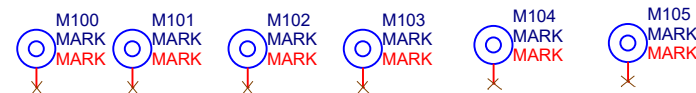
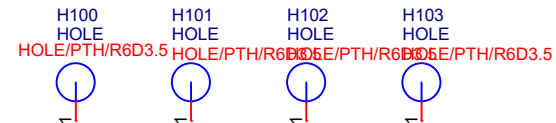


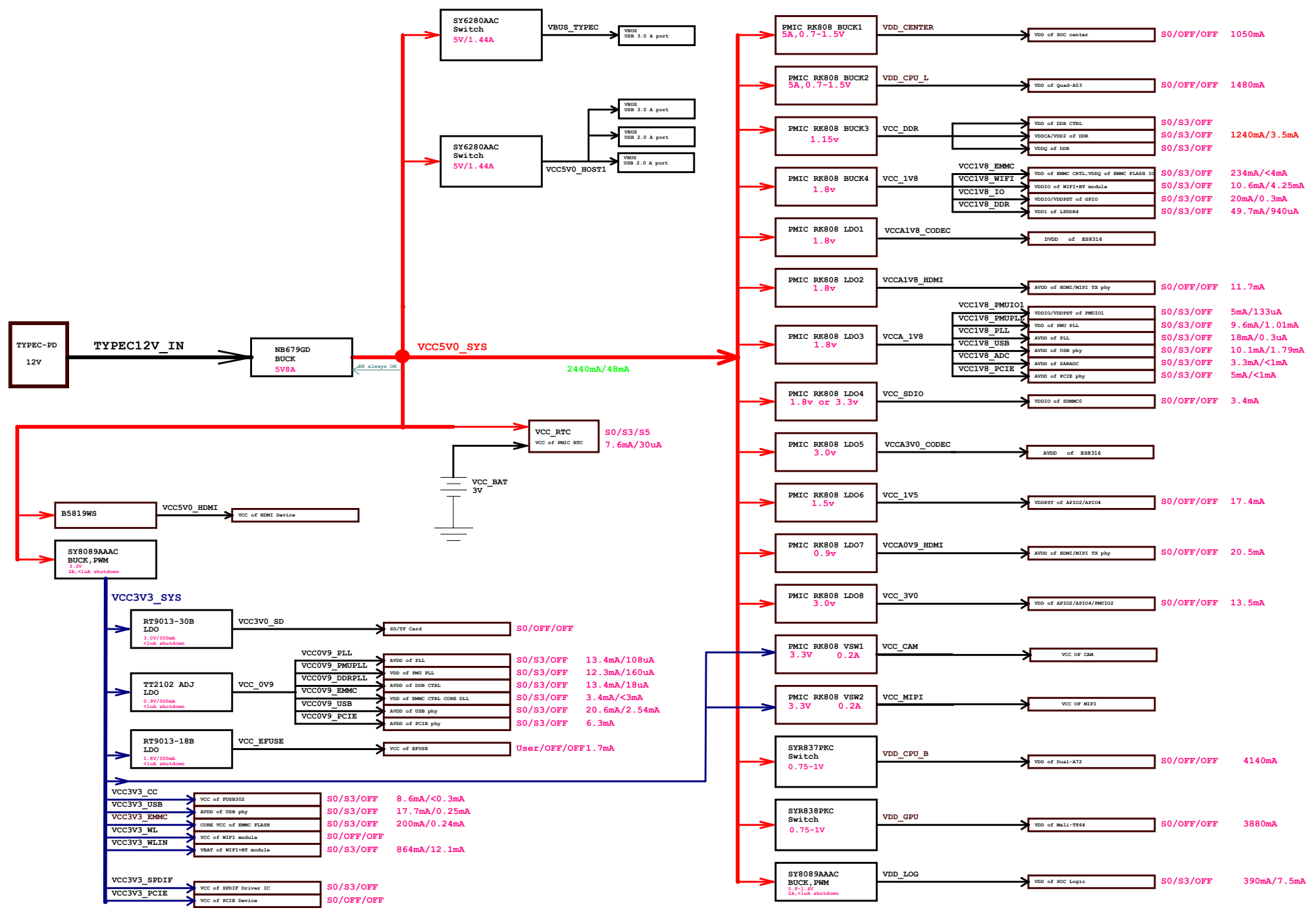
CONTENT INDEXING

- 01.Index
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- 03.Power Tree
- 04.I2C Map
- 05.Power Domain Map
- 06.RK3399 Power
- 07.RK3399 PMU Controler
- 08.RK3399 DDR Controler
- 09.RK3399 Flash&SDMMC Controler
- 10.RK3399 USB/USIC Controler
- 11.RK3399 SARADC/Key
- 12.RK3399 DVP Interface
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- 18.RTL8211F
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- 20.RAM-LPDDR4(200P)
- 21.Memory-EMMC
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- 23.TF Card
- 24.HDMI Output
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RK3399 POWER DIAGRAM



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	I2C_SDA_PMIC I2C_SCL_PMIC	VCC_1V8	Rockchip RK808	0x1b	PMIC	100kHz, 400KHz
					BL24C16	0x57	EEPROM	100kHz, 400KHz
					SYR837PKC	0x40	DC-DC BUCK	100kHz, 400KHz, 3.4MHz
					SYR838PKC	0x41	DC-DC BUCK	100kHz, 400KHz, 3.4MHz
I2C1	GPIO4_A1/I2C1_SDA GPIO4_A2/I2C1_SCL	APIO5		VCC_1V8			Low Speed CONNECTOR	
I2C2	GPIO2_A0/VOP_D0/CIF_D0/I2C2_SDA GPIO2_A1/VOP_D1/CIF_D1/I2C2_SCL	APIO2		VCC_1V8			High Speed CONNECTOR	
I2C3	GPIO4_C0/I2C3_SDA/UART2B_RX GPIO4_C1/I2C3_SCL/UART2B_TX	APIO4	I2C_SDA_HDMI I2C_SCL_HDMI	VCC_3V0				
I2C4	GPIO1_B3/I2C4_SDA GPIO1_B4/I2C4_SCL	PMUIO2	I2C_SDA_MEMS I2C_SCL_MEMS	VCC_1V8	Fairchild FUSB302B	0x44, 0x46	USB-TypeC Mux	100kHz, 400KHz, 1MHz
I2C5	GPIO3_B2/MAC_RXER/I2C5_SDA GPIO3_B3/MAC_CLK/I2C5_SCL	APIO1	Other pin function					
I2C6	GPIO2_B1/SPI2_RXD/CIF_HREF/I2C6_SDA GPIO2_B2/SPI2_TXD/CIF_CLKIN/I2C6_SCL	APIO2		VCC_1V8			Low Speed CONNECTOR	
I2C7	GPIO2_A7/VOP_D7/CIF_D7/I2C7_SDA GPIO2_B0/VOP_CLK/CIF_VSYNC/I2C7_SCL	APIO2		VCC_1V8			High Speed CONNECTOR	

