

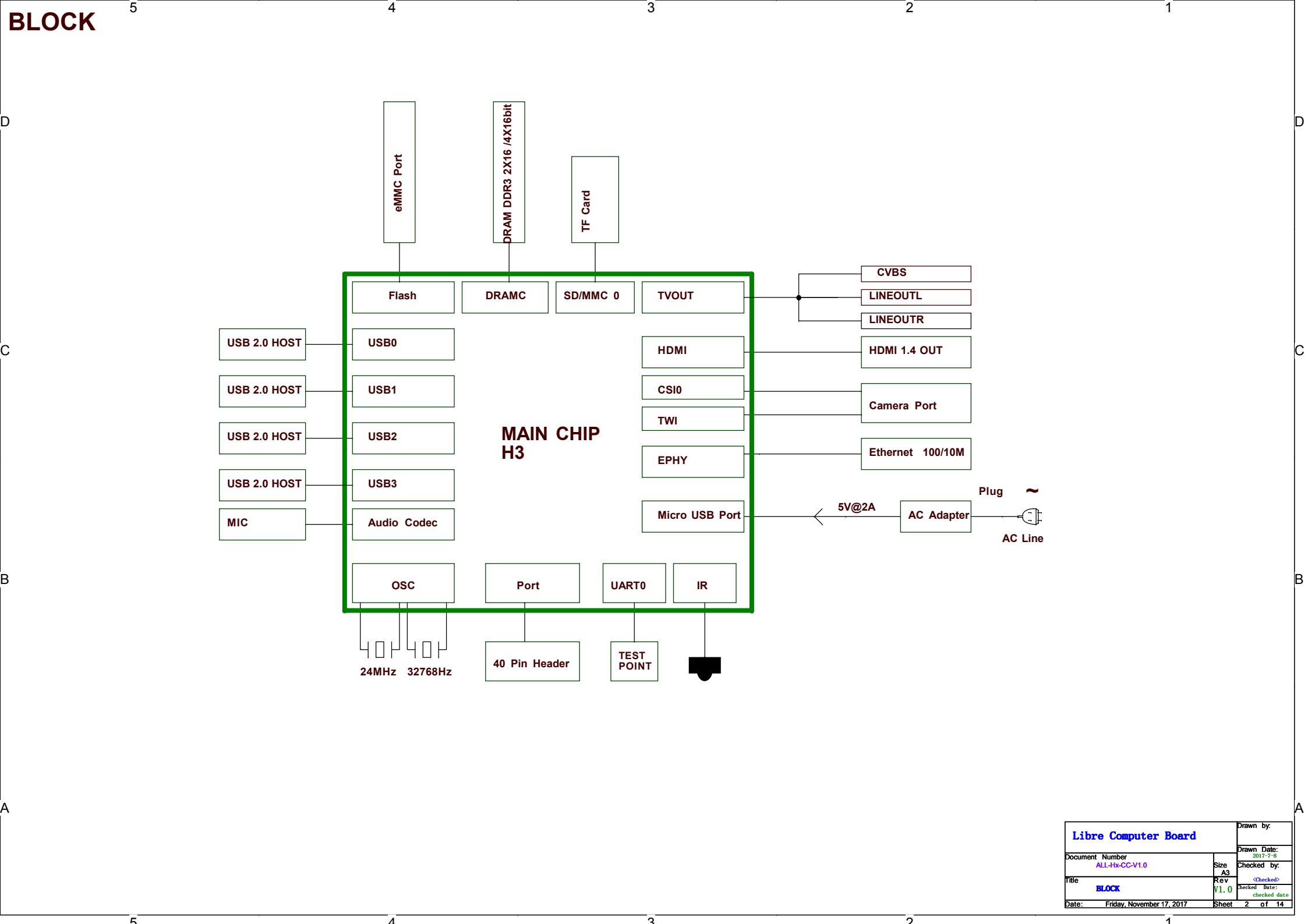
REVISION HISTORY

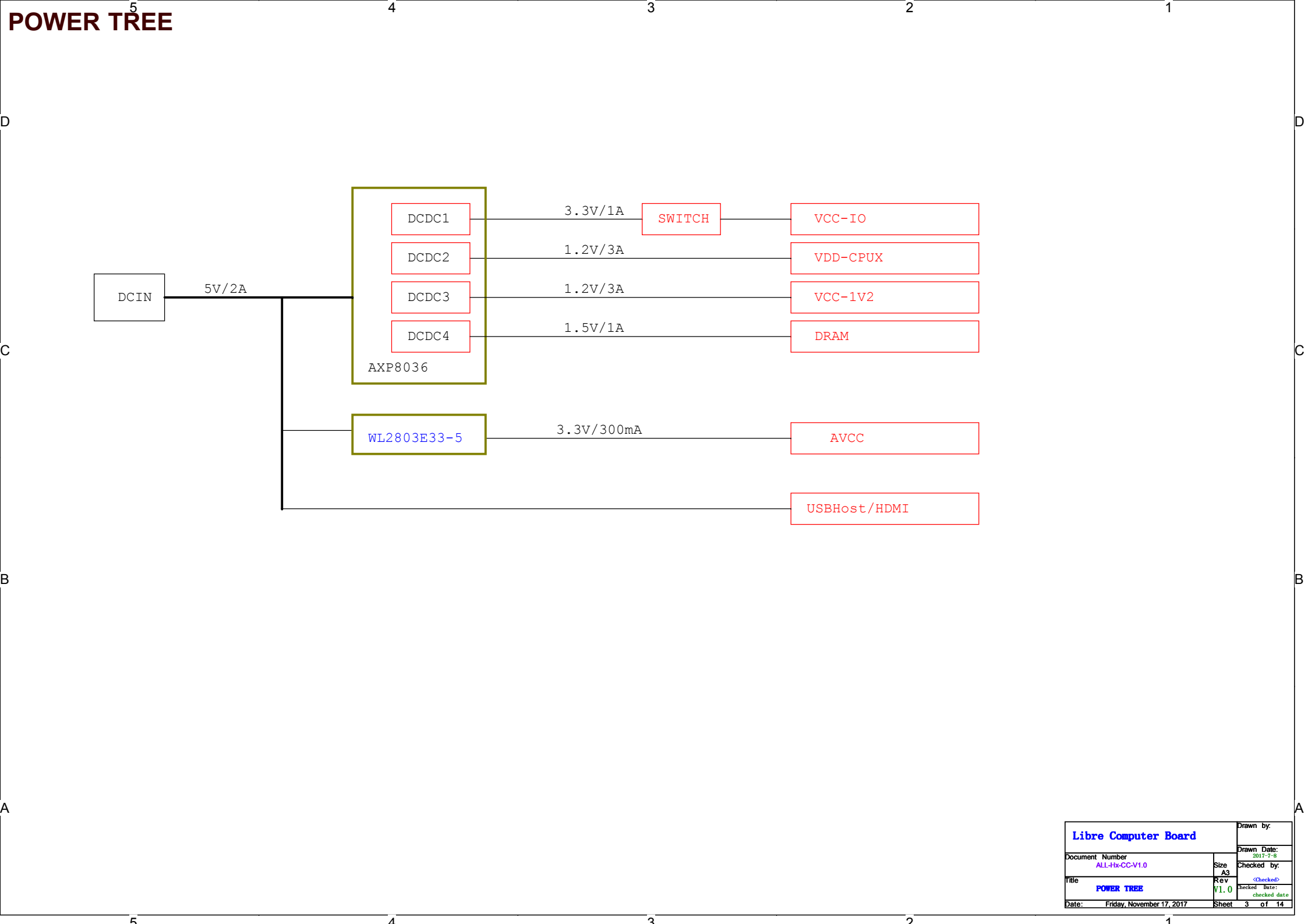
Schematics

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Revision	Description	Date	Drawn	Checked
Ver 1.0	Initial	2017-11-10		



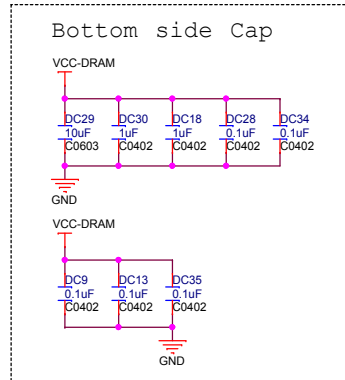
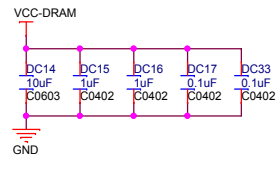
