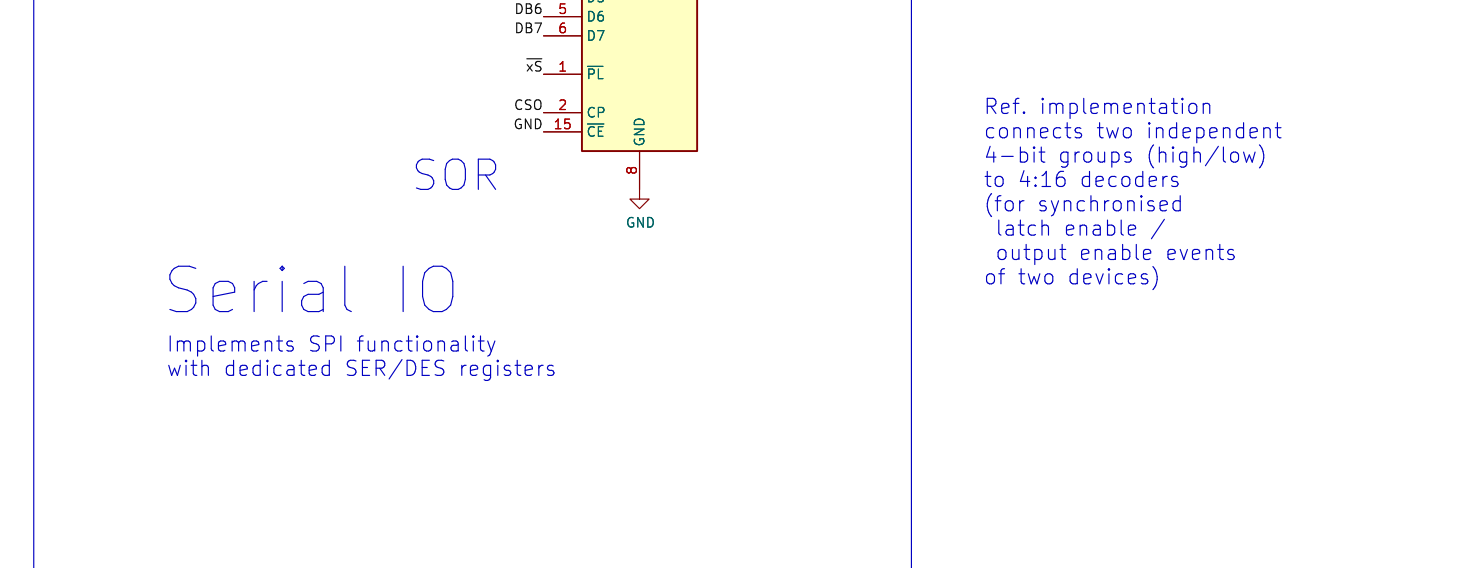
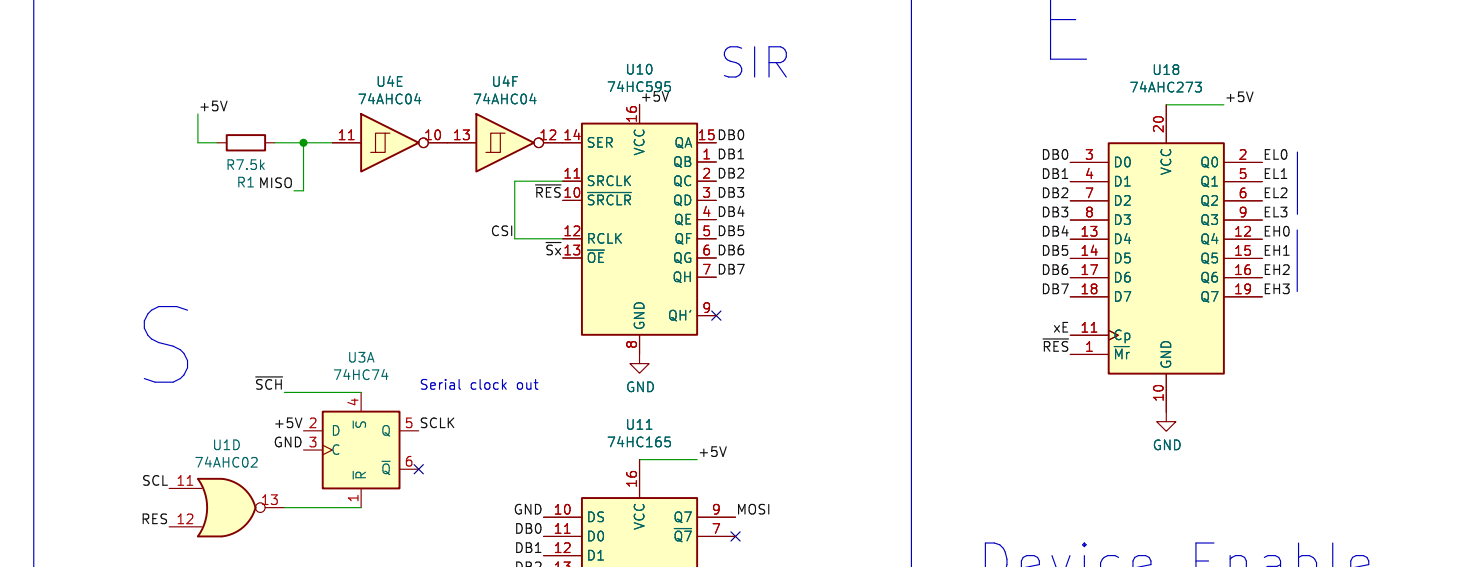
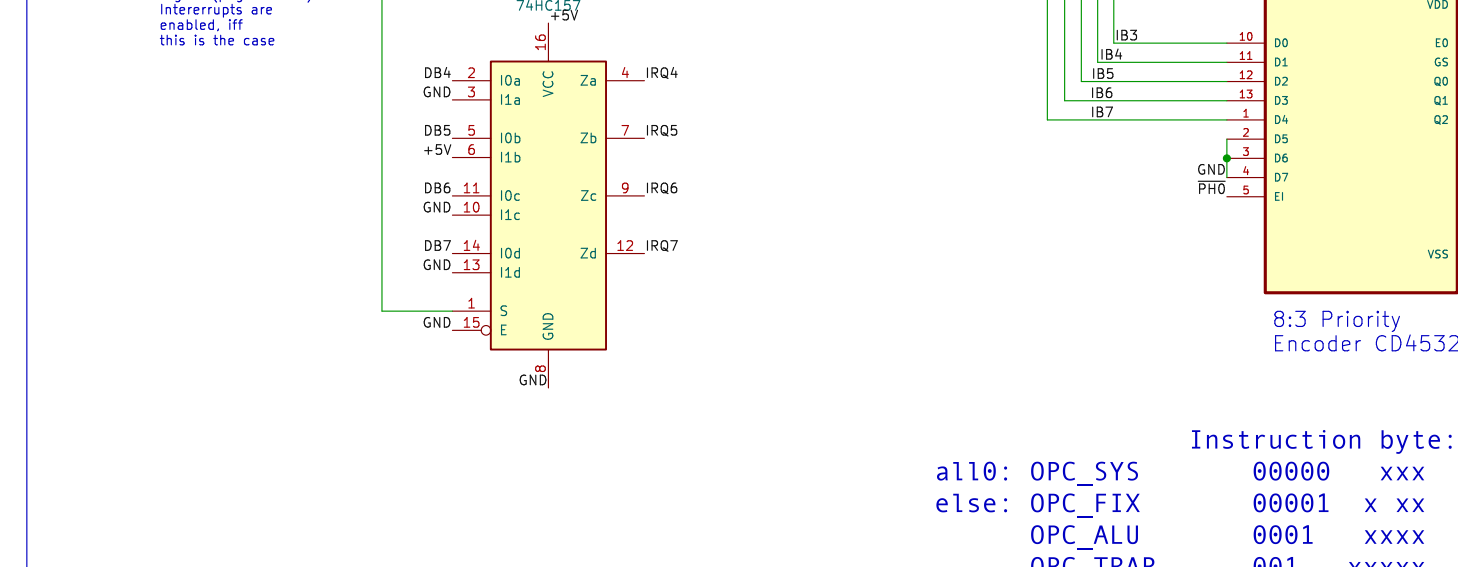
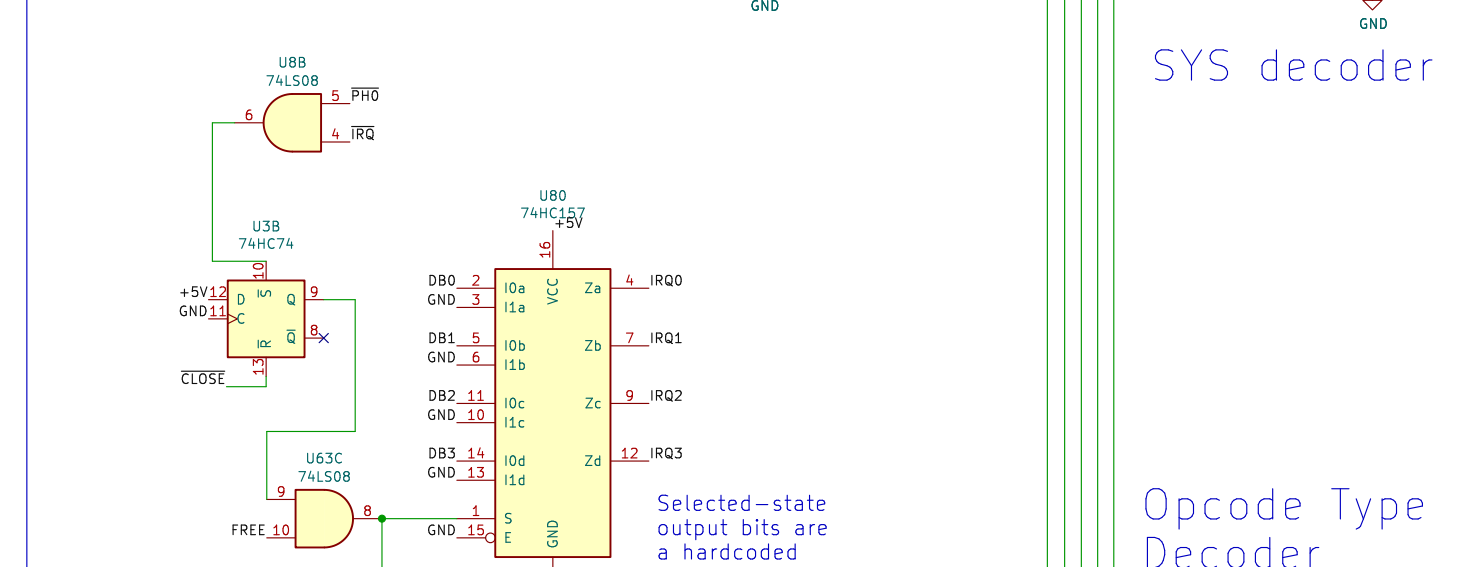
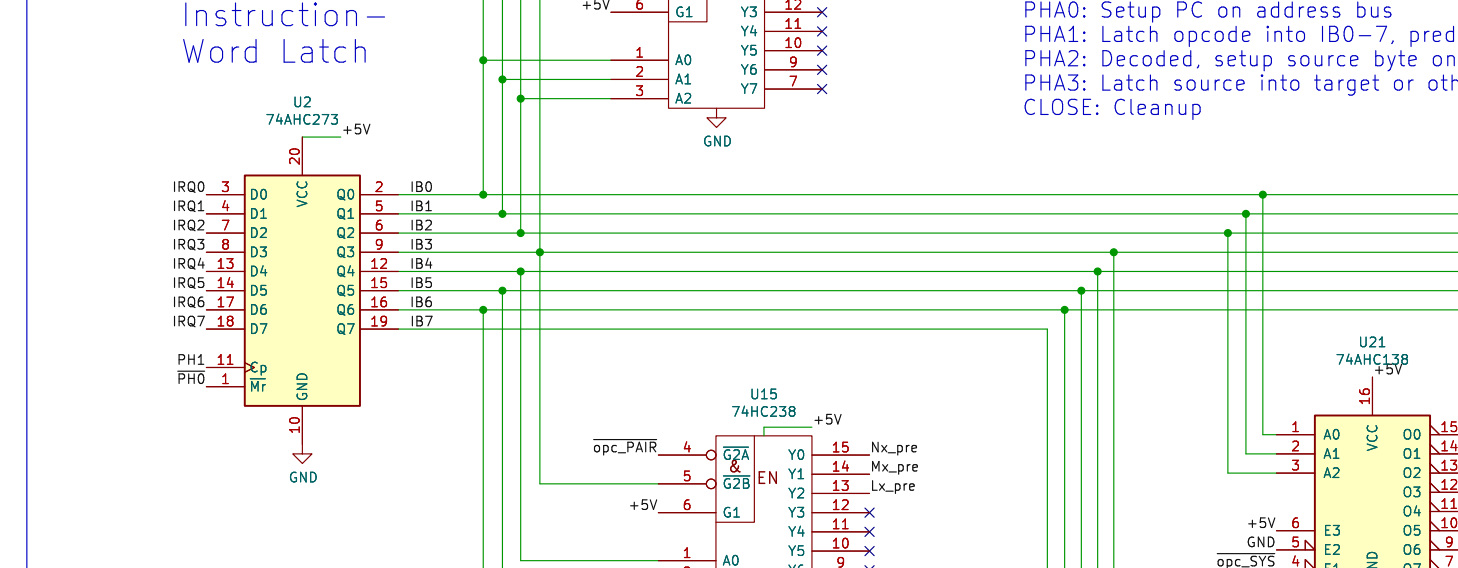
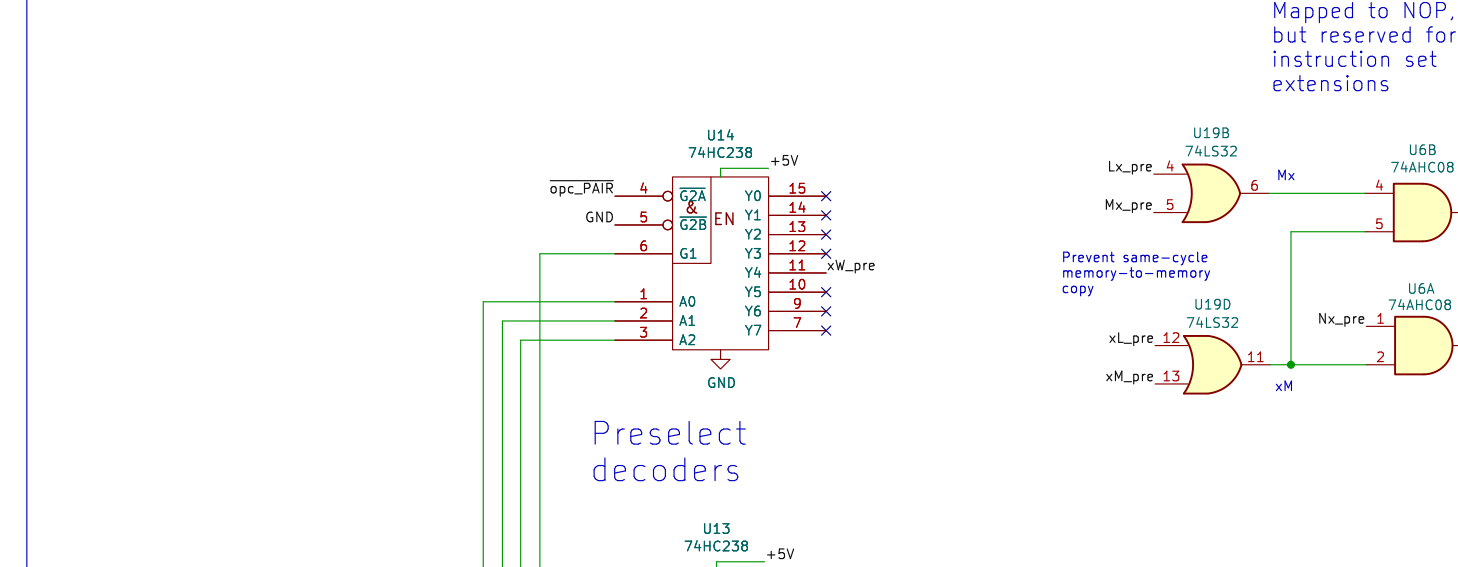
