

RV1106G_GMF_V1.0

Reference Design Main Functions Introduction	
Power	Discrete
RAM	SPI FLASH
Interface	SDMMC/SDIO/MIPI_CSI/I2S/USB/ADC

HINLINK			
Project:	SoloLinker-A		
File:	01.Cover Page		
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VCC1V8_MICBIAS

MIC IN

R9 1 NA 5% 2 R0201

C23 NA X5R 6.3V C0201

R11 NA 5% R0201

MICINO P

MICINO N

R12 NA 5% R0201

VCC1V8_MICBIAS

MIC IN

R7 1 NA 5% 2 R0201

C22 NA X5R 6.3V C0201

R8 NA 5% R0201

MICINO1 P

MICINO1 N

R10 NA 5% R0201

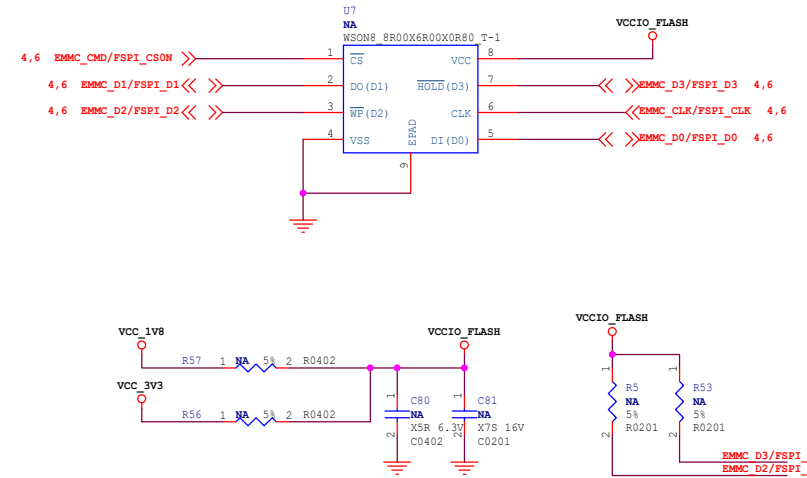
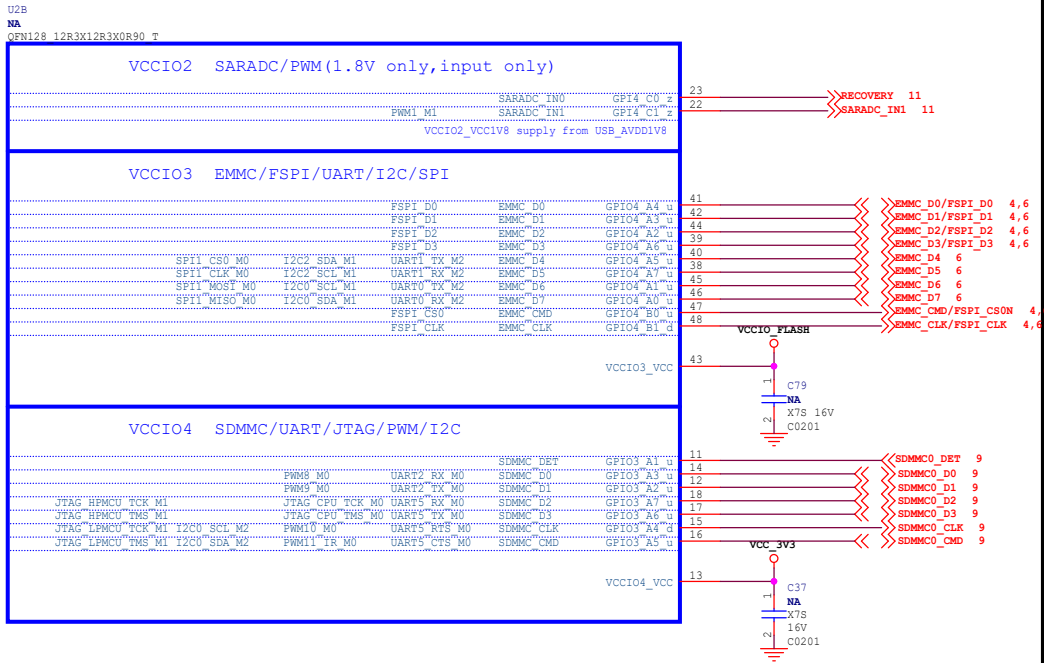
The diagrams illustrate the placement of decoupling capacitors for various power pins on the power plane:

