

Parts for TempCtrl32, Revision 1.1

Last revised 3/6/13 by Ed Eyster

Reference Designators	Product/Value	QTY	Mfr. Part #	Digi-Key Part #
C9	0.01 μ F	1	Kemet C315C103K1R5TA	399-4147-ND
C1-C2, C7-C8, C12-C16	0.1 μ F	9	Kemet C320C104K5R5TA	399-4264-ND
C3	0.33 μ F	1	Kemet C320C334M5U5TA	399-4299-ND
C11	10 μ F	1	AVX TAP106K016SCS	478-1839-ND
C4	22 μ F	1	AVX TAP226K010SCS	478-1874-ND
C5	47 μ F	1	AVX TAP476K006SCS	478-1909-ND
C6, C10	(opt.) as needed	2		
D1	green LED	1	Lumex SSL-LX3044LGD	67-1070-ND
D2	yellow LED	1	Lumex SSL-LX3044LYD	67-1072-ND
D3	red LED	1	Lumex SSL-LX3044LID	67-1071-ND
J9 J15	(opt.) screw terminals	2	Phoenix Contact 1729157	277-1250-ND
J6	0.1" header, 6-pin	1	TE Connectivity 3-644456-6	A31116-ND
J3	Pwr jack, 2.1x5.5 mm	1	CUI PJ-102AH	CP-102AH-ND
J12	SMA	1	Linx CONSMA002 or 142-0701-301	CONSMA002-ND or J501-ND
J1, J2, J8, J11	BNC right-angle	1	TE Connectivity 1-1634613-0	A97554-ND
R6	10	1	1/4 W metal film	
R14-R16	10k, 5 ppm/C	3	Vishay PTF5610K000FZEB	PTF10.0KBCT-ND
R4	11k	1	1/4 W metal film	
R12-R13	150	2	1/4 W metal film	
R11	330	1	1/4 W metal film	
R1-R3, R5, R7-R10	(opt.) as needed	8		
S1	Power switch	1	E-Switch 100DP1T2B4M6QE	EG2404-ND
U11	quad NAND gate	1	Fairchild 74VHC00M	74VHC00M-ND
U10	(opt.) +/- 12V supply	1	TDK-Lambda CC1R5-0512DF-E	445-2447-ND
U8	DAC32	1	homemade, see Note 1 on schematic	daughter board
U6	20 MHz TXCO oscillator	1	FOX 924B-20.000	631-1073-1-ND
U1	5 V regulator, 1A max	1	TI LM2940CT-5.0/NOPB	LM2940CT-5.0-ND
U2	3.3 V regulator, 0.25A	1	Microchip MCP1702-3302E/TO	MCP1702-3302E/TO-ND
U9	22-bit ADC	1	Microchip MCP3550-60E/SN	MCP3550-60E/SN-ND
U3, U7	OPA548 or similar	2	(Notes 4-5) TI OPA548T	296-23089-5-ND
U5	PIC32MX250F128B	1	Microchip PIC32MX250F128B-I/SO	PIC32MX250F128B-I/SO-ND
U4	USB32	1	homemade	daughter board
none	10k thermistor	1	Murata NXFT15XH103FA2B100	490-5630-ND