

Model Name: GA-H81M-S2PH

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_MS,USB PWR
17	IT8892E
18	PCI SLOT 1,2
19	PCI EXPRESS*1 SLOT.LPT
20	HWM,FAN CTRL,OV,-PROCHOT
21	DUAL BIOS
22	FP,F_USB,SPK,SATALED
23	Realtek ALC887-VD2
24	REAR AUDIO JACK
25	REALTEK RTL8111F
26	DISCRETE POWER
27	ATX,DUMMY LOAD

www.xinxunwei.com 400-800-9990

Revision 2.01

SHEET

TITLE

28	RT8120_DDR POWER
29	VCORE ISL95812_1
30	VCORE ISL95812_2
31	HDMI

Gigabyte Technology		
Cover Sheet		
Size Custom	Document Number GA-H81M-S2PH	Rev 2.01
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Revision 2.01

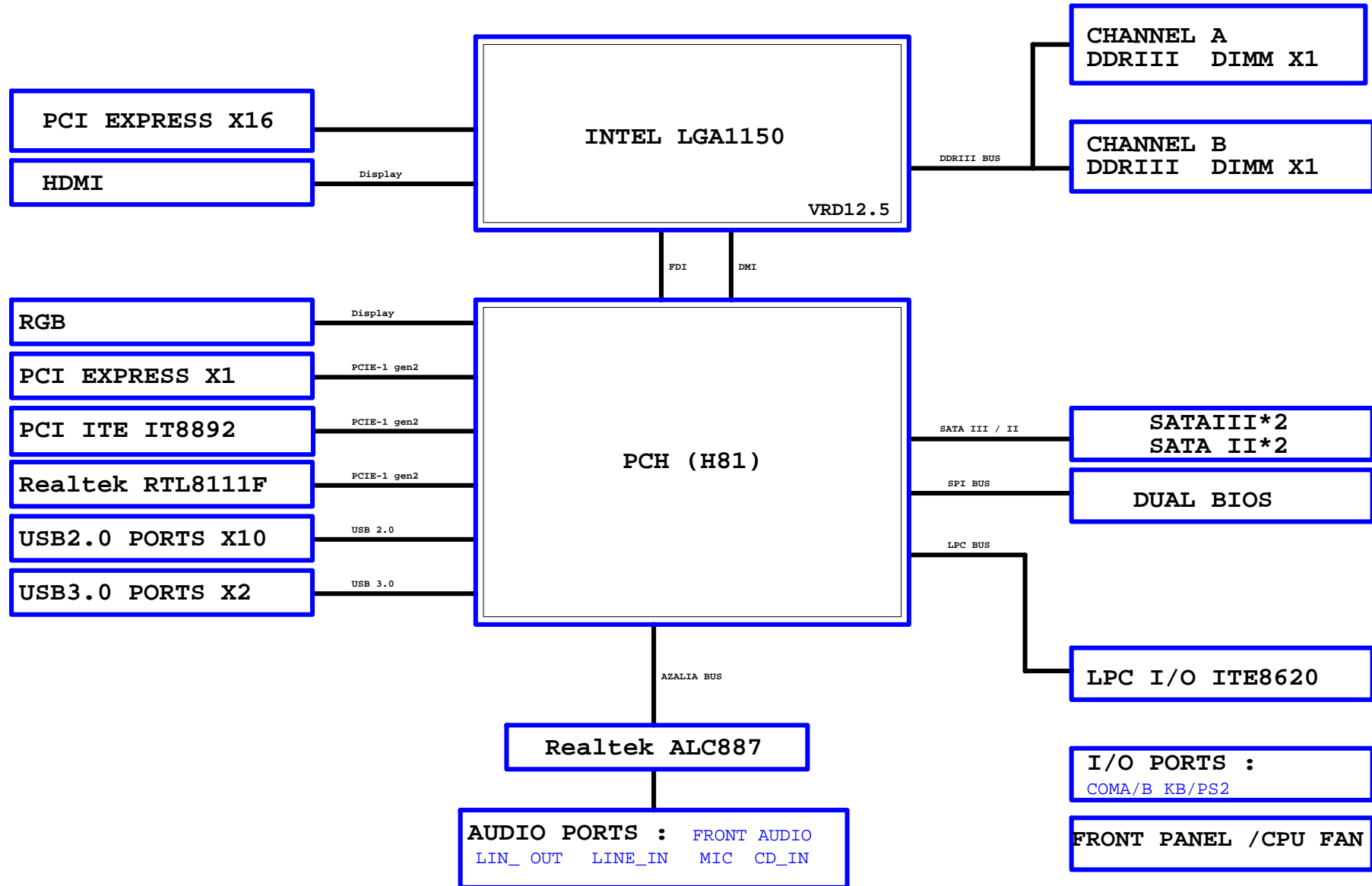
Component value change history

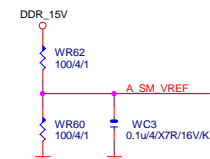
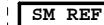
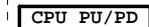
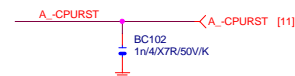
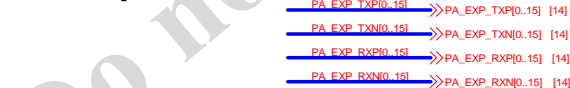
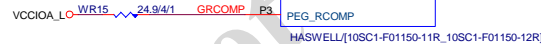
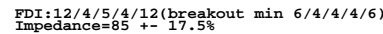
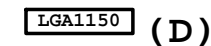
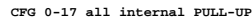
2014/06/24

[illegible]

Circuit or PCB layout change

[illegible]

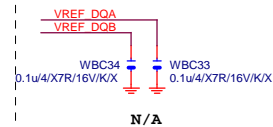
BLOCK DIAGRAM



LGA1150A			
MAAA0	AU13	DDR0_M0	DDR0_D00
MAAA1	AV16	DDR0_M1	DDR0_D01
MAAA2	AU16	DDR0_M2	DDR0_D02
MAAA3	AW17	DDR0_M3	DDR0_D03
MAAA4	AU17	DDR0_M4	DDR0_D04
MAAA5	AU18	DDR0_M5	DDR0_D05
MAAA6	AV17	DDR0_M6	DDR0_D06
MAAA7	AT18	DDR0_M7	DDR0_D07
MAAA8	AU18	DDR0_M8	DDR0_D08
MAAA9	AT19	DDR0_M9	DDR0_D09
MAAA10	AW11	DDR0_M10	DDR0_D10
MAAA11	AV19	DDR0_M11	DDR0_D11
MAAA12	AU19	DDR0_M12	DDR0_D12
MAAA13	AY10	DDR0_M13	DDR0_D13
MAAA14	AT20	DDR0_M14	DDR0_D14
MAAA15	AU21	DDR0_M15	DDR0_D15
MODT_A0	AW10	DDR0_ODT0	DDR0_ODT0
MODT_A1	AY8	DDR0_ODT1	DDR0_ODT1
AW9	AW9	DDR0_ODT2	DDR0_ODT2
AW8	AW8	DDR0_ODT3	DDR0_ODT3
AW33	AW33	DDR0_ECC0	DDR0_ECC0
AW33	AW33	DDR0_ECC1	DDR0_ECC1
AU31	AU31	DDR0_ECC2	DDR0_ECC2
AT33	AT33	DDR0_ECC3	DDR0_ECC3
AU33	AU33	DDR0_ECC4	DDR0_ECC4
AT31	AT31	DDR0_ECC5	DDR0_ECC5
AW31	AW31	DDR0_ECC6	DDR0_ECC6
AW31	AW31	DDR0_ECC7	DDR0_ECC7
SBA00	SBA00	DDR0_BA0	DDR0_BA0
SBA01	SBA01	DDR0_BA1	DDR0_BA1
SBA02	SBA02	DDR0_BA2	DDR0_BA2
CKEA0	CKEA0	DDR0_CKE0	DDR0_CKE0
CKEA1	CKEA1	DDR0_CKE1	DDR0_CKE1
CSA0	CSA0	DDR0_CS_N0	DDR0_CS_N0
CSA1	CSA1	DDR0_CS_N1	DDR0_CS_N1
DCLKA0	DCLKA0	DDR0_CLK_P0	DDR0_CLK_P0
DCLKA0	DCLKA0	DDR0_CLK_N0	DDR0_CLK_N0
DCLKA1	DCLKA1	DDR0_CLK_P1	DDR0_CLK_P1
DCLKA1	DCLKA1	DDR0_CLK_N1	DDR0_CLK_N1
AV14	AV14	DDR0_CLK_P2	DDR0_CLK_P2
AV14	AV14	DDR0_CLK_N2	DDR0_CLK_N2
AV13	AV13	DDR0_CLK_P3	DDR0_CLK_P3
AV13	AV13	DDR0_CLK_N3	DDR0_CLK_N3
RSVD	RSVD	DDR0_RSVD	DDR0_RSVD
SRASA	SRASA	DDR0_RAS*	DDR0_RAS*
SWEA	SWEA	DDR0_WE*	DDR0_WE*
SCASA	SCASA	DDR0_CAS*	DDR0_CAS*
DDR3_RST	DDR3_RST	DDR0_RESET*	DDR0_RESET*

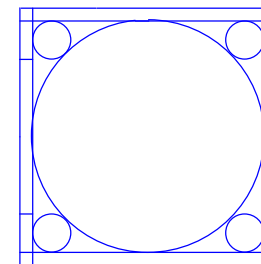
HASWELL(10SC1-F01150-11R_10SC1-F01150-12R)

