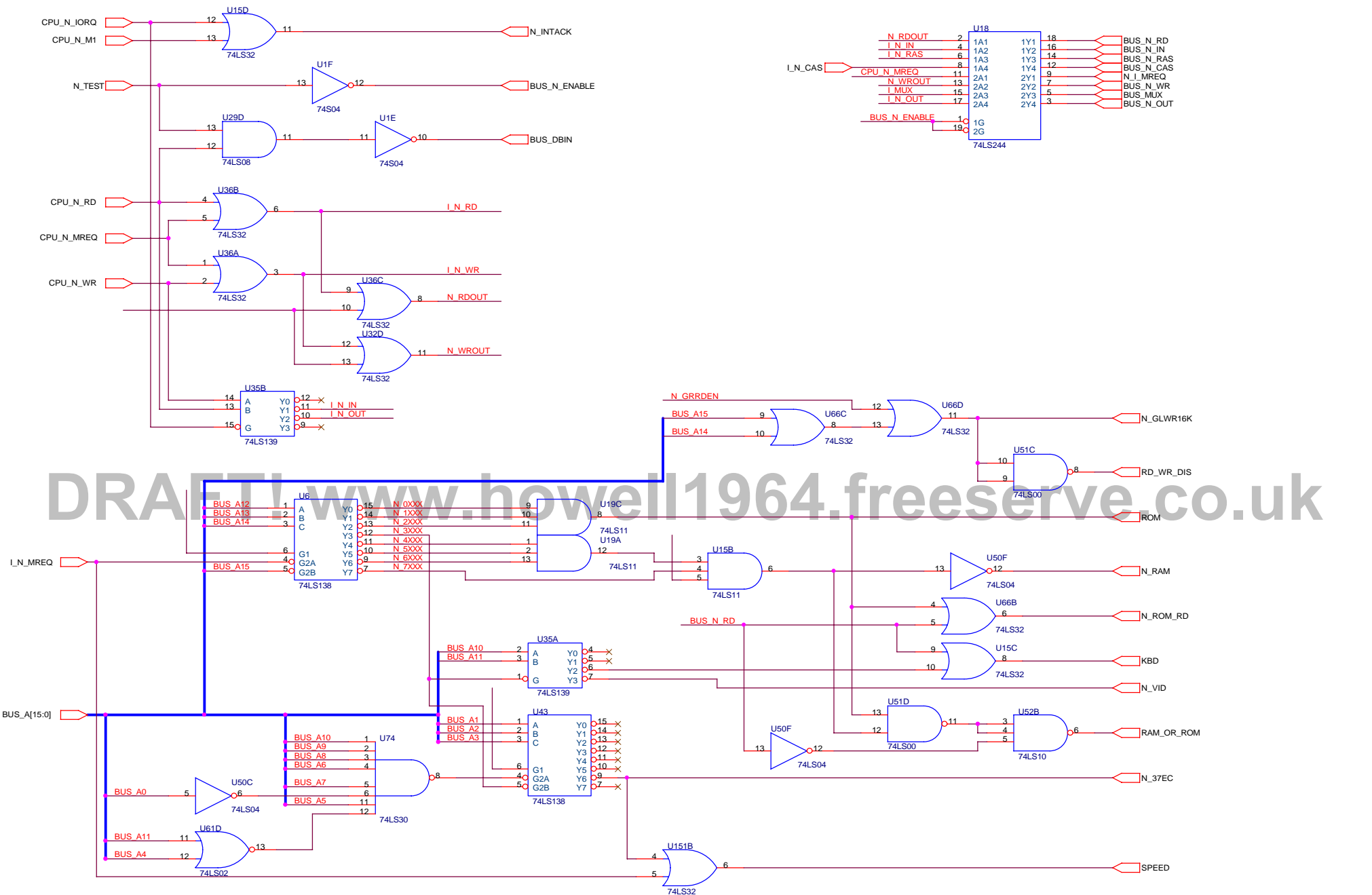


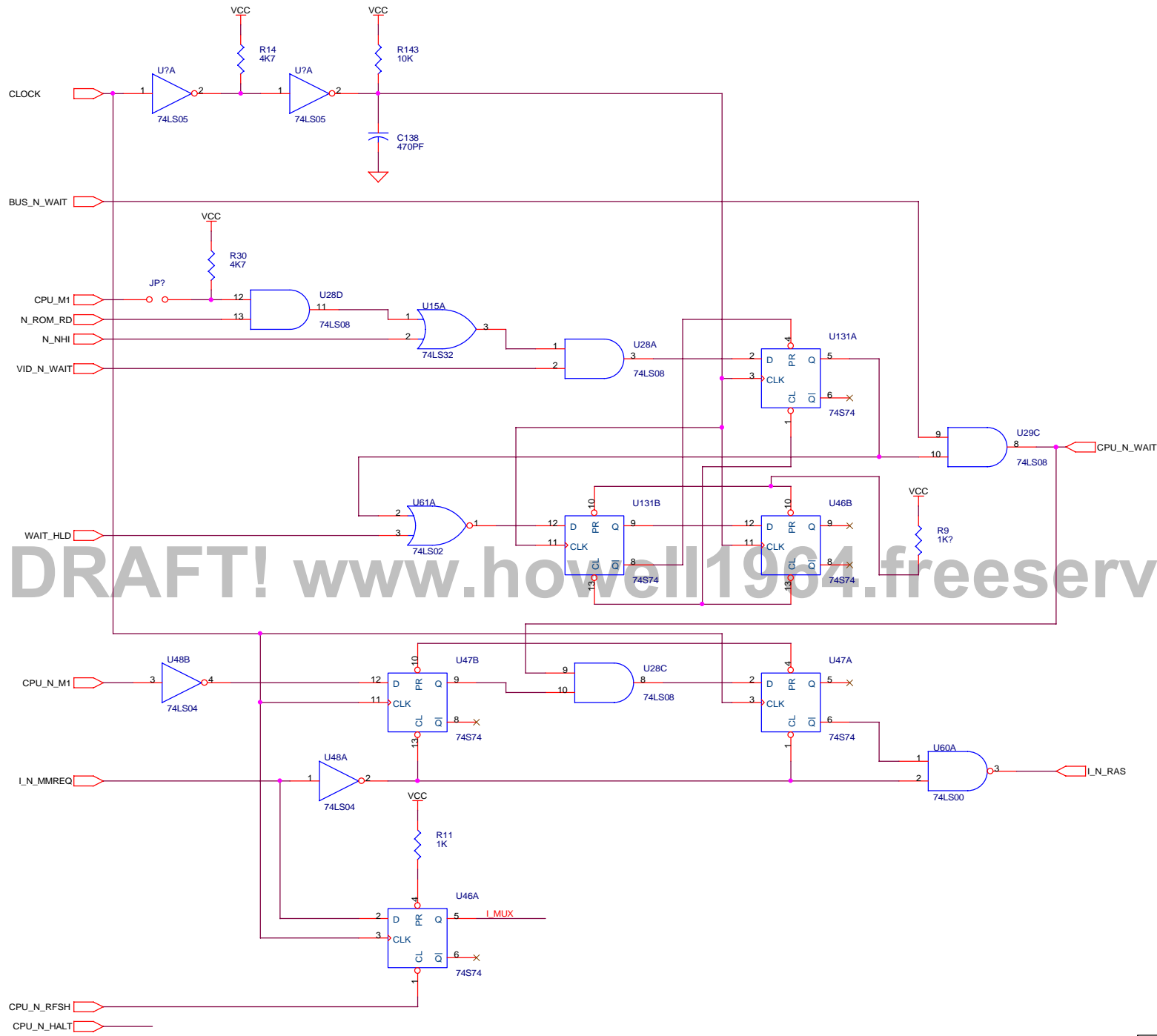
DRAFT! www.nowell1904freeware.co.uk

Title		
LNW80 Main RAM		
Size	Document Number	Rev
A3	K1021	<Rev Code>
Date:	Tuesday, March 23, 2004	Sheet 1 of 1

DRAFT! www.howell1964.freemove.co.uk

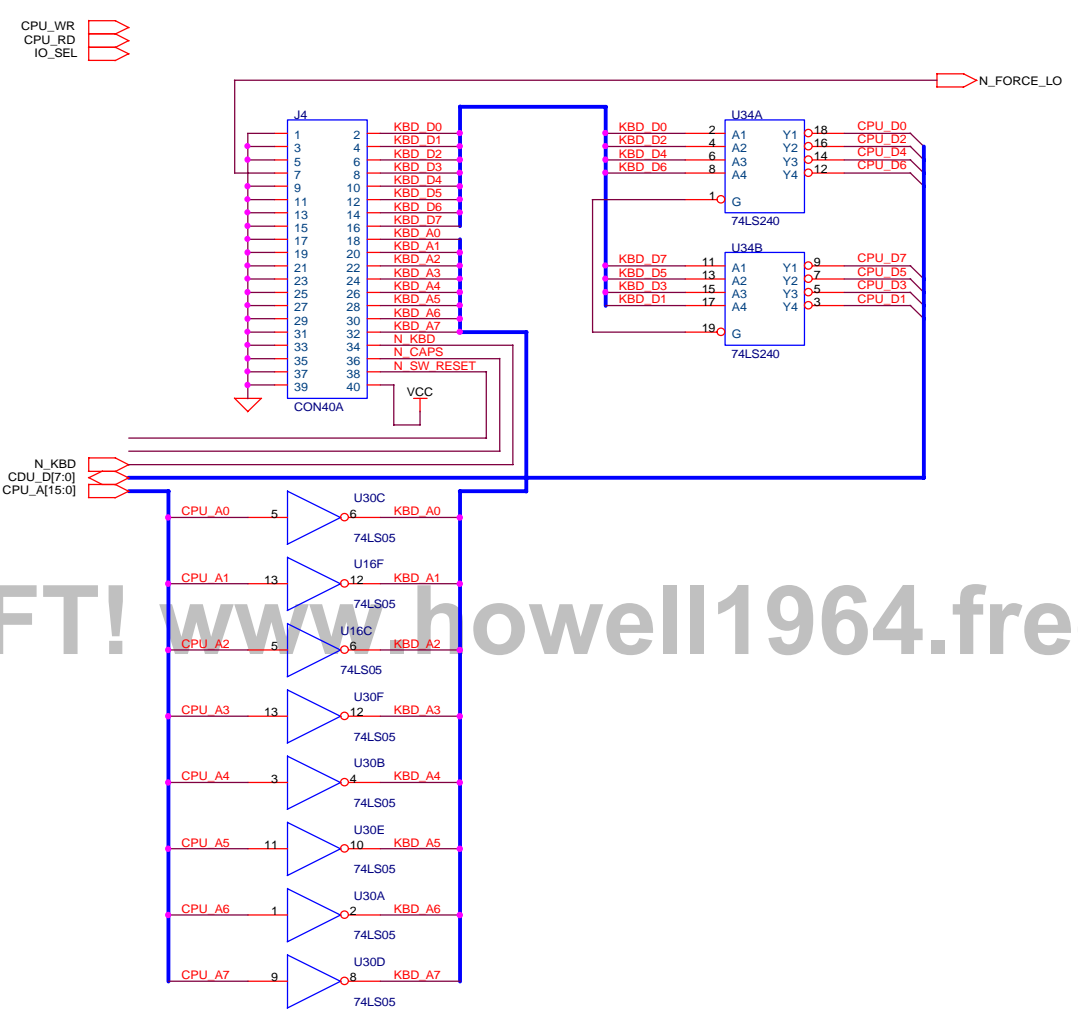


Title		
LNW80 Glue Logic		
Size	Document Number	Rev
A3	K1021	<Rev Code>
Date:	Tuesday, March 23, 2004	Sheet 1 of 1



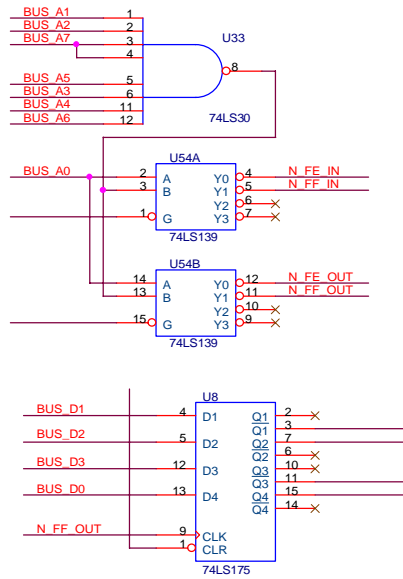
DRAFT! www.howell1994.freemove.co.uk

Title		
LNW80 Wait-state generator		
Size	Document Number	Rev
A3	K1021	<Rev Code>
Date:	Tuesday, March 23, 2004	Sheet 1 of 1