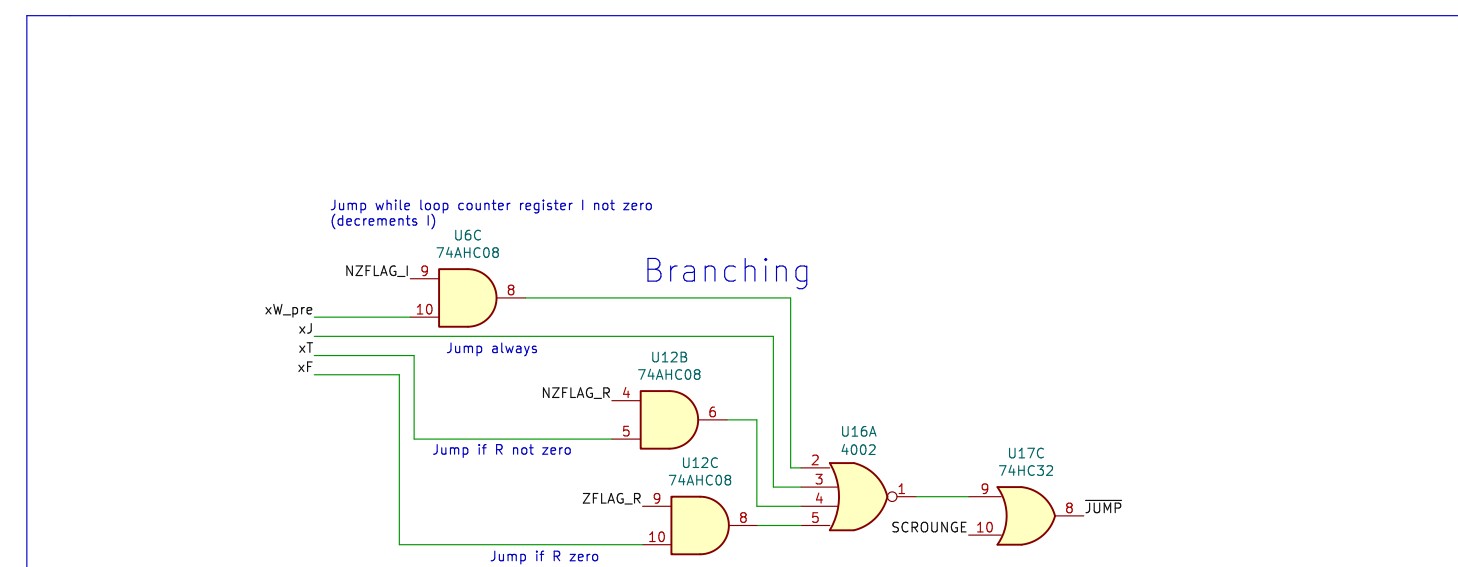
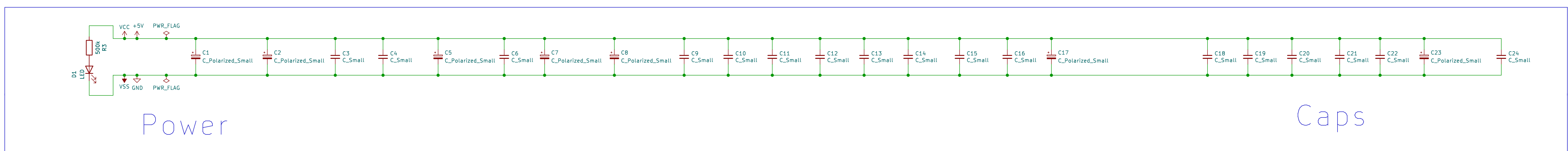


# Sonne-8 Microcontroller Reference Schematics

Rev. Myth/LOX

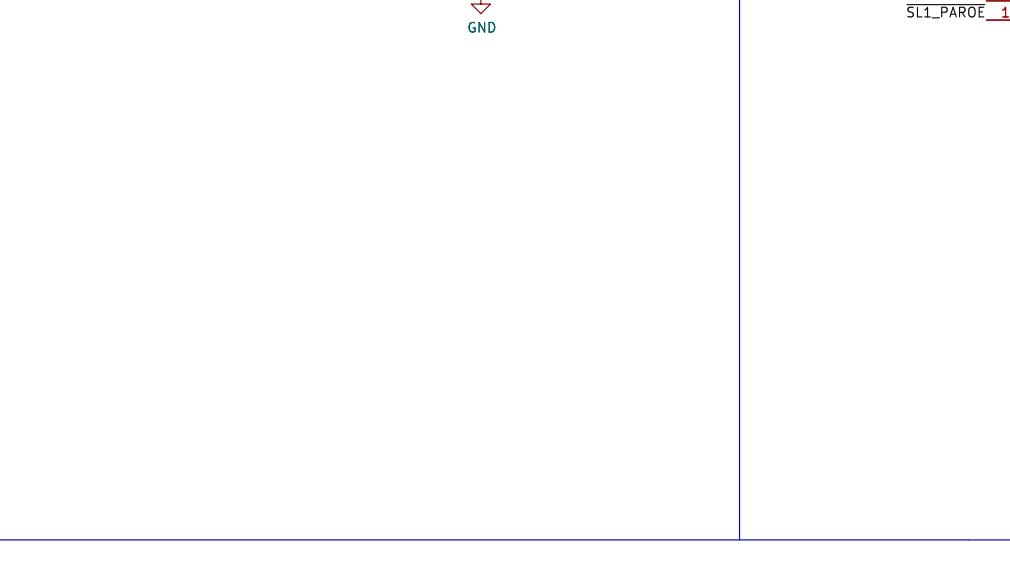
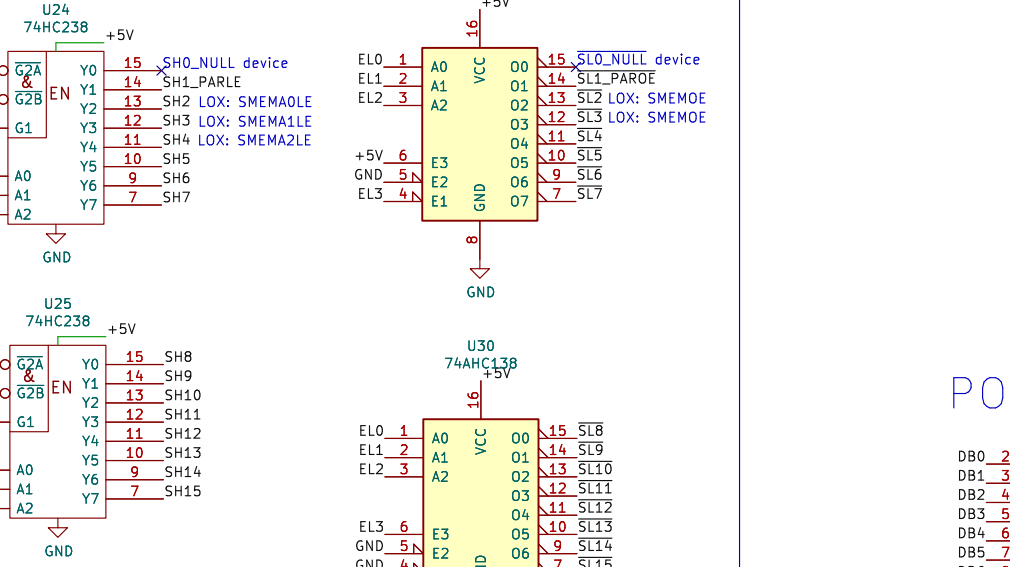
