

Model Name: GA-H61M-S

Revision
1.01

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 8620 LPC IO
17	COMA,KB_MS,R_USB,-PROCHOT
18	HWM,FAN CTRL,OV
19	SINGLE BIOS
20	FP,FUSB,SPK,SATALED
21	ALC887
22	REAR AUDIO JACK
23	REALTEK 8111E/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
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1.01

Component value change history

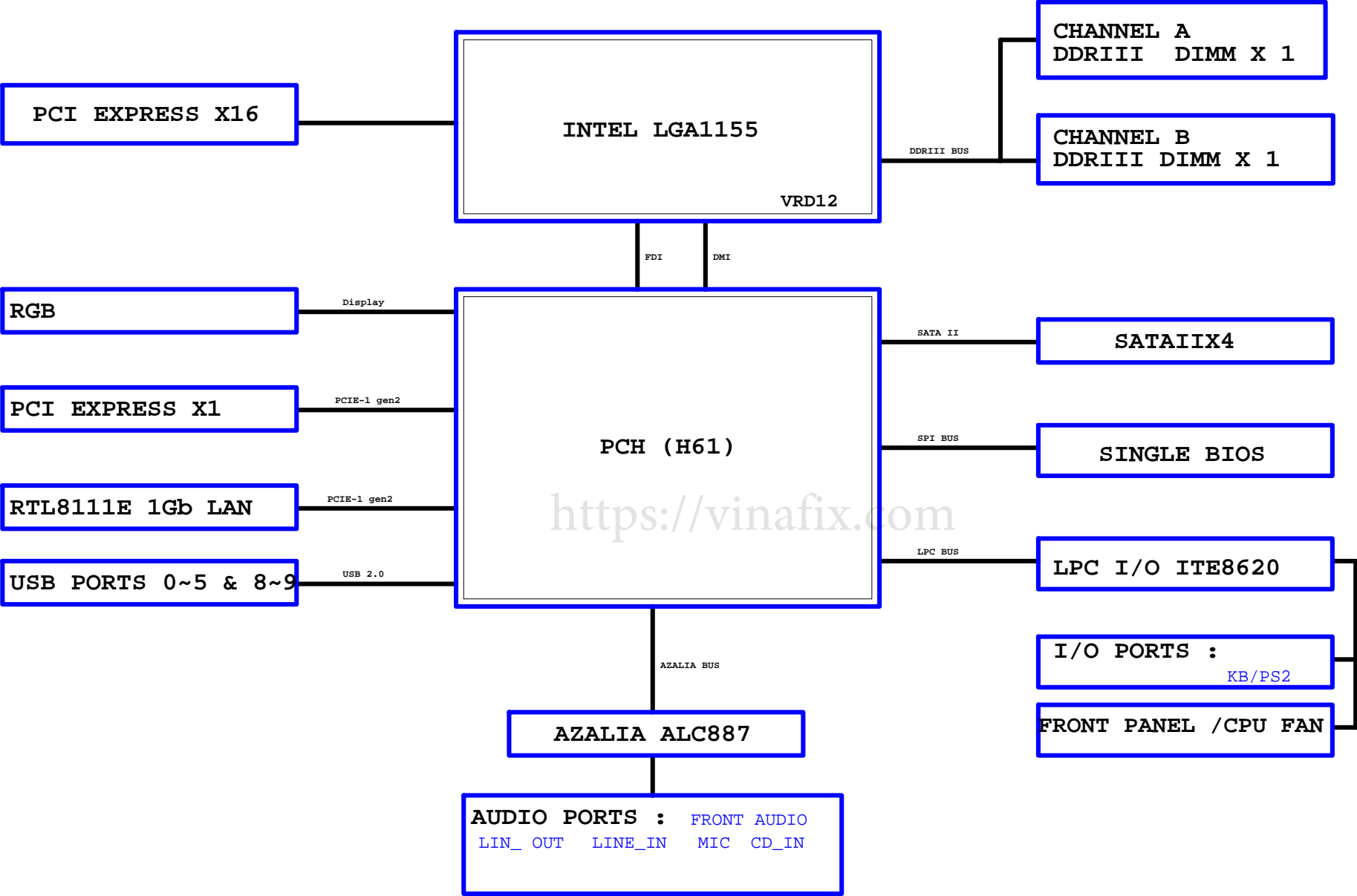
2013/02/05

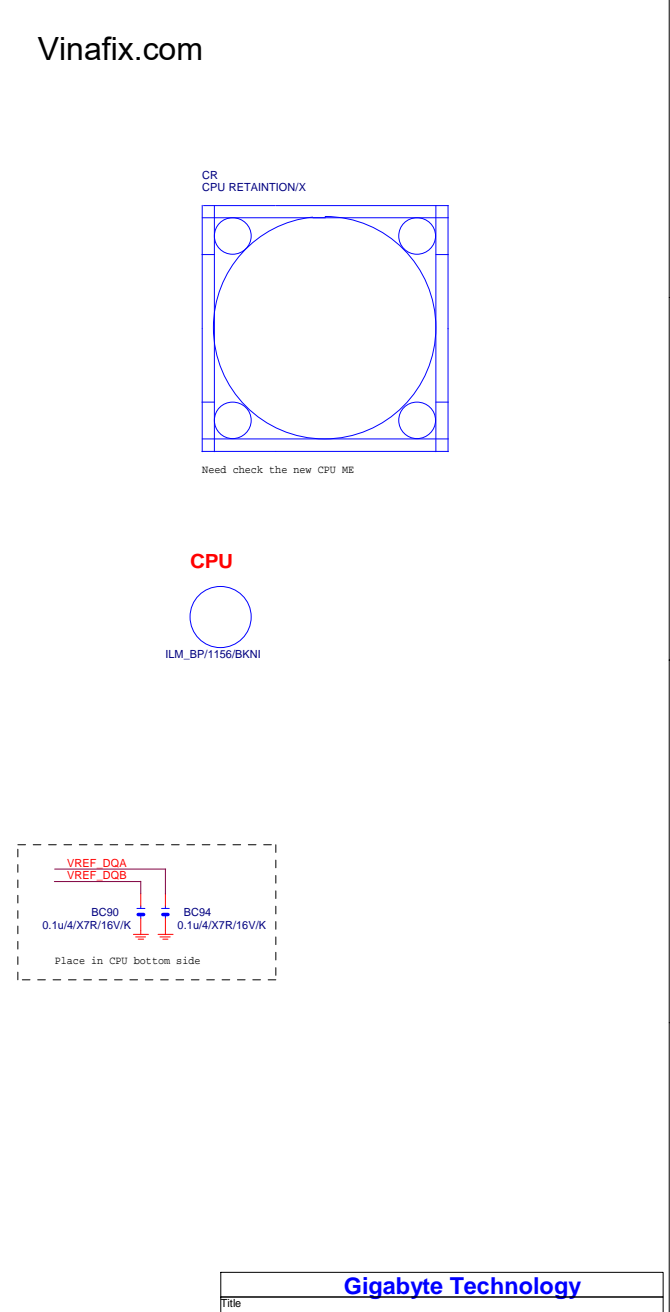
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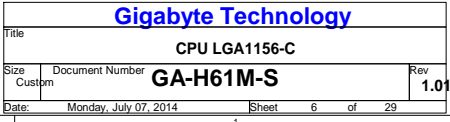
Circuit or PCB layout change

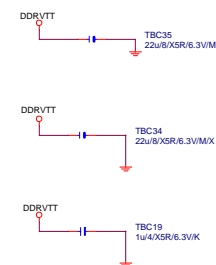
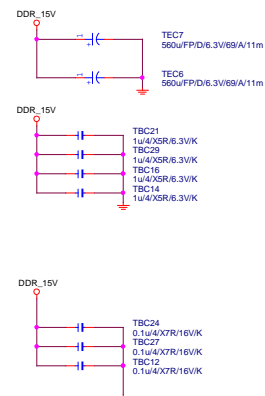
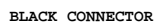
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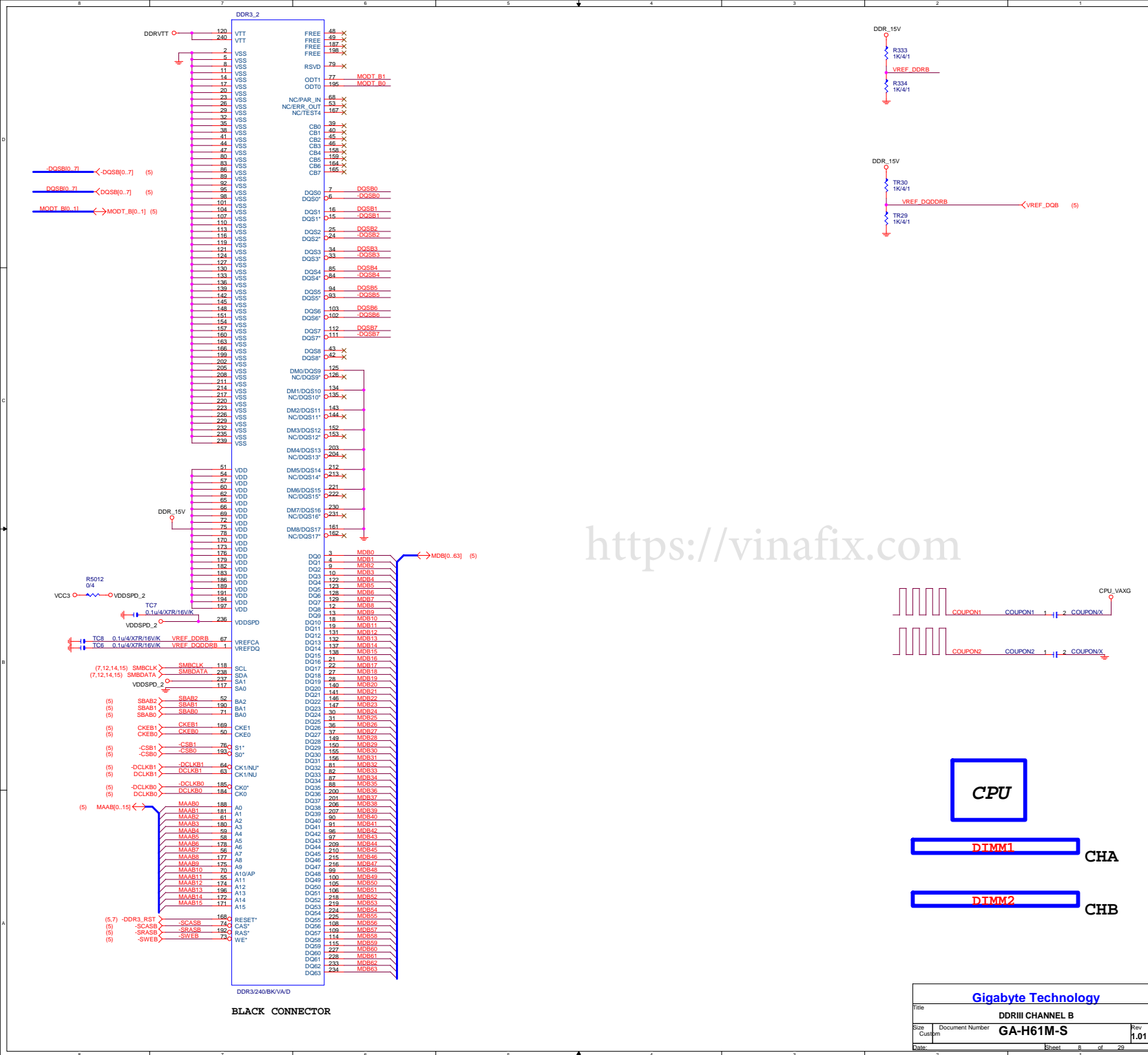
BLOCK DIAGRAM

