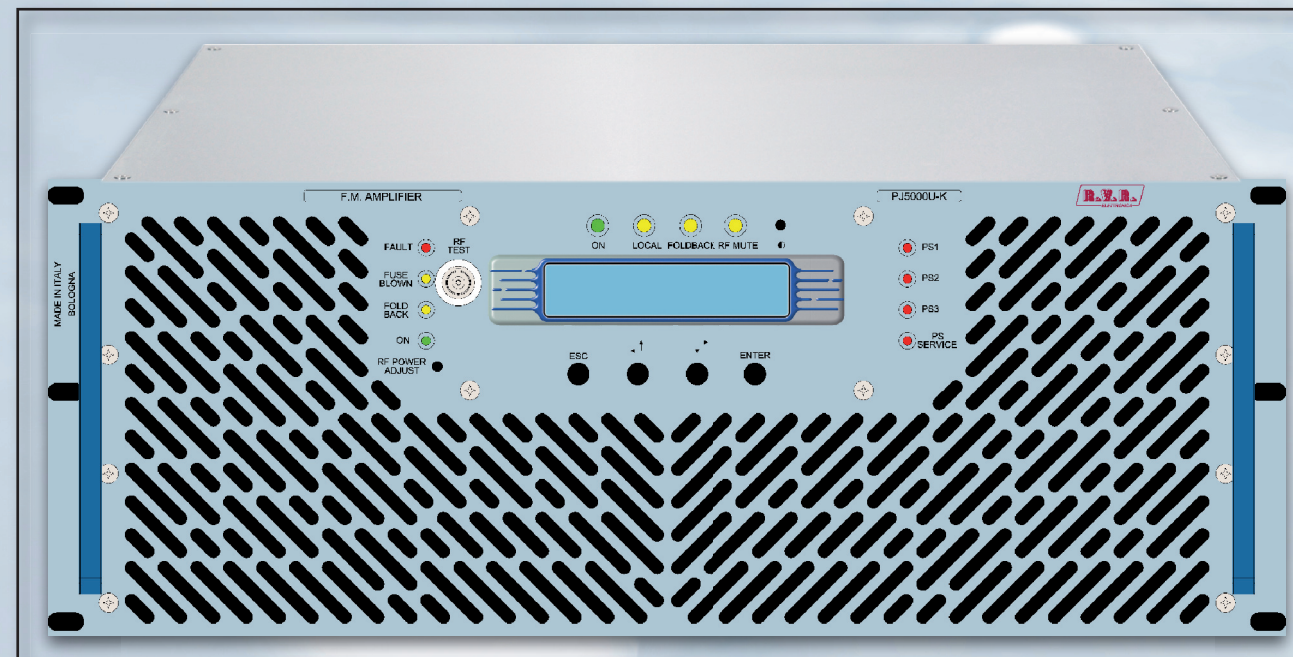




# PJ5000U-K

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 PJ5000U-K . L'appendice è composta dalle seguenti sezioni:

*This part of the manual contains the technical details about the different Cards of the PJ5000U-K . This appendix is composed of the following sections:*

Description	RVR Code	Vers.	Page
Wiring Diagram	/	1.4	1
Power Input Measure Card	SLMT0450R01V01	1.2	8
RF Status LEDs Card	SLLEDREPJ2K1	1.0	11
RMS Detector Card	SLMT0406R01V02	1.0	13
Thermal Probe Card	SL024MT1001	1.1	16
Bias Distribution Card	SLIN0388R01V01	1.0	18
Bias & Measure board	SLMTPRTPJ6K0	1.1	21
Pass-Through Card	SLFILPJ1KM	2.1	29
CPU Card	CPUPJ2KMC	1.0	31
Signal Interface Card	SLIN0427R02V01	1.2	36
Power Supply	PSL4280HS	1.0	40
Power Factor Correction	PFCPSL4280	1.0	58
Auxiliary Power Supply	PSSWEPP15024	1.0	72
Panel Card	SLPC0436R01V07	1.0	73
PS Status LEDs Card	SLLD0448R01V01	1.0	76
Service and Fan Control Card	SLPS0424R02V01	1.1	78
RF Power Amplifier Card	SL237RF4001	1.0	81
Splitter Card	SLSP0387R01V01	1.0	84
Filter Card	SLFI0350R01V01	1.0	87
FWD-RFL Sensor Card	SLOP0405R01V01	1.1	89
Monitor Sensor Card	SLOP0405R01V02	1.1	91
Telemetry Card	SLTLMTXLCH01	1.0	93

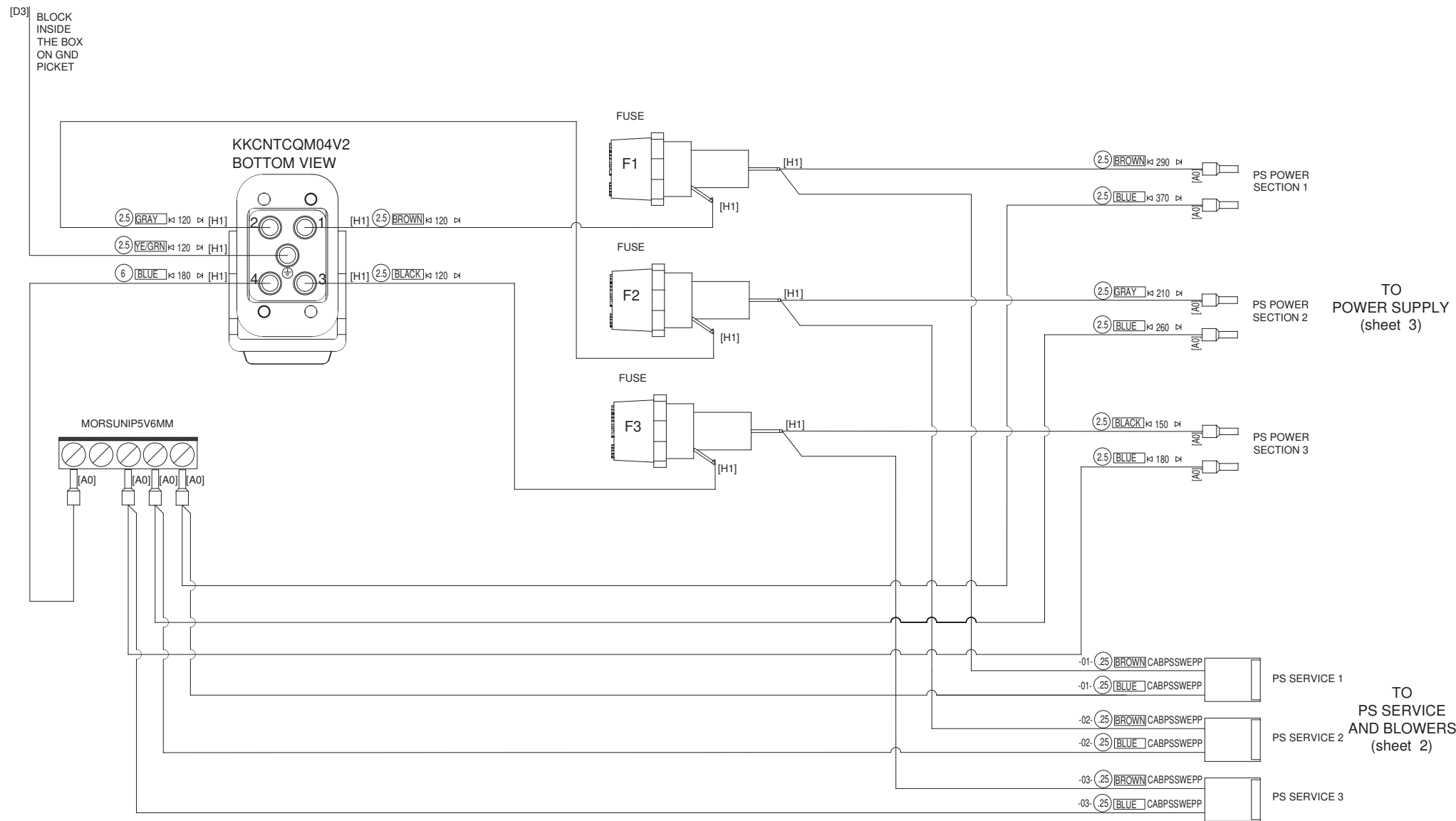
### Document History

Date	Version	Reason	Code	Editor
09/03/2018	3.0	Third Release	/	J.H. Berti

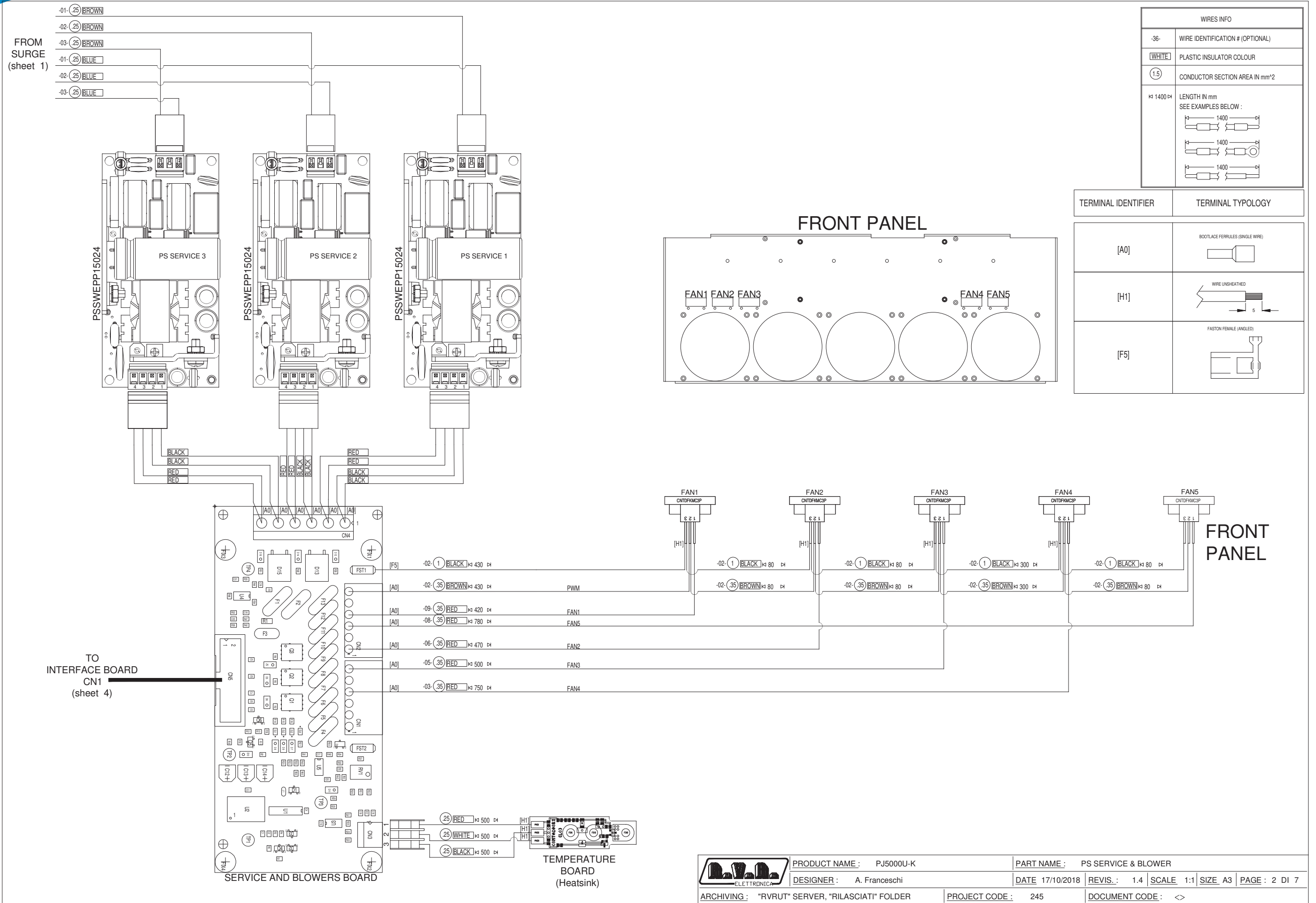
# THREE-PHASE 380V Y CONFIGURATION

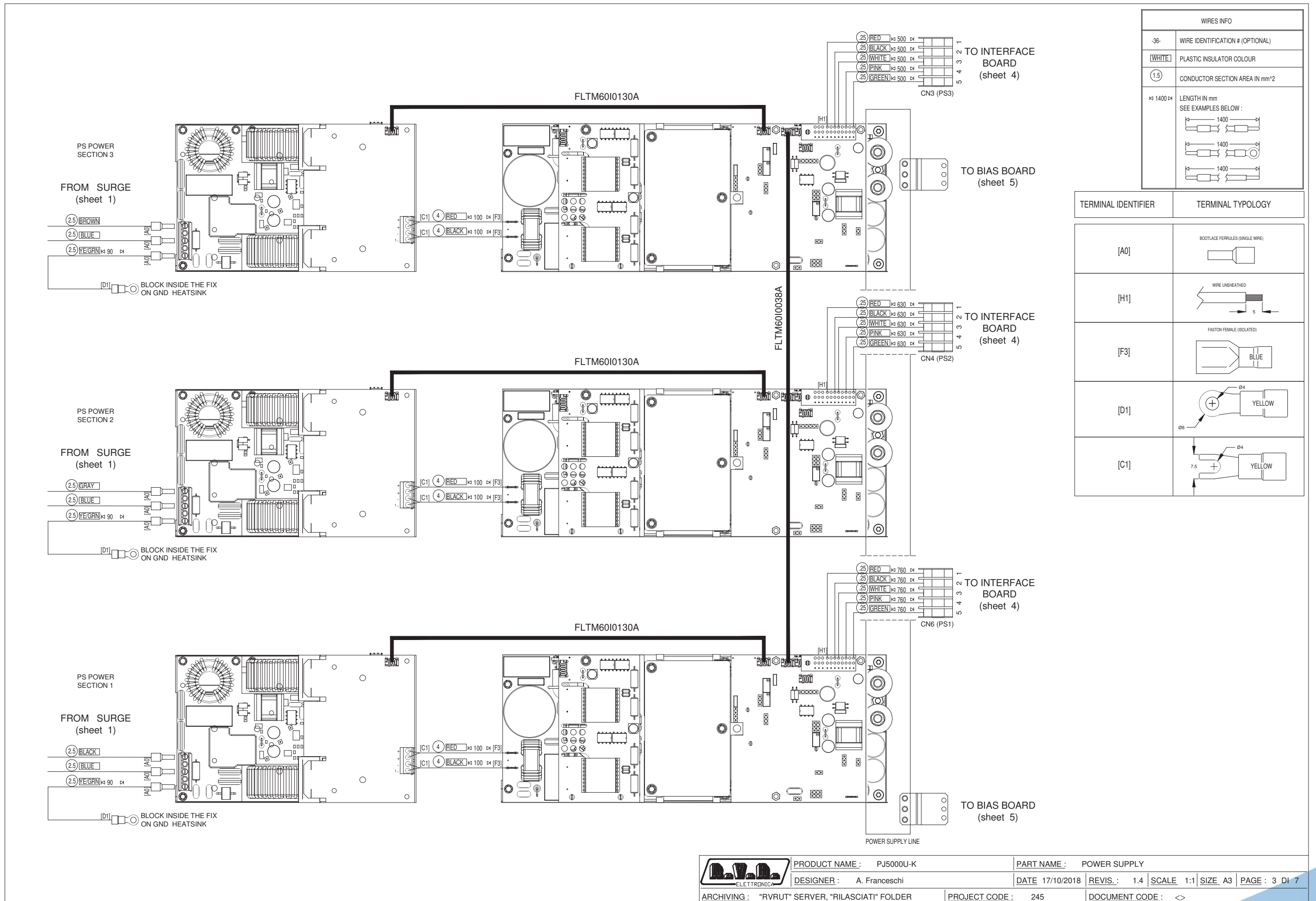
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-36-	WIRE IDENTIFICATION # (OPTIONAL)
[WHITE]	PLASTIC INSULATOR COLOUR
(1.5)	CONDUCTOR SECTION AREA IN mm²
≅ 1400 ≳	LENGTH IN mm SEE EXAMPLES BELOW:

TERMINAL IDENTIFIER	TERMINAL TYPOLOGY
[A0]	BOOTLACE FERRULES (SINGLE WIRE) 
[H1]	WIRE UNSHEATHED 
[D3]	

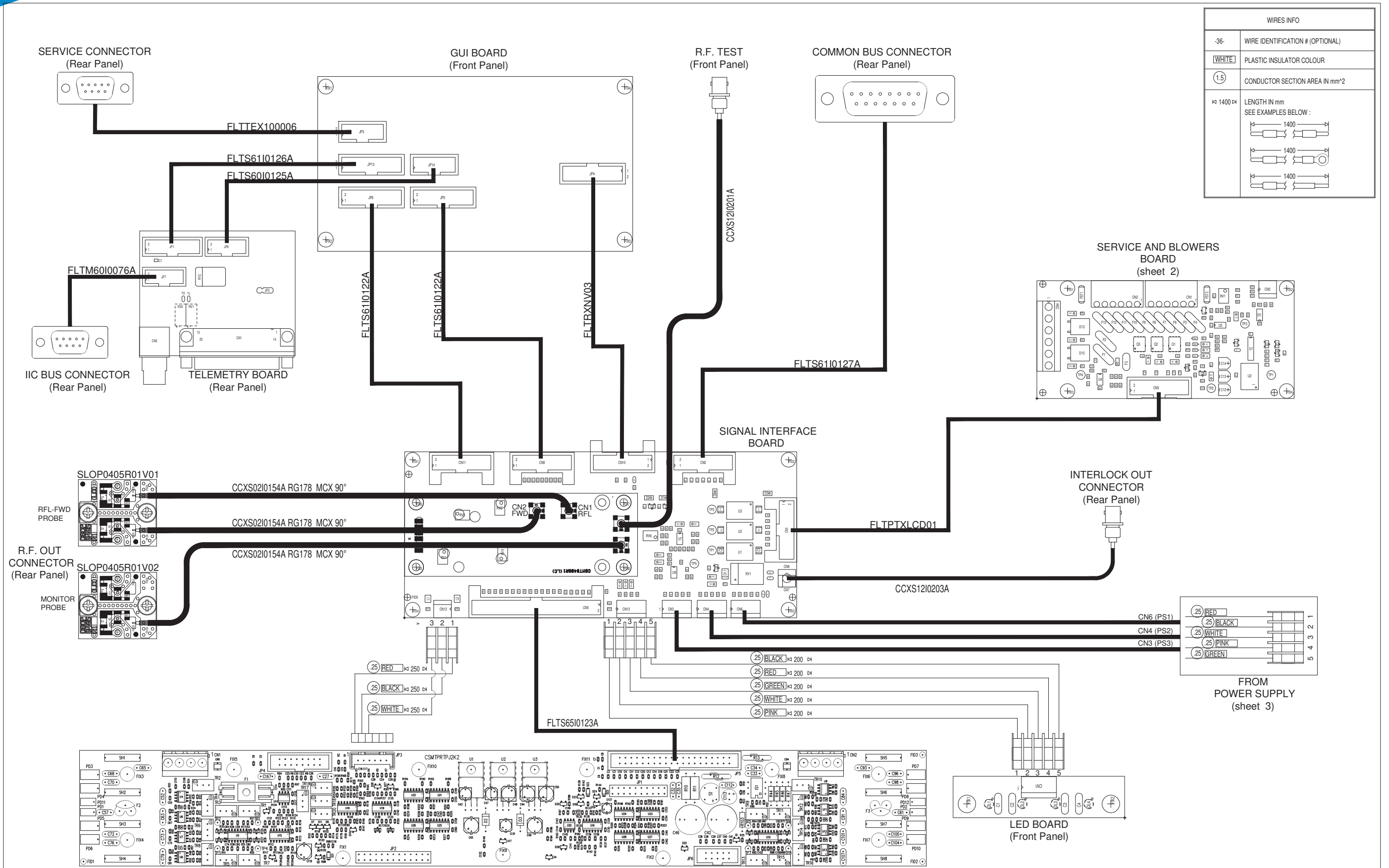


	PRODUCT NAME: PJ5000U-K	PART NAME: SURGE
	DESIGNER: A. Franceschi	DATE 17/10/2018   REVIS.: 1.4   SCALE 1:1   SIZE A3   PAGE: 1 DI 7
ARCHIVING: "RVRLIT" SERVER. "RILASCIATI" FOLDER	PROJECT CODE: 245	DOCUMENT CODE: <



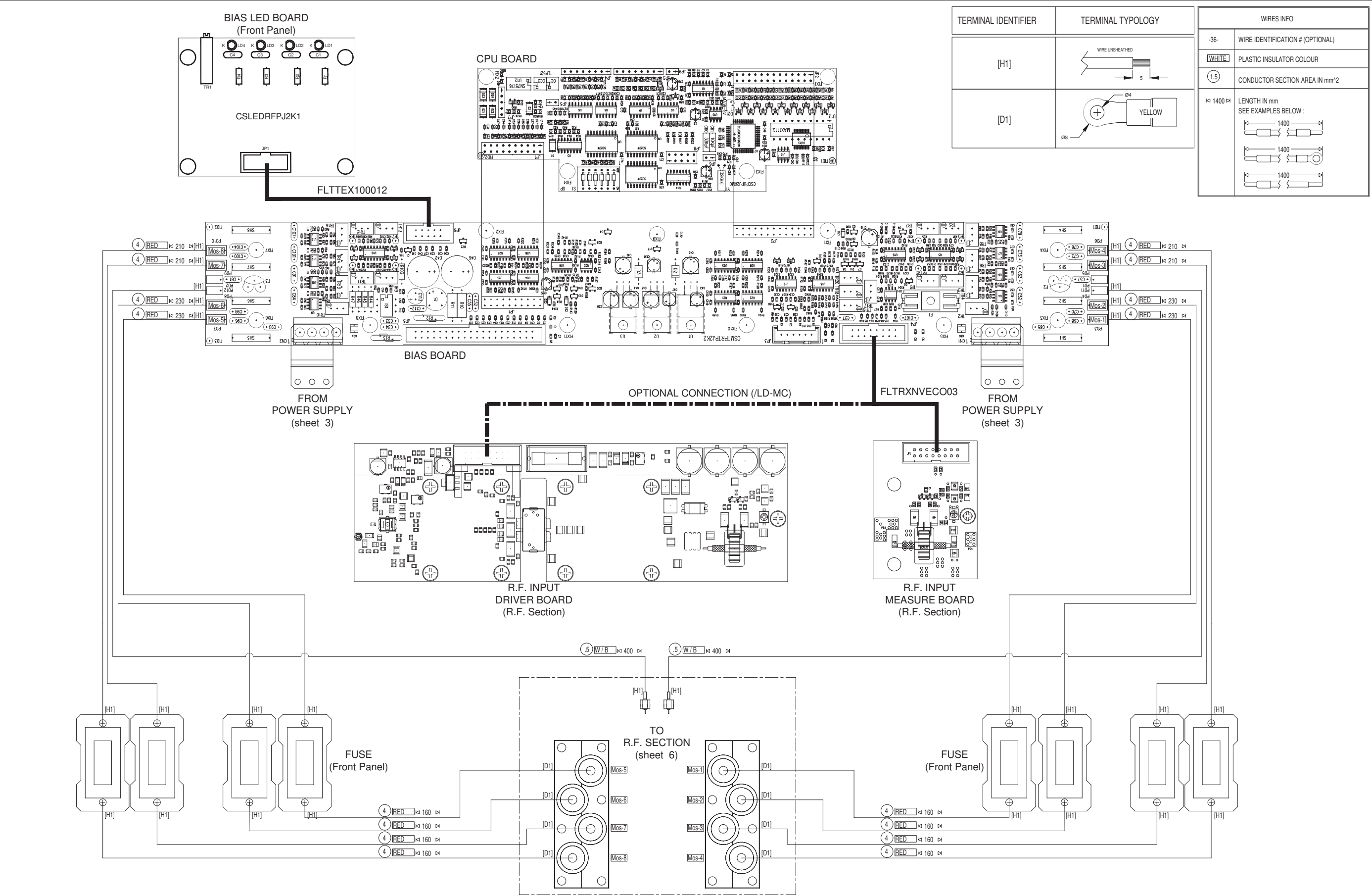


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	DESIGNER: A. Franceschi	DATE 17/10/2018   REVIS.: 1.4   SCALE 1:1   SIZE A3   PAGE: 3 DI 7
ARCHIVING: "RVUT" SERVER, "RILASCIATI" FOLDER	PROJECT CODE: 245	DOCUMENT CODE: <



WIRES INFO	
-36-	WIRE IDENTIFICATION # (OPTIONAL)
[WHITE]	PLASTIC INSULATOR COLOUR
(1.5)	CONDUCTOR SECTION AREA IN mm <sup>2</sup>
≧ 1400 PH	LENGTH IN mm SEE EXAMPLES BELOW :

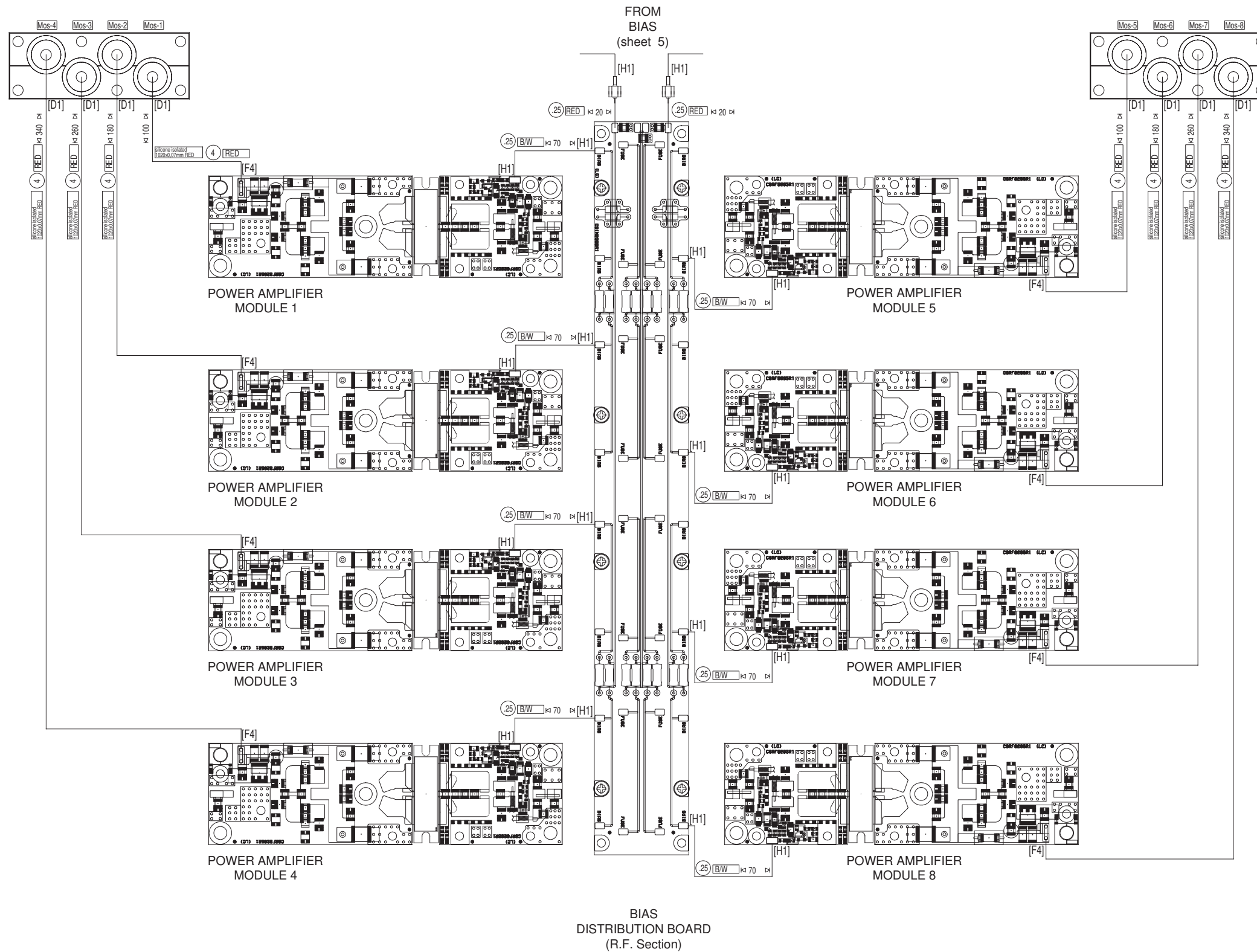
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	DESIGNER: A. Franceschi	DATE 17/10/2018   REVIS.: 1.4   SCALE 1:1   SIZE A3   PAGE: 4 DI 7
ARCHIVING: "RVVUT" SERVER, "RILASCIATI" FOLDER	PROJECT CODE: 245	DOCUMENT CODE: <>



TERMINAL IDENTIFIER	TERMINAL TYPOLOGY	WIRES INFO	
[H1]	WIRE UNSHEATHED	-36-	WIRE IDENTIFICATION # (OPTIONAL)
		WHITE	PLASTIC INSULATOR COLOUR
		1.5	CONDUCTOR SECTION AREA IN mm <sup>2</sup>
[D1]		k3 1400	LENGTH IN mm SEE EXAMPLES BELOW :

	PRODUCT NAME: PJ5000U-K	PART NAME: BIAS			
	DESIGNER: A. Franceschi	DATE 17/10/2018	REVIS: 1.4	SCALE 1:1	SIZE A3
ARCHIVING: "RVUT" SERVER, "RILASCIATI" FOLDER	PROJECT CODE: 245	DOCUMENT CODE: <			

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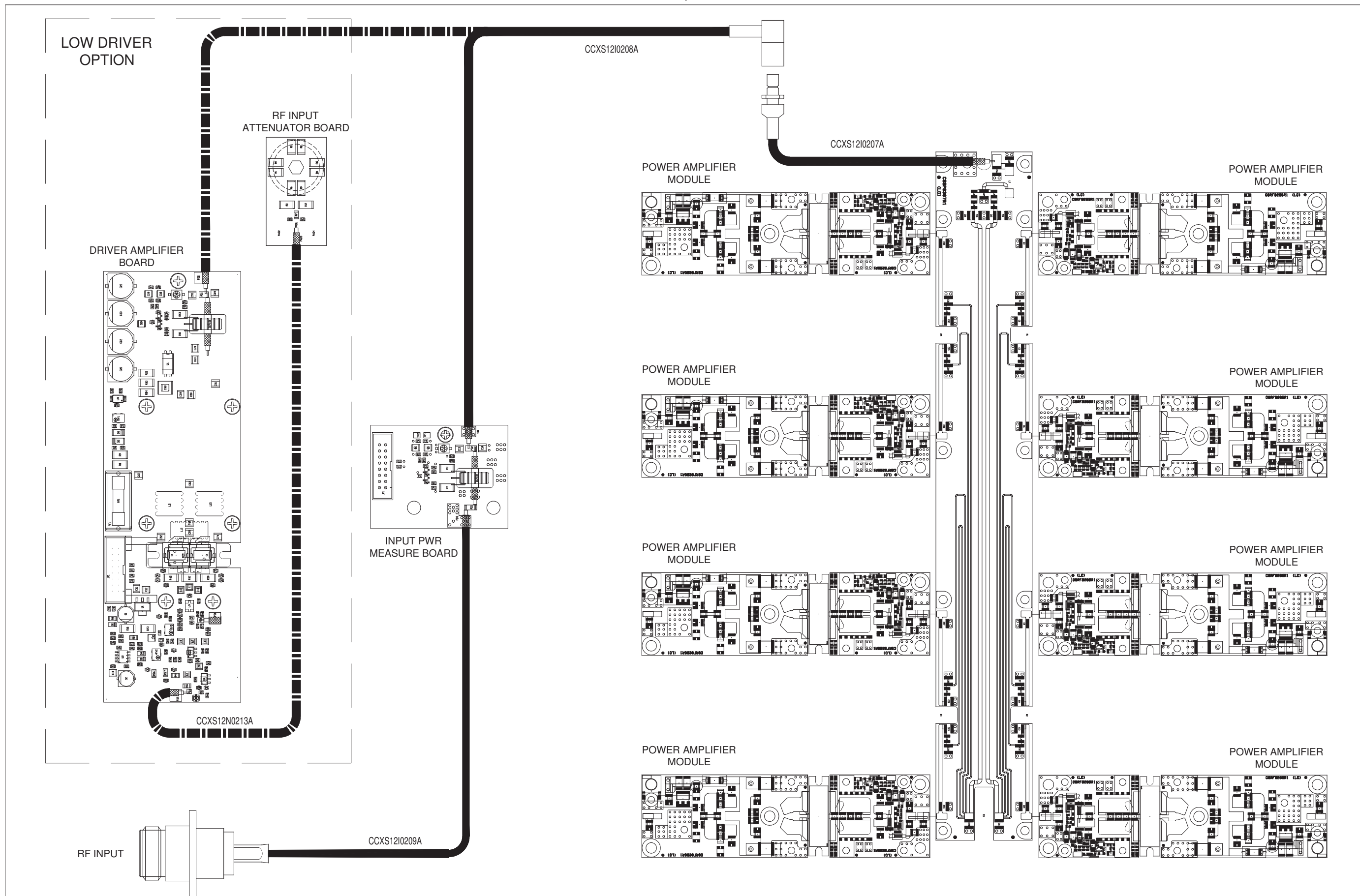



WIRES INFO	
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(1.5)	CONDUCTOR SECTION AREA IN mm <sup>2</sup>
k1 1400 EX	LENGTH IN mm SEE EXAMPLES BELOW :

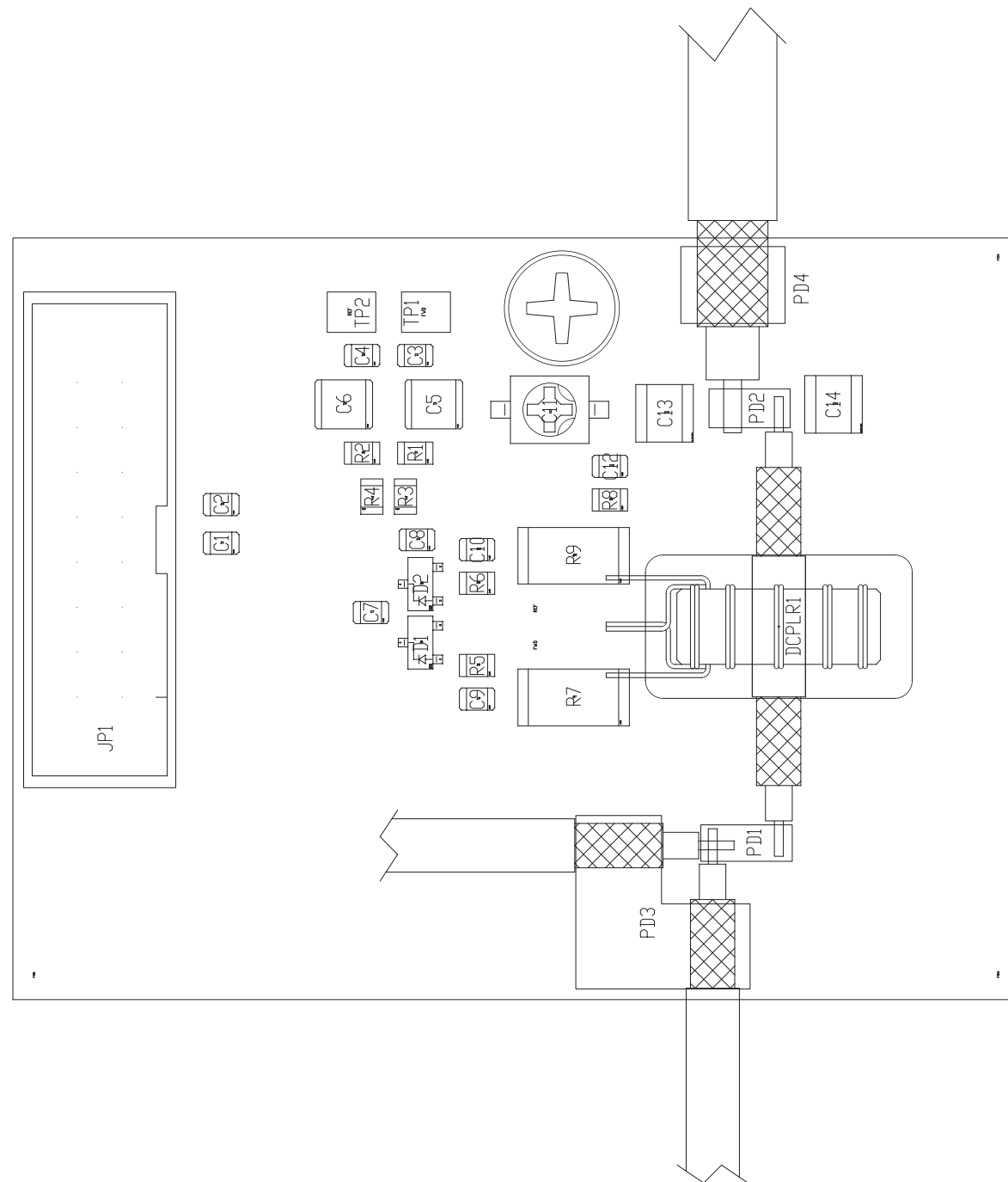
TERMINAL IDENTIFIER	TERMINAL TYPOLOGY
[H1]	
[D1]	
[F4]	

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	DESIGNER : A. Franceschi	DATE 17/10/2018	REVIS. : 1.4	SCALE 1:1	SIZE A3
ARCHIVING : "RVUT" SERVER, "RILASCIATI" FOLDER	PROJECT CODE : 245	DOCUMENT CODE : <			





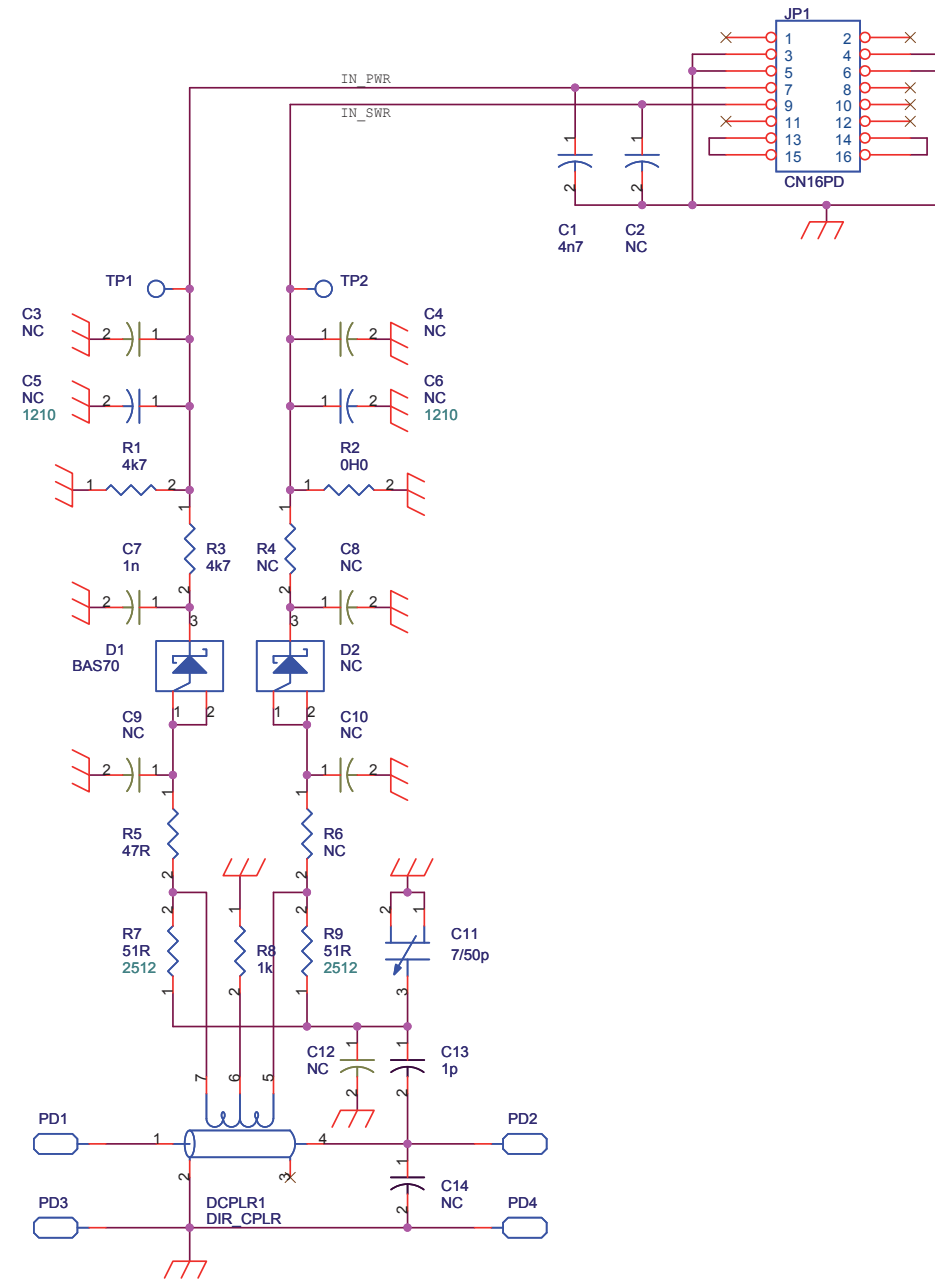
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	DESIGNER : A. Franceschi	DATE 17/10/2018	REVIS. : 1.4	SCALE 1:1	SIZE A3
ARCHIVING : "RVRUT" SERVER, "RILASCIATI" FOLDER	PROJECT CODE : 245	DOCUMENT CODE : <			



PRODUCT NAME : PJ6000U-K	PART NAME : INPUT PWR MEASURE CARD
DESIGNER : M. UCELLI	DATE : 15/06/15
ARCHIVING : "RVRUT" SERVER, "RILASCIATI" FOLDER	REVISION : 1.0
	SCALE : 2:1
	SIZE : A4
	PAGE : 1
	DI : 1
	DOCUMENT CODE : SLMT0450R01V01



SLMT0450R01V01



<b>Description:</b> SEM.SCH. INPUT PWR MEASURE		
<b>Designer:</b> M. Ucelli; A. Franceschi	<b>Size:</b> A3	<b>Page:</b> 1 of 1
<b>Part No.:</b> SLMT0450R01V01	<b>Rev.:</b> 1.2	<b>Date:</b> 26/04/2019

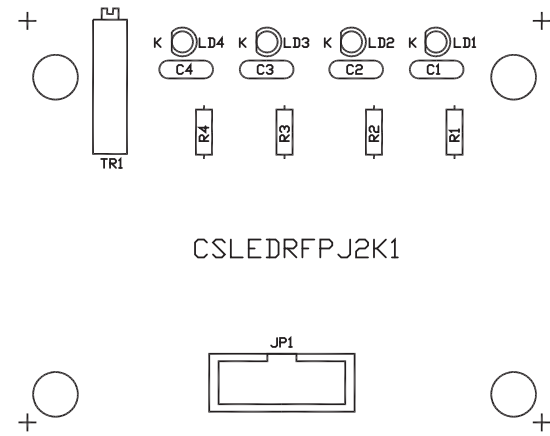


SLMT0450R01V01

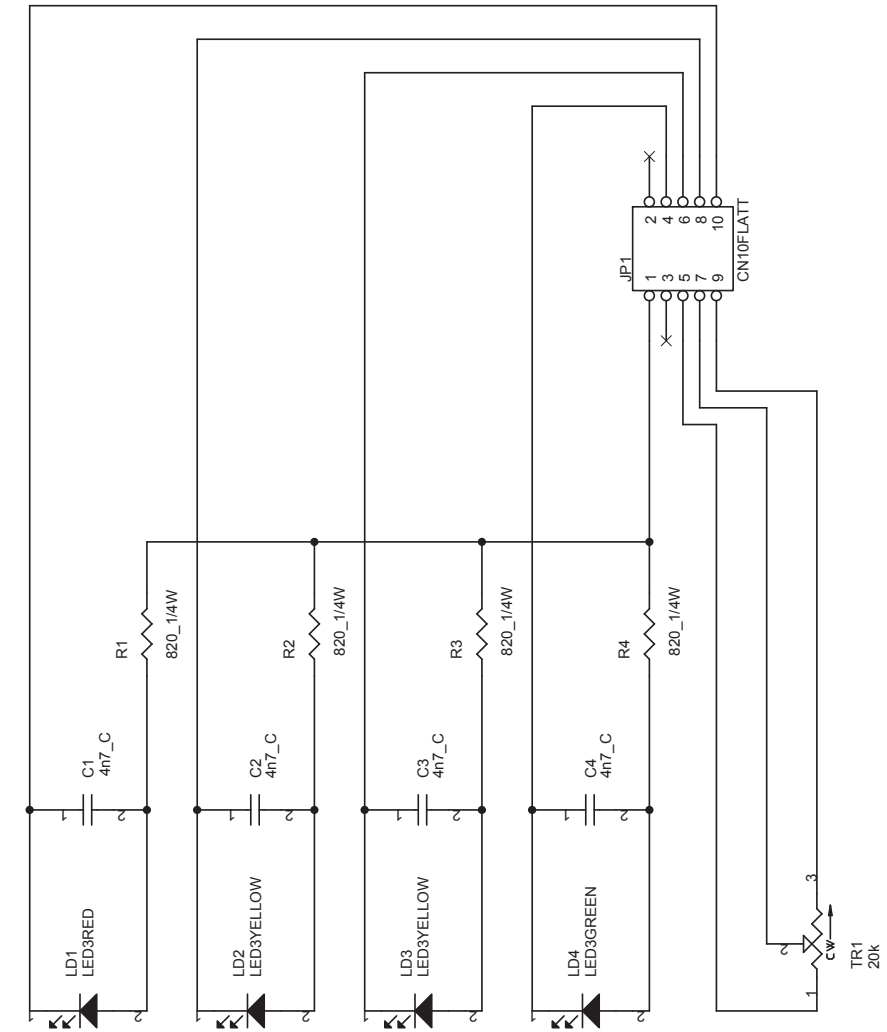
SEM.SCH. INPUT PWR MEASURE  
 SLMT0450R01V01  
 Revision: 1.2 Date: 26/04/2019  
 M. Ucelli; A. Franceschi


