

VERSION HISTORY

Index:	Revision	Description	Date	Drawn	Checked	Approved
P01 BLOCK	Ver 1.0	Initial Edition	2026/02/03	QYF		
P02 D125CxR						
P03 USB/POWER						
P04 FLASH/TF CARD/SD NAND						
P05 RS485/CAN/ADC						
P06 WIFI+BT						
P07 CAMERA						
P08 MIPI/CTP						
P09 RGB/RTSP						
P10 AUDIO						

GPIO ASSIGNMENT

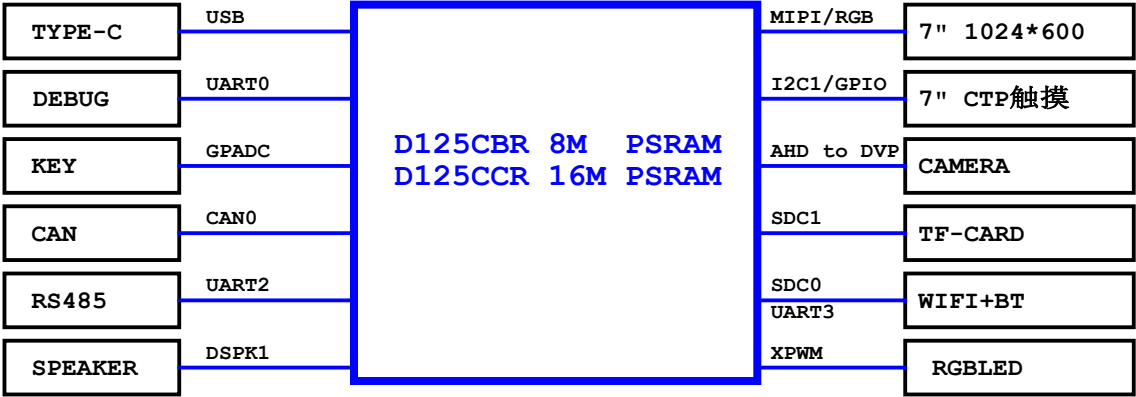
PIN	Define	CFG	Function
PA0	UART0_TX	5	DEBUG/ BOOT
PA1	UART0_RX	5	
PA2	GPADC	2	
PA3		1	
PA4	CAN0-TX	4	CAN
PA5	CAN0-RX	4	
PA8	RTP-XP/CTS	2/7	RTP/ UART3
PA9	RTP-YP/RTS	2/7	
PA10	RTP-XN/TX	2/7	
PA11	RTP-YN/RX	2/7	
PN0	USB-DM	2	USB
PN1	USB-DP	2	

PIN	888	666	565	MIPI	CFG	Function	Define	CFG	Function
PD0	B0				2	RGB888 RGB666 RGB565	CTP_RST	1	CTP
PD1	B1				2		CTP_INT	1	
PD2	B2				2		I2C1-SCL	4	
PD3	B3				2		I2C1-SDA	4	
PD4	B4				2		DVP-RESET	1	
PD5	B5				2		DVP-IRQ-PWDN	1	
PD6	B6	B2			2		PA_SHDN	1	SPEAKER
PD7	B7	B3			2		WIFI_PWR_ON	1	WIFI
PD8	G0	B4	B3		2		XPWM2	4	RGBLED
PD9	G1	B5	B4		2		USB_SWITCH	1	
PD10	G2	B6	B5		2	MIPI	BT_PWR_ON	1	
PD11	G3	B7	B6		2		I2S-DIN	4	I2S/PCM
PD12	G4	G2	B7		2		I2S-DOUT	4	
PD13	G5	G3	G2		2		I2S-LRCK	4	
PD14	G6	G4	G3		2		I2S-BCLK	4	
PD15	G7	G5	G4		2		I2S-MCLK	4	RS485
PD16	R0	G6	G5		2		UART2-TX	5	
PD17	R1	G7	G6		2		UART2-RX	5	
PD18	R2	R2	G7	DSI_D0N	2/4				QSPI屏
PD19	R3	R3	R3	DSI_D0P	2/4				
PD20	R4	R4	R4	DSI_D1N	2/4		QSPI-SDA0	2	
PD21	R5	R5	R5	DSI_D1P	2/4		QSPI-SDA1	2	
PD22	R6	R6	R6	DSI_CKN	2/4		QSPI-SDA2	2	
PD23	R7	R7	R7	DSI_DKP	2/4		QSPI-SDA3	2	
PD24	DCLK	DCLK	DCLK	DSI_D2N	2/4		QSPI-SCL	2	
PD25	HS	HS	HS	DSI_D2P	2/4		QSPI-RESET	1	
PD26	VS	VS	VS	DSI_D3N	2/4		QSPI-CS	2	
PD27	DE	DE	DE	DSI_D3P	2/4		QSPI-DC/RS	2	

