	R68	82R	2512 1% SMD res.
117	1	R71	22R	1206 SMD res.
118	1	R74	3R9	0805 SMD res.
119	1	R76	50R	DPAK resistor
120	2	R77, R78	NC	2512 1% SMD res.
121	1	R80	330R	0805 SMD res.
122	1	U1	LMC6482	Rail to Rail Dual Op. SMD SO8
123	1	U2	TLV431	Low Volt. Adj. Shunt Reg 1.24Vref
124	1	U3	GALI-5+	RF MMIC
125	1	U4	LM50C_SMD	Temperature sensor
126	1	W1	NC	Filo D. 0.5mm lungh 5mm

SLVC0030R03V01



Description:	VCO CARD
Designer:	Tommasi A.; De Donno G.
Part No.:	SLVC0030R03V01
Size:	A4
Page:	1 of 1
Rev.:	1.3
Date:	02/02/2022



R.V.R. ELETTRONICA	PRODUCT NAME:	PTX-LCD	PART NAME:	VCO CARD	
	DESIGNER:	A. TOMMASI	DATE:	23/07/2015	
ARCHIVING:	"RVRUT" SERVER, "RILASCIATI" FOLDER	PROJECT CODE:	057	DOCUMENT CODE:	SLVC0030R03V01
		REVISION:	1.1	SCALE:	3:1
		SIZE:	A4	PAGE:	1 DI 1

SLVC0030R03V01

VCO CARD Revised: 02/02/2022
 SLVC0030R03V01 Revision: 1.3
 Tommasi A.; De Donno G.

Item	Quantity	Reference	Part	Description
1	1	CS1	CSVC0030R3	Circuito stampato
2	2	C1,C14	470pF	Cond. SMD 0805
3	4	C2,C4,C5,C19	10uF/16V	Cond. Elett. SMD tant. size C
4	3	C3,C15,C18	10nF	Cond. SMD 0805
5	1	C9	22pF	Cond. SMD 0805
6	1	C10	33pF	Cond. SMD 0805
7	1	C11	15pF	Cond. SMD 0805
8	1	C12	3n3	Cond. SMD 0805
9	1	C13	47pF	Cond. SMD 0805
10	8	C16,C17,C20,C21,C22,C23, C24,C25	100nF	Cond. SMD 0805
11	3	C26,C27,C28	NC	Cond. SMD 0805
12	1	C29	NC	Cond. SMD 0603
13	8	D1,D2,D3,D4,D5,D6,D7,D8	NC	Diodo Varicap SMD SOT23
14	2	D9,D10	BAS70-04	Doppio Diodo SMD SOT23
15	8	D11,D13,D15,D16,D19,D22, D24,D26	NC	Diodo varicap SOD323
16	8	D12,D14,D17,D18,D20,D21, D23,D25	BB172	Diodo varicap SOD323
17	10	FIX1,FIX2,FIX3,FIX4,FIX5, FIX6,FIX7,FIX8,FIX9, FIX10	FIX25	Foro fissaggio 2.5mm
18	1	L1	RG405	Induttanza a cavo RG
19	2	L2,L3	2u2	Induttanza SMD 3225 (1210)
20	2	L4,L5	15uH	Induttanza SMD 3225 (1210) Schermata
21	1	Q1	BC847	Trans. NPN SOT23
22	2	Q2,Q3	MMBFJ310	Trans. FET SOT23
23	1	Q4	MMBT918	Trans. NPN SOT23
24	1	R1	56H0	Res. SMD 0805 1%
25	1	R2	100H0	Res. SMD 0805 1%
26	2	R3,R11	4K70	Res. SMD 0805 1%
27	1	R5	330K0	Res. SMD 0805 1%
28	2	R6,R8	150H0	Res. SMD 0805 1%
29	1	R7	10H0	Res. SMD 0805 1%
30	2	R9,R12	22H0	Res. SMD 0805 1%
31	1	R10	10K0	Res. SMD 0805 1%
32	1	R13	100K0	Res. SMD 0805 1%
33	1	R14	NC	Res. SMD 0805 1%
34	1	R15	0H0	Res. SMD 0805 1%
35	5	TP1,TP2,TP3,TP4,TP5	TPSMD	Piazzola SMD