Item	Quantity	Reference	Part	Description
1	1	CS1	CSMT0450R1	Circuito Stampato
2	1	C1	4n7	SMD 0805 MLCC X7R
3	1	C2	NC	SMD 0805 MLCC X7R
4	5	C3,C4,C9,C10,C12	NC	Cond. SMD 0805 COG
5	2	C5,C6	NC	Capacitor SMD 1210 MLCC >
6	1	C7	1n	Cond. SMD 0805 COG
7	1	C8	NC	Cond. SMD 0805 COG
8	1	C11	7/50p	Adj. Cap 7 / 50pF
9	1	C13	1p	Cond. SMD 1212 HQ
10	1	C14	NC	Cond. SMD 1212 HQ
11	1	DCPLR1	DIR_CPLR	Toroidal Directional Coupler
12	1	D1	BAS70	Hot Carrier Schottky Diode
13	1	D2	NC	Hot Carrier Schottky Diode
14	4	FID1,FID2,FID3,FID4	FID	Fiducial CS
15	1	JP1	CN16PD	Connettore 16 poli Flat cs
16	4	PD1,PD2,PD3,PD4	PAD	Pad for connection
17	1	R1,R3	4k7	Res. SMD 0805
18	1	R2	0H0	Res. SMD 0805
19	2	R4,R6	NC	Res. SMD 0805
20	1	R5	47R	Res. SMD 0805
21	2	R7,R9	51R	Res. SMD 2512 1%
22	1	R8	1k	Res. SMD 0805
23	2	TP1,TP2	TP	Test point

SLLEDRFPJ2K1



CSLEDRFPJ2K1



		Pagina: 1	di 1	Size: A4		
Nome Progetto:	HCS-10	Data:	28/02/02	Codice Progetto:	014	
Autore:	Mauro Ucelli	Revisione:	1.0	Nome Parte:	LEDs board RF section	
Nome PC in Rete:	Mauro2	File/ Cartella:	3:\CS-10\Board\Bordi\Bordi\CSLEDRFPJ2K1		Codice:	SLLEDRFPJ2K1
Autorizzazione:						

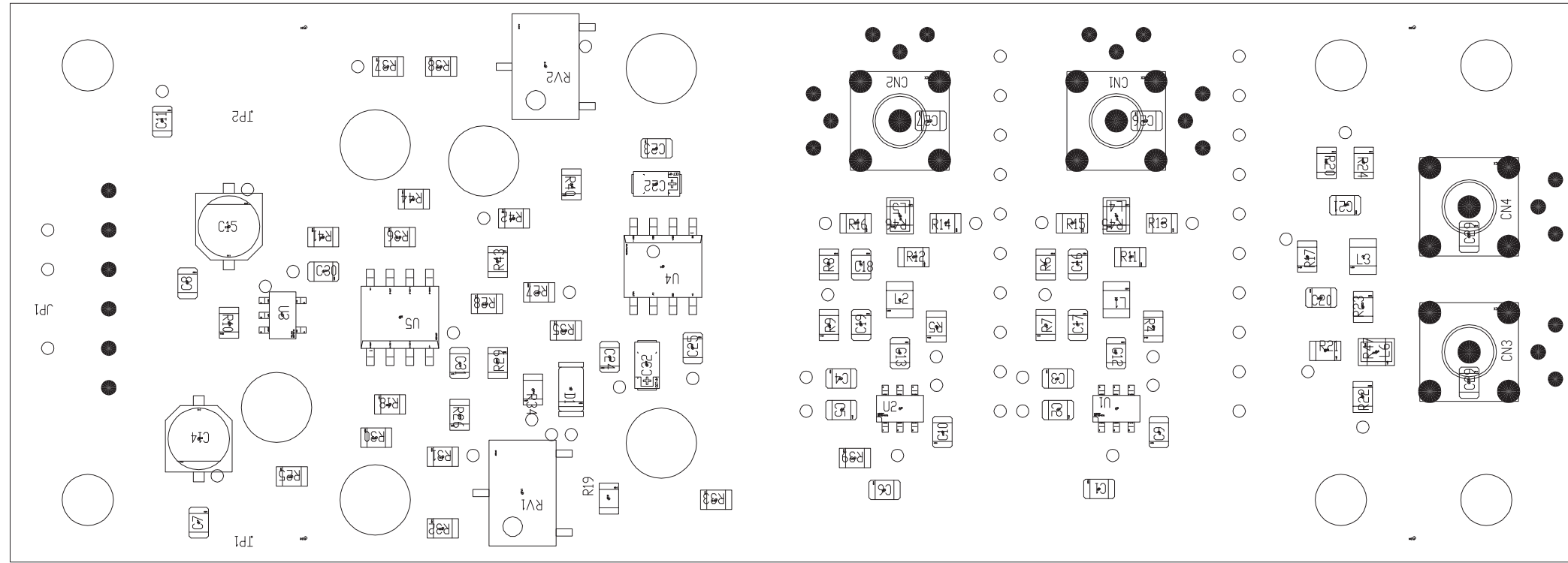
		NOME PROGETTO:	HCS-10	NOME PARTE:	LED RF BOARD
ARCHIVIAZIONE ELETTRONICA:	"CARTELLA PROGETTI" SU "UT_SRV"	AUTORE:	GP - Rev.: Berti J.	DATA:	11/02/2004
MATERIALE:	FR4-74 1.6mm Cu 35um	CODICE PROGETTO:	014	REVISIONE:	1.0
TRATTAMENTO:	STANDARD COSTRUTTORE	CODICE DISEGNO:	SLLEDRFPJ2K1	SCALA:	1:1
PROFILO:	Positivo	STATO:	ESECUTIVO	SIZE:	A4
		PAGINA:	1	DI	1

SLLEDRFPJ2K1

LEDs board RF section Revised: Thursday, February 26, 2004  
 SLLEDRFPJ2K1 Revision: 1.0  
 HC5-10

Item	Quantity	Reference	Part	Description
1	4	C1, C2, C3, C4	4n7_C	COND.CER. 4NF7 P5,08 10% 60V N150
2	1	JP1	CN10FLATT	Connettore 10p per Flatt diritto
3	1	LD1	LED3RED	Diode LED 3mm Rosso
4	2	LD2, LD3	LED3YELLOW	Diode LED 3mm Giallo
5	1	LD4	LED3GREEN	Diode LED 3mm Verde
6	4	R1, R2, R3, R4	820_1/4W	Resistenza 820 Ohm 1/4W
7	1	TR1	20k	Trimmer multigiri 20k reg. di lato in conten. allungato (L623)

SLMT0406R01V02



NOME PROGETTO: ATVCA2K0LU  
AUTORE: E. MONTAGNA

NOME PARTE: SEM.SCH. TRUE RMS DETECTOR ADD-ON

DATA: 27/03/2014 REVISIONE: 1.0 SCALA: 2:1 SIZE: A4 PAGINA: 1 DI 1

ARCHIVIAZIONE ELETTRONICA: "CARTELLA RILASCIATI" SU "RVRUT"

CODICE PROGETTO: 190

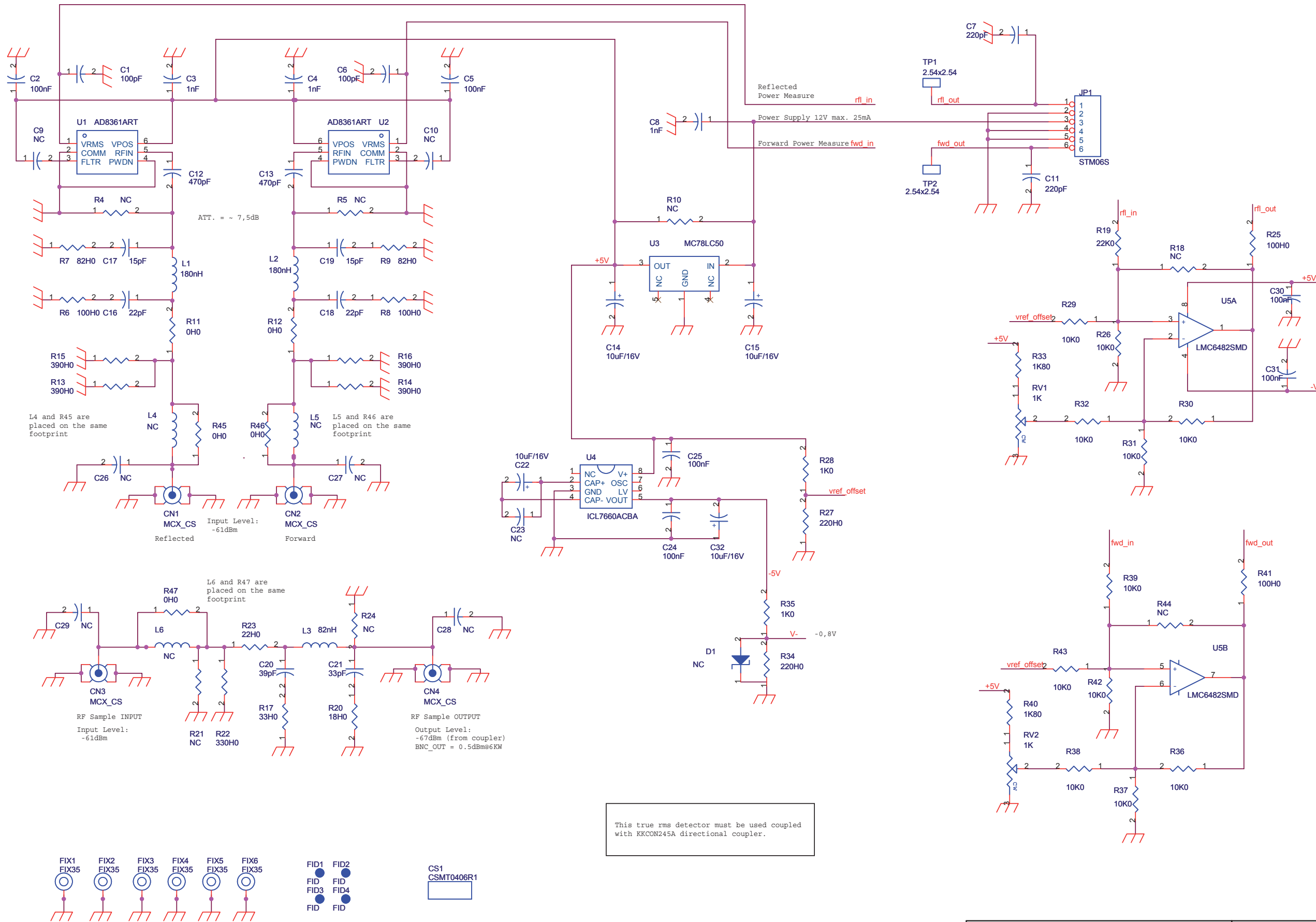
CODICE DISEGNO: SLMT0406R01V01

MATERIALE: <>

TRATTAMENTO: <>

PROFILO: <>

STATO: ESECUTIVO



This true rms detector must be used coupled with KKCON245A directional coupler.

Description: True RMS Detector		
Designer: Montagna / Ariatti	Size: A3	Page: 1 of 1
Part No.: SLMT0406R01V02	Rev. 1.0	Date: 05/08/2016

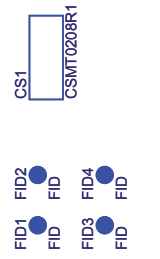
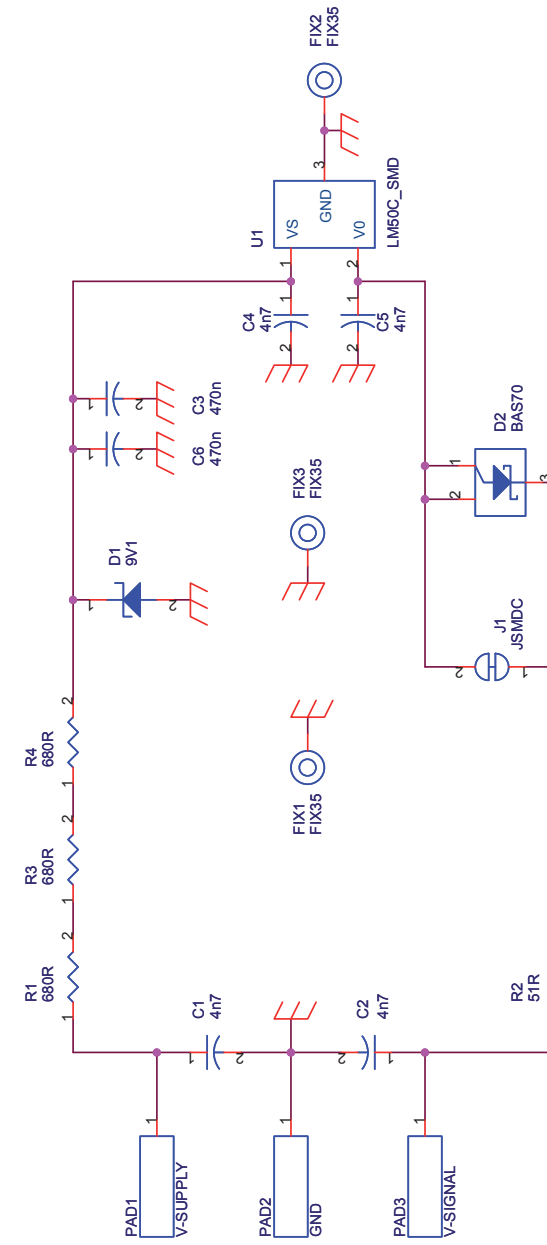
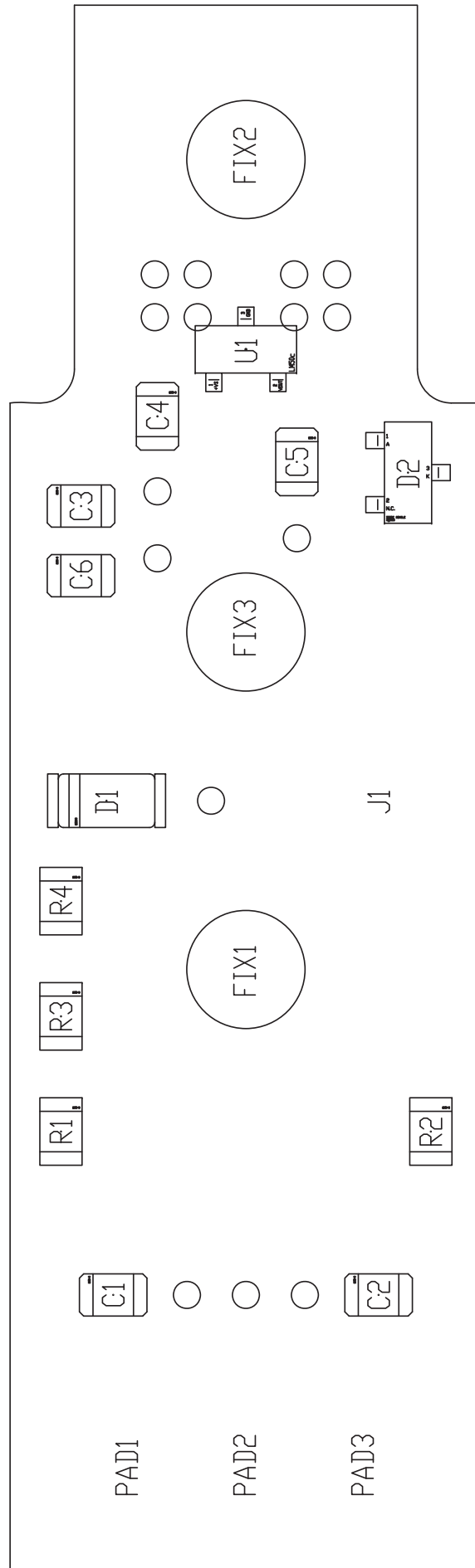




## SLMT0406R01V02

True RMS Detector Revised: Friday, August 05, 2016  
 SLMT0406R01V02 Revision: 1.0  
 Montagna / Ariatti

Item	Quan	Reference	Part	Description
1	4	CN1, CN2, CN3, CN4	MCX_CS	Connettore MCX da CS
2	1	CS1	CSMT0406R1	Circuito stampato
3	2	C1, C6	100pF	Cond. SMD 0805
4	6	C2, C5, C24, C25, C30, C31	100nF	Cond. SMD 0805
5	3	C3, C4, C8	1nF	Cond. SMD 0805
6	2	C7, C11	220pF	Cond. SMD 0805
7	7	C9, C10, C23, C26, C27, C28, C29	NC	Cond. SMD 0805
8	2	C12, C13	470pF	Cond. SMD 0805
9	2	C14, C15	10uF/16V	Cond. Elett. SMD d. 4mm
10	2	C16, C18	22pF	Cond. SMD 0805
11	2	C17, C19	15pF	Cond. SMD 0805
12	1	C20	39pF	Cond. SMD 0805
13	1	C21	33pF	Cond. SMD 0805
14	2	C22, C32	10uF/16V	Cond. Elett. SMD tant. size A
15	1	D1	NC	MINIMELF SMD Zener Diode
16	4	FID1, FID2, FID3, FID4	FID	Fiducial CS
17	6	FIX1, FIX2, FIX3, FIX4, FIX5, FIX6	FIX35	Foro fissaggio 3.5mm
18	1	JP1	STM06S	Strip maschio 6 pin
19	2	L1, L2	180nH	Induttanza SMD 2012 (0805)
20	1	L3	82nH	Induttanza SMD 2012 (0805)
21	3	L4, L5, L6	NC	Induttanza SMD 2012 (0805)
22	2	RV1, RV2	1K	Trimmer Rg V 3269W SMD
23	7	R4, R5, R10, R18, R21, R24, R44	NC	Res. SMD 0805 1%
24	4	R6, R8, R25, R41	100H0	Res. SMD 0805 1%
25	2	R7, R9	82H0	Res. SMD 0805 1%
26	5	R11, R12, R45, R46, R47	0H0	Res. SMD 0805 1%
27	4	R13, R14, R15, R16	390H0	Res. SMD 0805 1%
28	1	R17	33H0	Res. SMD 0805 1%
29	1	R19	22K0	Res. SMD 0805 1%
30	1	R20	18H0	Res. SMD 0805 1%
31	1	R22	330H0	Res. SMD 0805 1%
32	1	R23	22H0	Res. SMD 0805 1%
33	11	R26, R29, R30, R31, R32, R36, R37, R38, R39, R42, R43	10K0	Res. SMD 0805 1%
34	2	R27, R34	220H0	Res. SMD 0805 1%
35	2	R28, R35	1K0	Res. SMD 0805 1%
36	2	R33, R40	1K80	Res. SMD 0805 1%
37	2	TP1, TP2	2.54x2.54	Piazzola SMD
38	2	U1, U2	AD8361ART	RF Power detector
39	1	U3	MC78LC50	Stab. SMD SOT23-5
40	1	U4	ICL7660ACBA	Switched capacitor supply inverter
41	1	U5	LMC6482SMD	Dual R/R op. amp.

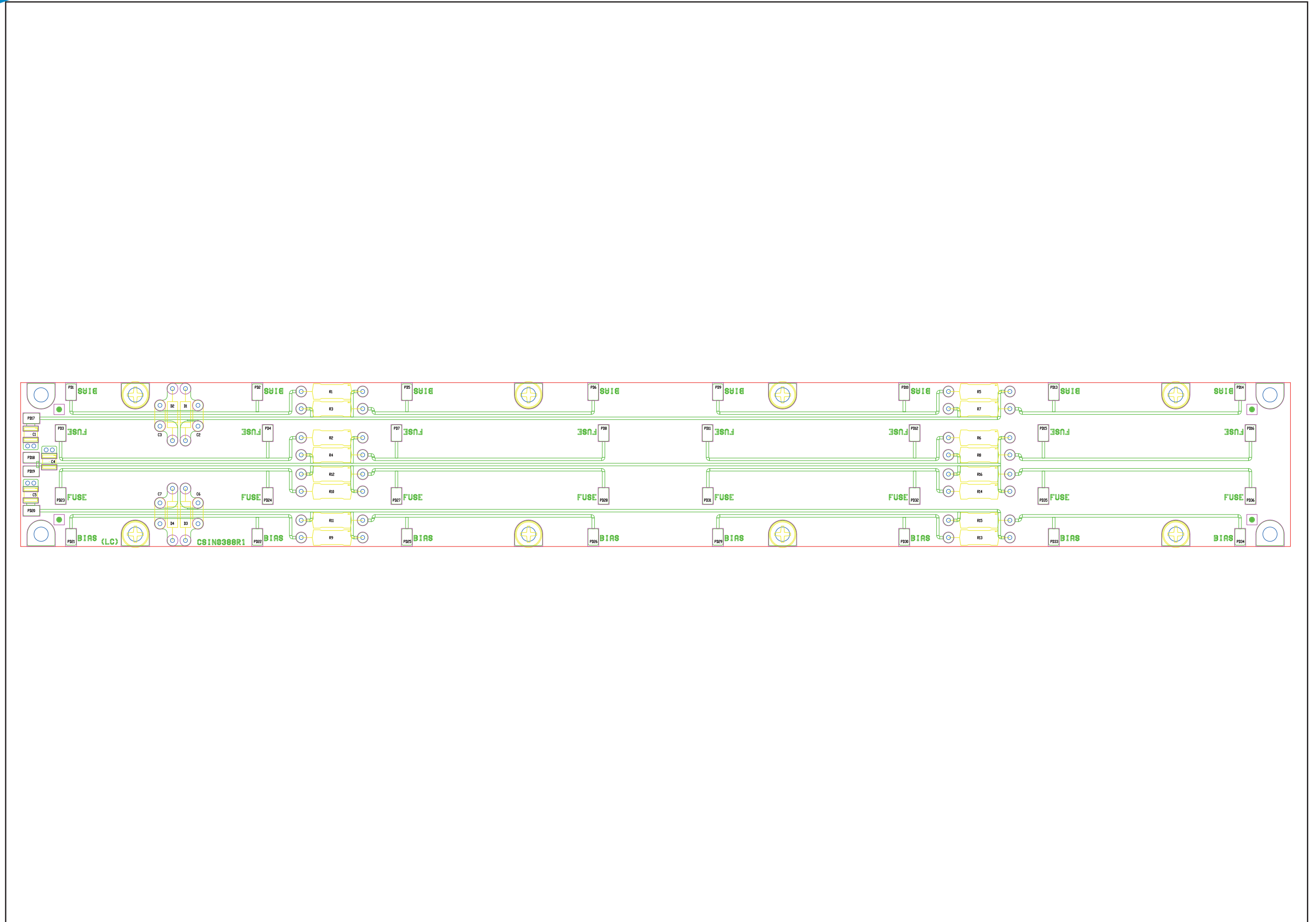


Project Name: Thermal Probe		Page: 1 of 1	Size: A4
Designer: Mauro Ucelli	Date: 26/04/2019	Project Code: RVR_024	
File Location: \	Revision: 1,1	Description: Thermal Probe	
Folder/File: 1	Approval:	Part No.: SL024MT1001	

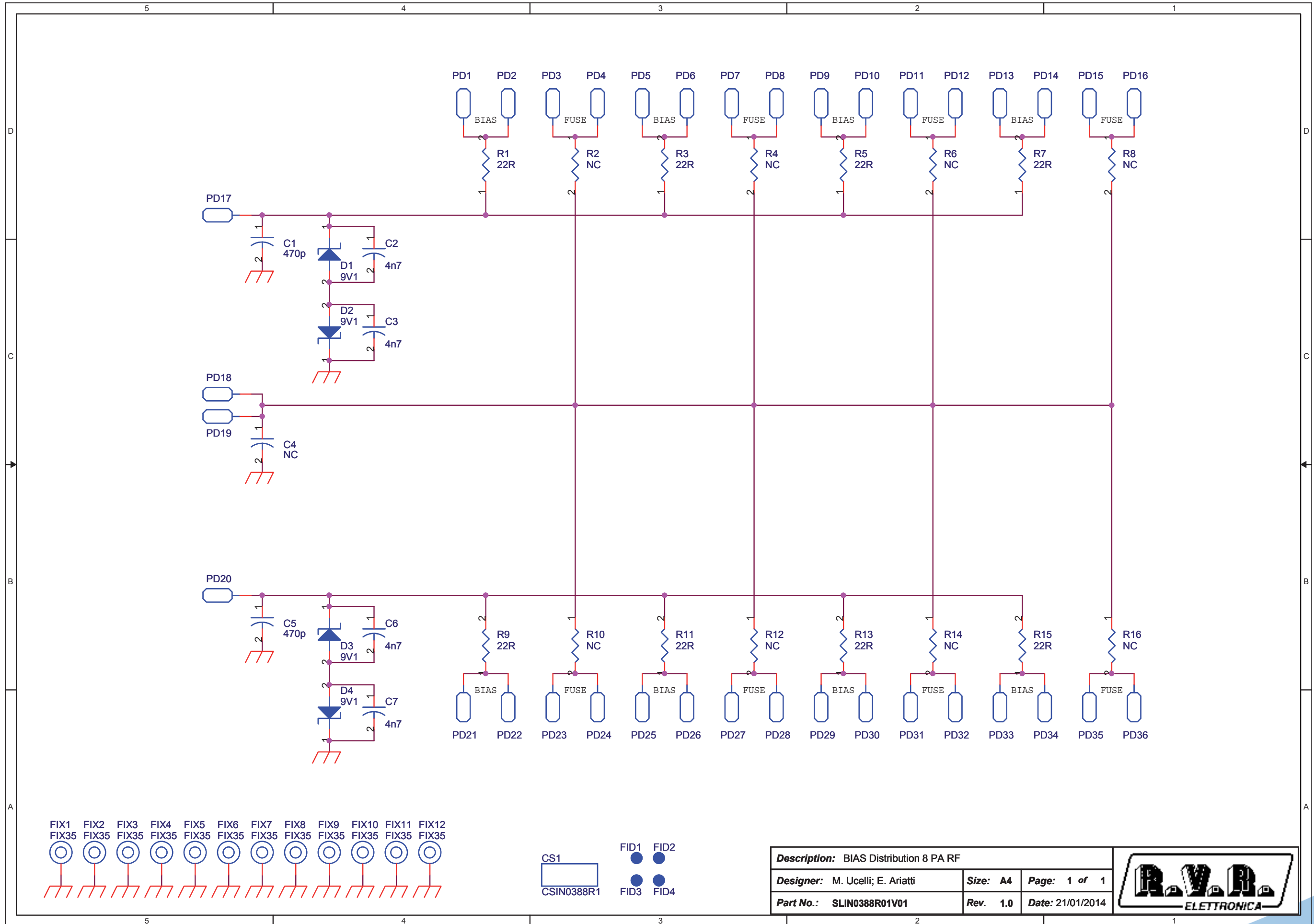
SL024MT1001

Thermal Probe  
 Revision: 1.1  
 Thermal Probe  
 Mauro Ucelli  
 04/26/19

tem	Quantity	Reference	Part	Description
1	4	C1,C2,C4,C5	4n7	Cond. SMD 0805
2	2	C3,C6	470n	Cond. SMD 0805
3	1	D1	9V1	MINIMELF SMD Zener Diode
4	1	D2	BAS70	Diodo Shottky SOT23
5	3	FIX1,FIX2,FIX3	FIX35	Foro fissaggio 3.5mm
6	1	J1	JSMDC	Pad SMD a saldare chiuso
7	1	PAD1	V-SUPPLY	
8	1	PAD2	GND	
9	1	PAD3	V-SIGNAL	
10	3	R1,R3,R4	680R	Res. SMD 0805
11	1	R2	51R	Res. SMD 0805
12	1	U1	LM50C_SMD	Temperature sensor
13	1	CS1	CSMT0208R1	Circuito stampato



SLIN0388R01V01



<b>Description:</b> BIAS Distribution 8 PA RF		
<b>Designer:</b> M. Ucelli; E. Ariatti	<b>Size:</b> A4	<b>Page:</b> 1 of 1
<b>Part No.:</b> SLIN0388R01V01	<b>Rev.:</b> 1.0	<b>Date:</b> 21/01/2014

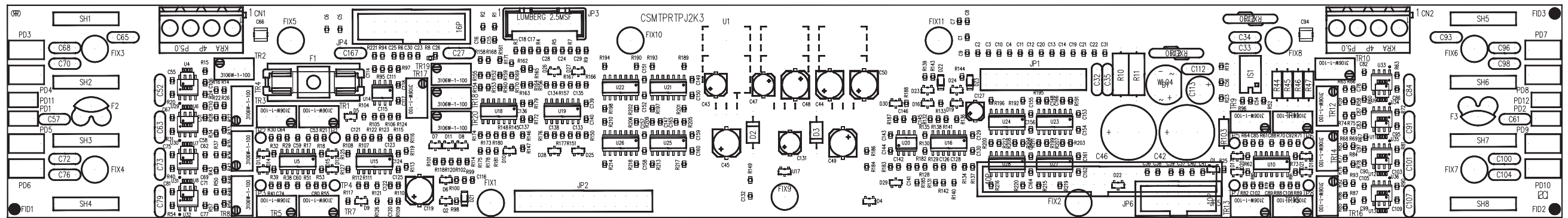



SLIN0388R01V01

BIAS Distribution 8 PA RF  
 SLIN0388R01V01  
 21/01/2014  
 Rev. 1.0  
 46  
 M. Ucelli / E. Ariatti

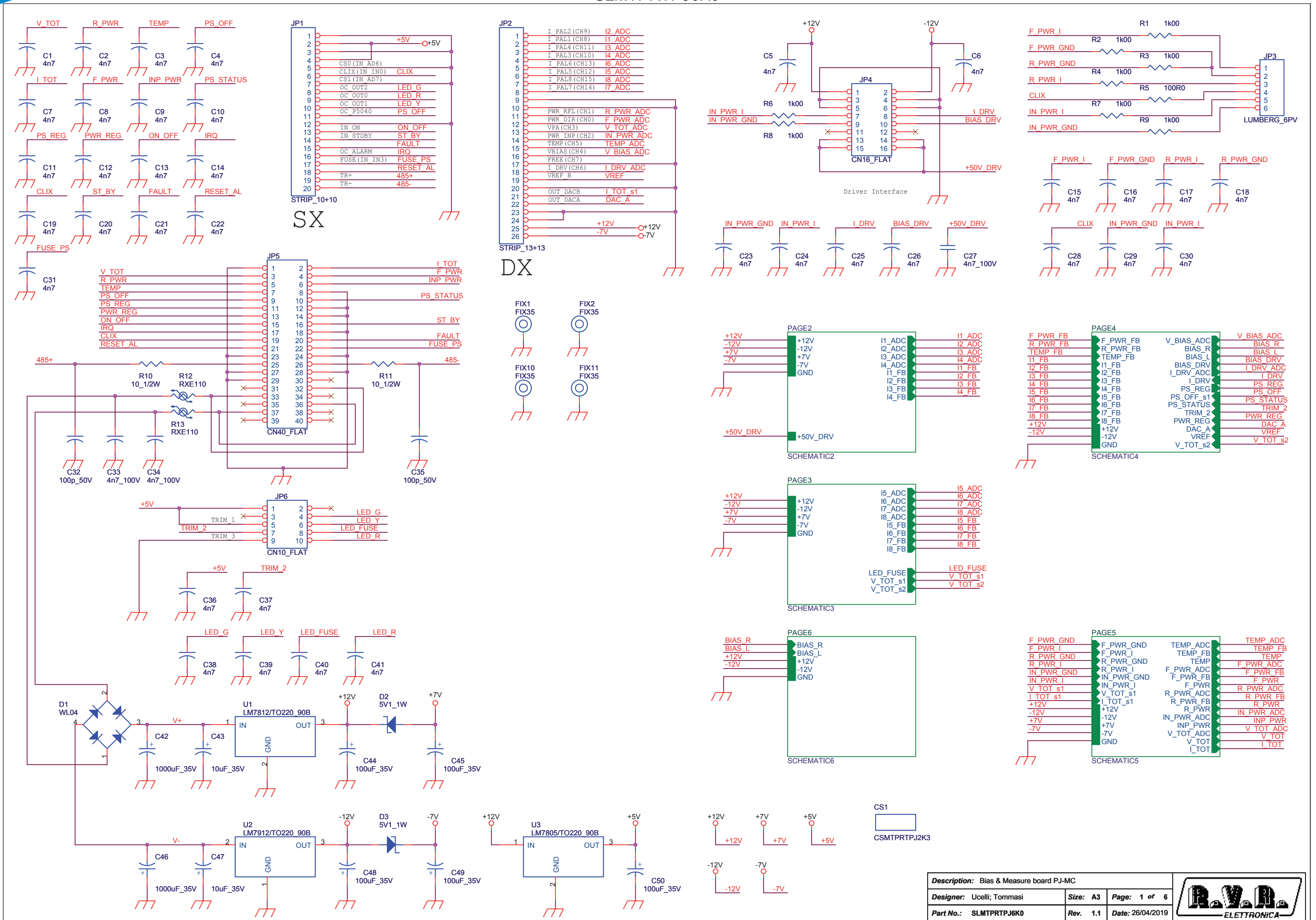
Item	Quantity	Reference	Part	Description
1	1	CS1	CSIN0388R1	Circuito stampato
2	2	C1,C5	470p	Cond. SMD 1212 HQ
3	4	C2,C3,C6,C7	4n7	Cond. ceramico p 5mm
4	1	C4	NC	Cond. SMD 1212 HQ
5	4	D1,D2,D3,D4	9V1	1W Zener Diode
6	4	FID1,FID2,FID3,FID4	FID	Fiducial CS
7	12	FIX1,FIX2,FIX3,FIX4,FIX5,FIX6, FIX7,FIX8,FIX9,FIX10,FIX11, FIX12	FIX35	Foro fissaggio 3.5mm
8	36	PD1,PD2,PD3,PD4,PD5,PD6, PD7,PD8,PD9,PD10,PD11, PD12,PD13,PD14,PD15,PD16, PD17,PD18,PD19,PD20,PD21, PD22,PD23,PD24,PD25,PD26, PD27,PD28,PD29,PD30,PD31, PD32,PD33,PD34,PD35,PD36	PAD	Pad a saldare
9	8	R1,R3,R5,R7,R9,R11,R13, R15	22R	Res. Strato Metallico 2W
10	8	R2,R4,R6,R8,R10,R12,R14,R16	NC	Res. 1/2W 10k

SLMTPRTPJ6K0



	PRODUCT NAME : PJ5000U-K	PART NAME : BIAD & MEASURE BOARD
	DESIGNER : UCELLI; TOMMASI	DATE 07/08/17
ARCHIVING : 'RVRUT' SERVER, 'RILASCIATI' FOLDER		PROJECT CODE : 245   DOCUMENT CODE : <>

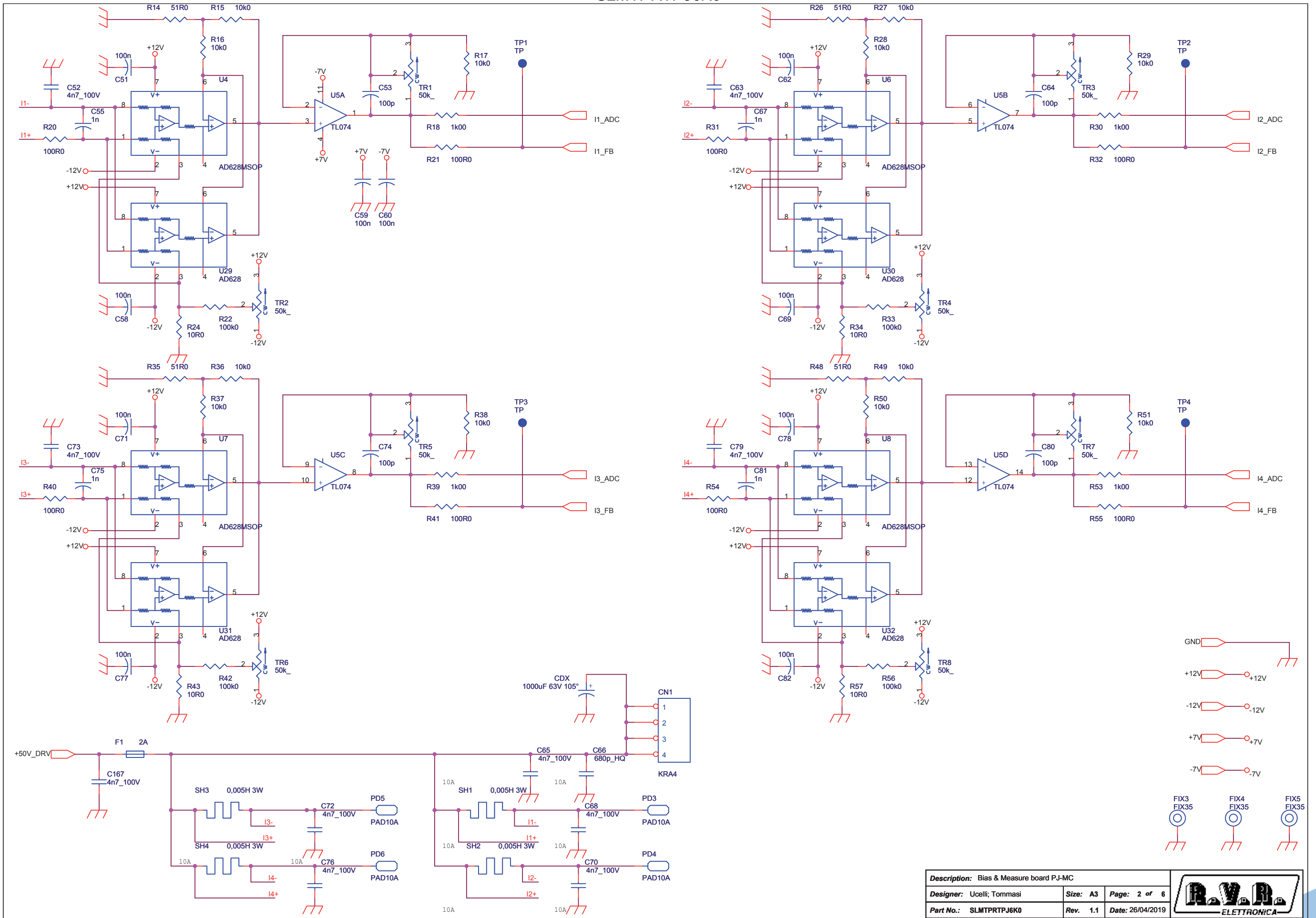
SLMTPRTPJ6K0



Description: Bias & Measure board PJ-MC			
Designer: Ucelli; Tommasi	Size: A3	Page: 1 of 6	
Part No.: SLMTPRTPJ6K0	Rev. 1.1	Date: 26/04/2019	

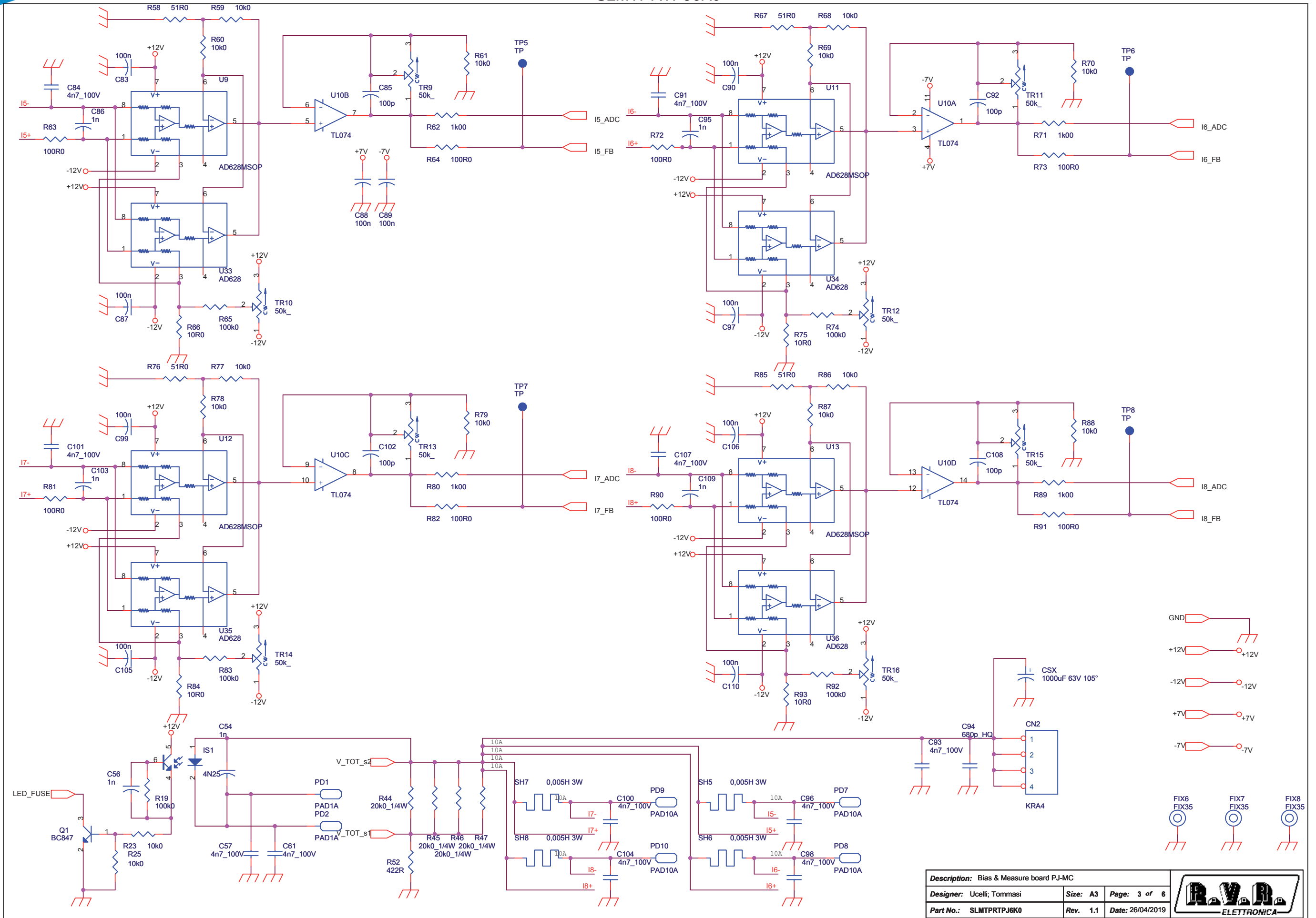


SLMTPRTPJ6K0



Description: Bias & Measure board PJ-MC			
Designer: Ucelli; Tommasi	Size: A3	Page: 2 of 6	
Part No.: SLMTPRTPJ6K0	Rev. 1.1	Date: 26/04/2019	