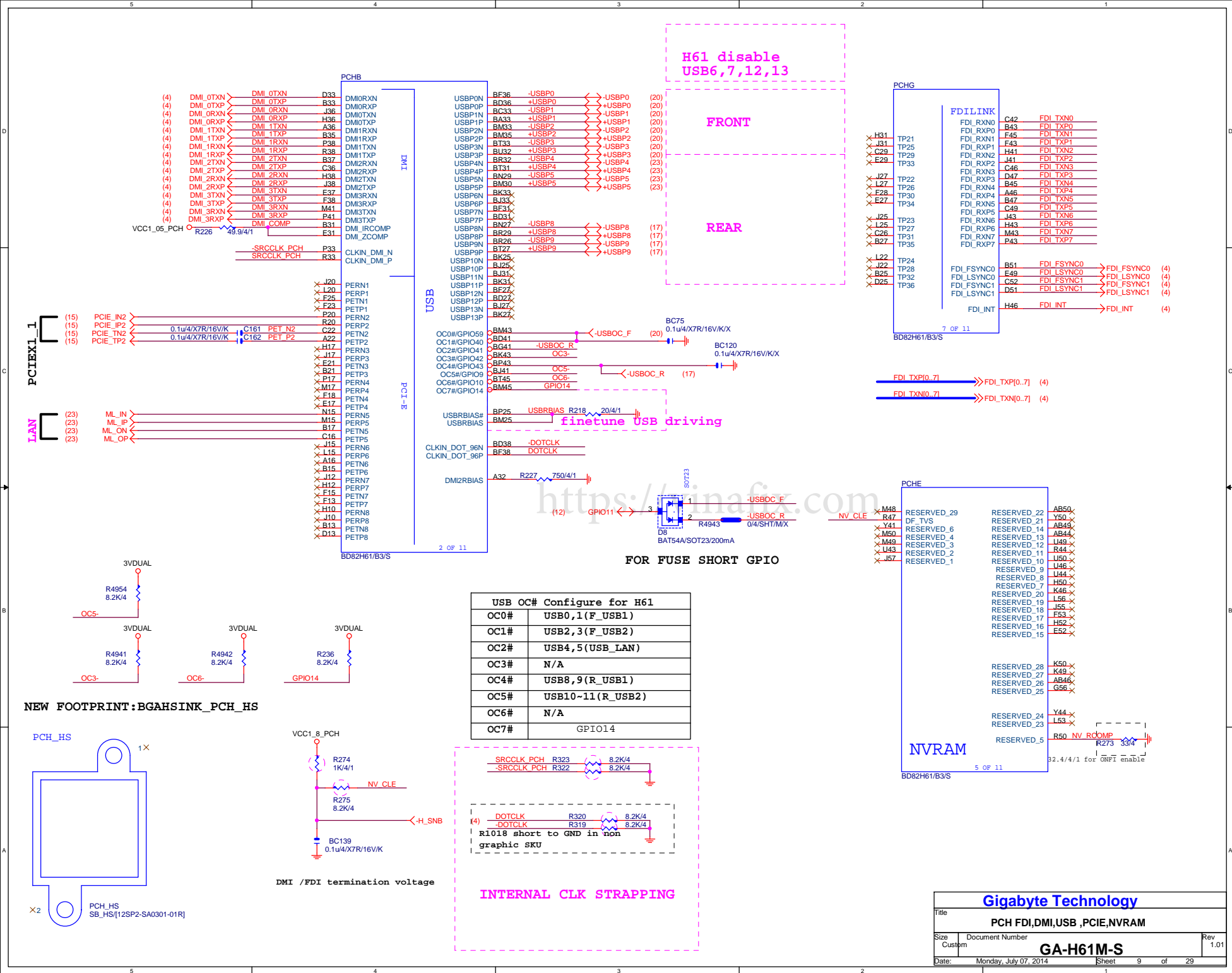


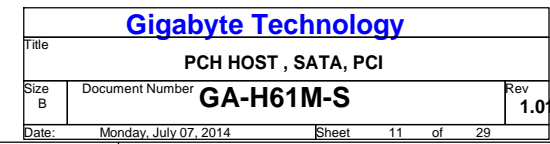




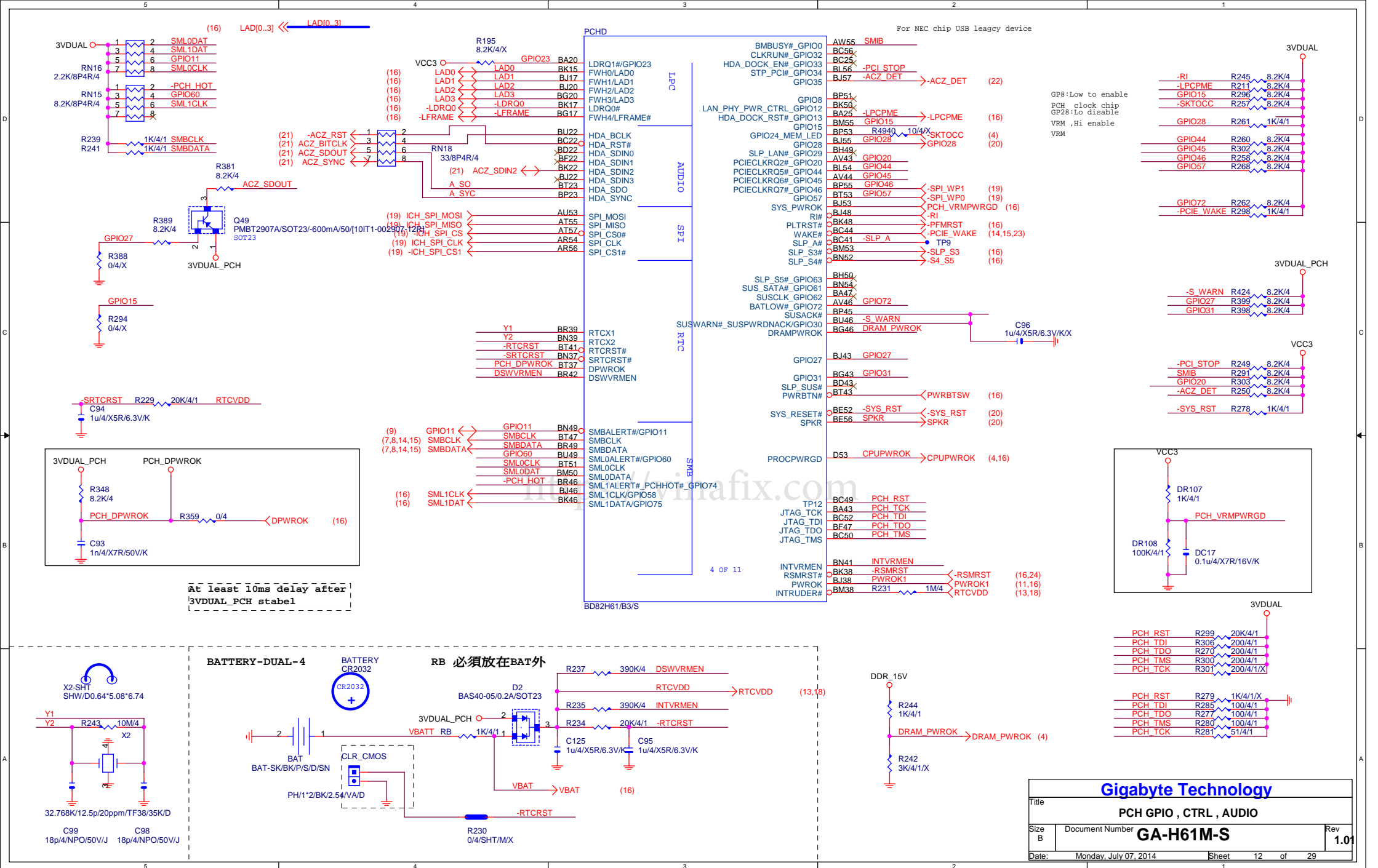


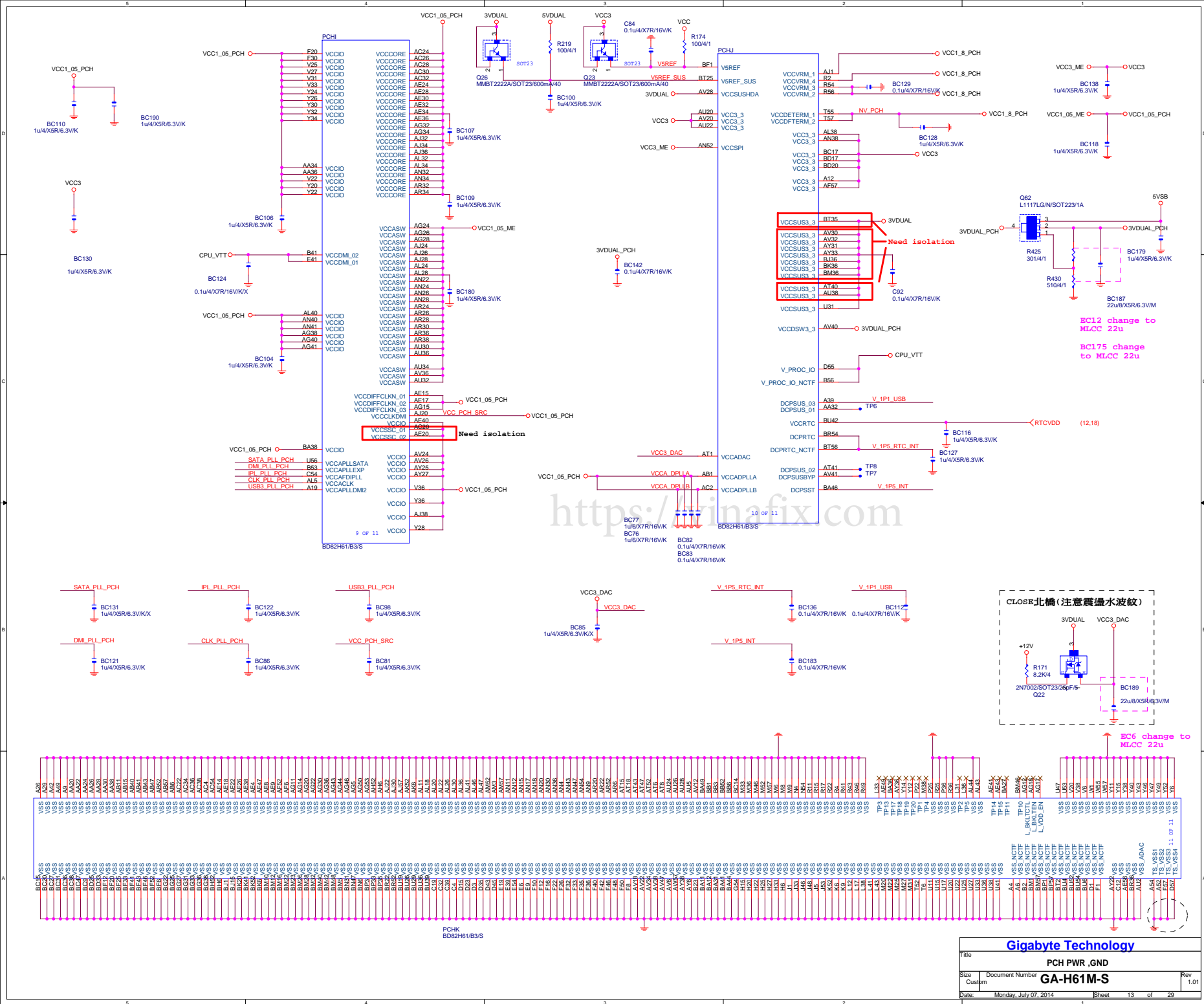


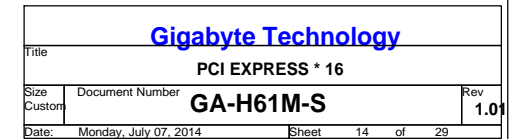




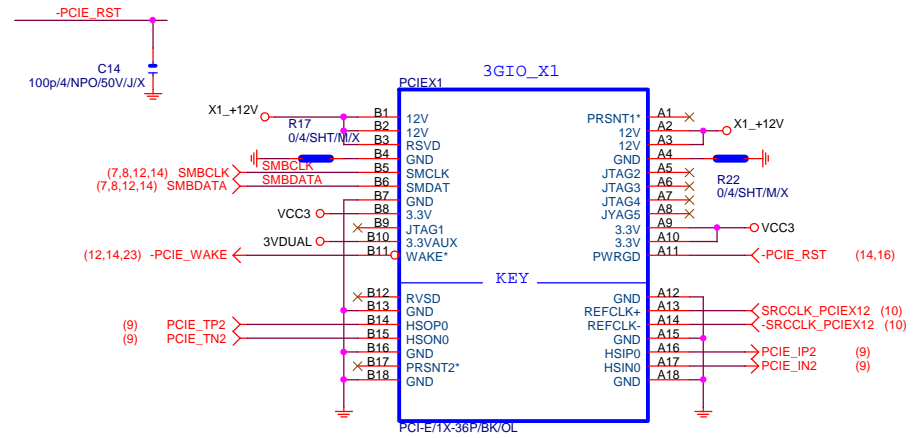
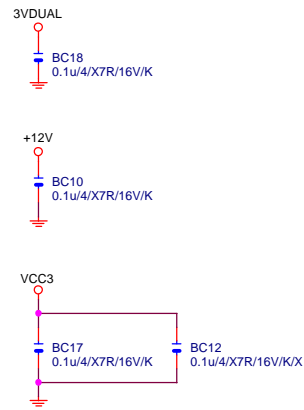
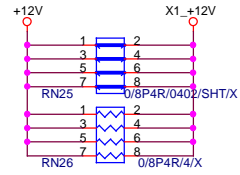
H1X7-SATA2-HS-MASK







PCIE*1



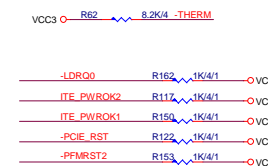
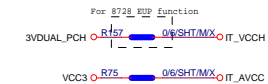
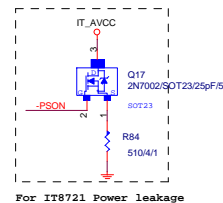
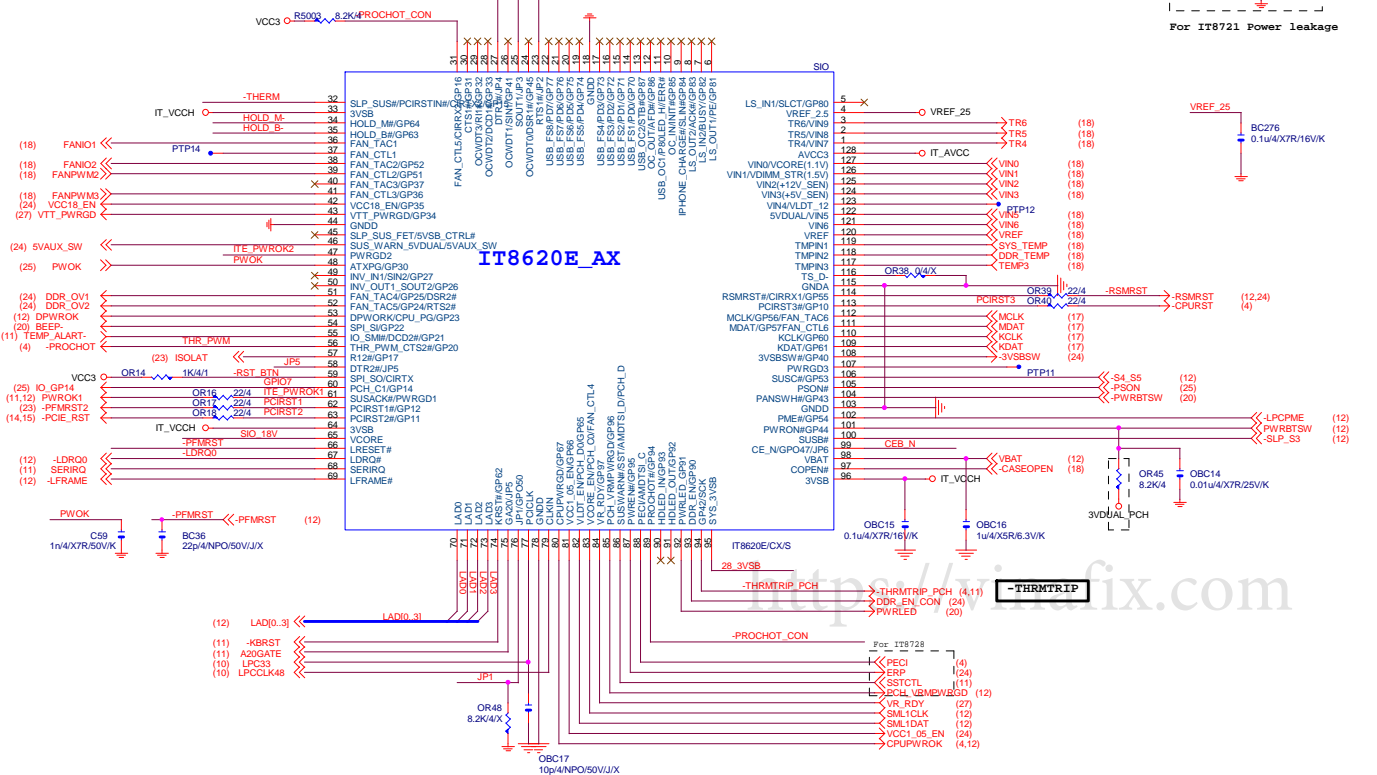
CLK GEN

<https://vinafix.com>

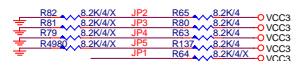
Gigabyte Technology

Title			
PCIEX1,X2/CLK GEN			
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```