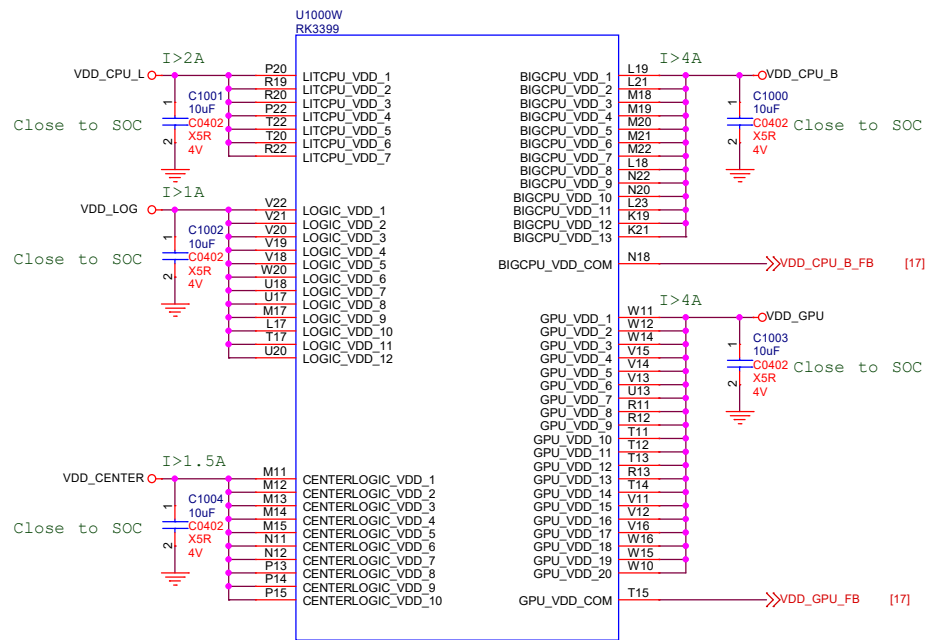


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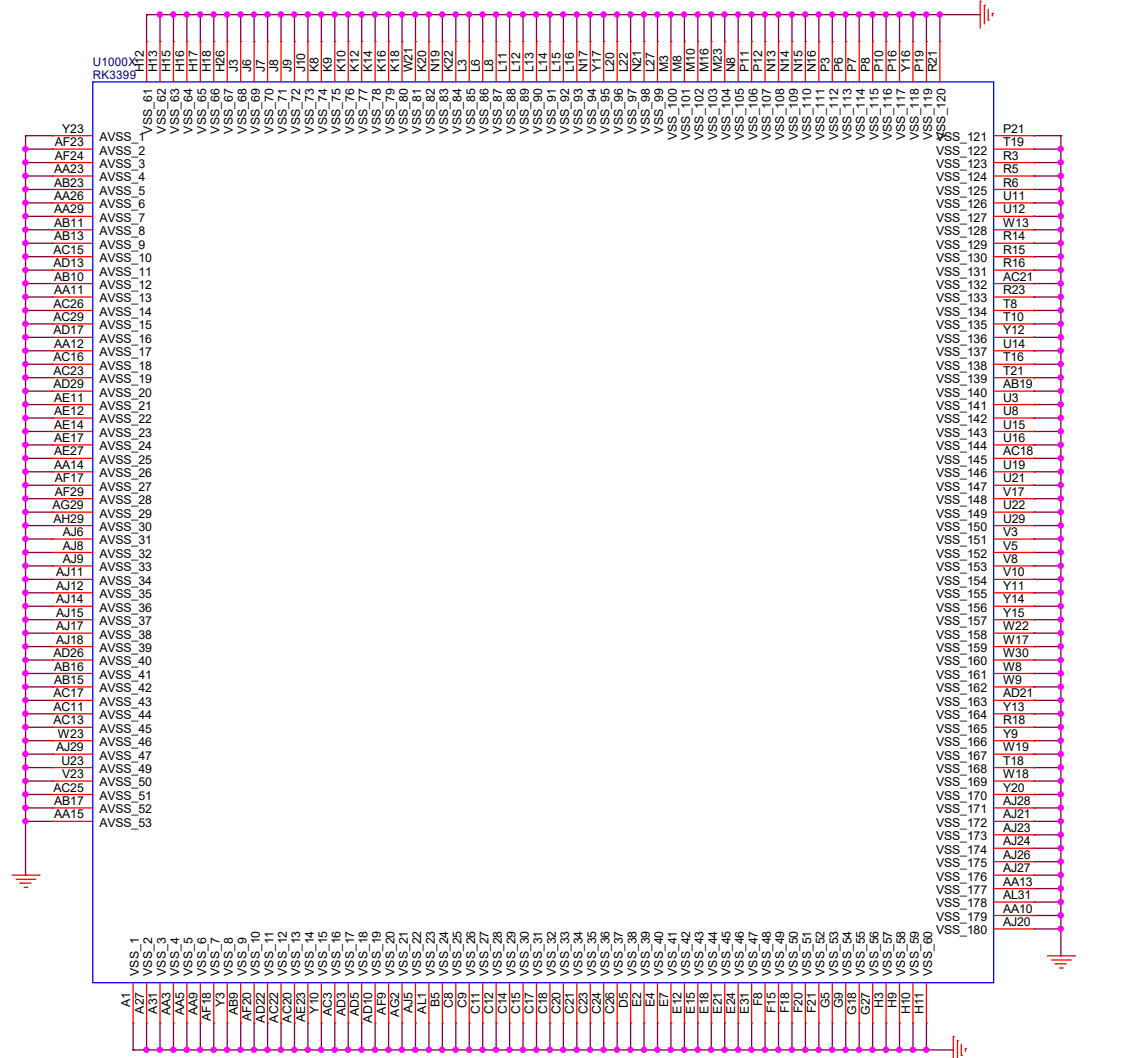
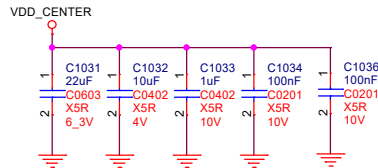
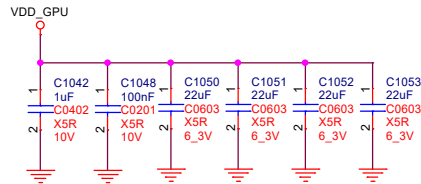
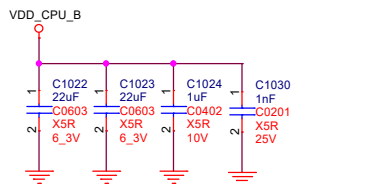
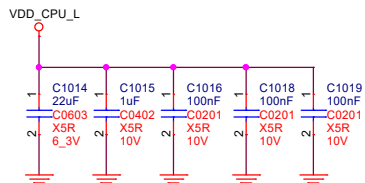
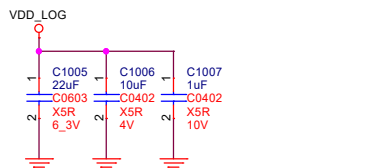
Power Domain Map

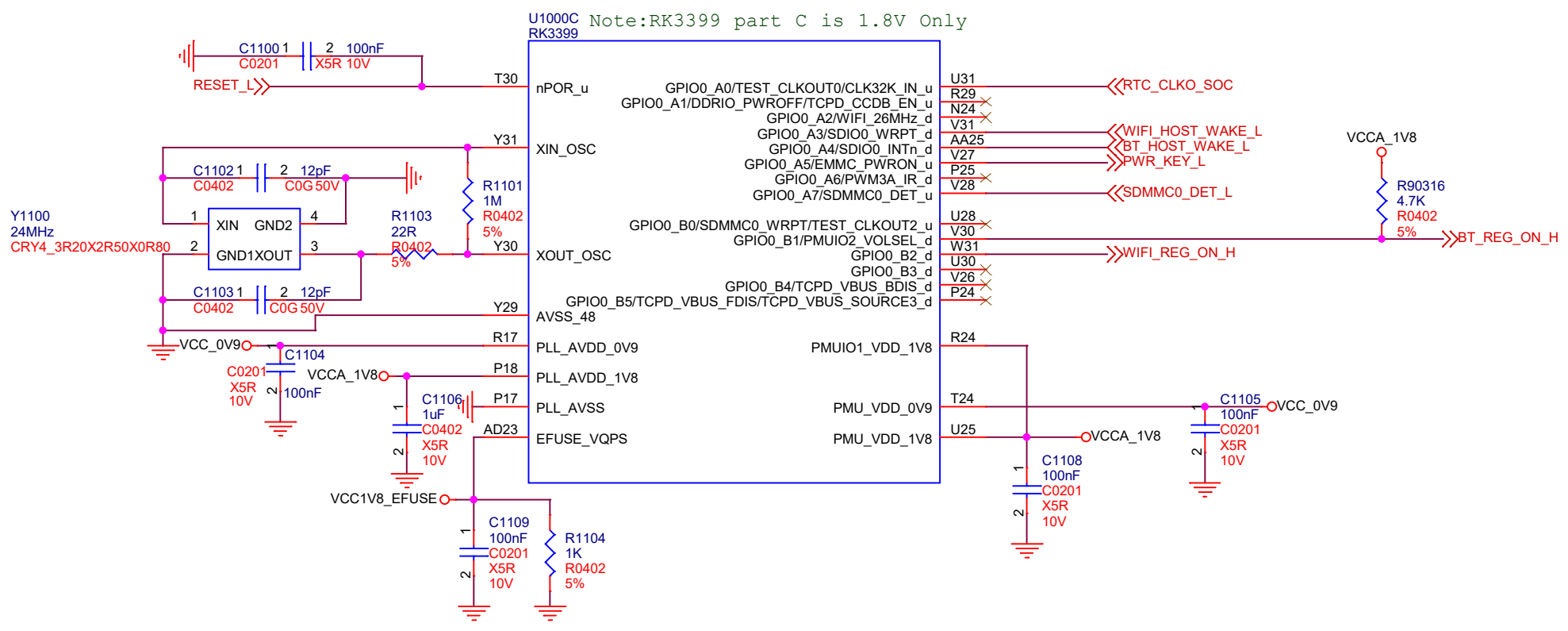
Part Port	Domain	Pin name in datasheet	I/O type	Power supply	Power source
Part C	PMUIO1	pmuiol_gpio0ab	1.8V only	VCCA_1V8	RK808-D VLDO3
Part E	PMUIO2	pmu1830_gpio1abcd	1.8V (Default) 3.0V	VCC_1V8	RK808-D Buck4
Part I	APIO1	gmac_gpio3abc	3.3V only	VCC_1V8 VCC3V3_SYS	RK808-D Buck4
Part L	APIO2	bt656_gpio2ab	1.8V (Default) 3.0V	VCC_1V8	RK808-D VLDO3
Part G	APIO3	wifi/bt_gpio2cd	1.8V only	VCC_1V8	RK808-D Buck4
Part K	APIO4	gpio1830_gpio4cd	1.8V 3.0V (Default)	VCC_1V5 VCC_3V0	RK808-D VLDO6 RK808-D VLDO8
Part J	APIO5	audio_gpio3d_gpio4a	1.8V (Default) 3.0V	VCC_1V8	RK808-D Buck4
Part F	SDMMC0	sdmmc_gpio4b	1.8V 3.0V (Default)	VCC_SDIO	RK808-D VLDO4