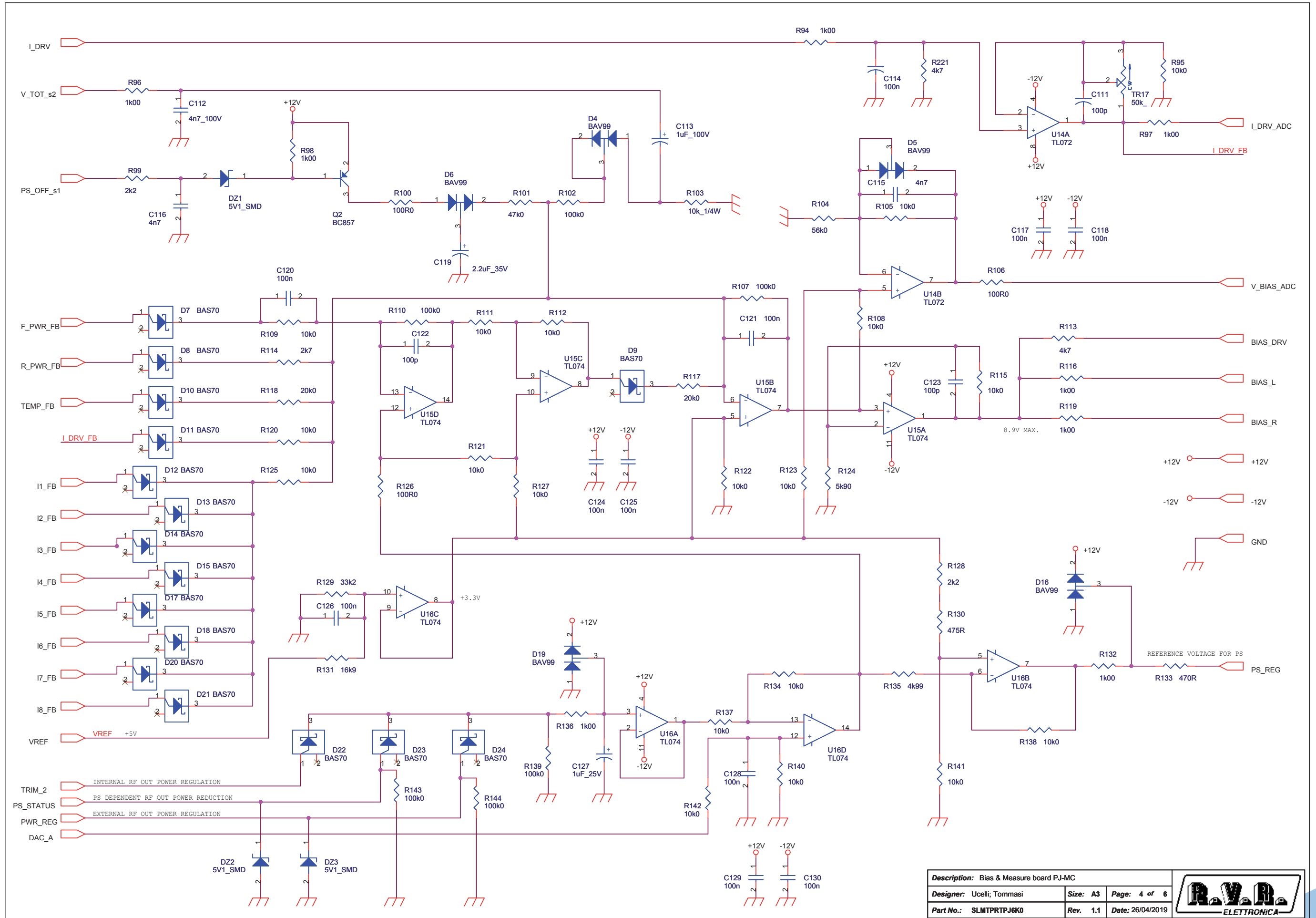
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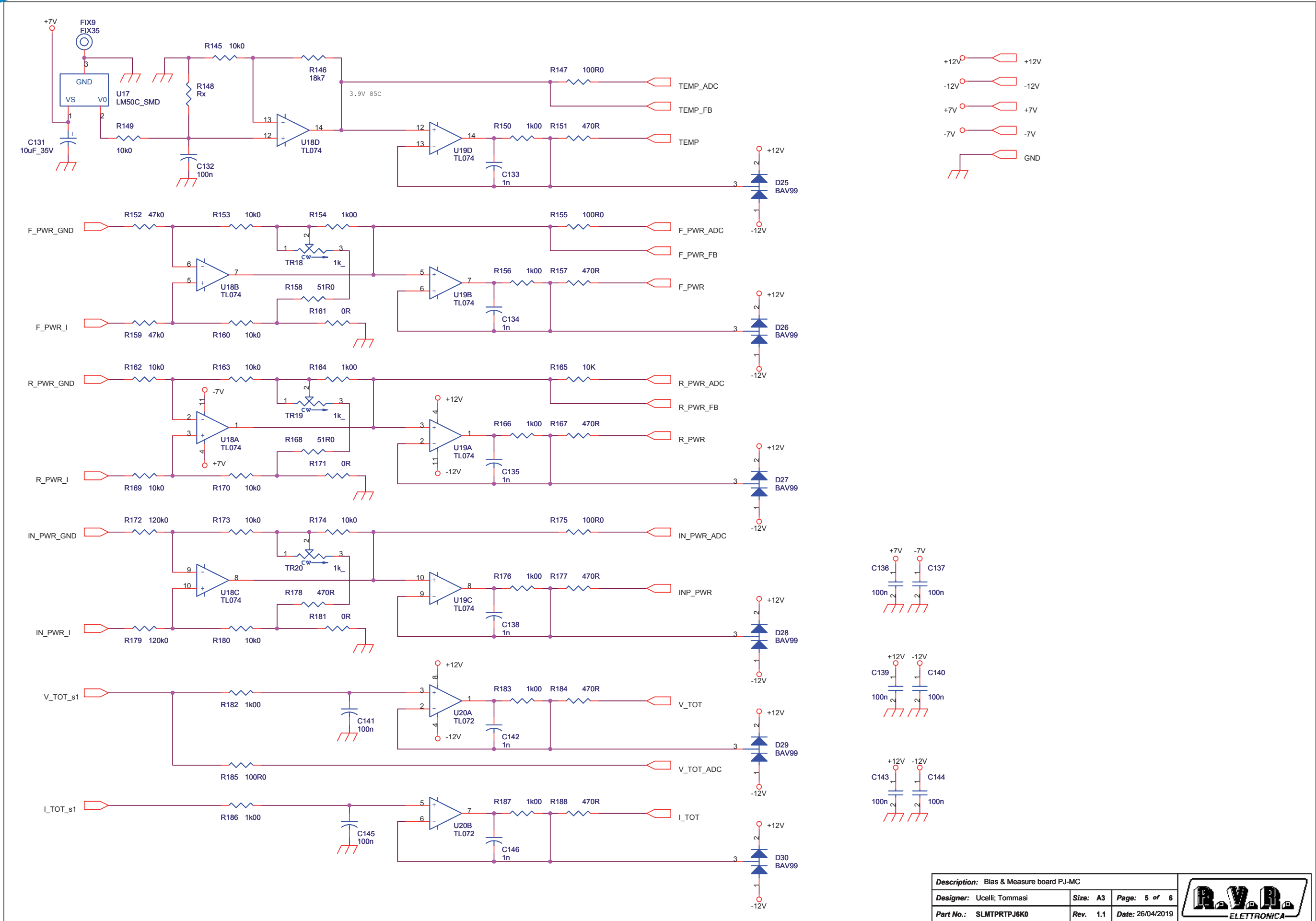
Description: Bias & Measure board PJ-MC		
Designer: Ucelli; Tommasi	Size: A3	Page: 3 of 6
Part No.: SLMTPRTPJ6K0	Rev. 1.1	Date: 26/04/2019



SLMTPRTPJ6K0

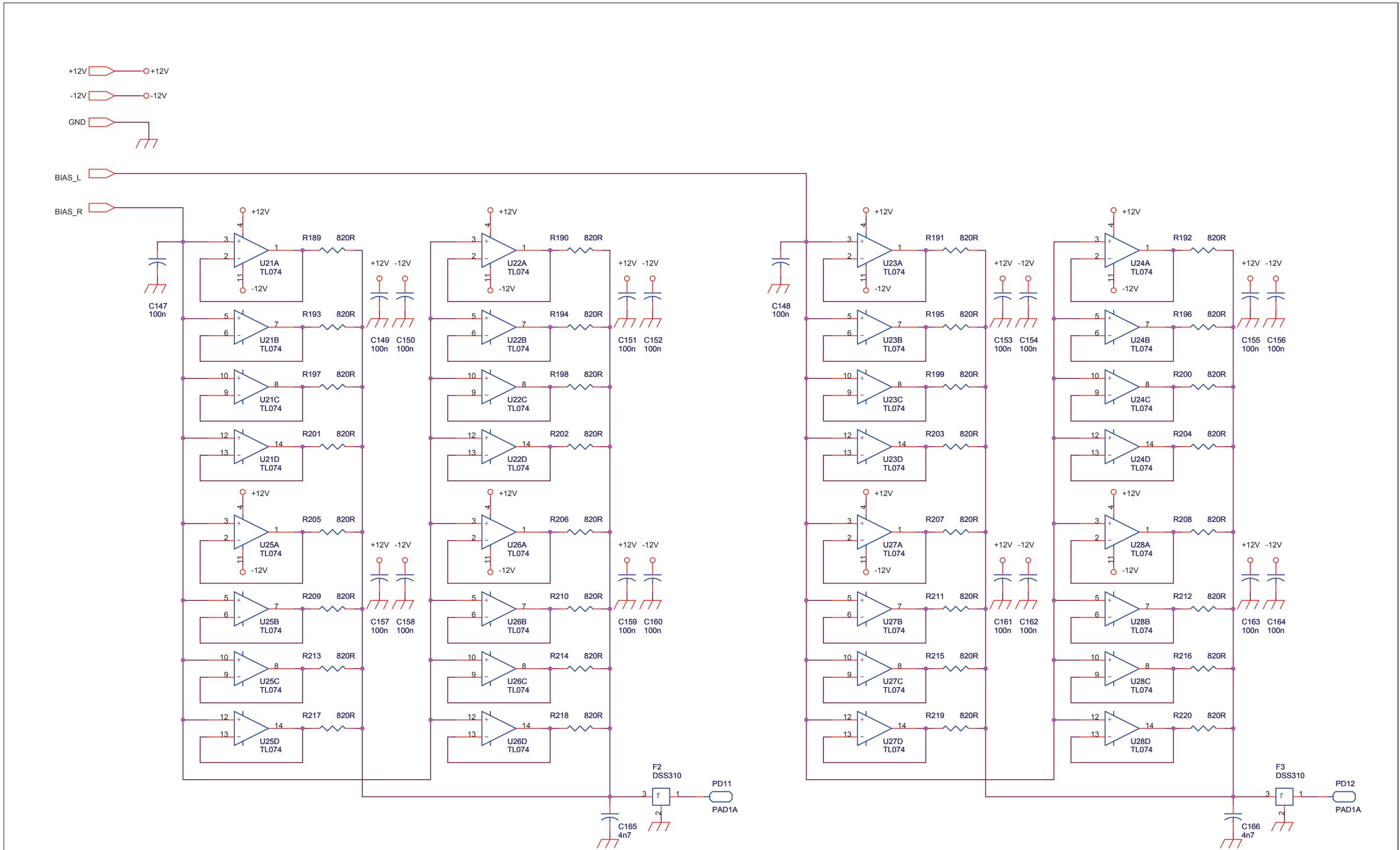


SLMTPRTPJ6K0



<b>Description:</b> Bias & Measure board PJ-MC			
<b>Designer:</b> Ucelli, Tommasi	<b>Size:</b> A3	<b>Page:</b> 5 of 6	
<b>Part No.:</b> SLMTPRTPJ6K0	<b>Rev.:</b> 1.1	<b>Date:</b> 26/04/2019	

SLMTPRTPJ6K0



Description: Bias & Measure board PJ-MC			
Designer: Ucelli; Tommasi	Size: A3	Page: 6 of 6	
Part No.: SLMTPRTPJ6K0	Rev. 1.1	Date: 26/04/2019	

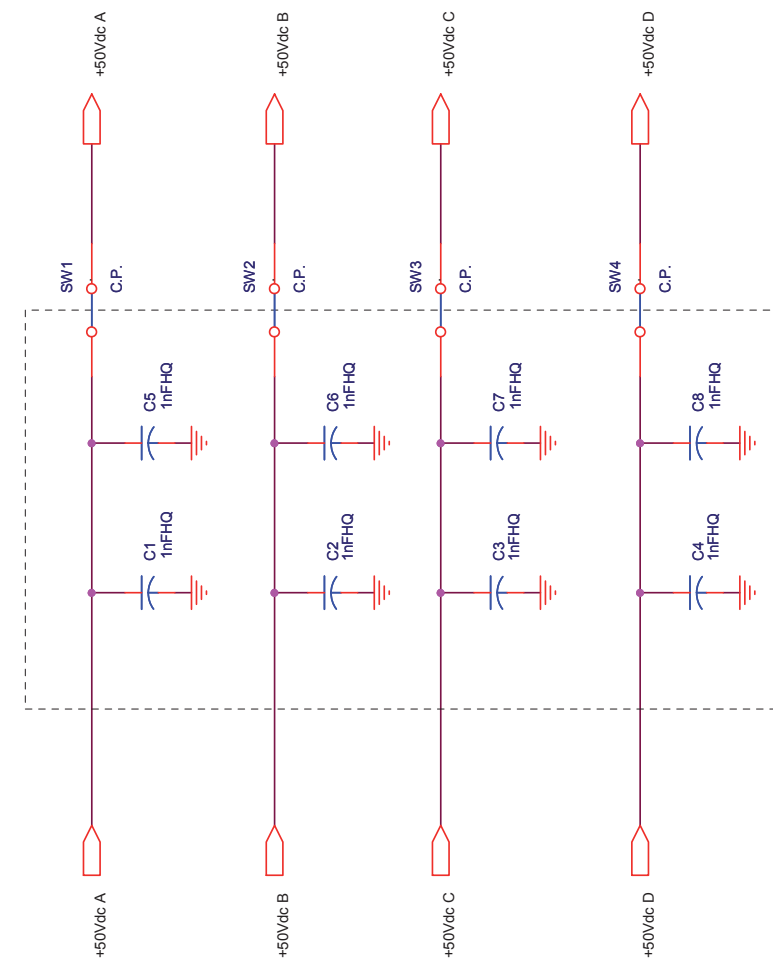
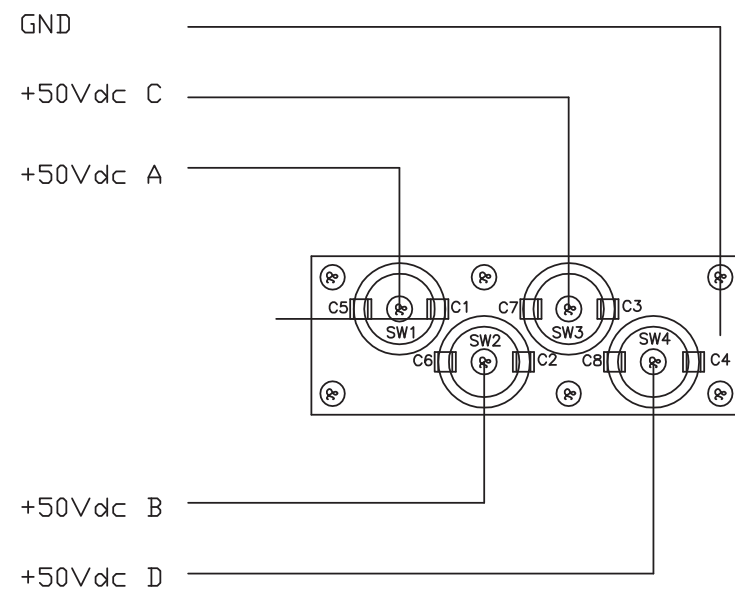
SLMTPRTPJ6K0

Bias & Measure board PJU-K Revised: 26/04/2019  
 SLMTPRTPJ6K0 Revision: 1.1  
 Ucelli ; Tommasi

Item	Quantity	Reference	Part
1	2	CN1, CN2	KRA4
2	40	C1, C2, C3, C4, C5, C6, C7, C8, C9, C10, C11, C12, C13, C14, C15, C16, C17, C18, C19, C20, C21, C22, C23, C24, C25, C26, C28, C29, C30, C31, C36, C37, C38, C39, C40, C41, C115, C116, C165, C166	4n7
3	25	C27, C33, C34, C52, C57, C61, C63, C65, C68, C70, C72, C73, C76, C79, C84, C91, C93, C96, C98, C100, C101, C104, C107, C112, C167	4n7_100V
4	2	C32, C35	100p_50V
5	2	C42, C46	1000uF_35V
6	3	C43, C47, C131	10uF_35V
7	5	C44, C45, C48, C49, C50	100uF_35V
8	58	C51, C58, C59, C60, C62, C69, C71, C77, C78, C82, C83, C87, C88, C89, C90, C97, C99, C105, C106, C110, C114, C117, C118, C120, C121, C124, C125, C126, C128, C129, C130, C132, C136, C137, C139, C140, C141, C143, C144, C145, C147, C148, C149, C150, C151, C152, C153, C154, C155, C156, C157, C158, C159, C160, C161, C162, C163, C164	100n
9	11	C53, C64, C74, C80, C85, C92, C102, C108, C111, C122, C123	100p
10	16	C54, C55, C56, C67, C75, C81, C86, C95, C103, C109, C133, C134, C135, C138, C142, C146	1n
11	2	C66, C94	680p_HQ
12	1	C113	1uF_100V
13	1	C119	2.2uF_35V
14	1	C127	1uF_25V
15	3	DZ1, DZ2, DZ3	5V1_SMD
16	1	D1	WL04
17	2	D2, D3	5V1_1W
18	11	D4, D5, D6, D16, D19, D25, D26, D27, D28, D29, D30	BAV99
19	16	D7, D8, D9, D10, D11, D12, D13, D14, D15, D17, D18, D20, D21, D22, D23, D24	BAS70
20	11	FIX1, FIX2, FIX3, FIX4, FIX5, FIX6, FIX7, FIX8, FIX9, FIX10, FIX11	FIX35
21	1	F1	2A
22	2	F2, F3	DSS310
23	1	IS1	4N25
24	1	JP1	STRIP_10+10
25	1	JP2	STRIP_13+13
26	1	JP3	LUMBERG_6PV
27	1	JP4	CN16_FLAT
28	1	JP5	CN40_FLAT
29	1	JP6	CN10_FLAT
30	4	PD1, PD2, PD11, PD12	PAD1A
31	8	PD3, PD4, PD5, PD6, PD7, PD8, PD9, PD10	PAD10A
32	1	Q1	BC847
33	1	Q2	BC857
34	34	R1, R2, R3, R4, R6, R7, R8, R9, R18, R30, R39, R53, R62, R71, R80, R89, R94, R97, R132, R150, R154, R156, R164, R166, R176, R182, R183, R186, R187, R96, R98, R116, R119, R136	1k00
35	24	R5, R20, R21, R31, R32, R40, R41, R54, R55, R63, R64, R72, R73, R81, R82, R90, R91, R147, R155, R175, R185, R100, R106, R126	100R0
36	2	R10, R11	10_1/2W
37	2	R12, R13	RXE110
38	10	R14, R26, R35, R48, R58, R67, R76, R85, R158, R168	51R0
39	57	R15, R16, R17, R23, R25, R27, R28, R29, R36, R37, R38, R49, R50, R51, R59, R60, R61, R68, R69, R70, R77, R78, R79, R86, R87, R88, R95, R145, R149, R153, R160, R162, R163, R169, R170, R173, R180, R105, R108, R109, R111, R112, R115, R120, R121, R122, R123, R125, R127, R134, R137, R138, R140, R141, R142, R165, R174	10k0
40	15	R19, R22, R33, R42, R56, R65, R74, R83, R92, R102, R107, R110, R139, R143, R144	100k0

Item	Quantity	Reference	Part
41	8	R24, R34, R43, R57, R66, R75, R84, R93	10R0
42	4	R44, R45, R46, R47	20k0_1/4W
43	1	R52	422R
45	2	R99, R128	2k2
49	1	R103	10k_1/4W
50	1	R104	56k0
52	2	R113, R221	4k7
53	1	R114	2k7
54	2	R117, R118	20k0
55	1	R124	5k90
56	1	R129	33k2
57	1	R130	475R
58	1	R131	16k9
59	8	R133, R151, R157, R167, R177, R184, R188, R178	470R
60	1	R135	4k99
61	1	R146	18k7
62	1	R148	Rx
64	3	R152, R159, R101	47k0
65	3	R161, R171, R181	0R
66	2	R172, R179	120k0
67	32	R189, R190, R191, R192, R193, R194, R195, R196, R197, R198, R199, R200, R201, R202, R203, R204, R205, R206, R207, R208, R209, R210, R211, R212, R213, R214, R215, R216, R217, R218, R219, R220	820R
68	8	SH1, SH2, SH3, SH4, SH5, SH6, SH7, SH8	0,005H 3W
69	8	TP1, TP2, TP3, TP4, TP5, TP6, TP7, TP8	TP
70	17	TR1, TR2, TR3, TR4, TR5, TR6, TR7, TR8, TR9, TR10, TR11, TR12, TR13, TR14, TR15, TR16, TR17	50k_
71	3	TR18, TR19, TR20	1k_
72	1	U1	LM7812/TO220_90B
73	1	U2	LM7912/TO220_90B
74	1	U3	LM7805/TO220_90B
76	8	U4, U6, U7, U8, U9, U11, U12, U13	AD628MSOP
77	14	U5, U10, U15, U16, U18, U19, U21, U22, U23, U24, U25, U26, U27, U28	TL074
78	2	U14, U20	TL072
79	1	U17	LMS50C_SMD
80	8	U29, U30, U31, U32, U33, U34, U35, U36	AD628S08
81	1	CS1	CSMTPRTPJ2K3
82	2	CDX, CSX	1000uF 63V 105*

SLFILPJ1KM



Nome Progetto: TEX PJ C HC		Pagina: 1 di 1		Size: A4
Autore: Ufficio Tecnico		Data: 17/06/2013		Codice Progetto: 014
Nome PC in Rete: \\Rvruti\Rilasciati		Revisione: 2.1		Nome Parte: SCHEDA PASSA PARETE
File/Cartella:		Autorizzazione:		Codice: SLFILPJ1KM

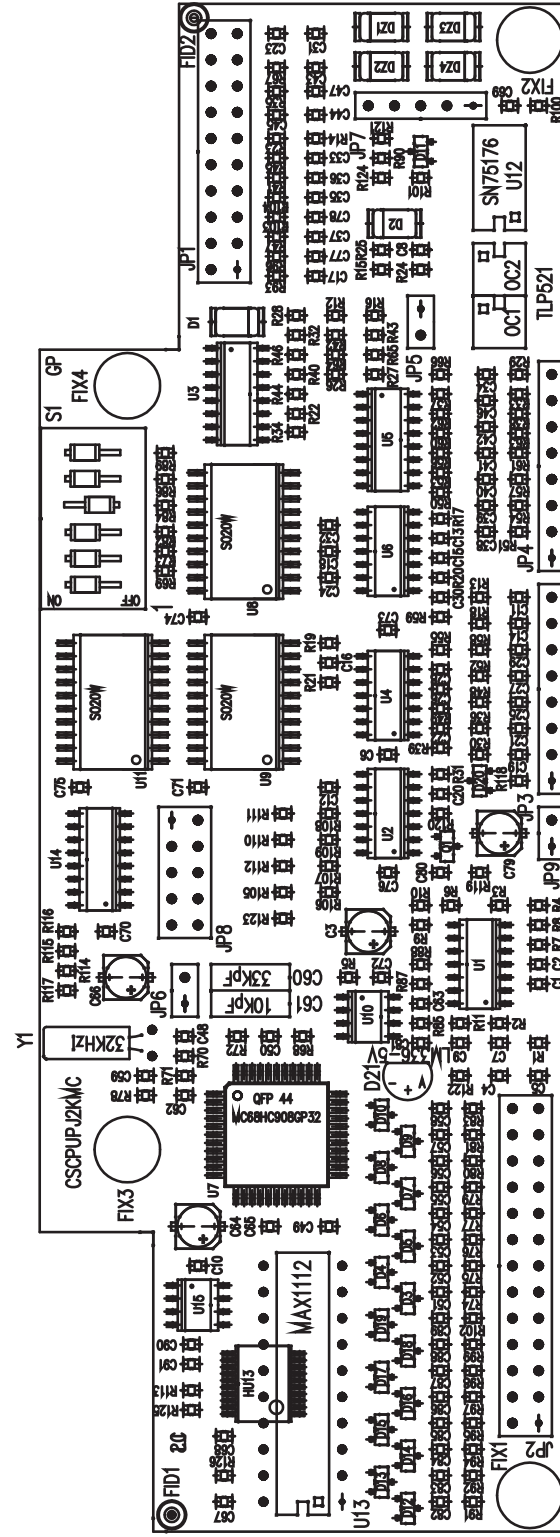
NOME PROGETTO: TEX PJ C HC		NOME PARTE: WALK-THROUGH BOARD	
AUTORE: UFFICIO TECNICO		DATA: 17/06/2013	REVISIONE: 1.1
ARCHIVIAZIONE ELETTRONICA: "CARTELLA PROGETTI" SU "UT_SRV"	CODICE PROGETTO: 014	CODICE DISEGNO: SLFILPJ1KM	SCALA: 1:1
MATERIALE: FR4-74 1.6mm Cu 35um	TRATTAMENTO: STANDARD COSTRUTTORE	PROFILO: Positivo	STATO: ESECUTIVO
PAGINA: 1 DI 1		SIZE: A4	

SLFILPJ1KM

SCHEDA PASSA PARETE Revised: 17/06/2013  
SLFILPJ1KM Revision: 2.1  
TEX PJC HC

Item	Quantity	Reference	Part
1	8	C1, C2, C3, C4, C5, C6, C7, C8	1nFHQ
2	4	SW1, SW2, SW3, SW4	C.P.





NOME PROGETTO: HC5/10

NOME PARTE: Scheda CPU

AUTORE: U.T. - Rev.: BERTI J.

DATA: 11/02/2004 REVISIONE: 1.0 SCALA: 1:1 SIZE: A4 PAGINA: 1 DI 1

ARCHIVIAZIONE ELETTRONICA: "CARTELLA PROGETTI" SU "UT\_SRV"

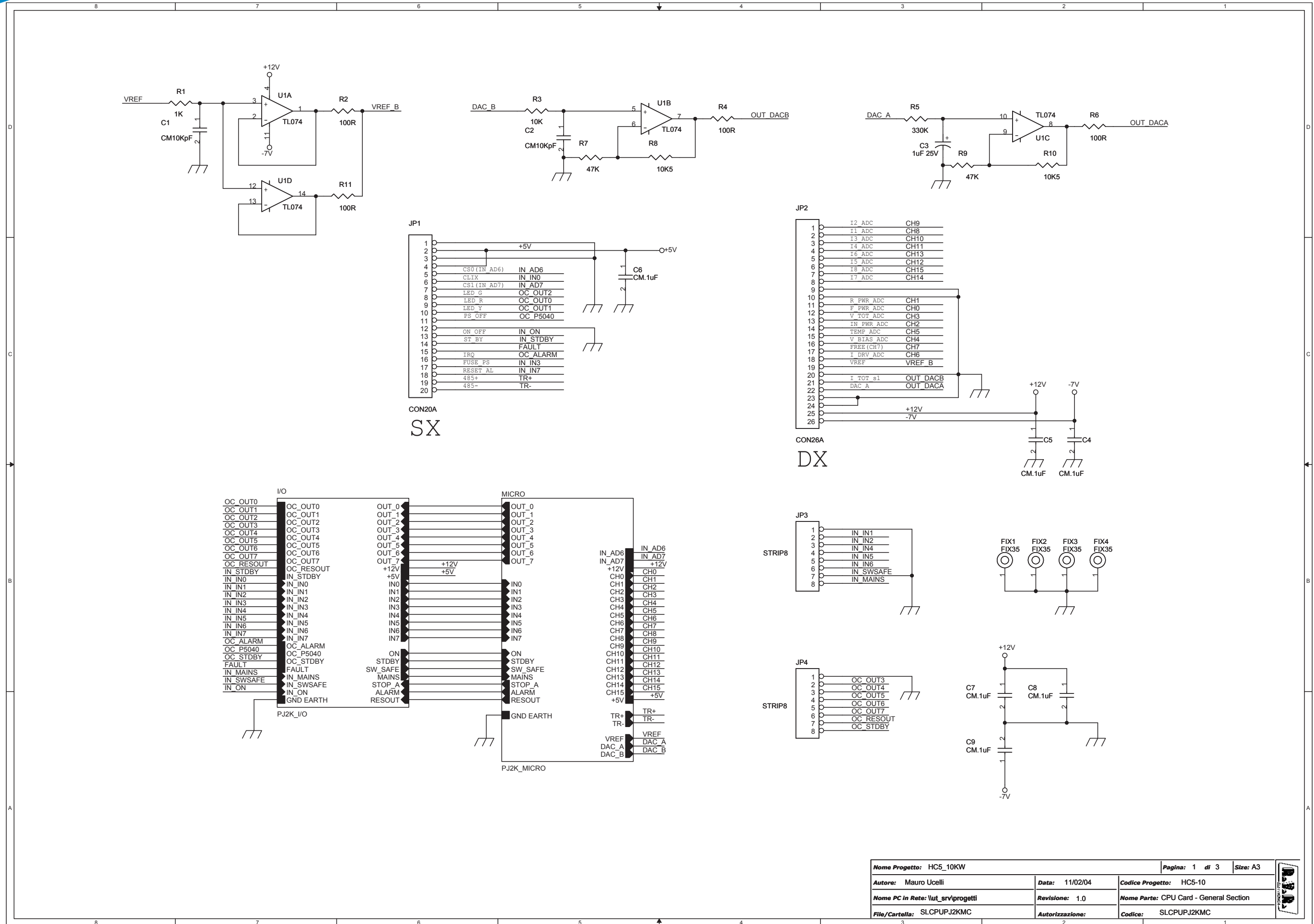
CODICE PROGETTO: 014

CODICE DISEGNO: SLCPUJ2KMC

MATERIALE: /

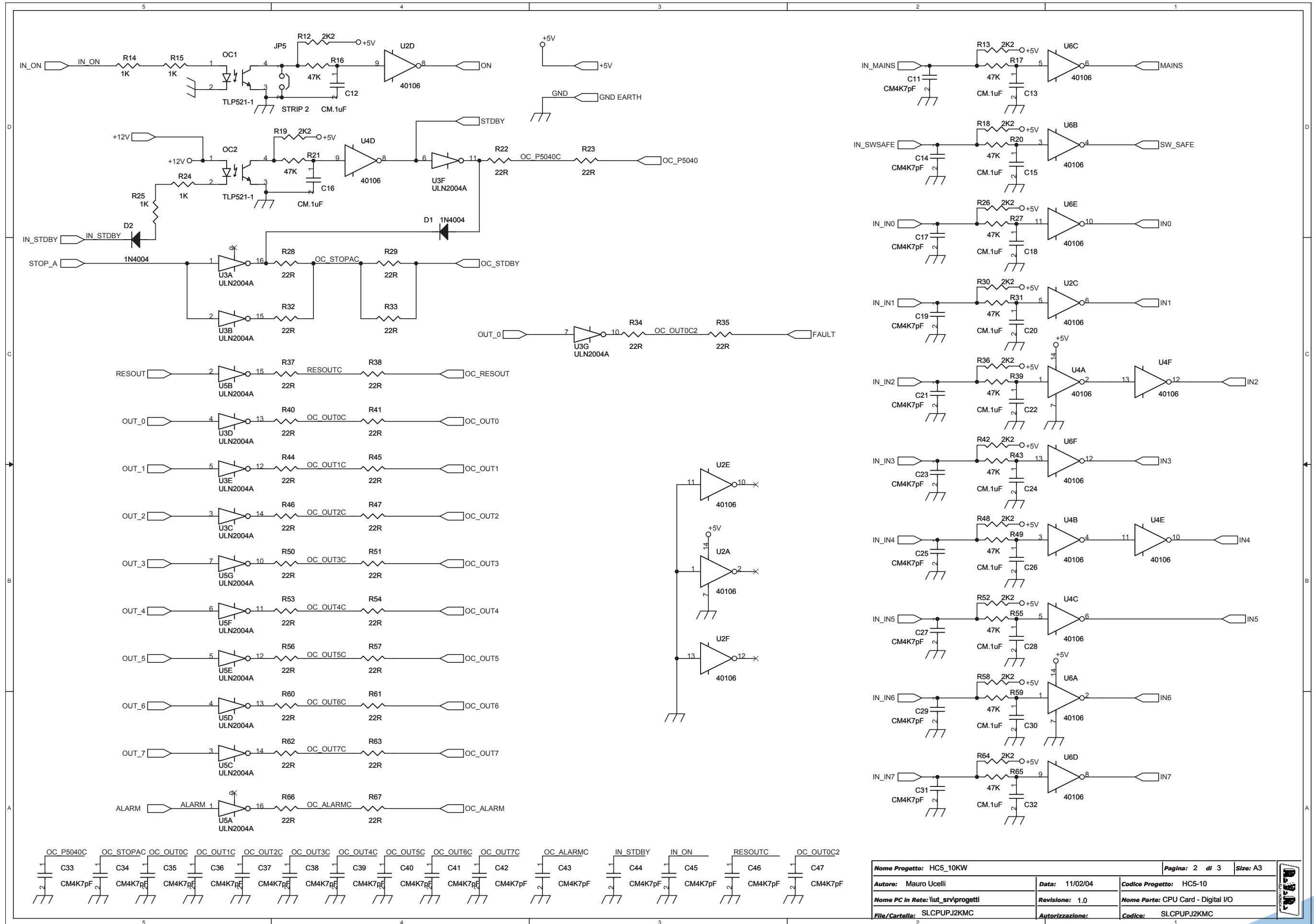
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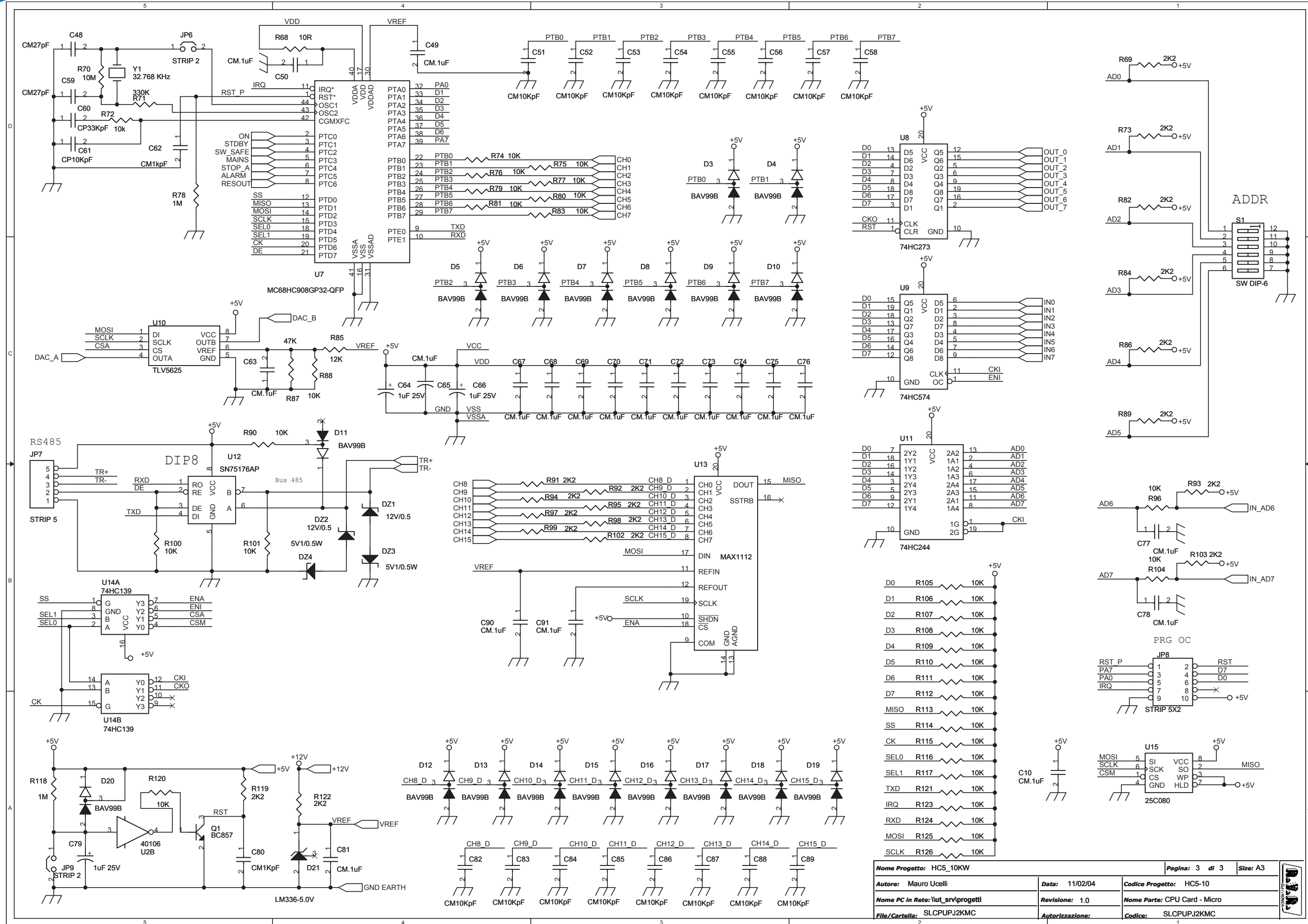
STATO: ESECUTIVO



Nome Progetto: HC5_10KW		Pagina: 1 di 3		Size: A3
Autore: Mauro Ucelli		Data: 11/02/04	Codice Progetto: HC5-10	
Nome PC in Rete: \lut_srv\progetti		Revisione: 1.0	Nome Parte: CPU Card - General Section	
File/Cartella: SLCPUJ2KMC		Autorizzazione:	Codice: SLCPUJ2KMC	

CPUPJ2KMC





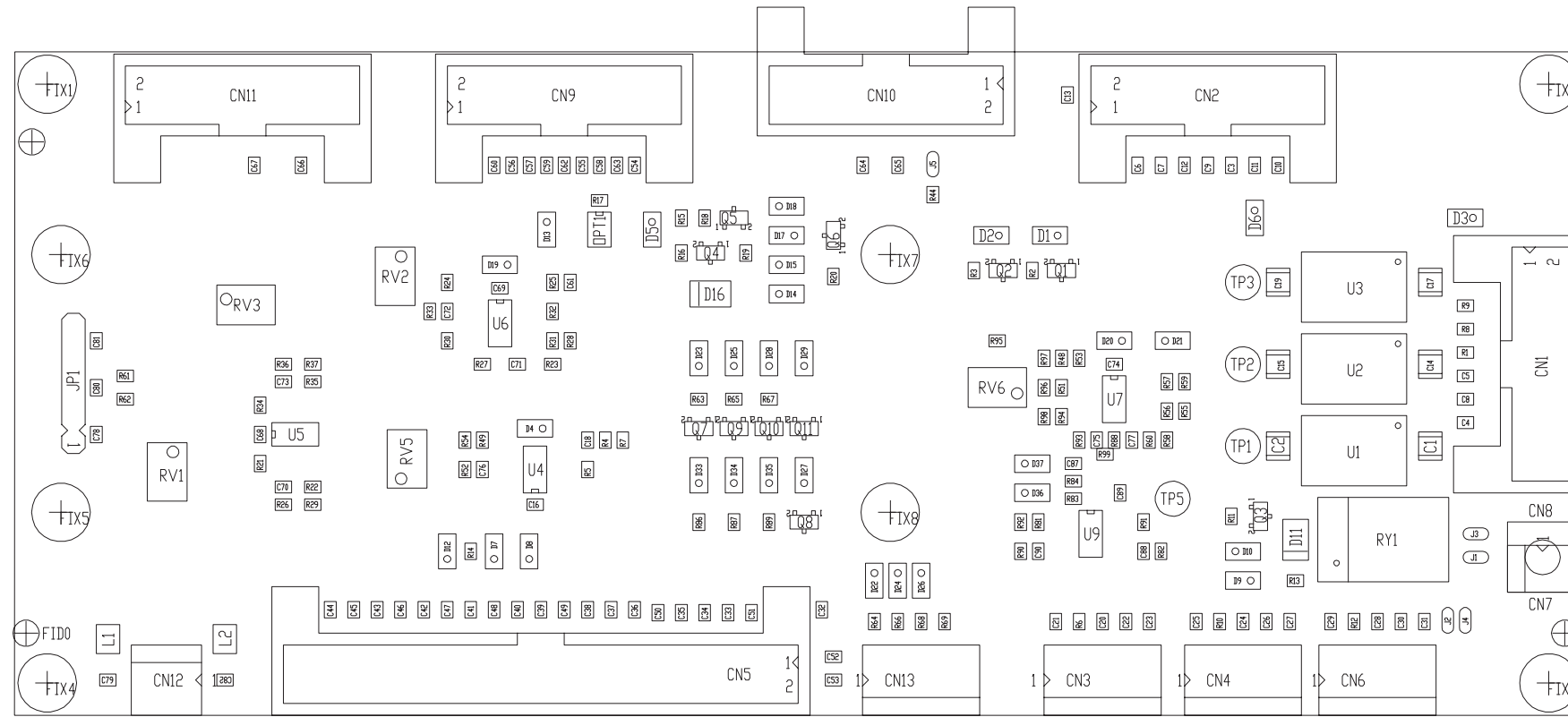
Nome Progetto: HCS_10KW		Pagina: 3 di 3		Size: A3	
Autore: Mauro Ucelli		Data: 11/02/04		Codice Progetto: HCS-10	
Nome PC in Rete: \lut_srv\progetti		Revisione: 1.0		Nome Parte: CPU Card - Micro	
File/Cartella: SLCPUJ2KMC		Autorizzazione:		Codice: SLCPUJ2KMC	

CPUPJ2KMC

General Revised: Thursday, May 29, 2003  
 CSCUPJ2KMC Revision: 1

Item	Quantity	Reference	Part
1	18	C1, C2, C51, C52, C53, C54, C55, C56, C57, C58, C82, C83, C84, C85, C86, C87, C88, C89	CM10KpF
2	4	C3, C64, C66, C79	1uF 25V
3	38	C4, C5, C6, C7, C8, C9, C10, C12, C13, C15, C16, C18, C20, C22, C24, C26, C28, C30, C32, C49, C50, C63, C65, C67, C68, C69, C70, C71, C72, C73, C74, C75, C76, C77, C78, C81, C90, C91	CM.1uF
4	25	C11, C14, C17, C19, C21, C23, C25, C27, C29, C31, C33, C34, C35, C36, C37, C38, C39, C40, C41, C42, C43, C44, C45, C46, C47	CM4K7pF
5	2	C48, C59	CM27pF
6	1	C60	CP33KpF
7	1	C61	CP10KpF
8	2	C62, C80	CM1KpF
9	2	DZ2, DZ1	12V/0.5
10	2	DZ4, DZ3	5V1/0.5W
11	2	D1, D2	1N4004
12	18	D3, D4, D5, D6, D7, D8, D9, D10, D11, D12, D13, D14, D15, D16, D17, D18, D19, D20	BAV99B
13	1	D21	LM336-5.0V
14	4	FIX1, FIX2, FIX3, FIX4	FIX35
15	1	JP1	CON20A
16	1	JP2	CON26A
17	2	JP4, JP3	STRIP8
18	3	JP5, JP6, JP9	STRIP 2
19	1	JP7	STRIP 5
20	1	JP8	STRIP 5X2
21	2	OC1, OC2	TLP521-1
22	1	Q1	BC857
23	5	R1, R14, R15, R24, R25	1K
24	4	R2, R4, R6, R11	100R
25	35	R3, R72, R74, R75, R76, R77, R79, R80, R81, R83, R88, R90, R96, R100, R101, R104, R105, R106, R107, R108, R109, R110, R111, R112, R113, R114, R115, R116, R117, R120, R121, R123, R124, R125, R126	10K
26	2	R71, R5	330K
27	15	R7, R9, R16, R17, R20, R21, R27, R31, R39, R43, R49, R55, R59, R65, R87	47K
28	2	R8, R10	10K5
29	30	R12, R13, R18, R19, R26, R30, R36, R42, R48, R52, R58, R64, R69, R73, R82, R84, R86, R89, R91, R92, R93, R94, R95, R97, R98, R99, R102, R103, R119, R122	2K2
30	28	R22, R23, R28, R29, R32, R33, R34, R35, R37, R38, R40, R41, R44, R45, R46, R47, R50, R51, R53, R54, R56, R57, R60, R61, R62, R63, R66, R67	22R
31	1	R68	10R
32	1	R70	10M
33	2	R118, R78	1M
34	1	R85	12K
35	1	S1	SW DIP-6
36	1	U1	TL074

