

GA-AB350M-DS3H V2

PAGE	TITLE	Revision :1.11
01	COVER SHEET	
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04	CPU DDR4 MEMORY	
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06	CPU GFX, GPP, SB, GND	
07	CPU MISC	
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09	CPU CLK, USB3, SPI ,LPC	
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11	DDR4 CHANNEL B	
12	PM CLK, SPI, MISC	
13	PM USB	
14	PM SATA, GPP	
15	PM POWER, GND	
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17	IT8686	
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22	POWER SEQ, A_VDDP	
23	ATX , F_PANEL	
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25	VCORE MOS	

[illegible]

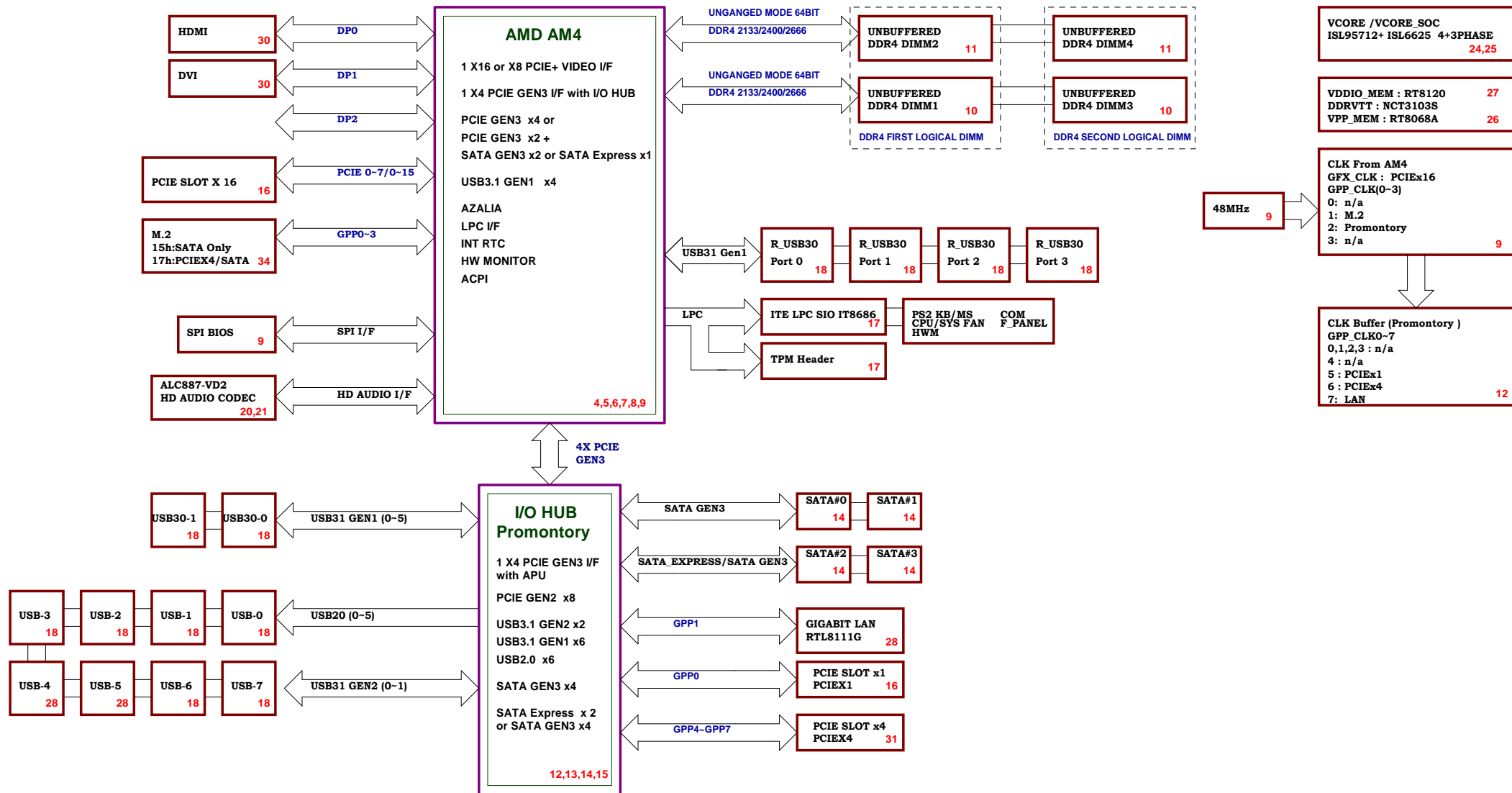
Circuit or PCB layout change for next version

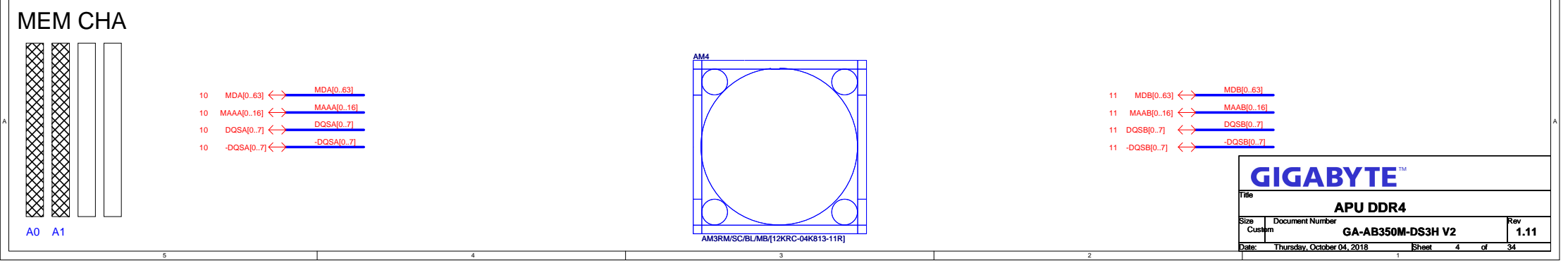
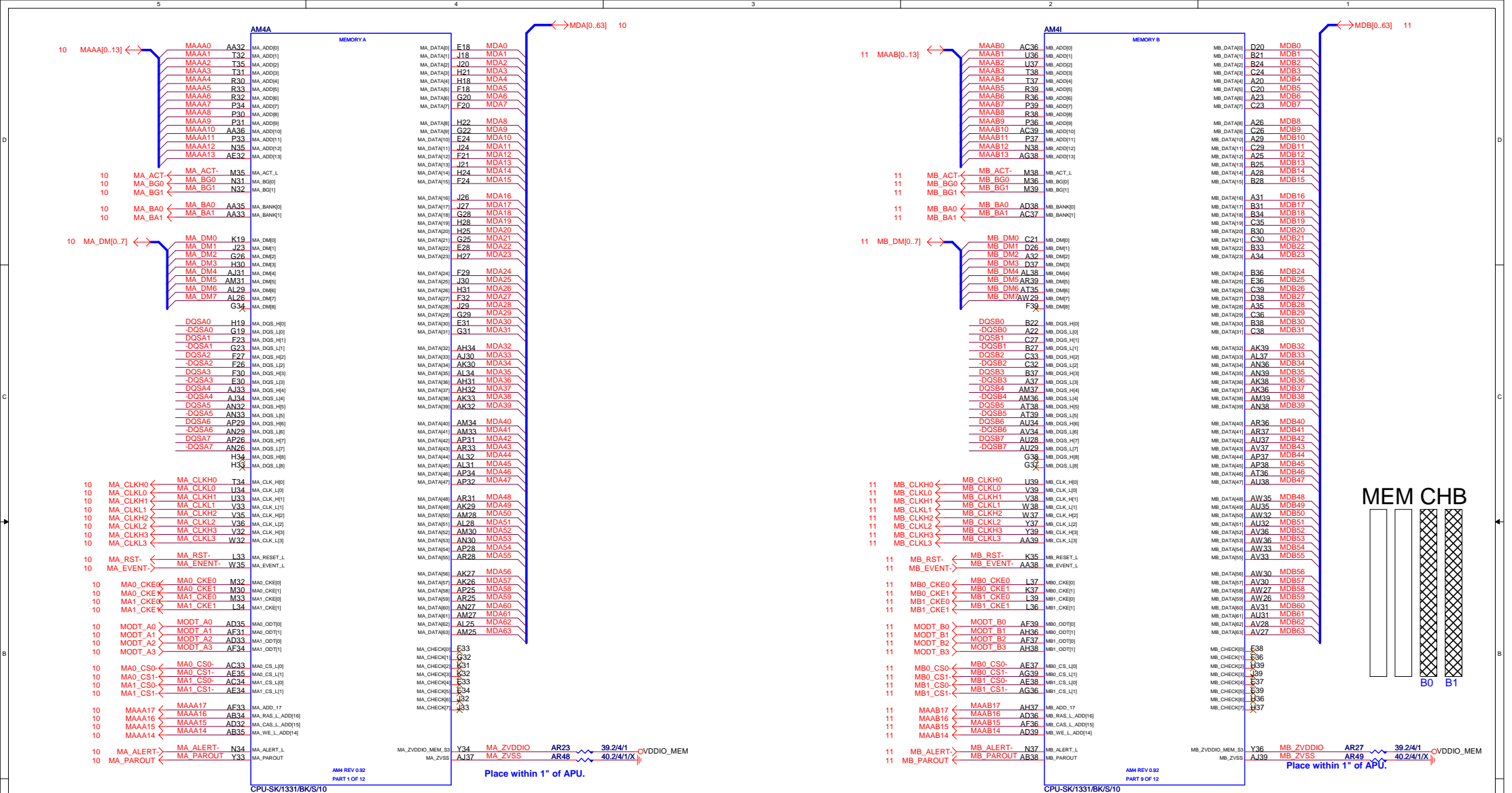
Component value change history

P-Code: U18142-0

Tip-Top: 9MAB35HV2-00-11A

[illegible][illegible]





3VDDAL0 AR112 1K/4/1X S0A3 GPIO

3VDDAL0 AR111 8.2K/4 LPCPME-

3VDDAL0 AR110 1K/4/1X SLP S3-

3VDDAL0 AR109 1K/4/1X SLP S5-

3VDDAL0 AR74 2.2K/4/1X A TEST0

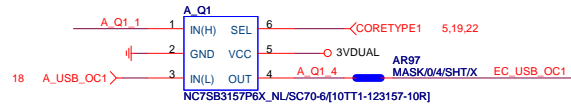
3VDDAL0 AR75 15K/4/1

3VDDAL0 AR76 2.2K/4/1X A TEST1

3VDDAL0 AR77 15K/4/1

3VDDAL0 AR78 2.2K/4/1X A TEST2

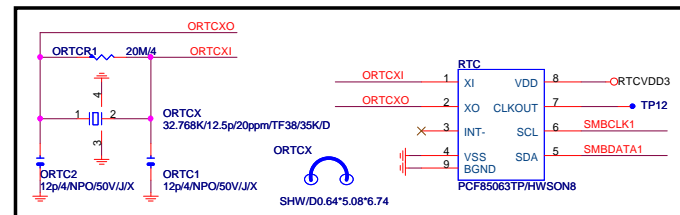
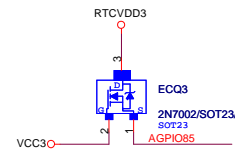
3VDDAL0 AR79 15K/4/1

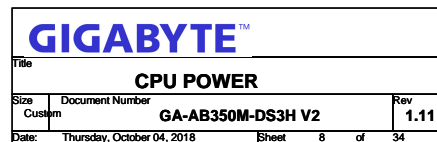
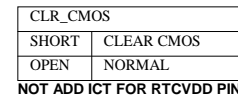
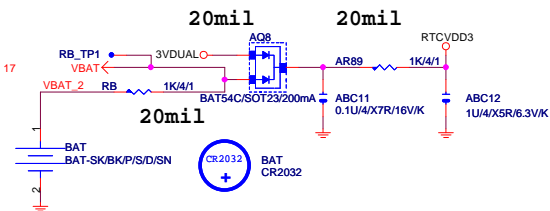


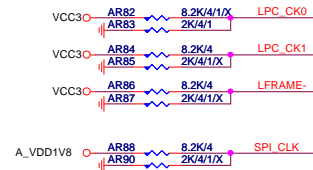
AM4D		ACPI023/SGPIORT/SCMSMC	
22	LPC_RST_L		
17	PCH_RST_L#GPI028		
5	RSMRST_L		EGPI09
P5	PWR_BTN_LIAGPI00		EGPI09
V3	PWR_GOOD		
V4	SYS_RESET_LIAGPI01		
15	WAKE_LIAGPI02		EGPI09
T2	SLP_S3_L		EGPI09
P2	SLP_S5_L		EGPI09
B3	SA0_GPI0AGPI010SGPI00_CLK		
	IS_MIA_CTR#EGPI040		SCLODC2_SCLEGPI01
M6	TEST0		SDA0I0C2_SDA#EGPI01
M7	TEST1/ITM3		
T3	TEST2		SCLEI0C3_SCLEAGPI0
24	ESPI_RESET_L#KBRST_L		SDA0I0C3_SDA#AGPI03
L2	LPC_PME_LIAGPI022		
17	AGPI066		AGPI0
N3	AGPI023/SGPI00_LOAD		AGPI09/DEVSLP
23	CLK_REG0_LISATA_00_LISATA_ZP#_LIAGPI02		AGPI0
24	CLK_REG0_LIAGPI015		AGPI09/SGPI00_DATAOUT
24	CLK_REG02_LIAGPI016		GENINT1_LIAGPI09
23	CLK_REG0_LISATA_01_LISATA_ZP1_L#EGPI031		GENINT2_LIAGPI09
26	CLK_REG0_LI0C0#EGPI0132		SATA_ACT_LIAGPI013
19	USB_OC0_LIAGPI016		AGPI040SGPI00_DATA
M1	USB_OC1_LIT0AGPI017		
M4	USB_OC2_LIT0AGPI018		
M4	USB_OC3_LIT0AGPI024		
V3	AZ_BITCLK		SPKRAGPI09
V3	AZ_S0DN1		
V5	AZ_S0DN1		
V4	AZ_S0DN2		BLINKAGPI01
U1	AZ_RST_L		
U2	AZ_SYNC		
U4	AZ_S0OUT		FANNINGAGPI09
			FANOUT0AGPI09
P8	RTCCLK		TEST4U1
V5	32KX_K1		
V6	32KX_K2		

