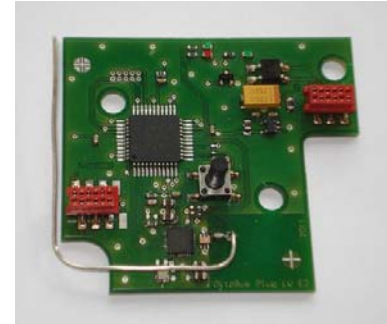


PCB Documents

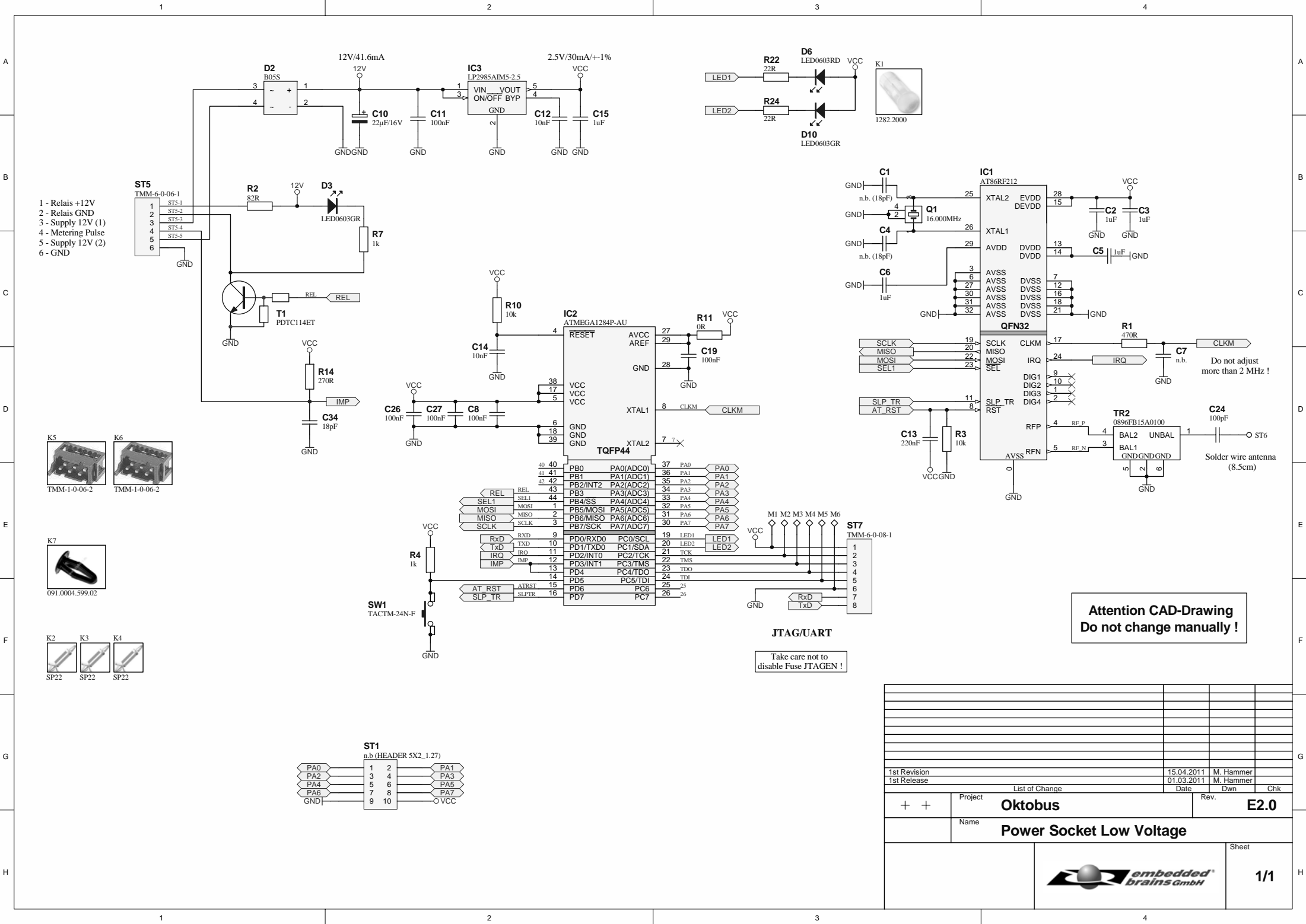
Project : OktoBus
PCB : Low Voltage LV
Version : E2.0
Date : 12.05.2011
Author : Markus Hammer, Embedded Brains GmbH



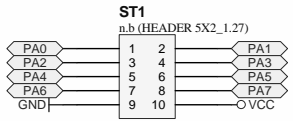
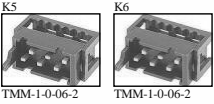
This document contents

- schematic,
- assembly diagram and
- bill of material.






