Model Name: GA-H55M-D2H

REV: 1.31

SHEET	TITLE
01	COVER SHEET
02	BOM & PCB MODIFY HISTORY
03	BLOCK DIAGRAM
04	CPU_LGA1156-A
05	CPU_LGA1156-B
06	CPU_LGA1156-C
07	DDR III CHANNEL A
08	DDR III CHANNEL B
09	DDR III POWER CAP
10	PCH_FDI,DMI,USB,PCIE,NVRAM
11	PCH_DP,CLK BUFFER
12	PCH_HOST,SATA,PCI
13	PCH_GPIO,CTRL,AUDIO
14	PCH_PWR,GND
15	PCI EXPRESS*16 SLOT
16	PCI EXPRESS*4 SLOT
17	PCI SLOT 1,2
18	ITE 8720 LPC IO
19	Dual BIOS,PHOT,D-OC
20	ALC888B
21	REAR AUDIO JACK
22	CLOCK GEN ICS9LPRS914
23	DISCRETE POWER
24	DDR_15V,PWR SEQ
25	CPU_VAXG PWM_ISL6314CRZ
26	CPU_VTT PWM_ISL6322G
27	VCORE PWM_ISL6334CR

SHEET	TITLE
28	F_PANEL , F_USB , FDD
29	ATX POWER,TPM
30	REALTEK RTL8111D
31	JMB368
32	HDMI,DVI
33	HWM,KB/MS , FAN CTRL
34	TABLE LIST

Gigabyte Technology			
Title: Cover Sheet			
Size: Custom	Document Number: GA-H55M-S2H		Rev: 1.31
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GA-H55M-D2H   Version: 1.31

Circuit or PCB layout change for next version

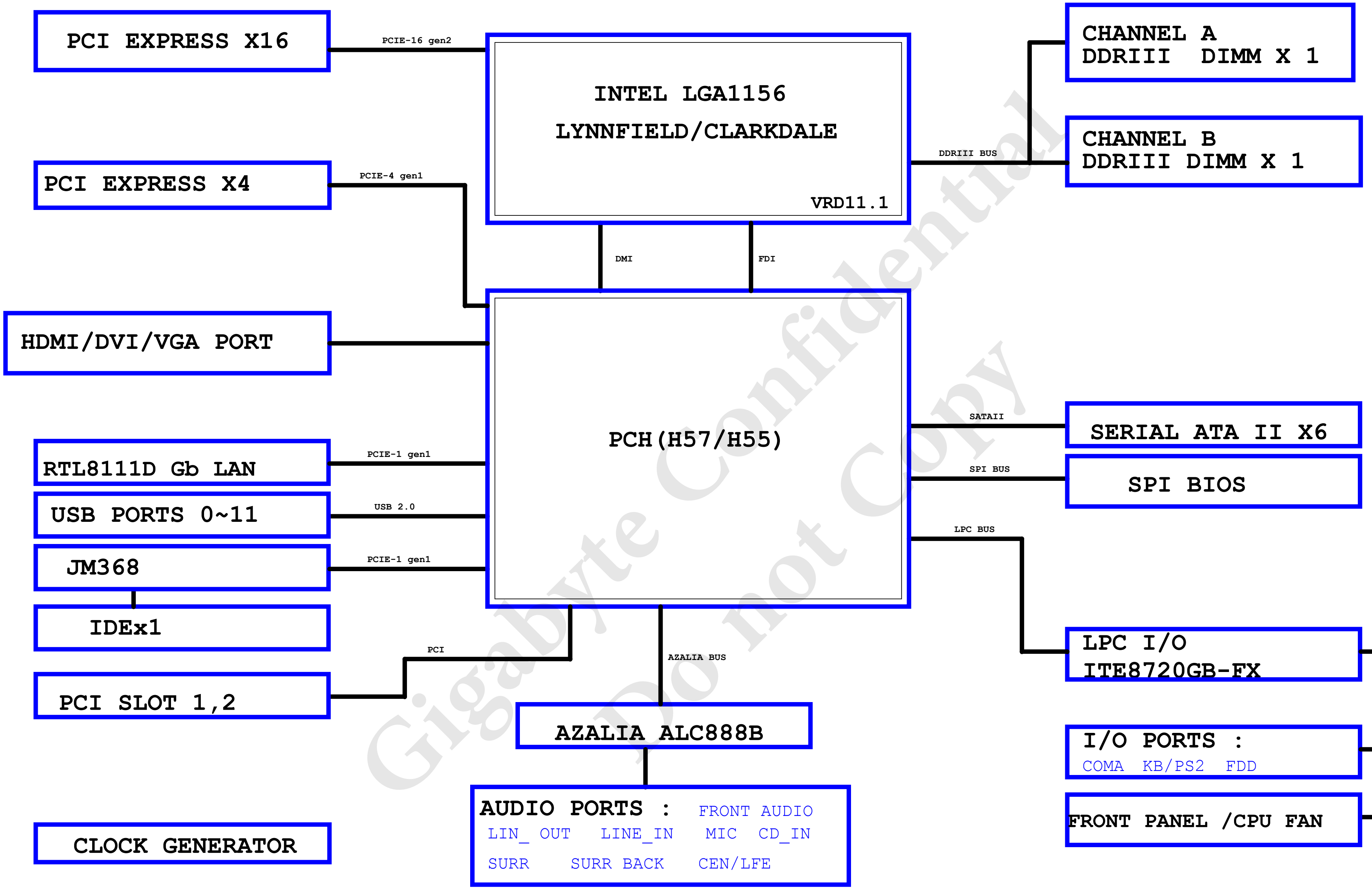
DATE	Change Item	Reason

Component value change history

2010/04/29

Data	Change Item	Reason
2009/08/24	ADD DISPLAY LED	
2009/11/03	REV1.0 MODIFY MH7	
2010/01/07	PBOM:10A CHANGE 10B , 改一般1.0uH/1.2uH CHOKE S1R	
2010/02/22	REV1.01 REMOVE DISPLAY_LED	
2010/03/17	R1.1 RENAME FORM R1.01	
2010/04/29	R1.31 RENAME FROM R1.1.MODIFY F_USB 3X POWER.ALL SOLID CAP.	

BLOCK DIAGRAM



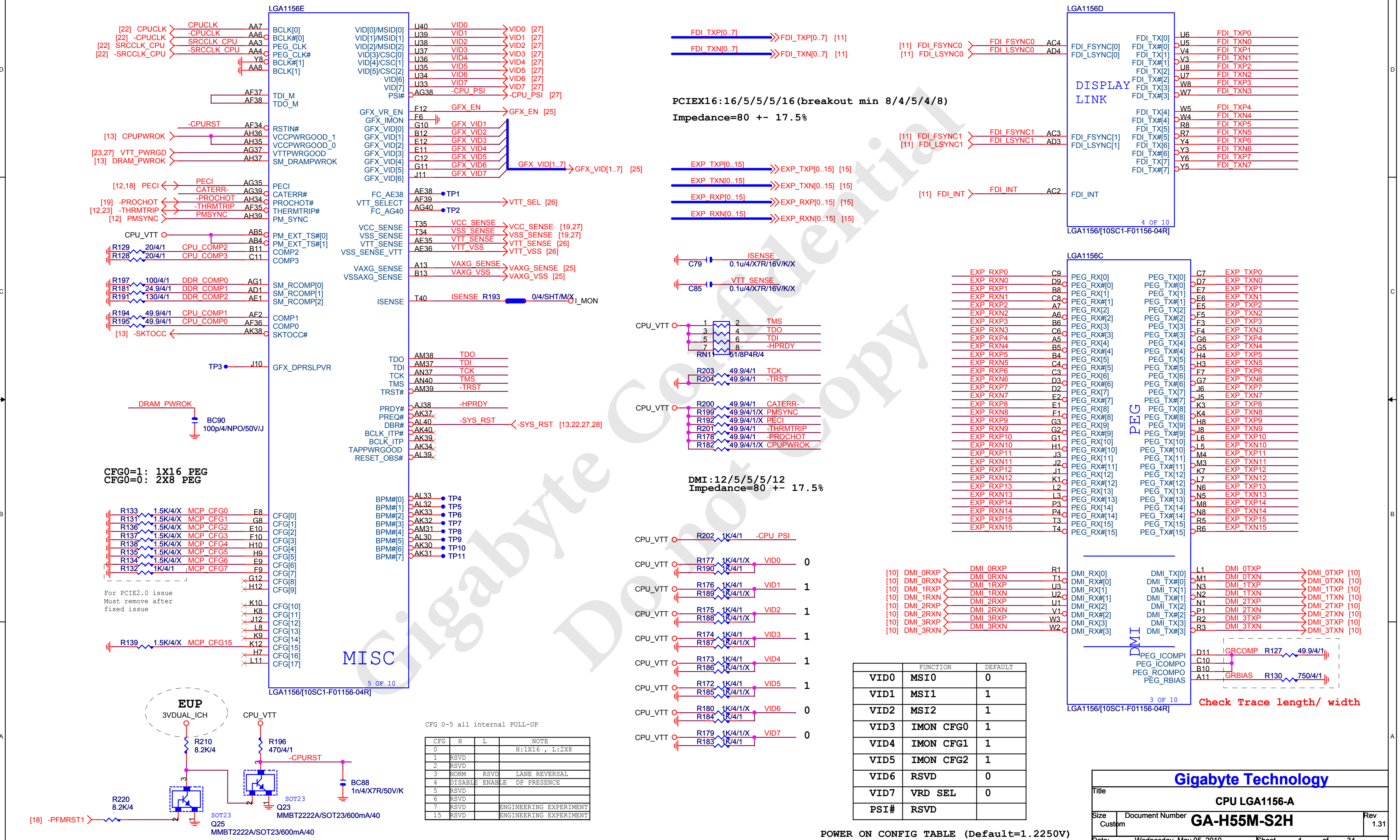
Gigabyte Technology			
Title	BLOCK DIAGRAM		
Size C	Document Number	GA-H55M-S2H	Rev 1.31
Date: Wednesday, May 05, 2010	Sheet 3 of 34		

FDI : 16/5/5/5/16(breakout min 8/4/5/4/8)
Impedance=80 +- 17.5%

PCIEX16:16/5/5/5/16(breakout min 8/4/5/4/8)
Impedance=80 +- 17.5%

DMI:12/5/5/5/12
Impedance=80 +- 17.5%

CFG0=1: 1X16 PEG
CFG0=0: 2X8 PEG



CFG 0-5 all internal PULL-UP

CFG	H	L	NOTE
0			H:1X16 , L:2X8
1	RSVD		
2	RSVD		
3	NORM	RSVD	LANE REVERSAL
4	DISABLE	ENABLE	DP PRESENCE
5	RSVD		
6	RSVD		
7	RSVD		ENGINEERING EXPERIMENT
15	RSVD		ENGINEERING EXPERIMENT

	FUNCTION	DEFAULT
VID0	MSI0	0
VID1	MSI1	1
VID2	MSI2	1
VID3	IMON CFG0	1
VID4	IMON CFG1	1
VID5	IMON CFG2	1
VID6	RSVD	0
VID7	VRD SEL	0
PSI#	RSVD	

POWER ON CONFIG TABLE (Default=1.2250V)

Gigabyte Technology
Title: CPU LGA1156-A
Size: Custom
Document Number: GA-H55M-S2H
Rev: 1.31
Date: Wednesday, May 05, 2010
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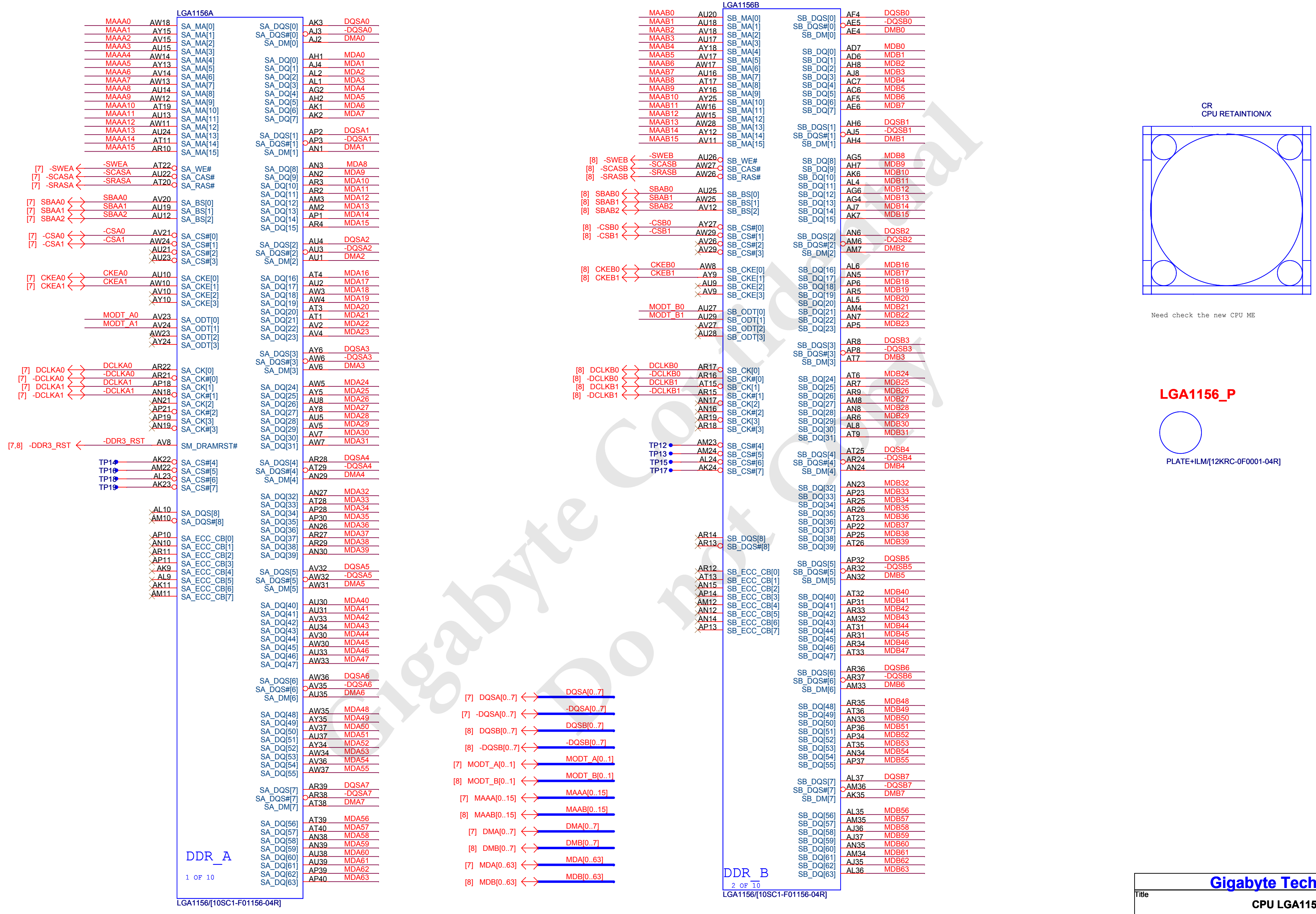
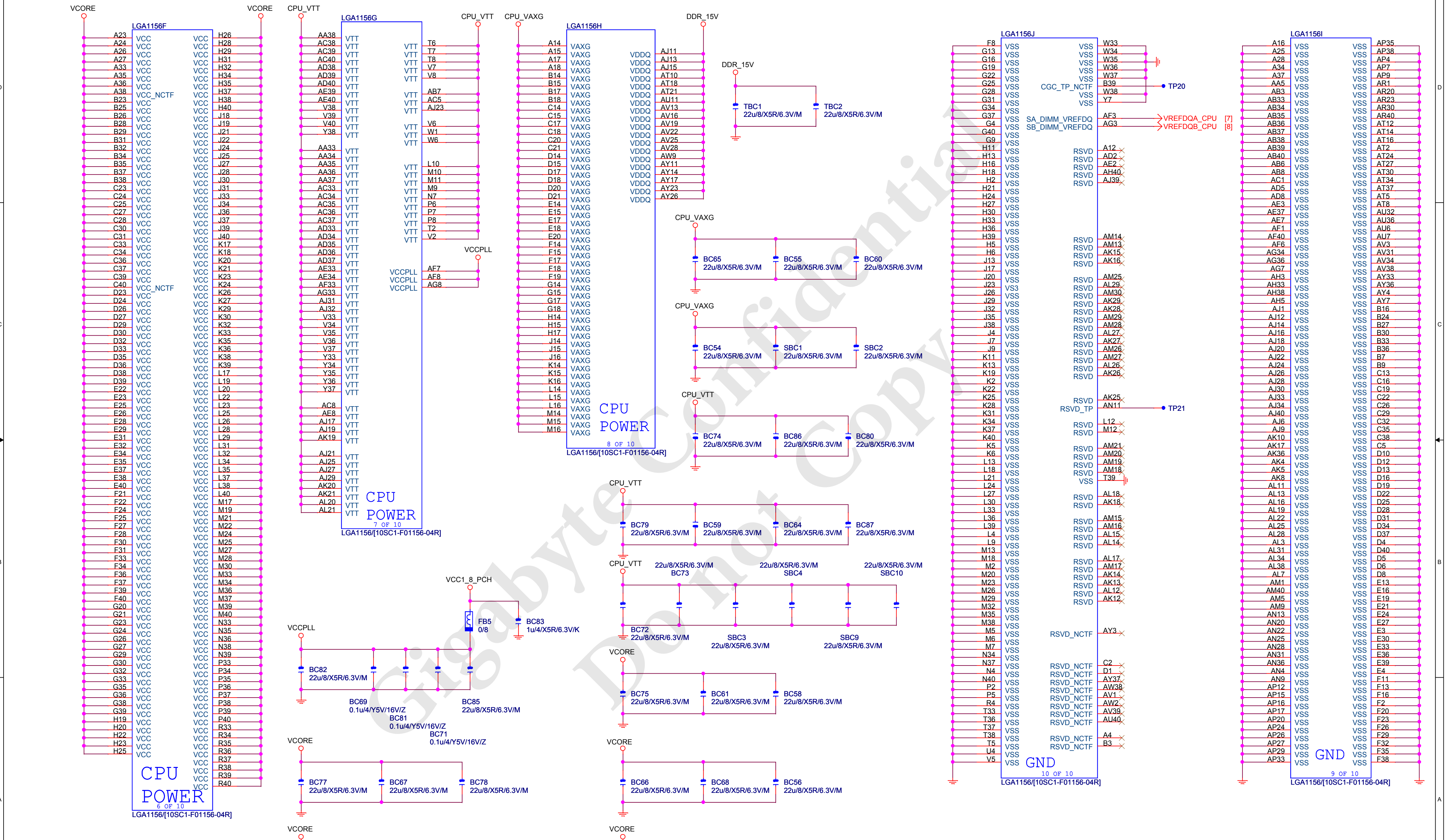