- VDD_ARM (For ARM):** Shows three capacitors (C18, C20, C21) connected to the VDD_ARM pin. C18 and C20 are 6.3V 0.402 capacitors, and C21 is a 16V 0.201 capacitor. The text "Close to Power Pin" is written below the capacitors.
- VDD_DDR (For DDR):** Shows four capacitors (C17, C11, C71, C36) connected to the VDD_DDR pin. C17, C11, and C71 are 6.3V 0.402 capacitors, and C36 is a 16V 0.201 capacitor. The text "Close to Power Pin" is written below the capacitors.
- VDD_0V9 (For LOGIC/NPU/VEPU):** Shows seven capacitors (C28, C12, C7, C25, C13, C16, C63) connected to the VDD_0V9 pin. C28, C12, C7, C25, and C13 are 6.3V 0.402 capacitors, and C16 and C63 are 16V 0.201 capacitors. The text "Close to Power Pin" is written below the capacitors.
- VCC_1V8 (For AVDD18_DDR):** Shows two capacitors (C61, C39) connected to the VCC_1V8 pin. C61 is a 6.3V 0.201 capacitor, and C39 is a 16V 0.201 capacitor. The text "Close to Power Pin" is written below the capacitors.
- VCC1V8_CODEC:** Shows two capacitors (C34, C32) connected to the VCC1V8_CODEC pin. C34 is a 6.3V 0.402 capacitor, and C32 is a 16V 0.201 capacitor. The text "Close to Power Pin" is written below the capacitors.

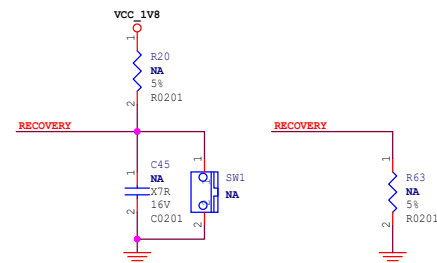
HINLINK			
Project:	SoloLinker-A		
File:	02.RV1106G Power/Codec/ETH/USB		
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SPI Flash

NOTE:
Refer to the latest AVL for parts selection.



SARADC



Project:	SoloLinker-A	 HINLINK
File:	04.RV1106G ADC/FLASH/SDMMC	
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U2C
NA
QFN128 12R3X12R3X0R90 T

VCCIO5 SDIO/I2S/VO_LCDC/UART/PWM/I2C

I2C4_SCL_M0	UART1_RTS_M1	VO_LCDC_D9	I2S0_LRCK	SDIO_D0_M0	GPIO2_A1_D
I2C4_SDA_M0	UART1_CTS_M1	VO_LCDC_D8	I2S0_SCLK	SDIO_D1_M0	GPIO2_A0_D
	UART1_RX_M1	VO_LCDC_D13	I2S0_SDIO	SDIO_D2_M0	GPIO2_A5_D
	UART1_TX_M1	VO_LCDC_D12	I2S0_SDOA	SDIO_D3_M0	GPIO2_A4_D
		VO_LCDC_D10	I2S0_MCLK	SDIO_CLK_M0	GPIO2_A2_D
		VO_LCDC_D11	I2S0_SDO3_SDI1	SDIO_CMD_M0	GPIO2_A3_D
FLASH_TRIGOUT	I2C3_SCL_M0	PWM2_M1	I2S0_SDO2_SDI2	UART0_RTS_M1	GPIO2_A6_D
PRELIGHT_TRIGOUT	I2C3_SDA_M0	PWM4_M1	I2S0_SDO1_SDI3	UART0_CTS_M1	GPIO2_A7_D
		PWM5_M1	I2C1_SCL_M1	UART0_RX_M1	GPIO2_B0_D
		PWM6_M1	I2C1_SDA_M1	UART0_TX_M1	GPIO2_B1_D

