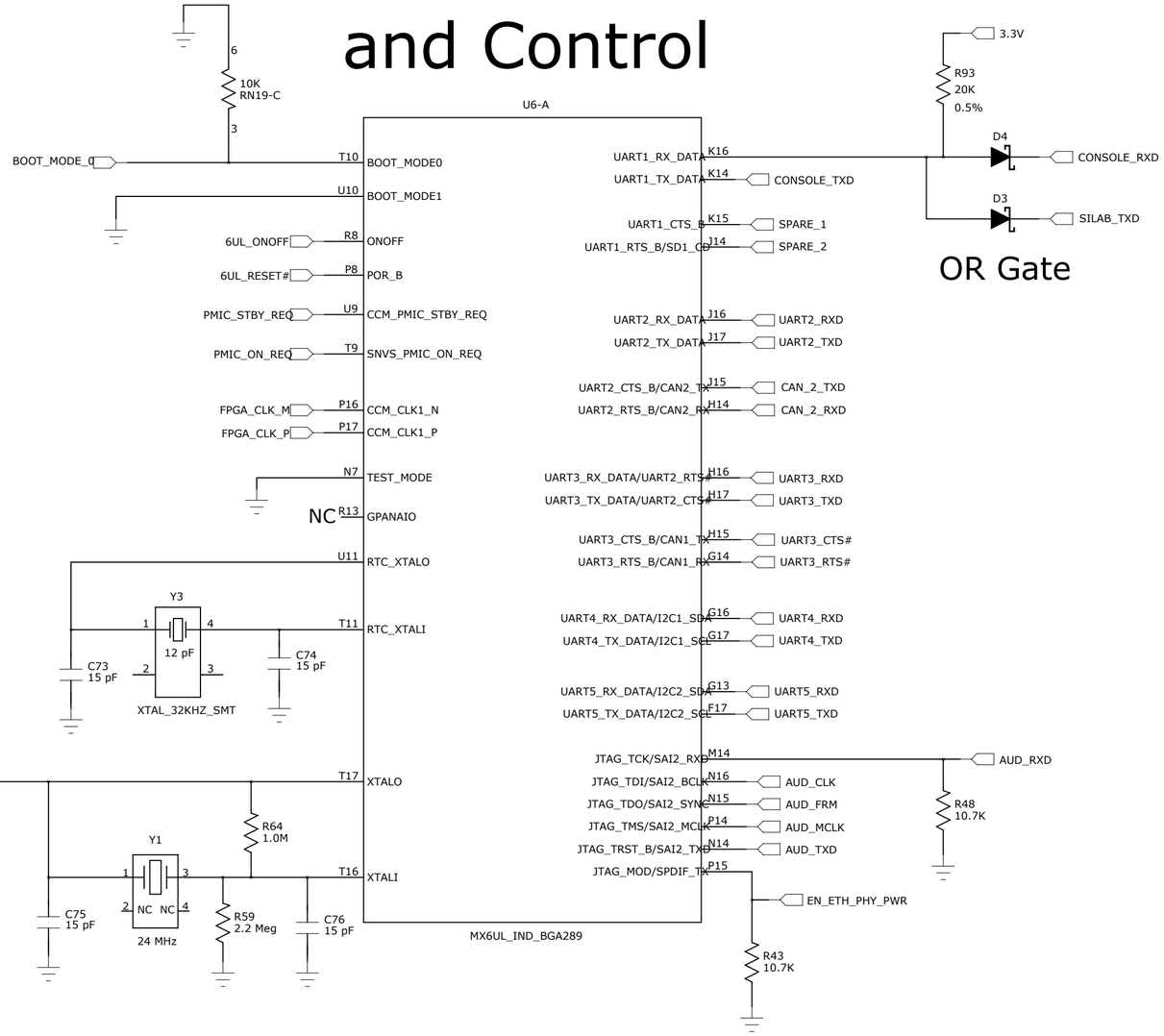
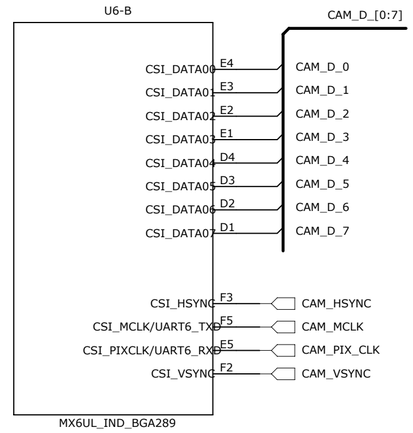
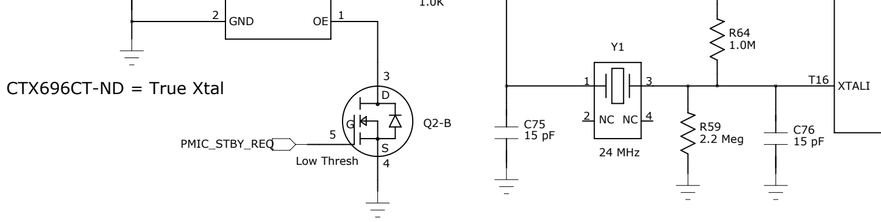
6UL UART and Control



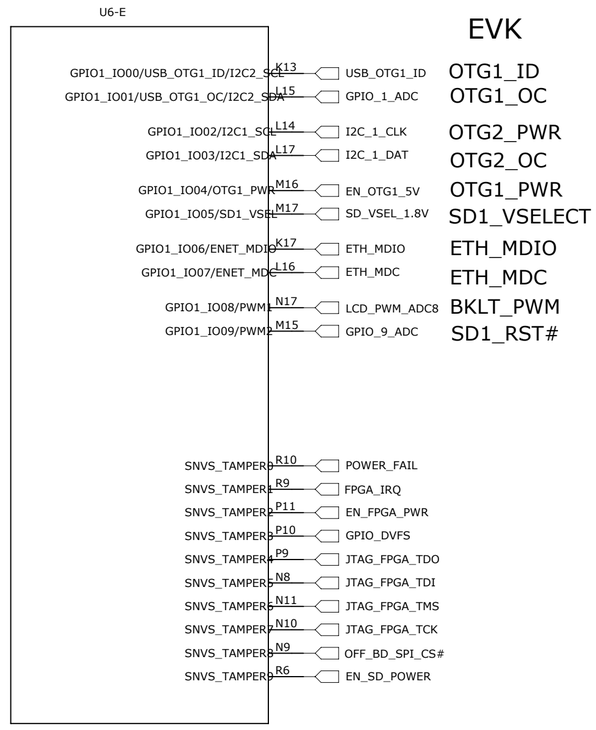
6UL Camera



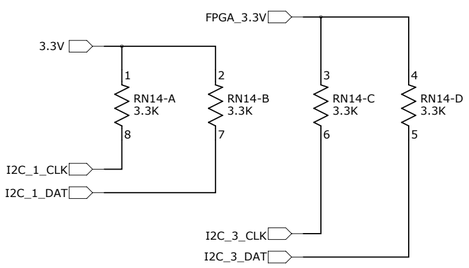
24 MHz Clock



6UL DIO



I2C PU Res.



