

Advanced PSSTC Controller Board

PARTS LIST

Date: August 14, 2004
Rev: Initial Release

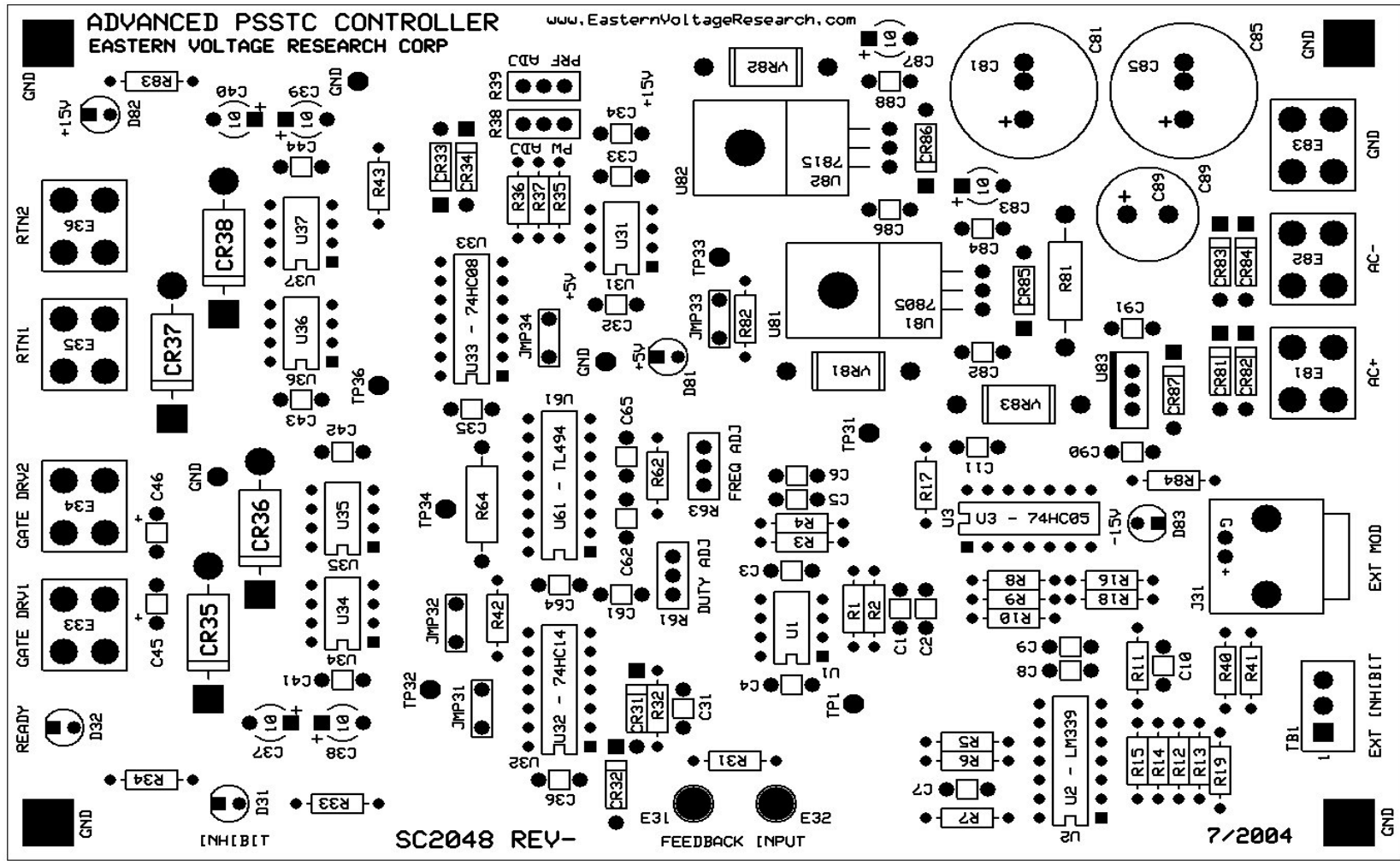
Item	Ref Des	Part No.	Description	Distributor	Qty	Price	Total
1	R1,R3	30.1KXBK-ND	Resistor 30.1k, 1/4W, 1%	DIGIKEY	2	\$ 0.11	\$ 0.22
2	R13	5.62KXBK-ND	Resistor, 5.62k, 1/4W, 1%	DIGIKEY	1	\$ 0.11	\$ 0.11
3	R8,R9,R10,R16,R17 R33,R34,R51	470QBK-ND	Resistor, 470 ohm, 1/4W, 5%	DIGIKEY	8	\$ 0.06	\$ 0.45
4	R2,R4	200KXBK-ND	Resistor, 200k, 1/4W, 1%	DIGIKEY	2	\$ 0.11	\$ 0.22
5	R5,R6,R11,R14	20.0KXBK-ND	Resistor, 20.0k, 1/4W, 1%	DIGIKEY	4	\$ 0.11	\$ 0.43
6	R12,R32	10.0KXBK-ND	Resistor, 10.0k, 1/4W, 1%	DIGIKEY	2	\$ 0.11	\$ 0.22
7	R7	470KQBK-ND	Resistor, 470k, 1/4W, 5%	DIGIKEY	1	\$ 0.06	\$ 0.06
8	R15	1.0MQBK-ND	Resistor, 1Meg, 1/4W, 5%	DIGIKEY	1	\$ 0.06	\$ 0.06
