

Model Name: GA-Z97N-WIFI

Revision 1.0

SHEET

TITLE

01	COVER SHEET
02	BOM & PCB MODIFY HISTORY
03	BLOCK DIAGRAM
04	CPU_LGA1150-A
05	CPU_LGA1150-B
06	CPU_LGA1150-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	ITE 8620 LPC IO
16	COM,KB_USB20
17	HWM,FAN CTRL,OV,-PROCHOT
18	DUAL BIOS
19	FP,FUSB,SPK,SATALED
20	Realtek ALC892-GR
21	REAR AUDIO JACK
22	INTEL LAN I217V(A)
23	ARTHEROS LAN AR8161B(B)
24	DISCRETE POWER
25	ATX
26	RT8120_DDR POWER,M3 POWER
27	VCORE ISL95820_1

SHEET

TITLE

28	VCORE ISL95820_2
29	DVI-I
30	HDMI*2
31	mSATA, Mini-PCie

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Gigabyte Technology

Cover Sheet

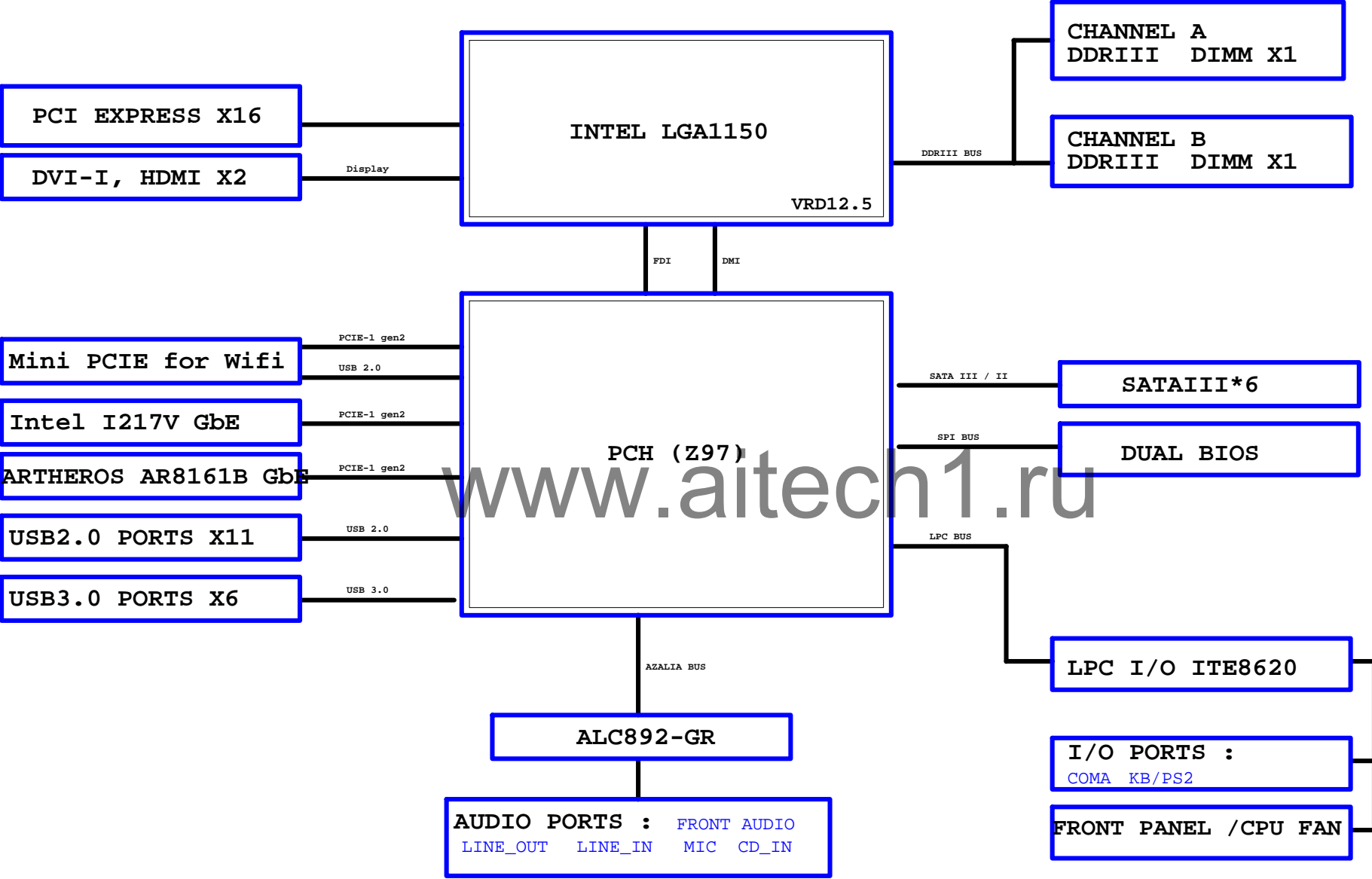
Size Custom	Document Number <b>GA-Z97N-WIFI</b>	Rev <b>1.0</b>
Date: Wednesday, April 02, 2014	Sheet 1 of 31	

Revision 1.0

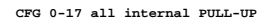
## 2014/03/21

[illegible][illegible]

BLOCK DIAGRAM

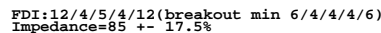


(E)



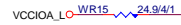
(D)

LGA1150D



(C)

Impedance=80 +- 17.5%



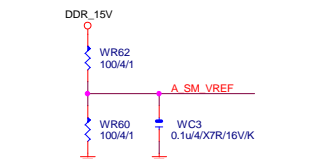
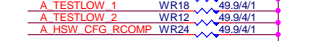
HASWELL/[10SC1-F01150-01R

Impedance=85  $\pm$  17.5%

PA EXP TXP[0..15] >> PA\_EXP\_TXP[0..15] [14]  
PA EXP TXN[0..15] >> PA\_EXP\_TXN[0..15] [14]  
PA EXP RXP[0..15] >> PA\_EXP\_RXP[0..15] [14]  
PA EXP RXN[0..15] >> PA\_EXP\_RXN[0..15] [14]

## B:DVI-I

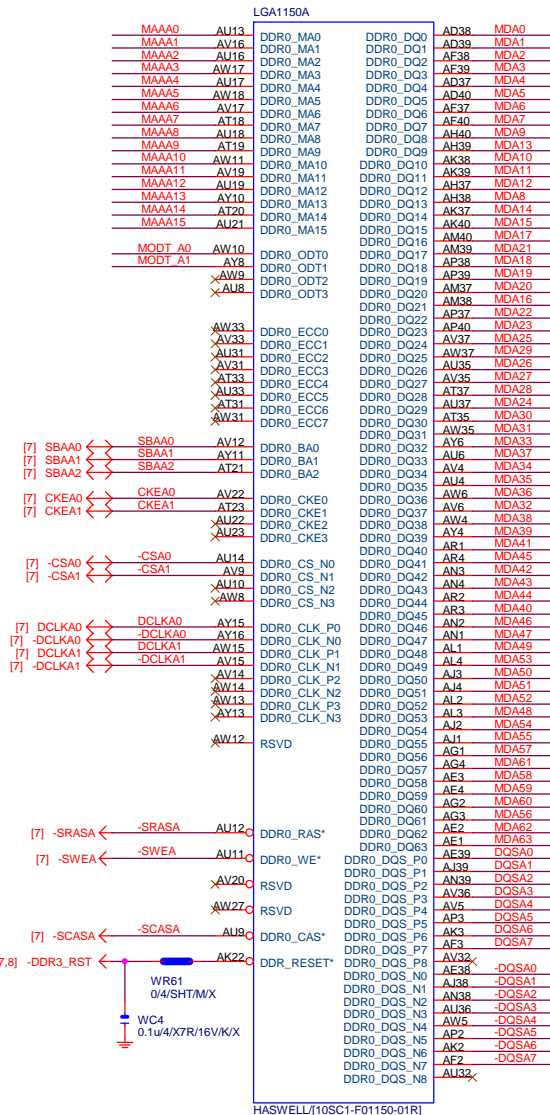
CPU	PU/PD
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
10	10
11	11
12	12
13	13
14	14
15	15
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97	97
98	98
99	99
100	100



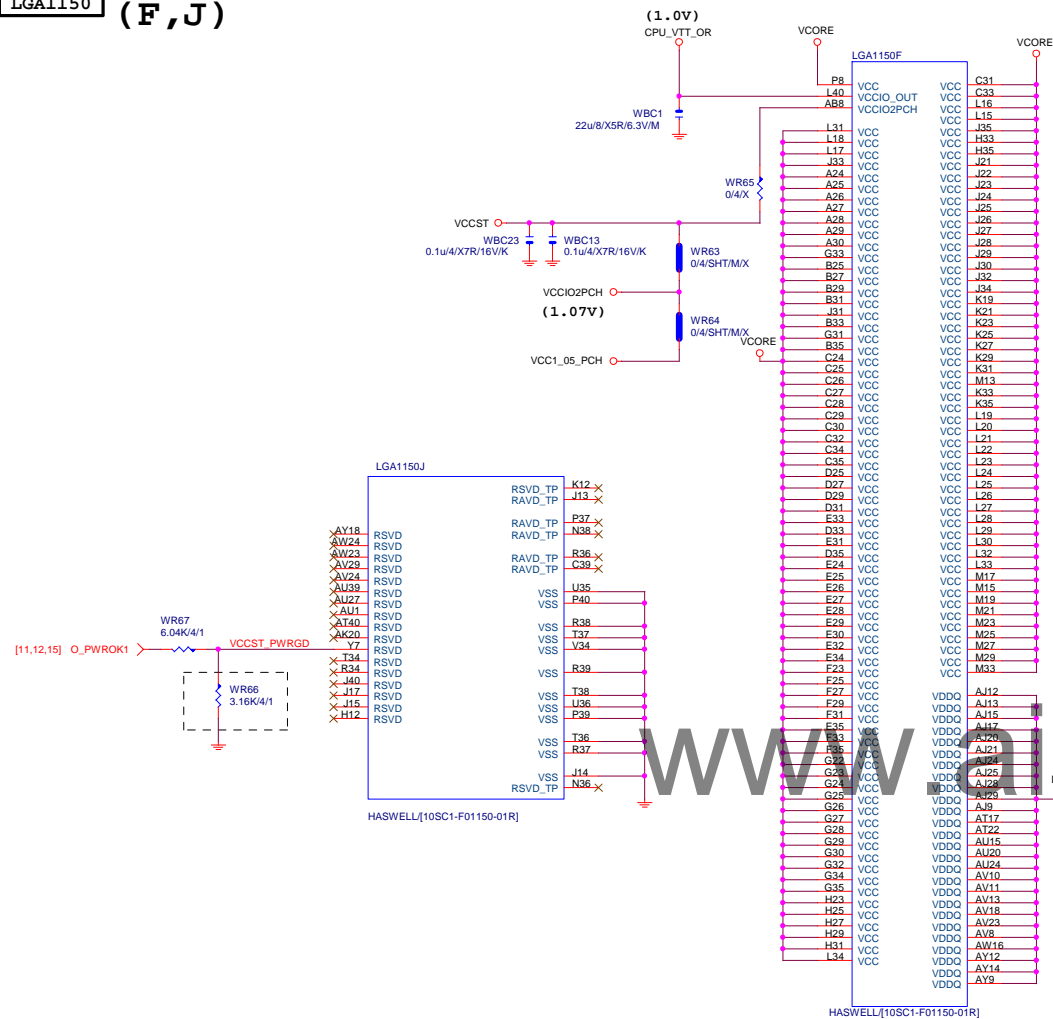
## Gigabyte Technology

CPU LGA1150-A

Size Custom	Document Number <b>GA-Z97N-WIFI</b>	Rev <b>1.0</b>
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**LGA1150 (F,J)**

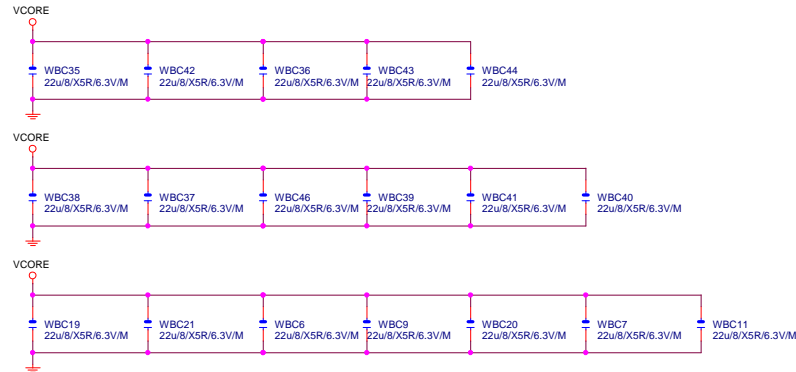


LGA1155 (G,H,I)



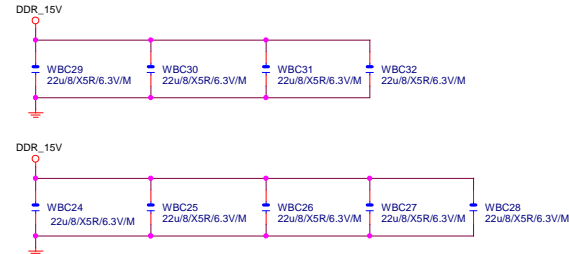
## VCore CAP

(X18)



DDR CAP

(x9)



## Gigabyte Technology

Title	CPU LGA1150-C
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Size Custom	Document Number <b>GA-Z97N-WIFI</b>	Rev <b>1.0</b>
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PCH

(B)

DMI:12/4/4/4/12(breakout min 8/4/4/4/8)  
Impedance=85 +- 17.5%

USB2.0 : 12/4.5/7.5/4.5/12 (breakout min 8/4/4/4/8)  
Impedance=90 +- 17.5%

PCHB

B85: Port 6/7 N/A

H81: Port 6/7/12/13 N/A

W=4 mil out of PCH

S=15 mil out of PCH

VCC1\_5\_PCH NR50 7.5K/4/1 DMI\_COMP B19  
NR40 7.5K/4/1 PCIE\_COMP C13

USB3.0

MINI AR8161B  
PCI-E

PCIEX1:15/4/4/4/15 (breakout min 8/4/4/4/8)  
Impedance=85 +- 17.5%

DH82Z97/S/[10HB1-030Z97-10R]

PCH

(J)

