

Model Name: 965P-DS3P

Revision 2.0B

SHEET

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24	PCI EXPRESS X4 PORT1 SLOT
25	PCI SLOT 1, 2, 3
26	PCIE_1, SW
27	ITE 8718 CX

SHEET

TITLE

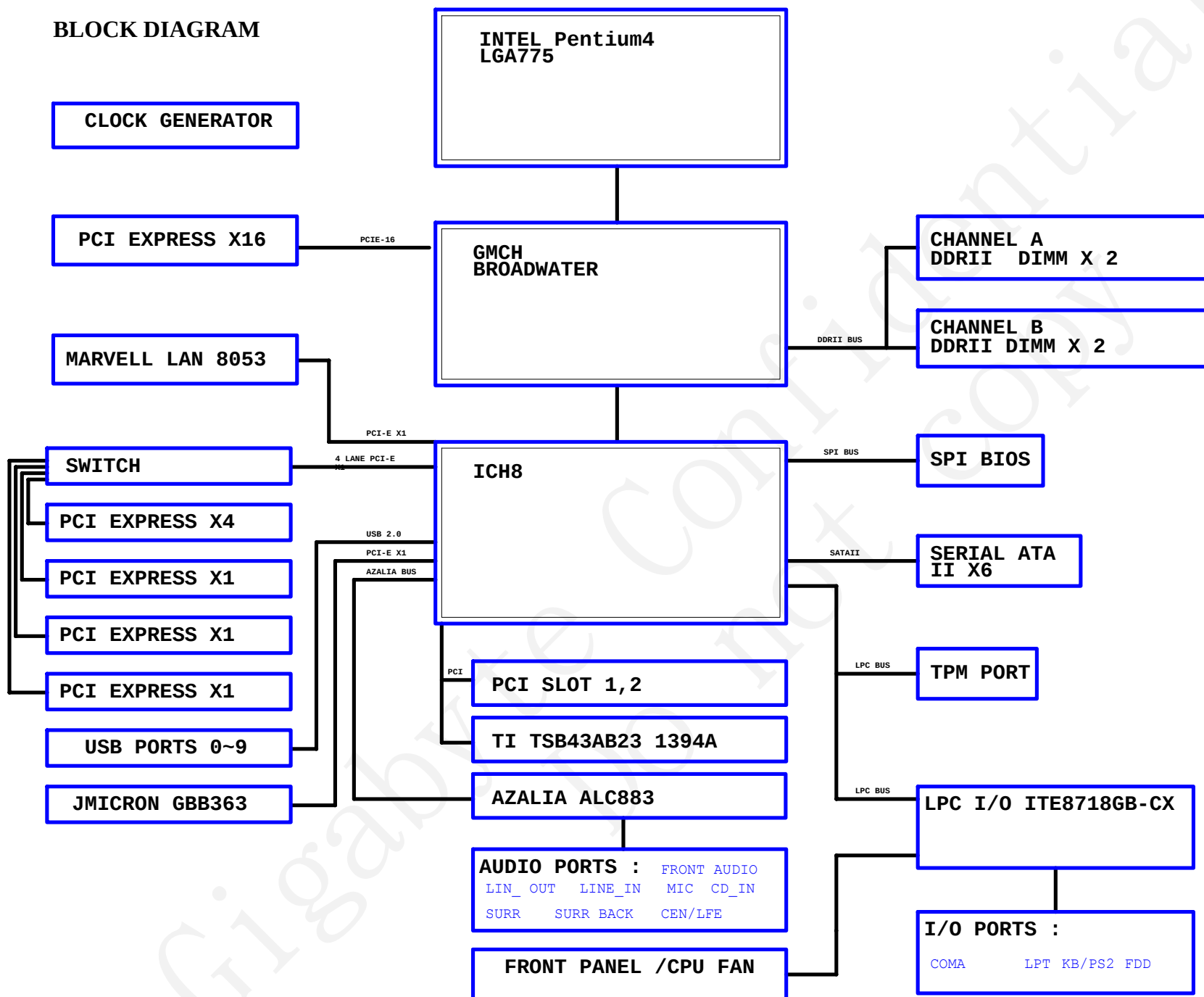
28	COM_LPT, -PROHOT, DYNAMIC OC
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Cover Sheet		
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Custom	965P-DS3P	2.0B
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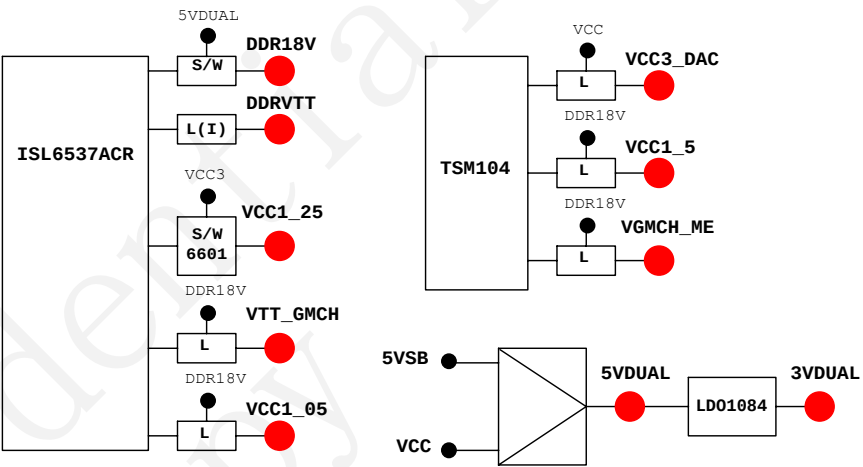
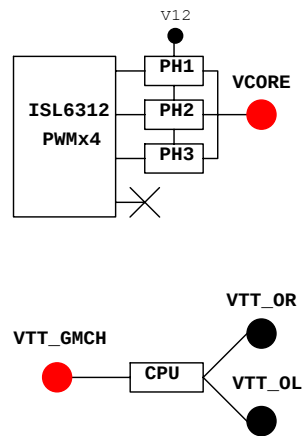
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BLOCK DIAGRAM

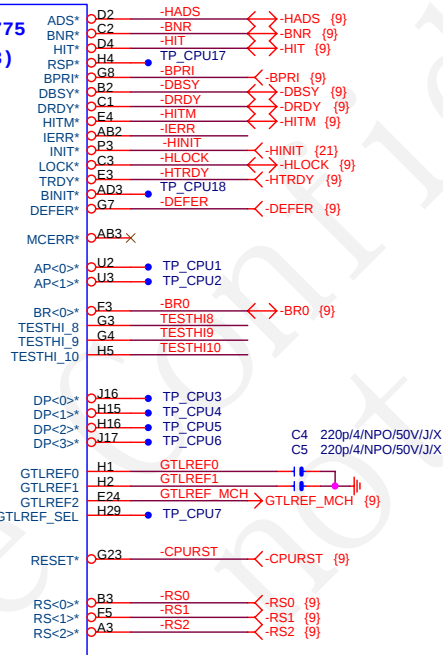
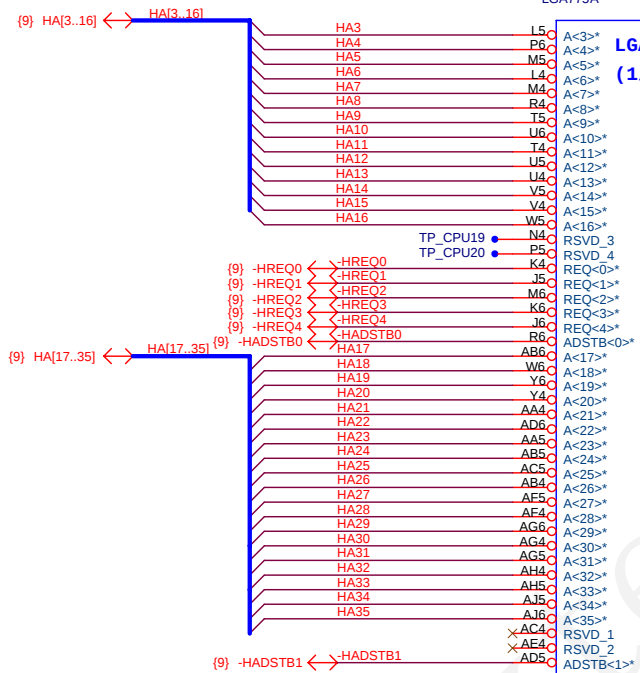
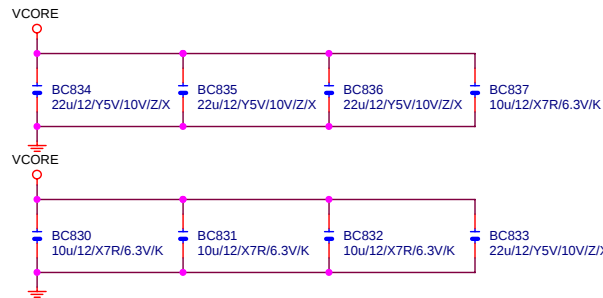
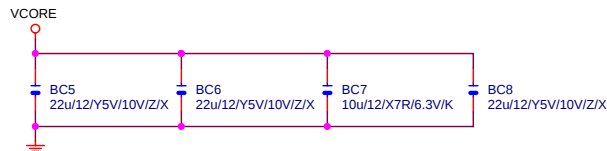


N/A	5	4	3	2	1
ICH8 GPIO LIST TABLE					
PIN NAME	PWR WELL	AFTER/ ELTRST	USAGE	NOTE	
GP0	MAIN	IN	-ACZ_DET	P/U 8.2K VCC3	
GP1/TACH1	MAIN	IN	ICH_FAN_TACH1	P/U 8.2K VCC3	
GP2/PIRQE#	MAIN	IN	-PIRQE	P/U 8.2K VCC3	
GP3/PIRQF#	MAIN	IN	-PIRQF	P/U 8.2K VCC3	
GP4/PIRQ6#	MAIN	IN	-PIRQ6	P/U 8.2K VCC3	
GP5/PIRQH#	MAIN	IN	-PIRQH	P/U 8.2K VCC3	
GP6/TACH2	MAIN	IN	ICH_FAN_TACH2	P/U 8.2K VCC3	
GP7/TACH3	MAIN	IN	VTT_GMCH_OV3	P/U 8.2K VCC3	
GP8	STBY	IN	GPIO8(DUALBIOS_INPUT)	P/U 8.2K 3VDUAL	
GP9	STBY	OUT	WOL_ONLY	P/D 100K GND	
GP10	STBY	IN	CLGPIO1	P/U 8.2K 3VDUAL	
GP11/SMBALERT#	STBY	OUT	-SMBALRT	P/U 8.2K 3VDUAL	
GP12	STBY	IN	DDR18V_OV5	P/U 8.2K 3VDUAL	
GP13	STBY	IN	-LPCPME	P/U 8.2K 3VDUAL	
GP14	STBY	IN	CLGPIO2	P/U 8.2K 3VDUAL	
GP15	STBY	OUT	RM	N/A	
GP16	MAIN	OUT/LOW	RESET	N/A	
GP17/TACH0	MAIN	IN	ICH_FAN_TACH0	P/U 8.2K VCC3	
GP18	MAIN	OUT	MB_ID1	P/U 8.2K VCC3	
GP19	MAIN	IN	VCC15_OV1	P/U 8.2K VCC3	
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	S4_STATE#	P/U 8.2K 3VDUAL	
GP27	STBY	OUT/LOW	GPIO27(EL_STATE0)	P/U 8.2K 3VDUAL	
GP28	STBY	OUT/LOW	-SPI_WP0	N/A	
GP29/OC5#	STBY	IN	-USB0C_R	P/U FUSEVCC	
GP30/OC6#	STBY	IN	-USB0C_R	P/U FUSEVCC	
GP31/OC7#	STBY	IN	-USB0C_R	P/U FUSEVCC	
GP32	MAIN	OUT	DUAL_BIOS	P/U 100K+1M VCC3	
GP33	MAIN	OUT	DUAL_BIOS	P/U 8.2K VCC3	
GP34	MAIN	OUT/LOW	GPIO34/SMB_RST	N/A	
GP35	MAIN	OUT	VCC15_OV2	N/A	
GP36	MAIN	IN	VCORE_OV4	P/U 8.2K VCC3	
GP37	MAIN	IN	VCORE_OV5	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	CPUPWROK	P/U 100 VTT_OL	

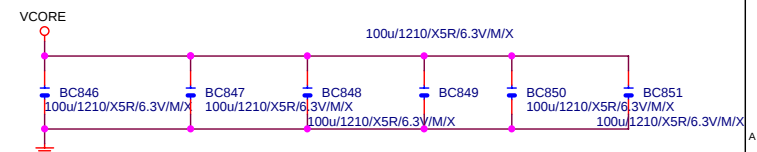
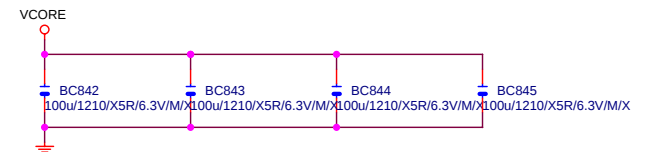
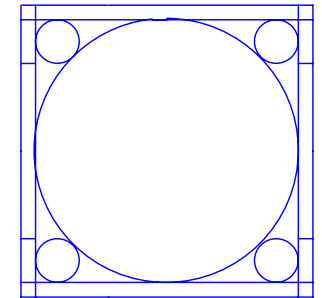
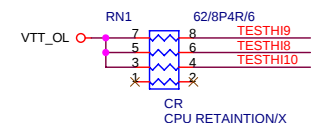
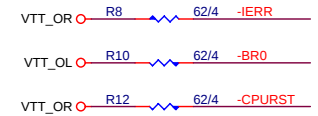
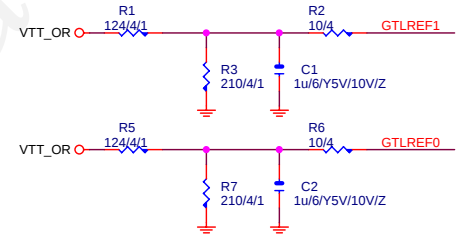
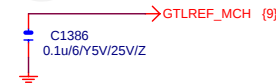
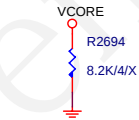
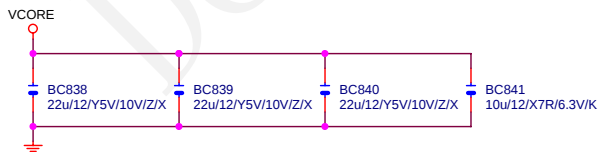
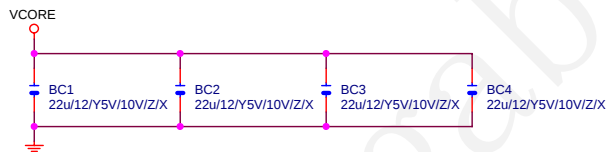
VCORE:3 PHASE PWM--ISL6312



	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

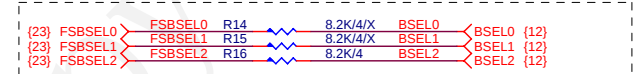
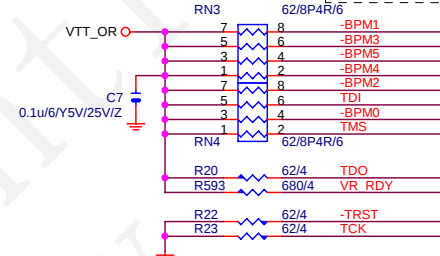
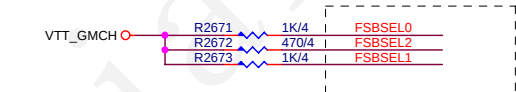
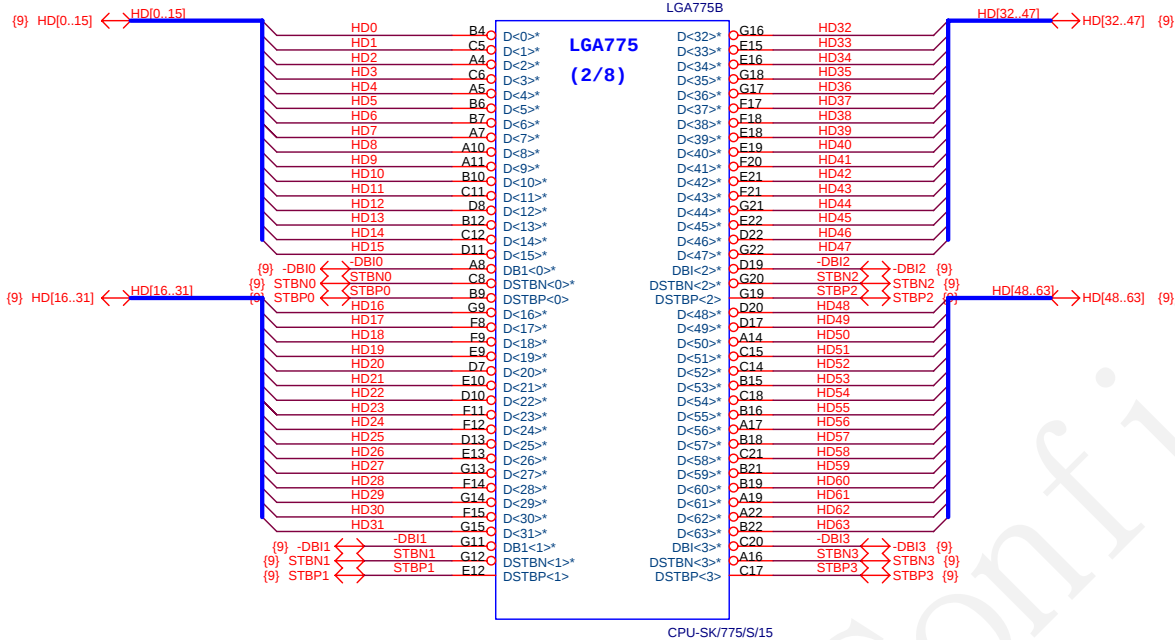


