Tabelle 1

						Tabelle 1
Source:	ledbox	ay; 09 Octobe	2017 'pmt' 1	0.22.11		
Tool:		ema 4.0.7	2017 pilit 1	9.55.11		
Component Count:	68					
Individual Components:						
Item	Qty	Reference(s)	Value	LibPart	Footprint	Datasheet
item	Qty	C201	10u		Capacitors_SMD:C_1206	Datasteet
		C202	22p		Capacitors_SMD:C_1206	
		C203	470p		Capacitors_SMD:C_1206	
		C301	10u		Capacitors_SMD:C_1206	
		C302 C401	100n 100n		Capacitors_SMD:C_1206 Capacitors_SMD:C_1206	
		C402	100n	device:C	Capacitors_SMD:C_1206	
		C403	100n	device:C	Capacitors_SMD:C_1206	
		C404	100n		Capacitors_SMD:C_1206	
		C405	100n	device:C	Capacitors_SMD:C_1206 Capacitors_SMD:C_1206	
		C406 C407	100n 100n	device:C device:C	Capacitors_SMD:C_1206 Capacitors_SMD:C_1206	
		C408	DNP/22p	device:C	Capacitors_SMD:C_1206	
		C409	DNP/22p	device:C	Capacitors_SMD:C_1206	
		C501	4u7	device:CP	Capacitors_SMD:CP_Elec_4x5.7	
		C502 C503	100n 100n	device:C device:C	Capacitors_SMD:C_1206 Capacitors_SMD:C_1206	
		C504	47u	device:CP	Capacitors_SMD:CP_Elec_4x5.7	
		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	http://www.asaasaa.com/Ouraghina/VDia/VO0007000 0 adf
		D301 D302	LED1	device:LED	ledbox-newfootprints:LED-6-BIG LEDs:LED_1206	http://www.osram-os.com/Graphics/XPic4/00067263_0.pdf
		D303	LED2	device:LED	LEDs:LED_1206	
		D501	1N4148	device:D	Diodes_SMD:D_MiniMELF	
		J201	Bus		Pin_Headers:Pin_Header_Straight_2x05	
		J301	IR LED	conn:Conn_01x03	Pin_Headers:Pin_Header_Straight_1x03	
		J302 J401	Button	conn:Conn_01x02 conn:Conn_02x03_Odd_Even	Pin_Headers:Pin_Header_Straight_1x02 Socket_Strips:Socket_Strip_Straight_2x03	
		J402	Power		Socket_Strips:Socket_Strip_Straight_2x04	
		J403	Power	conn:Conn_02x04_Odd_Even	Socket_Strips:Socket_Strip_Straight_2x04	
		J404	Port D	conn:Conn_01x03	Socket_Strips:Socket_Strip_Straight_1x03	
		J405 J406	Port B Port C	conn:Conn_01x04 conn:Conn_01x04	Socket_Strips:Socket_Strip_Straight_1x04 Socket_Strips:Socket_Strip_Straight_1x04	
		J406 J407	ADC6	conn:Conn_01x04	Socket_Strips:Socket_Strip_Straight_1x04 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_Pheonix_MKDS1.5-2pol	
		J502	5V	conn:Conn_01x02	Connectors_Terminal_Blocks:TerminalBlock_Pheonix_MKDS1.5-2pol	
		R201 R202		device:R device:R	Resistors_SMD:R_1206 Resistors_SMD:R_1206	
		R203		device:R	Resistors_SMD:R_1206	
		R204	10k	device:R	Resistors_SMD:R_1206	
		R205	10k	device:R	Resistors_SMD:R_1206	
		R206	100	device:R	Resistors_SMD:R_1206	
		R207 R208	22k 3k3	device:R device:R	Resistors_SMD:R_1206 Resistors_SMD:R_1206	
		R209	2k2	device:R	Resistors_SMD:R_1206	
		R301	10k	device:R	Resistors_SMD:R_1206	
		R302	10k	device:R	Resistors_SMD:R_1206	
		R303	10k	device:R	Resistors_SMD:R_1206	
		R304 R305	150 42	device:R device:R	Resistors_SMD:R_1206 Resistors_SMD:R_1206	
		R306	22	device:R	Resistors_SMD:R_1206	
		R307	22	device:R	Resistors_SMD:R_1206	
		R308	430	device:R	Resistors_SMD:R_1206	
		R309 R310	430 10k	device:R device:R	Resistors_SMD:R_1206 Resistors_SMD:R_1206	
		R401	1k	device:R	Resistors_SMD:R_1206	
		R402	1k	device:R	Resistors_SMD:R_1206	
		R403	1k	device:R	Resistors_SMD:R_1206	
		SW301	Reset	switches:SW_Push	Buttons_Switches_THT:SW_PUSH_6mm_h5mm	
		SW302 SW303	Push 1 Push 2	switches:SW_Push switches:SW_Push	Buttons_Switches_THT:SW_PUSH_6mm_h5mm Buttons_Switches_THT:SW_PUSH_6mm_h5mm	
		U201	ST485C		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
		U301	ULN2003	interface:ULN2003	Housings_SOIC:SOIC-16_3.9x9.9mm_Pitch1.27mm	http://www.ti.com/lit/ds/symlink/ulq2004a.pdf
		U401		atmel:ATMEGA88-20AU	TQFP32	http://ww1.microchip.com/downloads/en/DeviceDoc/Atmel-2545-8-bit-AVR-Microcontroller-ATmega48-88-168_Datasheet.pdf
		U501 Y401		regul:AZ1117-5.0 z device:Crystal	TO_SOT_Packages_SMD:TO-263-3Lead Crystals:Crystal_HC49-SD_SMD	
			2111 / 20111 II	across year	C. youard restrict to the objection	
0.11.						
