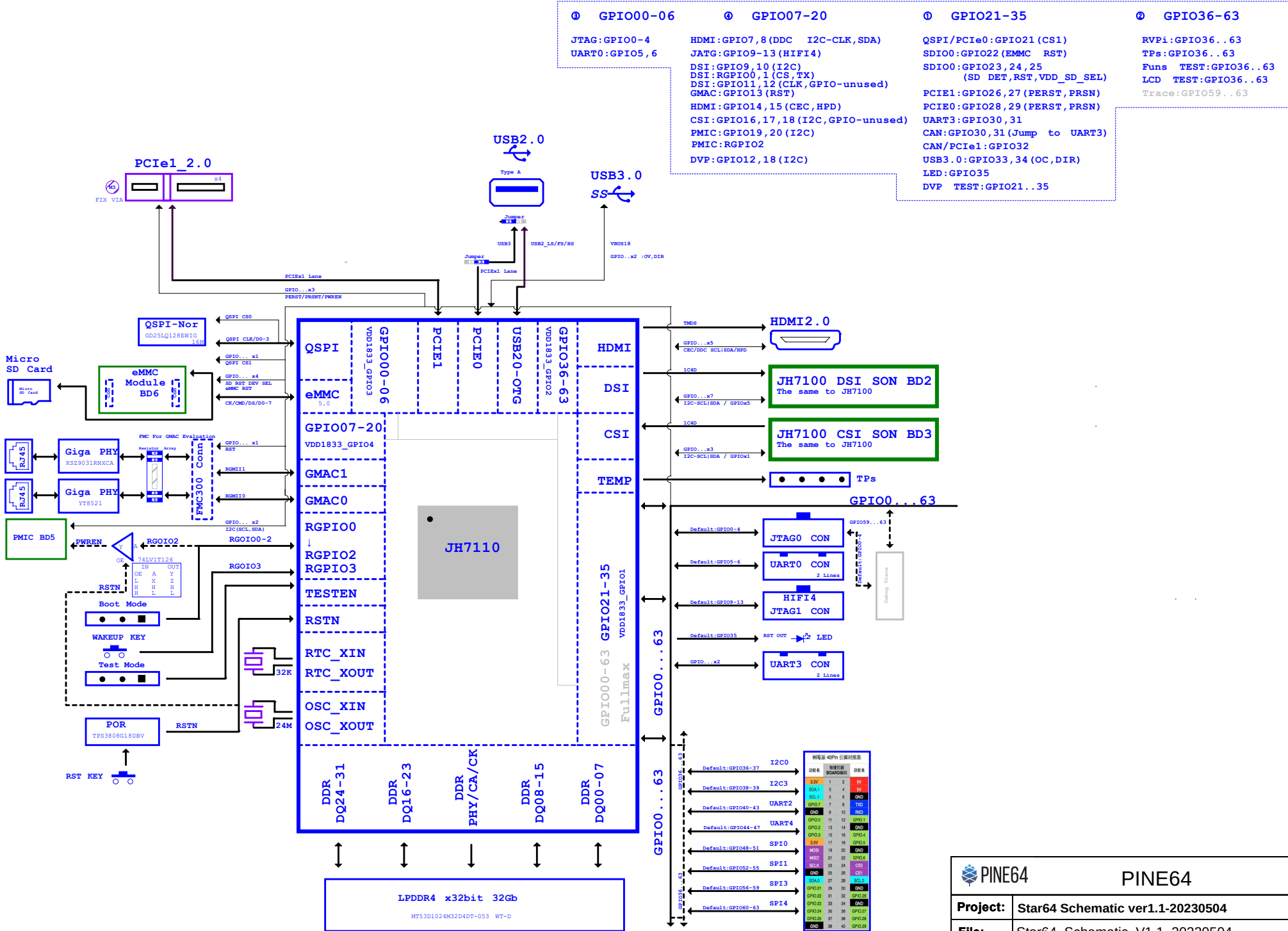
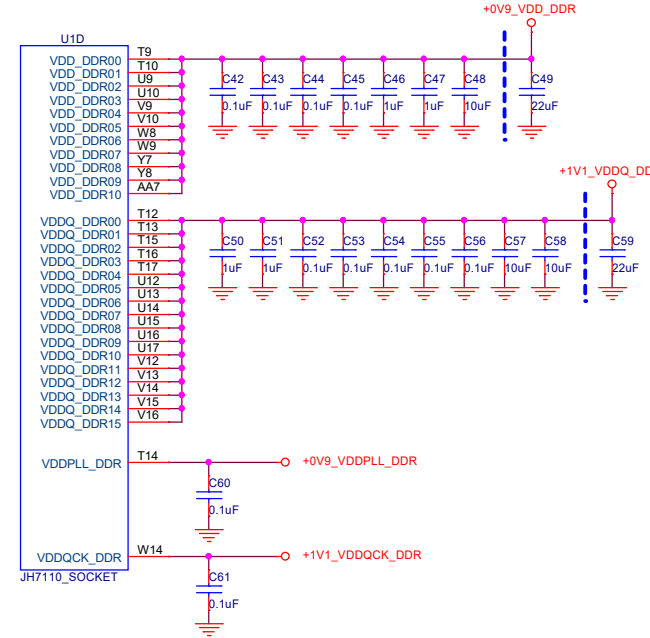
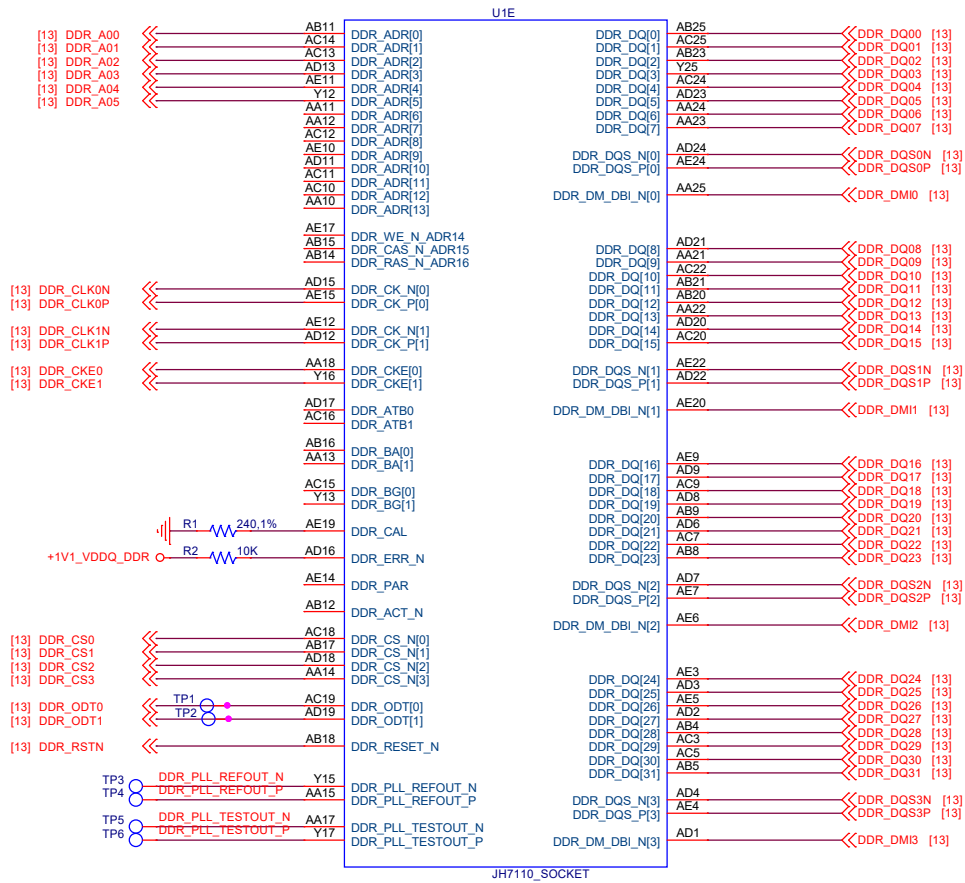


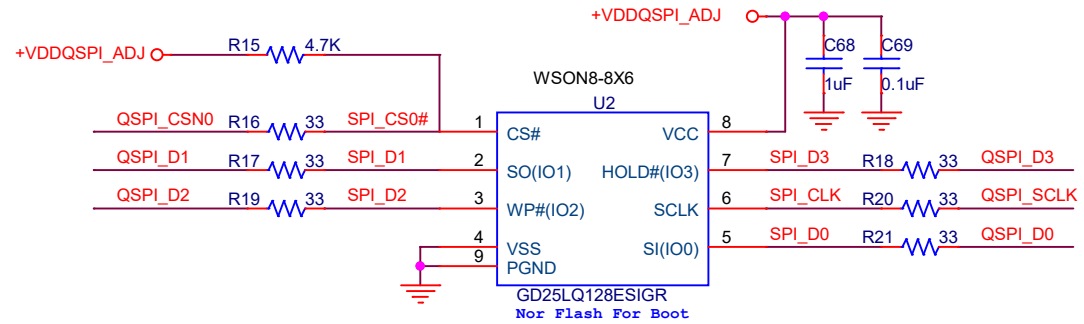
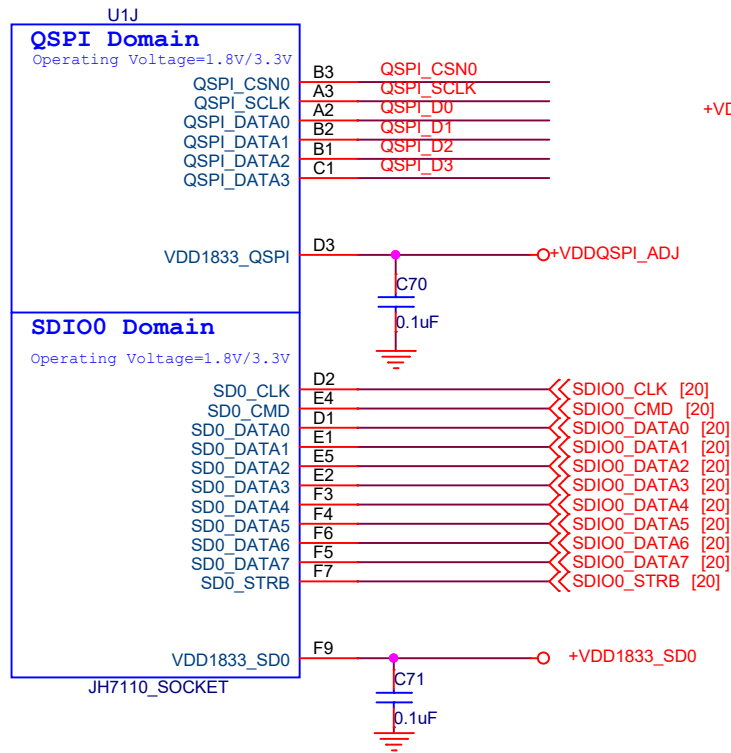
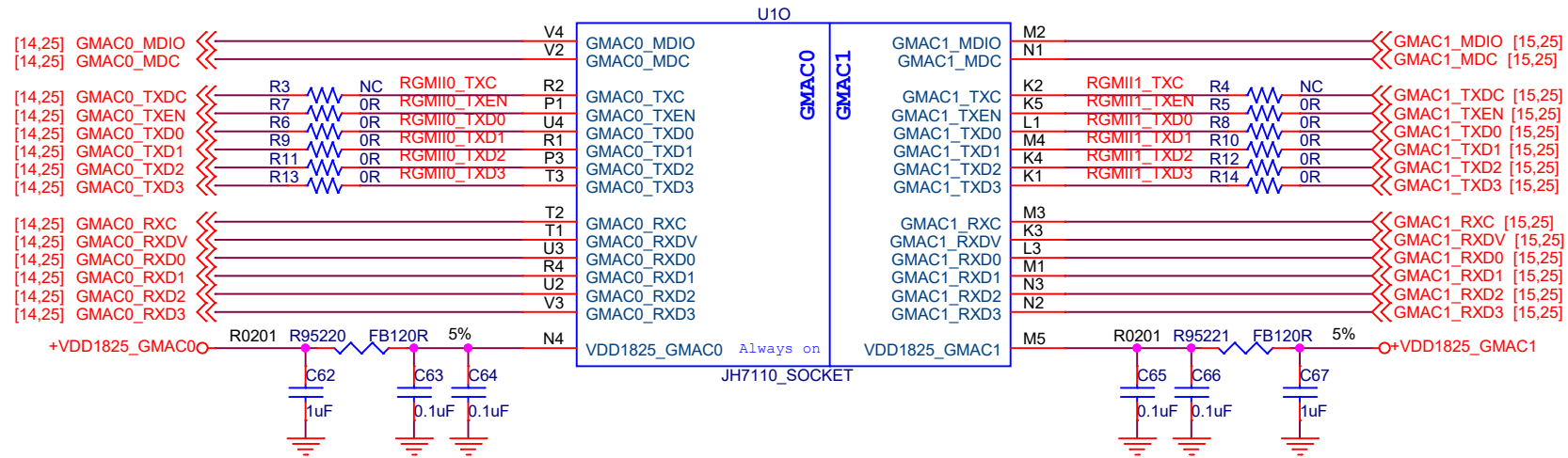