CPU-SK/775/S/15

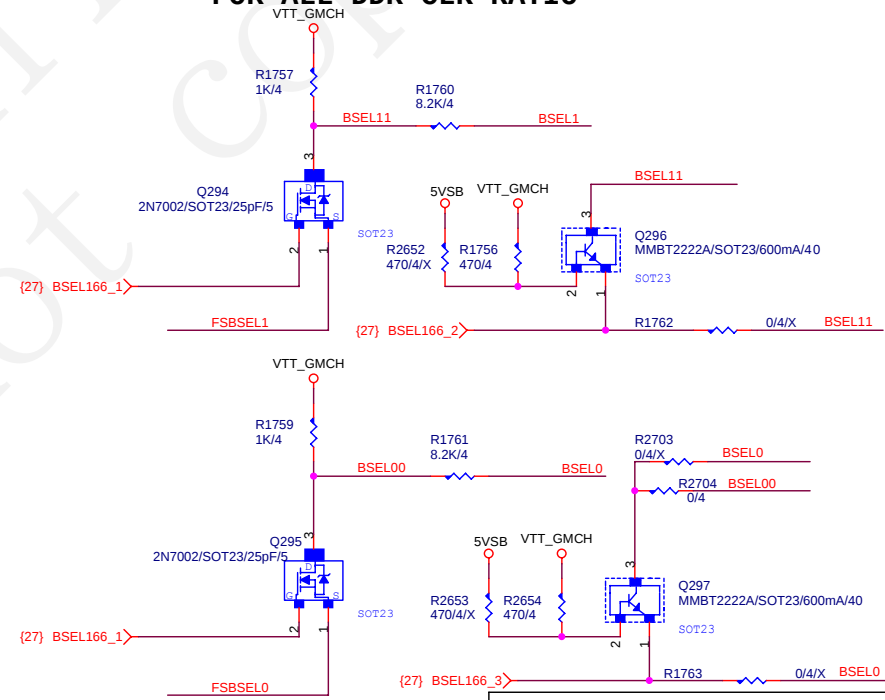


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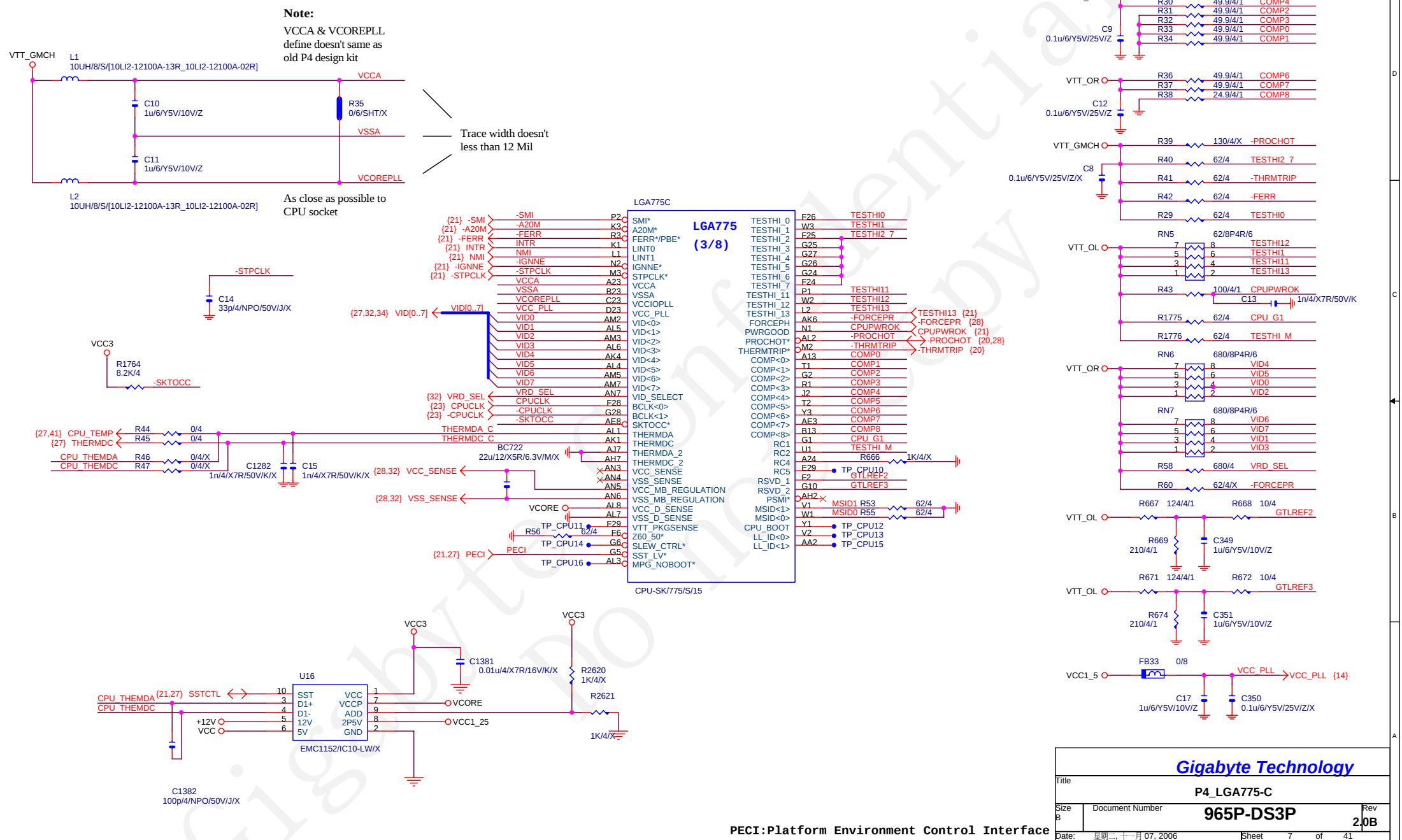


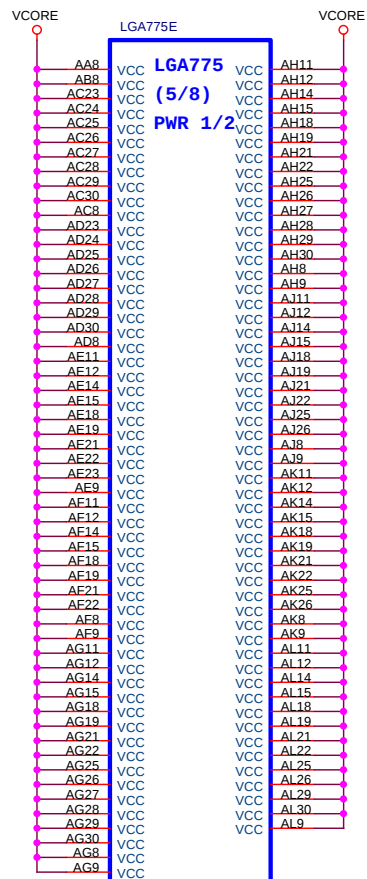
FOR ALL DDR CLK RATIO



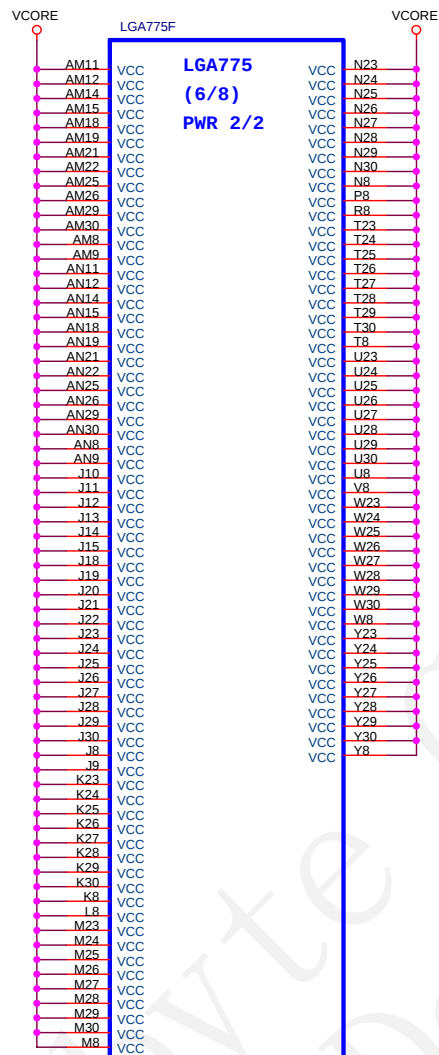
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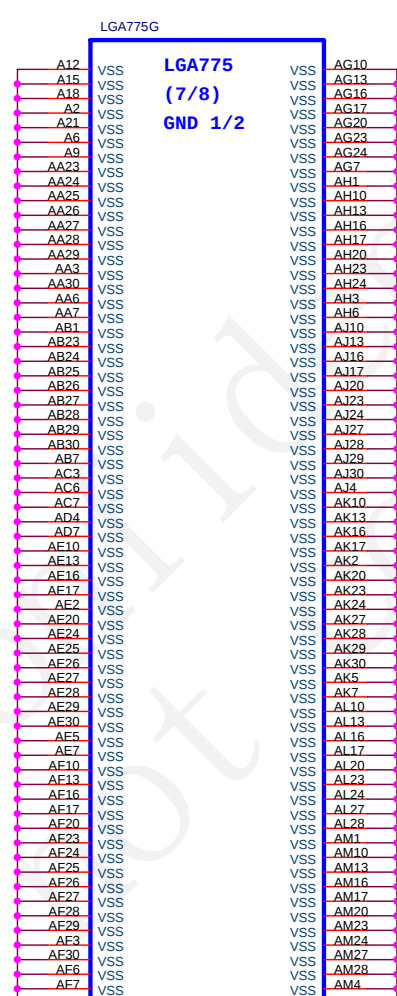




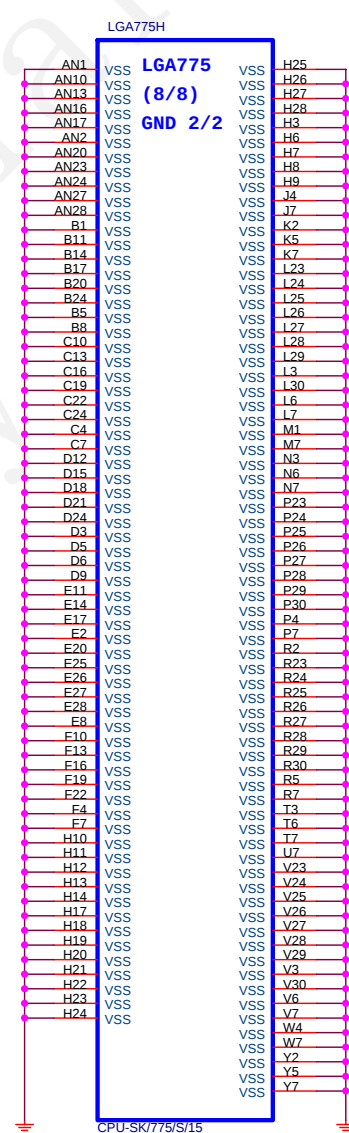
CPU-SK/775/S/15



CPU-SK/775/S/15



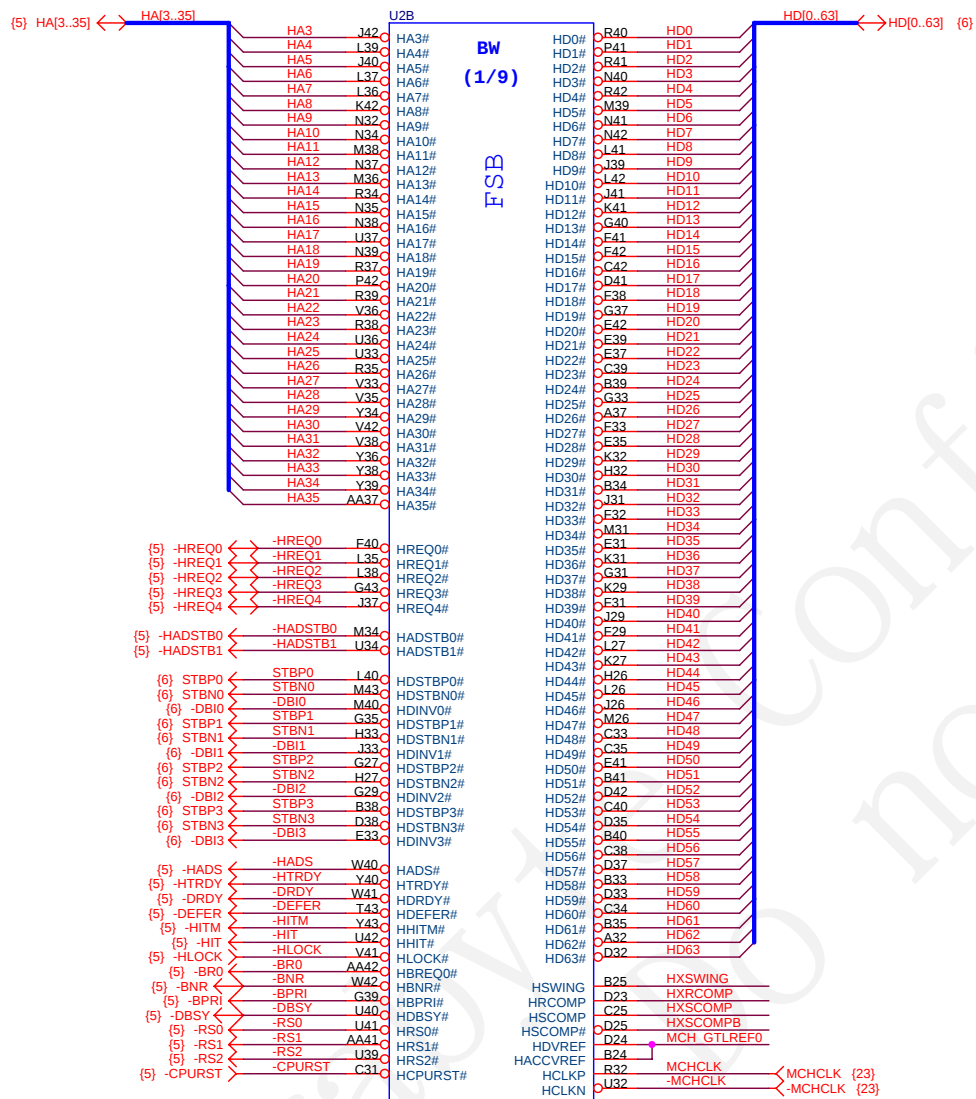
CPU-SK/775/S/15



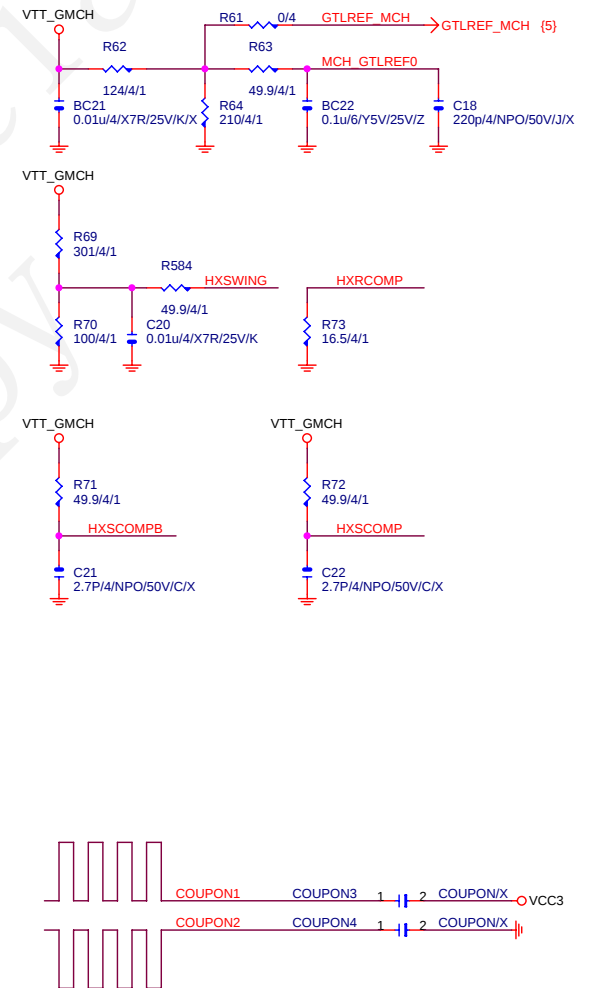
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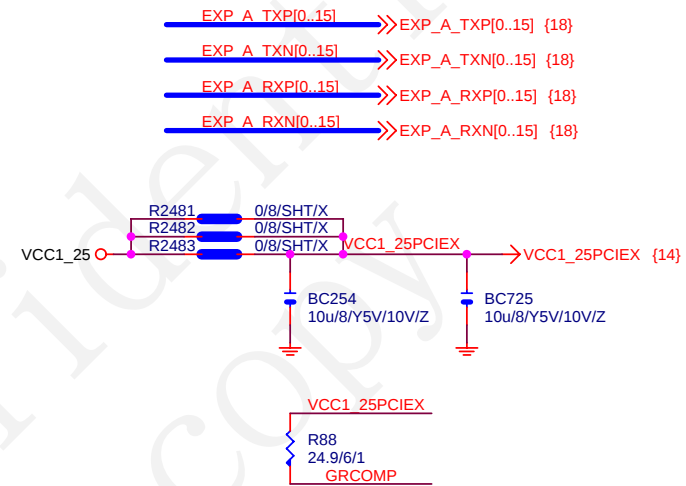
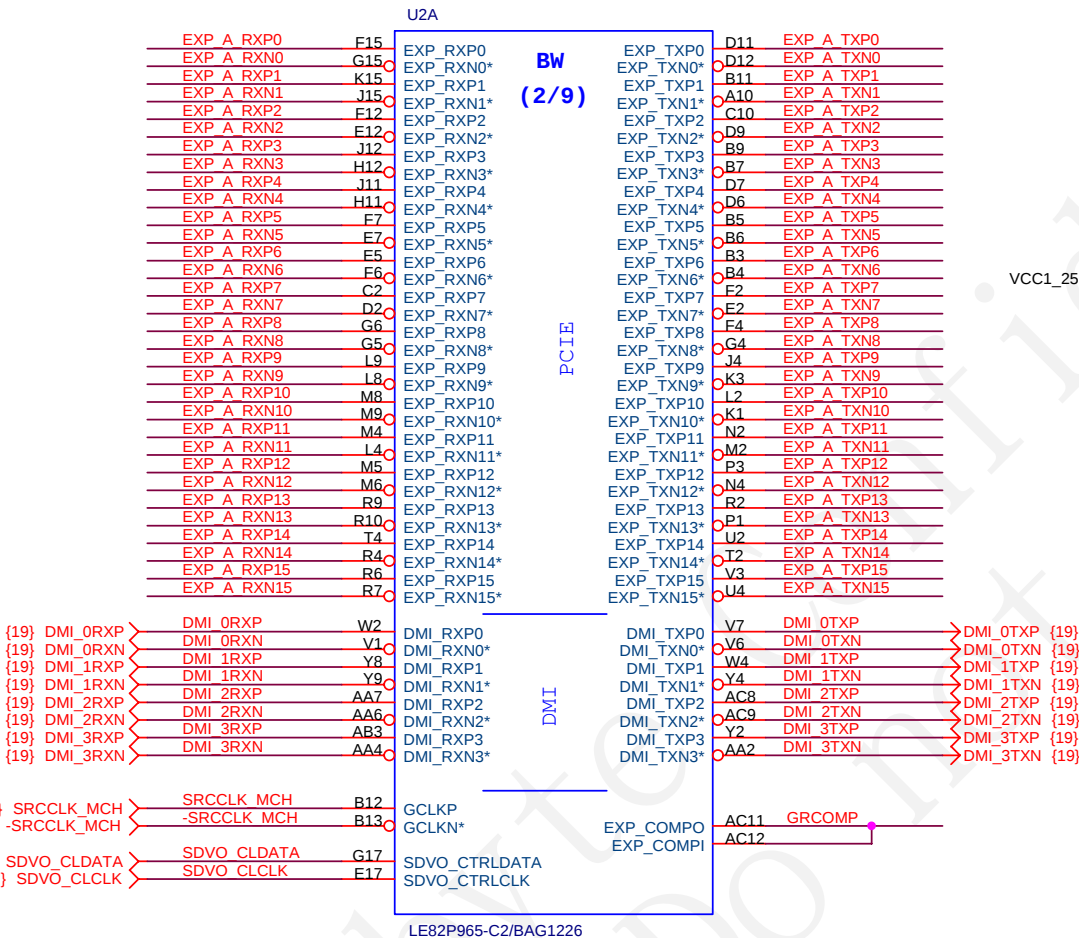


