

Reference	Value	Footprint	part	datasheet	Valid	Current (A)	Max Current (A)	Current_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	
C7	100nF	Capacitor_SMD:C_0805_2012Metric_Pad1.18x1.45mm_HandSolder	C0805C104K5RACTU	KEM_C1002_X7R_SMD.pdf	OK				3,365	50	OK				50	125	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	QTP650C4TR/FC15-21SYGC/S530-E2/TR8	DSE-0031723-QTP650C4TR-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_0x04_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_ruihizi_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_GCF_USB4125_xx-xx-0190_6P_TopMnt_Horizontal	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	BTA16-600CWWRG	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-nrgb-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	62,72775032	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:TSOP-20_4.4x6.5mm_P0.65mm	STM32C011F6P6	stm32c011f6.pdf	OK	0,067979798	0,1	OK	3,365	4	OK				50	85	OK	
STM32C031F6Px	Package_SO:TSOP-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	LD1117.pdf	LD1117.pdf	OK	0,155139073	0,8	OK	5,25	15	OK	0,312605232	12	OK	84,38657547	125	OK	
Vdr1	S14K230	Varistor:RV_DisC_D15.5mm_W7.5mm_P7.5mm	B72214S0231K101	SIOV_Leaded_StanderD.pdf	OK	12	3000	OK							50	105	OK	