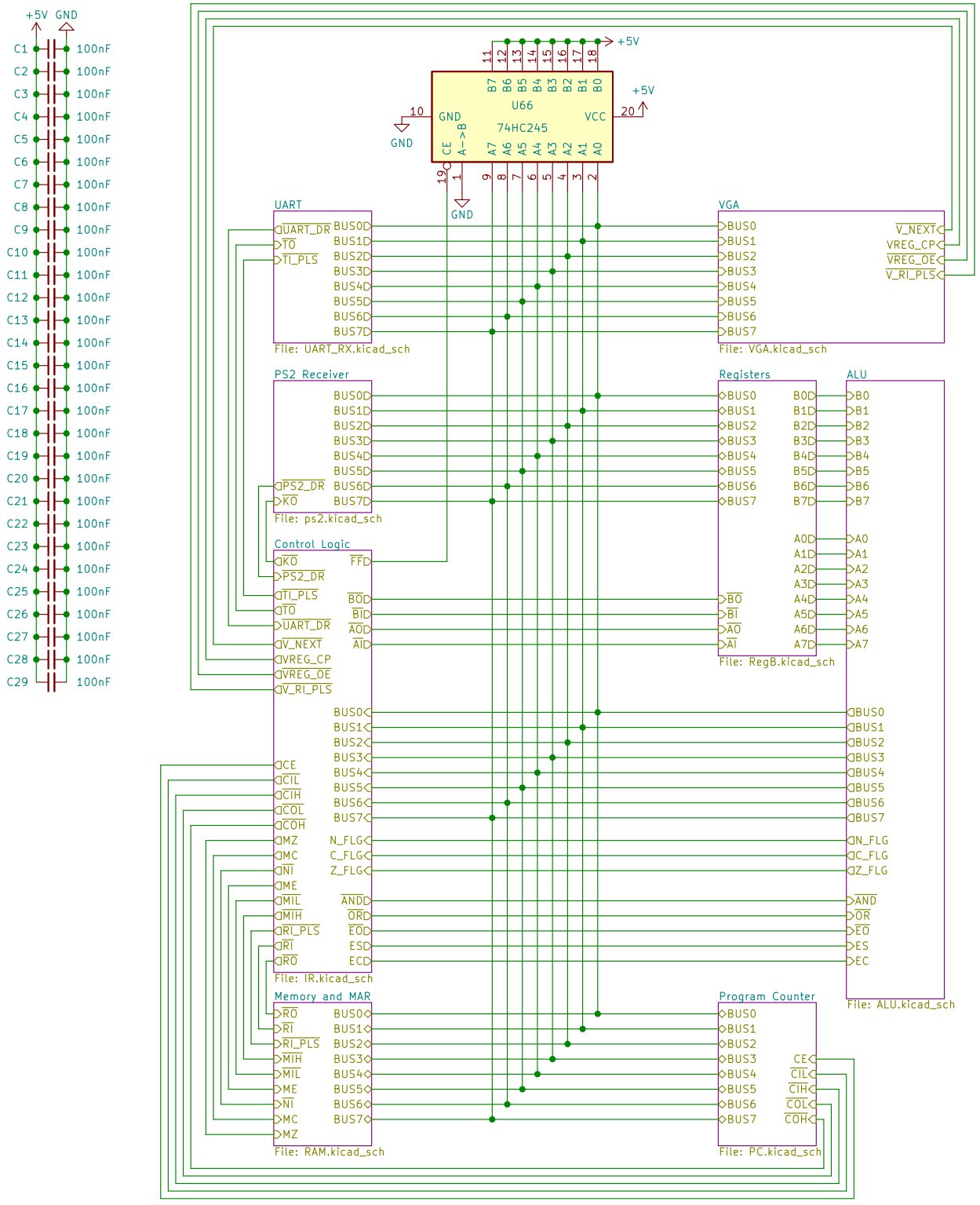


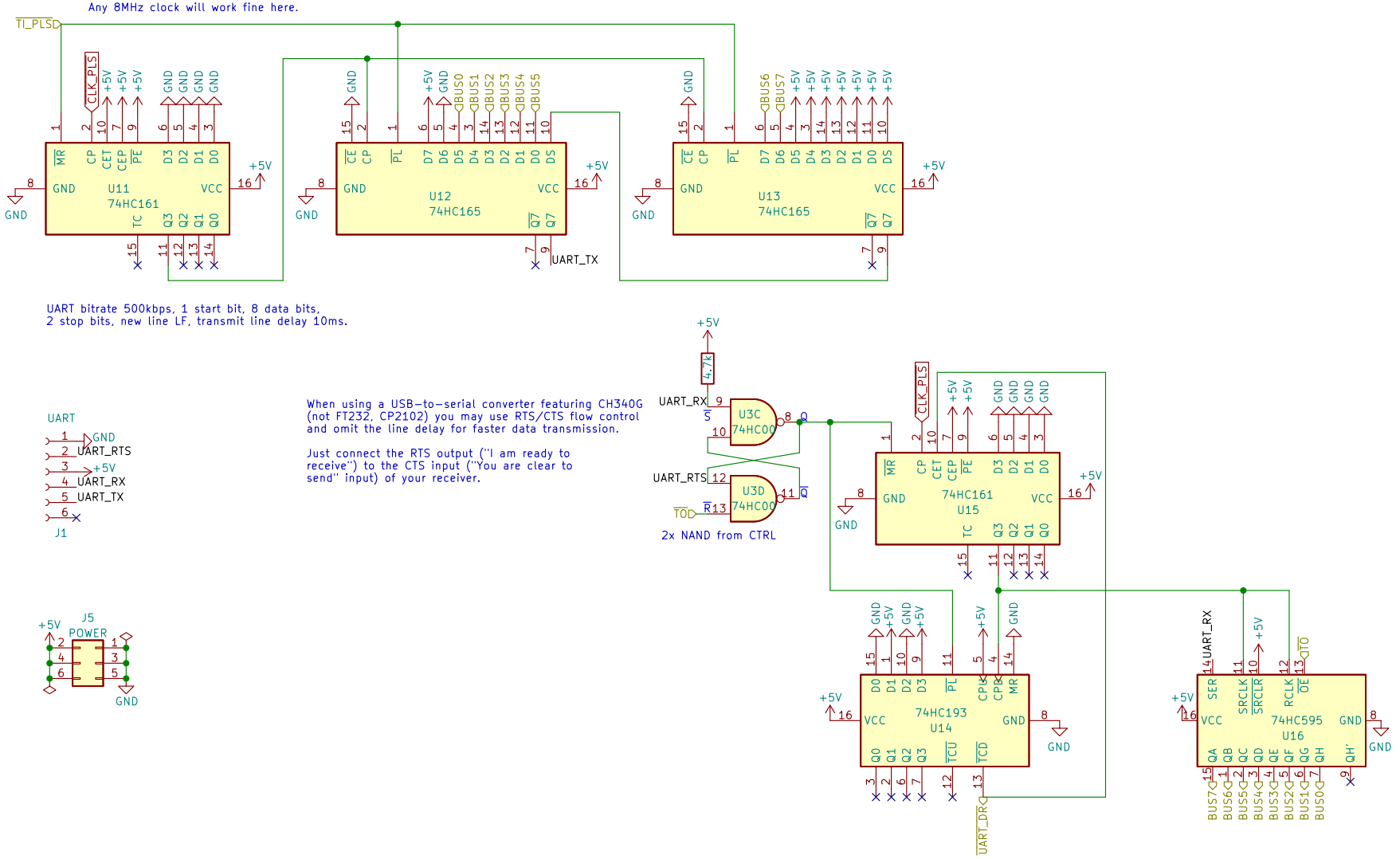
M2 H4 M2 H3 M2 H2 M2 H1

Author: Carsten Herting (slu4)

