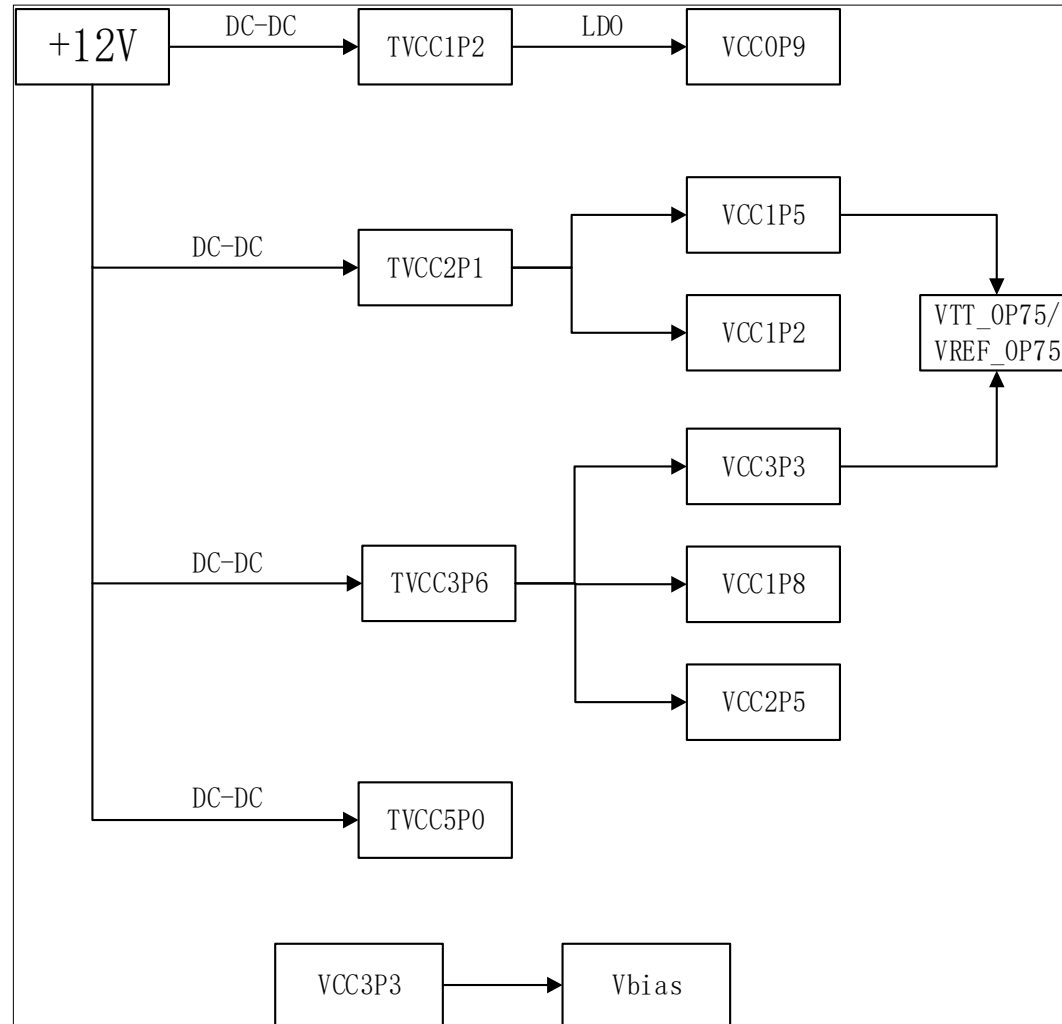


PAGE1	Block Diagram
PAGE2	POWER TREE
PAGE3	Bank123-DDR3*2-ADC
PAGE4	BANK0-GPIO_1P5-4KEY-4LED
PAGE5	BANK45-HDMI-U2.0-CLK-FLASH
PAGE6	BANK67MI-MIPI_R/T-LVDS_T/R
PAGE7	POWER-DCDC
PAGE8	POWER-LDO
PAGE9	BANK-POWER&JTAG

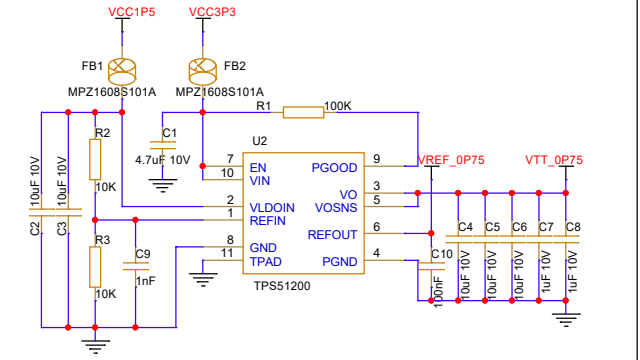
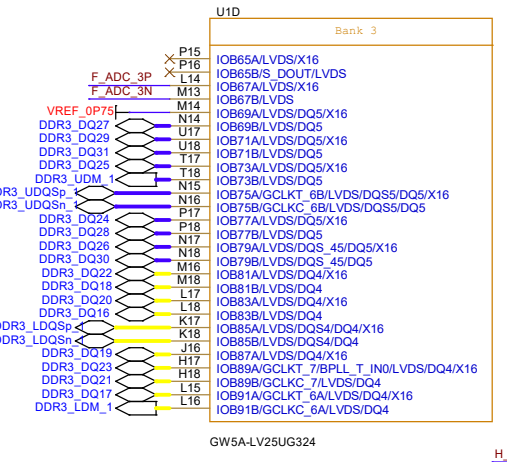
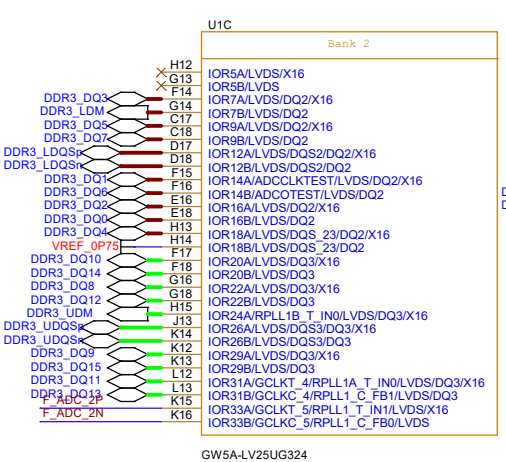
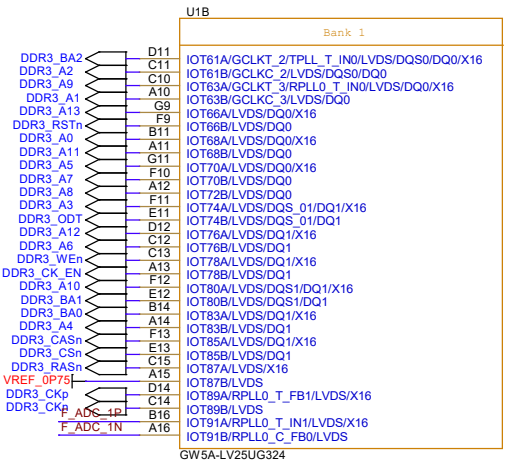
POWER TREE

