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HiFive Premier P550 CARRIER BOARD Schematic

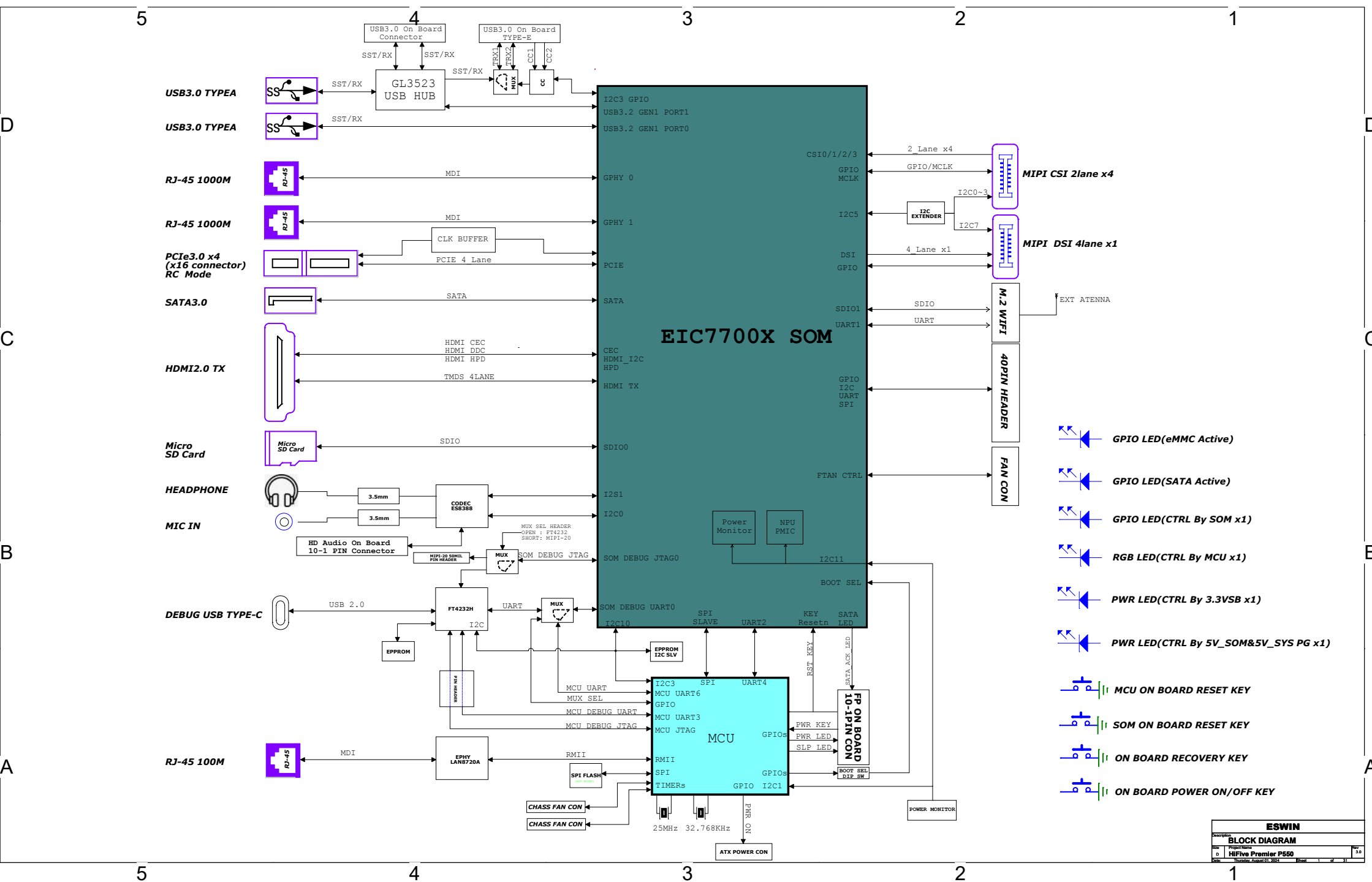
Proprietary Notice

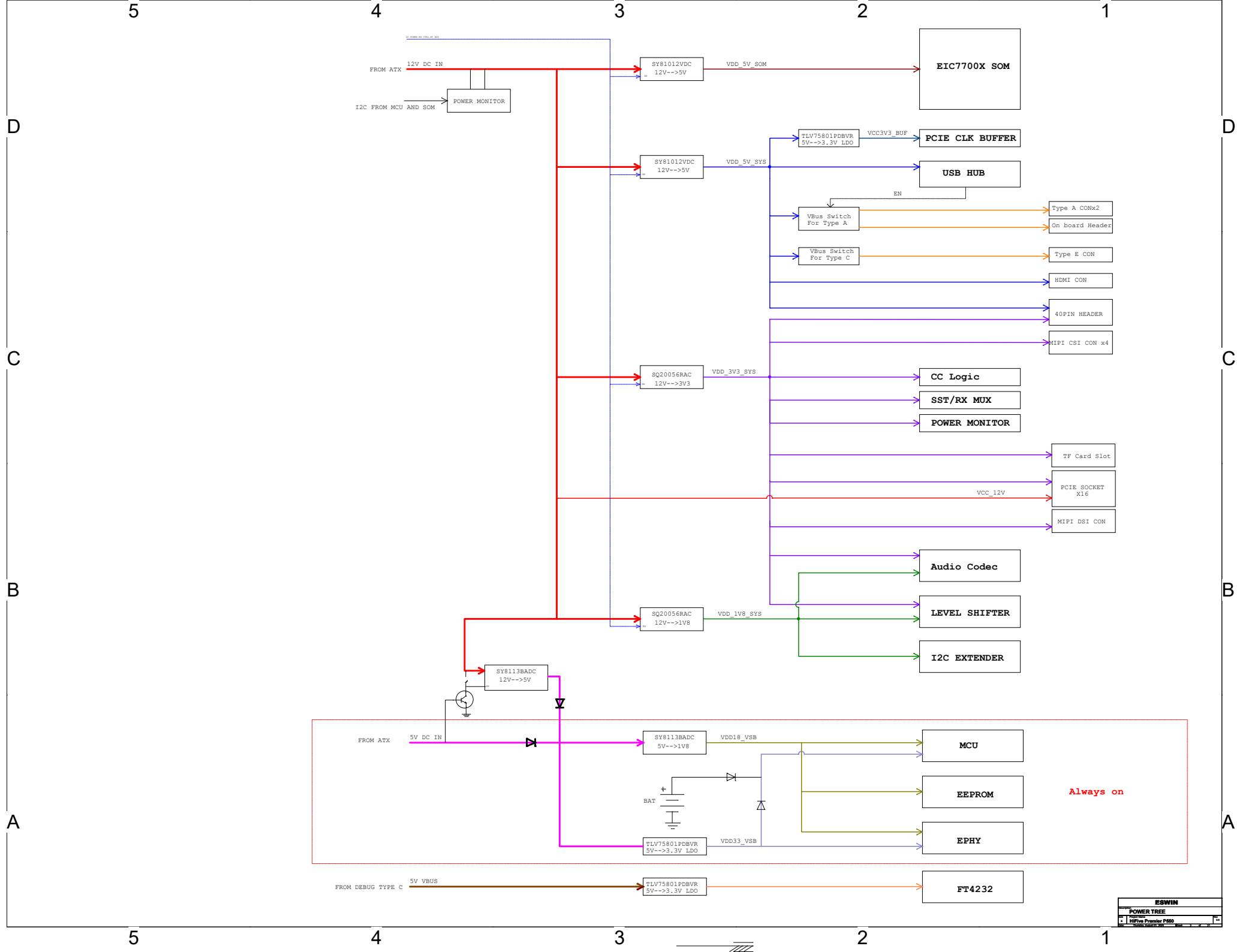
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Port	Pin name	MCU IO Voltage	Slave Device	Slave IO Voltage	Slave Addr	COMMENTS
I2C3	PA8 PC9	1.8V	NPU PMIC	1.8V	0010010	Slave mount on SOM board
			Power Monitor (PAC1934)	1.8V	0010000	Slave mount on SOM board
			Power Monitor (INA246)	3.3V	1000100	Slave mount on Carrier board
I2C1	PB6 PB7	1.8V	EEPROM	1.8V	10100000	1. EPF80K10 Store Carrier Board information 2. SOM_PFA4232 and BMC MCU share I2C BUS 3. Slave mount on Carrier board

Port	Pin name	4332 IO Voltage	Slave Device	Slave IO Vltage	Slave Addr	COMMENTS
I2C	BCR0S4 BCR0S5	3.3V	EEPROM	1.8V	1010000	1. EEPROM Store Carrier Board information 2. SOM, FT4232 and BMC MCU share I2C BUS 3. Slave mount on Carrier board

SOM I2C MAP						
Port	Pin name	SOC IO Voltage	Slave Device	Slave IO Vltage	Slave Addr	COMMENTS
I2C0	I2C0_SCL I2C0_SDA	1.8V	U39 (E88388 CODEC)	1.8V	0019001	Slave mount on Carrier board
I2C1	I2C1_SCL I2C1_SDA	1.8V		3.3V		Slave mount on Carrier board 40PIN HEADER
I2C3	I2C3_SCL I2C3_SDA	1.8V	U4 (FUSB303B OC LOGIC)	1.8V	1000010	Slave mount on Carrier board
I2C4	I2C4_SCL I2C4_SDA	1.8V		3.3V		Slave mount on Carrier board 40PIN HEADER
I2C5	I2C5_SCL I2C5_SCL	1.8V	U25 (TCA9548 I2C EXT.)	1.8V	1110000	Slave mount on Carrier board
I2C10	I2C10_SCL I2C10_SDA	1.8V	U63 (AT24C02C EEPROM)	1.8V	1010000	1. EPROM Store Carrier Board information 2. SOM, FTK232 and BMC MCU share I2C BUS 3. Slave mount on Carrier board
I2C11	I2C11_SCL I2C11_SDA	1.8V	PMIC0 MP8785	1.8V	0010010	Slave mount on SOM board
			Power Monitor (PAC1934)	1.8V	0010000	Slave mount on SOM board
			Power Monitor (INA226)	3.3V	1000100	Slave mount on Carrier board