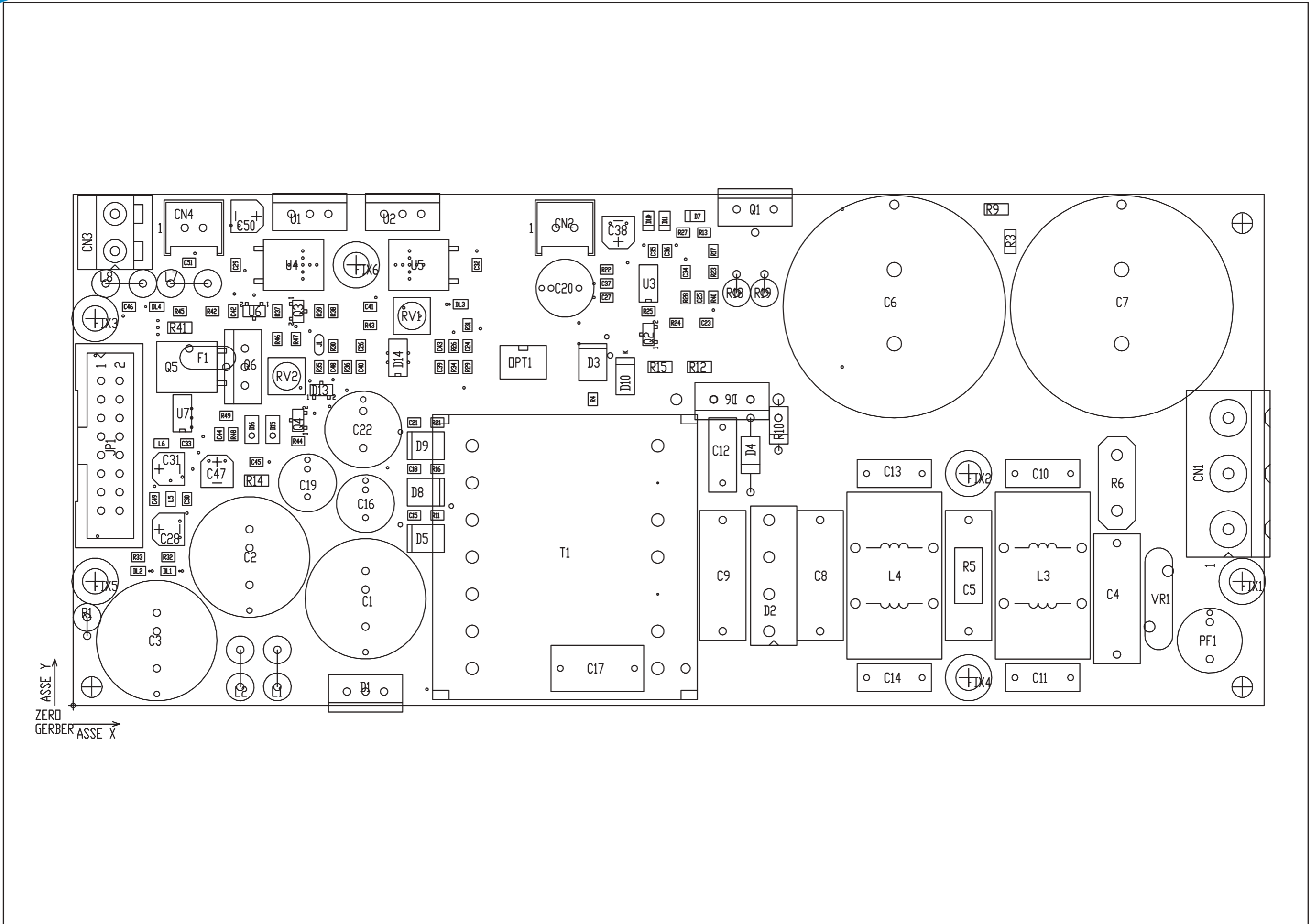
SLPC0435R01V04

Panel Card PIC18F452 1U V4
 SLPC0435R01V04
 Rev.1.1 26/04/2019
 A. Tommasi

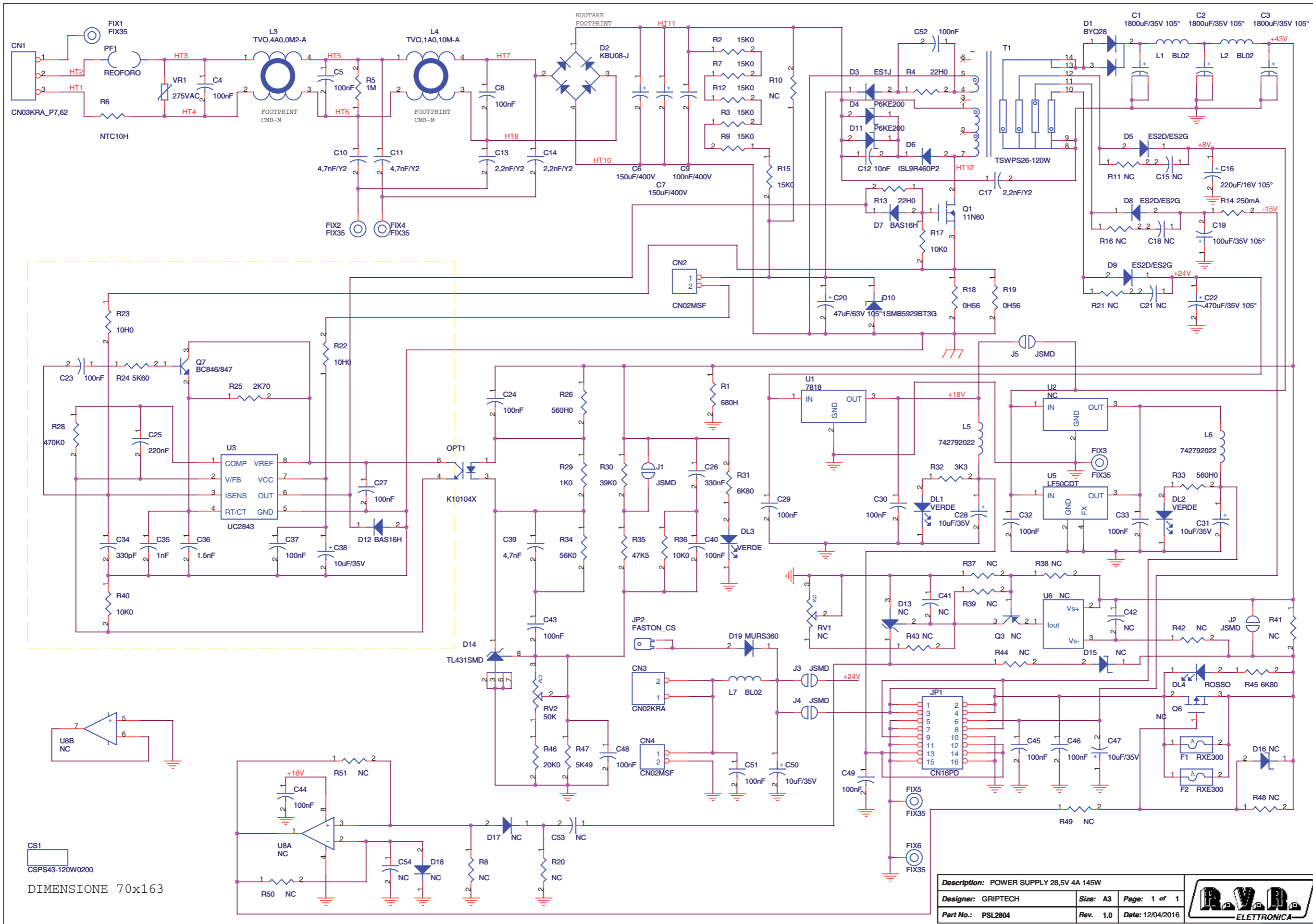
Item	Quantity	Reference	Part	Description
1	1	CN1	NC	Connettore DB9 femm. cs
2	1	CS1	CSPC0435R1	Circuito stampato
3	3	C1,C28,C38	10uF/16V	Cond. Elett. SMD d. 4mm
4	29	C2,C3,C4,C8,C9,C10,C14, C15,C16,C19,C22,C23,C24, C25,C29,C30,C31,C32,C35, C37,C40,C41,C42,C44,C45, C46,C47,C48,C49	0.1uF	Cond. SMD 0805
5	9	C5,C6,C7,C20,C21,C26,C36, C39,C43	1nF	Cond. SMD 0805
6	6	C11,C12,C13,C17,C18,C27	100pF	Cond. SMD 0805
7	2	C33,C34	15pF	Cond. SMD 0805
8	1	C50	NC	Cond. SMD 0805
9	1	D1	5V1	MINIMELF SMD Zener Diode
10	2	D2,D4	LED-Y3	LED dia. 3mm
11	2	D5,D6	LED-G3	LED dia. 3mm
12	4	D7,D8,D9,D10	BAS70-05	Doppio Diodo SMD SOT23
13	1	ENC1	EC11B1524	Incremental encoder ALPS EC11
14	6	FIX1,FIX2,FIX3,FIX4,FIX5, FIX6	FIX35	Foro fissaggio
15	4	FIX7,FIX8,FIX9,FIX10	FIX25	Foro fissaggio 2.5mm
16	1	JP1	CN26PD	Connettore 26 poli Flat cs
17	1	JP2	NC	Strip maschio 4 pin
18	1	JP3	STM05S	Strip maschio 5 pin
19	1	JP4	NC	Strip maschio 14 pin doppia fila
20	2	JP6,JP7	NC	Strip femmina 1 pin
21	1	JP9	STM16S	Strip maschio 16 pin
22	2	JP10	CN10PD	Connettore 10 poli Flat cs
23	1	JP11	NC	Connettore 10 poli Flat cs
24	1	J1	JSMD	Pad SMD a saldare
25	2	J2,J3	JSMD	
26	1	Q1	BC847	Trans. NPN SOT23
27	1	Q2	BC817	Trans. NPN SOT23
28	1	RV1	10K	Trimmer Rg V 3296W
29	11	R1,R2,R3,R4,R5,R6,R7,R8, R11,R41,R45	10K0	Res. SMD 0805
30	1	R13	100K0	Res. SMD 0805
31	6	R9,R12,R14,R40,R42,R46	330H0	Res. SMD 0805
32	14	R10,R21,R22,R24,R27,R28, R29,R30,R31,R32,R33,R34, R35,R37	4K7	Res. SMD 0805
33	8	R15,R16,R18,R19,R20,R23, R25,R26	1K0	Res. SMD 0805
34	1	R17,R38	NC	Res. SMD 0805