第一级DC-DC电源转换芯片的最大输出电流是6A
第二级LDO电源转换芯片的最大输出电流是3A
实际转换电流的大小还应结合电源芯片的实际功率来看

12V (2A) 适配器

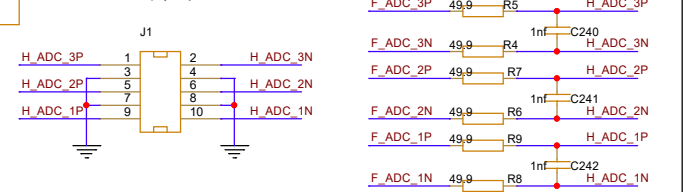


Title		
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A3	POWER TREE	1.1
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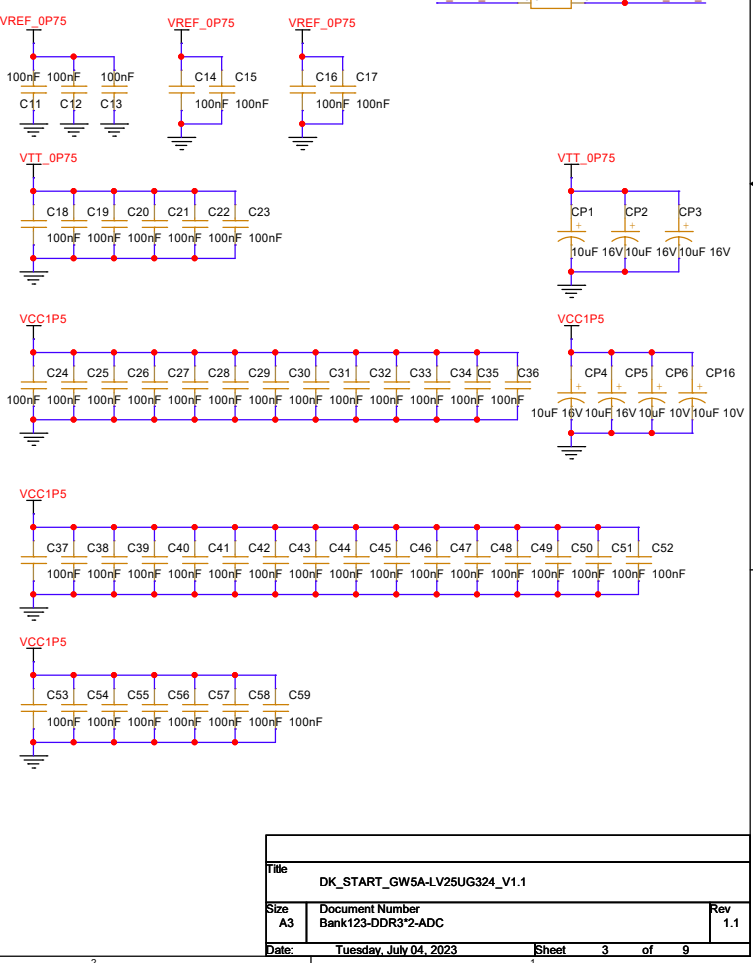
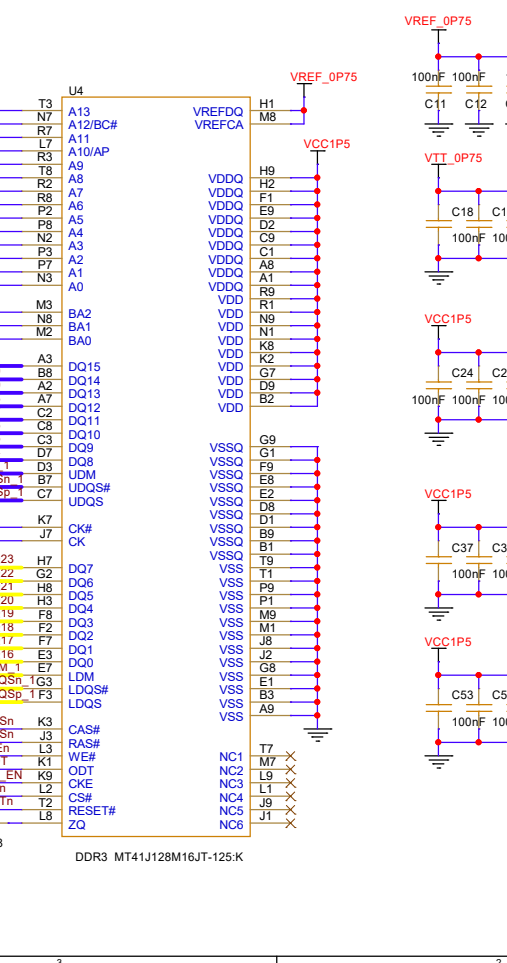
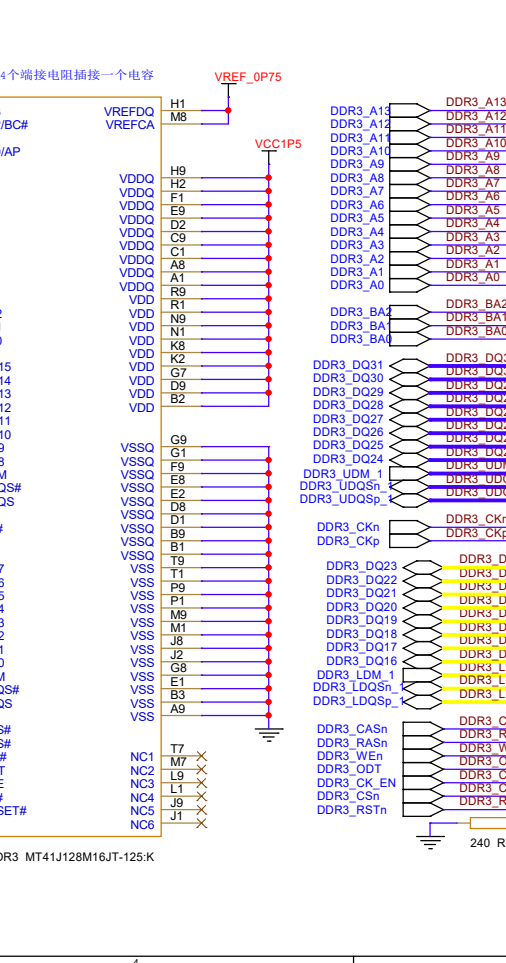
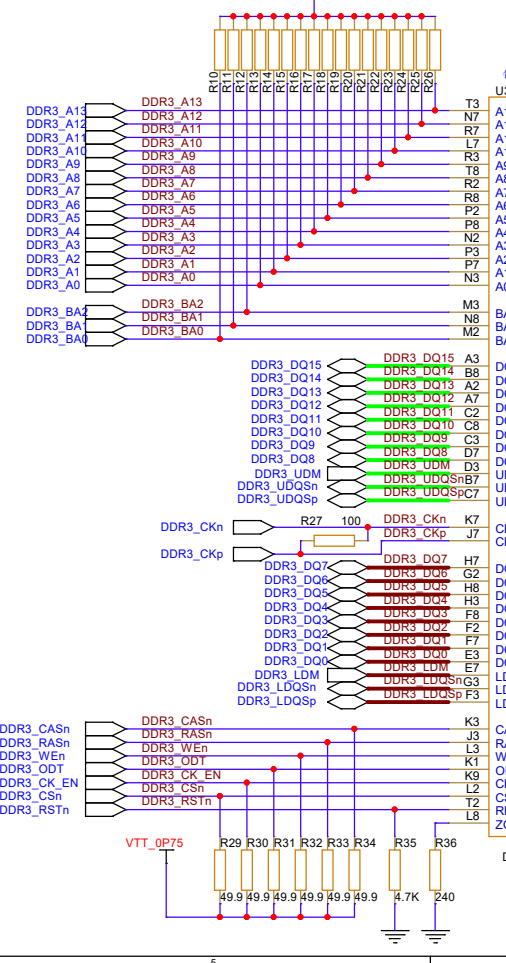