Place in CPU bottom side



LGA1150B			
MAAB0	AL19	DDR1_M0	DDR1_D00
MAAB1	AK23	DDR1_M1	DDR1_D01
MAAB2	AM22	DDR1_M2	DDR1_D02
MAAB3	AM23	DDR1_M3	DDR1_D03
MAAB4	AP23	DDR1_M4	DDR1_D04
MAAB5	AL23	DDR1_M5	DDR1_D05
MAAB6	AL24	DDR1_M6	DDR1_D06
MAAB7	AV25	DDR1_M7	DDR1_D07
MAAB8	AL26	DDR1_M8	DDR1_D08
MAAB9	AW25	DDR1_M9	DDR1_D09
MAAB10	AP18	DDR1_M10	DDR1_D10
MAAB11	AV26	DDR1_M11	DDR1_D11
MAAB12	AL26	DDR1_M12	DDR1_D12
MAAB13	AL25	DDR1_M13	DDR1_D13
MAAB14	AV27	DDR1_M14	DDR1_D14
MAAB15	AY28	DDR1_M15	DDR1_D15
MODT_B0	AM17	DDR1_ODT0	DDR1_ODT0
MODT_B1	AL16	DDR1_ODT1	DDR1_ODT1
AM16	AM16	DDR1_ODT2	DDR1_ODT2
AK15	AK15	DDR1_ODT3	DDR1_ODT3
AM26	AM26	DDR1_ECC0	DDR1_ECC0
AM25	AM25	DDR1_ECC1	DDR1_ECC1
AP26	AP26	DDR1_ECC2	DDR1_ECC2
AL26	AL26	DDR1_ECC3	DDR1_ECC3
AL25	AL25	DDR1_ECC4	DDR1_ECC4
AR26	AR26	DDR1_ECC5	DDR1_ECC5
AR25	AR25	DDR1_ECC6	DDR1_ECC6
AR25	AR25	DDR1_ECC7	DDR1_ECC7
SBA00	SBA00	DDR1_BA0	DDR1_BA0
SBA01	SBA01	DDR1_BA1	DDR1_BA1
SBA02	SBA02	DDR1_BA2	DDR1_BA2
CKEB0	CKEB0	DDR1_CKE0	DDR1_CKE0
CKEB1	CKEB1	DDR1_CKE1	DDR1_CKE1
CSB0	CSB0	DDR1_CS_N0	DDR1_CS_N0
CSB1	CSB1	DDR1_CS_N1	DDR1_CS_N1
CSB1	CSB1	DDR1_CS_N2	DDR1_CS_N2
CSB1	CSB1	DDR1_CS_N3	DDR1_CS_N3
DCLKB0	DCLKB0	DDR1_CLK_P0	DDR1_CLK_P0
DCLKB0	DCLKB0	DDR1_CLK_N0	DDR1_CLK_N0
DCLKB1	DCLKB1	DDR1_CLK_P1	DDR1_CLK_P1
DCLKB1	DCLKB1	DDR1_CLK_N1	DDR1_CLK_N1
AN20	AN20	DDR1_CLK_P2	DDR1_CLK_P2
AN21	AN21	DDR1_CLK_N2	DDR1_CLK_N2
AP19	AP19	DDR1_CLK_P3	DDR1_CLK_P3
AP20	AP20	DDR1_CLK_N3	DDR1_CLK_N3
SCASB	SCASB	DDR1_CAS*	DDR1_CAS*
SRASB	SRASB	DDR1_RAS*	DDR1_RAS*
SWEB	SWEB	DDR1_WE*	DDR1_WE*
VREF_DQA	VREF_DQA	DDR_VREF_DQA	DDR_VREF_DQA
VREF_DQB	VREF_DQB	DDR_VREF_DQB	DDR_VREF_DQB
DQS_P0	DQS_P0	DDR1_DQS_P0	DDR1_DQS_P0
DQS_P1	DQS_P1	DDR1_DQS_P1	DDR1_DQS_P1
DQS_P2	DQS_P2	DDR1_DQS_P2	DDR1_DQS_P2
DQS_P3	DQS_P3	DDR1_DQS_P3	DDR1_DQS_P3
DQS_P4	DQS_P4	DDR1_DQS_P4	DDR1_DQS_P4
DQS_P5	DQS_P5	DDR1_DQS_P5	DDR1_DQS_P5
DQS_P6	DQS_P6	DDR1_DQS_P6	DDR1_DQS_P6
DQS_P7	DQS_P7	DDR1_DQS_P7	DDR1_DQS_P7
DQS_P8	DQS_P8	DDR1_DQS_P8	DDR1_DQS_P8
DQS_N0	DQS_N0	DDR1_DQS_N0	DDR1_DQS_N0
DQS_N1	DQS_N1	DDR1_DQS_N1	DDR1_DQS_N1
DQS_N2	DQS_N2	DDR1_DQS_N2	DDR1_DQS_N2
DQS_N3	DQS_N3	DDR1_DQS_N3	DDR1_DQS_N3
DQS_N4	DQS_N4	DDR1_DQS_N4	DDR1_DQS_N4
DQS_N5	DQS_N5	DDR1_DQS_N5	DDR1_DQS_N5
DQS_N6	DQS_N6	DDR1_DQS_N6	DDR1_DQS_N6
DQS_N7	DQS_N7	DDR1_DQS_N7	DDR1_DQS_N7
DQS_N8	DQS_N8	DDR1_DQS_N8	DDR1_DQS_N8

HASWELL(10SC1-F01150-11R_10SC1-F01150-12R)

CR
CPU RETAINTION/X

LGA1150_P



ILM_BP/1156/CSP/ILM_BP/1156/CSP(12KRC-0F0001-52R_12KRC-0F0001-51R)

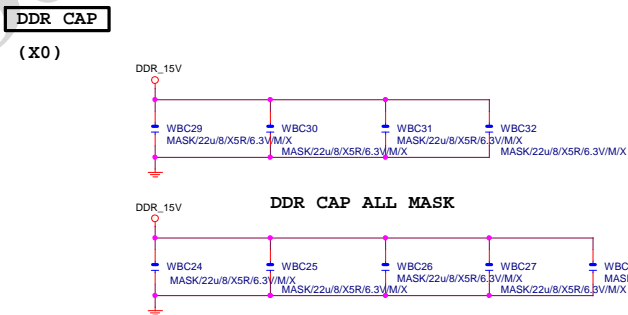
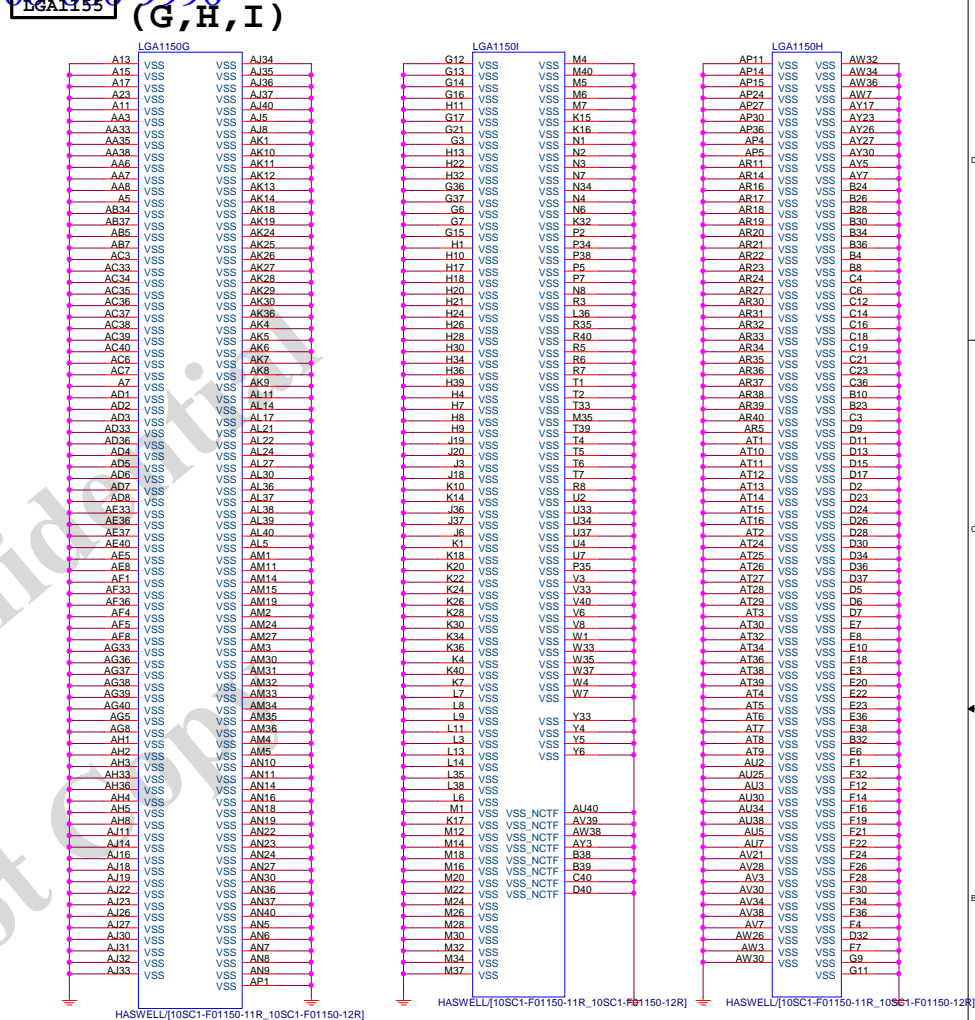
DDR BUS

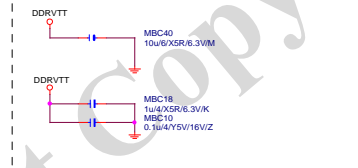
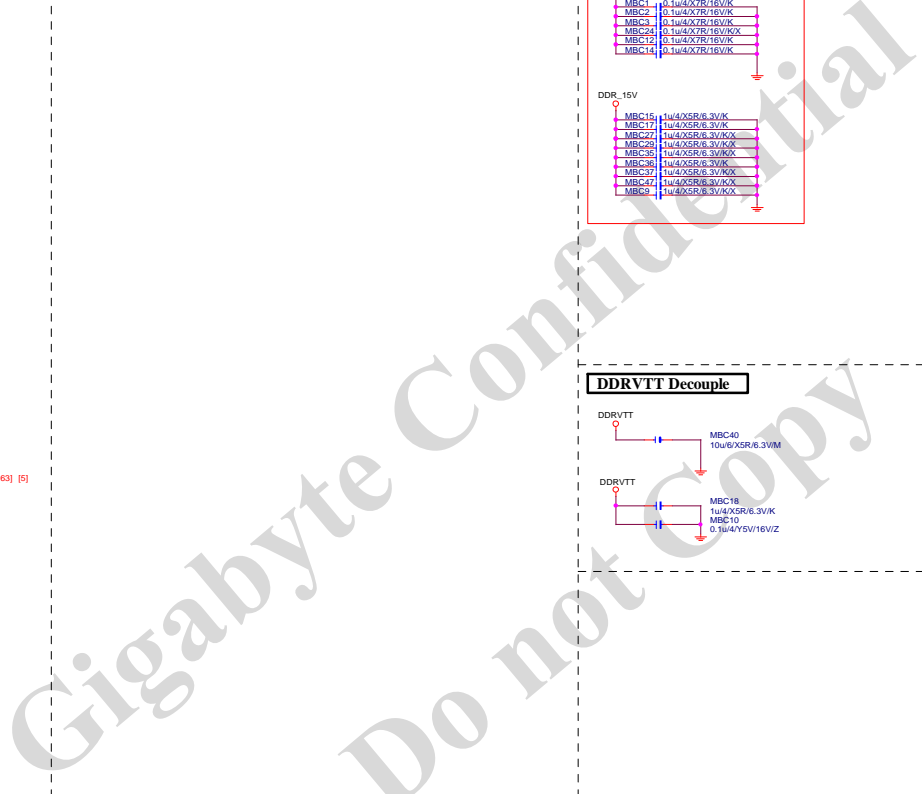
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[8] MODT_B[0..1]	MODT_B[0..1]
[7] MDA[0..63]	MDA[0..63]
[8] MDB[0..63]	MDB[0..63]
[7] DQSA[0..7]	DQSA[0..7]
[7] -DQSA[0..7]	-DQSA[0..7]
[7] MAAA[0..15]	MAAA[0..15]
[8] MAAB[0..15]	MAAB[0..15]
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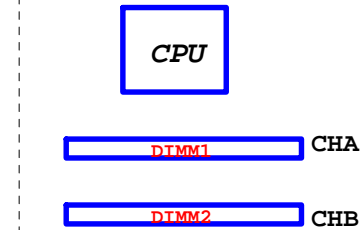
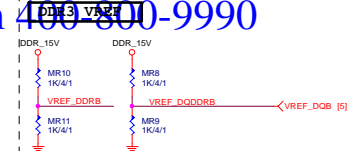
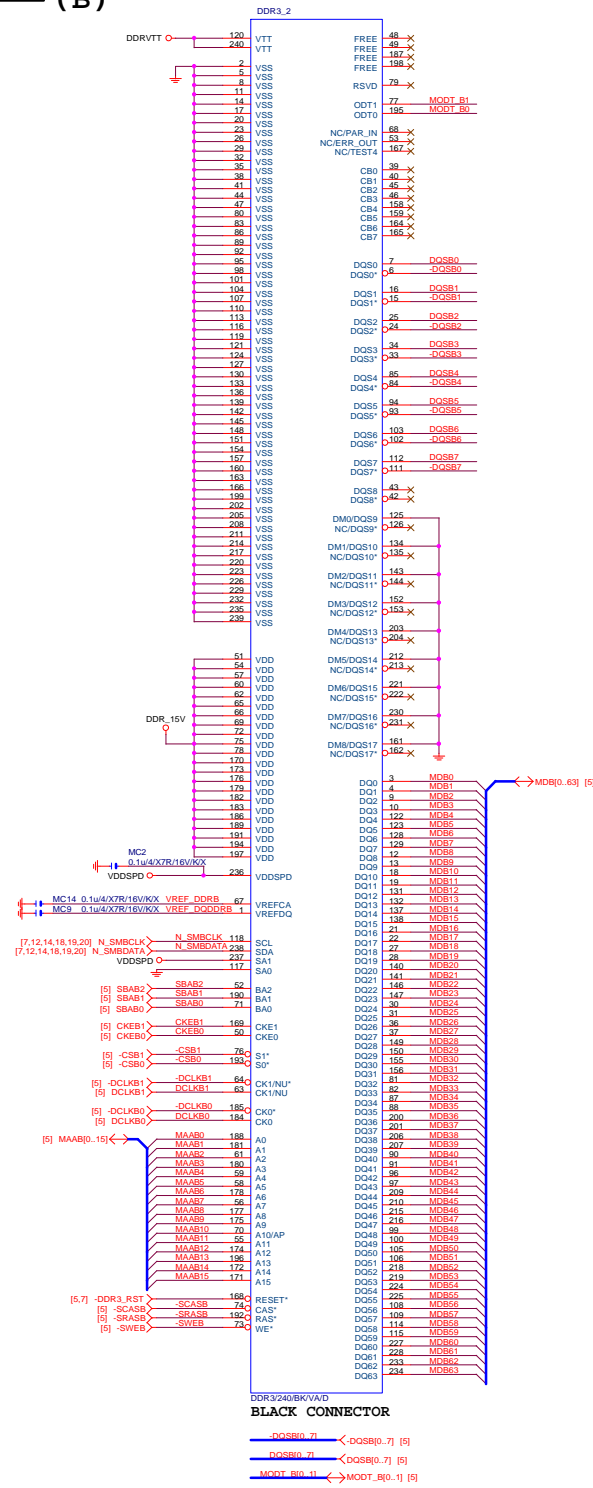
Gigabyte Technology