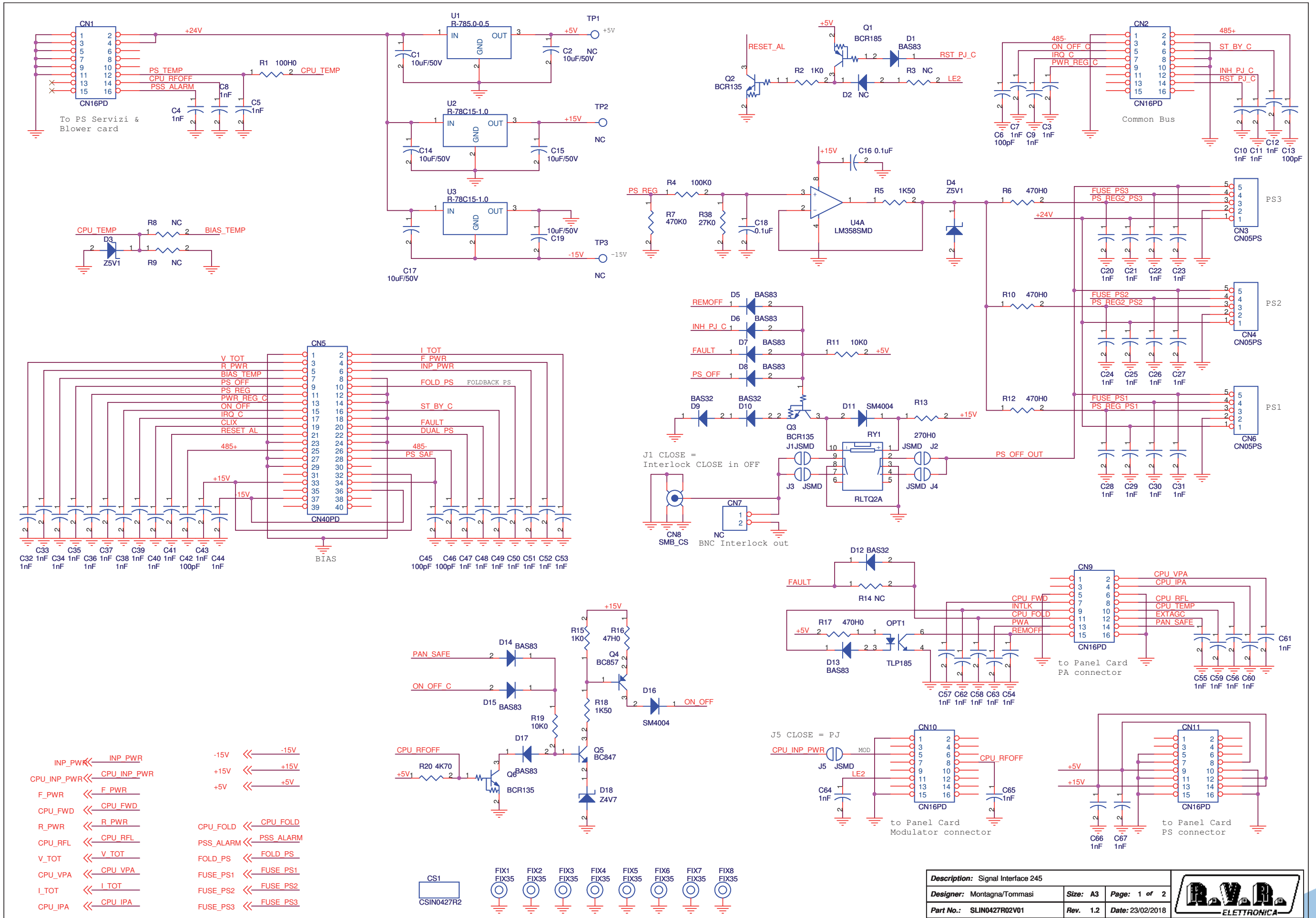
Item	Quantity	Reference	Part
37	3	U2, U4, U6	40106
38	2	U5, U3	ULN2004A
39	1	U7	MC68HC908GP32-QFP
40	1	U8	74HC273
41	1	U9	74HC574
42	1	U10	TLV5625
43	1	U11	74HC244
44	1	U12	SN75176AP
45	1	U13	MAX1112
46	1	U14	74HC139
47	1	U15	25C080
48	1	Y1	32.768 KHz



PRODUCT NAME : PJ5000U-K	PART NAME : SIGNAL INTERFACE CARD
DESIGNER : MONTAGNA / TOMMASI	DATE : 23/02/18
ARCHIVING : "RVRUT" SERVER, "RILASCIATI" FOLDER	REVISION : 1.2
	SCALE : 1:1
	SIZE : A4
	PAGE : 1
	DI : 1
	DOCUMENT CODE : SLIN0427R02V01

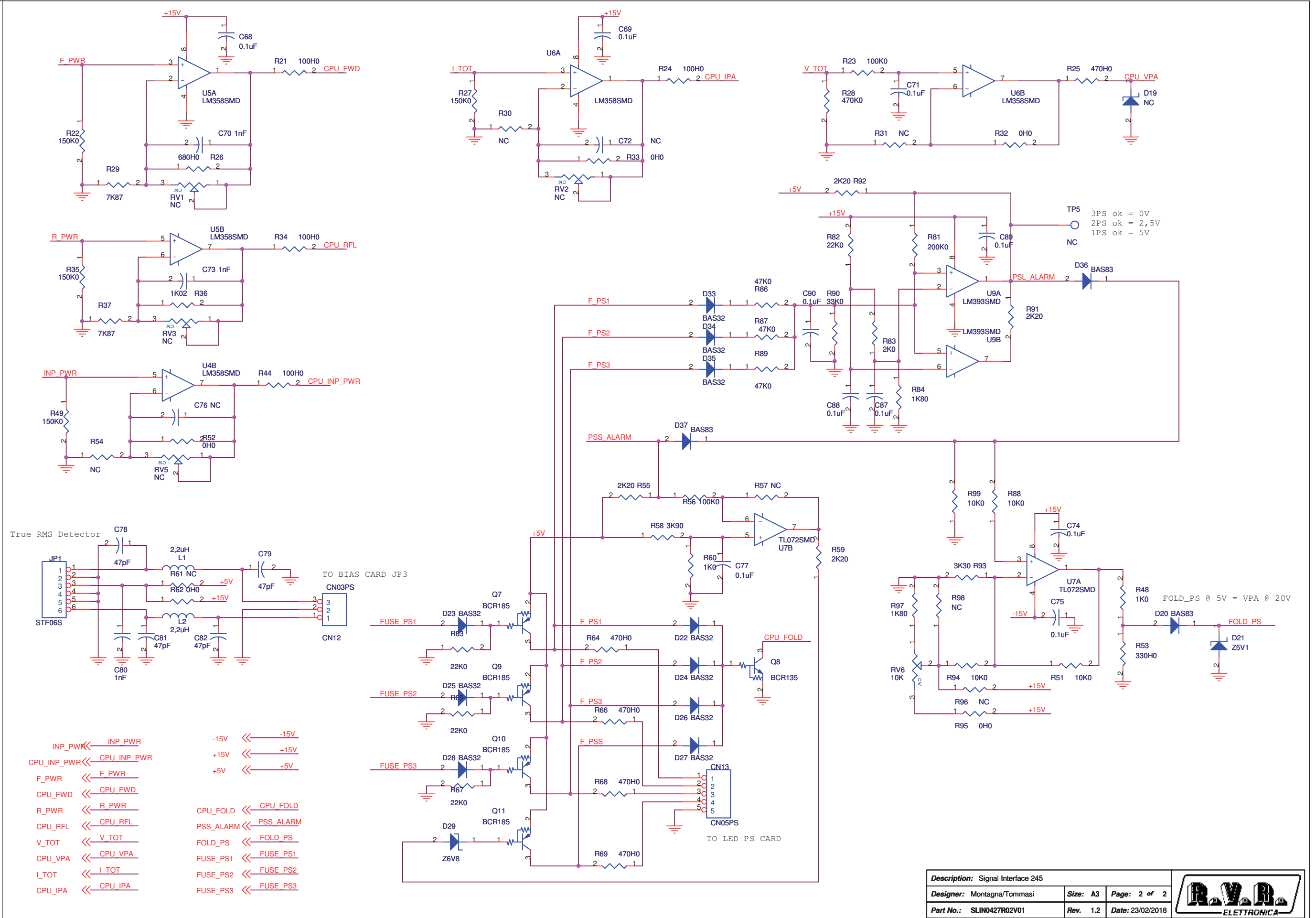


SLIN0427R02V01



- INP\_PWR ← INP\_PWR      -15V ← -15V
- CPU\_INP\_PWR ← CPU\_INP\_PWR      +15V ← +15V
- F\_PWR ← F\_PWR      +5V ← +5V
- CPU\_FWD ← CPU\_FWD
- R\_PWR ← R\_PWR      CPU\_FOLD ← CPU\_FOLD
- CPU\_RFL ← CPU\_RFL      PSS\_ALARM ← PSS\_ALARM
- V\_TOT ← V\_TOT      FOLD\_PS ← FOLD\_PS
- CPU\_VPA ← CPU\_VPA      FUSE\_PS1 ← FUSE\_PS1
- I\_TOT ← I\_TOT      FUSE\_PS2 ← FUSE\_PS2
- CPU\_IPA ← CPU\_IPA      FUSE\_PS3 ← FUSE\_PS3

<b>Description:</b> Signal Interface 245			
<b>Designer:</b> Montagna/Tommasi	<b>Size:</b> A3	<b>Page:</b> 1 of 2	
<b>Part No.:</b> SLIN0427R02V01	<b>Rev.:</b> 1.2	<b>Date:</b> 23/02/2018	



Description: Signal Interface 245			
Designer: Montagna/Tommasi	Size: A3	Page: 2 of 2	
Part No.: SLIN0427R02V01	Rev. 1.2	Date: 23/02/2018	

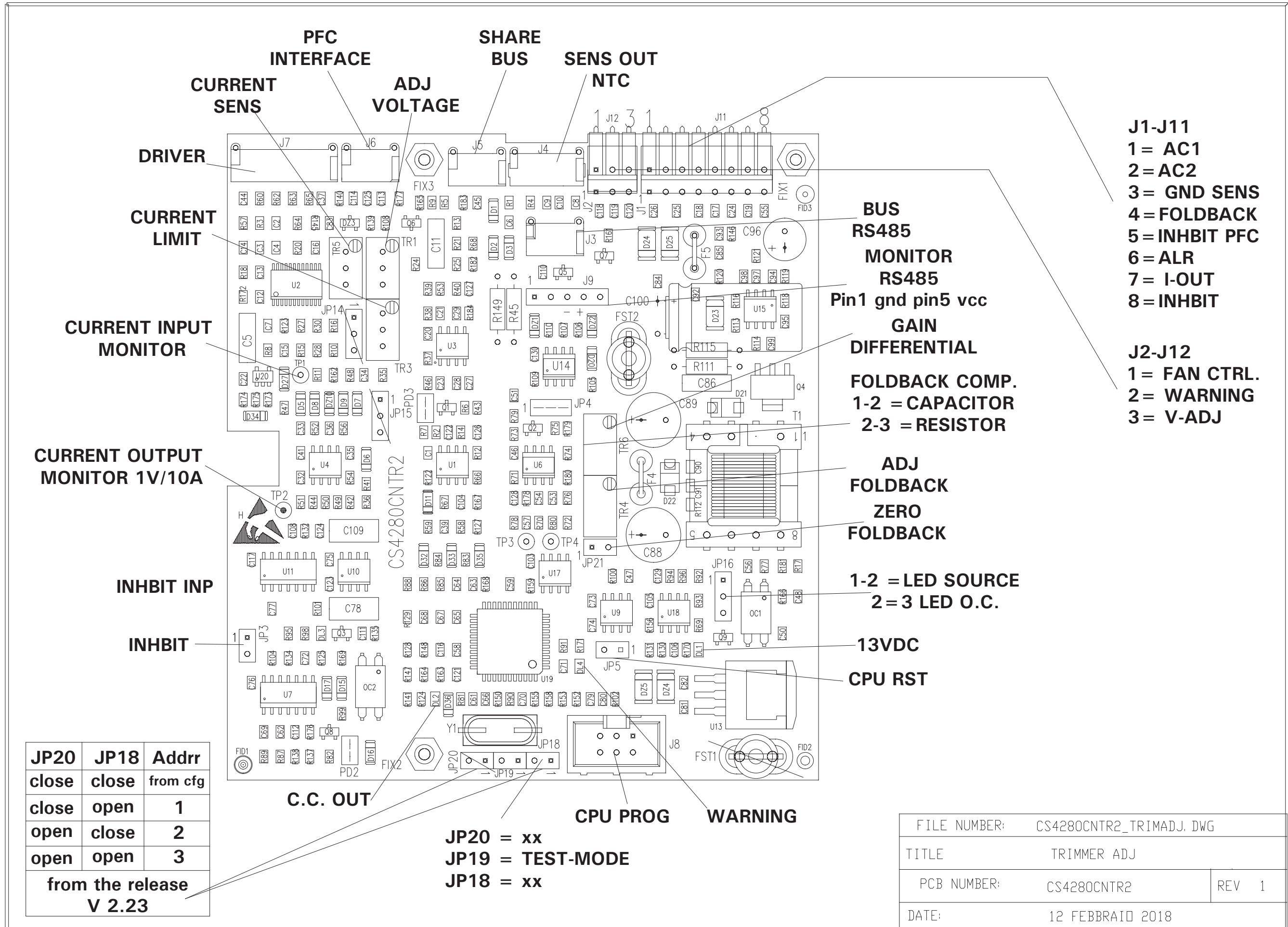


## SLIN0427R02V01

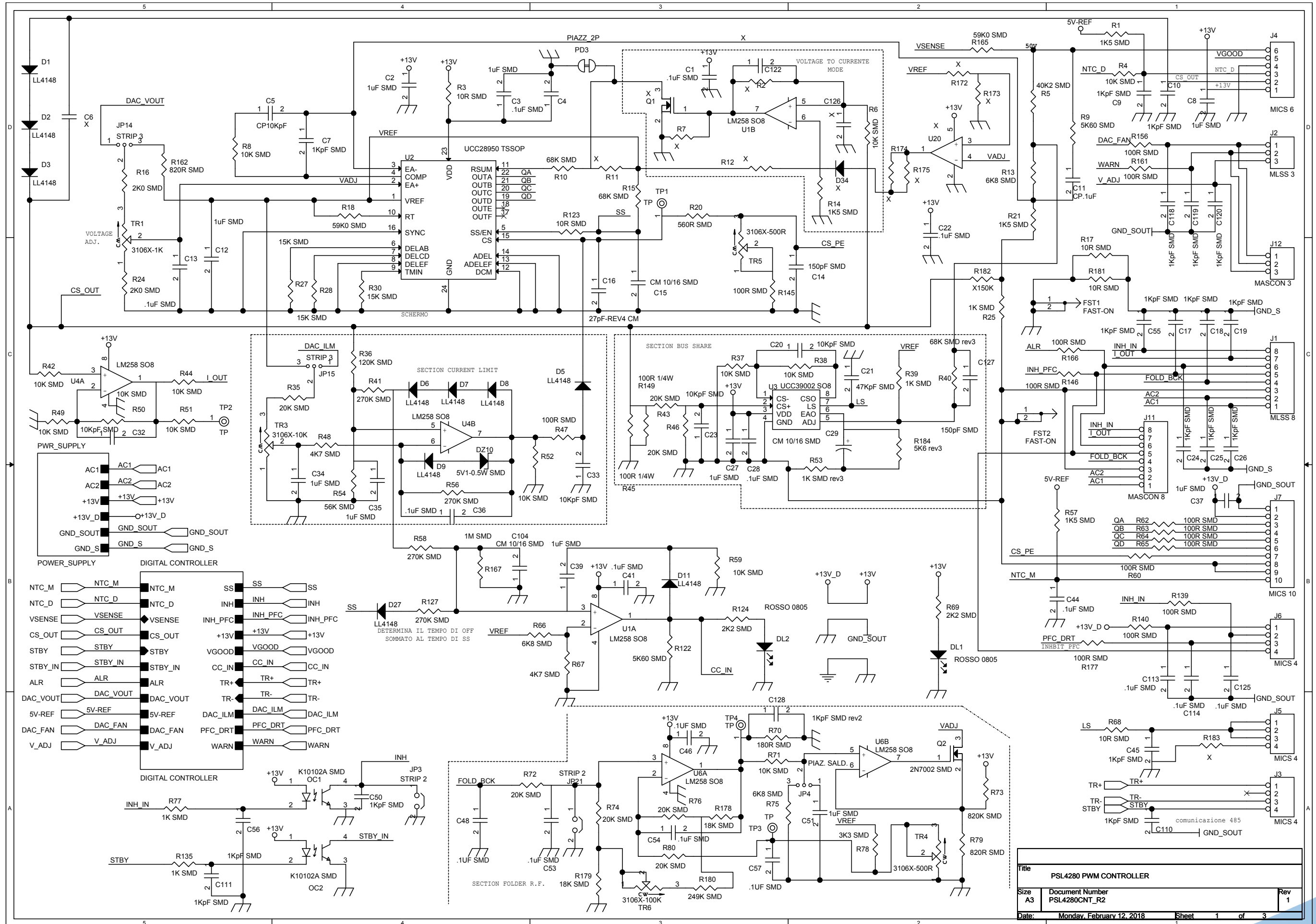
Signal Interface 245 Revised: 23/02/2018  
 SLIN0427R02V01 Revision: 1.2  
 Montagna/Tommasi

Item	Quantity	Reference	Part	Description
1	5	CN1, CN2, CN9, CN10, CN11	CN16PD	Conn.M.C.S.Dritto 16P alette.
2	4	CN3, CN4, CN6, CN13	CN05PS	Conn. 5 poli Mascon
3	1	CN5	CN40PD	Conn.M.C.S.Dritto 40P
4	1	CN7	NC	Conn. 2 poli Mascon
5	1	CN8	SMB_CS	Conn. SMB cs
6	1	CN12	CN03PS	Conn. 3 poli Mascon
7	1	CS1	CSIN0427R2	Circuito stampato
8	6	C1, C2, C14, C15, C17, C19	10uF/50V	Cond. SMD 1210
9	57	C3, C4, C5, C7, C8, C9, C10, C11, C12, C20, C21, C22, C23, C24, C25, C26, C27, C28, C29, C30, C31, C32, C33, C34, C35, C36, C37, C38, C39, C40, C41, C43, C44, C47, C48, C49, C50, C51, C52, C53, C54, C55, C56, C57, C58, C59, C60, C61, C62, C63, C64, C65, C66, C67, C70, C73, C80	1nF	Cond. SMD 0805
10	5	C6, C13, C42, C45, C46	100pF	Cond. SMD 0805
11	12	C16, C18, C68, C69, C71, C74, C75, C77, C87, C88, C89, C90	0.1uF	Cond. SMD 0805
12	2	C72, C76	NC	Cond. SMD 0805
13	4	C78, C79, C81, C82	47pF	Cond. SMD 0805
14	12	D1, D5, D6, D7, D8, D13, D14, D15, D17, D20, D36, D37	BAS83	MINIMELF SMD Diode
15	1	D2	NC	MINIMELF SMD Diode
16	3	D3, D4, D21	Z5V1	MINIMELF SMD Zener Diode
17	13	D9, D10, D12, D22, D23, D24, D25, D26, D27, D28, D33, D34, D35	BAS32	MINIMELF SMD Diode
18	2	D11, D16	SM4004	Diodo SMD cont. SMA
19	1	D18	Z4V7	MINIMELF SMD Zener Diode
20	1	D19	NC	MINIMELF SMD Zener Diode
21	1	D29	Z6V8	MINIMELF SMD Zener Diode
22	8	FIX1, FIX2, FIX3, FIX4, FIX5, FIX6, FIX7, FIX8	FIX35	Foro fissaggio 3.5mm
23	1	JP1	STF06S	Male strip 6 pin
24	5	J1, J2, J3, J4, J5	JSMD	Pad SMD a saldare
25	2	L1, L2	2,2uH	Induttanza SMD HQ 3225 (1210)
26	1	OPT1	TLP185	Optocoupler SMD SO6
27	5	Q1, Q7, Q9, Q10, Q11	BCR185	Trans./Res. PNP SOT23
28	4	Q2, Q3, Q6, Q8	BCR135	Trans./Res. NPN SOT23
29	1	Q4	BC857	Trans. PNP SOT23
30	1	Q5	BC847	Trans. NPN SOT23
31	4	RV1, RV2, RV3, RV5	NC	Trimmer Rg V 3269W SMD
32	1	RV6	10K	Trimmer Rg V 3269W SMD
33	1	RY1	RLTQ2A	Rele' TQ2
34	5	R1, R21, R24, R34, R44	100H0	Res. SMD 0805 1%
35	4	R2, R15, R48, R60	1K0	Res. SMD 0805 1%
36	11	R3, R8, R9, R14, R30, R31, R54, R57, R61, R96, R98	NC	Res. SMD 0805 1%
37	3	R4, R23, R56	100K0	Res. SMD 0805 1%
38	2	R5, R18	1K50	Res. SMD 0805 1%
39	9	R6, R10, R12, R17, R25, R64, R66, R68, R69	470H0	Res. SMD 0805 1%
40	2	R7, R28	470K0	Res. SMD 0805 1%
41	6	R11, R19, R51, R88, R94, R99	10K0	Res. SMD 0805 1%
42	1	R13	270H0	Res. SMD 0805 1%
43	1	R16	47H0	Res. SMD 0805 1%
44	1	R20	4K70	Res. SMD 0805 1%
45	4	R22, R27, R35, R49	150K0	Res. SMD 0805 1%
46	1	R26	680H0	Res. SMD 0805 1%
47	2	R29, R37	7K87	Res. SMD 0805 1%
48	5	R32, R33, R52, R62, R95	0H0	Res. SMD 0805 1%
49	1	R36	1K02	Res. SMD 0805 1%
50	1	R38	27K0	Res. SMD 0805 1%
51	1	R53	330H0	Res. SMD 0805 1%
52	4	R55, R59, R91, R92	2K20	Res. SMD 0805 1%
53	1	R58	3K90	Res. SMD 0805 1%
54	4	R63, R65, R67, R82	22K0	Res. SMD 0805 1%
55	1	R81	200K0	Res. SMD 0805 1%
56	1	R83	2K0	Res. SMD 0805 1%
57	2	R84, R97	1K80	Res. SMD 0805 1%
58	3	R86, R87, R89	47K0	Res. SMD 0805 1%
59	1	R90	33K0	Res. SMD 0805 1%
60	1	R93	3K30	Res. SMD 0805 1%

Item	Quantity	Reference	Part	Description
61	4	TP1, TP2, TP3, TP5	NC	Test point
62	1	U1	R-785.0-0.5	Switching SIP3 regulator
63	2	U2, U3	R-78C15-1.0	Switching SIP3 regulator
64	3	U4, U5, U6	LM358SMD	Dual Op. SMD SO8
65	1	U7	TL072SMD	Dual Op. SMD SO8
66	1	U9	LM393SMD	Dual Comp. SMD SO8

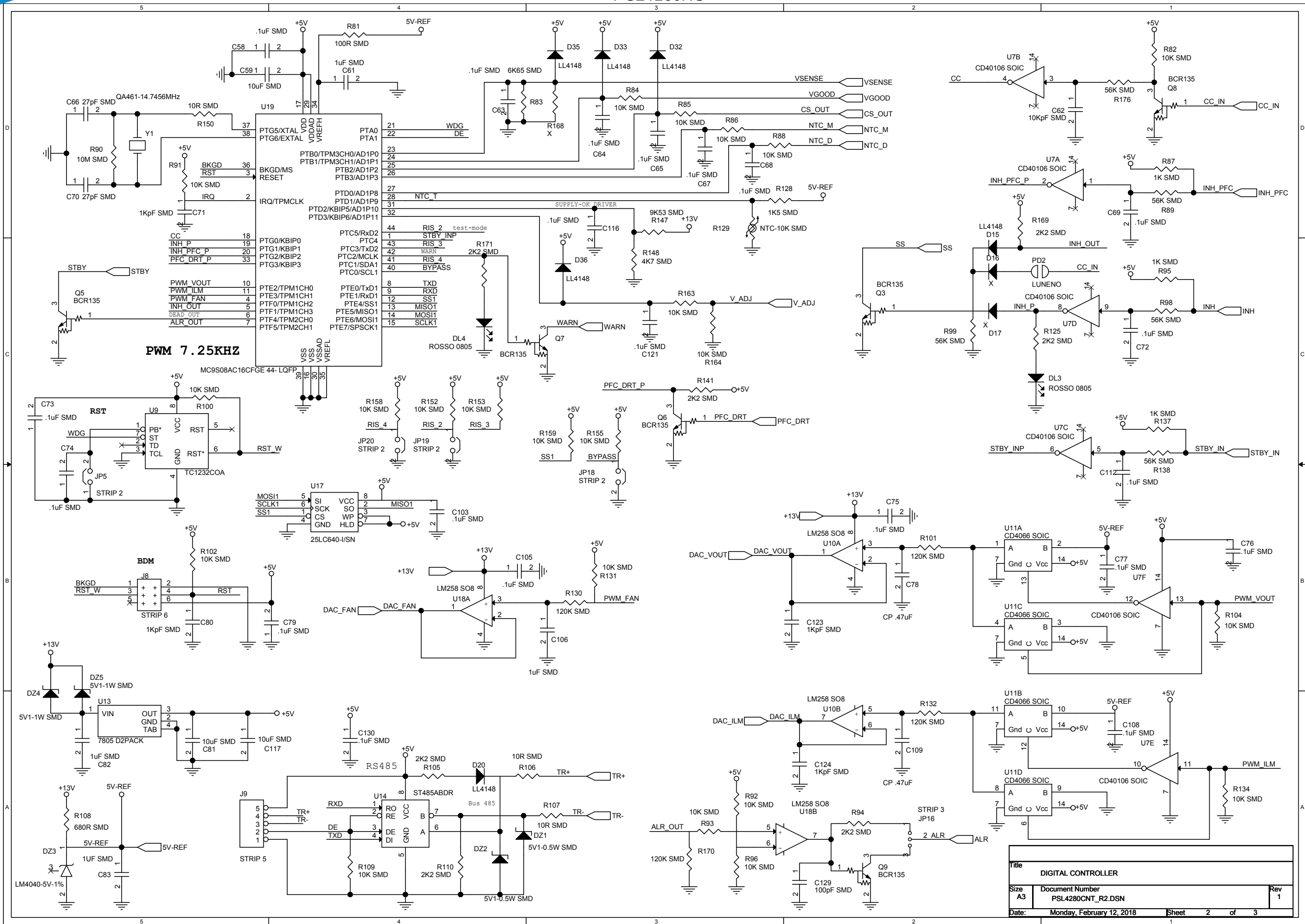


PSL4280HS



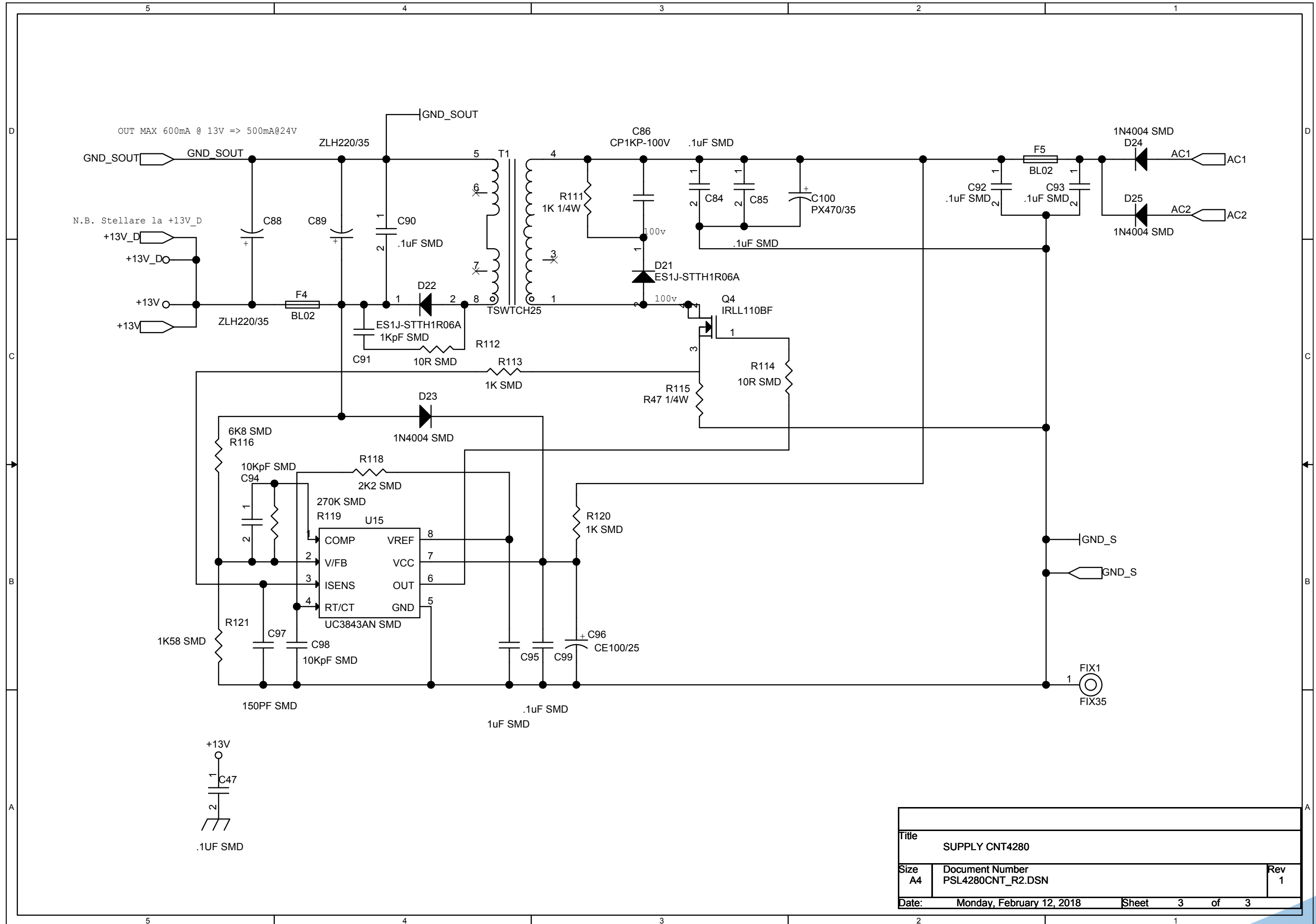
Title		
PSL4280 PWM CONTROLLER		
Size	Document Number	Rev
A3	PSL4280CNT_R2	1
Date:	Monday, February 12, 2018	Sheet 1 of 3

PSL4280HS



Title		
DIGITAL CONTROLLER		
Size	Document Number	Rev
A3	PSL4280CNT_R2.DSN	1
Date:	Monday, February 12, 2018	Sheet 2 of 3

PSL4280HS



PSL4280HS

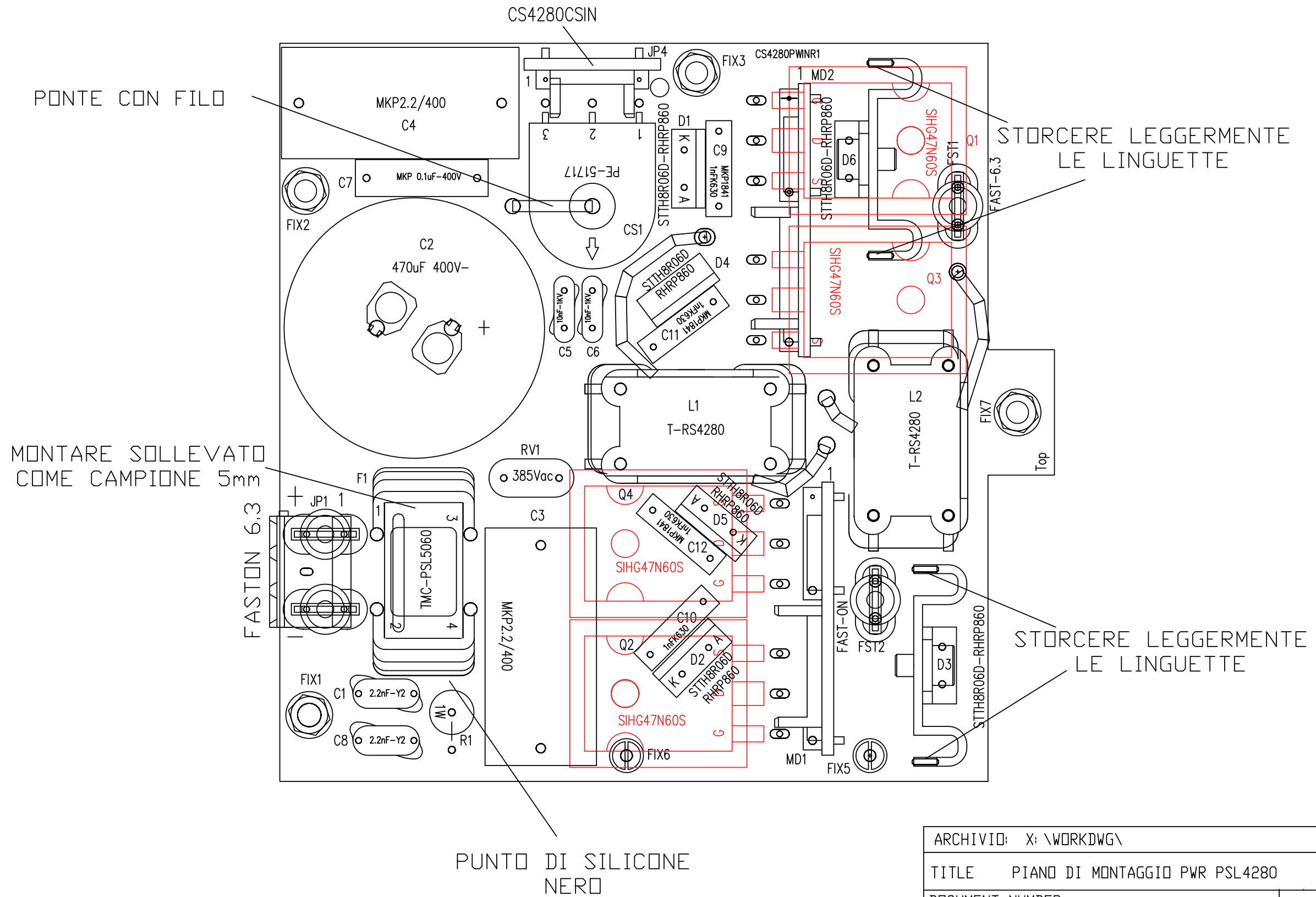
PSL4280 PWM CONTROLLER Revised: Thursday, February 22, 2018  
 PSL4280CNT\_R2 Revision: 1

Item	Quantity	Reference	Part
1	44	C1, C4, C13, C22, C28, C36, C41, C44, C46, C47, C48, C53, C54, C57, C58, C63, C64, C65, C67, C68, C69, C72, C73, C74, C75, C76, C77, C79, C84, C85, C90, C92, C93, C99, C103, C105, C108, C112, C113, C114, C116, C121, C125, C130	.1uF SMD
2	15	C2, C3, C8, C12, C27, C34, C35, C37, C39, C51, C61, C82, C83, C95, C106	1uF SMD
3	1	C5	CP10KpF
4	18	Q1, R2, C6, R7, R11, R12, D16, D17, U20, D34, C122, C126, R168, R172, R173, R174, R175, R183	X
5	23	C7, C9, C10, C17, C18, C19, C24, C25, C26, C45, C50, C55, C56, C71, C80, C91, C110, C111, C118, C119, C120, C123, C124	1KpF SMD
6	1	C11	CP.1uF
7	3	C14, C97, C127	150pF SMD
8	3	C15, C29, C104	CM 10/16 SMD
9	1	C16	27pF-REV4 CM
10	7	C20, C23, C32, C33, C62, C94, C98	10KpF SMD
11	1	C21	47KpF SMD
12	3	C59, C81, C117	10uF SMD
13	2	C66, C70	27pF SMD
14	1	C78	CP .47uF
15	1	C86	CP1KP-100V
16	2	C88, C89	ZLH220/35
17	1	C96	CE100/25
18	1	C100	PX470/35
19	1	C109	CP .47uF
20	1	C128	1KpF SMD rev2
21	1	C129	100pF SMD
22	4	DL1, DL2, DL3, DL4	ROSSO 0805
23	3	DZ1, DZ2, DZ10	5V1-0.5W SMD
24	1	DZ3	LM4040-5V-1%
25	2	DZ4, DZ5	5V1-1W SMD
26	16	D1, D2, D3, D5, D6, D7, D8, D9, D11, D15, D20, D27, D32, D33, D35, D36	LL4148
27	2	D21, D22	ES1J-STTH1R06A
28	3	D23, D24, D25	1N4004 SMD
29	1	FIX1	FIX35
30	2	FST1, FST2	FAST-ON
31	2	F4, F5	BL02
32	6	JP3, JP5, JP18, JP19, JP20, JP21	STRIP 2
33	1	JP4	PIAZ. SALD.
34	3	JP14, JP15, JP16	STRIP 3
35	1	J1	MLSS 8
36	1	J2	MLSS 3
37	3	J3, J5, J6	MICS 4
38	1	J4	MICS 6
39	1	J7	MICS 10
40	1	J8	STRIP 6
41	1	J9	STRIP 5
42	1	J11	MASCON 8
43	1	J12	MASCON 3
44	2	OC1, OC2	K10102A SMD
45	1	PD2	LUNENO
46	1	PD3	PIAZZ_2P
47	1	Q2	2N7002 SMD
48	6	Q3, Q5, Q6, Q7, Q8, Q9	BCR135
49	1	Q4	IRLL110BF
50	5	R1, R14, R21, R57, R128	1K5 SMD
51	10	R3, R17, R68, R106, R107, R112, R114, R123, R150, R181	10R SMD
52	35	R4, R6, R8, R37, R38, R42, R44, R49, R50, R51, R52, R59, R71, R82, R84, R85, R86, R88, R91, R92, R93, R96, R100, R102, R104, R109, R131, R134, R152, R153, R155, R158, R159, R163, R164	10K SMD
53	1	R5	40K2 SMD
54	2	R9, R122	5K60 SMD

Item	Quantity	Reference	Part
55	2	R10, R15	68K SMD
56	4	R13, R66, R75, R116	6K8 SMD
57	2	R16, R24	2K0 SMD
58	2	R18, R165	59K0 SMD
59	1	R20	560R SMD
60	9	R25, R39, R77, R87, R95, R113, R120, R135, R137	1K SMD
61	3	R27, R28, R30	15K SMD
62	7	R35, R43, R46, R72, R74, R76, R80	20K SMD
63	5	R36, R101, R130, R132, R170	120K SMD
64	1	R40	68K SMD rev3
65	5	R41, R56, R58, R119, R127	270K SMD
66	2	R45, R149	100R 1/4W
67	15	R47, R60, R62, R63, R64, R65, R81, R139, R140, R145, R146, R156, R161, R166, R177	100R SMD
68	3	R48, R67, R148	4K7 SMD
69	1	R53	1K SMD rev3
70	6	R54, R89, R98, R99, R138, R176	56K SMD
71	10	R69, R94, R105, R110, R118, R124, R125, R141, R169, R171	2K2 SMD
72	1	R70	180R SMD
73	1	R73	820K SMD
74	1	R78	3K3 SMD
75	2	R79, R162	820R SMD
76	1	R83	6K65 SMD
77	1	R90	10M SMD
78	1	R108	680R SMD
79	1	R111	1K 1/4W
80	1	R115	R47 1/4W
81	1	R121	1K58 SMD
82	1	R129	NTC-10K SMD
83	1	R147	9K53 SMD
84	1	R167	1M SMD
85	2	R178, R179	18K SMD
86	1	R180	249K SMD
87	1	R182	X150K
88	1	R184	5K6 rev3
89	4	TP1, TP2, TP3, TP4	TP
90	1	TR1	3106X-1K
91	1	TR3	3106X-10K
92	2	TR4, TR5	3106X-500R
93	1	TR6	3106X-100K
94	1	T1	TSWITCH25
95	5	U1, U4, U6, U10, U18	LM258 SO8
96	1	U2	UCC28950 TSSOP
97	1	U3	UCC39002 SO8
98	1	U7	CD40106 SOIC
99	1	U9	TC1232COA
100	1	U11	CD4066 SOIC
101	1	U13	7805 D2PACK
102	1	U14	ST485ABDR
103	1	U15	UC3843AN SMD
104	1	U17	25LC640-I/SN
105	1	U19	MC9508AC16CFGE 44- LQFP
106	1	Y1	QA461-14.7456MHz

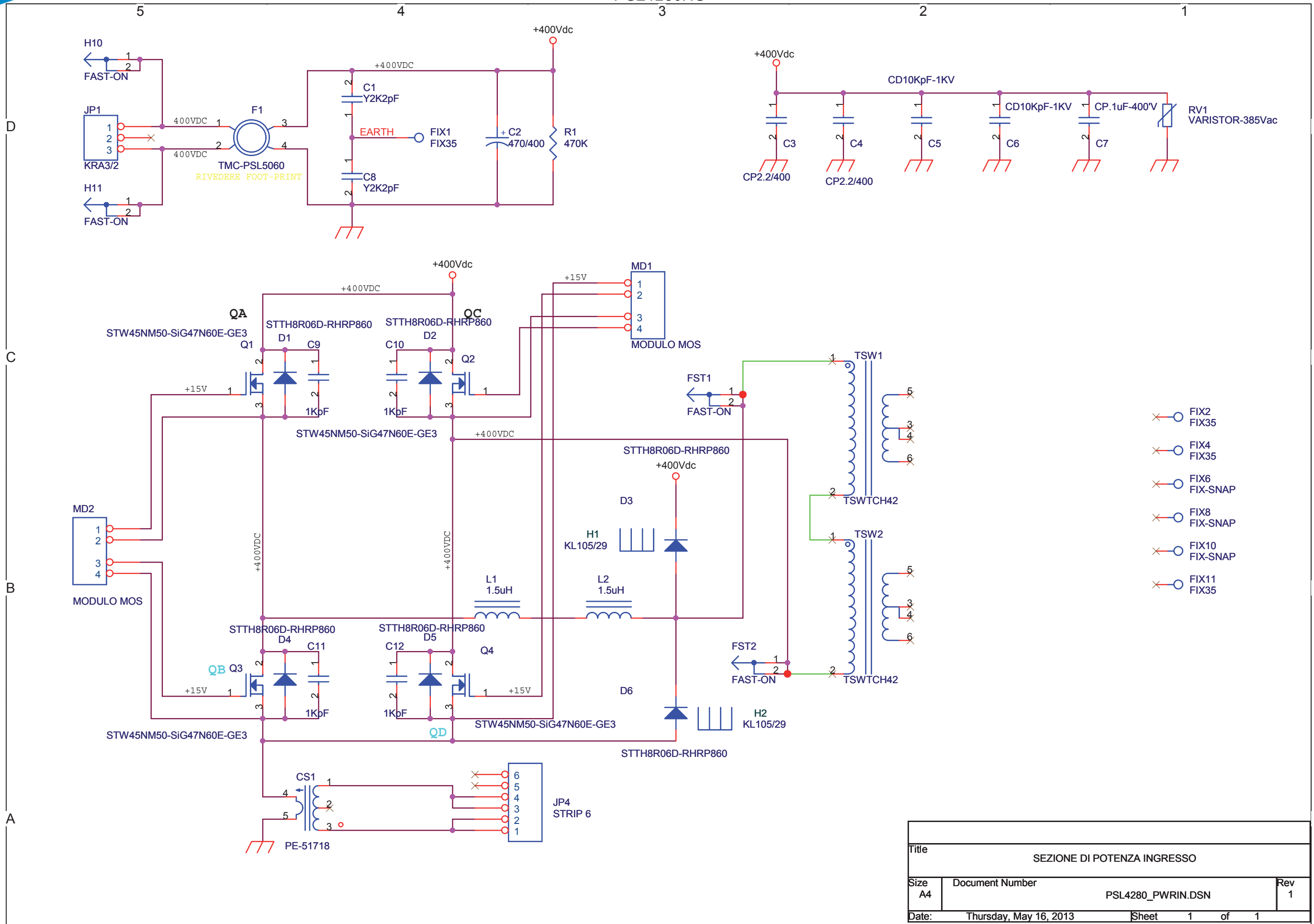
PSL4280HS

# PIANO DI MONTAGGIO POWER INPUT PSL4280 R1



ARCHIVIO: X:\WORKDWG\	
TITLE PIANO DI MONTAGGIO PWR PSL4280	
DOCUMENT NUMBER CS4280PWRIN_R1_MNT. DWG	REV 1
DATE:	13 GIUGNO 2013

PSL4280HS



Title			SEZIONE DI POTENZA INGRESSO		
Size	Document Number	PSL4280_PWRIN.DSN		Rev	1
A4	Date: Thursday, May 16, 2013			Sheet	1 of 1

