

Bill Of Materials

Qty	description	supplier 1	part 1	supplier 2	part 2	RoHS	Temperature Range (0° - 70° C)	5% - 95% RH non-condensing	unit price	Minimum qty.	Part Cost
7	Master PIC	Digi-Key	PIC18F458-I/P-ND	Mouser	579-PIC18F458-I/P	✓	✓	✓	\$11.25	10	\$78.75
20	Slave PIC	Digi-Key	PIC18F2431-I/SP-ND	Mouser	579-PIC18F2431-I/SP	✓	✓	✓	\$7.68	15	\$153.60
7	driver/receiver for RS-232	Digi-Key	296-1402-S-ND	Mouser	595-MAX232N	✓	✓	✓	\$0.88	1	\$6.16
25	Electrolytic capacitor (1 uF)	Digi-Key	4062PHCT-ND	Mouser	594-2222-021-38108	✓	✓	✓	\$0.51	1	\$12.75
50	capacitor (0.1 uF)	Digi-Key	1109PHCT-ND	Jameco	536542	✓	✓	✓	\$0.09	10	\$4.50
100	Resistor (1K Ohms)	Digi-Key	1.0KH-ND	Mouser	293-1K-RC	✓	✓	✓	\$0.05	5	\$5.00
80	LED (Bicolor red/green)	Digi-Key	160-1058-ND	Mouser	604-WP937EGW	✓	✓	✓	\$0.30	10	\$24.00
100	LED (red)	Digi-Key	P374-ND	Mouser	696-SSLX5093HD125	✓	✓	✓	\$0.17	10	\$17.00
7	9-pin right angle D-sub connector	Digi-Key	A32117-ND	Mouser	571-5747844-4	✓	✓	✓	\$2.86	1	\$20.02
100	Resistor (100 Ohms)	Digi-Key	100H-ND	Mouser	293-100-RC	✓	✓	✓	\$0.05	5	\$5.00
7	Rotary dip switch	Digi-Key	563-1053-ND	Allied Electronics	372-0623	✓	✓	✓	\$4.13	1	\$28.91
10	Oscillator (40 Mhz)	Digi-Key	X966-ND	Mouser	520-TCH4000-X	✓	✓	✓	\$2.13	1	\$21.30
10	tactile switch	Digi-Key	EG1828-ND	Mouser	612-TL1105-250	✓	✓	✓	\$0.23	1	\$2.30
60	capacitor (0.47 uF)	Digi-Key	P4960-ND	Mouser	60-C330C474M5U	✓	✓	✓	\$0.87	1	\$52.20
100	Resistor (10K Ohms)	Digi-Key	10KH-ND	Mouser	293-10K-RC	✓	✓	✓	\$0.05	5	\$5.00
25	Electrolytic capacitor (1000 uF)	Digi-Key	P5544-ND	Mouser	UVZ1E102MPH	✓	✓	✓	\$0.46	1	\$11.50
100	Resistor (1.6K Ohms)	Digi-Key	1.6KH-ND	Mouser	293-1.6K-RC	✓	✓	✓	\$0.05	5	\$5.00
100	Resistor (2.2K Ohms)	Digi-Key	2.2KH-ND	Mouser	660-CFS14CT52R22J	✓	✓	✓	\$0.05	5	\$5.00
100	Resistor (16K Ohms)	Digi-Key	16KH-ND	Mouser	293-16K-RC	✓	✓	✓	\$0.05	5	\$5.00
30	LM317 voltage regulator	Digi-Key	LM317TFS-ND	Mouser	512-LM317T	✓	✓	✓	\$0.48	1	\$14.40
30	MOSFET N-channel	Digi-Key	BU273LIN-ND	Mouser	726-BU273L	✓	✓	✓	\$1.22	1	\$36.60
35	L293D Quad H-Bridge	Digi-Key	296-9518-S-ND	Mouser	595-L293DNE	✓	✓	✓	\$1.93	1	\$67.55
