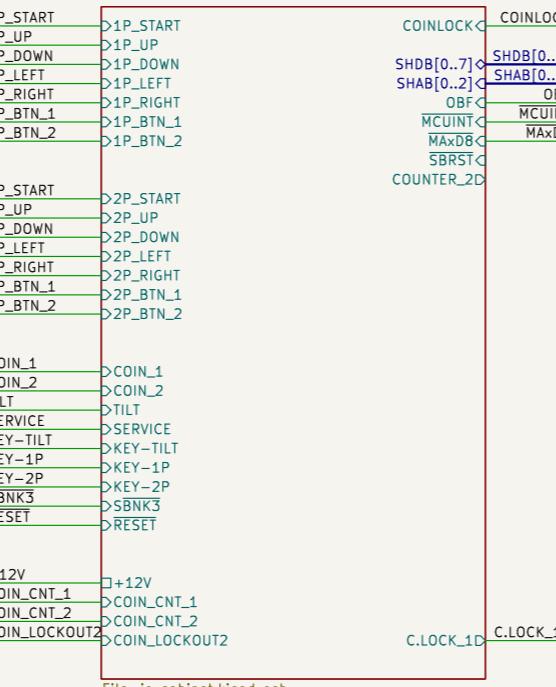
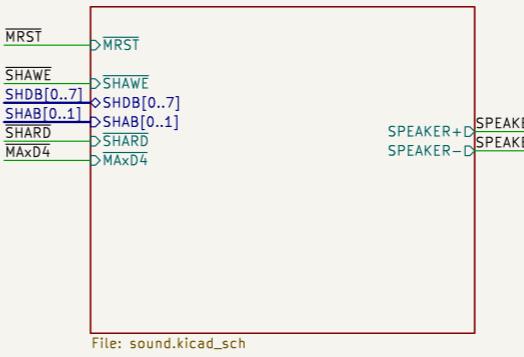


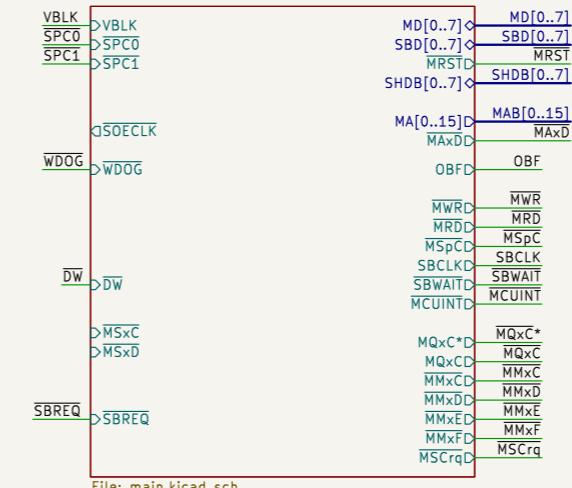
Cabinet



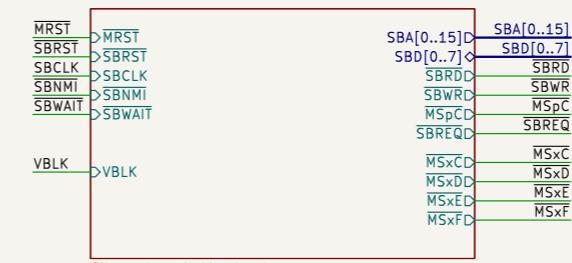
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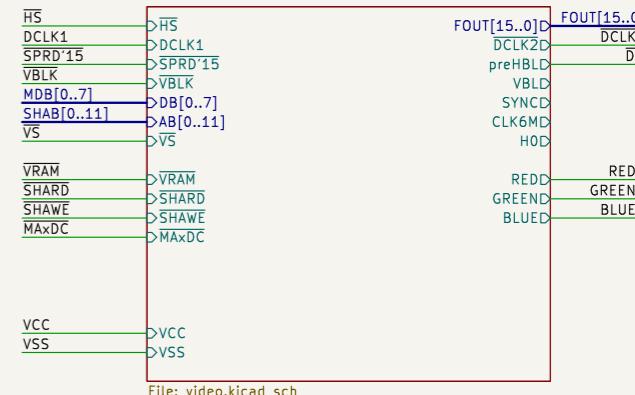
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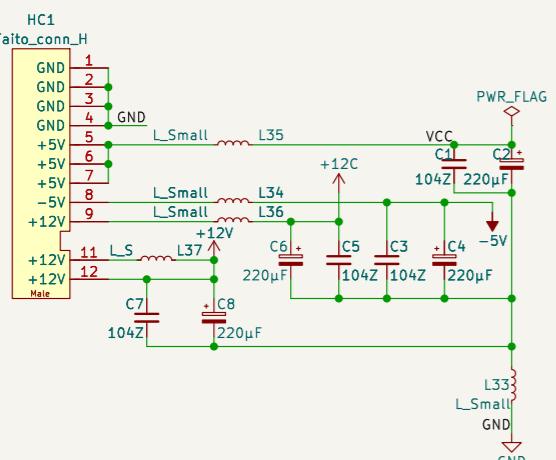
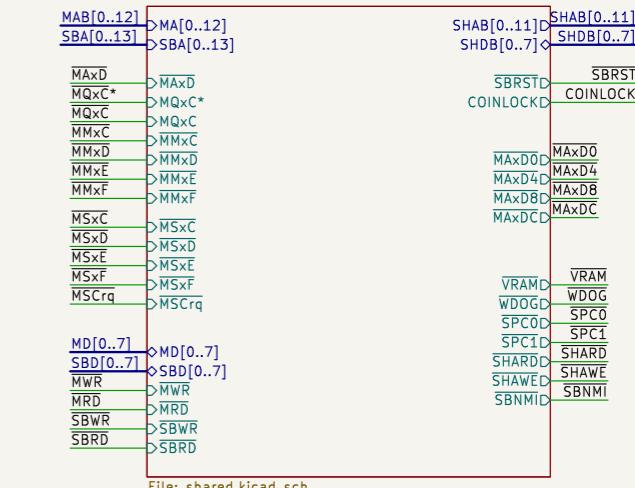
Sub



Video



Shared



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Sheet: /
File: fairyland.kicad_sch

