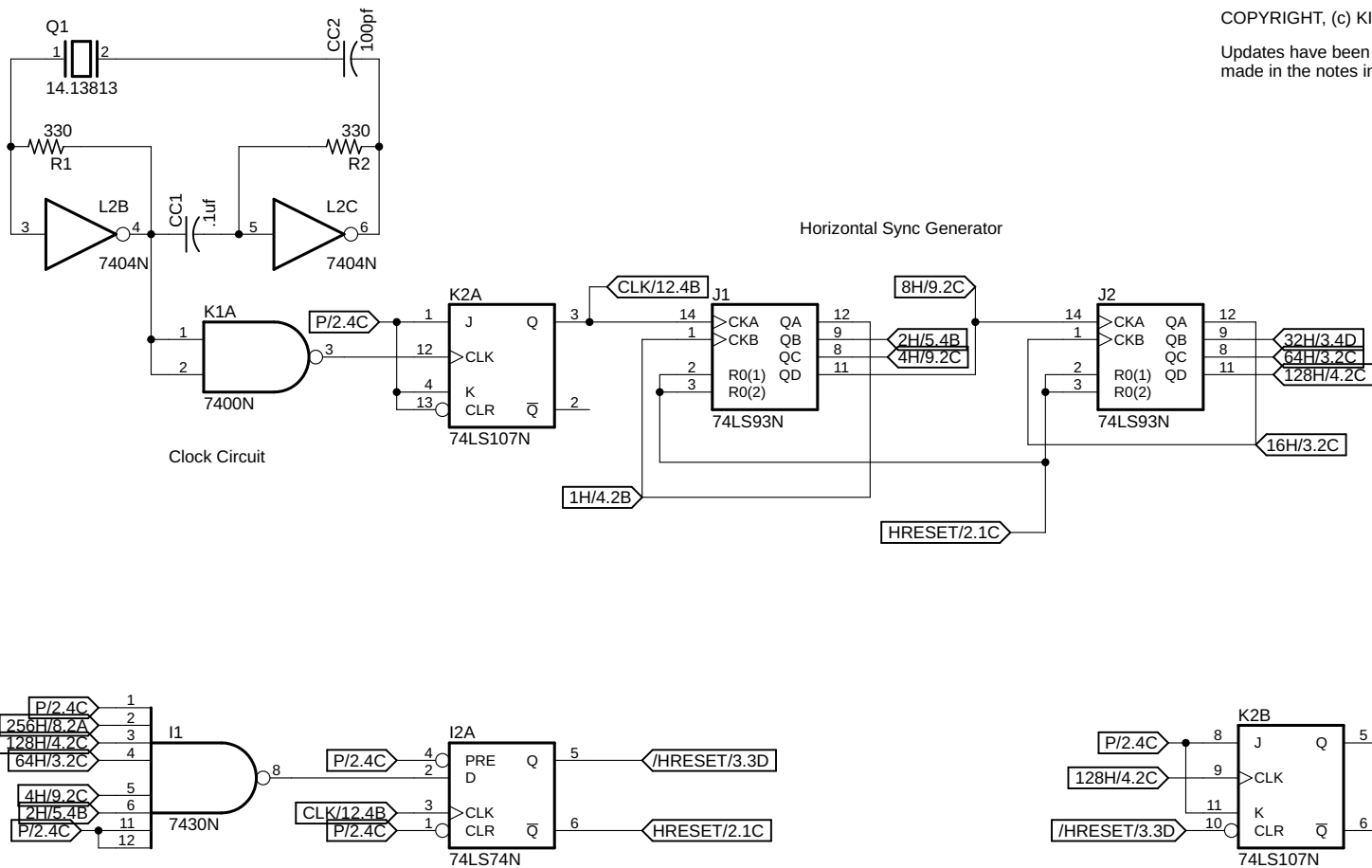




NOTES:

Designed by Alexander K. Haley, KINCAID ARCADE

Diodes are represented with a "DD"

Capacitors are represented with a "CC"

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Updates have been made to fix small mistakes I have made in the notes in the schematic.

At first glance, these may look messy like RAMTEK schematics, but these signal names actually have meanings, and they are to make it easier to split up into multiple sheets.

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1

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6

A

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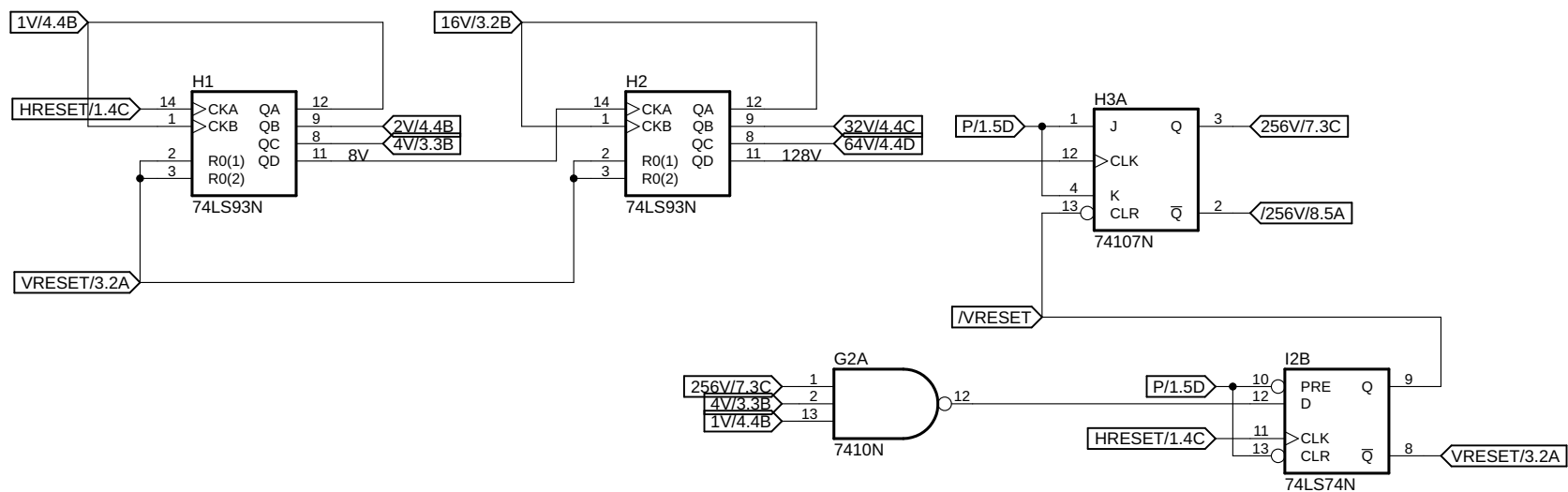
C

