

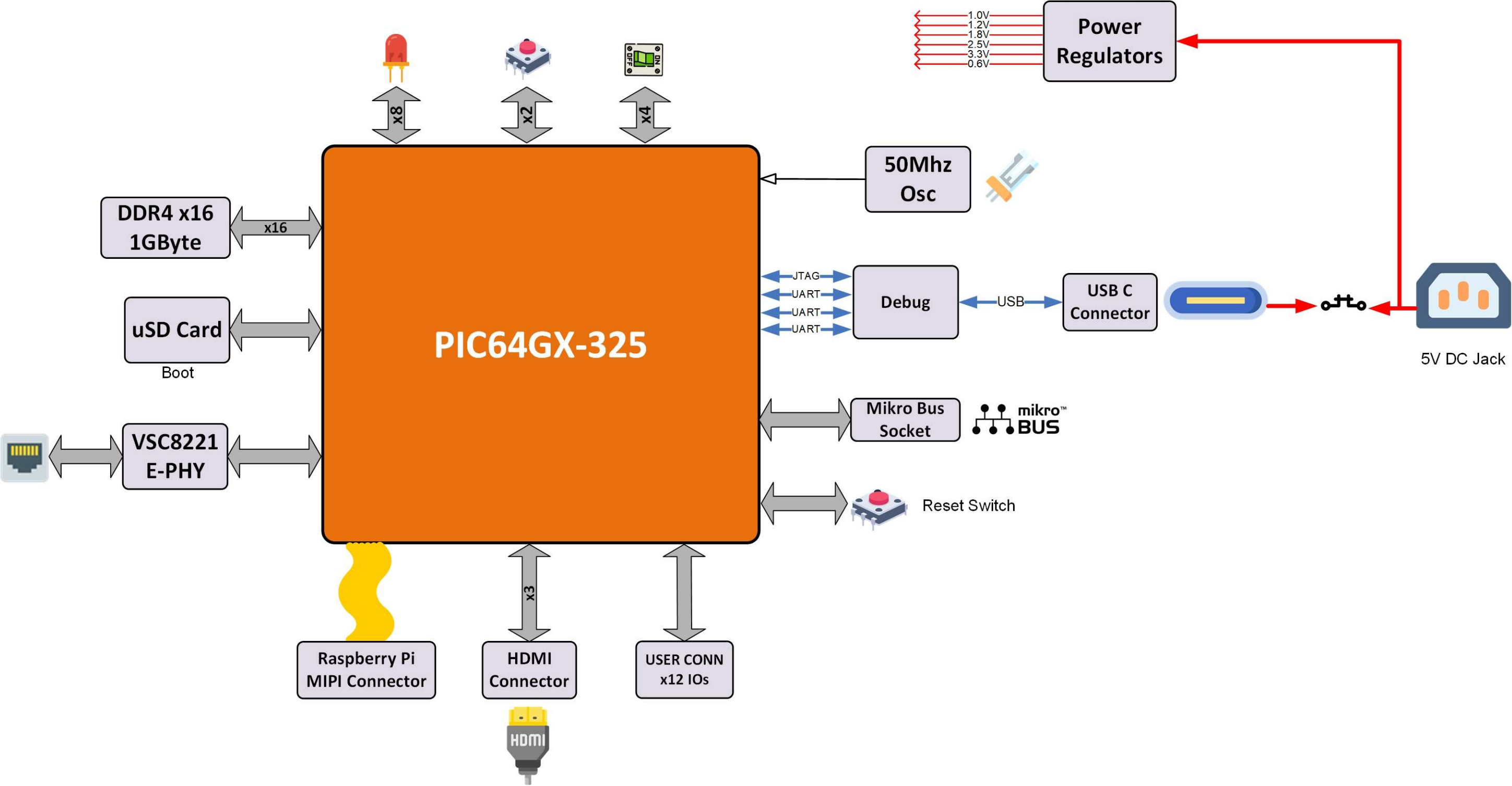
Curiosity-PIC64GX1000

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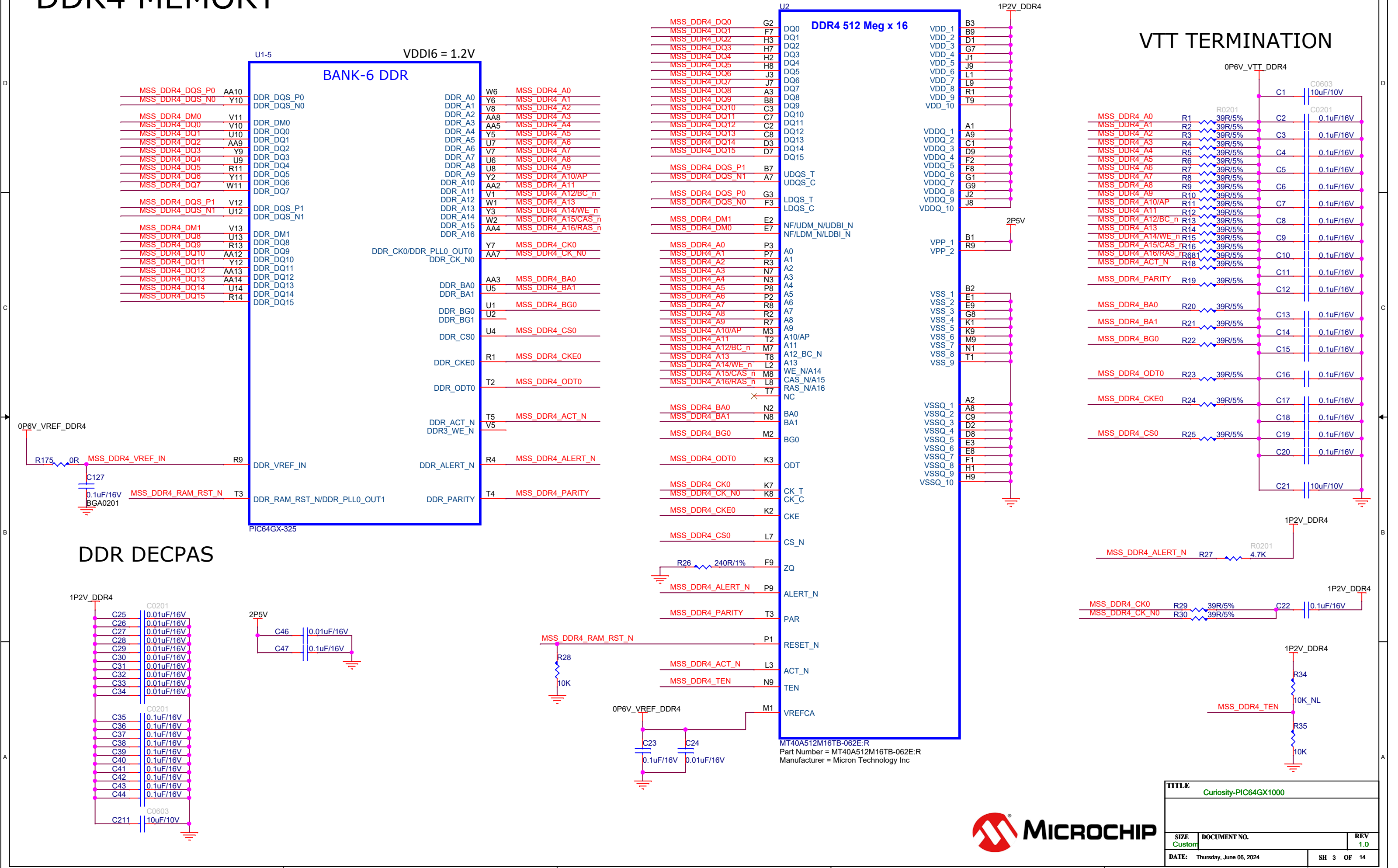
Project Name:		
Curiosity-PIC64GX1000		
Rev	Part Number:	
1.0	DVP-100-000584-002	PACTRON:
Originator:		
Size	Date:	
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Curiosity-PIC64GX1000



