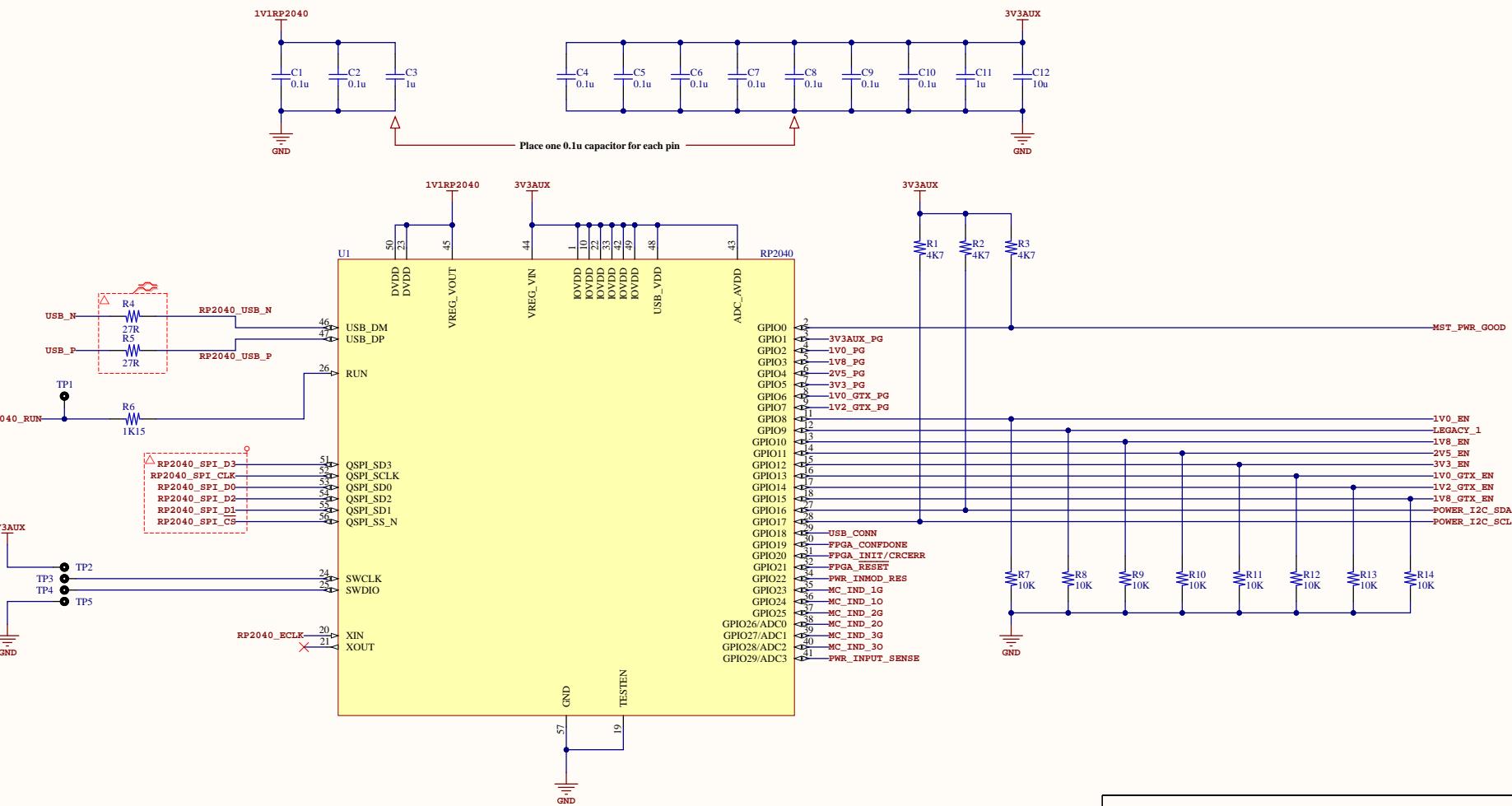


Title Overview Sheet	
Drawn By	Jordan Harris-Toovy
Reviewed By	Jason Sullins
Date	4/29/2024
Version	0.1
Sheet 1	of 22
Size	ANSI B

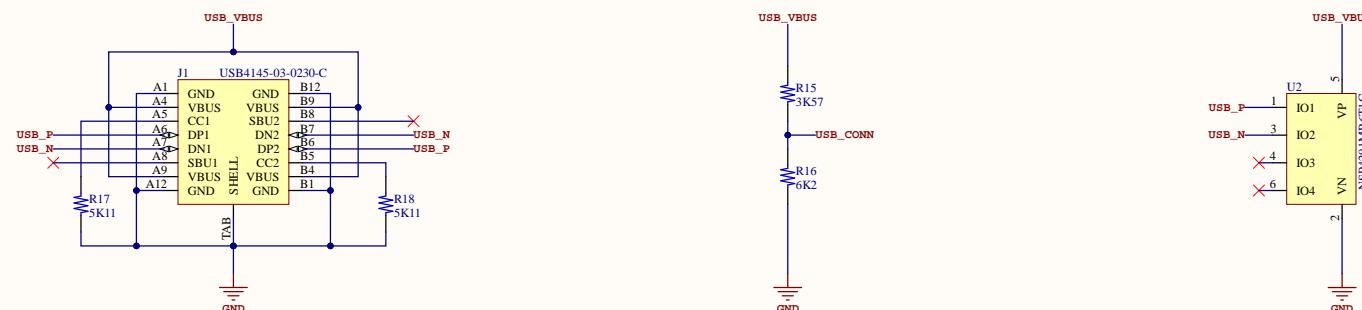
Microcontroller Connections & Decoupling Capacitors



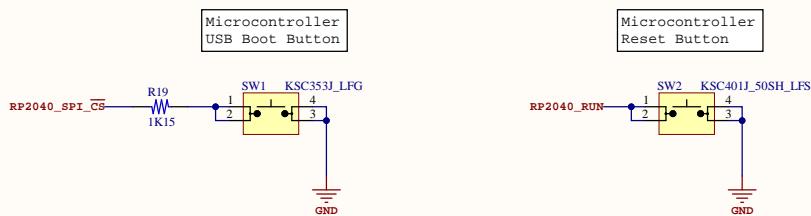
Title Management Microcontroller	
Drawn By	Jordan Harris-Toovy
Reviewed By	Jason Sullins
Date	4/29/2024
Version	0.1
Sheet	2 of 22
Size	ANSI B

1 2 3 4 5 6

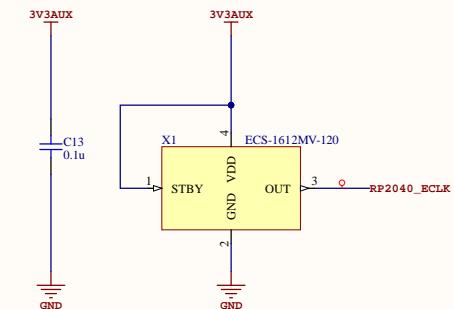
Microcontroller USB Connection



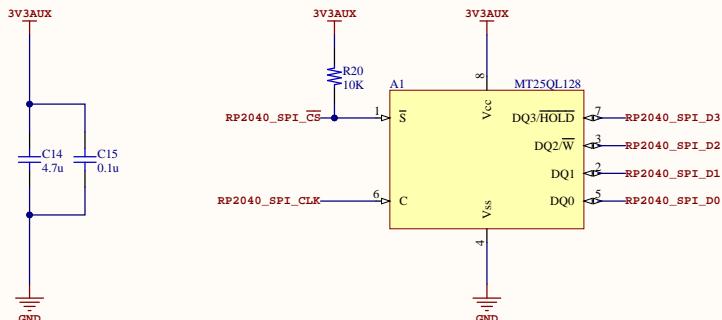
Microcontroller Buttons



Microcontroller Clock



Microcontroller FLASH



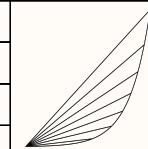
Title Management Microcontroller Support	
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Drawn By	Jordan Harris-Toovy
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Reviewed By	Jason Sullins
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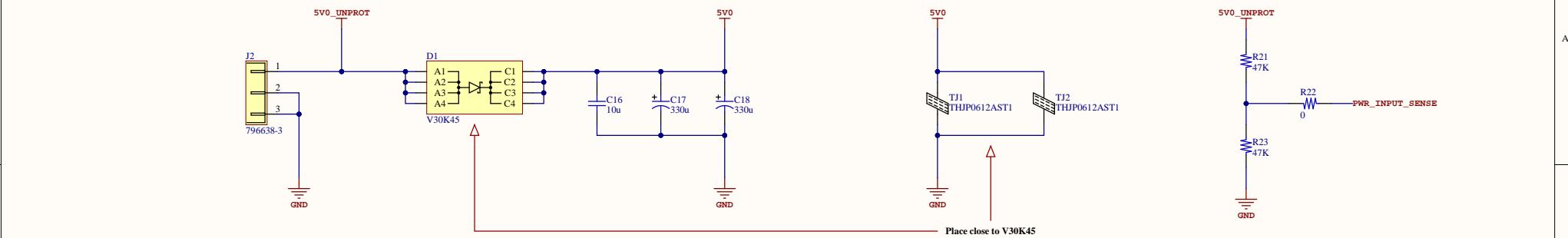
Date	4/29/2024	Version	0.1
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Sheet	3	of	22
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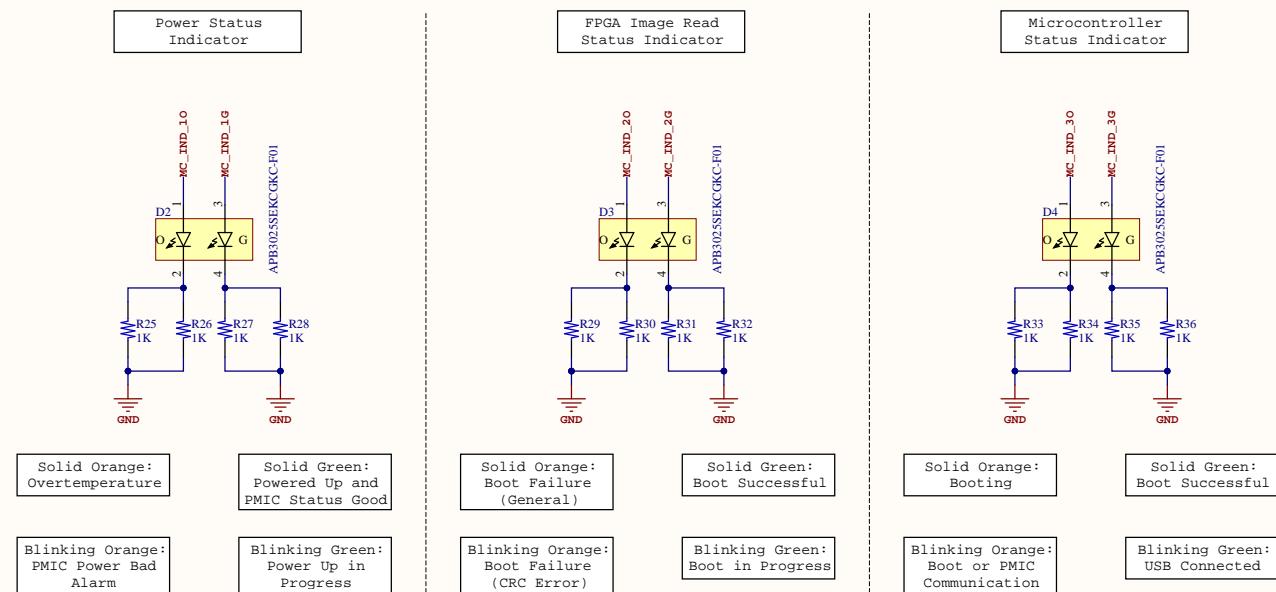