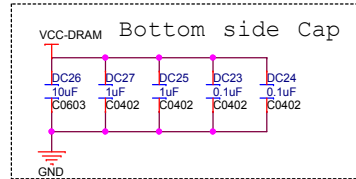
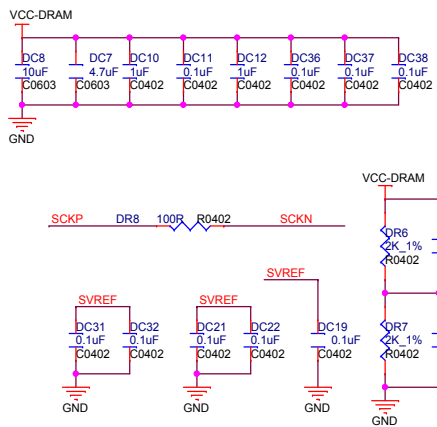
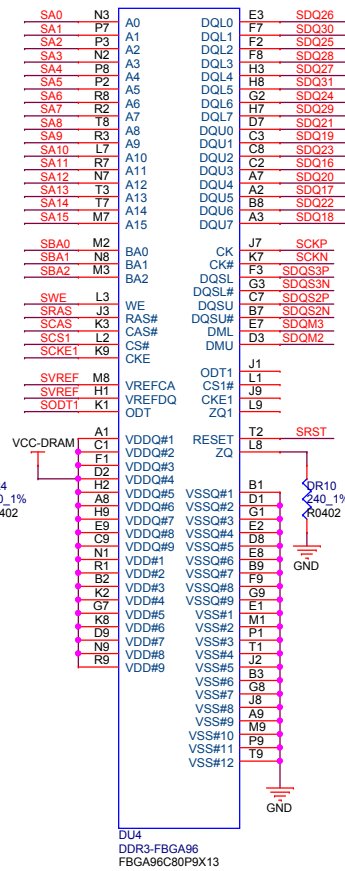
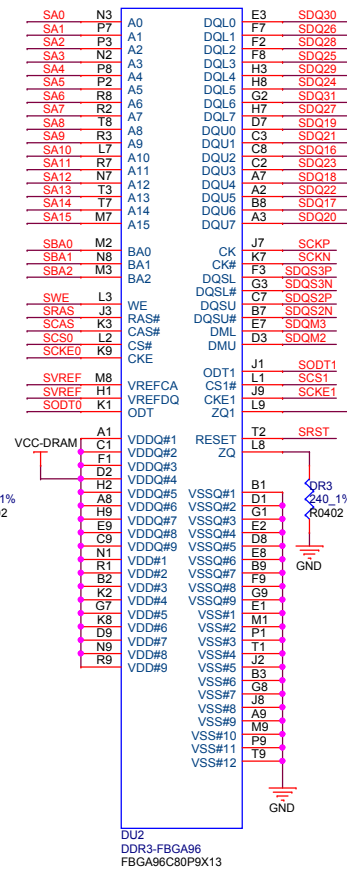
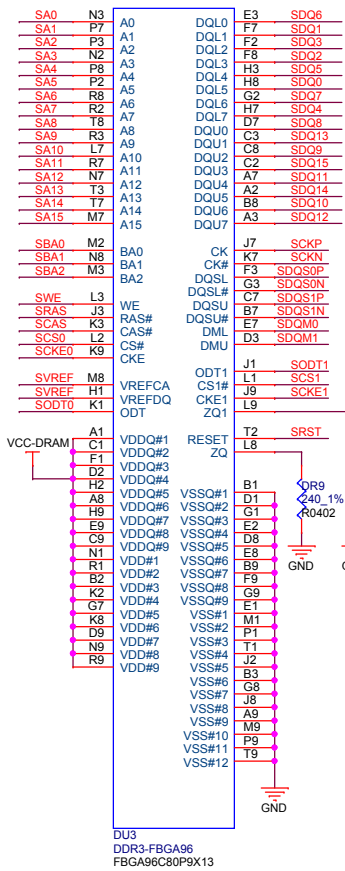
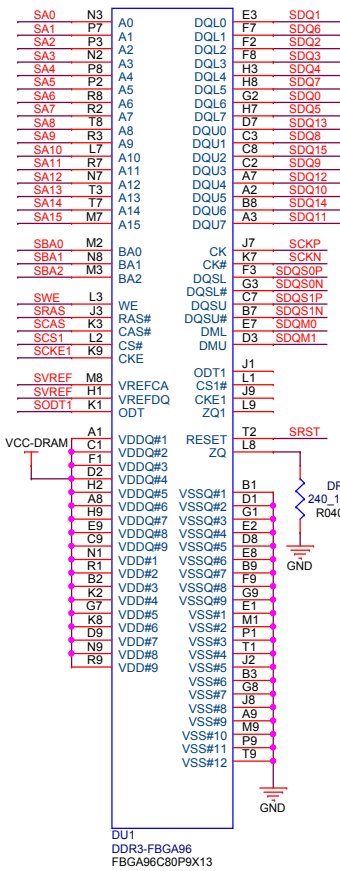
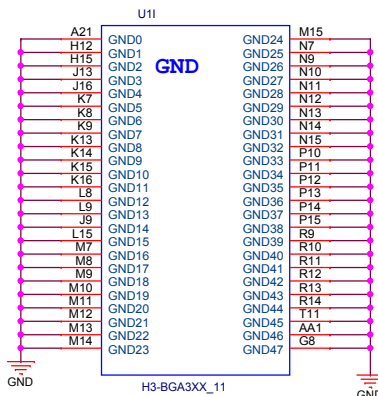
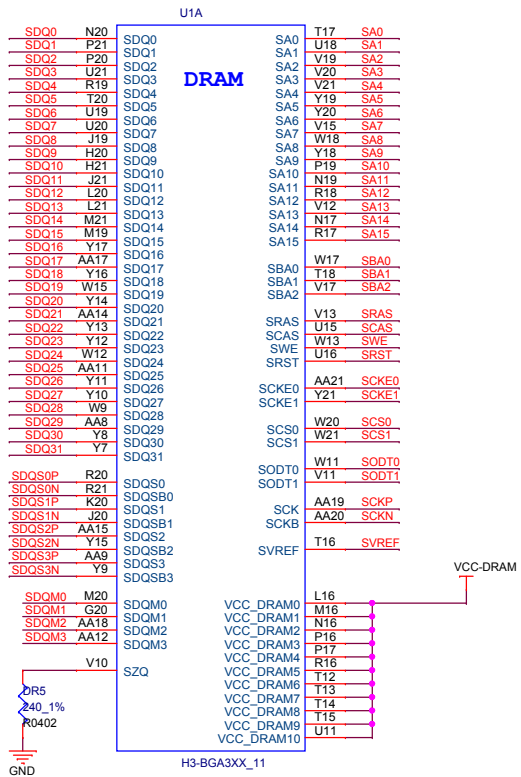