CPU LGA1156-B

Title		CPU LGA1156-B	
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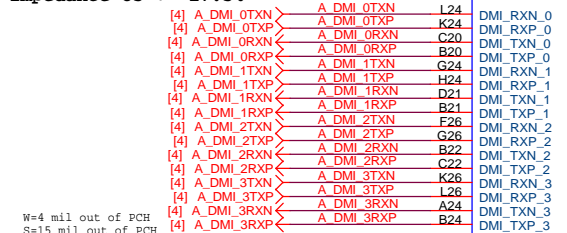






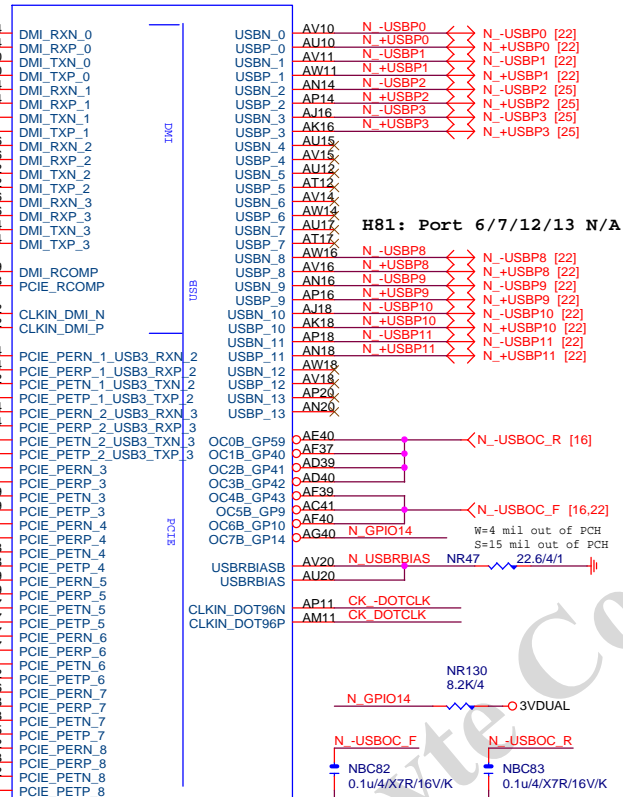
PCH (B)

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



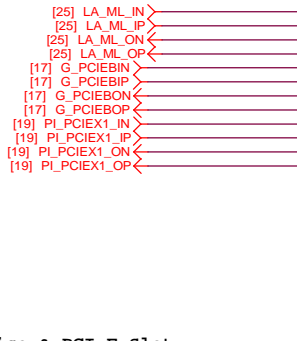
USB2.0 : 12/4.5/7.5/4.5/12 (breakout min 8/4/4/4/8)
Impedance=90 +- 17.5%

PCHB



H81: USB3 only Port 0/1

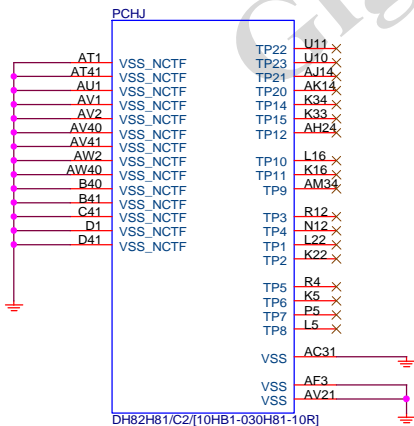
PCIEx1 8892 LAN



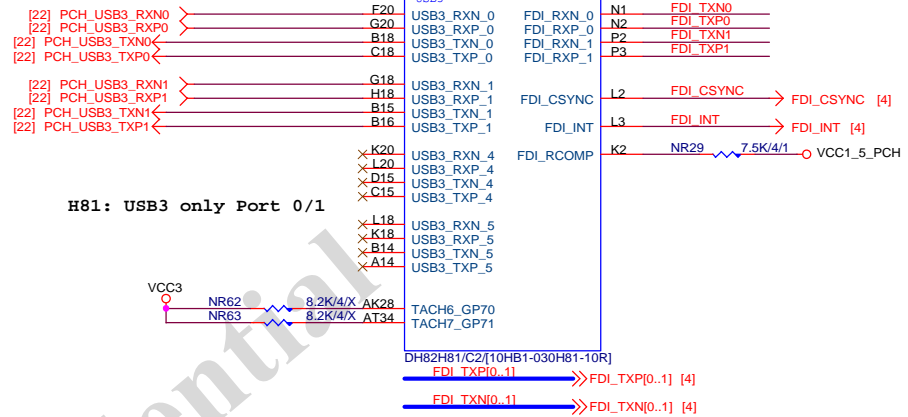
放靠近 Device & PCI-E Slot

Impedance=80 +- 17.5%

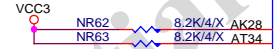
PCIEx1:16/5/5/5/16 (breakout min 8/4/4/4/8)

PCH (J)

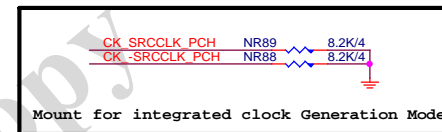
DH82H81/C2/[10HB1-030H81-10R]

PCH (F)

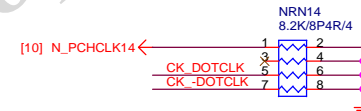
H81: USB3 only Port 0/1



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

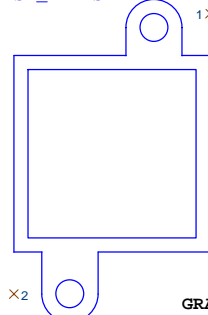
PCH CLK PD

Mount for integrated clock Generation Mode

**PCH H/S**

LOW COST ICH7 HEATSINK

SB_HEATSIN



PCH_HS
PCH_HS/[12SP2-030005-43R_12SP2-030005-41R_12SP2-030005-42R]

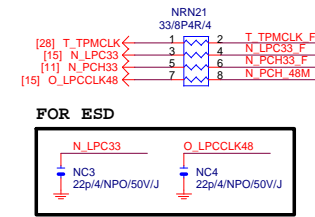
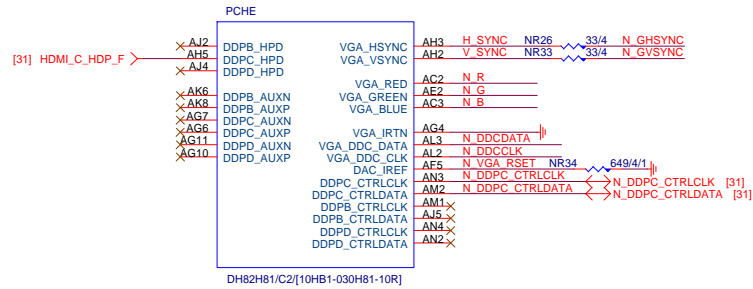
USB TABLE

OC[3:0]# for Device 29 (ports 0-7)
OC[7:4]# for Device 26 (ports 8-13)

USB OC#	Configure
OC0#	USB30_HDMI
OC1#	R_USB
OC2#	N/A
OC3#	N/A
OC4#	F_USB1
OC5#	F_USB2
OC6#	N/A
OC7#	Not Use

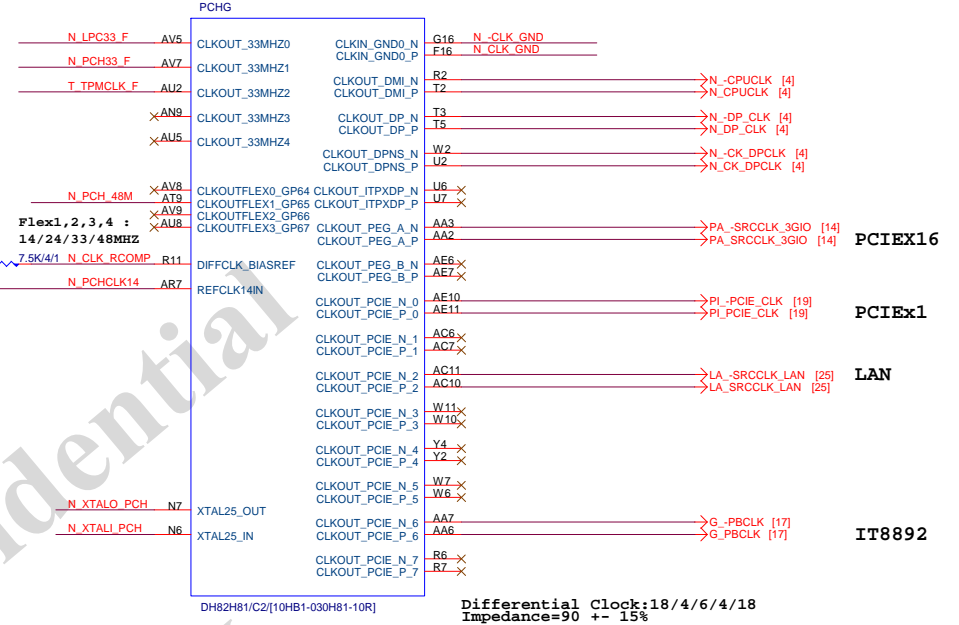
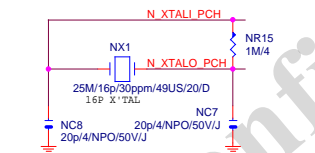
Gigabyte Technology