AM4 REV.0.92
PART 4 OF 12

CPU-SK/1331/BK/S/10



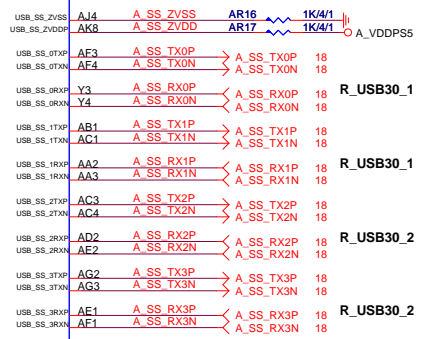
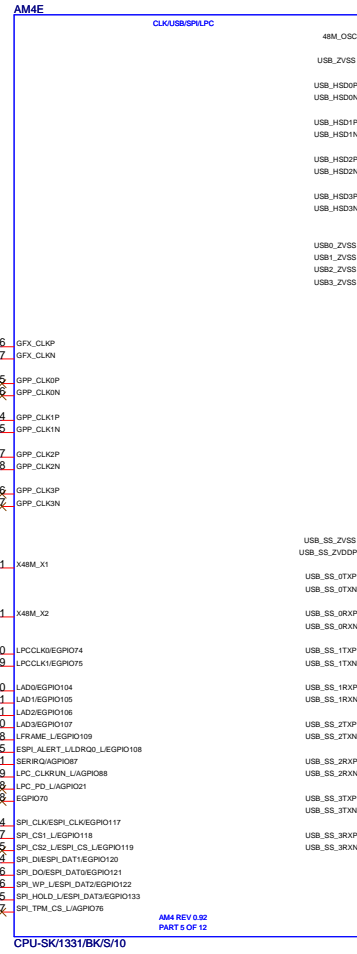
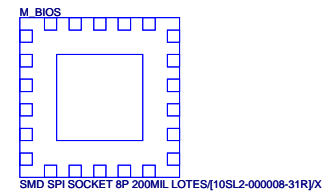
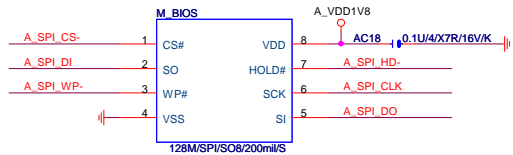
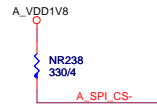
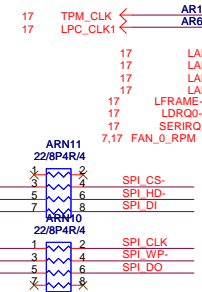
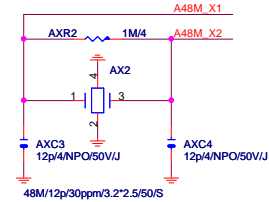


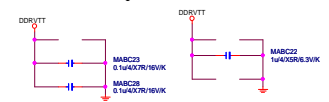


X16 Slot

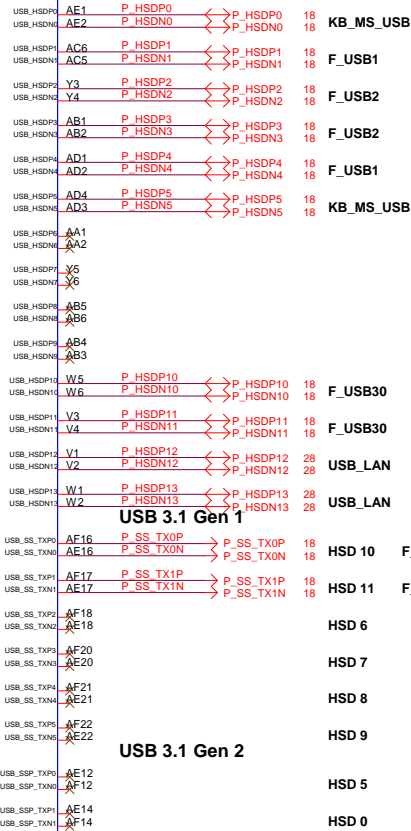
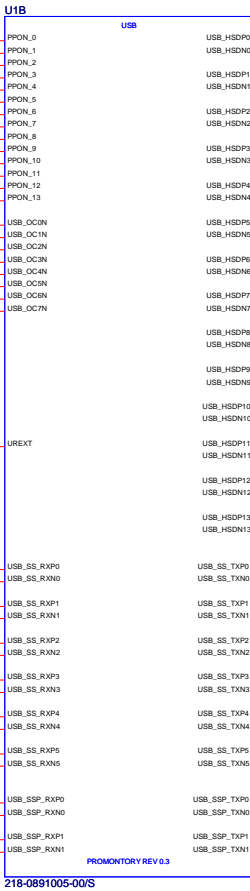
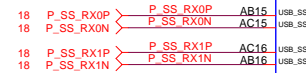
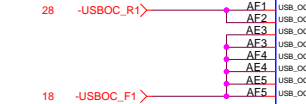
M.2

Promontory





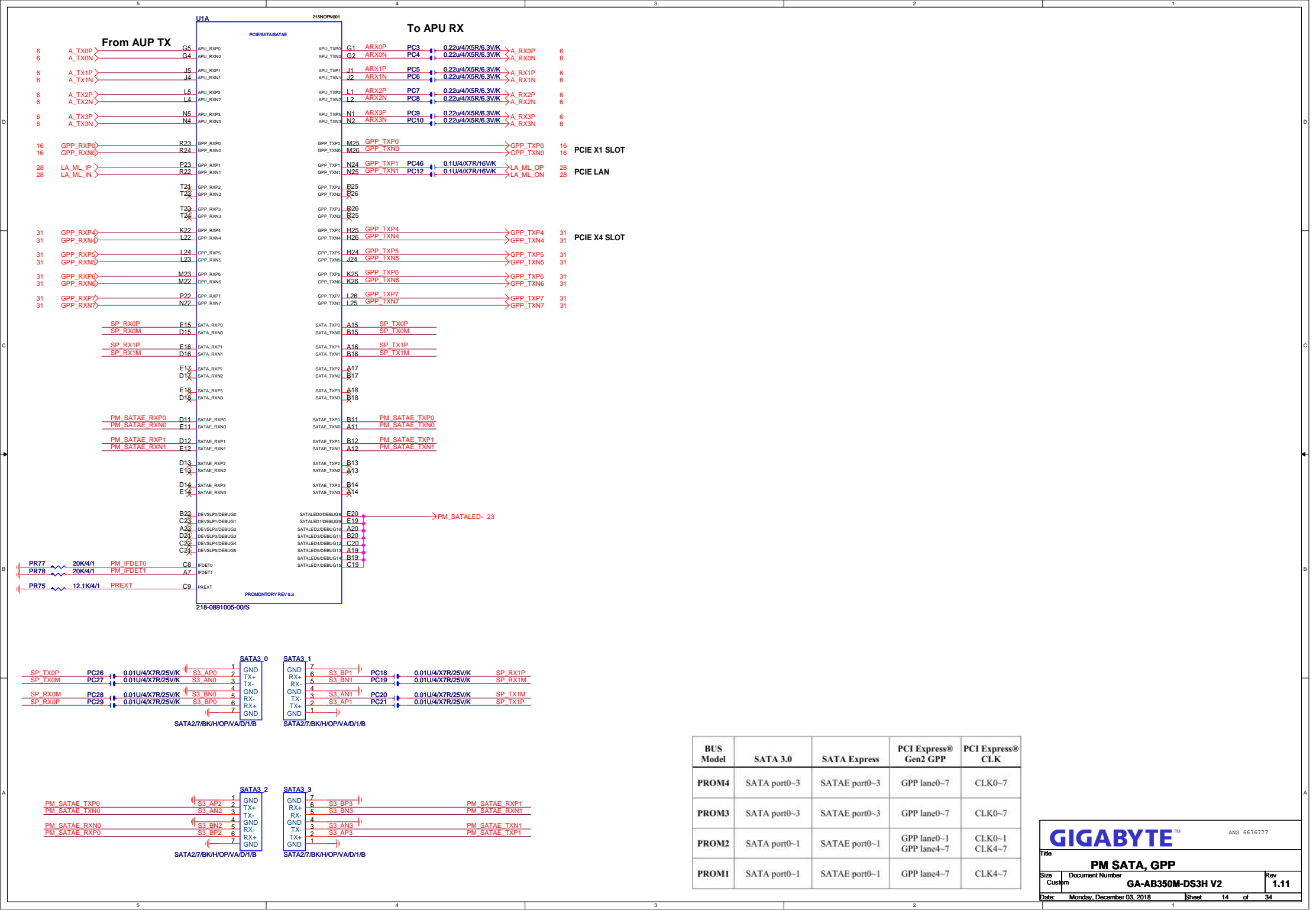
USB port power control 13:0
(VCC3). Output.