PIN	Define	CFG	Function
PB0	SPI0-WP	2	NOR/ NAND
PB1	SPI0-MISO	2	
PB2	SPI0-CS	2	
PB3	SPI0-HOLD	2	
PB4	SPI0-CLK	2	WIFI
PB5	SPI0-MOSI	2	
PB6	SDC0-CMD	2	
PB7	SDC0-CLK	2	
PB8	SDC0-D3	2	
PB9	SDC0-D0	2	
PB10	SDC0-D1	2	
PB11	SDC0-D2	2	

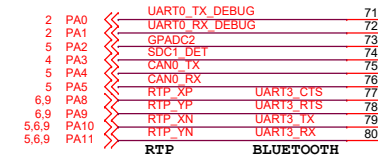
PIN	Define	CFG	Function
PC0	SDC1-D1	2	TF CARD
PC1	SDC1-D0	2	
PC2	SDC1-CLK	2	
PC3	SDC1-CMD	2	
PC4	SDC1-D3	2	
PC5	SDC1-D2	2	
PC6	SDC1-DET	2	

PIN	Define	CFG	Function
PE0	DVP-D0	3	
PE1	DVP-D1	3	
PE2	DVP-D2	3	
PE3	DVP-D3	3	
PE4	DVP-D4	3	
PE5	DVP-D5	3	
PE6	DVP-D6	3	
PE7	DVP-D7	3	
PE8	DVP-CK	3	
PE9	DVP-HS	3	
PE10	DVP-VS	3	
PE11	DVP-MCLK	4	
PF0	LCD_PWM	3	XPWM1
PF1	DSPK1	5	SPEAKER



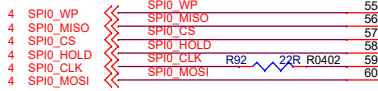
U1

RTP/CAN/I2C0~1/UART0~3 (IO支持3.3V)



RTP BLUETOOTH

NAND/NOR



SDC0 CMD

SDC0 CLK

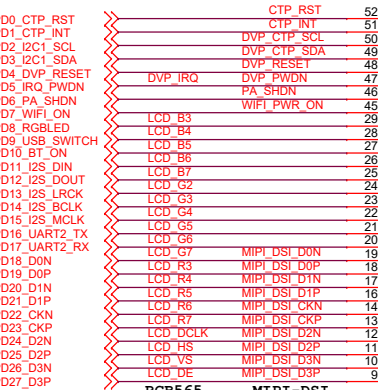
SDC0 CS

SDC0 D0

SDC0 D1

SDC0 D2

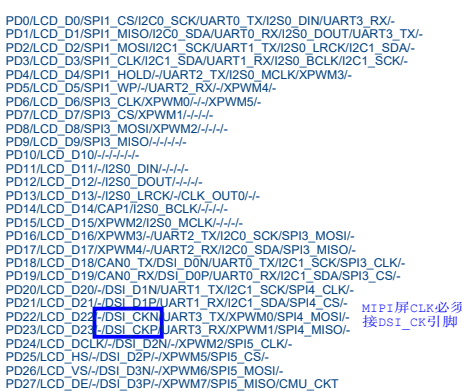
WIFI



RGB565

MIPI-DSI

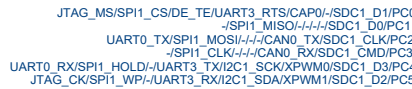
LCD/MIPI-DSI/I2S/XPWM0~7 (IO支持3.3V)



MIPI屏CLK必须接DSI_CK引脚

D125CCR

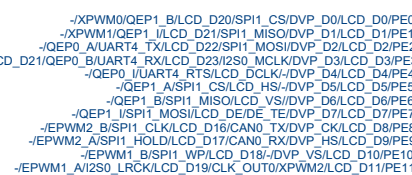
SDC1/QSPI1 (IO支持3.3V)



DSPK (IO使用LDO25, 仅支持2.5V)



DVP/QSPI1/EPWM/QEP/I2S (IO支持3.3V)



USB (IO支持3.3V)



RTC



OSC-24M



PA/PB/PC/PD/PE/PN组IO供电



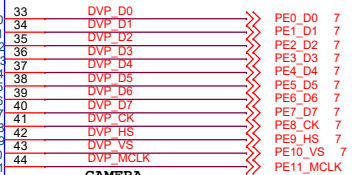
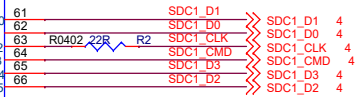
CPU内核供电, 引脚68为LDO1x输出



