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# CB-6454-001-B01-A1

Revision 1.0

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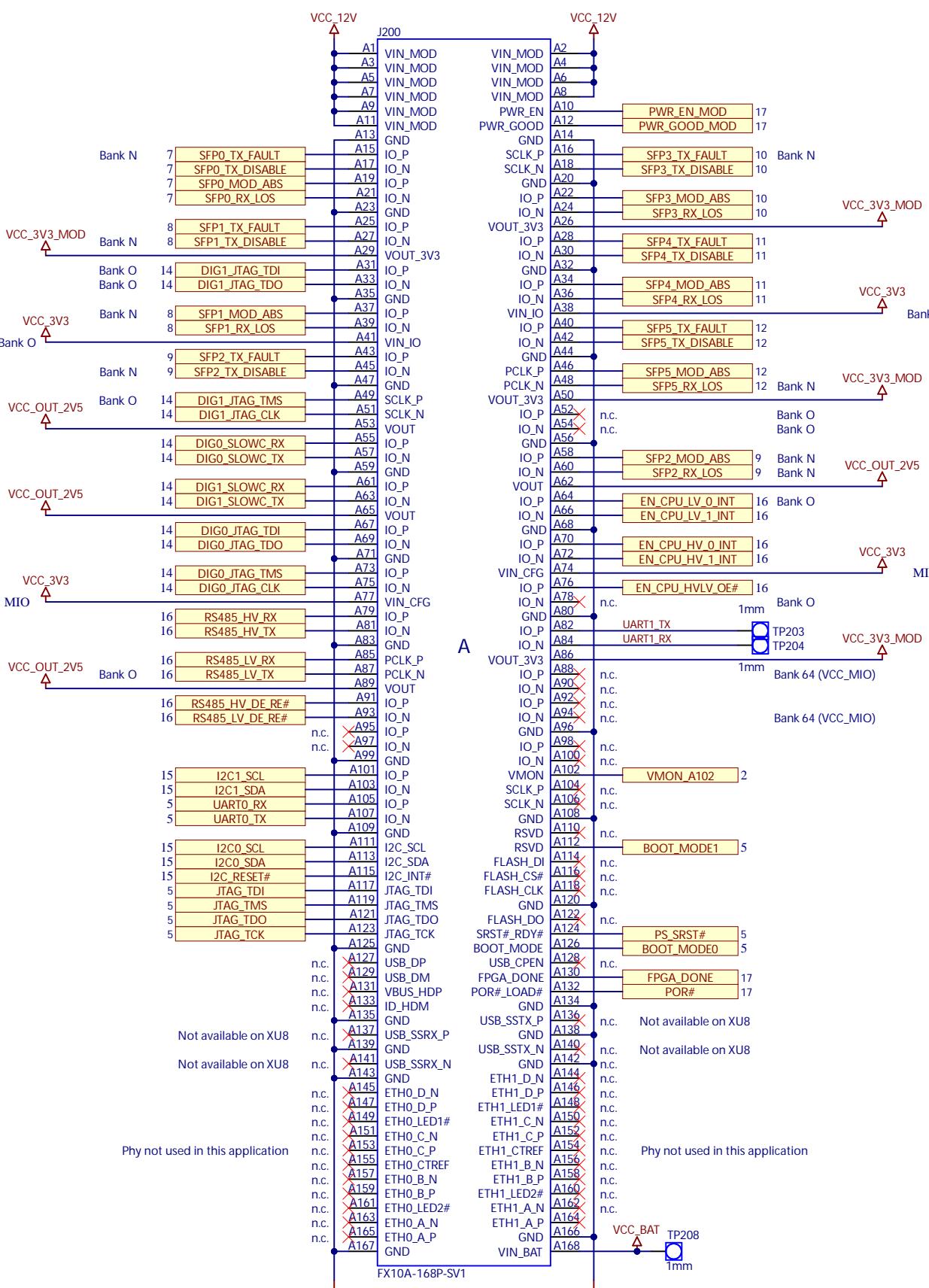
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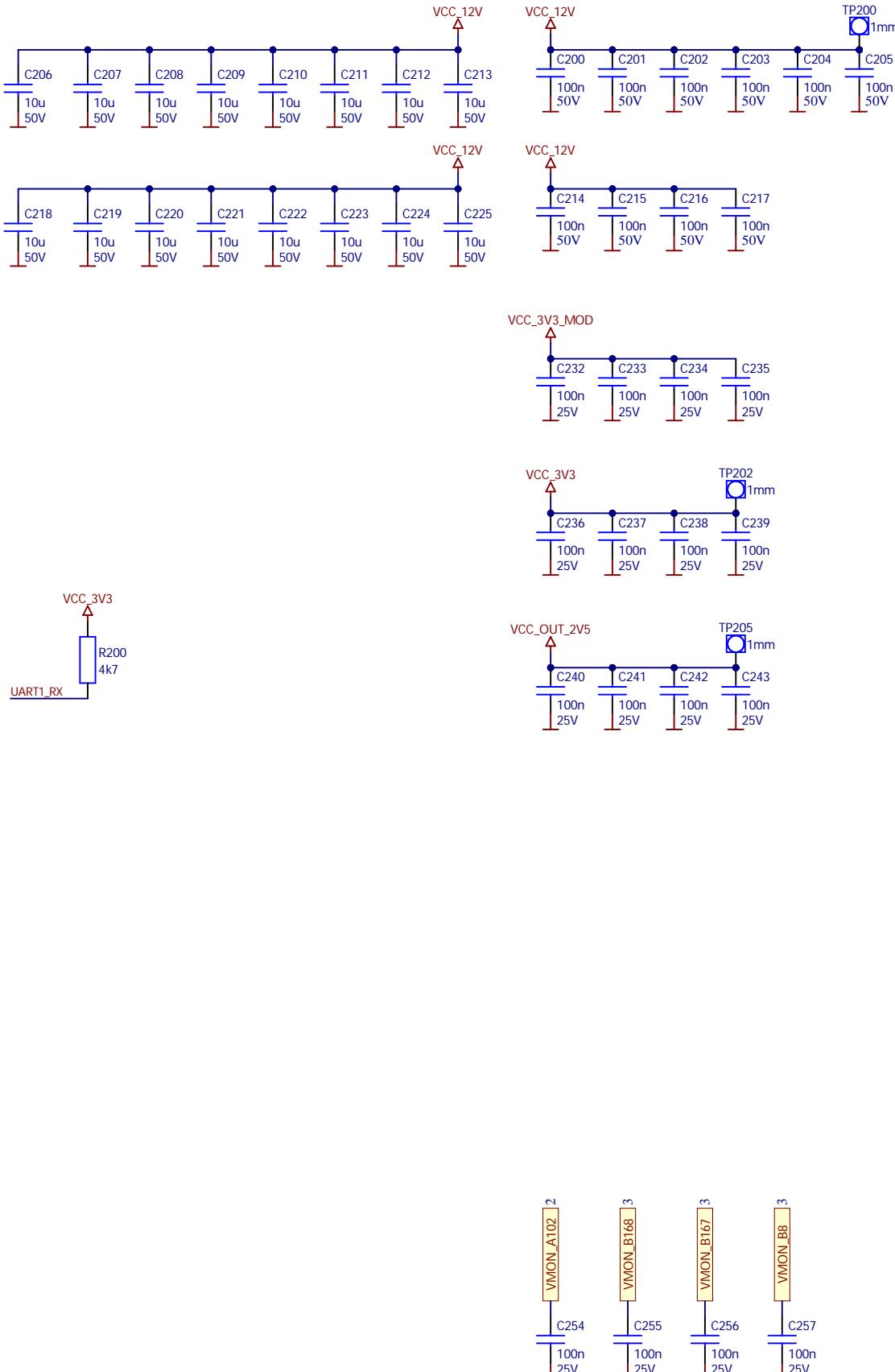
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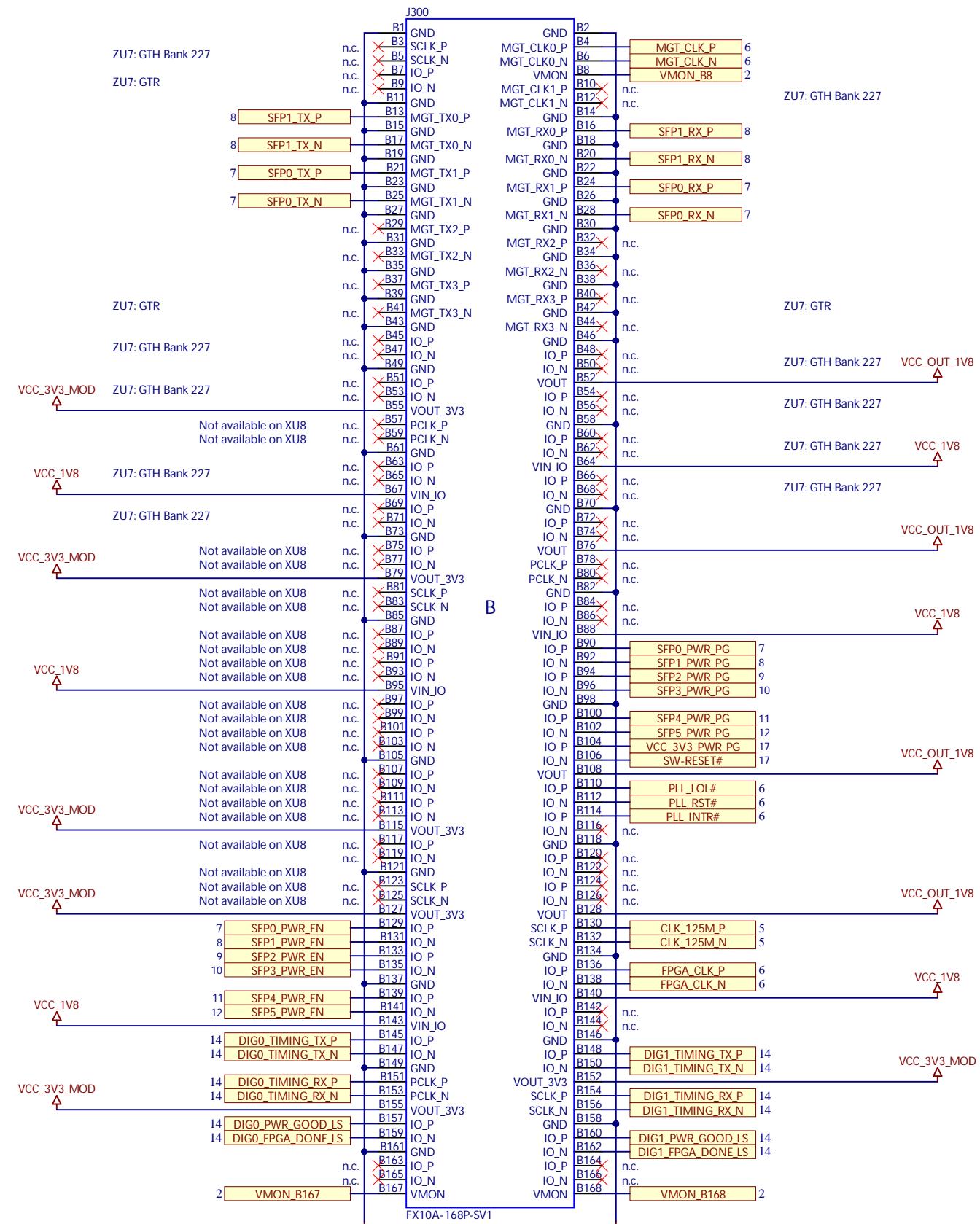
# Mercury Module Connector A