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File:	Star64_Schematic_V1.1_20230504		
Date:	Thursday, May 04, 2023	Rev:	V1.1
Designed by:	Vamrs Tech	Sheet:	1 of 26

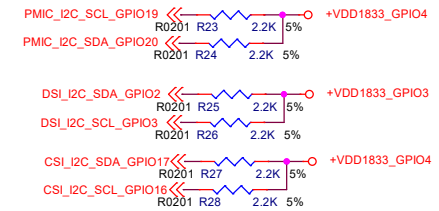
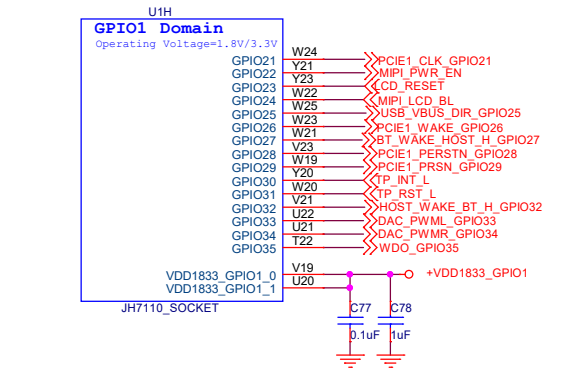
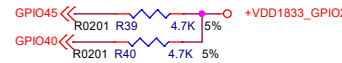
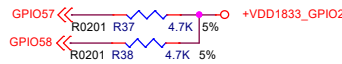
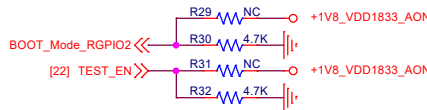
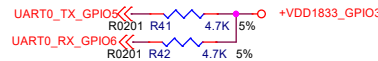
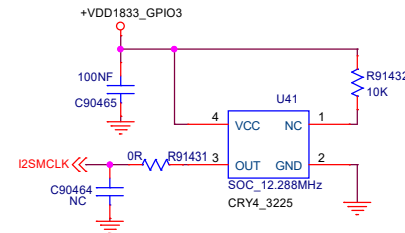
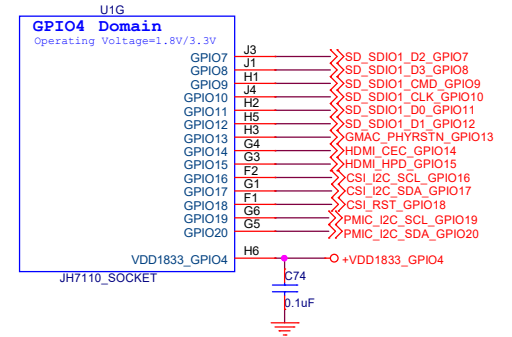
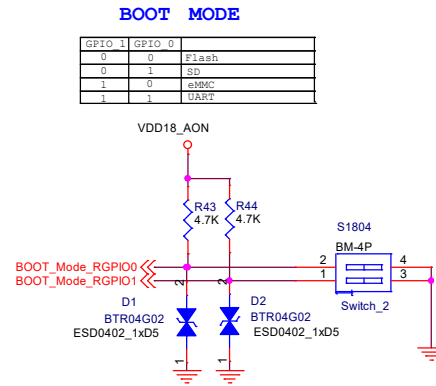
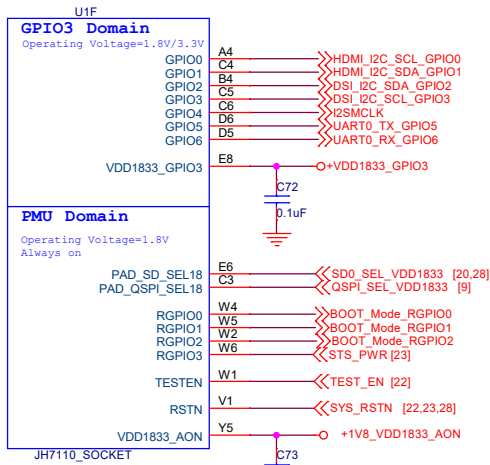
PAGE LIST
PAGE01: Diagram-SYSTEM
PAGE02: Diagram-PD_SEQ
PAGE03: Diagram PD
PAGE04: Diagram-GPIOs List
PAGE05: JH7110 Power
PAGE06: JH7110 DDR Ctrl
PAGE07: JH7110 EMMC&QSPI
PAGE08: JH7110 GPIOs
PAGE09: JH7110 SYS&OSC
PAGE10: JH7110 PCIE_MIPI_USB
PAGE11: LPDDR4 RAM
PAGE12: MIPI_RX/TX_AUDIO
PAGE13: ETHERNET_0
PAGE14: ETHERNET_1
PAGE15: eMMC & SD
PAGE16: Power & Reset
PAGE17: PMIC
PAGE18: 40PIN IO&RTC
PAGE19: MIPI_LCD
PAGE20: USB HUB_0
PAGE21: USB HUB_1
PAGE22: USB Port
PAGE23: DIGITAL VIDEO
PAGE24: PCIE_X1
PAGE25: POWER IN
PAGE26: WIFI/BT

Power Group	GPIO Name	Default FUN	Default Jumper	Default Devices (ALL ON J57)	EXT Jumper Function				
VDD1833_GPIO3	GPIO00	U7MC JTAG TCK	J17 & J18	J37(JTAG CON)					
	GPIO01	U7MC JTAG TDI							
	GPIO02	U7MC JTAG TMS							
	GPIO03	U7MC JTAG TDO							
	GPIO04	U7MC JTAG TRSTN	J21 & J22	J38(UART CON)					
	GPIO05	UART0 TX							
	GPIO06	UART0 RX							
VDD1833_GPIO4	GPIO07	HDMI I2C SCL	J26 & J27	CN1(HDMI CON)	J24 & J25 J43(FIHI4 JTAG TCK) J24 & J25 J43(FIHI4 JTAG TDI) J24 & J25 J43(FIHI4 JTAG TDO) J24 & J25 J43(FIHI4 JTAG TMS) J24 & J25 J43(JTAG TRSTN FIHI4)	J36 J54(DVP I2C SDA)			
	GPIO08	HDMI I2C SDA	J24 & J23	J6(DSI CON)					
	GPIO09	DSI I2C SDA							
	GPIO10	DSI GPIO							
	GPIO11	DSI I2C SCL							
	GPIO12		R237	U6,7(GMAC PHYRSTN)					
	GPIO13	GMAC PHYRSTN							
	GPIO14	HDMI CEC GPIO	J26 & J27	CN1(HDMI CON)					
	GPIO15	HDMI HPDIN							
	GPIO16	CSI I2C SCL	J28 & J29					J5(CSI CON)	J36 J54(DVP I2C SCL)
	GPIO17	CSI I2C SDA							
	GPIO18	CSI GPIO							
	GPIO19	PMIC I2C SCL		J32 & J33			U26(PMIC Module)		
	GPIO20	PMIC I2C SDA							
	VDD1833_GPIO1	GPIO21	PCIE1 PWREN H	J15			U32(PCIE1 PWREN)	J16 U3(QSPI Flash CS)	
GPIO22		SDIO0 RSTN	J16	J10(eMMC Module)					
GPIO23		SD DET N							
GPIO24		SD RST N							
GPIO25		SD SEL18 EN							
GPIO26		PCIE0 PERSTN	J19	J14(SD Socket)					
GPIO27		PCIE0 PRSN							
GPIO28		PCIE1 PERSTN							
GPIO29		PCIE1 PRSN							
GPIO30		UART3 TX	J20	U12(PCIE1 CON)	J104 U22(CAN0_TXD) J105 U22(CAN0_RXD) J100 U22(CAN0_STBY)				
GPIO31		UART3 RX							
GPIO32		PCIE0 PWREN H							
GPIO33		USB VBUS DIR							
GPIO34		USB OC							
GPIO35		WTD RSTOUT							
VDD1833_GPIO2	GPIO36			J55					
	GPIO37								
	GPIO38								
	GPIO39								
	GPIO40								
	GPIO41								
	GPIO42								
	GPIO43								
	GPIO44								
	GPIO45								
	GPIO46								
	GPIO47								
	GPIO48								
	GPIO49								
	GPIO50								
	GPIO51								
	GPIO52								
	GPIO53								
	GPIO54								
	GPIO55								
	GPIO56								
	GPIO57								
	GPIO58								
	GPIO59								
	GPIO60								
	GPIO61								
	GPIO62								
	GPIO63								
VDD18_AON	RGPIO0	Boot Mode	J44	(NOT ON J57)	J6(DSI CON)				
	RGPIO1	Boot Mode	J41		J6(DSI CON)				
	RGPIO2	Boot Mode	J40		U26(PMIC WAKEUP)				