VCCIO5_VCC

VCCIO6 VO_LCDC/VI_CIF/PWM/UART/I2C/SDIO/SPI/AUD_DSM/VI_BT656

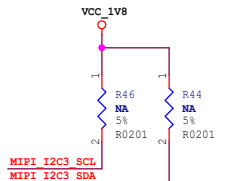
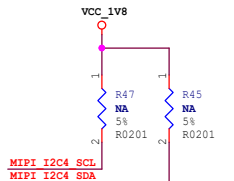
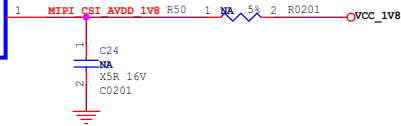
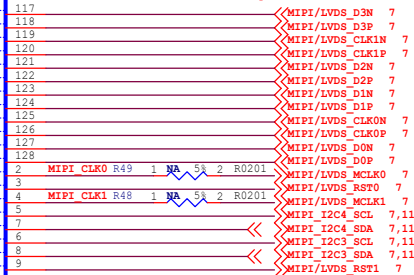
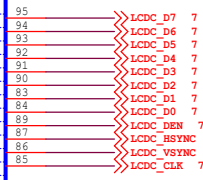
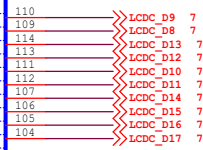
VI_BT656_D0_M1	SDIO_D1_M1	SPI0_CS0_M0	PWM2_M2	VI_CIF_D2_M1	VO_LCDC_D7	GPIO1_C0_D	
VI_BT656_D1_M1	SDIO_D0_M1	SPI0_CLK_M0	PWM4_M2	VI_CIF_D3_M1	VO_LCDC_D6	GPIO1_C1_D	
VI_BT656_D2_M1	I2C4_SCL_M1	SDIO_CLK_M1	PWM5_M2	VI_CIF_D4_M1	VO_LCDC_D5	GPIO1_C2_D	
VI_BT656_D3_M1	I2C4_SDA_M1	SDIO_CMD_M1	PWM6_M2	VI_CIF_D5_M1	VO_LCDC_D4	GPIO1_C3_D	
VI_BT656_D4_M1	SDIO_D3_M1	UART4_RX_M1	PWM8_M1	VI_CIF_D6_M1	VO_LCDC_D3	GPIO1_C4_D	
VI_BT656_D5_M1	SDIO_D2_M1	UART4_TX_M1	PWM9_M1	VI_CIF_D7_M1	VO_LCDC_D2	GPIO1_C5_D	
VI_BT656_D6_M1	UART4_RTS_M1	PWM10_M1	VI_CIF_D8_M1	VO_LCDC_D1	GPIO1_C6_D		
VI_BT656_D7_M1	UART4_CTS_M1	PWM11_IR_M1	VI_CIF_D9_M1	VO_LCDC_D0	GPIO1_C7_D		
VI_BT656_CLK_M1	UART3_TX_M1	PWM3_IR_M2	PWM10_M2	VI_CIF_CLK0_M1	VO_LCDC_DEN	GPIO1_D0_D	
	UART3_RX_M1	PWM5_CTS_M1	PWM10_M2	VI_CIF_HREF_M1	VO_LCDC_HSYNC	GPIO1_D1_D	
SPI0_CS1_M0	I2C3_SDA_M1	AUD_DSM_F	UART5_RX_M1	PWM0_M1	VI_CIF_VSYNC_M1	VO_LCDC_VSYNC	GPIO1_D2_D
I2C3_SCL_M1	I2C3_SCL_M1	AUD_DSM_N	UART5_TX_M1	PWM11_IR_M2	VI_CIF_CLK0_M1	VO_LCDC_CLK	GPIO1_D3_D

VCCIO6_VCC

VCCIO7 VI_CIF/MIPI CSI/LVDS RX/UART/I2C/VI_BT1120/VI_BT656
(1.8V only,some for input only)

