

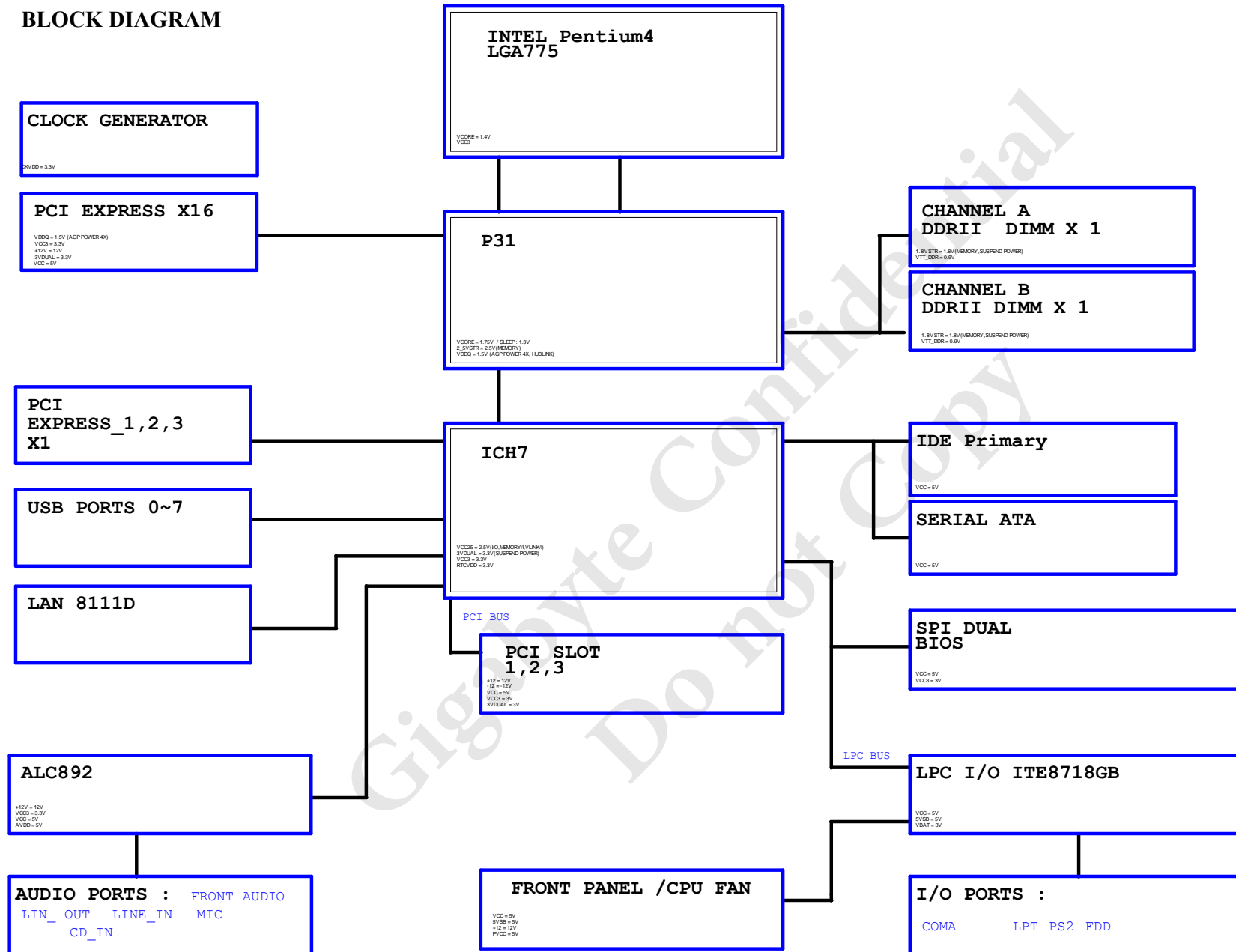
**Model Name: GA-P41-ES3G** Revision 1.4

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02	BLOCK DIAGRAM
03	BOM & PCB MODIFY HISTORY
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05	P4 LGA775 B,D
06	P4 LGA775 C
07	P4 LGA775 E,F,G,H
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09	Eaglelake DDR
10	Eaglelake PCI EXP 16,DMI
11	Eaglelake VGA
12	Eaglelake GND
13	Eaglelake PWR
14	PCI EXPRESS*16 SLOT
15	DDRII CHANNEL A
16	DDRII CHANNEL B
17	DDRII TERMINATION
18	ICH7 PCI, USB, DMI, LAN
19	ICH7 IDE, GPIO, SATA, CTRL
20	ICH7 VCC, GND
21	CK505 CLOCK.
22	PCI SLOT 1,2,PCIE*1
23	IDE/FLOPPY
24	ITE 8718 GB/HX
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SHEET	TITLE
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29	DISCRETE POWER
30	VCORE PWM ISL6312
31	ATX, OTHERS POWER
32	FRONT PANEL
33	REALTEK RTL8111D
34	PCI SLOT3,PCIE*2,3

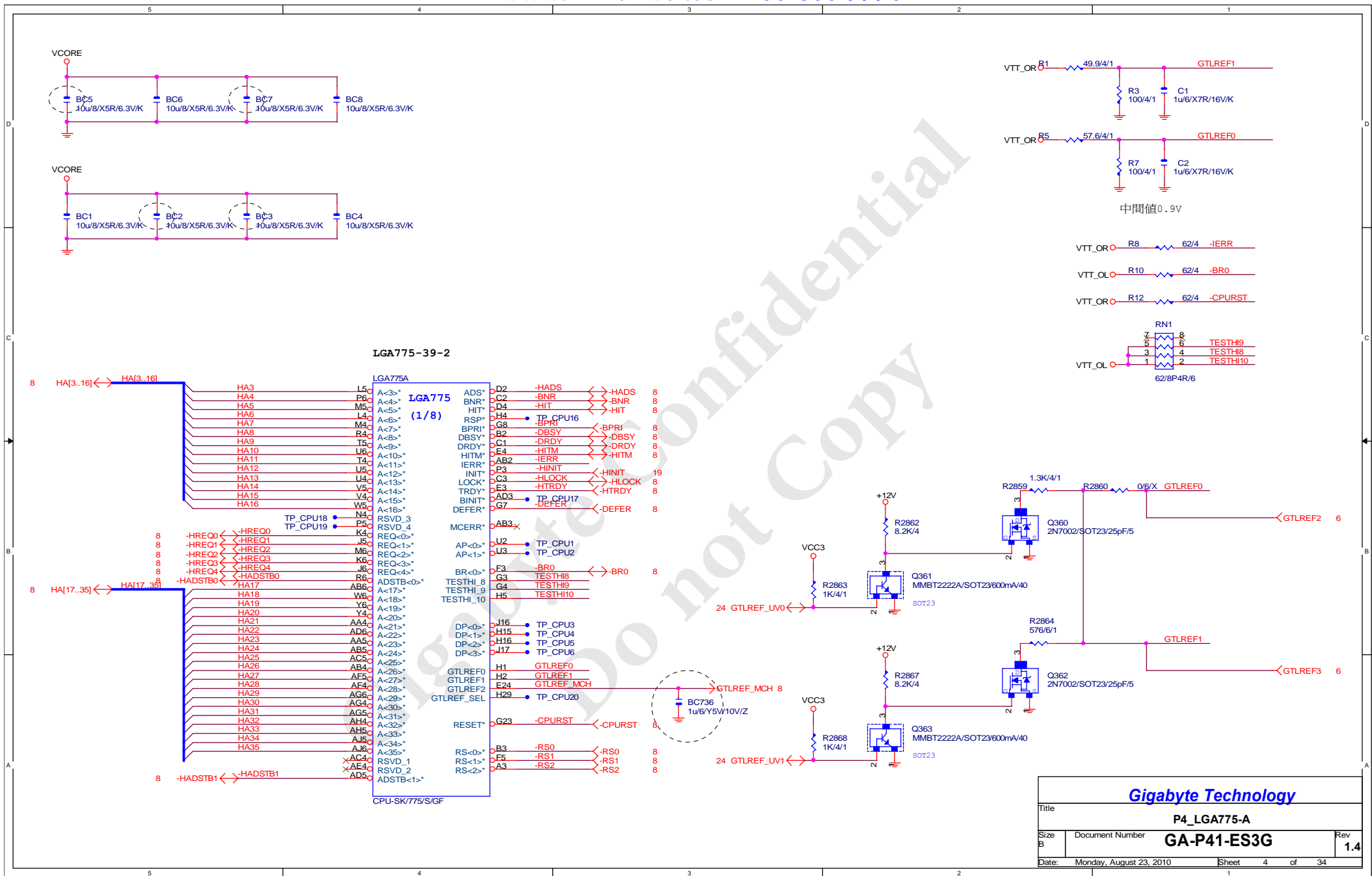
<b>Gigabyte Technology</b>			
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# BLOCK DIAGRAM



