

Model Name: X48-DQ6 1.11

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SHEET TITLE

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Cover Sheet			
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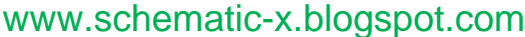
GA-X48-DQ6 Version: 1.11

Circuit or PCB layout change
for next version

Component value change history

[illegible][illegible]

CLOCK GENERATOR



LOW

ICH9 GPIO LIST TABLE

PIN NAME	PWR WELL	AFTER/ ELTRST	USAGE	NOTE
GP0	MAIN	IN	VTT_GMCH_OV3	
GP1/TACH1	MAIN	IN	ICH_FAN_TACH1	P/U 8.2K VCC3
GP2/PIRQE#	MAIN	IN	-PIRQE	P/U 8.2K VCC3
GP3/PIRQF#	MAIN	IN	-PIRQF	P/U 8.2K VCC3
GP4/PIRQG#	MAIN	IN	-PIRQG	P/U 8.2K VCC3
GP5/PIRQH#	MAIN	IN	-PIRQH	P/U 8.2K VCC3
GP6/TACH2	MAIN	IN	ICH_FAN_TACH2	P/U 8.2K VCC3
GP7/TACH3	MAIN	IN	ICH_FAN_TACH3	P/U 8.2K VCC3
GP8	STBY	IN	DDR18V_OV4	
GP9	STBY	H-Z	GPIO9(DUALBIOS_INPUT)	
GP10	STBY	H-Z	DDR18V_OV5	P/D 100K GND/X
GP11/SMBALERT#	STBY	NATIVE	-SMBALRT	P/U 8.2K 3VDUAL
GP12	STBY	L OUT	AUDIO DETECT	P/U 8.2K VCC3
GP13	STBY	L IN	-LPCPME	P/U 8.2K 3VDUAL
GP14	STBY	H-Z	DDR18V_OV2	P/U 8.2K 3VDUAL
GP15	STBY	H-Z	SPI_WP	STP_PCI#
GP16	MAIN	L OUT	DUAL BIOS CONTROL	N/A
GP17/TACH0	MAIN	IN	ICH_FAN_TACH0	P/U 8.2K VCC3
GP18	MAIN	H OUT	MB_ID1	P/U 8.2K VCC3
GP19	MAIN	IN	VCC15_OV1	P/U 8.2K VCC3/X
GP20	MAIN	OUT	-SPI_WP0	P/U 1K 3VCL
GP21	MAIN	IN	VCC15_OV3	P/U 8.2K VCC3
GP22	MAIN	IN	VCORE_OV3	P/U 8.2K VCC3
GP23	MAIN	OUT	-LDRQ1	P/U 8.2K VCC3
GP24	STBY	OUT	TLS	P/U 8.2K 3VDUAL
GP25	STBY	IN	MB_ID2(STP_CPU~)	P/U 8.2K 3VDUAL
GP26/S4_STATE#	STBY	OUT	MB_ID0	P/U 8.2K 3VDUAL
GP27	STBY	OUT/LOW	GPIO27(EL_STATE0)	P/U 8.2K 3VDUAL
GP28	STBY	OUT/LOW	DUAL BIOS CONTROL	N/A
GP29/OC5#	STBY	IN	-USBOC_R	P/U FUSEVCC
GP30/OC6#	STBY	IN	-USBOC_R	P/U FUSEVCC
GP31/OC7#	STBY	IN	-USBOC_R	P/U FUSEVCC
GP32	MAIN	OUT	DUAL BIOS	P/U 100K+1M VCC3
GP33	MAIN	OUT		
GP34	MAIN	OUT/LOW		N/A
GP35	MAIN	L OUT	400K FS CONTROL	N/A
GP36	MAIN	IN	DUAL BIOS CONTROL	P/U 8.2K VCC3
GP37	MAIN	IN	150K FS CONTROL	P/U 8.2K VCC3
GP38	MAIN	IN	VCORE_OV2	P/U 8.2K VCC3
GP39	MAIN	IN	GPIO39	P/D 8.2K GND
GP48	MAIN	IN	VCORE_OV1	P/U 8.2K VCC3
GP49	MAIN	IN	STARPPING	P/D 8.2K

PIN NAME	PWR WELL	AFTER/ ELTRST	USAGE	NOTE
GP50	MAIN	IN	REQ1#	
GP51	MAIN	IN	GNT1#	P/U 8.2K VCC3
GP52	MAIN	IN	REQ2#	P/U 8.2K VCC3
GP53	MAIN	IN	GNT2#	P/U 8.2K VCC3
GP54	MAIN	IN	REQ3#	P/U 8.2K VCC3
GP55	MAIN	IN	GNT3#	P/U 8.2K VCC3
GP56	STBY	IN	VCORE_OV5	
GP57	STBY	IN	VCORE_OV4	
GP58	STBY	IN	SPI_CS1#	
GP59	STBY		-USBOC_R	
GP60	STBY		LINKALRT#	

TSM104

VCC

VCC3_DAC

DDR18V

VCC1_5

DDR18V

VGMCH_ME

5VSB

VCC

5VDUAL

LDO1084

3VDUAL

	3 pin FAN control	4 pin FAN control	FAN speed	Controller
CPU FAN	FANPWM1	FANPWM3	FANIO1	IT8718
	ICH_FAN_PWM2	ICH_FAN_PWM0	ICH_FAN_TACH0	ICH8
SYS FAN	FANPWM2	N/A	FANIO2	IT8718
	ICH_FAN_PWM1	N/A	ICH_FAN_TACH1	ICH8
PWR FAN	N/A	N/A	FANIO3	IT8718
			ICH_FAN_TACH2	ICH8

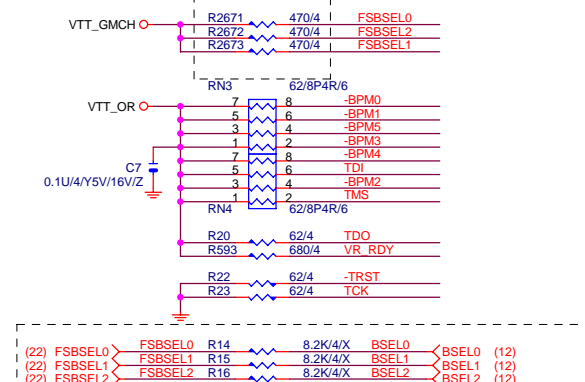
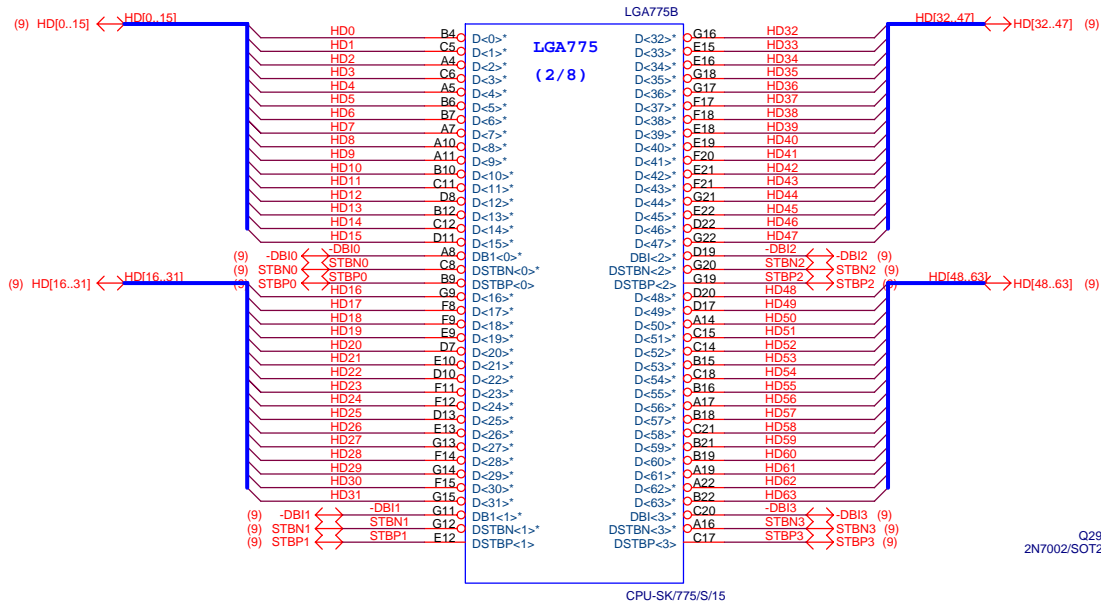
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TABLE LIST

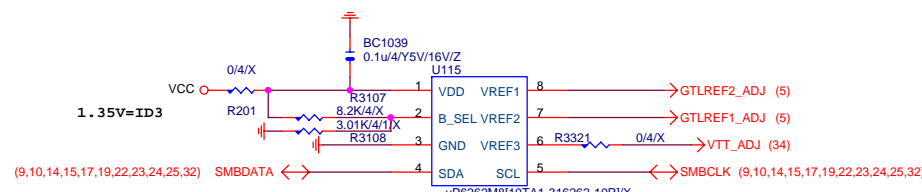
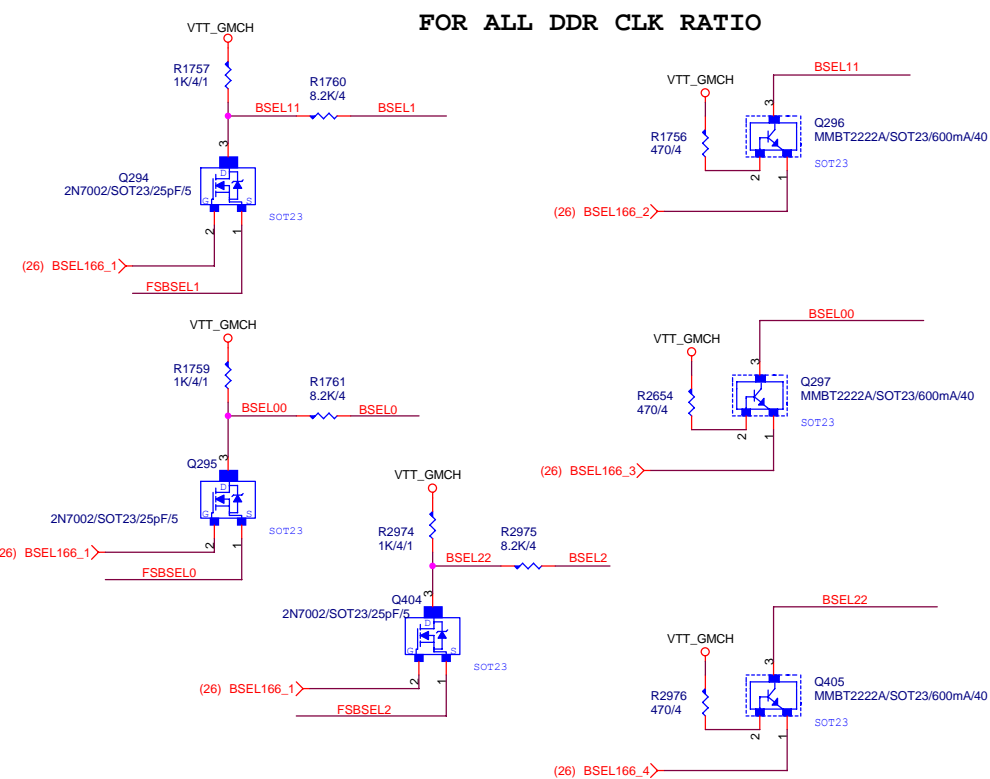
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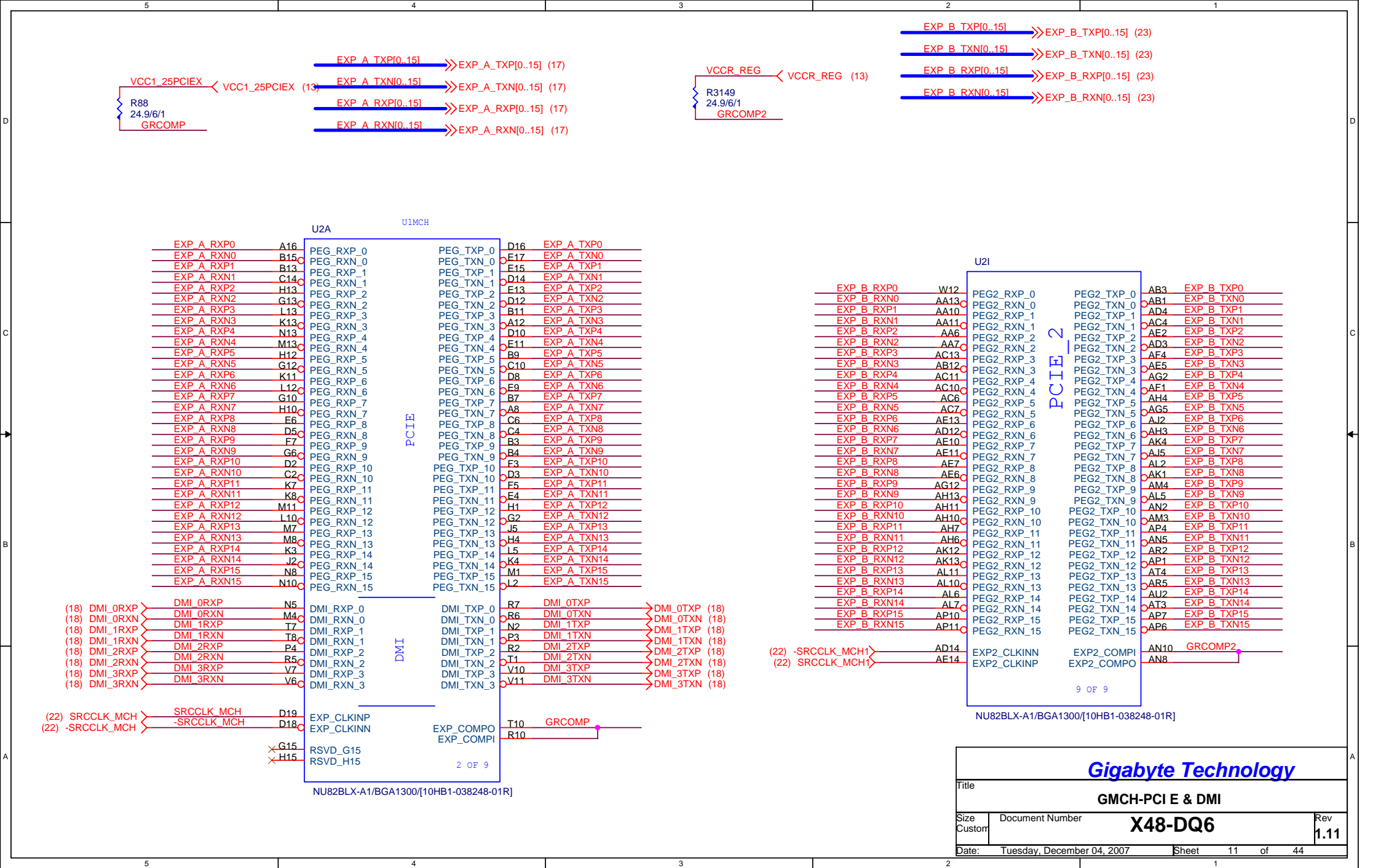
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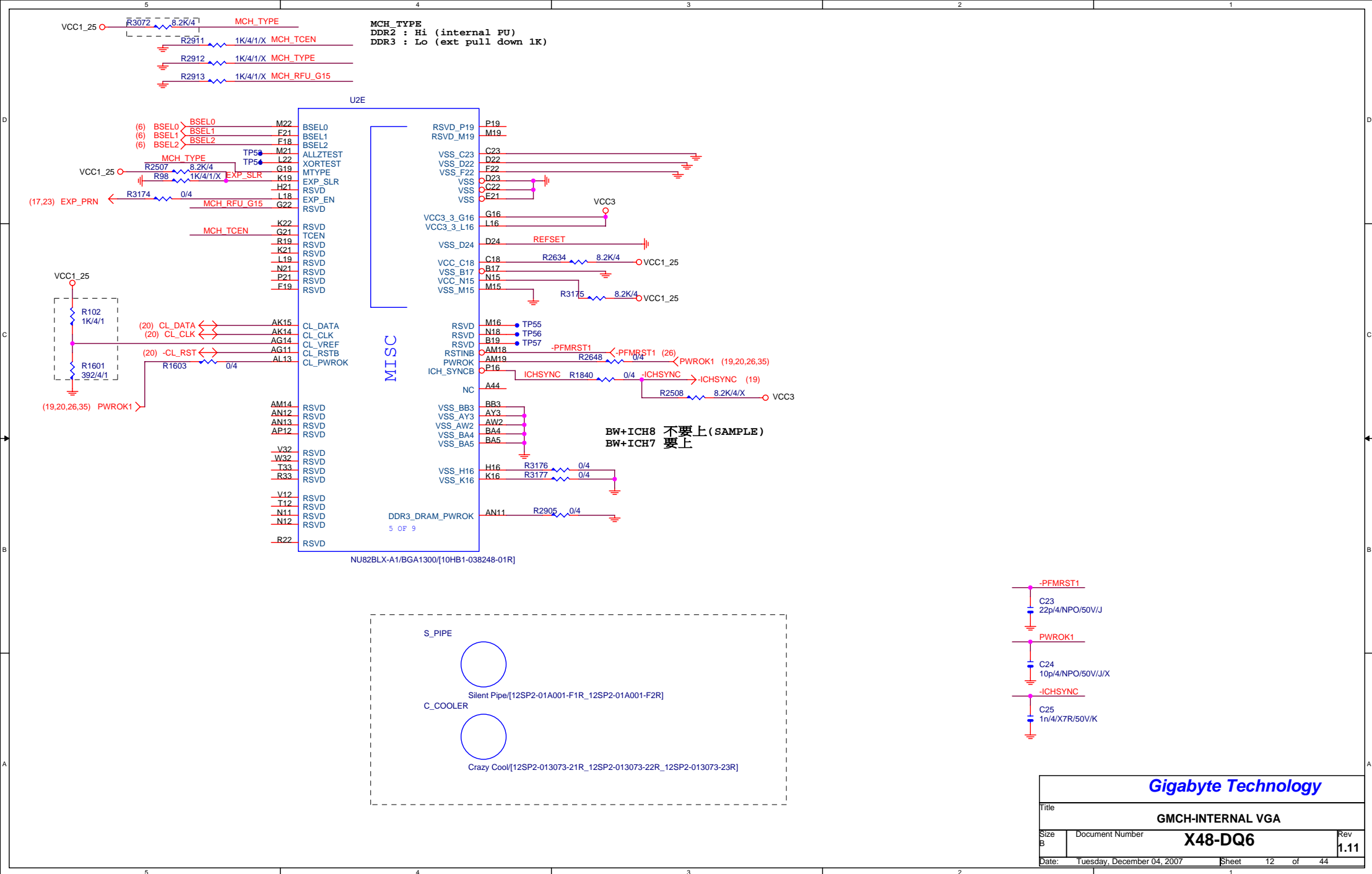
VCORE_OV5

