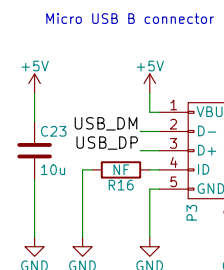
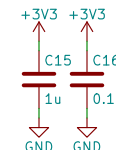
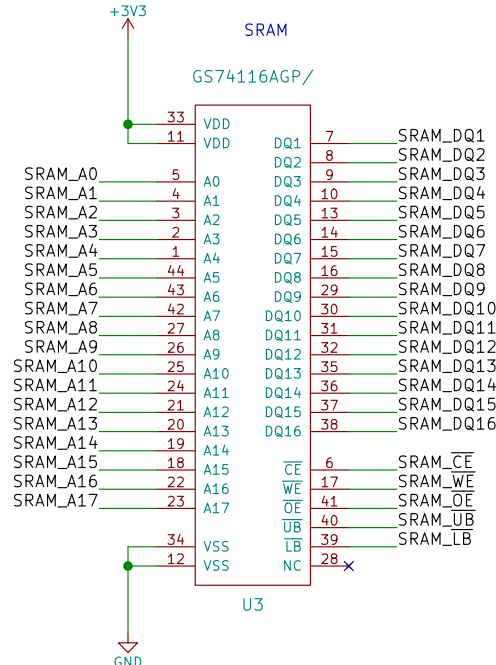
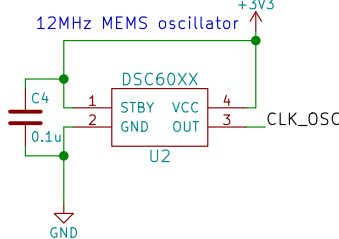
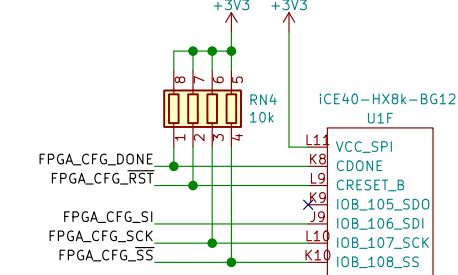
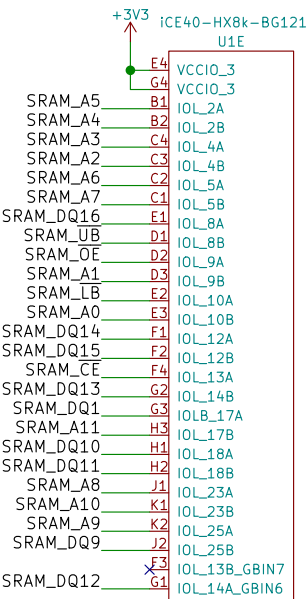
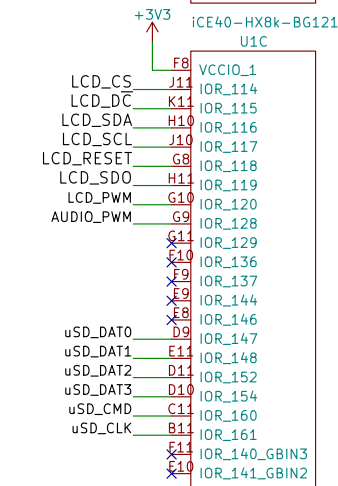
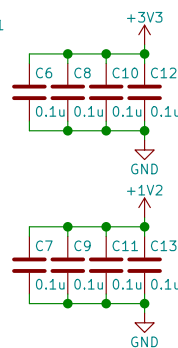
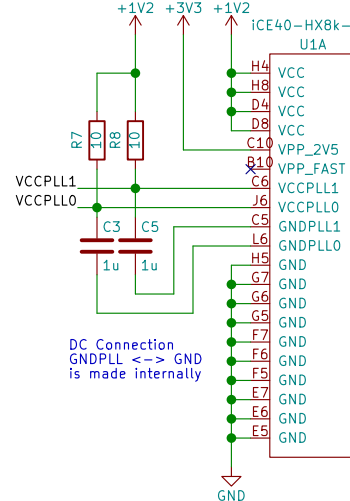
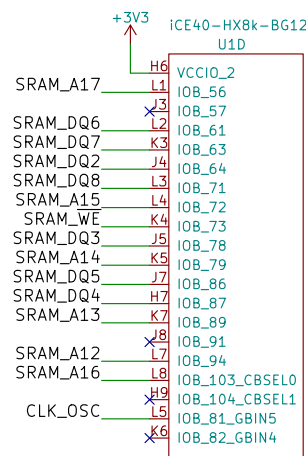
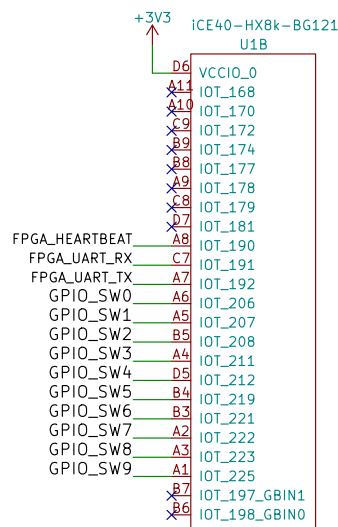


