

ConnectCore for i.MX 8M Nano/Mini Castellated Reference Design

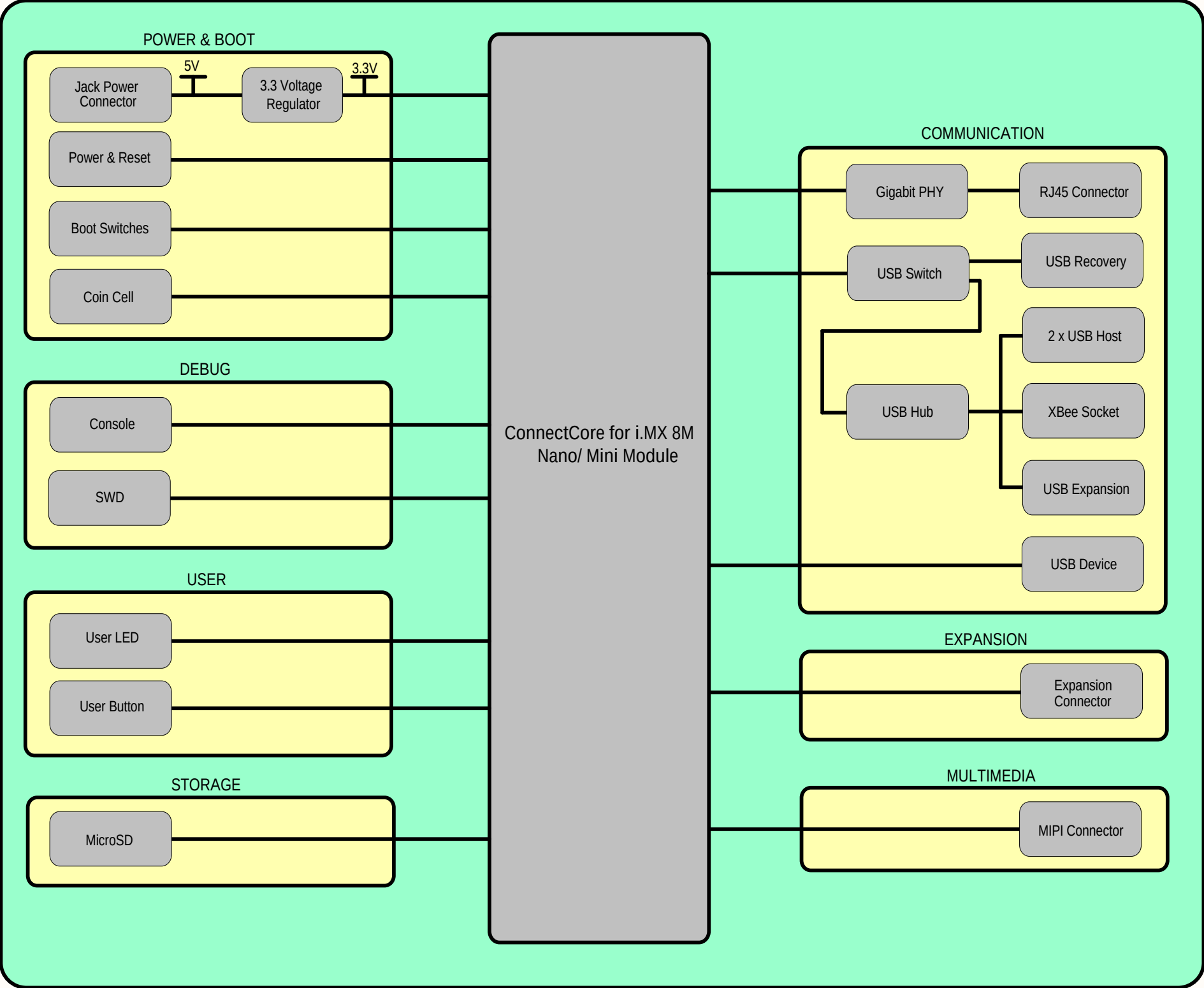
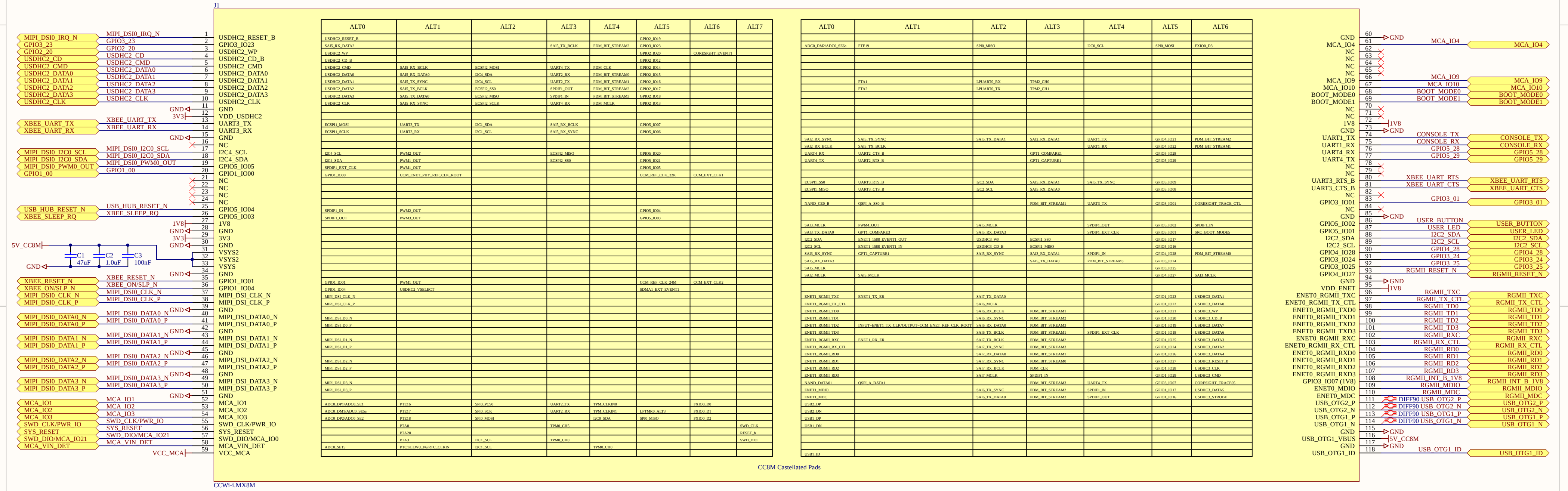