内置LDO



TF-CARD

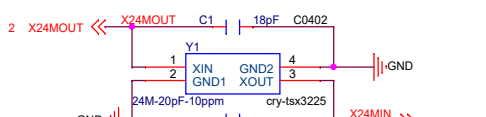


CAMERA

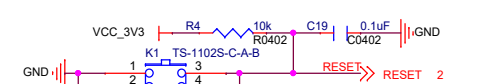


CPU底部GND焊盘加强散热

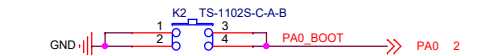
OSC-24M



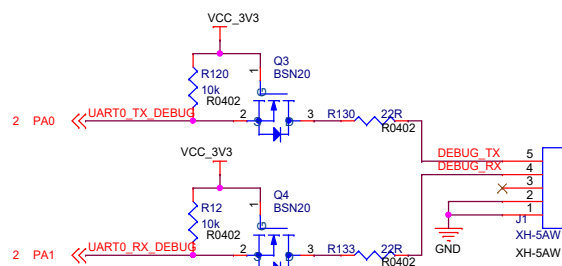
RESET-KEY



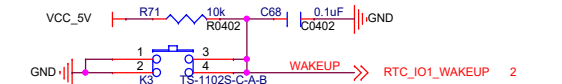
UBOOT-KEY



DEBUG/UART0



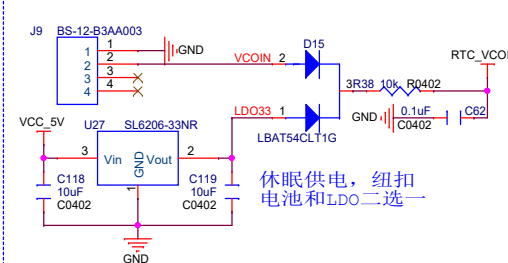
WAKEUP-KEY



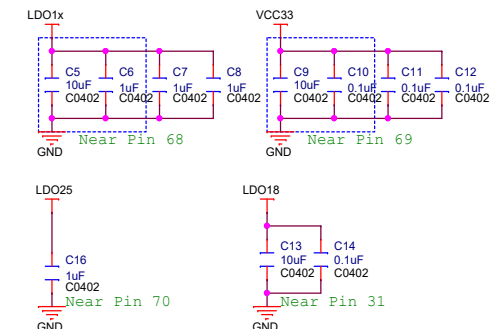
按键唤醒, 低电平有效, 用于调试休眠功能

RTC

使用内置RTC功能, 需外挂晶振

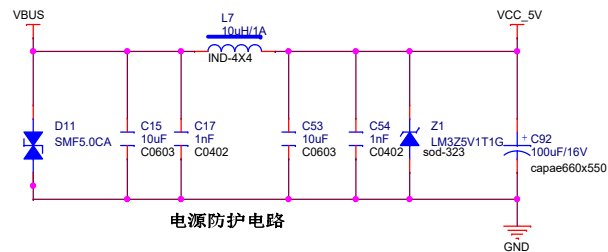


CPU decouple cap

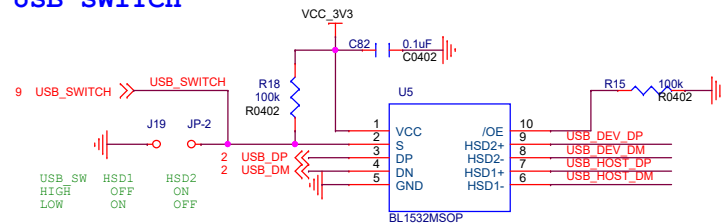


ArtInChip Technology Co., Ltd			
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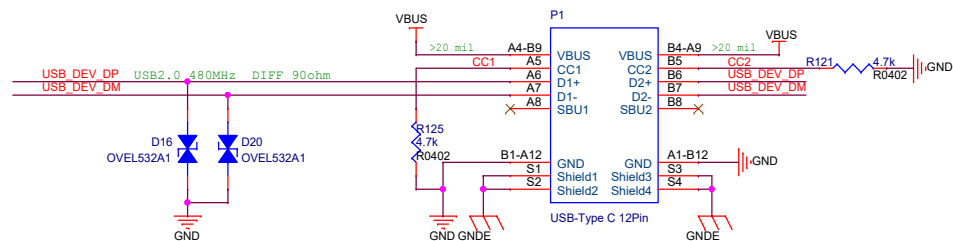
DC5V POWER



