

Reference	Value	Footprint	part	datasheet	Valid	Current (A)	Max Cur (A)	Cur_valid	Voltage (V)	Max Voltage (V)	Voltage_Valid	Power (W)	Max Power (W)	Power_valid	Temperature	Max temperature	Temp_valid			
C1	100nF	Capacitor_SMD:C_0805_2012Metric_Pad1.18x1.45mm_HandSolder	C0805C104K5RACTU	KEM_C1002_X7R_SMD.pdf	OK				3.365	50	OK				50	125	OK			
C2	100nF	Capacitor_SMD:C_0805_2012Metric_Pad1.18x1.45mm_HandSolder	C0805C104K5RACTU	KEM_C1002_X7R_SMD.pdf	OK				3.365	50	OK				50	125	OK			
C3	100nF	Capacitor_SMD:C_0805_2012Metric_Pad1.18x1.45mm_HandSolder	C0805C104K5RACTU	KEM_C1002_X7R_SMD.pdf	OK				3.365	50	OK				50	125	OK			
C4	4.7uF	Capacitor_SMD:C_0805_2012Metric_Pad1.18x1.45mm_HandSolder	C0805C475K3RACTU	KEM_C1002_X7R_SMD.pdf	OK				3.365	25	OK				50	125	OK			
C5	10uF	Capacitor_SMD:C_0805_2012Metric_Pad1.18x1.45mm_HandSolder	C0805C106K3PACTU	KEM_C1006_X5R_SMD.pdf	OK				5.25	25	OK				50	85	OK			
C6	10uF	Capacitor_SMD:C_0805_2012Metric_Pad1.18x1.45mm_HandSolder	C0805C106K3PACTU	KEM_C1006_X5R_SMD.pdf	OK				3.365	25	OK				50	85	OK			
D1	RED LED	LED_THT-LED_D5.0mm			OK															
D2	GREEN LED	LED_THT-LED_D5.0mm			OK															
D3	POWER LED	LED_SMD-LED_1206_3216Metric_Pad1.42x1.75mm_HandSolder	QTL650C4TR/FC15-21SYGC/S530-E2/TR8	DSE-0031723-QTLP650C4TR-FC15-21SYGC-S530-E2-TR8-V1.pdf	OK	0.011212121	0.015	OK	3.365	5	OK	0.037728788	0.06	OK	50	85	OK			
HS1	HEAT SINK	530002B02500G	530002B02500G	Boyd-Board-Level-Heatsinks-Catalog.pdf	OK											100	150	OK		
HP	HEAT PASTE	-	TC3-1G	TC3-1G.pdf	OK													100	150	OK
J1	Conn_01x04_Pin	Connector_PinHeader_2.54mm:PinHeader_1x04_P2.54mm_Vertical			OK															
J2	OLED Display	Connector_PinHeader_2.54mm:PinHeader_1x04_P2.54mm_Vertical	oled display ruizhi_0.96	OLED_096.pdf	OK				3.365	5.2	OK							50	80	OK
J3	USB C Receptacle_PowerOnly 6P	Connector_USB:USB_C_Receptacle_GCT_USB4125-xx-x-0190_6P_TopMnt	Hori USB4125-GF-A	usb4125-spec.pdf	OK	0.80207962	3	OK	5.25	48	OK							50	85	OK
Q1	BTA16-600CW	Package_TO_SOT_THT:TO-220-3_Vertical	BTA16-600CWRG	bta16.pdf	OK	12	16	OK	325.2691193	600	OK	13	14.42307692	OK	117.6	125	OK			
R1	1100ohm	Resistor_THT:R_Axial_DIN0309_L9.0mm_D3.2mm_P12.70mm_Horizontal	CFR-50JB-52-1K1	YAGEO-CFR_DATASHEET.pdf	OK				230	300	OK	0.308611111	0.5	OK	50	70	OK			
R2	1100ohm	Resistor_THT:R_Axial_DIN0309_L9.0mm_D3.2mm_P12.70mm_Horizontal	CFR-50JB-52-1K1	YAGEO-CFR_DATASHEET.pdf	OK				230	300	OK	0.308611111	0.5	OK	50	70	OK			
R3	1100ohm	Resistor_THT:R_Axial_DIN0309_L9.0mm_D3.2mm_P12.70mm_Horizontal	CFR-50JB-52-1K1	YAGEO-CFR_DATASHEET.pdf	OK				230	300	OK	0.308611111	0.5	OK	50	70	OK			
R4	1800ohm	Resistor_SMD:R_0805_2012Metric_Pad1.20x1.40mm_HandSolder	ERA-6AEB182V	R1800_panasonic.pdf	OK				3.365	100	OK	0.006296978	0.125	OK	50	85	OK			
