

Item No.	Component		Quantity	Part Number	Brand
1	PIC18F46J50-I/PT	IC1,	1	PIC18F46J50-I/PT	Microchip
2	SMD Multilayer Ceramic Capacitor, 0.1 µF, 25 V, 0603 [1608 Metric], -20%, +80%, Y5V	C5,C6,C7,C1,C17,C21,C22,C25,C26,C27,C28,C29,C30,C31,C35,	13	06033G104ZAT2A	KYOCERA AVX
5	SMD Multilayer Ceramic Capacitor, 10 µF, 25 V, 1210 [3225 Metric], ± 10%, X5R	C18,C19,C20,C32,C33,C34	6	12103D106KAT2A	KYOCERA AVX
8	SMD Chip Resistor, 100 kohm, ± 1%, 100 mW, 0603 [1608 Metric], Thick Film, General Purpose	R12	5	RC0603FR-07100KL	YAGEO
10	Fuseholder, 6.3 A, 250 V, PCB, 5 x 20 mm	H1	1	CFH02	CAMDENBOSS
13	Pin Header, Shrouded, Wire-to-Board, 2.5 mm, 1 Rows, 4 Contacts, Through Hole, XA	J1,J6,J7	3	B04B-XASK-1(LF)(SN)	JST
16	EEPROM 16byte 128b 2.5V	IC5	1	24LC00-I/SN	Microchip Technology
17	RS-232 Interface IC Dual EIA-232 Driver/ Receiver ALT 595-MAX232IDR	IC23	1	MAX232IDR	Texas Instruments
18	Multilayer Ceramic Capacitor, 1 µF, 50 V, ± 20%, Radial Leaded, Y5V, 5.08 mm	C12,C13,C14,C15,C16	5	MCMLR50V105MY5V	MULTICOMP
19	D Sub Connector, W/ Board Lock, DB9, Standard, Plug, 9 Contacts, DE, Solder	J2	1	2301843-1	TE CONNECTIVITY
21	Temperature Sensor IC, Thermocouple, Digital, ± 2°C, -200 °C, 1350 °C, NSOIC, 8 Pins	IC7	1	MAX31855KASA+	ANALOG DEVICES
22	Wire-To-Board Terminal Block, 3.5 mm, 2 Ways, 24 AWG, 16 AWG, 1.5 mm², Push In	J3,J14,J15,J16	4	1825640000	WEIDMULLER
23	SMD Chip Resistor, 240 ohm, ± 5%, 100 mW, 0603 [1608 Metric], Thick Film, Precision	R8,R9,R10	3	ERJ3GEYJ241V	PANASONIC
24	LED, Red, Through Hole, T-1 3/4 (5mm), 2 mA, 1.9 V, 629 nm	LED2,LED3	2	MP008247	Dialight
25	LED, Green, Through Hole, T-1 3/4 (5mm), 20 mA, 2.1 V, 570 nm	LED1	1	C503B-GCN-CY0C0791	Cree LED
26	Temperature Sensor IC, Analogue, ± 0.5°C, 0 °C, 100 °C, TO-92, 3 Pins	IC8	1	LM35DZ/NOPB	TEXAS INSTRUMENTS
28	Pin Header, R/A, Board-to-Board, 2.54 mm, 1 Rows, 6 Contacts, Through Hole, MC34	J4	1	MC34751	MULTICOMP PRO
29	I/O Expander, 16 bit, I2C, Serial, 1.8 V, 5.5 V, DIP, 28 Pins	IC9	1	MCP23017-E/SP	MICROCHIP
30	SMD Chip Resistor, 3.3 kohm, ± 1%, 100 mW, 0603 [1608 Metric], Thick Film, General Purpose	R13,R14,R15,R16,R17,R18,R19,R20,R21,R22,R1,R2,R3	13	RC0603FR-073K3L	YAGEO
31	Power Load Distribution Switch, Low Side, 1 Output, 35A, 0.023ohm, TO-252-3	IC10,IC11,IC12,IC13,IC14,IC15,IC16,IC17,IC18,IC2,IC3,IC4	13	NCV8401BDTRKG	ONSEMI
32	Headers & Wire Housings 10 Position Top Entry Through Hole Shrouded Header	J5	1	B10B-XASK-1(LF)(SN)	JST Commercial
34	Crystal, 16.384 MHz, Through Hole, 11.5mm x 5mm, 50 ppm, 18 pF, 20 ppm, ABL	Y1	1	ABL-16.384MHZ-B2	ABRACON