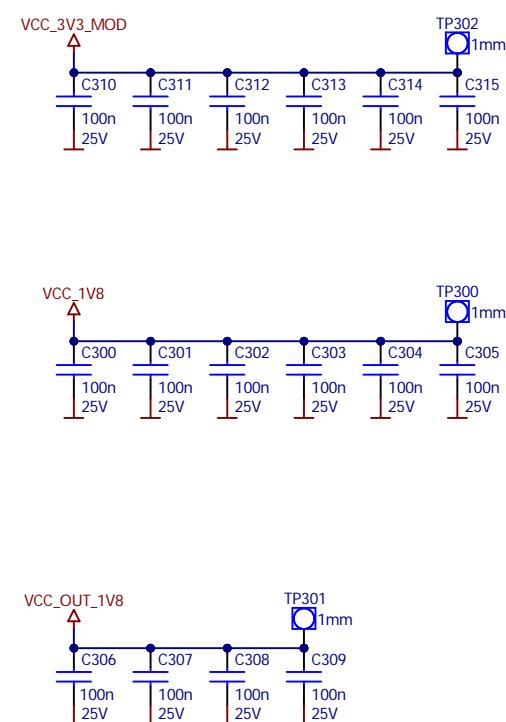
## Module Decoupling A



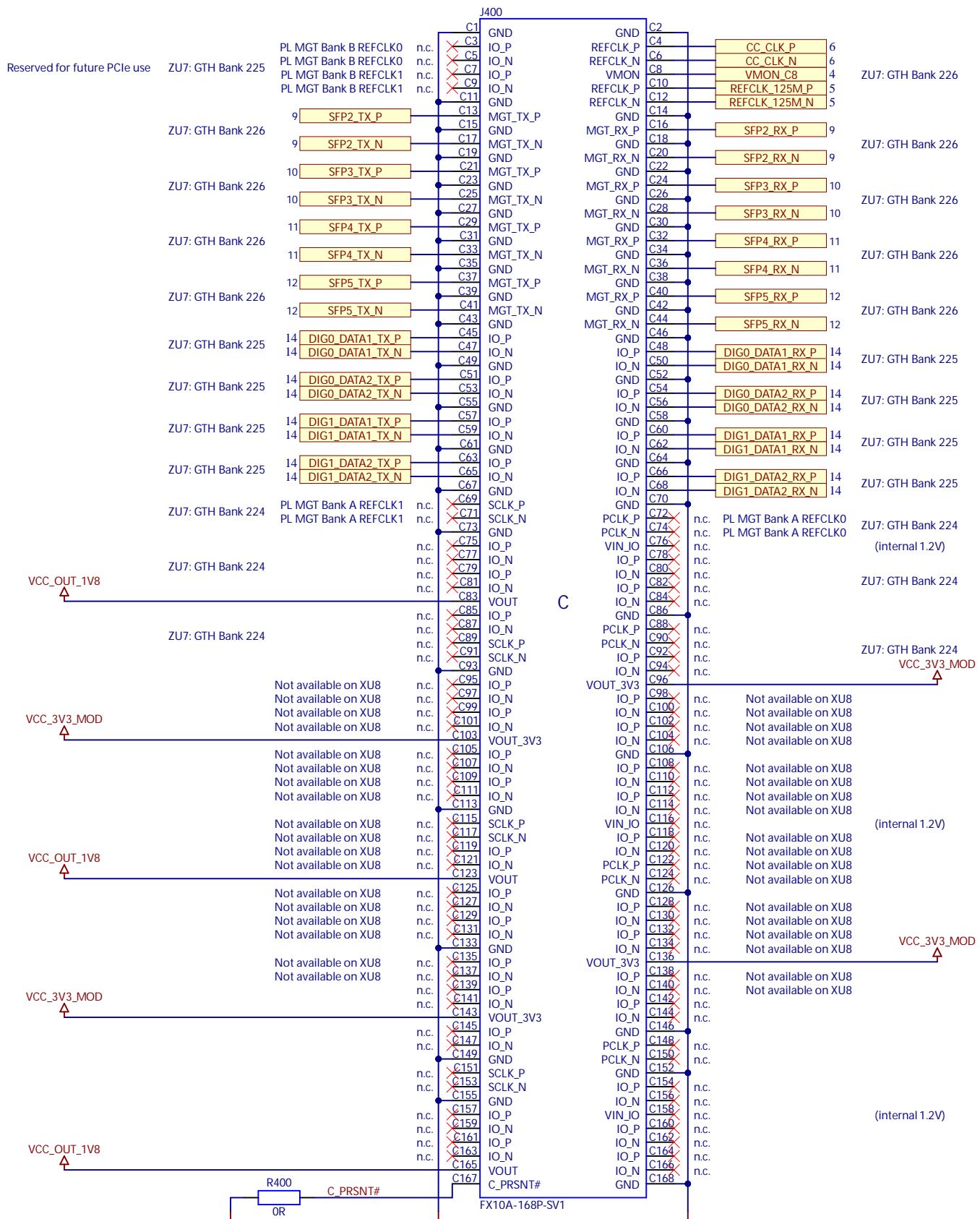
# Mercury Module Connector B



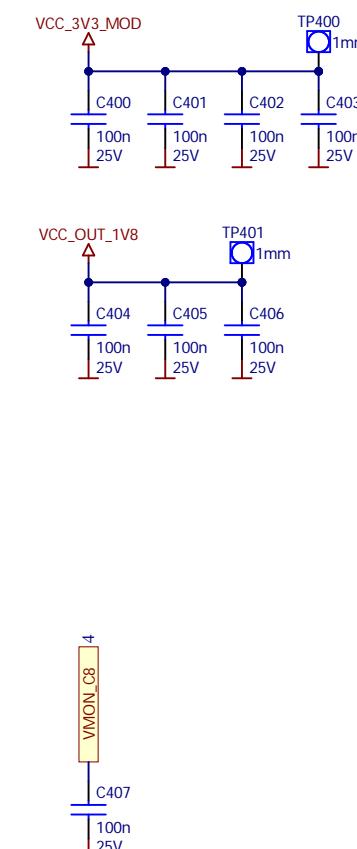
# Module Decoupling B



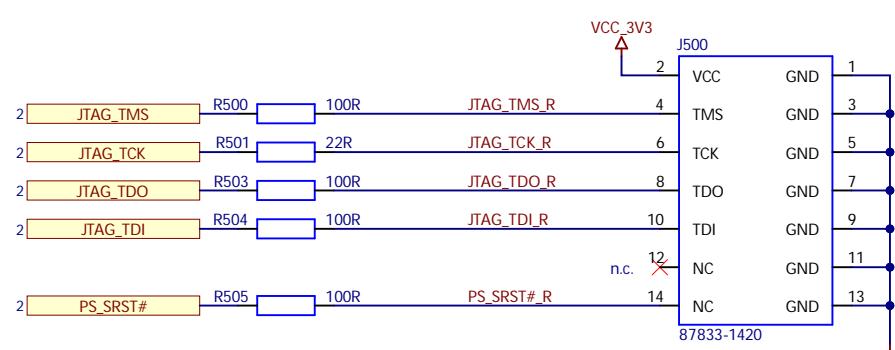
# Mercury Module Connector C



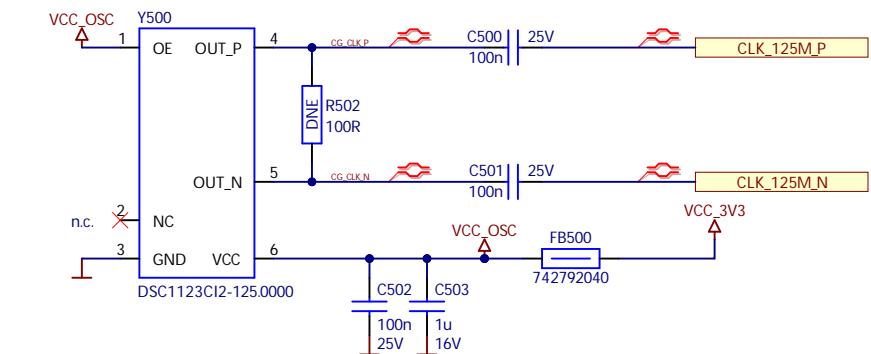
## Module Decoupling C



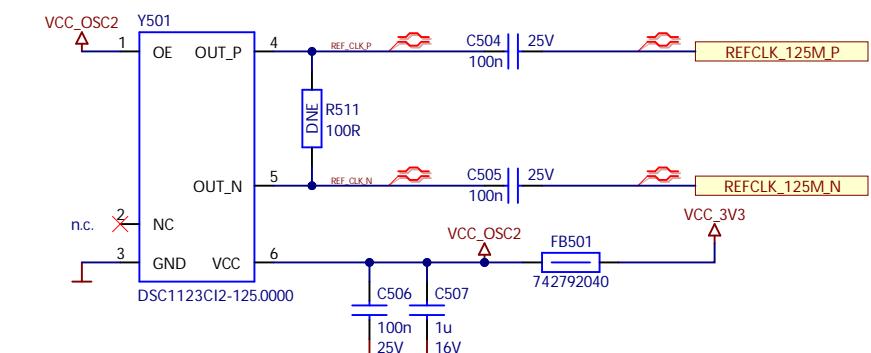
## JTAG Connector



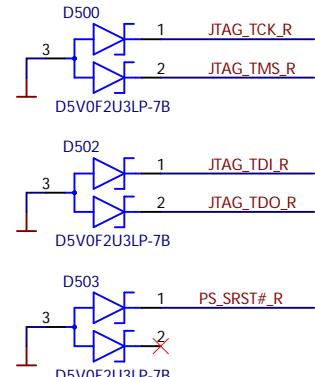
## 125MHz Oscillator (Global Clock)