GPIO ASSIGNMENT

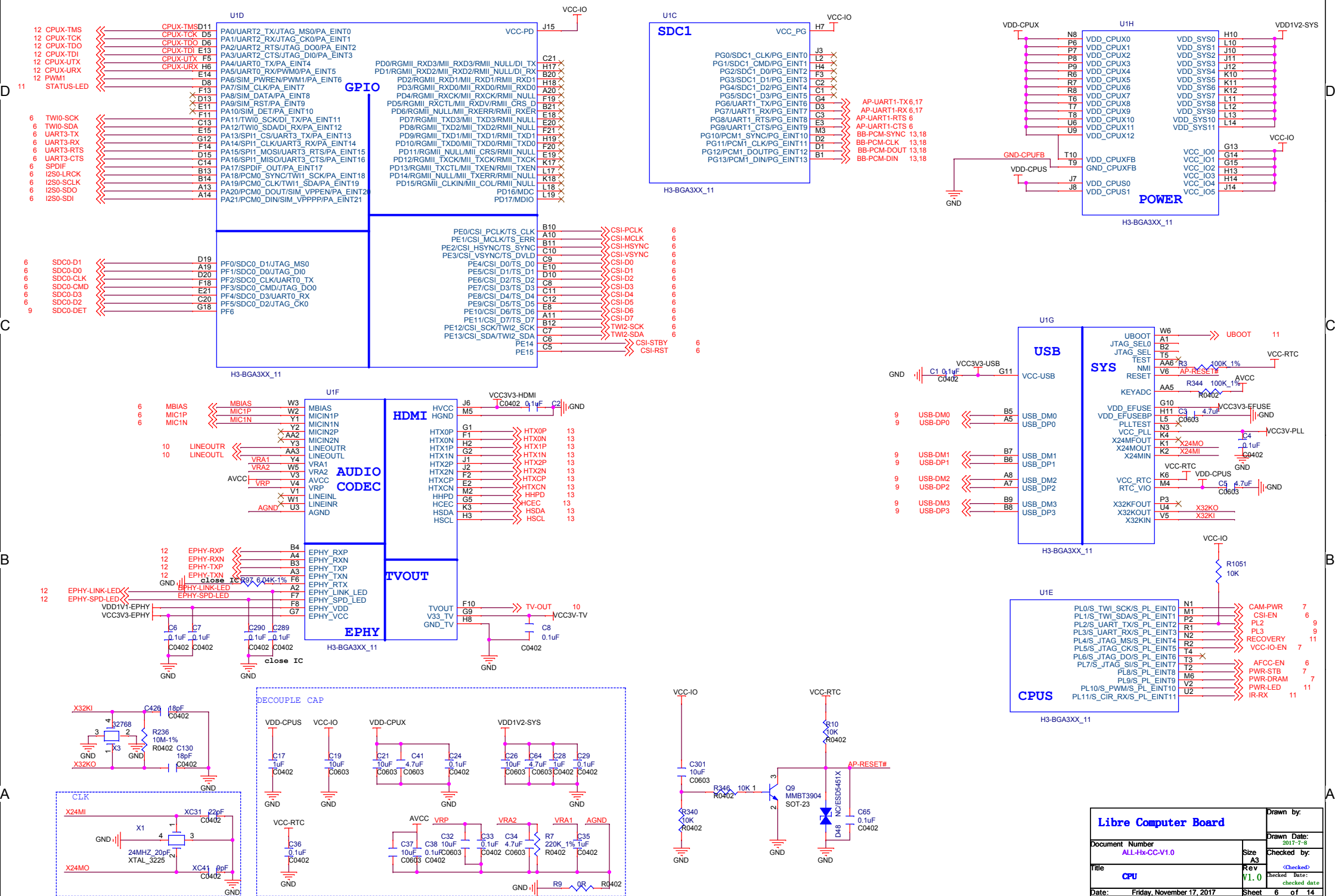
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PA0	MS	3/1	JTAG /USB	PC0	NWE	2/3	NAND /eMMC /NOR	PD0	NC	7		PE0	CSI-PCLK	7	
PA1	TCK	3/1		PC1	NALE	2/3		PD1	NC	7		PE1	CSI-MCLK	7	
PA2	TDO	3/1		PC2	NCLE	2/3		PD2	NC	7		PE2	CSI-HSYNC	7	
PA3	TDI	3	UART	PC3	NCE1	2/3		PD3	NC	7		PE3	CSI-VSYNC	7	
PA4	UART-TX	3		PC4	NCE0	2		PD4	NC	7		PE4	CSI-D0	7	
PA5	UART-RX	3		PC5	NRE	2/3		PD5	NC	7		PE5	CSI-D1	7	
PA6	PWM1	7		PC6	NRB0	2/3		PD6	NC	7		PE6	CSI-D2	7	
PA7	STATUS-LED	7		PC7	NRB1	2		PD7	NC	7		PE7	CSI-D3	7	
PA8	NC	7		PC8	NDQ0	2/3		PD8	NC	7		PE8	CSI-D4	7	
PA9	NC	7		PC9	NDQ1	2/3		PD9	NC	7		PE9	CSI-D5	7	
PA10	NC	7		PC10	NDQ2	2/3		PD10	NC	7		PE10	CSI-D6	7	
PA11	TWI0-SCK	7		PC11	NDQ3	2/3		PD11	NC	7		PE11	CSI-D7	7	
PA12	TWI0-SDA	7		PC12	NDQ4	2/3		PD12	NC	7		PE12	TWI2-SCK	7	
PA13	UART3-TX	7		PC13	NDQ5	2/3		PD13	NC	7		PE13	TWI2-SDA	7	
PA14	UART3-RX	7		PC14	NDQ6	2/3		PD14	NC	7		PE14	CSI-STBY	7	
PA15	UART3-RTS	1		PC15	NDQ7	2/3		PD15	NC	7		PE15	CSI-RST	7	
PA16	UART3-CTS	1	LED	PC16	NDQS	2/3		PD16	NC	7					
PA17	SPDIF	2	AV					PD17	NC	7					
PA18	I2S0-LRCK	7	SPDIF												
PA19	I2S0-SCLK	7													
PA20	I2S0-SDO	7													
PA21	I2S0-SDI	7													