VI_BT1120_D0	LVDS_RX_D3N	MIPI_CSI_RX_D3N	VI_CIF_D0_M0	GPIO3_B0_D	
VI_BT1120_D1	LVDS_RX_D3P	MIPI_CSI_RX_D3P	VI_CIF_D1_M0	GPIO3_B1_D	
VI_BT1120_D2	LVDS_RX_CLKIN	MIPI_CSI_RX_CLKIN	VI_CIF_D2_M0	GPIO3_B2_D	
VI_BT1120_D3	LVDS_RX_CLKIP	MIPI_CSI_RX_CLKIP	VI_CIF_D3_M0	GPIO3_B3_D	
VI_BT1120_D4	LVDS_RX_D2N	MIPI_CSI_RX_D2N	VI_CIF_D4_M0	GPIO3_B4_D	
VI_BT1120_D5	LVDS_RX_D2P	MIPI_CSI_RX_D2P	VI_CIF_D5_M0	GPIO3_B5_D	
VI_BT1120_D6	LVDS_RX_D1N	MIPI_CSI_RX_D1N	VI_CIF_D6_M0	GPIO3_B6_D	
VI_BT1120_D7	LVDS_RX_D1P	MIPI_CSI_RX_D1P	VI_CIF_D7_M0	GPIO3_B7_D	
VI_BT656_D0_M0	VI_BT1120_D8	LVDS_RX_CLKON	MIPI_CSI_RX_CLKON	VI_CIF_D8_M0	GPIO3_C0_D
VI_BT656_D1_M0	VI_BT1120_D9	LVDS_RX_CLKOP	MIPI_CSI_RX_CLKOP	VI_CIF_D9_M0	GPIO3_C1_D
VI_BT656_CLK_M0	VI_BT1120_CLK	LVDS_RX_D0N	MIPI_CSI_RX_D0N	VI_CIF_CLK1_M0	GPIO3_C2_D
		LVDS_RX_D0P	MIPI_CSI_RX_D0P	VI_CIF_HREF_M0	GPIO3_C3_D
		MIPI_CLK0_OUT		VI_CIF_CLK0_M0	GPIO3_C4_D
				VI_CIF_VSYNC_M0	GPIO3_C5_D
VI_BT656_D2_M0	VI_BT1120_D10	PWM1_IR_M2	MIPI_CLK1_OUT	VI_CIF_D10	GPIO3_C6_D
VI_BT656_D3_M0	VI_BT1120_D11	UART5_RX_M2	I2C4_SCL_M2	VI_CIF_D11	GPIO3_C7_D
VI_BT656_D4_M0	VI_BT1120_D12	UART5_RX_M2	I2C4_SDA_M2	VI_CIF_D12	GPIO3_D0_D
VI_BT656_D5_M0	VI_BT1120_D13	UART5_RTS_M2	I2C3_SCL_M2	VI_CIF_D13	GPIO3_D1_D
VI_BT656_D6_M0	VI_BT1120_D14	UART5_CTS_M2	I2C3_SDA_M2	VI_CIF_D14	GPIO3_D2_D
VI_BT656_D7_M0	VI_BT1120_D15	PWM1_M2		VI_CIF_D15	GPIO3_D3_D