GP22 Default GP22 DIOD8
GP23 Default CPU_PG DOD8
```



H61M-S2 1.1 JP6 stuff
pull down

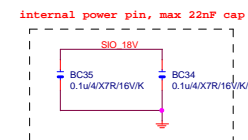
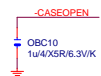
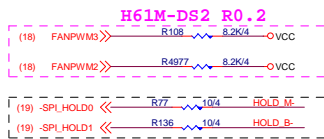
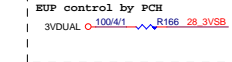


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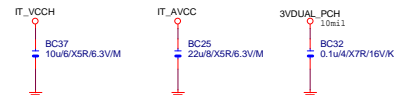
| JP3--- High SPI-Flash Disable
|         Low SPI-Flash Enable

```

EUP from PCH



	IT8728
PIH121	VCORE_EN/PCB_C0
PIH120	VLD1_EN/PCB_D0
PIH19	ATXPG
PIH31	PCR_C1
PIH53	SET/AMDS1_D/NTX8H/PCB_D1
PIH55	PBCT/AMDS1_C/DRYB8
PIH66	SYS_3VSB
PIH70	GP47
PIH95	VIN2 (VCC5)
PIH96	VIN1 (VCC12)
PIH97	VIM0/VDIMM_STR(1.5V)
PIH98	VIM0/VCORE(1.1V)/NC