## 125MHz Oscillator (MGT Ref Clock)



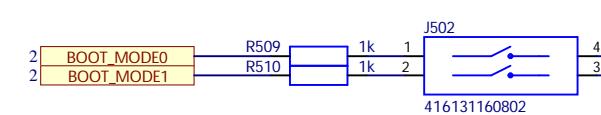
## JTAG TVS Protection



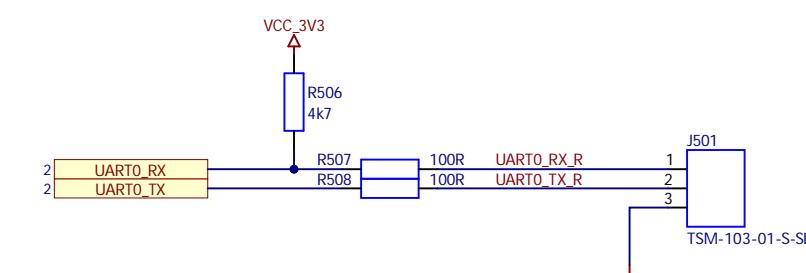
## UART TVS Protection



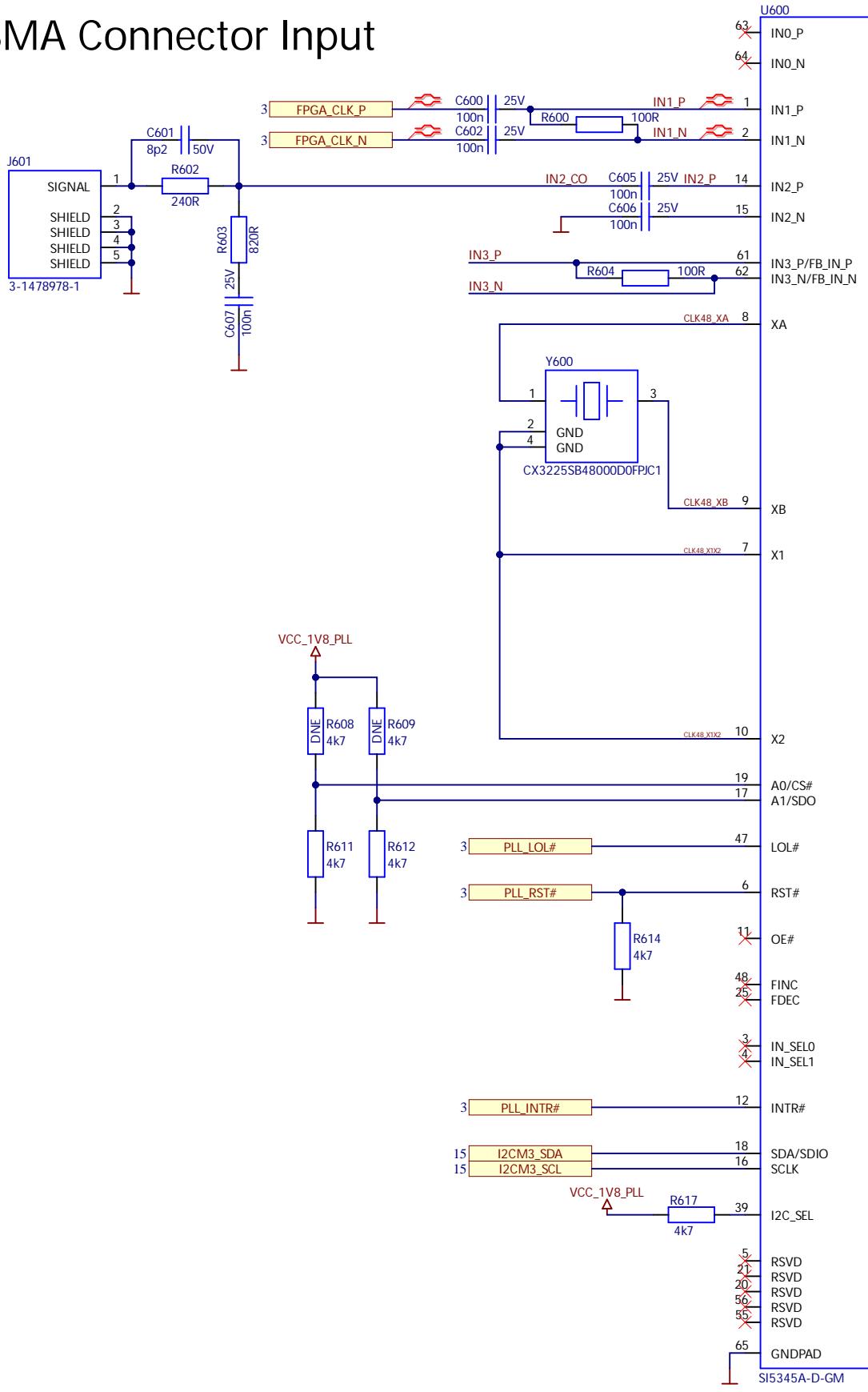
## Boot Mode Select



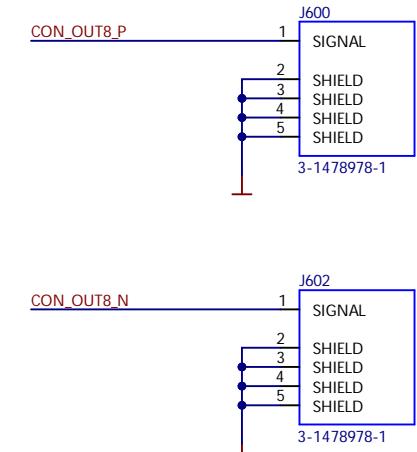
## UART Debug Connector



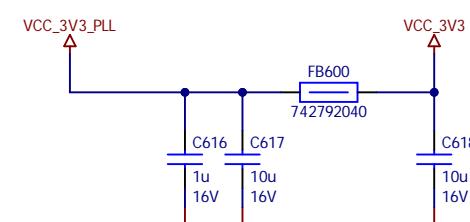
## SMA Connector Input



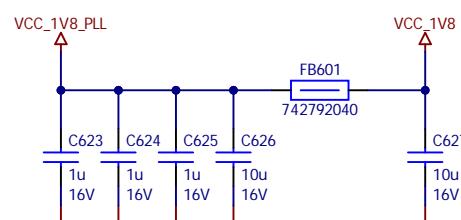
## SMA Connector OUT8



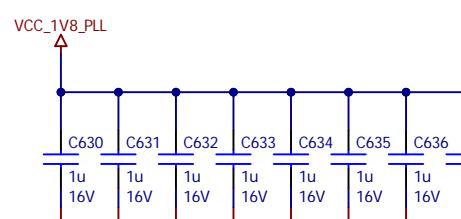
### Filtering and Decoupling VDDA



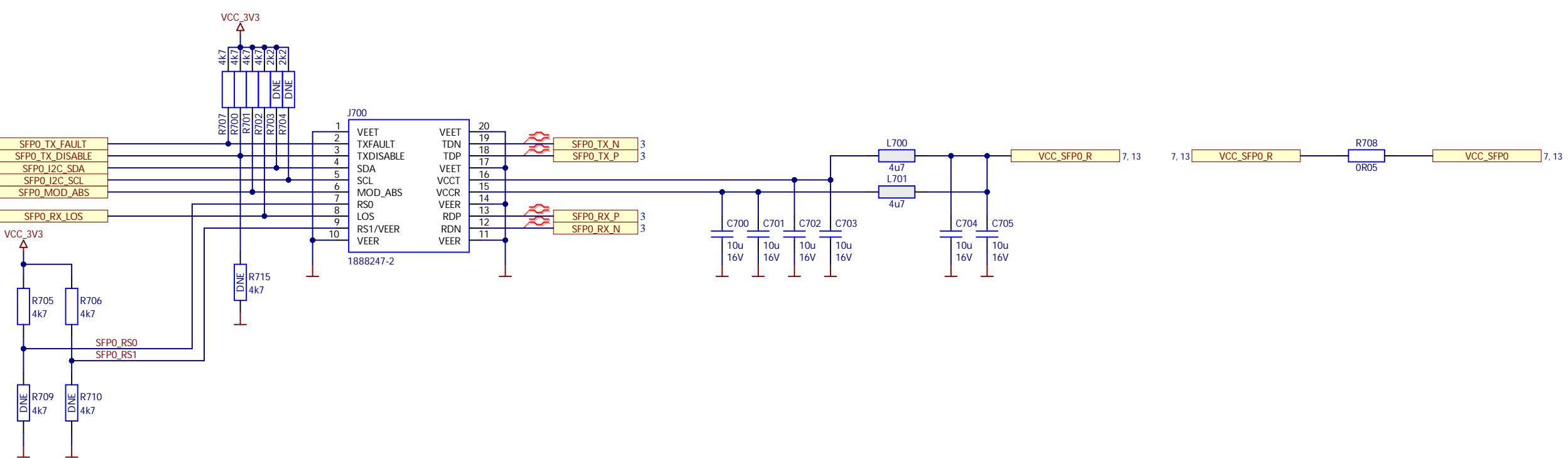
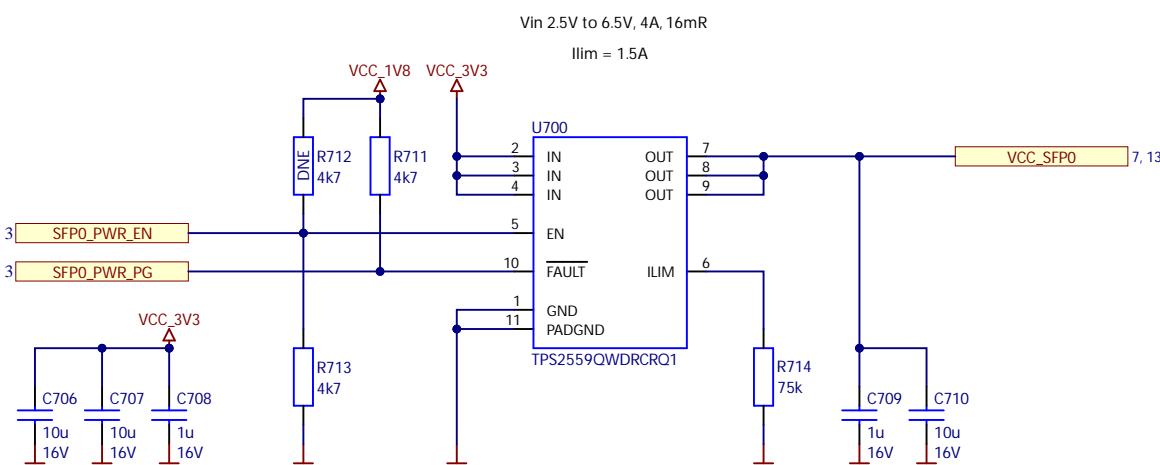
### Filtering and Decoupling VDD