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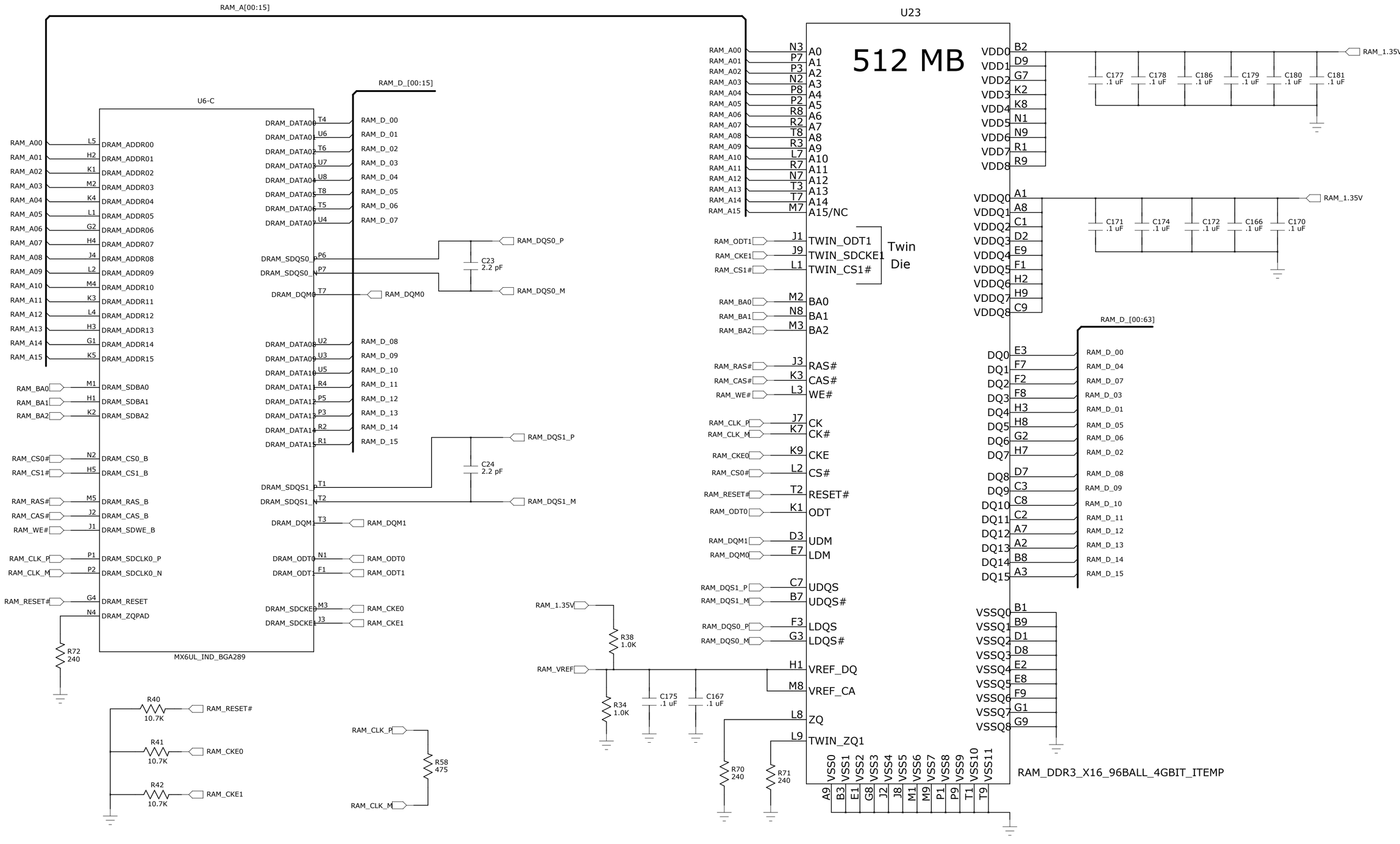
6UL RAM Interface

DDR3 RAM

EVK has 512MB



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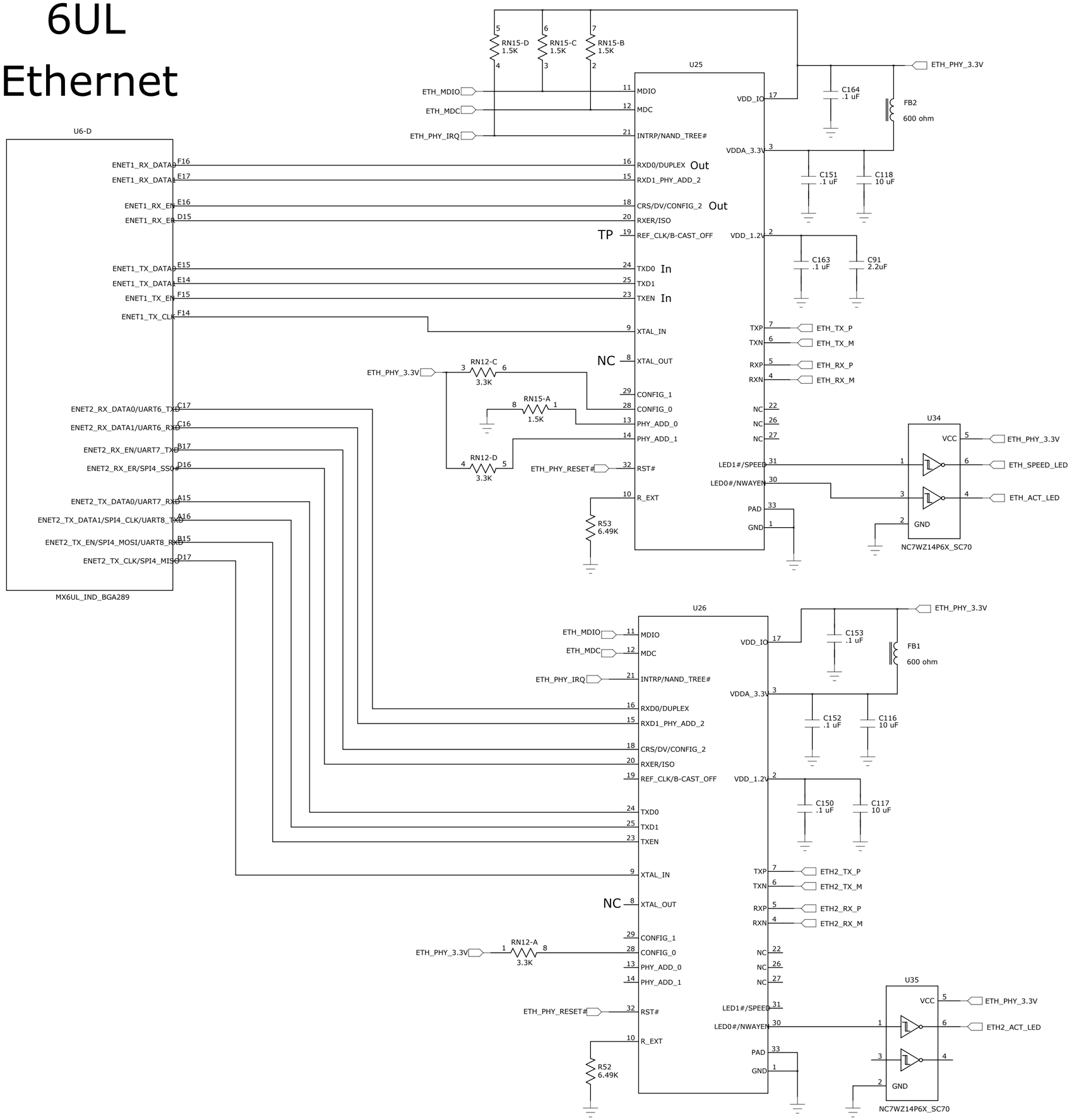
6UL Ethernet



