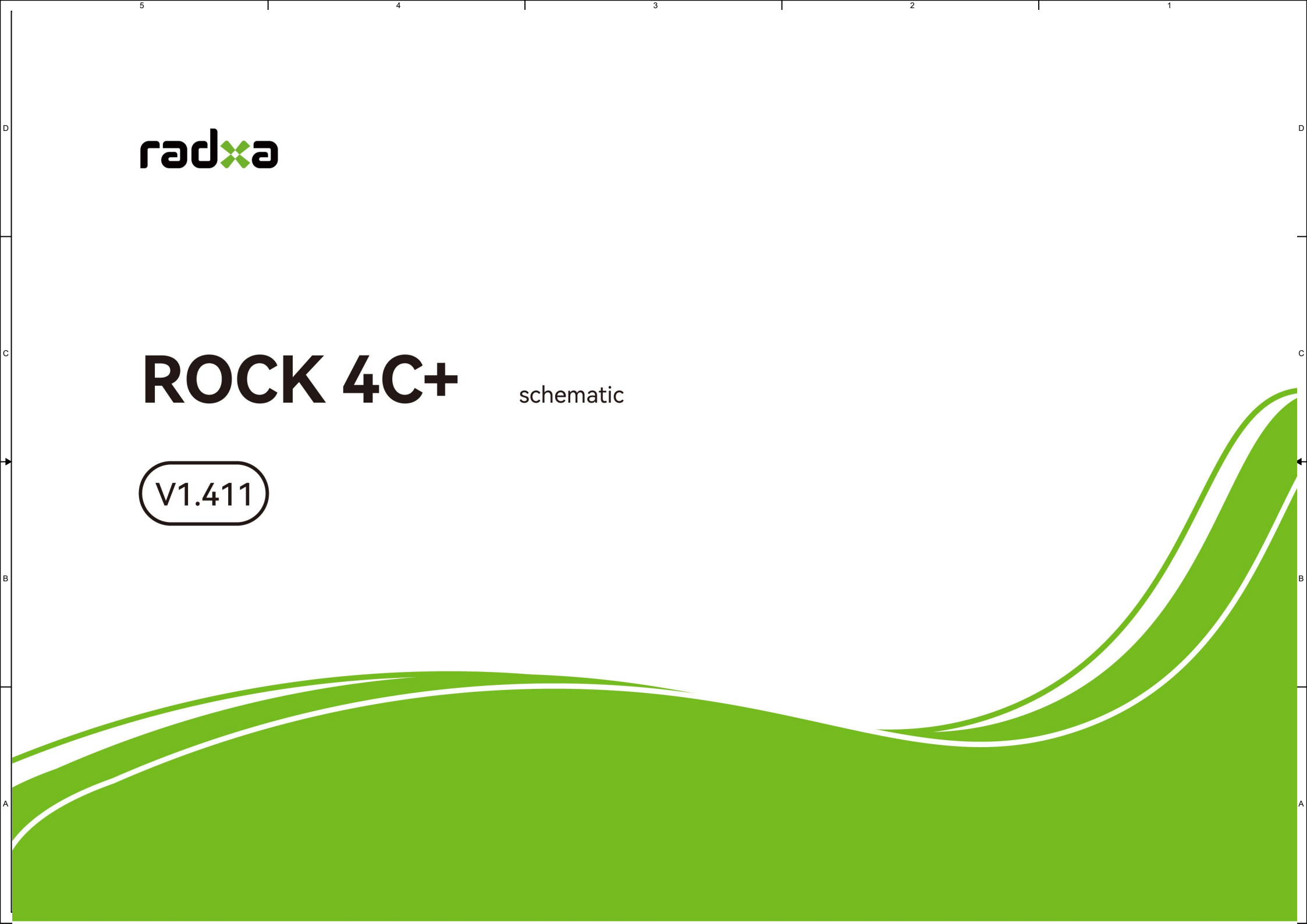




ROCK 4C+ schematic

V1.411

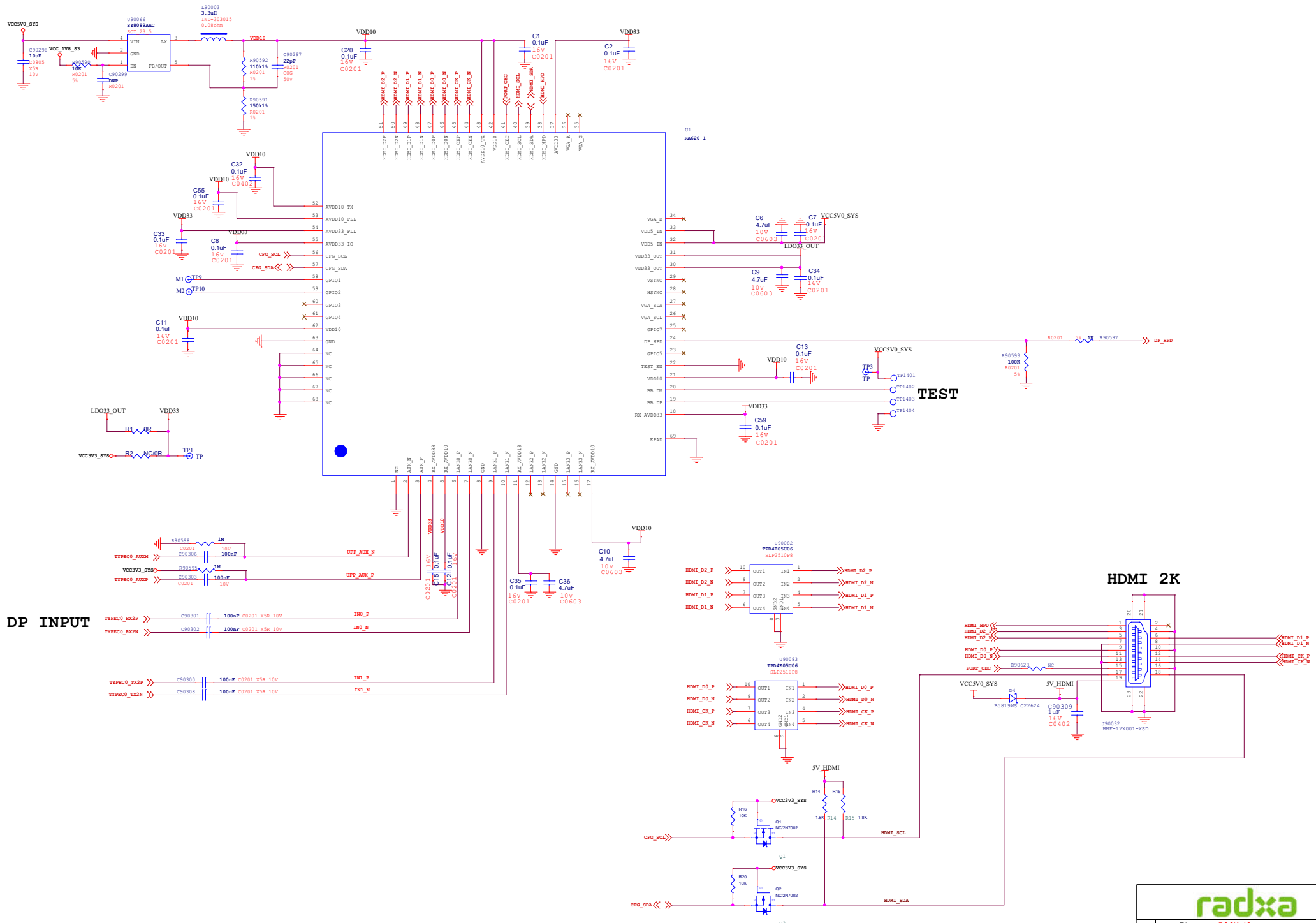


CONTENT INDEXING

- 01.Cover Page
- 02.CONTENT
- 03.DP to HDMI 2K
- 04.HDMI 4K
- 05.RK3399 Power/GND
- 06.RK3399 PMU Controller
- 07.RK3399 DRAM Controller
- 08.RK3399 FLASH/MMC Controller
- 09.RK3399 USB/USIC Controller
- 10.RK3399 SAR-ADC/Key
- 11.RK3399 VideoInput
- 12.RK3399 VideoOutput
- 13.RK3399 GPIO
- 14.RK3399 PCIE
- 15.RAM-LPDDR4(200P)
- 16.EMMC
- 17.WIFI/BT MODULE
- 18.TF Card
- 19.CAM
- 20.Audio
- 21.CONNECTOR
- 22:Power-PMIC RK809-3
- 23.USB3.0 OTG Port
- 24.RTL8211F
- 25.Power TYEPC IN



Size	Title: ROCK 4C+	REV
A4	Page Name: CONTENT	1.411
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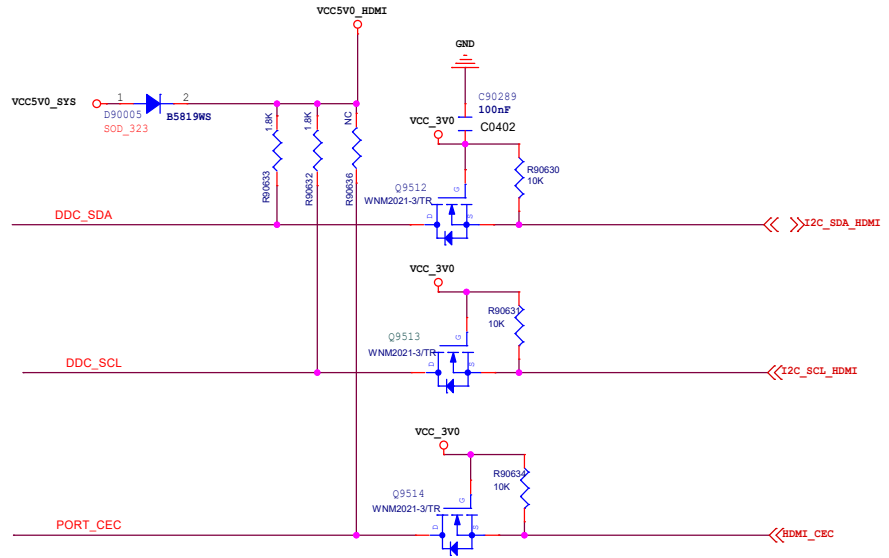
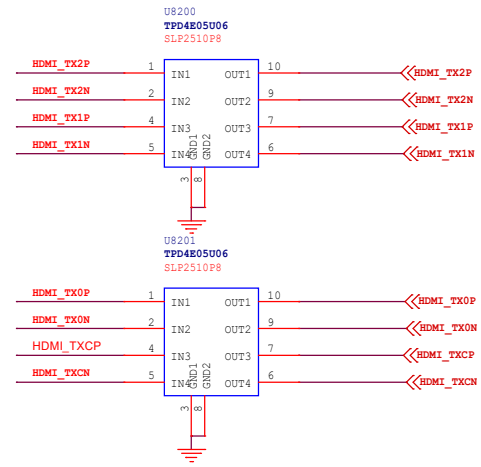
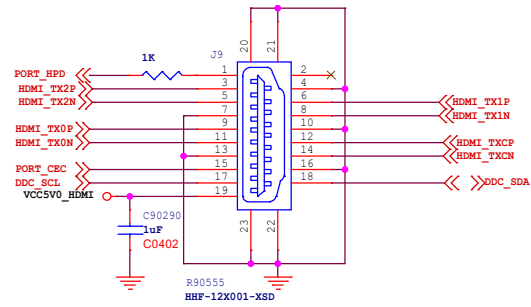