35	1	R36	22K0	Res. SMD 0805
36	1	R39	56H0	Res. SMD 0805
37	2	R43,R44	100H0	Res. SMD 0805
38	1	RX	470H0	Res. SMD 0805
39	1	U1	7406SMD	Hex inv OC SMD SO14
40	1	U2	4094SMD	Shift Reg. SMD SO16
41	1	U3	PIC18F452	TQFP44 SMD Microprocessor
42	1	U4	82B715SO	IIC Bus driver SMD SO8
43	1	U5	MAX202ESMD	RS232 Driver SMD SO16
44	2	VAR1,VAR2	V18MLE0805	ESD SMD protector
45	1	X1	Q4M	Quarzo SMD HC49SMD

KPSL2804V01A



KPSL2804V01A



DIMENSIONE 70x163

Description: POWER SUPPLY 28,5V 4A 145W		
Designer: GRIPTECH	Size: A3	Page: 1 of 1
Part No.: PSL2804	Rev.: 1.0	Date: 12/04/2016



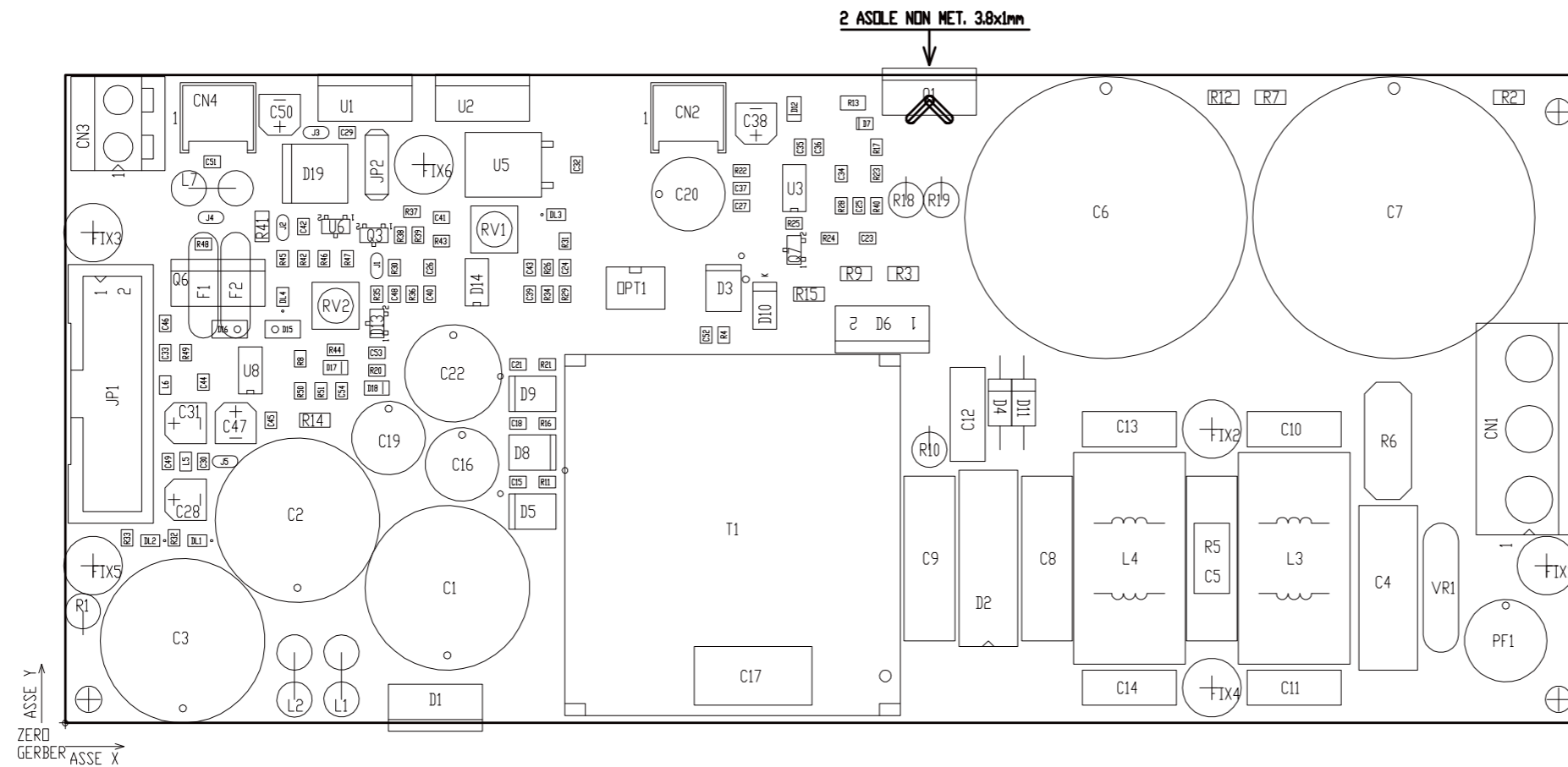
KPSL2804V01A

POWER SUPPLY 28,5V 4A 145W
PSL2804
12/04/2016 REV.1.0

Item	Quantity	Reference	Part	(description)
1	1	CN1	CN03KRA P7,62	Conn. tipo KRA a 3 poli
2	2	CN2, CN4	CN02MSF	Connettore 2 poli Lumberg MSF p 2.5mm
3	1	CN3	CN02KRA	Conn. tipo KRA a 2 poli
4	1	CS1	CSPS43-120W0200	Circuito stampato
5	3	C1, C2, C3	1800uF/35V 105°	Cond. Elettr. Dia 16 105°C
6	3	C4, C5, C8	100nF	Cond. Poliestere p 15mm
7	2	C7, C6	150uF/400V	Cond. Elettr. Dia 30 P10
8	1	C9	100nF/400V	Cond. Poliestere p 15mm
9	2	C11, C10	4,7nF/Y2	Cond. ceramico p 7mm Y2
10	1	C12	10nF	Cond. ceramico p 7mm Y2
11	3	C13, C14, C17	2,2nF/Y2	Cond. ceramico p 7mm Y2
12	7	C15, C18, C21, C41, C42, C53, C54	NC	Cond. SMD 0805
13	1	C16	220uF/16V 105°	Cond. Elettr. Dia 8 P3
14	1	C19	100uF/35V 105°	Cond. Elettr. Dia 8 P3
15	1	C20	47uF/63V 105°	Cond. Elettr. Dia 8 P3
16	1	C22	470uF/35V 105°	Cond. Elettr. Dia 10 P5.08
17	17	C23, C24, C27, C29, C30, C32, C33, C37, C40, C43, C44, C45, C46, C48, C49, C51, C52	100nF	Cond. SMD 0805
18	1	C25	220nF	Cond. SMD 0805
19	1	C26	330nF	Cond. SMD 0805
20	5	C28, C31, C38, C50, C47	10uF/35V	Cond. Elett. SMD d. 4mm
21	1	C34	330pF	Cond. SMD 0805
22	1	C35	1nF	Cond. SMD 0805
23	1	C36	1.5nF	Cond. SMD 0805
24	1	C39	4,7nF	Cond. SMD 0805
25	3	DL1, DL2, DL3	VERDE	LED Verde SMD 0805
26	1	DL4	ROSSO	LED Verde SMD 0805
27	1	D1	BYQ28	Doppio diodo TO220
28	1	D2	KBU08-J	Ponte diodi KBL/KBU
29	1	D3	ES1J	Diodo SMD cont. SMA
30	2	D11, D4	P6KE200	1W Zener Diode
31	3	D5, D8, D9	ES2D/ES2G	Diodo SMD cont. SMB