PIN	Define	CFG	Function	PIN	Define	CFG	Function	PIN	Define	CFG	Function
PF0	D1	2	CARD0	PG0	NC	7		PL0	CAM-PWR	2	
PF1	D0	2		PG1	NC	7		PL1	CSI-EN	2	
PF2	CLK	2		PG2	NC	7		PL2	PL2	1	
PF3	CMD	2		PG3	NC	7		PL3	PL3	1	
PF4	D3	2		PG4	NC	7		PL4	RECOVERY	0	
PF5	D2	2		PG5	NC	7		PL5	VCC-IO-EN	1	
PF6	DET	0		PG6	UART1-TX	7		PL6	NC	7	
				PG7	UART1-RX	7		PL7	AFCC-EN	7	
				PG8	UART1-RTS	7		PL8	PWR-STB	1	
				PG9	UART1-CTS	7		PL9	PWR-DRAM	1	
				PG10	PCM-SYNC	7		PL10	PWR-LED	1	
				PG11	PCM-CLK	7		PL11	IR-RX	2	
				PG12	PCM-DOUT	7					
				PG13	PCM-DIN	7					

DDR3 16x4⁵

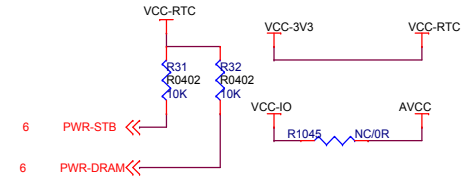
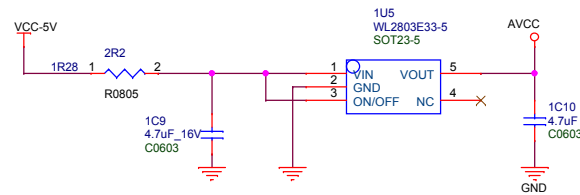
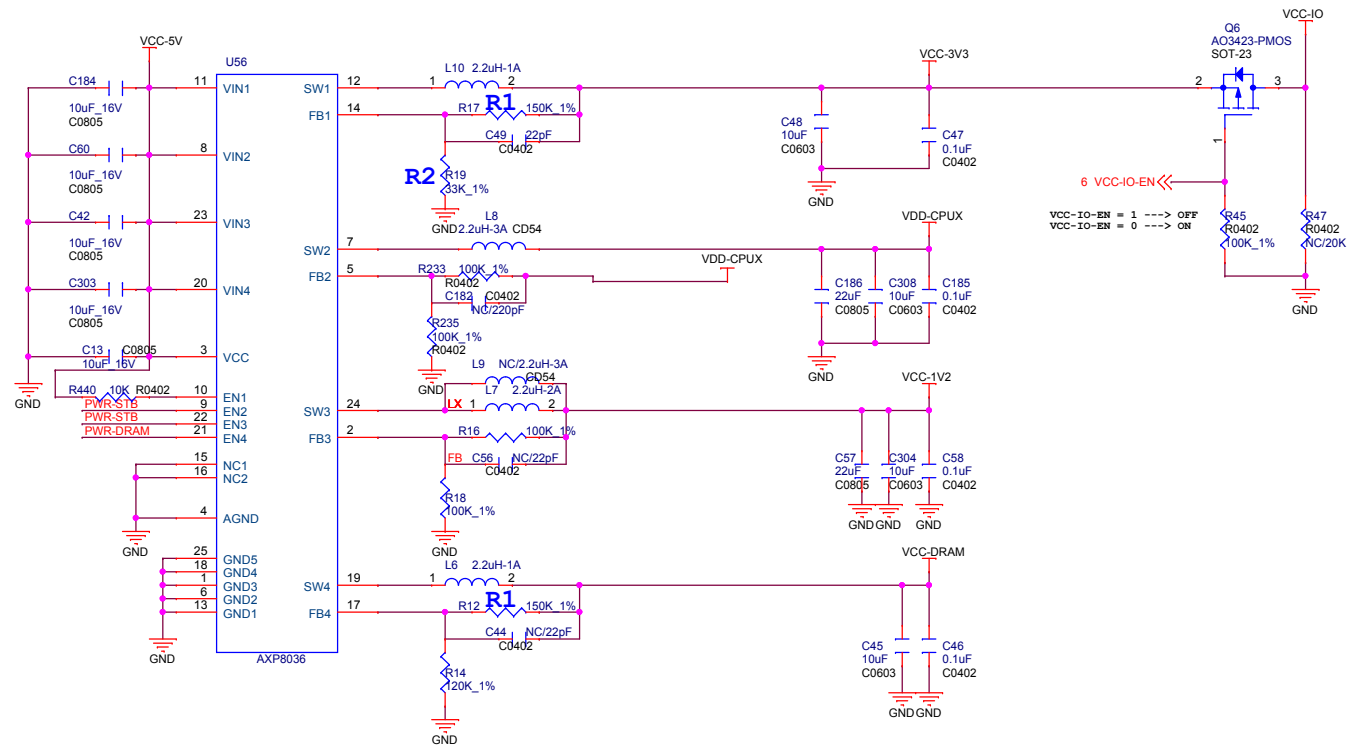
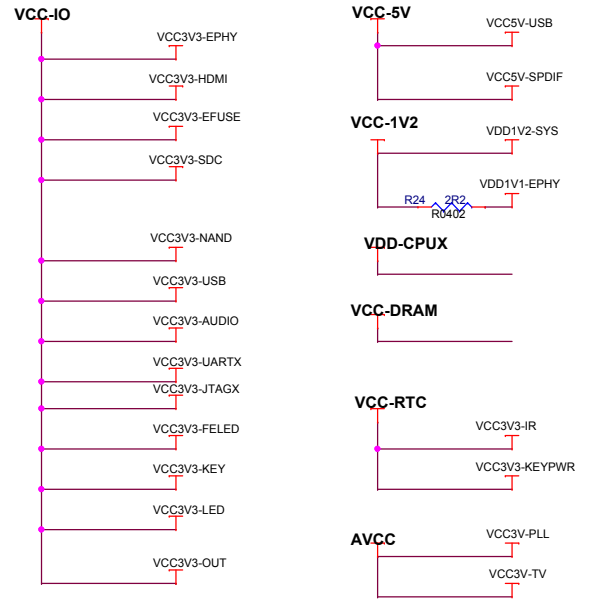
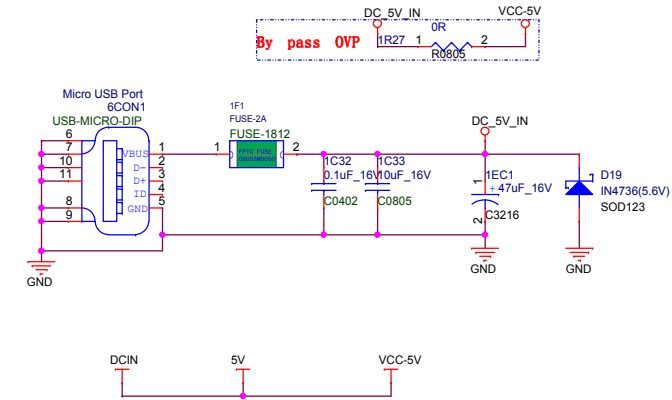