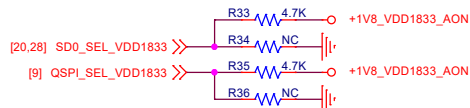


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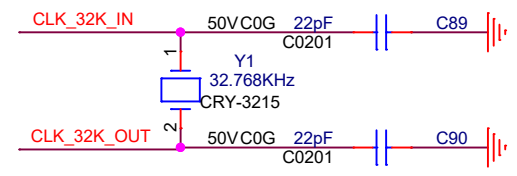
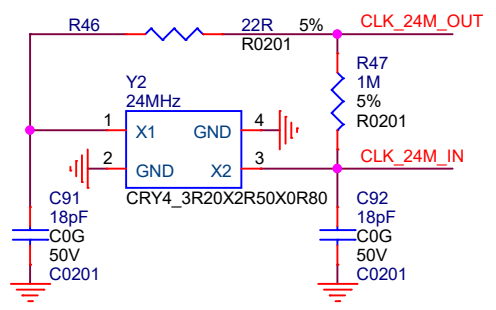
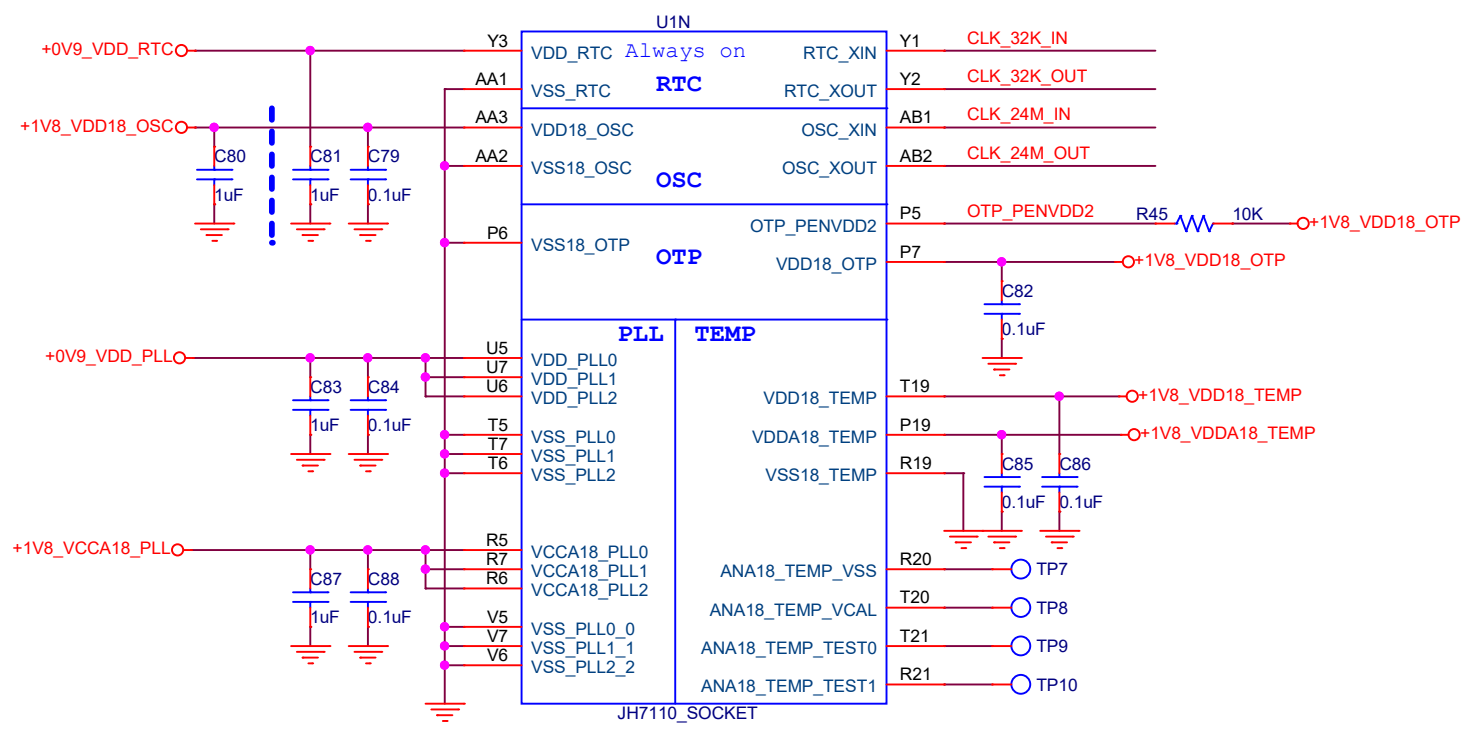


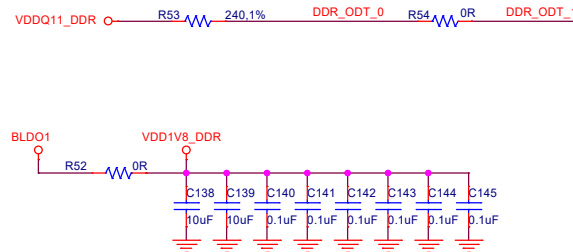
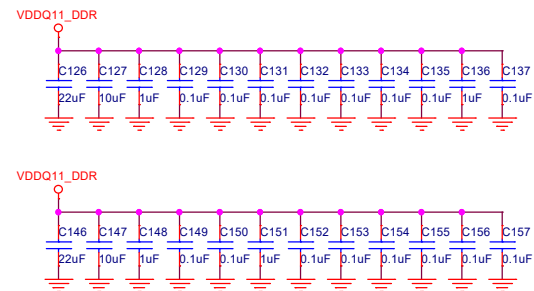
Note:

+VDD1833_SD0=1.8V, SD0_SEL=H.
+VDD1833_SD0=3.3V, SD0_SEL=L.
+VDDQSPI_ADJ=1.8V, QSPI_SEL=H.
+VDDQSPI_ADJ=3.3V, QSPI_SEL=L.



5 4 3 2 1



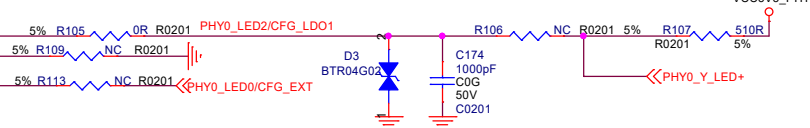
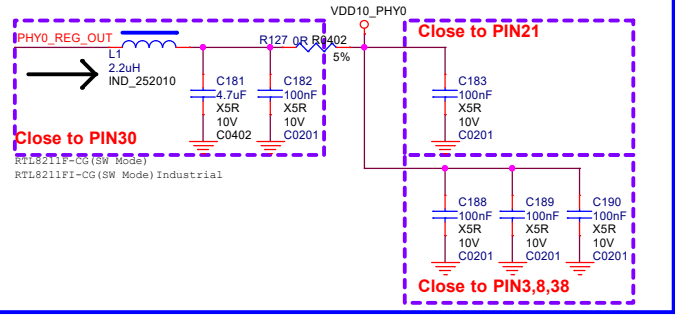
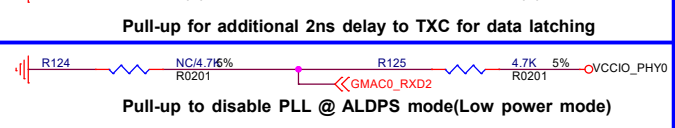
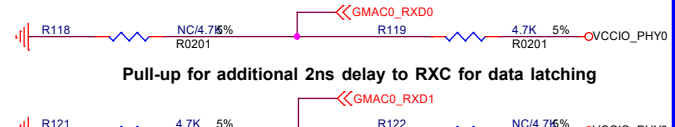
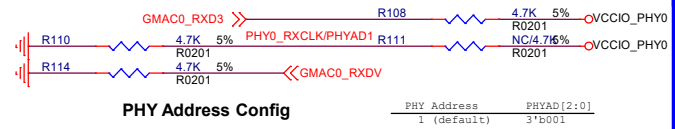
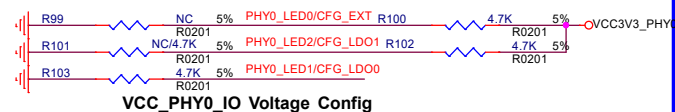
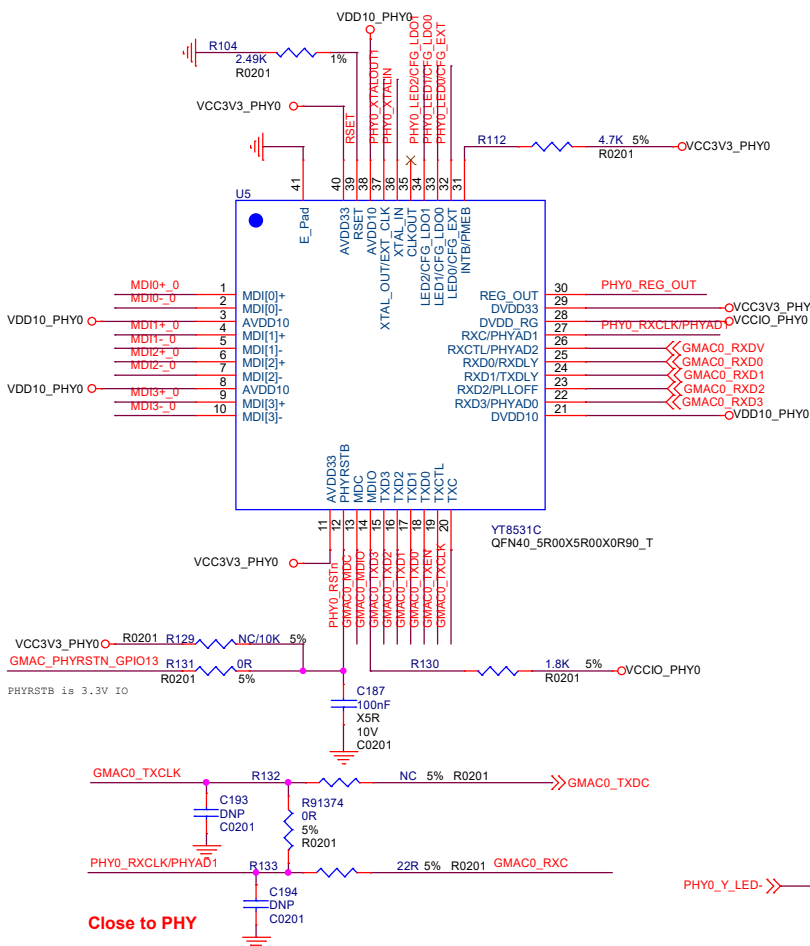
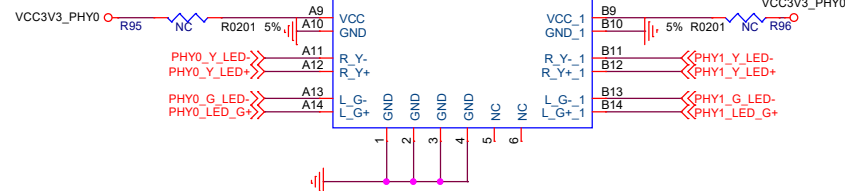
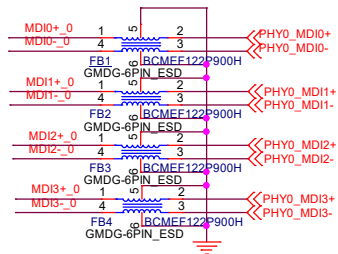
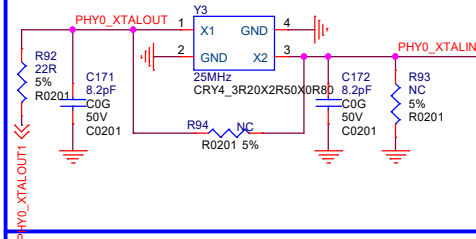


