

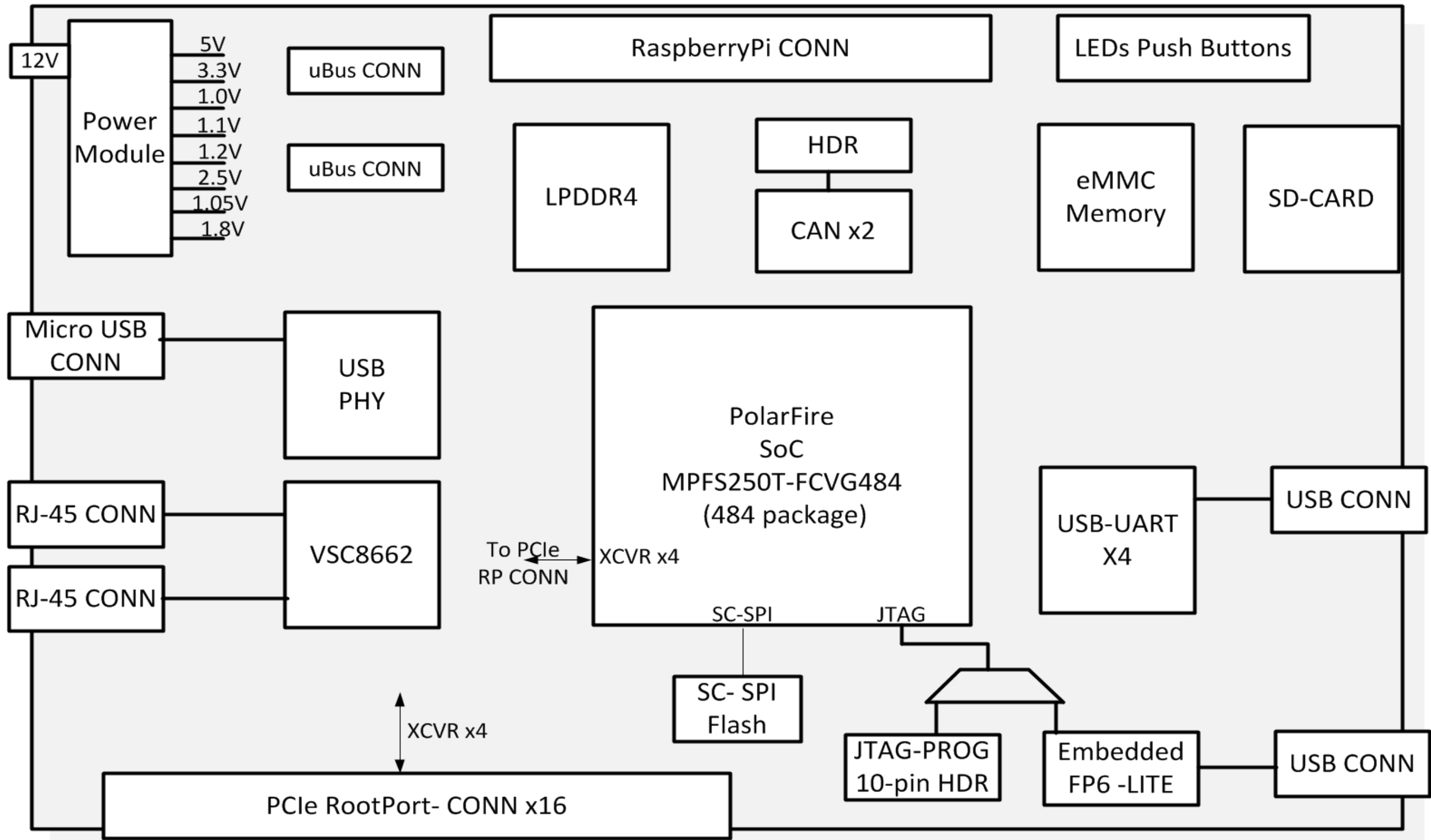
ICICLE Kit Rev1.0

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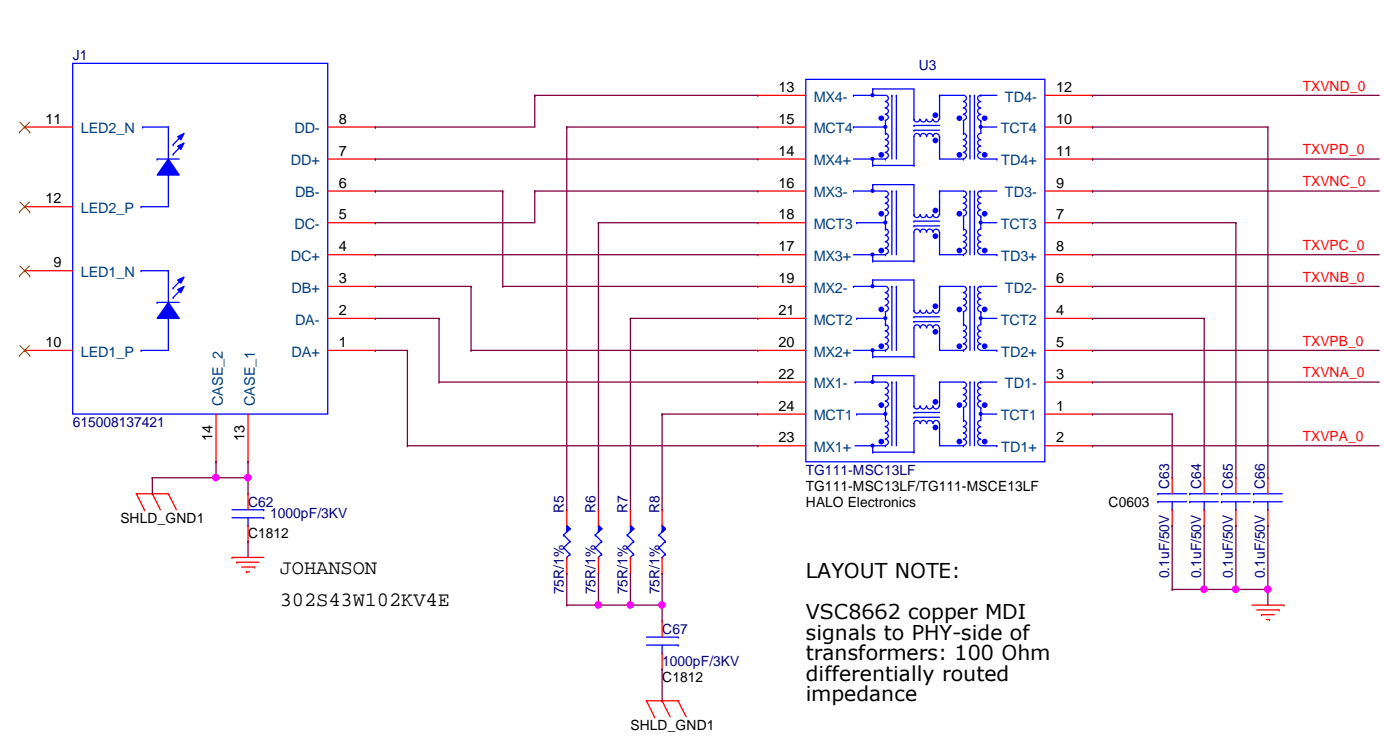
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Rev	Part Number:		PACTRON:
1.0	DVP-102-000536-001		
Originator:			
Size	Date:		Sheet
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ICICLE KIT

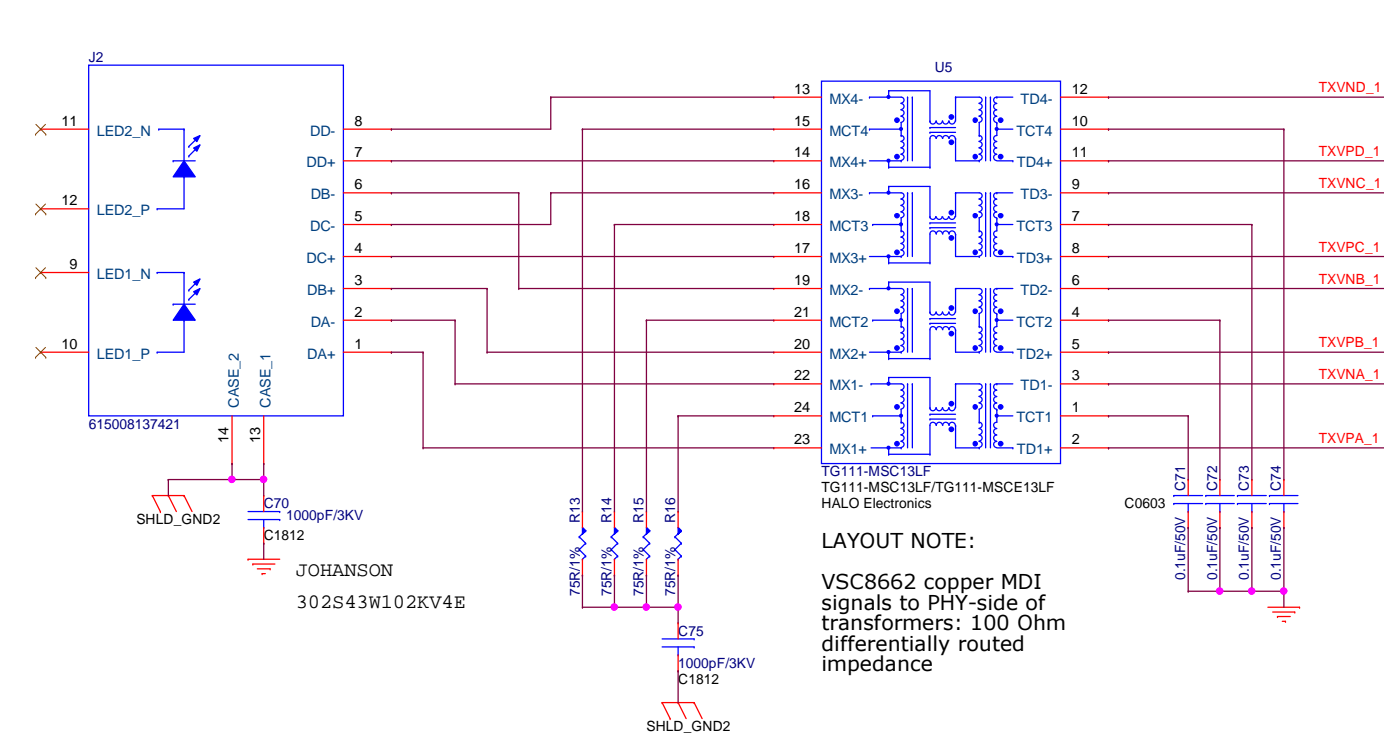
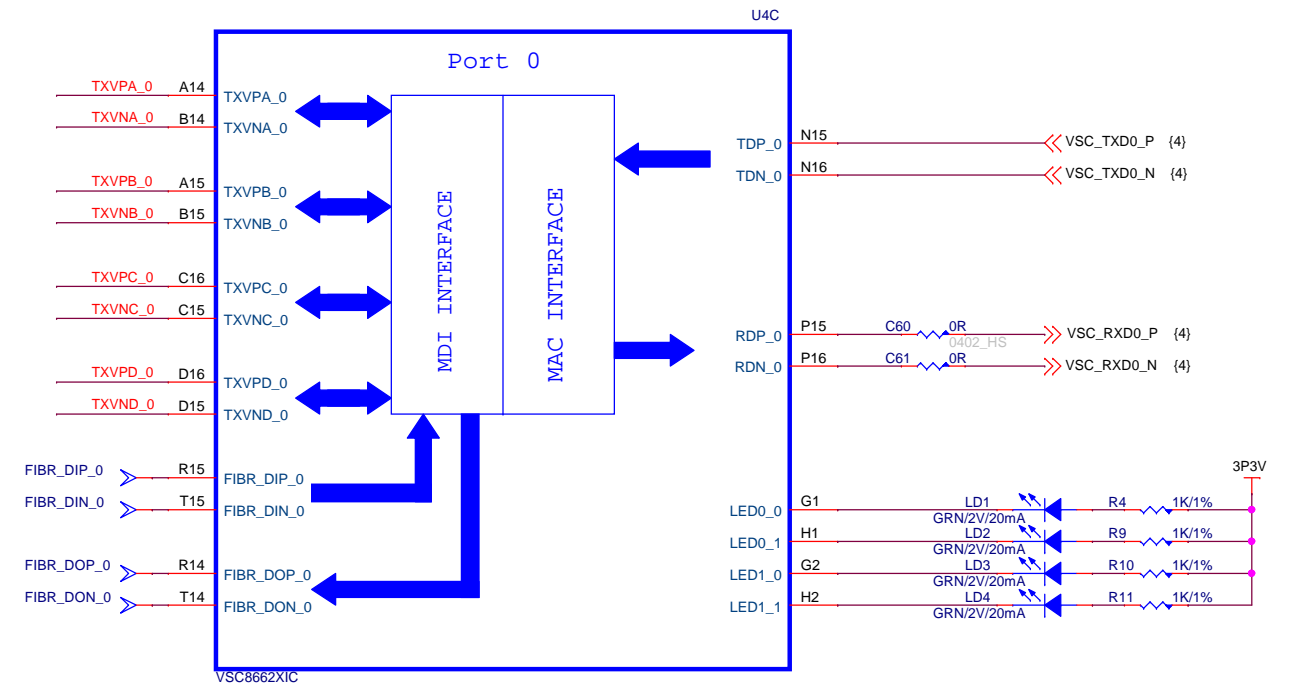


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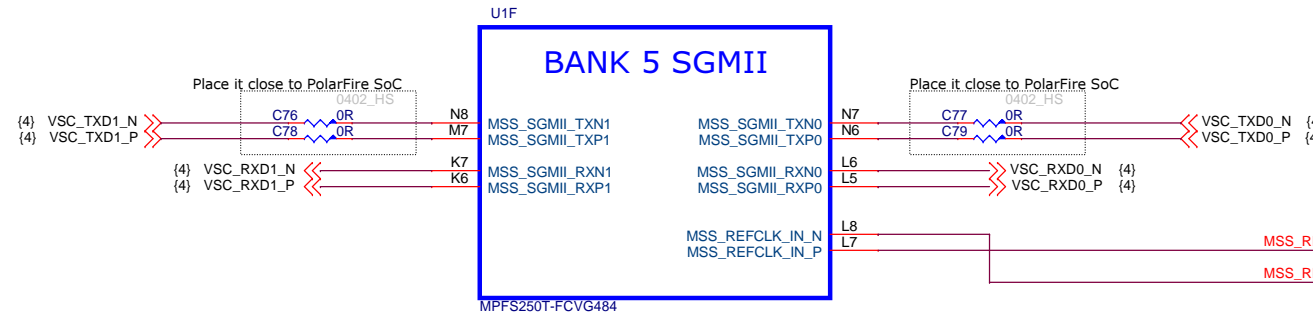
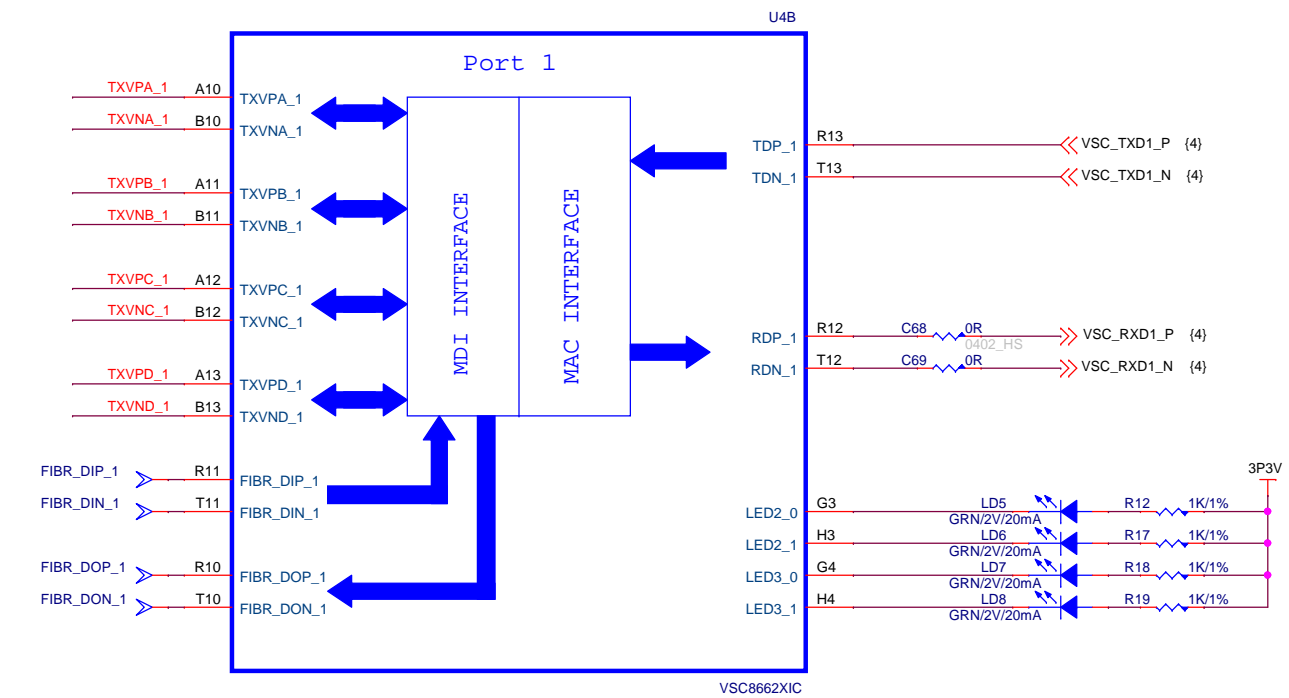
VSC8662 - SGMII Interface



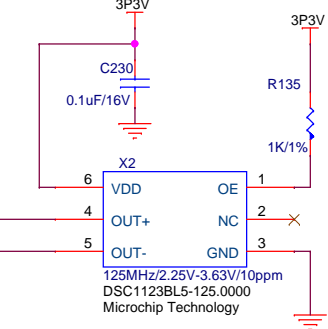
LAYOUT NOTE:
VSC8662 copper MDI signals to PHY-side of transformers: 100 Ohm differentially routed impedance



LAYOUT NOTE:
VSC8662 copper MDI signals to PHY-side of transformers: 100 Ohm differentially routed impedance