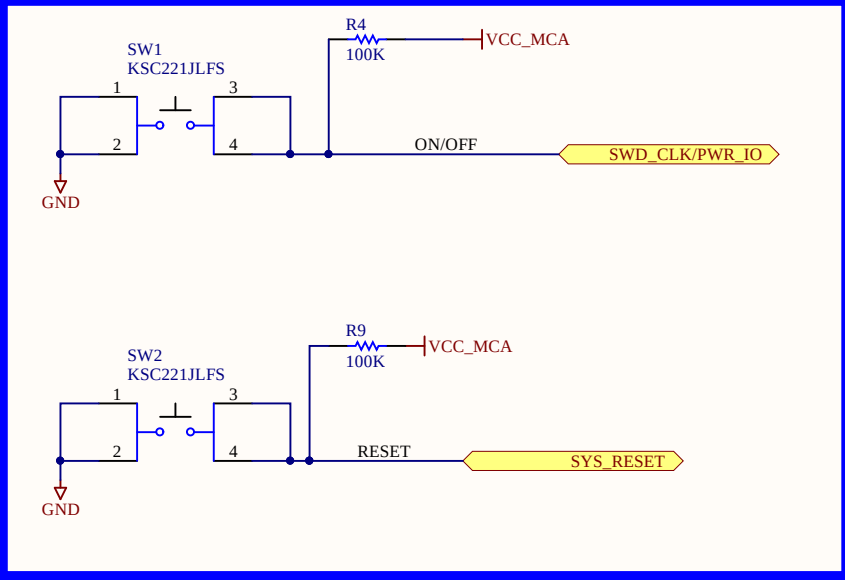
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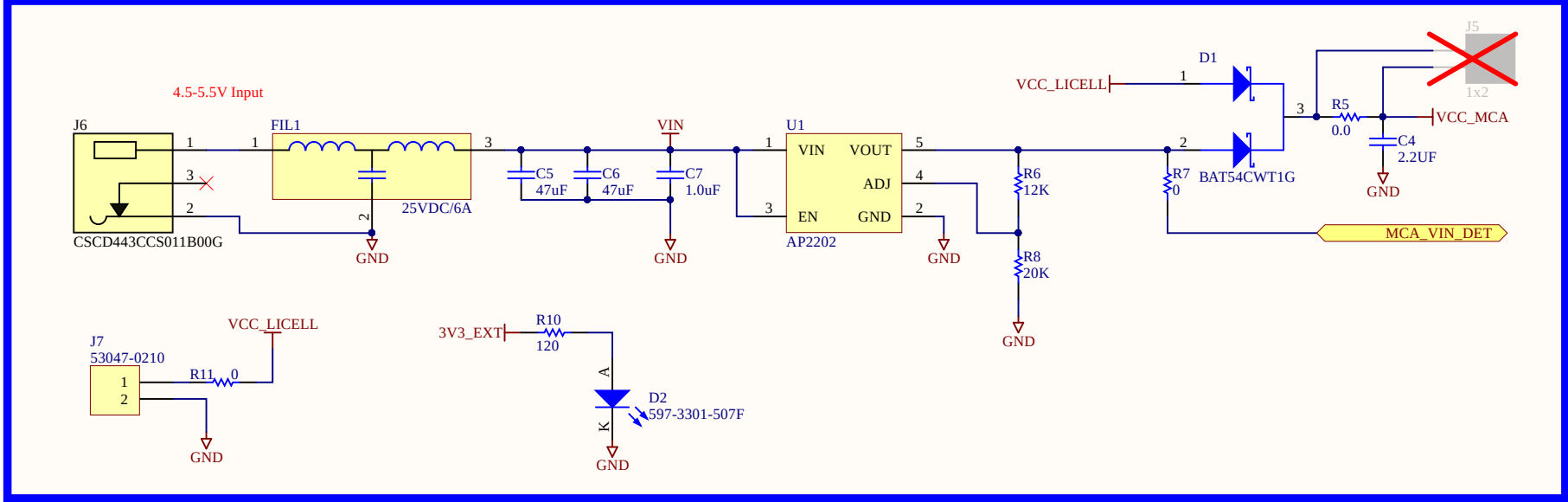
ConnectCore for i.MX8M Module



