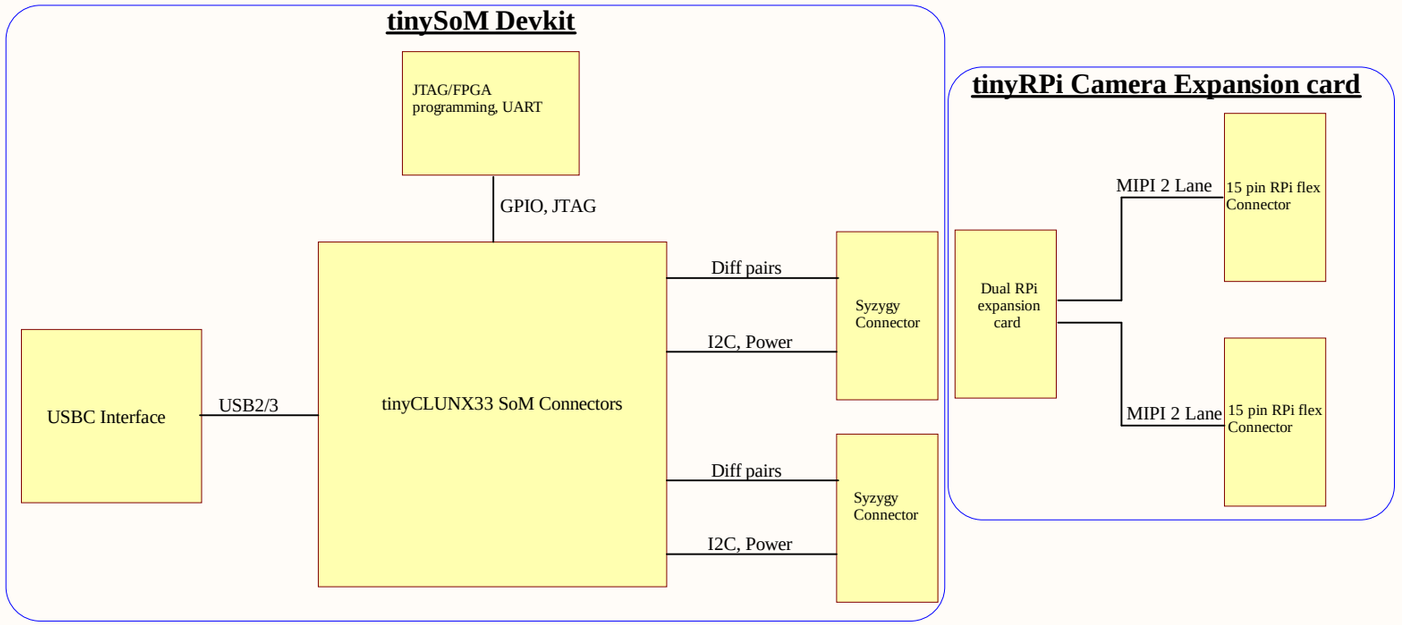
REV	Revision Notes	Designed by	Approved by	Date
1.0	Initial release	TinyVision	*	*
2.0	Rev2	TinyVision	*	*
3.0	Rev3	TinyVision	*	*