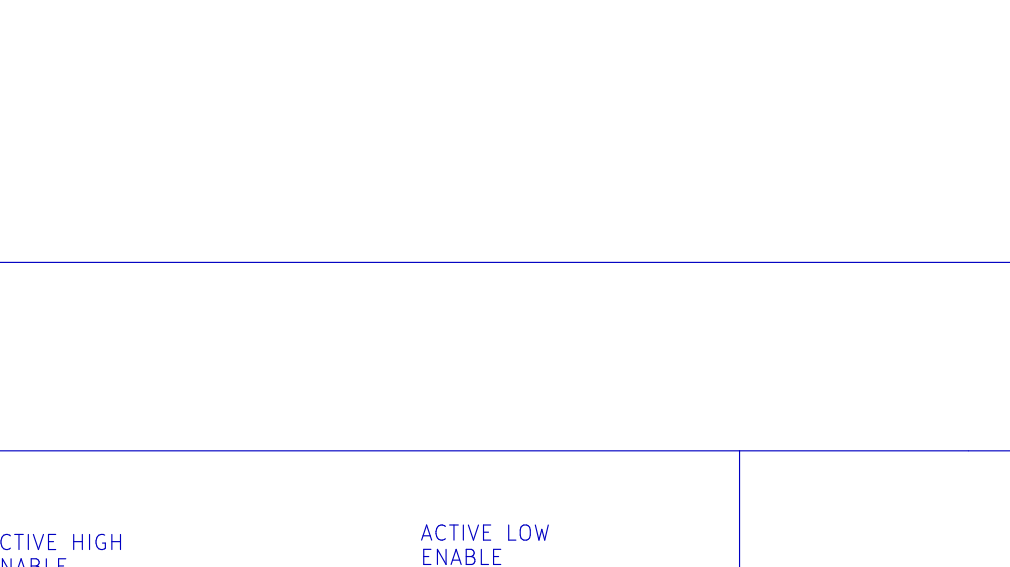
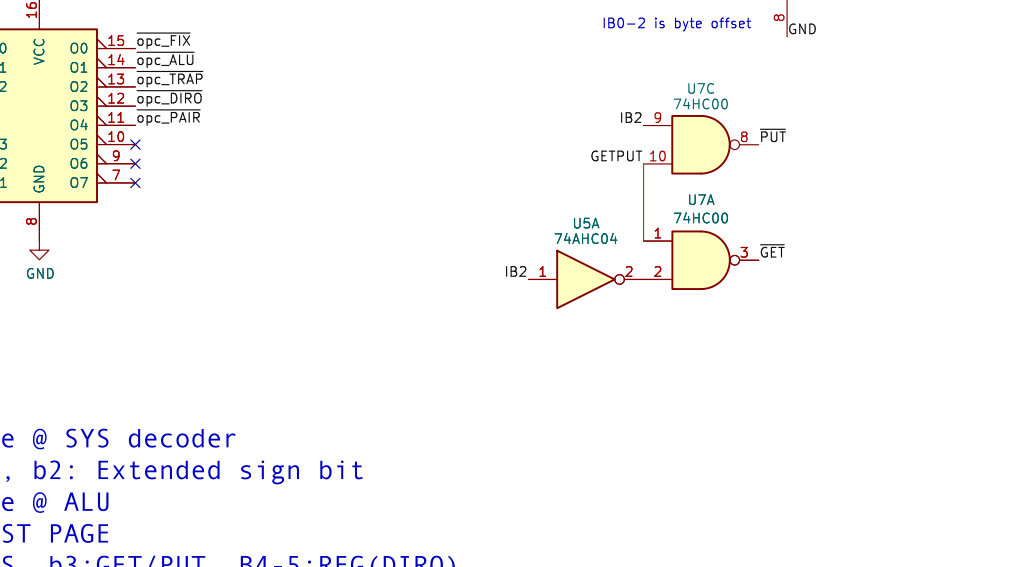
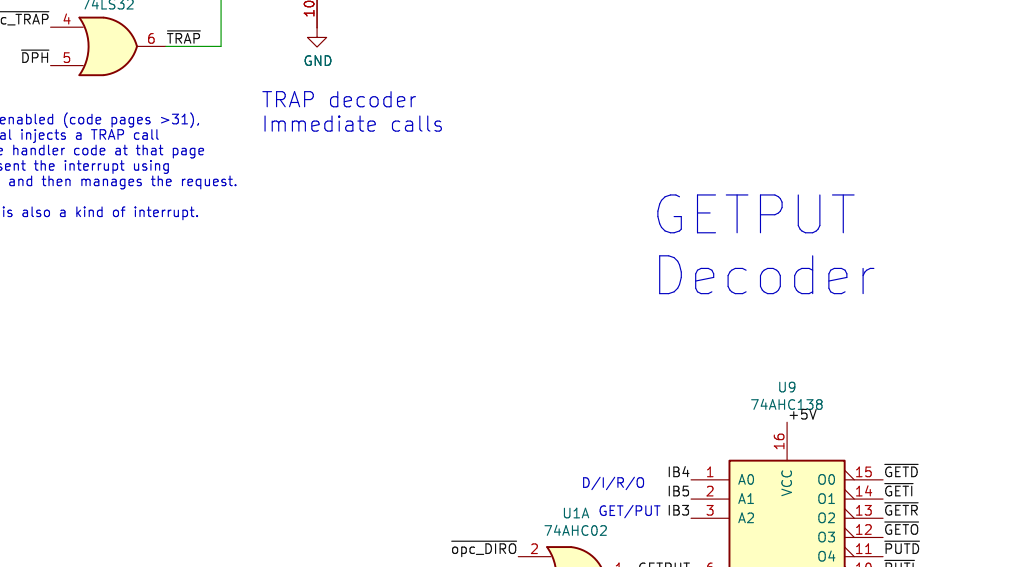
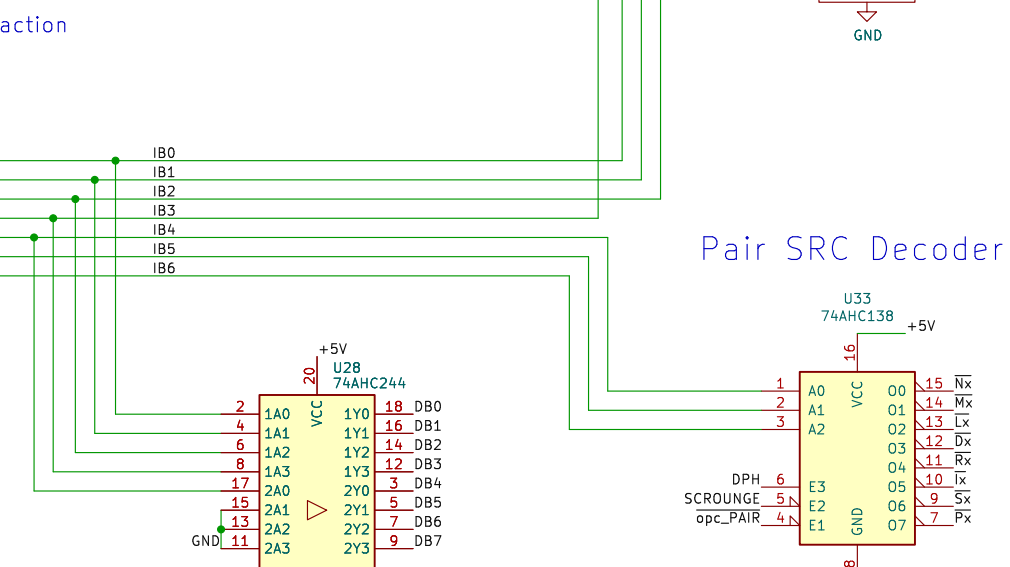
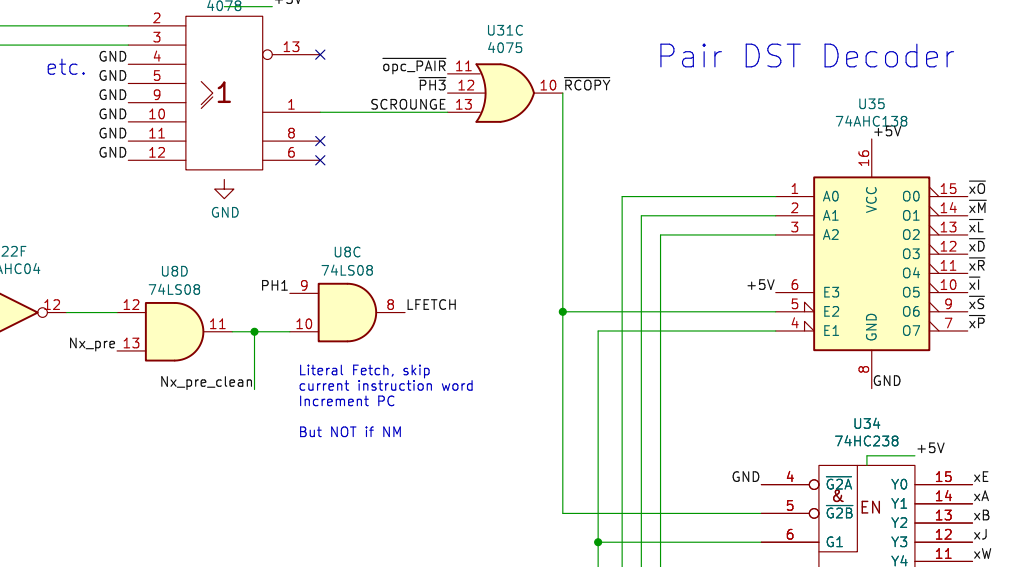


