

Parts	Manufacturer	Manufacturer P/N	Value	Size	Quantity	Low cost	Cost @ Quantity	(Price) *(Quantity)	Small Order Quantity
R1	Stackpole Electronics	RMCF1/1690.9K1%R	90.9k	0603	1	\$0.00228	5000	\$0.00228	1
R2	Stackpole Electronics	RMCF1/1610K1%R	10.0k	0603	1	\$0.00228	5000	\$0.00228	1
R7,R12	Stackpole Electronics	RMCF 1/16 20K 1% R	20.0k	0603	2	\$0.00228	5000	\$0.00456	1
R3,R5,R9,R13,R18,R19	Stackpole Electronics	RMCF1/16100K1%R	100k	0603	6	\$0.00228	5000	\$0.01368	1
R4	Stackpole Electronics	RMCF1/1649.9K1%R	49.9k	0603	1	\$0.00228	5000	\$0.00228	1
R6,R11	Stackpole Electronics	RMCF1/16130K1%R	130k	0603	2	\$0.00228	5000	\$0.00456	1
R8,R21,R22,R23	Vishay/Dale	CRCW25121R20JNEG	1.2	2512	4	\$0.07500	4000	\$0.30000	10
R14,R17,R20	Stackpole Electronics	RMCF1/160R	Zero	0603	3	\$0.00152	5000	\$0.00456	20
R15	Yageo	RC0603JR-07130RL	130	0603	1	\$0.00270	5000	\$0.00270	10
R16	Stackpole Electronics	RMCF1/161201%R	120	0603	1	\$0.00228	5000	\$0.00228	10
RT1	Panasonic ECG	ERT-J1VS104FA	100k	0603	1	\$0.15100	4000	\$0.15100	10
C1,C2,C3,C4,C5,C10,C11	Murata	GRM188R71H104KA93D	0.1u	0603	7	\$0.00600	4000	\$0.04200	10
C6	Murata	GCM2195C1H103JA16D	0.01u	0805	1	\$0.06500	4000	\$0.06500	10
C7	Taiyo Yuden	TMK212BJ225KG-T	2.2u	0805	1	\$0.04500	3000	\$0.04500	10
C8	Murata	GRM188R60J475KE19D	4.7u	0603	1	\$0.02400	4000	\$0.02400	10
C9	Nichicon	F930J226MBA	22u	SMD	1	\$0.11731	2000	\$0.11731	10
Q1,Q4,Q5	Infineon	BSS670S2L L6327	NMOS	SOT-23	3	\$0.06900	9000	\$0.20700	10
Q2	ST Microelectronics	STP12PF06	PMOS	TO-220AB	1	\$0.30450	2500	\$0.30450	10
Q3	Zetex	ZXMP3A13FTA	PMOS	SOT-23	1	\$0.20400	3000	\$0.20400	10
D1	Lite-On Inc	LTL-4224	Red	5mm T1-3/4	1	\$0.05800	2000	\$0.05800	10
D2	Lite-On Inc	LTL-4234	Green	5mm T1-3/4	1	\$0.04400	2000	\$0.04400	10
D3	NXP Semiconductor	BAT54CW,115		SOT323	1	\$0.04200	3000	\$0.04200	10
D4	Diodes, Inc.	B230A-13-F		SMA	1	\$0.09400	5000	\$0.09400	10
D5	ST Microelectronics	STPS2H100A		SMA	1	\$0.28400	5000	\$0.28400	10
F1,F2	Cooper/Bussmann	BK/S500-1.6-R	1.6A	5 x 20mm	2	\$0.12350	5000	\$0.24700	10
F1,F2 (holders)	Littlefuse Inc	100056H		5x20mm	4	\$0.08840	5000	\$0.35360	10
Q2 (heatsink)	Aavid Thermalloy	575102B00000G	5W	TO-220	1	\$0.22812	5000	\$0.22812	10
Thermal Grease	ITW Chemtronics	CT40-5		5oz	0.001	\$20.57000	1	\$0.02057	1
Screw	Building Fasteners	PMS 632 0038 SL		6-32x3/8"	1	\$0.01272	1000	\$0.01272	100
Nut	Building Fasteners	HNZ632		6-32	1	\$0.01152	1000	\$0.01152	100
