

I have?	I Need?	Ref	Value	BOM_Qty	OrderQty	Part_No	Each	Src	Footprint	Info
		C2 C3 C37 C38	47 pF, Capacitor Monolithic, 100 Volt, ±5% NPO	4	10	332567	\$ 0.19	Jameco	C2	multiples of 10
		C1 C4 C5 C6 C7 C8 C9 C10 C11 C12 C13 C14 C15 C16 C17 C18 C19 C20 C21 C22 C25 C26 C27 C28 C29 C30 C31 C32 C35 C36 C39 C40 C41 C42	0.1 uF, 50 Volt, Monolithic X7R, Radial	34	40	544921	\$ 0.15	Jameco	C2	multiples of 10
		C33 C34 C51 C52	1 uF, 25 Volt, Radial Tantalum	4	4	154860	\$ 0.35	Jameco	C1V5	
		C23 C24 C55	10 uF, 25 Volt, ±10%, Radial Tantalum	3	3	545641	\$ 0.59	Jameco	C1V5	
		C54	33 uF, 25 Volt, ±10%, Radial Tantalum	1	1	33785	\$ 1.75	Jameco	C1V5	
		D1, D3	LED, Red Diffused, T-1, 65mcd 660 nm	2	10	333851	\$ 0.12	Jameco	LEDV	multiples of 10
		D2	LED, Green Diffused, T-1, 30mcd 567nm	1	10	156930	\$ 0.15	Jameco	LEDV	multiples of 10
		D4	LED, Orange Diffused, T-1 3/4, 50mcd 622nm	1	1	2155268	\$ 0.25	Jameco	LEDV	
		FB1 L1	Choke, 10uH, 10% Inductive Tol, 130mA Idc, Axial Conformal	2	10	372171	\$ 0.19	Jameco	C2	multiples of 10
		J1	Connector, DB9, 9 Position Female D-Sub, Right Angle, Through Hole	1	1	104952	\$ 0.89	Jameco	DB9-F	
		P15 P16 P27 P29 P42 P44	Test_Pin, 1 Position, Unshrouded Header, Solder Straight	6		2168211	\$ 0.59	Jameco	SIL-1	order 40 Pin strips and cut down
		JP1 JP2 JP3 P10 P11 P45 P48 P50 P52	Jumper, 2 Position, Unshrouded Header 2.54mm Solder Straight	9		2168211	\$ 0.59	Jameco	SIL-2	order 40 Pin strips and cut down
		K1 K5 K8	Jumper, 3 Position, Unshrouded Header 2.54mm Solder Straight	3		2168211	\$ 0.59	Jameco	SIL-3	order 40 Pin strips and cut down
		P8 P43	Jumper, 4 Position, Unshrouded Header 2.54mm Solder Straight	2		2168211	\$ 0.59	Jameco	SIL-4	order 40 Pin strips and cut down
		P2 P32 P41 P47	Jumper, 5 Position, Unshrouded Header 2.54mm Solder Straight	4		2168211	\$ 0.59	Jameco	SIL-5	order 40 Pin strips and cut down

	P28 P33	Header, Vertical Receptacle, Female, 1 Row, 6 Contacts, .100" 2.54mm L.S.	2		308567	\$ 0.99	Jameco	SIL-6	order 20 pin strips, cut to size
	P26 P30	Header, Vertical Receptacle, Female, 1 Row, 7 Contacts, .100" 2.54mm L.S.	2		308567	\$ 0.99	Jameco	SIL-7	order 20 pin strips, cut to size
	P7 P31 P39	Header, Vertical Receptacle, Female, 1 Row, 8 Contacts, .100" 2.54mm L.S.	3		308567	\$ 0.99	Jameco	SIL-8	order 20 pin strips, cut to size
	P38	Header, Vertical Receptacle, Female, 1 Row, 10 Contacts, .100" 2.54mm L.S.	1		308567	\$ 0.99	Jameco	SIL-10	order 20 pin strips, cut to size
	P6	Header, Vertical Receptacle, Female, 1 Row, 16 Contacts, .100" 2.54mm L.S.	1		308567	\$ 0.99	Jameco	SIL-16	order 20 pin strips, cut to size
	P25 P56	Jumper, 3x2 Position, Unshrouded Header, 2.54mm, Solder Straight	2		53532	\$ 0.85	Jameco	pin_array_3X2	order 20x2 pins and cut down
	P9 P46 P53	Jumper, 4x2 Position, Unshrouded Header, 2.54mm, Solder Straight	3		53532	\$ 0.85	Jameco	pin_array_4X2	order 20x2 pins and cut down
	P1	Jumper, 5x2 Position, Unshrouded Header, 2.54mm, Solder Straight	1		53532	\$ 0.85	Jameco	pin_array_5X2	order 20x2 pins and cut down
	P12 P49 P51	Jumper, 6x2 Position, Unshrouded Header, 2.54mm, Solder Straight	3		53532	\$ 0.85	Jameco	pin_array_6X2	order 20x2 pins and cut down
	P13 P14 P34 P35 P36 P37 P40	Jumper, 8x2 Position, Unshrouded Header, 2.54mm, Solder Straight	7		53532	\$ 0.85	Jameco	pin_array_8X2	order 20x2 pins and cut down
	P17, P24 (Optional: P18, P19, P20, P21, P22, P23)	Jumper, 20x2 Position, Unshrouded Header, 2.54mm, Solder Straight	8	2	53532	\$ 0.85	Jameco	pin_array_20X2	order 20x2 pins
	R3	10 Ohm 5% 1/4W	1	10	690380	\$ 0.10	Jameco	R3	multiples of 10
	R2 RR2	1K Ohm 5% 1/4W	2	10	690865	\$ 0.10	Jameco	R3	multiples of 10
	R7	3.3K Ohm 5% 1/4W	1	10	690988	\$ 0.10	Jameco	R3	multiples of 10
	R8	6.8K Ohm 5% 1/4W	1	10	691067	\$ 0.10	Jameco	R3	multiples of 10
	R1 R4 R6 R9 R10	10K Ohm 5% 1/4W	5	10	691104	\$ 0.10	Jameco	R3	multiples of 10