1 2 3 4 5 6

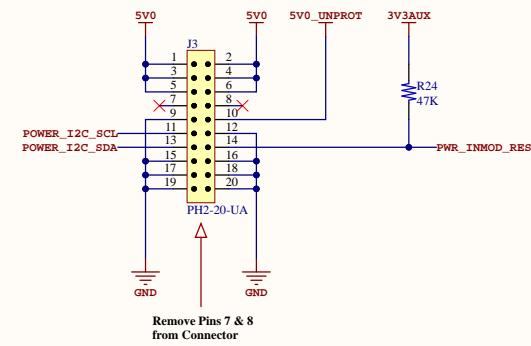
Board 5V Power Input



Indicator LEDs



Power Input Module Connector (Optional)



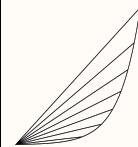
Title Power Inputs and Indicators

Drawn By Jordan Harris-Toovy

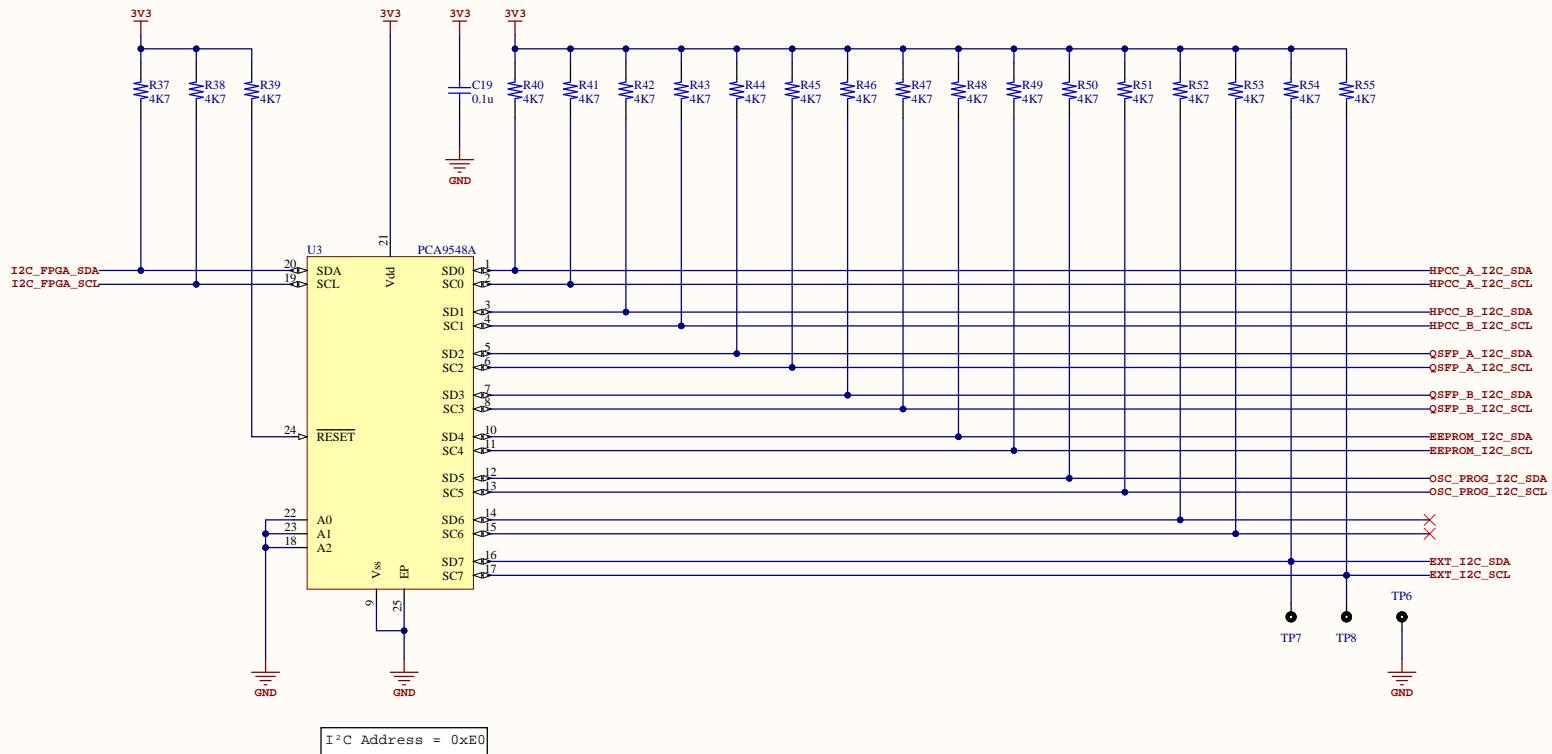
Reviewed By Jason Sullins

Date 4/29/2024 Version 0.1

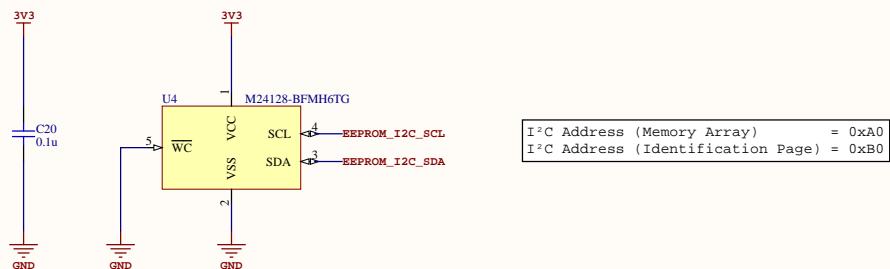
Sheet 4 of 22 Size ANSI B



IIC Switch



IIC EEPROM



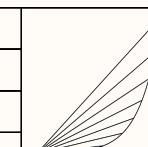
Title PC Switch & EEPROM

Drawn By Jordan Harris-Toovy

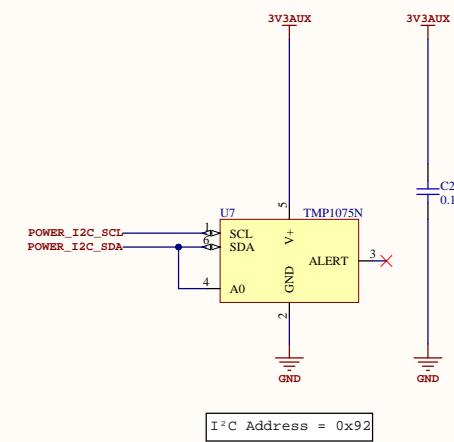
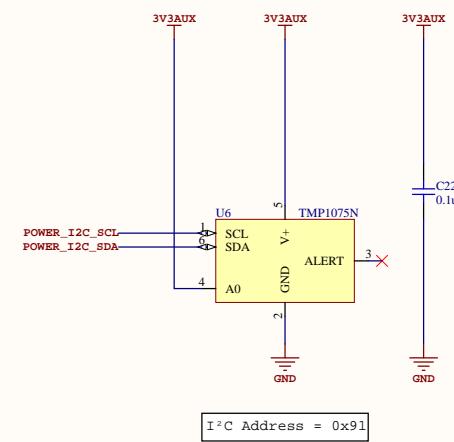
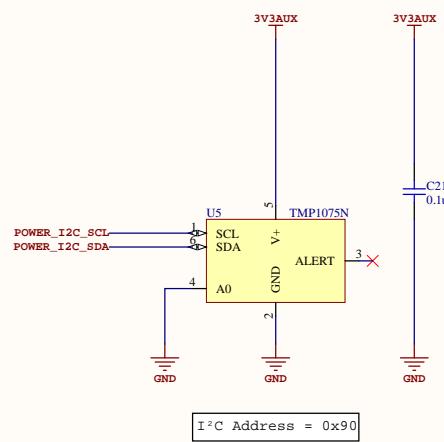
Reviewed By Jason Sullins

