



Radxa ROCK 3C

schematic

V1.332

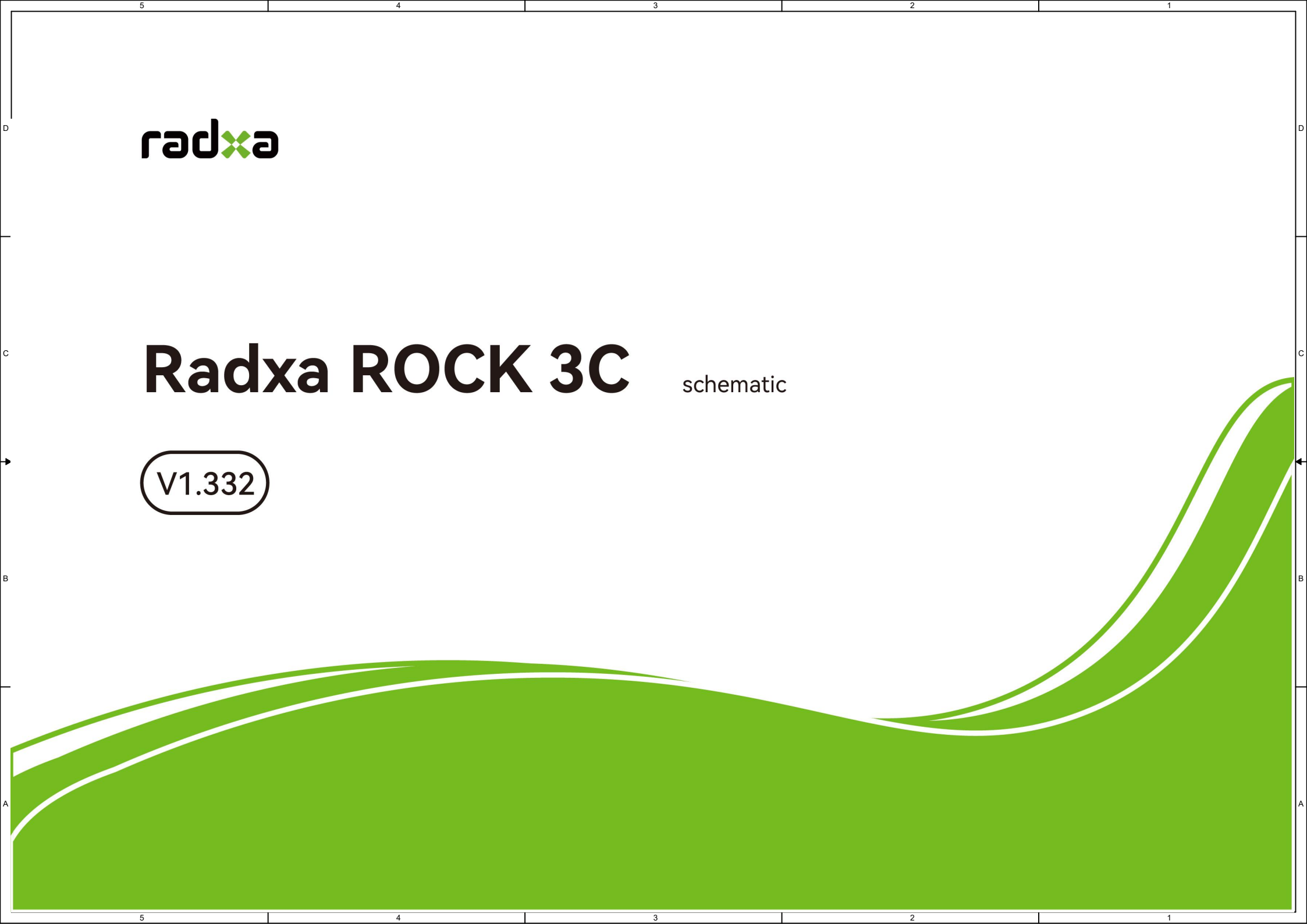


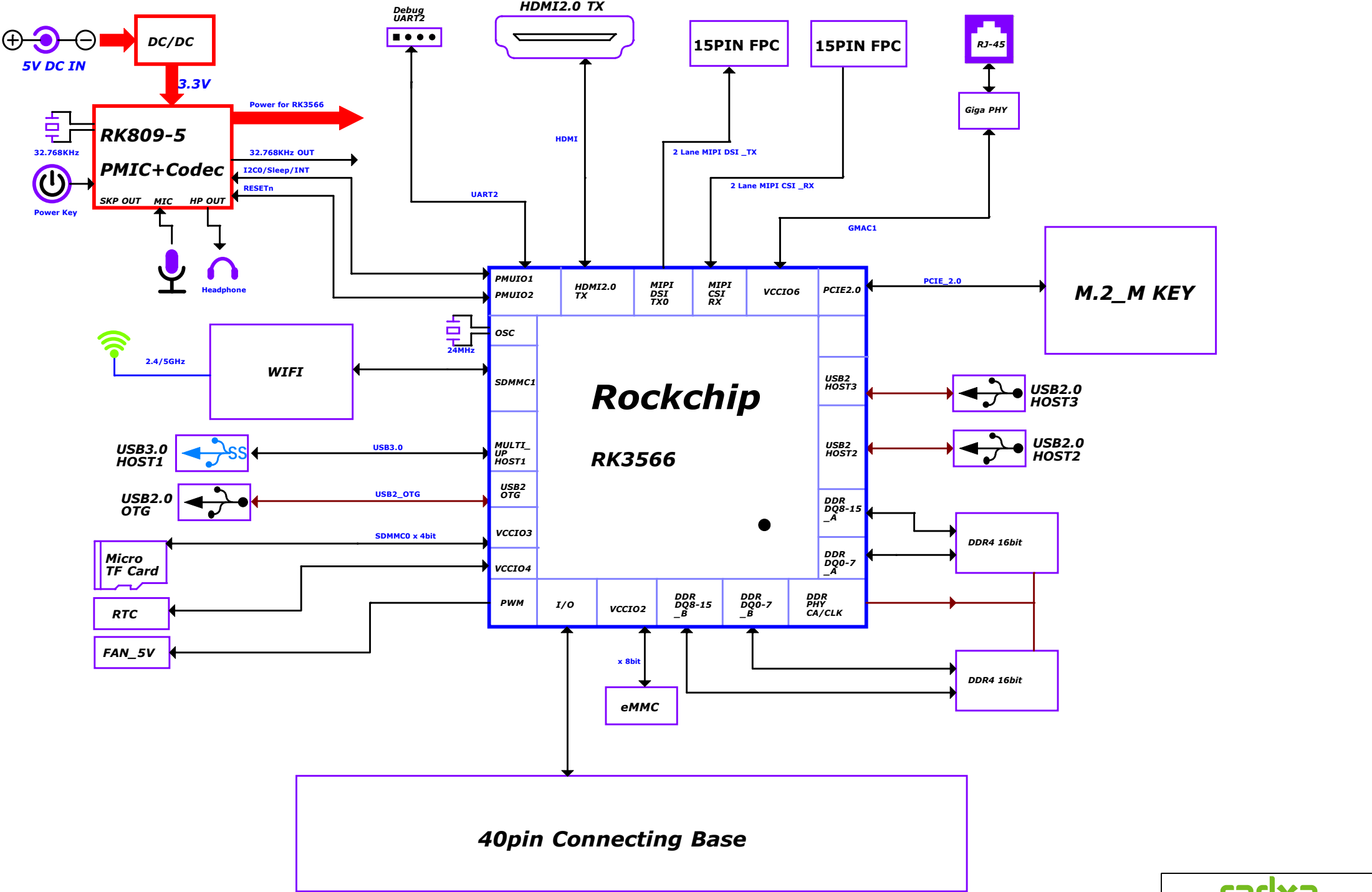
Table of Content

- 01.cover
- 02.Index
- 03.Block Diagram
- 04.RK3566_Power/GND
- 05.RK3566_DDR PHY
- 06.RK3566_Flash/SD
- 07.RK3566_VI Interface
- 08.RK3566_VO Interface_1
- 09.RK3566_VO Interface_2
- 10.RK3566_Audio Interface
- 11.RK3566_SARADC/GPIO
- 12.RK3566_USB/PCIe/SATA PHY
- 13.RK3566_OSC/PLL/PMUIO
- 14.LED/RTC/FAN
- 15.USB Port
- 16.LPDDR4X_1X32bit
- 17.SPI Flash/eMMC
- 18.MicroSD Card
- 19.MIPI-CSI
- 20.HDMI2.0 TX
- 21.MIPI-DSI
- 22.WIFI/BT-SDIO
- 23.AUDIO OUT
- 24.CONNECTOR
- 25.PCIE-M2
- 26.RGMII
- 27.Power_other
- 28.Power_PMIC
- 29.Power_DC IN

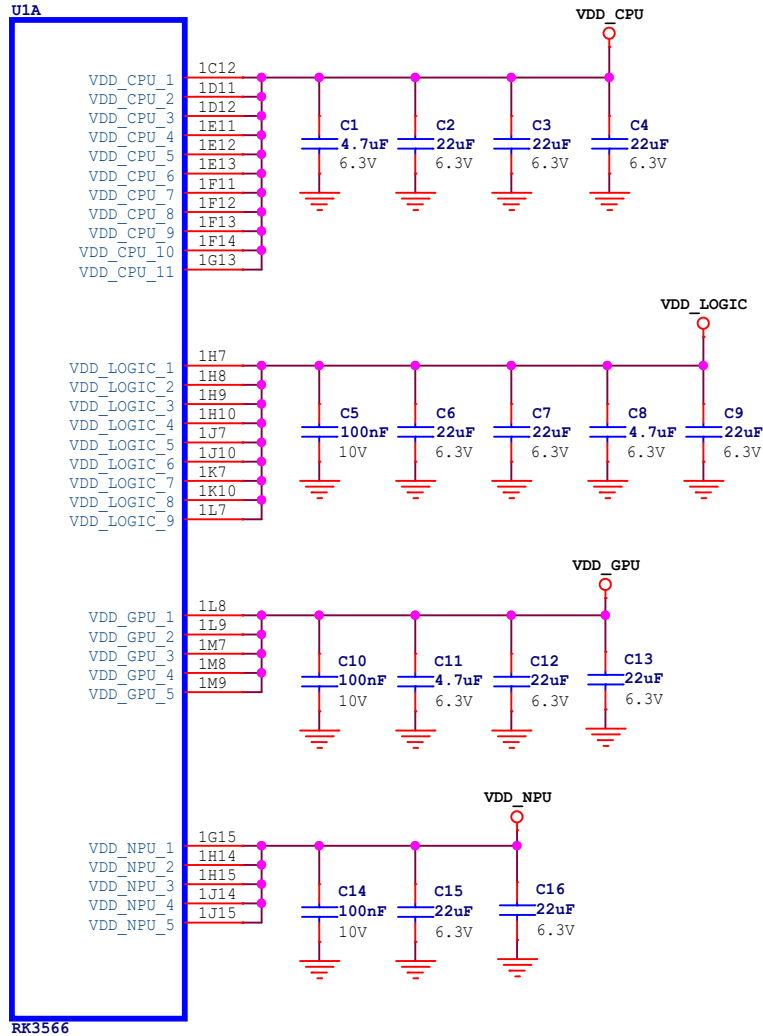


Size	Title: ROCK 3C	REV
A4	Page Name: Index	1.332
Date: Tuesday, March 28, 2023	Sheet 02 of 29	

ROCK 3C Ref Block Diagram



RK3566_ABCDE (Power&GND)



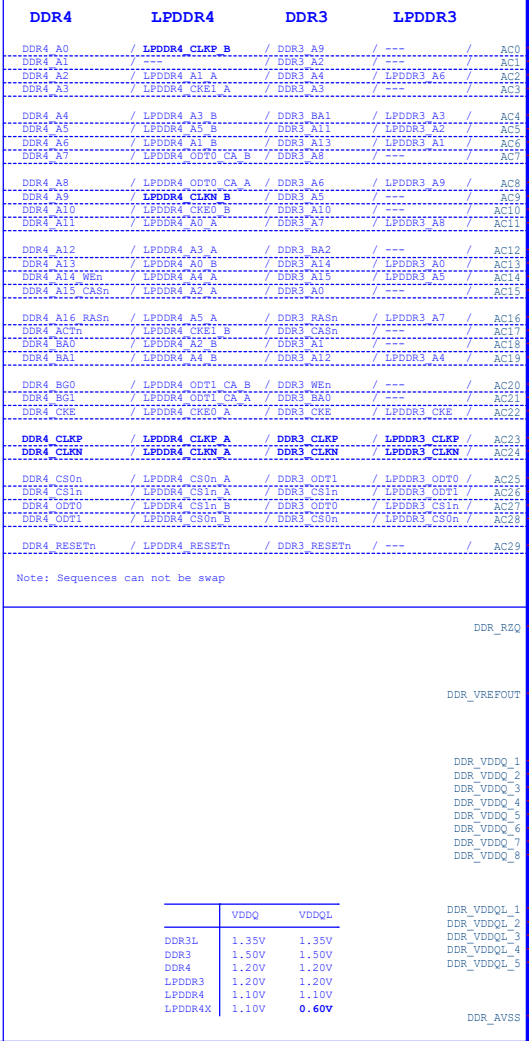
RK3566



Size	Title: ROCK 3C	REV
A4	Page Name: RK3566_Power/GND	1.332
Date: Tuesday, March 28, 2023	Sheet 04 of 29	

RK3566_F (DDR PHY)

