

野火_RK3566 LUBANCAT_1_原理图_V1.2

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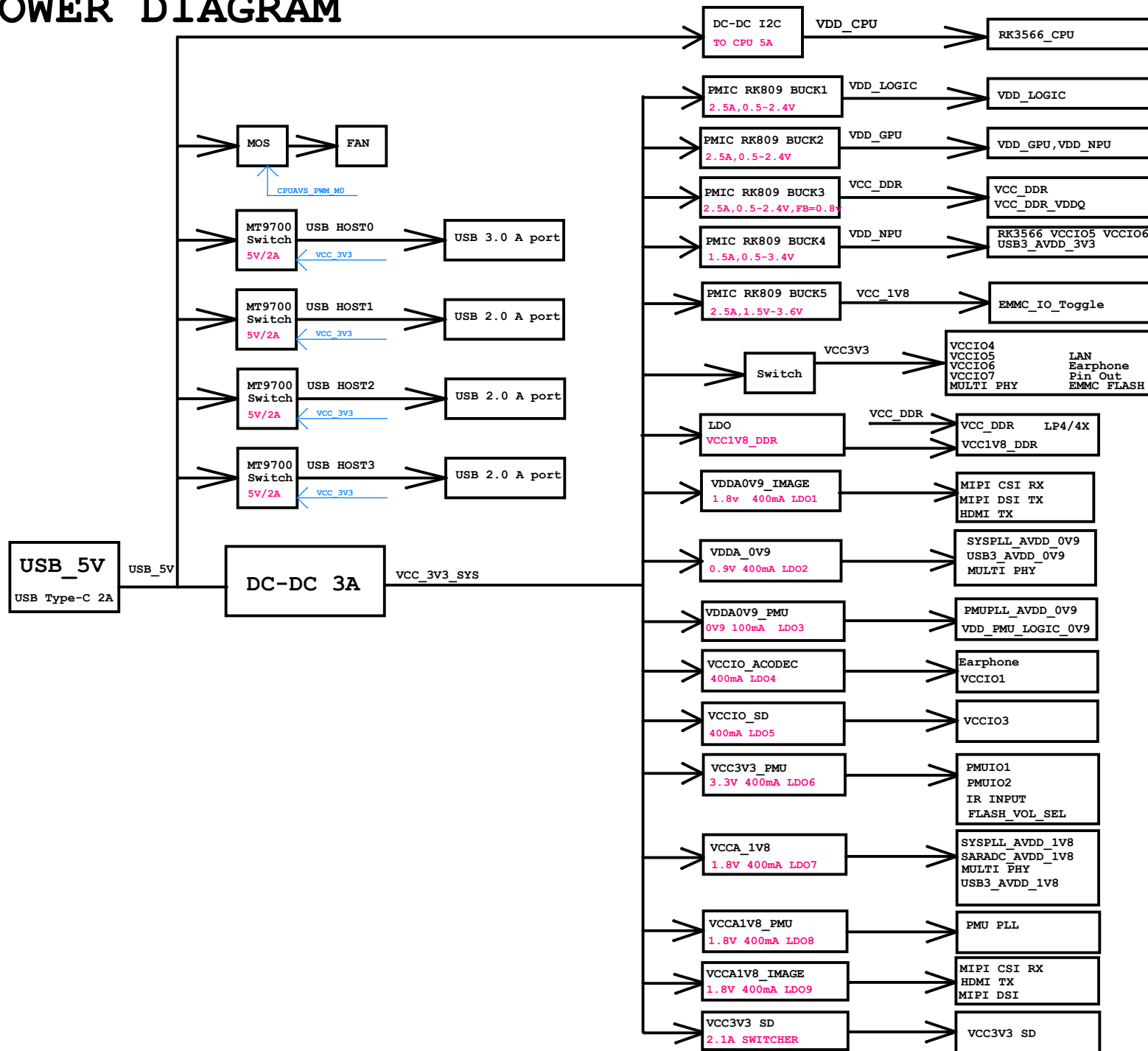
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历史版本

版本号	日期	设计	描述
V0.1	2022-03-18	ghs	初始版本
V1.0	2022-12-12	ghs	修正PHY芯片的RST引脚复位电平不匹配问题
V1.1	2023-04-17	ghs	新增一个BTB的2lane 的mipi csi接口
V1.2	2023-05-12	ghs	将两个MIPI CSI接口的连接器更换为BTB类型

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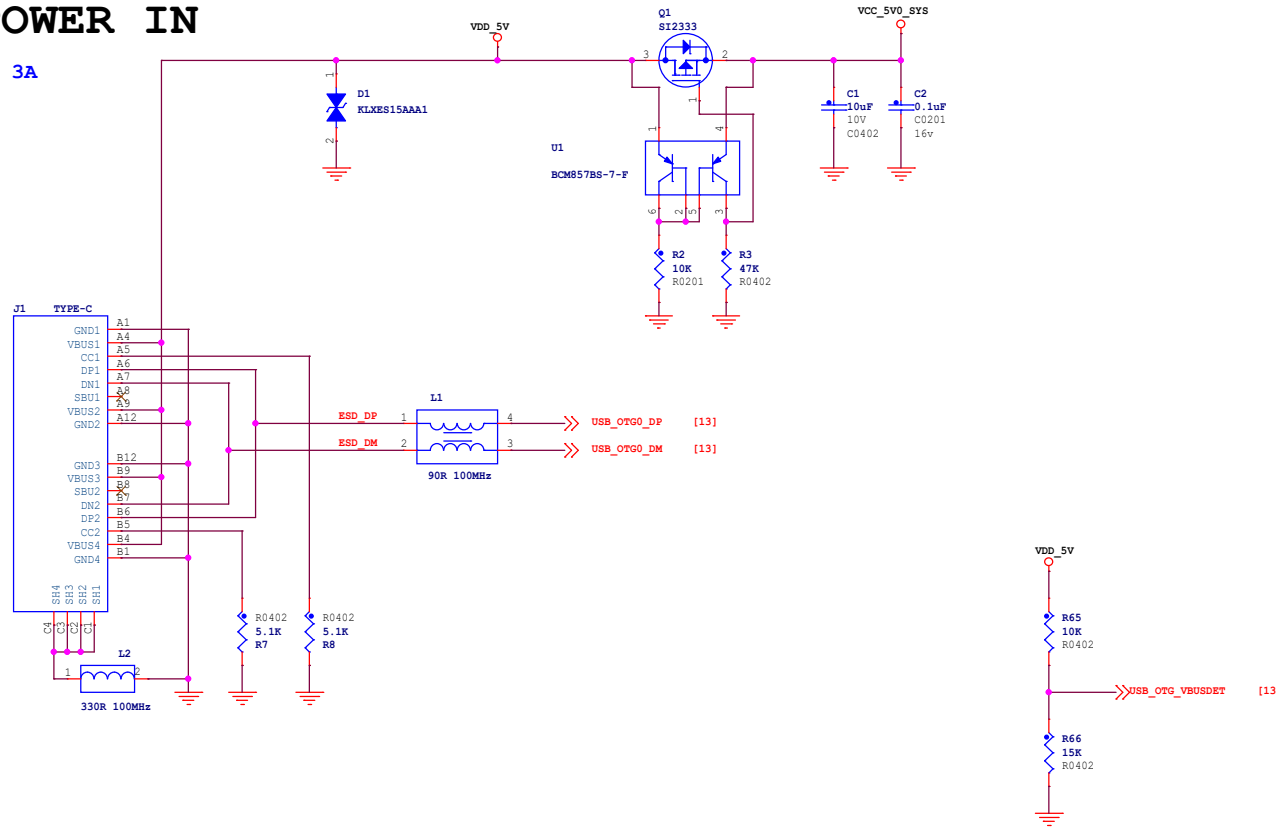
POWER DIAGRAM



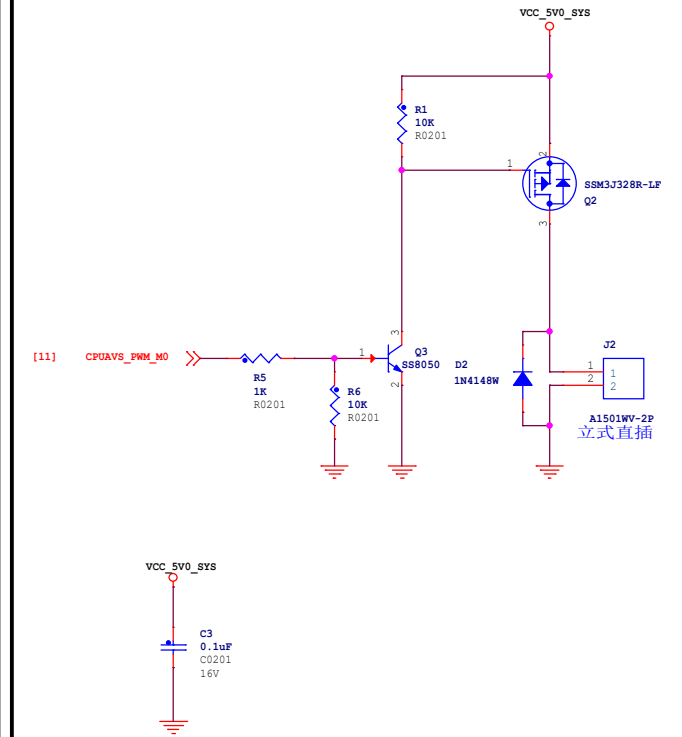
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POWER IN

5V 3A

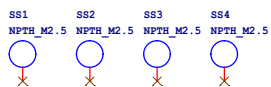


Active Cooling

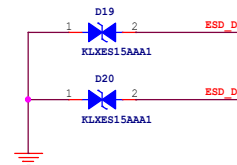


机械定位孔

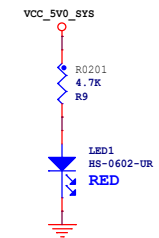
4*M3



USB ESD

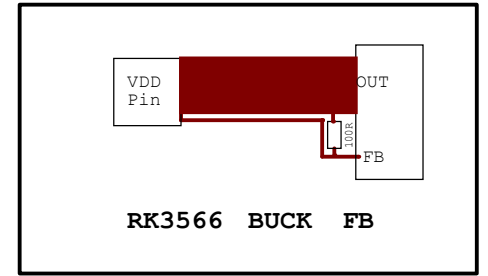
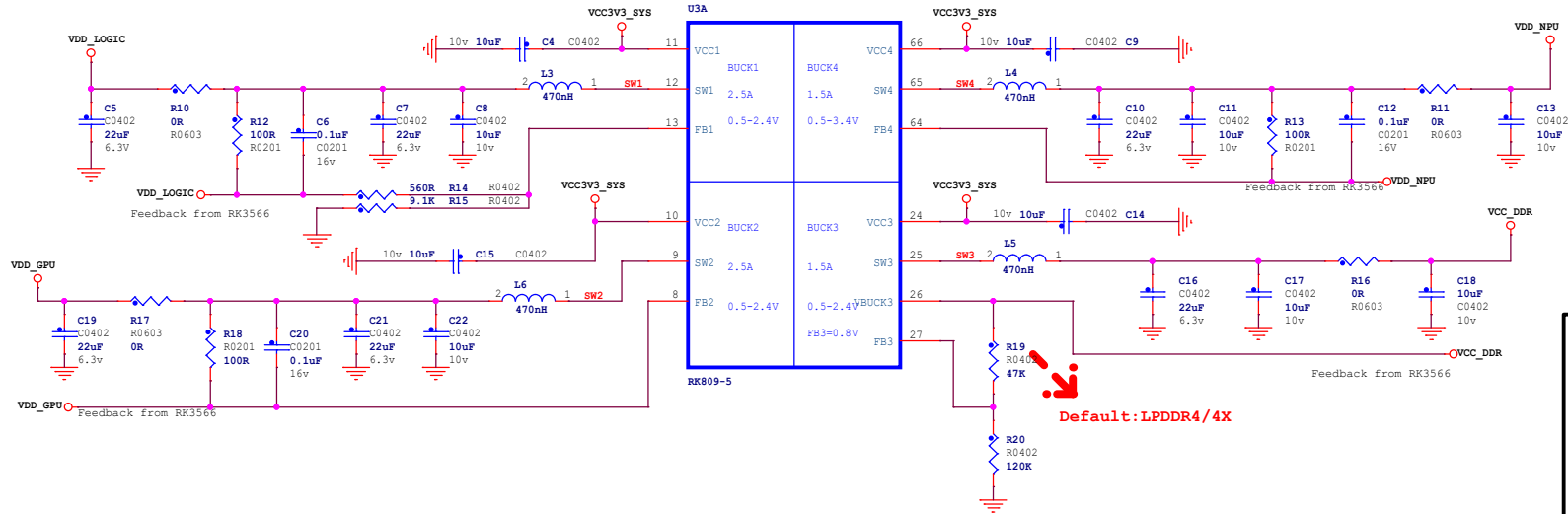