Gigabyte Technology			
BOM & PCB MODIFY HISTORY			
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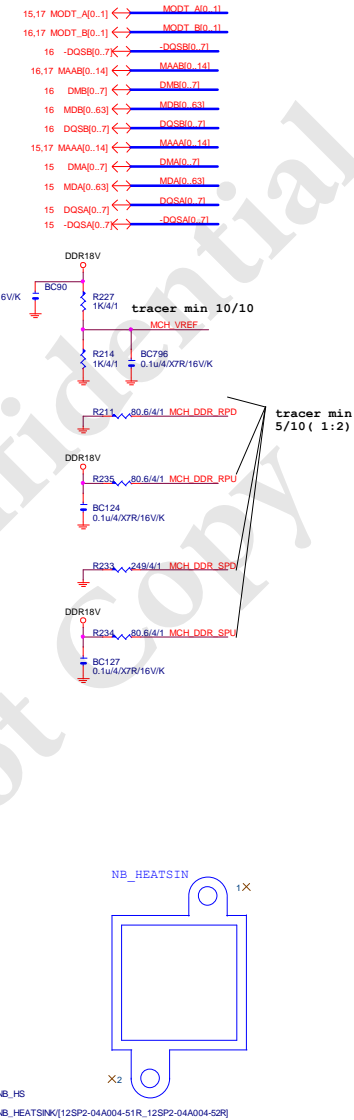
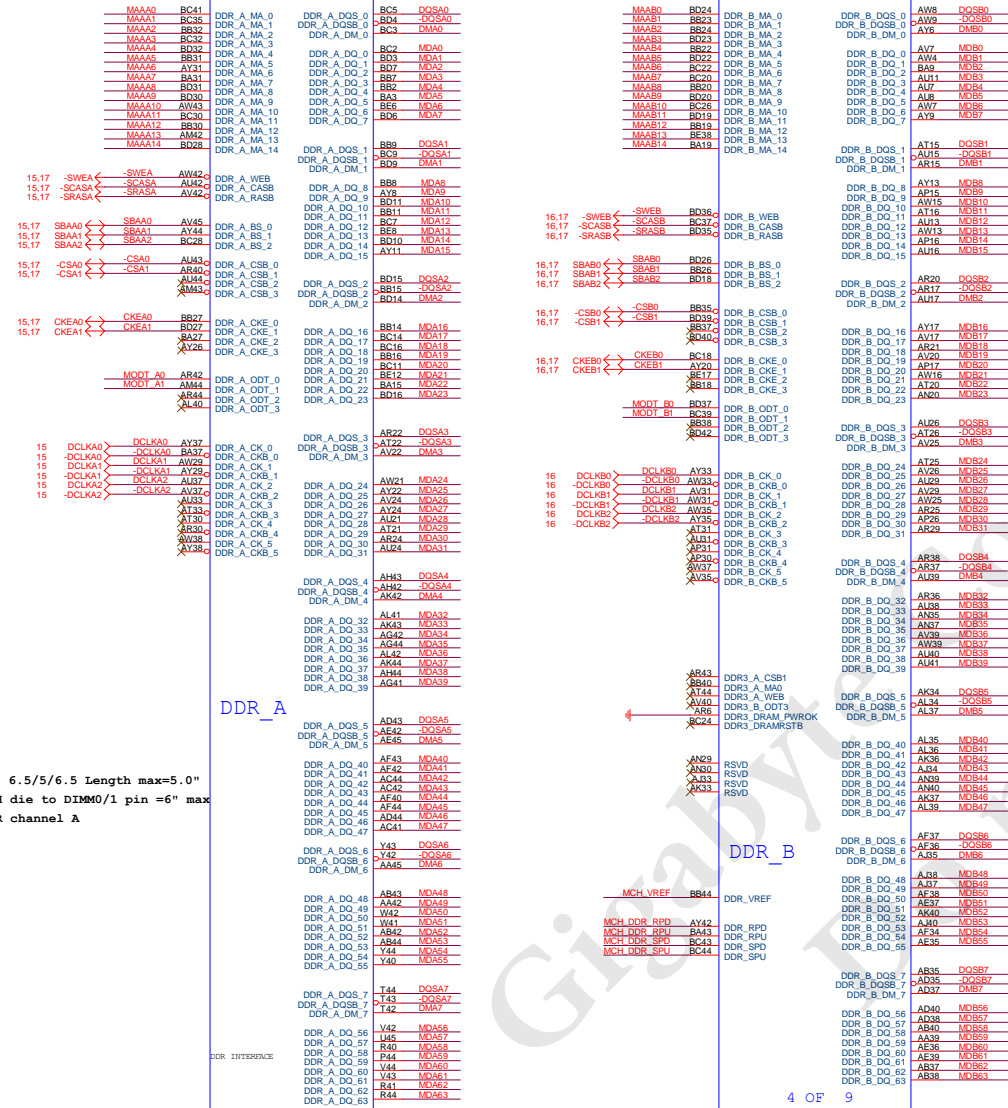






## MCHC

## MCHD

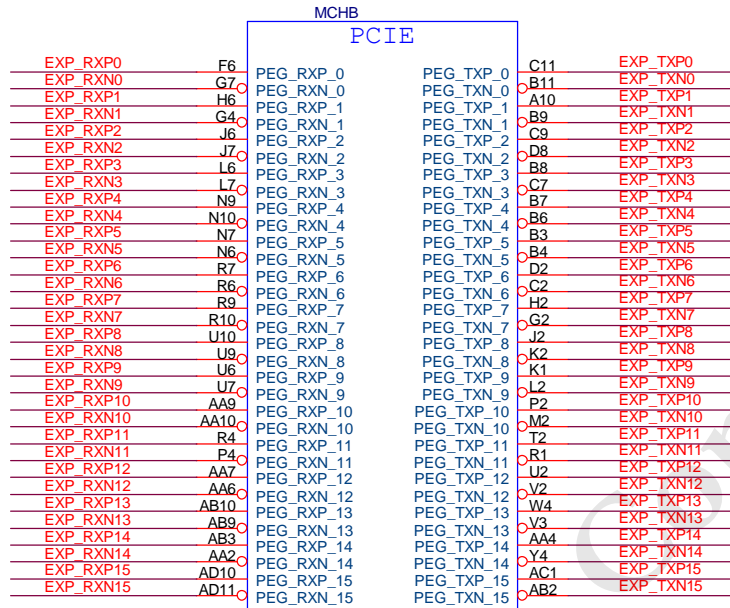


Gigabyte Technology

File	GMCH-DDR11	Rev	1.4
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PCIEX16:16/5/5/5/16(breakout min 8/4/5/4/8)

Impedance=85 +- 17.5%

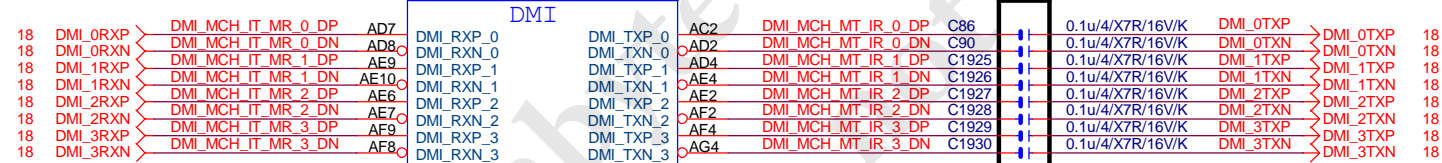


EXP\_TXP[0..15] >> EXP\_TXP[0..15] 14

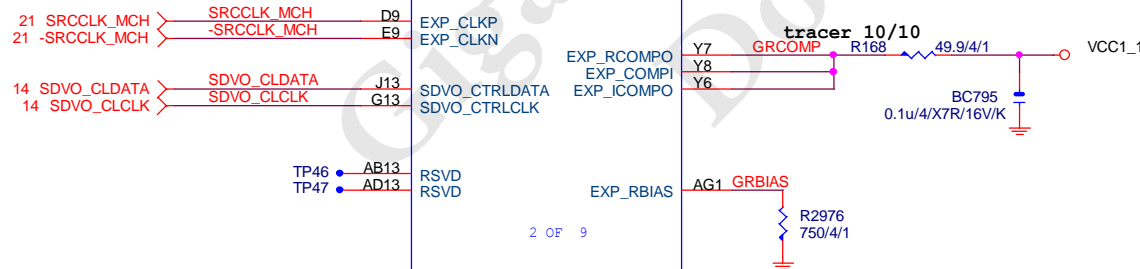
EXP\_TXN[0..15] >> EXP\_TXN[0..15] 14

EXP\_RXP[0..15] >> EXP\_RXP[0..15] 14

EXP\_RXN[0..15] >> EXP\_RXN[0..15] 14

DMI:12/4/8/4/12  
Impedance=95 +- 17.5%

Close to MCH



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G41/A3/HDMI[10HB1-030G41-20R]

Gigabyte Technology

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EXP\_SM  
0:SDVO OR PCIE  
1:BOTH SDVO AND  
EXP\_SLR:  
0:BTX PCIE are reversed  
1:ATX PCIE normal

MCHE

4/10//15&lt;500 MILS

1th RGB:7.5/6 &lt; 300 MILS

2th RGB:4/20 &lt;5"~8" inch

VGA

ON-BOARD VGA 75ohm  
non-ON-BOARD VGA 0ohm

4/6//12

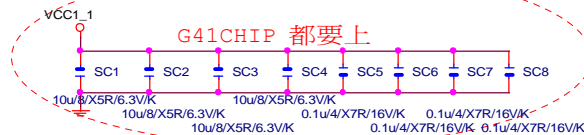
ON-BOARD VGA 1.02k  
non-ON-BOARD VGA 0ohm

