

Model Name: GA-H61M-HD2

Rev: 1.0

SHEET

TITLE

01	COVER SHEET
02	BOM & PCB MODIFY HISTORY
03	BLOCK DIAGRAM
04	CPU_LGA1155-A
05	CPU_LGA1155-B
06	CPU_LGA1155-C
07	DDR III CHANNEL A
08	DDR III CHANNEL B
09	PCH_FDI,DMI,USB,PCIE,NVRAM
10	PCH_DP,CLK BUFFER
11	PCH_HOST,SATA,PCI
12	PCH_GPIO,CTRL,AUDIO
13	PCH_PWR,GND
14	PCI EXPRESS*16 SLOT
15	PCI EXPRESS*1x2 SLOT
16	ITE 8728 LPC IO
17	KB_MS,R_USB,-PROCHOT
18	HWM,FAN CTRL,OV
19	Dual BIOS
20	FP,FUSB,SPK,SATALED
21	ALC887
22	REAR AUDIO JACK
23	REALTEK 8111F/USB_LAN
24	DISCRETE POWER
25	ATX,-S_WARN,-S_ACK,5VDUAL
26	Richtek_RT8120_CPU_VTT
27	VCORE INTERSIL 95836_1

SHEET

TITLE

28	VCORE INTERSIL_95836_2
29	VCORE INTERSIL_95836_3
30	DVI & HDMI

Gigabyte Technology		
Cover Sheet		
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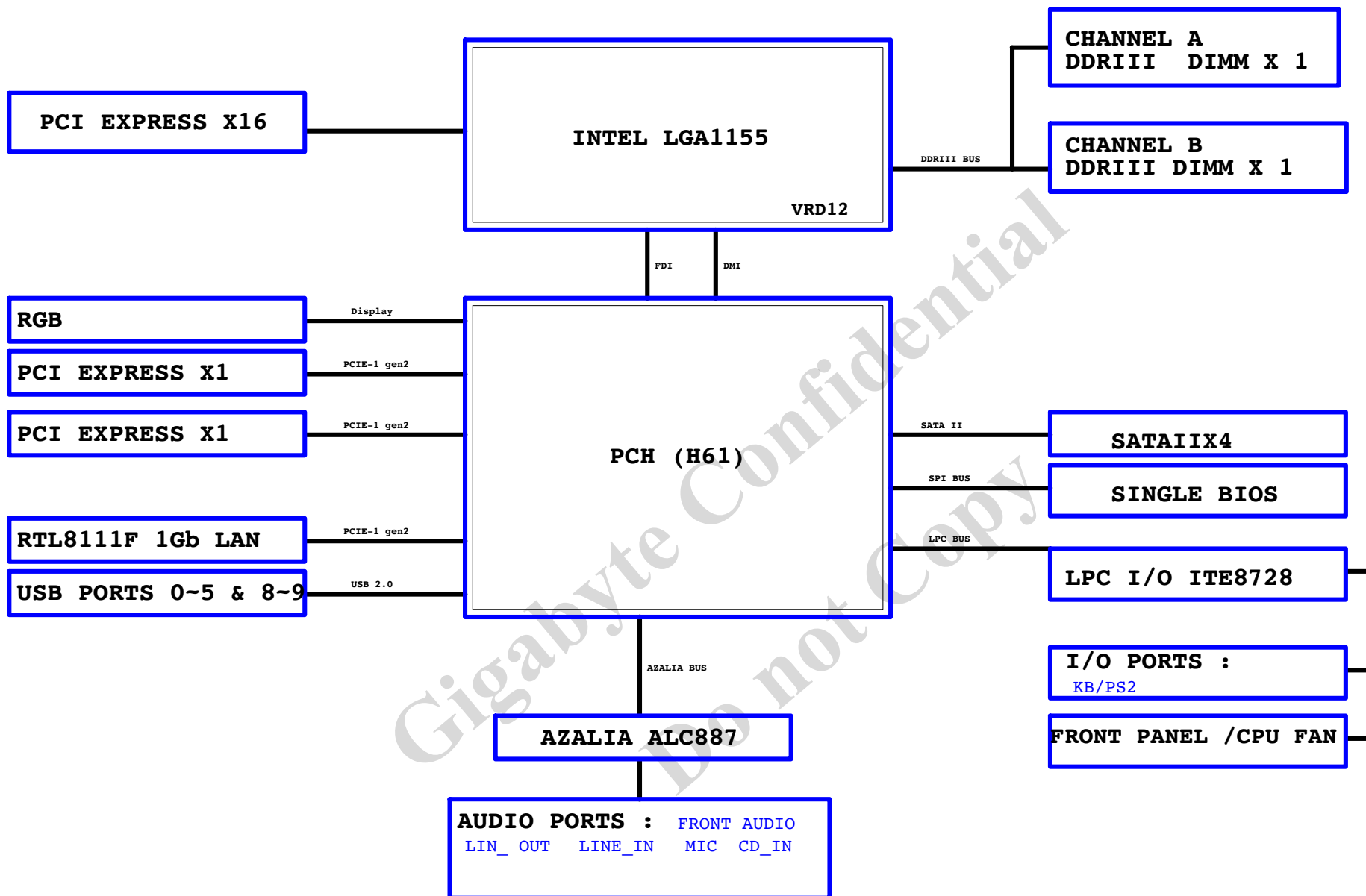
Model Name: GA-H61M-HD2