PWR_LED

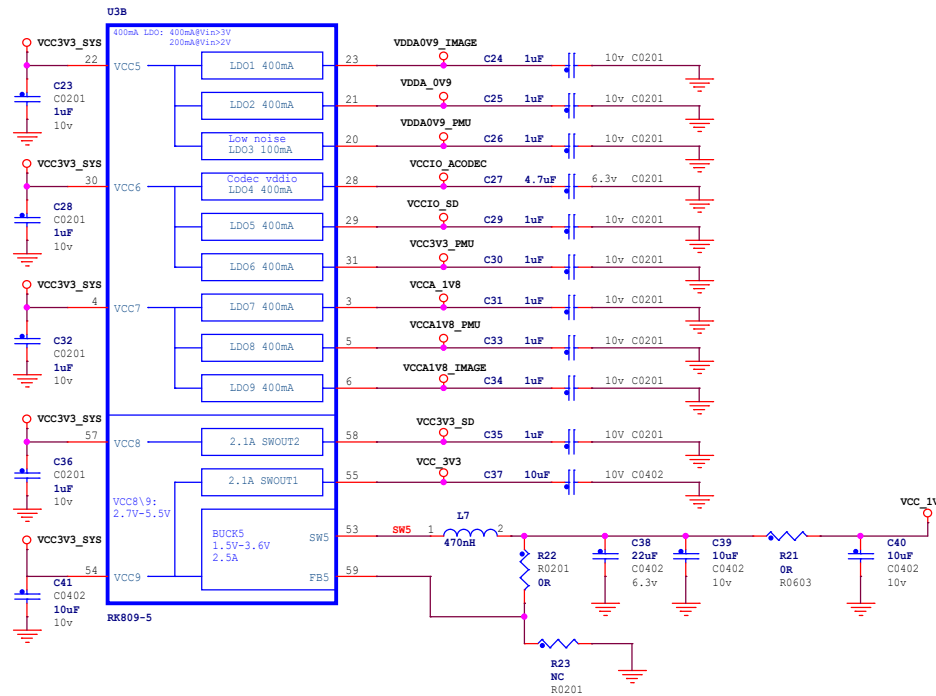


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PMIC RK809 DCDC

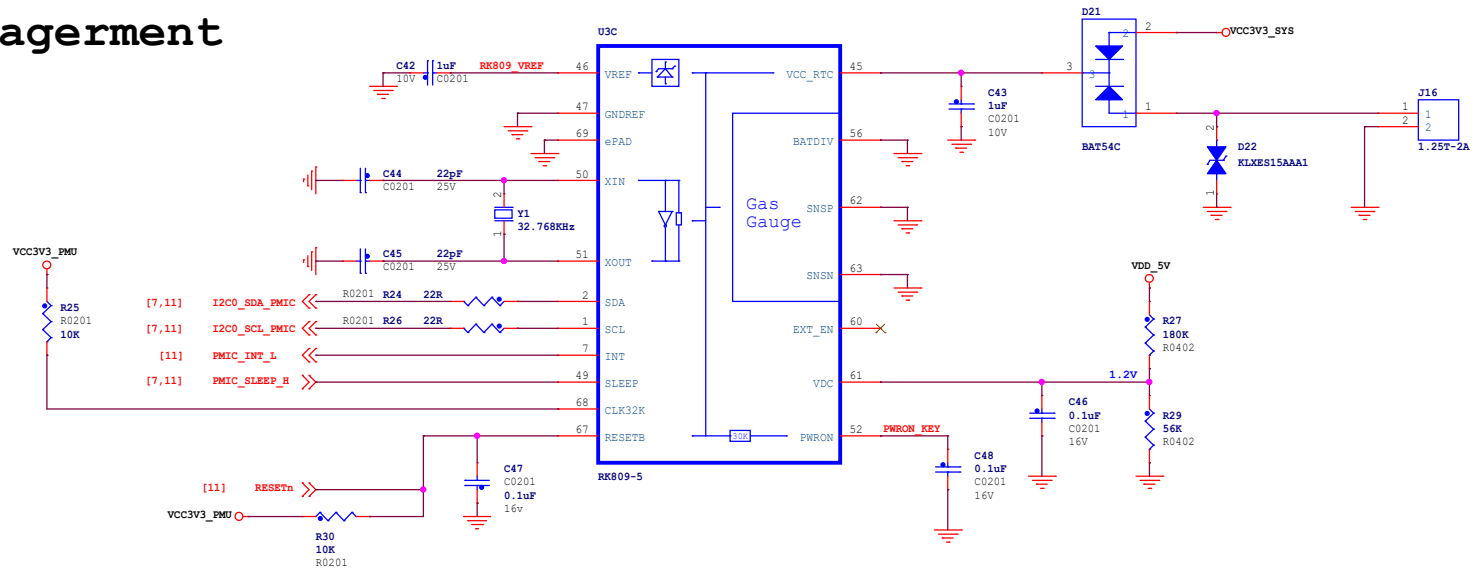


PMIC RK809 LDO

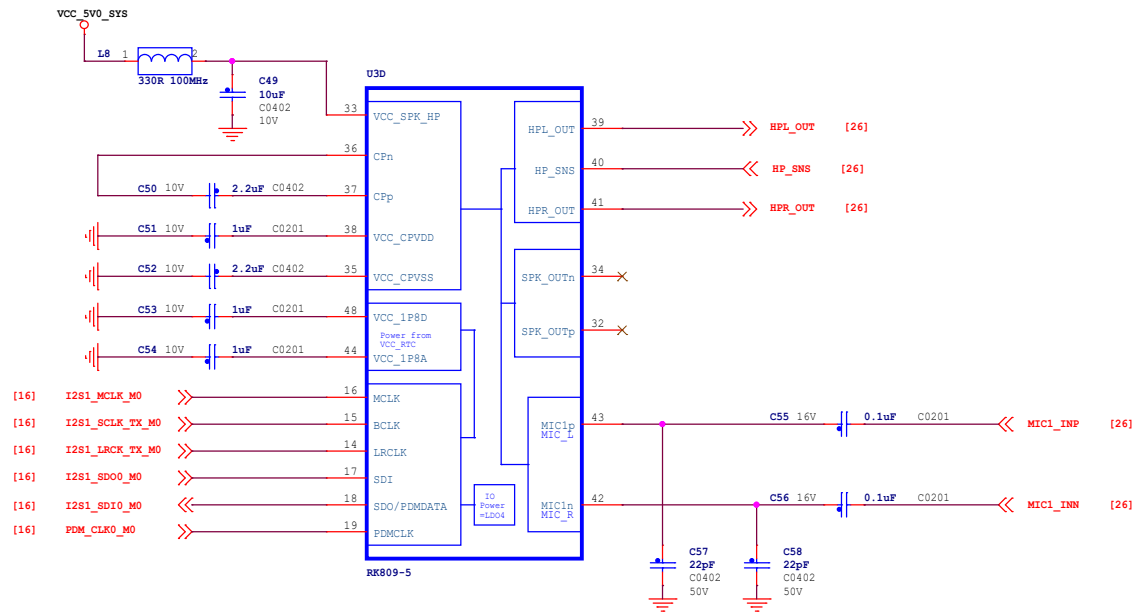


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PMIC RK809 Management

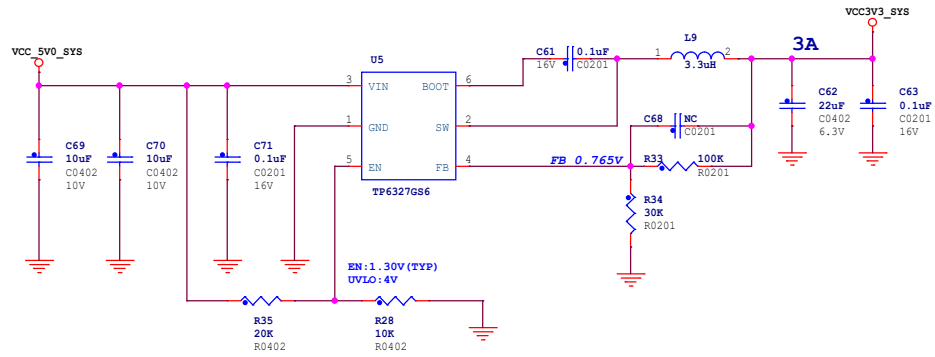


PMIC RK809 CODEC



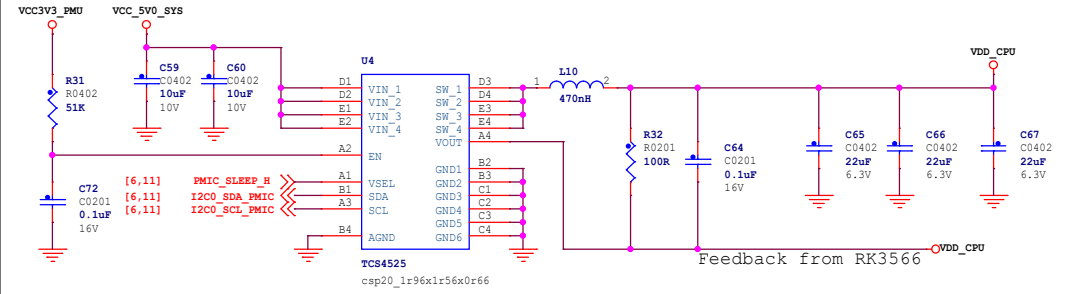
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SYS_Power