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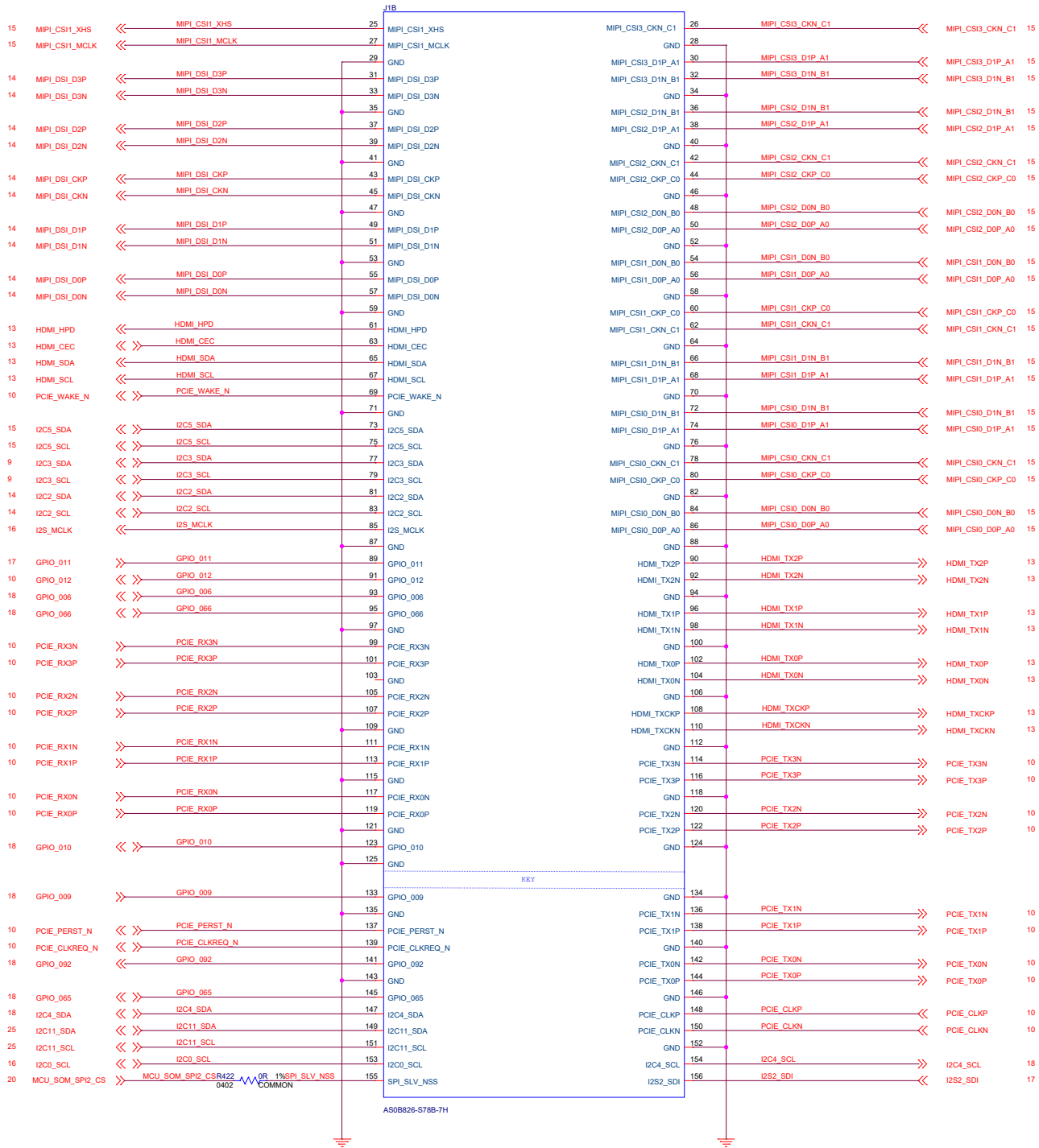
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ESWIN			
Description			
EDGE CONNECTOR PART-II			
Size	Project Name	Rev	
C	HiFive Premier P550	3.0	
Date:	Monday, August 26, 2024	Sheet	5 of 31

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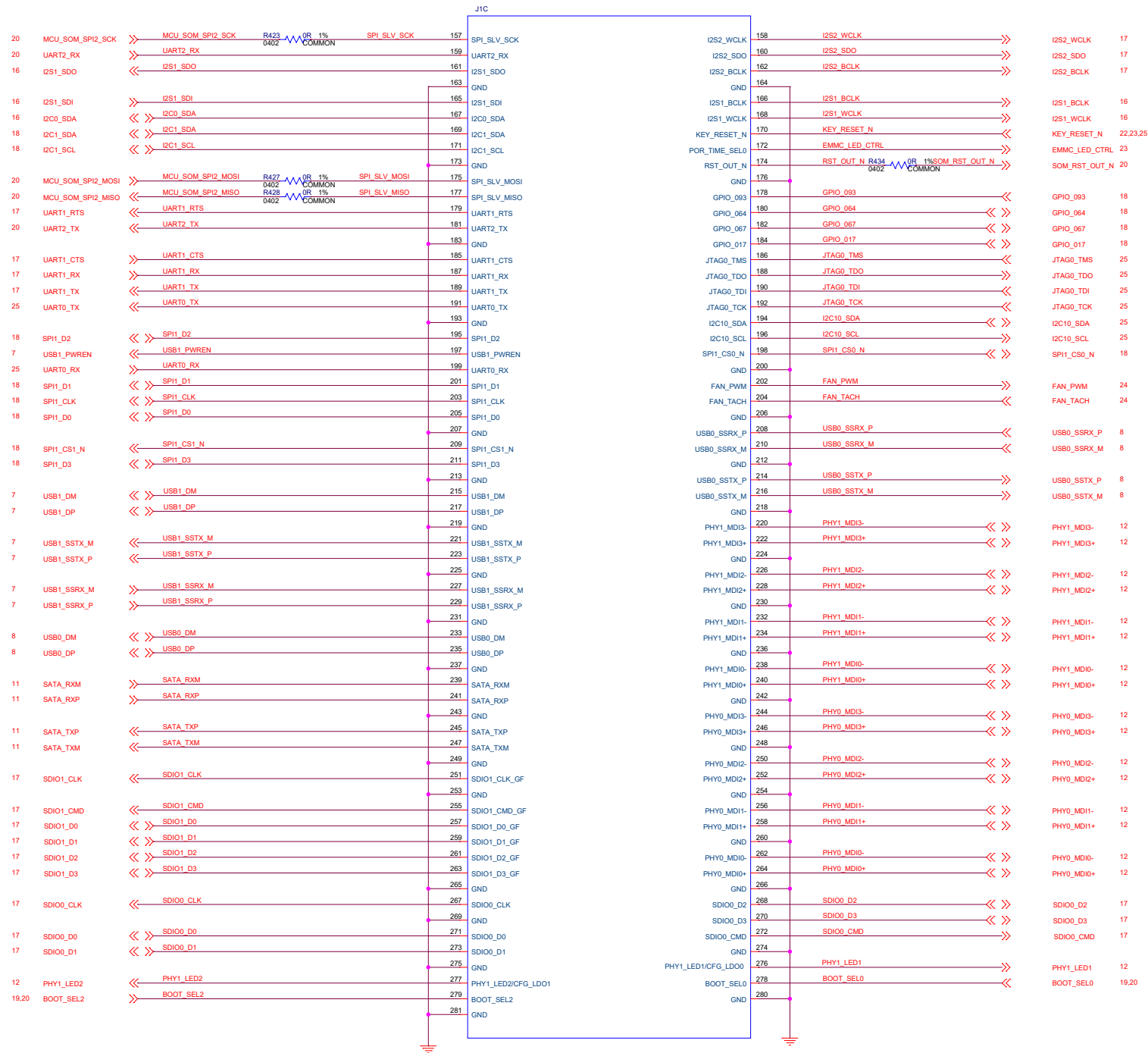
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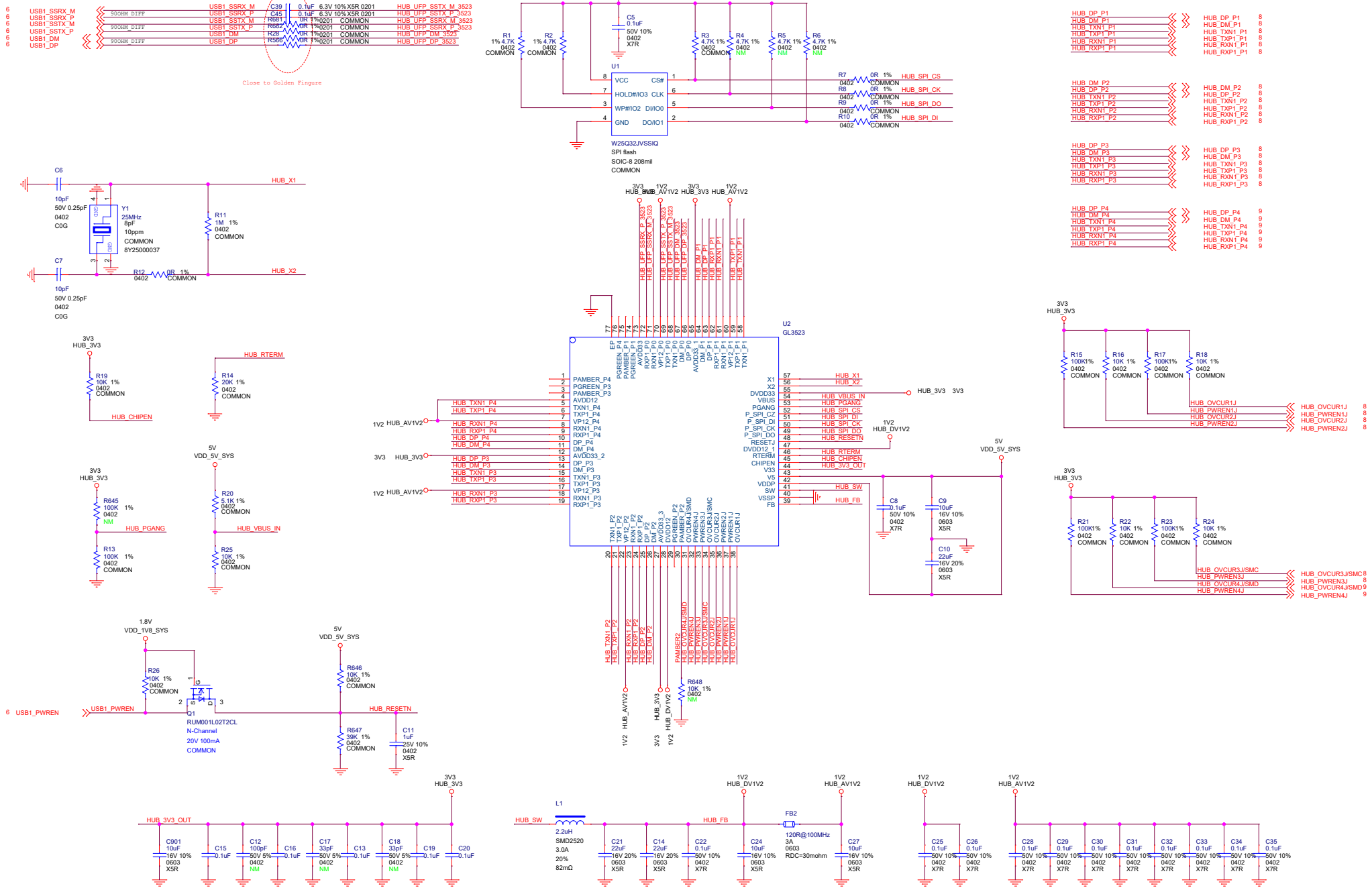
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AS08A26-S78B-7H

ESWIN				
Description				
EDGE CONNECTOR PART-III				
Size	Project Name			Rev
C	HiFive Premier P550			3.0
Date:	Monday, August 26, 2024		Sheet	6 of 31