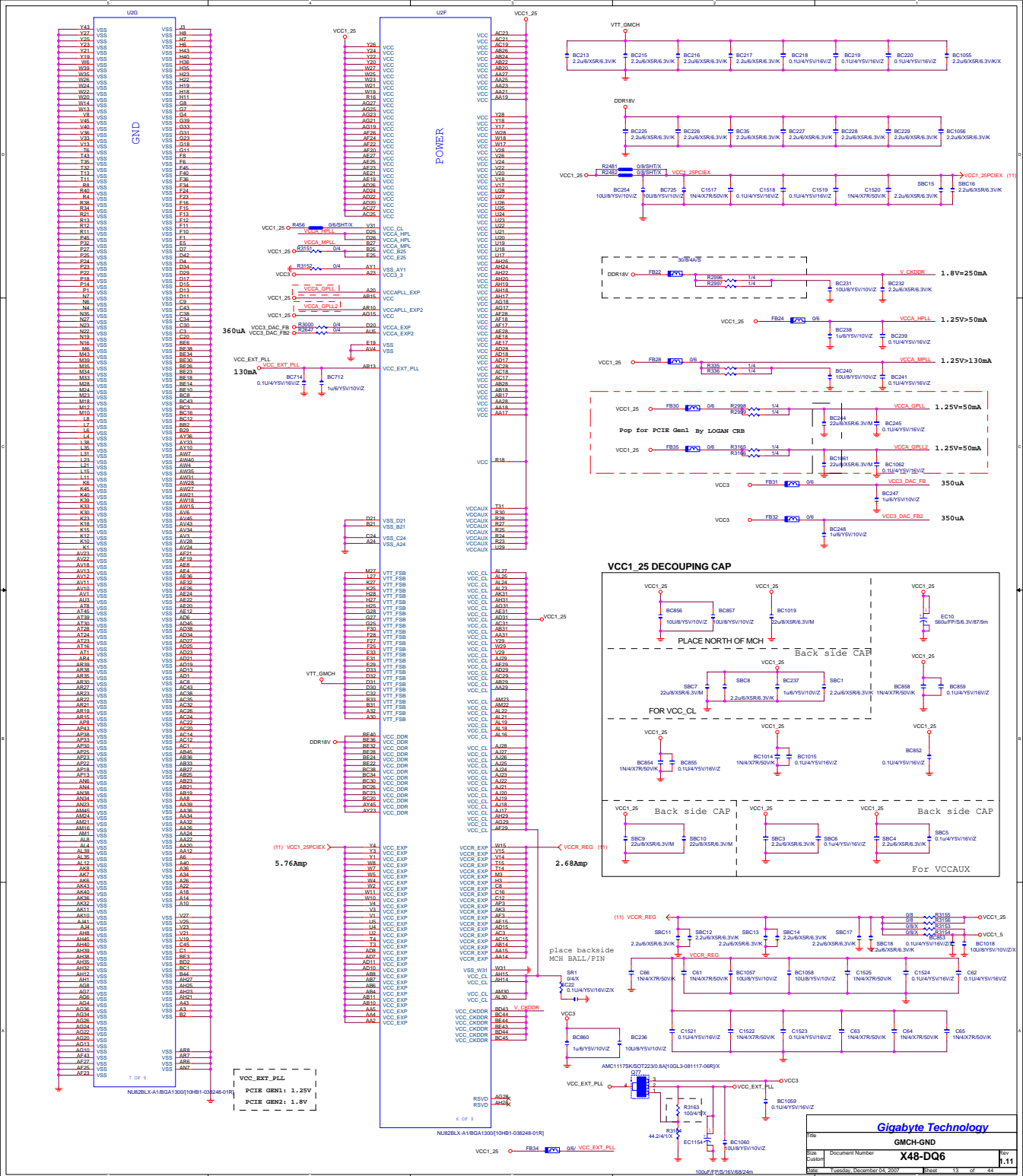


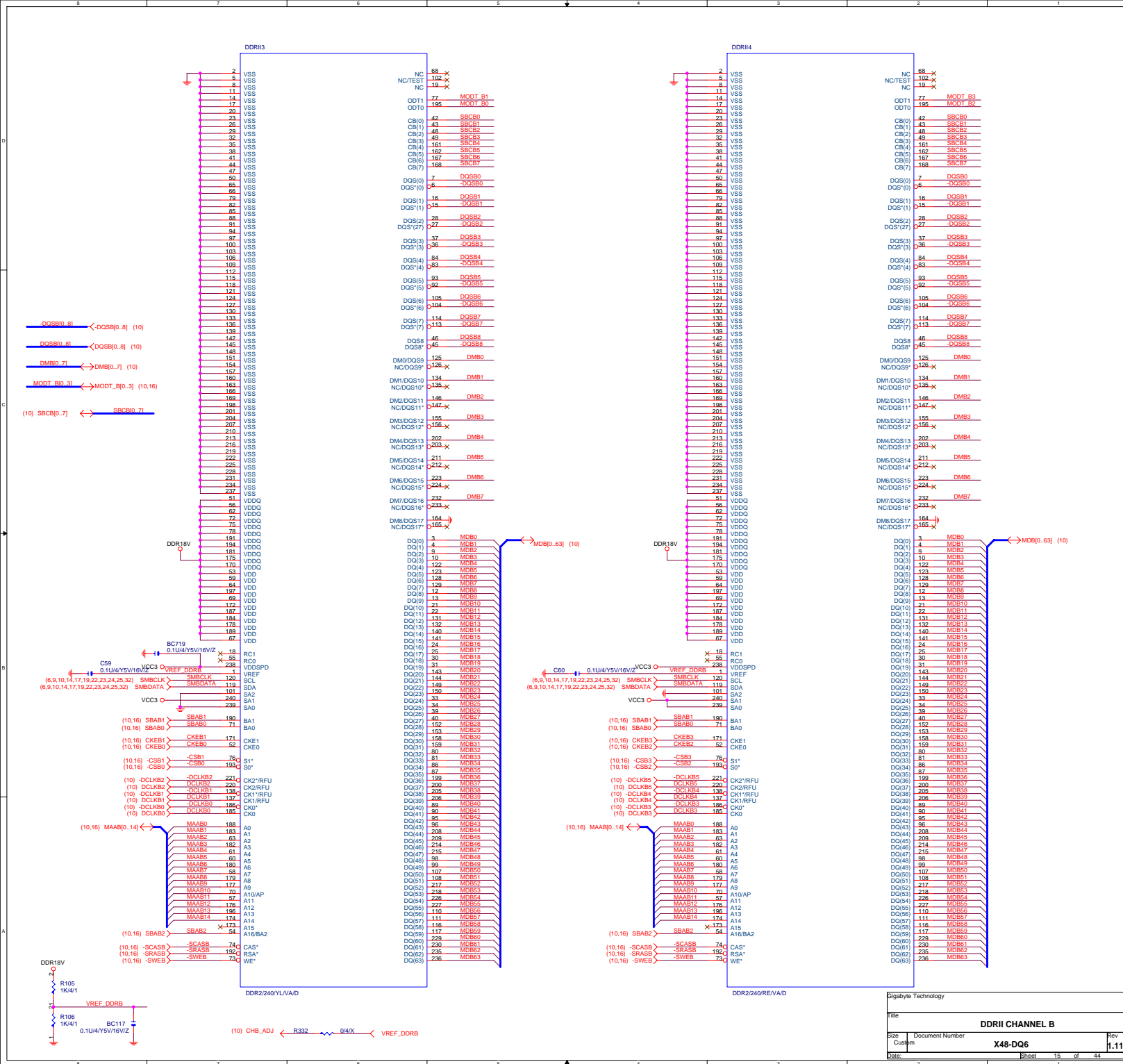
FOR ALL DDR CLK RATIO





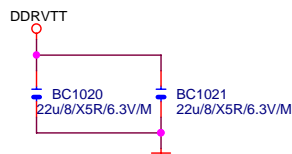
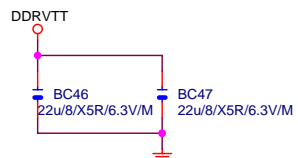
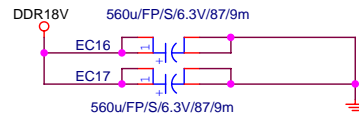
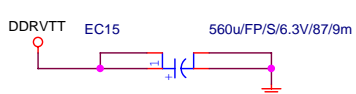




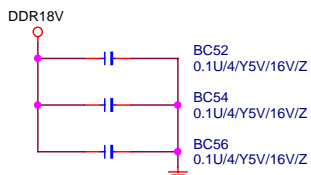


DDR TERMINATION CHANNEL A

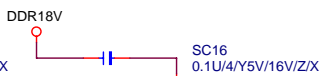
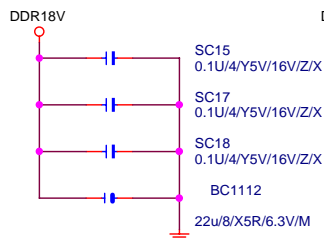
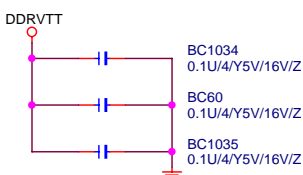
DDRVTT Decouple



DDR18V Decouple



DDRVTT Decouple



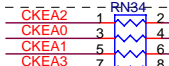
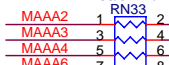
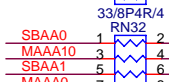
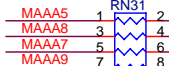
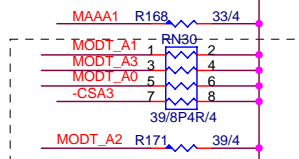
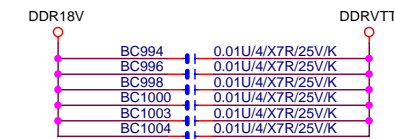
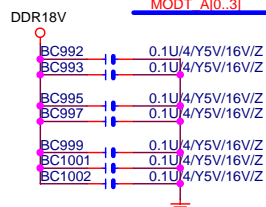
SBAAI[0..2] <- SBAI[0..2] (10,14)

-CSAI[0..3] <- -CSAI[0..3] (10,14)

CKEAI[0..3] <- CKEAI[0..3] (10,14)

MAAAI[0..14] <- MAAAI[0..14] (10,14)

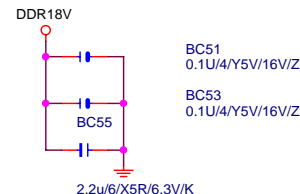
MODT_A[0..3] <-> MODT_A[0..3] (10,14)



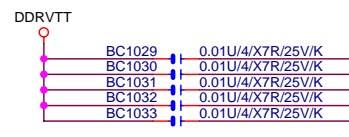
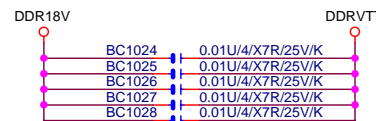
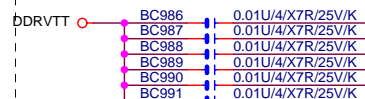
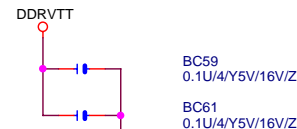
(10,14) -SWEA >
(10,14) -SCASA >
(10,14) -SRASA >

DDR TERMINATION CHANNEL B

DDR18V Decouple



DDRVTT Decouple



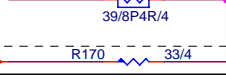
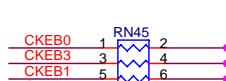
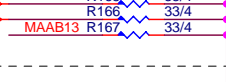
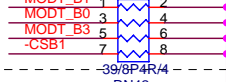
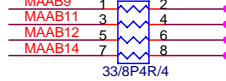
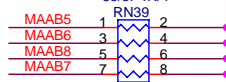
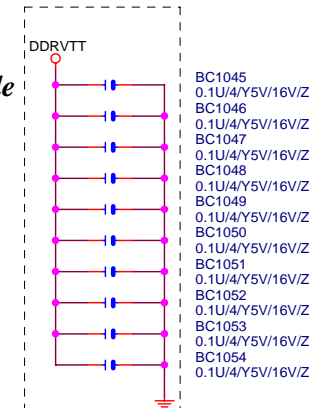
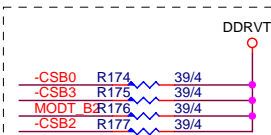
MODT_BI[0..3] <-> MODT_B[0..3] (10,15)

SBAB[0..2] <- SBAB[0..2] (10,15)

-CSBI[0..3] <- -CSBI[0..3] (10,15)

CKEBI[0..3] <- CKEBI[0..3] (10,15)

MAABI[0..14] <-> MAAB[0..14] (10,15)