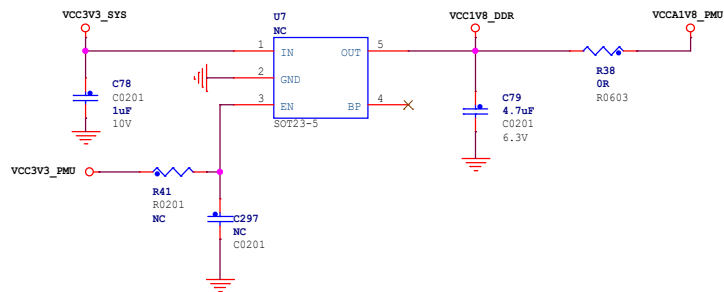
RK3566 CPU Power

VDD_CPU_EXT



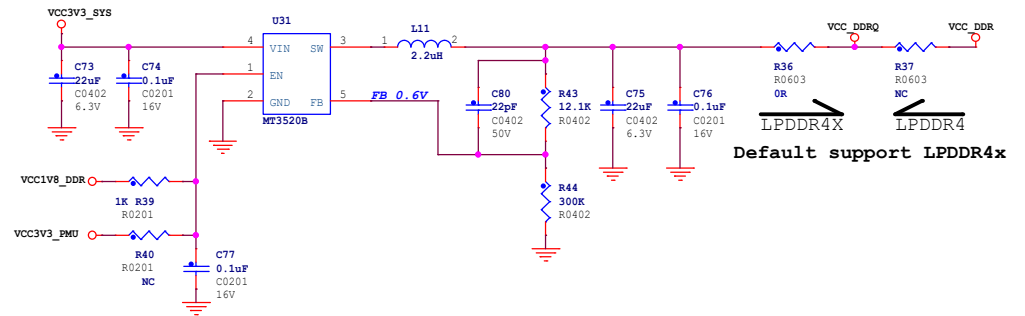
Auxiliary power supply

LPDDR4_VCC1V8_DDR



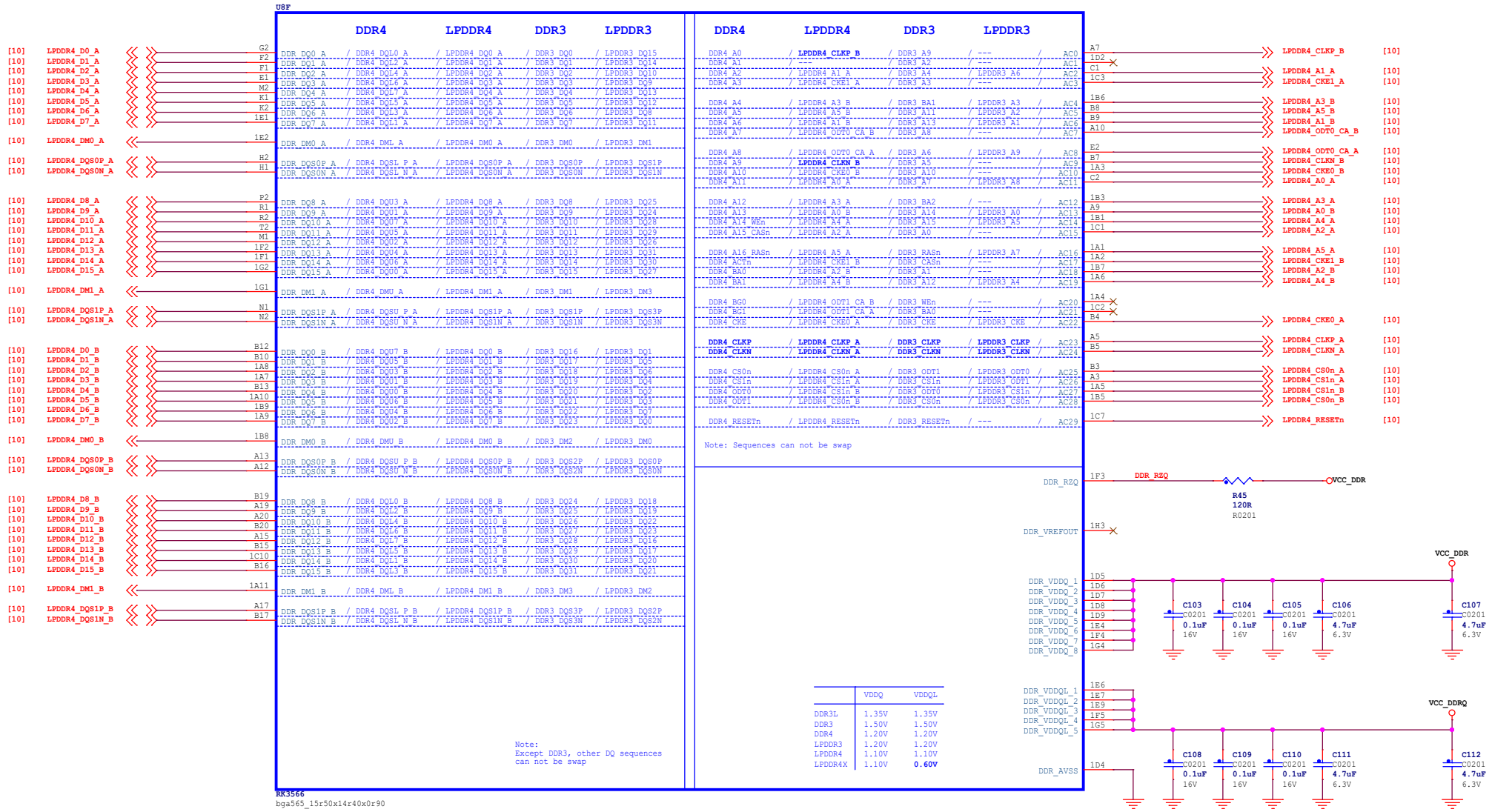
LPDDR4X Power

output: 0.6V

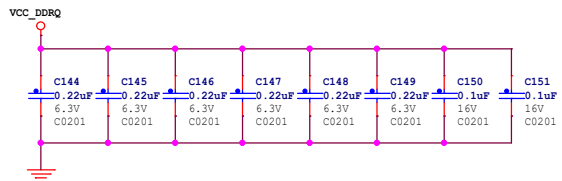
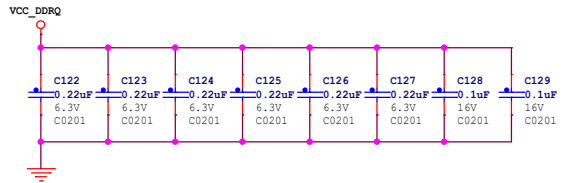
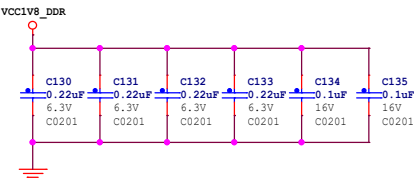
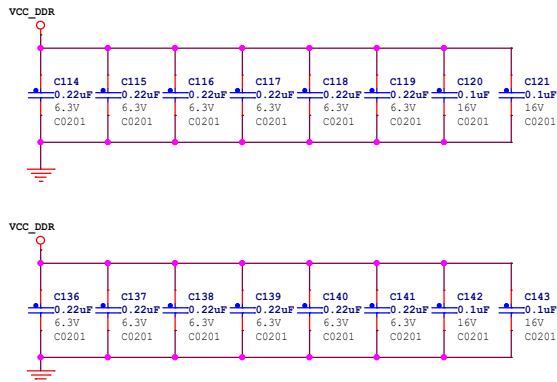
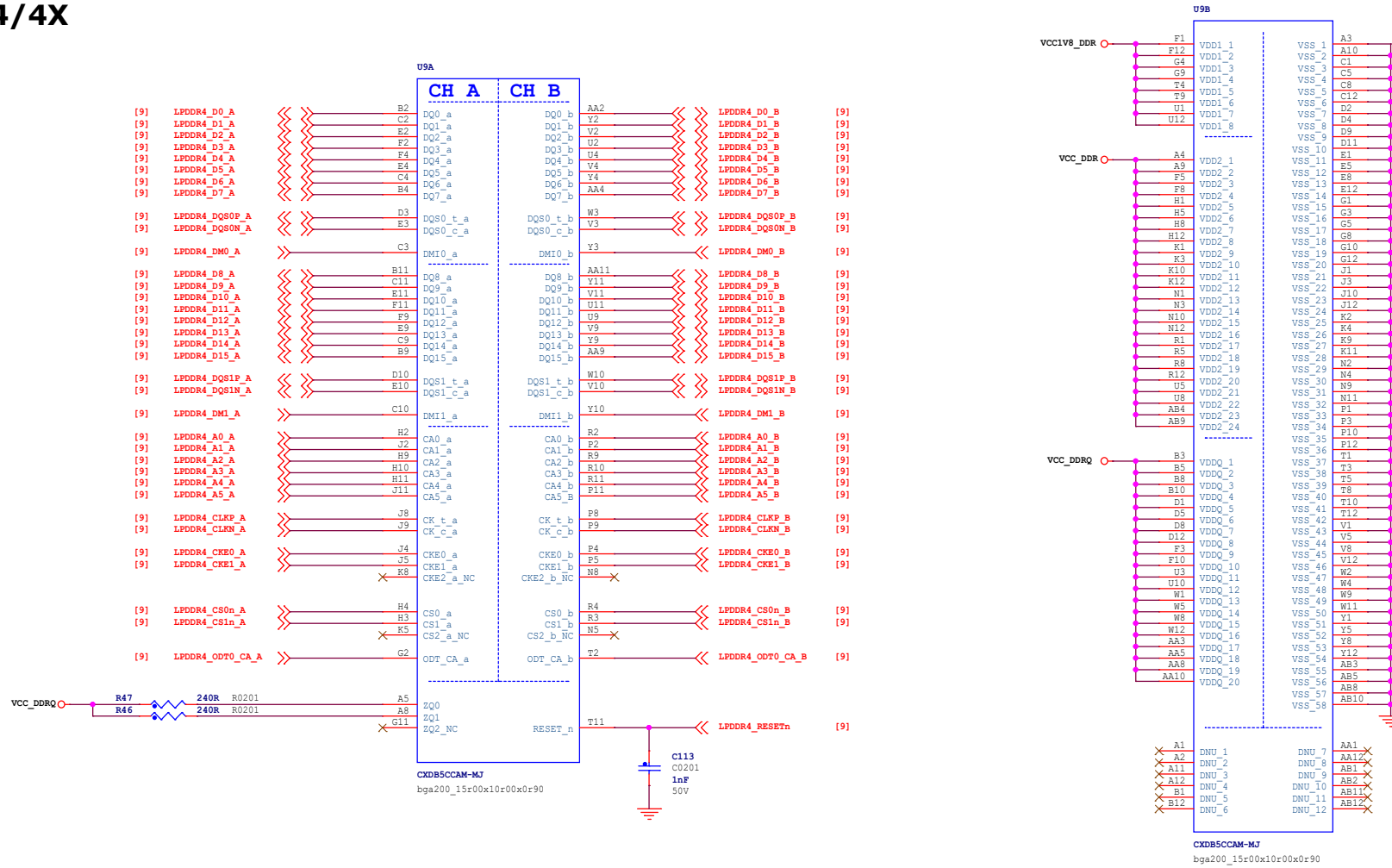


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RK3566_F (DDR PHY)

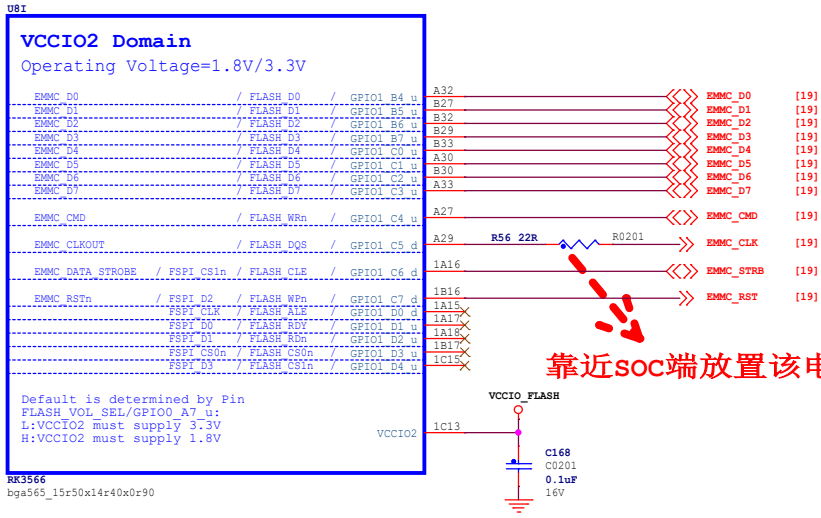


LPDDR4/4X

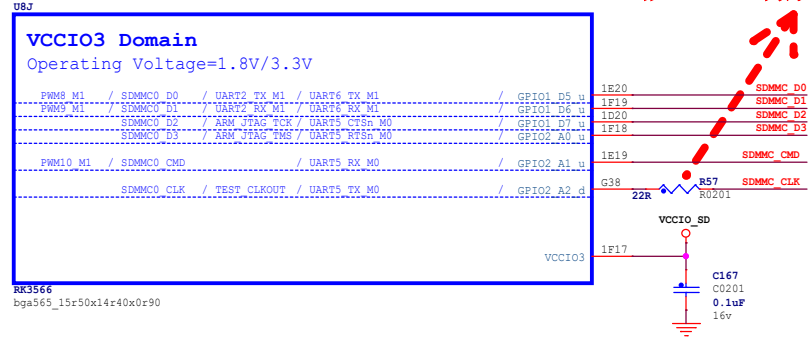


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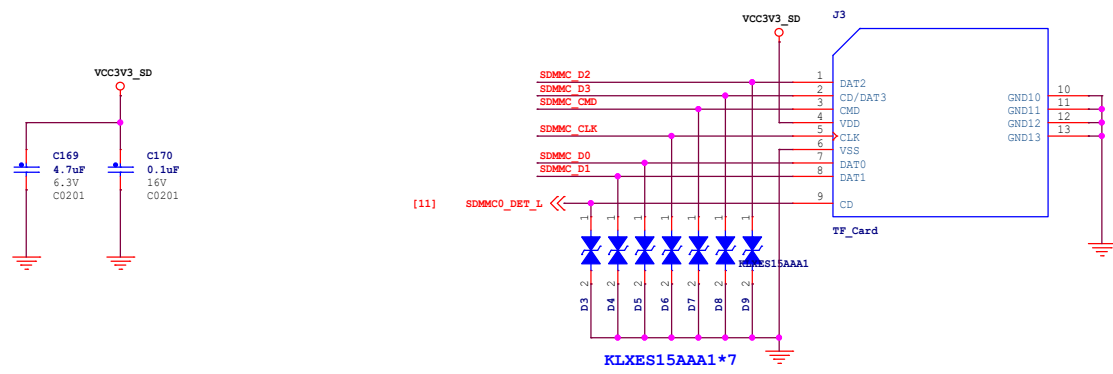
RK3566_I (VCCIO2 Domain) EMMC_IO