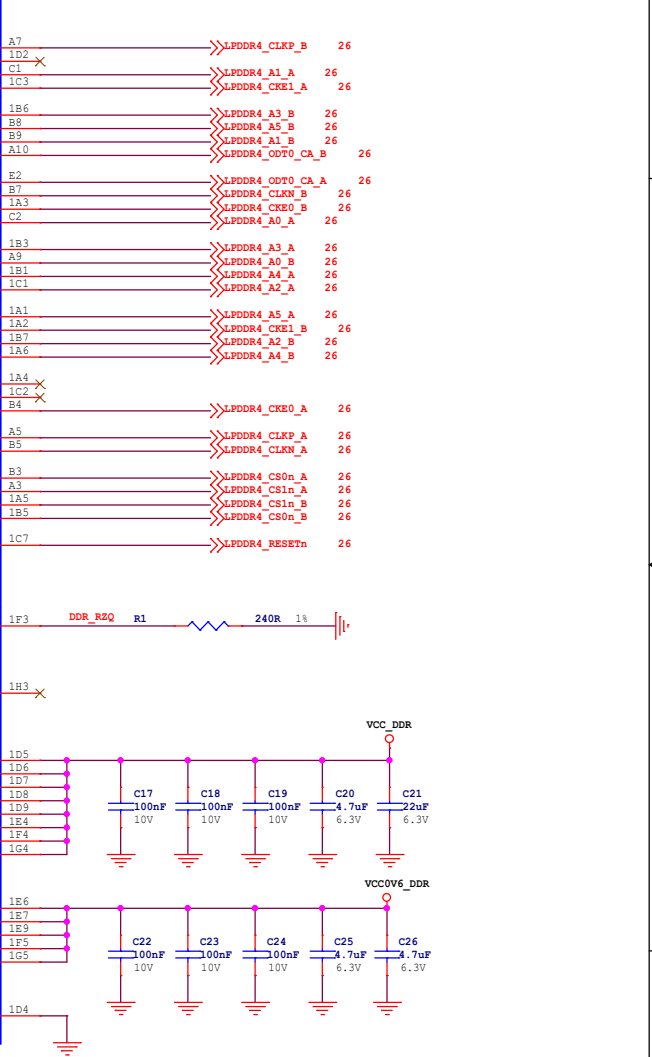
UIF



Note: Sequences can not be swap

Note:
Except DDR3, other DQ sequences
can not be swap

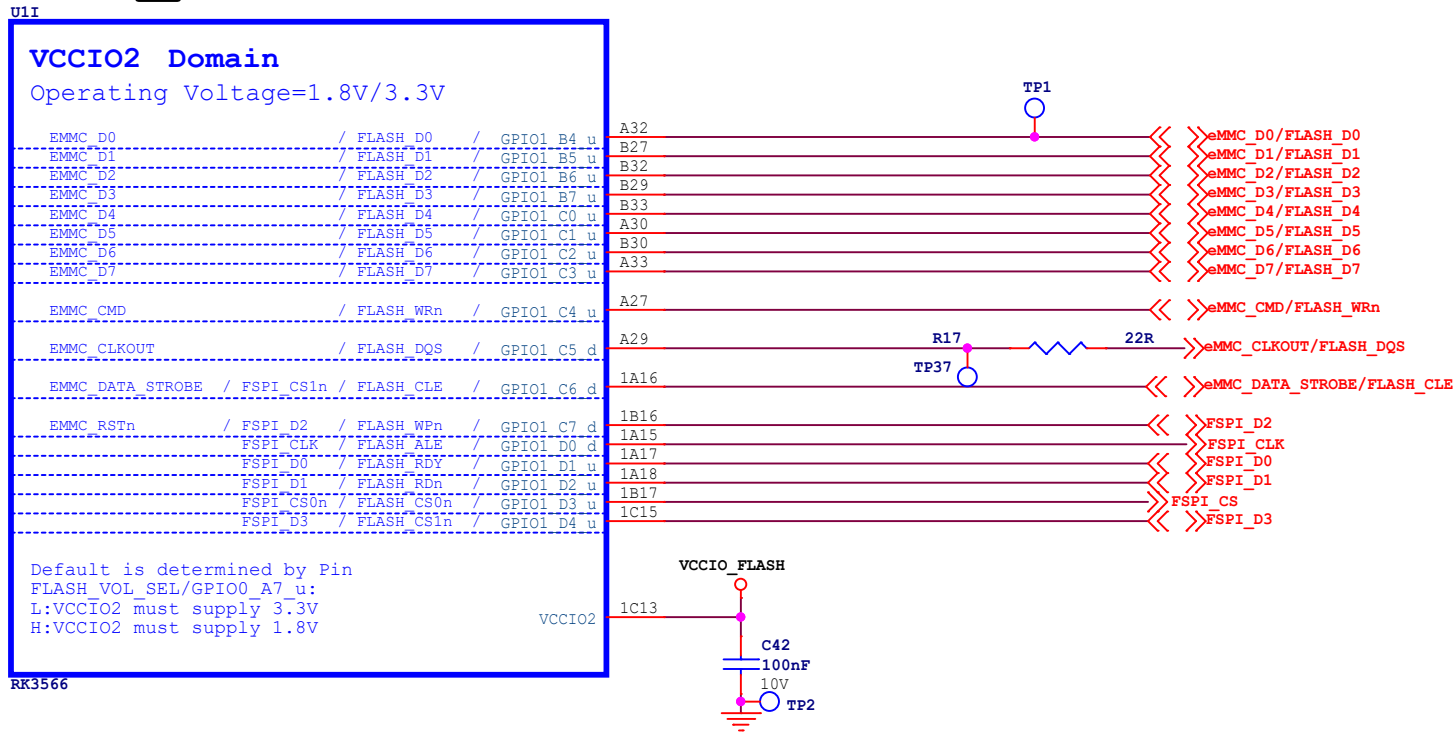
RK3566



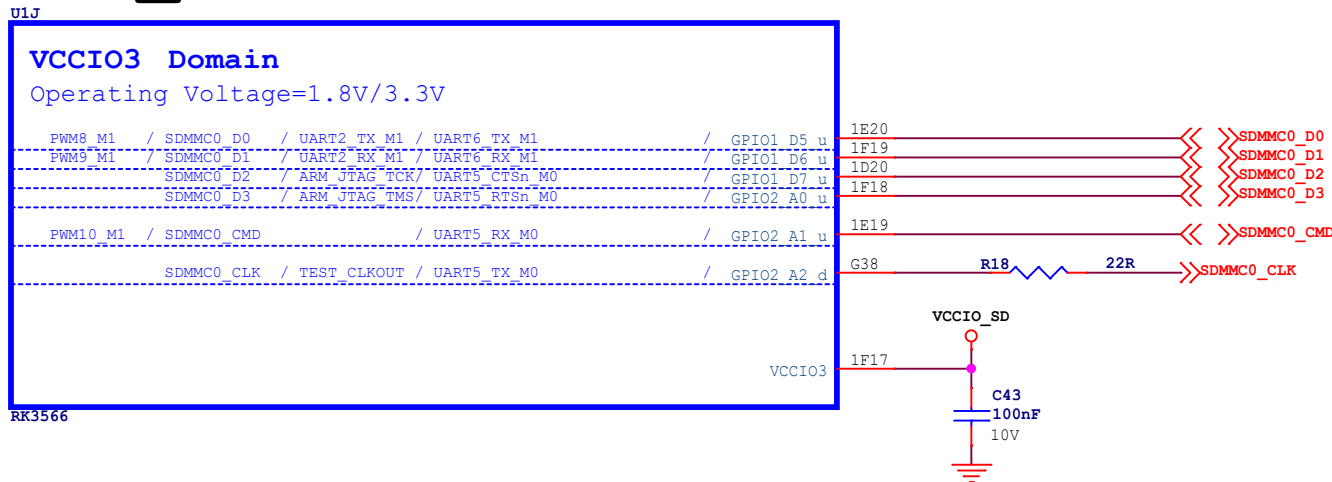
	VDDQ	VDDQL
DDR3L	1.35V	1.35V
DDR3	1.50V	1.50V
DDR4	1.20V	1.20V
LPDDR3	1.20V	1.20V
LPDDR4	1.10V	1.10V
LPDDR4X	1.10V	0.60V



RK3566_I (VCCIO2 Domain)

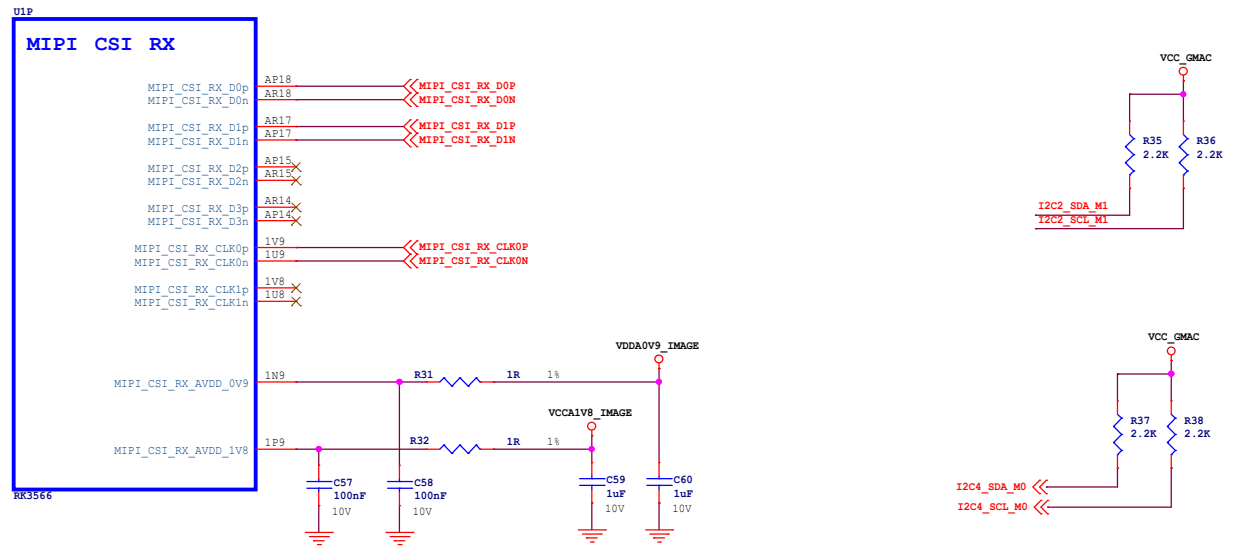


RK3566_J (VCCIO3 Domain)

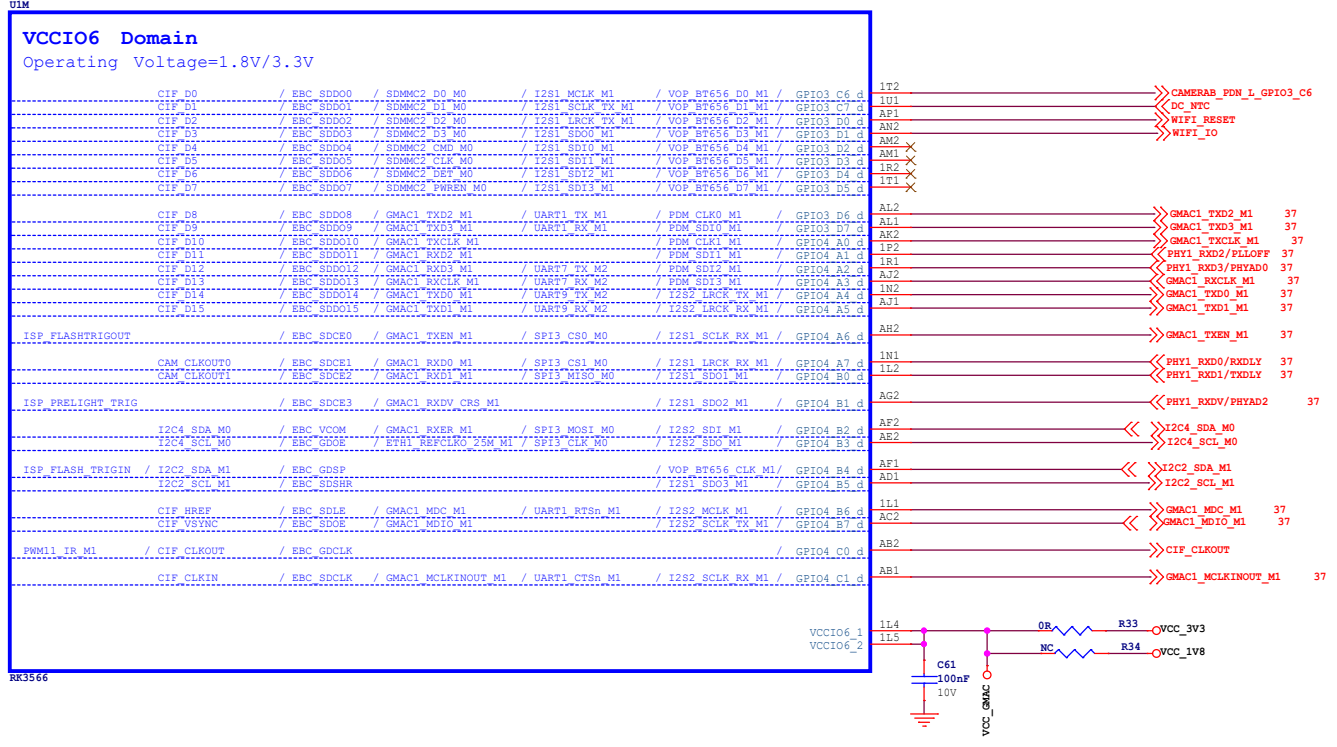


Size	Title:	ROCK 3C	REV
A4	Page Name:	RK3566_Flash/SD	1.332
Date:	Tuesday, March 28, 2023	Sheet	06 of 29

RK3566_P (MIPI_CSI_RX)

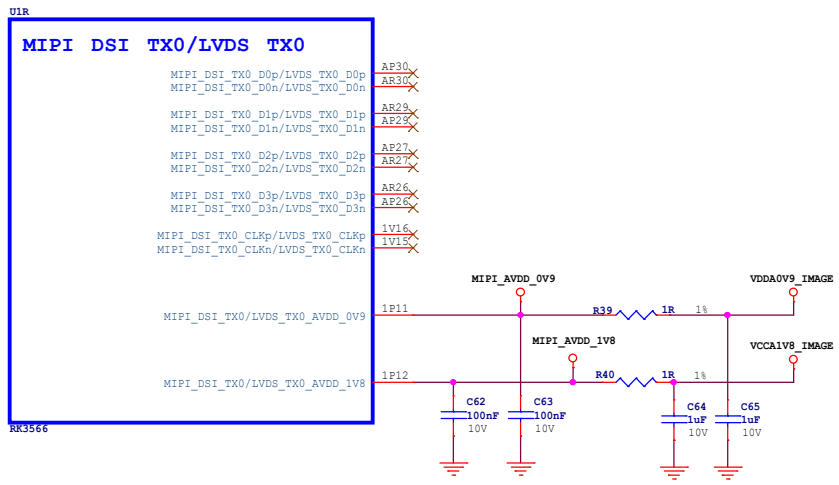


RK3566_M (VCCIO6 Domain)