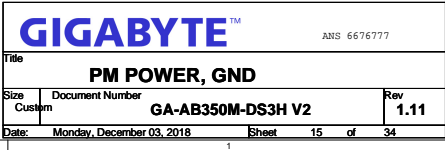


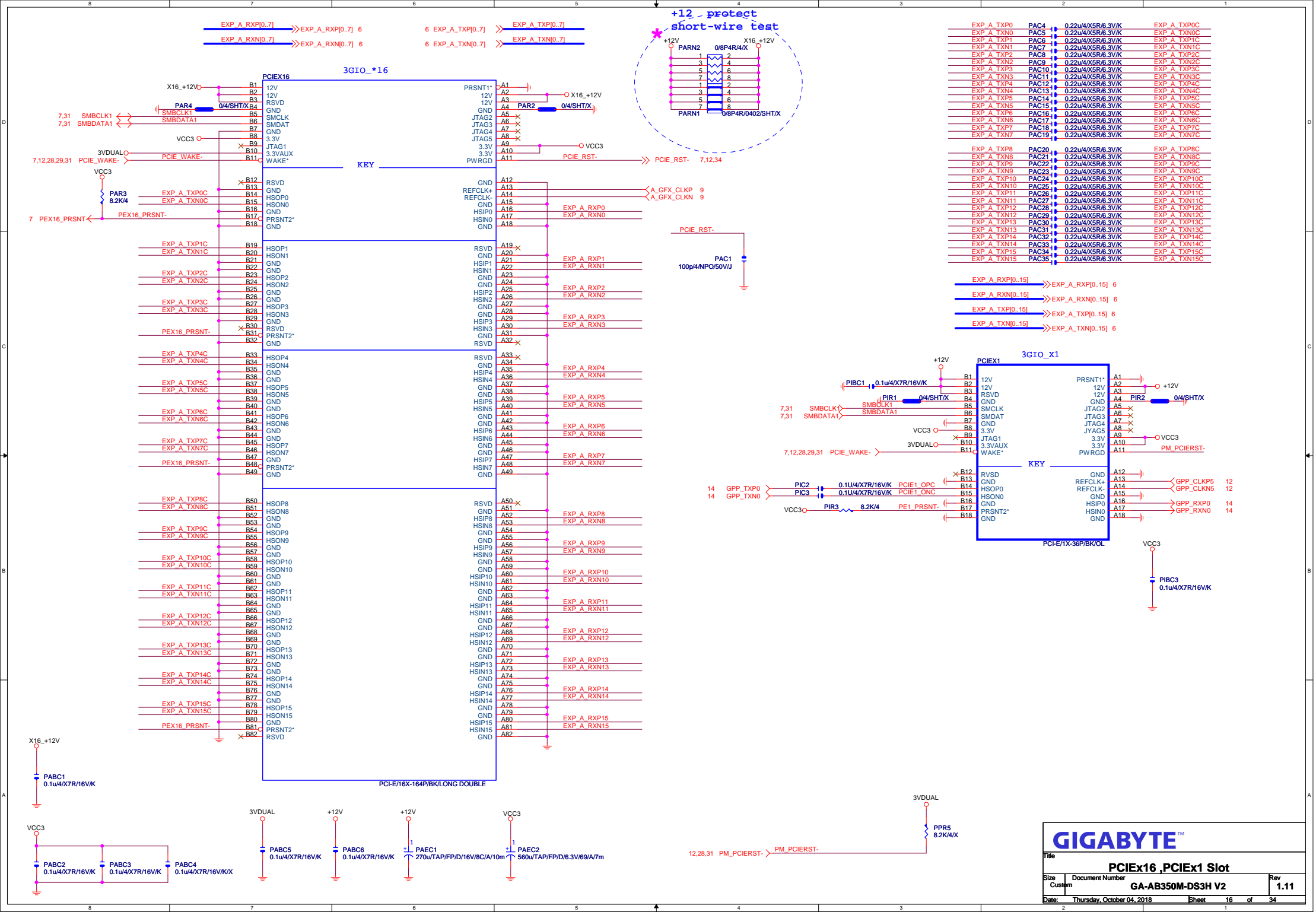
USB 3.1 Gen 2

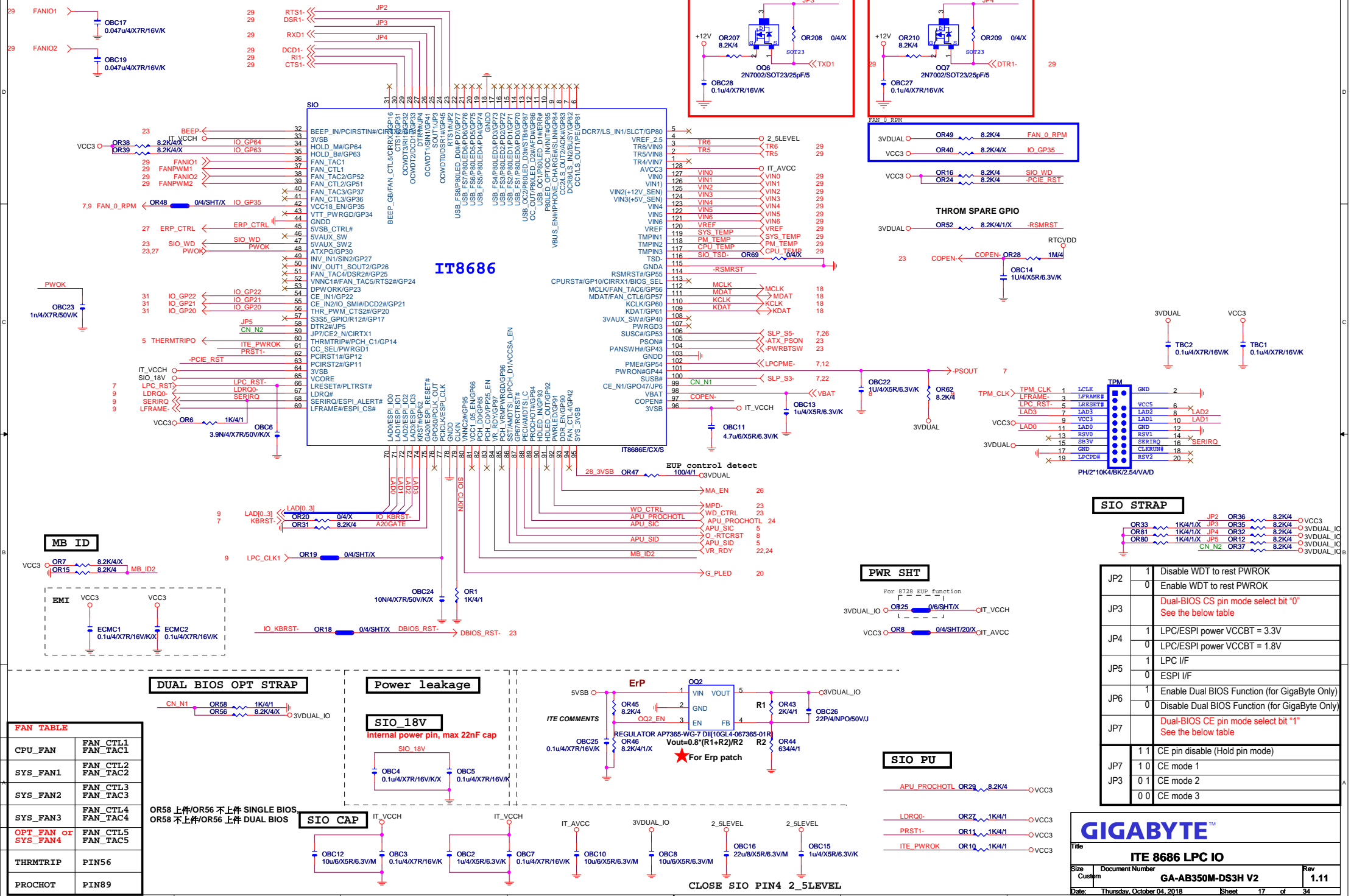
USB3.1	USB2.0	USB_OC
USB_SSP_TX/RXP/N[0]	USB_HSDP/N[5]	USB_OC0N
USB_SSP_TX/RXP/N[1]	USB_HSDP/N[0]	USB_OC1N
USB3.0	USB2.0	USB_OC
USB_SS_TX/RXP/N[0]	USB_HSDP/N[10]	USB_OC2N
USB_SS_TX/RXP/N[1]	USB_HSDP/N[11]	USB_OC3N
USB_SS_TX/RXP/N[2]	USB_HSDP/N[6]	USB_OC4N
USB_SS_TX/RXP/N[3]	USB_HSDP/N[7]	USB_OC5N
USB_SS_TX/RXP/N[4]	USB_HSDP/N[8]	USB_OC6N
USB_SS_TX/RXP/N[5]	USB_HSDP/N[9]	USB_OC7N
	USB_HSDP/N[1]	USB_OC7N
	USB_HSDP/N[2]	USB_OC7N
	USB_HSDP/N[3]	USB_OC7N
	USB_HSDP/N[4]	USB_OC7N
	USB_HSDP/N[12]	USB_OC7N
	USB_HSDP/N[13]	USB_OC7N

BUS Model	USB			
	3.1 Gen2 10 Gbps	3.1 Gen1 5 Gbps	2.0	Debug Port
PROM4	USB_SSP Port0~1	USB_SS Port 0~5	USB_HSD Port0~13	USB_SSP Port0
PROM3	USB_SSP Port0~1	USB_SS Port 0~5	USB_HSD Port0~13	USB_SSP Port0
PROM2	USB_SSP Port0~1	USB_SS Port 0~1	USB_HSD Port0~5 USB_HSD Port10~13	USB_SSP Port0
PROM1	USB_SSP Port0	USB_SS Port0 USB_SSP Port1	USB_HSD Port0~5 USB_HSD Port10, 12~13	USB_SSP Port0