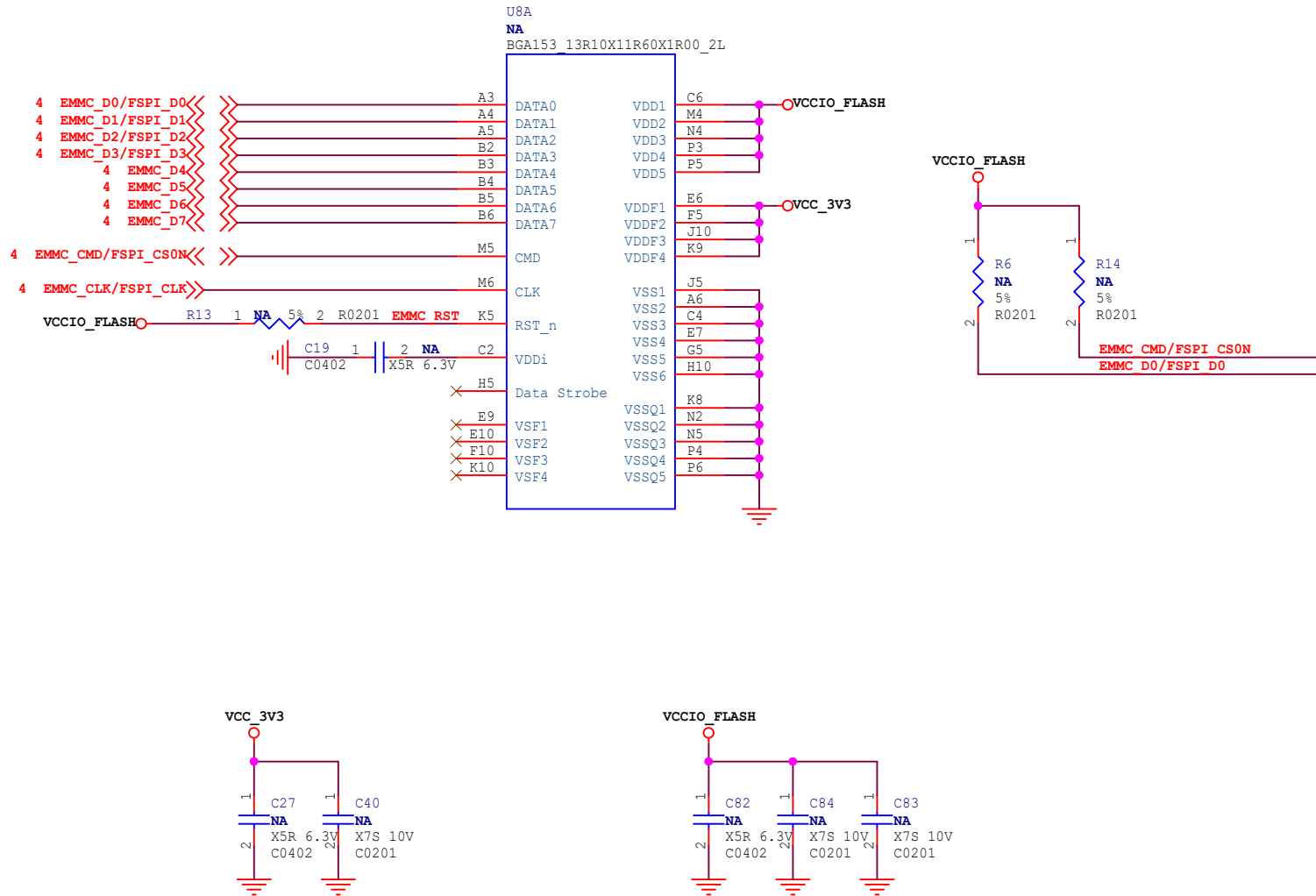
MIPI_AVDD1V8 VCCIO7_VCC1V8



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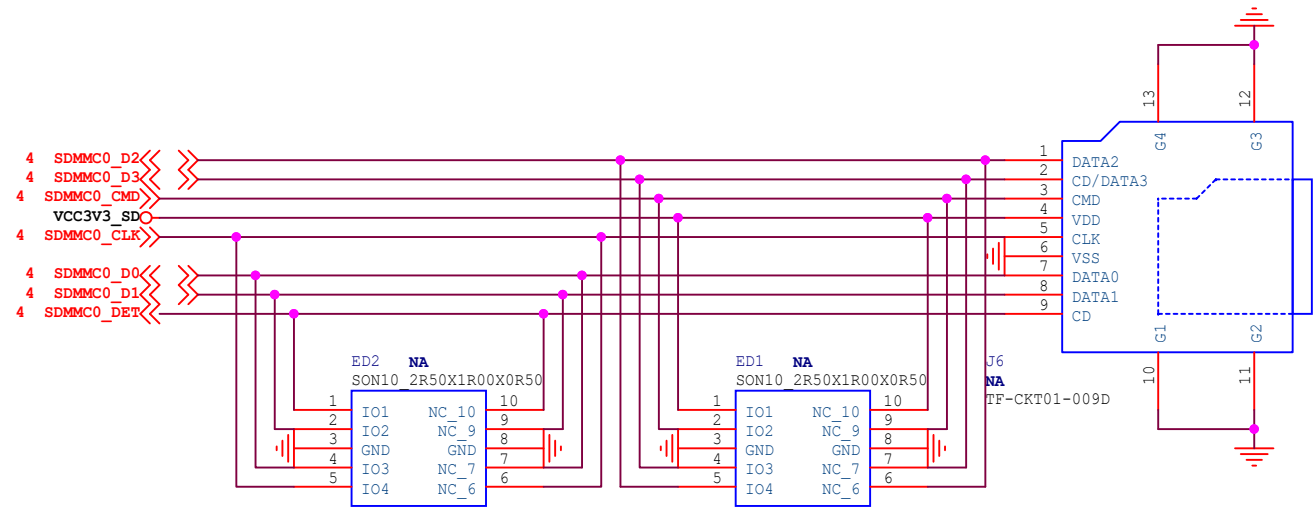
Project:	SoloLinker-A	Rev:	<Revision>
File:	05.RV1106G SDIO/LCD/VCAP	Sheet:	5 of 12
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Designer:	<designer>		

NOTE:
Refer to the latest AVL for parts selection.

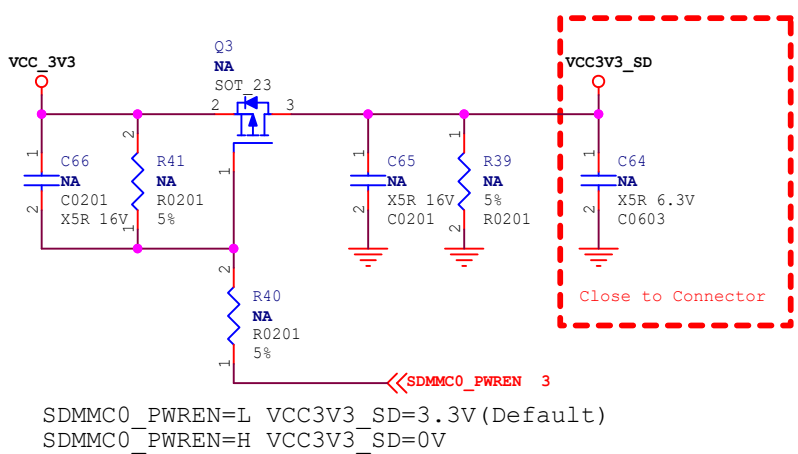


HINLINK			
Project:	SoloLinker-A	 HINLINK	
File:	06.Flash-eMMC Flash		
Date:	Wednesday, March 20, 2024	Rev:	<Revision>
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Micro-SD Card



