

PCB Documents

Project : OktoBus
PCB : USB-Stick
Version : E2.0
Date : 12.05.2011
Author : Markus Hammer, Embedded Brains GmbH

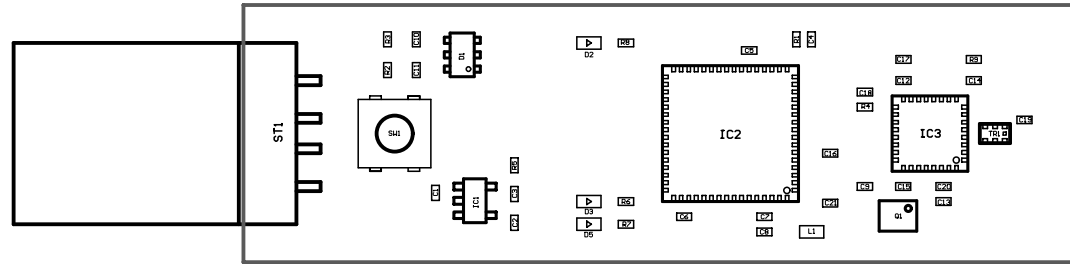


This document contents

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



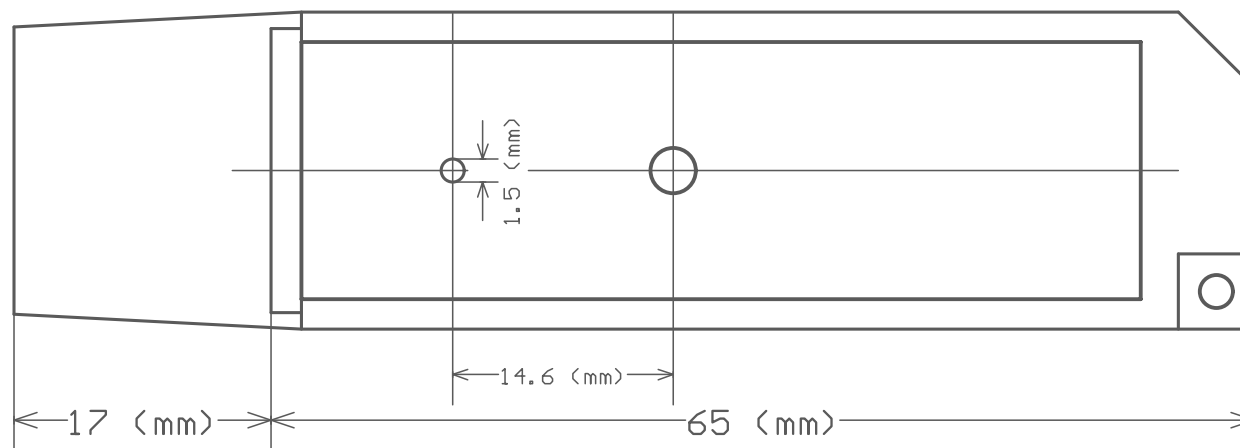
Top



Bottom

M9	M7	M8
M3	M5	M6
M2	M4	M1

Bohrung auf der oberen Gehaeusehalbschale



Bill of Material

Project : OktoBus
 Name : USB-Stick
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Commentary :

Pos.	Num.	Components	Size	Description	Case	Manufacturer	Temperature Range	Characteristics	Distributor	Ordering Number	€	Commentary
1	8	C1, C3, C8, C12, C13, C16, C17, C20	1uF	Keramikkondensator X5R	0402	Multicomp	-55°C - +125°C	6.3V/+10%	Farnell	175-9375	0,01	
2	1	C2	10nF	Keramikkondensator X7R	0402	Murata	-55°C - +125°C	16V/+10%	Farnell	182-8864	0,01	
3	5	C4, C5, C6, C7, C21	100nF	Keramikkondensator X7R	0402	Murata	-55°C - +125°C	10V/+10%	Farnell	182-8860	0,01	
4	2	C9, C15	n.b. (18pF)	Keramikkondensator X7R	0402	Multicomp	-55°C - +125°C	50V/+5%	Farnell	175-8947	0,01	
5	3	C10, C11, C18	22pF	Keramikkondensator X7R	0402	Multicomp	-55°C - +125°C	50V/+5%	Farnell	175-8951	0,01	
6	1	C14	220nF	Keramikkondensator X5R	0402	Multicomp	-55°C - +85°C	6.3V/+10%	Farnell	175-9373	0,01	
7	1	C19	100pF	Keramikkondensator C0G	0402	Multicomp	-55°C - +125°C	50V/+5%	Farnell	175-8969	0,01	
8	1	D1	824001	TVS Diode Array WE-TVS	SOT23-6L	Würth Elektronik	-55°C - +85°C	6V/5A	Farnell	174-8613	0,79	
9	1	D2	n.b. (LED0603GR)	SMT LED green	0603	Dialight Corporation	-30°C - +85°C	2,0V/20mA	Farnell	146-5991	0,11	
10	1	D3	LED0603GR	SMT LED green	0603	Dialight Corporation	-30°C - +85°C	2,0V/20mA	Farnell	146-5991	0,11	
11	1	D5	LED0603RD	SMT LED red	0603	Dialight Corporation	-30°C - +85°C	2,0V/20mA	Farnell	146-5988	0,11	
12	1	IC1	SPX5205M5L3	150mA Low-Noise LDO Voltage Regulator	SOT23-5	Sipex	-40°C - +125°C	3.3V/150mA	TME	SPX5205M5L3-3TR	0,18	

Pos.	Num.	Components	Size	Description	Case	Manufacturer	Temperature Range	Characteristics	Distributor	Ordering Number	€	Commentary
13	1	IC2	AT90USB1287-16MU	8-bit Microcontroller 128KB Flash und USB	QFN64	Atmel	-40°C - +85°C	2.7 - 5.5V	Digikey	AT90USB1287-16MU-ND	10,67	Beistellung
14	1	IC3	AT86RF212	IEEE 802.15.4 Transceiver	QFN32	Atmel	-40°C - +85°C	1.8V-3.6V/25mA	Farnell	174-8492	5,55	Beistellung
15	1	L1	74279263	Ferrit Serie WE-CBF	0603	Würth Elektronik	-55°C - +125°C	500mA/0,3R	Farnell	163-5689	0,13	
16	1	Q1	16.000MHz	Quarz 16.000MHz	2.5x2.0	Euroquartz	-40°C - +85°C	+/-15ppm	Reichelt	16,000000-X22	1,05	Beistellung
17	3	R1, R5, R9	10k	SMD-Widerstand 0402	0402	Vishay Craloric	-55°C - +155°C	1%/0,125W	Farnell	173-8864	0,03	
18	2	R2, R3	22R	SMD-Widerstand 0402	0402	Multicomp	-55°C - +155°C	0,063W	Farnell	173-8828	0,03	
19	3	R4, R6, R7	82R	SMD-Widerstand 0402	0402	Multicomp	-55°C - +155°C	0,063W	Farnell	173-8836	0,03	
20	1	R8	n.b. (82R)	SMD-Widerstand 0402	0402	Multicomp	-55°C - +155°C	0,063W	Farnell	173-8836	0,03	
21	1	ST1	A-USB-A-LP/SMT	USB Buchse Typ A SMD	12mm	Assmann	-40°C - +60°C	750VAC/1A	Reichelt	USB AGF	0,22	Beistellung
22	1	SW1	7914J	SMD Key Switch	4.8x5.0	Bourns	-55°C - +125°C	100mA/16V	Farnell	112-3624	1,34	
23	1	TR1	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