32	1	D6	ISL9R460P2	Diodo TO220
33	1	D12	BAS16H	Diodo SMD SOD123F
34	1	D10	1SMB5929BT3G	Diodo SMD cont. SMB
35	4	U6, Q6, U8, D13	NC	
36	1	D14	TL431SMD	SO8 Reference
37	2	D15, D16	NC	MINIMELF SMD Zener Diode
38	2	D17, D18	NC	Diodo SMD SOD123F
39	1	D19	MURS360	Diodo SMD cont. SMC
40	6	FIX1, FIX2, FIX3, FIX4, FIX5, FIX6	FIX35	Foro fissaggio 3.5mm
41	2	F2, F1	RXE300	Fusibile autoripristinante
42	1	JP1	CN16PD	Conn.M.C.S.Dritto 16P alette.
43	1	JP2	FASTON CS	
44	1	J1	J5MD	Pad SMD a saldare
45	4	J2, J3, J4, J5	J5MD	Pad SMD a saldare
46	3	L1, L2, L7	BL02	Induttanza cilindrica
47	1	L3	TVO.4A0,0M2-A	Ind. toroidale modo comune
48	1	L4	TVO.1A0,10M-A	Ind. toroidale modo comune
49	2	L6, L5	742792022	Induttanza SMD 2012 (0805)
50	1	OPT1	K10104X	Optoisolatore SMD SO6
51	1	PF1	REOFORO	Fusibile Busmann LET
52	1	Q1	11N60	Trans. FET N TO220
53	1	Q3	NC	Trans. PNP SOT23
54	1	Q7	BC846/847	Trans. NPN SOT23
55	1	RV1	NC	Trimmer SMD
56	1	RV2	50K	Trimmer SMD
57	1	R1	680H	Res. strato 2W
58	6	R2, R3, R7, R9, R12, R15	15K0	Res. SMD 1206
59	1	R4	22H0	Res. SMD 0805
60	1	R5	1M	Res. SMD 2512 1%
61	1	R6	NTC10H	Res. 1/4W 1%
62	15	R8, R11, R16, R20, R21, R37, R38, R39, R42, R43, R44, R48, R49, R50, R51	NC	Res. SMD 0805
63	1	R10	NC	Res. strato 2W
64	1	R13	22H0	Res. SMD 1206
65	1	R14	250mA	Fus. SMD 1206
66	3	R17, R36, R40	10K0	Res. SMD 0805
67	2	R18, R19	0H56	Res. strato 2W
68	2	R22, R23	10H0	Res. SMD 0805
69	1	R24	5K60	Res. SMD 0805
70	1	R25	2K70	Res. SMD 0805
71	2	R33, R26	560H0	Res. SMD 0805
72	1	R28	470K0	Res. SMD 0805
73	1	R29	1K0	Res. SMD 0805
74	1	R30	39K0	Res. SMD 0805
75	2	R31, R45	6K80	Res. SMD 0805
76	1	R32	3K3	Res. SMD 0805
77	1	R34	56K0	Res. SMD 0805
78	1	R35	47K5	Res. SMD 0805
79	1	R41	NC	Res. SMD 1206
80	1	R46	20K0	Res. SMD 0805
81	1	R47	5K49	Res. SMD 0805
82	1	T1	TSWPS26-120W	Trasformatore
83	1	U1	7818	Stabilizzatore TO220
84	1	U2	NC	Stabilizzatore TO220

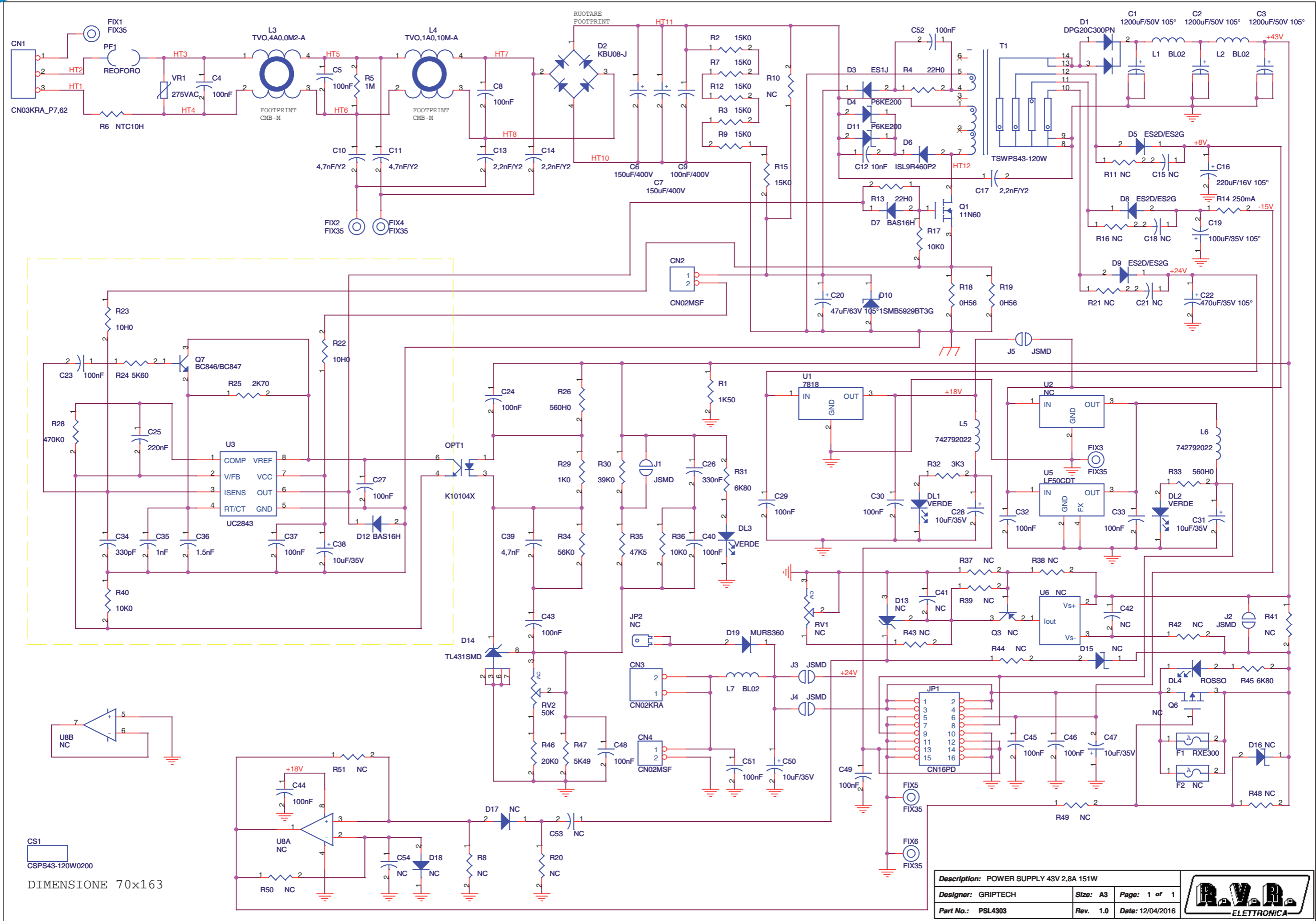
Item	Quantity	Reference	Part	(description)
85	1	U3	UC2843	Reg. switching
86	1	U5	LF50CDT	Stabilizzatore SMD DPAK
87	1	VR1	275VAC	Varistor dia. 7mm
88	1	D7	BAS16H	Diodo SMD SOD323