Gigabyte Technology

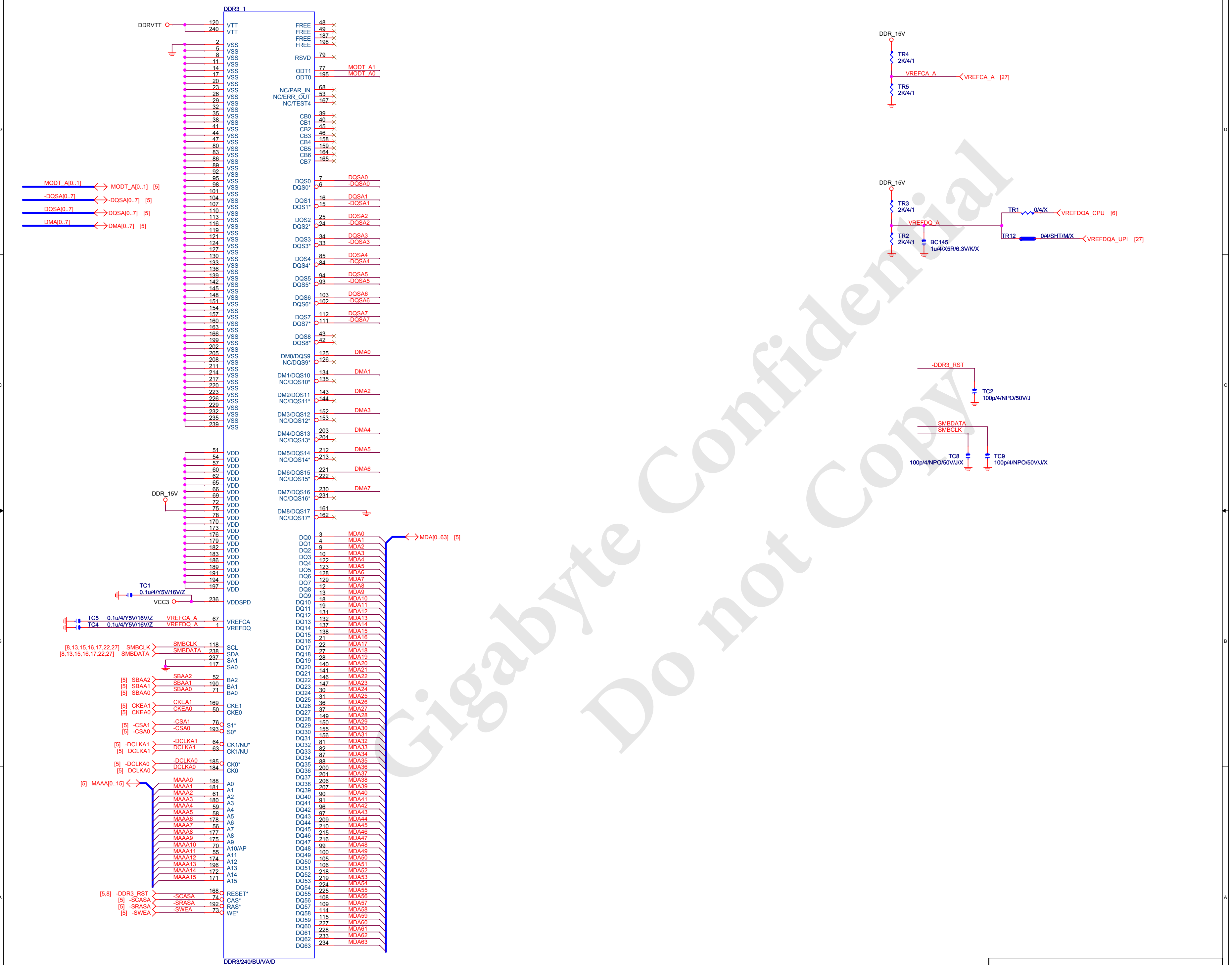
Title: CPU LGA1156-B

Size: Custom | Document Number: GA-H55M-S2H | Rev: 1.31

Date: Wednesday, May 05, 2010 | Sheet 5 of 34

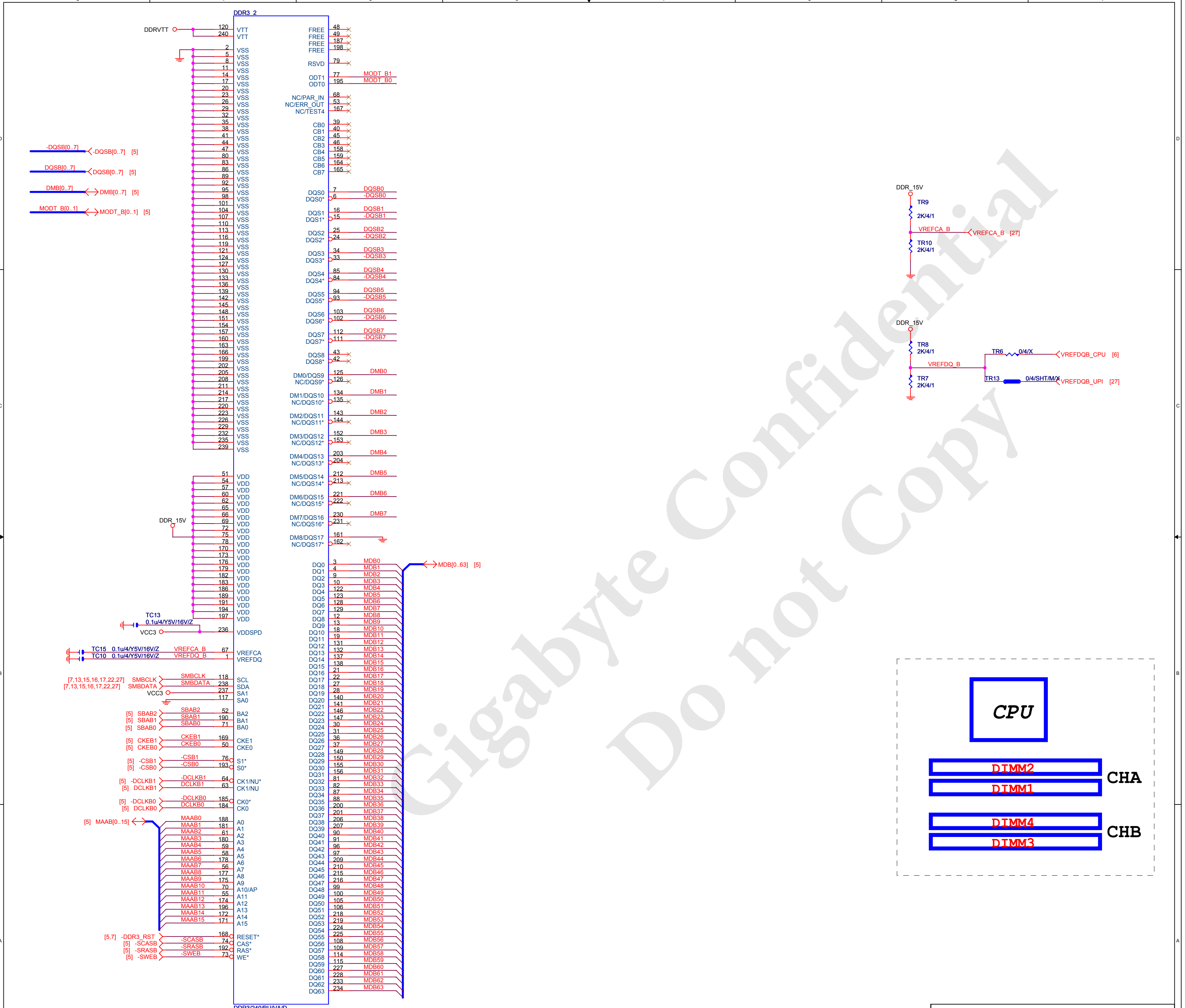


Gigabyte Technology		
Title	CPU LGA1156-C	
Size: Custom	Document Number: GA-H55M-S2H	Rev 1.31
Date: Wednesday, May 05, 2010	Sheet 6 of 34	



Gigabyte Technology

Title	DDRIII CHANNEL A
Size	Custom
Document Number	GA-H55M-S2H
Rev	1.31
Date:	
Sheet	7 of 34

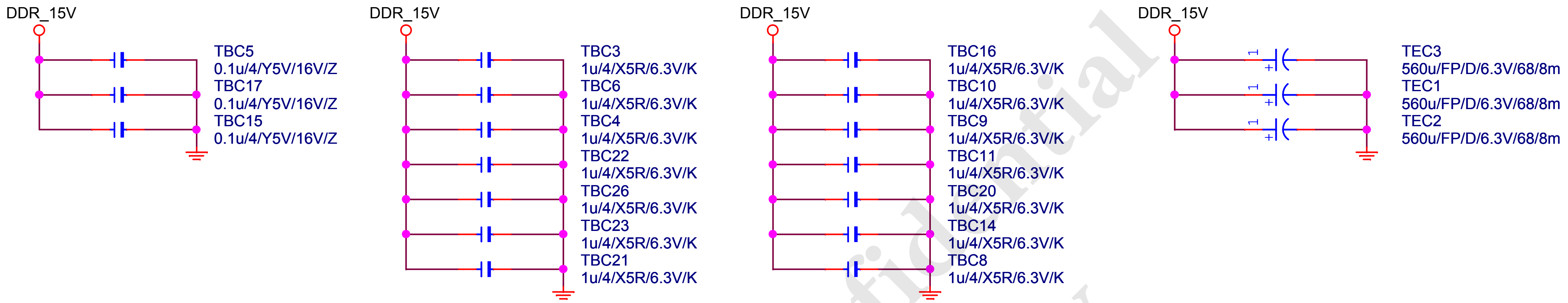


Gigabyte Technology

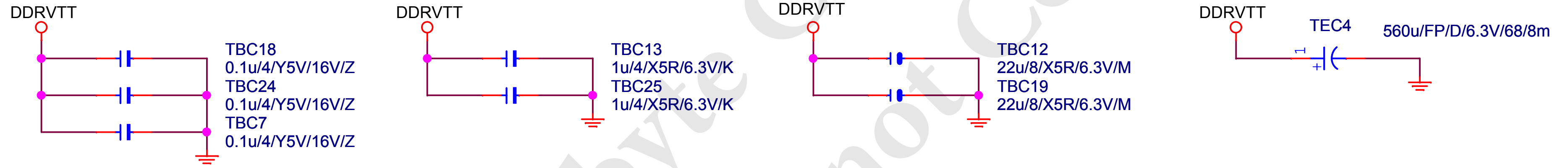
Title	DDRIII CHANNEL B	
Size: Custom	Document Number: GA-H55M-S2H	Rev: 1.31
Date:	Sheet 8 of 34	

DDR TERMINATION CHANNEL A/B

DDR15V Decouple



DDRVTT Decouple



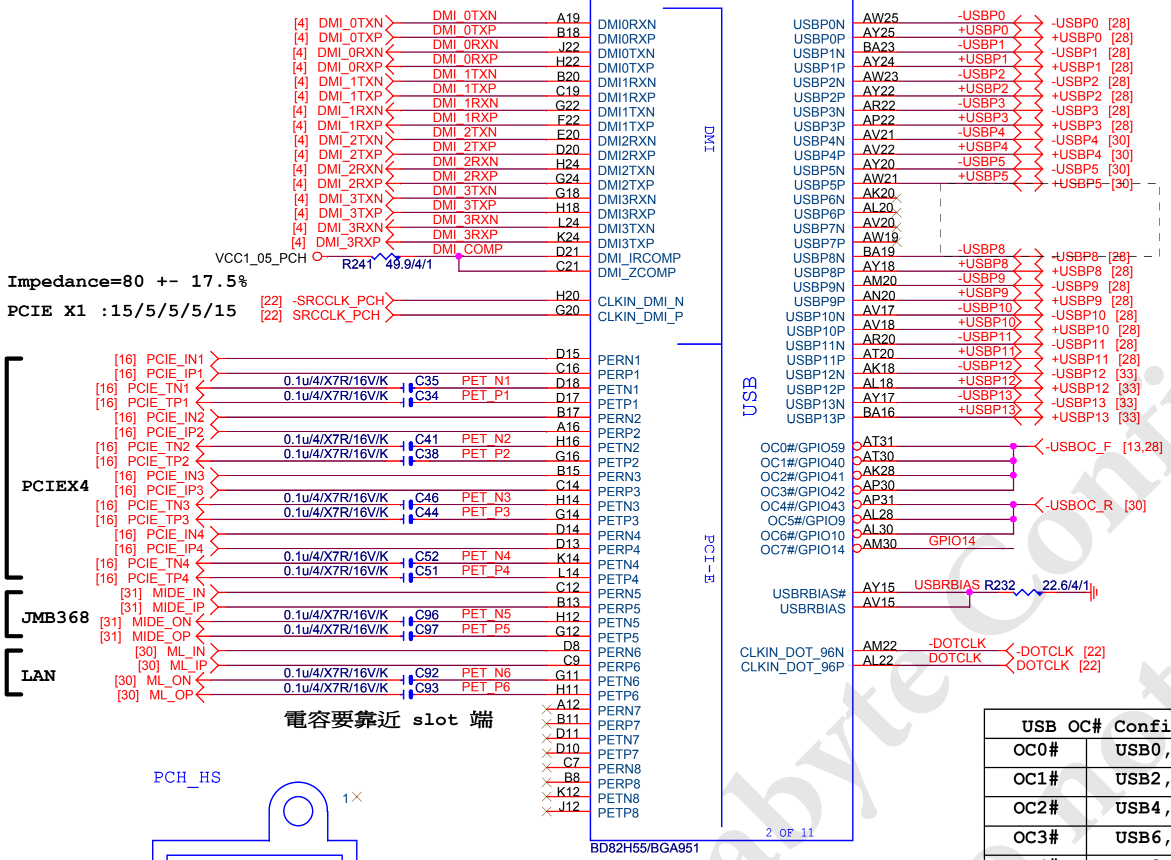
REF VCC層GND,GND層GND要塞孔

REF GND層GND,VCC層GND要塞孔

	Gigabyte Technology
Title	DDRIII POWER CAP
Size A	Document Number **GA-H55M-S2H** — Rev **1.31**
Date:	Wednesday, May 05, 2010 — Sheet 9 of 34

DMI:12/5/5/5/12
Impedance=80 +- 17.5%

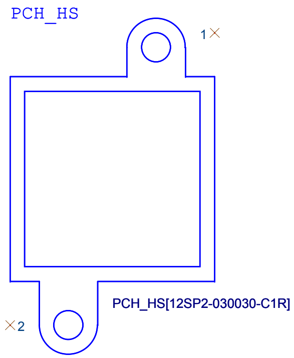
USB:15/4.5/7.5/4.5/15
Impedance=90+- 15%

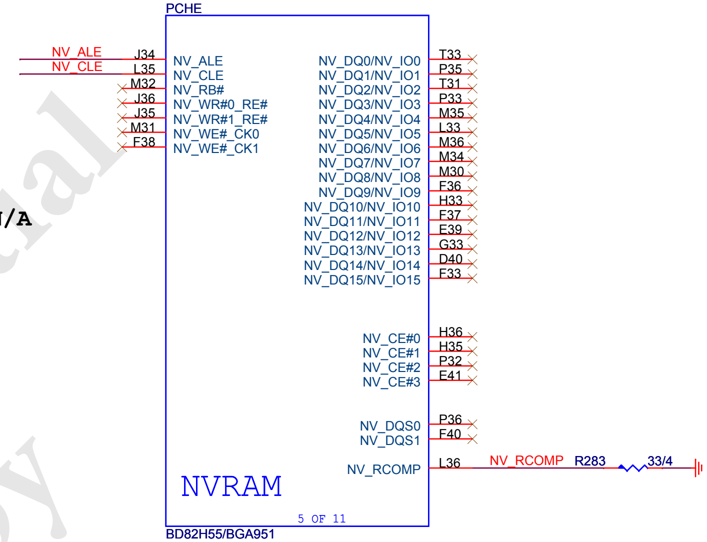


H55-->PORT6,7:N/A

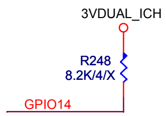
OC[3:0]# for
Device 29
(ports 0-7)

OC[7:4]# for
Device 26
(ports 8-13)

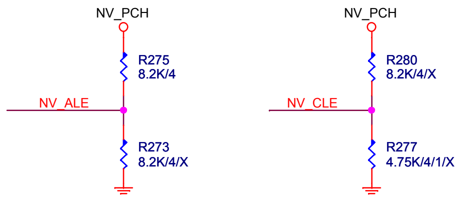




Impedance=50+- 15%
ONFI: NV_DQ 4/5
NV_DQS 4/10
NV_CTRL 4/10
NV_CK 4/15



USB OC#	Configure
OC0#	USB0,1(F_USB1)
OC1#	USB2,3(F_USB2)
OC2#	USB4,5(USB_LAN)
OC3#	USB6,7(X)H55-->N/A
OC4#	USB8,9(R_USB)
OC5#	USB10~11(R_USB)
OC6#	USB12~13(KB_USB)
OC7#	GPIO14