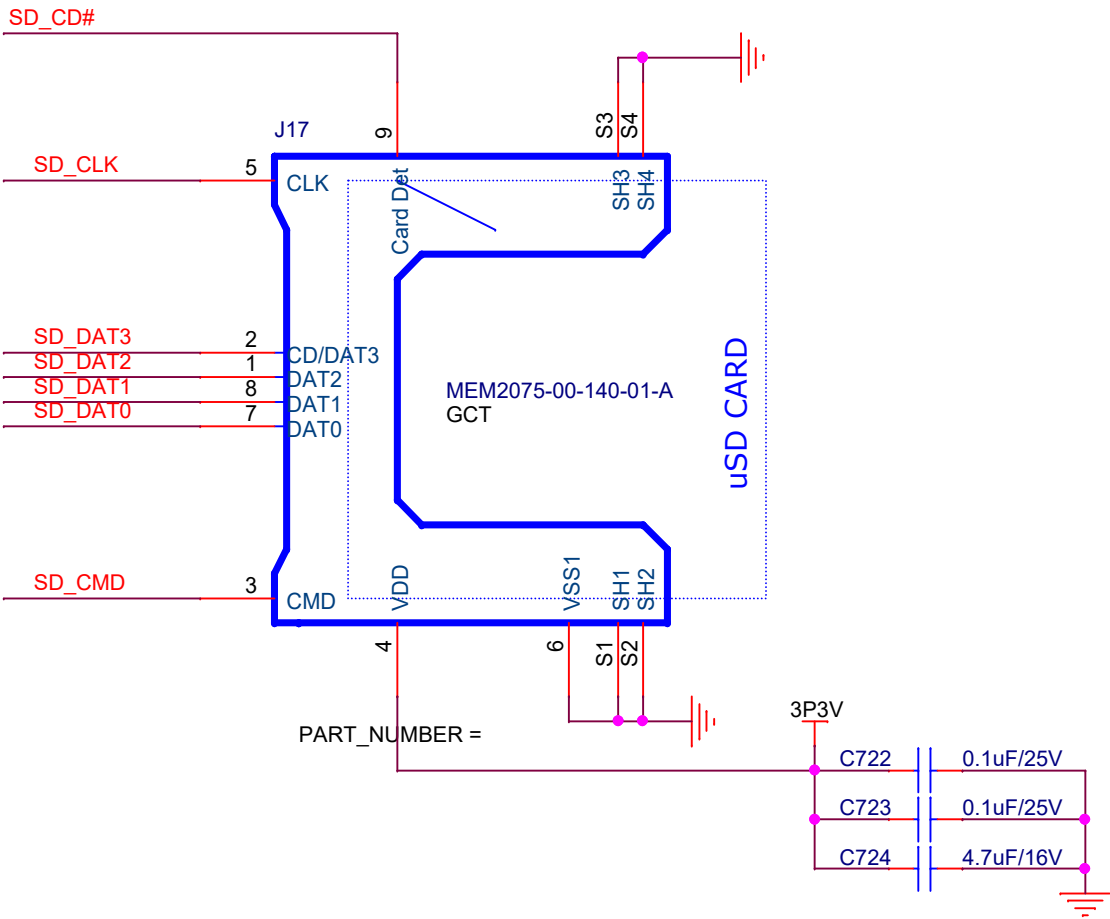
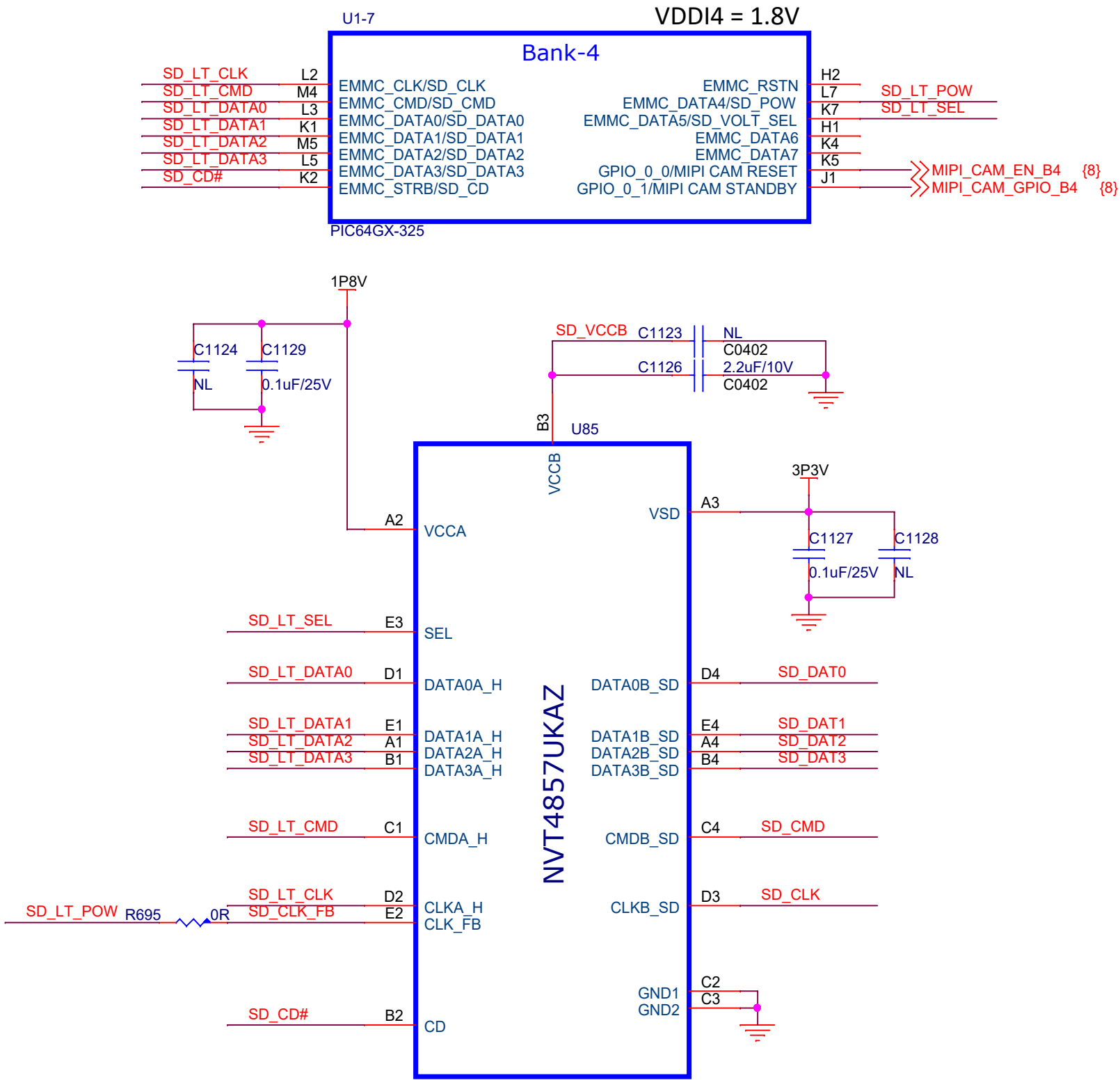
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DDR4 MEMORY