KPSL4303V01A



RILASCIO: 29/12/2015	DIS. S.POL. CTR. L.G. LATO PIANO DI MONTAGGIO VISTA LATO COMPONENTI		
REV:			
DIM.SCHEDA: VEDI PROFILO TRATT.: STANDARD COSTRUTTORE	DENOMINAZIONE FLY 100		
MAT.: FR4-74 1.6mm Cu 35um 2 LAYER VISTA POSITIVA	CODICE CSPS43-120W0200	TEKNIIGHT	SCALA 1:1

KPSL4303V01A



CS1
CSPS43-120W0200
DIMENSIONE 70x163

Description: POWER SUPPLY 43V 2,8A 151W		
Designer: GRIPTECH	Size: A3	Page: 1 of 1
Part No.: PSL4303	Rev.: 1.0	Date: 12/04/2016



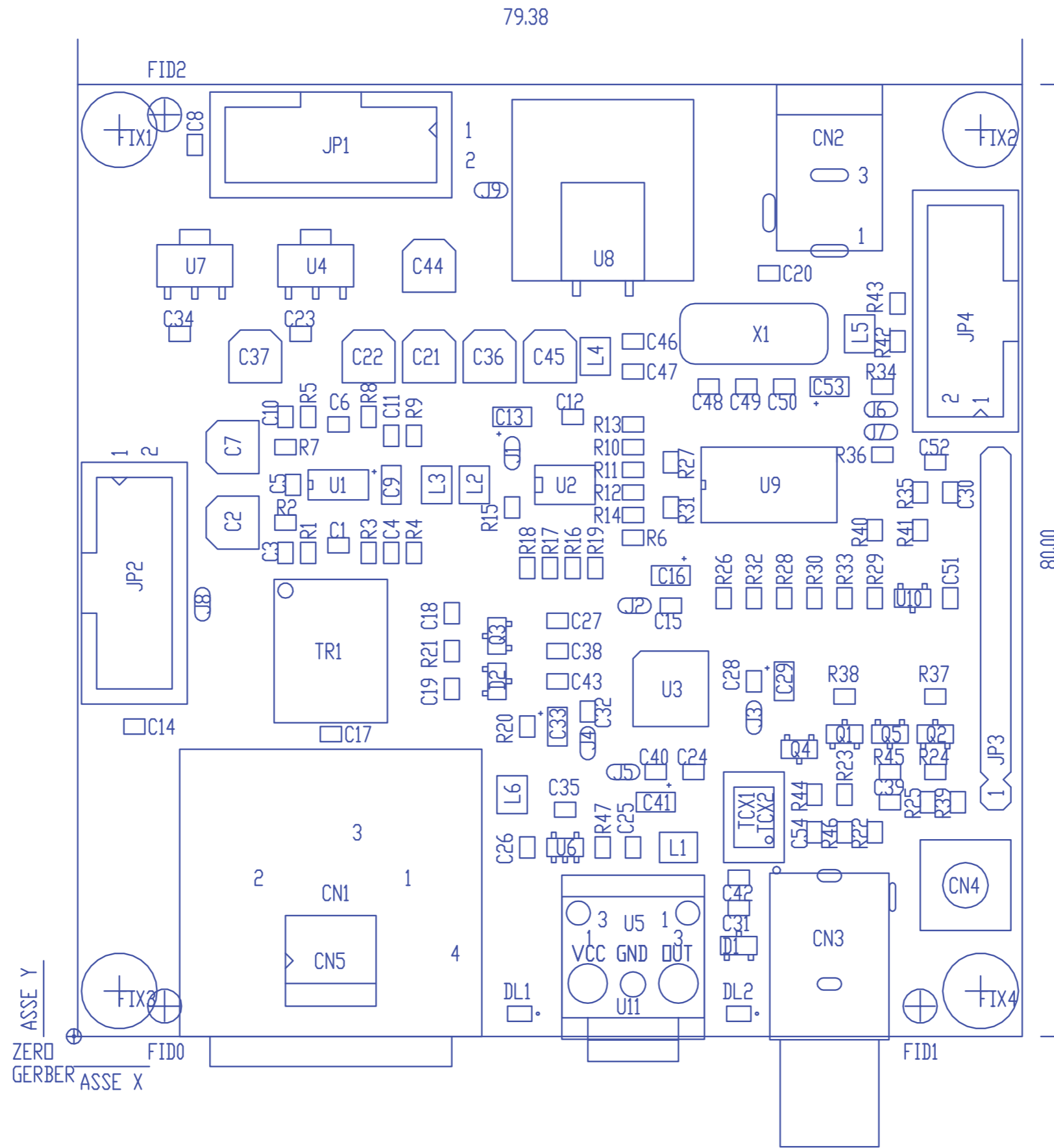
KPSL4303V01A

POWER SUPPLY 43V 2,8A 151W
PSL4303
12/04/2016 REV.1.0

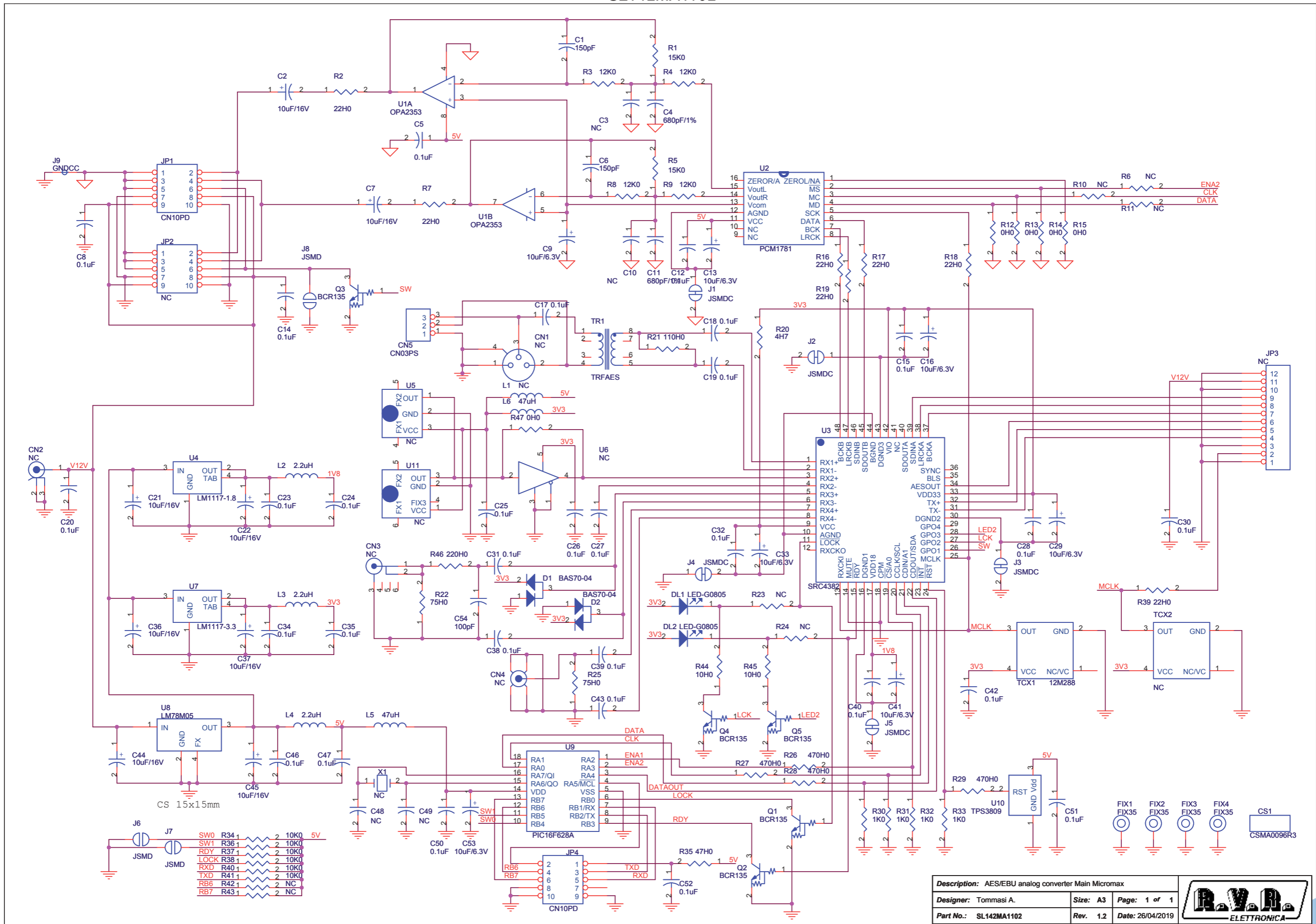
Item	Quantity	Reference	Part	(description)
1	1	CN1	CN03KRA P7,62	Conn. tipo KRA a 3 poli
2	2	CN2, CN4	CN02MSF	Connettore 2 poli Lumberq MSF p 2.5mm
3	1	CN3	CN02KRA	Conn. tipo KRA a 2 poli
4	1	CS1	CSPS43-120W0200	Circuito stampato
5	3	C1, C2, C3	1200uF/50V 105*	Cond. Elettr. Dia 16 105°C
6	3	C4, C5, C8	100nF	Cond. Poliestere p 15mm
7	2	C7, C6	150uF/400V	Cond. Elettr. Dia 30 P10
8	1	C9	100nF/400V	Cond. Poliestere p 15mm
9	2	C11, C10	4,7nF/Y2	Cond. ceramico p 7mm Y2
10	1	C12	10nF	Cond. ceramico p 7mm Y2
11	3	C13, C14, C17	2,2nF/Y2	Cond. ceramico p 7mm Y2
12	7	C15, C18, C21, C41, C42, C53, C54	NC	Cond. SMD 0805
13	1	C16	220uF/16V 105*	Cond. Elettr. Dia 8 P3
14	1	C19	100uF/35V 105*	Cond. Elettr. Dia 8 P3
15	1	C20	47uF/63V 105*	Cond. Elettr. Dia 8 P3
16	1	C22	470uF/35V 105*	Cond. Elettr. Dia 10 P5.08
17	17	C23, C24, C27, C29, C30, C32, C33, C37, C40, C43, C44, C45, C46, C48, C49, C51, C52	100nF	Cond. SMD 0805
18	1	C25	220nF	Cond. SMD 0805
19	1	C26	330nF	Cond. SMD 0805
20	5	C28, C31, C38, C50, C47	10uF/35V	Cond. Elett. SMD d. 4mm
21	1	C34	330pF	Cond. SMD 0805
22	1	C35	1nF	Cond. SMD 0805
23	1	C36	1.5nF	Cond. SMD 0805
24	1	C39	4,7nF	Cond. SMD 0805
25	3	DL1, DL2, DL3	VERDE	LED Verde SMD 0805
26	1	DL4	ROSSO	LED Verde SMD 0805
27	1	D1	DPG20C300PN	Doppio diodo TO220
28	1	D2	KBU08-J	Ponte diodi KBL/KBU
29	1	D3	ES1J	Diodo SMD cont. SMA