**Serial IO**  
Implements SPI functionality with dedicated SER/DES registers

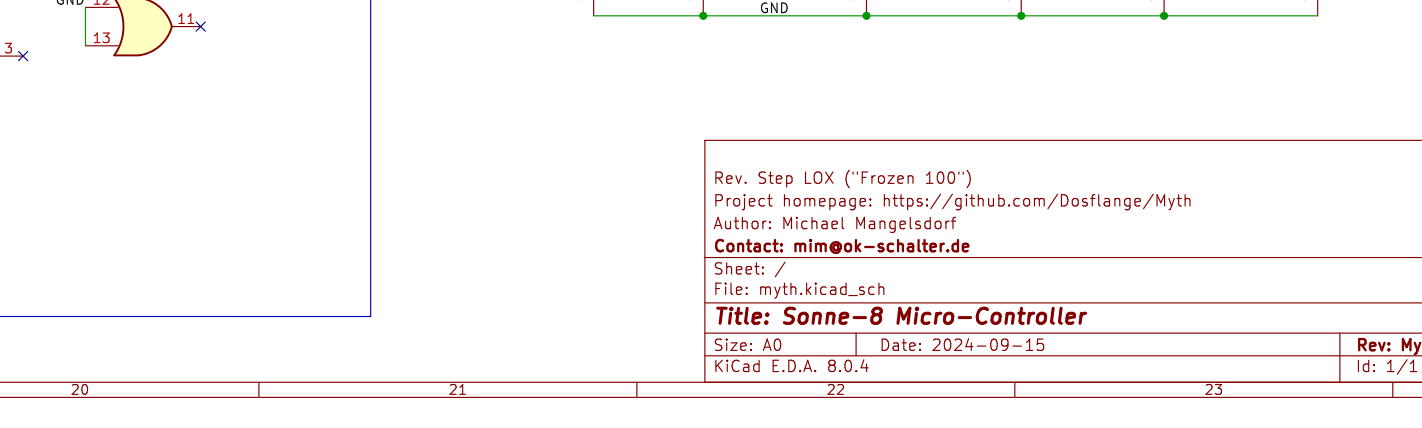
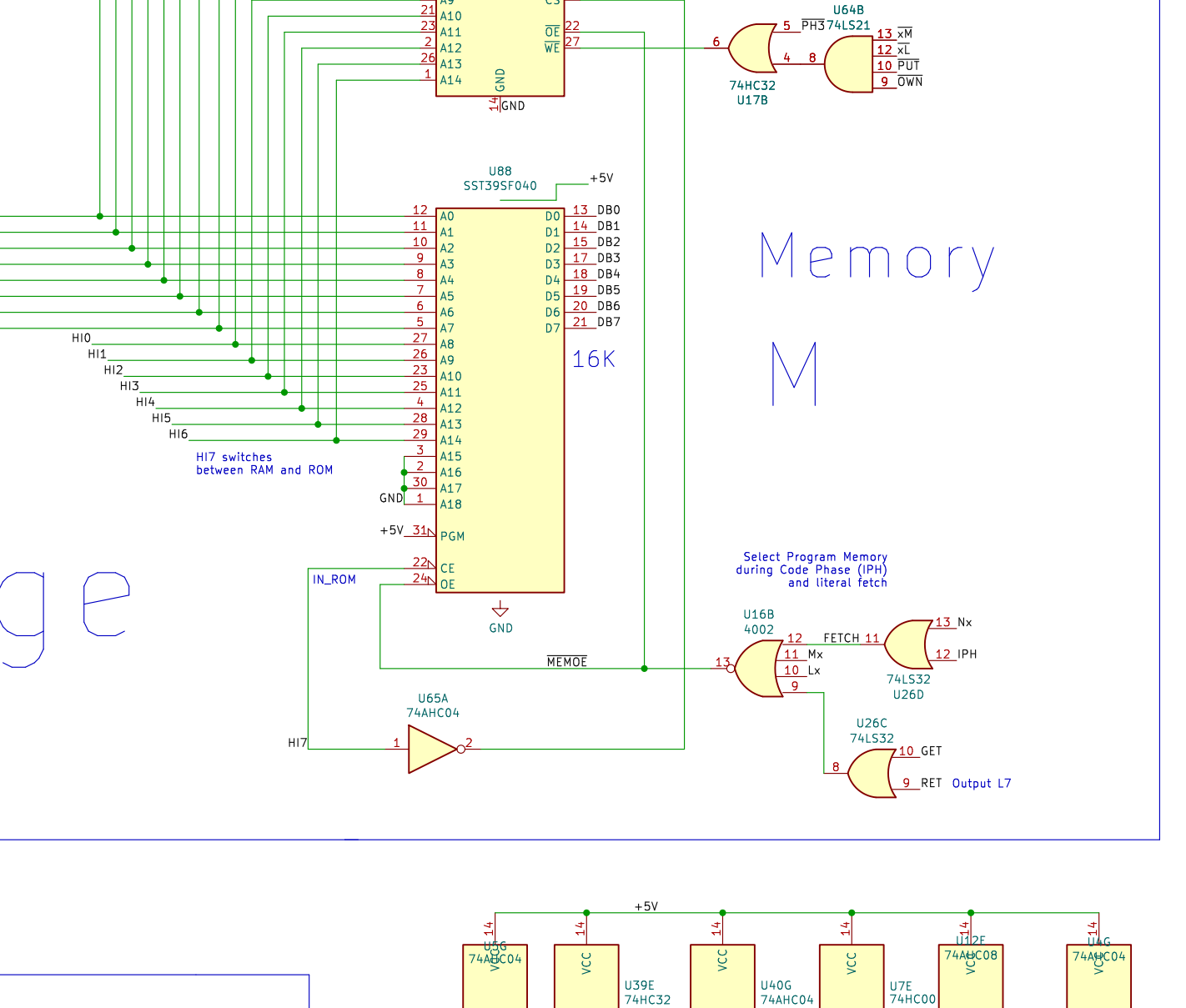
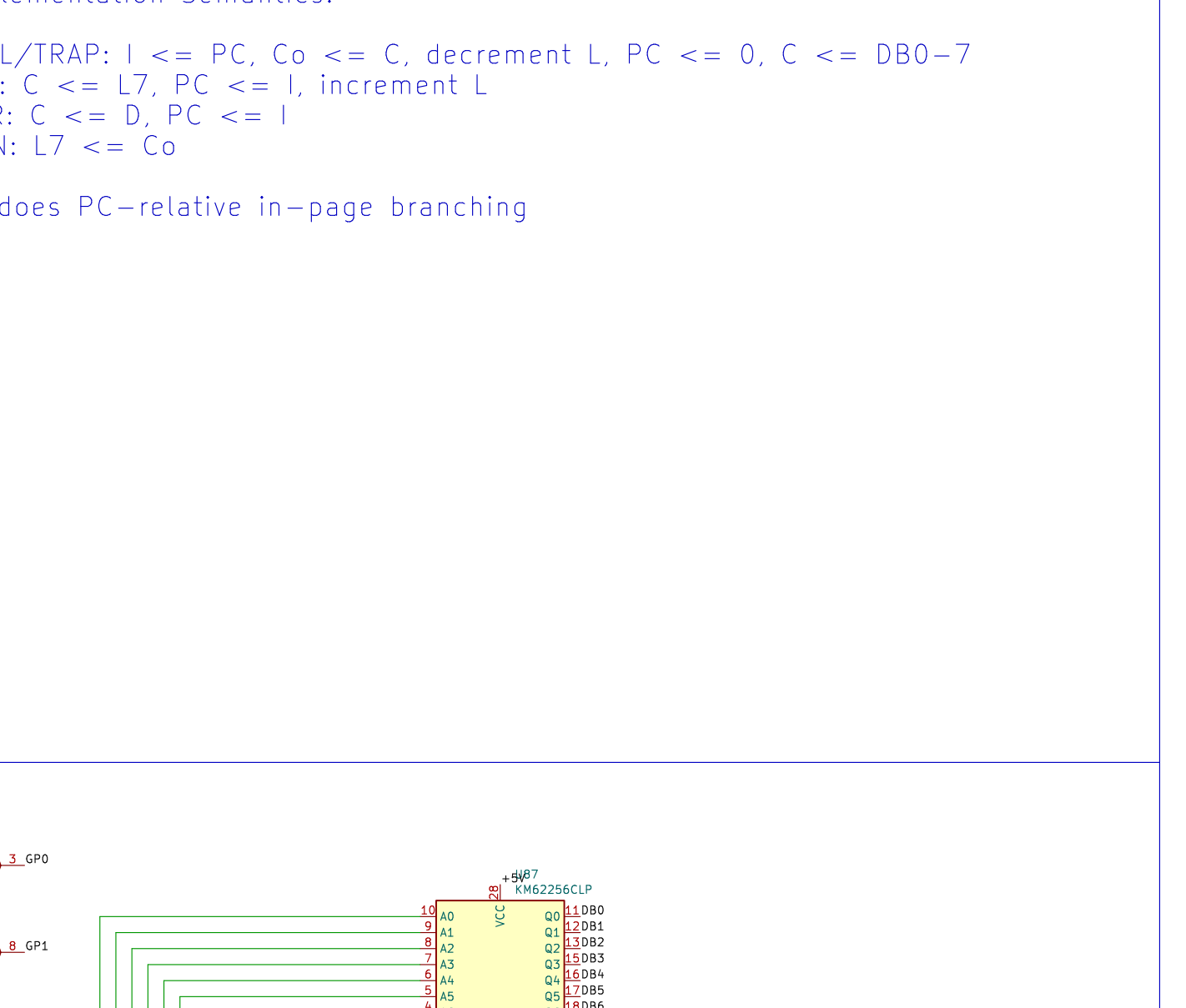
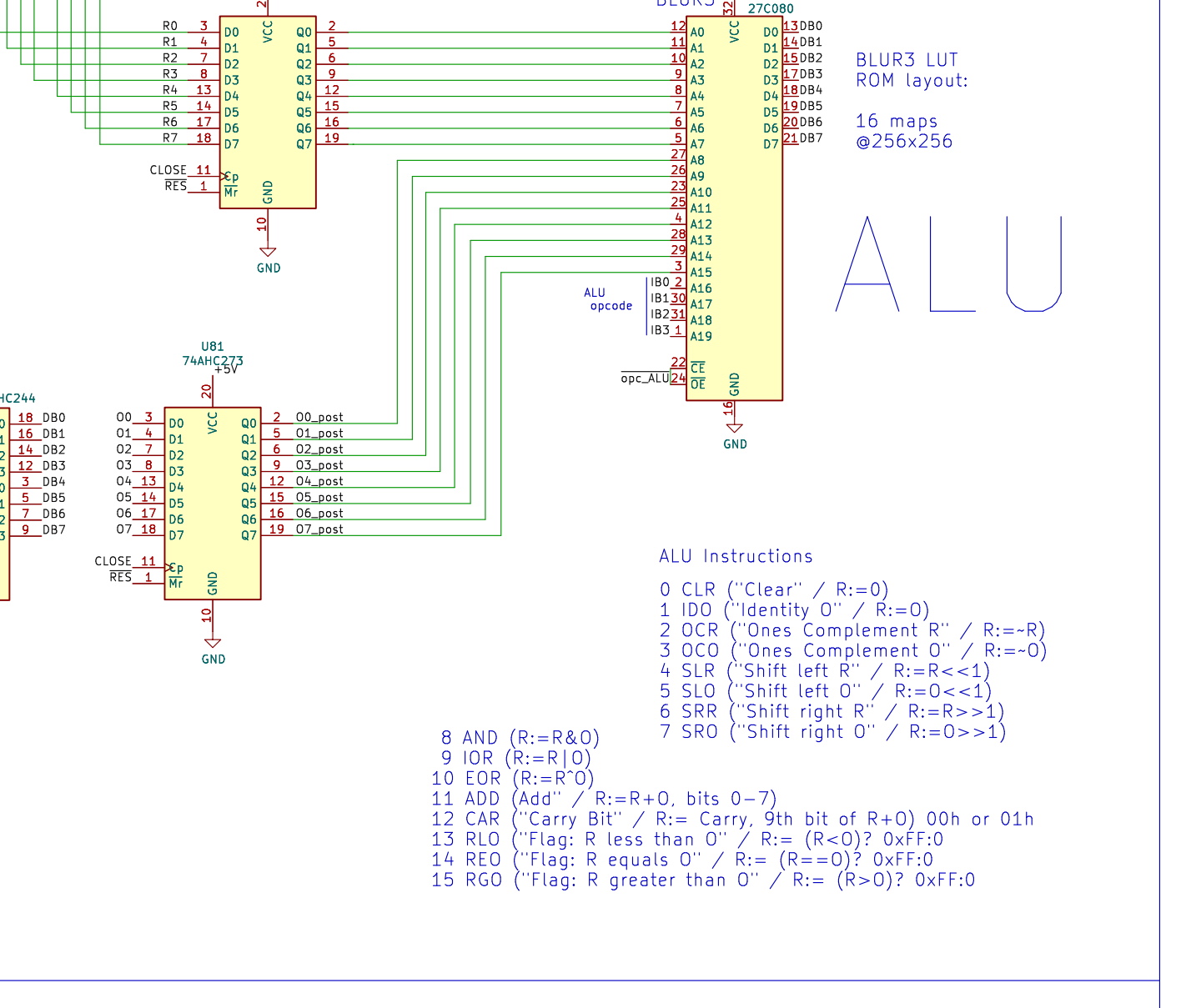
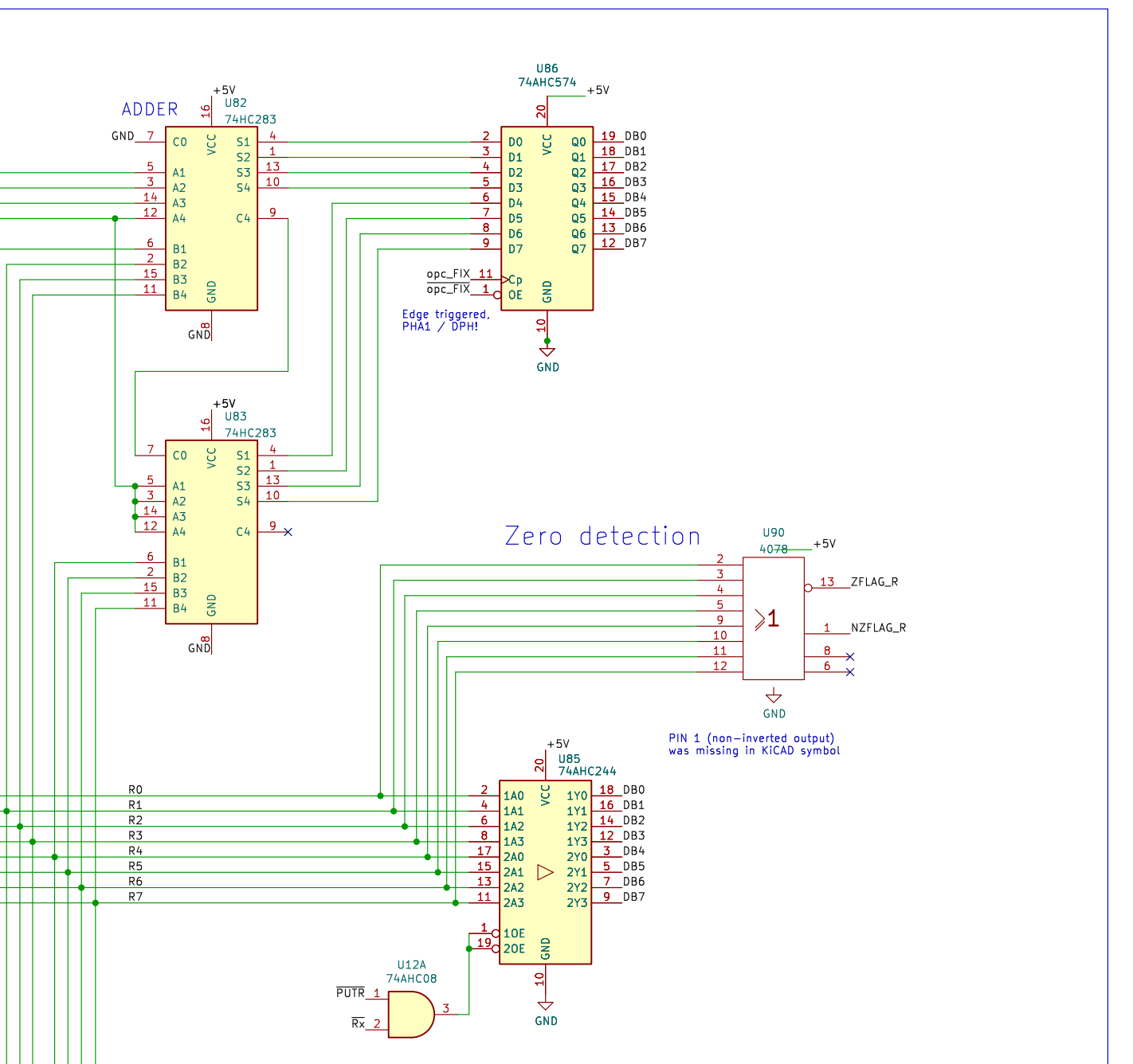
