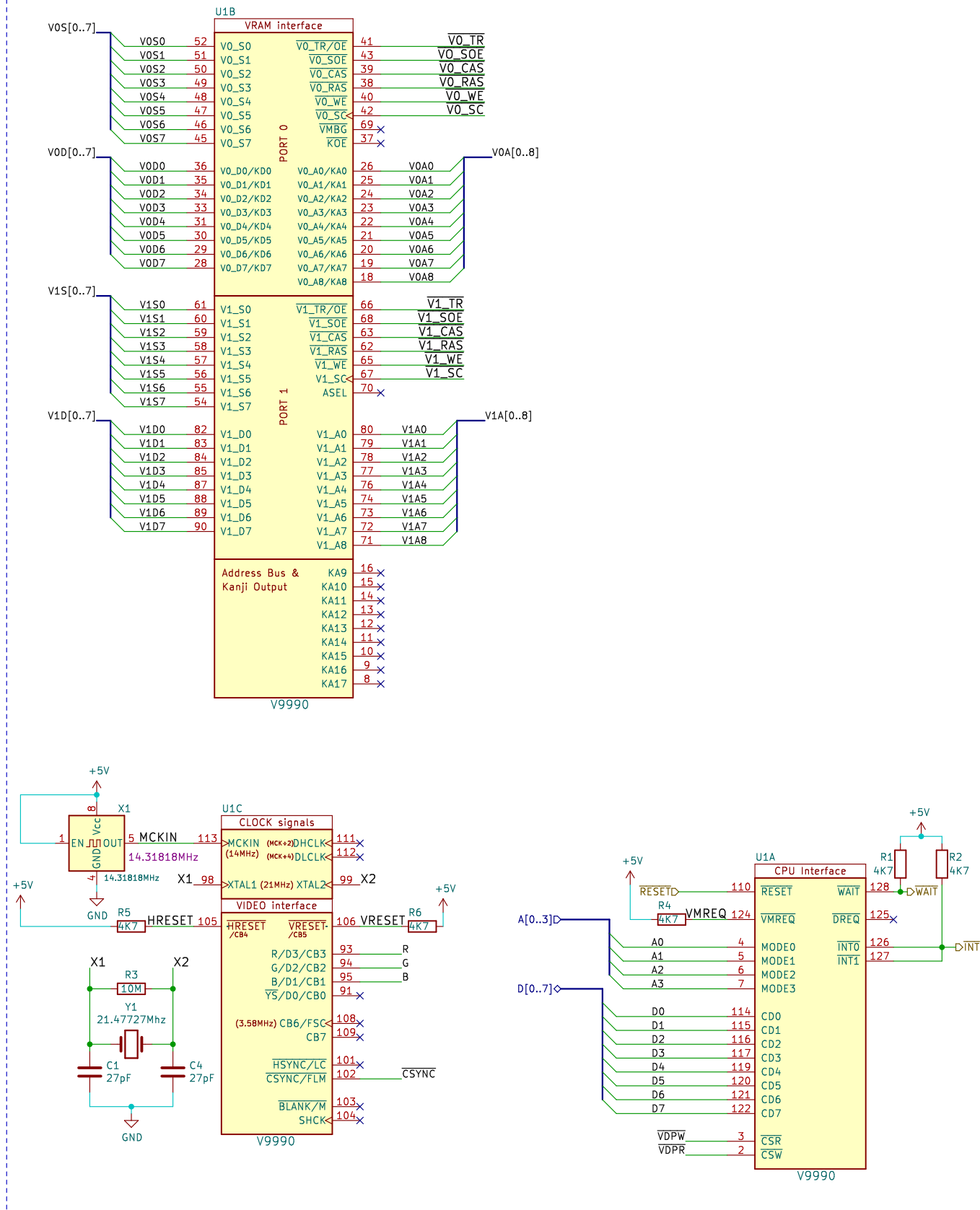


Video Display Processor



VGA clocks:

640x400 (70Hz) – 25.175 MHz
640x480 (60Hz) – 25.175 MHz

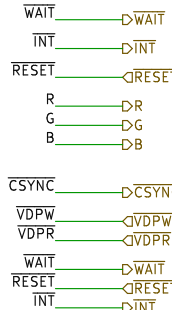
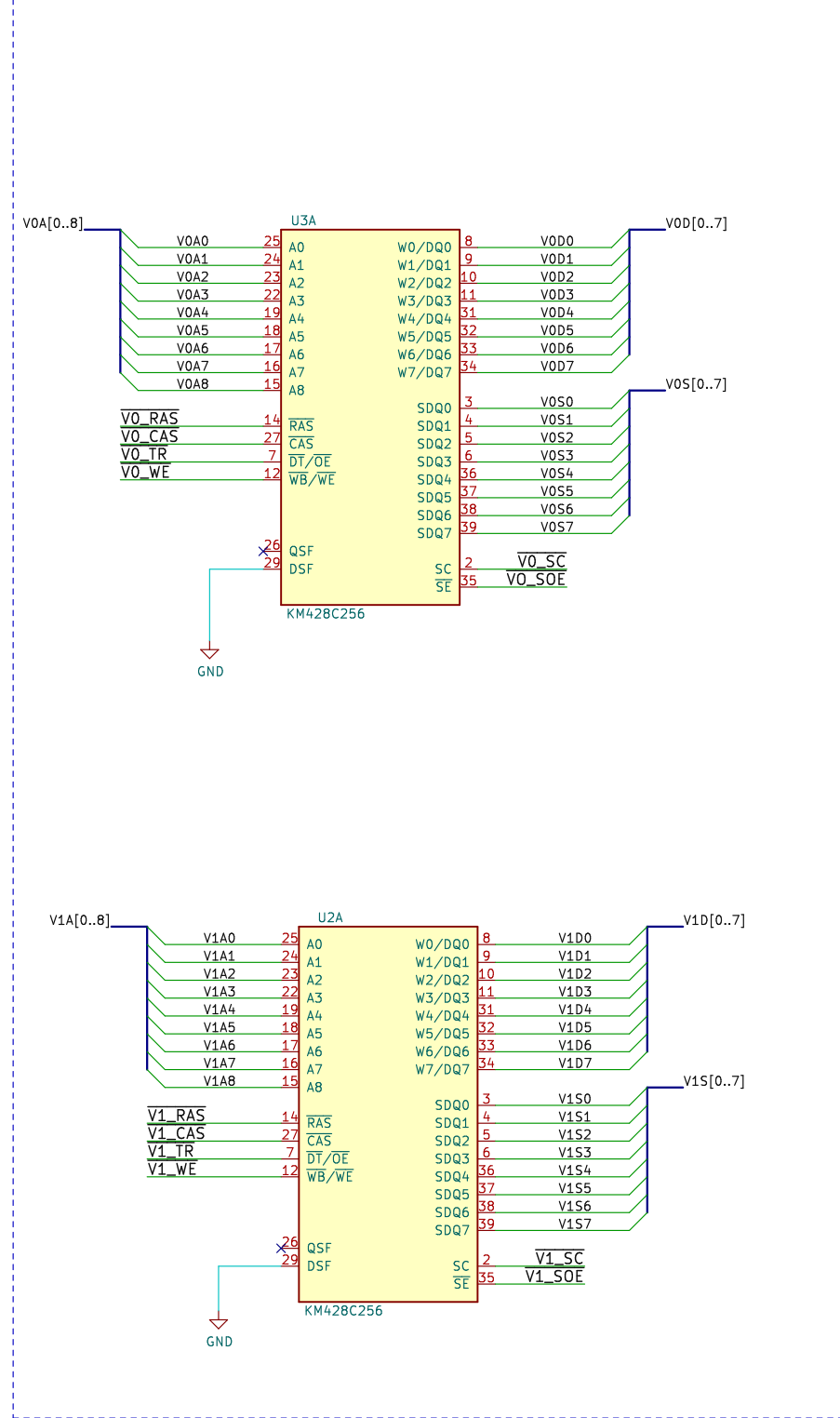
Pal clocks:

704x576 (50Hz) – 4.43361875 MHz

NTSC clocks:

704x480 (60Hz) – 3.579545 MHz

VRAM



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The Retro Hacker

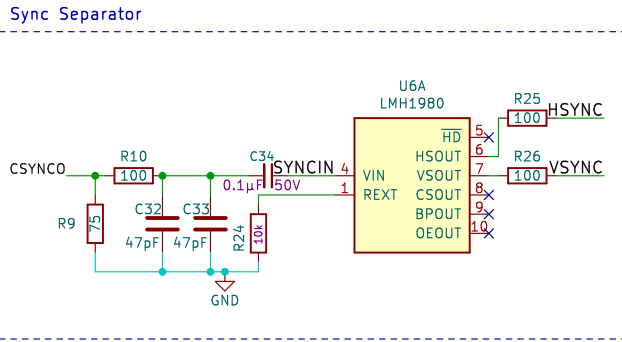
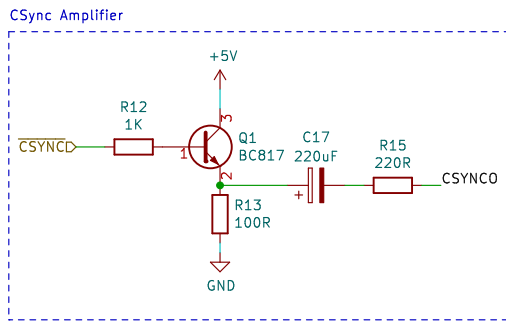
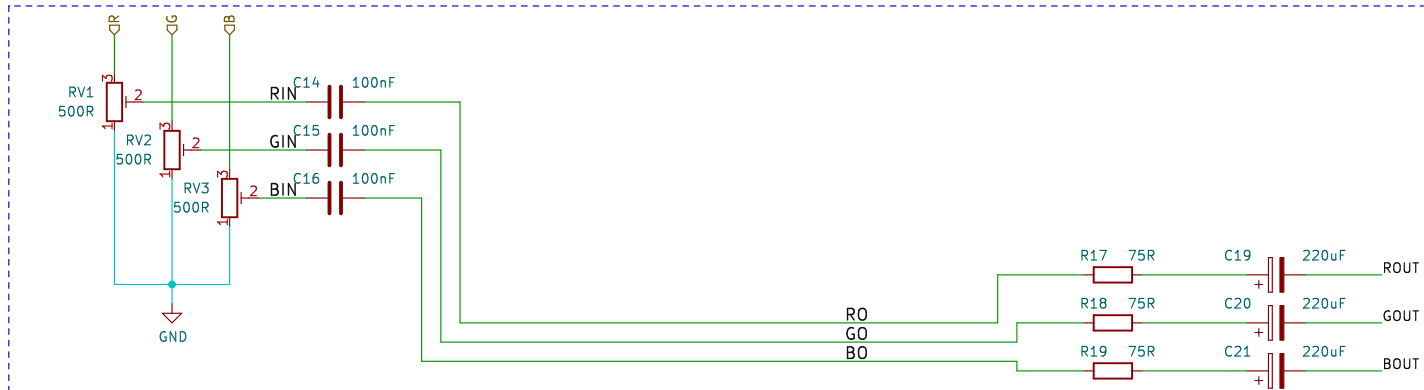
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Title: TRH9000

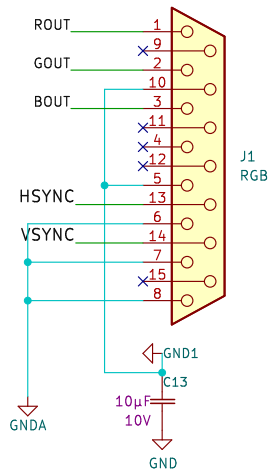
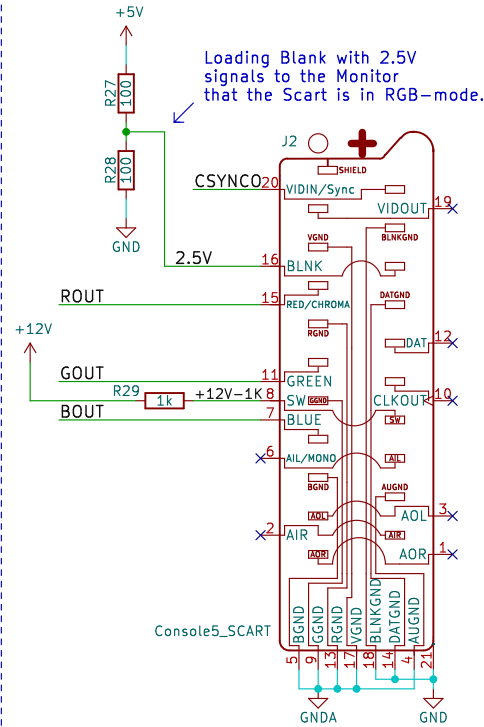
Size: A3 Date: 2022-08-04
KiCad E.D.A. kicad (6.0.0)