30	2	D11, D4	P6KE200	1W Zener Diode
31	3	D5, D8, D9	ES2D/ES2G	Diodo SMD cont. SMB
32	1	D6	ISL9R460P2	Diodo TO220
33	1	D12	BAS16H	Diodo SMD cont. SOD123F
34	1	D10	1SMB5929BT3G	Diodo SMD cont. SMB
35	6	JP2, F2, U6, Q6, U8, D13	NC	
36	1	D14	TL431SMD	SO8 Reference
37	2	D15, D16	NC	MINIMELF SMD Zener Diode
38	2	D17, D18	NC	Diodo SMD cont. SOD123F
39	1	D19	MURS360	Diodo SMD cont. SMC
40	6	FIX1, FIX2, FIX3, FIX4, FIX5, FIX6	FIX35	Foro fissaggio 3.5mm
41	1	F1	RXE300	Fus autoripristinante
42	1	JP1	CN16PD	Conn.M.C.S.Dritto 16P alette.
43	1	J1	JSM	Pad SMD a saldare
44	4	J2, J3, J4, J5	JSM	Pad SMD a saldare
45	3	L1, L2, L7	BLQ2	Induttanza cilindrica
46	1	L3	TVO 4A0,0M2-A	Ind. toroidale modo comune
47	1	L4	TVO 1A0,10M-A	Ind. toroidale modo comune
48	2	L6, L5	742792022	Induttanza SMD 2012 (0805)
49	1	OPT1	K10104X	Optoisolatore SMD SO6
50	1	PF1	REOFORO	Fusibile Bussmann LET
51	1	Q1	11N60	Trans. FET N TO220
52	1	Q3	NC	Trans. PNP SOT23
53	1	Q7	BC846/BC847	Trans. NPN SOT23
54	1	RV1	NC	Trimmer SMD
55	1	RV2	50K	Trimmer SMD
56	1	R1	1K50	Res. strato 2W
57	6	R2, R3, R7, R9, R12, R15	15K0	Res. SMD 1206
58	1	R4	22H0	Res. SMD 0805
59	1	R5	1M	Res. SMD 2512 1%
60	1	R6	NTC10H	Res. NTC d.10mm
61	15	R8, R11, R16, R20, R21, R37, R38, R39, R42, R43, R44, R48, R49, R50, R51	NC	Res. SMD 0805
62	1	R10	NC	Res. strato 2W
63	1	R13	22H0	Fus. SMD 1206
64	1	R14	250mA	Res. SMD 1206
65	3	R17, R36, R40	10K0	Res. SMD 0805
66	2	R18, R19	0H56	Res. strato 2W
67	2	R22, R23	10H0	Res. SMD 0805
68	1	R24	5K60	Res. SMD 0805
69	1	R25	2K70	Res. SMD 0805
70	2	R33, R26	560H0	Res. SMD 0805
71	1	R28	470K0	Res. SMD 0805
72	1	R29	1K0	Res. SMD 0805
73	1	R30	39K0	Res. SMD 0805
74	2	R31, R45	6K80	Res. SMD 0805
75	1	R32	3K3	Res. SMD 0805
76	1	R34	56K0	Res. SMD 0805
77	1	R35	47K5	Res. SMD 0805
78	1	R41	NC	Res. SMD 1206
79	1	R46	20K0	Res. SMD 0805
80	1	R47	5K49	Res. SMD 0805
81	1	T1	TSWPS43-120W	Trasformatore
82	1	U1	7818	Stabilizzatore TO220
83	1	U2	NC	Stabilizzatore TO220
84	1	U3	UC2843	Req. switching