Sheet: /
File: 8-Bit CPU 32k.kicad_sch

Title: Minimal 64x4 Home Computer

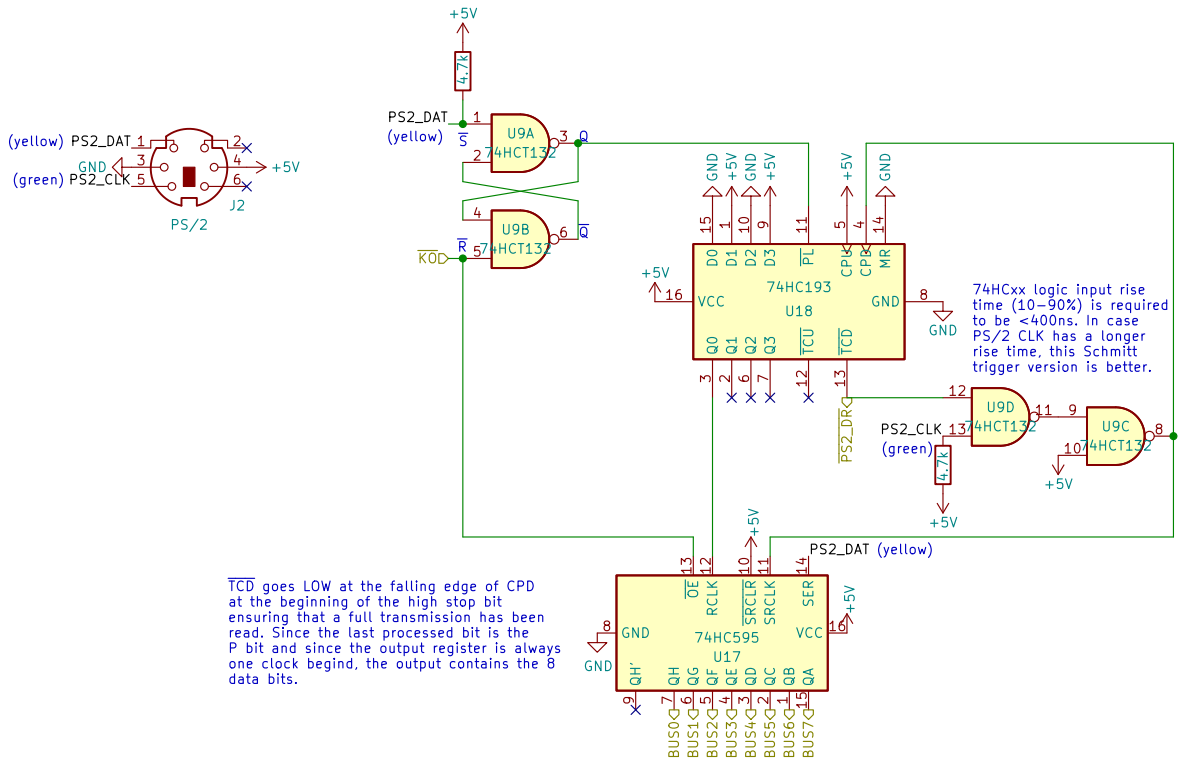
Size: A4	Date: 2023-12-11	**Rev: 1.1**
KiCad E.D.A. kicad (6.0.5)		Id: 1/9



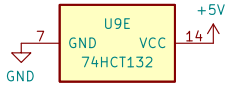
Sheet: /UART/
File: UART_RX.kicad_sch

Title: UART Section

Size: A4	Date: 2023-12-11	**Rev: 1.1**
KiCad E.D.A. kicad (6.0.5)		Id: 2/9



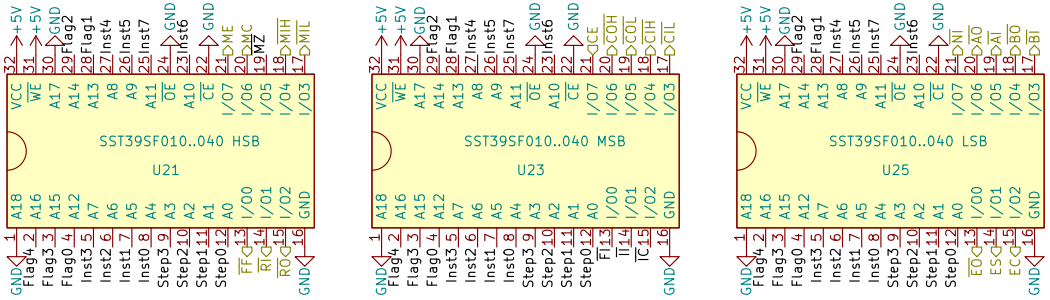
I am using a 74HC132 (NAND with Schmitt-trigger inputs) rather than the standard 74HC00 here, since PS/2 signals can have rather large rise and fall time.
For PS/2 devices with lower (3.3V) output use 74HCT132.