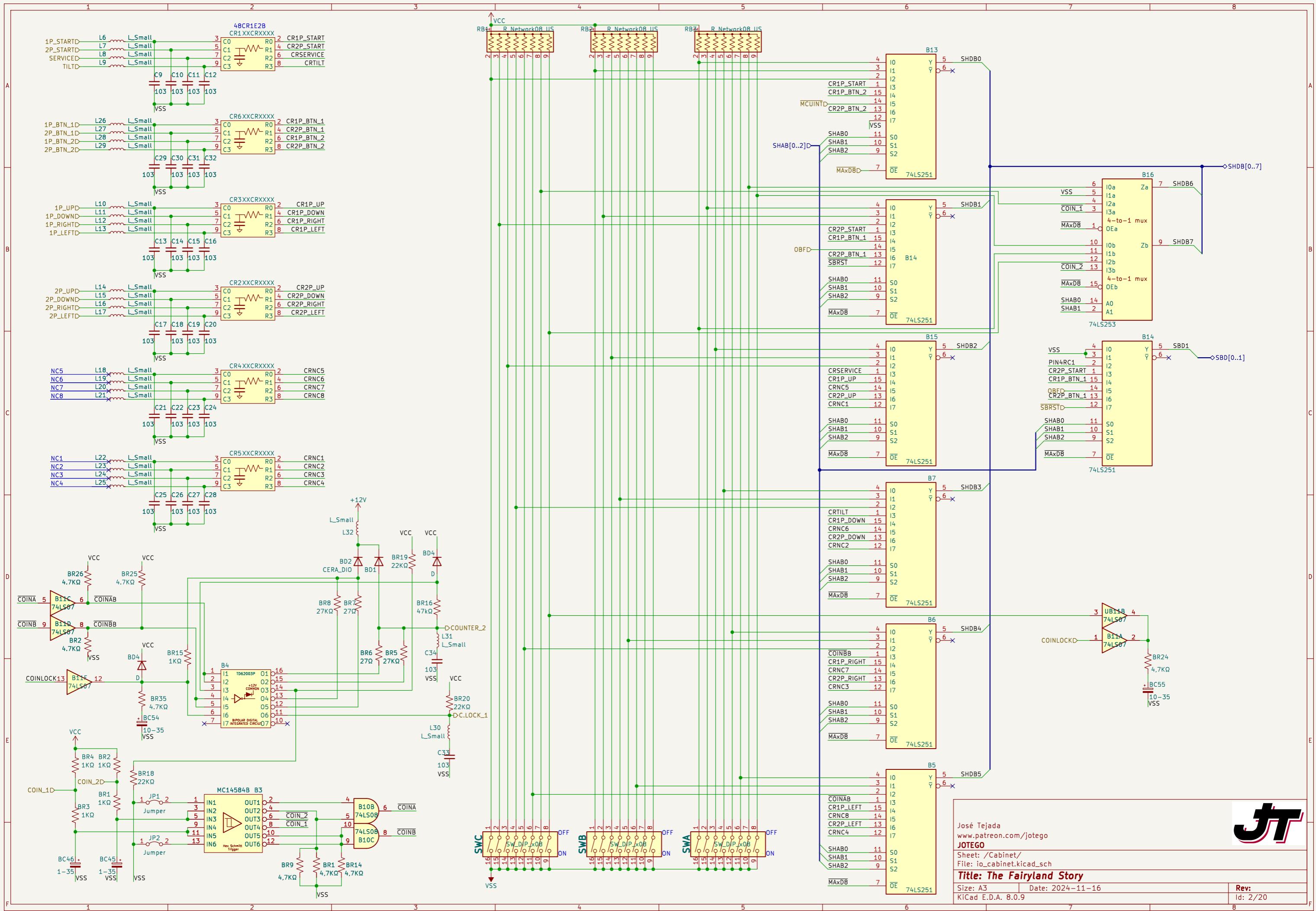
Title: The Fairyland Story

Size: A3 Date: 2024-11-16

KiCad E.D.A. 8.0.9

Rev:

Id: 1/20



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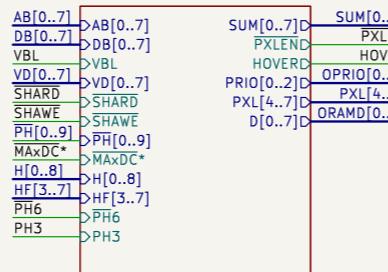
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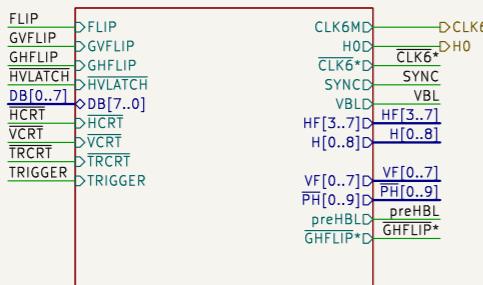
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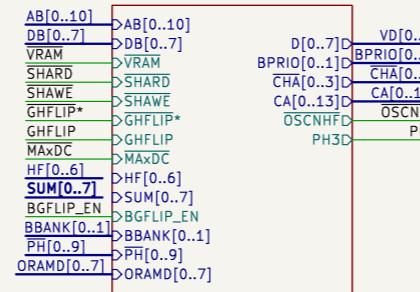
Object RAM



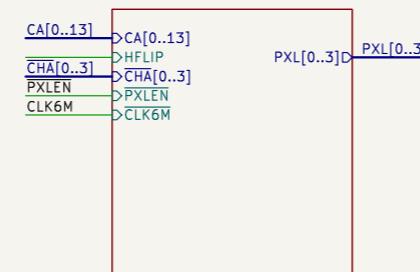
Timing



Video RAM



Tile ROM



1 2 3 4 5 6 7 8

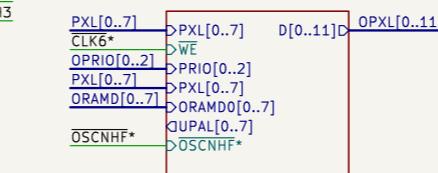
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1 2 3 4 5 6 7 8

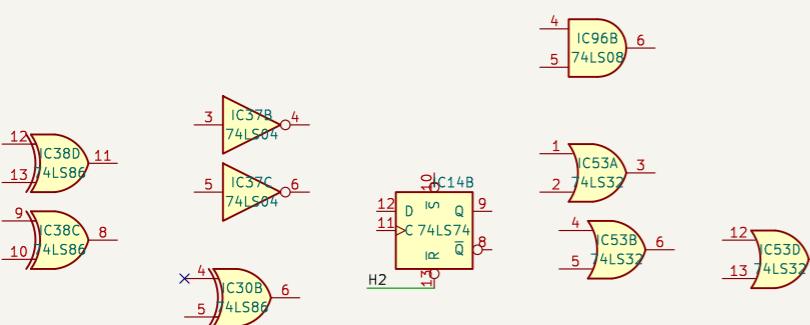
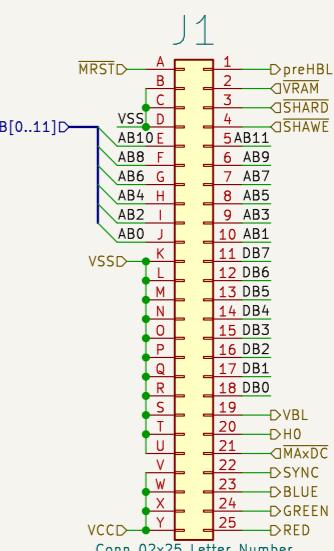
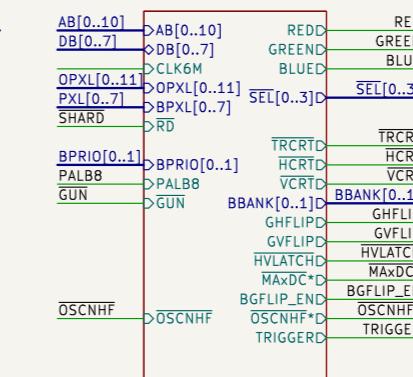
1 2 3 4 5 6 7 8

1 2 3 4 5 6 7 8

Line buffer



Palette



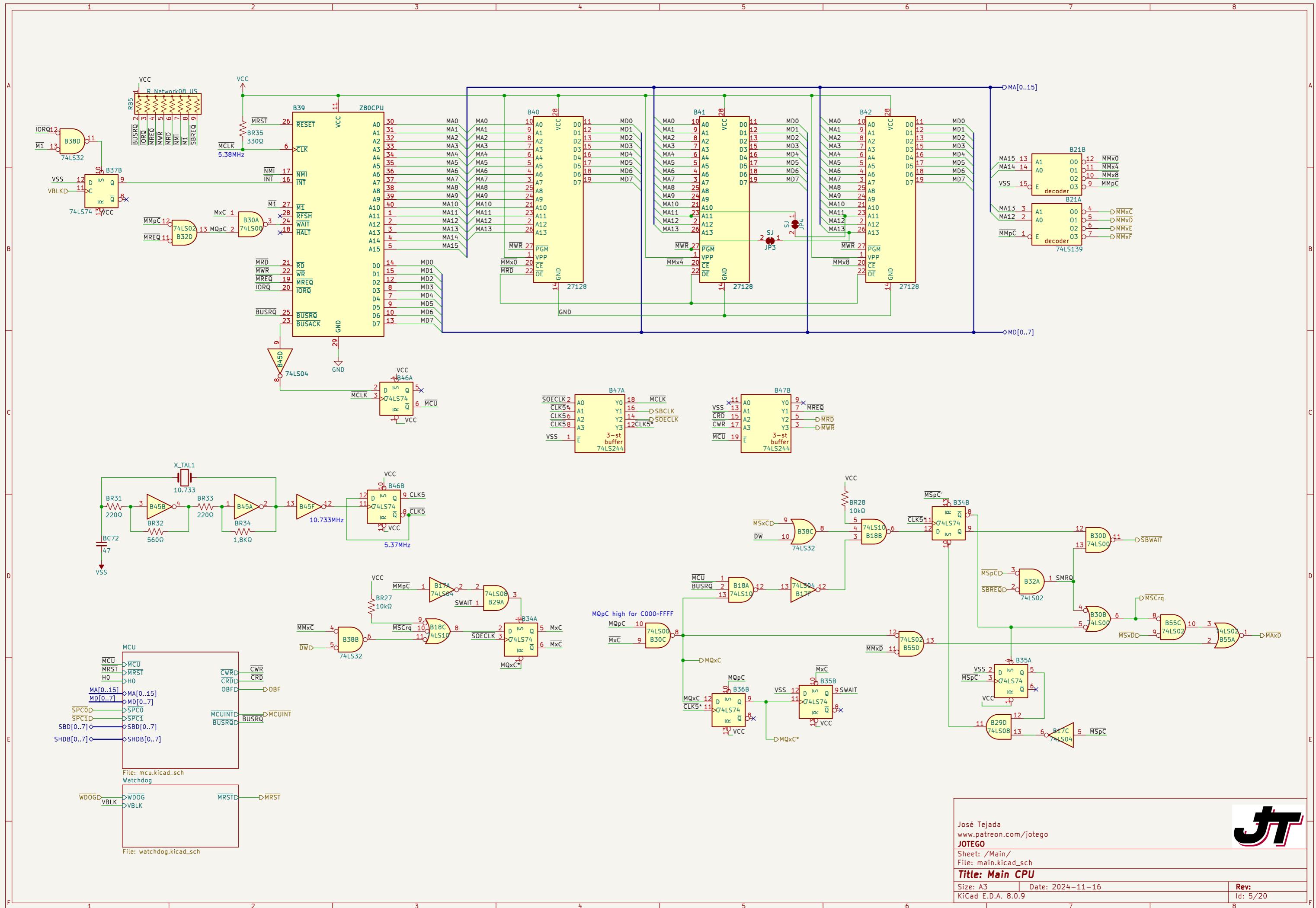
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Sheet: /Video/
File: video.kicad_sch