PCB LOGO
WEEE

PCB LOGO
ESD Susceptible

TP1

1 FID
1 FID
1 FID

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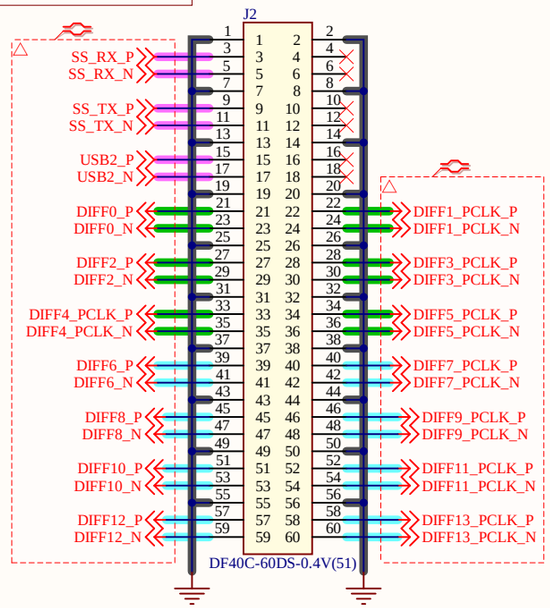
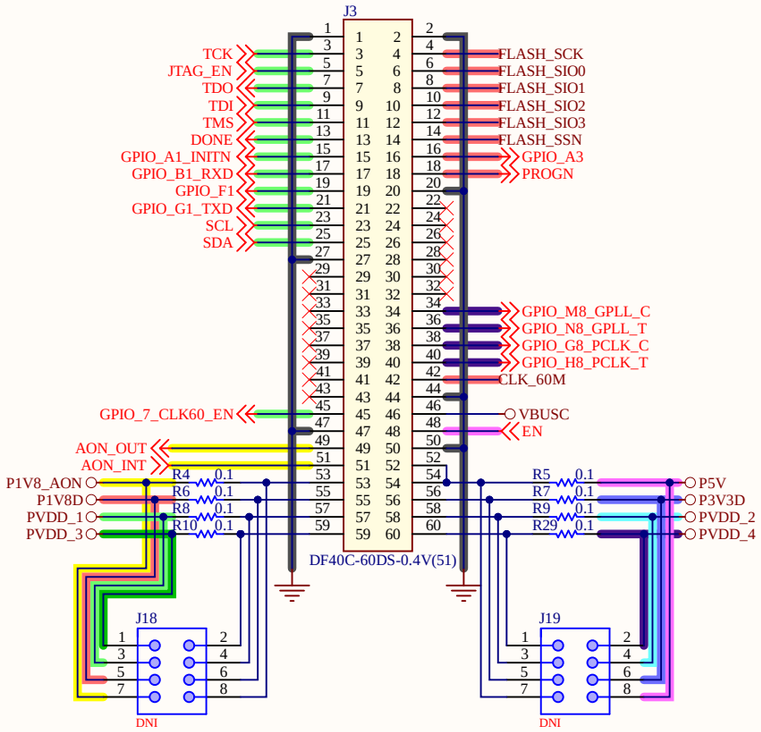
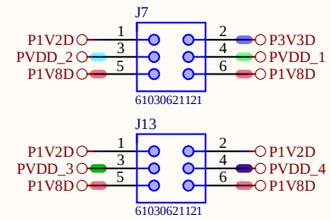
Color Legend:
3.3V IO
USB
1.8V
Bank 1 Voltage (1.2-3.3V)
Bank 2 Voltage (1.2-1.8V)
Bank 3 Voltage (1.2-1.8V)
Ground

