

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
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15	ITE 8620 LPC IO
16	COM,KB_MS,USB PWR
17	IT8892E
18	PCI SLOT 1,2
19	PCI EXPRESS*1 SLOT.LPT
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23	Realtek ALC887-VD2
24	REAR AUDIO JACK
25	REALTEK RTL8111F
26	DISCRETE POWER
27	ATX,DUMMY LOAD

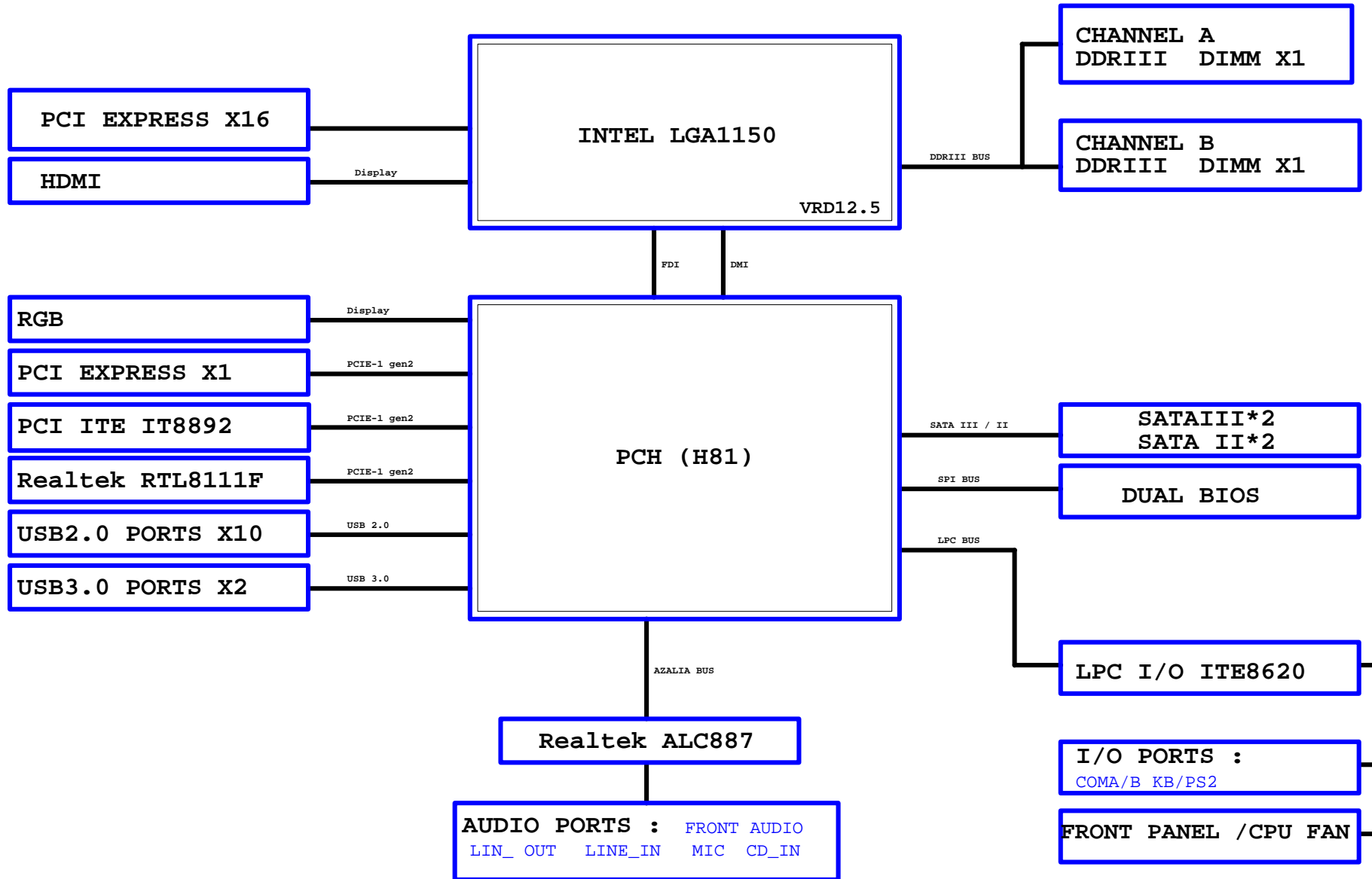
SHEET TITLE