Title: The Fairyland Story

Size: A3 Date: 2024-11-16
KiCad E.D.A. 8.0.9

Rev: 4/20
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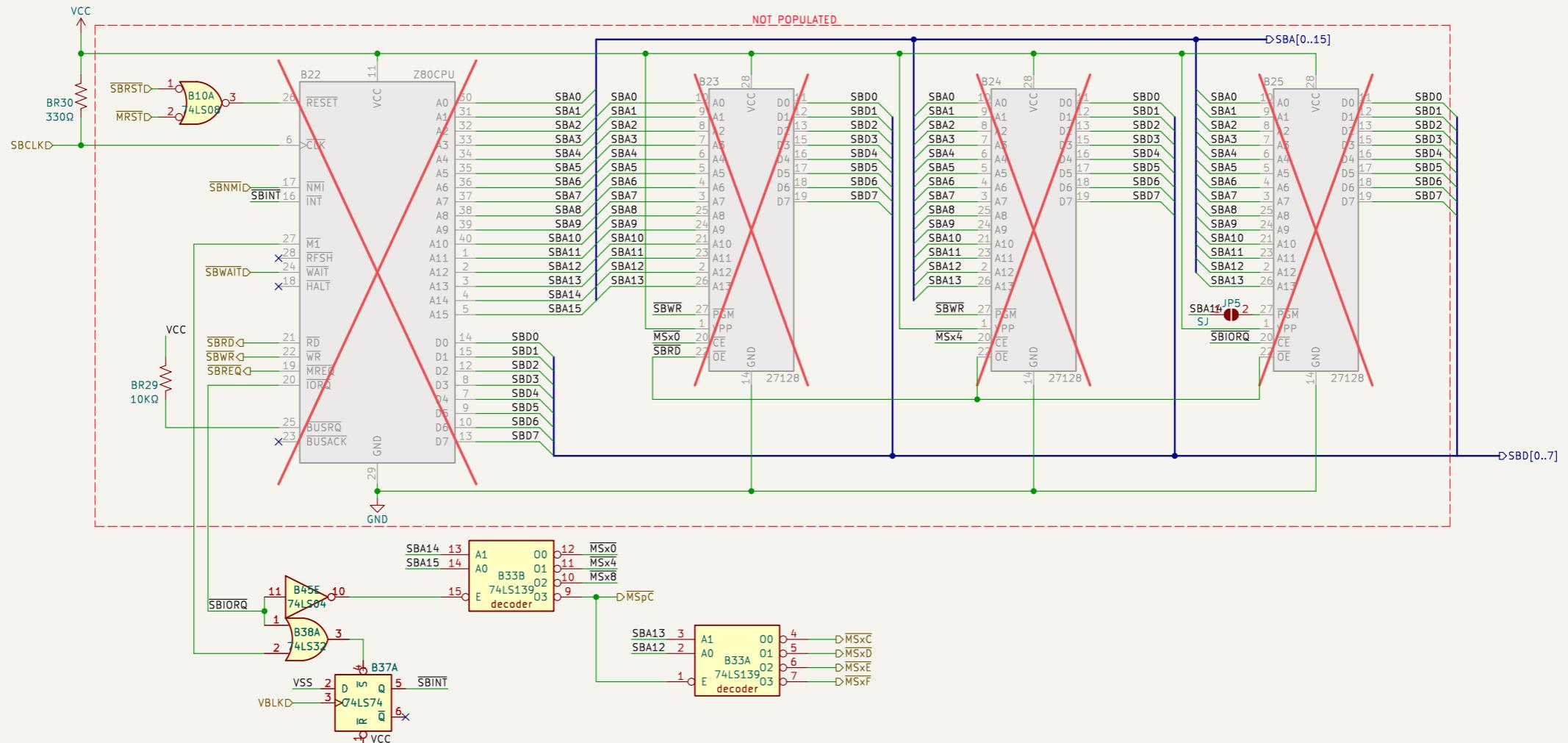
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Sheet: /Sound/
File: sound.kicad_sch