Component value change history

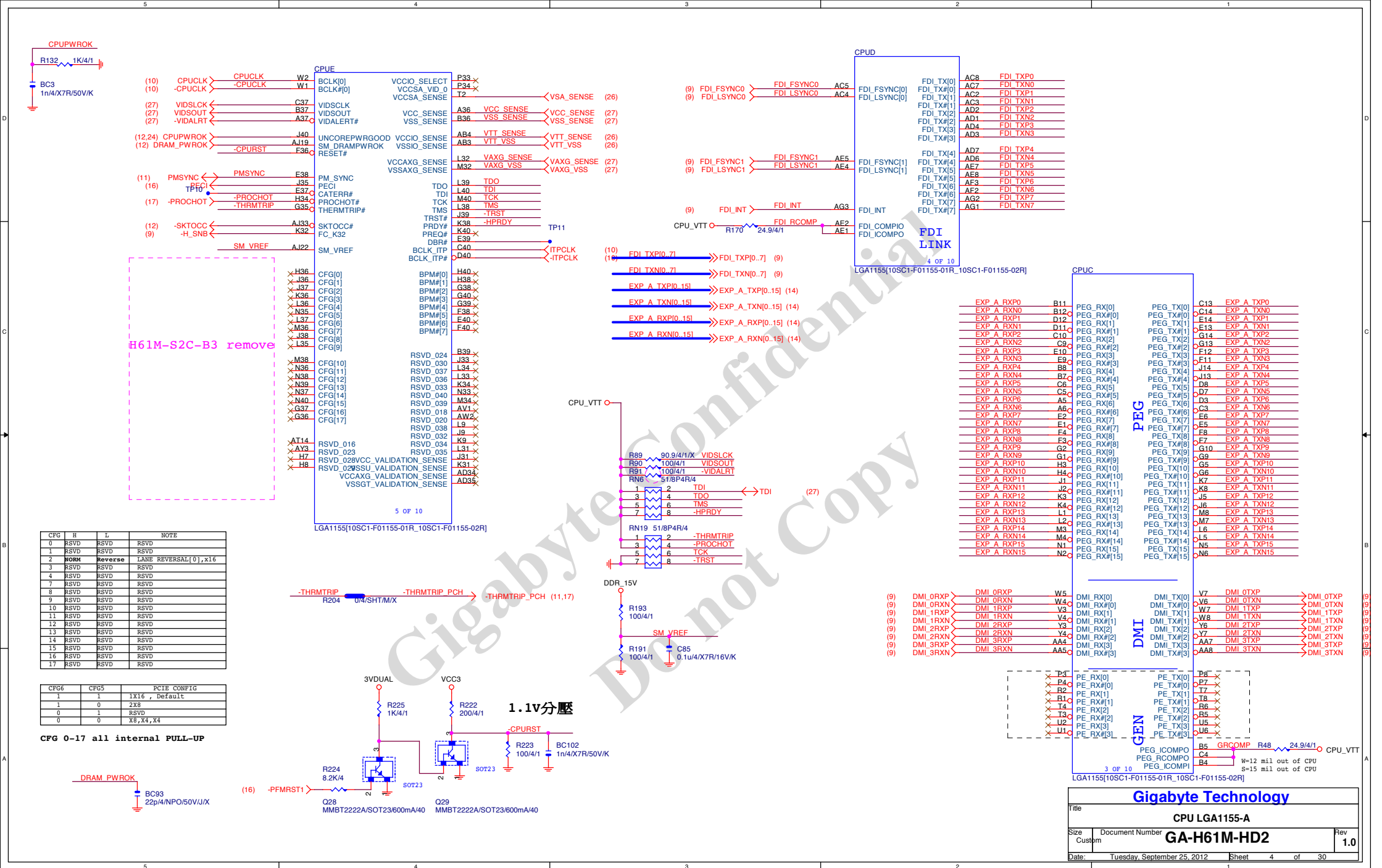
2012/08/16

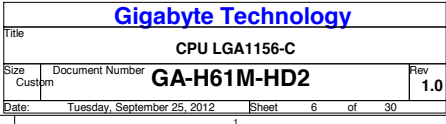
Circuit or PCB layout change

BLOCK DIAGRAM

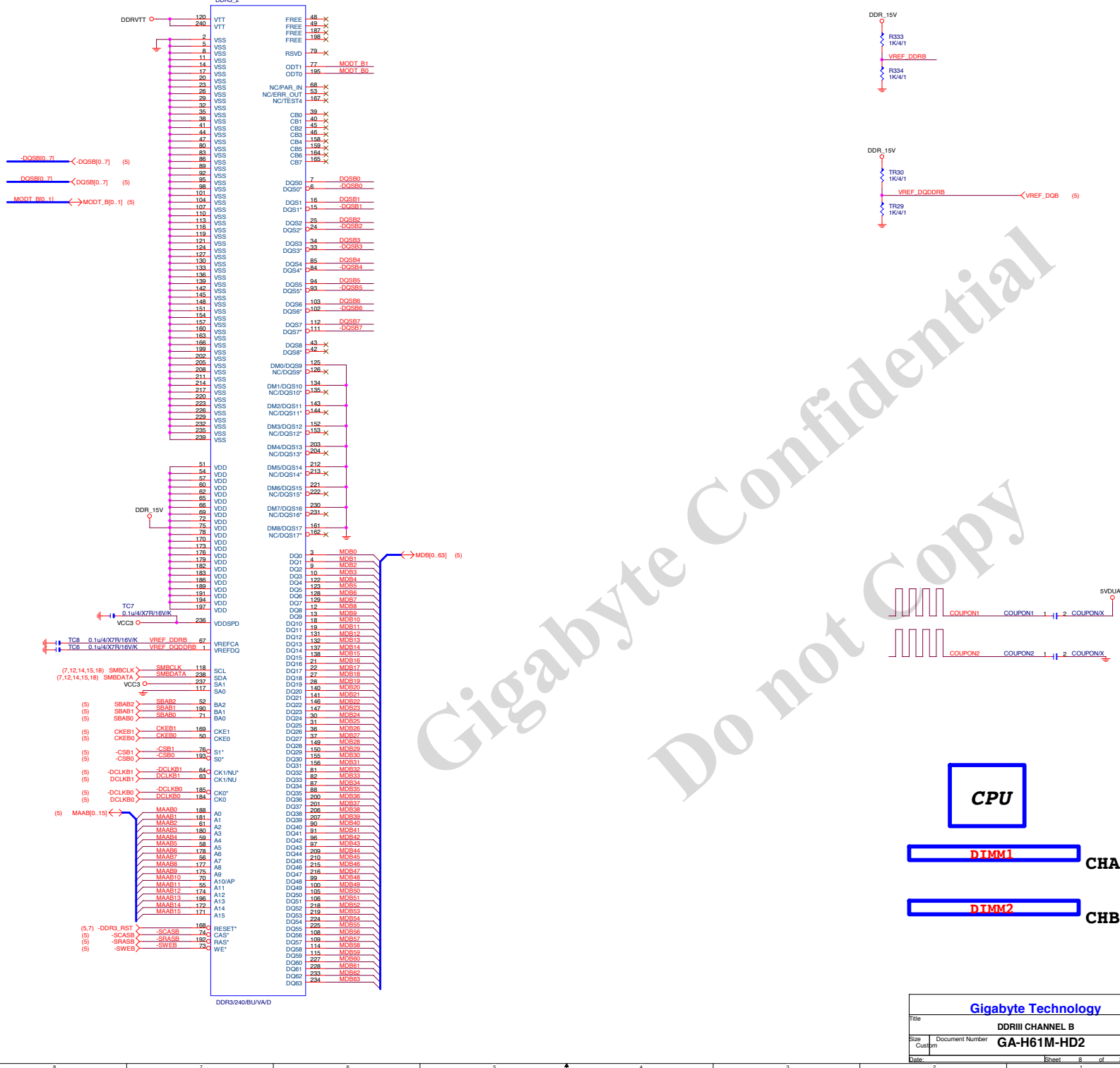


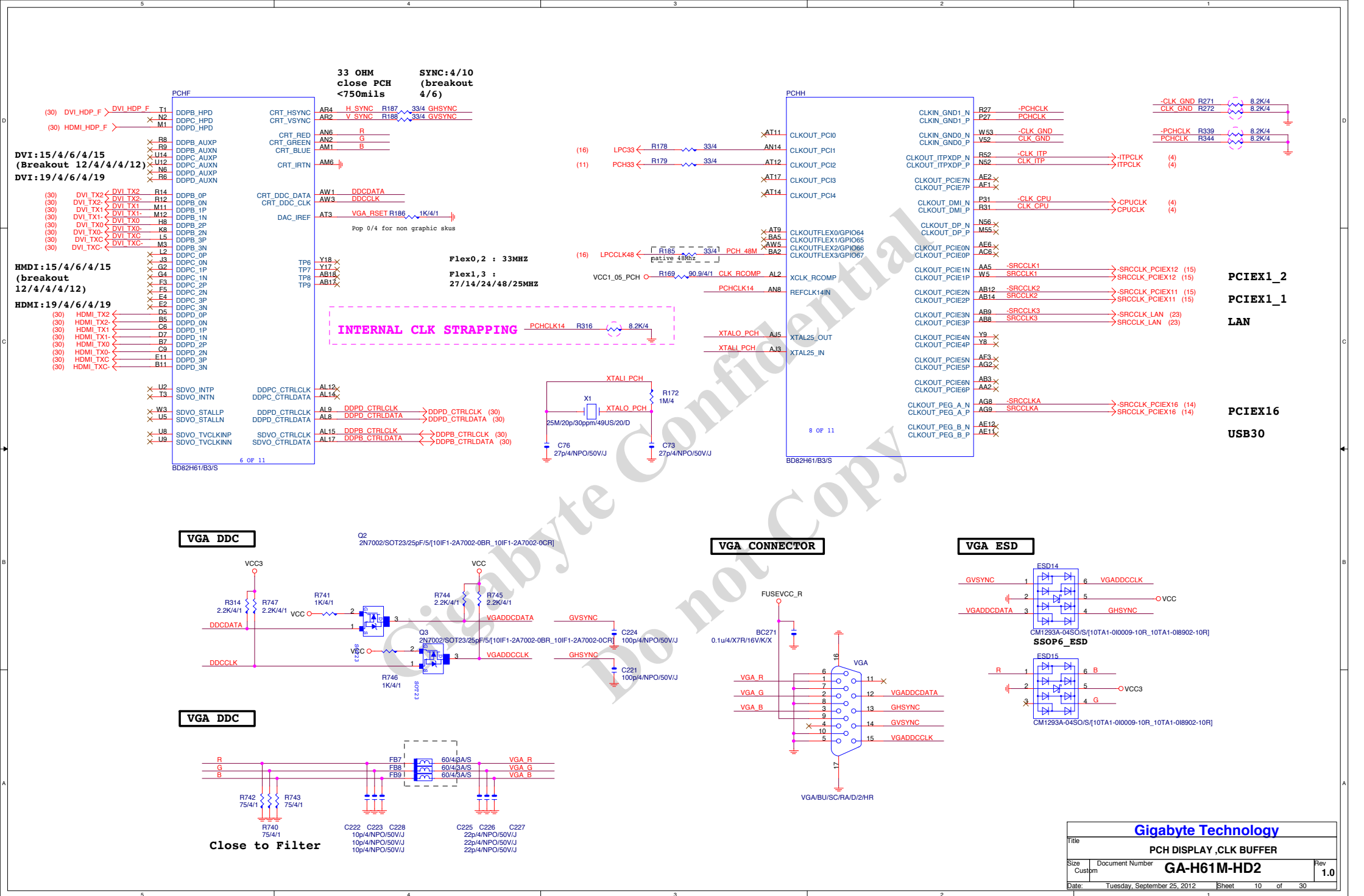
www.vinafix.vn

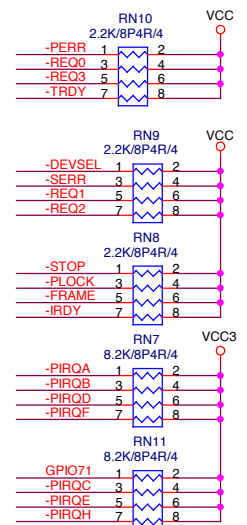