CPU



DCIN

POWER

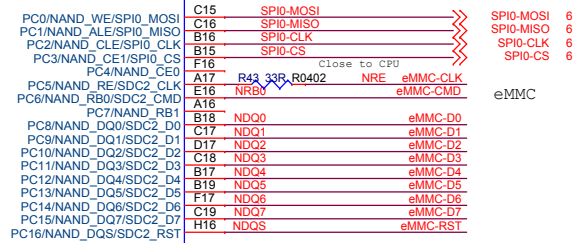


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Date: Friday, November 17, 2017		Sheet	7 of 14

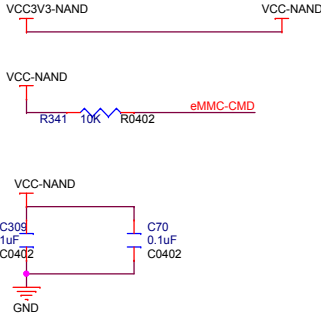
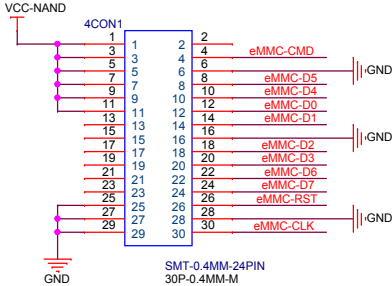
eMMC

U1B

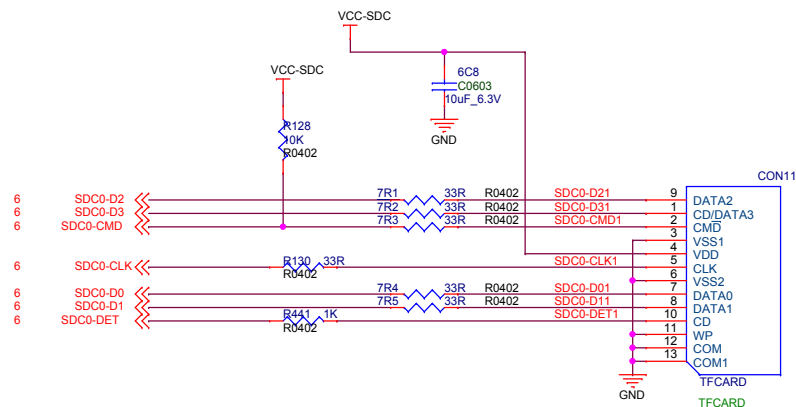
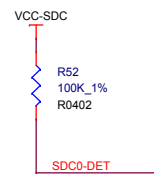
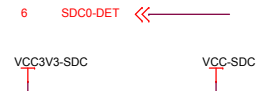
NAND



H3-BGA3XX_11



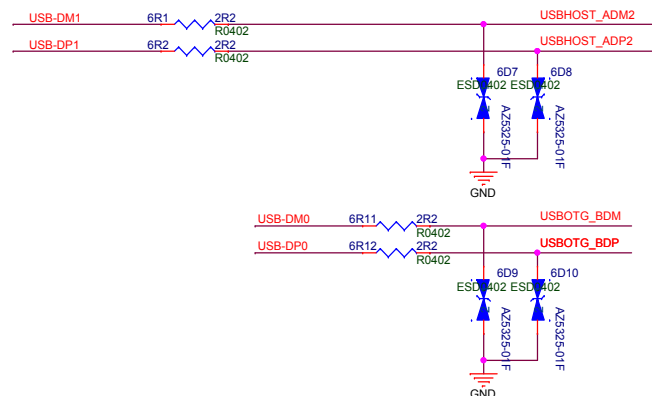
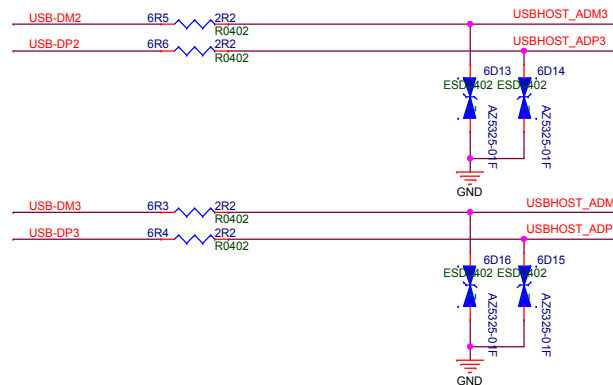
T-CARD