SoM Connectors

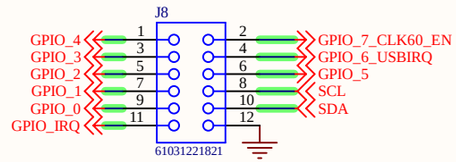




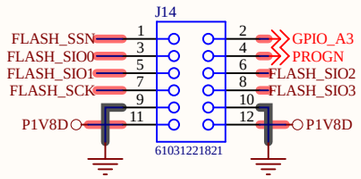
Bank Voltage Selection



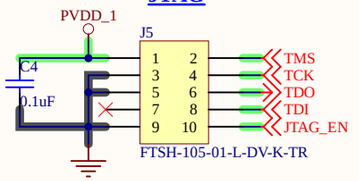
GPIO/I2C

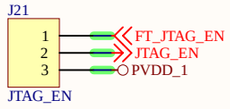


Flash IO

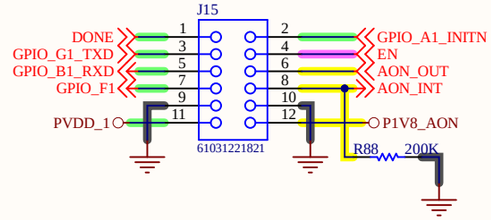


JTAG

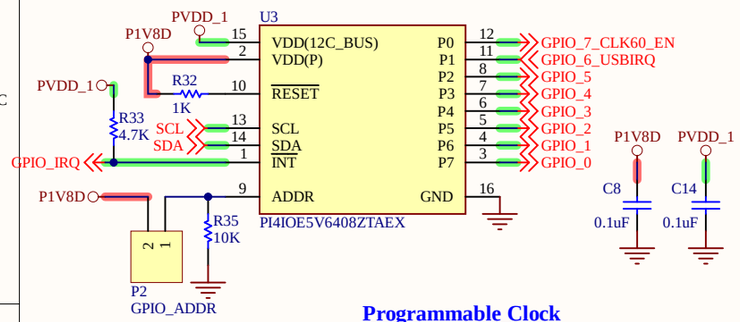




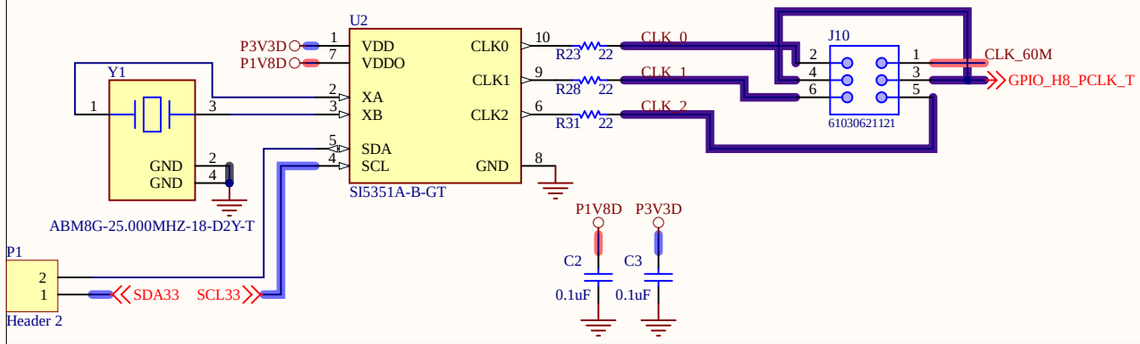
AON/GPIO



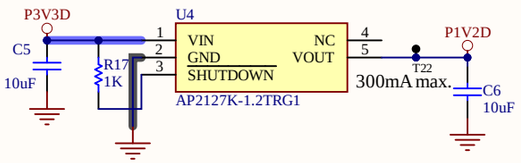
I2C GPIO Expander



Programmable Clock

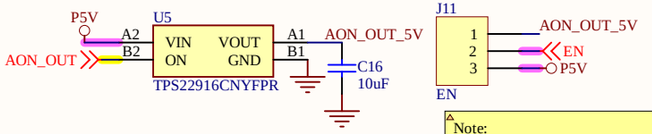


1.2V LDO



Note:
The 1.2V LDO is required as the bank voltage for proper MIPI operation.

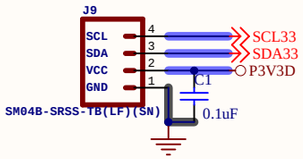
AON Circuit



Note:
This switch allows the EN line to go all the way to 5V allowing for more efficient PFM operation of the module switchers. Else, the switchers are limited to PWM (good for EMI but poor low load efficiency).

Note:
1-2: Power controlled by FPGA AON block
2-3: Power is always on

QWIIC Connector



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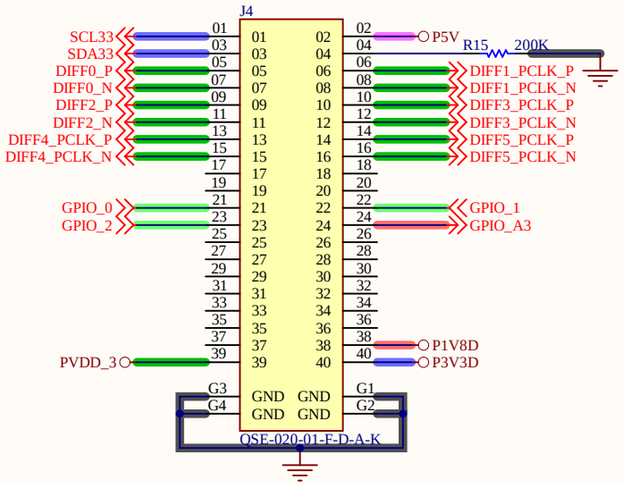
Pod A