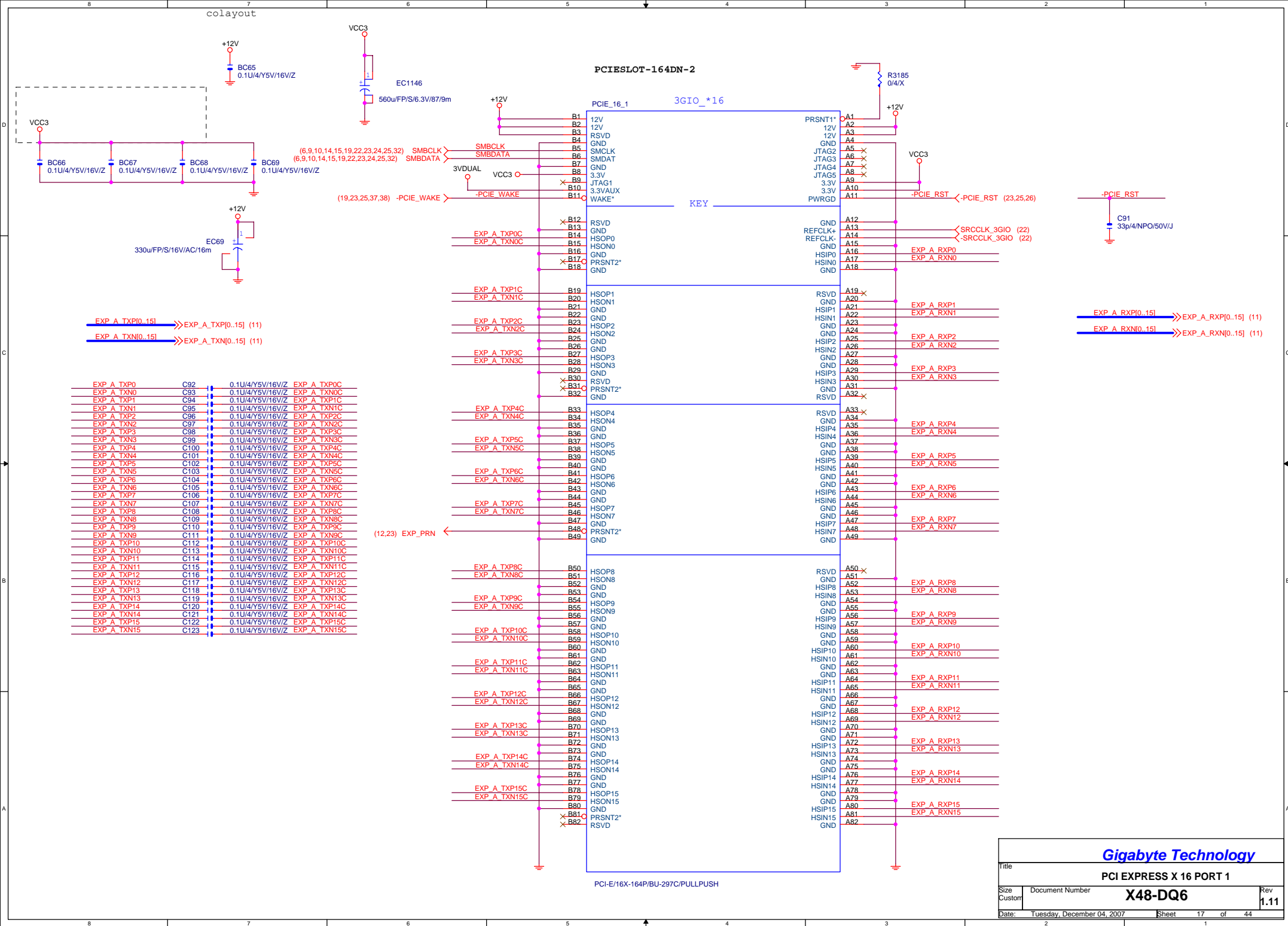


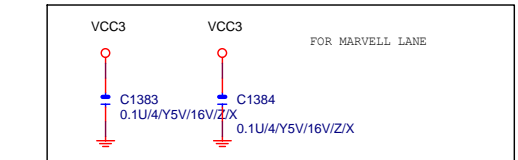
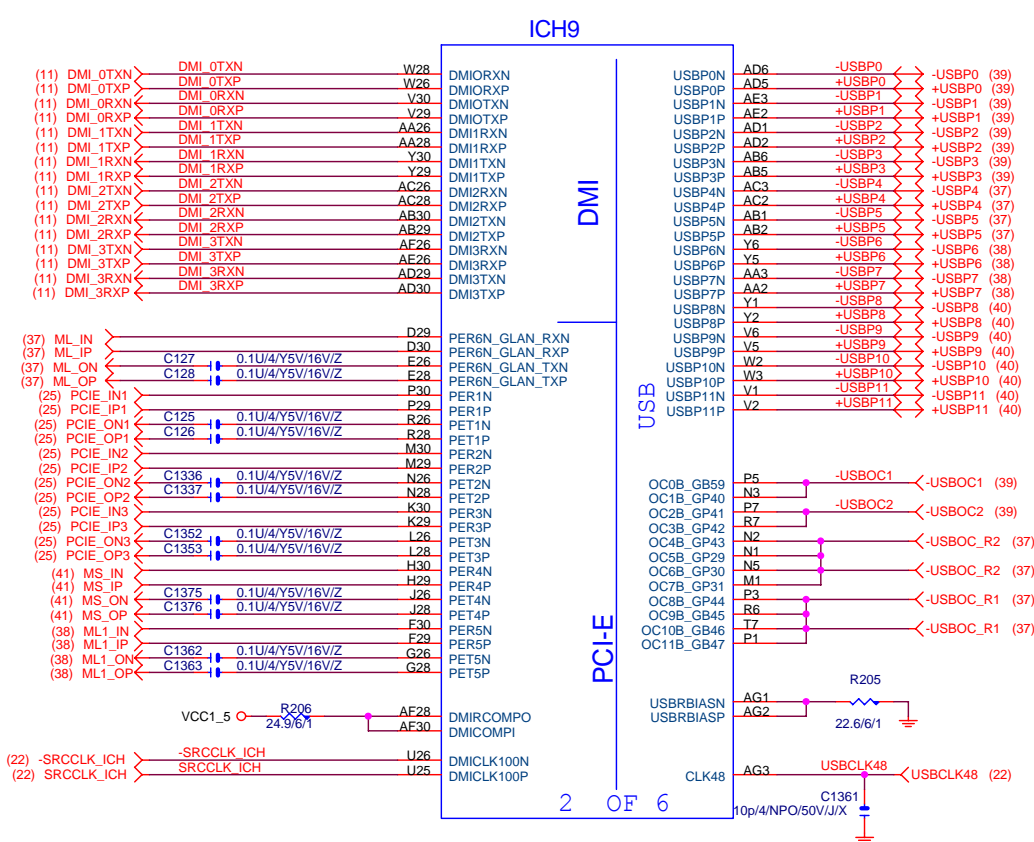
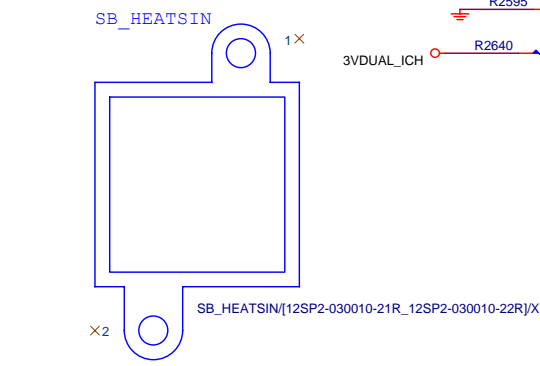
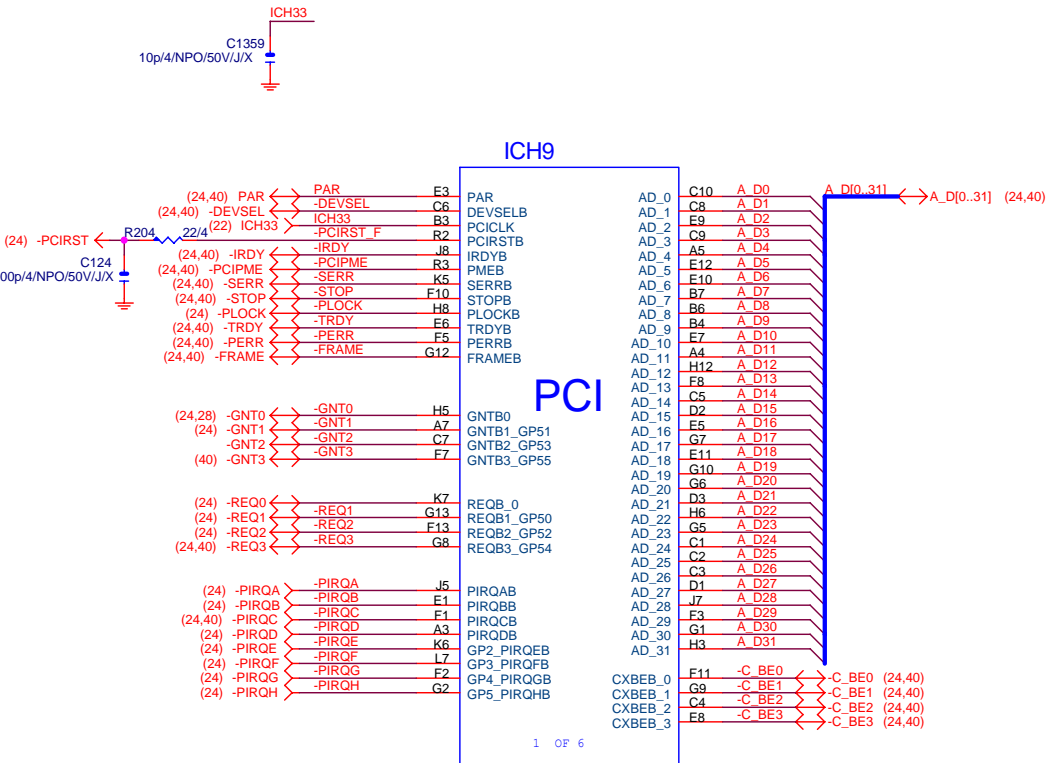
(10,15) -SCASB >

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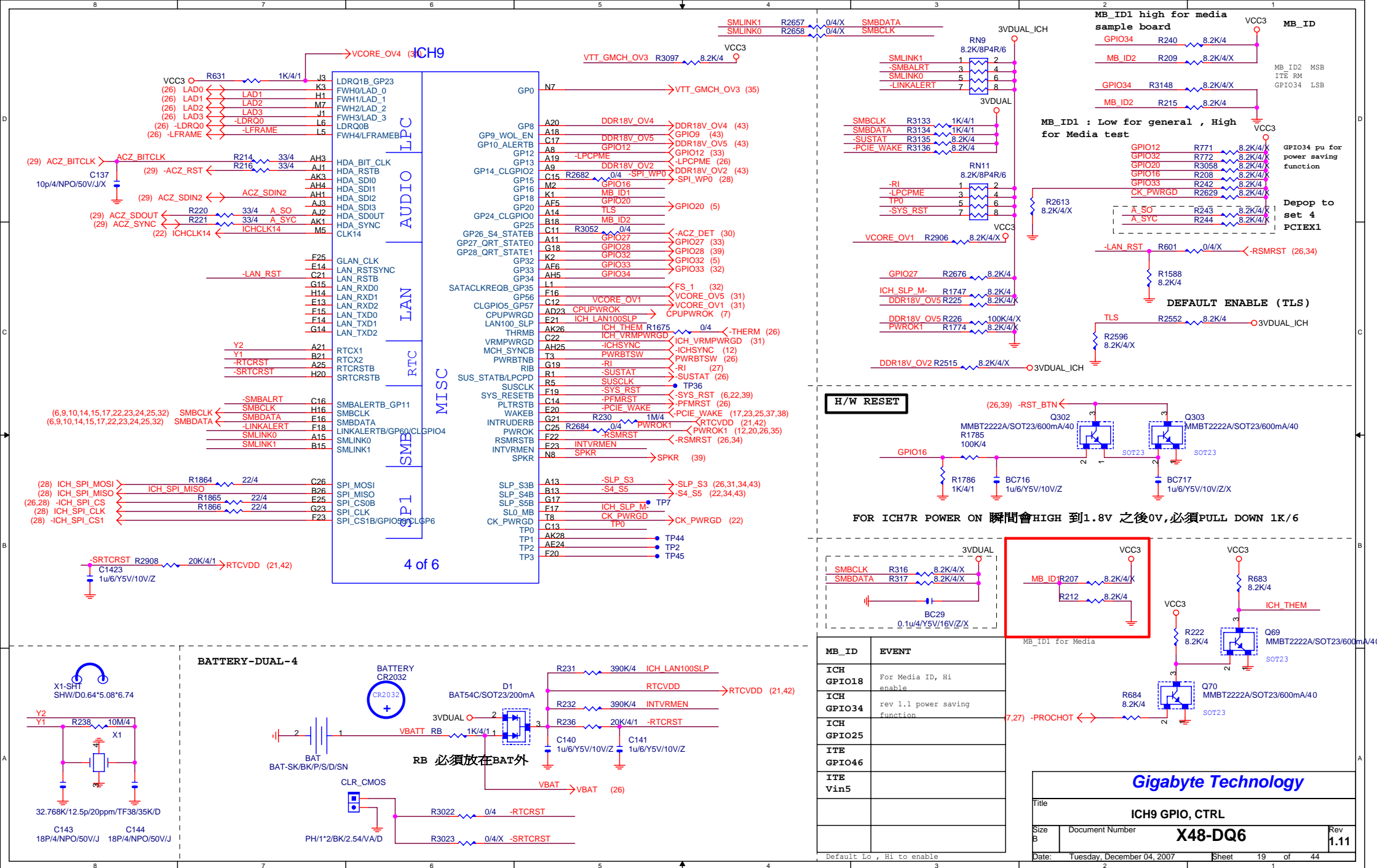
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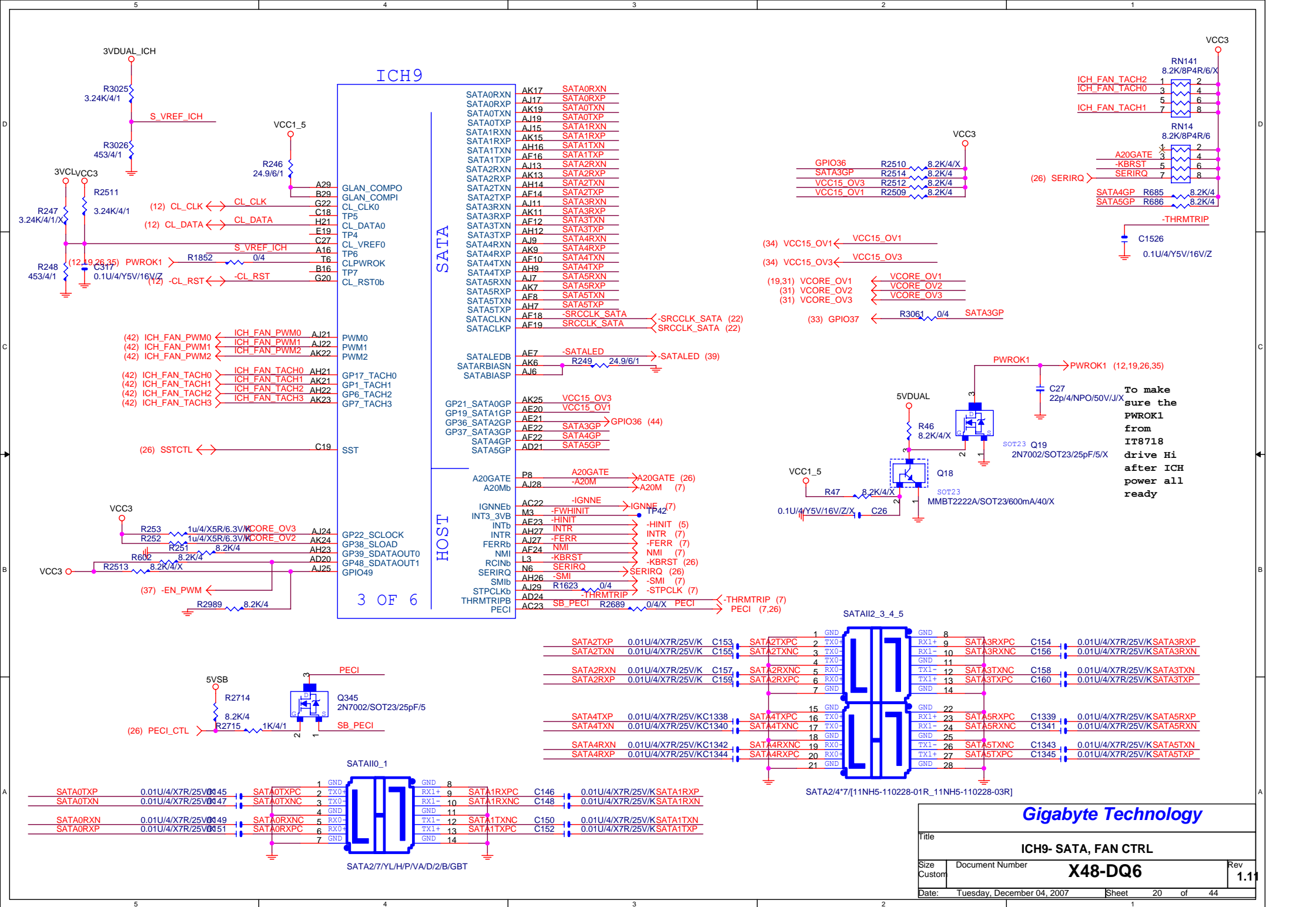
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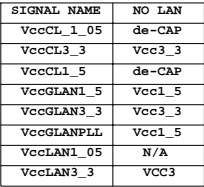