DP INPUT

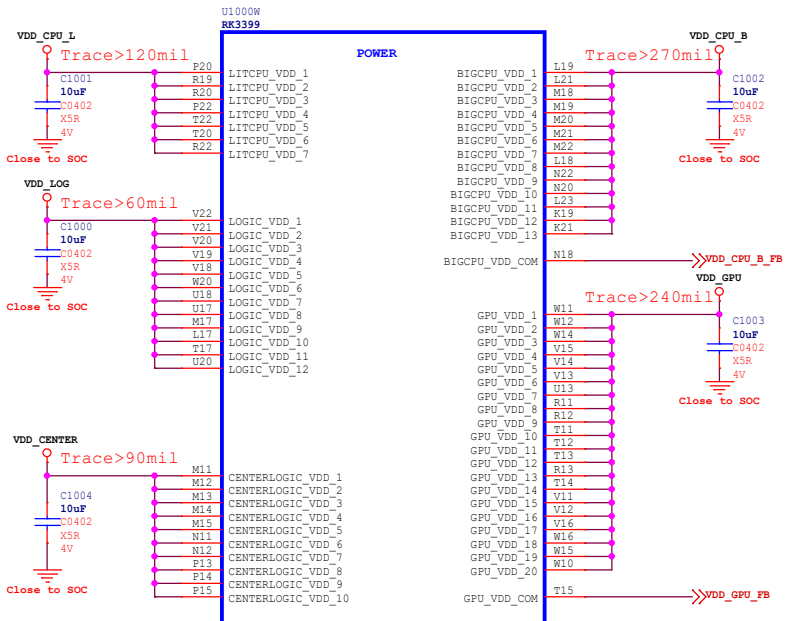
TEST

HDMI 2K

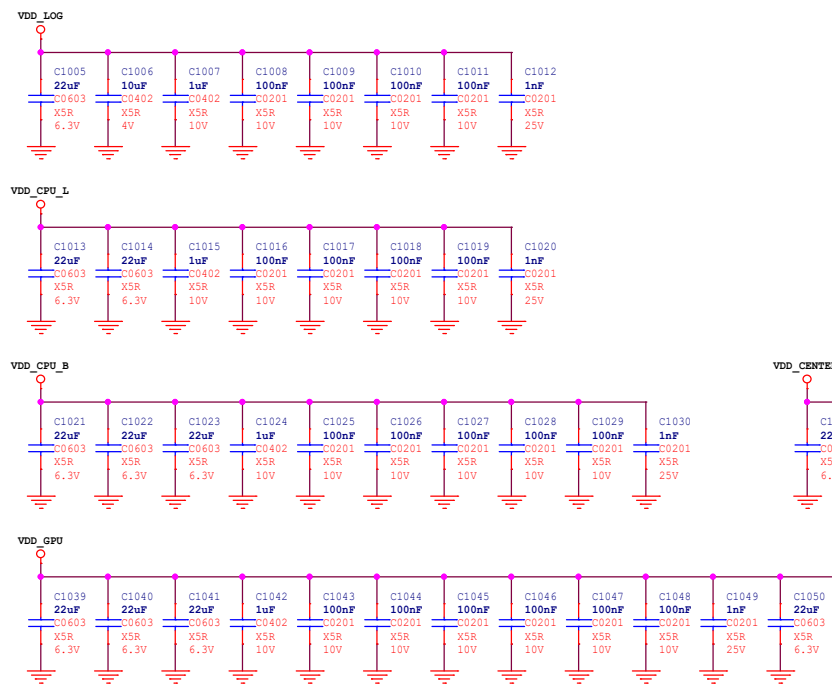
HDMI 4K



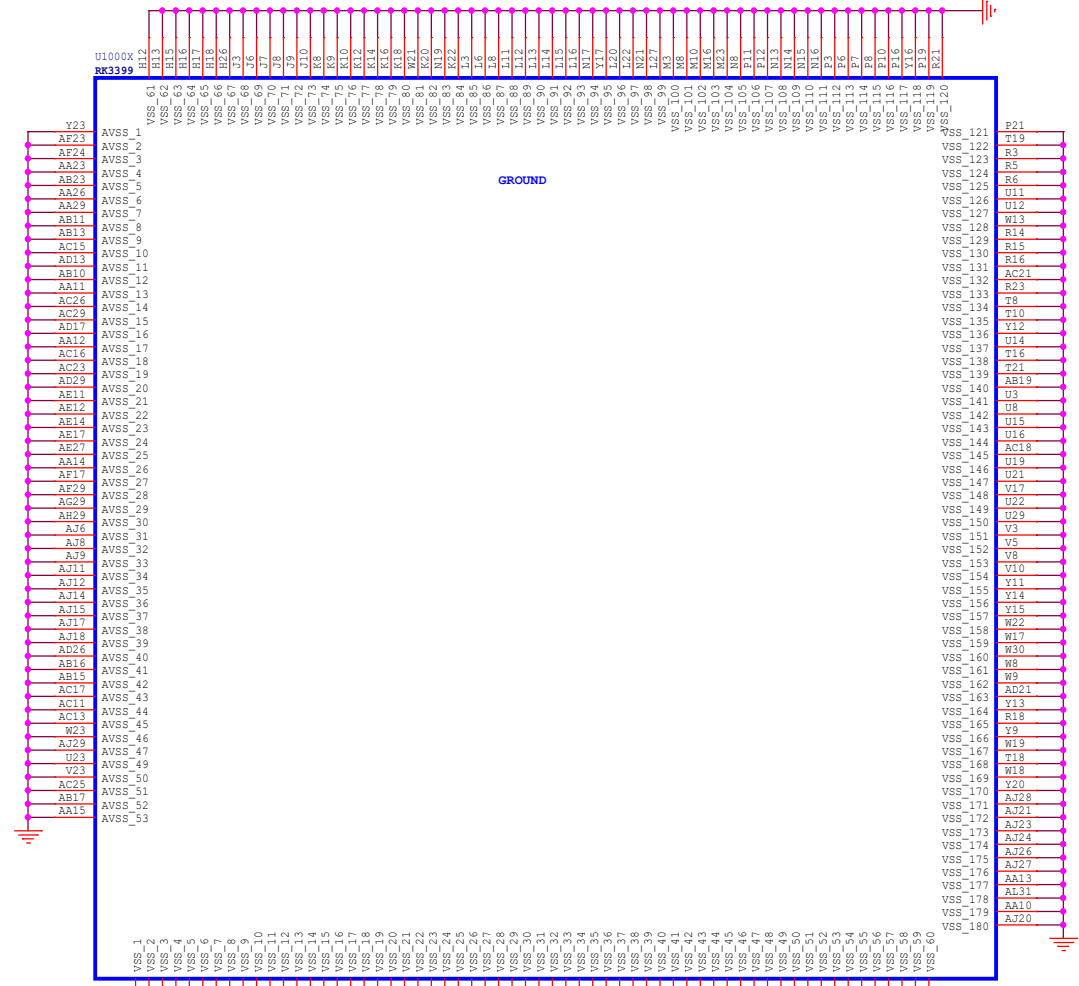
Power




Note: All the Power filter capacitors should be placed close to the power pins of RK3399



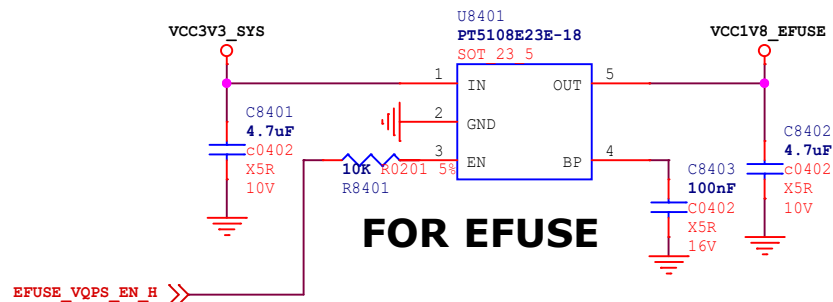
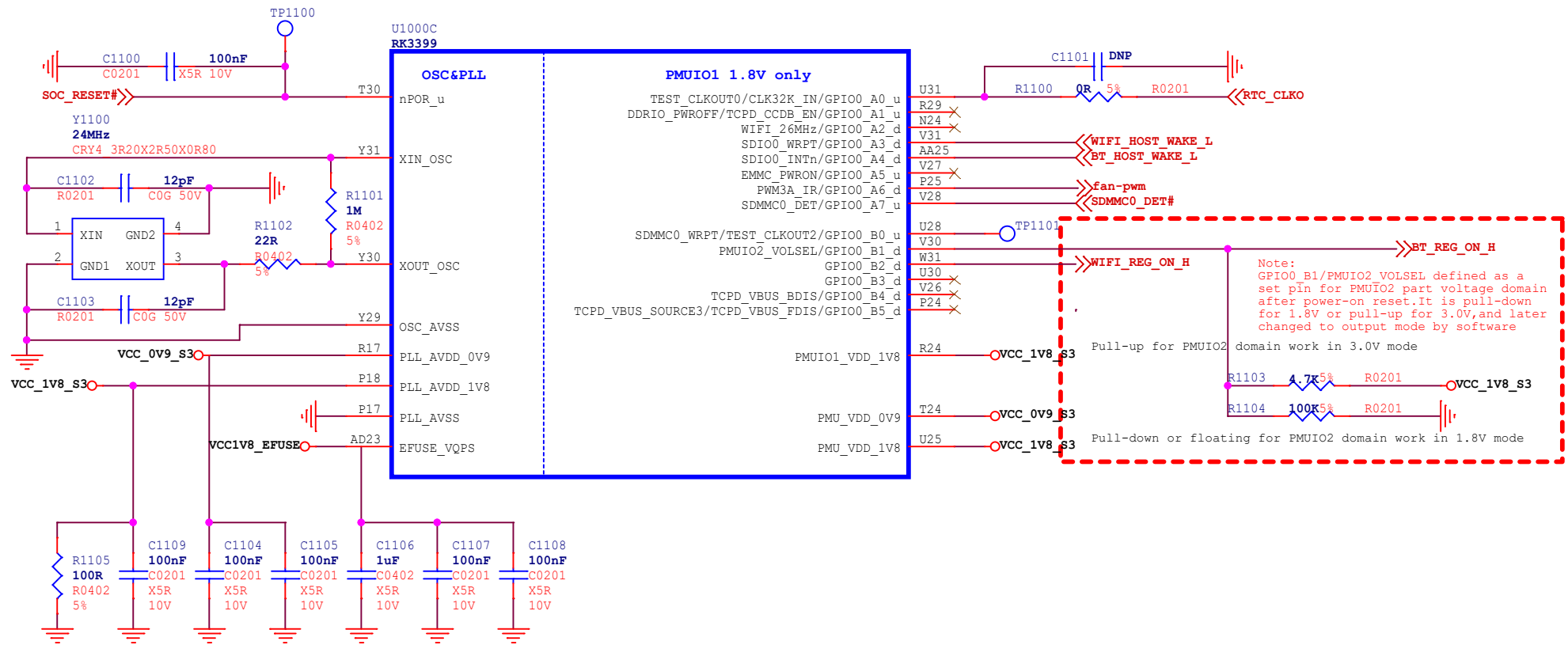
Ground