ADC测试 (BANK1)

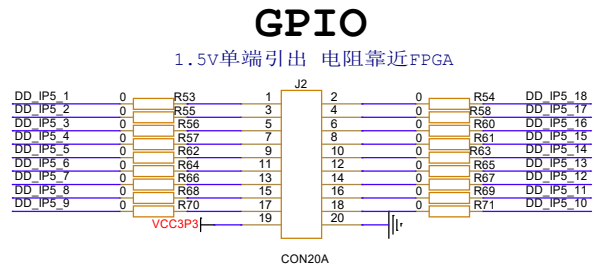
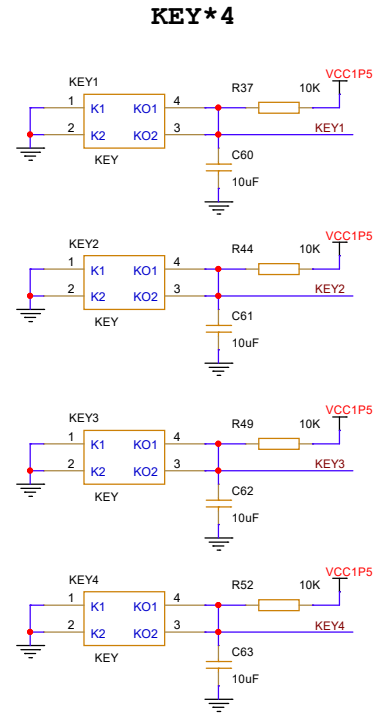
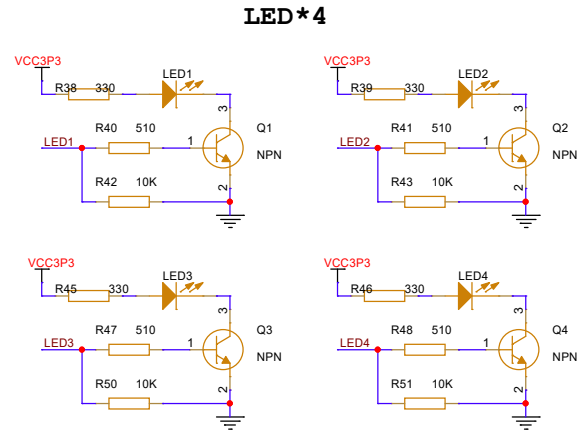
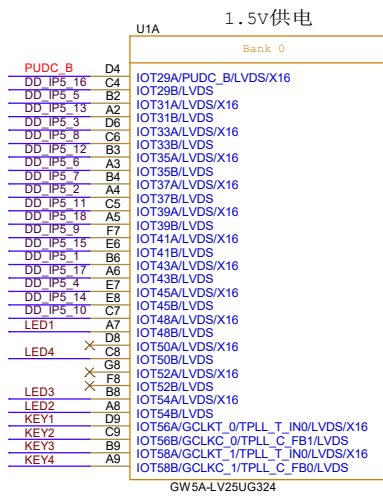
抗混叠滤波

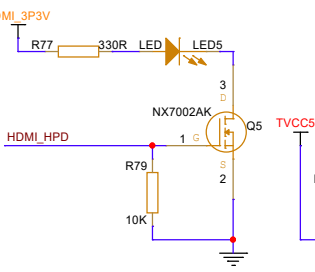
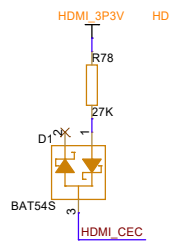
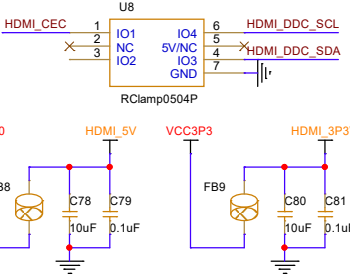
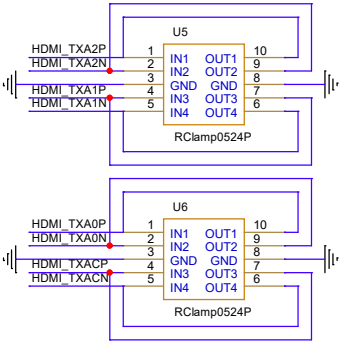
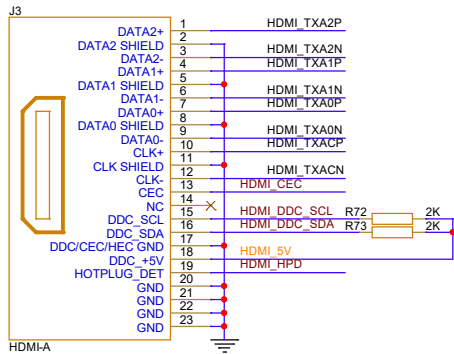