- 1 - Relais +12V
- 2 - Relais GND
- 3 - Supply 12V (1)
- 4 - Metering Pulse
- 5 - Supply 12V (2)
- 6 - GND

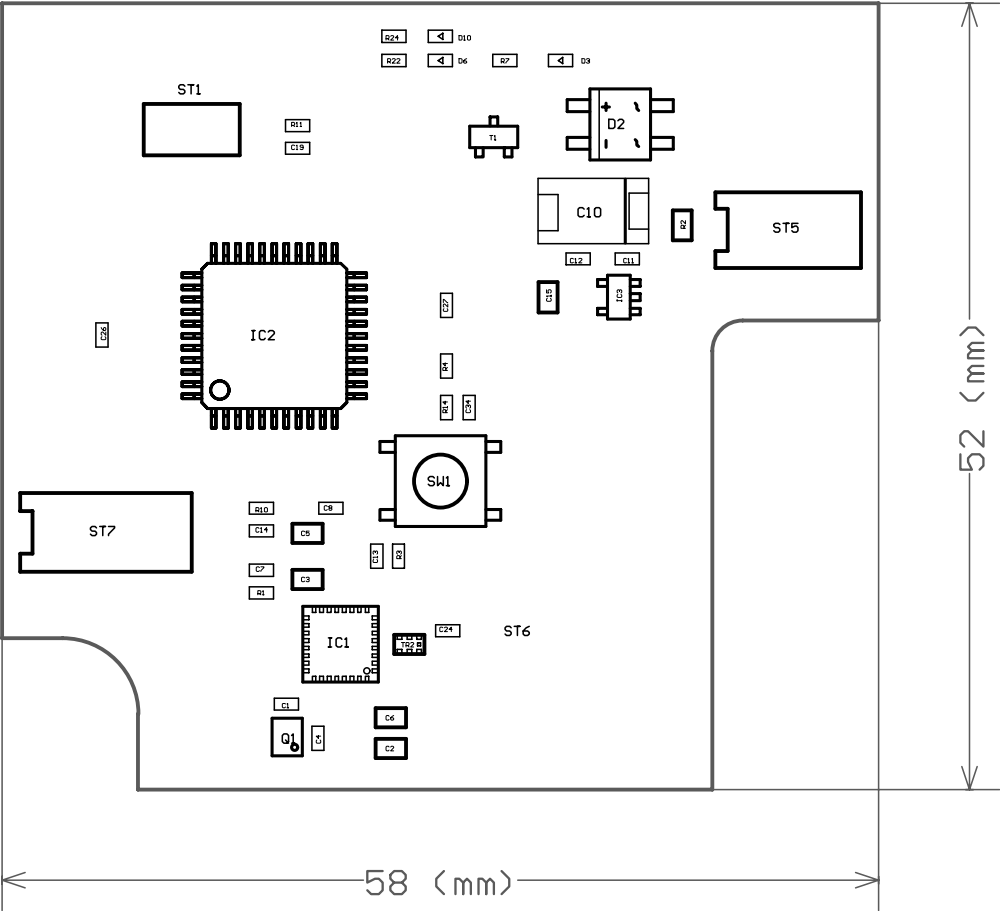


Attention CAD-Drawing
Do not change manually !