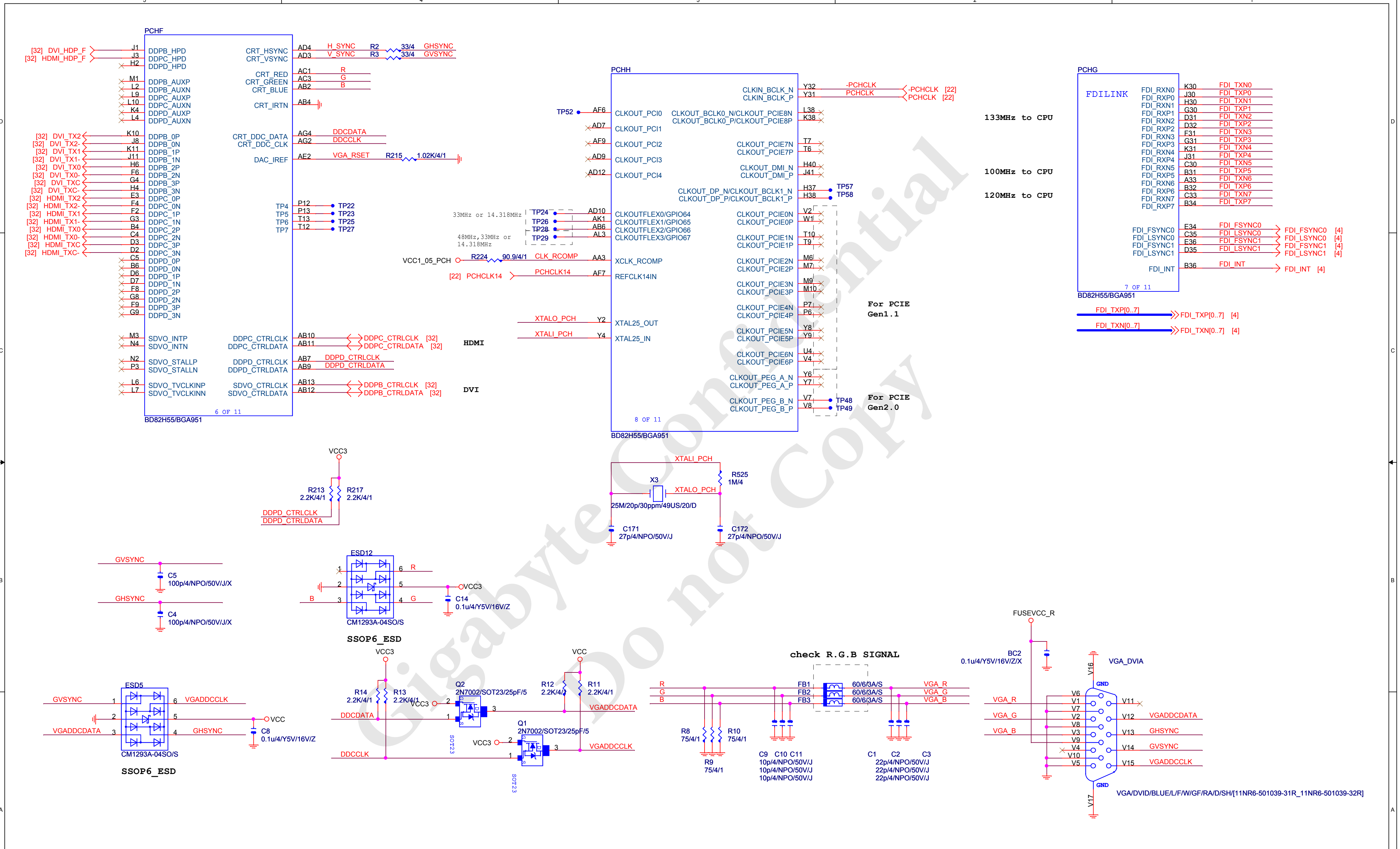


NV_ALE	
Hi	Enable Danbury
Lo	Disable Danbury

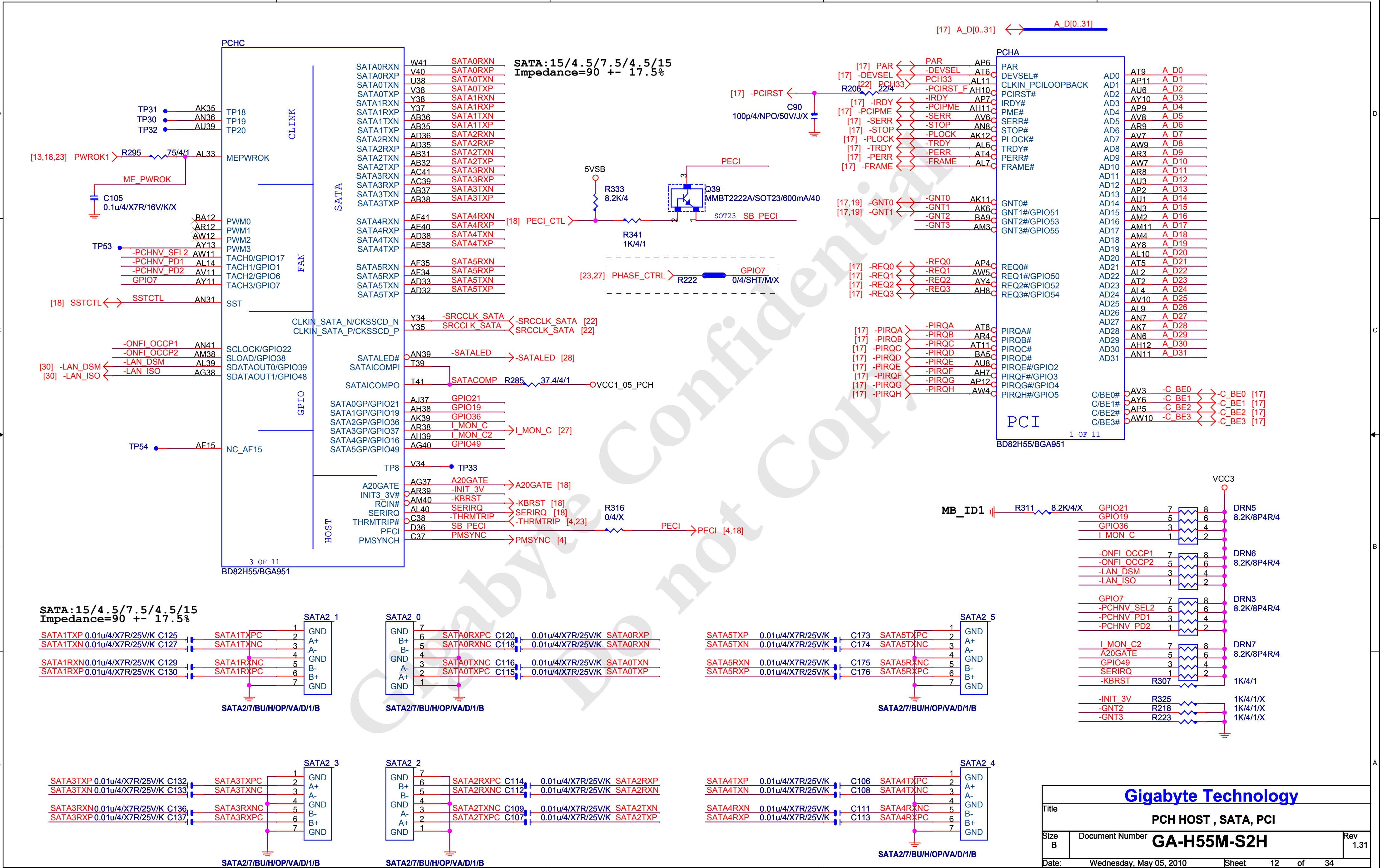
Intel anti theft techonlogy

DMI Terminator voltage
HI : AC COUP : TX/RX TO VCC
LO : DC COUP : HALF SWING

Gigabyte Technology		
Title	PCH FDI,DMI,USB ,PCIE,NVRAM	
Size B	Document Number GA-H55M-S2H	Rev 1.31
Date: Wednesday, May 05, 2010	Sheet 10 of 34	



	Gigabyte Technology
Title	PCH DISPLAY ,CLK BUFFER
Size: Custom	Document Number: GA-H55M-S2H	Rev 1.31
Date: Wednesday, May 05, 2010	Sheet 11 of 34

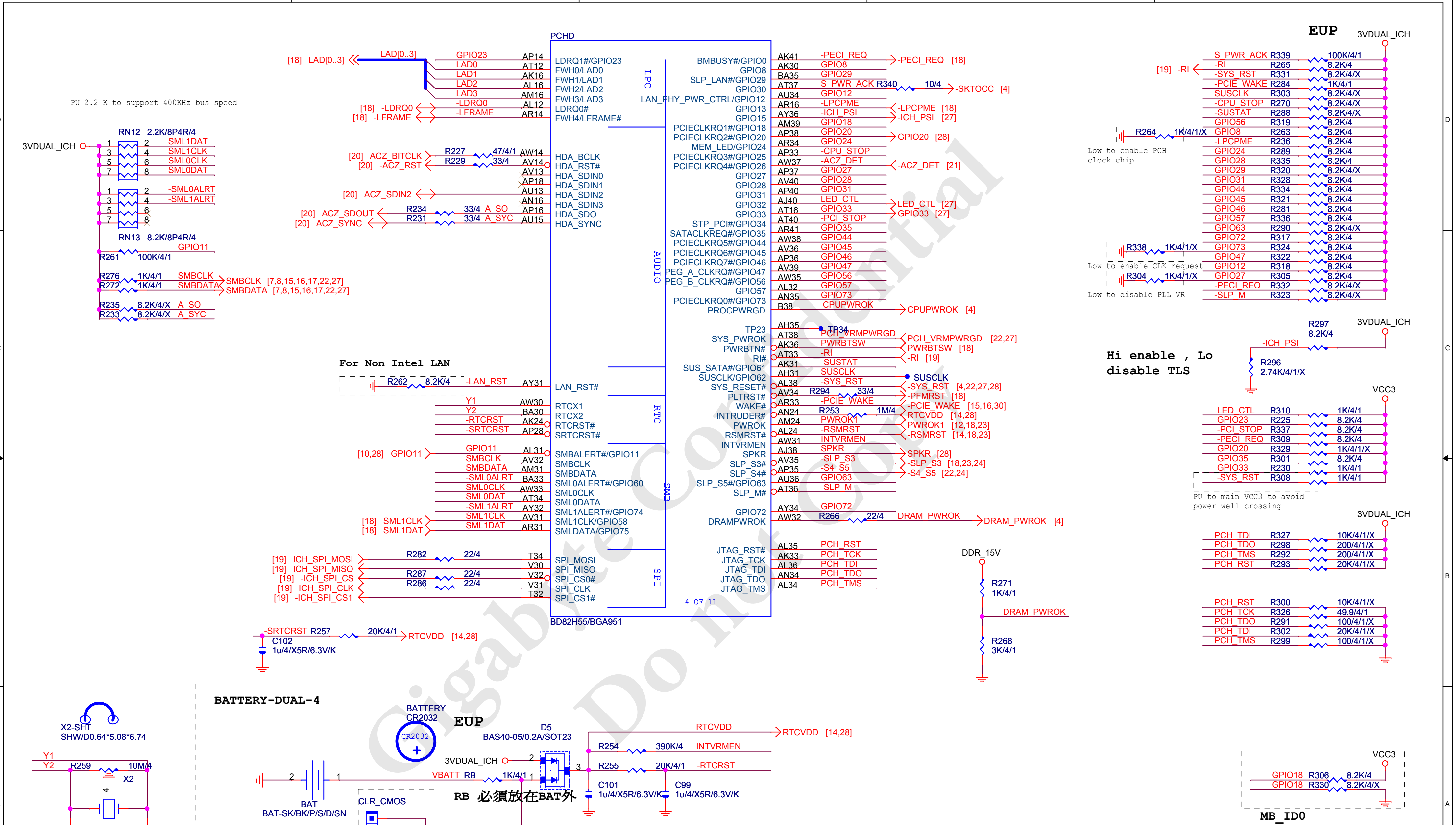


Gigabyte Technology

Title: PCH HOST , SATA, PCI

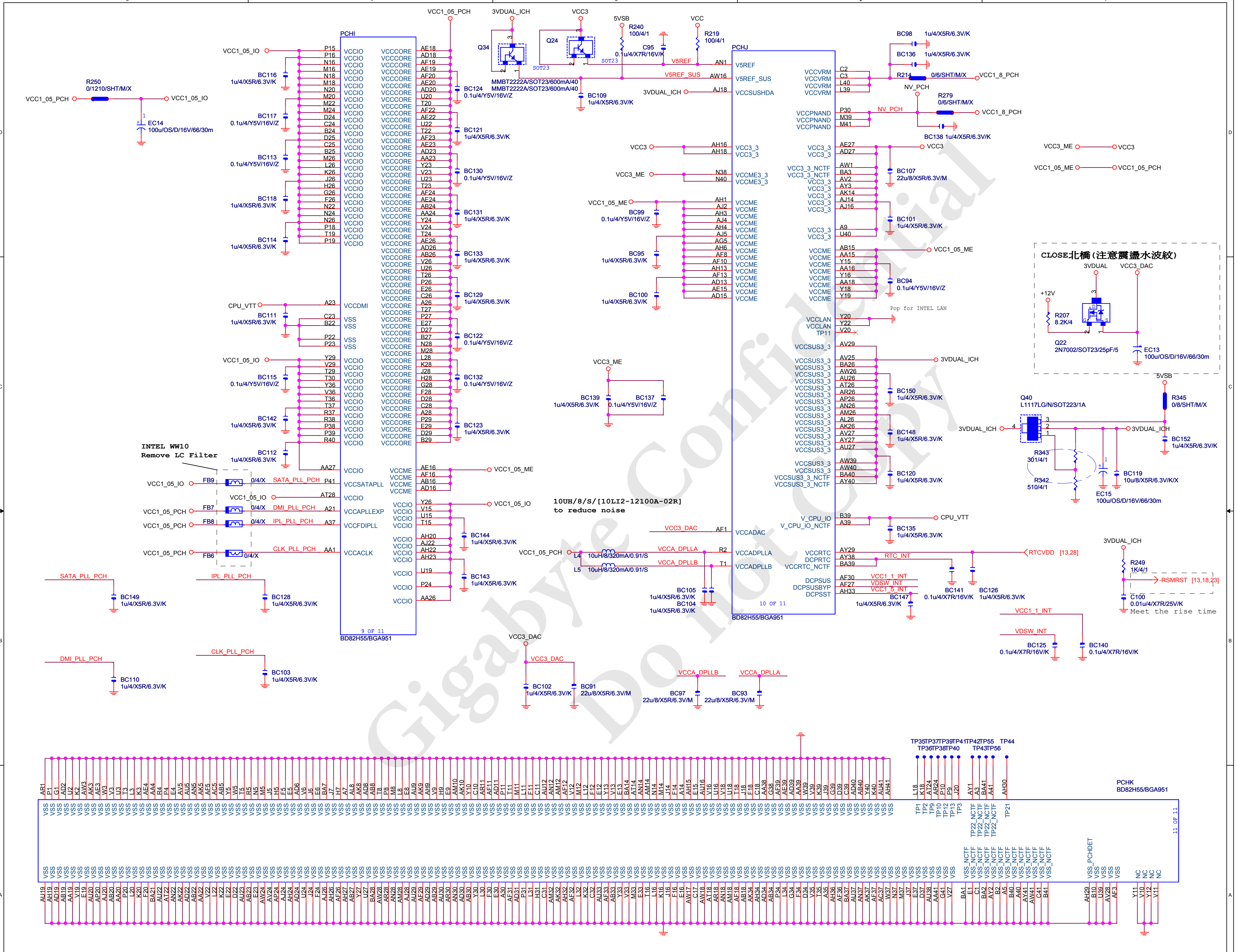
Size: B | Document Number: GA-H55M-S2H | Rev: 1.31

Date: Wednesday, May 05, 2010 | Sheet 12 of 34



Gigabyte Technology

Title	PCH GPIO , CTRL , AUDIO
Size: B	Document Number: GA-H55M-S2H	Rev: 1.31
Date: Wednesday, May 05, 2010	Sheet 13 of 34