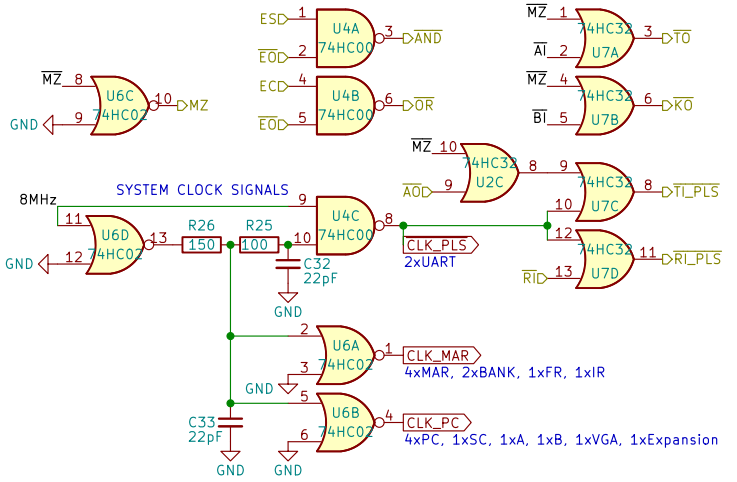


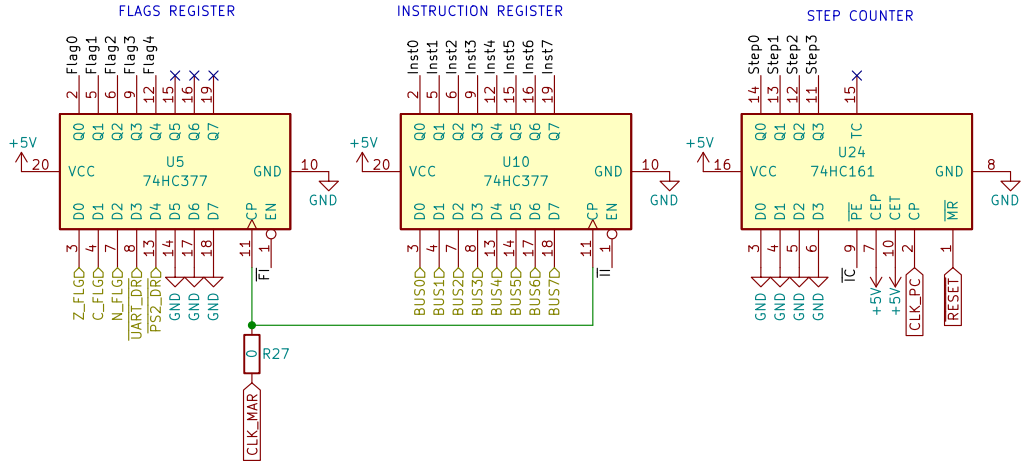
Sheet: /PS2 Receiver/
File: ps2.kicad_sch

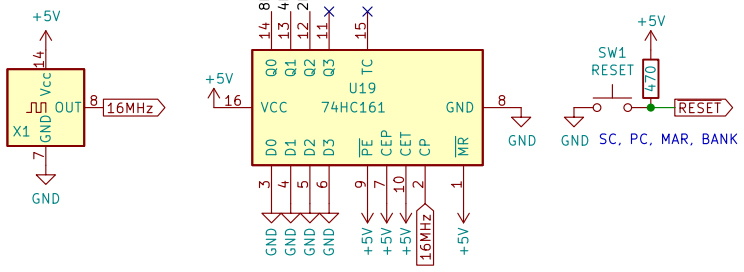
Title: PS/2 Receiver

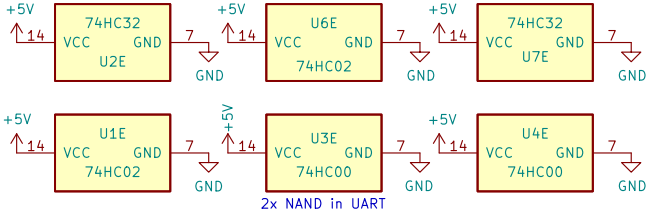
Size: A4	Date: 2023-12-11	**Rev: 1.1**
KiCad E.D.A. kicad (6.0.5)		Id: 3/9