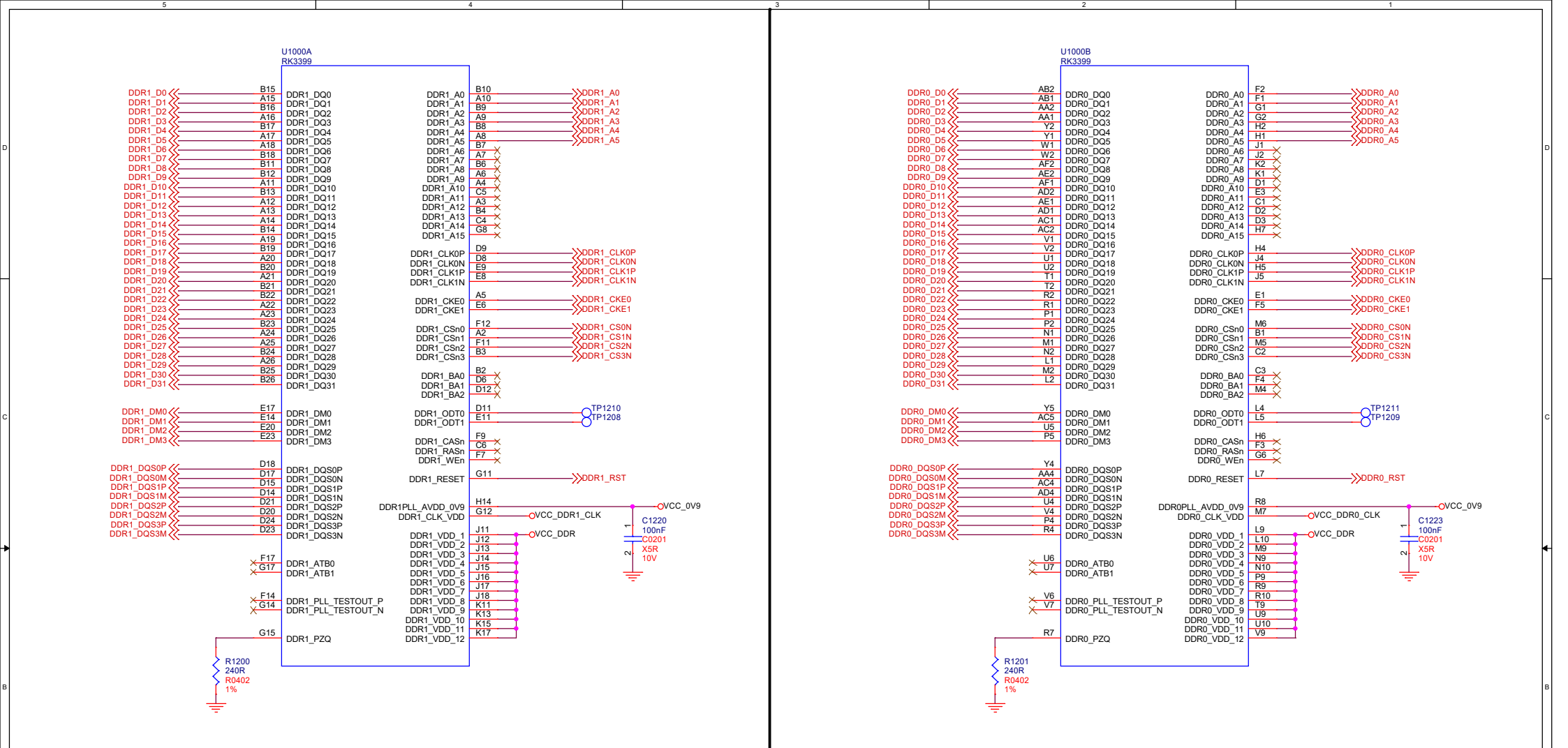


Note: Power filter CAP please place back of SOC or close to SOC



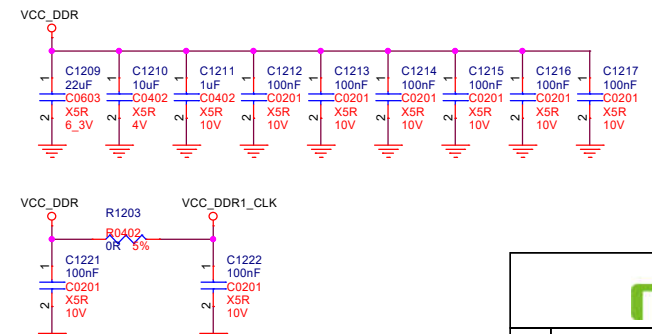
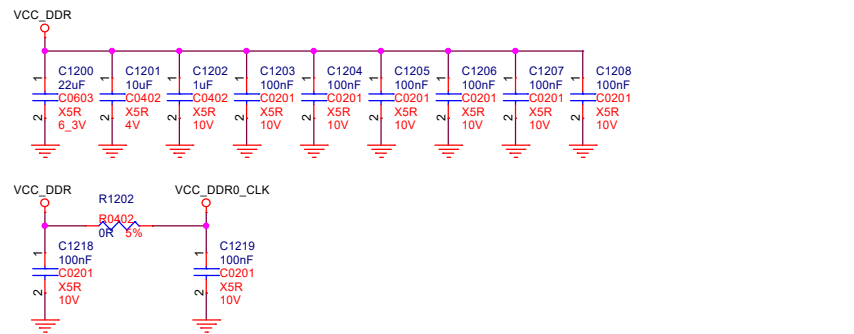


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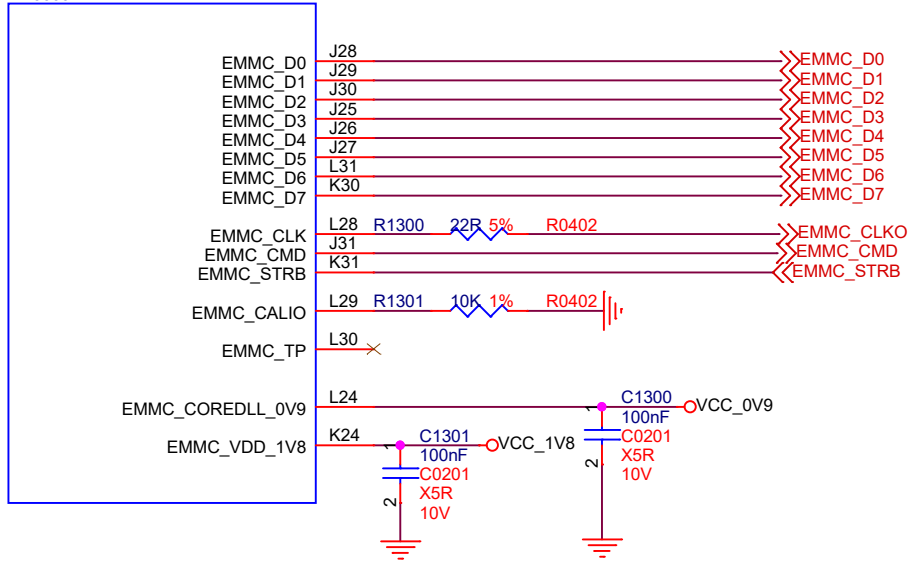
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DDR FILTER Note:R1203 cannot be deleted

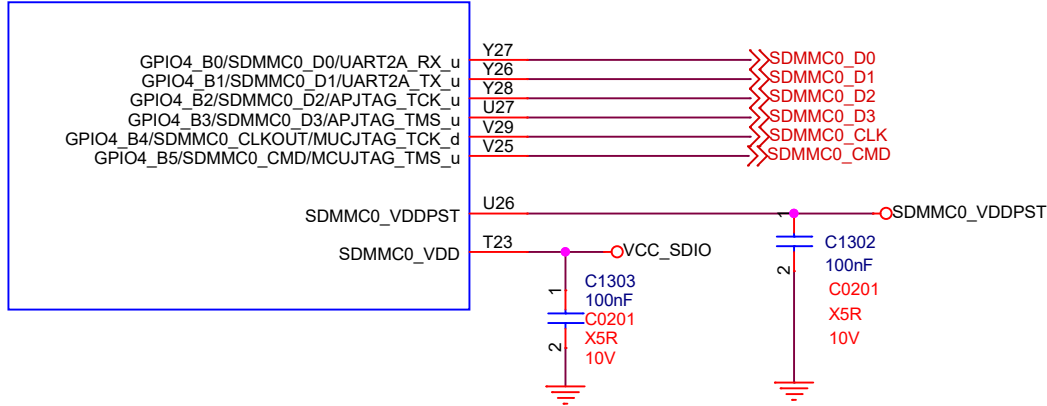


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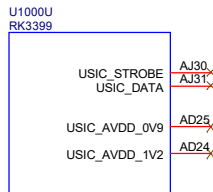
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RK3399



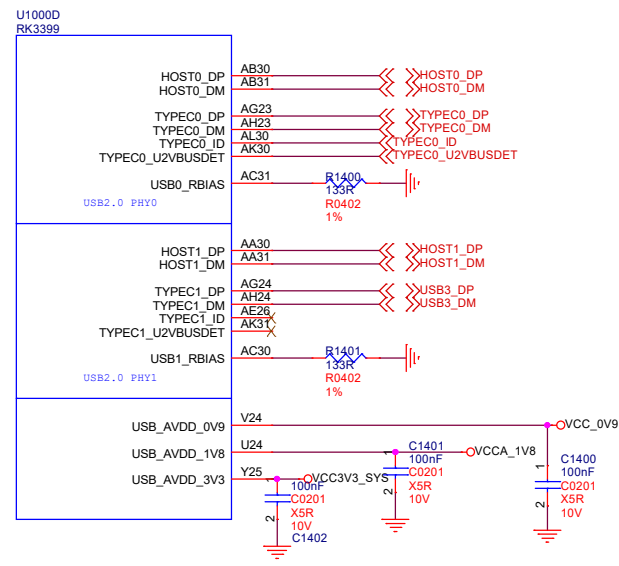
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RK3399



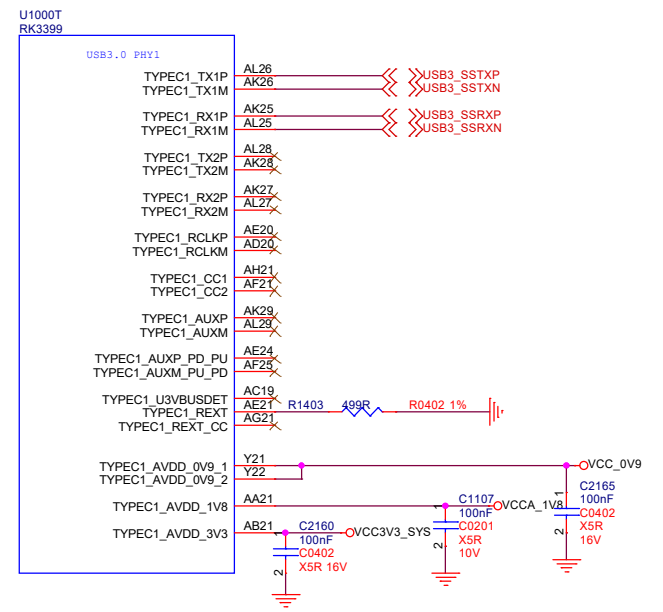
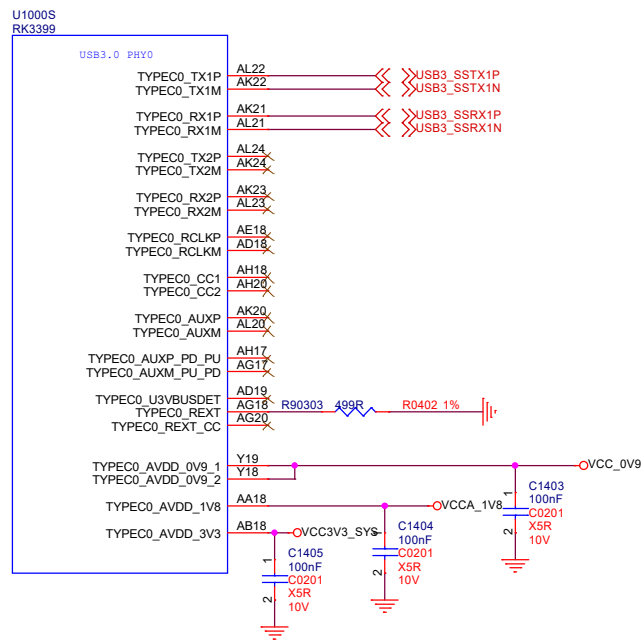
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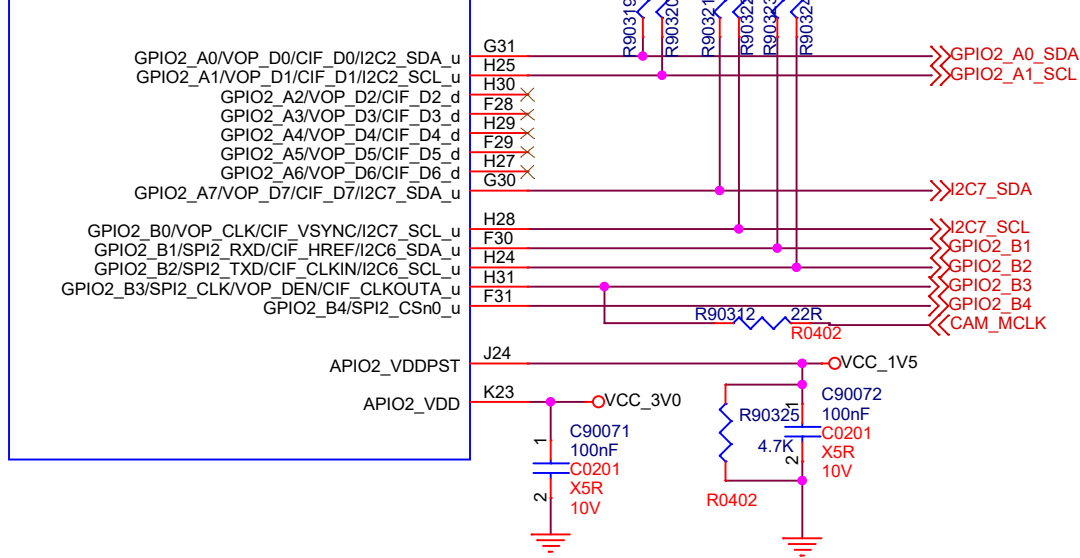
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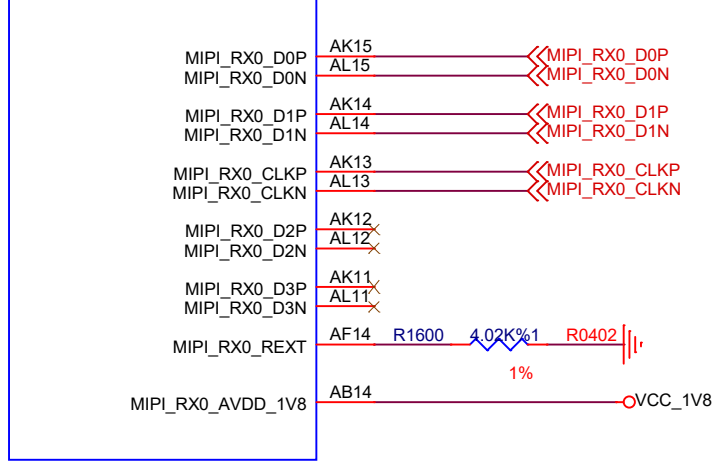
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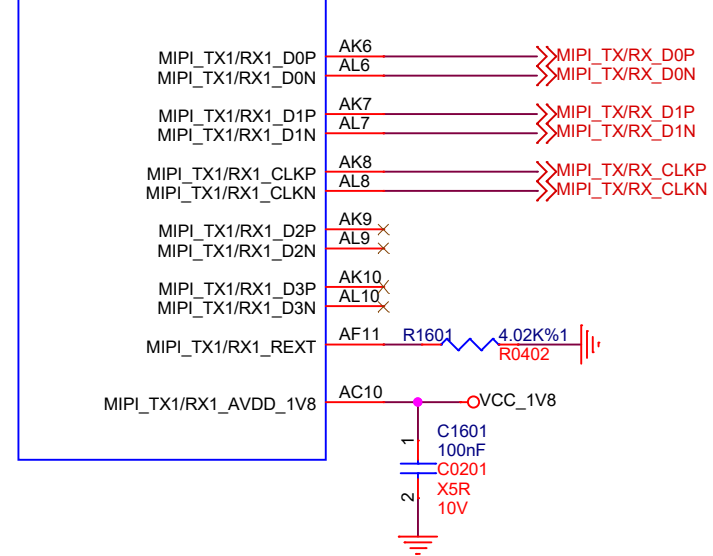
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RK3399