DDR3*2

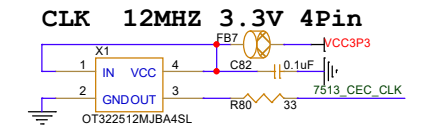
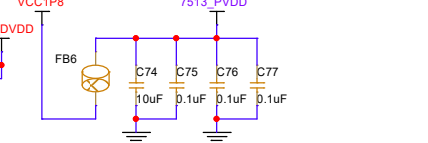
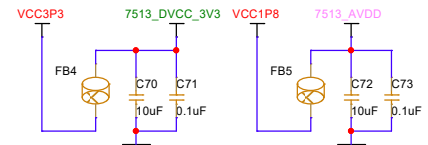
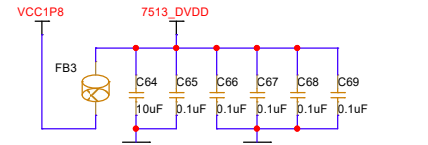
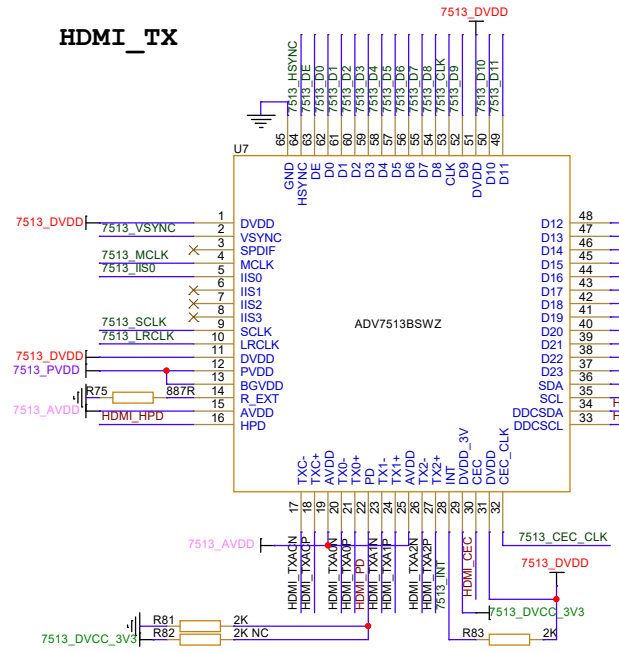


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HDMI_TX

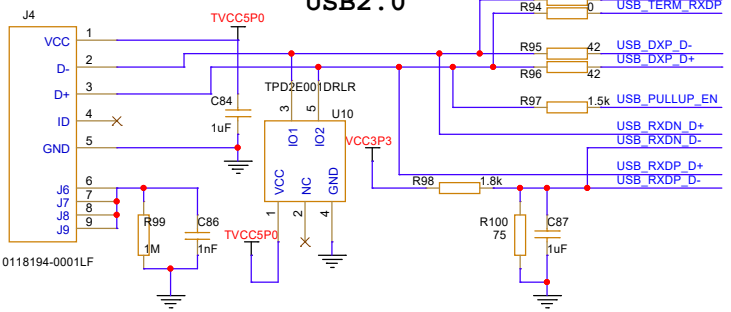


3.3V供电

RECONFIG_N	V2	IOB1A/S_RECONFIGN
7513_D1	T4	IOB2A/LVDS/X16
7513_LRCLK	N5	IOB4A/S_D08/SDA/LPLL1_T_FB0/LVDS/X16
7513_VSYNC	P6	IOB4B/D09/SCL/LVDS
7513_HSYNC	R7	IOB6A/LVDS/X16
7513_D5	T7	IOB8B/LVDS
7513_SCLK	R3	IOB8A/S_D05/SSPI_SO/SSI1/LVDS/X16
7513_D0	T3	IOB8B/S_D06/LVDS
7513_D10	U5	IOB10A/S_D03/SSPI_CS/NLVDS/X16
7513_D11	V5	IOB10B/S_D04/SSPI_SI/SSI0/LVDS
7513_MCLK	R5	IOB12A/GCLKT_10B/S_D07/SSPI_WPN/SSI2/LVDS/X16
7513_D2	T5	IOB12B/GCLKC_10B/S_RDWR_B/LPLL1_C_IN1/LVDS
7513_IIS0	N6	IOB14A/SSPI_CLK/LVDS/X16
7513_D4	P7	IOB14B/SSPI_HOLDN/SSI3/LVDS
7513_D3	T6	IOB16A/LVDS/X16
7513_D12	V6	IOB16B/LVDS
7513_D6	P8	IOB18B/LVDS
7513_D13	U7	IOB20A/LVDS/X16
7513_D14	V7	IOB20B/LVDS
7513_D15	U8	IOB22A/LVDS/X16
7513_D18	V8	IOB22B/LVDS
7513_DE	M8	IOB24A/LVDS/X16
7513_CLK	N8	IOB24B/LVDS
7513_D17	M10	IOB26A/GCLKT_12/LVDS/X16
7513_D7	N9	IOB26B/GCLKC_12/LVDS