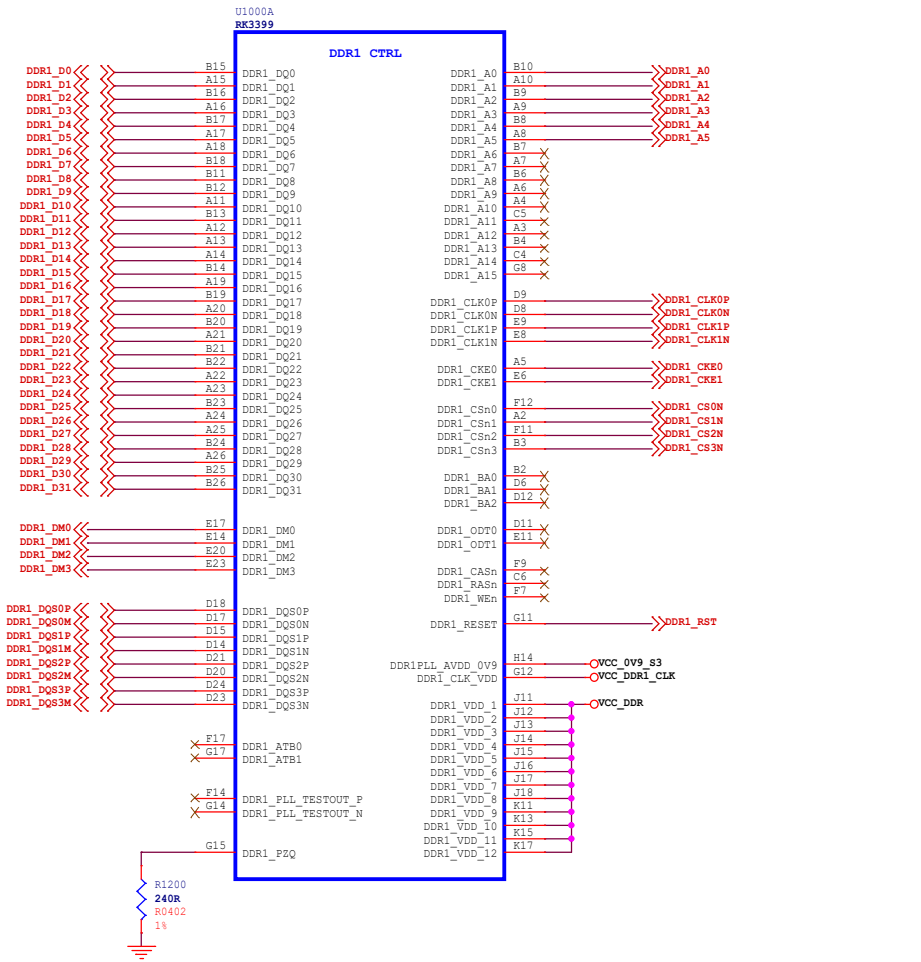
Size	Title: ROCK 4C+	REV
A3	Page Name: RK3399 Power/GND	1.411
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OSC/PLL/PMUIO1

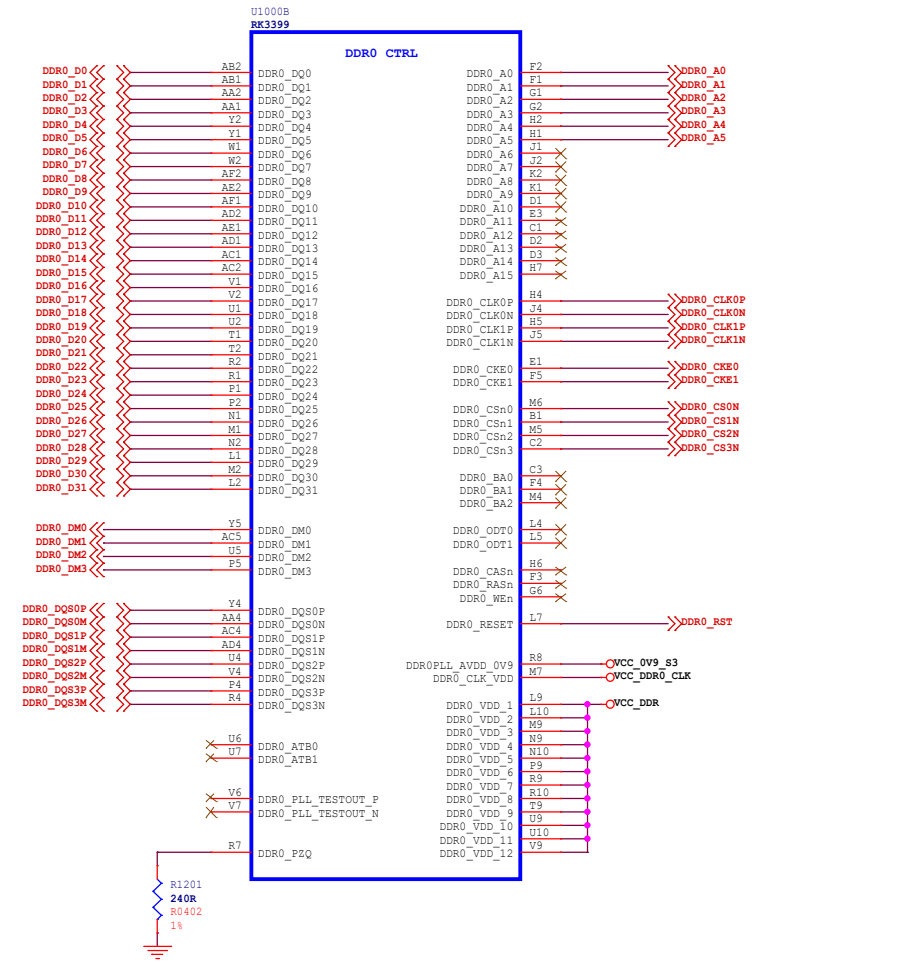


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A4	Page Name: RK3399 PMU Controller	1.411
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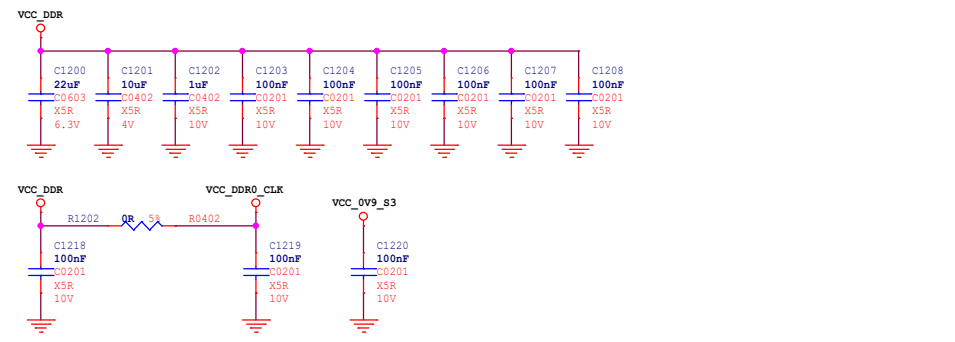
DDR1 Controller



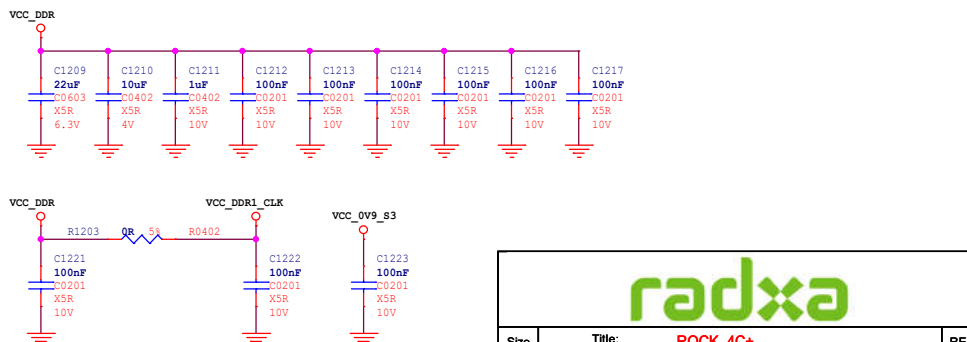
DDR0 Controller



DDR1 Power Decoupling

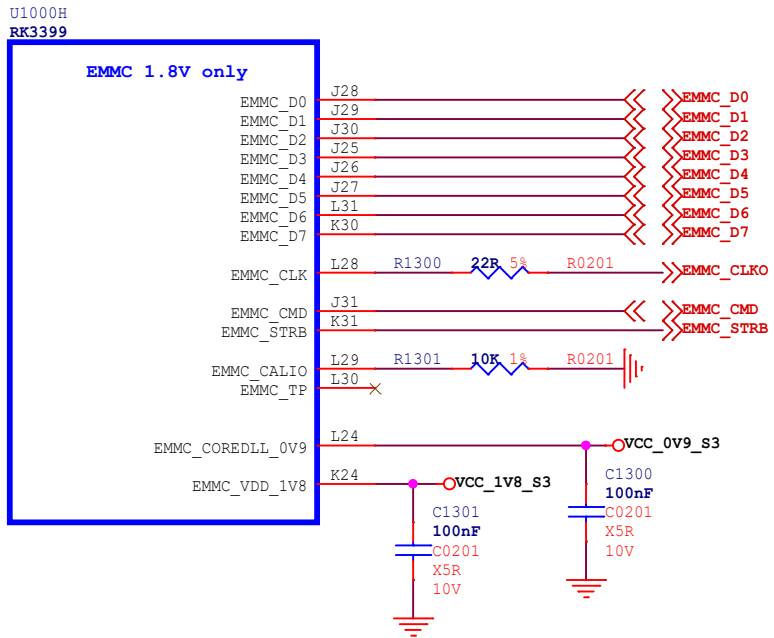


DDR0 Power Decoupling

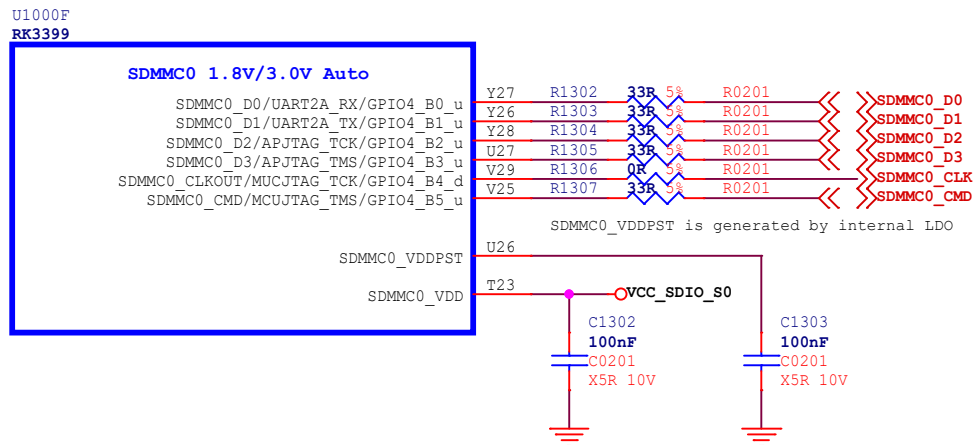


Size	Title:	ROCK 4C+	REV
A3	Page Name:	RK3399 DRAM Controller	1.411
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eMMC Controller