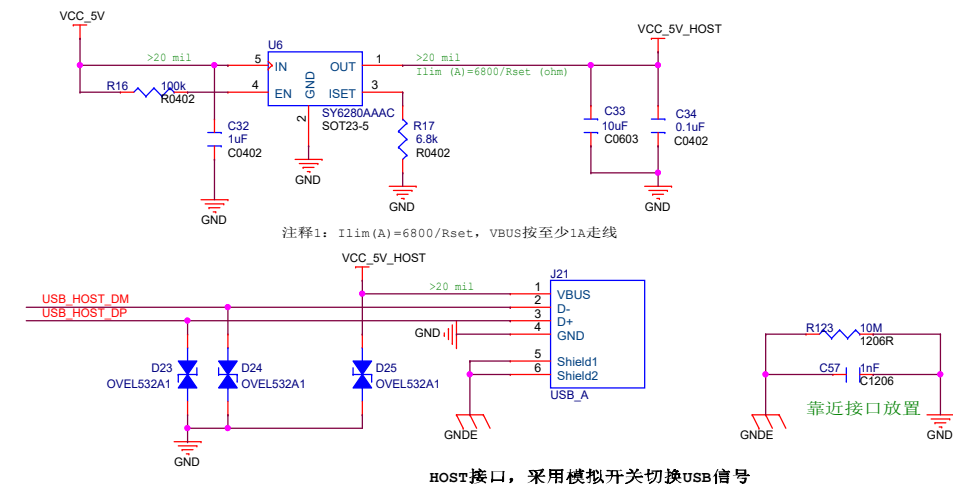
USB SWITCH



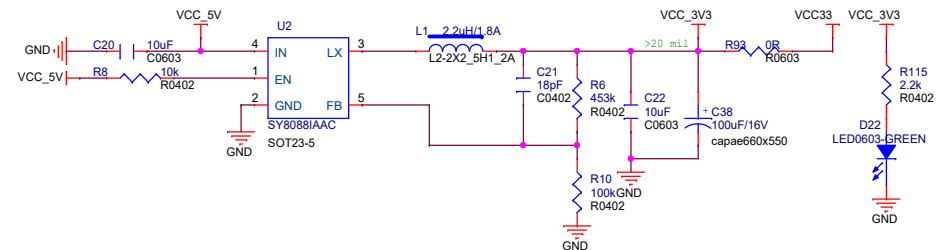
USB DEVICE



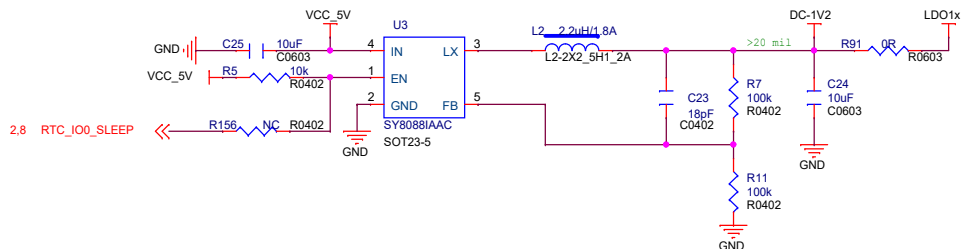
USB HOST



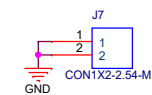
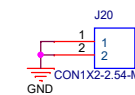
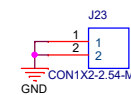
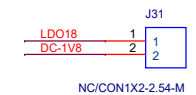
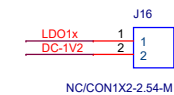
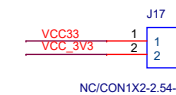
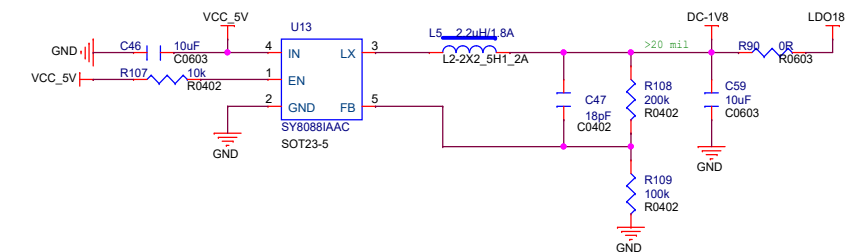
VCC33



