



Modify note

Version	Date	Author	Change Note	Approved
V00	20170504	LZZ	First edictor	

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Title: Modify note	
File: AIO_3399J	REV: V10
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RK3399 I2C MAP

Port	Pin name	Domain	Bus name	Pull-up voltage	Slave Device	Slave Addr (MS 7Bits)	Note	Slave Bus Capability
I2C0	GPIO1_B7/SPI3_RXD/I2C0_SDA GPIO1_C0/SPI3_TXD/I2C0_SCL	PMUIO2 VCC3V0_IO	I2C0_SDA_PMIC I2C0_SCL_PMIC	VCC3V0	TT8563	0xA2,0XA3	RTC	
					Rockchip RK808	0x1b	PMIC	
I2C1	GPIO4_A1/I2C1_SDA GPIO4_A2/I2C1_SCL	APIO5 VCC1V8_IO	I2C1_SDA_PCIE I2C1_SCL_PCIE	VCCA1V8_CODEC				
			I2C1_SDA_AUDIO I2C1_SCL_AUDIO	VCCA1V8_CODEC	ALC5640	0x38h	Audio codec	
			I2C1_SDA_CAM I2C1_SCL_CAM	VCCA1V8_CODEC	Omnivision OV13850	0x6c0,0x6D	MIPI Camera	
				VCCA1V8_CODEC	S5K4ECGX	0x78	DVP Camera	
	Other pin function	VCCA1V8_CODEC						
I2C2	GPIO2_A0/VOP_D0/CIF_D0/I2C2_SDA GPIO2_A1/VOP_D1/CIF_D1/I2C2_SCL	APIO2 VCC1V8_IO	Other pin function	VCC1V8_DVP				
I2C3	GPIO4_C0/I2C3_SDA/UART2B_RX GPIO4_C1/I2C3_SCL/UART2B_TX	APIO4 VCC3V0_IO	I2C3_SDA_HDMI I2C3_SCL_HDMI	VCC_3V0				
I2C4	GPIO1_B3/I2C4_SDA GPIO1_B4/I2C4_SCL	PMUIO2 VCC3V0_IO	I2C4_SDA_TYPEC I2C4_SCL_TYPEC	VCC_3V0	Fairchild FUSB302B	0x44,0x46	USB-TypeC Mux	100kHz,400kHz,1MHz fast mode+
			I2C4_SDA_TP I2C4_SCL_TP	VCC_3V0	Silead GSL3680	0x40	Touch panel	
			AT18_SDA AT18_SCL	VCC_3V0	AT18		Encryption	
			Other pin function	VCC_3V0				
I2C5	GPIO3_B2/MAC_RXER/I2C5_SDA GPIO3_B3/MAC_CLK/I2C5_SCL	APIO1 VCC3V3_LAN	Other pin function	VCC3V3_S3				
I2C6	GPIO2_B1/SPI2_RXD/CIF_HREF/I2C6_SDA GPIO2_B2/SPI2_TXD/CIF_CLKIN/I2C6_SCL	APIO2 VCC1V8_IO	Other pin function	VCC1V8_DVP				
I2C7	GPIO2_A7/VOP_D7/CIF_D7/I2C7_SDA GPIO2_B0/VOP_CLK/CIF_VSYNC/I2C7_SCL	APIO2 VCC1V8_IO	Other pin function					
I2C8	GPIO1_C4/I2C8_SDA GPIO1_C5/I2C8_SCL	PMUIO2 VCC3V0_IO	Other pin function					



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Title: I2C Map


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RK3399 Power Domain Map

Part Port	Domain	Pin name in datasheet	I/O type	Power supply	Power source
Part C	PMUI01	pmui01_gpio0ab	1.8V only	VCC1V8_PMUPLL	RK808 VLD03
Part E	PMUI02	pmu1830_gpio1abcd	1.8V(Default) 3.0V	VCC_1V5 VCC_3V0	RK808 VLD06 RK808 VLD08
Part I	API01	gmac_gpio3abc	3.3V only	VCC3V3_S3	RK808 VSW1
Part L	API02	bt656_gpio2ab	1.8V(Default) 3.0V	VCC1V8_DVP	RK808 VLD01
Part G	API03	wifi/bt_gpio2cd	1.8V only	VCC1V8_S3	RK808 Buck4
Part K	API04	gpio1830_gpio4cd	1.8V 3.0V(Default)	VCC_1V5 VCC3V0_IO	RK808 VLD06 RK808 VLD08
Part J	API05	audio_gpio3d_gpio4a	1.8V(Default) 3.0V	VCCA1V8_CODEC	RK808 VLD07
Part F	SDMMC0	sdmmc_gpio4b	1.8V 3.0V(Default)	VCC_SDIO	RK808 VLD04



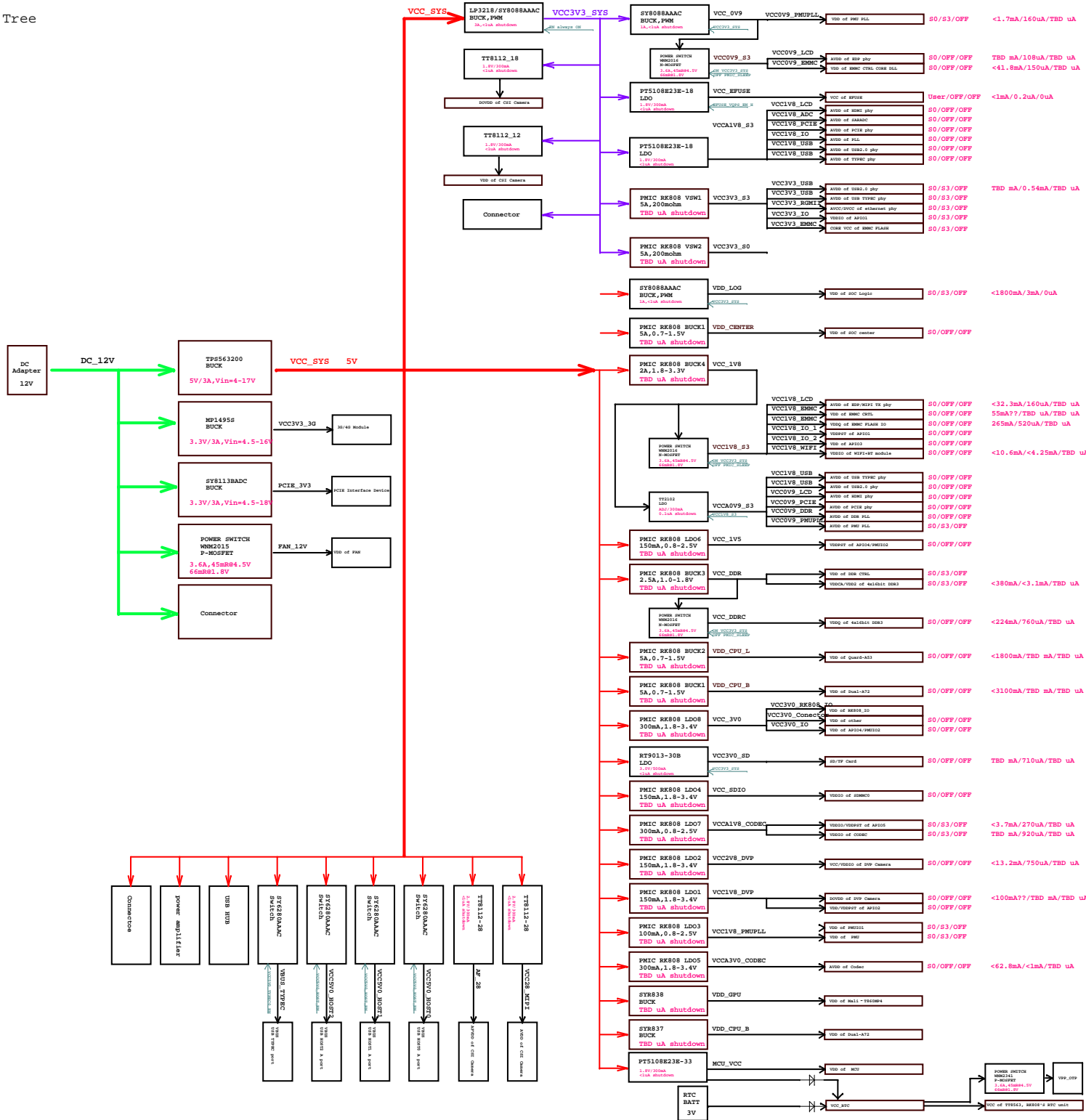
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Title: Power Domain Map