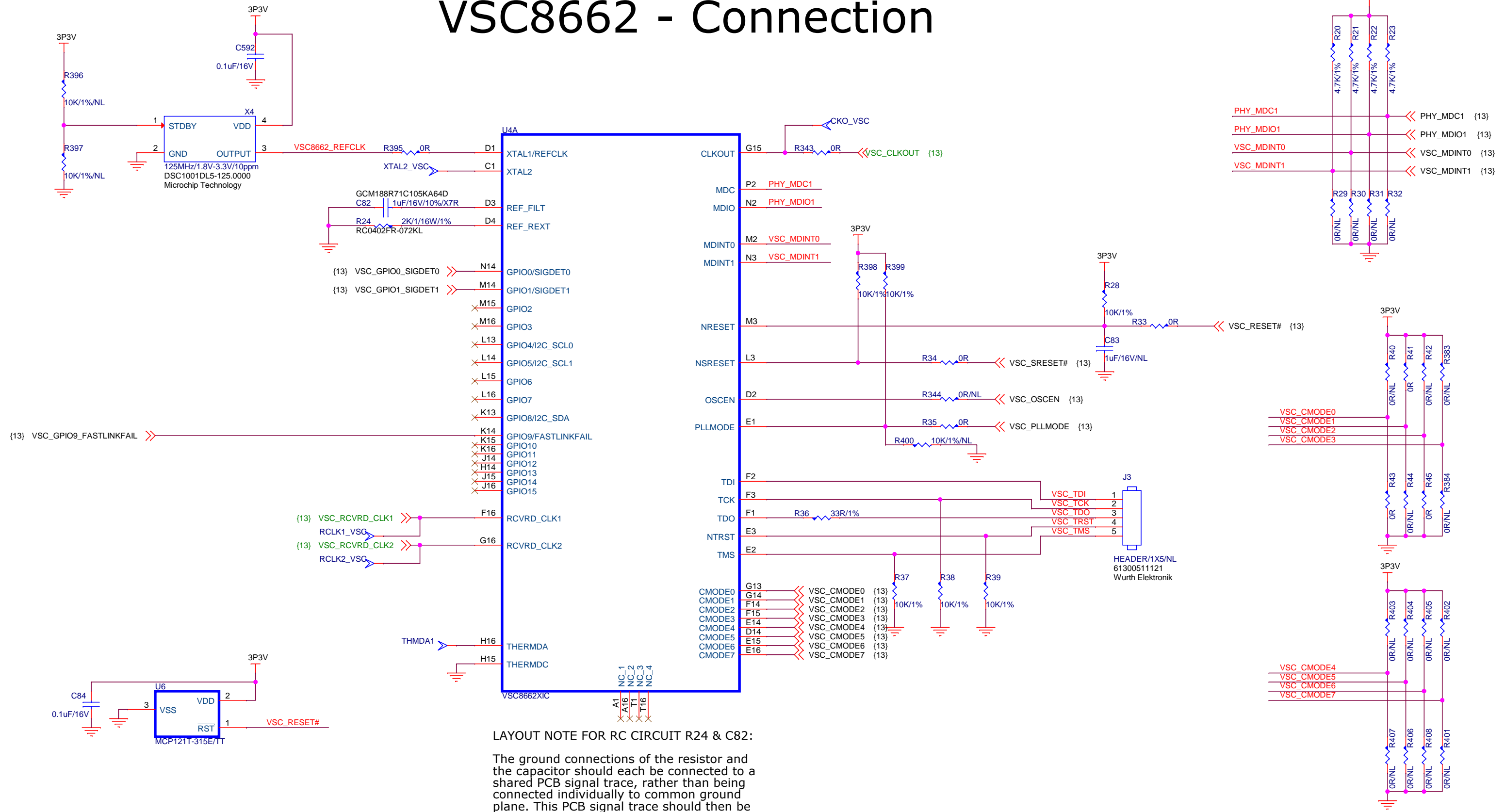


125MHz Oscillator



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VSC8662 - Connection



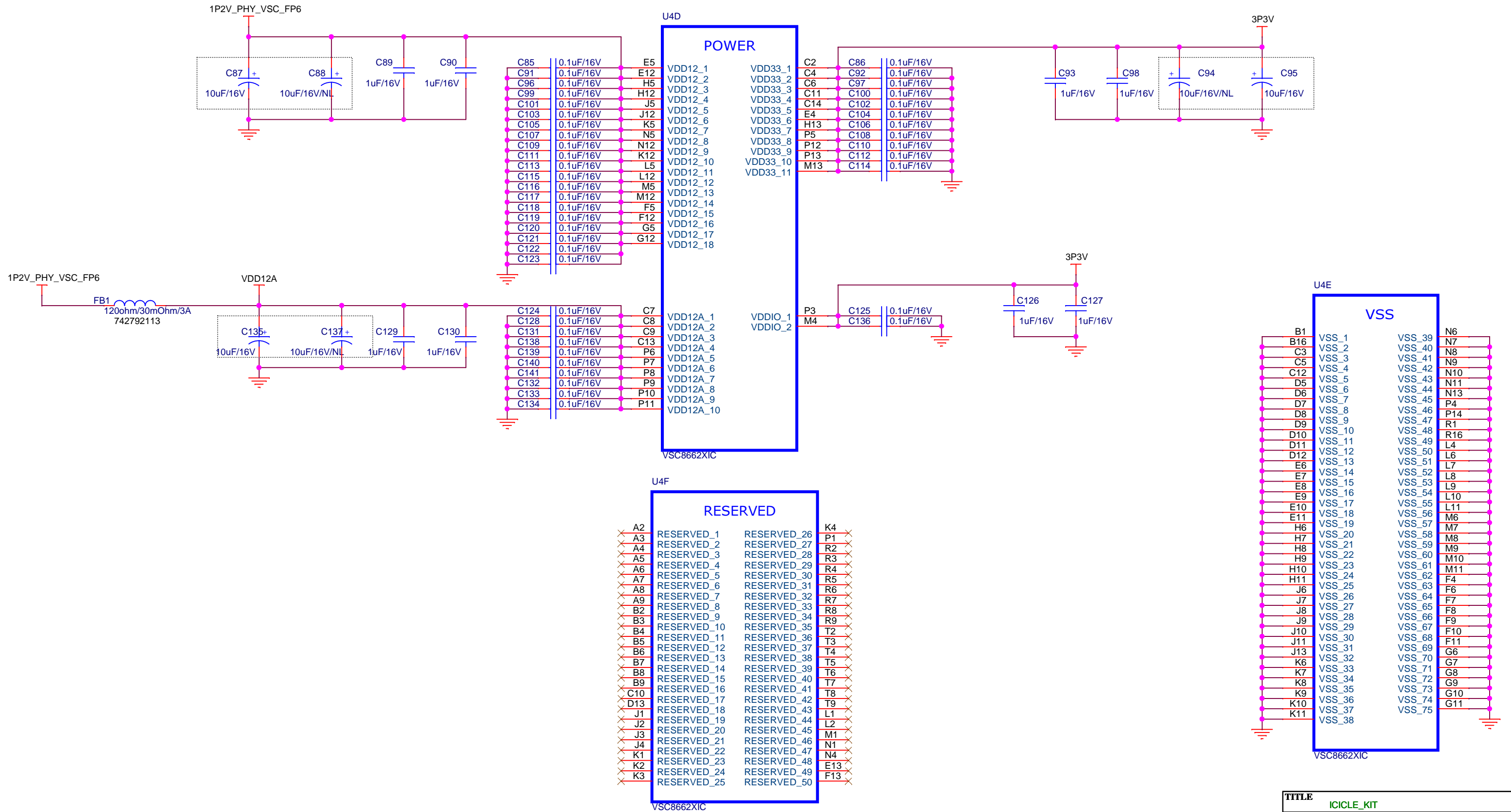
LAYOUT NOTE FOR RC CIRCUIT R24 & C82:

The ground connections of the resistor and the capacitor should each be connected to a shared PCB signal trace, rather than being connected individually to common ground plane. This PCB signal trace should then be connected to a ground plane at a single point. In addition, the reference capacitor and resistor should be placed as close as possible to the VSC8662



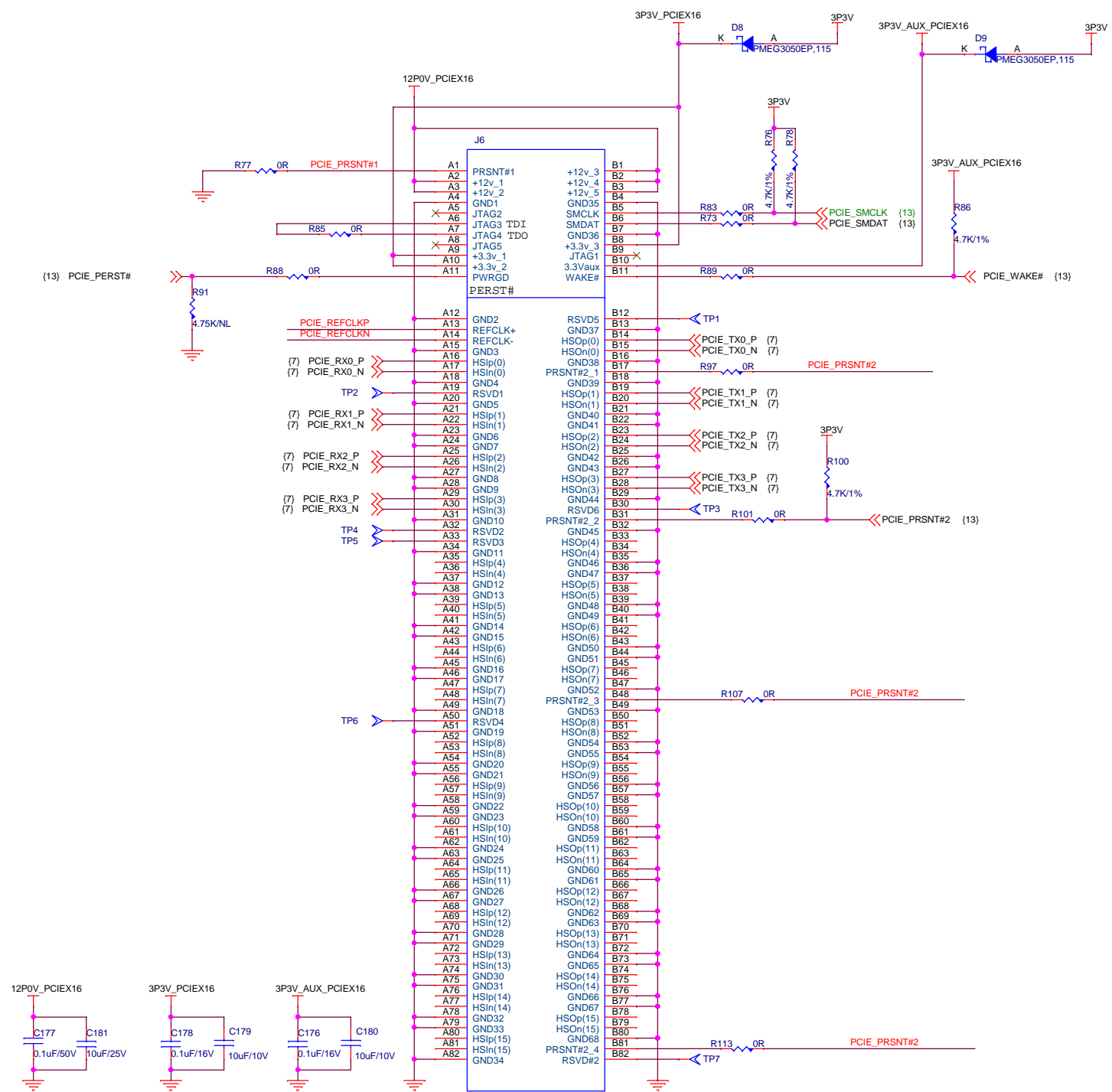
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VSC8662-Power & Ground

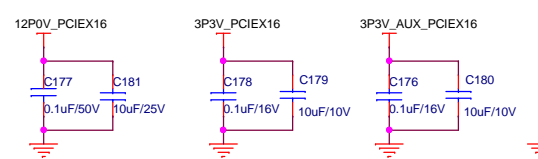


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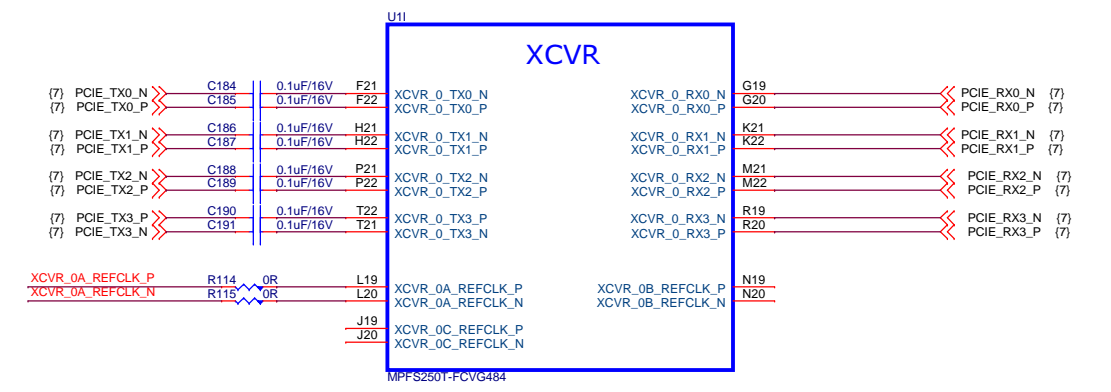
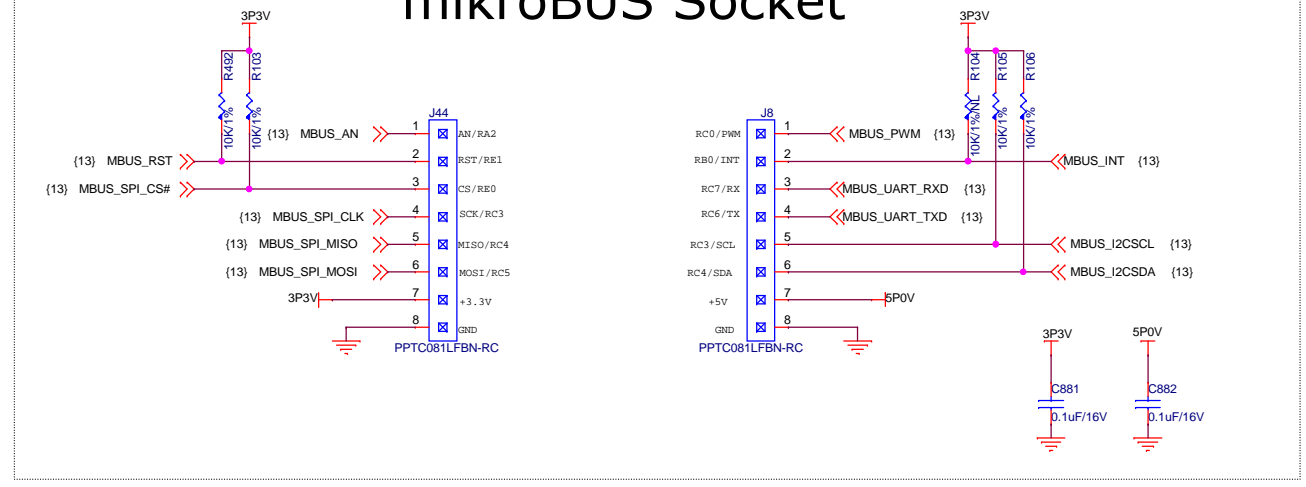
PCIEX16 Connection



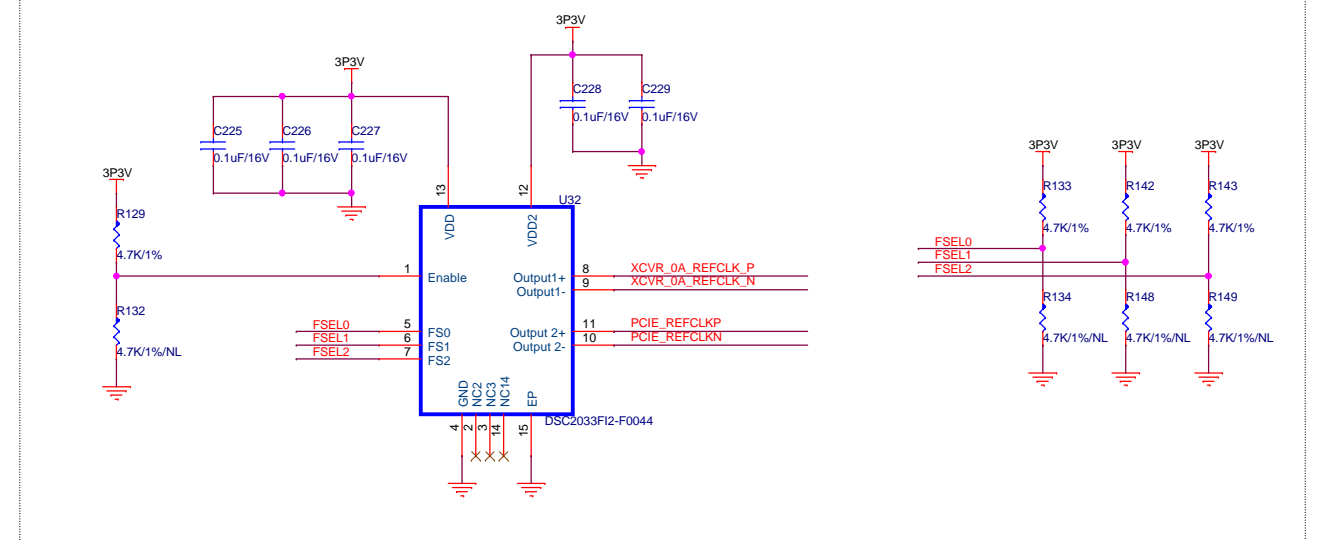
10025026-10103TLF
 Part Number = 10025026-10103TLF
 Manufacturer = Amphenol ICC (FCI)
Straddle Mount