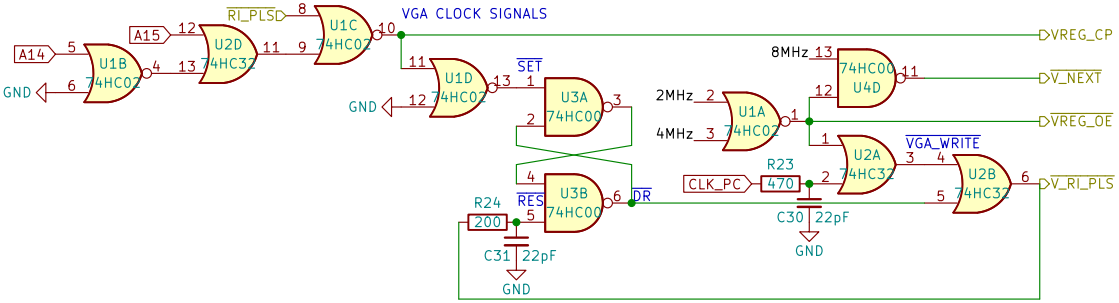








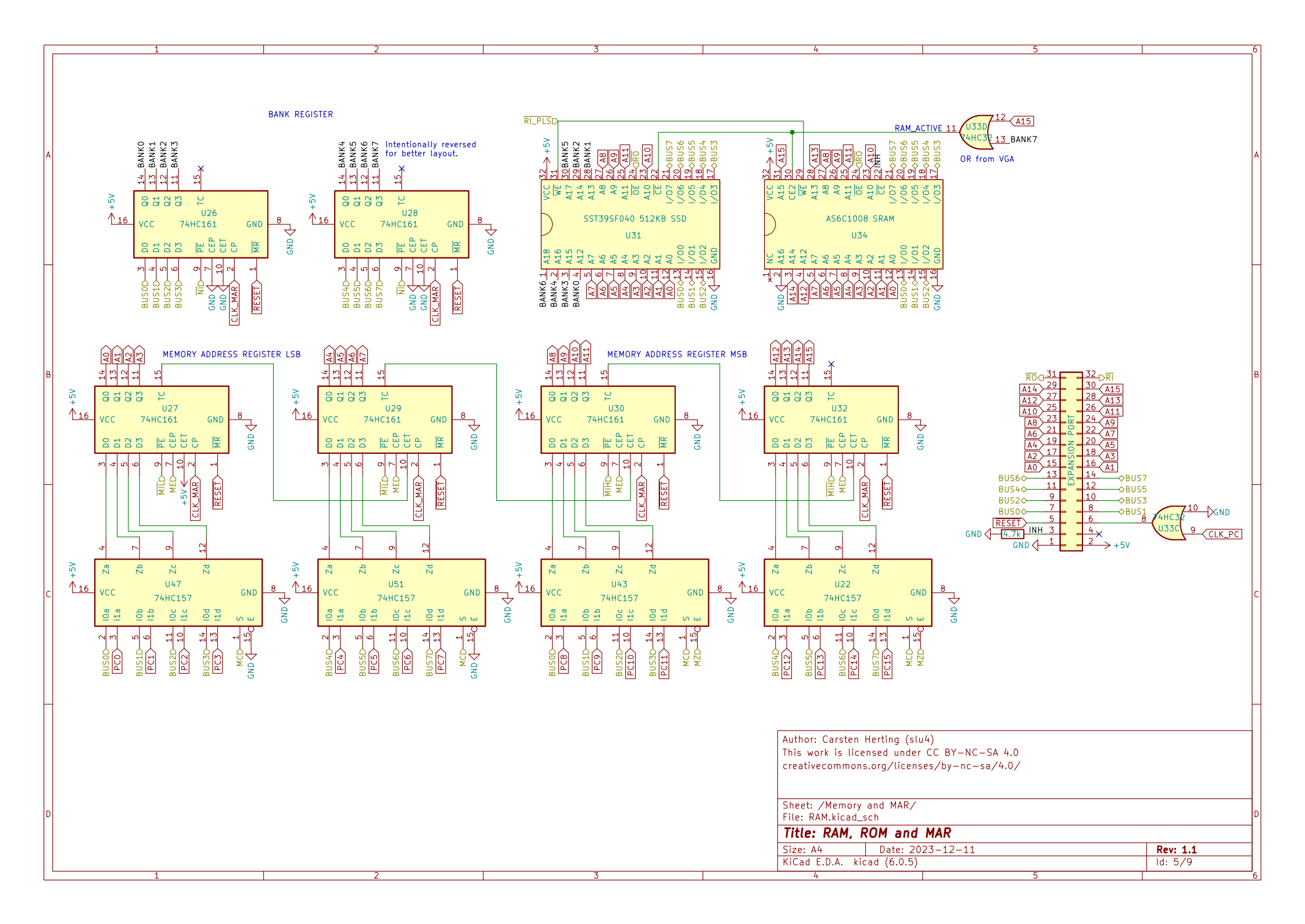




Sheet: /Control Logic/
File: IR.kicad_sch

Title: Control Logic

Size: A4	Date: 2023-12-11	**Rev: 1.1**
KiCad E.D.A. kicad (6.0.5)		Id: 4/9


BANK REGISTER
Intentionally reversed
for better layout.
U26
U28
74HC161
SST39SF040 512KB SSD
U31
AS6C1008 SRAM
U34
RAM_ACTIVE 11
U33D
74HC32
OR from VGA
MEMORY ADDRESS REGISTER LSB