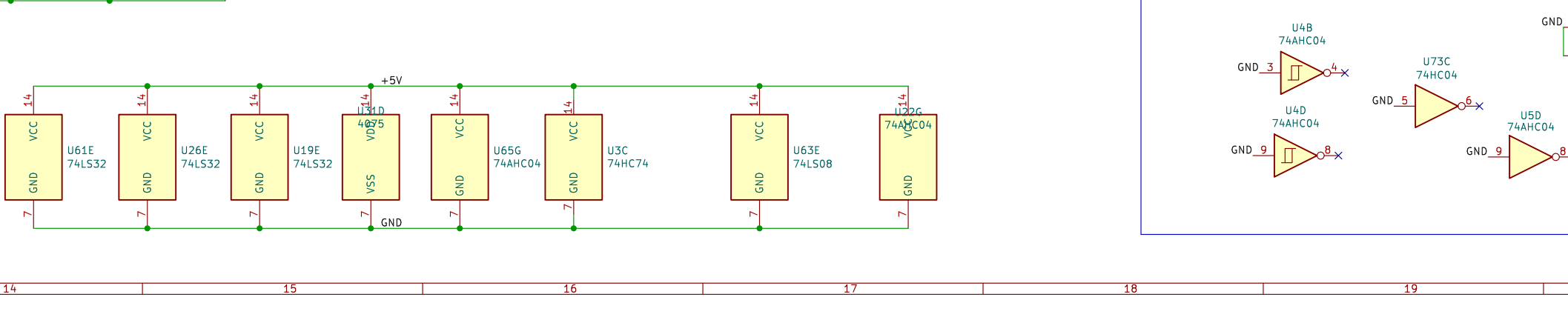
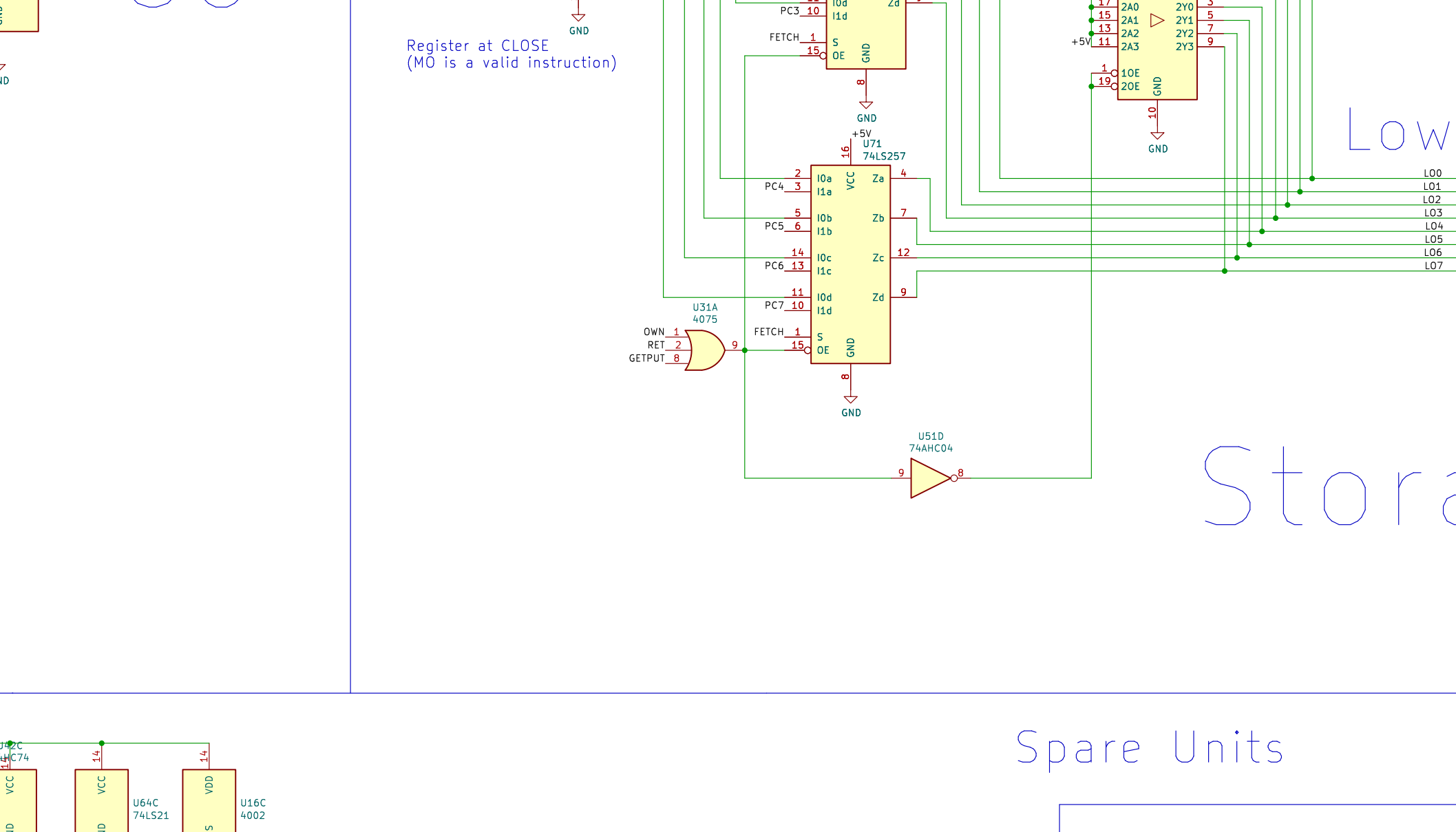
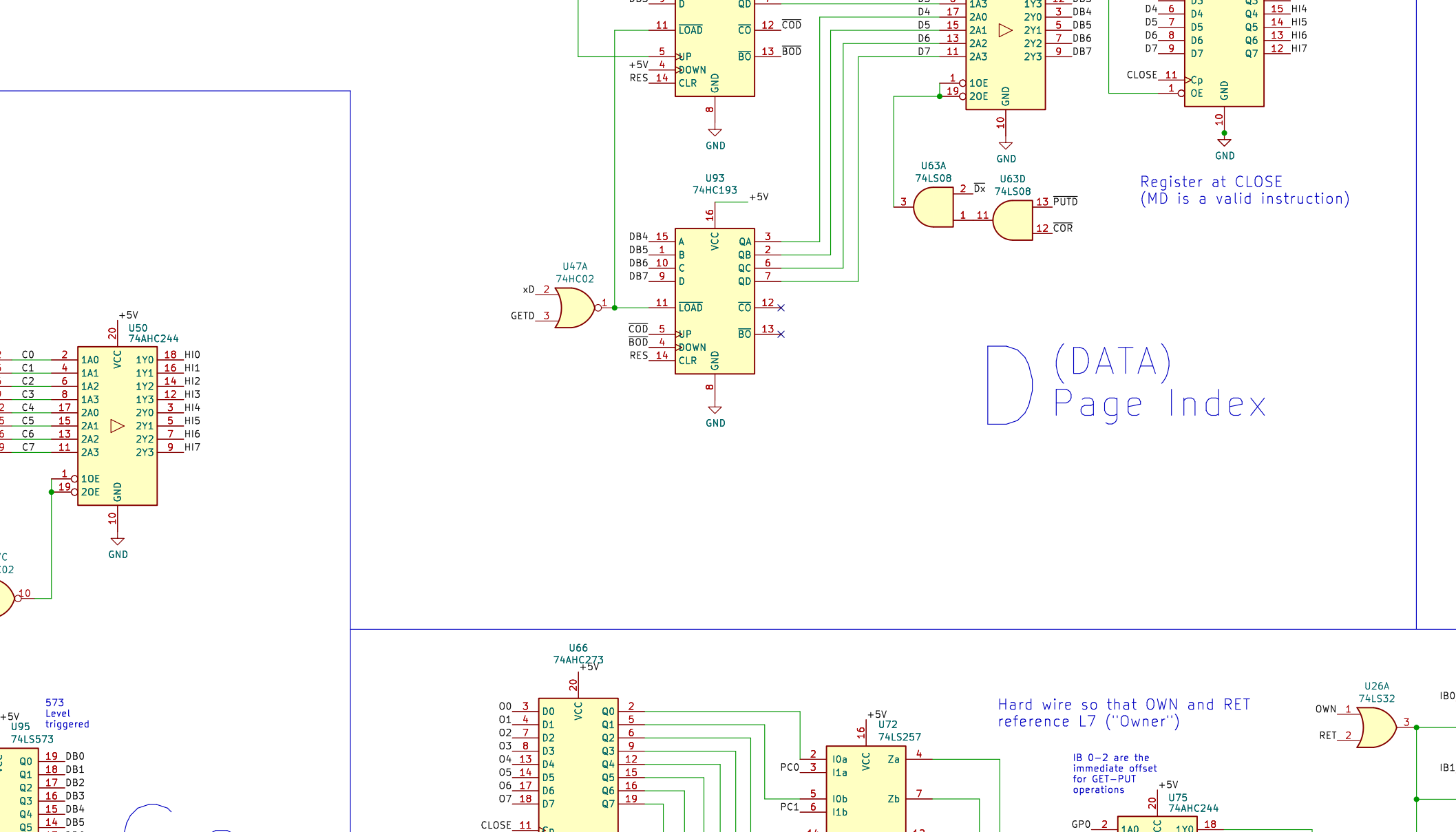
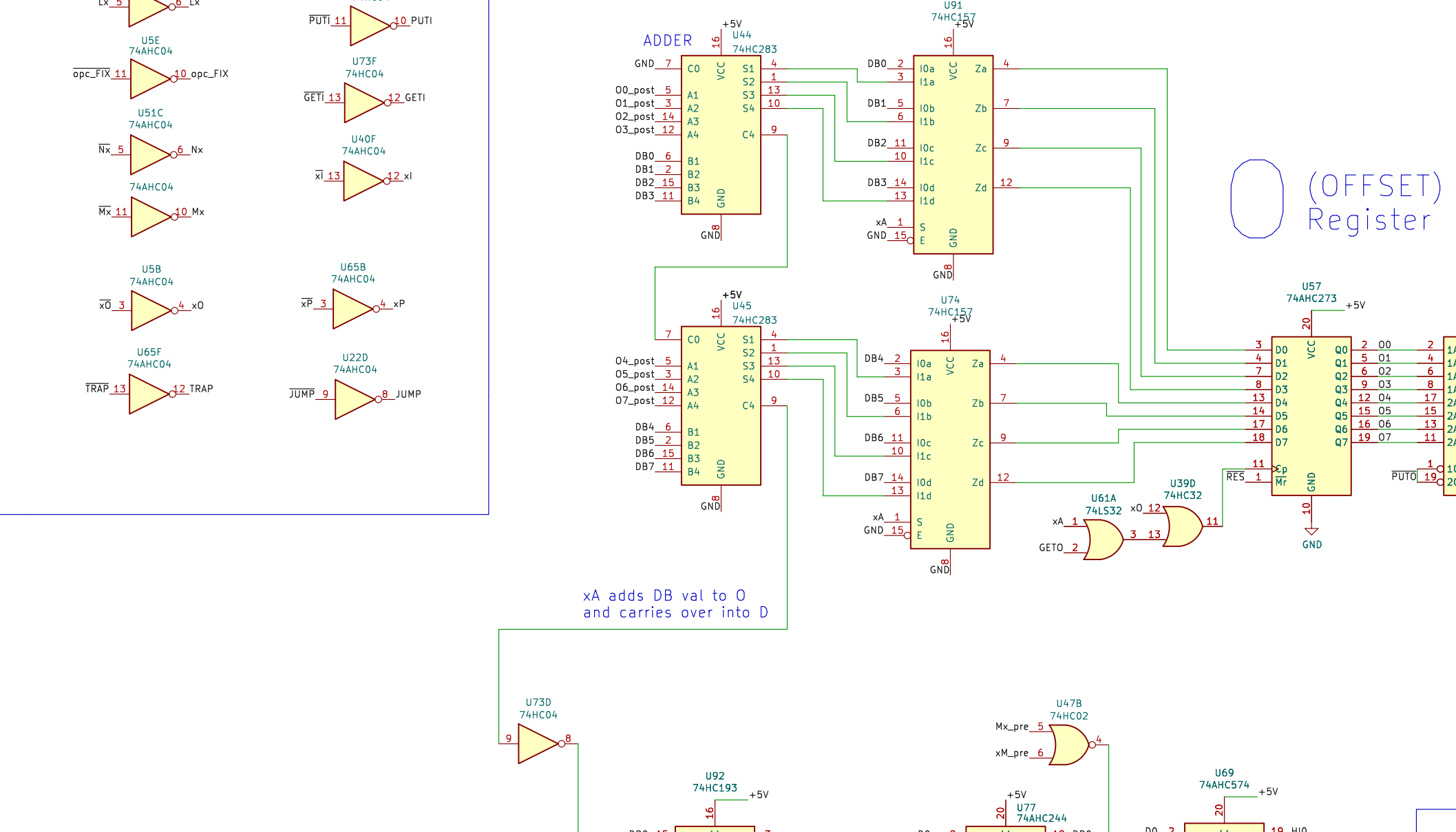
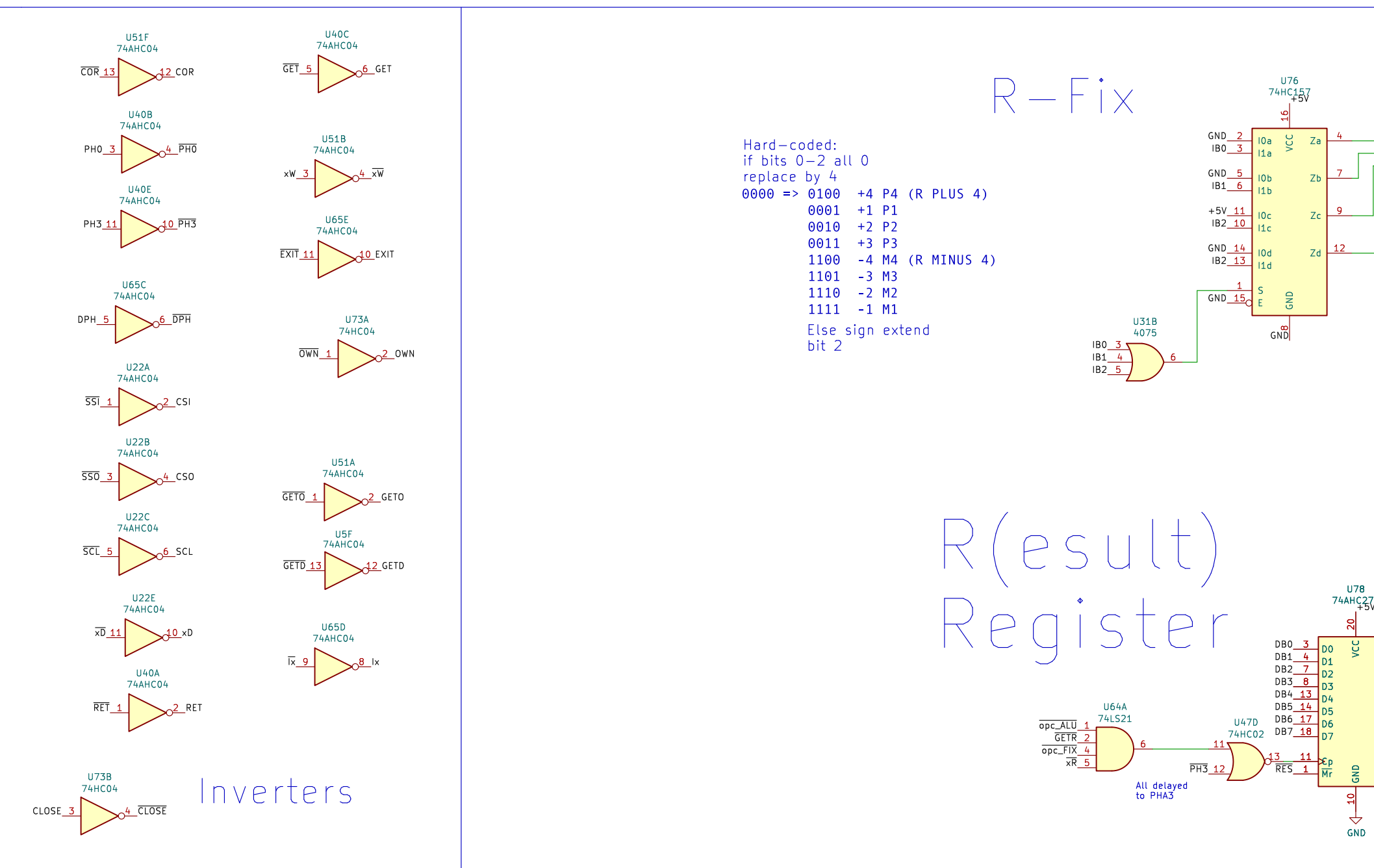
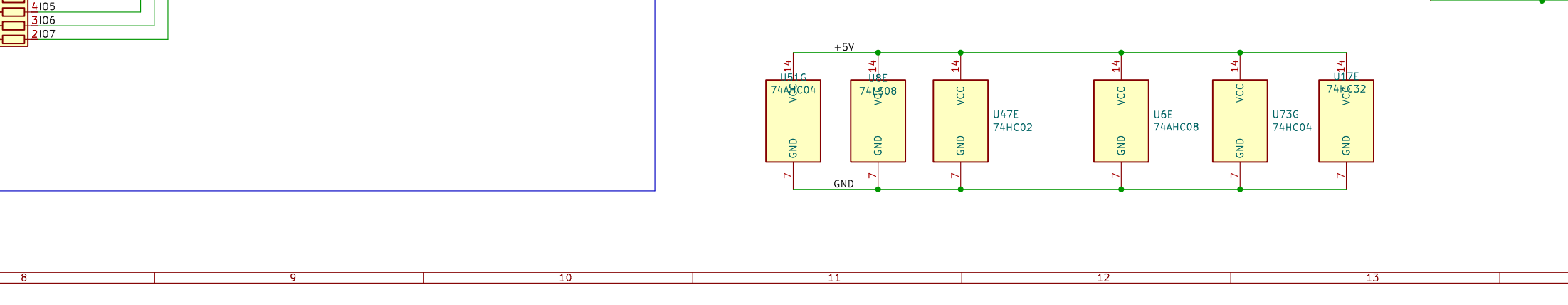