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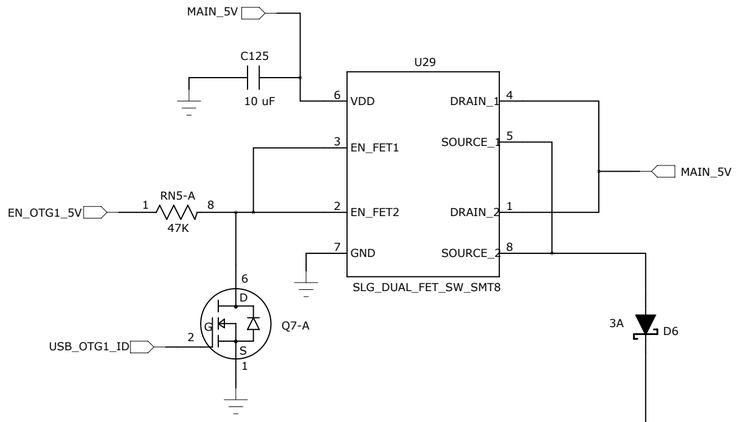
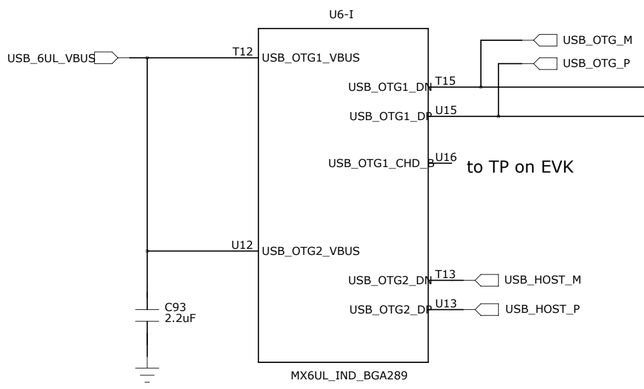
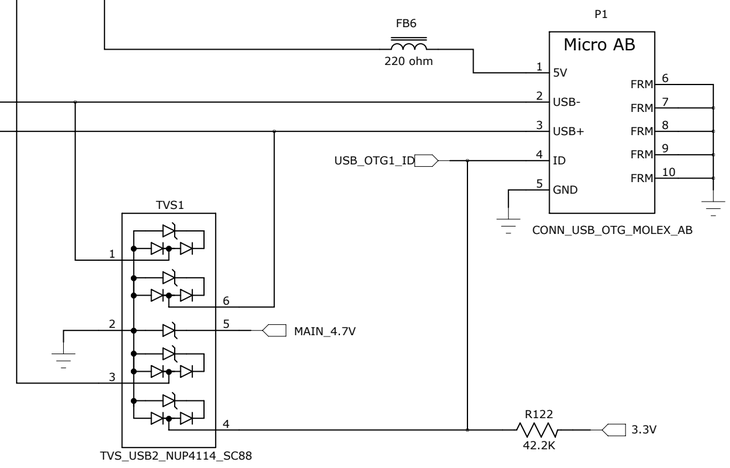
USB 5V Switch



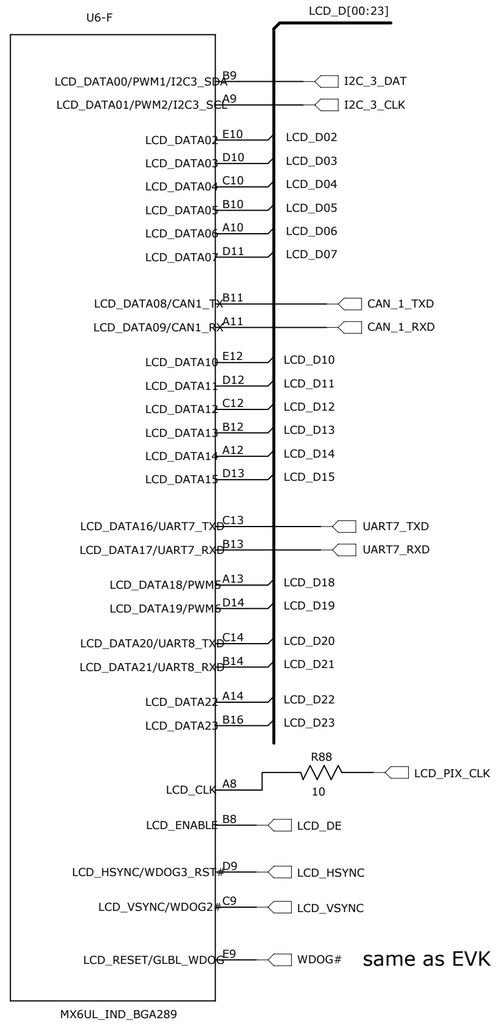
6UL USB Ports



USB OTG Micro AB



6UL LCD



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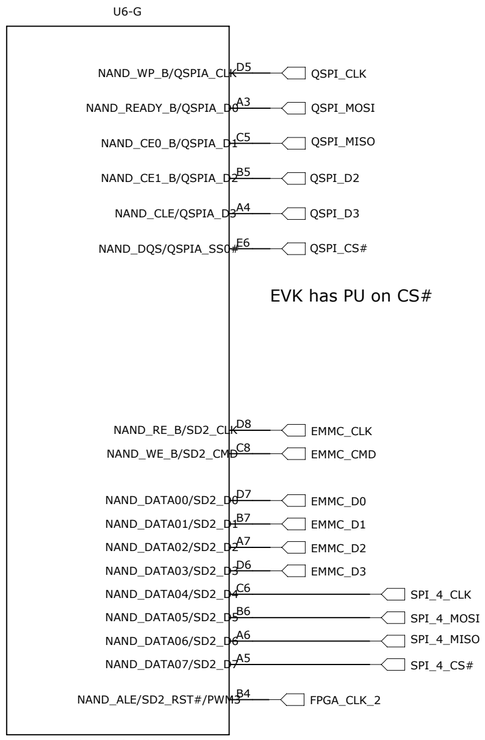
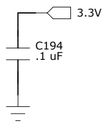
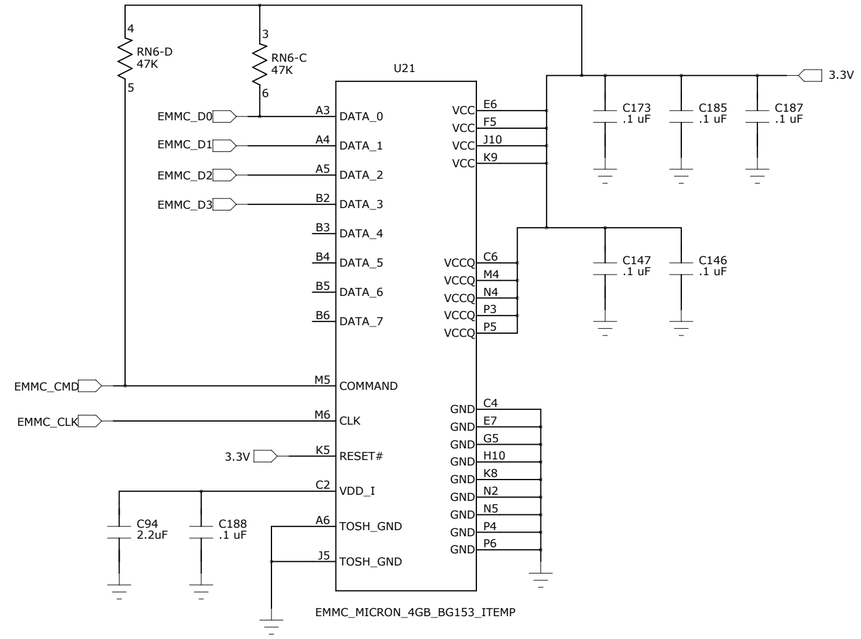
6UL Flash