Card Power



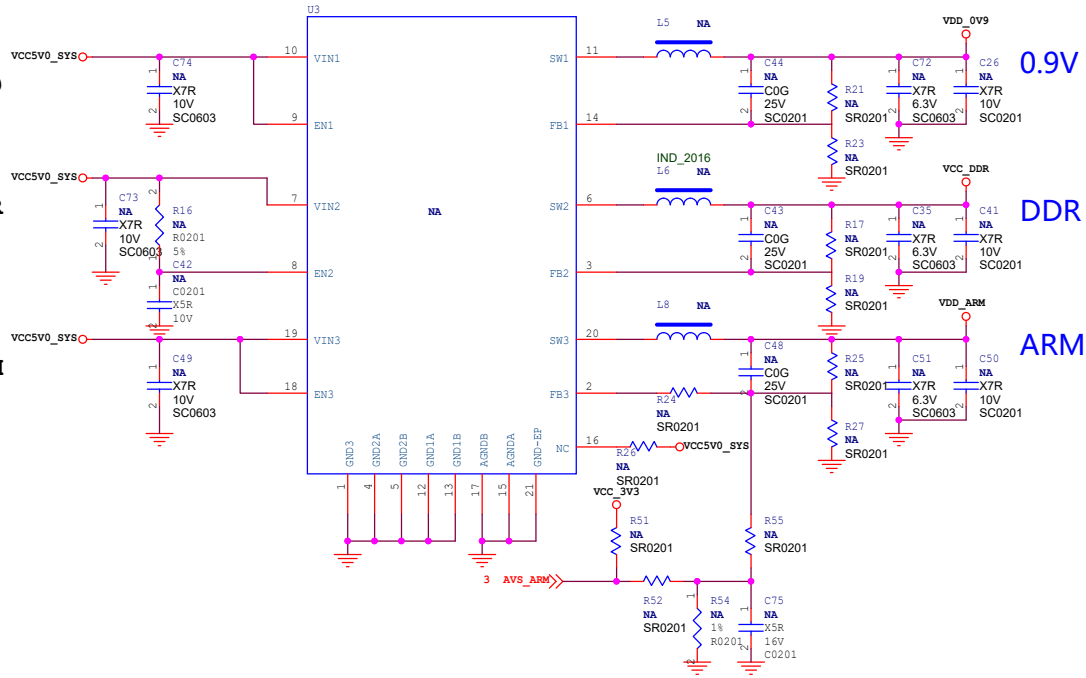
SDMMC0_PWREN=L VCC3V3_SD=3.3V (Default)
SDMMC0_PWREN=H VCC3V3_SD=0V

HINLINK		
Project:	SoloLinker-A	
File:	09.SD Card	
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VDD_0V9 Setp 1