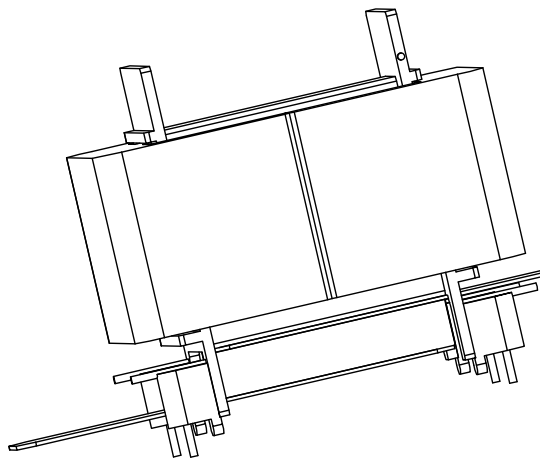
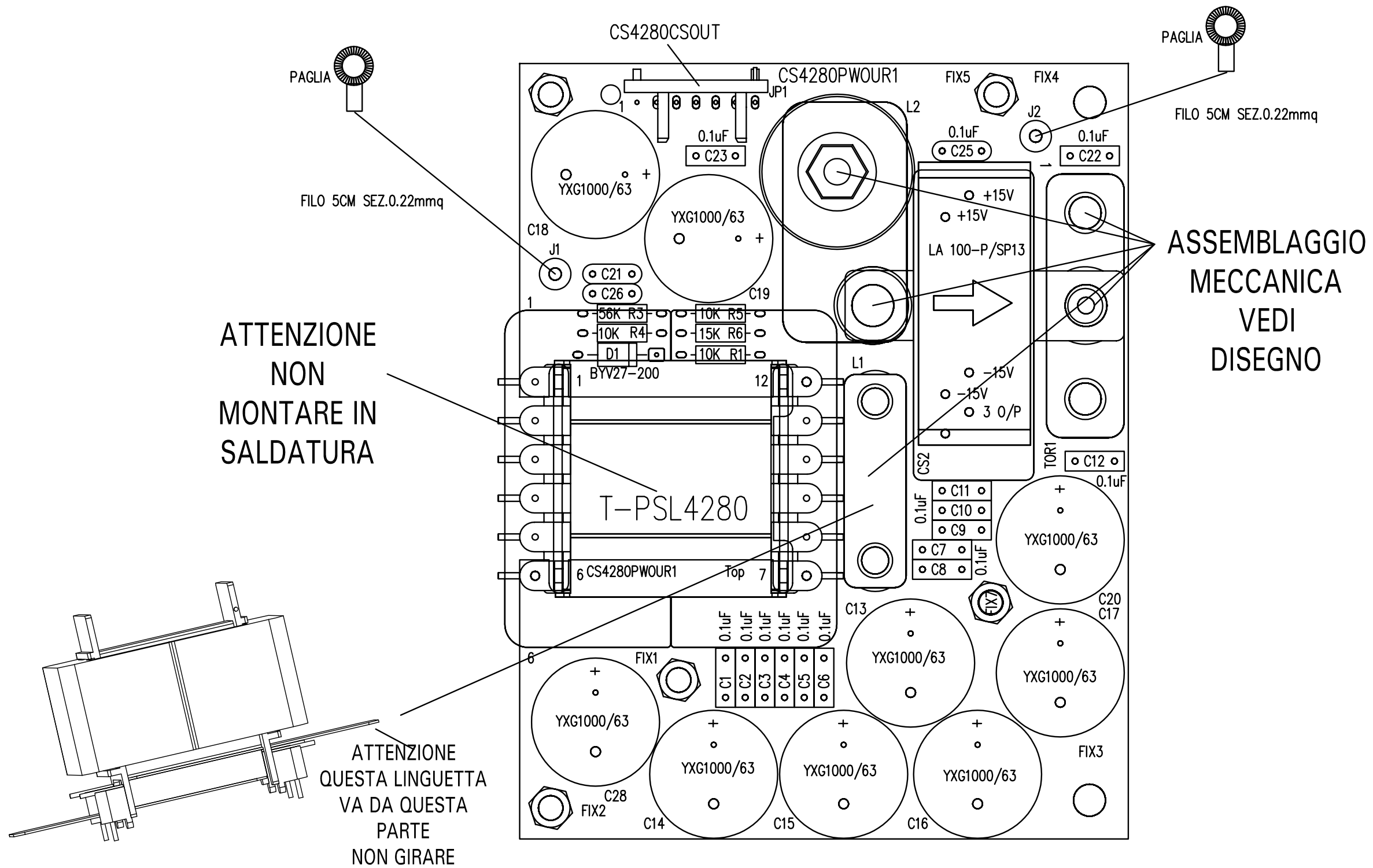


## PSL4280HS

SEZIONE DI POTENZA INGRESSO Revised: Thursday, May 16, 2013  
 PSL4280\_PWRIN.DSN Revision: 1

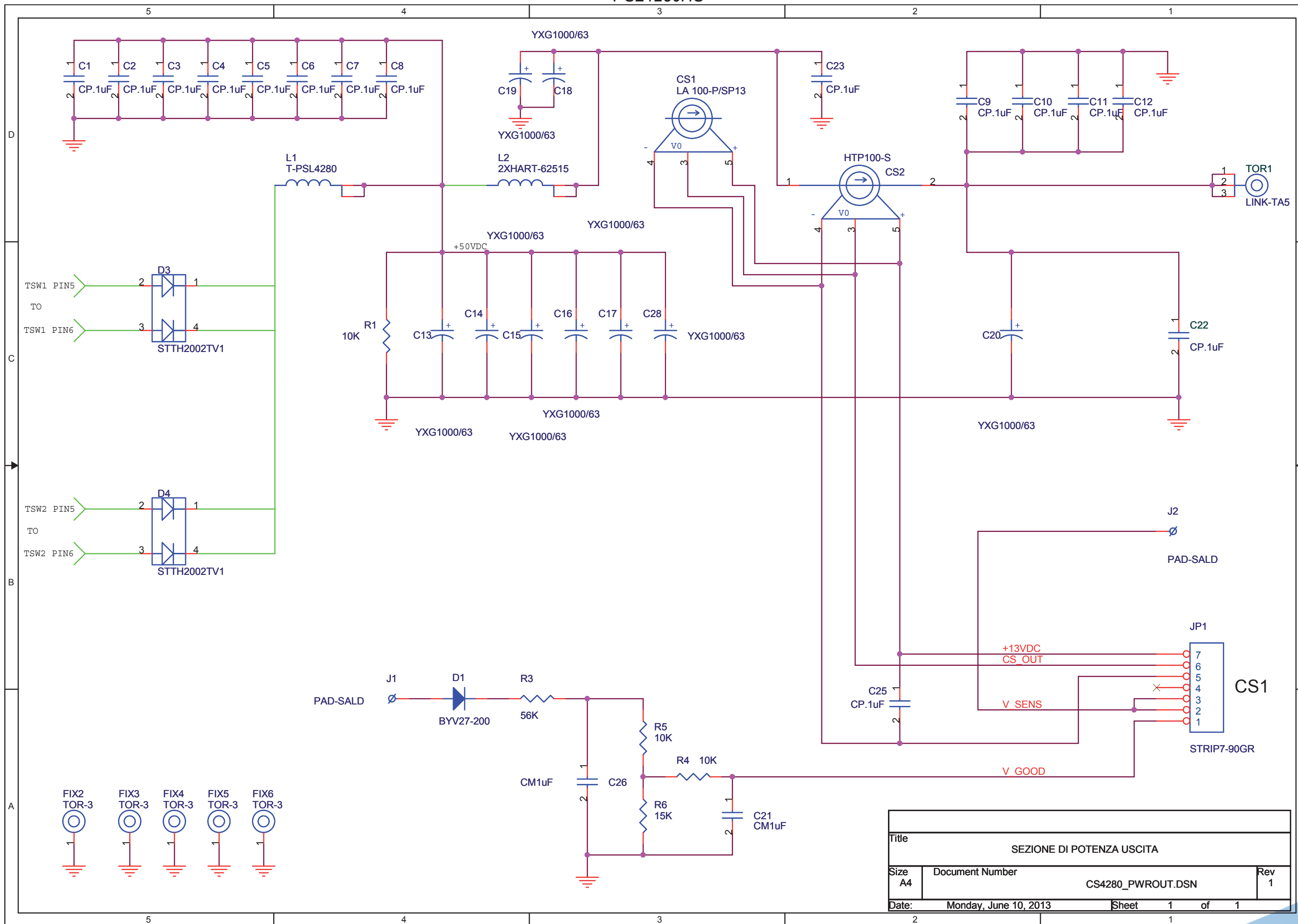
Item	Quantity	Reference	Part
1	1	CS1	PE-51718
2	2	C8,C1	Y2K2pF
3	1	C2	470/400
4	2	C4,C3	CP2.2/400
5	2	C6,C5	CD10KpF-1KV
6	1	C7	CP.1uF-400V
7	4	C9,C10,C11,C12	1KpF
8	6	D1,D2,D3,D4,D5,D6	STTH8R06D-RHRP860
9	4	FIX1,FIX2,FIX4,FIX11	FIX35
10	3	FIX6,FIX8,FIX10	FIX-SNAP
11	4	FST1,FST2,H10,H11	FAST-ON
12	1	F1	TMC-PSL5060
13	2	H1,H2	KL105/29
14	1	JP1	KRA3/2
15	1	JP4	STRIP 6
16	2	L2,L1	1.5uH
17	2	MD1,MD2	MODULO MOS
18	4	Q1,Q2,Q3,Q4	STW45NM50-SIG47N60E-GE3
19	1	RV1	VARISTOR-385Vac
20	1	R1	470K
21	2	TSW1,TSW2	TSWTCH42

# PIANO DI MONTAGGIO POWER OUT PSL4280 R1



ARCHIVIO: X:\WORKDWG\	
TITLE PIANO DI MONTAGGIO POWER OUT PSL4280	
DOCUMENT NUMBER CS4280PWRQUT_R1_MNT. DWG	REV 1
DATE:	10 GIUGNO 2013

PSL4280HS



Title			SEZIONE DI POTENZA USCITA		
Size	Document Number			Rev	
A4	CS4280_PWRROUT.DSN			1	
Date:	Monday, June 10, 2013	Sheet	1	of	1

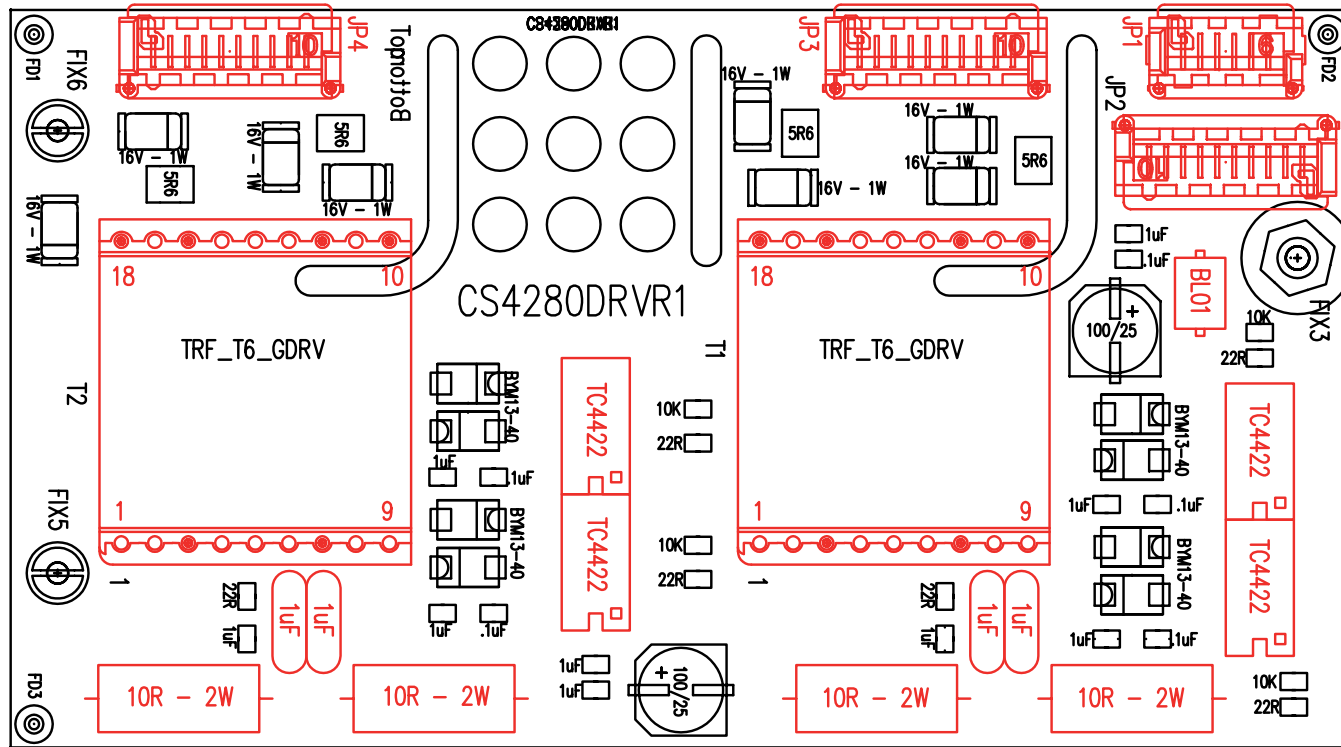
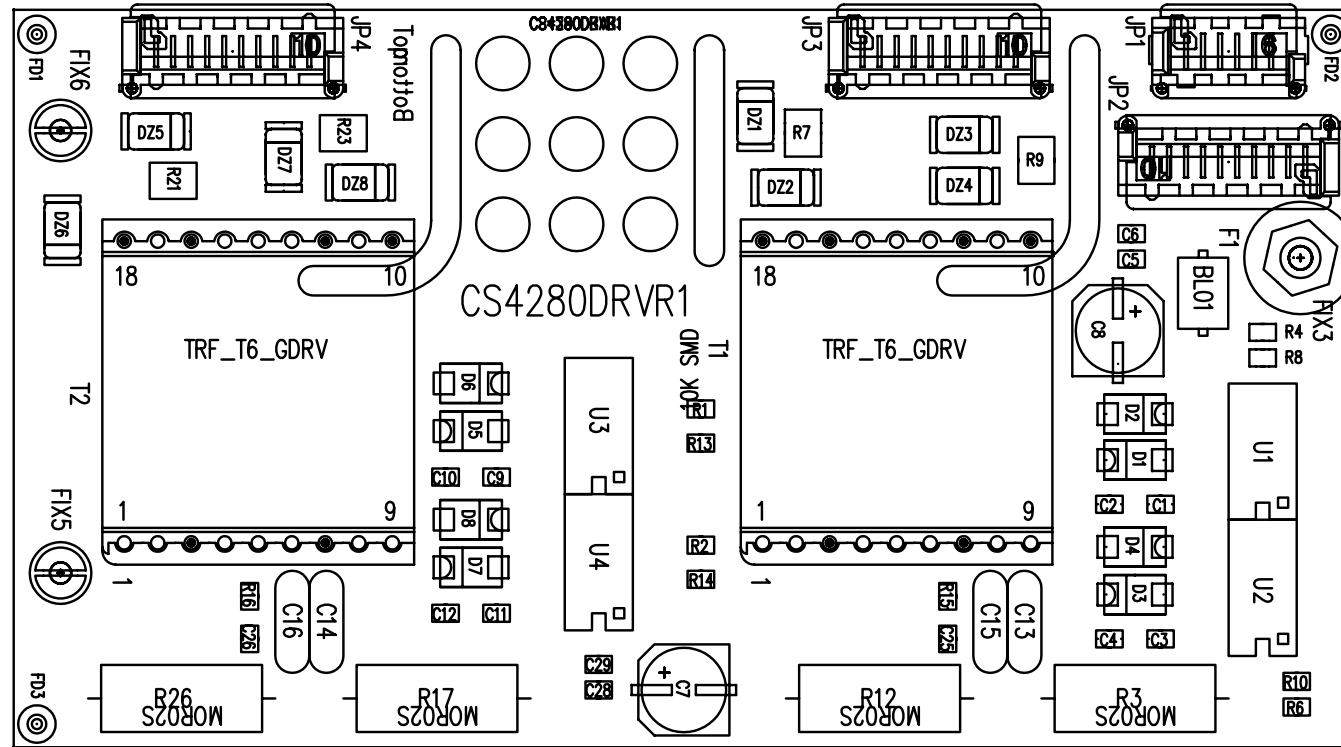
PSL4280HS

CONNECT TA NTC OUT Revised: Monday, June 10, 2013  
 CS4280CSOUR0.DSN Revision: 1

Item	Quantity	Reference	Part
1	2	C1,C2	CM.1uF
2	1	JP1	MICS6
3	1	JP2	STRIP7-90GR
4	1	J1	JUMP 2P
5	1	R1	10R-1/4W

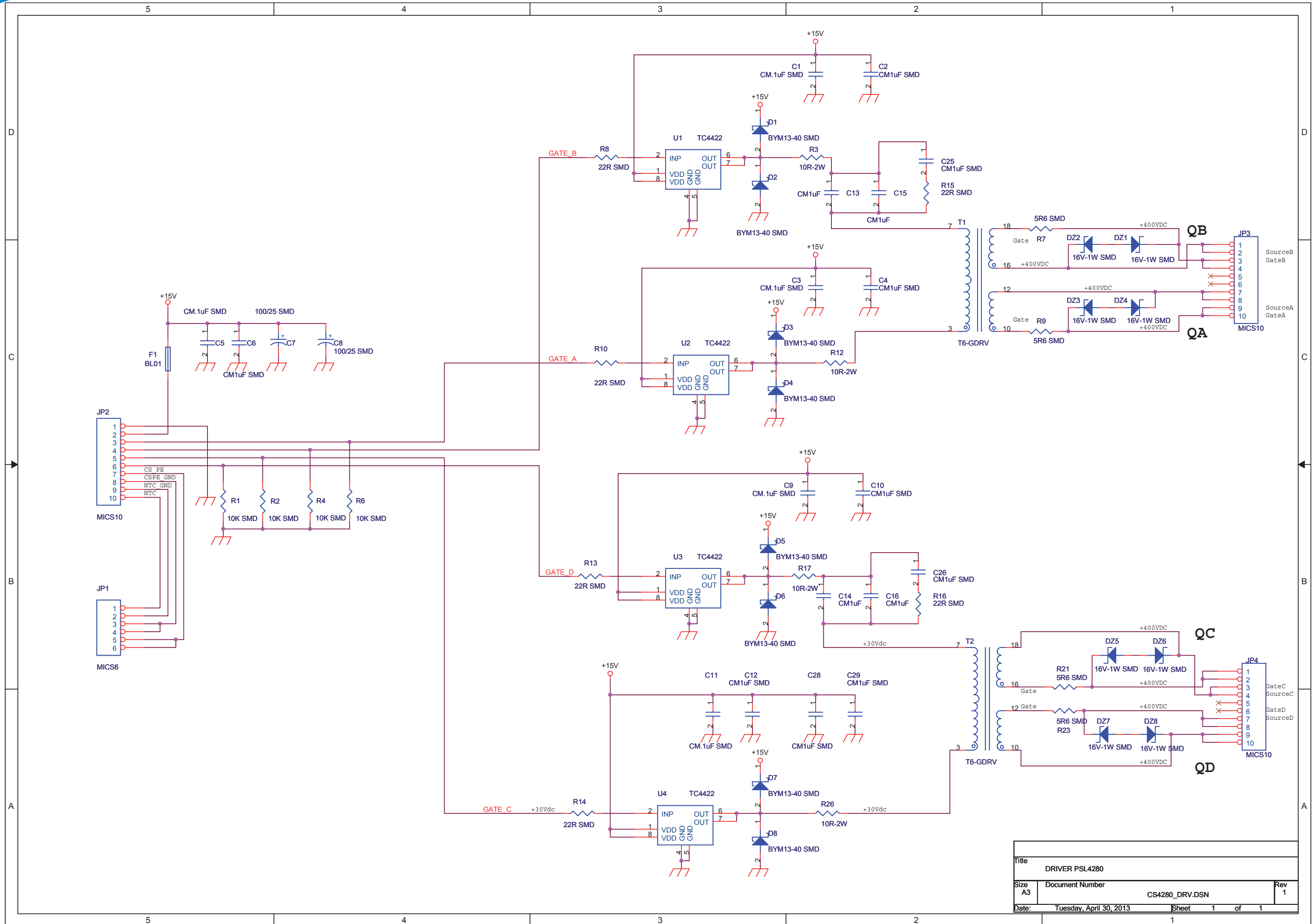
PSL4280HS

# PIANO DI MONTAGGIO DRV PSL4280 R1



ARCHIVIO: X:\WORKDWG\	
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DOCUMENT NUMBER CS4280DRV_R1_MNT. DWG	REV 1
DATE: 23 GIUGNO 2013	

PSL4280HS



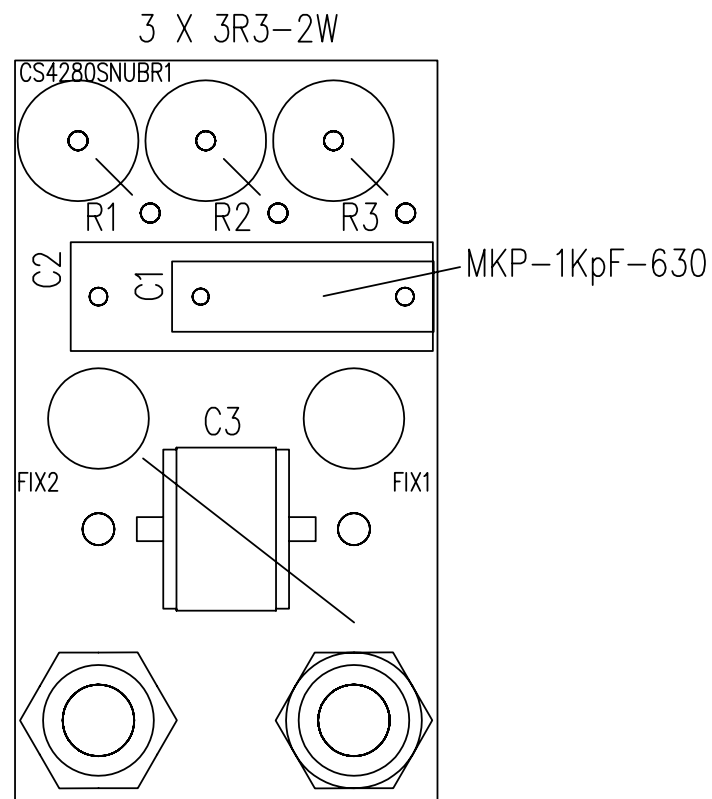
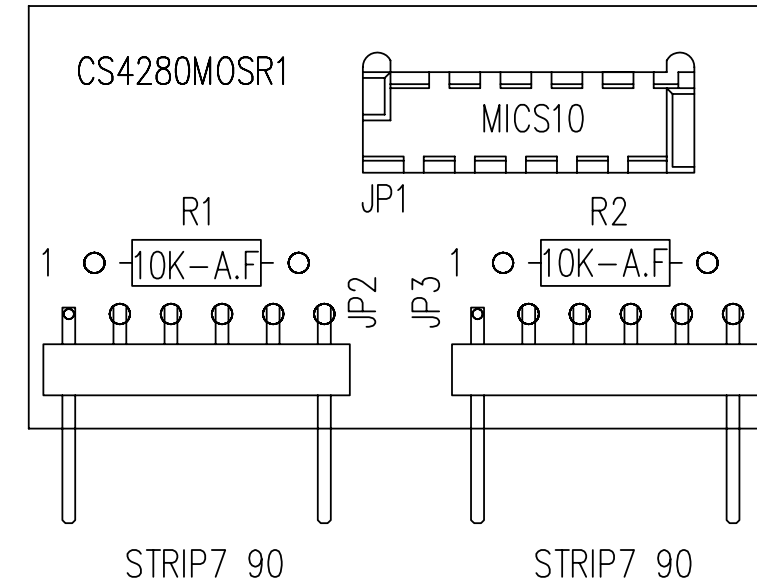
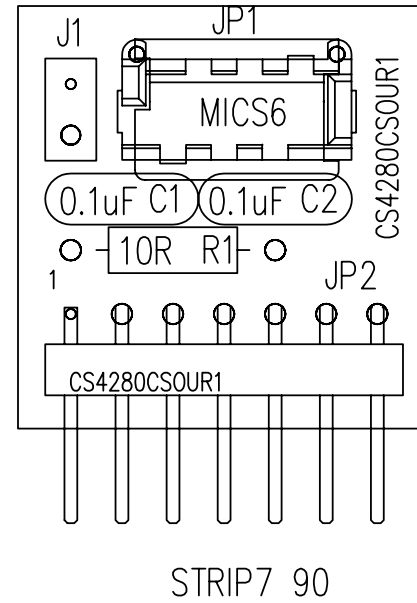
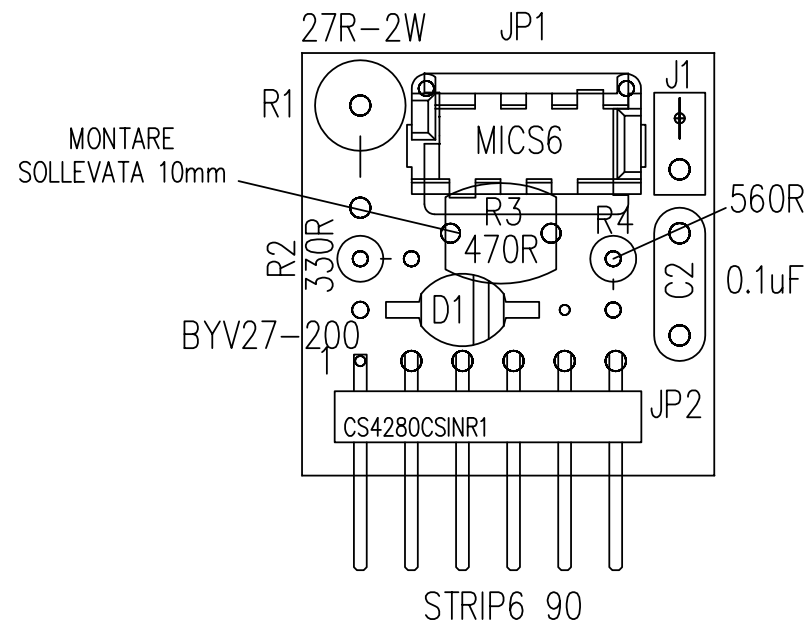
Title		
DRIVER PSL4280		
Size	Document Number	Rev
A3	CS4280_DRV.DSN	1
Date:	Tuesday, April 30, 2013	Sheet 1 of 1

PSL4280HS

DRIVER PSL4280 Revised: Tuesday, April 30, 2013  
 CS4280\_DRV.DSN Revision: 1

Item	Quantity	Reference	Part
1	5	C1,C3,C5,C9,C11	CM.1uF SMD
2	9	C2,C4,C6,C10,C12,C25,C26,C28,C29	CM1uF SMD
3	2	C8,C7	100/25 SMD
4	4	C13,C14,C15,C16	CM1uF
5	8	DZ1,DZ2,DZ3,DZ4,DZ5,DZ6,DZ7,DZ8	16V-1W SMD
6	8	D1,D2,D3,D4,D5,D6,D7,D8	BYM13-40 SMD
7	1	F1	BL01
8	1	JP1	MICS6
9	3	JP2,JP3,JP4	MICS10
10	4	R1,R2,R4,R6	10K SMD
11	4	R3,R12,R17,R26	10R-2W
12	4	R7,R9,R21,R23	5R6 SMD
13	6	R8,R10,R13,R14,R15,R16	22R SMD
14	2	T1,T2	T6-GDRV
15	4	U1,U2,U3,U4	TC4422

# PIANO DI MONTAGGIO CSIN CSOUT MOS SNUB PSL4280 R1



ARCHIVIO: X:\WORKDWG\	
TITLE PIANO DI MONTAGGIO CSIN CSOUT MOSFET SNUBBER PSL4280	
DOCUMENT NUMBER CS4280CSIN_OUT_MOS_R1_SNUB_MNT. DWG	REV 1
DATE:	10 GIUGNO 2013

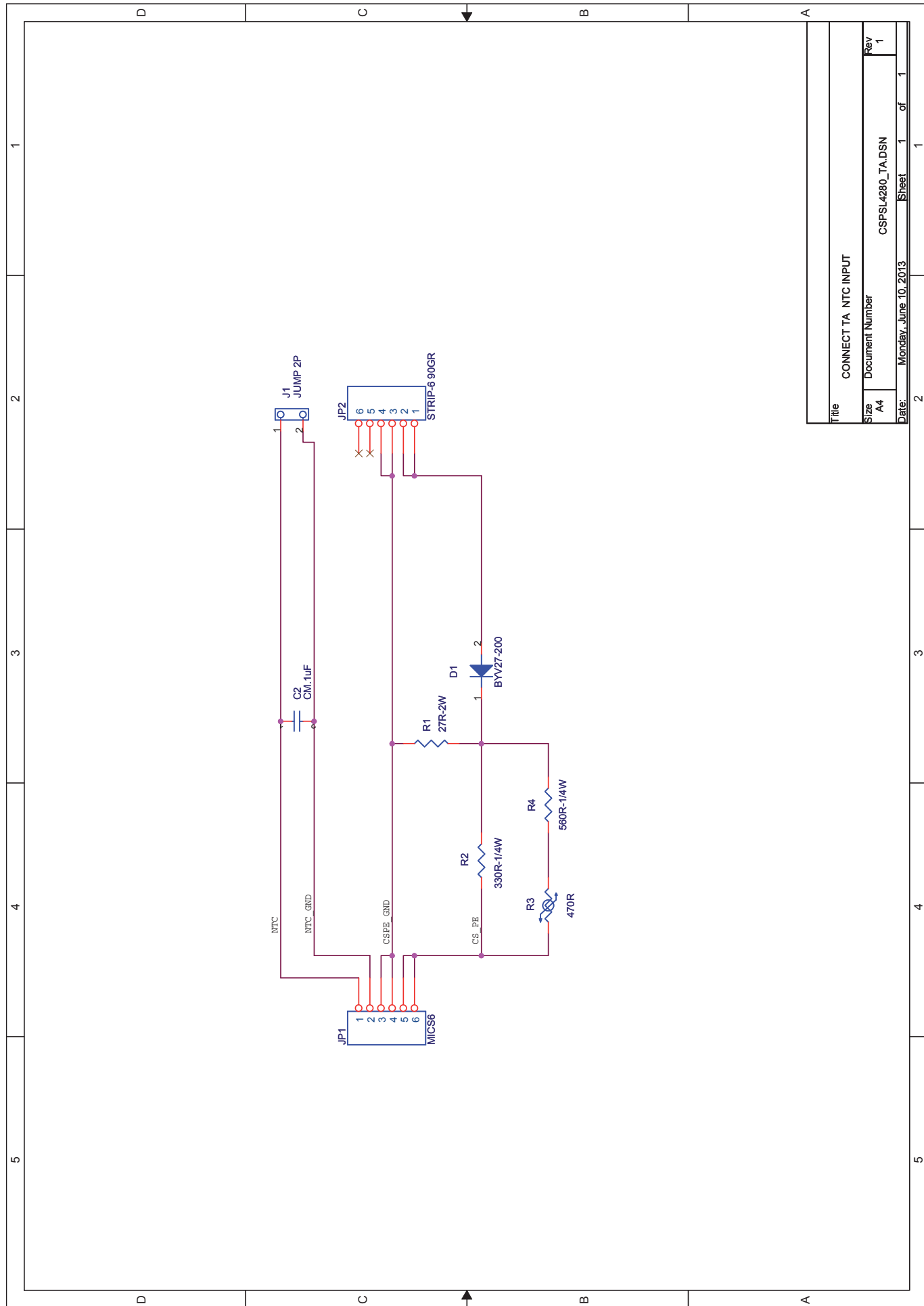


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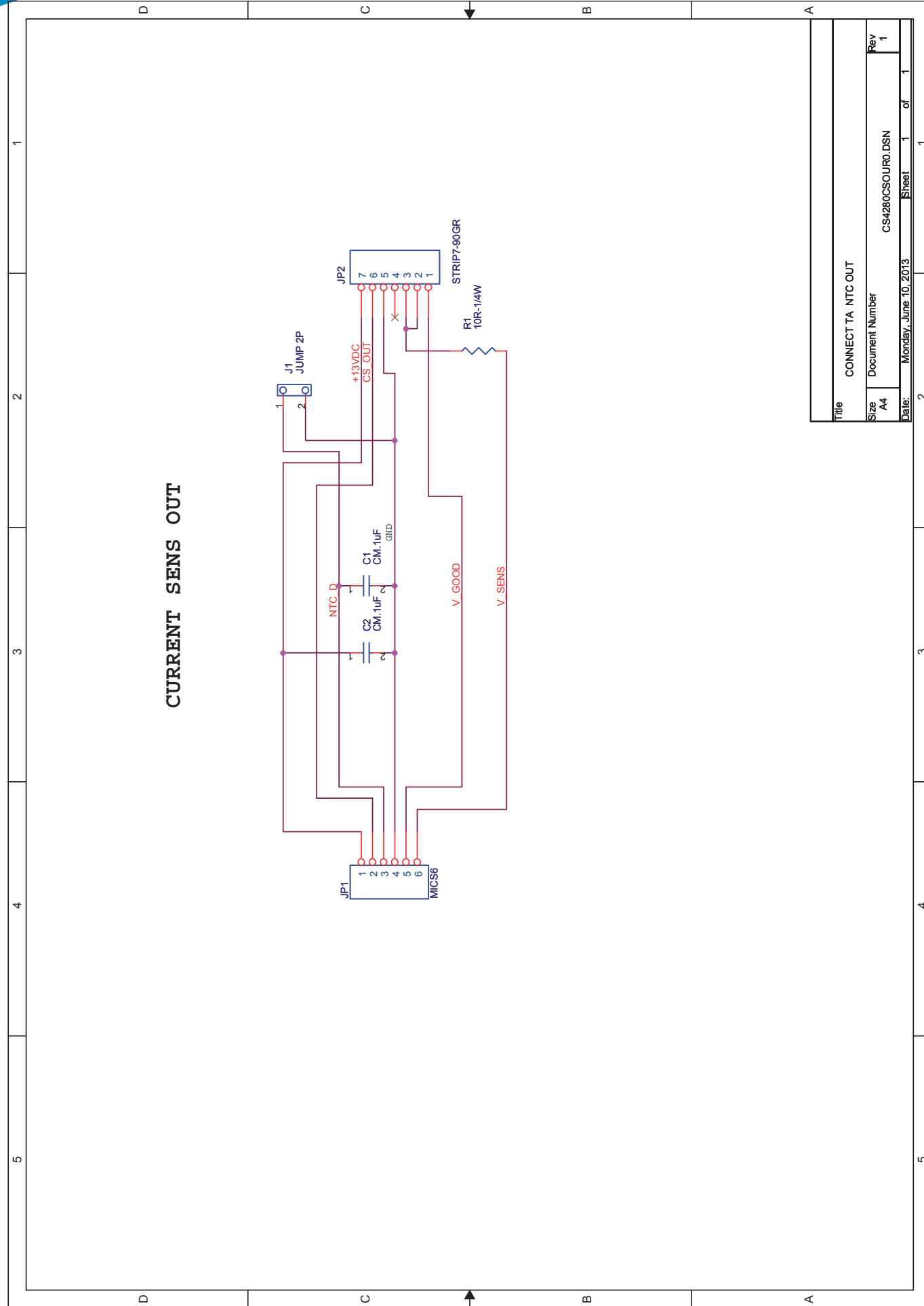
Title	CONNECT TA NTC INPUT
Size	A4
Document Number	CSPSL4280_TA.DSN
Rev	1
Date	Monday, June 10, 2013
Sheet	1 of 1

SEZIONE DI POTENZA INGRESSO Revised: Thursday, May 16, 2013  
 PSL4280\_PWRIN.DSN Revision: 1

Item	Quantity	Reference	Part
1	1	CS1	PE-51718
2	2	C8,C1	Y2K2pF
3	1	C2	470/400
4	2	C4,C3	CP2.2/400
5	2	C6,C5	CD10KpF-1KV
6	1	C7	CP.1uF-400'V
7	4	C9,C10,C11,C12	1KpF
8	6	D1,D2,D3,D4,D5,D6	STTH8R06D-RHRP860
9	4	FIX1,FIX2,FIX4,FIX11	FIX35
10	3	FIX6,FIX8,FIX10	FIX-SNAP
11	4	FST1,FST2,H10,H11	FAST-ON
12	1	F1	TMC-PSL5060
13	2	H1,H2	KL105/29
14	1	JP1	KRA3/2
15	1	JP4	STRIP 6
16	2	L2,L1	1.5uH
17	2	MD1,MD2	MODULO MOS
18	4	Q1,Q2,Q3,Q4	STW45NM50-SiG47N60E-GE3
19	1	RV1	VARISTOR-385Vac
20	1	R1	470K
21	2	TSW1,TSW2	TSWTCH42



PSL4280HS



Title	CONNECT TA NTC OUT
Document Number	CS4280CSOUR0.DSN
Size	A4
Date:	Monday, June 10, 2013
Sheet	1 of 1
Rev	1

CONNECT TA NTC OUT Revised: Monday, June 10, 2013  
 CS4280CSOUR0.DSN Revision: 1

Item	Quantity	Reference	Part
1	2	C1,C2	CM.1uF
2	1	JP1	MICS6
3	1	JP2	STRIP7-90GR
4	1	J1	JUMP 2P
5	1	R1	10R-1/4W

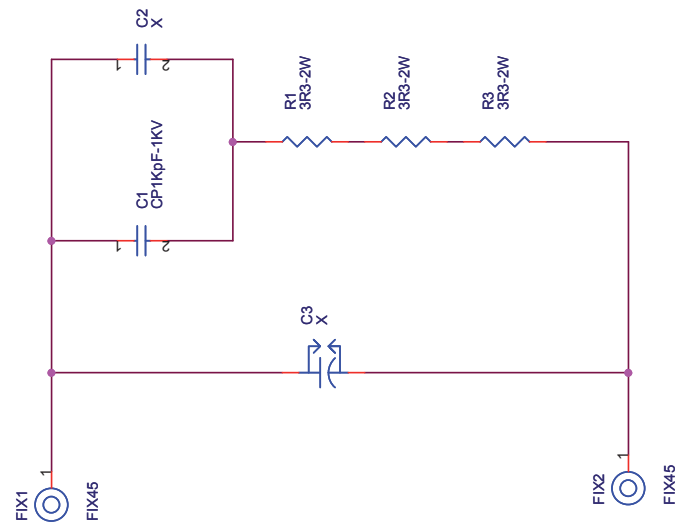
PSL4280HS

Title	SNUBBER DIODE OUT
Document Number	CS4280SNUBR0.DSN
Size	A4
Date	Monday, June 10, 2013
Rev	1
Sheet	1 of 1

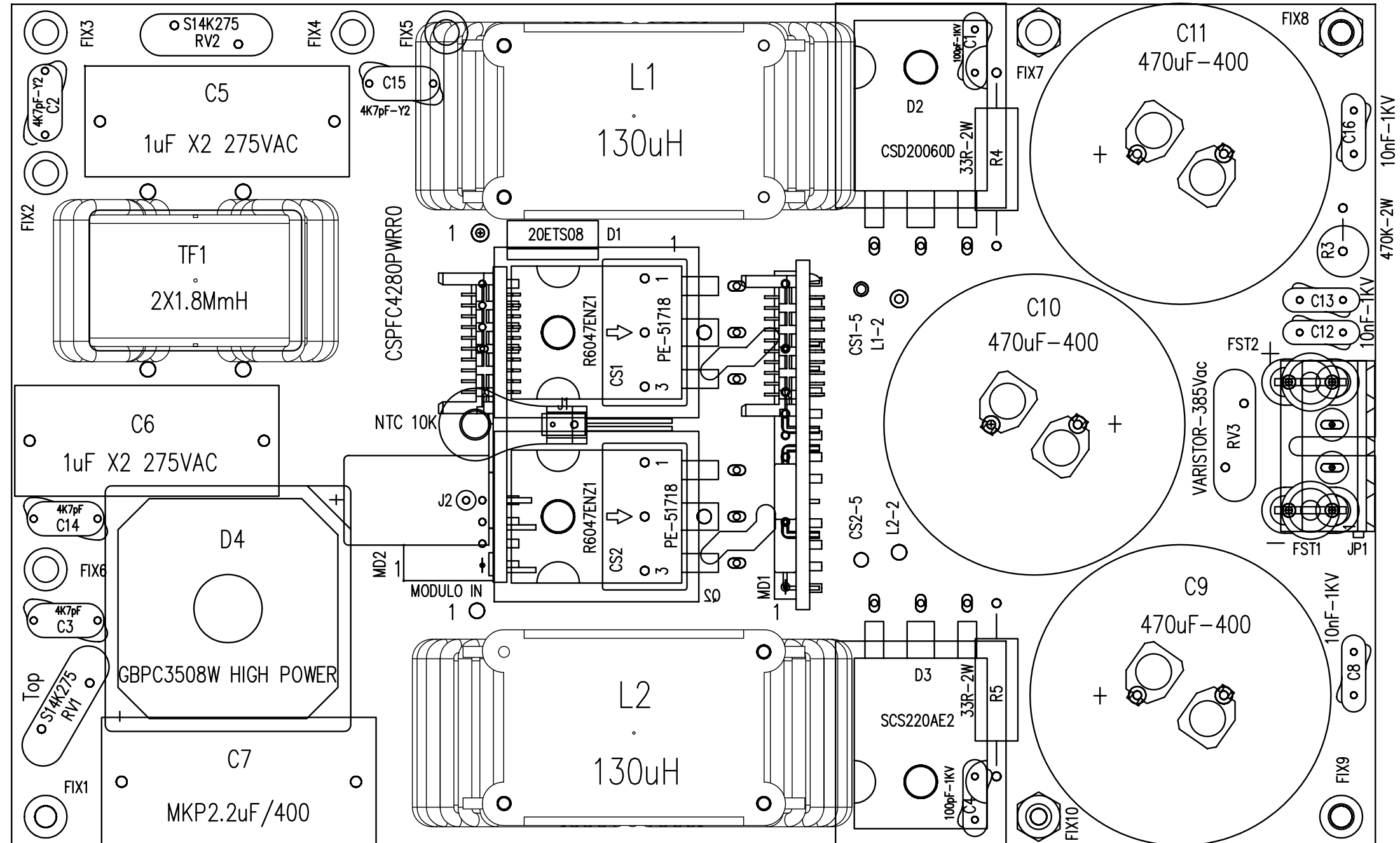
SNUBBER DIODE OUT Revised: Monday, June 10, 2013  
 CS4280SNUBR0.DSN Revision: 1

Item	Quantity	Reference	Part
1	1	C1	CP1KpF-1KV
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3	2	FIX1FIX2	FIX45
4	3	R1,R2,R3	3R3-2W

SNUBBER DIODE SOT227

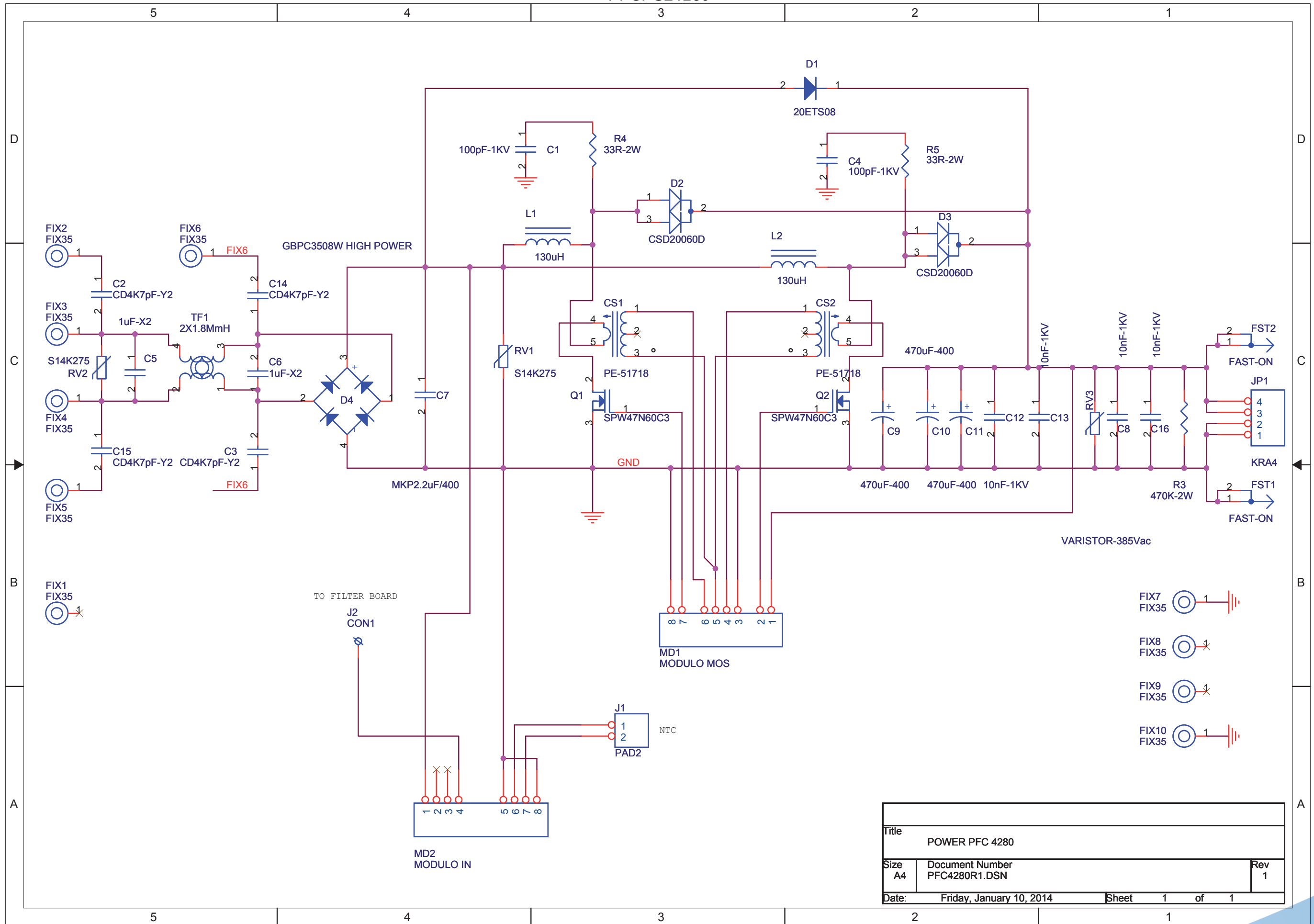


# PIANO DI MONTAGGIO PWR PFC4280R1



ARCHIVIO: X:\WORKDWG\	
TITLE PIANO DI MONTAGGIO PWR PFC4280 R1	
DOCUMENT NUMBER PFC4280PWR_R1_MNT. DWG	REV 1
DATE:	4 MARZO 2014

PFCPSL4280



Title		
POWER PFC 4280		
Size	Document Number	Rev
A4	PFC4280R1.DSN	1
Date:	Friday, January 10, 2014	Sheet 1 of 1