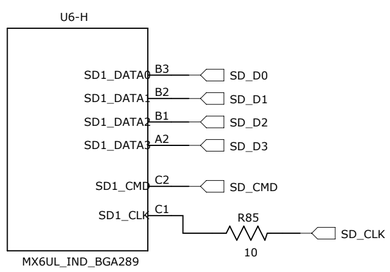


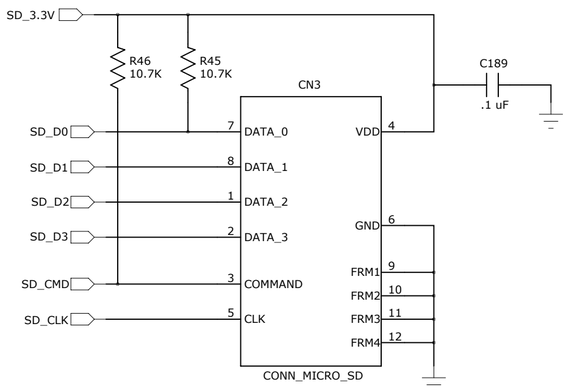
eMMC 4GB - 64GB



Micro SD Card Socket

6UL SDIO





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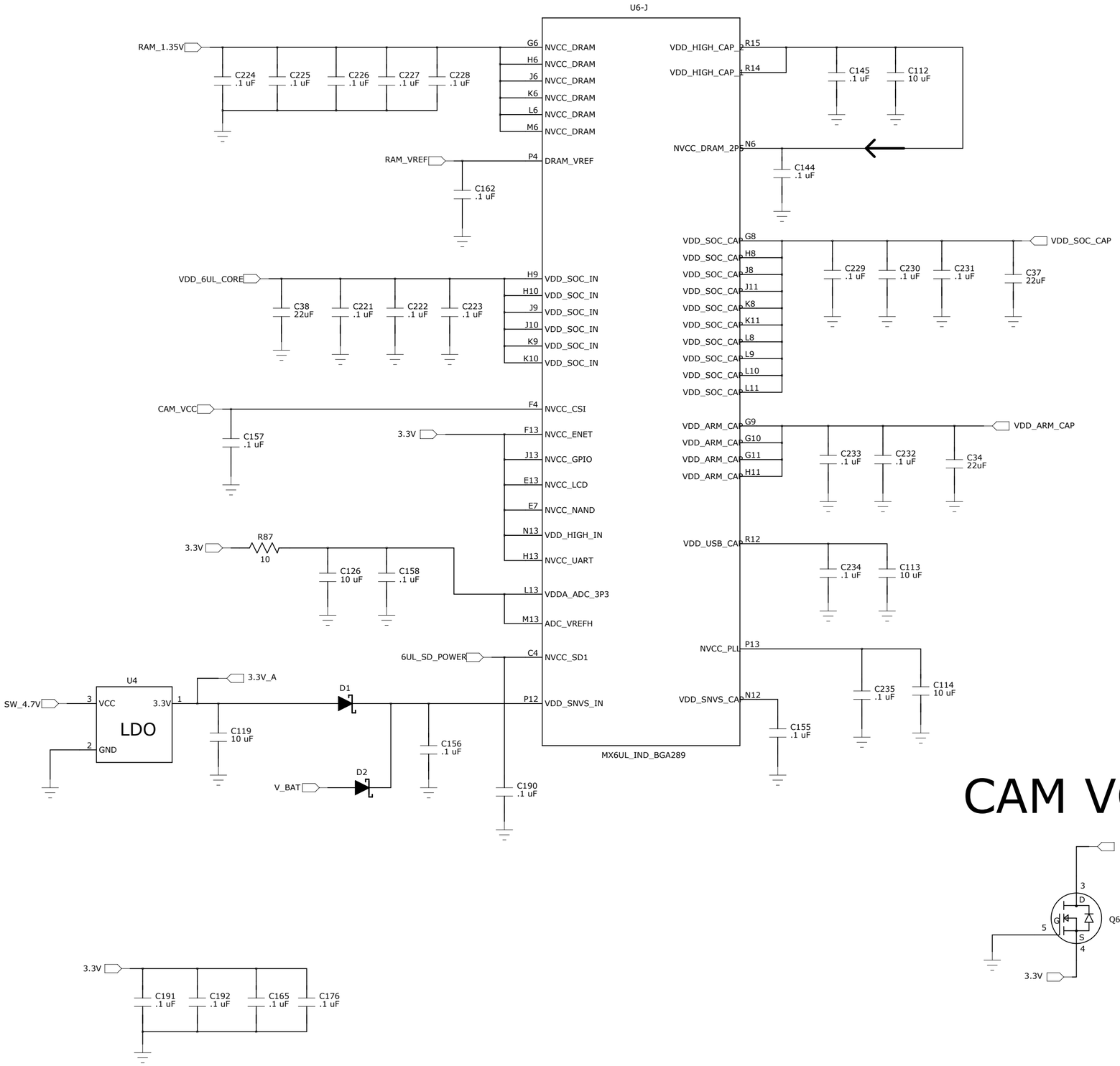
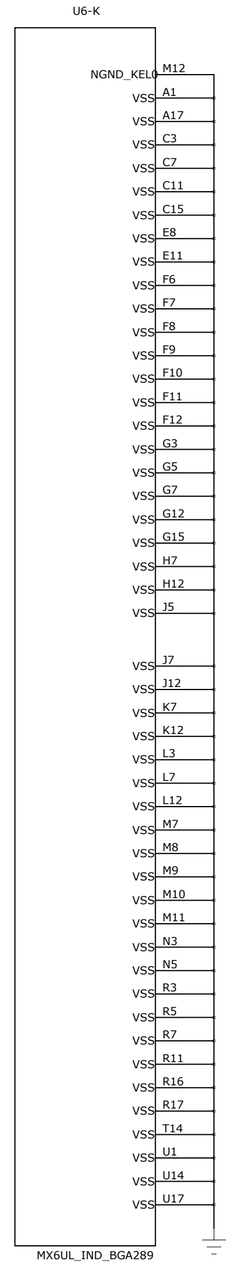
6UL Power