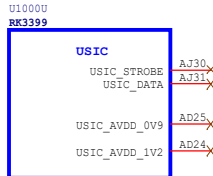


SDMMC Controller

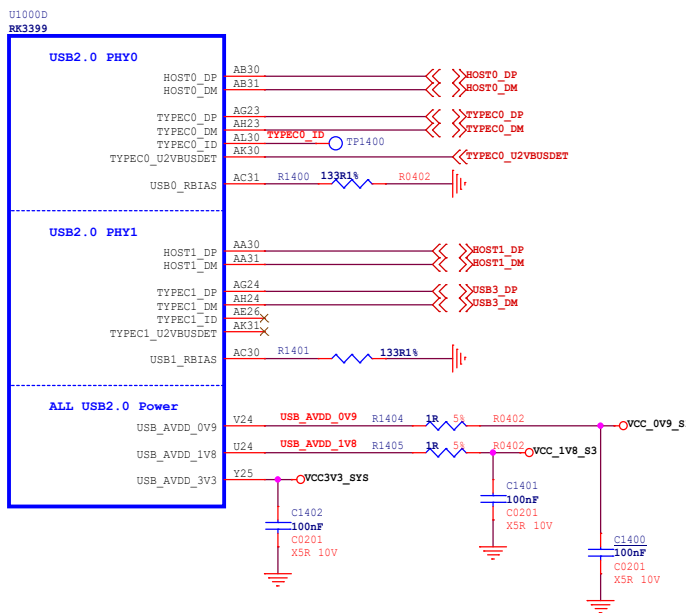


Size	Title: ROCK 4C+	REV
A4	Page Name: RK3399 FLASH/MMC Controller	1.411
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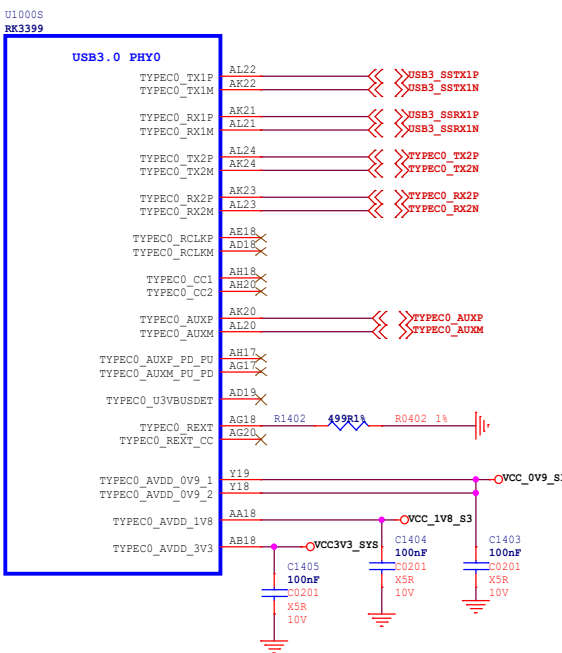
USIC Controller



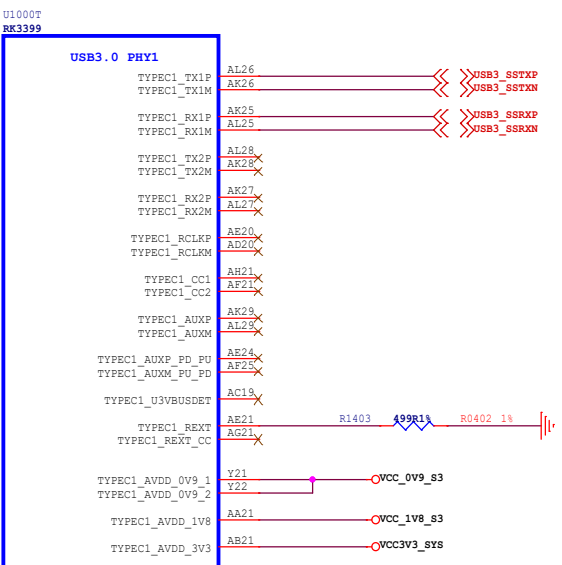
USB2.0 Controller



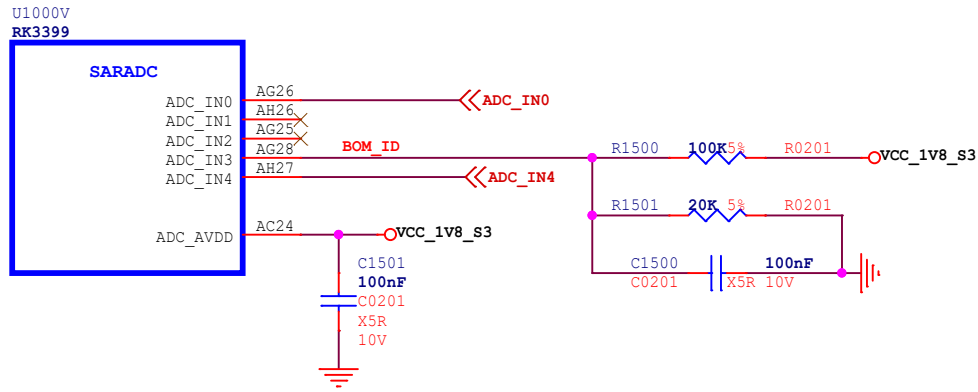
USB3.0 PHY0 Controller



USB3.0 PHY1 Controller



SARADC



BOM ID

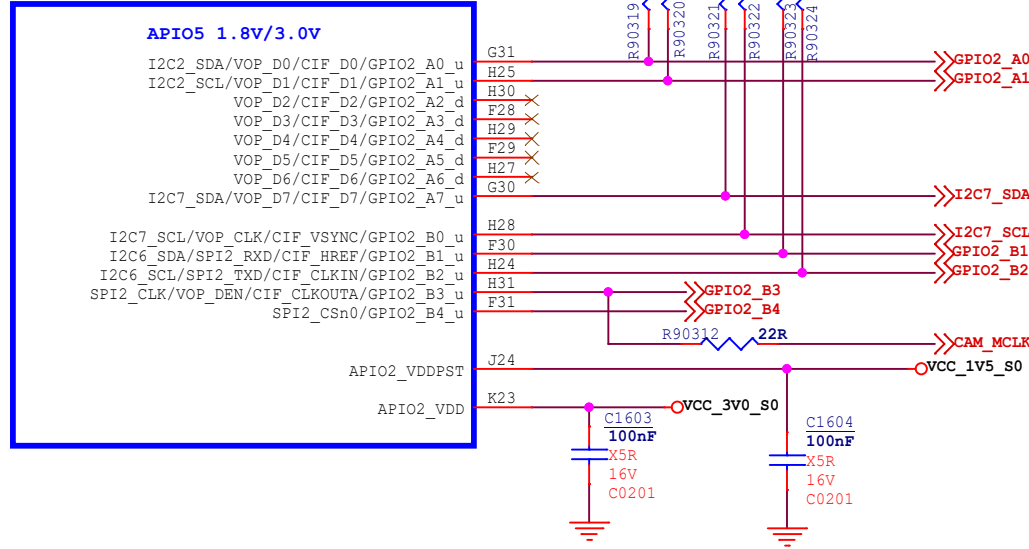
Item	Rup	Rdown		VOL	VERSION
LEVEL1	DNP	100K		0V	A
LEVEL2	100K	20K		0.3V	B
LEVEL3	100K	51K		0.6V	C
LEVEL4	100K	100K		0.9V	D
LEVEL5	100K	200K		1.2V	E
LEVEL6	100K	499K		1.5V	F
LEVEL7	100K	DNP		1.8V	G



Size	Title: ROCK 4C+	REV
A4	Page Name: RK3399 SAR-ADC/Key	1.411
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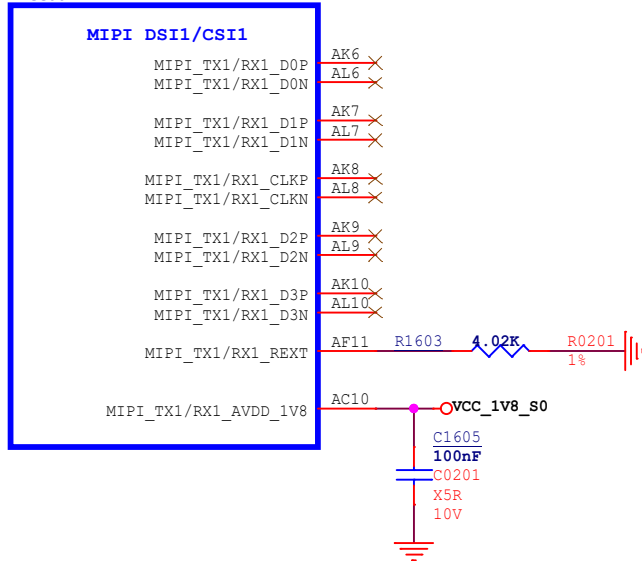
GPIO

U1000L
RK3399



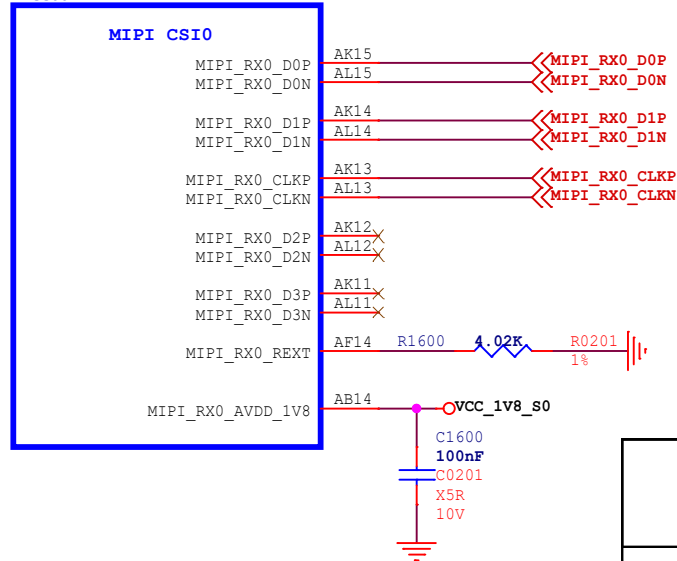
MIPI DSI1/CSI1

U1000P
RK3399



MIPI CSI0

U1000R
RK3399

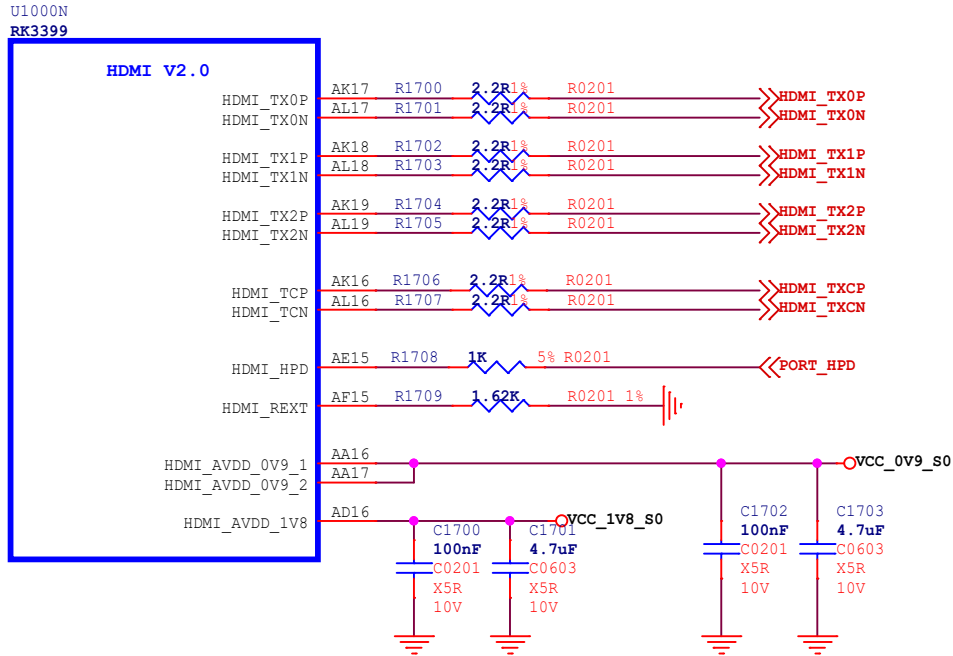


Note: All the Power filter capacitors should be placed close to the power pins of RK3399