Syzygy address: 0x30



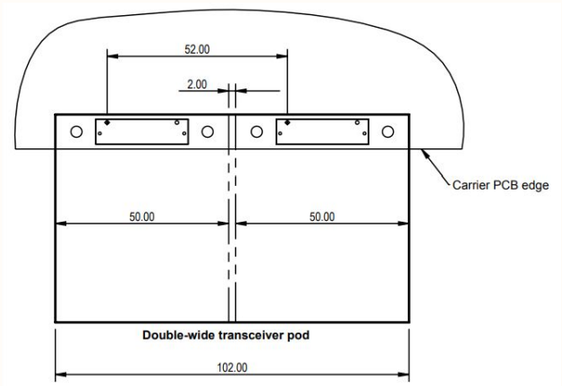
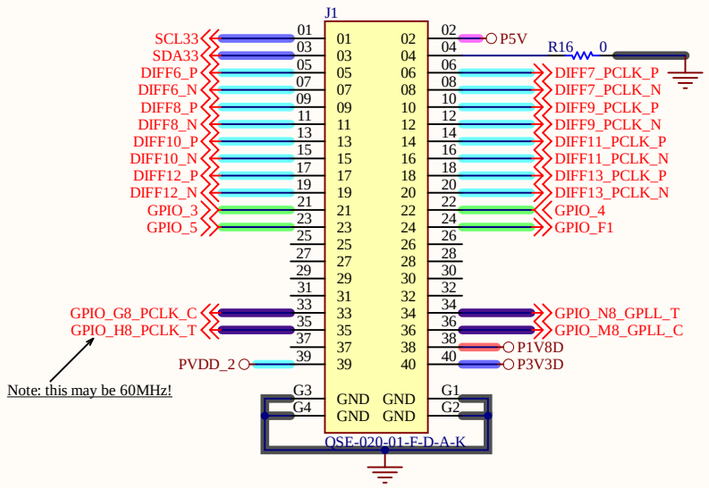


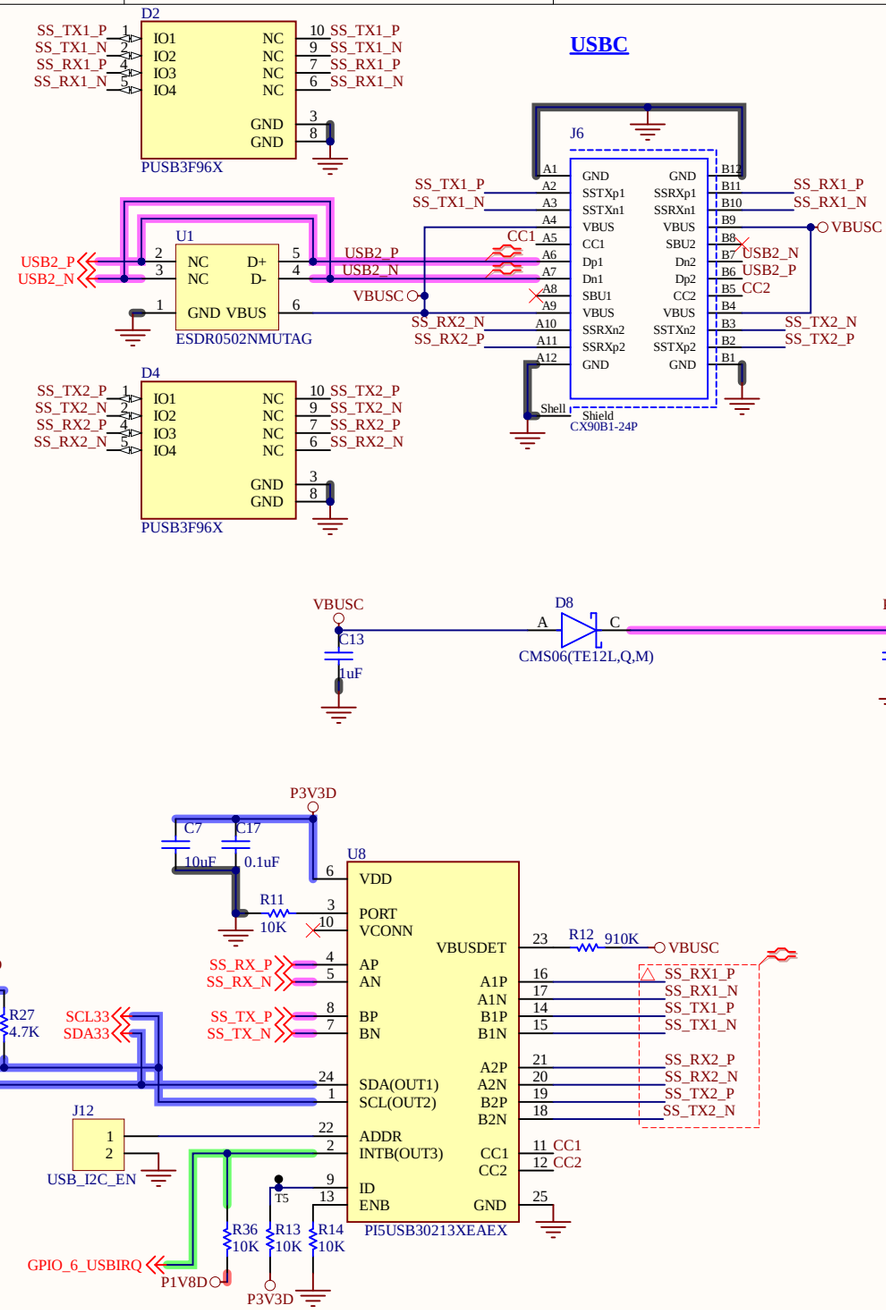
Figure 8. Double-Wide Transceiver Pod Dimensions