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E



Vertical Sync Generator

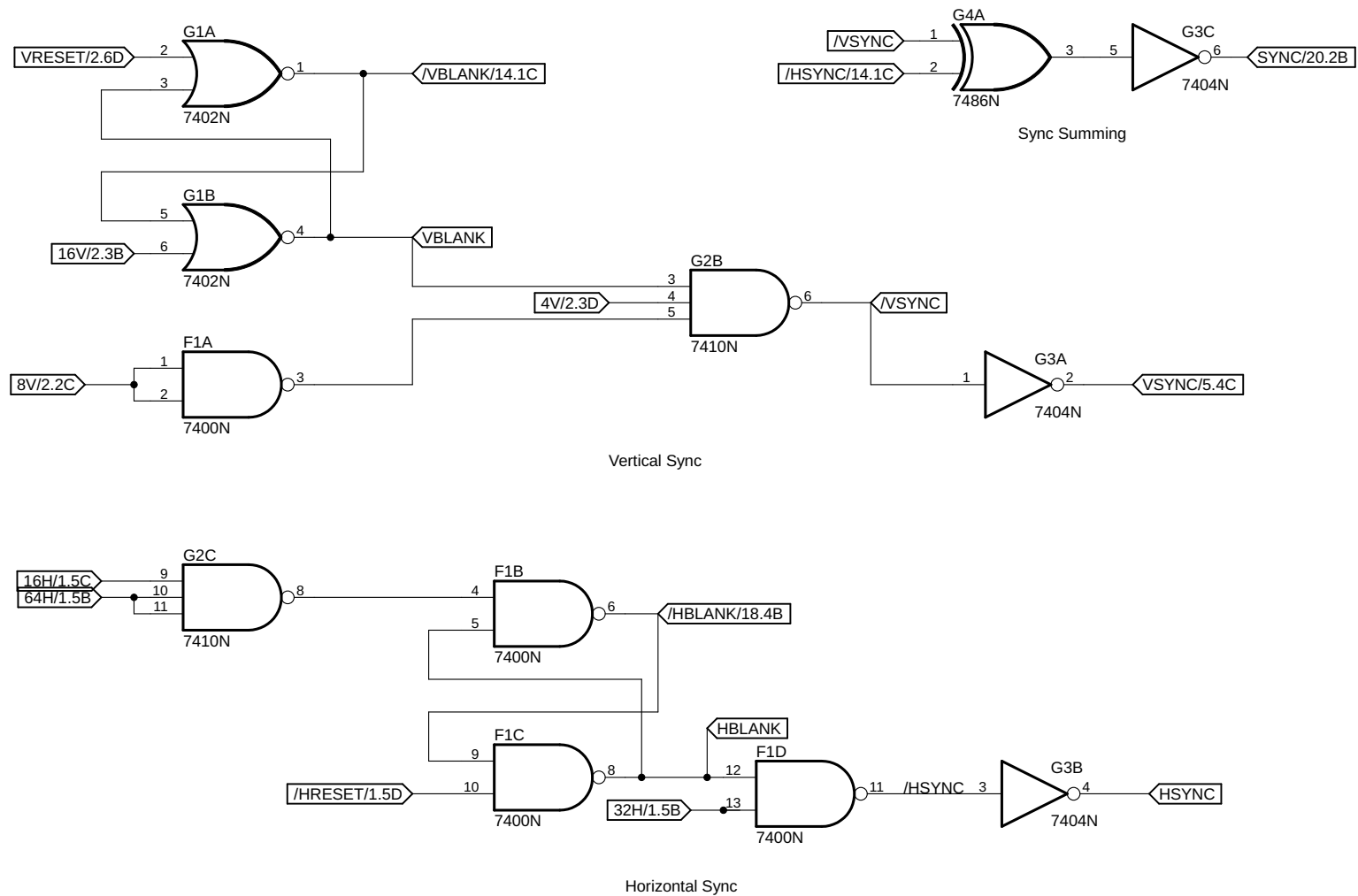
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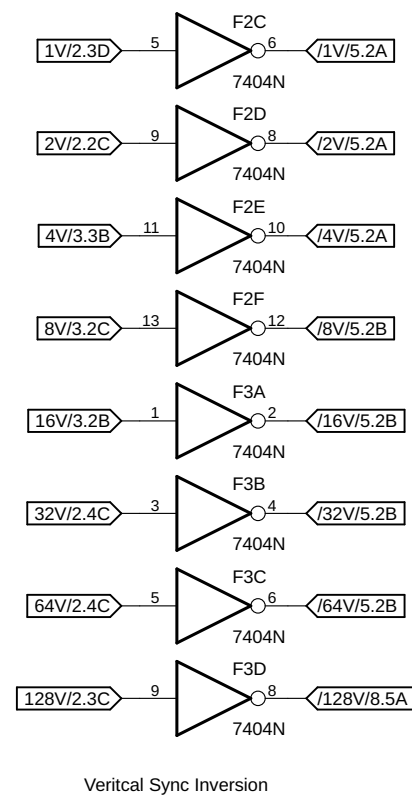
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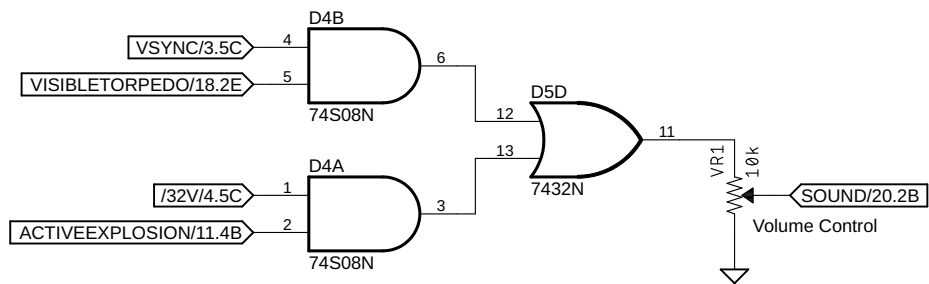
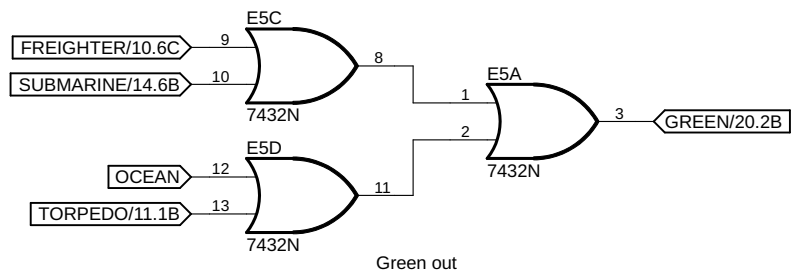
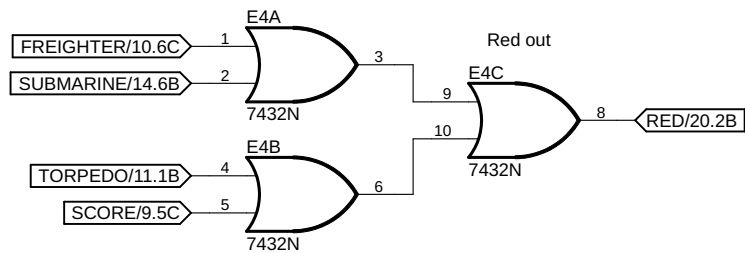
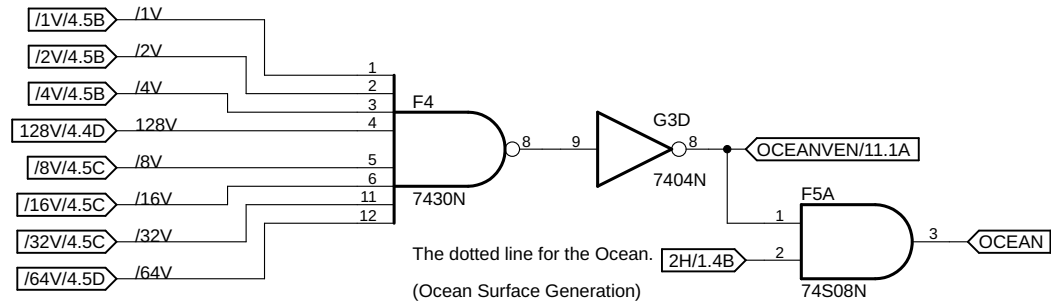
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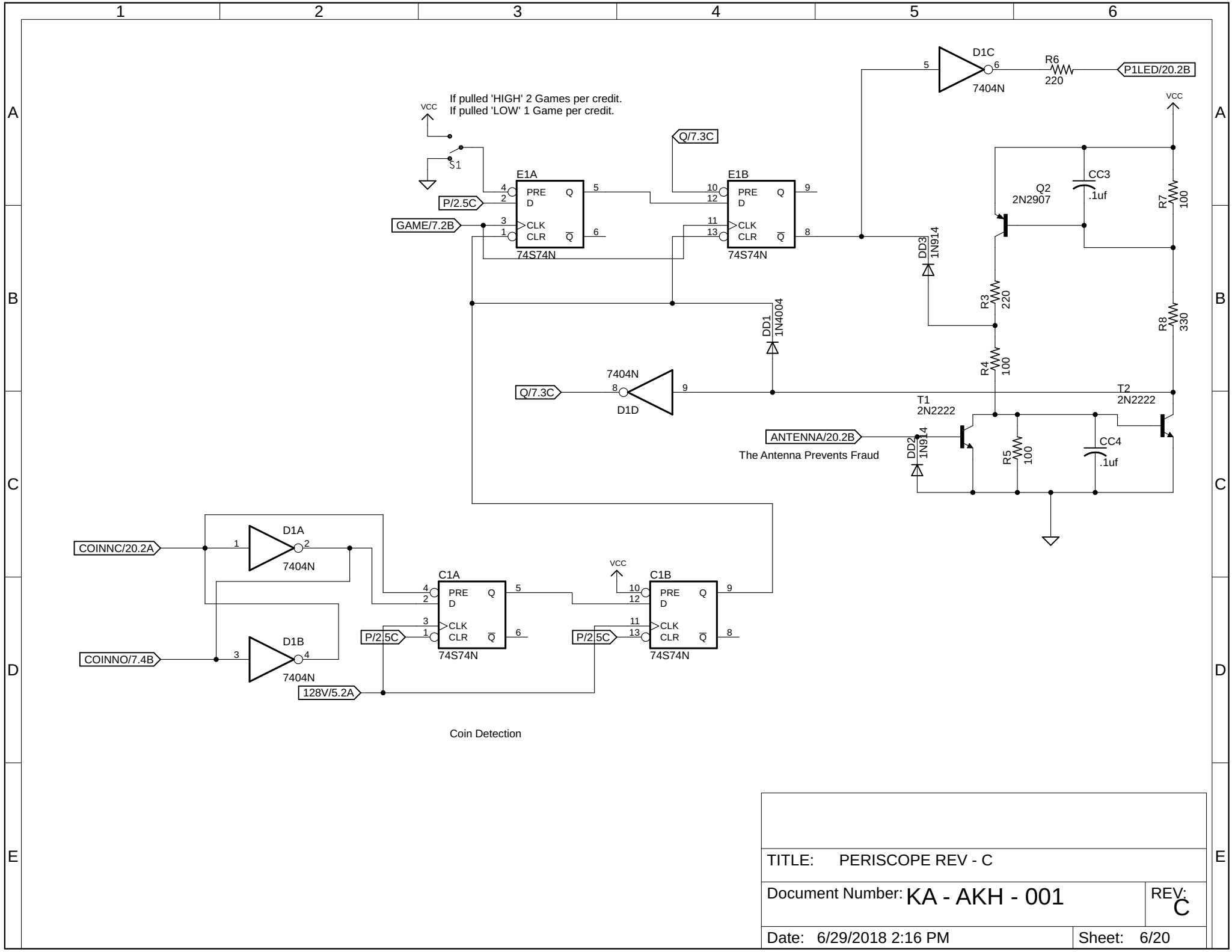