Rev: 1

Id: 2/4



Video Output Connectors



Implementing Superimpose:

1. Feed external HSYNC / VSYNC into V9990 HRESET / VRESET pins for synchronisation
 2. Combine external and internal R, G, B with an analog multiplexer, controlled by /Ys signal
- The principle is that the original external signal is passed through while /Ys is not superimposing.

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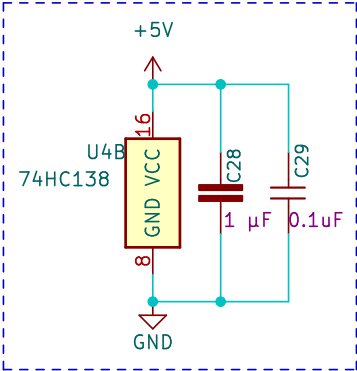
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Title: TRH9000

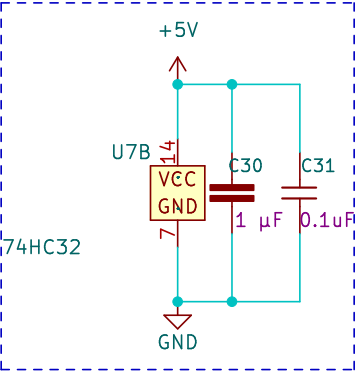
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KiCad E.D.A. kicad (6.0.0)

Rev: 1
Id: 3/4

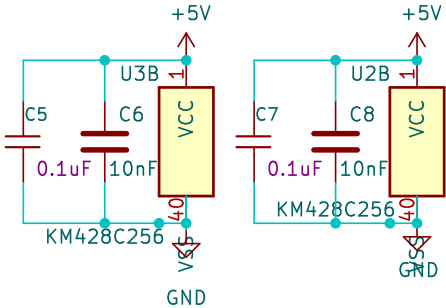
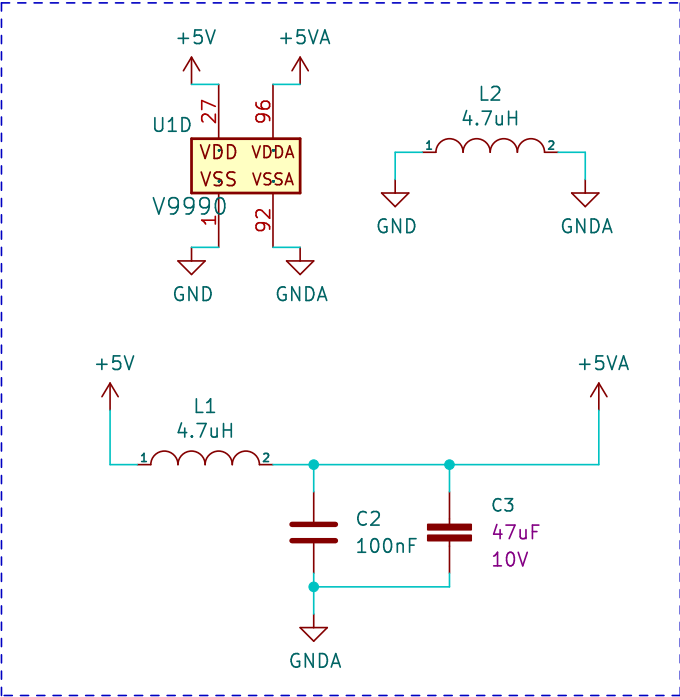
Demultiplexer Power



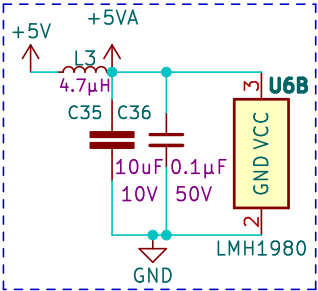
OR-gate Power



VDP Power



Sync Separator power



Power Nets