9	R35,R62	2.2KQBK-ND	Resistor, 2.2k, 1/4W, 5%	DIGIKEY	2	\$ 0.06	\$ 0.11
10	R36	10QBK-ND	Resistor, 10 ohm, 1/4W, 5%	DIGIKEY	1	\$ 0.06	\$ 0.06
11	R37	196KXBK-ND	Resistor, 196k, 1/4W, 1%	DIGIKEY	1	\$ 0.11	\$ 0.11
12	R40	0.0QBK-ND	Resistor, Zero Ohm Jumper, 1/4W	DIGIKEY	1	\$ 0.05	\$ 0.05
13	R52,R53	1.5KQBK-ND	Resistor, 1.5k, 1/4W, 5%	DIGIKEY	2	\$ 0.06	\$ 0.11
14	R38,R61	3296W-103-ND	Potentiometer, 10k, 10 Turn	DIGIKEY	2	\$ 2.50	\$ 5.00
15	R39	3296W-105-ND	Potentiometer, 1Meg, 10 Turn	DIGIKEY	1	\$ 2.50	\$ 2.50
16	R63	3296W-203-ND	Potentiometer, 20k, 10 Turn	DIGIKEY	1	\$ 2.50	\$ 2.50
17	R64	220H-ND	Resistor, 220 ohm, 1/2W, 5%	DIGIKEY	1	\$ 0.05	\$ 0.05
18	R54	TBD	Resistor, TBD, 2W, 5%	DIGIKEY			
19	R31	(OPTIONAL)					
20	R41	(OPTIONAL)					
21	R42	(OPTIONAL)					
22	R43	(OPTIONAL)					