Date 4/29/2024 **Version** 0.1

Sheet 5 of 22 **Size** ANSI B



Temperature Sensors



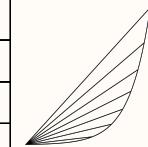
Title PMIC-Area Temperature Sensors

Drawn By Jordan Harris-Toovy

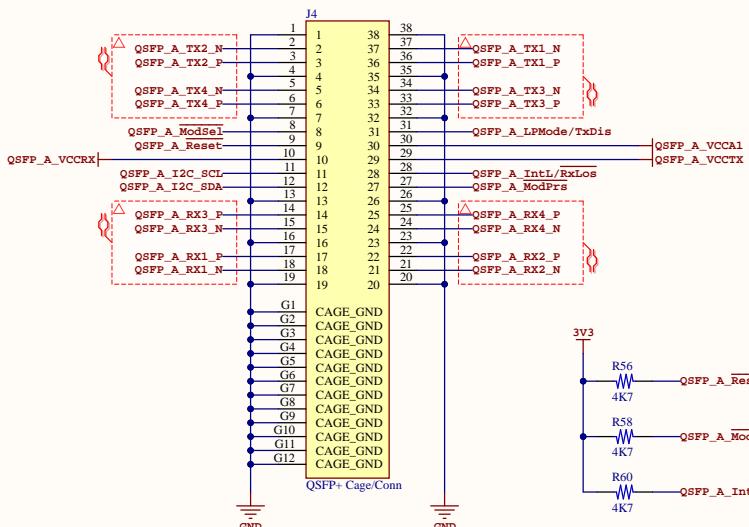
Reviewed By Jason Sullins

Date 4/29/2024 **Version** 0.1

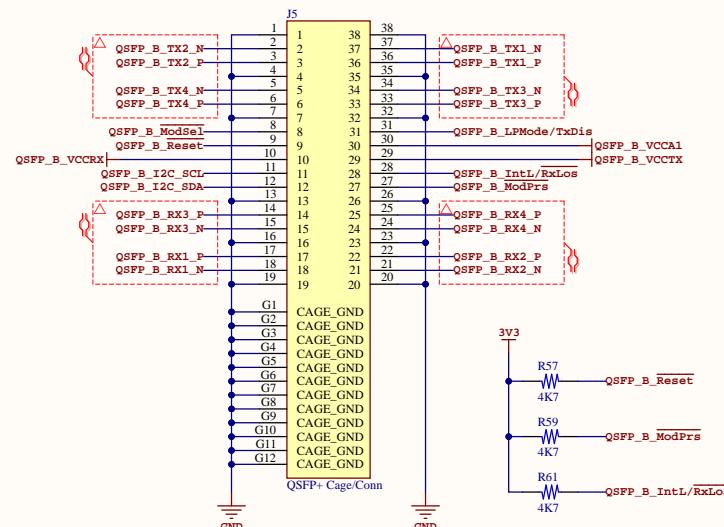
Sheet 6 **of** 22 **Size** ANSI B



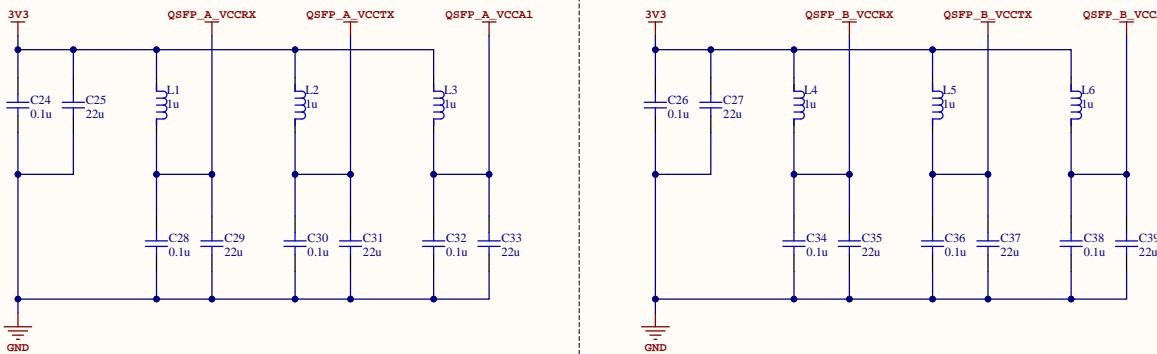
QSFP+ A Cage & Connector



QSFP+ B Cage & Connector



QSFP+ Power Filters



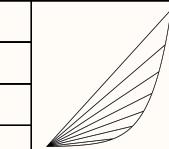
Title QSFP+ Connectors & Filtering

Drawn By Jordan Harris-Toovy

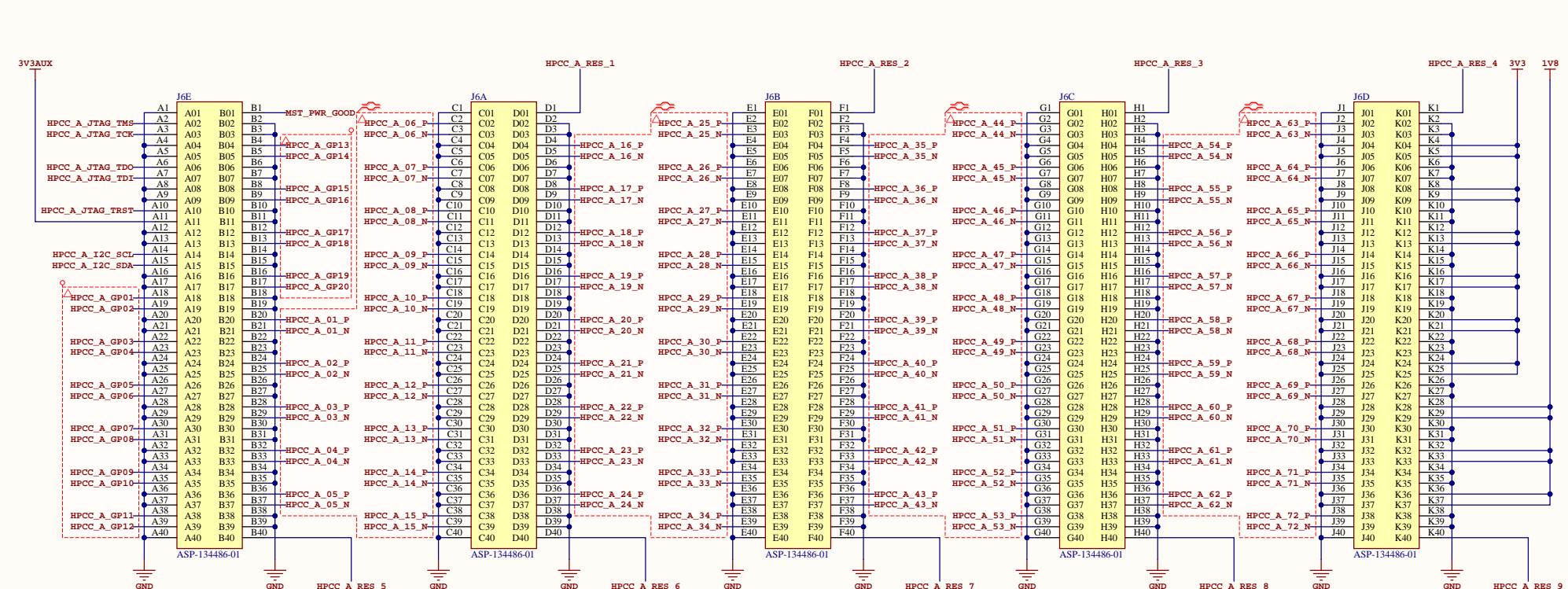
Reviewed By Jason Sullins

Date 4/29/2024 **Version** *

Sheet 7 **of** 22 **Size** ANSI B