mikroBUS Socket

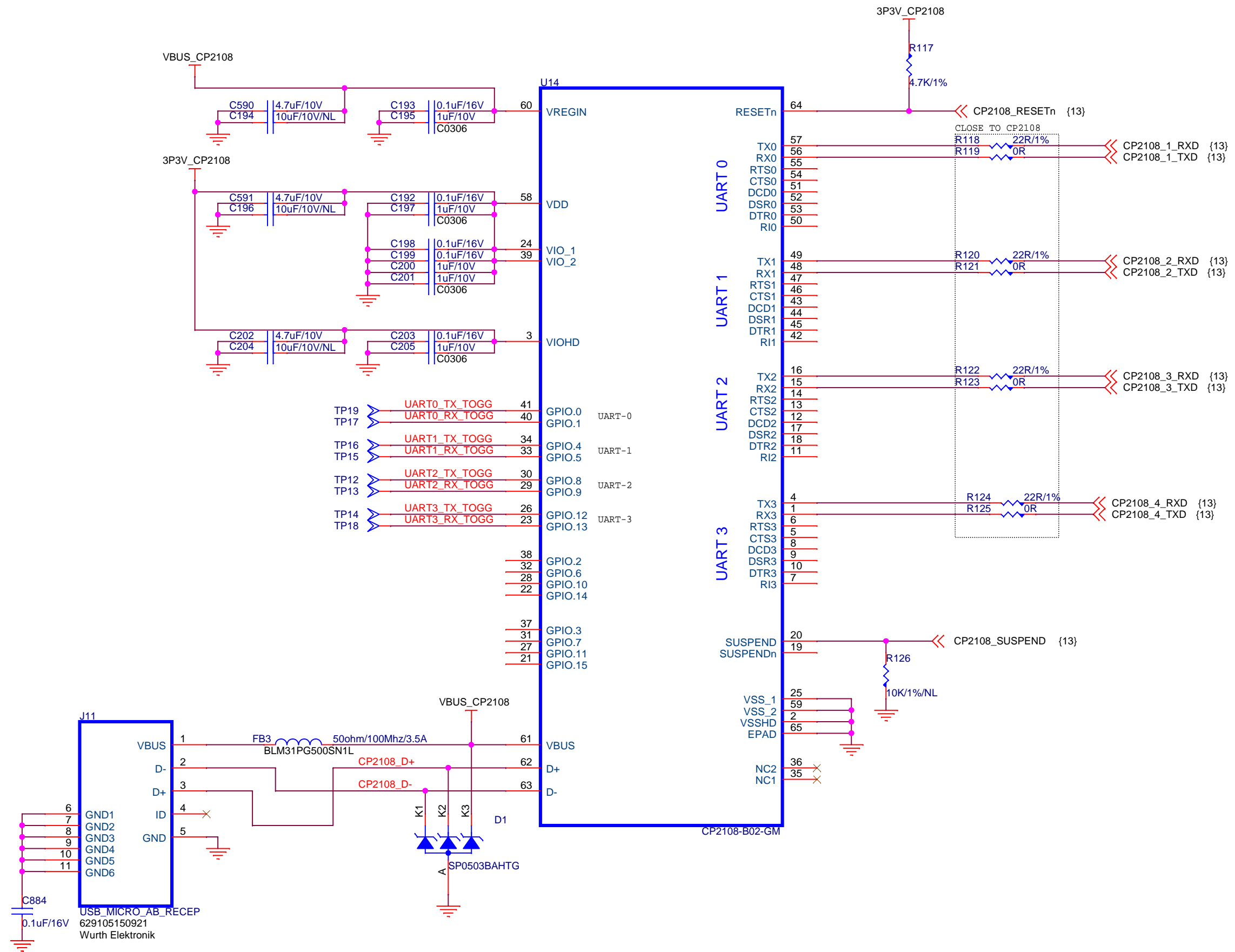


CLOCK BUFFER - 100MHZ



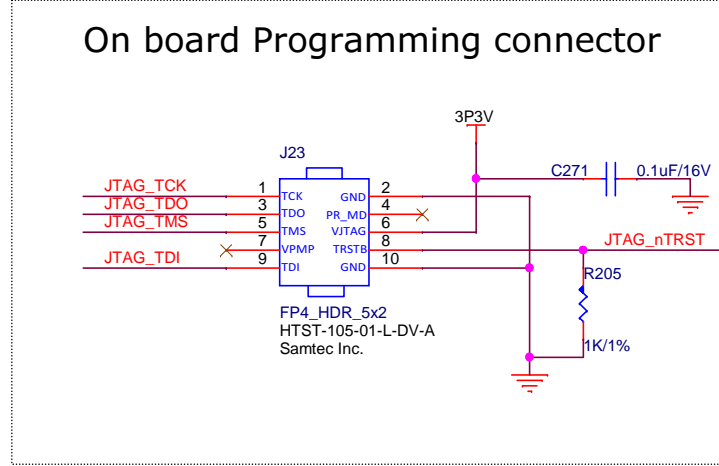
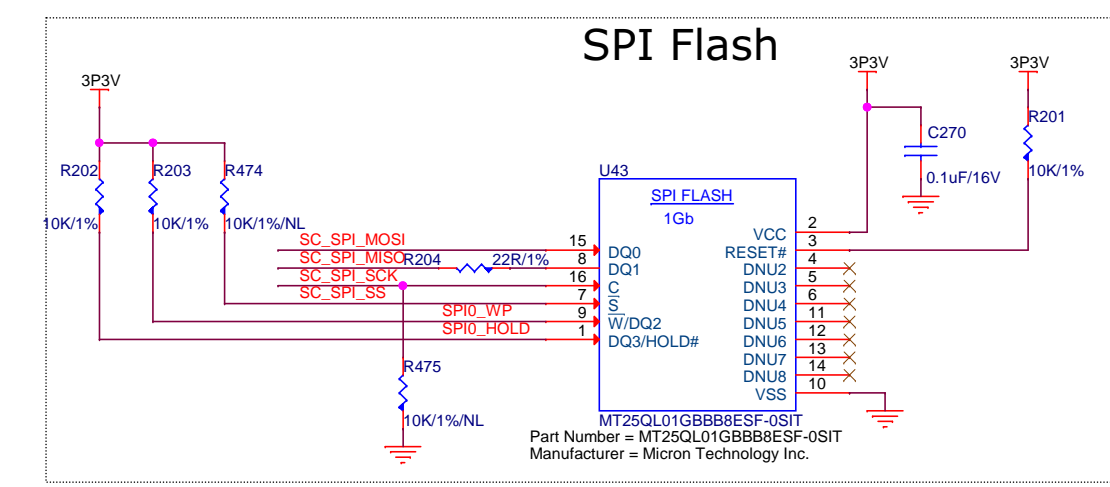
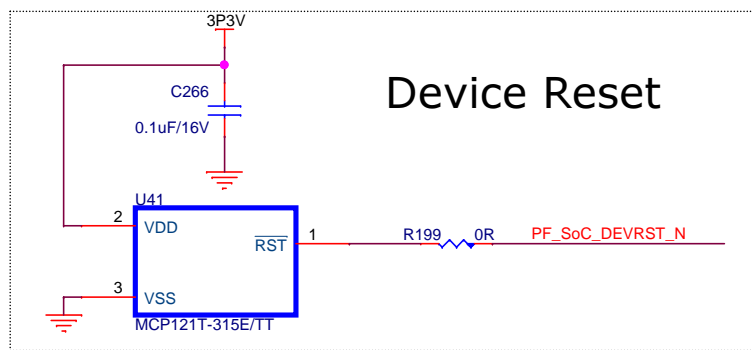
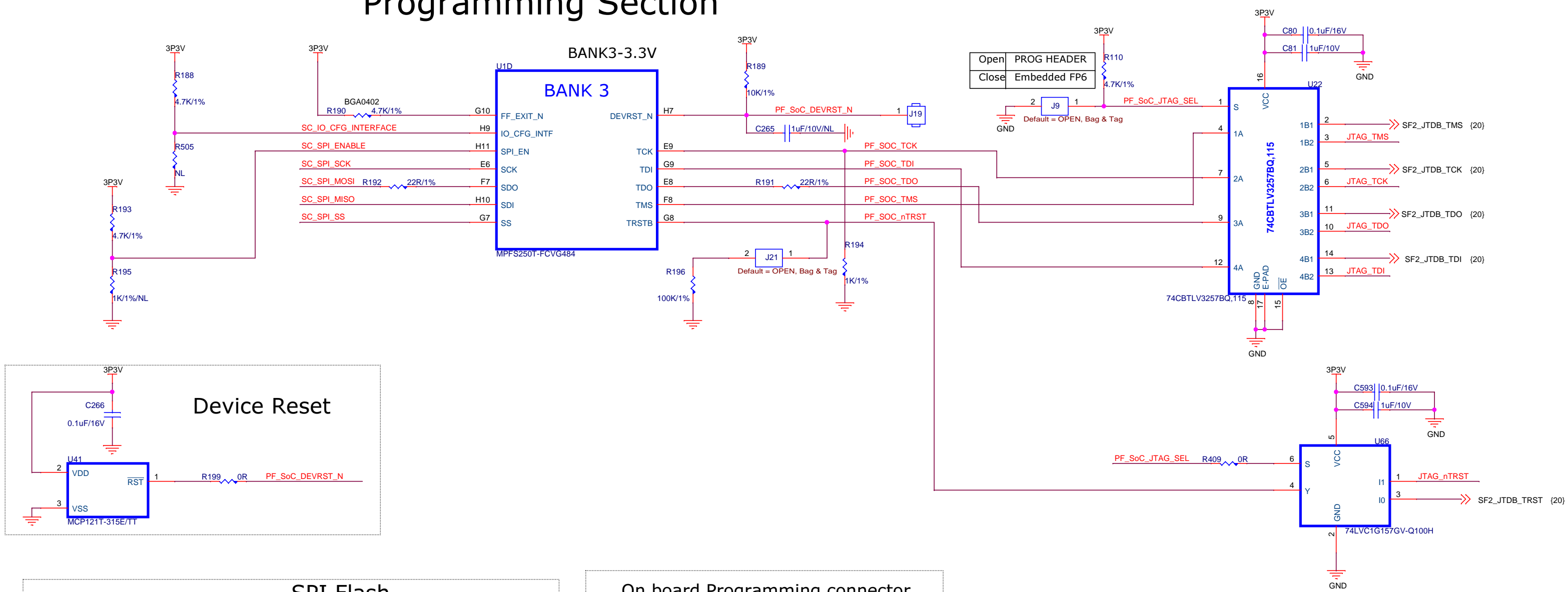
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CP2108 CONNECTION



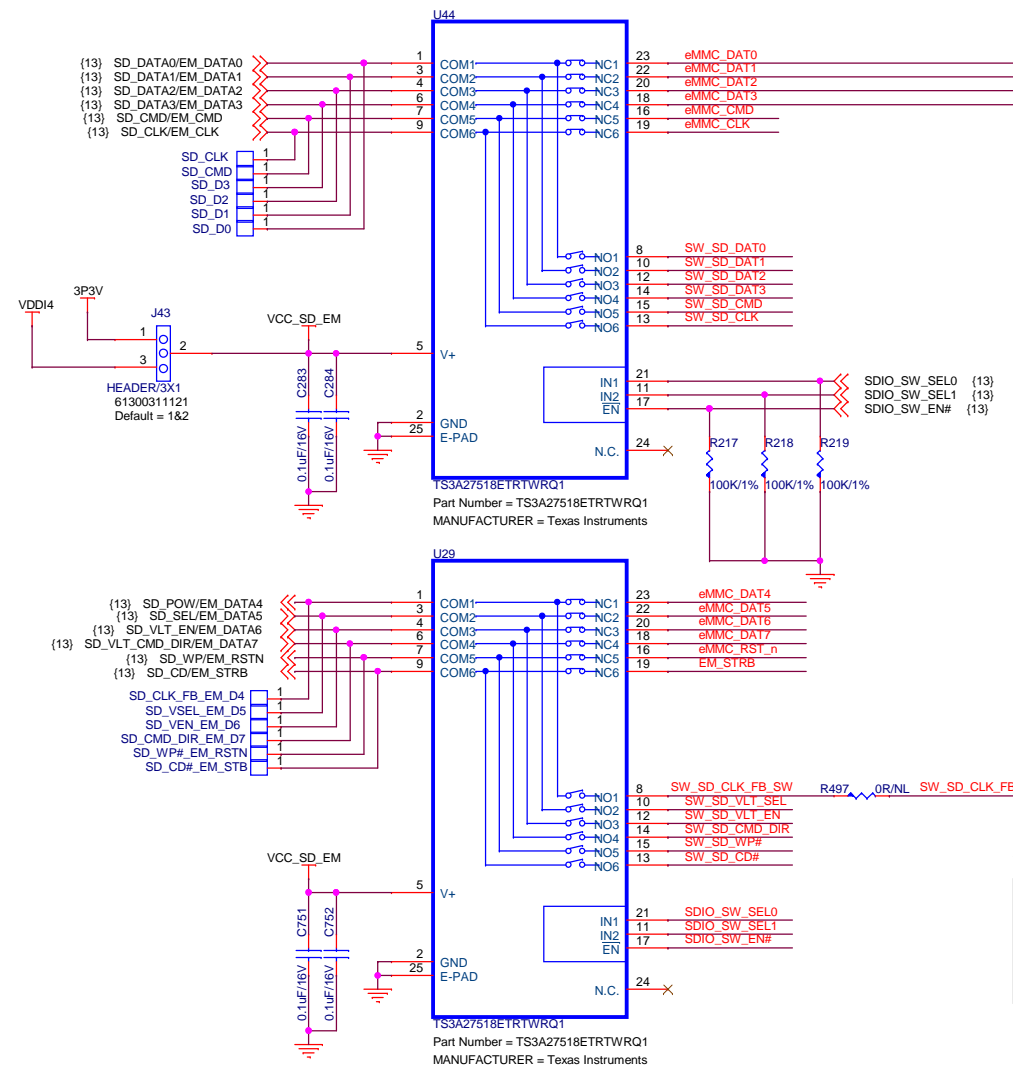
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Programming Section



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SDIO INTERFACE

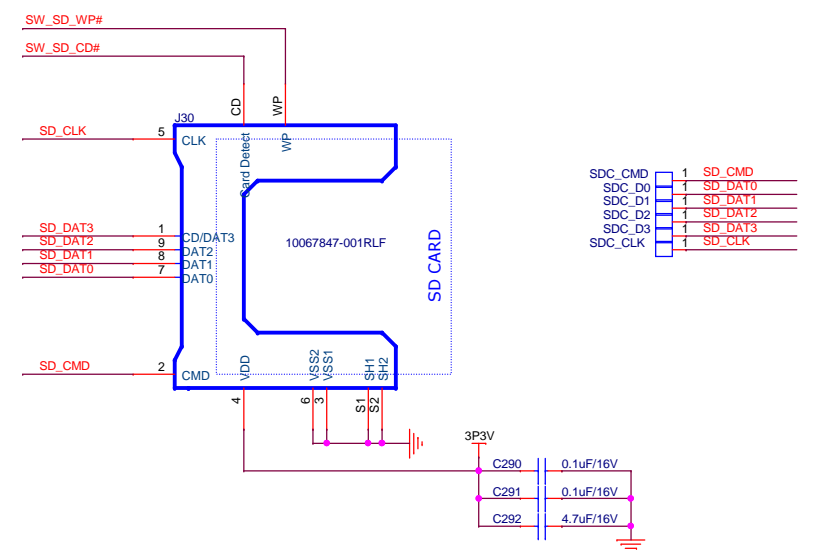
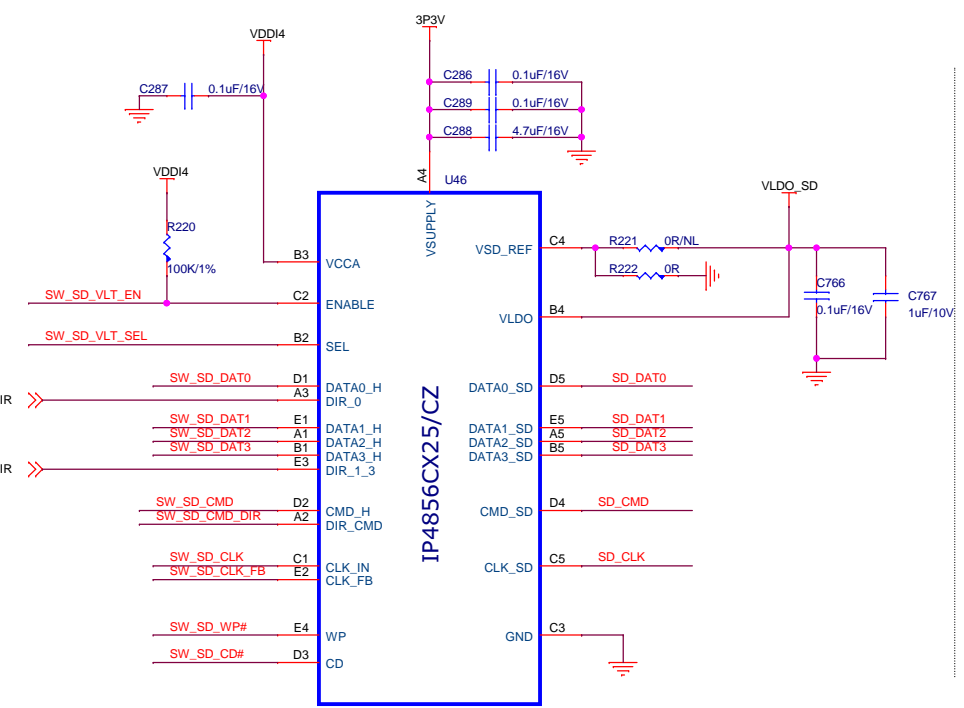
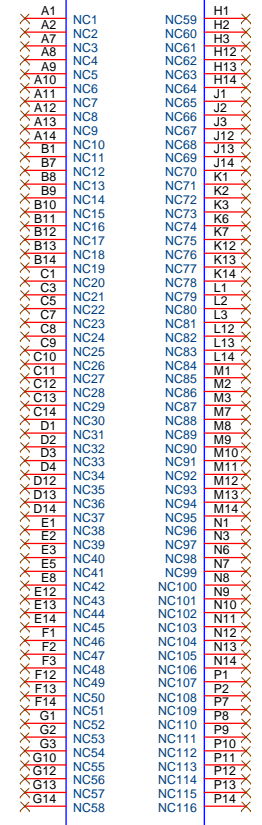
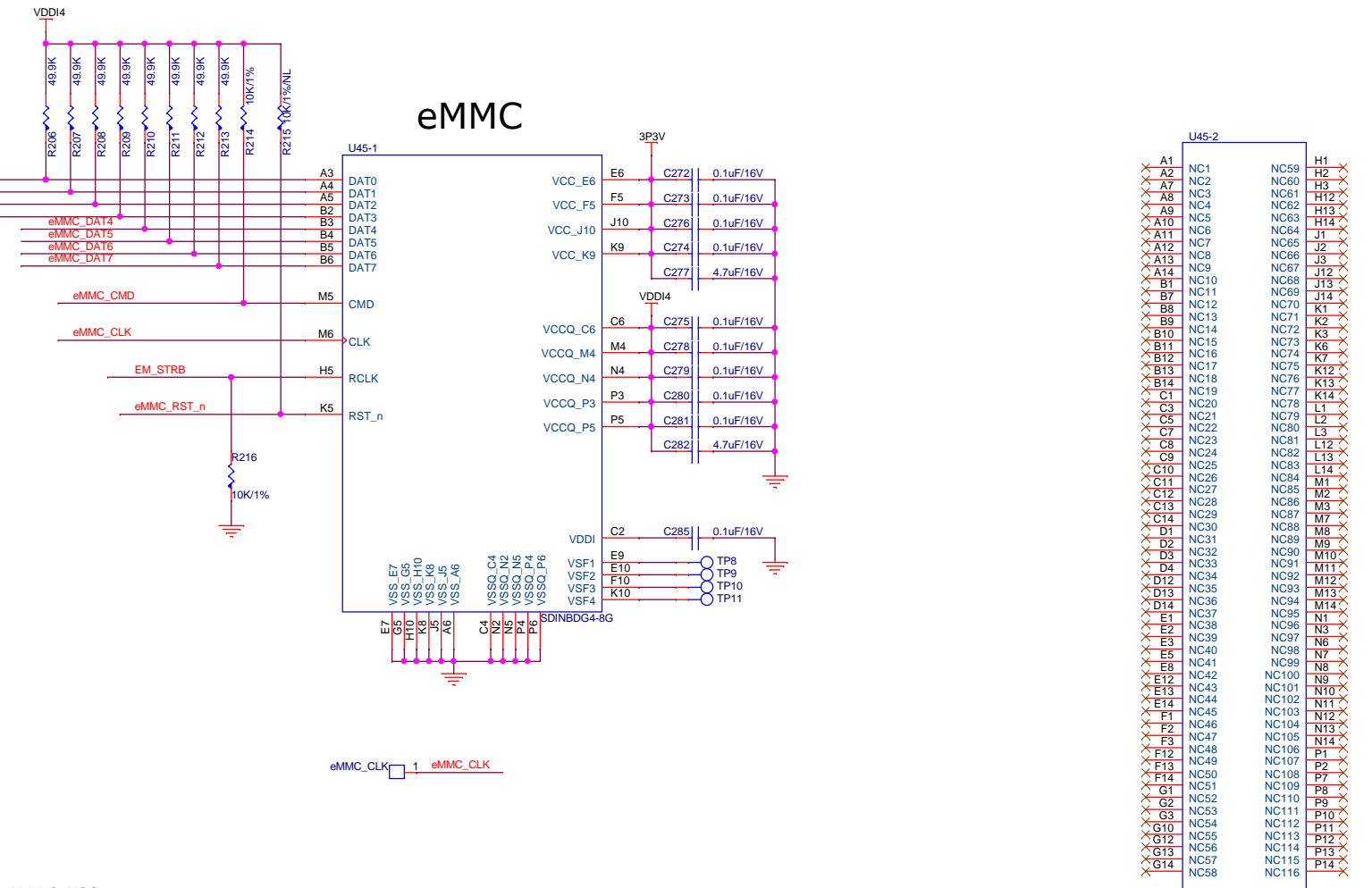