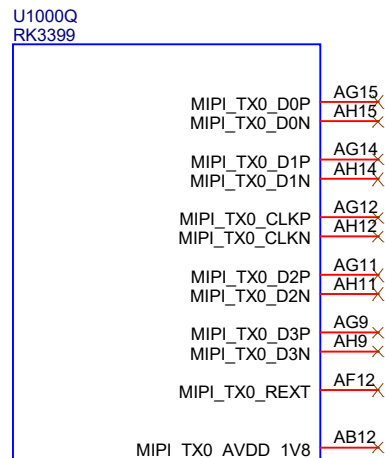
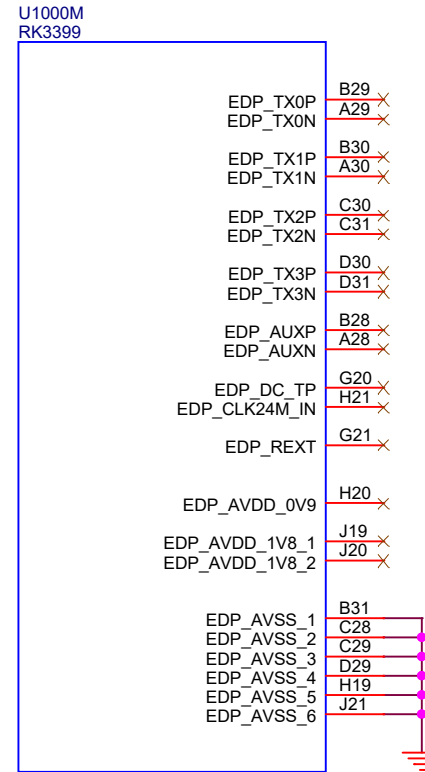
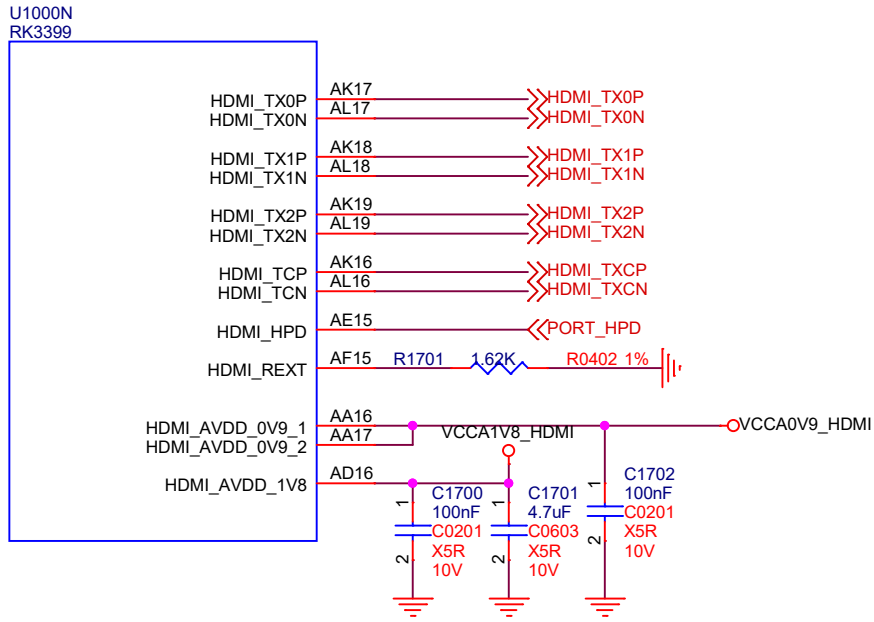
U1000R
RK3399