MEMORY ADDRESS REGISTER MSB
U27
U29
U30
U32
U47
U51
U43
U22
74HC157
EXPANSION PORT
U33C
Author: Carsten Herting (slu4)
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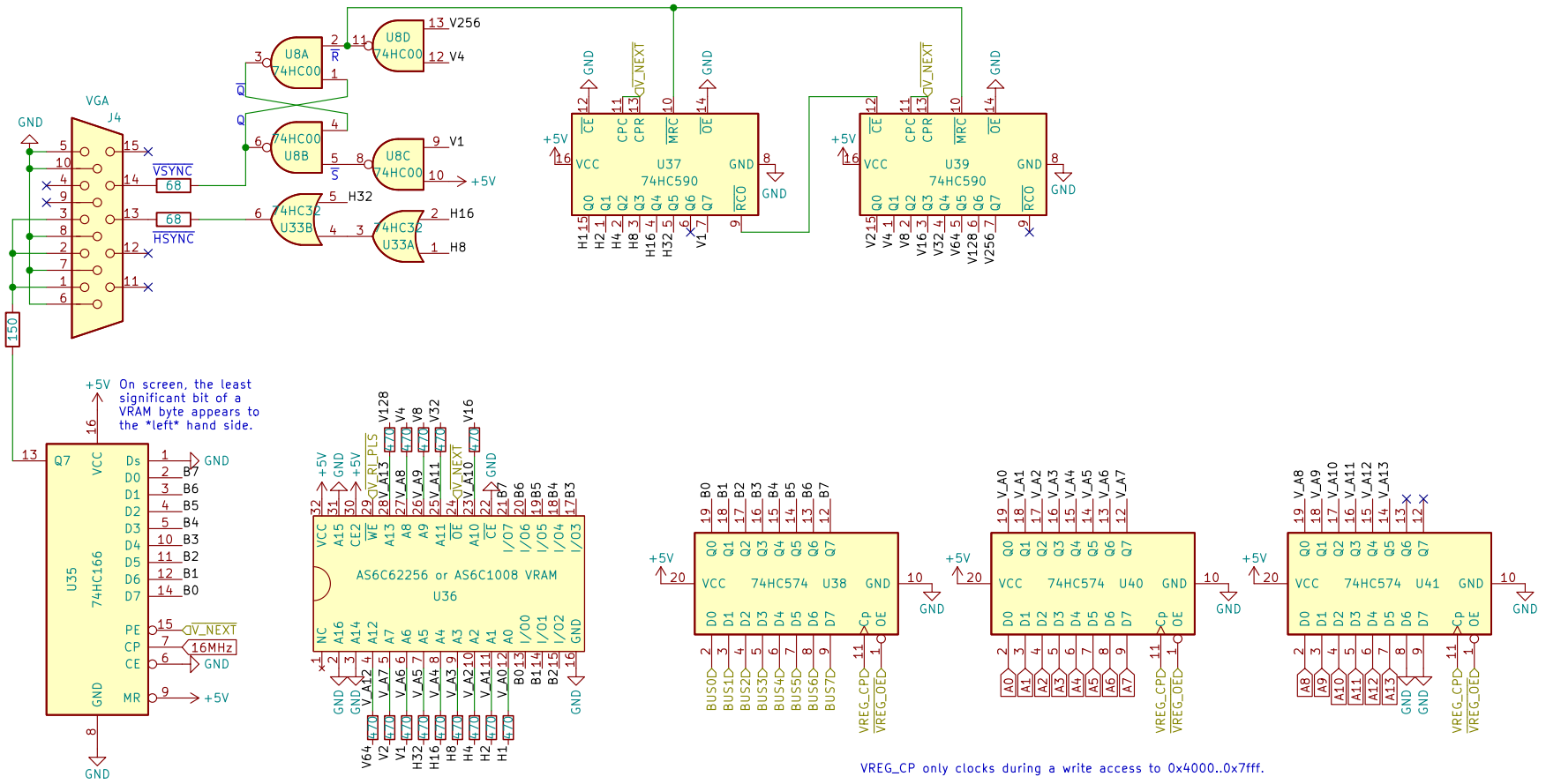
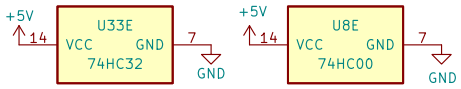
Sheet: /Memory and MAR/
File: RAM.kicad_sch
Title: RAM, ROM and MAR
Size: A4
Date: 2023-12-11
Rev: 1.1
KiCad E.D.A. kicad (6.0.5)
Id: 5/9