Title	PCH FDI,DMI,USB ,PCIE,NVRAM		
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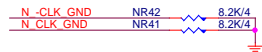


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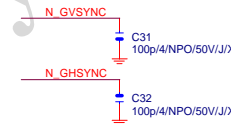
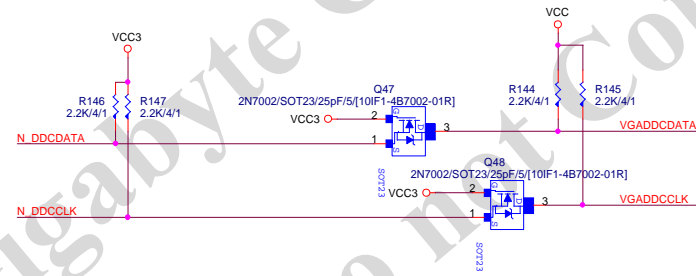
25MHZ X'TAL



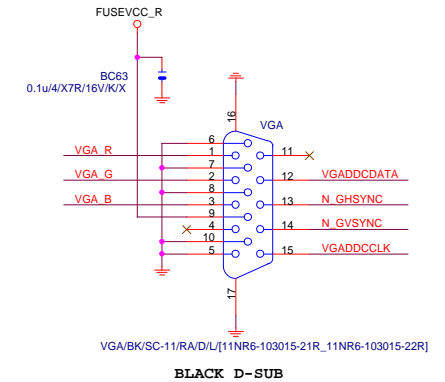
PCH CLK PD



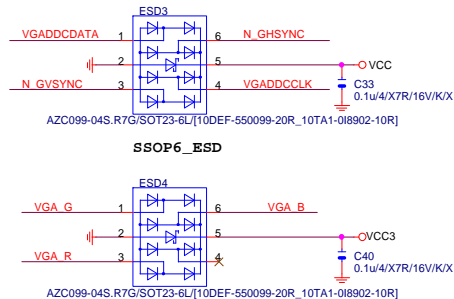
VGA DDC



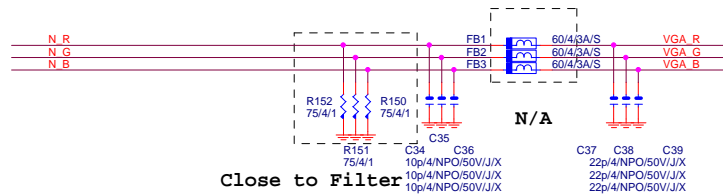
VGA CONNECTOR



VGA ESD



VGA DDC



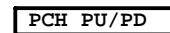
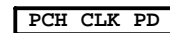
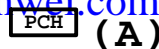
Gigabyte Technology

PCH DISPLAY, CLK BUFFER

GA-H81M-S2PH

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ME PWROK

GPIO38 Ctrl

Title			
PCH HOST , SATA, PCI			
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PCH (D)

[15,28] N_LAD[0..3] << N_LAD[0..3]

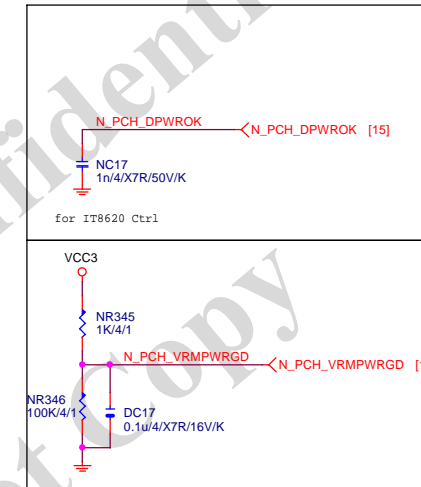
ACZ_SDOUT

N/A

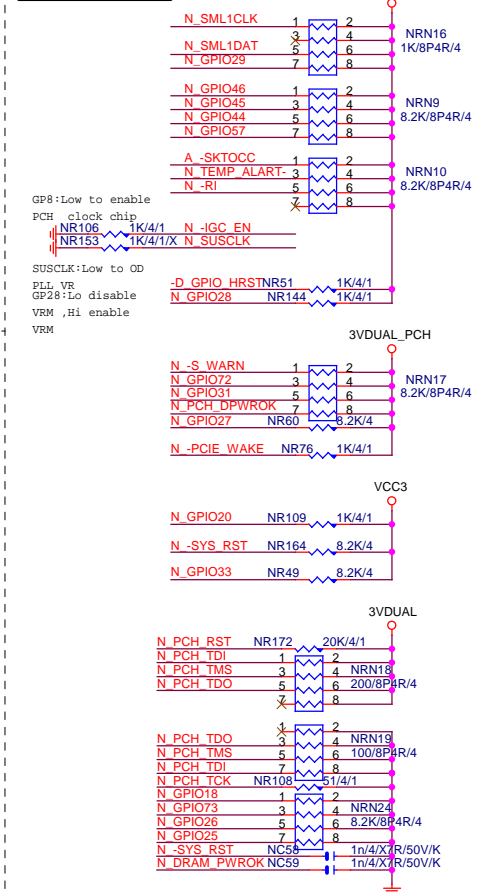
HSW_STRAP13

N/A

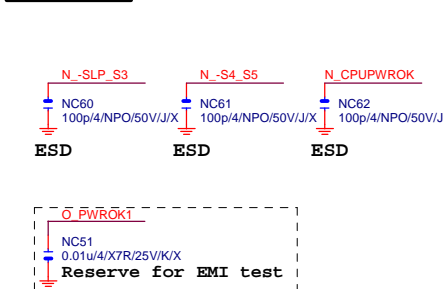
PCH_DPWROK



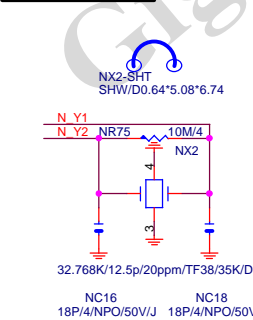
PCH PU/PD



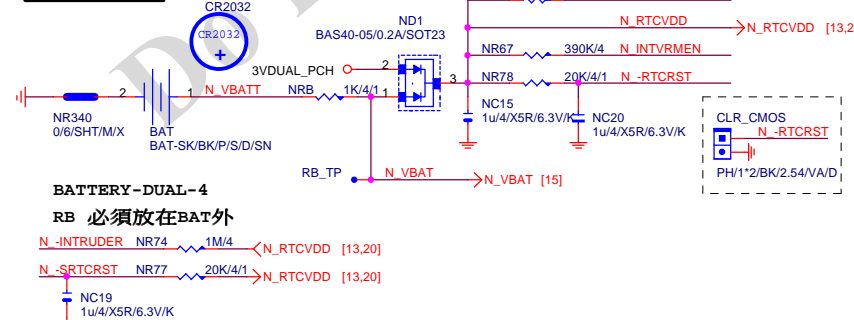
FOR ESD



32.768KHZ

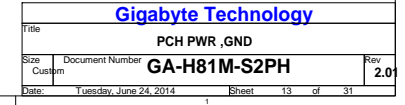
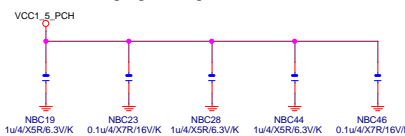


CLR_CMOS

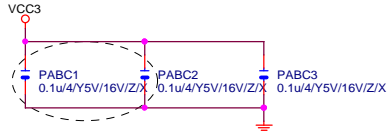


Gigabyte Technology

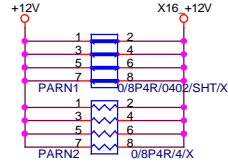
Title			PCH GPIO , CTRL , AUDIO		
Size	Document Number	GA-H81M-S2PH			Rev
Custom					2.01
Date:	Tuesday, June 24, 2014	Sheet	12	of	31



PCIEX16 CAP



PCIEX16 PROTECT SHT



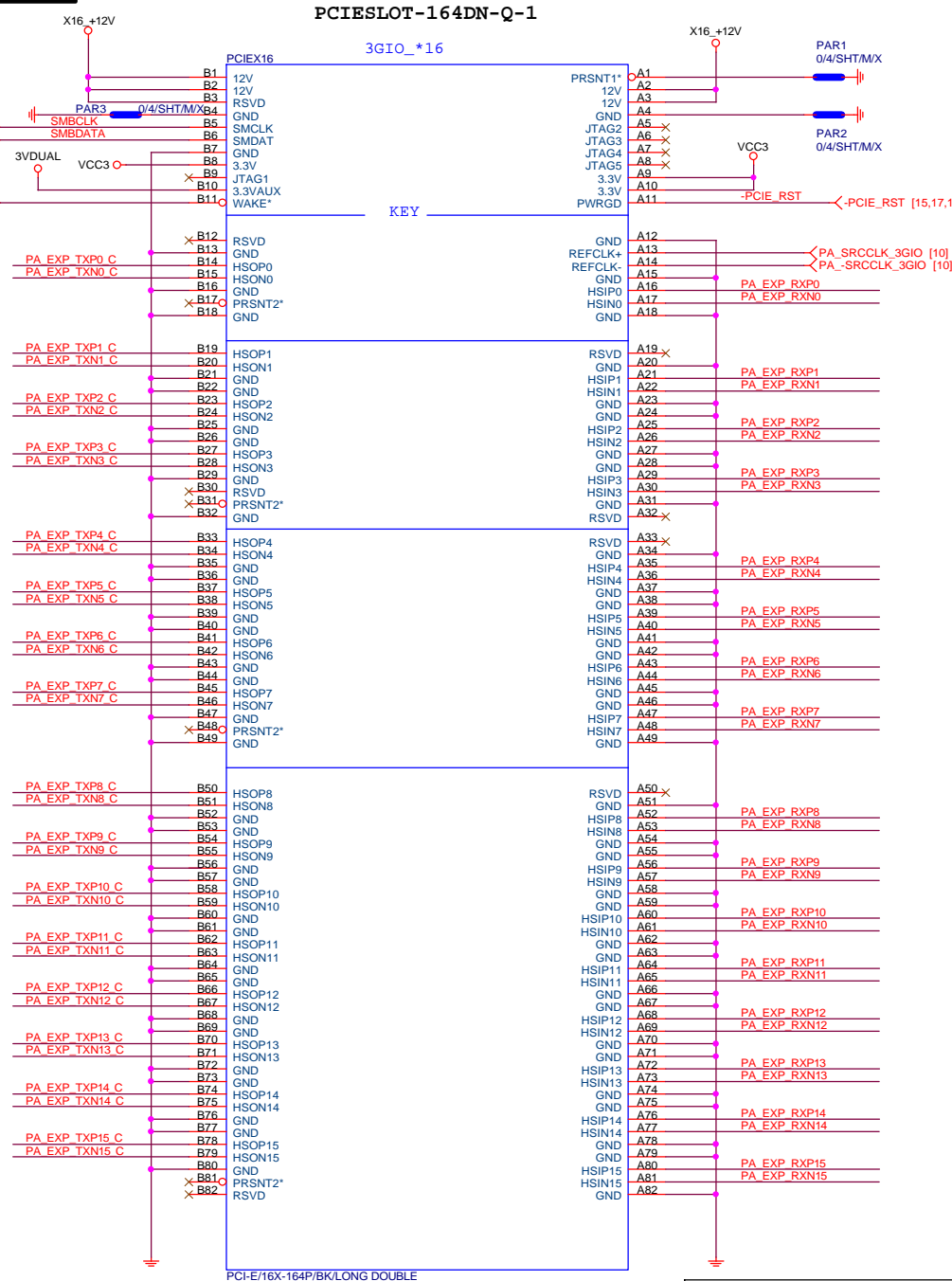
PCIEX16 AC CAP

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

PA EXP RXP0[0..15] >>> PA_EXP_RXP[0..15] [4]
PA EXP RXN0[0..15] >>> PA_EXP_RXN[0..15] [4]
PA EXP TXP0[0..15] >>> PA_EXP_TXP[0..15] [4]
PA EXP TXN0[0..15] >>> PA_EXP_TXN[0..15] [4]