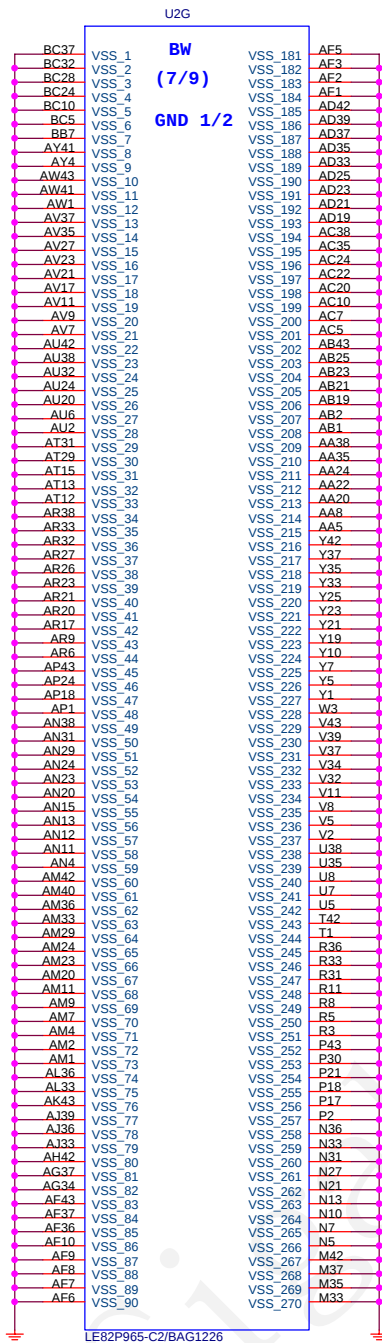
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CPU INTERFACE



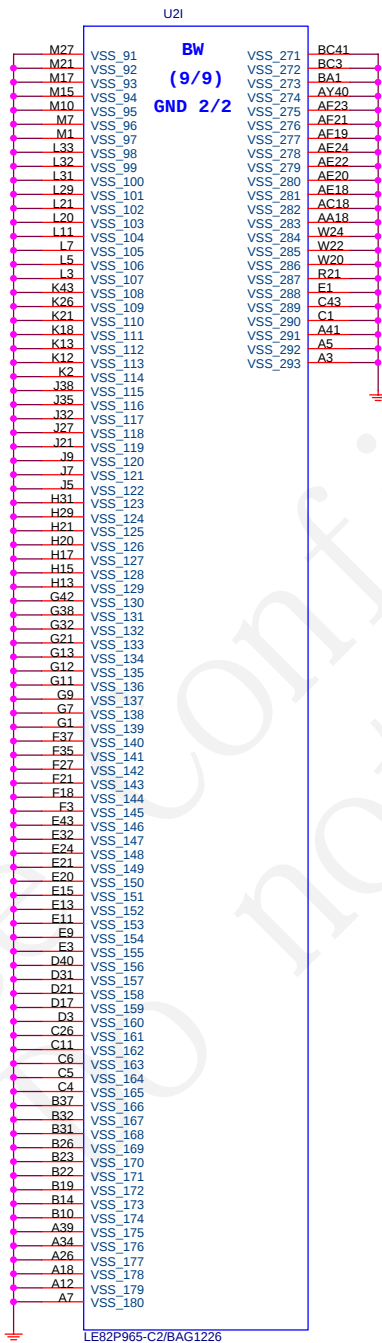
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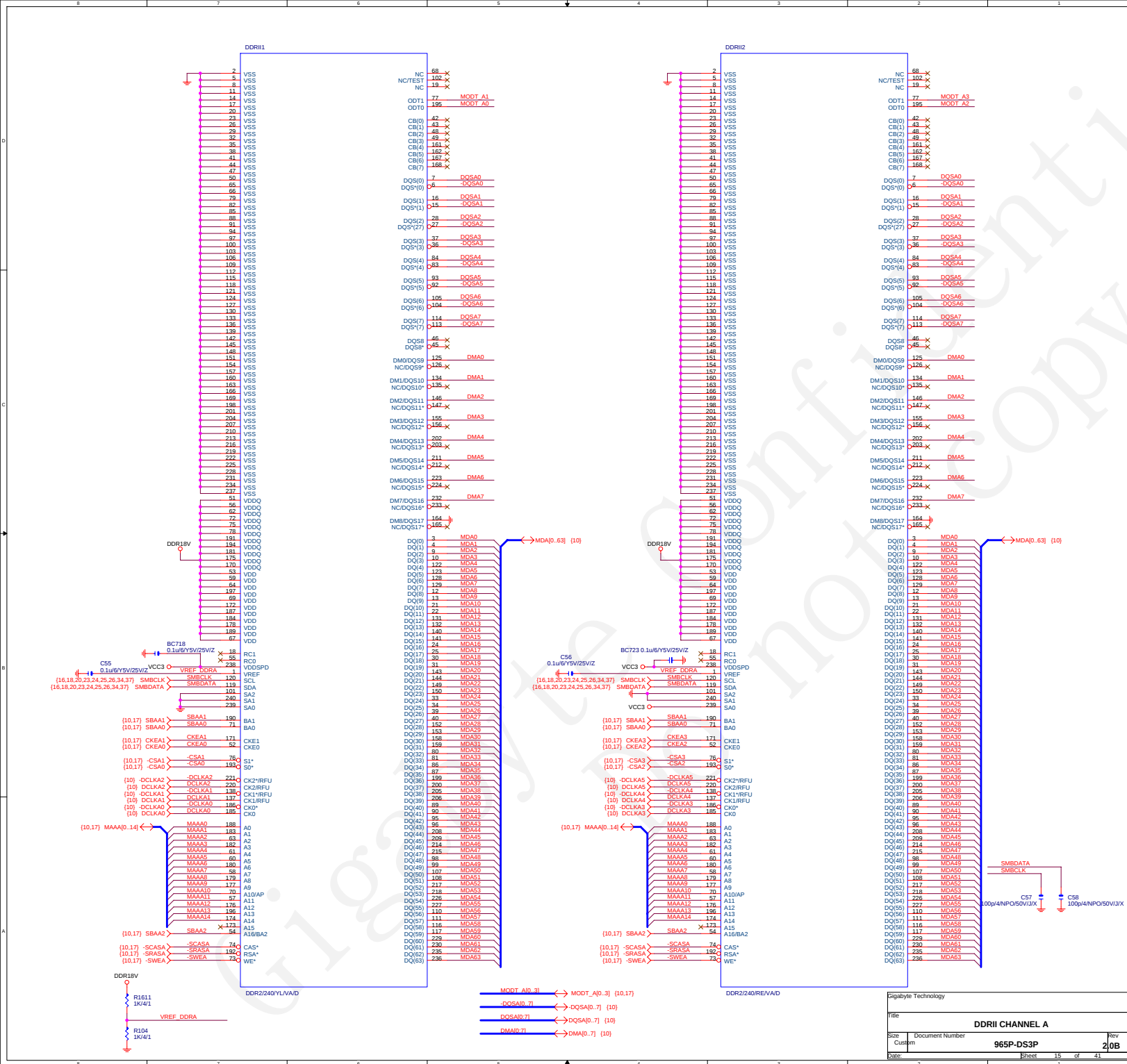


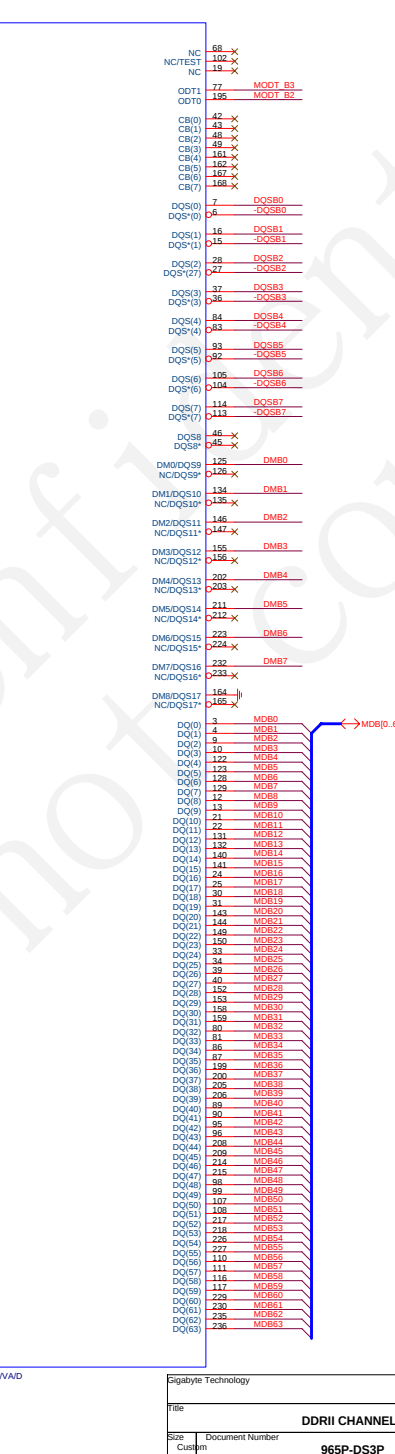
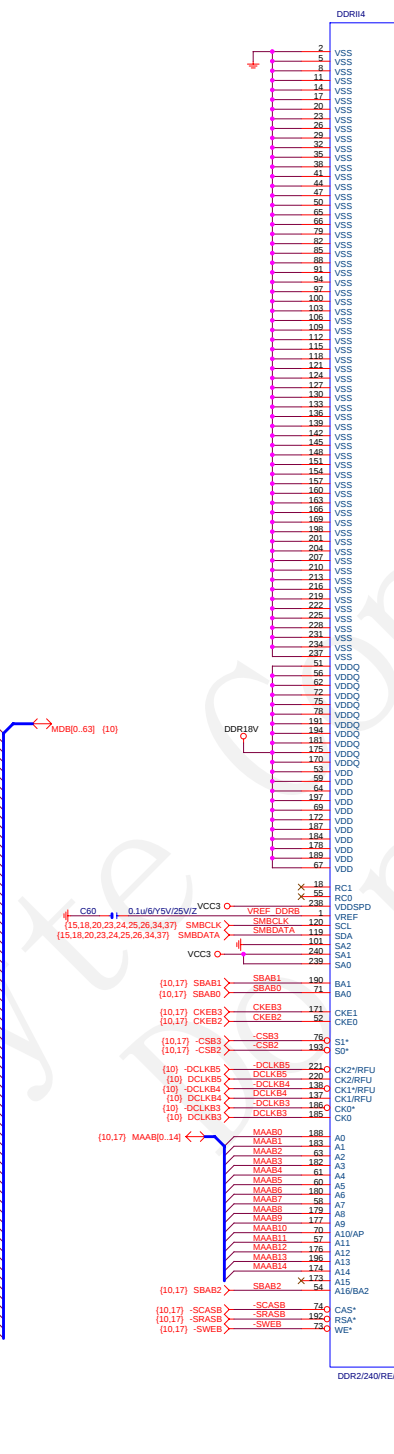
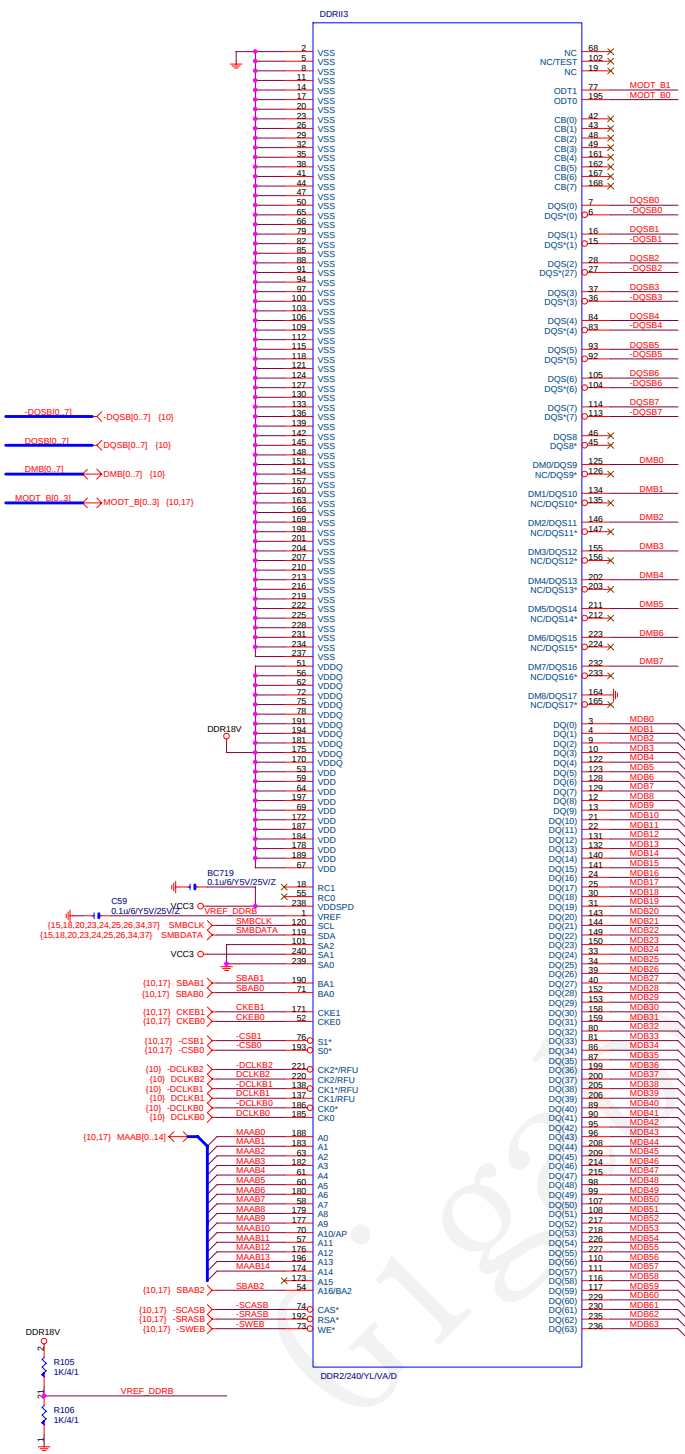
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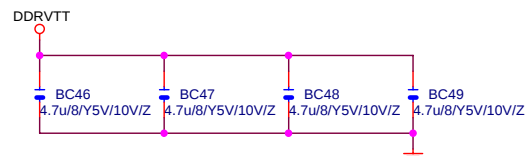
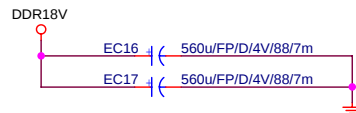
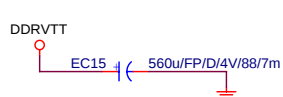
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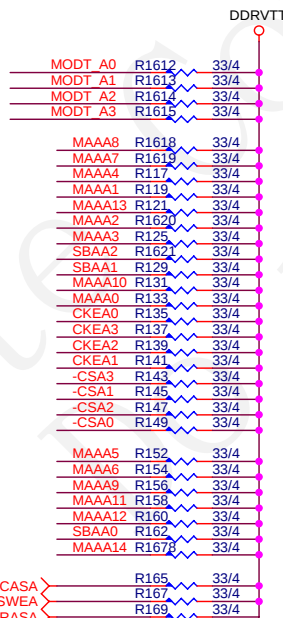
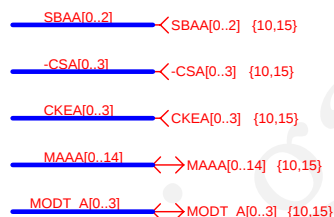
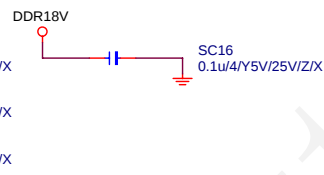
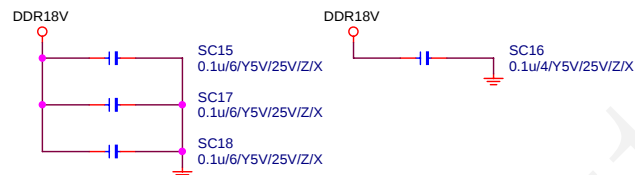
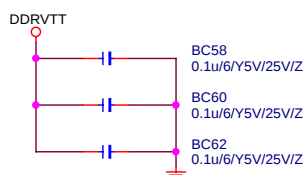
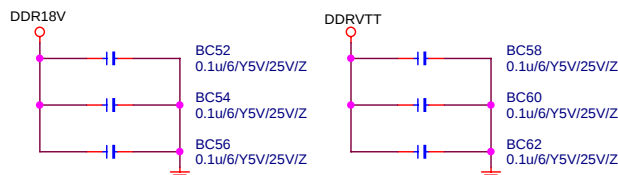
DDR TERMINATION CHANNEL A

DDRVTT Decouple



DDR18V Decouple

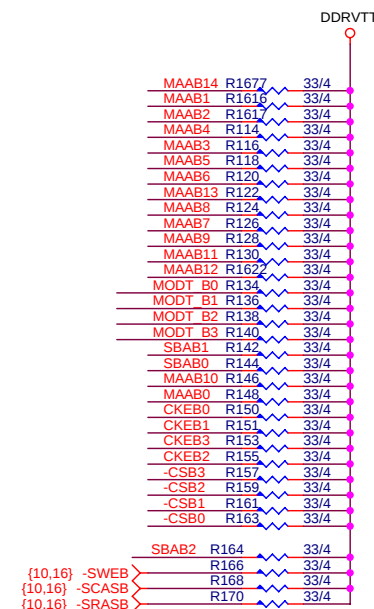
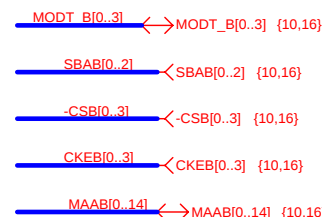
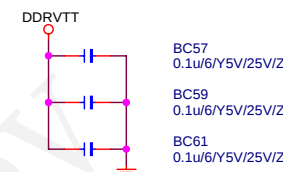
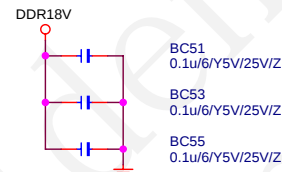
DDRVTT Decouple