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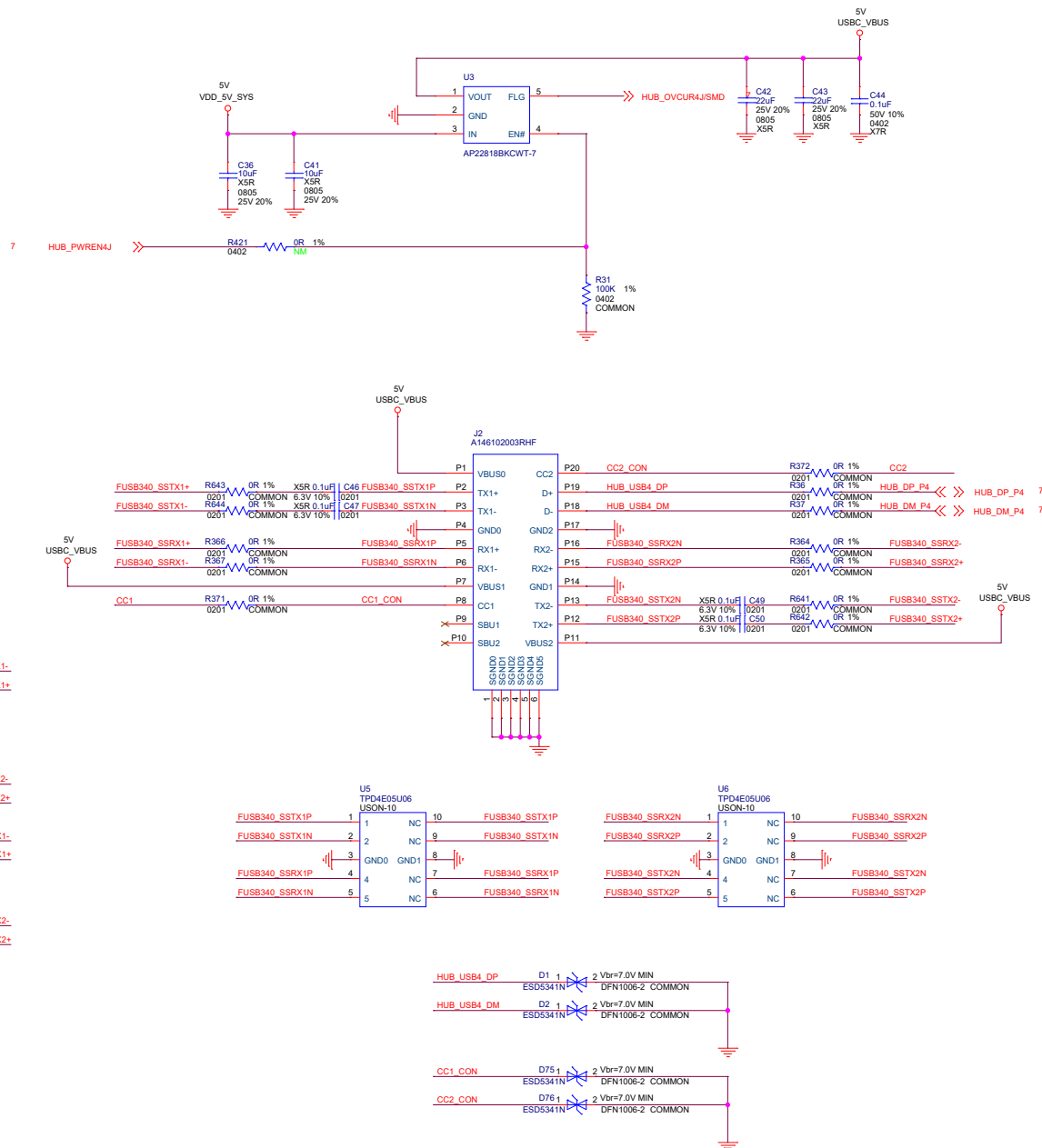
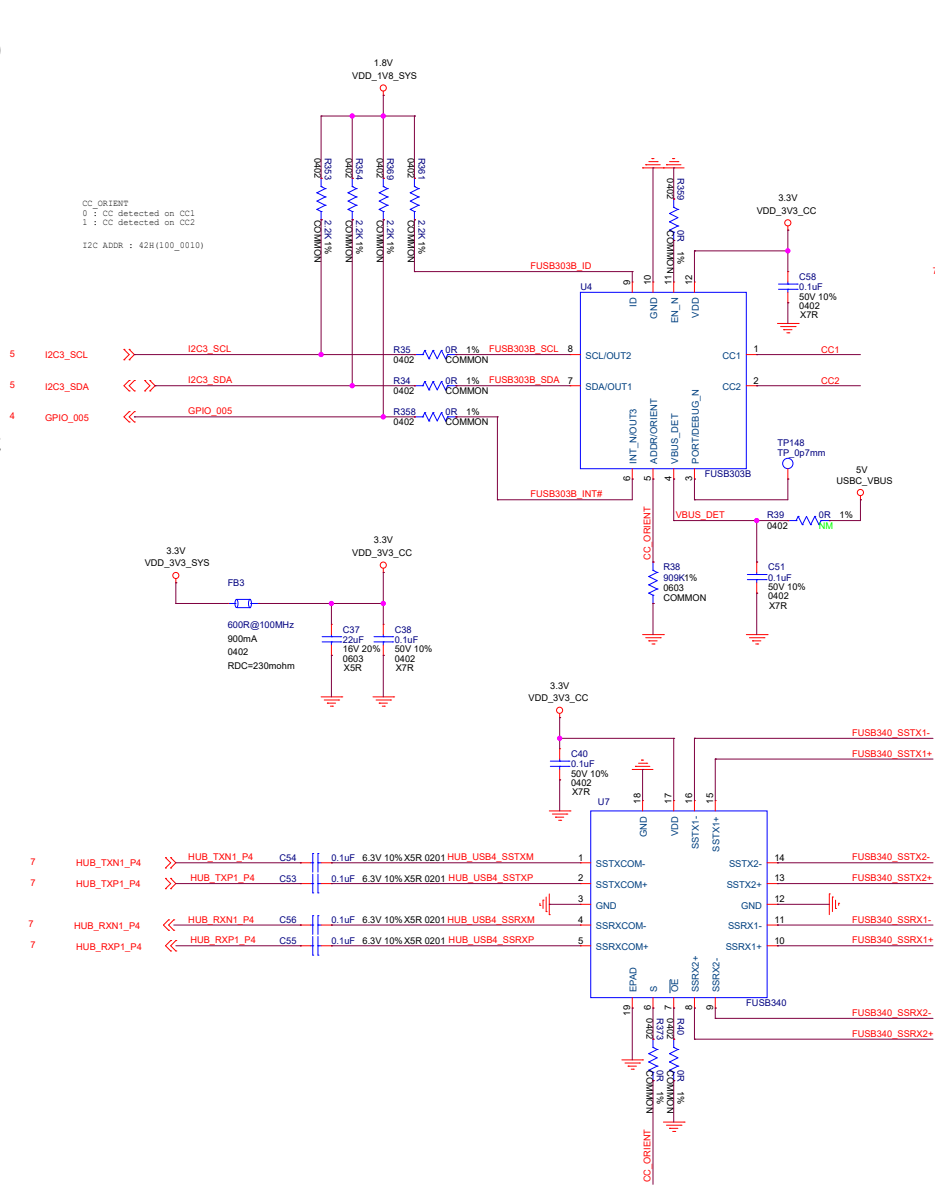
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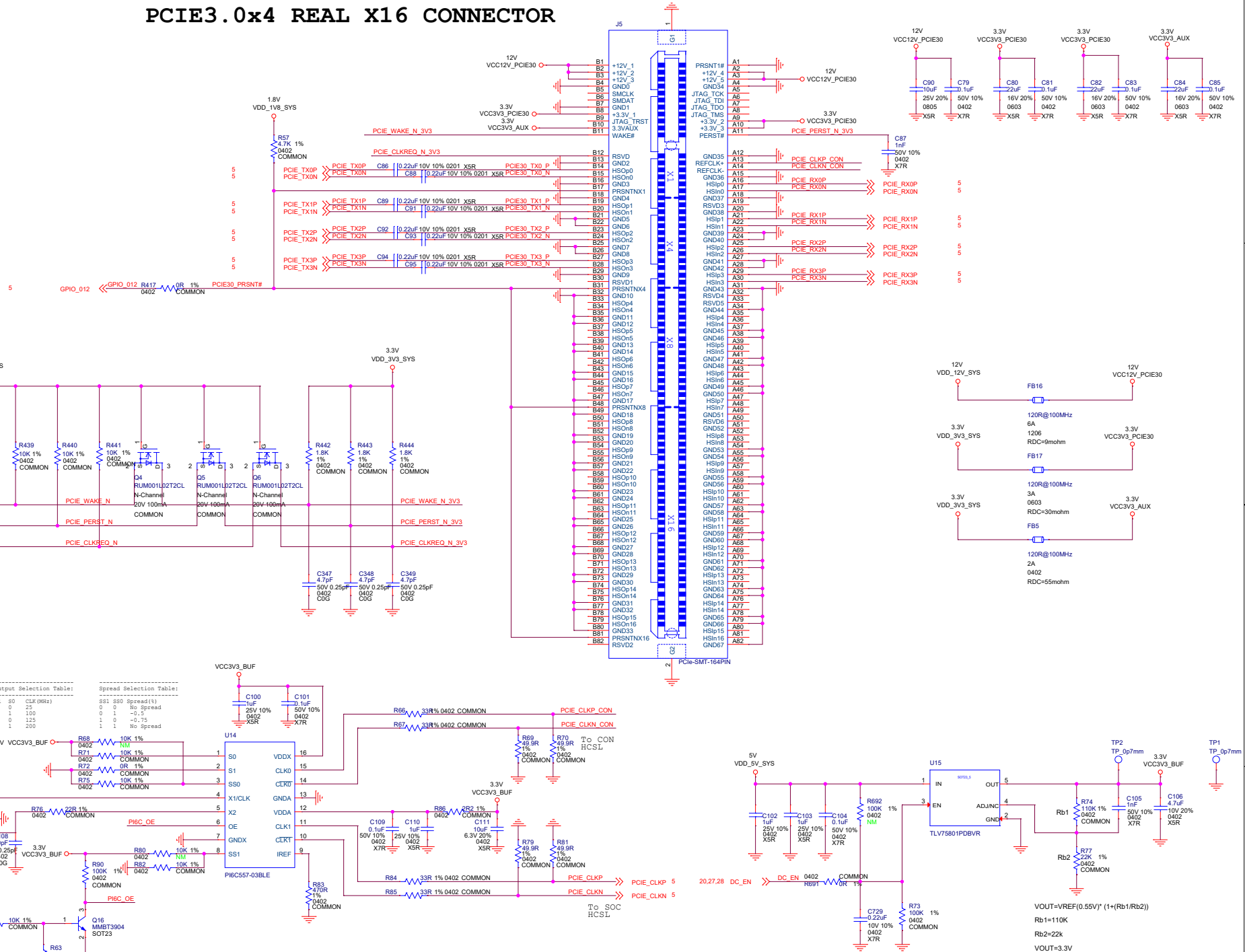
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ESWIN			
Description			
USB MULTIPLEXERS AND TYP-E CONNECTOR			
Size	Project Name	Rev	
C	HiFive Premier P550	3.0	
Date:	Friday, August 16, 2024	Sheet	9 of 31

PCIe3.0x4 REAL X16 CONNECTOR



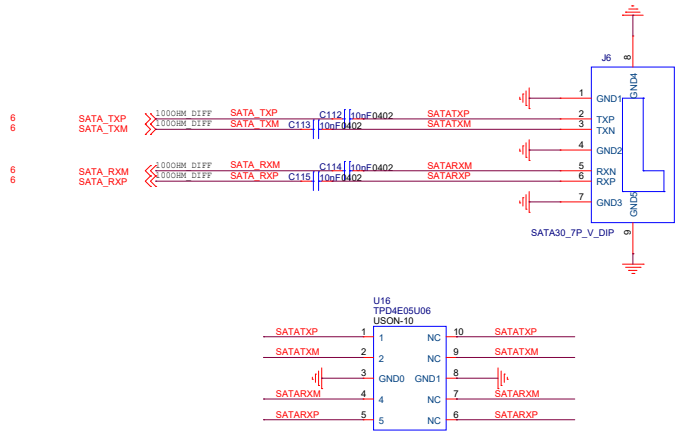
ESWIN

Description	PCIe 3.0 x16 CONNECTOR(4-LANES)
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Size	Project Name	Rev
C	HiFive Premier P550	3.0

