

Tabelle 1

Source: /ledbox.sch						
Date:	Sunday, 15 October 2017 'pmt' 14:40:42					
Tool:	Eeschema 4.0.7					
Component Count:	69					
Individual Components:						
Item	Qty	Reference(s)	Value	LibPart	Footprint	Datasheet
		C201	10u	device:C	Capacitors_SMD:C_0805	
		C202	22p	device:C	Capacitors_SMD:C_0805	
		C203	470p	device:C	Capacitors_SMD:C_0805	
		C301	10u	device:C	Capacitors_SMD:C_0805	
		C302	100n	device:C	Capacitors_SMD:C_0805	
		C401	100n	device:C	Capacitors_SMD:C_0805	
		C402	100n	device:C	Capacitors_SMD:C_0805	
		C403	100n	device:C	Capacitors_SMD:C_0805	
		C404	100n	device:C	Capacitors_SMD:C_0805	
		C405	100n	device:C	Capacitors_SMD:C_0805	
		C406	100n	device:C	Capacitors_SMD:C_0805	
		C407	100n	device:C	Capacitors_SMD:C_0805	
		C408	DNP/22p	device:C	Capacitors_SMD:C_0805	
		C409	DNP/22p	device:C	Capacitors_SMD:C_0805	
		C501	4u7	device:CP	Capacitors_THT:CP_Radial_D6.3mm_P2.50mm	
		C502	100n	device:C	Capacitors_SMD:C_0805	
		C503	100n	device:C	Capacitors_SMD:C_0805	
		C504	47u	device:CP	Capacitors_THT:CP_Radial_D6.3mm_P2.50mm	
		CON401	AVR_ISP	atmel:AVR-ISP-6	Pin_Headers:Pin_Header_Straight_2x03	
		D201	1N4148	device:D	Diodes_SMD:D_MiniMELF	
		D202	1N4148	device:D	Diodes_SMD:D_MiniMELF	
		D301	LRTBG6TG	ledbox-newsymbols:LRTBG6TG	ledbox-newfootprints:LED-6-BIG	http://www.osram-os.com/Graphics/XPic4/00067263_0.pdf
		D302	LED1	device:LED	LEDs:LED_0805	
		D303	LED2	device:LED	LEDs:LED_0805	
		D501	1N4148	device:D	Diodes_SMD:D_MiniMELF	
		D502	LED2	device:LED	LEDs:LED_0805	
		J201	Bus	conn:Conn_02x05_Odd_Even	Pin_Headers:Pin_Header_Straight_2x05	
		J301	IR LED	conn:Conn_01x03	Pin_Headers:Pin_Header_Straight_1x03	
		J302	Button	conn:Conn_01x02	Pin_Headers:Pin_Header_Straight_1x02	
		J401	Power	conn:Conn_02x03_Odd_Even	Socket_Strips:Socket_Strip_Straight_2x03	
		J402	Power	conn:Conn_02x04_Odd_Even	Socket_Strips:Socket_Strip_Straight_2x04	
		J403	Power	conn:Conn_02x05_Odd_Even	Socket_Strips:Socket_Strip_Straight_2x05	
		J404	Port D	conn:Conn_01x03	Socket_Strips:Socket_Strip_Straight_1x03	
		J405	Port B	conn:Conn_01x04	Socket_Strips:Socket_Strip_Straight_1x04	
		J406	Port C	conn:Conn_01x05	Socket_Strips:Socket_Strip_Straight_1x05	
		J407	ADC6	conn:Conn_01x03	Socket_Strips:Socket_Strip_Straight_1x03	
		J408	ADC7	conn:Conn_01x03	Socket_Strips:Socket_Strip_Straight_1x03	
		J501	6.5V-12V	conn:Conn_01x02	Connectors_Terminal_Blocks:TerminalBlock_Phoenix_MKDS1.5-2pol	
		J502	5V	conn:Conn_01x02	Connectors_Terminal_Blocks:TerminalBlock_Phoenix_MKDS1.5-2pol	
		R201	DNP/1k	device:R	Resistors_SMD:R_0805	
		R202	DNP/150	device:R	Resistors_THT:R_Axial_DIN0207_L6.3mm_D2.5mm_P7.62mm_Horizontal	