Title: Sound Board

Size: A3 Date: 2024-11-16
KiCad E.D.A. 8.0.9

Rev: Id: 7/20



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Sheet: /Sub/

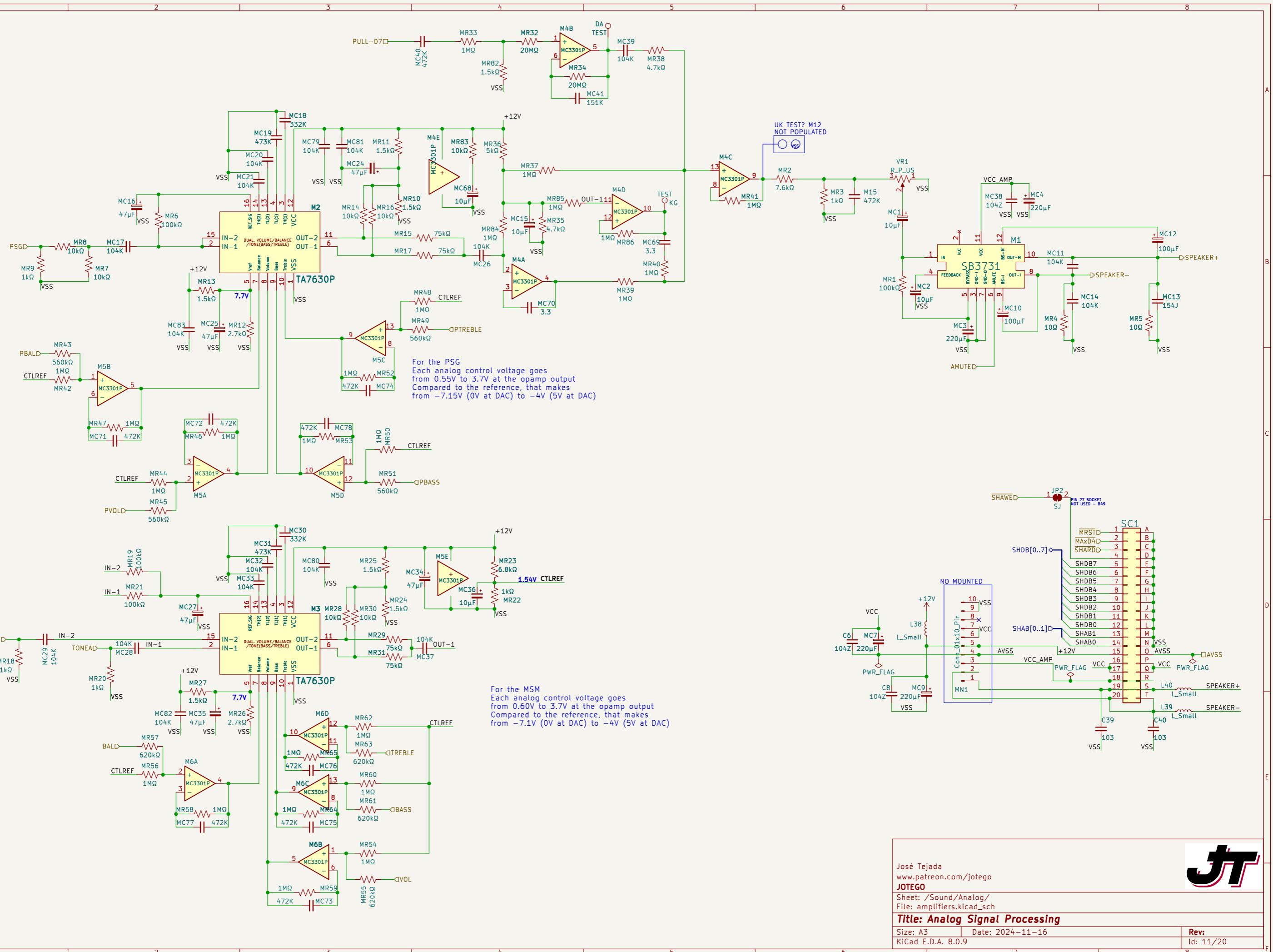
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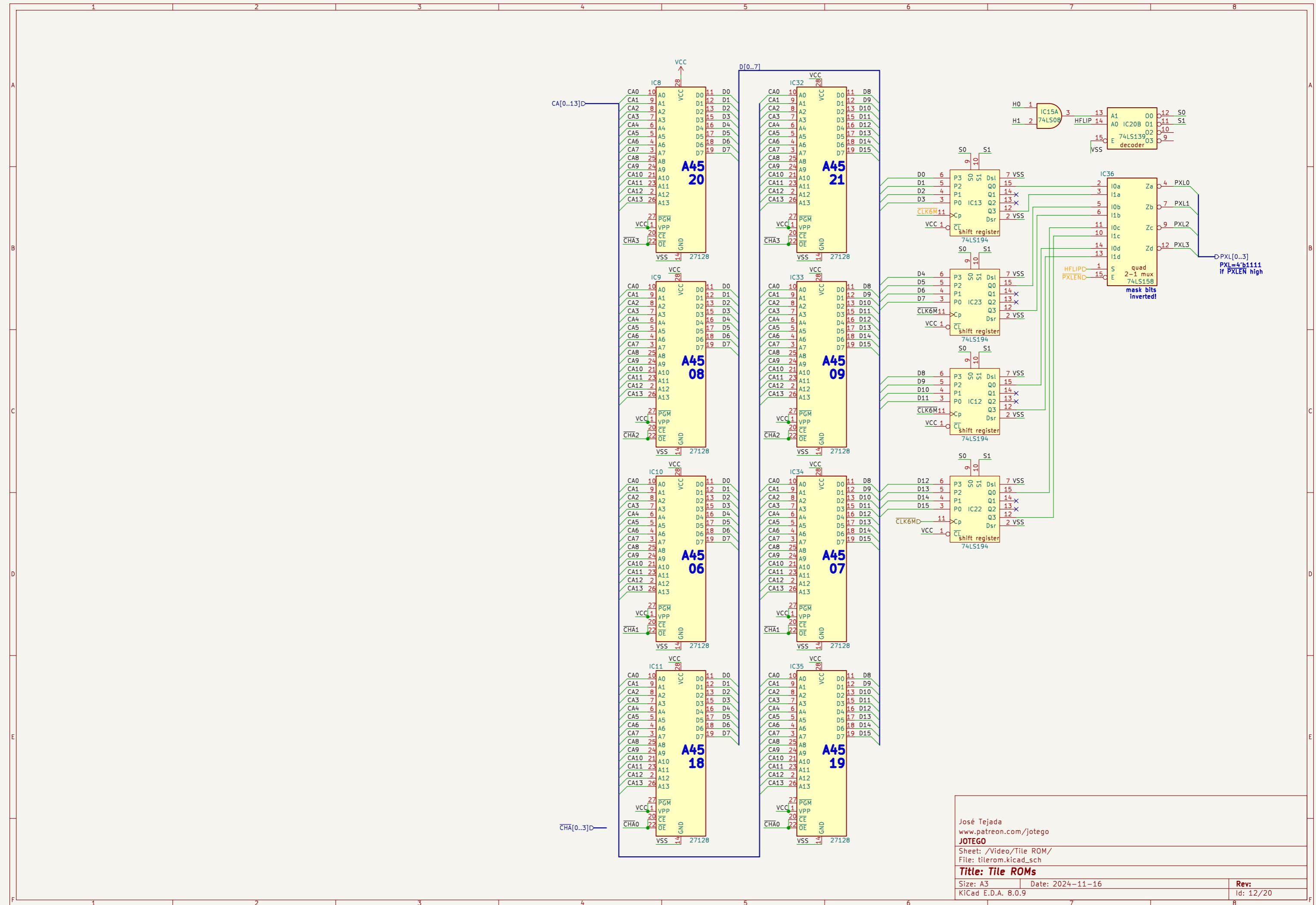
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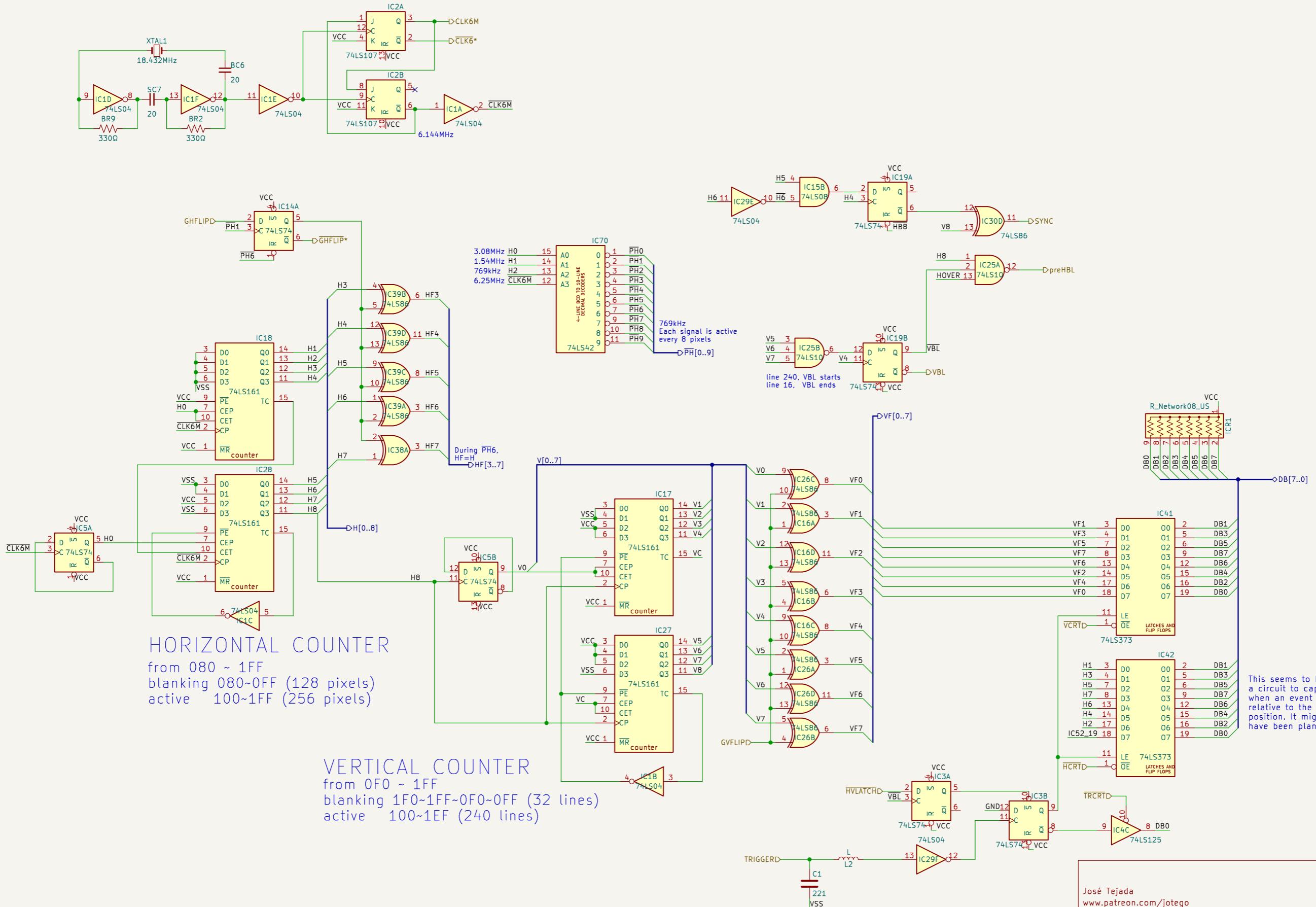
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KiCad EDA 8.0.8