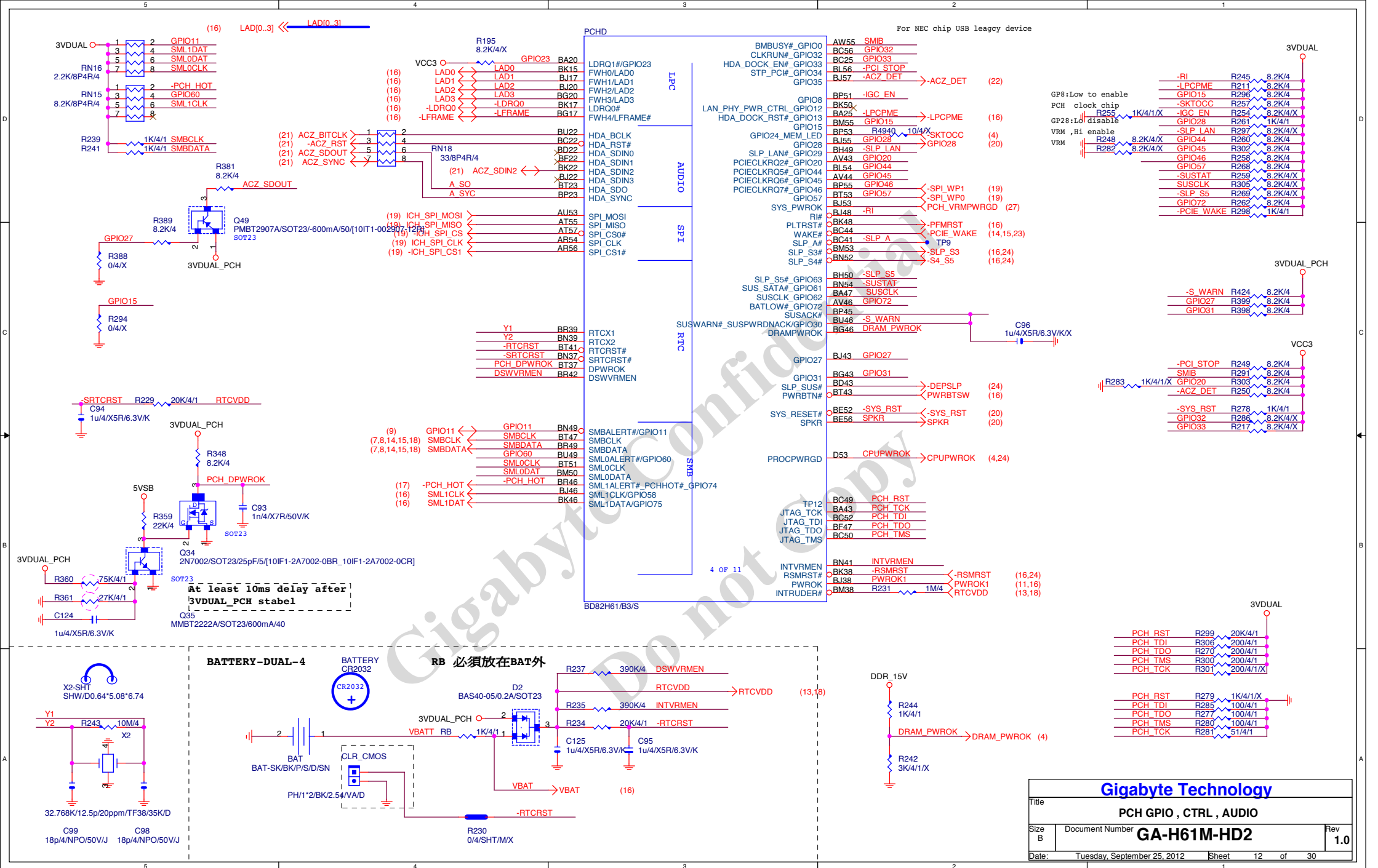


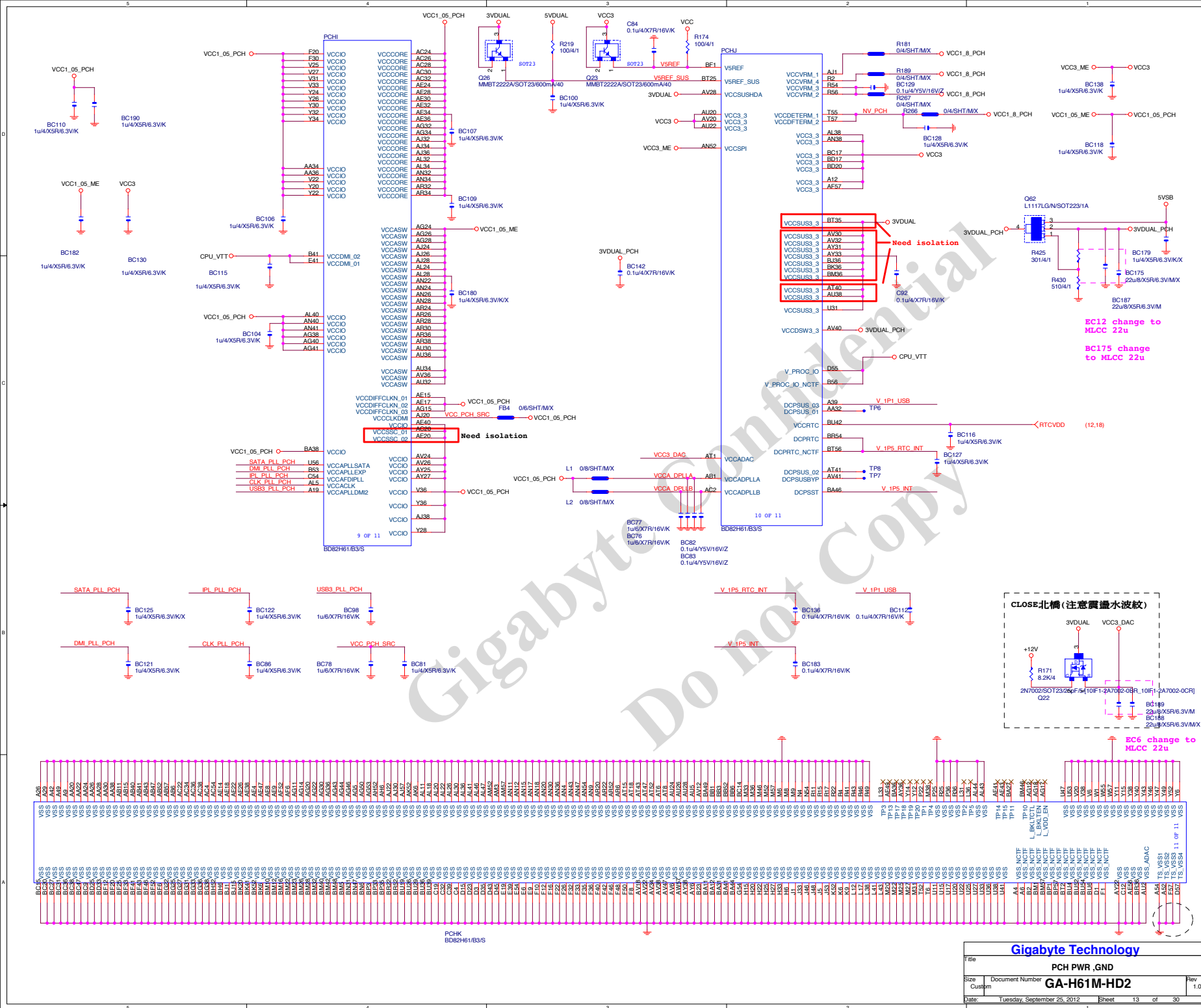


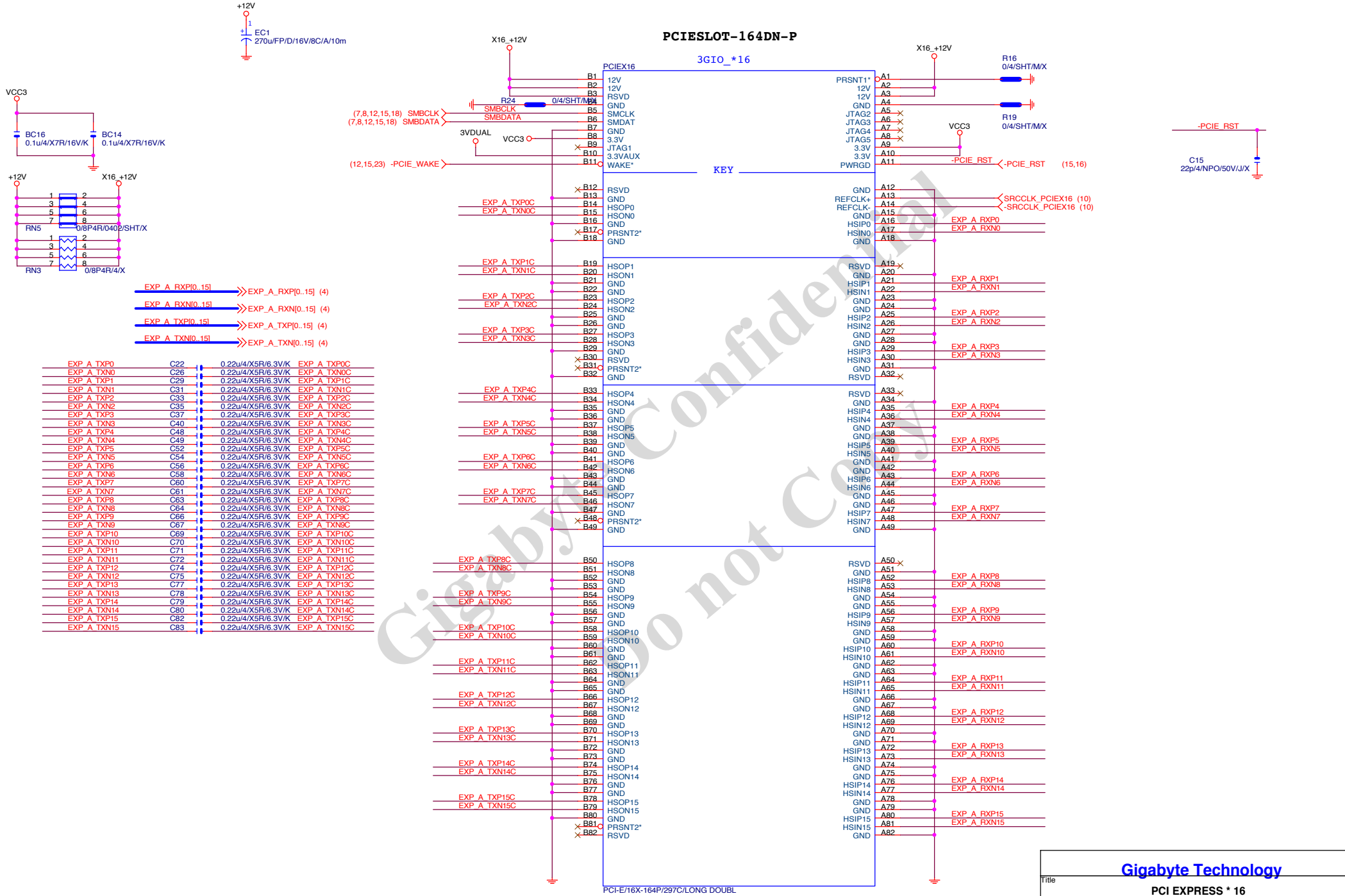




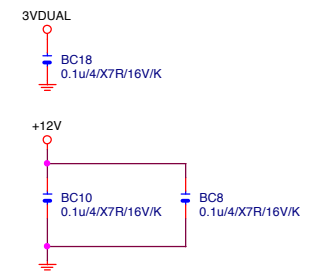
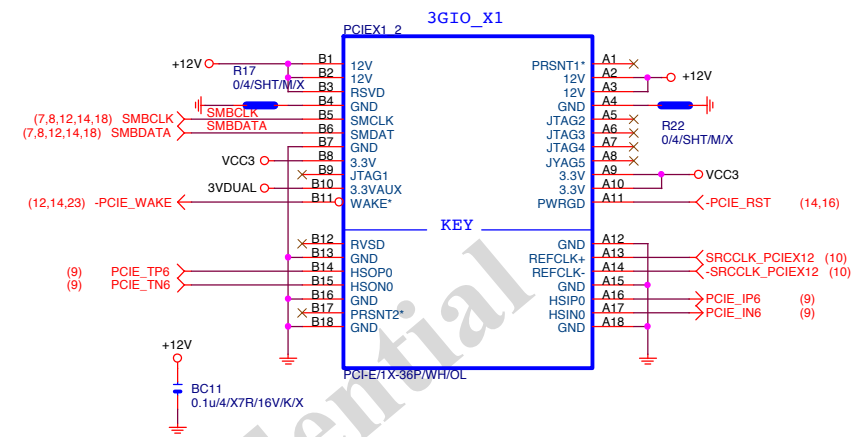
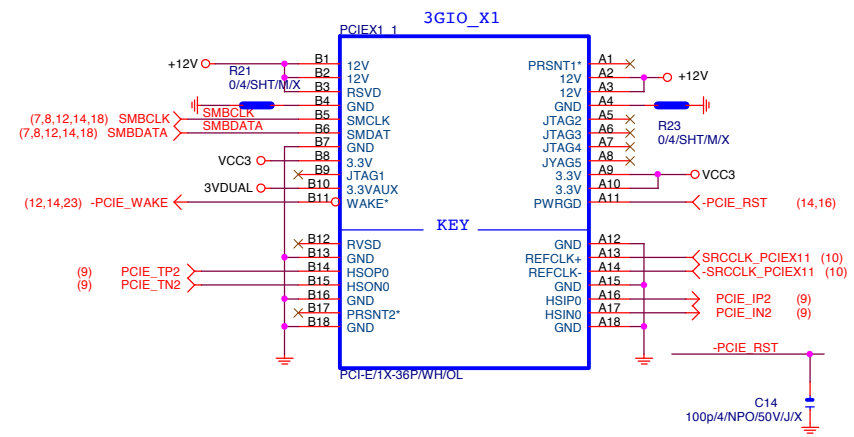
**H1X7-SATA2-HS-MASK**