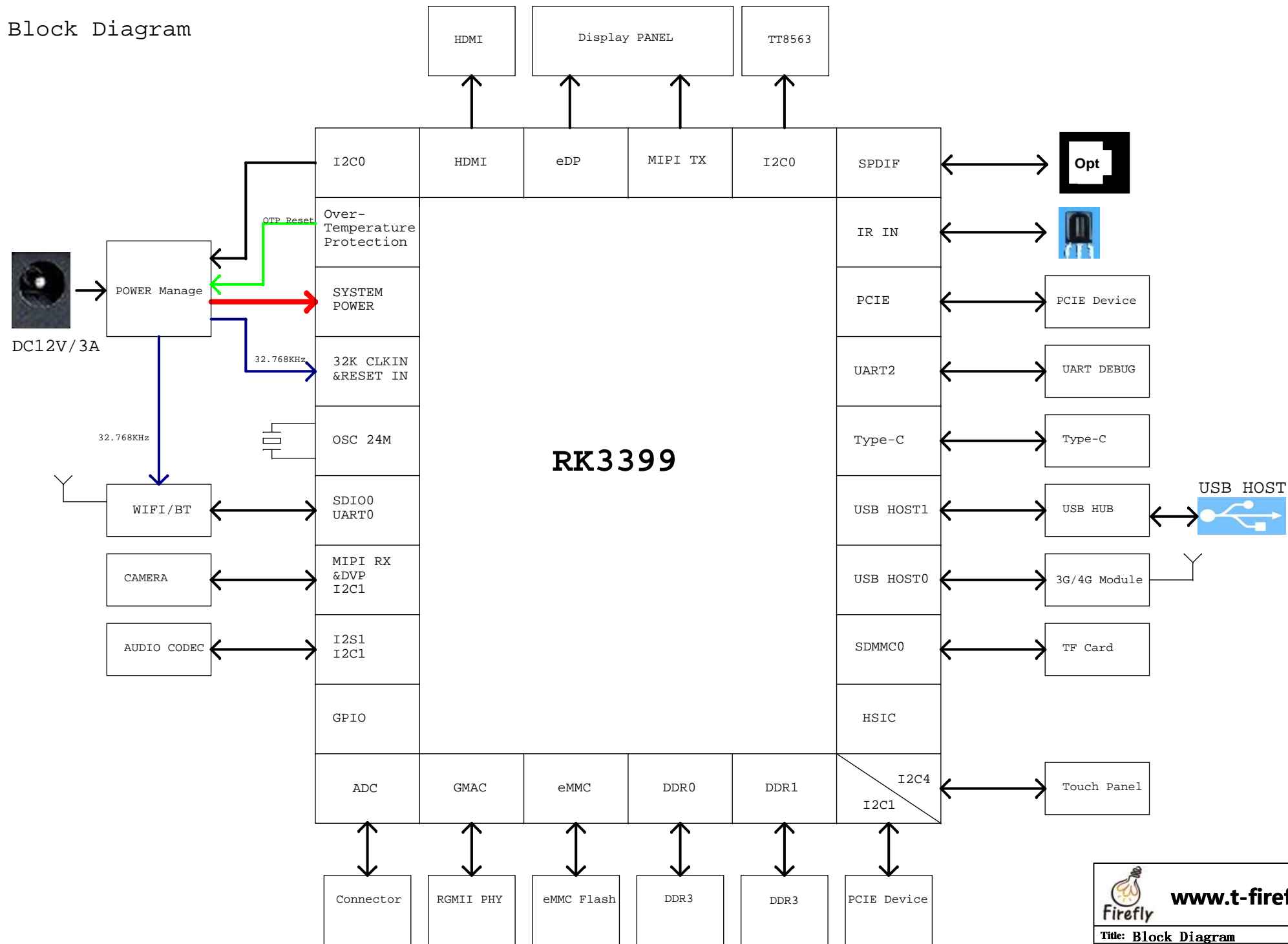
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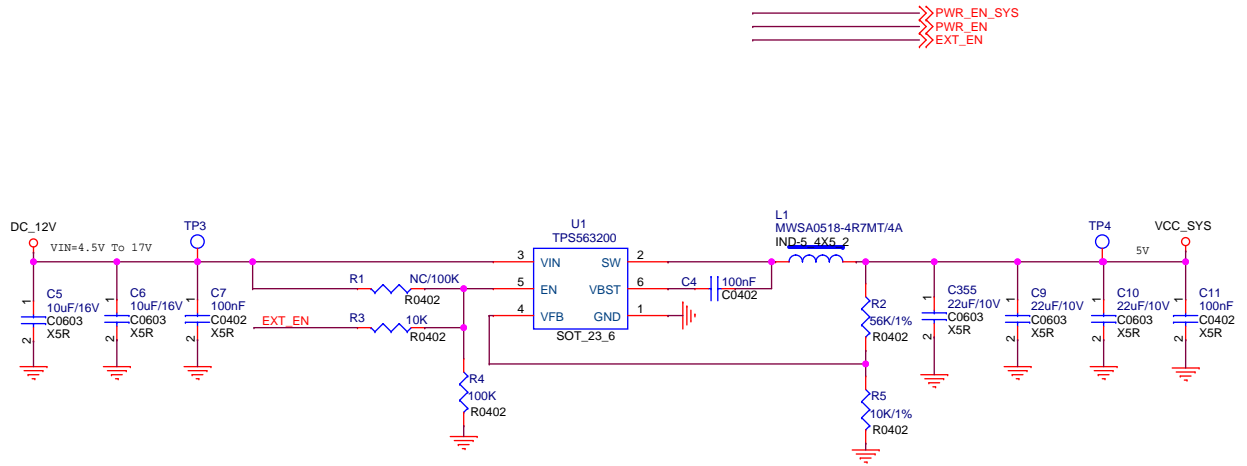
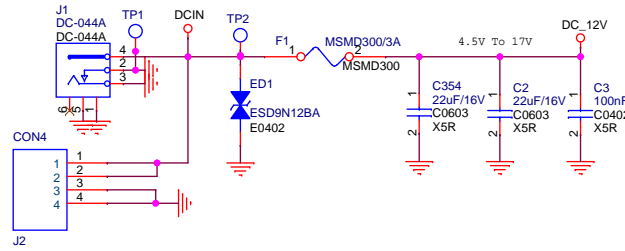
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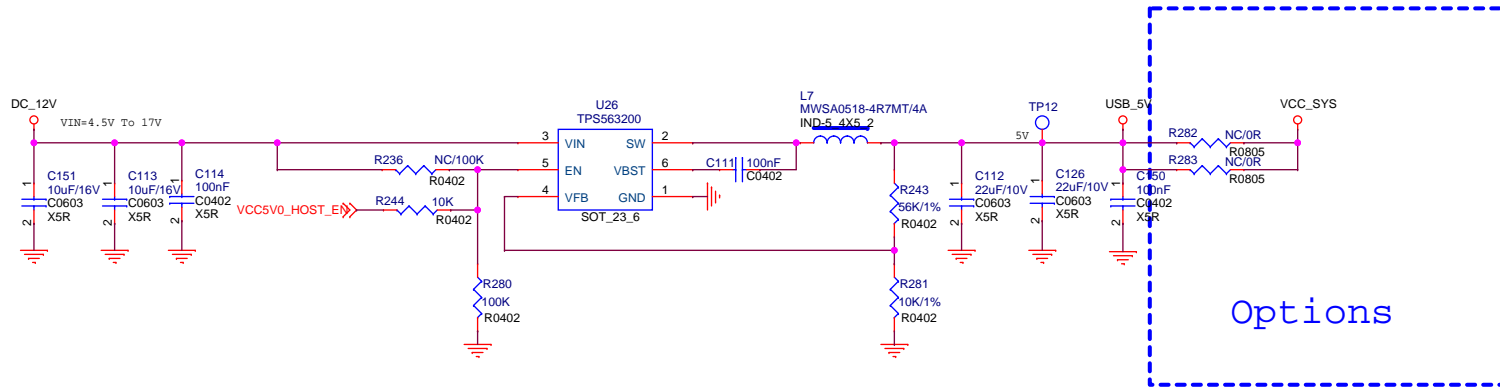
Block Diagram



DC_IN

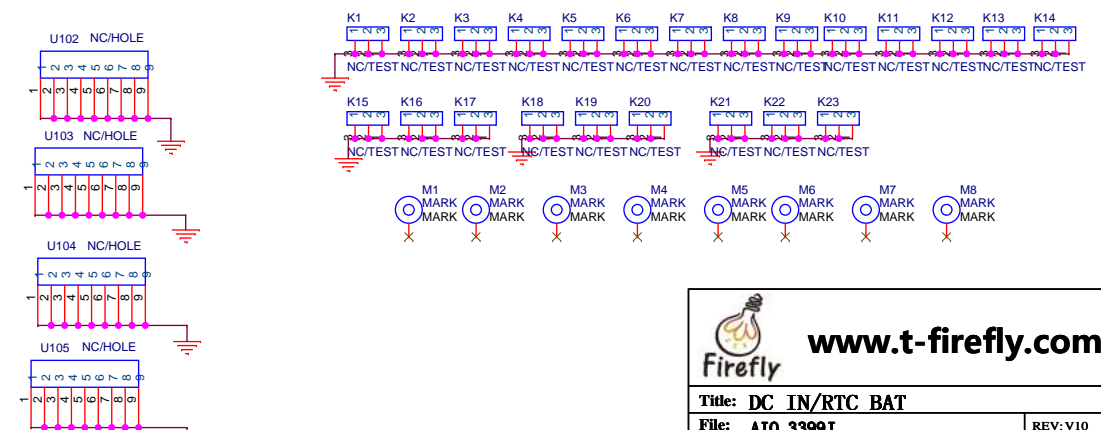
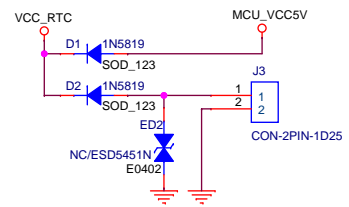