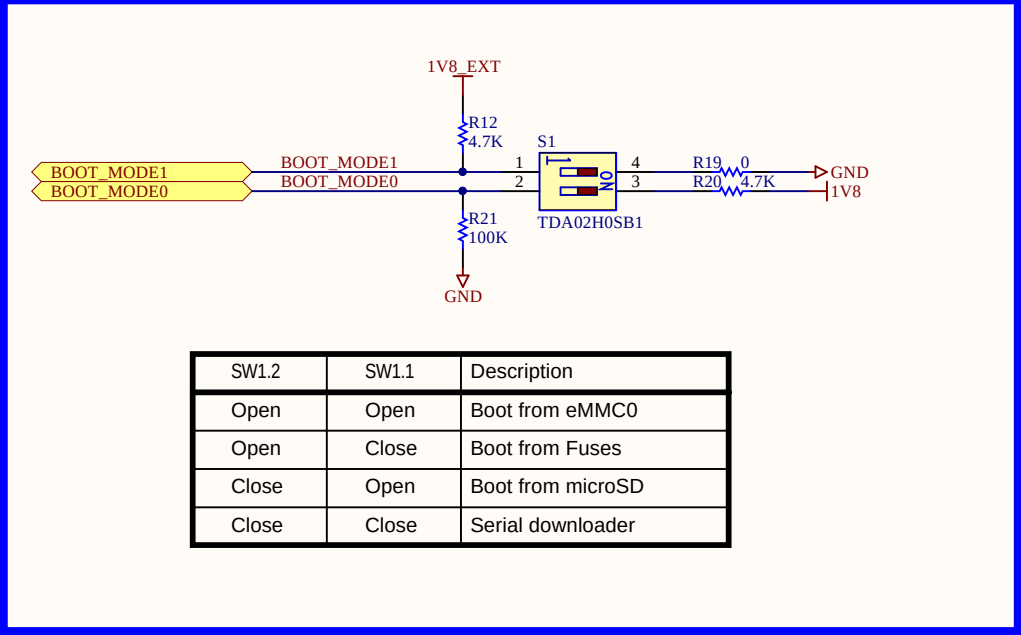
Power and Reset



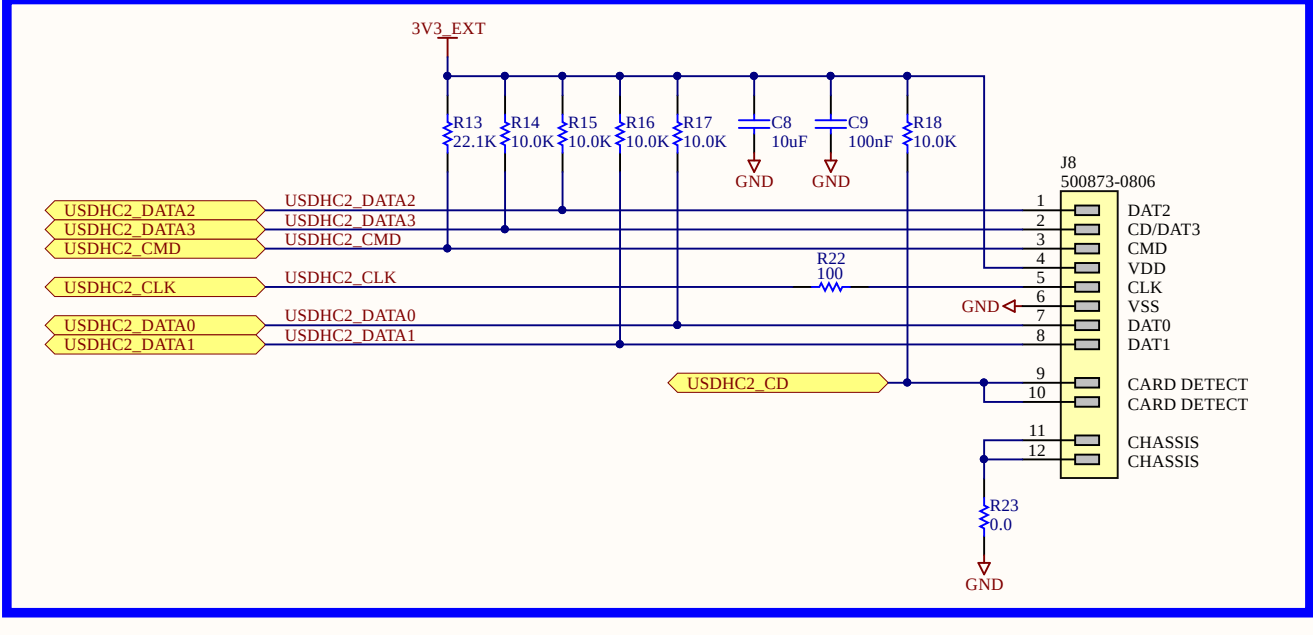