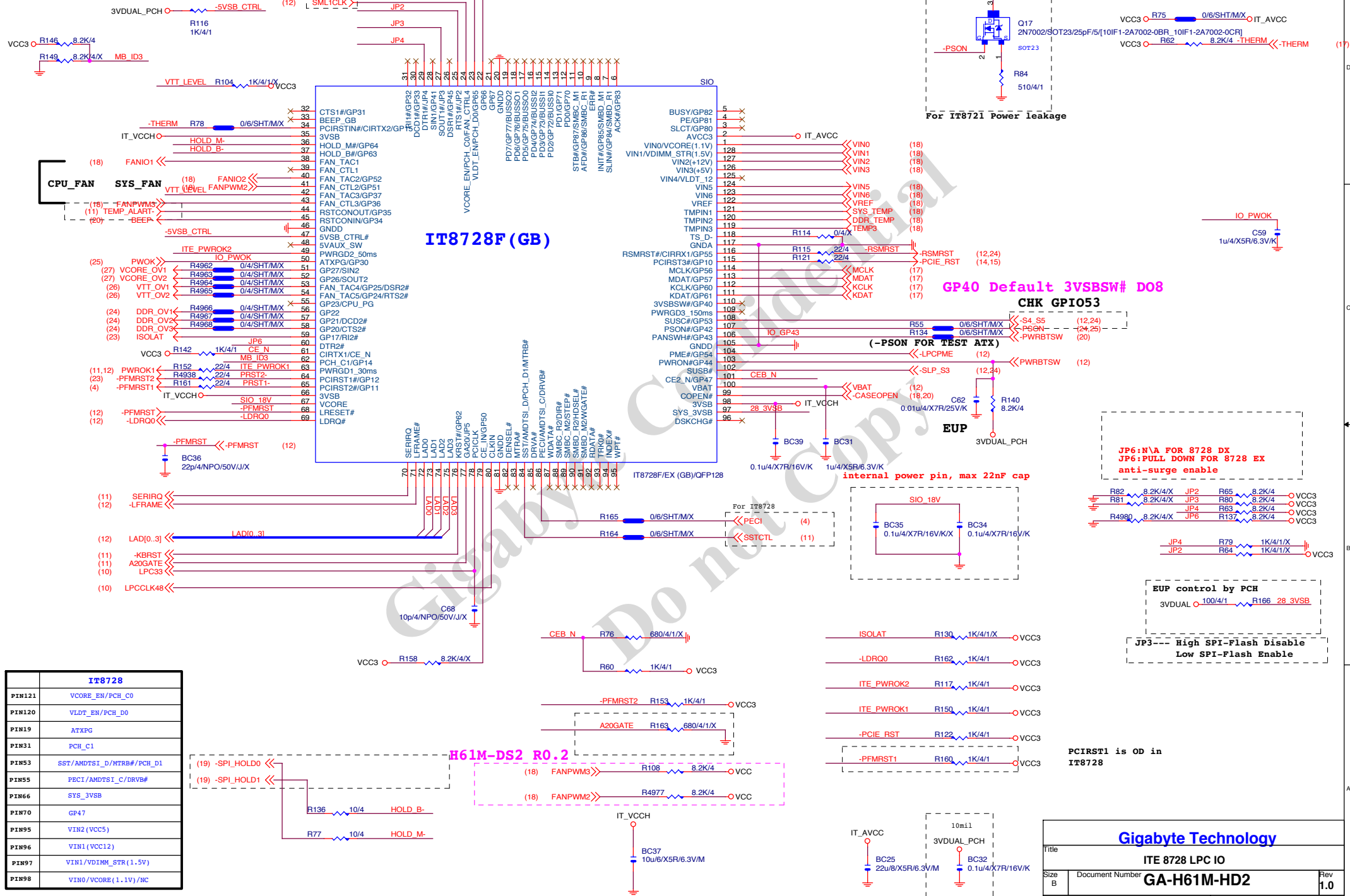
PCIE*1



CLK GEN

Gigabyte Technology			
Title			
PCIEX1,X2/CLK GEN			
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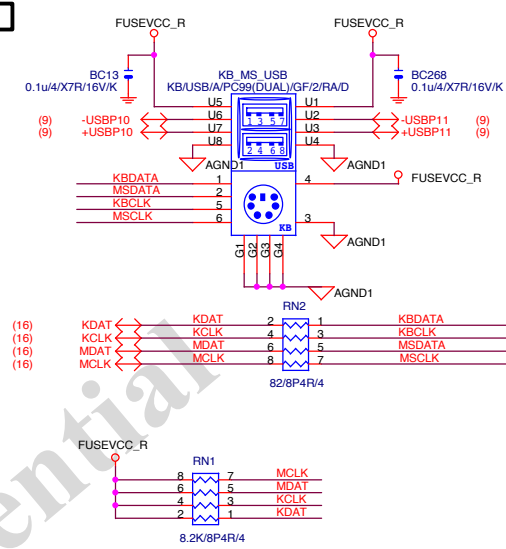
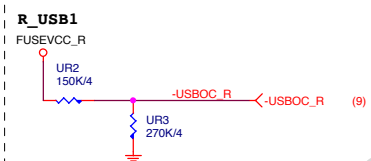
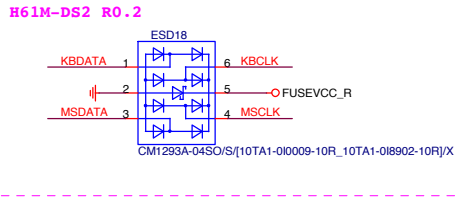
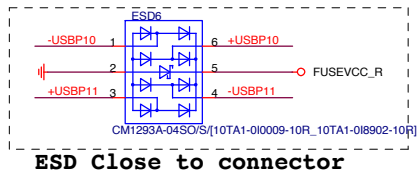
GP23 Default CPU PG DOD8



COM

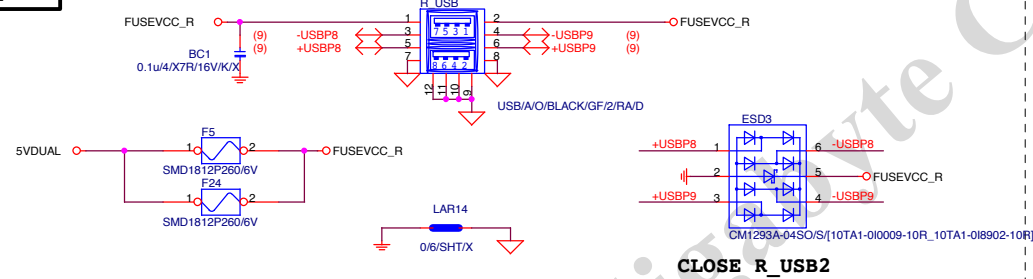
COM RI

KB/MS

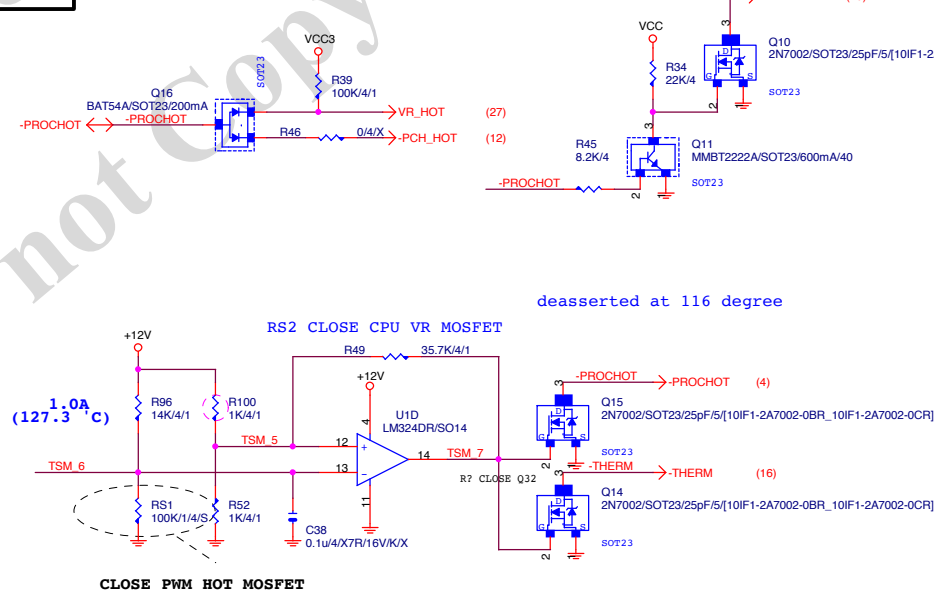
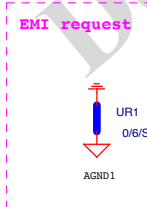


R_USB1

-PROHOT

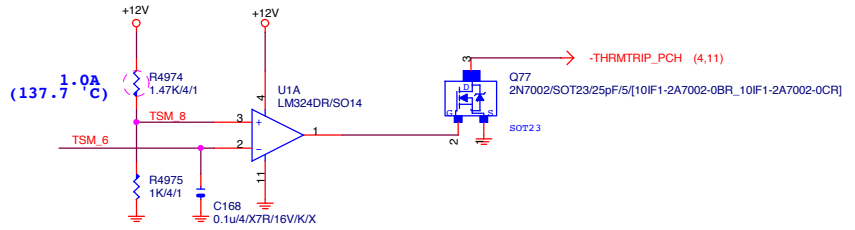
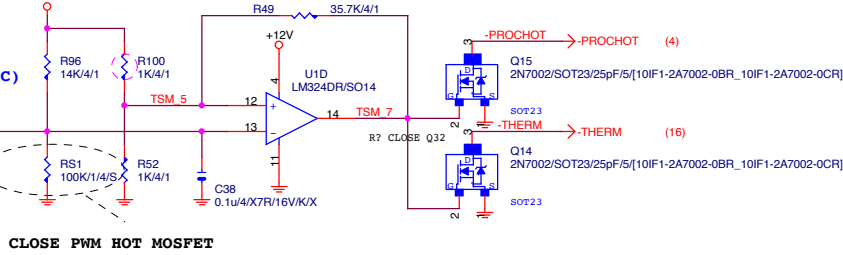


CLOSE R_USB2



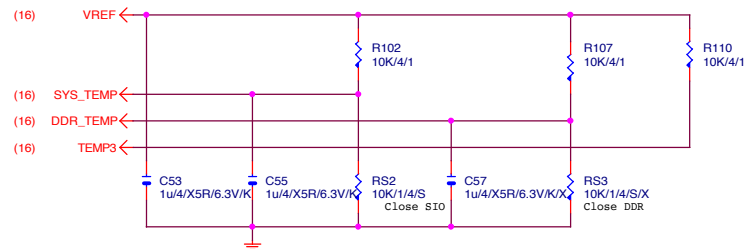
deasserted at 116 degree

RS2 CLOSE CPU VR MOSFET

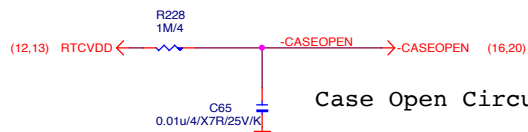


Gigabyte Technology			
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-RI,KB_USB_ESATA,-PROHOT			
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TEMP H/W MONITOR