PCIEX16 SLOT

[7,8,12,18,19,20] N_SMBCLK
[7,8,12,18,19,20] N_SMBDATA
[12,17,19,25] N_-PCIE_WAKE



PCI-E/16X-164P/BK/LONG DOUBLE

BLACK CONNECTOR

Gigabyte Technology

Title			PCI EXPRESS * 16		
Size			Document Number		
Custom			GA-H81M-S2PH		
Date:			Rev		
Tuesday, June 24, 2014			2.01		
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SIO IT8620E

www.xinxunwei.com 400-800-9990

FIX ATX 插拔漏電

PWR SHT

SIO PU

SIO STRAP

IT8620 NOTE

	IT8728
PIN121	VCORE_EN/PCH_C0
PIN120	VLDLT_EN/PCH_D0
PIN19	ATXPG
PIN31	PCH_C1
PIN53	SST/AMDS1_D/MTRB#/PCH_D1
PIN55	PEC1/AMDS1_C/DRV#
PIN66	SYS_3VSB
PIN70	GP47
PIN95	VIN2(VCC5)
PIN96	VIN1(VCC12)
PIN97	VIN1/VDIMM_STR(1.5V)
PIN98	VIN0/VCORE(1.1V)/NC

DUAL BIOS OPT STRAP

FOR ESD

SIO 18V

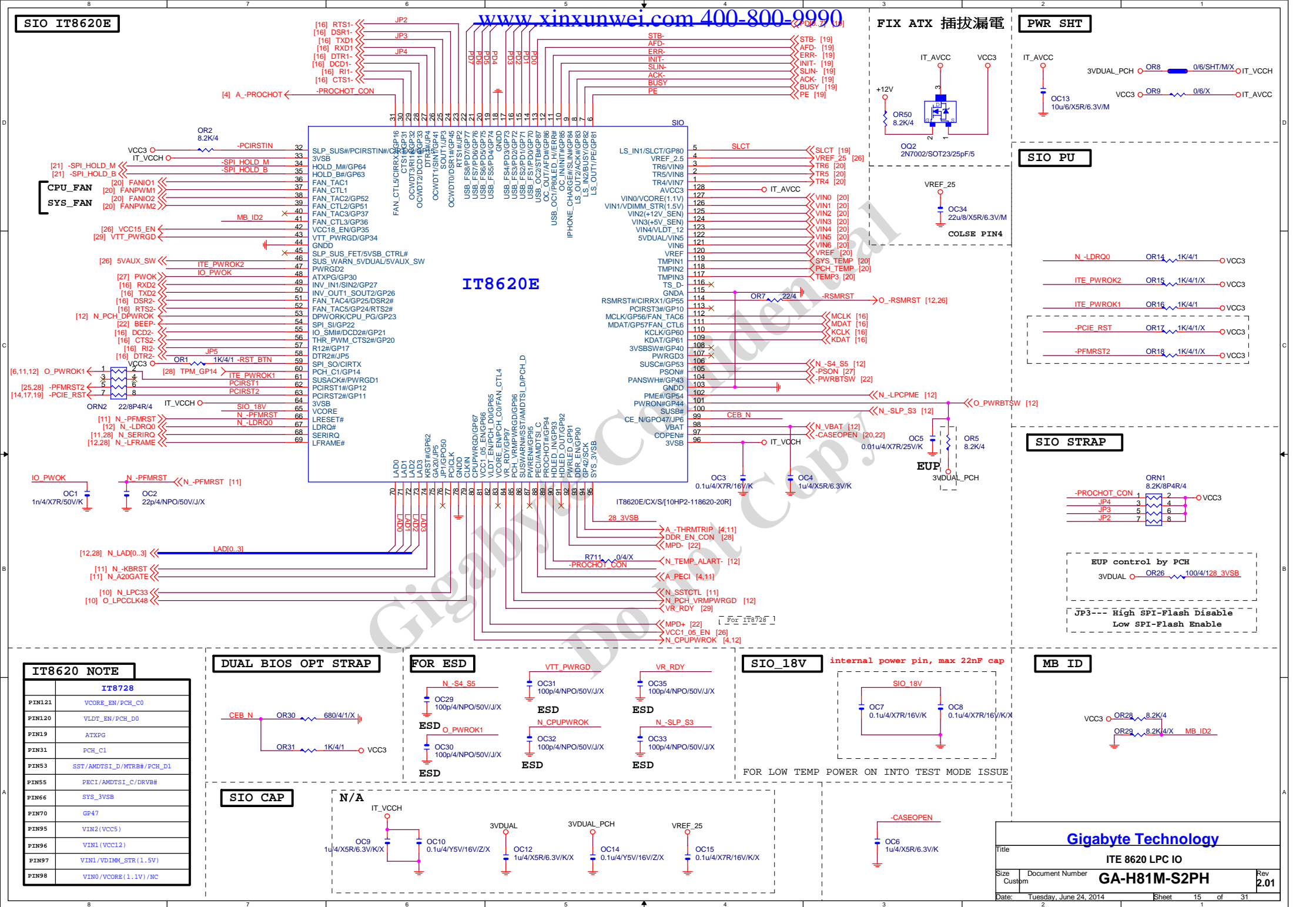
MB ID

SIO CAP

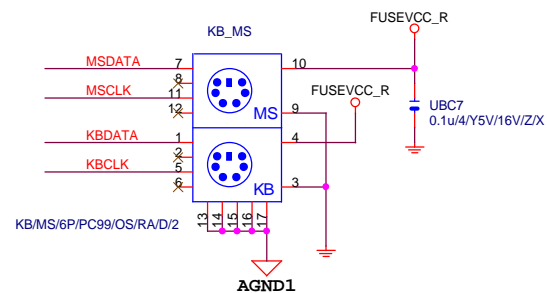
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Gigabyte Technology

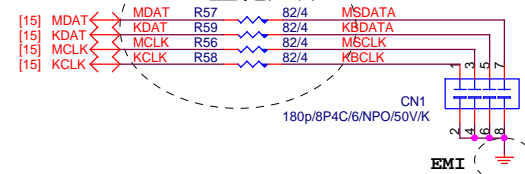
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Size			Custom
Document Number			GA-H81M-S2PH
Date:			Tuesday, June 24, 2014
Sheet			15 of 31
Rev			2.01



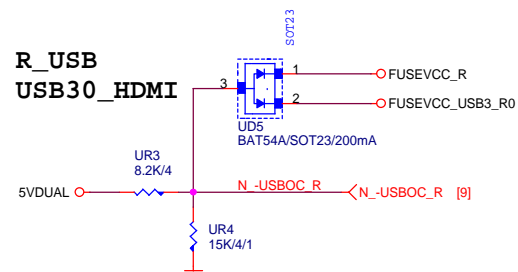
KB/MS



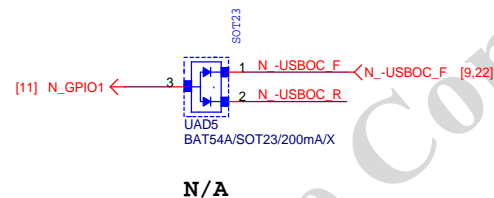
FOR 鹽化短路



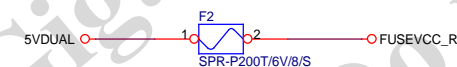
-USBOC_R



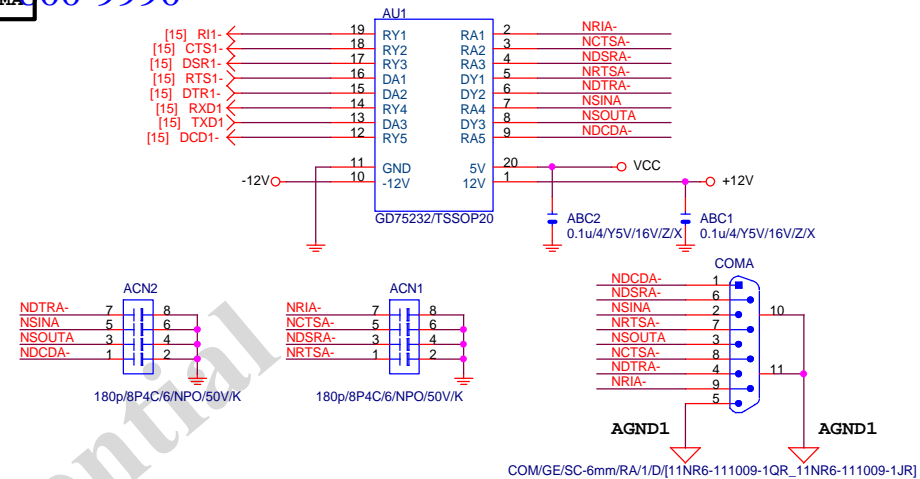
USB POWER PROTECT



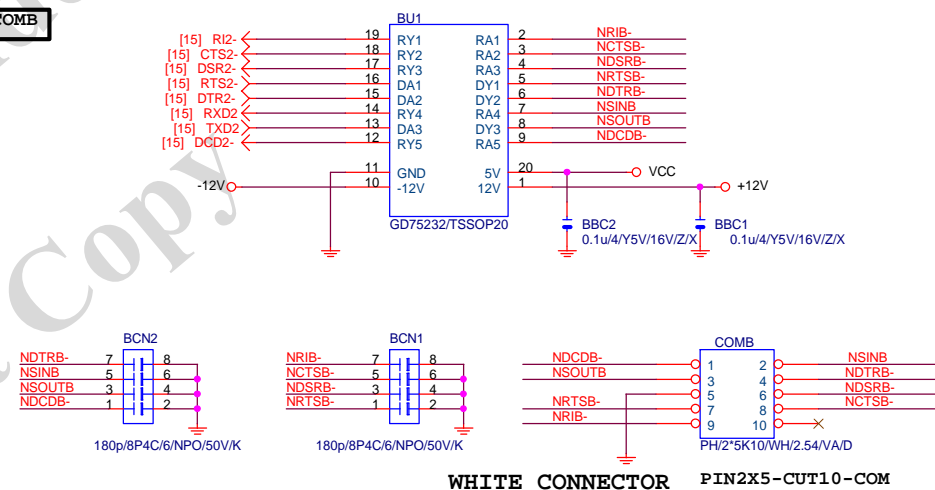
R_USB PWR

Close to connector
KB_MS_USB 2-Port 2.0A

COMA

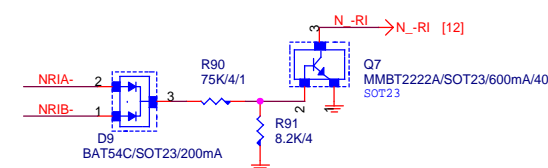


COMB



WHITE CONNECTOR PIN2X5-CUT10-COM

COM RI



Gigabyte Technology

Title			COM,-RI,KB_MS
Size			Document Number
Custom			GA-H81M-S2PH
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PCI:5/4/5 Impedance=50 +- 15%

