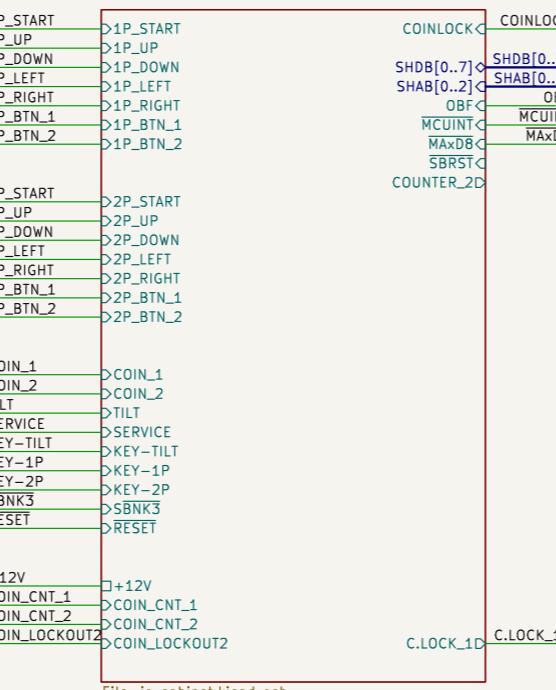
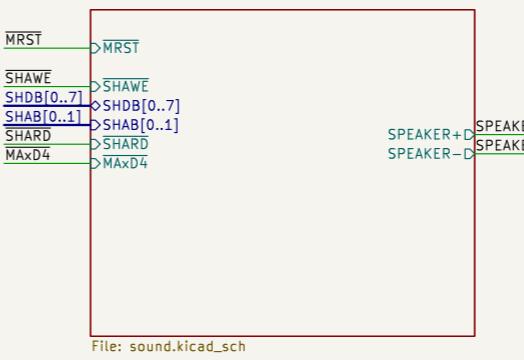


Cabinet



File: io_cabinet.kicad_sch

Sound



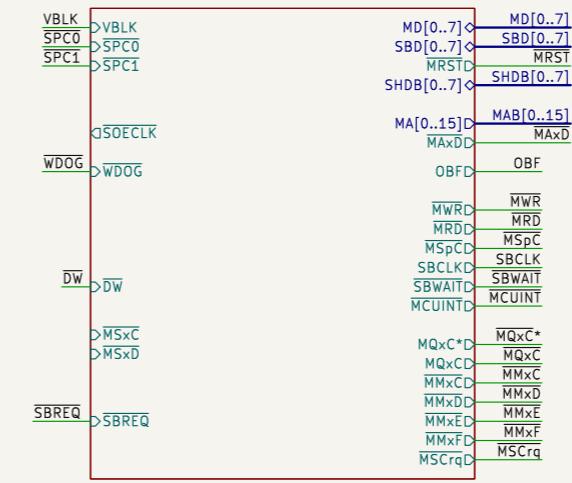
File: sound.kicad_sch

Video



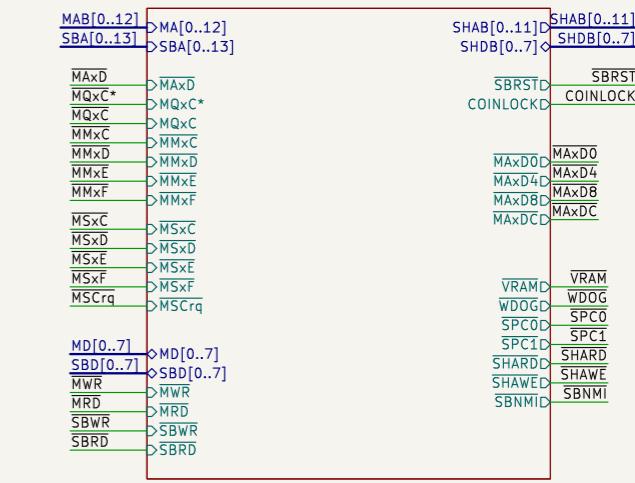
File: video.kicad_sch

Main



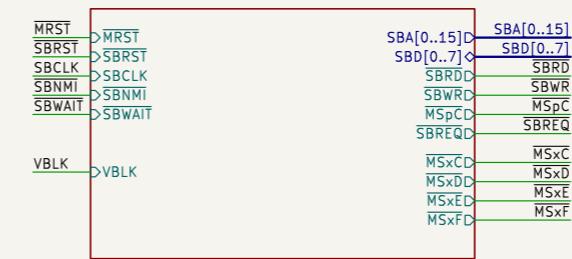
File: main.kicad_sch

Shared

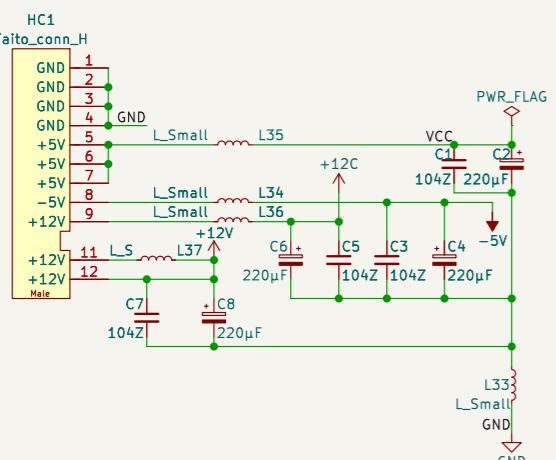


File: shared.kicad_sch

Sub



File: sub_main.kicad_sch



File: capacitors_lu.kicad_sch

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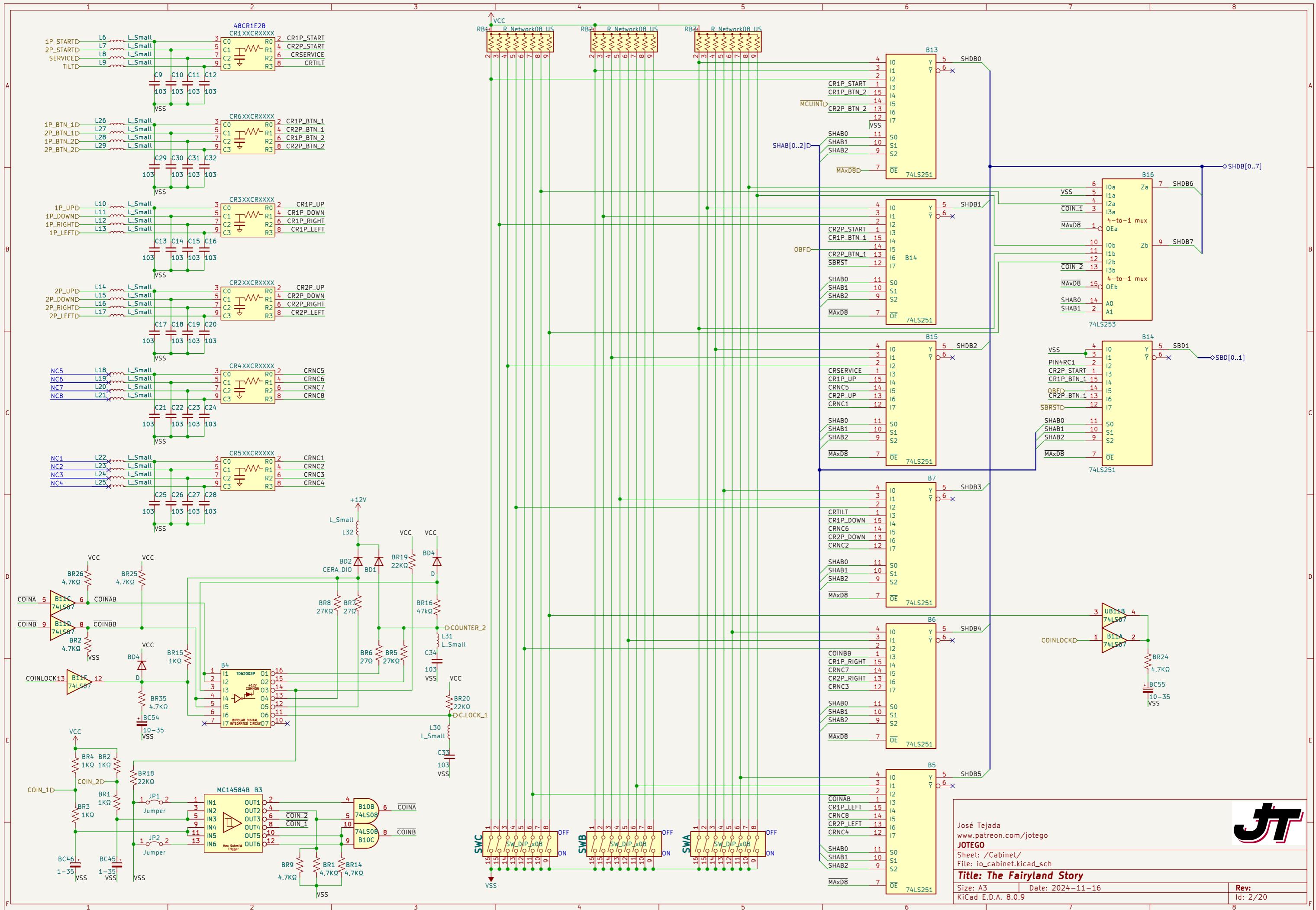
Sheet: /
File: fairyland.kicad_sch