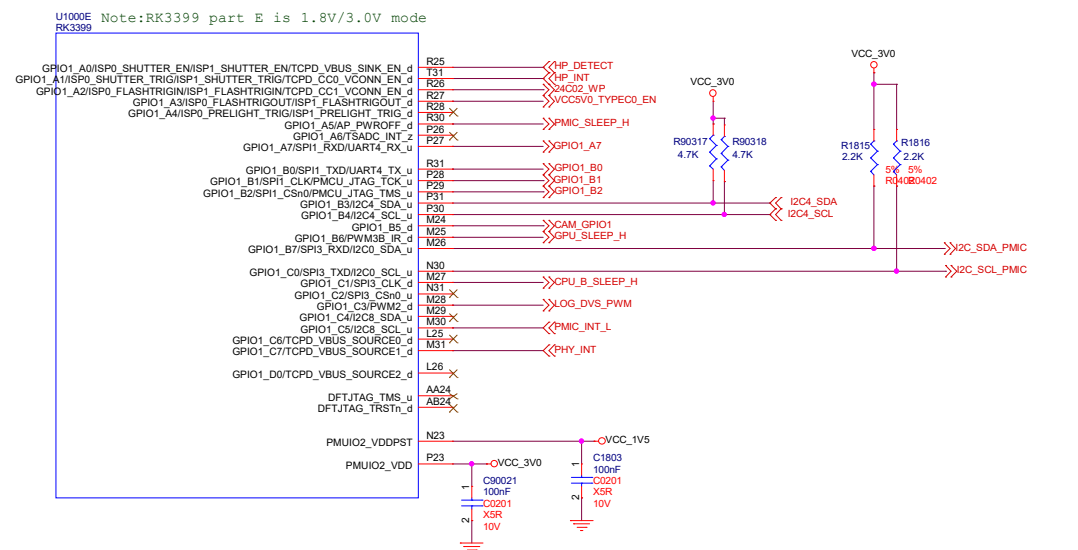
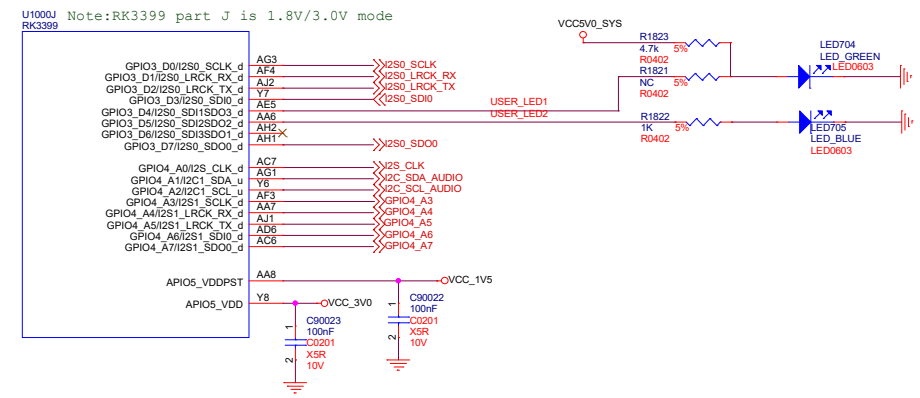
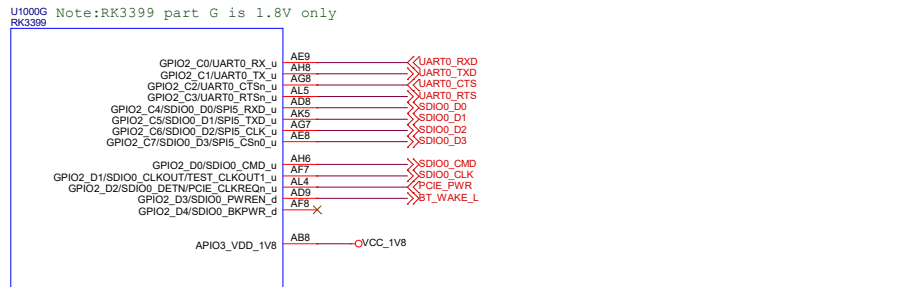
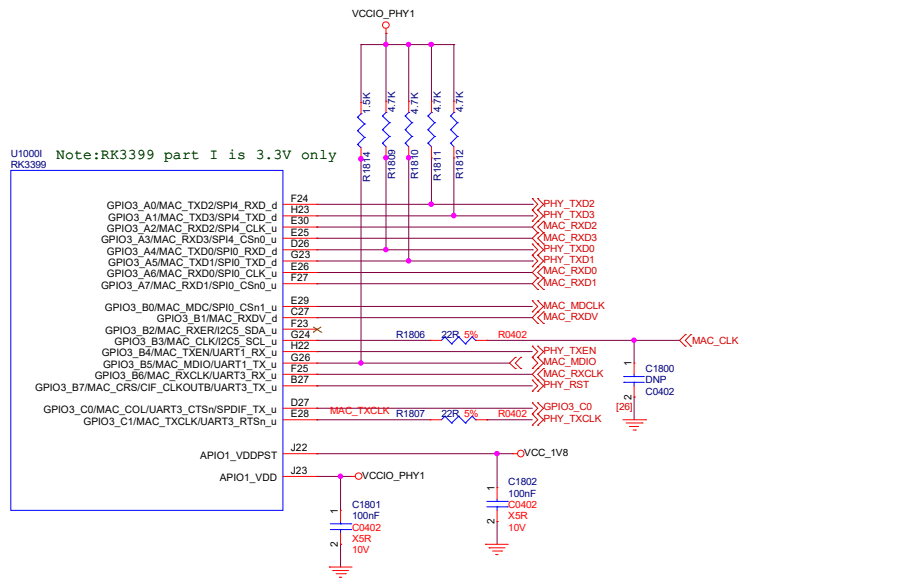
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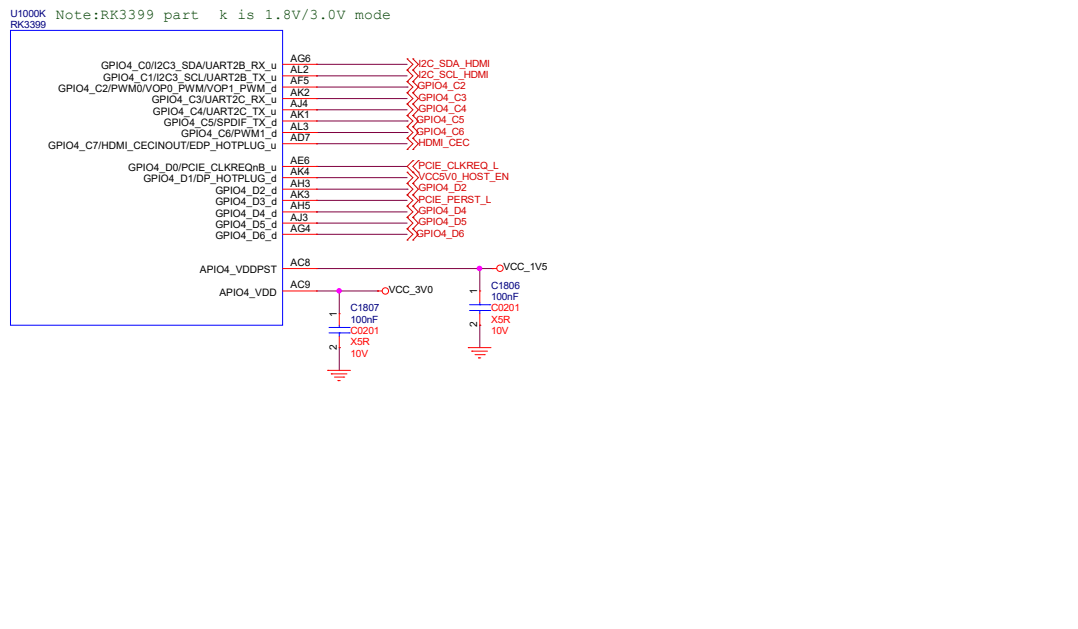
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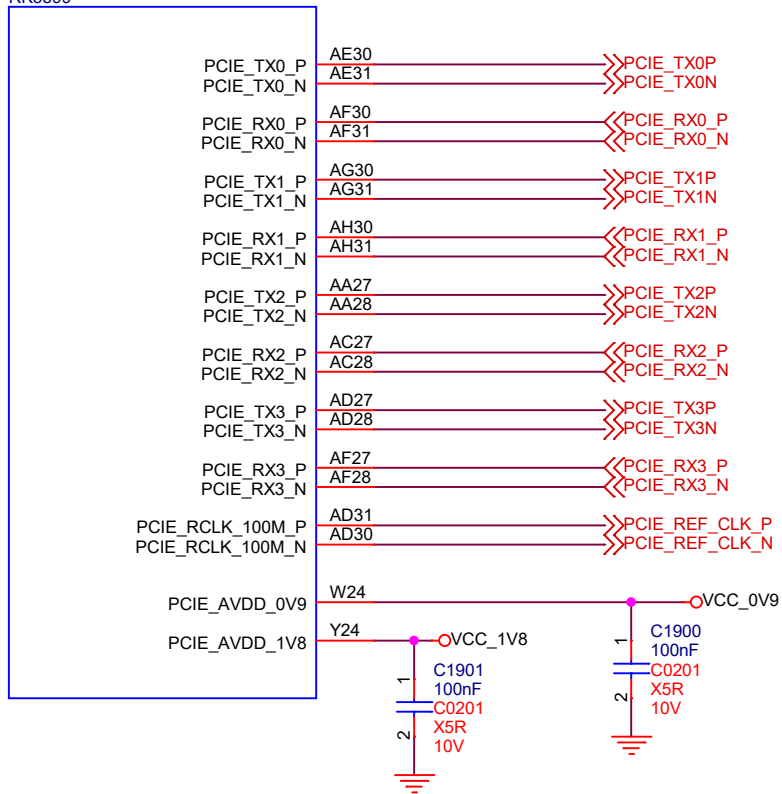
1.8V Only	VDDPST=VDDIO=1.8V
3.3V Only	VDDPST=1.8V, VDDIO=3.3V
other	3.0V mode: VDDPST=1.5V, VDDIO=3.0V 1.8V mode: VDDPST=1.8V, VDDIO=1.8V



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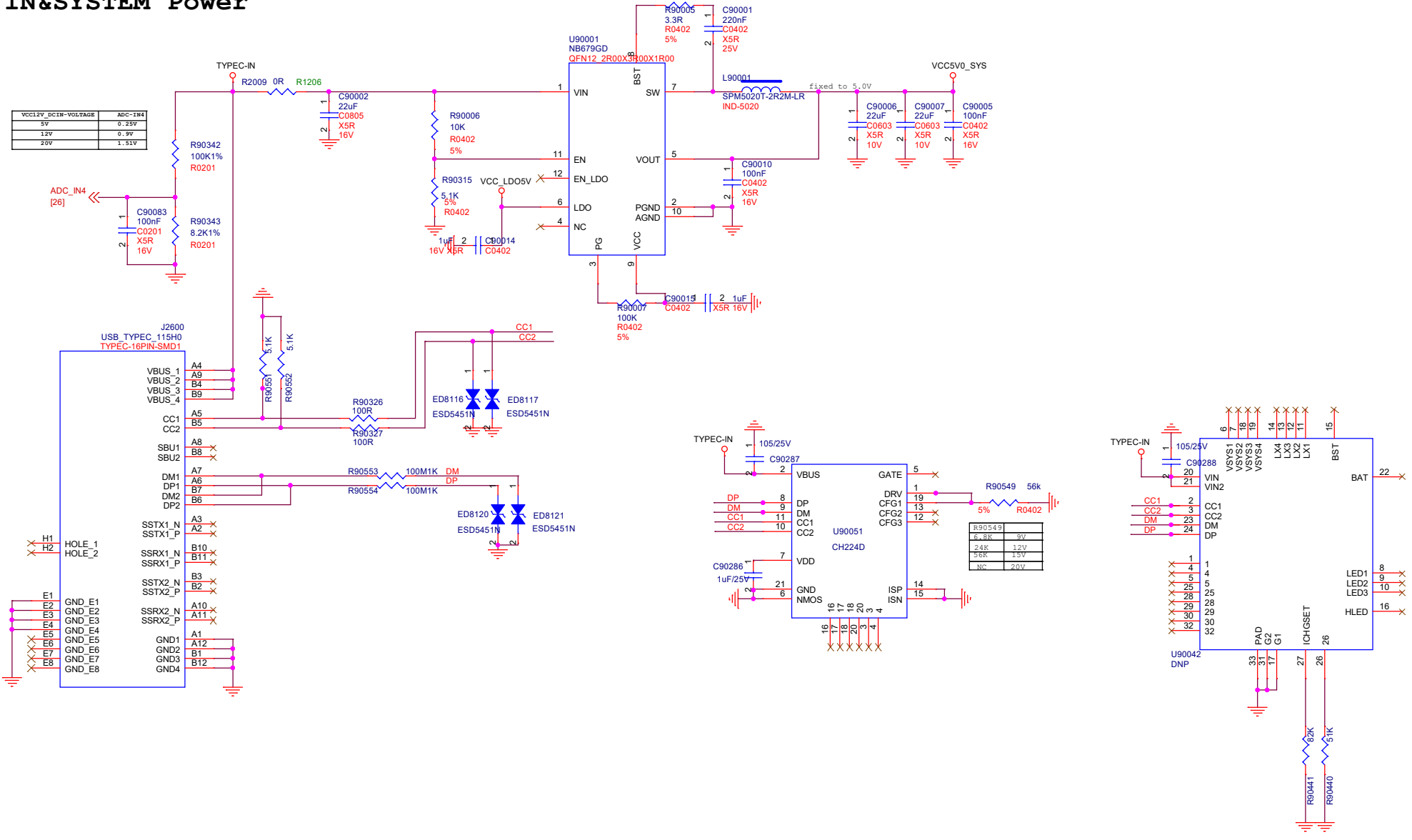
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Customer Page Name:	RK3399 GPIO	1.54
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U10000
RK3399