Truth Table for U44 & U29

EN#	IN1	IN2	COM-NC	COM-NO
H	X	X	OFF	OFF
L	L	L	ON	OFF
L	H	H	OFF	ON

Default selection is eMMC path (COM-NC)

eMMC

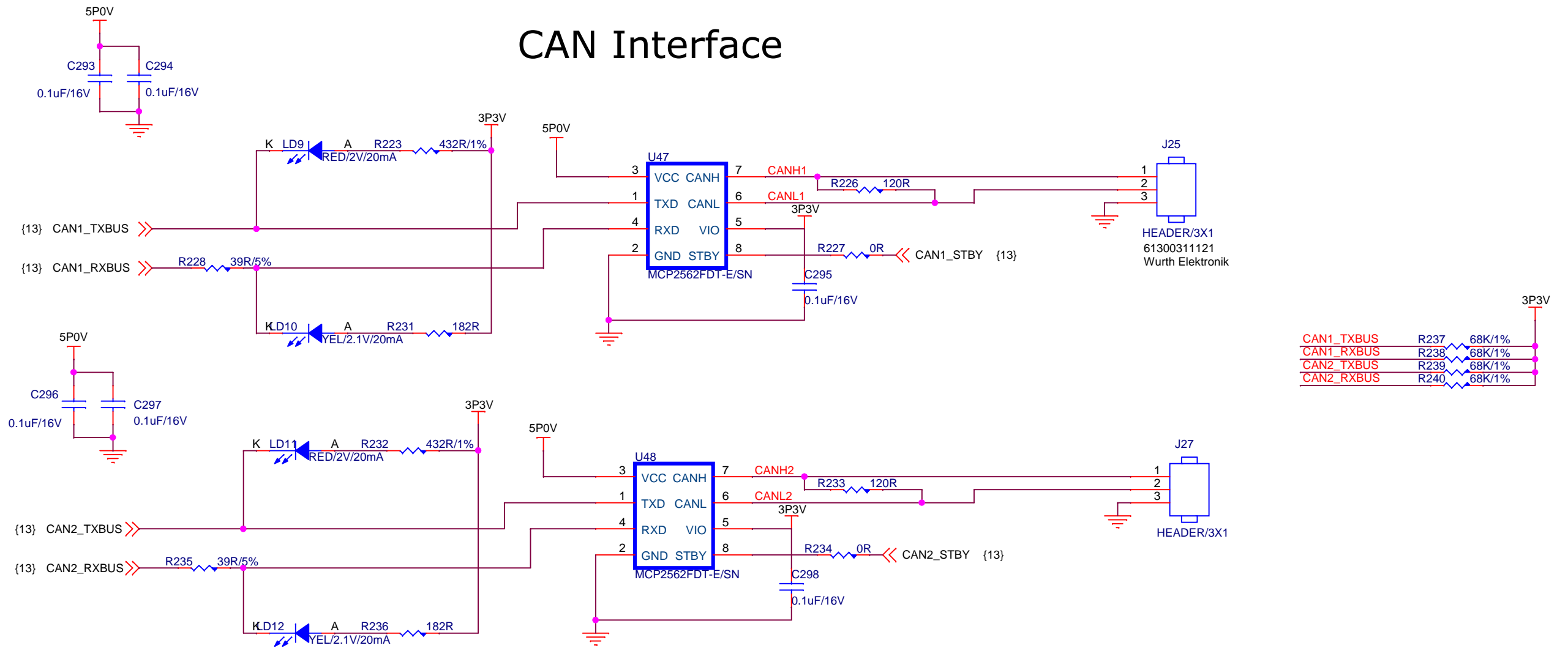


SEL-H- 1.8V Operation
SEL-L- 3V Operation

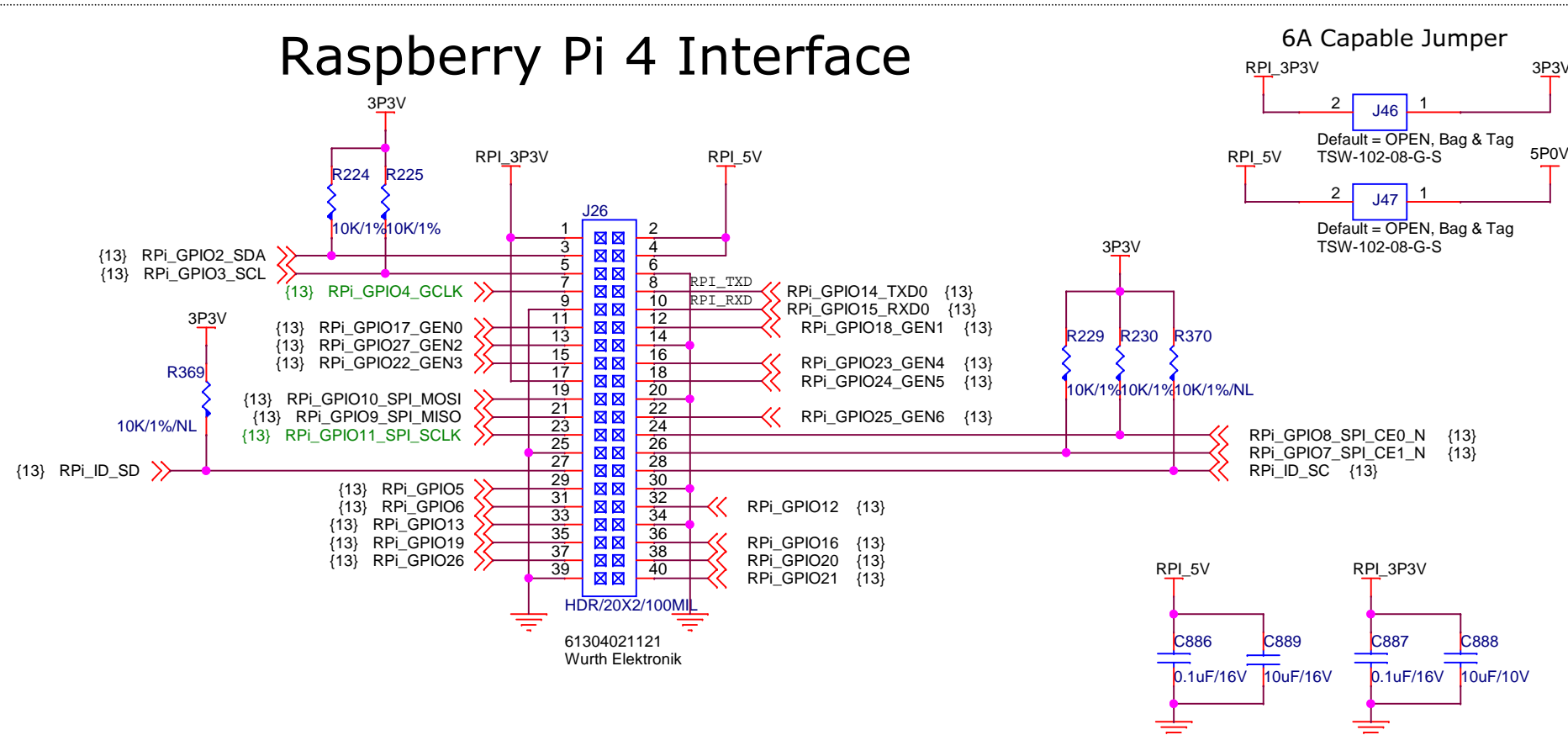


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CAN Interface

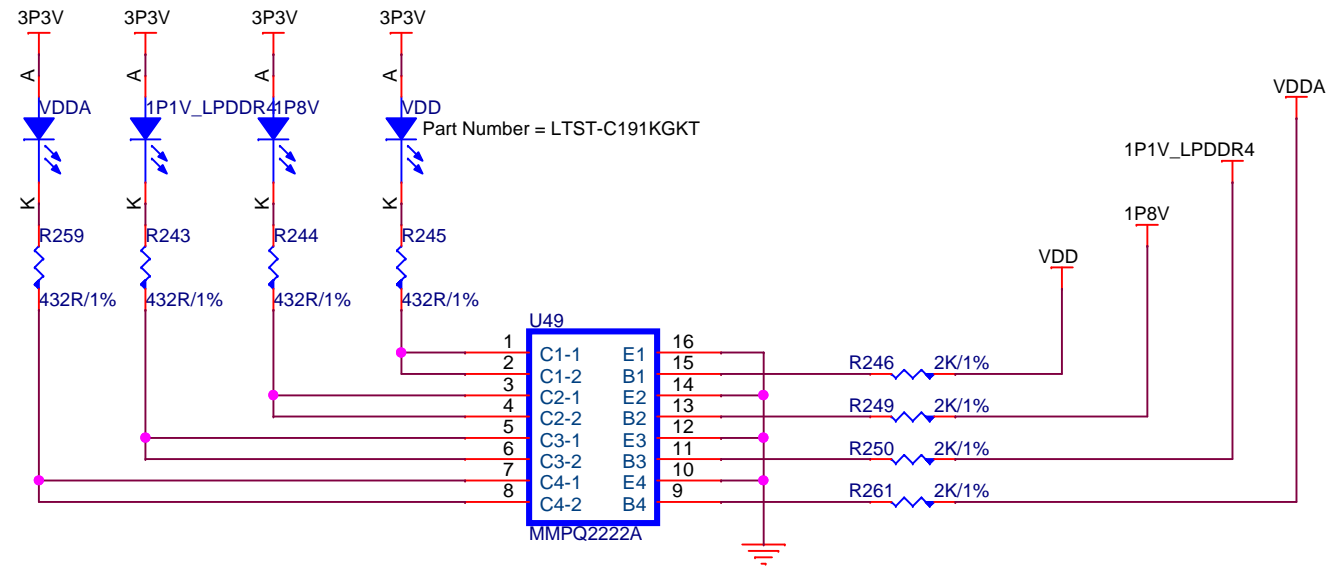


Raspberry Pi 4 Interface

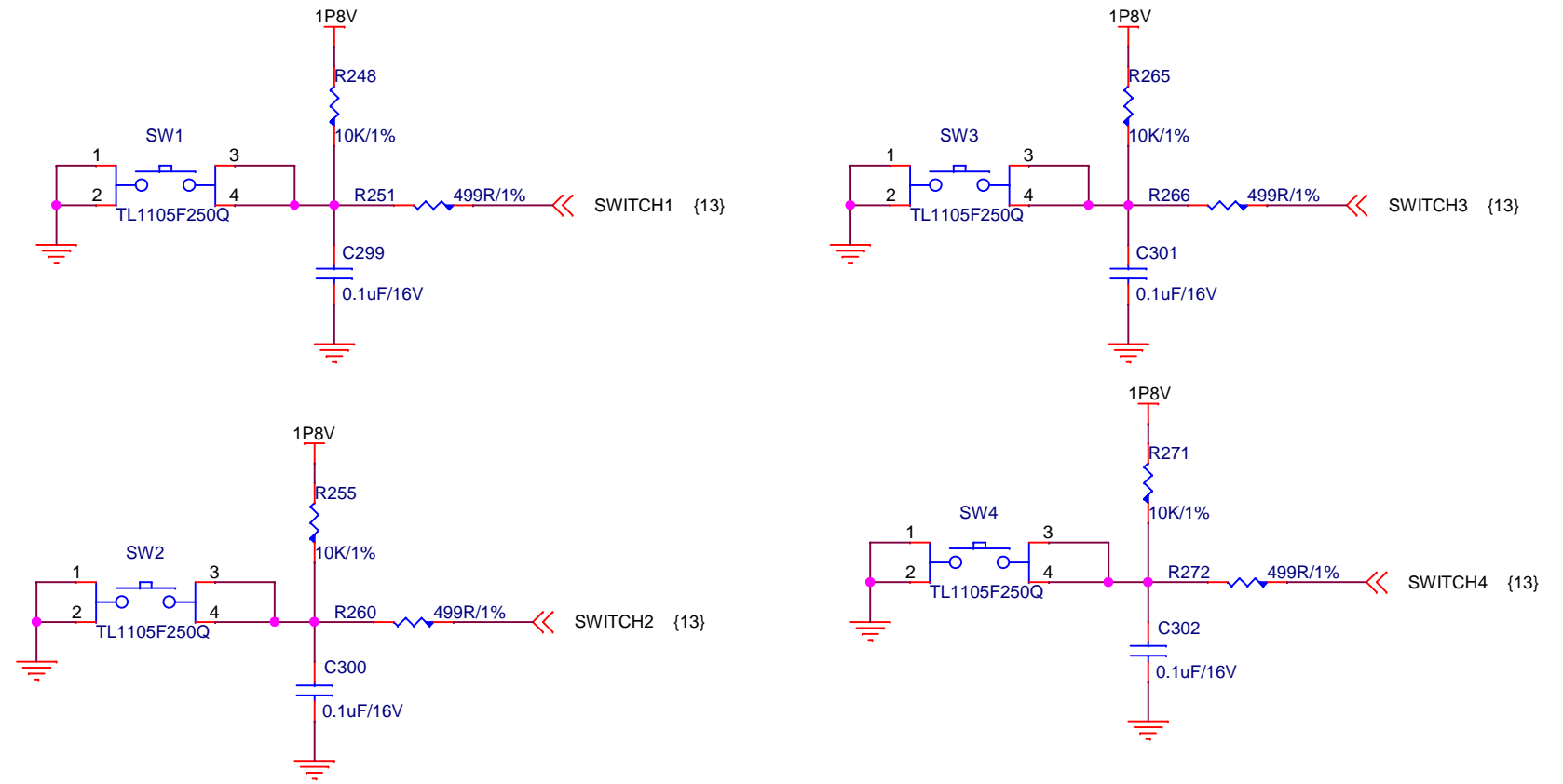


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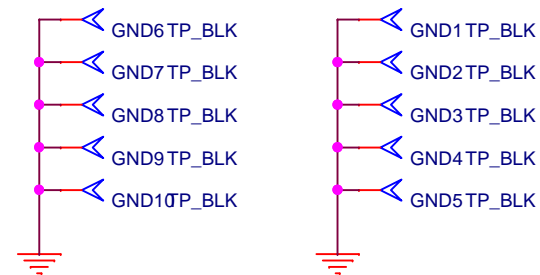
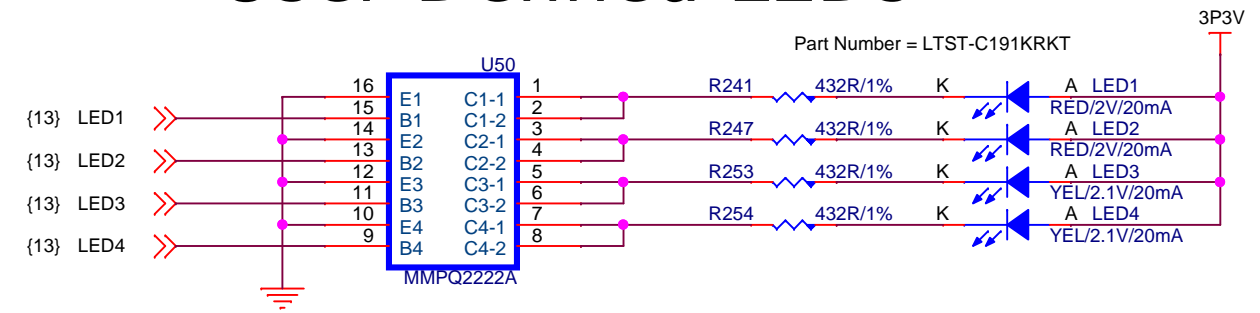
Power LEDs