DDR TERMINATION CHANNEL B

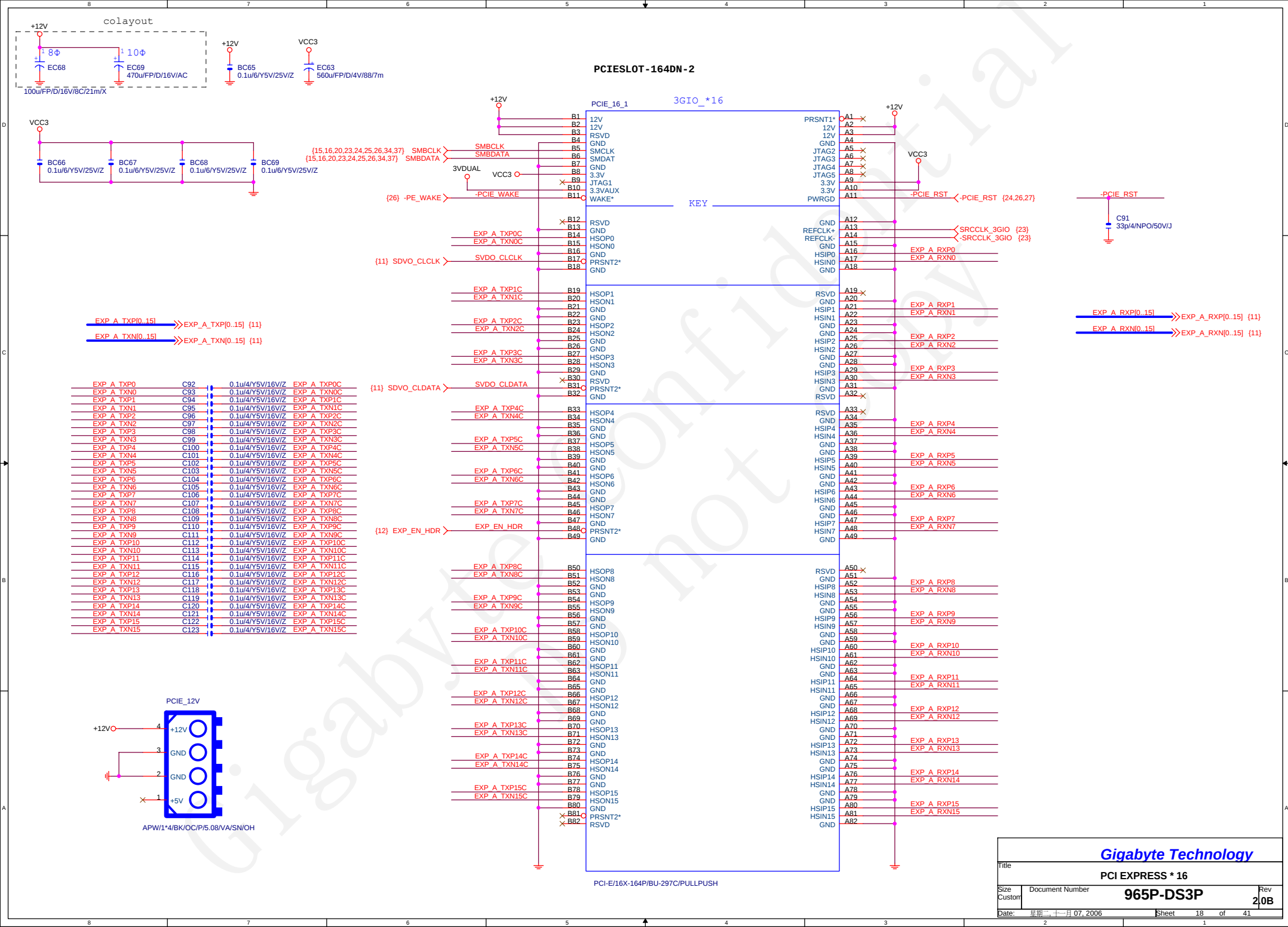
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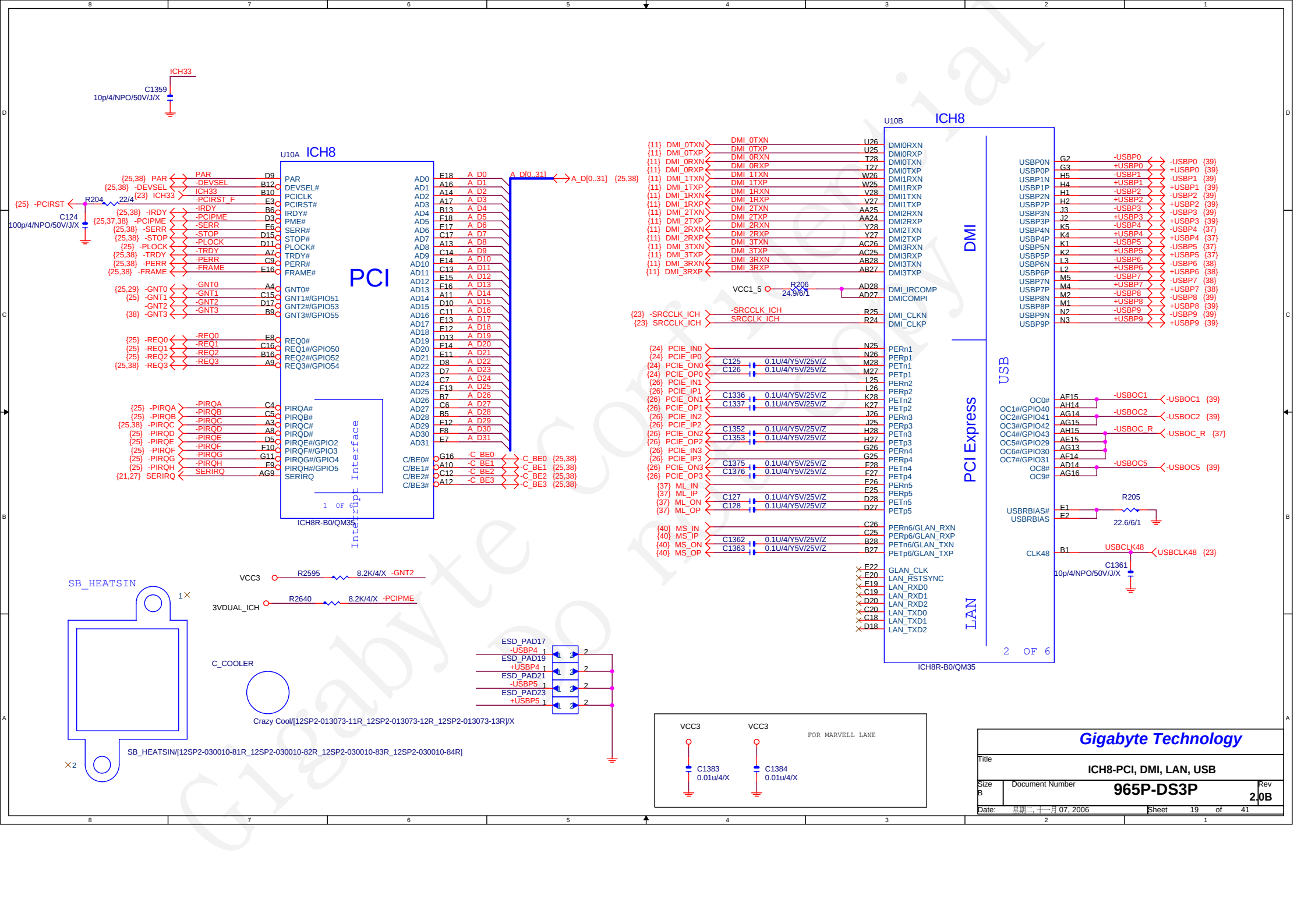
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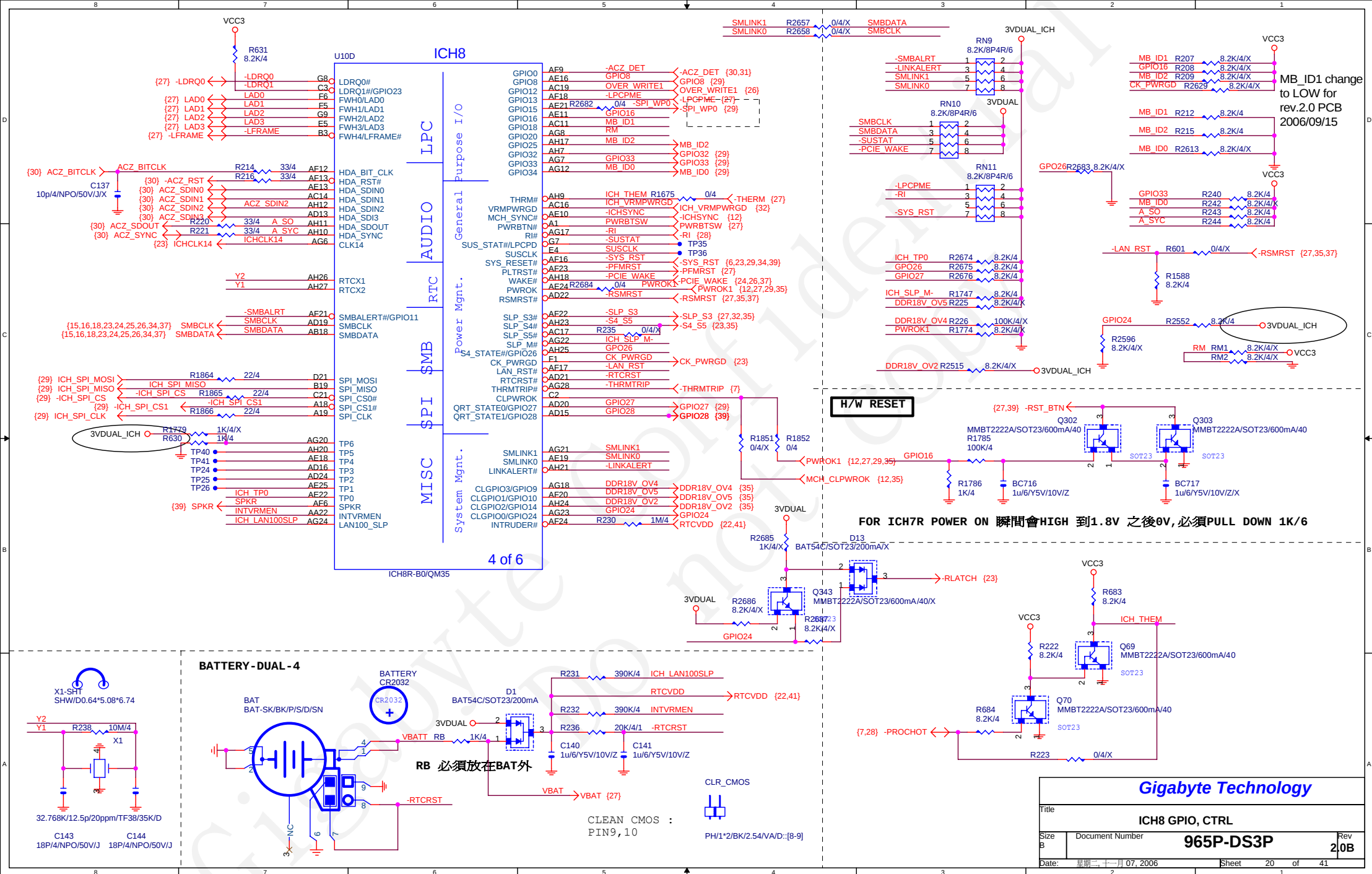


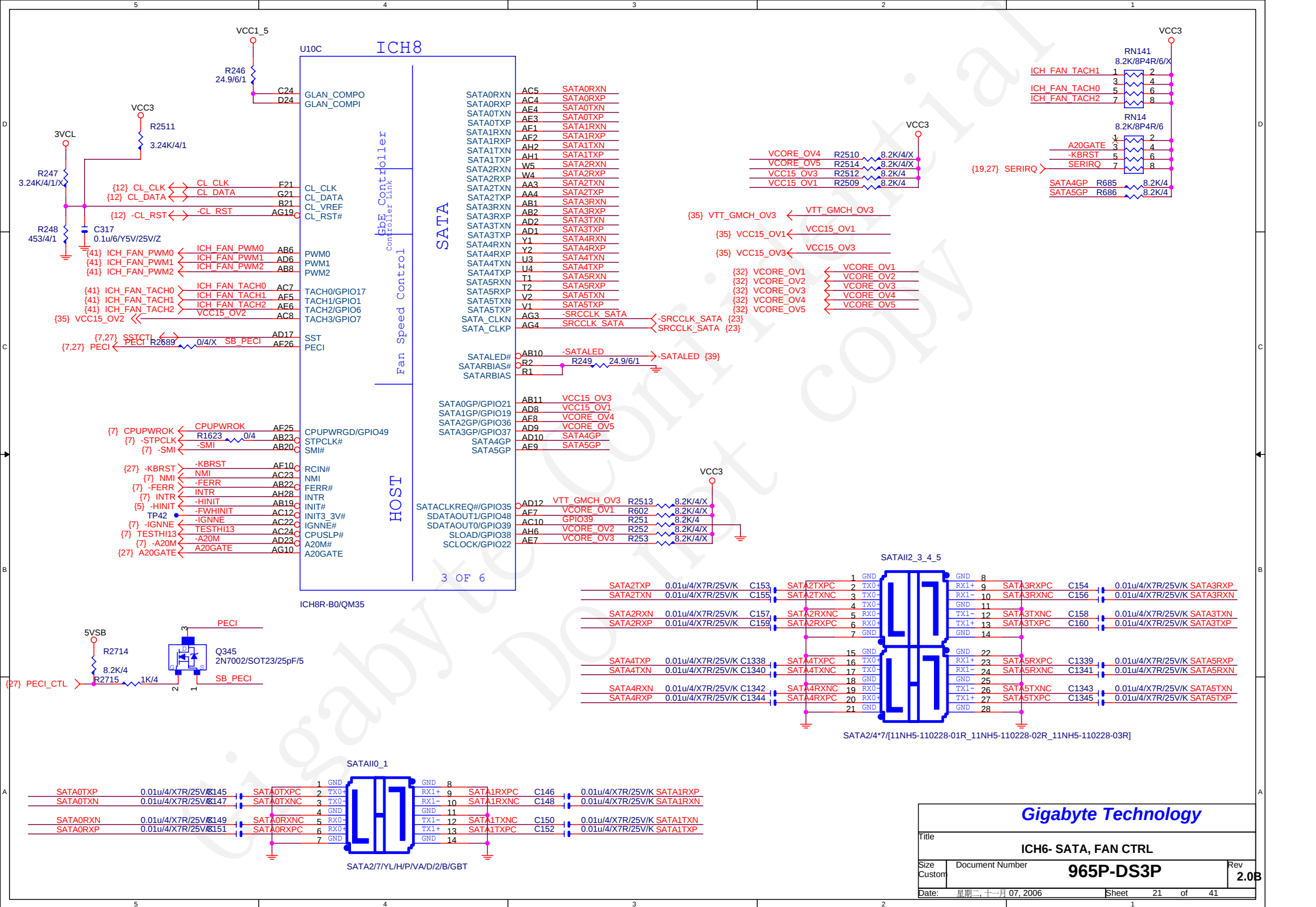
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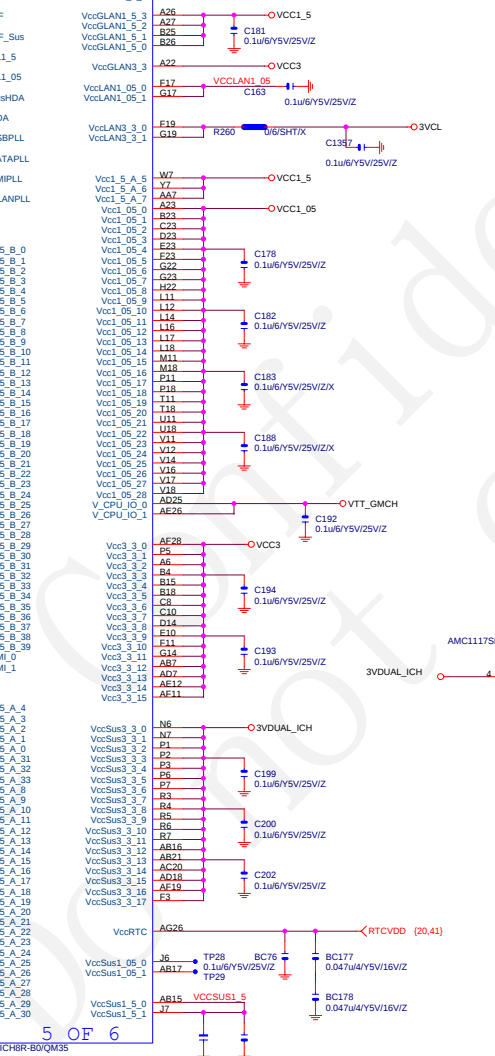
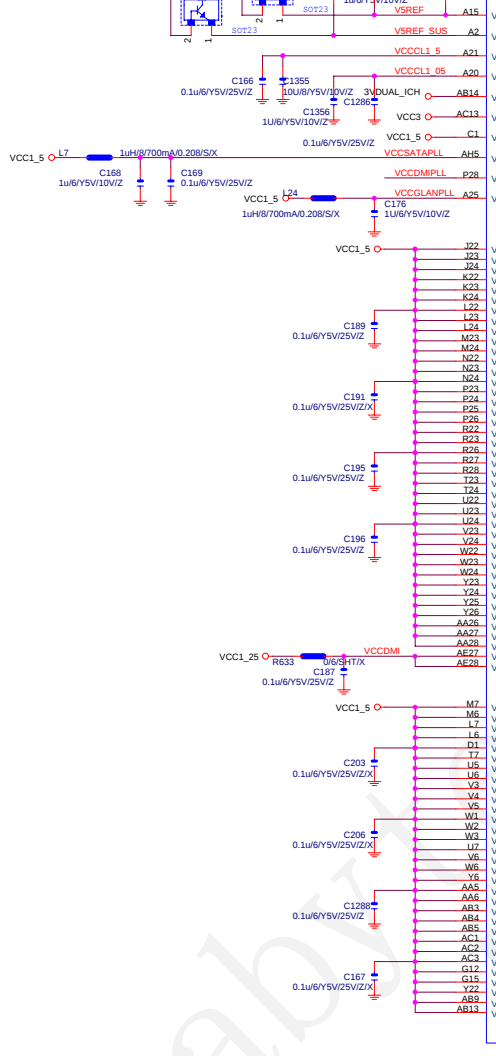
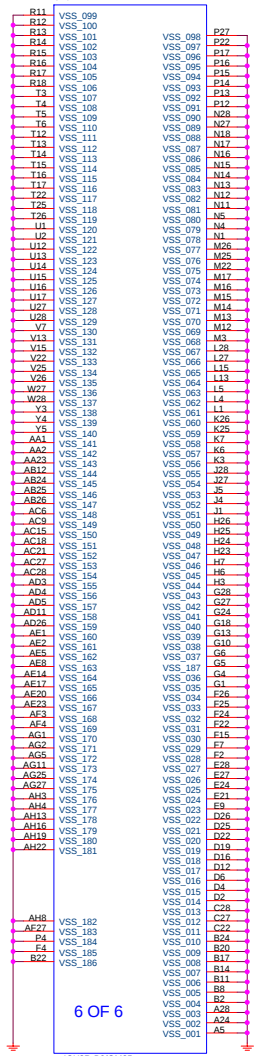
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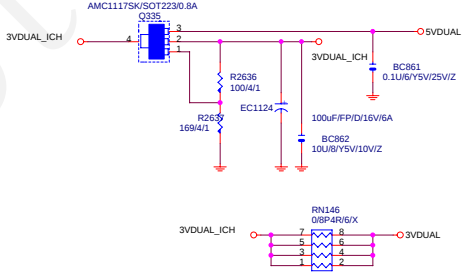
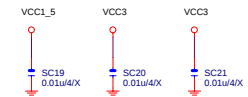




