

Main Control Logic

Qty	Part Number	Description	Reference Designator	Unit Cost	Line Price	Vendor
1	W005GGI-ND	AC Bridge Rectifier	D3	\$ 0.46	\$ 0.46	Digi-Key
1	GH1320-ND	Rotary DIP Switches BCD	S2	\$ 3.02	\$ 3.02	Digi-Key
2	P2067-ND	Cap, Tant, .1/50v	C4, 5	\$ 0.26	\$ 0.52	Digi-Key
1	PS1223J-ND	Cap, .022/100v	C6	\$ 0.59	\$ 0.59	Digi-Key
1	E6104-ND	Cap, .1/630v	C1	\$ 0.65	\$ 0.65	Digi-Key
2	1N4004MSCT-ND	Diode, 1N4004	D1, 2	\$ 0.04	\$ 0.09	Digi-Key
2	P2105-ND	Cap,Tant, 1/16v	C2, 3	\$ 0.28	\$ 0.56	Digi-Key
1	IC, AT90S8515	IC, AT90S8515	IC2	\$ 3.00	\$ 3.00	
0	SN75176AP	IC, SN75176	IC1	\$ 1.38	\$ -	Digi-Key
2	296-1368-2-ND	IC, ULN2003AN	IC4, 5	\$ 0.75	\$ 1.50	Digi-Key
1	67-1085-ND	Led, Green	D4	\$ 0.23	\$ 0.23	Digi-Key
3	ZTX457-ND	PNP, 2N4400	Q1,2,3	\$ 0.48	\$ 1.44	Digi-Key
1	P8006S-ND	Push Button SP NO	S1	\$ 0.26	\$ 0.26	Digi-Key
1	NJM78L05A	Regulator 5 volt -- LM7805	VR1	\$ 0.36	\$ 0.36	Digi-Key
			R3, 4,9-			
9	10KQBK-ND	Res, 1/4W, 10K Ohm	12,13,14, 15	\$ 0.06	\$ 0.50	Digi-Key
4	1.0KQBK-ND	Res, 1/4W, 1K Ohm	R2, 5, 16, 17	\$ 0.06	\$ 0.22	Digi-Key
1	P22W-1BK-ND	Res, 1W, 22 Ohm	R1	\$ 0.23	\$ 0.23	Digi-Key
1	470QBK-ND	Res, 1/4W, 470 Ohm	R6	\$ 0.06	\$ 0.06	Digi-Key
1	X123-ND	Resinator, 7.32728MHz	XTAL1	\$ 3.38	\$ 3.38	Digi-Key
1	MT3119-ND	XMFR, MT3119	T1	\$ 7.97	\$ 7.97	Digi-Key
0	281-1415-ND	3 pos Terminal Block	TB1	\$ 0.85	\$ -	Digi-Key
0	S1012-06-ND	6 pos headers	H1, H2	\$ 0.51	\$ -	Digi-Key
0	S1012-05-ND	5 pos headers	TS1-4	\$ 0.49	\$ -	Digi-Key
					\$ -	
Grand Total:					\$ 25.04	

AC Output Module

Low Current AC Output Module

Qty	Part Number	Description	Reference Designator	Unit Cost	Line Price	Vendor
4	E6103-ND	Cap, .01/630v	C1, 2, 3, 4	\$ 0.38	\$ 1.52	DigiKey
4	Q201E3-ND	Q201E3, 1 amp	Q1, 2, 3, 4	\$ 0.63	\$ 2.52	DigiKey
4	270QBK-ND	Res, 1/4W, 270 Ohm	R5, 6, 7, 8	\$ 0.06	\$ 0.22	DigiKey
4	33QBK-ND	Res, 1/4W, 33 Ohm	R13, 14, 15, 16	\$ 0.06	\$ 0.22	DigiKey
4	330QBK-ND	Res, 1/4W, 330 Ohm	R9, 10, 11, 12	\$ 0.06	\$ 0.22	DigiKey
4	ALSR1J-470-ND	Res, 1/2W, 470 Ohm FP	R1, 2, 3, 4	\$ 1.56	\$ 6.24	DigiKey
0	MOC3010QT-ND	MOC3010 - Non Zero Cross Detect	IC1, 2, 3, 4	\$ 0.53	\$ -	DigiKey
4	TLP3042-ND	TLP3042 - Zero Cross Detect	IC1, 2, 3, 4	\$ 0.90	\$ 3.60	DigiKey
6	16F2075	.25 QD		\$ 0.06	\$ 0.35	Newark
					\$ -	
					\$ -	
Grand Total:					\$ 14.90	