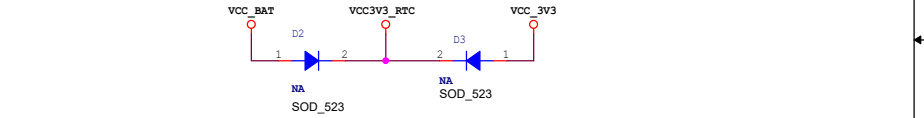
VCC_DDR Setp 2

VDD_ARM Setp 1

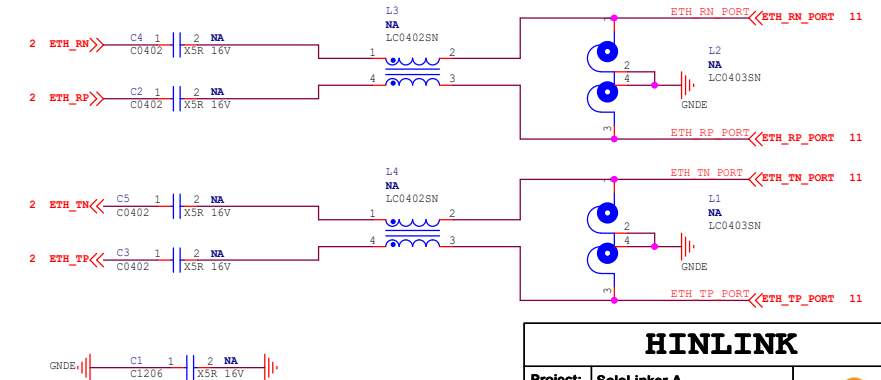
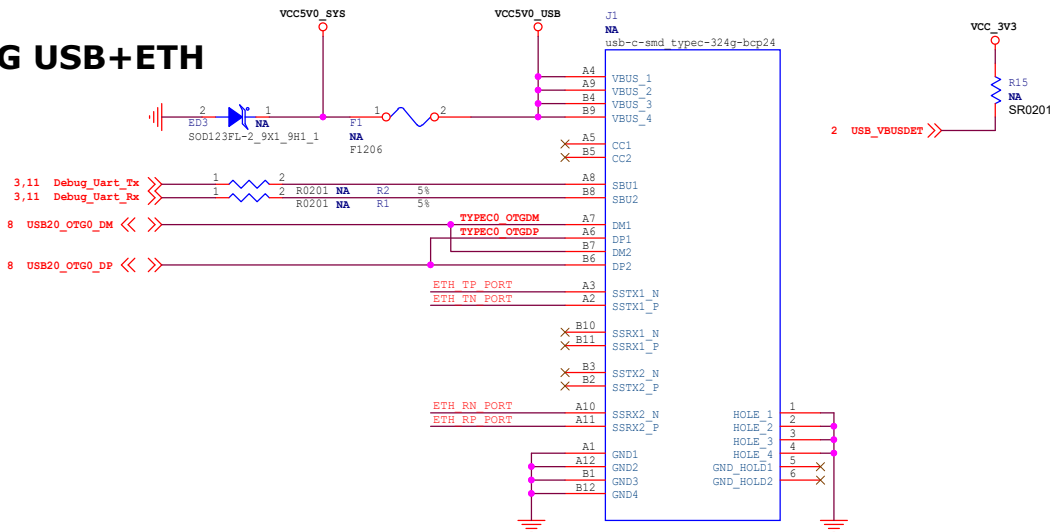


VCC_1V8 Setp 2

VCC_3V3 Setp 3

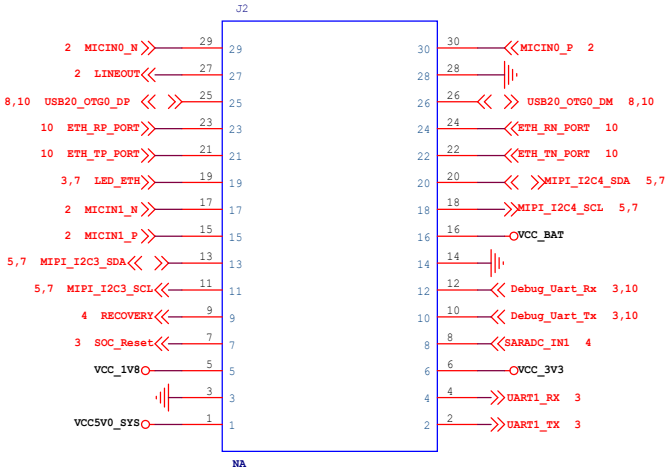
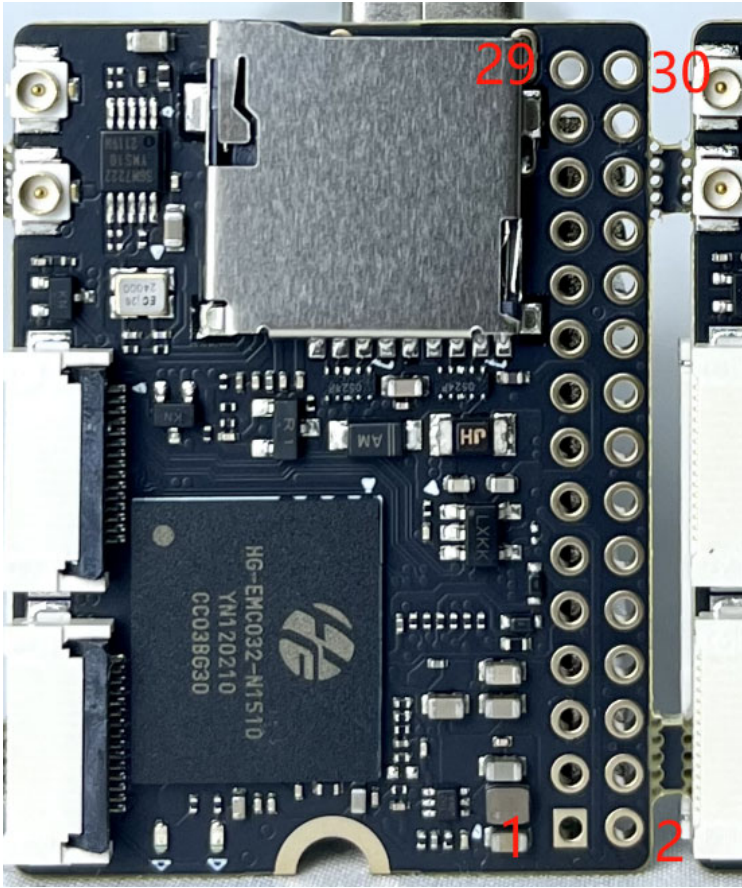