GW5A-LV25UG324

USB2.0

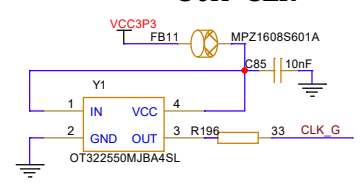


3.3V供电

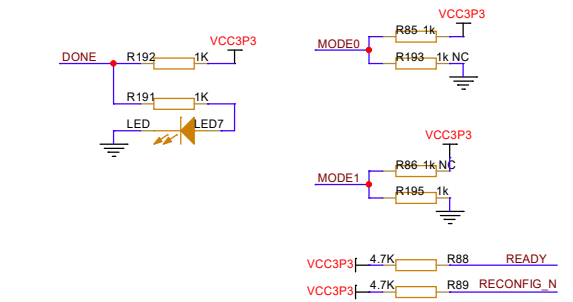
CLK_G	T9	IOB29A/GCLKT_11A/LVDS/X16
USB_DXP_D-	X9	IOB29B/GCLKC_11A/LVDS
USB_DXP_D+	V10	IOB31A/GCLKT_10A/D14/LVDS/X16
USB_RXDN_D+	R10	IOB33A/GCLKT_9D13/BPLL_T_INT/LVDS/X16
USB_RXDN_D-	T10	IOB33B/GCLKC_9S_EN/CCLK/LVDS
READY	U3	IOB35A/GCLKT_8/LVDS/X16
FLASH_SPI_CS_N	V3	IOB35B/GCLKC_8/LVDS
USB_RXDP_D+	U11	IOB37A/S_READY/LVDS/X16
USB_RXDP_D-	V11	IOB37B/S_MCSN_CS0_B/LVDS
USB_TERM_RXDN	N10	IOB39A/LVDS/X16
USB_TERM_RXDP	P11	IOB39B/LVDS
USB_PULLUP_EN	T12	IOB41A/LVDS/X16
7513_D20	V12	IOB41B/LVDS
7513_D19	R11	IOB43A/LVDS/X16
7513_D18	T11	IOB43B/LVDS
7513_D8	M11	IOB45A/LVDS/X16
7513_D9	N11	IOB45B/LVDS
7513_SDA	U13	IOB48A/LVDS/X16
7513_D21	V13	IOB48B/LVDS
MODE1	N12	IOB50A/D11/LVDS/X16
FLASH_SPI_WP_N	X14	IOB50B/D12/LVDS
FLASH_SPI_HOLD_N	V14	IOB52A/S_MODE1/LVDS/X16
7513_INT	V15	IOB52B/S_D10/LVDS
FLASH_SPI_MISO	R13	IOB54A/GCLKT_11B/S_D10/MS02/LVDS/X16
7513_D23	V16	IOB54B/GCLKC_11B/S_D02/MS03/BPLL_C_FB1/LVDS
7513_D22	U16	IOB56A/LVDS/X16
FLASH_SPI_CLK	R15	IOB56B/LVDS
MODE0	T15	IOB58A/D00/DIN/MISO/MSO1/LVDS/X16
DONE	V17	IOB58B/S_MOSI/S_MSO0/S_CSI_B/LVDS
		IOB60A/LVDS/X16
		IOB60B/LVDS
		IOB62A/CCLK/LVDS/X16
		IOB62B/S_MODE0/LVDS
		IOB64A/S_DONE

GW5A-LV25UG324

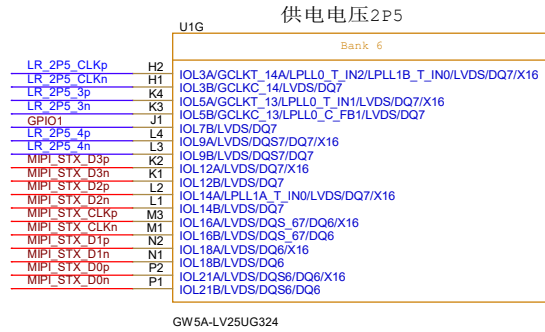
50M-CLK



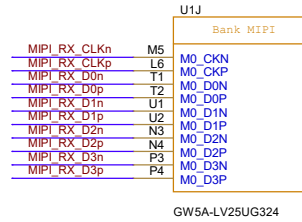
CONFIG



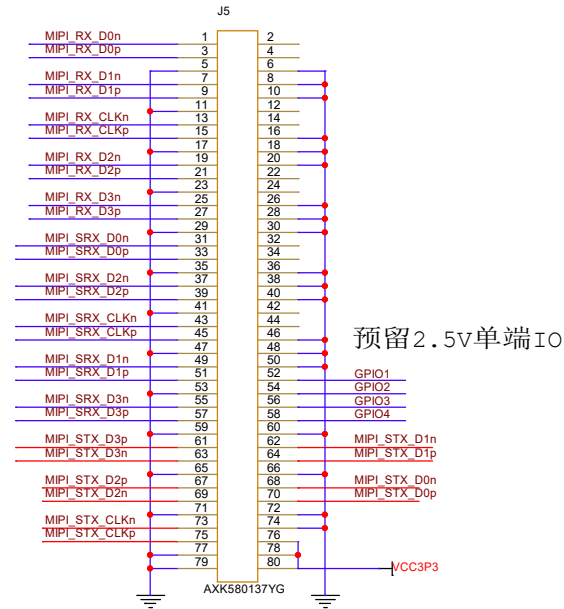
MIPI-RX/TX



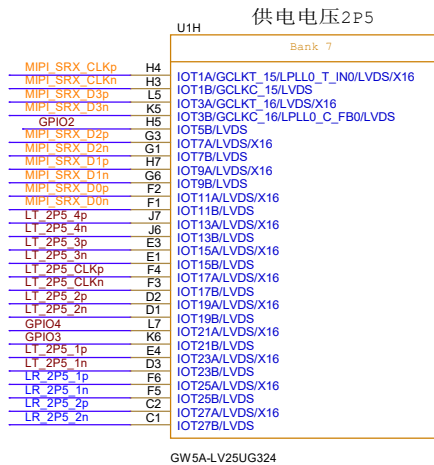
EV25UG324S当作普通IO
LV25UG324是MIPI 收发硬核



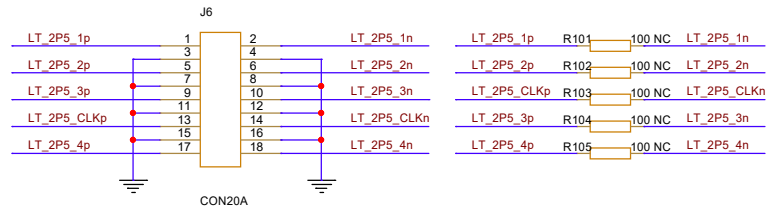
SRX /STX 代表mipi软核



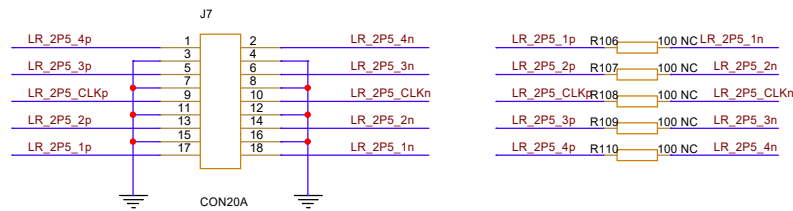
MIPI或LVDS的输出时钟可以放置在普通的差分对引脚
MIPI或LVDS的输入时钟必须放置在clk差分对引脚
MIPI或LVDS的输入输出放在不同侧，尽量不要交叉