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SATA3.0 Port



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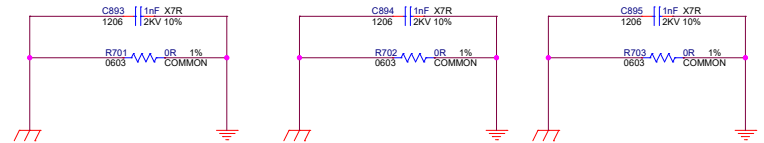
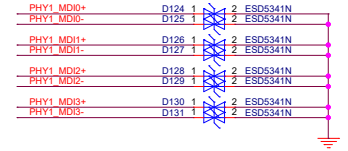
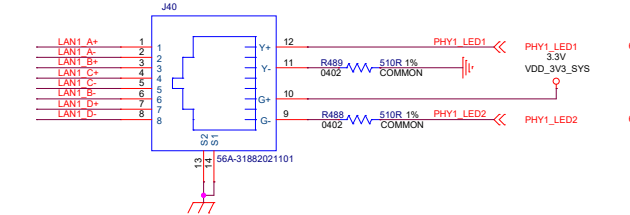
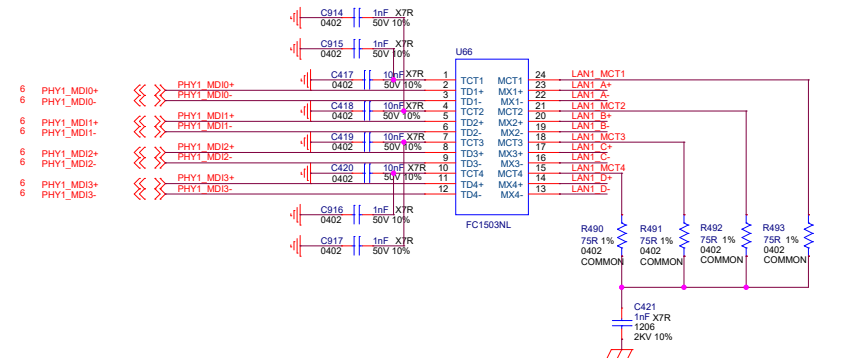
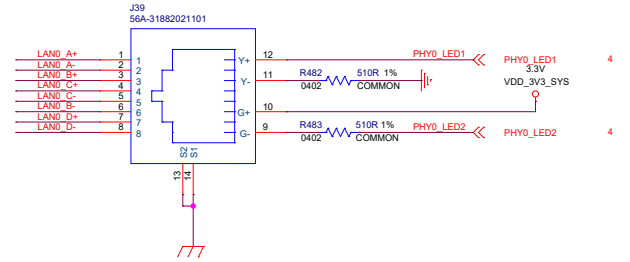
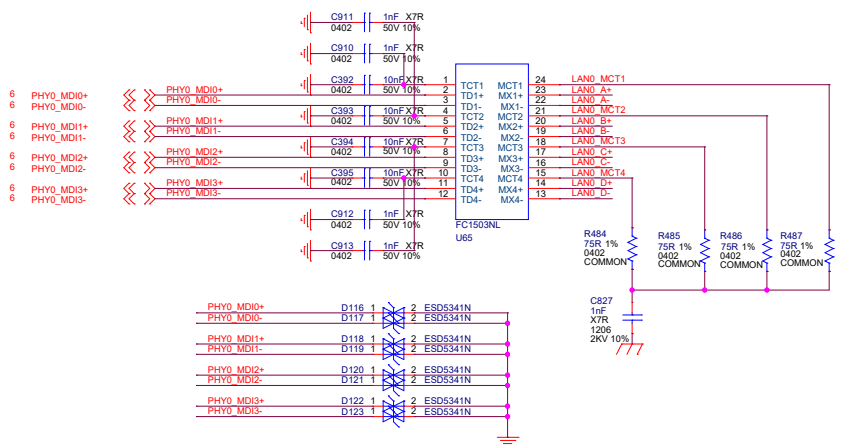
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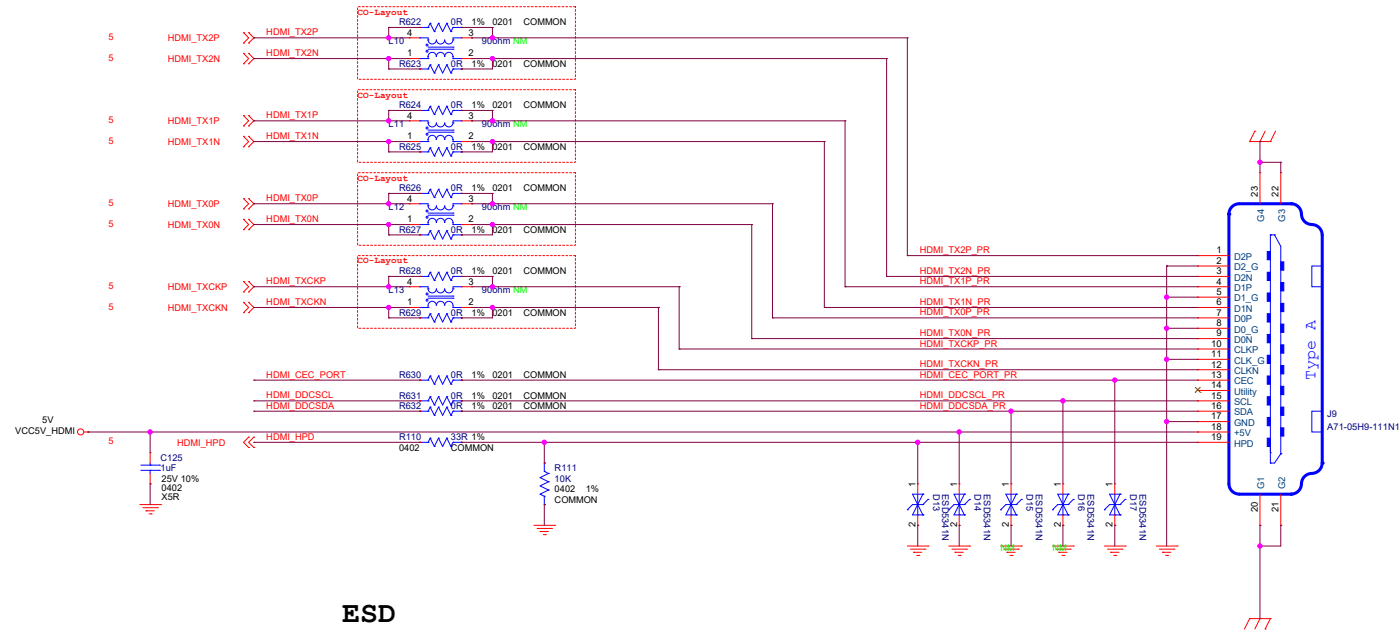
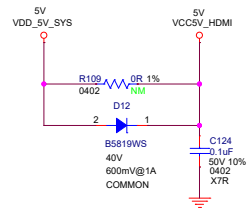
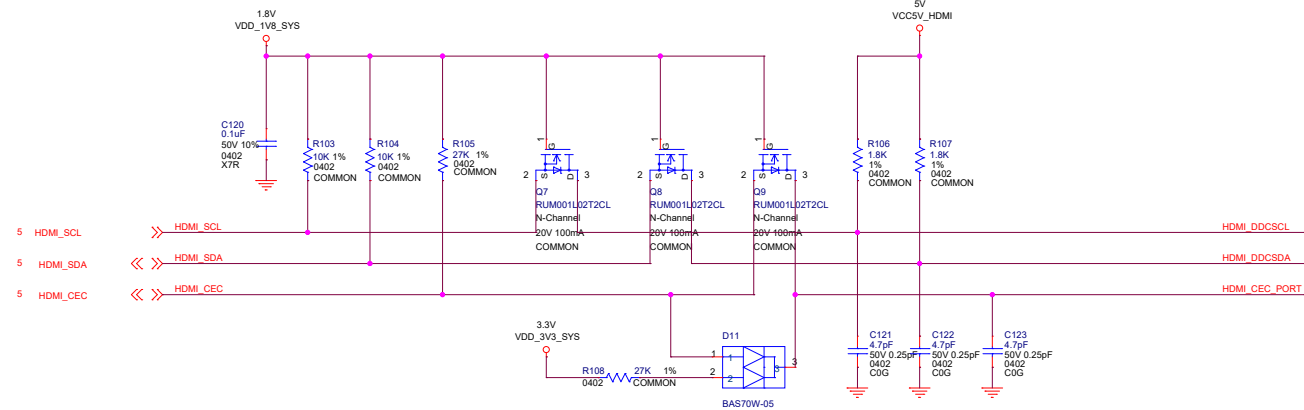
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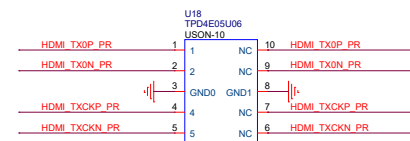
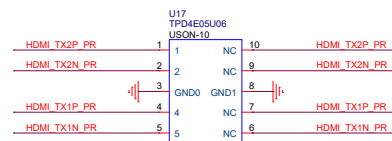
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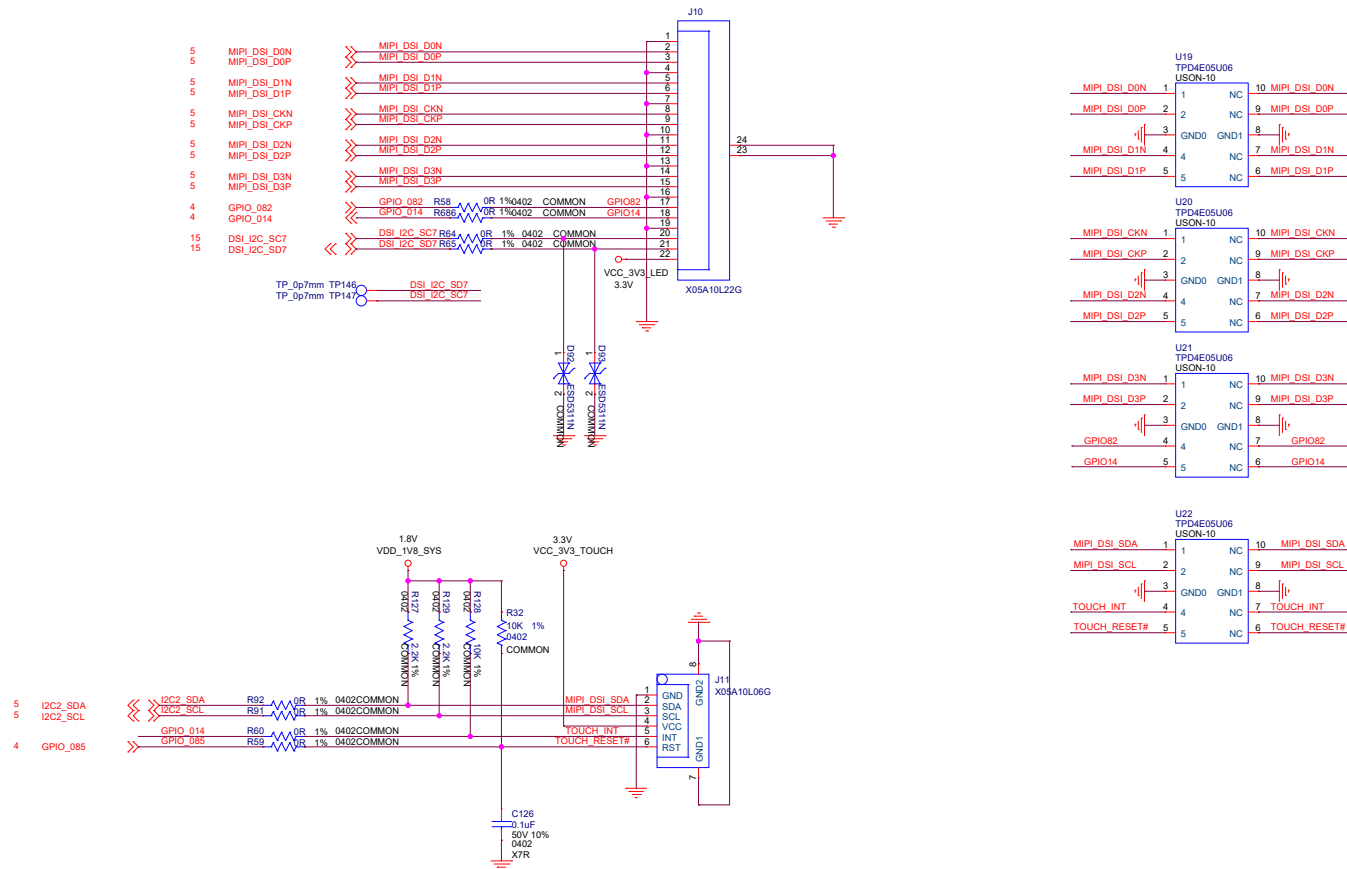