BA D10_31] <-> BA_D10_31] [18]
-BC BE0 <-> BC_BE0 [18]
-BC BE1 <-> BC_BE1 [18]
-BC BE2 <-> BC_BE2 [18]
-BC BE3 <-> BC_BE3 [18]

-BPERR <-> BPERR [18]
-BSERR <-> BSERR [18]

BPAR <-> BPAR [18]
-BPLOCK <-> BPLOCK [18]
-BDEVSEL <-> BDEVSEL [18]
-BSTOP <-> BSTOP [18]
-BTRDY <-> BTRDY [18]
-BIRDY <-> BIRDY [18]
-BFRAME <-> BFRAME [18]

-PCIE_RST <-> PCIE_RST [14,15,19]
-BPCIRST <-> BPCIRST [18]

-BREQ0 <-> BREQ0 [18]
-BREQ1 <-> BREQ1 [18]
-BGNT0 <-> BGNT0 [18]
-BGNT1 <-> BGNT1 [18]

-BPCIPME1 <-> BPCIPME1 [18]

[18] BPCLK0 <-> PR24 47/4/1 CLKOUT0
[18] BPCLK1 <-> PR19 47/4/1 CLKOUT1

RREF PR13 12K/4/1
TEST_EN PR21 10K/4/1
EXT_ARB PR22 10K/4/1
RST_SEL PR7 10K/4/1

High: Enable PCI CLK 66MHz
Low: Disable PCI CLK 66MHz

High: PCICLK INPUT form CLK Gen
Low: PCICLK OUTPUT form IT8893 chip

IT8892

PCI slot

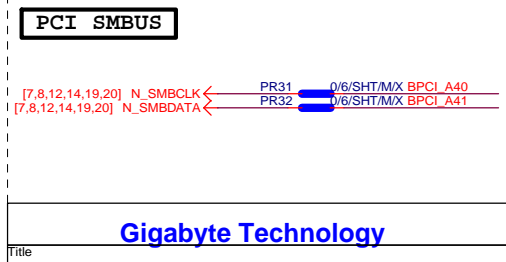
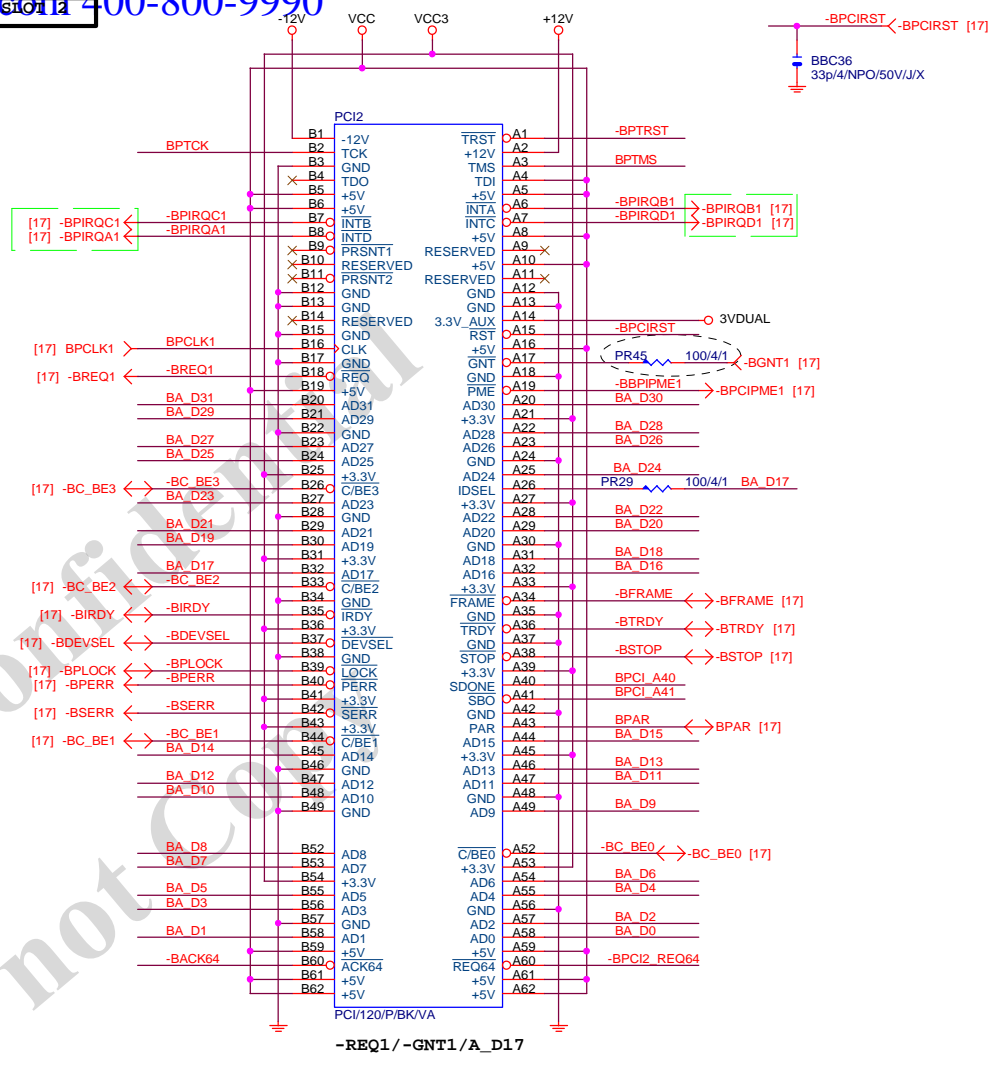
PCI slot

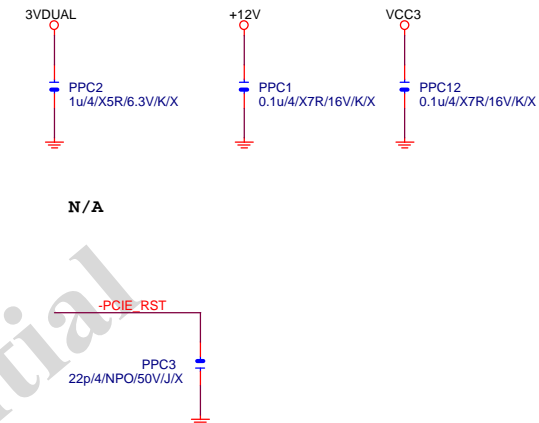
chipset side

PCB layout note:
Close to chip

Gigabyte Technology

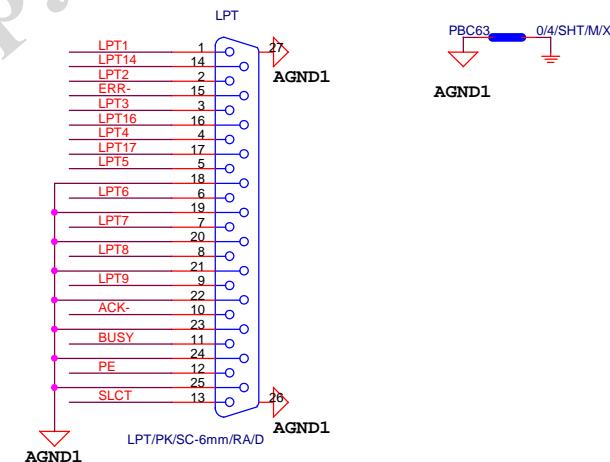
Title				Rev
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Size	Document Number			
Custom	GA-H81M-S2PH			
				2.0
Date:	Tuesday, June 24, 2014			Sheet 17 of 31



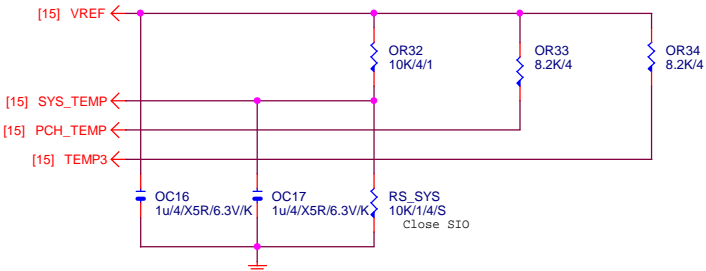


The schematic diagram illustrates the internal circuitry of the PC1 module and its connections to other modules. Key components include:

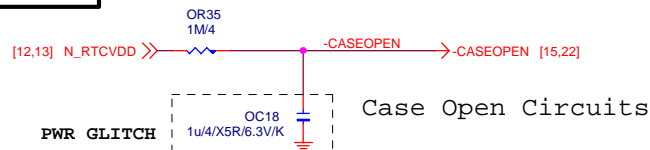
- Power Supply:** A CD4148WP/1206/300mA diode, a PBC19 0.1u/4/Y5/16V/Z/X capacitor, and a VCC connection point.
- Resistors:** PRN10 (2.2K/8P4R/4), PRN8 (2.2K/8P4R/4), PRN12 (2.2K/8P4R/4), PRN6 (2.2K/8P4R/4), and PR33 (2.2K/4/1).
- Logic Components:** LPT1 through LPT16, LPT5, LPT6, LPT7, LPT8, LPT9, LPT14, LPT15, LPT16, LPT17, LPT18, LPT19, LPT20, LPT21, LPT22, LPT23, LPT24, LPT25, LPT26, LPT27, LPT28, LPT29, LPT30, LPT31, LPT32, LPT33, LPT34, LPT35, LPT36, LPT37, LPT38, LPT39, LPT40, LPT41, LPT42, LPT43, LPT44, LPT45, LPT46, LPT47, LPT48, LPT49, LPT50, LPT51, LPT52, LPT53, LPT54, LPT55, LPT56, LPT57, LPT58, LPT59, LPT60, LPT61, LPT62, LPT63, LPT64, LPT65, LPT66, LPT67, LPT68, LPT69, LPT70, LPT71, LPT72, LPT73, LPT74, LPT75, LPT76, LPT77, LPT78, LPT79, LPT80, LPT81, LPT82, LPT83, LPT84, LPT85, LPT86, LPT87, LPT88, LPT89, LPT90, LPT91, LPT92, LPT93, LPT94, LPT95, LPT96, LPT97, LPT98, LPT99, LPT100.
- Module Connections:** The PC1 module is connected to the PC10 module (top left), PC8 module (middle left), PC12 module (bottom left), PC6 module (bottom right), and PC3 module (top right).