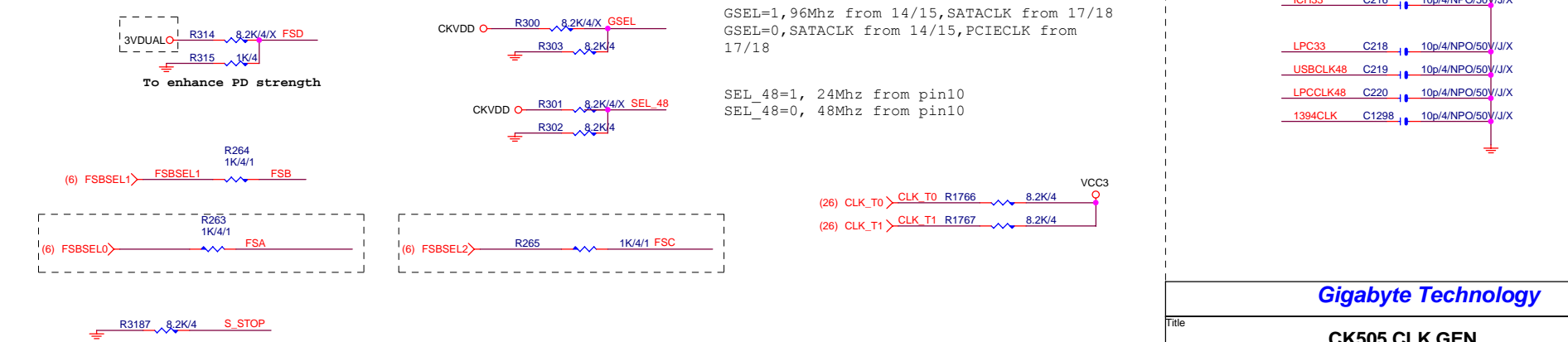
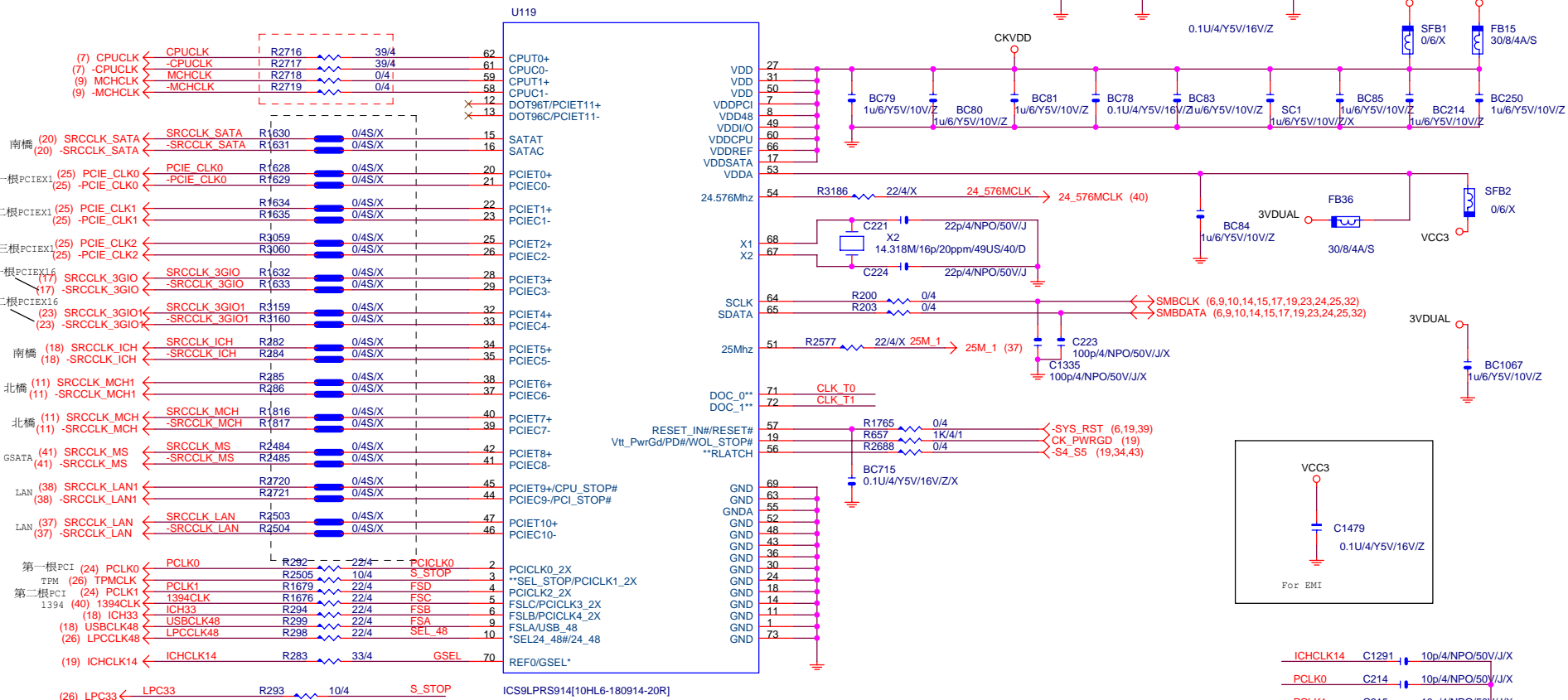
Gigabyte Technology			
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ICH9-PCI, DMI, LAN, USB			
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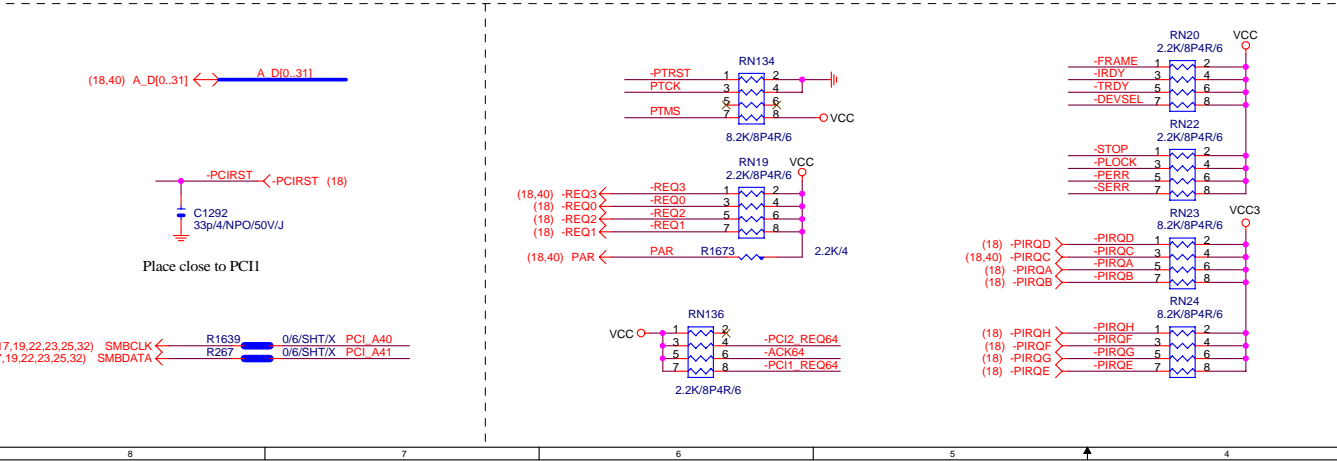
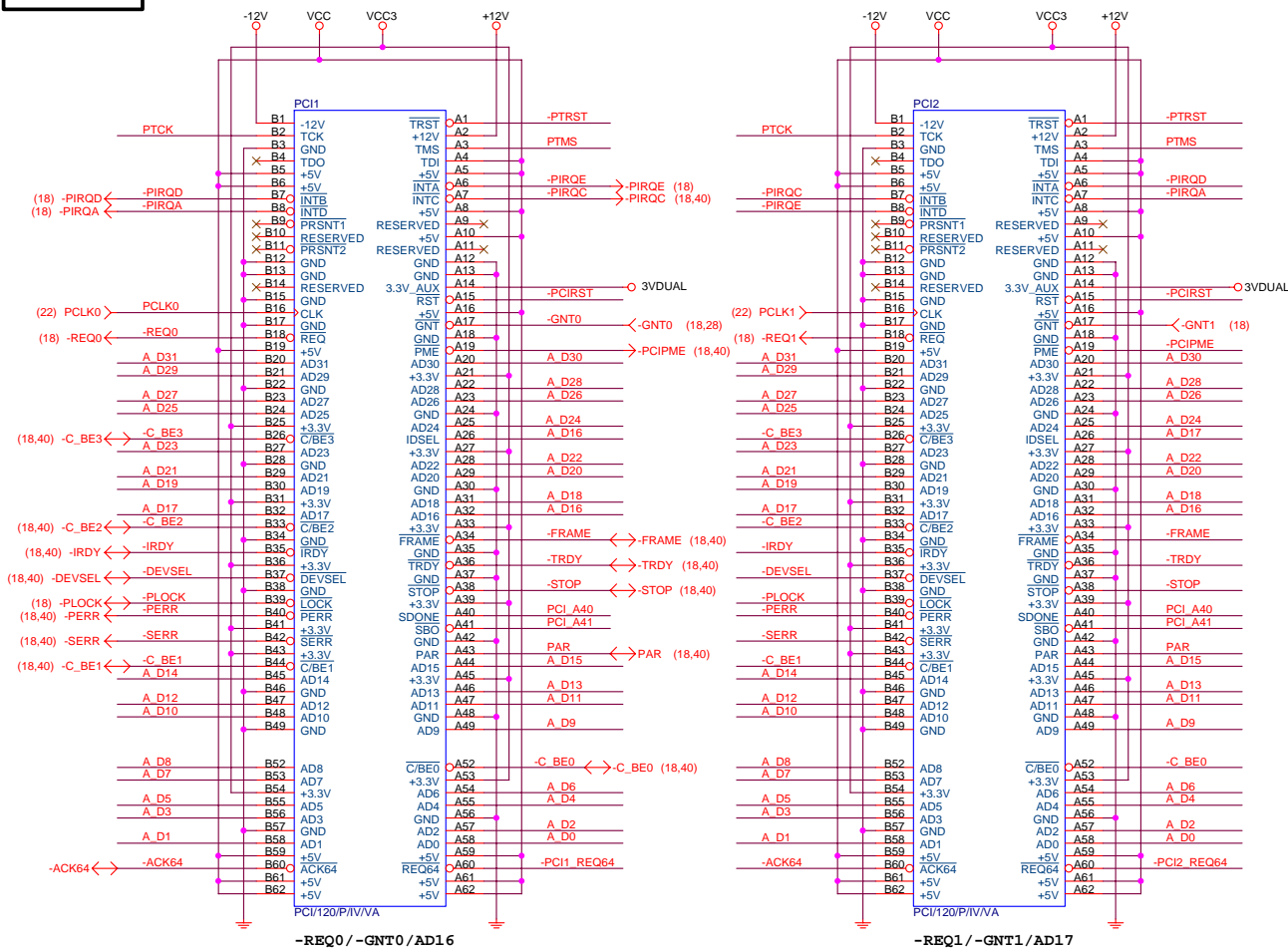
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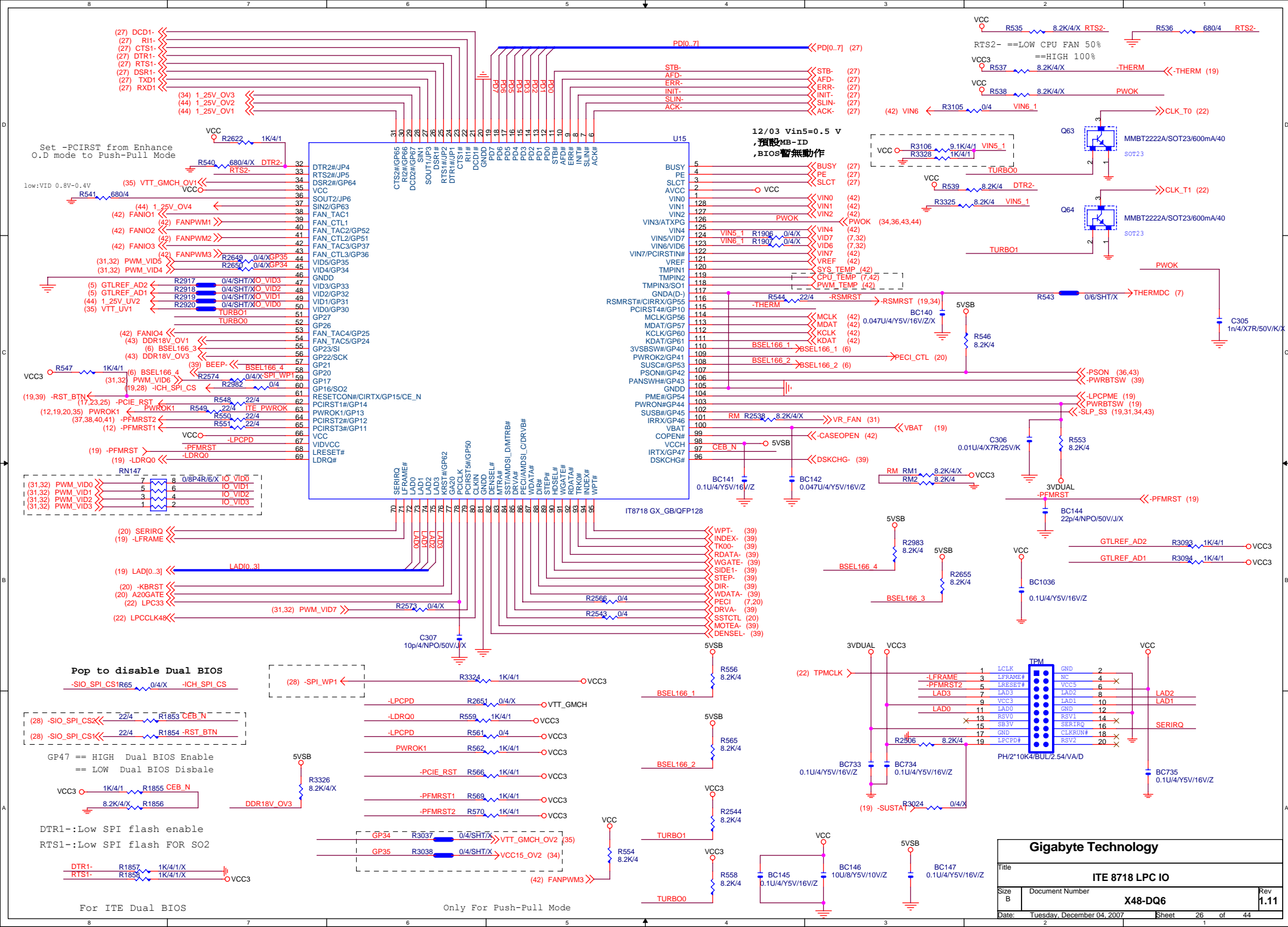
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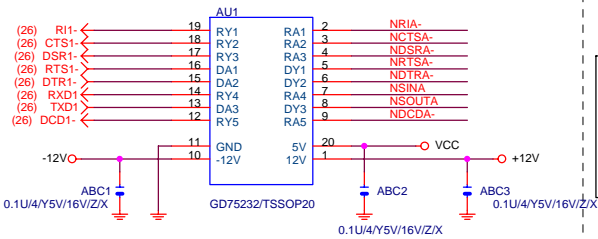
PCI1,2 SLOT



Gigabyte Technology			
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PCI SLOT 1, 2			
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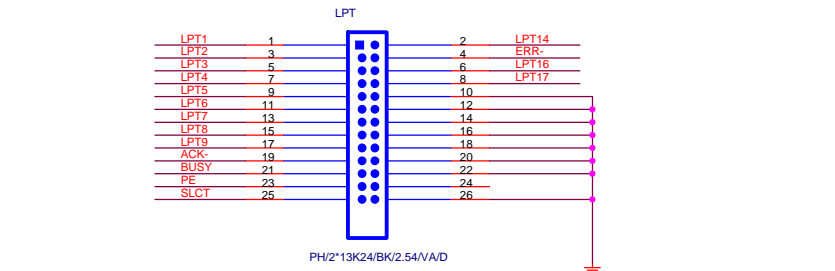
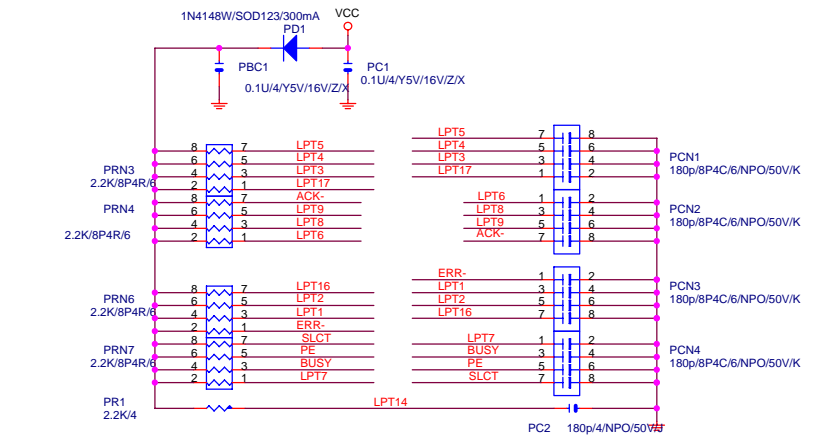
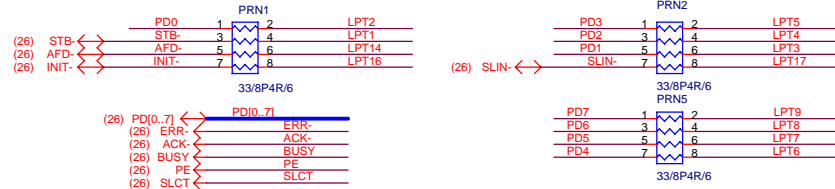
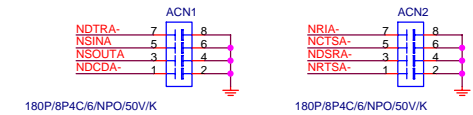
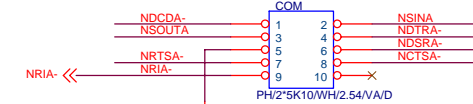
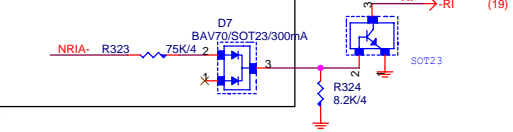