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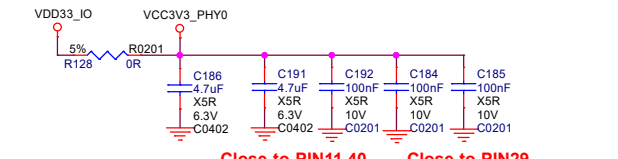
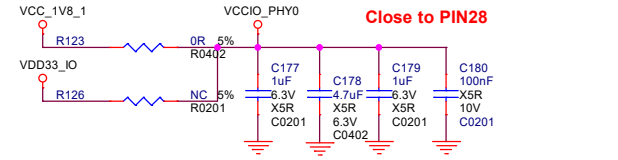
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Date: Thursday, May 04, 2023	Sheet 11 of 26	

Giga PHY0

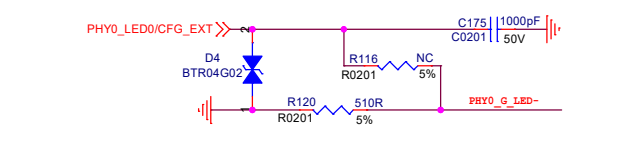
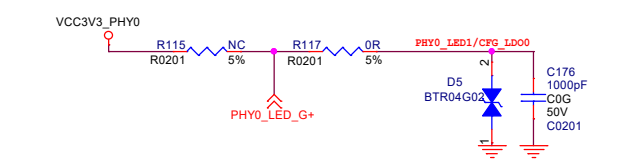
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GMACO_TXD1
GMACO_TXD2
GMACO_TXD3
GMACO_TXEN
GMACO_TXDC
GMACO_RXD0
GMACO_RXD1
GMACO_RXD2
GMACO_RXD3
GMACO_RXDV
GMACO_RXC
GMACO_MDC
GMACO_MDIO
GMACO_PHYRSTN_GPIO13



Note: According to the actual choice of mounted Cannot be mounted at the same time



RGMI1 Power Source	CFG_EXT	CFG_LDO[1:0]
External 3.3V	1'b1	2'b00
External 1.8V	1'b1	2'b10
Internal 1.8V(default)	1'b0	2'b10

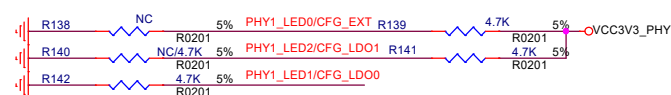
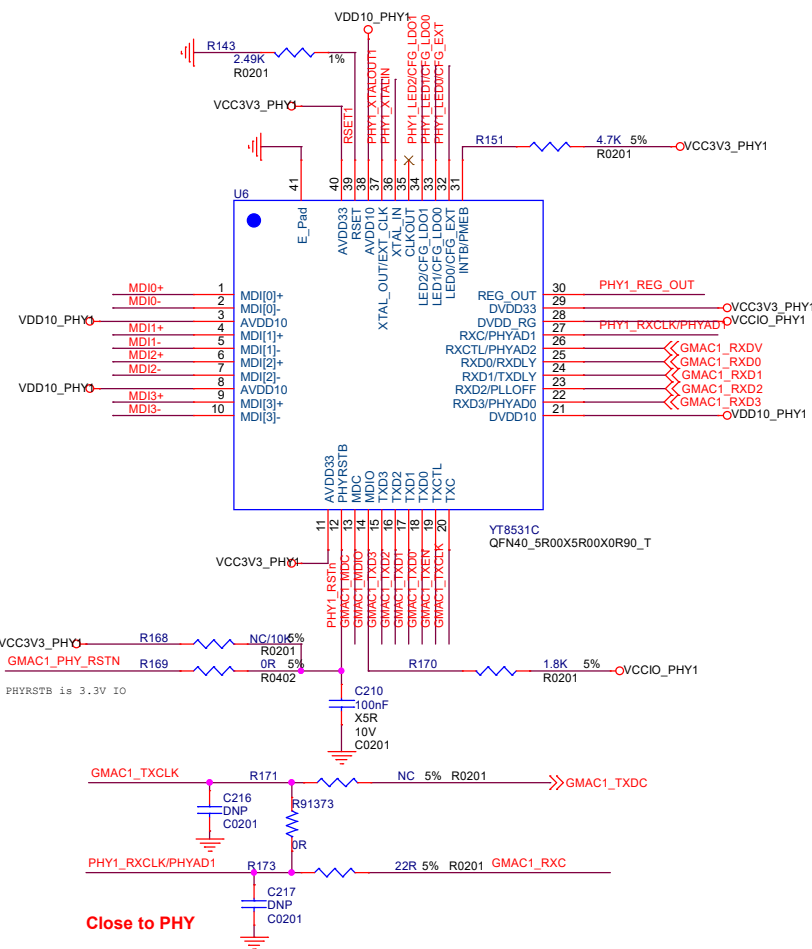
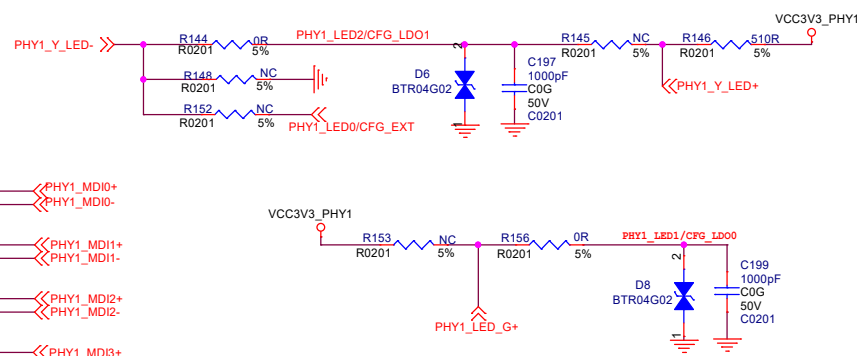
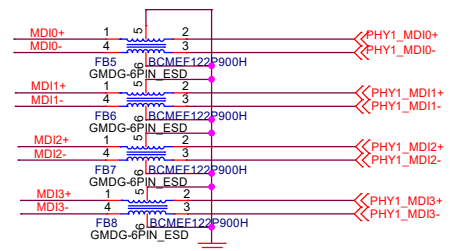
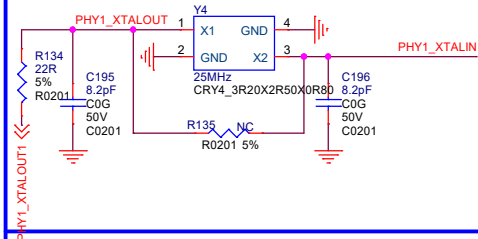


————>>> GMAC1_TXD0
 ————>>> GMAC1_TXD1
 ————>>> GMAC1_TXD2
 ————>>> GMAC1_TXD3
 ————>>> GMAC1_TXEN

 ————>>> GMAC1_TXDC

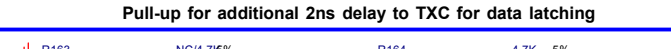
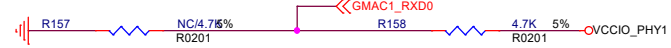
 <<< GMAC1_RXD0
 <<< GMAC1_RXD1
 <<< GMAC1_RXD2
 <<< GMAC1_RXD3
 <<< GMAC1_RXDV

 <<< GMAC1_RXC

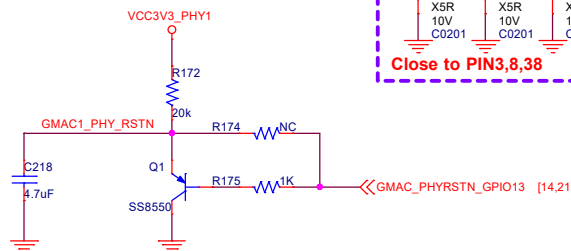
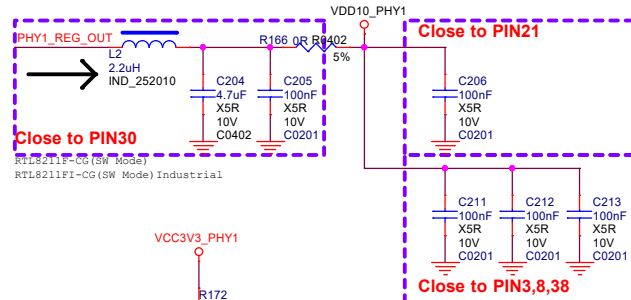


Timing diagram for PHY1_RXCLK/PHYAD1. The diagram shows signals R149, R150, R154, R147, R150, and R150. The signals are connected to VCCIO_PHY1. The timing parameters are 4.7K, 5%, and 5%.

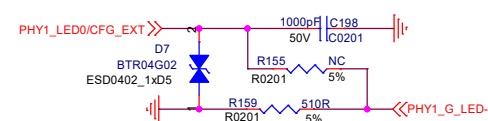
PHY Address Config	PHY Address	PHYAD[2:0]
	1 (default)	2'b001



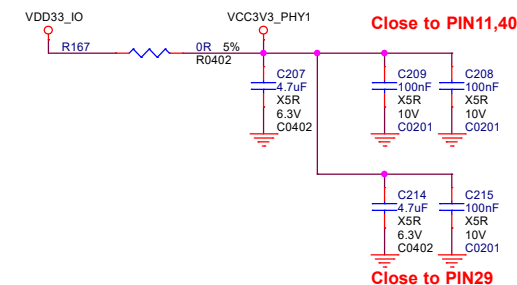
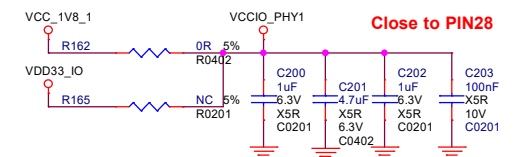
Pull-up to disable PLL @ ALDPS mode(Low power mode)



RGMII Power Source	CFG_EXT	CFG_LDO[1:0]	
External 3.3V	1'b1	2'b00	
External 1.8V	1'b1	2'b10	
Internal 1.8V(default)	1'b0	2'b10	



