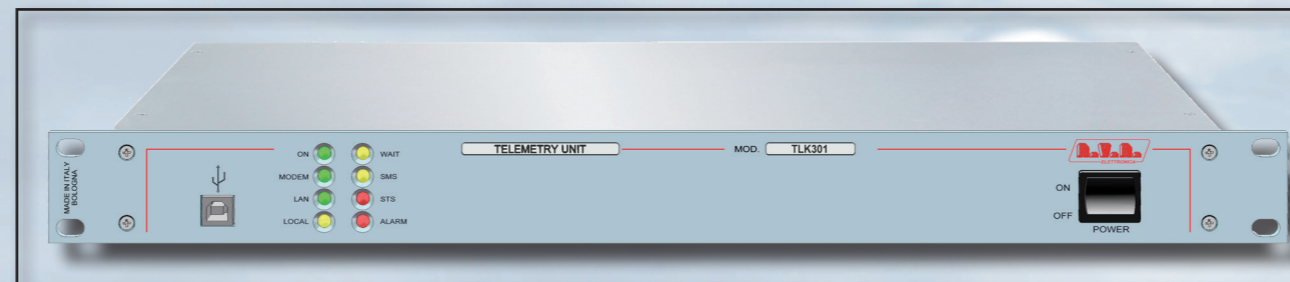




TLK301

TECHNICAL ANNEX VOLUME 2



R.V.R. Elettronica S.r.l.
Via del Fonditore, 2 / 2c
Zona Industriale Roveri · 40138 Bologna · Italy
Phone: +39 051 6010506 · Fax: +39 051 6011104
e-mail: info@rvr.it · web: <http://www.rvr.it>

Member of CISQ Federation



CERTIFIED MANAGEMENT SYSTEM
ISO 9001



The RVR Logo, and others referenced RVR products and services are trademarks of RVR Elettronica in Italy, other countries or both. RVR © 1998 all rights reserved.
All other trademarks, trade names or logos used are property of their respective owners.

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 TLK301. L'appendice è composta dalle seguenti sezioni:

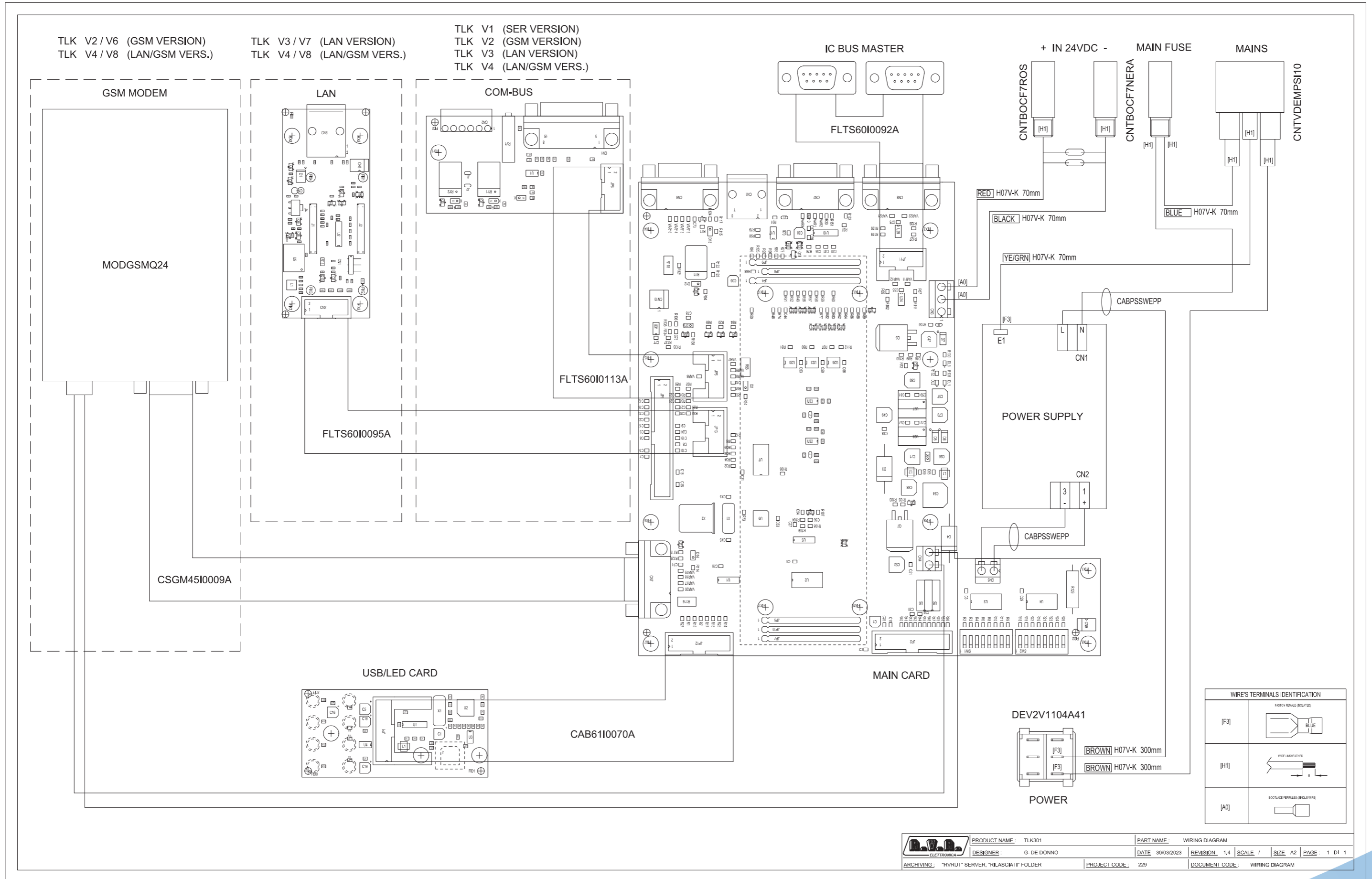
This part of the manual contains the technical details about the different boards of the TLK301. This appendix is composed of the following sections:

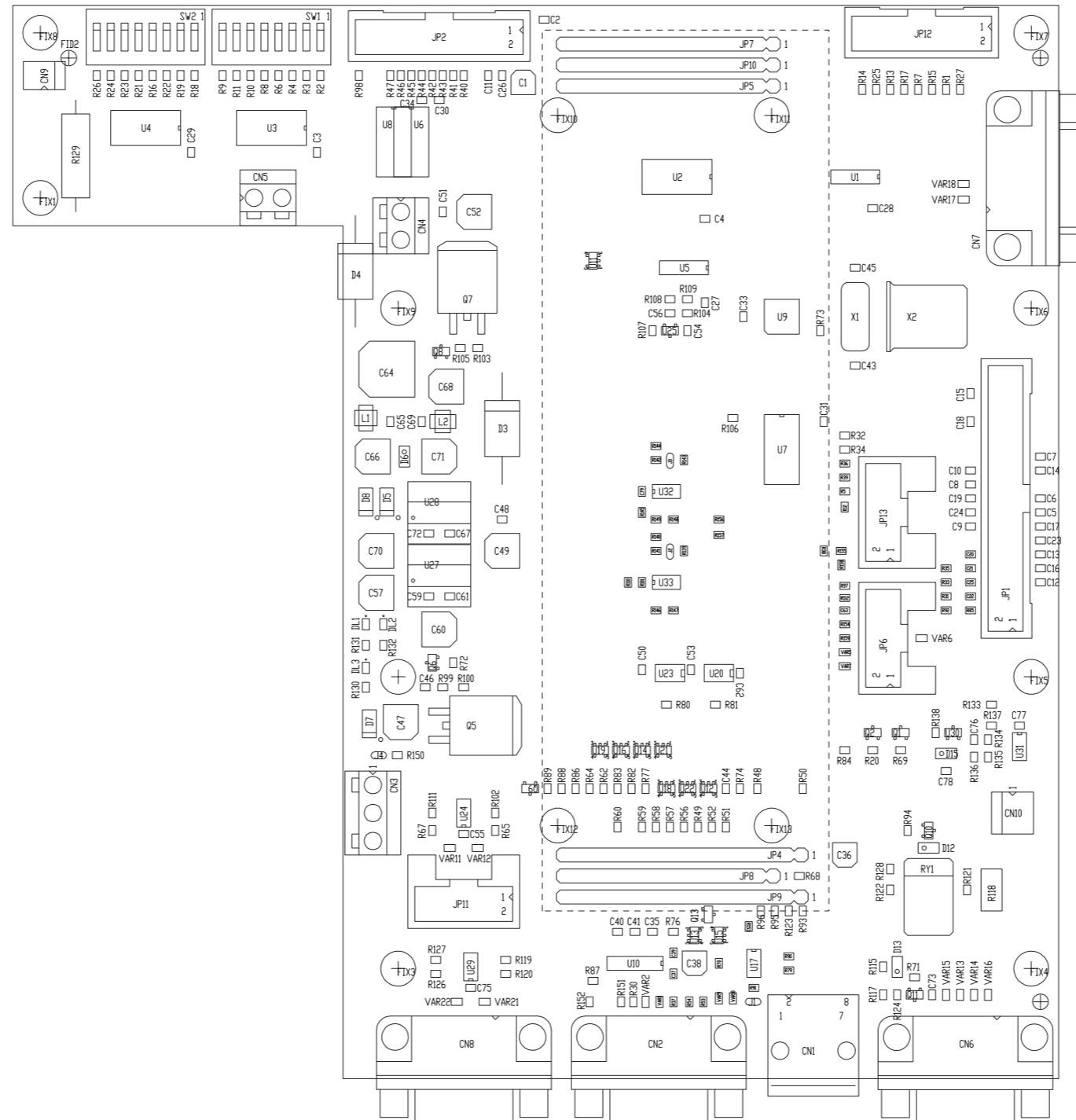
Description	RVR Code	Vers.Pages	
Wiring Diagrams	/	1.0	1
Main Card	SLIN0317R05V01	1.2	2
16-bit CPU Card	SL034CP1001	1.1	5
USB Card	SLIN0026R02V01	1.0	8
Power Supply	PSSWEPS45S15	1.0	10
/V1, /V2, /V3 & /V4 Version			
COM-BUS Interface Card	SLIN0423R01V01	1.0	12
/V3, /V4, /V7 & /V8 Version			
LAN Card	SLIN0473R02V01	1.0	14
/V2, /V4, /V6 & /V8 Version			
Modem GSM	MODGSMWM02BUSA	/	/

Document History

Date	Version	Reason	Code	Editor
10/07/2023	1.0	First Release	/	J.H. Berti

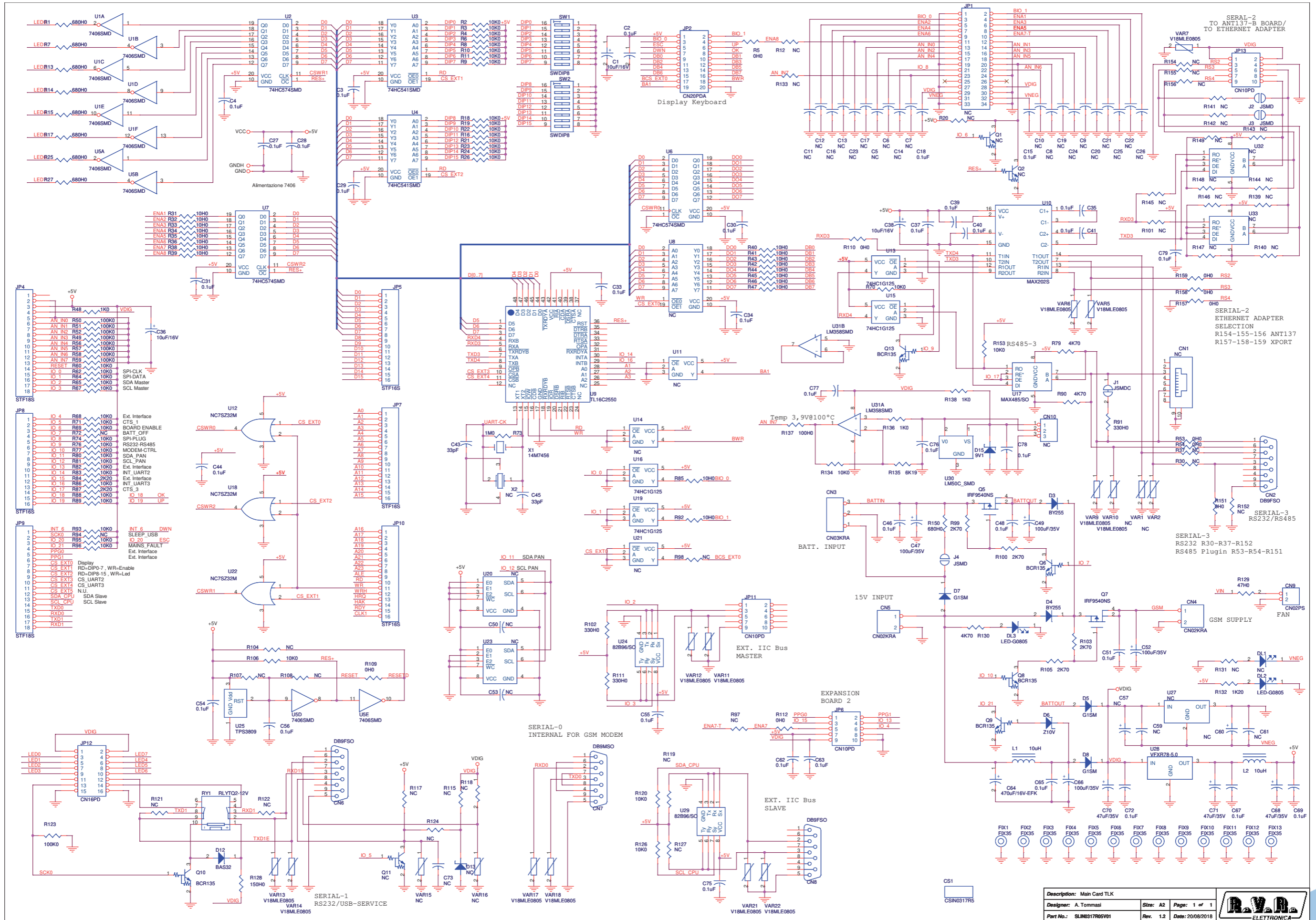
/





	PRODUCT NAME: TLK 300/2000	PART NAME: MAIN BOARD
	DESIGNER: A. TOMMASI	DATE: 09/03/2015 REVISION: 1.0 SCALE: 1:1 SIZE: A3 PAGE: 1 DI 1
ARCHIVING: "RVRUT" SERVER, "RILASCIATI" FOLDER	PROJECT CODE: 229	DOCUMENT CODE: SLIN0317R05V01