COMA

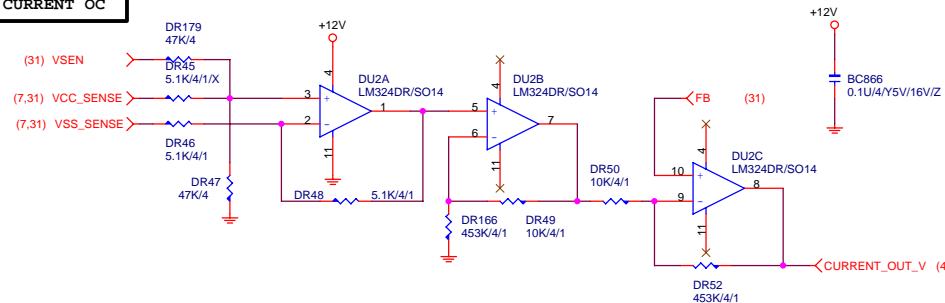


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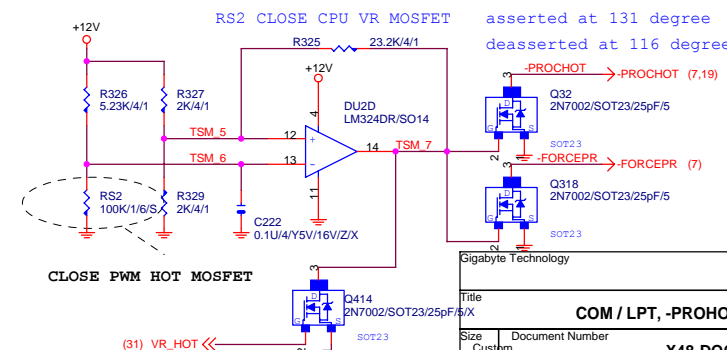
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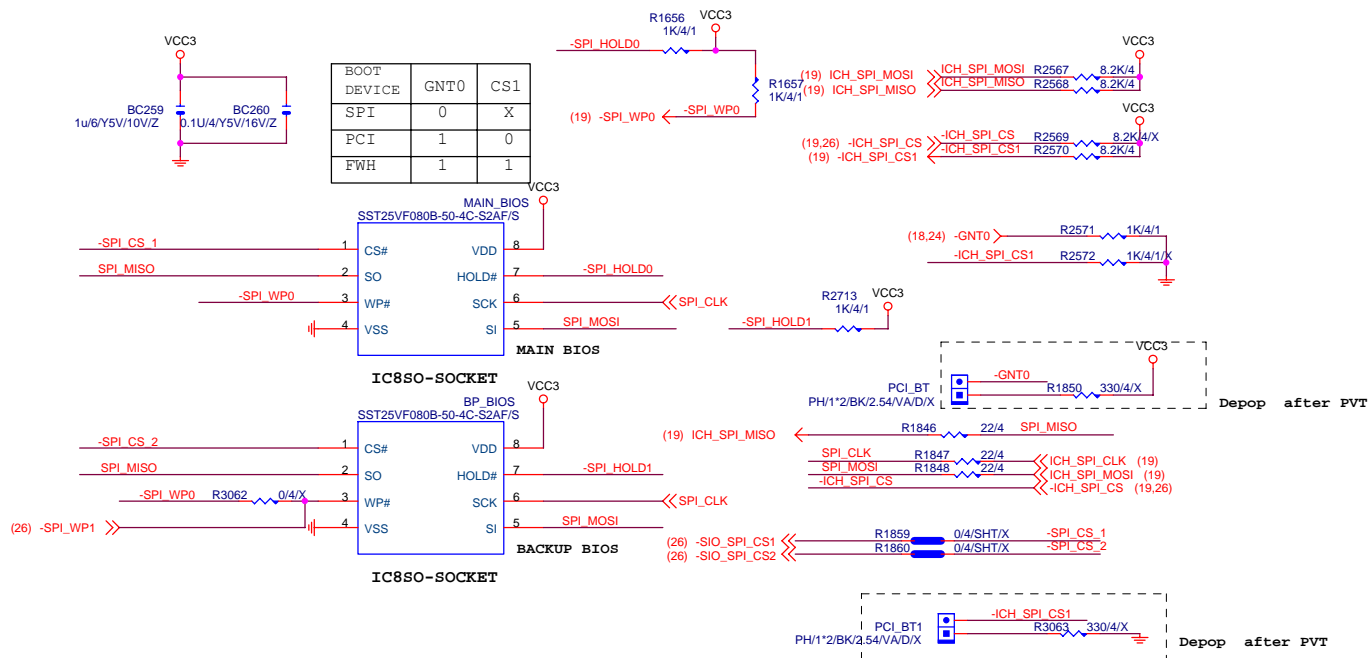
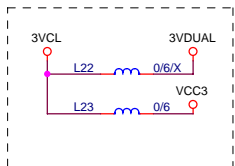
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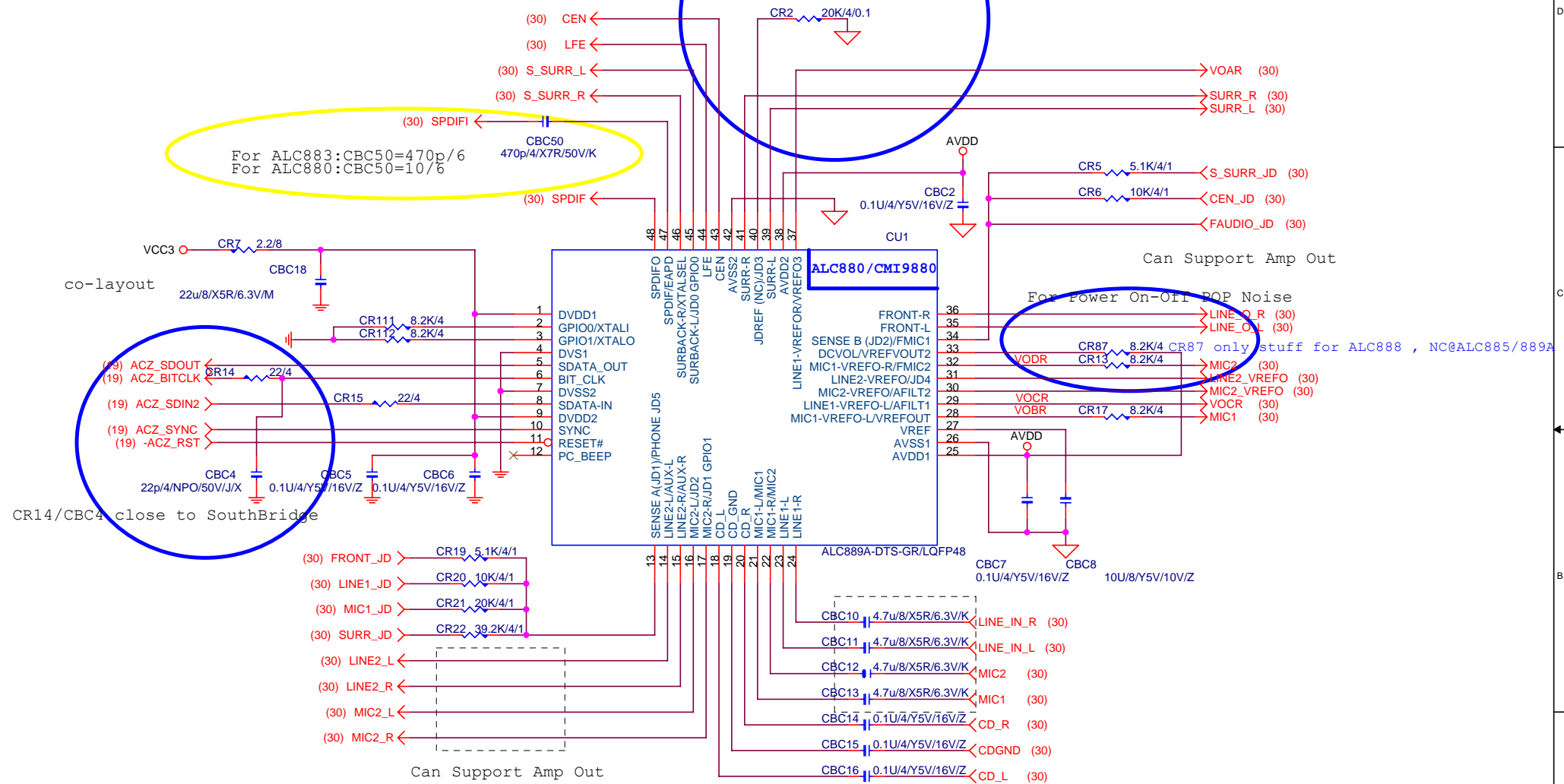


-PROHOT



Gigabyte Technology			
Title			
COM / LPT, -PROHOT,DYNAMIC OC			
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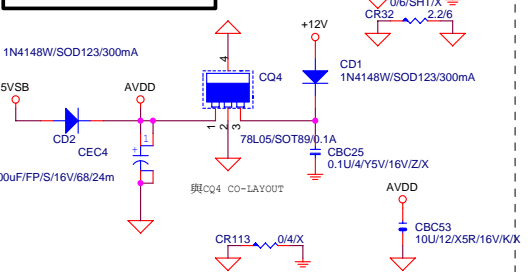




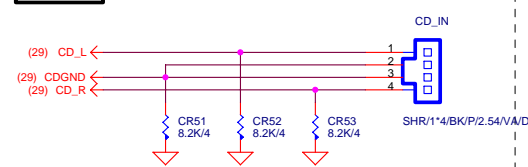
Gigabyte Technology

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CODEC POWER/EMI PAD



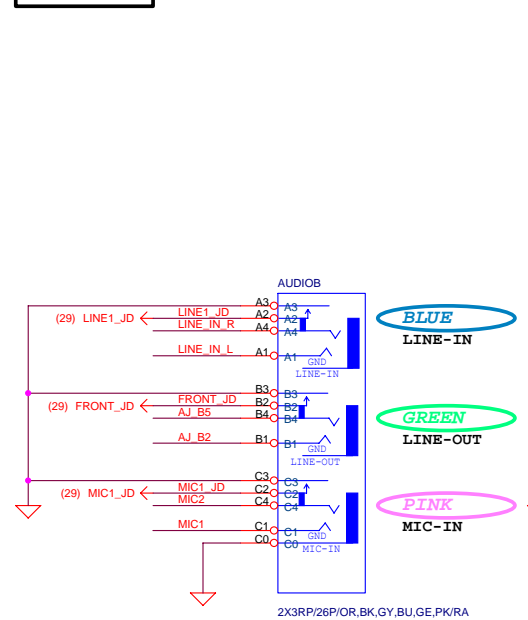
CD IN



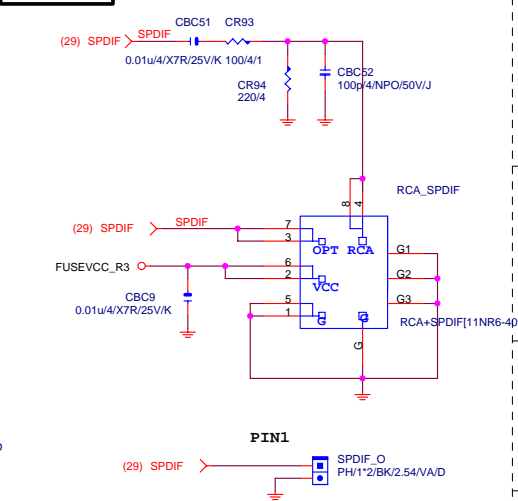
SPDIF_IN



AZALIA JACK



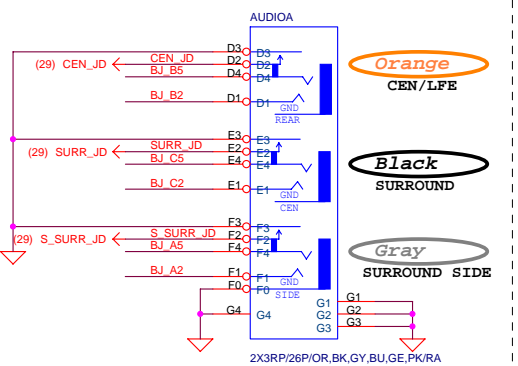
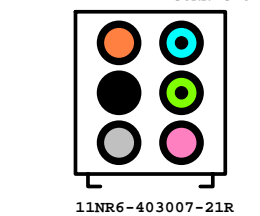
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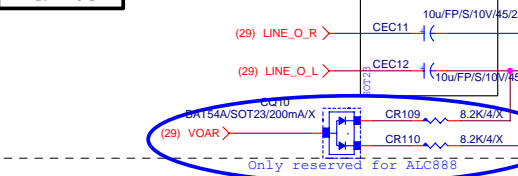
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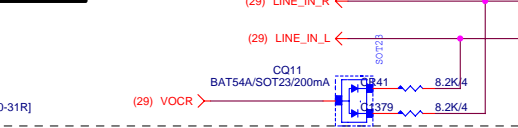
BTX AZALIA CONNECTOR



LINE-OUT



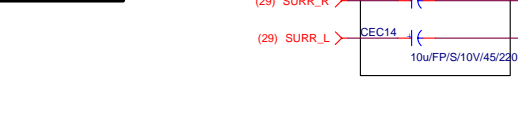
LINE-IN



MIC-IN



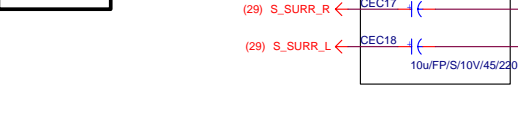
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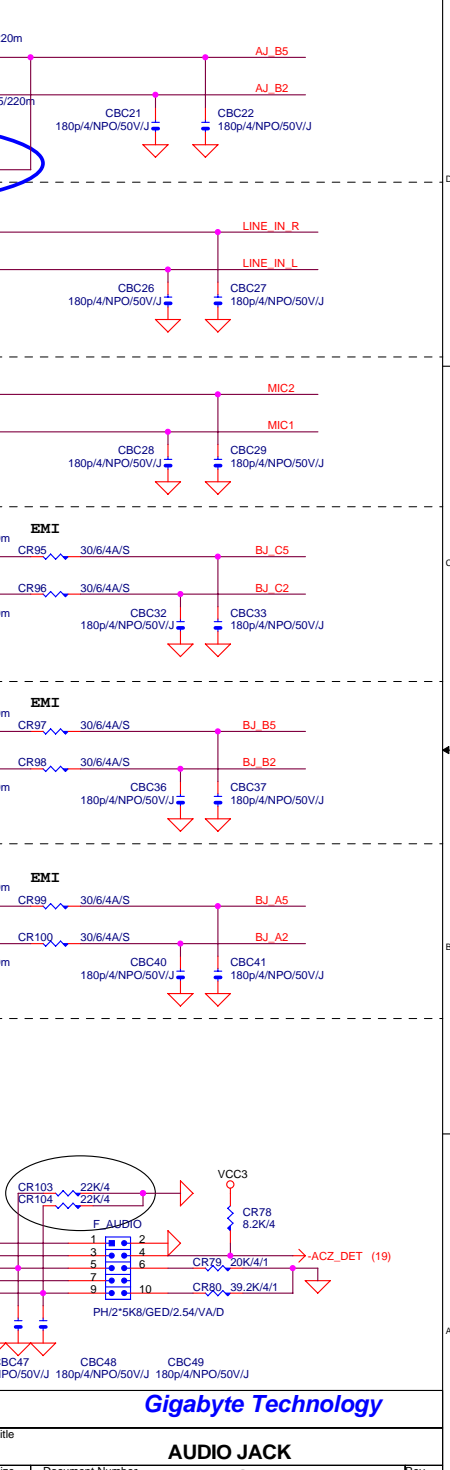
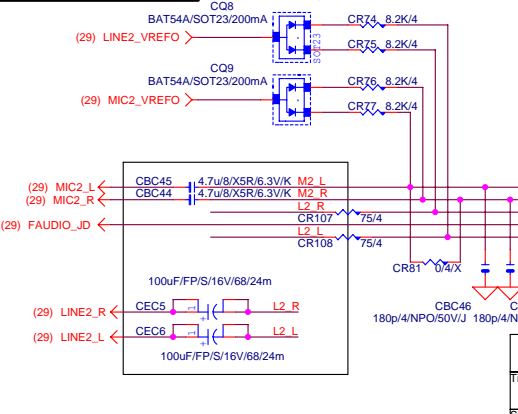
CEN/LFE



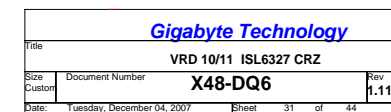
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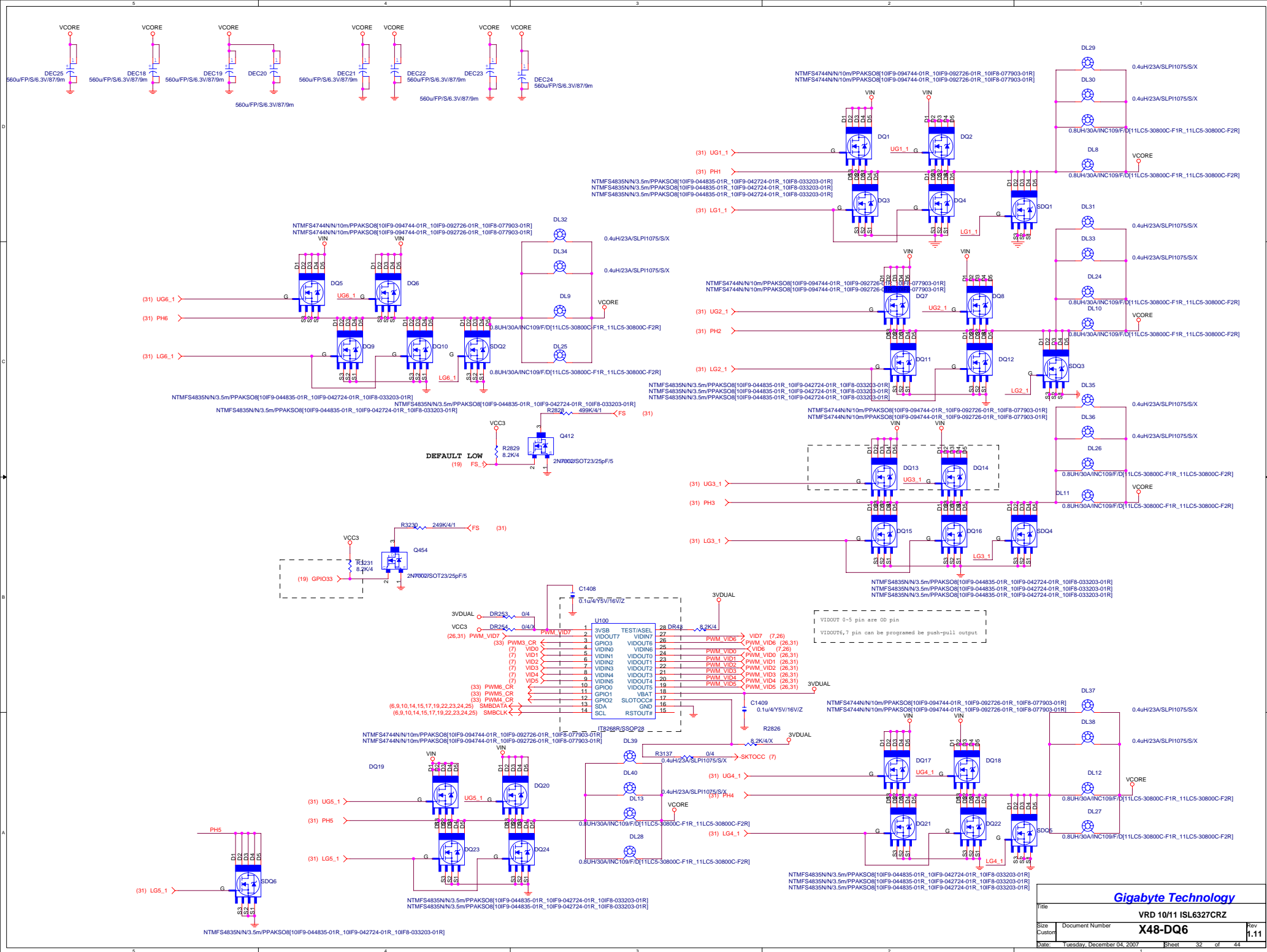