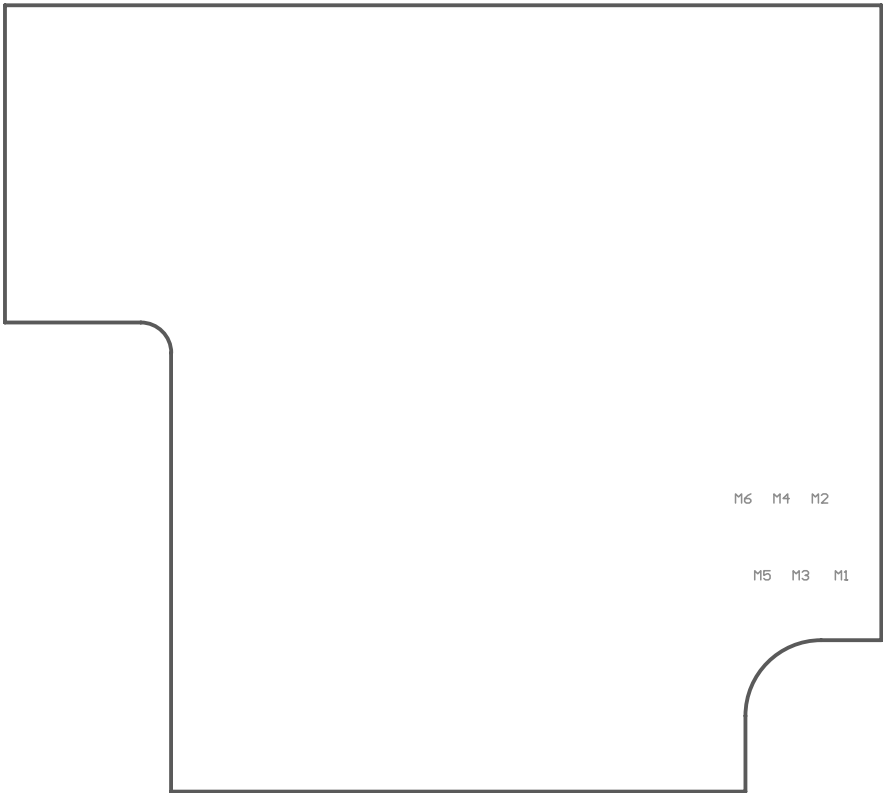
1st Revision		15.04.2011	M. Hammer	
1st Release		01.03.2011	M. Hammer	
List of Change		Date	Dwn	Chk
+	+	Project	Rev.	E2.0
		Name	Power Socket Low Voltage	
		Sheet		
				1/1



Top



Bottom



Bill of Material

Project : OktoBus
 Name : Steckdose Low Voltage
 Release : E2.0
 Author : Markus Hammer
 Date : 12.05.11



Commentary :

Pos.	Num.	Components	Size	Description	Case	Manufacturer	Temperature Range	Characteristics	Distributor	Ordering Number	€	Commentary
1	2	C1, C4	n.b. (18pF)	Keramikvielschichtkondensator C0G	0603	AVX	-55°C - +125°C	25V/+5%	Farnell	139-6426	0,01	
2	5	C2, C3, C5, C6, C15	1uF	Keramikkondensator X7R	0805	Yageo	-55°C - +125°C	25V/+10%	Farnell	145-8903	0,10	
3	1	C7	n.b.	Keramikvielschichtkondensator C0G	0603		-55°C - +125°C	50V/+5%	Farnell			
4	5	C8, C11, C19, C26, C27	100nF	Keramikvielschichtkondensator X7R	0603	AVX	-55°C - +125°C	16V/+10%	Farnell	132-7679	0,04	
5	1	C10	22µF/16V	Tantal Kondensator TAJ Series	Size D	AVX	-55°C - +85°C	22µF/16V/+20%	Reichelt	SMD TAN.22/20 (TAJD226)	0,17	Beistellung
6	2	C12, C14	10nF	Keramikvielschichtkondensator X7R	0603	AVX	-55°C - +125°C	50V/+10%	Farnell	132-7675	0,04	
7	1	C13	220nF	Keramikvielschichtkondensator X7R	0603	AVX	-55°C - +125°C	16V/+10%	Farnell	132-7683	0,09	
8	1	C24	100pF	Keramikvielschichtkondensator C0G	0603	AVX	-55°C - +125°C	50V/+5%	Farnell	499-122	0,04	
9	1	C34	18pF	Keramikvielschichtkondensator C0G	0603	AVX	-55°C - +125°C	25V/+5%	Farnell	139-6426	0,01	
10	1	D2	B05S	SMD Bridge Rectifier	DB1-MS	DC Components	-55°C - +150°C	50V/0,5A	TME	B05S	0,11	
11	2	D3, D10	LED0603GR	SMT LED green	0603	Dialight Corporation	-30°C - +85°C	2,0V/20mA	Farnell	146-5991	0,11	
12	1	D6	LED0603RD	SMT LED red	0603	Dialight Corporation	-30°C - +85°C	2,0V/20mA	Farnell	146-5988	0,11	