MISC

BW+ICH8 不要上 (SAMPLE)  
BW+ICH7 要上

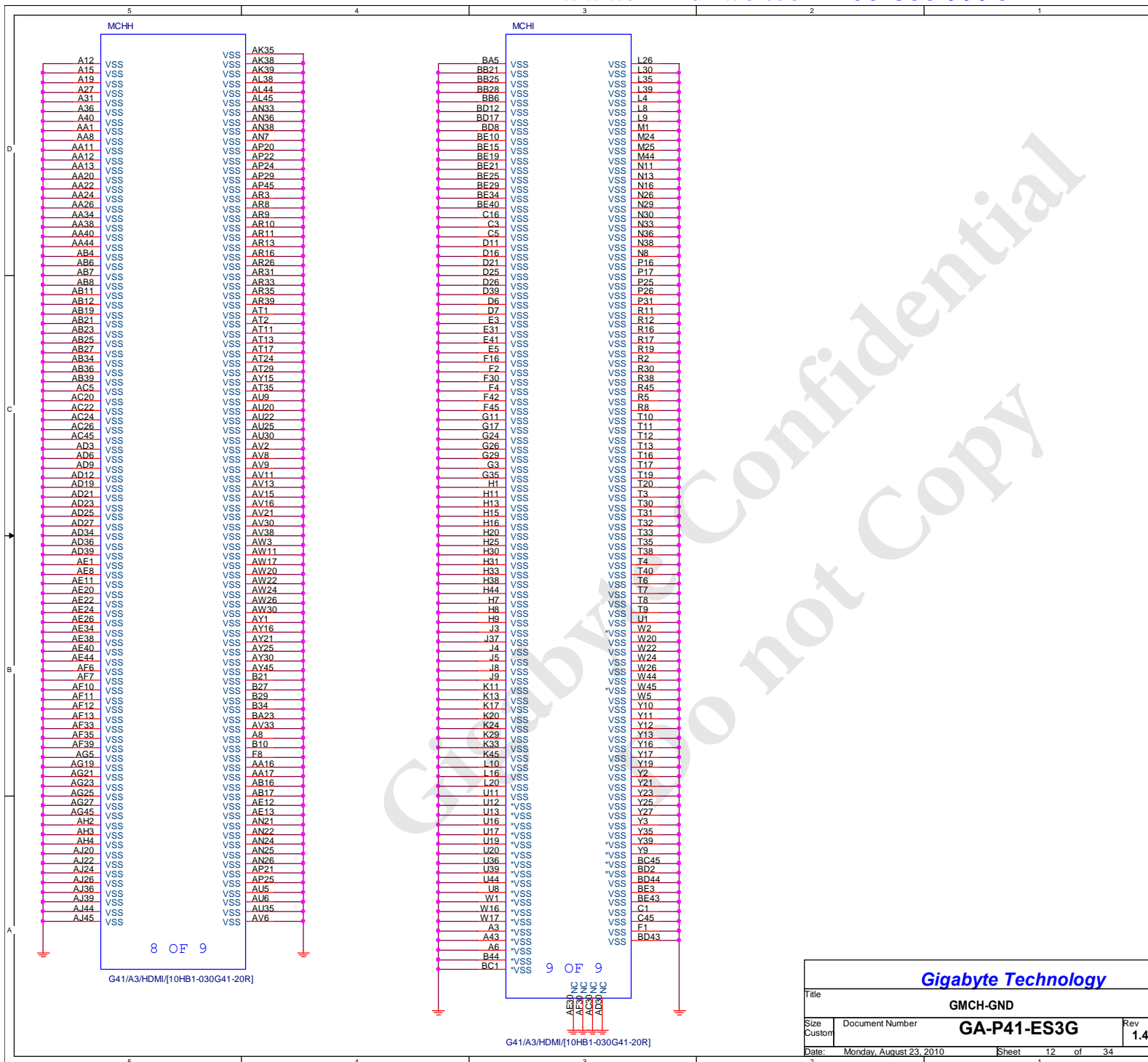
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G41/A3/HDMI/[10HB1-030G41-20R]



Gigabyte Technology

Title			GMCH-INTERNAL VGA	
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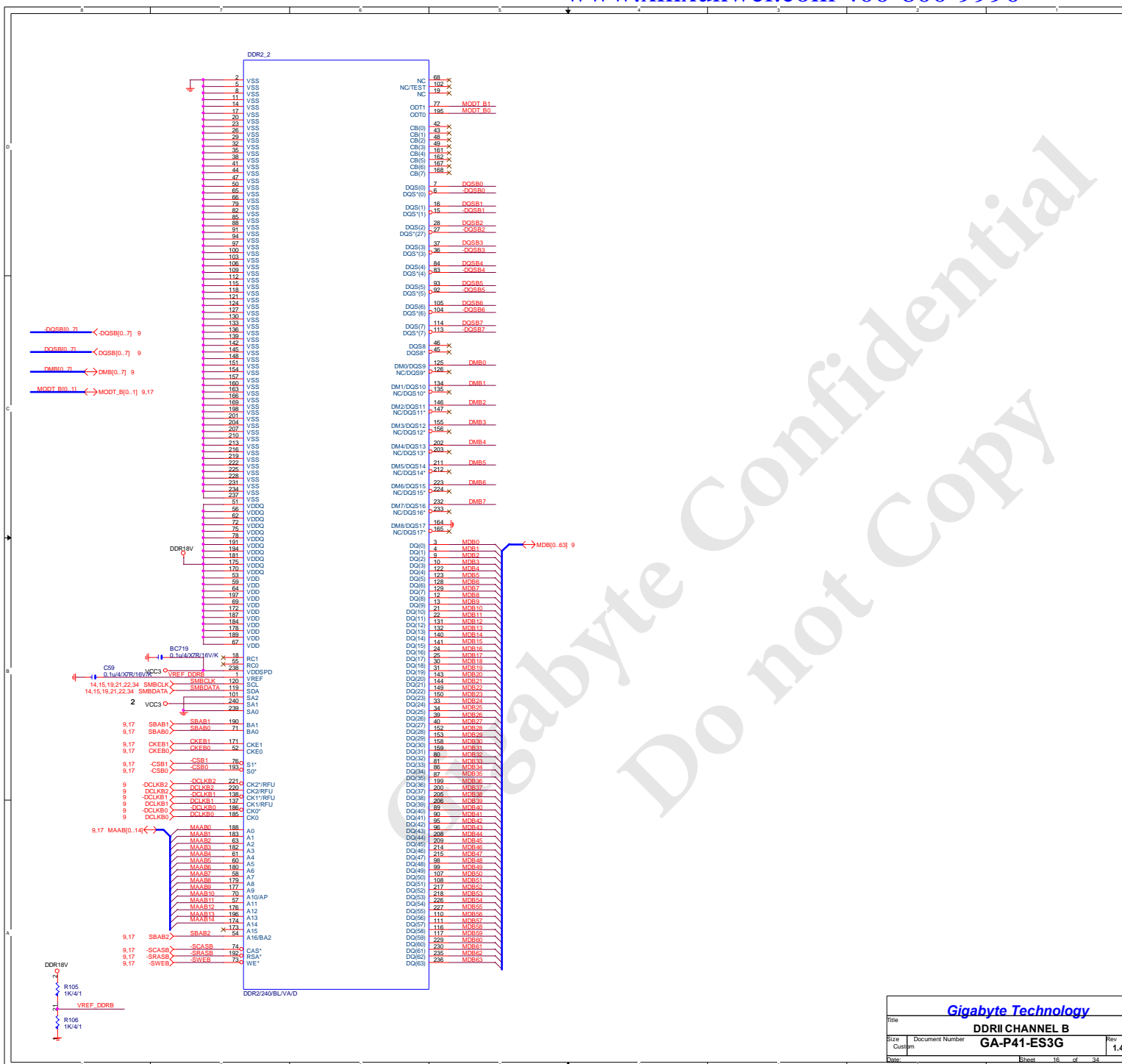
Gigabyte Technology		
Title: GMCH-GND		
Size: Custom	Document Number: GA-P41-ES3G	Rev: 1.4
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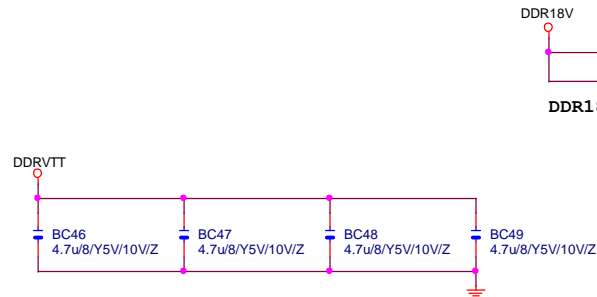




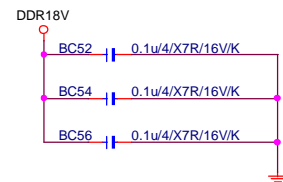


## DDR TERMINATION CHANNEL A

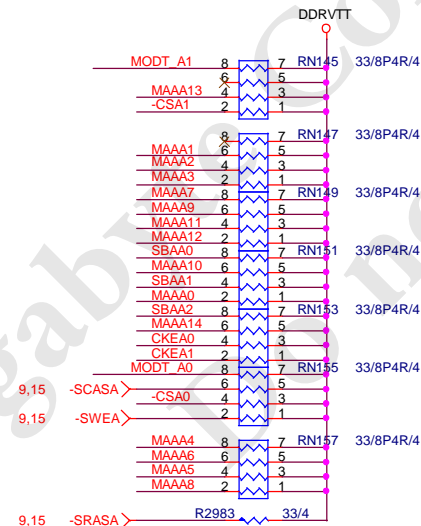
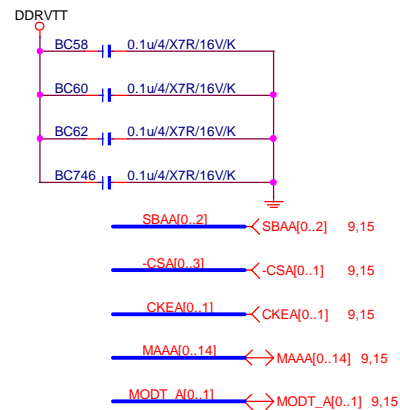
### DDRVTT Decouple