High Current AC Output Module

9	Part Number	Description	R3, 4,9- 12,13,14, 15	Unit Cost	Line Price	Vendor
4	E6103-ND	Cap, .01/630v	C1, 2, 3, 4	\$ 0.38	\$ 1.52	DigiKey
4	Q2008L4-ND	Q2008E3, 8 amp	Q1, 2, 3, 4	\$ 1.82	\$ 7.28	DigiKey
4	270QBK-ND	Res, 1/4W, 270 Ohm	R5, 6, 7, 8	\$ 0.06	\$ 0.22	DigiKey
4	33QBK-ND	Res, 1/4W, 33 Ohm	R13, 14, 15, 16	\$ 0.06	\$ 0.22	DigiKey
4	330QBK-ND	Res, 1/4W, 330 Ohm	R9, 10, 11, 12	\$ 0.06	\$ 0.22	DigiKey
4	ALSR1J-470-ND	Res, 1/2W, 470 Ohm FP	R1, 2, 3, 4	\$ 1.56	\$ 6.24	DigiKey
0	MOC3010QT-ND	MOC3010 - Non Zero Cross Detect	IC1, 2, 3, 4	\$ 0.53	\$ -	DigiKey
4	TLP3042-ND	TLP3042 - Zero Cross Detect	IC1, 2, 3, 4	\$ 0.90	\$ 3.60	DigiKey
6	16F2075	.25 QD		\$ 0.06	\$ 0.35	Newark
					\$ -	
					\$ -	
Grand Total:					\$ 19.66	

Output Modules Enclosures

Qty	Part Number	Description	Unit Cost	Line Price	Vendor
1		Outlet Box	\$ 3.15	\$ 3.15	Home Depot
1		Cover Plate	\$ 0.83	\$ 0.83	Home Depot
2		Duplex Outlet	\$ 0.33	\$ 0.66	Home Depot
3		Cable Clamp	\$ 0.31	\$ 0.94	Home Depot
25	66F8398	22-5 MultiConductor Control Cable	\$ 0.61	\$ 15.29	Newark
4	275-1002-ND	Din Inline Connector - 5 pos - Male	\$ 0.59	\$ 2.36	Digi-Key
1		3 Prong Cord end, Male	\$ 2.50	\$ 2.50	Home Depot
1		3 Prong Cord end, Female	\$ 4.70	\$ 4.70	Home Depot
25		18-3 Power Cords		\$ -	
				\$ -	
				\$ -	
				\$ 30.43	

Watertight Version

Qty	Part Number	Description	Unit Cost	Line Price	Vendor
1		Outlet Box	\$ 3.15	\$ 3.15	Home Depot
1		Cover Plate	\$ 0.83	\$ 0.83	Home Depot
2		Duplex Outlet	\$ 0.33	\$ 0.66	Home Depot
3	01NX6036	LiquidTight Strain Relief Connector	\$ 1.58	\$ 4.74	Newark
25	66F8398	22-5 MultiConductor Control Cable	\$ 0.61	\$ 15.29	Newark
4	275-1002-ND	Din Inline Connector - 5 pos - Male	\$ 0.59	\$ 2.36	Digi-Key
1		3 Prong Cord end, Male	\$ 2.50	\$ 2.50	Home Depot
1		3 Prong Cord end, Female	\$ 4.70	\$ 4.70	Home Depot
25		18-3 Power Cords		\$ -	
				\$ -	
				\$ -	
				\$ 34.23	