KiCad EDA 8.0.9

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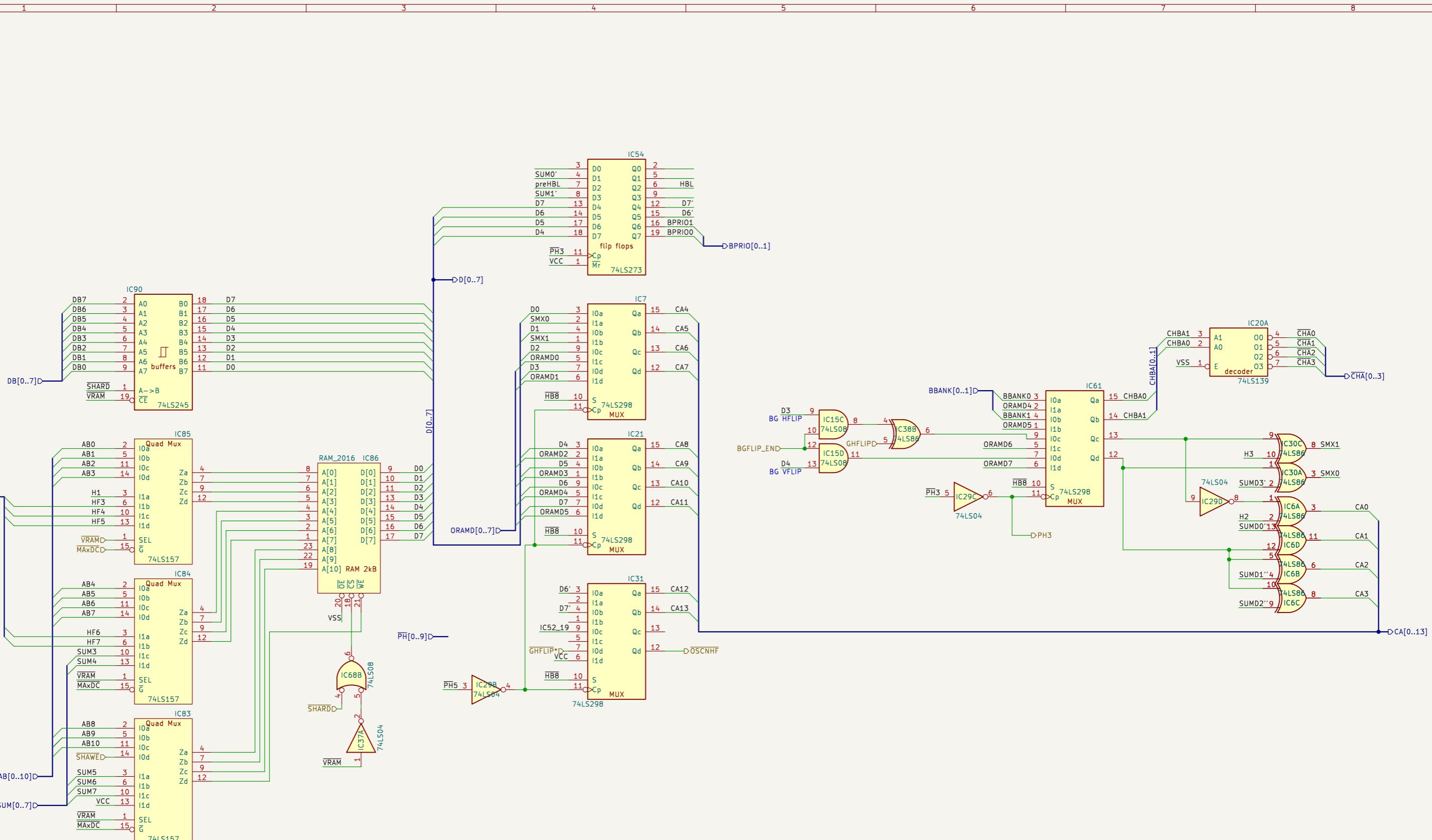


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Title: Video Timing

Size: A3 Date: 2024-11-16
KiCad E.D.A. 8.0.9



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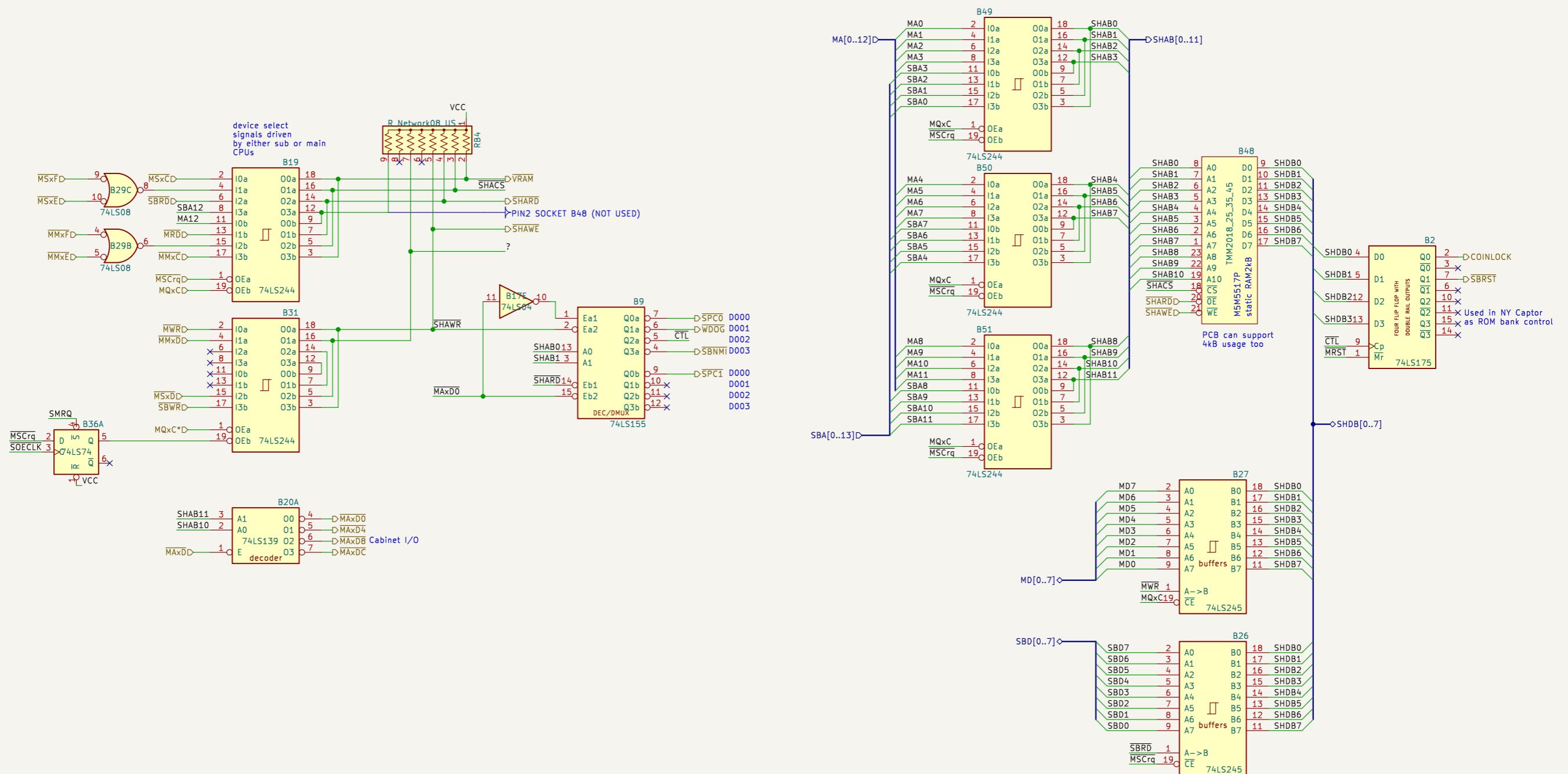
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Sheet: /Video/Video RAM/
 File: vram.kicad_sch