Item	Quantity	Reference	Part	(description)
85	1	U5	LF50CDT	Stabilizzatore SMD DPAK
86	1	VR1	275VAC	Varistor dia. 7mm
87	1	D7	BAS16H	Diodo SMD cont. SOD323

SL142MA1102



SL142MA1102



Description: AES/EBU analog converter Main Micromax
Designer: Tommasi A. **Size:** A3 **Page:** 1 of 1
Part No.: SL142MA1102 **Rev.:** 1.2 **Date:** 26/04/2019



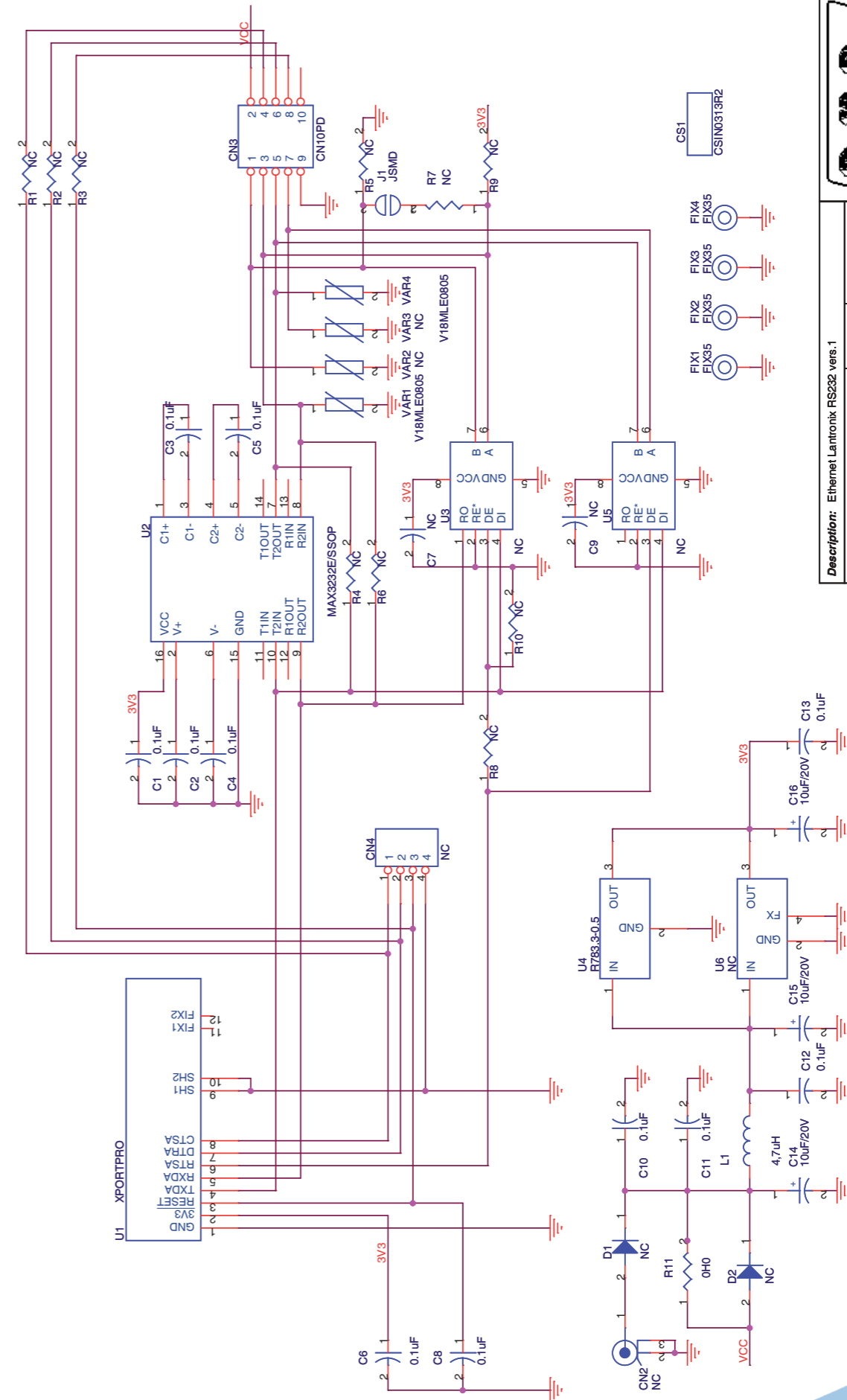
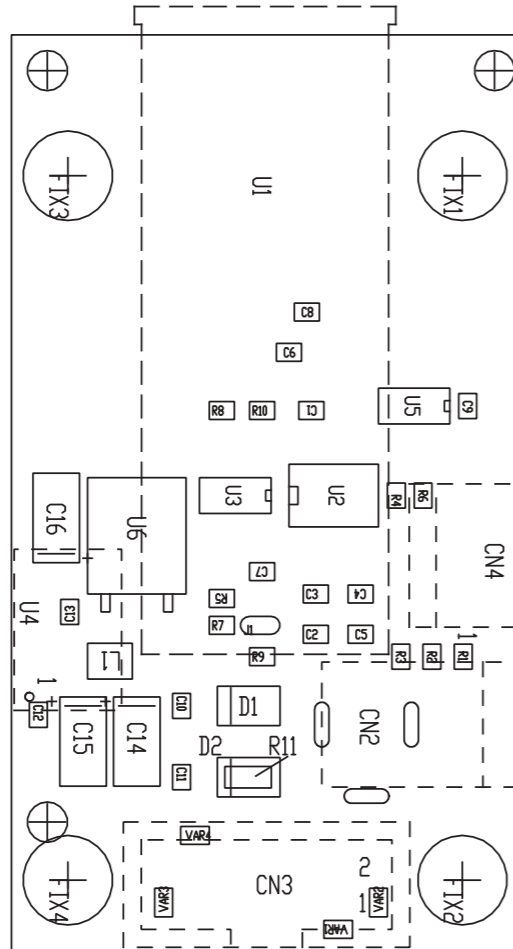
SL142MA1102

AES/EBU analog converter Main Micromax
 Revised: 26/04/2019
 SL142MA1102 Revision: 1.2
 Tommasi A.