PCH PCIE ,DMI 15/4/4/4/15

usb2.0 12/5/7/5//12

usb3.0 20/5/7/5//20

PCHJ

AT1 VSS\_NCTF TP22 U11  
AT41 VSS\_NCTF TP23 U10  
AU1 VSS\_NCTF TP21 AJ14  
AV1 VSS\_NCTF TP20 AK14  
AV2 VSS\_NCTF TP14 K34  
AV40 VSS\_NCTF TP15 K33  
AV41 VSS\_NCTF TP12 AH24  
AW2 VSS\_NCTF TP10 L16  
AW40 VSS\_NCTF TP11 K16  
B40 VSS\_NCTF TP9 AM34  
B41 VSS\_NCTF TP3 R12  
C41 VSS\_NCTF TP4 N12  
D1 VSS\_NCTF TP1 L22  
D41 VSS\_NCTF TP2 K22  
VSS AC31  
VSS AF3  
VSS AV21

DH82Z97/S/[10HB1-030Z97-10R]

PCH

(F)

USB2.0/3.0 PORT要對應

USB20 1/9 debug Capability Test 一定要拉出來

PCHF

USB3 FDI LINK  
USB3 RXN\_0 FDI\_RXN\_0 N1 FDI\_TXN0  
USB3 RXP\_0 FDI\_RXP\_0 N2 FDI\_TXP0  
USB3 TXN\_0 FDI\_TXN\_1 P2 FDI\_TXN1  
USB3 TXP\_0 FDI\_RXP\_1 P3 FDI\_TXP1  
G18 USB3\_RXN\_1 FDI\_CSXNC L2 FDI\_CSXNC [4]  
H18 USB3\_RXP\_1 FDI\_CSXNC L2 FDI\_CSXNC [4]  
B15 USB3\_TXN\_1 FDI\_INT L3 FDI\_INT [4]  
B16 USB3\_TXP\_1 FDI\_INT L3 FDI\_INT [4]  
K20 USB3\_RXN\_4 FDI\_RCOMP K2 NR29 7.5K/4/1 VCC1\_5\_PCH  
L20 USB3\_RXP\_4  
D15 USB3\_TXN\_4  
C15 USB3\_TXP\_4  
L18 USB3\_RXN\_5  
K18 USB3\_RXP\_5  
B14 USB3\_TXN\_5  
A14 USB3\_TXP\_5  
TACH6\_GP70  
TACH7\_GP71

DH82Z97/S/[10HB1-030Z97-10R]

FDI\_TXP0..11 &gt;&gt;&gt; FDI\_TXP0..11 [4]

FDI\_TXN0..11 &gt;&gt;&gt; FDI\_TXN0..11 [4]

USB3.0:20/5/7/5/20 (breakout min  
8/4/4/4/8) ; ONLY 3 VIAS

Impedance=85 +- 17.5%  
Back Panel < 10000 MILS  
Front Panel < 6000 MILS

PCH CLK PD

Mount for integrated clock Generation Mode

CK\_SRCCLK\_PCH NR89 8.2K/4  
CK\_SRCCLK\_PCH NR88 8.2K/4  
CK\_DOTCLK NR92 8.2K/4  
CK\_DOTCLK NR91 8.2K/4  
NR225 short to GND in non  
graphic SKU

PCH H/S

SB\_HEATSIN

1X

GRAY HS

X2

PCH\_HS  
PCH\_HS[12SP2-S03507-01R\_12SP2-S03507-02R]

USB TABLE

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

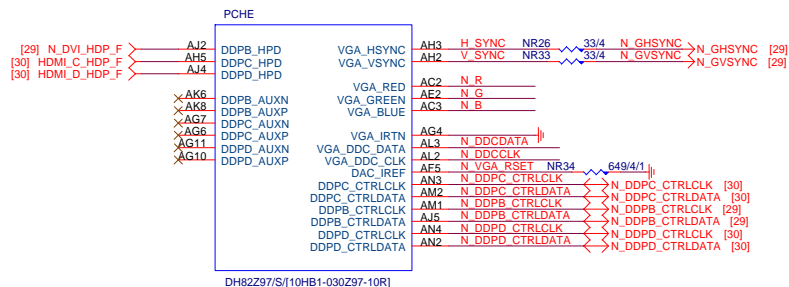
OC[7:4]# for Device 26 (ports 8-13)

USB OC#	Configure
OC0#	F_USB30
OC1#	USB30_LAN2
OC2#	USB30_LAN1
OC3#	N/A
OC4#	F_USB20
OC5#	KB_MS_USB
OC6#	MINI_PCIE
OC7#	Not Use

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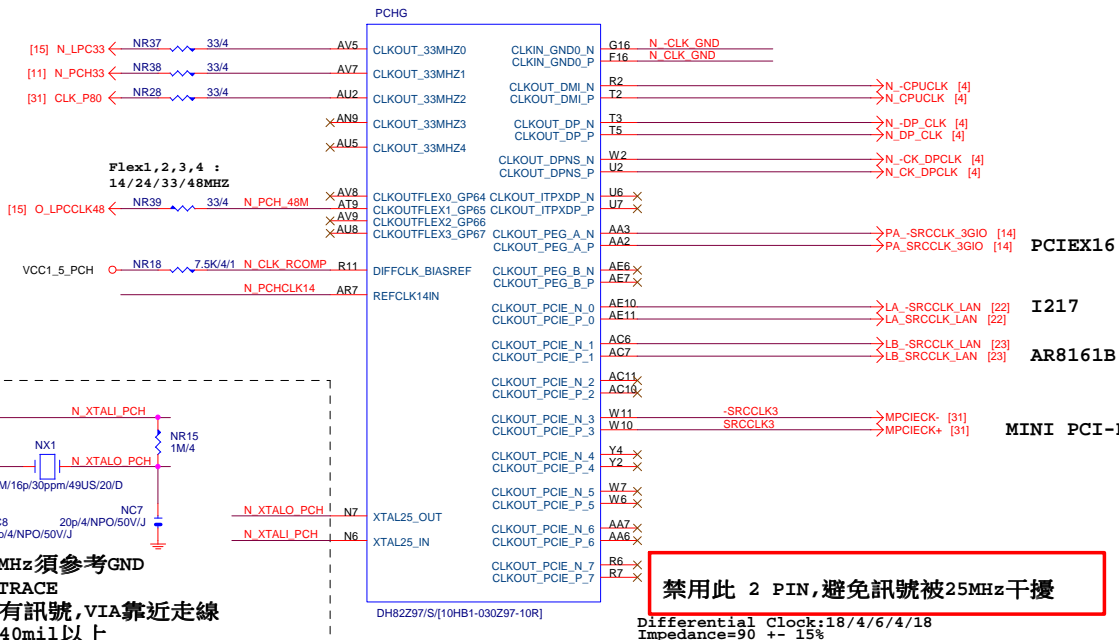
Title	PCH FDI,DMI,USB ,PCIE,NVRAM		
Size	Document Number	GA-Z97N-WIFI	
Custom			Rev 1.0
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# PCH (E)



VGA DISABLE	
R,G,B	NC OR GND
IRTN / IREF	GND
VGA_HSYNC, VGA_VSYNC, DDC_CLK, DDC_DATA	NC
POWER	VCCADAC(AF2), VCCADACBG(AE1) GND

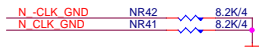
# PCH (G)



X'TAL 25MHz須參考GND  
 CRYSTAL/TRACE  
 週邊不要有訊號,VIA靠近走線  
 遠離其他40mil以上

禁用此 2 PIN,避免訊號被25MHz干擾

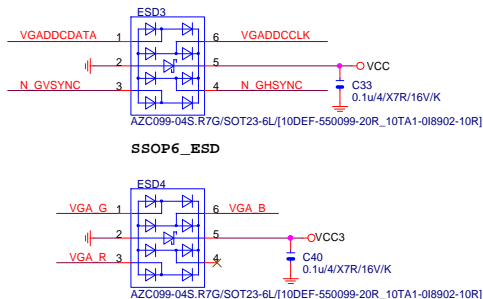
## PCH CLK PD



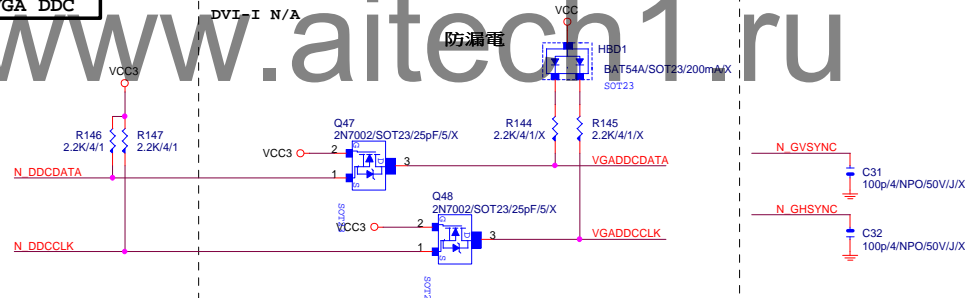
Mount for integrated clock Generation Mode



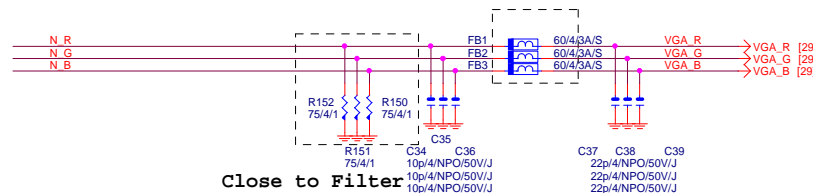
## VGA ESD



## VGA DDC



## VGA SIGNAL



Close to Filter

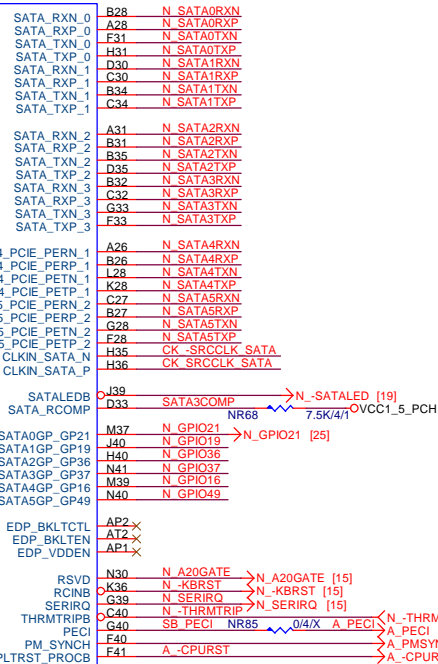
## VGA CONNECTOR

Gigabyte Technology			
PCH DISPLAY,CLK BUFFER			
Size	Document Number	Rev	
Custom	GA-Z97N-WIFI	1.0	
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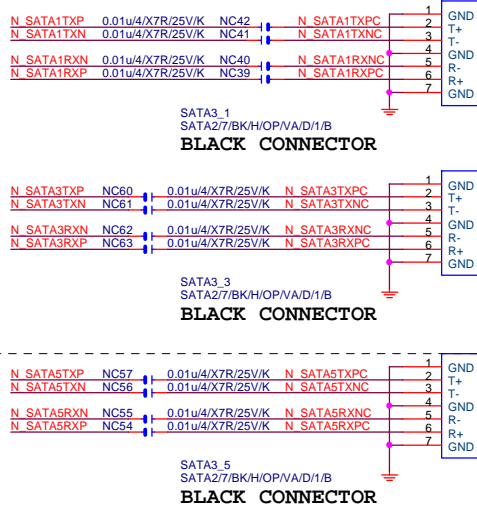
(C)

PCHC [REDACTED] B28 N. SATHAPYAN

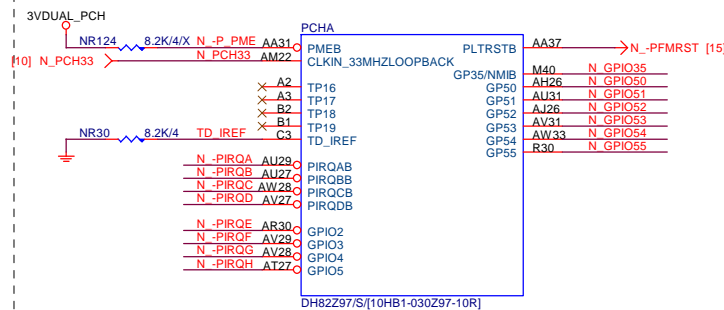
Z97+I217V N/A



N SATA0TXP 0.01u/4/X7R/25V/



(A)



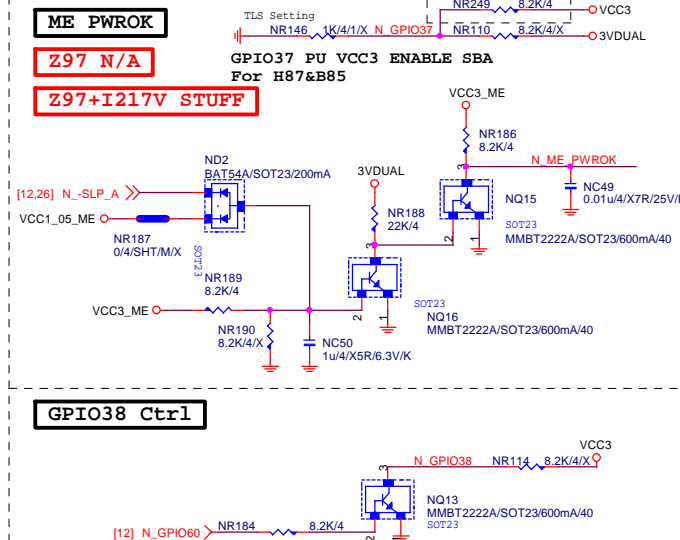
CK\_SRCCLK\_SATA NR174 8.2K/4  
CK -SRCCLK\_SATA NR173 8.2K/4