PWR_EN_SYS
 PWR_EN
 EXT_EN

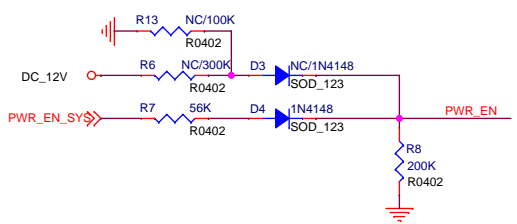



Options

RTC_BAT



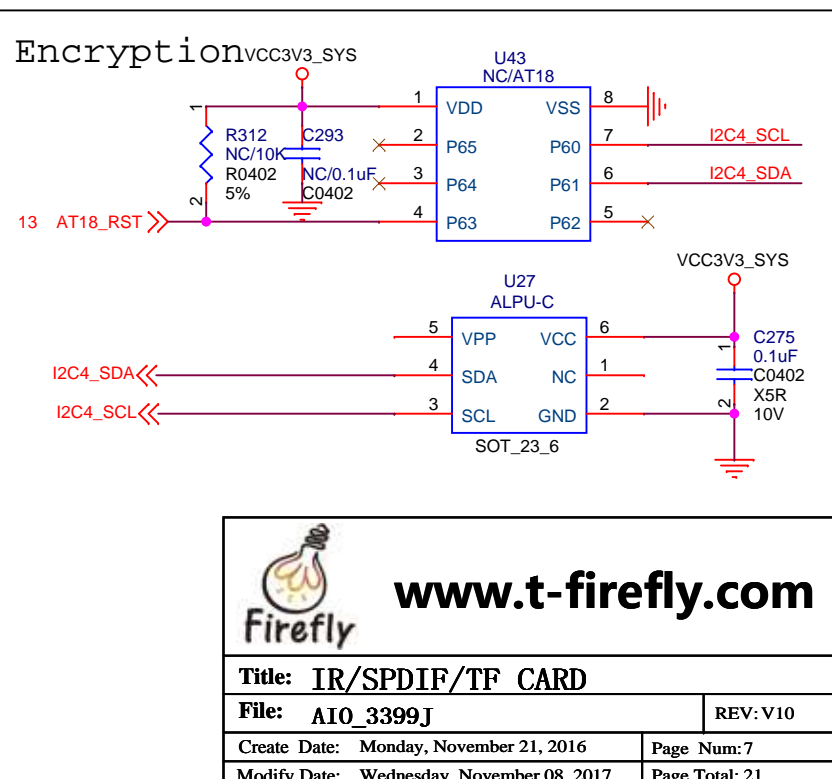
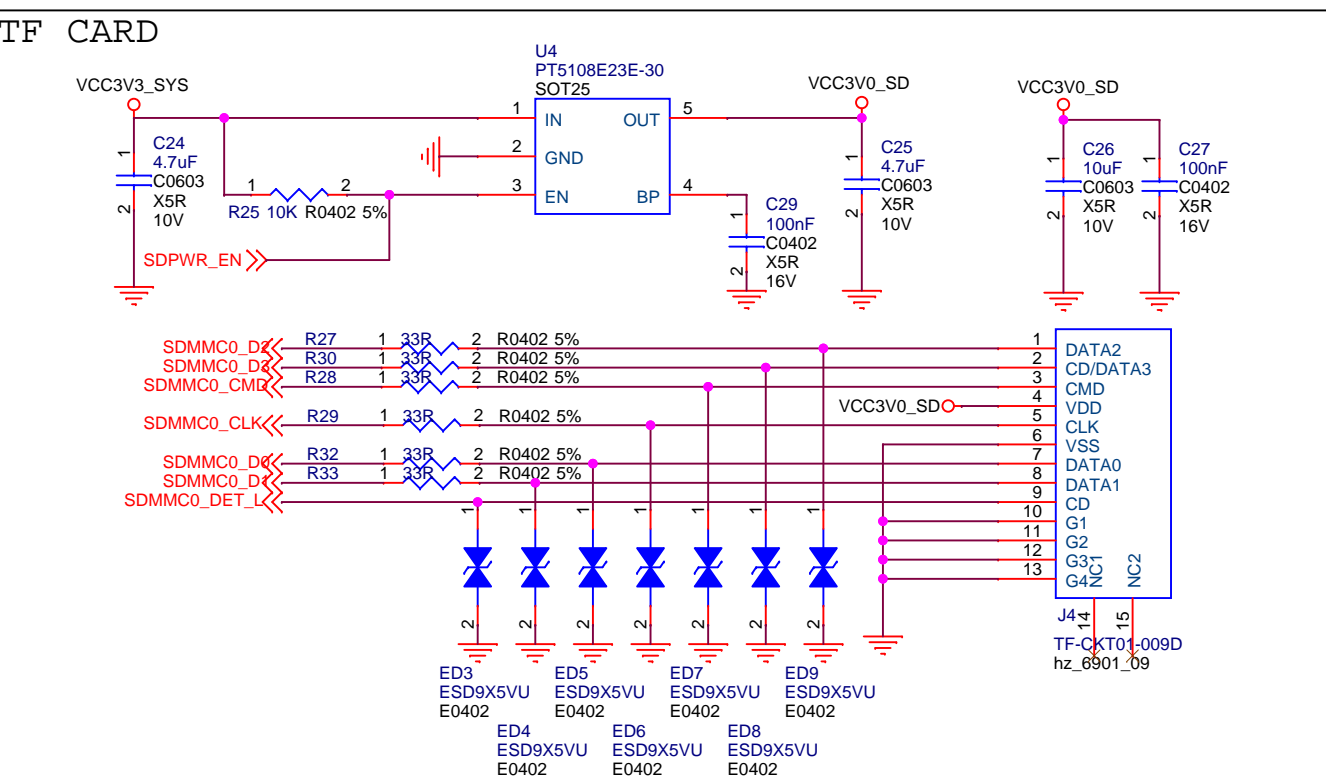
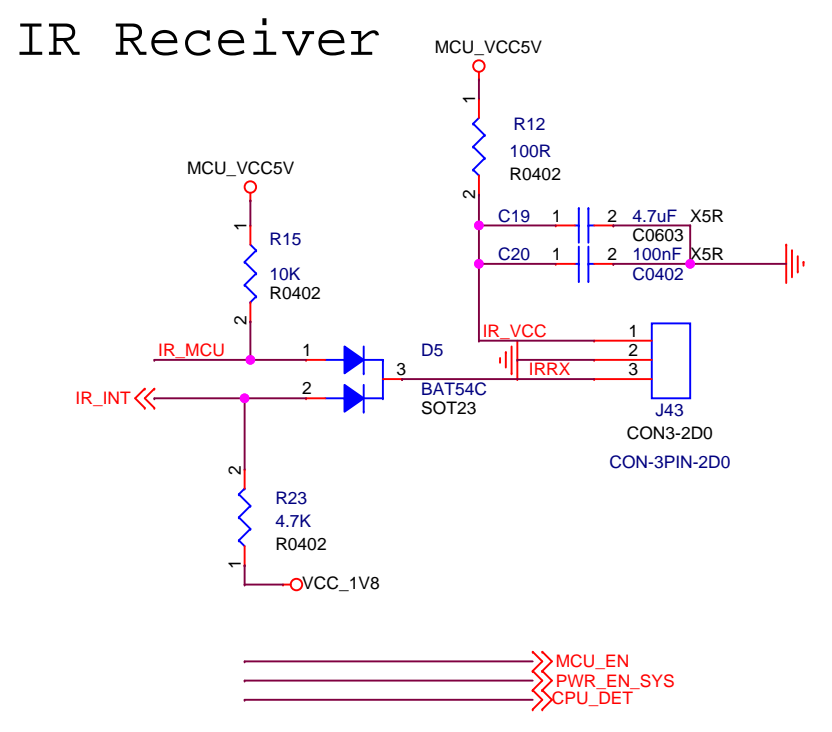
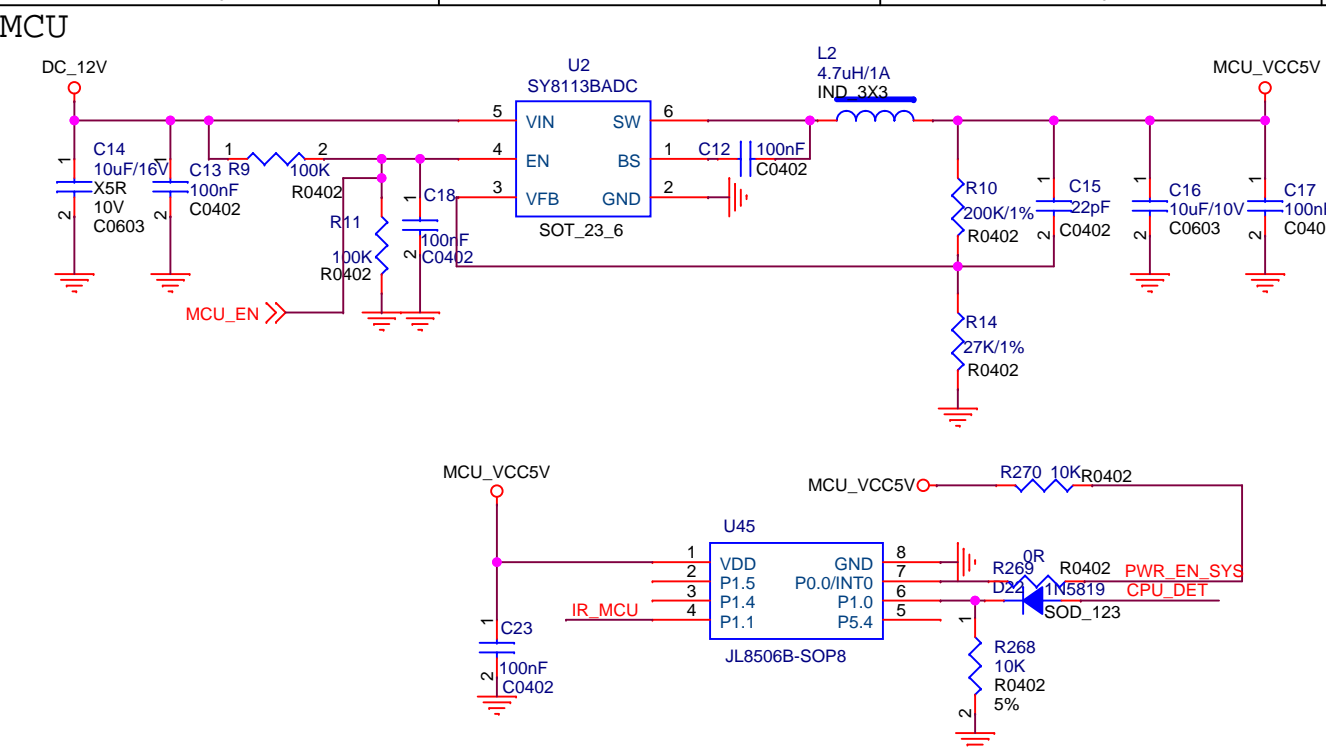
PWR_EN





