

Bill of Materials

TI DESIGNS

TIDA-00722

Item	Qty	Reference	Value	Part Description	Manufacturer	Manufacturer Part Number	Alternate Part	PCB Footprint	Note
1	3	D1, D2, D3	Red LED	LED, Red, SMD	Everlight	19-21SURC/S530-A3/TR8		19-21_Red	
2	1	J1	10-PIN CONNECTOR	Connector, 2.54mm, 5x2, Gold, Black, TH	3M	961210-6404-AR		Through-hole	
3	1	J2	10-PIN HEADER	Header, 100mil, 10x1	JST Sales America	SM10B-SRSS-TB		SMD	
4	1	Q1	Transistor	Transistor, NPN, 40V, 0.6A, TO-18	STMicroelectronics	2N2222A		TO-18	
5	1	U1	MSP430F5310IRGCR	25 MHz Mixed Signal Microcontroller with 32KB Flash, 6144B SRAM and 47 GPIOs, -40 to 85 degC, 64-pin QFN(RGC), Green (RoHS & no Sb/Br)	Texas Instruments	MSP430F5310IRGCR		RGC0064B	
6	1	U2		RGB Color sensor	Capella	CM3303			
7	1	C1	2.2nF	CAP, CERM, 2.2nF, 25V, +/-10%	TDK	C0603X7R1E222K030BA		0603	
8	1	C2	0.22uF	CAP, CERM, 0.22uF, 25V, +/-10%	TDK	C0603X5R0J224K030BB		0603	
9	1	C3	0.1uF	CAP, CERM, 0.1uF, 25V, +/-10%	TDK	C0603X5R0J104K030BC		0603	
10	2	C4, C5	100pF	CAP, CERM, 100pF, 25V, +/-2%	TDK	C0603C0G1E101G		0603	
11	1	C6	0.47uF	CAP, CERM, 0.47uF, 25V, +/-10%	TDK	C0603X5R0J474K030BC		0603	
12	6	R1, R2, R3, R4, R6, R7	0 OHM	RES, 0 ohm, 1%, 0.05W, 0603	Vishay-Dale	CRCW02010000Z0ED		0603	
13	1	R5	47K OHM	RES, 47K ohm, 1%, 0.05W, 0603	Vishay-Dale	CRCW020147K0FKED		0603	
14	3	R8, R9, R10	330 OHM	RES, 330 ohm, 1%, 0.05W, 0603	Vishay-Dale	CRCW0201330RFKED		0603	

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