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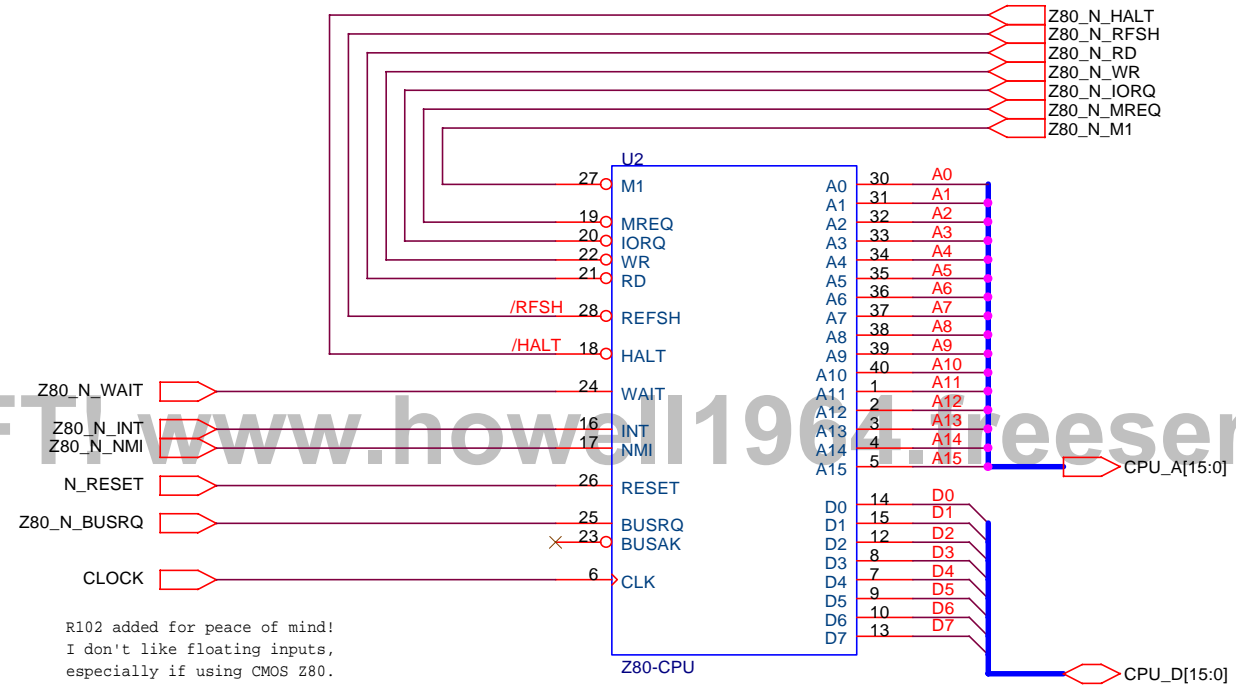
Title			LNW80 Keyboard		
Size	Document Number				Rev
A3	K1021				<RevCode>
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Title		
LNW80 Tape		
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A3	K1021	<RevCode>
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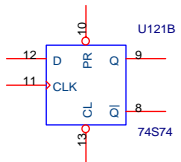
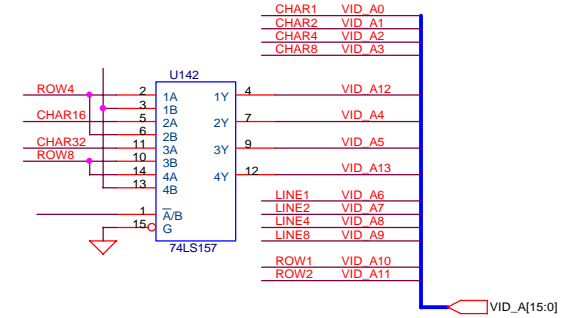
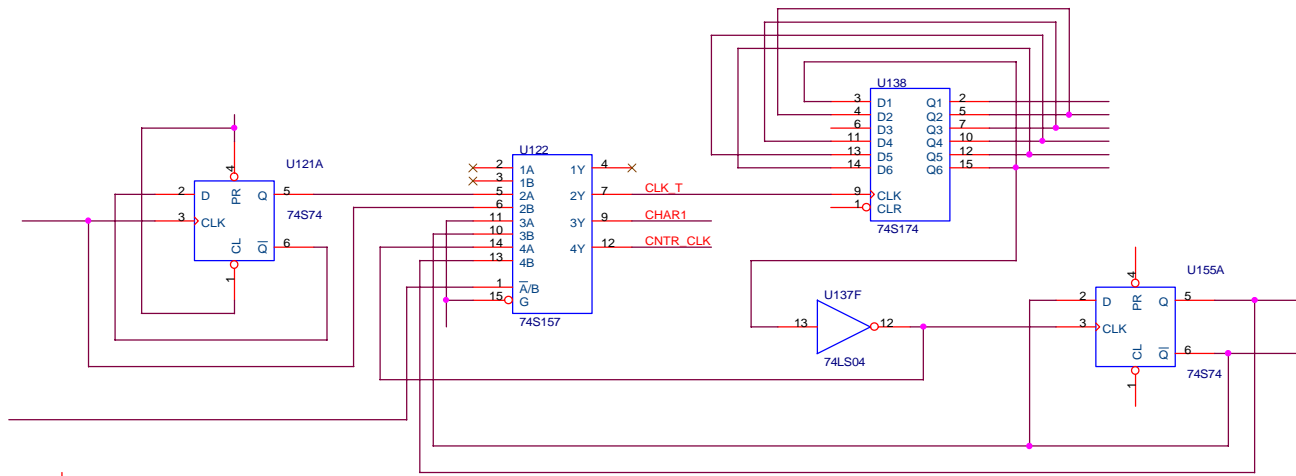


R102 added for peace of mind!
 I don't like floating inputs,
 especially if using CMOS Z80.

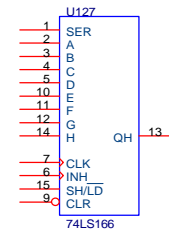
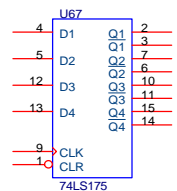
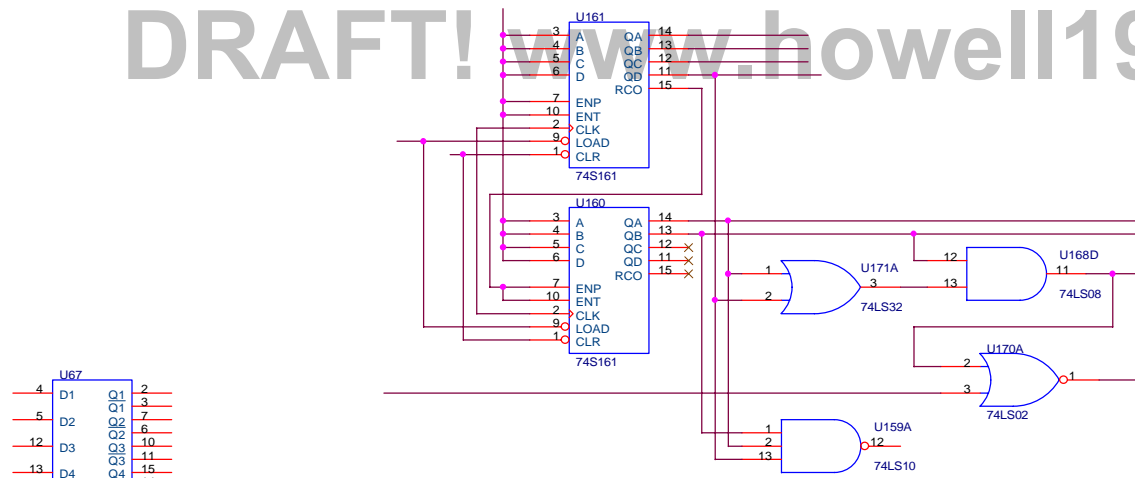
Title		
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Size	Document Number	Rev
A4	<Doc>	<Rev Code>
Date:	Tuesday, March 23, 2004	Sheet 1 of 1