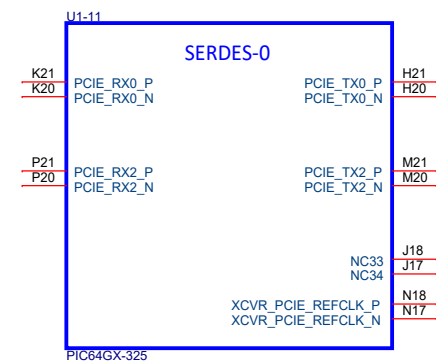
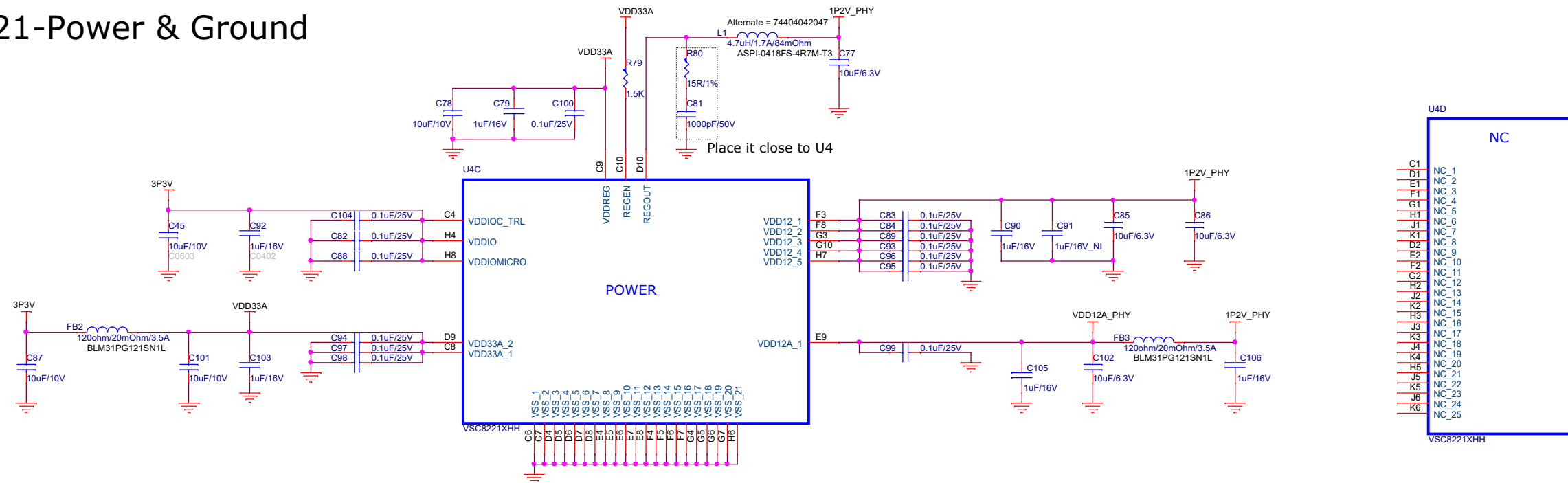
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BANK4- uSD Conneciton



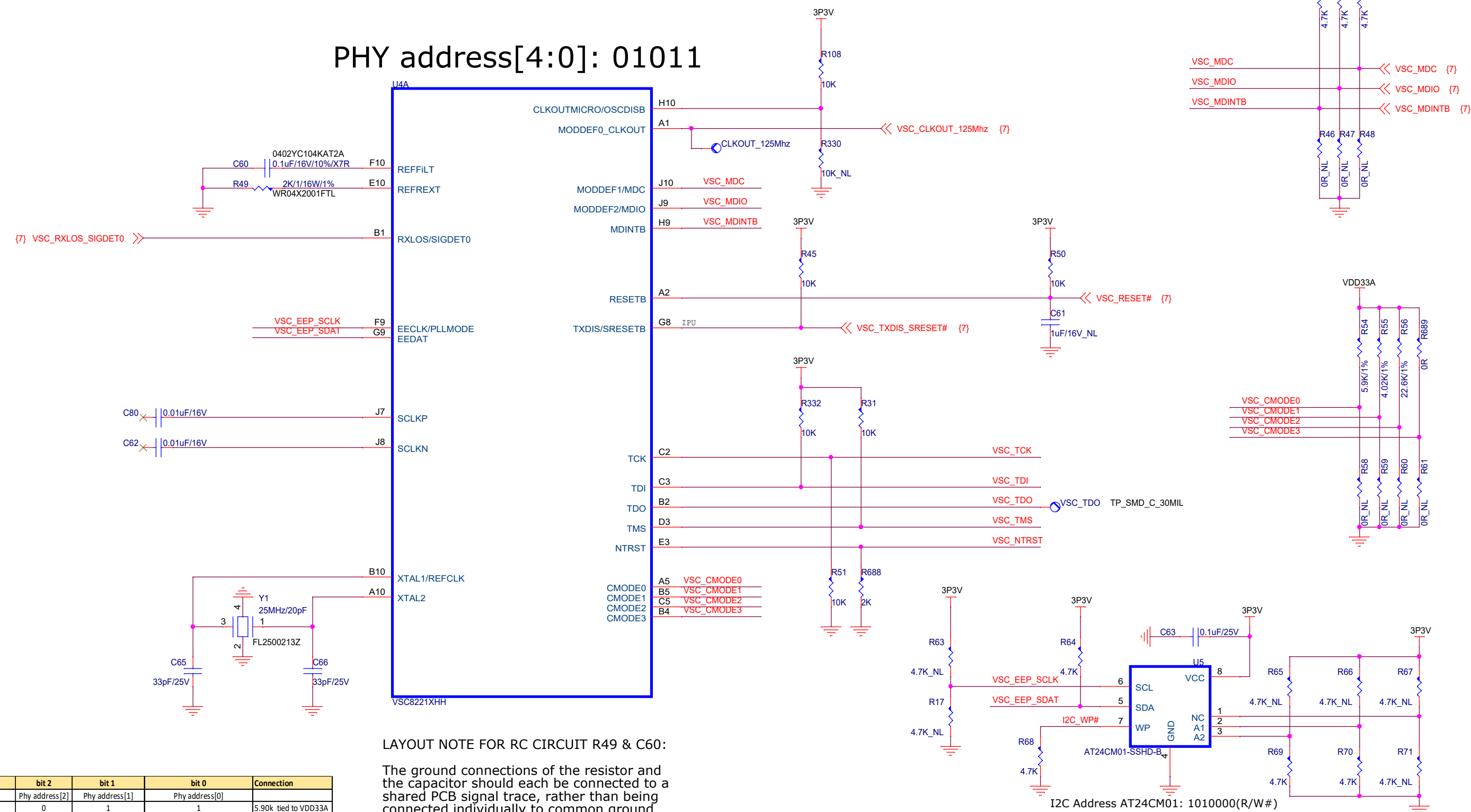
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Schematic diagram of the LED driver circuit for the SI-61001-F module. The module is represented by a blue box labeled J3 with pins 1 through 10. Pin 1 is LEDG_C, pin 2 is LEDG_A, pin 3 is TRD1+, pin 4 is COM_CT, pin 5 is TRD1-, pin 6 is TRD2+, pin 7 is TRD2-, pin 8 is TRD3+, pin 9 is TRD3-, pin 10 is TRD4+. The module also has pins for SH1, SH2, LEDY_C, LEDY_A, and SHLD_GND1. The circuit includes a 0.1uF/50V capacitor C74 connected between the module's ground and the positive supply rail. A 1000pF/3KV capacitor C76 is connected between the module's SHLD_GND1 pin and the positive supply rail. The positive supply rail is connected to a 21V source and a 22V source. The ground rail is connected to a common ground point.