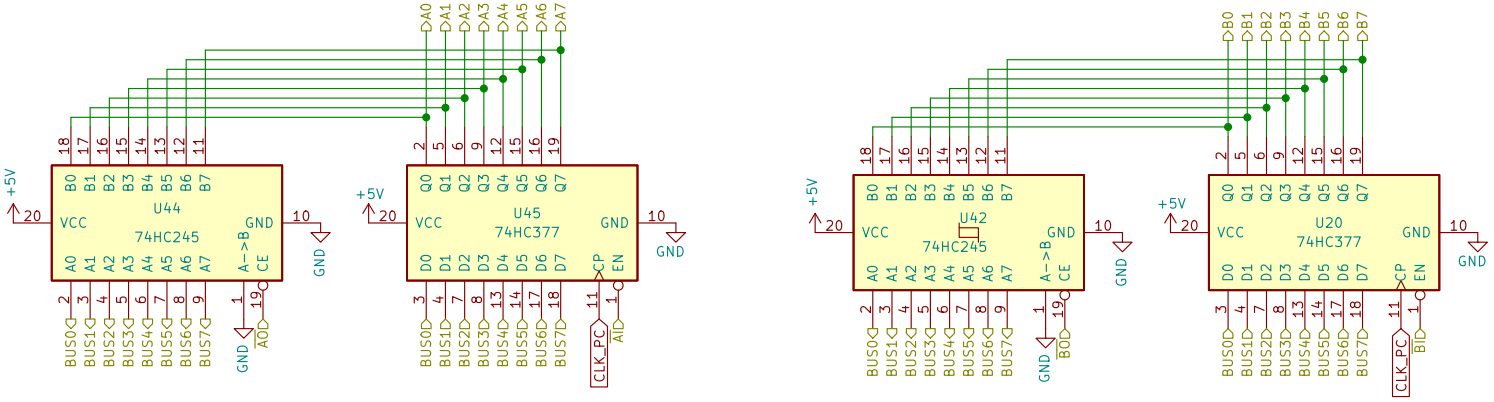
OR_C and OR_D used by MAR



Sheet: /VGA/
File: VGA.kicad_sch

Title: VGA Circuit

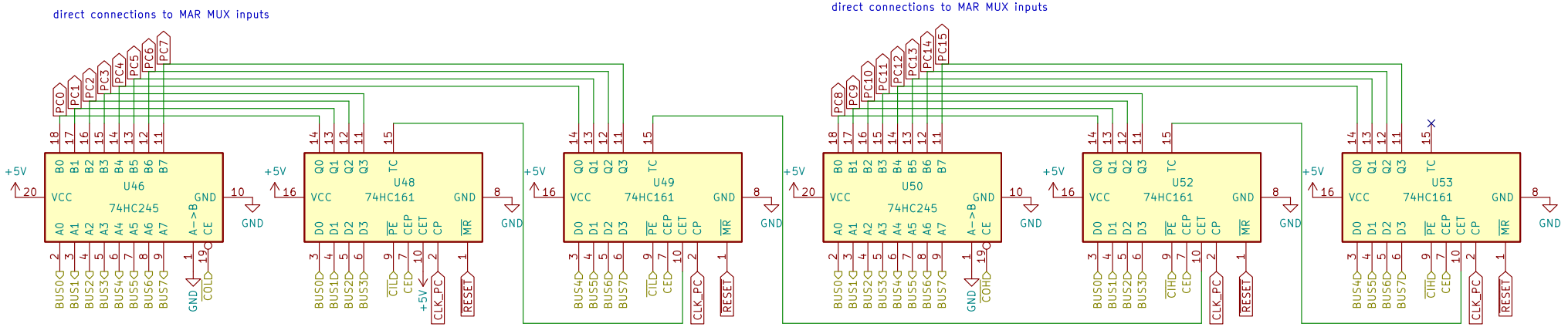
Size: A4	Date: 2023-12-11	**Rev: 1.1**
KiCad E.D.A. kicad (6.0.5)		Id: 6/9