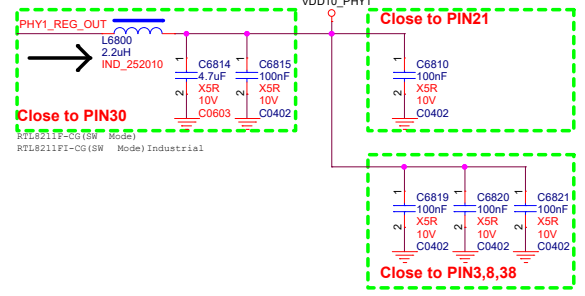
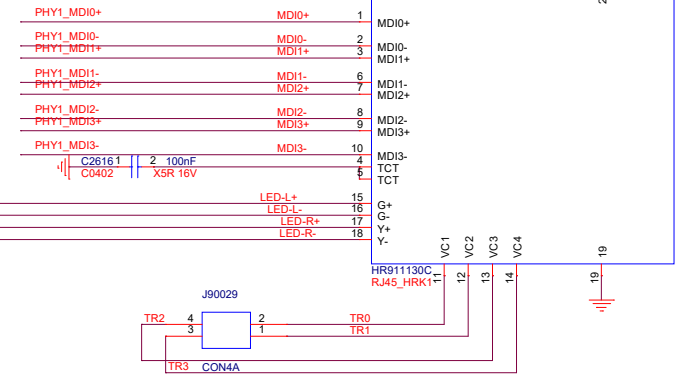
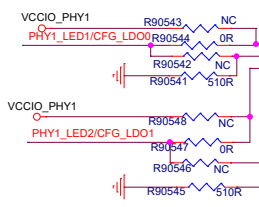
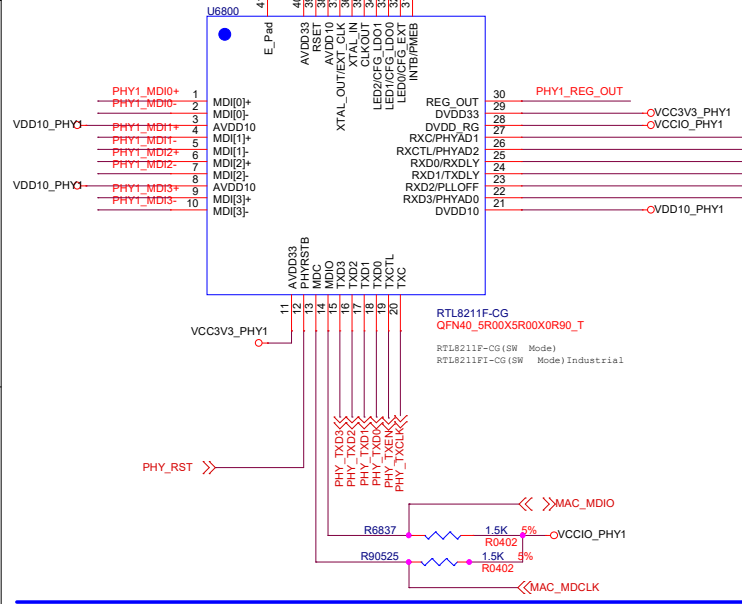
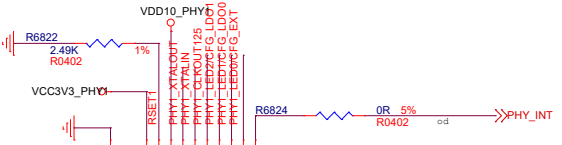
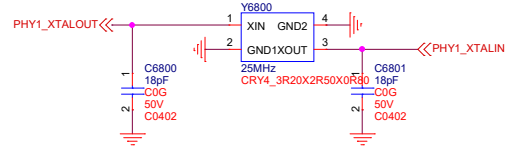
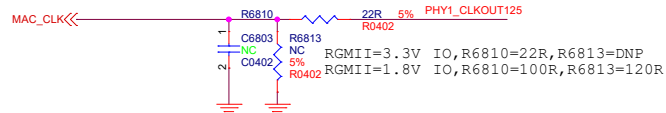
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A4	Page Name: RK3399 PCIE	1.54
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DC IN&SYSTEM Power



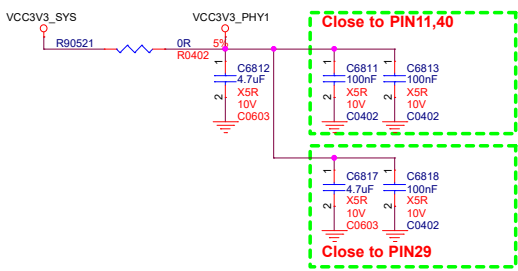
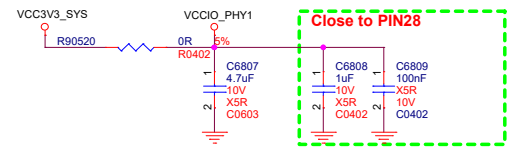
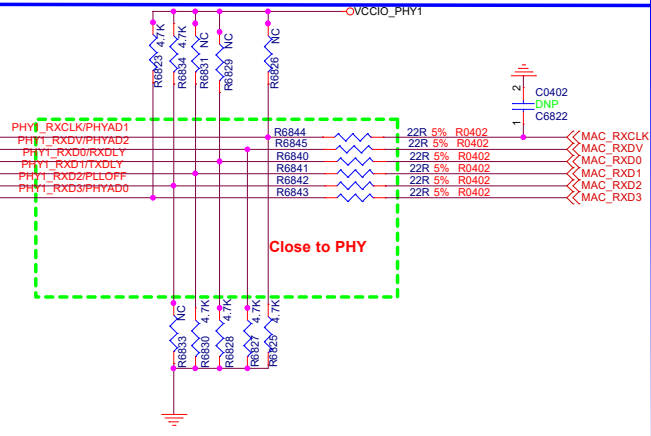
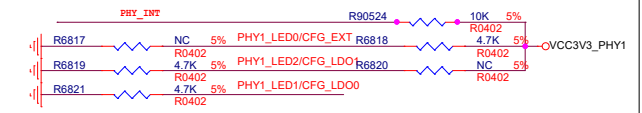
VCC12V_DCIN-VOLTAGE	ADC-IN4
5V	0.25V
12V	0.9V
20V	1.51V

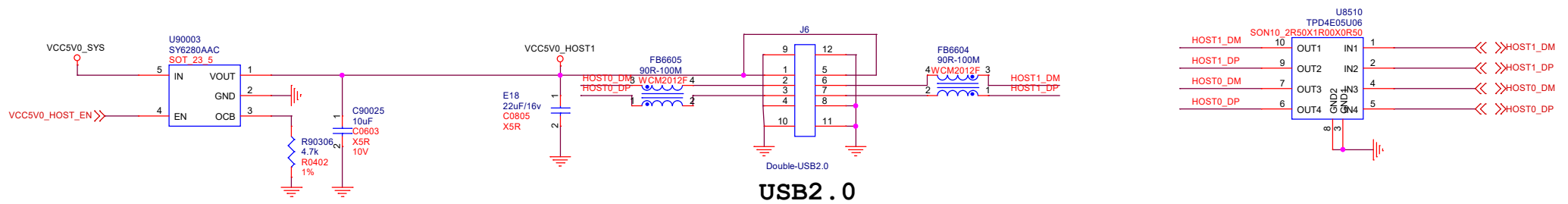
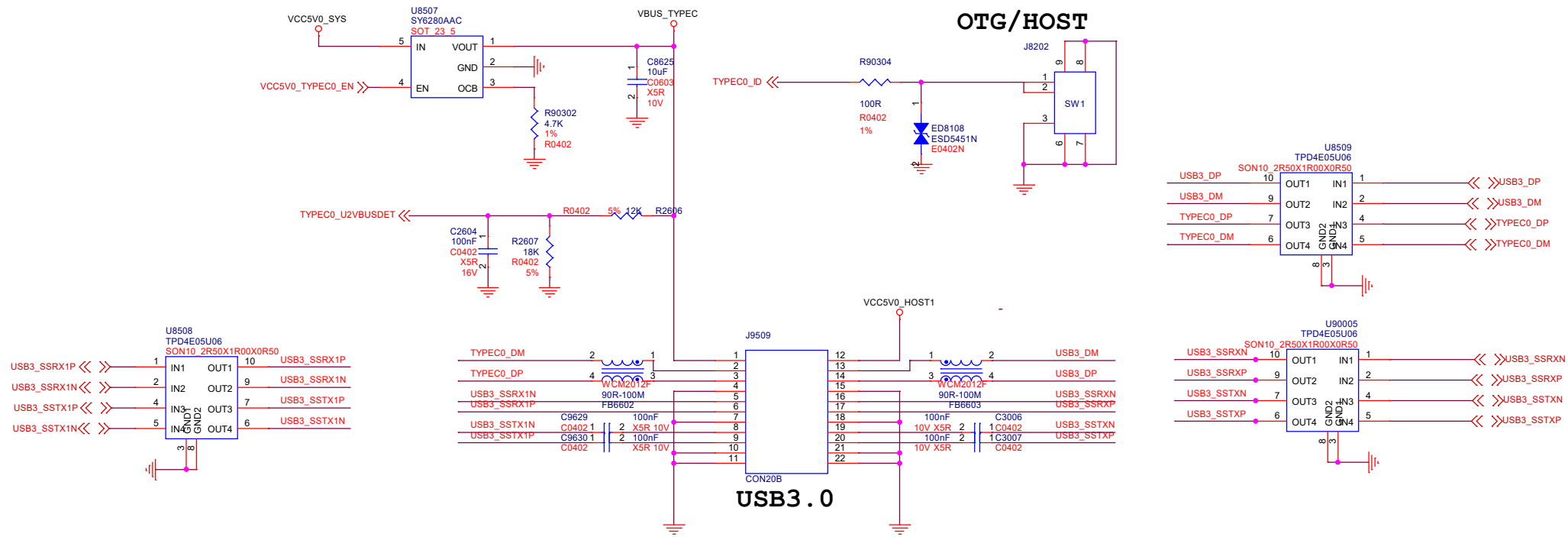
R90549	9V
5.8K	9V
24K	12V
56K	15V
NC	20V