Mount for integrated clock Generation Mode

## Z97 N/A

707:7017

## Z97+I217V STUFF

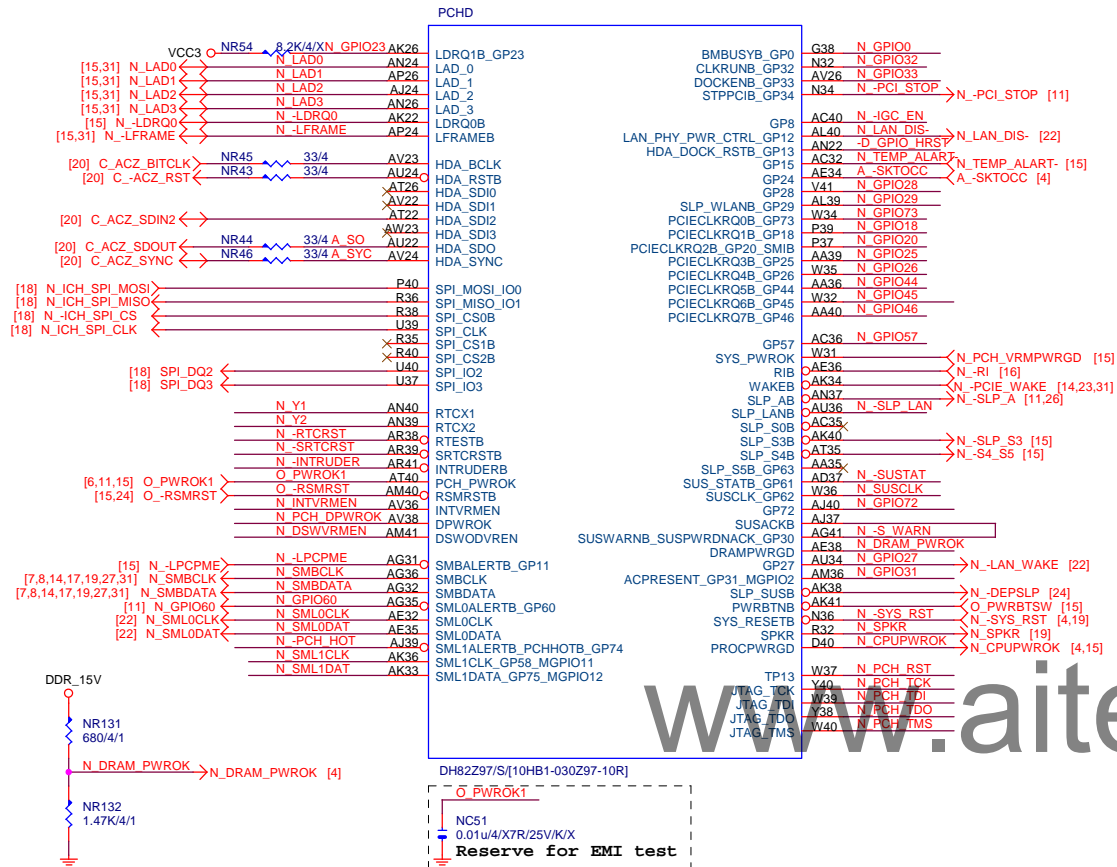


GPIO38 Ctrl

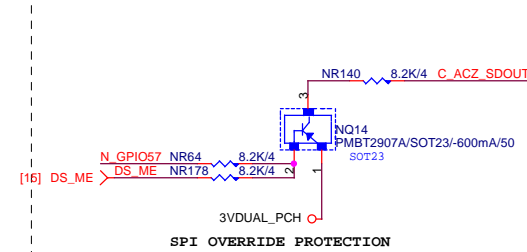
## Gigabyte Technology

Title			
PCH HOST , SATA, PCI			
Size	Document Number	Rev	
Custom	GA-Z97N-WIFI	1.0	
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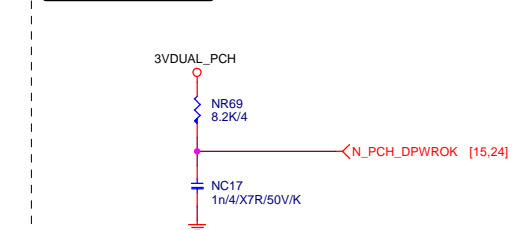
**(D)**



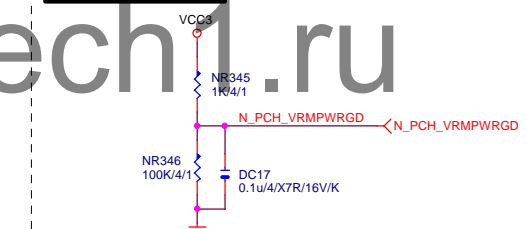
## ACZ\_SDOUT



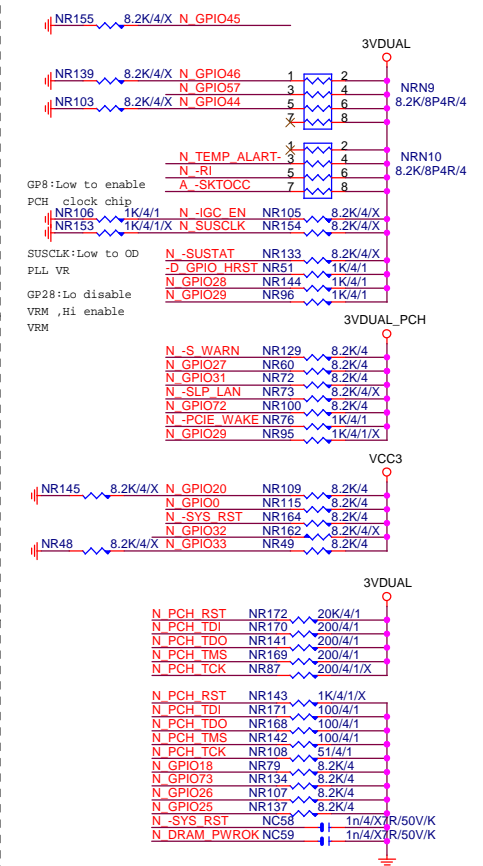
## PCH\_DPWROK



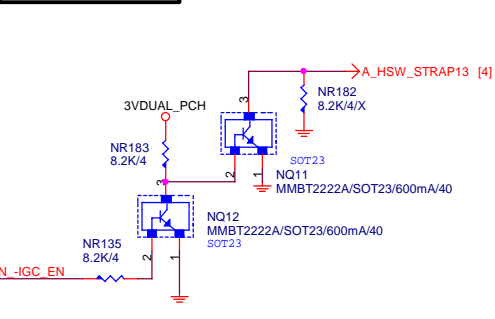
## CPU VRMPWRGD



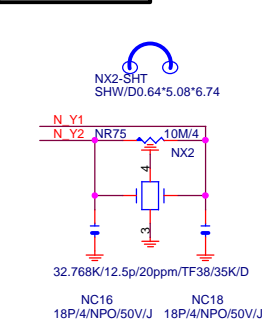
PCH	PU/PD
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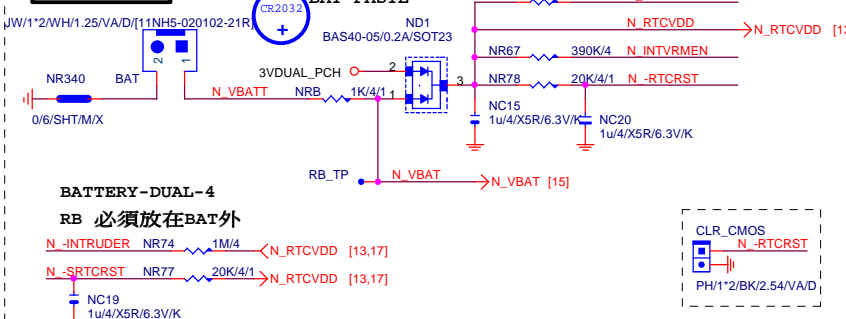
## HSW\_STRAP13



32.768KHZ



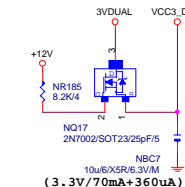
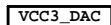
CLR_CMOS
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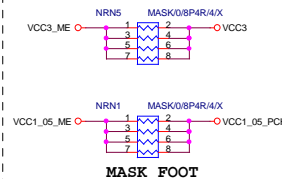
## Gigabyte Technology

Title				PCH GPIO , CTRL , AUDIO			
Size	Document Number					Rev	
Custom	GA-Z97N-WIFI					1.0	
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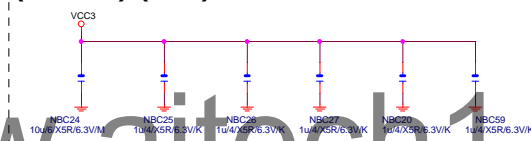
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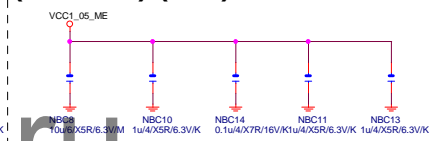
## Z97+I217 N/A



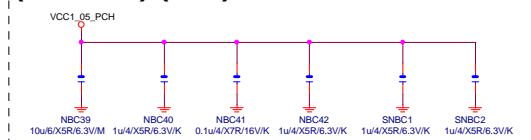
( 3.3V ) ( X6 )



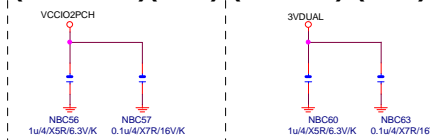
(1.05V) (x5)



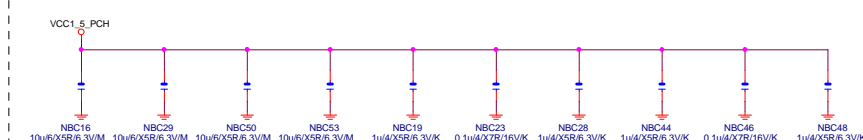
(1.05V)(x6)



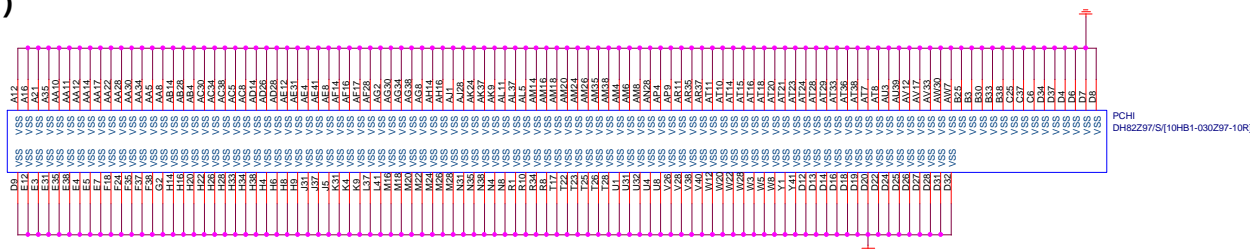
$(1.05V)(x2) \quad (3.3V)(x2)$



(1.05V) (x10)

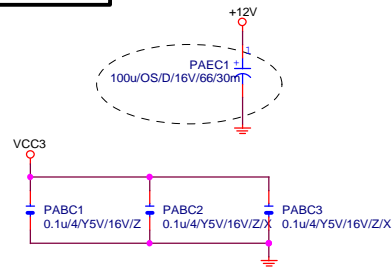


(I)