Main Card
SLIN0317R05V01



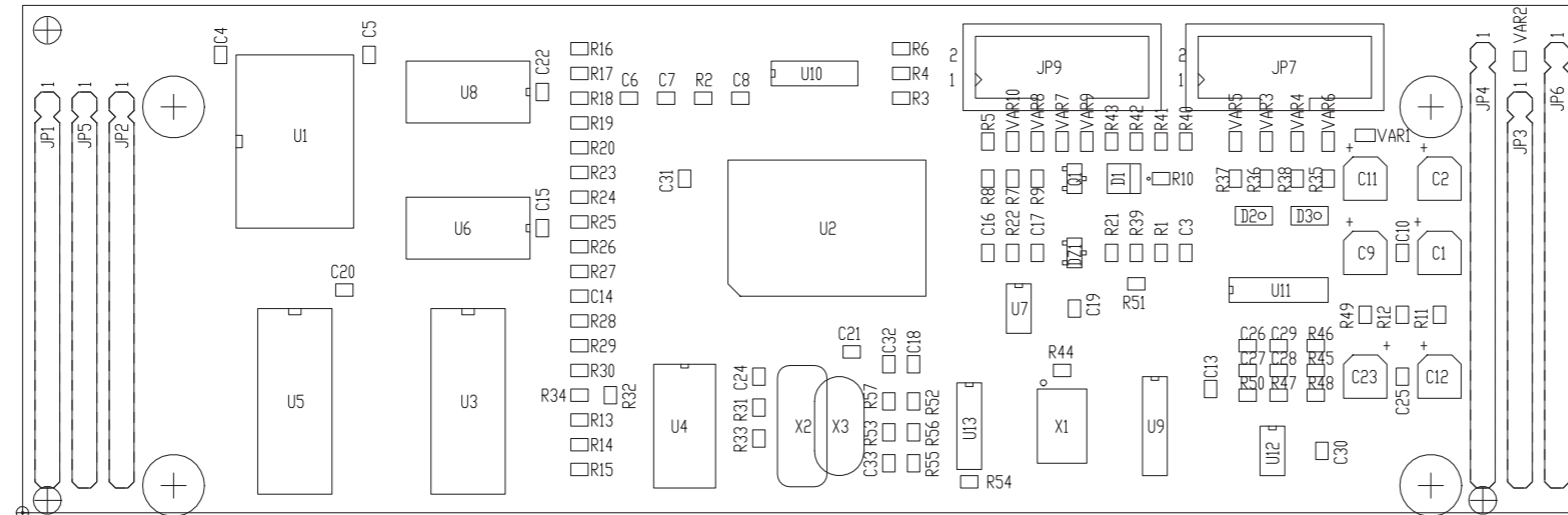
Description: Main Card TLK		Size: A2	Page: 1 of 1
Designer: A. Tommasi		Rev. 1.2	Date: 20/08/2018
Part No.: SLIN0317R05V01		R.V.R. ELETTRONICA	

SLIN0317R05V01

Main Card TLK Revised: Monday, August 20, 2018
 SLIN0317R05V01 Revision: 1.2
 A. Tommasi