TEMP H/W MONITOR



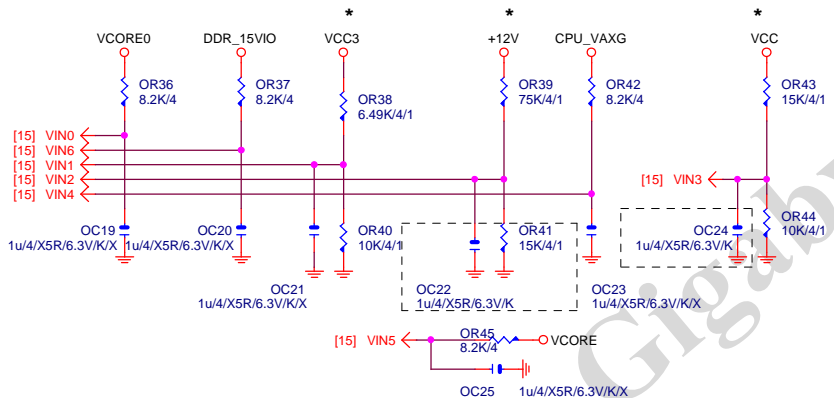
CASE OPEN



VOLTAGE-- H/W MONITOR

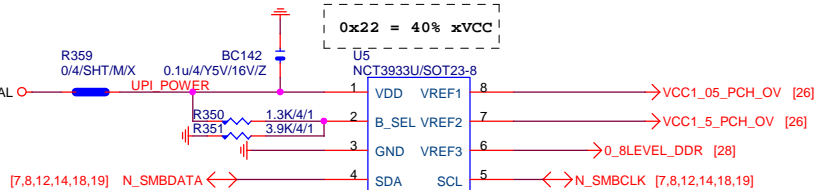
$$\text{VIN2: } 75\text{K}/15\text{K} = 2\text{V}$$

$$\text{VIN3: } 15\text{K}/10\text{K} = 2\text{V}$$



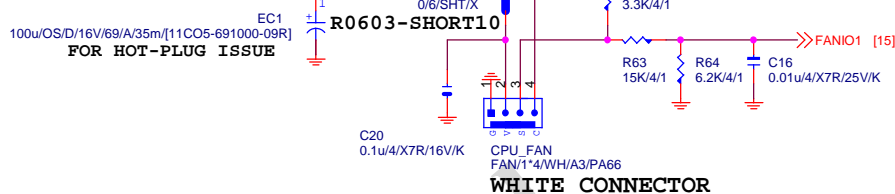
OV NCT3933

接pwm feedback pin



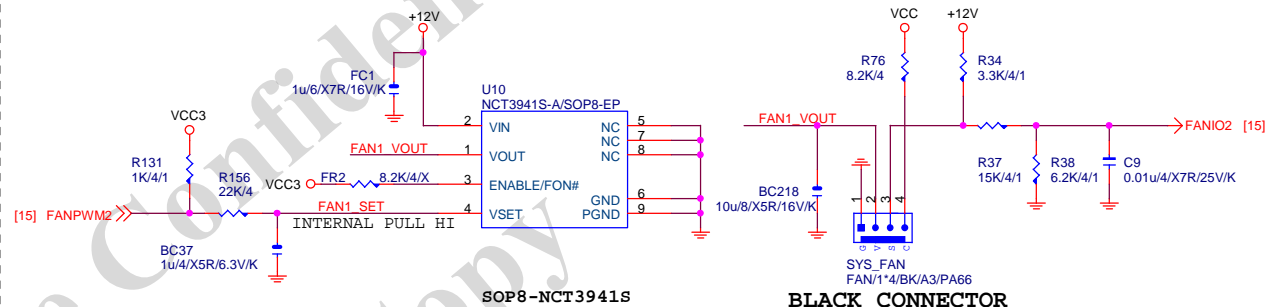
CPU SMART FAN

【技術通報R&D技術通報162】
FAN 0ohm Change to 0603
FOR HOT-PLUG ISSUE

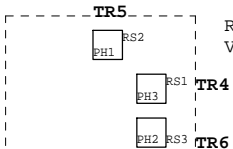
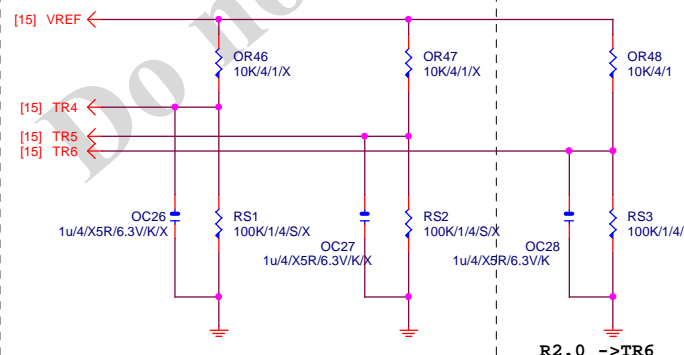


SYS SMART FAN

Linear SYS_FAN

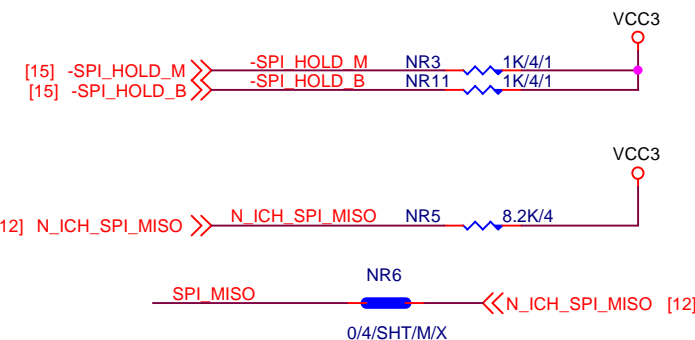
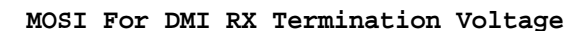
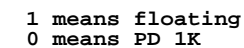


THERMISTOR MONITOR

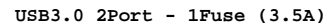
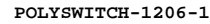


-PROHOT

Gigabyte Technology			
Title			
HWM,FAN CTRL,OV			
Size	Document Number	Rev	
Custom	GA-H81M-S2PH	2.01	
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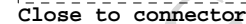
USB30+HDMI 一體式



PCH_USB3



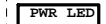
FRONT USB2



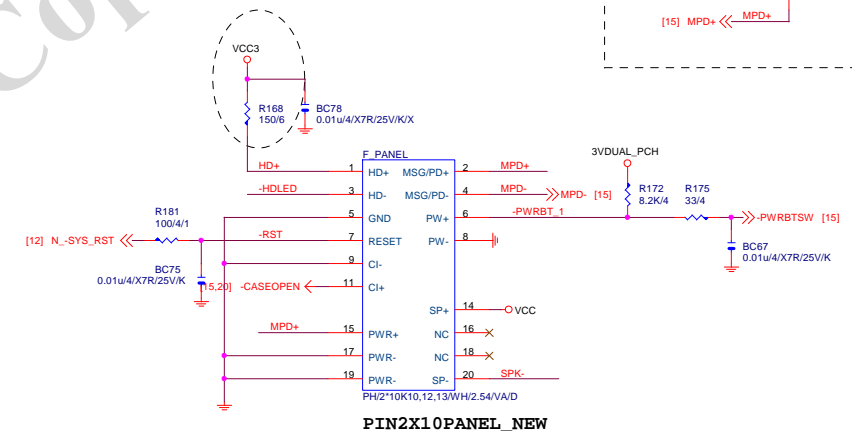
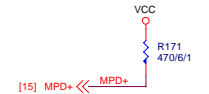
FUSEVCC_F

FUSE-0805

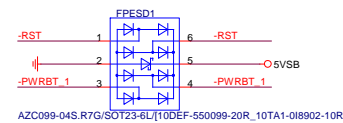
F_USB1, F_USB2 4-Port 2.6A



FOR IT8620 Ctrl

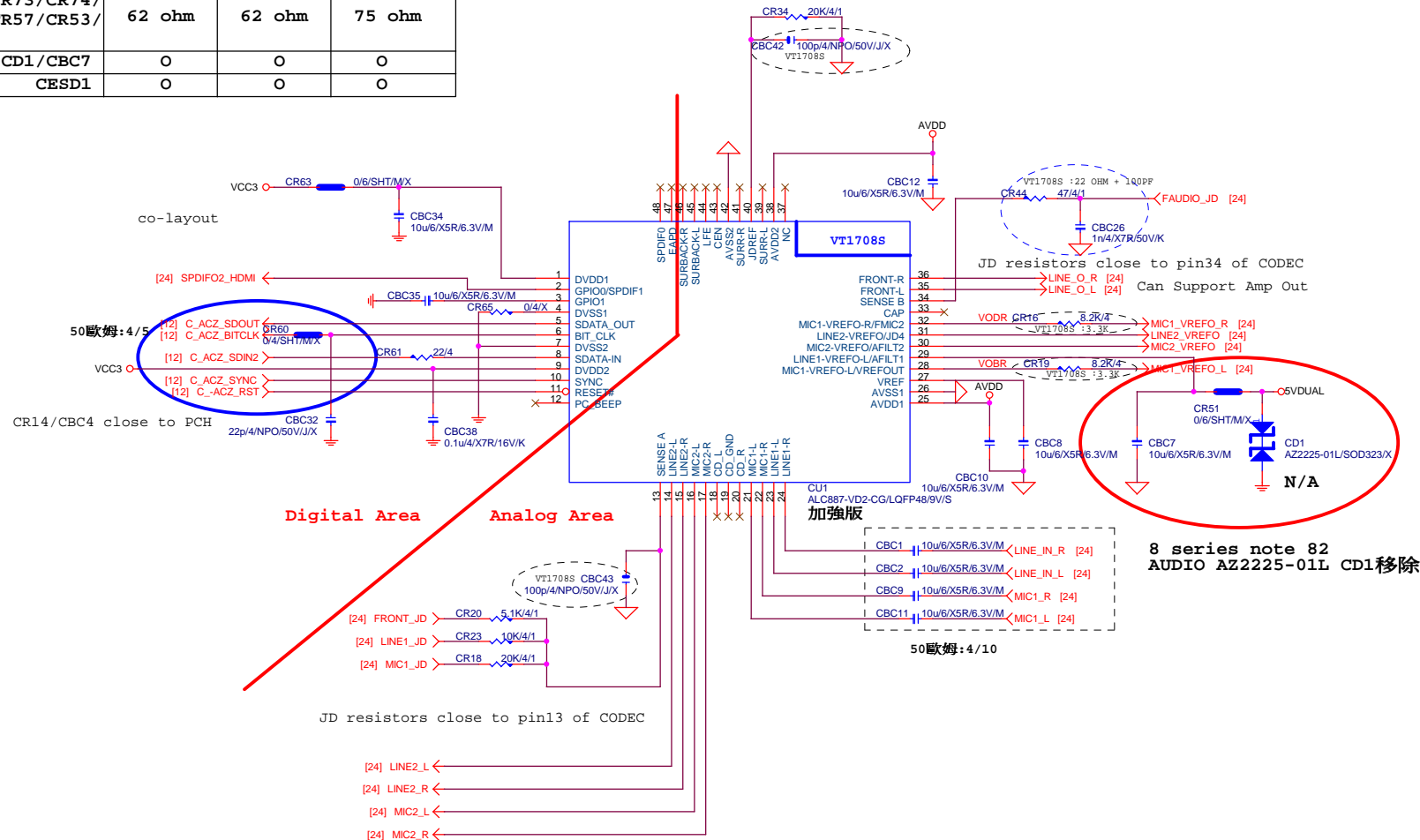


PIN2X10PANEL_NEW



AZALIA CODEC **ALC892/ALC887-VD2/VT1708-CE Colay**

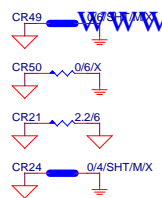
	ALC892	ALC887-VD2	VT1708S-CE
CR44/CBC26	47ohm+1nF	47ohm+1nF	22ohm+100P
CBC42/CBC43	X	X	100P/4
CR6/CR7/CR58/CR54/ CR67/CR68/CR69/CR70	22K/4	22K/4	10K/4/1
CR5/CR8/CR1/CR14/ CR17/CR22/CR73/CR74/ CR13/CR11/CR57/CR53/ CR75/CR76	62 ohm	62 ohm	75 ohm
CR51/CD1/CBC7	O	O	O
CESD1	O	O	O