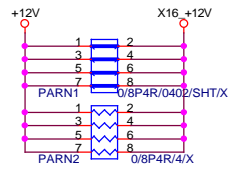




# PCIEX16 CAP



# PCIEX16 PROTECT SHT

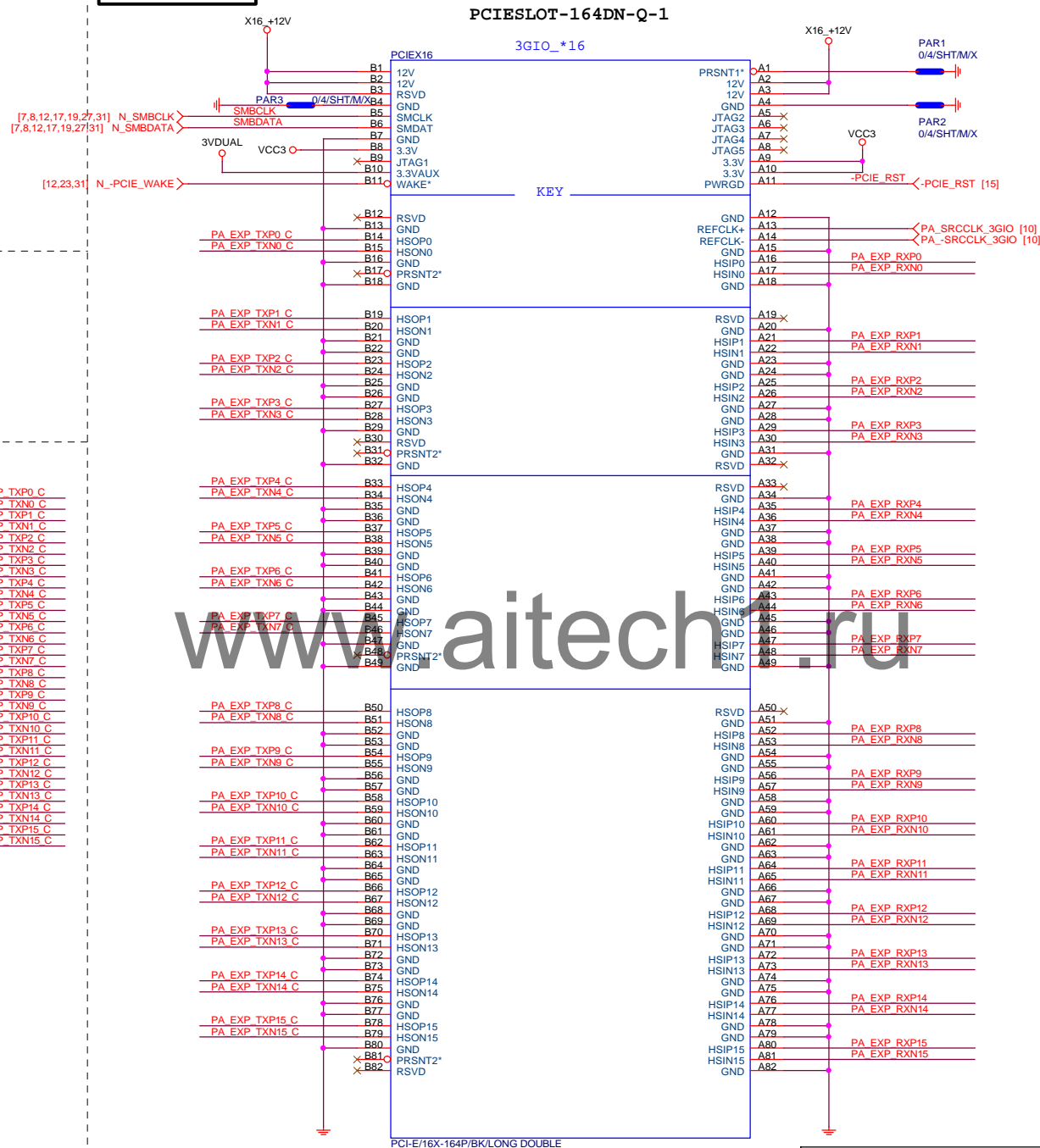


# PCIEX16 AC CAP

PA EXP TXP0	PAC5	0.22uF/4X5R/6.3V/K	PA EXP TXP0 C
PA EXP TXN0	PAC4	0.22uF/4X5R/6.3V/K	PA EXP TXN0 C
PA EXP TXP1	PAC6	0.22uF/4X5R/6.3V/K	PA EXP TXP1 C
PA EXP TXN1	PAC7	0.22uF/4X5R/6.3V/K	PA EXP TXN1 C
PA EXP TXP2	PAC8	0.22uF/4X5R/6.3V/K	PA EXP TXP2 C
PA EXP TXN2	PAC9	0.22uF/4X5R/6.3V/K	PA EXP TXN2 C
PA EXP TXP3	PAC10	0.22uF/4X5R/6.3V/K	PA EXP TXP3 C
PA EXP TXN3	PAC11	0.22uF/4X5R/6.3V/K	PA EXP TXN3 C
PA EXP TXP4	PAC12	0.22uF/4X5R/6.3V/K	PA EXP TXP4 C
PA EXP TXN4	PAC13	0.22uF/4X5R/6.3V/K	PA EXP TXN4 C
PA EXP TXP5	PAC14	0.22uF/4X5R/6.3V/K	PA EXP TXP5 C
PA EXP TXN5	PAC15	0.22uF/4X5R/6.3V/K	PA EXP TXN5 C
PA EXP TXP6	PAC16	0.22uF/4X5R/6.3V/K	PA EXP TXP6 C
PA EXP TXN6	PAC17	0.22uF/4X5R/6.3V/K	PA EXP TXN6 C
PA EXP TXP7	PAC19	0.22uF/4X5R/6.3V/K	PA EXP TXP7 C
PA EXP TXN7	PAC18	0.22uF/4X5R/6.3V/K	PA EXP TXN7 C
PA EXP TXP8	PAC20	0.22uF/4X5R/6.3V/K	PA EXP TXP8 C
PA EXP TXN8	PAC21	0.22uF/4X5R/6.3V/K	PA EXP TXN8 C
PA EXP TXP9	PAC22	0.22uF/4X5R/6.3V/K	PA EXP TXP9 C
PA EXP TXN9	PAC23	0.22uF/4X5R/6.3V/K	PA EXP TXN9 C
PA EXP TXP10	PAC24	0.22uF/4X5R/6.3V/K	PA EXP TXP10 C
PA EXP TXN10	PAC25	0.22uF/4X5R/6.3V/K	PA EXP TXN10 C
PA EXP TXP11	PAC26	0.22uF/4X5R/6.3V/K	PA EXP TXP11 C
PA EXP TXN11	PAC27	0.22uF/4X5R/6.3V/K	PA EXP TXN11 C
PA EXP TXP12	PAC28	0.22uF/4X5R/6.3V/K	PA EXP TXP12 C
PA EXP TXN12	PAC29	0.22uF/4X5R/6.3V/K	PA EXP TXN12 C
PA EXP TXP13	PAC30	0.22uF/4X5R/6.3V/K	PA EXP TXP13 C
PA EXP TXN13	PAC31	0.22uF/4X5R/6.3V/K	PA EXP TXN13 C
PA EXP TXP14	PAC32	0.22uF/4X5R/6.3V/K	PA EXP TXP14 C
PA EXP TXN14	PAC33	0.22uF/4X5R/6.3V/K	PA EXP TXN14 C
PA EXP TXP15	PAC34	0.22uF/4X5R/6.3V/K	PA EXP TXP15 C
PA EXP TXN15	PAC35	0.22uF/4X5R/6.3V/K	PA EXP TXN15 C

PA EXP RXP0.[15] >>> PA\_EXP\_RXP0.[15] [4]  
 PA EXP RXN0.[15] >>> PA\_EXP\_RXN0.[15] [4]  
 PA EXP TXP0.[15] >>> PA\_EXP\_TXP0.[15] [4]  
 PA EXP TXN0.[15] >>> PA\_EXP\_TXN0.[15] [4]

# PCIEX16 SLOT

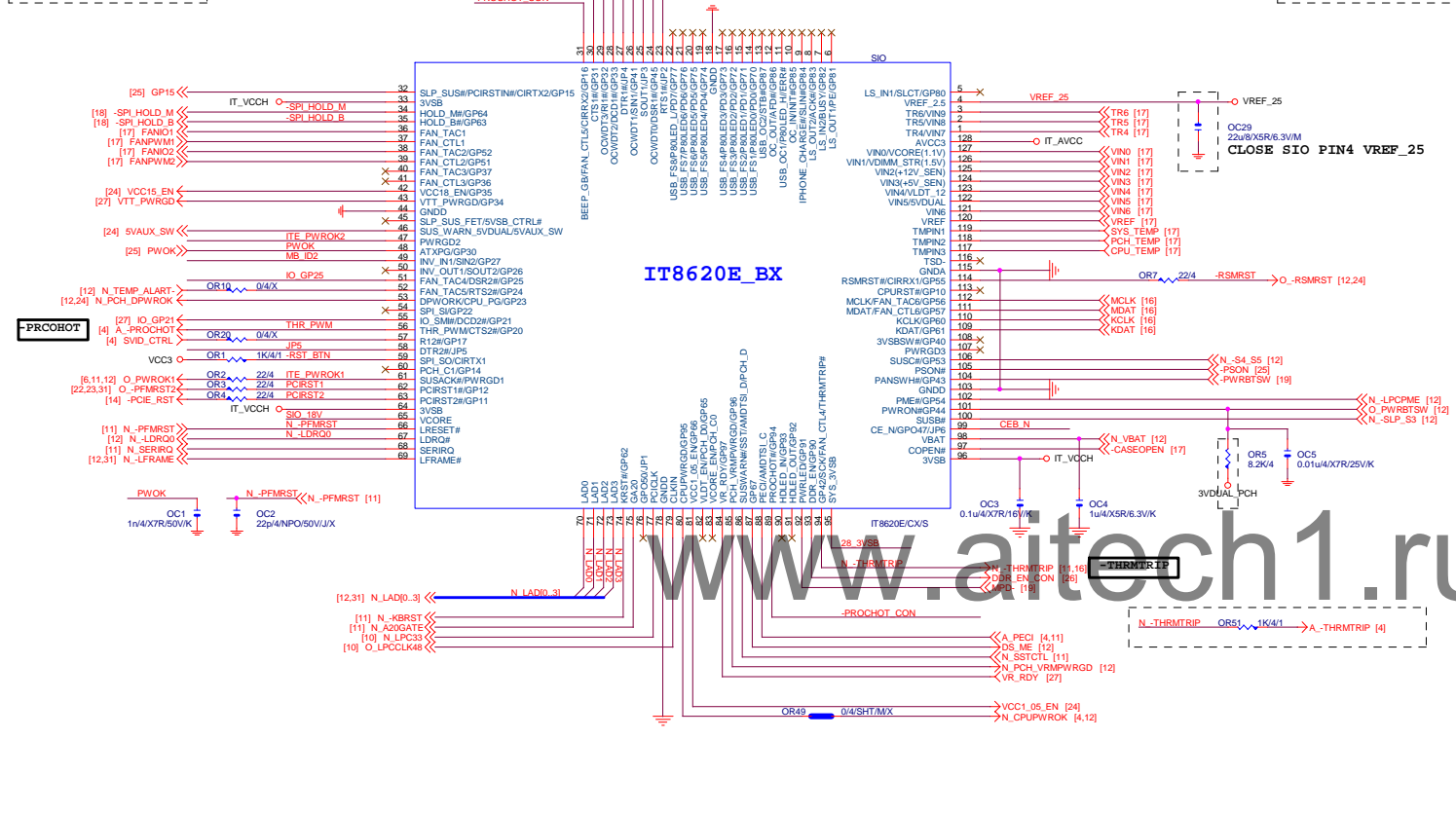
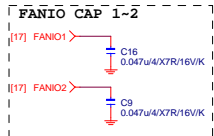


BLACK CONNECTOR

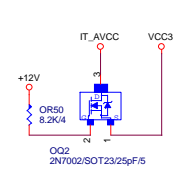
Gigabyte Technology

Title			PCI EXPRESS * 16	
Size			GA-Z97N-WIFI	
Custom			Rev 1.0	
Date: Wednesday, April 02, 2014			Sheet 14 of 31	

# SIO IT8620



## FIX ATX 插拔漏電



## PWR SHT



## SIO PU



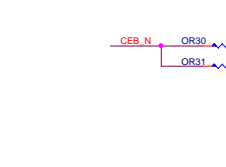
## SIO STRAP



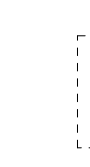
## Power leakage



## DUAL BIOS OPT STRAP



## SIO\_18V



## MB ID

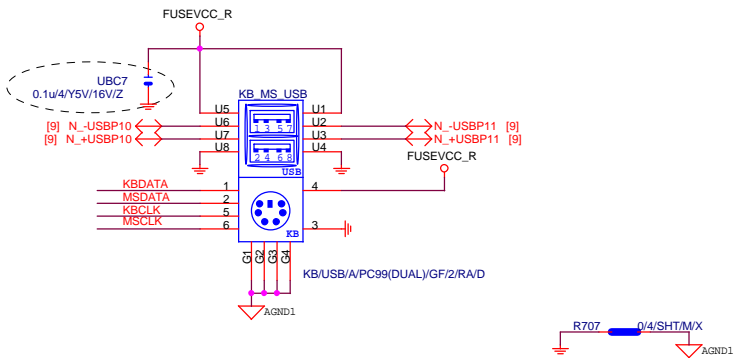


## SIO CAP

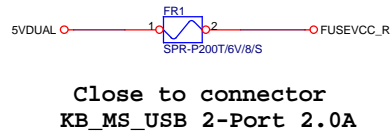


IT8620E GPIO問題匯整	
PIN	GP26---
50	第一次接上POWER時會拉 LO
PIN	DEFAULT 為 HDLED FUNCTION, GP93 BYPASS TO GP92
90/91	高溫時 GP92 會被拉 Lo (ITE)
PIN	SP48--- POWER ON
108	時會拉 LO
PIN	MOUSE 跟 FAN6 FUNCTION
111/112	擇一使用,不然會互相干擾

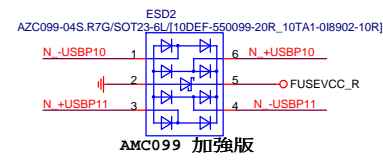
# KB/MS



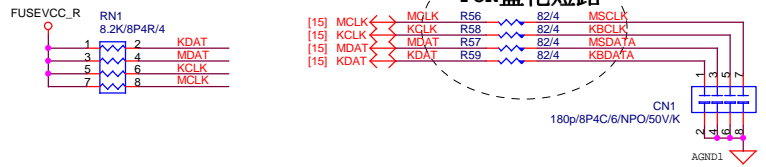
# USB2.0 PWR



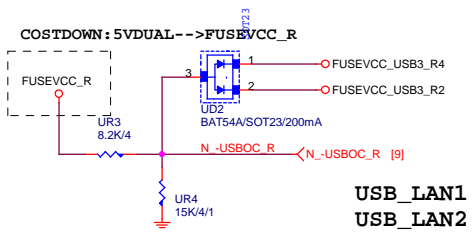
# USB2.0 ESD



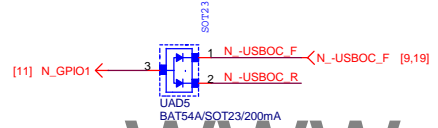
# KB\_MS



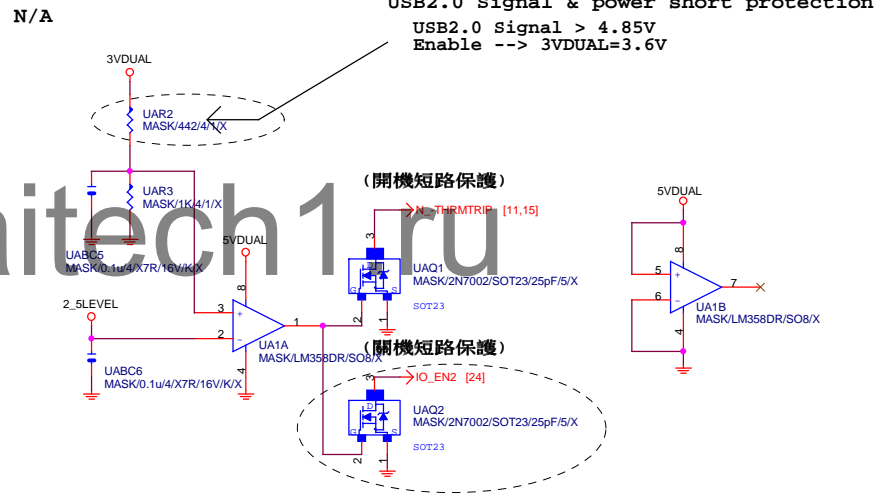
# -USBOC\_R



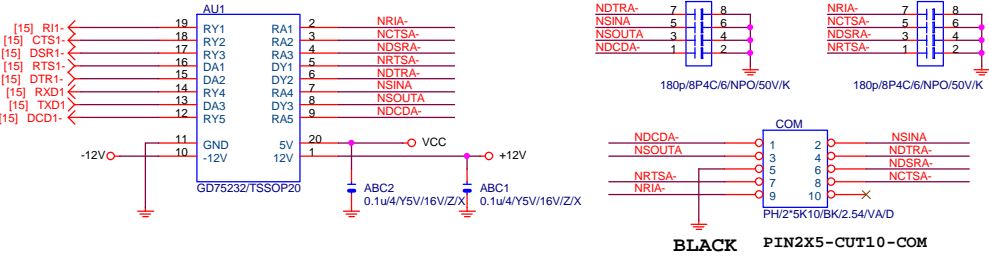
# USB POWER PROTECT



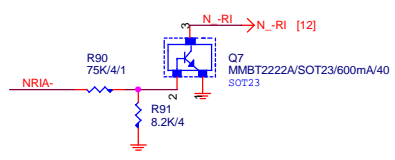
# USB2.0 Short Power Protection



# COM



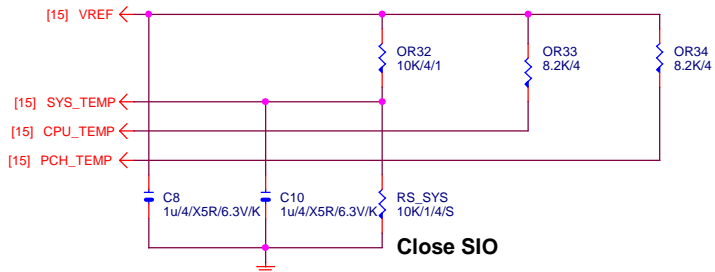
# COM RI



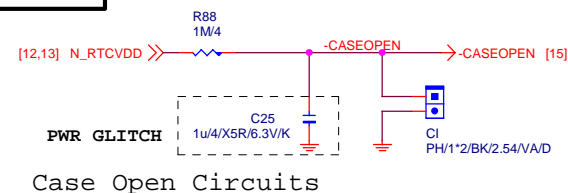
Gigabyte Technology			
Title			
COM-RI,KB_USB,USB_ESATA-PROCHOT			
Size	Document Number	GA-Z97N-WIFI	
Custom			Rev 1.0
Date:	Wednesday, April 02, 2014	Sheet	16 of 31