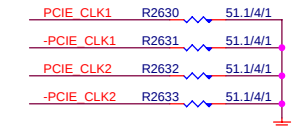
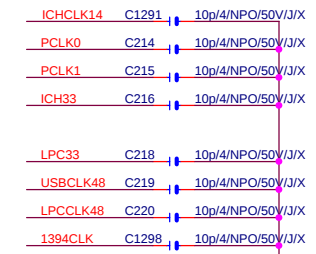
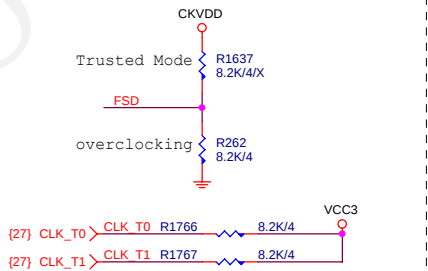
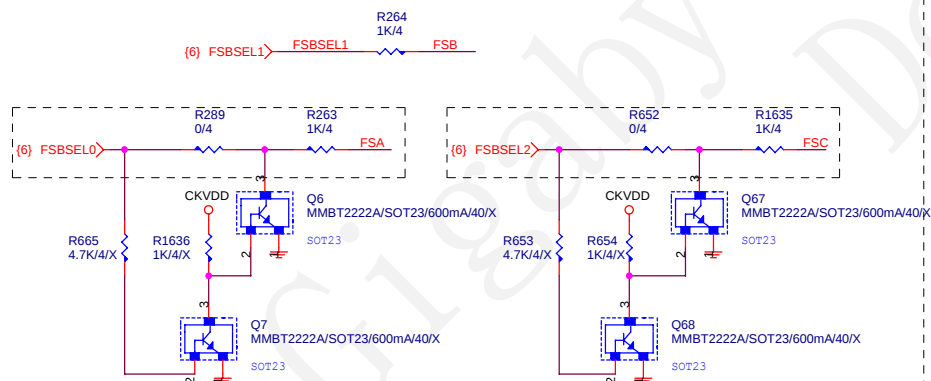
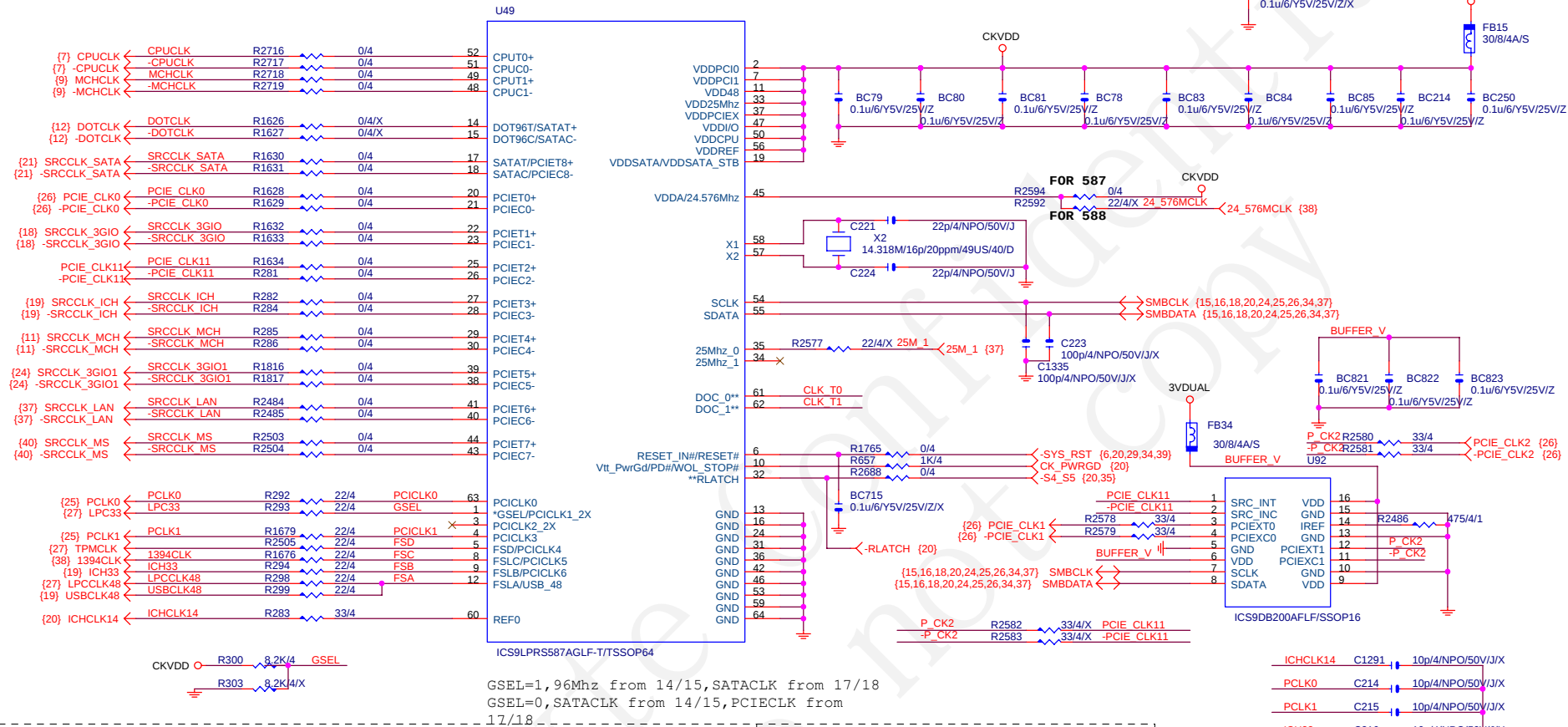




SIGNAL_NAME	NO LAN
VccCL_1_05	de-CAP
VccCL3_3	Vcc3_3
VccCL1_5	de-CAP
VccGLAN1_5	Vcc1_5
VccGLAN3_3	Vcc3_3
VccGLANPLL	Vcc1_5
VccLAN1_05	N/A
VccLAN3_3	VCC3

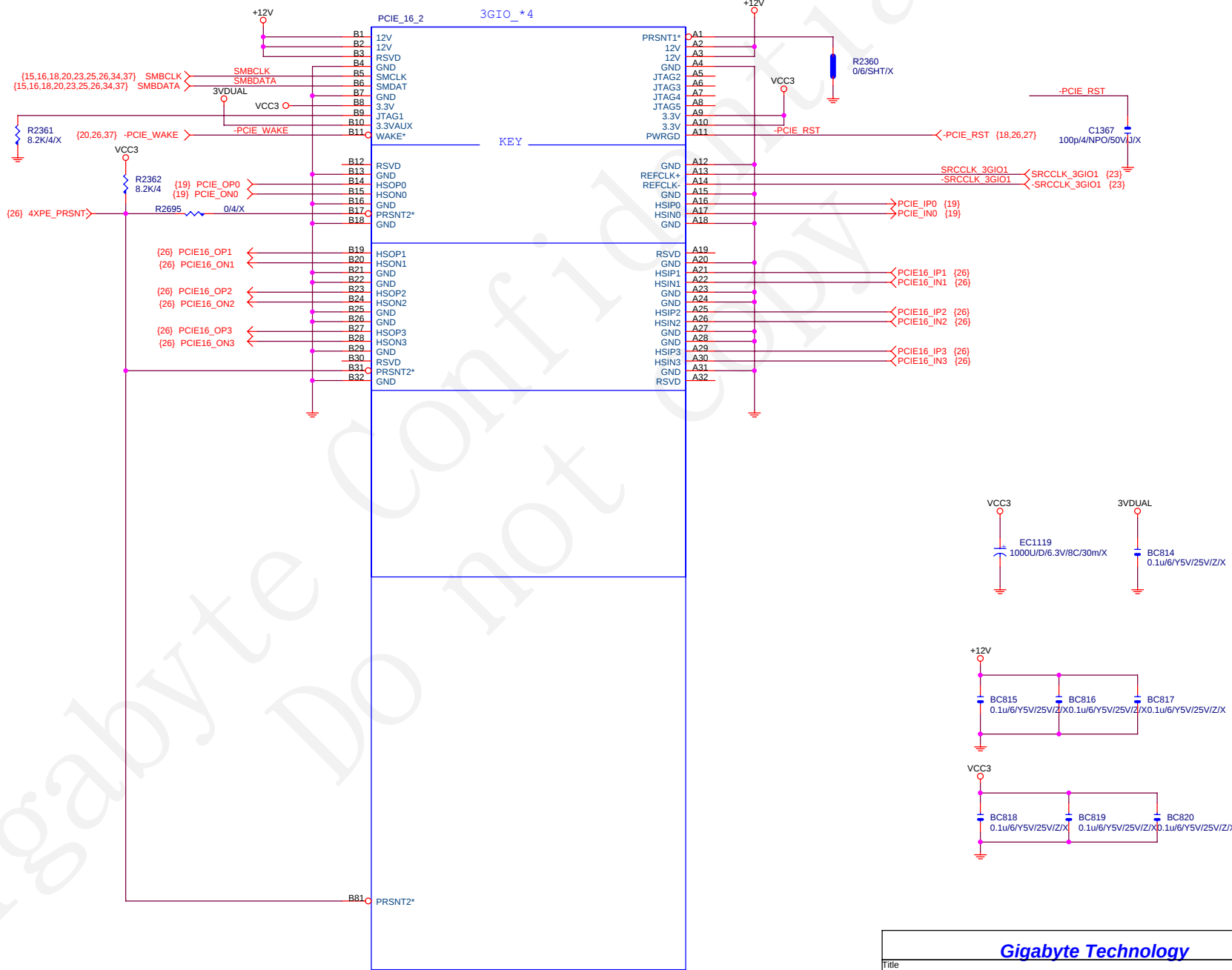


CLK GEN CK505



Gigabyte Technology

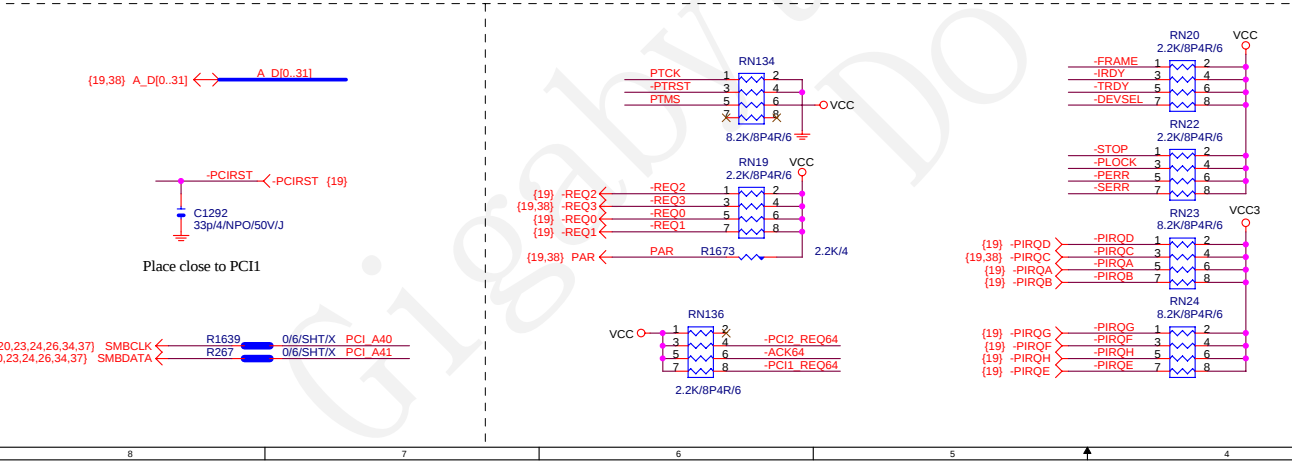
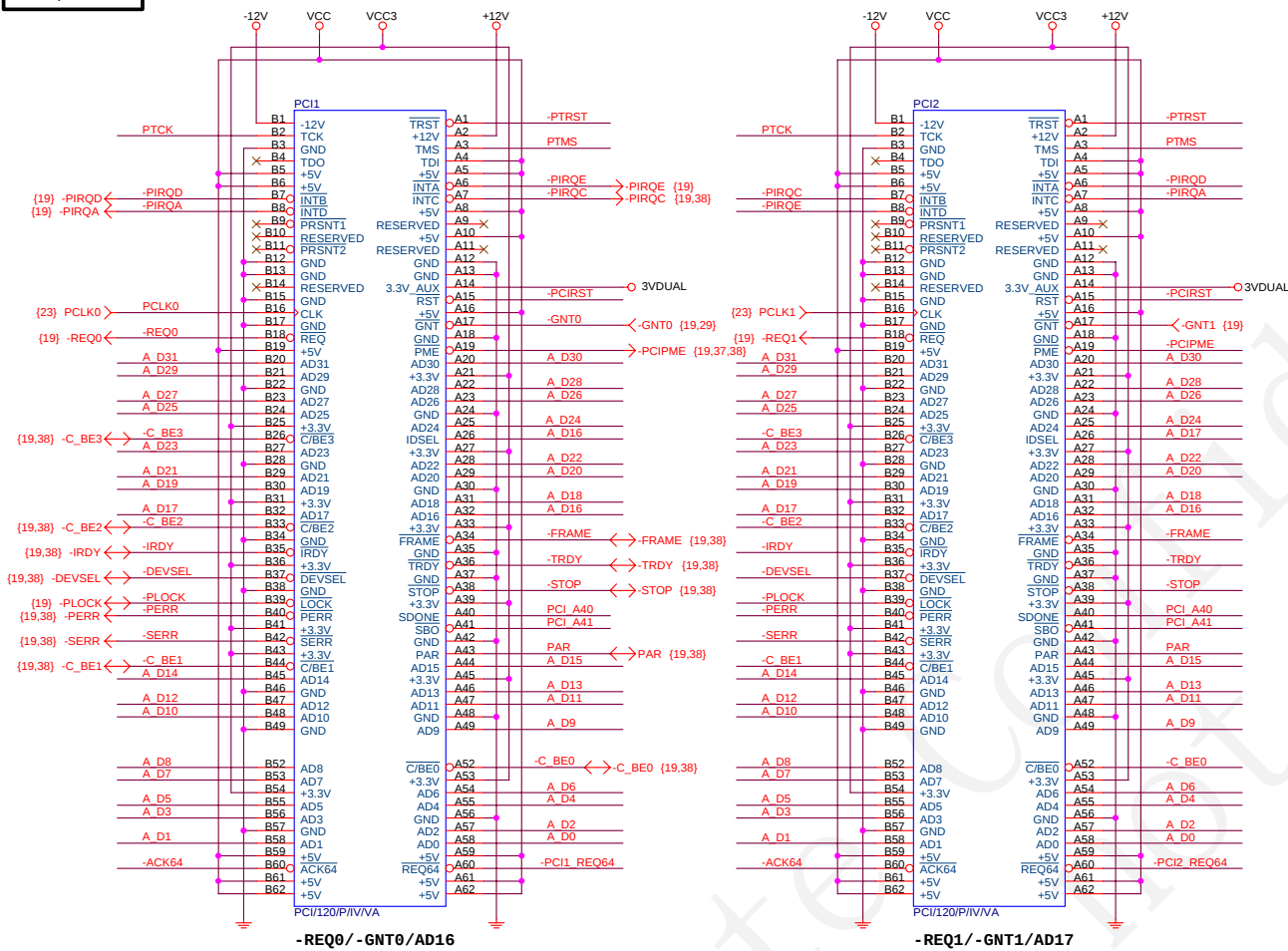
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Size	Document Number	965P-DS3P	
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Date:	星期二, 十一月 07, 2006	Sheet	23 of 41



PCI-E/16X-65P/BU/RIGHT PUSH

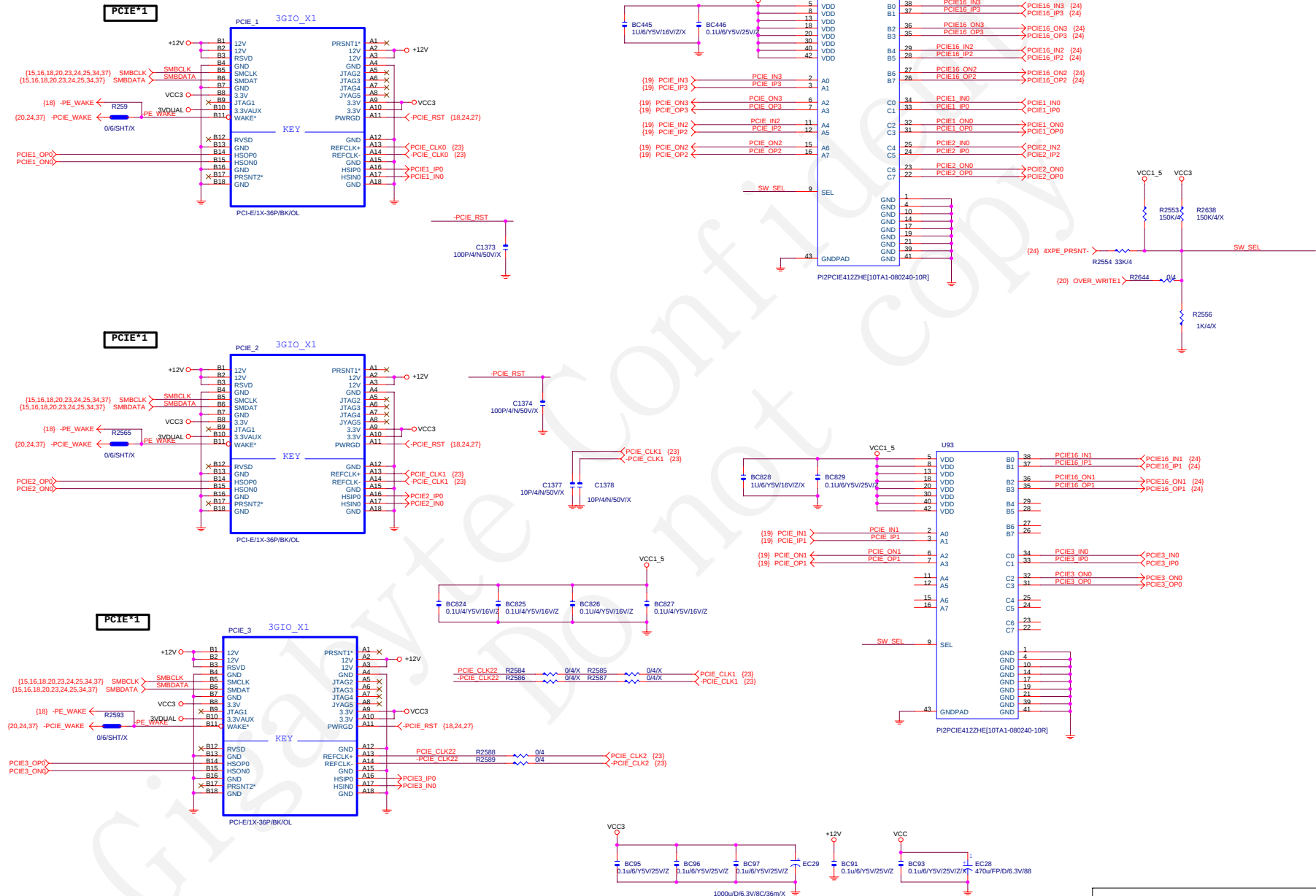
Gigabyte Technology			
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PCI EXPRESS X 8 PORT 1			
Size	Document Number	Rev	
Custom	965P-DS3P	2.0B	
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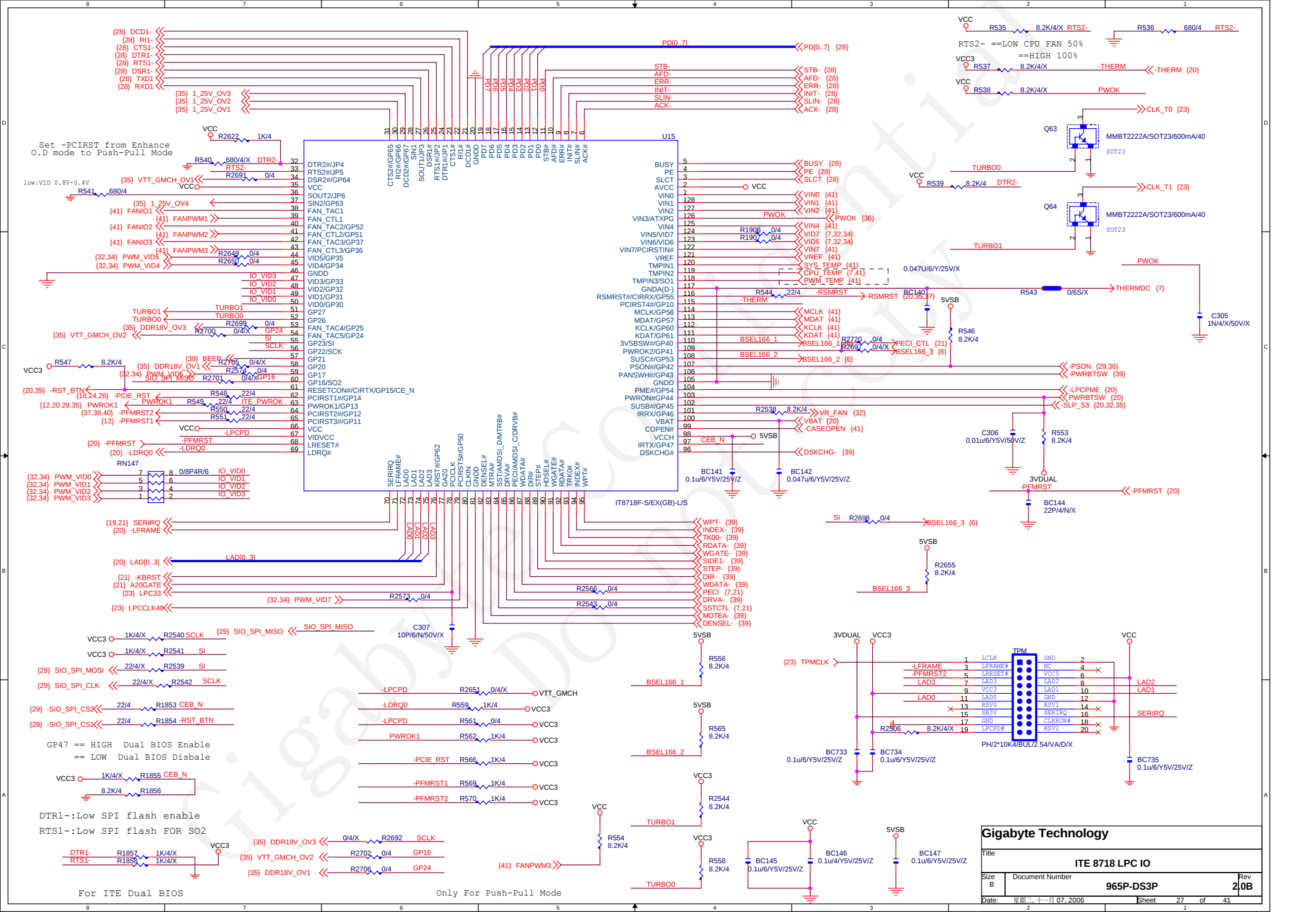
PCI1, 2 SLOT