Supply Input



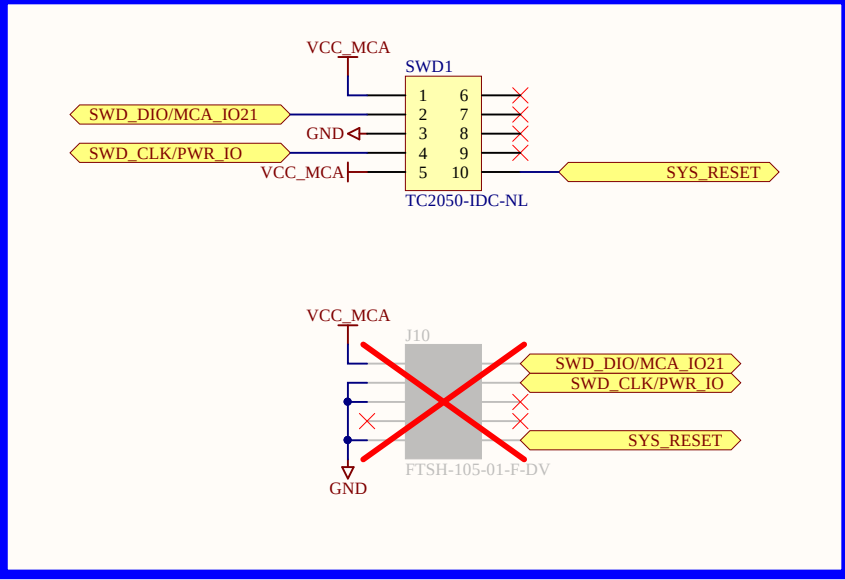
Boot Mode



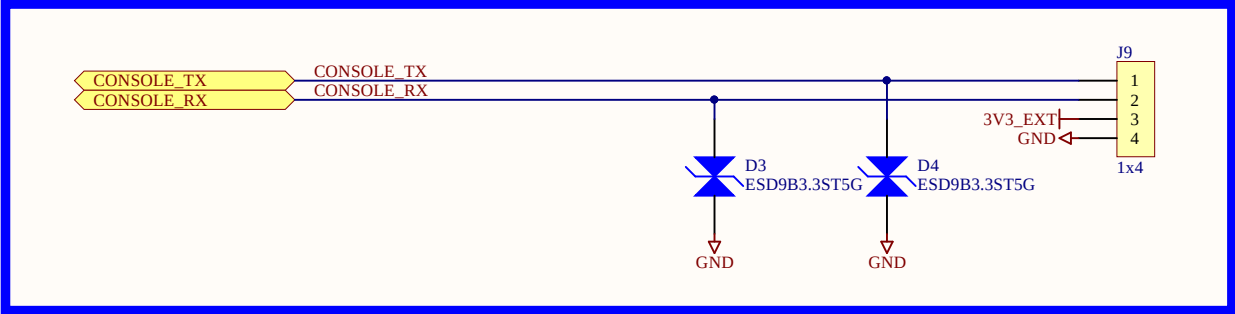