VDD11



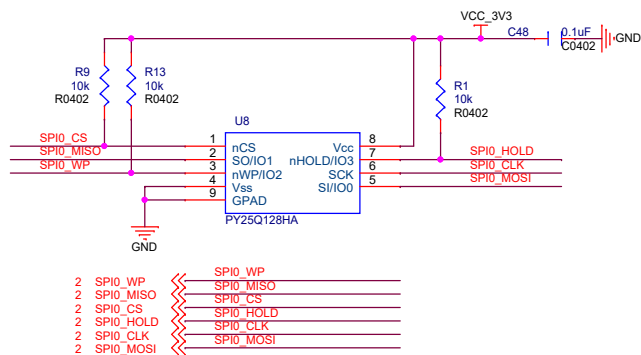
1.8V



<Variant Name>

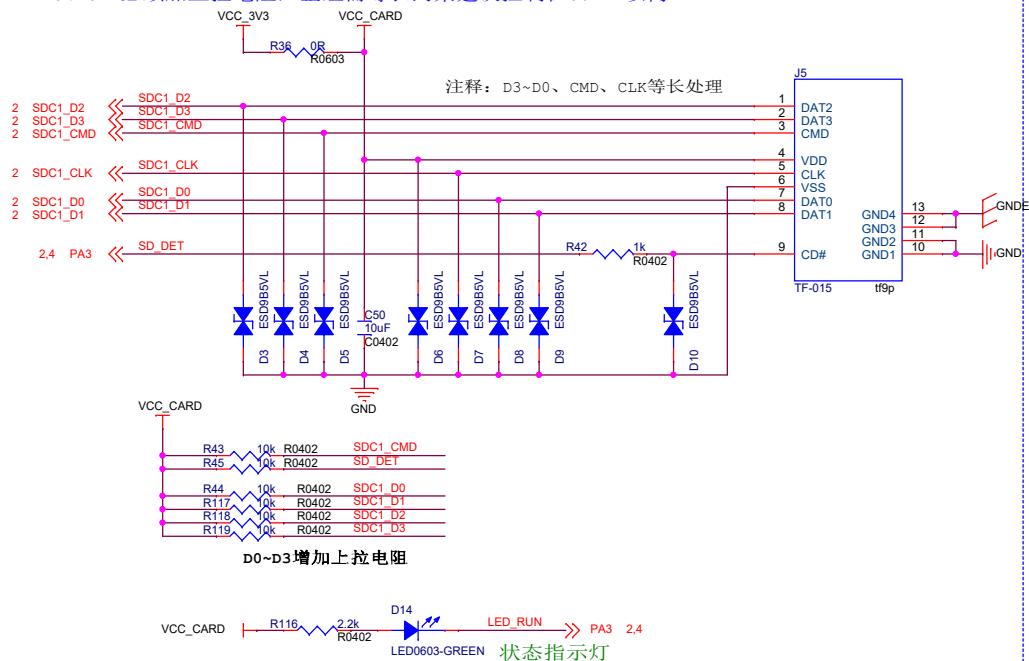
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QSPI NOR/NAND



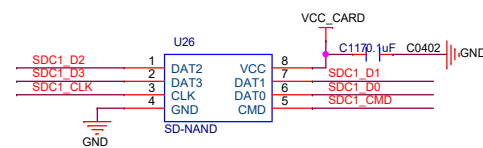
TF-CARD

D0、CMD必须加上拉电阻，整组需等长约束建议控制在80mil以内



SD-NAND预留

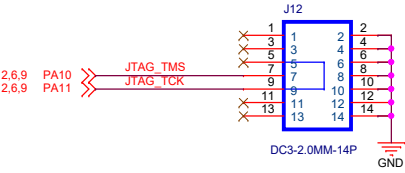
D0、CMD必须加上拉电阻，整组需等长约束建议控制在80mil以内



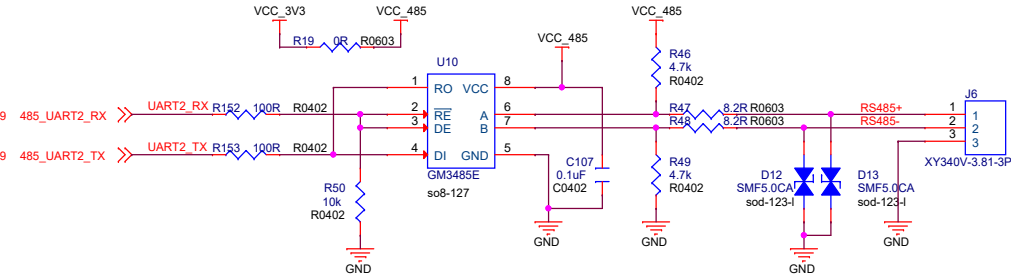
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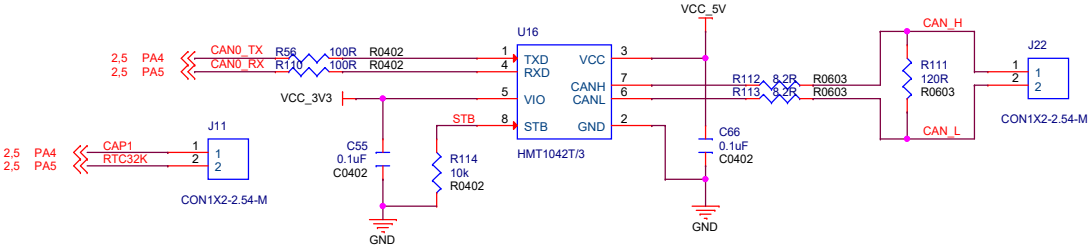
JTAG (Option)