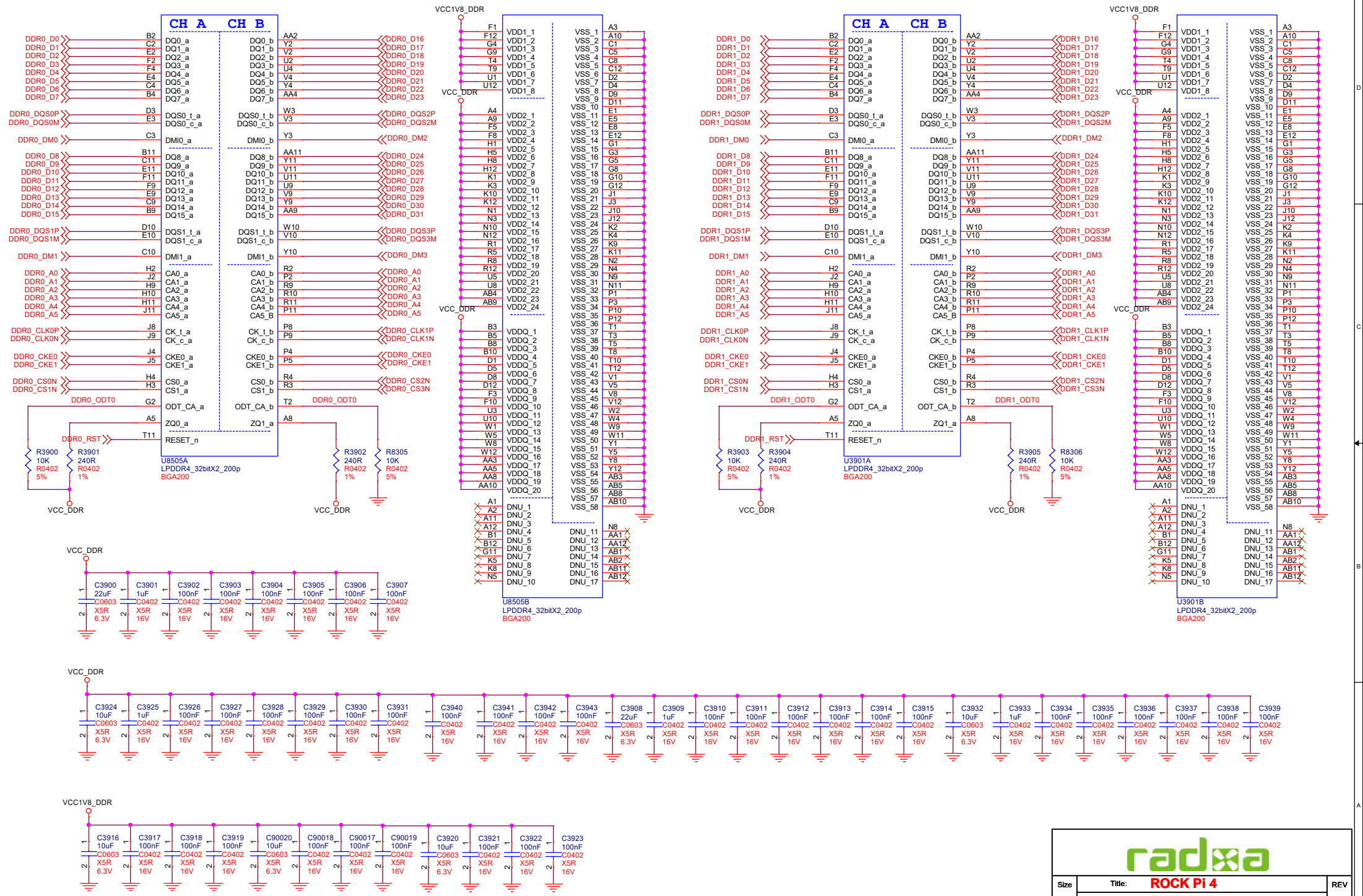


VCC_PHY0_IO Voltage Config

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



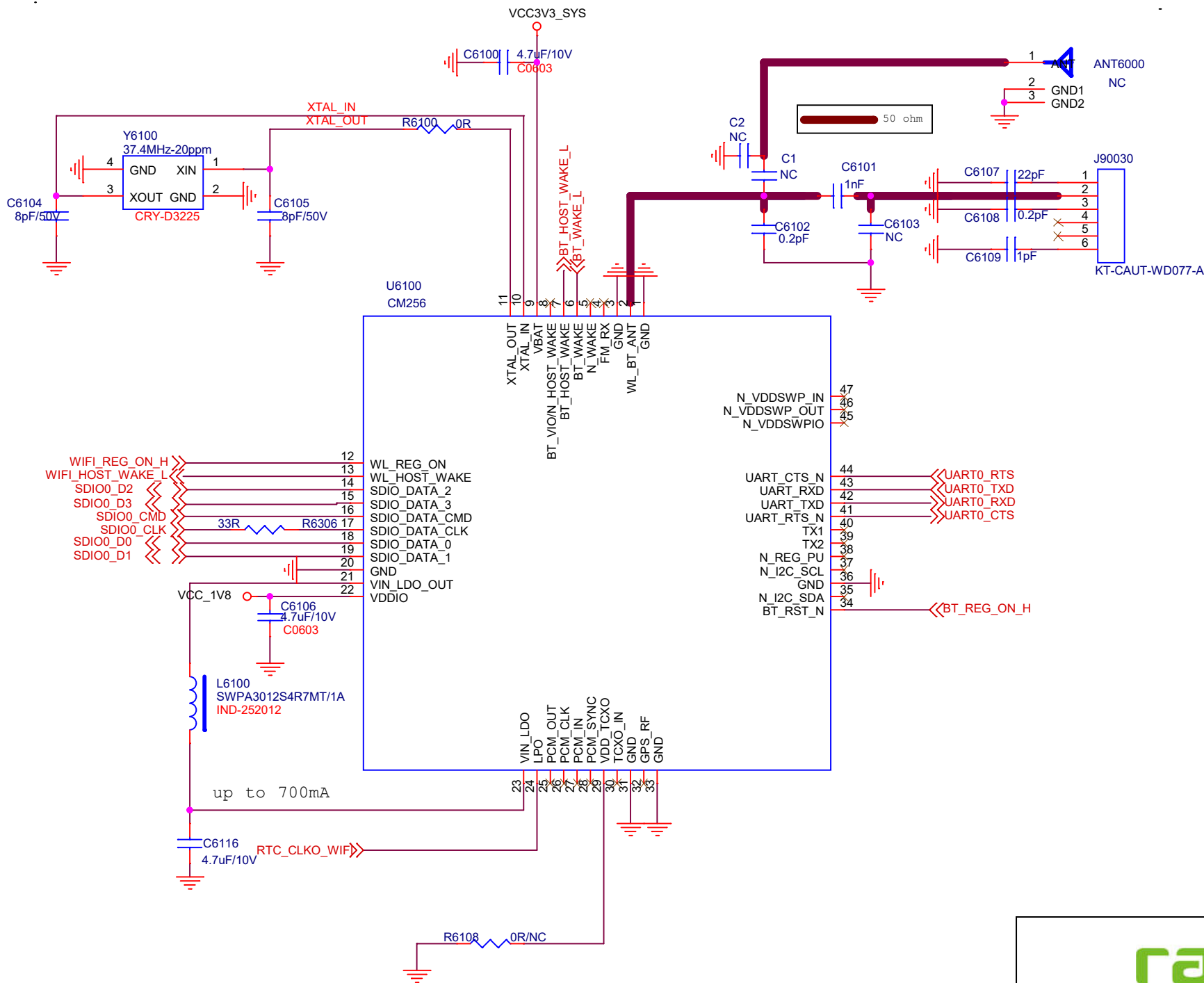




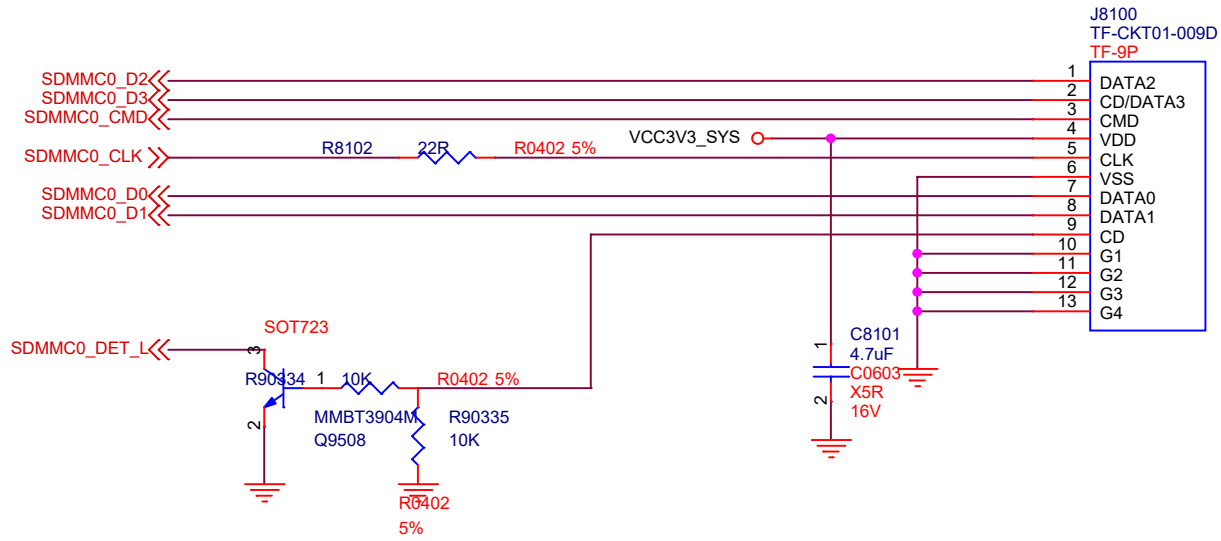
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ROCK PI 4

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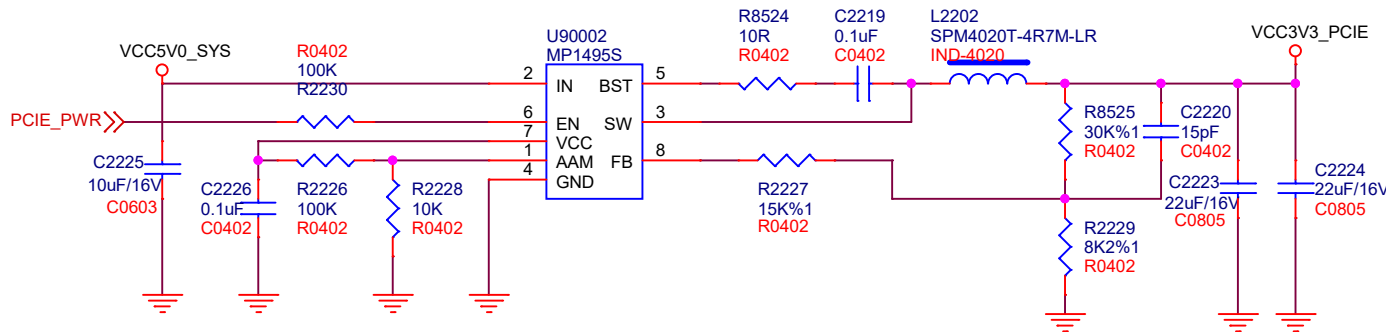
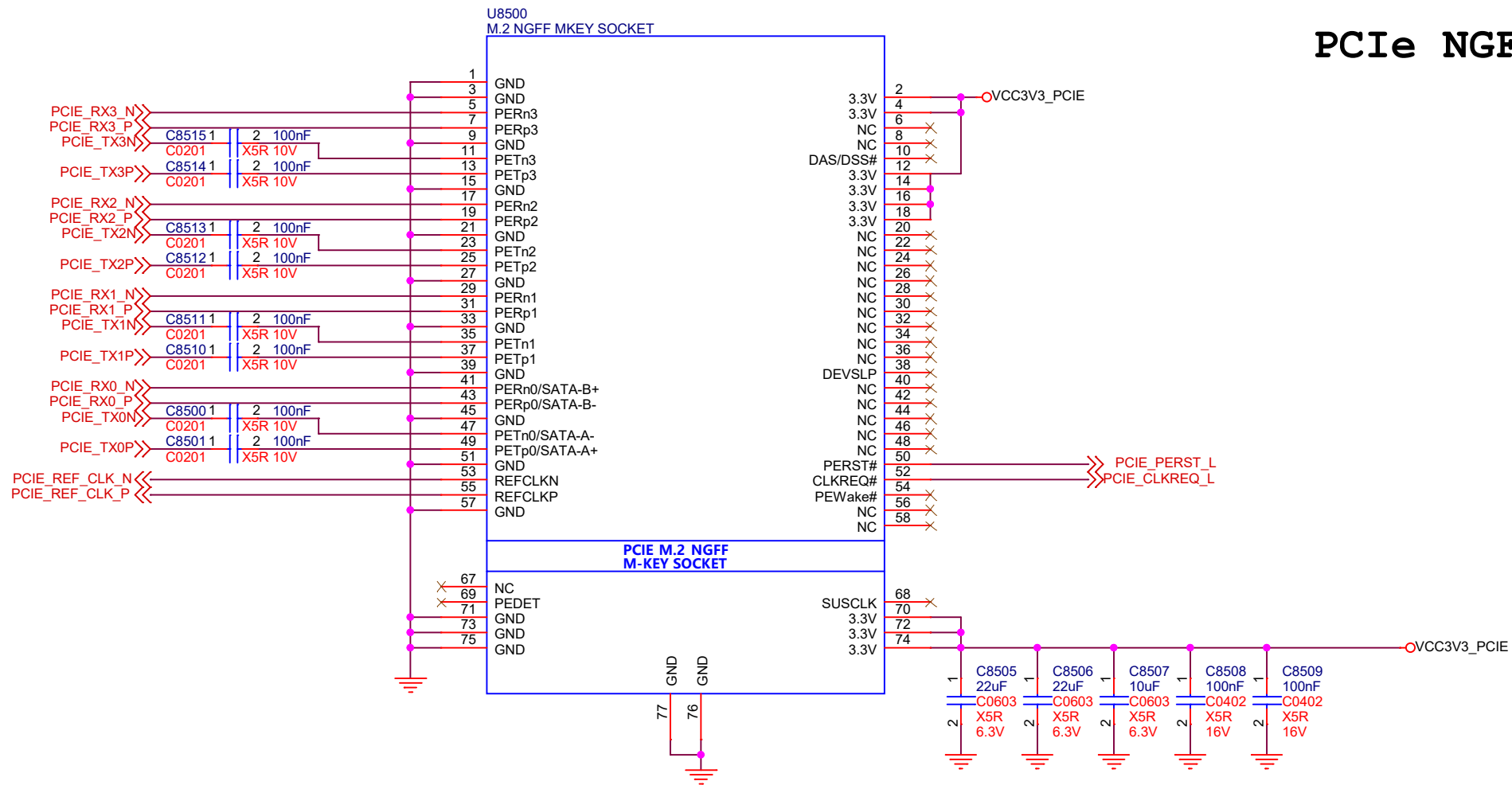