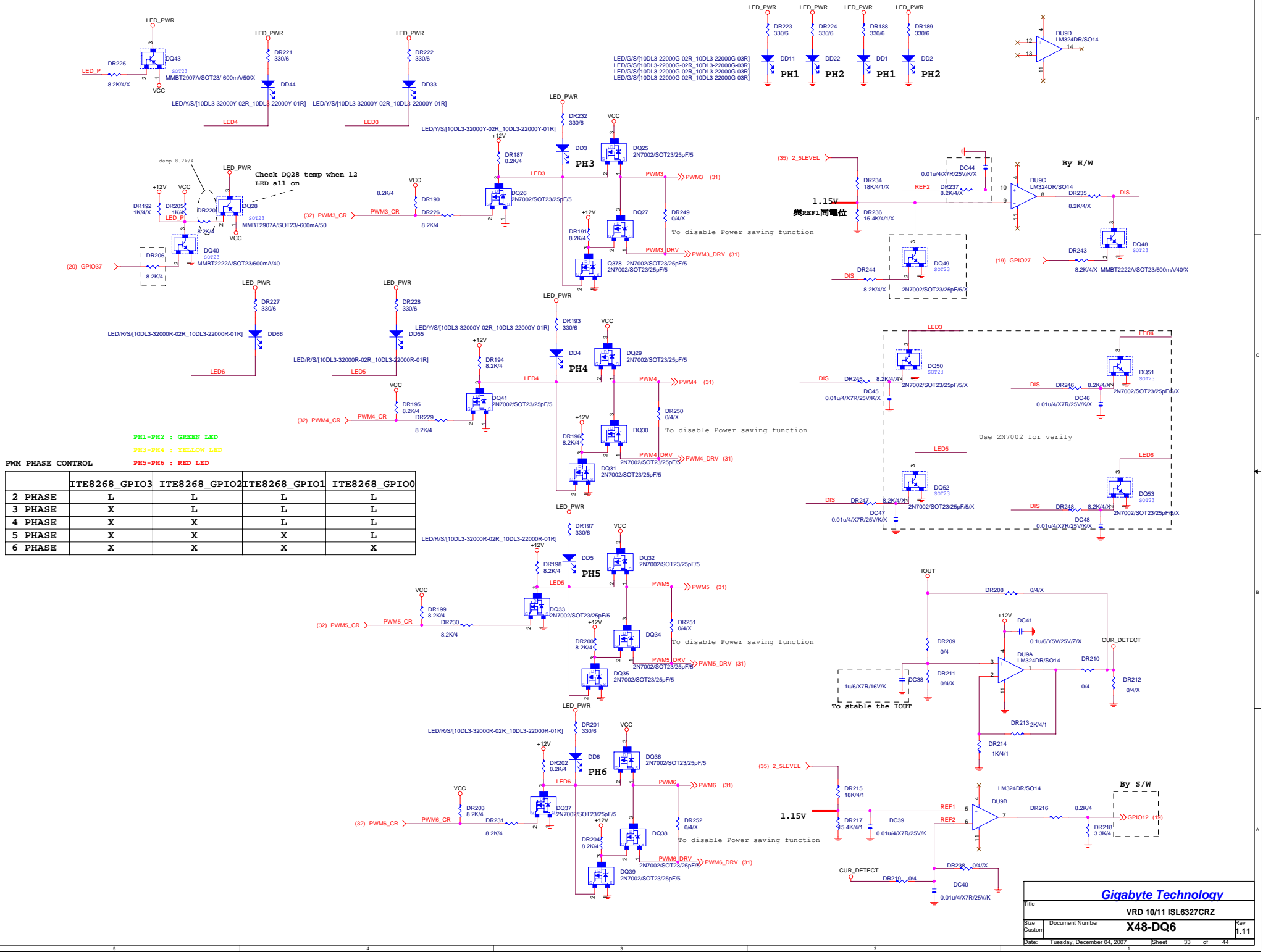
AZALIA FRONT PANEL



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AUDIO JACK		
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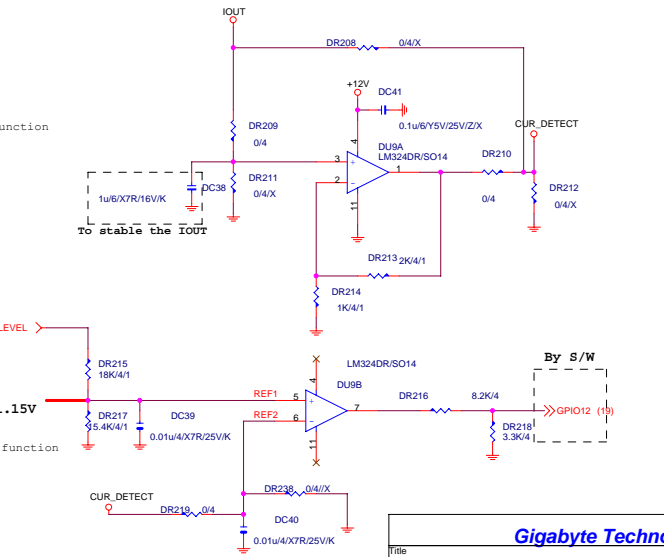
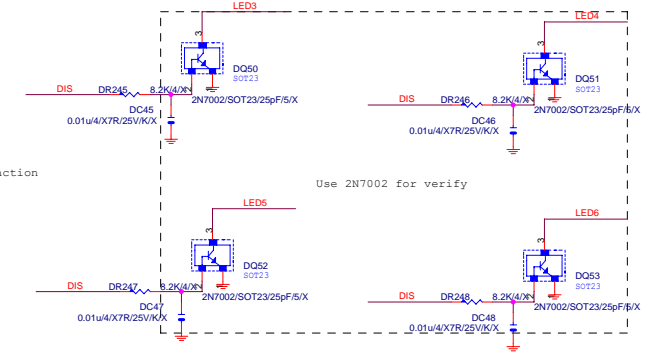
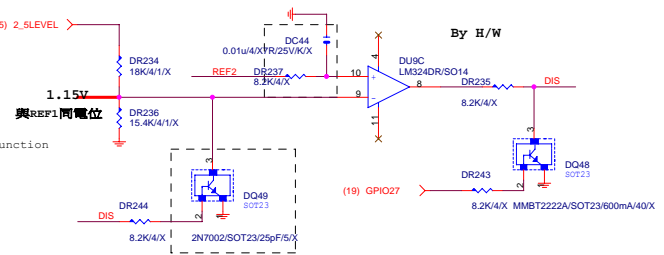


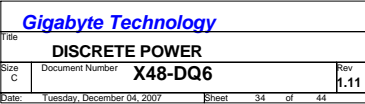
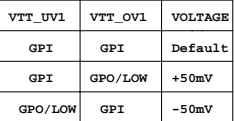
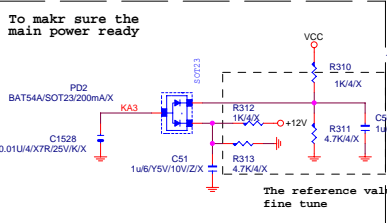




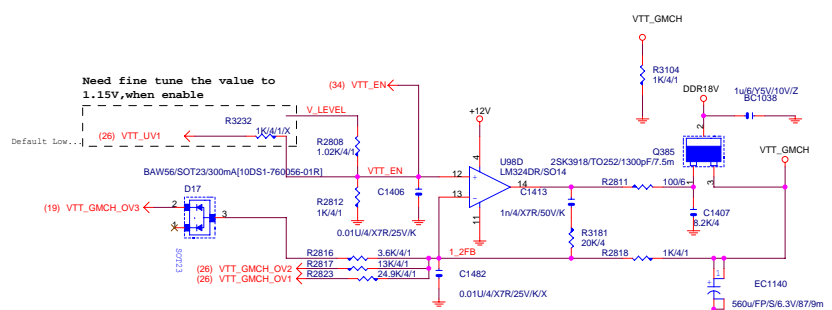
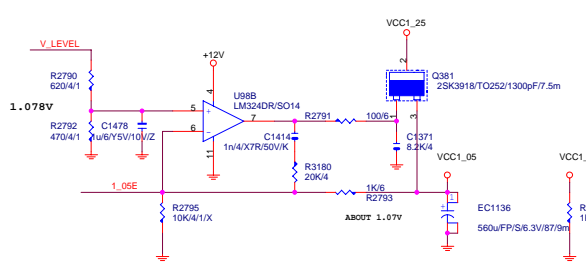
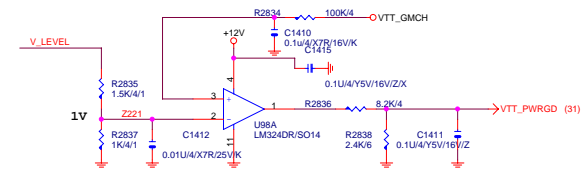
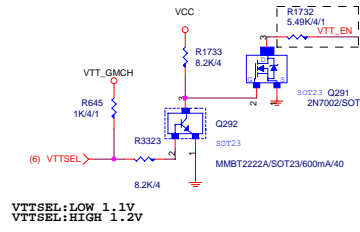
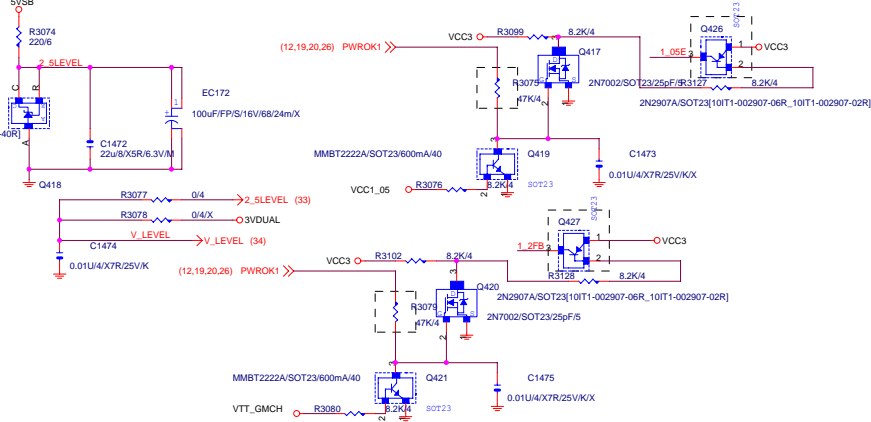
PWM PHASE CONTROL

	ITE8268_GPIO3	ITE8268_GPIO2	ITE8268_GPIO1	ITE8268_GPIO0
2 PHASE	L	L	L	L
3 PHASE	X	X	L	L
4 PHASE	X	X	X	L
5 PHASE	X	X	X	L
6 PHASE	X	X	X	X

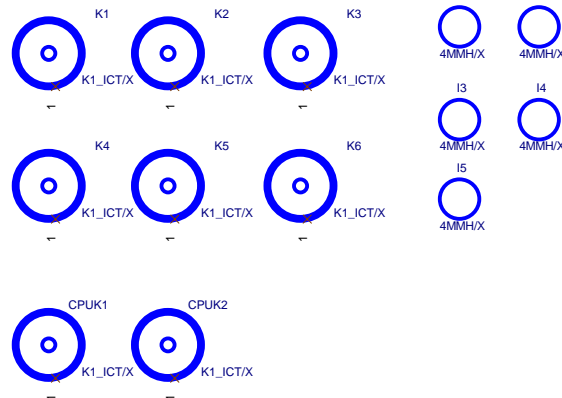
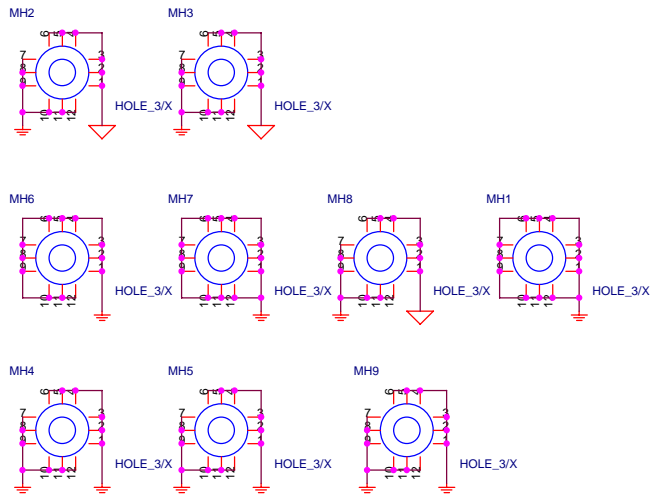
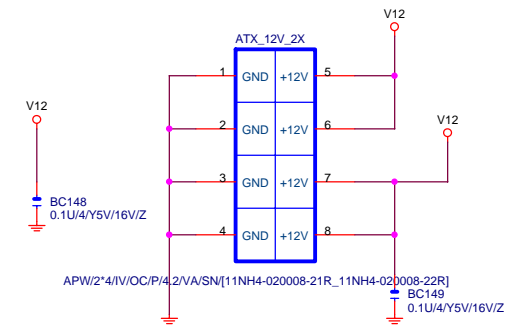
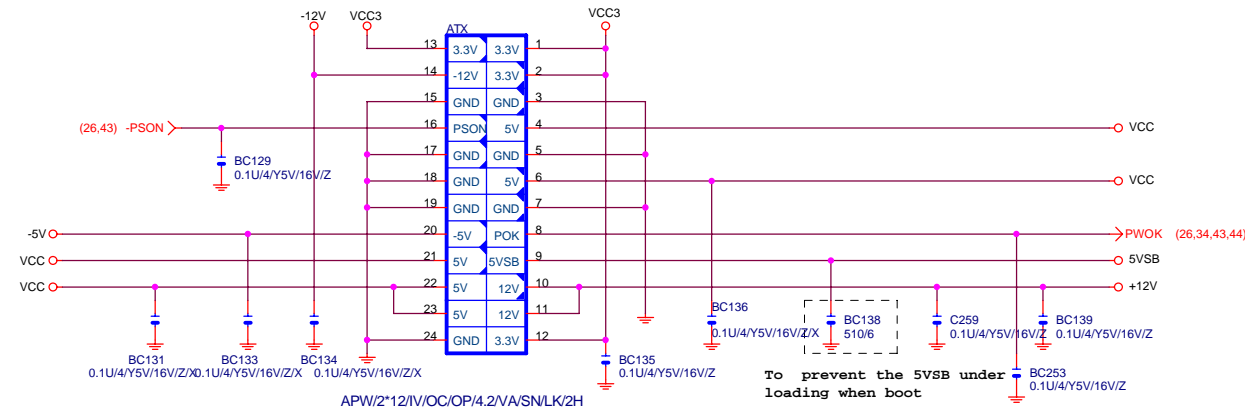