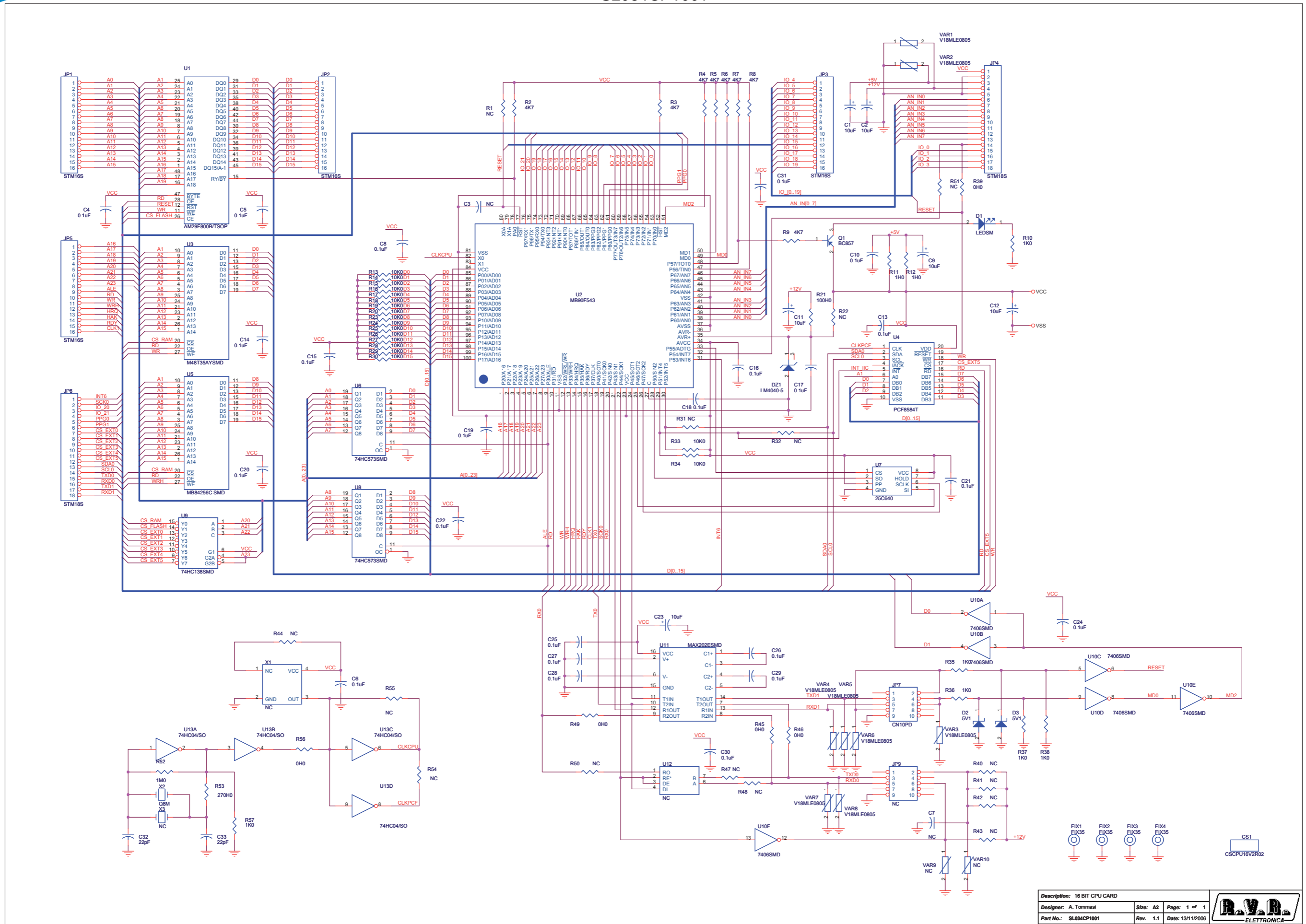
Item	Quantity	Reference	Part	Description
1	1	CN1	NC	Connettore RJ45 da CS a 90°
2	3	CN2, CN6, CN8	DB9FSO	Connettore DB9 femm. cs 90°
3	1	CN3	CN03KRA	Conn. tipo KRA a 3 poli
4	2	CN4, CN5	CN02KRA	Conn. tipo KRA a 2 poli
5	1	CN7	DB9MSO	Connettore DB9 mas. cs 90°
6	1	CN9	CN02PS	Connettore 2 poli Mascon
7	1	CN10	NC	Connettore 3 poli Mascon
8	1	CS1	CSIN0317R5	Circuito stampato
9	3	C1, C36, C38	10uF/16V	Cond. Elett. SMD d. 4mm
10	35	C2, C3, C4, C15, C18, C27, C28, C29, C30, C31, C33, C34, C35, C37, C39, C40, C41, C44, C46, C48, C51, C54, C55, C56, C62, C63, C65, C67, C69, C72, C75, C76, C77, C78, C79	0.1uF	Cond. SMD 0805
11	25	C5, C6, C7, C8, C9, C10, C11, C12, C13, C14, C16, C17, C19, C20, C21, C22, C23, C24, C25, C26, C50, C53, C59, C61, C73	NC	Cond. SMD 0805
12	2	C43, C45	33pF	Cond. SMD 0805
13	4	C47, C49, C52, C66	100uF/35V	Cond. Elett. SMD d. 6.3mm
14	2	C57, C60	NC	Cond. Elett. SMD d. 6.3mm
15	1	C64	470uF/16V-EFK	Cond. Elett. SMD d. 10mm
16	3	C68, C70, C71	47uF/35V	Cond. Elett. SMD d. 6.3mm
17	1	DL1	NC	LED Verde SMD 0805
18	2	DL2, DL3	LED-G0805	LED Verde SMD 0805
19	2	D3, D4	BY255	Diode plastico DO201
20	3	D5, D7, D8	G1SM	MELF SMD Diode
21	1	D6	Z10V	MINIMELF SMD Zener Diode
22	1	D12	BAS32	MINIMELF SMD Diode
23	1	D13	NC	MINIMELF SMD Zener Diode
24	1	D15	9V1	MINIMELF SMD Zener Diode
25	13	FIX1, FIX2, FIX3, FIX4, FIX5, FIX6, FIX7, FIX8, FIX9, FIX10, FIX11, FIX12, FIX13	FIX35	Foro fissaggio 3.5mm
26	1	JP1	NC	Conn.M.C.S.Dritto 34P alette
27	1	JP2	CN20PDA	Conn.M.C.S.Dritto 20P alette
28	2	JP4, JP9	STF18S	Strip femmina 18 pin
29	4	JP5, JP7, JP8, JP10	STF16S	Strip femmina 16 pin
30	3	JP6, JP11, JP13	CN10PD	Connettore 10 poli Flat cs con alette
31	1	JP12	CN16PD	Conn.M.C.S.Dritto 16P alette.
32	1	J1	JSMDC	Pad SMD a saldare chiuso
33	3	J2, J3, J4	JSMO	Pad SMD a saldare
34	2	L1, L2	10uH	Ind. verticale SMD dia. 4 p 4.8
35	3	Q1, Q2, Q11	NC	Trans./Res. NPN SOT23
36	2	Q5, Q7	IRF9540NS	Trans. FET P D2PAK
37	5	Q6, Q8, Q9, Q10, Q13	BCR135	Trans./Res. NPN SOT23
38	1	RV1	RLYTQ2-12V	Relè TQ2
39	9	R1, R7, R13, R14, R15, R17, R25, R27, R150	680H0	Res. SMD 0805
40	43	R2, R3, R4, R6, R8, R9, R10, R11, R16, R18, R19, R21, R22, R23, R24, R26, R60, R62, R64, R65, R67, R68, R69, R70, R71, R74, R76, R77, R80, R81, R82, R83, R86, R88, R89, R93, R95, R96, R106, R120, R126, R134, R153	10K0	Res. SMD 0805
41	10	R5, R53, R54, R109, R110, R112, R151, R157, R158, R159	0H0	Res. SMD 0805
42	36	R12, R20, R30, R37, R72, R94, R97, R98, R101, R104, R107, R108, R115, R117, R119, R121, R122, R124, R127, R131, R133, R139, R140, R141, R142, R143, R144, R145, R146, R147, R148, R149, R152, R154, R155, R156	NC	Res. SMD 0805
43	18	R31, R32, R33, R34, R35, R36, R38, R39, R40, R41, R42, R43, R44, R45, R46, R47, R85, R92	10H0	Res. SMD 0805
44	3	R48, R136, R138	1K0	Res. SMD 0805
45	9	R49, R50, R51, R52, R56, R57, R58, R59, R123	100K0	Res. SMD 0805
46	1	R73	1M0	Res. SMD 0805
47	3	R79, R90, R130	4K70	Res. SMD 0805
48	2	R84, R87	2K20	Res. SMD 0805
49	3	R91, R102, R111	330H0	Res. SMD 0805
50	4	R99, R100, R103, R105	2K70	Res. SMD 0805
51	1	R118	NC	Res. SMD 2512 5%
52	1	R128	150H0	Res. SMD 0805
53	1	R129	47H0	Res. 1W
54	1	R132	1K20	Res. SMD 0805
55	1	R135	6K19	Res. SMD 0805
56	1	R137	100H0	Res. SMD 0805
57	2	SW1, SW2	SWDIP8	Dip switch 8 vie
58	2	U1, U5	7406SMD	Hex inv OC SMD SO14
59	3	U2, U6, U7	74HC574SMD	Octal Latch SMD
60	2	U3, U4	74HC541SMD	Octal buffer SMD
61	1	U8	NC	Octal buffer SMD
62	1	U9	TL16C2550	Dual FIFO Bus UART
63	1	U10	MAX2025	RS232 Driver SMD SO16
64	3	U11, U14, U21	NC	SOT23-5 Bus Buffer
65	3	U12, U18, U22	NC7S232M	SOT23-5 OR Port
66	4	U13, U15, U16, U19	74HC1G125	SOT23-5 Bus Buffer
67	1	U17	MAX485/SO	RS485 driver SMD SO8
68	2	U20, U23	NC	IIC Bus 512Kb EEPROM
69	2	U24, U29	82B96/SO	IIC Bus driver SMD
70	1	U25	TP53809	uP supply supervisor
71	1	U27	NC	Switching SIP3 regulator
72	1	U28	VXR78-5.0	Switching SIP3 regulator
73	1	U30	LM50C_SMD	Temperature sensor
74	1	U31	LM358SMD	Dual Op. SMD SO8
75	2	U32, U33	NC	RS485 driver SMD SO8
76	4	VAR1, VAR2, VAR15, VAR16	NC	ESD SMD protector
77	13	VARS, VAR6, VAR7, VAR8, VAR10, VAR11, VAR12, VAR13, VAR14, VAR17, VAR18, VAR21, VAR22	V18MLE0805	ESD SMD protector
78	1	X1	14M7456	Quarzo SMD HC495MD
79	1	X2	NC	Quarzo HC25 orizz.