Pod B

Syzygy address: 0x3F



USBC



Title	***tinyNX33U Module BaseBoard***		
Size: B	Number: USB	Revision: 3.0	
Date: 06-06-2025	Time: 11:39:27	Sheet 3	of 4
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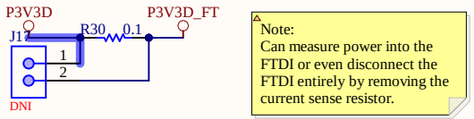
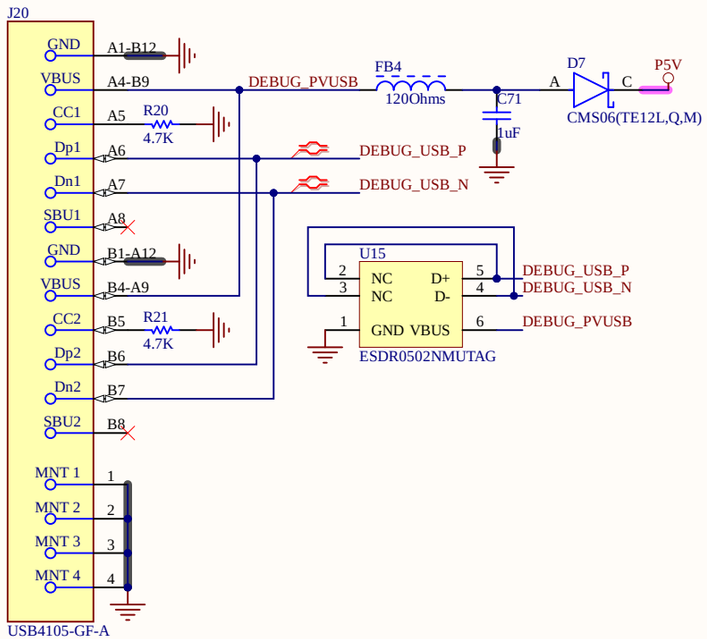
FTDI Power Measurement/Disconnect

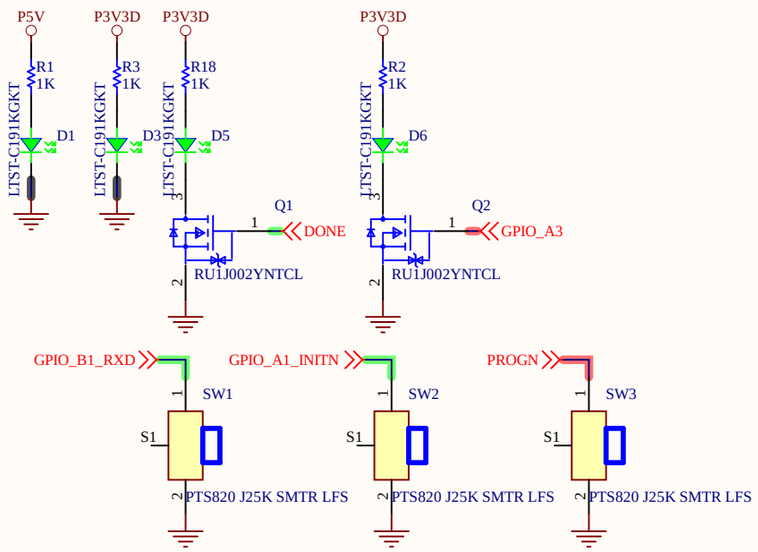


Note:
Can measure power into the FTDI or even disconnect the FTDI entirely by removing the current sense resistor.