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Title: DC_IN/RTC BAT
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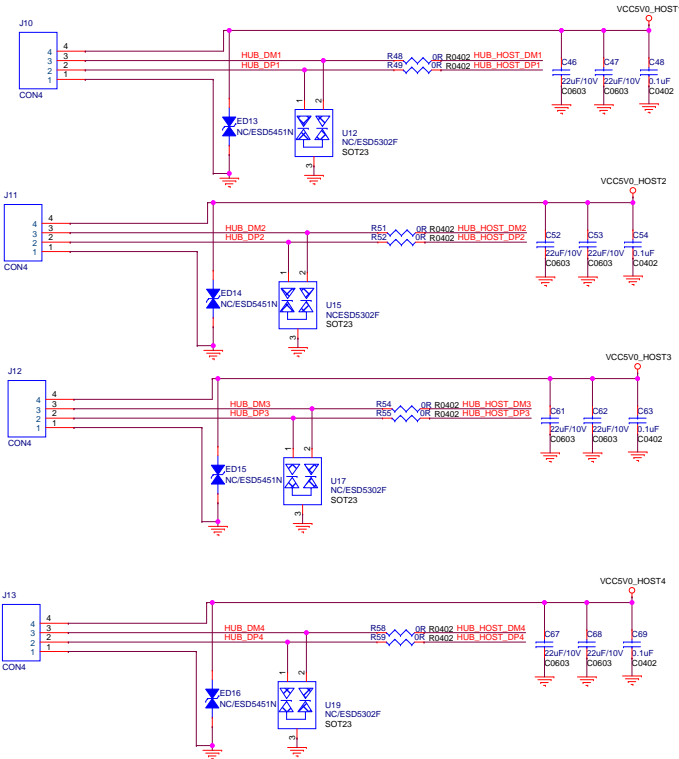
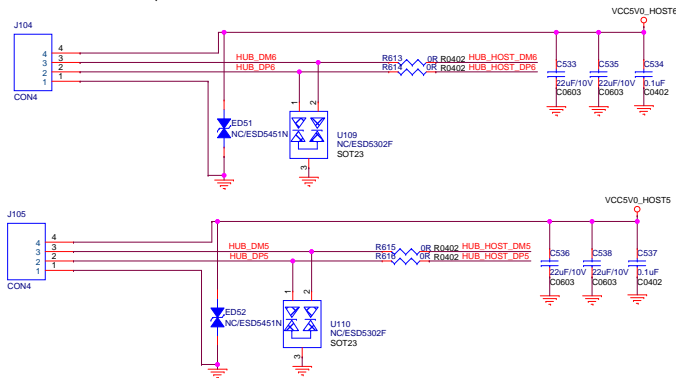




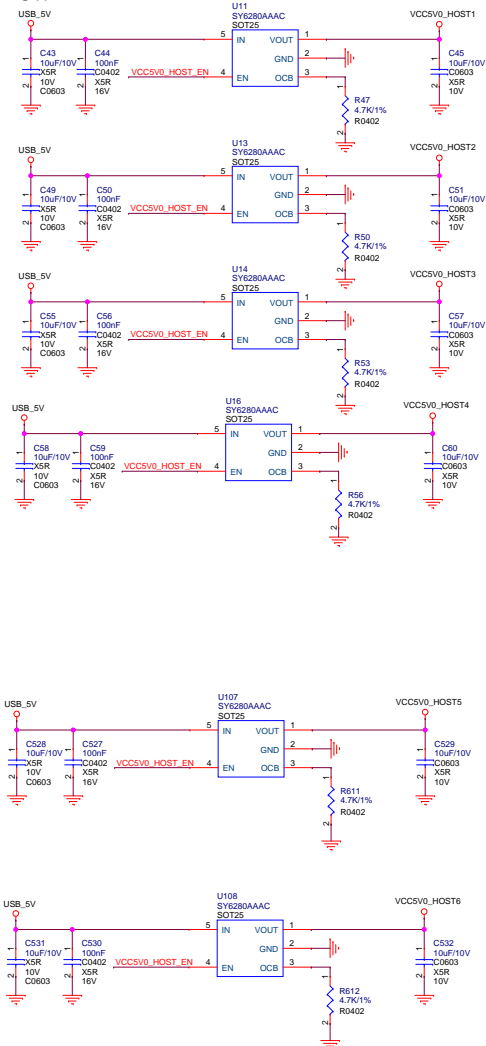
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Title: IR/SPDIF/TF CARD		REV: V10
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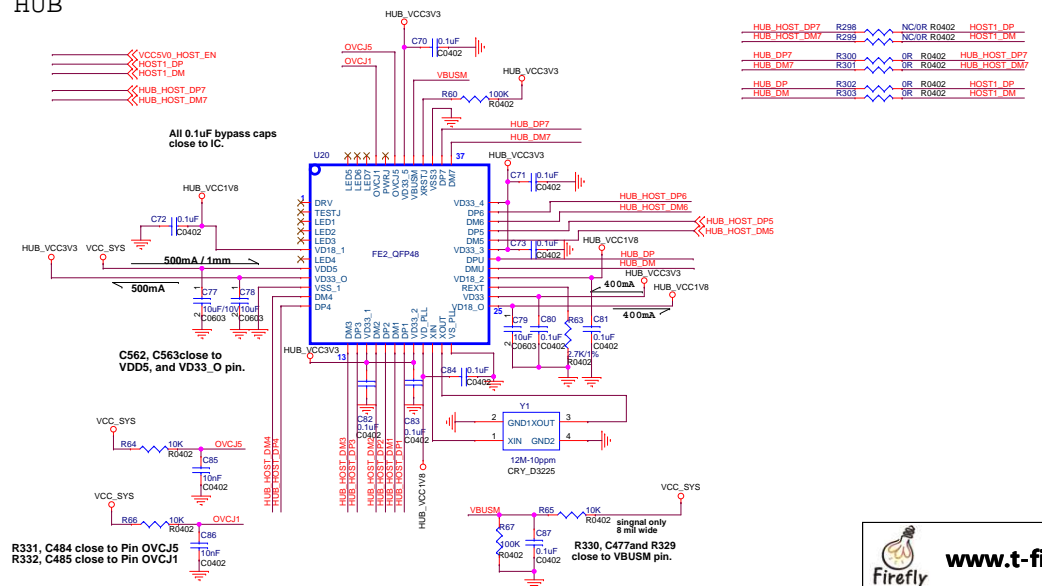
HOST PORT/USB2.0



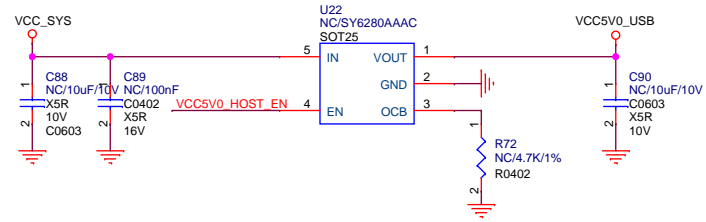
HOST POWER



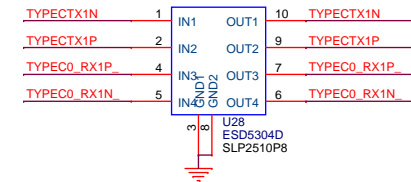
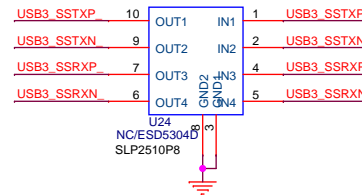
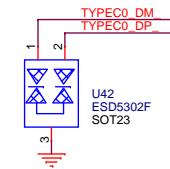
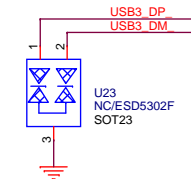
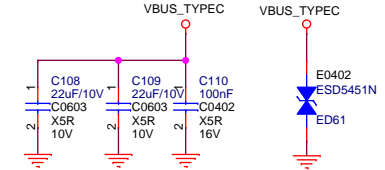
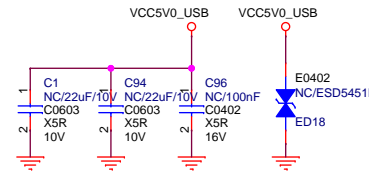
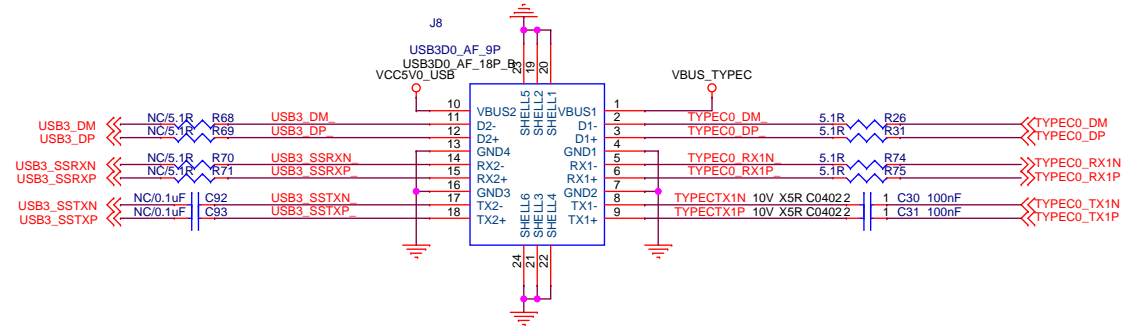
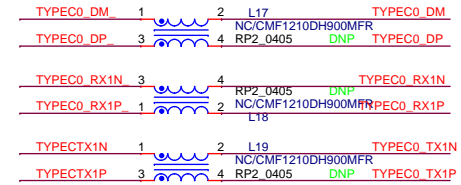
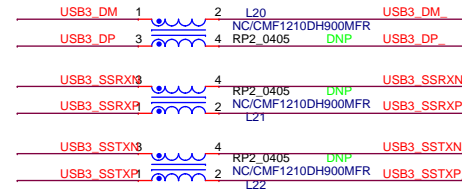
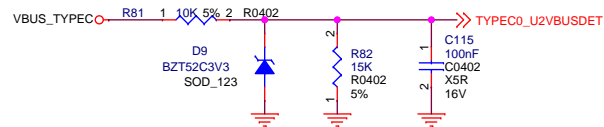
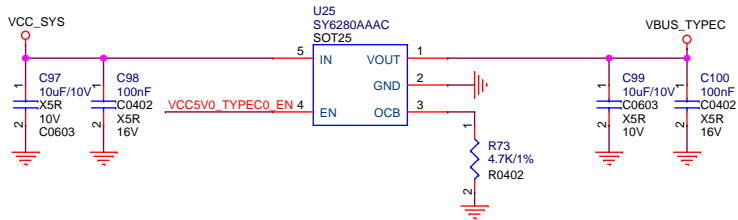
HUB