### Decoupling VDDO



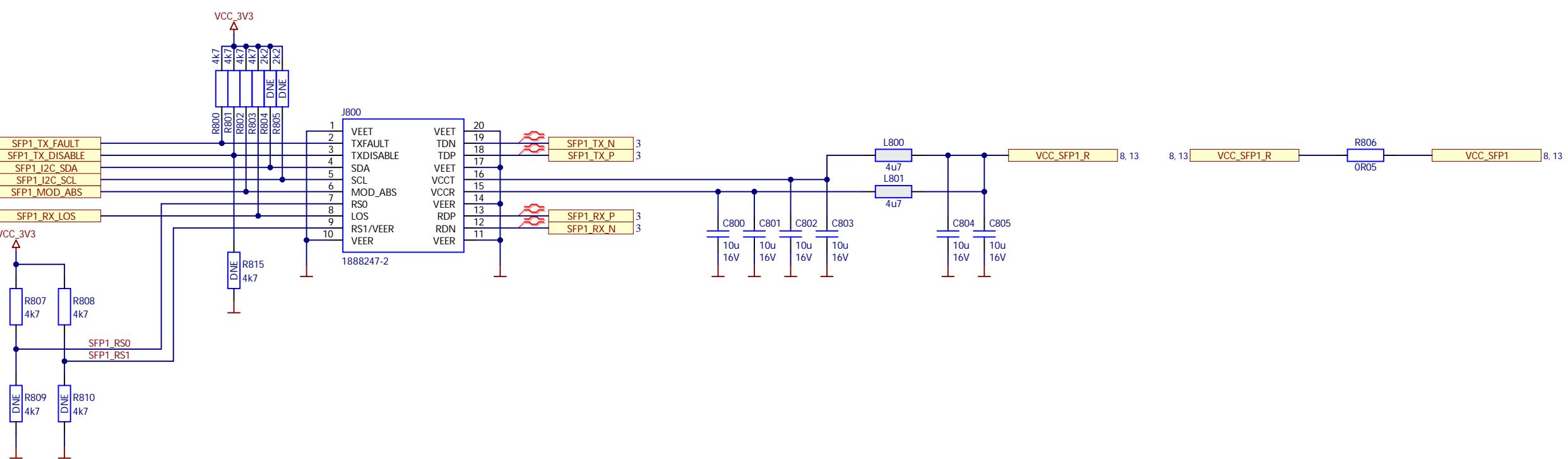
6 5 4 3 2 1

**SFP+ Connector 0****Current Sense****SFP+ PWR Enable****SFP+ Cage**

6 5 4 3 2 1

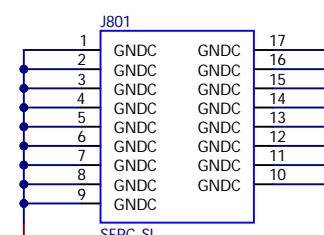
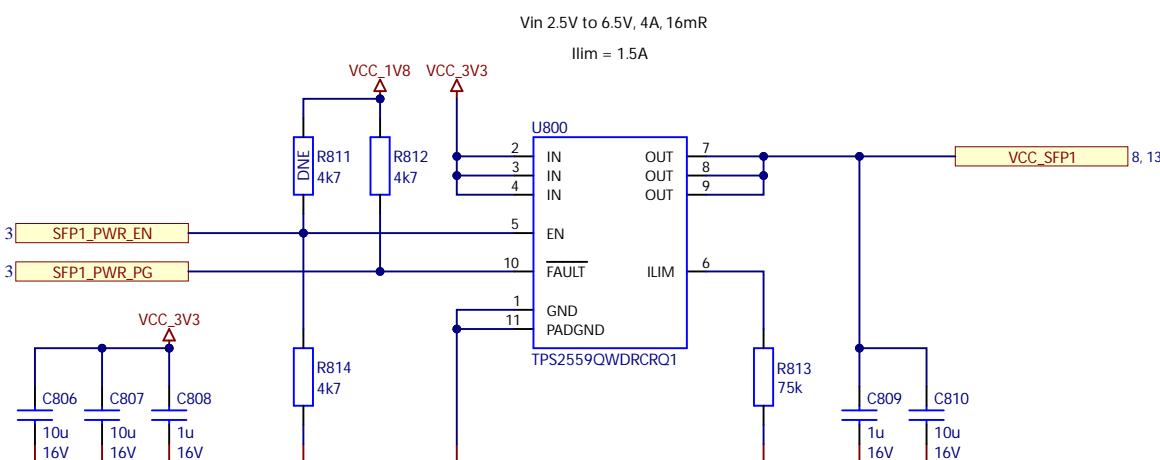
## SFP+ Connector 1

## Current Sense



## SFP+ PWR Enable

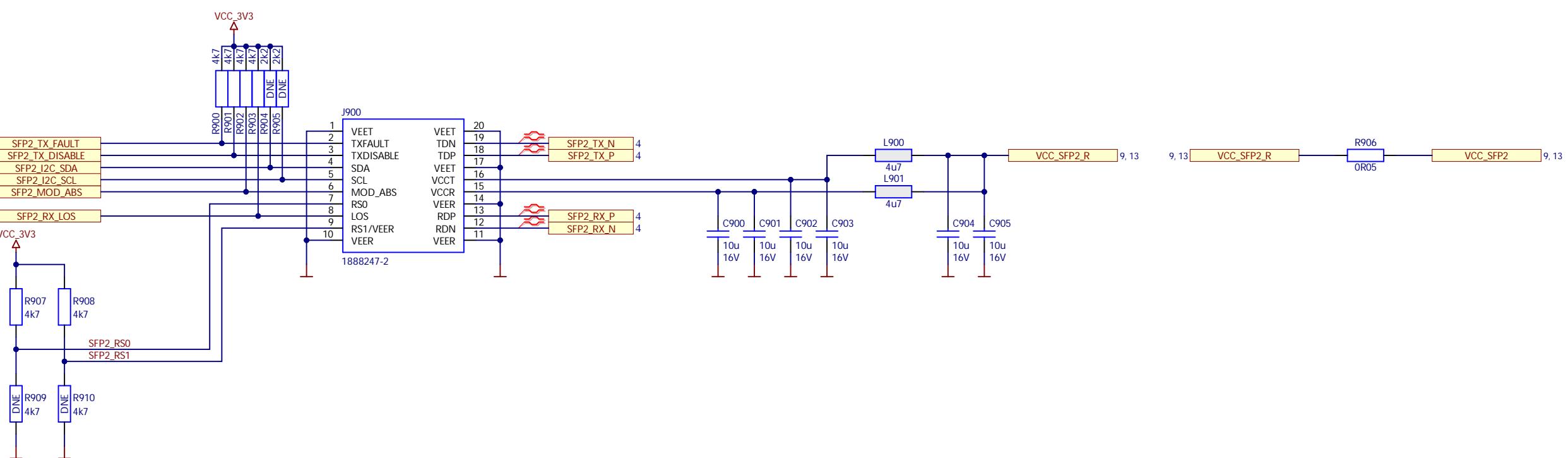
## SFP+ Cage



6 5 4 3 2 1

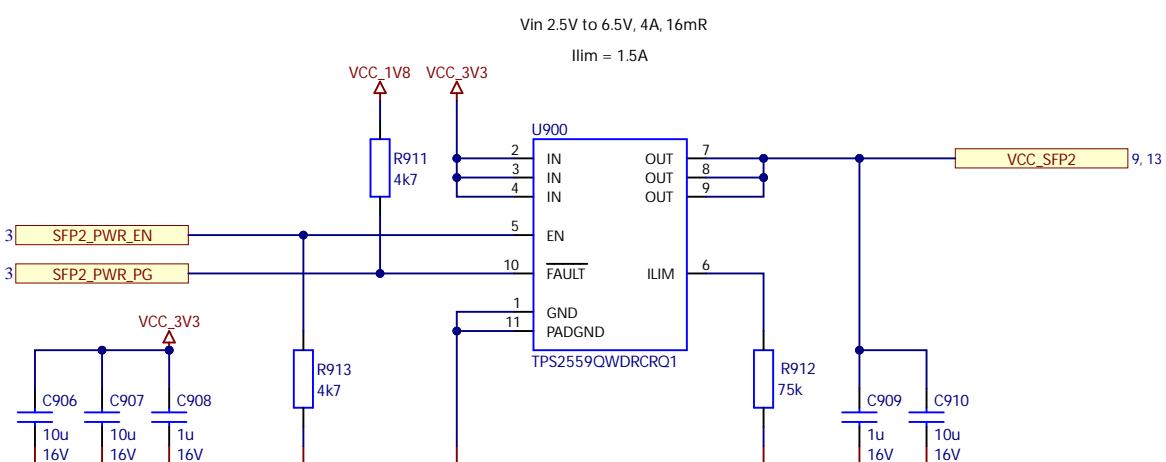
## SFP+ Connector 2

Current Sense



## SFP+ PWR Enable

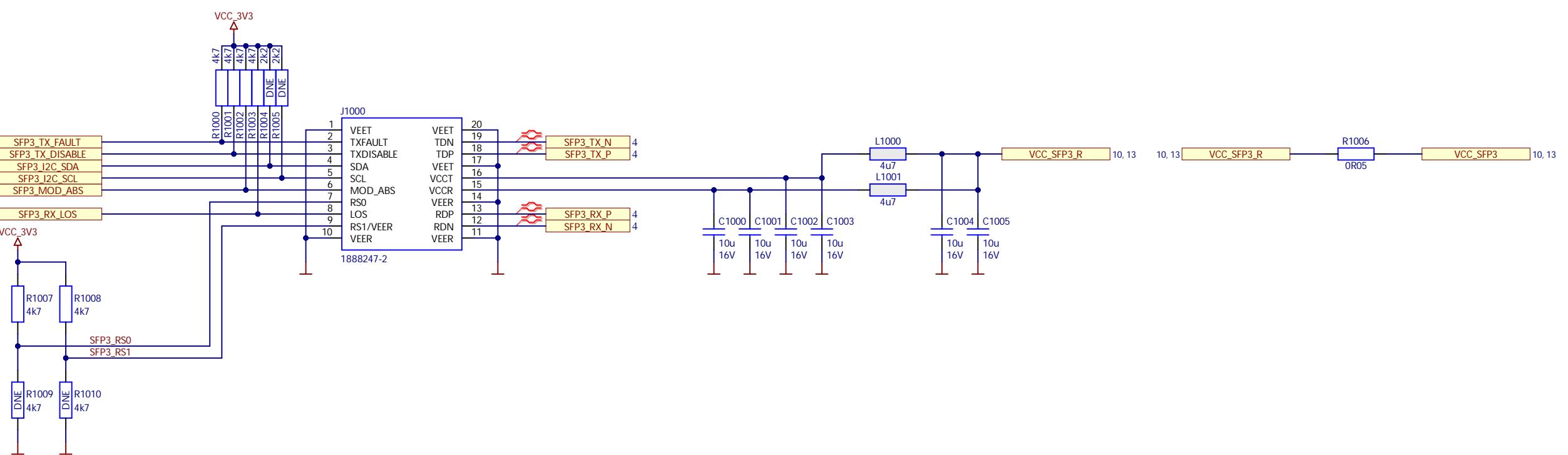
SFP+ Cage



6 5 4 3 2 1

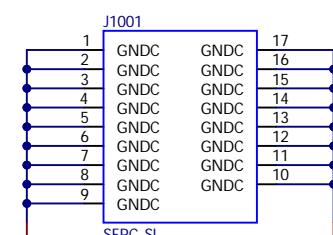
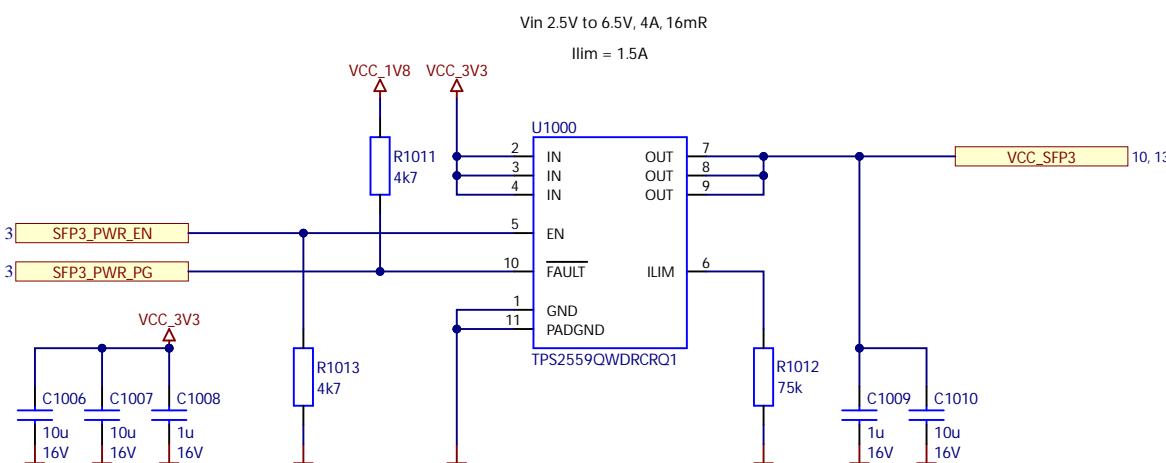
### SFP+ Connector 3