28	RT8120_DDR POWER
29	VCORE ISL95812_1
30	VCORE ISL95812_2
31	HDMI

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Gigabyte Technology		
Cover Sheet		
Size Custom	Document Number GA-H81M-S2PT	Rev 1.01
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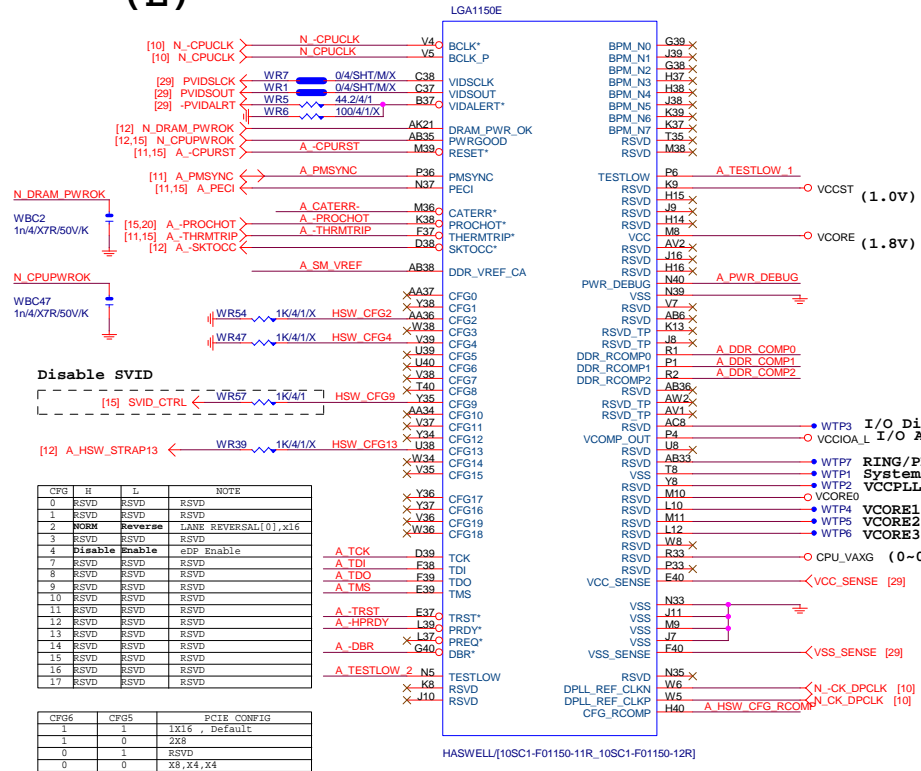
BLOCK DIAGRAM



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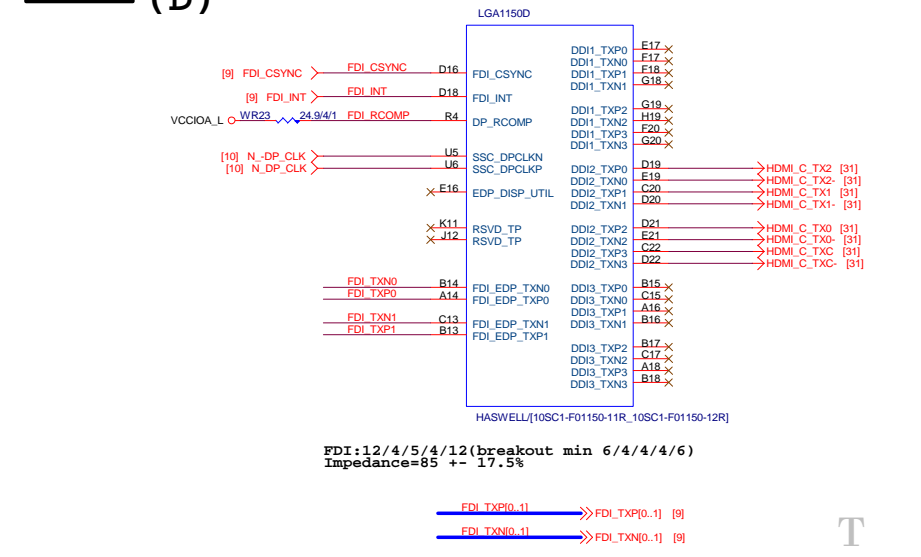
LGA1150