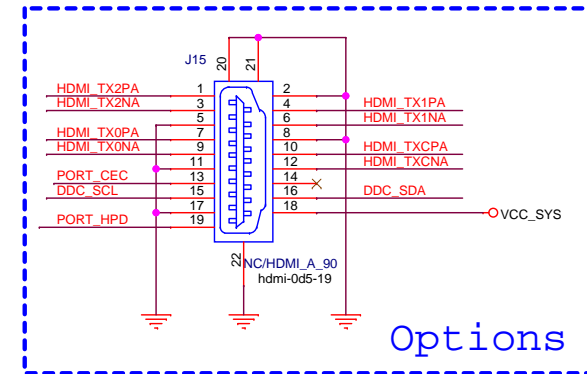
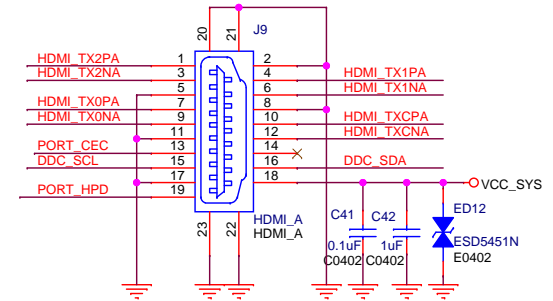
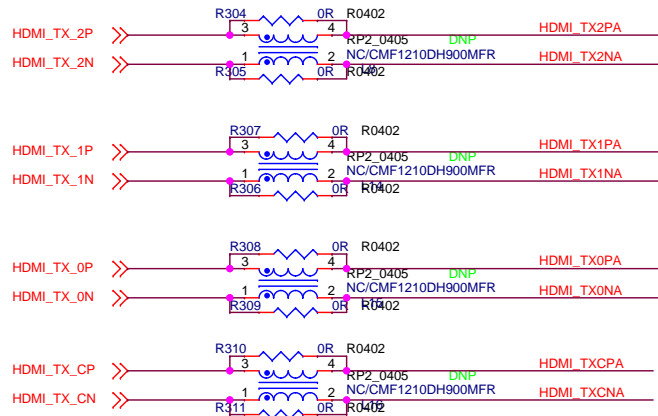
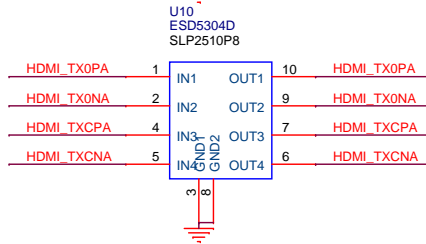
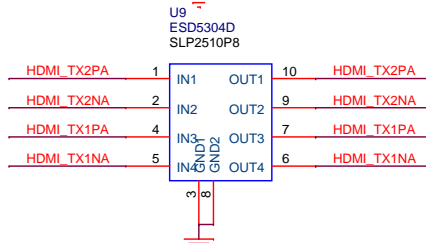
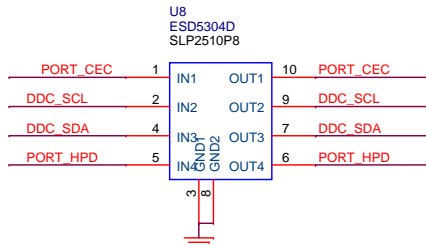
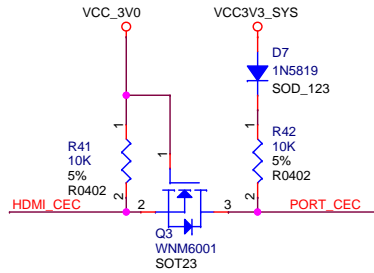
USB3.0



TYPEC0



HDMI OUT

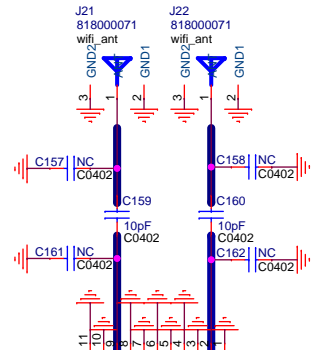



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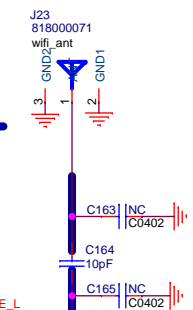
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WIFI/BT MODULE

Dual ANT1 Dual ANT0

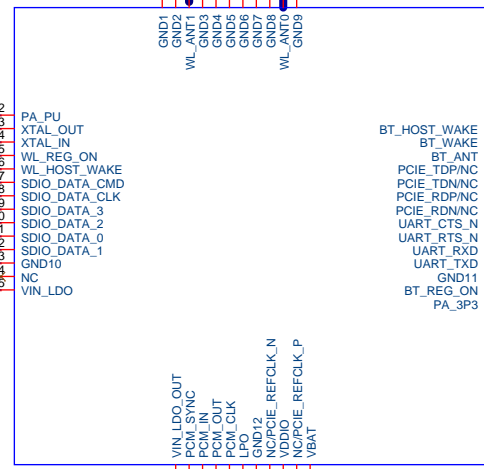
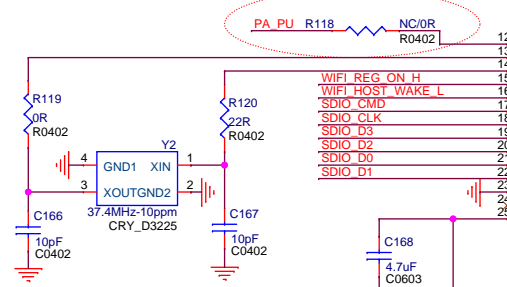


2.4G ANT

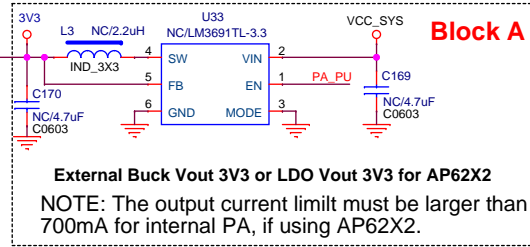


50 Ohm RF trace

NOTE: Default is AP6354/AP6356S/AP6359S, If using AP62X2, module pin12 is connected.



- 50 BT_HOST_WAKE
- 49 BT_WAKE_L
- 48 BT_WAKE_L
- 47 BT_ANT
- 46
- 45
- 44
- 43
- 42 UART0_RTS
- 41 UART0_CTS
- 40 UART0_TXD
- 39 UART0_RXD
- 38
- 37 BT_REG_ON_H



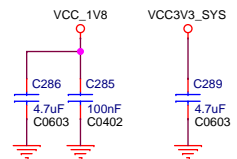
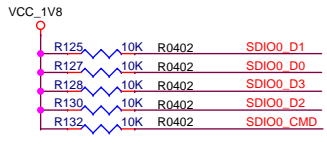
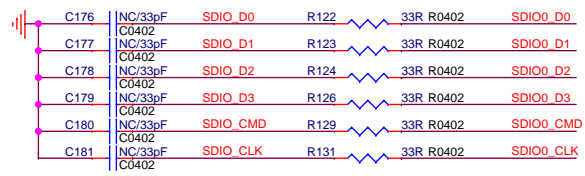
External Buck Vout 3V3 or LDO Vout 3V3 for AP62X2
NOTE: The output current limit must be larger than 700mA for internal PA, if using AP62X2.

NOTE: Default is AP6354/AP6356S/AP6359S, If using AP62X2, block A components is need.