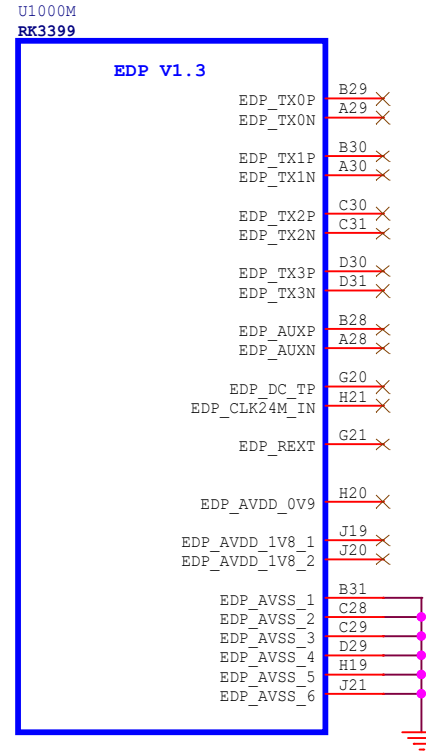


Size	Title: ROCK 4C+	REV
A4	Page Name: RK3399 VideoInput	1.411
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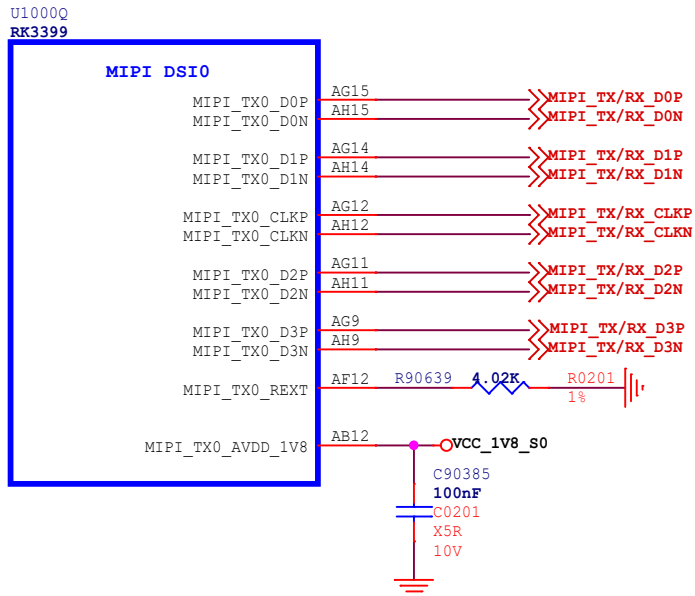
HDMI



EDP

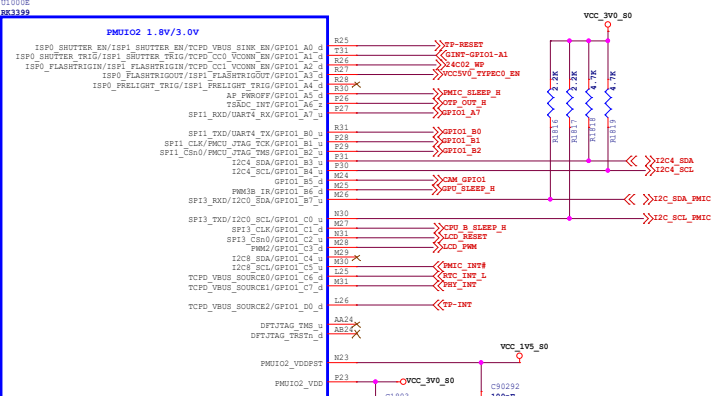
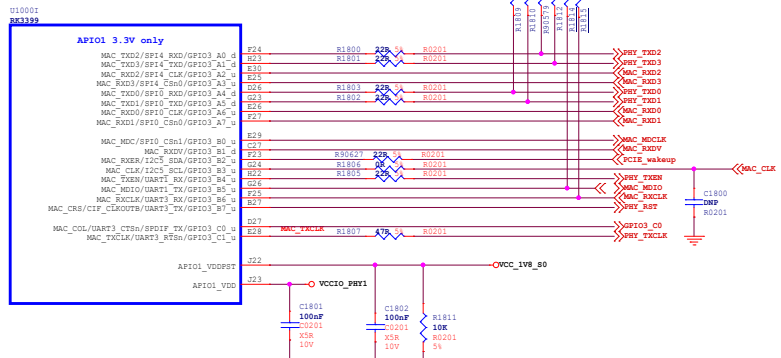


MIPI DSI0

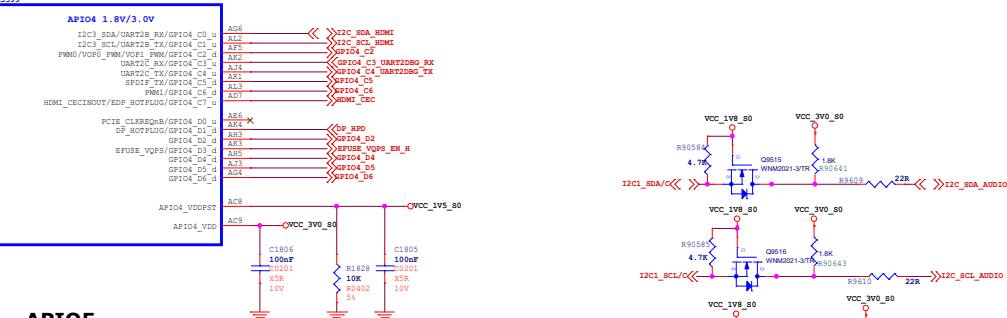


Size	Title: ROCK 4C+	REV
A4	Page Name: RK3399 VideoOutput	1.411
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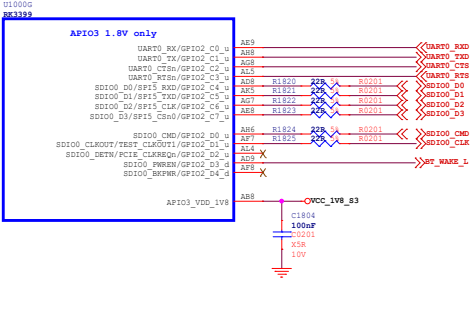
APIO1