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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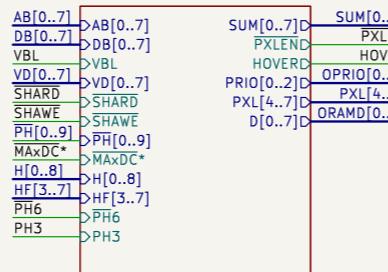
E

E

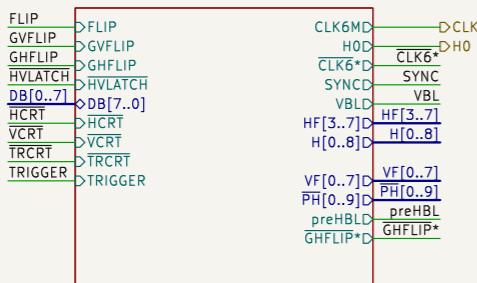
F

F

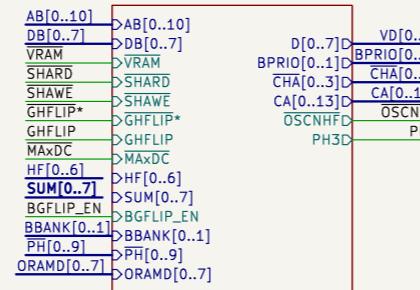
Object RAM



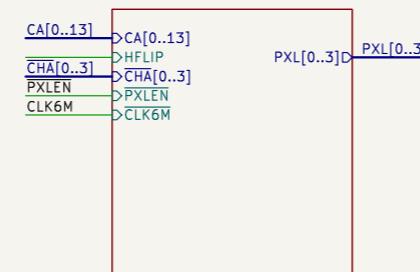
Timing



Video RAM



Tile ROM



1 2 3 4 5 6 7 8

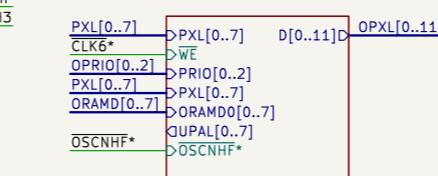
1 2 3 4 5 6 7 8

1 2 3 4 5 6 7 8

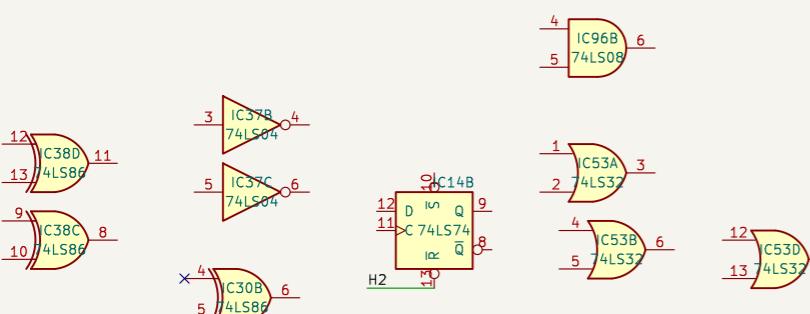
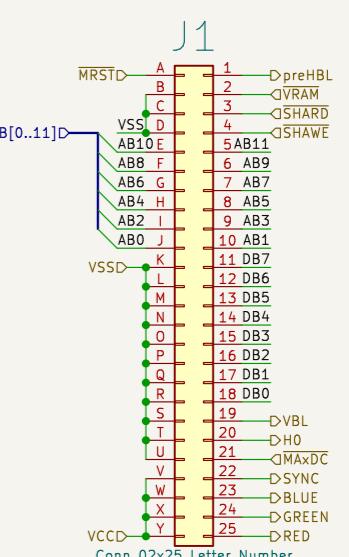
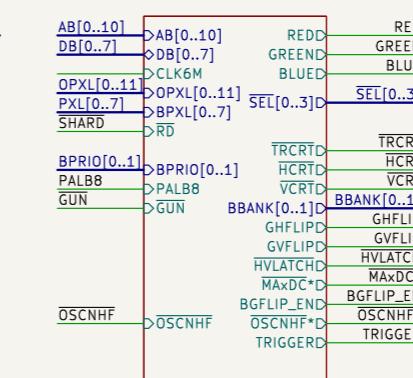
1 2 3 4 5 6 7 8

1 2 3 4 5 6 7 8

Line buffer



Palette



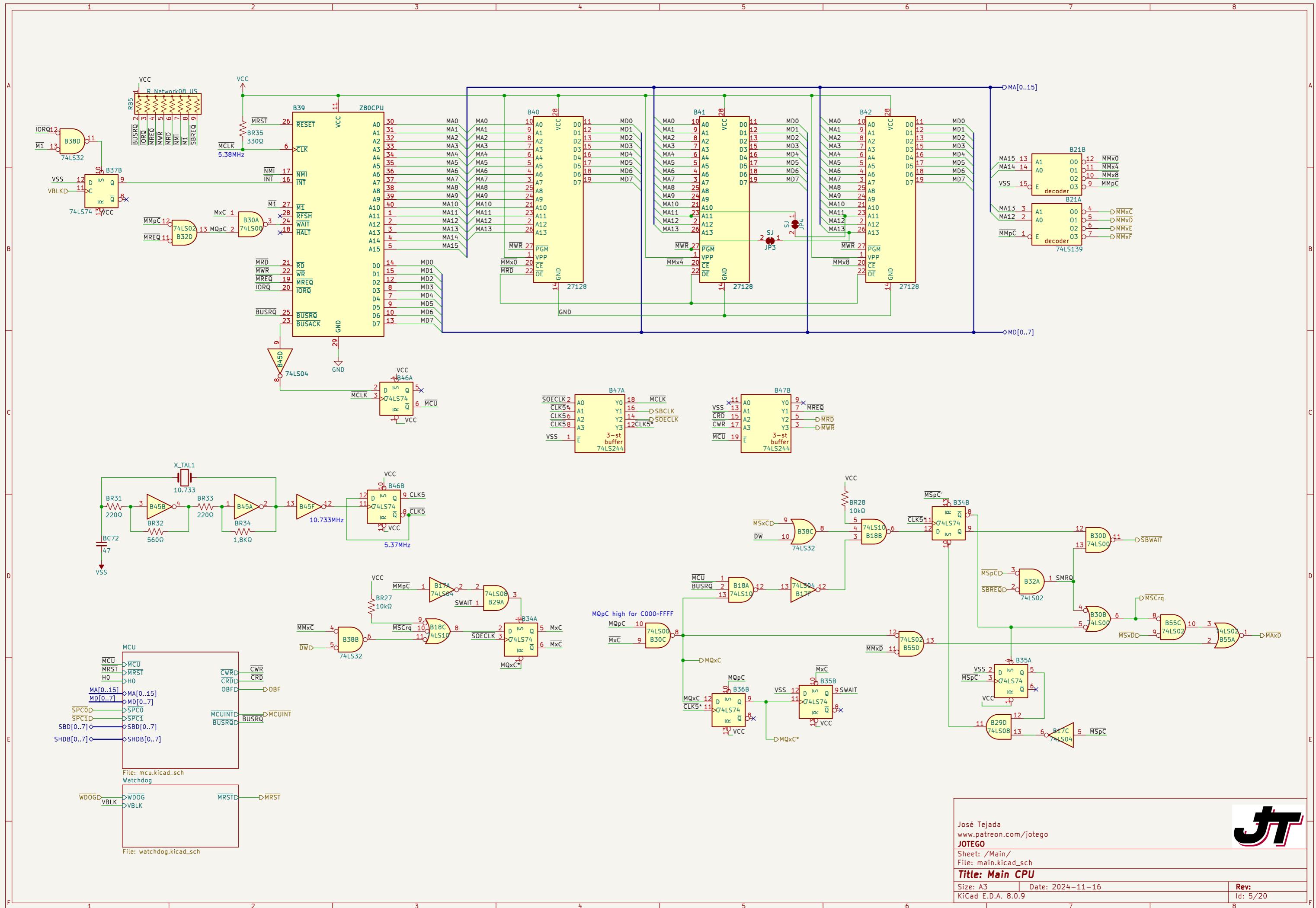
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Sheet: /Video/
File: video.kicad_sch