HPCC A Connector



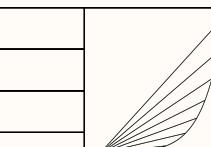
Title HPCC Connector A

Drawn By Jordan Harris-Toovy

Reviewed By Jason Sullins

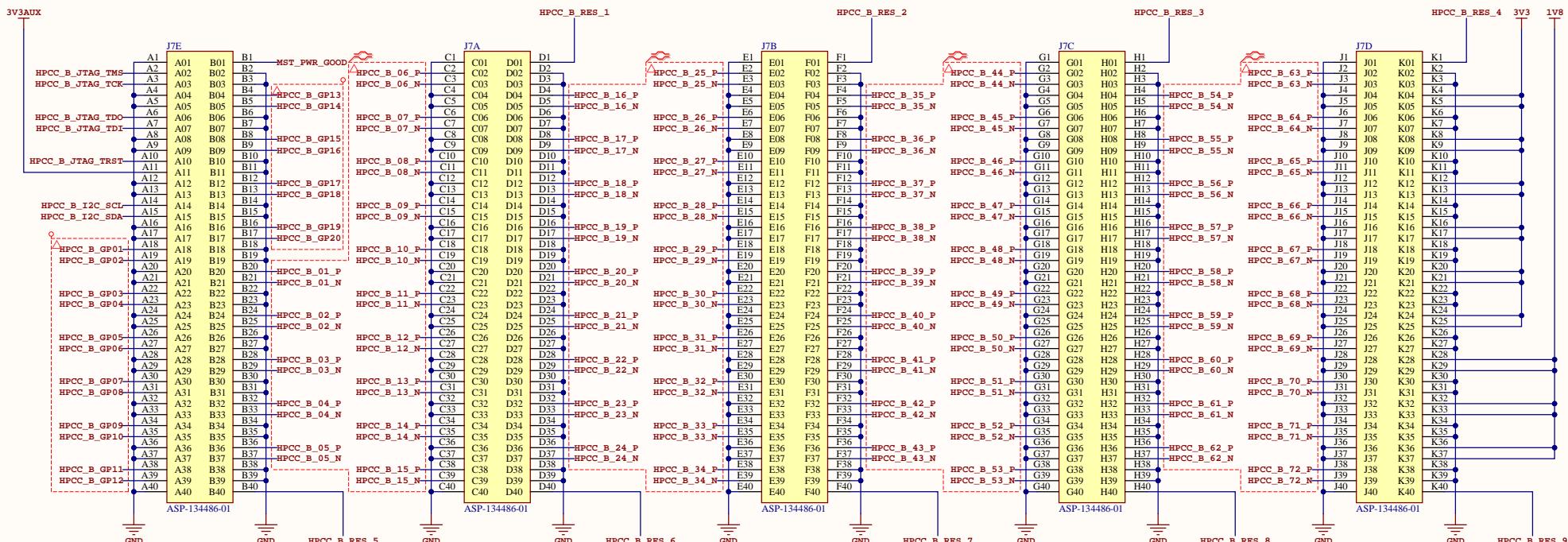
Date 4/29/2024 Version 0.1

Sheet 8 of 22 Size ANSI B

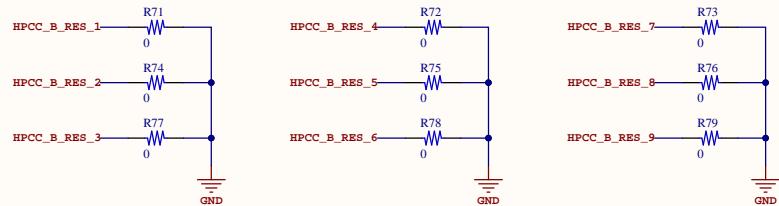


HPCC B Connector

A



D



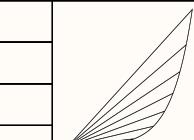
Title HPCC Connector B

Drawn By Jordan Harris-Toovy

Reviewed By Jason Sullins

Date 4/29/2024 Version 0.1

Sheet 9 of 22 Size ANSI B



1

2

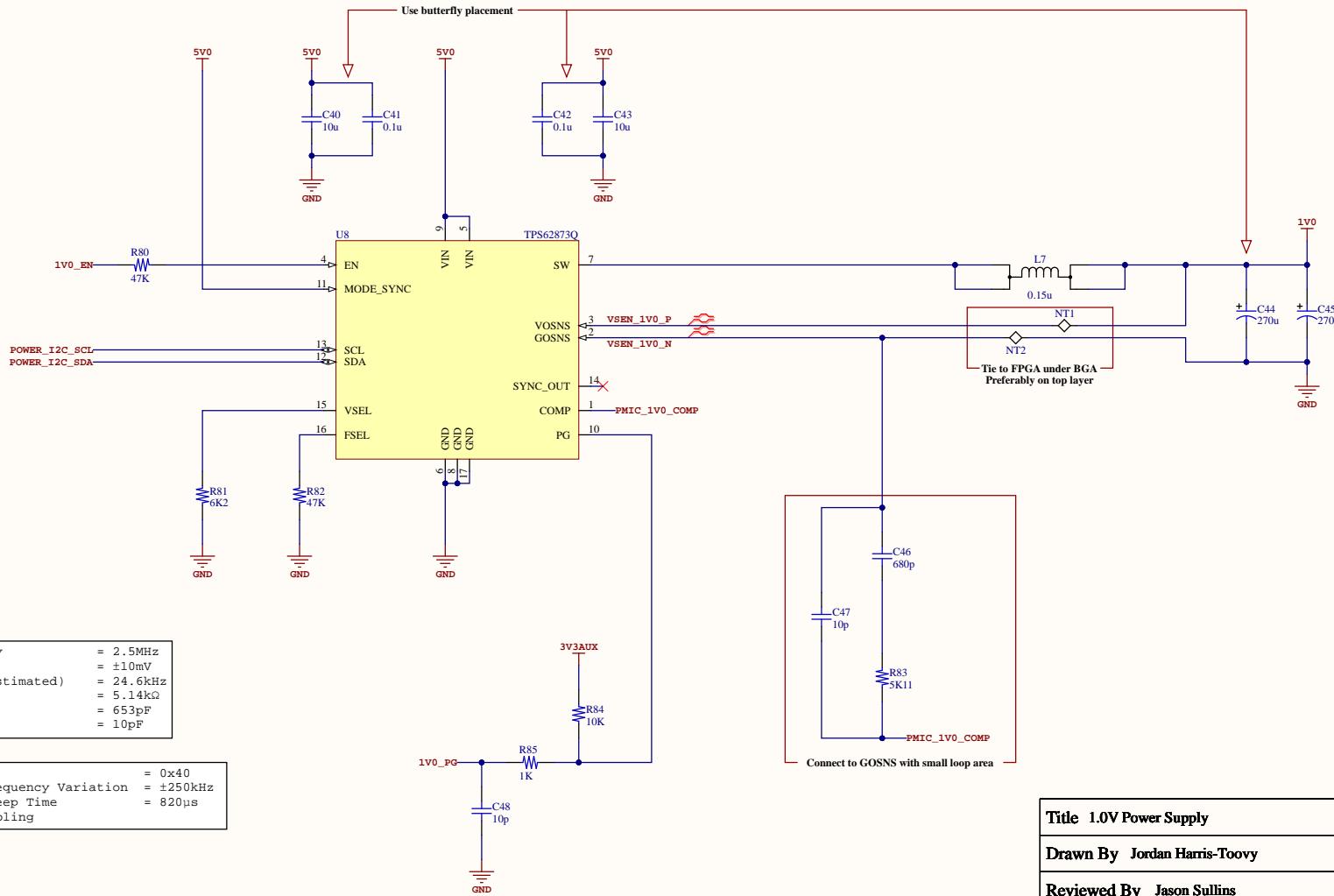
3

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5

6

FPGA 1.0V Power Supply



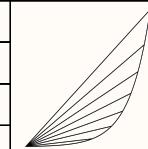
Title 1.0V Power Supply

Drawn By Jordan Harris-Toovy