ESD

Note: All the ESD components should be placed close to the port and $C_j \leq 0.4\text{pF}$



ESWIN			
Description			
HDMI CONNECTOR			
Size	Project Name	Rev	
C	HiFive Premier P550	3.0	
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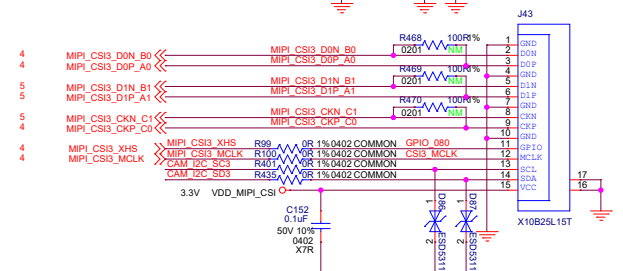
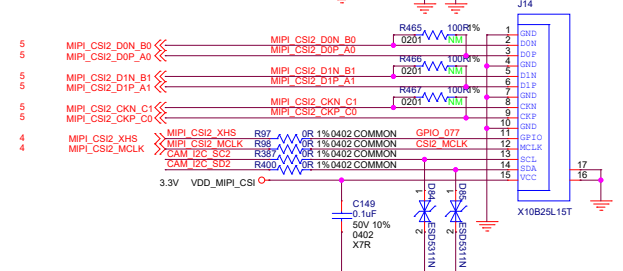
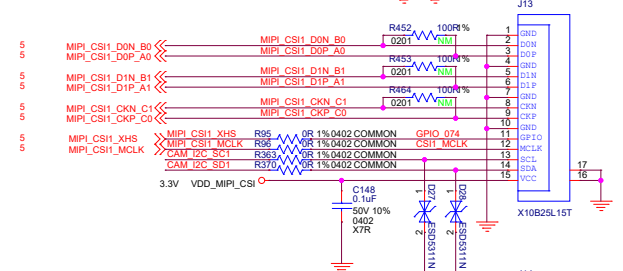
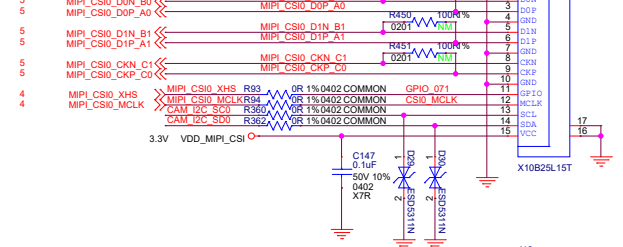
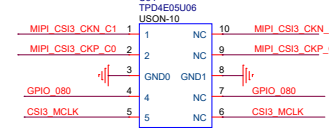
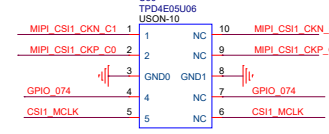
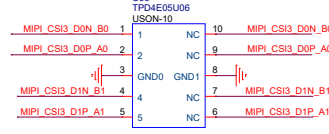
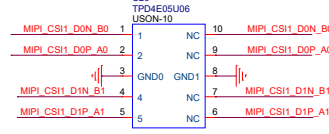
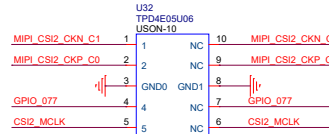
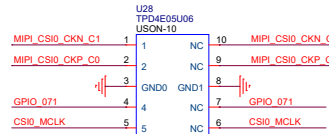
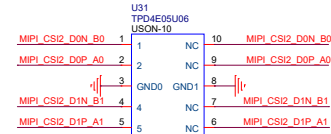
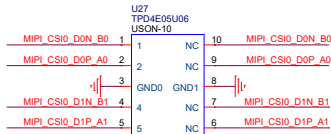
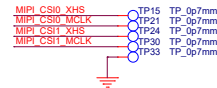
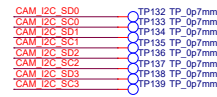
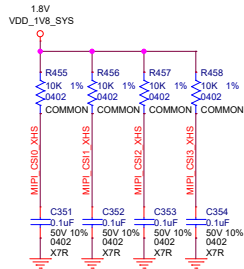
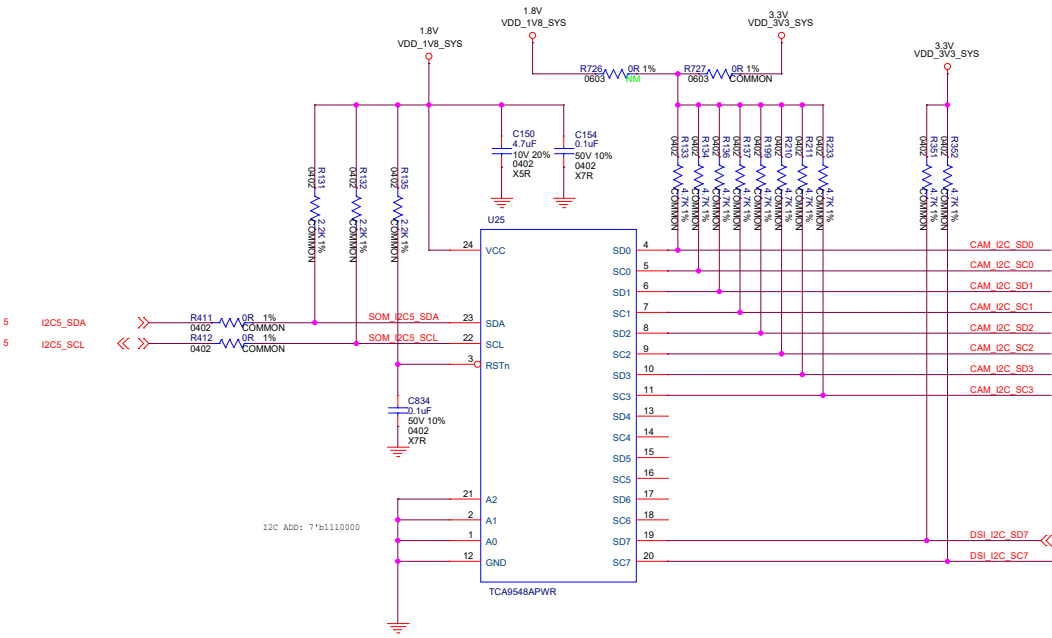


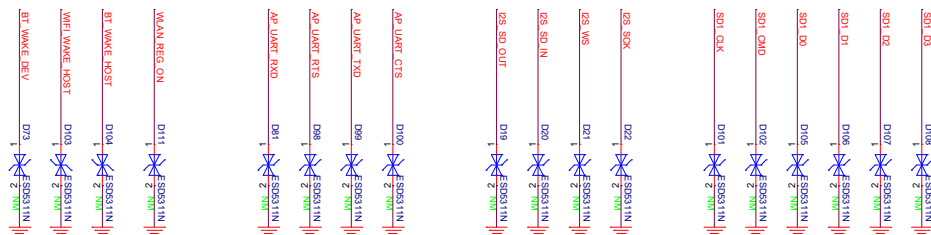
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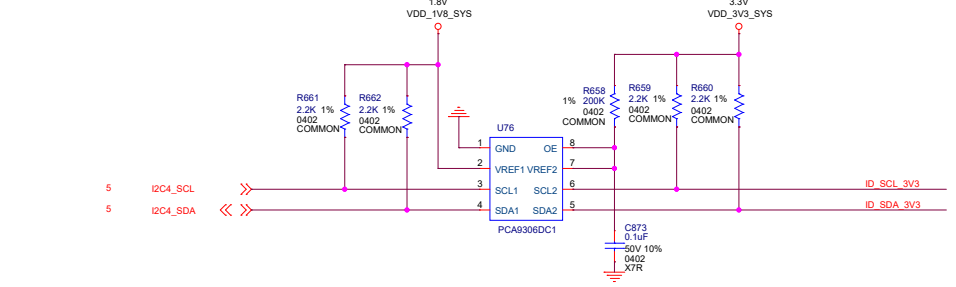
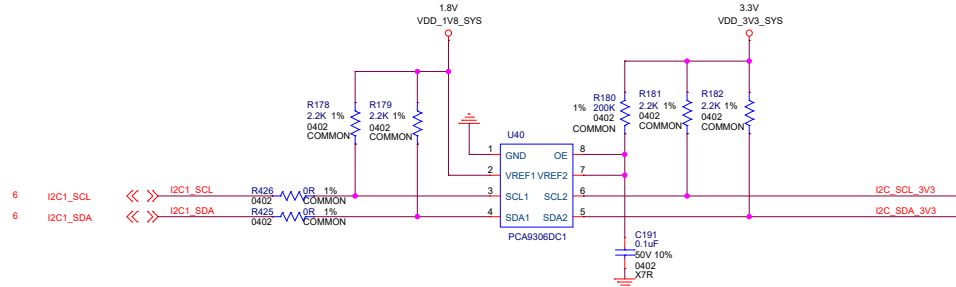
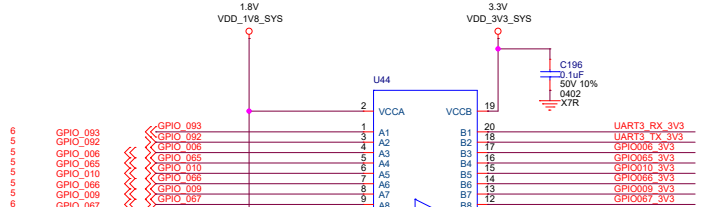
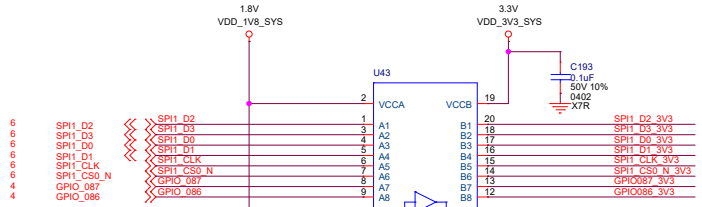
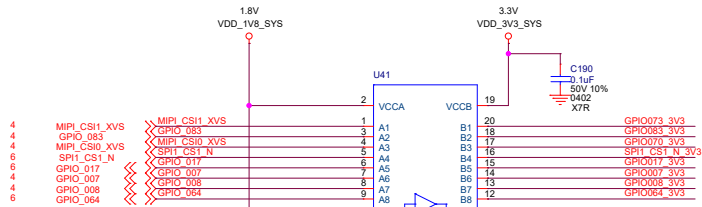
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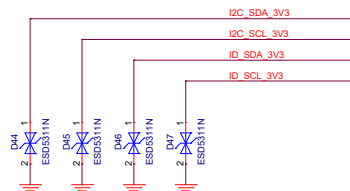
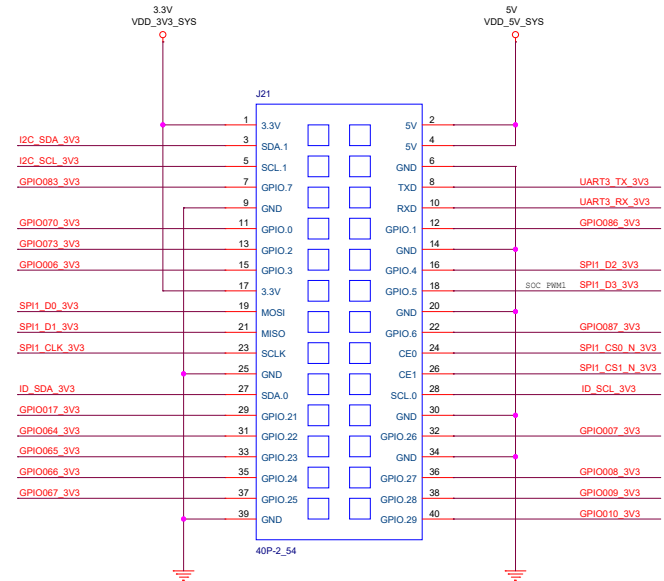
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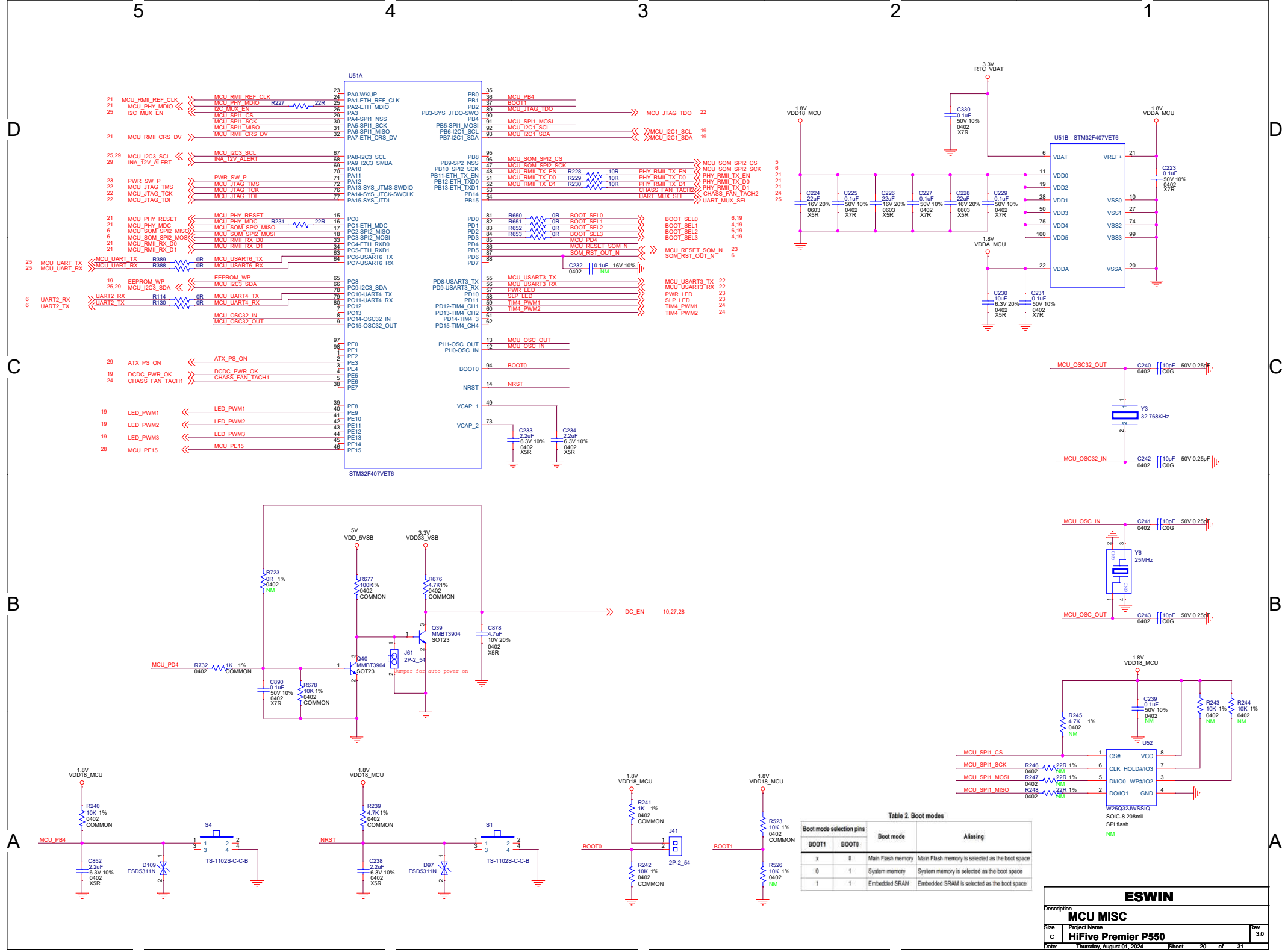