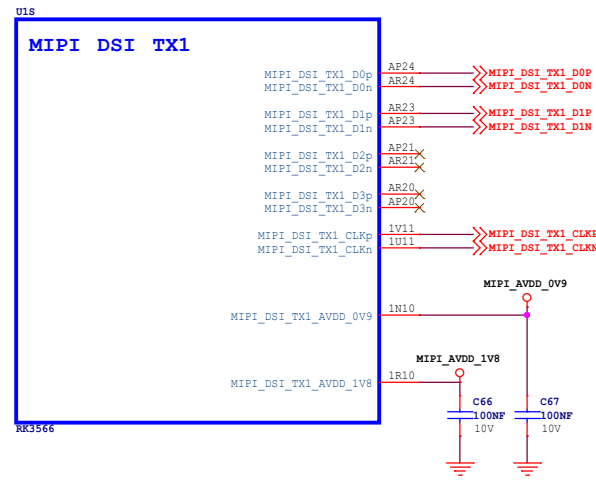


Size	Title: ROCK 3C	REV
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Date: Tuesday, March 28, 2023	Sheet 07 of 29	

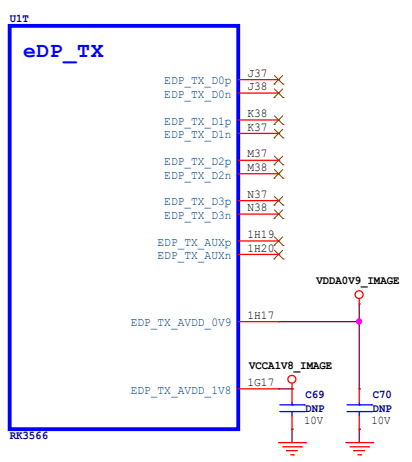
RK3566_R (MIPI_DSI_TX0/LVDS_TX0)



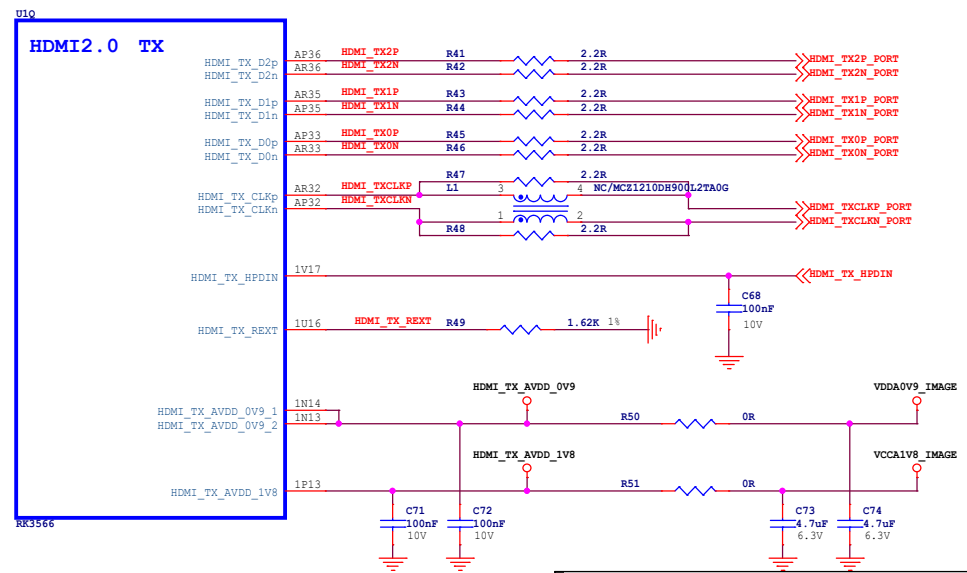
RK3566_S (MIPI_DSI_TX1/LVDS_TX1)



RK3566_T (eDP/DP TX)



RK3566_Q (HDMI2.0 TX)



RK3566_L (VCCIO5 Domain)

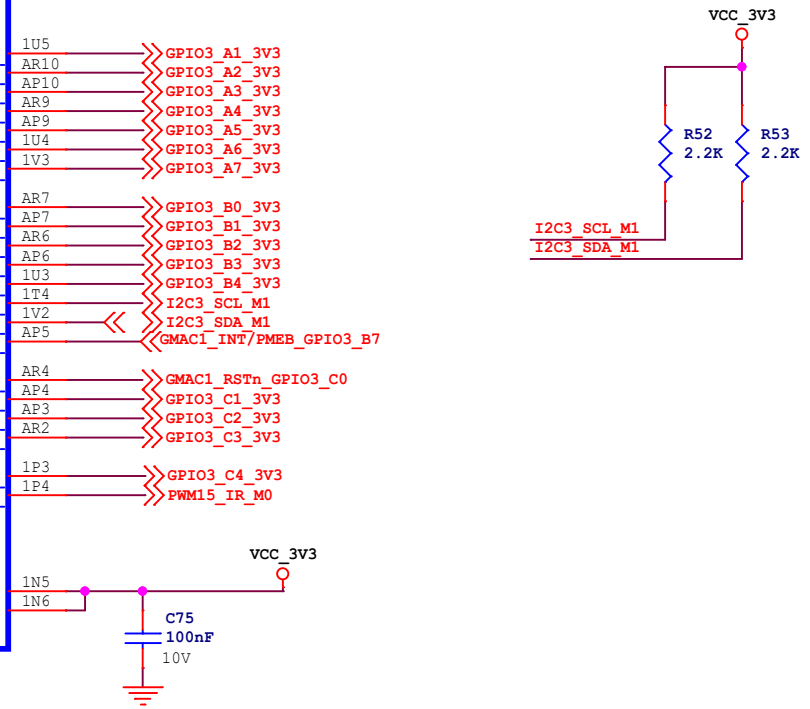
U1L

VCCIO5 Domain

Operating Voltage=1.8V/3.3V

VOP_BT1120_D0	/ SPI1_CS0_M1			/ SDMMC2_D0_M1	/ GPIO3_A1_d
VOP_BT1120_D1		/ GMAC1_TXD2_M0	/ I2S3_MCLK_M0	/ SDMMC2_D1_M1	/ GPIO3_A2_d
VOP_BT1120_D2		/ GMAC1_TXD3_M0	/ I2S3_SCLK_M0	/ SDMMC2_D2_M1	/ GPIO3_A3_d
VOP_BT1120_D3		/ GMAC1_RXD2_M0	/ I2S3_LRCK_M0	/ SDMMC2_D3_M1	/ GPIO3_A4_d
VOP_BT1120_D4		/ GMAC1_RXD3_M0	/ I2S3_SDO_M0	/ SDMMC2_CMD_M1	/ GPIO3_A5_d
VOP_BT1120_CLK		/ GMAC1_TXCLK_M0	/ I2S3_SDI_M0	/ SDMMC2_CLK_M1	/ GPIO3_A6_d
VOP_BT1120_D5		/ GMAC1_RXCLK_M0		/ SDMMC2_DET_M1	/ GPIO3_A7_d
VOP_BT1120_D6		/ ETH1_REFCLKO_25M_M0		/ SDMMC2_PWREN_M1	/ GPIO3_B0_d
PWM8_M0	/ VOP_BT1120_D7	/ GMAC1_RXD0_M0	/ UART4_RX_M1	/ GPIO3_B1_d	
PWM9_M0	/ VOP_BT1120_D8	/ GMAC1_RXD1_M0	/ UART4_TX_M1	/ GPIO3_B2_d	
VOP_BT1120_D9	/ I2C5_SCL_M0	/ GMAC1_RXDV_CRS_M0		/ PDM_SDI0_M2	/ GPIO3_B3_d
VOP_BT1120_D10	/ I2C5_SDA_M0	/ GMAC1_RXER_M0		/ PDM_SDI1_M2	/ GPIO3_B4_d
PWM10_M0	/ VOP_BT1120_D11	/ GMAC1_TXD0_M0		/ GPIO3_B5_d	
PWM11_IR_M0	/ VOP_BT1120_D12	/ GMAC1_TXD1_M0		/ GPIO3_B6_d	
PWM12_M0		/ GMAC1_TXEN_M0	/ UART3_TX_M1	/ PDM_SDI2_M2	/ GPIO3_B7_d
PWM13_M0		/ GMAC1_MCLKINOUT_M0	/ UART3_RX_M1	/ PDM_SDI3_M2	/ GPIO3_C0_d
VOP_BT1120_D13	/ SPI1_MOSI_M1		/ PCIE20_PERStn_M1	/ I2S1_SDO2_M2	/ GPIO3_C1_d
VOP_BT1120_D14	/ SPI1_MISO_M1		/ UART5_TX_M1	/ I2S1_SDO3_M2	/ GPIO3_C2_d
VOP_BT1120_D15	/ SPI1_CLK_M1		/ UART5_RX_M1	/ I2S1_SCLK_RX_M2	/ GPIO3_C3_d
PWM14_M0	/ VOP_PWM_M1	/ GMAC1_MDC_M0	/ UART7_TX_M1	/ PDM_CLK1_M2	/ GPIO3_C4_d
PWM15_IR_M0	/ SPDIF_TX_M1	/ GMAC1_MDIO_M0	/ UART7_RX_M1	/ I2S1_LRCK_RX_M2	/ GPIO3_C5_d

RK3566



Size	Title: ROCK 3C	REV
A4	Page Name: RK3566_VO Interface_2	1.332
Date: Tuesday, March 28, 2023	Sheet 09 of 29	

RK3566_H (VCCIO1 Domain)

U1H

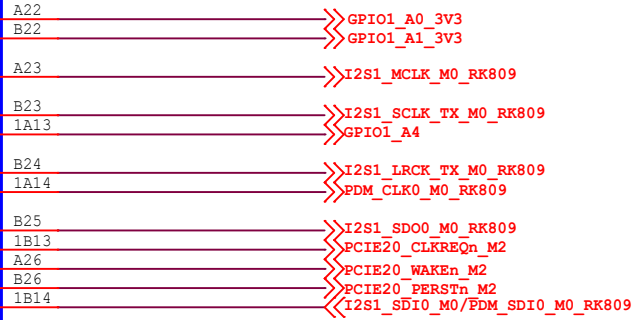
VCCIO1 Domain

Operating Voltage=1.8V/3.3V

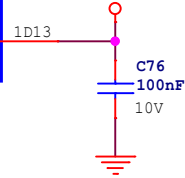
	/ I2C3 SDA M0	/ UART3 RX M0	/ AUDIOPWM LOUT p	/ GPIO1 A0 u
	/ I2C3 SCL M0	/ UART3 TX M0	/ AUDIOPWM LOUT r	/ GPIO1 A1 u
SCR CLK	/ I2S1 MCLK M0	/ UART3 RTSn M0		/ GPIO1 A2 d
SCR IO	/ I2S1 SCLK TX M0	/ UART3 CTSn M0		/ GPIO1 A3 d
	I2S1 SCLK RX M0	/ UART4 RX M0	/ PDM CLR1 M0	/ SPDIF TX M0
				/ GPIO1 A4 d
SCR RST	/ I2S1 LRCK TX M0	/ UART4 RTSn M0		/ GPIO1 A5 d
	I2S1 LRCK RX M0	/ UART4 TX M0	/ PDM CLR0 M0	/ AUDIOPWM ROUT p
				/ GPIO1 A6 d
SCR DET	/ I2S1 SDO0 M0	/ UART4 CTSn M0		/ GPIO1 A7 d
	I2S1 SDO1 M0	/ I2S1 SDI3 M0	/ PDM SDI3 M0	/ PCIE20 CLKREOn M2
	I2S1 SDO2 M0	/ I2S1 SDI2 M0	/ PDM SDI2 M0	/ PCIE20 WAKEn M2
	I2S1 SDO3 M0	/ I2S1 SDI1 M0	/ PDM SDI1 M0	/ PCIE20 PERSTn M2
		I2S1 SDI0 M0	/ PDM SDI0 M0	/ GPIO1 B3 d