1_25V_UV2	1_25V_UV1	VOLTAGE
LOW	LOW	1.1V
LOW	HIGH	1.15V
HIGH	LOW	1.2V
HIGH	HIGH	1.25V



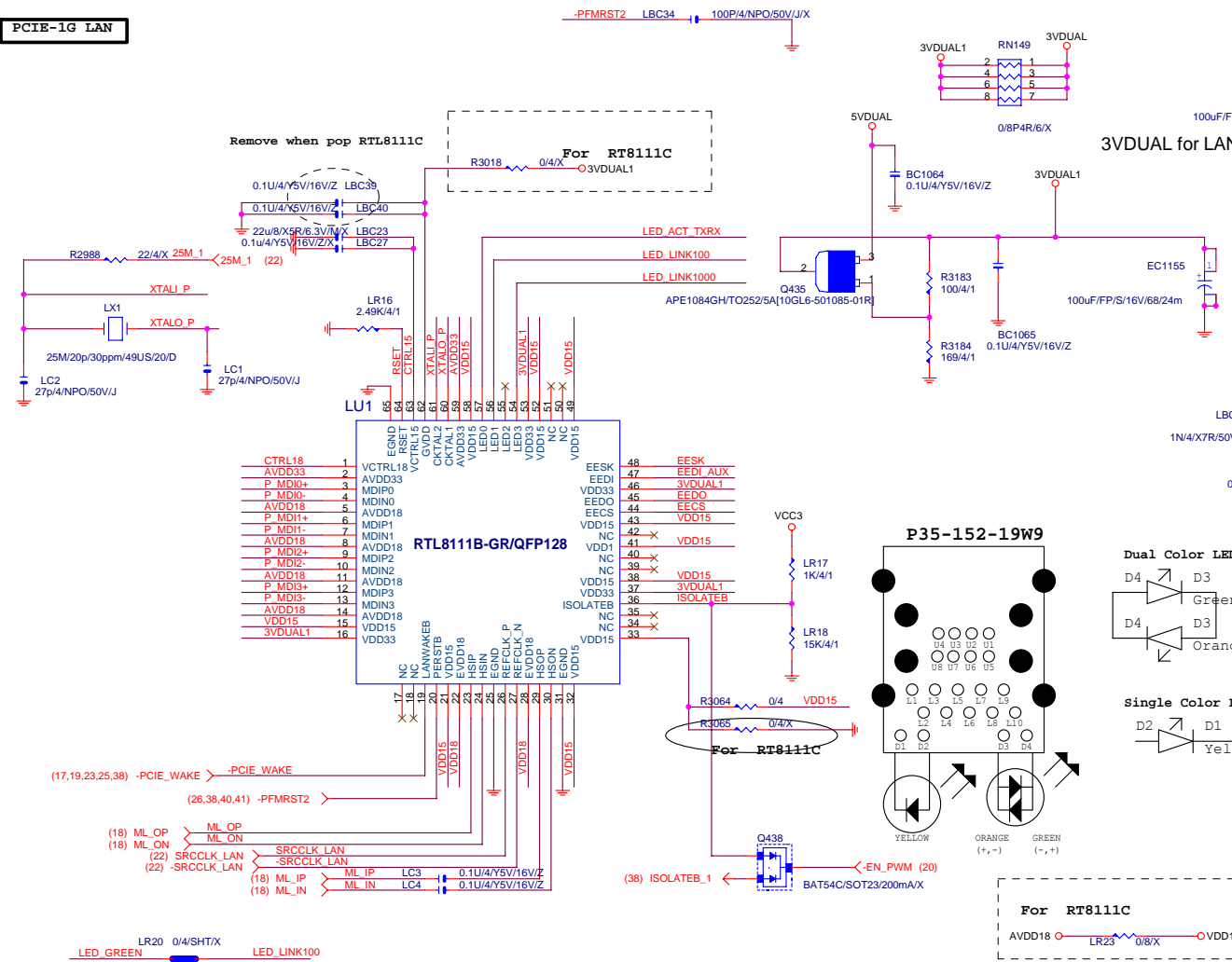
ATX POWER CONNECTOR



Gigabyte Technology

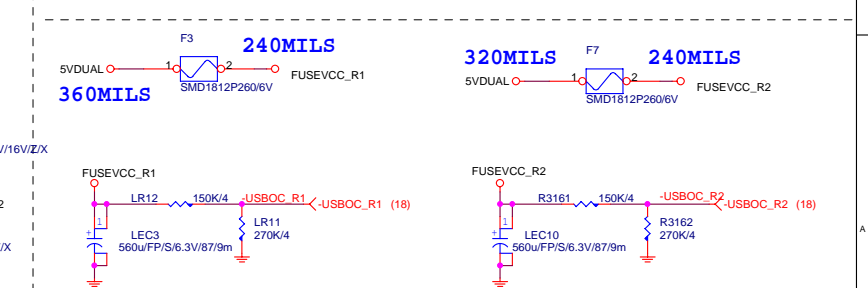
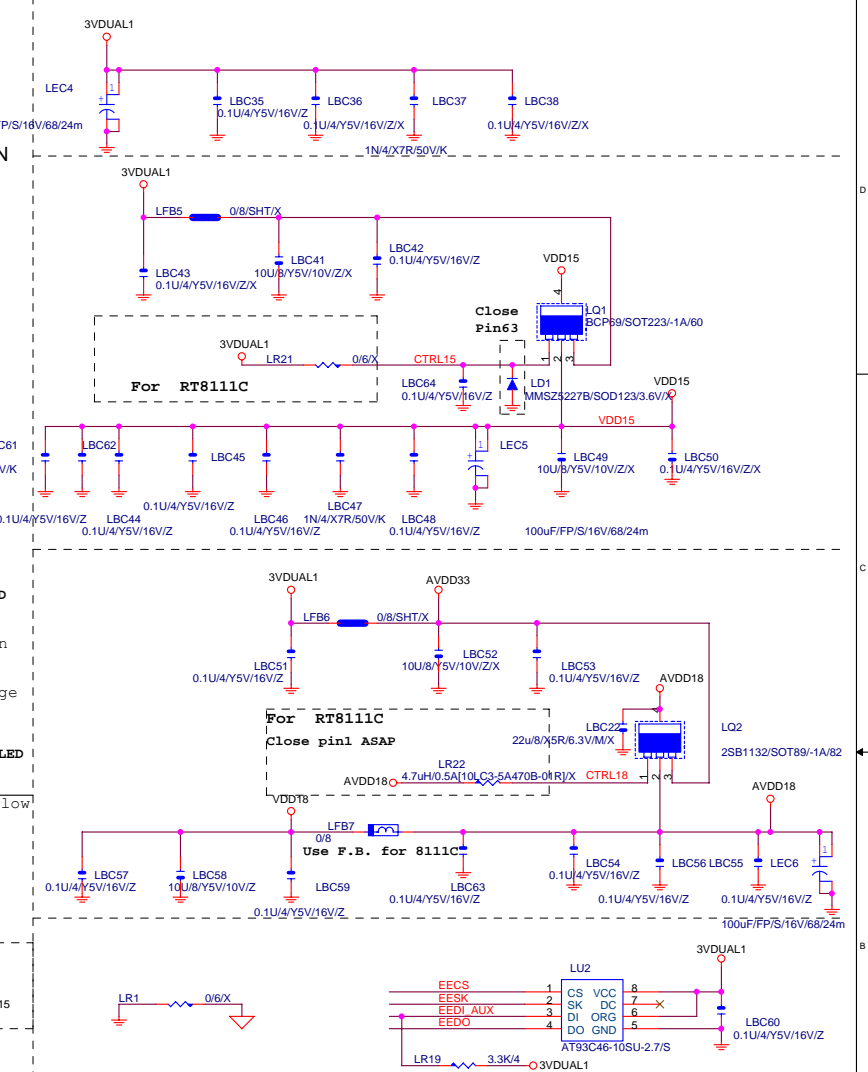
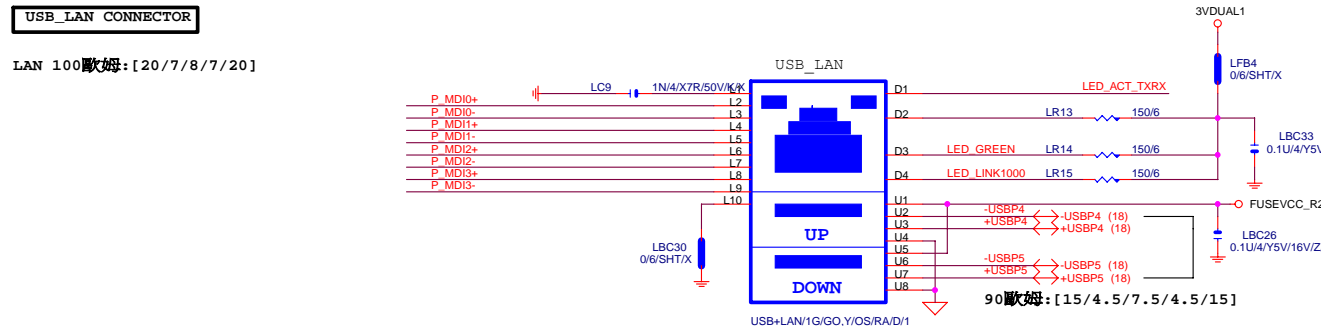
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PCIE-1G LAN

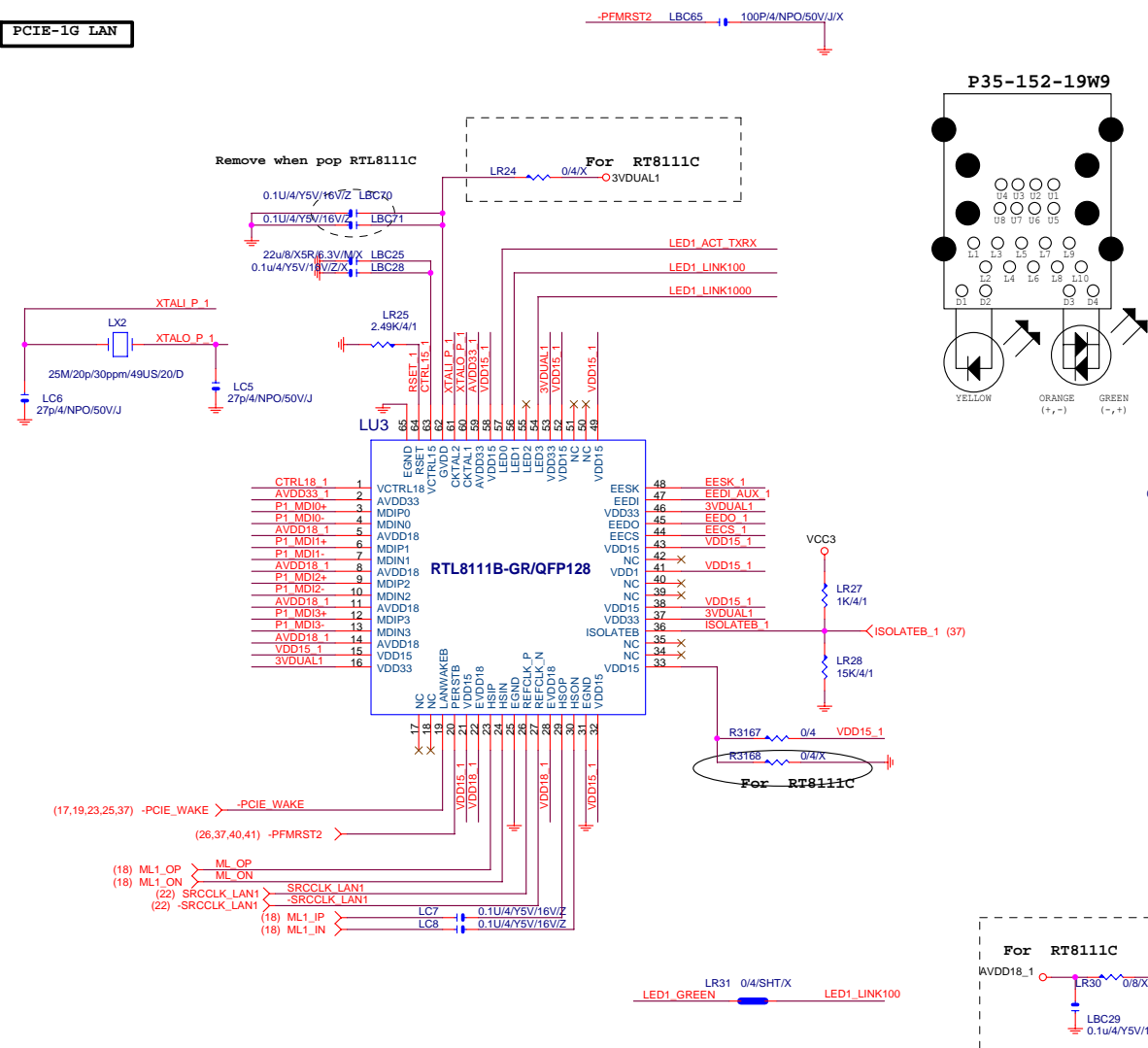


USB_LAN CONNECTOR

LAN 100 歌姆:[20/7/8/7/20]

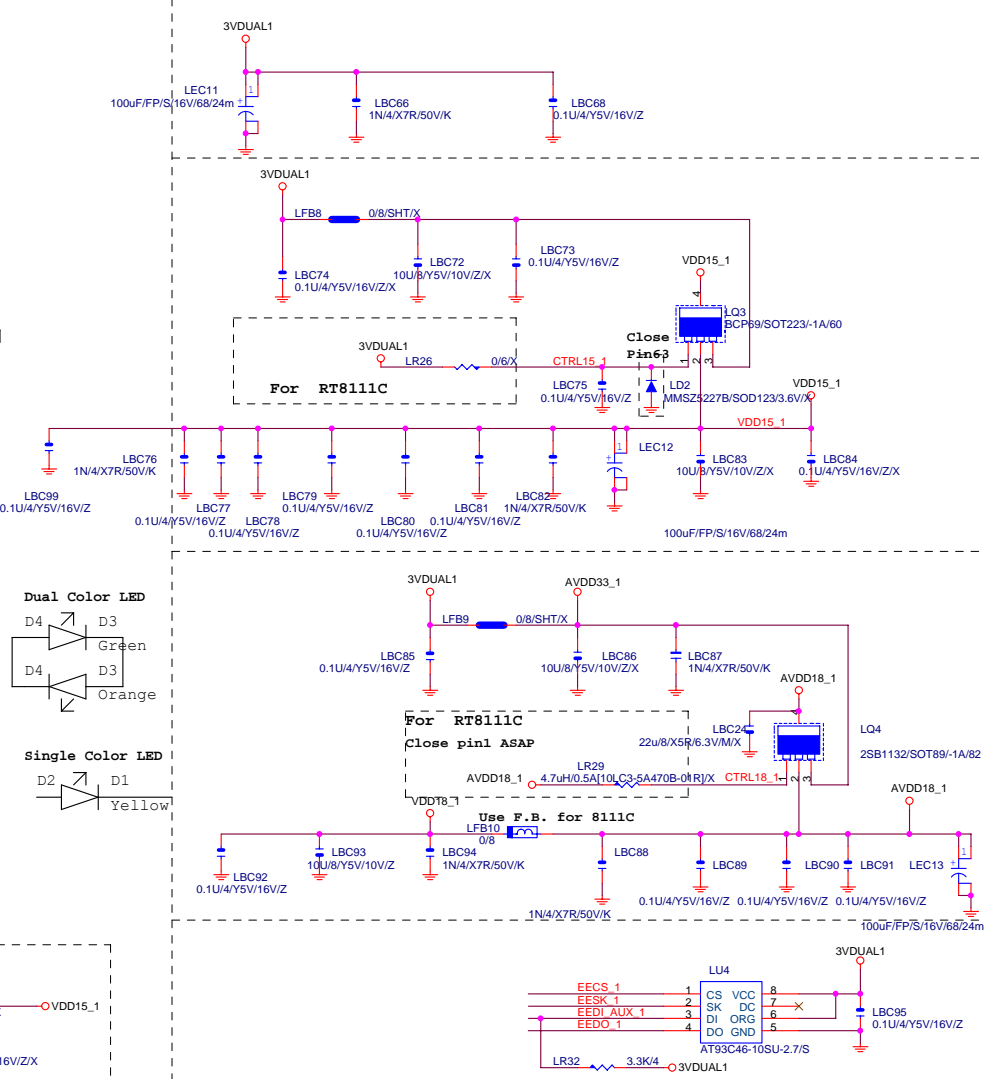
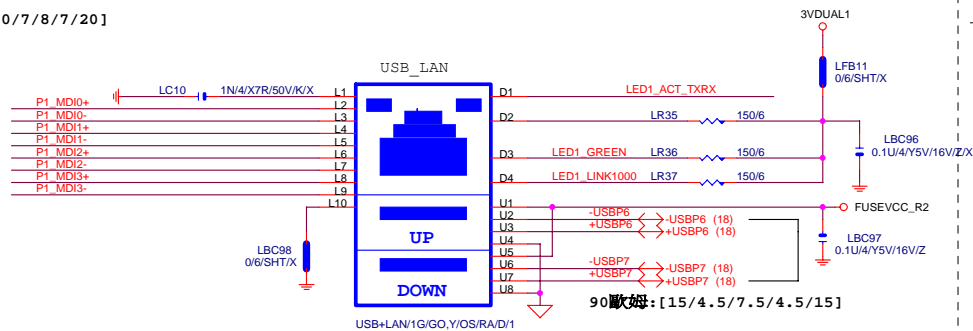


PCIE-1G LAN

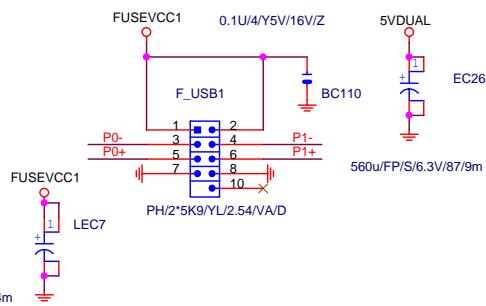
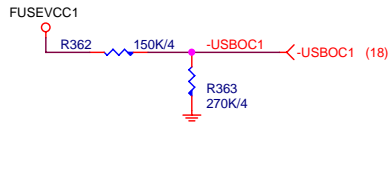


USB_LAN CONNECTOR

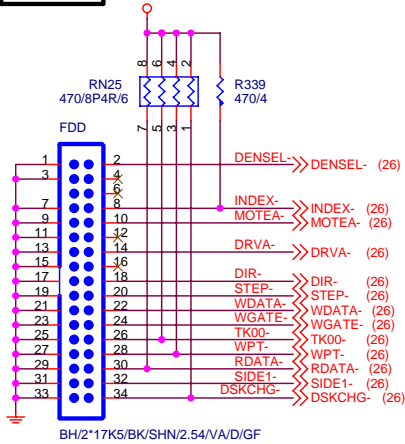
LAN 100 欧姆:[20/7/8/7/20]



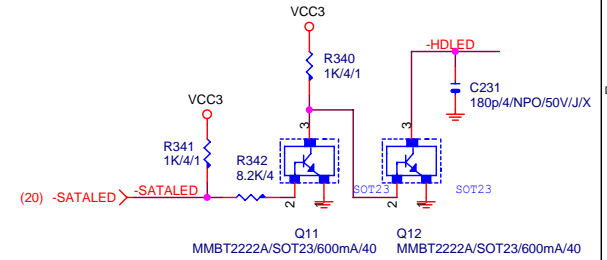
FRONT USB1



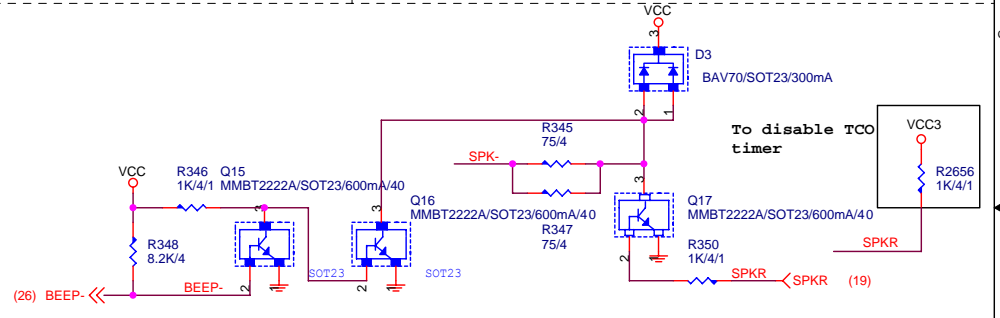
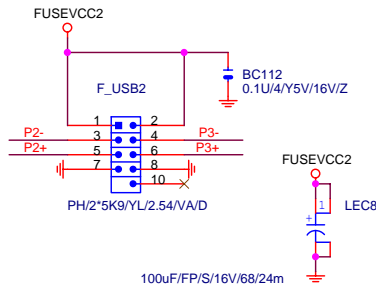
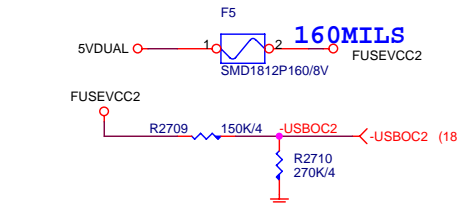
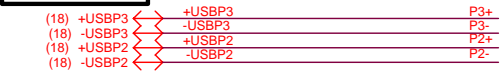
FLOPPY