Title: Background Video RAM

Size: A3 | Date: 2024-11-16
 KiCad E.D.A. 8.0.9

Rev: 13/20





The MCU can take control of the share bus by requesting the main CPU bus

The MCU can communicate with both CPUs via latches B52 and B53

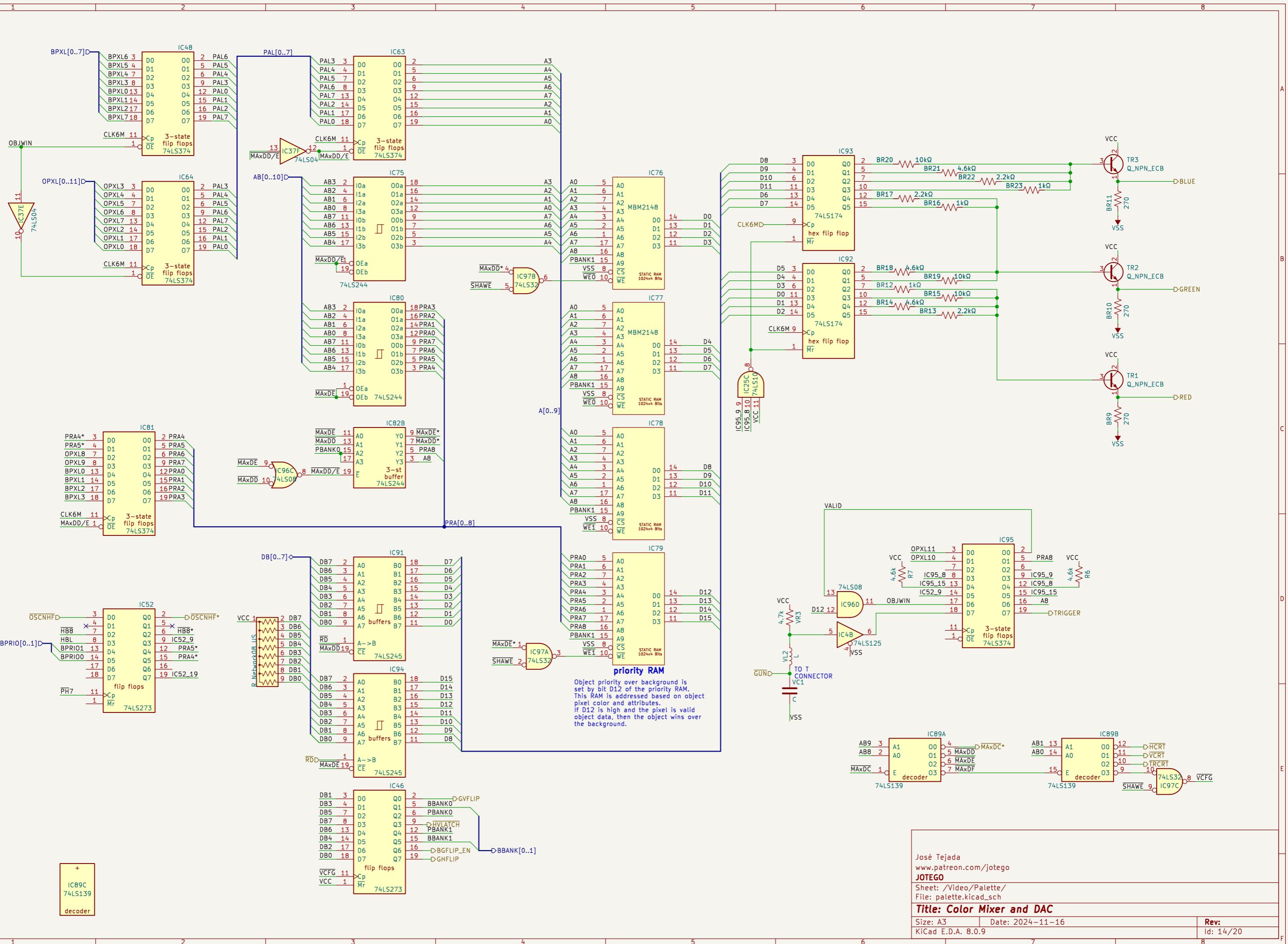
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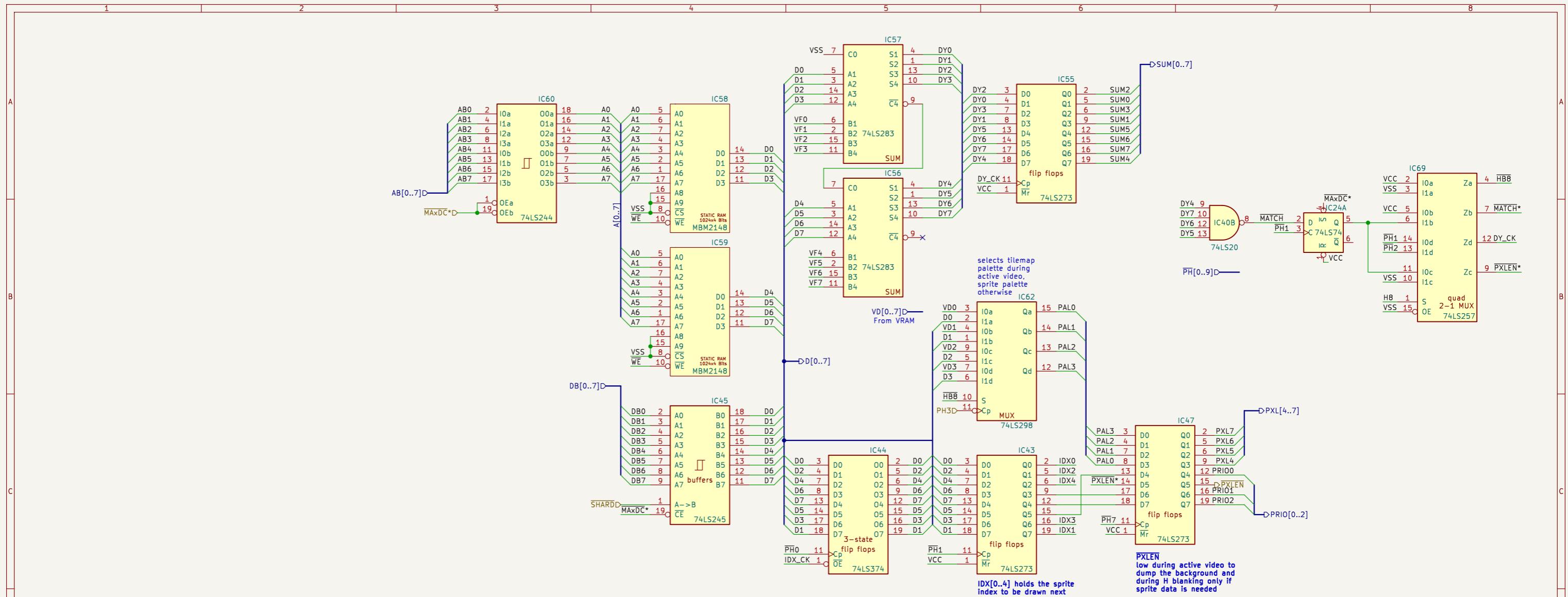
Sheet: /Main/MCU/
File: mcu.kicad_sch

