

Encoder Parts List

Item	Quantity	ID	Part number	Description	Supplier	Cost each	Total cost	Notes	Option 1	Option 2	Option 3
1	2	R21,R36,R40	263-1	1 ohm resistor 1206	Mouser	0.08	0.16		0.16	0.16	0.16
2	1	R3	263-10	10 ohm resistor, 1206	Mouser	0.08	0.08		0.08	0.08	0.08
3	12	R28-35, R41-R44	263-100	100 ohm resistor 1206	Mouser	0.08	0.96		0.96	0.96	0.96
4	4	R8-R9, R37-38	263-470	470 ohm resistor 1206	Mouser	0.08	0.32		0.32	0.32	0.32
5	8	R2,R5,R16-R20,R23	263-1K	1K resistor 1206	Mouser	0.08	0.64		0.64	0.64	0.64
6	2	R22,R45	263-2.7K	2.7K resistor 1206		0.08	0.16		0.16	0.16	0.16
7	8	R1,R11,R15,R24-R27,R39	263-5.1K	5.1K resistor 1206	Mouser	0.08	0.64		0.64	0.64	0.64
8	6	R4,R6,R7,R10,R12,R13	263-10K	10K resistor 1206	Mouser	0.08	0.48		0.48	0.48	0.48
9	2	RN1,RN2	04F4844	Bourns 4609X-101-103	Newark	0.39	0.78		0.78	0.78	0.78
10	1	R14	72-T93YB-10K	10K trim pot	Mouser	1.2	1.2		1.2	1.2	1.2
11	5	C1-C4,C18	P981-ND	22uF 35V cap	Digikey	0.22	1.1		1.1	1.1	1.1
12	18	C5-C10,C19-C30	P4584-ND	.015 uF 50V	Digikey	0.132	2.376	1	2.376	2.376	2.376
13	4	C11-C14	P993-ND	1 uF 50V	Digikey	0.16	0.64		0.64	0.64	0.64
14	2	C16-C17	140-CC501N120J	12 pF, 0805	Mouser	0.08	0.16		0.16	0.16	0.16
15	1	C15	140-CC502B104K	.1 uF 1206	Mouser	0.07	0.07		0.07	0.07	0.07
16	1	IC1	PIC17C766/CL-ND	17C766 PIC	Digikey	18.38	18.38		18.38	18.38	18.38
17	1	IC2	511-M93C86-WMN6	93C86 serial eeprom	Mouser	1.66	1.66		1.66	1.66	1.66
18	1	IC4	570-ICL232CPE	Dual rec/xmit RS232	Mouser	2.45	2.45		2.45	2.45	2.45
19	1	XTL1	SE2504CT-ND	8 MHz crystal	Digikey	1.56	1.56		1.56	1.56	1.56
20	1	D2	IN4148DICT-ND	1N4148 signal diode	Digikey	0.07	0.07		0.07	0.07	0.07
21	1	D1	1N4004GICT-ND	1N4004	Digikey	0.04	0.04	1	0.04	0.04	0.04
22	1	SW1	P8056S-ND	Reset PB	Digikey	0.66	0.66	2		0.66	0.66
23	2	LED1,LED2	67-1064-ND	LED	Digikey	0.117	0.234		0.234	0.234	0.234
24	1	T1	FMMT2222ACT-ND	NPN transistor	Digikey	0.36	0.36		0.36	0.36	0.36
25	1	F1	F829-ND	2.5 Amp pico fuse	Digikey	0.73	0.73		0.73	0.73	0.73
26	1	IC3	NJM7805FA-ND	7805 5V regulator	Digikey	0.63	0.63		0.63	0.63	0.63
27	1	BUZ1	539-MSO320	Mallory sonalert II	Mouser	3.63	3.63		3.63	3.63	3.63
28	1	J2	S2111-36-ND	Right angle header x 2	Digikey	3.42	3.42	2	3.42	3.42	3.42
29	1	J1,J6	S1111-36-ND	Right angle header x 1	Digikey	1.82	1.82		1.82	1.82	1.82
30	1	J4,J5,J7,JM2	S1011-36-ND	Header x 1	Digikey	2.37	2.37		2.37	2.37	2.37
31	1	J3,JM1,J102	S2011-36-ND	Header x 2	Digikey	2.37	2.37		2.37	2.37	2.37
32	1		73-1037-ND	2 X 16 LCD display	Digikey	13.35	13.35	3	13.35		
33	1		73-1177-ND	2 X 16 LCD display	Digikey	15.08	15.08	3		15.08	
34	1	J101	HFG24T-ND	1mm Flex connector, RA	Digikey	1.37	1.37	4		1.37	
35	1		PRD250LPW-ND	Bezel	Digikey	3	3	2			
36	1		164-9007	IDC 2 x 7 connectors	Mouser	0.5	0.5		0.5	0.5	
37	1		ED80027-ND or A2125-ND	84 pin plcc socket	Digikey	1.14	1.14		1.14	1.14	1.14
38	3		929974-01-36-ND	Single row female	Digikey	1.23	3.69	2	3.69	3.69	3.69
39	2		534-612	Threaded bracket	Mouser	0.14	0.28		0.28	0.28	0.28

40	1		CP-1280-ND	8 pin DIN recptacle	Digikey	0.86	0.86		0.86	0.86	0.86
41	1		CP-1260-ND	6 pin DIN recptacle	Digikey	0.74	0.74		0.74	0.74	0.74
42	1		336DN3	3 pin deans connector pair	CERMARK	2	2	2			
43	1		929975-01-36-ND	Dual row female	Digikey	2.04	2.04		2.04	2.04	2.04
44	5	C101-C105	140-CC502B104K	0.1 uF capacitor, 1205	Mouser	0.07	0.35	1,4		0.35	
45	1		HFF18T-ND	1mm Flex connector	Digikey	0.88	0.88	5			0.88
46	1		260-100K	100K resistor, 805	Mouser	0.08	0.08	5			0.08
47	1		R011-10-ND	25 conductor multi ribbon	Digikey	5.69	5.69	2	5.69	5.69	5.69
48	1			Encoder PCB	GAA	10	10		10	10	10
49	1			On glass display PCB	GAA	2	2			2	
50	1		ECM-A1010	4x12 LCD display	Earth Tech	3	3	3			3
51	1		11DQ3-ND	Shottky Rectifier	Digikey	0.38	0.38	2			
52	1		1.0QBK-ND	1.0 ohm 1/4 W resistor	Digikey	0.28	0.28	2,6			

Notes

- 1 Sold in pkg of 10
- 2 Optional
- 3 Other display options are possible, select item 32, 33, or 50
- 4 Needed for item 33
- 5 Used for Earth Tech 4x12 display
- 6 Sold in pkg of 5

2 x 16 standard display total cost	87.78		
2 x 16 on glass display total cost		93.89	
4 x 12 surplus display total cost			77.35