SL034CP1001



PRODUCT NAME: PTX-LCD
 DESIGNER: A. TOMMASI
 ARCHIVING: "RVRUT" SERVER, "RILASCIATI" FOLDER

PART NAME: 16 BIT CPU CARD
 DATE: 12/02/2004 REVISION: 2.1 SCALE: 1:1 SIZE: A4 PAGE: 1 DI 1
 PROJECT CODE: RV021 DOCUMENT CODE: SL034CP1001



Description: 16 BIT CPU CARD		
Designer: A. Tommasi	Size: A2	Page: 1 of 1
Part No.: SL034CP1001	Rev: 1.1	Date: 13/11/2006



SL034CP1001

16 BIT CPU CARD - SL034CP1001
Revision: 1.1 Date: 13/11/2006

PTX-DDS

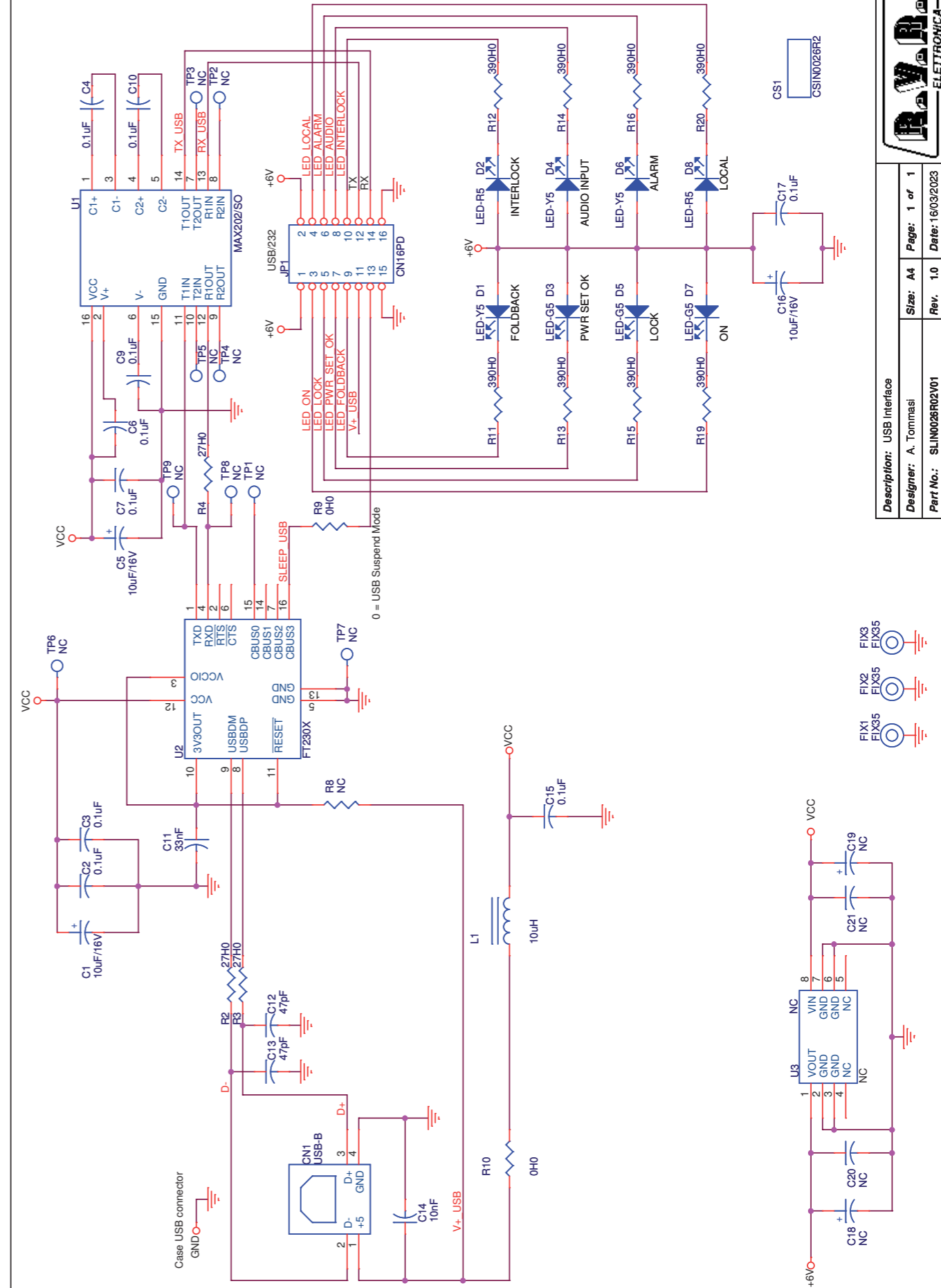
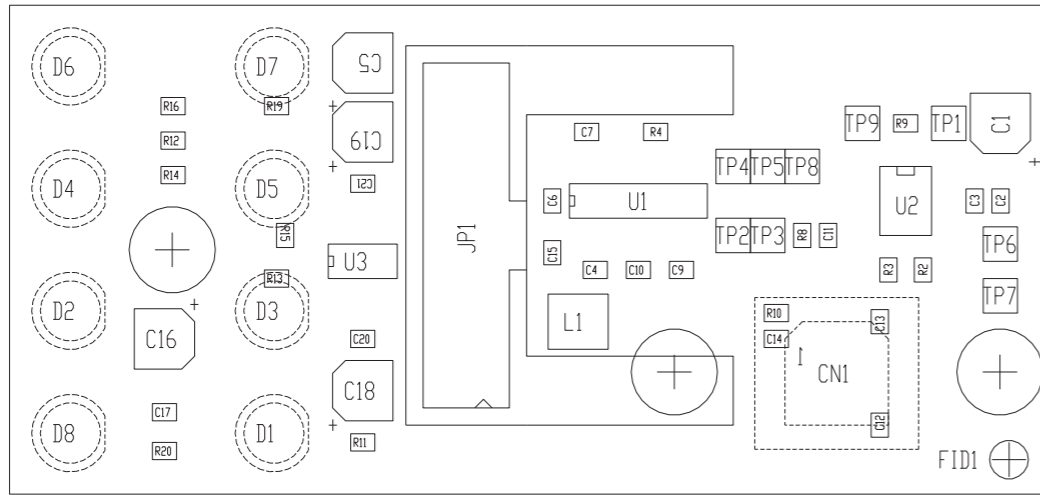
034

A. Tommasi

Item	Quantity	Reference	Part	Description
1	1	CS1	CSCPU16V2R02	Circuito stampato
2	6	C1, C2, C9, C11, C12, C23	10uF	Cond. Elett. SMD d. 4mm
3	2	C3, C7	NC	Cond. SMD 0805
4	23	C4, C5, C6, C8, C10, C13, C14, C15, C16, C17, C18, C19, C20, C21, C22, C24, C25, C26, C27, C28, C29, C30, C31	0.1uF	Cond. SMD 0805
5	2	C32, C33	22pF	Cond. SMD 0805
6	1	DZ1	LM4040-5	Diodi Zener SMD SOT23
7	1	D1	LEDSM	LED SMD PLCC2
8	2	D2, D3	5V1	MINIMELF SMD Zener Diode
9	4	FIX1, FIX2, FIX3, FIX4	FIX35	Foro fissaggio
10	4	JP1, JP2, JP3, JP5	STM16S	Strip maschio 16 pin
11	2	JP4, JP6	STM18S	Strip maschio 18 pin
12	1	JP7	CN10PD	Connettore 10 poli Flat cs
13	1	JP9	NC	Connettore 10 poli Flat cs
14	1	Q1	BC857	Trans. PNP SOT23
15	15	R1, R22, R31, R32, R40, R41, R42, R43, R44, R47, R48, R50, R51, R54, R55	NC	Res. SMD 0805
16	8	R2, R3, R4, R5, R6, R7, R8, R9	4K7	Res. SMD 0805
17	6	R10, R35, R36, R37, R38, R57	1K0	Res. SMD 0805
18	2	R11, R12	1H0	Res. SMD 0805
19	18	R13, R14, R15, R16, R17, R18, R19, R20, R23, R24, R25, R26, R27, R28, R29, R30, R33, R34	10K0	Res. SMD 0805
20	1	R21	100H0	Res. SMD 0805
21	5	R39, R45, R46, R49, R56	0H0	Res. SMD 0805
22	1	R52	1M0	Res. SMD 0805
23	1	R53	270H0	Res. SMD 0805
24	1	U1	AM29F800B/TSOP	Flash Eprom SMD TSOP48
25	1	U2	MB90F543	QFP100 SMD Microprocessor
26	1	U3	M48T35AYSMD	RAM+RTC with Battery SMD
27	1	U4	PCF8584T	IIC Bus controller SMD
28	1	U5	MB84256C SMD	RAM+RTC with Battery SMD
29	2	U6, U8	74HC573SMD	Octal Latch SMD
30	1	U7	25C640	Serial EEPROM SMD
31	1	U9	74HC138SMD	8 line decoder SMD
32	1	U10	7406SMD	Hex inv OC SMD SO14
33	1	U11	MAX202ESMD	RS232 Driver SMD SO16
34	1	U12	NC	RS485 driver SMD SO8
35	1	U13	74HC04/SO	Hex Inv. SMD SO14
36	8	VAR1, VAR2, VAR3, VAR4, VAR5, VAR6, VAR7, VAR8	V18MLE0805	ESD SMD protector
37	2	VAR9, VAR10	NC	ESD SMD protector
38	1	X1	NC	Osc. quarzo SMD
39	1	X2	Q8M	Quarzo SMD HC49SMD
40	1	X3	NC	Quarzo HC18