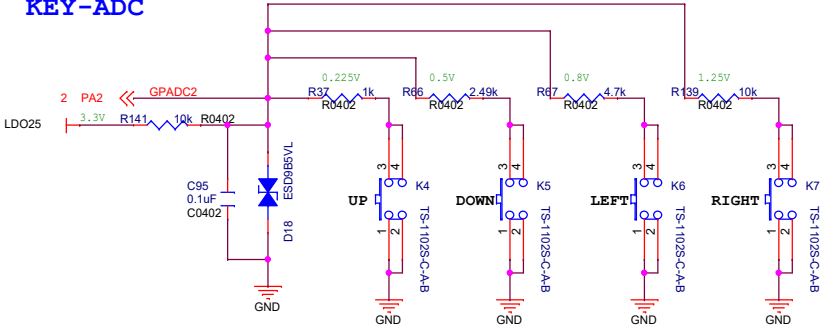
RS485



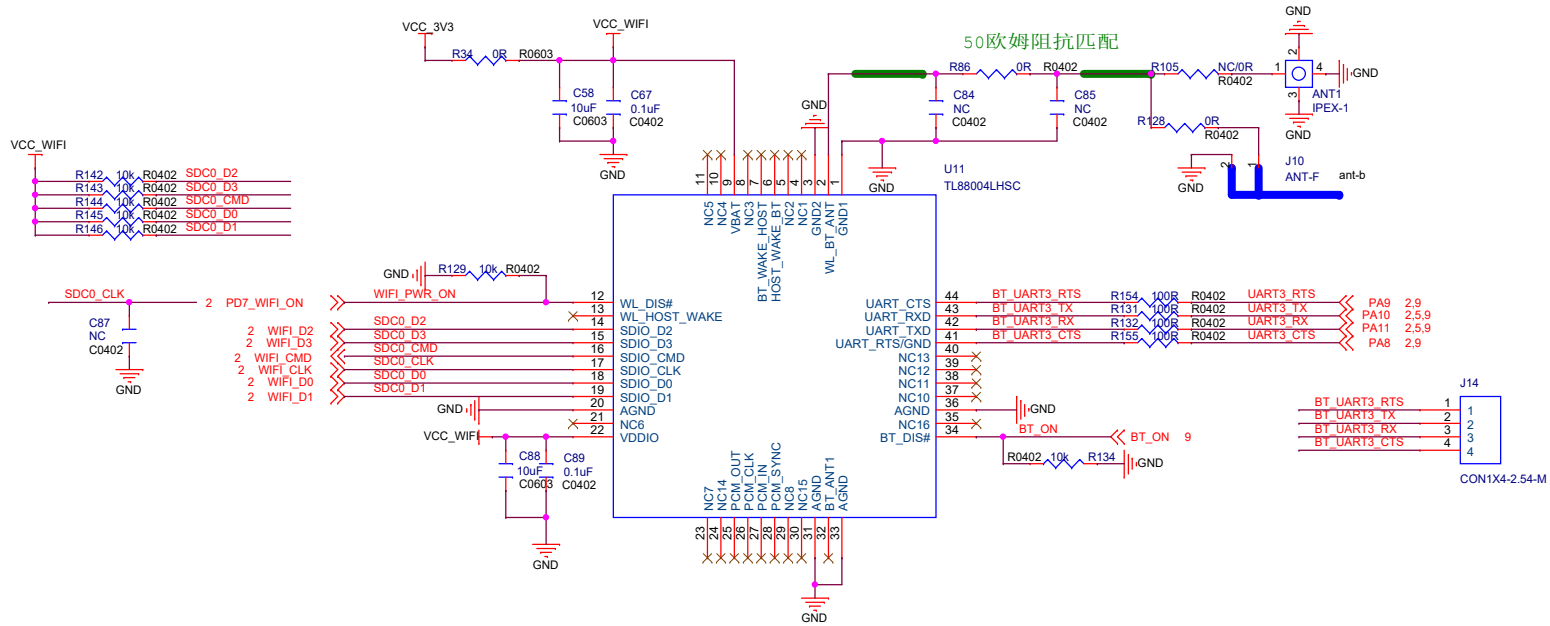
CAN



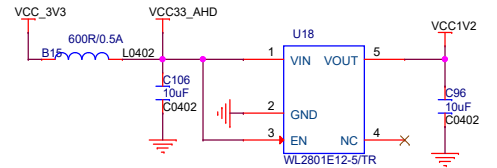
KEY-ADC



WIFI+BT



DVP CAMERA



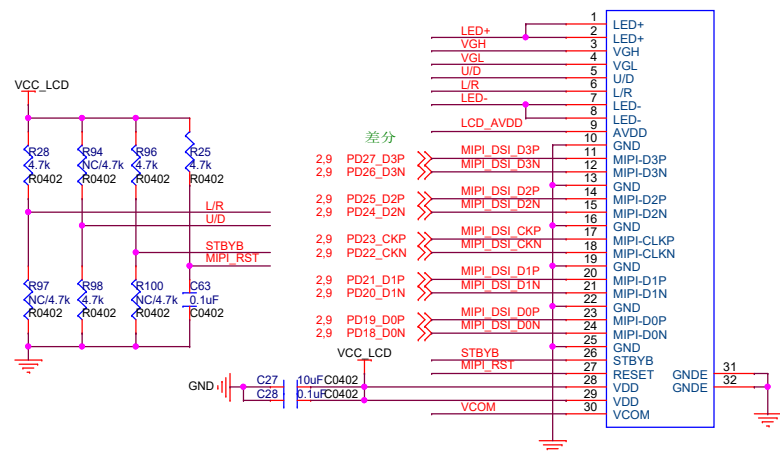
D125CxR-HMI-DEMO