RK3566

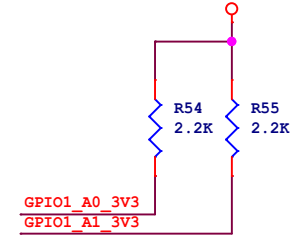
VCCIO1



VCCIO_ACODEC

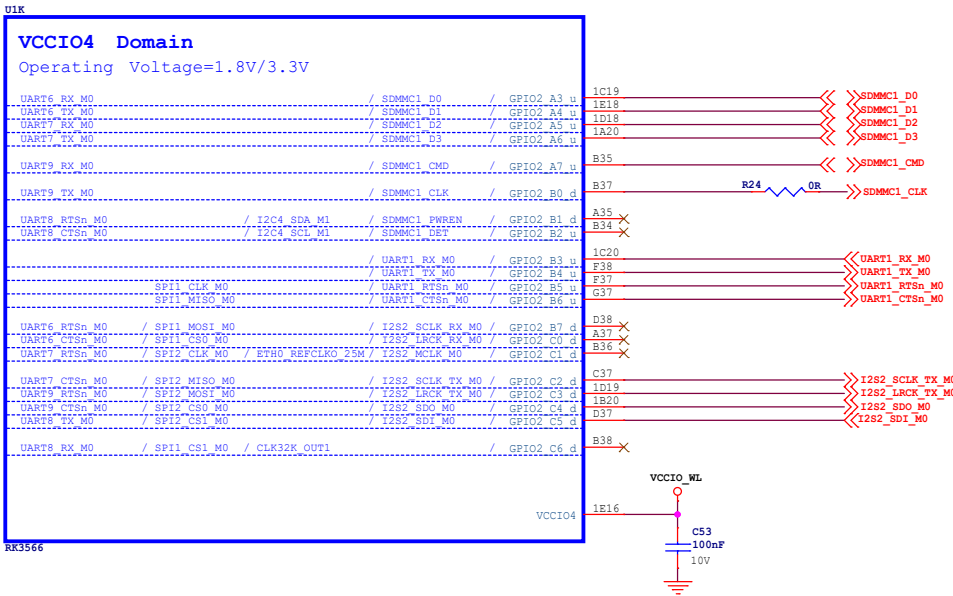


VCCIO_ACODEC

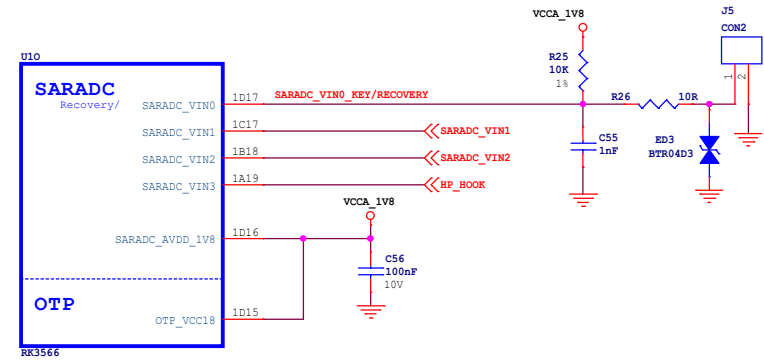


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A4	Page Name:	RK3566_Audio Interface	1.332
Date:	Tuesday, March 28, 2023	Sheet	10 of 29

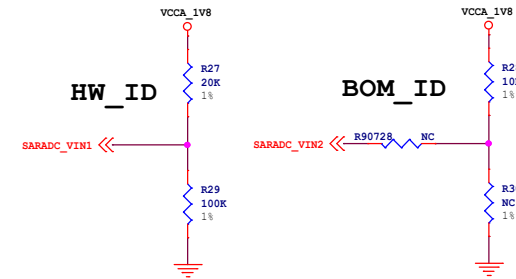
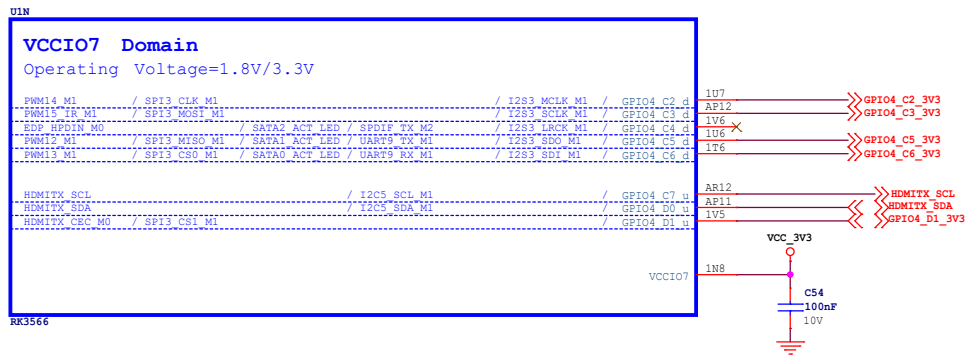
RK3566_K (VCCIO4 Domain)



RK3566_O (SARADC/OTP)



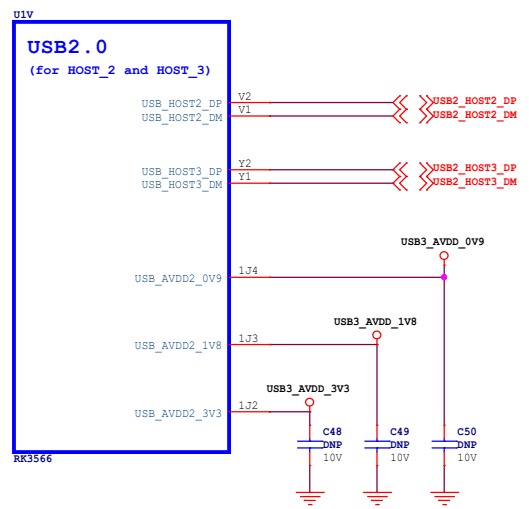
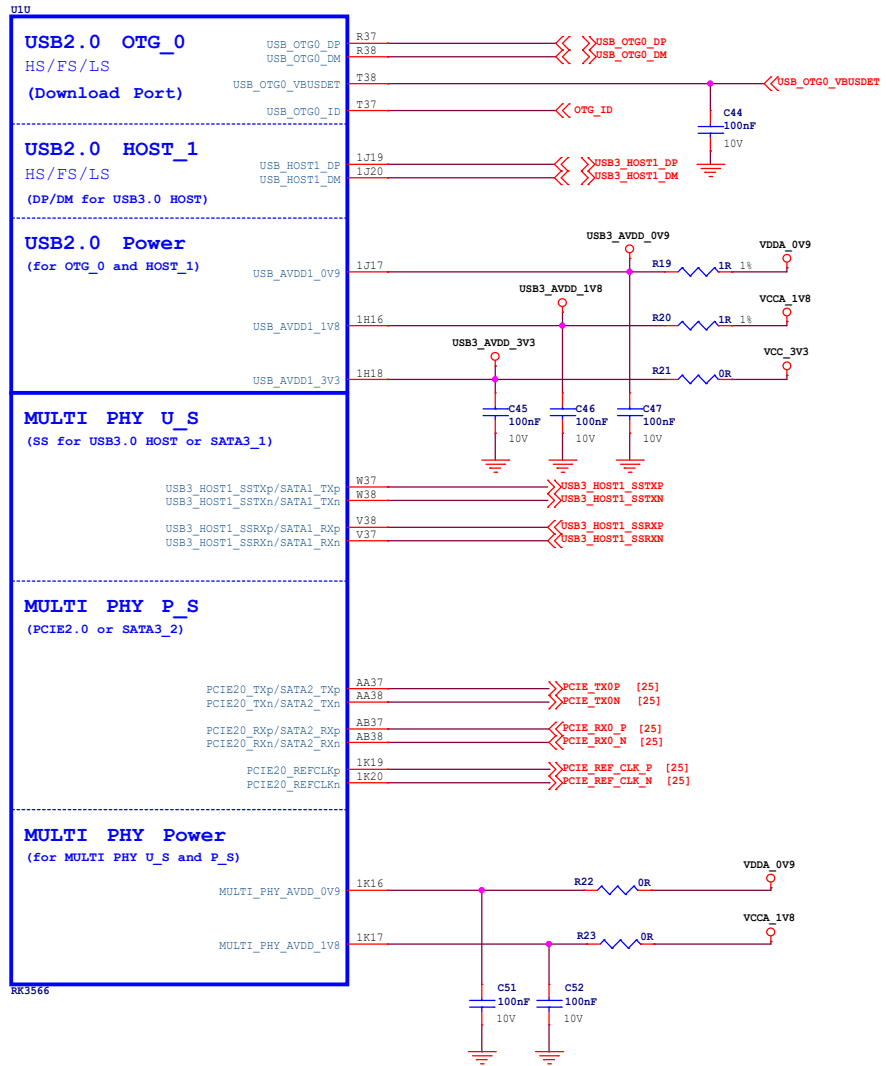
RK3566_N (VCCIO7 Domain)



Size	Title:	ROCK 3C	REV
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Date:	Tuesday, March 28, 2023	Sheet	11 of 29

RK3566_U (USB3.0/SATA/QSGMII/PCIE2.0 x1)

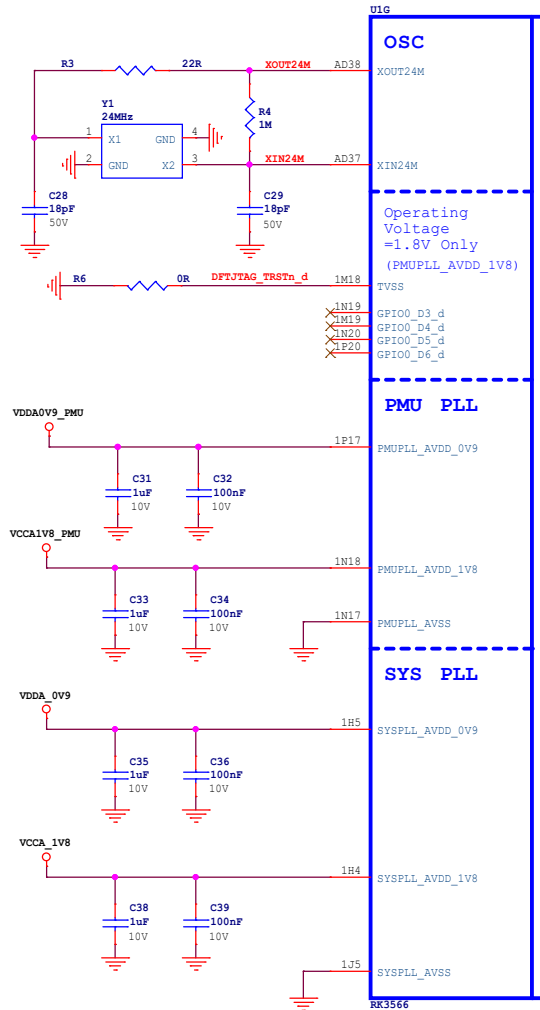
RK3566_V (USB2.0 HOST)



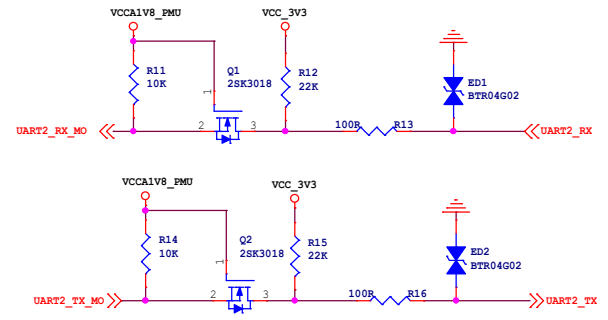
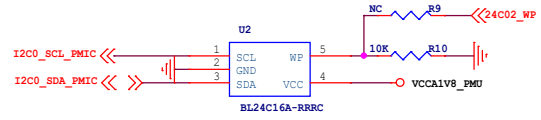
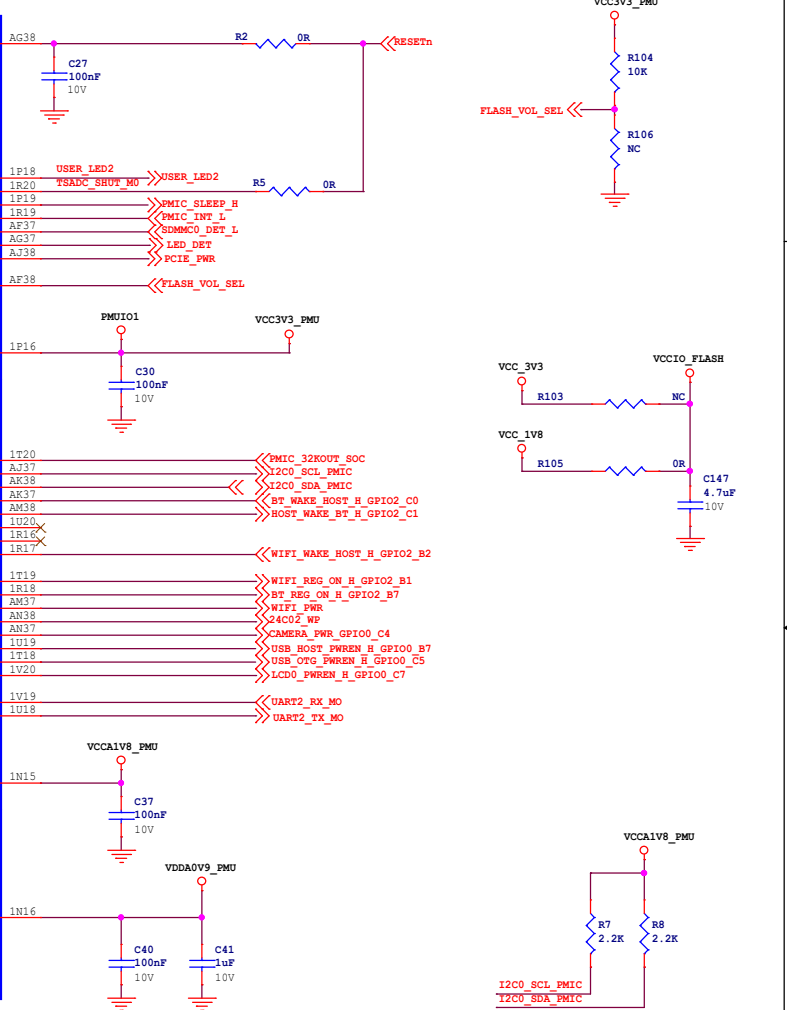
RK3566


RK3566

RK3566 (OSC/PLL/PMUIO1/2)