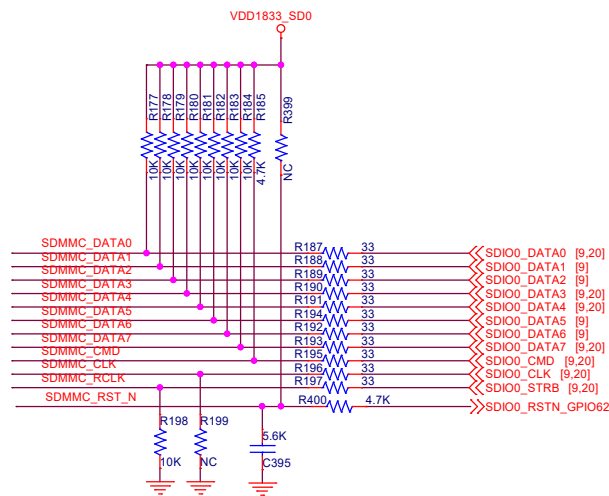
Note:
According to the actual
choice of mounted
Cannot be mounted
at the same time



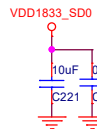
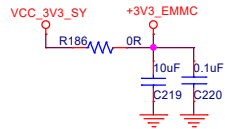
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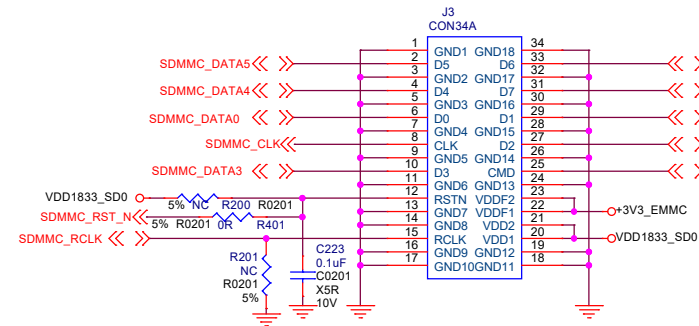
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	Page Name: Ethernet_1	
Date: Thursday, May 04, 2023		Sheet 14 of 26



