

ICs:	Qty	Ref Designation	Description	Possible source(s) and/or Notes
1)	1	U52	Z8S180, PLCC68	Mouser has 692-Z8S18033VSG \$11.82 Digi-Key (DK) 269-4307-ND \$15.18
2)	1	U33	TMS9918, Dip 40	ebay?
3)	1	U39	AY-3-8910, Dip 40	Unicorn Electronics \$7.99
4)	1	U61	WD37C65BJM, PLCC44	ebay? (Andrew has some, also)
5)	1	U17	27C080, Dip 32	Jameco has 27C080-90 \$7.49
6)	2	U20,U53	512K SRAM, Dip 32	Jameco has AS6C4008-55PCN \$5.95
7)	1	U40	32K SRAM, Dip 28, 0.3"	Jameco #242376 CY7C199-35PC \$1.99
8)	2	U2,U7	8255, Dip 40	Jameco has 8255AC-5 Refurb \$4.75 also 82C55A-5 \$4.95 (new) also 82C55A-5 \$4.95 (new)
9)	2	U25,U54	DS1210, Dip 8 1210N (Ind temp vers) 1210+ (RoHS vers)	Jameco, DK
10)	1	U12	DS1302, Dip 8	
11)	2	U19,U60	MAX232, Dip 16	DK, Jameco Could also use HIN232ACPZ (DK) with 0.1 uF ceramic caps
12)	1	U27	74LS02/HC02?, Dip 14	
13)	1	U14	74LS04/HC04?, Dip 14	
14)	1	U34	74ALS04/AHC04?, Dip 14	(to reduce mem decode delay)
15)	1	U41	74LS06N, Dip 14	
16)	2	U1,U65	74LS07N, Dip 14	
16.1)	1	U8	74LS06N, Dip 14	
17)	1	U5	74LS08/HC08?, Dip 14	
18)	1	U3	74LS10/HC10?, Dip 14	
19)	1	U10	74ALS14/AHC14?, Dip 14	
20)	1	U63	74LS14/HC14?, Dip 14	
21)	1	U59	74LS32/HC32?, Dip 14	
22)	3	U6,U24,U69	74ALS32/AHC32?, Dip 14	(to reduce mem decode delay)
24)	1	U4	74AHC125/AHCT125?, Dip 14	(needs to be able to drive LED)

25)	1	U58	74LS138/HC138?, Dip 16	
26)	1	U68	74ALS138/AHC138?, Dip 16	(to reduce mem decode delay)
27)	1	U64	74LS139/HC139?, Dip 16	
28)	2	U66,U67	74LS157/HC157?, Dip 16	
29)	1	U70	74LS174/HC174?, Dip 16	
30)	4	U11,U35,U36,U37	74LS574/HC574, Dip 20	
31)	1	U43	74LS244/HC244, Dip 20	
32)	4	U44,U45,U46,U47	74LS245, Dip 20	(LS for ECB Bus interface)
33)	1	U55	74LS273, Dip 20	
34)	1	U57	74LS682/HC682, Dip 20	
34.1)	1	U71	74LS393, DIP14	
35)	1	P32	MAX485	Optional chip for RS-485
36)	1	P18	FMS6141, SO8E	Optional SMT Video Amplifier Use either this or the 2N3904 amplifier. Andrew: "The FMS6141 gives slightly better video performance."
36.1)	1	U27	74LS02, Dip 14	
36.2)	1	U34	74LS04, Dip 14	
36.3)	1	U14	74LS04, Dip 14	

Semiconductor:	Qty	Ref Designation	Description	Possible source(s) and/or Notes
38)	1	U49	7805, TO-220	(may need a big heatsink)
39)	1	U50	LM317L, TO-92, SD VDD regulator	
40)	1	U41	16.00 MHz can osc, DIP 8 or DIP 14	DK XC1186-ND
42)	1	P37	Can osc for Zilog chip, CMOS output levels, 5V Can be either 8 or 14-pin (18.432 MHz should allow accurate baud rates)	Jameco #325649
43)	1	D1	1N4148	
43.1)	4	D2,D3,D4,D5	Germanium or Schottky (1N270 or 1N5280)	
44)	1	D8	1N4002	
45)	1	D6	Bi-color LED	Jameco #1766366?
46)	2	D7,D9	LED	
47)	3	Q1,Q2,Q3	2N3904, TO-92	