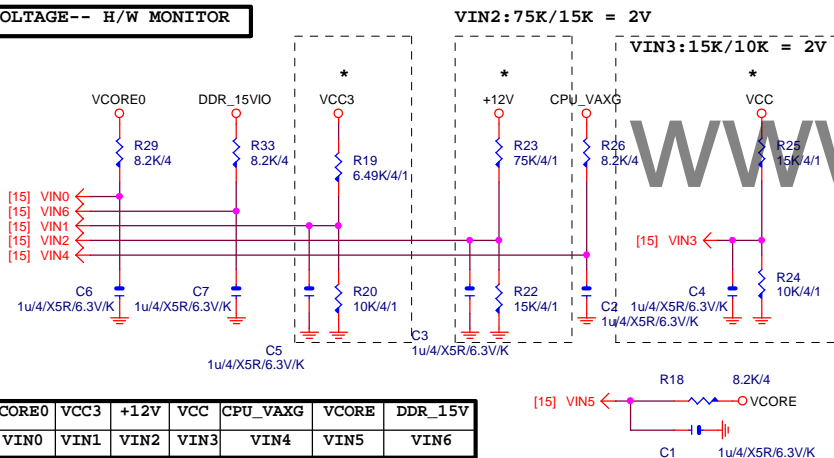
# TEMP H/W MONITOR



# CASE OPEN

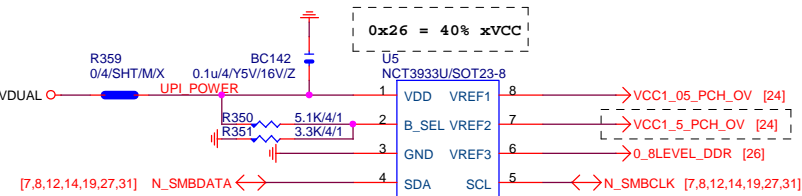


# VOLTAGE-- H/W MONITOR

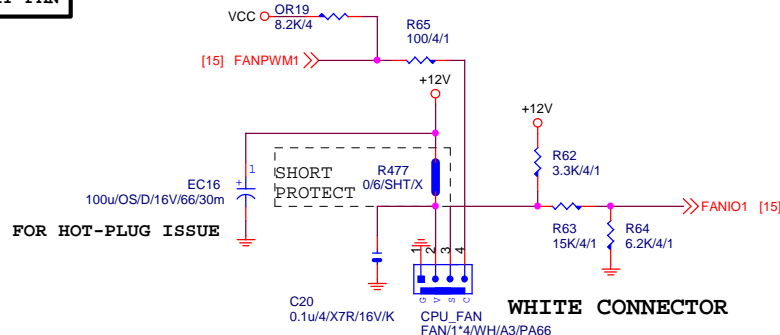


# OV NCT3933

接pwm feedback pin

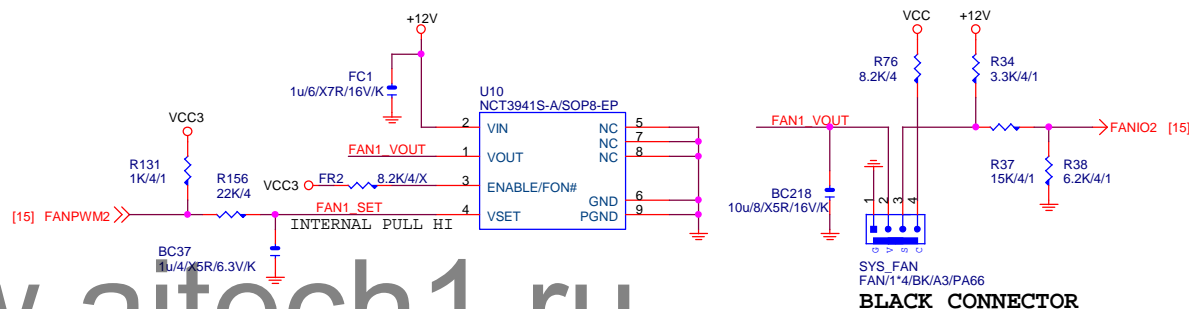


# CPU SMART FAN

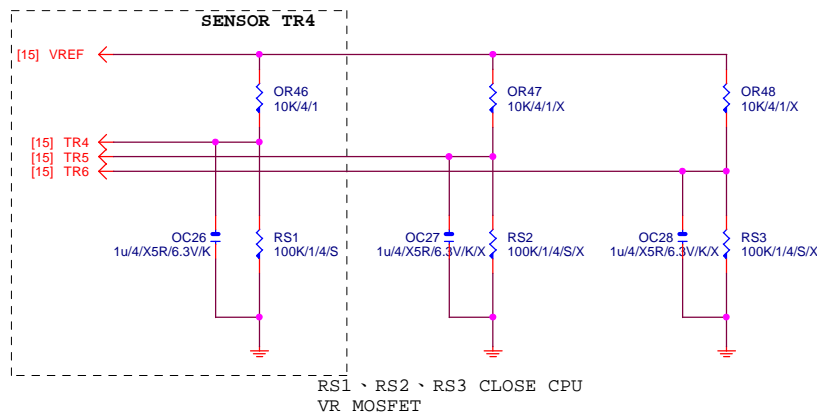


# SYS SMART FAN

Linear SYS\_FAN

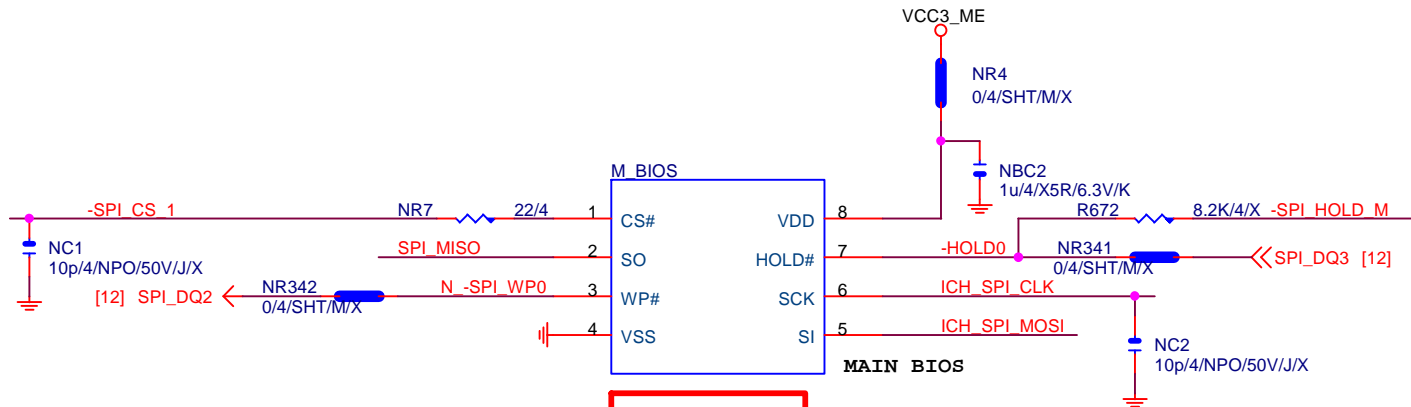


# -PROHOT



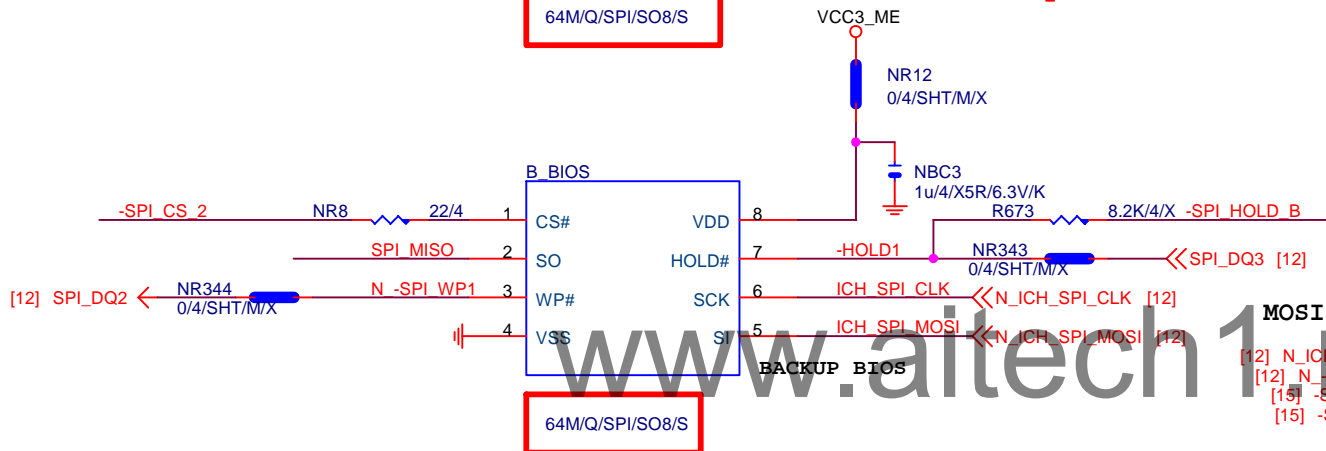
Gigabyte Technology

Title			HWM,FAN CTRL,OV
Size	Document Number	Rev	
Custom	GA-Z97N-WIFI	1.0	
Date:	Wednesday, April 02, 2014	Sheet	17 of 31

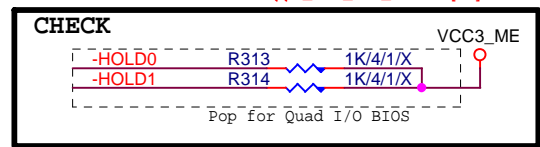
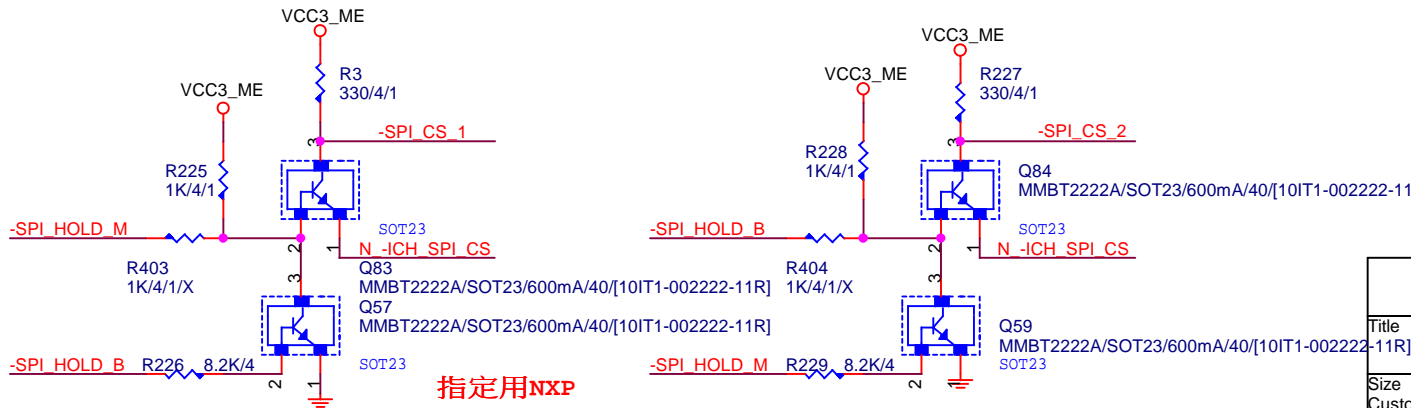
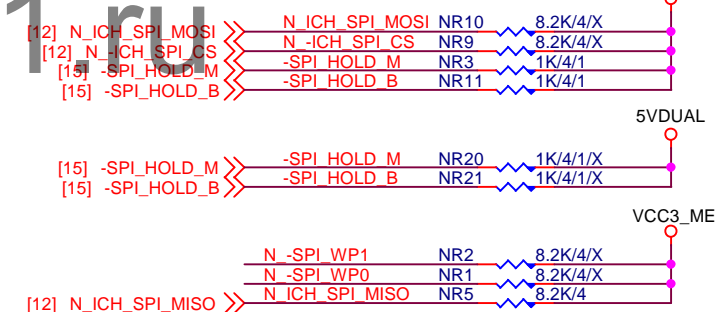


BOOT DEVICE	GNT0	GNT1
LPC	0	0
PCI	0	1
NAND	1	0
SPI	1	1

1 means floating  
0 means PD 1K



### MOSI For DMI RX Termination Voltage



**Gigabyte Technology**

**DUAL BIOS**

**GA-Z97N-WIFI**

Rev 1.0

Title

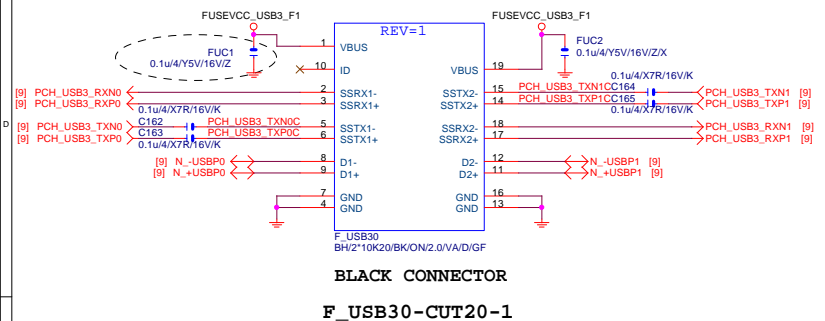
Size Custom

Document Number

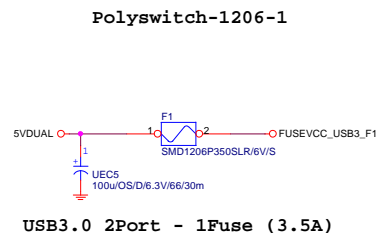
Date: Wednesday, April 02, 2014

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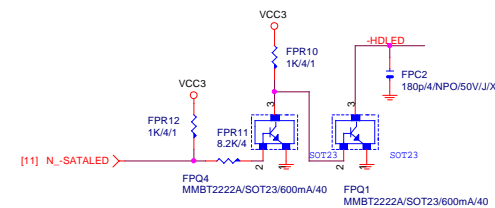
## F\_USB30