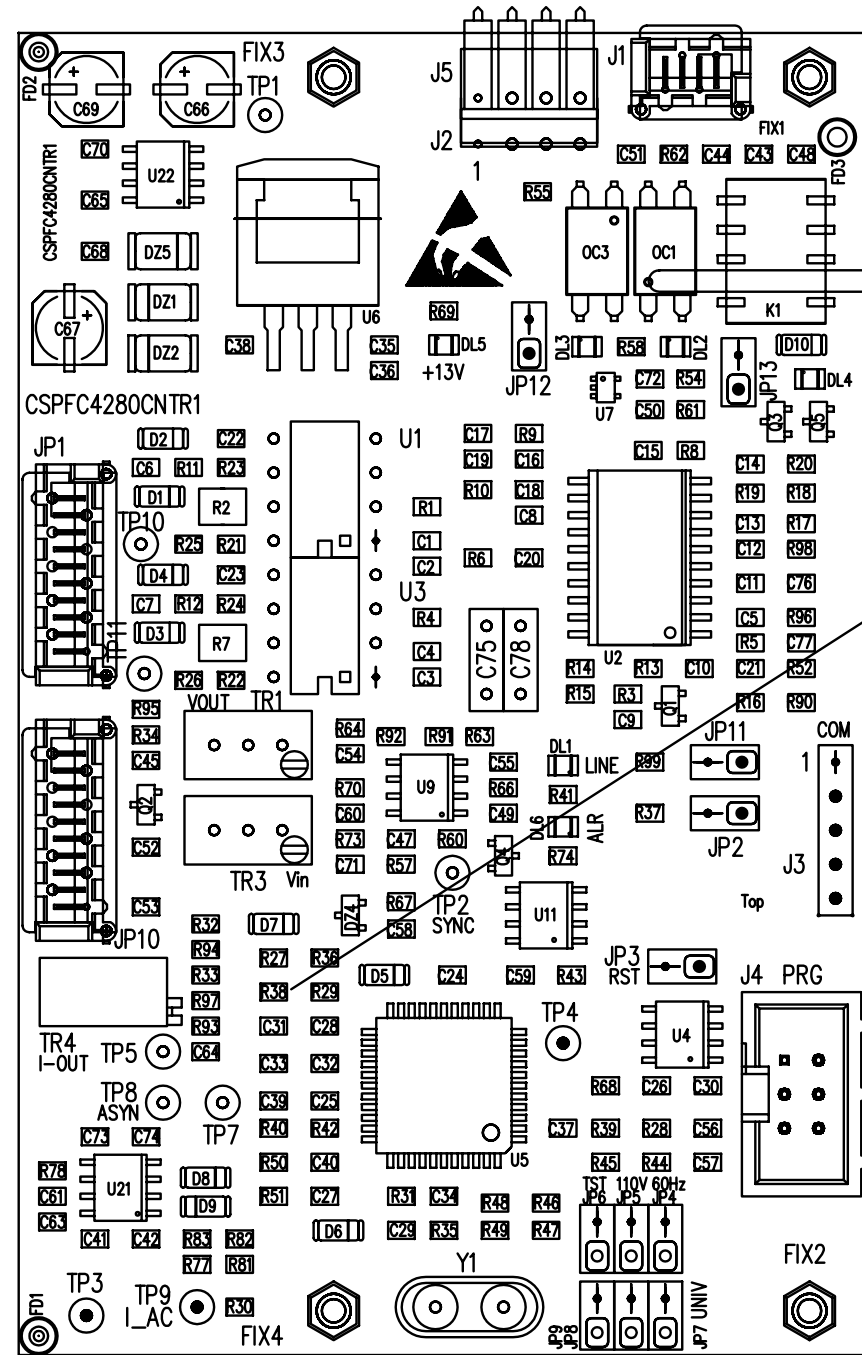
PFCPSL4280

POWER PFC 4280 Revised: Friday, January 10, 2014  
 PFC4280R1.DSN Revision: 1

Item	Quantity	Reference	Part
1	2	CS2,CS1	PE-51718
2	2	C1,C4	100pF-1KV
3	4	C2,C3,C14,C15	CD4K7pF-Y2
4	2	C5C6	1uF-X2
5	1	C7	MKP2.2uF/400
6	4	C8,C12,C13,C16	10nF-1KV
7	3	C9,C10,C11	470uF-400
8	1	D1	20ETS08
9	2	D2,D3	CSD20060D
10	1	D4	GBPC3508W HIGH POWER
11	10	FIX1, FIX2, FIX3, FIX4, FIX5, FIX6, FIX7, FIX8, FIX9, FIX10	FIX35
12	2	FST1,FST2	FAST-ON
13	1	JP1	KRA4
14	1	J1	PAD2
15	1	J2	CON1
16	2	L1,L2	130uH
17	1	MD1	MODULO MOS
18	1	MD2	MODULO IN
19	2	Q1,Q2	SPW47N60C3
20	2	RV2,RV1	S14K275
21	1	RV3	VARISTOR-385Vac
22	1	R3	470K-2W
23	2	R4,R5	33R-2W
24	1	TF1	2X1.8mMH

PFPCSL4280

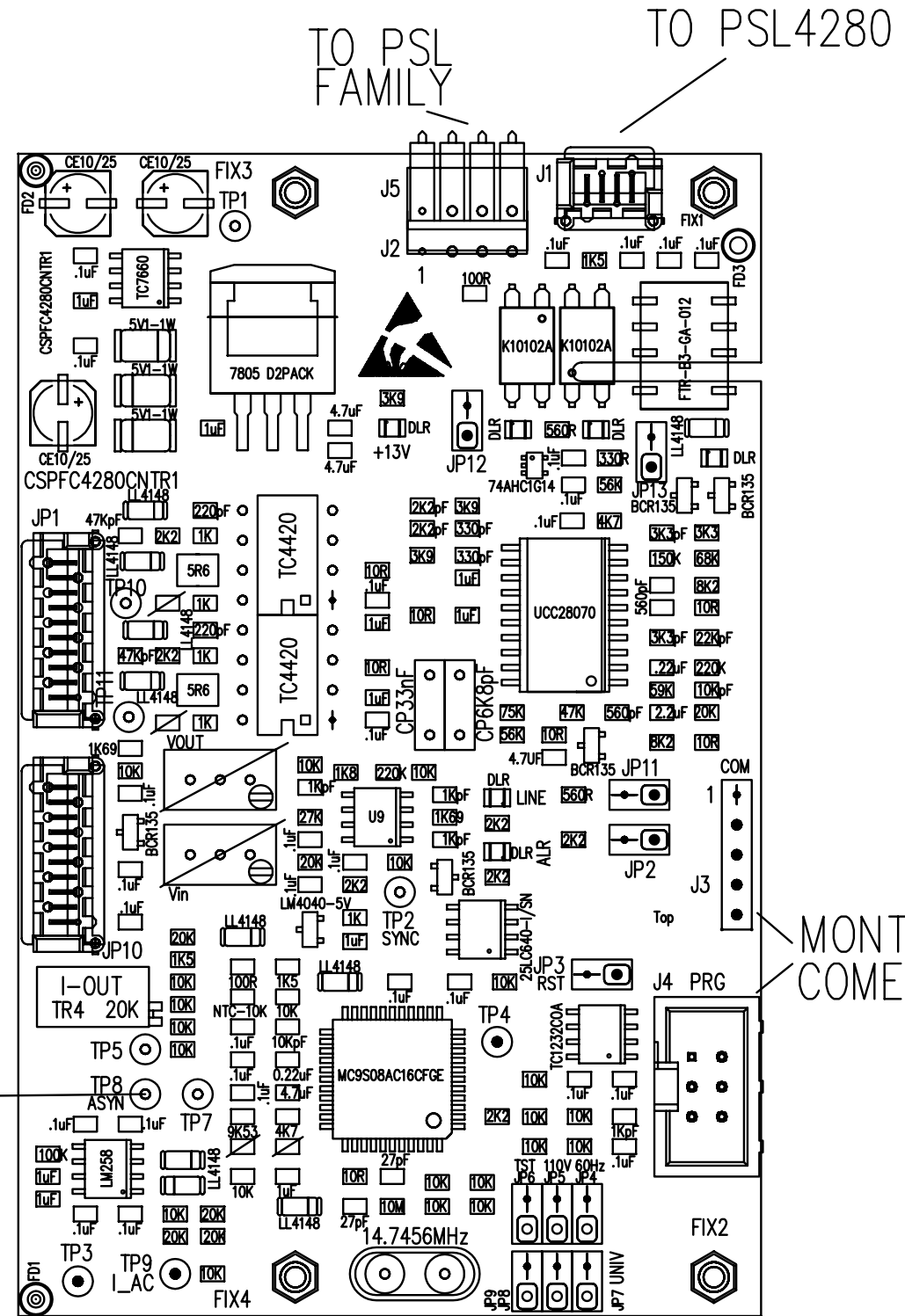
# PIANO DI MONTAGGIO CNT PFC4280R1



ATTENZIONE  
R38 SALDATO SOTTO  
NO RE-WORK.

NOTA:  
TUTTI I TP VANNO  
MONTATI CON LA  
PARTE CORTA  
L.C.

FLT MOS

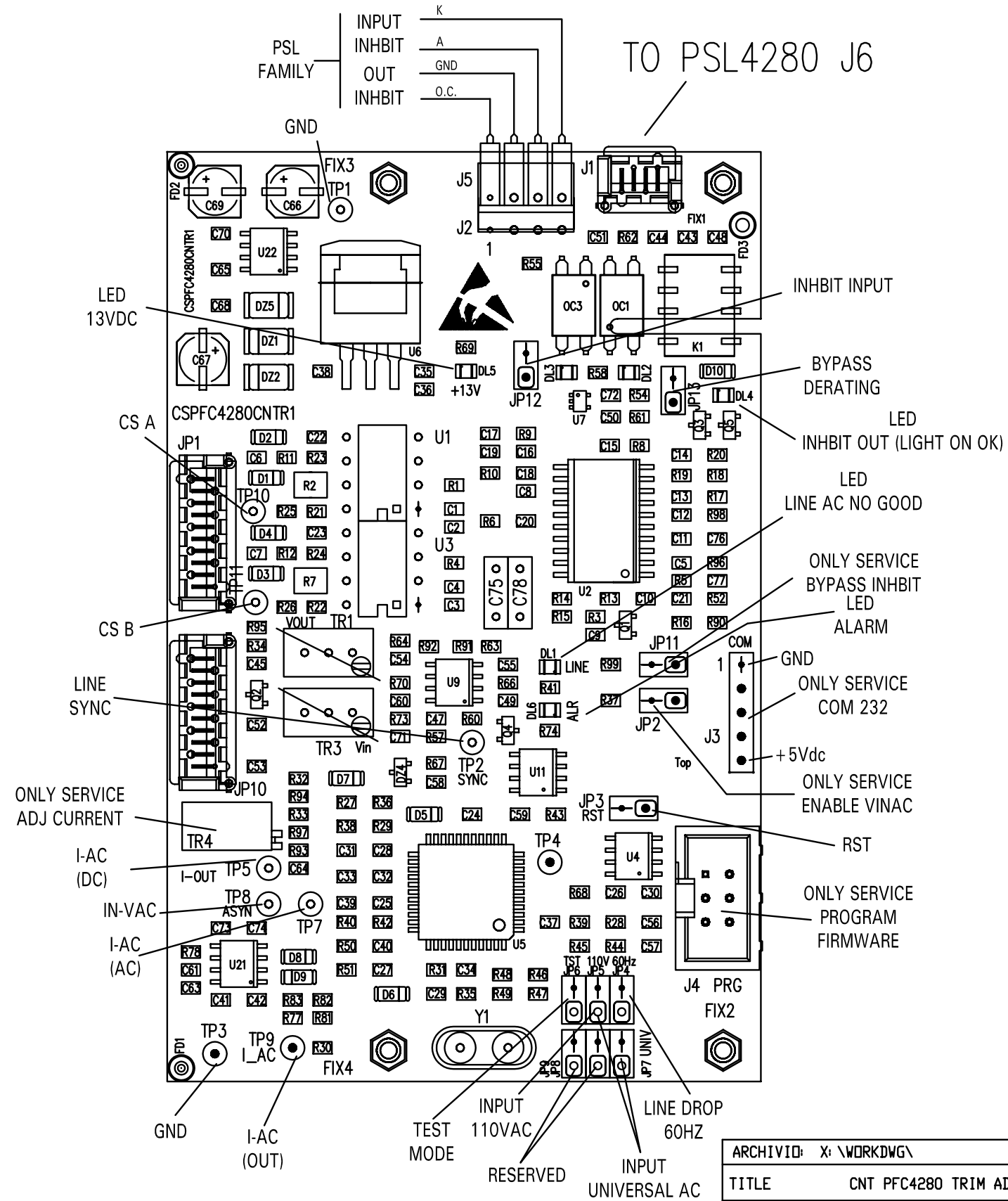


MONTARE  
COME T.P.

ARCHIVIO: X:\WORKDWG\	
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DOCUMENT NUMBER PFC4280CNT_R1_MNT. DWG	REV 2
DATE:	24 SETTEMBRE 2014

PFPCSL4280

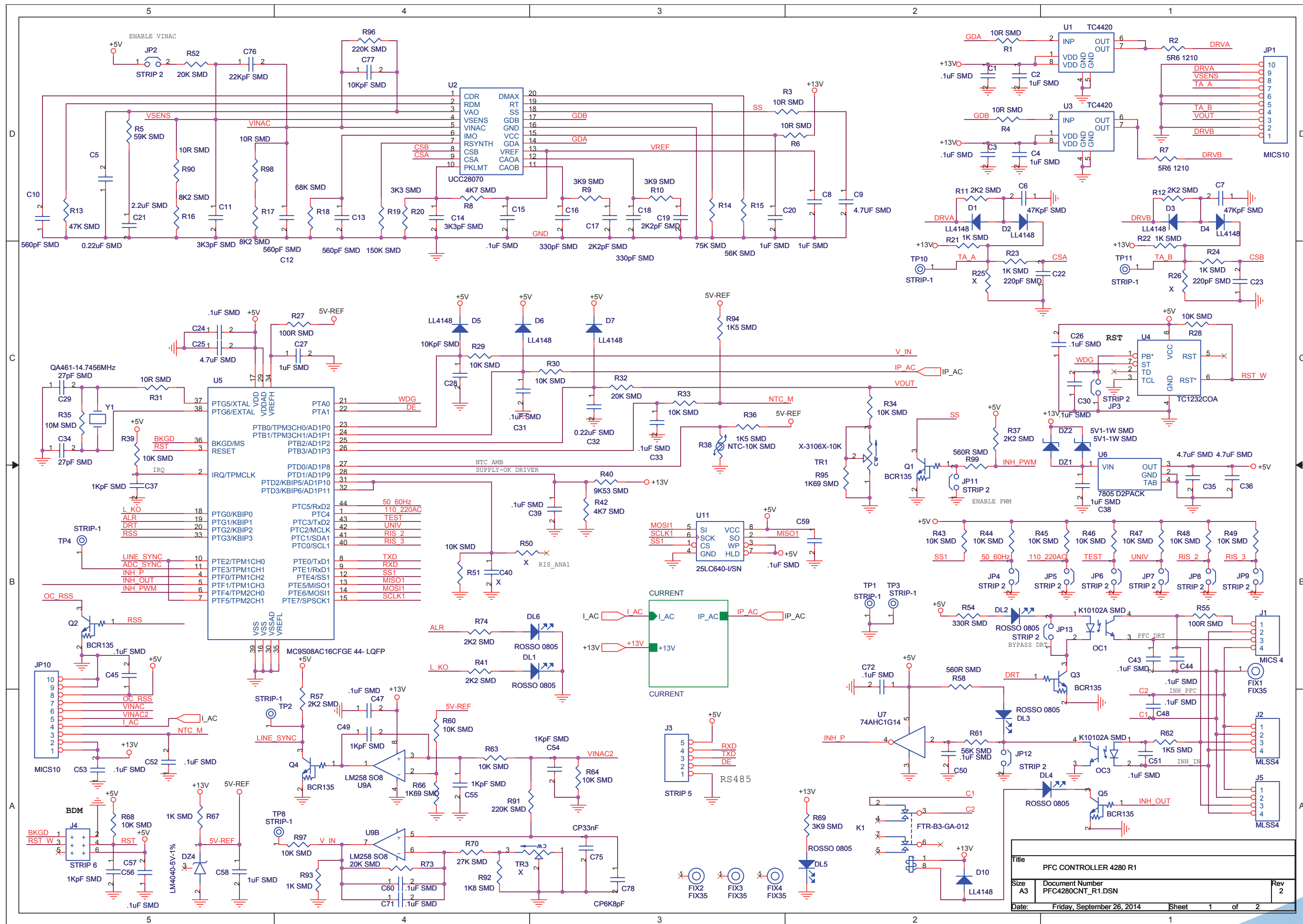
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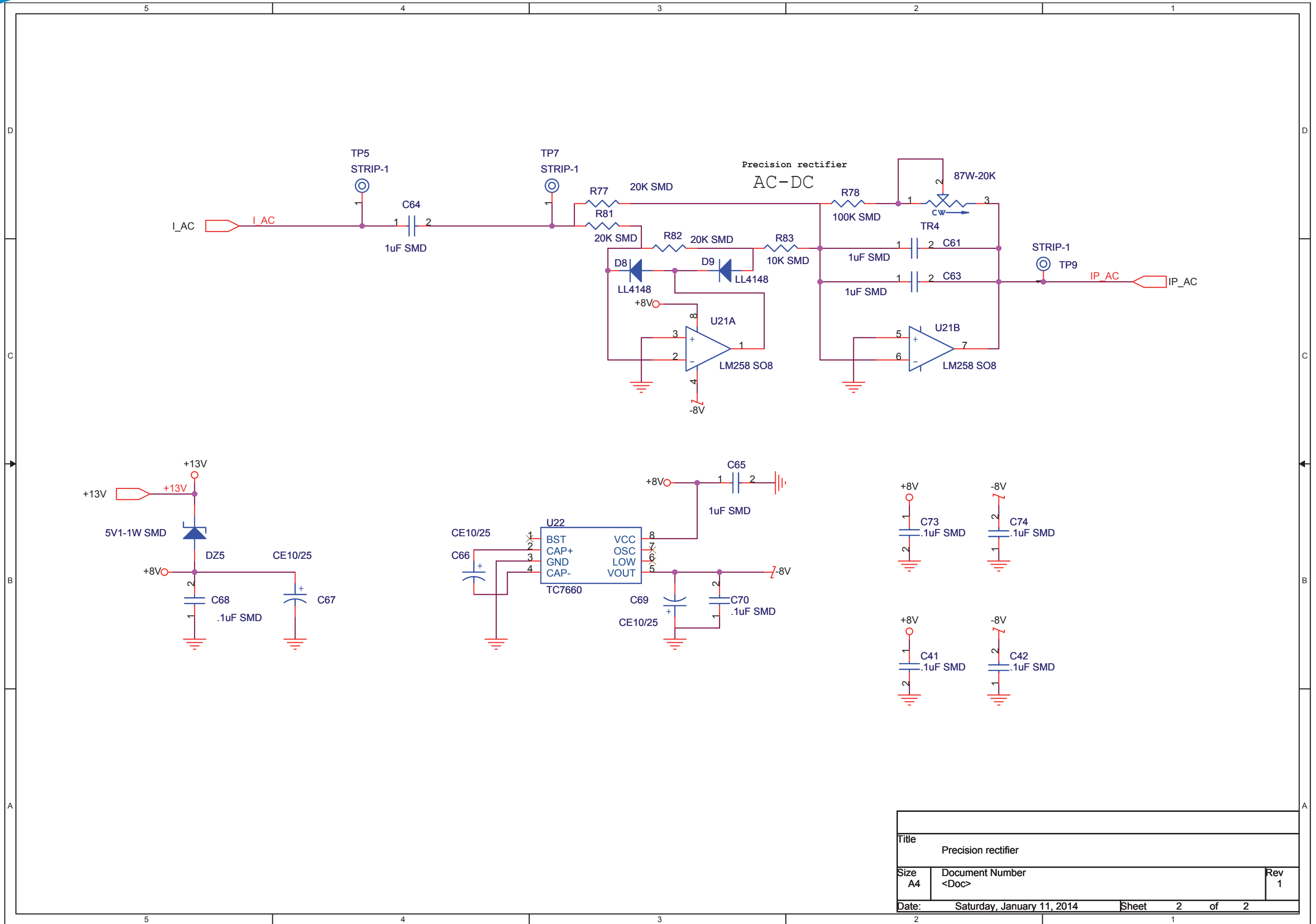


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DOCUMENT NUMBER PFC4280CNT_R1_MNT.DWG	REV 1
DATE: 28 aprile 2014	



PFPSL4280





Title		
Precision rectifier		
Size	Document Number	Rev
A4	<Doc>	1
Date:	Saturday, January 11, 2014	Sheet 2 of 2

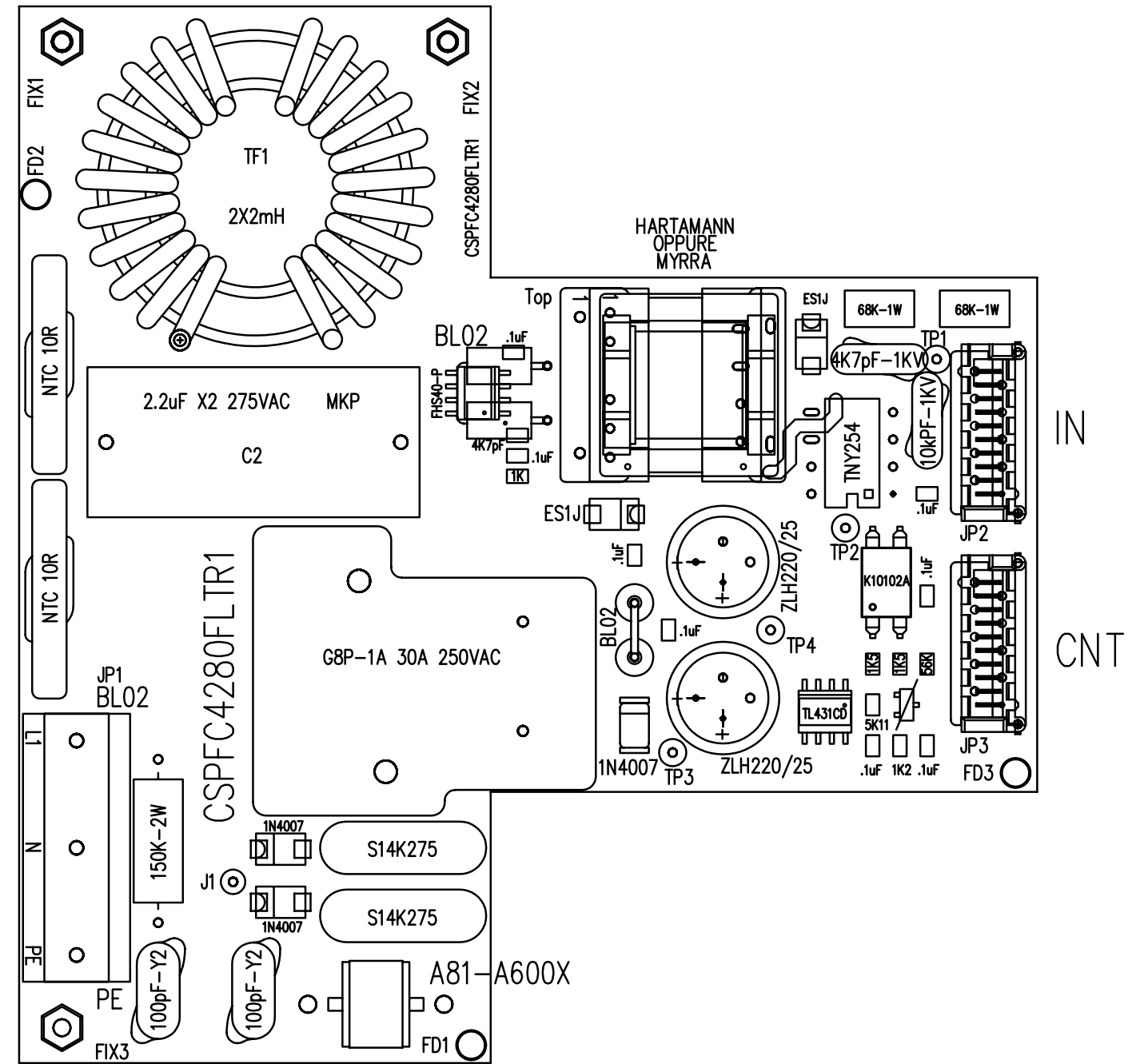
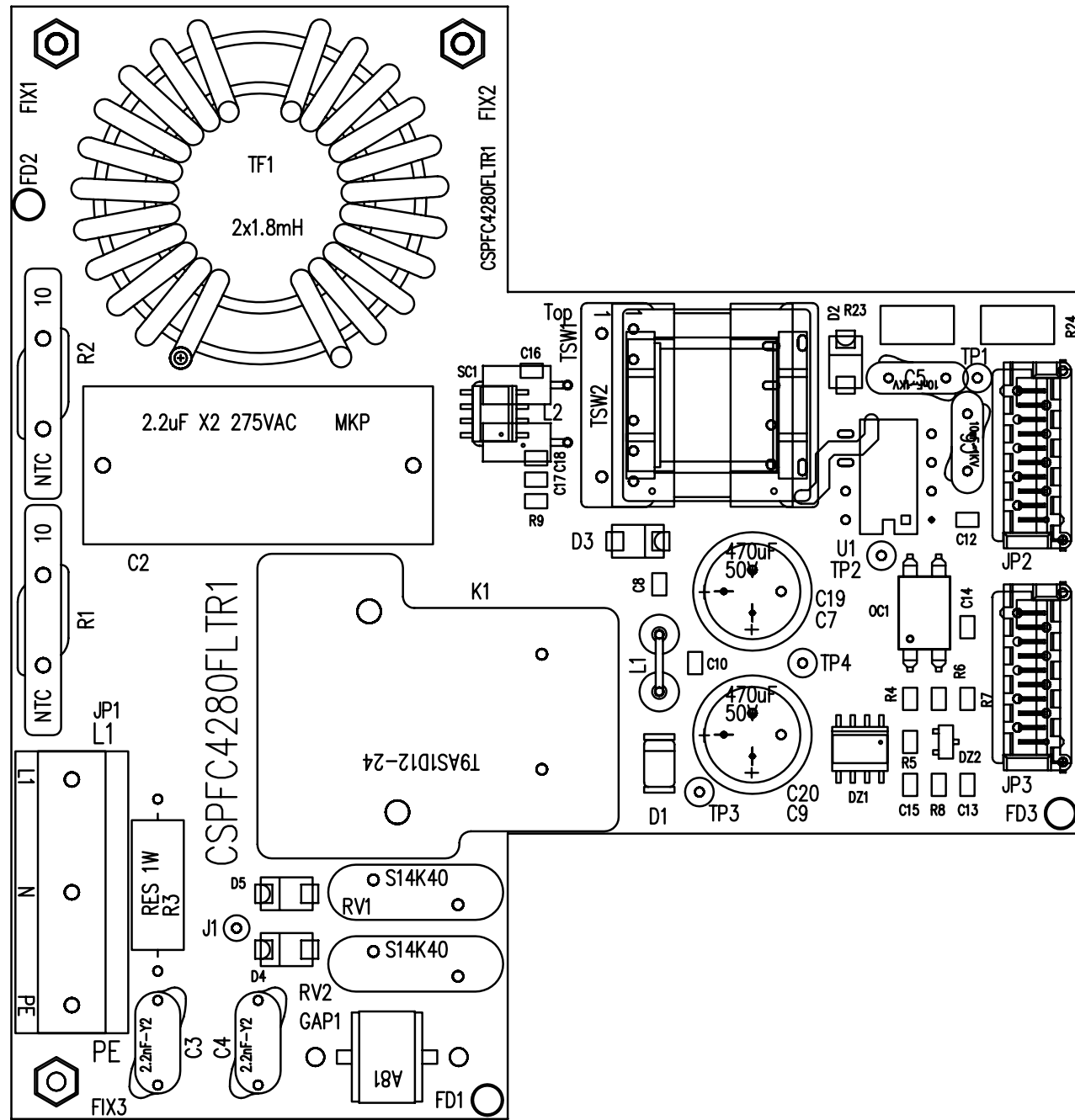
PFPCPSL4280

PFC CONTROLLER 4280 R1 Revised: Monday, April 28, 2014  
 PFC4280CNT\_R0.DSN Revision: 1

Item	Quantity	Reference	Part
1	29	C1,C3,C15,C24,C26,C30,C31,C33,C39,C41,C42,C43,C44,C45,C47,C48,C50,C51,C52,C53,C57,C59,C60,C68,C70,C71,C72,C73,C74	.1uF SMD
2	11	C2,C4,C8,C20,C27,C38,C58,C61,C63,C64,C65	1uF SMD
3	2	C5,C32	0.22uF SMD
4	2	C6,C7	47KpF SMD
5	4	C9,C25,C35,C36	4.7uF SMD
6	4	C10,C12,C13,C49	560pF SMD
7	2	C14,C11	3K3pF SMD
8	2	C16,C18	330pF SMD
9	2	C17,C19	2K2pF SMD
10	1	C21	2.2uF SMD
11	2	C23,C22	220pF SMD
12	2	C28,C77	10KpF SMD
13	2	C34,C29	27pF SMD
14	4	C37,C54,C55,C56	1KpF SMD
15	5	TR3,R25,R26,C40,R50	X
16	3	C66,C67,C69	CE10/25
17	1	C75	CP33nF
18	1	C76	22KpF SMD
19	1	C78	CP6K8pF
20	6	DL1,DL2,DL3,DL4,DL5,DL6	ROSSO 0805
21	3	DZ1,DZ2,DZ5	5V1-1W SMD
22	1	DZ4	LM4040-5V-1%
23	10	D1,D2,D3,D4,D5,D6,D7,D8,D9,D10	LL4148
24	4	FIX1,FIX2,FIX3,FIX4	FIX35
25	2	JP1,JP10	MICS10
26	11	JP2,JP3,JP4,JP5,JP6,JP7,JP8,JP9,JP11,JP12,JP13	STRIP 2
27	1	J1	MICS 4
28	2	J5,J2	MLSS4
29	1	J3	STRIP 5
30	1	J4	STRIP 6
31	1	K1	FTR-B3-GA-012
32	2	OC1,OC3	K10102A SMD
33	5	Q1,Q2,Q3,Q4,Q5	BCR135
34	7	R1,R3,R4,R6,R31,R90,R98	10R SMD
35	2	R2,R7	5R6 1210
36	1	R5	59K SMD
37	2	R42,R8	4K7 SMD
38	3	R9,R10,R69	3K9 SMD
39	6	R11,R12,R37,R41,R57,R74	2K2 SMD
40	1	R13	47K SMD
41	1	R14	75K SMD
42	2	R15,R61	56K SMD
43	2	R17,R16	8K2 SMD
44	1	R18	68K SMD
45	1	R19	150K SMD
46	1	R20	3K3 SMD
47	6	R21,R22,R23,R24,R67,R93	1K SMD
48	2	R27,R55	100R SMD
49	20	R28,R29,R30,R33,R34,R39,R43,R44,R45,R46,R47,R48,R49,R51,R60,R63,R64,R68,R83,R97	10K SMD
50	6	R32,R52,R73,R77,R81,R82	20K SMD
51	1	R35	10M SMD
52	3	R36,R62,R66,R94	1K5 SMD
53	1	R38	NTC-10K SMD
54	1	R40	9K53 SMD
55	1	R54	330R SMD

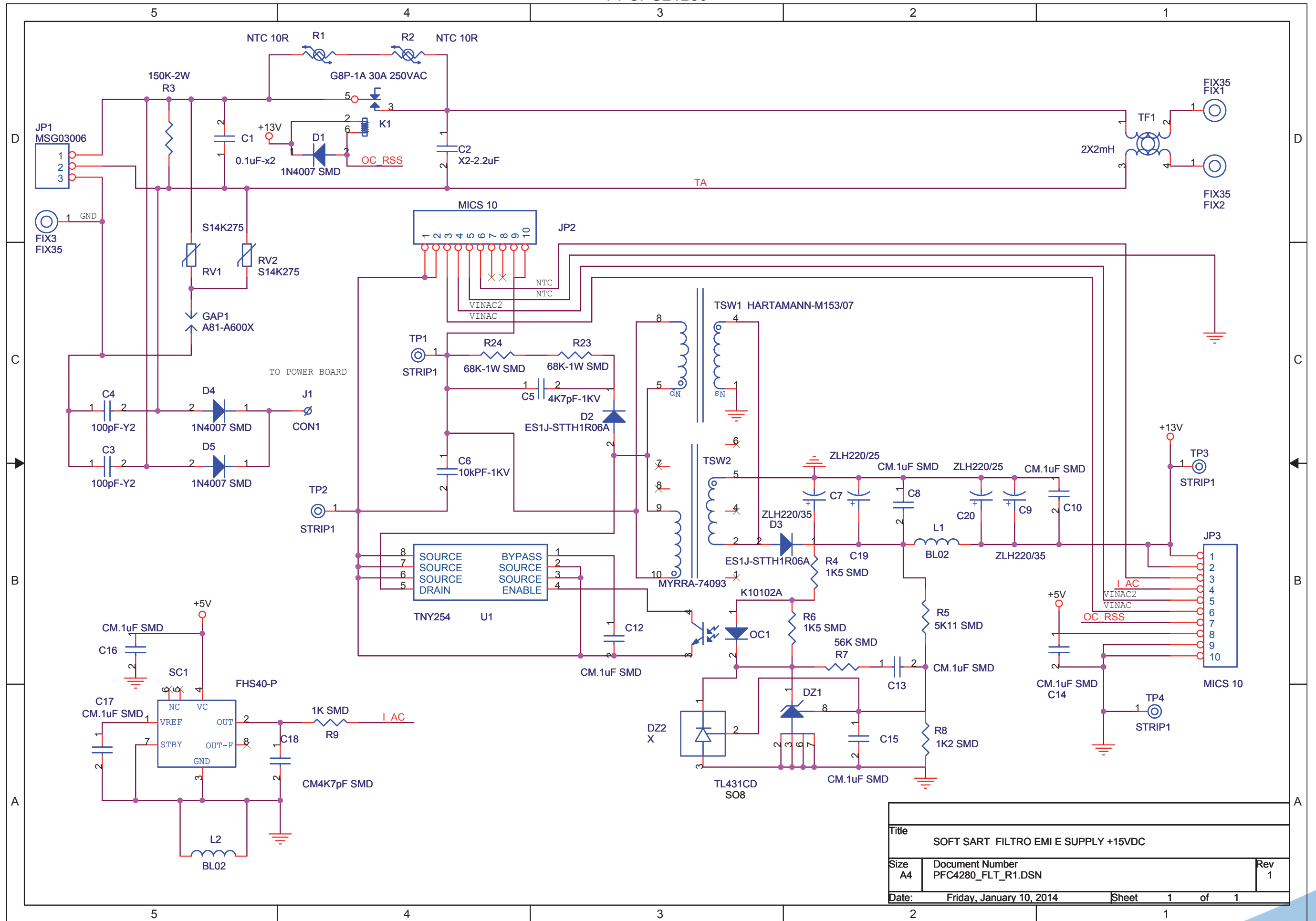
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56	2	R58,R99	560R SMD
57	1	R70	27K SMD
58	1	R78	100K SMD
59	2	R96,R91	220K SMD
60	1	R92	1K8 SMD
61	1	R95	1K69 SMD
62	10	TP1,TP2,TP3,TP4,TP5,TP7,TP8,TP9,TP10,TP11	STRIP-1
63	1	TR1	X-3106X-10K
64	1	TR4	87W-20K
65	2	U3,U1	TC4420
66	1	U2	UCC28070
67	1	U4	TC1232COA
68	1	U5	MC9S08AC16CFGE 44- LQFP
69	1	U6	7805 D2PACK
70	1	U7	74AHC1G14
71	2	U21,U9	LM258 SO8
72	1	U11	25LC640-I/SN
73	1	U22	TC7660
74	1	Y1	QA461-14.7456MHz

# PIANO DI MONTAGGIO FLT PFC4280R1



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TITLE	PIANO DI MONTAGGIO FLT PFC4280
DOCUMENT NUMBER	PFC4280_FLT_R1_MNT. DWG
REV	1
DATE:	4 MARZO 2014

PFCPSL4280



Title		
SOFT SART FILTRO EMI E SUPPLY +15VDC		
Size	Document Number	Rev
A4	PFC4280_FLT_R1.DSN	1
Date:	Friday, January 10, 2014	Sheet 1 of 1

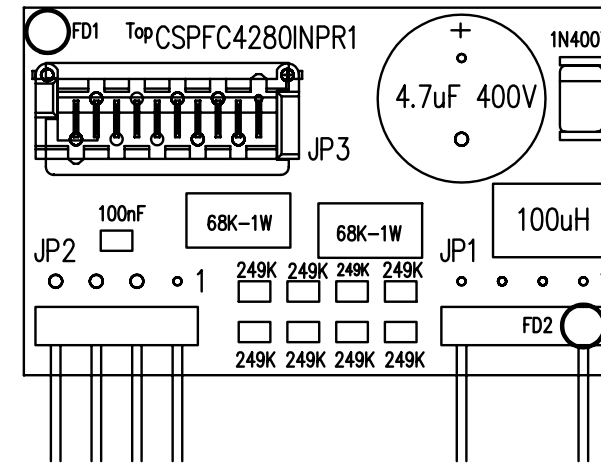
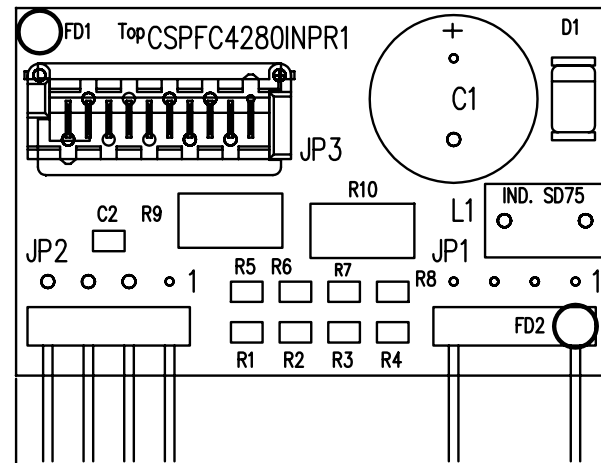
PFCPSL4280

SOFT SART FILTRO EMI E SUPPLY +15VDC Revised: Friday, January 10, 2014  
 PFC4280\_FLT\_R1.DSN Revision: 1

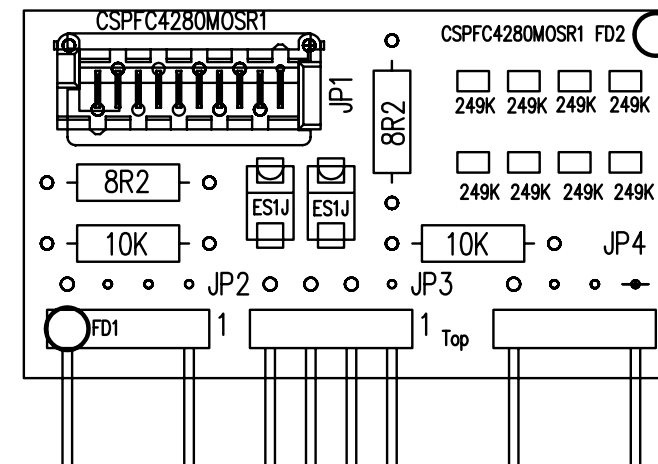
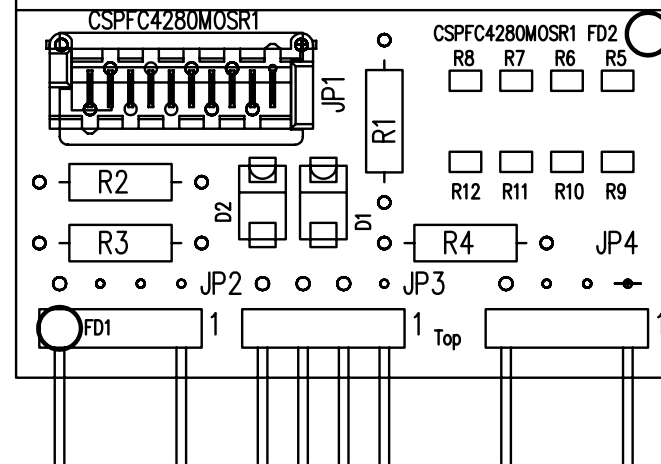
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1	1	C1	0.1uF-x2
2	1	C2	X2-2.2uF
3	2	C3,C4	100pF-Y2
4	1	C5	4K7pF-1KV
5	1	C6	10kPF-1KV
6	2	C9,C7	ZLH220/35
7	8	C8,C10,C12,C13,C14,C15,C16,C17	CM.1uF SMD
8	1	C18	CM4K7pF SMD
9	2	C20,C19	ZLH220/25
10	1	DZ1	TL431CD
11	1	DZ2	X
12	3	D1,D4,D5	1N4007 SMD
13	2	D3,D2	ES1J-STTH1R06A
14	3	FIX1,FIX2,FIX3	FIX35
15	1	GAP1	A81-A600X
16	1	JP1	MSG03006
17	2	JP2,JP3	MICS 10
18	1	J1	CON1
19	1	K1	G8P-1A 30A 250VAC
20	2	L1,L2	BL02
21	1	OC1	K10102A
22	2	RV1,RV2	S14K275
23	2	R2,R1	NTC 10R
24	1	R3	150K-2W
25	2	R6,R4	1K5 SMD
26	1	R5	5K11 SMD
27	1	R7	56K SMD
28	1	R8	1K2 SMD
29	1	R9	1K SMD
30	2	R23,R24	68K-1W SMD
31	1	SC1	FHS40-P
32	1	TF1	2X2mH
33	4	TP1,TP2,TP3,TP4	STRIP1
34	1	TSW1	HARTAMANN-M153/07
35	1	TSW2	MYRRA-74093
36	1	U1	TNY254

PFCPSL4280

# PIANO DI MONTAGGIO INPUT PFC4280R1



# PIANO DI MONTAGGIO MOS PFC4280R1



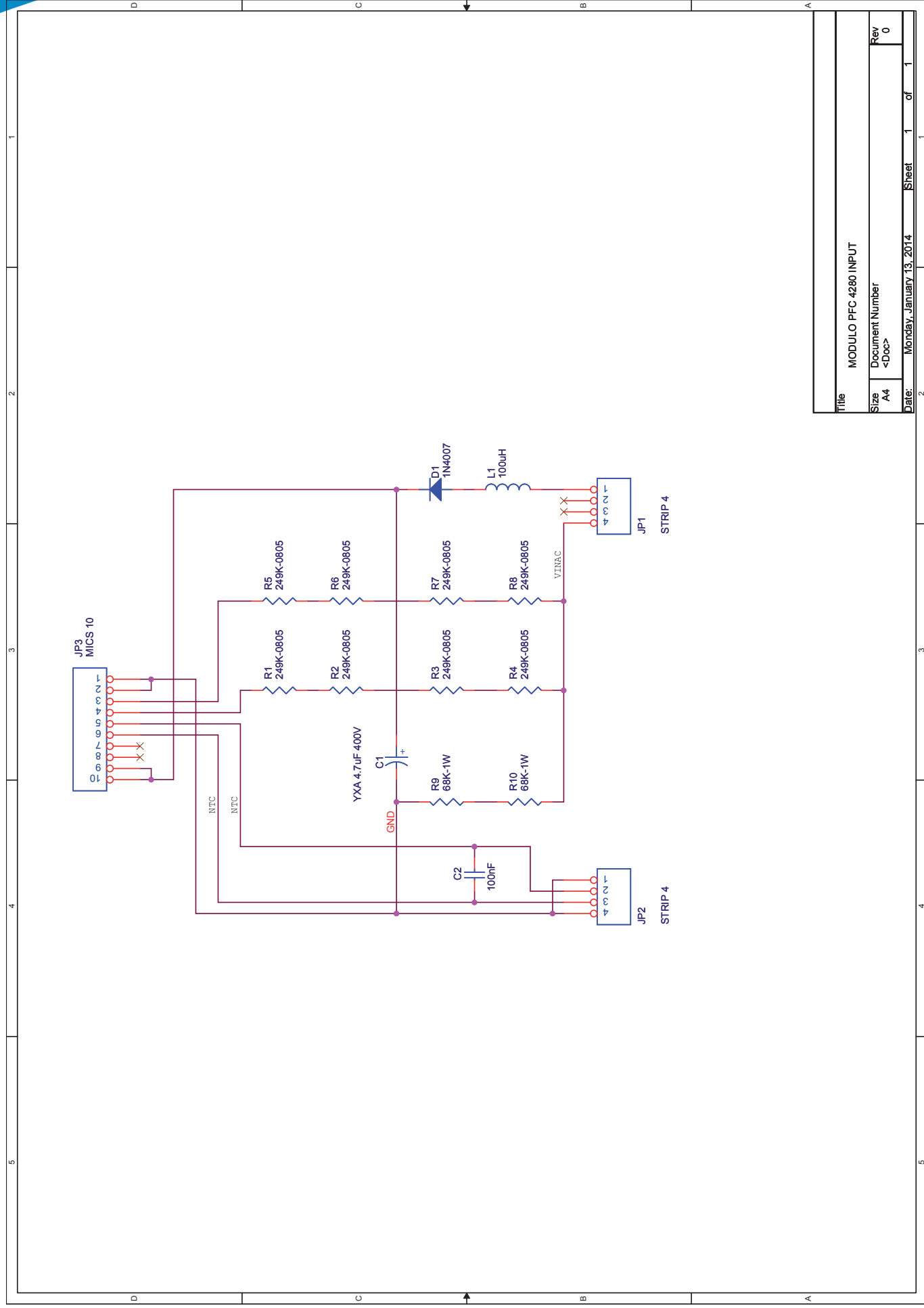
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DATE:	4 MARZO 2014