Washer	Building Fasteners	#6FWZ		#6	2	\$0.00778	1000	\$0.01556	100
U1	Microchip	PIC16F684-I/SL-ND		14-SOIC	1	\$1.13000	100	\$1.13000	1
U2	National Semiconductor	LP2985AIM5-3.3/NOPB	3.3V	SOT-23	1	\$0.32400	5000	\$0.32400	2
J6	Molex	22-05-3041		M 4-pin	1	\$0.38935	5000	\$0.38935	10
J7,J8	Molex	22-05-3021		M 2-pin	2	\$0.17535	5000	\$0.35070	10
SW1	NKK Switches	M2032SS1G03		3PDT	0	\$12.87000	1	\$0.00000	2
PCB					1	\$2.00000	1000 (?)	\$2.00000	
Total Board					61.001			\$7.10	

Small Order Digikey P/N	Large Order Digikey P/N	Replaceable	Voltage Rating (V)	Current Rating (A)	Tolerance	Power Rating (W)	Notes
RMCF1/1690.9KFRCT-1	RMCF1/1690.9KFRTR-1	yes			1%	1/10	
RMCF1/1610KFRCT-NI	RMCF1/1610KFRTR-NI	yes			1%	1/10	
RMCF1/1620KFRCT-NI	RMCF1/1620KFRTR-NI	yes			1%	1/10	
RMCF1/16100KFRCT-N	RMCF1/16100KFRTR-N	yes			1%	1/10	
RMCF1/1649.9KFRCT-1	RMCF1/1649.9KFRTR-1	yes			1%	1/10	
RMCF1/16130KFRCT-N	RMCF1/16130KFRTR-N	yes			1%	1/10	
541-1.2XCT-ND	541-1.2XTR-ND	yes			5%	1	
RMCF1/160RCT-ND	RMCF1/160RTR-ND	yes			5%	1/10	
311-130GRCT-ND	311-130GRTR-ND	yes			5%	1/10	
RMCF1/16120FRCT-NE	RMCF1/16120FRTR-NE	yes			5%	1/10	
P12016CT-ND	P12016TR-ND	no			1%		thermistor behavior coded into firmware
490-1519-1-ND	490-1519-2-ND	yes	50		10%		
490-4783-1-ND	490-4783-2-ND	yes	50		5%		
587-1292-1-ND	587-1292-2-ND	yes	25		10%		
490-3297-1-ND	490-3297-2-ND	yes	6.3		10%		
493-2344-1-ND	493-2344-2-ND	yes	6.3V		20%		
BSS670S2 L6327-ND	BSS670S2 L6327-ND	yes	55	0.54		0.36	
497-2721-5-ND	497-2721-5-ND	no	-200	-12		60	0.20 Ohm on resistance
ZXMP3A13FTR-ND	ZXMP3A13FTR-ND	yes	-60	-1.1		0.625	
160-1128-ND	160-1128-ND	yes	approx 2.0	approx 10m			
160-1131-ND	160-1131-ND	yes	approx 2.1	approx 10m			
568-1613-1-ND	568-1613-2-ND	yes	30	200mA		0.2	
B230A-FDICT-ND	B230A-FDITR-ND	yes	30V	2A			0.4V forward voltage drop
497-3758-1-ND	497-3758-2-ND	yes	100V	2			
283-2673-ND	283-2673-ND	yes	250	1.6			
F063-ND	F063-ND	yes					
HS116-ND	HS116-ND	yes				5	
CT40-5-ND	CT-40-5-ND	yes					
H156-ND	H156-ND	yes					
H220-ND	H220-ND	yes					
H778-ND	H778-ND	yes					
PIC16F684-I/SL-ND	PIC16F684-I/SL-ND	no					firmware is specific to this chip - replaced by manufacturer stability & accuracy characteristics are important - replaced by manufacturer
LP2985AIM5-3.3TR-ND	LP2985AIM5-3.3TR-ND	no					
WM4302-ND	WM4302-ND	yes					
WM4300-ND	WM4300-ND	yes					
360-1138-ND	N/A	N/A					this part is only stuffed when debugging
		no					