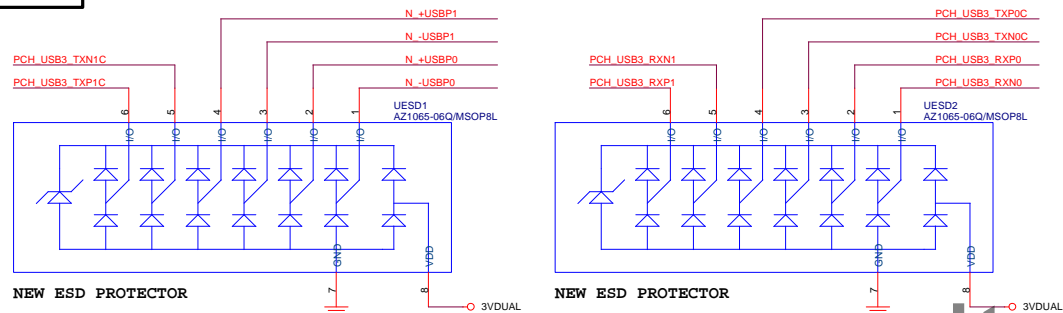
F_USB30 PWR
-------------



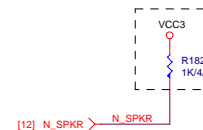
**SATA LED**



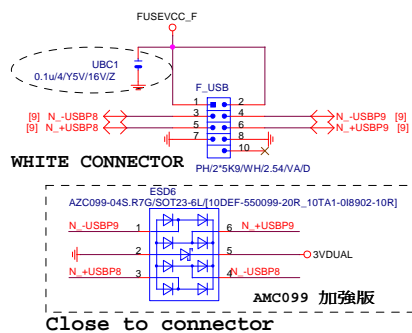
F\_USB30 ESD PROTECT



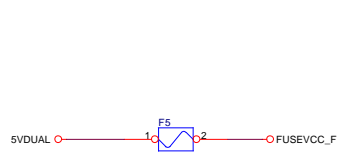
## SPKR



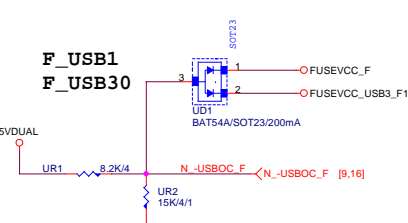
FRONT USB20



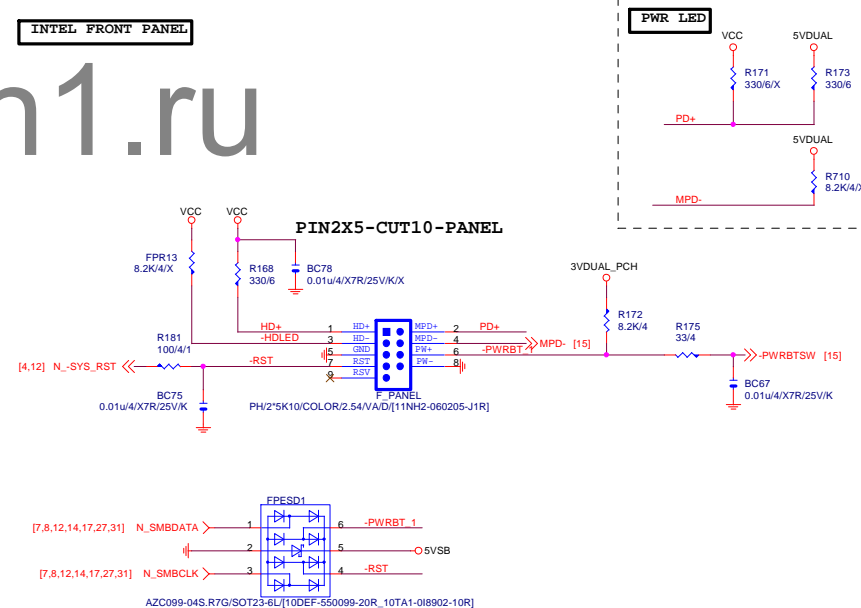
## FUSEVCC\_F



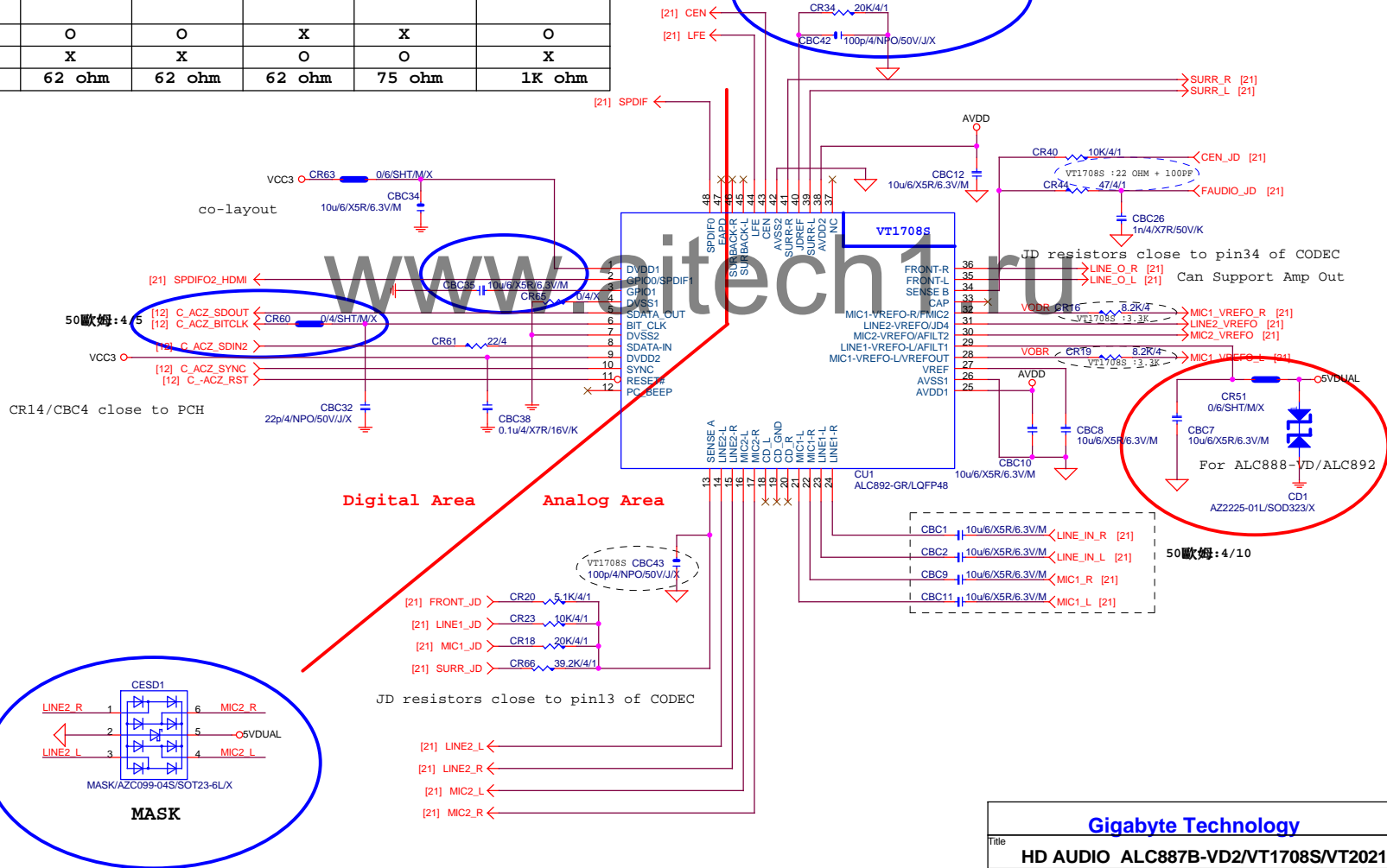
## -USB0C\_F



## INTEL FRONT PANEL



	ALC662	ALC887-VD2	ALC889	VT1708S	VT1708SCE
CR65	X	X	O	O	X
CR64	X	X	X	X	0.1u/4
CBC35	O	O	X	X	O
CR44/CBC6	47ohm+1nF	47ohm+1nF	47ohm+1nF	22ohm+100P	22ohm+100P
CR31	X	O	O	O	O
CR30	O	X	X	X	X
CBC1/CBC2	22uF/X5R	22uF/X5R	22uF/X5R	22uF/X5R	22uF/X5R
CR20	5.11K/4/1	5.11K/4/1	5.11K/4/1	5.1K/4/1	5.1K/4/1
CR34	20K/4/1	20K/4/1	20K/4/1	5.1K/4/1	20K/4/1
CBC39/CBC40	N/A	N/A	N/A	100P/4	100P/4
CR6/CR7/CR54/CR58	22K/4	22K/4	22K/4	10K/4	10K/4
CR5/CR8/CR11/CR4/ CR17/CR22/CR45/CR33/ CR47/CR40/CR26/CR37/ CR13/CR11/CR57/CR53	62 ohm	62 ohm	62 ohm	75 ohm	75 ohm
CR51/CD1/CBC7	O	O	X	X	O
CD2/CD3/CQ3/CQ5	X	X	O	O	X
CR1/CR14/CR17/CR22	62 ohm	62 ohm	62 ohm	75 ohm	1K ohm



CODEC POWER/EMI PAD

ADD CD2 For ESD PROTECT DIODE

**SPDIF\_OUT**

[20] SPDIFO2\_HDMI → CR26 0/4SHT/MX

CBC14 100pF/4NPO/50VJ

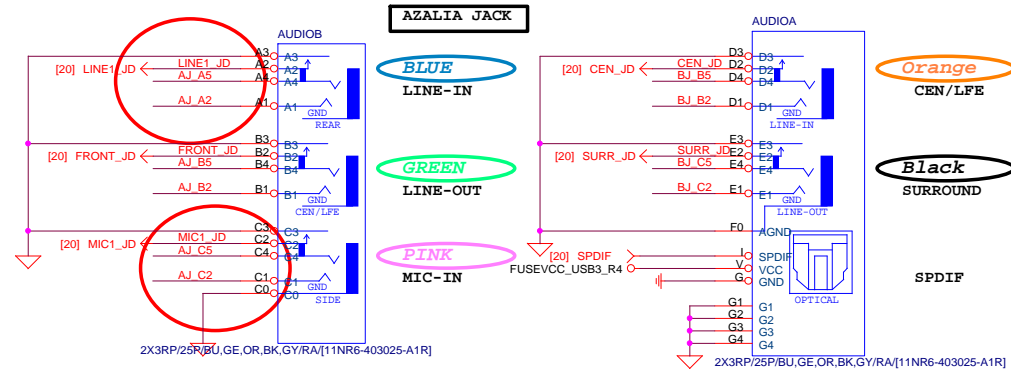
PIN

SPDIF\_O PH/1\*2BK/2.54V/A/D

For HDMI SPDIF

AZALIA JACK

A 2x3 grid of colored circles. The top row contains an orange circle, a cyan circle with a black outline, and a black circle. The bottom row contains a black circle, a lime green circle with a black outline, and a grey circle. To the right of the grid is a pink circle with a black outline. The entire grid is enclosed in a black rectangular frame with two small black legs at the bottom.



**LINE-OUT**

CEC1 100uF/OS/D/6.3V/66/30m  
 [20] LINE\_O\_R → CEC1  
 CEC2 100uF/OS/D/6.3V/66/30m  
 [20] LINE\_O\_L → CEC2  
 CR5 62K/4  
 CR6 22K/4  
 CR7 22K/4  
 CR8 62K/4  
 AJ\_B5  
 AJ\_B2  
 CBC19 180pF/4/NPO/50V/J  
 CBC24 180pF/4/NPO/50V/J

only reserved for ALC888

**LINE-IN**

[20] LINE\_IN\_R ← CR1 62/4

[20] LINE\_IN\_L ← CR14 62/4

Verify MIC function in LINE-in

For 889A/888

AJ\_A5

AJ\_A2

CBC20 180pF/4/NPO/50V/J

CBC23 180pF/4/NPO/50V/J

**MIC-IN**

[20] MIC1\_R ← CR17 62/4

[20] MIC1\_L ← CR22 62/4

[20] MIC1\_VREFO\_L

[20] MIC1\_VREFO\_R

CBC3 180p/4/NPO/50V/J

CBC4 180p/4/NPO/50V/J

AJ\_C5

AJ\_C2

**SURROUND**

CEC10 100u/OS/D/6.3V/66/30m  
[20] SURR\_R

CEC11 100u/OS/D/6.3V/66/30m  
[20] SURR\_L

EMI

CR73 62/4

CR74 62/4

CR67 22K/4

CR68 22K/4

BJ\_C5

BJ\_C2

CBC44 180p/4/NPO/50V/J

CBC45 180p/4/NPO/50V/J

CEN/LFE

CEC12 100uF/6.3V/66/30m

CEC13 100uF/6.3V/66/30m

CR75 62/4

CR76 62/4

EMI

CR69 22K/4

CR70 22K/4

B5

B2

CBC46 180pF/4NPO/50V/J

CBC47 180pF/4NPO/50V/J

**SURR BACK**

**AZALIA FRONT PANEL**

Diagram illustrating the front panel connections for the AZALIA board, showing components and signal paths.

**Components and Connections:**

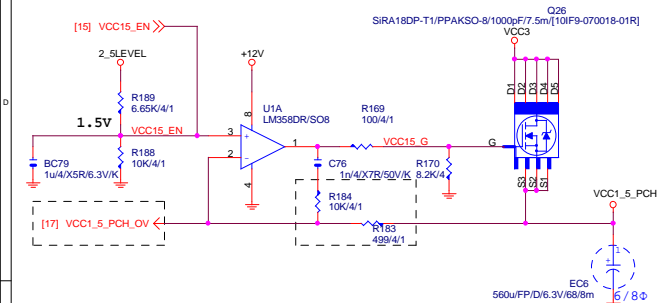
- Diodes:** BAT54A/SOT23/200mA (Q1, Q2).
- Resistors:** CR52, CR56, CR10, CR9, CR13, CR11, CR57, CR53, CR12, CR58, CR54, CR55, CR59.
- Capacitors:** 100uF/OS/D/6.3V/68/30m (C1), 10uF/6/X5R/6.3V/M (C2, C3).
- Connectors:** GRAY CONNECTOR (Pin headers).
- Signal Lines:**
  - LINE2\_VREFO (Red)
  - MIC2\_VREFO (Red)
  - AUDIO\_ID (Red)
  - LINE2\_R (Red)
  - LINE2\_L (Red)
  - M2\_L (Blue)
  - M2\_R (Blue)
  - L2\_L (Blue)
  - L2\_R (Blue)
  - F\_AUDIO (Blue)
  - PH/2\*5K8/GY/2.54/VA/D (Blue)
- Other Labels:** SOT23, 0.4/4, 180p/4/NPO/50V/J, 180p/4/NPO/50V/J, 180p/4/NPO/50V/J, 180p/4/NPO/50V/J.