RK3566_J (VCCIO3 Domain) SDMMC_IO

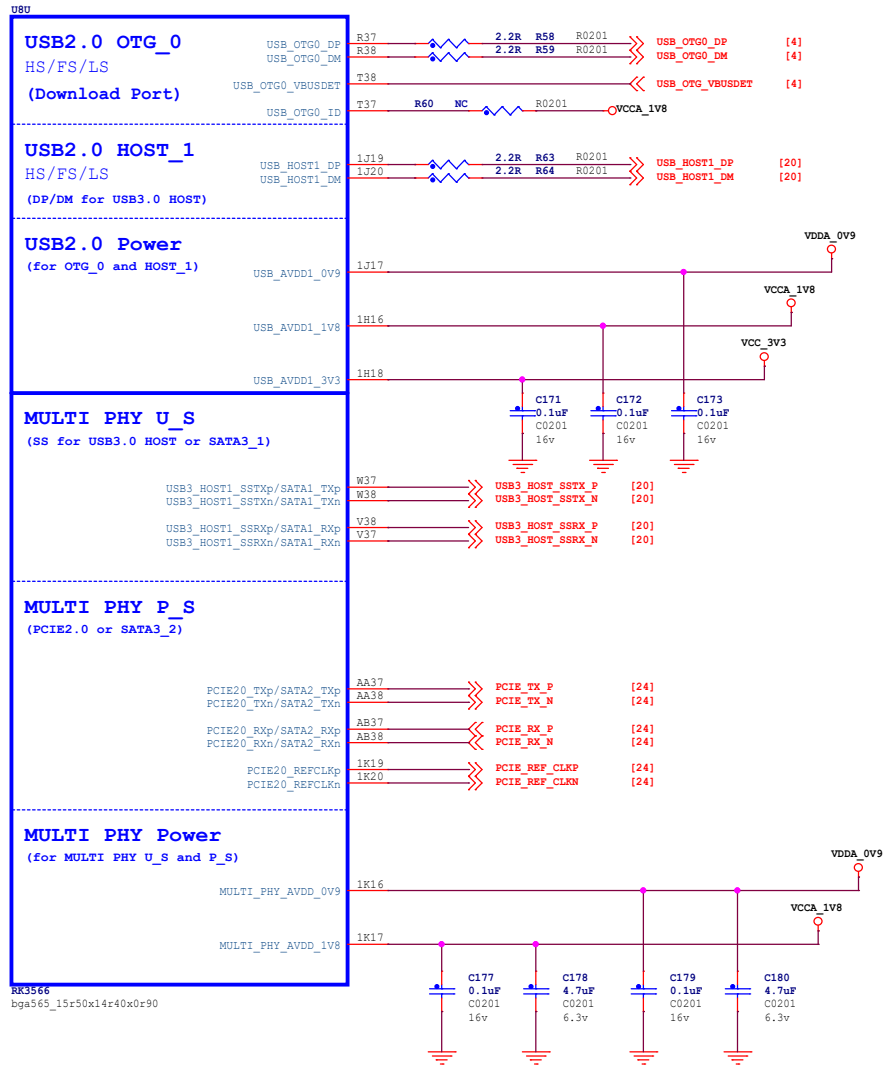


TF_CARD

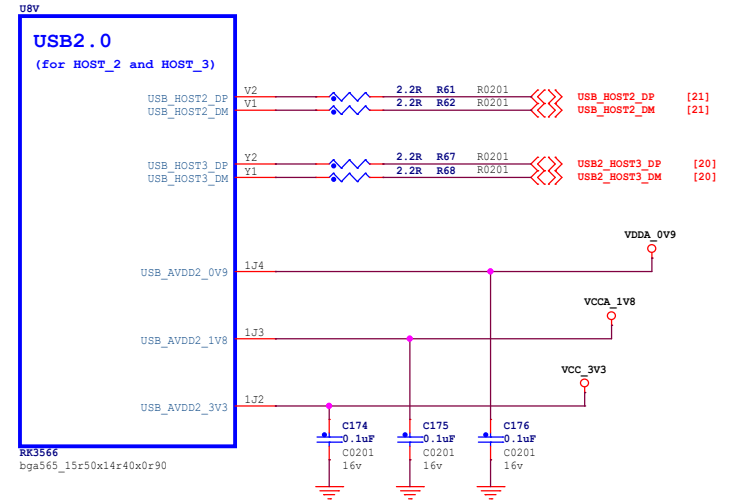


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RK3566_U (USB3.0/SATA/PCIe2.0 x1)



RK3566_V (USB2.0 HOST)

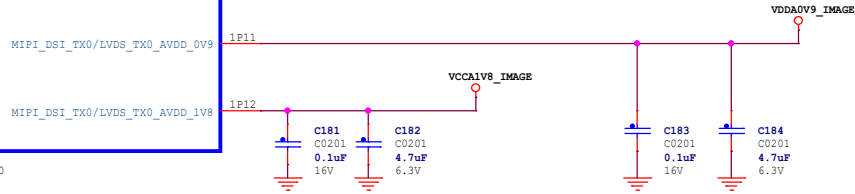
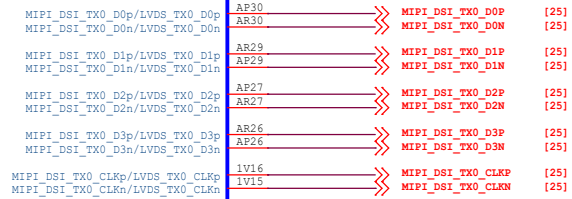


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Title 野火_RK3566_LUBANCAT_1_原理图_V1.2		
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RK3566_R (MIPI_DSI_TX0/LVDS_TX0)

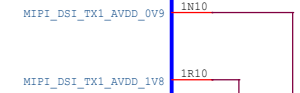
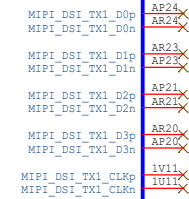
MIPI DSI TX0/LVDS TX0



RR3566
bga565_15r50x14r40x0r90

RK3566_S (MIPI_DSI_TX1)

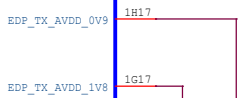
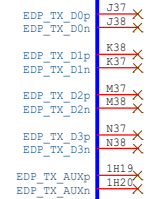
MIPI DSI TX1



RR3566
bga565_15r50x14r40x0r90

RK3566_T (eDP/DP TX)

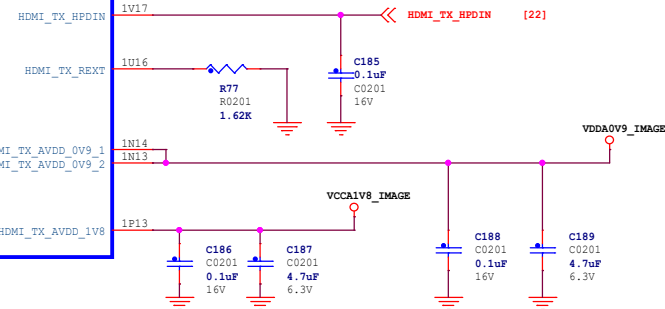
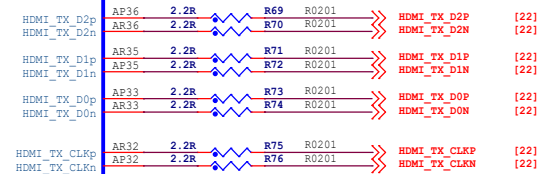
eDP_TX



RR3566
bga565_15r50x14r40x0r90

RK3566_Q (HDMI2.0 TX)

HDMI2.0 TX



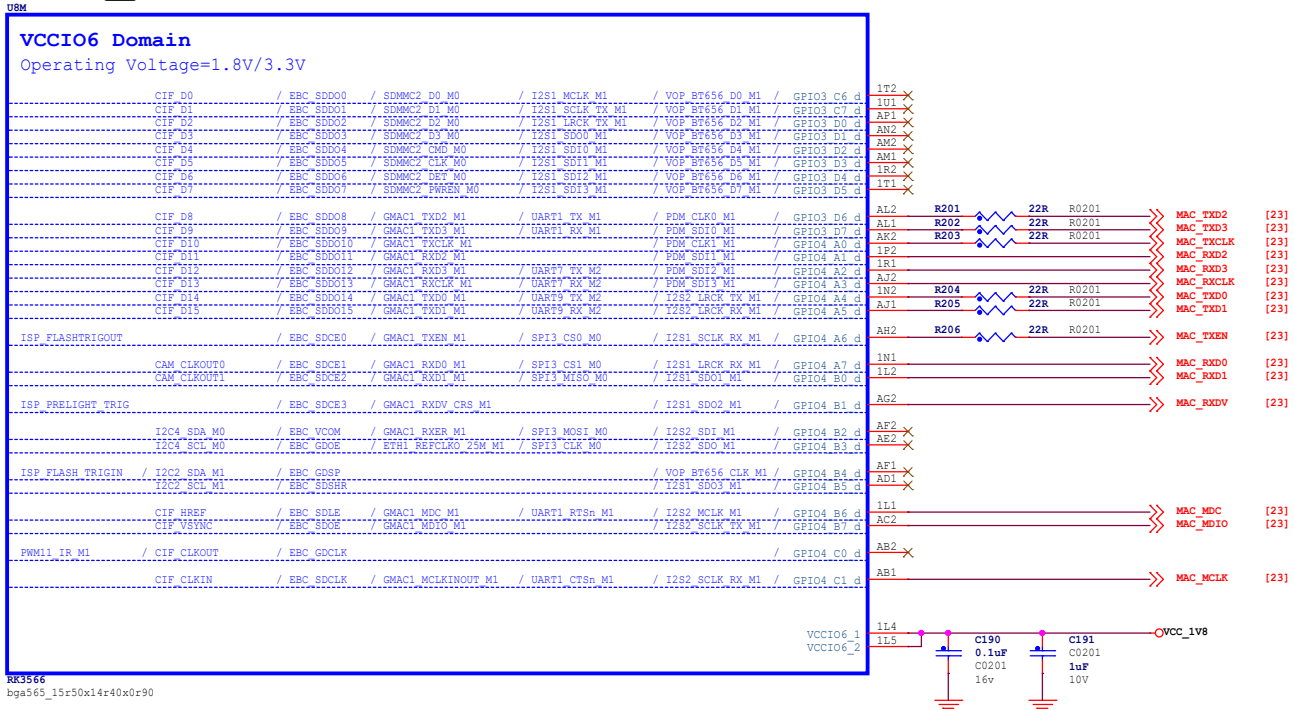
RR3566
bga565_15r50x14r40x0r90

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Title 野火_RK3566_LUBANCAT_1_原理图_V1.2		
Size A3	Document Number MIPI_DSI/EDP/HDMI_Controller	Rev V1.2
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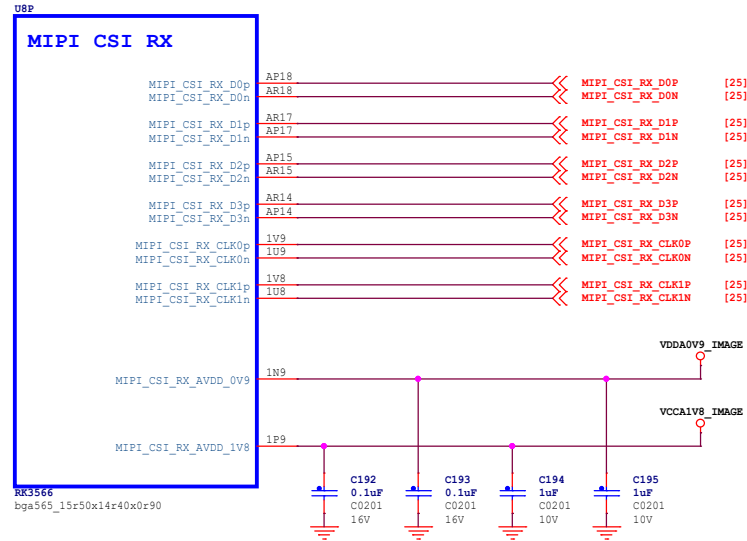
RK3566_M(VCCIO6 Domain)