### DDR18V Decouple

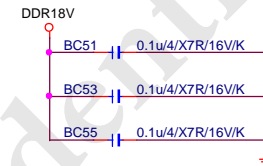


### DDRVTT Decouple

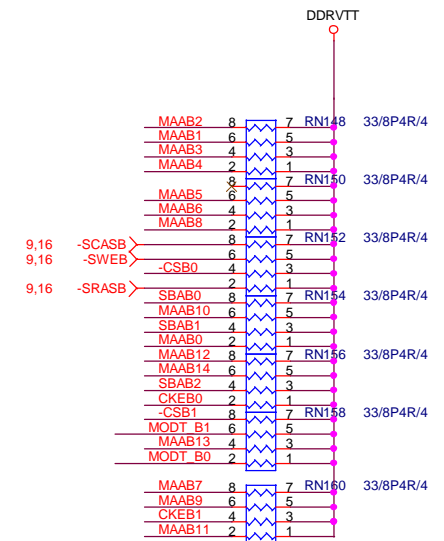
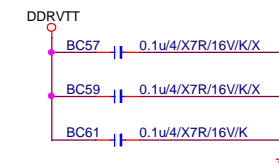


## DDR TERMINATION CHANNEL B

### DDR18V Decouple



### DDRVTT Decouple



**Gigabyte Technology**

Title		
DDRII TERMINATOR		
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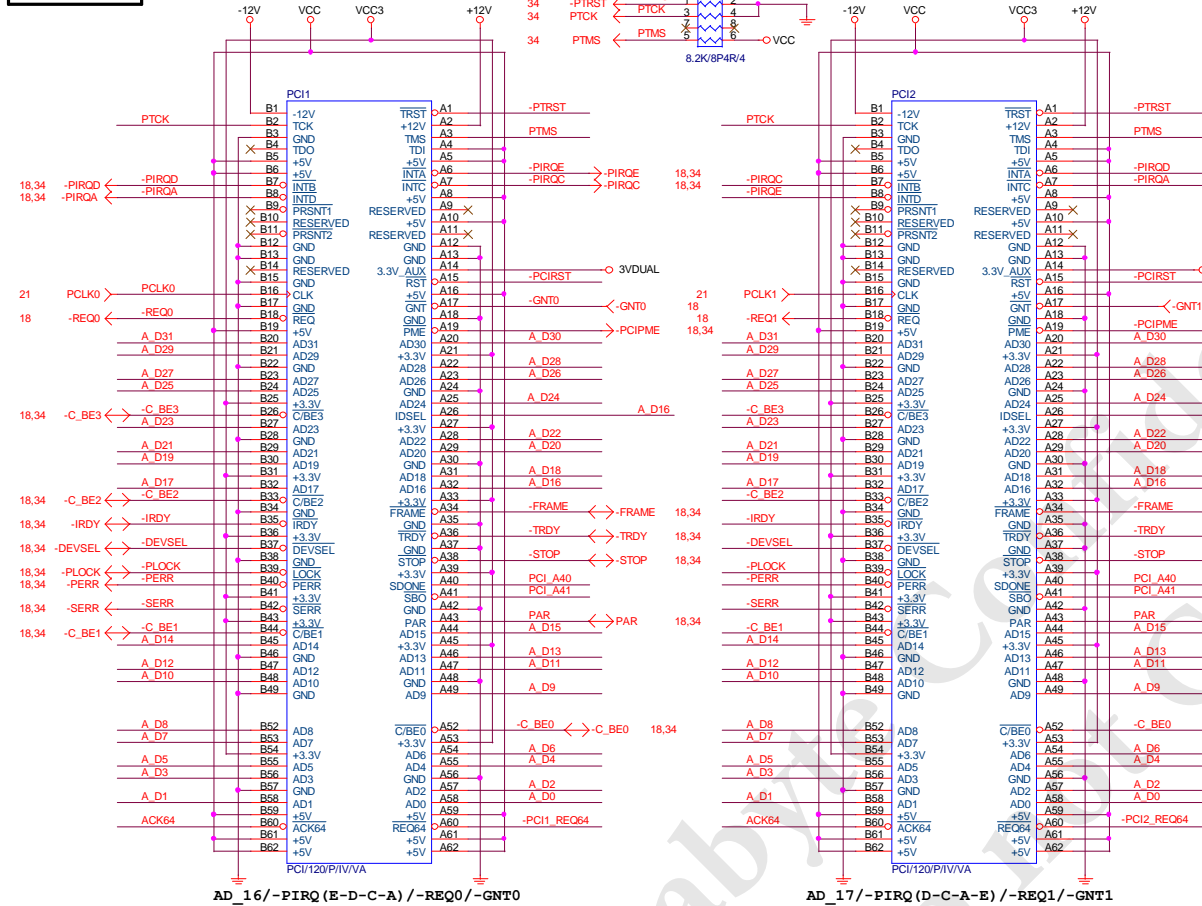




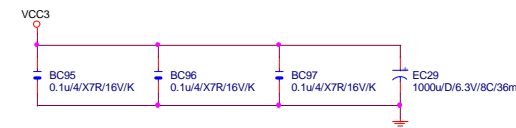
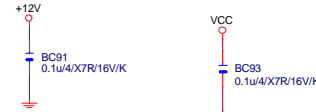
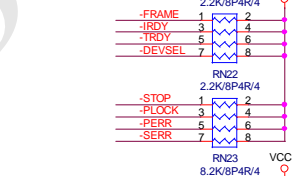
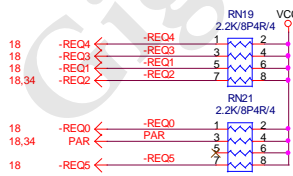
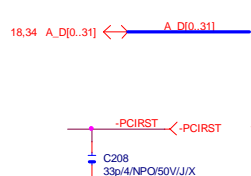
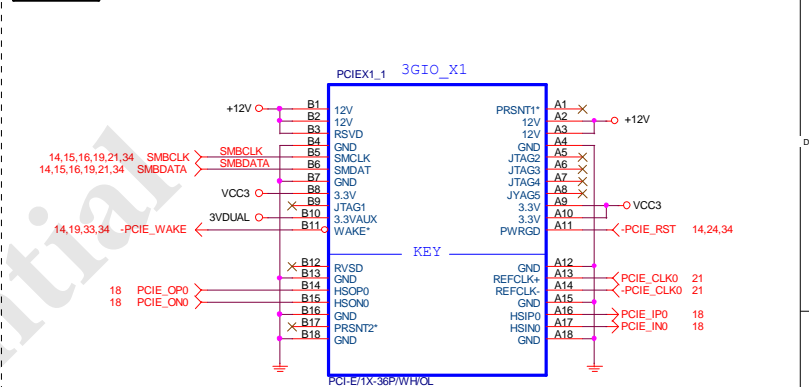


[www.pdfactory.com](http://www.pdfactory.com)

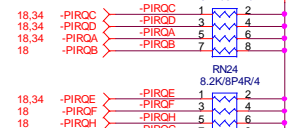
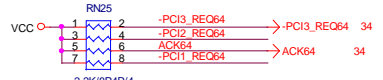
# PCI1,2 SLOT



# PCIE\*1



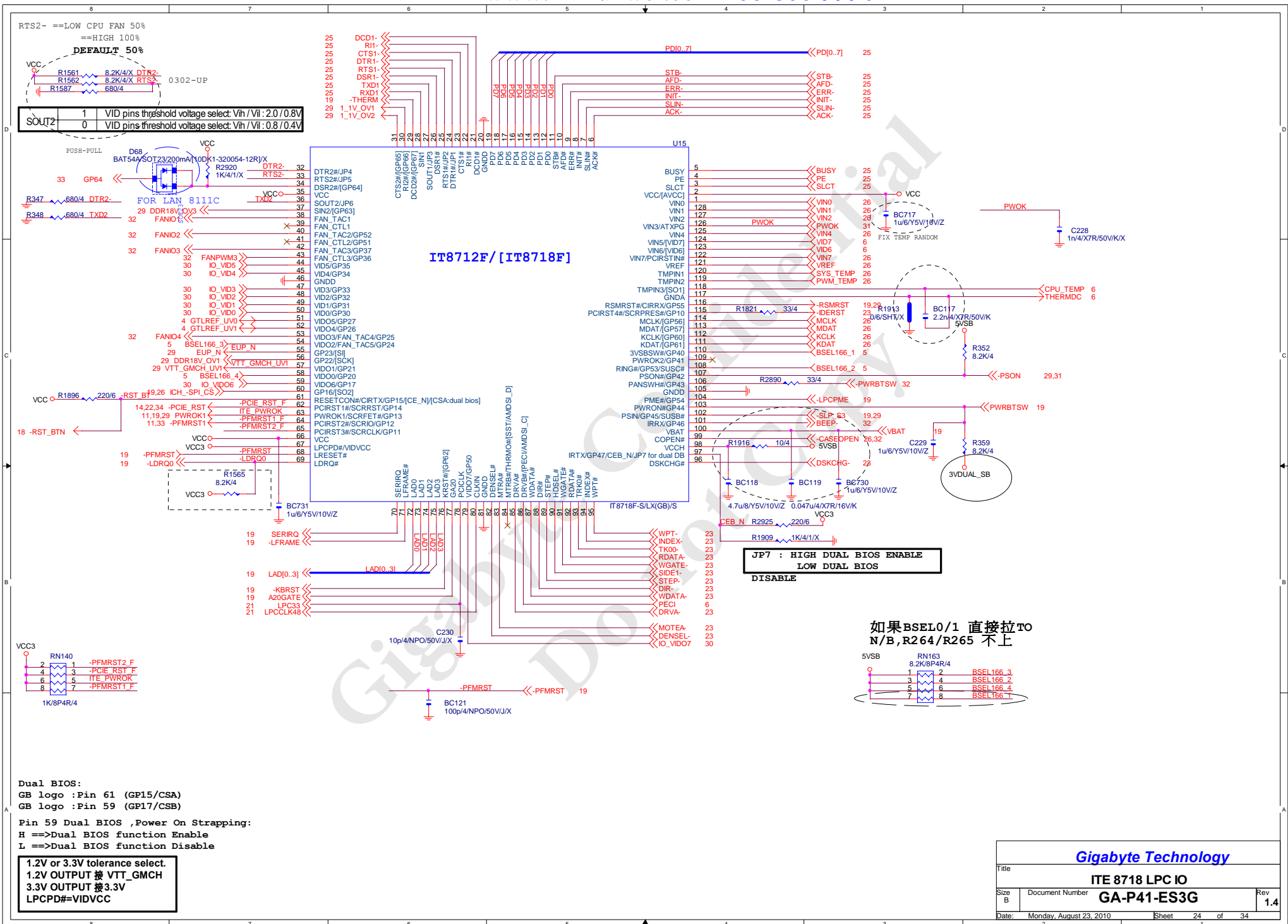
14,15,16,19,21,34 SMBCLK <- PCI\_A40  
14,15,16,19,21,34 SMBDATA <- PCI\_A41