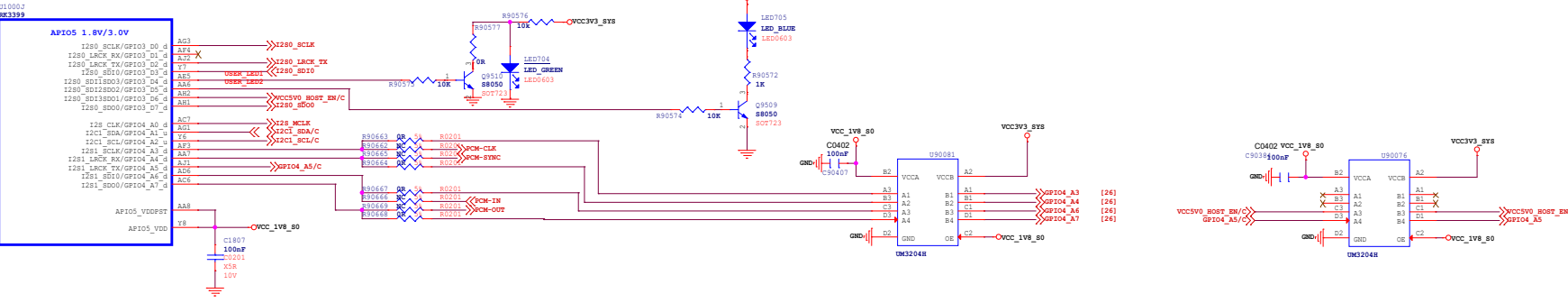
APIO4



APIO3

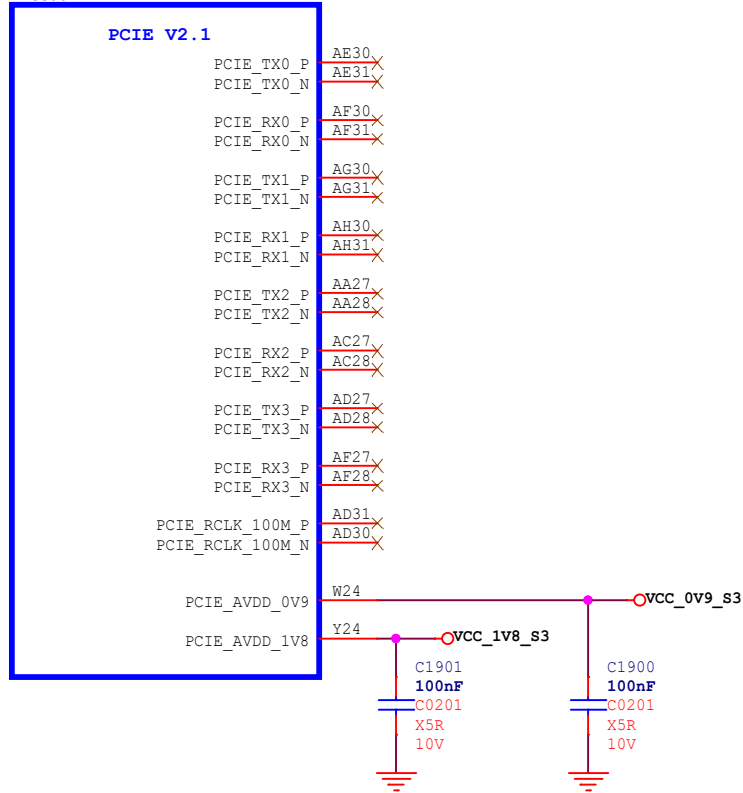


APIO5



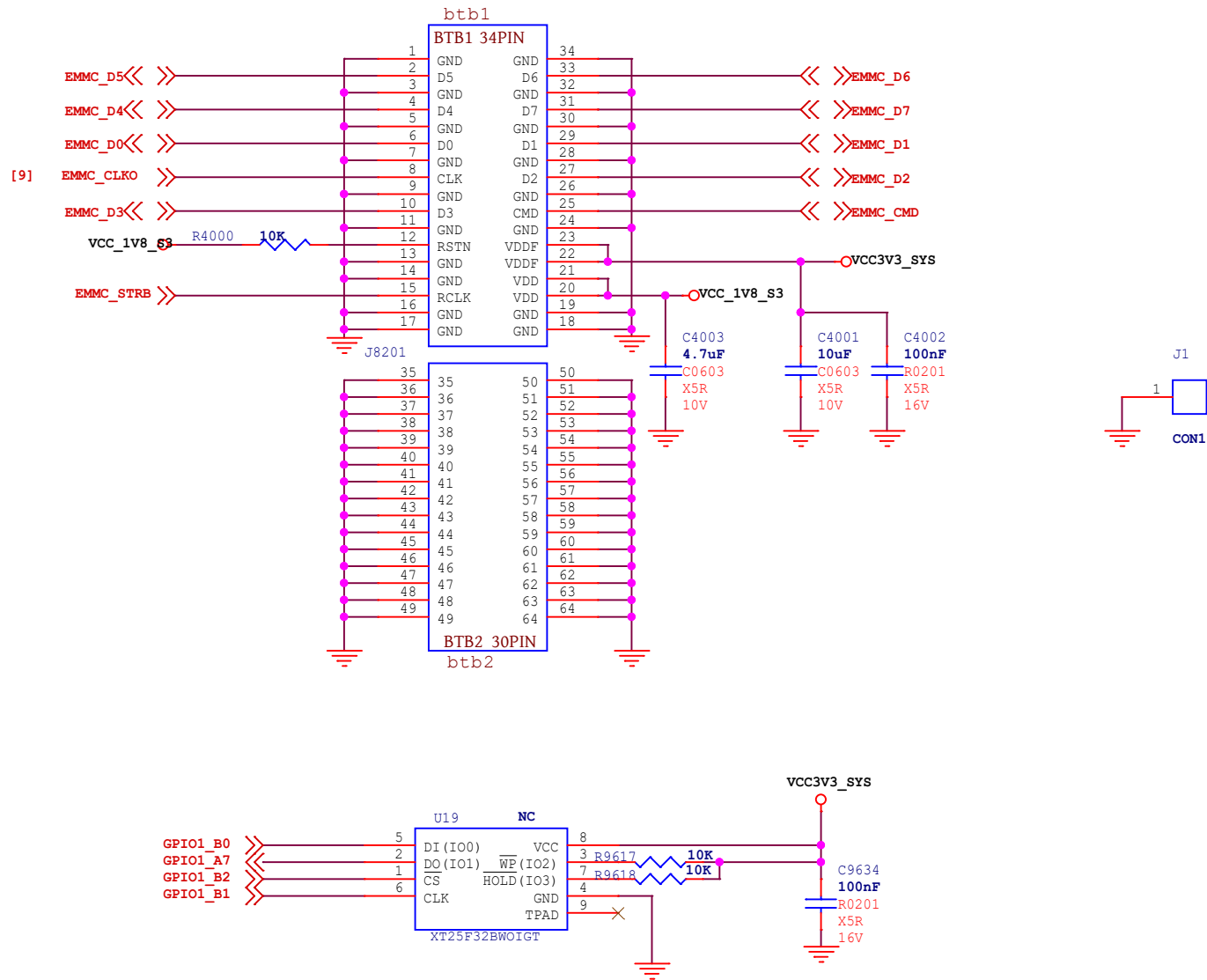
PCIE

U10000
RK3399

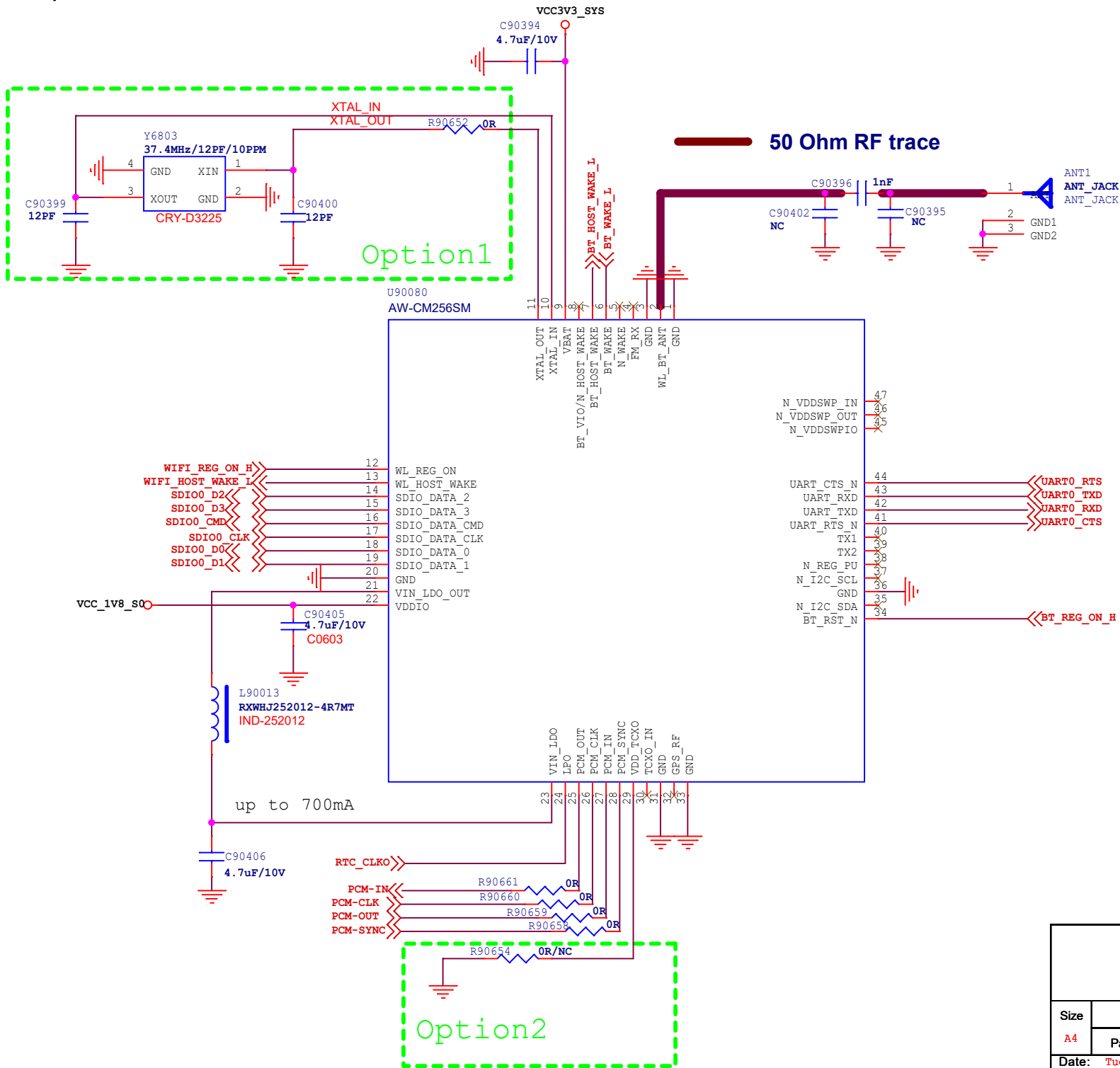


Size	Title: ROCK 4C+	REV
A4	Page Name: RK3399 PCIE	1.411
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eMMC FLASH

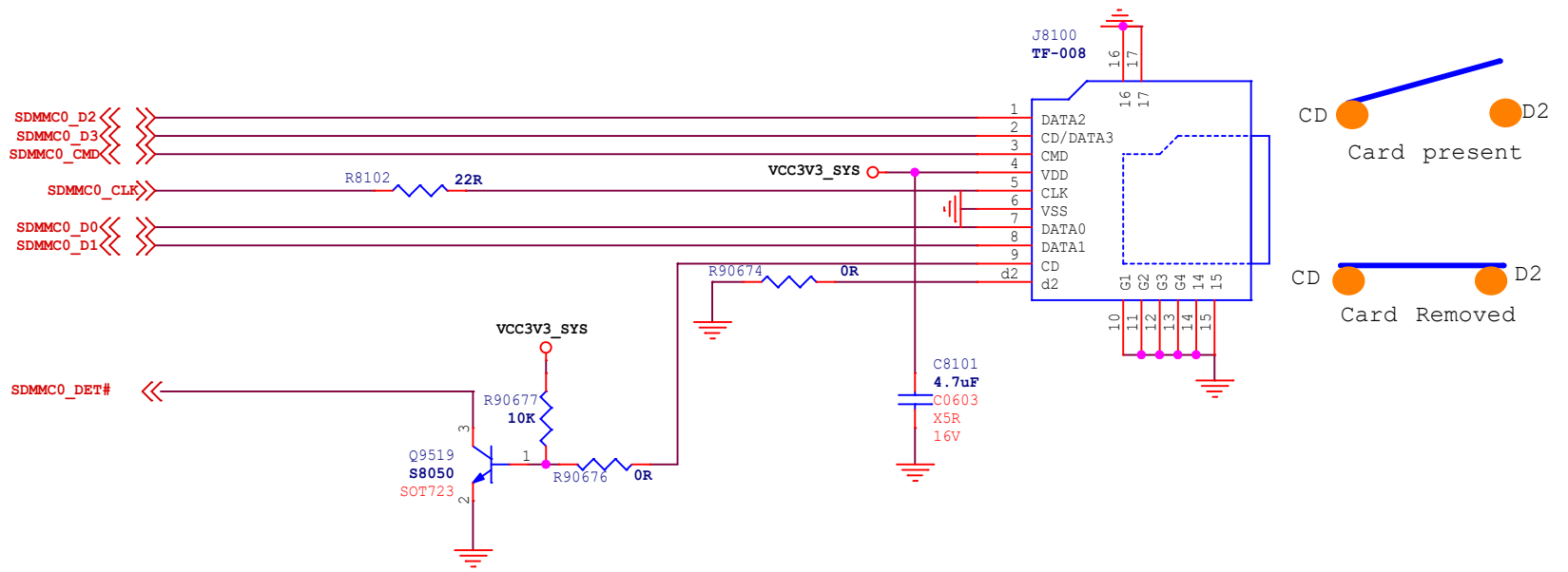


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A4	Page Name: EMMC	1.411
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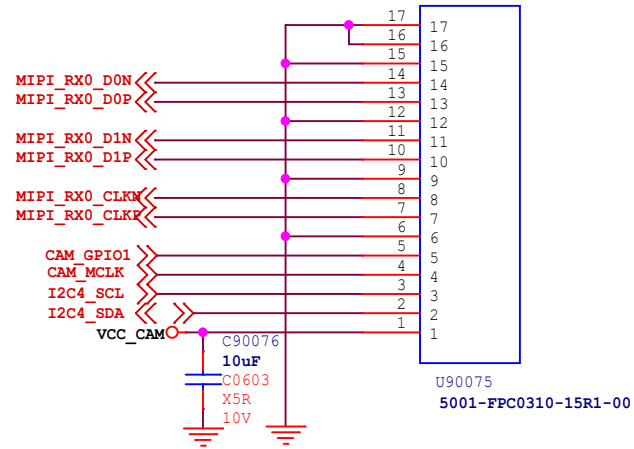


Size	Title: ROCK 4C+	REV
A4	Page Name: WIFI/BT MODULE	1.411
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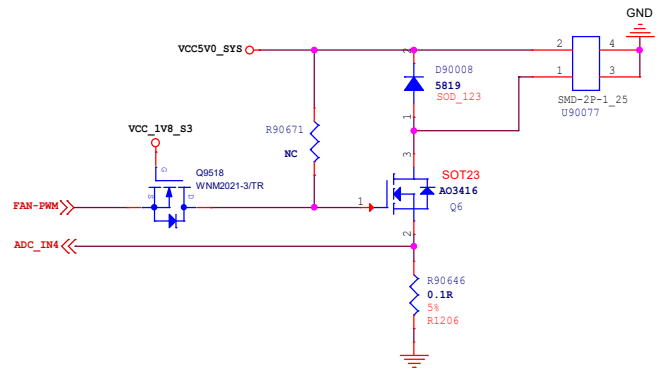
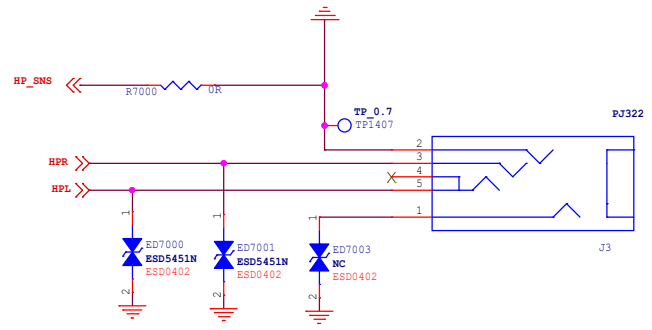
TF CARD