Title: The Fairyland Story

Size: A3 | Date: 2024-11-16
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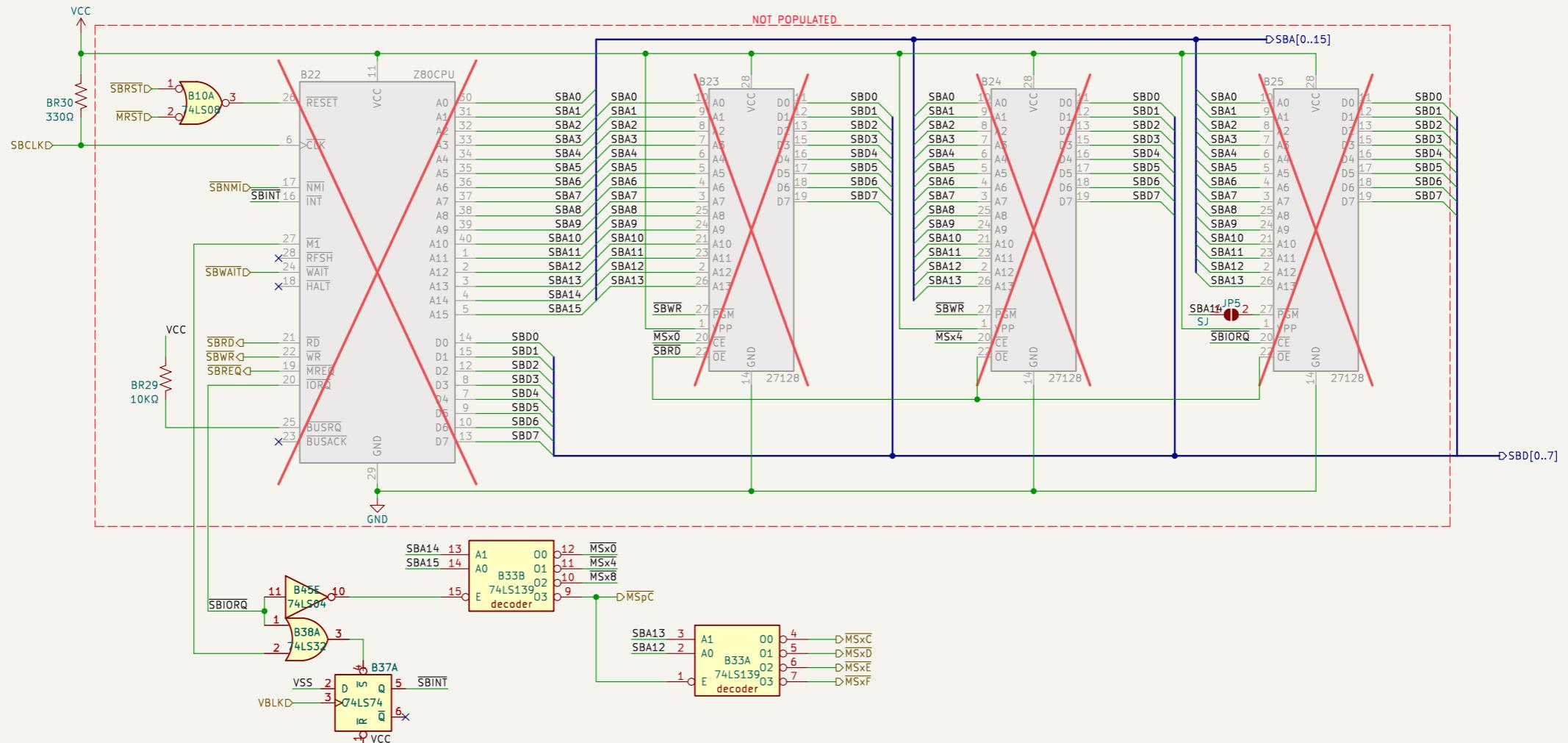
Sheet: /Sound/
 File: sound.kicad_sch