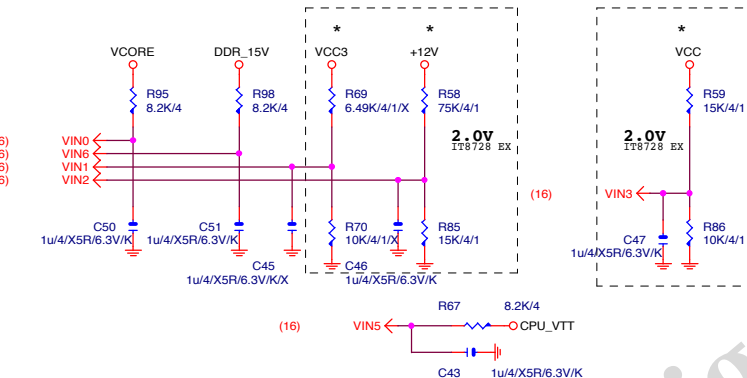


CASE OPEN

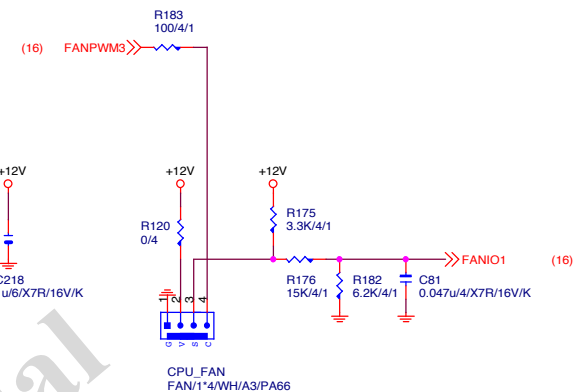


Case Open Circuits

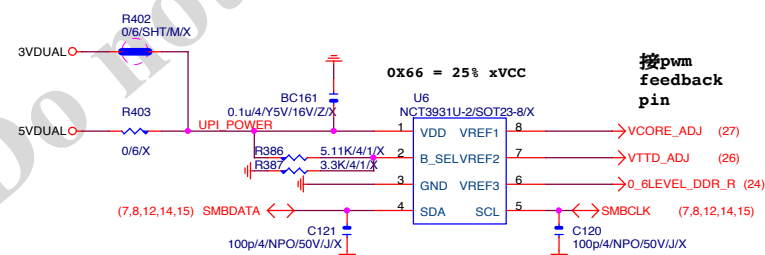
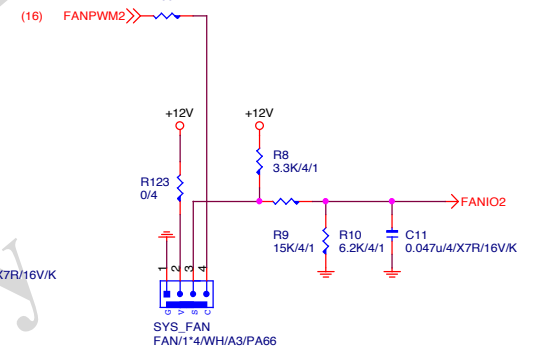
VOLTAGE-- H/W MONITOR



CPU SMART FAN



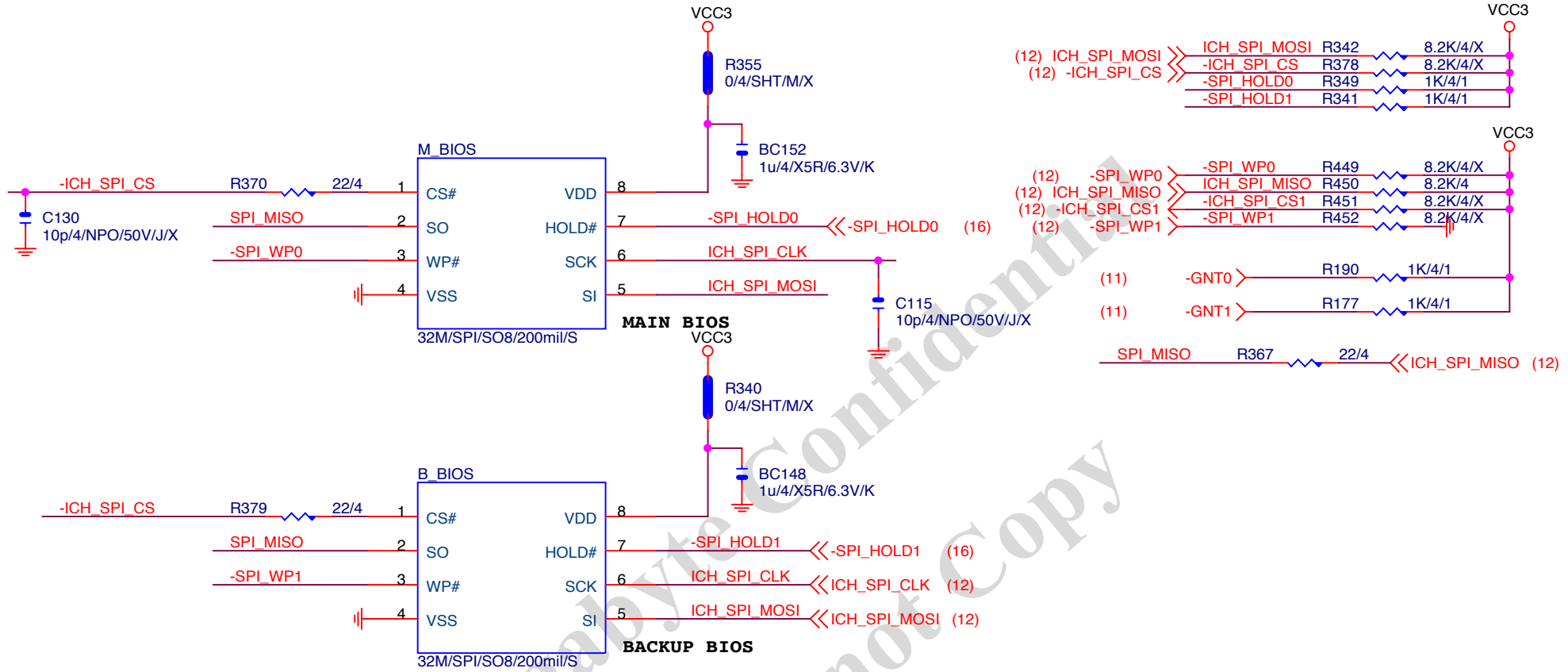
SYS SMART FAN



Gigabyte Technology

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DUAL BIOS



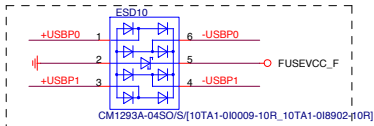
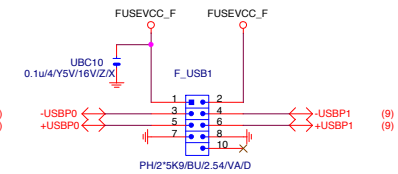
BOOT DEVICE	GNT1	GNT0
LPC	0	0
PCI	0	1
SPI	1	1

1 means floating
0 means PD 1K

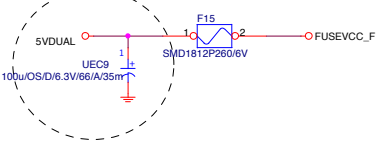
Gigabyte Technology

Title		
SINGLE BIOS		
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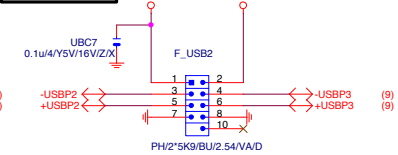
FRONT USB1



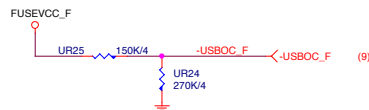
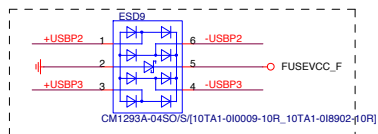
CLOSE F_USB1



FRONT USB2



FRONT USB3

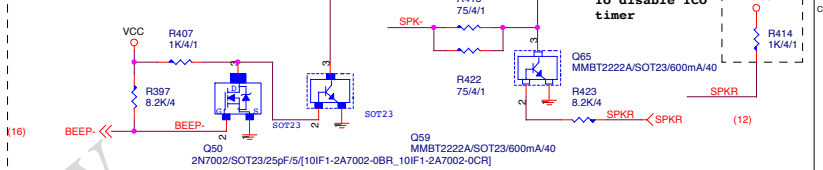


SATA LED

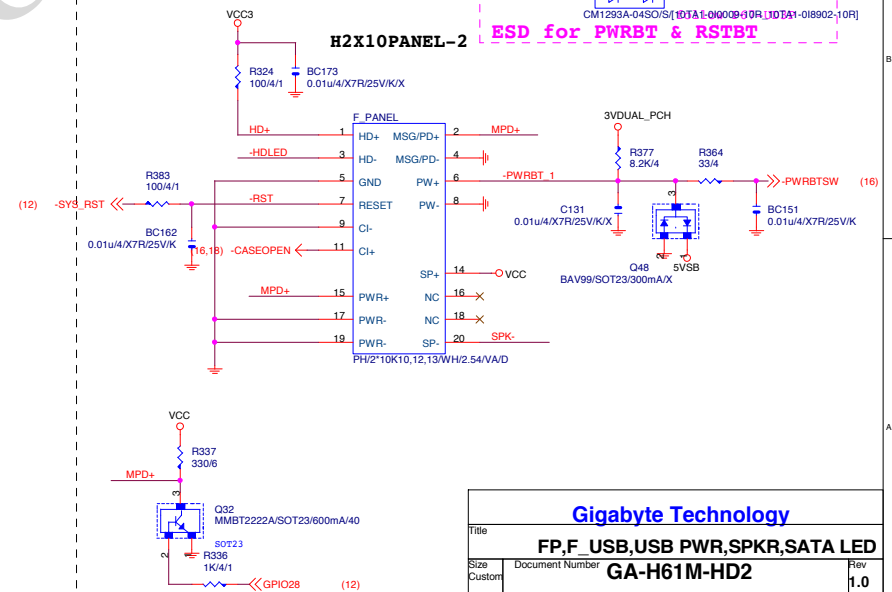
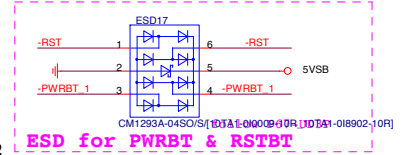