6UL GND



CAM VCC

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SD Card 1A Reg
1.8V or 3.2V

3.3V --> 6UL_SD_POWER

3.3V 2A Reg

SW_4.7V --> 3.3V

CPU Core 1A Reg

SW_4.7V --> VDD_6UL_CORE

RAM 1.35V 1A Reg

SW_4.7V --> RAM_1.35V

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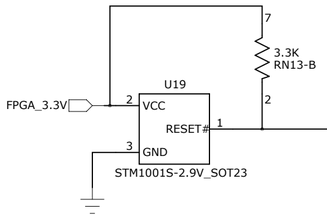
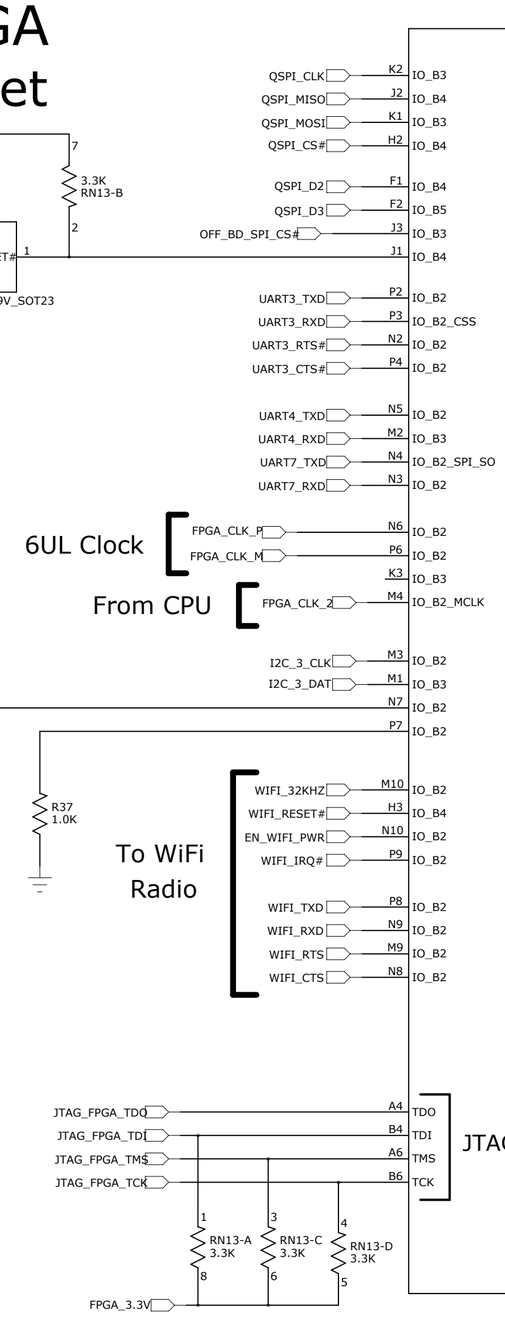
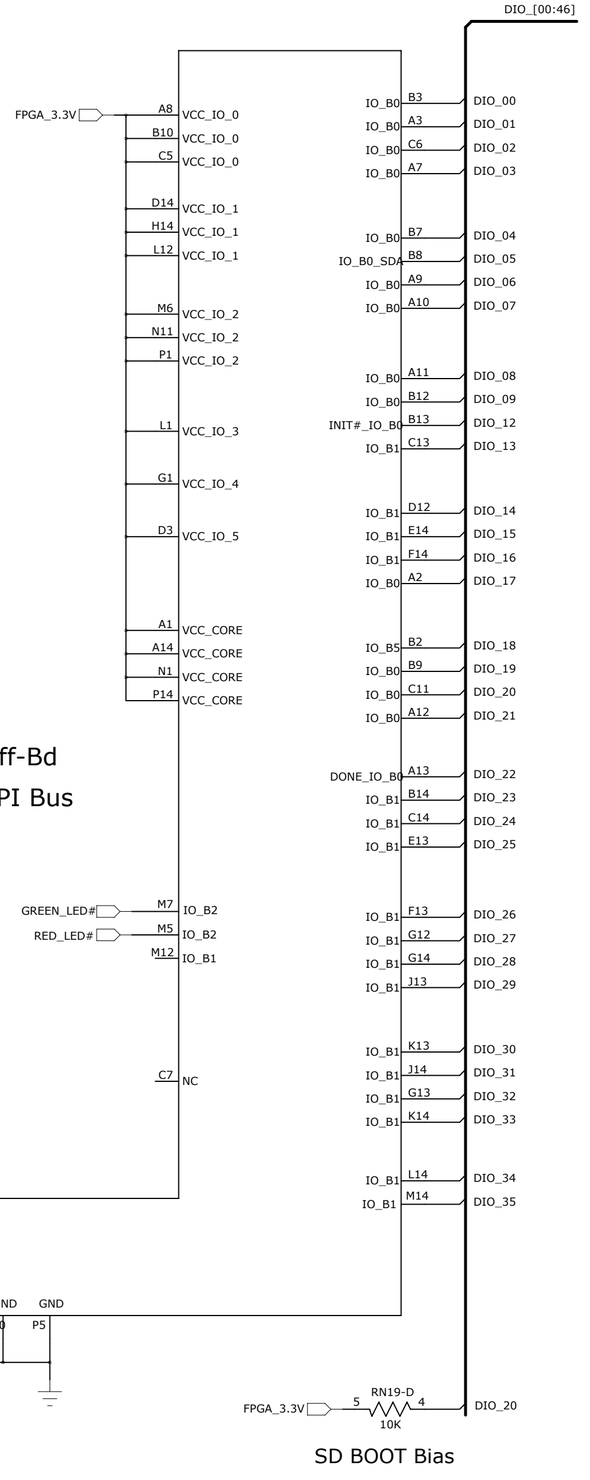
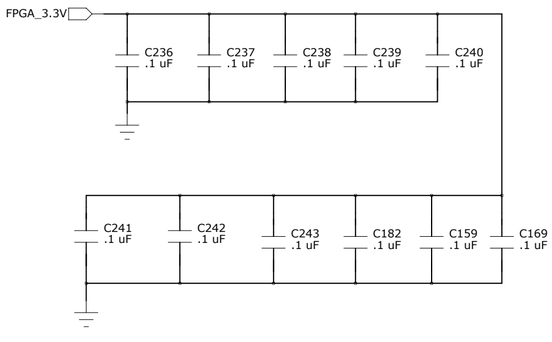
MACH XO2 FPGA

