

RoboSAX LED box

Item	Reference(s)	Value	LibPart	Footprint	Footprint	Datasheet	Populate	Qty	Part Suppl	Elecrow ID	Elecrow Part	Elecrow Value	Supplier link	Price Piece	Price Sum
1	C201; C301	10u	device:C	Capacitors_SMD:C_0805	0805			2	Elecrow	16532	C15850	10uF (106) ±10% 25V		0	0
2	C202; C408; C409	22p	device:C	Capacitors_SMD:C_0805	0805		Prototype	3	Elecrow	2156	C1804	22pF (220) ±5% 50V		0	0
3	C203	470p	device:C	Capacitors_SMD:C_0805	0805			1	Elecrow	2095	C1743	470pF (471) ±10% 50V		0	0
4	C302; C401; C402; C403; C404; C405; C407; C502; C503	100n	device:C	Capacitors_SMD:C_0805	0805			9	Elecrow	50686	C49678	100nF(104) ±10% 50V		0	0
5	C501	4u7	device:CP	Capacitors_THT:CP_Radial_D5.0mm_P2.00mm				1	DNP					0	0
6	C504	47u	device:CP	Capacitors_THT:CP_Radial_D6.3mm_P2.50mm				1	DNP					0	0
7	CON401	AVR_ISP	atmel:AVR-ISP-6	Pin_Headers:Pin_Header_Straight_2x03				1	DNP					0	0
8	D201; D202; D501	1N4148	device:D	Diodes_SMD:D_SOD-123	SOD-123			3	Digikey				<a href="https://www.digikey.de/product-detail/de/smc-diode-solutions/1N4148WTR/1655-1360-1-ND/6022805">https://www.digikey.de/product-detail/de/smc-diode-solutions/1N4148WTR/1655-1360-1-ND/6022805</a>	0,03872	0,11616
9	D301	changes	RGB LED					1	Digikey					0,5	0,5
10	D302	LED1	device:LED	LEDs:LED_0805	0805			1	Digikey				<a href="https://www.digikey.de/product-detail/de/lite-on-inc/LTST-C171GKT/160-1423-1-ND/386792">https://www.digikey.de/product-detail/de/lite-on-inc/LTST-C171GKT/160-1423-1-ND/386792</a>	0,06080	0,0608
11	D303; D502	LED2	device:LED	LEDs:LED_0805	0805			2	Digikey				<a href="https://www.digikey.de/product-detail/de/lite-on-inc/LTST-C171GKT/160-1423-1-ND/386792">https://www.digikey.de/product-detail/de/lite-on-inc/LTST-C171GKT/160-1423-1-ND/386792</a>	0,06080	0,1216
12	J201	Bus	ledbox-cache:Conn_02x05_Odd_Even	Pin_Headers:Pin_Header_Straight_2x05				1	DNP					0	0
13	J301	IR LED	ledbox-cache:Conn_01x03	Pin_Headers:Pin_Header_Straight_1x03				1	DNP					0	0
14	J302	Button	ledbox-cache:Conn_01x02	Pin_Headers:Pin_Header_Straight_1x02				1	DNP					0	0
15	J401	Power	ledbox-cache:Conn_02x03_Odd_Even	Socket_Strips:Socket_Strip_Straight_2x03				1	DNP					0	0
16	J402	Power	ledbox-cache:Conn_02x04_Odd_Even	Socket_Strips:Socket_Strip_Straight_2x04				1	DNP					0	0
17	J403	Power	ledbox-cache:Conn_02x05_Odd_Even	Socket_Strips:Socket_Strip_Straight_2x05				1	DNP					0	0
18	J404	Port D	ledbox-cache:Conn_01x03	Socket_Strips:Socket_Strip_Straight_1x03				1	DNP					0	0
19	J405	Port B	ledbox-cache:Conn_01x04	Socket_Strips:Socket_Strip_Straight_1x04				1	DNP					0	0
20	J406	Port C	ledbox-cache:Conn_01x05	Socket_Strips:Socket_Strip_Straight_1x05				1	DNP					0	0
21	J407	ADC6	ledbox-cache:Conn_01x03	Socket_Strips:Socket_Strip_Straight_1x03				1	DNP					0	0
22	J408	ADC7	ledbox-cache:Conn_01x03	Socket_Strips:Socket_Strip_Straight_1x03				1	DNP					0	0
23	J501	6.5V-12V	ledbox-cache:Conn_01x02	Connectors_Terminal_Blocks:TerminalBlock_Pheonix_MKDS1.5-2pol				1	DNP					0	0
24	J502	5V	ledbox-cache:Conn_01x02	Connectors_Terminal_Blocks:TerminalBlock_Pheonix_MKDS1.5-2pol				1	DNP					0	0
25	R201; R203; R401; R402; R403	1k	device:R	Resistors_SMD:R_0805	0805		Prototype	5	Elecrow	18201	C17513	1KΩ (1001) ±1%		0	0
26	R202	150Q	device:R	Resistors_THT:R_Axial_DIN0207_L6.3mm_D2.5mm_P7.62mm_Horizontal			Prototype	1	DNP					0	0
27	R204; R301; R302; R303; R310	10k	device:R	Resistors_SMD:R_0805	0805			5	Elecrow	18102	C17414	10KΩ (1002) ±1%		0	0