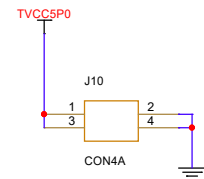
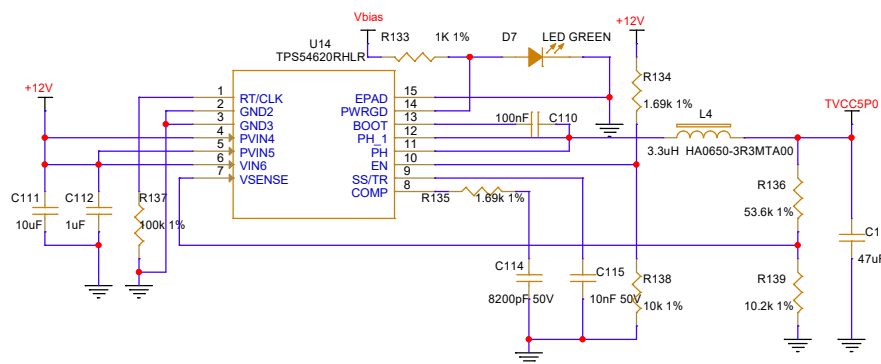
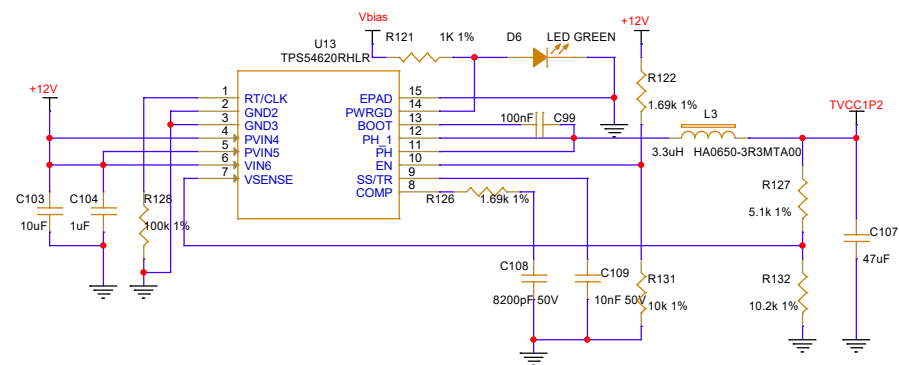
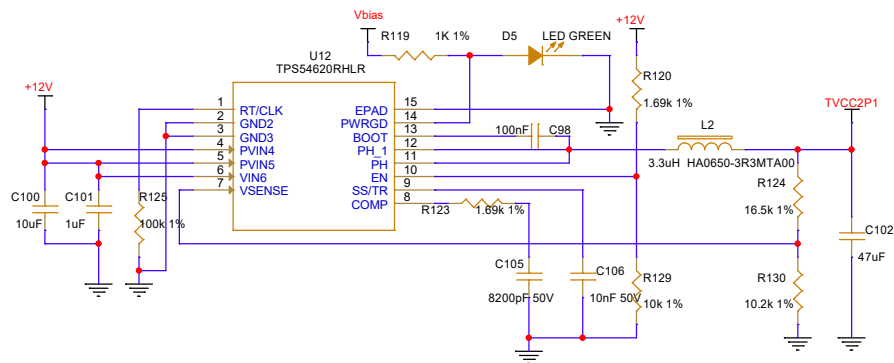
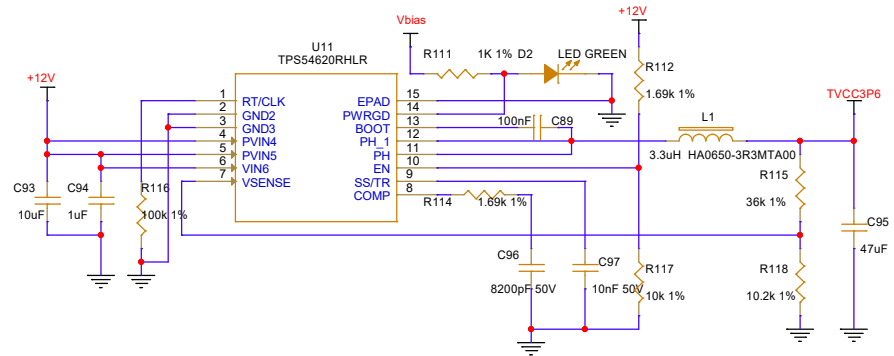
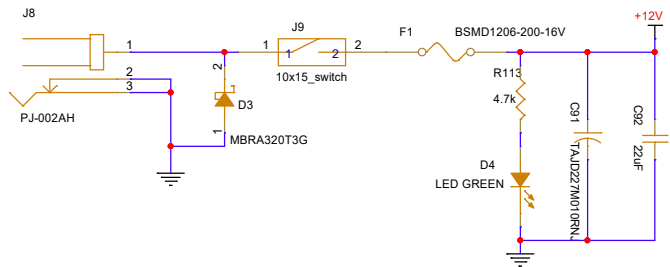