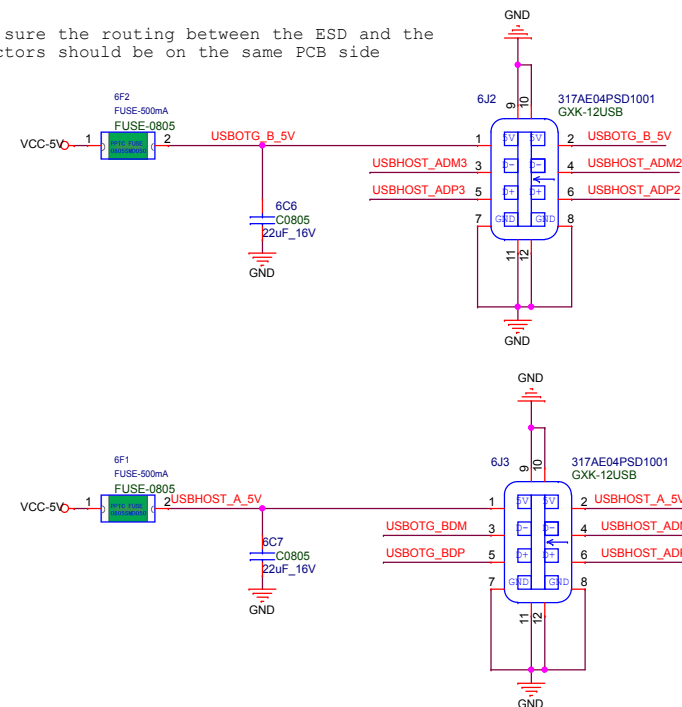
USB



Differential pairs
Z0= 90 ohm

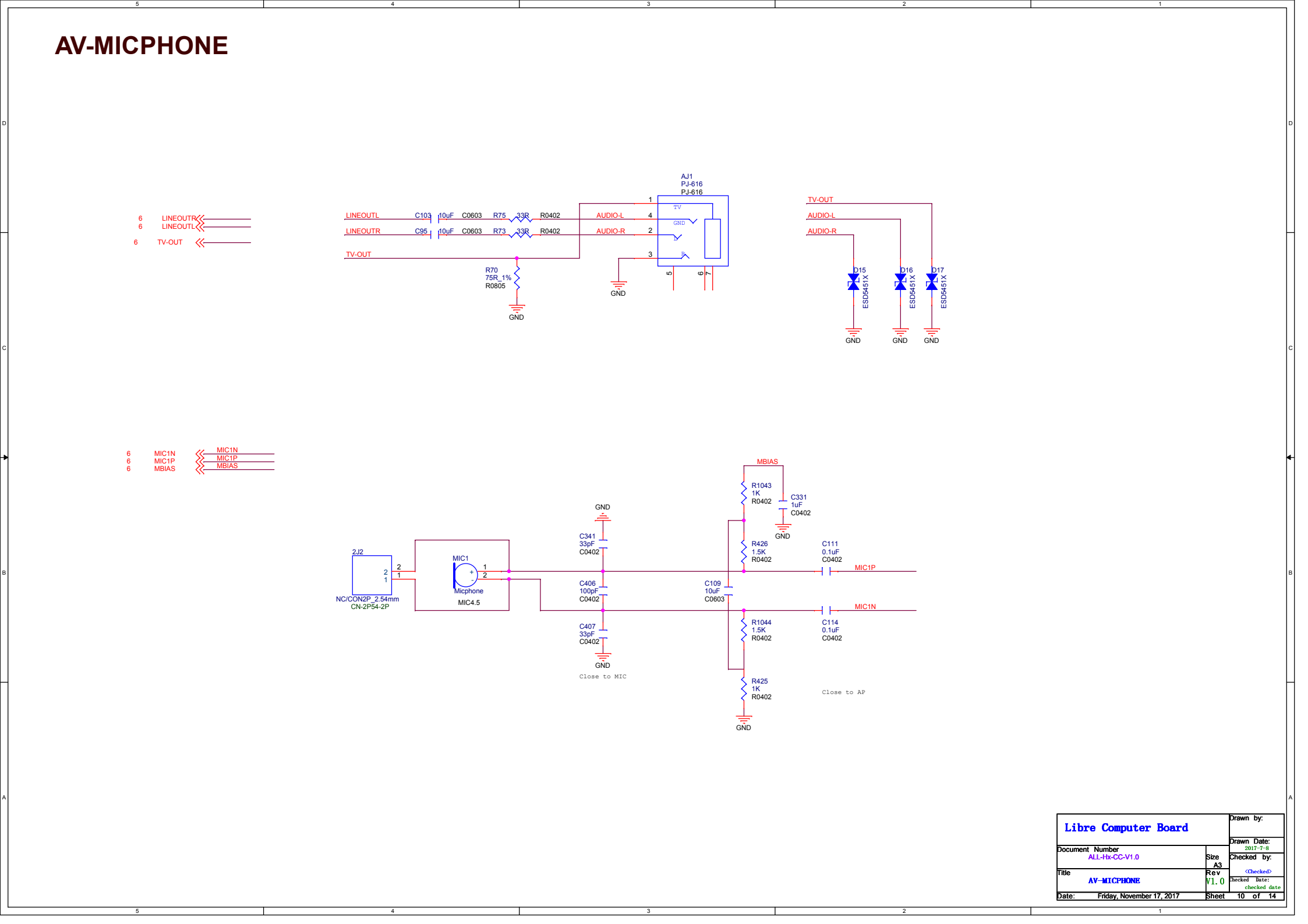


note: Make sure the routing between the ESD and the USB connectors should be on the same PCB side