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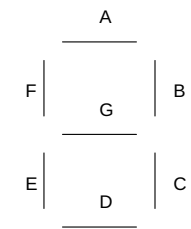
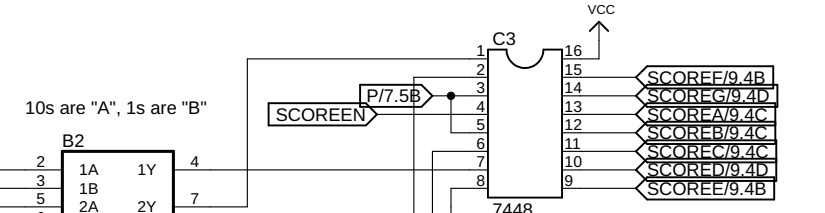
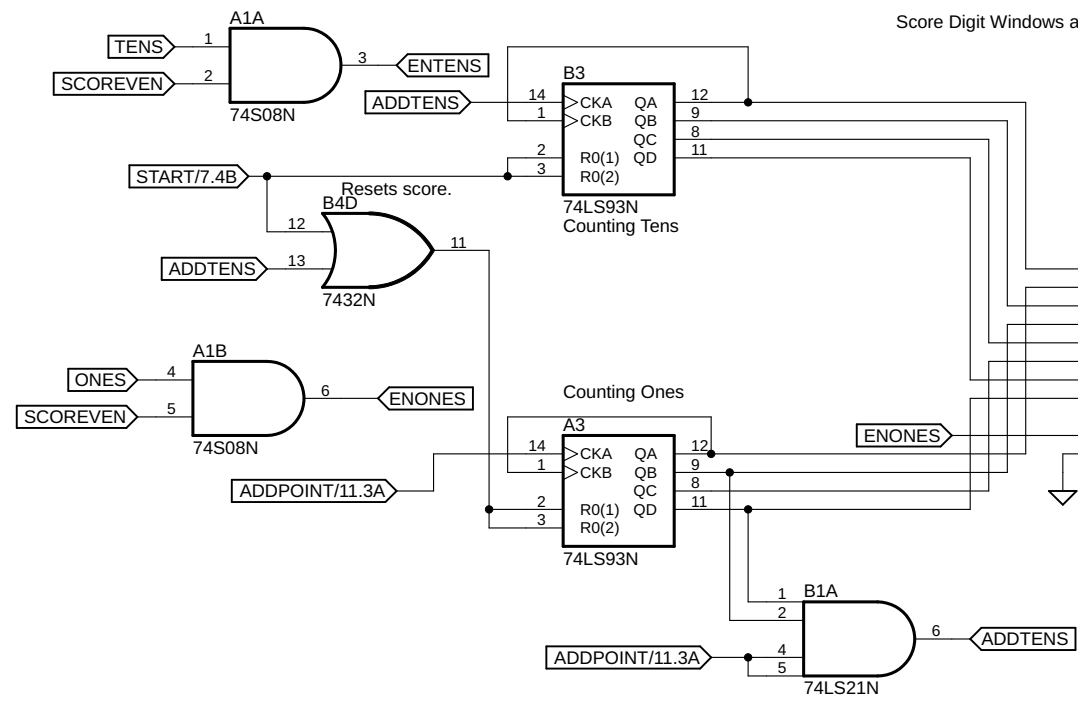
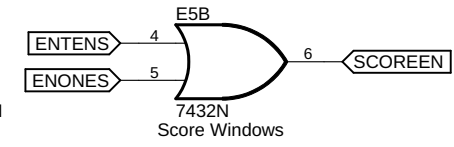
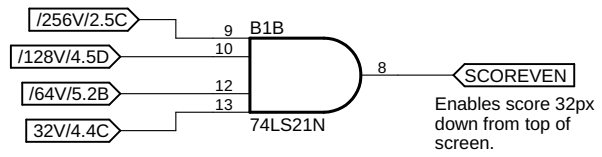
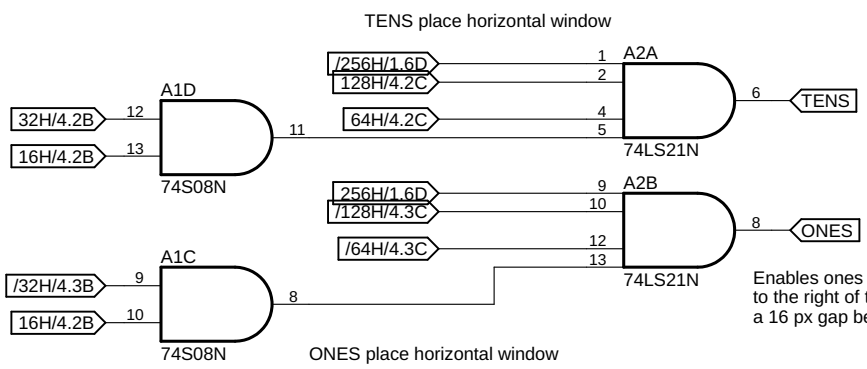
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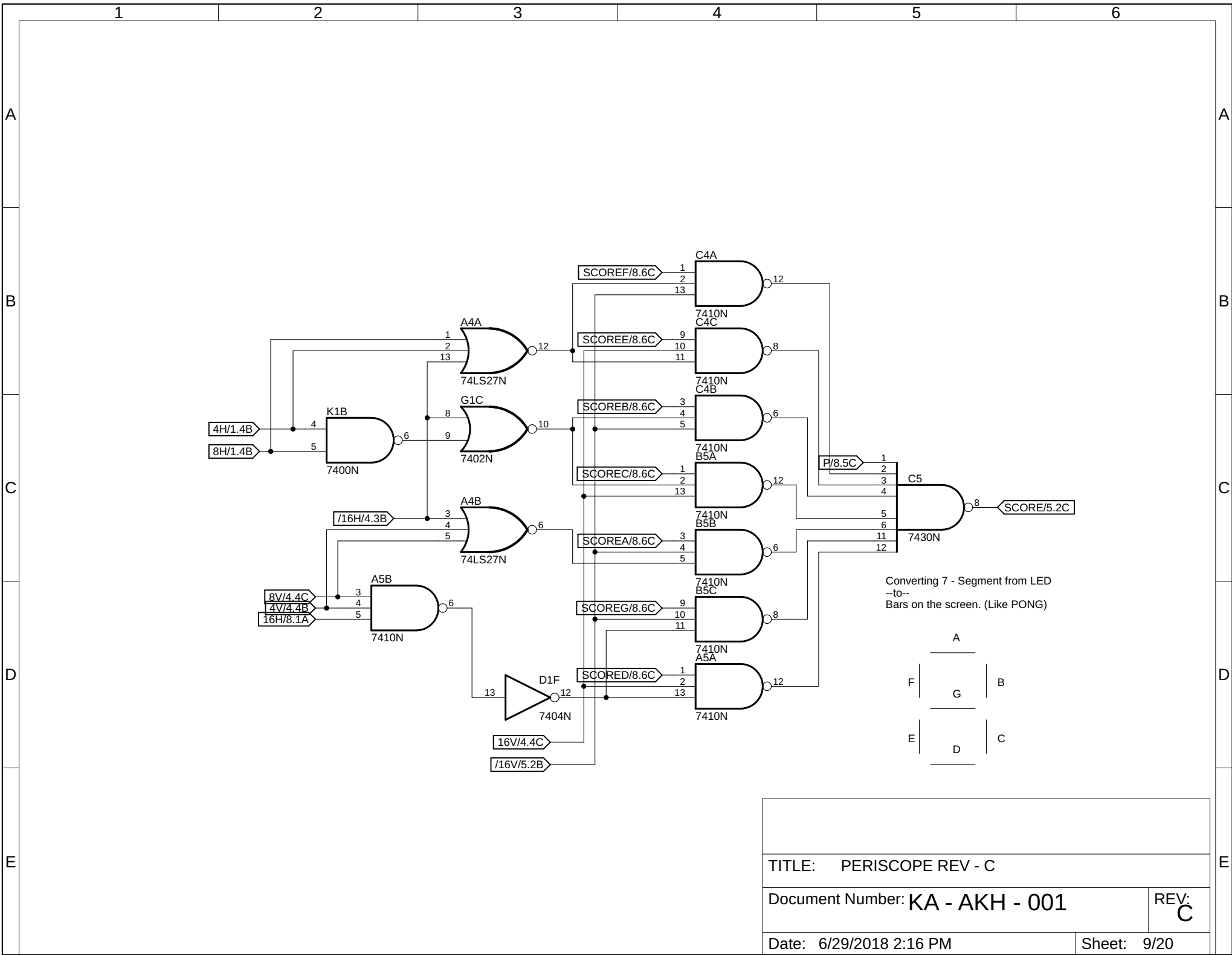
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1 2 3 4 5 6