FPGA

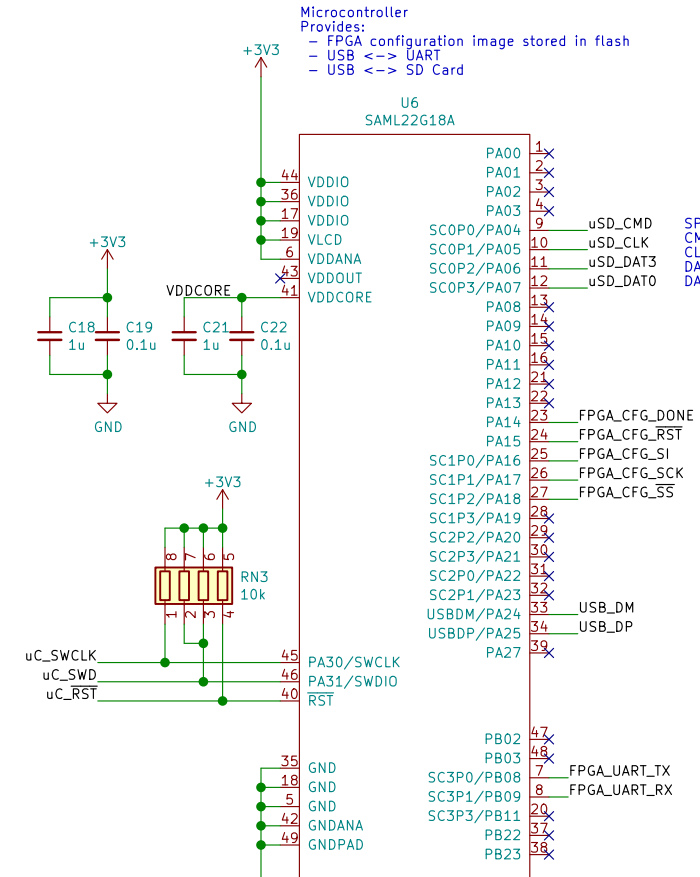
VPP_FAST for NVCM programming only.
Do not connect.
VPP_2V5 can be tied to 3V3 when not programming NVCM.

FPGA decoupling

Separate nets from 1V2 due to RC filter. Must explicitly mark as powered.

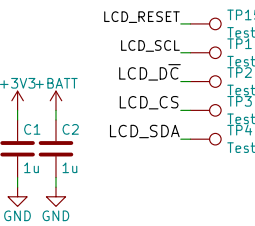
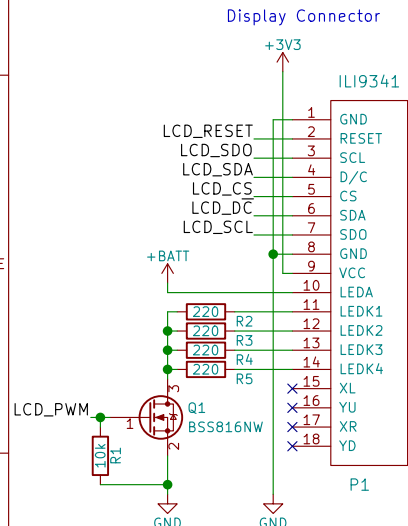


Microcontroller Provides:
- FPGA configuration image stored in flash
- USB <=> UART
- USB <=> SD Card



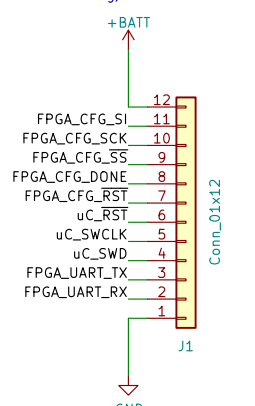
Note there is extensive scrambling here to decongest FPGA->SRAM routing

Display Connector

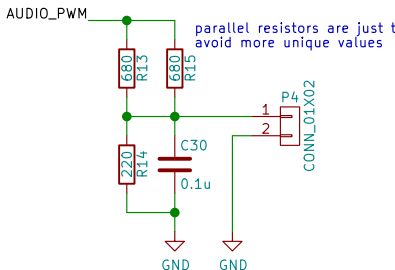
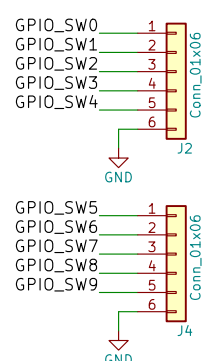


Multiple resistors helps backlight uniformity

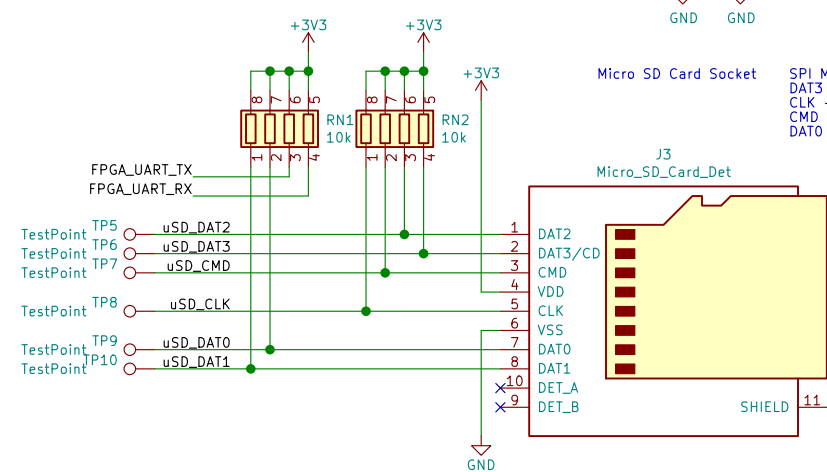
Debug/Chicken Connector



Buttons (use internal pullups in ICE40 pads)



Micro SD Card Socket



Luke Wren

Sheet: /
File: fpgaboy.sch

Title: FPGABoy Logic Board

Size: A3 Date: 2018-02-11
KiCad E.D.A. kicad 5.0.1-33cea8e68ubuntu18.10.1

Rev: A
Id: 1/1