Description: USB Interface	Size: A4	Page: 1 of 1
Designer: A. Tommasi	Rev. 1.0	Date: 16/03/2023
Part No.: SLIN0026R02V01		



	PRODUCT NAME : TLK	PART NAME : USB CONNECTOR CARD
	DESIGNER : A. TOMMASI	DATE : 17/04/23 REVISION : 1.0 SCALE : 2:1 SIZE : A4 PAGE : 1 DI 1
ARCHIVING : *RVRUT* SERVER, *RILASCIATI* FOLDER	PROJECT CODE : 229	DOCUMENT CODE : SLIN0026R02Vxx

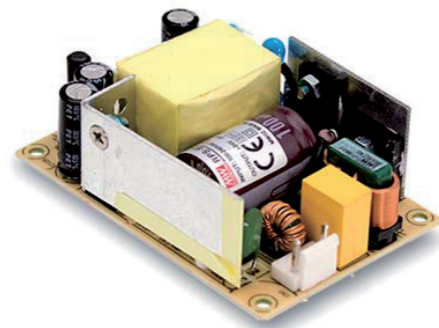
SLIN0026R02V01

USB Interface TLK Revised: Thursday, March 16, 2023
 SLIN0026R02V01 Revision: 1.0
 Tommasi A.

Item	Quantity	Reference	Part	Description
1	1	CN1	USB-B	Conn. Molex USB B 67265
2	1	CS1	CSIN0026R2	Circuito stampato
3	3	C1, C5, C16	10uF/16V	Cond. Elett. SMD d. 4mm
4	9	C2, C3, C4, C6, C7, C9, C10, C15, C17	0.1uF	Cond. SMD 0805
5	1	C11	33nF	Cond. SMD 0805
6	2	C12, C13	47pF	Cond. SMD 0805
7	1	C14	10nF	Cond. SMD 0805
8	2	C18, C19	NC	Cond. Elett. SMD d. 4mm
9	2	C20, C21	NC	Cond. SMD 0805
10	3	D1, D4, D6	LED-Y5	Yellow LED dia. 5mm
11	2	D2, D8	LED-R5	Red LED dia. 5mm
12	3	D3, D5, D7	LED-G5	Green LED dia. 5mm
13	3	FIX1, FIX2, FIX3	FIX35	Foro fissaggio 3.5mm
14	1	JP1	CN16PD	Connettore 16 poli Flat cs
15	1	L1	10uH	SMD Vertical Ind. WE PD2 series
16	3	R2, R3, R4	27H0	Res. SMD 0805
17	1	R8	NC	Res. SMD 0805
18	2	R9, R10	0H0	Res. SMD 0805
19	8	R11, R12, R13, R14, R15, R16, R19, R20	390H0	Res. SMD 0805
20	9	TP1, TP2, TP3, TP4, TP5, TP6, TP7, TP8, TP9	NC	Test point
21	1	U1	MAX202/SO	RS232 Driver SMD SO16
22	1	U2	FT230X	USB to RS232 Interface
23	1	U3	NC	Stabilizzatroe SMD SO8



45W Single Output Switching Power Supply **EPS-45S** series



■ Features

- 3"×2" miniature size
- Universal AC input / Full range
- Class II (without FG) installations
- No load power consumption<0.1W
- High efficiency up to 91%
- For 1U applications
- Protections: Short circuit / Overload / Over voltage
- Cooling by free air convection
- -30~70°C wide range of operating temperature
- Operating altitude up to 5000 meters(Note 7.)
- LED indicator for power on
- 3 years warranty

■ Description

EPS-45S is a 45W highly reliable green PCB type industrial power supply with a high power density on the 3" by 2" footprint. It accepts 80~264VAC input and offers various output voltages between 3.3V and 48V. The working efficiency is up to 91% and the extremely low no load power consumption is down below 0.1W. EPS-45S is able to be used for Class II (no FG) system design.

■ Model Encoding

EPS - 45 S - 3.3

- Output voltage
- Small size
- Output wattage
- Series name

File Name:EPS-45S-SPEC 2015-12-10



45W Single Output Switching Power Supply **EPS-45S** series

SPECIFICATION

ORDER NO.	EPS-45S-3.3	EPS-45S-5	EPS-45S-7.5	EPS-45S-12	EPS-45S-15	EPS-45S-24	EPS-45S-48	
OUTPUT	DC VOLTAGE	3.3V	5V	7.5V	12V	15V	24V	48V
	RATED CURRENT	8A	8A	5.4A	3.8A	3A	1.9A	0.94A
	CURRENT RANGE	0 ~ 8.8A	0 ~ 8.8A	0 ~ 5.95A	0 ~ 4.18A	0 ~ 3.3A	0 ~ 2.1A	0 ~ 1.03A
	RATED POWER	26.4W	40W	40.5W	45.6W	45W	45.6W	45.1W
	PEAK LOAD(10sec.) Note.2	29W	44W	44.6W	50.2W	49.5W	50.2W	49.4W
	RIPPLE & NOISE (max.) Note.3	80mVp-p	80mVp-p	80mVp-p	120mVp-p	150mVp-p	240mVp-p	300mVp-p
	VOLTAGE ADJ. RANGE	3.1~3.6V	4.7~5.5V	7.12~8.3V	11.4~13.2V	13.5~16.5V	22.8~27.6V	45.6~52.8V
	VOLTAGE TOLERANCE Note.4	±2.0%	±2.0%	±2.0%	±2.0%	±1.0%	±1.0%	±1.0%
	LINE REGULATION	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
	LOAD REGULATION	±2.0%	±2.0%	±2.0%	±2.0%	±1.0%	±1.0%	±1.0%
SETUP, RISE TIME	500ms, 30ms / 230VAC 500ms, 30ms / 115VAC at full load							
HOLD UP TIME (Typ.)	30ms / 230VAC		12ms / 115VAC at full load					
INPUT	VOLTAGE RANGE Note.5	80 ~ 264VAC						
	FREQUENCY RANGE	47 ~ 63Hz						
	EFFICIENCY (Typ.)	80%	83%	85%	88%	89%	90%	91%
	AC CURRENT (Typ.)	1.2A / 115VAC		1A / 230VAC				
	INRUSH CURRENT (Typ.)	COLD STAR 30A/115VAC		60A/230VAC				
	LEAKAGE CURRENT(max.)	0.25mA/264VAC						
PROTECTION	OVERLOAD	115 ~ 150% rated output power Protection type : Hiccup mode, recovers automatically after fault condition is removed						
	OVER VOLTAGE	3.8~5V	5.7~6.8V	8.62~11.3V	13.8~16.2V	17.25~20.3V	28.4~32.4V	55.2~64.8V
ENVIRONMENT	WORKING TEMP.	-30 ~ +70°C (Refer to "Derating Curve")						
	WORKING HUMIDITY	20% ~ 90% RH non-condensing						
	STORAGE TEMP., HUMIDITY	-40 ~ +85°C, 10 ~ 95% RH						
	TEMP. COEFFICIENT	±0.03% / °C (0 ~ 50°C)						
SAFETY & EMC (Note. 7)	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes						
	SAFETY STANDARDS	UL60950-1, TUV EN60950-1 approved						
	ISOLATION LEVEL	Primary-Secondary: 2xMOPP						
	WITHSTAND VOLTAGE	I/P-O/P: 3KVAC						
	ISOLATION RESISTANCE	I/P-O/P:100M Ohms / 500VDC / 25°C / 70% RH						
OTHERS	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, EN55024, Heavy industry Level criteria A						
NOTE	MTBF	726.2Khrs min. MIL-HDBK-217(25°C)						
	DIMENSION	76.2*50.8*24mm or 3" * 2" * 0.945" inch (L*W*H)						
	PACKING	0.11Kg; 120pcs/14.2Kg/0.97CUFT						
<p>1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature. 2. 33% Duty cycle maximum within every 30 seconds. Average output power should not exceed the rated power. 3. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. 4. Tolerance : includes set up tolerance, line regulation and load regulation. 5. Derating may be needed under low input voltages. Please check the derating curve for more details. 6. Touch current was measured from primary input to DC output. 7. The ambient temperature derating of 5°C/1000m is needed for operating altitude greater than 2000m (6500ft). 8. The power supply is considered a component which will be installed into a final equipment. *All the EMC tests are been executed by mounting the unit on a 360mm*360mm metal plate with 1mm of thickness. *The final equipment must be re-confirmed that it still meets EMC directives. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies." (as available on http://www.meanwell.com)</p>								