SPKR

RESETCONIN DEFAULT LOW
4sec, 會發BEEP, 故改2N7002

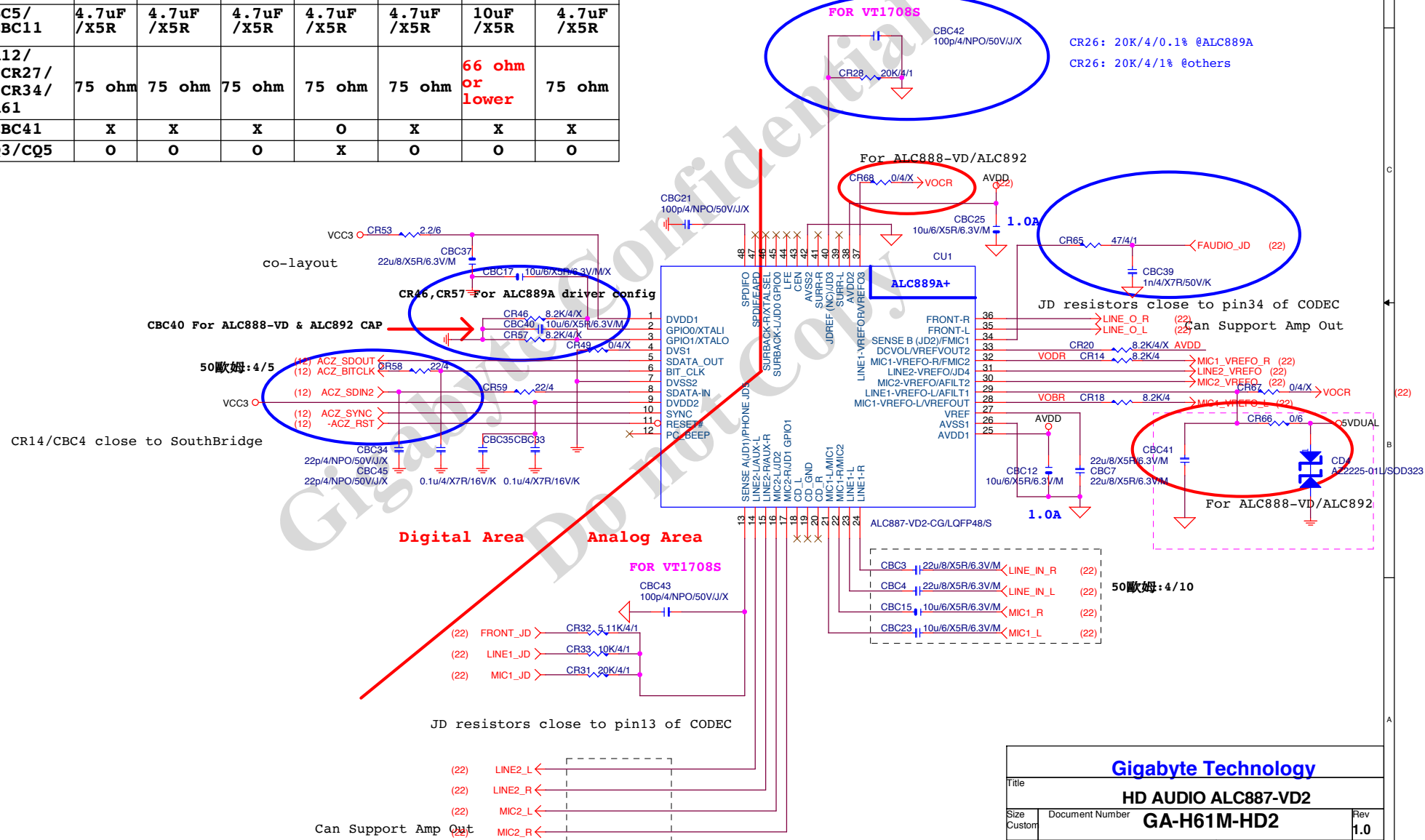


INTEL FRONT PANEL

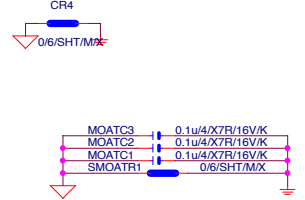
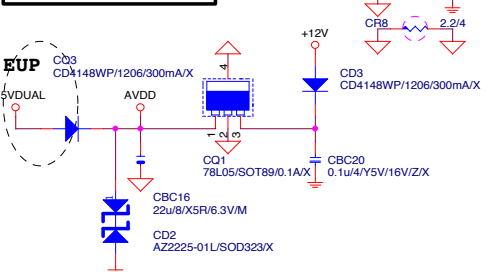


Gigabyte Technology			
Title	FP,F, USB,USB PWR,SPKR,SATA LED		
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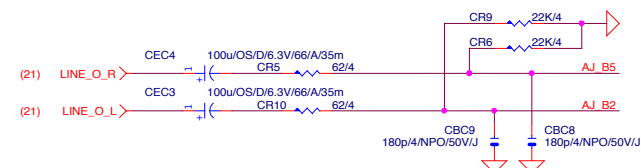
	ALC883	ALC888-VA	ALC888B	ALC888-VD	ALC892R	ALC889	ALC889A
CR46	X	X	X	X	X	X	O
CR57	X	X	X	X	X	X	O
CR49	O	O	X	X	X	O	O
CBC40	X	X	X	10uF/X5R	10uF/X5R	X	X
CR20	O	X	X	X	X	X	X
CR26	20K/1%	20K/1%	20K/1%	20K/1%	20K/1%	20K/1%	20K/0.1%
CR47	X	X	O	X	O	O	X
CR48	O	O	X	O	X	X	O
CBC2/CBC4/CBC5/ CBC6/CBC10/CBC11	4.7uF /X5R	4.7uF /X5R	4.7uF /X5R	4.7uF /X5R	4.7uF /X5R	10uF /X5R	4.7uF /X5R
CR1/CR3/CR10/CR12/ CR15/CR19/CR56/CR27/ CR55/CR37/CR28/CR34/ CR6/CR9/CR51/CR61	75 ohm	75 ohm	75 ohm	75 ohm	75 ohm	66 ohm or lower	75 ohm
CR66/CR68/CD3/CBC41	X	X	X	O	X	X	X
CR67/CD1/CD2/CQ3/CQ5	O	O	O	X	O	O	O



CODEC POWER/EMI PAD

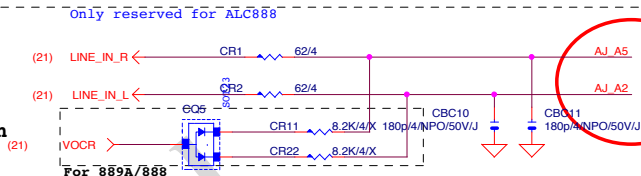


LINE-OUT

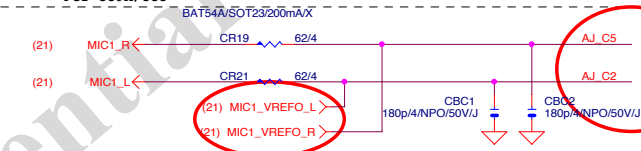


LINE-IN

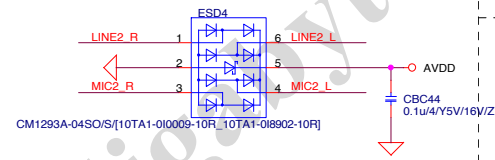
Verify MIC function in LINE-in



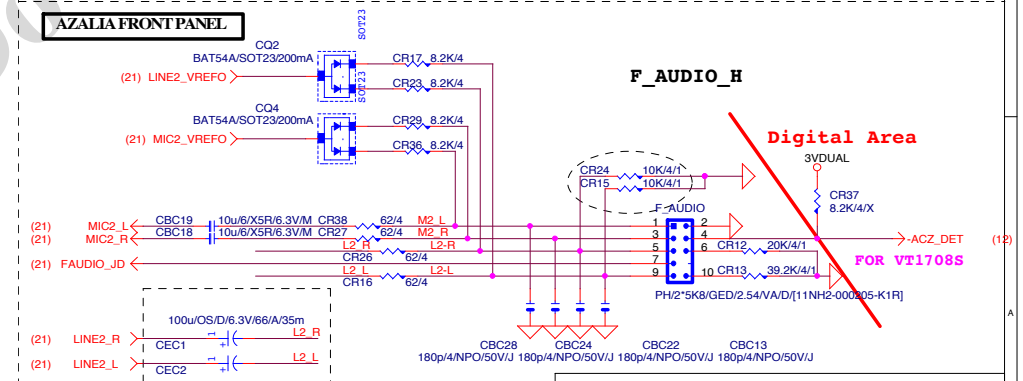
MIC-IN



AZALIA JACK



AZALIA FRONT PANEL



F_AUDIO_H

Digital Area

FOR VT1708S

Gigabyte Technology

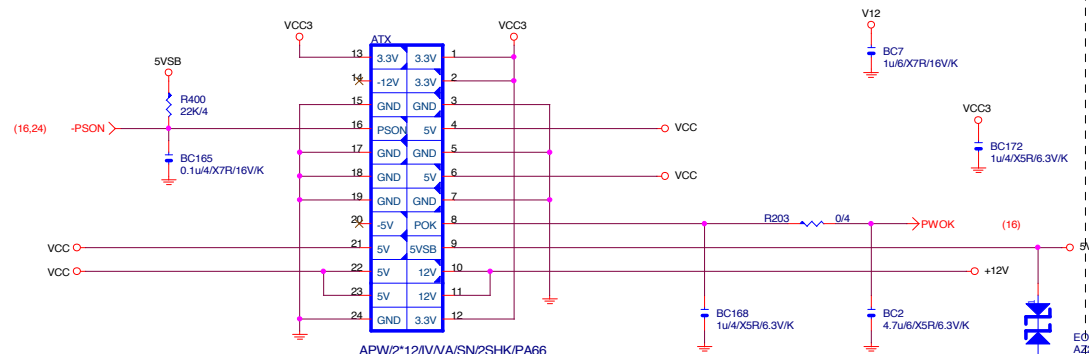
AUDIO JACK

GA-H61M-HD2

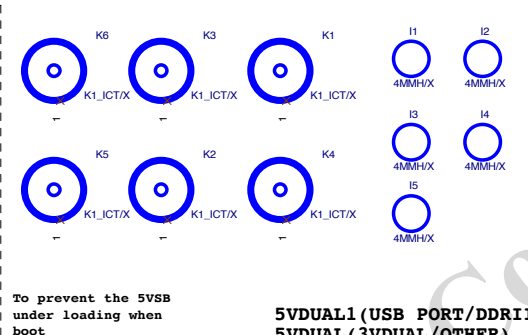
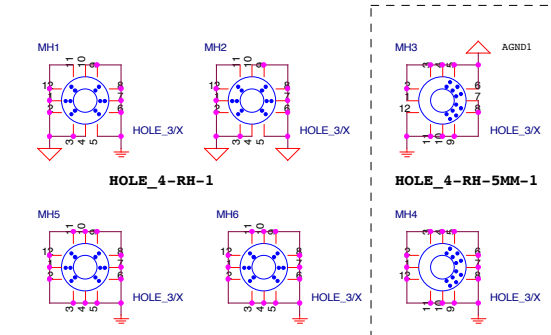
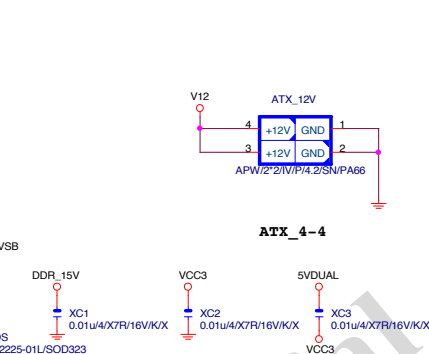
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ATXX24 POWER CONNECTOR



ATXX4 POWER CONNECTOR

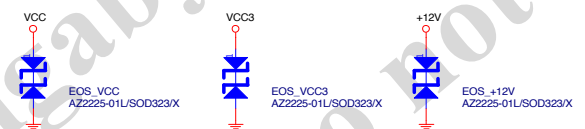


To prevent the 5VSB under loading when boot

5VDUAL1(USB PORT/DDRIII POWER)
5VDUAL(3VDUAL/OTHER)