Title: Sound Board

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

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Sheet: /Sub/

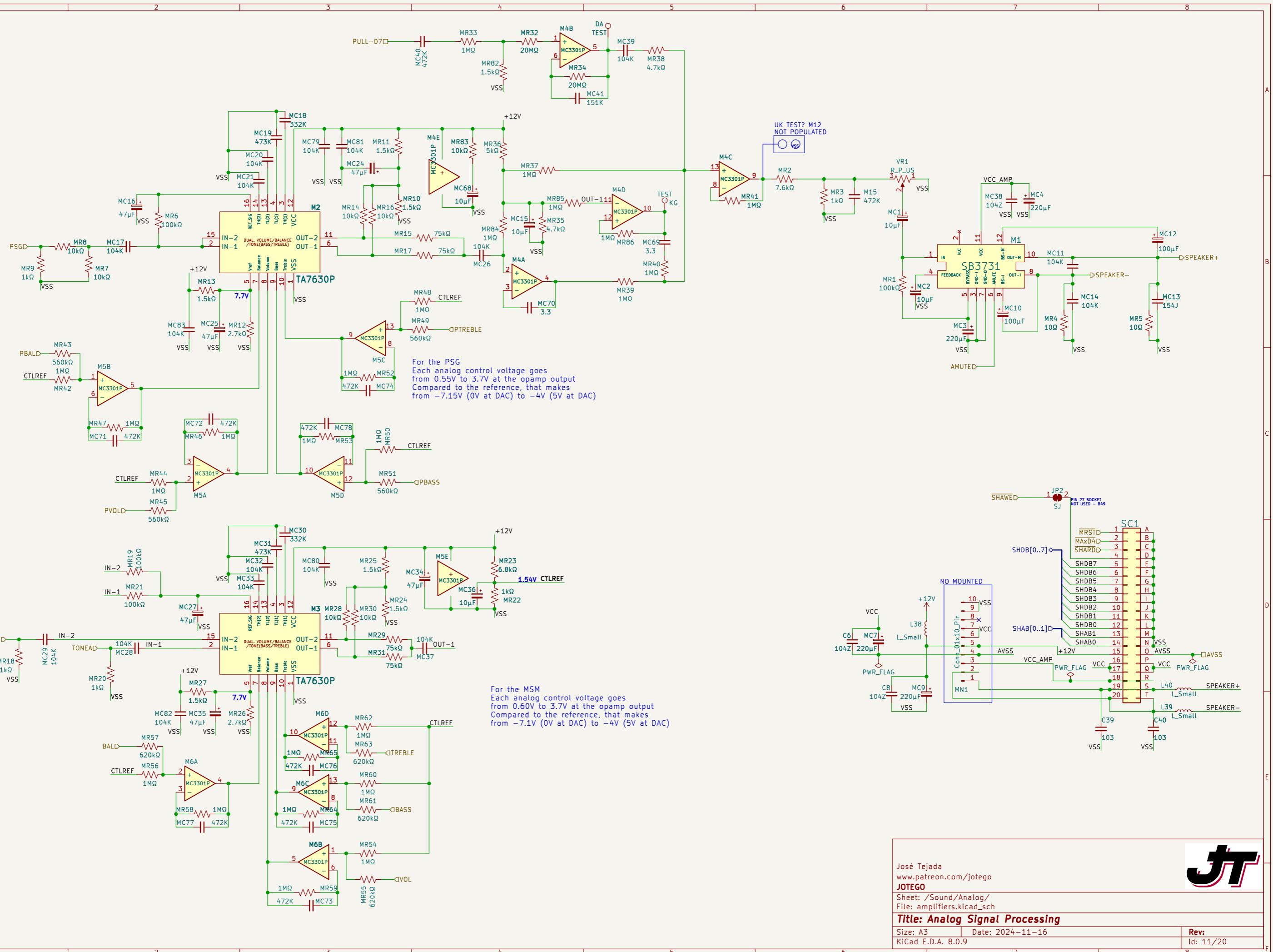
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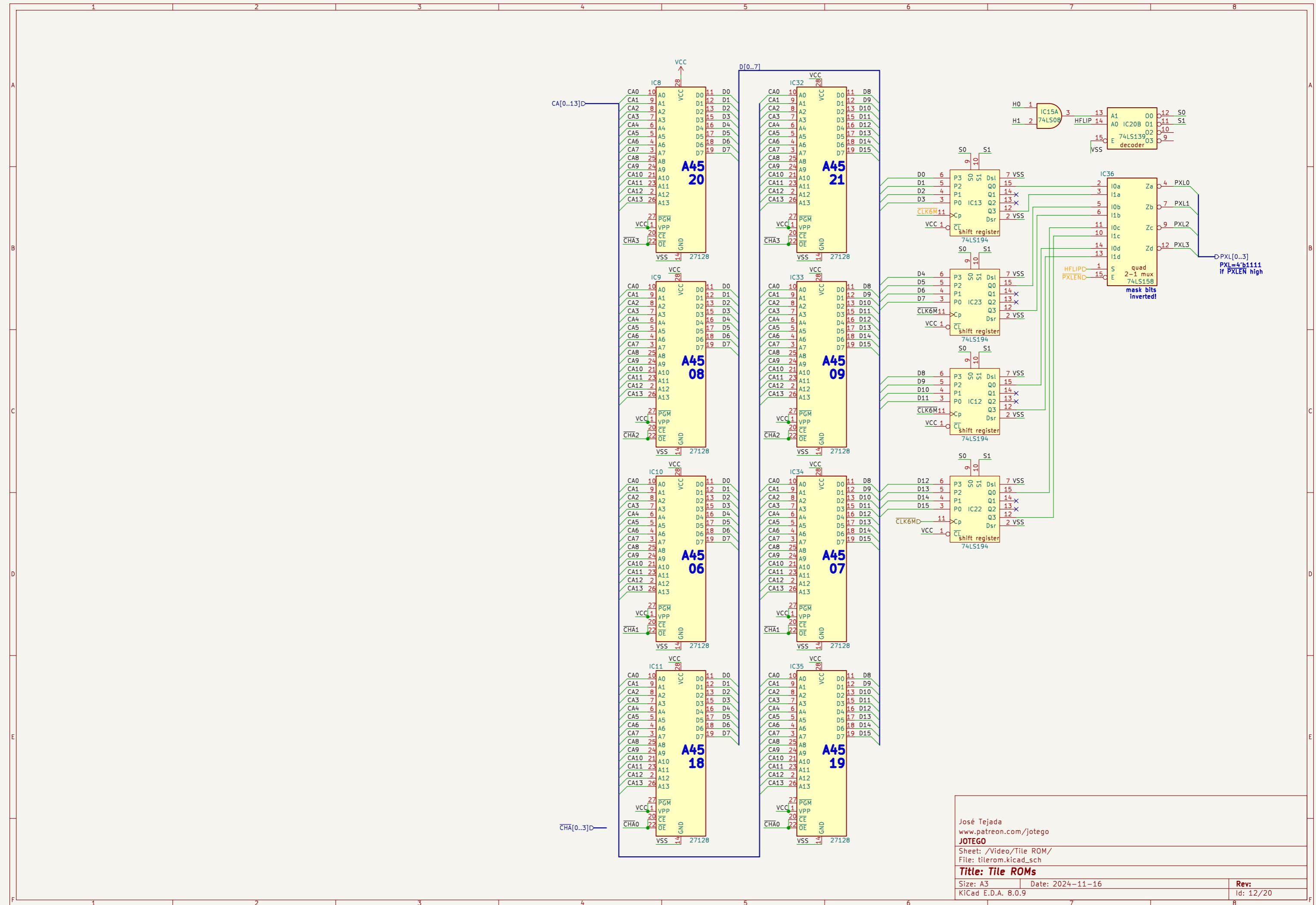
Title: Subsidiary CPU

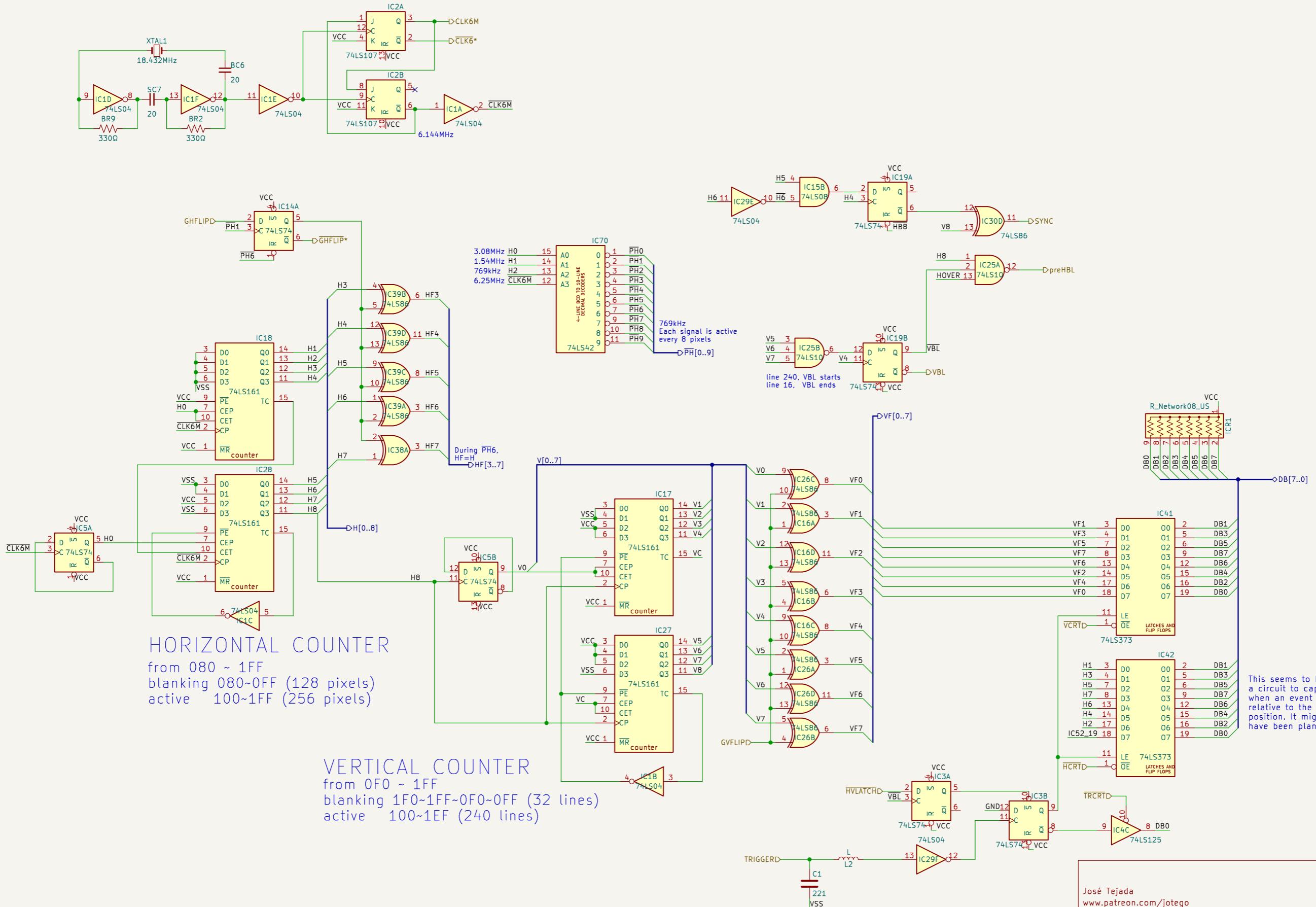
Size: A3 Date: 2024-11-16
KiCad EDA 8.0.8