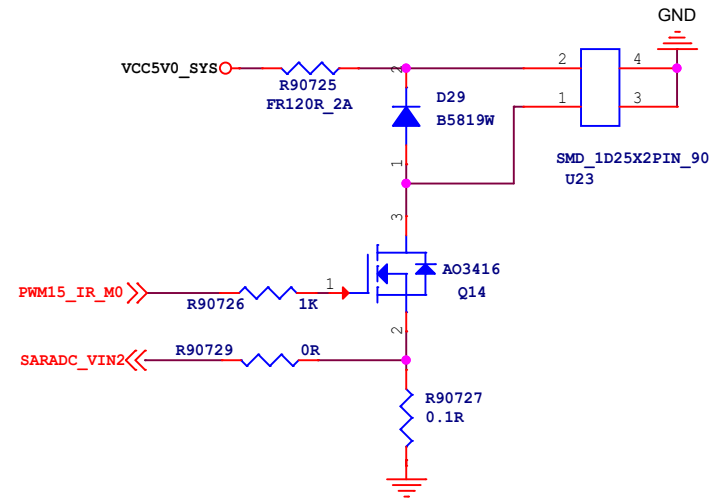
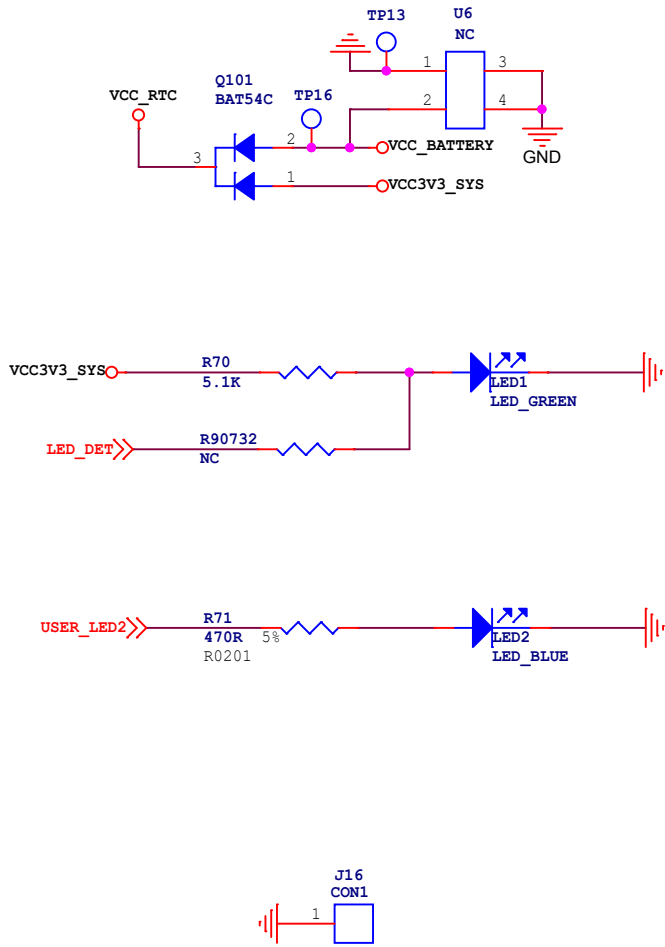


PMUIO1 Domain	
Operating Voltage=3.3V Only	
REFCLK_OUT	GPIO0 A0 H
TSADC_SHUT_W0	GPIO0 A1 H
PMIC_SLEEP	GPIO0 A2 H
TSADC_SHUT_W1	GPIO0 A3 H
SIMMCO_DET	GPIO0 A4 H
SIMMCO_PWREN	GPIO0 A5 H
GPU_PWREN	GPIO0 A6 H
SATA_CP_FOD	GPIO0 A7 H
FLASH_VOL_SEL / GPIO0 A7 H	
PMUIO2 Domain	
Operating Voltage=1.8V/3.3V	
CLK32K_IN	GPIO0 B0 H
I2C0_SCL	GPIO0 B1 H
I2C0_SDA	GPIO0 B2 H
I2C1_SCL	GPIO0 B3 H
I2C1_SDA	GPIO0 B4 H
I2C0_SCL_M0	GPIO0 B5 H
I2C0_SDA_M0	GPIO0 B6 H
I2C0_SCL_M1	GPIO0 B7 H
I2C0_SDA_M1	GPIO0 B7 H
PMU1_M0	GPIO0 C0 H
PMU2_M0	GPIO0 C1 H
PMU3_IR	GPIO0 C2 H
PMU4	GPIO0 C3 H
PMU5	GPIO0 C4 H
PMU6	GPIO0 C5 H
PMU7_IR	GPIO0 C6 H
PMU8_M1	GPIO0 C7 H
UART2_RX_M0	GPIO0 D0 H
UART2_TX_M0	GPIO0 D1 H



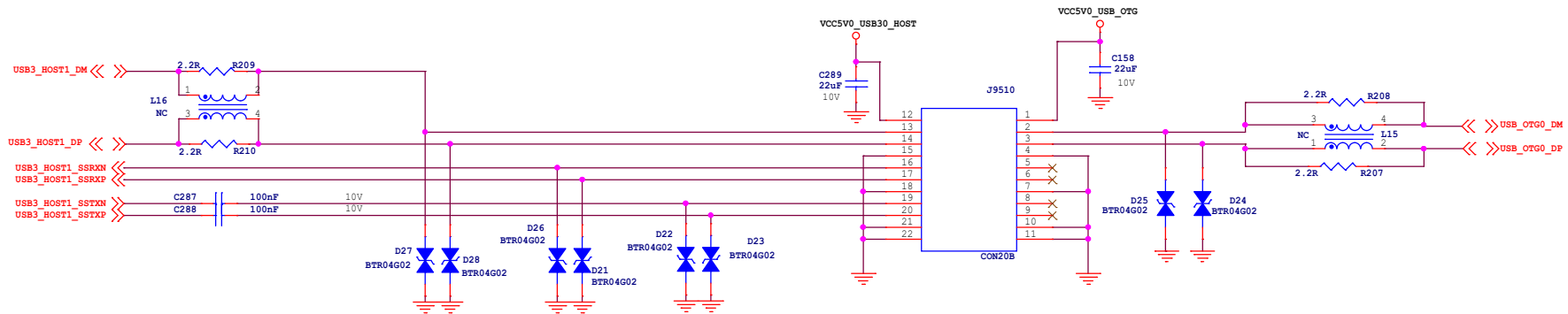
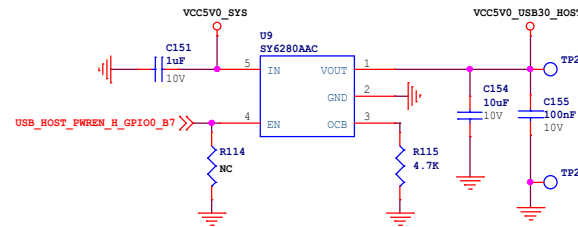
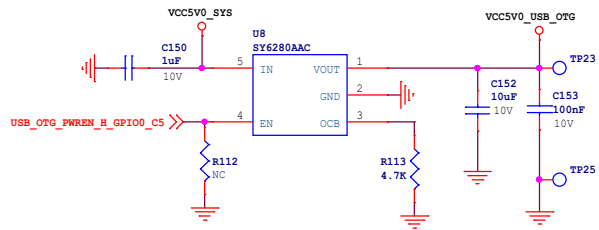
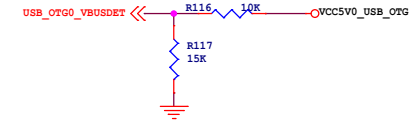
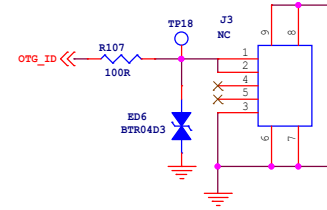
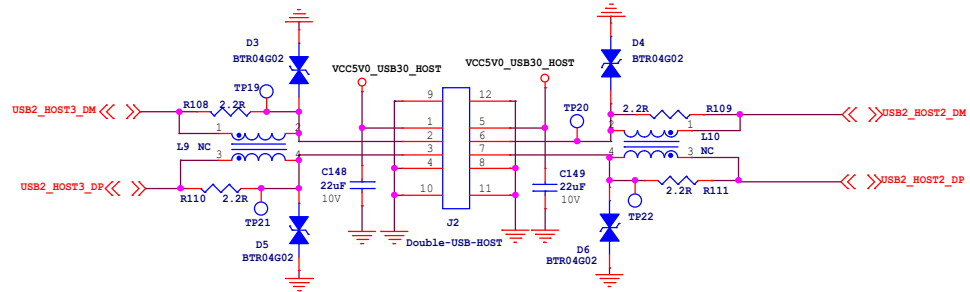


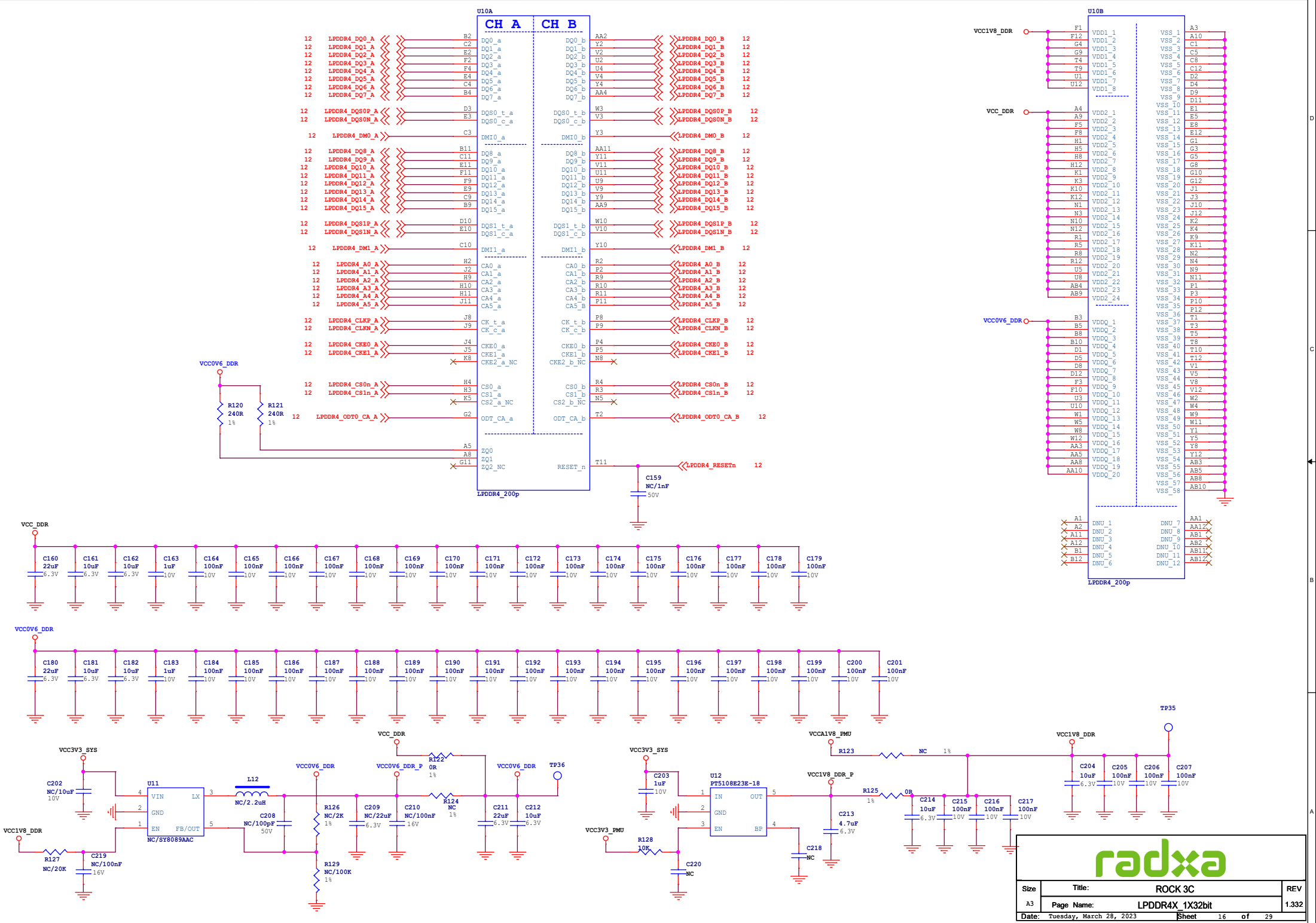
Size	Title: ROCK 3C	REV
A3	Page Name: RK3566_OSC/PLL/PMUIO	1.332
Date: Tuesday, March 28, 2023	Sheet 13 of 29	



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Size	Title:	ROCK 3C	REV
A4	Page Name:	LED/RTC/FAN	1.332
Date:		Tuesday, March 28, 2023	Sheet 14 of 29

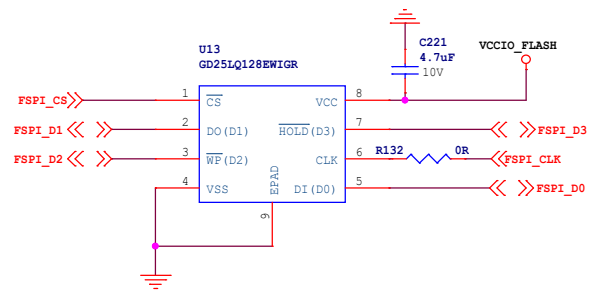




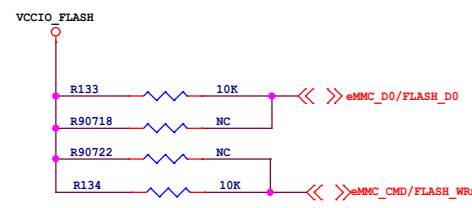
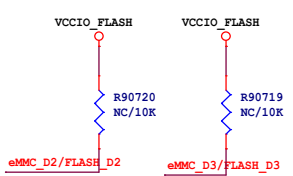
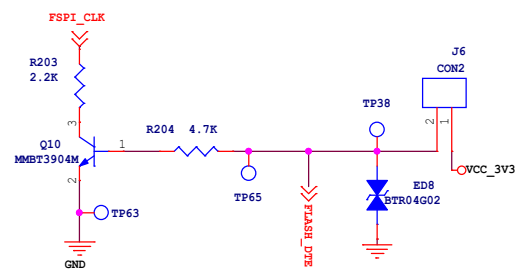
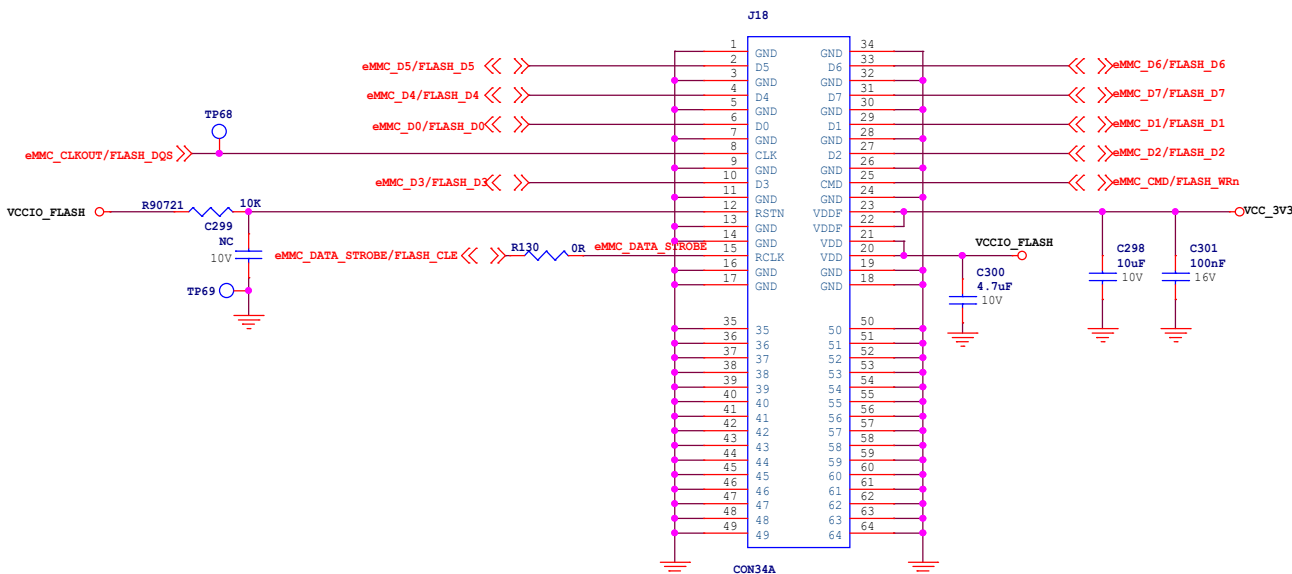
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Size	Title: ROCK 3C	REV
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Date: Tuesday, March 28, 2023	Sheet 16 of 29	