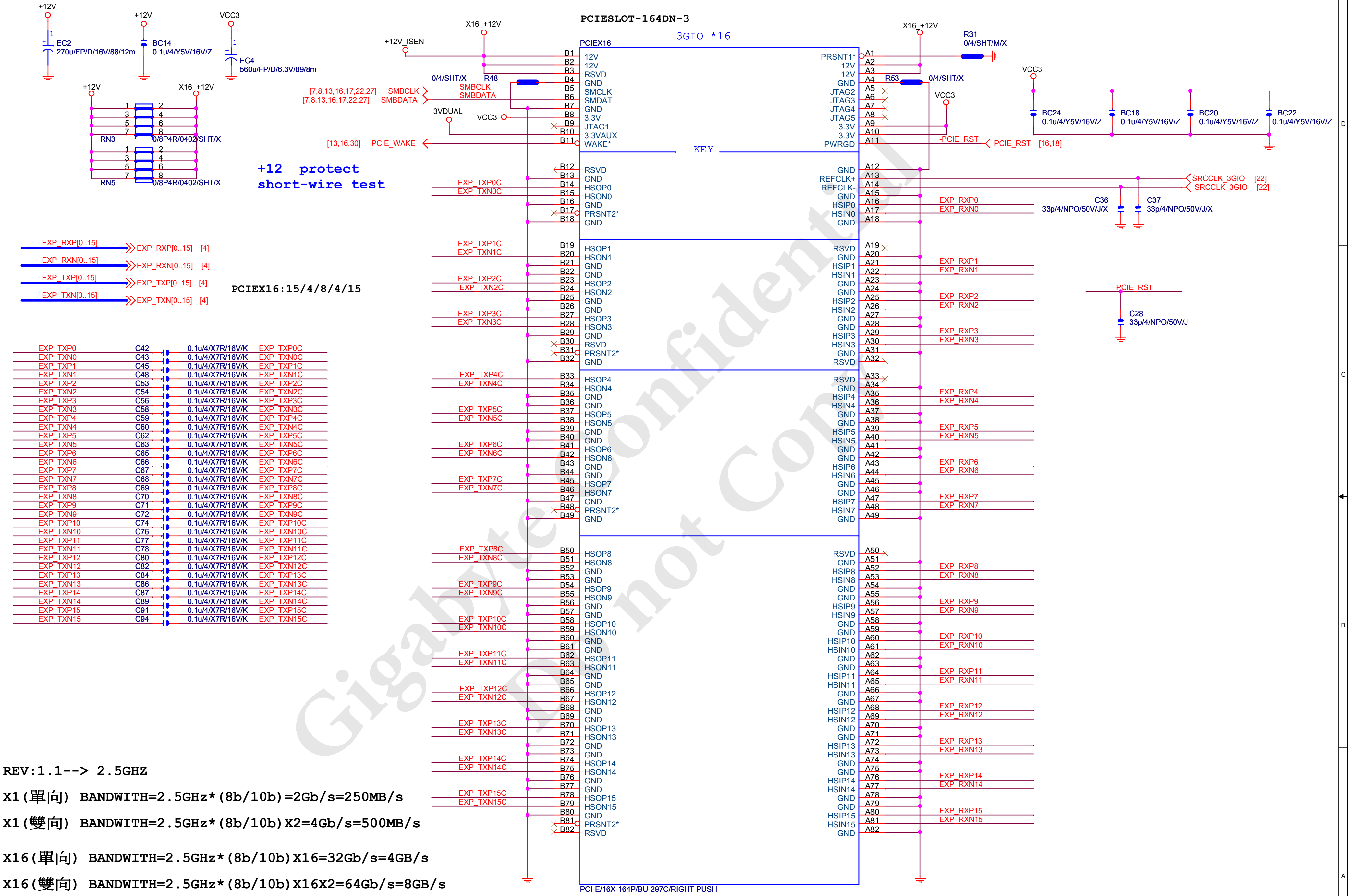


Gigabyte Technology

Title: PCH PWR ,GND

Size	Document Number	Rev
Custom	GA-H55M-S2H	1.31

Date: Wednesday, May 05, 2010 — Sheet 14 of 34



PCI-E REV:1.1--> 2.5GHZ

PCE-E X1(單向) BANDWITH=2.5GHz*(8b/10b)=2Gb/s=250MB/s

PCE-E X1(雙向) BANDWITH=2.5GHz*(8b/10b)X2=4Gb/s=500MB/s

PCE-E X16(單向) BANDWITH=2.5GHz*(8b/10b)X16=32Gb/s=4GB/s

PCE-E X16(雙向) BANDWITH=2.5GHz*(8b/10b)X16X2=64Gb/s=8GB/s

PCI-E REV:2.0--> 5GHZ

Gigabyte Technology	
Title	PCI EXPRESS * 16
Size: Custom	Document Number: GA-H55M-S2H — Rev 1.31
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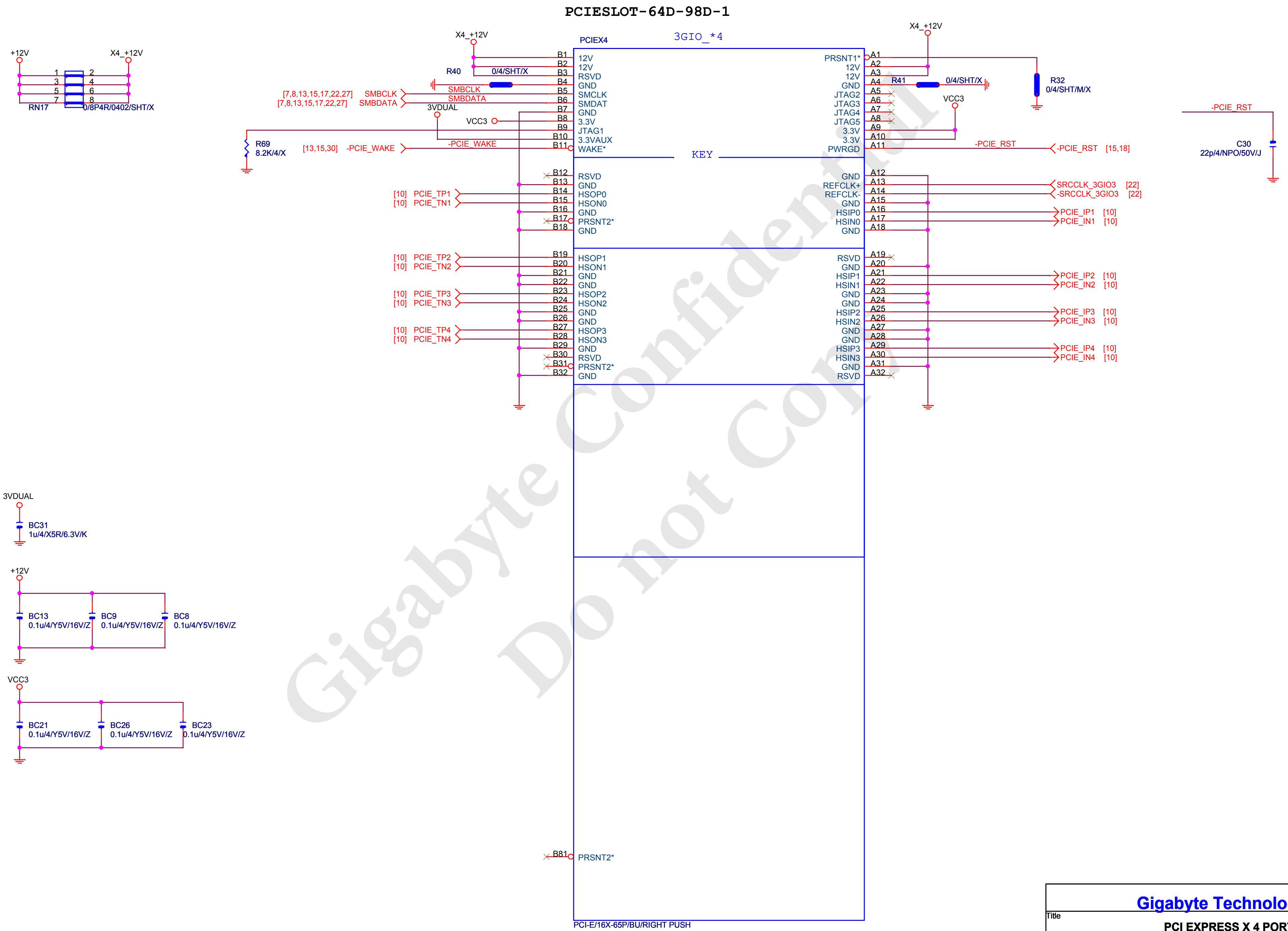
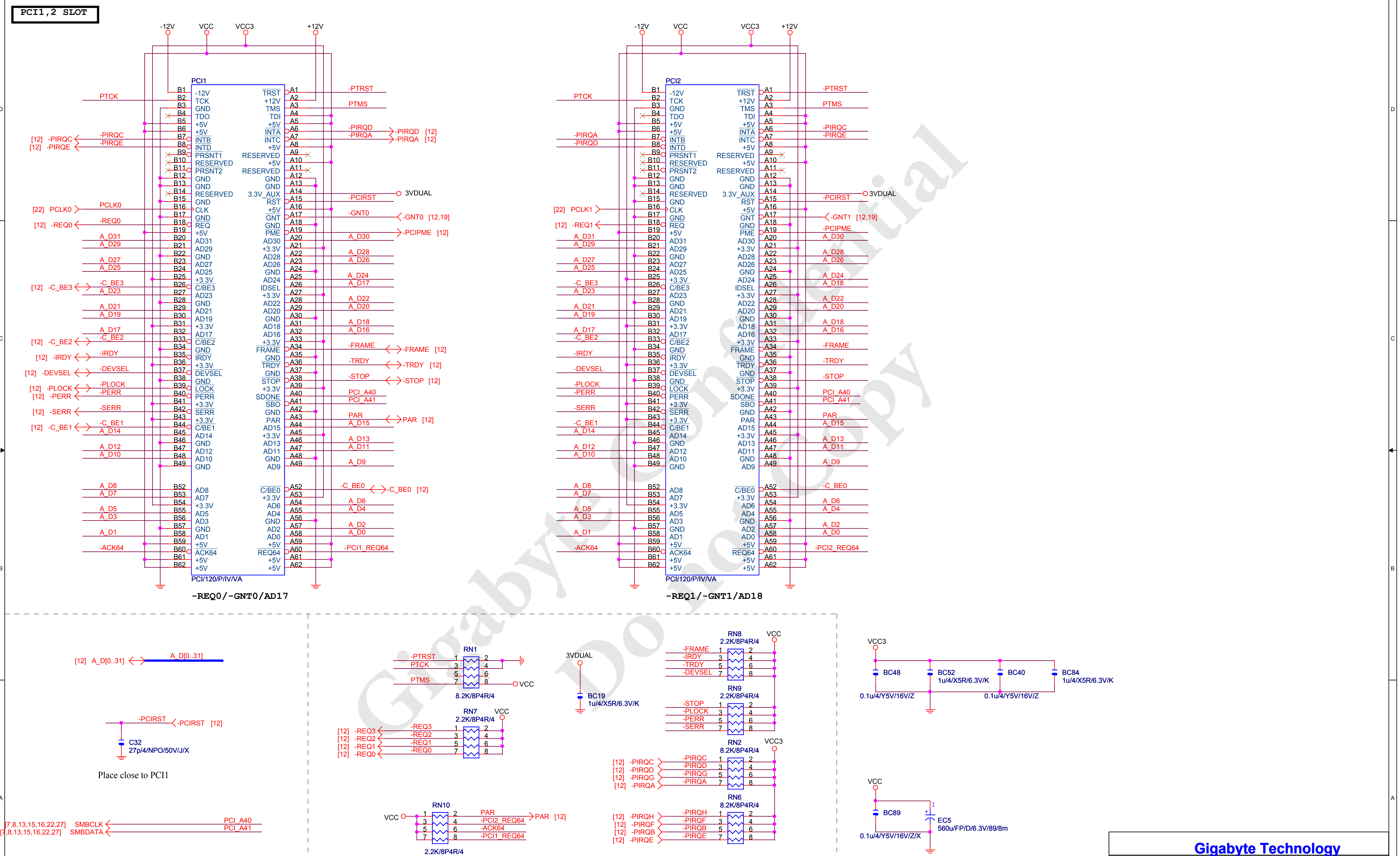


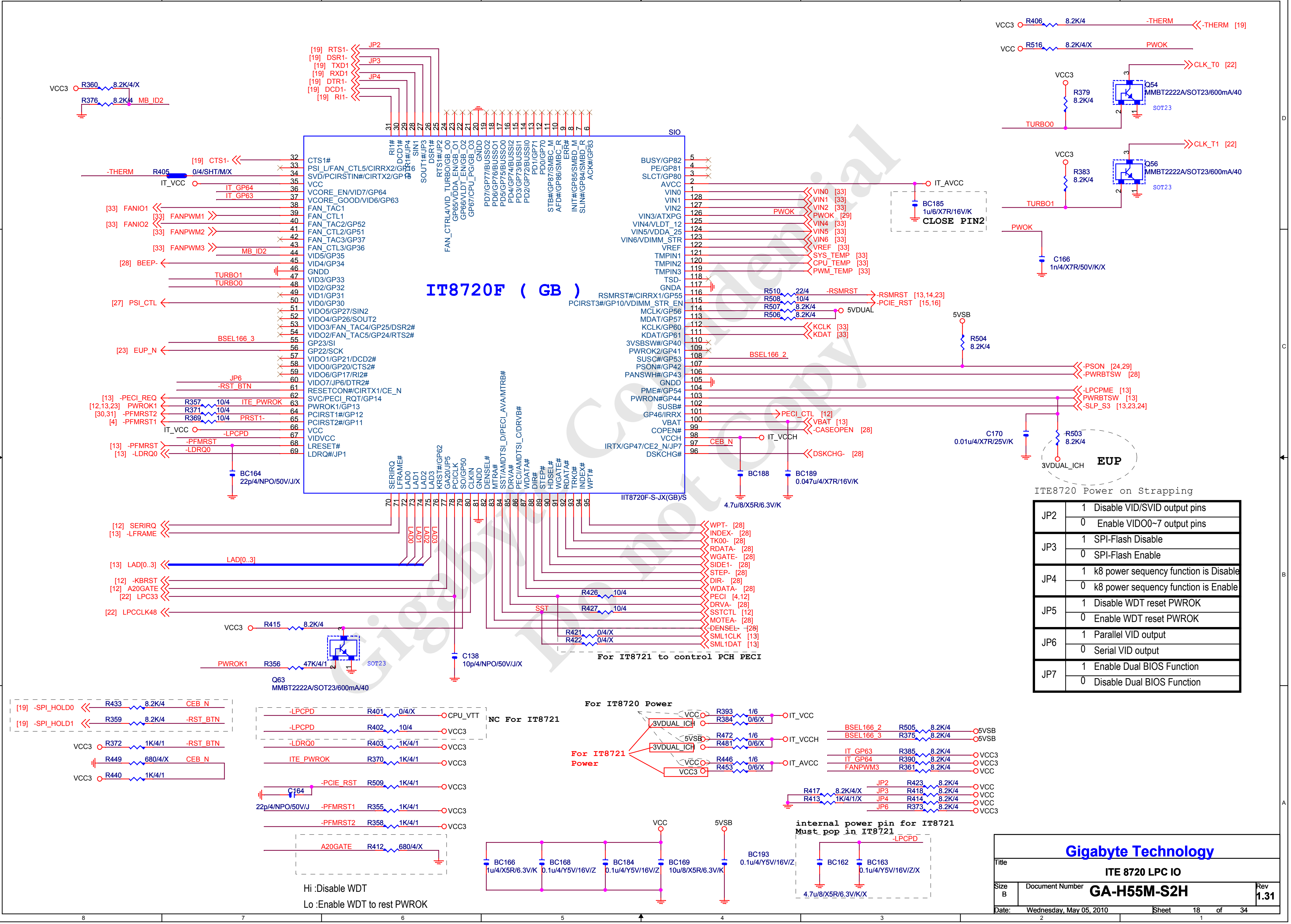
Gigabyte Technology

Title	PCI EXPRESS X 4 PORT	
Size Custom	Document Number GA-H55M-S2H	Rev 1.31
Date: Wednesday, May 05, 2010	Sheet 16 of 34	



Gigabyte Technology

Title	PCI SLOT 1, 2	
Size: Custom	Document Number: GA-H55M-S2H	Rev: 1.31
Date: Wednesday, May 05, 2010	Sheet 17 of 34	



ITE8720 Power on Strapping

JP2	1	Disable VID/SVID output pins
	0	Enable VIDO0~7 output pins
JP3	1	SPI-Flash Disable
	0	SPI-Flash Enable
JP4	1	k8 power sequency function is Disable
	0	k8 power sequency function is Enable
JP5	1	Disable WDT reset PWROK
	0	Enable WDT reset PWROK
JP6	1	Parallel VID output
	0	Serial VID output
JP7	1	Enable Dual BIOS Function
	0	Disable Dual BIOS Function

Gigabyte Technology		
Title	ITE 8720 LPC IO	
Size B	Document Number GA-H55M-S2H	Rev 1.31
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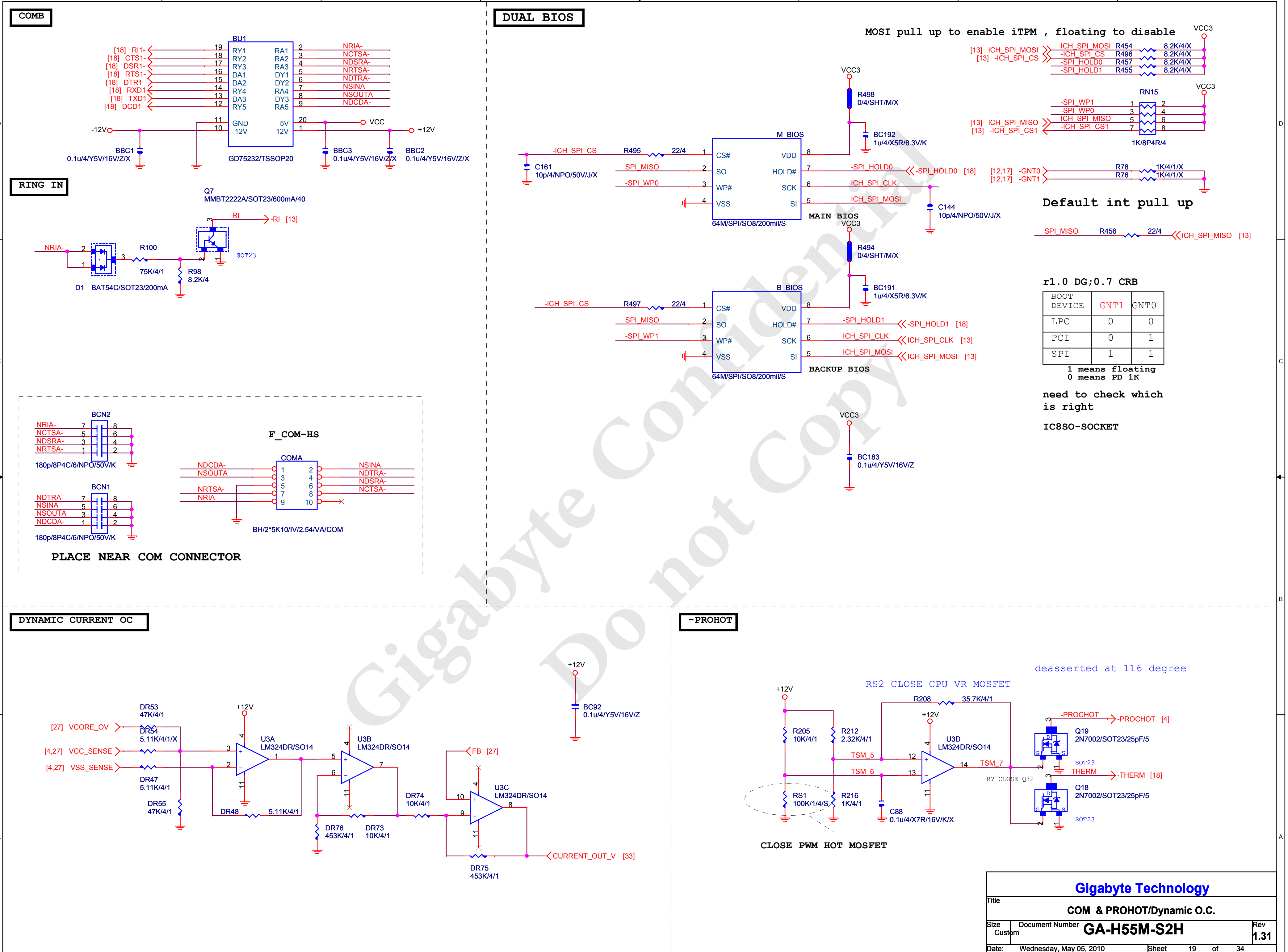

BOOT DEVICE	GNT1	GNT0
LPC	0	0
PCI	0	1
SPI	1	1

Gigabyte Technology

Title: COM & PROHOT/Dynamic O.C.