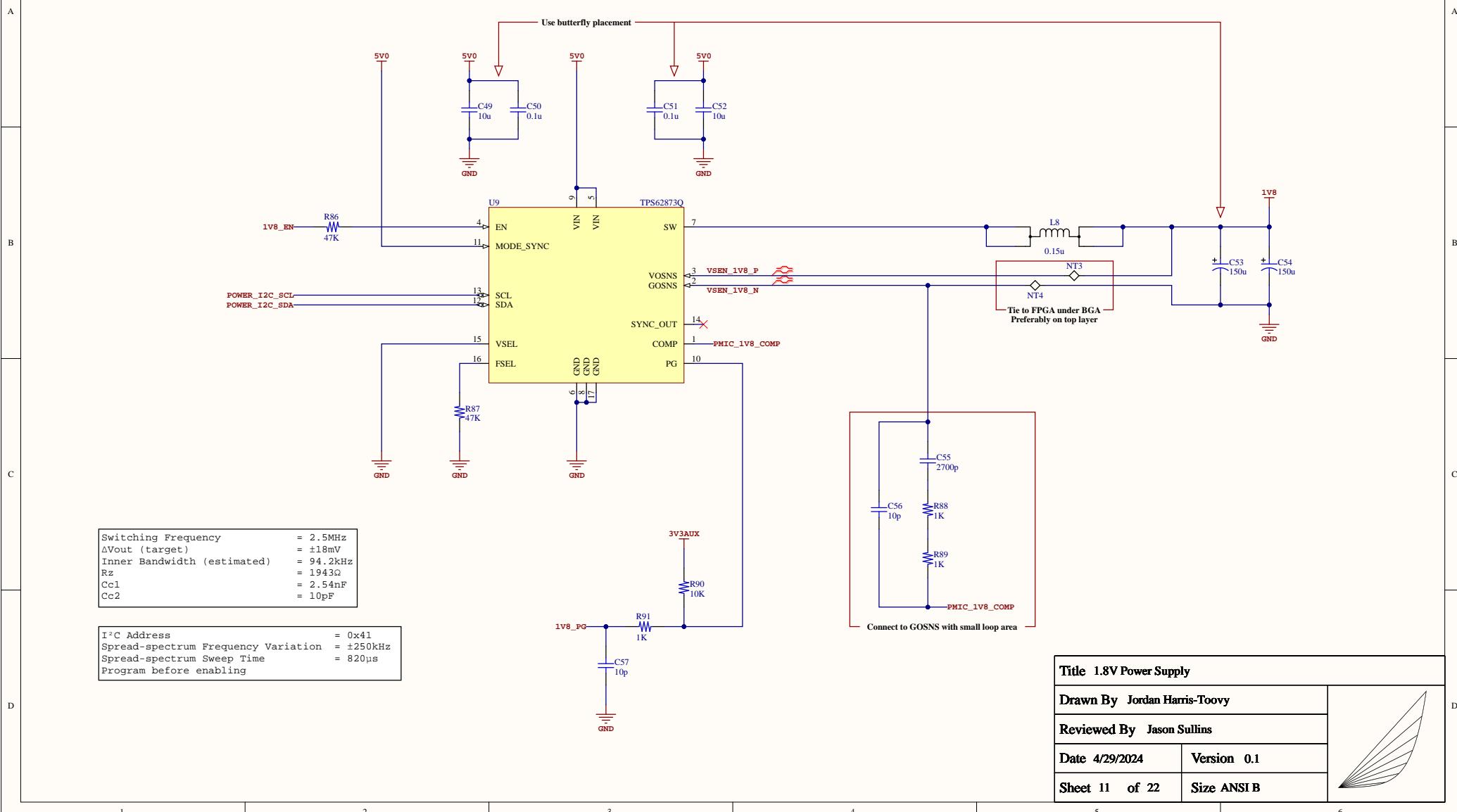
Reviewed By Jason Sullins

Date 4/29/2024 **Version** 0.1

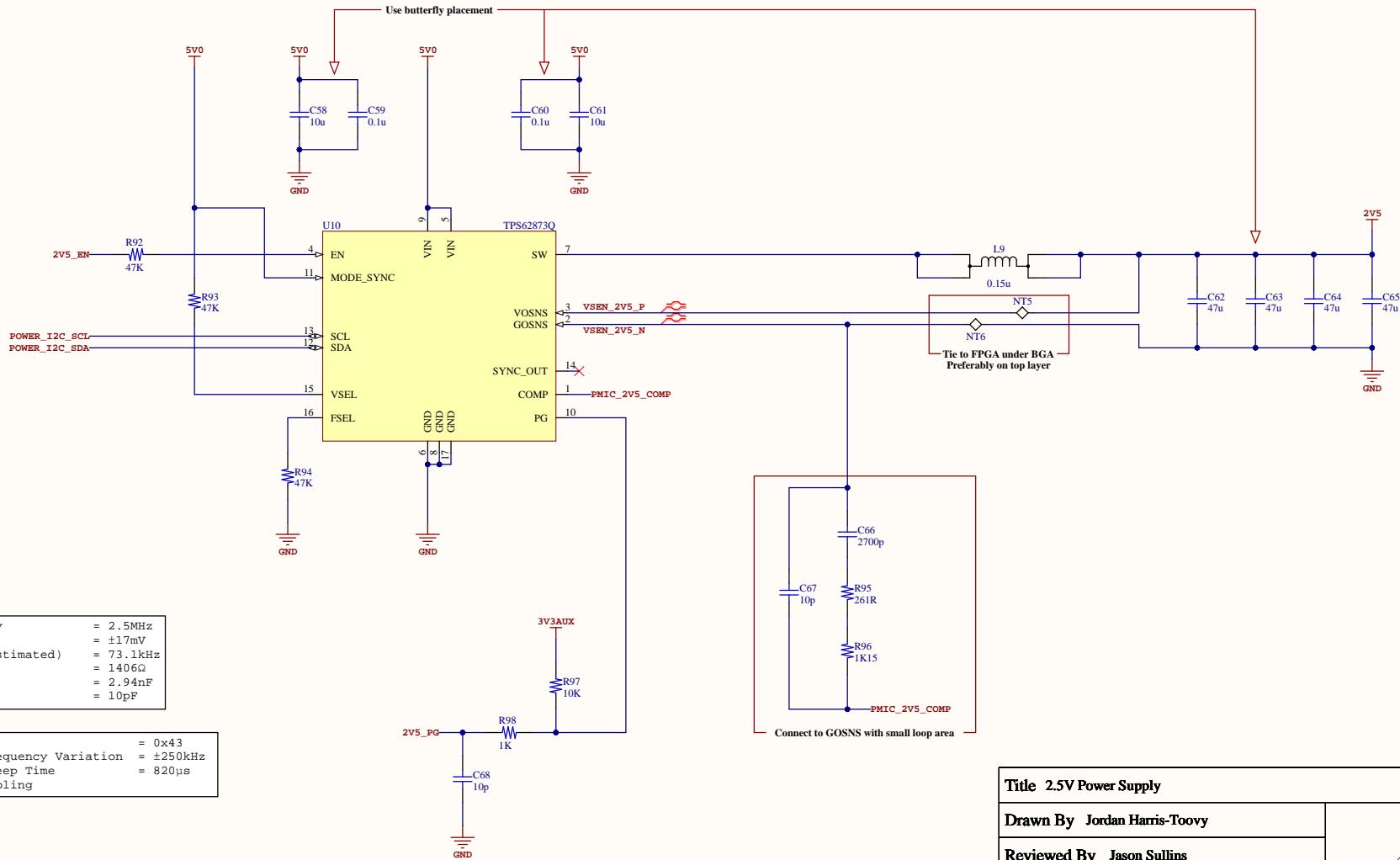
Sheet 10 **of** 22 **Size** ANSI B



FPGA 1.8V Power Supply



FPGA 2.5V Power Supply



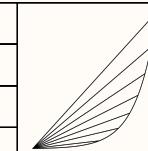
Title 2.5V Power Supply

Drawn By Jordan Harris-Toovy

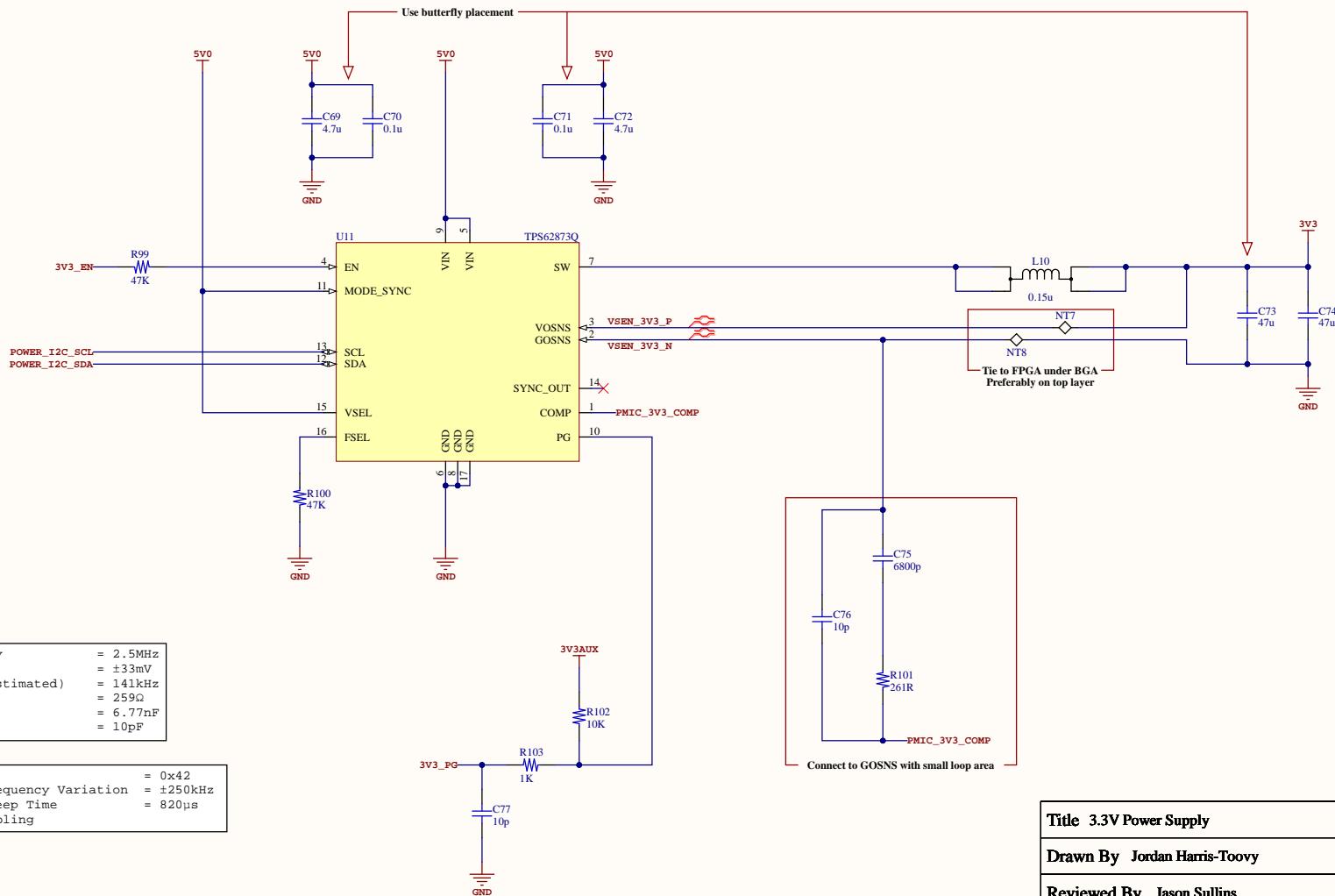
Reviewed By Jason Sullins

Date 4/29/2024 **Version** 0.1

Sheet 12 **of** 22 **Size** ANSI B



FPGA 3.3V Power Supply



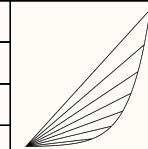
Title 3.3V Power Supply

Drawn By Jordan Harris-Toovy

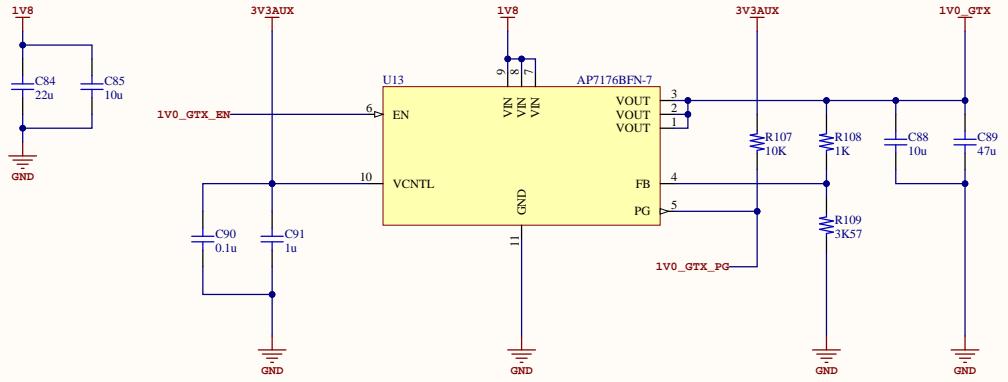
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Date 4/29/2024 Version 0.1