microSD



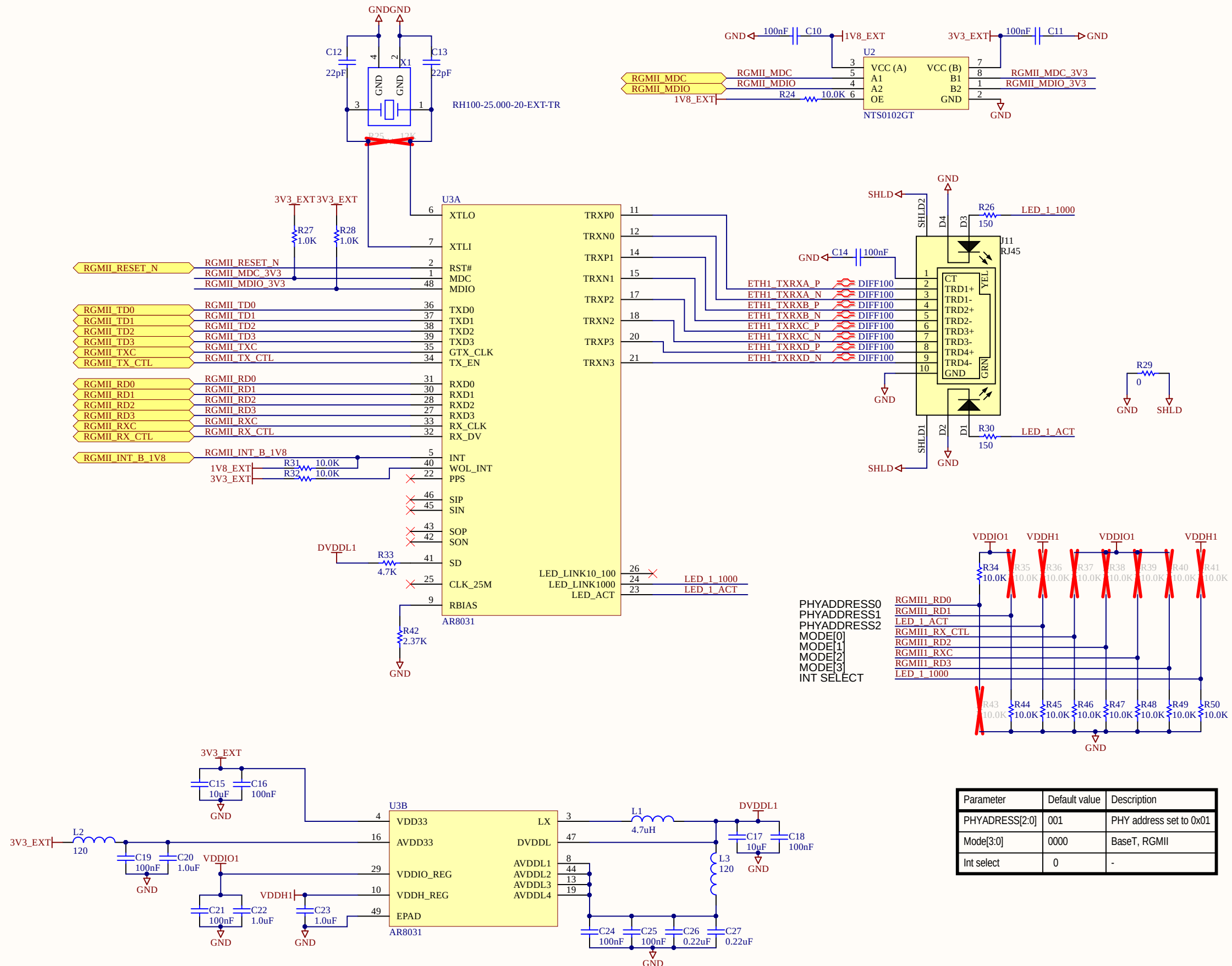
SWD MCA



Console TTL

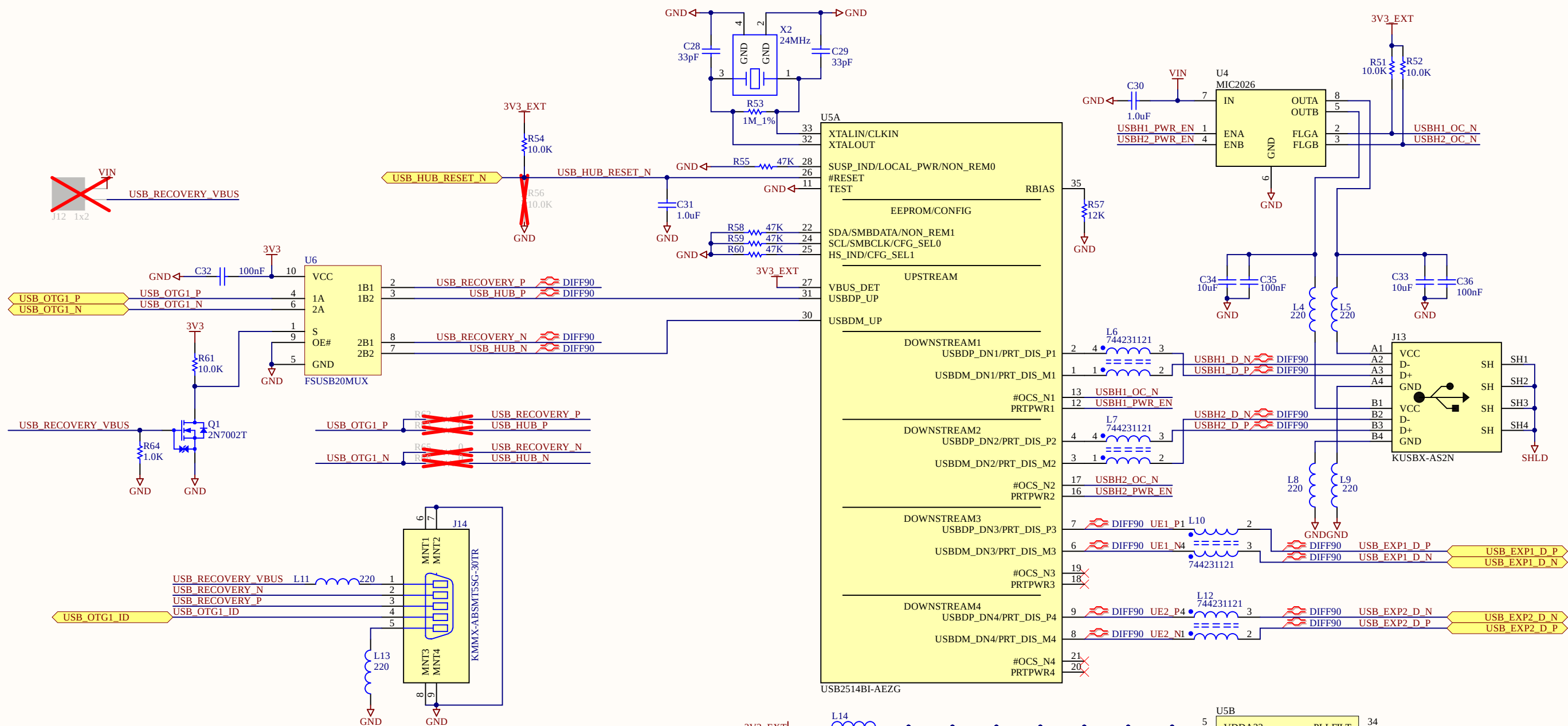