SPI FLASH

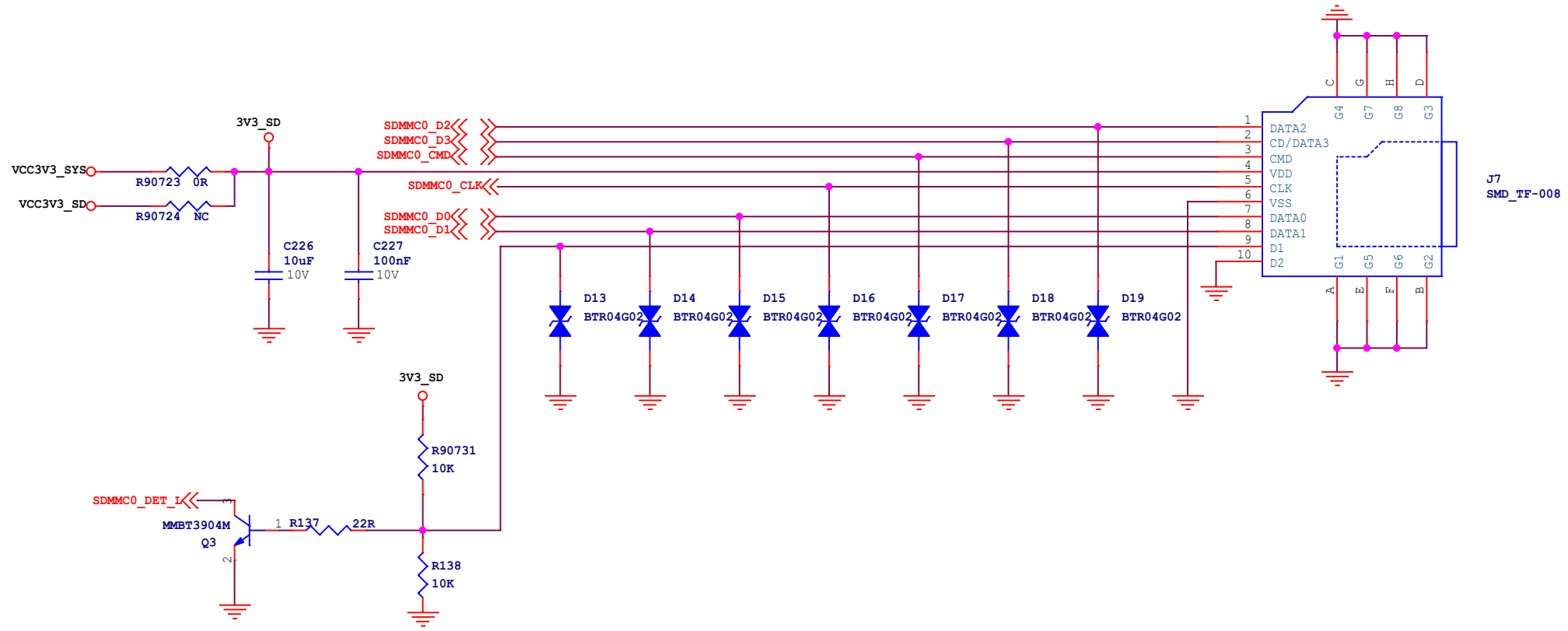


EMMC FLASH

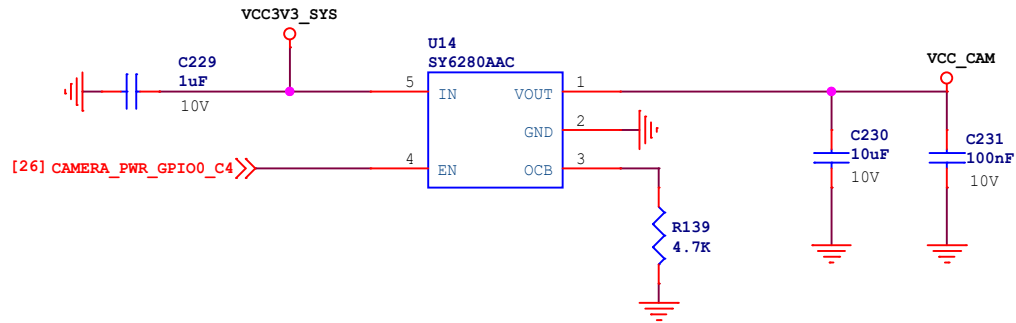
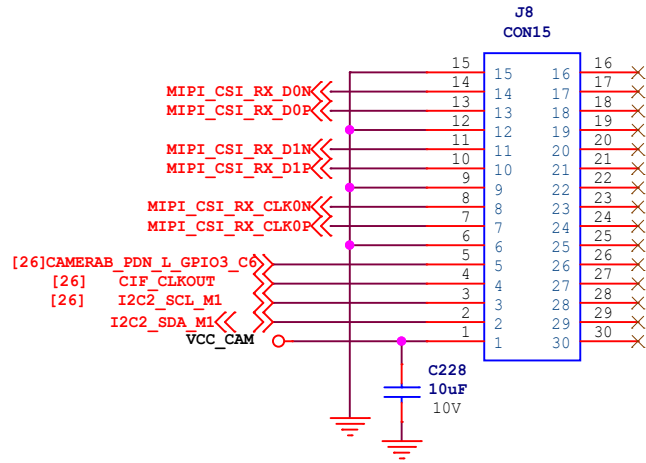


Size	Title: ROCK 3C	REV
B	Page Name: SPI Flash/eMMC	1.332
Date: Tuesday, March 28, 2023	Sheet 17	of 29

MicroSD Card

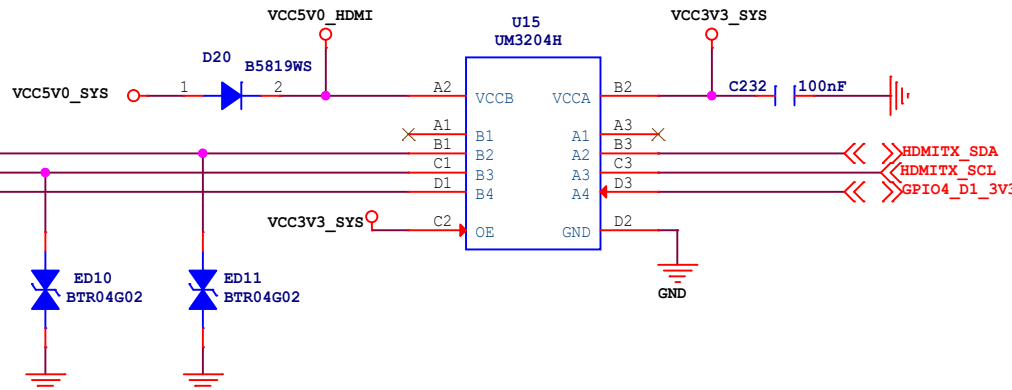


Size	Title: ROCK 3C	REV
A4	Page Name: MicroSD Card	1.332
Date: Tuesday, March 28, 2023		Sheet 18 of 29

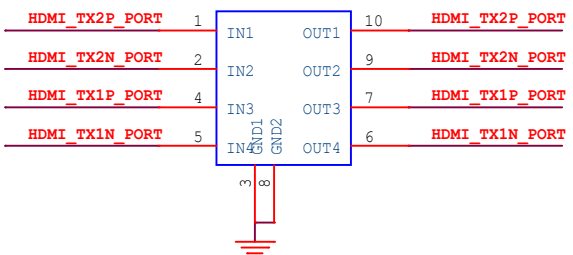


>>>HDMI_TX2P_PORT
 >>>HDMI_TX2N_PORT
 >>>HDMI_TX1P_PORT
 >>>HDMI_TX1N_PORT
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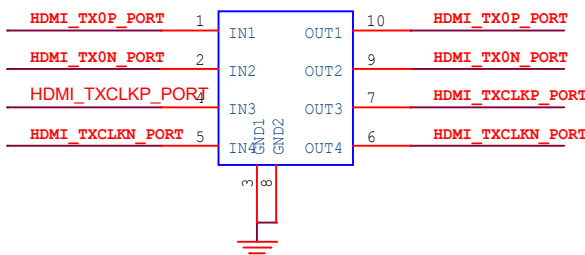
HDMI_TXDDC_SDA_PORT
 HDMI_TXDDC_SCL_PORT
 HDMI_TX_CEC_PORT



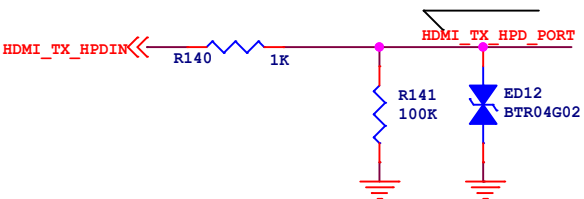
U16
TPD4E05U06



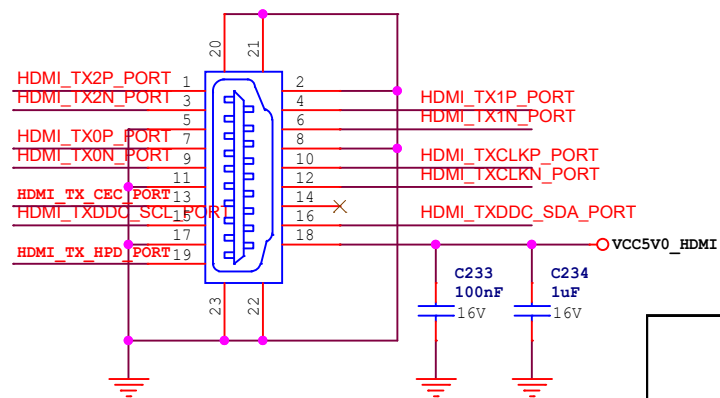
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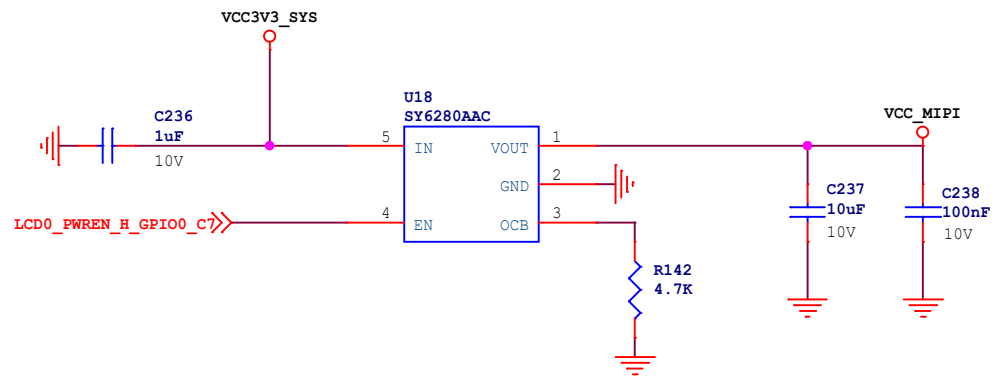
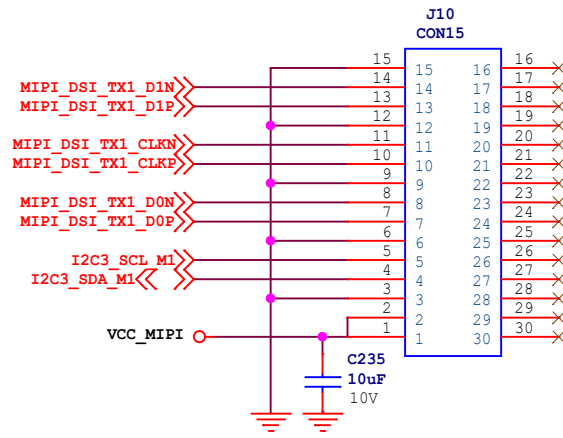
HDMI TX HPD



