

Please refer to these notes as applicable for the parts list below:

- *A The LEDs and resistors shown are personal preference for color and with resistance values chosen to give equal brightness from all colors for these particular LEDs. Disregard the silkscreen value of 470 ohms when using these values and refer to reference number instead for location.
- *B Rev A and Rev B boards and schematics specified 47K ohms for all of R1-7 and R16-19. Recommended values are shown as below, use location reference for placement.
- *C The header pins for configuration jumpers are cut down from longer strips.
- *D The Samtec 39 pin connector, when ordering from Digikey, will always show zero stock because they are made-to-order. They will ship same or next day though.
- *E Virtually any of the many 555 timer clones can be substituted, with CMOS parts preferred. The part numbers shown are not the only possible substitutes.

PROCESSOR CARD

Qty	Description		Manufacturer	Manufacturer #	Vendor	Vendor #	Price	Qty	Total
<u>Integrated Circuits</u>									
1	CDP1802	U2	Harris	CDP1802AEX	Rochester	CDP1802AEX	5.46	1.00	5.46
1	32K x 8 CMOS SRAM	U5	Sharp	LM62256L-70	Jameco	82472	3.95	1.00	3.95
1	32K x 8 CMOS EEPROM	U6	Atmel	28C256-25	Jameco	74878	4.95	1.00	4.95
1	CD40244 (or 74C244 or 74HC244)	U3	TI	SN74HC244N	Digikey	296-1582-5-ND	0.61	1.00	0.61
1	CD40373 (or 74C373 or 74HC373)	U4	TI	SN74HC373N	Digikey	296-1591-5-ND	0.66	1.00	0.66
1	CD4049	U9	TI	CD4049UBE	Digikey	296-2055-5-ND	0.66	1.00	0.66
1	CD4071	U7	TI	CD4071BE	Digikey	296-2062-ND	0.66	1.00	0.66
1	CD4011	U8	TI	CD4011BE	Digikey	296-2031-ND	0.66	1.00	0.66
1	LMC555 (or ICP7555) (*E)	U1	Renesas	ICM7555IPAZ	Digikey	ICM7555IPAZ-ND	0.87	1.00	0.87
1	Oscillator module full size	X1	Epson	MXO45-3C-4M000000	Digikey	110-MXO45-3C-4M000000-ND	2.18	1.00	2.18
<u>Discrete Components</u>									
1	LED T1-3/4 Red (*A)	D1	Valuepro	UT1871-81-M1-R	Jameco	333973	0.12	1.00	0.12
2	LED T1-3/4 Orange (*A)	D2-3	Valuepro	LE3330	Jameco	107393	0.12	2.00	0.24
2	LED T1-3/4 Yellow (*A)	D4-5	Valuepro	LY3330	Jameco	34825	0.15	2.00	0.30
3	LED T1-3/4 Green (*A)	D6-8	Valuepro	LG3330	Jameco	34761	0.15	3.00	0.45
3	Resistor 1/4 watt 10 (*A)	R13-15	Stackpole	CF14JT10R0	Digikey	CF14JT10R0CT-ND	0.10	3.00	0.30
2	Resistor 1/4 watt 270 (*A)	R11-12	Stackpole	CF14JT270R	Digikey	CF14JT270RCT-ND	0.10	2.00	0.20
2	Resistor 1/4 watt 1K (*A)	R9,R10	Stackpole	CF14JT1K00	Digikey	CF14JT1K00CT-ND	0.10	2.00	0.20
2	Resistor 1/4 watt 1.5K (*A)	R8	Stackpole	CF14JT1K50	Digikey	CF14JT1K50CT-ND	0.10	2.00	0.20
10	Resistor 1/4 watt 4.7K (*B)	R1-7,16-17,19	Stackpole	CF14JT4K70	Digikey	CF14JT4K70CT-ND	0.10	10.00	1.00
1	Resistor 1/4 watt 47K (*B)	R20	Stackpole	CF14JT47K0	Digikey	CF14JT47K0CT-ND	0.10	1.00	0.10
1	Resistor 1/4 watt 470K	R18	Stackpole	CF14JT470K	Digikey	CF14JT470KCT-ND	0.10	1.00	0.10
1	Diode 1N4148	D9	ON Semi	1N4148	Digikey	1N4148FS-ND	0.10	1.00	0.10
5	Ceramic capacitor 0.1uF radial 0.2"	C1-2,5-7	Valuepro	SR215C104KAA	Jameco	544921	0.19	5.00	0.95
1	Tantalum capacitor 10uF radial 0.1"	C3	AVX	TAP106K010SCS	Digikey	478-1838-ND *	0.8	1.00	0.80
<u>Interconnects</u>									
1	Straight header 2 pins 0.1" (*C)		Sullins	PREC025DAAN-RC	Digikey	S1012EC-40-ND	0.51	0.05	0.03
8	Straight header 3 pins 0.1" (*C)		Sullins	PREC025DAAN-RC	Digikey	S1012EC-40-ND	0.51	0.60	0.31
2	Straight header 9 pins 0.1" (*C)		Sullins	PREC025DAAN-RC	Digikey	S1012EC-40-ND	0.51	0.45	0.23
2	Right-angle header 5 pins 0.1" (*C)		Sullins	PREC040SBAN-M71RC	Digikey	S1112EC-40-ND	0.66	0.25	0.17
16	Jumper shunts 0.1"		Sullins	STC02SYAN	Digikey	S9000-ND	0.10	16.00	1.60
1	Socket 39 pin 0.1" long tail (*D)		Samtec	SSQ-139-03-T-S	Digikey	SAM1206-39-ND	4.52	1.00	4.52
1	Mini-USB receptable AB		Molex	565790519	Digikey	WM17121-ND	2.54	1.00	2.54
<u>Sockets</u>									
1	DIP socket 40 pin 0.6"		On Shore	ED40DT	Digikey	ED3048-5-ND	0.48	1.00	0.48
2	DIP socket 28 pin 0.6"		On Shore	ED28DT	Digikey	ED3052-5-ND	0.34	2.00	0.68
2	DIP socket 20 pin 0.3"		On Shore	ED20DT	Digikey	ED3054-5-ND	0.26	2.00	0.52
1	DIP socket 16 pin 0.3"		On Shore	ED16DT	Digikey	ED3046-5-ND	0.19	1.00	0.19
2	DIP socket 14 pin 0.3"		On Shore	ED14DT	Digikey	ED3045-5-ND	0.19	2.00	0.38
1	DIP socket 8 pin 0.3"		On Shore	ED08DT	Digikey	ED3044-5-ND	0.16	1.00	0.16
1	DIP socket 4 pin in 14 pin frame 0.3"		On Shore	ED14DT	Digikey	ED3045-5-ND	0.19	1.00	0.19
<u>Mechanical</u>									
8	LED stand-off spacer		VCC	STD_500_BLK	Jameco	2231371	0.15	8.00	1.20
4	0.5 inch standoff spacer		RAF	4505-440-AL-7	Jameco	393474	0.49	4.00	1.96
1	Circuit Board		Madole		JLPCPB		1.95	1.00	1.95
							Total		42.82