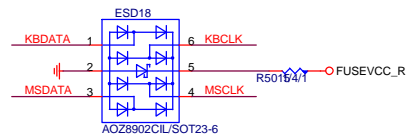


COM

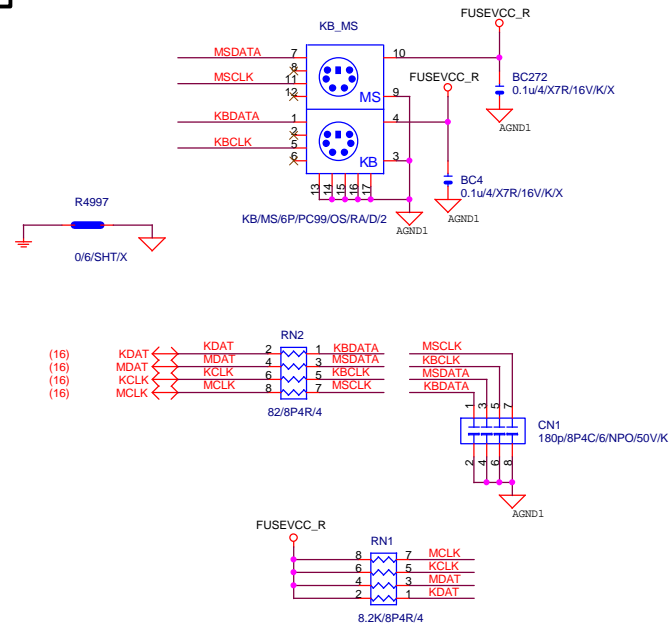
COM RI

KB/MS

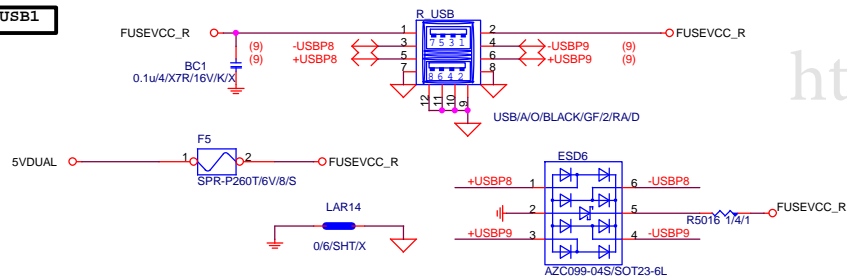
H61M-DS2 R0.2



ESD Close to connector



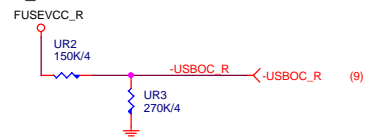
R_USB1



CLOSE R_USB

-PROHOT

R_USB1



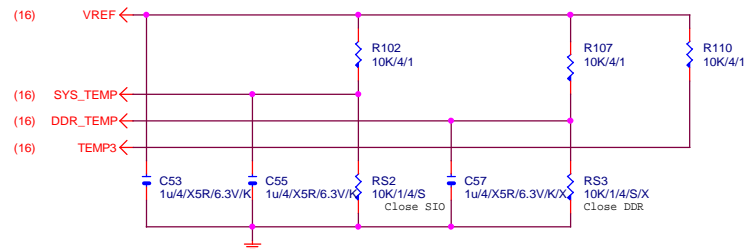
EMI request



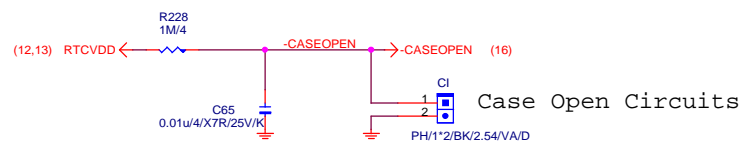
Gigabyte Technology

Title			
COM,-RI,KB_USB,USB_ESATA,-PROCHOT			
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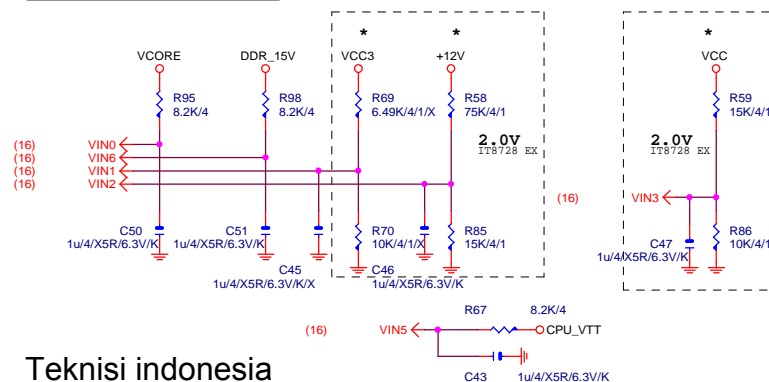
TEMP H/W MONITOR



CASE OPEN



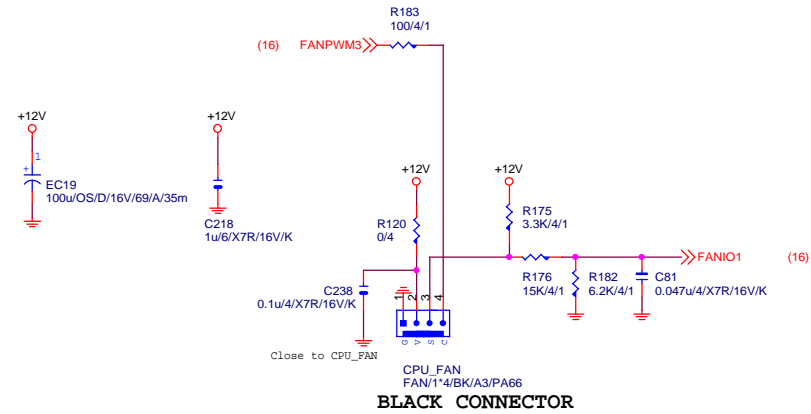
VOLTAGE-- H/W MONITOR



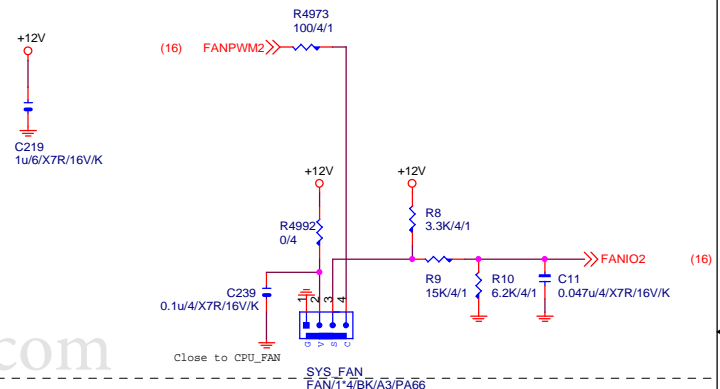
Teknisi Indonesia

PRS1 CLOSE CPU VR MOSFET

CPU SMART FAN



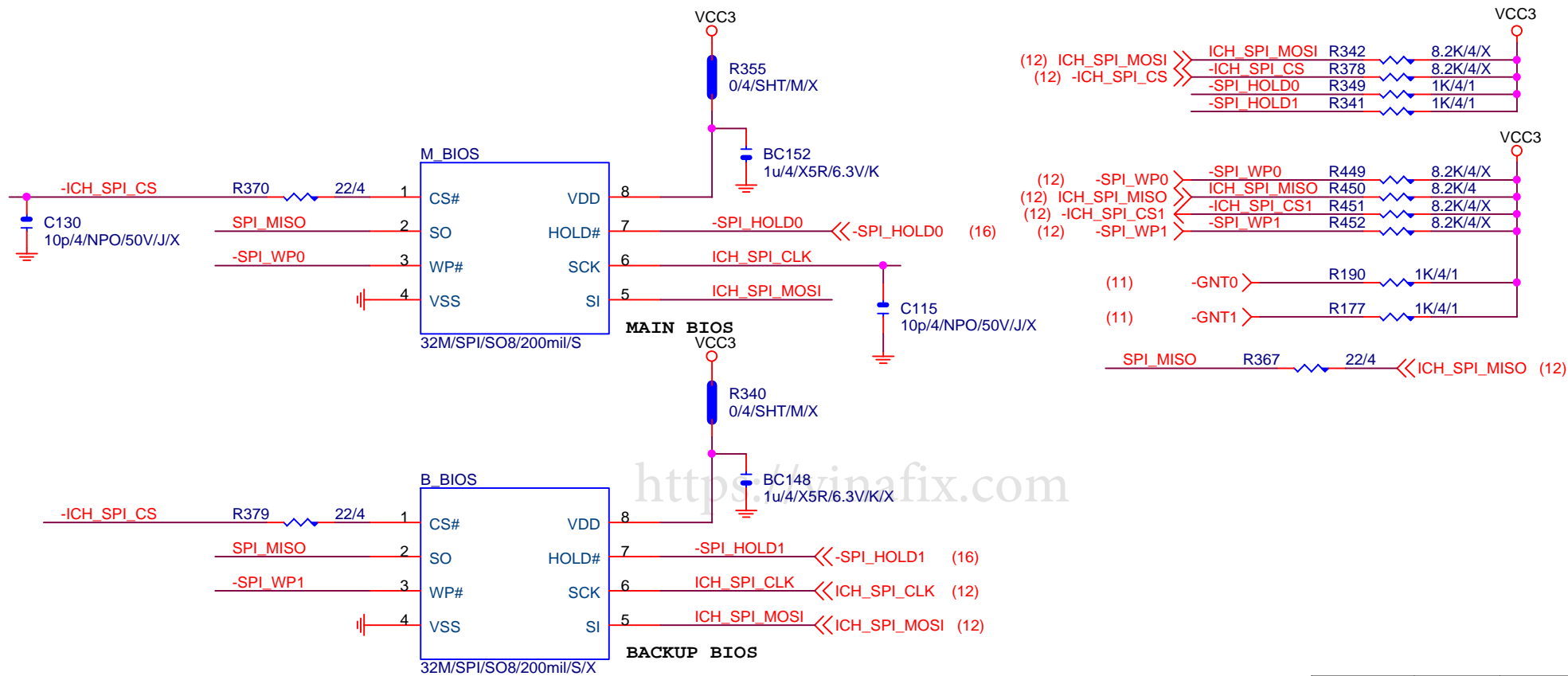
SYS SMART FAN



BLACK CONNECTOR

Gigabyte Technology			
Title			
HWM,FAN CTRL,OV			
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DUAL BIOS