LVDS TX

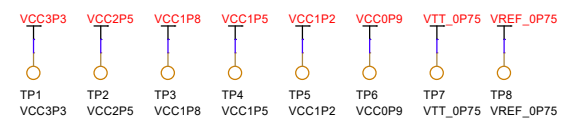


LVDS RX

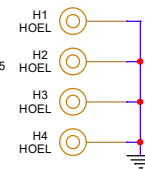




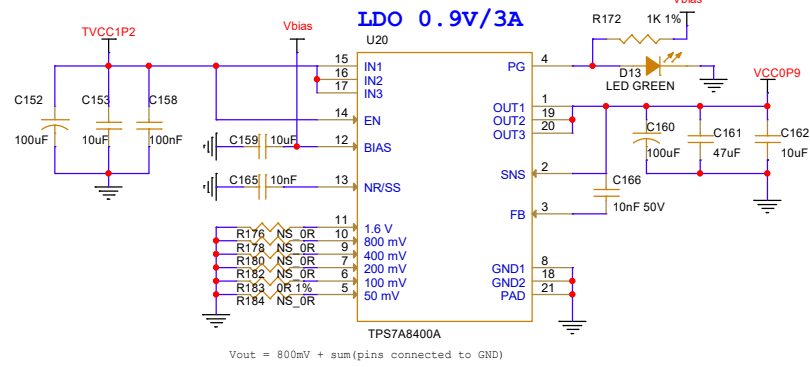
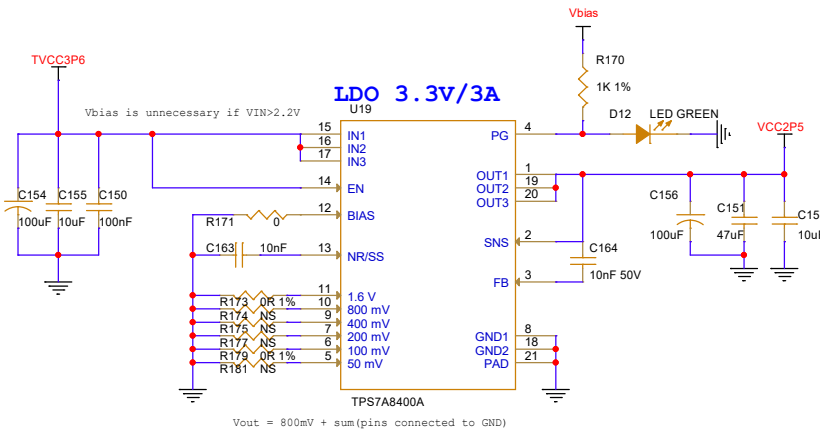
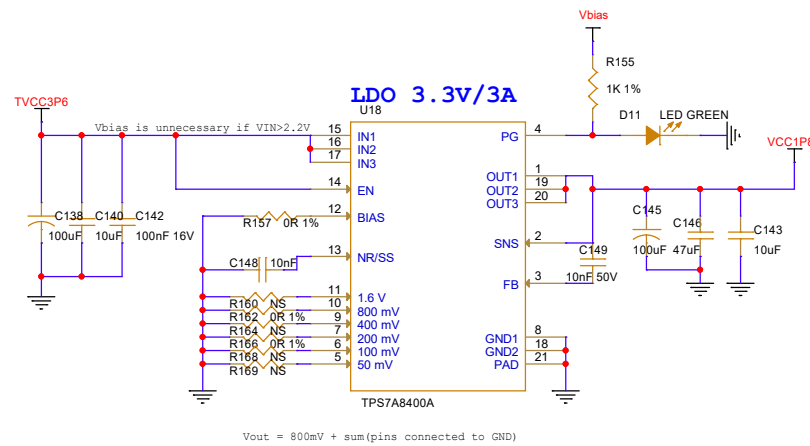
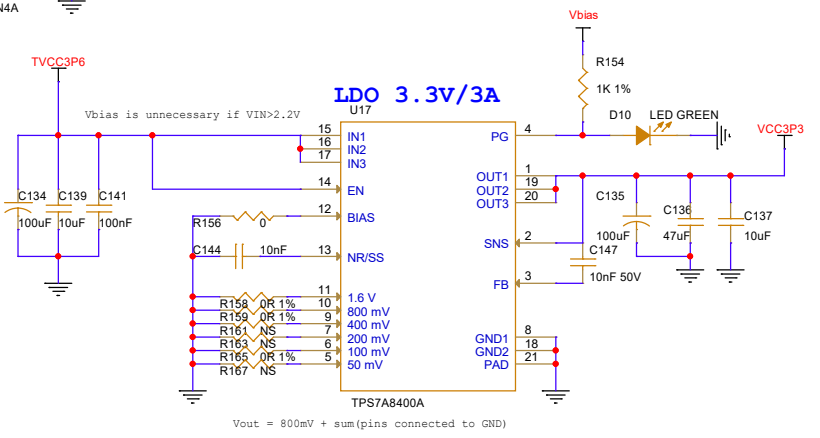
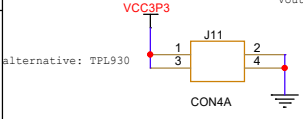
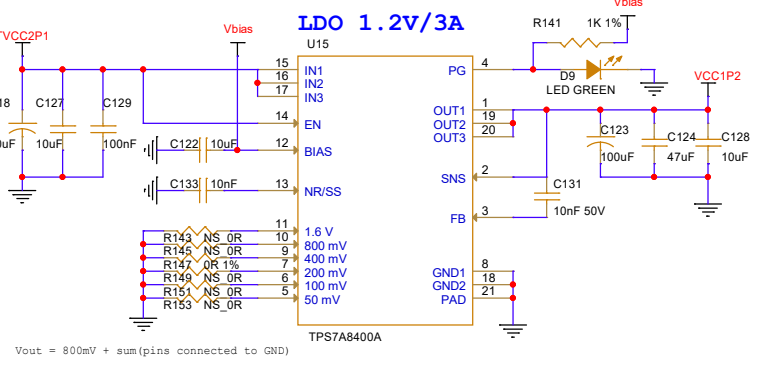
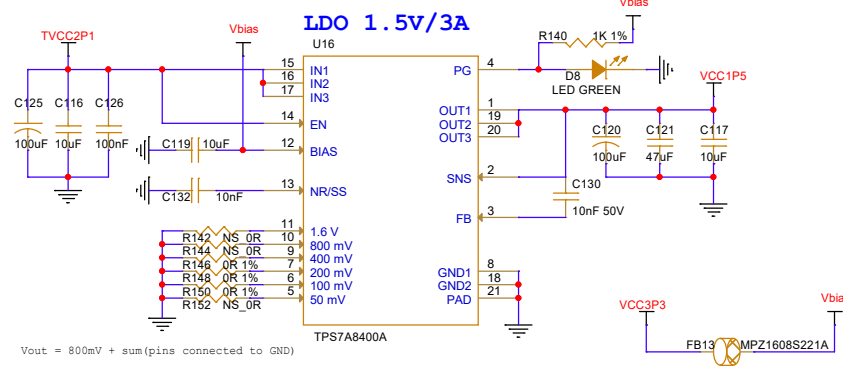
测试孔