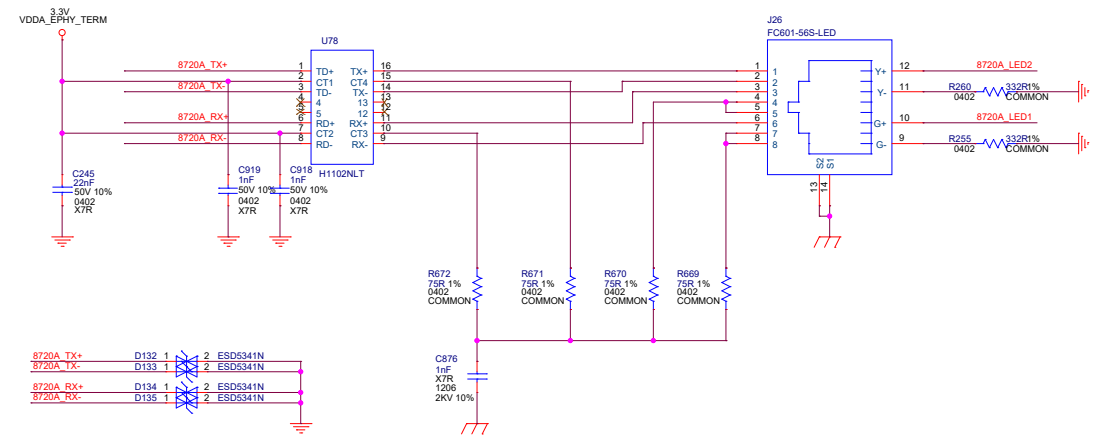
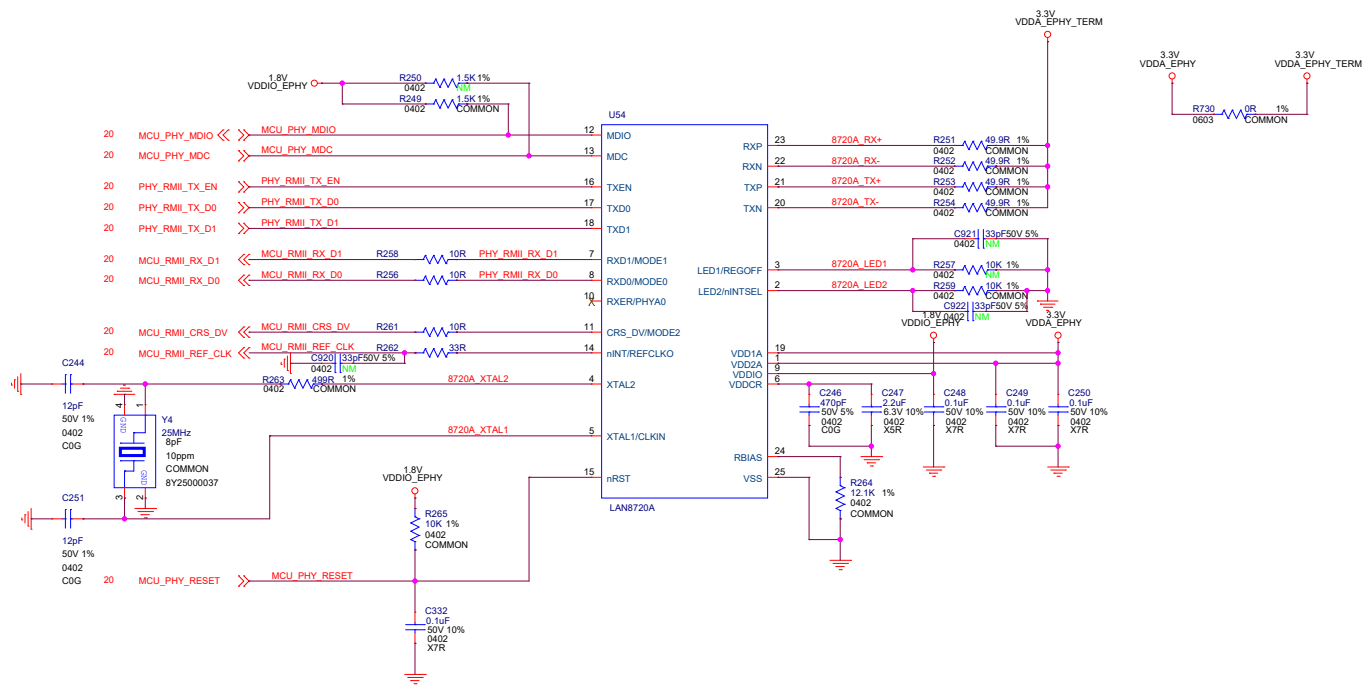