Current Sense



### SFP+ PWR Enable

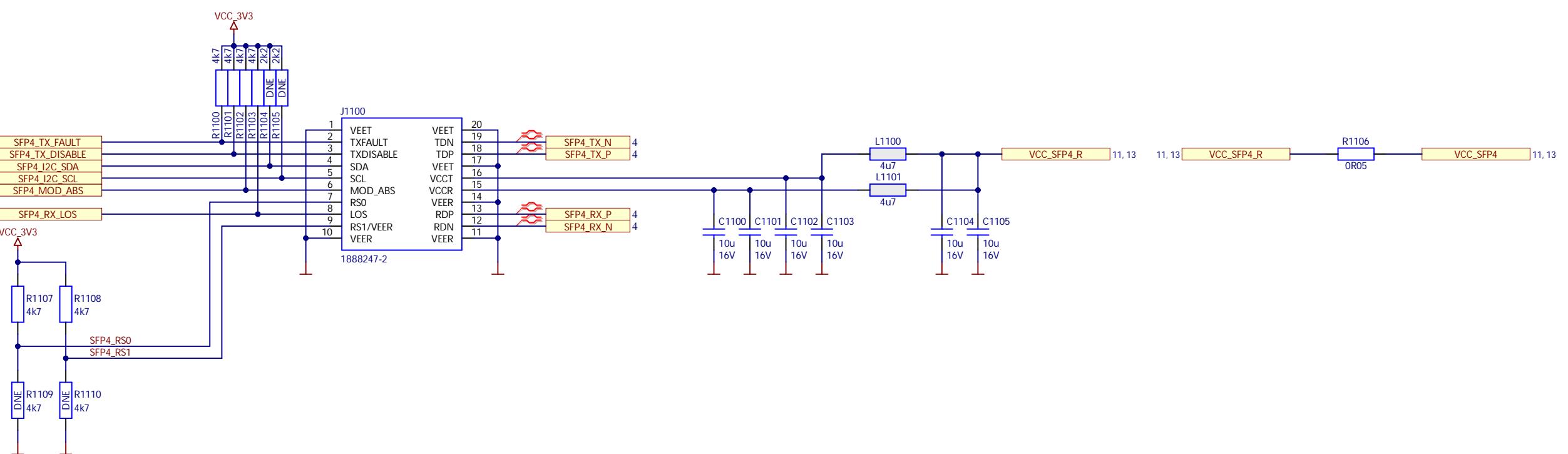
SFP+ Cage



6 5 4 3 2 1

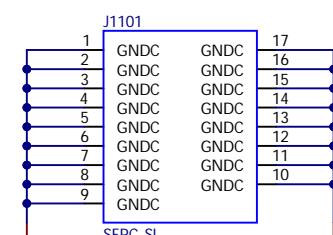
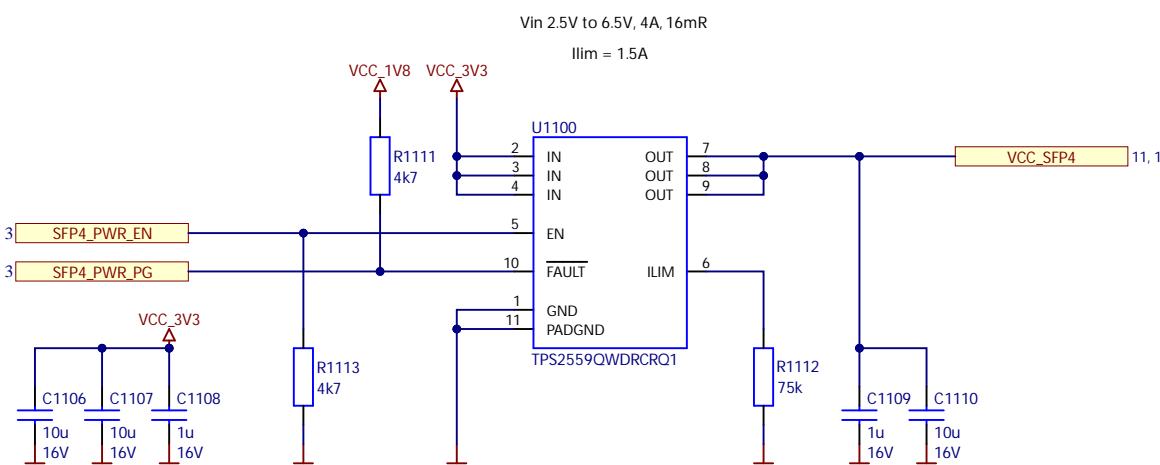
## SFP+ Connector 4

## Current Sense



## SFP+ PWR Enable

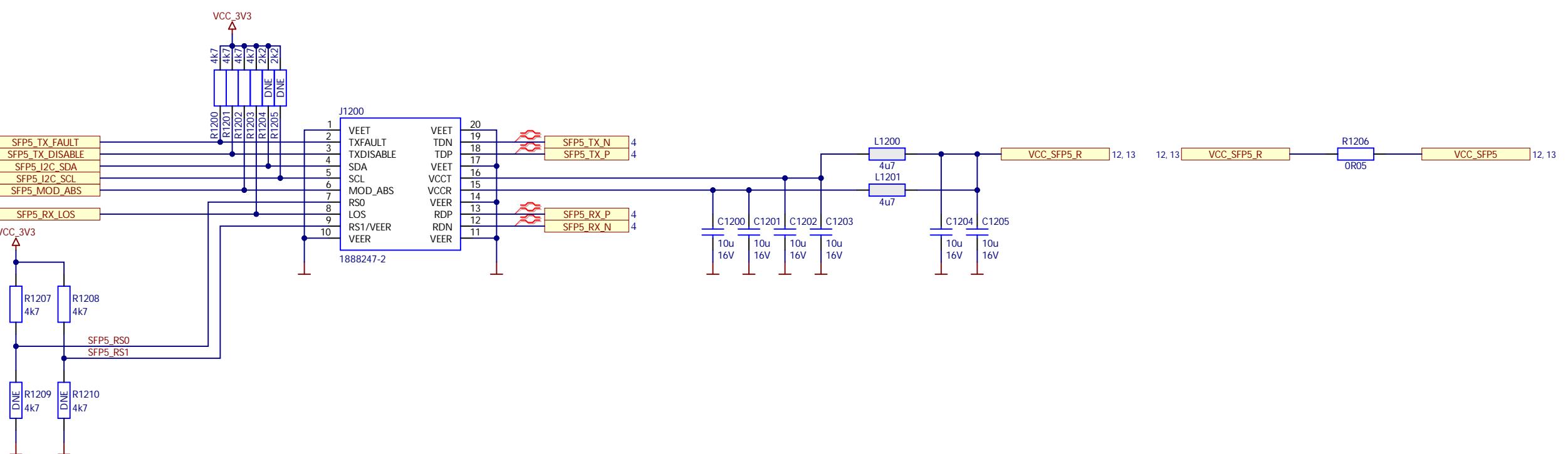
## SFP+ Cage



6 5 4 3 2 1

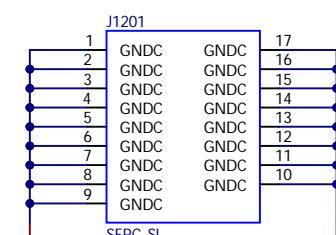
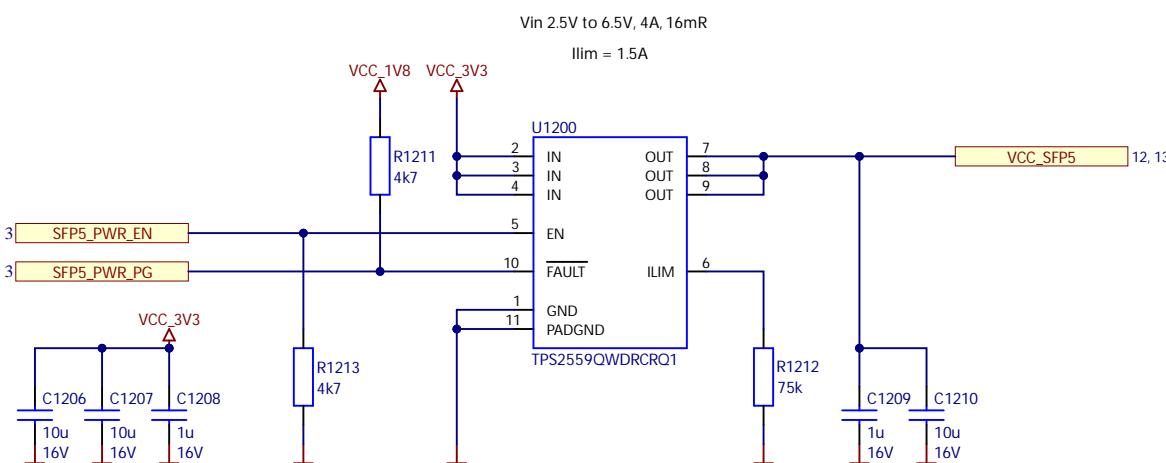
## SFP+ Connector 5