<h1 style="text-align: center; color: blue;">Gigabyte Technology</h1>			
Title			
<h2 style="color: black;">AUDIO JACK</h2>			
Size Custom	Document Number	<h1 style="color: black;">GA-Z97N-WIFI</h1>	Rev 1.0
Date:	Wednesday, April 02, 2014	Sheet	21 of 31

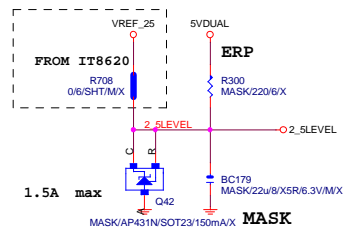




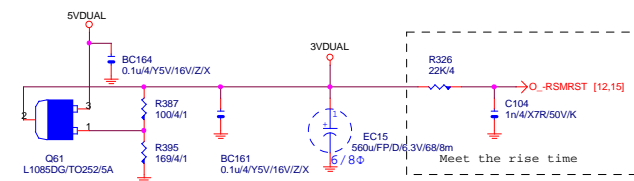
## VCC1\_5\_PCH



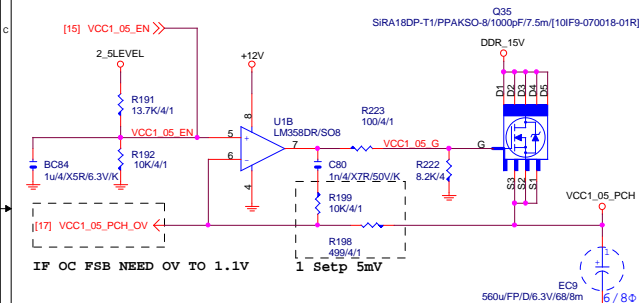
## 2\_5LEVEL



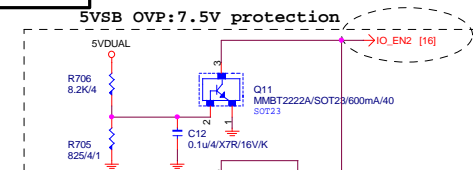
## 3VDUAL



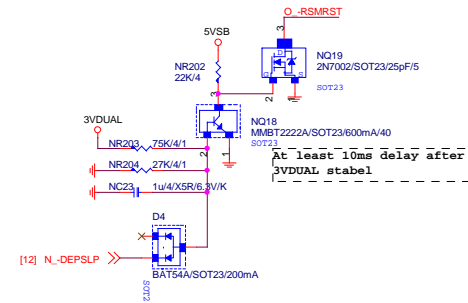
## VCC1\_05\_PCH



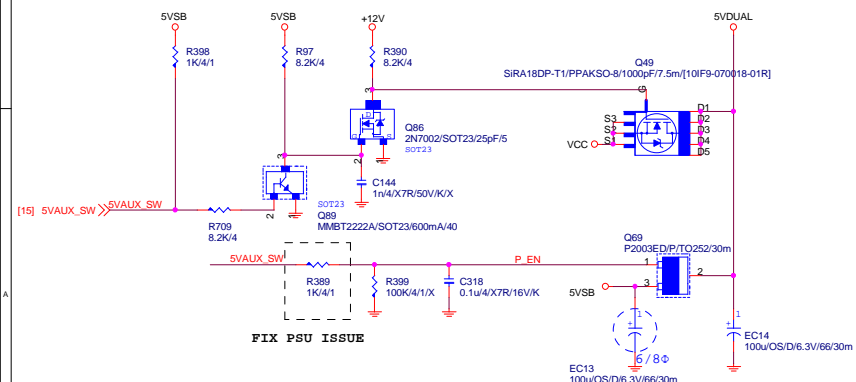
## 5VDUAL SHORT PROTECT



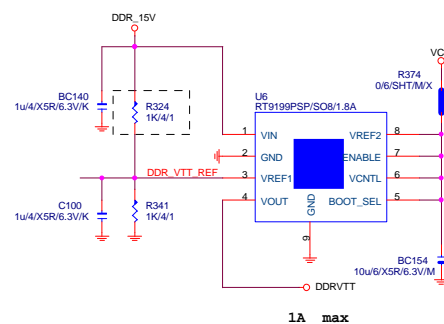
## - RSMRST



## 5VDUAL

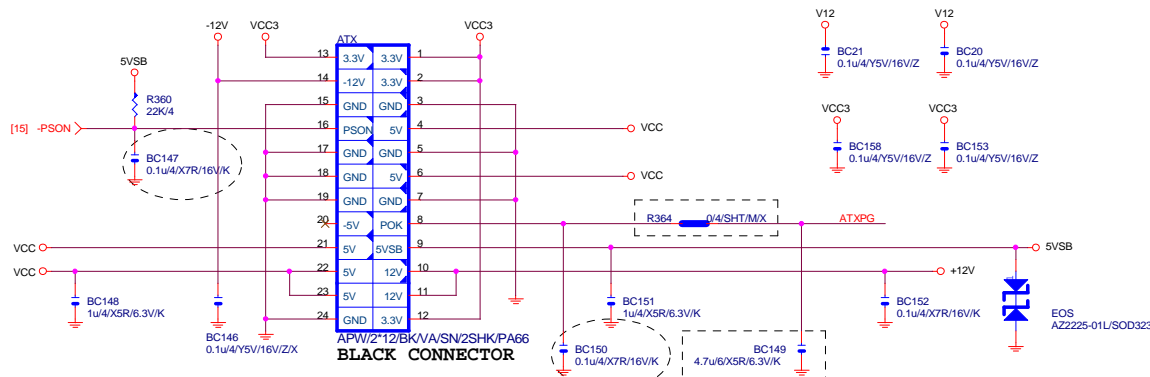


DDRVTT

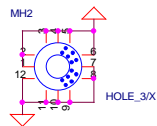




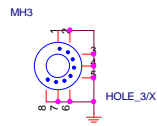
# ATXX24 POWER CONNECTOR



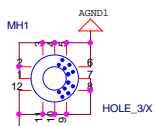
## MB LOCATION



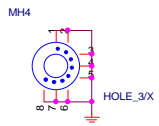
HOLE\_4-RH-5MM-1



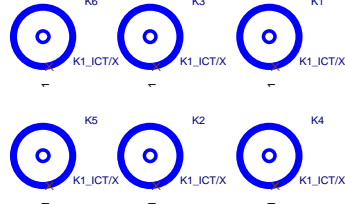
HOLE\_4-RH-5MM-5PIN-1



HOLE\_4-RH-5MM-1

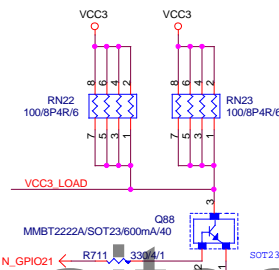


HOLE\_4-RH-5MM-5PIN-1

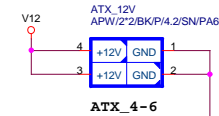


To prevent the 5VSB under loading when boot

## FIX PWR MINMUN LOAD



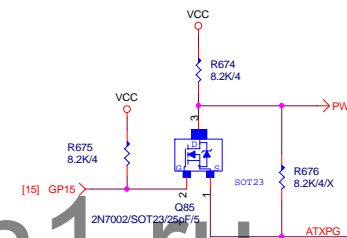
# ATXX4 POWER CONNECTOR



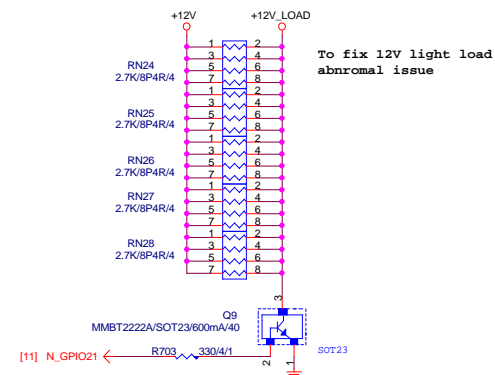
BLACK CONNECTOR

## PWOK PATCH

【技術通報R&D技術通報154】



【技術通報R&D技術通報153】



To fix 12V light load abnormal issue

## CLK GEN

N/A

Gigabyte Technology

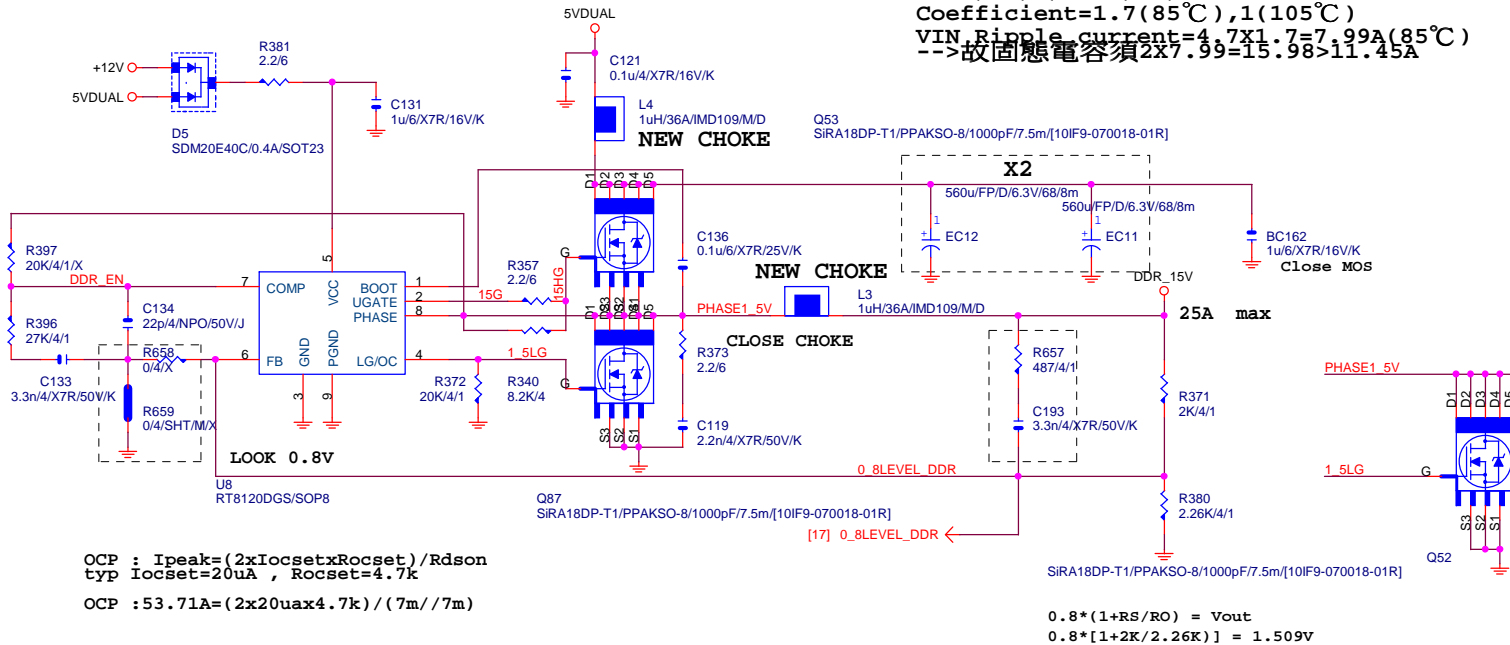
ATX CONNECTOR

GA-Z97N-WIFI

Rev 1.0

Date: Wednesday, April 02, 2014 Sheet 25 of 31

# DDR15V



# PWR SEQ

[15] DDR\_EN\_CON >> DDR\_EN

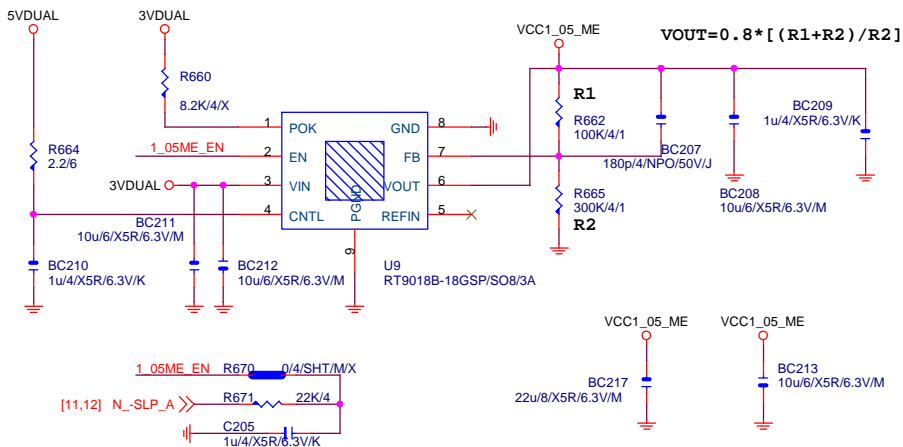
From DDR\_15V source  
 10 mils trace to SIO

# VCC1\_05\_ME

Z97 N/A

Z97+I217V STUFF

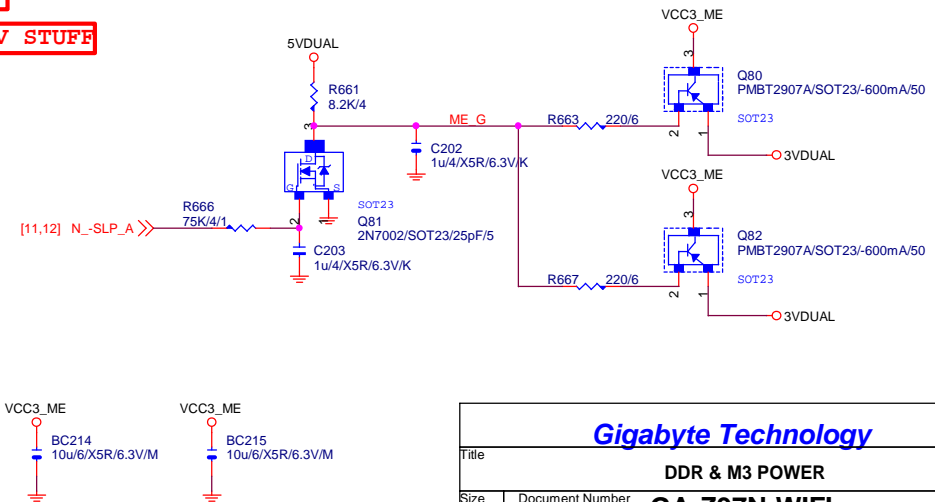
【技術通報R&D技術通報156】  
 (RICHTEK), (NUVOTON), (EMC)做共用  
 PIN7分壓阻值須做修改為100K以上電阻值