File Name:EPS-45S-SPEC 2015-12-10

PSSWEPS45S15



45W Single Output Switching Power Supply **EPS-45S** series

Block Diagram

Derating Curve

Ambient Temperature (°C)	Load (%)
-30	100
0	100
10	100
20	100
30	100
40	100
50	100
60	~60
70	0

Static Characteristics

Input Voltage (V) 60Hz	Load (%)
80	70
100	100
115	100
120	100
140	100
160	100
180	100
200	100
220	100
240	100
264	100

File Name:EPS-45S-SPEC 2015-12-10



45W Single Output Switching Power Supply **EPS-45S** series

Mechanical Specification

Case No. Unit:mm

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

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

DC Output Connector (CN2) : JST B2P-VH or equivalent

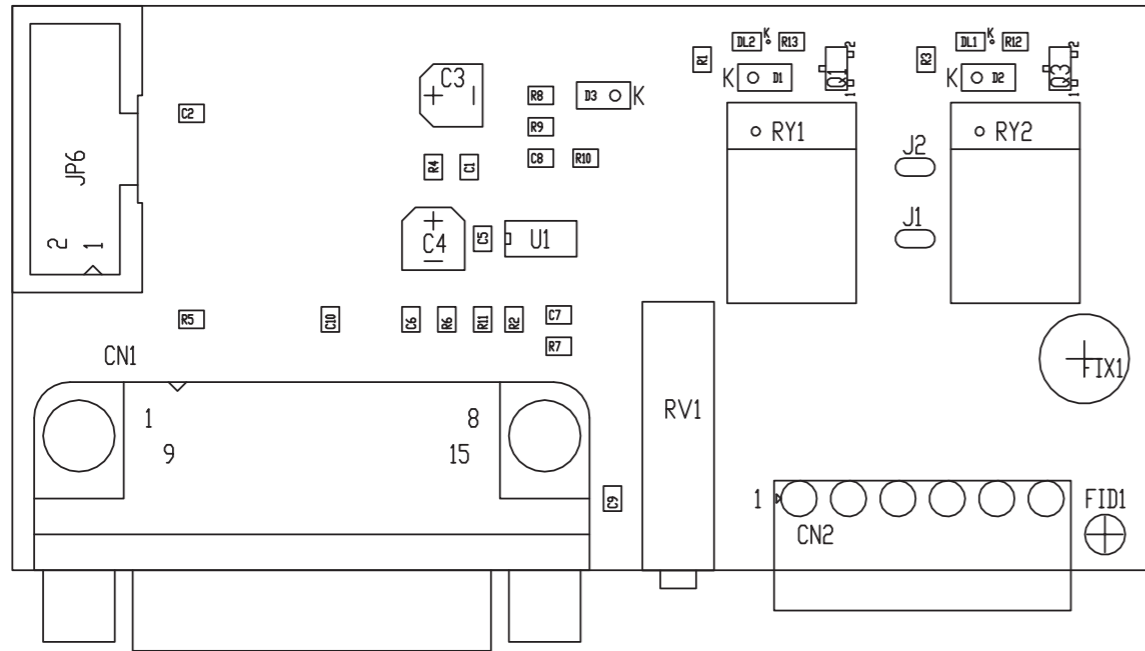
Pin No.	Assignment	Mating Housing	Terminal
1	+V	JST VHR or equivalent	JST SVH-21T-P1.1 or equivalent
2	+V		
3	-V		
4	-V		