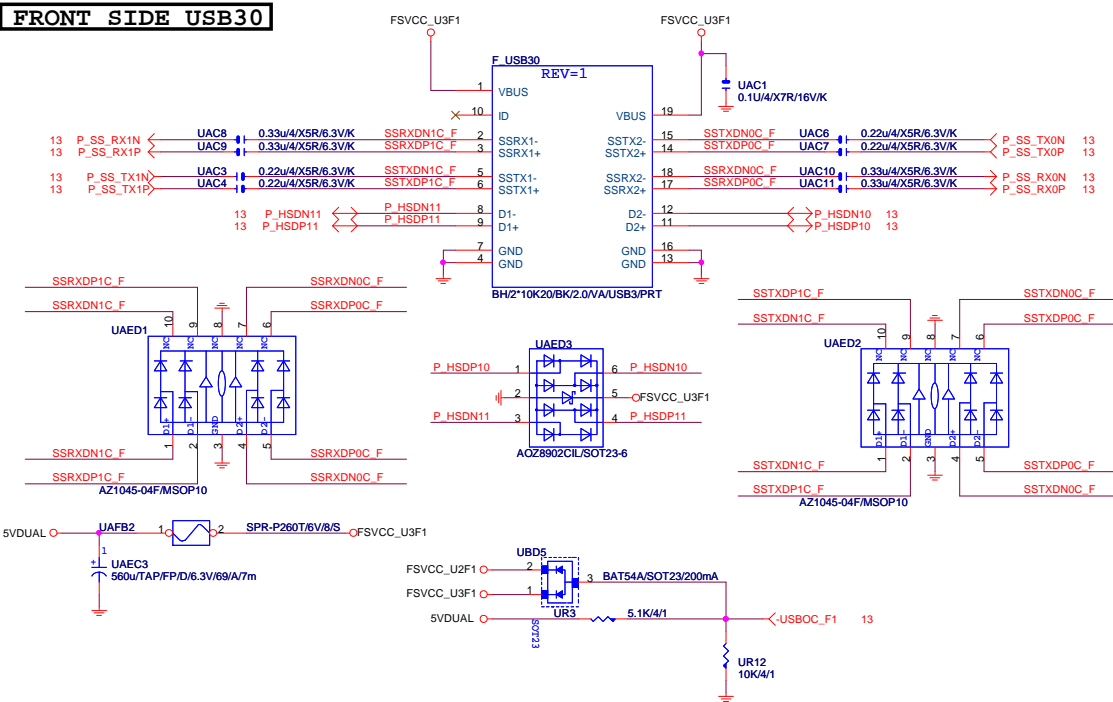




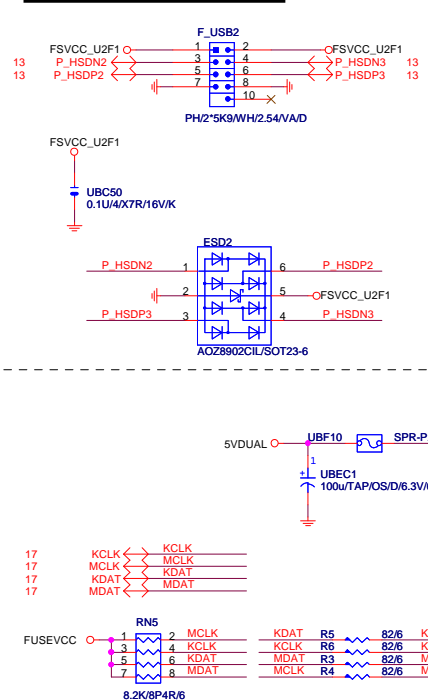




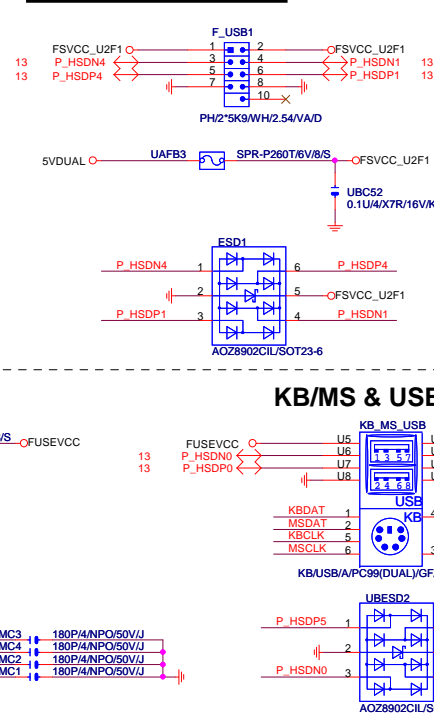
FRONT SIDE USB30



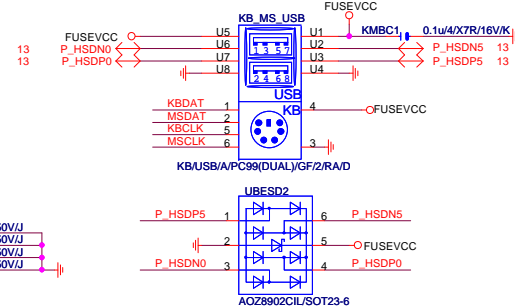
FRONT SIDE USB2



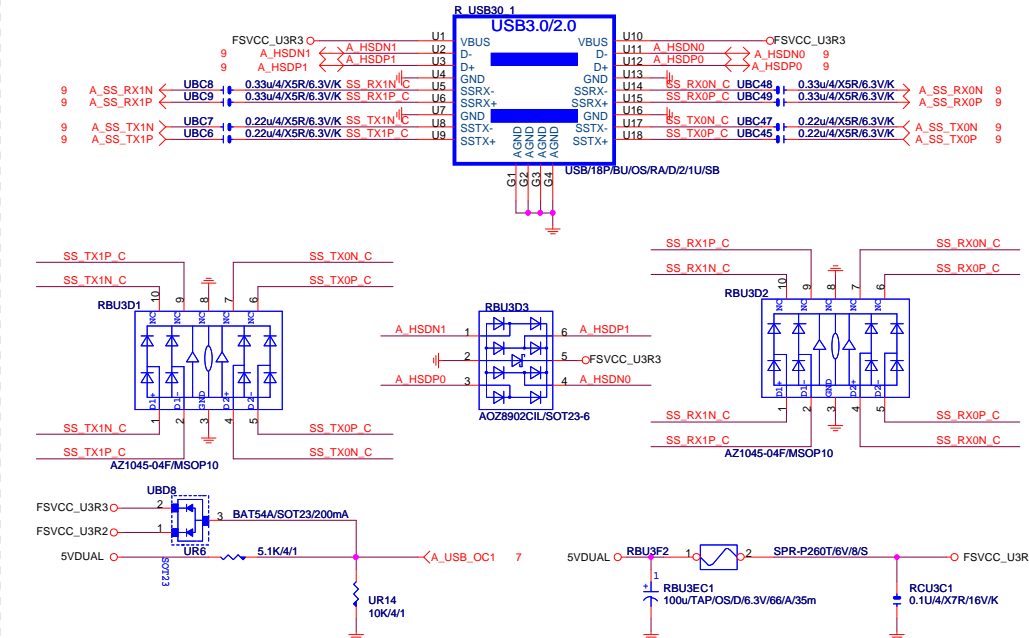
FRONT SIDE USB1



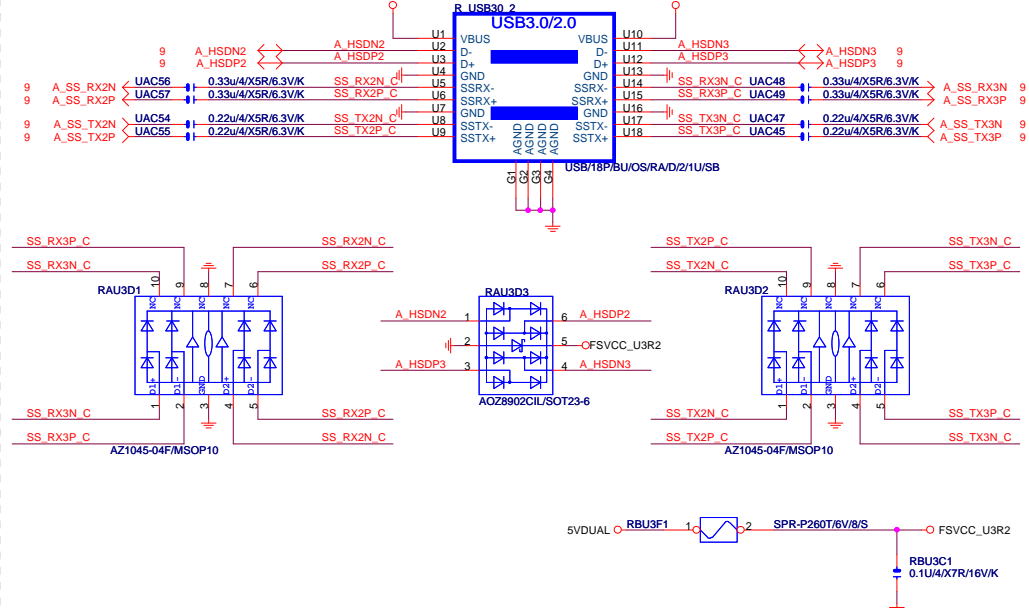
KB/MS & USB



R USB30 1
USB3.0/2.0

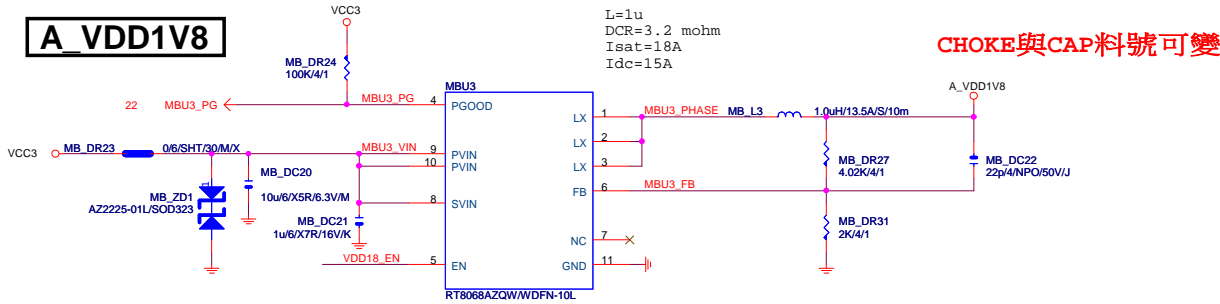


R USB30 2
USB3.0/2.0



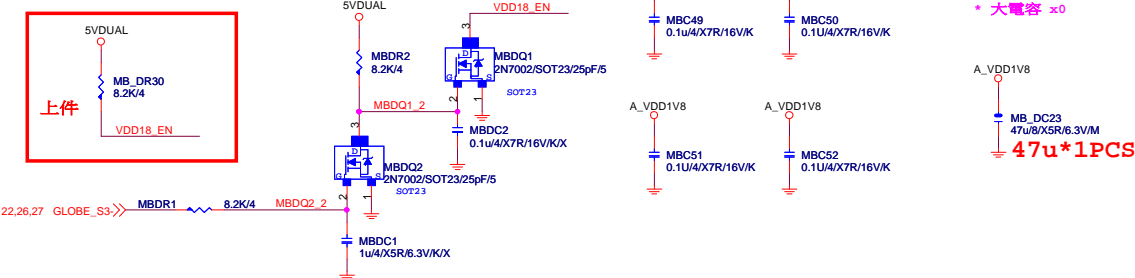
REV:0.4

A_VDD1V8

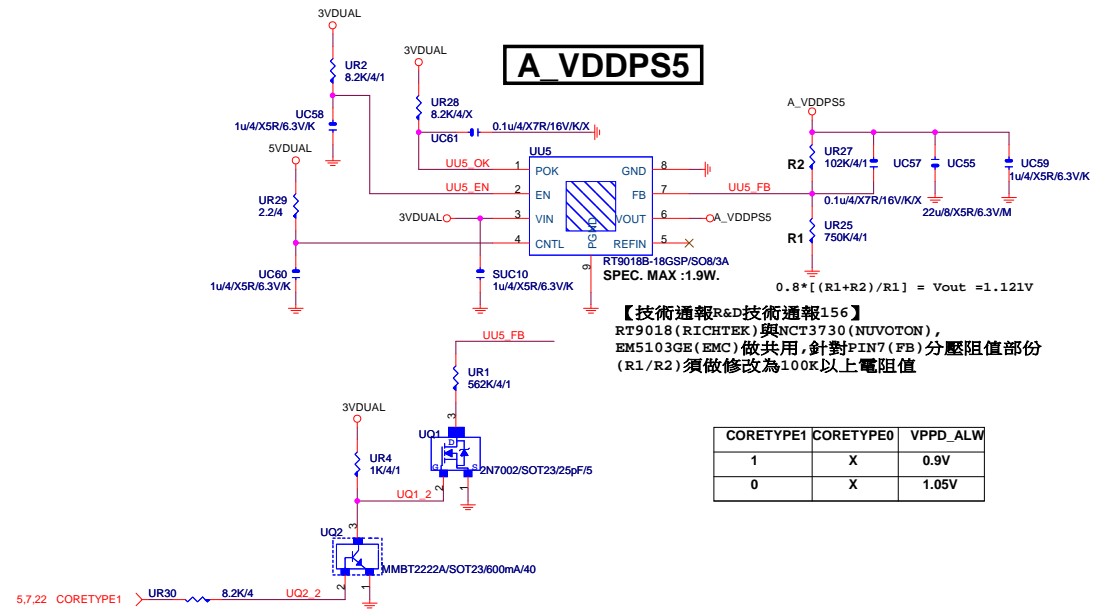


PWR_SEQ

* 刪 MA_DR32

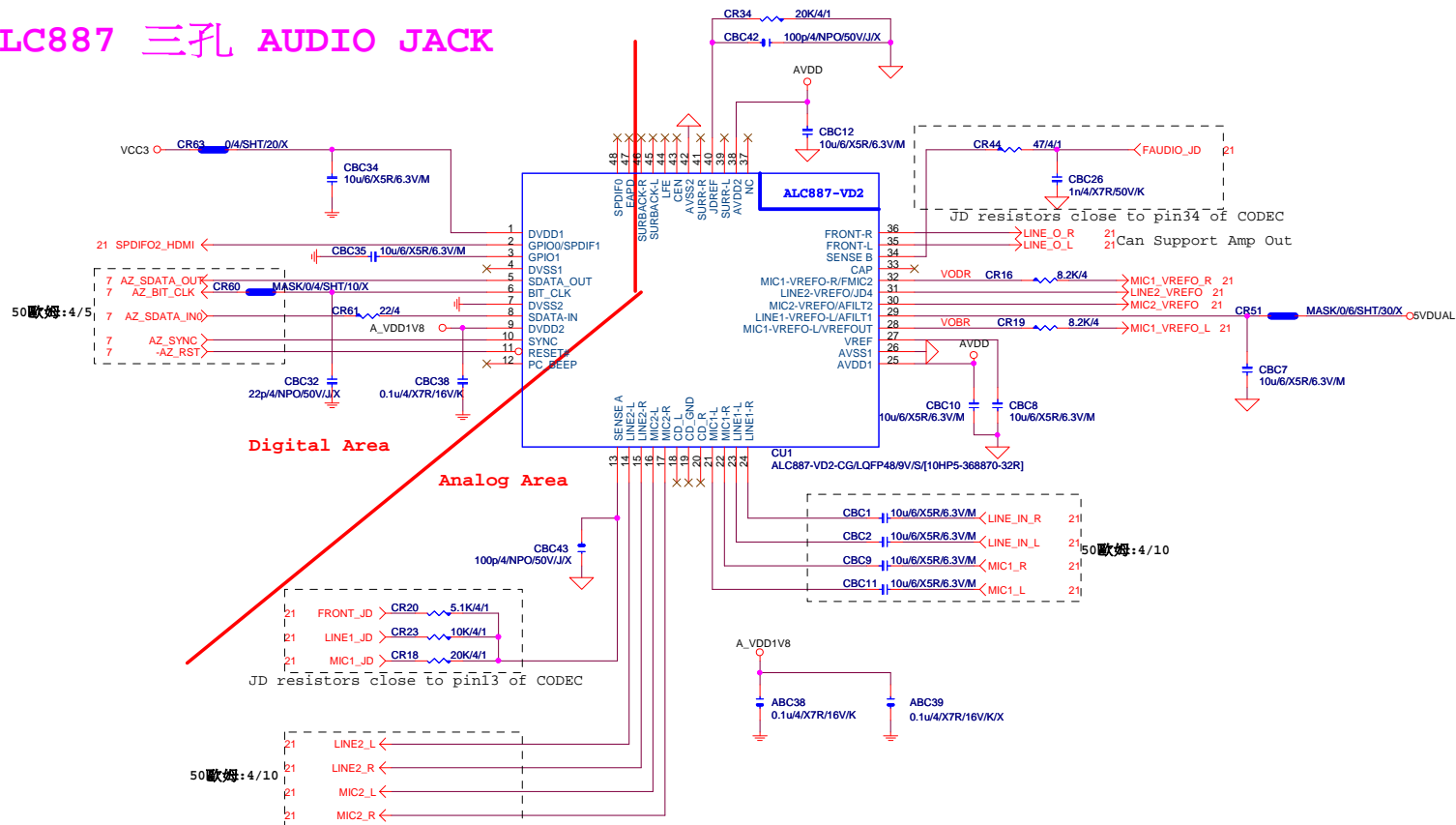


A_VDDPS5

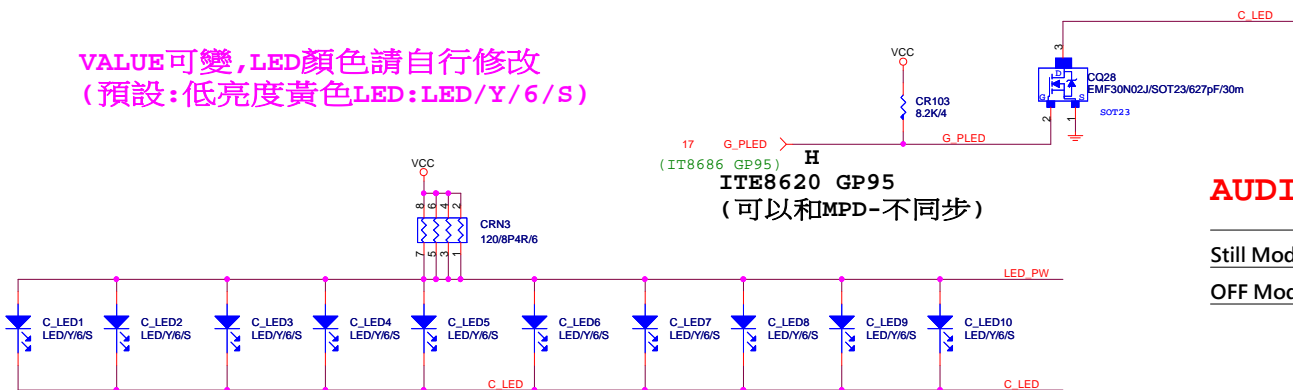


CORETYPE1	CORETYPE0	VPPD_ALW
1	X	0.9V
0	X	1.05V

ALC887 三孔 AUDIO JACK



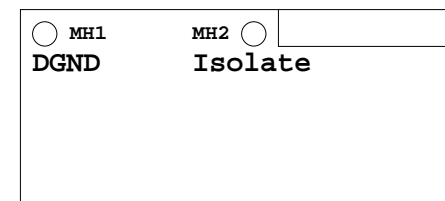
VALUE可變,LED顏色請自行修改
(預設:低亮度黃色LED:LED/Y/6/S)



- BOM OPTION :**
1. Chemicon音效電容
 2. 金屬外罩 Reserve (上件與否,依照各Model spec)
 3. LED Reserve (上件與否和LED顏色,依照各Model spec)

LAYOUT注意:螺絲孔下GND方式

1. MH1空間夠,下DGND
2. MH2一律改為Isolate

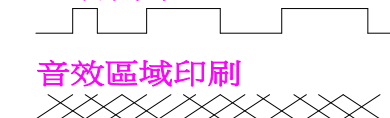


AUDIO LED Control

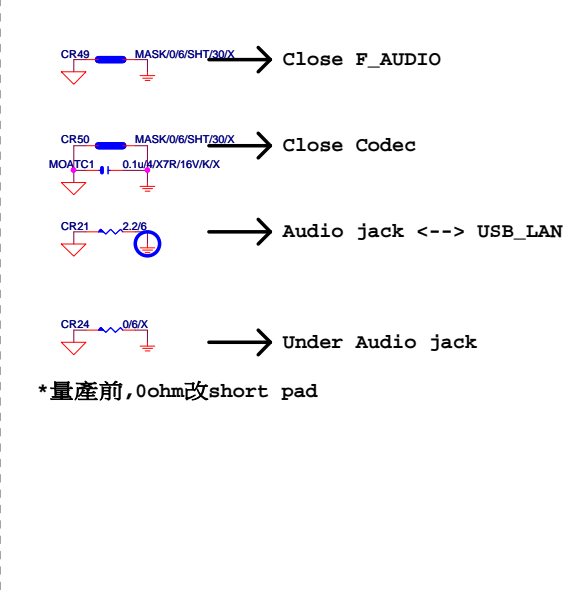
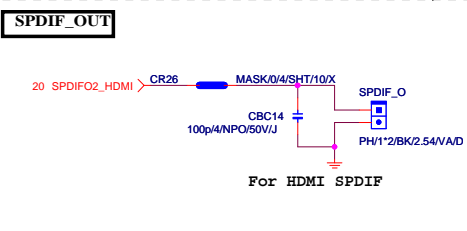
	IO_GP95	
Still Mode	H	
OFF Mode	L	