Gigabit Ethernet

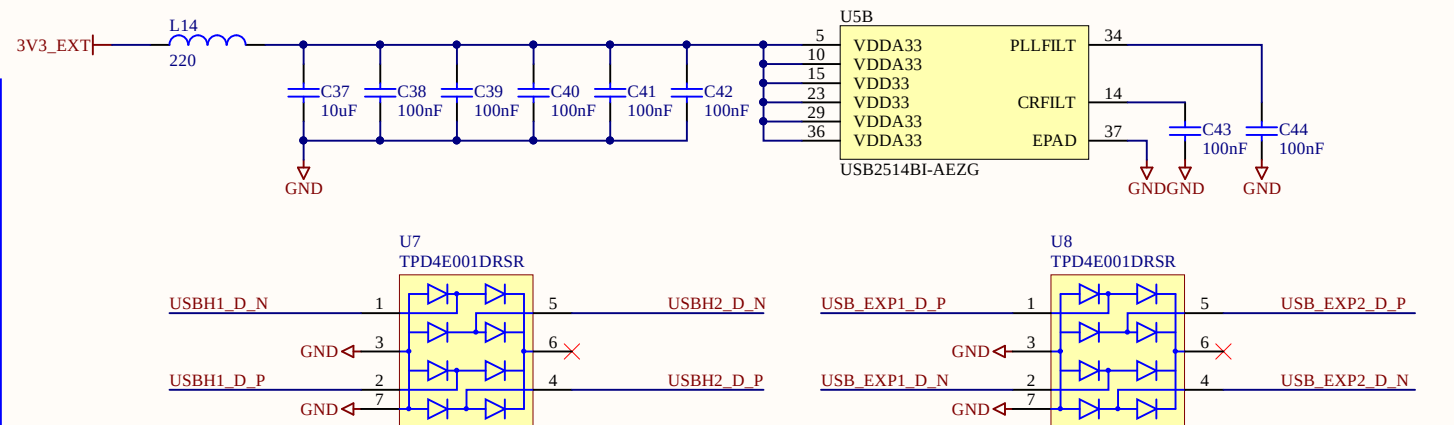
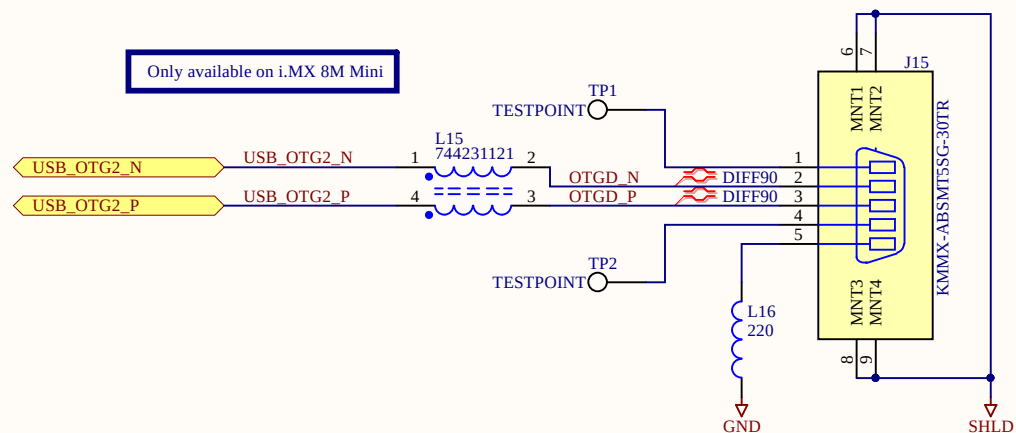