J9
HDMI_A

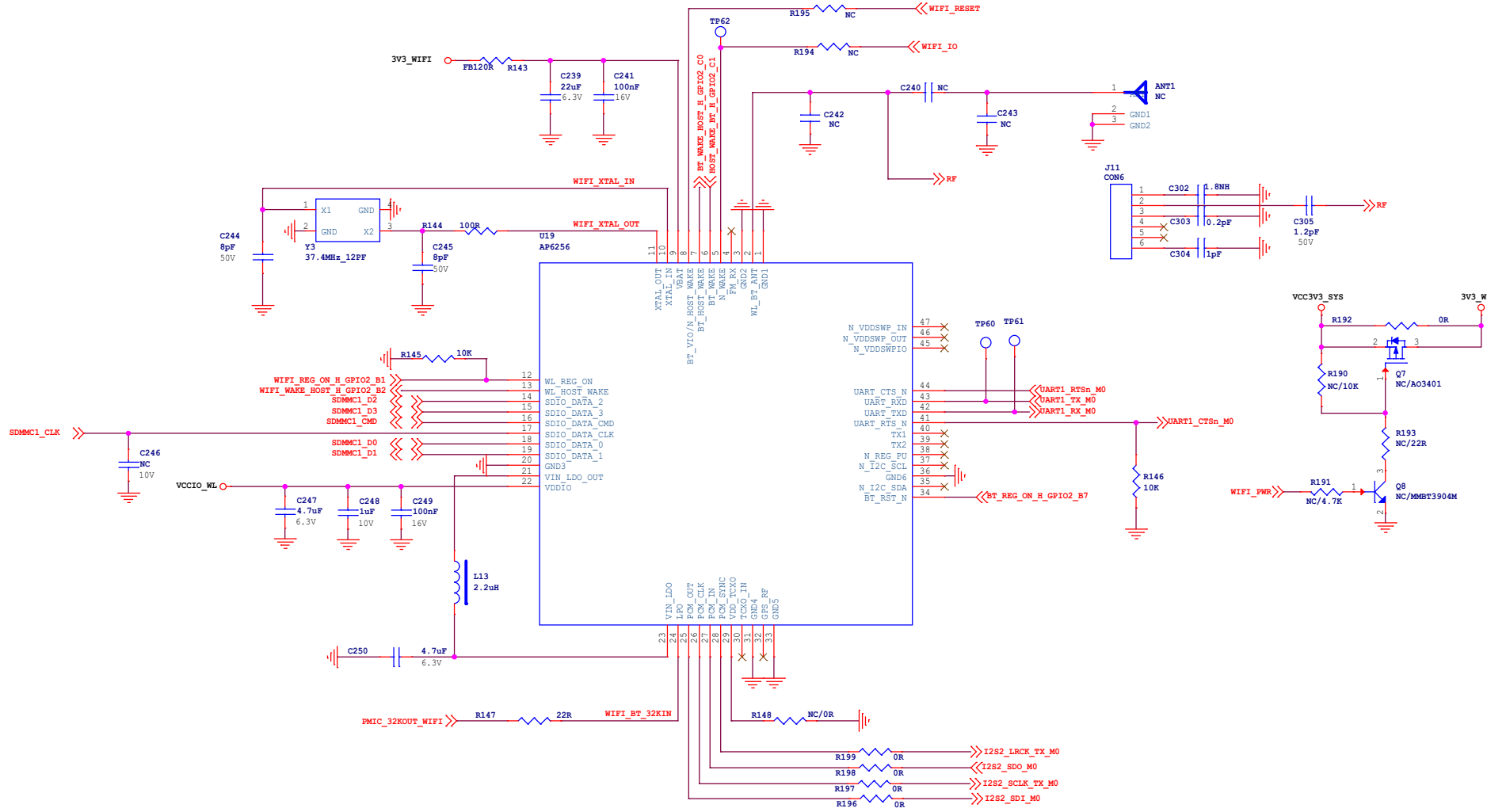


Size	Title: ROCK 3C	REV
A4	Page Name: HDMI2.0 TX	1.332
Date: Tuesday, March 28, 2023	Sheet 20 of 29	

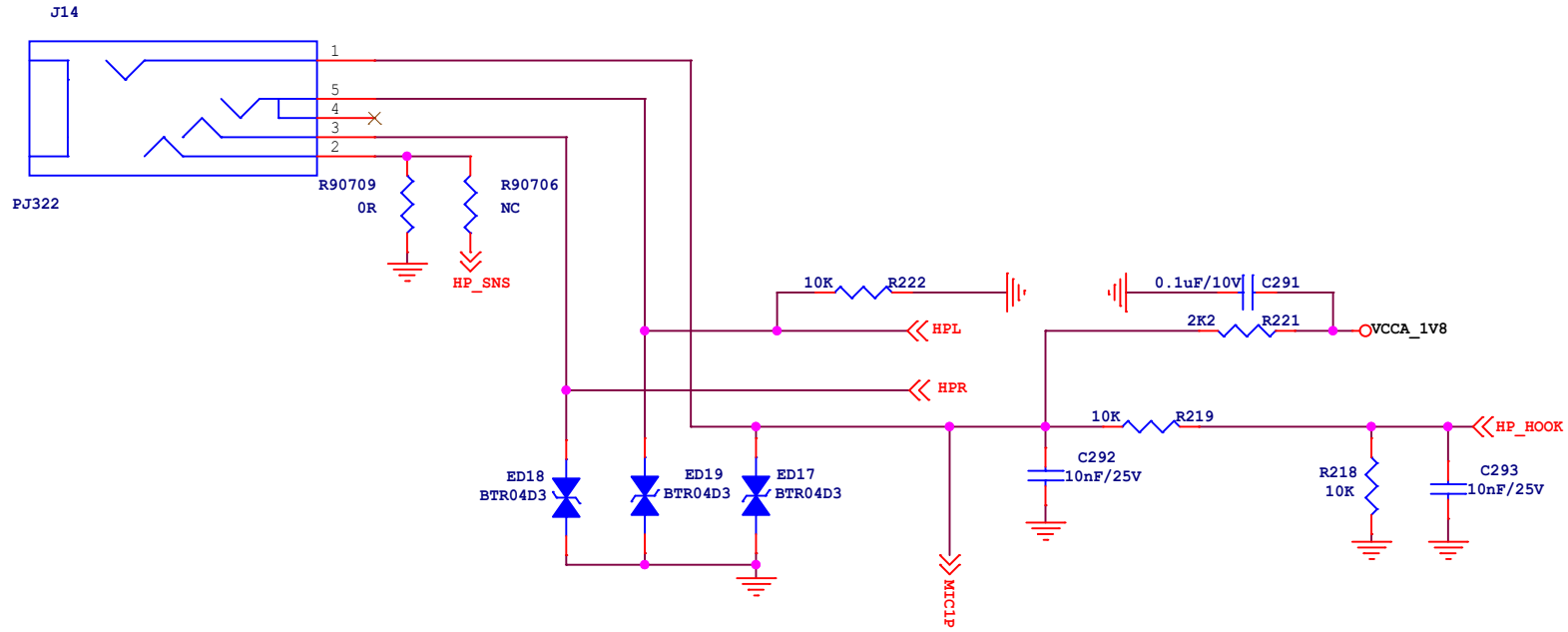


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Date:	Tuesday, March 28, 2023	Sheet 21 of 29
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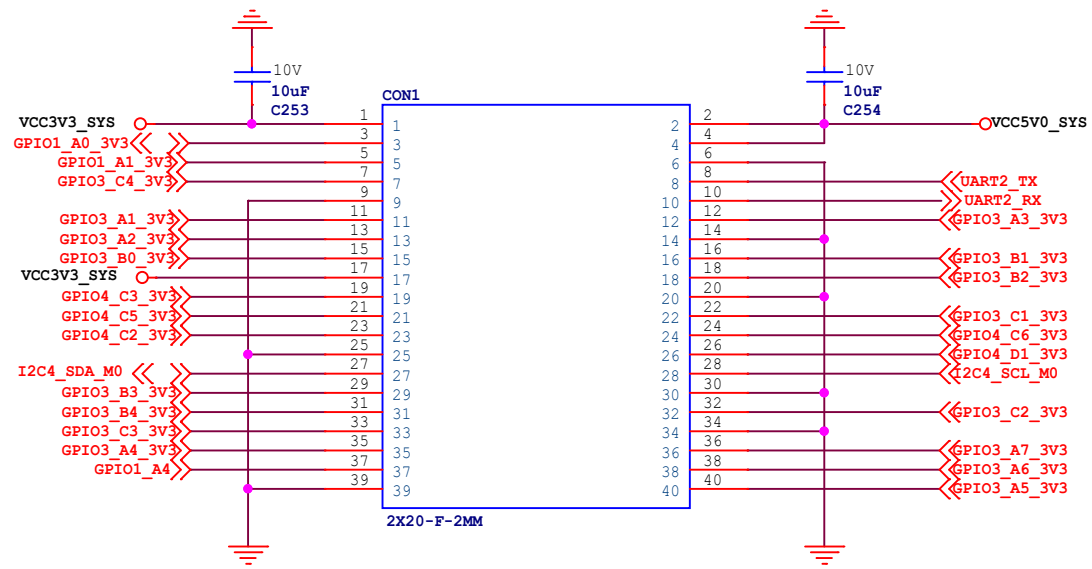
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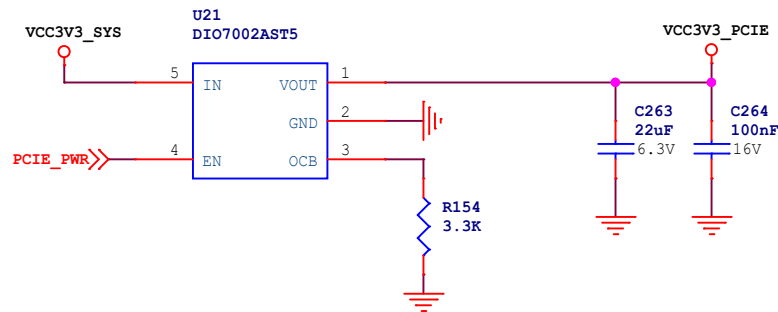
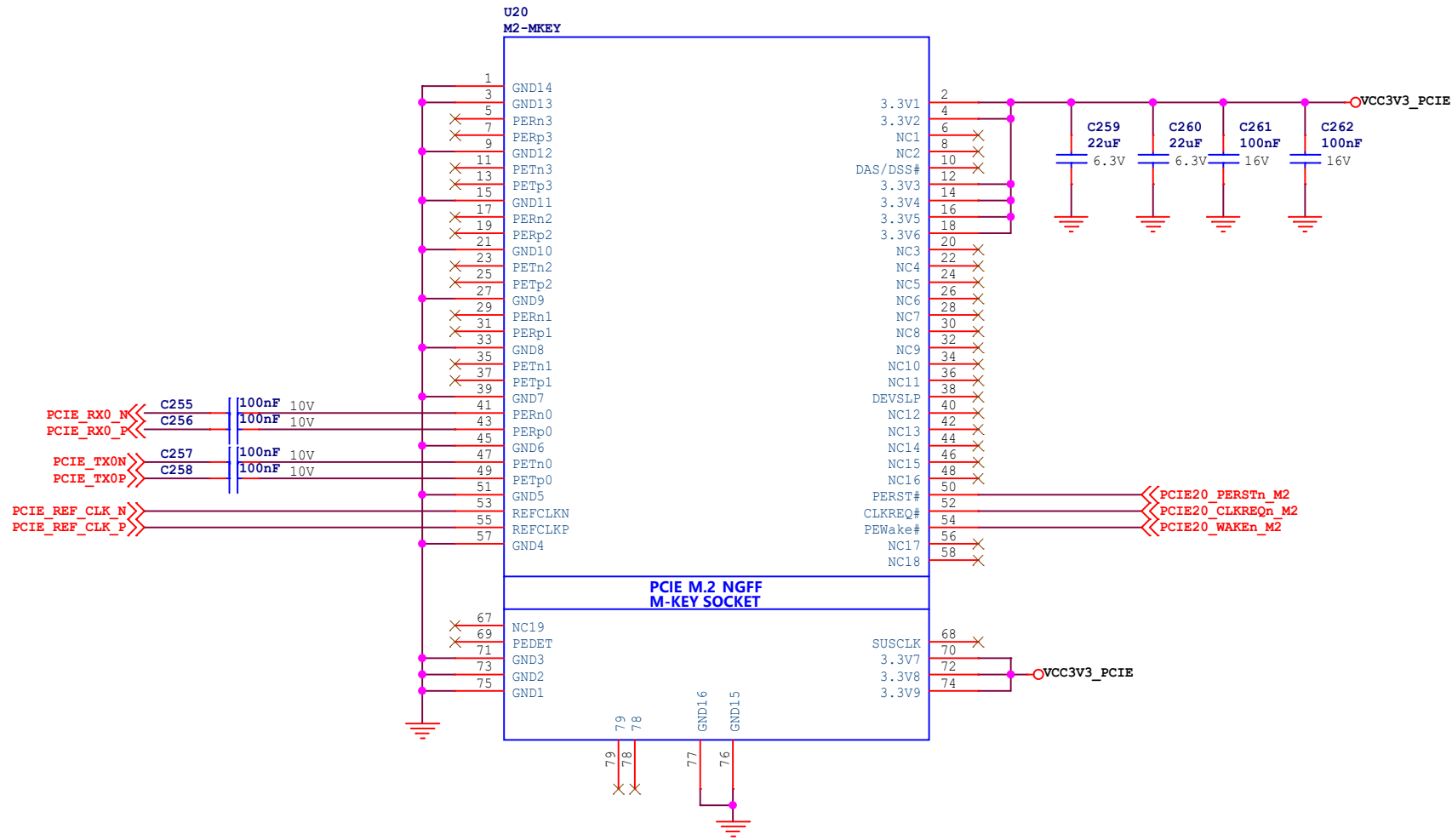
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Date: Tuesday, March 28, 2023	Sheet 23 of 29	