A

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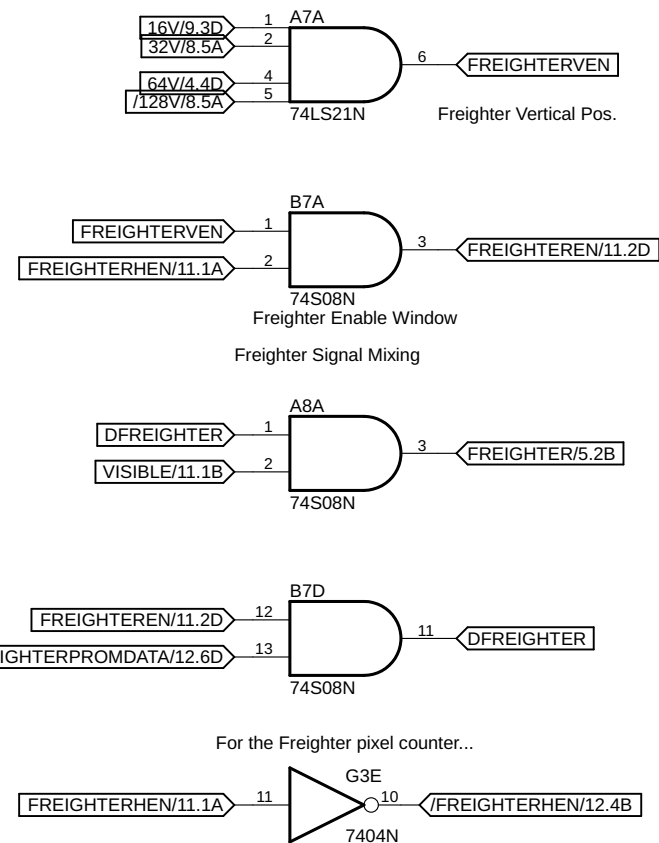
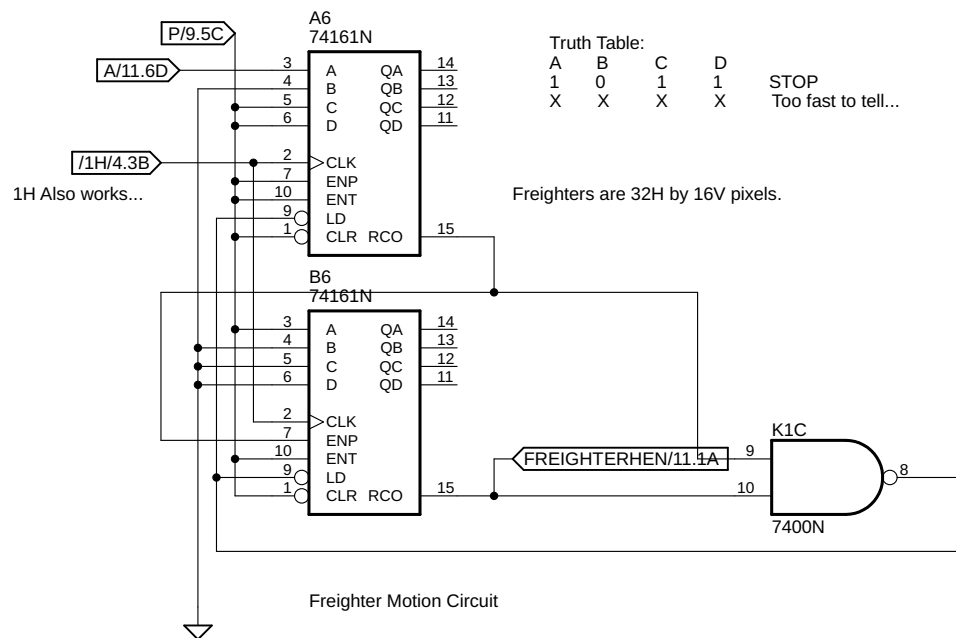
C