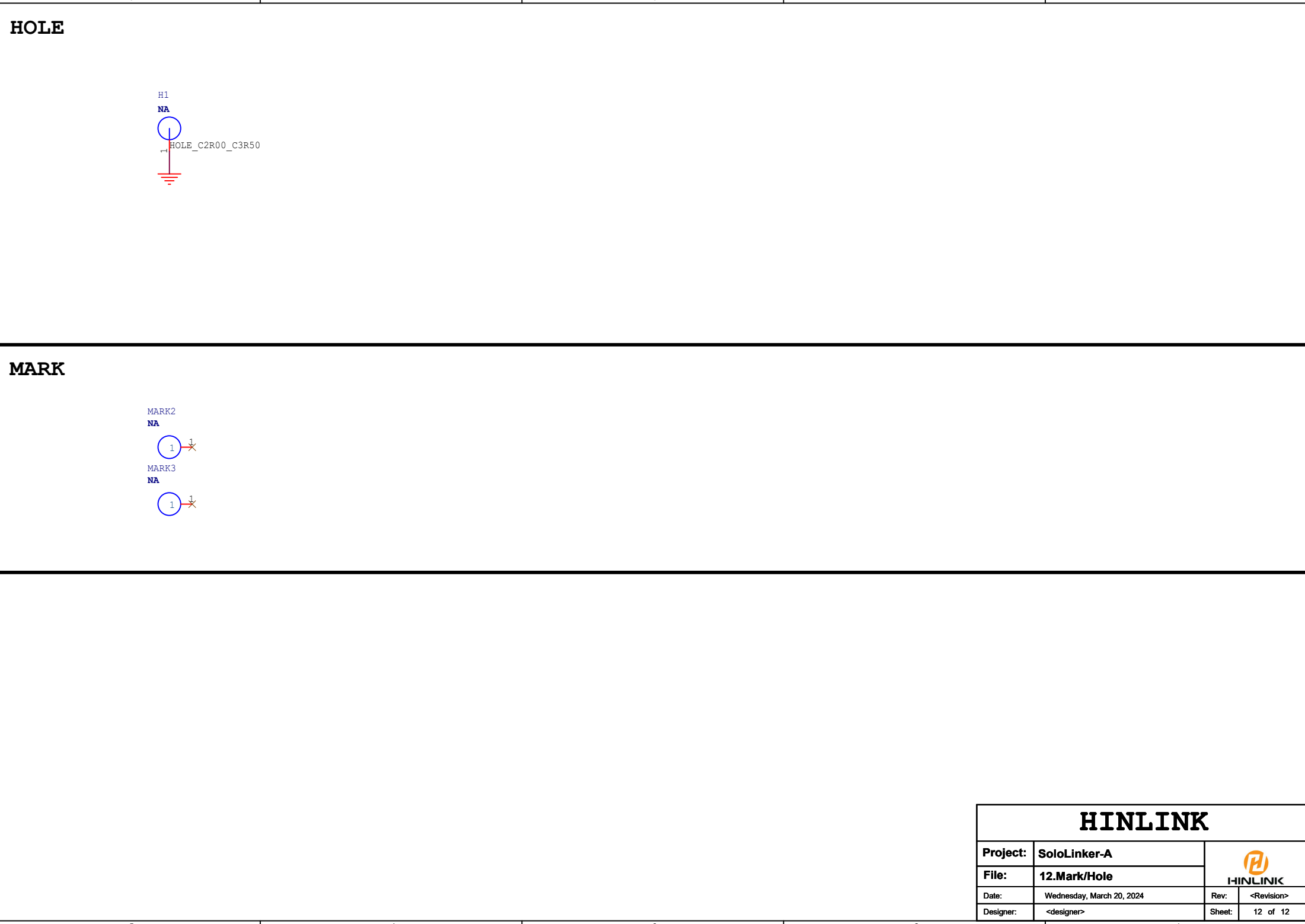
OTG USB+ETH



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HINLINK			
Project:	SoloLinker-A	 HINLINK	
File:	12.Mark/Hole		
Date:	Wednesday, March 20, 2024	Rev:	<Revision>
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