Debug Circuitry

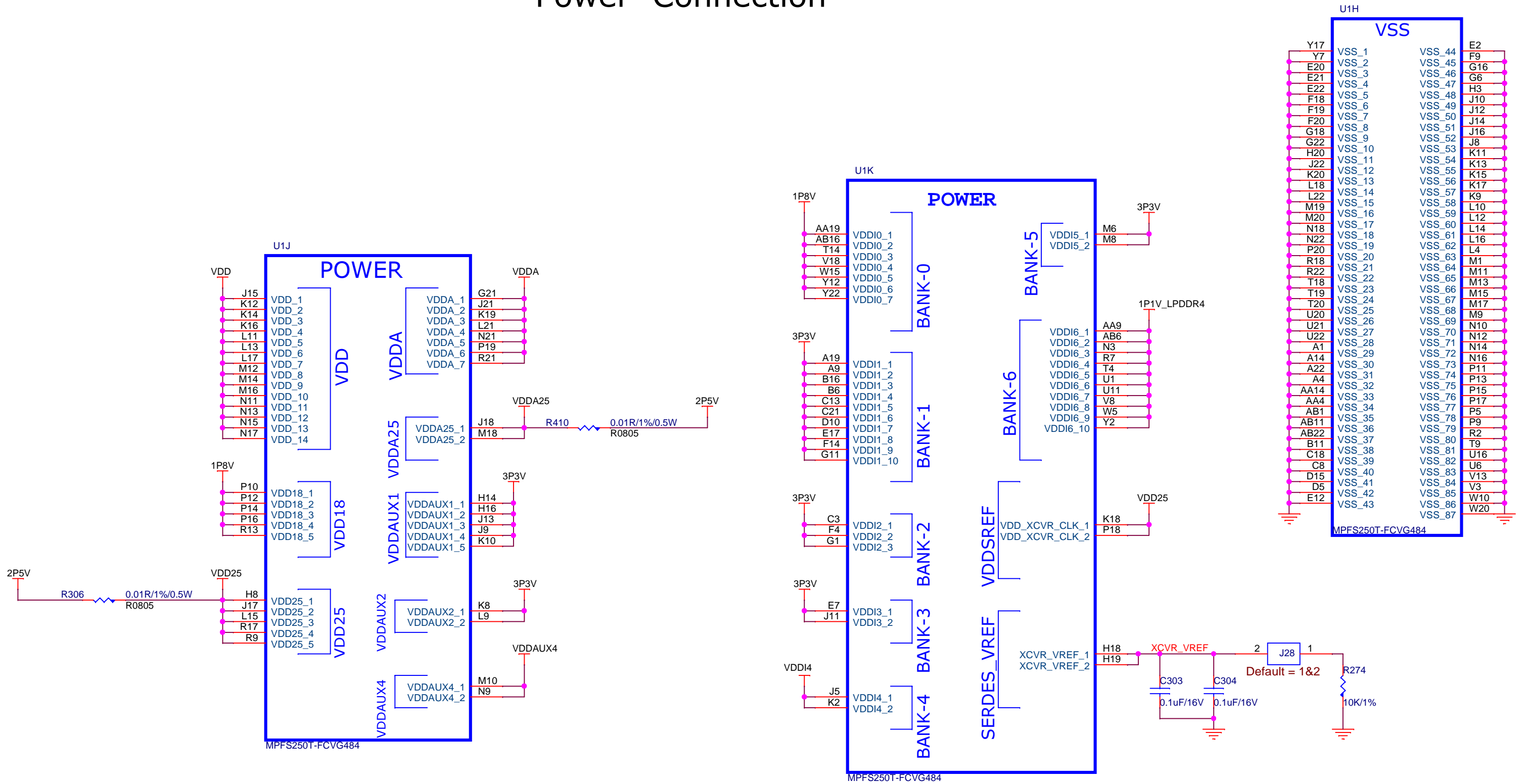


User Defined LEDs



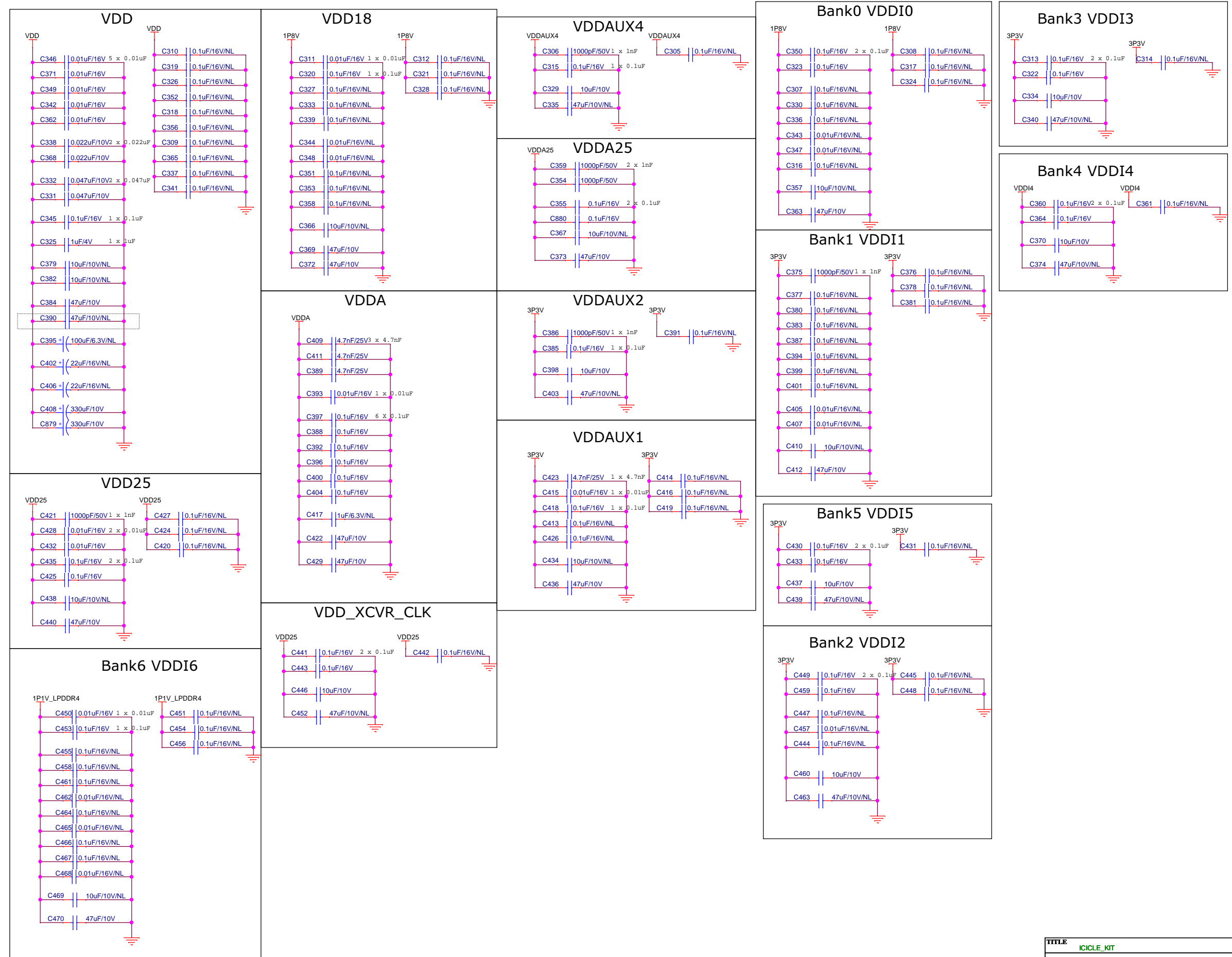
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Power Connection



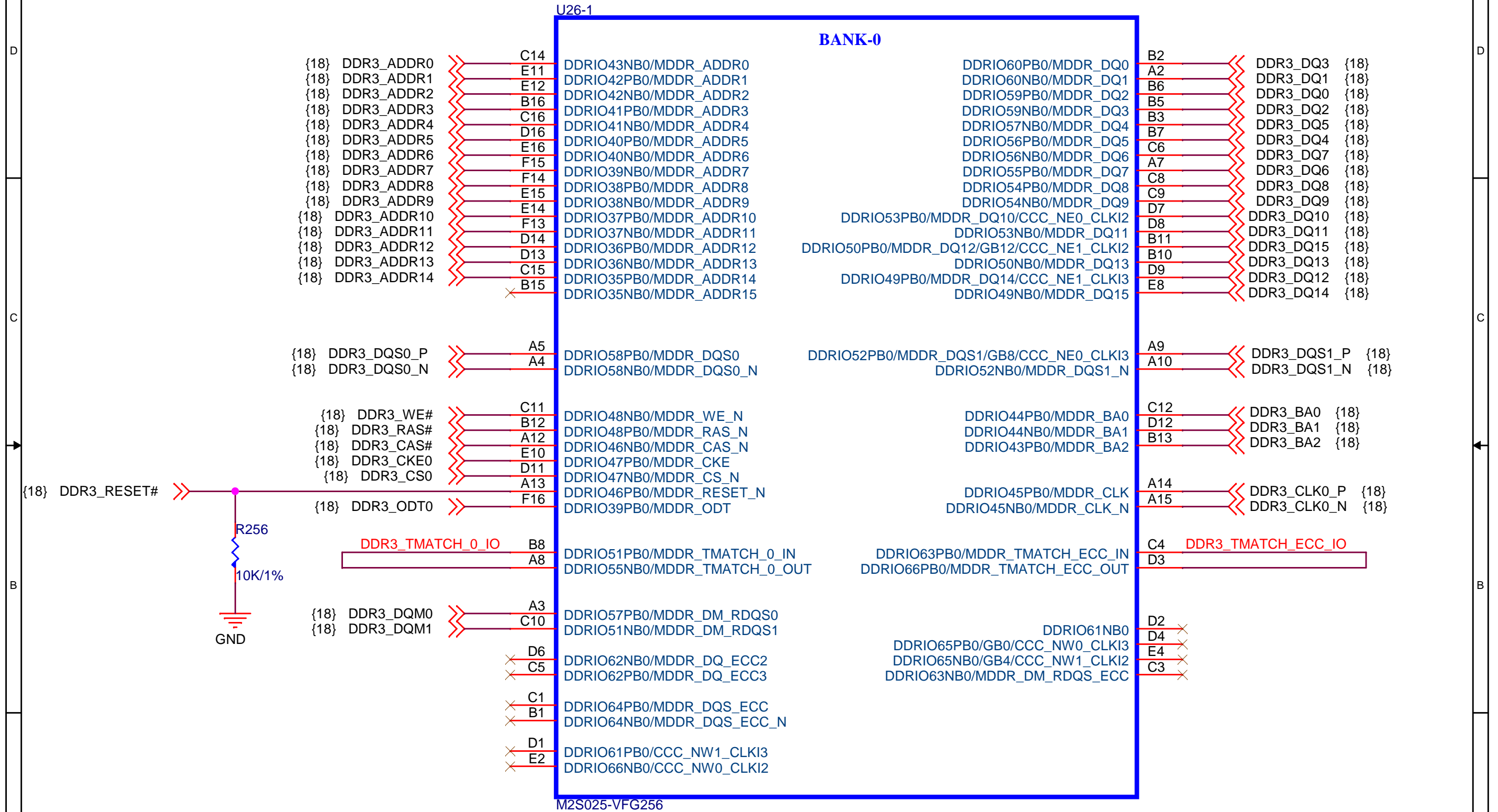
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Decoupling Capacitors



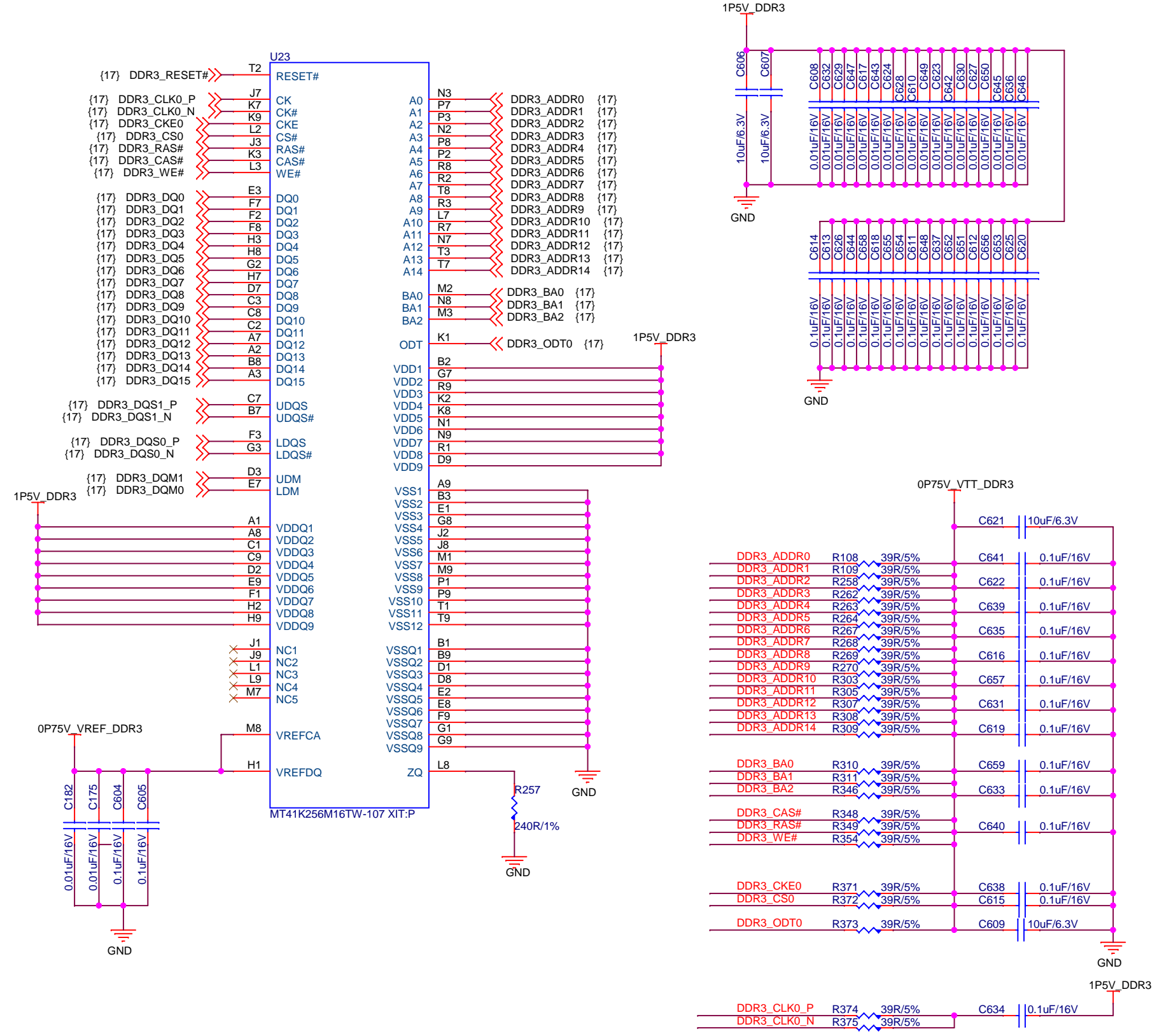
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BANK0 - DDR3



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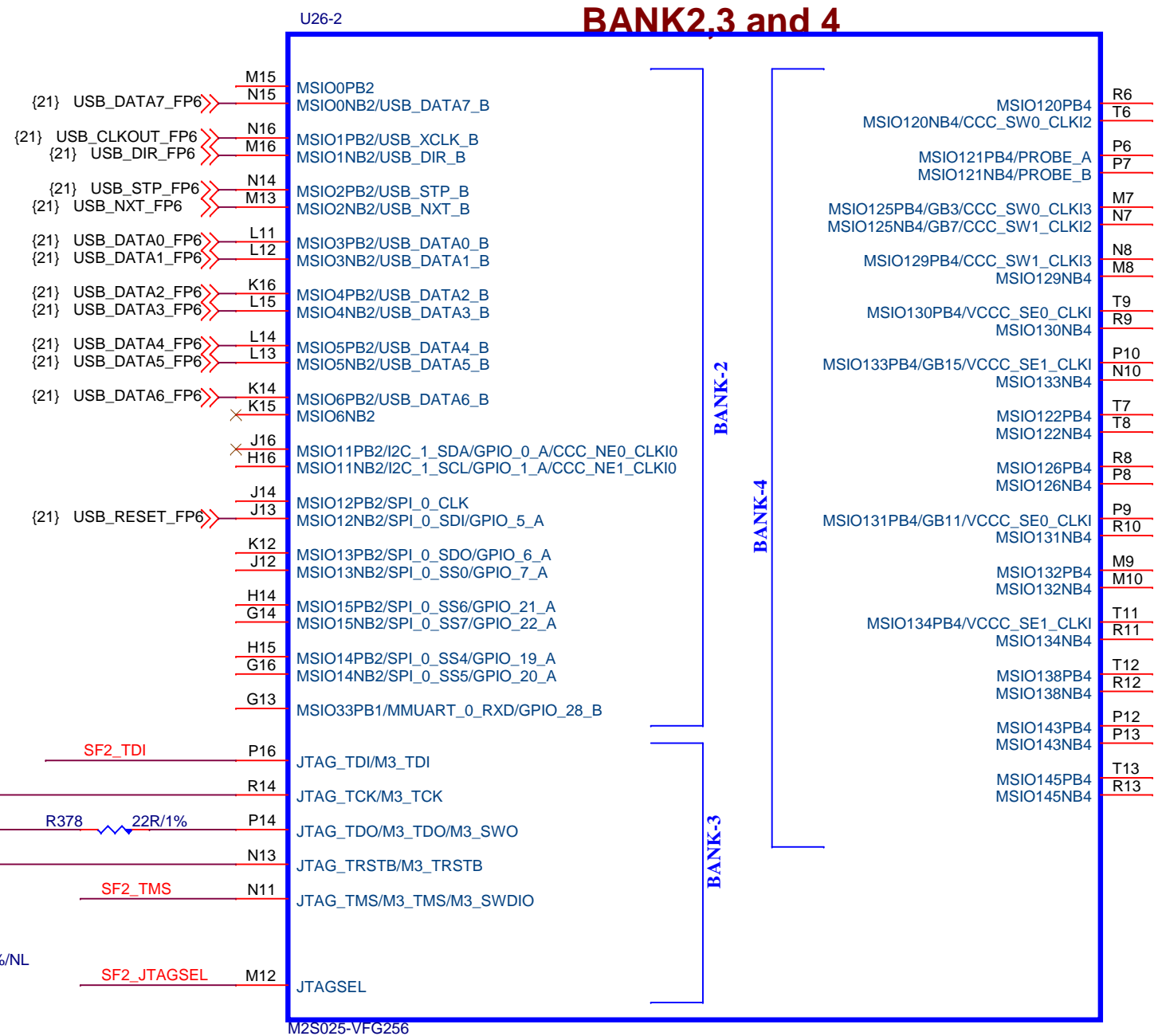
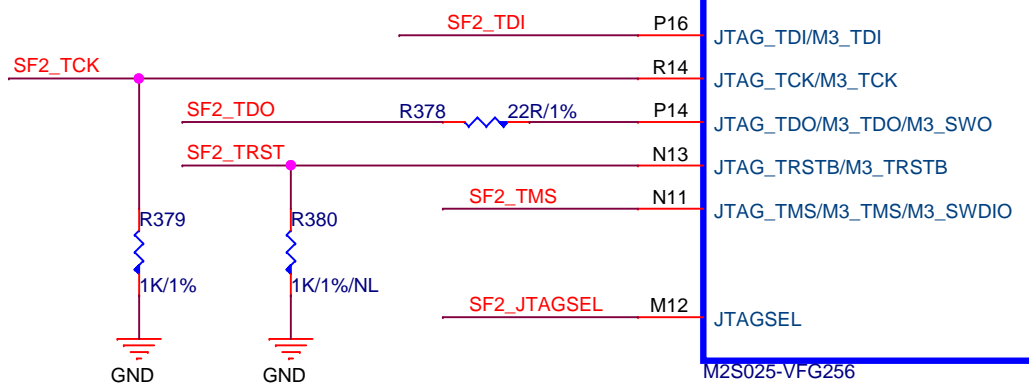
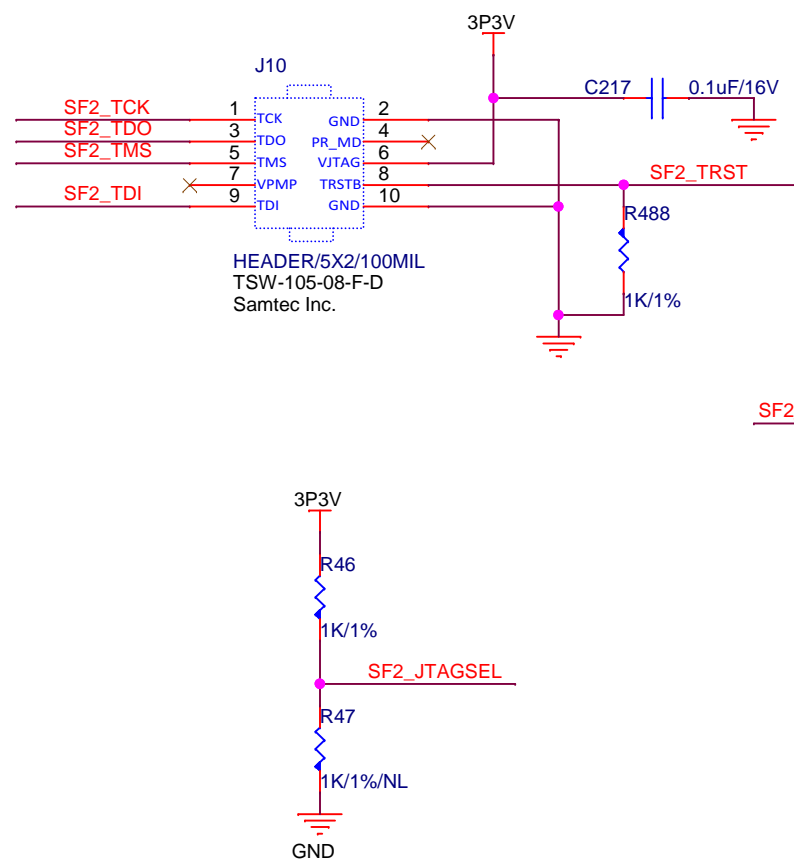
DDR3 MEMORY -BANK0