35 Multilayer Ceramic Capacitor, 22 pF, 100 V, ± 5%, PC Pin, C0G / NP0, 2.5 mm	C23,C24	2 FG18C0G2A220JNT00	TDK
44 Headers & Wire Housings XA Series 6 Position 2.5mm Through Hole Wire to Board Single Row Shrouded Header	J11	1 B06B-XASK-1(LF)(SN)	JST Commercial
45 USB Connector, Micro USB Type B, USB 2.0, Receptacle, 5 Ways, Surface Mount, Through Hole Mount	J12	1 47642-0001	MOLEX
46 4.7 kOhms ±1% 0.1W, 1/10W Chip Resistor 0603 (1608 Metric) Moisture Resistant Thick Film		0 RC0603FR-104K7L	YAGEO
47 0.068 µF ±10% 250V Ceramic Capacitor X7R 1206 (3216 Metric)	C2,C3,C4	3 C1206C683KARECAUTO	KEMET
48 RES 21K OHM 1% 1/8W 0805	R44,R45,R46,R54,R55,R56,R57,R58,R59,R60	10 RC0805FR-0721KL	YAGEO
49 RES SMD 13.3KOHM 0.1% 1/10W 0603	R62,R63,R64,R65,R66,R67,R68,R69,R70,R71	10 ERA-3AEB1332V	Panasonic Electronic Components
50 DIODE ZENER 4.3V 500MW SOD123	Z1,Z2,Z3,Z4,Z5,Z6,Z7,Z8,Z9,Z10	10 MMSZ5229B-7-F	MMSZ5229B-7-F
51 RES SMD 200K OHM 0.1% 1/10W 0603	R61,R72,R73,R74,R75,R76,R77,R78,R79,R80	10 ERA-3AEB204V	Panasonic Electronic Components
52 CONN HEADER VERT 11POS 2.5MM	J17	1 B11B-XASK-1	JST
53 TVS DIODE 24VWM 44VC SOT233	IC21	1 NUP2105LT1G	onsemi
54 CAP CER 0402 10NF 50V X7R 10%	C8,C9,C10	3 C0402C103K5REC7411	KEMET
55 FERRITE BEAD 470 OHM 0603 1LN	FB1,FB2	2 BLM18PG471SN1D	Murata Electronics
56 RES 10K OHM 1% 1/10W 0603	R26,R27,R28,R4,R5,R23,R24,R25,R29,R30,R31	11 RC0603FR-0710KL	YAGEO
57 FERRITE BEAD 4.7 KOHM 0805 1LN	FB3,FB4,FB5	3 BLM21HE472SH1L	Murata Electronics
58 RES 1K OHM 1% 1/2W 1206	R6	1 RNCP1206FTD1K00	Stackpole Electronics Inc
DIODE SCHOTTKY 40V 5A DO201	D3,D4	2 SB540	Diotec Semiconductor
CAP ALUM 220UF 20% 25V RADIAL TH	C39,C40	2 25YXJ220M6.3X11	Rubycon
FIXED IND 33UH 11.7A 13 MOHM TH	L1,L2	2 2307-V-RC	Bourns Inc.
IC REG BUCK 3.3V 3A TO220-5	IC22	1 LM2596T-3.3/NOPB	Texas Instruments
CAP ALUM 470UF 20% 50V RADIAL TH	C36,C37	2 ECA-1HHG471	Panasonic Electronic Components
HEATSINK TO-220 ALUMINUM	H2,H3	2 ALUMINUM HEATSINK TO-220	Olimex LTD
LM2596T-5.0_NOPB	IC20	1 LM2596T-5.0/NOPB	Texas Instruments

CAP CER 0.1UF 50V X8L RADIAL	C38,C42	2 RHEL81H104K0A2H03B	Murata Electronics
42 Phone Connectors 3.5mm Audio Jack SMT 4 conductor 0 switc	J8,J9,J10	3 SJ2-3574A-SMT-TR	Same Sky
	J5	1 B10B-XASK-1	JST Sales America Inc.
		Estimated discount 20%:	#REF!