Current Sense

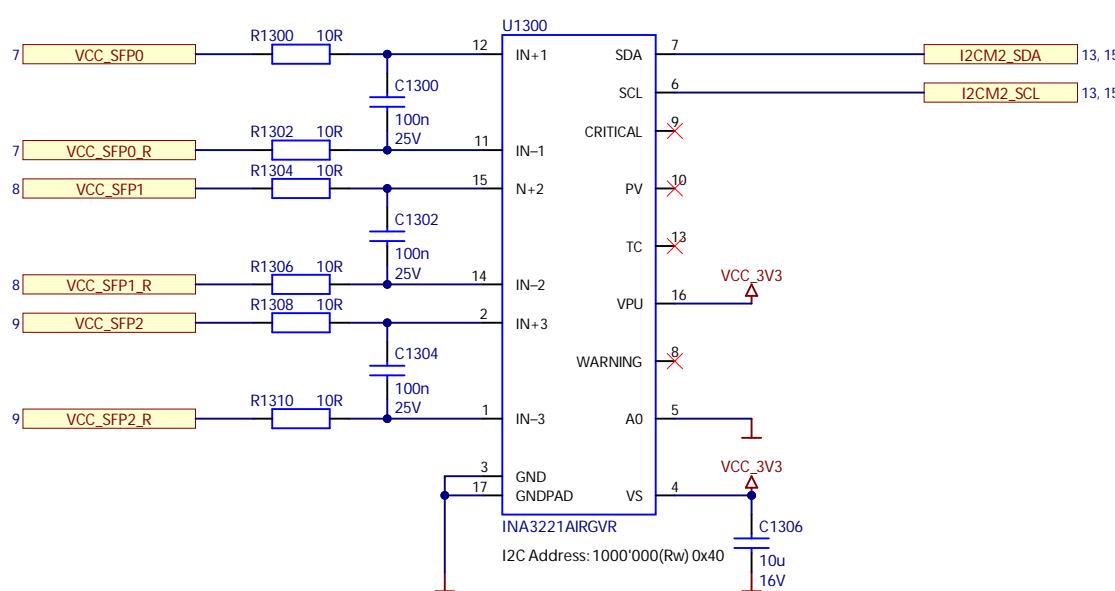


## SFP+ PWR Enable

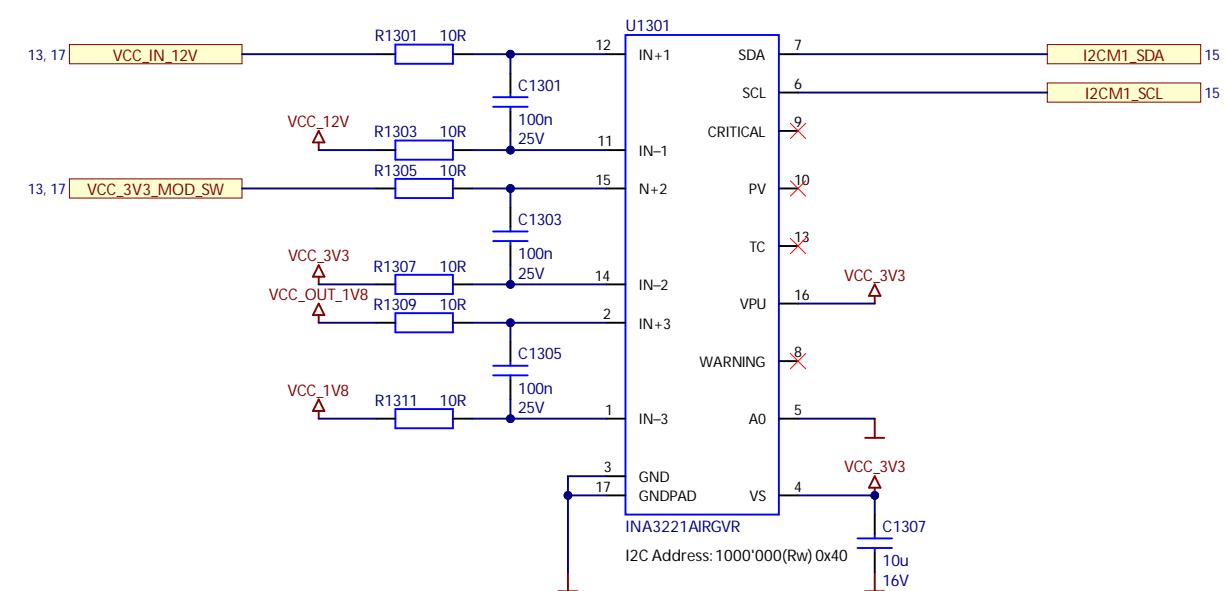
SFP+ Cage



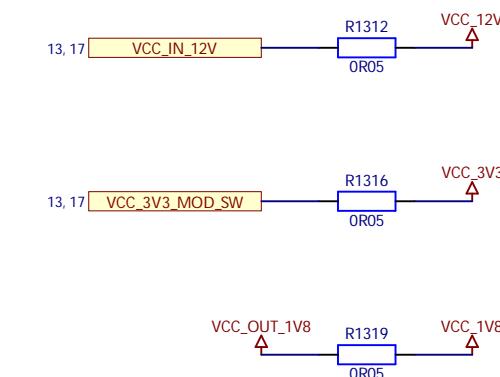
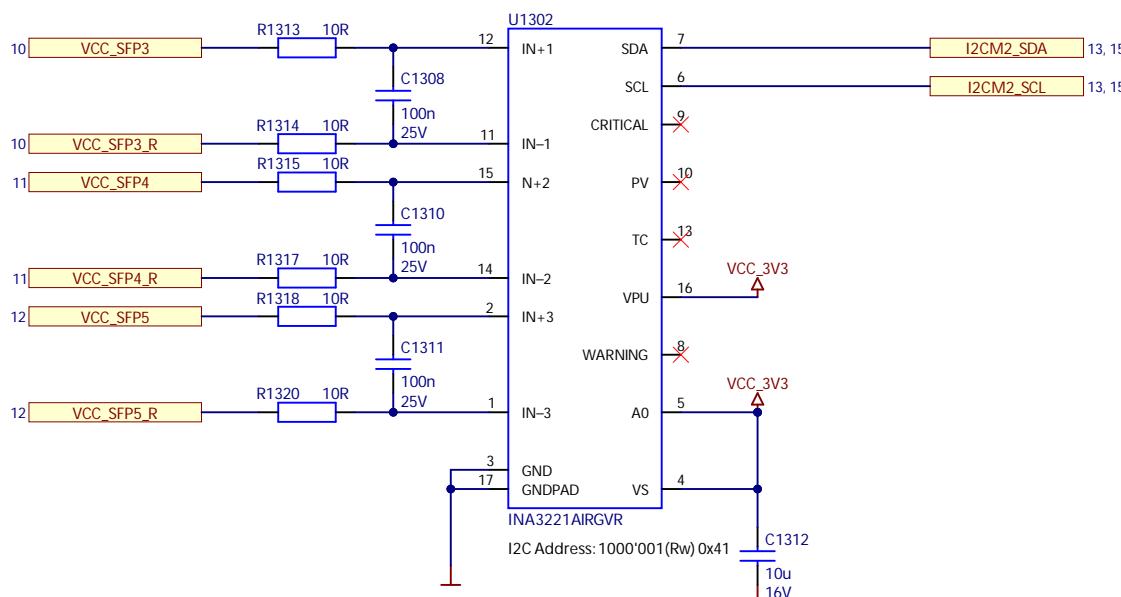
## SFP 0-2 Current Sense | Voltage Monitor



## SoM Current Sense | Voltage Monitor

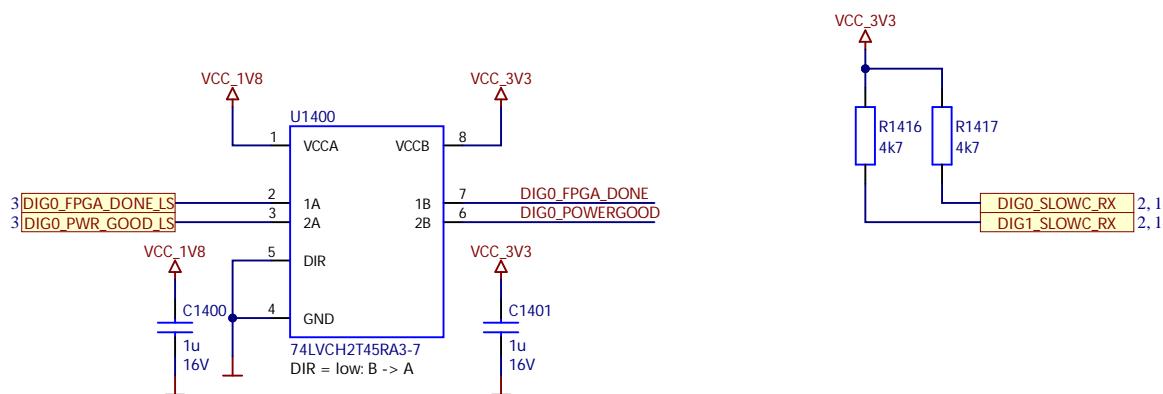
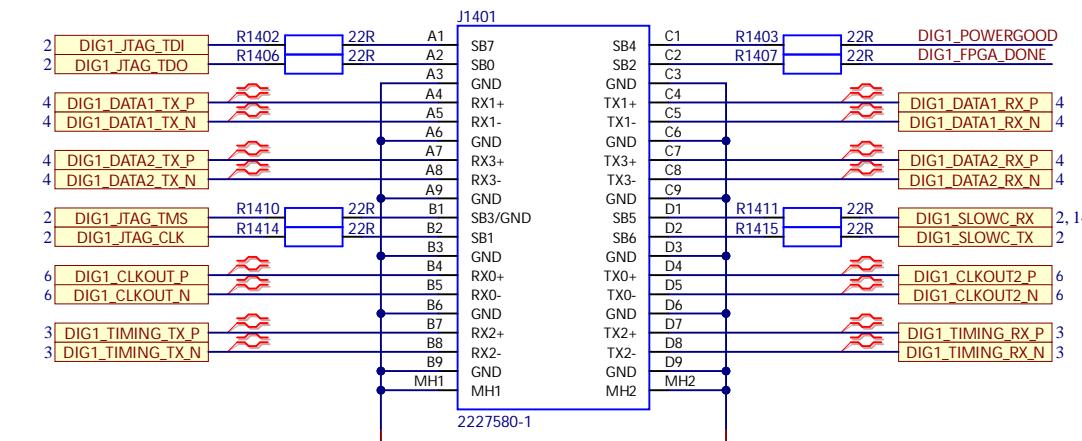
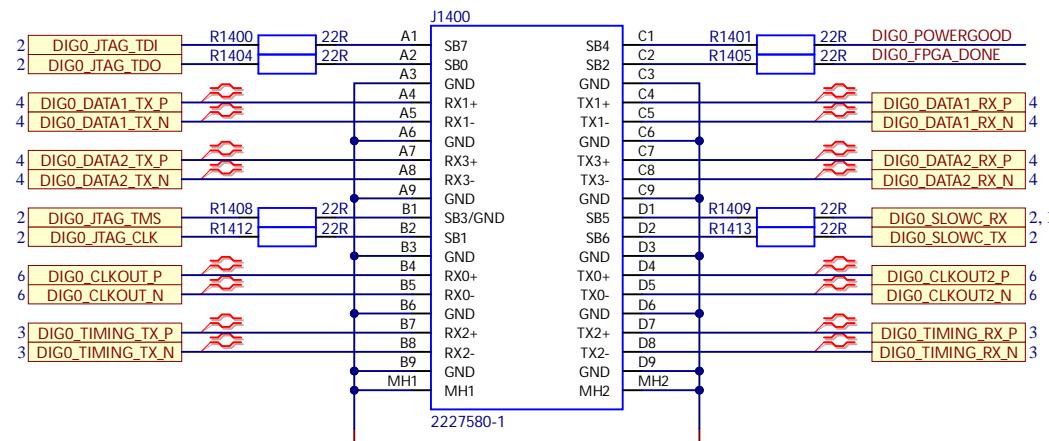