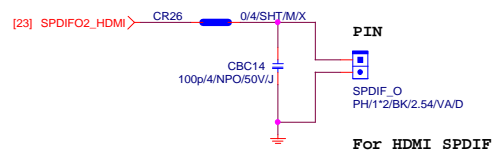
8 series note 82
AUDIO AZ2225-01L CD1移除

Gigabyte Technology

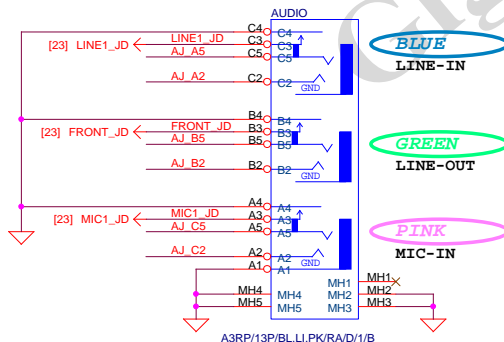
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Size	Document Number	GA-H81M-S2PH	Rev 2.01
Custom			
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SPDIF_OUT



SPDIF_OUT

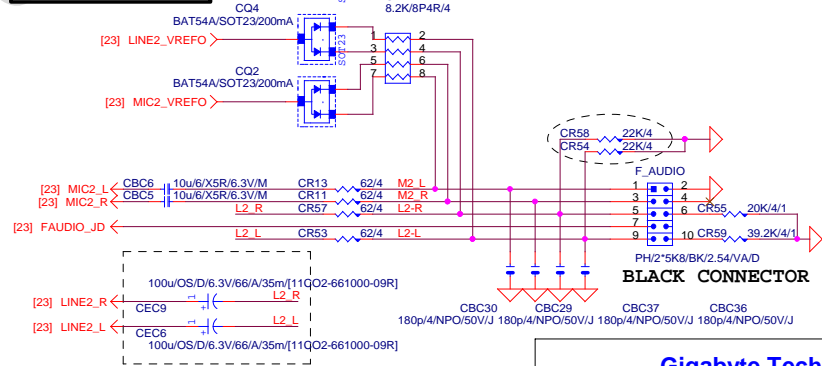


LINE-IN

Verify MIC function
in LINE-in

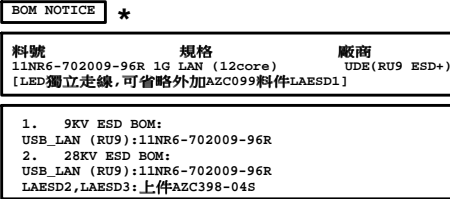
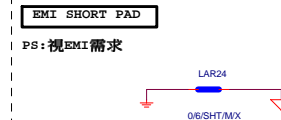
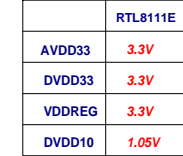
MIC-IN

AZALIA FRONT PANEL

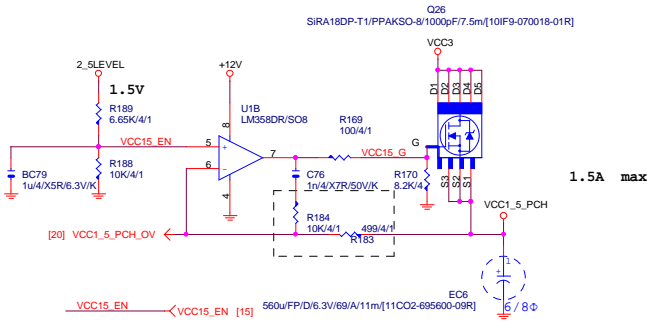


Gigabyte Technology

Title			AUDIO JACK
Size			GA-H81M-S2PH
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VCC1_5_PCH

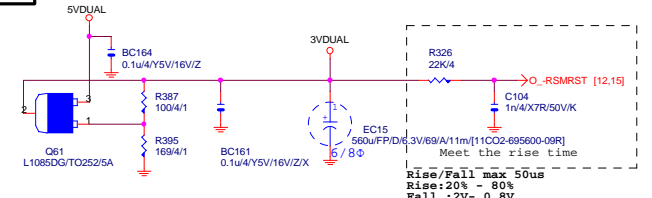


2_5LEVEL

FROM I/O

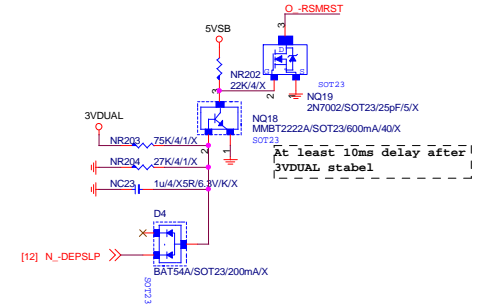


3VDUAL

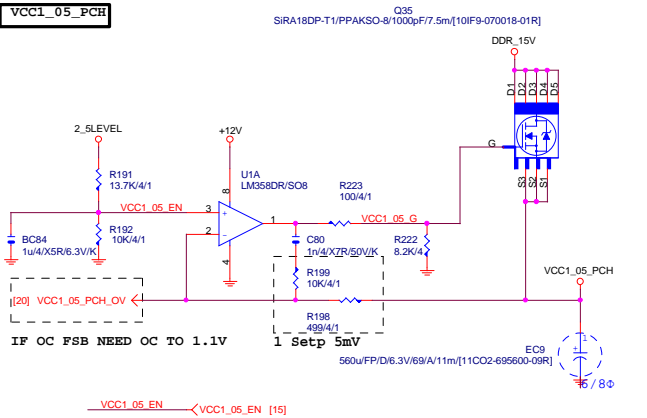


-RSMRST

N/A

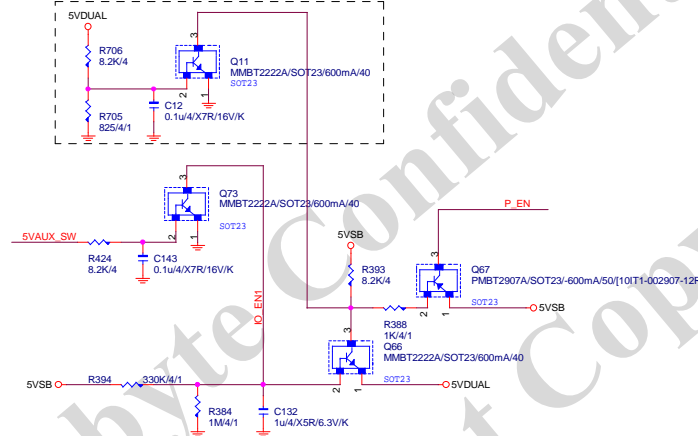


VCC1_05_PCH

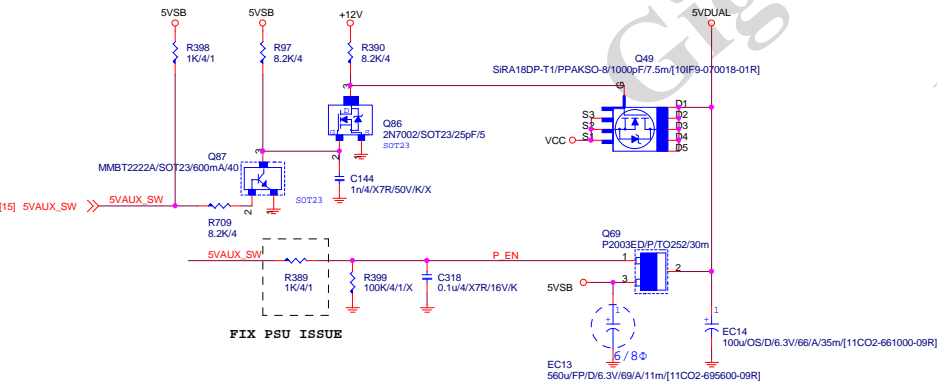


5VDUAL SHORT PROTECT

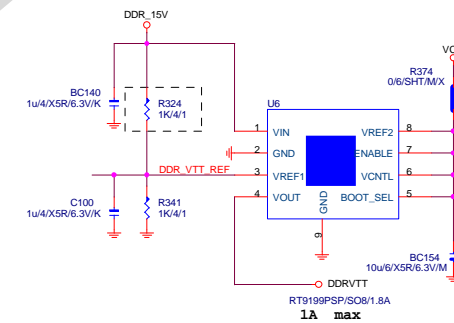
5VSB OVP:7.5V protection



5VDUAL

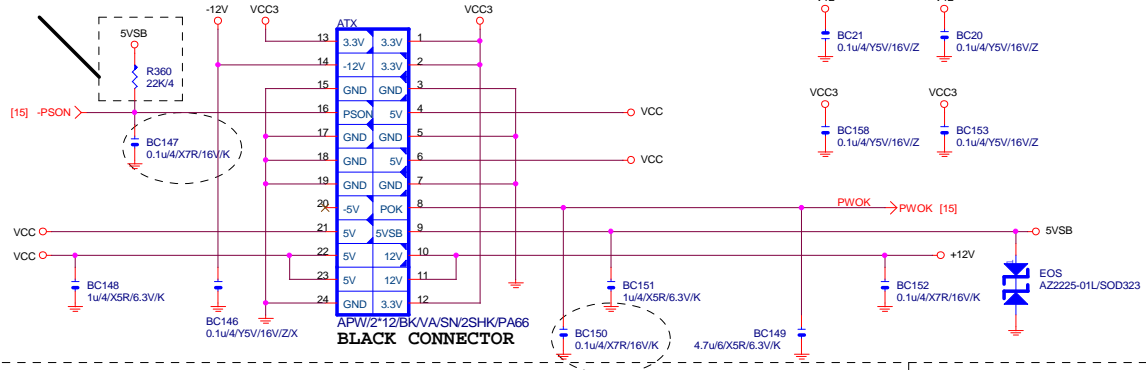


DDR_VTT

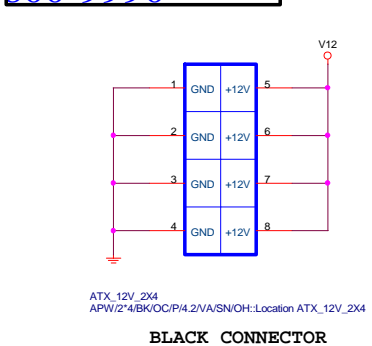


ATXX24 POWER CONNECTOR

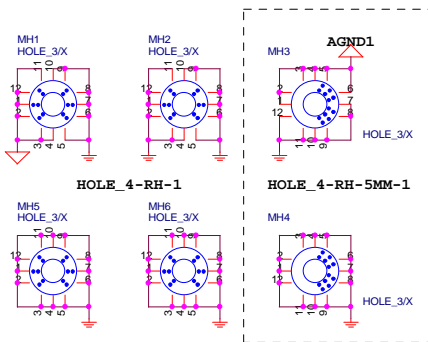
【技術通報R&D技術通報155】



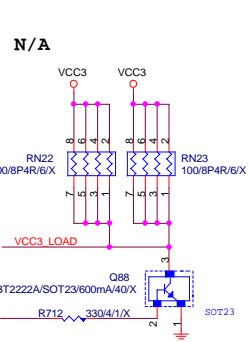
ATXX24 POWER CONNECTOR



MB LOCATION



FIX PWR MINMUN LOAD



PWOK PATCH

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N/A

CLK GEN

N/A

【技術通報R&D技術通報153】