LAYOUT注意:要加

GND切割線

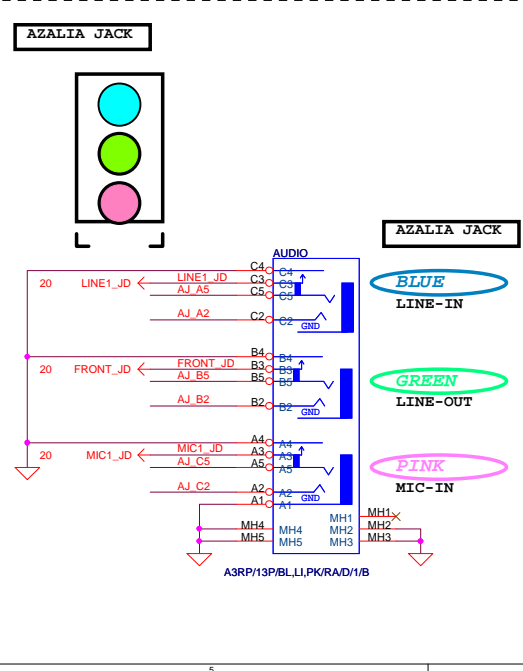


Rev 0.5

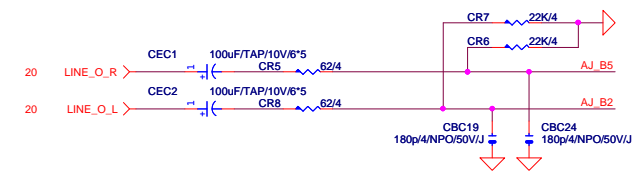
**SPDIF_OUT**

SPDIF_IN

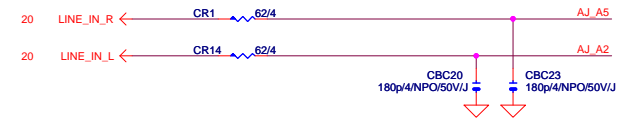
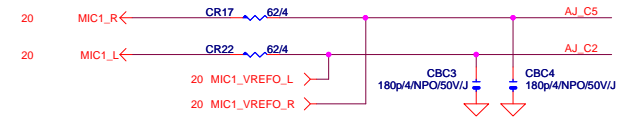
AZALIA JACK



LINE-OUT



LINE-IN

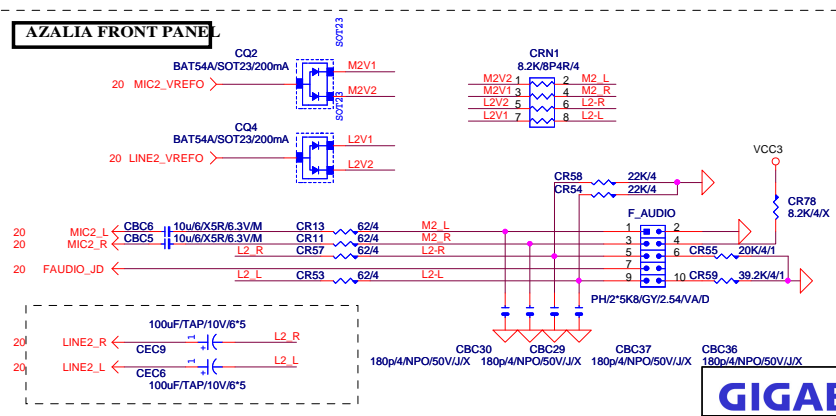
**MIC-IN**

SURROUND

CEN/LFE

SURR BACK

AZALIA FRONT PANEL



GIGABYTE™

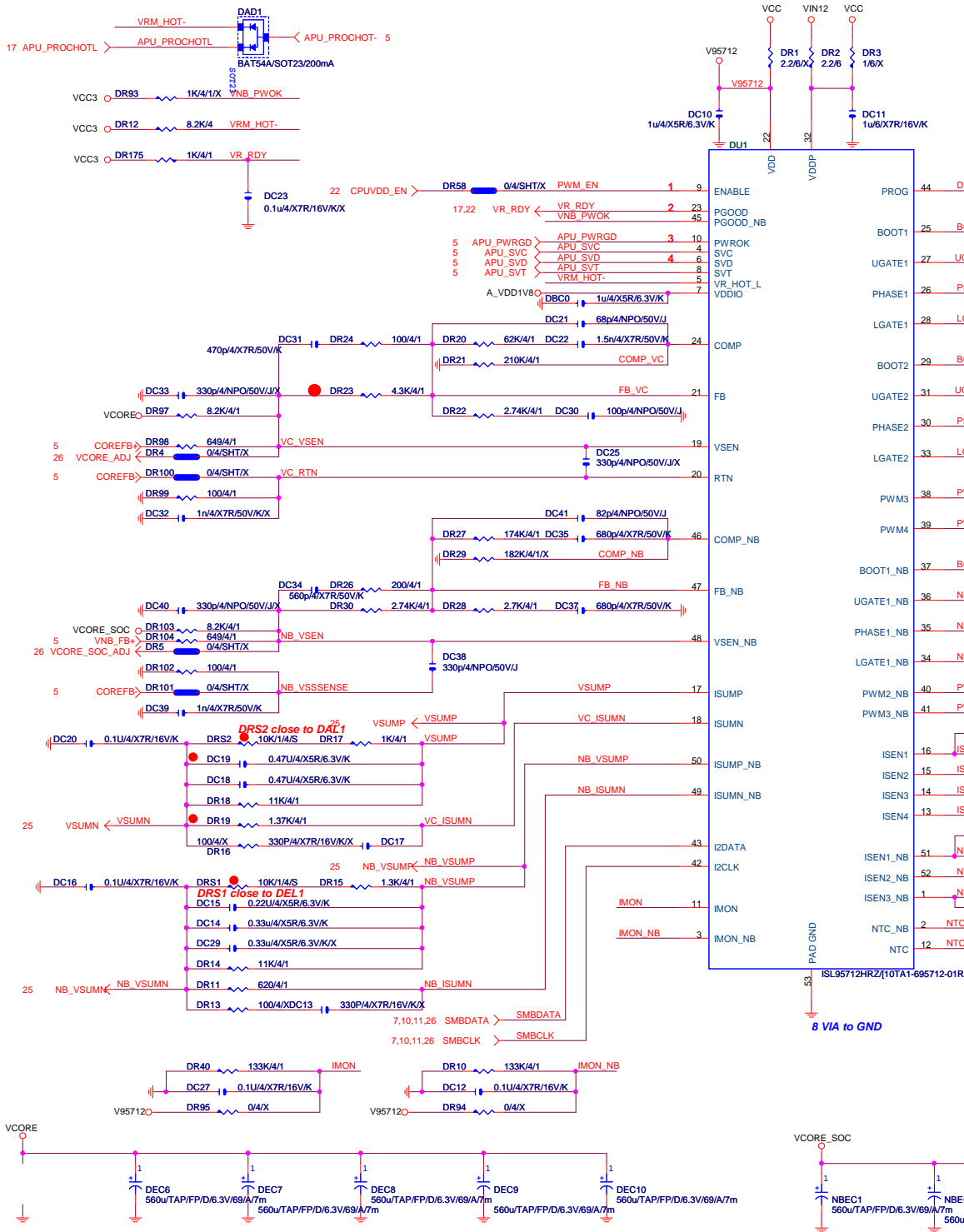
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Size	Document Number
Custom	GA-AB350M-DS3H V2

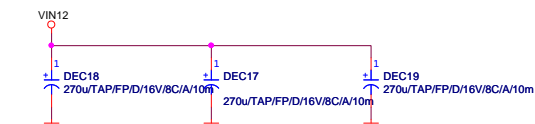
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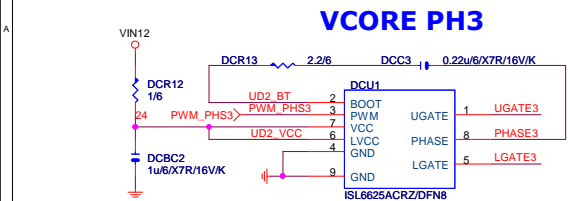
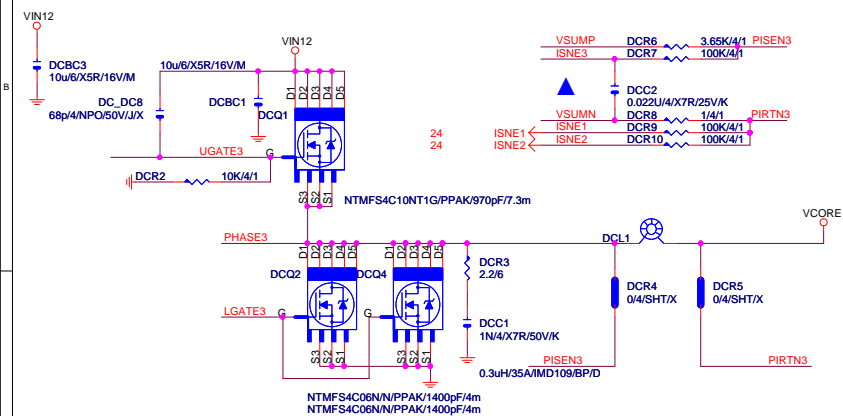
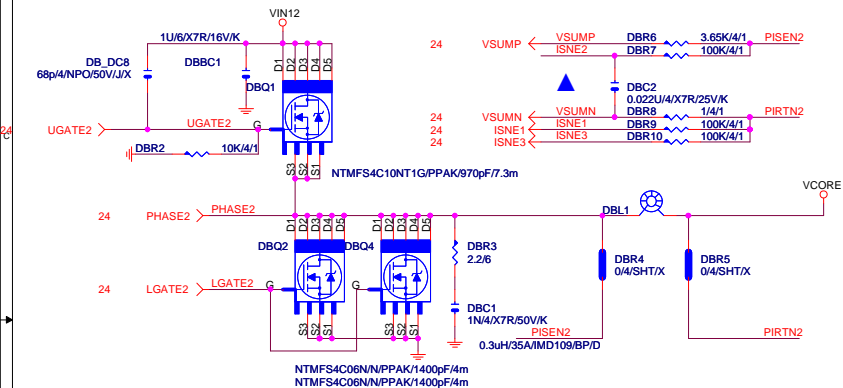
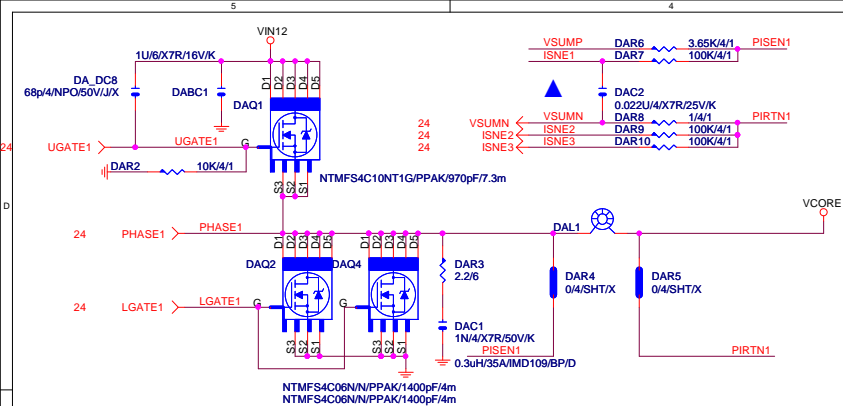
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1.11

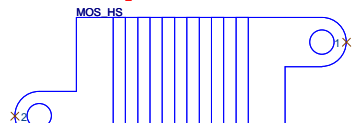


1. 新增DAR128.DAQ5 (12V負壓線路)
2. DR1改不上件

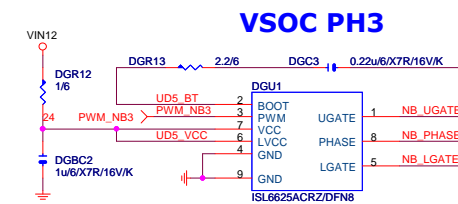
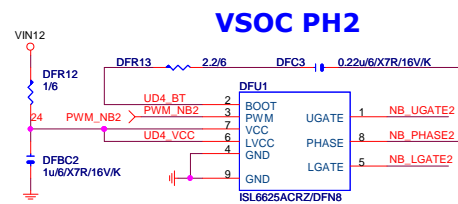




Footprint: MOSFET-HS

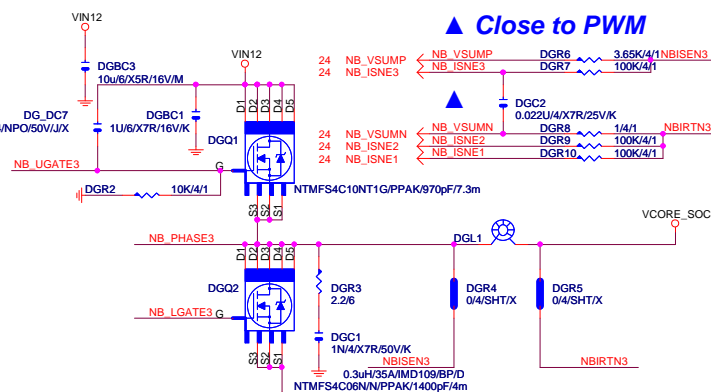
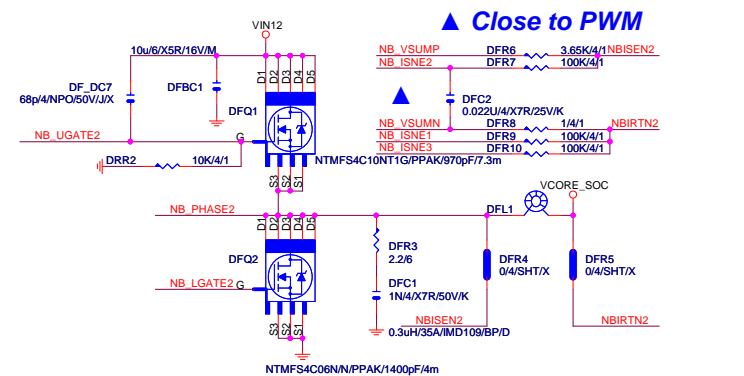
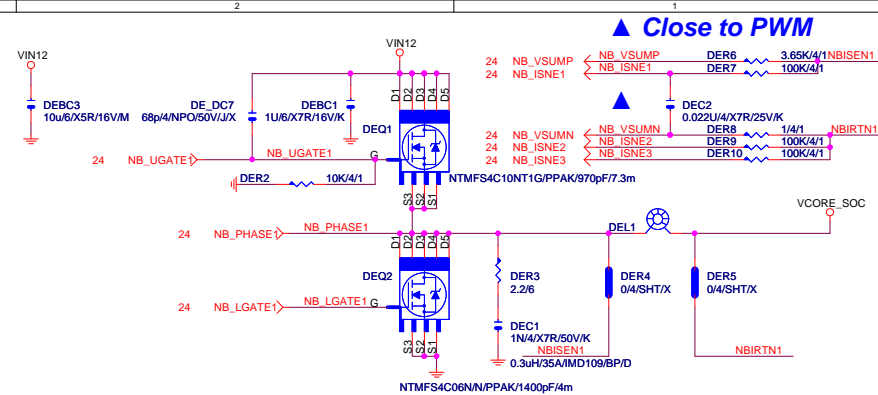