## SFP 3-5 Current Sense | Voltage Monitor

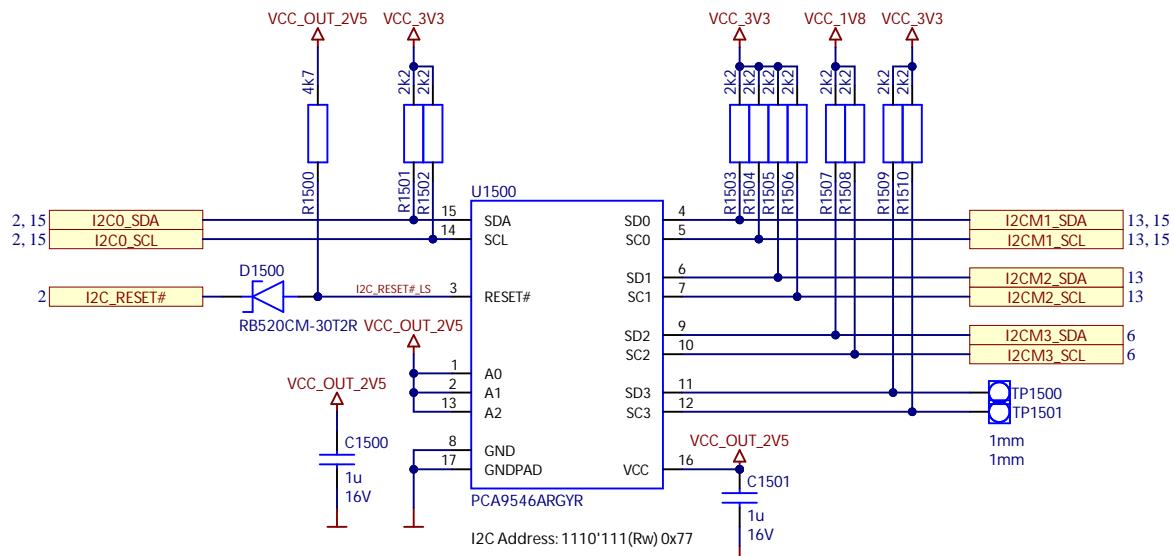


Digitizer 0 Connector

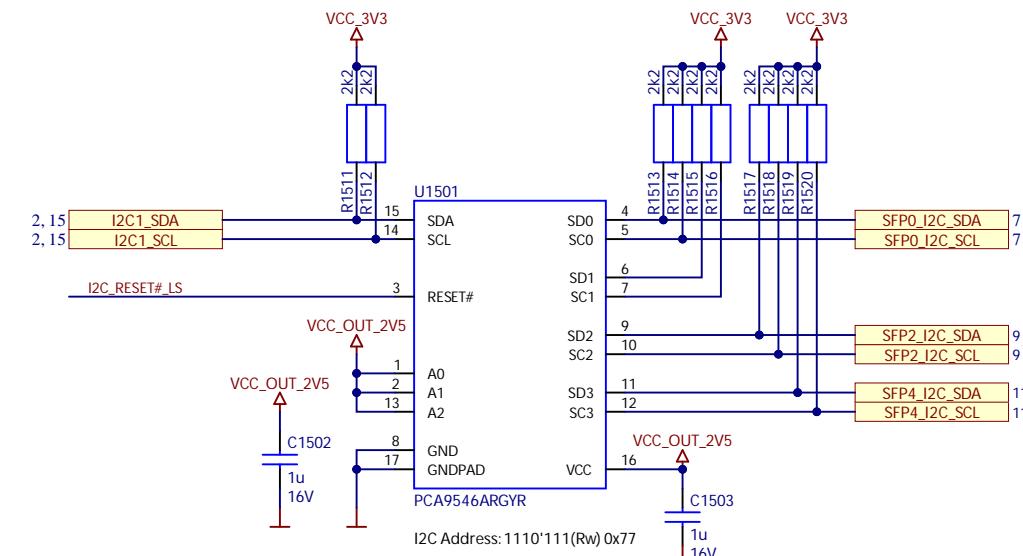
Digitizer 1 Connector



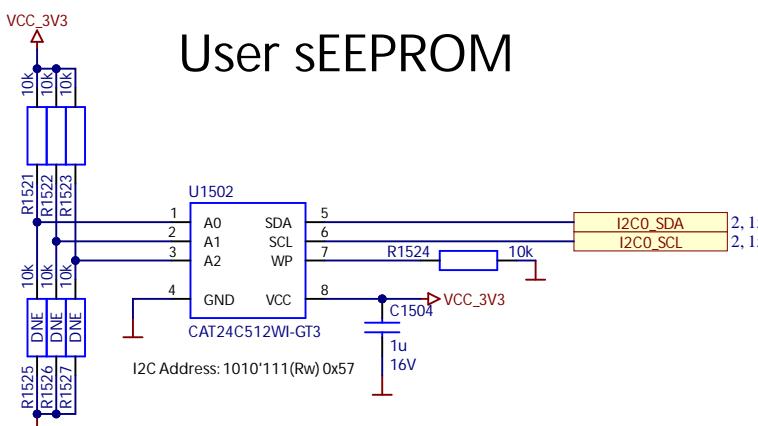
# I<sup>2</sup>C0-Bus Multiplexer



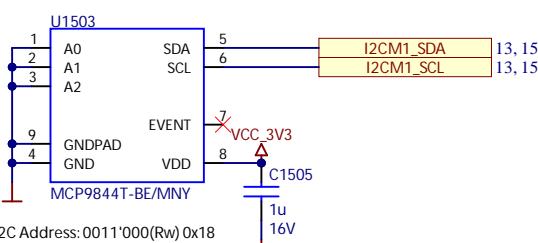
## I2C1-Bus Multiplexer 1



# User EEPROM



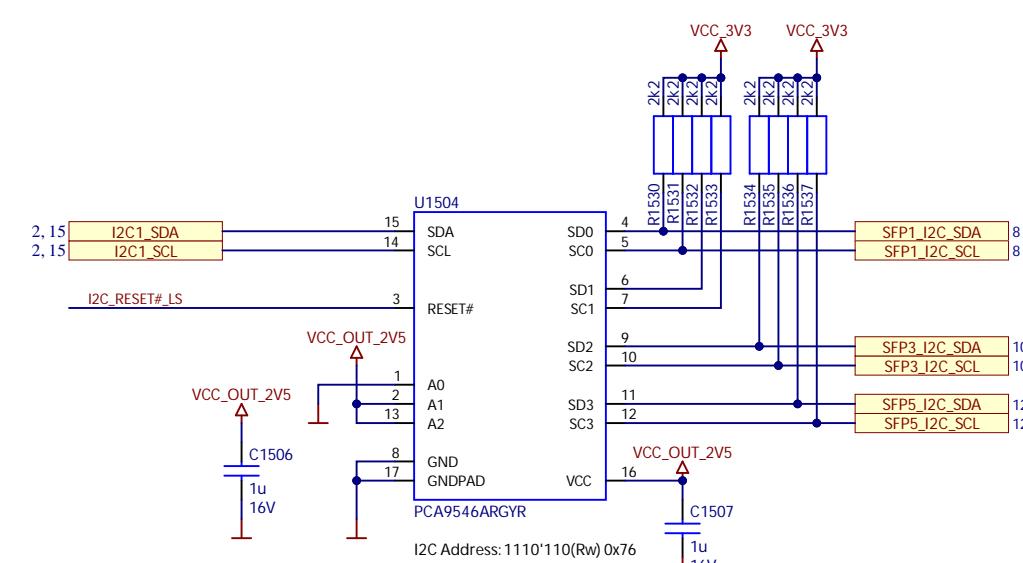
# Temperature Sensor



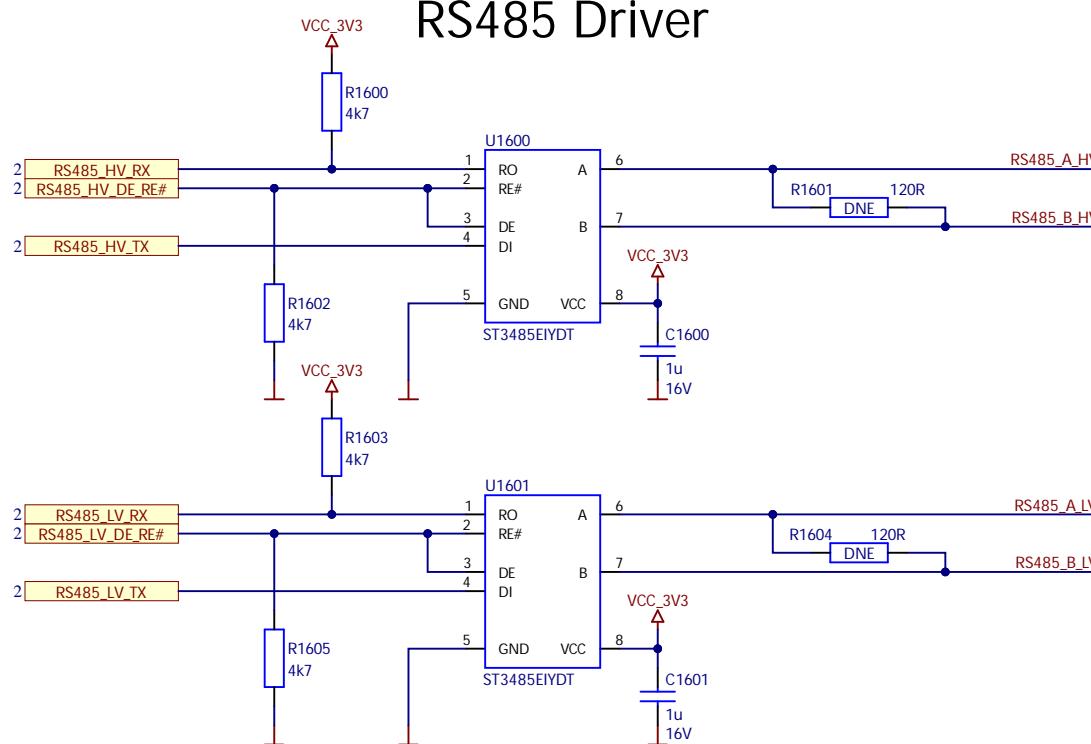
I2C Address Table

I2C0 Bus Mux:	1110'111(Rw)0x77	I2C0
I2C1 Bus Mux 1:	1110'111(Rw)0x77	I2C1
I2C1 Bus Mux 2:	1110'111(Rw)0x76	I2C1
 sEEPROM:	1010'111(Rw)0x57	I2C0
Secure sEEPROM:	1100'100(Rw)0x64	I2C0
Sec sEEPROM opt:	1011'100(Rw)0x5C	I2C0
Temp Sensor:	0011'000(Rw)0x18	I2CM
Current Sense others:	1000'000(Rw)0x40	I2CM
Current Sense 0-2:	1000'001(Rw)0x41	I2CM
Current Sense 3-5:	1000'000(Rw)0x40	I2CM
Clock Generator:	1101'000(Rw)0x68	I2CM
 SFP+ 0:	Full range without 0x77	I2C1
SFP+ 1:	Full range without 0x76	I2C1
SFP+ 2:	Full range without 0x77	I2C1
SFP+ 3:	Full range without 0x76	I2C1
SFP+ 4:	Full range without 0x77	I2C1
SFP+ 5:	Full range without 0x76	I2C1