PFCPSL4280

Title	MODULO PFC 4280 INPUT
Size	A4
Document Number	<Doc>
Date	Monday, January 13, 2014
Rev	0
Sheet	1 of 1

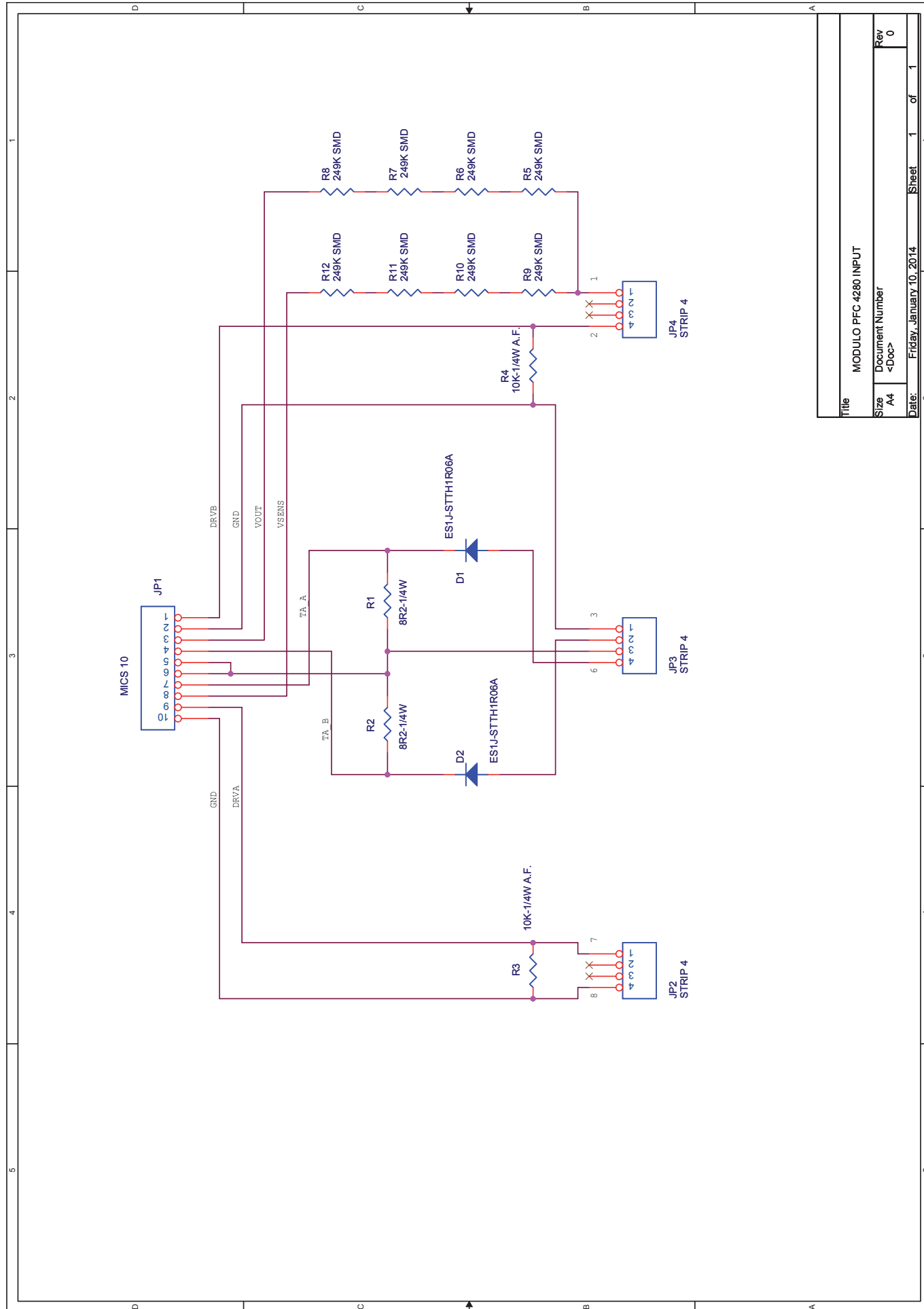
MODULO PFC 4280 INPUT Revised: Monday, January 13, 2014  
Revision: 0

Item	Quantity	Reference	Part
1	1	C1	YXA 4.7uF 400V
2	1	C2	100nF
3	1	D1	1N4007
4	2	JP1,JP2	STRIP 4
5	1	JP3	MICS 10
6	1	L1	100uH
7	8	R1,R2,R3,R4,R5,R6,R7,R8	249K-0805
8	2	R9,R10	68K-1W





PFCPSL4280



Title	MODULO PFC 4280 INPUT
Size	A4
Document Number	<Doc>
Date	Friday, January 10, 2014
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Sheet	1 of 1

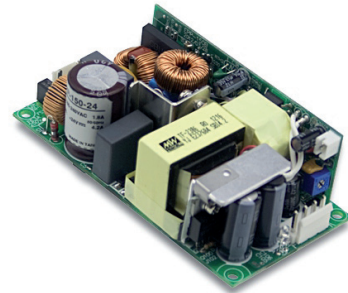
MODULO PFC 4280 INPUT Revised: Friday, January 10, 2014  
Revision: 0

Item	Quantity	Reference	Part
1	2	D2,D1	ES1J-STTH1R06A
2	1	JP1	MICS 10
3	3	JP2,JP3,JP4	STRIP 4
4	2	R1,R2	8R2-1/4W
5	2	R3,R4	10K-1/4W A.F.
6	7	R5,R6,R8,R9,R10,R11,R12	249K SMD
7	1	R7	249K SMD



150W Single Output with PFC Function

**EPP-150 series**



- Features :
  - 4"x2" Compact size
  - Universal AC input / Full range
  - Built-in active PFC function
  - High efficiency up to 93%
  - Protections: Short circuit / Overload / Over voltage/ Over temperature
  - 100W free air convection, 150W with 20CFM forced air
  - LED indicator for power on
  - No load power consumption<0.5W
  - Built-in 12V/0.3A auxiliary output
  - 3 years warranty



**SPECIFICATION**

MODEL	EPP-150-12	EPP-150-15	EPP-150-24	EPP-150-27	EPP-150-48	
OUTPUT	DC VOLTAGE	12V	15V	24V	27V	48V
	RATED CURRENT (convection)	8.4A	6.7A	4.2A	3.71A	2.1A
	RATED CURRENT (20CFM FAN)	12.5A	10A	6.25A	5.56A	3.125A
	CURRENT RANGE (convection)	0 ~ 8.4A	0 ~ 6.7A	0 ~ 4.2A	0 ~ 3.71A	0 ~ 2.1A
	CURRENT RANGE (20CFM FAN)	0 ~ 12.5A	0 ~ 10A	0 ~ 6.25A	0 ~ 5.56A	0 ~ 3.125A
	RATED POWER (convection)	100.8W	100.5W	100.8W	100.17W	100.8W
	RATED POWER (20CFM FAN)	150W	150W	150W	150.12W	150W
	RIPPLE & NOISE (max.) Note.2	130mVp-p	150mVp-p	240mVp-p	240mVp-p	300mVp-p
	VOLTAGE ADJ. RANGE	11.76 ~ 12.6V	14.7 ~ 15.75V	23.52 ~ 25.2V	26.46 ~ 28.35V	47.04 ~ 50.4V
	VOLTAGE TOLERANCE Note.3	±2.0%	±2.0%	±1.0%	±1.0%	±1.0%
LINE REGULATION	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	
LOAD REGULATION	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	
SETUP, RISE TIME	1000ms, 30ms/230VAC		2000ms, 30ms/115VAC at full load			
HOLD UP TIME (Typ.)	16ms/230VAC		16ms/115VAC at full load			
INPUT	VOLTAGE RANGE Note.5	90 ~ 264VAC	127 ~ 370VDC			
	FREQUENCY RANGE	47 ~ 63Hz				
	POWER FACTOR (Typ.)	PF>0.95/230VAC		PF>0.98/115VAC at full load		
	EFFICIENCY (Typ.)	91.5%	92%	93%	92%	92%
	AC CURRENT (Typ.)	1.8A/115VAC		1A/230VAC		
	INRUSH CURRENT (Typ.)	COLD START 70A/230VAC				
	LEAKAGE CURRENT	<2mA/240VAC				
PROTECTION	OVER LOAD	105 ~ 145% rated output power Protection type : Hiccup mode, recovers automatically after fault condition is removed				
	OVER VOLTAGE	13.2 ~ 15.6V	16.83 ~ 19.5V	27.7 ~ 31.5V	30.2 ~ 34.05V	51.3 ~ 62.7V
	OVER TEMPERATURE	Protection type : Shut down o/p voltage, re-power on to recover				
FUNCTION	AUXILIARY POWER(AUX)	12V@0.3A for driving a fan, tolerance ± 10% at main output 100% load				
	WORKING TEMP.	-30 ~ +70°C (Refer to "Derating Curve")				
ENVIRONMENT	WORKING HUMIDITY	20 ~ 90% RH non-condensing				
	STORAGE TEMP., HUMIDITY	-40 ~ +85°C, 10 ~ 95% RH				
	TEMP. COEFFICIENT	±0.03%/°C (0 ~ 45°C)				
SAFETY & EMC (Note 4)	WITHSTAND VOLTAGE	I/P-O/P:3KVAC I/P-FG:2KVAC O/P-FG:0.5KVAC				
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC/ 500VDC / 25°C / 70% RH				
	EMC EMISSION	Compliance to EN55022 (CISPR22) Class B, EN61000-3-2,-3				
	EMC IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11, heavy industry level, criteria A				
OTHERS	MTBF	207.1Khrs min. MIL-HDBK-217F (25°C)				
	DIMENSION	101.6*50.8*29mm (L*W*H)				
	PACKING	0.2Kg; 72pcs/15.4Kg/0.82CUFT				
NOTE	1.	All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.				
	2.	Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uF & 47uF parallel capacitor.				
	3.	Tolerance : includes set up tolerance, line regulation and load regulation.				
	4.	The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives.				
	5.	Derating may be needed under low input voltages. Please check the derating curve for more details.				

File Name:EPP-150-SPEC 2016-06-11

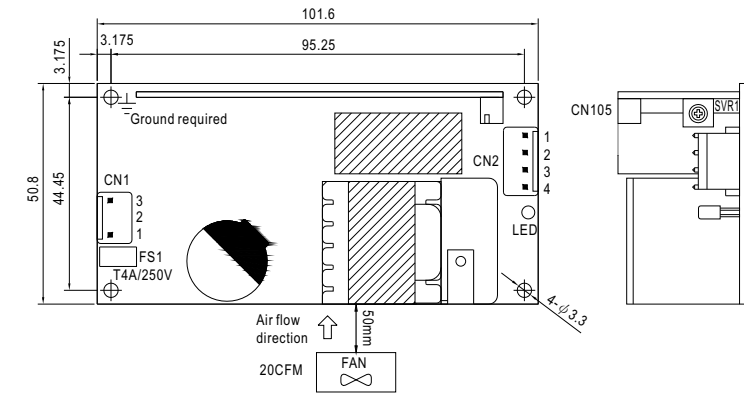


150W Single Output with PFC Function

**EPP-150 series**

**Mechanical Specification**

Unit:mm



AC Input Connector (CN1) : JST B3P-VH or equivalent

Pin No.	Assignment	Mating Housing	Terminal
1	AC/L	JST VHR or equivalent	JST SVH-21T-P1.1 or equivalent
2	No Pin		
3	AC/N		

DC Output Connector (CN2) : JST B4P-VH or equivalent

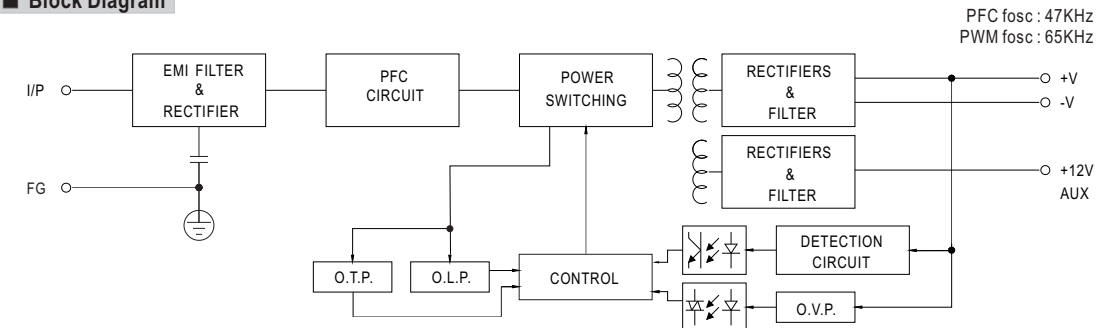
Pin No.	Assignment	Mating Housing	Terminal
1,2	DC COM	JST VHR or equivalent	JST SVH-21T-P1.1 or equivalent
3,4	+V		

FAN Connector(CN105) : JST B\*YB-PH-K-S or equivalent

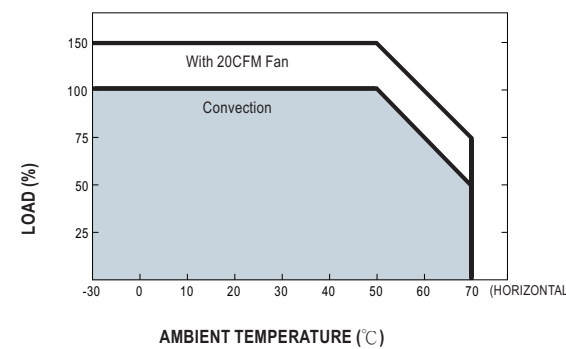
Pin No.	Assignment	Mating Housing	Terminal
1	+12V	JST PHR-1 or equivalent	JST SPH-11T-P1.1 or equivalent
2	DC COM		

≡ : Grounding required

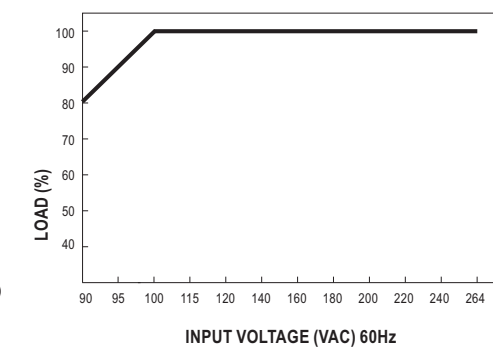
**Block Diagram**



**Output Derating**

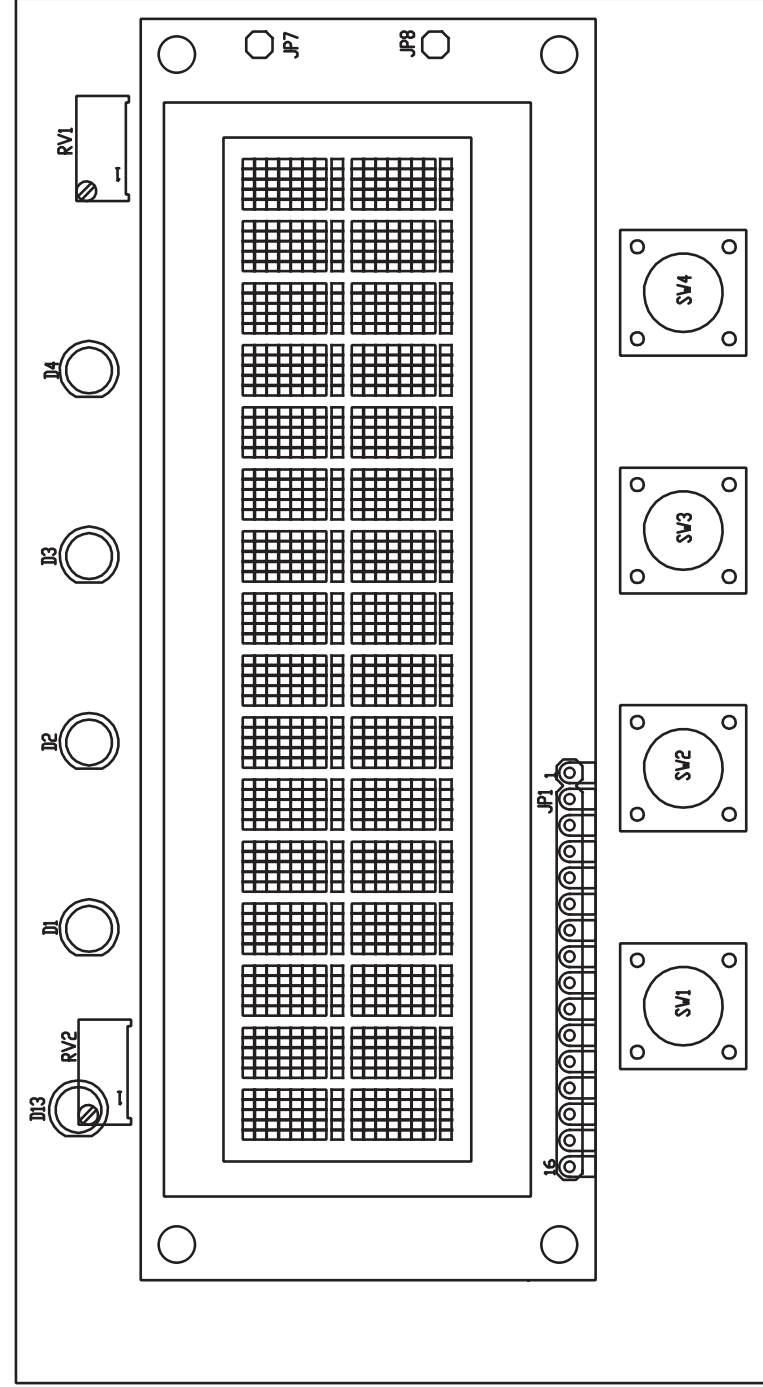
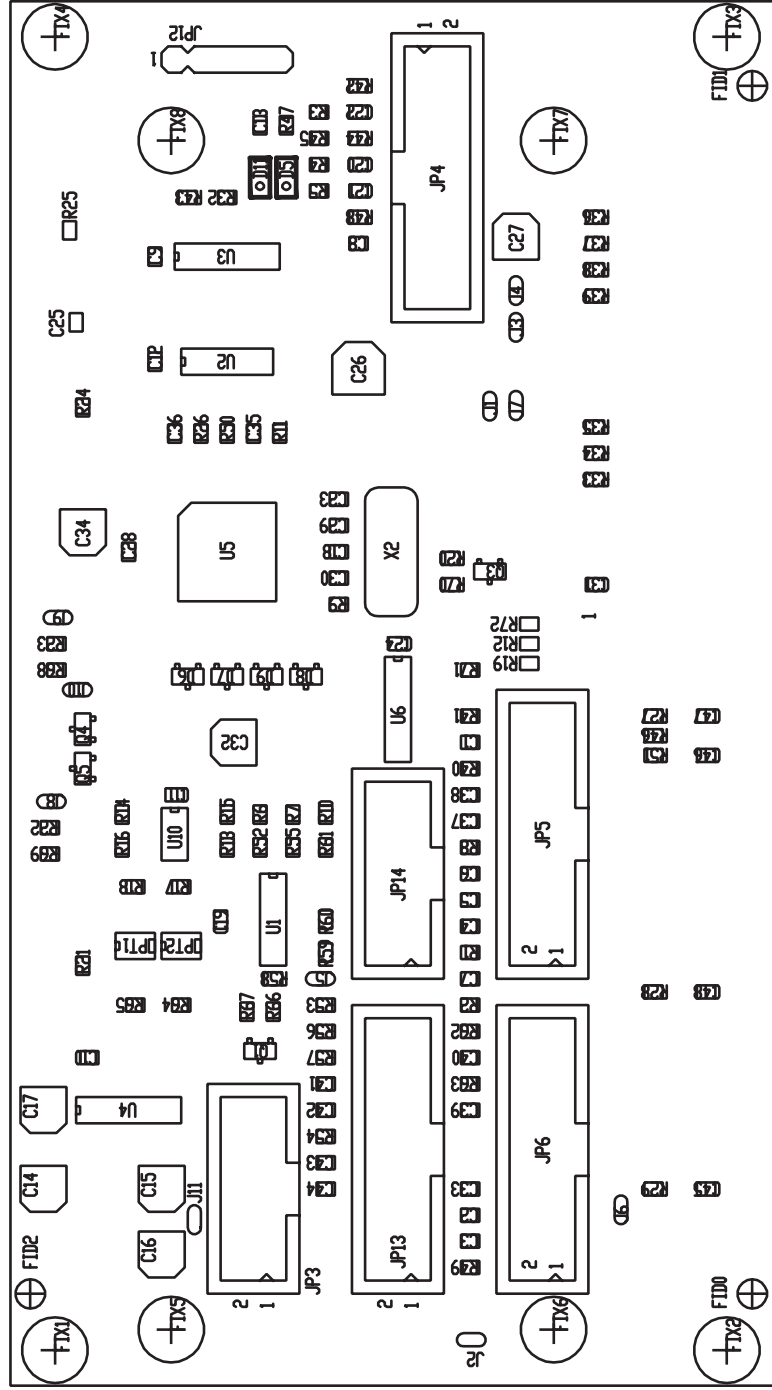


**Output Derating VS Input Voltage**



File Name:EPP-150-SPEC 2016-06-11

SLPC0436R01V07



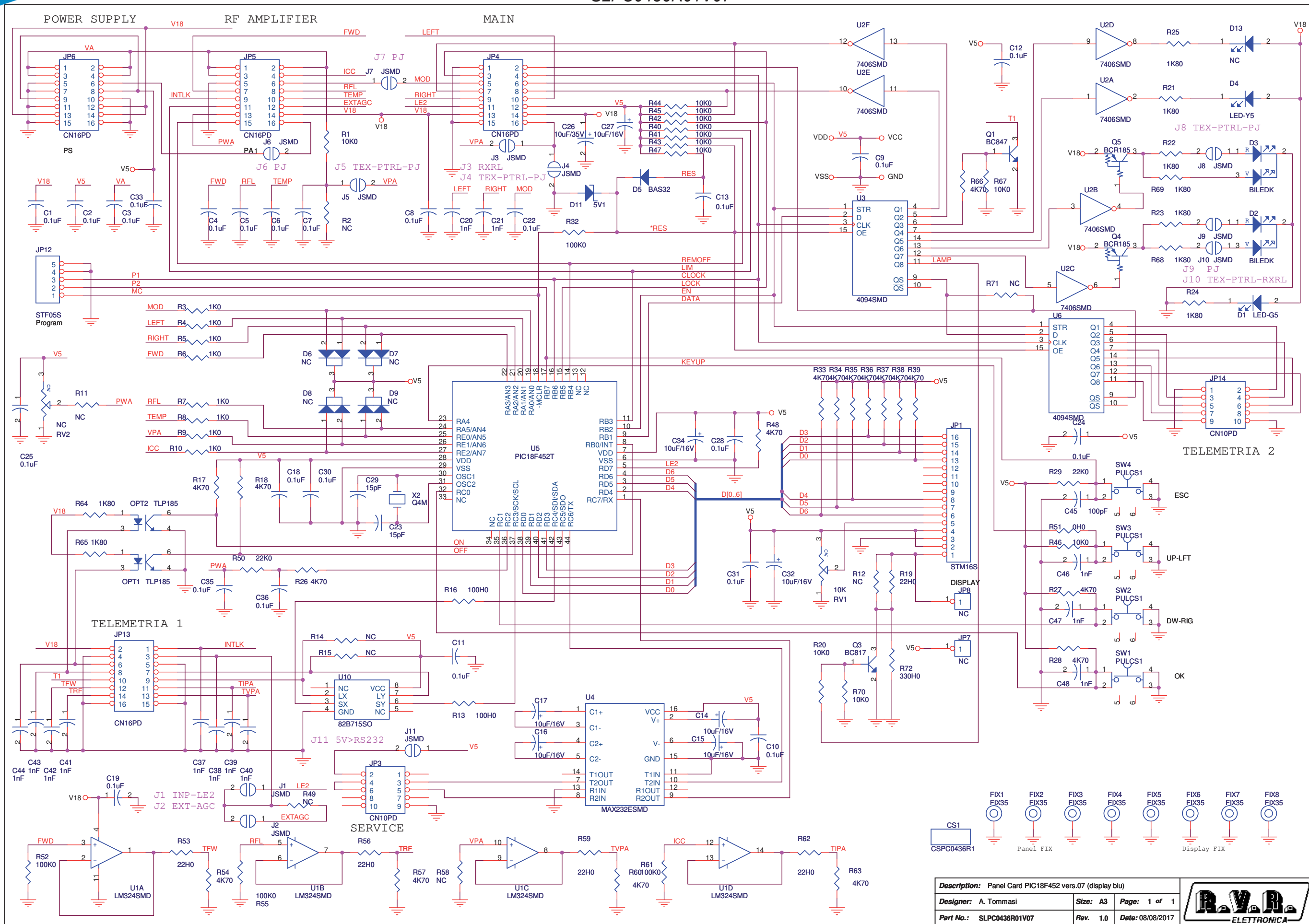
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DESIGNER: A. TOMMASI

DATE: 03/09/15 | REVISION: 1.0 | SCALE: 1:1 | SIZE: A4 | PAGE: 1 DI 1

ARCHIVING: 'RVRUT' SERVER, 'RILASCIATI' FOLDER | PROJECT CODE: <>

DOCUMENT CODE: SLPC0436R01V01



<b>Description:</b> Panel Card PIC18F452 vers.07 (display blu)		
<b>Designer:</b> A. Tommasi	<b>Size:</b> A3	<b>Page:</b> 1 of 1
<b>Part No.:</b> SLPC0436R01V07	<b>Rev.</b> 1.0	<b>Date:</b> 08/08/2017

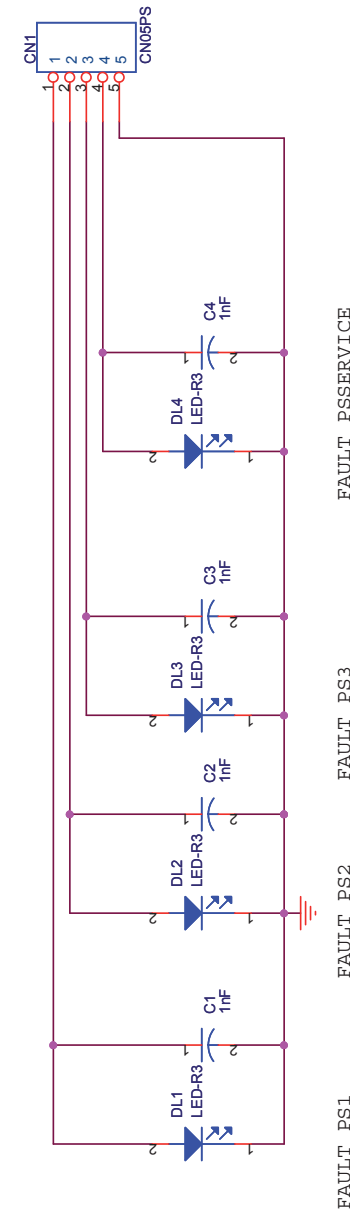
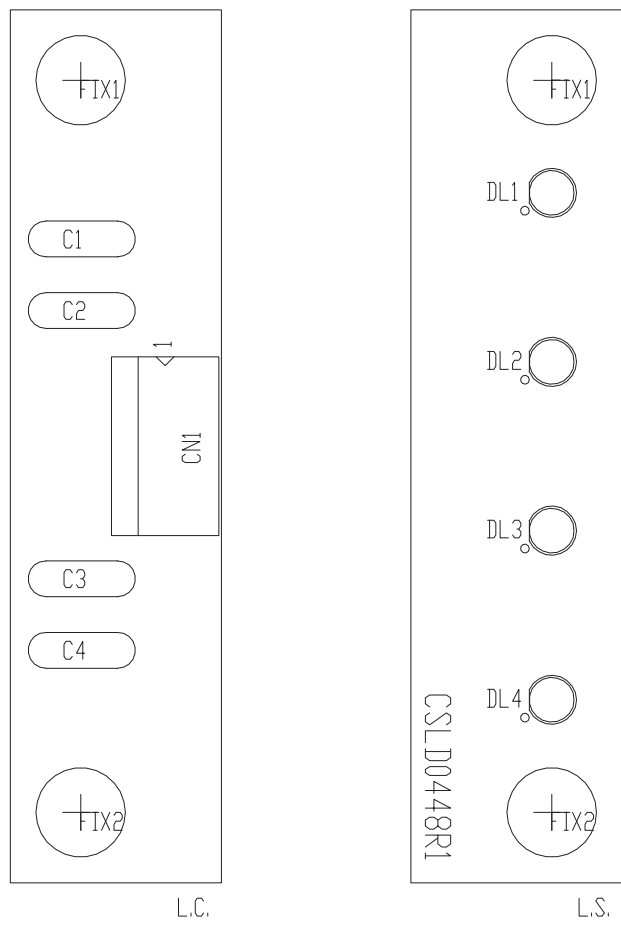


SLPC0436R01V07

Panel Card PIC18F452 vers.07 (display blu)  
 SLPC0436R01V07 Revision: 1.0  
 08/08/2017  
 A. Tommasi

Item	Quantity	Reference	Part	Description
1	1	CS1	CSPC0436R1	Circuito stampato
2	24	C1,C2,C3,C4,C5,C6,C7,C8,C9,C10,C11,C12,C13,C18,C19,C22,C24,C25,C28,C30,C31,C33,C35,C36	0.1uF	Cond. SMD 0805
3	7	C14,C15,C16,C17,C27,C32,C34	10uF/16V	Cond. Elett. SMD d. 4mm
4	13	C20,C21,C37,C38,C39,C40,C41,C42,C43,C44,C46,C47,C48	1nF	Cond. SMD 0805
5	2	C23,C29	15pF	Cond. SMD 0805
6	1	C26	10uF/35V	Cond. Elett. SMD d. 5mm
7	1	C45	100pF	Cond. SMD 0805
8	1	D1	LED-G5	LED Verde dia. 5mm
9	2	D2,D3	BILEDK	Doppio led V-R 5mm Catodo com.
10	1	D4	LED-Y5	LED Giallo dia. 5mm
11	1	D5	BAS32	MINIMELF SMD Diode
12	4	D6,D7,D8,D9	NC	Doppio Diodo SMD SOT23
13	1	D11	5V1	MINIMELF SMD Zener Diode
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 femmina 16 pin
17	2	JP3,JP14	CN10PD	Connettore 10 poli Flat cs
18	4	JP4,JP5,JP6,JP13	CN16PD	Connettore 16 poli Flat cs
19	2	JP7,JP8	NC	Strip femmina 1 pin
20	1	JP12	STF05S	Strip femmina 5 pin
21	11	J1,J2,J3,J4,J5,J6,J7,J8,J9,J10,J11	JSMD	Pad SMD a saldare
22	2	OPT1,OPT2	TLP185	Optoisolatore SMD SO6
23	1	Q1	BC847	Trans. NPN SOT23
24	1	Q3	BC817	Trans. NPN SOT23
25	2	Q4,Q5	BCR185	Trans./Res. PNP SOT23
26	1	RV1	10K	Trimmer Rg V 3296W
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%
29	1	R2	NC	Res. SMD 0805 1%
30	8	R3,R4,R5,R6,R7,R8,R9,R10	1K0	Res. SMD 0805 1%
31	7	R11,R12,R14,R15,R49,R58,R71	NC	Res. SMD 0805 1%
32	2	R13,R16	100H0	Res. SMD 0805 1%
33	18	R17,R18,R26,R27,R28,R33,	4K70	Res. SMD 0805 1%

34	5	R19,R53,R56,R59,R62	22H0	Res. SMD 0805 1%
35	9	R21,R22,R23,R24,R25,R64,R65,R68,R69	1K80	Res. SMD 0805 1%
36	2	R29,R50	22K0	Res. SMD 0805 1%
37	4	R32,R52,R55,R61	100K0	Res. SMD 0805 1%
38	1	R51	0H0	Res. SMD 0805 1%
39	1	R72	330H0	Res. SMD 0805 1%
40	4	SW1,SW2,SW3,SW4	PULCS1	Pulsante cs
41	1	U1	LM324SMD	Quad Op. SMD SO14
42	1	U2	7406SMD	Hex inv OC SMD SO14
43	2	U3,U6	4094SMD	Shift Reg. SMD SO16
44	1	U4	MAX232ESMD	RS232 Driver SMD SO16
45	1	U5	PIC18F452T	TQFP44 SMD Microprocessor
46	1	U10	82B715SO	IIC Bus driver SMD SO8
47	1	X2	Q4M	Quarzo SMD HC49SMD



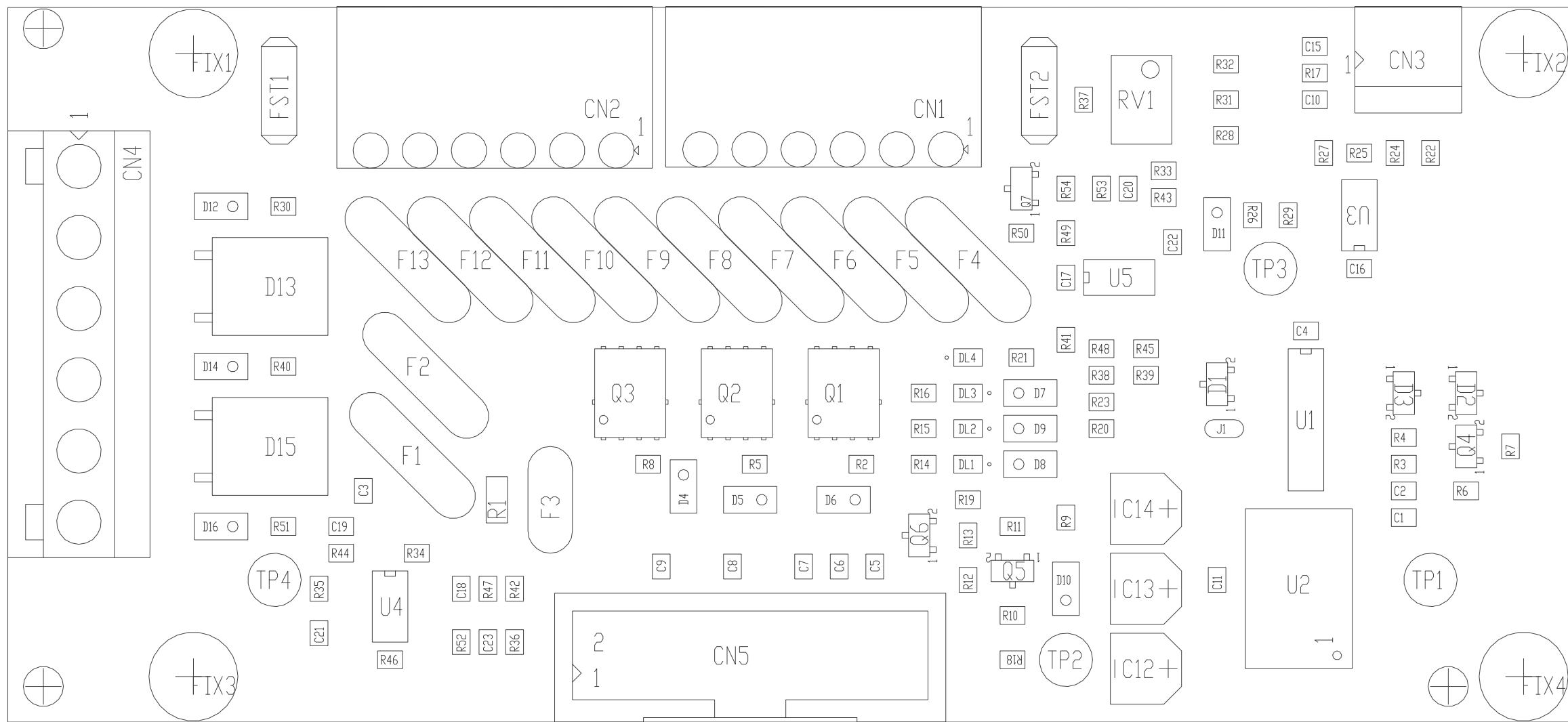
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Designer: Tommasi A.			
Part No.: SLLD0448R01V01			

	PRODUCT NAME : PJ5000U-K	PART NAME : LED CARD			
	DESIGNER : A. TOMMASI	DATE : 27/07/18	REVISION : 1.0	SCALE : 2:1	SIZE : A4
ARCHIVING : "RVVUT" SERVER, "RILASCIATI" FOLDER		PROJECT CODE : 245	DOCUMENT CODE : SLLD0448R01V01		

SLLD0448R01V01

Led Board Revised: Monday, July 11, 2016  
SLLD0448R01V01 Revision: 1.0  
Tommasi A.

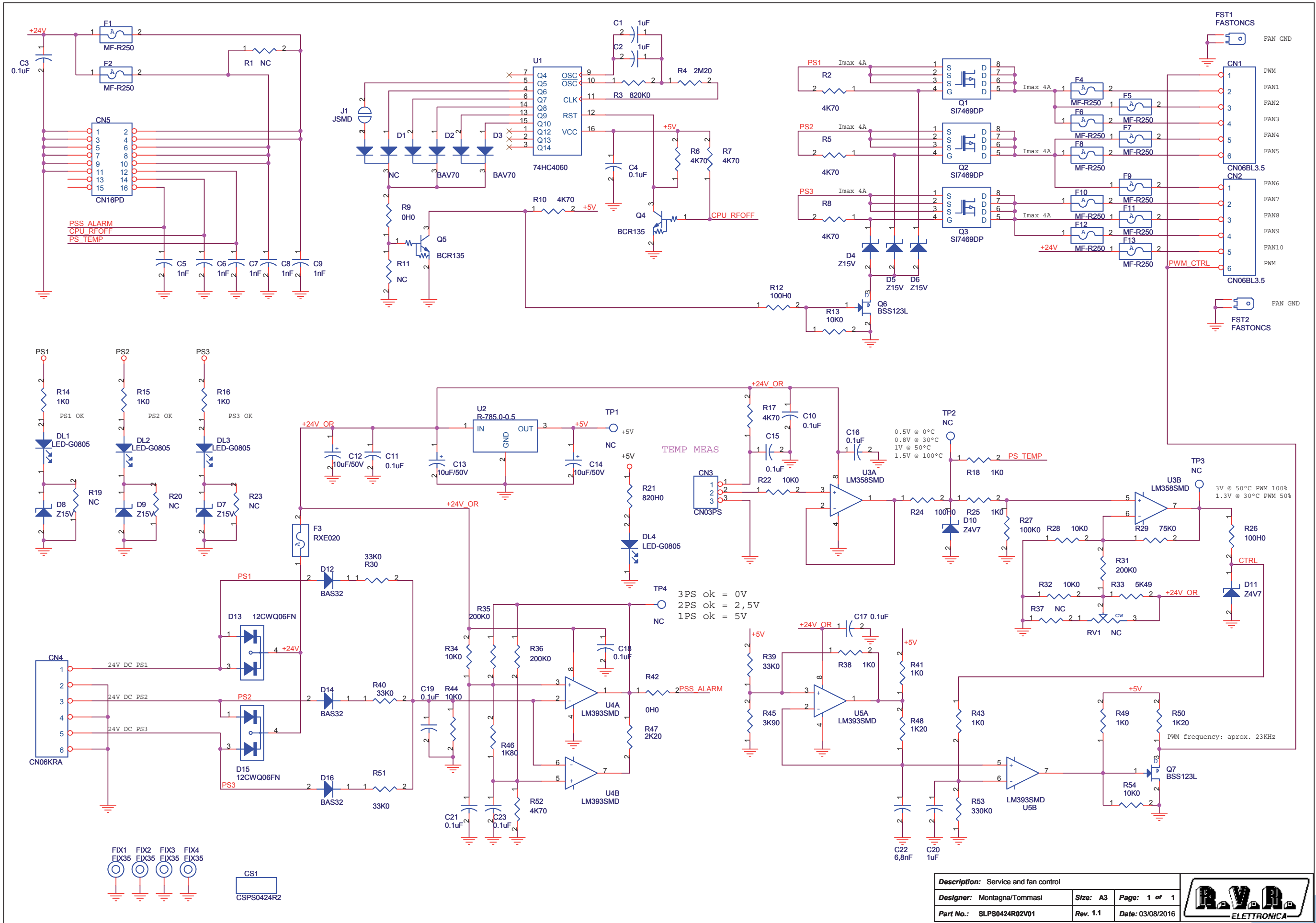
Item	Quantity	Reference	Part	Description
1	1	CN1	CN05PS	Conn. 5 poli Mascon
2	1	CS1	CSLD0448R1	Circuito stampato
3	4	C1, C2, C3, C4	1nF	Cond. ceramico p 5mm
4	4	DL1, DL2, DL3, DL4	LED-R3	LED Rosso dia. 3mm
5	2	FIX1, FIX2	FIX35	Foro fissaggio 3.5mm



PRODUCT NAME : PJ5000U-K	PART NAME : SERVICE AND FAN CONTROL CARD
DESIGNER : MONTAGNA/TOMMASI	DATE : 03/08/16
ARCHIVING : "RVRUT" SERVER, "RILASCIATI" FOLDER	REVISION : 1.1
	SCALE : 2:1
	SIZE : A4
	PAGE : 1
	DI : 1
	DOCUMENT CODE : SLPS0424R02V01



SLPS0424R02V01

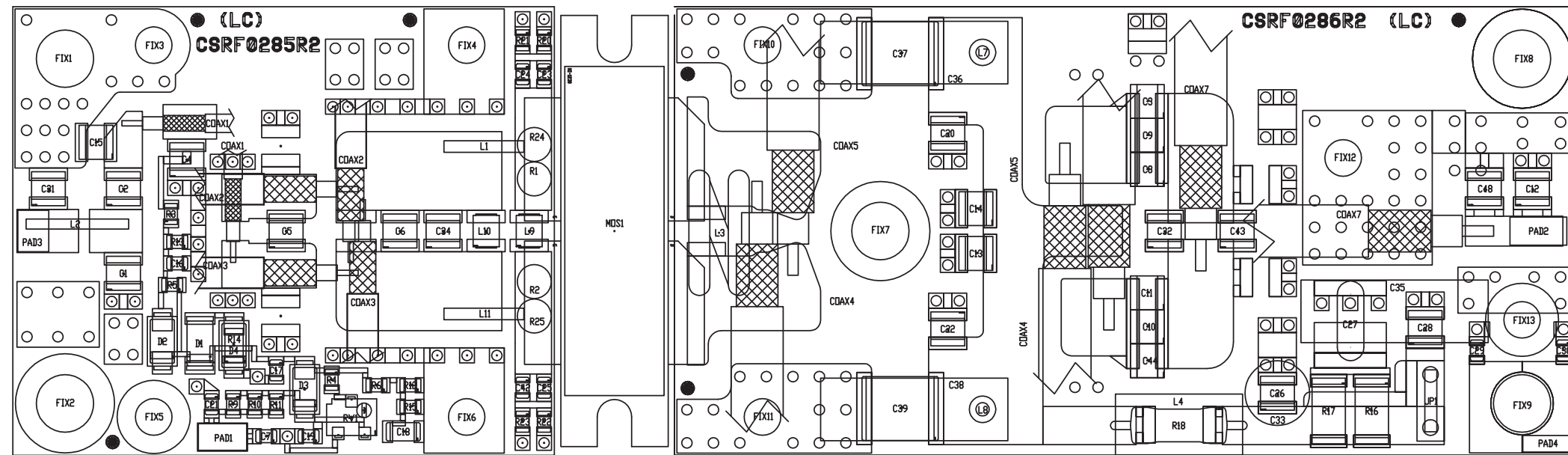



Description: Service and fan control				
Designer: Montagna/Tommasi	Size: A3			Page: 1 of 1
Part No.: SLPS0424R02V01	Rev. 1.1			Date: 03/08/2016