CPU_A[15:0]
CPU_D[15:0]

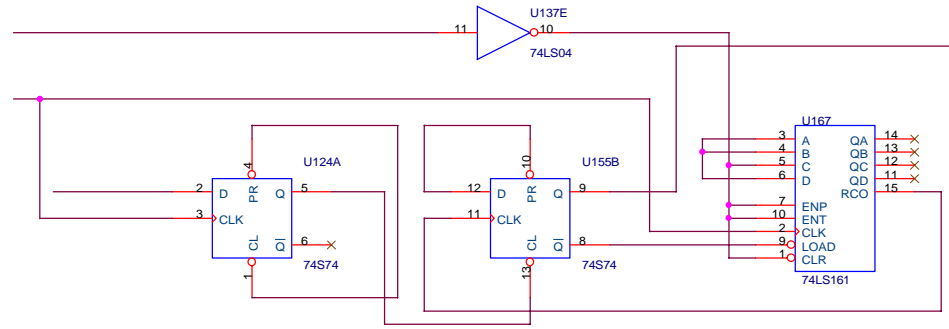
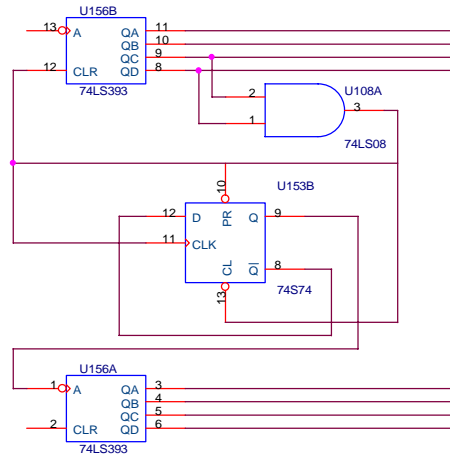
VID_D[15:0]



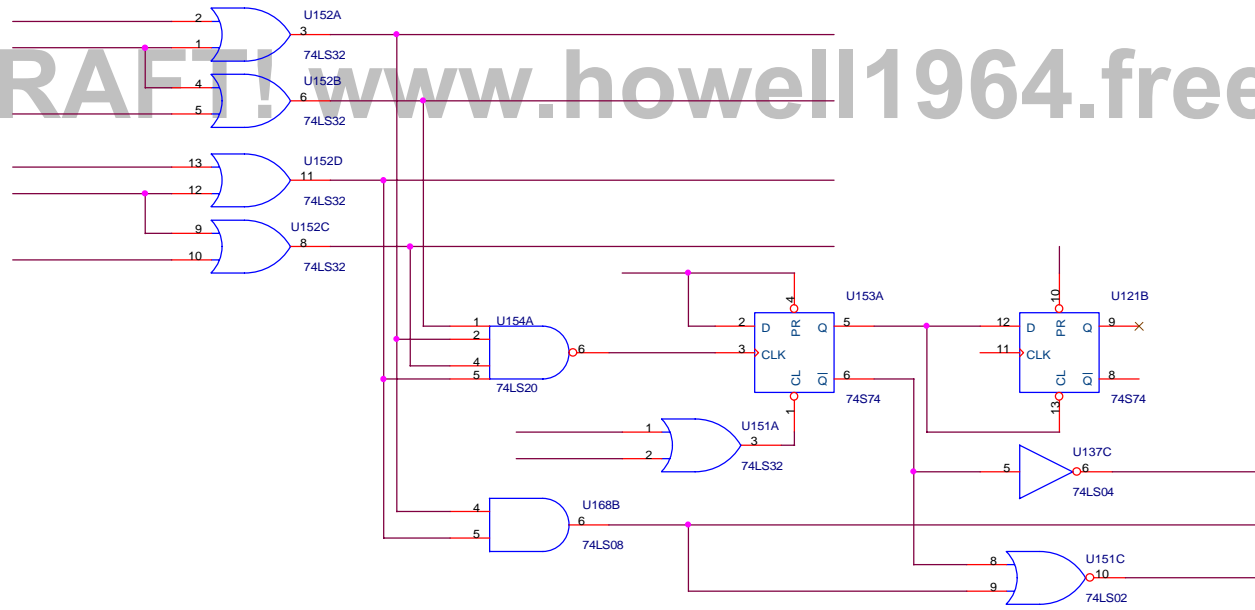
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Date:	Tuesday, March 23, 2004	Sheet 1 of 1