GMAC_Controller



RK3566
bga565_15r50x14r40x0r90

RK3566_P(MIPI_CSI_RX)

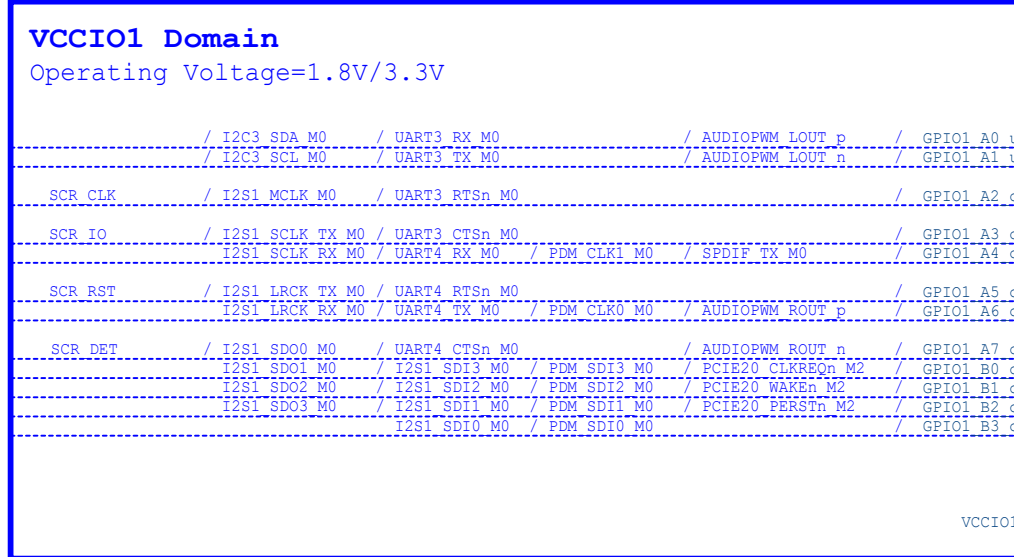


RK3566
bga565_15r50x14r40x0r90

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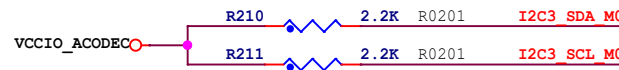
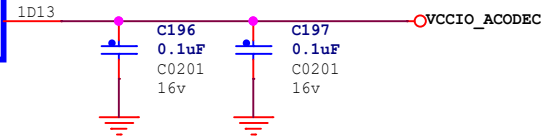
RK3566_H (VCCIO1 Domain)

U8H



RK3566
bga565_15r50x14r40x0r90

VCCIO1



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Title
野火_RK3566 LUBANCAT_1_原理图_v1.2

Size A4	Document Number RK3566_Audio Interface	Rev V1.2
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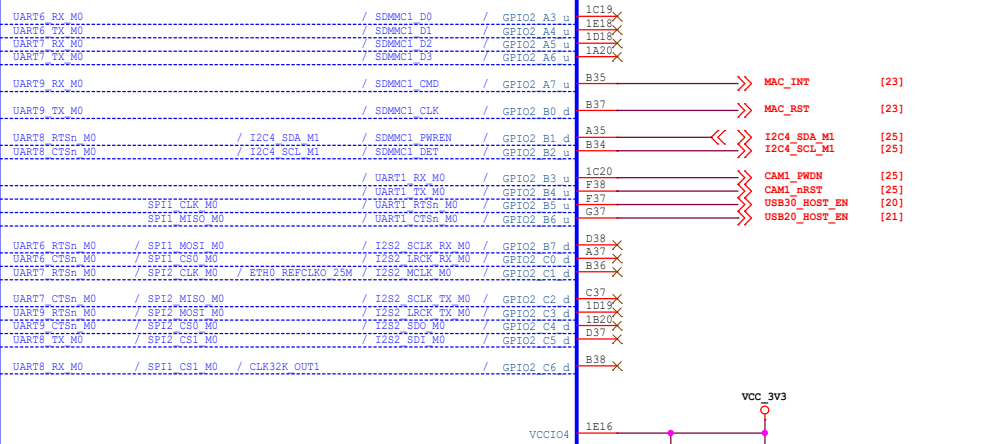
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RK3566_K (VCCIO4 Domain)

UBK

VCCIO4 Domain

Operating Voltage=1.8V/3.3V



RK3566
bga565_15r50x14r40x0r90

RK3566_O (SARADC/OTP)

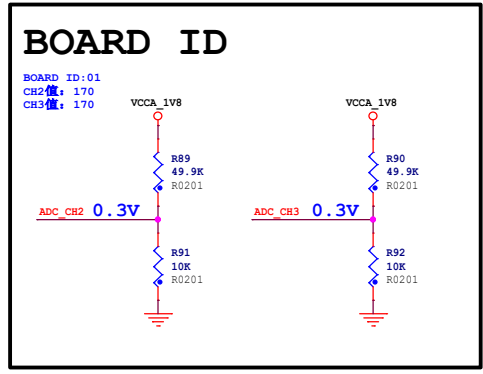
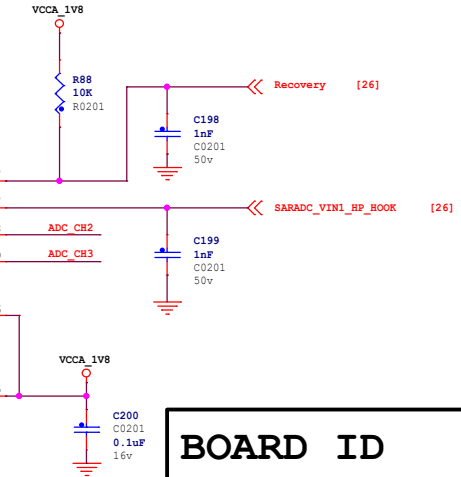
UBO

SARADC

Recovery/

OTP

RK3566
bga565_15r50x14r40x0r90

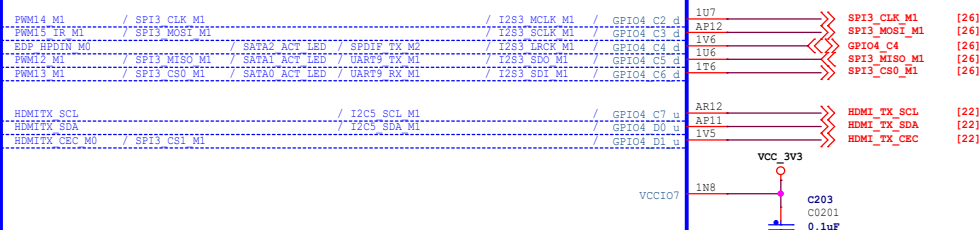


RK3566_N (VCCIO7 Domain)

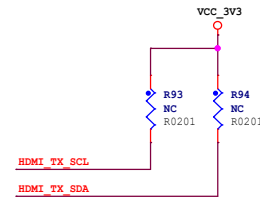
UBN

VCCIO7 Domain

Operating Voltage=1.8V/3.3V



RK3566
bga565_15r50x14r40x0r90



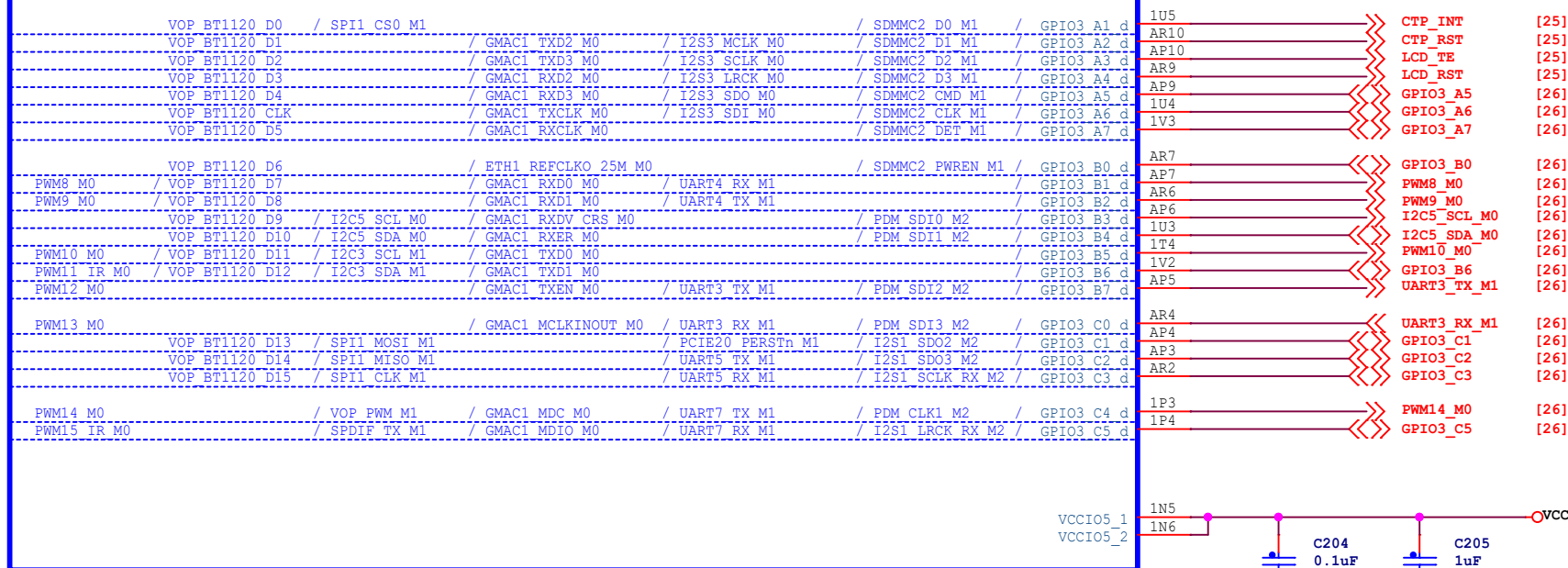
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RK3566_L (VCCIO5 Domain)

U8L

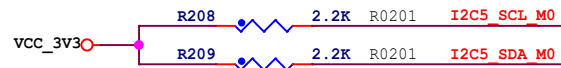
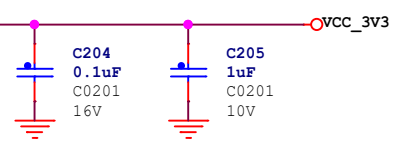
VCCIO5 Domain