Parameter	Default value	Description
PHYADDRESS[2:0]	001	PHY address set to 0x0
Mode[3:0]	0000	BaseT, RGMII
Int select	0	-

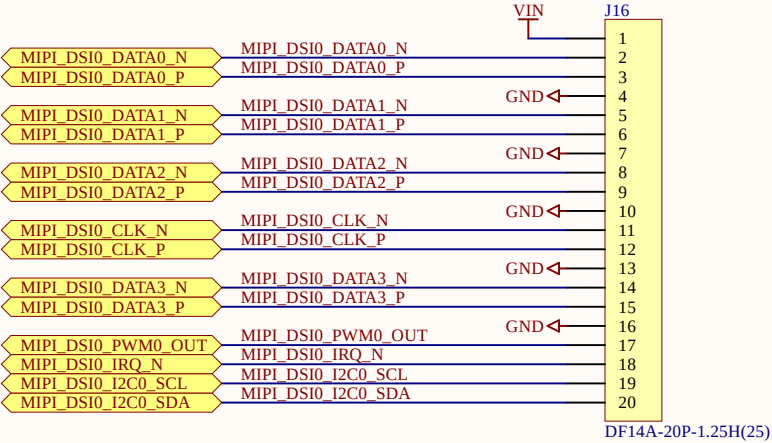
USB1



USB2

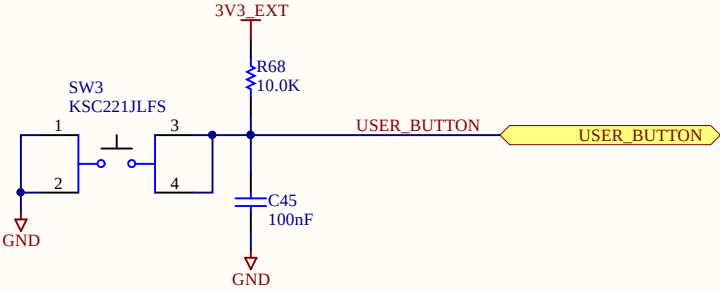


MIPI Display

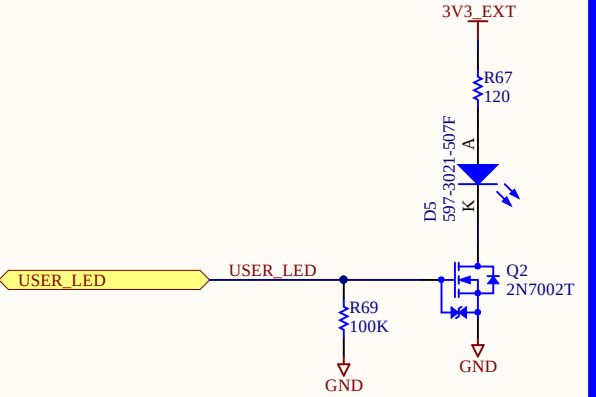


For further display implementations (LVDS/HDMI) check the full LGA version reference design (DVK).