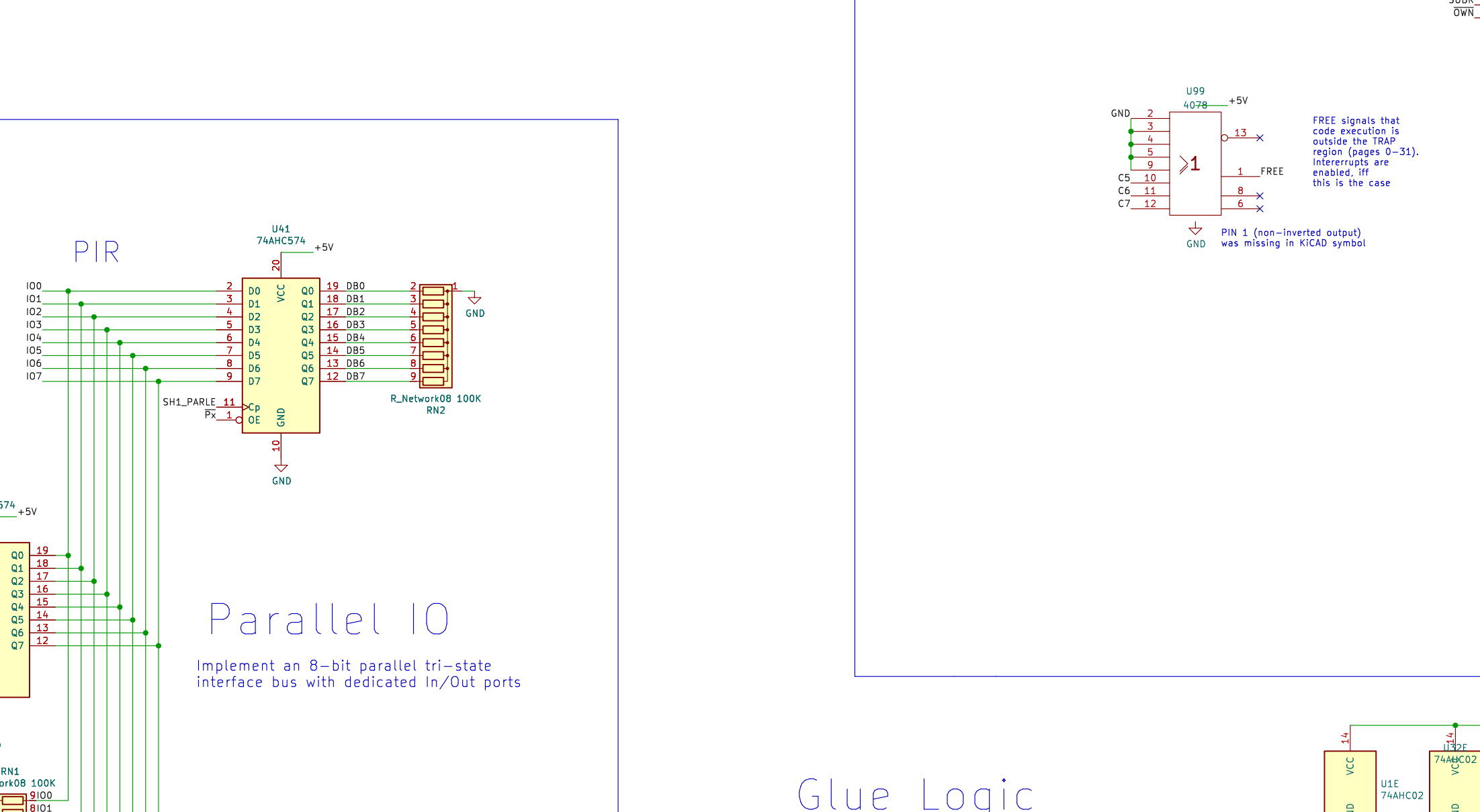
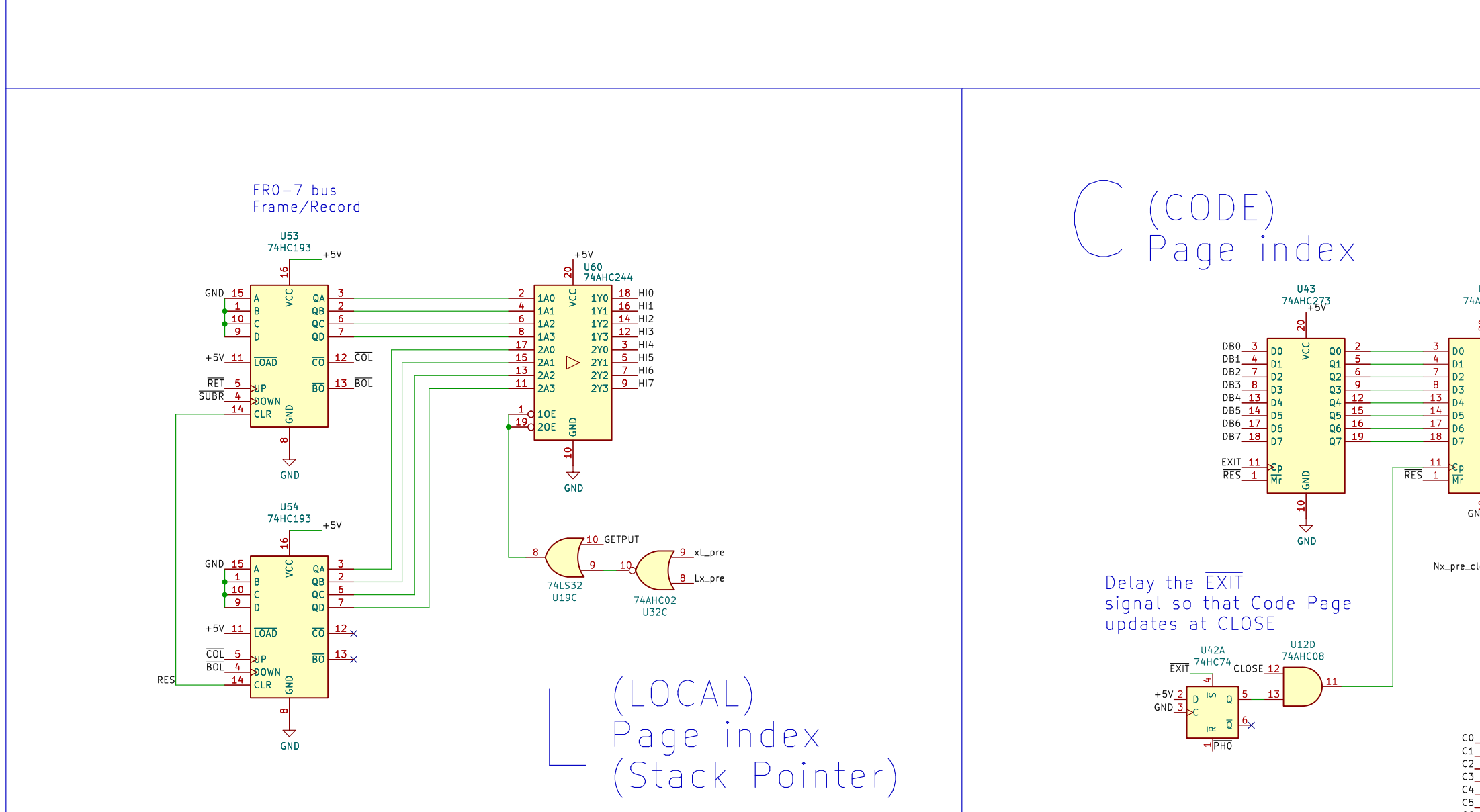
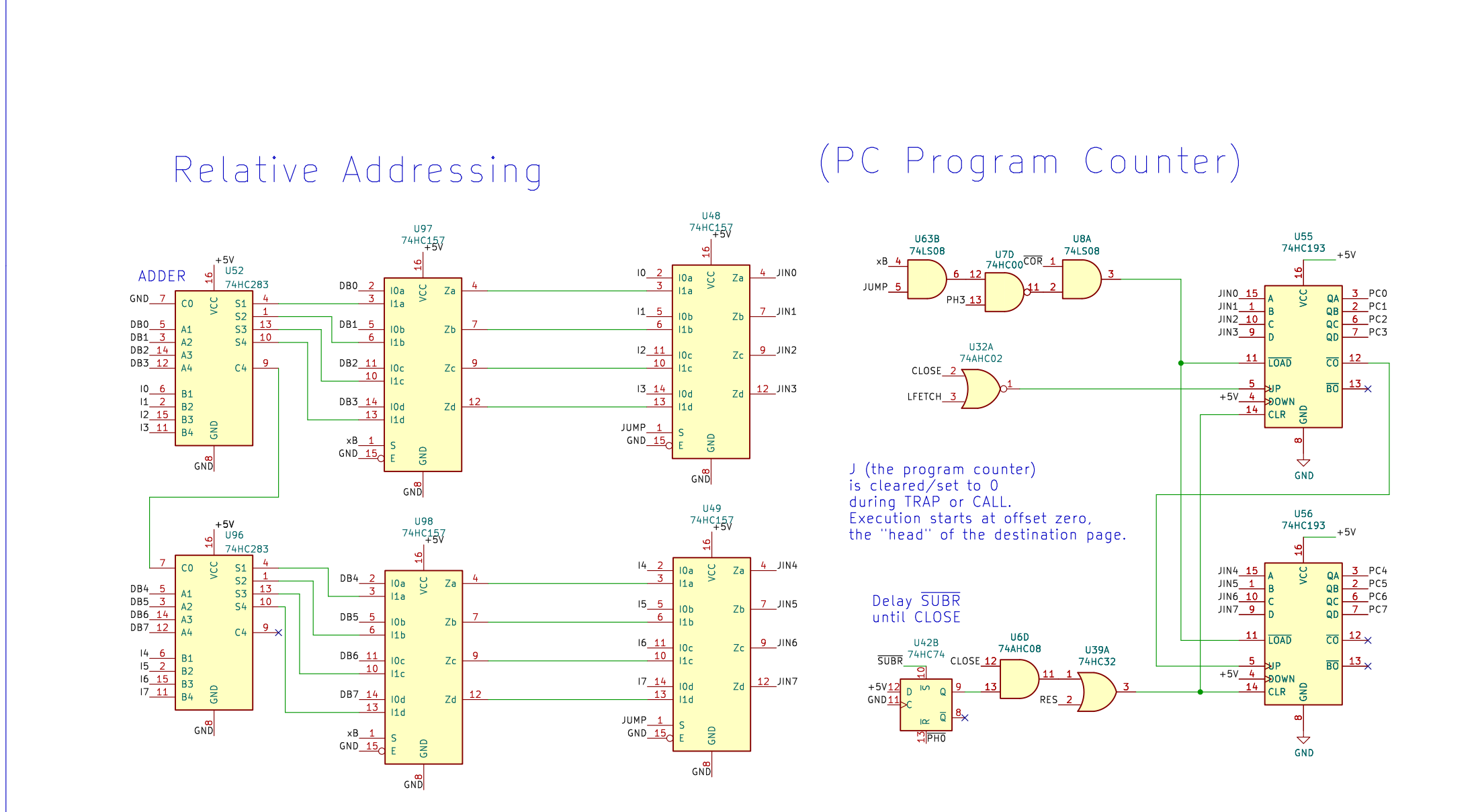
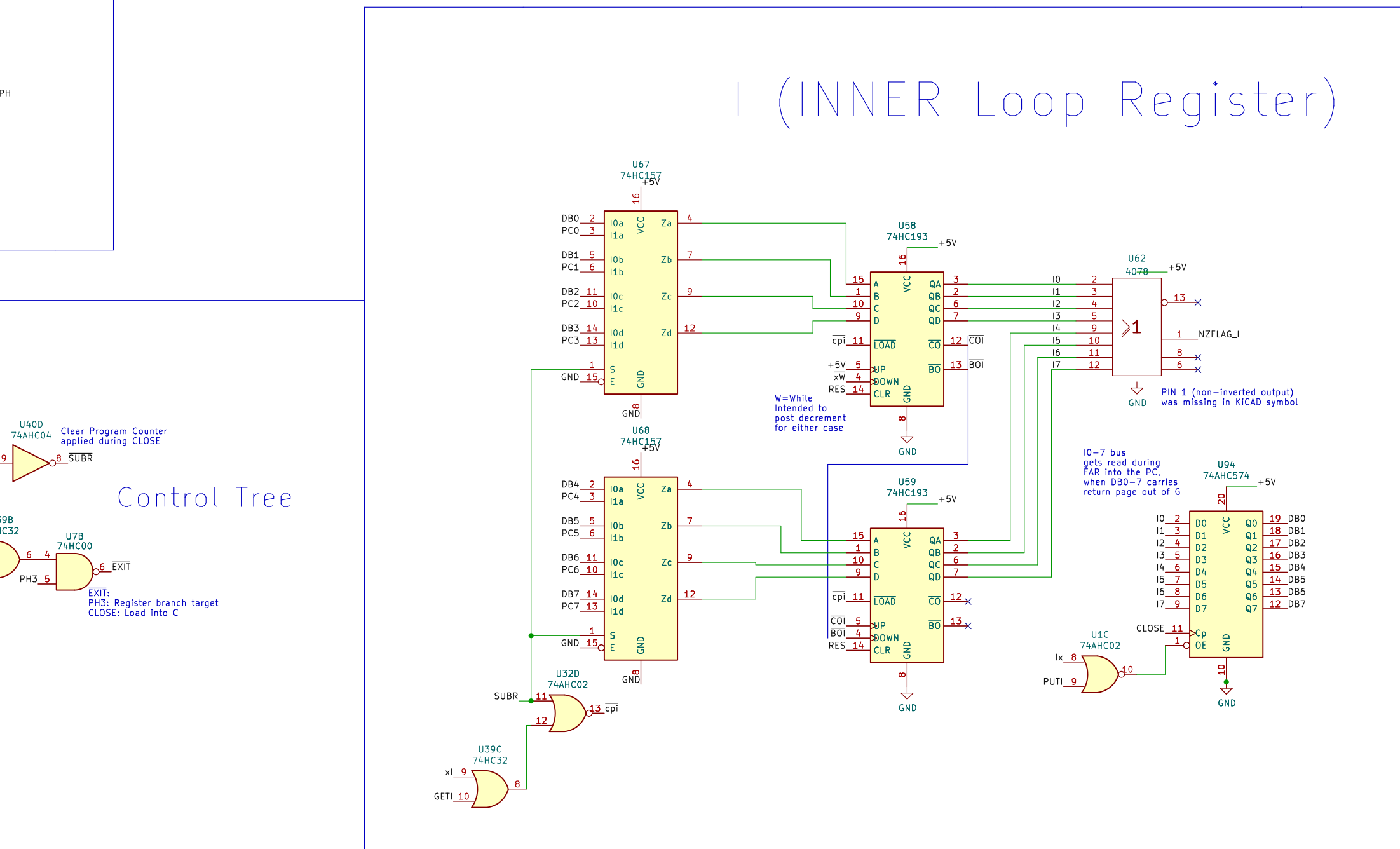
## Instruction Decoder

Scrounger

Remap 'L' (scrounger) to 66, 68, 69 etc. and impracticable opcodes such as NM



Ref. implementation connects two independent 4-bit groups (high/low) to 4:16 decoders (for synchronised latch enable / output enable events of two devices)



Rev. Stop LIX ('Frozen 100')  
Project homepage: <https://github.com/Danilov/Myth>  
Author: Michael, Mergelov  
Contact: [michael.mergelov@gmail.com](mailto:michael.mergelov@gmail.com)  
Date: 2024-09-15  
Title: Sonne-8 Micro-Controller  
Page: 40  
Rev: Myth