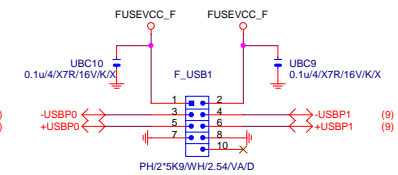
BOOT DEVICE	GNT1	GNT0
LPC	0	0
PCI	0	1
SPI	1	1

1 means floating
0 means PD 1K

Gigabyte Technology

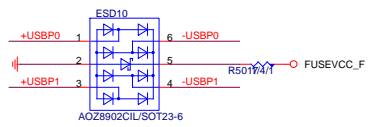
Title		
DUAL BIOS		
Size A	Document Number GA-H61M-S	Rev 1.01
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FRONT USB1

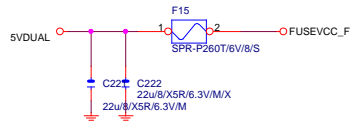


WHITE CONNECTOR

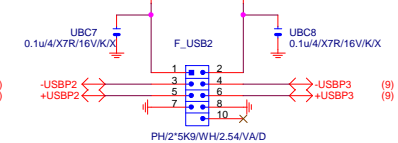
Close to connector



CLOSE F_USB1



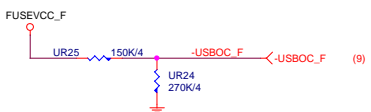
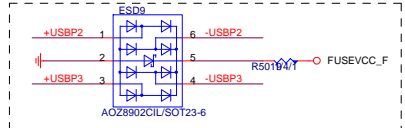
FRONT USB2



Close to connector

WHITE CONNECTOR

FRONT USB3



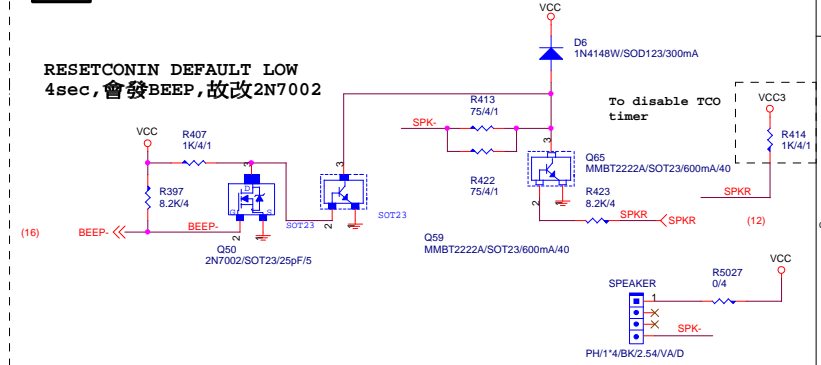
<https://vinafix.com>

SATA LED

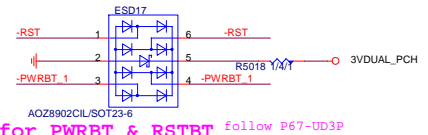


SPKR

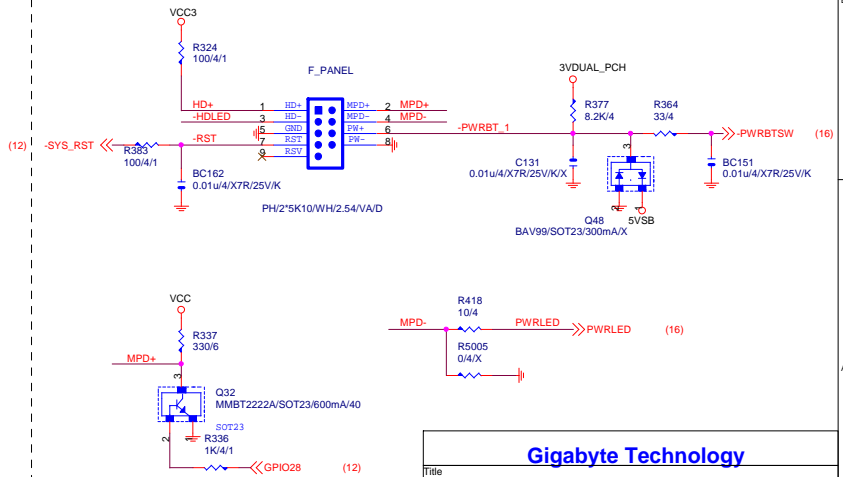
RESETCONIN DEFAULT LOW
4sec, 會發BEEP, 故改2N7002



INTEL FRONT PANEL



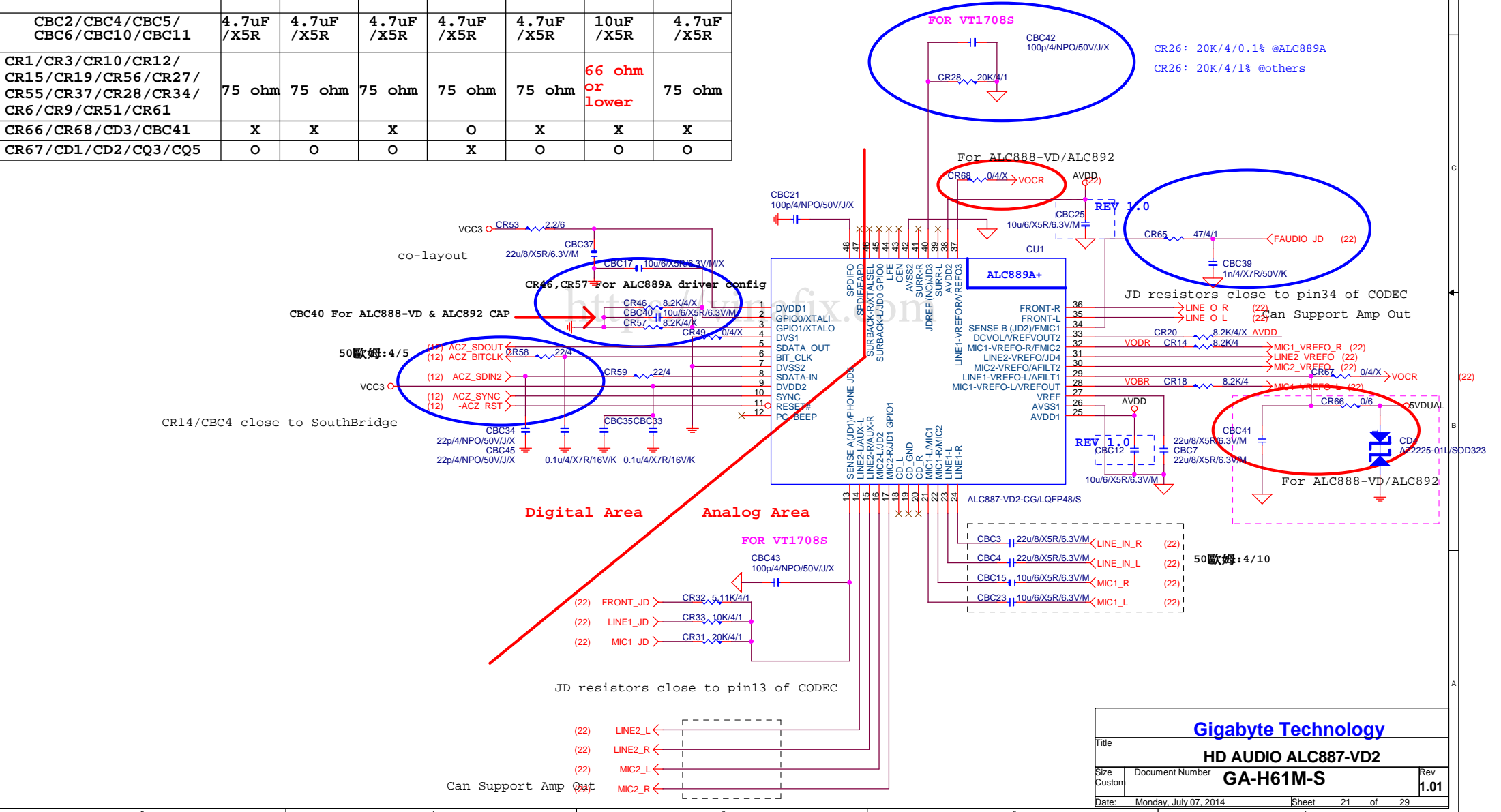
ESD for PWRBT & RSTBT follow P67-UD3P



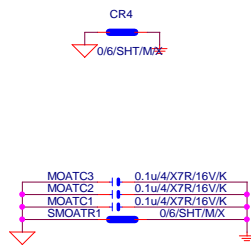
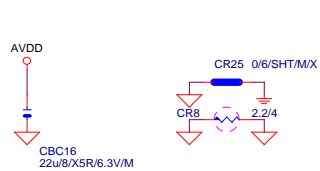
Gigabyte Technology

Title	FP,F, USB,USB PWR,SPKR,SATA LED		
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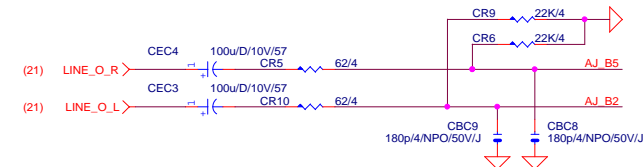
	ALC883	ALC888-VA	ALC888B	ALC888-VD	ALC892R	ALC889	ALC889A
CR46	X	X	X	X	X	X	O
CR57	X	X	X	X	X	X	O
CR49	O	O	X	X	X	O	O
CBC40	X	X	X	10uF/X5R	10uF/X5R	X	X
CR20	O	X	X	X	X	X	X
CR26	20K/1%	20K/1%	20K/1%	20K/1%	20K/1%	20K/1%	20K/0.1%
CR47	X	X	O	X	O	O	X
CR48	O	O	X	O	X	X	O
CBC2/CBC4/CBC5/ CBC6/CBC10/CBC11	4.7uF /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