Collated Components:						
Item	Qty	Reference(s)	Value	LibPart	Footprint	Datasheet
1	2	C201; C301		device:C	Capacitors_SMD:C_1206	
2	1	C202	22p	device:C	Capacitors_SMD:C_1206	
4	10	C203 C302; C401;	470p 100n	device:C device:C	Capacitors_SMD:C_1206 Capacitors_SMD:C_1206	
5	2	C302; C401; C408; C409		device:C	Capacitors_SMD:C_1206 Capacitors_SMD:C_1206	
6	1	C501	4u7	device:CP	Capacitors_SMD:CP_Elec_4x5.7	
7	1	C504	47u	device:CP	Capacitors_SMD:CP_Elec_4x5.7	
8	1 2	CON401 D201; D202;	AVR_ISP	atmel:AVR-ISP-6 device:D	Pin_Headers:Pin_Header_Straight_2x03 Diodes_SMD:D_MiniMELF	
10	1	D201; D202;			ledbox-newfootprints:LED-6-BIG	http://www.osram-os.com/Graphics/XPic4/00067263_0.pdf
11	1	D302	LED1	device:LED	LEDs:LED_1206	
12	1	D303	LED2	device:LED	LEDs:LED_1206	
13	1	J201	Bus		Pin_Headers:Pin_Header_Straight_2x05	
14 15	1	J301 J302	IR LED Button	conn:Conn_01x03 conn:Conn_01x02	Pin_Headers:Pin_Header_Straight_1x03 Pin_Headers:Pin_Header_Straight_1x02	
16	1	J401	Power		Socket_Strips:Socket_Strip_Straight_2x03	
17	2	J402; J403	Power		Socket_Strips:Socket_Strip_Straight_2x04	
18	1	J404	Port D	conn:Conn_01x03	Socket_Strips:Socket_Strip_Straight_1x03	
19	1	J405	Port C	conn:Conn_01x04	Socket_Strips:Socket_Strip_Straight_1x04	
20	1	J406 J407	Port C ADC6	conn:Conn_01x04 conn:Conn_01x03	Socket_Strips:Socket_Strip_Straight_1x04 Socket_Strips:Socket_Strip_Straight_1x03	
22	1	J408	ADC7	conn:Conn_01x03	Socket_Strips:Socket_Strip_Straight_1x03	
23	1	J501		conn:Conn_01x02	Connectors_Terminal_Blocks:TerminalBlock_Pheonix_MKDS1.5-2pol	
24	1	J502	5V	conn:Conn_01x02	Connectors_Terminal_Blocks:TerminalBlock_Pheonix_MKDS1.5-2pol	
25 26	2	R201; R203		device:R	Resistors_SMD:R_1206 Resistors_SMD:R_1206	
26 27	6	R202 R204; R205;		device:R device:R	Resistors_SMD:R_1206 Resistors_SMD:R_1206	
28	1	R206	100	device:R	Resistors_SMD:R_1206	
29	1	R207	22k	device:R	Resistors_SMD:R_1206	
30	1	R208	3k3	device:R	Resistors_SMD:R_1206	
21	1	R209 R304	2k2 150	device:R device:R	Resistors_SMD:R_1206 Resistors_SMD:R_1206	
31 32	1	R305	42	device:R	Resistors_SMD:R_1206	
	1			device:R	Resistors_SMD:R_1206	
32	1 2	R306; R307				
32 33	2 2	R308; R309	430	device:R	Resistors_SMD:R_1206	
32 33 34 35 36	1 2 2 3	R308; R309 R401; R402;	430 1k	device:R device:R	Resistors_SMD:R_1206 Resistors_SMD:R_1206	
32 33 34	1 2 2 3 1	R308; R309	430	device:R	Resistors_SMD:R_1206	
32 33 34 35 36	1 2 2 3 1 1	R308; R309 R401; R402; SW301	430 1k Reset	device:R device:R switches:SW_Push	Resistors_SMD:R_1206 Resistors_SMD:R_1206 Buttons_Switches_THT:SW_PUSH_6mm_h5mm	
32 33 34 35 36 37 38	1 2 2 3 1 1 1	R308; R309 R401; R402; SW301 SW302	430 1k Reset Push 1	device:R device:R switches:SW_Push switches:SW_Push switches:SW_Push	Resistors_SMD:R_1206 Resistors_SMD:R_1206 Buttons_Switches_THT:SW_PUSH_6mm_h5mm Buttons_Switches_THT:SW_PUSH_6mm_h5mm	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

41	1	U301	ULN2003 interface:ULN2003	Housings_SOIC:SOIC-16_3.9x9.9mm_Pitch1.27mm	http://www.ti.com/lit/ds/symlink/ulq2004a.pdf
42	1	U401	ATMEGA88- atmel:ATMEGA88-20AU	TQFP32	http://ww1.microchip.com/downloads/en/DeviceDoc/Atmel-2545-8-bit-AVR-Microcontroller-ATmega48-88-168_Datasheet.pdf
43	1	U501	AZ1117-5.0 regul:AZ1117-5.0	TO_SOT_Packages_SMD:TO-263-3Lead	
44	1	Y401	DNP/20MHz device:Crystal	Crystals:Crystal_HC49-SD_SMD	