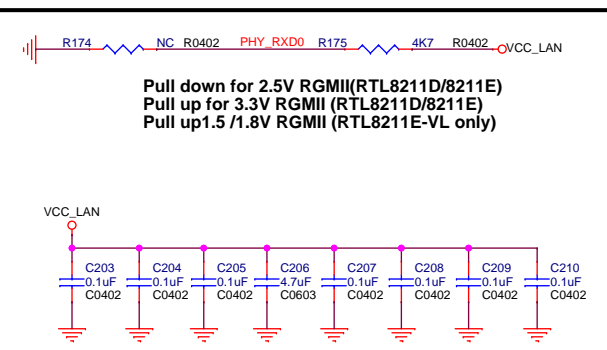
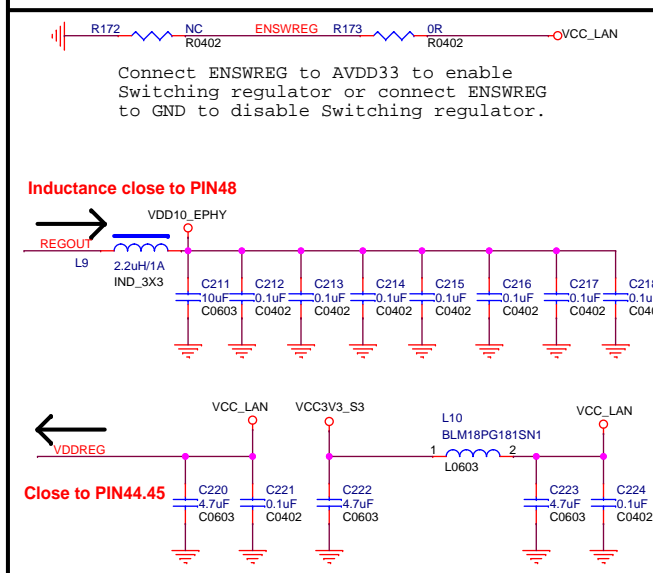
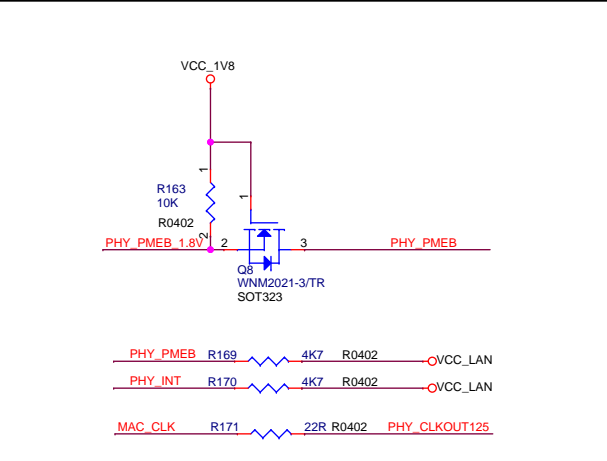
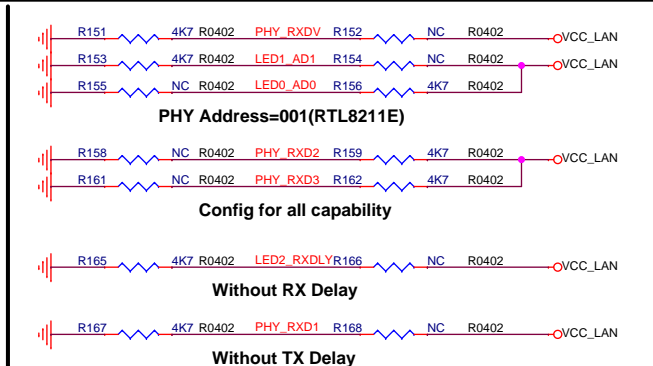
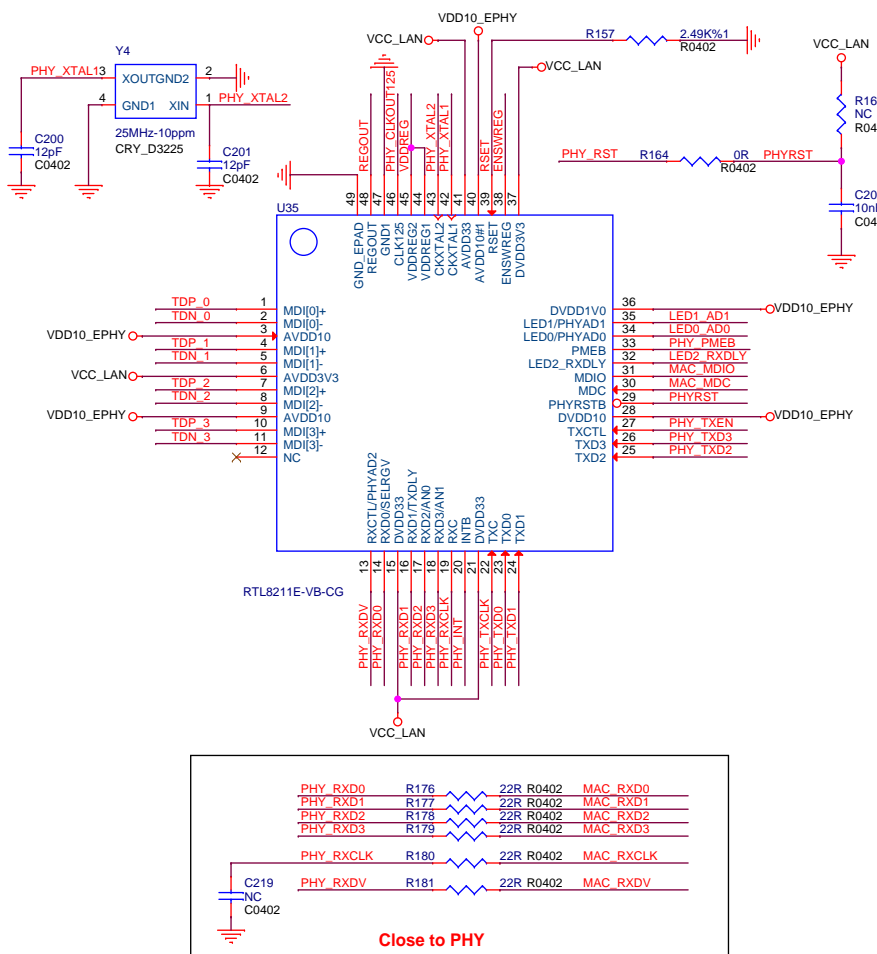
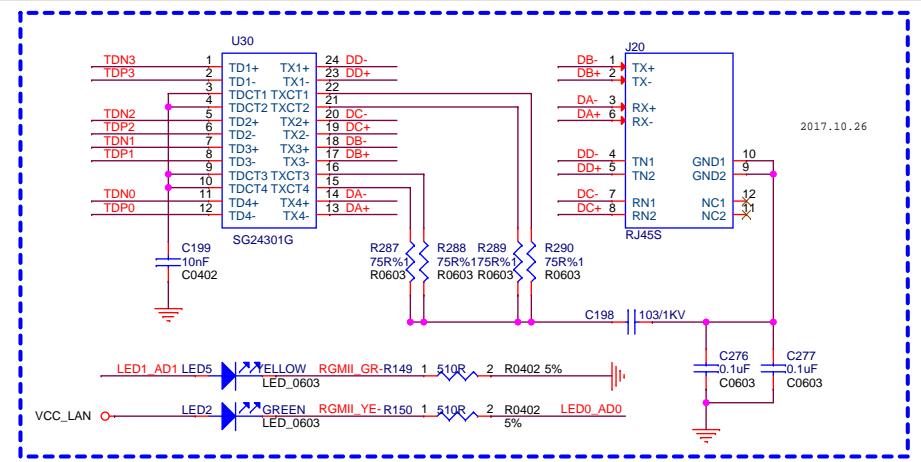
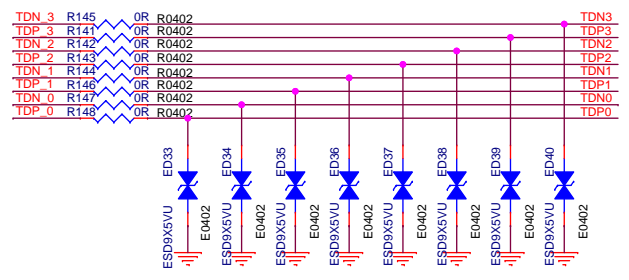
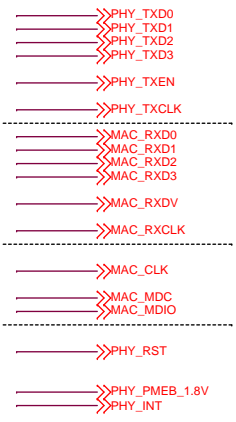
Note: VBAT电压范围3.0V~4.8V, 供电电流至少400mA

NOTE: L5, rated current 1A expectation specification.

- BT_PCM_OUT
- BT_PCM_IN
- BT_PCM_CLK
- BT_PCM_SYNC
- SDIO0_D0
- SDIO0_D1
- SDIO0_D2
- SDIO0_D3
- SDIO0_CMD
- SDIO0_CLK
- UART0_RTS
- UART0_TXD
- UART0_RXD
- UART0_CTS
- RTC_CLKO_WIFI
- BT_WAKE_L
- BT_WAKE_L
- BT_REG_ON_H
- WIFI_REG_ON_H
- WIFI_HOST_WAKE_L

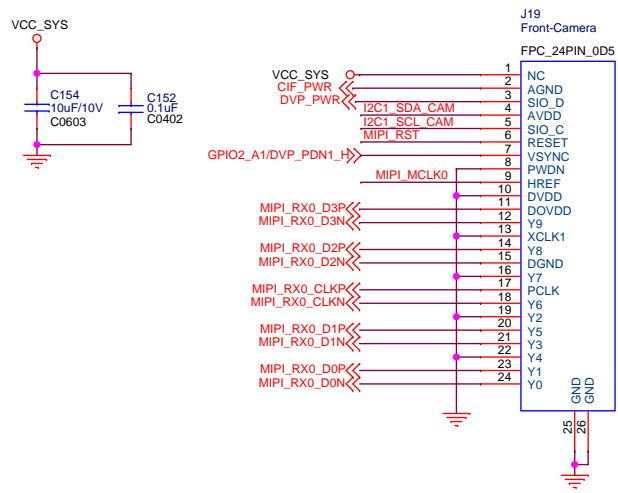


Title: WIFI/BT-AP6356S	
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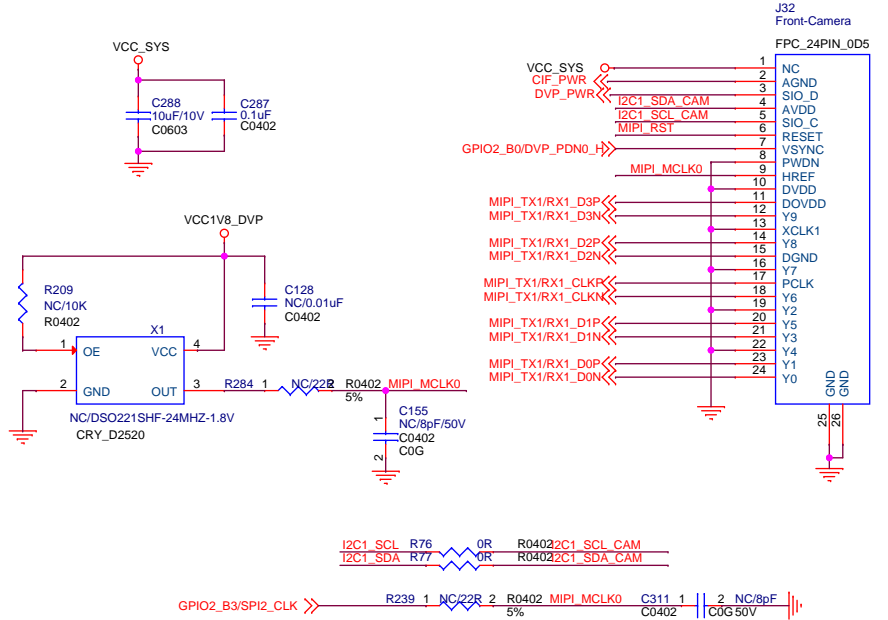


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Firefly
Title: RJ45-1000M-RTL8211E
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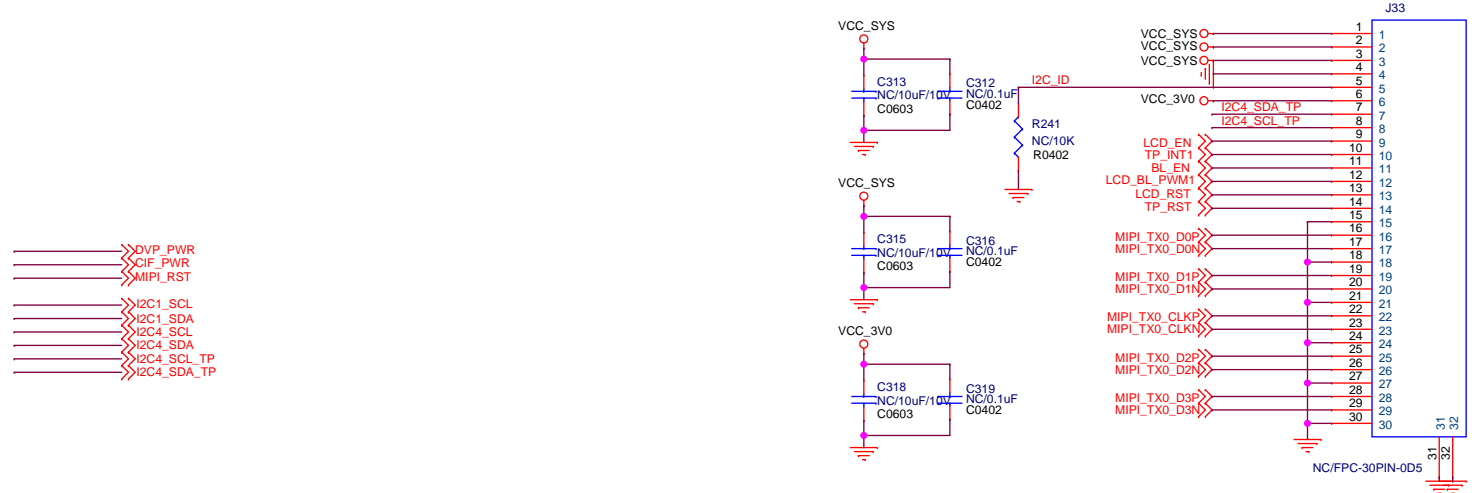
MIPI RX CAMERA