Capacitors:	Qty	Ref Designation	Description	Possible source(s) and/or Notes
48)	2	C27,C28	33 pF ; 0.1" LS	DK BC1007
49)	2	C57,C58	270 pF ; 0.1" LS	
50)	57	C11,C12,C13, C14,C15,C16, C17,C18,C19,C20, C21,C22,C23,C24, C25,C29,C31,C32, C33,C34,C35,C36, C37,C38,C39,C40, C41,C42,C43,C44, C45,C46,C47,C48, C49,C50,C51,C52, C53,C54,C55,C60, C69,C70,C73,C79, C80,C81,C82,C83, C84,C85,C86,C87, C88,C89,C90	0.1 uF ; 0.2" LS (5 mm)	DK BC1123CT? Jameco #25523? Jameco #544921?
51)	1	C66	0.1 uF, Electrolytic, 0.1" LS	
52)	1	C65	0.33 uF, Electrolytic, 0.1" LS	
53)	11	C4,C5,C6,C7,C8 C68,C74,C75,C76 C77,C78	1.0 uF , C1V5	Only one req'd if newer RS-232 chips are used which use 0.1 uF caps instead.
54)	3	C3,C61,C62	10 uF Electrolytic, 0.1" LS	DK P5134
55)	5	C1,C26,C30,C56	22 uF Electrolytic, 0.1" LS	DK P5135
56)	1	C59	220 uF, 0.1" LS	

Resistors:	Qty	Ref Designation	Description	Possible source(s) and/or Notes
57)	2	R18,R37	0 ohms, 1/4W 5% (or jumper)	
58)	1	R2	10 ohms, 1/4W 5%	DK 10Q
59)	2	R25,R27	75 ohms, 1/4W 5%	DK 75Q
60)	5	R4,R39,R40,R41	100 ohms, 1/4W 5%	DK 100Q
60.1)	1	R32	240 ohms, 1/4W 5%	
61)	1	R33	390 ohms, 1/4W 1%	
62)	3	R14,R20,R36	470 ohms, 1/4W 5%	DK 470Q
63)	5	R17,R19,R21 R34,R35	1.0K ohms, 1/4W 5%	DK 1.0KQ
64)	2	R6,R10	2.7K ohms, 1/4W 5%	DK 2.7KQ
65)	1	R38	3.3K ohms, 1/4W 5%	DK 3.3KQ
66)	4	R5,R7,R11,R13	4.7K ohms, 1/4W 5%	DK 4.7KQ
67)	5	R3,R22,R23 R24,R26	10K ohms, 1/4W 5%	DK 10KQ
67.1)	2	R42,R43	2.2K ohms, 1/4W 5%	DK 2.2KQ
68)	1	RP1	150, 10-pin res network SIP, pin 1 common	DK 770-101-R150P-ND
69)	1	RR6	1.0K, 6-pin res network SIP, pin 1 common	DK 770-61-R1KP-ND
70)	2	RR1,RR2	1.5K, 10-pin res network SIP, pin 1 common	DK 770-101-R1.5KP-ND
71)	3	RR4,RR5,RR8	4.7K, 10-pin res network SIP, pin 1 common	DK 770-101-R4.7KP-ND
72)	1	RR7	4.7K, 6-pin res network SIP, pin 1 common	DK 770-61-R4.7KP-ND
74)	1	RR3	10K, 6-pin res network SIP, pin 1 common	DK 770-61-R10KP-ND
73)	2	RV1,RV2	5K, Potentiometer	DK CT6EP502-ND or DK 3329H-502LF-ND Jameco #854532 or #769961