MOS_HeatSink[12SP2-S07517-01R_12SP2-S07517-02R_12SP2-S07517-03R]



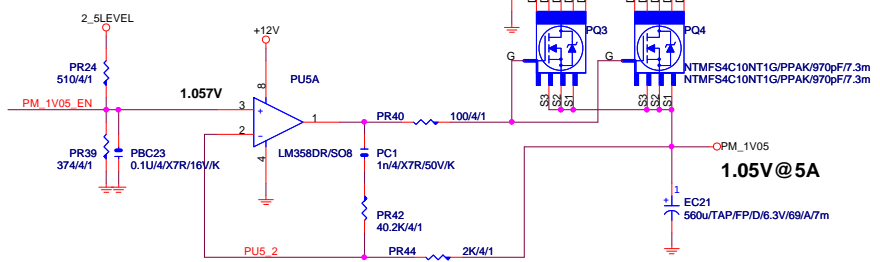
VCORE_SIO VCORE_VS MASK0/4/SHT/M/X VCORE

SOC_SIO SOC_VS MASK0/4/SHT/M/X VCORE_SOC

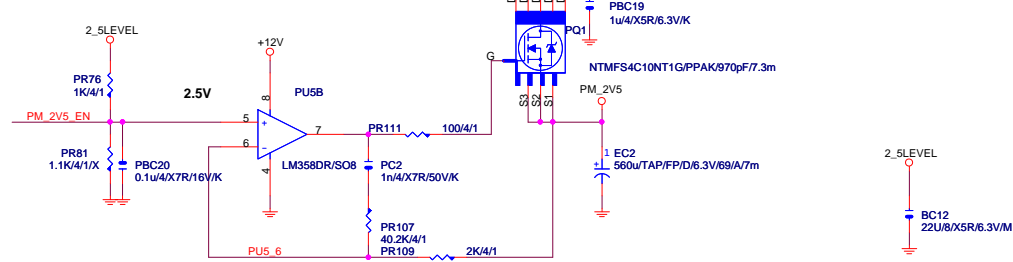


GIGABYTE™			
VCORE MOS			
Size	Document Number	GA-AB350M-DS3H V2	Rev
Custom			1.11
Date:	Thursday, October 04, 2018	Sheet	25 of 34

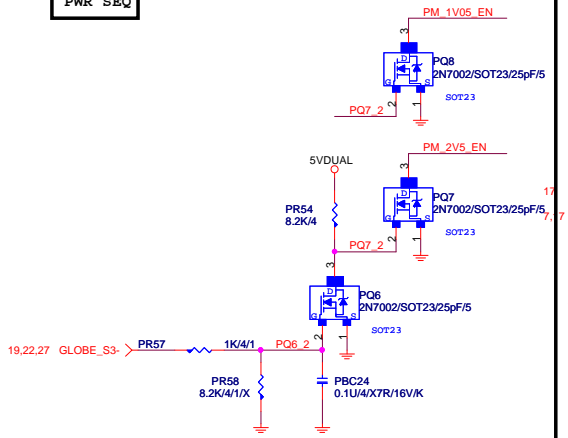
PM_1V05



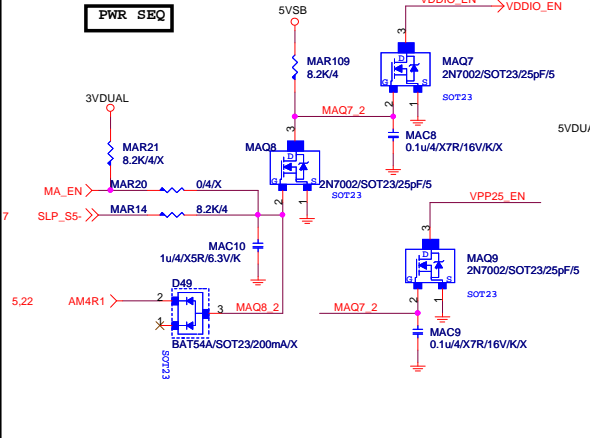
PM_2V5



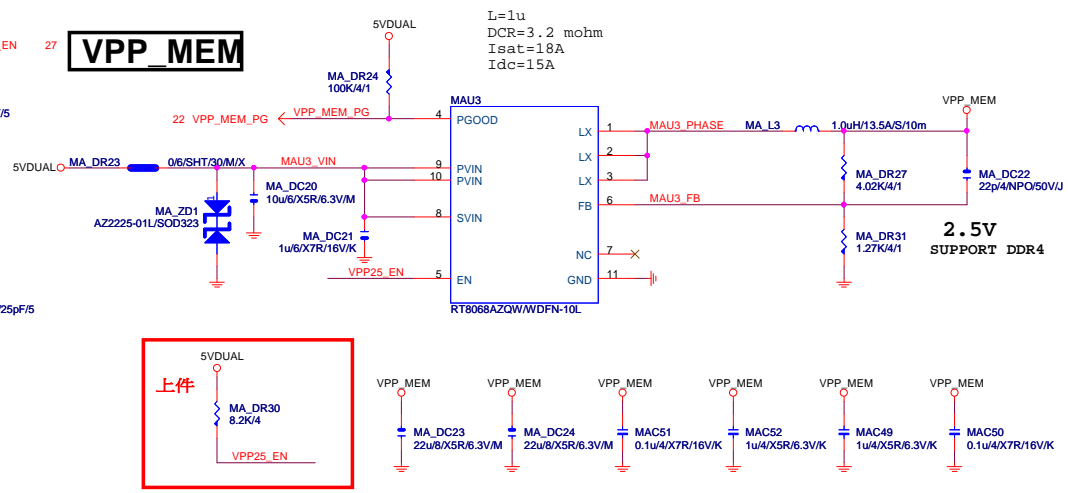
PWR_SEQ



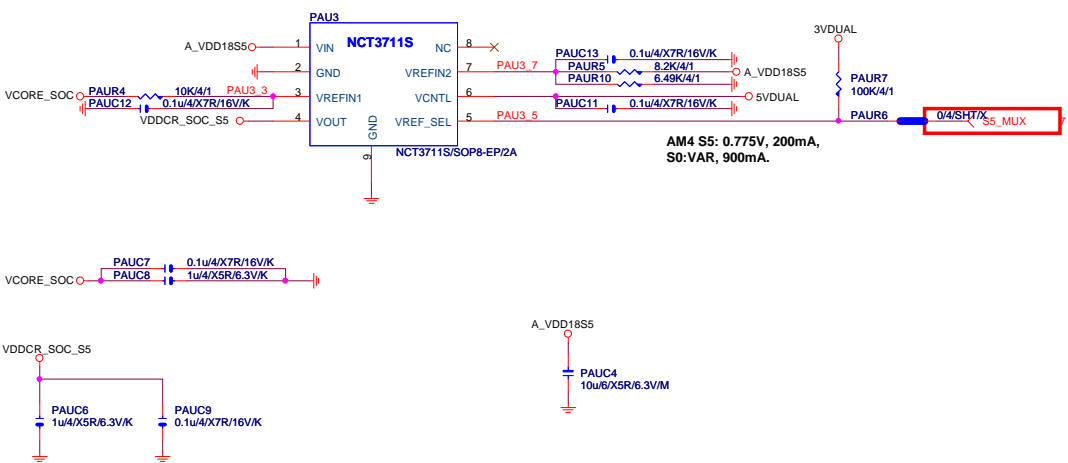
PWR_SEQ



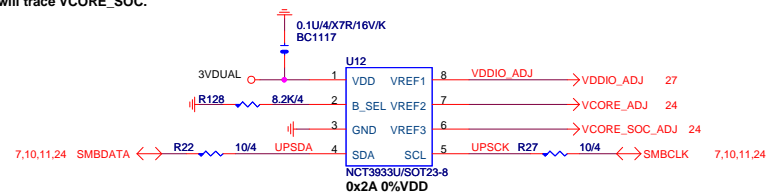
VPP_MEM

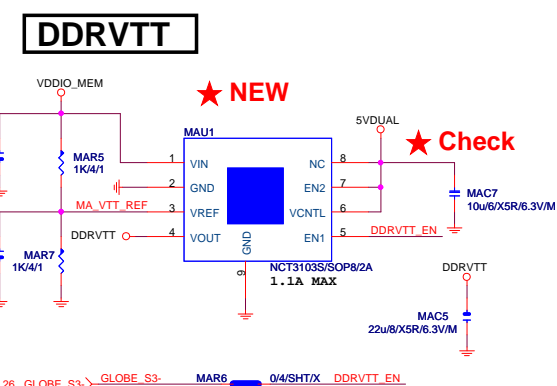
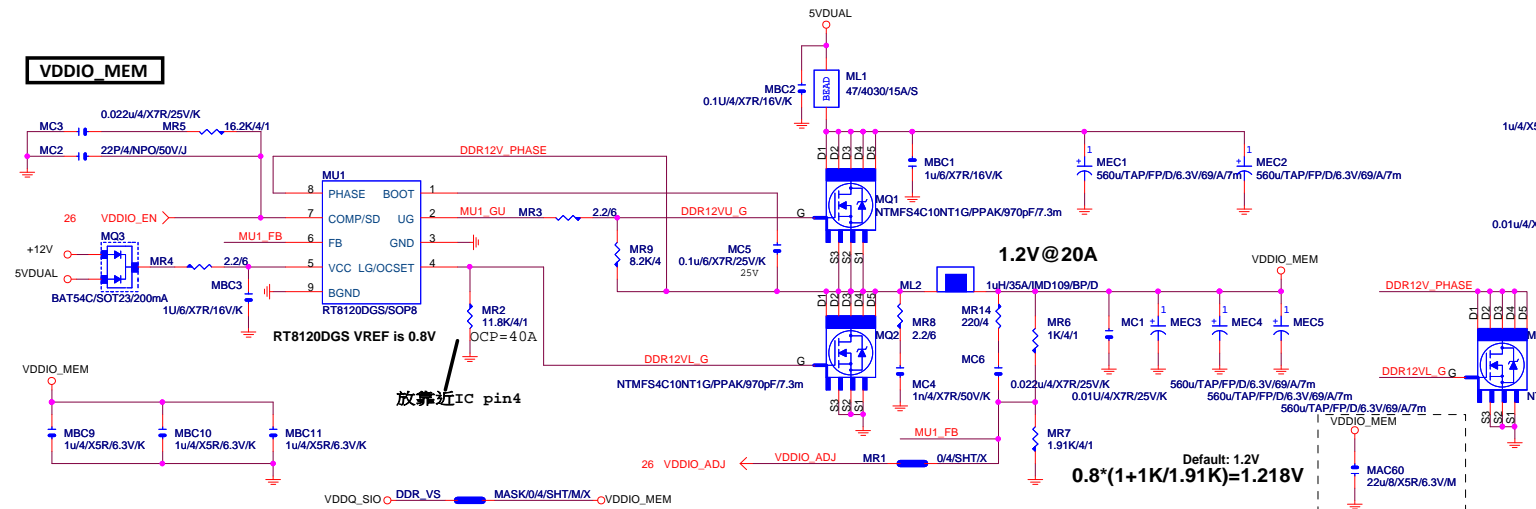
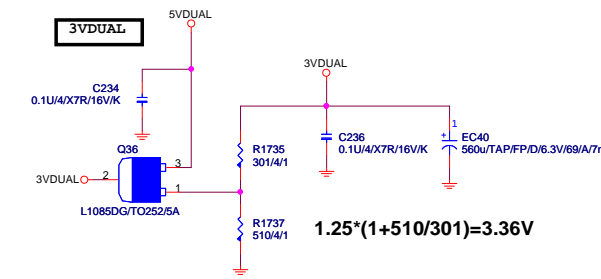
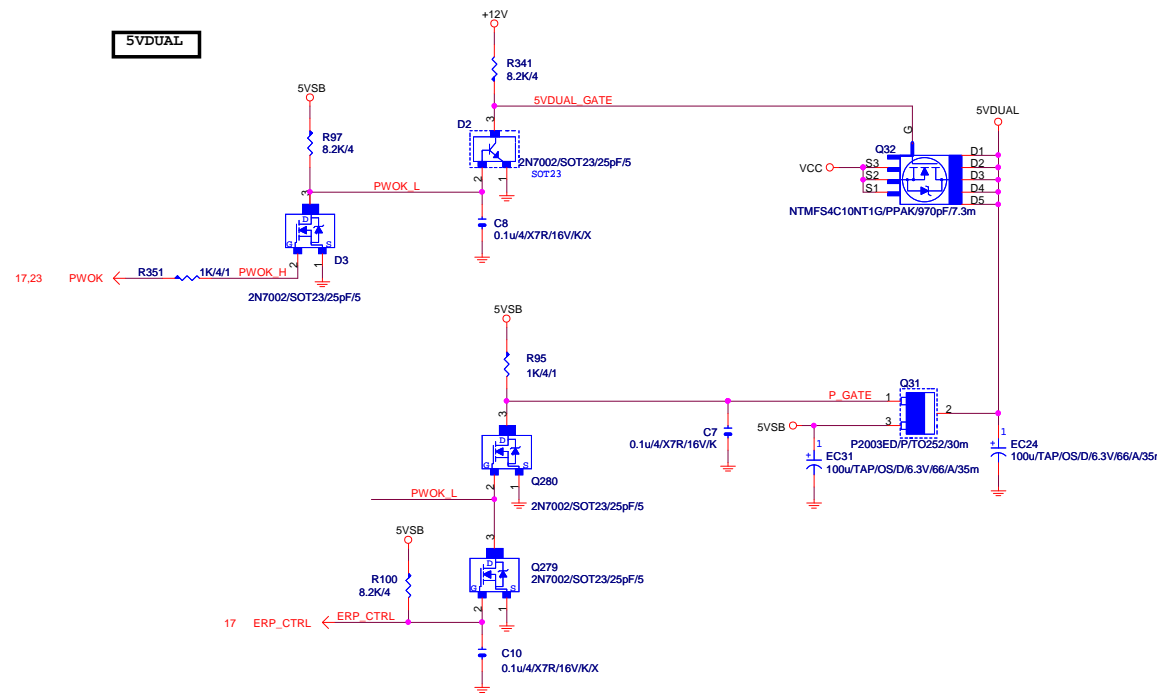