Item	Quantity	Reference	Part	Description
1	1	CN1	NC	Connettore XLR NC3 femm. cs 90°
2	1	CN2	NC	Connettore Alimentazione
3	1	CN3	NC	Conn. RCA 1500-1485 da CS 90°
4	1	CN4	NC	Connettore SMB cs
5	1	CN5	CN03PS	Connettore 3 poli Mascon
6	1	CS1	CSMA0096R3	Circuito stampato
7	2	C1,C6	150pF	Cond. SMD 0805 COG
8	8	C2,C7,C21,C22,C36,C37,C44,C45	10uF/16V	Cond. Elett. SMD d. 4mm
9	2	C3,C10	NC	Cond. SMD 0805 COG
10	2	C4,C11	680pF/1%	Cond. SMD 0805 COG
11	30	C5,C8,C12,C14,C15,C17,C18,C19,C20,C23,C24,C25,C26,C27,C28,C30,C31,C32,C34,C35,C38,C39,C40,C42,C43,C46,C47,C50,C51,C52	0.1uF	Cond. SMD 0805
12	7	C9,C13,C16,C29,C33,C41,C53	10uF/6.3V	Cond. Elett. SMD tant. size A
13	2	C48,C49	NC	Cond. SMD 0805
14	1	C54	100pF	Cond. SMD 0805
15	2	DL1,DL2	LED-G0805	LED SMD 0805
16	2	D1,D2	BAS70-04	Doppio Diodo SMD SOT23
17	4	FIX1,FIX2,FIX3,FIX4	FIX35	Foro fissaggio 3.5mm
18	2	JP1,JP4	CN10PD	Connettore 10 poli Flat cs
19	1	JP2	NC	Connettore 10 poli Flat cs
20	1	JP3	NC	Strip femmina 12 pin tornita 90°
21	5	J1,J2,J3,J4,J5	JSMDC	Pad SMD a saldare chiuso
22	3	J6,J7,J8	JSMD	Pad SMD a saldare
23	1	J9	GNDCC	Non e' un componente
24	1	L1	NC	Induttanza SMD 3225 (1210)
25	3	L2,L3,L4	2.2uH	Induttanza SMD 3225 (1210)
26	2	L5,L6	47uH	Induttanza SMD 3225 (1210)
27	5	Q1,Q2,Q3,Q4,Q5	BCR135	Trans./Res. NPN SOT23
28	2	R1,R5	15K0	Res. SMD 0805
29	7	R2,R7,R16,R17,R18,R19,R39	22H0	Res. SMD 0805
30	4	R3,R4,R8,R9	12K0	Res. SMD 0805
31	7	R6,R10,R11,R23,R24,R42,R43	NC	Res. SMD 0805
32	5	R12,R13,R14,R15,R47	0H0	Res. SMD 0805
33	1	R20	4H7	Res. SMD 0805
34	1	R21	110H0	Res. SMD 0805
35	2	R22,R25	75H0	Res. SMD 0805
36	4	R26,R27,R28,R29	470H0	Res. SMD 0805
37	4	R30,R31,R32,R33	1K0	Res. SMD 0805
38	6	R34,R36,R37,R38,R40,R41,	10K0	Res. SMD 0805
39	1	R35	47H0	Res. SMD 0805
40	2	R44,R45	10H0	Res. SMD 0805

41	1	R46	220H0	Res. SMD 0805
42	1	TCX1	12M288	OSC SMD 5x3.2mm
43	1	TCX2	NC	TCXO SMD 7x5.2mm
44	1	TR1	TRFAES	Trasf. SDM AES/EBU
45	1	U1	OPA2353	Dual Op. SMD SO8
46	1	U2	PCM1781	Stereo DAC
47	1	U3	SRC4382	2 ch SRC DIR DIT
48	1	U4	LM1117-1.8	Stab. SMD SOT223
49	2	U5,U11	NC	Ricevitore digitale ottico
50	1	U6	NC	Level translator
51	1	U7	LM1117-3.3	Stab. SMD SOT223
52	1	U8	LM78M05	Stabilizzatore SMD DPAK
53	1	U9	PIC16F628A	PIC Microprocessor
54	1	U10	TPS3809	uP supply supervisor
55	1	X1	NC	Quarzo SMD HC49SMD

SLIN0313R02V01



Description: Ethernet Lantronix RS232 vers.1	
Designer: Tommasi A.	Size: A4
Part No.: SLIN0313R02V01	Page: 1 of 1
Rev. 1.1	Date: 06/11/2015

	PRODUCT NAME : TLK	PART NAME : SEM.SCH.ETH.LANTRONIX RS232 VERS.1.1				
	DESIGNER : A. TOMMASI	DATE : 06/11/15	REVISION : 1.1	SCALE : 2:1	SIZE : A4	PAGE : 1 DI 1
ARCHIVING : 'RVRRUT' SERVER, 'RILASCIATI' FOLDER	PROJECT CODE : <	DOCUMENT CODE : SLIN0313R02V01				

R11 montata al posto di D2

SLIN0313R02V01

Ethernet Lantronix RS232 vers.1 Revised: 06/11/2015
 SLIN0313R02V01 Revision: 1.1
 Tommasi A.

Item	Quantity	Reference	Part	Description
1	1	CN2	NC	Connettore Alimentazione
2	1	CN3	CN10PD	Connettore 10 poli Flat cs con alette
3	1	CN4	NC	Connettore 4 poli Mascon
4	1	CS1	CSIN0313R2	Circuito stampato
5	11	C1,C2,C3,C4,C5,C6,C8,C10, C11,C12,C13	0.1uF	Cond. SMD 0805
6	2	C7,C9	NC	Cond. SMD 0805
7	3	C14,C15,C16	10uF/20V	Cond. Elett. SMD tant. size C
8	2	D1,D2	NC	Diodo SMD cont. SMA
9	4	FIX1,FIX2,FIX3,FIX4	FIX35	Foro fissaggio 3.5mm
10	1	J1	JSMD	Pad SMD a saldare
11	1	L1	4,7uH	Induttanza SMD 3225 (1210)
12	1	R11	0H0	Res. SMD 1206
13	10	R1,R2,R3,R4,R5,R6,R7,R8, R9,R10	NC	Res. SMD 0805
14	1	U1	XPORTPRO	XPORT-PRO Ethernet module
15	1	U2	MAX3232E/SSOP	RS232 3V Driver SMD SSOP16
16	2	U3,U5	NC	RS485 3V driver SMD SO8
17	1	U4	R783.3-0.5	Switching SIP3 regulator
18	1	U6	NC	Stabilizzatore SMD DPAK
19	2	VAR1,VAR4	V18MLE0805	ESD SMD protector
20	2	VAR2,VAR3	NC	ESD SMD protector