MIPI CAMERA

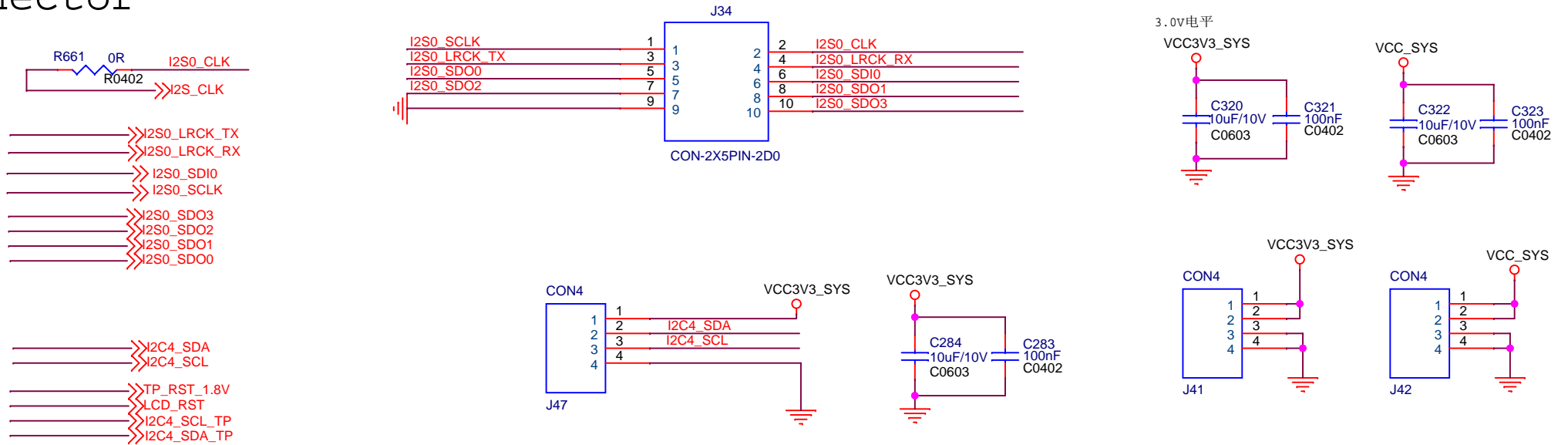


MIPI_TX

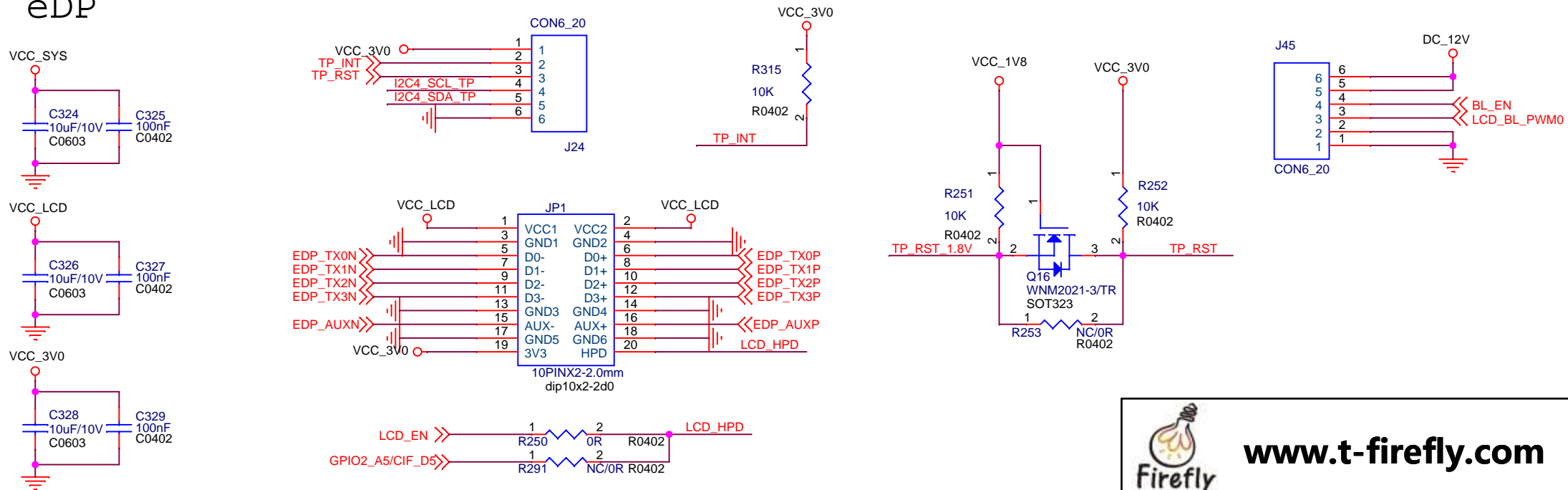



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Connector



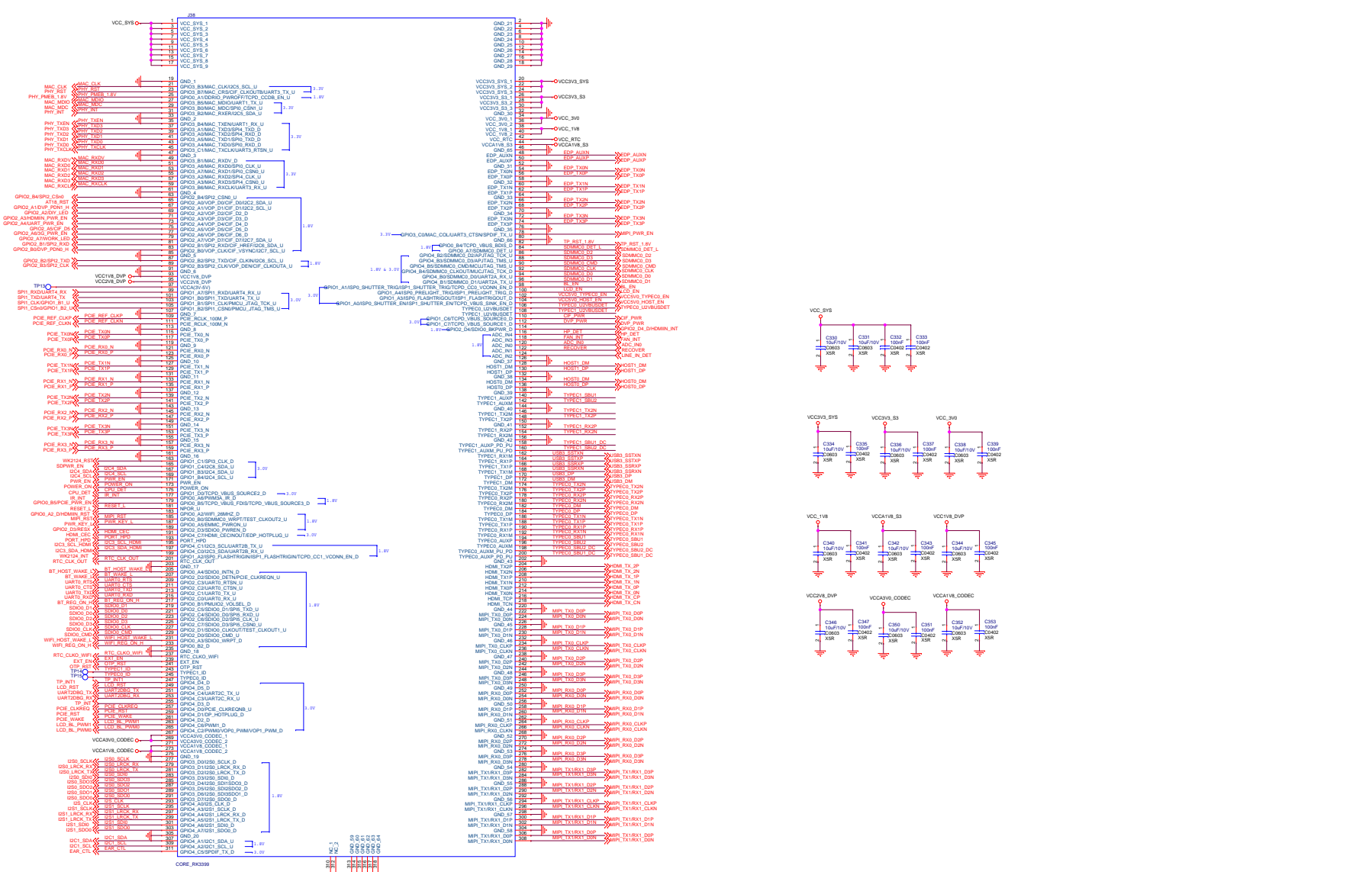
eDP



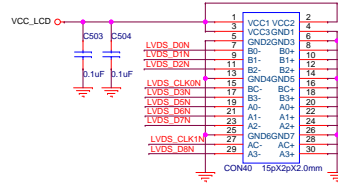
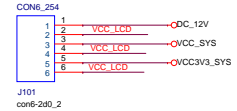
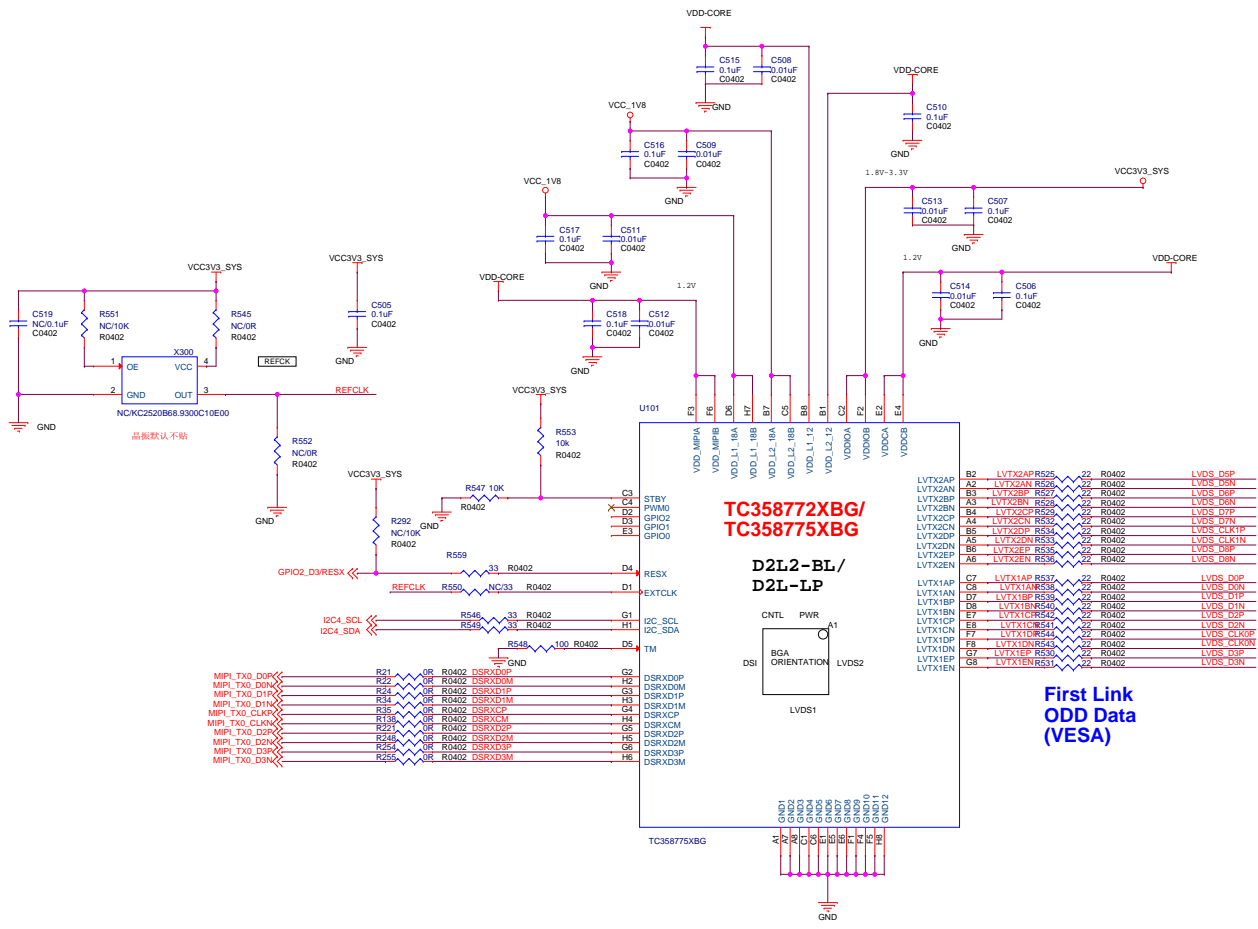
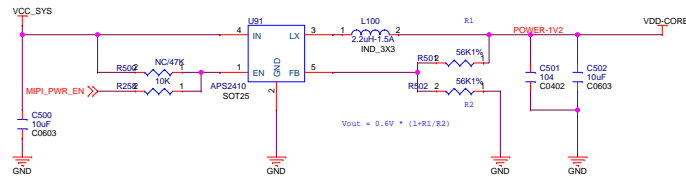


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MIPI Panel