VSC8221 - Connection

PHY address[4:0]: 01011



LAYOUT NOTE FOR RC CIRCUIT R49 & C60:

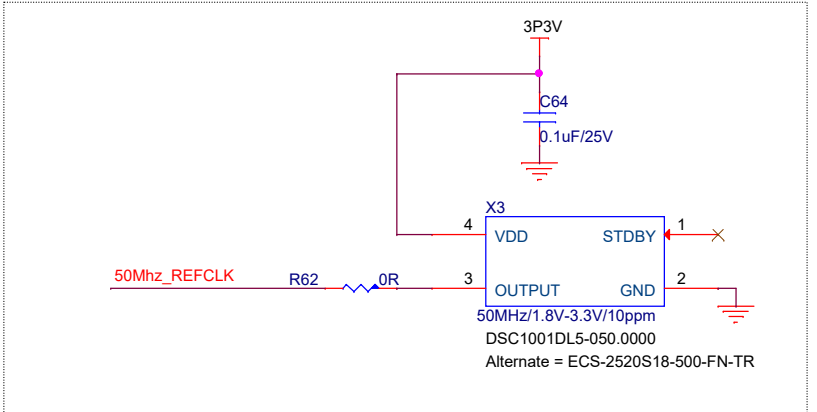
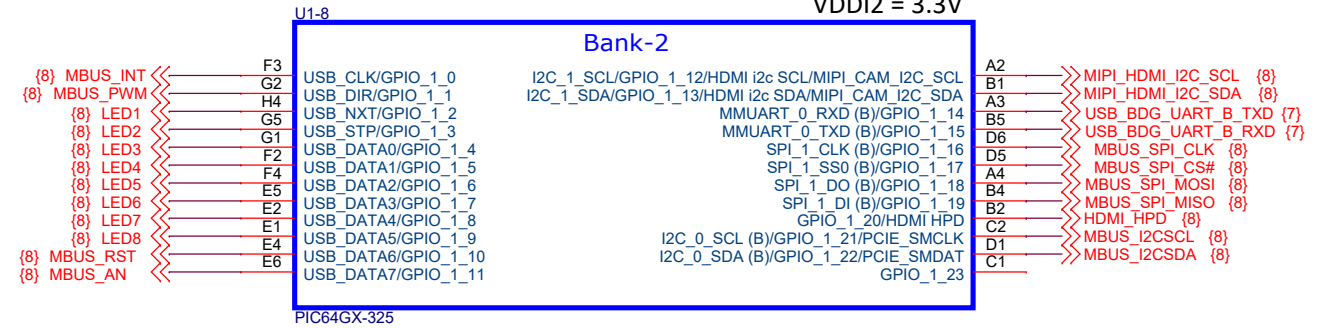
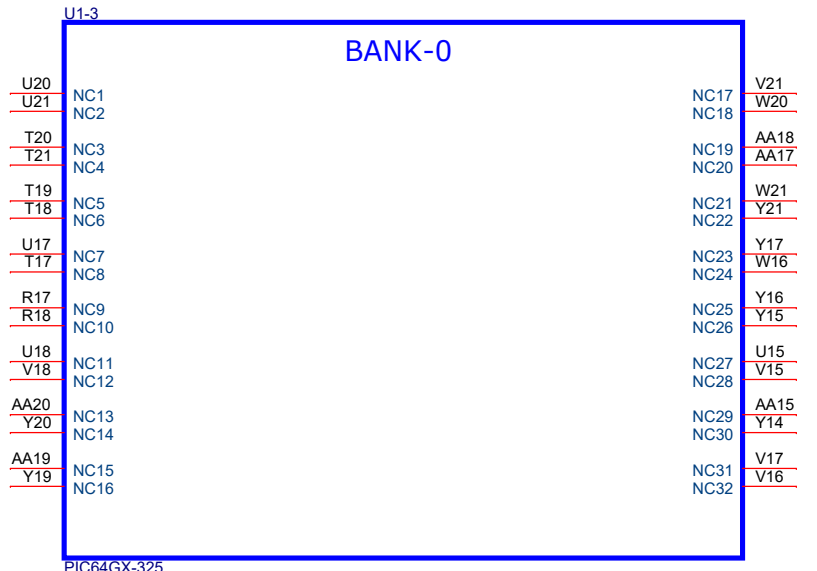
The ground connections of the resistor and the capacitor should each be connected to a shared PCB signal trace, rather than being connected individually to common ground plane. This PCB signal trace should then be connected to a ground plane at a single point. In addition, the reference capacitor and resistor should be placed as close as possible to the VSC8221

	bit 3	bit 2	bit 1	bit 0	Connection
CMODE 0	Phy address[3]	Phy address[2]	Phy address[1]	Phy address[0]	
	1	0	1	1	5.90k tied to VDD33A
CMODE1	SFP Mode Disable	PHY Address[4]	SIGDET pin direction	SerDes Line impedance	
	1	0	1	0	4.02k tied to VDD33A
CMODE 2	PHY Operating Mode[3]	PHY Operating Mode[2]	PHY Operating Mode[1]	PHY Operating Mode[0]	
	1	1	1	1	22.6k tied to VDD33A
CMODE3	LED Control[1]	SQE Enable	Reserved	Auto-negotiation Advertisement Control[1]	
	1	0	0	0	0k tied to VDD33A
	LED[2:0] = {Link/Activity, Link/Activity, Fault}				10/100/1000BASE-T HDX, FDX

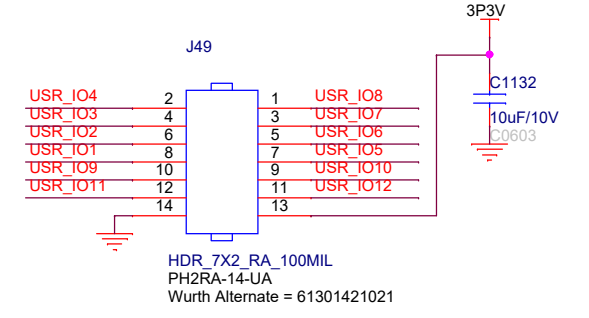


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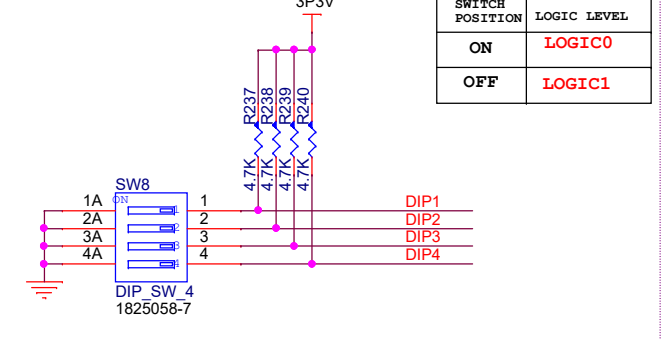
Bank0,1 & 2 Connection