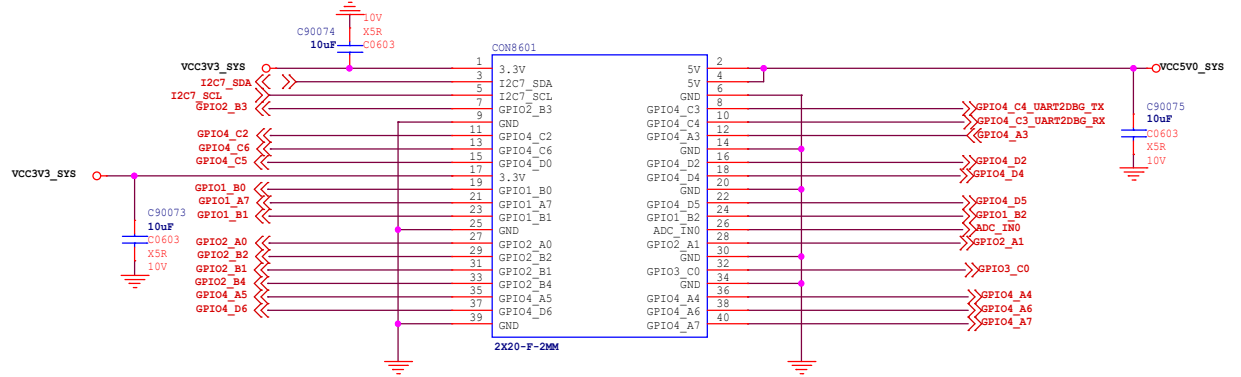
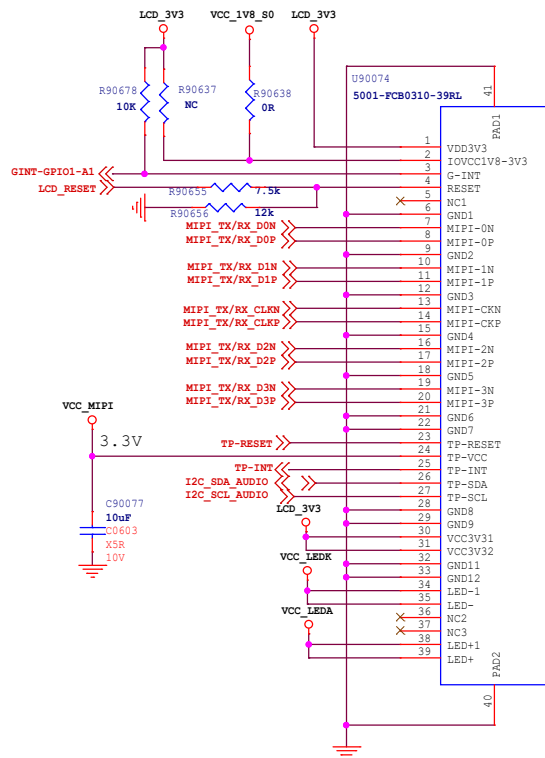


Size	Title: ROCK 4C+	REV
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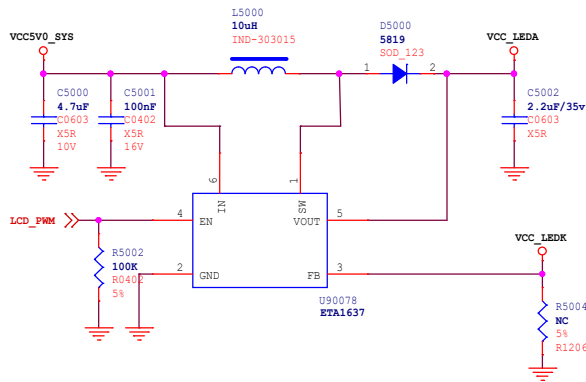


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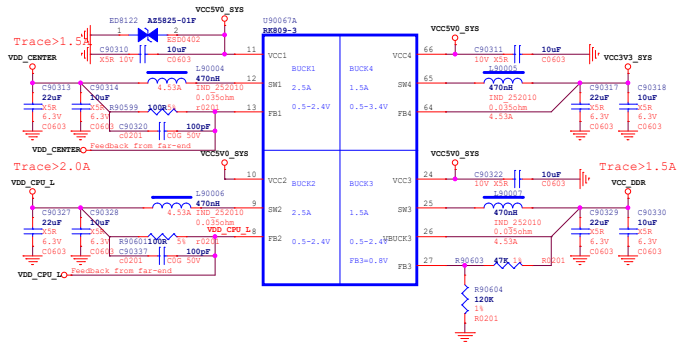