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AV-MICPHONE



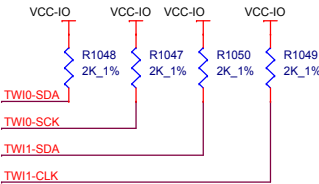
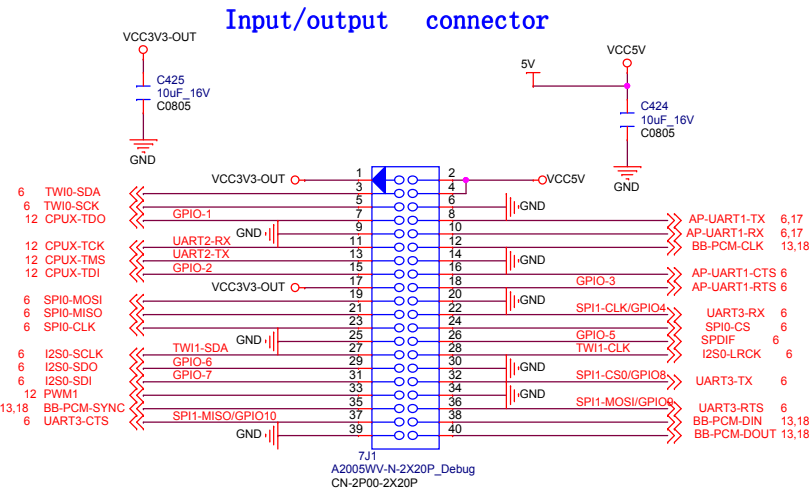
AV-MICPHONE

The schematic diagram illustrates the AV-Micphone circuit. It features several input/output sections:

- Top Left:** Connections for LINEOUTL, LINEOUTR, and TV-OUT. These are linked through capacitors C103 and C95 (both 10µF) and resistors R75, R73, and R70 (all 33Ω or 75Ω 1%) to a central node connected to GND.
- Top Right:** A section labeled TV-OUT, AUDIO-L, and AUDIO-R. It includes three ESD protection diodes D15, D16, and D17 (ESD6461X) connected to GND.
- Middle:** A central component labeled AJ1 PJ-616 PJ-616, which appears to be a switch or multiplexer with pins 1 through 7.
- Bottom Left:** A connector labeled NC/CON2P 2.54mm CN-2P54-2P, connected to a microphone MIC1 (MIC4.5). The microphone has pins 1, 2, and 3. Pin 1 is connected to MIC1N, pin 2 to MIC1P, and pin 3 to MBIAS.
- Bottom Center:** A network of capacitors (C341 33pF, C406 100pF, C407 33pF) and resistors (R1043 1K, R426 1.5K, R1044 1.5K, R425 1K) connecting the microphone signals to the main signal lines. Labels "Close to MIC" and "Close to AP" indicate placement instructions.
- Bottom Right:** Further filtering with capacitors C109 (10µF), C111 (0.1µF), and C114 (0.1µF) leading to MIC1P and MIC1N outputs.

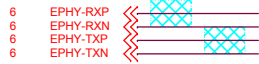
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Title AV-MICPHONE	Rev V1.0	Size A3	Checked by:
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Header

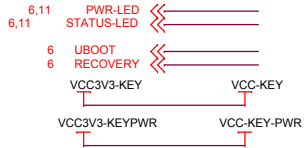


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Date: Friday, November 17, 2017		Rev V1.0	Checked Date: checked date
		Sheet 11 of 14	

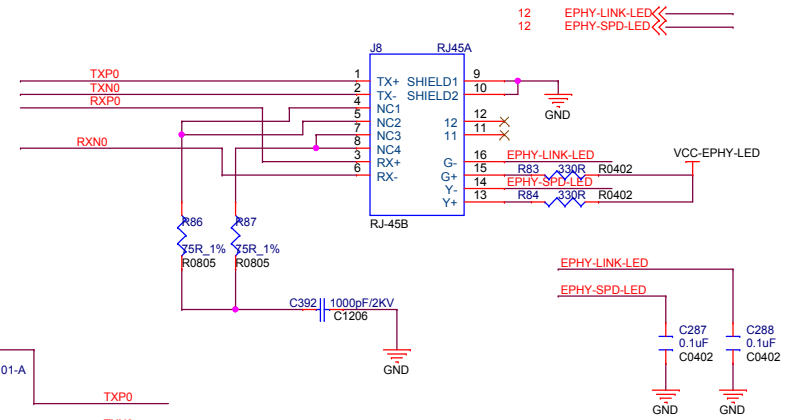
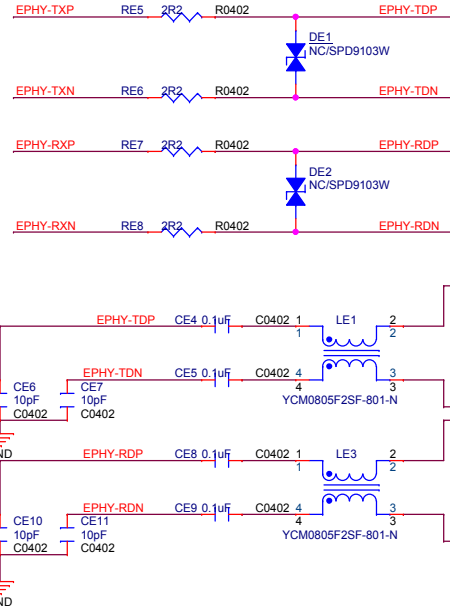
Differential pairs Z0= 100 ohm