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E



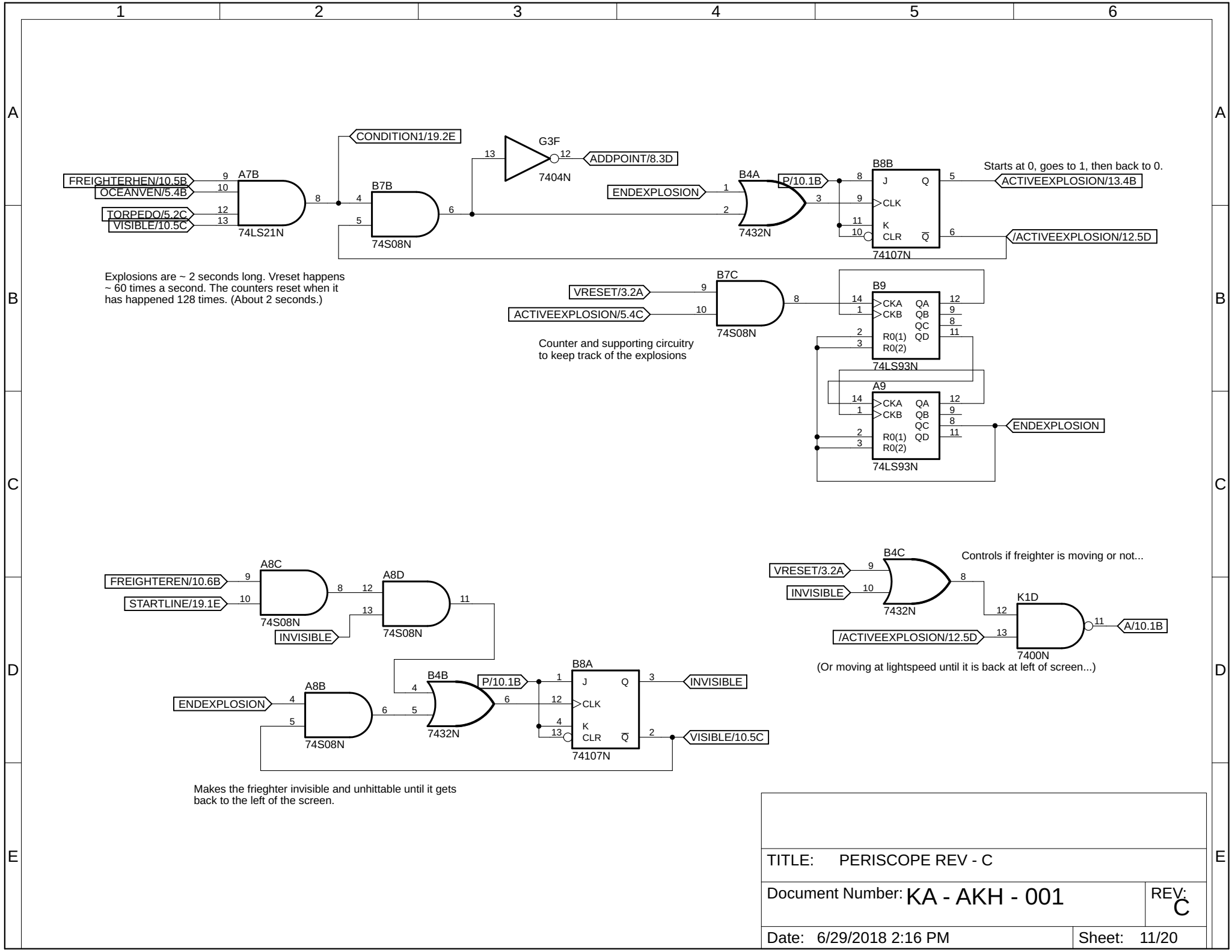
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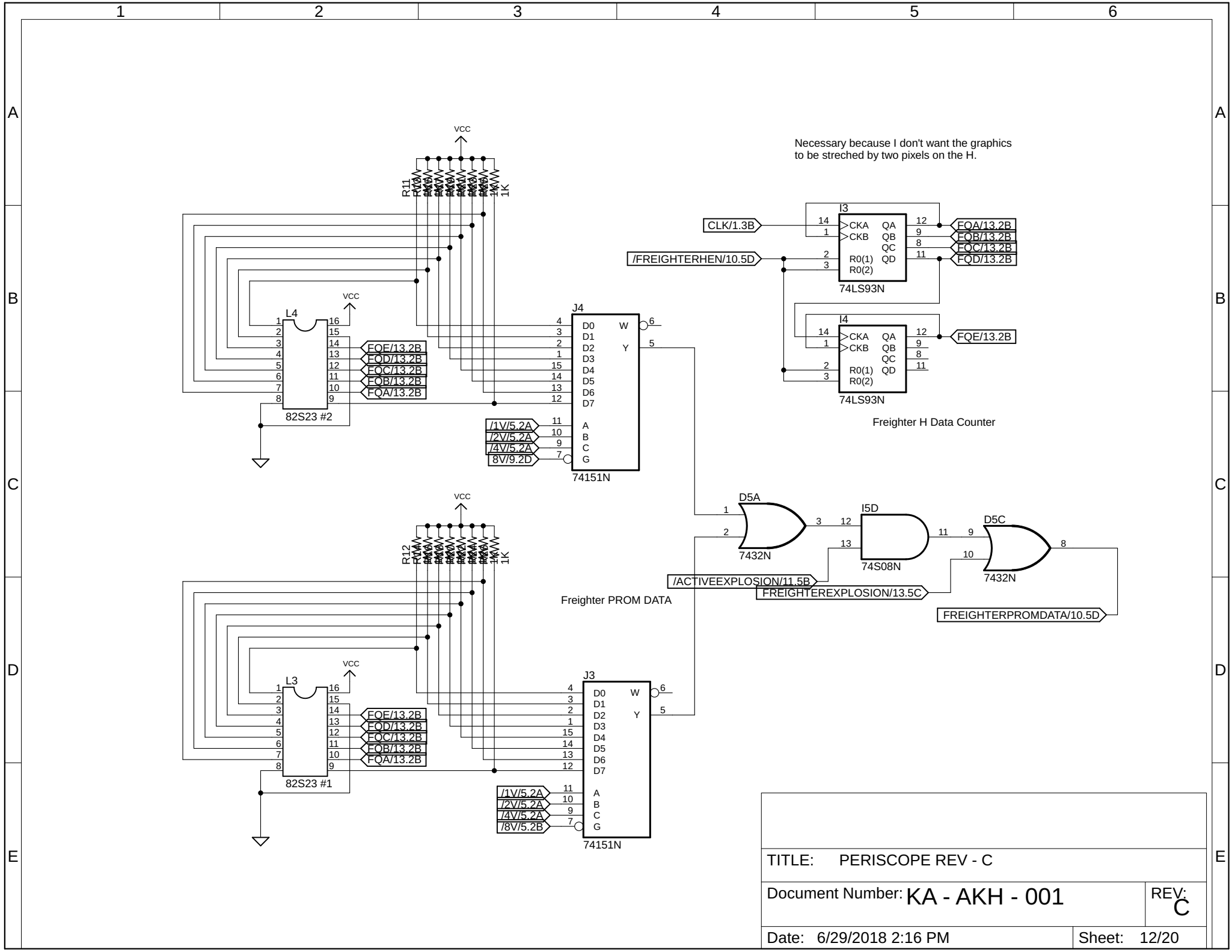
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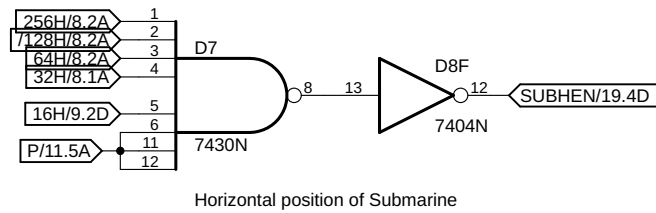
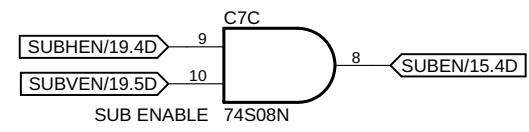
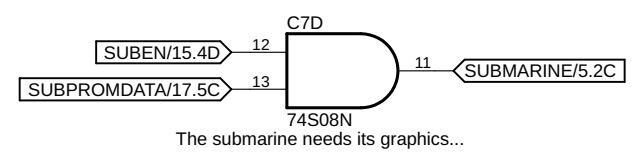
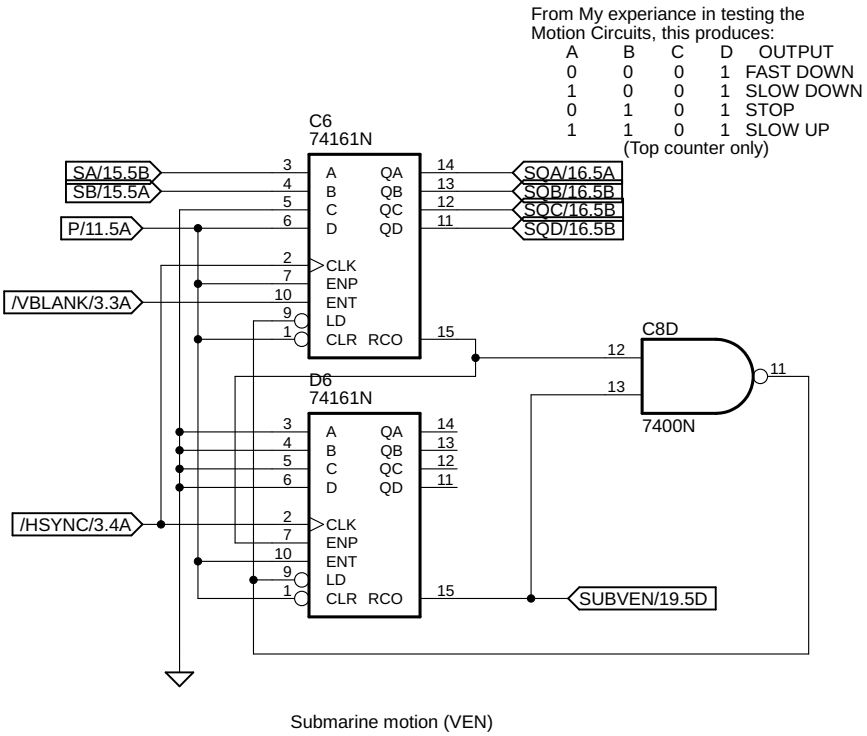
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A