FPGA Reset









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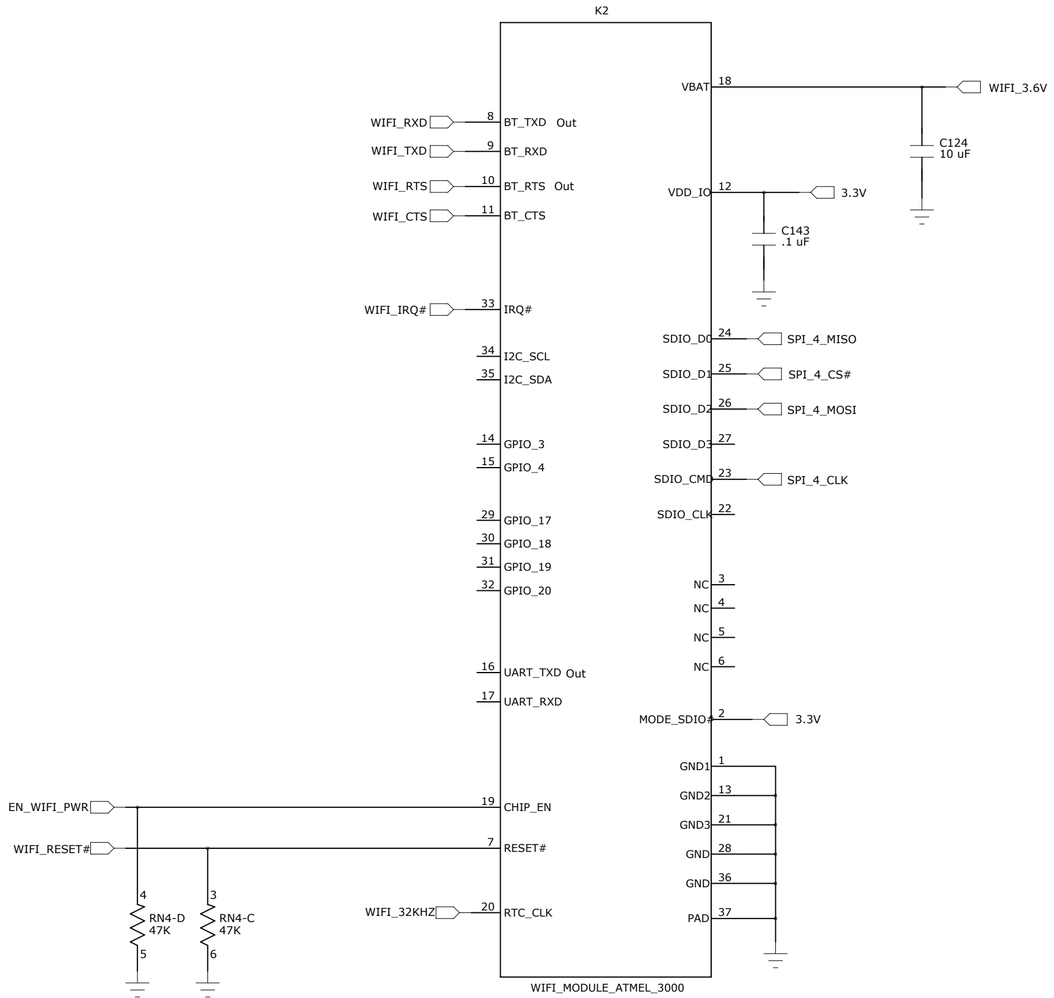
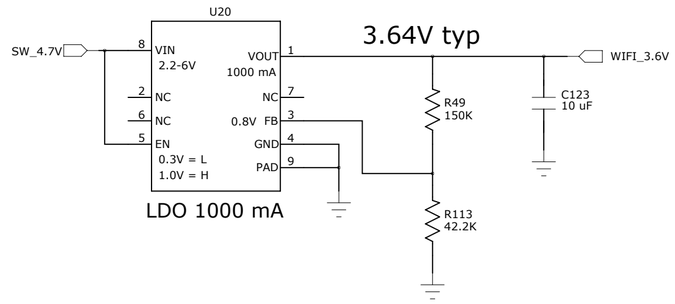
WiFi

WiFi / Blutooth Radio Module



WiFi 3.6V Regulator



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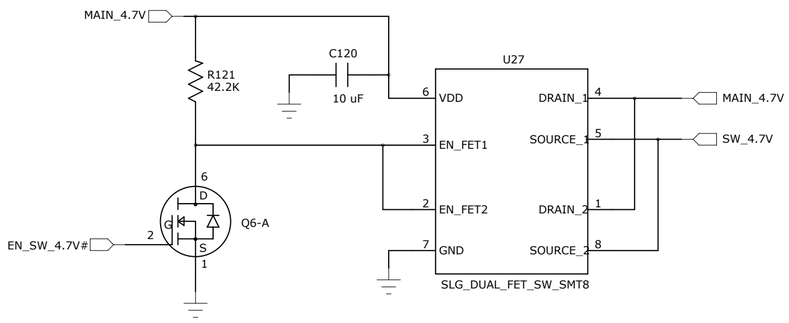
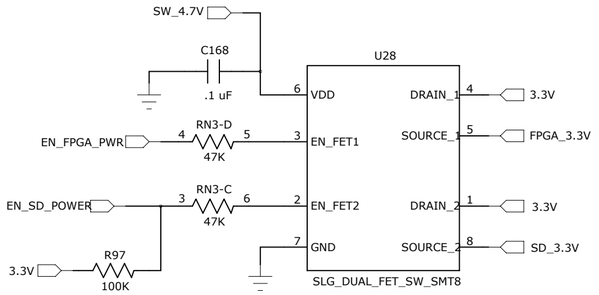
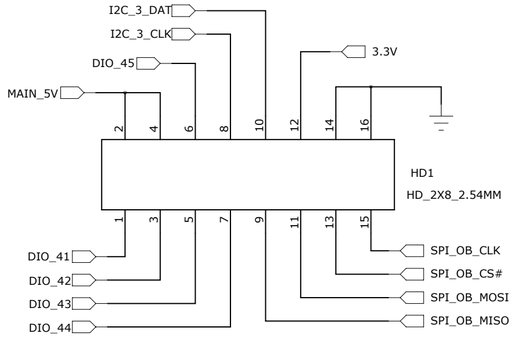
Main 4.7V Power Sw.



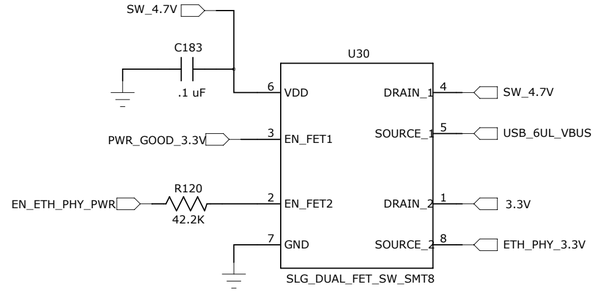
FPGA and SD Card Power Sw.



16-pin Header



USB VBus and Eth Power Sw.