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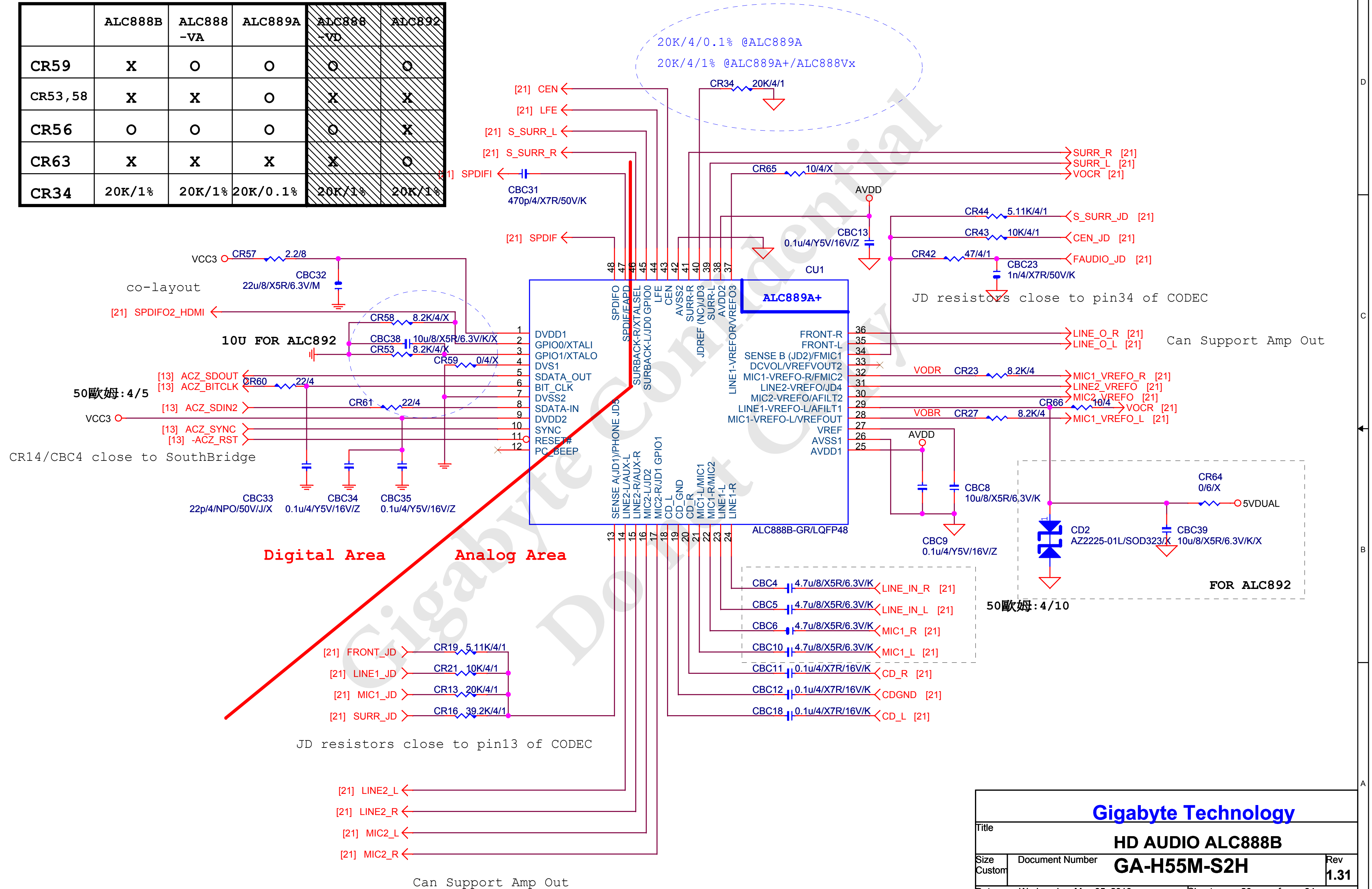
AZALIA CODEC

ALC892/ALC889A/ALC888Vx/ALC888B Colay

	ALC888B	ALC888 -VA	ALC889A	ALC888 -VD	ALC892
CR59	X	O	O	O	O
CR53,58	X	X	O	X	X
CR56	O	O	O	O	X
CR63	X	X	X	X	O
CR34	20K/1%	20K/1%	20K/0.1%	20K/1%	20K/1%



Gigabyte Technology

Title: HD AUDIO ALC888B

Size: Custom | Document Number: GA-H55M-S2H | Rev: 1.31

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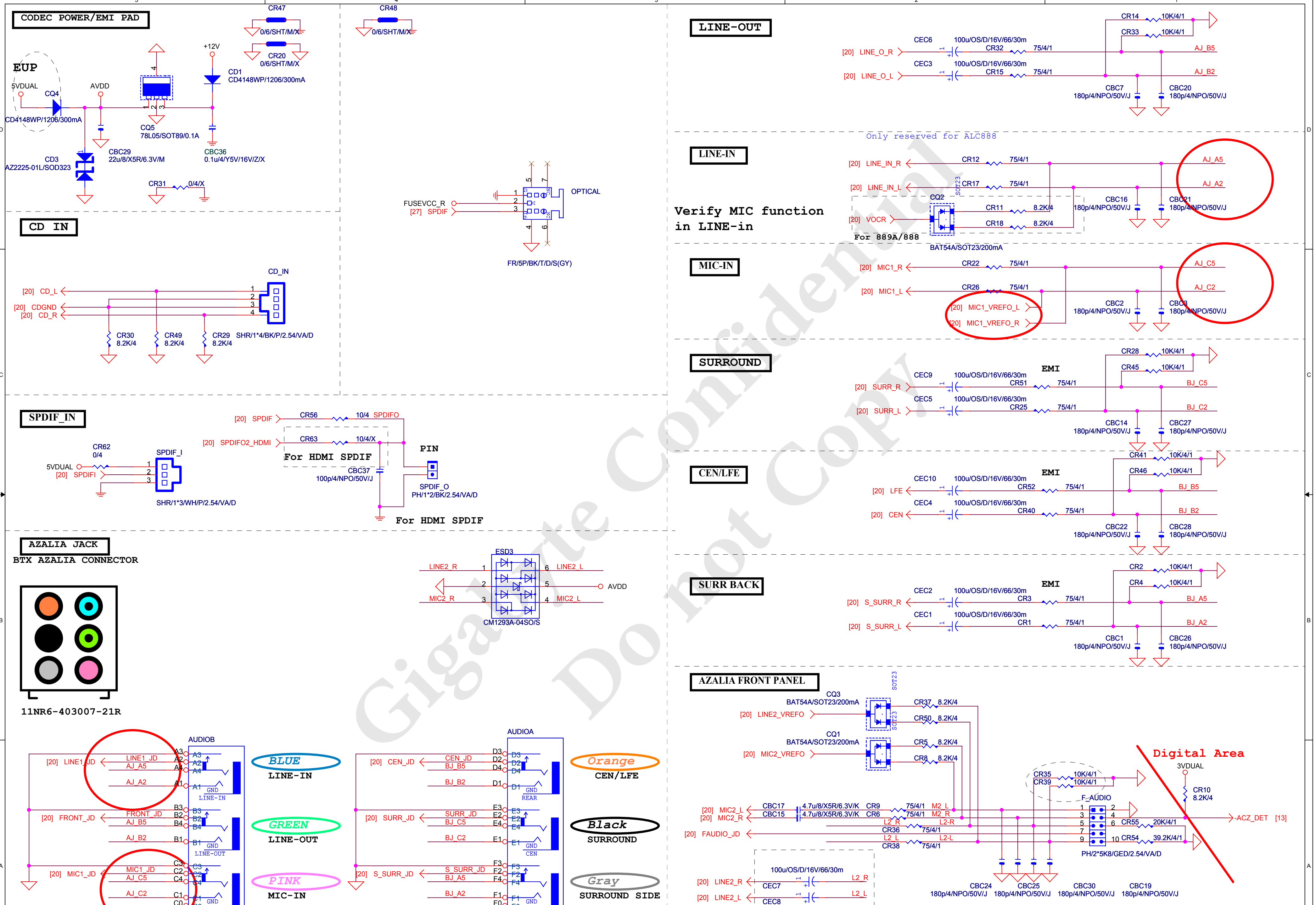

Gigabyte Technology

Title	AUDIO JACK	
Size: Custom	Document Number: GA-H55M-S2H	Rev: 1.31
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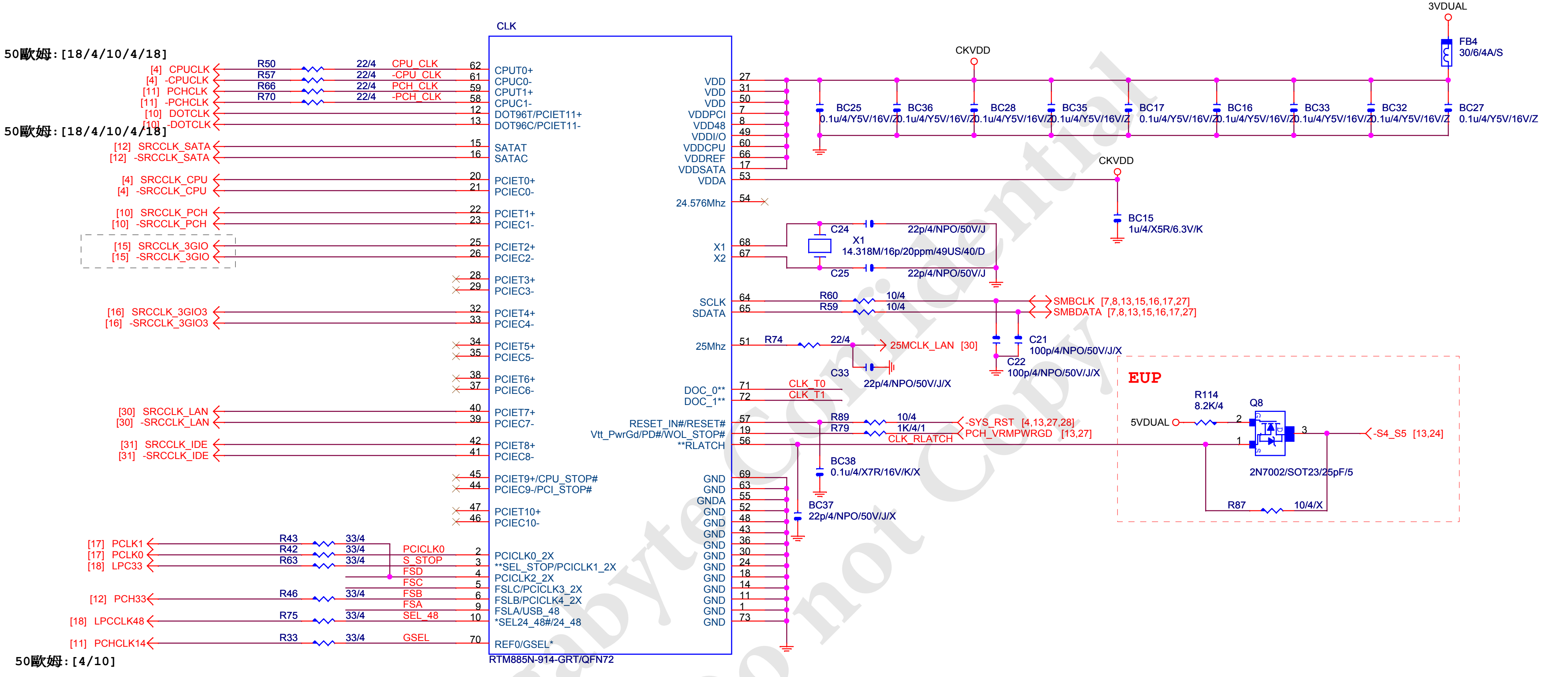
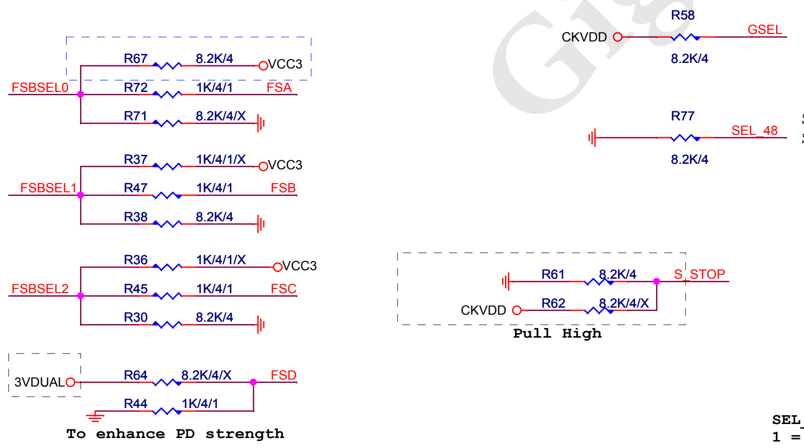
CLK GEN CK505

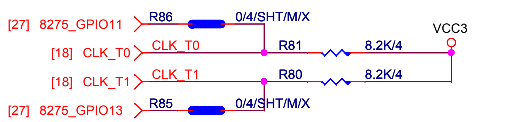


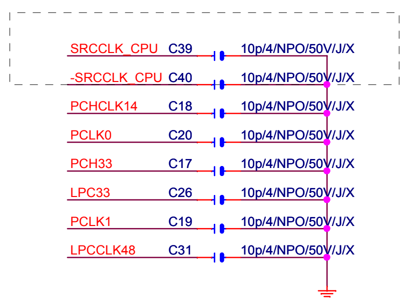


GSEL=1,96Mhz from 12/13
GSEL=0,100Mhz from12/13

SEL_48=1, 24Mhz from pin10
SEL_48=0, 48Mhz from pin10

FSC	FSB	FSA	CPU
0	0	0	266MHz
0	0	1	133MHz
0	1	0	200MHz
0	1	1	166MHz
1	0	0	333MHz
1	1	0	400MHz





SEL_STOP: latched input to select pin functionality
1 = Selects pin 44/45 to select PCI_STOP#/CPU_STOP#
0 = Selects pin 44/45 to be PCIEX outputs ;
3.3V PCICLK output

Gigabyte Technology

Title: CK505 CLK GEN

Size: Custom | Document Number: GA-H55M-S2H | Rev: 1.31

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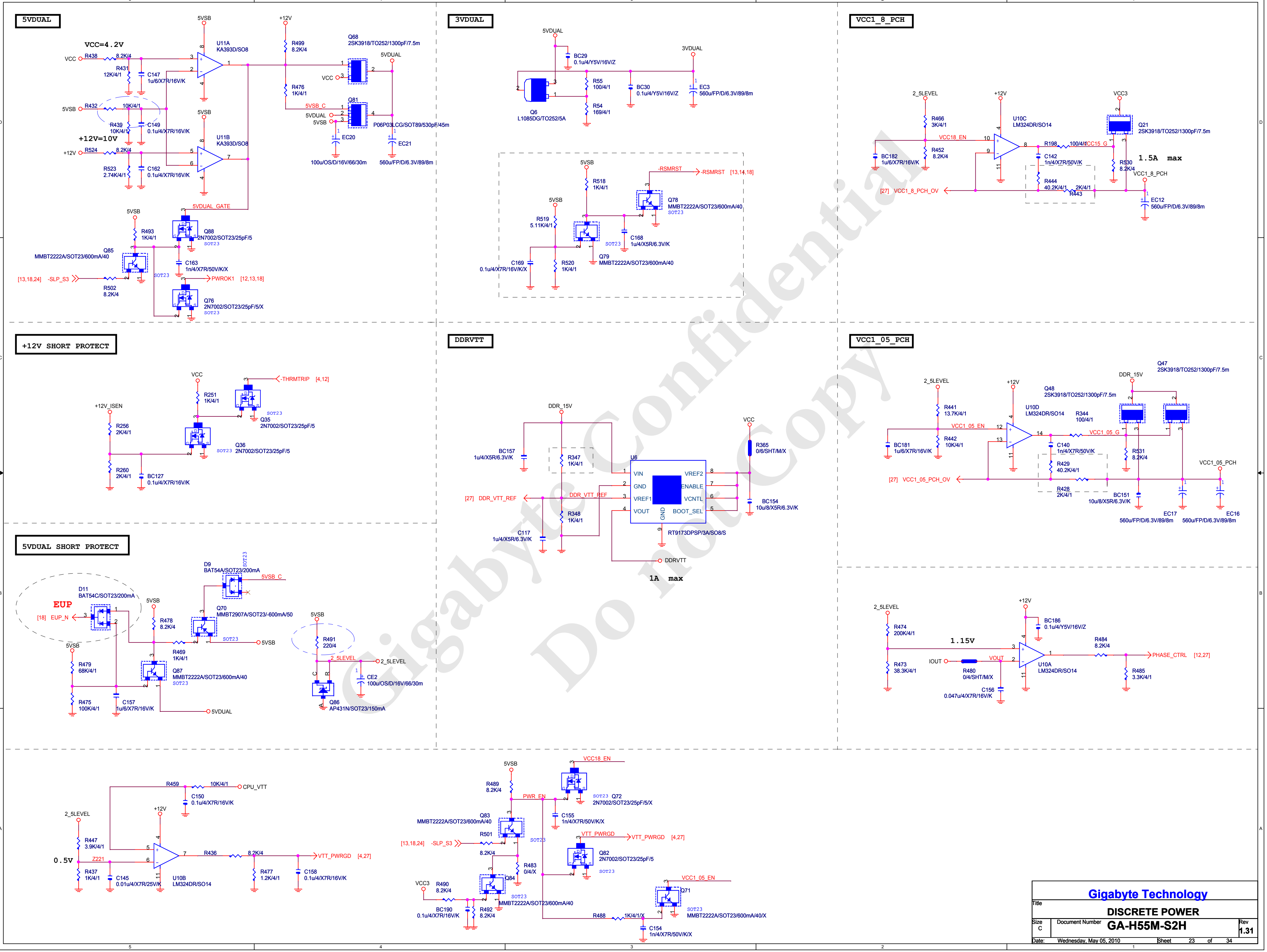
5VDUAL
VCC=4.2V
+12V=10V
3VDUAL
VCC1_8_PCH
1.5A max
+12V SHORT PROTECT
DDRVTT
1A max
VCC1_05_PCH
5VDUAL SHORT PROTECT
EUP
1.15V
0.5V
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DISCRETE POWER
GA-H55M-S2H
Rev 1.31
Date: Wednesday, May 05, 2010
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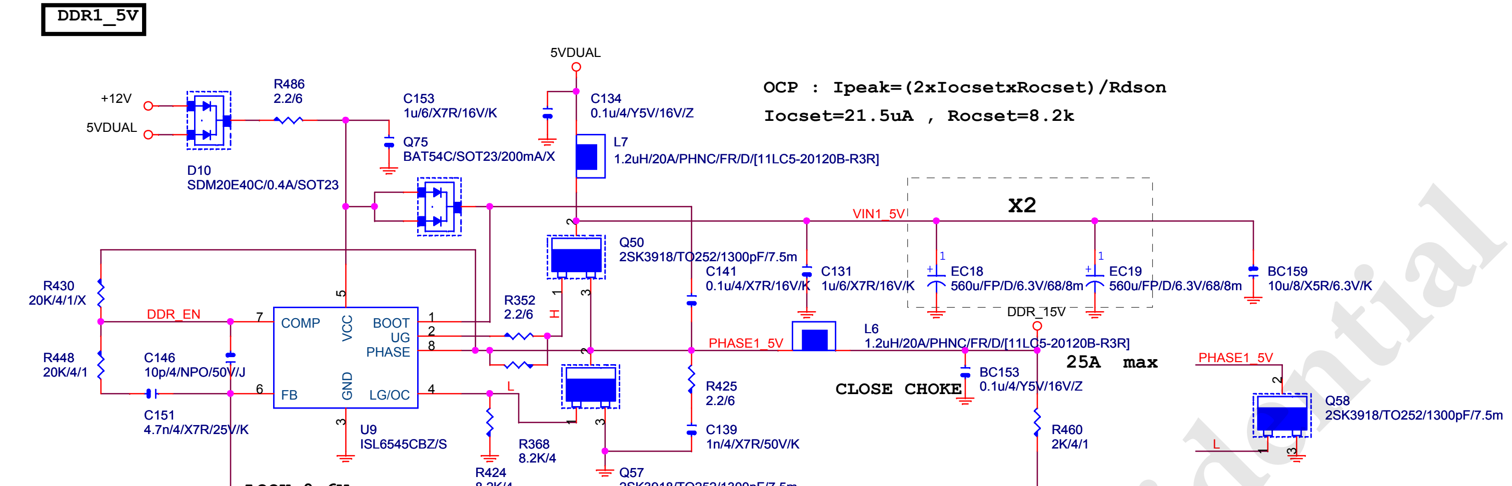