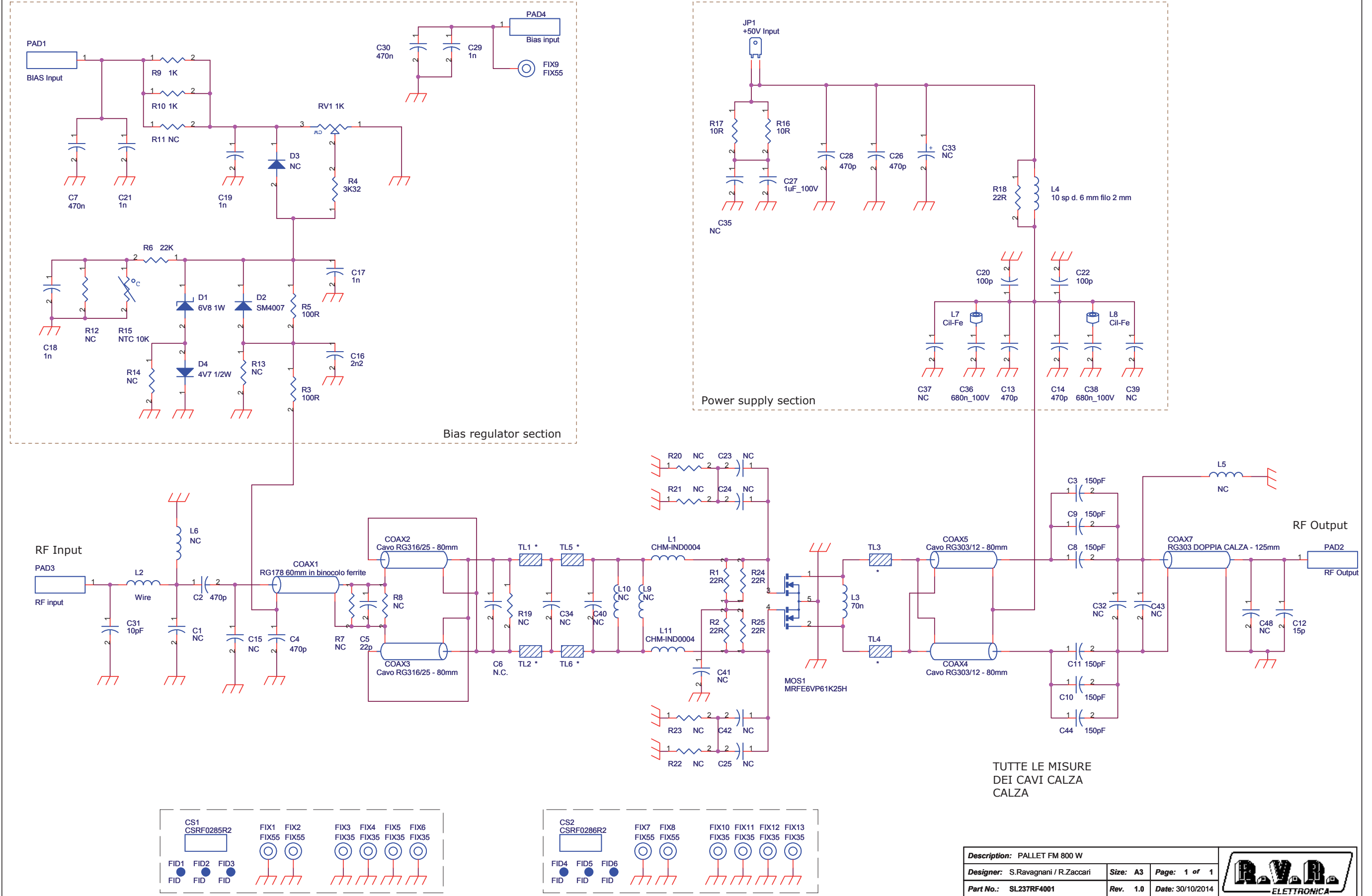
Service and fan control Revised: Wednesday, August 03, 2016  
 SLPS0424R02V01 Revision: 1.1  
 Montagna/Tommasi

Item	Quantity	Reference	Part	Description
1	2	CN1, CN2	CN06BL3.5	Conn. Weidm BL 6 poli passo 3.5mm
2	1	CN3	CN03PS	Conn. 3 poli Mascon
3	1	CN4	CN06KRA	Conn. tipo KRA a 6 poli
4	1	CN5	CN16PD	Conn.M.C.S Dritto 16P alette.
5	1	CS1	CSPS0424R2	Circuito stampato
6	3	C1, C2, C20	1uF	Cond. SMD 0805
7	11	C3, C4, C10, C11, C15, C16, C17, C18, C19, C21, C23	0.1uF	Cond. SMD 0805
8	5	C5, C6, C7, C8, C9	1nF	Cond. SMD 0805
9	3	C12, C13, C14	10uF/50V	Cond. Elett. SMD d. 5mm
10	1	C22	6,8nF	Cond. SMD 0805
11	4	DL1, DL2, DL3, DL4	LED-G0805	LED Verde SMD 0805
12	1	D1	NC	Doppio Diodo SMD SOT23
13	2	D2, D3	BAV70	Doppio Diodo SMD SOT23
14	6	D4, D5, D6, D7, D8, D9	Z15V	MINIMELF SMD Zener Diode
15	2	D10, D11	Z4V7	MINIMELF SMD Zener Diode
16	3	D12, D14, D16	BAS32	MINIMELF SMD Diode
17	2	D13, D15	12CWQ06FN	Doppio diodo shottky SMD DPAK
18	4	FIX1, FIX2, FIX3, FIX4	FIX35	Foro fissaggio 3.5mm
19	2	FST1, FST2	FASTONCS	Faston da CS p. 5,08
20	12	F1, F2, F4, F5, F6, F7, F8, F9, F10, F11, F12, F13	MF-R250	Fusibile autorip. RXE p5,1mm
21	1	F3	RXE020	Fusibile autorip. RXE p5mm
22	1	J1	JSMD	Pad SMD a saldare
23	3	Q1, Q2, Q3	SI7469DP	P-Channel 80-V (D-S) MOSFET
24	2	Q4, Q5	BCR135	Trans./Res. NPN SOT23
25	2	Q6, Q7	BSS123L	Trans. FET SOT23
26	1	RV1	NC	Trimmer Rg H 3269X SMD
27	1	R1	NC	Res. SMD 1206
28	8	R2, R5, R6, R7, R8, R10, R17, R52	4K70	Res. SMD 0805 1%
29	1	R3	820K0	Res. SMD 0805 1%
30	1	R4	2M20	Res. SMD 0805 1%
31	2	R9, R42	0H0	Res. SMD 0805 1%
32	5	R11, R19, R20, R23, R37	NC	Res. SMD 0805 1%
33	3	R12, R24, R26	100H0	Res. SMD 0805 1%
34	7	R13, R22, R28, R32, R34, R44, R54	10K0	Res. SMD 0805 1%
35	9	R14, R15, R16, R18, R25, R38, R41, R43, R49	1K0	Res. SMD 0805 1%
36	1	R21	820H0	Res. SMD 0805 1%
37	1	R27	100K0	Res. SMD 0805 1%
38	1	R29	75K0	Res. SMD 0805 1%
39	4	R30, R39, R40, R51	33K0	Res. SMD 0805 1%
40	3	R31, R35, R36	200K0	Res. SMD 0805 1%
41	1	R33	5K49	Res. SMD 0805 1%
42	1	R45	3K90	Res. SMD 0805 1%
43	1	R46	1K80	Res. SMD 0805 1%
44	1	R47	2K20	Res. SMD 0805 1%
45	2	R48, R50	1K20	Res. SMD 0805 1%
46	1	R53	330K0	Res. SMD 0805 1%
47	4	TP1, TP2, TP3, TP4	NC	Test point
48	1	U1	74HC4060	Divider SMD SO16
49	1	U2	R-785.0-0.5	Switching SIP3 regulator
50	1	U3	LM358SMD	Dual Op. SMD SO8
51	2	U4, U5	LM393SMD	Dual Comp. SMD SO8

SL237RF4001



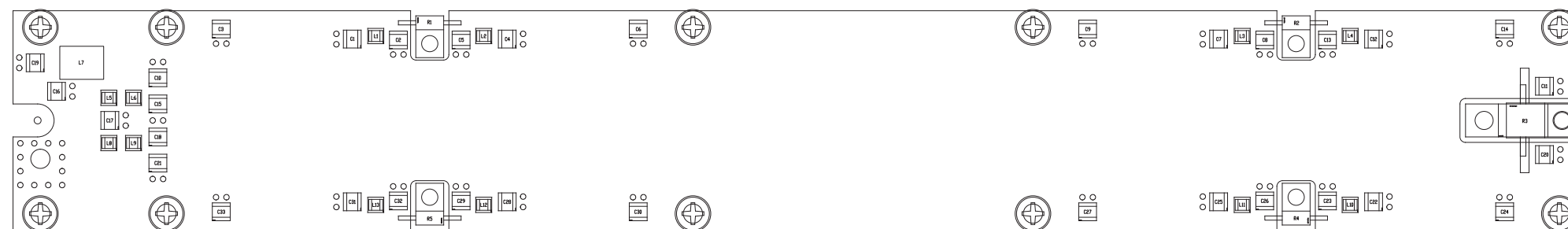
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	AUTORE: ZACCARI / DE DONNO	DATA: 07/11/2014	REVISIONE: 1.0	SCALA: 2:1	SIZE: A3
ARCHIVIAZIONE ELETTRONICA: "CARTELLA RILASCIATI" SU "UTSRV"	CODICE PROGETTO: 237		CODICE DISEGNO: SL237RF4001		
MATERIALE: <>	TRATTAMENTO: <>	PROFILO: <>	STATO: ESECUTIVO		



SL237RF4001

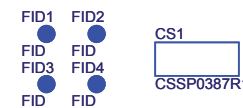
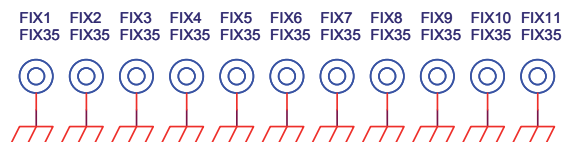
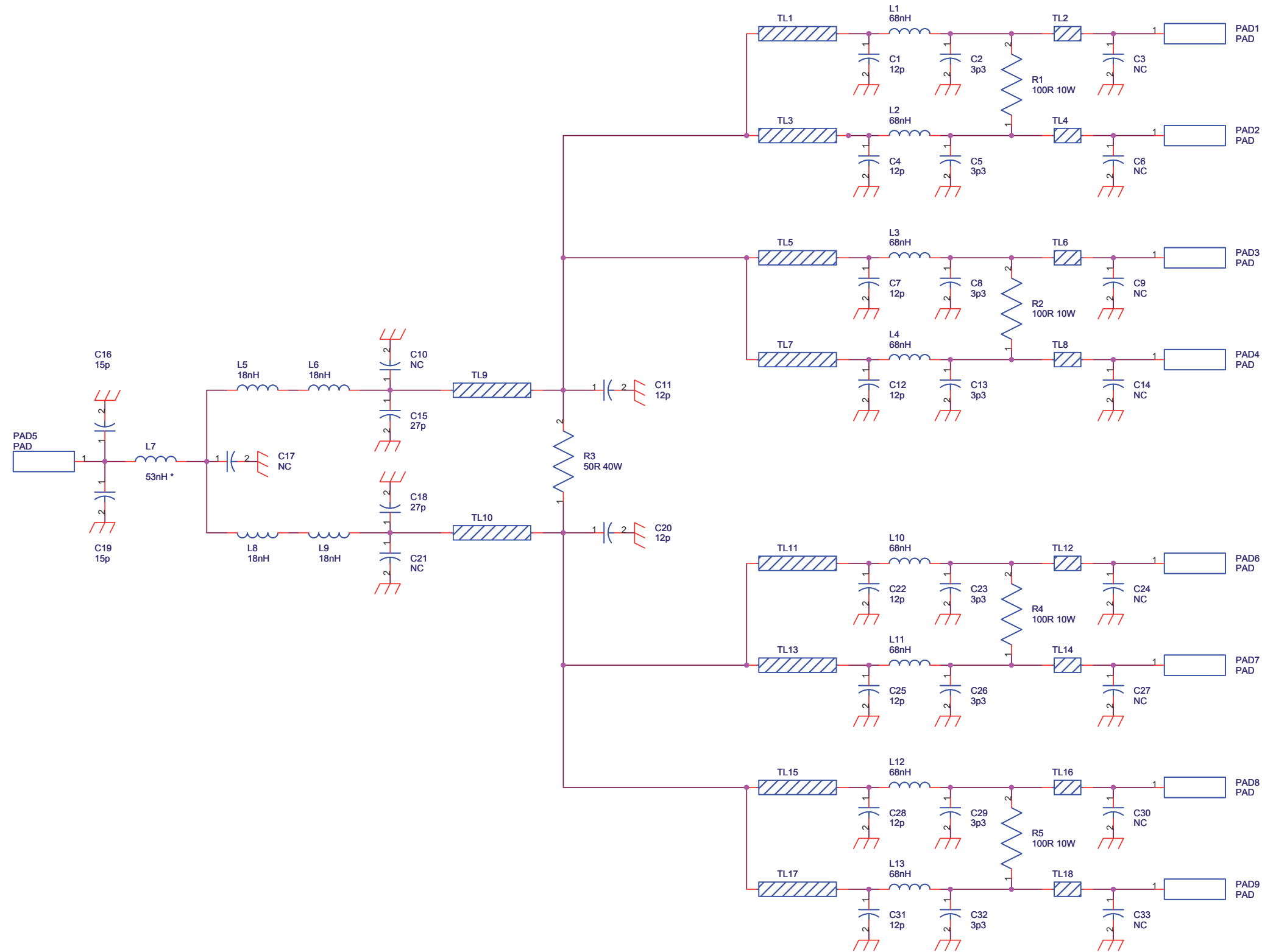
PALLET FM 800 W Revised: 30/10/2014  
 SL237RF4001 Revision: 1.0  
 S.Ravagnani / R.Zaccari

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	CSRF0285R2	Circuito stampato
6	1	CS2	CSRF0286R2	Circuito stampato
7	3	C1, C23, C25	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	NC	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	6	C15, C32, C34, C40, C43, C48	NC	Cond. SMD 1212 HQ
17	1	C16	2n2	Cond. SMD 0805 COG
18	3	C17, C19, C21	1n	Cond. SMD 0805
19	1	C18	1n	Cond. SMD 1206
20	2	C22, C20	100p	Cond. SMD 1212 HQ
21	2	C42, C24	NC	Cond. SMD 0805
22	1	C27	1uF 100V	Cond. multistrato p 5mm
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	1	D3	NC	Diode SMD cont. SMA
31	1	D4	4V7 1/2W	MELF SMD Zener Diode
32	6	FID1, FID2, FID3, FID4, FID5, FID6	FID	Fiducial CS
33	5	FIX1, FIX2, FIX7, FIX8, FIX9	FIX55	Foro fissaggio 5.5mm
34	8	FIX3, FIX4, FIX5, FIX6, FIX10, FIX11, FIX12, FIX13	FIX35	Foro fissaggio 3.5mm
35	1	JP1	+50V Input	Faston da CS p. 5.08
36	2	L11, L1	CHM-IND0004	Printed link on copper
37	1	L2	Wire	Filo R. Arg. 1mm lung. 10mm
38	1	L3	70n	1.5 Spire Filo R. Arg. 2mm Avvolte su 8mm Lung. 8 Alt. 5mm da PCB
39	1	L4	10 sp d. 6 mm filo 2 mm	10spire filo R. Small. 2mm Avvolte su 6mm includente R18 all'interno
40	2	L5, L9	NC	
41	1	L6	NC	
42	2	L7, L8	Cil-Fe	Cilindretto di ferrite
43	1	L10	NC	Ind. SMD 1008
44	1	MOS1	MRFE6VP61K25H	PP Power mosfet RF
45	2	PAD4, PAD1	BIAS Input	
46	1	PAD2	RF Output	
47	1	PAD3	RF input	
48	1	RV1	1K	Trimm. multi SMD PVG5 Murata
49	4	R1, R2, R24, R25	22R	Res. 2W
50	3	R7, R8, R19	NC	Res. 2W
51	2	R3, R5	100R	Res. SMD 0805 1%
52	1	R4	3K32	Res. SMD 0805 1%
53	1	R6	22K	Res. SMD 0805 1%
54	2	R10, R9	1K	Res. SMD 0805 1%
55	3	R11, R12, R13	NC	Res. SMD 0805 1%
56	1	R14	NC	Res. SMD 1206 1%
57	1	R15	NTC 10K	Res. NTC SMD 0805
58	2	R17, R16	10R	Res. SMD 2512 5%
59	1	R18	22R	Res. 2W
60	4	R20, R21, R22, R23	NC	Res. SMD 0805 1%
61	6	TL1, TL2, TL3, TL4, TL5, TL6	*	Linea strip CS
62	1		Ferrite balun	Ferrite balun



	PRODUCT NAME : PJ5000U-K	PART NAME : 8 WAY SPLITTER FM
	DESIGNER : M. UCELLI; E. ARIATTI	DATE 21/01/14   REVIS. : 1.0   SCALE 1:1   SIZE A3   PAGE :1 DI 1
ARCHIVING : "RVRUT" SERVER, "RILASCIATI" FOLDER   PROJECT CODE : 245		DOCUMENT CODE : SLSP0387R01V01

SLSP0387R01V01



Description: 8 Way Splitter FM		
Designer: M. Ucelli; E. Ariatti	Size: A3	Page: 1 of 1
Part No.: SLSP0387R01V01	Rev. 1.0	Date: 21/01/2014

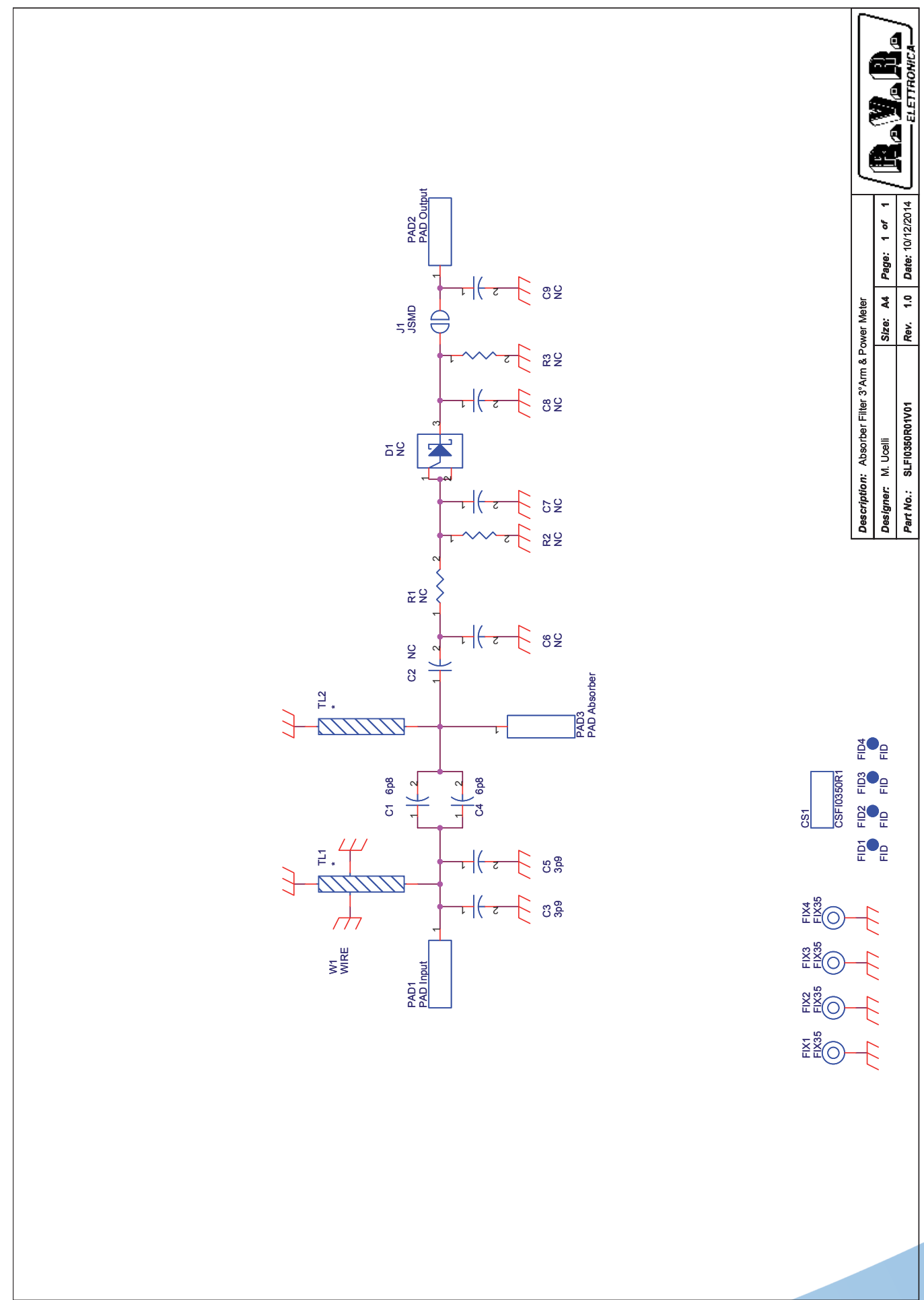
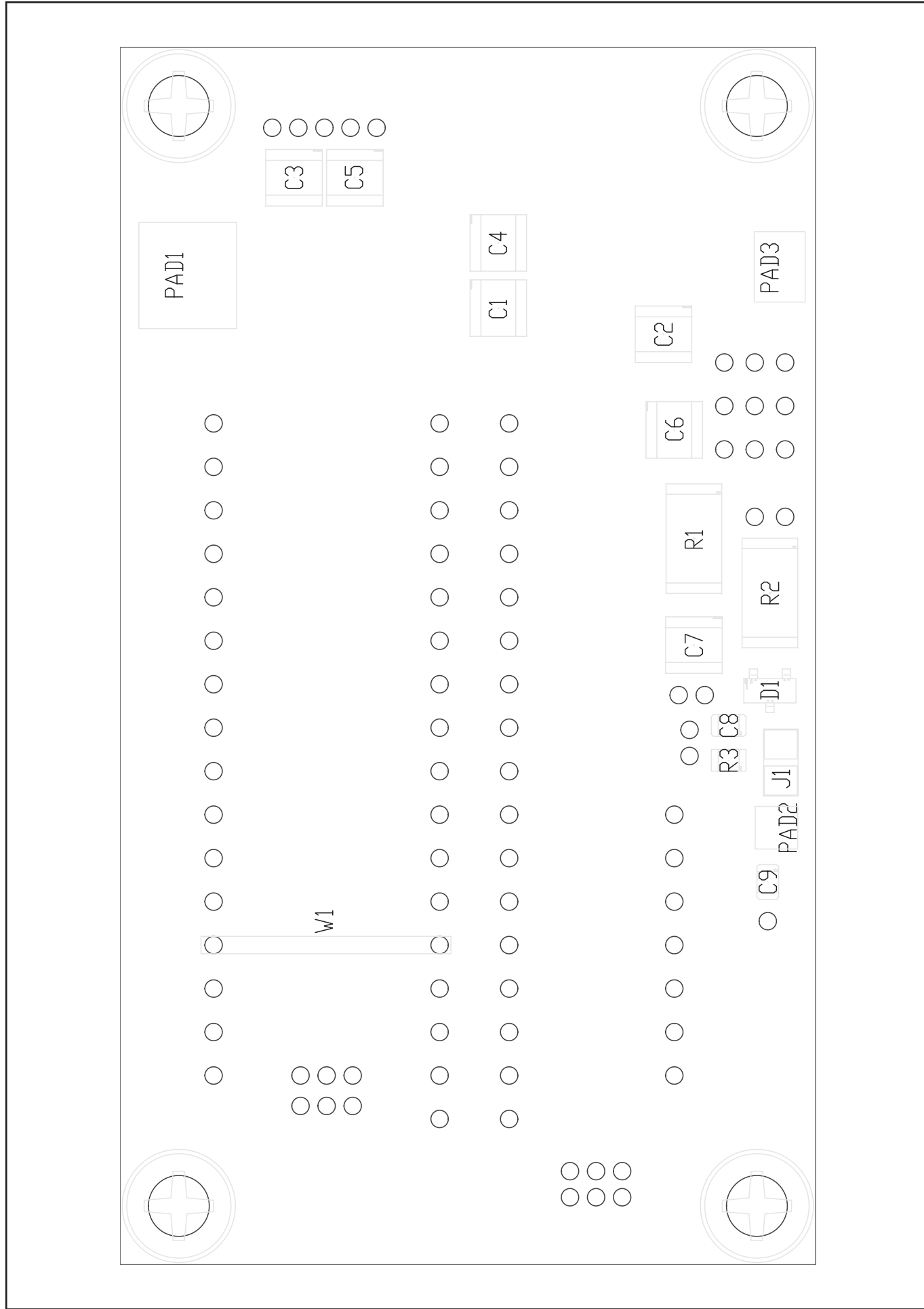


8 Ways Splitter FM  
 SLSP0387R01V01  
 Revision: 1.0  
 21/01/2014  
 46  
 Mauro Ucelli / E. Ariatti

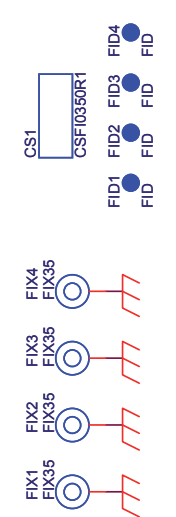
Item	Quantity	Reference	Part	Description
1	1	CS1	CSSP0387R1	Circuito stampato
2	10	C1,C4,C7,C11,C12,C20,C22,C25,C28,C31	12p	Cond. SMD 1212 HQ
3	8	C2,C5,C8,C13,C23,C26,C29,C32	3p3	Cond. SMD 1212 HQ
4	11	C3,C6,C9,C10,C14,C17,C21,C24,C27,C30,C33	NC	Cond. SMD 1212 HQ
5	2	C15,C18	27p	Cond. SMD 1212 HQ
6	2	C16,C19	15p	Cond. SMD 1212 HQ
7	4	FID1,FID2,FID3,FID4	FID	Fiducial CS
8	11	FIX1,FIX2,FIX3,FIX4,FIX5,FIX6,FIX7,FIX8,FIX9,FIX10,FIX11	FIX35	Foro fissaggio 3.5mm
9	8	L1,L2,L3,L4,L10,L11,L12,L13	68nH	Induttanza SMD HQ 2520 (1008)
10	4	L5,L6,L8,L9	18nH	Induttanza SMD HQ 2520 (1008)
11	1	L7	53nH *	4 spire filo rame arg. $\Phi$ 1mm, avvolte su $\Phi$ 4mm; lunghezza solenoide 5,5mm
12	9	PAD1,PAD2,PAD3,PAD4,PAD5,PAD6,PAD7,PAD8,PAD9	PAD	Pad SMD saldare
13	4	R1,R2,R4,R5	100R 10W	Resistenza KDI 1 fix, 100ohm 10W
14	1	R3	50R 40W	Resistenza KDI 2 fix, 50 ohm 40W
15	10	TL1,TL3,TL5,TL7,TL9,TL10,TL11,TL13,TL15,TL17	TLINE_L	Linea strip CS
16	8	TL2,TL4,TL6,TL8,TL12,	TLINE_S	Linea strip CS



SLFI0350R01V01



Description: Absorber Filter 3'Am & Power Meter	
Designer: M. Ucelli	Size: A4
Part No.: SLFI0350R01V01	Page: 1 of 1
	Date: 10/12/2014
	Rev. 1.0

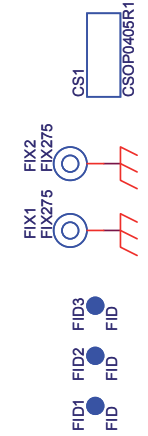
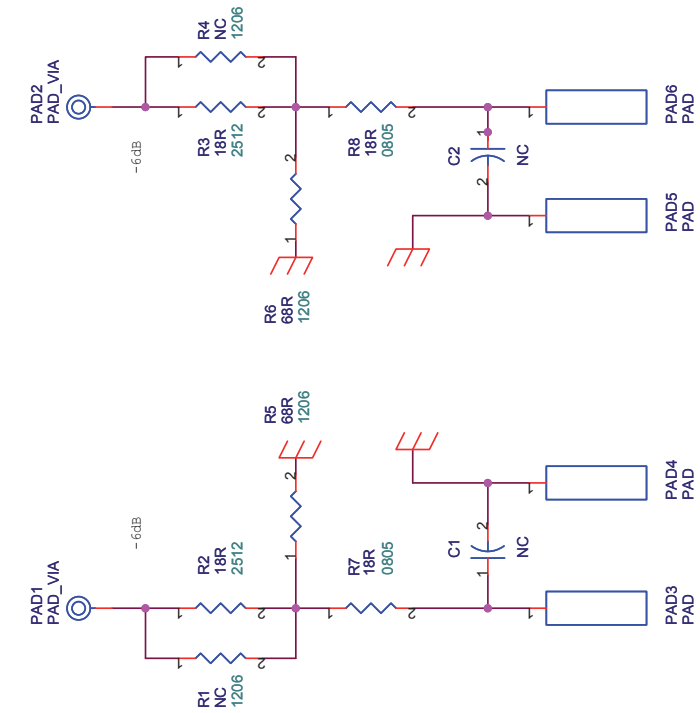
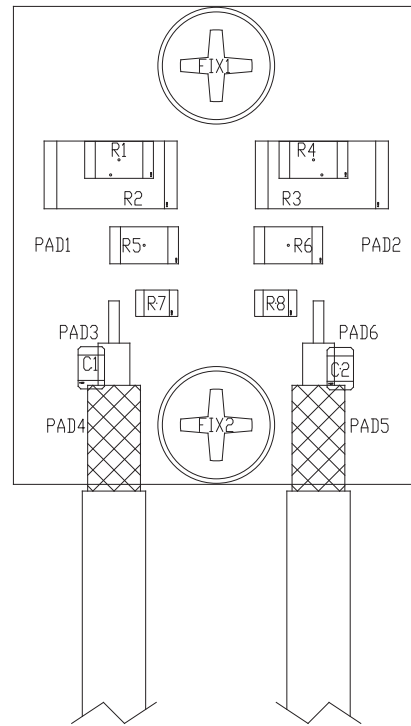


SLFI0350R01V01

Absorber Filter 3°Arm & Power Meter  
 SLFI0350R01V01  
 Revision: 1.0  
 Mauro Ucelli  
 12/10/14

Item	Quantity	Reference	Part	Description
1	1	CS1	CSFI0350R1	Circuito stampato
2	2	C1,C4	6p8	Cond. SMD 1212 HQ
3	3	C2,C6,C7	NC	Cond. SMD 1212 HQ
4	2	C3,C5	3p9	Cond. SMD 1212 HQ
5	2	C8,C9	NC	Cond. SMD 0805 COG
6	1	D1	NC	
7	4	FID1,FID2,FID3,FID4	FID	Fiducial CS
8	4	FIX1,FIX2,FIX3,FIX4	FIX35	Foro fissaggio 3.5mm
9	1	J1	JSMD	Pad SMD a saldare
10	1	PAD1	PAD Input	Pad SMD saldare
11	1	PAD2	PAD Output	Pad SMD saldare
12	1	PAD3	PAD Absorber	Pad SMD saldare
13	2	R1,R2	NC	Res. SMD 2512 1%
14	1	R3	NC	Res. SMD 0805
15	2	TL1,TL2	*	Linea strip CS
16	1	W1	WIRE	Filo a saldare diam 1mm

SLOP0405R01V01



Description: FWD-RFL  
 Designer: Ucelli/Montagna  
 Part No.: SLOP0405R01V01  
 Size: A4  
 Page: 1 of 1  
 Rev: 1.1  
 Date: 05/07/2017

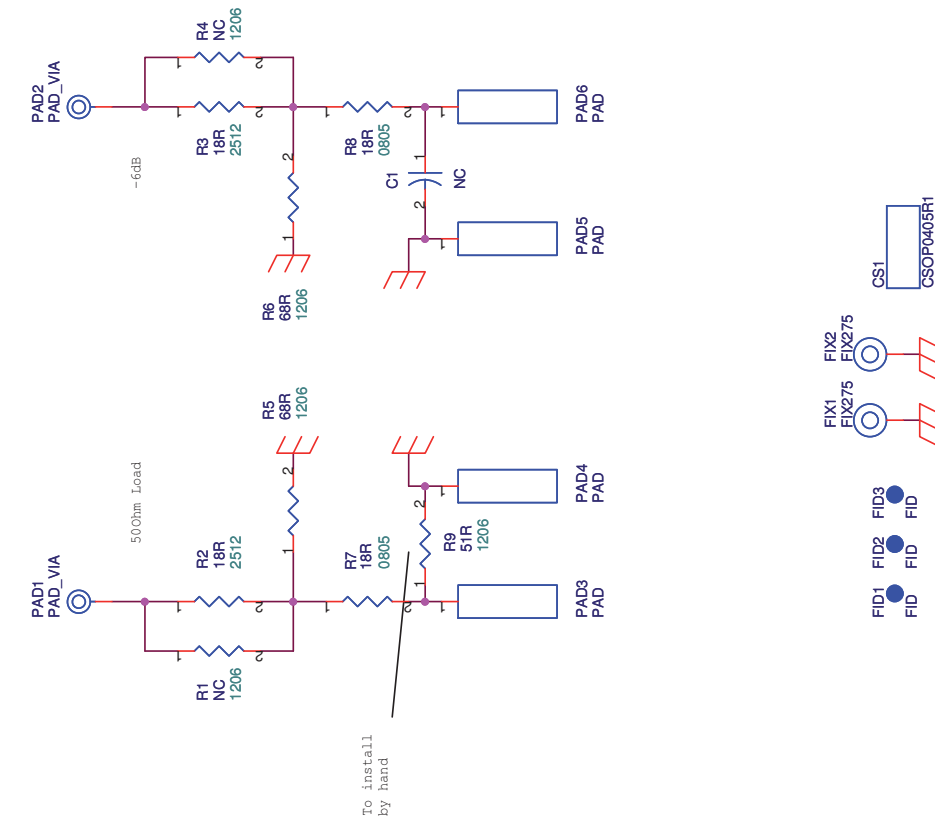
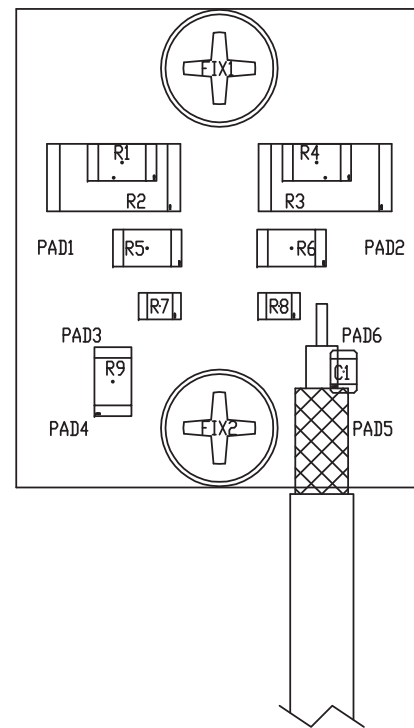
	NOME PROGETTO: VCA2K0LU	NOME PARSEM: SCHEDA TESTINA FWD-RFL AMP TV
	AUTORE: E. MONTAGNA	DATA: 21/08/2017 REVISIONE: 0
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SLOP0405R01V01

FWD-RFL Revised: 05/07/2017  
 SLOP0405R01V01 Revision: 1.1  
 Ucelli/Montagna

Item	Quantity	Reference	Part	Description
1	1	CS1	CSOP0405R1	Circuito stampato
2	2	C1,C2	NC	Cond. SMD 0805
3	3	FID1,FID2,FID3	FID	Fiducial CS
4	2	FIX1,FIX2	FIX275	Foro fissaggio 3mm
5	2	PAD1,PAD2	PAD_VIA	Pad Via
6	4	PAD3,PAD4,PAD5,PAD6	PAD	Pad SMD saldare
7	2	R1,R4	NC	Res. SMD 1206
8	2	R2,R3	18R	Res. SMD 2512 1%
9	2	R5,R6	68R	Res. SMD 1206
10	2	R7,R8	18R	Res. SMD 0805

SLOP0405R01V02



Description: Monitor	
Designer: Mauro Ucelli	Size: A4
Part No.: SLOP0405R01V02	Pages: 1 of 1
	Rev. 1.1
	Date: 05/07/2017

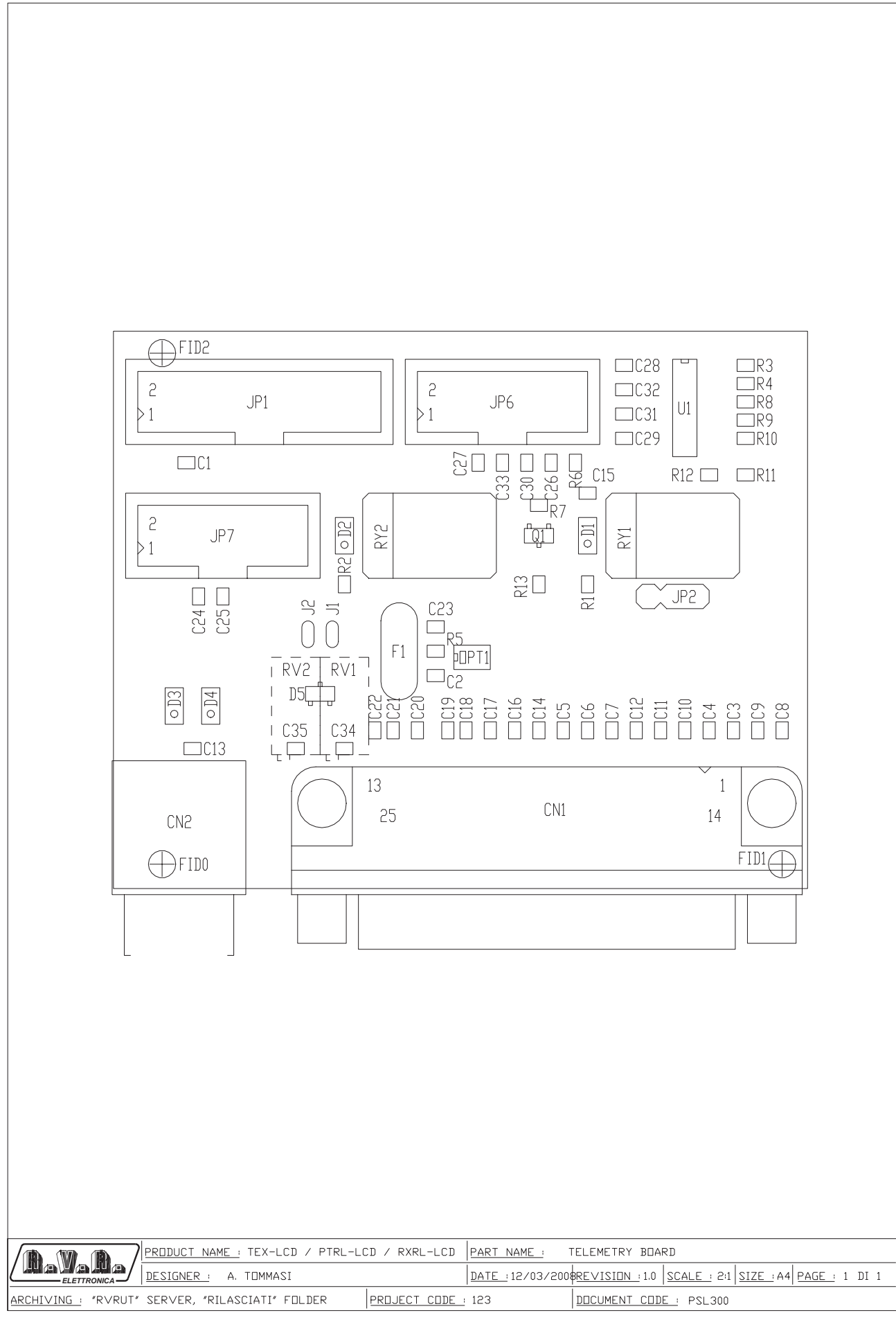
	NOME PROGETTO: ATVCA2KOLU	NOME PARTE: SEM.SCHEDA TESTINA MONITOR AMP TV
	AUTORE: E. MONTAGNA	DATA: 21/08/2014
ARCHIVIAZIONE ELETTRONICA: "CARTELLA RILASCIATI" SU "RVRUT"	CODICE PROGETTO: 190	CODICE DISEGNO: SLOP0405R01V02
MATERIALE: <>	TRATTAMENTO: <>	PROFILO: <>
		STATO: ESECUTIVO

SLOP0405R01V02

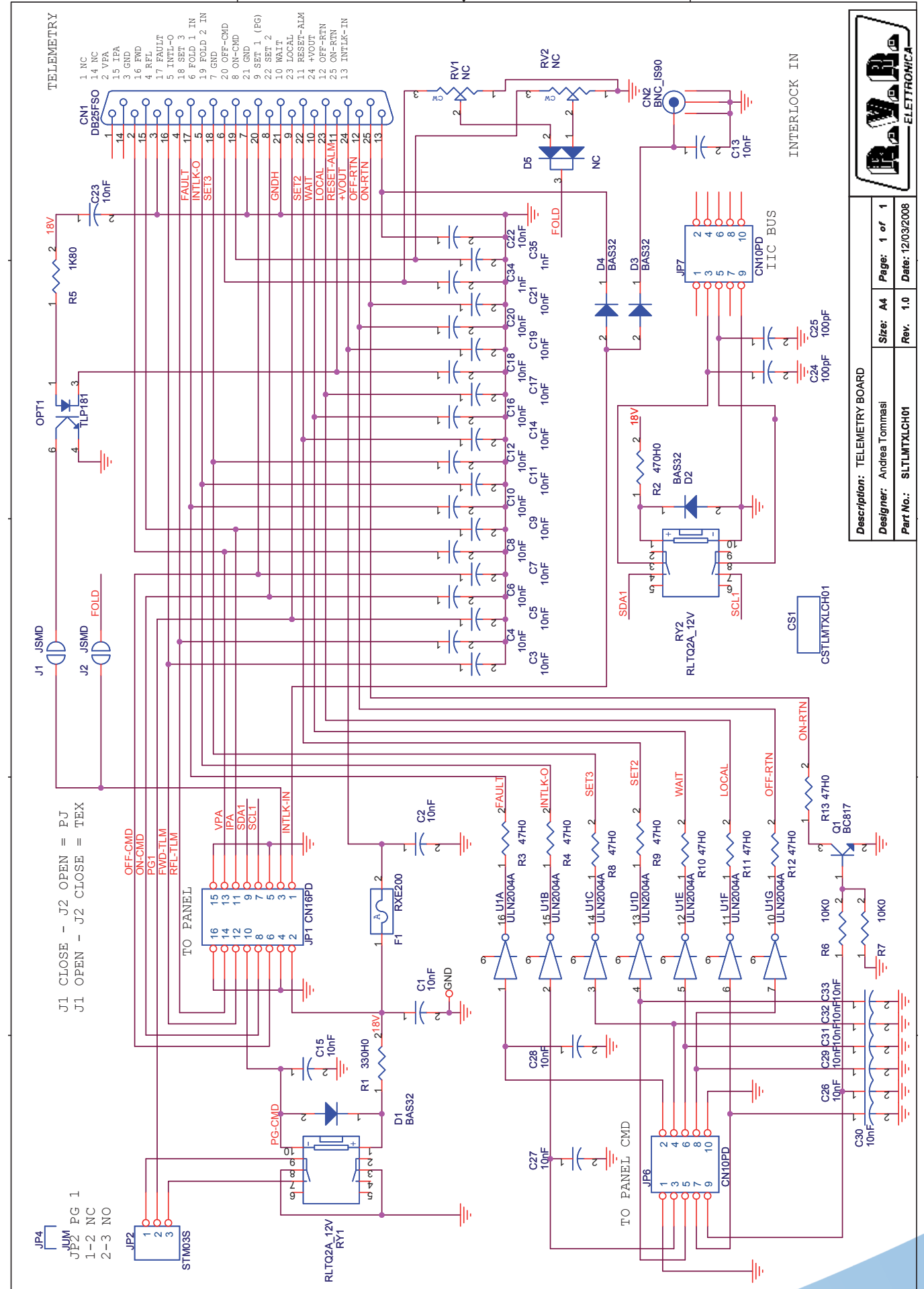
Monitor Revised: 05/07/2017  
 SLOP0405R01V02 Revision: 1.1  
 Mauro Ucelli

Item	Quantity	Reference	Part	Description
1	1	CS1	CSOP0405R1	Circuito stampato
2	1	C1	NC	Cond. SMD 0805
3	3	FID1,FID2,FID3	FID	Fiducial CS
4	2	FIX1,FIX2	FIX275	Foro fissaggio 3mm
5	2	PAD1,PAD2	PAD_VIA	Pad Via
6	4	PAD3,PAD4,PAD5,PAD6	PAD	Pad SMD saldare
7	2	R1,R4	NC	Res. SMD 1206
8	2	R2,R3	18R	Res. SMD 2512 1%
9	2	R5,R6	68R	Res. SMD 1206
10	2	R7,R8	18R	Res. SMD 0805
11	1	R9	51R	Res. SMD 1206

SLTLMTXLCH01



	PRODUCT NAME: TEX-LCD / PTRL-LCD / RXRL-LCD	PART NAME: TELEMETRY BOARD
	DESIGNER: A. TOMMASI	DATE: 12/03/2008
ARCHIVING: 'RVVUT' SERVER, 'RILASCIATI' FOLDER	PROJECT CODE: 123	DOCUMENT CODE: PSL300



Description: TELEMETRY BOARD	Size: A4
Designer: Andrea Tommasi	Page: 1 of 1
Part No.: SLTLMTXLCH01	Rev. 1.0
	Date: 12/03/2008

SLTLMTXLCH01

TELEMETRY BOARD Revised: 12/03/2008  
 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