LCD

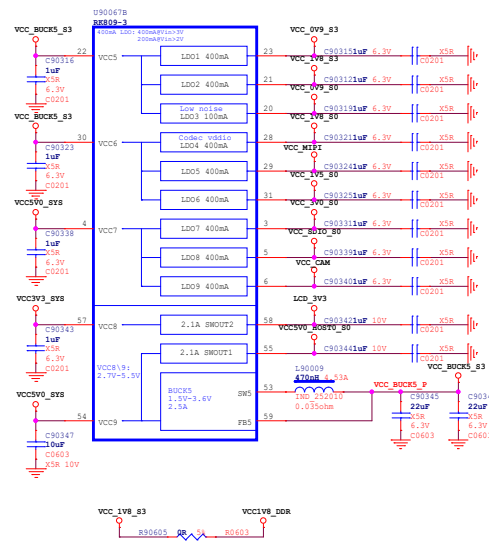


	RT9293B	ETA1637
R5004	2.2R	NC
OVF	20V	30V
L5000	10UH	10UH

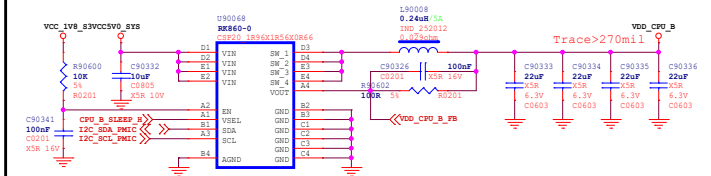
PMIC RK809-3 DCDC



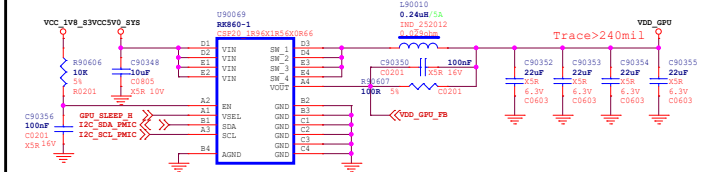
PMIC RK809-3 LDO



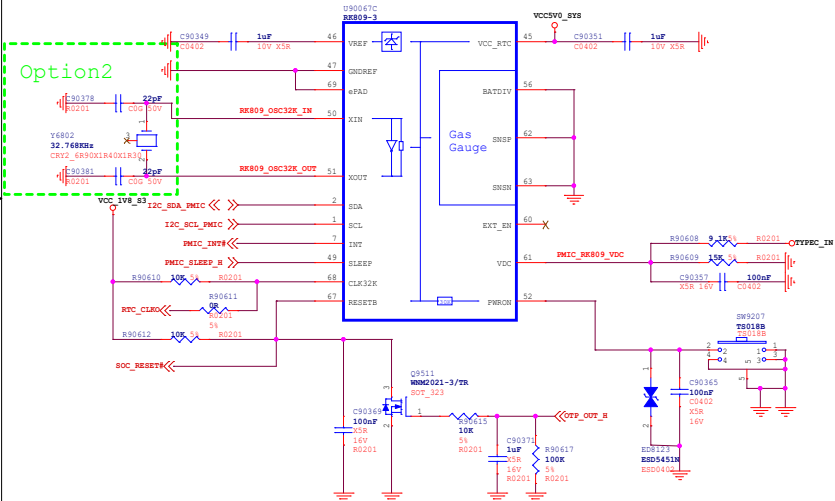
Power of VDD_CPU_B



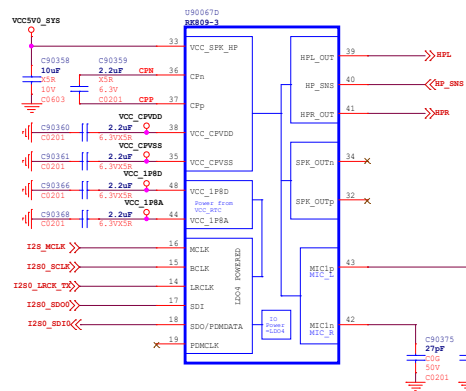
Power of VDD_GPU



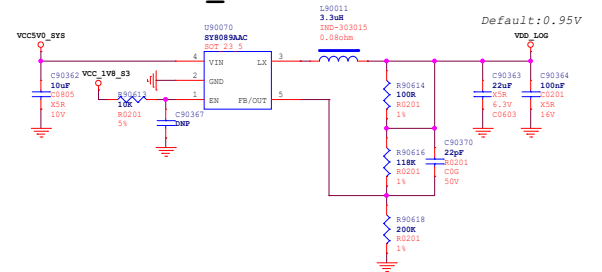
PMIC RK809-3 Manager



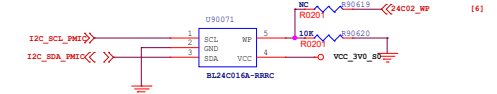
PMIC RK809-3 CODEC



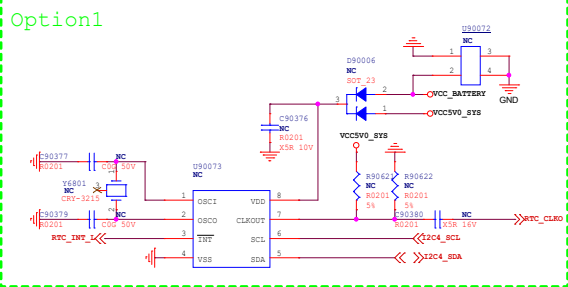
Power of VDD_LOG

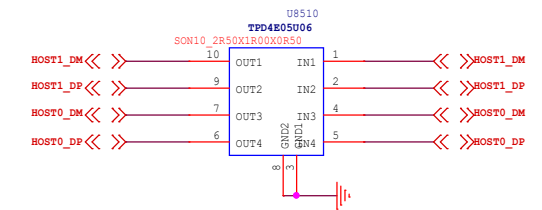
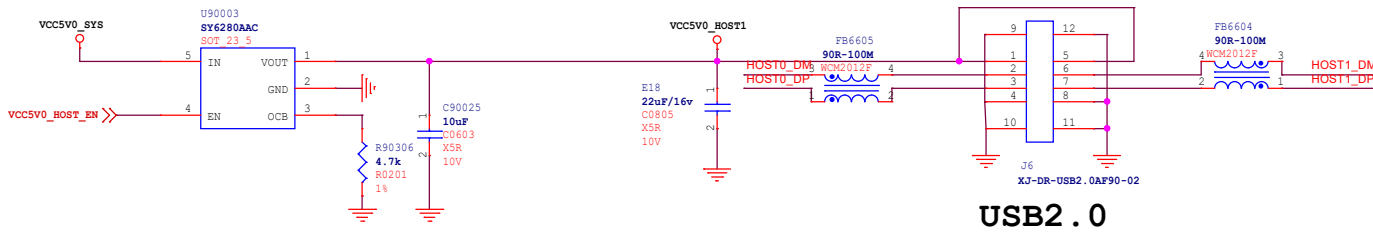
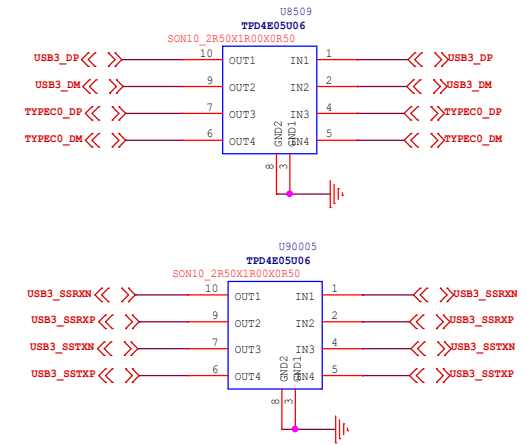
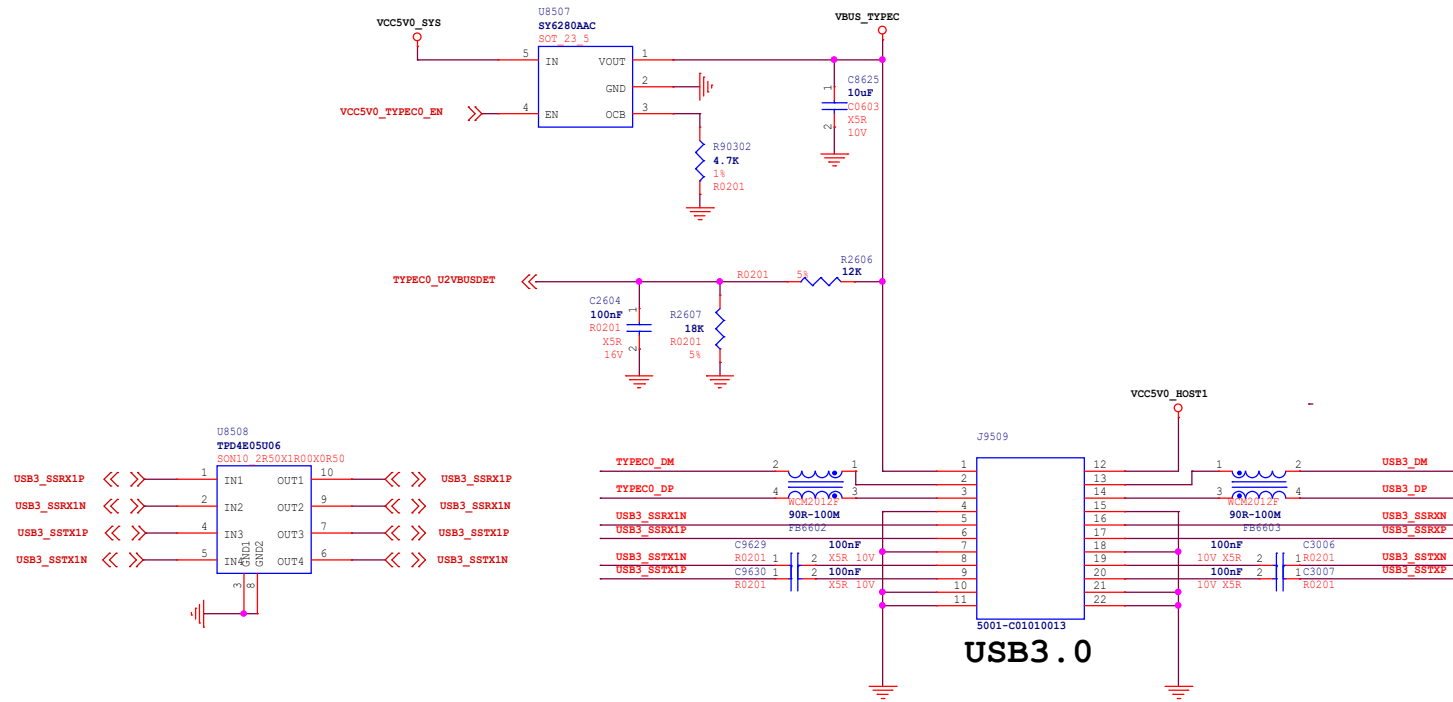


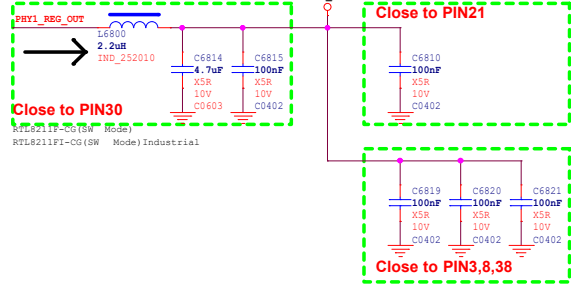
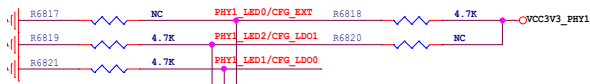
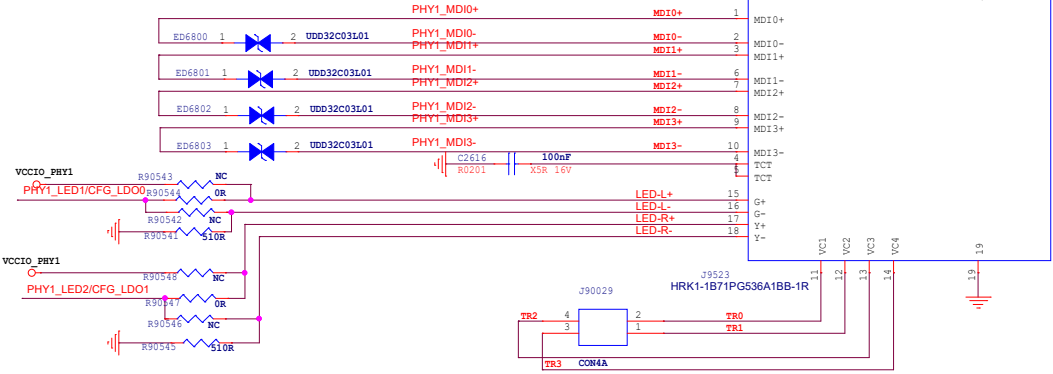
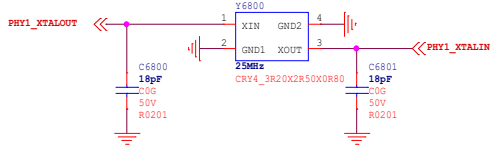
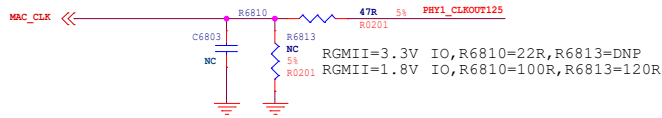
Mechine ID



Choose one of the option 1 and option 2 :



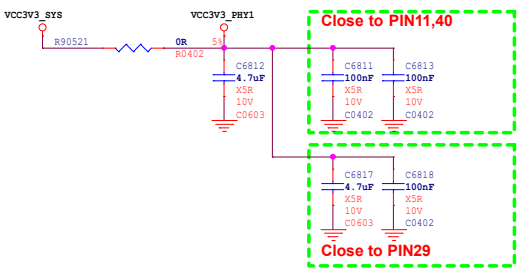
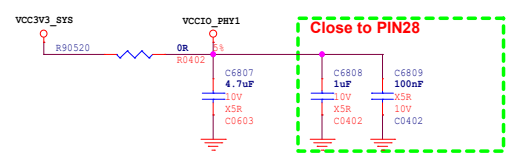
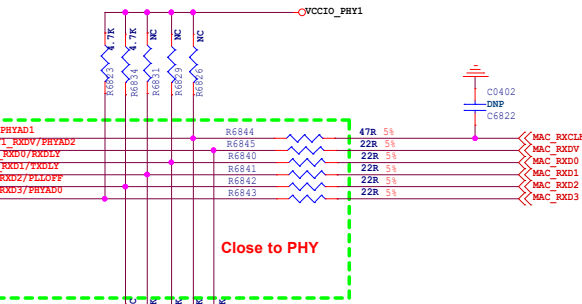




VCC_PHY0_IO Voltage Config

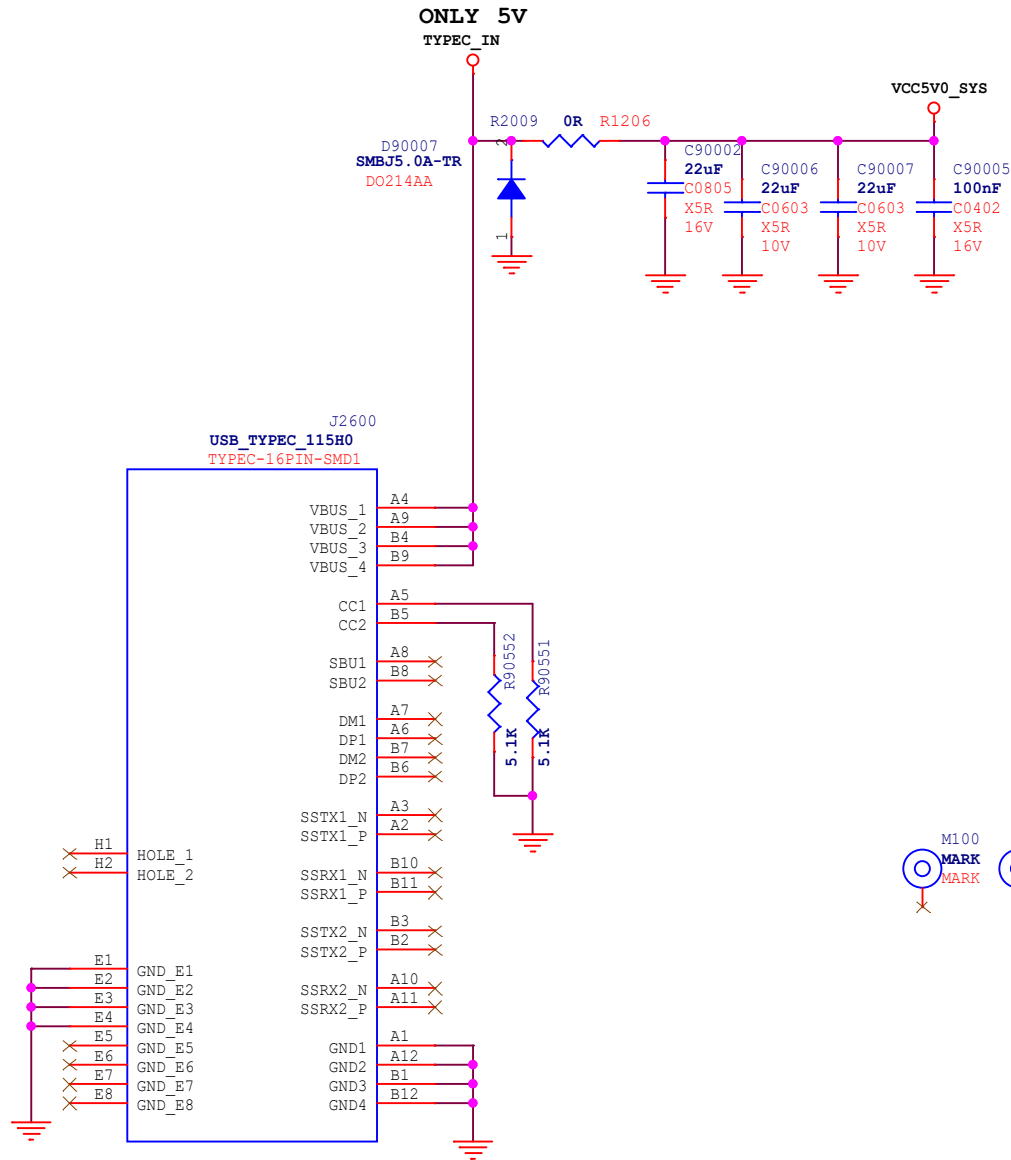
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External 3.3V	1'b1	2'b00
External 1.8V (default)	1'b1	2'b10
Internal 1.8V	1'b0	2'b10

VCCIO_PHY1

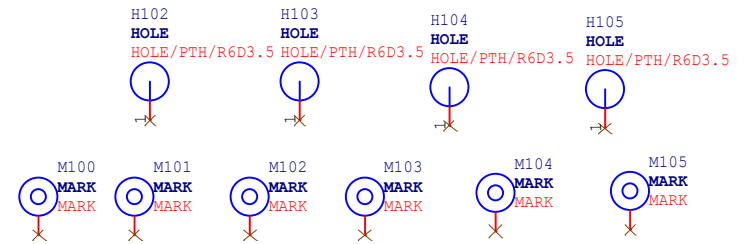


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DC IN&SYSTEM Power



HOLE



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