CAMERA

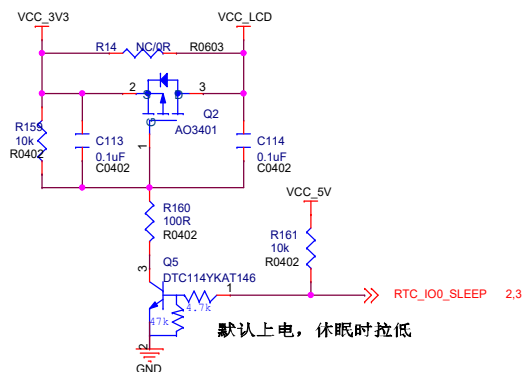
Rev
V1.0

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7" 1024*600 MIPI下接触

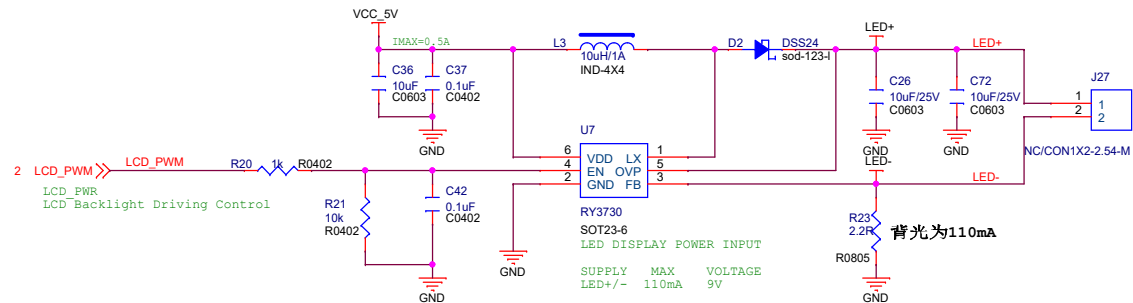


9 L/R
9 U/D



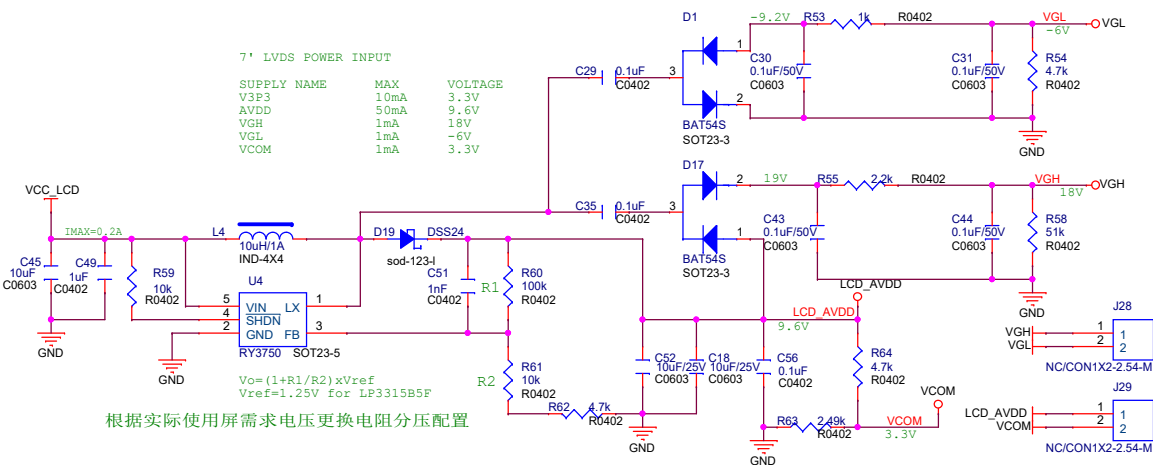