Operating Voltage=1.8V/3.3V



RK3566

bga565_15r50x14r40x0r90



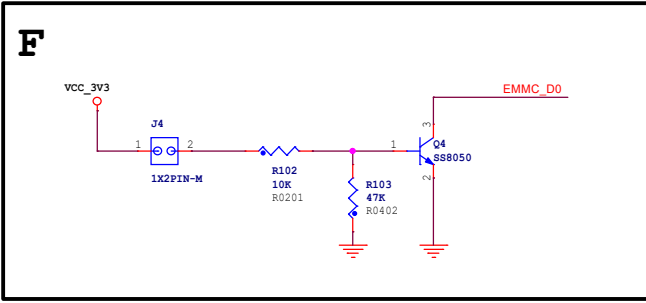
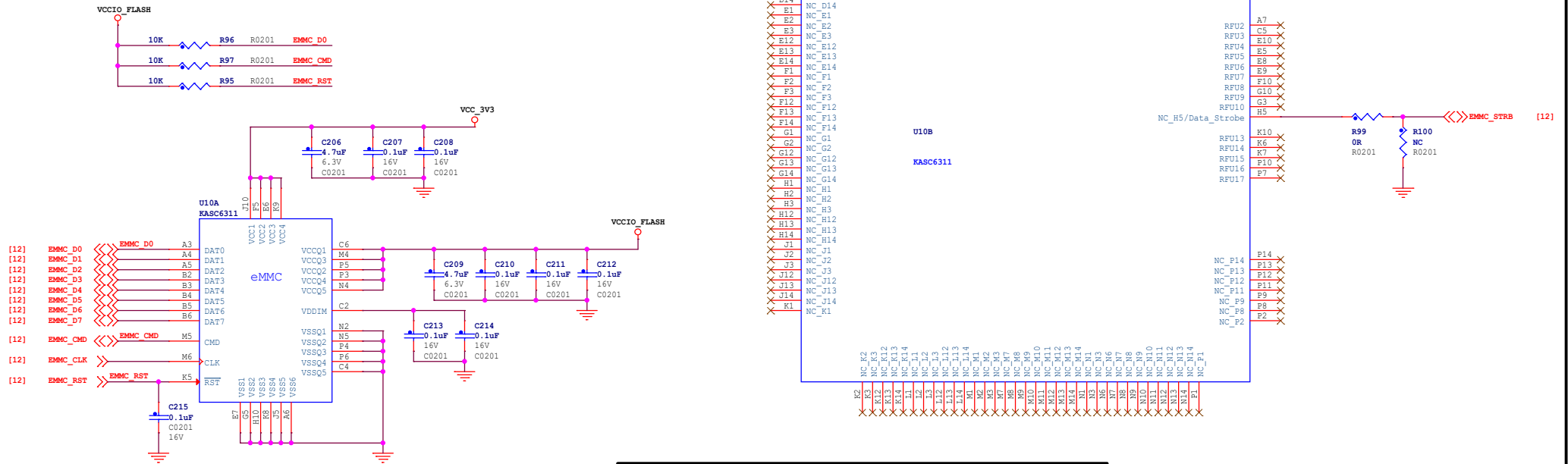
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Title
野火_RK3566 LUBANCAT_1 原理图_v1.2

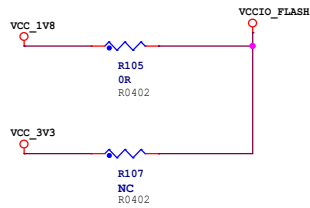
Size A4 Document Number RK3566_VO Interface Rev V1.2

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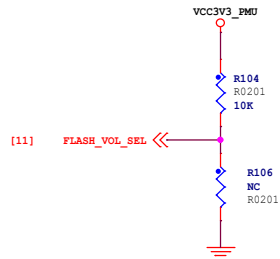
EMMC FLASH



EMMC_IO_Toggle



FLASH_VOL_SEL



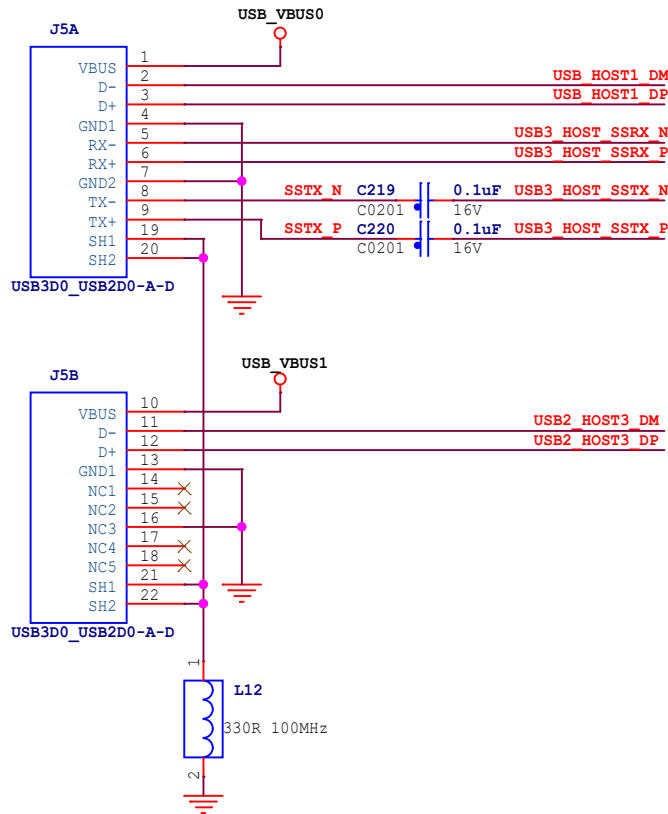
Note:

FLASH_VOL_SEL state decided
to VCCIO2 domain IO driven by default
Logic=L: 3.3V IO driven
Logic=H: 1.8V IO driven

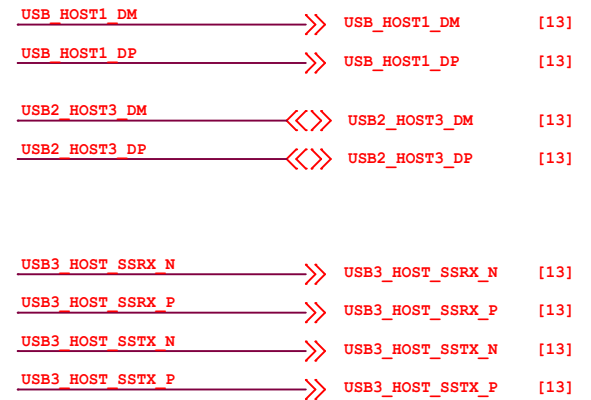
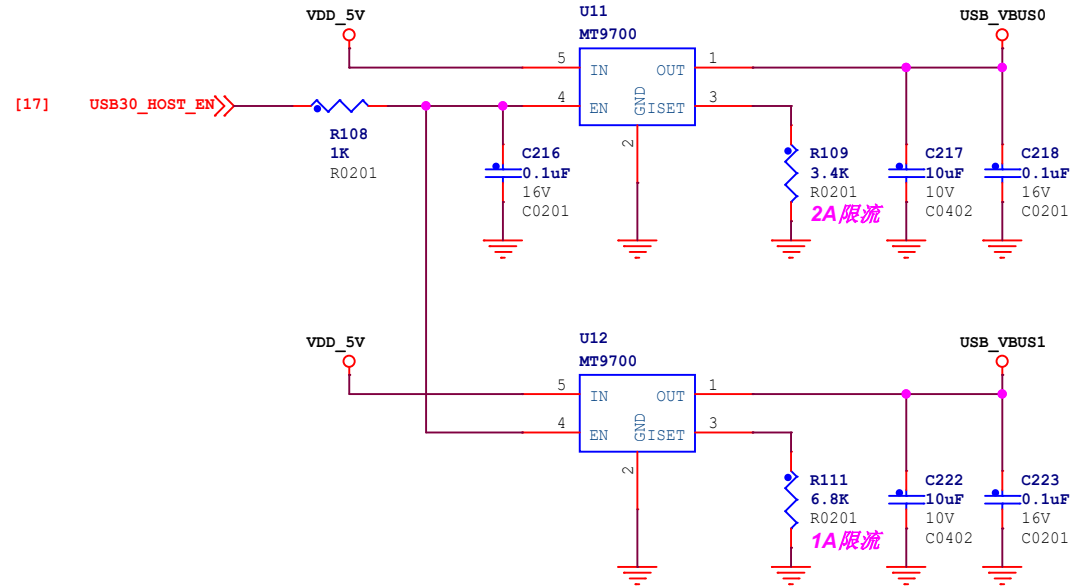
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USB 3.0 HOST x1

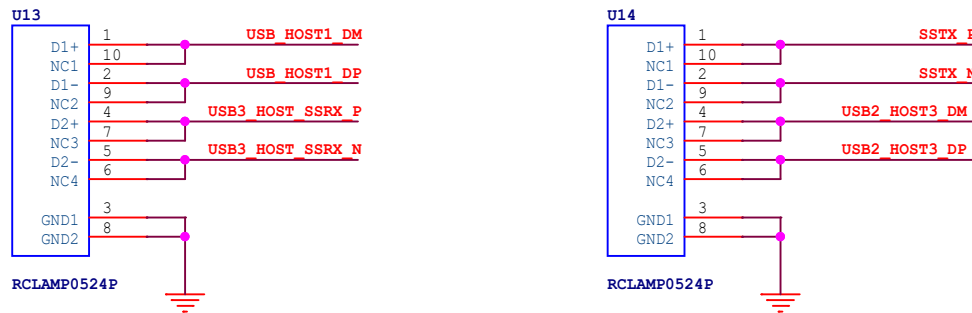
USB 2.0 HOST x1



USB POWER

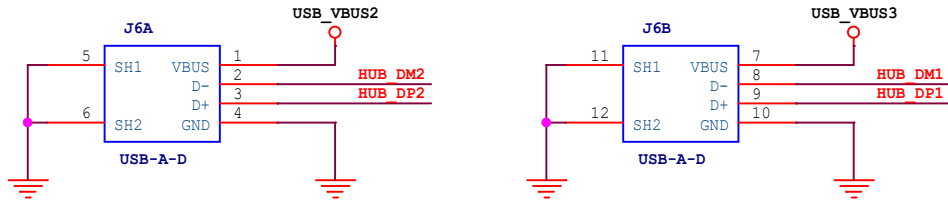


ESD

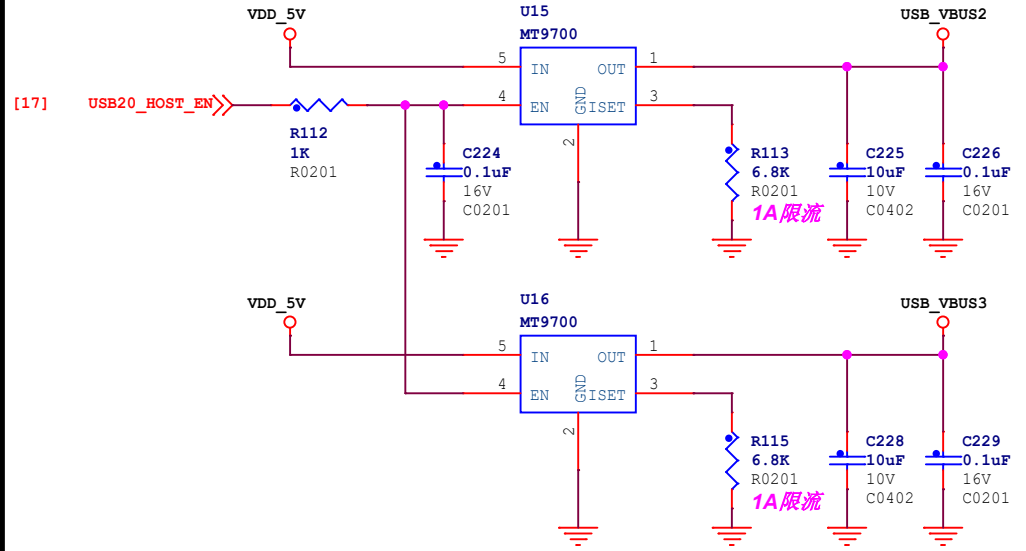


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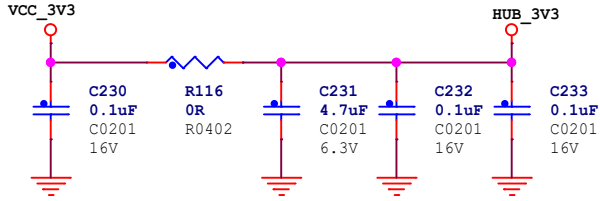
USB 2.0 HOST x2