	RR1	470 Ohm SIP 10 pin, 9 Resistors, 125 mWatt, 2%	1	1	97869	\$ 0.29	Jameco	r_pack9	
	RR2	1K Ohm SIP 10 pin, 9 Resistors, 125 mWatt, 2%	1	1	97877	\$ 0.29	Jameco	r_pack9	
	RV1	Pot, ( <b>See below:</b> LCD 16x2, comes with 10K Ohm 0.5W contrast potentiometer (RV1) )	1						
	SW1 SW2 SW3 SW4	Switch, Push Button Tactile, SPST, Off Momentary (On), 15 Volt DC @ 20mA	4	4	1586074	\$ 0.25	Jameco	SPST	
	SW5 SW6	DIP Switch, 8-Pos, On-Off, SPST, Raised Rocker	2	2	696917	\$ 1.39	Jameco	16dip300	
	X1 X2	CRYSTAL, 16.0 MHz, HC49/US, 20pF, Low Profile	2	2	325139	\$ 0.59	Jameco	HC49	
	U6	74LS00	1	1	46252	\$ 0.79	Jameco	14dip300	
	U5	74LS04	1	1	283792	\$ 0.65	Jameco	14dip300	
	U3	74LS07	1	1	46367	\$ 0.89	Jameco	14dip300	
	U18	74LS08	1	1	295401	\$ 0.59	Jameco	14dip300	
	U8 U10	74LS32	2	2	295515	\$ 0.55	Jameco	14dip300	
	U14 U17	74LS74	2	2	48004	\$ 0.49	Jameco	14dip300	
	U11 U12 U15 U16	74LS374	4	4	47634	\$ 0.79	Jameco	20dip300	
	IC1 IC2 U7	74LS682	3	3	309260	\$ 1.95	Jameco	20dip300	
	U4	ATmega2560-16AU, 8-bit Microcontroller, 256kB Flash, 4kB EEPROM, 86 I/O Pins, TQFP-100	1	1	556-ATMEGA2560-16AU	\$ 14.22	Mouser	TQFP-100	
	U9	ATMega328P-PU 32kB Flash Microcontroller 8bit, un-programmed, DIP28	1	1	2139111	\$ 2.95	Jameco	28dip300	
	U1	MAX232CPE, +5V-Powered, Multichannel RS-232 Drivers/Receivers	1	1	24811	\$ 2.95	Jameco	16dip300	
		FT231X Breakout board, USB-to-Serial Adapter, microUSB jack, 3.3V	1	1	BOB-13263	\$ 11.95	sparkfun.com		
		MicroSD card breakout adapter board, 5v->3v regulator, 3v level shifting, read and write 2Gb+	1	1	254	\$ 7.50	adafruit.com		

			LCD 16x2 Standard, white on blue, comes with 10K Ohm 0.5W contrast potentiometer (RV1) and strip of headers	1	1	181	\$ 9.95	adafruit.com		
		U13	LM3940 Low Dropout Regulator, 3.3 Volt 1A, 3-Pin (3+Tab), TO-220	1	1	840034	\$ 1.95	Jameco	LM78XX	
		U2	L7805CV, 5 Volt, 1.5 Amp, TO-220	1	1	924633	\$ 0.45	Jameco	TO-220	
		U2	Heat Sink, TO-220, 1.2"L x 1"W x 0.5"H (for L7805CV)	1	1	129242	\$ 0.75	Jameco		
		U2, U13	Screw, 6-32, 3/8" Phillips	2						
		U2, U13	NUT, HEX, 6-32	2						
		U2 (Alternate for L7805CV at U2)	PSU5a 5V 3A Regulator, TO-220 form Factor	1	1	PSU5a	\$ 7.95	ezsbc.com	TO-220	
		P2 (Alternate for L7805CV at U2)	D24V25F5, Pololu, 5V 2.5A, Step-Down Voltage Regulator	1	1	D24V25F5	\$ 10.95	Pololu.com	SIL-5	
		DIP14	DIP socket 14 Pins	8	10	112214	\$ 0.14	Jameco	14dip300	multiples of 10
		DIP16	DIP socket 16 Pins	1	10	112222	\$ 0.20	Jameco	16dip300	multiples of 10
		DIP20	DIP socket 20 Pins	7	10	112248	\$ 0.17	Jameco	20dip300	multiples of 10
		DIP28 (0.300")	DIP socket, 28 Pin, Machine Tooled, Low-Profile, 0.3 Inch Wide	1	1	114412	\$ 1.09	Jameco	28dip300	
		P3, P4 (Card Ejector)	Circuit Board Card Ejector and Pin, 0.062 inch, White Nylon, BIVAR PN# CP-06 WE	2	2	749-CP-06-WE	\$ 0.49	Mouser		