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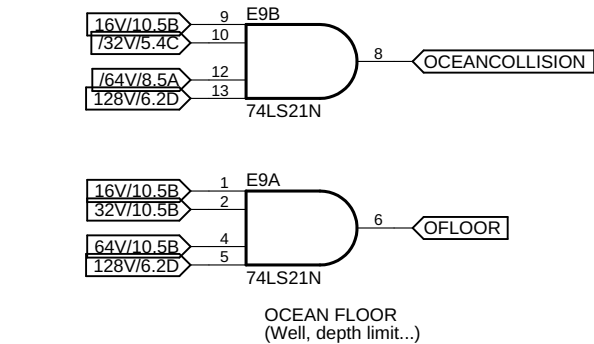
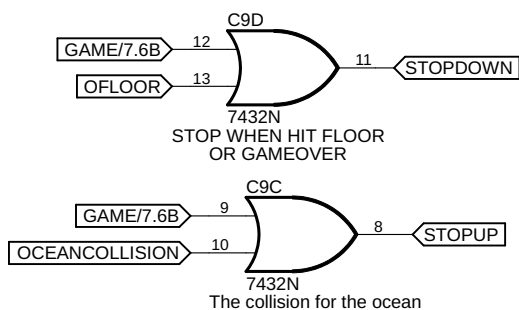
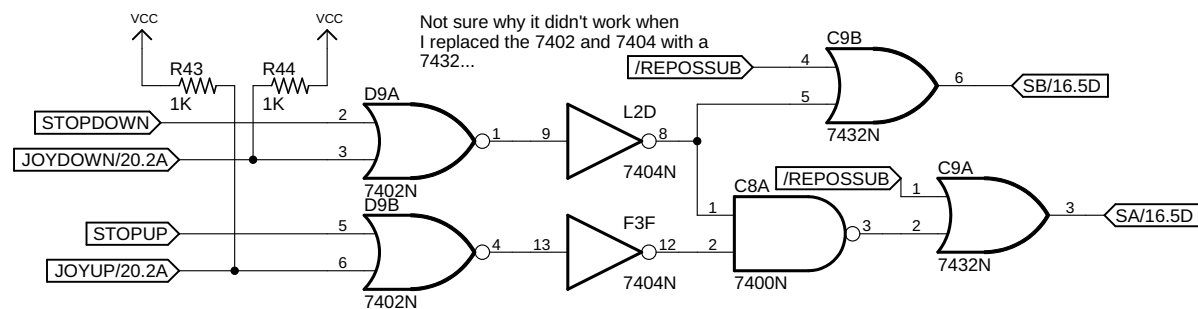
A

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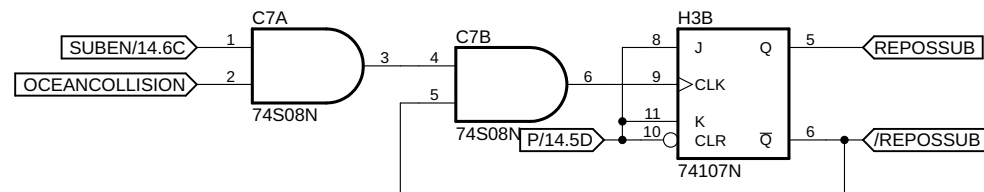


Move the submarine from the air to the water before screen shows game. (Because of video converter)

Only necessary because on power on, it starts at the top. I need to get it to the bottom before a game starts...

Basically a 1-bit memory cell that says Is the sub under water? If 0, THEN MOVE IT UNDER WATER!! If 1, then maybe physics actually is realistic here...

-OR- If 0, I DIDN'T KNOW SUBS COULD FLY! If 1, then nothing to see here...



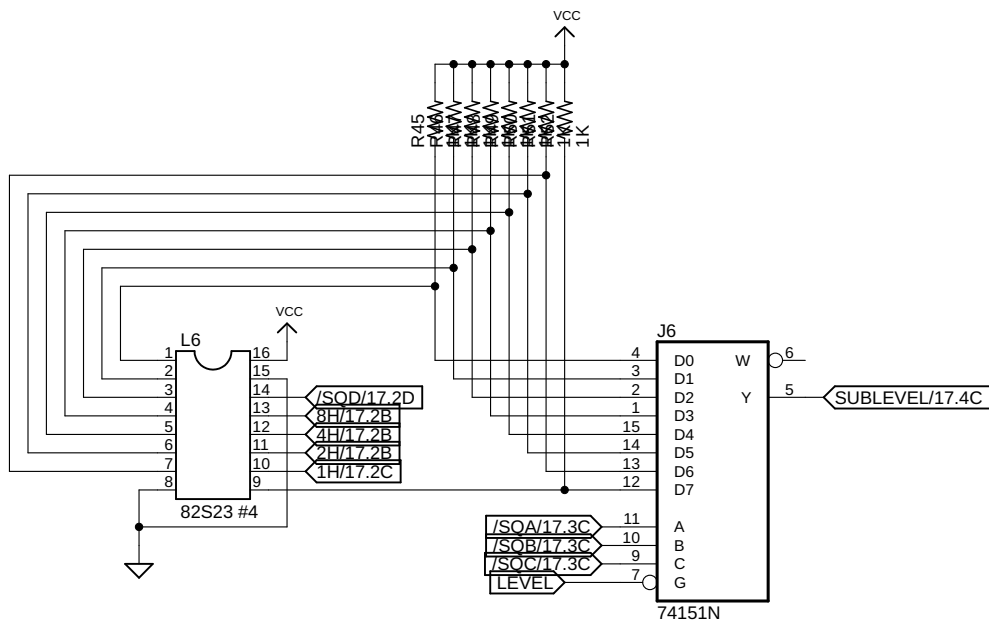
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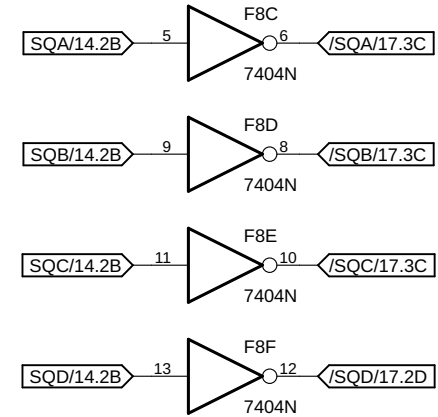
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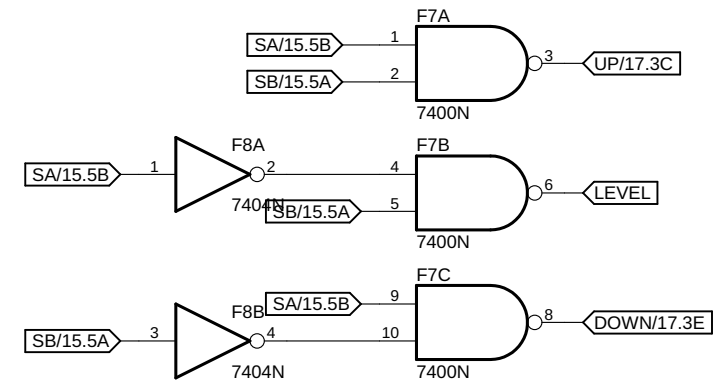
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This is only necessary because of how the PROMS are coded...



Which graphic will be shown at any given time...