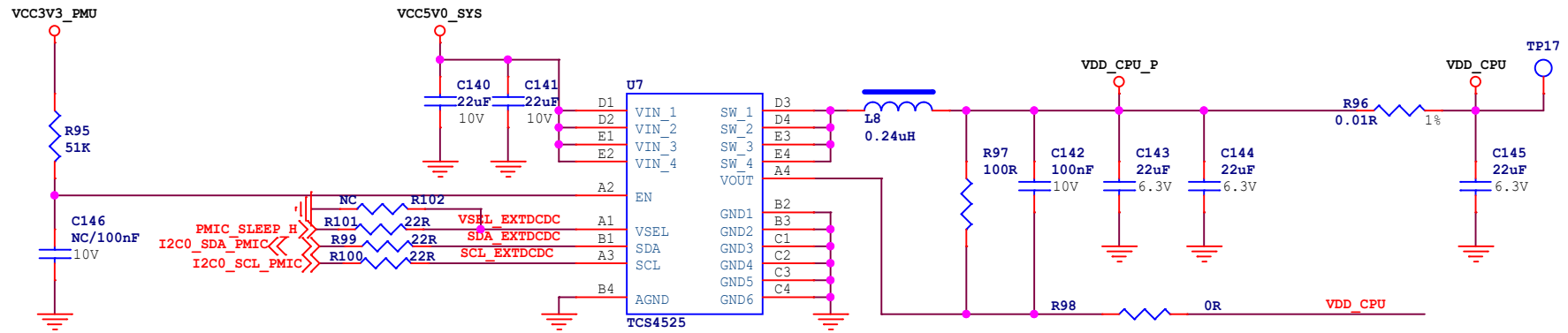


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Date:	Tuesday, March 28, 2023	Sheet	24 of 29



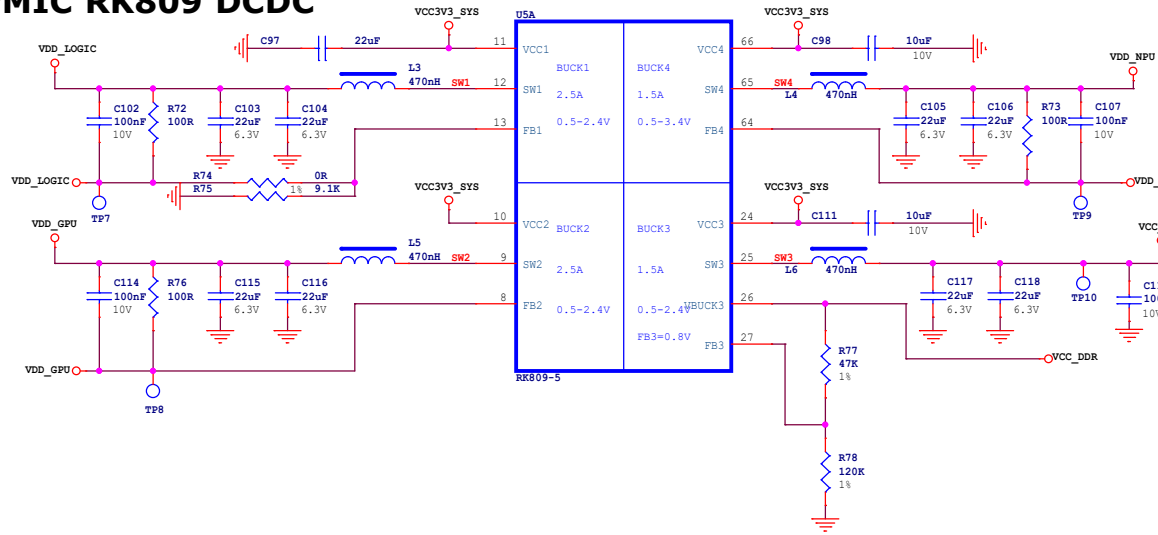
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Date:	Tuesday, March 28, 2023	Sheet	25 of 29

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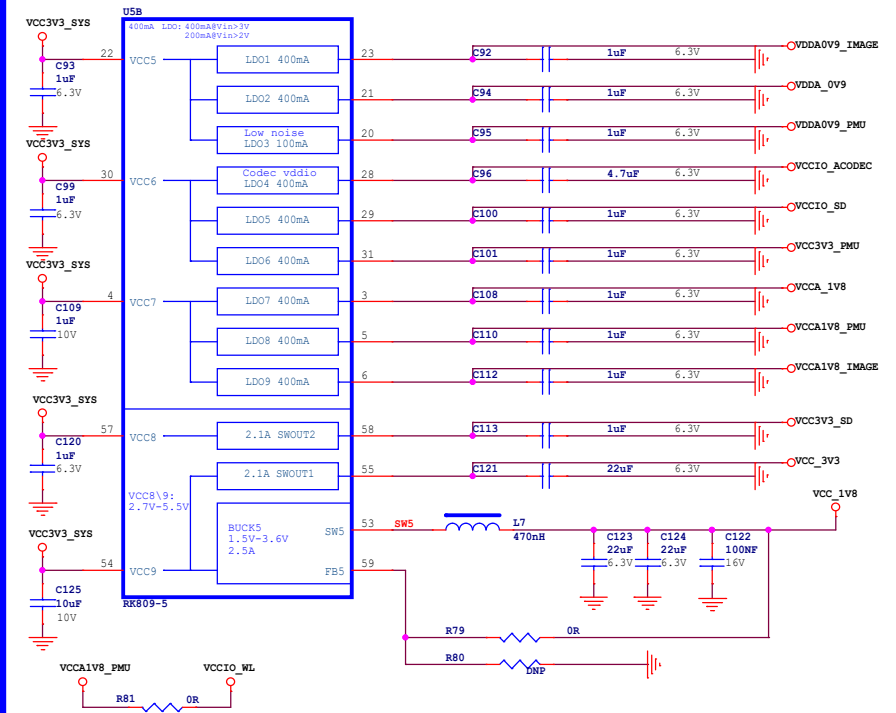


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Date:	Tuesday, March 28, 2023	Sheet	27 of 29

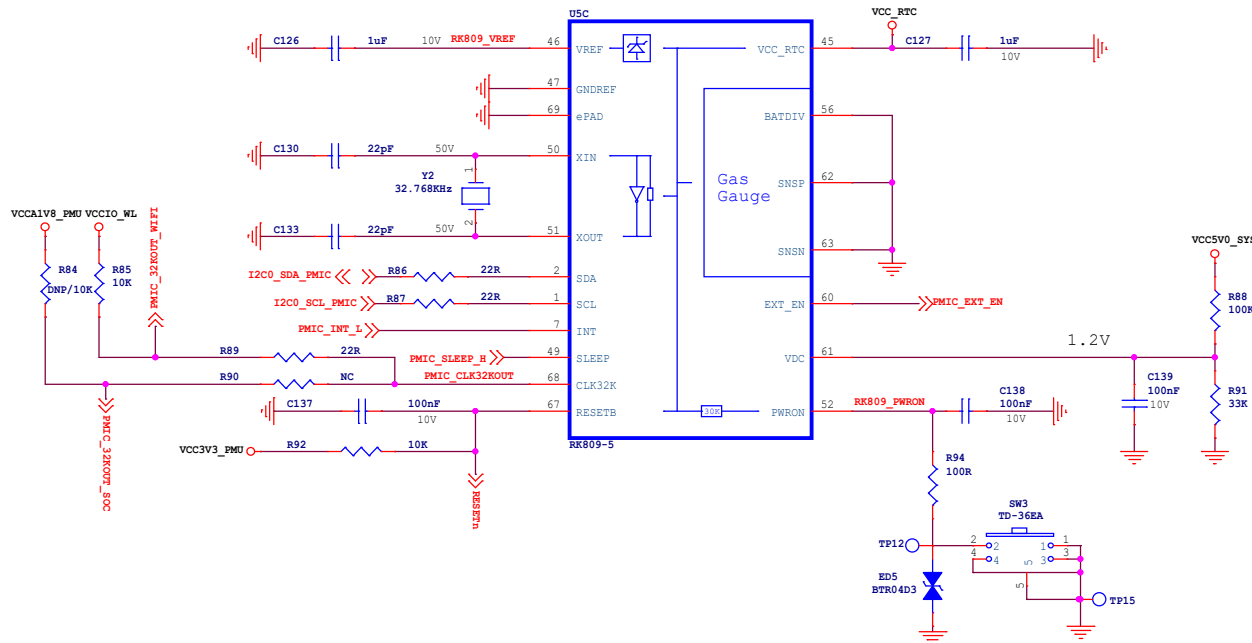
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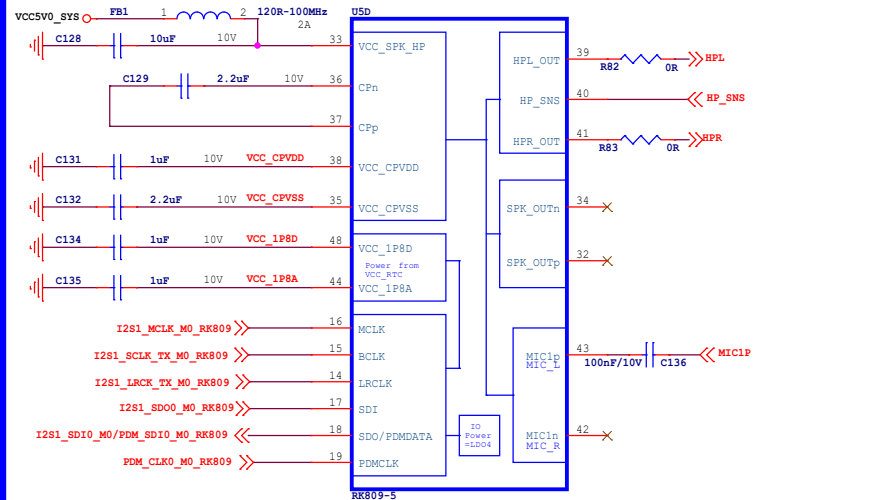
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PMIC RK809 Management

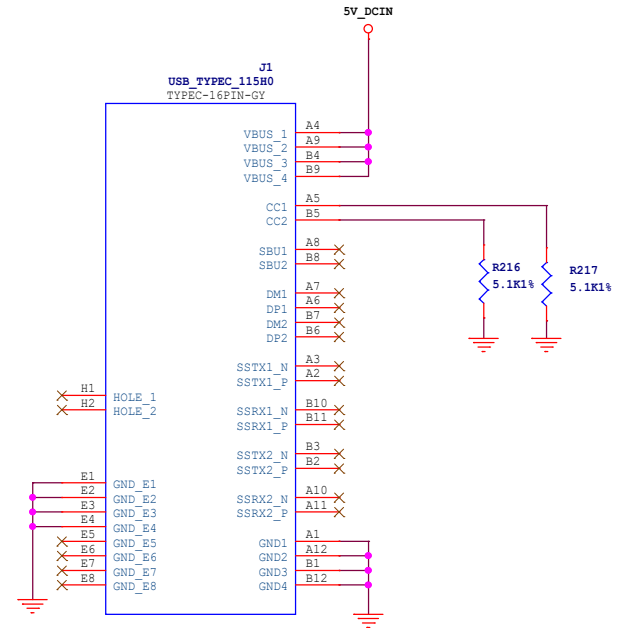
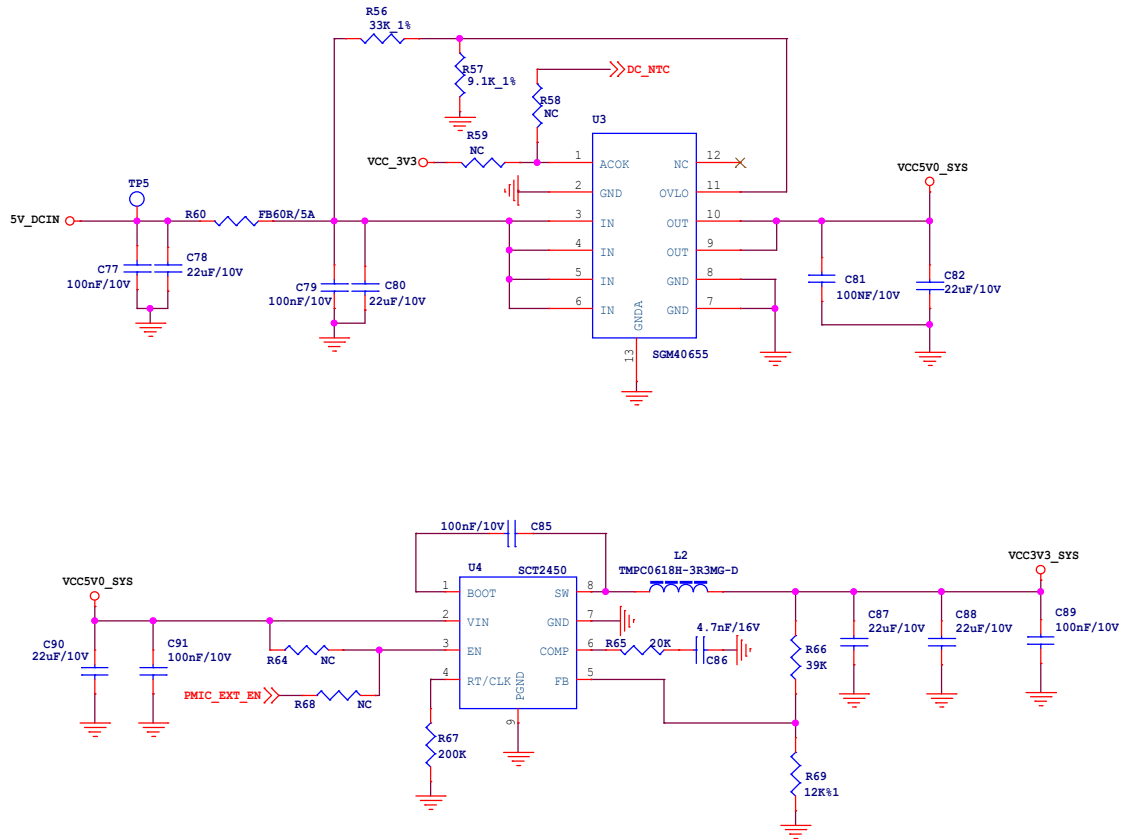



PMIC RK809 CODEC



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Date:	Tuesday, March 28, 2023	Sheet	28 of 29

DC 5V IN





Size	Title: ROCK 3C	REV
B	Page Name: Power_DC IN	1.332
Date: Tuesday, March 28, 2023	Sheet 29 of 29	