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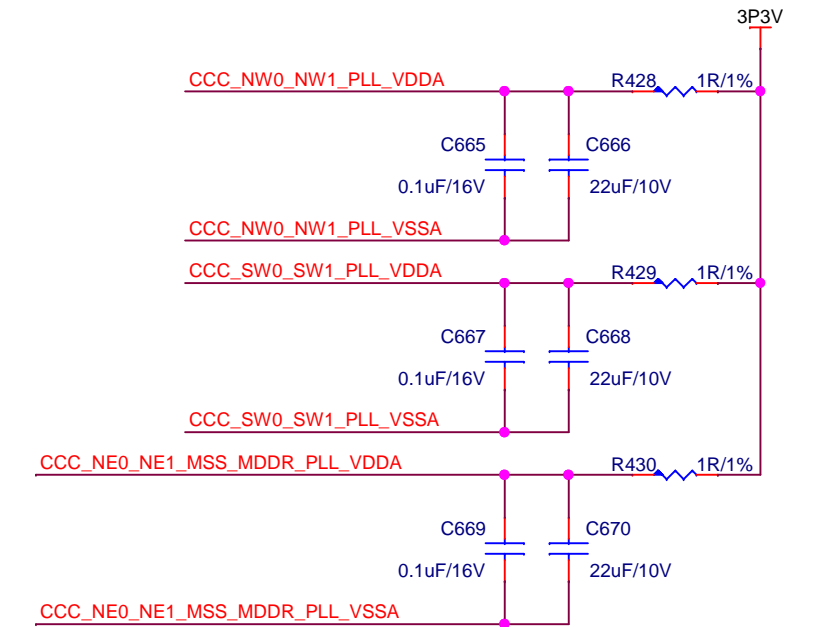
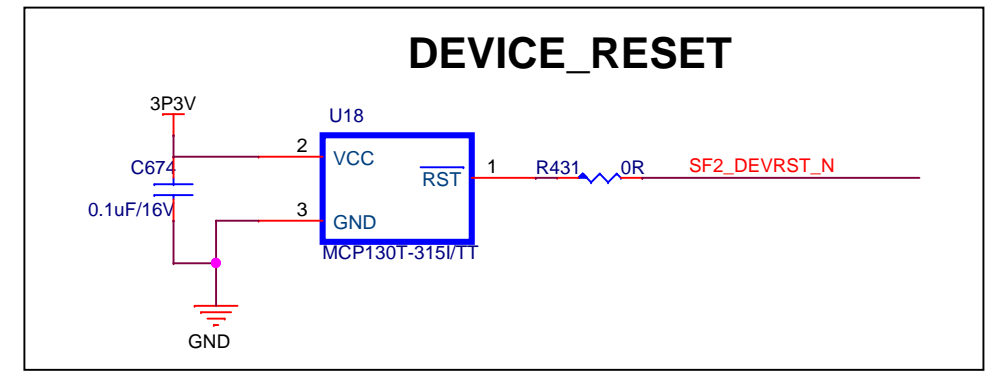
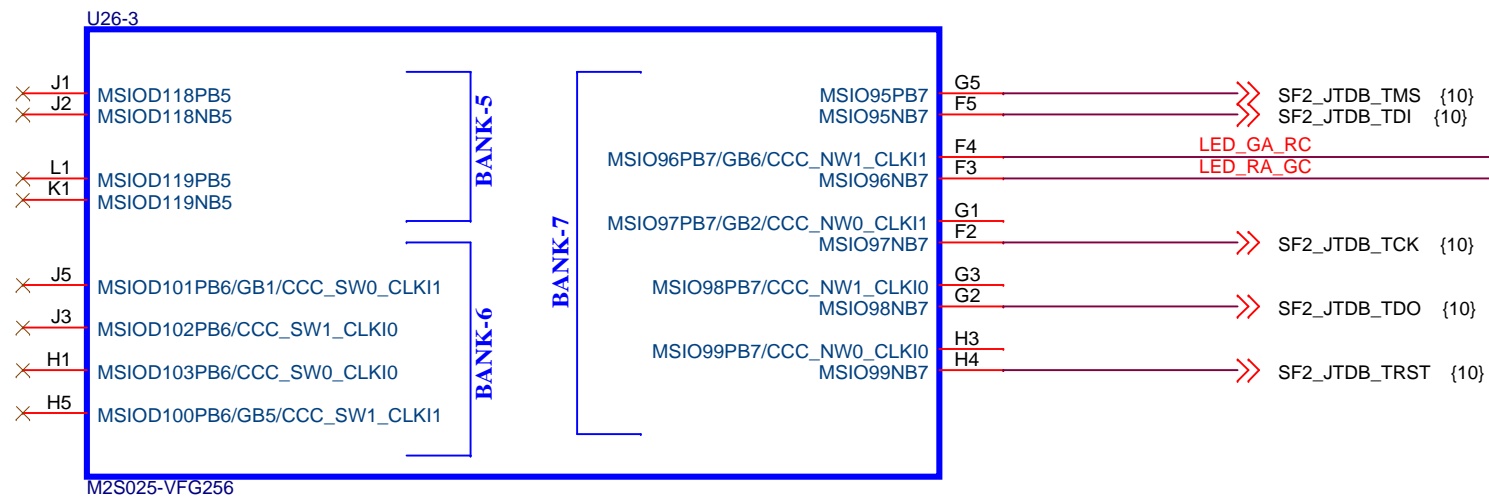
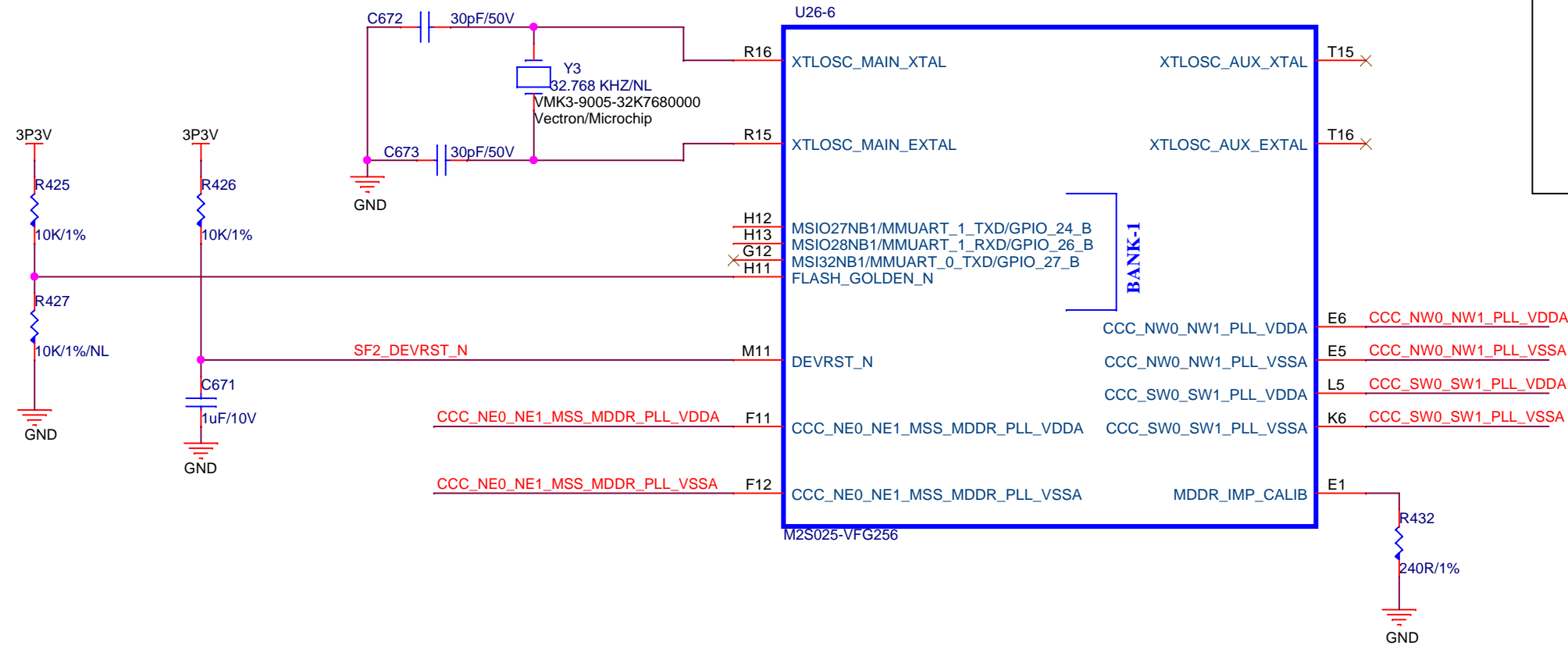


Programming connector for SF2



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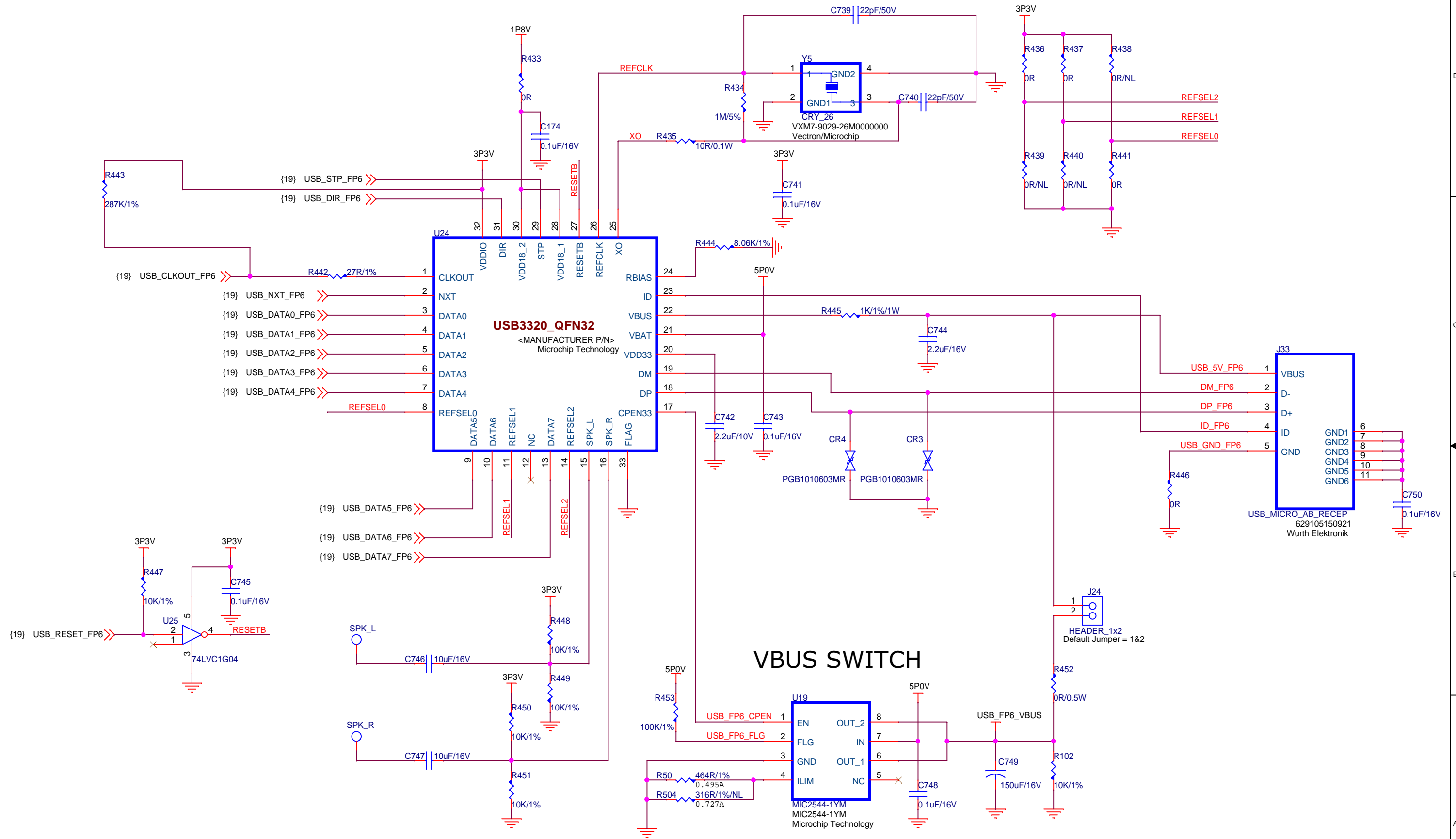
BANK-1,5,6,7 and MISC



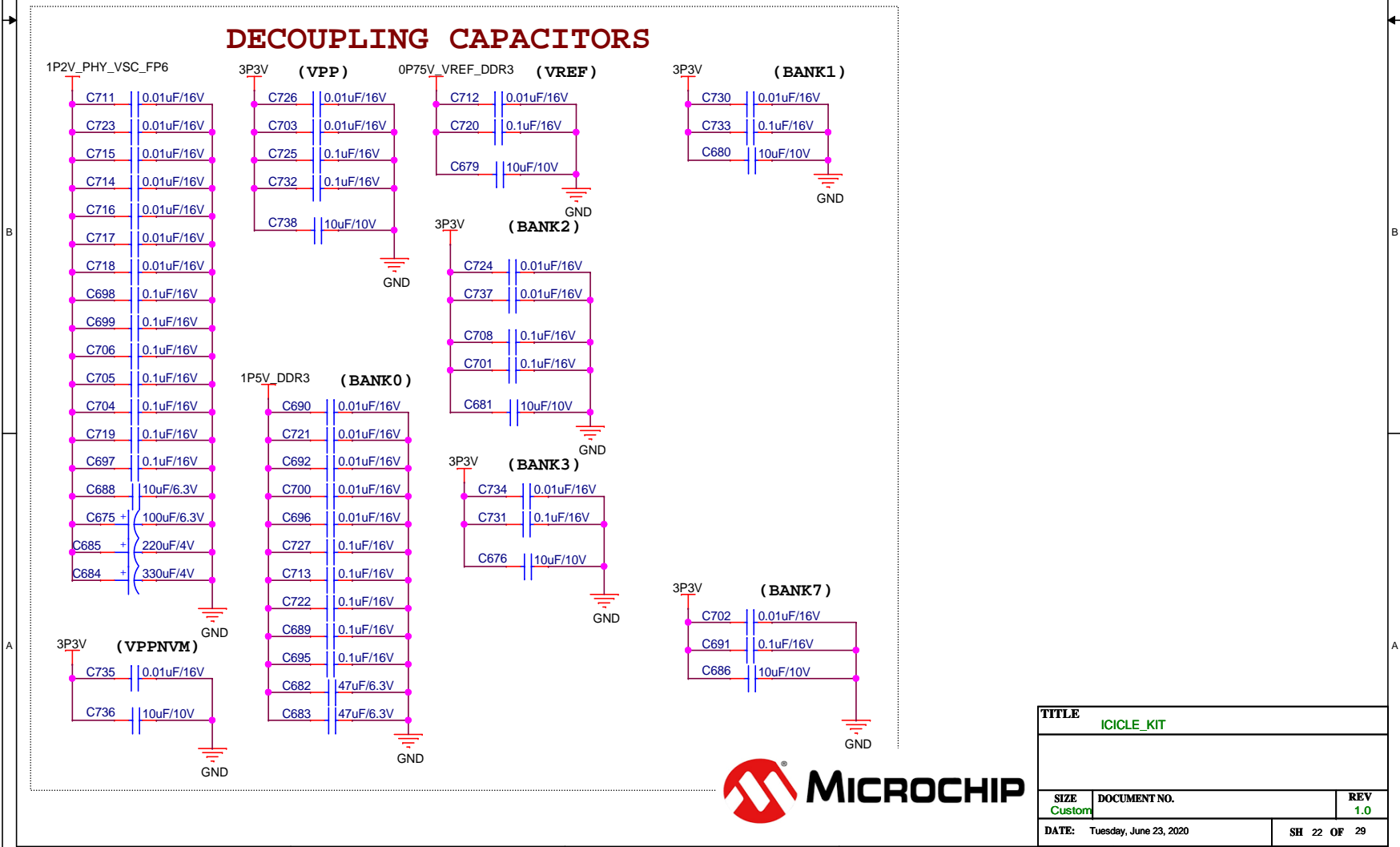
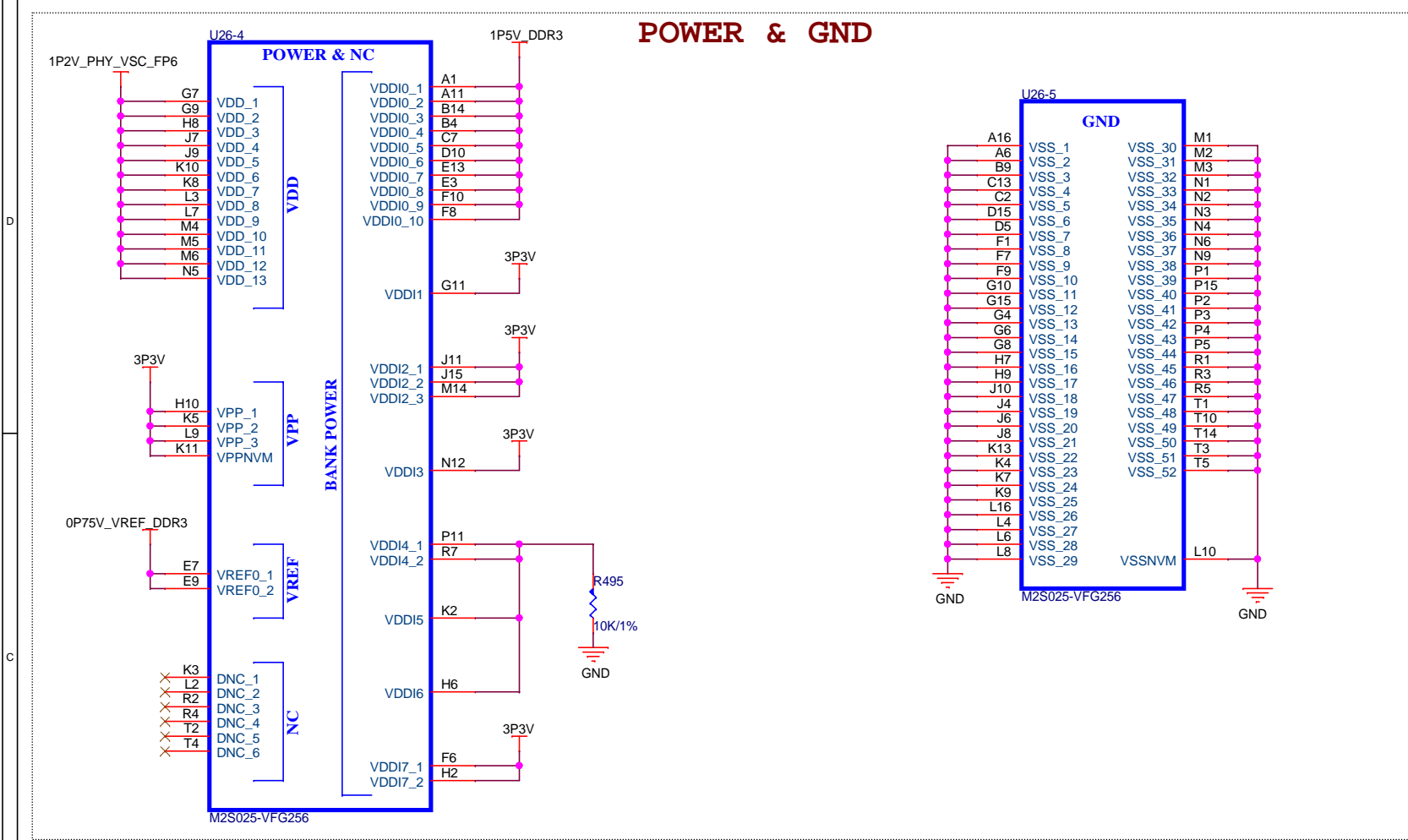
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FP6 - USB Interface