		R203	DNP/1k	device:R	Resistors_SMD:R_0805	
		R204	10k	device:R	Resistors_SMD:R_0805	
		R205	100	device:R	Resistors_SMD:R_0805	
		R206	22k	device:R	Resistors_SMD:R_0805	
		R207	3k3	device:R	Resistors_SMD:R_0805	
		R208	2k2	device:R	Resistors_SMD:R_0805	
		R301	10k	device:R	Resistors_SMD:R_0805	
		R302	10k	device:R	Resistors_SMD:R_0805	
		R303	10k	device:R	Resistors_SMD:R_0805	
		R304	150	device:R	Resistors_SMD:R_0805	
		R305	42	device:R	Resistors_SMD:R_0805	
		R306	22	device:R	Resistors_SMD:R_0805	
		R307	22	device:R	Resistors_SMD:R_0805	
		R308	430	device:R	Resistors_SMD:R_0805	
		R309	430	device:R	Resistors_SMD:R_0805	
		R310	10k	device:R	Resistors_SMD:R_0805	
		R401	1k	device:R	Resistors_SMD:R_0805	
		R402	1k	device:R	Resistors_SMD:R_0805	
		R403	1k	device:R	Resistors_SMD:R_0805	
		R501	430	device:R	Resistors_SMD:R_0805	
		SW301	Reset	switches:SW_Push	Buttons_Switches_THT:SW_PUSH_6mm_h5mm	
		SW302	Push 1	switches:SW_Push	Buttons_Switches_THT:SW_PUSH_6mm_h5mm	
		SW303	Push 2	switches:SW_Push	Buttons_Switches_THT:SW_PUSH_6mm_h5mm	
		U201	ST485C	ledbox-newsymbols:SN75176B	Housings_SOIC:SOIC-8_3.9x4.9mm_Pitch1.27mm	http://www.st.com/content/ccc/resource/technical/document/datasheet/4b/81/a8/cd/8a/72/47/82/CD000002183.pdf/files/CD000002183.pdf/jcr:content/translations/en.CD000002183.pdf
		U301	ULN2003	interface:ULN2003	Housings_SOIC:SOIC-16_3.9x9.9mm_Pitch1.27mm	http://www.ti.com/lit/ds/symlink/ulq2004a.pdf
		U401	ATMEGA88	atmel:ATMEGA88-20AU	Housings_QFP:TQFP-32_7x7mm_Pitch0.8mm	http://ww1.microchip.com/downloads/en/DeviceDoc/Atmel-2545-8-bit-AVR-Microcontroller-ATmega48-88-168_Datasheet.pdf
		U501	AZ1117-5.0	regul:AZ1117-5.0	TO_SOT_Packages_SMD:SOT-223-3Lead_TabPin2	
		Y401	DNP/20MHz	device:Crystal	Crystals:Crystal_HC49-SD_SMD	
Collated Components:						
Item	Qty	Reference(s)	Value	LibPart	Footprint	Datasheet
1	2	C201; C301	10u	device:C	Capacitors_SMD:C_0805	
2	1	C202	22p	device:C	Capacitors_SMD:C_0805	
3	1	C203	470p	device:C	Capacitors_SMD:C_0805	
4	10	C302; C401; C402	100n	device:C	Capacitors_SMD:C_0805	
5	2	C408; C409	DNP/22p	device:C	Capacitors_SMD:C_0805	
6	1	C501	4u7	device:CP	Capacitors_THT:CP_Radial_D6.3mm_P2.50mm	
7	1	C504	47u	device:CP	Capacitors_THT:CP_Radial_D6.3mm_P2.50mm	
8	1	CON401	AVR_ISP	atmel:AVR-ISP-6	Pin_Headers:Pin_Header_Straight_2x03	
9	3	D201; D202; D301	1N4148	device:D	Diodes_SMD:D_MiniMELF	
10	1	D301	LRTBG6TG	ledbox-newsymbols:LRTBG6TG	ledbox-newfootprints:LED-6-BIG	http://www.osram-os.com/Graphics/XPic4/00067263_0.pdf
11	1	D302	LED1	device:LED	LEDs:LED_0805	
12	2	D303; D502	LED2	device:LED	LEDs:LED_0805	