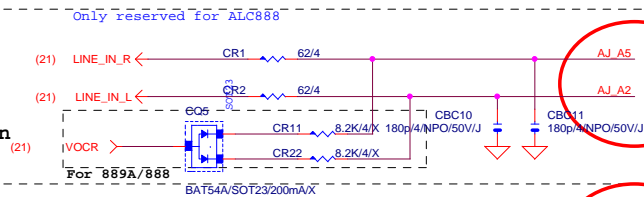
CODEC POWER/EMI PAD



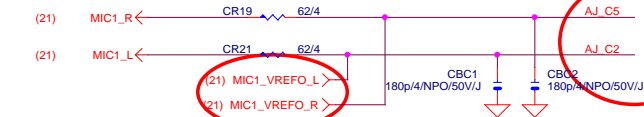
LINE-OUT



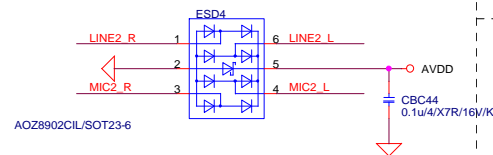
LINE-IN

Verify MIC function
in LINE-in

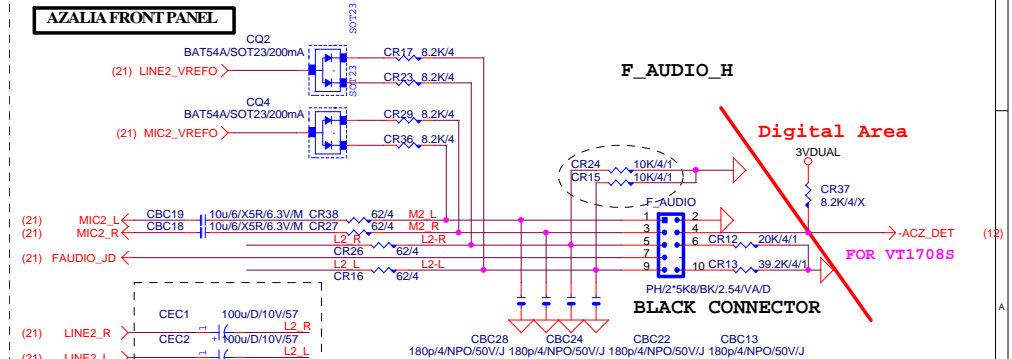
MIC-IN



AZALIA JACK

<https://vinafix.com>

AZALIA FRONT PANEL



Digital Area

3VDUAL

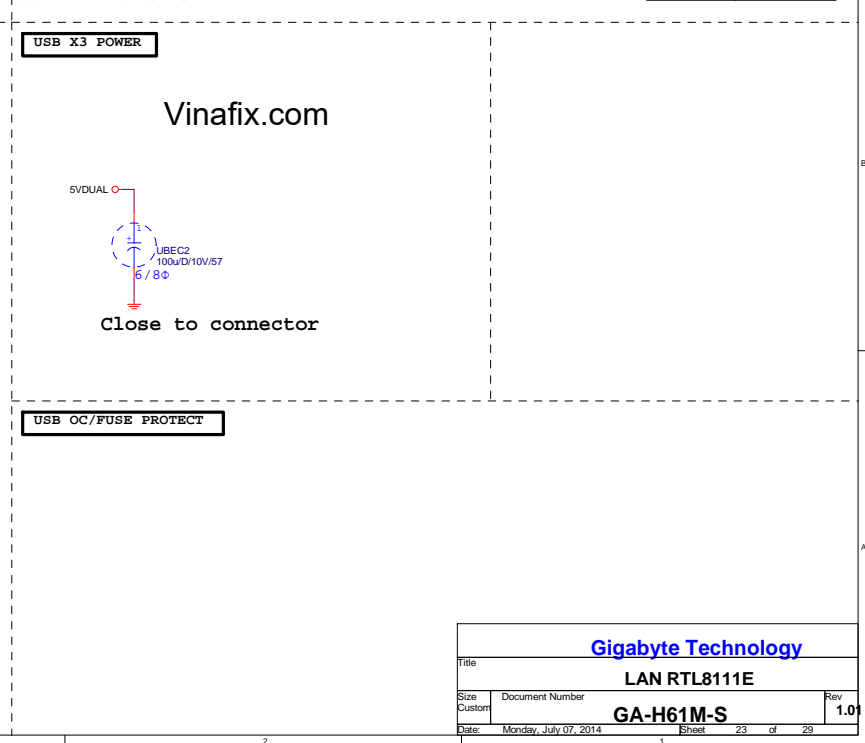
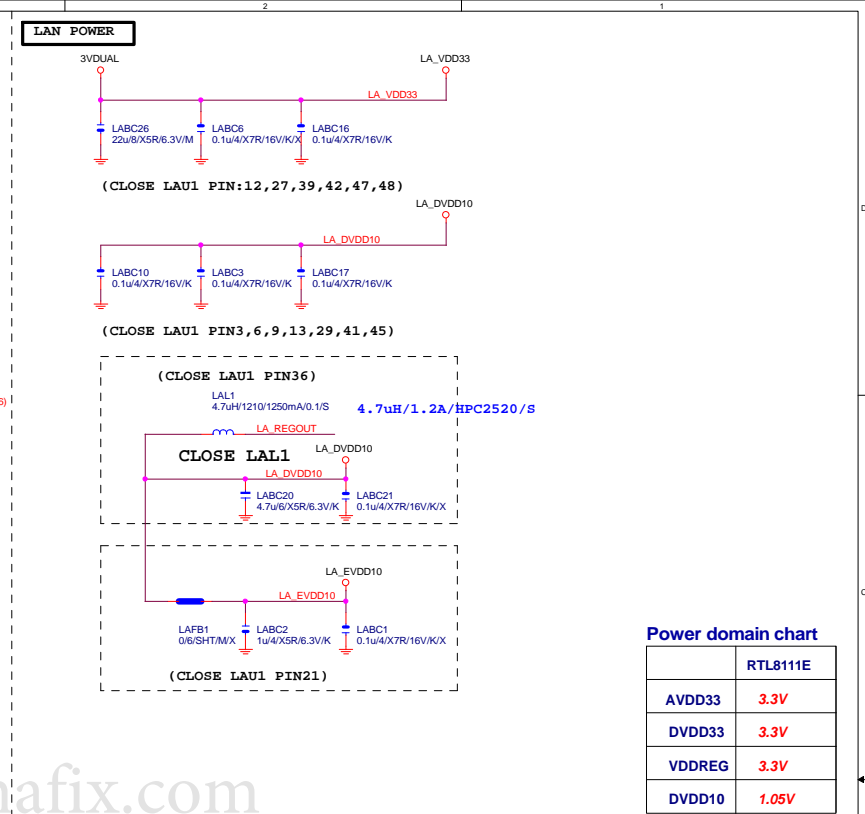
CR37
8.2K/4/X