Installation Manual

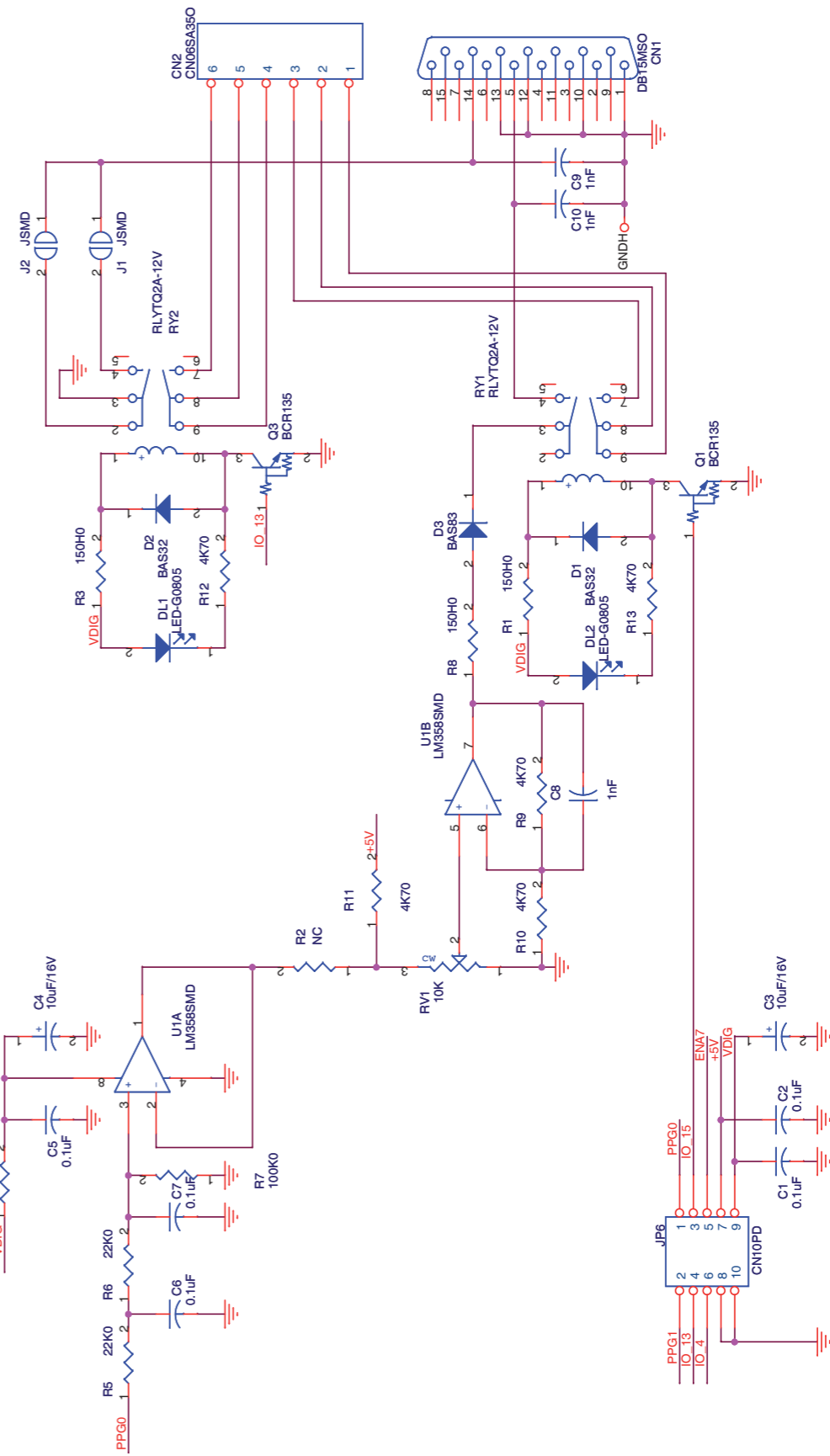
Please refer to : <http://www.meanwell.com/webnet/search/InstallationSearch.html>

File Name:EPS-45S-SPEC 2015-12-10

SLIN0423R01V01



Common Bus StBy line mode selection
 Close J1 = Normally Open
 Close J2 = Normally Closed
 Both open = No C-Bus StBy
 Both closed = NEVER USE



	PRODUCT NAME: TLK 300/2000	PART NAME: COM-BUS INTERFACE			
	DESIGNER: A. TOMMASI	DATE: 10/03/2015	REVISION: 1.0	SCALE: 2:1	SIZE: A4
ARCHIVING: "RVRUT" SERVER, "RILASCIATI" FOLDER	PROJECT CODE: 229	DOCUMENT CODE: SLIN0423R01V01			

Description: COM-BUS Interface TLK	Page: 1 of 1
Designer: Tommasi A.	Size: A4
Part No.: SLIN0423R01V01	Rev. 1.0
	Date: 22/07/2016



SLIN0423R01V01

COM-BUS Interface TLK Revised: 22/07/2016

SLIN0423R01V01 Revision: 1.0

A. Tommasi

Item	Quantity	Reference	Part	Description
1	1	CN1	DB15MSO	Connettore DB15 mas. cs 90°
2	1	CN2	CN06SA350	Conn. Sauro 6 poli p. 3.5 mm
3	1	CS1	CSIN0423R1	Circuito stampato
4	5	C1,C2,C5,C6,C7	0.1uF	Cond. SMD 0805
5	2	C3,C4	10uF/16V	Cond. Elett. SMD d. 4mm
6	3	C8,C9,C10	1nF	Cond. SMD 0805
7	2	DL1,DL2	LED-G0805	LED Verde SMD 0805
8	2	D1,D2	BAS32	MINIMELF SMD Diode
9	1	D3	BAS83	MINIMELF SMD Diode
10	1	FIX1	FIX35	Foro fissaggio 3.5mm
11	1	JP6	CN10PD	Connettore 10 poli Flat cs con alette
12	2	J1,J2	JSMD	Pad SMD a saldare
13	2	Q1,Q3	BCR135	Trans./Res. NPN SOT23
14	1	RV1	10K	Trimmer Rg H 3006
15	2	RY1,RY2	RLYTQ2A-12V	Rele' TQ2
16	3	R1,R3,R8	150H0	Res. SMD 0805
17	1	R2	NC	Res. SMD 0805
18	1	R4	10H0	Res. SMD 0805
19	2	R5,R6	22K0	Res. SMD 0805
20	1	R7	100K0	Res. SMD 0805
21	5	R9,R10,R11,R12,R13	4K70	Res. SMD 0805
22	1	U1	LM358SMD	Dual Op. SMD SO8

SLIN0473R02V01

WEBIF vers.2 Revised: Wednesday, March 02, 2022
 SLIN0473R02V01 Revision: 1.0
 A. Tommasi; Protech

Item	Quantity	Reference	Part	Description
1	1	CN1	STM03SO	Male strip 3 pin a 90°
2	1	CN2	CN10PDA	10 way pcb conn.
3	1	CN3	CNETHTRFLED2	Ethernet RJ45 10/100 w LED
4	1	CN4	NC	Male strip 2 pin
5	1	CN5	CN02PS	2 way Mascon conn.
6	1	CS1	CSIN0473R2	Printed Circuit board
7	16	C1, C2, C3, C4, C5, C7, C8, C9, C11, C12, C15, C17, C19, C20, C22, C23	100nF	0603 SMD capacitor
8	2	C13, C21	10uF/10V	0603 SMD capacitor
9	1	C14	22uF/10V	0603 SMD capacitor
10	2	C16, C18	10uF/25V	0603 SMD capacitor
11	1	D1	NC	SMD diode cont. SMB
12	4	FIX1, FIX2, FIX3, FIX4	FIX15	1.5mm Fixing hole
13	4	FIX5, FIX6, FIX7, FIX8	FIX35	3.5mm Fixing hole
14	2	J1, J2	CNDF40-90D-0.4	Hirose 45x2 way DF40-D-0.4 serie
15	1	LD1	LED-G0805	Green LED SMD 0805
16	1	L1	4,7uH	MURATA LQH44 series inductor
17	1	MIB1	DART-6UL	System On Module
18	5	Q1, Q3, Q4, Q6, Q9	NC	PNP trans. SOT23
19	3	Q2, Q5, Q8	NC	Channel P MOSFET SOT23
20	2	Q7, Q10	NC	Digital NPN trans. SOT23
21	11	R1, R2, R6, R8, R16, R18, R24, R25, R26, R31, R32	NC	0603 SMD res.
22	1	R3	4K70	0603 SMD res.
23	1	R4	330H0	0603 SMD res.
24	6	R5, R11, R14, R15, R17, R22	10K0	0603 SMD res.
25	2	R7, R20	510H0	0603 SMD res.
26	4	R9, R10, R23, R29	OH0	0603 SMD res.
27	1	R13	NC	1206 SMD res.
28	1	R21	2K70	0603 SMD res.
29	1	R27	150H0	0603 SMD res.
30	1	R28	220H0	0603 SMD res.
31	1	U2	MAX3232/SO	SO16 RS232 driver
32	1	U4	TLV1117LV33	Voltage reg. SMD SOT223
33	1	U5	NC	Switch. voltage reg. SIP3
34	1	U6	SN74LVC1G125	Level translator
35	2	VAR1, VAR2	NC	ESD SMD protector
36	2	VAR3, VAR4	V18MLE0805	ESD SMD protector