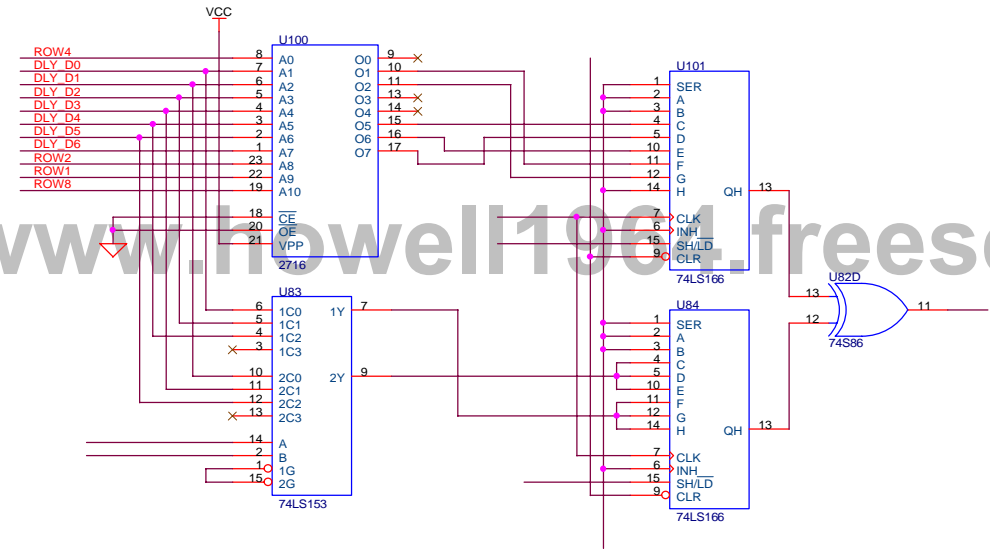


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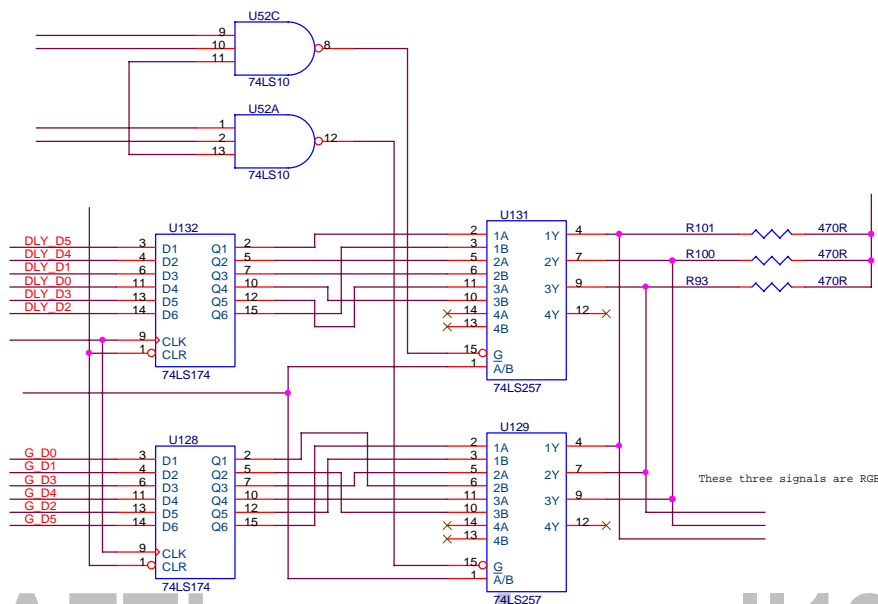


Title		
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Size	Document Number	Rev
A3	<Doc>	<Rev Code>
Date:	Tuesday, March 23, 2004	Sheet 1 of 1

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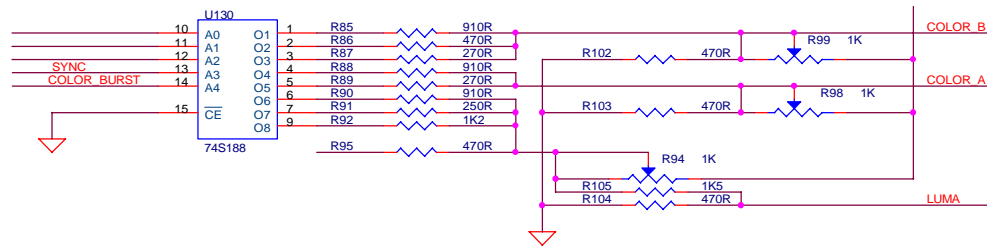


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A3	<Doc>	<Rev Code>
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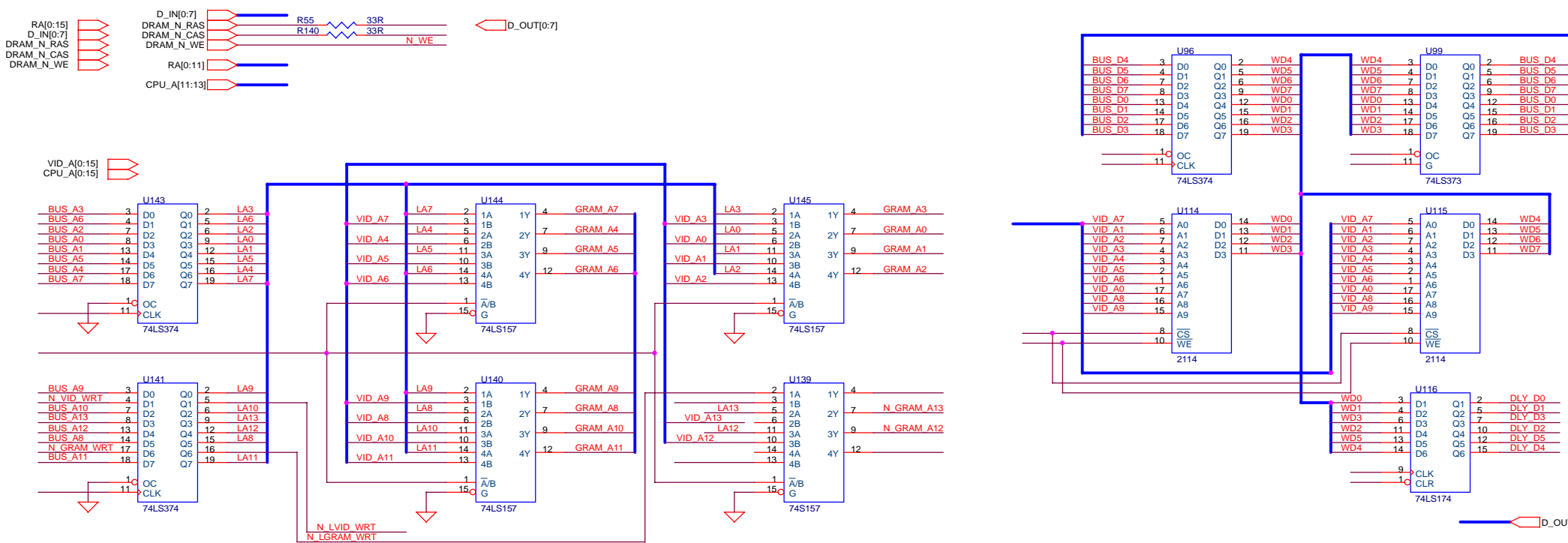
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Title		
LNW80		
Size	Document Number	Rev
A3	K1021	<RevCode>
Date:	Tuesday, March 23, 2004	Sheet 1 of 1