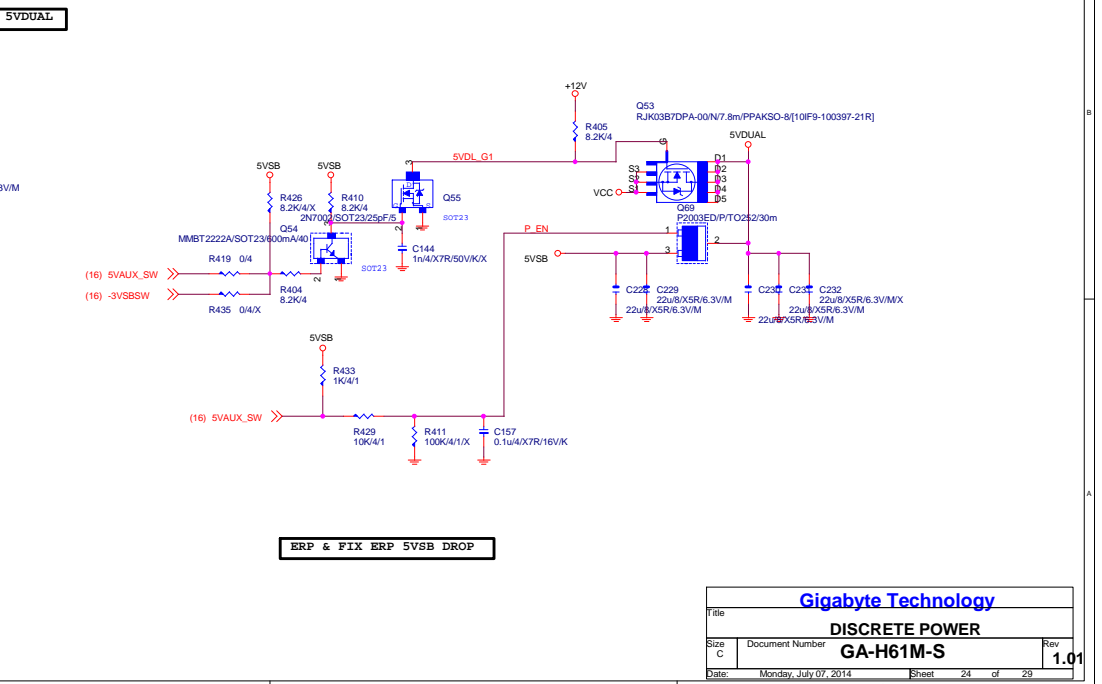
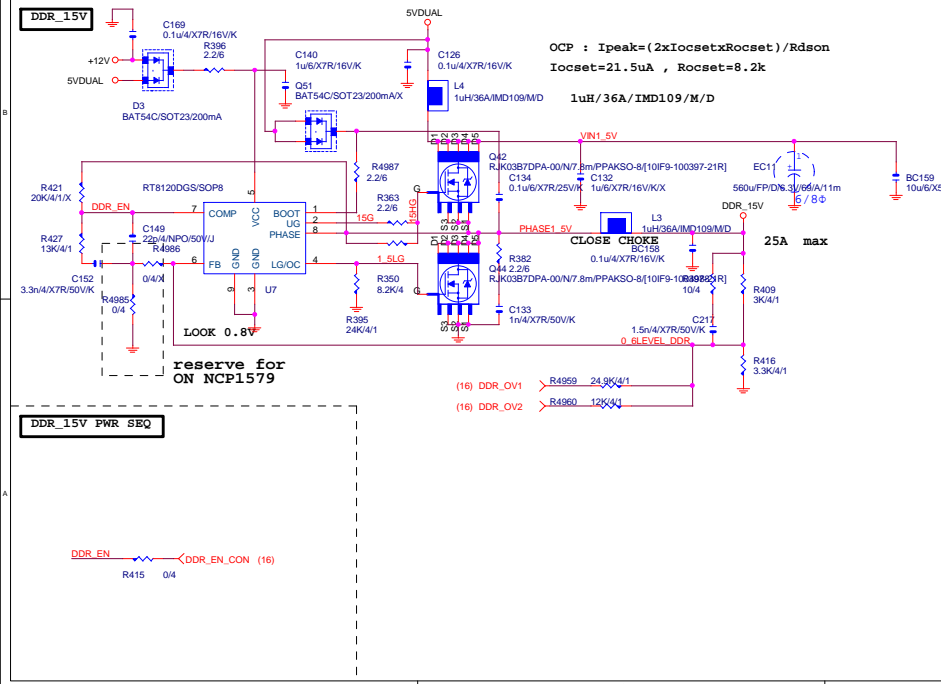
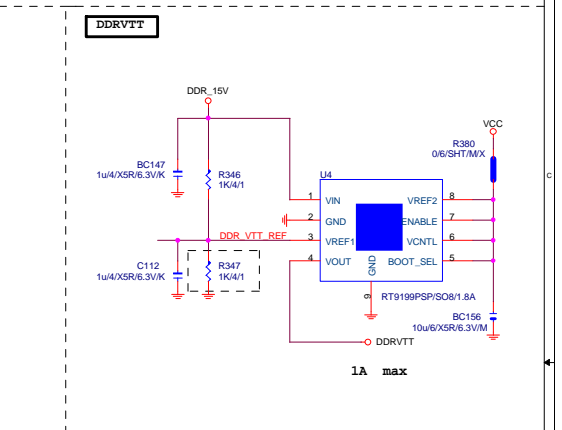
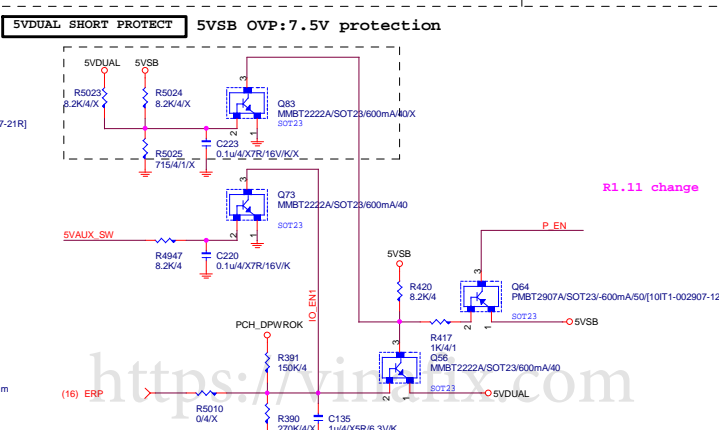
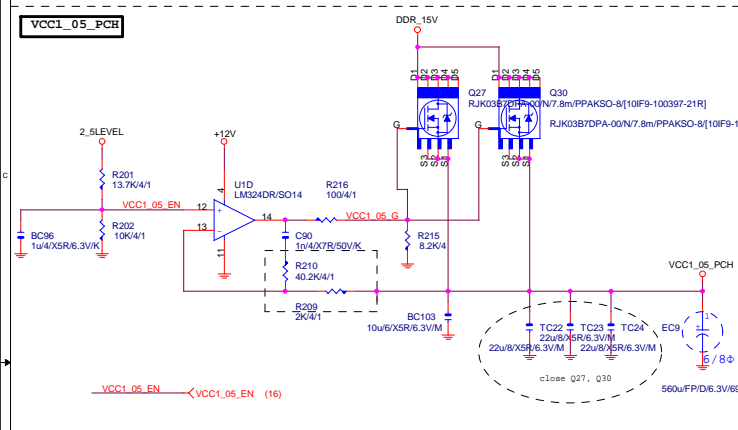
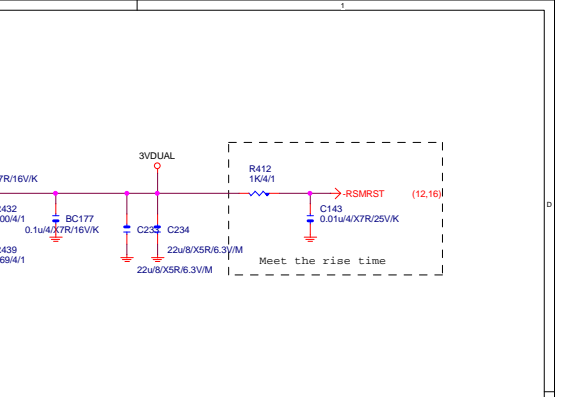
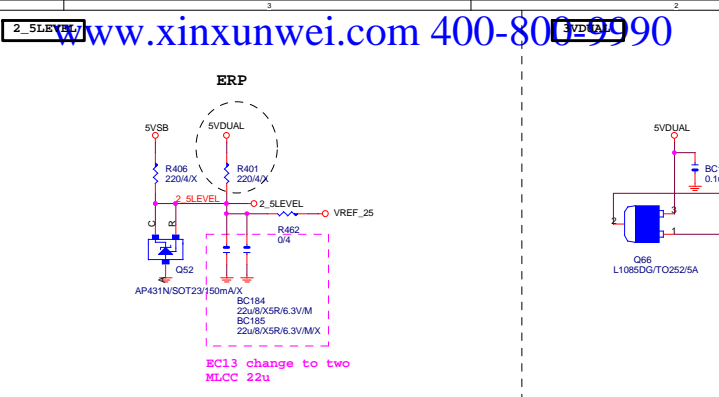
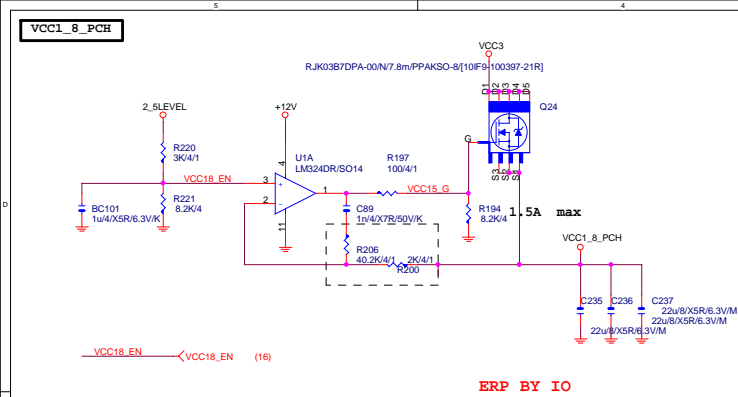
ACZ_DET (12)

FOR VT1708S

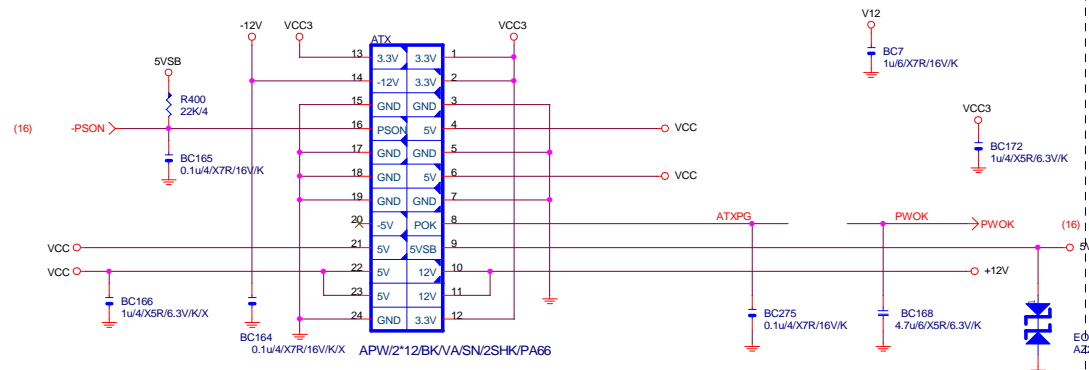
Gigabyte Technology

Title			
AUDIO JACK			
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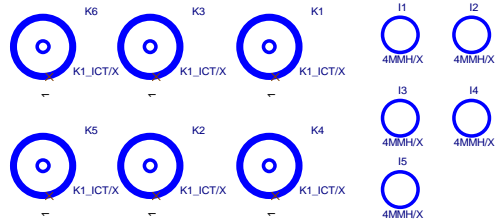
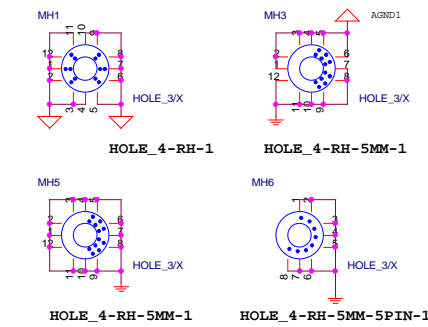




ATXX24 POWER CONNECTOR



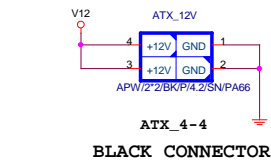
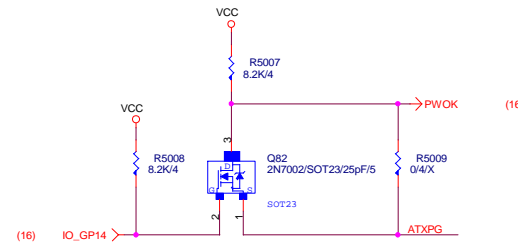
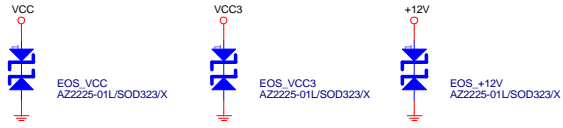
BLACK-CONNECTOR



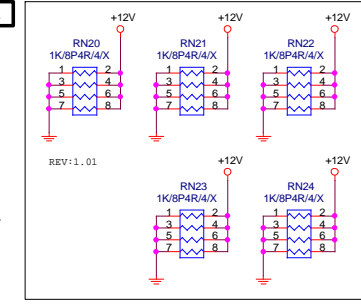
To prevent the 5VSB under loading when boot

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

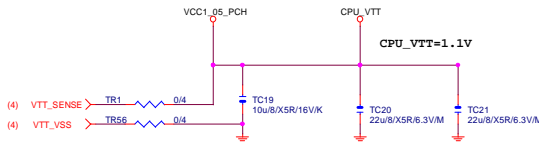
-S_WARN-->5VDUAL1-->-S_ACK(PCH)-->-DEPSLP/-RSMRST-->5VDUAL-->3VDUAL