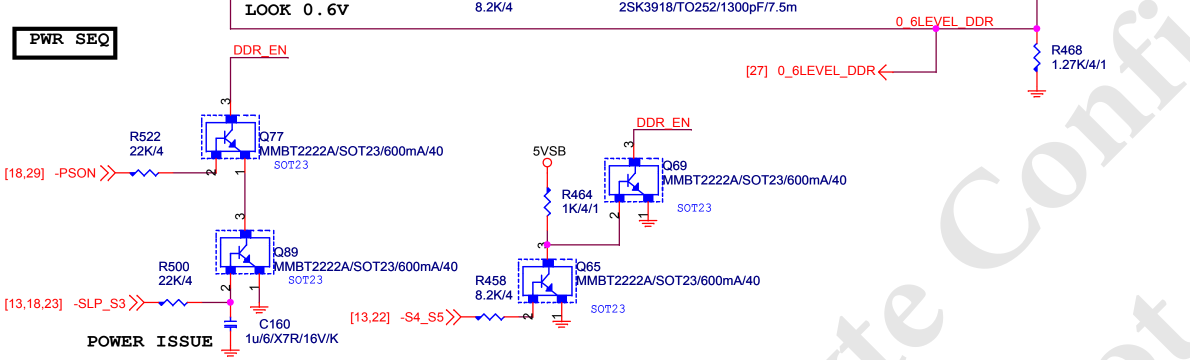

VIN=5V,VOUT=1.5V,IOUT=25A,PHASE=1
IRMS=11.46A

560u/FP/D/6.3V/68/8m RIPPLE CURRENT=5.6A
Coefficient=1.7(85℃),1(105℃)
VIN Ripple current=5.6X1.7=9.52A(85℃)

-->故固態電容須2X9.52=19.04>11.46A

1000u/D/6.3V/8C/30m RIPPLE CURRENT=1.14A
Coefficient=1.7(85℃),1(105℃)
VIN Ripple current=1.14X1.7=1.938A(85℃)

-->故電解電容須6X1.938=11.628>11.46A

VIN=3V,VOUT=1.05V,IOUT=7.5A,PHASE=1
IRMS=3.5A
-->故固態電容須1X9.52=9.52>3.5A

-->故電解電容須2X1.938=3.876>3.5A

Gigabyte Technology	
Title	DDR_15V
Size: Custom	Document Number: GA-H55M-S2H — Rev 1.31
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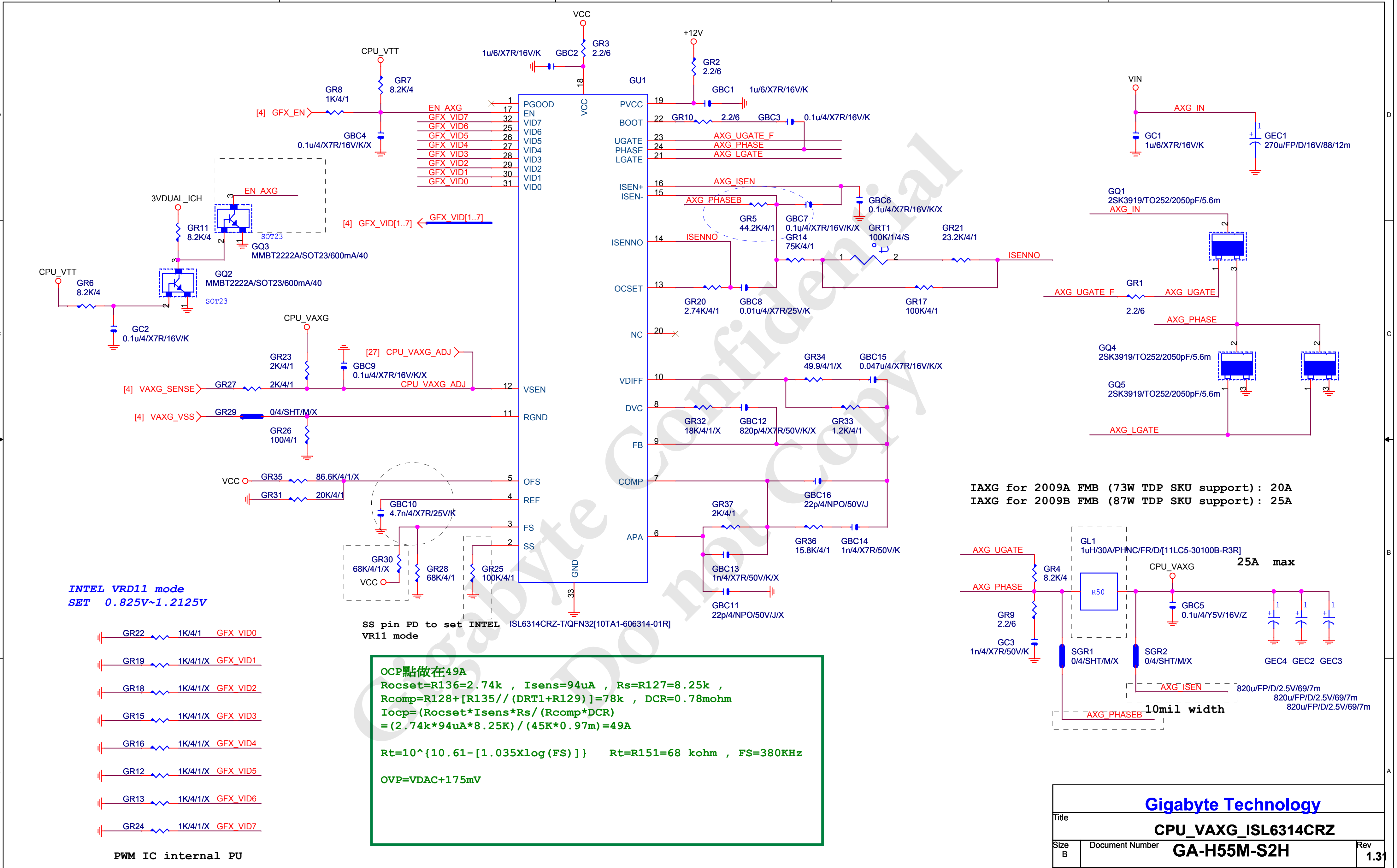

Gigabyte Technology

Title: CPU_VAXG_ISL6314CRZ

Size: B | Document Number: GA-H55M-S2H | Rev: 1.31

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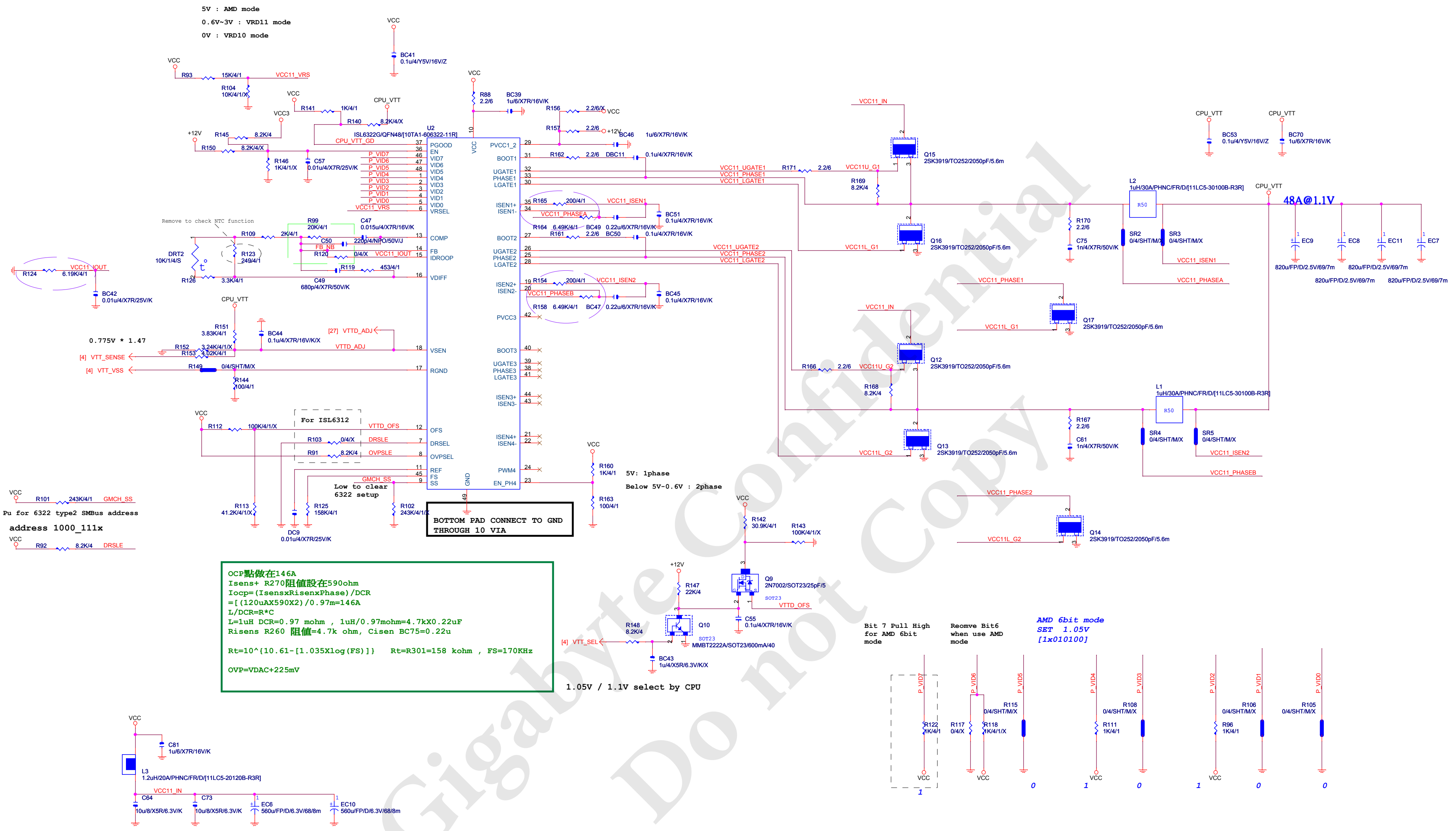

OCP點做在146A
Isens+ R270阻值設在590ohm
Iocp=(IsensxRisenxPhase)/DCR
=[(120uAX590X2)/0.97m=146A
L/DCR=R*C
L=1uH DCR=0.97 mohm , 1uH/0.97mohm=4.7kX0.22uF
Risens R260 阻值=4.7k ohm, Cisen BC75=0.22u

Rt=10^(10.61-[1.035Xlog(FS)])   Rt=R301=158 kohm , FS=170KHz

OVP=VDAC+225mV

VIN=5V,VOUT=1.1V,IOUT=48A,PHASE=2
IRMS=11.91A

560u/FP/D/6.3V/68/8m RIPPLE CURRENT=5.6A
Coefficient=1.7(85℃),1(105℃)
VIN Ripple current=5.6X1.7=9.52A(85℃)

-->故固態電容須2X9.52=19.04>11.91A

1000u/D/6.3V/8C/30m RIPPLE CURRENT=1.14A
Coefficient=1.7(85℃),1(105℃)
VIN Ripple current=1.14X1.7=1.938A(85℃)

-->故電解電容須7X1.938=13.566>11.91A

GIGABYTE™

Title	CPU_VTT PWM_ISL6322CRZ
Size Custom, Document Number	GA-H55M-S2H
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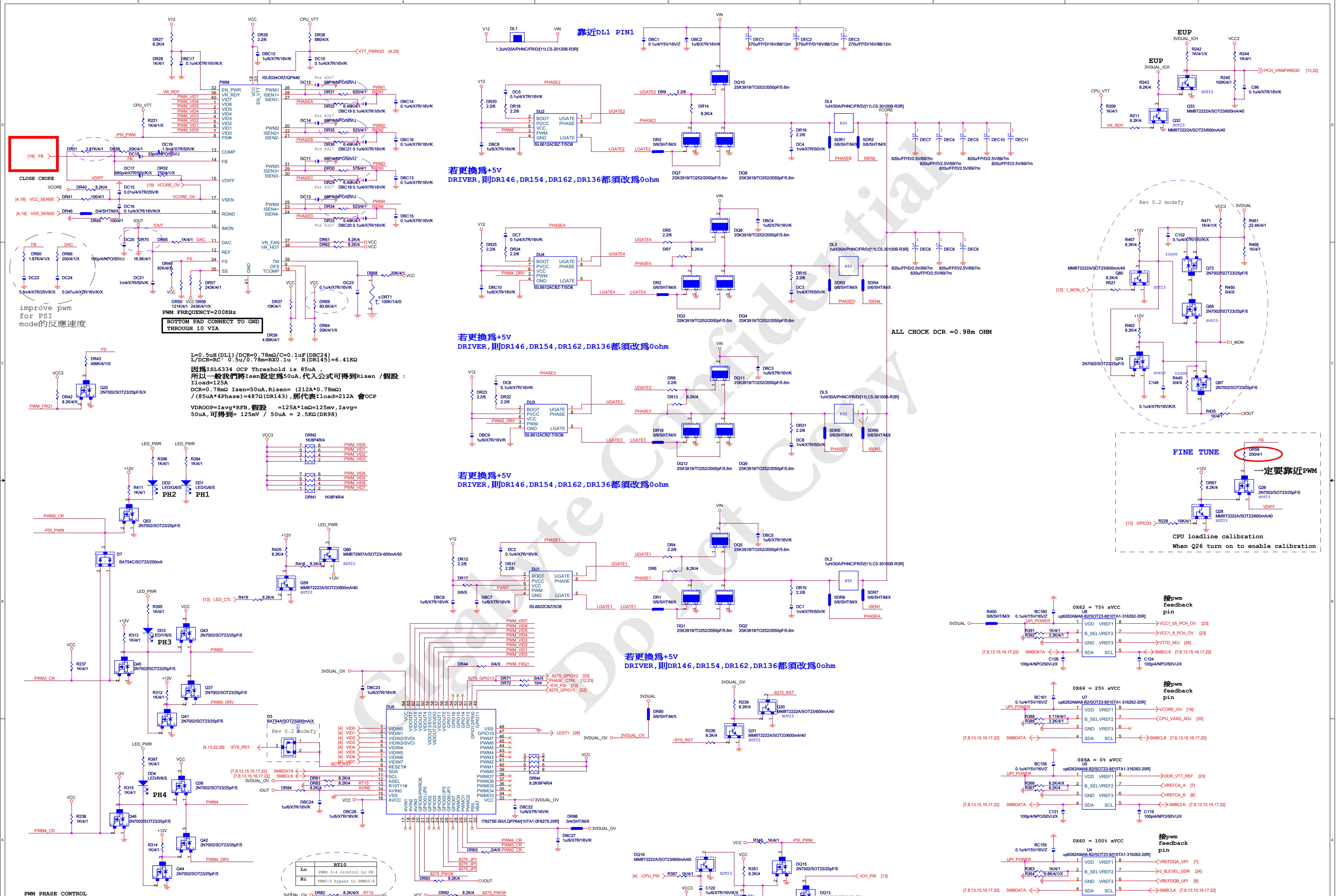

	ITE8268_GPIO2	ITE8268_GPIO1	ITE8268_GPIO0
1 PHASE	L	L	L
2 PHASE	X	L	L
3 PHASE	X	X	L
4 PHASE	X	X	X

up6262	0X6A	0X60	0X62	0X66
VREF1	DDRVTT	VREF_DDRA_DQ	VCC1_05_PCH	VCORE
VREF2	VREF_DDRA_CA	DDR15V	VCC1_8_PCH	3VDUAL
VREF3	VREF_DDRA_CA	VREF_DDRB_DQ	CPU_VTT	CPU_VAXG

Gigabyte Technology

Title: VRD 11 -ISL6334

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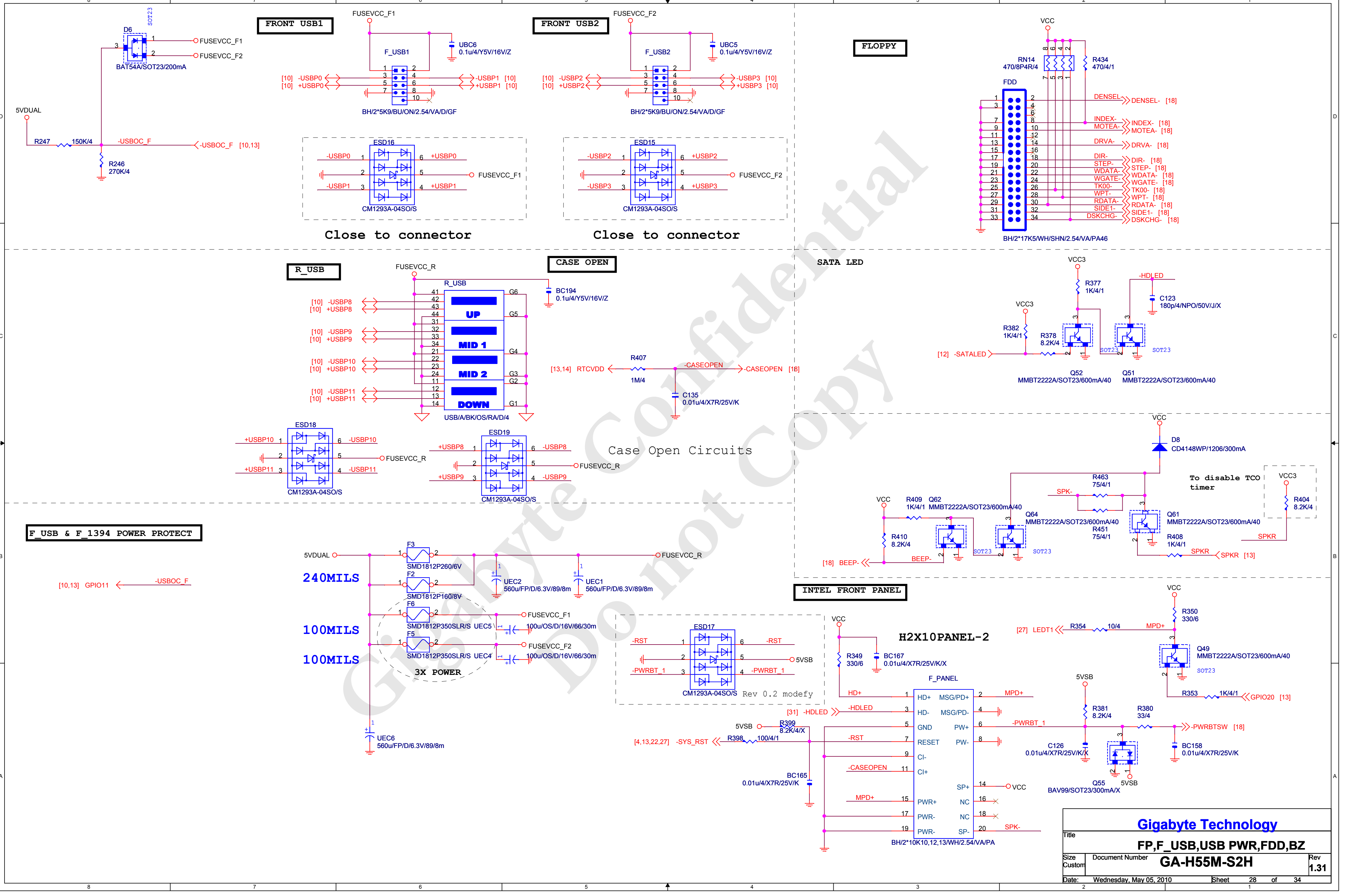