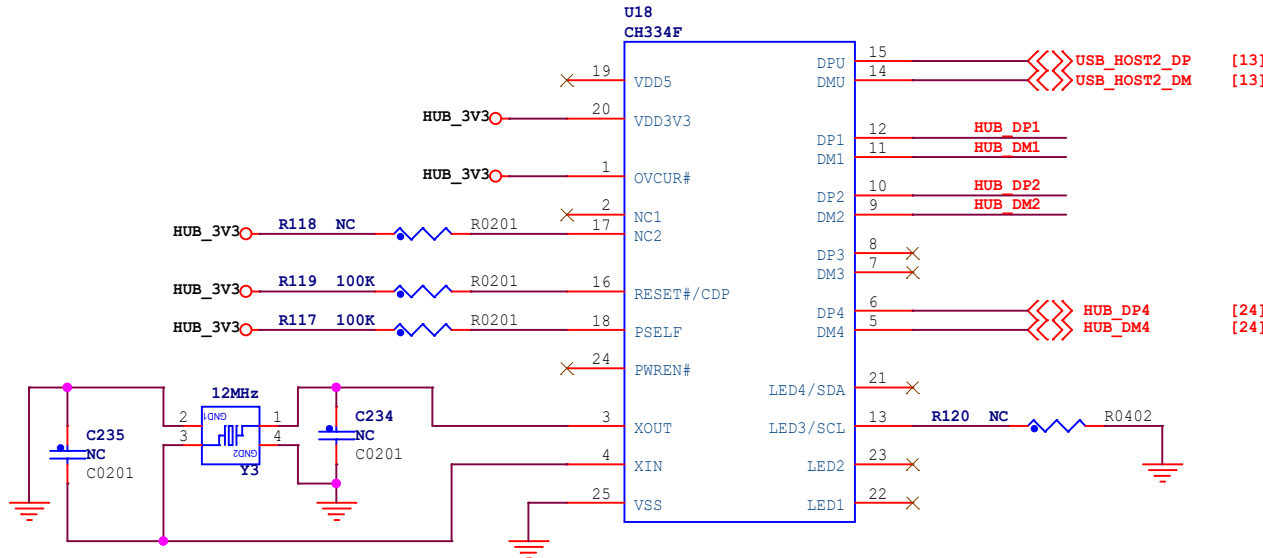
USB POWER



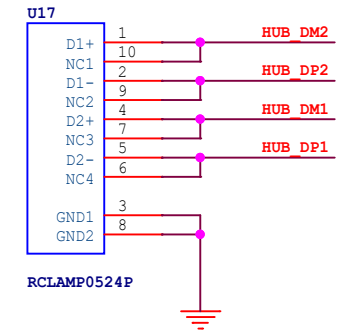
Filter capacitor



USB 2.0 HUB PHY



ESD



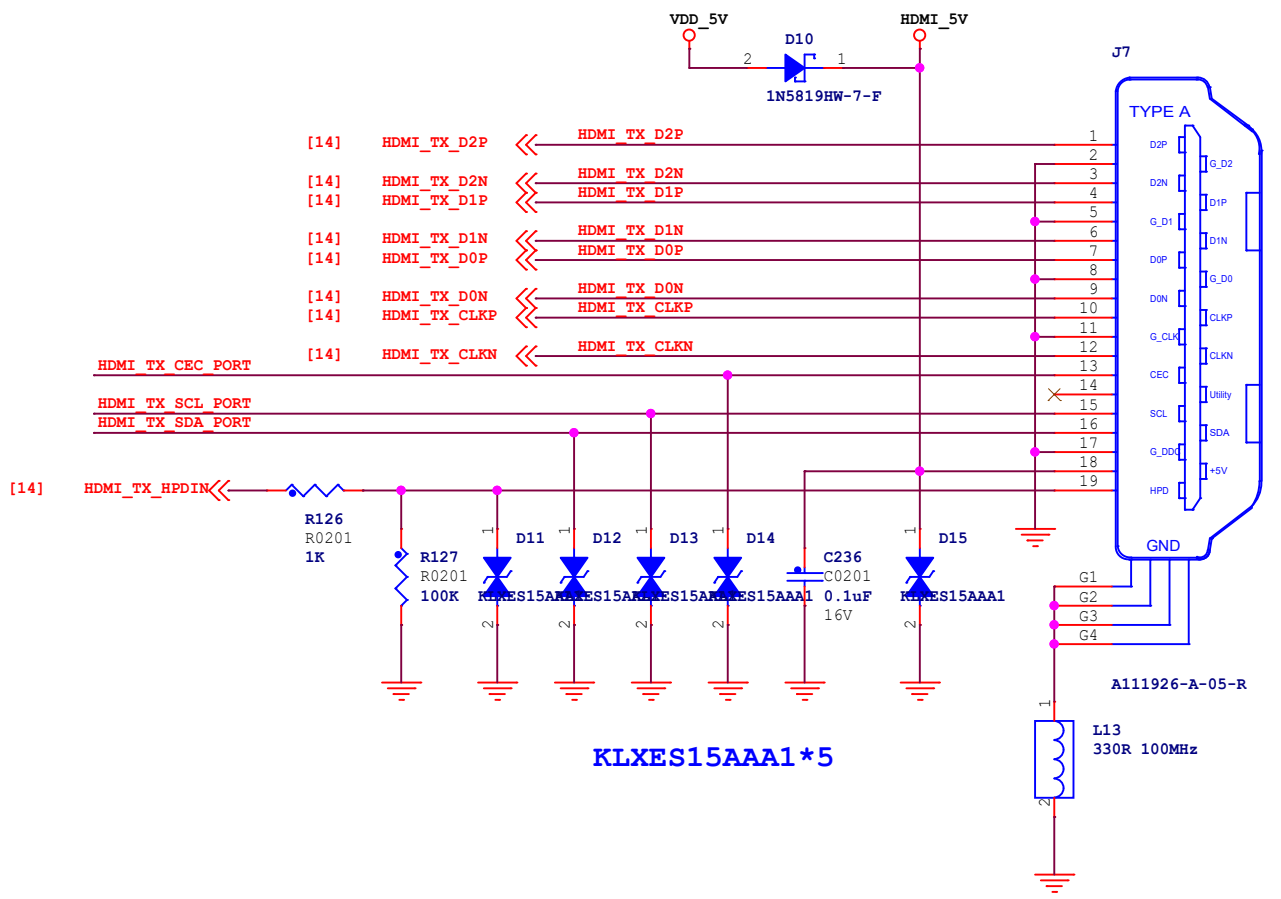
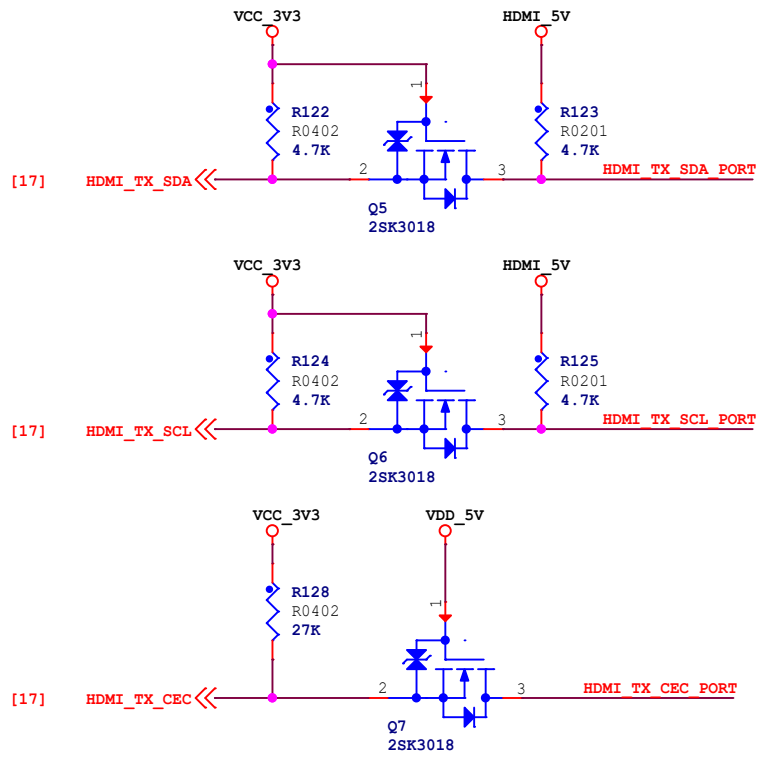
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Title
野火_RK3566 LUBANCAT_1 原理图_V1.2

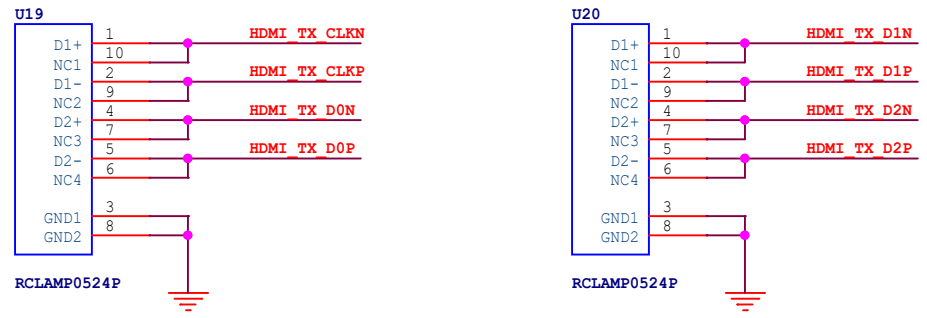
Size A4	Document Number USB_PORT_2	Rev V1.2
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HDMI_PORT



ESD

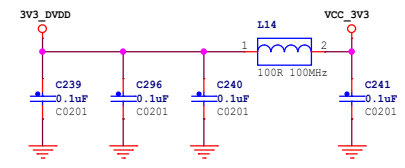
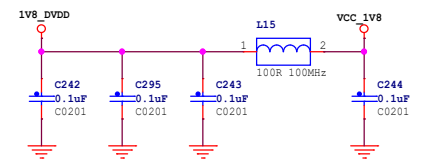
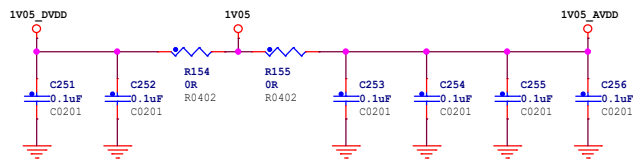
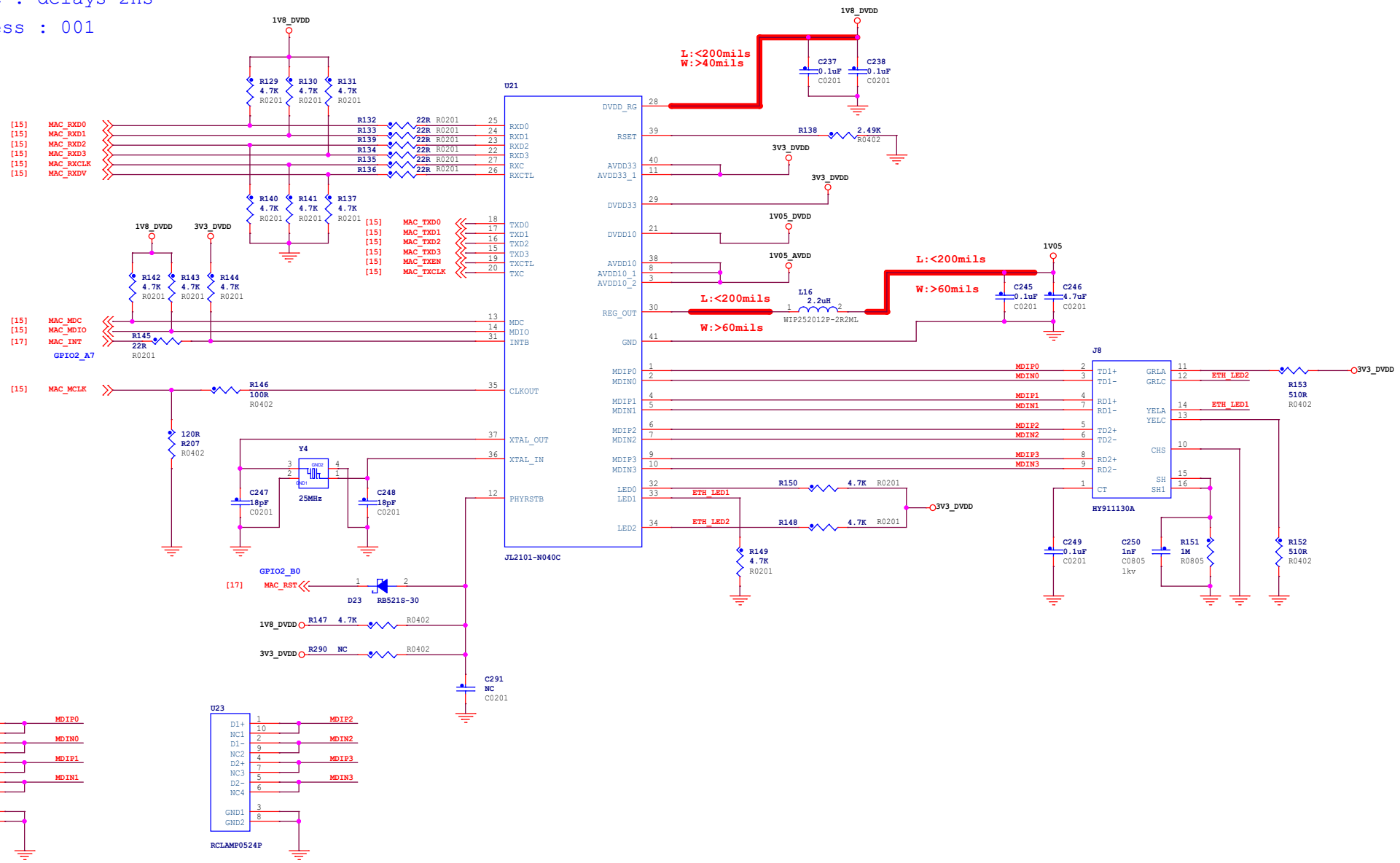