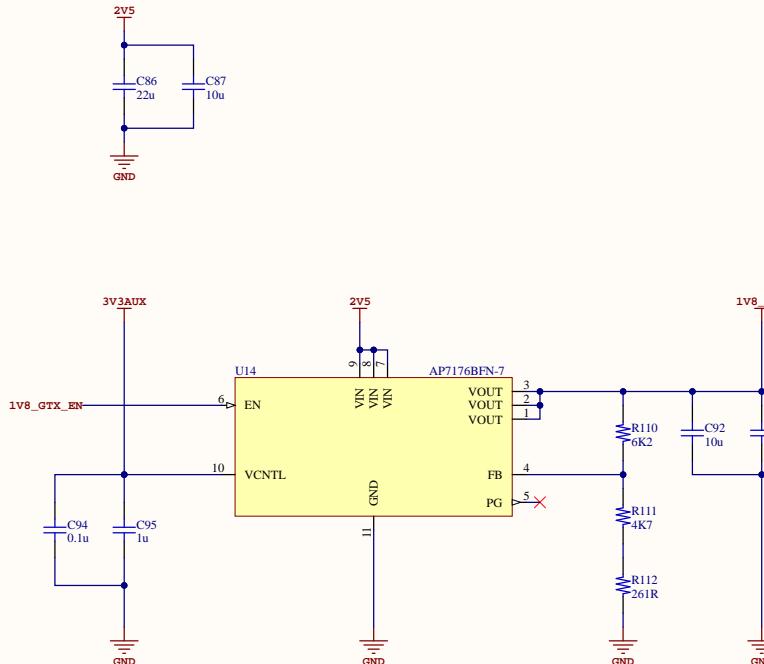
Sheet 13 of 22 Size ANSI B



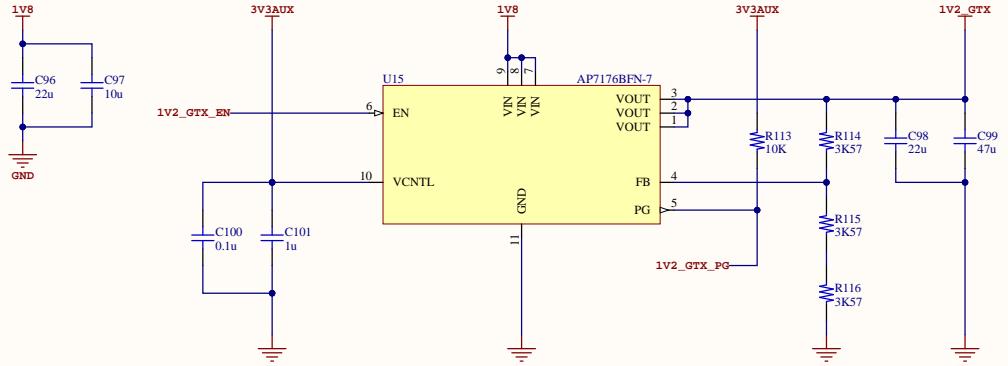
FPGA GTX 1.0V Supply



FPGA GTX 1.8V Supply



FPGA GTX 1.2V Supply



Title GTX Power Supplies

Drawn By Jordan Harris-Toovy

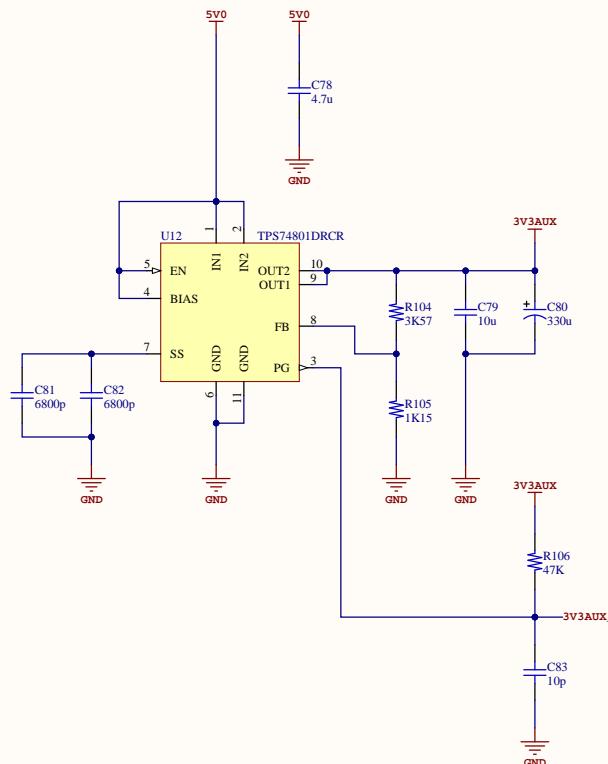
Reviewed By Jason Sullins

Date 4/29/2024 Version 0.1

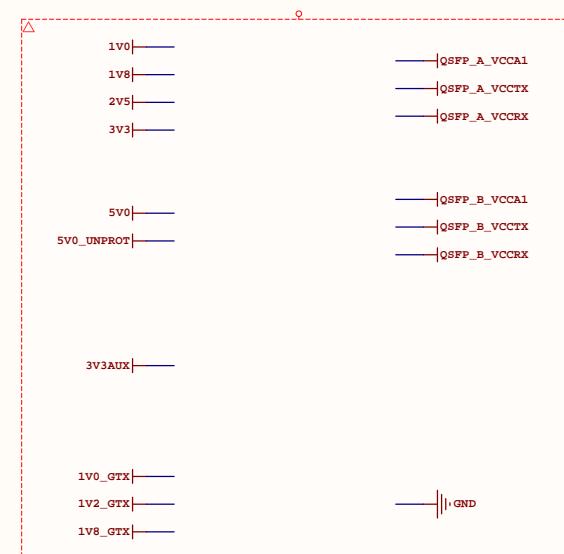
Sheet 14 of 22 Size ANSI B



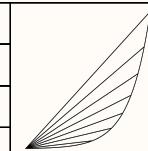
3.3V Auxiliary Power Supply



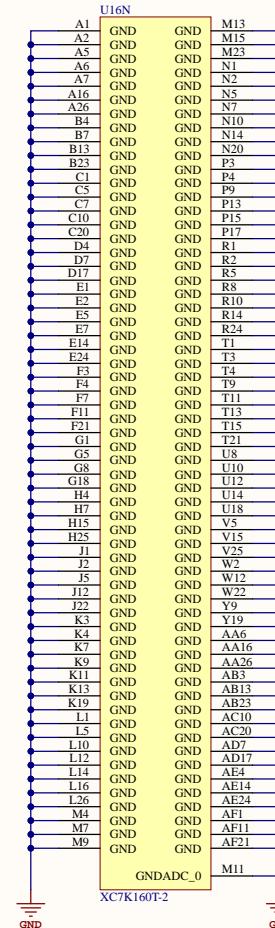
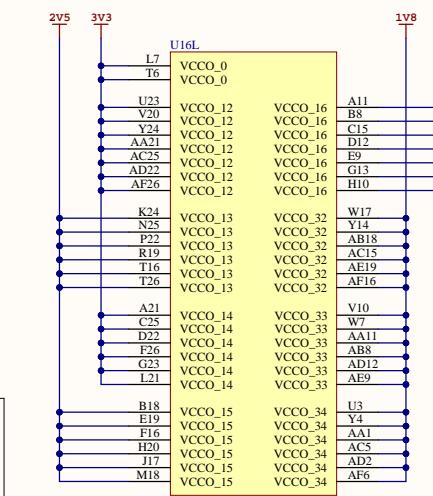
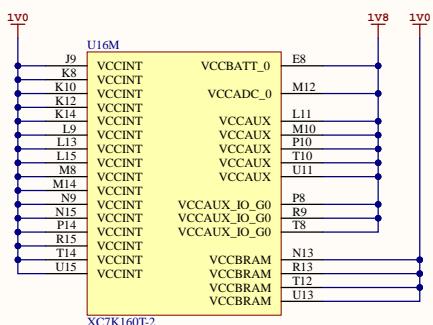
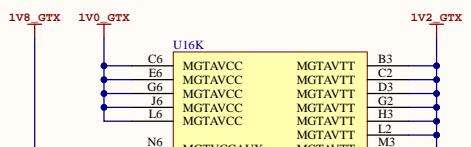
Power Net Class Definitions



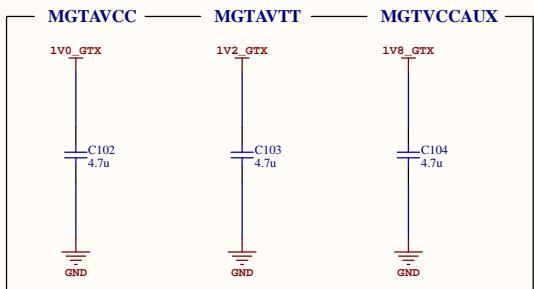
Title 3.3V Auxiliary Power Supply and Power Net Class Definitions	
Drawn By	Jordan Harris-Toovy
Reviewed By	Jason Sullins
Date	4/29/2024
Sheet	15 of 22
Version	0.1
Size	ANSI B



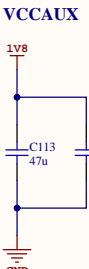
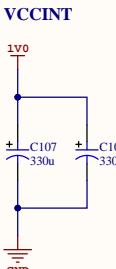
FPGA Power Connections