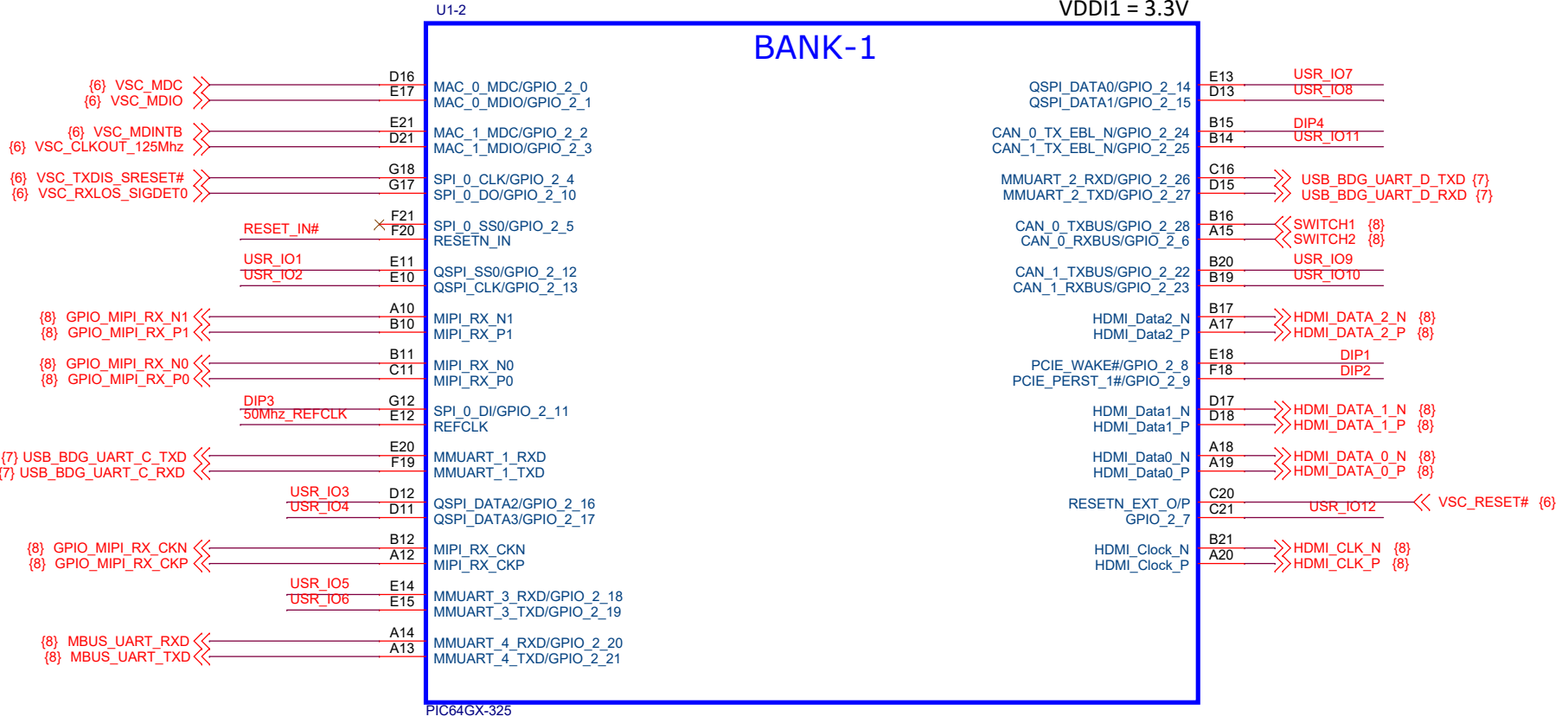
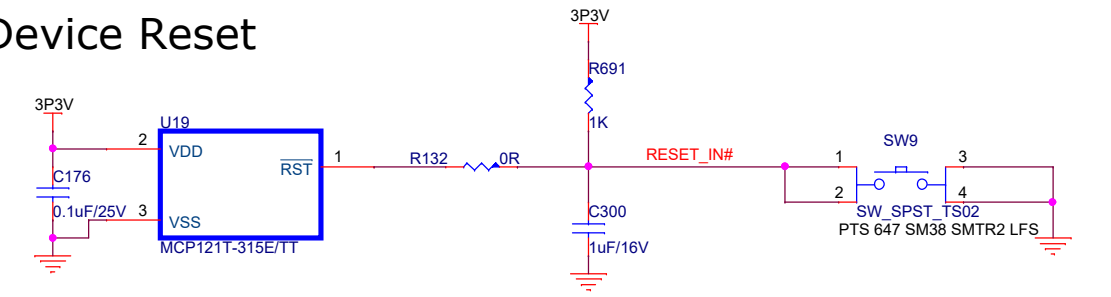
User Connector