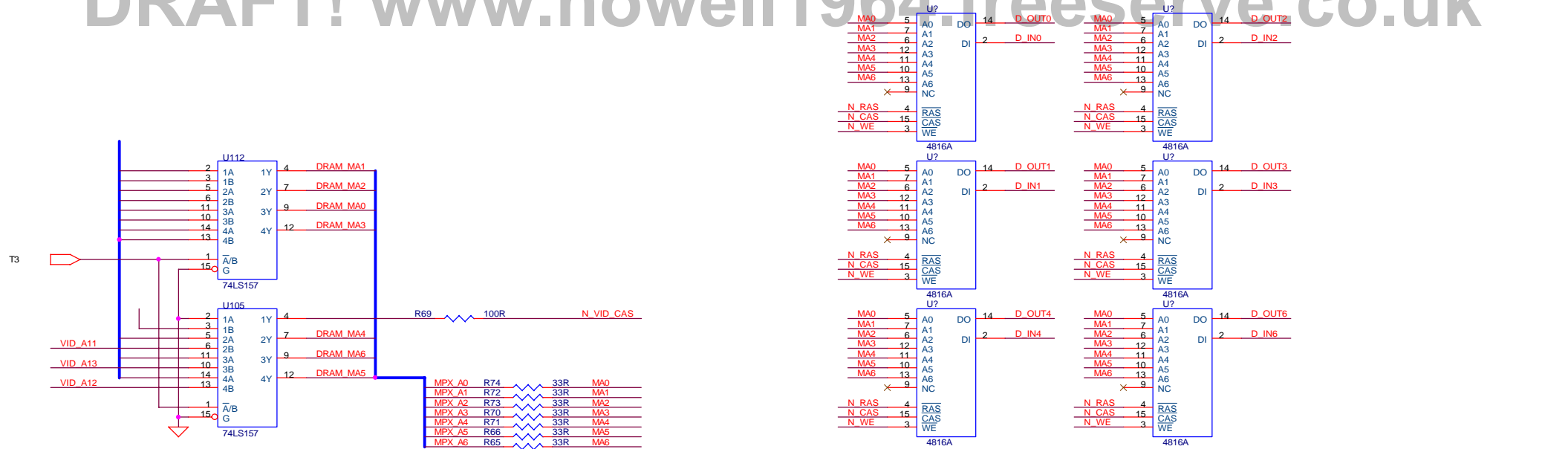


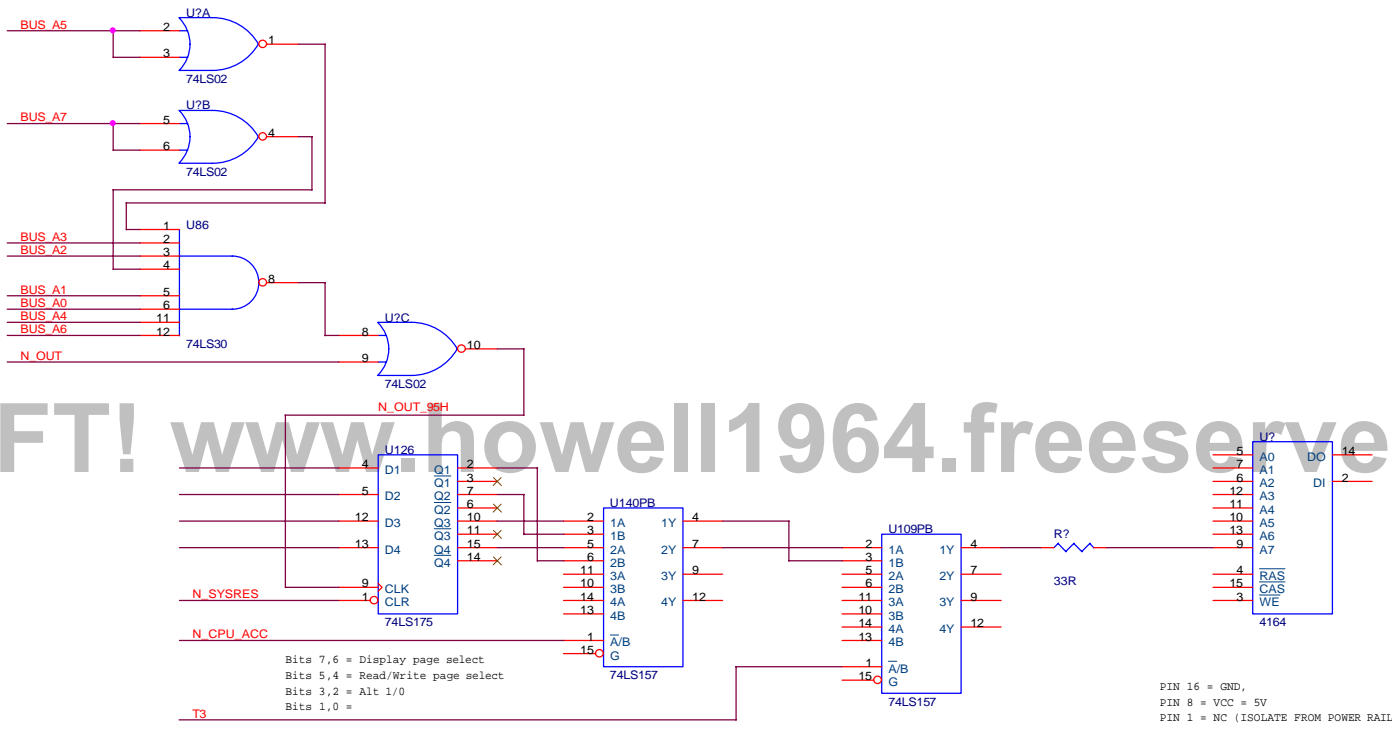
DRAFT! www.howell1964.freemove.co.uk

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Size	Document Number	Rev
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Date:	Tuesday, March 23, 2004	Sheet 1 of 1



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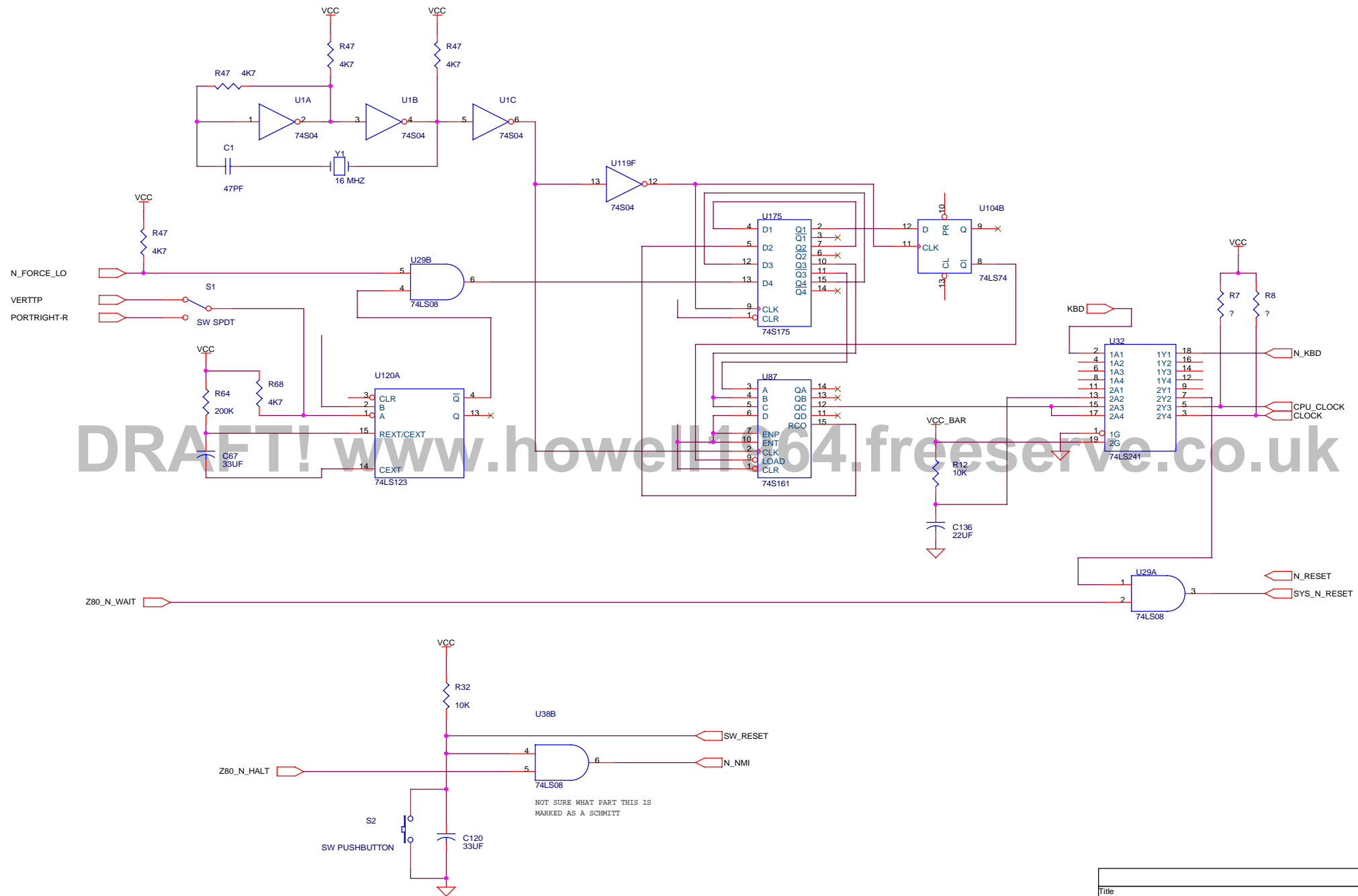
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This modification allows the graphics DRAM chips to be upgraded to 4164 chips, by adding multiplexing for the extra address line A7