VDDCR SOC S5

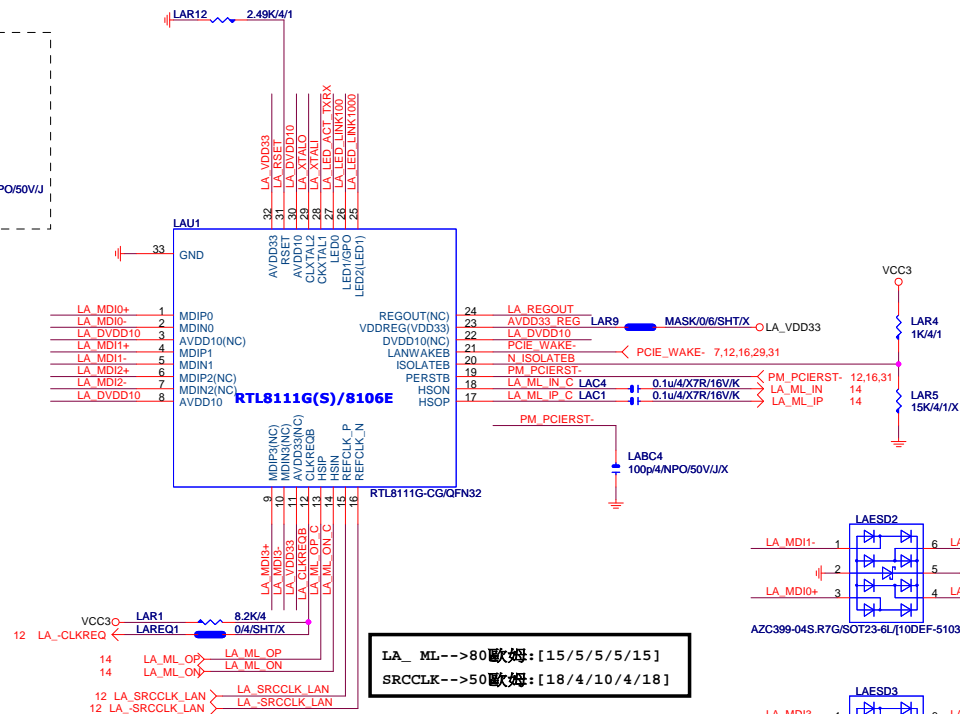
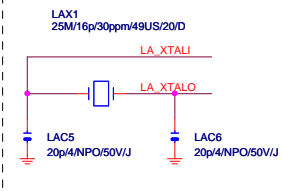


S5_MUX: S0-->High, S5-->Low
H: VDDCR_SOC_S5 will track VCORE_SOC.
L: If VCORE_SOC < 0.775V (OR 0.85V) , VDDCR_SOC_S5=0.775V.
If VCORE_SOC>=0.775V (OR 0.85V) , VDDCR_SOC_S5 will trace VCORE_SOC.

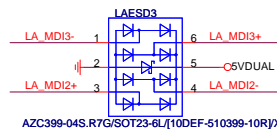
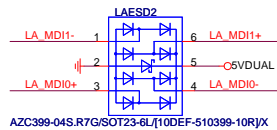




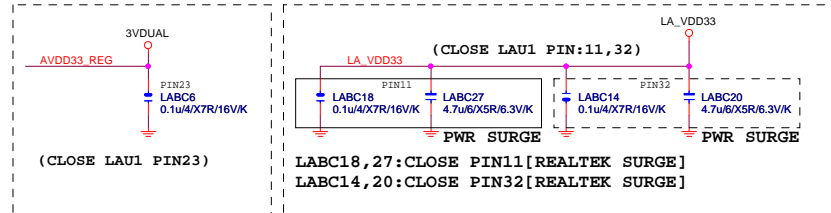
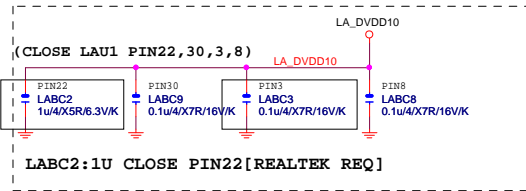
LAN:RTL8111G



LA_ML-->80歐姆:[15/5/5/5/15]
SRCLK-->50歐姆:[18/4/10/4/18]

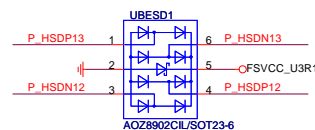


LAN POWER



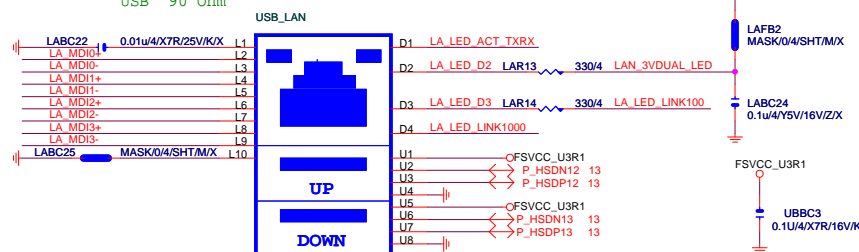
NOTE:
RT8106E:PIN3,11,22,24-->NC
LABC2LABC3,LABC5,LABC18,LABC27-->N/A

USB_LAN

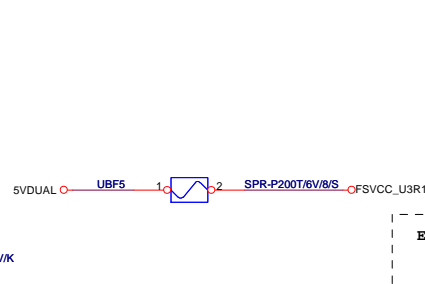


USB_LAN CONNECTOR

LAN 100 Ohm
USB 90 Ohm

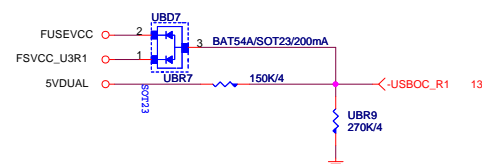


USB+LAN1G/GQ,Y/OS/RA/D/12C/ES[11NR6-702009-Z1R_11NR6-702009-R3R]



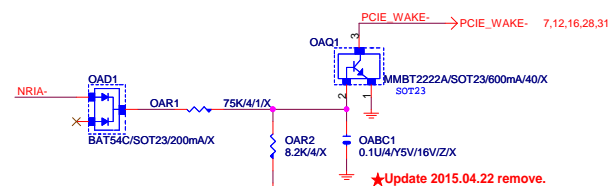
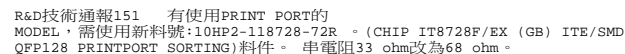
EMI

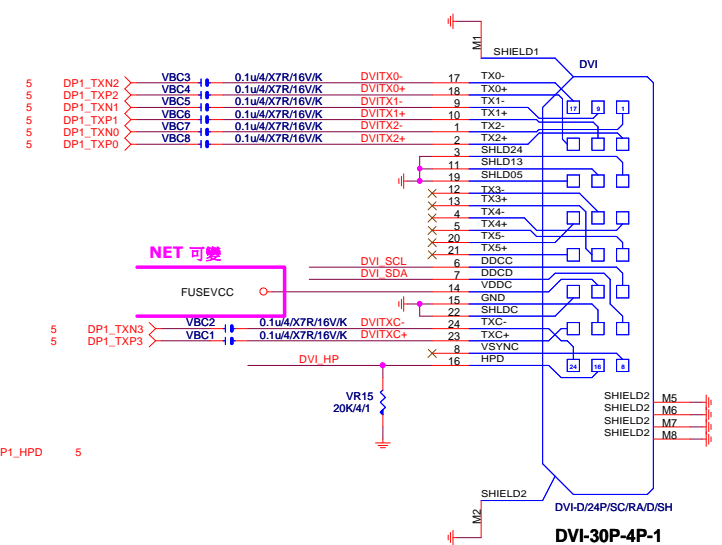
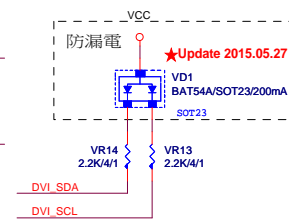
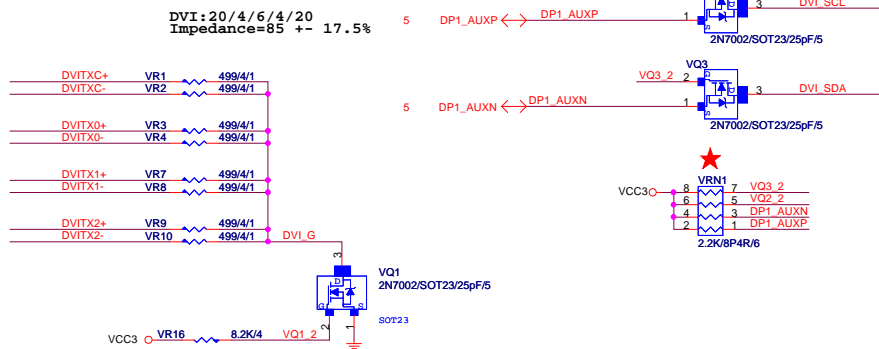
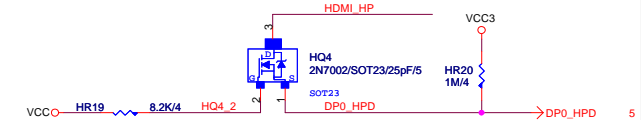
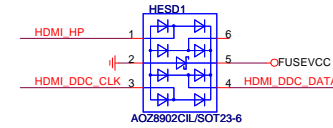
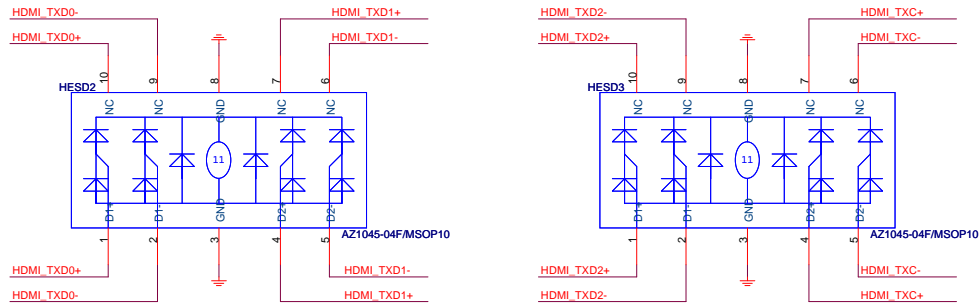
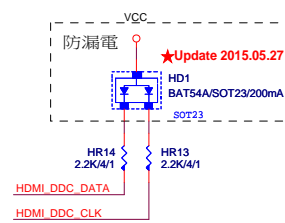
LAN AGND change GND
Remove Short Pad