DEBUG SWITCH

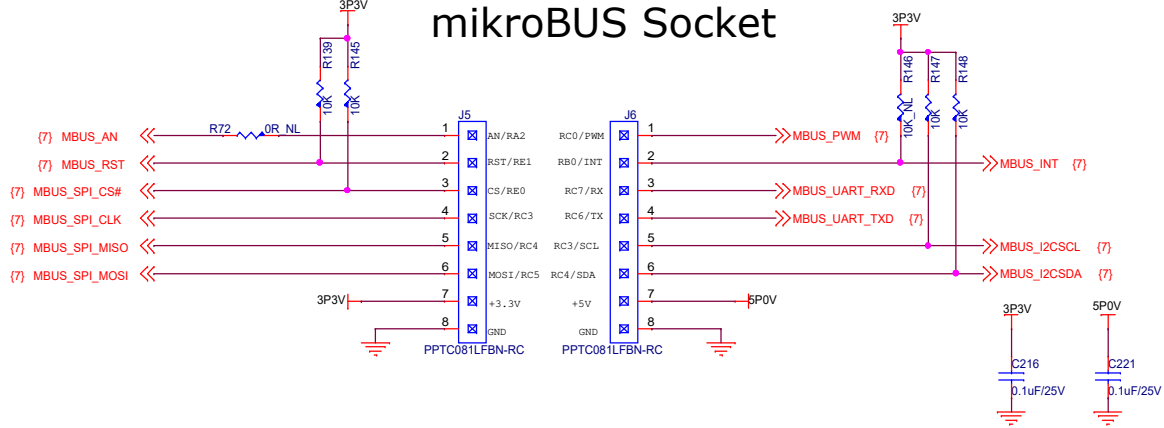


Device Reset

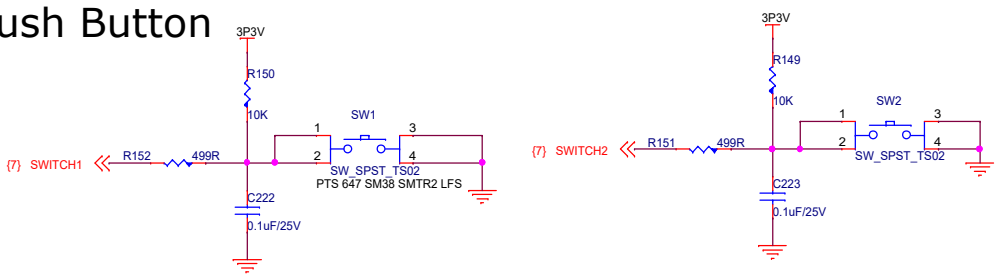


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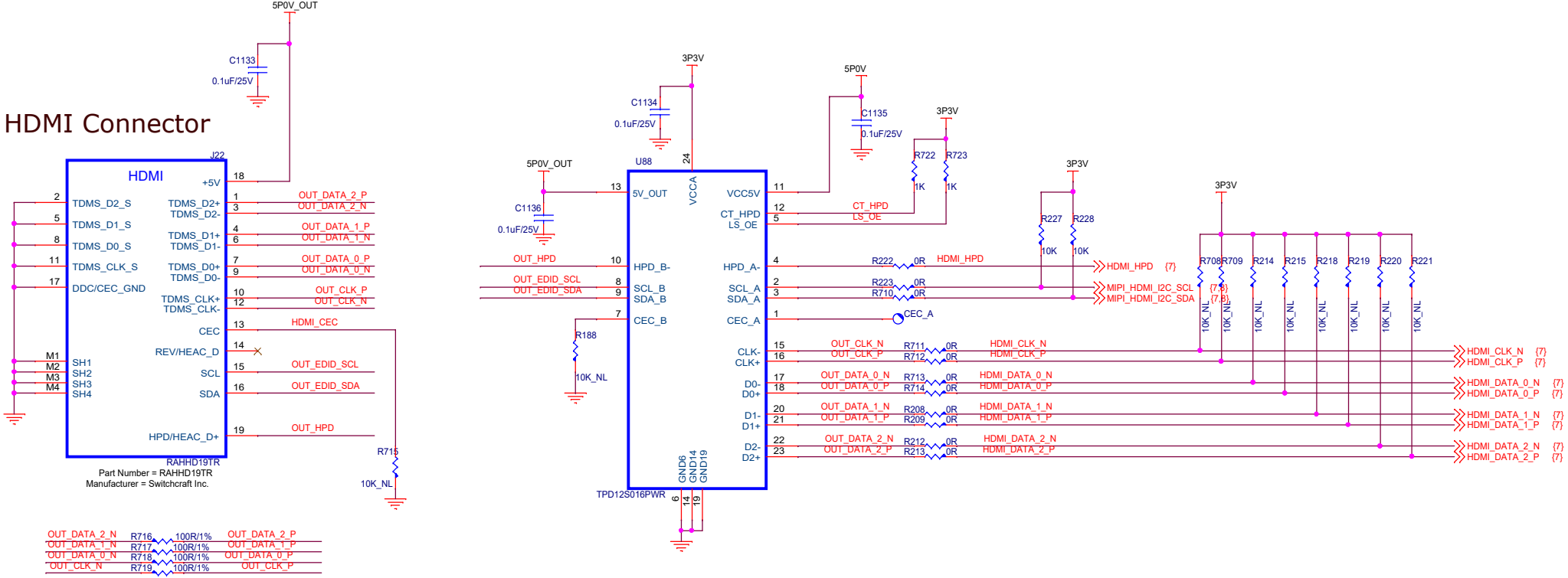
mikroBUS Socket



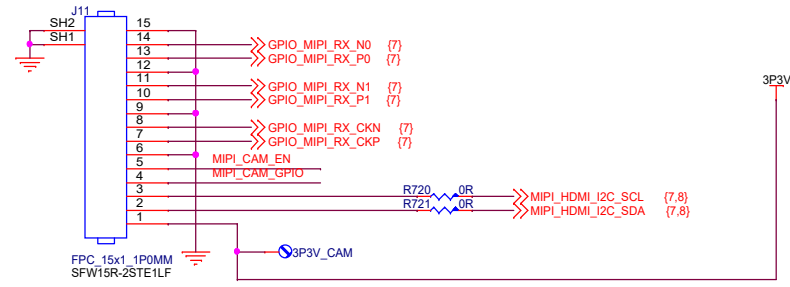
Push Button



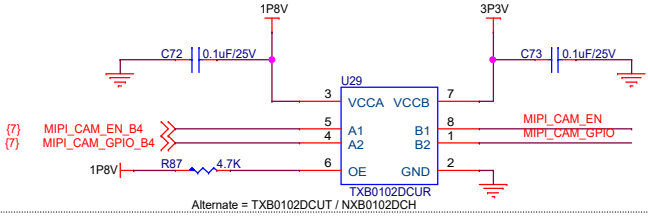
HDMI Connector



Raspberry Pi MIPI RX Connector

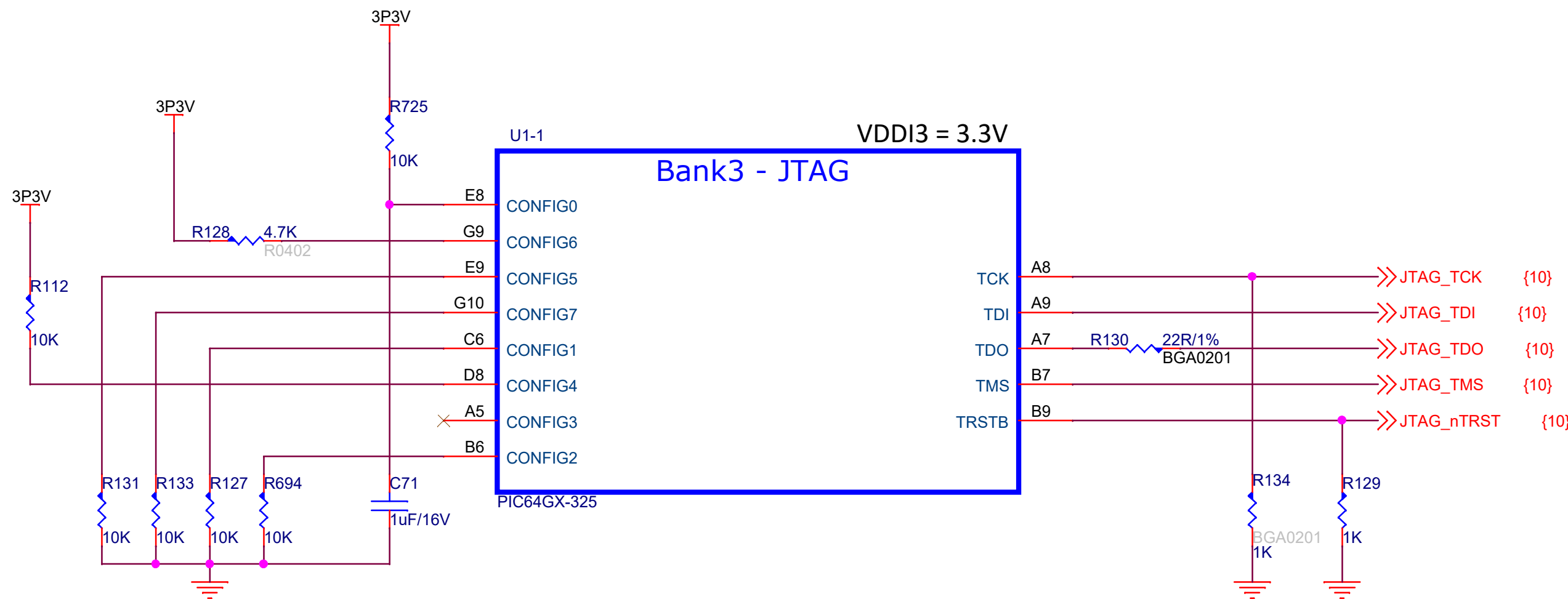


Cable to cable mating, Raspberry Camera module V2 board/Camera HQ
Cable Part Supplied with Camera Module - Opposite Sided Contacts