Gigabyte Technology		
Title		
PCI SLOT 1, 2/PCIE*1		
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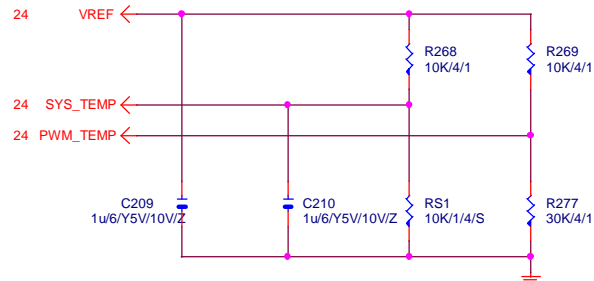




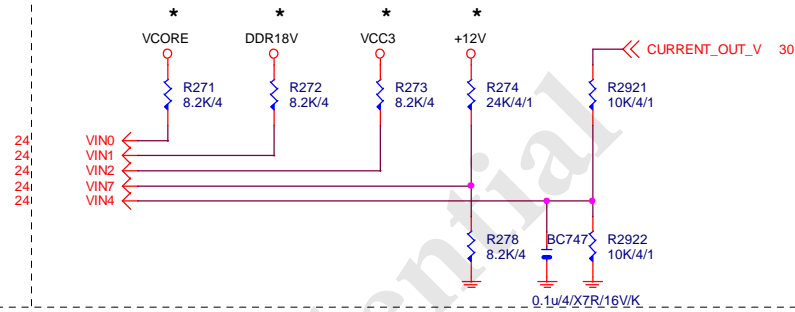




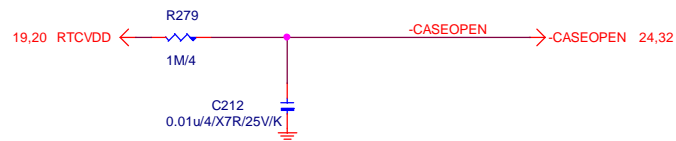
### TEMP H/W MONITOR



### VOLTAGE-- H/W MONITOR



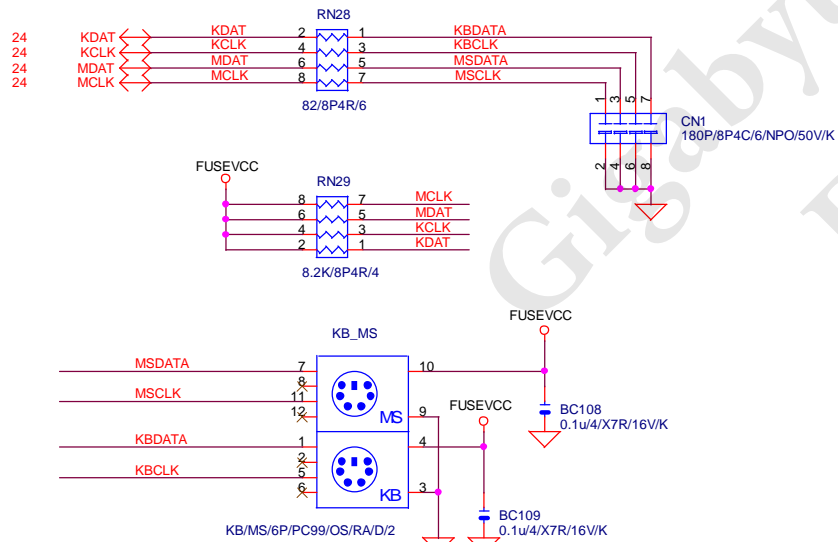
### CASE OPEN



Case Open Circuits

### DUAL BIOS

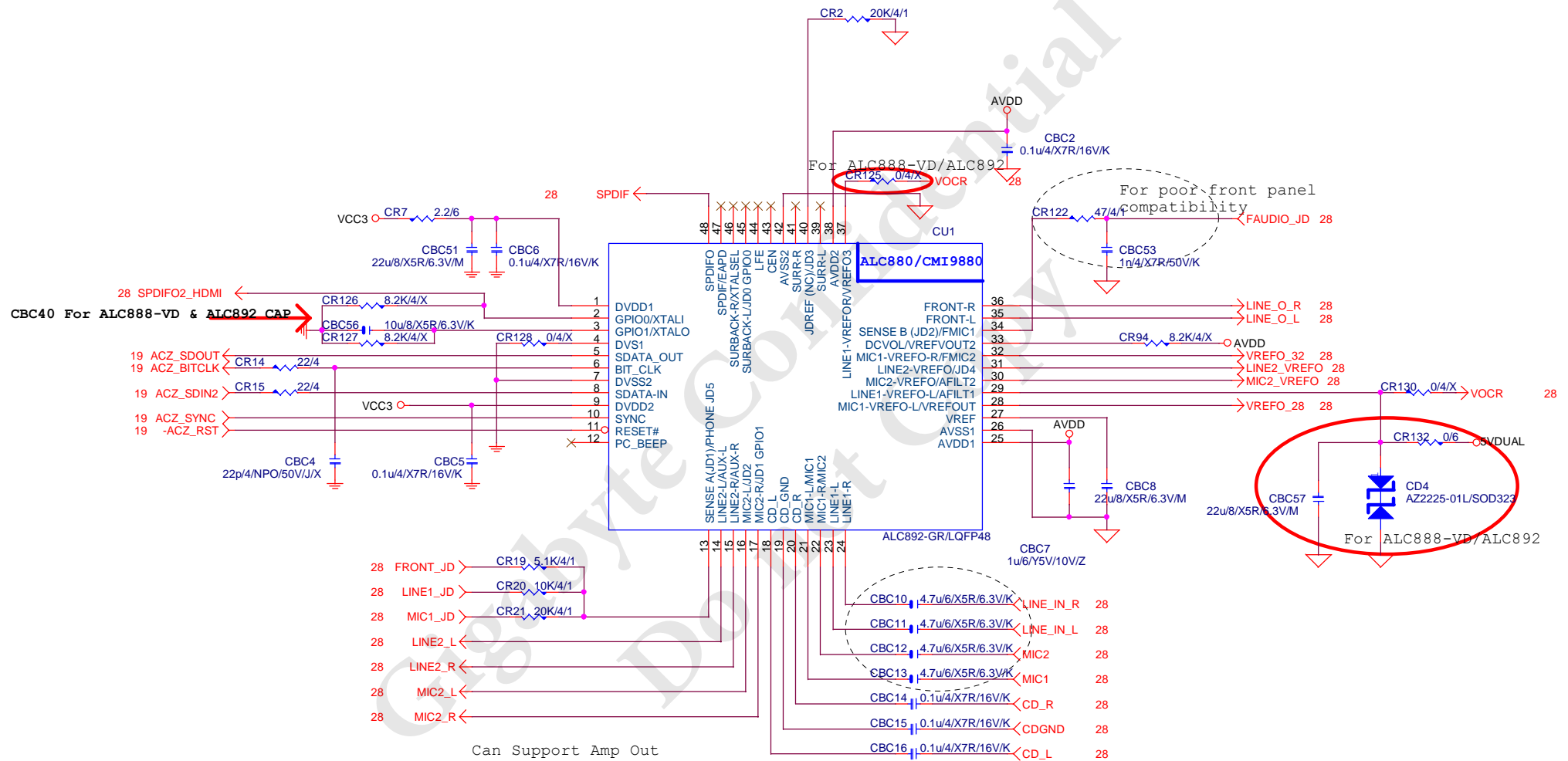
### KB/MS



**Gigabyte Technology**

Title			HW-MONITOR/CI/KB/MS/BIOS	
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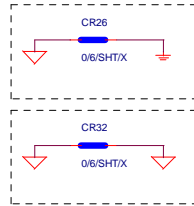
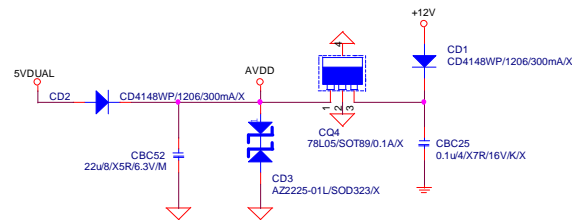
## AZALIA CODEC