(E)



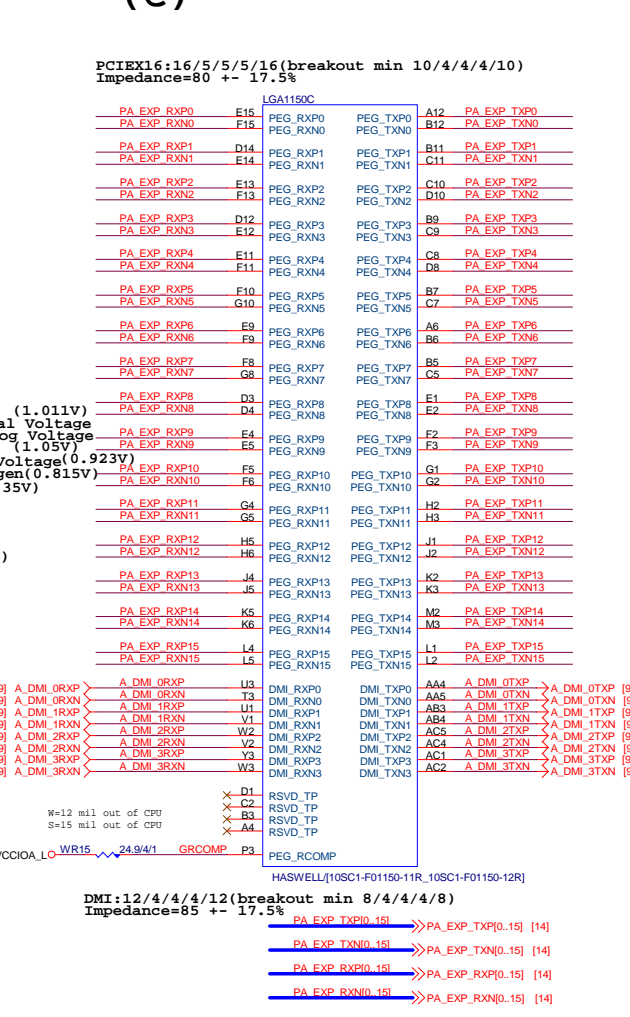
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(D)



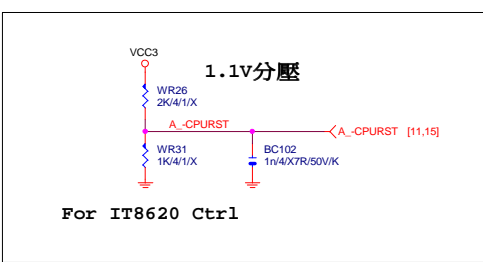
LGA1155

(C)



-CPURST

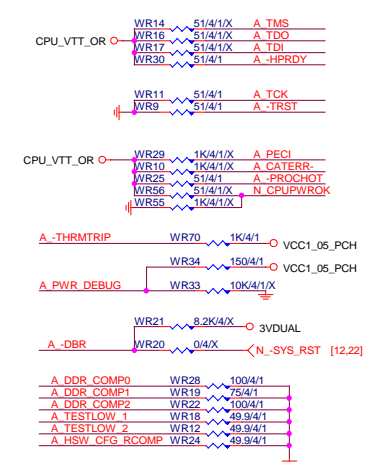
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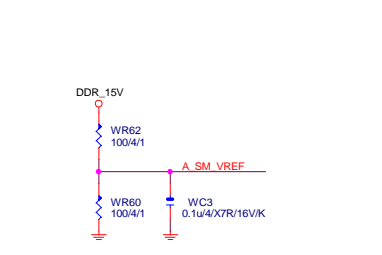
CPU SVID



