

Sheet1

	A	B	C	D	E	F	G	H
1	7404	16p socket	7410	7404	74109	7420	74109	74161 / 9316
2	7400	74161 / 9316	N8875A	74109	7400	7400	7402	7496
3	7402	74161 / 9316	7410	7404	7400	7410	7410	16p socket
4	74109	N8875A	74161 / 9316	7404	7440	7404	74109	NE555 x2
5	7404	7400	74161 / 9316	7420	7400	74161 / 9316	74161 / 9316	7402
6	7400	7410	7410	7486	7404	empty space	7420	7402
7	7410	7430	7448 / 9358	7420	16p socket	74161 / 9316	74161 / 9316	7400
8	7490 / 9390	74153	74153	7490 / 9390	16p socket	7402	7483	74109
9	7410	74109	7410	N8875A	7404	7400	74109	7486
10	LM339A	7402	7402	74109	74161 / 9316	7420	74161 / 9316	74153
11	[P1]	7402	7405	74109	74161 / 9316	7420	74161 / 9316	74153
12	7400	7438	7405	74109	7410	7438	7438	[P4]
13								
14	Type Number	locations	Description	Alternative Part No.				
15								
16	7400		10 Quad 2 input NAND gate					
17	7402		8 Quad 2 input NOR gate					
18	7404		8 Hex inverter gate					
19	7405		2 Hex inverter gate, open collector					
20	7410		10 Triple 3 input NAND gate					
21	7420		6 Dual 4 input NAND gate					
22	7430		1 Single 8 input NAND gate					
23	7438		3 Quad 2 input NAND gate, open collector					
24	7440		1 Dual 4 input NAND gate					
25	7448		1 BCD to seven segment decoder / driver					
26	7483		1 4 bit binary full adder					
27	7486		2 Quad 2 input XOR gate					
28	7490		2 decade counter					
29	7493		0 4 bit binary counter					
30	7496		1 5 bit parallel in parallel out shift register					
31	74109		11 Dual J-NotK positive edge triggered flip flop, clear and preset					
32	74153		4 Dual 4 to 1 data selector / multiplexer non inverting outputs					
33	74161		13 4 bit binary counter					
34	LM339A		1 Quad Voltage comparator					
35	N8875A		3 Triple 3 input NOR gate	Try 7427??				
36	NE555 x2		1 555 timer x2					
37	[P1]		1 10 Way PCB plug					
38	[P4]		1 6 Way PCB plug					
39			4 16p socket					
40			1 empty space					
41								
42	Total		96 locations on board					
43								
44	7402		8 Quad 2 input NOR gate					
45								
46	Out 1	1 14	VCC					
47	In 1 A	2 13	Out 4					
48	In 1 B	3 12	In 4 B					
49	Out 2	4 11	In 4 A					
50	In 2 A	5 10	Out 3					
51	In 2 B	6 9	In 3 B					
52	GND	7 8	In 3 A					

	A	B	C	D	E	F	G	H
53								
54	7404		8 Hex inverter gate					
55								
56	In 1	1 14	VCC					
57	Out 1	2 13	In 6					
58	In 2	3 12	Out 6					
59	Out 2	4 11	In 5					
60	In 3	5 10	Out 5					
61	Out 3	6 9	In 4					
62	GND	7 8	Out 4					
63								
64	7420		6 Dual 4 input NAND gate					
65								
66	In 1 A	1 14	VCC					
67	In 1 B	2 13	In 2 D					
68	N/C	3 12	In 2 C					
69	In 1 C	4 11	N/C					
70	In 1 D	5 10	In 2 B					
71	Out 1	6 9	In 2 A					
72	GND	7 8	Out 2					
73								
74	74109		11 Dual J-NotK positive edge triggered flip flop, clear and preset					
75								
76	<u>1 CLR</u>	1 16	VCC					
77	1 J	2 15	<u>2 CLR</u>					
78	<u>1 K</u>	3 14	2 J					
79	1 CLK	4 13	<u>2 K</u>					
80	<u>1 PRE</u>	5 12	2 CLK					
81	1 Q	6 11	<u>2 PRE</u>					
82	<u>1 Q</u>	7 10	2 Q					
83	GND	8 9	<u>2 Q</u>					
84								
85	74161		13 4 bit binary counter					
86								
87	CLR	1 16	VCC					
88	CLK	2 15	RCO					
89	A	3 14	QA					
90	B	4 13	QB					
91	C	5 12	QC					
92	D	6 11	QD					
93	ENP	7 10	ENT					
94	GND	8 9	<u>LOAD</u>					
95								
96	LM339A	1, pos A10	Quad Voltage comparator					
97								
98	Out 1	1 14	Out 3					
99	Out 2	2 13	Out 4					
100	VCC	3 12	GND					
101	In 2 -	4 11	In 4 +					
102	In 2 +	5 10	In 4 -					
103	In 1 -	6 9	In 3 +					
104	In 1 +	7 8	In 3 -					