KiCad EDA 8.0.9

Digitized by srujanika@gmail.com





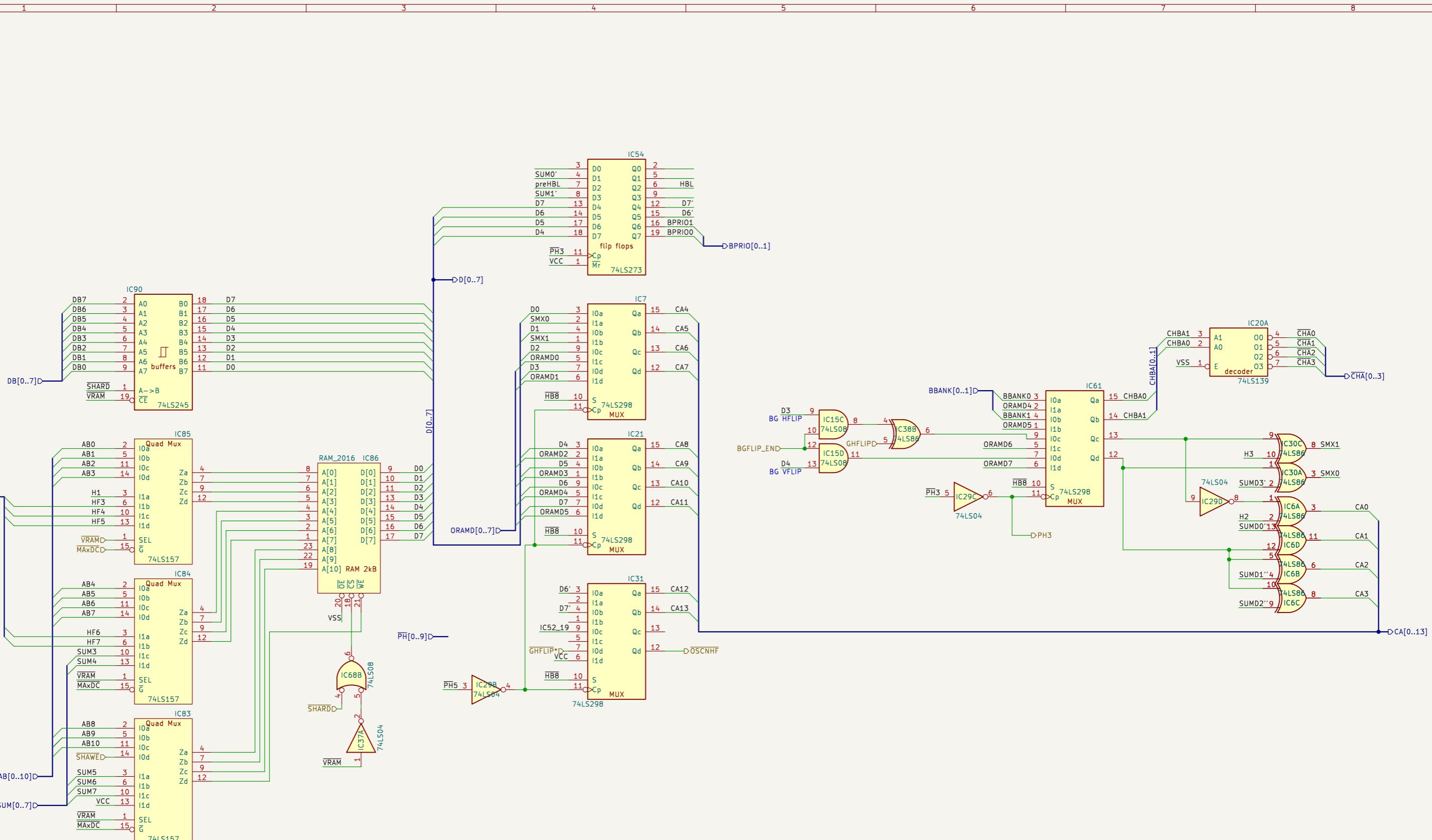


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Title: Video Timing

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



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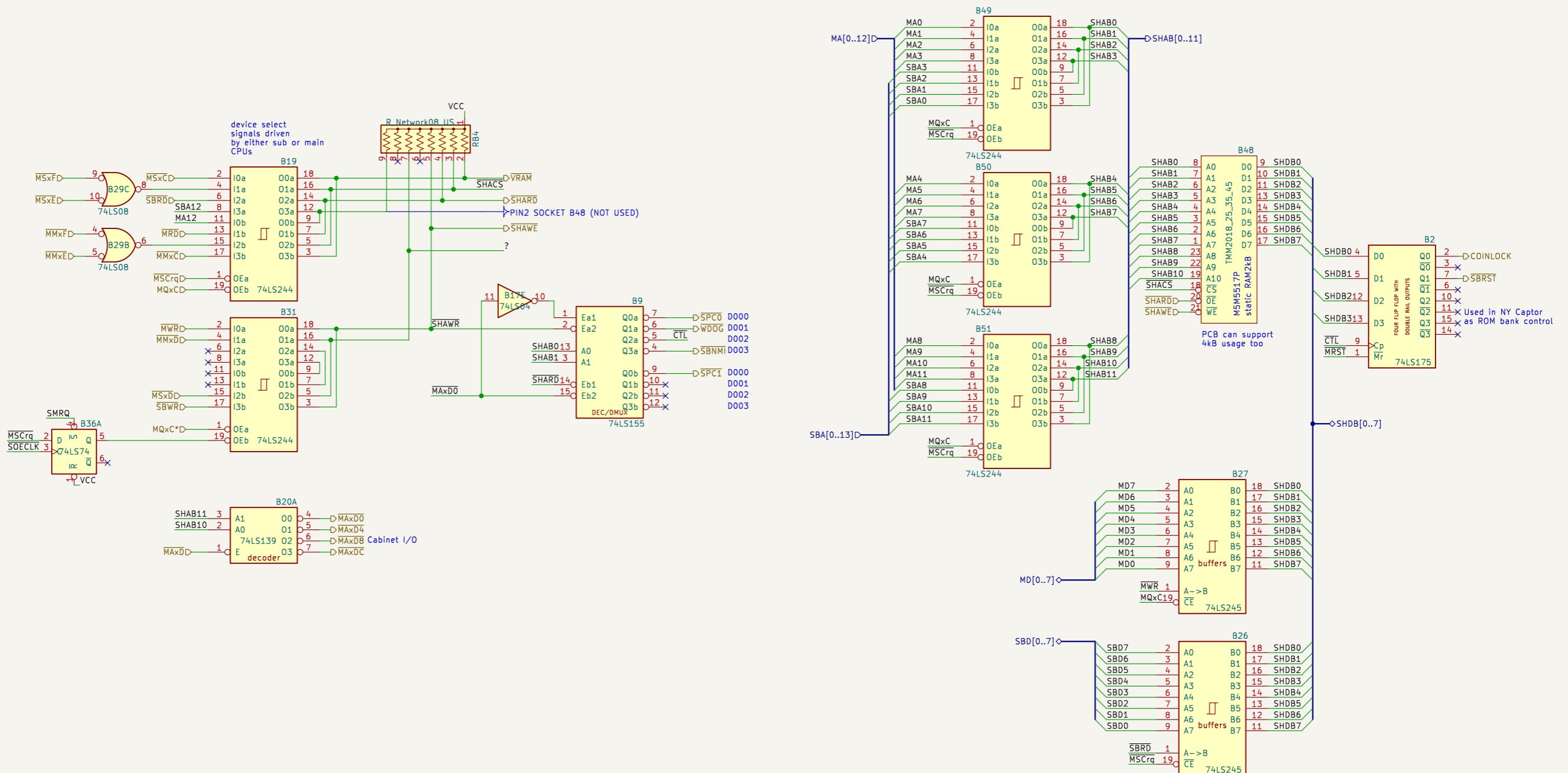
JOTEGO