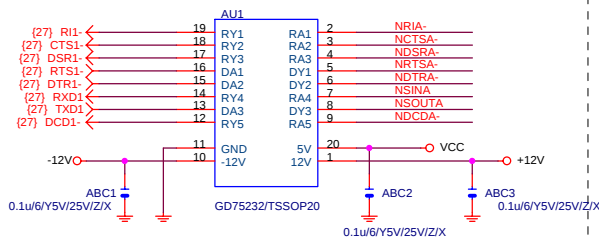
L : A-B (X4 X1)
H : A-C (X1 X4)

For Vih level consideration



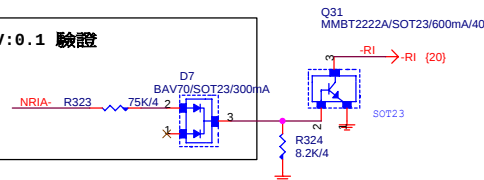


COMA

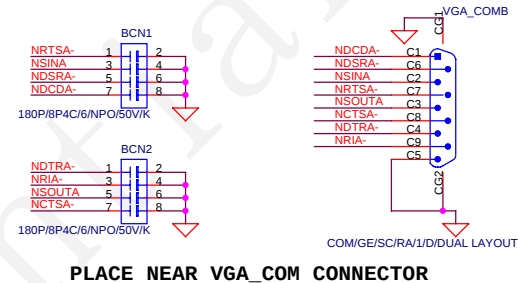


COM RI

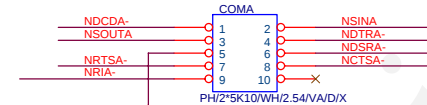
REV:0.1 驗證



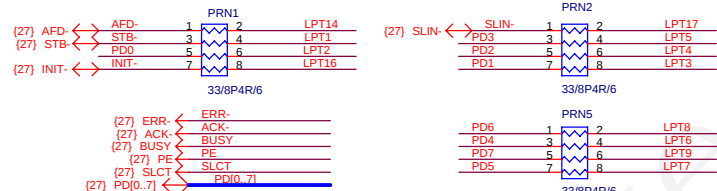
EXTERNAL COMB



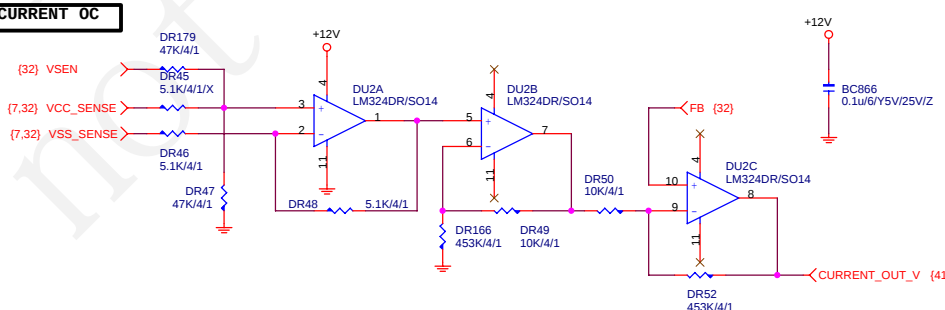
PLACE NEAR VGA_COM CONNECTOR



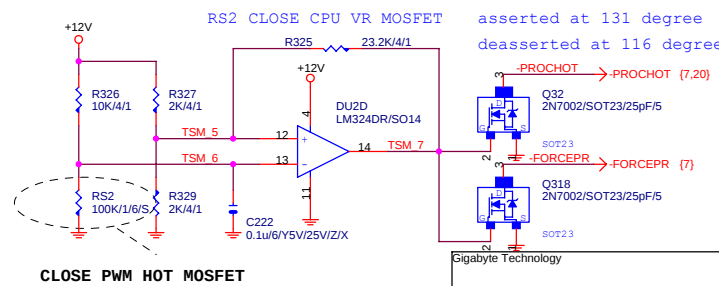
LPT PORT



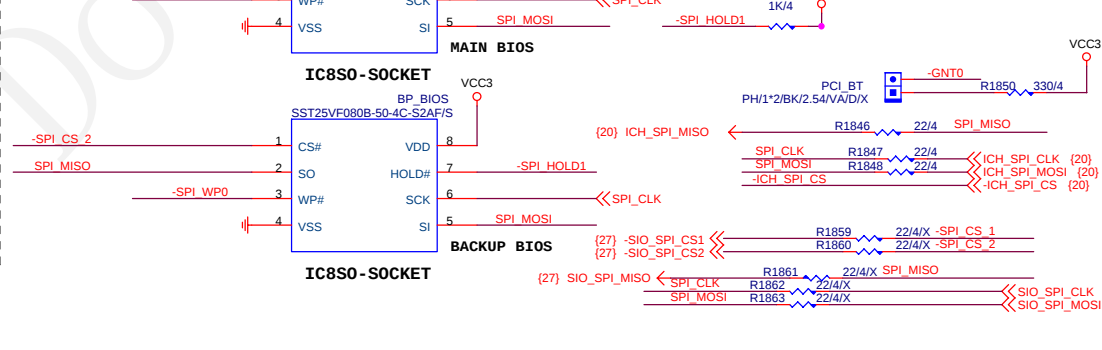
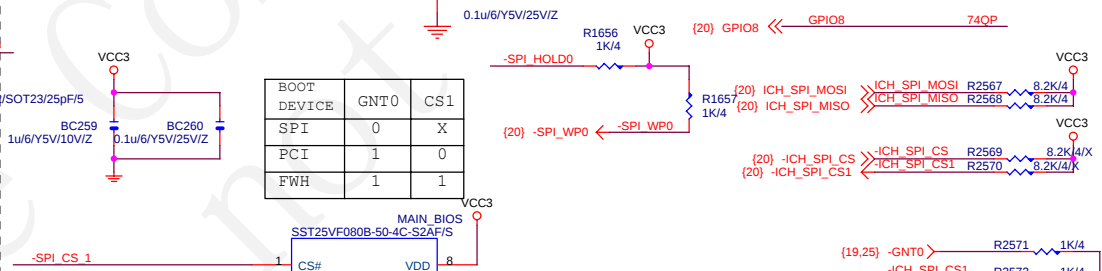
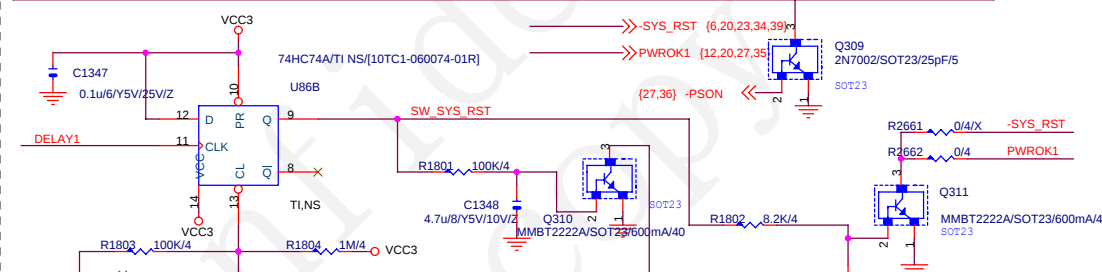
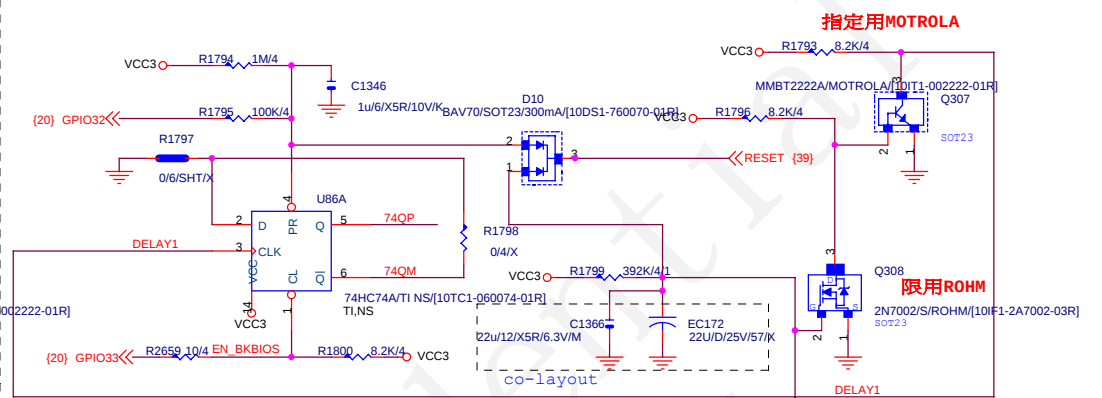
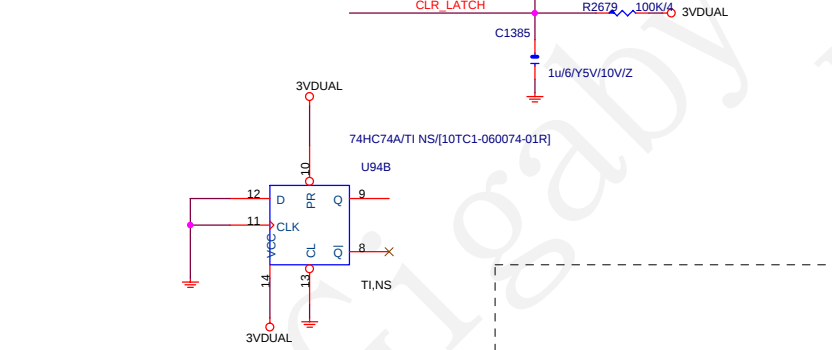
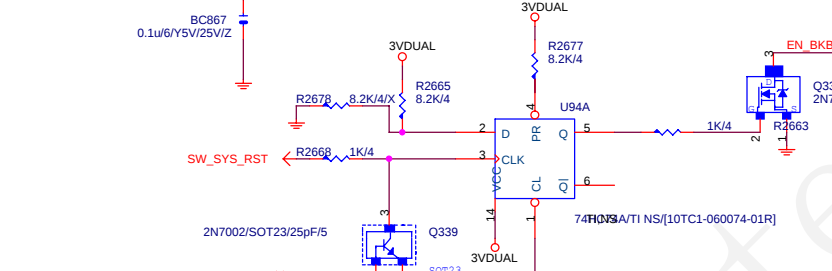
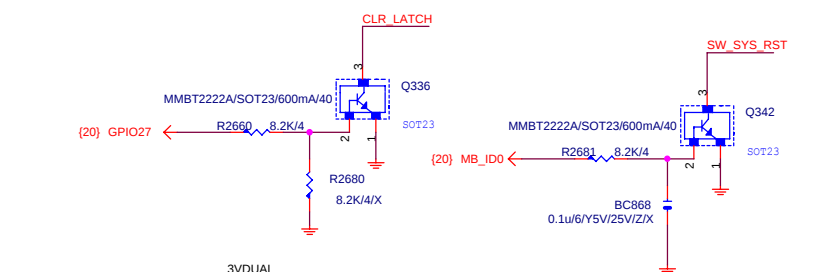
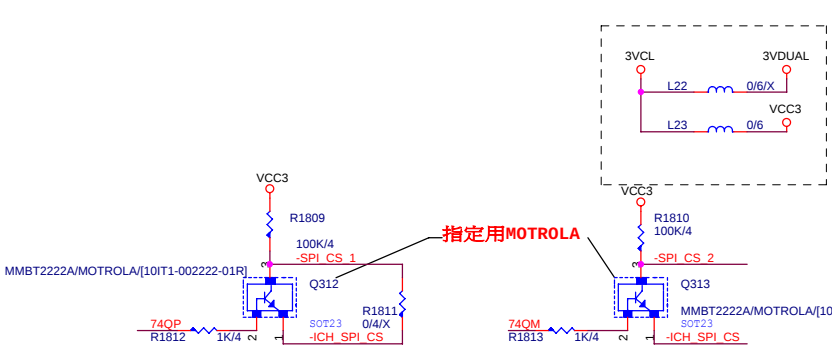
DYNAMIC CURRENT OC



-PROHOT

asserted at 131 degree
deasserted at 116 degree

Gigabyte Technology			
Title			
COM & LPT PORT			
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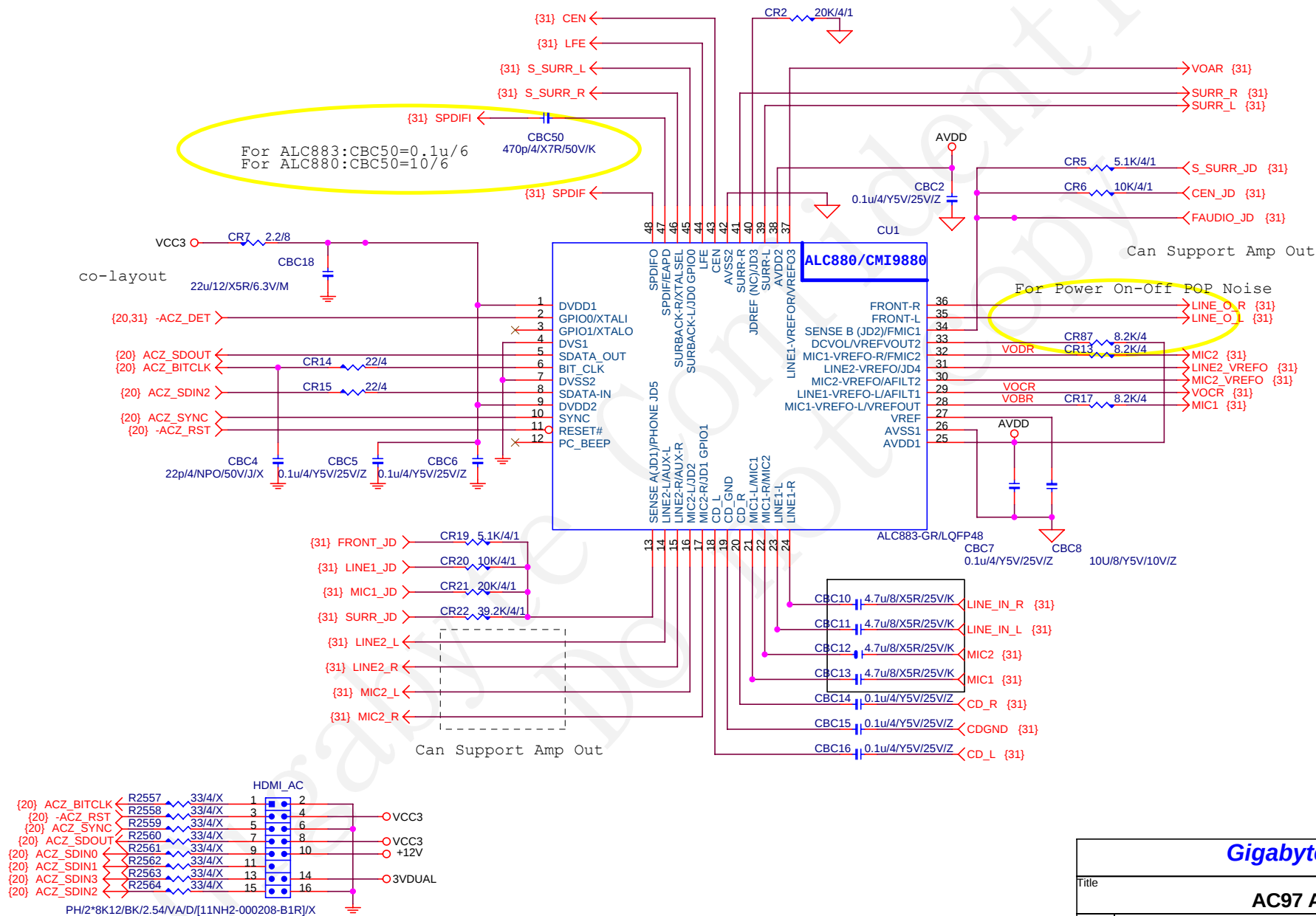