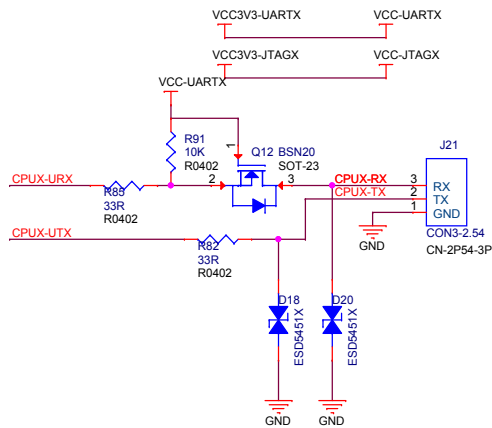
VCC3V3-FELED VCC-EPHY-LED



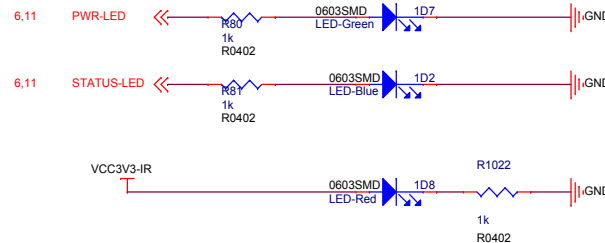
FE



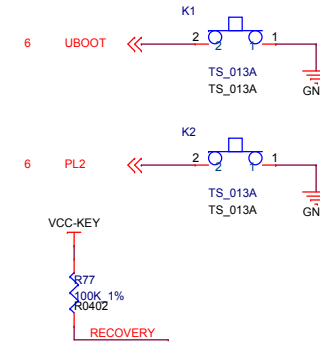
DEBUG



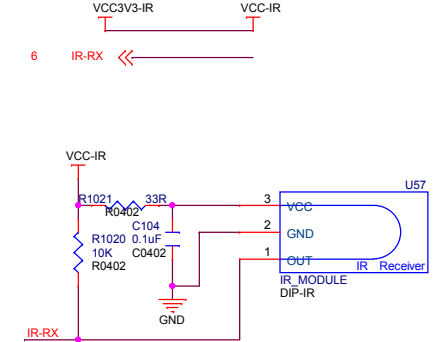
LED



KEY

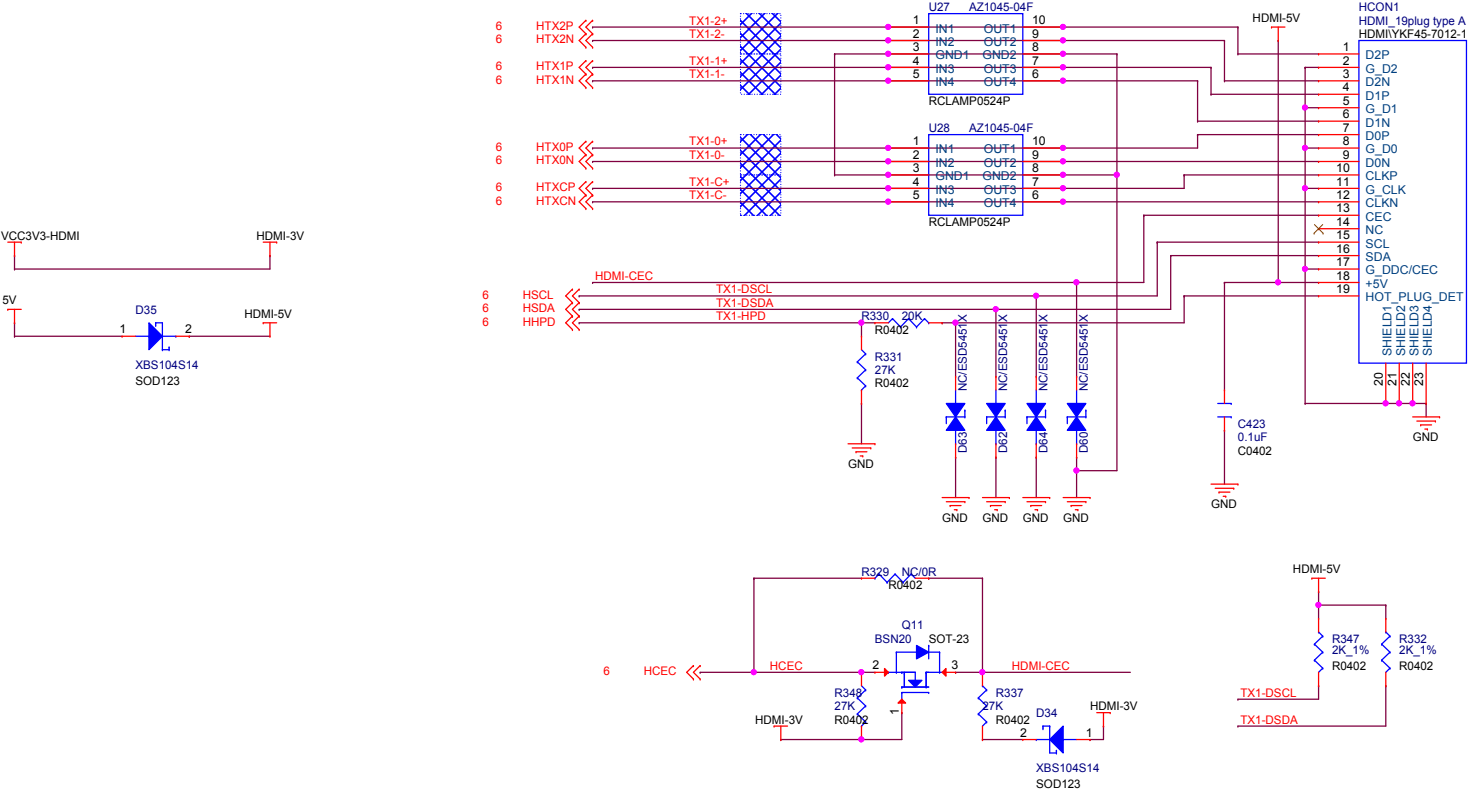


IR

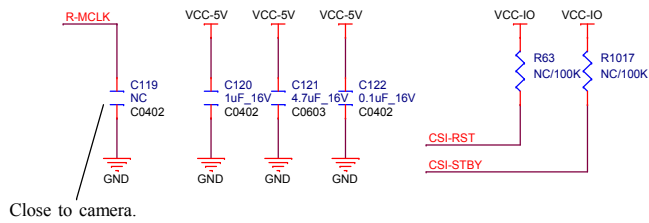
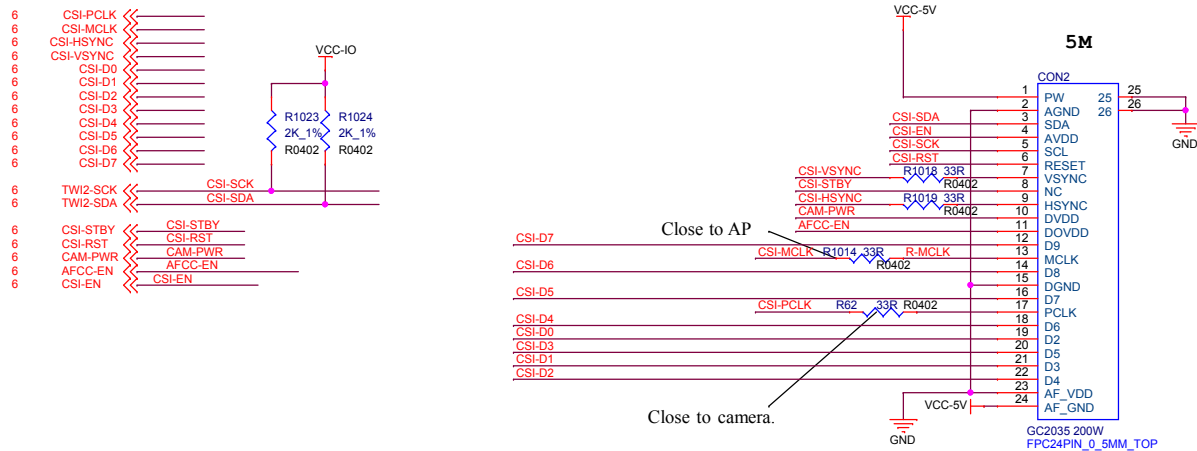


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HDMI



Camera



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