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

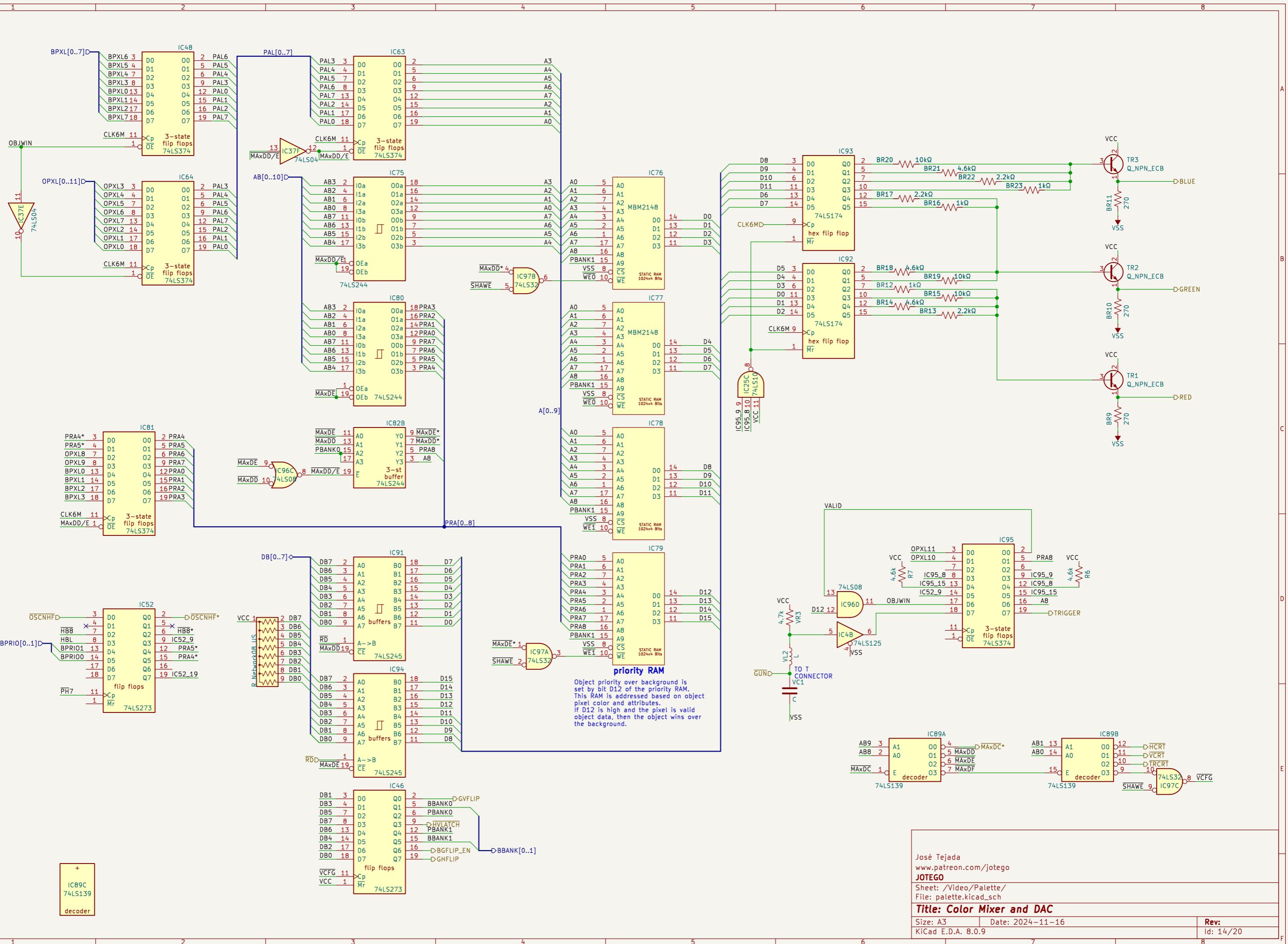
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Sheet: /Main/MCU/
File: mcu.kicad_sch

Title: MCU

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

Rev: Id: 14/20



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Sheet: /Video/Palette/

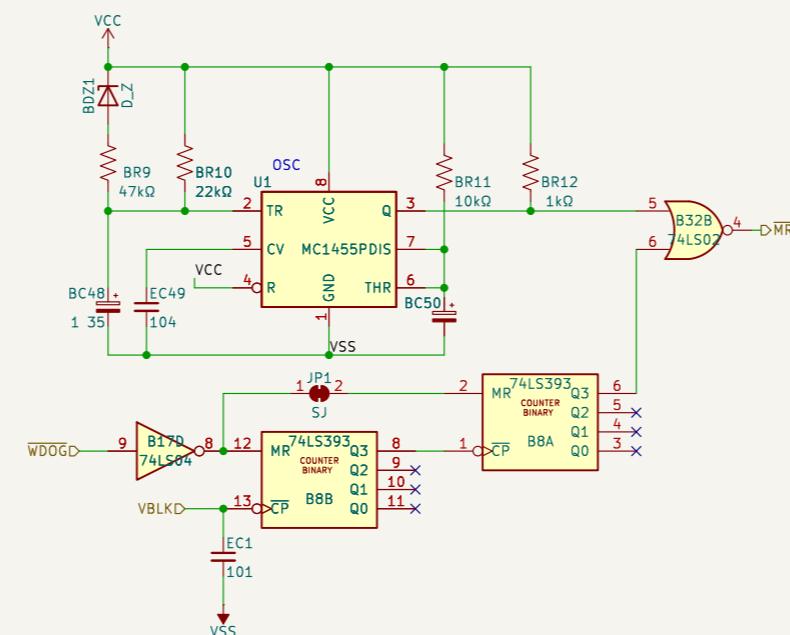
File: palette.kicad_sch

Title: Color Mixer and DAC

Size: A3 Date: 2024-11-16

KiCad E.D.A. 8.0.9

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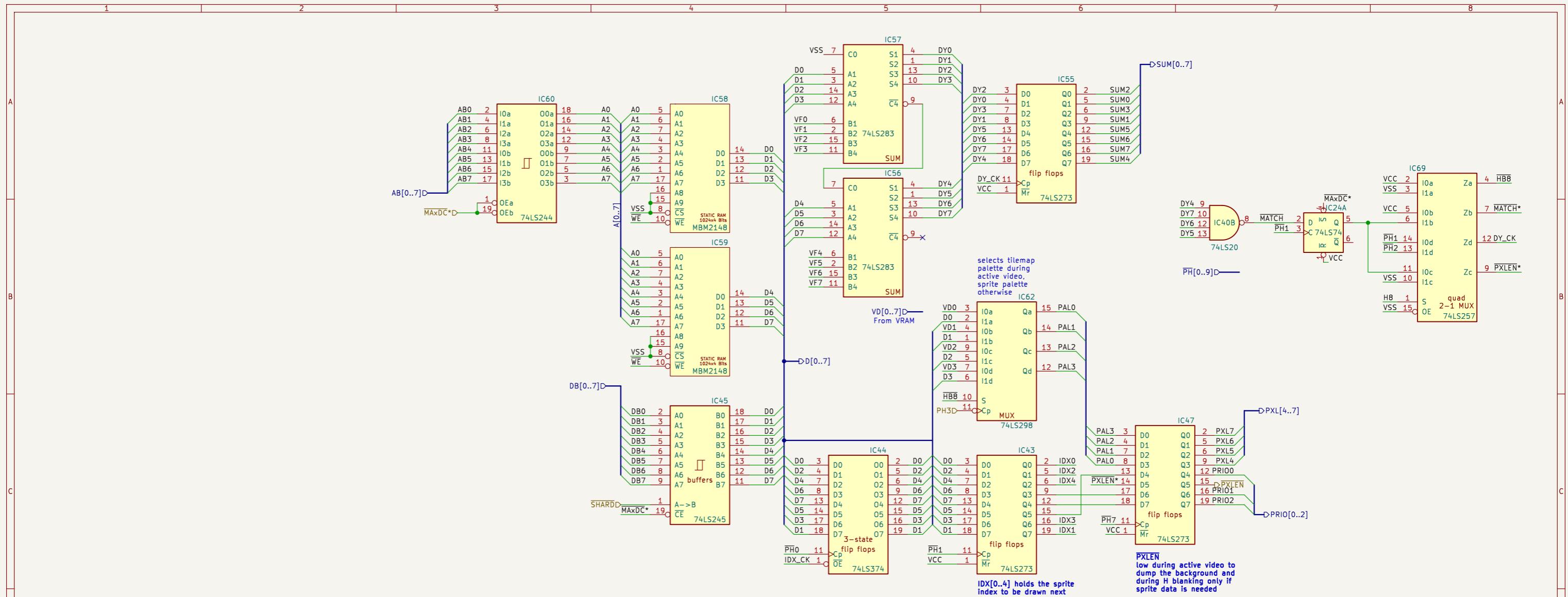
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Sheet: /Main/Watchdog/
File: watchdog.kicad_sch