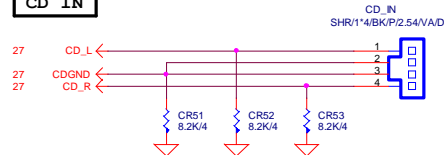
Gigabyte Technology

Title		
AZALIA ALC892		
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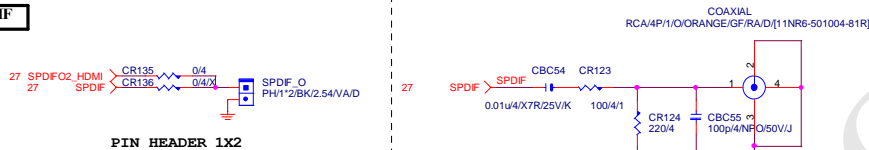
# CODEC POWER/EMI PAD



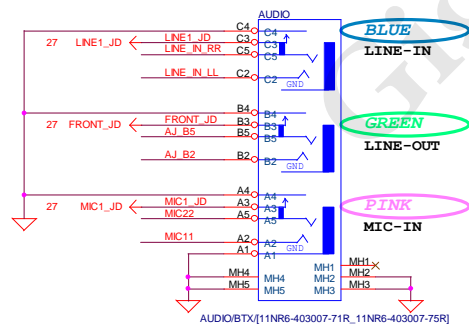
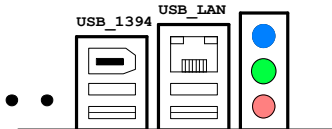
# CD IN