默认上电, 休眠时拉低

LCD BACKLIGHT



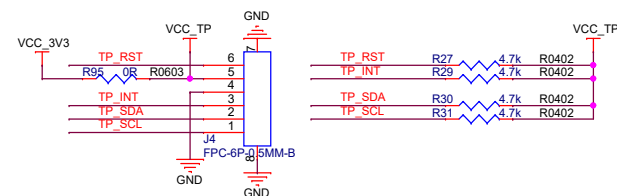
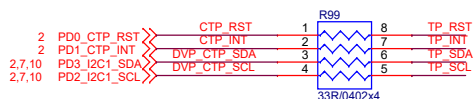
背光为110mA

LCD POWER



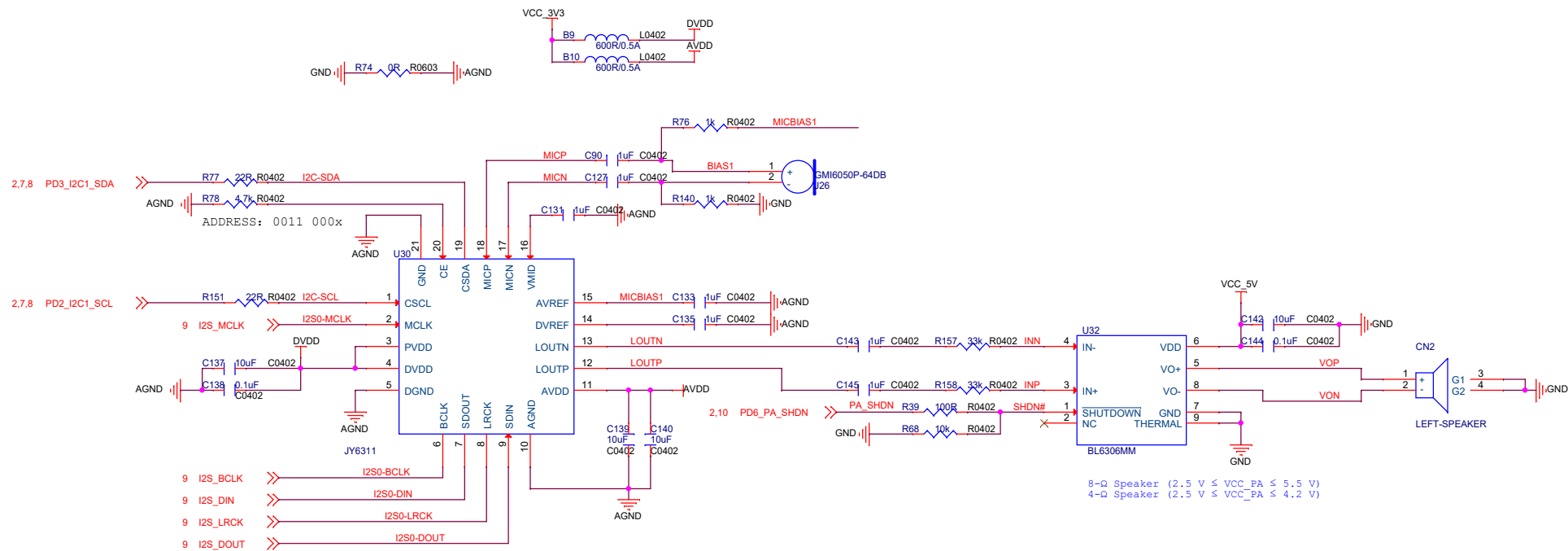
根据实际使用屏需求电压更换电阻分压配置

CTP



<Variant Name>

I2S CODEC



SPEAKER