FPGA Decoupling Capacitors



VCCO_13,15,16 VCCO_32,33,34



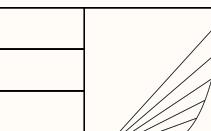
Title: FPGA Power Banks

Drawn By: Jordan Harris-Toovy

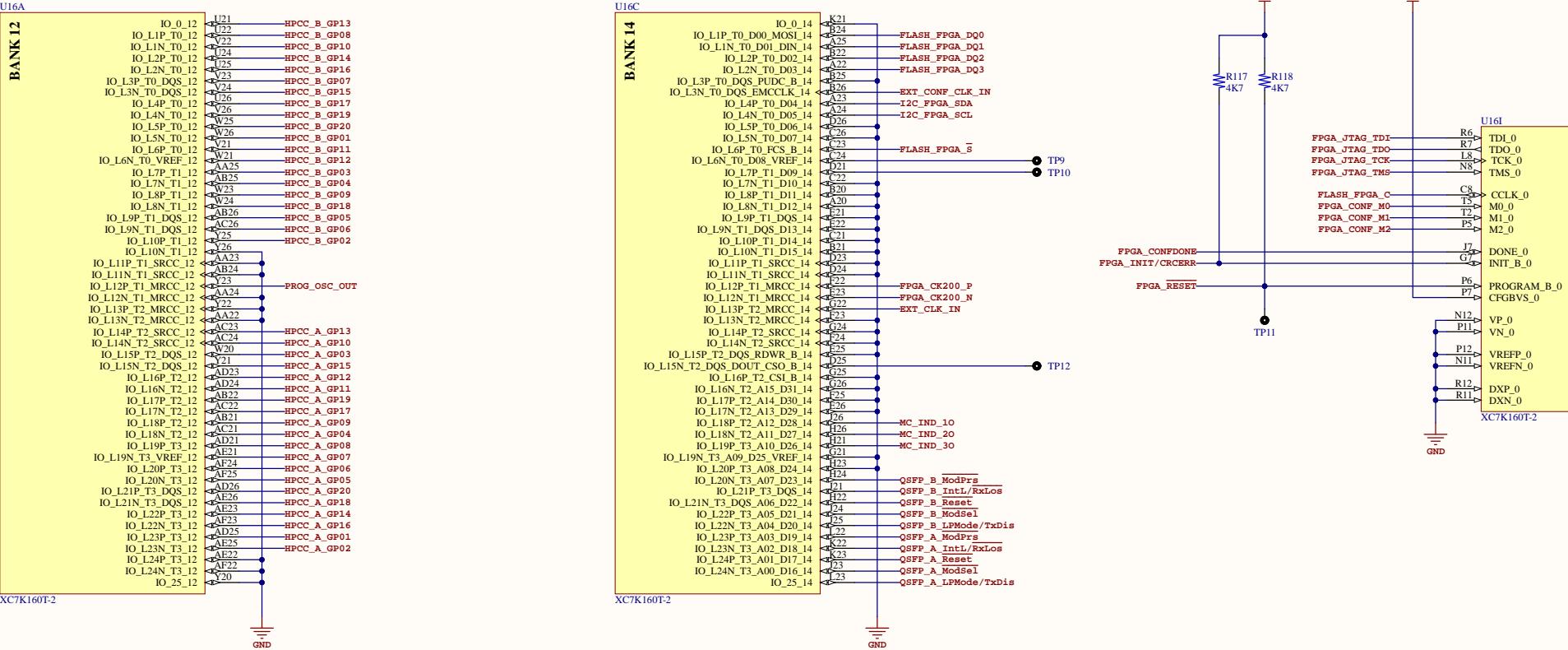
Reviewed By: Jason Sullins

Date: 4/29/2024 Version: 0.1

Sheet 16 of 22 Size: ANSI B



FPGA Configuration Connections



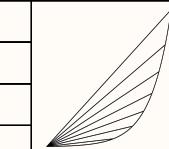
Title **FPGA Configuration Banks**

Drawn By **Jordan Harris-Toovy**

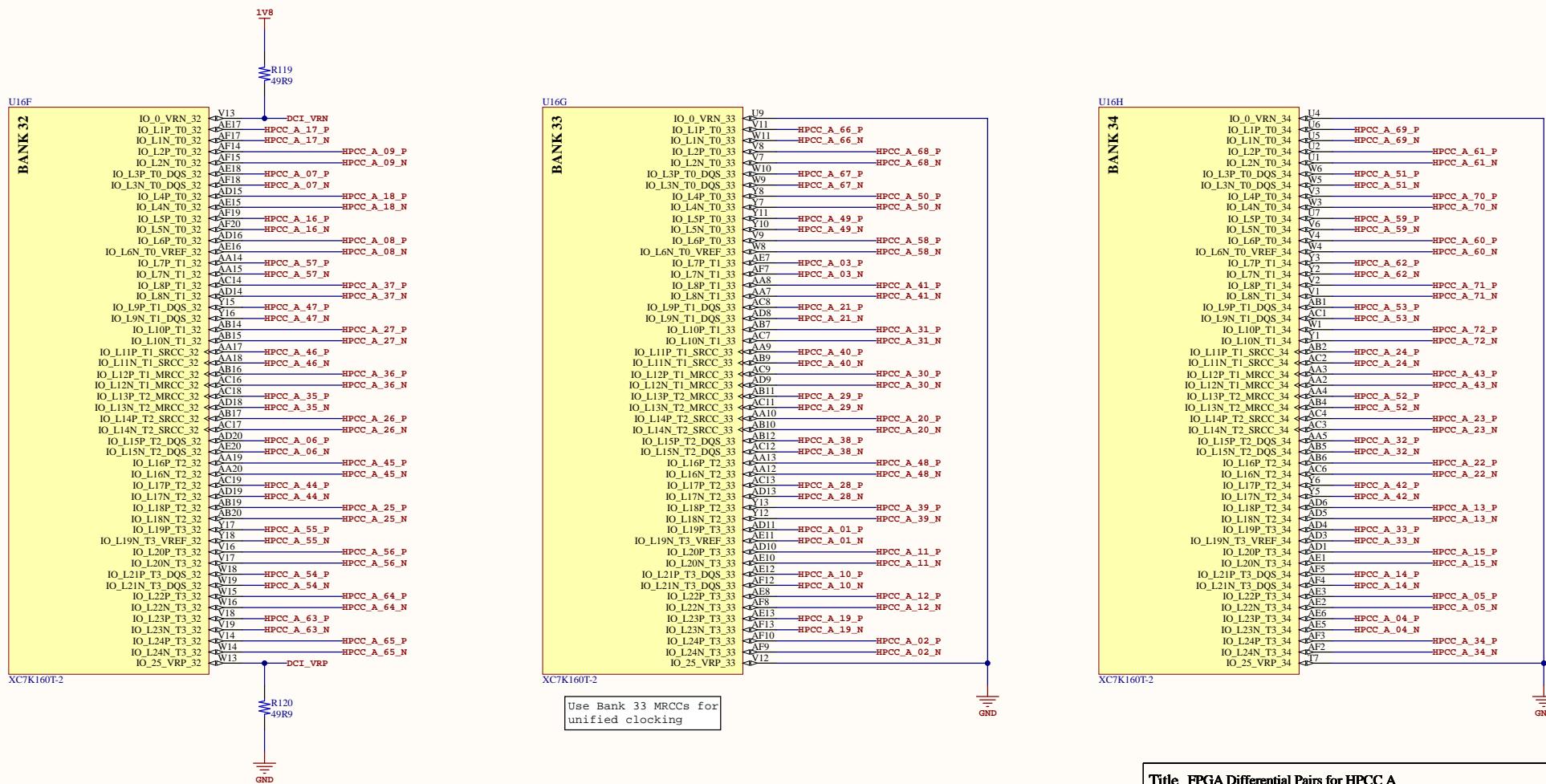
Reviewed By **Jason Sullins**

Date **4/29/2024** Version **0.1**

Sheet **17** of **22** Size **ANSI B**



FPGA HPCC A Connections



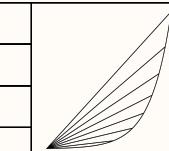
Title **FPGA Differential Pairs for HPCC A**

Drawn By **Jordan Harris-Toovy**

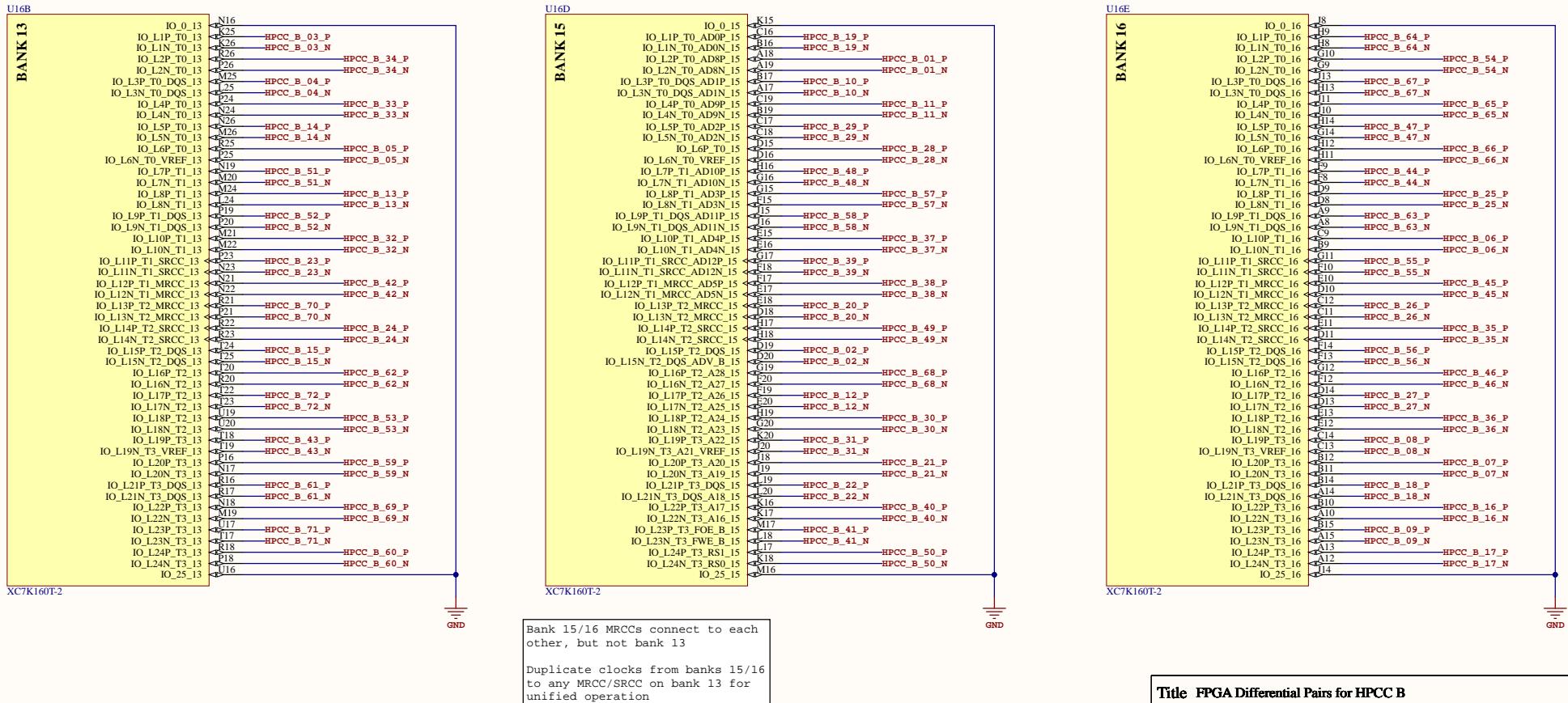
Reviewed By **Jason Sullins**

Date **4/29/2024** Version **0.1**

Sheet **18** of **22** Size **ANSI B**



FPGA HPCC B Connections



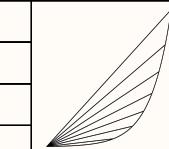
Title FPGA Differential Pairs for HPCC B

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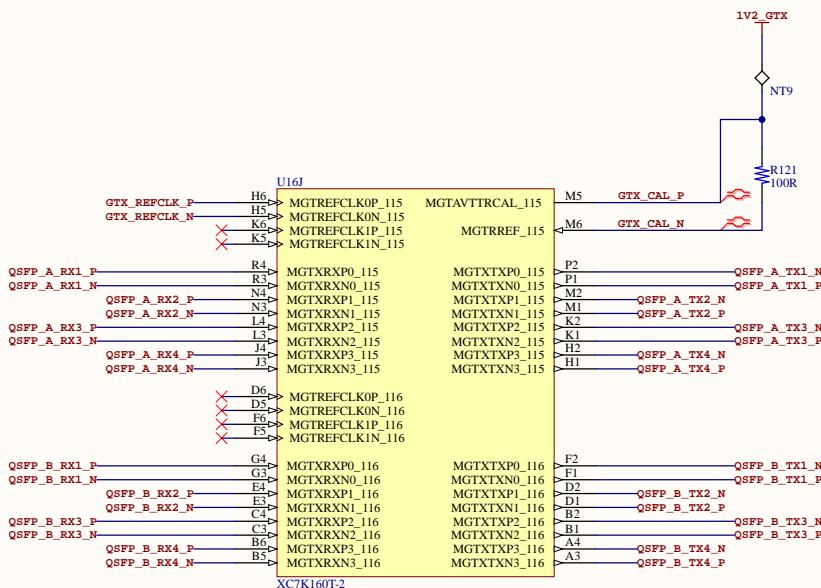
Reviewed By Jason Sullins