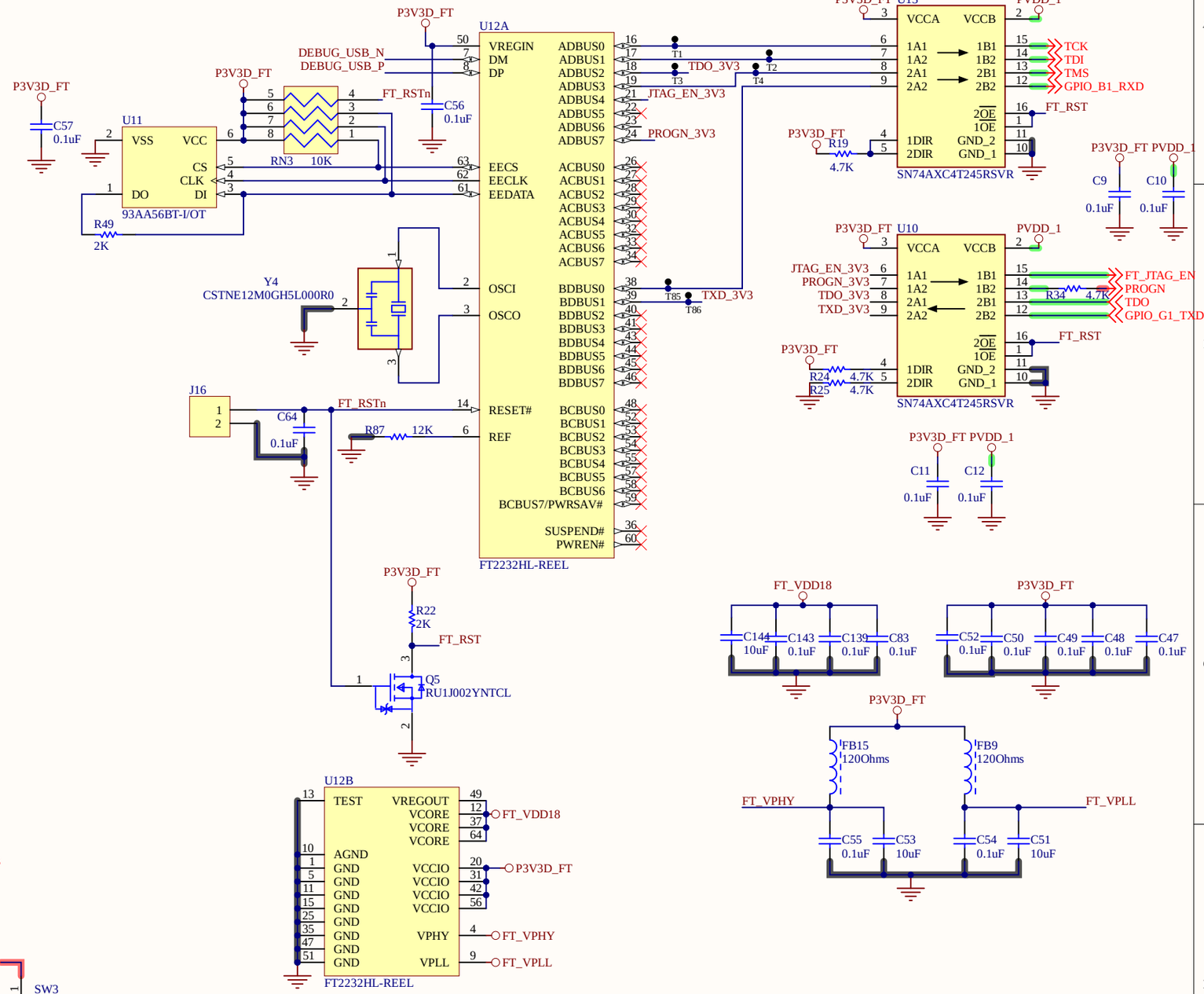
Debug/Programming USB



LED's/Switch



FPGA Programmer



Title	*tinyNX33U Module BaseBoard*		
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