Title		
Modifying the graphics to use 64K DRAM chips		
Size	Document Number	Rev
A3	<Doc>	0.0
Date:	Sunday, March 21, 2004	Sheet 1 of 1

N_MASTER_RESET
 POWER_FAIL_IN
 N_WATCHDOG_IN
 N_HALT

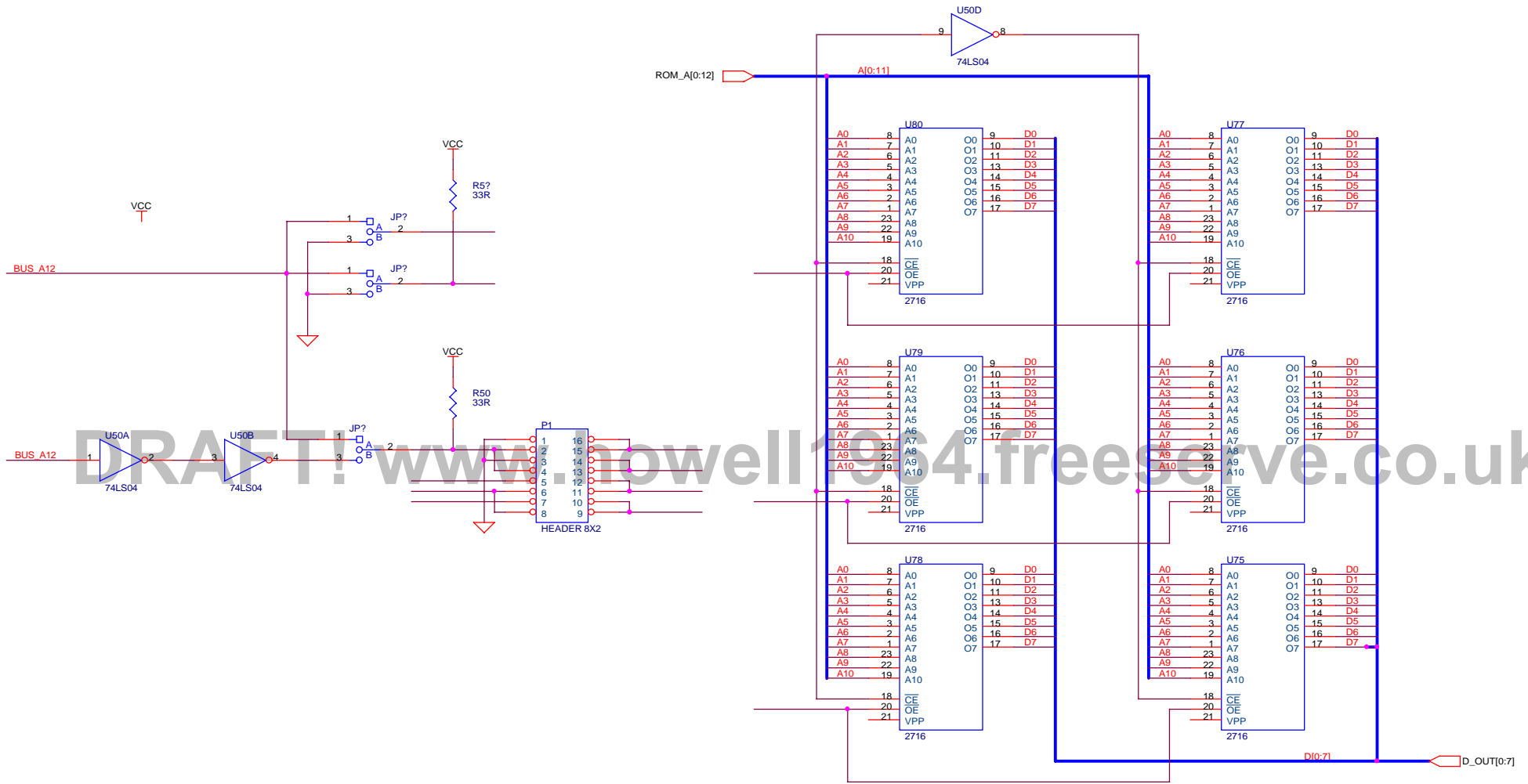
N_WATCHDOG_OUT
 N_POWER_FAIL_OUT



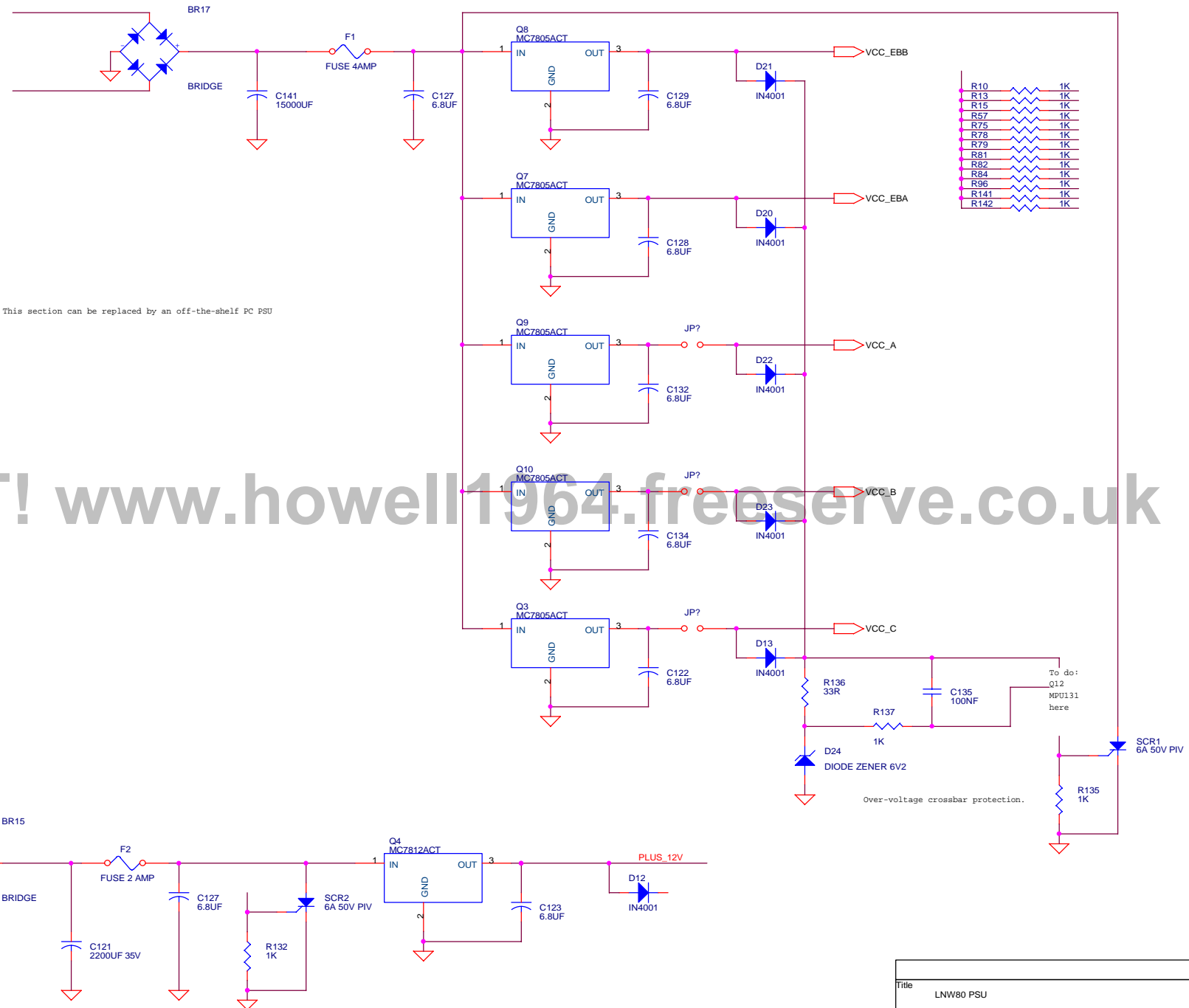
DRAFT! www.howell164.freemove.co.uk

Title		
LNW80 Reset and Clock		
Size	Document Number	Rev
A3	K1021	<RevCode>
Date:	Tuesday, March 23, 2004	Sheet 1 of 1

N_0XXXH
 N_1XXXH
 N_2XXXH



Title		
LNW80 ROM		
Size	Document Number	Rev
A3	K1021	<Rev Code>
Date:	Tuesday, March 23, 2004	Sheet 1 of 1



This section can be replaced by an off-the-shelf PC PSU

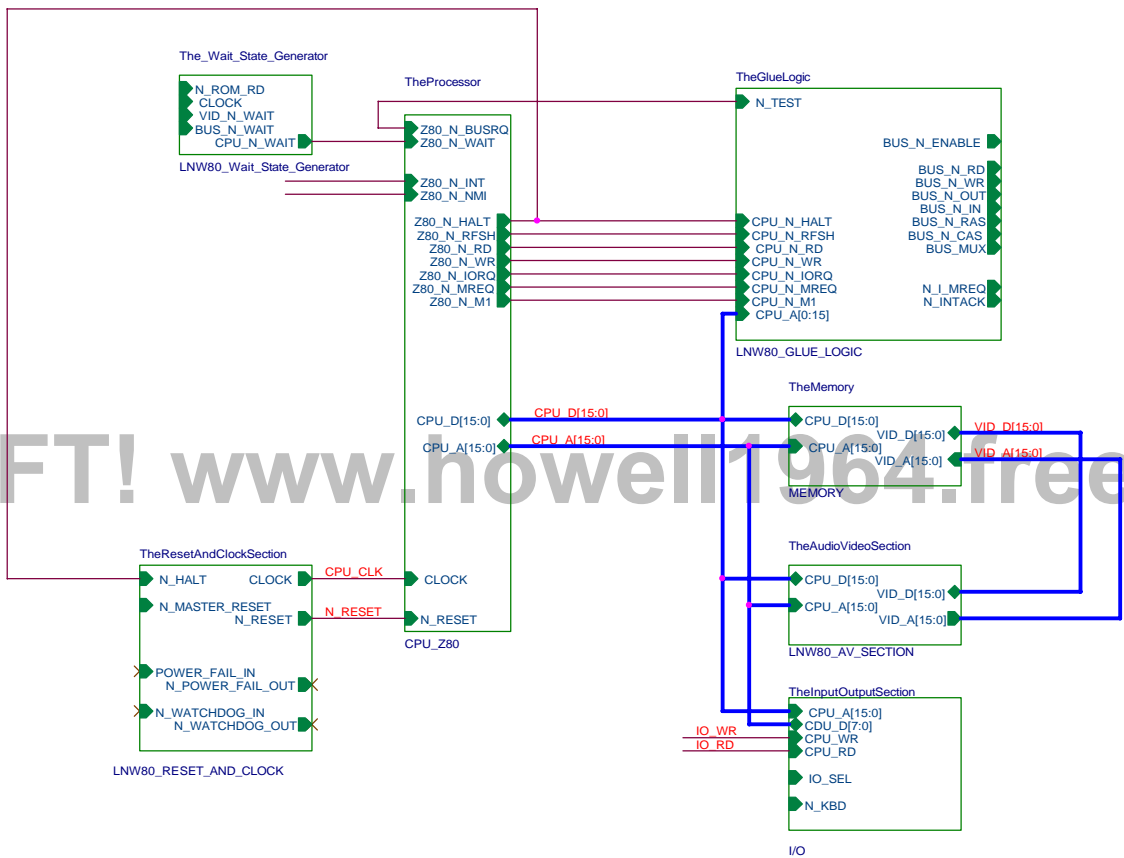
- R10 1K
- R13 1K
- R15 1K
- R57 1K
- R75 1K
- R78 1K
- R79 1K
- R81 1K
- R82 1K
- R84 1K
- R96 1K
- R141 1K
- R142 1K

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Over-voltage crossbar protection.

Title		
LNW80 PSU		
Size	Document Number	Rev
A3	K1021	<Rev Code>
Date:	Tuesday, March 23, 2004	Sheet 1 of 1

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This page contains the common features of cloned machines.
 They will all have:
 Glue, CPU, Memory, AudioVisual output,
 PS/2 Keyboard serial input to scan-code converter,
 and an I/O section.

All micros require some form of
 keyboard and visual display.

Title		<Title>
Size	Document Number	Rev
A3	<Doc>	<Rev Code>
Date:	Tuesday, March 23, 2004	Sheet 1 of 1