Title:

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

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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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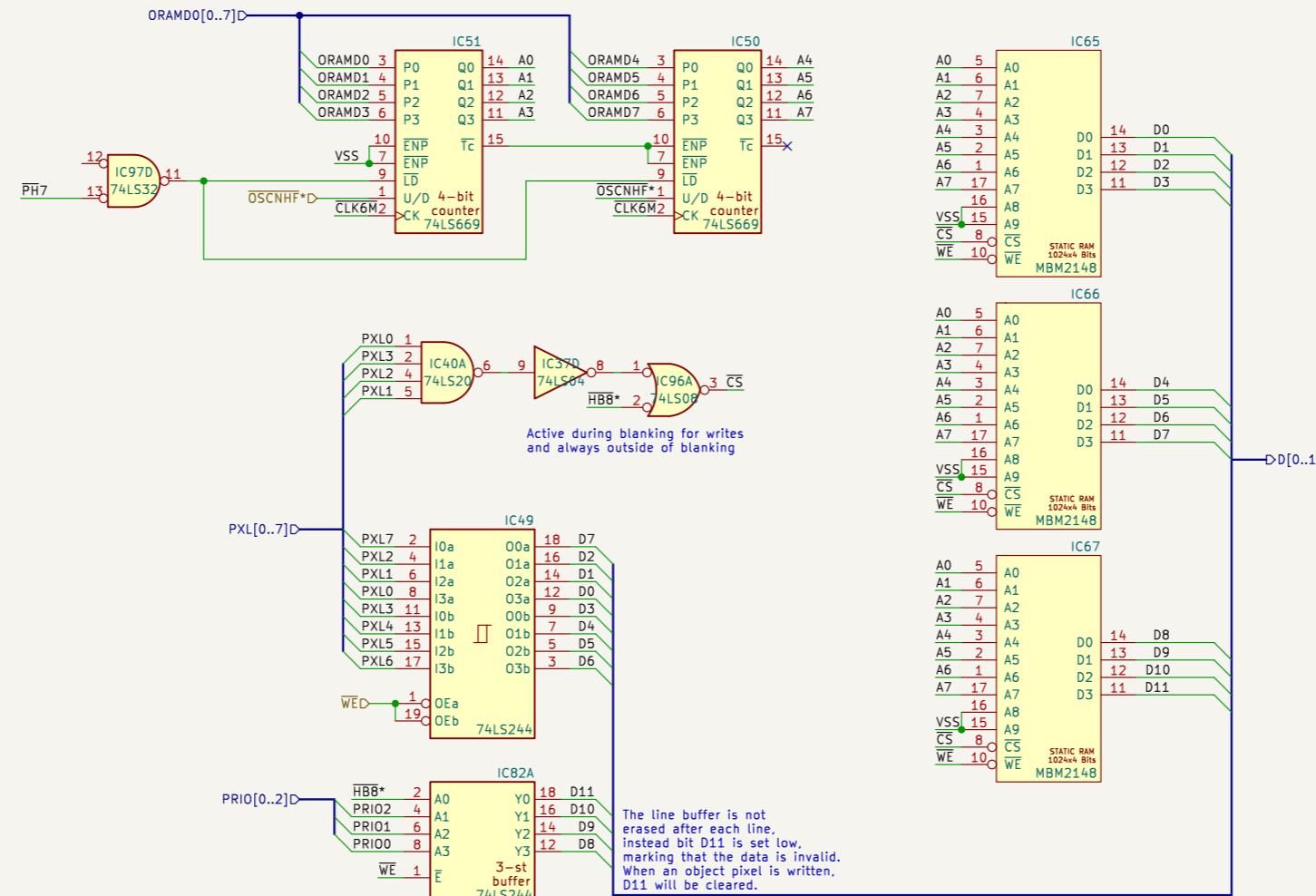
JOTEGO

Title: Object Information

Size: A3 Date: 2024-11-16

KiCad E.D.A. 8.0.9

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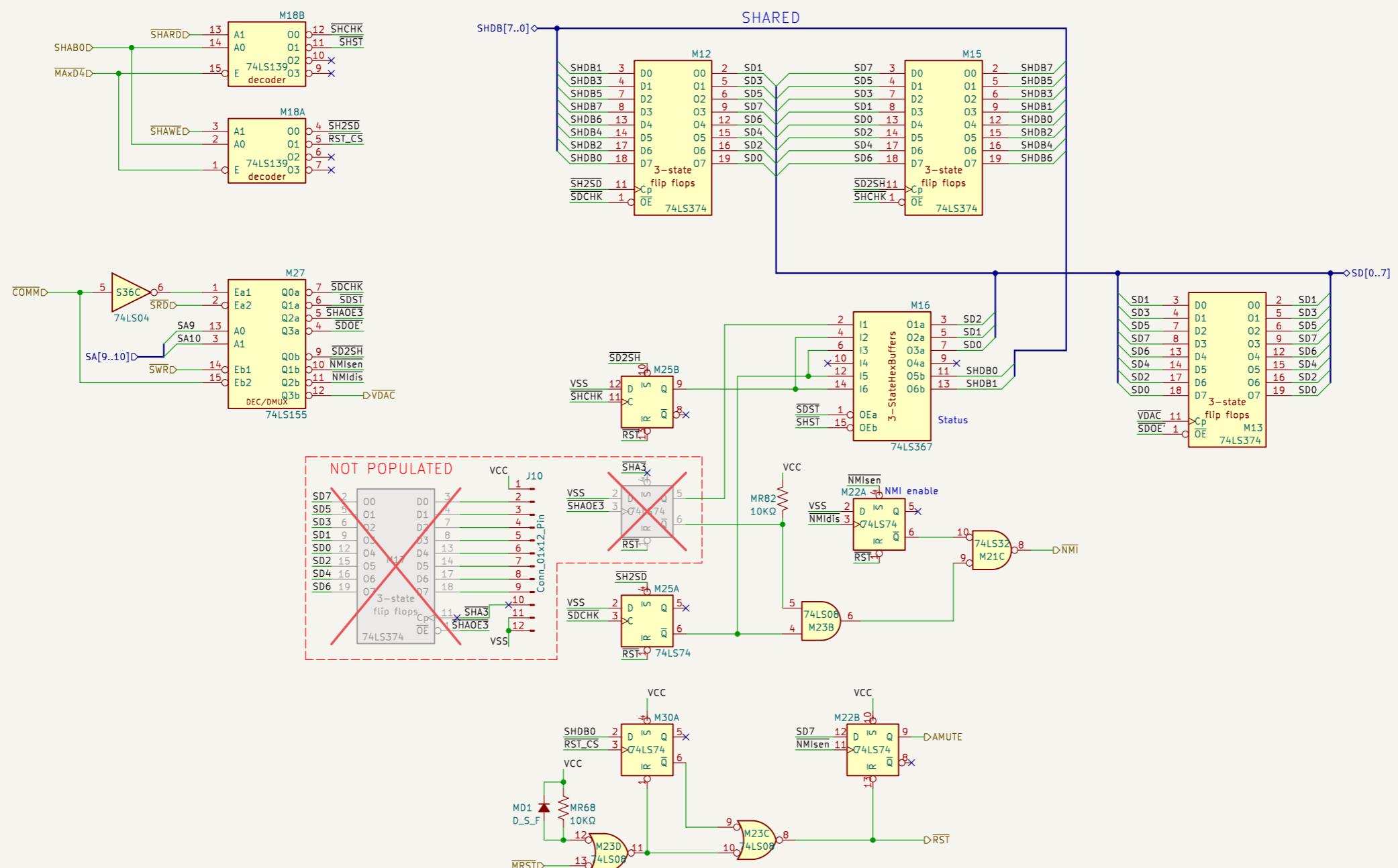
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Sheet: /Video/Line buffer/
File: linebuf.kicad_sch