BOOT DEVICE	GNT0	CS1
SPI	0	X
PCI	1	0
FWH	1	1

MAIN BIOS	
SST25VF080B-50-4C-S2AF/S	
CS#	VDD
SO	HOLD#
WP#	SCK
VSS	SI

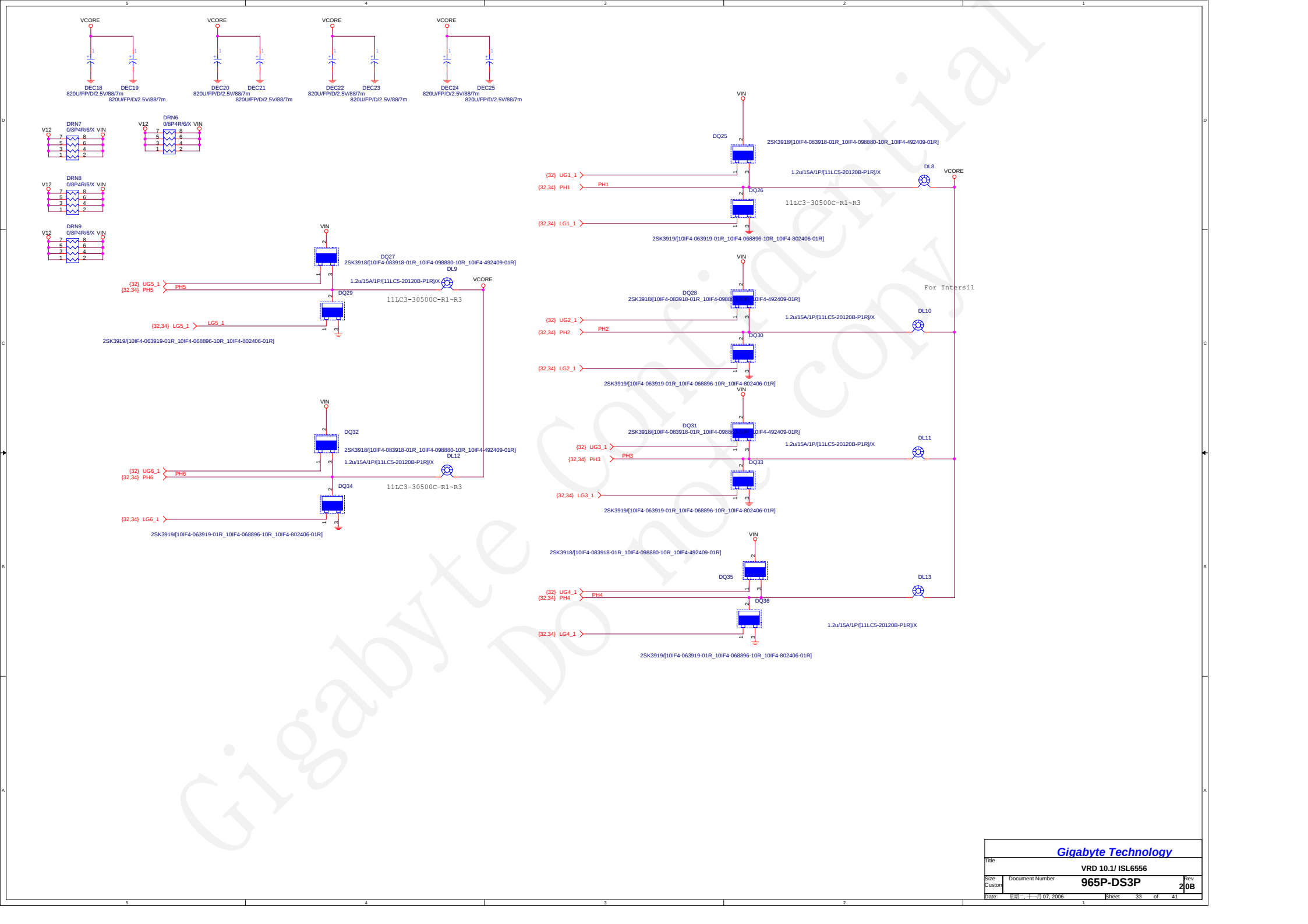
IC8S0-SOCKET	
BP BIOS	
SST25VF080B-50-4C-S2AF/S	
CS#	VDD
SO	HOLD#
WP#	SCK
VSS	SI

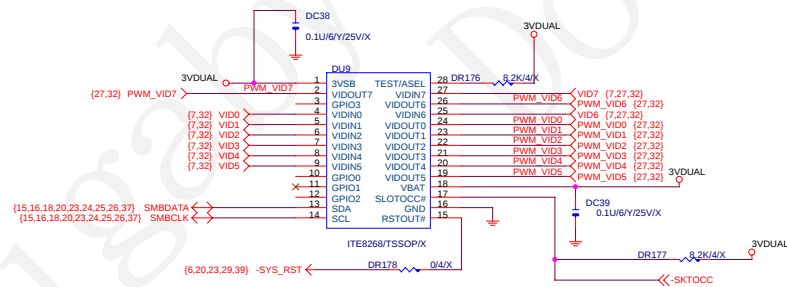
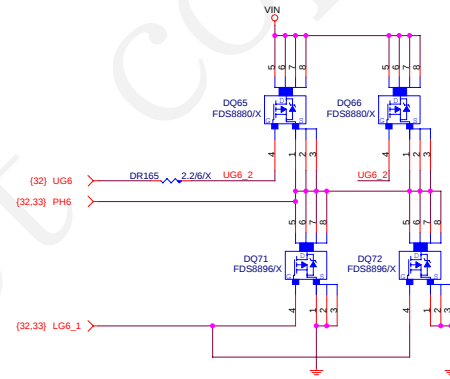
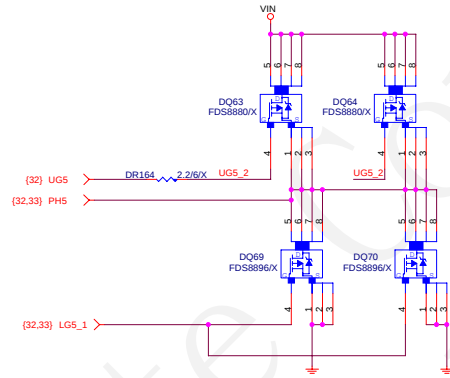
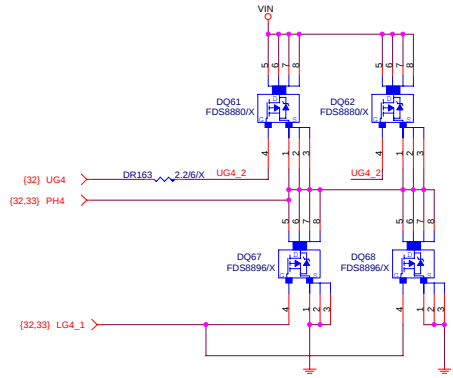
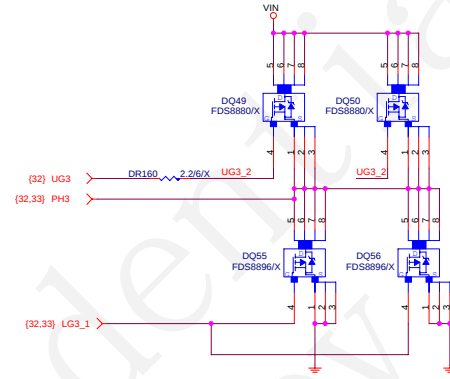
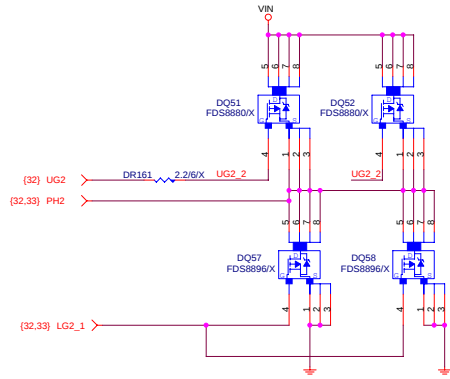
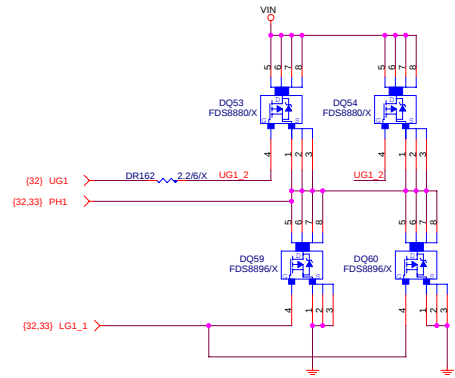
IC8S0-SOCKET	
BP BIOS	
SST25VF080B-50-4C-S2AF/S	
CS#	VDD
SO	HOLD#
WP#	SCK
VSS	SI



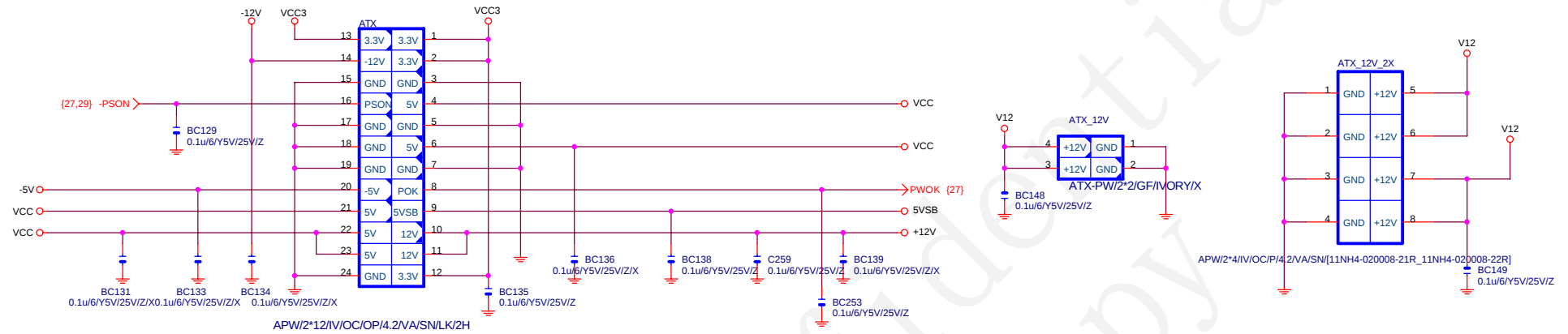
Gigabyte Technology

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Size	Document Number	Rev
Custom	965P-DS3P	2.0B
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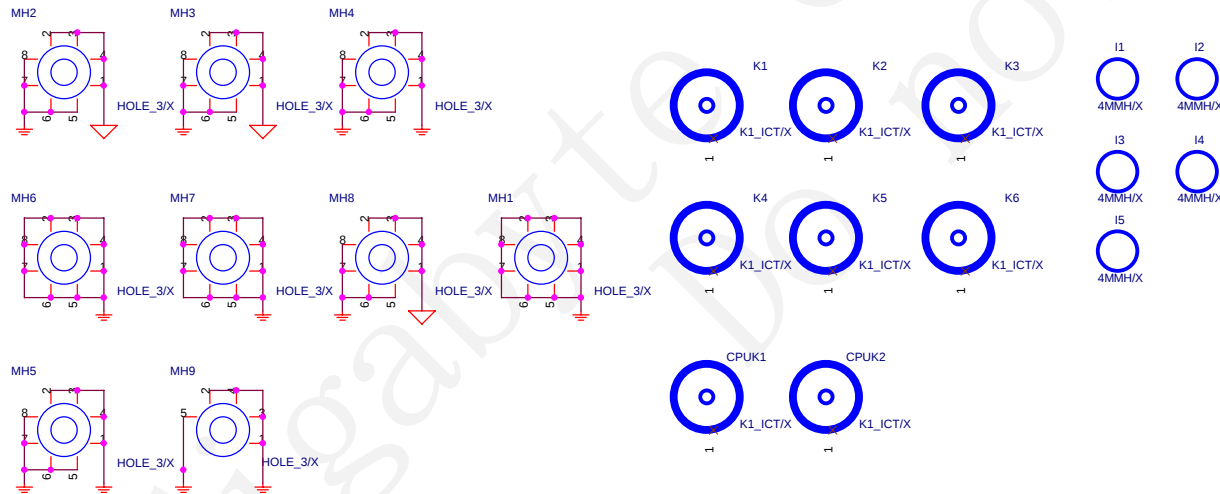




ATX POWER CONNECTOR



HOLE_3-2--->有鉛



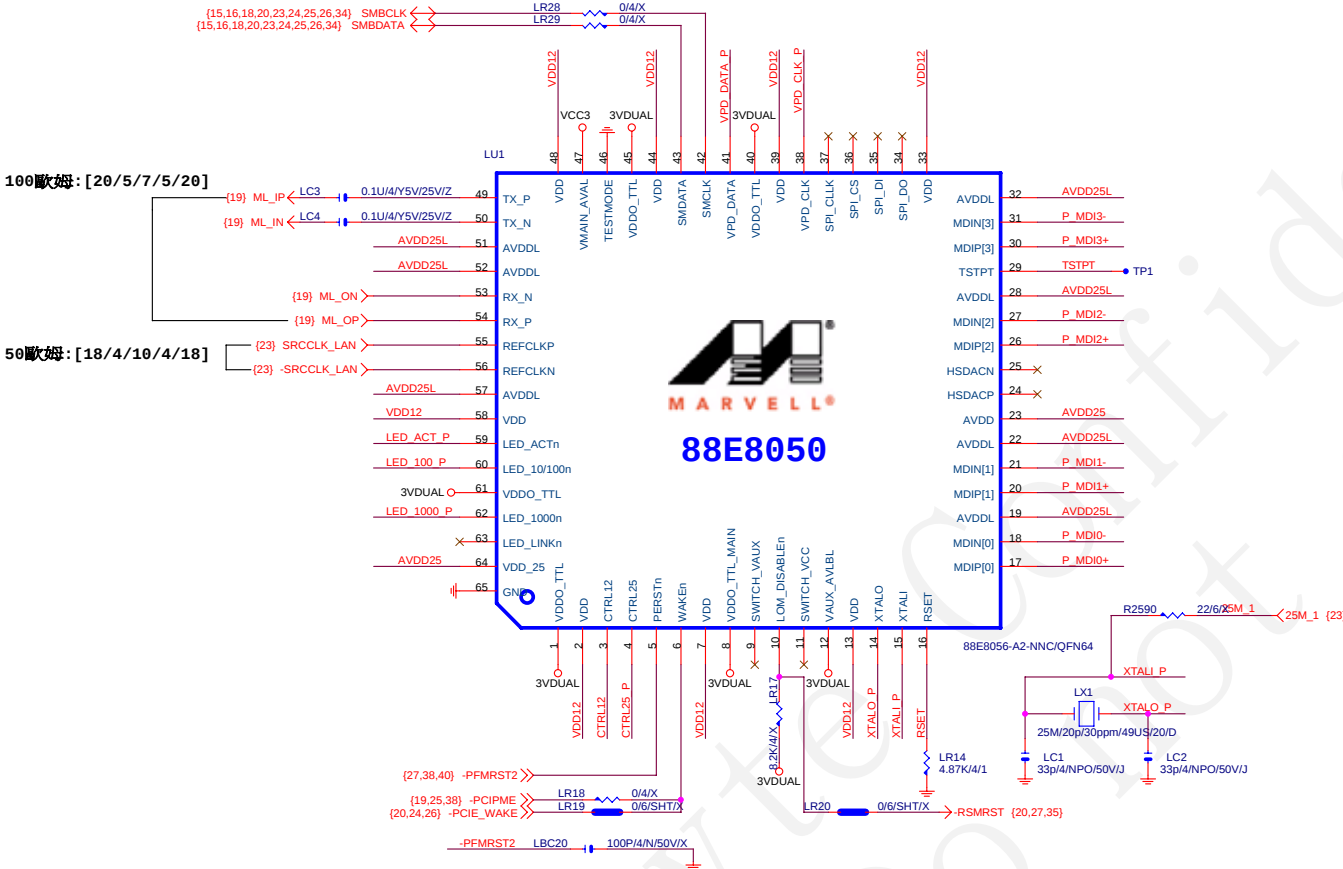
Gigabyte Technology

Title			
ATX POWER CONNECTOR			
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PCIE-16 LAN

Layout Check 注意事項

1. LU1 PIN65 需下內層GND,打12 VIA
2. 3VDUAL, VCC3, VDD15 L, AVDD25 L 至少走20mil寬,並且電容擺設每兩pin至少放一顆Bypass Cap.
3. X'TAL 25MHz 兩訊號線,TRACE 愈短愈好,線寬12mil
4. MDI正負0~3,TRACE 8:7:8, 每對之間保持 40mil



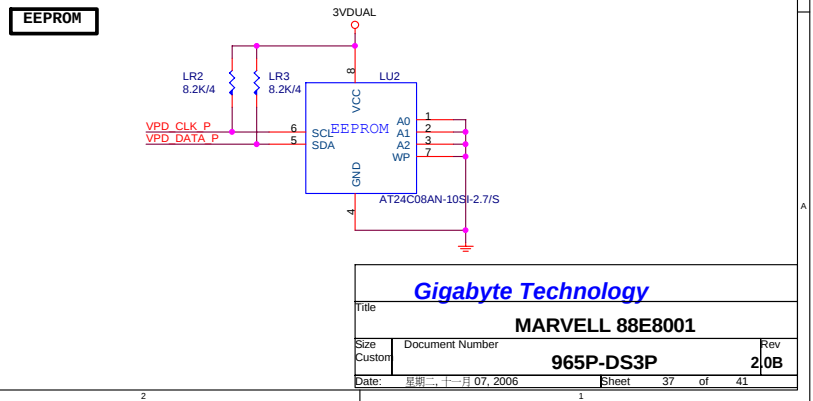
3VDUAL

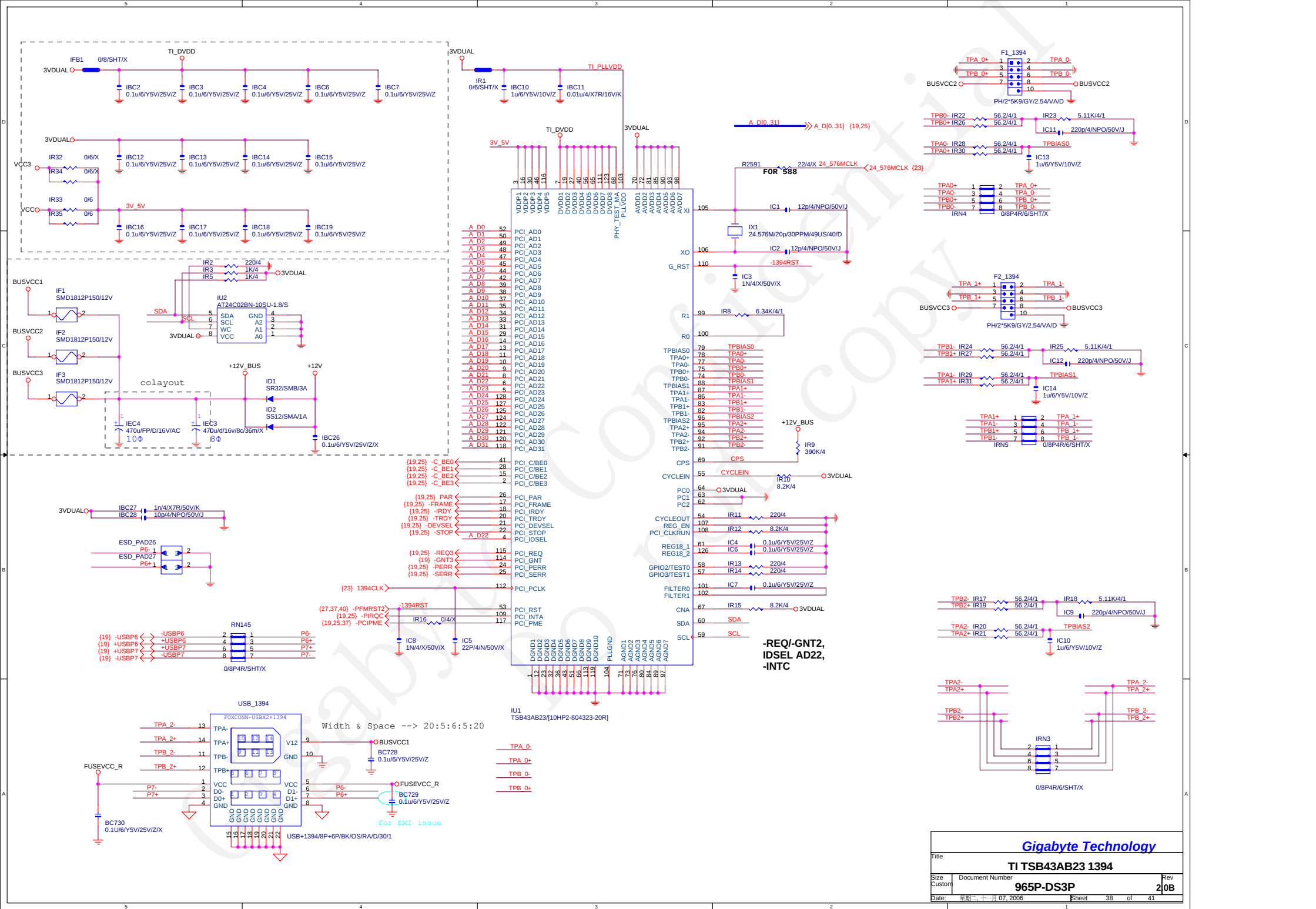
2.5V

1.2V

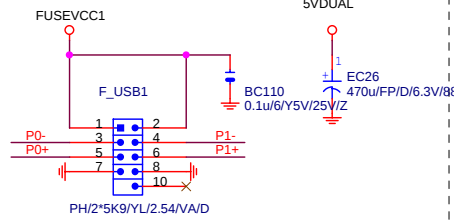
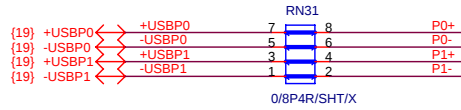
EEPROM