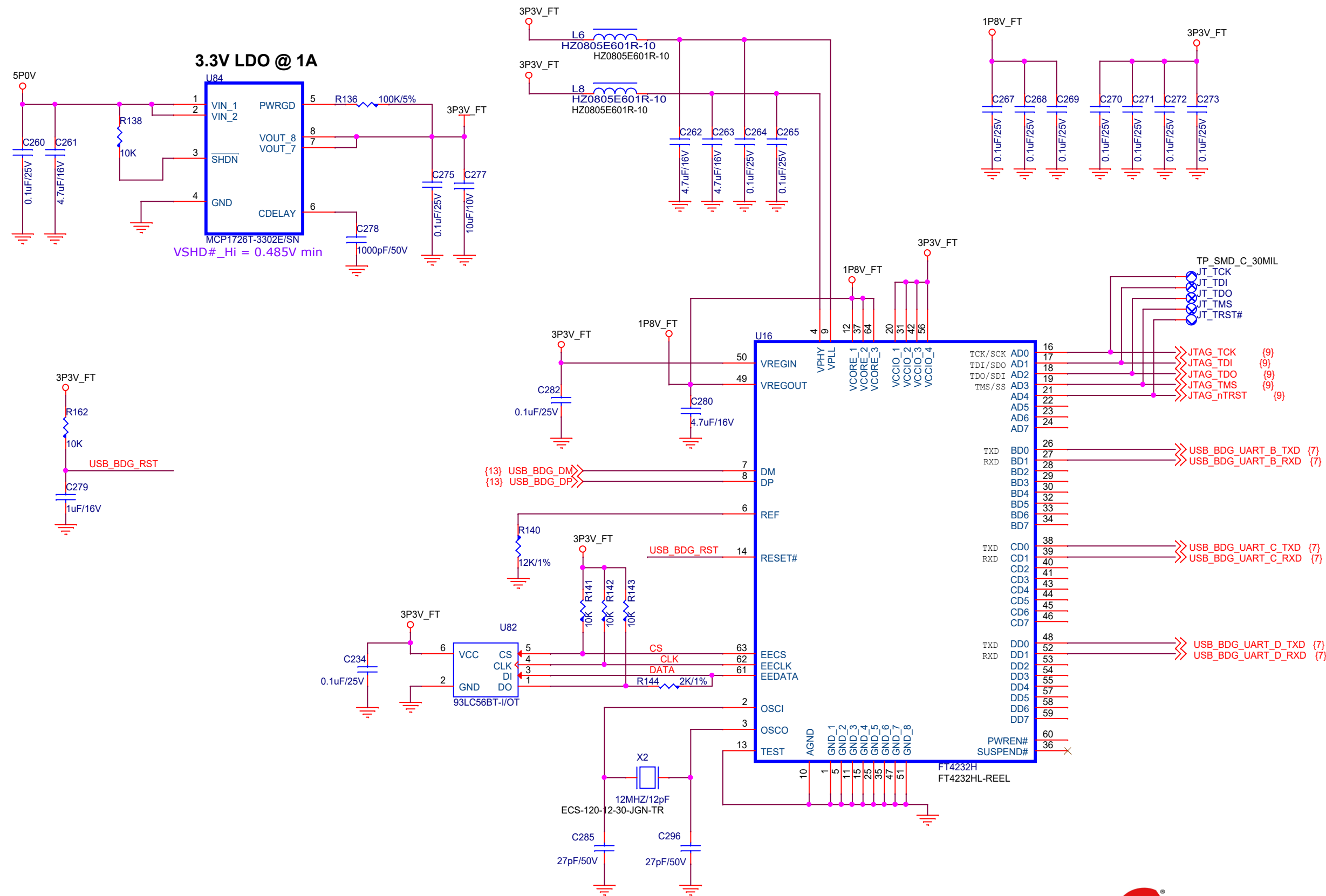
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Debug



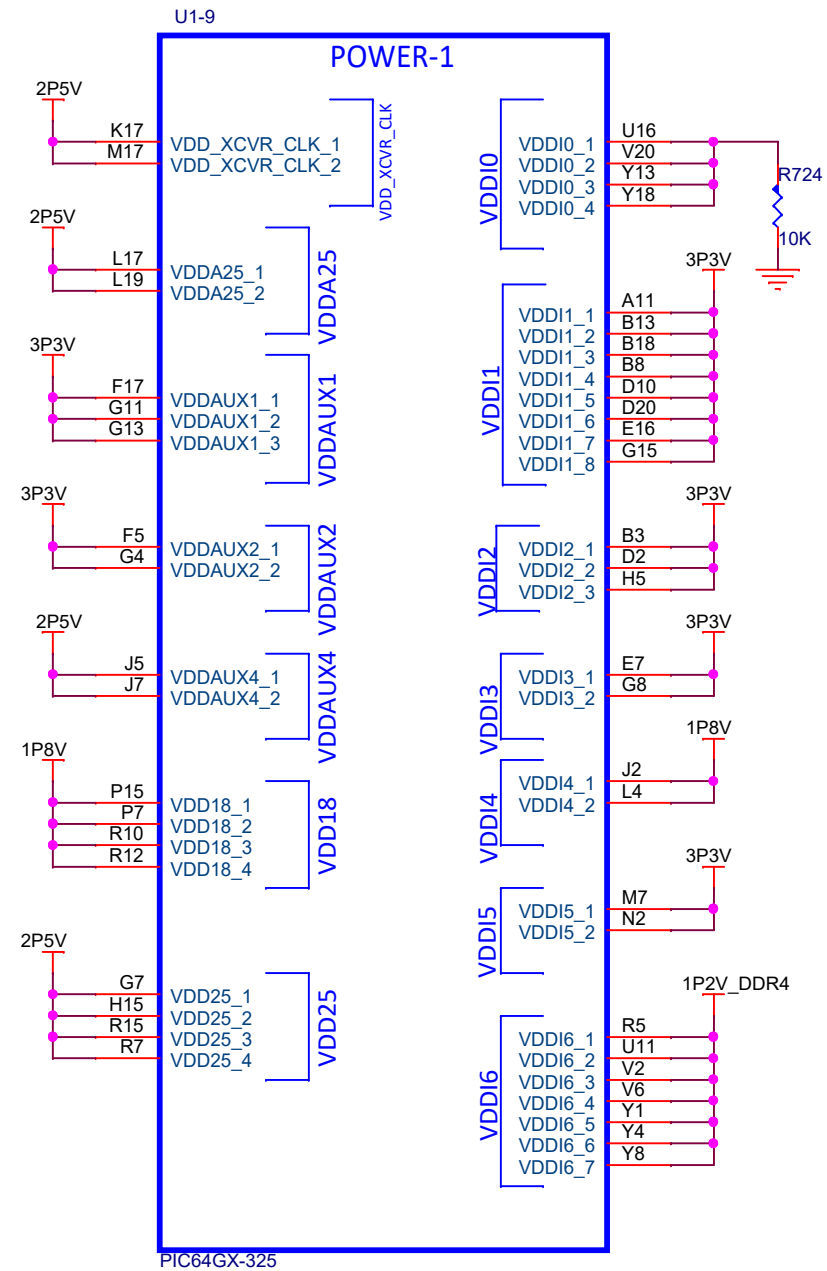
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USB To JTAG & UART Bridge