GIGABYTE™

Title		
RTL8111G		
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FUSEVCC

VBC10
0.1uF/4X7R/16V

DVI HP 1

6 DVI SCL

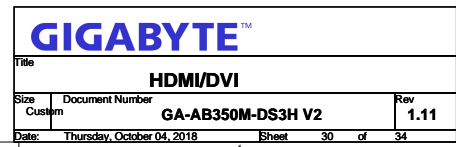
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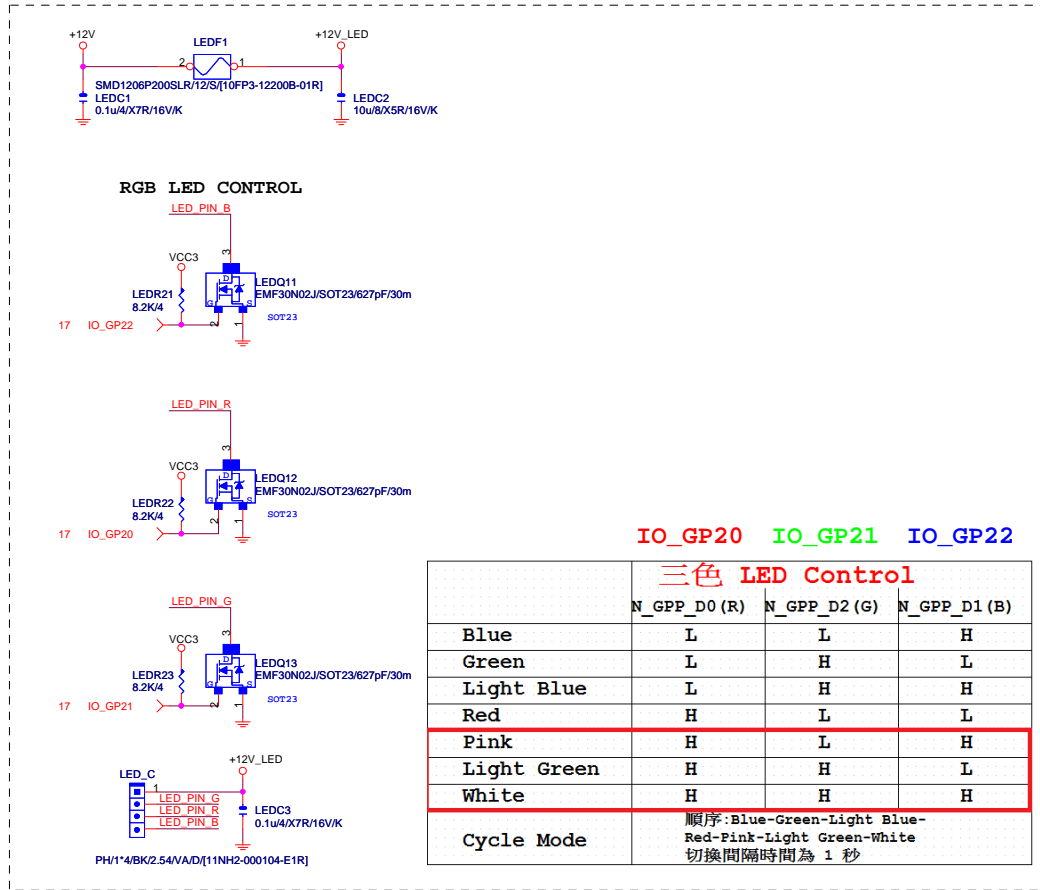
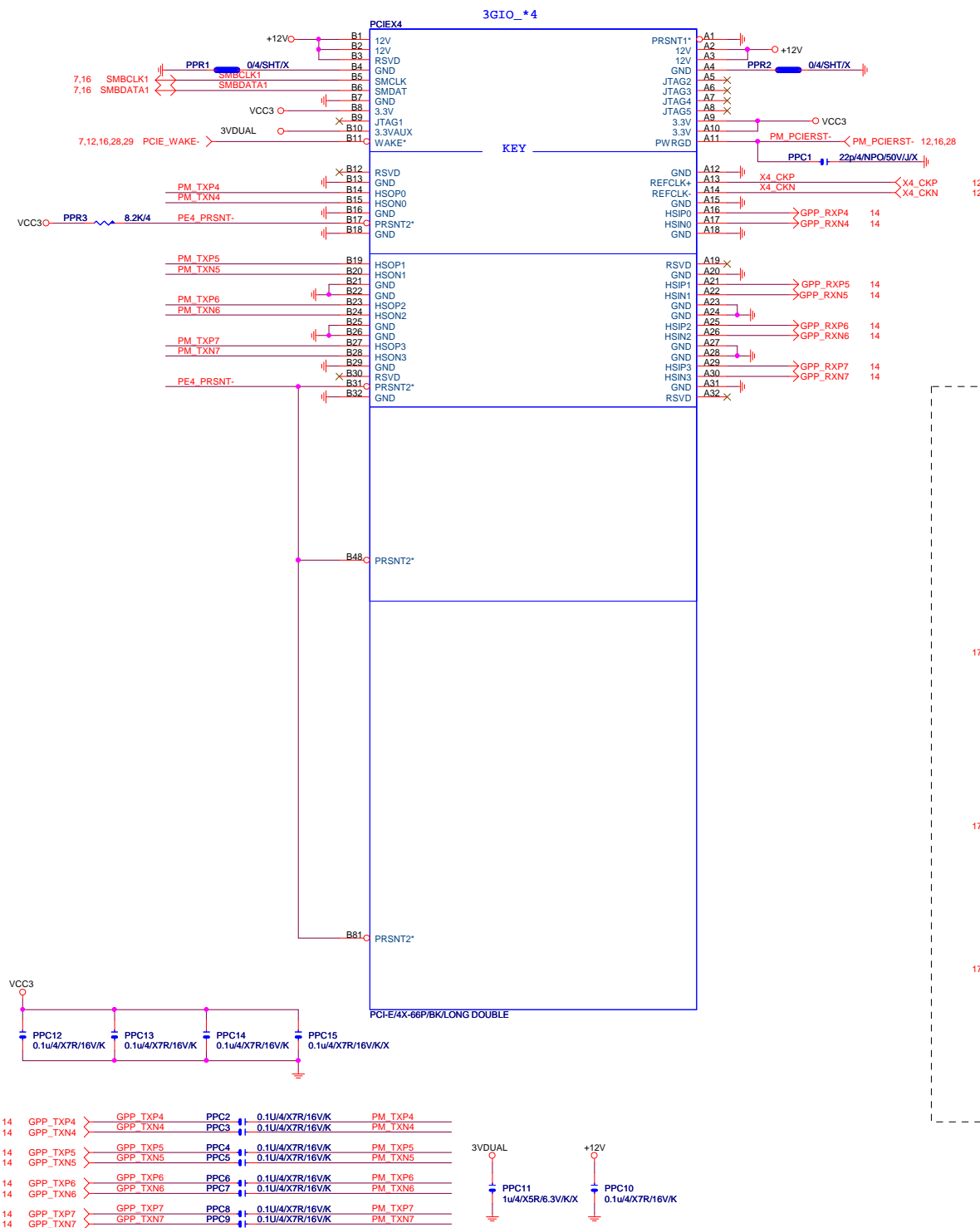
4 DVI SDA

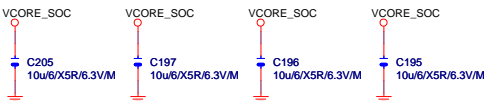
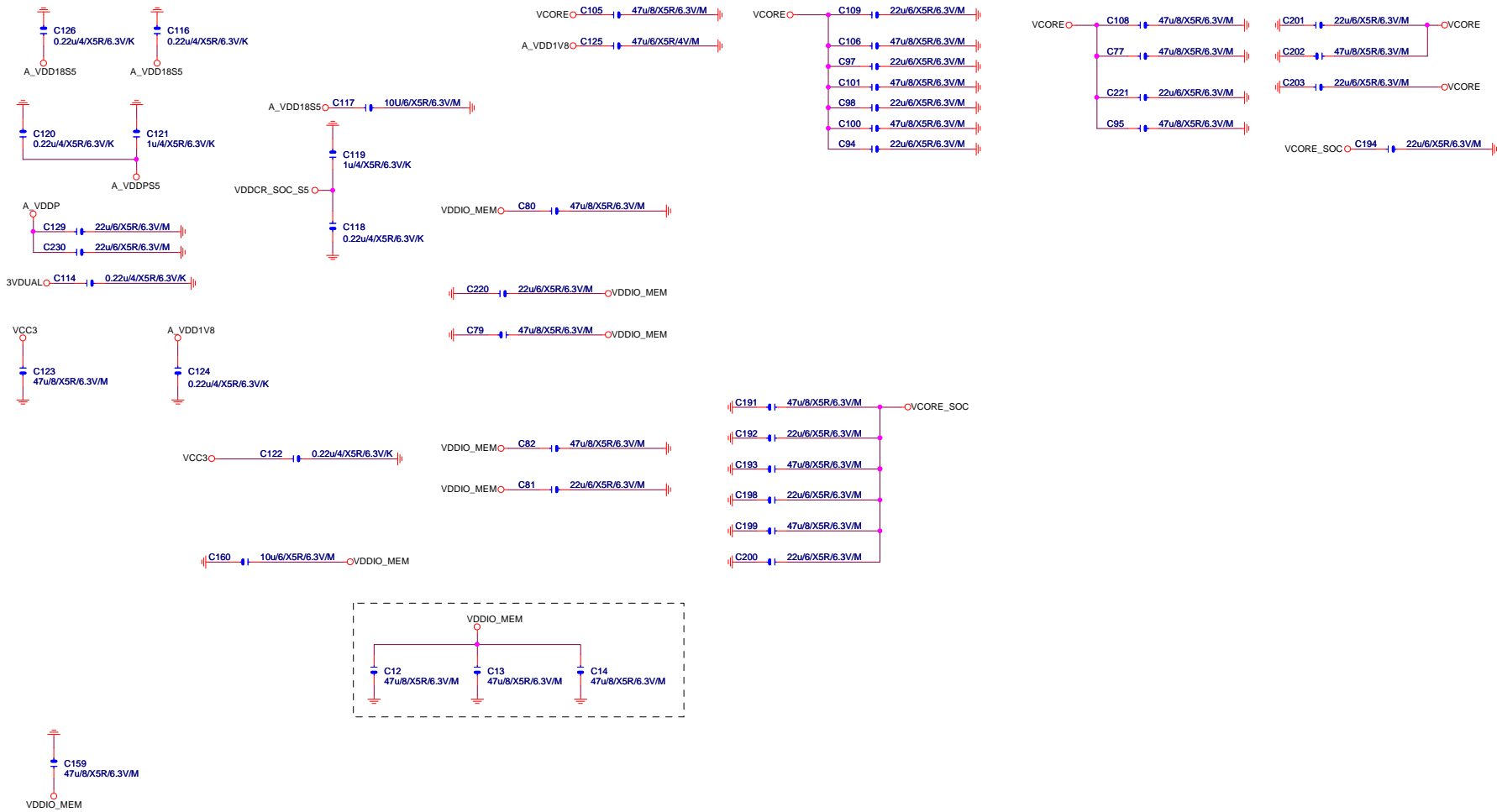
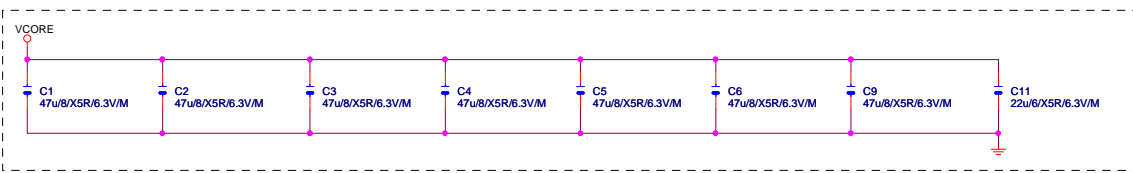
NET 可變

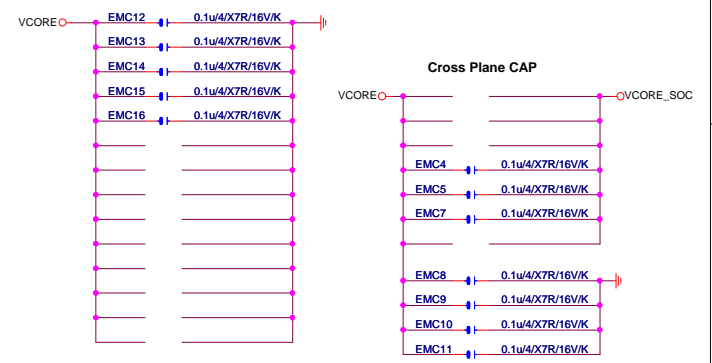
FUSEVCC

AOB2802CIL/SOT23-6

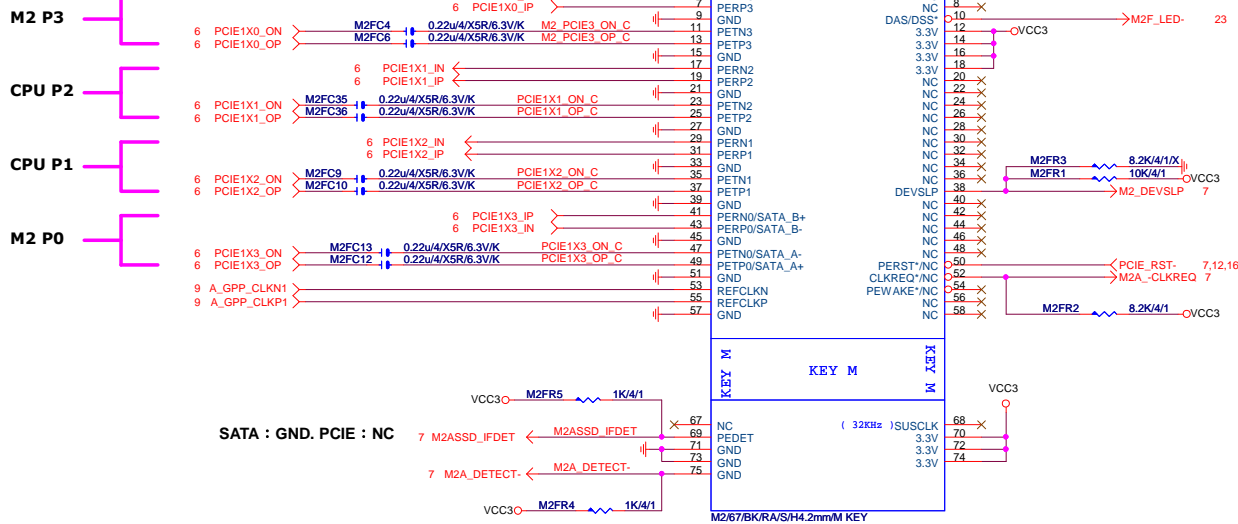








Rev 0.5



矮件 footprint : NGFF-M-75P-11CM-09MM-SMD