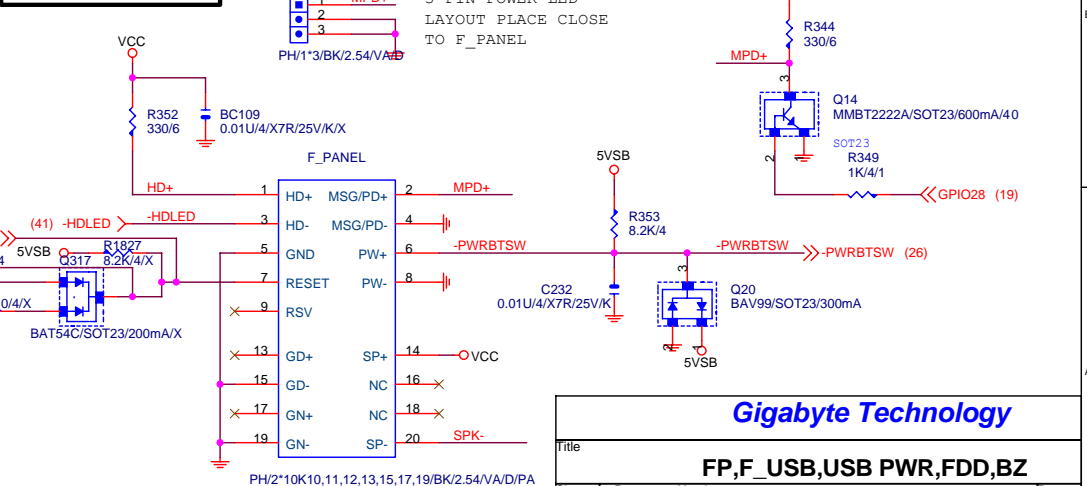
SATA LED



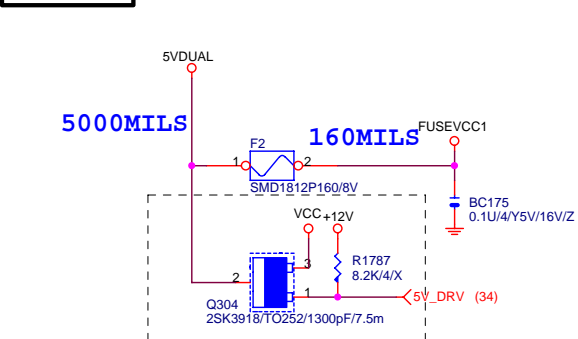
FRONT USB2



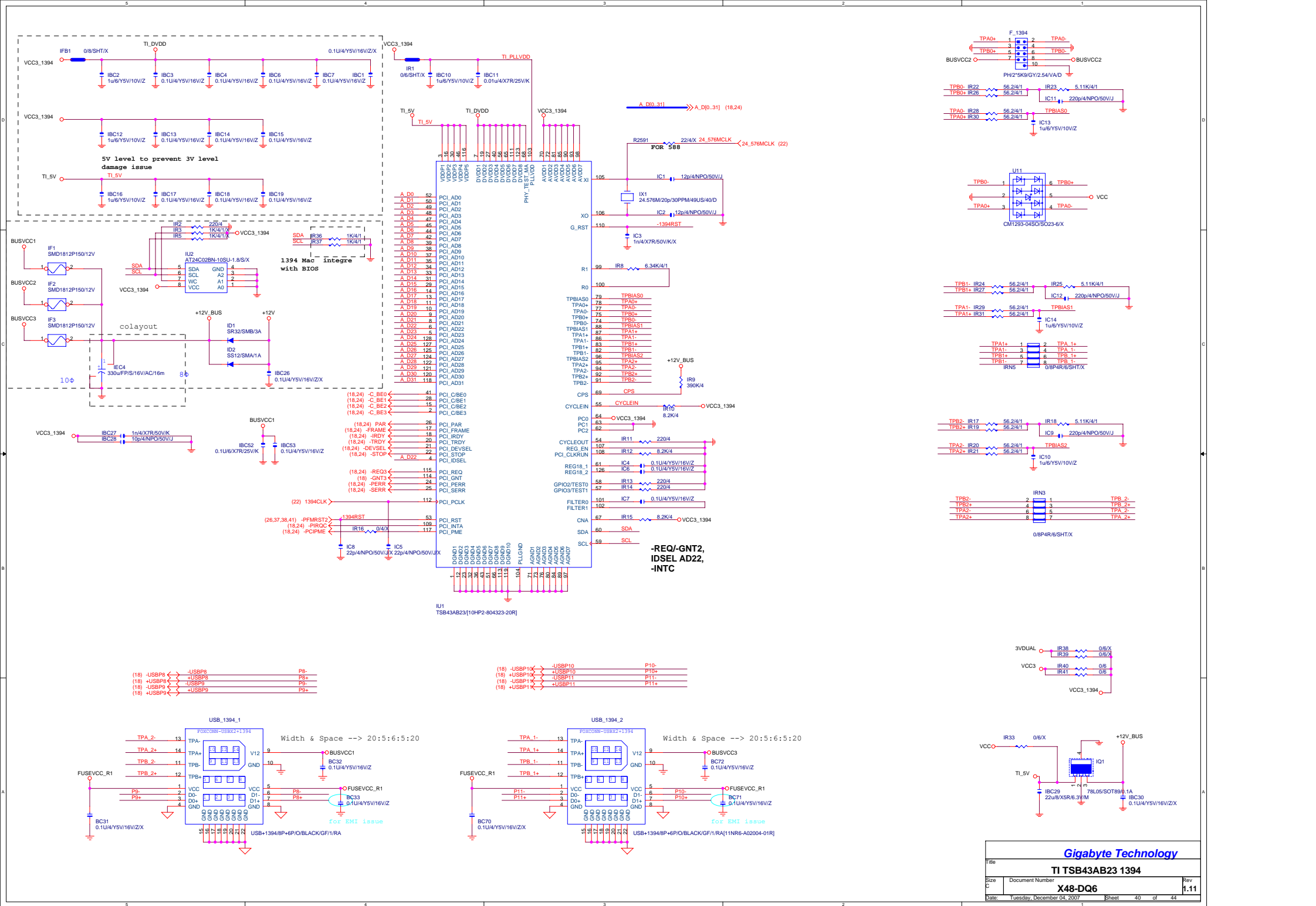
INTEL FRONT PANEL



USB POWER

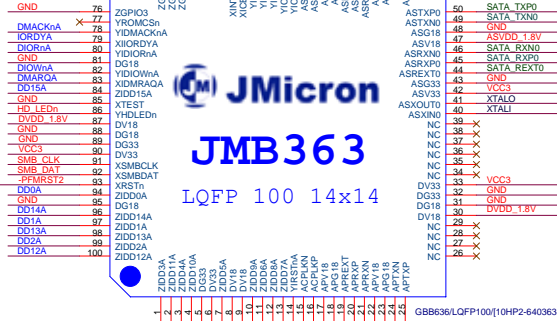
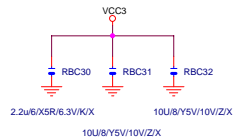
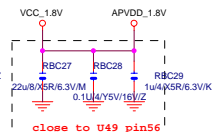
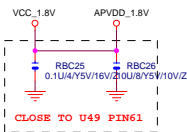
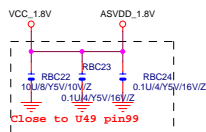
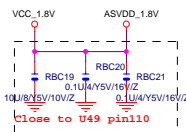
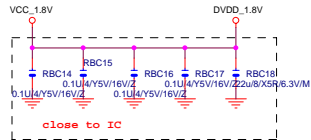
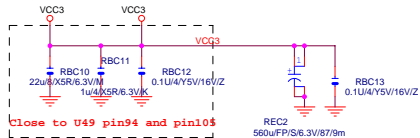
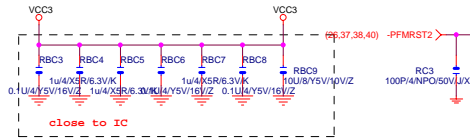
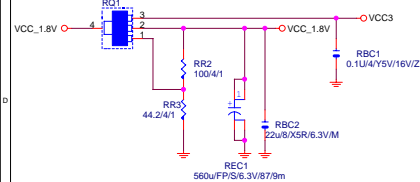


Gigabyte Technology			
FP,F_USB,USB PWR,FDD,BZ			
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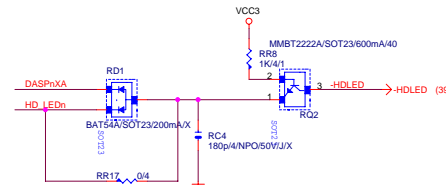
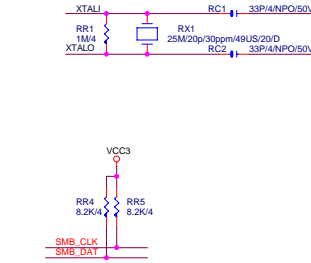
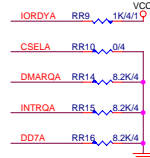
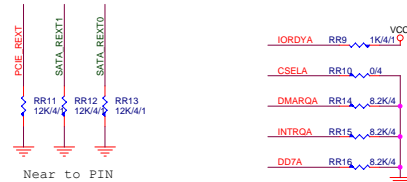
3.3V to 1.8V Voltage Regulator

AMC11175W/SOT223(0.8A)(10GL3-08117-06R)

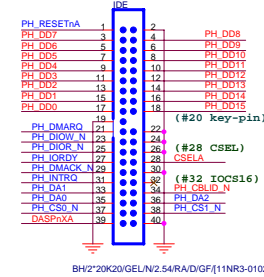


JMicron
JMB363
LQFP 100 14x14

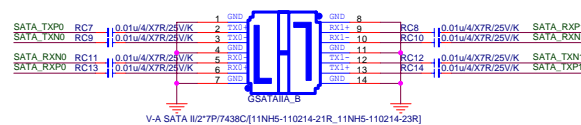
GBB636/LQFP100(10HP2-640363-20R)



IDE Connector



SATA Connector



Gigabyte Technology

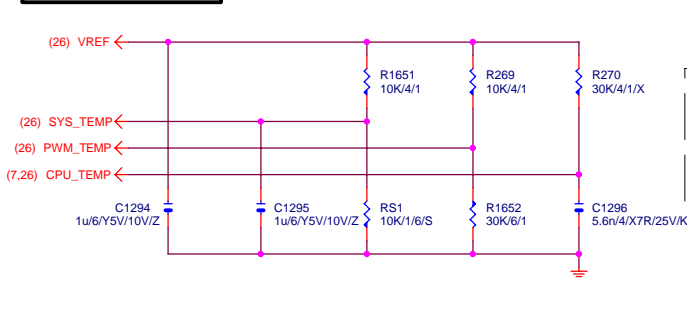
JMB363

X48-DQ6

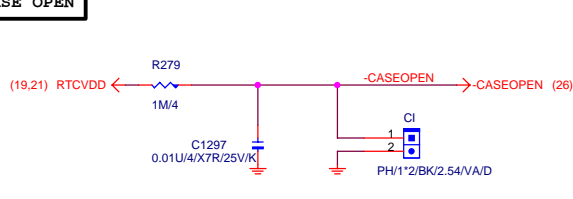
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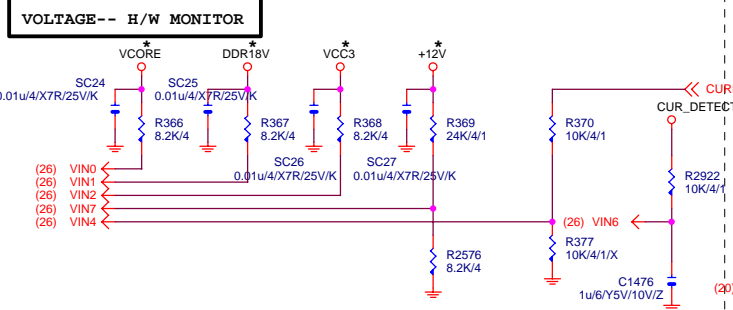
TEMP H/W MONITOR



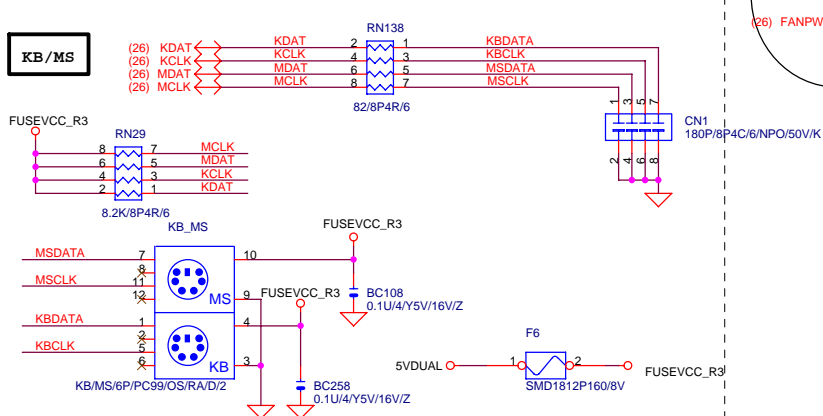
CAGE OPEN



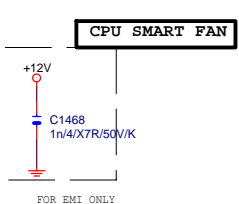
Case Open Circuits



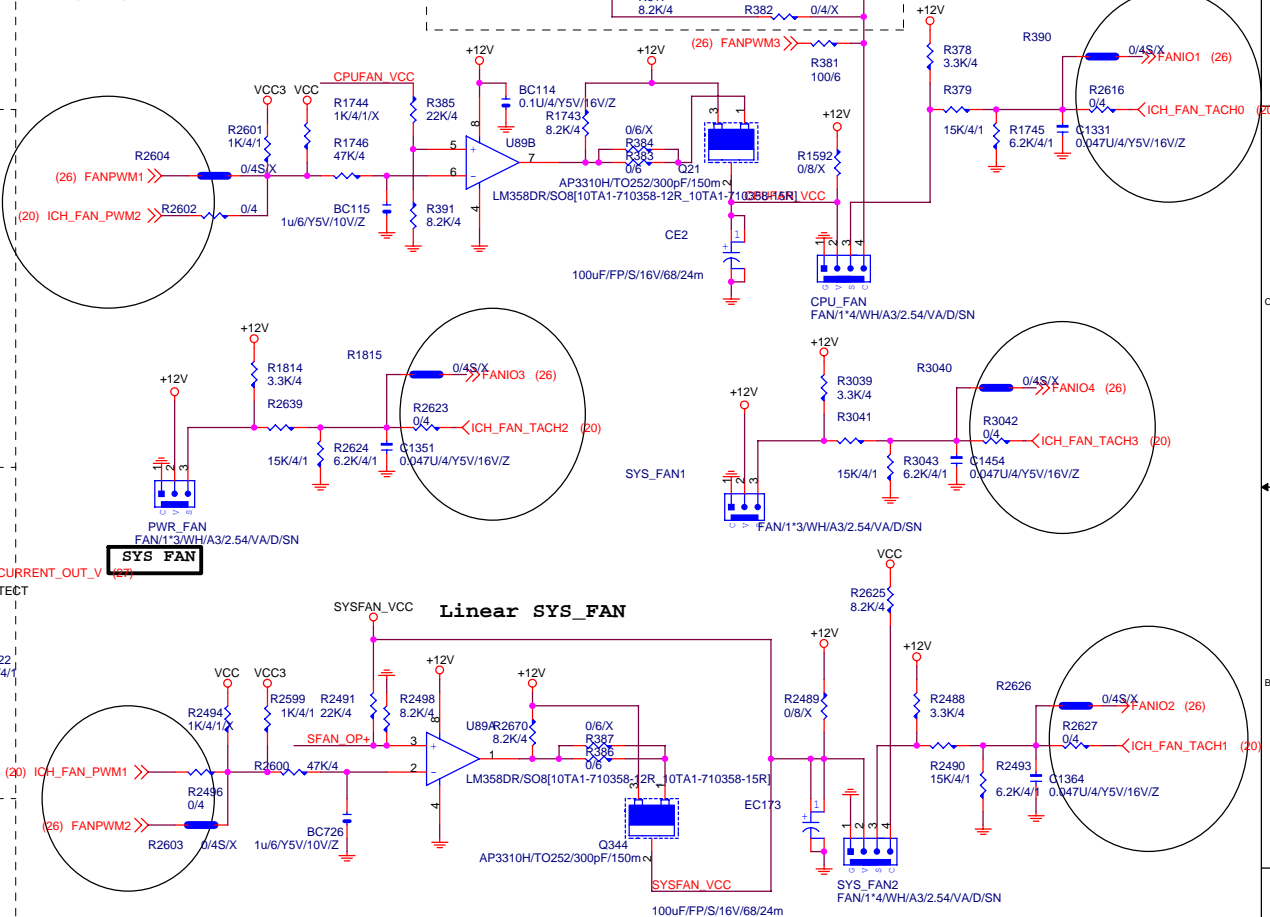
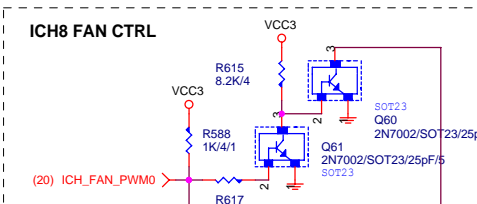
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CPU SMART FAN



ICH8 FAN CTRL VCC3



Gigabyte Technology

				
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HWM,KB/MS, FAN CTRL				
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