Sheet: /Registers/
File: RegB.kicad_sch

Title: B Register

Size: A4	Date: 2023-12-11	**Rev: 1.1**
KiCad E.D.A. kicad (6.0.5)		Id: 7/9



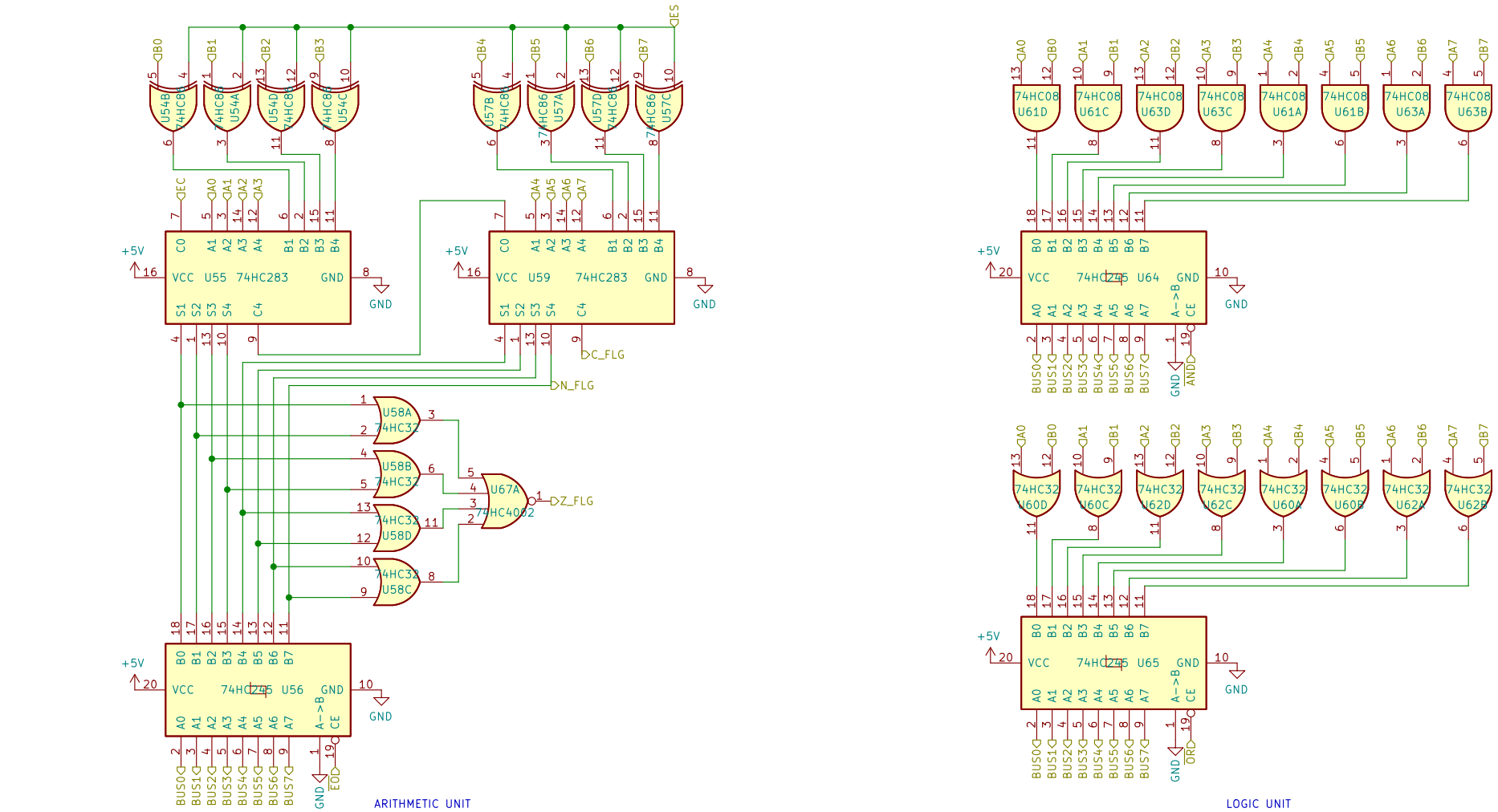
PROGRAM COUNTER LSB

PROGRAM COUNTER MSB

Sheet: /Program Counter/
File: PC.kicad_sch

Title: Program Counter

Size: A4	Date: 2023-12-11	**Rev: 1.1**
KiCad E.D.A. kicad (6.0.5)		Id: 9/9



Sheet: /ALU/
File: ALU.kicad_sch

Title: Arithmetic and Logic Unit

Size: A4	Date: 2023-12-11	**Rev: 1.1**
KiCad E.D.A. kicad (6.0.5)		Id: 10/9