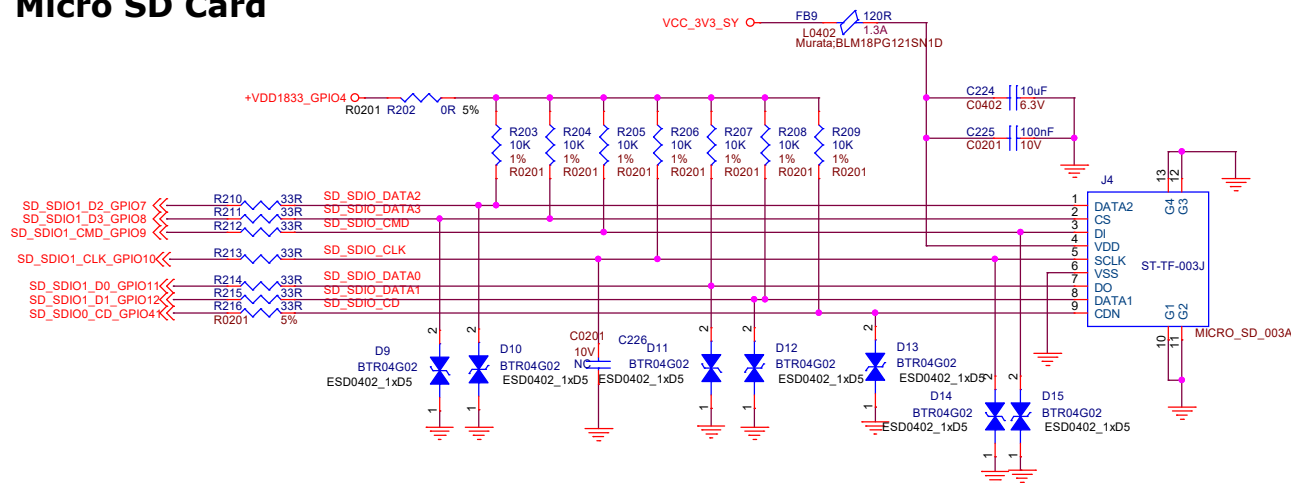
+VDD1833_SD0

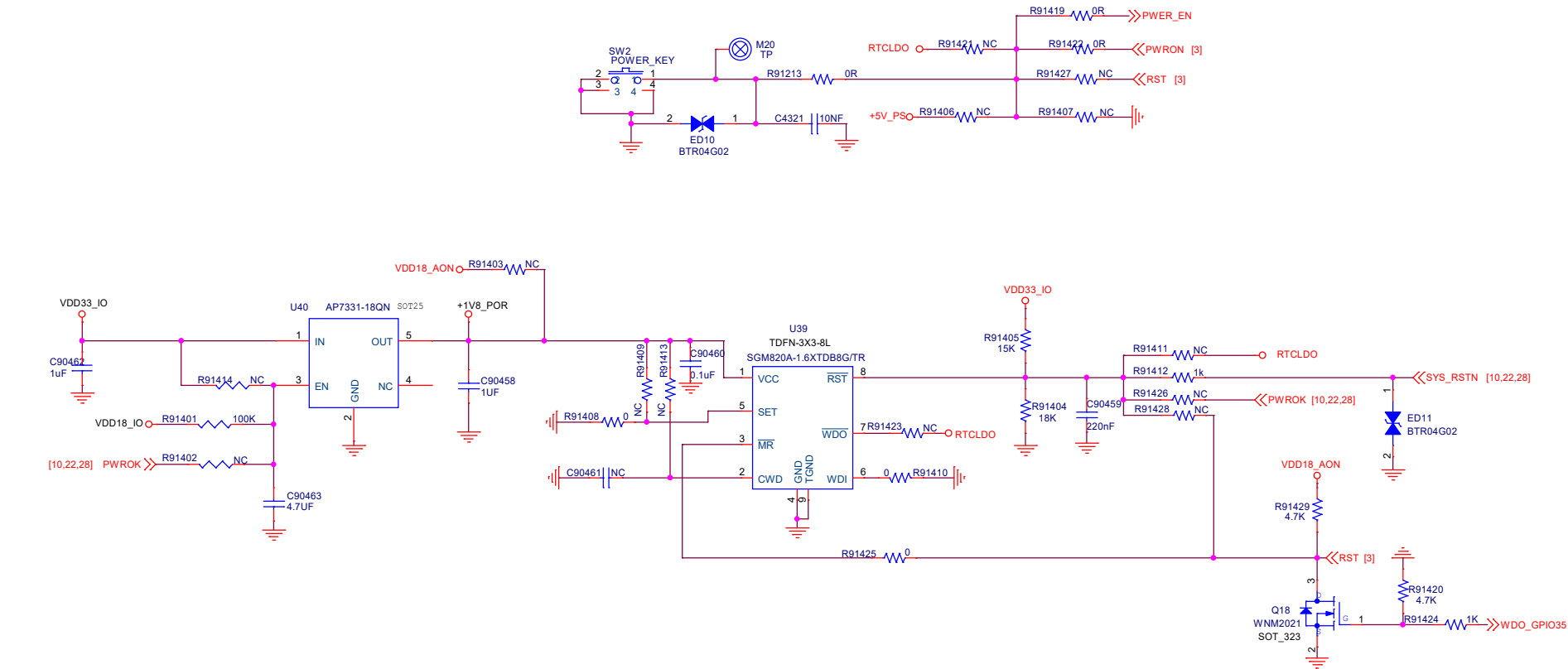


eMMC Module

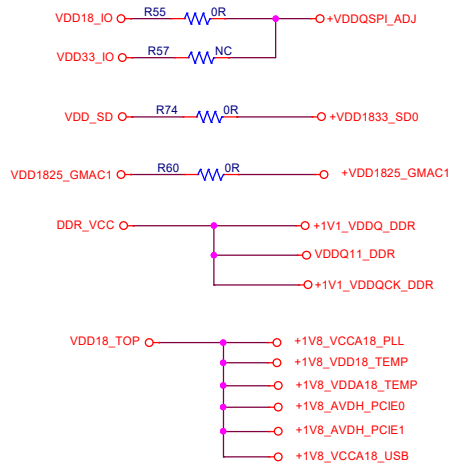


Micro SD Card

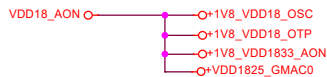




Timing 3



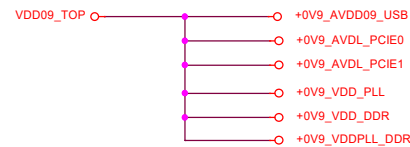
Timing 1



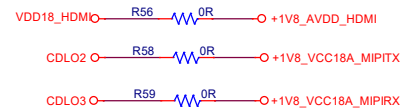
Timing 2



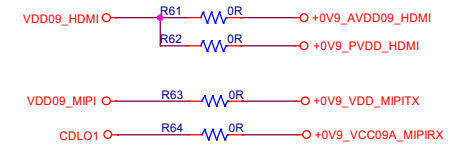
Timing 4



Timing 5

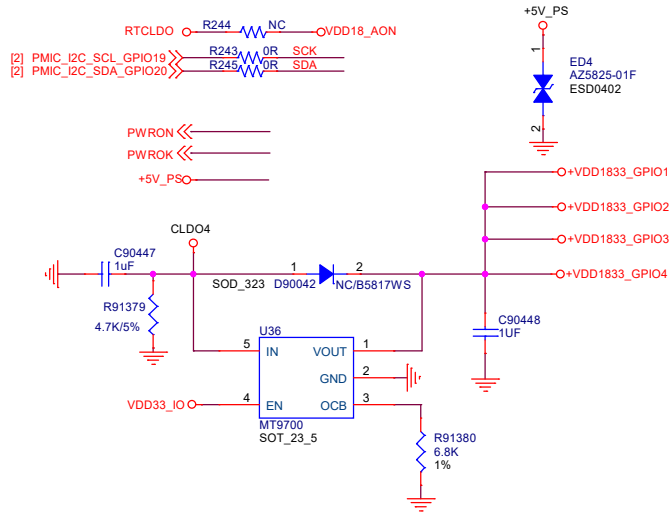


Timing 6

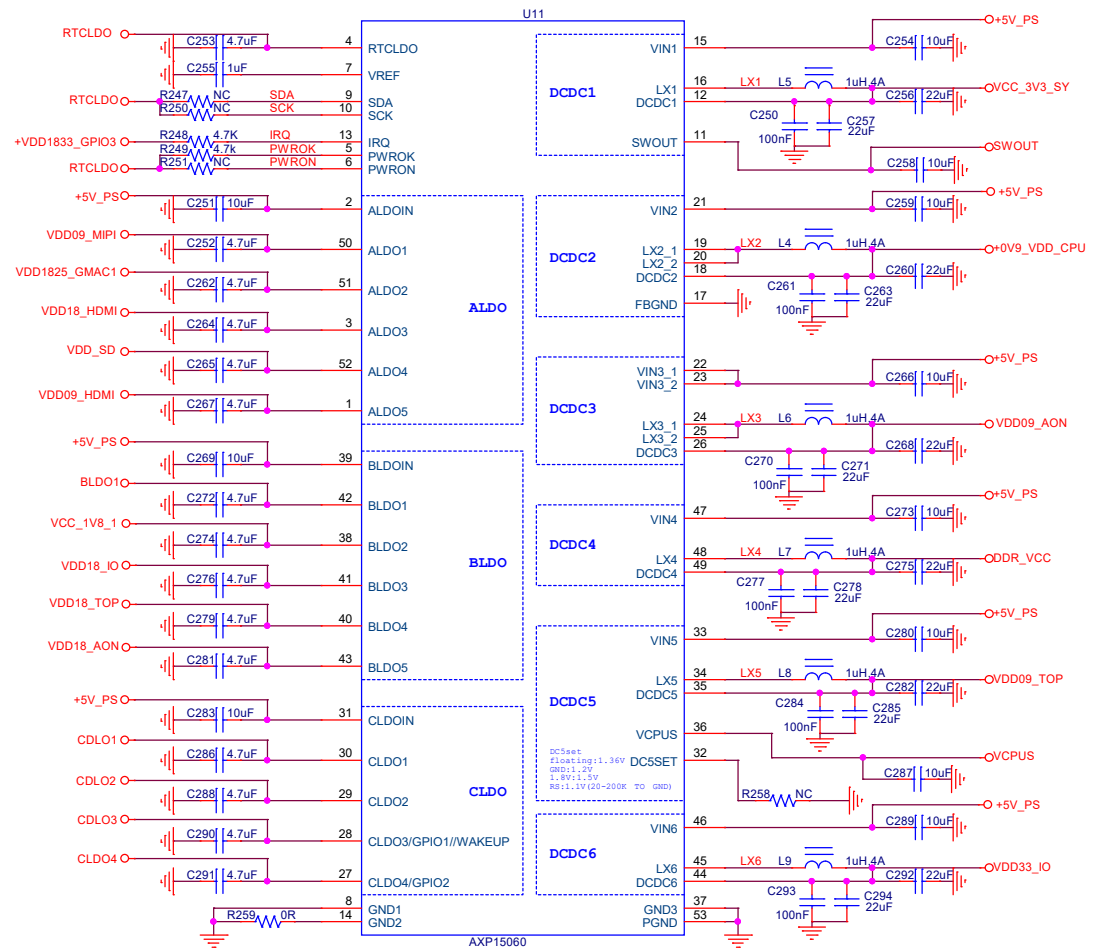
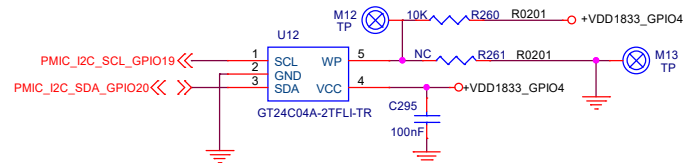
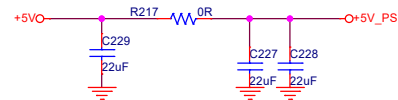
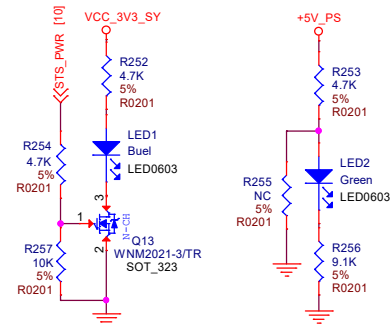


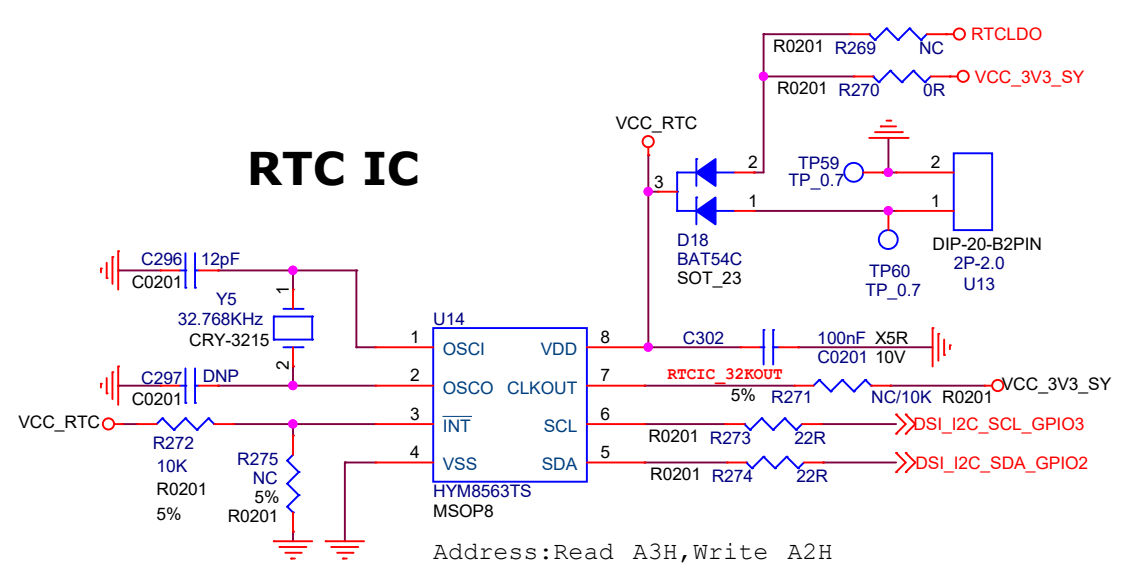
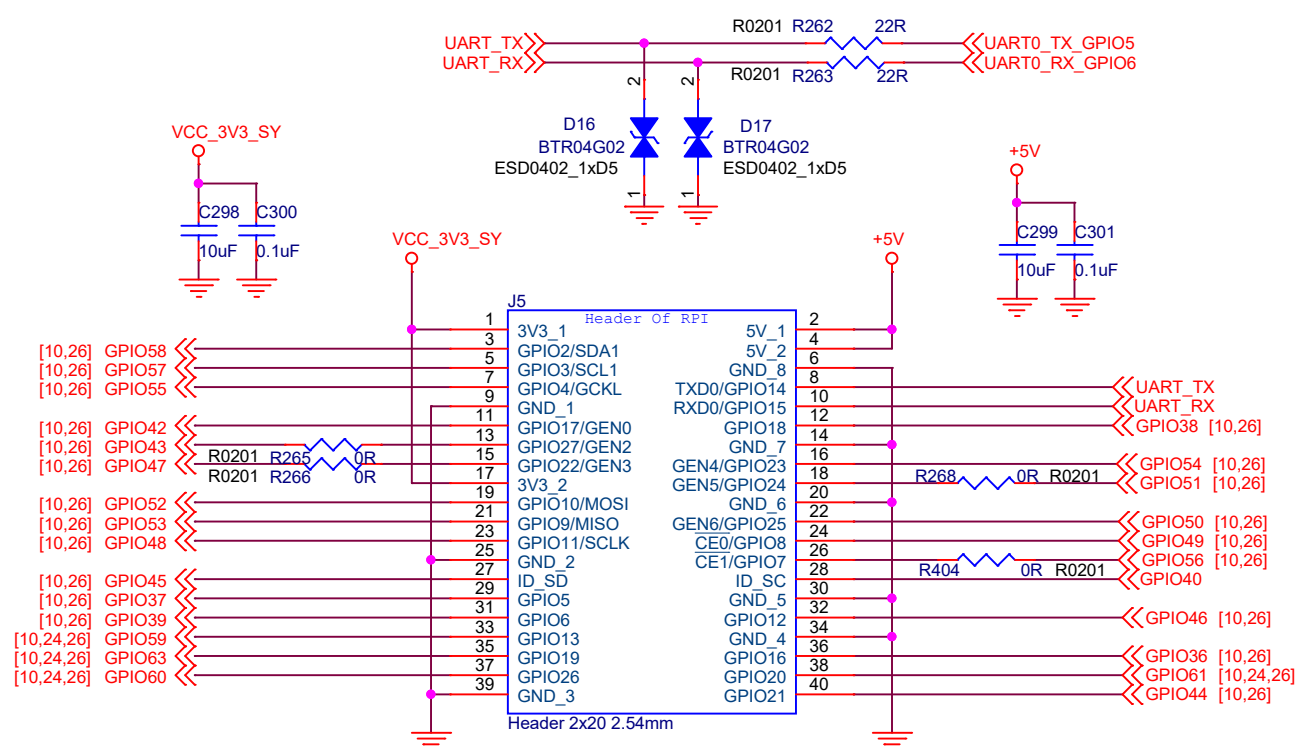
Timing 7