# VCC3\_ME

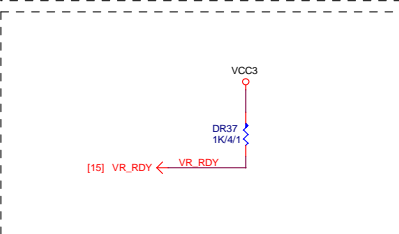
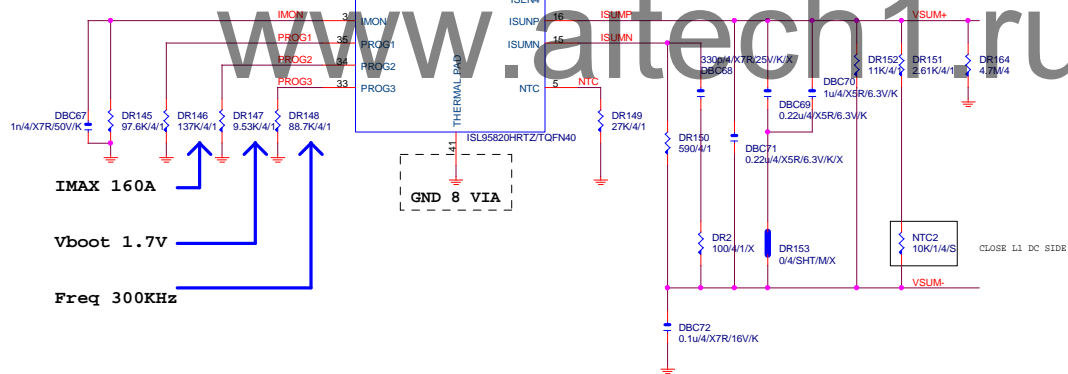
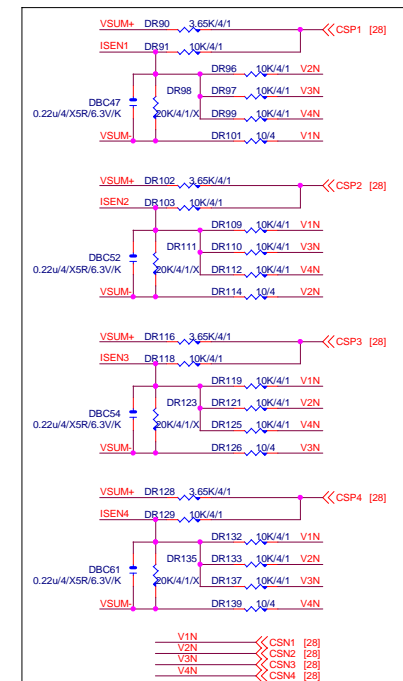
Z97 N/A

Z97+I217V STUFF



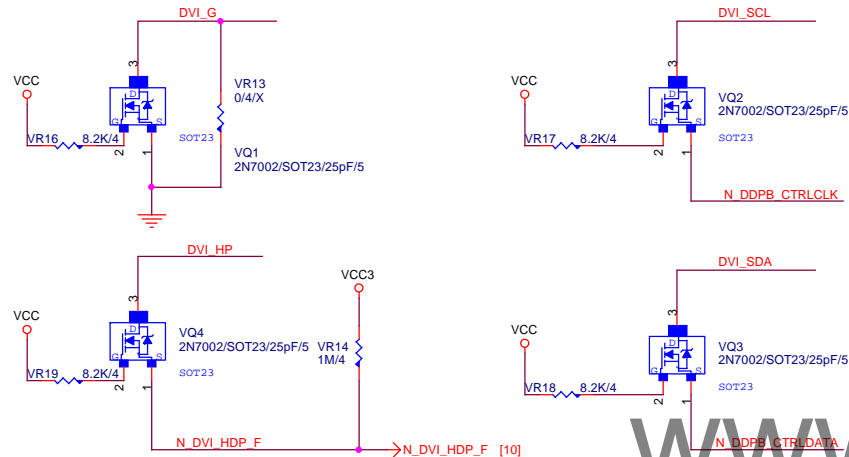
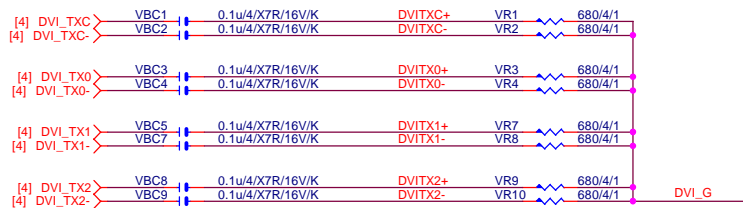
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DDR & M3 POWER		
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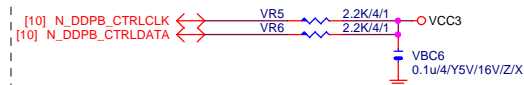




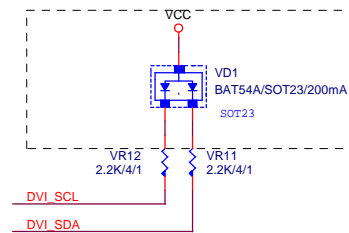
## DVI NON LEVEL SHIFT



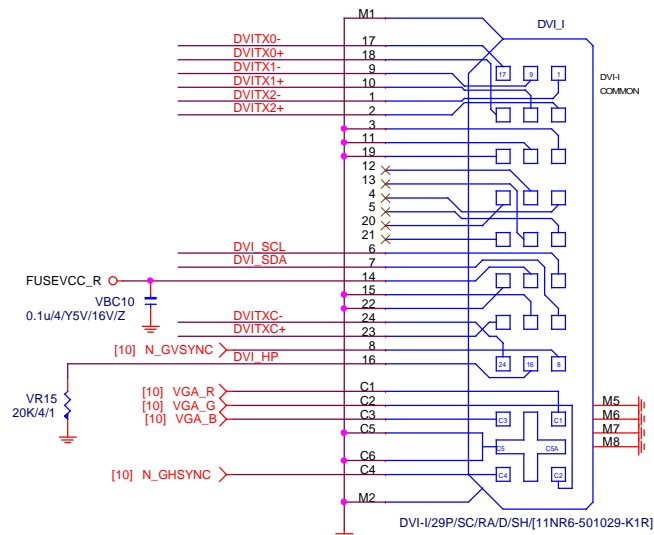
## DVI-I PH/PD



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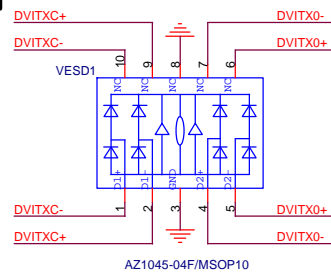


## DVI-I CONNECTOR

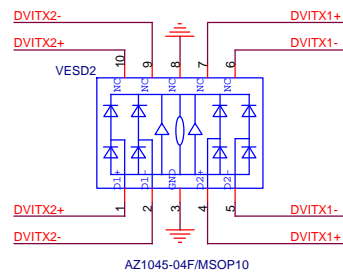


INSERT TRANSFER CONNECTOR  
TO DISABLE DDC\_EN FOR VGA  
CSM FAIL.

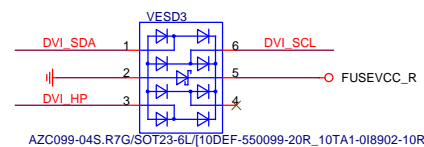
## DVI ESD



Close to connector



Close to connector

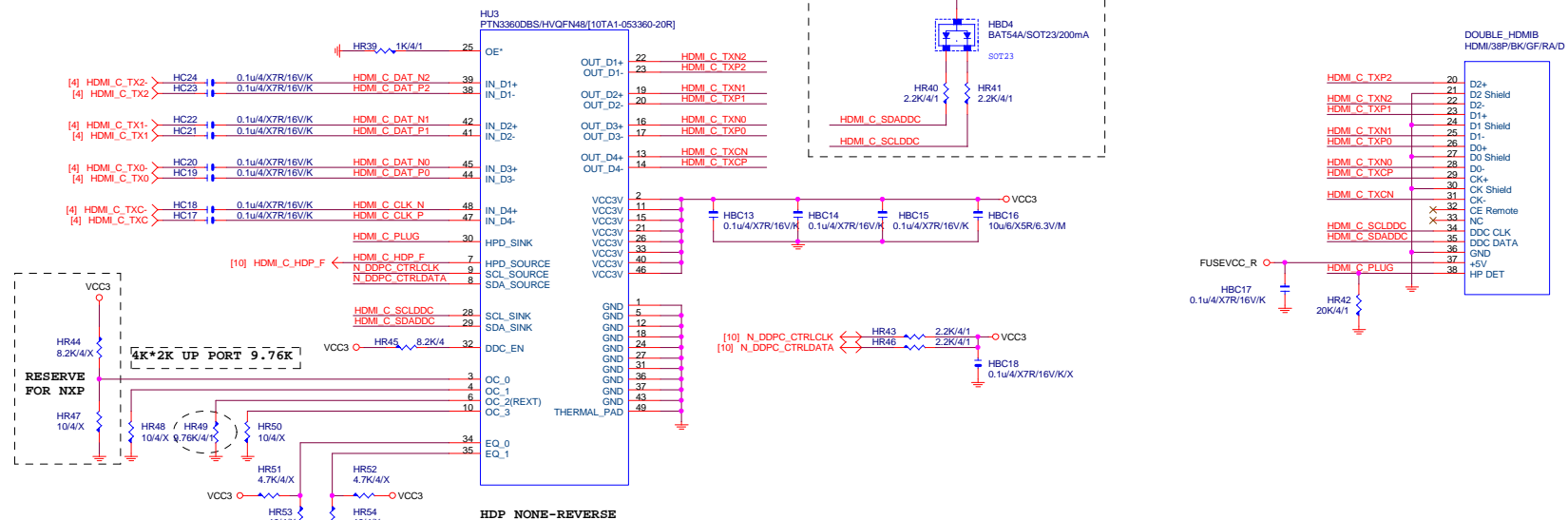


AZC099-04S.R7G/SOT23-6L/[10DEF-550099-20R\_10TA1-018902-10R]

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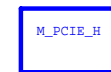
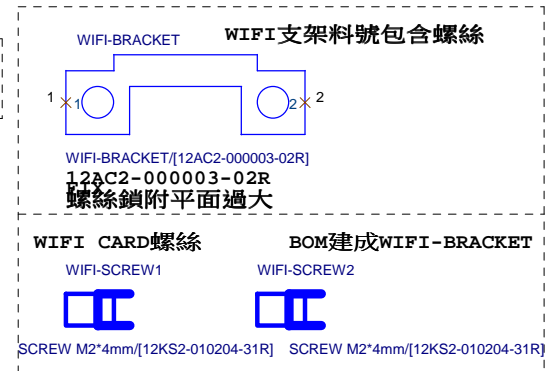
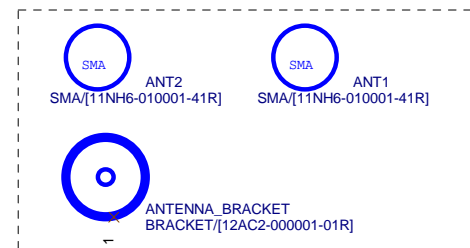
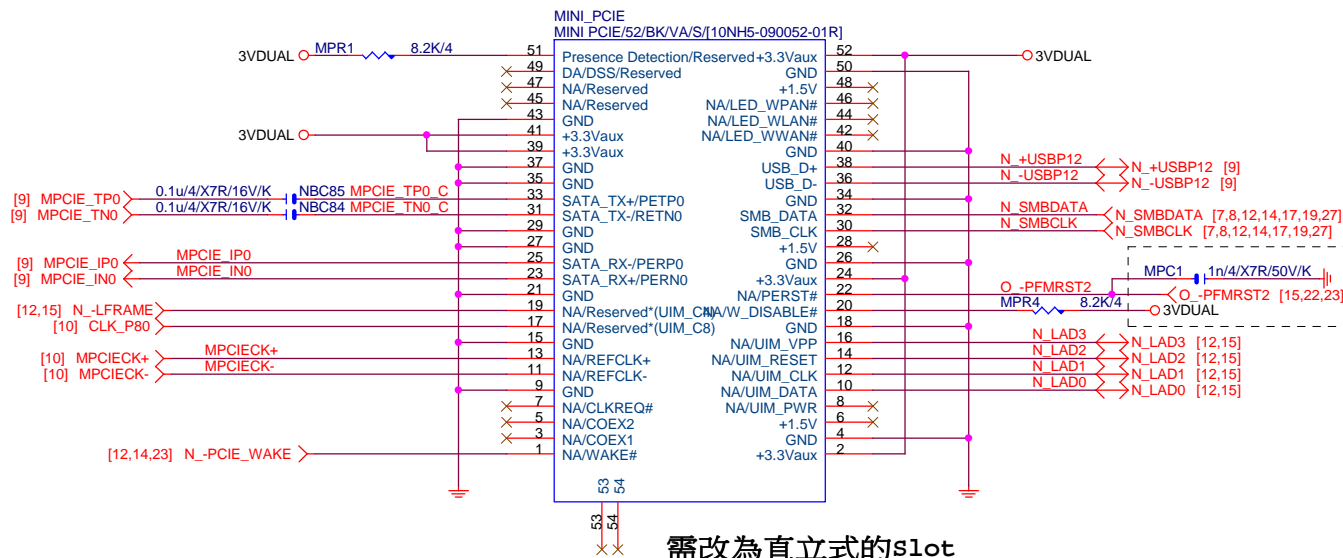
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HDMI LEVEL SHIFT
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## Mini PCIE



WIFI\_MODULE  
WIFI WITH BT MINI CARD INTEL/[20CB1-027260-00R]  
Intel 7260 - 2x2 11ac combo

## mSATA Slot

N/A

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