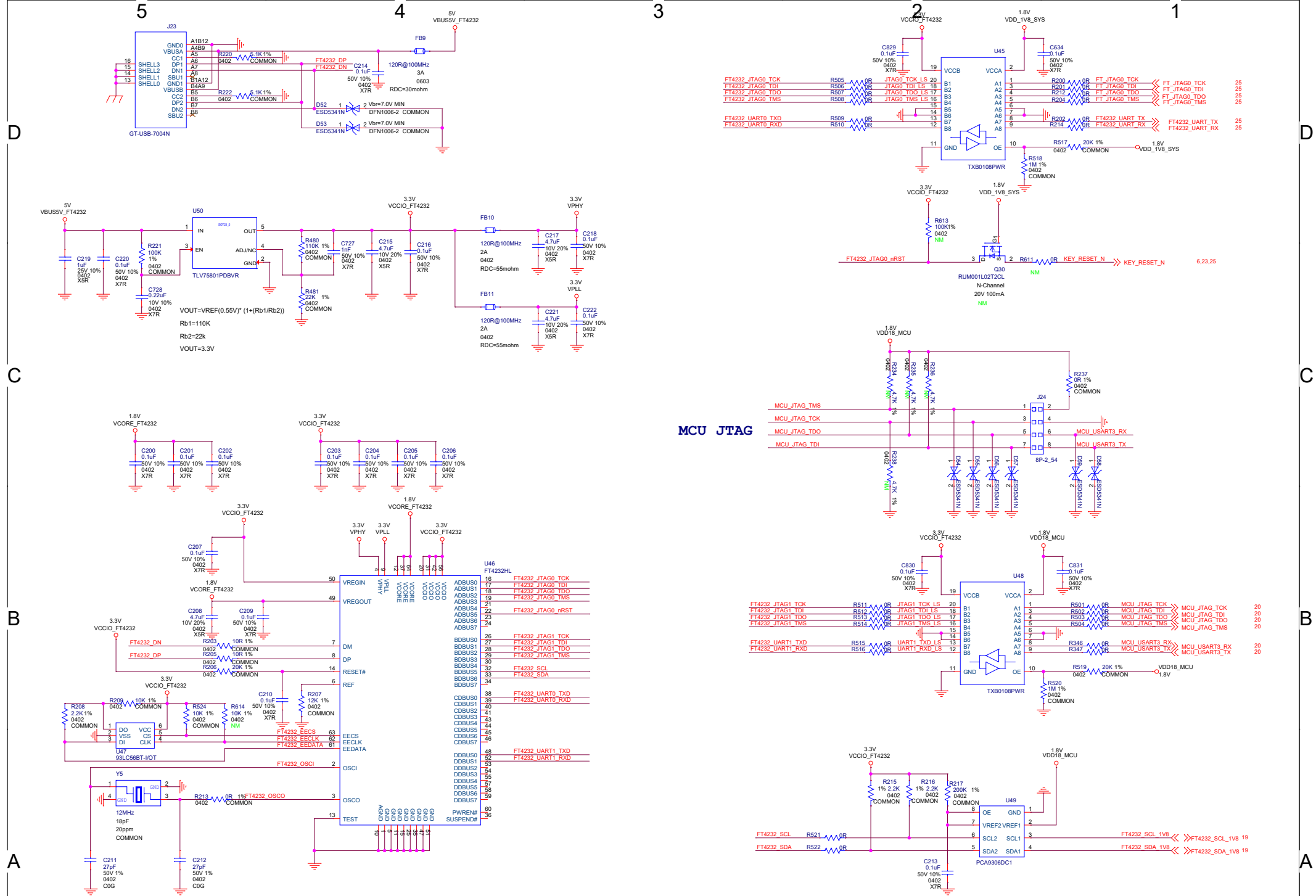


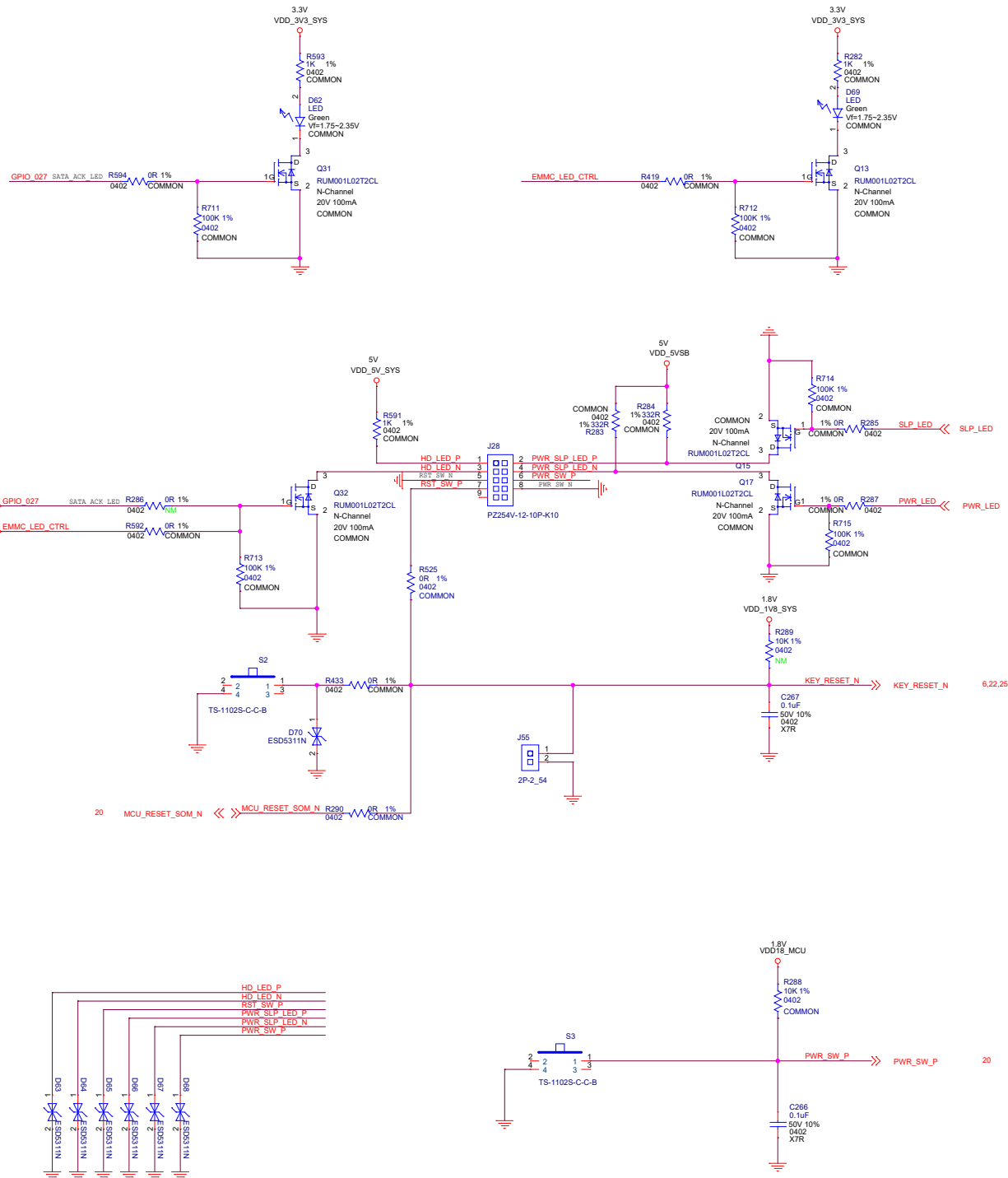
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7	GPIO83	GPIO92	8
9	GND	GPIO93	10
11	GPIO70	GPIO86	12
13	GPIO73	GND	14
15	GPIO06	GPIO39	16
17	3.3V	GPIO40	18
19	GPIO37	GND	20
21	GPIO38	GPIO87	22
23	GPIO36	GPIO35	24
25	GND	GPIO41	26
27	GPIO53	GPIO52	28
29	GPIO17	GND	30
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37	GPIO67	GPIO09	38
39	GND	GPIO10	40



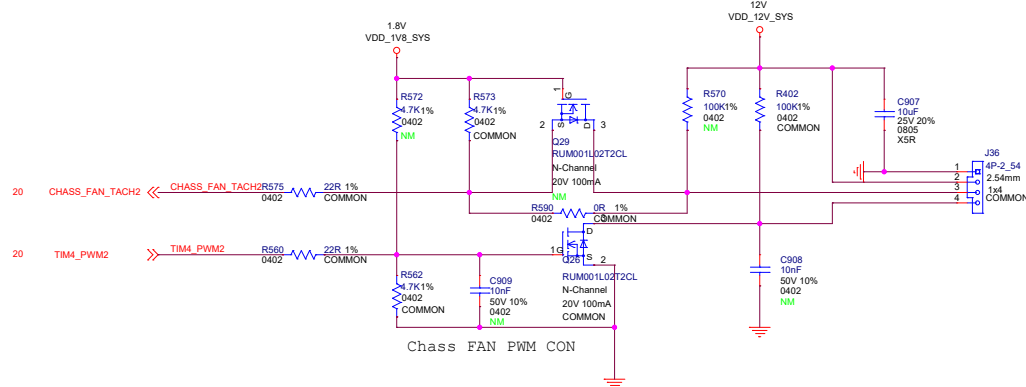
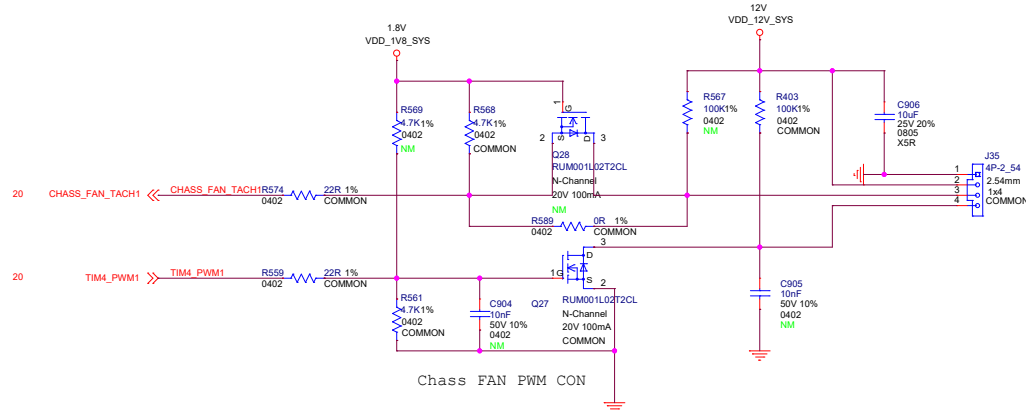
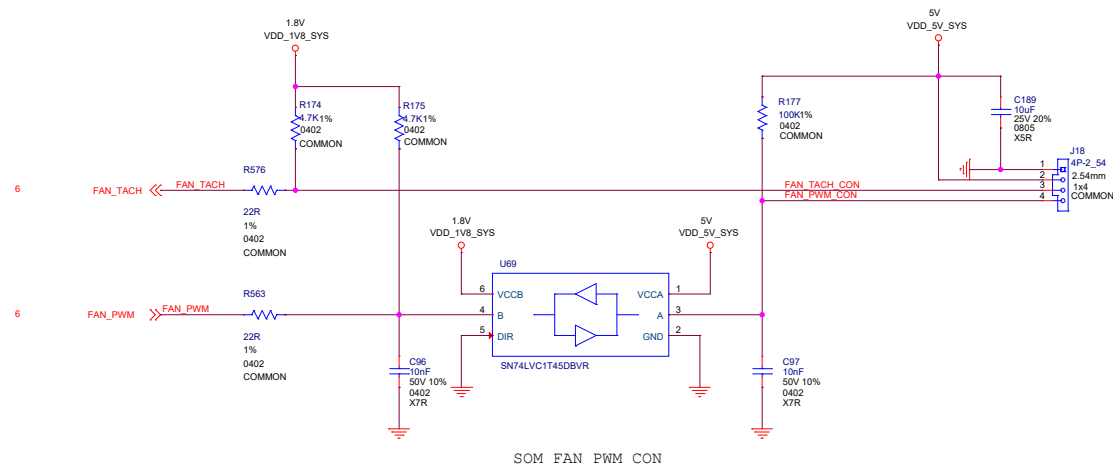