First Link ODD Data (VESA)


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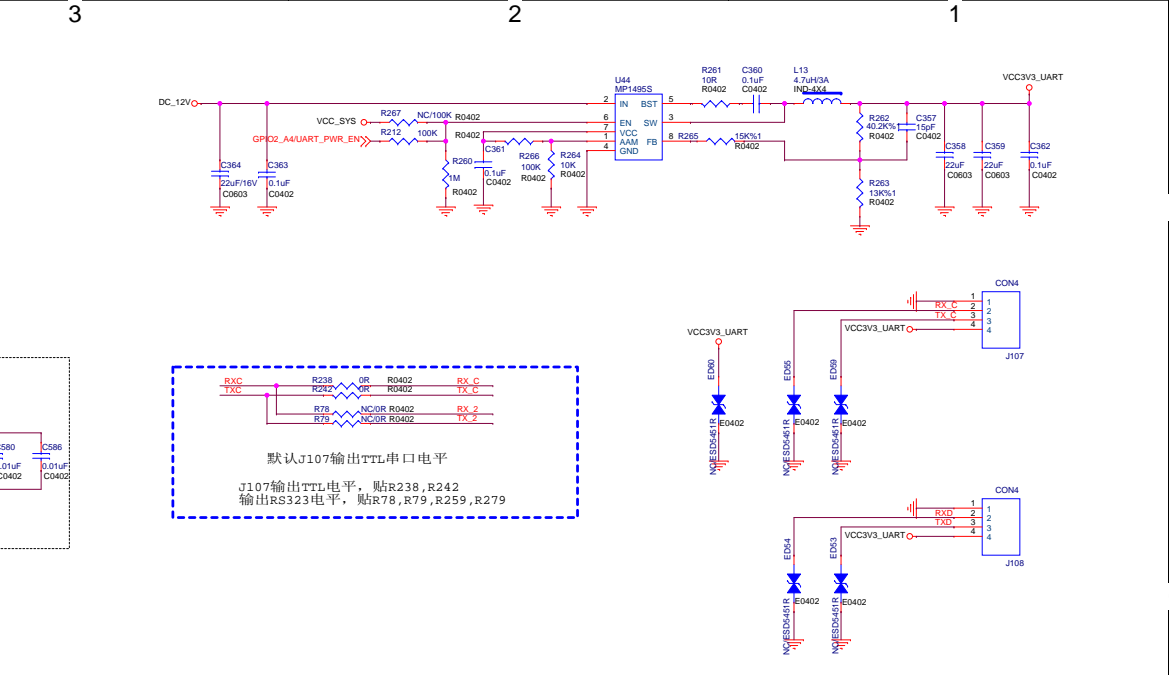
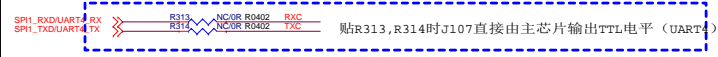
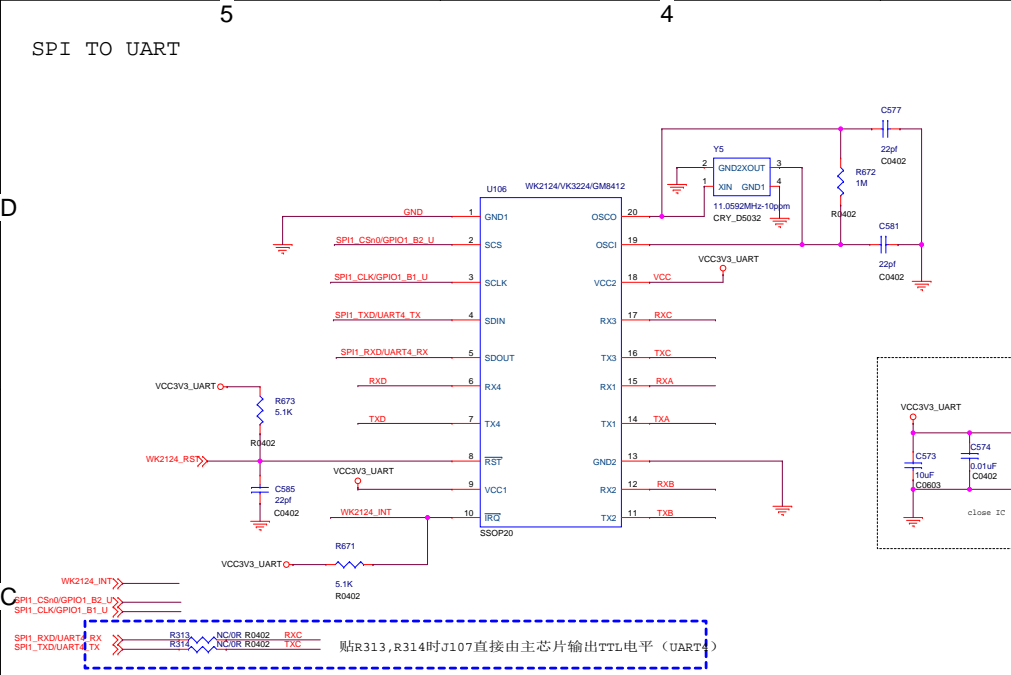
SPI TO UART

D

C

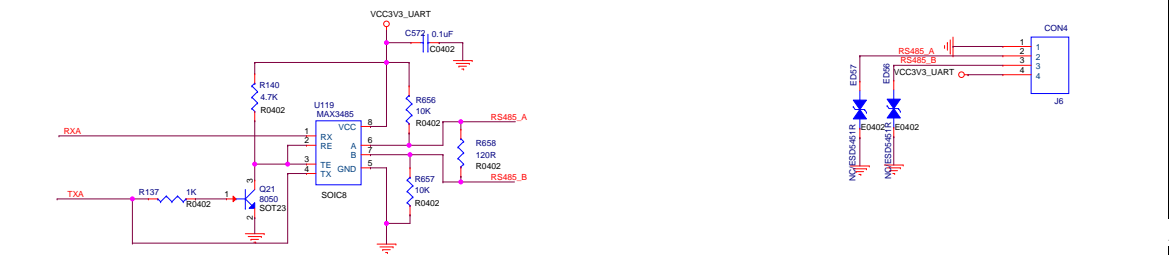
B

A



UART TO RS232

UART TO RS485



SPI PORT



Firefly www.t-firefly.com

Title: **Audio Codec-ALC5640**

File: **AIO_3399J** REV:V10

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