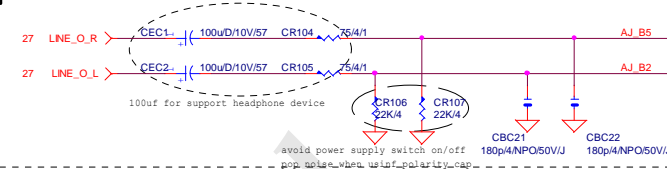
# SPDIF



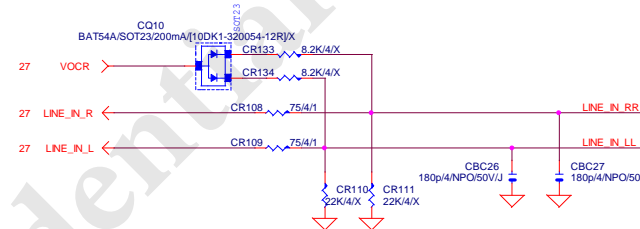
# AZALIA JACK



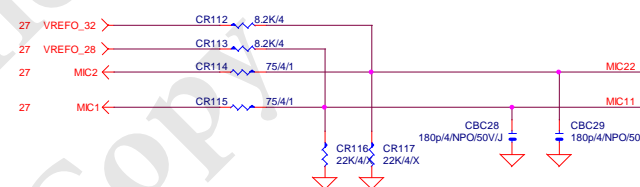
# LINE-OUT



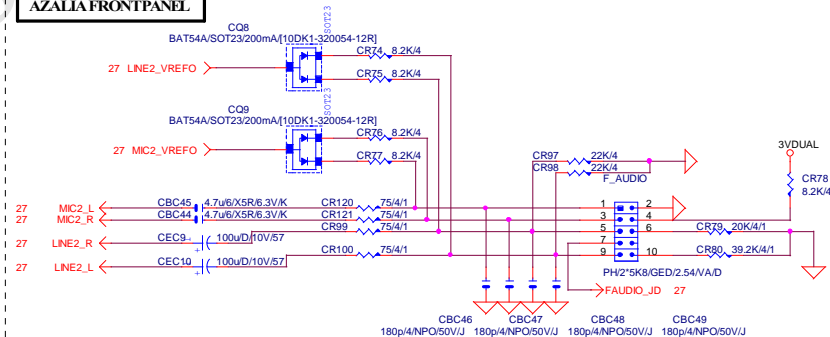
# LINE-IN



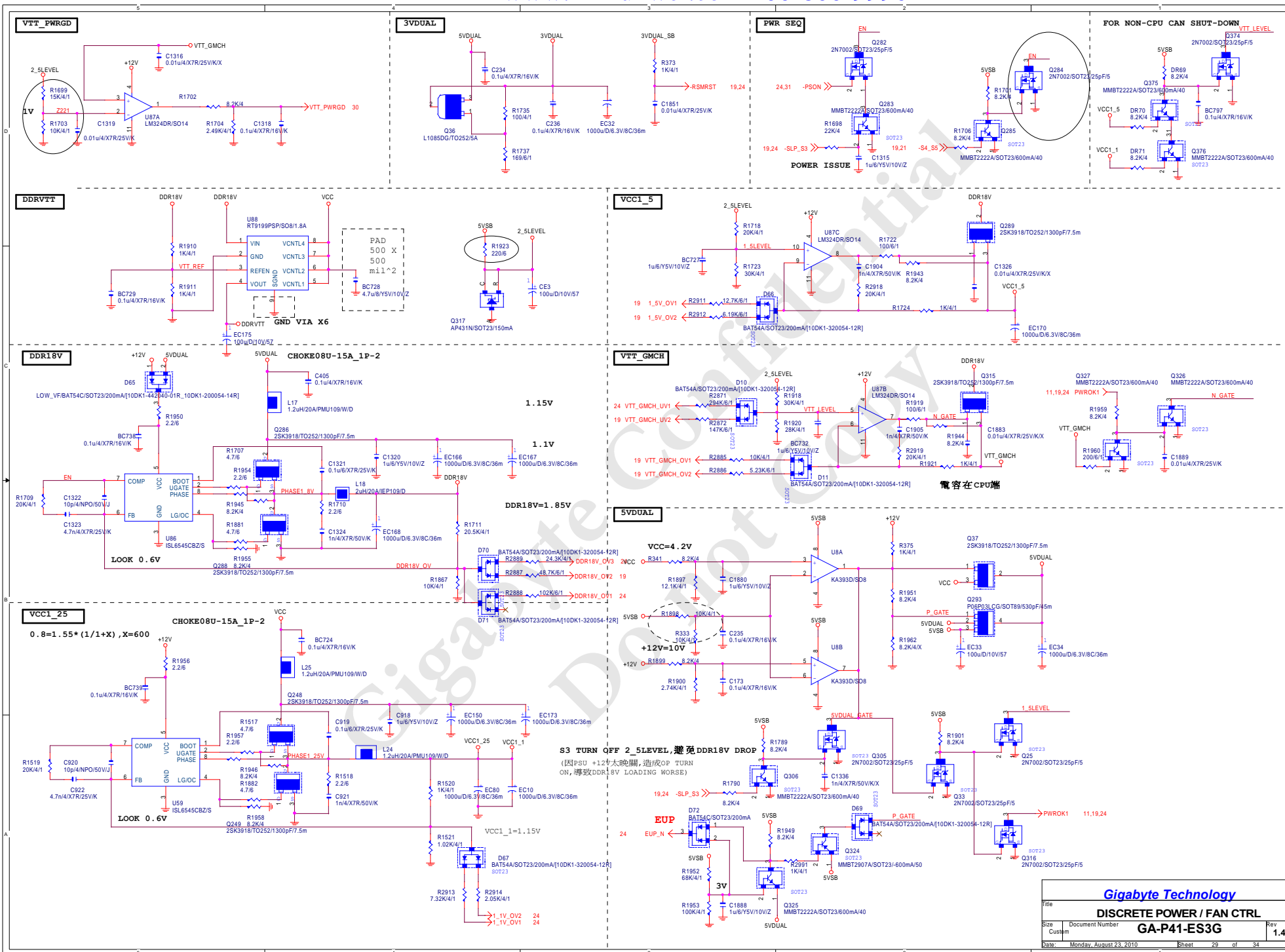
# MIC-IN



# AZALIA FRONT PANEL

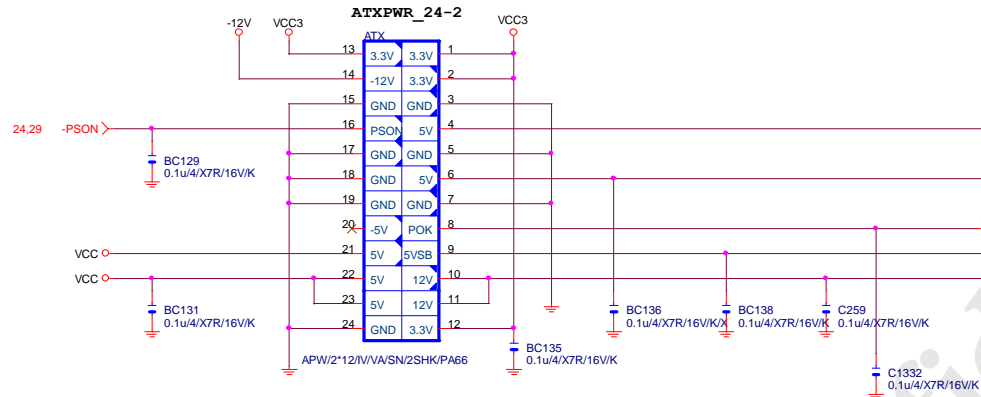


Gigabyte Technology			
AUDIO JACK			
GA-P41-ES3G			
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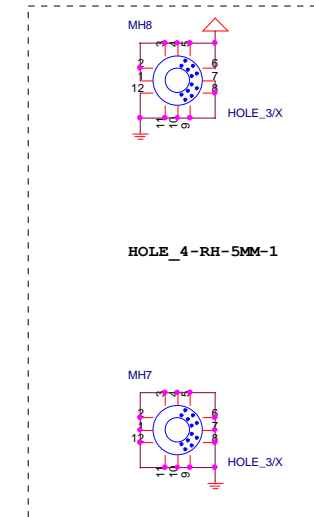
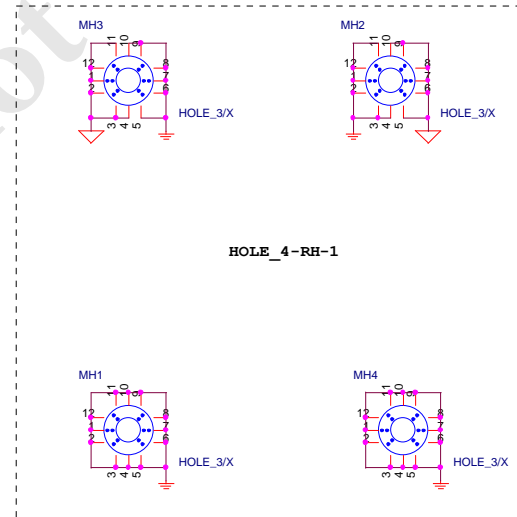
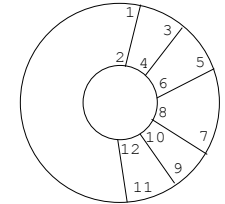
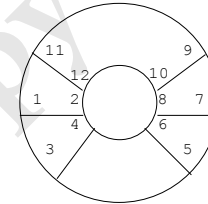
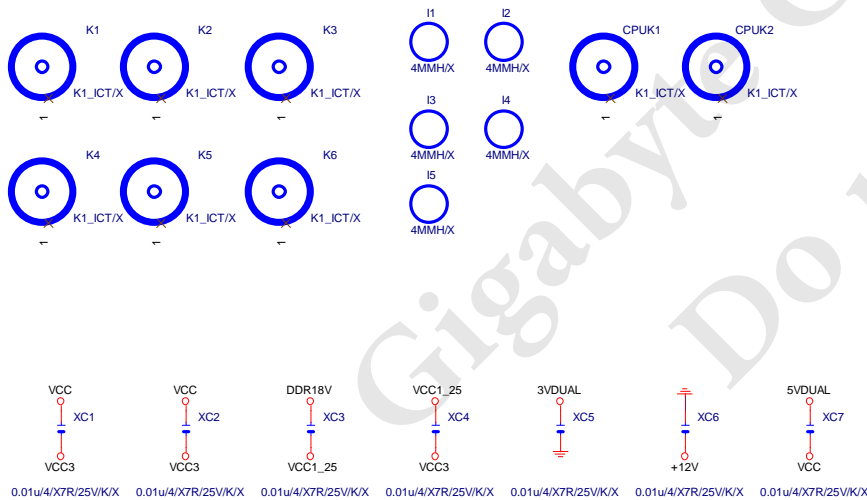
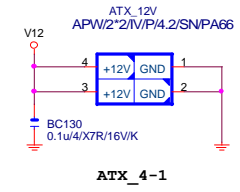
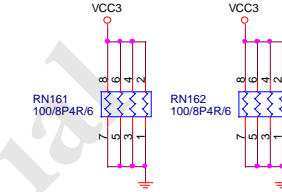




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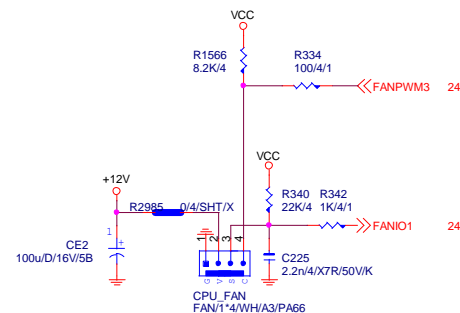


## FIX PWR AcBel (ATX-400C-A2ADB)

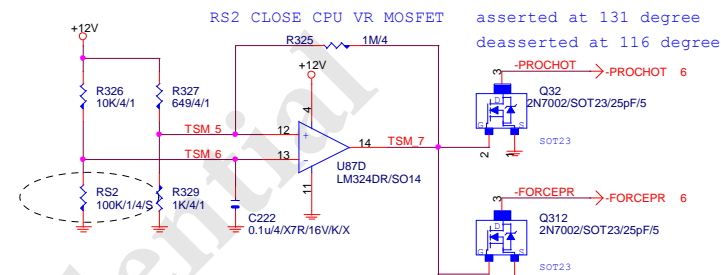


Gigabyte Technology			
Title			
ATX POWER CONNECTOR			
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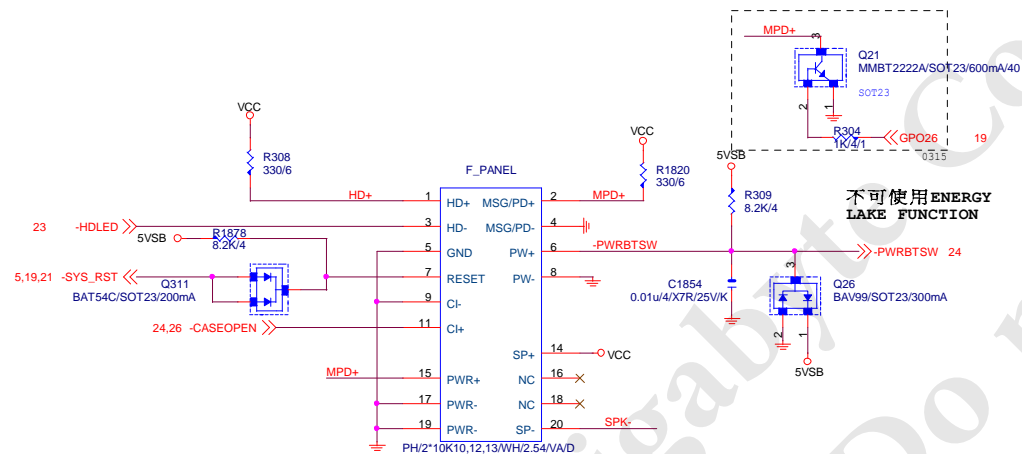
# CPU SMART FAN SMART FAN



