

BOM

Item #	*Ref Des	*Qty	Manufacturer	*Mfg Part #	Description / Value	*Package	Type	Your Instructions / Notes
1	C1, C4	2	any/open AVL	10uF	CERAMIC-10UF-10V-10%-X5R(0603)	C0603	SMD	any brand-name manufacturer from AVL
2	C2, C3, C5, C6, C7, C8, C9	7	any/open AVL	100nF	CERAMIC-100NF-50V-10%-X7R(0603)	C0603	SMD	any brand-name manufacturer from AVL
3	R2, R4	2	any/open AVL	100K	SMD-RES-100K-5%-1/10W(0603)	R0603	SMD	any brand-name manufacturer from AVL
4	R1, R3, R7	3	any/open AVL	100R	SMD-RES-100R-5%-1/10W(0603)	R0603	SMD	any brand-name manufacturer from AVL
5	R5, R9, R12	3	any/open AVL	10K	SMD-RES-10K-1%-1/10W(0603)	R0603	SMD	any brand-name manufacturer from AVL
6	R6, R10	2	any/open AVL	12K	SMD-RES-12K-1%-1/10W(0603)	R0603	SMD	any brand-name manufacturer from AVL
7	R8, R11	2	any/open AVL	1K 1/10W	SMD-RES-1K-5%-1/10W(0603)	R0603	SMD	any brand-name manufacturer from AVL
8	D1, D2	2	any/open AVL	1N4148WS	1N4148WS Series 75 V 300 mA Surface Mount Small Signal Diodes	SOD323	SMD	Polarity marked
9	Q1, Q2	2	Alpha Omega	MOSFET-NCH-AO3404A	5.8A/30V/35mΩ	SOT23-3	SMD	DO NOT REPLACE MUST USE THIS
10	J1	1	Würth Electronics	687106183722	WR-FPC SMT Horiztl .50mm Bott Cont 6P	687106183722	SMD	
11	U1	1	Microchip Technology	ATMEGA328P-TQFP	ATMEGA328P_32TQFP	TQFP32	SMD	no thermal pad implemented there are NO vias under
12	U2	1	Texas Instruments	TPS79533DCQR	Ultralow-Noise, High-PSRR, Fast, RF, 500-mA Low-Dropout Linear Regulators 6-SOT-223 -40 to 125	SOT-223-6	SMD	3.3V operation
13	X1	1	Murata Electronics North America	CSTNE8M00G550000R0	Resonators 8.0000MHz 33pF SMD	CFP95P160X100-3N	SMD	Resonators 8MHz 5%
14	LED	1	Lite-On Inc.	LTST-C195TBJRKT	Blue/Red Clear	0606	SMD	
15	U3	1	AMS	TCS3200D-TR	Light To Frequency & Light To Voltage Light to Frequency High Responsivity	SOIC8	SMD	

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AVL (Approved Vendor List)
 TDK, Murata, Taiyo Yuden,
 AVX, Panasonic, Samsung,
 Vishay, ON Semiconductor,
 Diodes Incorporated