CPU PU/PD



SM REF



THRMTRIP DISABLE

Gigabyte Technology

CPU LGA1150-A

Size Custom Document Number **GA-H81M-S2PT** Rev 1.0

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LGA1150 (A)

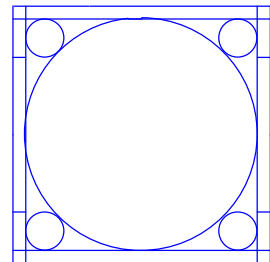
LGA1150 (B)

LGA1150 (CR)

LGA1150A

LGA1150B

CR CPU RETAINION X



LGA1150_P



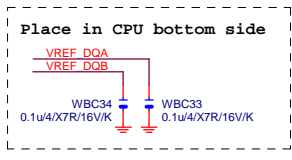
ILM_BP/1156/CSP/ILM_BP/1156/CSP(12KRC-0F0001-52R_12KRC-0F0001-51R)

DDR BUS

- [7] MODT_A[0..1] <-> MODT_A0_11
- [8] MODT_B[0..1] <-> MODT_B0_11
- [7] MD[A].63 <-> MD[A]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
- [8] DQSB[0..7] <-> DQSB[0]_7
- [8] -DQSB[0..7] <-> -DQSB[0]_7

MAAA0	AU13	DDR0_MA0	DDR0_D00	AD38	MDA0
MAAA1	AV16	DDR0_MA1	DDR0_D01	AD39	MDA1
MAAA2	AU16	DDR0_MA2	DDR0_D02	AF38	MDA2
MAAA3	AW17	DDR0_MA3	DDR0_D03	AF39	MDA3
MAAA4	AU17	DDR0_MA4	DDR0_D04	AD37	MDA4
MAAA5	AW18	DDR0_MA5	DDR0_D05	AD40	MDA5
MAAA6	AV17	DDR0_MA6	DDR0_D06	AF37	MDA6
MAAA7	AT18	DDR0_MA7	DDR0_D07	AF40	MDA7
MAAA8	AU18	DDR0_MA8	DDR0_D08	AH40	MDA9
MAAA9	AT19	DDR0_MA9	DDR0_D09	AH39	MDA13
MAAA10	AW11	DDR0_MA10	DDR0_DQ10	AK38	MDA11
MAAA11	AV19	DDR0_MA11	DDR0_DQ11	AK39	MDA11
MAAA12	AU19	DDR0_MA12	DDR0_DQ12	AH37	MDA12
MAAA13	AY10	DDR0_MA13	DDR0_DQ13	AH38	MDA8
MAAA14	AT20	DDR0_MA14	DDR0_DQ14	AK37	MDA14
MAAA15	AU21	DDR0_MA15	DDR0_DQ15	AK40	MDA15
MODT_A0	AW10	DDR0_ODT0	DDR0_DQ16	AM40	MDA17