FRONT USB1
FRONT USB2
FLOPPY
Close to connector
Close to connector
R_USB
CASE OPEN
SATA LED
Case Open Circuits
F_USB & F_1394 POWER PROTECT
240MILS
100MILS
100MILS
3X POWER
INTEL FRONT PANEL
H2X10PANEL-2
To disable TCO timer
Rev 0.2 modefy
BH/2*5K9/BU/ON/2.54/VA/D/GF
BH/2*17K5/WH/SHN/2.54/VA/PA46
USB/A/BK/OS/RA/D/4
BH/2*10K10,12,13/WH/2.54/VA/PA
CM1293A-04SO/S
Gigabyte Technology
Title
FP,F_USB,USB PWR,FDD,BZ
Size
Custom
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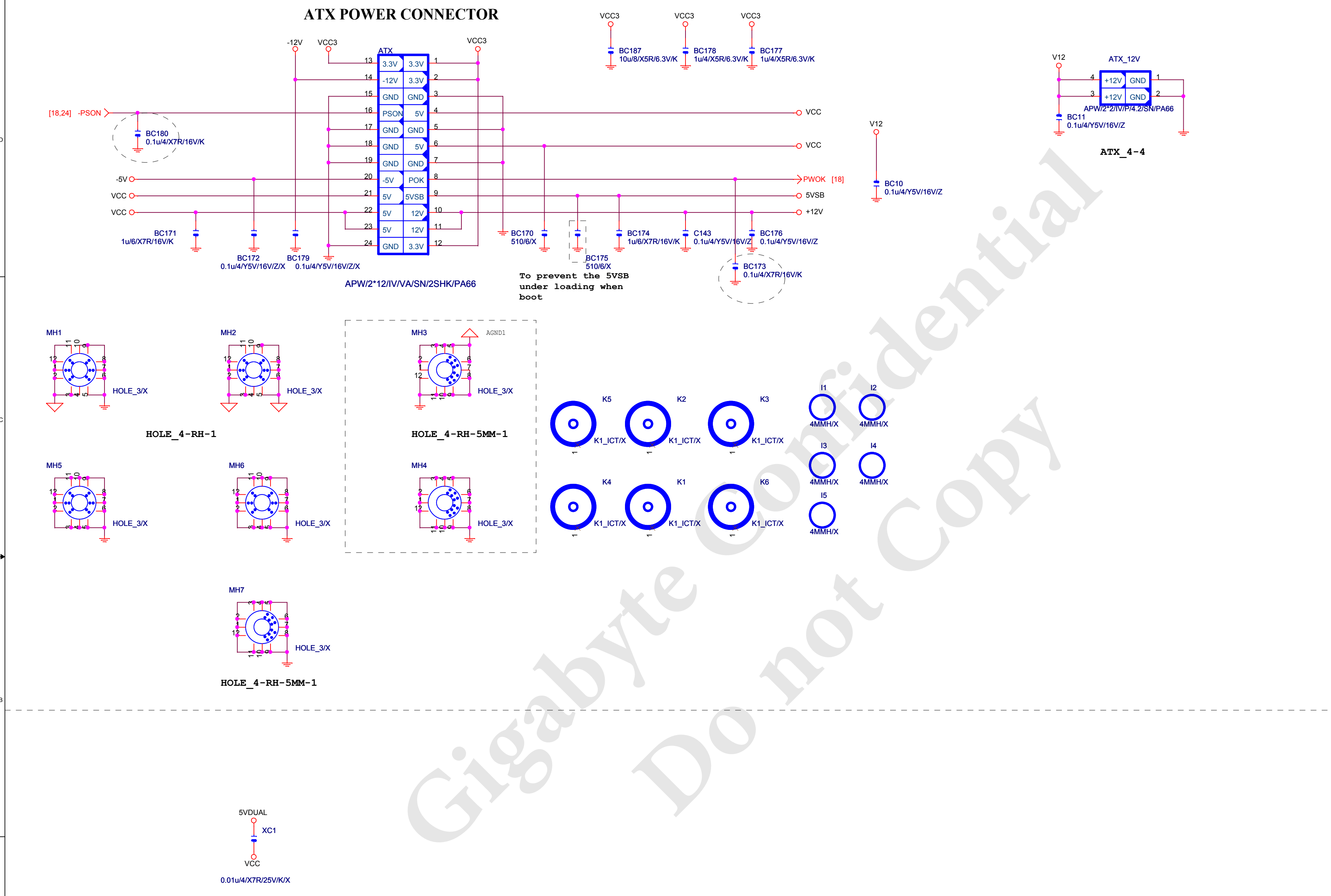
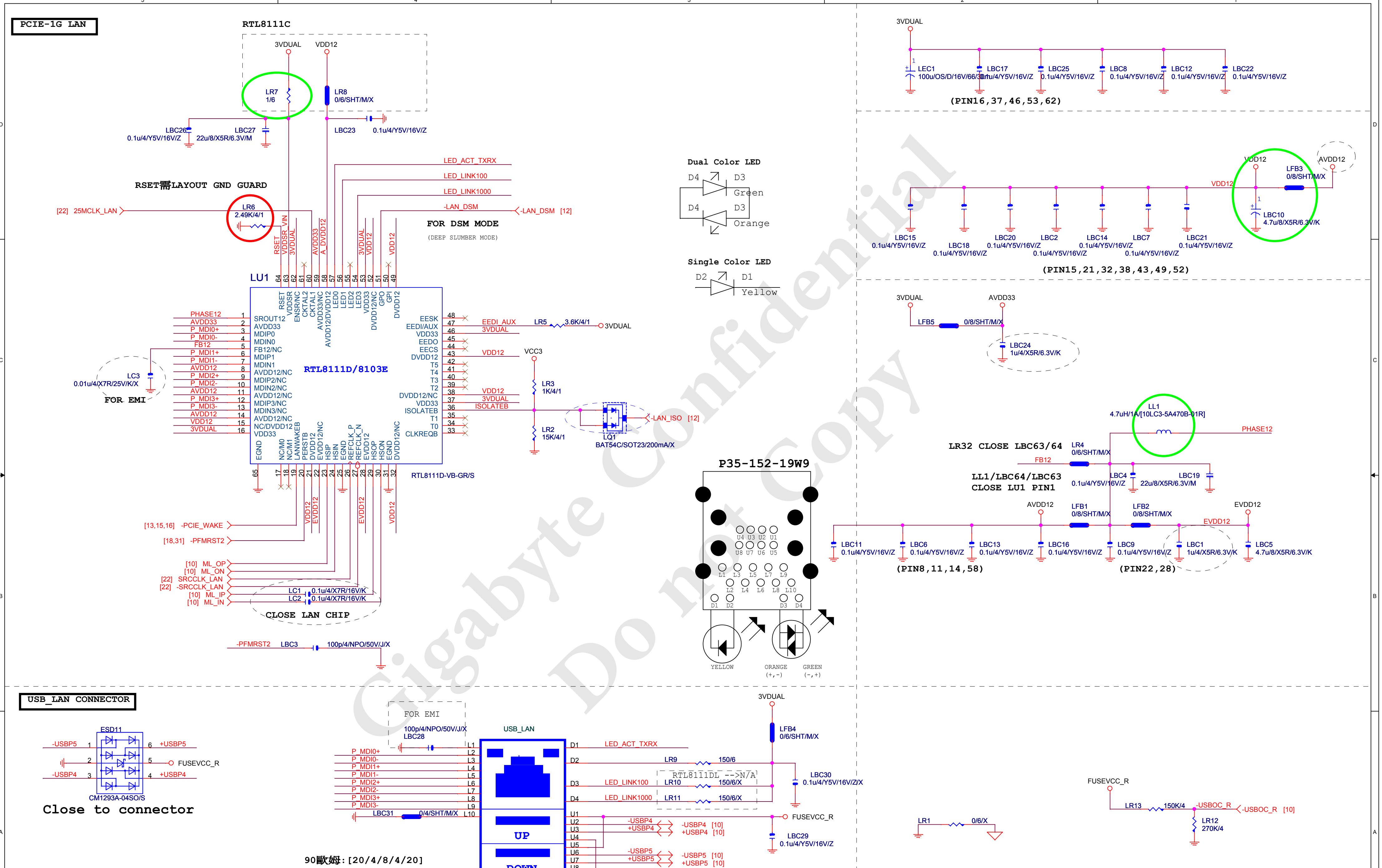


Gigabyte Technology		
Title: ATX POWER CONNECTOR		
Size: Custom	Document Number: GA-H55M-S2H	Rev: 1.31
Date: Wednesday, May 05, 2010	Sheet 29 of 34	



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Title	REALTEK RTL8111C
Size Custom / Document Number	GA-H55M-S2H
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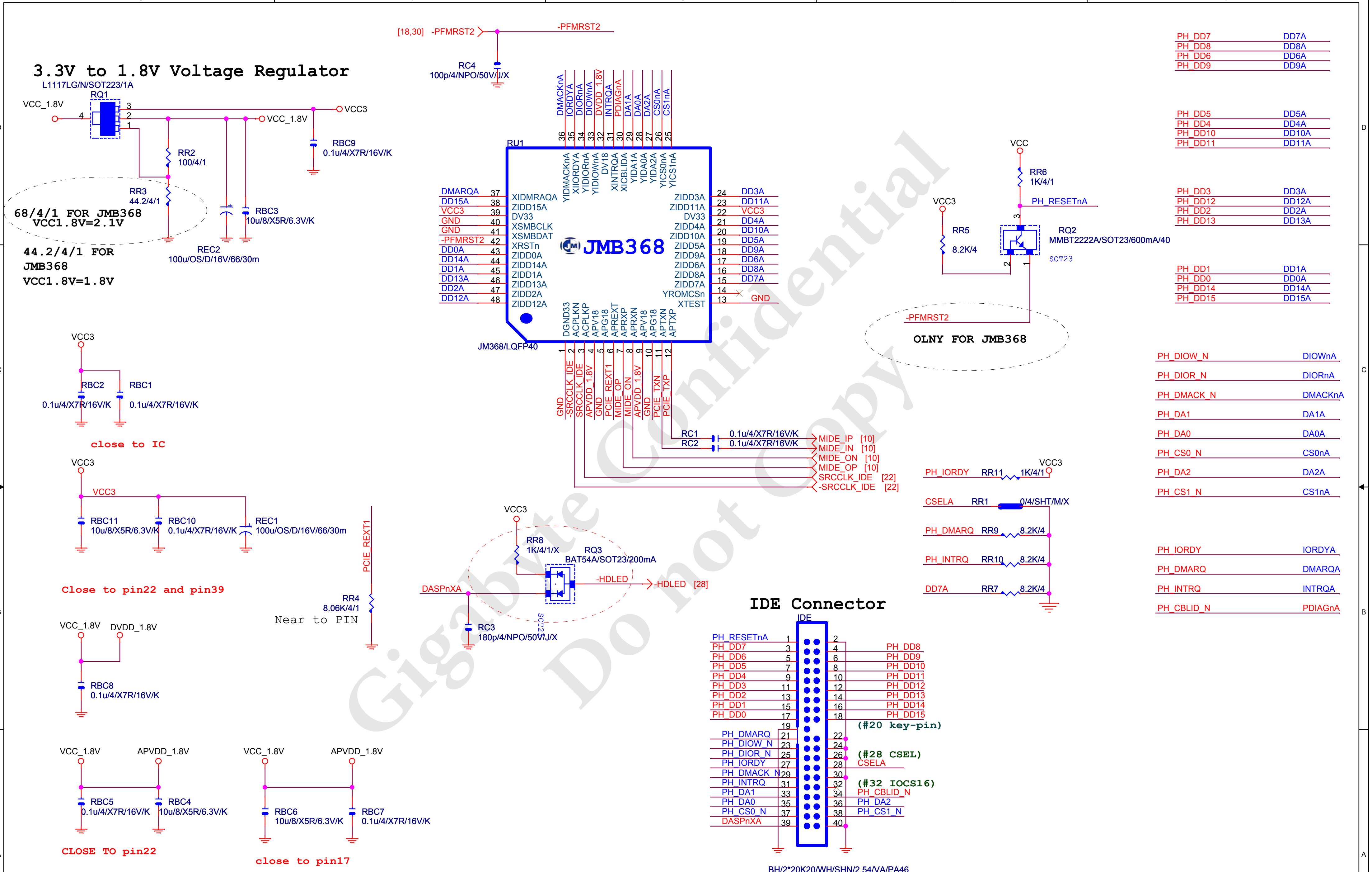
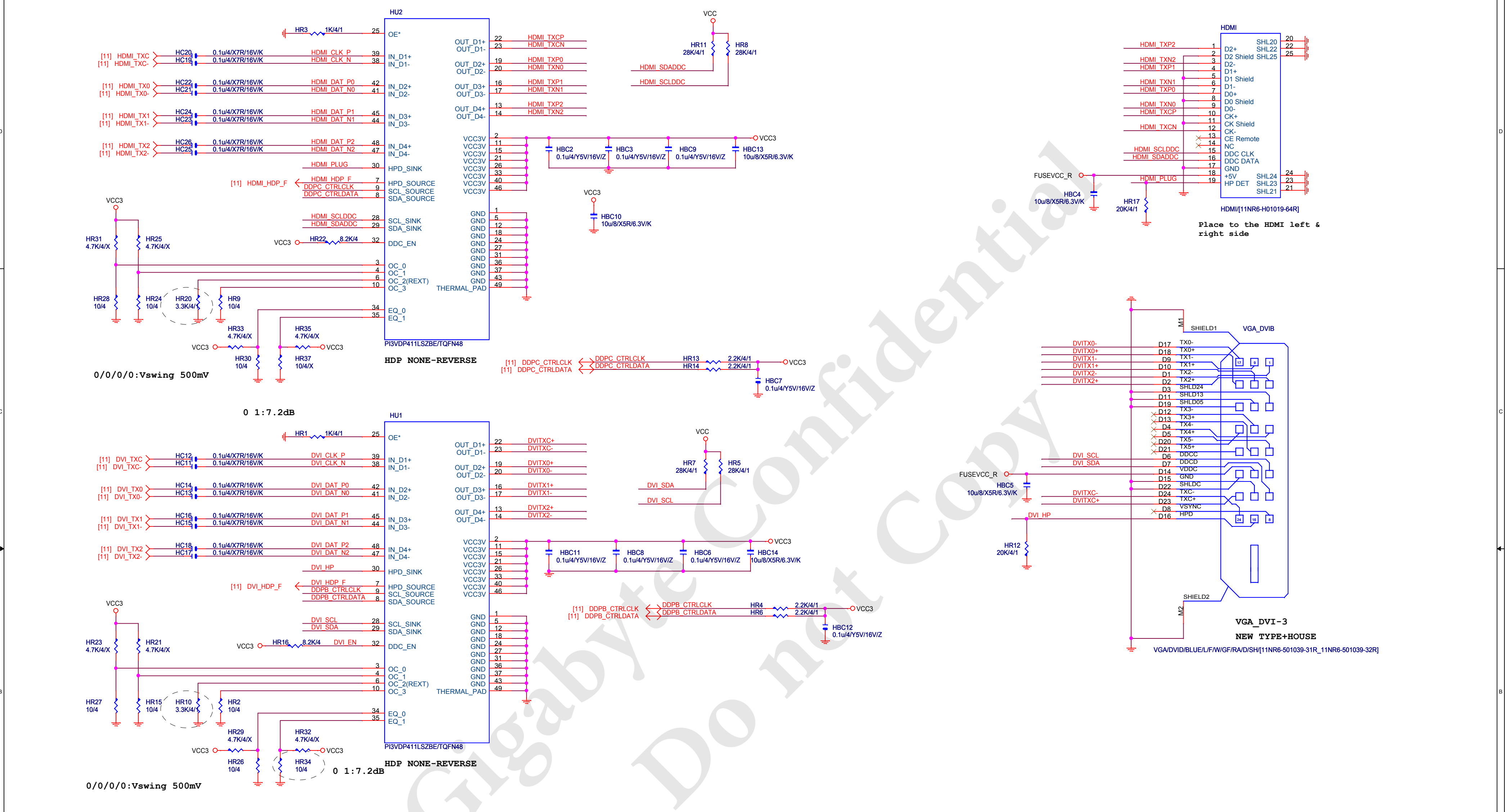
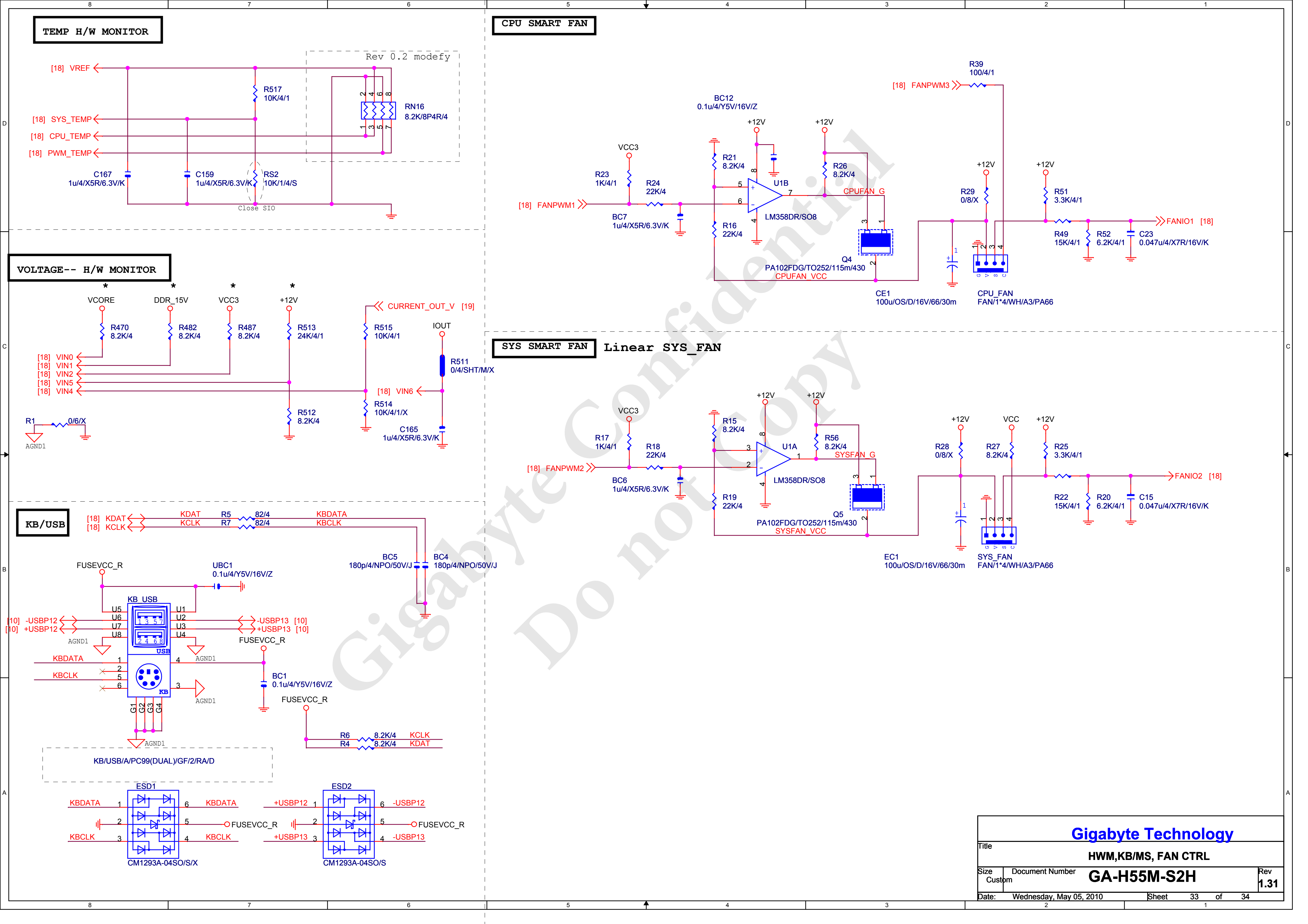