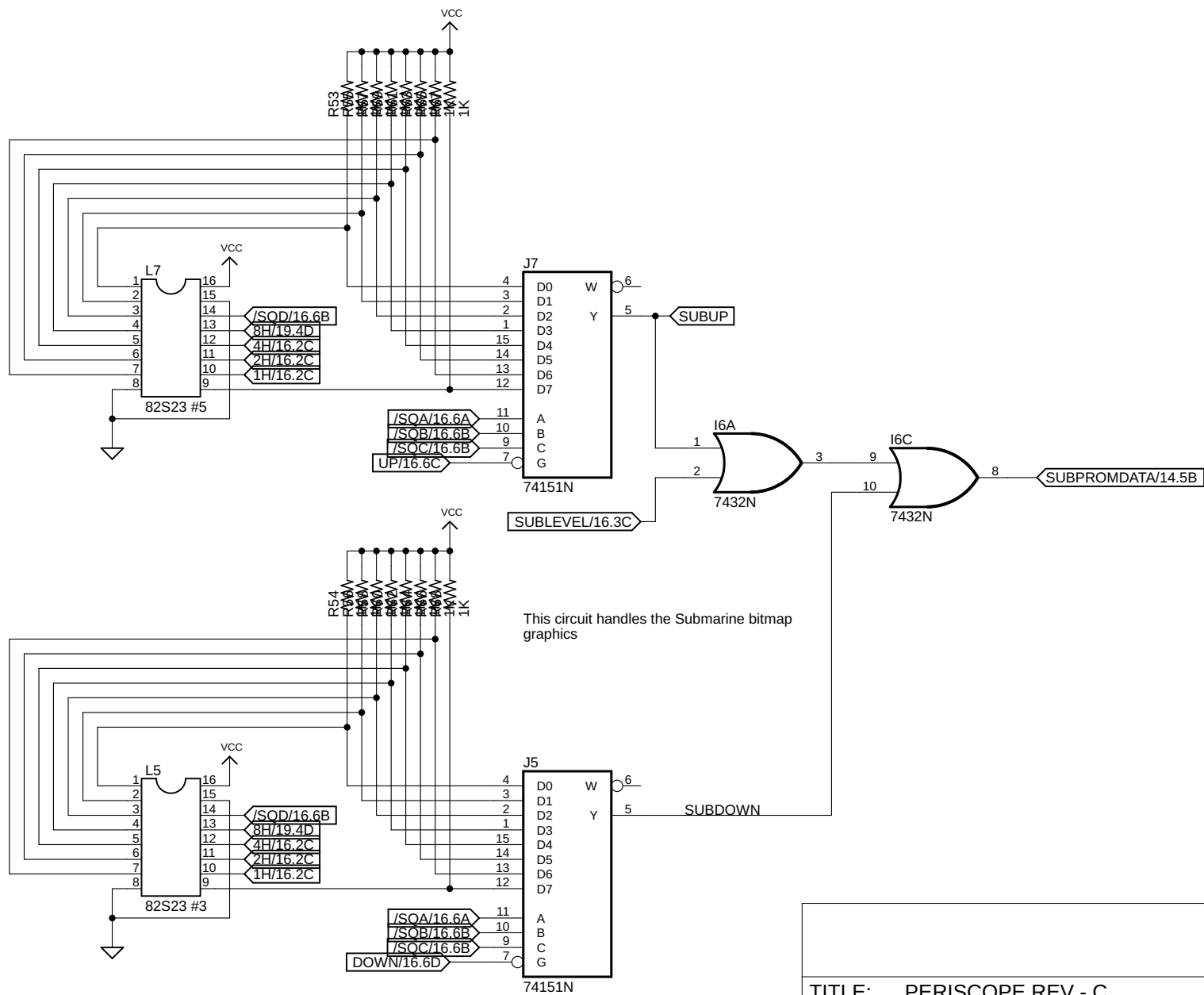
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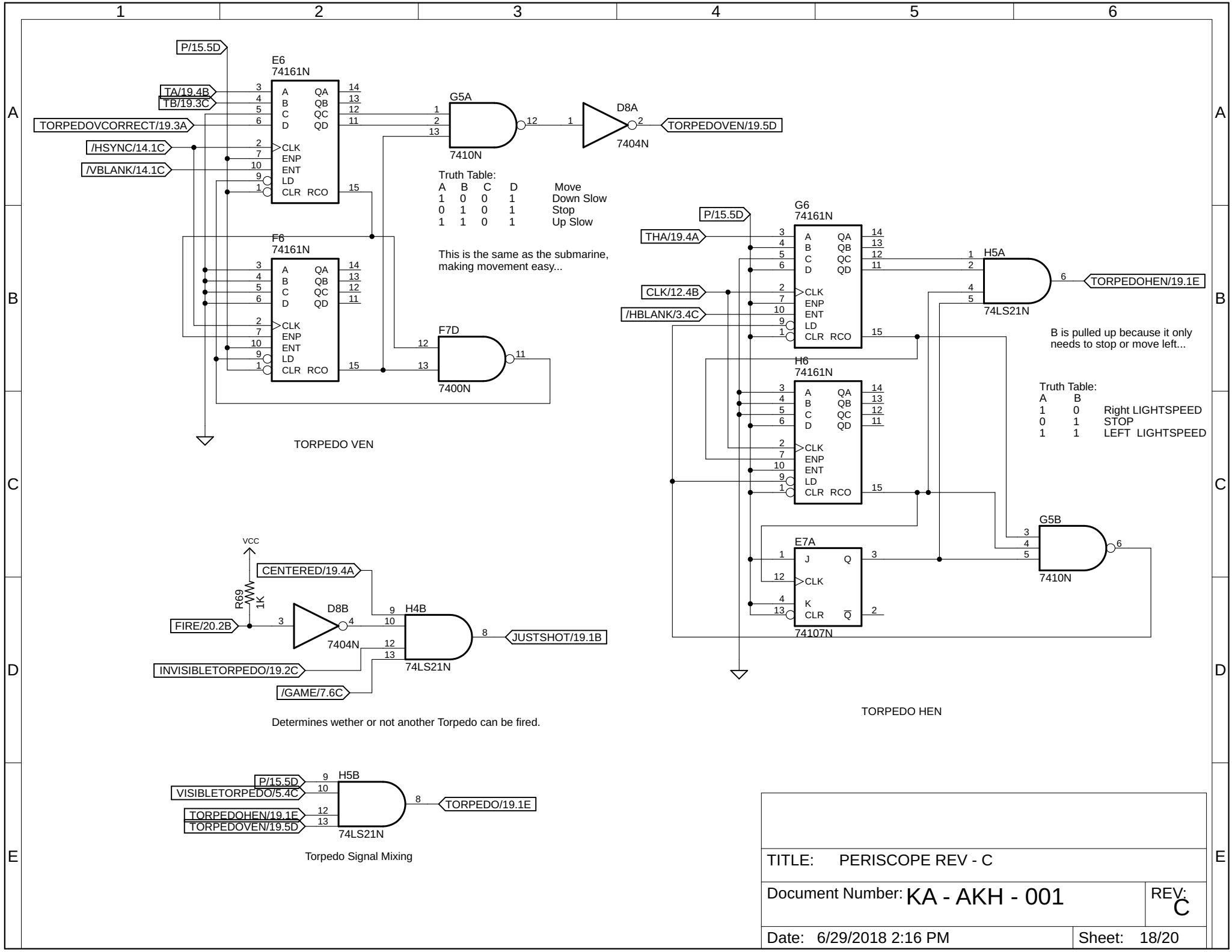
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1

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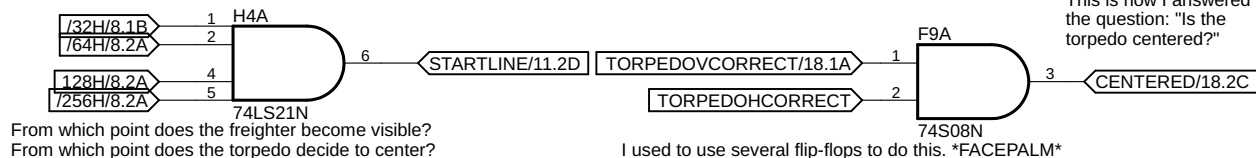
3