50	capacitor (1 uF)	Digi-Key	P4962-ND	Mouser	810-FK24Y5V1H1052	✓	✓	✓	\$1.42	1	\$71.00
5	Power Supply	Jameco	174845	Unifive	UWA324-24	✓	✓	✓	\$18.65	1	\$93.25
10	Power Supply Connector	Jameco	137673	NetComponents	DC-470-2P-R	✓	✓	✓	\$0.40	1	\$4.00
3	Extension Cord	Office Depot	765882	Aubuchon Hardware (Amazon.com)	B000KKJS94	✓	✓	✓	\$8.59	1	\$25.77
4	Power Strip	Altra (Office Depot) (not ROHS)	765889	Tripp Lite	TLP602	✓	✓	✓	\$9.99	1	\$39.96
1	Octopus-500 serial board	Dell	A0642815	FrontierPC.com	950017548	✓	✓	✓	\$119.99	1	\$119.99
55	16 pin socket	Digi-Key	A24809-ND	Mouser	571-26416101	✓	✓	✓	\$0.53	1	\$29.15
7	40 pin socket	Digi-Key	AE10008-ND	Jameco	41111	✓	✓	✓	\$1.08	1	\$7.56
20	28 pin socket	Digi-Key	ED90054-ND	Mouser	535-14-3518-10E	✓	✓	✓	1.79	1	\$35.80
5	DB9 serial cable (25')	cables unlimited.com	PCM-2100-25	tsgdirect.com	C184-09452	✓	✓	✓	\$6.00	1	\$30.00
2	DB9 serial cable (50')	cables unlimited.com	PCM-2100-50	tsgdirect.com	C184-09453	✓	✓	✓	\$8.00	1	\$16.00
20	Heat Sink (for LM317)	Digi-Key	HS215-ND	Mouser	532-577404B00	✓	✓	✓	\$0.44	1	\$8.80
30	Heat Sink (for H Bridge)	Digi-Key	HS179-ND	Mouser	532-580200B00	✓	✓	✓	\$0.50	1	\$15.00
10	8-bit Flip-Flop	Digi-Key	296-14678-1-ND	Mouser	595-SN74AB1823DWR	✓	✓	✓	\$1.45	1	\$14.50
3	double row connector (100 pins)	Digi-Key	WM268100-ND	Mouser	538-70280-0458	✓	✓	✓	\$8.96	1	\$26.88
4	single row connector (28 pins)	Digi-Key	929647-04-36-ND	Mouser	517-547-04-36	✓	✓	✓	\$5.27	1	\$21.08
10	L200 voltage regulator	Digi-Key	497-1382-S-ND	Mouser	511-L200CV	✓	✓	✓	\$1.60	1	\$16.00
4	Metal enclosure (plain)	Mouser	537-TF-787	Digi-Key	L109-ND	✓	✓	✓	\$27.37	1	\$109.48
1	Metal enclosure (painted)	Mouser	537-TF-787P	(use above item)	(use above item)	✓	✓	✓	\$34.32	1	\$34.32
5	DC 80mm Fan	Mouser	5912-8414	Digi-Key	381-1011-ND	✓	✓	✓	\$23.29	1	\$116.45
5	80mm Fan Filter	radioshack	28-1112	Digi-Key	CR229-ND	✓	✓	✓	\$5.99	1	\$29.95
10	L200 voltage regulator	Digi-Key	497-1382-S-ND	Mouser	511-L200CV	✓	✓	✓	\$1.92	1	\$19.20
55	Hex spacer (1/4 x 3/8)	Mouser	534-1451B	Digi-Key	1451BK-ND	✓	✓	✓	\$0.40	1	\$22.00
33	Capacitor (2200 uF)	Digi-Key	P5545-ND	Mouser	539-SEK25V2200	✓	✓	✓	\$0.77	1	\$25.25

Total Parts Cost: \$1,512.93