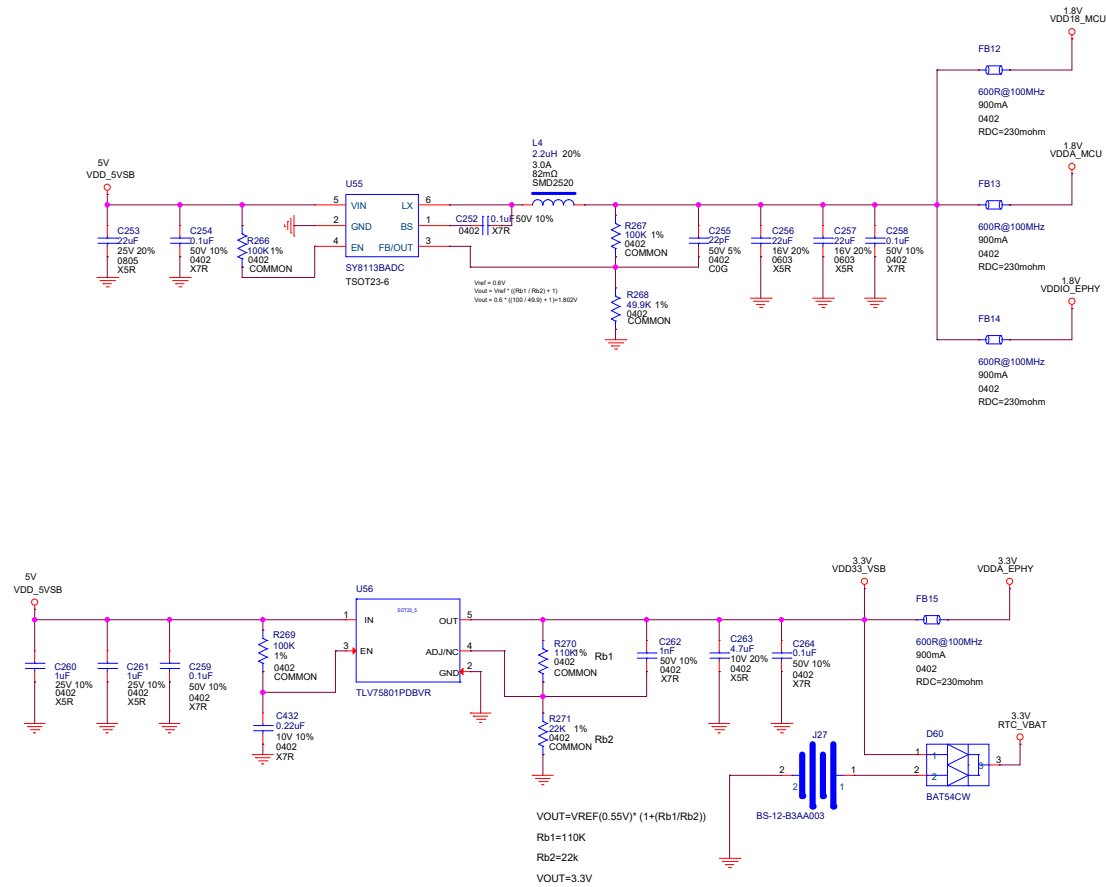


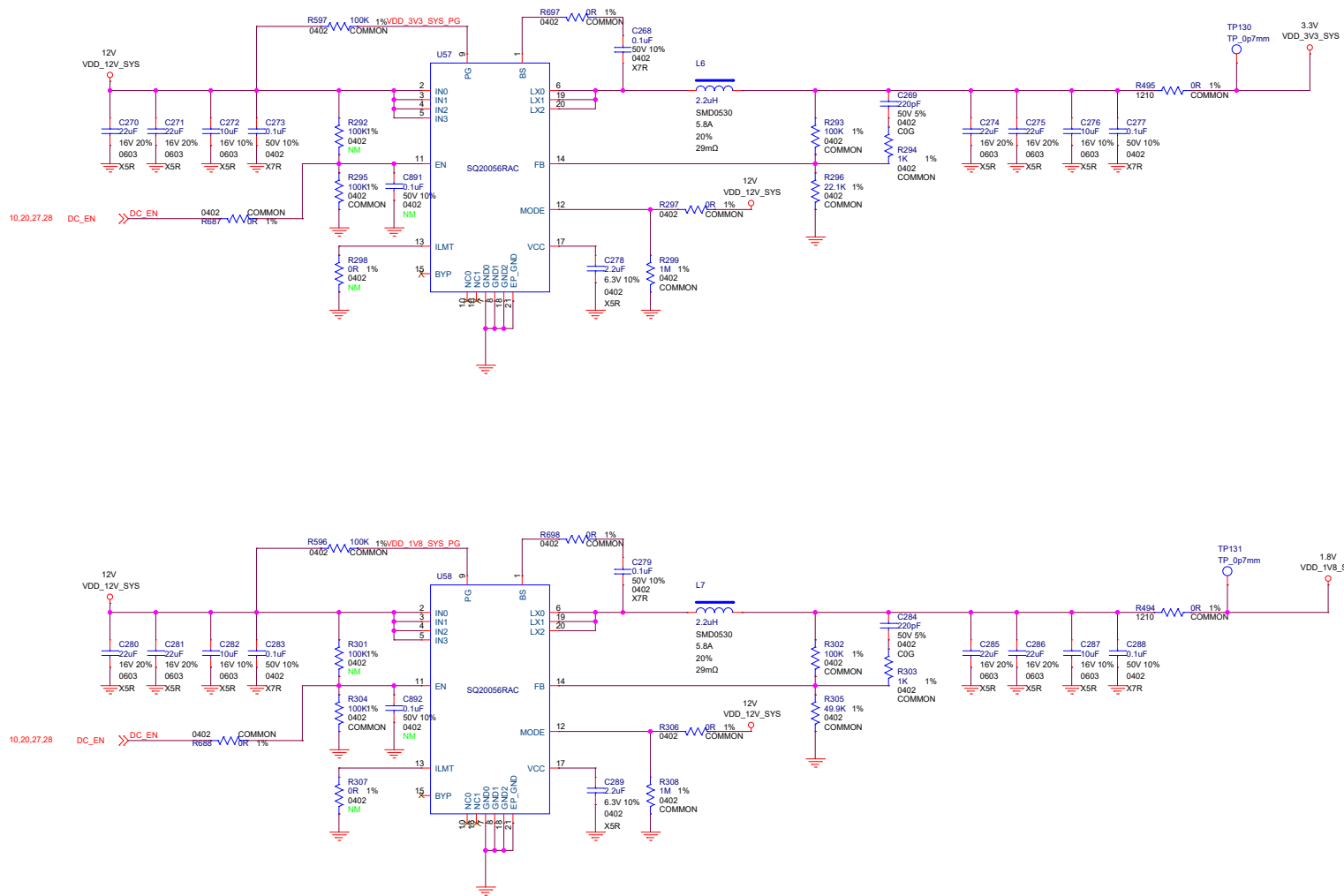




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Description			
CHASS FRONT PANEL CONNECTOR			
Size	Project Name	Rev	
C	HiFive Premier P550	3.0	
Date:	Thursday, August 01, 2024	Sheet	23 of 31







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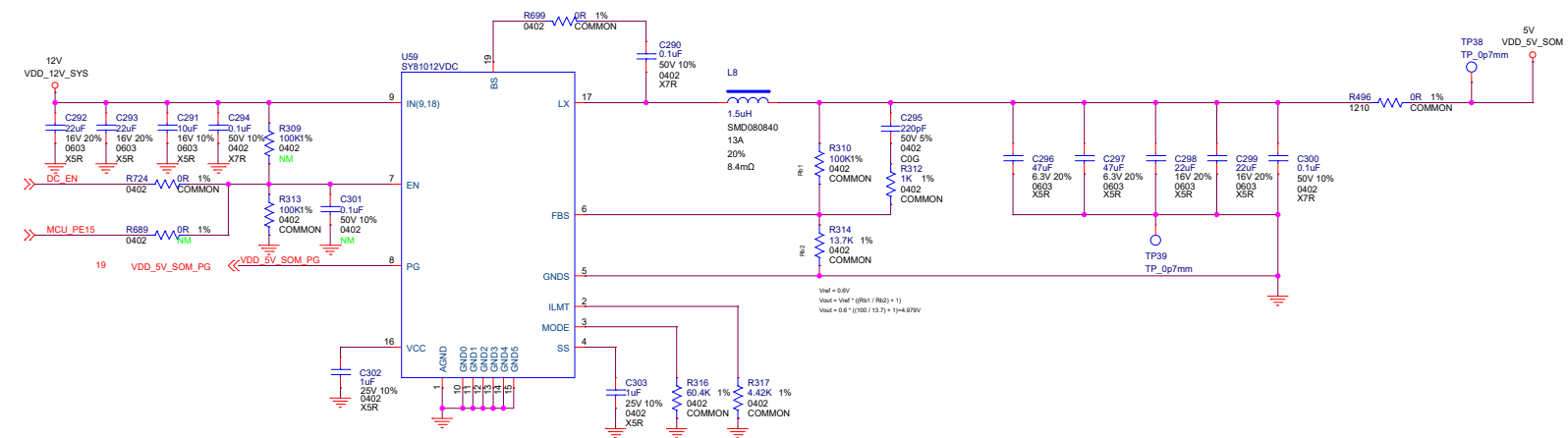
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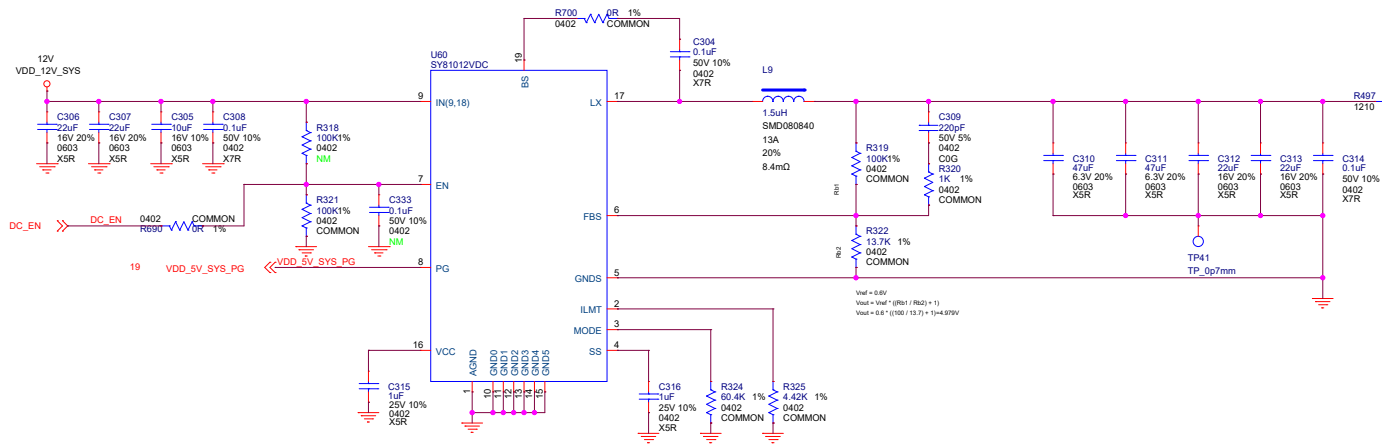
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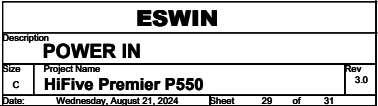
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20 MCU_PE15

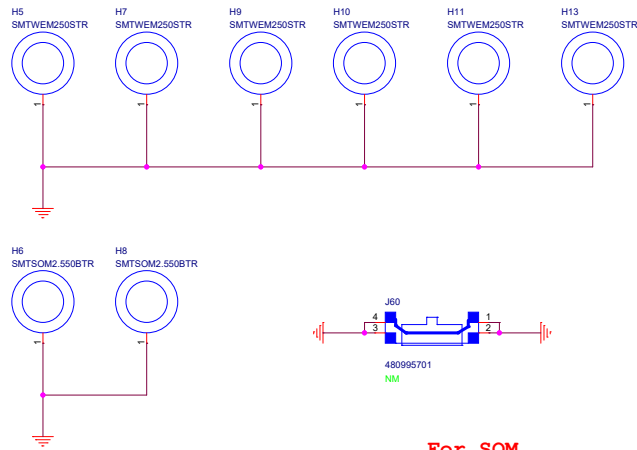
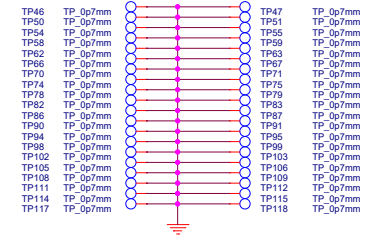
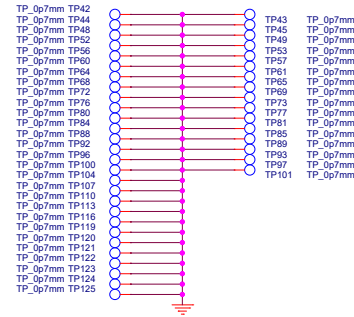
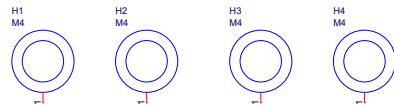
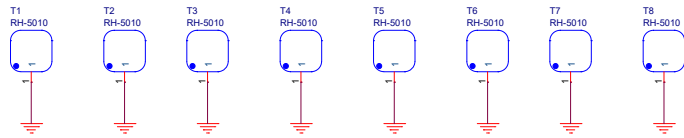


10,20,27,28 DC_EN



ESWIN			
Description			
POWER REGULATOR-II			
Size	Project Name		Rev
C	HiFive Premier P550		3.0
Date:	Thursday, August 01, 2024		Sheet 28 of 31





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