Schematic shows 26.0 MHz Configuration.
REFCLK[2:0] = 110

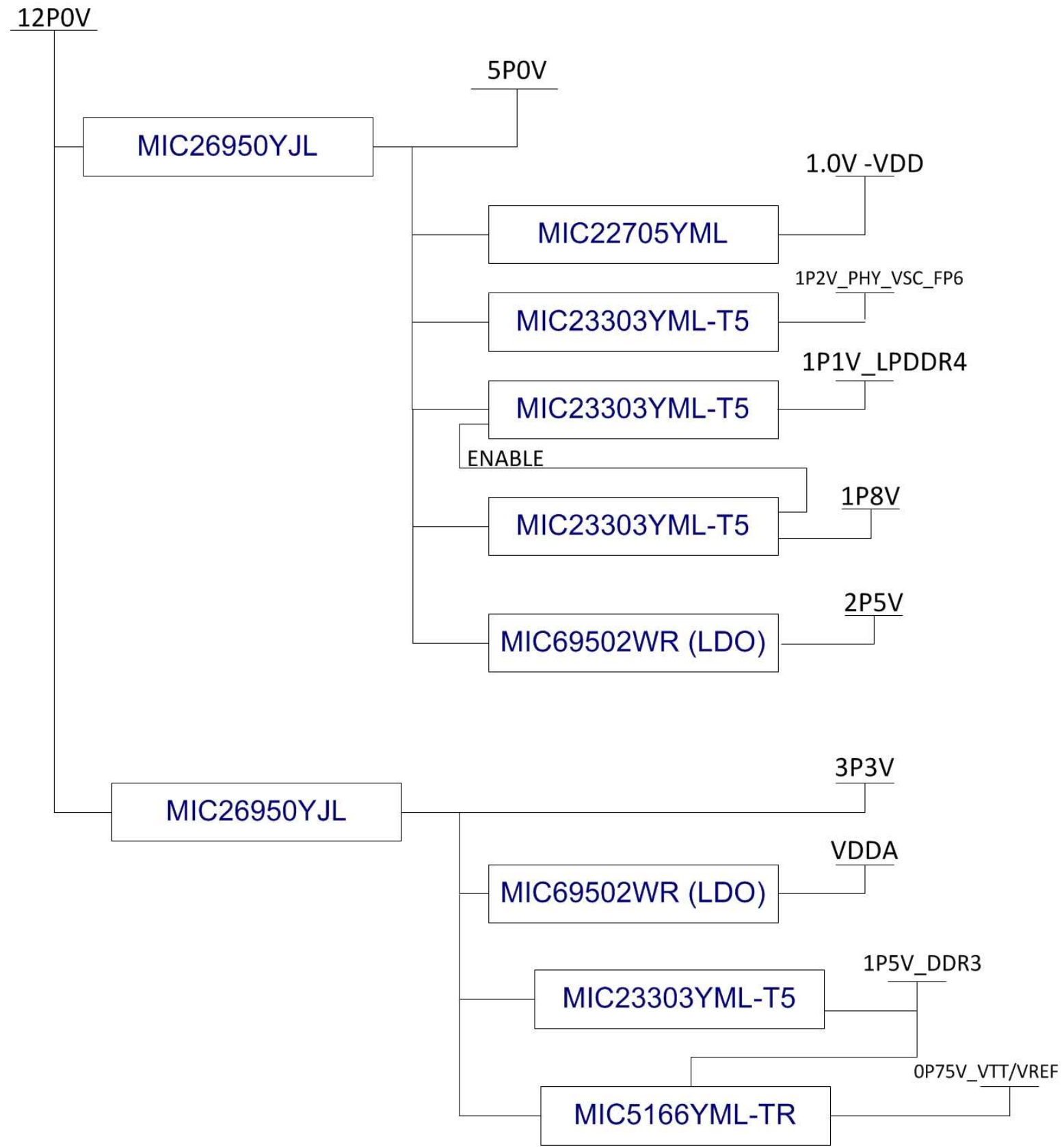


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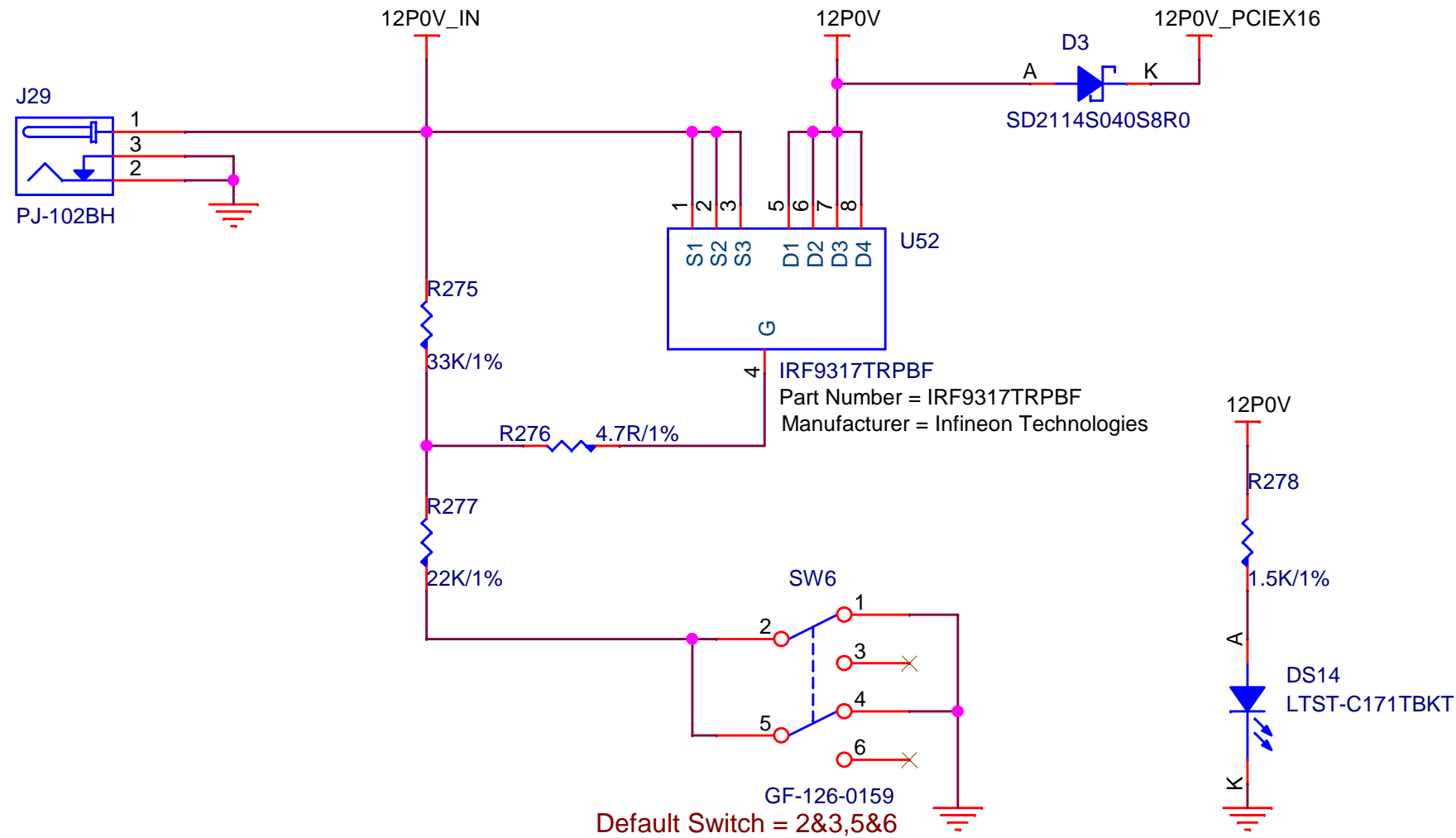
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POWER BLOCK DIAGRAM



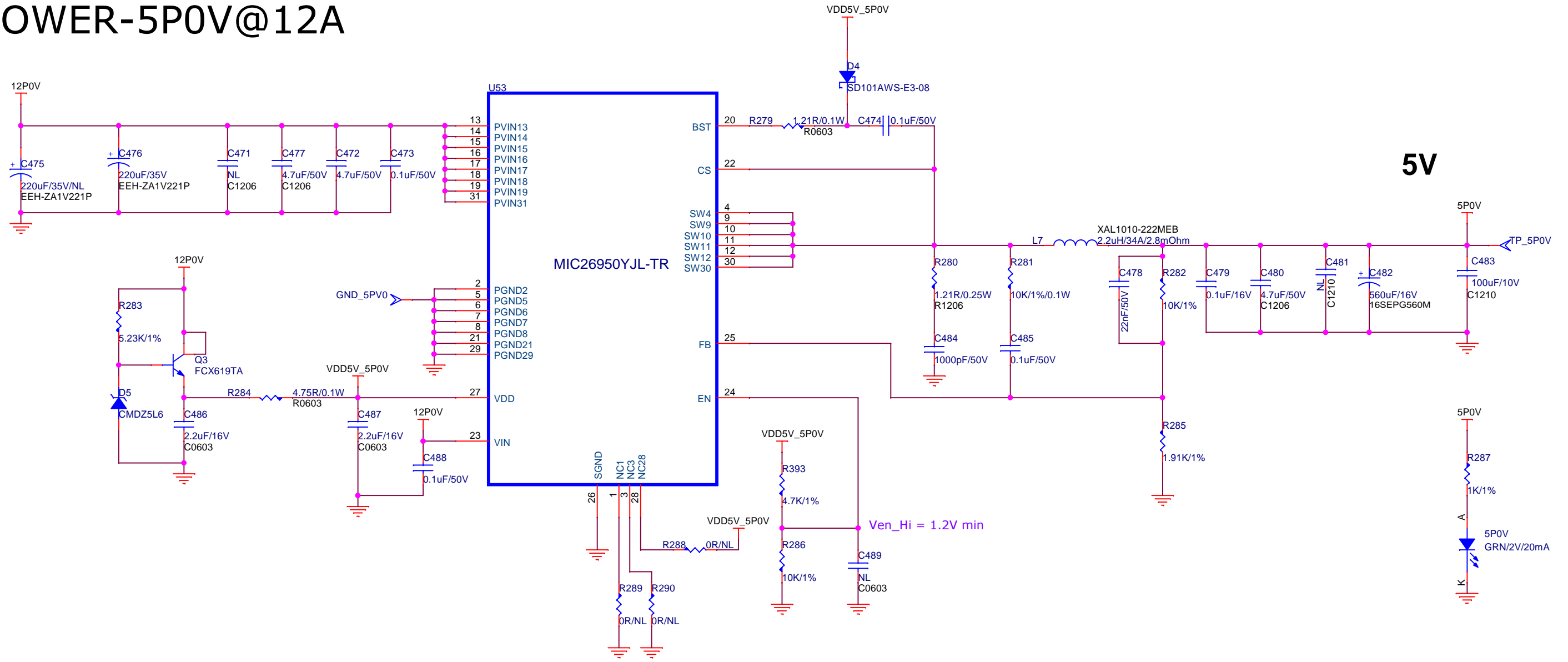
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12V External Supply @ 5A

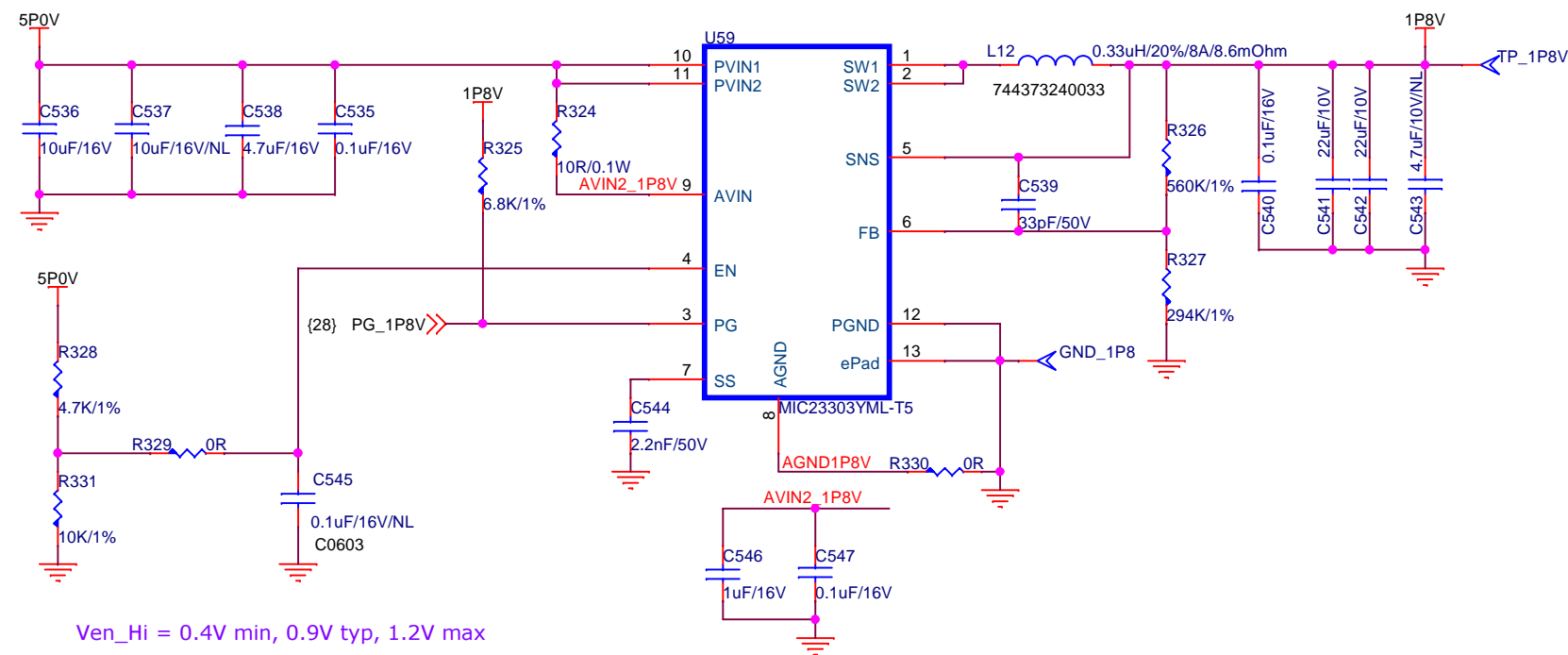


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POWER-5P0V@12A

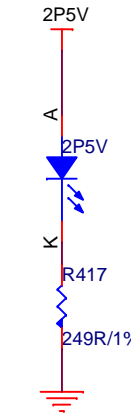
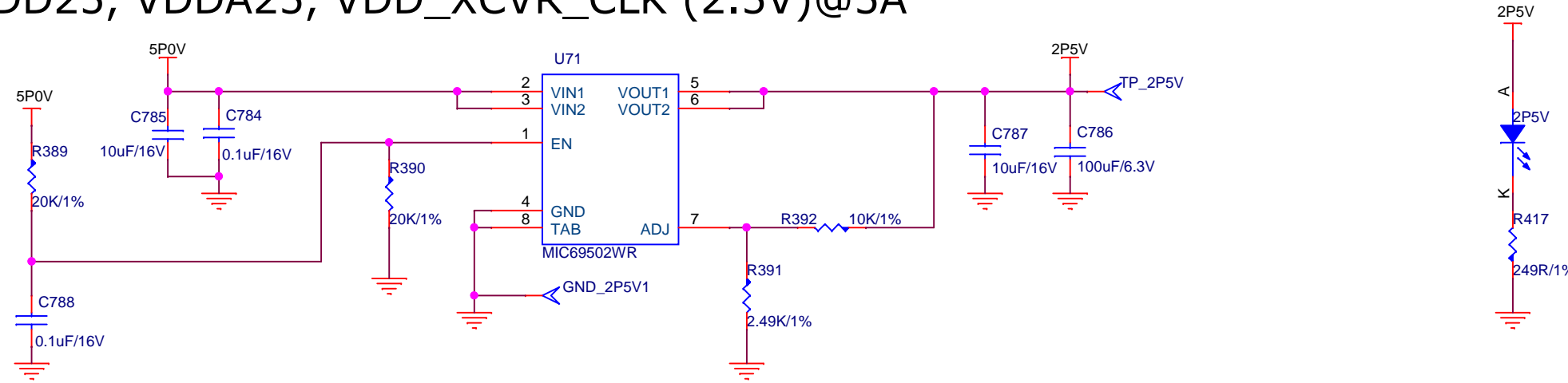


POWER:1P8V(1.8V)@3A

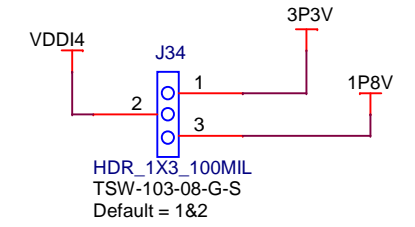


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POWER:VDD25, VDDA25, VDD_XCVR_CLK (2.5V)@5A

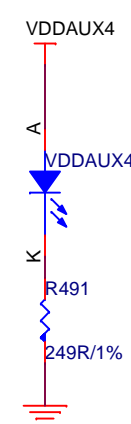
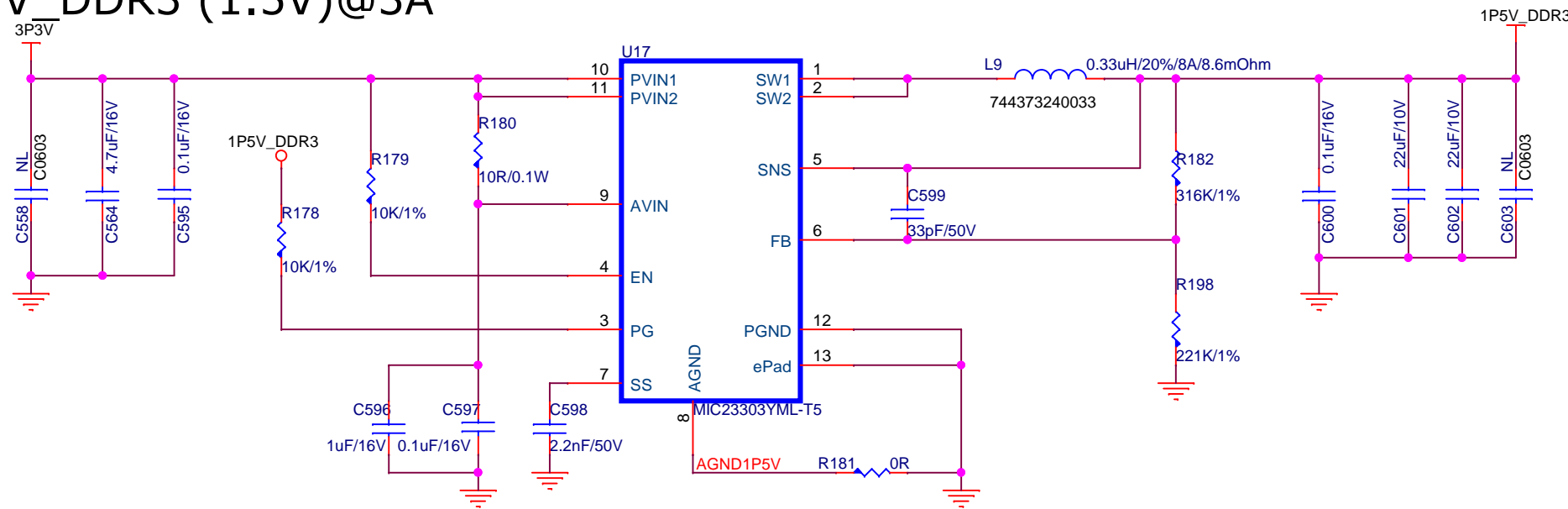