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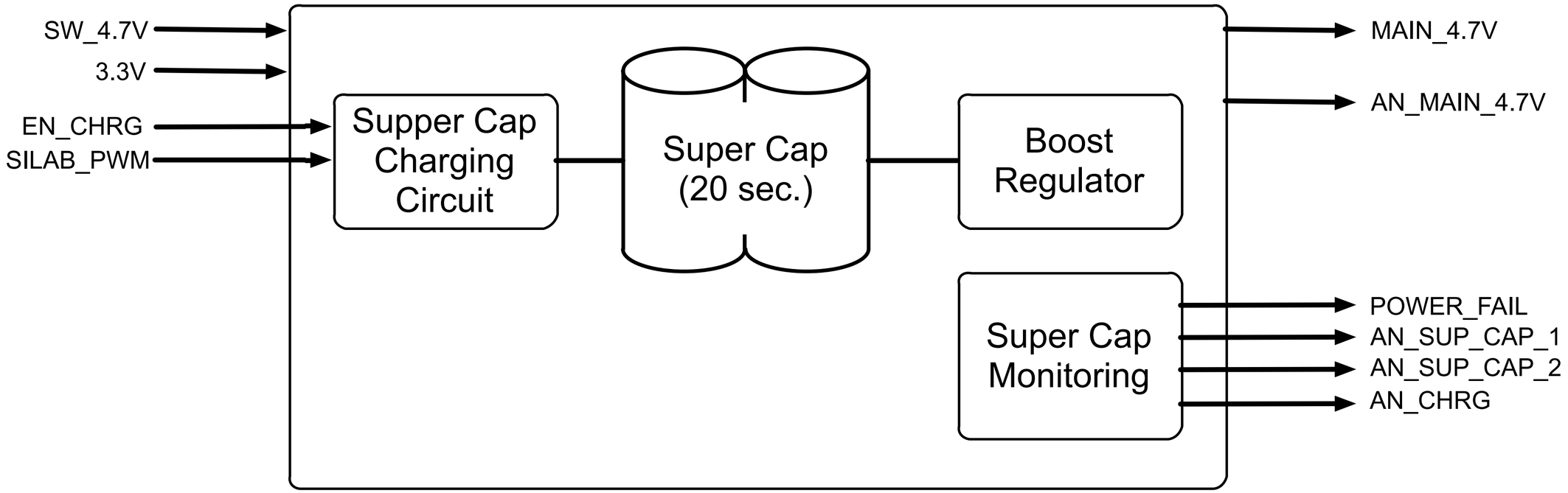
SuperCap 10 Second Power Hold



10 seconds assumes 2 watt load

10F SuperCaps charged to 4.7V

Functions down to SuperCap = 3.5V

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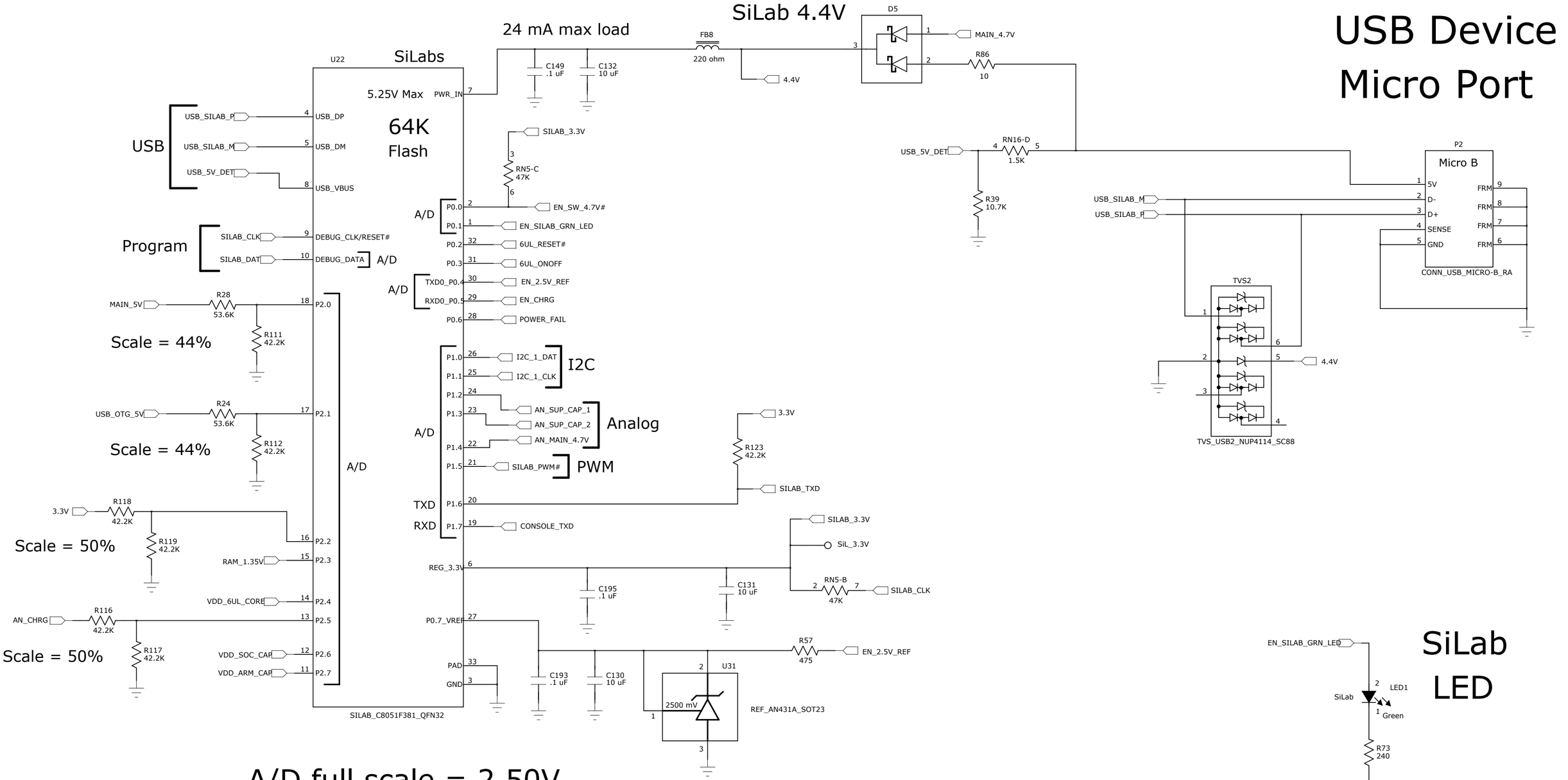
USB Device Port and SiLab uC



A/D full scale = 2.50V

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Two 100-pin Off-board Connectors