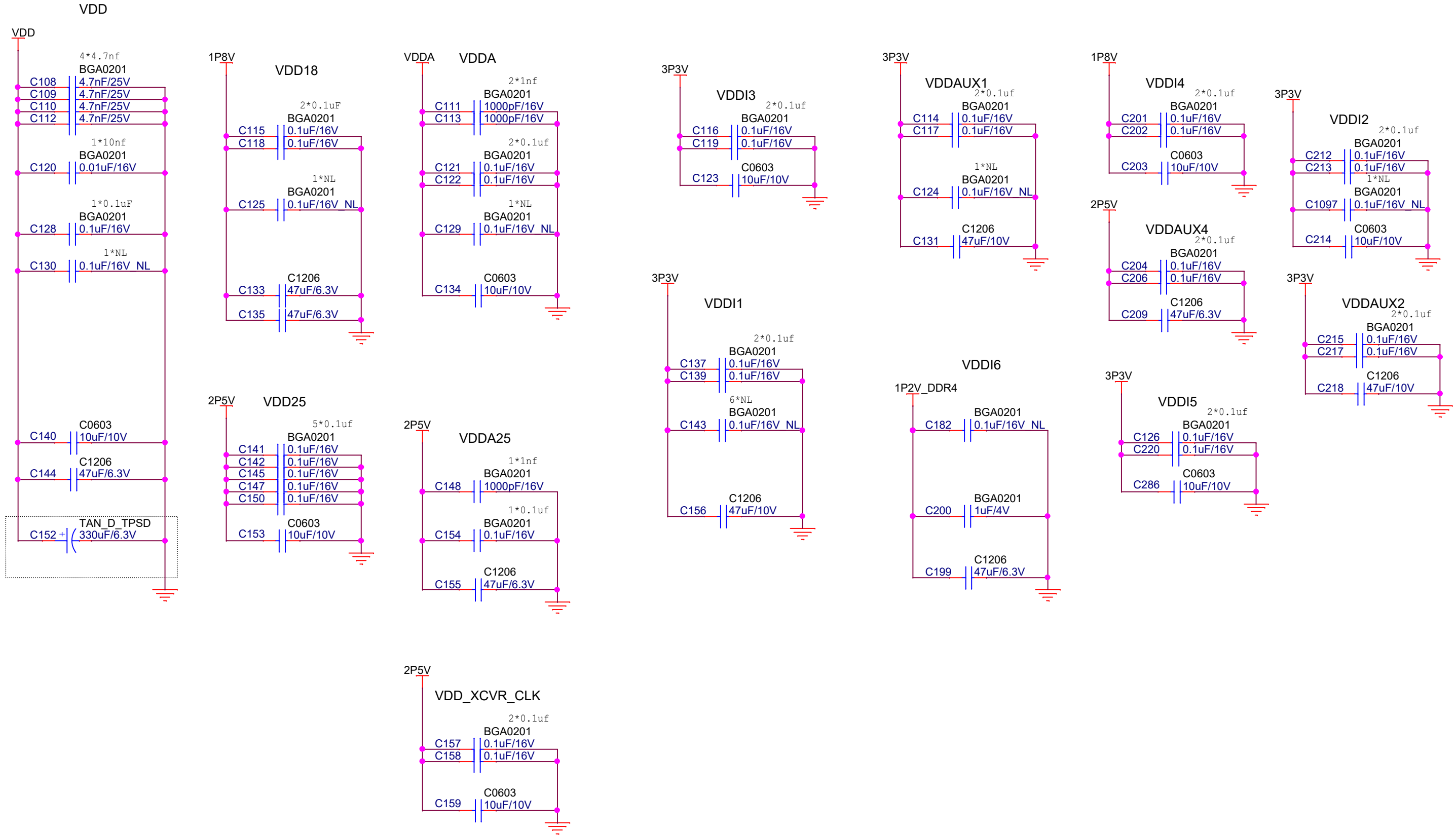
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MICROCHIP



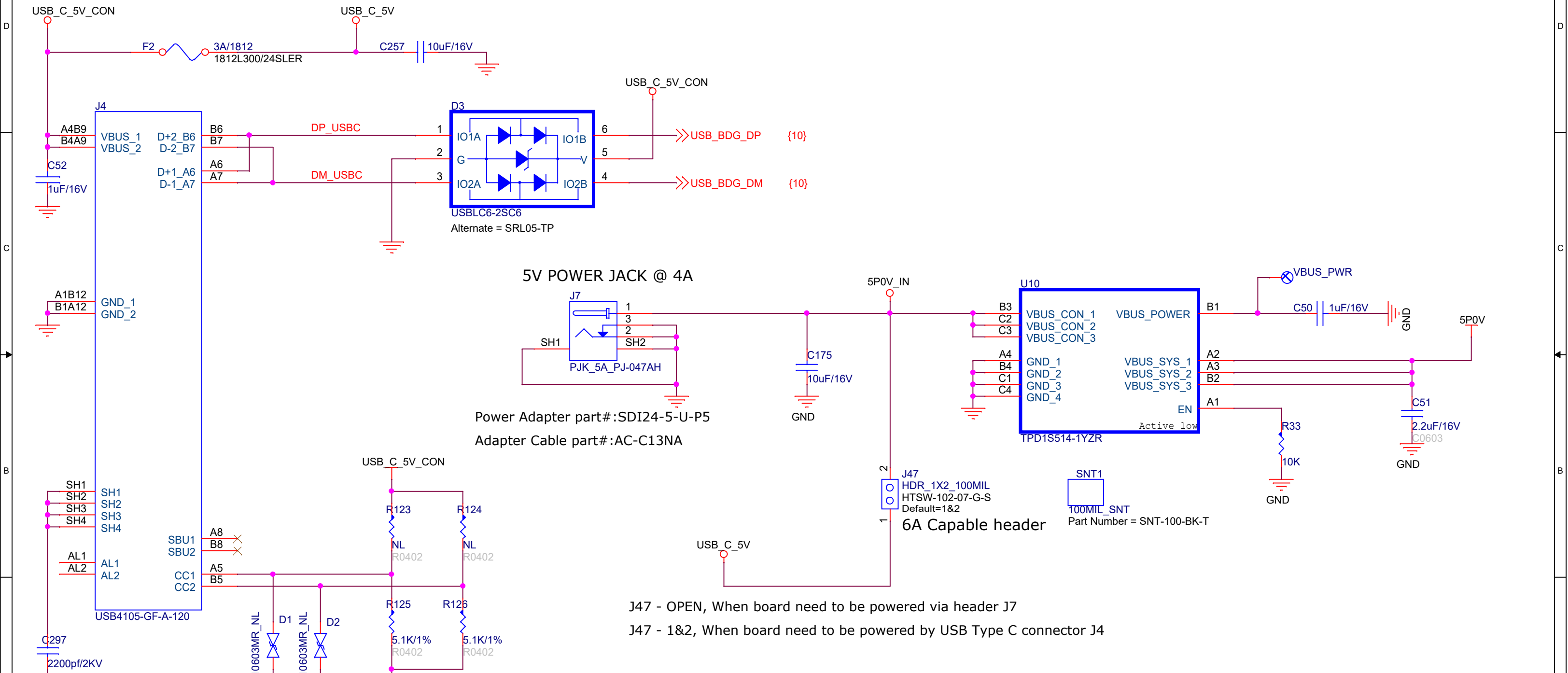
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Decoupling Capacitors

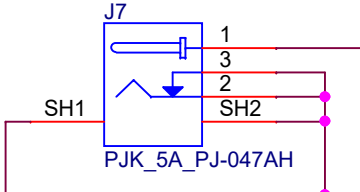


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5V DC Supply



5V POWER JACK @ 4A



Power Adapter part#:SDI24-5-U-P5
Adapter Cable part#:AC-C13NA

6A Capable header

J47 - OPEN, When board need to be powered via header J7
J47 - 1&2, When board need to be powered by USB Type C connector J4



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