MODT_A1	AY8	DDR0_ODT1	DDR0_DQ17	AM39	MDA21
AW9		DDR0_ODT2	DDR0_DQ18	AP38	MDA18
AU8		DDR0_ODT3	DDR0_DQ19	AP39	MDA19
			DDR0_DQ20	AM37	MDA20
			DDR0_DQ21	AK38	MDA16
			DDR0_DQ22	AP37	MDA22
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			DDR0_DQ25	AW37	MDA29
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			DDR0_DQ27	AT37	MDA27
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			DDR0_DQ29	AU37	MDA24
			DDR0_DQ30	AK35	MDA30
			DDR0_DQ31	AW35	MDA31
			DDR0_DQ32	AY8	MDA33
			DDR0_DQ33	AU8	MDA37
			DDR0_DQ34	AV4	MDA34
			DDR0_DQ35	AU4	MDA35
			DDR0_DQ36	AW6	MDA36
			DDR0_DQ37	AV6	MDA32
			DDR0_DQ38	AW4	MDA38
			DDR0_DQ39	AY4	MDA39
			DDR0_DQ40	AR1	MDA41
			DDR0_DQ41	AR4	MDA45
			DDR0_DQ42	AN5	MDA42
			DDR0_DQ43	AN4	MDA43
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			DDR0_DQ47	AN1	MDA47
			DDR0_DQ48	AL1	MDA49
			DDR0_DQ49	AL4	MDA53
			DDR0_DQ50	AJ3	MDA50
			DDR0_DQ51	AJ4	MDA51
			DDR0_DQ52	AL2	MDA52
			DDR0_DQ53	AL3	MDA48
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			DDR0_DQS_P2	AN39	DQSA2
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MAAB12	AV26	DDR1_MA12	DDR1_DQ12	AK35	MDB13
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			DDR1_DQ31	AL13	MDB34
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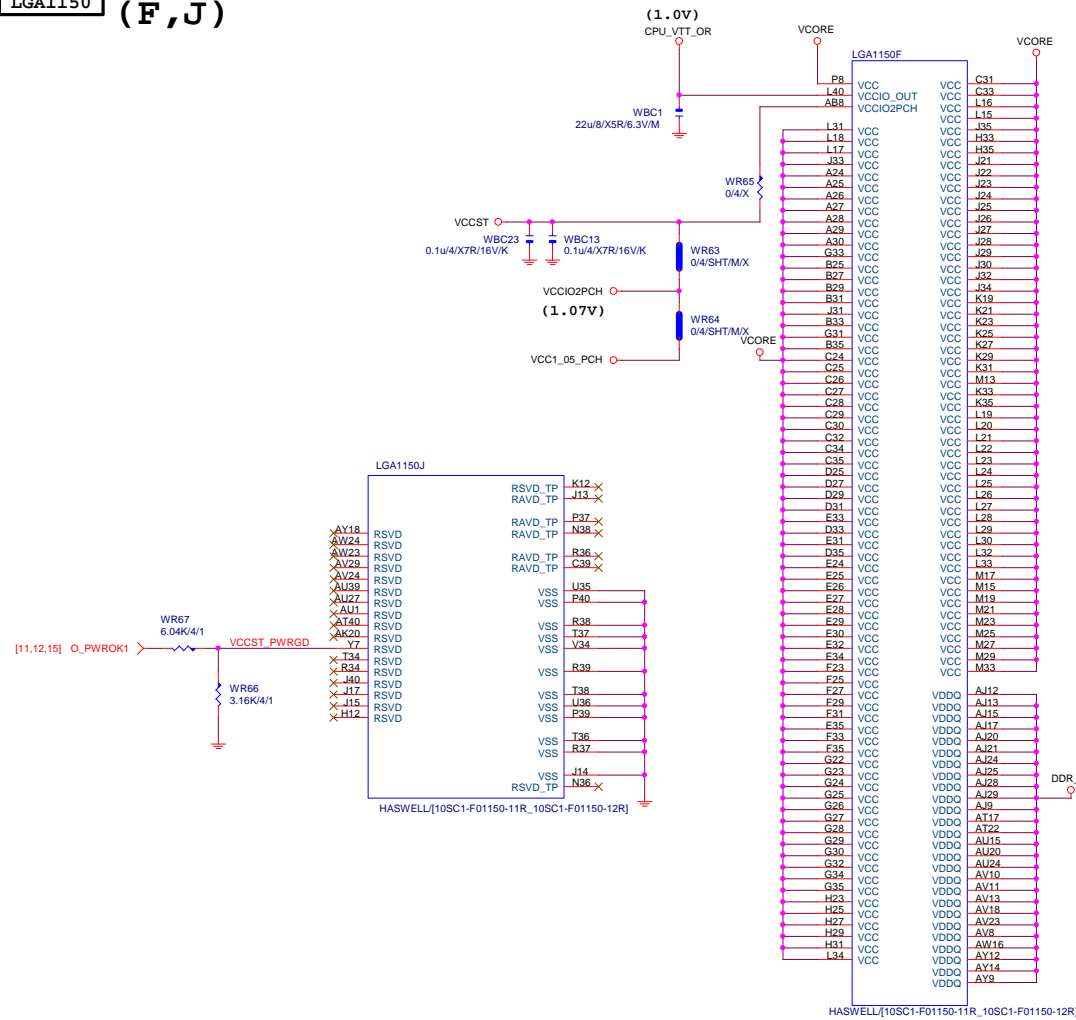
Gigabyte Technology