Gigabyte Technology			
Title	JMR368		
Size: Custom	Document Number: GA-H55M-S2H		Rev: 1.31
Date: Wednesday, May 05, 2010	Sheet 31 of 34		



Gigabyte Technology			
Title	HDMI / DVI/DP		
Size C	Document Number GA-H55M-S2H		Rev 1.31
Date: Wednesday, May 05, 2010	Sheet 32	of 34	


TEMP H/W MONITOR
Rev 0.2 modefy
[18] VREF
[18] SYS_TEMP
[18] CPU_TEMP
[18] PWM_TEMP
R517 10K/4/1
RN16 8.2K/8P4R/4
C167 1u/4/X5R/6.3V/K
C159 1u/4/X5R/6.3V/K
RS2 10K/1/4/S
Close SIO
VOLTAGE-- H/W MONITOR
VCORE
DDR_15V
VCC3
+12V
R470 8.2K/4
R482 8.2K/4
R487 8.2K/4
R513 24K/4/1
R515 10K/4/1
CURRENT_OUT_V [19]
IOUT
R511 0/4/SHT/M/X
[18] VIN0
[18] VIN1
[18] VIN2
[18] VIN5
[18] VIN4
[18] VIN6
R512 8.2K/4
R514 10K/4/1/X
C165 1u/4/X5R/6.3V/K
R1 0/6/X
AGND1
KB/USB
[18] KDAT
[18] KCLK
R5 82/4
R7 82/4
KDAT
KCLK
KBDATA
KBCLK
BC5 180p/4/NPO/50V/J
BC4 180p/4/NPO/50V/J
FUSEVCC_R
UBC1 0.1u/4/Y5V/16V/Z
KB_USB
[10] -USBP12
[10] +USBP12
-USBP13 [10]
+USBP13 [10]
BC1 0.1u/4/Y5V/16V/Z
R6 8.2K/4
R4 8.2K/4
KB/USB/A/PC99(DUAL)/GF/2/RA/D
ESD1
CM1293A-04SO/S/X
ESD2
CM1293A-04SO/S
CPU SMART FAN
R39 100/4/1
[18] FANPWM3
BC12 0.1u/4/Y5V/16V/Z
VCC3
R23 1K/4/1
R24 22K/4
R21 8.2K/4
R26 8.2K/4
U1B
LM358DR/SO8
CPUFAN_G
[18] FANPWM1
BC7 1u/4/X5R/6.3V/K
R16 22K/4
Q4 PA102FDG/TO252/115m/430
CPUFAN_VCC
CE1 100u/OS/D/16V/66/30m
R29 0/8/X
R51 3.3K/4/1
R49 15K/4/1
R52 6.2K/4/1
C23 0.047u/4/X7R/16V/K
FANIO1 [18]
CPU_FAN FAN/1*4/WH/A3/PA66
SYS SMART FAN
Linear SYS_FAN
R15 8.2K/4
R17 1K/4/1
R18 22K/4
U1A
LM358DR/SO8
R56 8.2K/4
SYSFAN_G
[18] FANPWM2
BC6 1u/4/X5R/6.3V/K
R19 22K/4
Q5 PA102FDG/TO252/115m/430
SYSFAN_VCC
EC1 100u/OS/D/16V/66/30m
R28 0/8/X
R27 8.2K/4
VCC
R25 3.3K/4/1
R22 15K/4/1
R20 6.2K/4/1
C15 0.047u/4/X7R/16V/K
FANIO2 [18]
SYS_FAN FAN/1*4/WH/A3/PA66
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Gigabyte Technology
Title
HWM,KB/MS, FAN CTRL
Size Custom
Document Number
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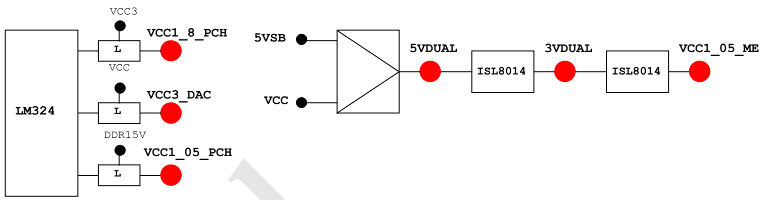
PCH GPIO LIST TABLE

PIN NAME	PWR	AFTER PLTRST	Default	USAGE	NOTE
GP0	MAIN	H-Z	GPI	-PECI_REQ	N/A
GP1/TACH1	MAIN		GPI	ICH_FAN_TACH1	N/A
GP2/PIRQE#	MAIN		GPI	-PIRQE	P/U 8.2K VCC3
GP3/PIRQF#	MAIN		GPI	-PIRQF	P/U 8.2K VCC3
GP4/PIRQG#	MAIN		GPI	-PIRQG	P/U 8.2K VCC3
GP5/PIRQH#	MAIN		GPI	-PIRQH	P/U 8.2K VCC3
GP6/TACH2	MAIN		GPI	ICH_FAN_TACH2	N/A
GP7/TACH3	MAIN		GPI	ICH_FAN_TACH3	N/A
GP8	STBY	H	GPO	GPIO8	P/U 8.2K 3VDUAL
GP9/OC5#	STBY		NATIVE	OC5#	N/A
GP10/OC6#	STBY		NATIVE	OC6#	N/A
GP11/SMBALERT#	STBY		NATIVE	-SMBALERT	P/U 8.2K 3VDUAL
GP12	STBY	L	GPI	LAN_PHY_PWR_CTRL	P/U 8.2K 3VDUAL
GP13	STBY	L	GPI	GPIO13	P/U 8.2K 3VDUAL
GP14/OC7#	STBY		NATIVE	OC7#	N/A
GP15	STBY	L	GPO	GPIO15	N/A
GP16	MAIN		GPI	-SKTOCC	P/U 8.2K VCC3
GP17/TACH0	MAIN		GPI	ICH_FAN_TACH0	N/A
GP18	MAIN		NATIVE	MB_ID0	P/D 8.2K GND
GP19	MAIN		GPI	-LAN1_ISO	P/U 8.2K VCC3
GP20	MAIN		NATIVE	LED_CTL	P/U 1K VCC3
GP21	MAIN		GPI	VCC18_PCH_OV2	P/U 8.2K VCC3
GP22	MAIN	H-Z	GPI	VCORE_OV3	P/U 8.2K VCC3
GP23	MAIN		NATIVE	-LDRQ1	P/U 8.2K VCC3
GP24	STBY	L	GPO	TLS	P/U 8.2K 3VDUAL
GP25	STBY		NATIVE	-CPU_STOP	P/U 8.2K 3VDUAL
GP26	STBY		NATIVE	-ACZ_DET	P/U 8.2K 3VDUAL
GP27	STBY	H	GPO	GPIO27	P/U 8.2K 3VDUAL
GP28	STBY	H	GPO	GPIO28	P/U 8.2K 3VDUAL
GP29	STBY	L	GPI	GPIO29	N/A
GP30	STBY	H-Z	GPI	S_PWR_ACK	P/U 100K 3VDUAL
GP31	STBY	H-Z	GPI	N/A(Reverse)	P/U 8.2K VCC3
GP32	MAIN	H	GPO	MB_ID1	P/D 8.2K GND
GP33	MAIN	H	GPO	LOAD-LINE	P/U 1K VCC3
GP34	MAIN	H-Z	GPI	-PCI_STOP	P/U 8.2K VCC3
GP35	MAIN	L	GPO	GPIO35	P/U 8.2K VCC3
GP36	MAIN		GPI	-LAN1_DSM	P/U 8.2K VCC3
GP37	MAIN		GPI	N/A	P/U 8.2K VCC3
GP38	MAIN	H-Z	GPI	VCORE_OV2	P/U 8.2K VCC3
GP39	MAIN	H-Z	GPI	-LAN_DSM	P/U 8.2K VCC3
GP40	STBY		NATIVE	OC1#	N/A
GP41	STBY		NATIVE	OC2#	N/A
GP42	STBY		NATIVE	OC3#	N/A
GP43	STBY		NATIVE	OC4#	N/A
GP44	STBY	L	NATIVE	N/A	P/U 8.2K 3VDUAL
GP45	STBY		NATIVE	-LPCPME	P/U 8.2K 3VDUAL
GP46	STBY	L	NATIVE	PWR_LED	P/U 8.2K 3VDUAL
GP47	STBY		NATIVE	PSI LED	P/U 8.2K 3VDUAL
GP48	MAIN	H-Z	IN	EN_PWM	P/U 8.2K VCC3
GP49	MAIN	H-Z	IN	VCC18_OV1	P/U 8.2K VCC3
GP50	MAIN		NATIVE	-REQ1	P/U 2.2K VCC
GP51	MAIN	H	NATIVE	-GNT1	N/A
GP52	MAIN		NATIVE	-REQ2	P/U 2.2K VCC
GP53	MAIN	H	NATIVE	-GNT2	N/A
GP54	MAIN		NATIVE	-REQ3	P/U 2.2K VCC
GP55	MAIN	H	NATIVE	-GNT3	N/A
GP56	STBY		NATIVE	N/A(Reverse)	P/U 8.2K 3VDUAL
GP57	STBY	H-Z	IN	VCORE_OV1	P/U 8.2K 3VDUAL
GP58	STBY	H-Z	NATIVE	F_USB_OC	P/U 8.2K 3VDUAL
GP59	STBY		NATIVE	USB_OC0#	N/A
GP60	STBY	H-Z	NATIVE	N/A(Reverse)	P/U 8.2K 3VDUAL
GP61	STBY	L	NATIVE	-SUSTAT	N/A
GP62	STBY	L	NATIVE	SUSCLK	N/A
GP63	STBY	L	NATIVE	GPIO63	N/A
GP64	MAIN	L	NATIVE	CLKOUTFLEX0	N/A
GP65	MAIN	L	NATIVE	CLKOUTFLEX1	N/A
GP66	MAIN	L	NATIVE	CLKOUTFLEX2	N/A
GP67	MAIN	L	NATIVE	CLKOUTFLEX3	N/A
GP72	STBY	H-Z	NATIVE	VCORE_OV4	P/U 8.2K 3VDUAL
GP73	STBY		NATIVE	1_05V_OV1	P/U 8.2K 3VDUAL
GP74	STBY	H-Z	NATIVE	1_05V_OV2	P/U 8.2K 3VDUAL
GP75	STBY	H-Z	NATIVE	N/A(Reverse)	P/U 8.2K 3VDUAL

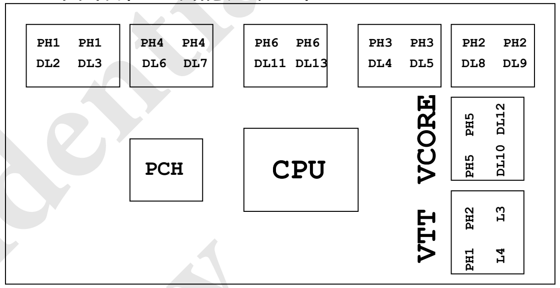
Super I/O ITE8720 GPIO Table

PIN NAME	USAGE	NOTE
SVC/PECI_RQT/GP14	-PECI_REQ	
PWROK1/GP13	PWROK1/ITE_PWROK	
KRST#/GP62	-KBRST	
SO/GP50	-ICH_SPI_CS	
IRTX/GP47/CE2_N/JP7	CEB_N	
GP46/IRRX	-LAN2_DSM	
PSION#/GP42	-PSON	
PWROK2#/GP41	PECI_CTL	
PCIRST3#/GP10/VDIMM_STR_EN	-PCIE_RST	
RSMRST#CIRRX1/GP55	-RSMRST	
PME#/GP54	-LPCPME	
PD5/GP75/BUSSO0	N/A	

PIN NAME	USAGE	NOTE
FAN_TAC2/GP52	FANIO2	
FAN_TAC3/GP37	FANIO3	
VIDO3/FAN_TAC4/GP25/DSR2#	FANIO4	
FAN_CTL2/GP51	FANPWM2	
FAN_CTL3/GP36	FANPWM3	
VID4/GP34	BEEP-	
VID3/GP33	TURBO1	
VID2/GP32	TURBO0	
VCORE_GOOD/VID6/GP63	CPUT_LED1_C	
VID5/GP35	CPUT_LED2_C	
VID1/GP31	CPUT_LED3_C	
VID0/GP30	-LAN1_DSM	NBT_LED1_C
SLCT/GP80	CPU_LED1_C	
PE/GP81	CPU_LED2_C	
BUSY/GP82	CPU_LED3_C	
PD3/GP73/BUSSI1	SB_LED1_C	
PD4/GP74/BUSSI2	SB_LED2_C	
VCORE_EN/VID7/GP64	IT_GP64	SB_LED3_C
PD0/GP70	NB_LED1_C	
PD1/GP71	NB_LED2_C	
PD2/GP72/BUSSI0	NB_LED3_C	
GP22/SCK	LOW_PWR_1	
VIDO5/GP27/SIN2	LOW_PWR_2	
PCIRST2#/GP11	-PFMRST1	
PCIRST1#/GP12	-PFMRST2	
3VSBSW#/GP40	CSI_F0	BSEL166_1
SUSC#/GP53	CSI_F1	BSEL166_2
GP23/SI	BSEL166_3/CSISBSL	
VIDO0/GP20/CTS2#	CPUT_LED1_C	BSEL166_4
GP65/VDDA_EN/GB_01	MB_ID2	
PD6/GP76/BUSSO1	MB_ID3	
PD7/GP77/BUSSO2	MB_ID4	
AFD#/GP86/SMBC_R	空 PIN	FST_2X8
INIT#/GP85/SMBD_M	SEC_2x8	GTLREF_AD2
ACK#/GP83	DDR_LED1_C	
VIDO1/GP21/DCD2#	DDR_LED2_C	
STB#/GP87/SMBC_M	DDR_LED3_C	
PWRON#GP44	VCORE_OV1	
PANSWH#/GP43	PWRBTSW	
KDAT/GP61	-PWRBTSW	
KCLK/GP60	KDAT	
MDAT/GP57	KCLK	
MACL/GP56	MDAT	
GP66/VLDT_EN/GB_02	NBT_LED1_C	MCLK
SVD/PCIRSTIN#/CIRTX/GP15	PWM2_CR	
KDAT/GP61	PWM2_CR	
GP67/CPU_PG/GB_03	EN_LOADLINE	IT_GP67/-EN_PWM2
SLIN#/GP84/SMBD_R	-EN_PWM2	
PSI_L/FAN_CLT5/CIRRX2/GP16	-THERM	
VIDO4/GP26/SOUT2	DDR18V_PH2_EN	
VIDO2/FAN_TAC5/GP24/DSR2#	DDR18V_LED	
VIDO6/GP17/RI2#	1_1V_PH_EN	
VIDO7/JP6/DTR2#	JP6	
PD5/GP75/BUSSO0	SB_LED3_C	



PWM各相位的擺法如下:



BIOS超電壓對應表:

線路圖名稱	BIOS選項
Vcore	CPU Vcore
CPU_VTT	CPU Termination
CPU_VAXG	CPU Graphic Core
VCC1_8_PCH	CPU PLL
VCC1_05_PCH	PCH core
3VDUAL	3VDUAL
DDR15V	DRAM voltage
DDRVTT	DRAM Terminatio
VREF_CA_A/VREF_CA_B	DRAM Address Ref
VREF_DQ_A/VREF_DQ_B	DRAM Data Ref

散熱模組料號:

8IBP:
1.12SP2-01A001-Y1R/Y2R
2.12SP2-01A001-Z1R/Z2R
(HIBRID模組)包材階

	3 pin FAN control	4 pin FAN control	FAN speed	Controller
CPU FAN	FANPWM1	FANPWM3	FANIO1	IT8720
	ICH_FAN_PWM2	ICH_FAN_PWM0	ICH_FAN_TACH0	PCH
SYS FAN	FANPWM2	N/A	FANIO2	IT8720
	ICH_FAN_PWM1	N/A	ICH_FAN_TACH1	PCH
PWR FAN	N/A	N/A	FANIO3	IT8720
			ICH_FAN_TACH2	PCH

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Title: TABLE LIST

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