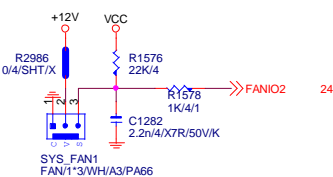
# PROCESSOR HOT



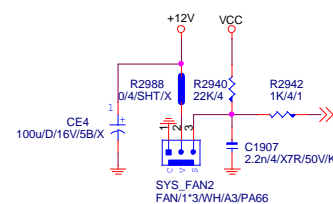
# INTEL FRONT PANEL



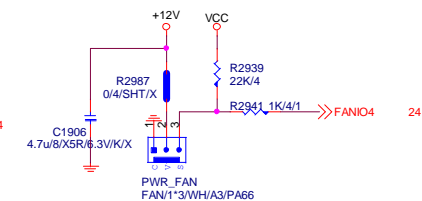
# SYS\_FAN1



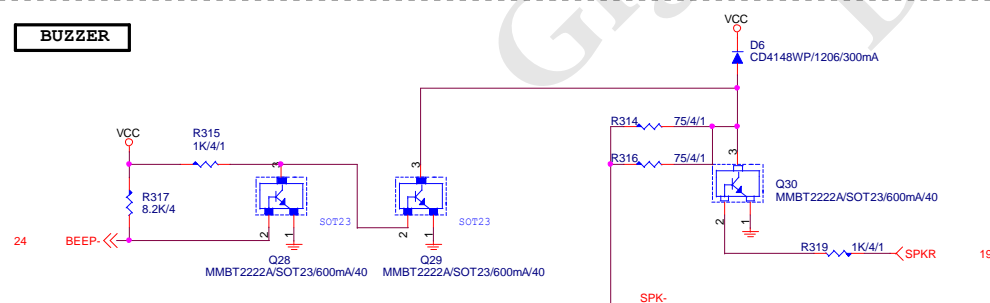
# SYS\_FAN2



# PWR\_FAN



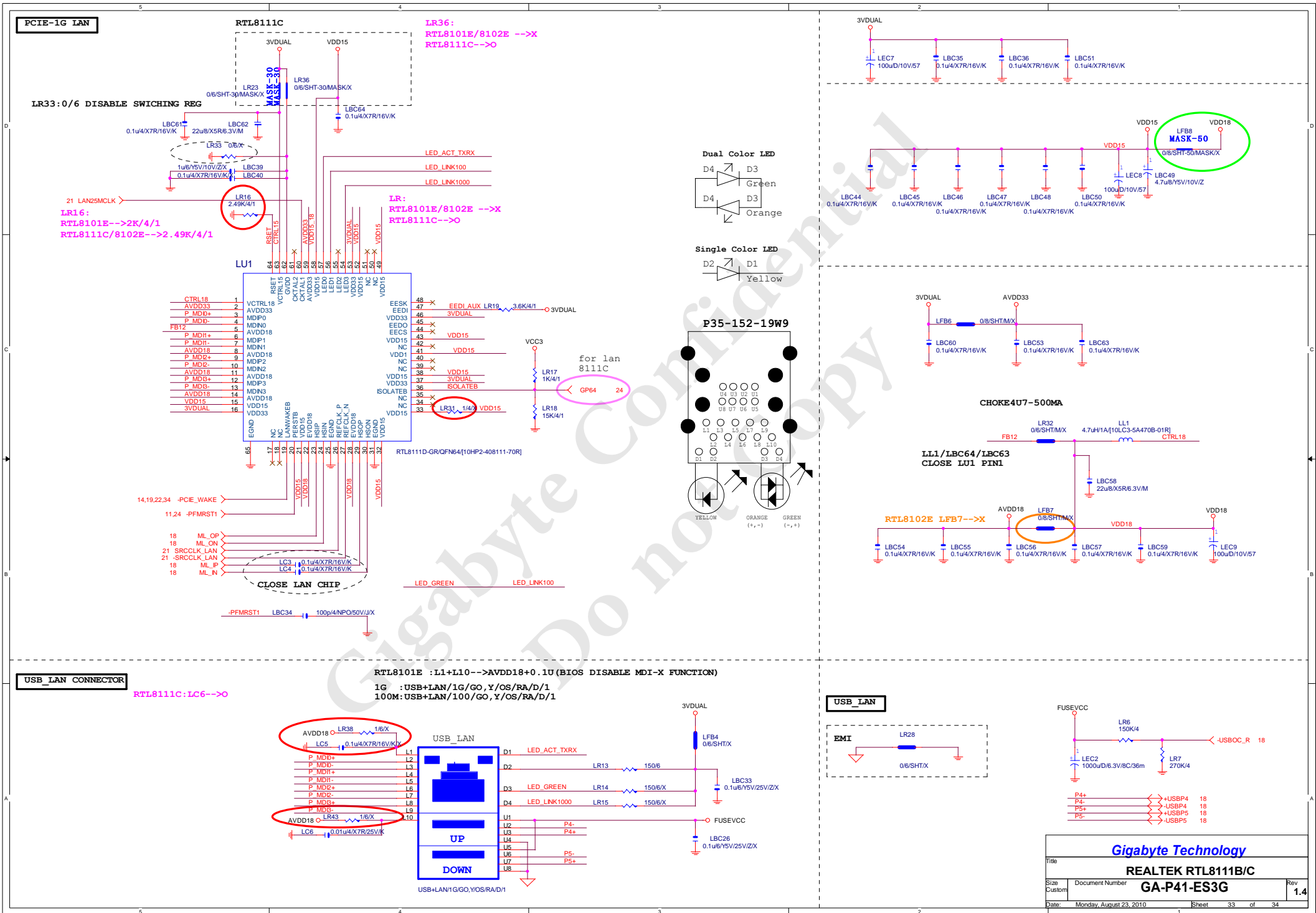
# BUZZER



Gigabyte Technology

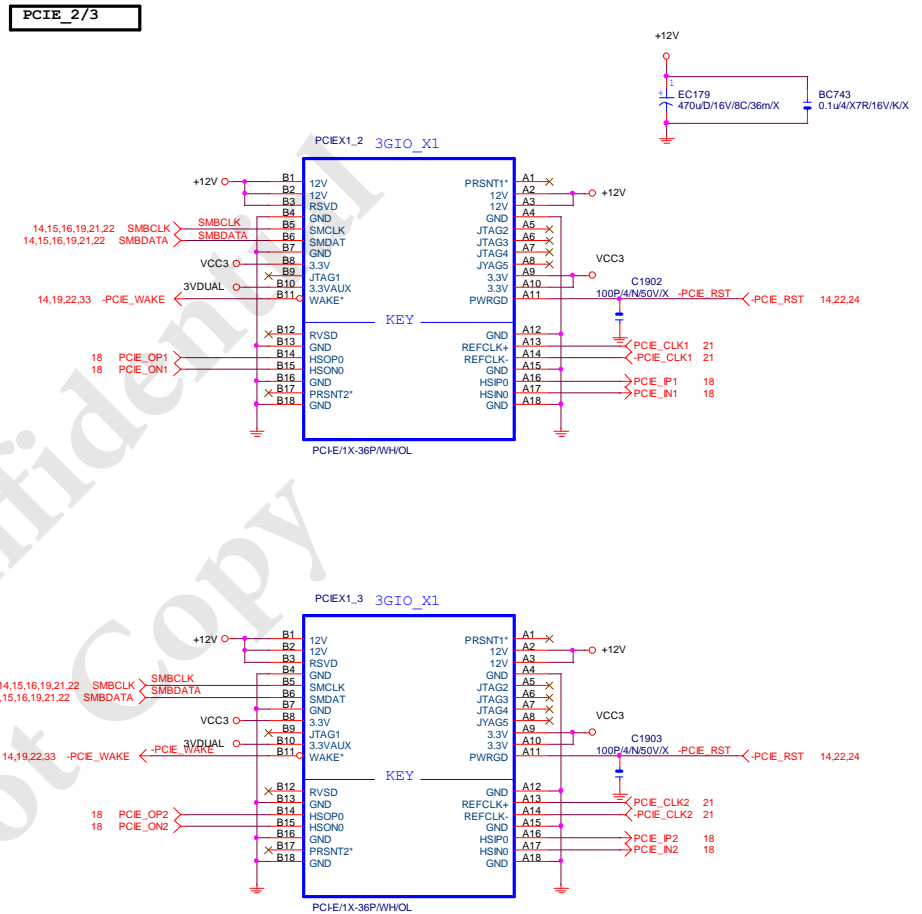
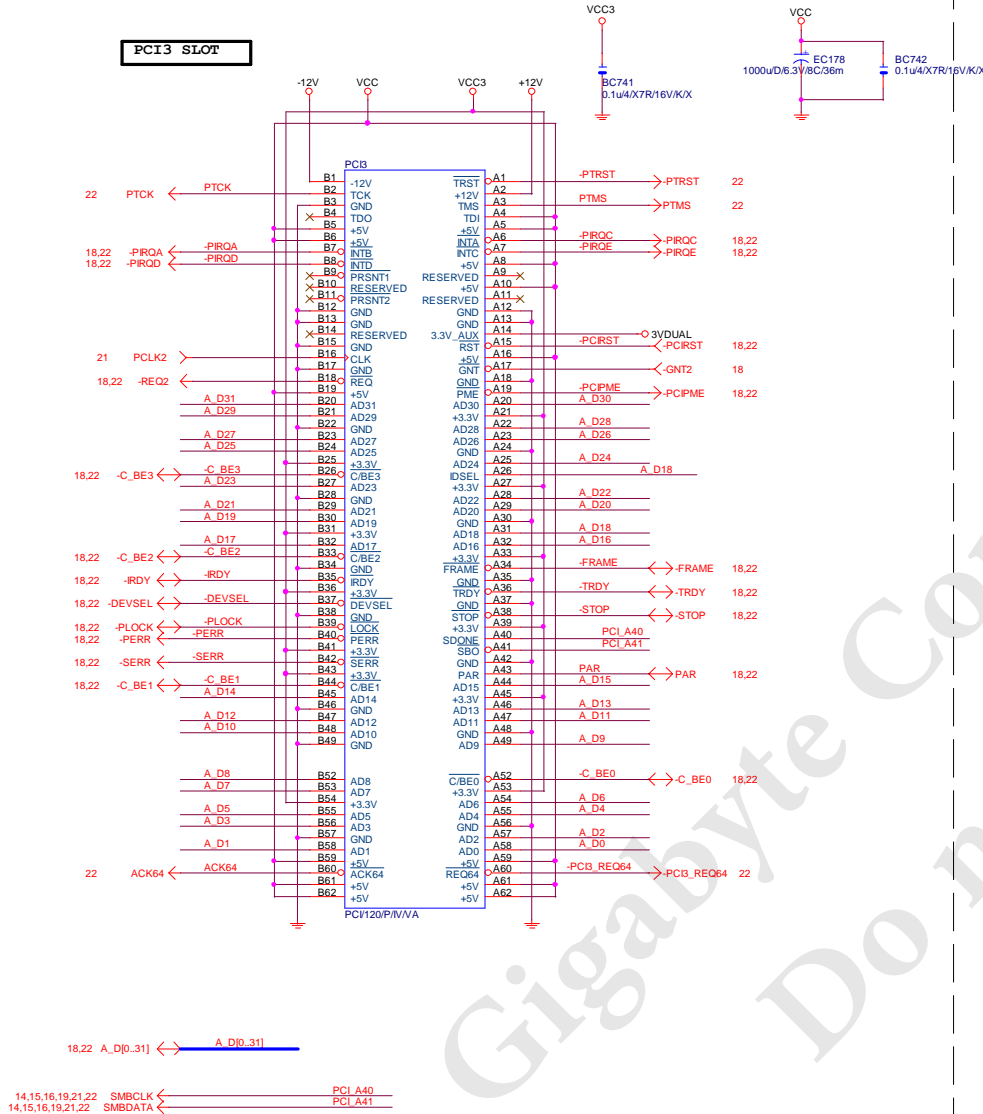
Title			FRONT PANEL / FAN CTRL
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# PCI3 SLOT

# PCIE\_2/3



Intel Confidential

PCI SLOT 3,PCIE2,3

GA-P41-ES3G

Rev 1.4

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