"POWER" pins supply all power to the module
Apply 4.7V to 5.3V to these pins

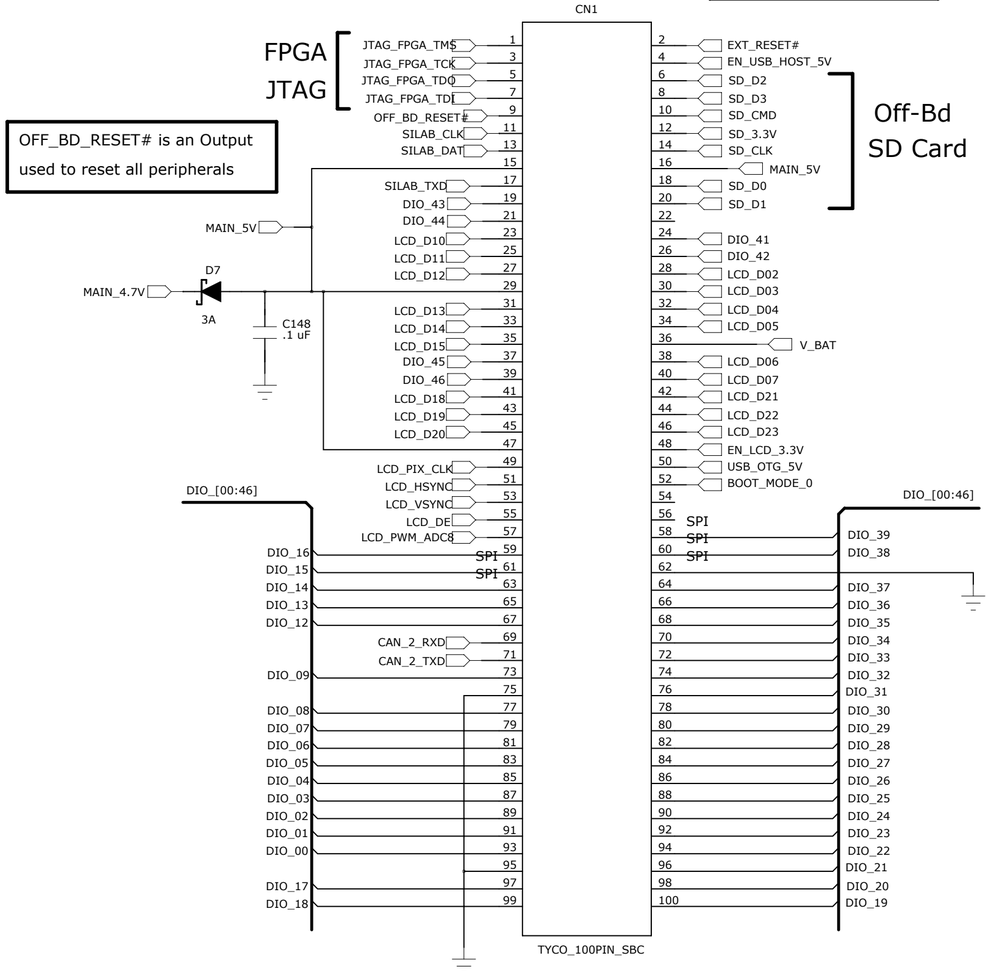
Current drain is approximately 300 mA

EXT_RESET# is an Input
used to reboot the CPU

Do not drive active high
(use open drain)

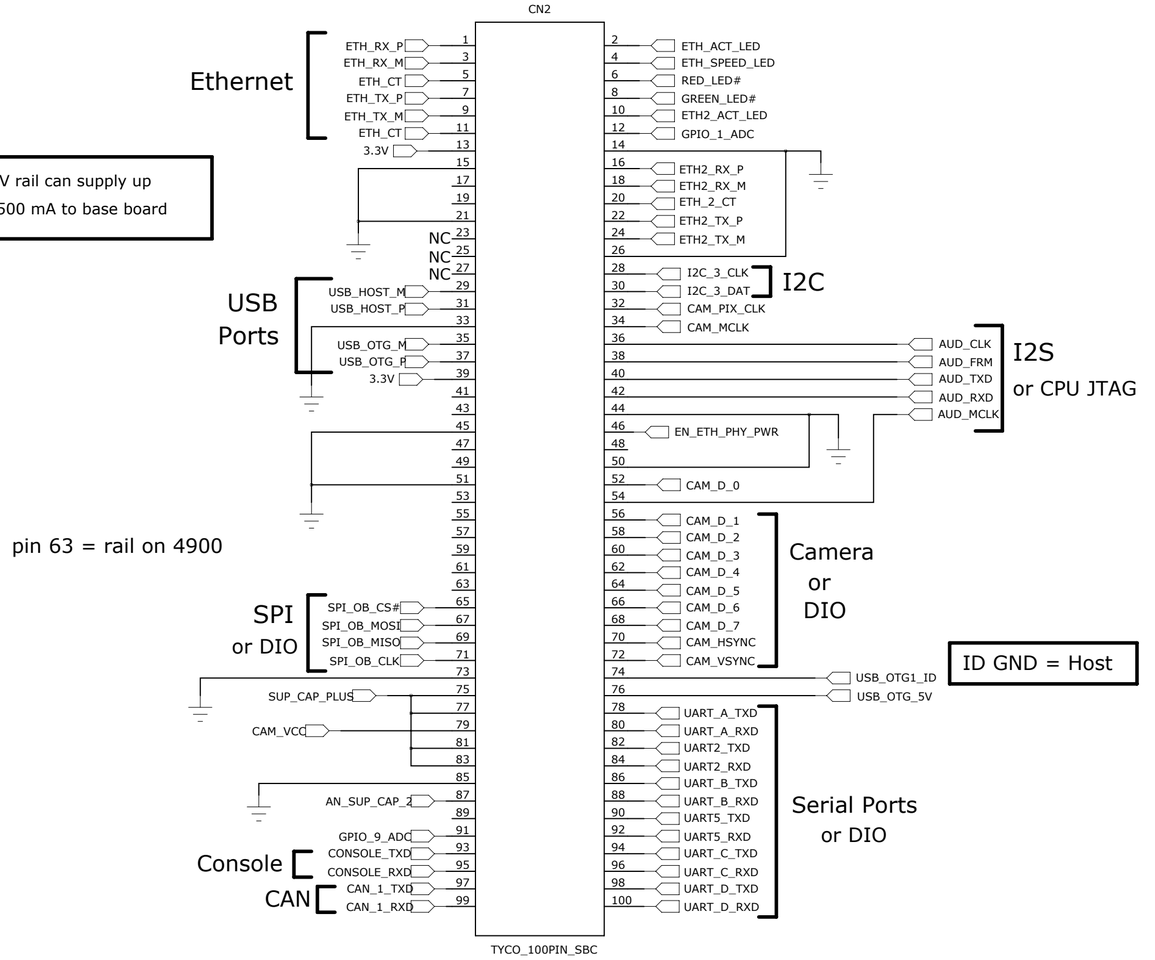
⚠ All signals driving DIO on CN1 & CN2 must be powered by the 3.3V on CN2, or remain at 0V until the CN2 3.3V rail is > 3.0V

Left



OFF_BD_RESET# is an Output
used to reset all peripherals

Right



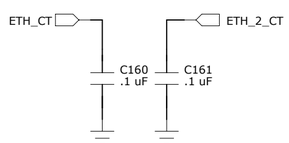
3.3V rail can supply up
to 500 mA to base board

pin 63 = rail on 4900

ID GND = Host

Boot Strap

DIO_20 BIAS	TS-4100 Boots from
1	eMMC Flash
0	SD Card



Base board should connect CN2 pins 39 and 79
together if the CAM DIO should use 3.3V levels
If not connected, they will have 2.6V levels

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