R5	150ohm	Resistor_SMD:R_0805_2012Metric_Pad1.20x1.40mm_HandSolder	CRCW0805150RFKEA	resistor_vishay.pdf	OK				3.365	150	OK	0.076250673	0.25	OK	50	70	OK			
R6	150ohm	Resistor_SMD:R_0805_2012Metric_Pad1.20x1.40mm_HandSolder	CRCW0805150RFKEA	resistor_vishay.pdf	OK				3.365	150	OK	0.076250673	0.25	OK	50	70	OK			
R7	150ohm	Resistor_SMD:R_0805_2012Metric_Pad1.20x1.40mm_HandSolder	CRCW0805150RFKEA	resistor_vishay.pdf	OK				3.365	150	OK	0.076250673	0.25	OK	50	70	OK			
R12	150ohm	Resistor_SMD:R_0805_2012Metric_Pad1.20x1.40mm_HandSolder	CRCW0805150RFKEA	resistor_vishay.pdf	OK				3.365	150	OK	0.076250673	0.25	OK	50	70	OK			
R8	10kohm	Resistor_SMD:R_0805_2012Metric_Pad1.20x1.40mm_HandSolder	CRCW080510K0FKEA	resistor_vishay.pdf	OK				3.365	150	OK	0.00114376	0.25	OK	50	70	OK			
R9	10kohm	Resistor_SMD:R_0805_2012Metric_Pad1.20x1.40mm_HandSolder	CRCW080510K0FKEA	resistor_vishay.pdf	OK				3.365	150	OK	0.00114376	0.25	OK	50	70	OK			
R10	5.1kohm	Resistor_SMD:R_0805_2012Metric_Pad1.20x1.40mm_HandSolder	CRCW08055K10FKEA	resistor_vishay.pdf	OK				5.25	150	OK	0.005459002	0.25	OK	50	70	OK			
R11	5.1kohm	Resistor_SMD:R_0805_2012Metric_Pad1.20x1.40mm_HandSolder	CRCW08055K10FKEA	resistor_vishay.pdf	OK				5.25	150	OK	0.005459002	0.25	OK	50	70	OK			
SW1	Valid	Button_Switch_THT:SW_PUSH_6mm_H5mm			OK															
SW2	Up	Button_Switch_THT:SW_PUSH_6mm_H5mm			OK															
SW3	Down	Button_Switch_THT:SW_PUSH_6mm_H5mm			OK															
SW4	Left	Button_Switch_THT:SW_PUSH_6mm_H5mm			OK															
SW5	Right	Button_Switch_THT:SW_PUSH_6mm_H5mm			OK															
SW6	return	Button_Switch_THT:SW_PUSH_6mm_H5mm			OK															
SW7	NRST	Button_Switch_THT:SW_PUSH_6mm_H5mm			OK															
SW8	BOOT0	Button_Switch_THT:SW_PUSH_6mm_H5mm			OK															
TH1	Thermistor_NTC	Resistor_THT:R_Axial_DIN0204_L3.6mm_D1.6mm_P2.54mm_Vertical	NRBG105F3950B1F	eaton-nrbg-glass-sealed-radial-lead-ntc-thermistor-datasheet-elx1105-en.pdf	OK				3.365	50	OK	0.000233092	0.032	OK	260	300	OK			
U1_emitter	MOC3063M	Package_DIP:DIP-6_W7.62mm_LongPads	MOC3063M	MOC3163M-D.pdf	OK	0.017946128	0.06	OK	3.365	6	OK	0.017946128	0.04935	OK	62.2775032	100	OK			
U1_detector	MOC3063M	Package_DIP:DIP-6_W7.62mm_LongPads	MOC3063M	MOC3163M-D.pdf	OK	0.89605818	1	OK	325.2691193	600	OK	0.045	0.0616	OK	75.56818182	100	OK			
U2	STM32C011F6Px	Package_SO:TSSOP-20_4.4x6.5mm_P0.65mm	STM32C011F6P6	stm32c011f6.pdf	OK	0.067979798	0.1	OK	3.365	4	OK				50	85	OK			
U3	STM32C031F6Px	Package_SO:TSSOP-20_4.4x6.5mm_P0.65mm	STM32C031F6P6	stm32c031f6.pdf	OK	0.067979798	0.1	OK	3.365	4	OK				50	85	OK			
U4	LD1117S33TR_SOT223	Package_TO_SOT_SMD:SOT-223-3_TabPin2	LD1117S33TR	LD1117.pdf	OK	0.155139073	0.8	OK	5.25	15	OK	0.312605232	12	OK	84.38657547	125	OK			
Vdr1	S14K230	Varistor:RV_Discrete_D15.5mm_W7.5mm_P7.5mm	B72214S0231K101	SIOV_Leaded_StandarD.pdf	OK	12	3000	OK							50	105	OK			