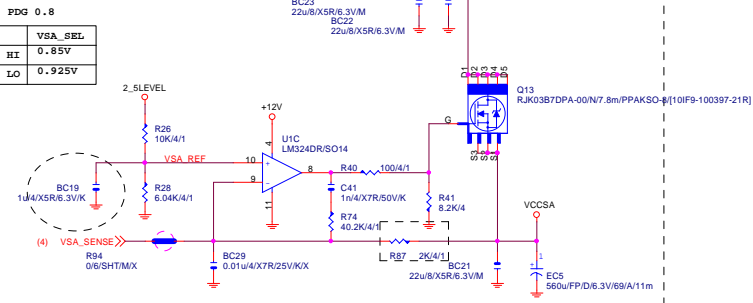
ATX_4-4 BLACK CONNECTOR



CPU_VTT

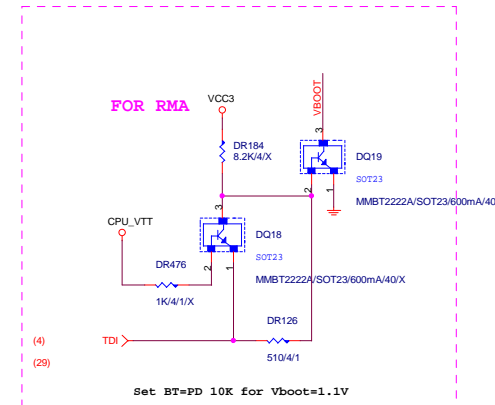
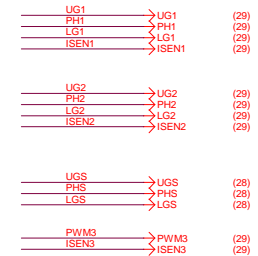
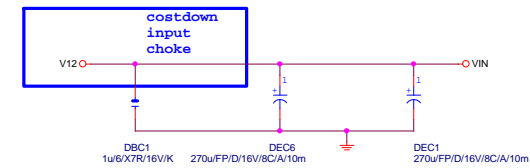
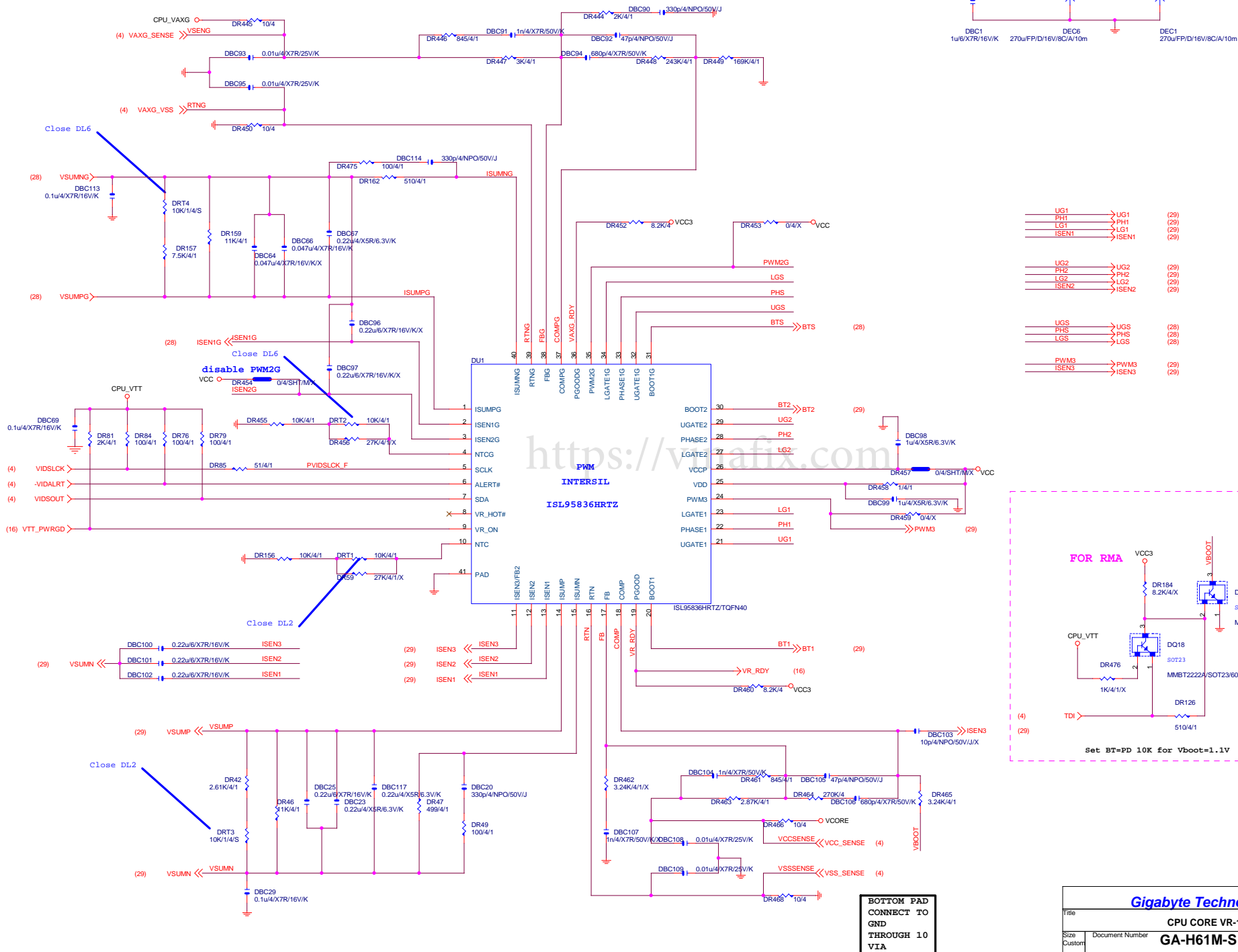


VCCSA



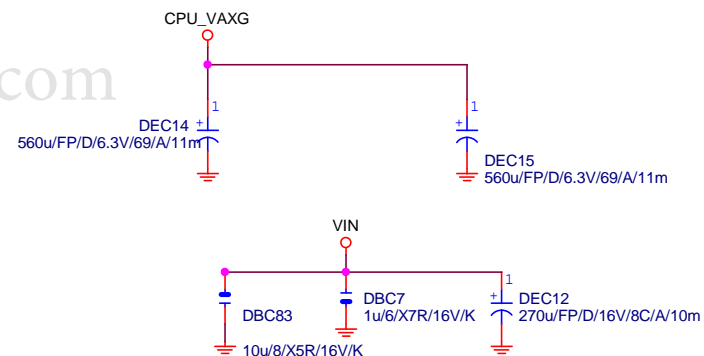
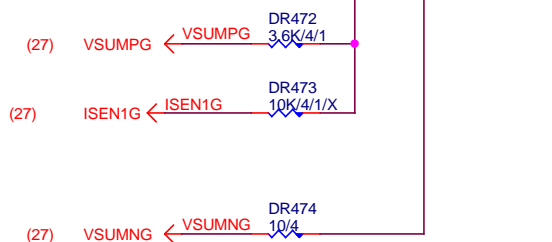
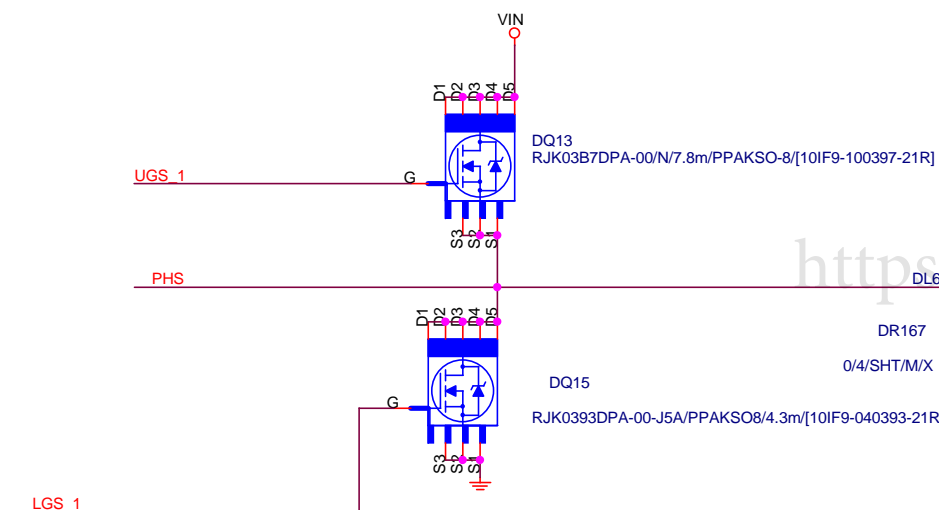
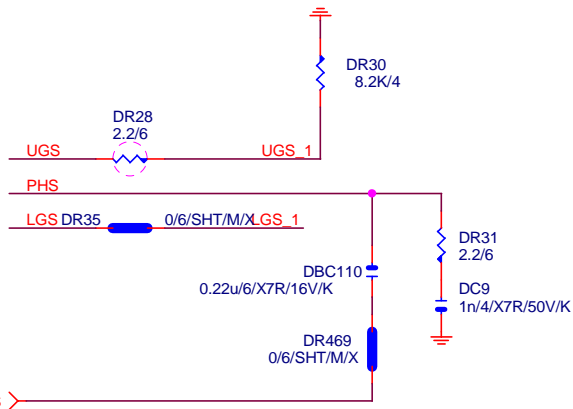
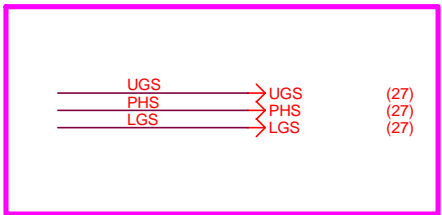
VCCSA_PWR_SEQ

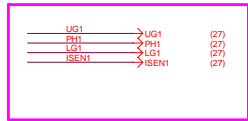
CPU_VTT_PWR_SEQ



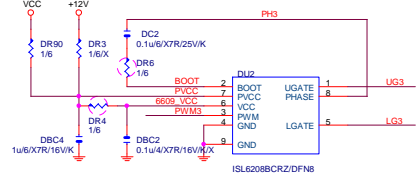
BOTTOM PAD
CONNECT TO
GND
THROUGH 10
VIA

VAXG

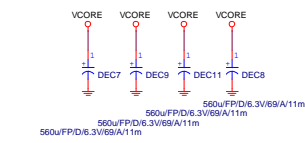




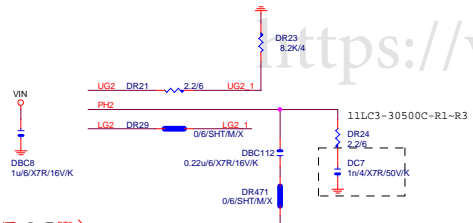
Pop 15L6425CB for PB2
[15L6425CBZ/908]



[2]



[3]



[1]