VDDI4

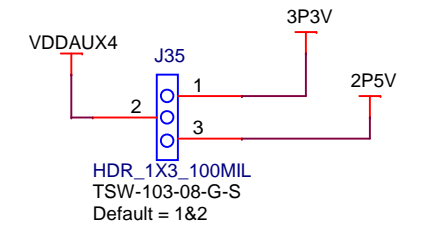


6A Capable header

POWER:1P5V_DDR3 (1.5V)@3A

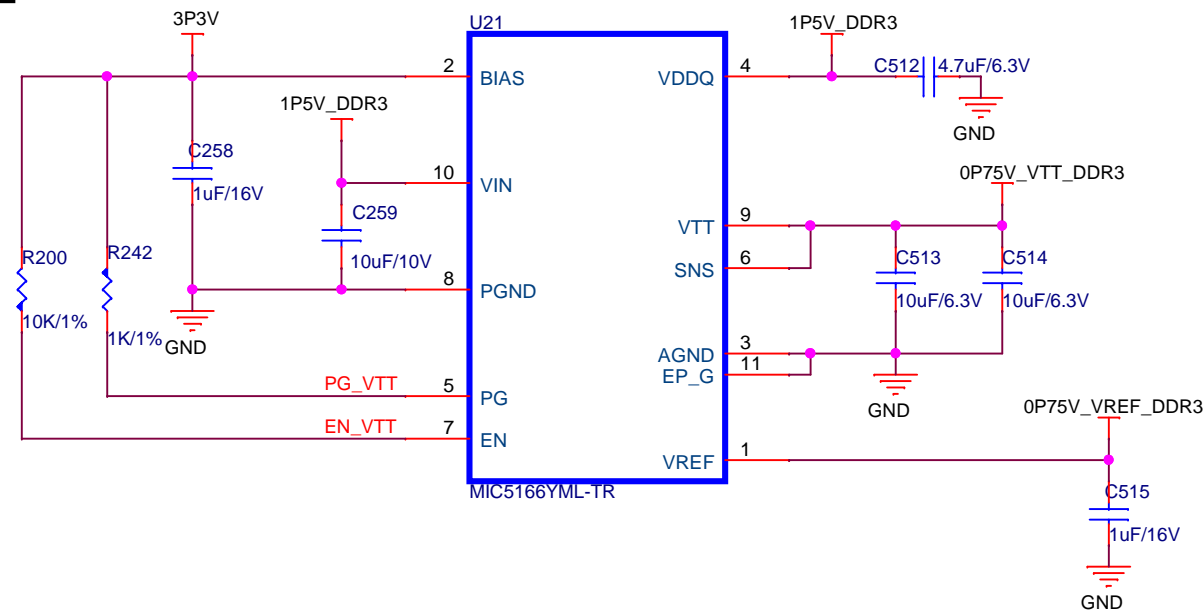


VDDAUX4



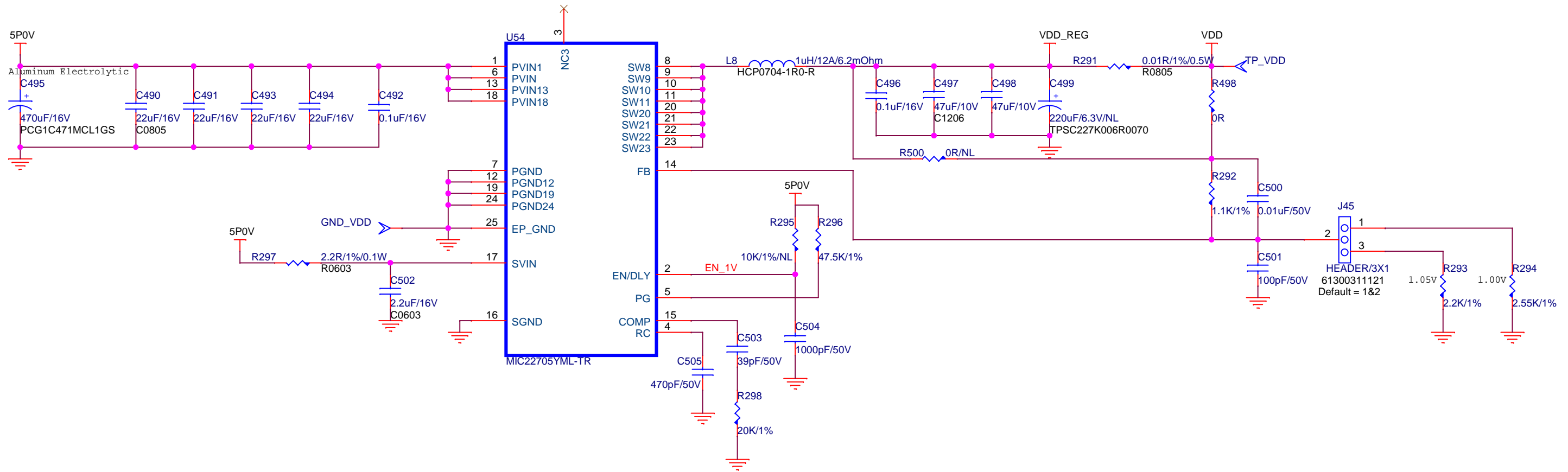
6A Capable header

POWER:DDR3 VTT & VREF

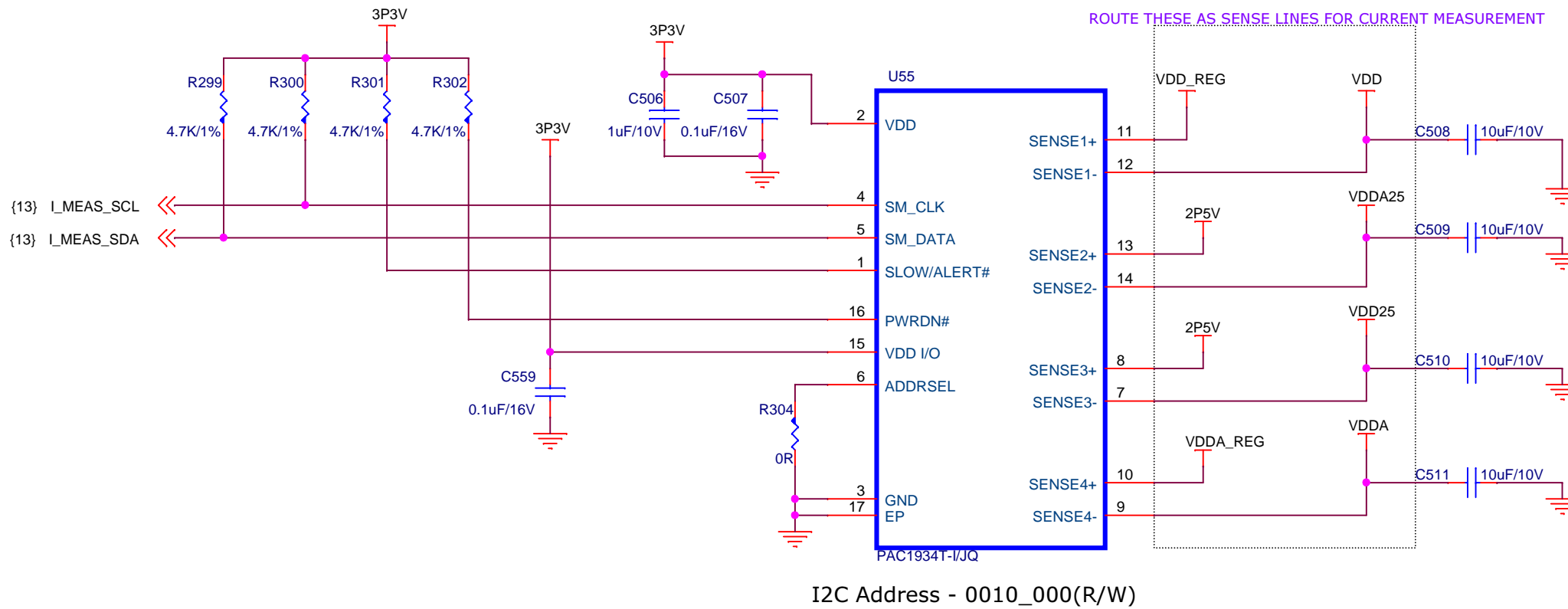


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POWER:VDD(1.0/1.05V)@7A

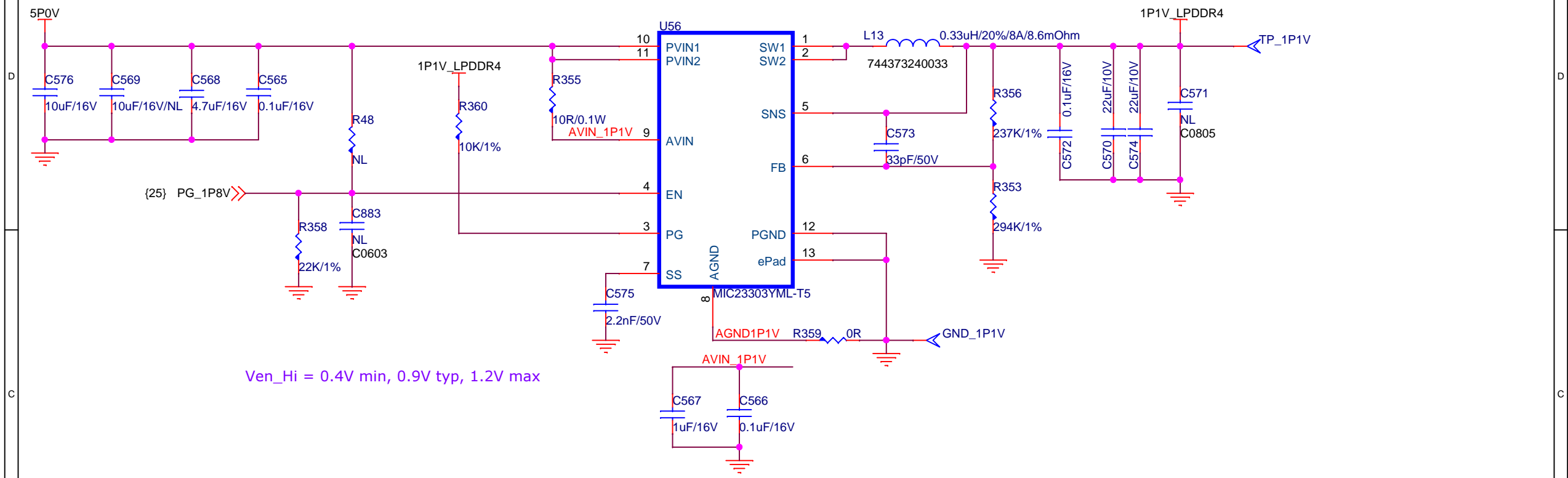


Current Measurement 1



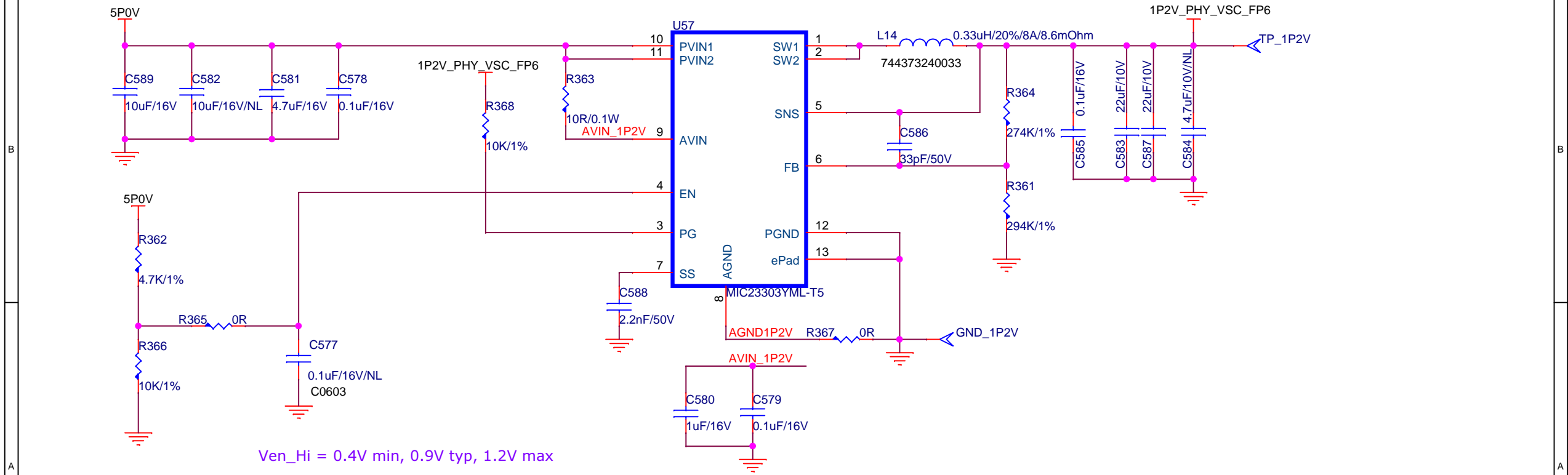
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POWER:1P1V_LPDDR4(1.1V)@3A



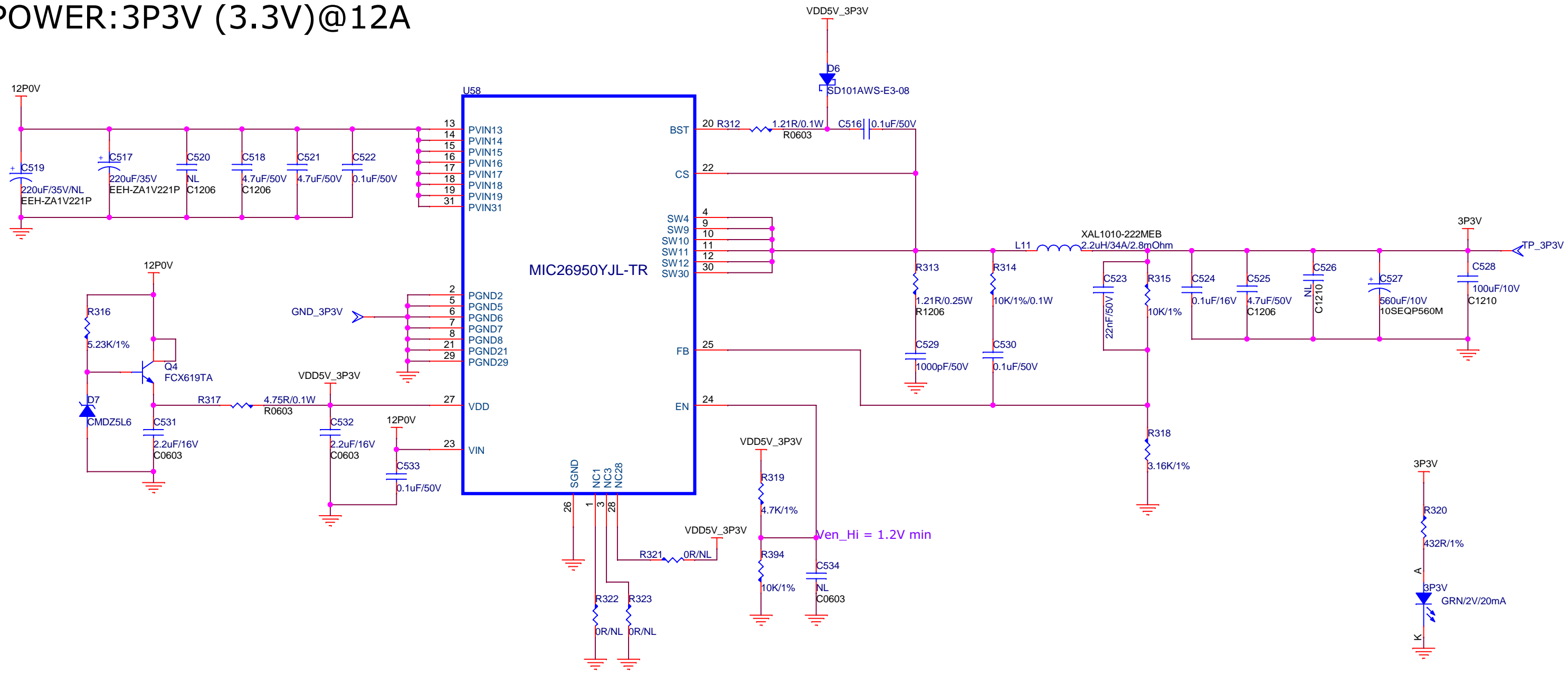
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1.2V/3A

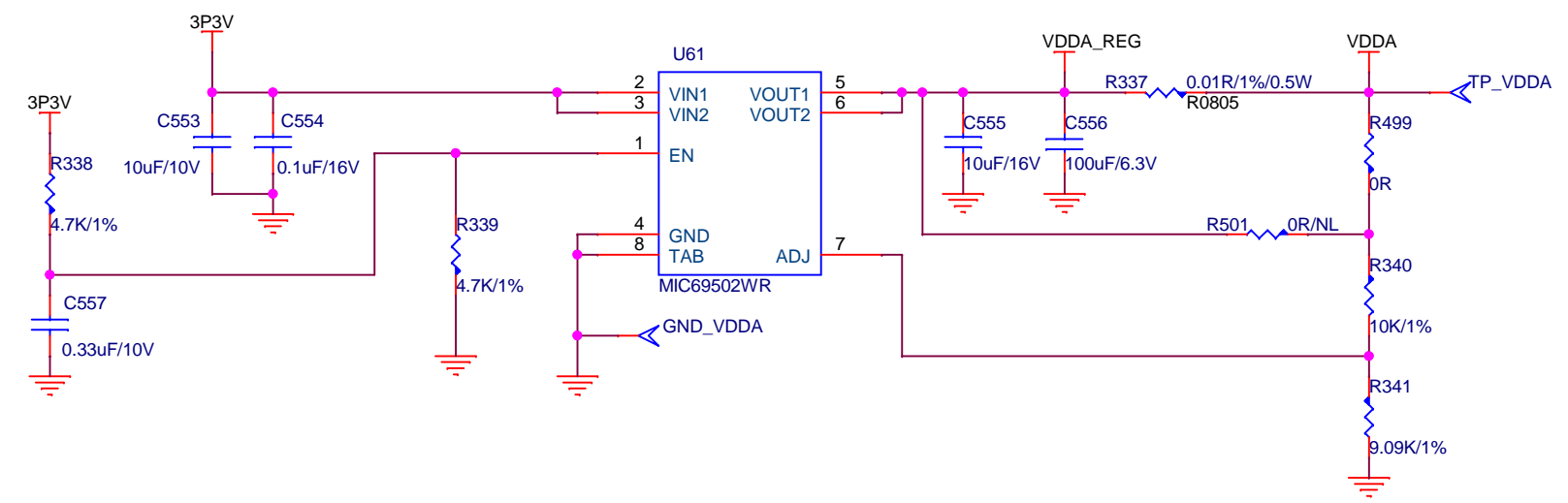


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POWER:3P3V (3.3V)@12A



POWER:VDDA 1.05V@5A



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