13	1	J201	Bus	conn:Conn_02x05_Odd_Even	Pin_Headers:Pin_Header_Straight_2x05	
14	1	J301	IR LED	conn:Conn_01x03	Pin_Headers:Pin_Header_Straight_1x03	
15	1	J302	Button	conn:Conn_01x02	Pin_Headers:Pin_Header_Straight_1x02	
16	1	J401	Power	conn:Conn_02x03_Odd_Even	Socket_Strips:Socket_Strip_Straight_2x03	
17	1	J402	Power	conn:Conn_02x04_Odd_Even	Socket_Strips:Socket_Strip_Straight_2x04	
18	1	J403	Power	conn:Conn_02x05_Odd_Even	Socket_Strips:Socket_Strip_Straight_2x05	
19	1	J404	Port D	conn:Conn_01x03	Socket_Strips:Socket_Strip_Straight_1x03	
20	1	J405	Port B	conn:Conn_01x04	Socket_Strips:Socket_Strip_Straight_1x04	
21	1	J406	Port C	conn:Conn_01x05	Socket_Strips:Socket_Strip_Straight_1x05	
22	1	J407	ADC6	conn:Conn_01x03	Socket_Strips:Socket_Strip_Straight_1x03	
23	1	J408	ADC7	conn:Conn_01x03	Socket_Strips:Socket_Strip_Straight_1x03	
24	1	J501	6.5V-12V	conn:Conn_01x02	Connectors_Terminal_Blocks:TerminalBlock_Phoenix_MKDS1.5-2pol	
25	1	J502	5V	conn:Conn_01x02	Connectors_Terminal_Blocks:TerminalBlock_Phoenix_MKDS1.5-2pol	
26	2	R201; R203	DNP/1k	device:R	Resistors_SMD:R_0805	
27	1	R202	DNP/150	device:R	Resistors_THT:R_Axial_DIN0207_L6.3mm_D2.5mm_P7.62mm_Horizontal	
28	5	R204; R301; R302	10k	device:R	Resistors_SMD:R_0805	
29	1	R205	100	device:R	Resistors_SMD:R_0805	
30	1	R206	22k	device:R	Resistors_SMD:R_0805	
31	1	R207	3k3	device:R	Resistors_SMD:R_0805	
32	1	R208	2k2	device:R	Resistors_SMD:R_0805	
33	1	R304	150	device:R	Resistors_SMD:R_0805	
34	1	R305	42	device:R	Resistors_SMD:R_0805	
35	2	R306; R307	22	device:R	Resistors_SMD:R_0805	
36	3	R308; R309; R501	430	device:R	Resistors_SMD:R_0805	
37	3	R401; R402; R403	1k	device:R	Resistors_SMD:R_0805	
38	1	SW301	Reset	switches:SW_Push	Buttons_Switches_THT:SW_PUSH_6mm_h5mm	
39	1	SW302	Push 1	switches:SW_Push	Buttons_Switches_THT:SW_PUSH_6mm_h5mm	

40	1	SW303	Push 2	switches:SW_Push	Buttons_Switches_THT:SW_PUSH_6mm_h5mm	
41	1	U201	ST485C	ledbox-newsymbols:SN75176B	Housings_SOIC:SOIC-8_3.9x4.9mm_Pitch1.27mm	http://www.st.com/content/ccc/resource/technical/document/datasheet/4b/81/a8/cd/8a/72/47/82/CD00002183.pdf/files/CD00002183.pdf/jcr:content/translations/en.CD00002183.pdf
42	1	U301	ULN2003	interface:ULN2003	Housings_SOIC:SOIC-16_3.9x9.9mm_Pitch1.27mm	http://www.ti.com/lit/ds/symlink/ulq2004a.pdf
43	1	U401	ATMEGA88	atmel:ATMEGA88-20AU	Housings_QFP:TQFP-32_7x7mm_Pitch0.8mm	http://ww1.microchip.com/downloads/en/DeviceDoc/Atmel-2545-8-bit-AVR-Microcontroller-Atmega48-88-168_Datasheet.pdf
44	1	U501	AZ1117-5.0	regul:AZ1117-5.0	TO_SOT_Packages_SMD:SOT-223-3Lead_TabPin2	
45	1	Y401	DNP/20MHz	device:Crystal	Crystals:Crystal_HC49-SMD_SMD	