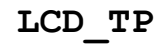


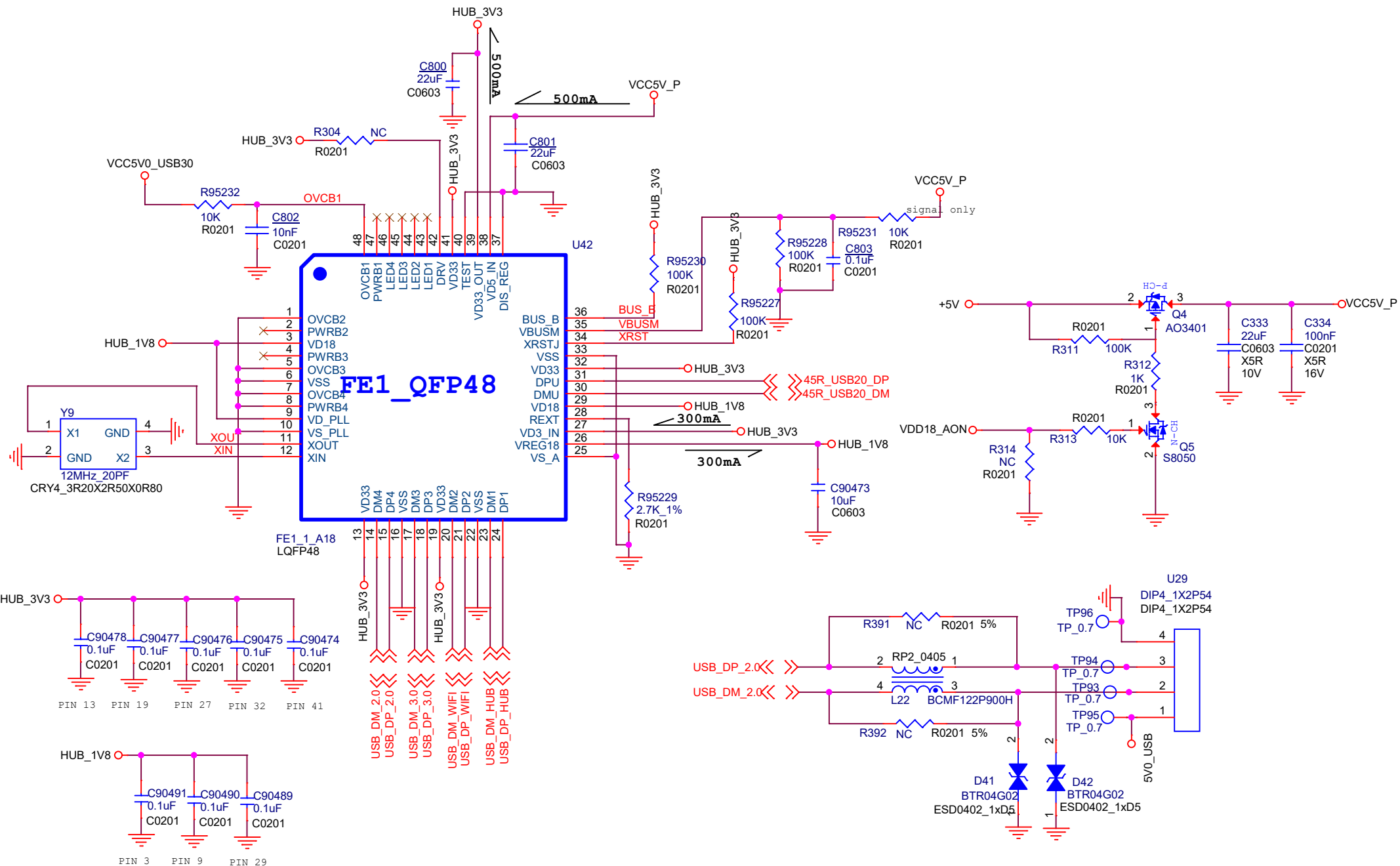


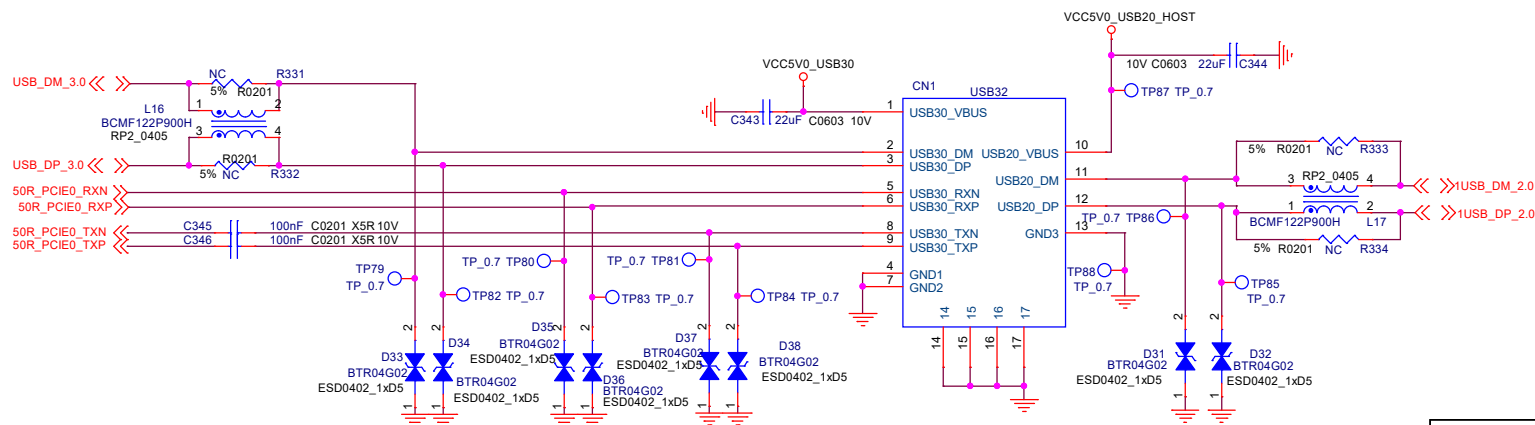
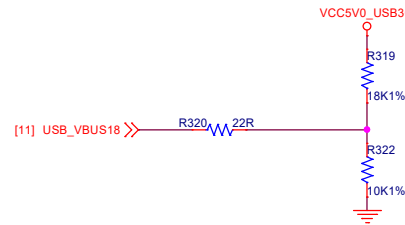
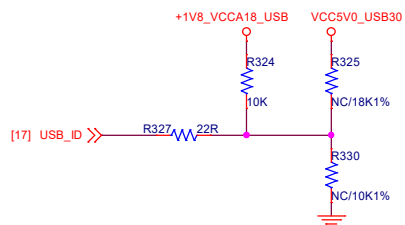
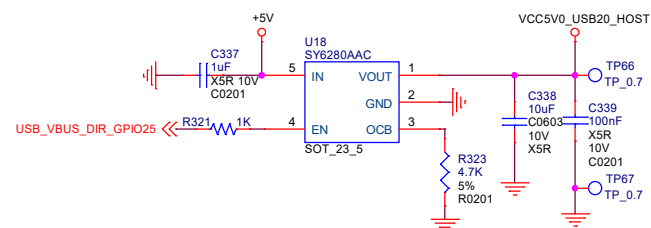
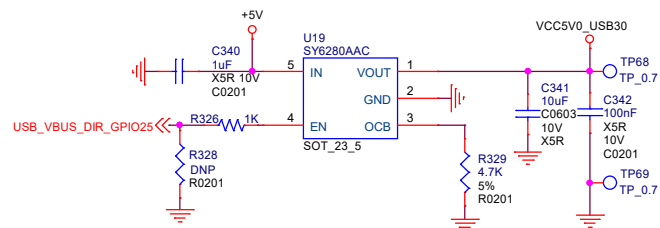
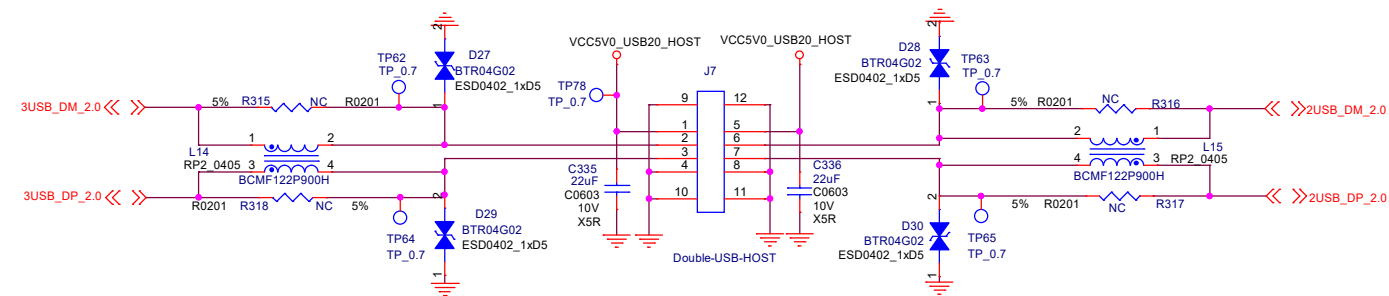
ACK&Power LEDs



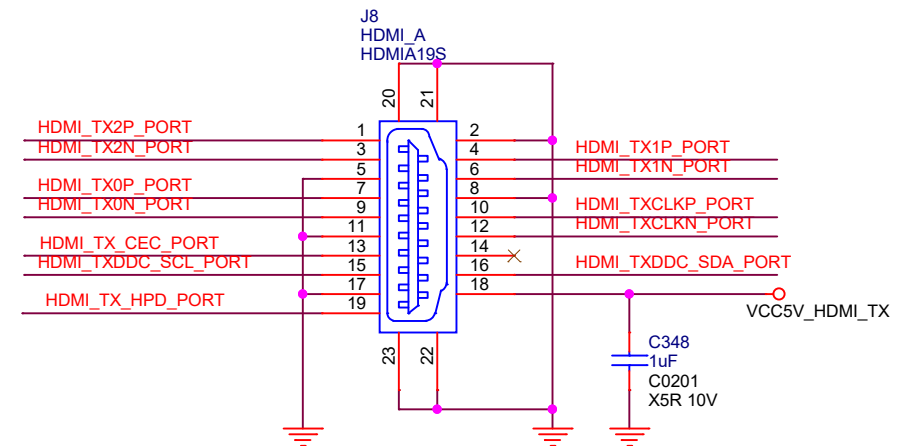
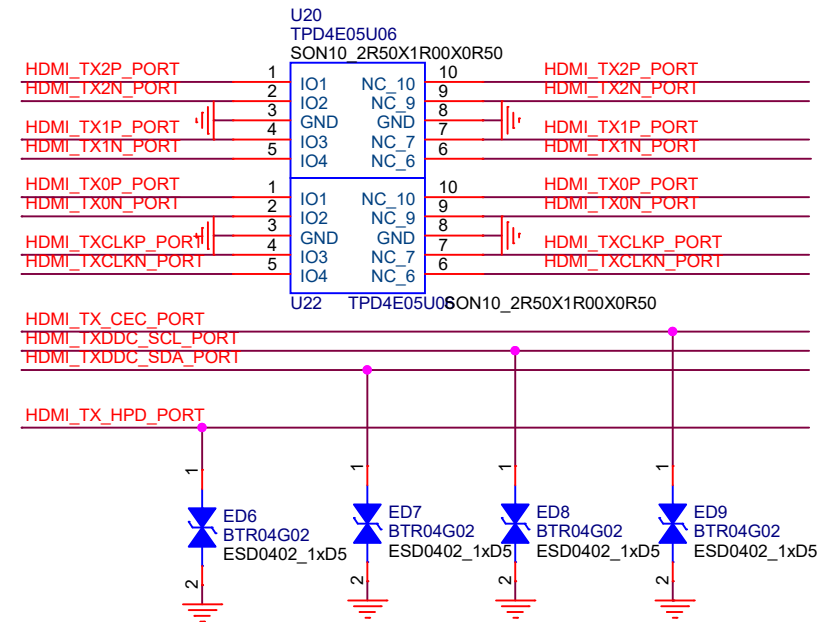
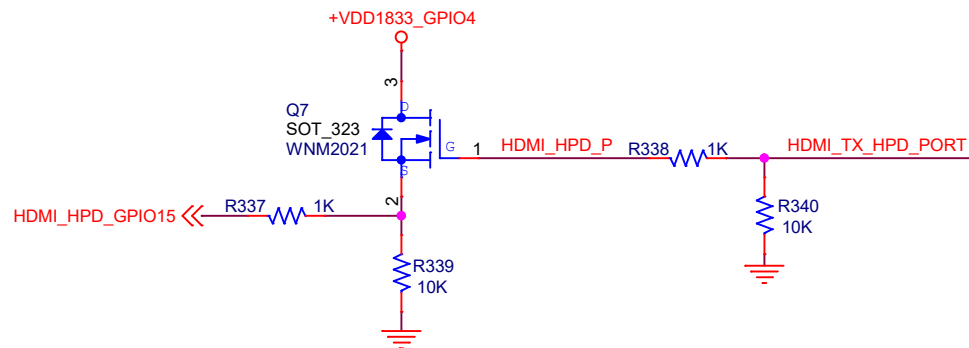
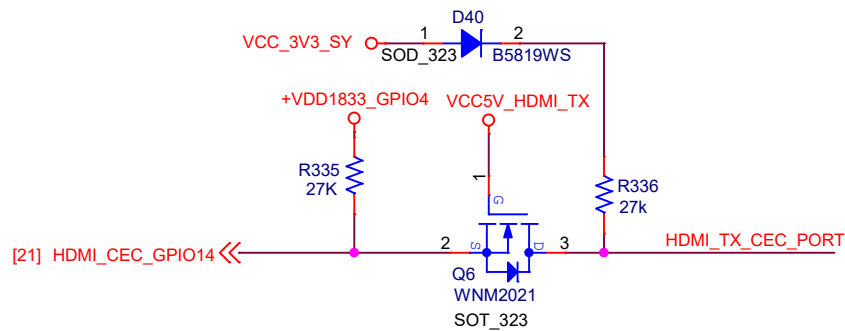
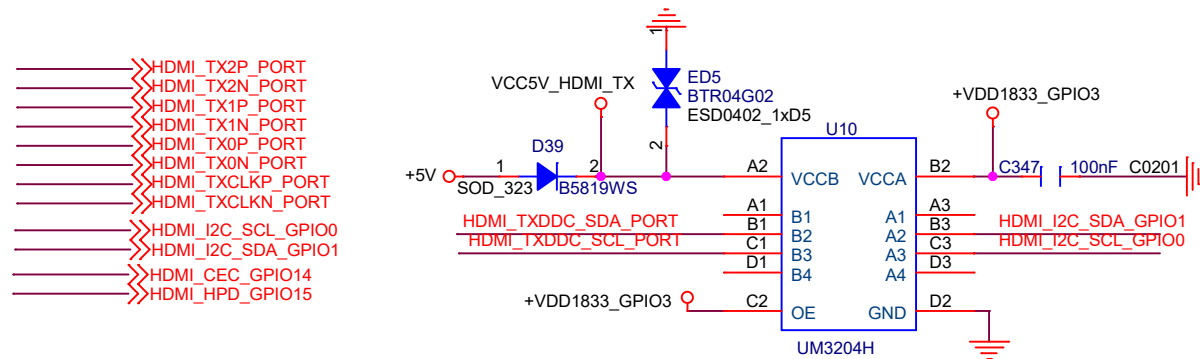




