

Qty	Note	REF	DES	Type	Bill of Materials	EE345L Fall 2010	October 15, 2010		EE345L pays for the PCB									
Quantity					Description	Manufacturer	Mfg. P/N	Distributor	P/N	Unit cost	Cost PCB Artist	Where to get it?	Inventory					
1				ASM	Black case, 8" x 8" x 4"			BGMicro	CAS1007	\$1.00	\$1.00 CAS1007	Prof						
11				CAP	Ceramic, X7R, 20%, 0.1uF			Jameco	544921	\$0.14	\$1.54 Ceramic0.2	Prof						
1				CAP	Ceramic, Z5U, -20/+80%, 0.47 uF	Kemet	C320C474M5U5TA	Digikey	399-4309-ND	\$0.40	\$0.40 Ceramic	Prof						
1				CAP	Ceramic, Z5U, -20/+80%, 0.0033 uF	Kemet	C320C332M5U5TA			\$0.40	\$0.40 Ceramic	Prof						
2				CAP	Ceramic Z5U, -20/+80%, 22 pF			Jameco	15405	\$0.03	\$0.06 Ceramic	Prof						
1				CAP	Ceramic Z5U, -20/+80%, 330 pF			Jameco	15410	\$0.03	\$0.03 Ceramic	Prof						
3				CAP-Elect	Electrolytic 10uV 16V, 20%	Panasonic - ECG	ECE-A1CKA100	Digikey	P807-ND	\$0.22	\$0.66 Electrolytic	some						
1				CAP-Elect	Electrolytic 4.7uV 25V, 20%	Panasonic - ECG	ECE-A1EKA4R7	Digikey	P812-ND	\$0.14	\$0.14 Electrolytic	some						
1				CAP-Elect	Electrolytic 0.1uV 25V, 20%	Panasonic - ECG	ECE-A1EKA4R7	Digikey	P752-ND	\$0.14	\$0.14 Electrolytic	some						
1				CON	2-pin for TechArts power plug			AllElectronics	CON-242	\$0.70	\$0.70 PowerJumper	Prof						
1				CON	2-pin header			AllElectronics	SBH-2	\$0.10	\$0.10 Jumper2	Prof						
1				CON	2-pin jumper			AllElectronics	SBC-2	\$0.27	\$0.27 goes with SBH-2	Prof						
1				CON	Test point, black	Keystone Electronics	5001	Digikey	5001K-ND	\$0.29	\$0.29 testpoint	Prof						
1				CON	Test point, red	Keystone Electronics	5000	Digikey	5000K-ND	\$0.29	\$0.29 testpoint	Prof						
1				CON	DB9 serial connector, female, board mount			Jameco	15771	\$0.65	\$0.65 SerialDB9	Prof						
1				CPU	MC9S12C32MFUE25, 80-pin QFP	Freescall	MC9S12C128MFUE			\$5.00	\$5.00 MC9S12C128	Prof	8					
1				CRYS	8 MHz crystal,50ppm,HC49/U			Jameco	14728	\$0.59	\$0.59 XTAL	Prof						
1				IC	78M05 500MA 5V TO-220	National	LM78M05	Jameco	192233	\$0.19	\$0.19 LM7805CT	Prof						
1				IC	RS232 driver	STMicroelectronics	ST232CN	Jameco	2001171	\$0.58	\$0.58 MAX3232	Prof						
1				IC	3-Terminal 1A Positive Voltage Regulator	Fairchild	LM7805	Digikey	rLM7805CT-ND	\$0.65	\$0.65 LM7805CT	www.digikey.com						
1				JACK	DC Power MALE 2.1mm			Jameco	101179	\$0.55	\$0.55 PowerJack	Prof						
1				LED	Green 2mA 5mm diffused	Avago Technologies	HLMP-4740	Digikey	516-1327-ND	\$0.29	\$0.29 LEDT1.75	Prof						
1				PCB	PCB plus shipping	Advanced Circuits		Advanced Circuits		\$49.06	\$49.06	http://www.4pcb.com/						
1				RES	Carbon 1/6W, 5%, 2.7K	Yageo	CFR-12JB-2K7	Digikey	2.7KEBK-ND	\$0.02	\$0.02 0.125Wresistor	Prof						
1				RES	Carbon 1/6W, 5%, 3.9K	Yageo	CFR-12JB-3K9	Digikey	3.9KEBK-ND	\$0.02	\$0.02 0.125Wresistor	Prof						
1				RES	Carbon 1/6W, 5%, 4.7K	Yageo	CFR-12JB-4K7	Digikey	4.7KEBK-ND	\$0.02	\$0.02 0.125Wresistor	Prof						
1				RES	Carbon 1/6W, 5%, 10K	Yageo	CFR-12JB-10K	Digikey	10KEBK-ND	\$0.02	\$0.02 0.125Wresistor	Prof						
1				RES	Carbon 1/6W, 5%, 10M	Yageo	CFR-12JB-10M	Digikey	10MEBK-ND	\$0.02	\$0.02 0.125Wresistor	Prof						
6				SW	B3F tactile push button switch	Omron Electronics	B3F-1052	Digikey	SW405-ND	\$0.17	\$1.02 B3F-1050	Prof						
1				SW	On/off power switch			BGMicro	SWT1010	\$0.85	\$0.85 BOXMOUNTBUTTON	some						
4				BAT	AA, 1.25V NMH, 2500mAh			BGMicro	BAT1102	\$2.49	\$9.96	tenergybattery.com						
6				RES	Carbon 1/4W, 5%, 10K	Yageo	CFR-12JB-10K	Digikey	10KEBK-ND	\$0.02	\$0.14 0.25Wresistor	Prof						
1				LCD	128x64 Graphic LCD	AZ Displays	AGM1264F	BGMicro	LCD1030	\$9.95	\$9.95 LCD1030	bgmicro.com						
1				XBEE	XBee 1mW Zigbee Module	Digi			WRL-08664	\$22.95	\$22.95							
1				XBEE	XBee Module Breakout Board	Digi			BOB-08276	\$2.95	\$2.95							
2				XBEE	Two 2mm 10 pin XBee Sockets	Digi			PRT-08272	\$1.00	\$2.00							
1				XBEE	0.1" 40 pin Break Away Headers	Digi			PRT-00116	\$2.50	\$2.50							
1				IC	MC34119, AUDIO LOW PWR 8-PDIP	Freescall	MC34119	Jameco	316865	\$2.25	\$2.25 MC34119	not free						
1				IC	TLV5616 12-bit DAC	TI	TLV5616	TI	TLV5616CP	\$6.66	\$6.66 TLV5616	free sample						
1				IC	LM4041CILPR shunt diode reference	TI	LM4041CILPR	TI	LM4041CILPR	\$0.90	\$0.90 LM4041	free sample						
1				BOX	Serpac 272 Electronic Enclosure	Serpac	272	Serpac	272	\$0.00	\$0.00 Serpac272Box	free sample						

\$125.84 Total Cost