安装孔



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DK_START_GW5A-LV25UG324_V1.1		
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A3	POWER-LDO	1.1
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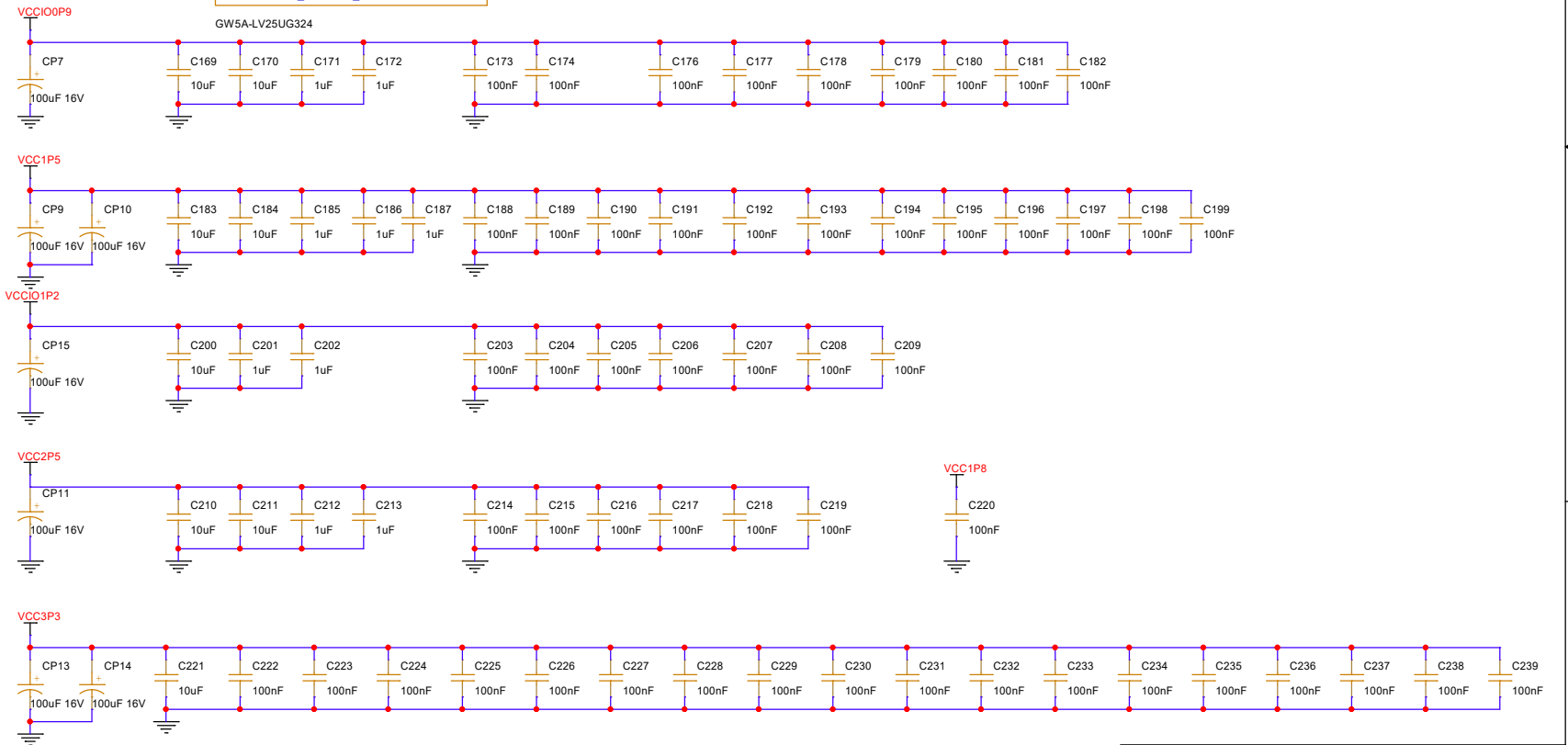
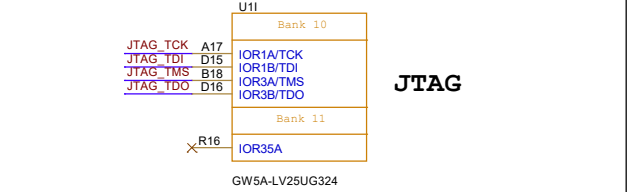
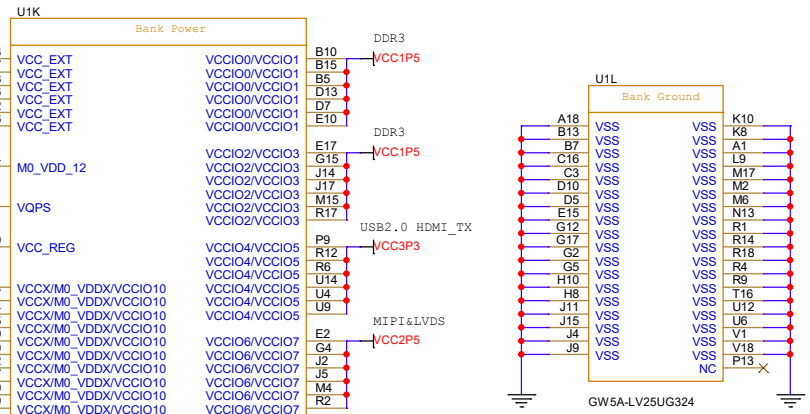
Gowin	Voltage range (V)
VCC_EXT	1.14-1.98
VCC/VCC/m0_vdda/m0_vddd	0.855-1.0
VCC_REG	1.14-3.3
m0_vdd_12(vcc_1p2)	1.14-1.32
VCCX/mo_vddx/VCCIO10	2.375-3.465
vqps	1.8
VCCIO0/VCCIO1	1.14-3.465
VCCIO2/VCCIO3	1.14-3.465
VCCIO4/VCCIO5	1.14-3.465
VCCIO6/VCCIO7	1.14-3.465

LV324的VCC_EXT与EV324S手册描述的应该不一样
VCC_EXT 接到1.2V, mipi_obuf才能生效
VQPS eFuse写入所需电压
VCC_REG Regulator电压
VCCX 辅助电压供电管脚
VCC 核电压供电
VCC clock tree电压供电管脚
M0_VDD* MIPI电压供电

LV25UG324中作为VCC_EXT供电管脚
EV25UG324S中作为普通IO
空贴0欧姆电阻

LV25UG324中作为MIPI供电管脚
EV25UG324S中作为普通IO
空贴0欧姆电阻

LV25UG324中作为VCC3P3供电管脚
EV25UG324S中作为VCC_EXT供电管脚
空贴1P2电源连接磁珠



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