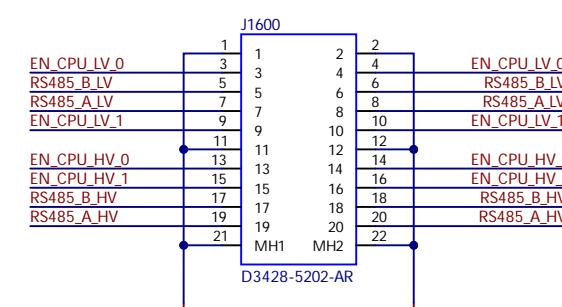
# I2C1-Bus Multiplexer 2



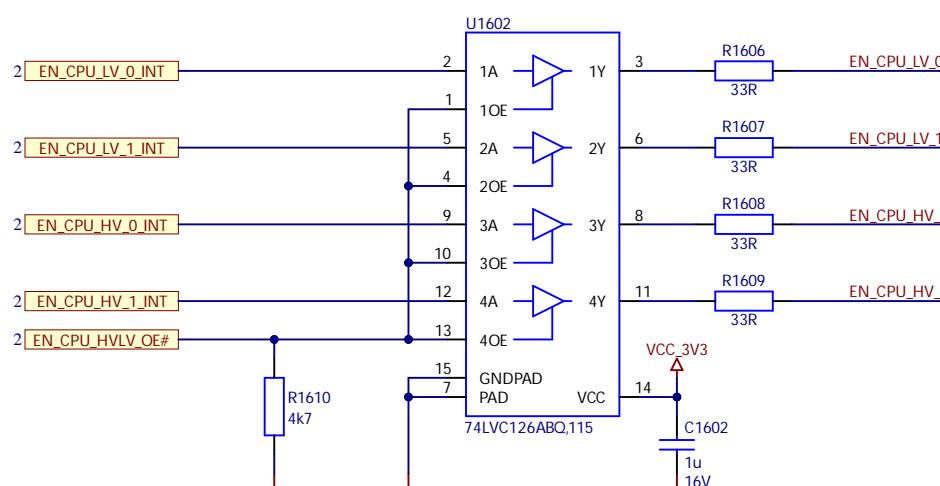
# RS485 Driver



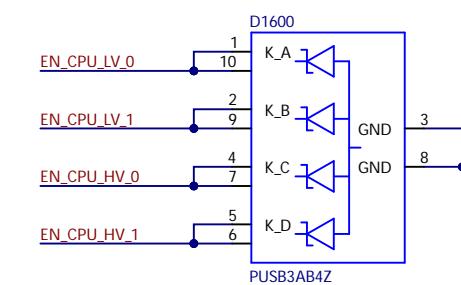
## Interface Connector



# Logic Buffer



# ESD Protection



6

5

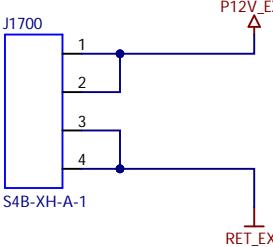
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3

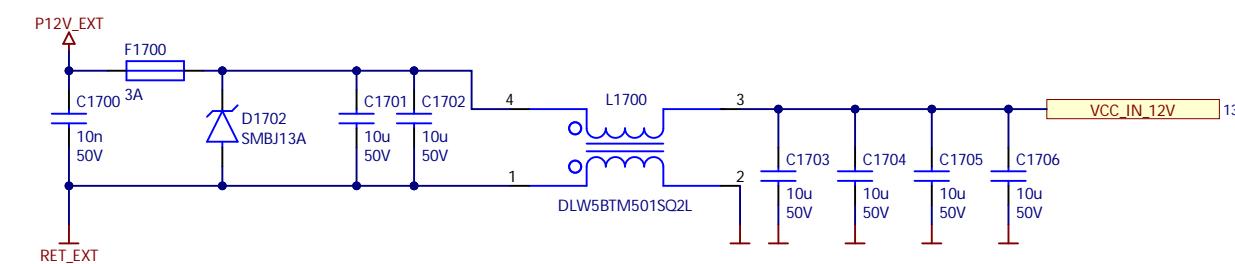
2

1

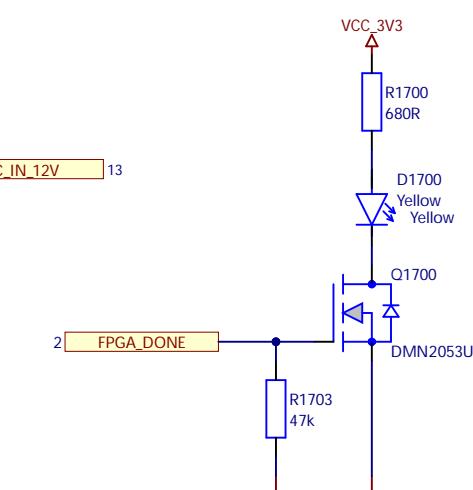
## Power Connector



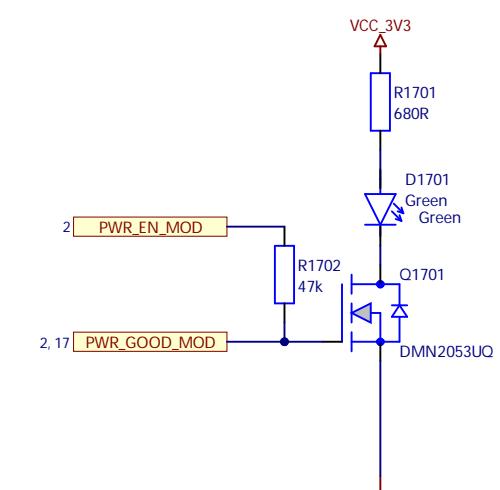
## Power Filter



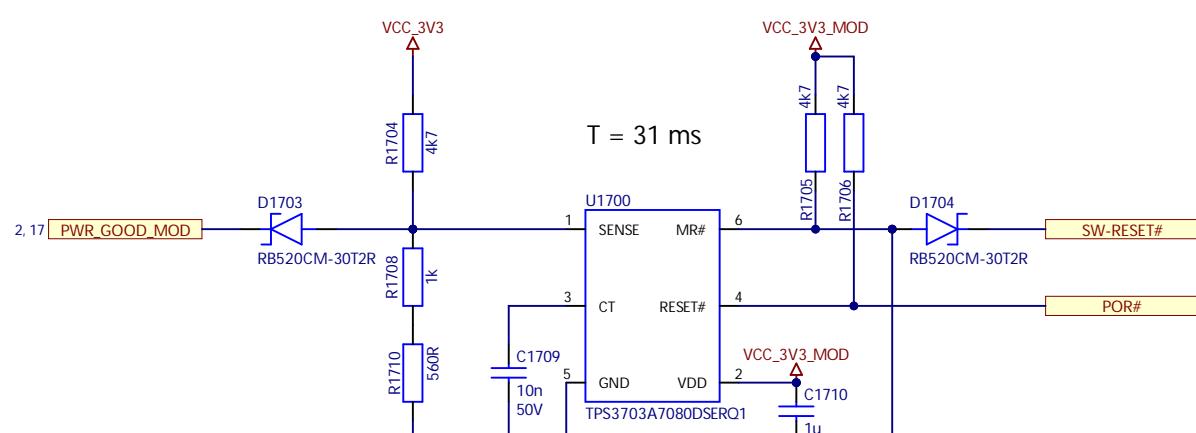
## Done LED



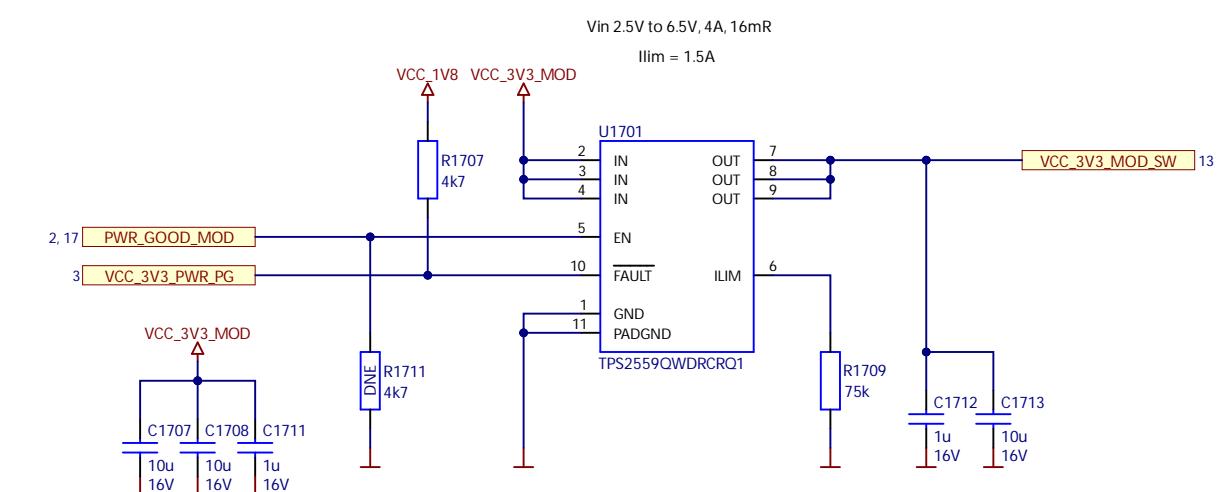
## Power Good LED



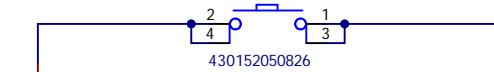
## Reset Logic



## VCC\_3V3 PWR Enable



## Reset Button



6

5

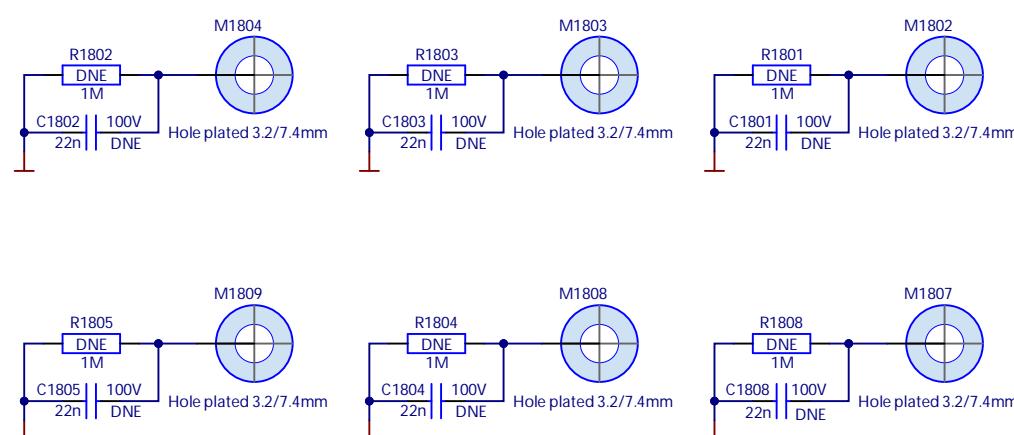
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3

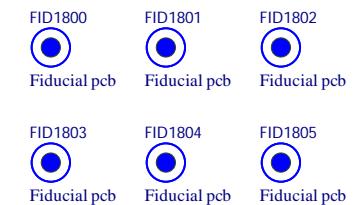
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1

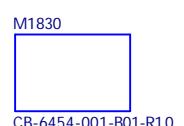
## Board Mounting Holes



## PCB Fiducials



## PCB

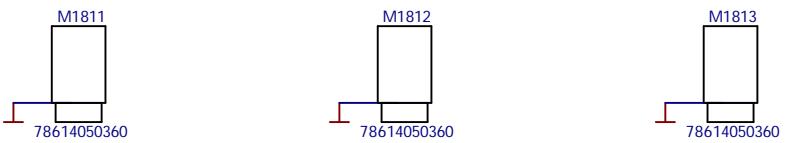
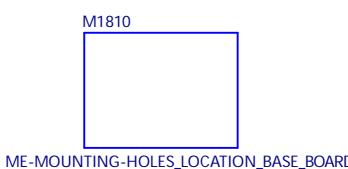


Z1800 Z1801 Z1802  
 WW / YY E888888

Z1803 Z1804 Z1805  
UL 94V-0 0000 RoHS

Z1806 HK-DPBv2-May23

## Steel Spacer ME-XU



## Assembly

 EN1054160  
CB-6454-001-B01-A1-R1.0

## Ground