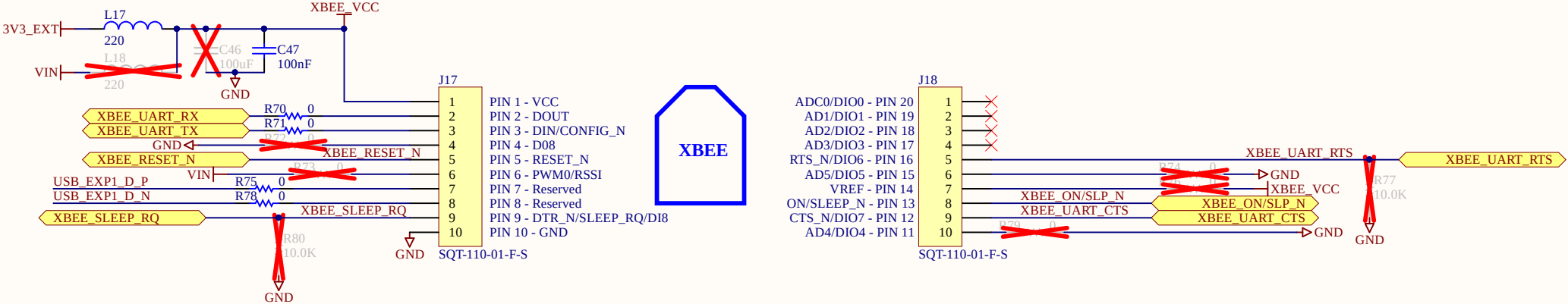
USER BUTTON



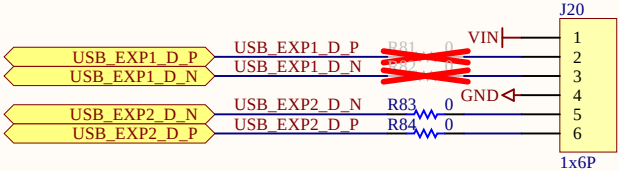
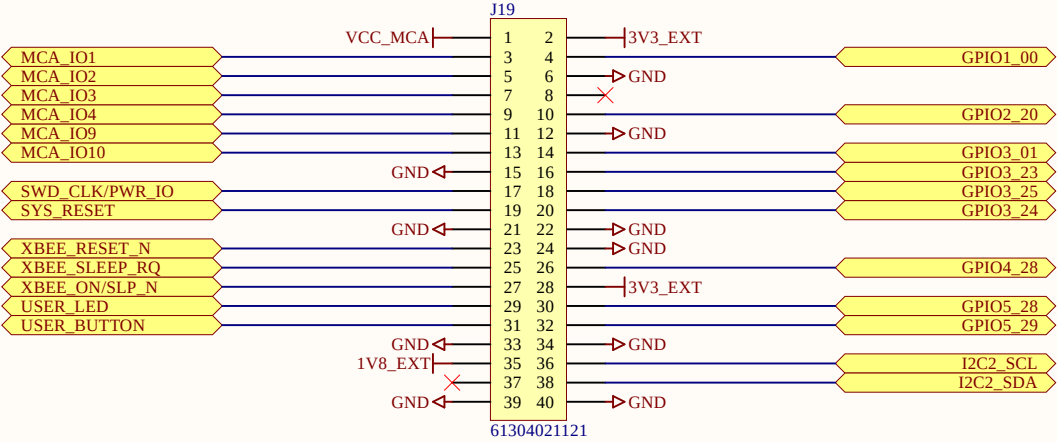
USER LED



XBee



Expansion Headers



System Power Rails					
Voltage (V)	Supply Name	Block	Generated by	Current Capability (mA)	Notes
5.0	VIN	USB	External DC supply	3000	
		LVDS			
		Expansion header			
		ConnectCore 8M			
3.3	3V3	microSD	PMIC BUCK4	3000	
		Ethernet			
		MIPI			
		LVDS			
		XBee			
		Expansion header			
	VCC_MCA	MCA	U1	150	
1.8	1V8	Ethernet	PMIC BUCK5	2000	
		Expansion header			

SOM pad name	GPIO	Signal name
i.MX8M processor		
GPIO4_IO27	GPIO4_27	RGMII_RESET
GPIO3_IO07(1V8)	GPIO3_07	RGMII_INT_B_1V8
USDHC2_RESET_B	GPIO2_19	MIPI_DSI0_IRQ_N
GPIO5_IO01	GPIO5_01	USER_LED
GPIO5_IO02	GPIO5_02	USER_BUTTON
GPIO5_IO03	GPIO5_03	XBEE_SLEEP_RQ
GPIO1_IO01	GPIO1_01	XBEE_RESET_N
GPIO1_IO04	GPIO1_04	XBEE_ON/SLP_N
GPIO5_IO04	GPIO5_04	USB_HUB_RESET_N

1	2	3	4	5	6	7	8	
A	Format: DD/MM/YYYY 05/08/2021 - ConnectCore for i.MX8M Castellated pad reference design * NPRO005956: 55002123-01 rev A - Initial version.							A
B								B
C								C
D								D
1	2	3	4	5	6	7	8	

Title: History			
Designer: Juan Anzola	Sheet: 8 of 8		
Variant: 55002123-01	Rev: A		
Description: CC8M Castellated Reference Design			