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Title 野火_RK3566 LUBANCAT_1_原理图_v1.2		
Size A4	Document Number HDMI_PORT	Rev V1.2
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JL2101-N040C

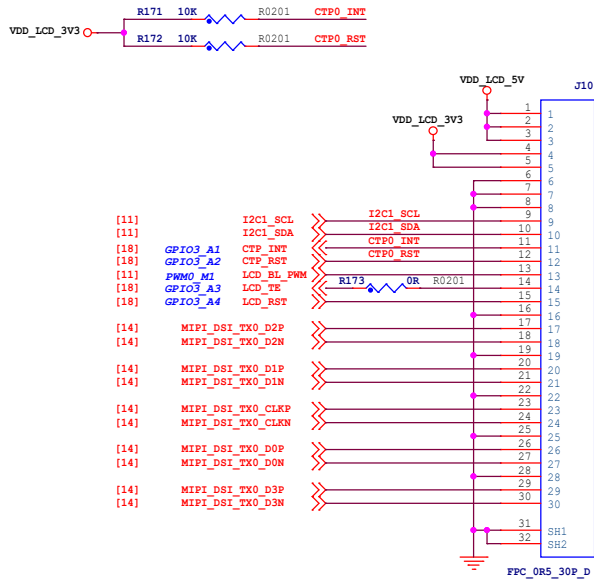
TXC / RXC : delays 2ns

PHY Address : 001

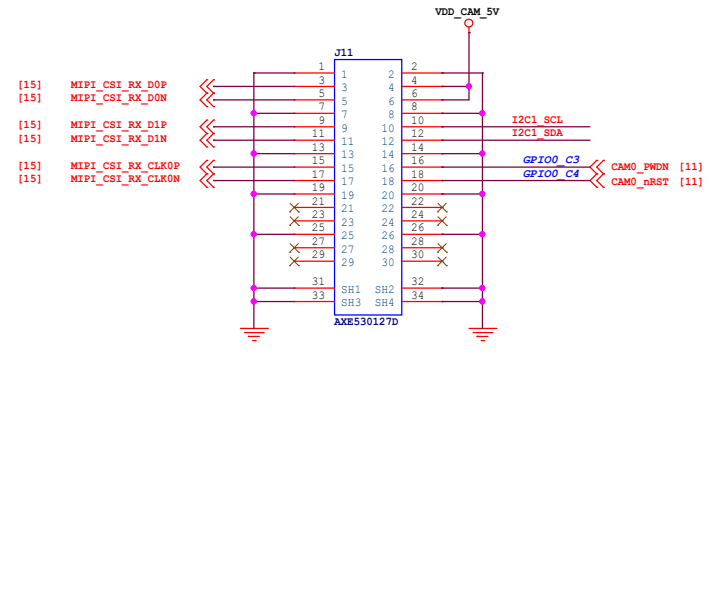


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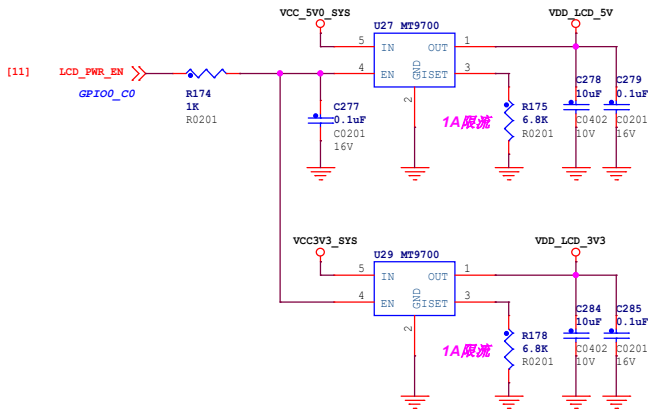
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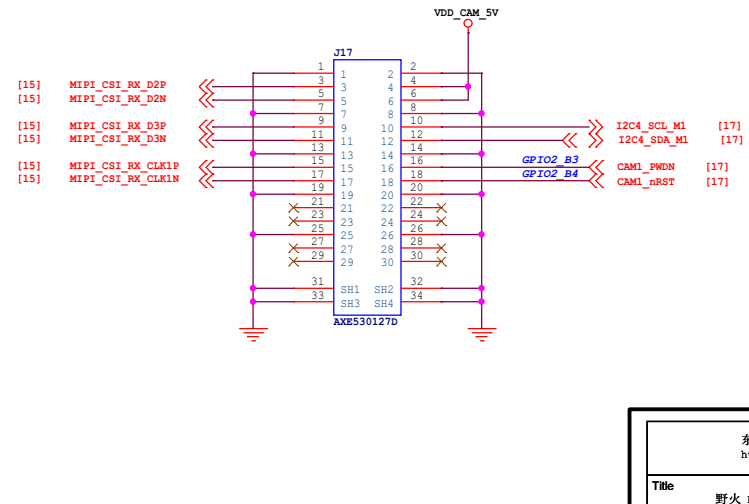
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LCD Power

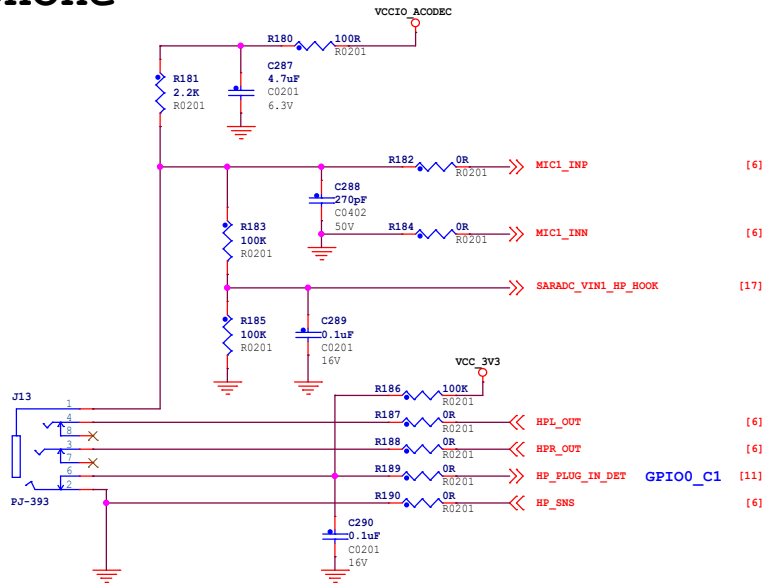


MIPI CSI1 PORT

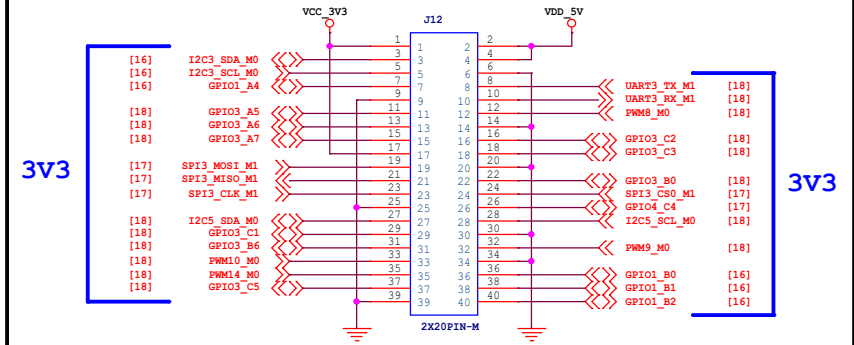


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Size A3	Document Number MIPI DSI/MIPI CSI_PORT	Rev V1.2
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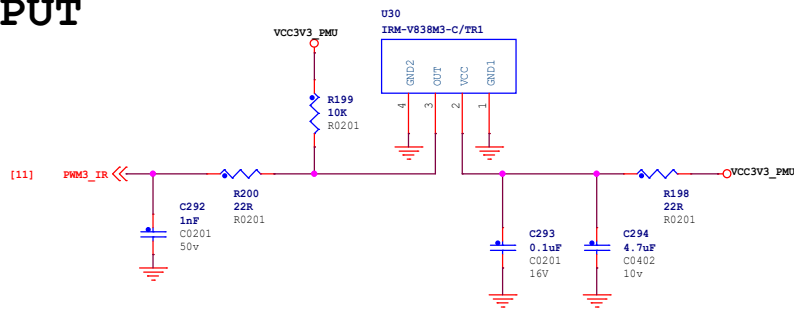
Earphone



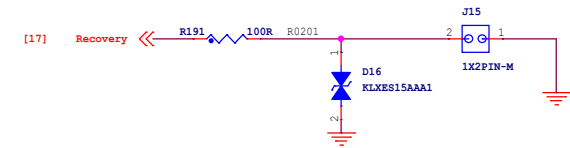
Pin Out



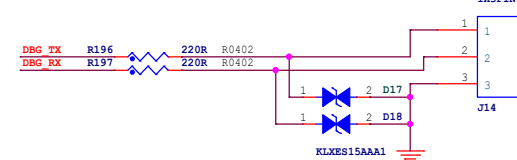
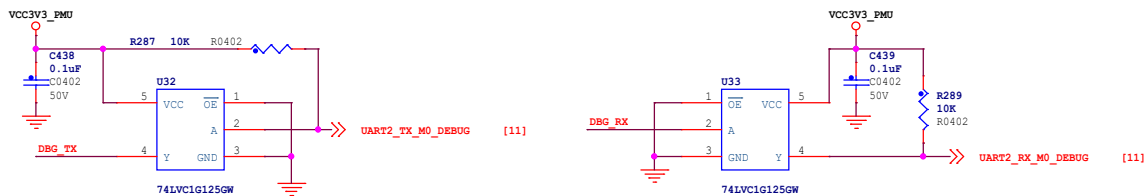
IR_INPUT



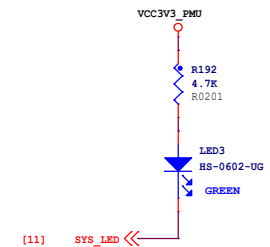
REC KEY



Debug UART2



SYS_LED



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Title	野火_RK3566 LUBANCAT_1 原理图_v1.2	
Size	Document Number	Rev
A3	DEBUG/KEY/LED/IR_IN/PIN_OUT	V1.2
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