4

5

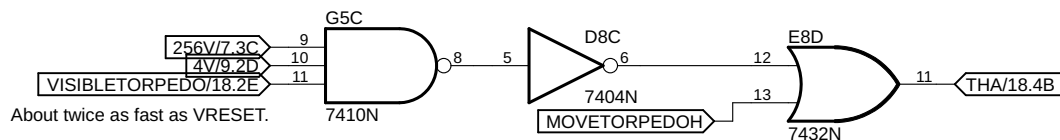
6

A



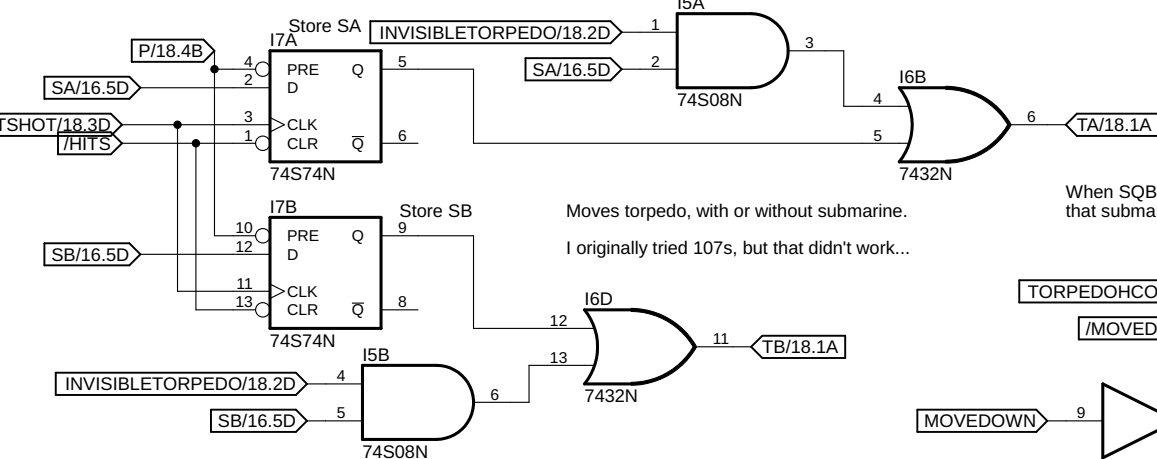
A

B

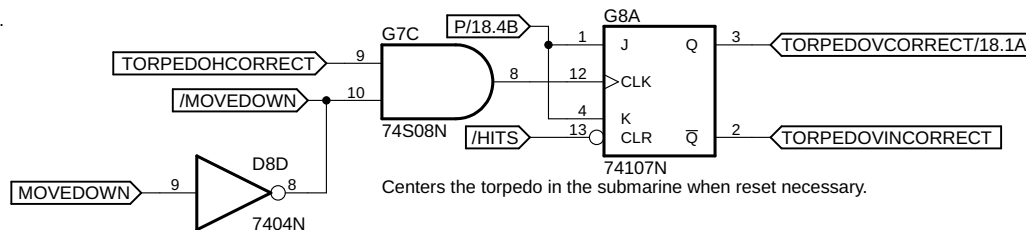


B

C

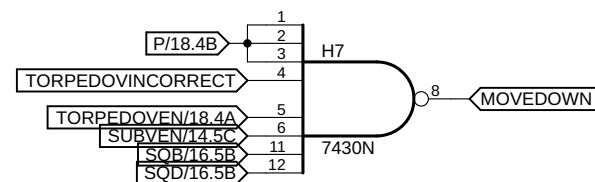
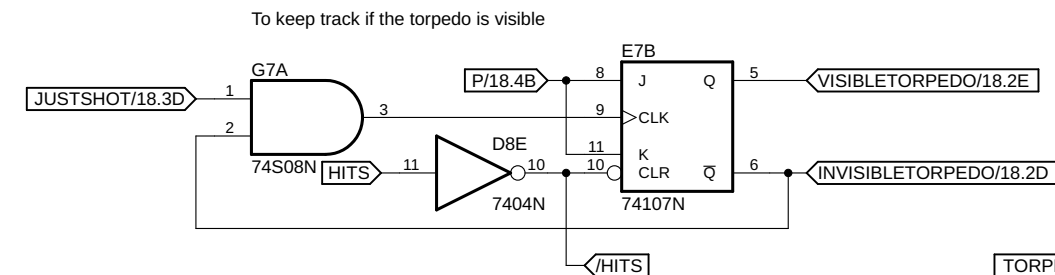


When SQB and SQD and SUBVEN is high, it indicates that submarine line 10 is active. Perfect for centering.



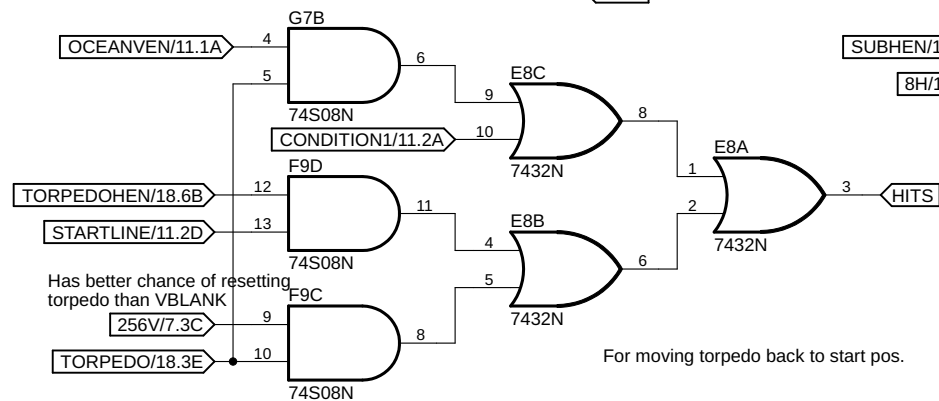
C

D



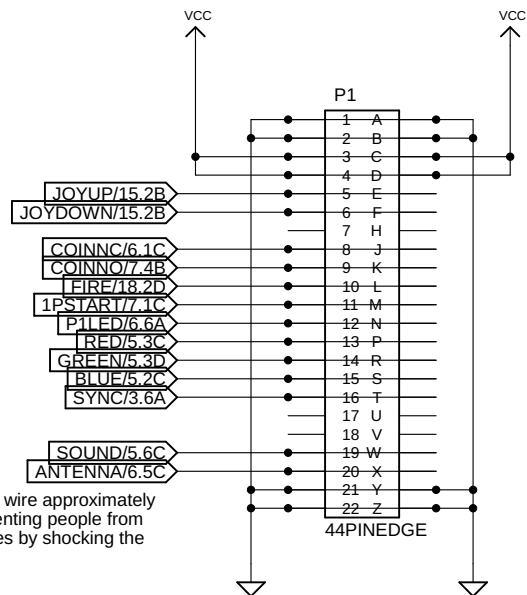
D

E

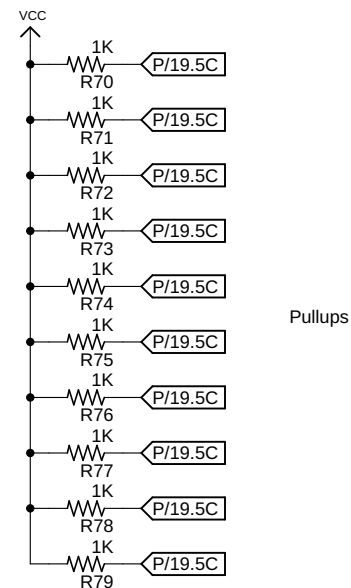
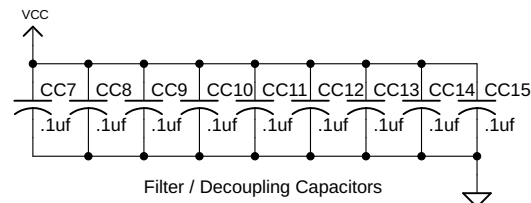


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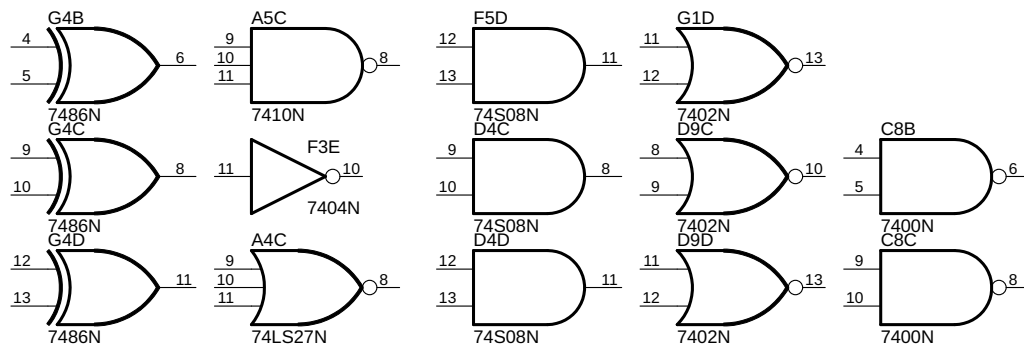
E



The Antenna is a wire approximately 1 foot long, preventing people from getting free games by shocking the cabinet.



Extra Gates:



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