Date 4/29/2024 **Version** 0.1

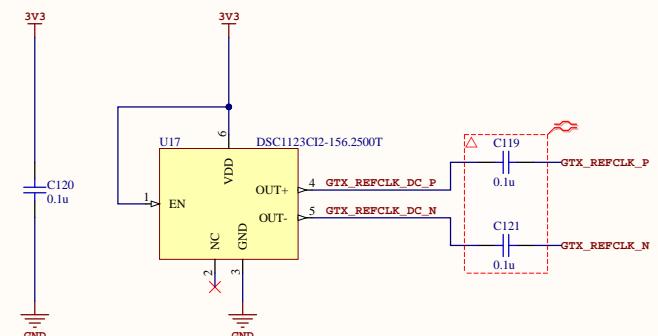
Sheet 19 of 22 **Size** ANSI B



FPGA GTX Quads



FPGA GTX Clock



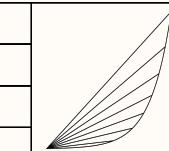
Title FPGA GTX Transceivers & SFP Clock

Drawn By Jordan Harris-Toovy

Reviewed By Jason Sullins

Date 4/29/2024 Version 0.1

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FPGA FLASH

A

A

B

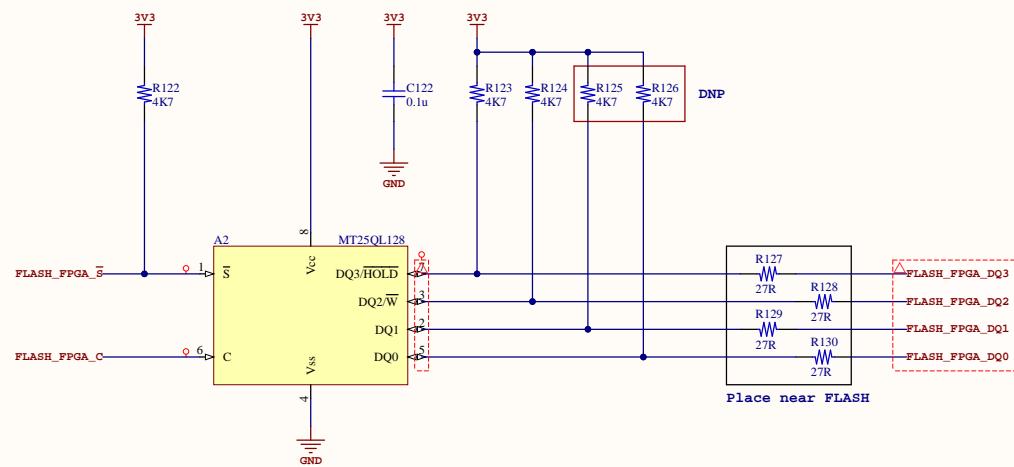
B

C

C

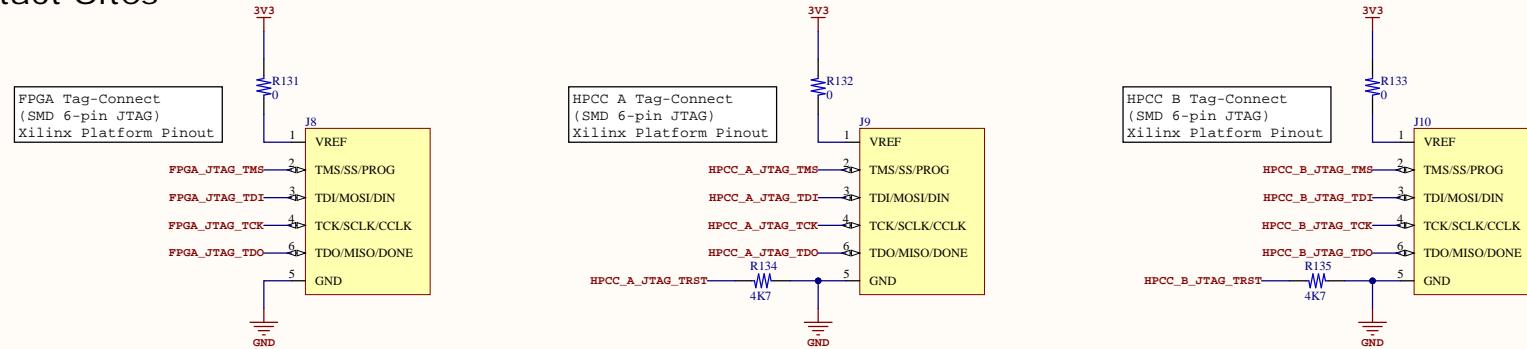
D

D

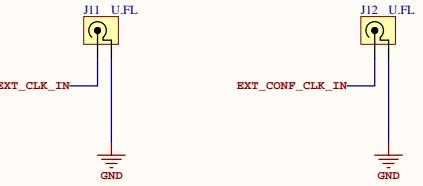


Title FPGA QSPI FLASH	
Drawn By Jordan Harris-Toovy	Reviewed By Jason Sullins
Date 4/29/2024	Version 0.1
Sheet 21 of 22	Size ANSI B

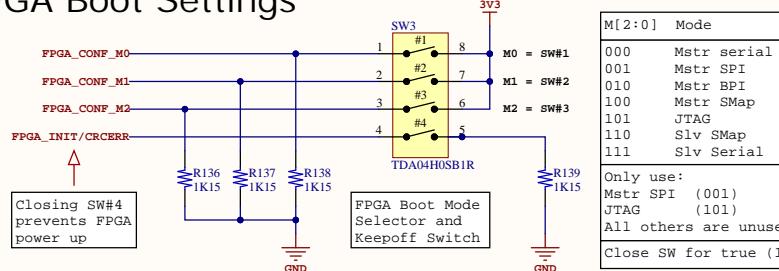
JTAG Contact Sites



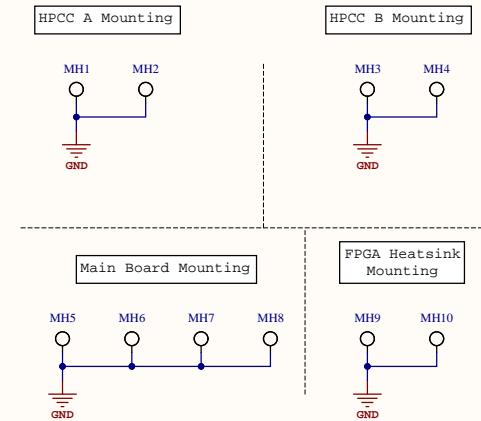
FPGA External Clocks



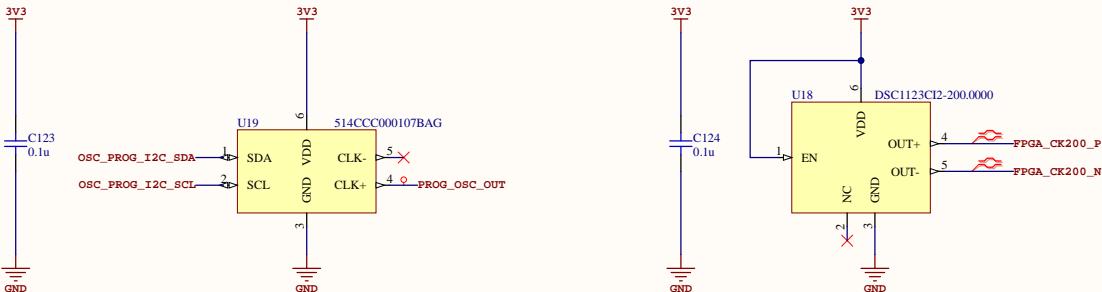
FPGA Boot Settings



Mounting Holes



FPGA 200MHz Clock & Programmable Clock



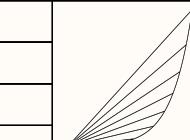
Title Miscellaneous Functions & Programming

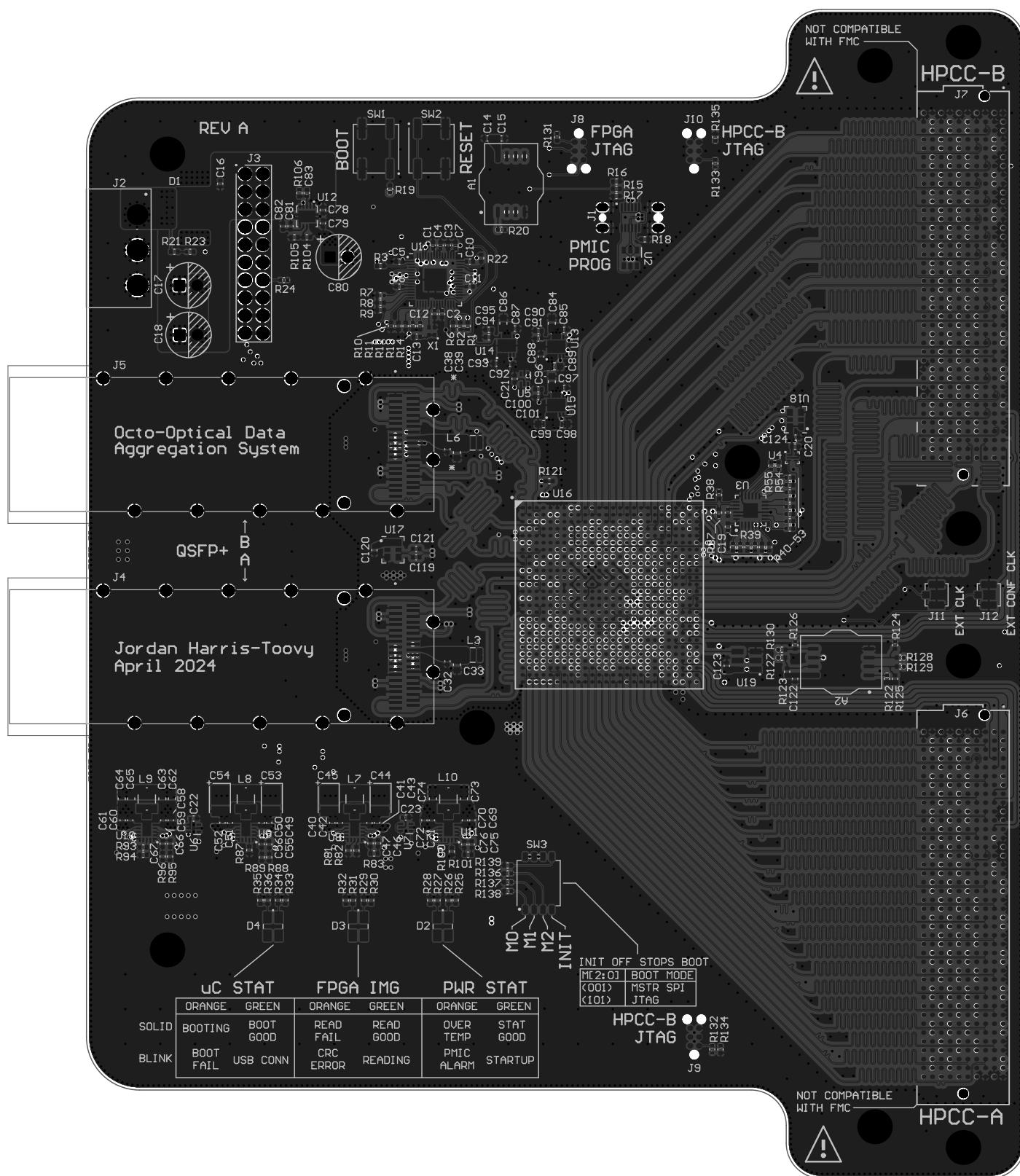
Drawn By Jordan Harris-Toovy

Reviewed By Jason Sullins

Date 4/29/2024 Version 0.1

Sheet 22 of 22 Size ANSI B





Board Stack Report