Crystals:	Qty	Ref Designation	Description	Possible source(s) and/or Notes
75)	1	X1	Crystal, 32.768 KHz, 6 pF load capacitance	DK 300-8761 (10PPM) or 300-8310 (20PPM)
76)	1	X2	10.738635 MHz 32pF Crystal	HC-18UV, TMS9918 oscillator (Note that this is exactly 3X color-burst (3.579 MHz, so this frequency must be exact to get correct colors) DK CTX085-ND (no stock as of 3/20/11)

Oscillators:	Qty	Ref Designation	Description	Possible source(s) and/or Notes
76.1)	1	P41	OSC_16.000MHZ, 14 or 8 Pin.	

Jumper / Conn	Qty	Ref Designation	Description	Possible source(s) and/or Notes
77)	7	JP1,JP7,JP8,JP10 JP11,JP12,JP13,P44	Jumper, SIL-2	Could be part of DK S2011E-36
78)	1	P3	Reset sw header, SIL-2	Could be part of DK S1011E-36
79)	5	P10,P11,P12,P13 P47	Conn_1, 1 pin	
80)	9	K2,K3,K4,K5 K9,K16,K17,K18 K19	Conn_3, SIL-3	Could be part of DK S1011E-36
81)	1	K14	CONN_3, JACK_ALIM	
82)	1	P33	Conn_5, SIL-5	Could be part of DK S1011E-36
83)	1	P22	CONN_3X2, pin_array_3x2	Could be part of DK S2011E-36
84)	6	P19,P20,P39,P48 P51,P52	CONN_5X2, pin_array_5x2	Could be part of DK S2011E-36
85)	1	P31	PARALLEL, pin_array_13x2	Could be part of DK S2011E-36
86)	1	P38	CONN_13X2, pin_array_13x2	Could be part of DK S2011E-36
87)	1	P27	CONN_17X2, PIN_ARRAY_20X2	Could be part of DK S2011E-36
88)	1	P29	CONN_20X2, PIN_ARRAY_20X2	Could be part of DK S2011E-36
89)	1	P45	Conn_4, SIL-4	Battery connector, SIL-4 (for 3-5V battery)
89.1)	1	P49	Conn_6, SIL-6	
89.2)	2	P43,P50	Conn_2X2, PIN_ARRAY_2X2	
89.3)	1	P46	Bornier4 (Male 4 pin power connector)	
90)	2	P5,P6	Keyboard,Mouse; mini_din-M_DIN6	DK CP-4060?, CP-2260?
91)	1	P21	RCA Jack, Rt Angle PC Mount	Jameco #220564, DK CP-1403 is close
92)	1	U51	stereo_jack	Jameco #2081772, DK CP1-3553NG
93)	1	U26	CONN_SD, Memory_Card_SD_3M	3M Part #SD-RSMT-2-MQ-WF, also maybe DK 101-00708-64 could work (3M part seems hard to find)
94)	1	U48	C96ABC, 96 pin (rows A,B,and C)	DIN 41612 male right angle conn.

Misc:	Qty	Ref Designation	Description	Possible source(s) and/or Notes
95)	1	SW1	SW_PUSH	DK SW400, Jameco #162886
96)	1	L1	Inductor (bead)	DK P9821BK
97)		P42	Spare sites for patching, Dip 8	
99)		P23	Spare site for patching, Dip 16	
100)	5		8-pin Dip socket	Jameco #112206
101)	2		14-pin mach socket for DIP osc	Jameco #51626
102)	17		14-pin Dip socket	Jameco #112214
103)	8		16-pin Dip socket	Jameco #112222
104)	11		20-pin Dip socket	Jameco #38608
105)	1		28-pin Dip socket - 300M	
106)	3		32-pin Dip socket	
107)	4		40-pin Dip socket	
108)	1		44-pin PLCC socket	Jameco #71618
109)	1		68-pin PLCC socket	Jameco #71969