EEPROM

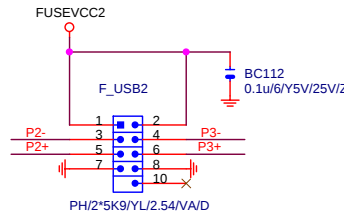
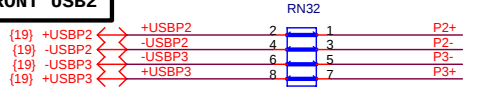




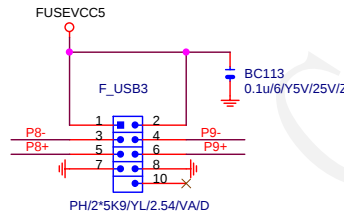
FRONT USB1



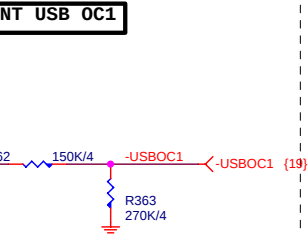
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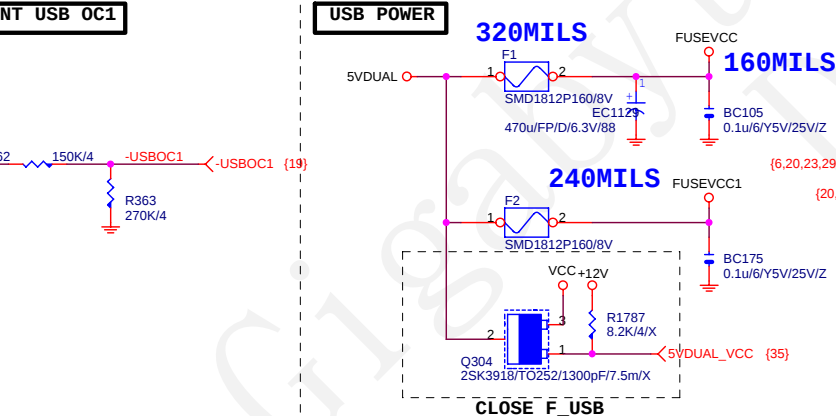
FRONT USB3



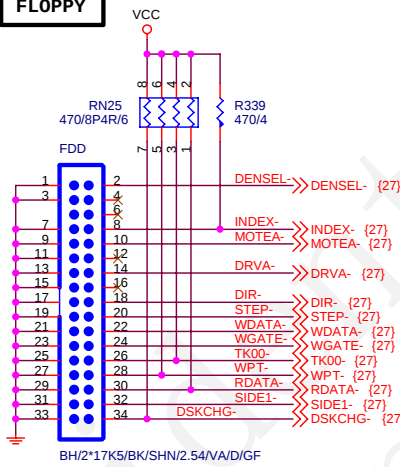
FRONT USB OC1



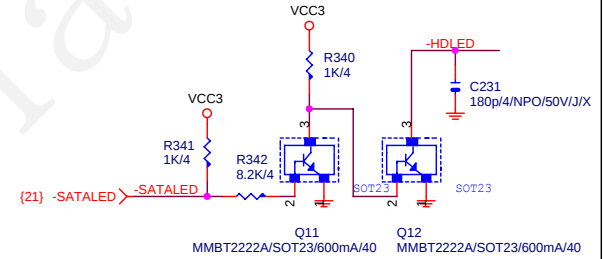
USB POWER



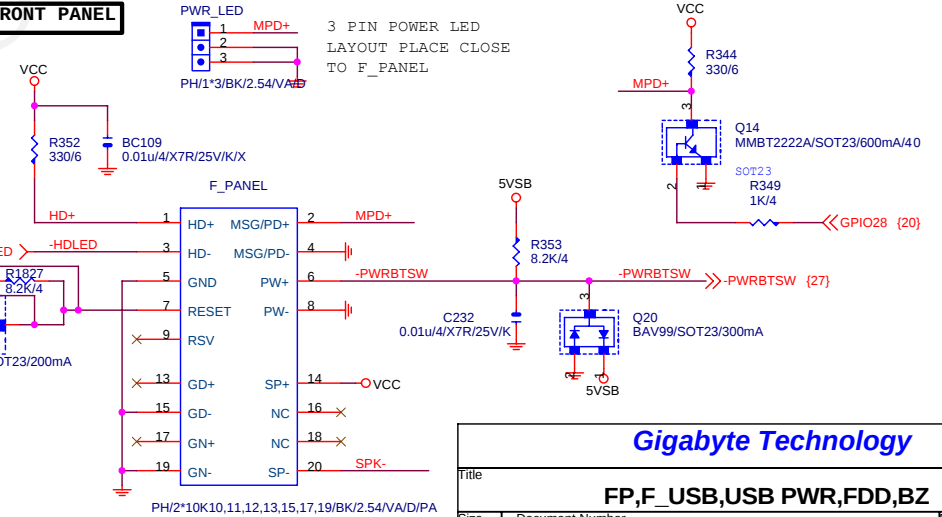
FLOPPY



SATA LED



INTEL FRONT PANEL

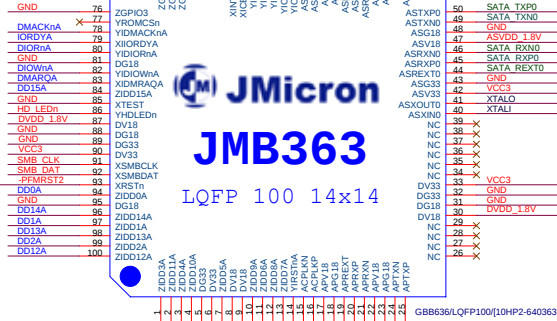
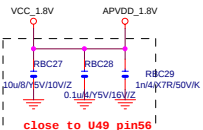
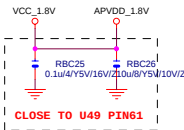
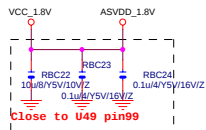
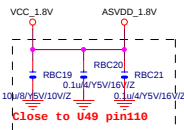
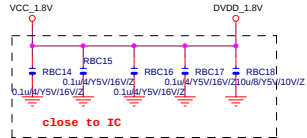
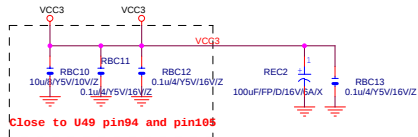
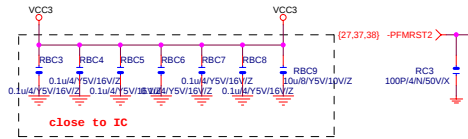
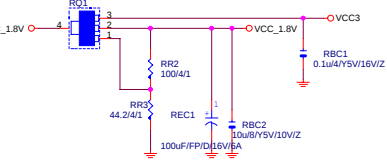


Gigabyte Technology

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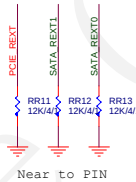
3.3V to 1.8V Voltage Regulator

AMC11175V/SOT223/0.8A

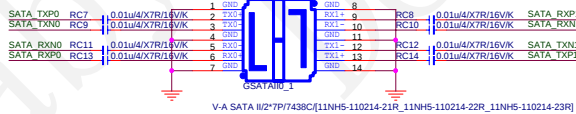


GBB836/LQFP100[10HP2-640363-20R]

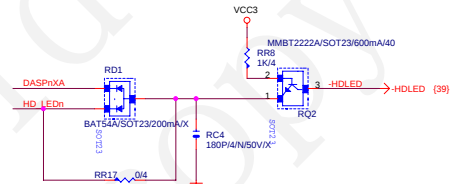
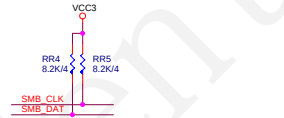
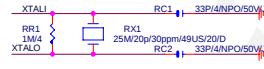
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MS_IN (19)
MS_ON (19)
MS_OP (19)
SRCCLK_MS (23)
SRCCLK_MS (23)



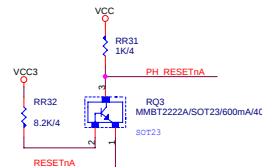
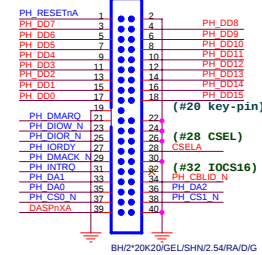
SATA Connector



V-A SATA N2*7P/7438C[11NH5-110214-21R_11NH5-110214-22R_11NH5-110214-23R]



IDE Connector



PH_DD7 2 1 DD7A
PH_DD8 4 3 DD8A
PH_DD6 6 5 DD6A
PH_DD9 8 7 DD9A

PH_DD5 2 1 DD5A
PH_DD10 4 3 DD10A
PH_DD4 6 5 DD4A
PH_DD11 8 7 DD11A

PH_DD3 2 1 DD3A
PH_DD12 4 3 DD12A
PH_DD2 6 5 DD2A
PH_DD13 8 7 DD13A

PH_DD1 2 1 DD1A
PH_DD0 4 3 DD0A
PH_DD15 8 7 DD15A

PH_DIOW_N RR18 82/4 DIOWnA
PH_DIOR_N RR19 82/4 DIORnA
PH_DMACK_N RR20 82/4 DMACKnA
PH_DA1 RR21 82/4 DA1A
PH_DA0 RR22 82/4 DA0A
PH_CS0_N RR23 82/4 CS0nA
PH_DA2 RR24 82/4 DA2A
PH_CS1_N RR25 82/4 CS1nA
PH_RESETnA RR26 82/4X RESETnA

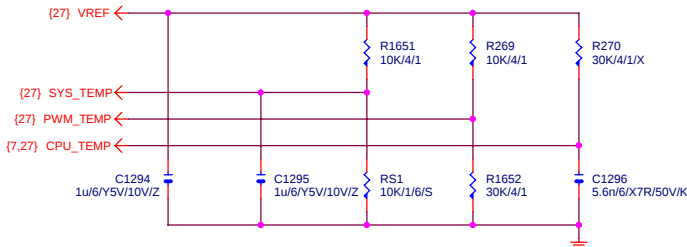
PH_IORDY RR27 22/4 IORDYA
PH_DMARQ RR28 22/4 DMARQA
PH_INTRQ RR29 22/4 INTRQA
PH_CBLID_N RR30 22/4 PDIAGnA

Gigabyte Technology

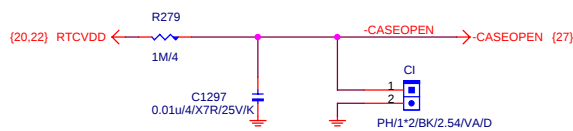
JMB363

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TEMP H/W MONITOR

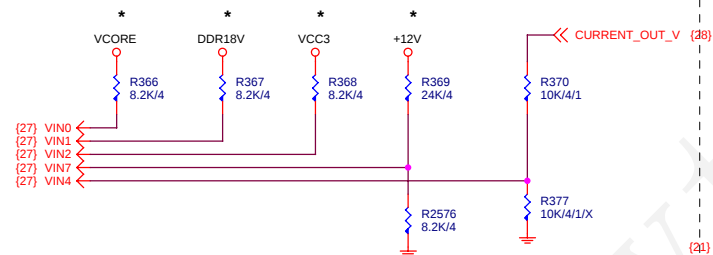


CASE OPEN

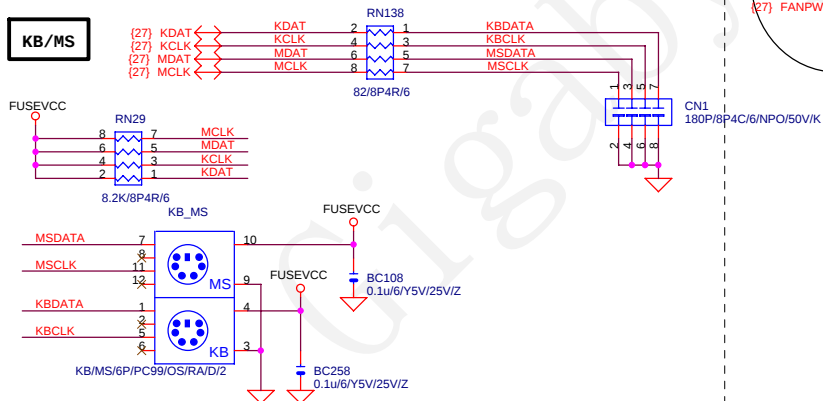


Case Open Circuits

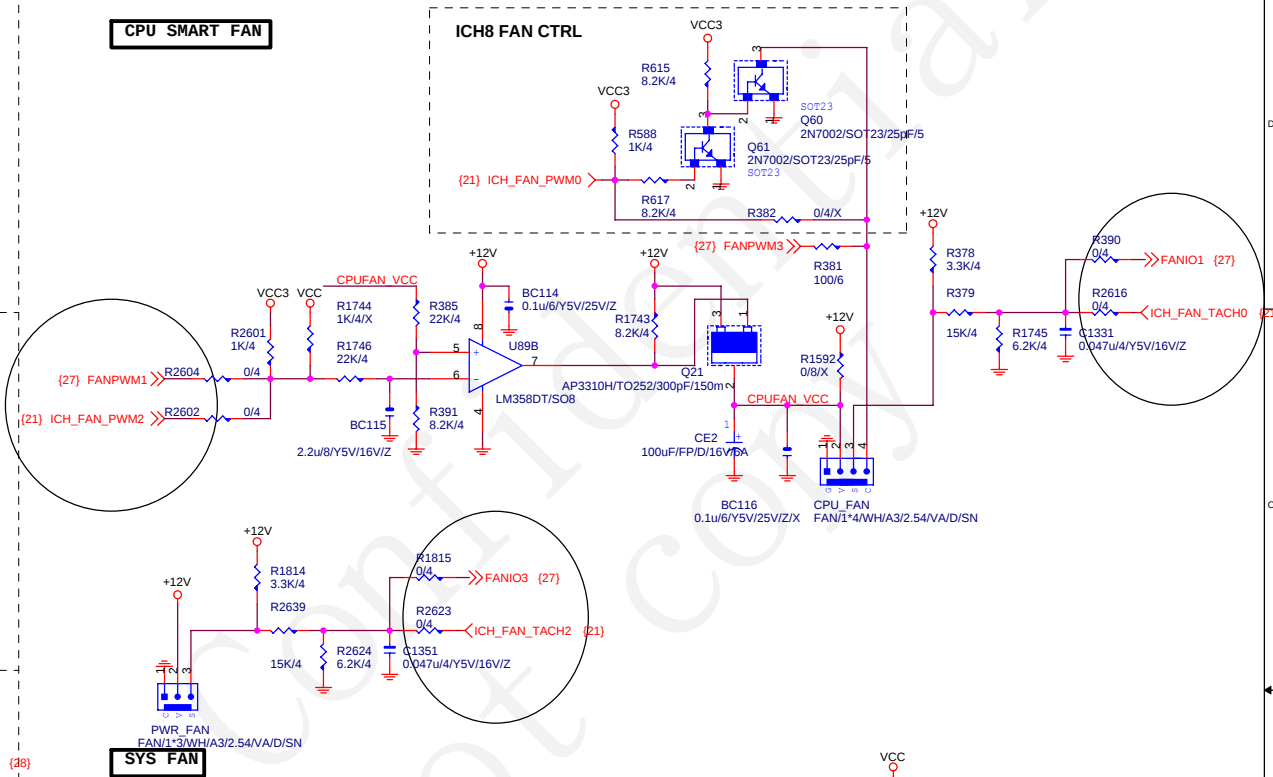
VOLTAGE-- H/W MONITOR



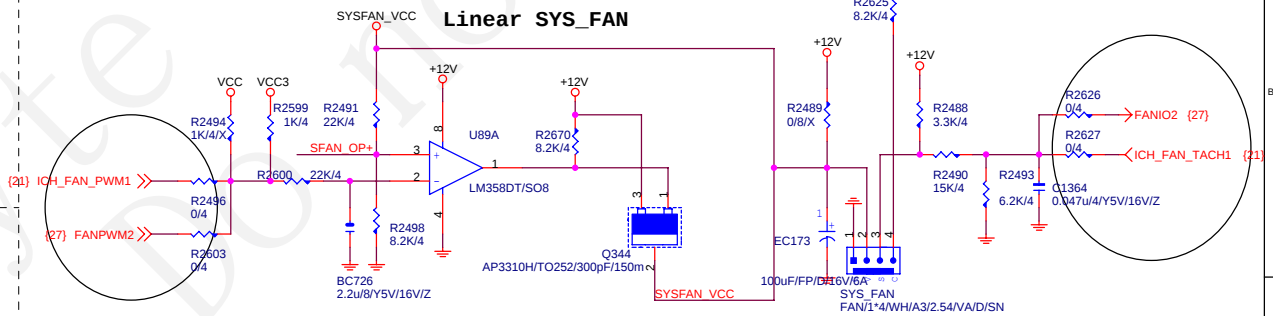
KB/MS



CPU SMART FAN



SYS FAN



Gigabyte Technology

Title

COM & LPT PORT

Size Custom

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