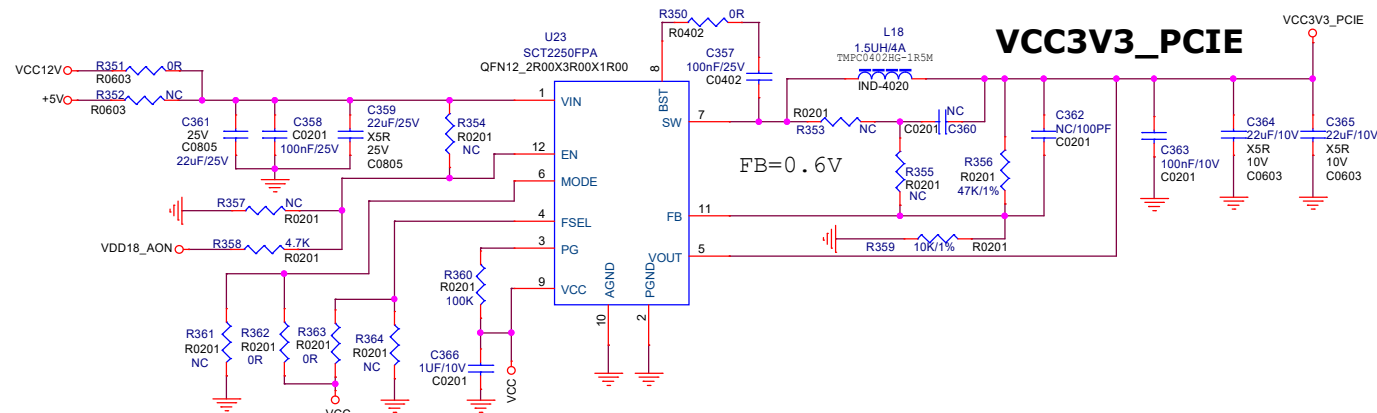
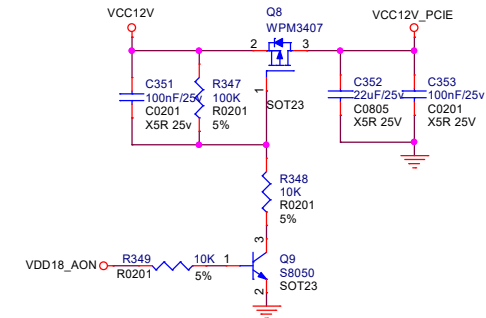
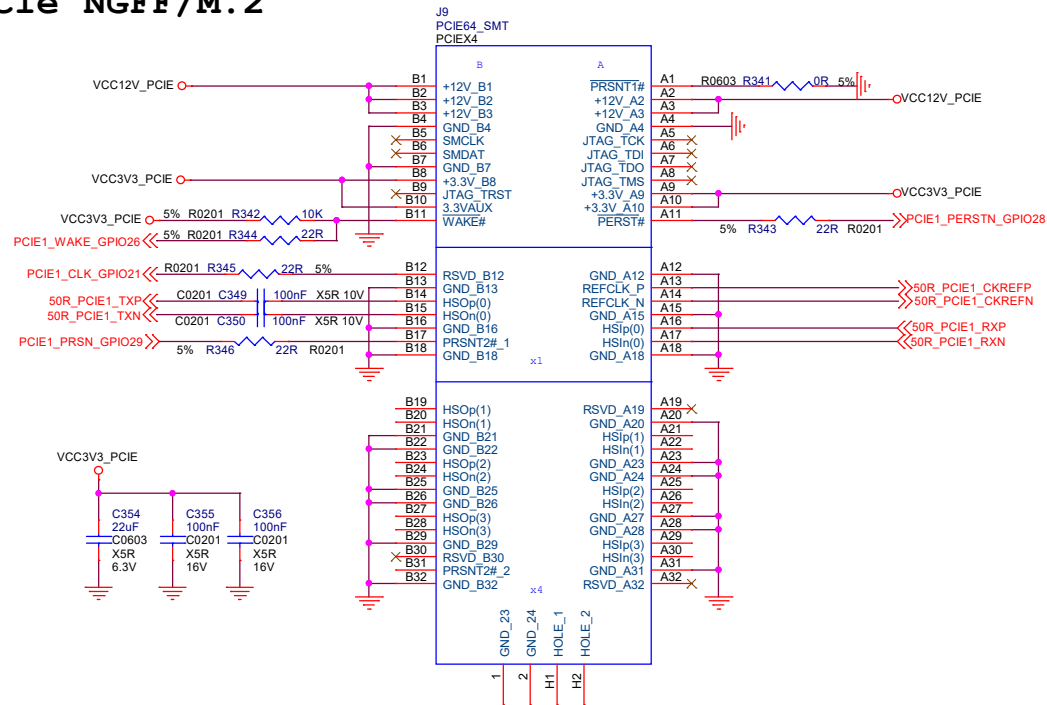




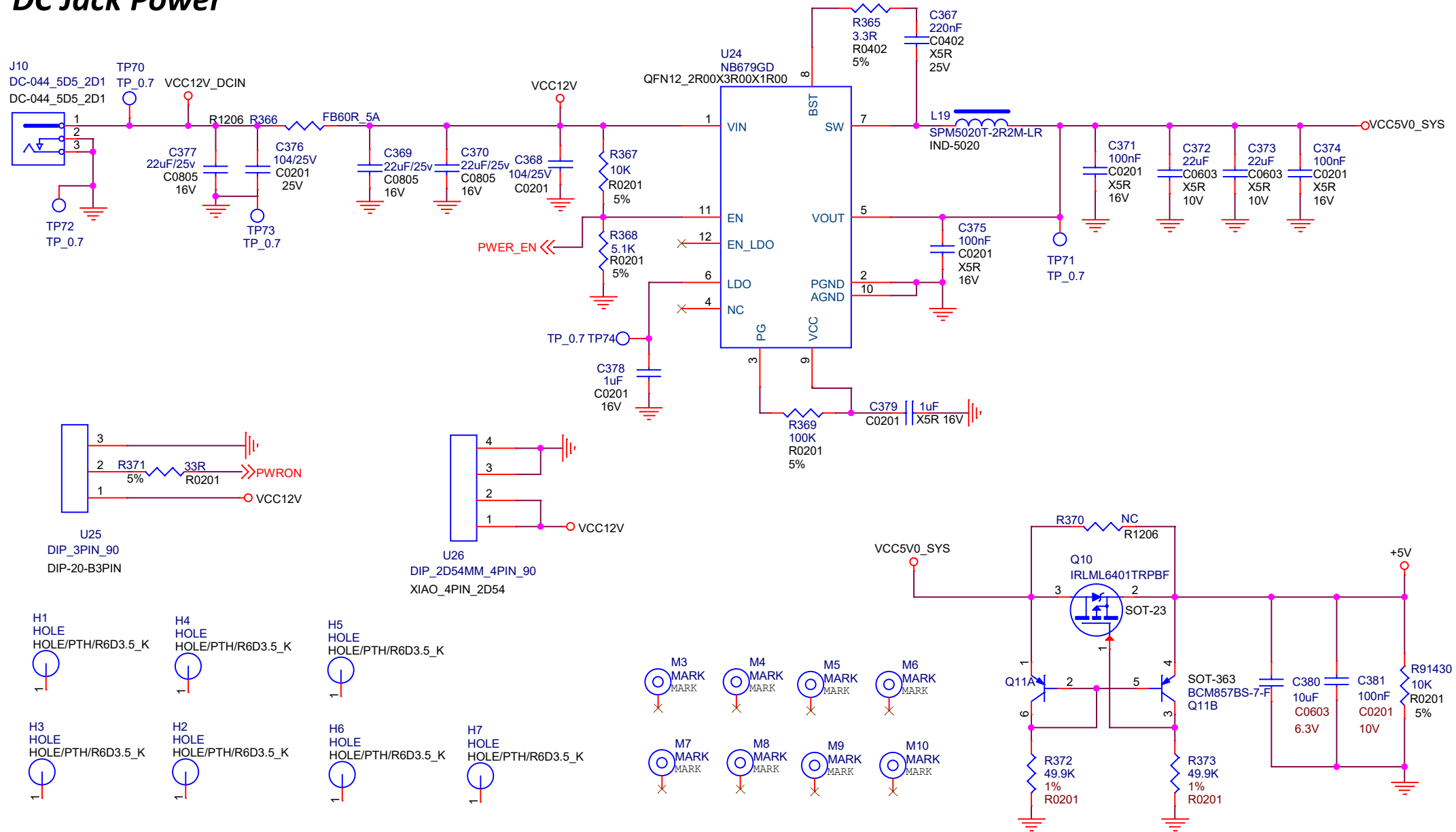
HDMI2.0 TX



PCIe NGFF/M.2



DC Jack Power



[10,26] GPIO43 << R0201 R375 0R << EESK
 [10,26] GPIO47 << R0201 R376 0R << WIFI_RESET
 [10,26] GPIO56 >> R0201 R405 0R >> WIFI_WAKE_HOST_GPIO22