23	C3,C4,C7,C8,C9,C10,C11 C31,C32,C35,C36,C41,C42 C43,C44,C61,C62,C64,C82 C84,C86,C88,C90,C91	BC1101CT-ND	Capacitor, 0.1uF, 50V, Ceramic	DIGIKEY	24	\$ 0.17	\$ 4.01
24	C37,C38,C39,C40,C45,C46 C83,C87	399-1360-ND	Capacitor, Tantalum, 10uF, 35V	DIGIKEY	8	\$ 1.28	\$ 10.24
25	C81,C85	P5172-ND	Capacitor, Electrolytic, 4700uF, 35V	DIGIKEY	2	\$ 3.76	\$ 7.52
26	C89	P5169-ND	Capacitor, Electrolytic, 1000uF, 35V	DIGIKEY	1	\$ 1.25	\$ 1.25
27	C65	BC1085CT-ND	Capacitor, 220pF, 50V, Ceramic	DIGIKEY	1	\$ 0.11	\$ 0.11
28	C1,C2,C5,C6	BC1157CT-ND	Capacitor, 1uF, 50V, Ceramic	DIGIKEY	4	\$ 0.45	\$ 1.80
29	C33	BC1098CT-ND	Capacitor, 0.033uF, 50V, Ceramic	DIGIKEY	1	\$ 0.24	\$ 0.24
30	C34	BC1095CT-ND	Capacitor, 0.01uF, 50V, Ceramic	DIGIKEY	1	\$ 0.09	\$ 0.09
31	CR33,CR34,CR81,CR82 CR83,CR84,CR85,CR86 CR87	1N4002DICT-ND	Diode, Rectifier, 100V, 1A	DIGIKEY	9	\$ 0.13	\$ 1.13
32	CR35,CR36,CR37,CR38	1N5822DICT-ND	Diode, Schottky, 40V, 1A	DIGIKEY	4	\$ 0.68	\$ 2.72
33	CR31,CR32	1N60 OR 1N90	Diode, Germanium	See Note	2		\$ -
34	VR81	1.5KE7.5CADICT-ND	Transient Voltage Suppressor, 7.5V	DIGIKEY	1	\$ 0.74	\$ 0.74
35	VR82,VR83	1.5KE18CADICT-ND	Transient Voltage Suppressor, 18V	DIGIKEY	2	\$ 0.74	\$ 1.48
36	D31,D32,D81,D82,D83	P405-ND	LED, Red, High Brightness	DIGIKEY	5	\$ 0.38	\$ 1.90
37	U61	296-1799-5-ND	TL494CN PWM Controller	DIGIKEY	1	\$ 0.52	\$ 0.52
38	U1	LM318N-ND	High Speed Op-Amp	DIGIKEY	1	\$ 1.50	\$ 1.50
39	U2	296-1393-5-ND	LM339N Quad Comparator	DIGIKEY	1	\$ 0.45	\$ 0.45
40	U3	296-1568-5-ND	SN74HC05N Hex Inverter with OpenCol	DIGIKEY	1	\$ 0.44	\$ 0.44
41	U33	296-1570-5-ND	SN74HC08N Quad AND Gate ST	DIGIKEY	1	\$ 0.44	\$ 0.44
42	U32	296-1577-5-ND	SN74HC14N Hex Inverter Schmidt Trig	DIGIKEY	1	\$ 0.44	\$ 0.44
43	U31	LM555CNNS-ND	555 Timer	DIGIKEY	1	\$ 0.68	\$ 0.68
44	U36,U37	296-13686-5-ND	Gate Driver w/ ENA 9A Inverting	DIGIKEY	2	\$ 2.48	\$ 4.96
45	U34,U35	296-13689-5-ND	Gate Driver w/ ENA 9A Non-Inverting	DIGIKEY	2	\$ 2.48	\$ 4.96
46	U81	LM340T-5.0-ND	Voltage Regulator, 5V, TO-220	DIGIKEY	1	\$ 0.99	\$ 0.99
47	U82	LM340T-15-ND	Voltage Regulator, 15V, TO-220	DIGIKEY	1	\$ 0.99	\$ 0.99
48	U83	LM7915CT-ND	Voltage Regulator, -15V, TO-220	DIGIKEY	1	\$ 1.01	\$ 1.01
49	E31,E32,E33,E34,E35,E36 E81,E82,E83	8191K-ND	Screw Terminals, PC Mount	DIGIKEY	10	\$ 0.19	\$ 1.90
50		ED3108-ND	8-pin IC Socket	DIGIKEY	6	\$ 0.32	\$ 1.92
51		ED3114-ND	14-pin IC Socket	DIGIKEY	4	\$ 0.57	\$ 2.28
52		ED3316-ND	16-pin IC Socket	DIGIKEY	1	\$ 0.83	\$ 0.83

53	T31	F-114A-77	Toroid, Ferrite, Type 77 Material	CWS	1	\$ 2.45	\$ 2.45
54		5000K-ND	Test Points, Compact, Red	DIGIKEY	1	\$ 0.22	\$ 0.22
55	TB1	ED1515-ND	Terminal Block, 3Pos., 3.5mm	DIGIKEY	1	\$ 0.60	\$ 0.60
56	J31	A24492-ND	BNC Connector, PC Mount	DIGIKEY	1	\$ 1.83	\$ 1.83

Total Cost of Components: \$ 74.88

Notes:



Advanced PSSTC Board - Silkscreen