Pos.	Num.	Components	Size	Description	Case	Manufacturer	Temperature Range	Characteristics	Distributor	Ordering Number	€	Commentary
13	1	IC1	AT86RF212	IEEE 802.15.4 Transceiver	QFN32	Atmel	-40°C - +85°C	1.8V-3.6V/25mA	Farnell	174-8492	5,55	Beistellung
14	1	IC2	ATMEGA1284P-AU	8-bit Microcontroller 128KB Flash	TQFP44	Atmel	-40°C - +85°C	1.8 - 5.5V	CSD Electronics	301909	7,95	Beistellung
15	1	IC3	LP2985AIM5-2.5	Micropower Ultra-Low Dropout Voltage Regulator	SOT23-5	National Semiconductor	-40°C - +125°C	2.5V/150mA	Farnell	1691-630	0,74	
16	1	K1	1282.2000	Lightguide for front panels	8.5mm x 3.2mm	Mentor	-40°C - +85°C	2.8mm Hole	Farnell	432-7767	0,79	
17	3	K2, K3, K4	SP22	Spacer 22.2mm	22.2mm	Skiffy	---	4mm/4.3mm	Skiffy	100 0372 000 02	0,17	Beistellung
18	2	K5, K6	TMM-1-0-06-2	Micromatch Plug 6pin	1.27mm	Amphenol	-40°C - +105°C	1.5A/230VAC	TME	TMM-1-0-06-2	0,25	Beistellung (konfektioniertes Kabel)
19	1	K7	091.0004.599.02	Treibstift	5mm Hole	Skiffy	---	---	Skiffy	091.0004.599.02	0,05	Beistellung
20	1	Q1	16.000MHz	Quarz 16.000MHz	2.5x2.0	Euroquartz	-40°C - +85°C	+/-15ppm	Reichelt	16,000000-X22	1,05	Beistellung
21	1	R1	470R	SMD-Widerstand	0603	Multicomp	-55°C - +125°C	0,063W	Farnell	933-2146	0,03	
22	1	R2	82R	SMD-Widerstand	0805	Multicomp	-55°C - +125°C	0,1W	Farnell	933-4882	0,03	
23	2	R3, R10	10k	SMD-Widerstand	0603	Multicomp	-55°C - +125°C	0,063W	Farnell	933-1700	0,03	
24	2	R4, R7	1k	SMD-Widerstand	0603	Multicomp	-55°C - +125°C	0,063W	Farnell	933-1697	0,03	
25	1	R11	0R	SMD-Widerstand	0603	Multicomp	-55°C - +125°C	0,063W	Farnell	933-1662	0,03	
26	1	R14	270R	SMD-Widerstand	0603	Multicomp	-55°C - +125°C	0,063W	Farnell	933-1964	0,03	
27	2	R22, R24	22R	SMD-Widerstand	0603	Multicomp	-55°C - +125°C	1%/0,063W	Farnell	933-0844	0,03	
28	1	ST1	n.b (HEADER 5X2_1.27)	Steckverbinder 10-polig	1.27mm	MPE Garry	-40°C - +105°C	1,0A	Reichelt	SL 2X10G 1,27	0,54	
29	1	ST5	TMM-6-0-06-1	Micromatch gerade 6-polig	1,27 SMD	Amphenol	-40°C - +105°C	1,5A/100VDC	TME	TMM-6-0-06-1	0,44	
30	1	ST7	TMM-6-0-08-1	Micromatch gerade 8-polig	1,27 SMD	Amphenol	-40°C - +105°C	1,5A/100VDC	TME	TMM-6-0-08-1	0,25	
31	1	SW1	TACTM-24N-F	Mikroschalter monostabil	6x6	Ninigi/Schurter	n.d.	0.5A/12V/1.6N	TME/Reichelt	TACTM-613N-F/TASTER 9320	0,05/0,28	
32	1	T1	PDTC114ET	NPN resistor-equipped transistor	SOT23	Philips	-65°C - +150°C	100mA/250mW	Farnell	121-7269	0,13	
33	1	TR2	0896FB15A0100	896 MHz Balun/Filter Combination	2mm x 1.25mm	Johanson Technology	-40°C - +85°C	863-928 MHz/1W	Digikey/BFI Optilas	712-1473-1-ND/0896FB15A0100	0,53/0,31	Beistellung