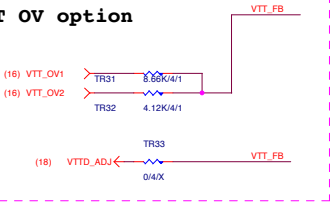
-S_WARN-->5VDUAL1-->-S_ACK(PCH)-->-DEPSLP/-RSMRST-->5VDUAL-->3VDUAL

HOLE_4-RH-5MM-1

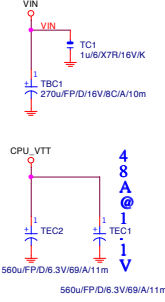
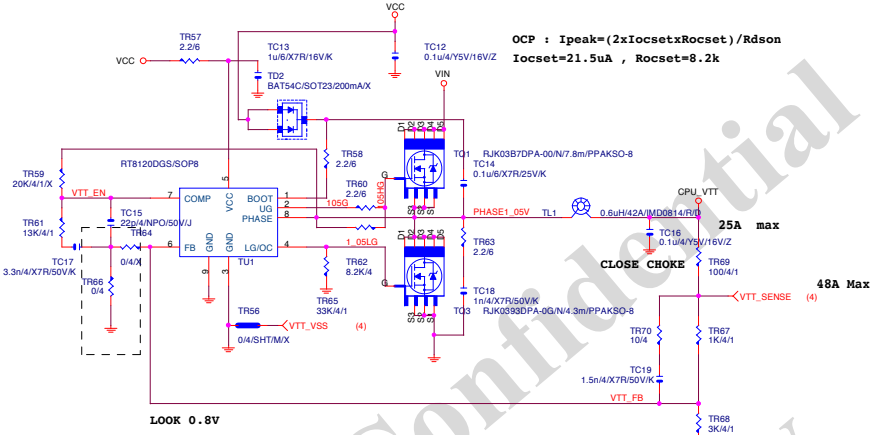


CPU_VTT

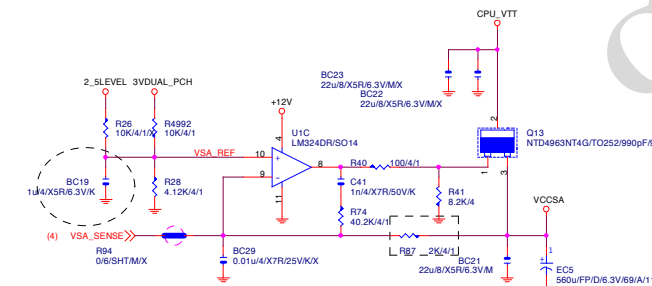
VTT OV option



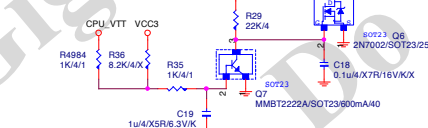
	VTT_EN
HI	ENABLE
LO	DISABLE



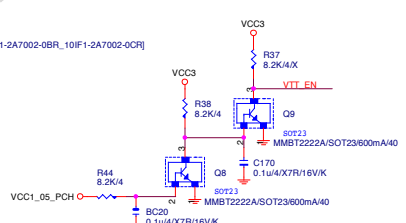
VCCSA



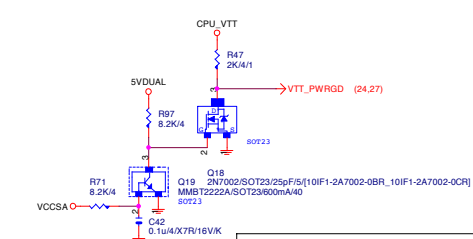
VCCSA_PWR_SEQ



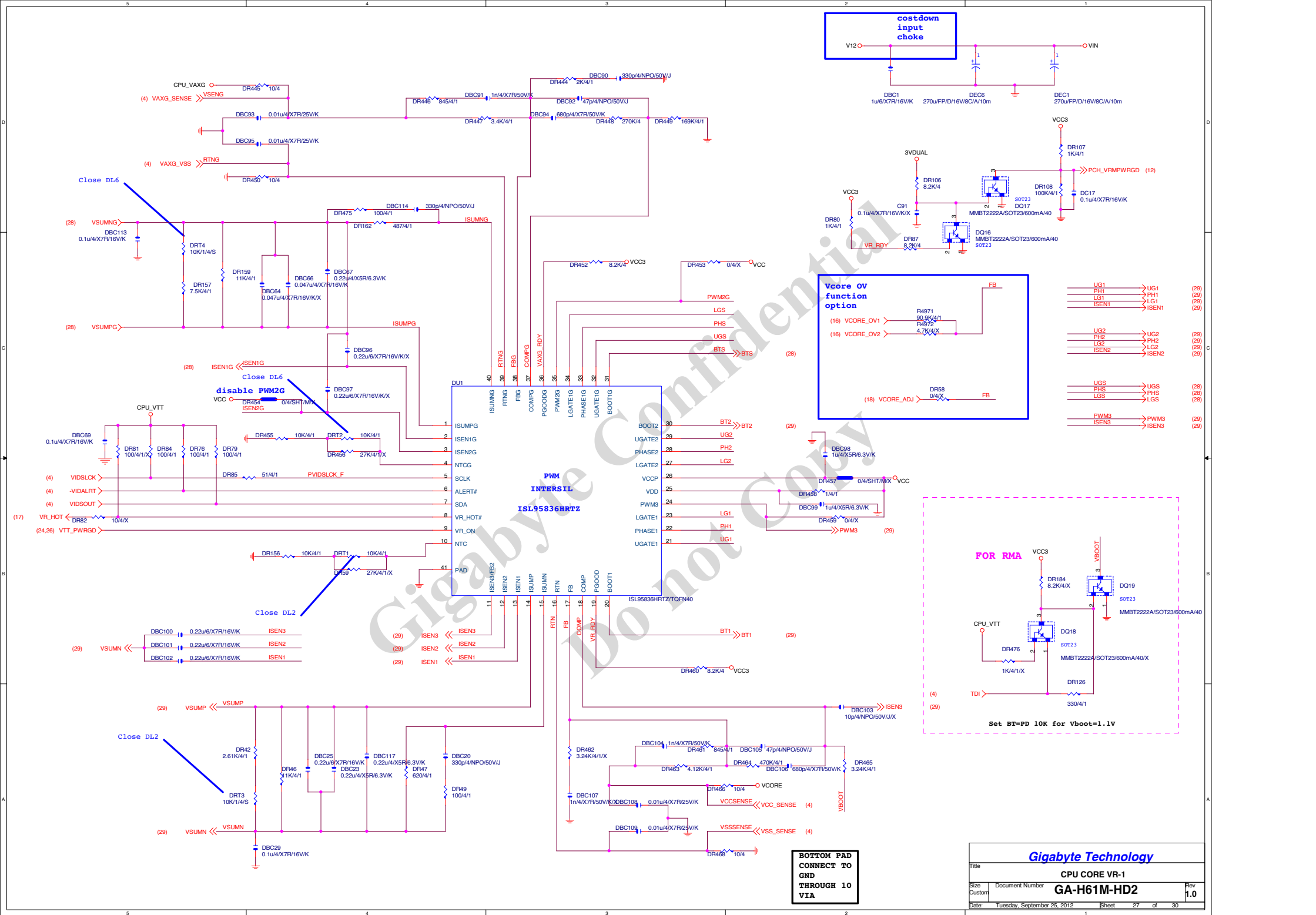
CPU_VTT_PWR_SEQ



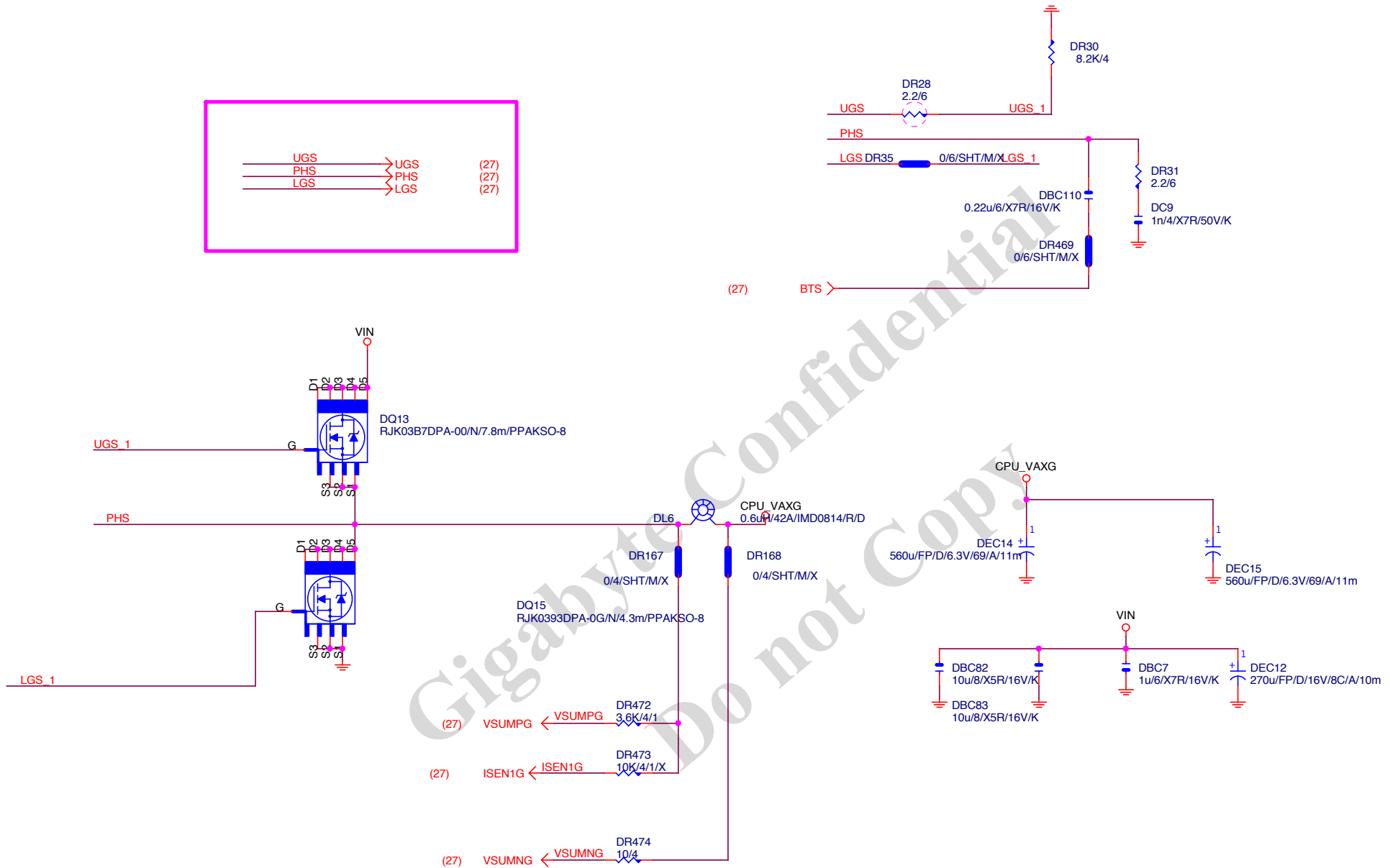
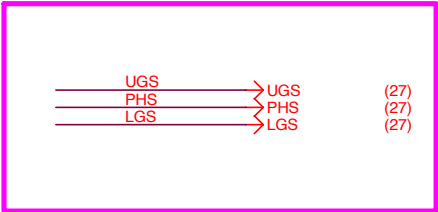
VTT_PWRGD