28	R205	100Q	device:R	Resistors_SMD:R_0805	0805			1	Elecrow	18096	C17408	100Q (1000) ±1%		0	0
29	R206	22k	device:R	Resistors_SMD:R_0805	0805			1	Elecrow	18248	C17560	22KΩ (2202) ±1%		0	0
30	R207	3k3	device:R	Resistors_SMD:R_0805	0805			1	Digikey				<a href="https://www.digikey.de/product-detail/de/stackpole-electronics-inc/RMCF0805JT3K30/RMCF0805JT3K30CT-ND/1942567">https://www.digikey.de/product-detail/de/stackpole-electronics-inc/RMCF0805JT3K30/RMCF0805JT3K30CT-ND/1942567</a>	0,00540	0,0054
31	R208	2k2	device:R	Resistors_SMD:R_0805	0805			1	Digikey				<a href="https://www.digikey.de/product-detail/de/stackpole-electronics-inc/RMCF0805JT2K20/RMCF0805JT2K20CT-ND/1942563">https://www.digikey.de/product-detail/de/stackpole-electronics-inc/RMCF0805JT2K20/RMCF0805JT2K20CT-ND/1942563</a>	0,00540	0,0054
32	R304	150Q	device:R	Resistors_SMD:R_0805	0805			1	Elecrow	18159	C17471	150Q (1500) ±1%		0	0
33	R305; R311	82Q	device:R	Resistors_SMD:R_0805	0805			2	Elecrow	18529	C17841	82Q (82R0) ±1%		0	0
34	R306; R307	22Q	device:R	Resistors_SMD:R_0805	0805			2	Elecrow	18249	C17561	22Q (22R0) ±1%		0	0
35	R308; R309; R501	430Q	device:R	Resistors_SMD:R_0805	0805			3	Digikey				<a href="https://www.digikey.de/product-detail/de/stackpole-electronics-inc/RMCF0805JT430R/RMCF0805JT430RCT-ND/1942550">https://www.digikey.de/product-detail/de/stackpole-electronics-inc/RMCF0805JT430R/RMCF0805JT430RCT-ND/1942550</a>	0,00540	0,0162
36	SW301	Reset	ledbox-cache:SW_Push	Buttons_Switches_THT:SW_PUSH_6mm_h5mm				1	DNP					0	0
37	SW302	Push 1	ledbox-cache:SW_Push	Buttons_Switches_THT:SW_PUSH_6mm_h5mm				1	DNP					0	0
38	SW303	Push 2	ledbox-cache:SW_Push	Buttons_Switches_THT:SW_PUSH_6mm_h5mm				1	DNP					0	0
39	U201	ST485C	ledbox-newsymbols:SN75176B	Housings_SOIC:SOIC-8_3.9x4.9mm_Pitch1.27mm	SOIC 8	<a href="http://www.ti.com/lit/ds/">http://www.ti.com/lit/ds/</a>	Yes	1	Digikey				<a href="https://www.digikey.de/product-detail/de/stmicroelectronics/ST485CDR/497-3734-1-ND/686452">https://www.digikey.de/product-detail/de/stmicroelectronics/ST485CDR/497-3734-1-ND/686452</a>	0,46690	0,4669
40	U301	U1N2003	interface:U1N2003	Housings_SOIC:SOIC-16_3.9x9.9mm_Pitch1.27mm	SOIC 16	<a href="http://www.ti.com/lit/ds/">http://www.ti.com/lit/ds/</a>		1	Digikey				<a href="https://www.digikey.de/product-detail/de/on-semiconductor/U1N2003ADR2G/U1N2003ADR2GOSCT-ND/2623488">https://www.digikey.de/product-detail/de/on-semiconductor/U1N2003ADR2G/U1N2003ADR2GOSCT-ND/2623488</a>	0,22410	0,2241
41	U401	ATMEGA88A-AU	atmel:ATMEGA88A-AU	Housings_QFP:TQFP-32_7x7mm_Pitch0.8mm	TQFP 32			1	Digikey				<a href="https://www.digikey.de/product-detail/de/microchip-technology/ATMEGA88A-AU/ATMEGA88A-AU-ND/2271018">https://www.digikey.de/product-detail/de/microchip-technology/ATMEGA88A-AU/ATMEGA88A-AU-ND/2271018</a>	1,05730	1,0573
42	U501	AZ1117-5.0	regul:AZ1117-5.0	TO_SOT_Packages_SMD:SOT-223-3Lead_TabPin2	SOT 223			1	Digikey				<a href="https://www.digikey.de/product-detail/de/diodes-incorporated/AZ1117CH-5.0TRG1/AZ1117CH-5.0TRG1DICT-ND/450520Z">https://www.digikey.de/product-detail/de/diodes-incorporated/AZ1117CH-5.0TRG1/AZ1117CH-5.0TRG1DICT-ND/450520Z</a>	0,14510	0,1451
43	Y401	20MHz	device:Crystal	Crystals:Crystal_HC49-SD_SMD	HC49/SU		Prototype	1	Digikey				<a href="https://www.digikey.de/product-detail/de/abracon-llc/ABLS-20.000MHZ-B2-T/535-9074-1-ND/675591">https://www.digikey.de/product-detail/de/abracon-llc/ABLS-20.000MHZ-B2-T/535-9074-1-ND/675591</a>	0,15040	0,1504
															2,86936