Title: MCU

Size: A3 Date: 2024-11-16
KiCad E.D.A. 8.0.9

Rev: Id: 14/20





Complex multiplexer driving
the 256-byte memory because it holds
three kinds of information
00-7F: 4-byte sprite data (32 sprites)
80-9F: sprite drawing order (bits 4:0) and sprite priority (bit 7)
A0-BF: column scroll
D0-DF: matched sprites for next line

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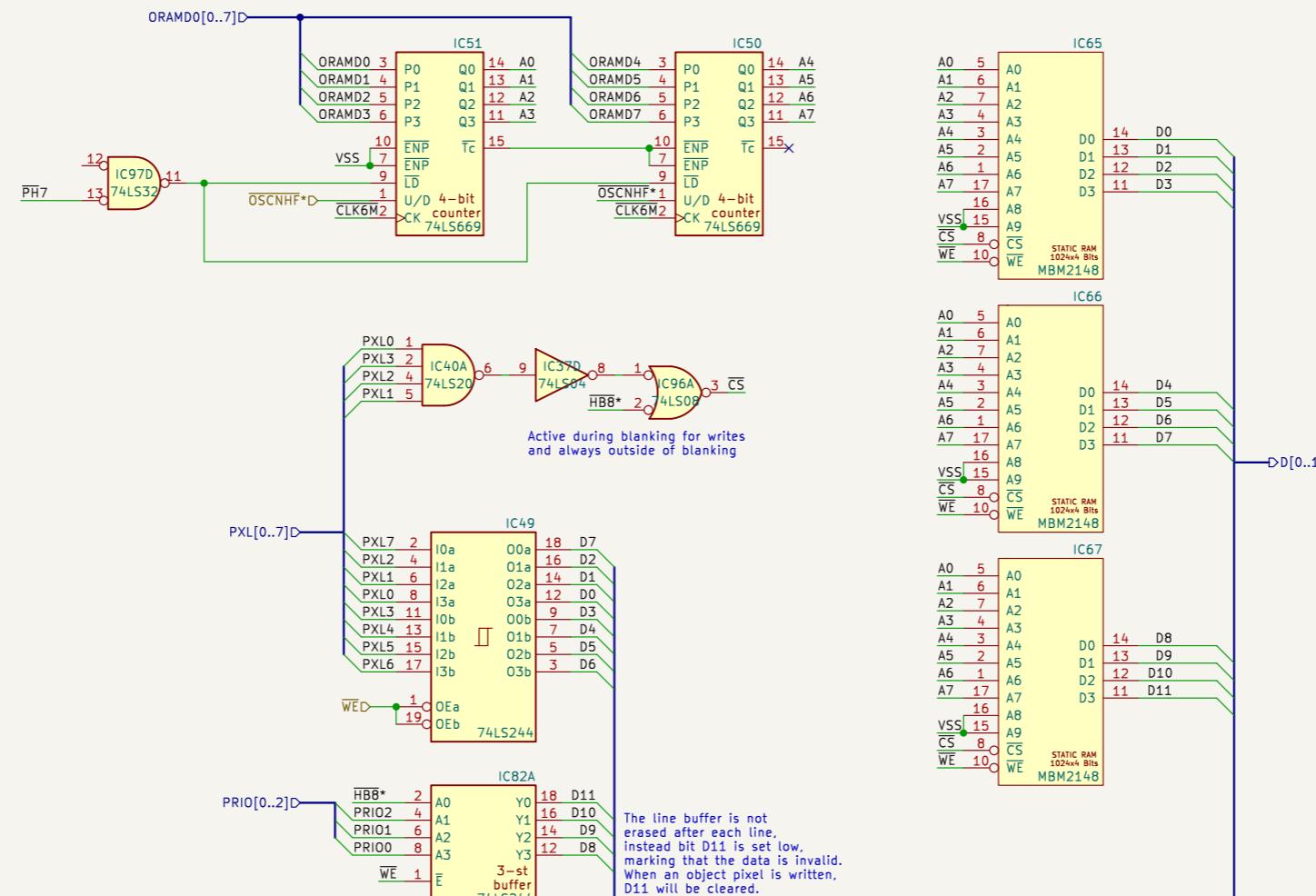
JOTEGO

Title: Object Information

Size: A3 Date: 2024-11-16

KiCad E.D.A. 8.0.9

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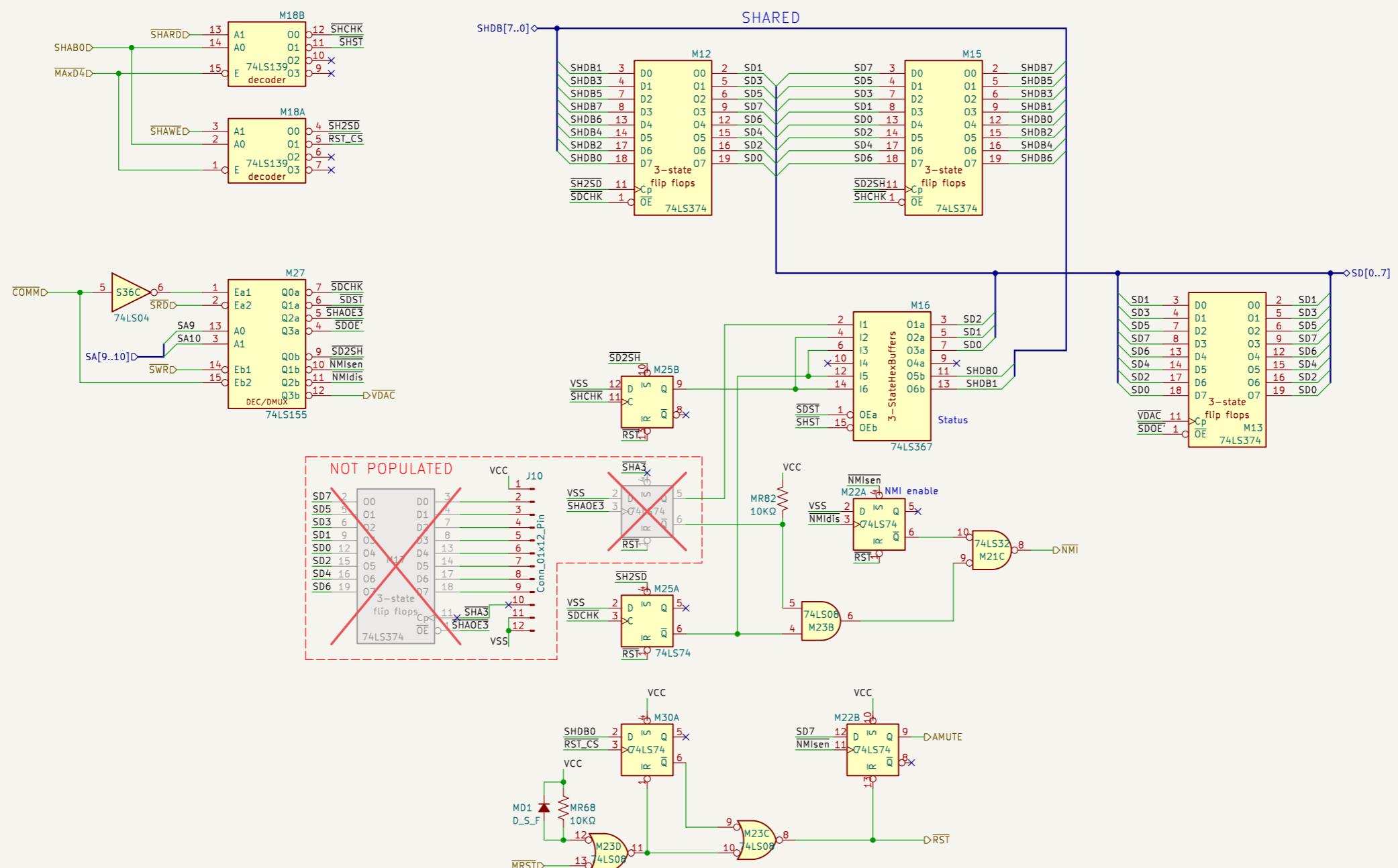
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Sheet: /Video/Line buffer/
File: linebuf.kicad_sch