Title: Single Line Video Buffer

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

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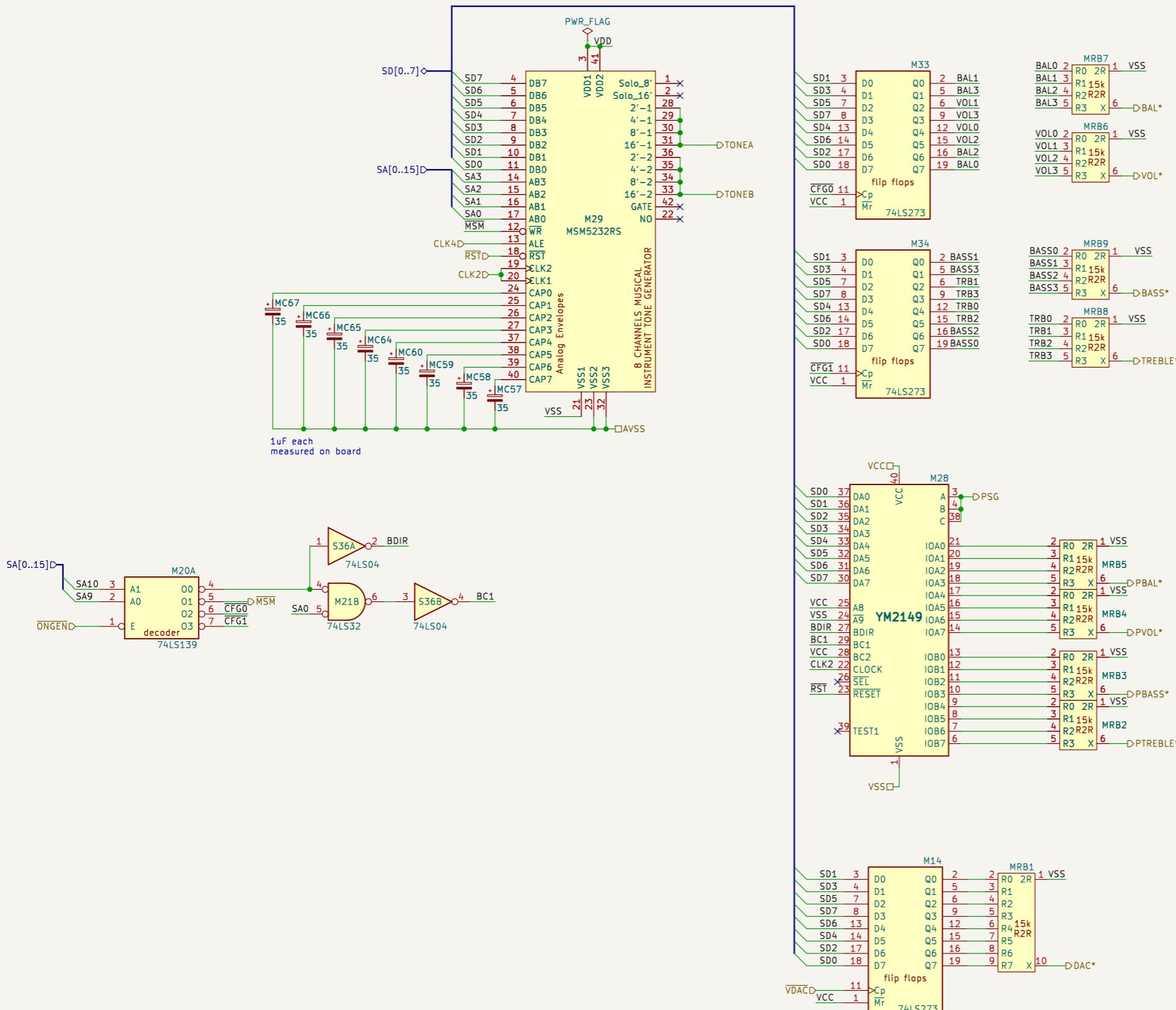
JOTEGO

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

Title: Communication Latches

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

Rev:
Id: 18/20



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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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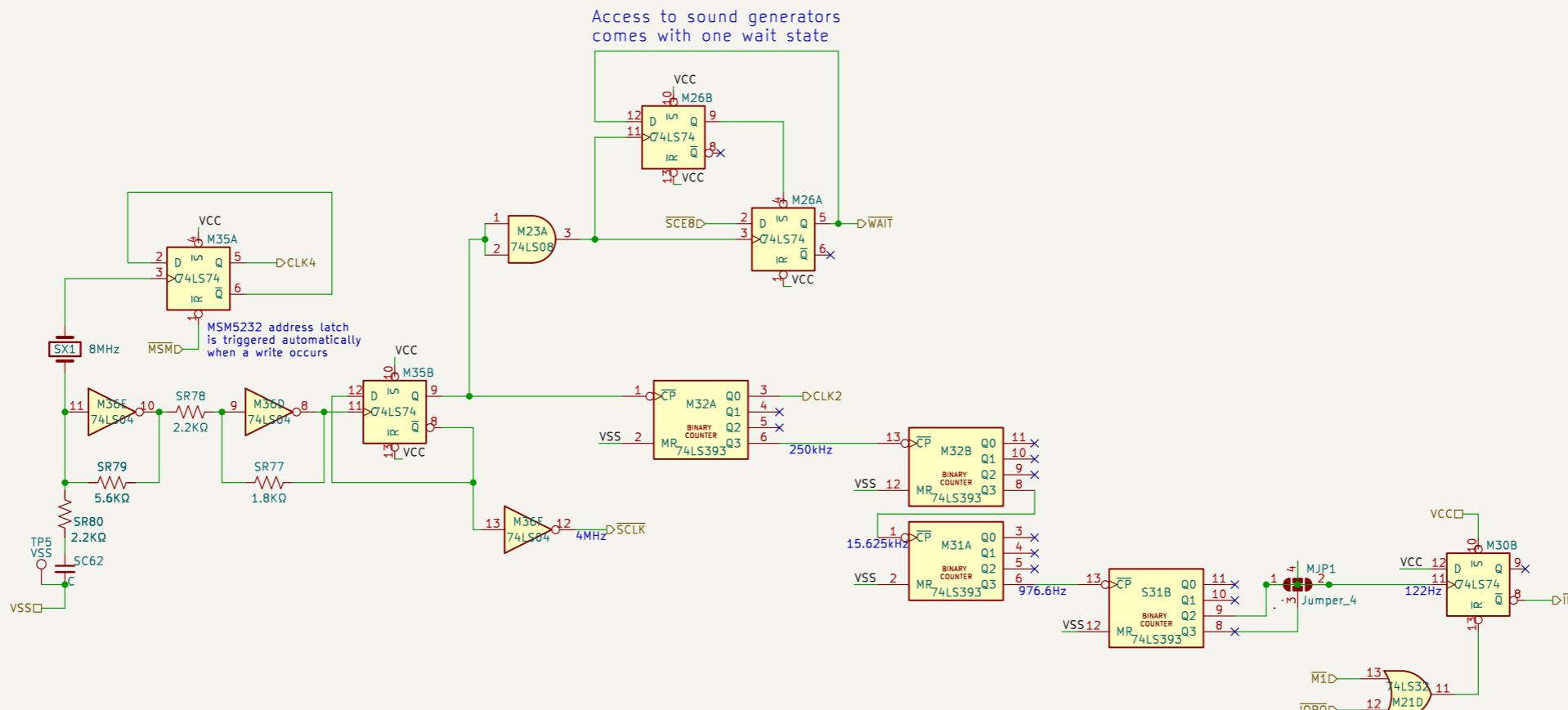
D

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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