

“Peggy” a light emitting pegboard designed by Evil Mad Scientist Laboratories  
 Bill of Materials, with part numbers from Digi-Key where applicable. Kit version 1.1

Line	Designation	Value	Type	Digi-Key#	QTY
1	PCB	Light Emitting Pegboard		N/A	1
2	RA1, RA3, RA4	5.1 k	Resistor, 1/4 W	5.1KQBK-ND	3
3	RA2	1k	Resistor, 1/4 W	1.0KQBK-ND	26
	RB0-RB24				
4	JPI (ONLY if S4 empty)	Zero-ohm jumpers		0.0QBK-ND	5
	JP2, JP3, battery box (x2)				
5	S1	Tiny slider switch		EG1906-ND	1
6	U1	40-pin DIP socket		3M5471-ND	1
	U1	ATmega164P (programmed)		ATMEGA164P-20PU-ND	1
7	C3	1000 uF, 10 V	Cap., electrolytic	P5127-ND	1
8	C5	1uF	Capacitor, ceramic	BC1162CT-ND	1
9	S2,S3	Tactile Button Switch		SW400-ND	2
10	QA1	LTR-3208E	Phototransistor	160-1031-ND	1
11	RL0-RL25	75 ohm	Resistor, 1/4 W	75QBK-ND	26
12	Q0-Q24	2N4401 (or similar)	Transistor	2N4401D26ZTR-ND	25
13	Battery Box	3 x D cell		BH3DL-ND	1
14	Cable Ties	Cable ties, 4.5"x0.1", black		RP202C-ND	2
15	DXXYY	Blue, Green, White, Pink and/or UV LEDs. 3mm, 5mm or 10 mm		N/A	up to 625
16	Rubber feet	McMaster Carr 95495K66		N/A	4
-	J1	6-pin header	ISP connector	WM26806-ND	Opt.
-	XTL	16 MHz	oscillator crystal	631-1108-ND	Opt.
-	C1,C2	20 pF	Capacitor, ceramic		Opt.
-	C4,C105,106	no component- leave empty			

<b>Optional Power adapter kit: US</b>					
	Power adapter: US	4.5 V DC regulated, 1 A, 1.3 mm plug		T976-P7P-ND	Opt.
	J2	1.3 mm power jack, US power jack		CP-035D-ND	Opt.
	DPI	Zero-ohm jumper		0.0QBK-ND	Opt.
	S4	high-power slider, SPDT		CKC5107-ND	Opt.

<b>Optional Power adapter kit: International</b>					
	Power adapter: Int'l	5 V DC regulated, 1.2 A, 2.1 mm plug		T946-P5P-ND	Opt.
	J2	2.1 mm power jack, Int'l power jack		CP-002AH-ND	Opt.
	DPI	SBI60 Schottky Diode		SBI60-E3/1GI-ND	Opt.
	S4	high-power slider, SPDT		CKC5107-ND	Opt.