Title: Single Line Video Buffer

Size: A3 | Date: 2024-11-16
KiCad E.D.A. 8.0.9

Rev:
Id: 17/20



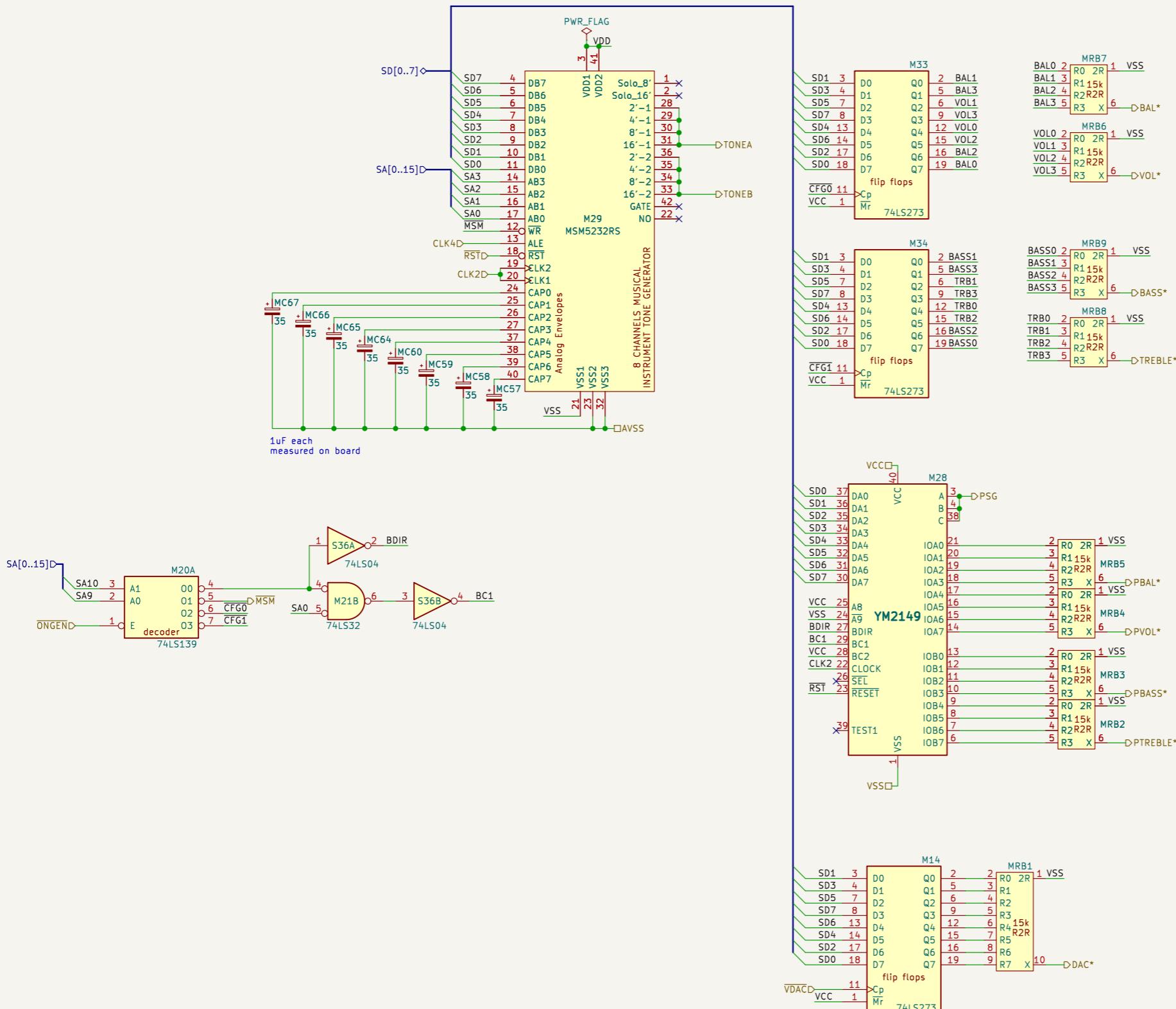
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Sheet: /Sound/Latches/
File: latches.kicad_sch

Title: Communication Latches

Size: A3 | Date: 2024-11-16
KiCad E.D.A. 8.0.9

Rev: 18/20



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JOTEGO
Sheet: /Sound/Sound Generators/
File: ongen.kicad_sch

Title: Sound Generators

Size: A3 Date: 2024-11-16
KiCad E.D.A. 8.0.9

Rev:
Id: 19/20

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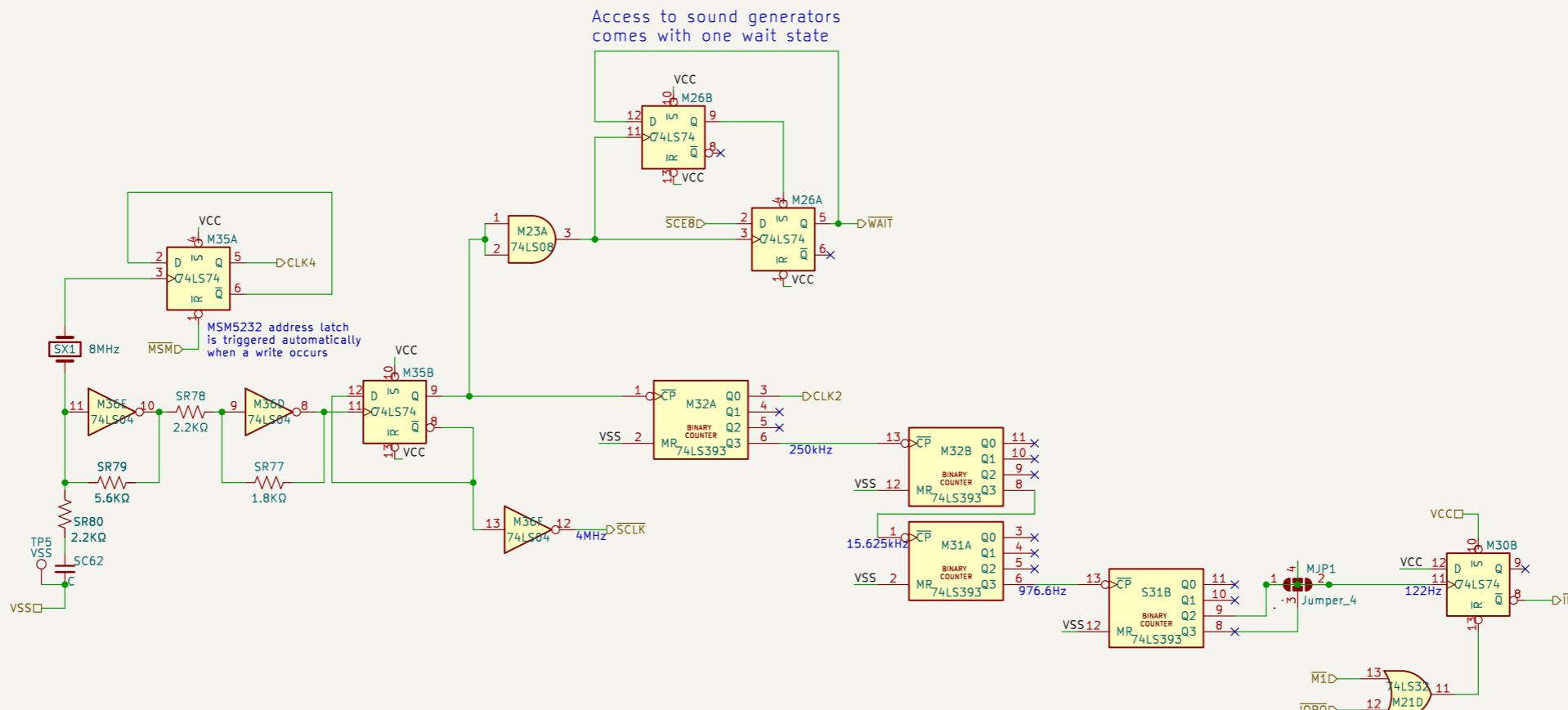
D

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E

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F



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Sheet: /Sound/Clocks/
File: snd_clocks.kicad_sch

Title: Sound Clock Generation

Size: A3 Date: 2024-11-16
KiCad E.D.A. 8.0.9

Rev:
Id: 20/20