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Title CPU_VTT PWM_RT8120DGSP			
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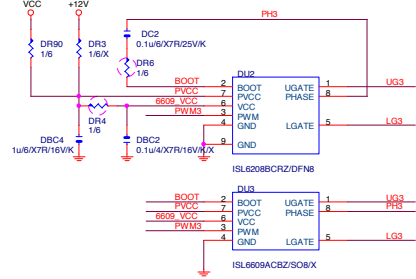


VAXG

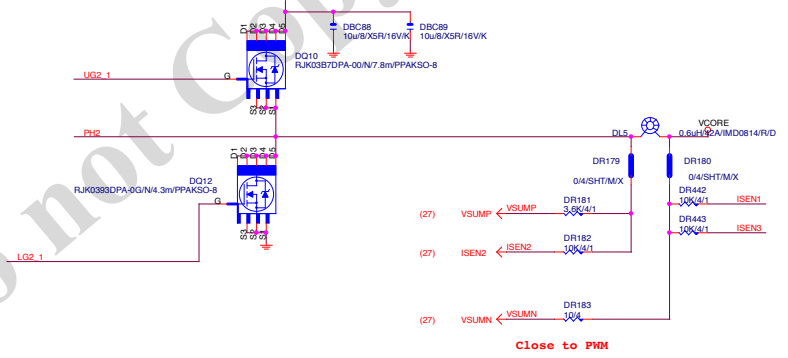
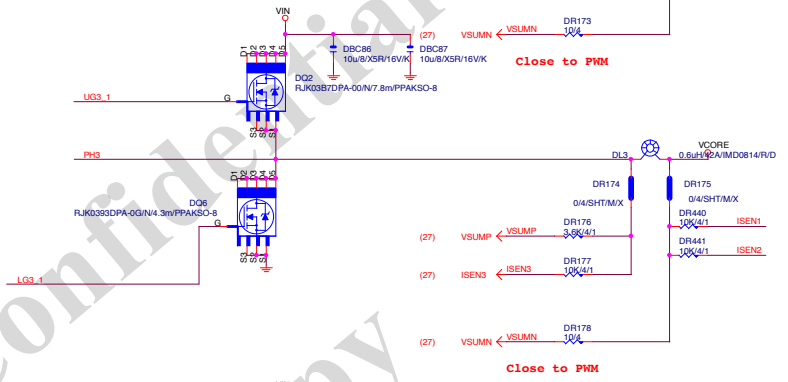
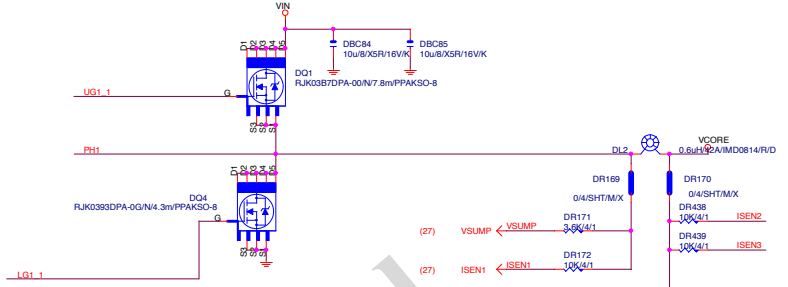
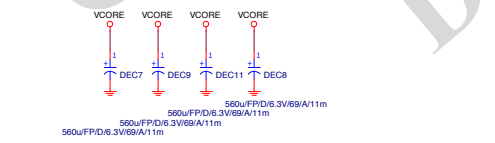
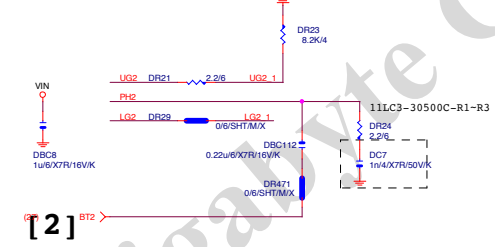
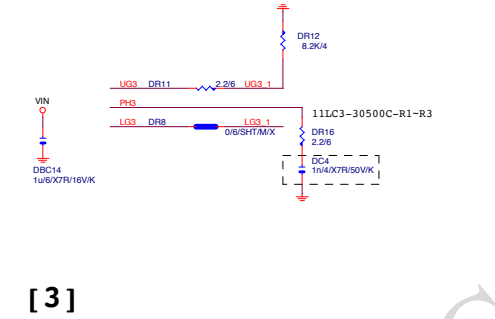
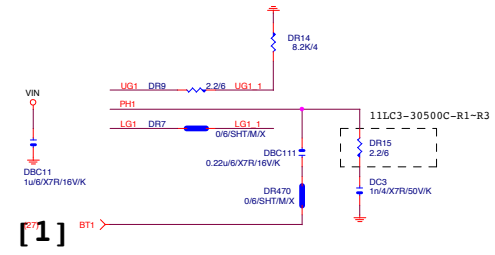




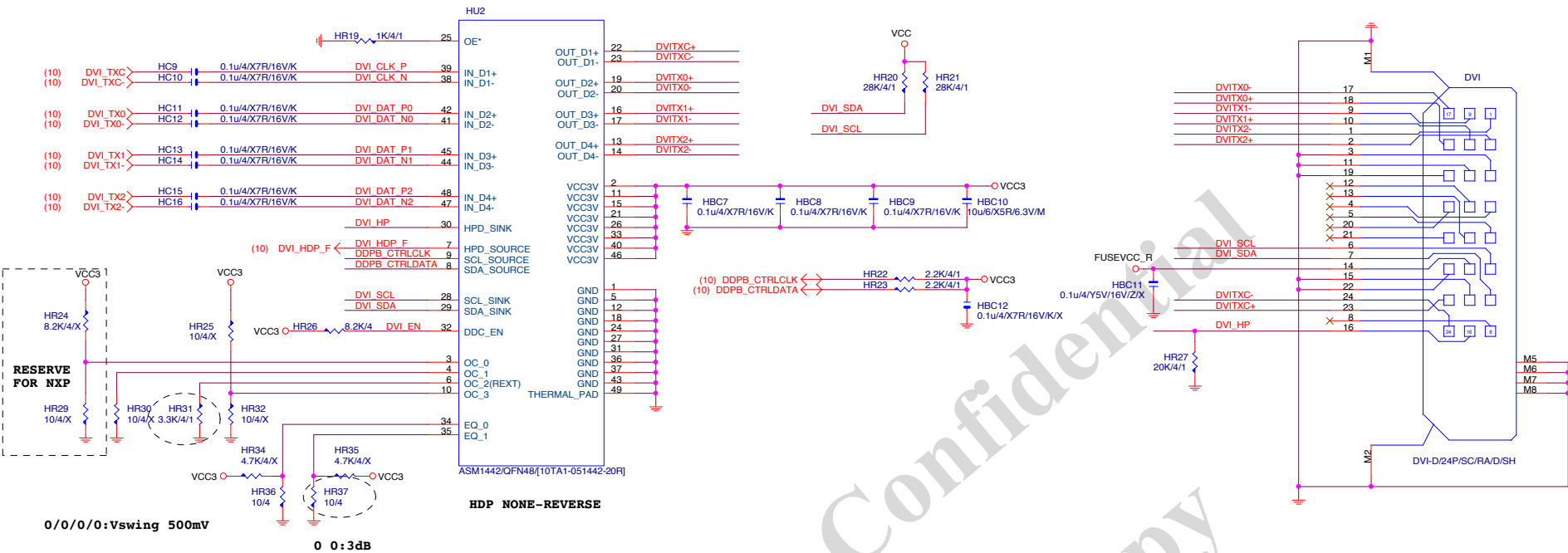
Pop 1S16425CB for PB1
[1S16425CB/608]



6609 colay with 6208

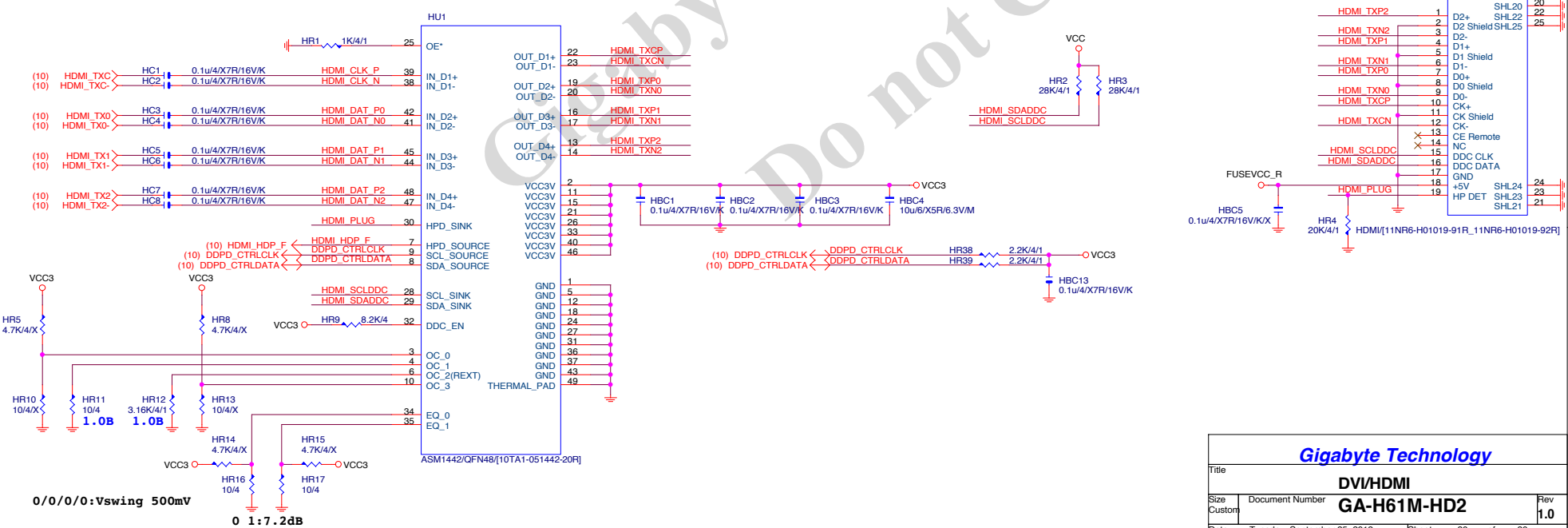


DVI LEVEL SHIFT



HDMI LEVEL SHIFT

HDMI:20/4/6/4/20
Impedance=85 +- 17.5%



Gigabyte Technology

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