TF CARD

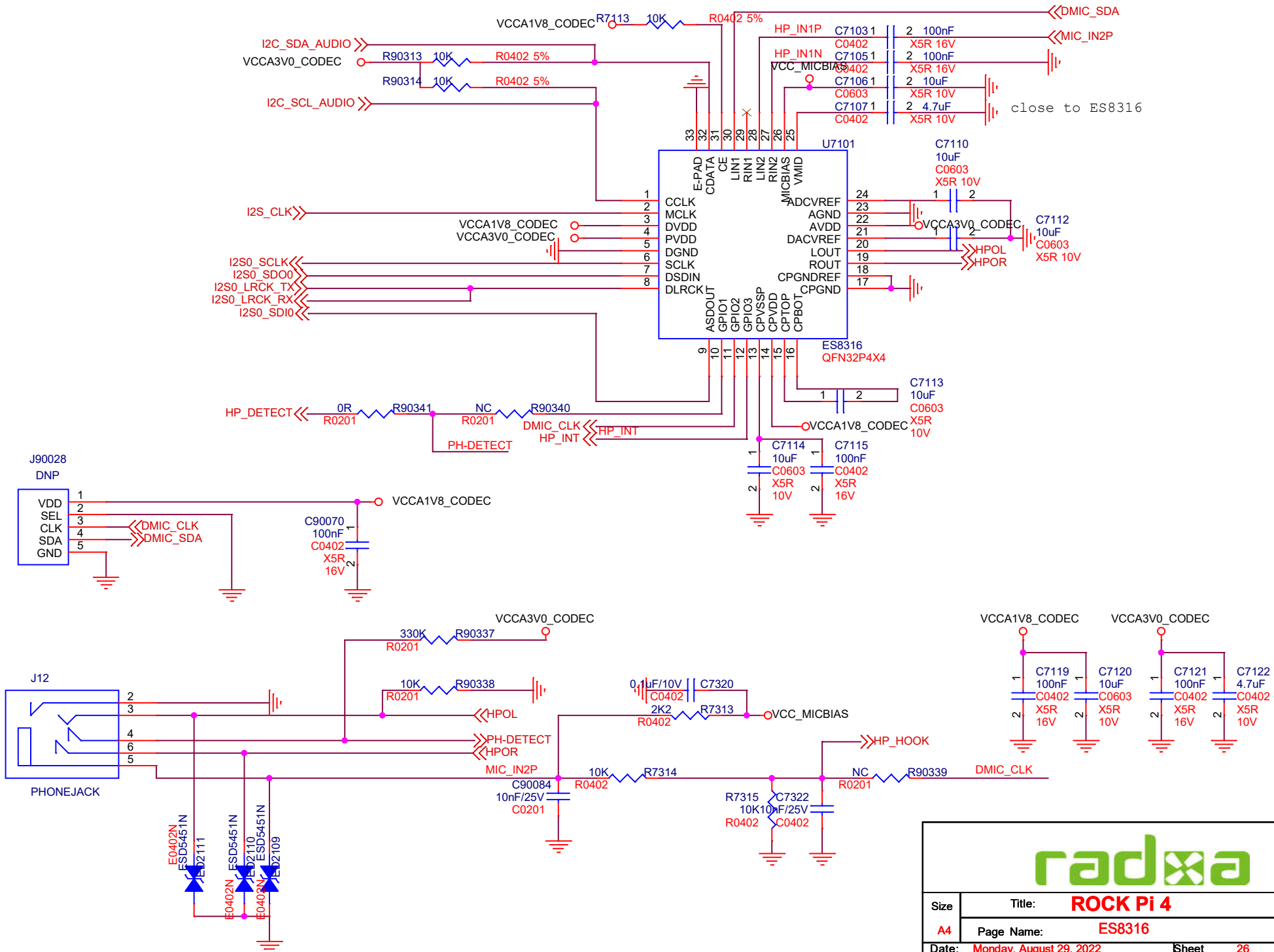


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PCIe NGFF/M.2

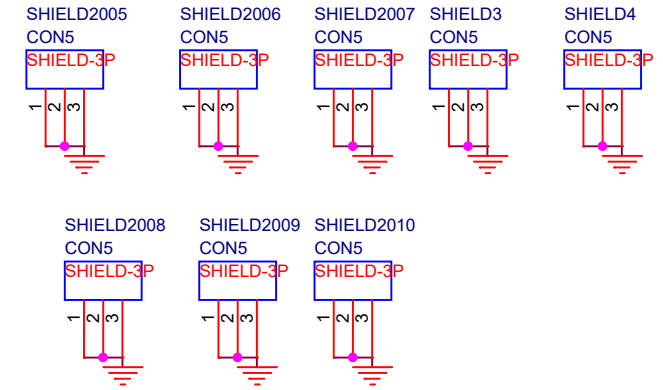
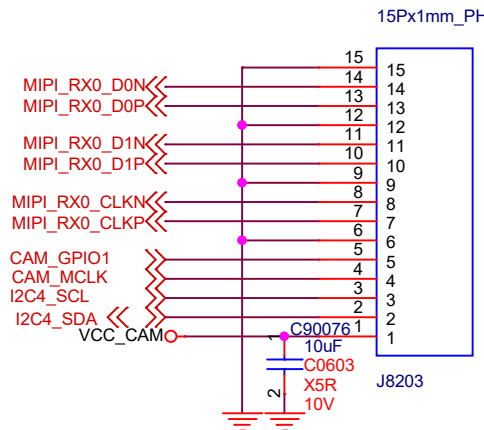
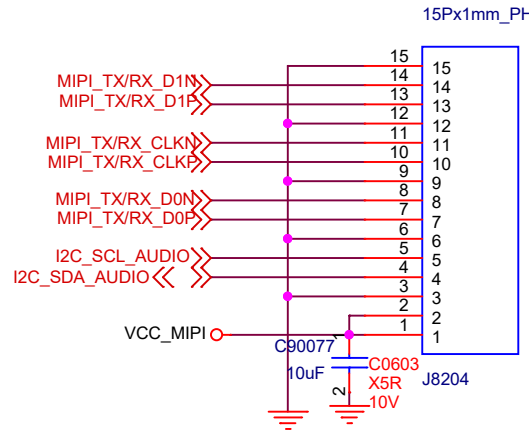
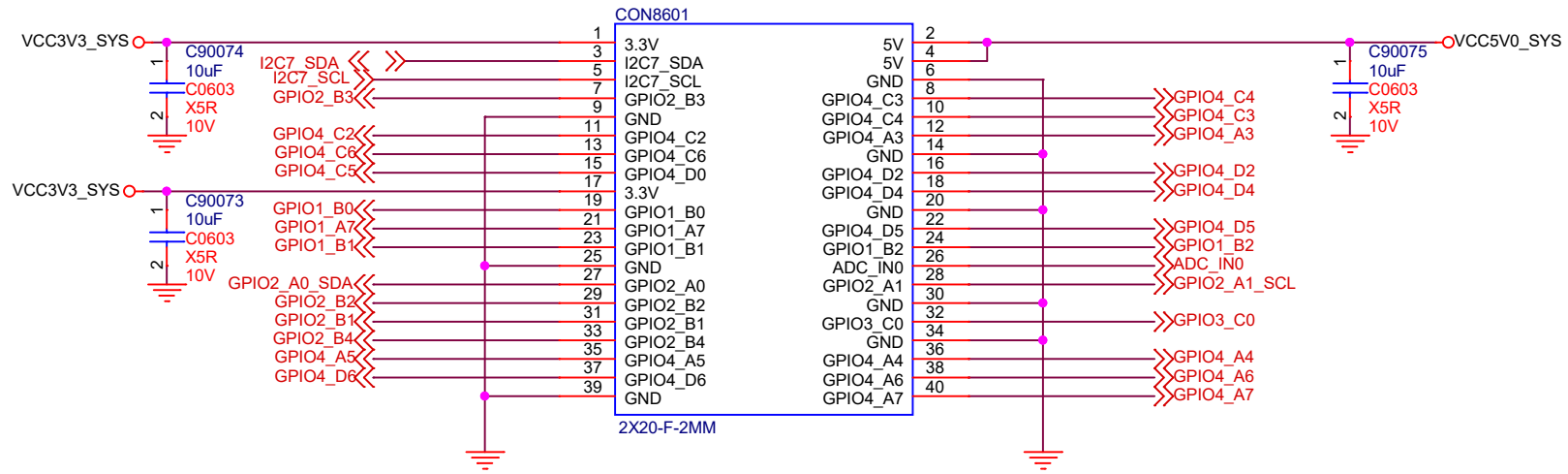


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Size	Title: ROCK Pi 4	REV
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