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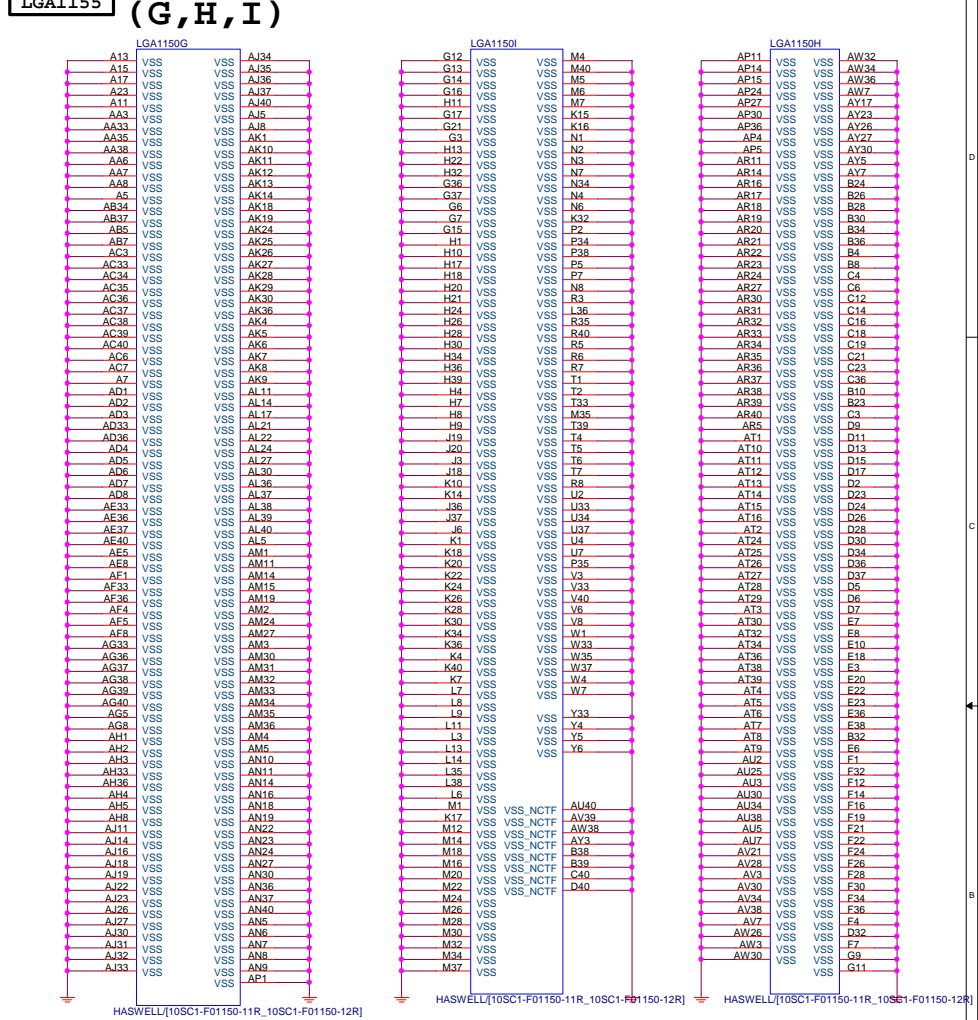
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Date: Monday, May 19, 2014 Sheet: 5 of 31

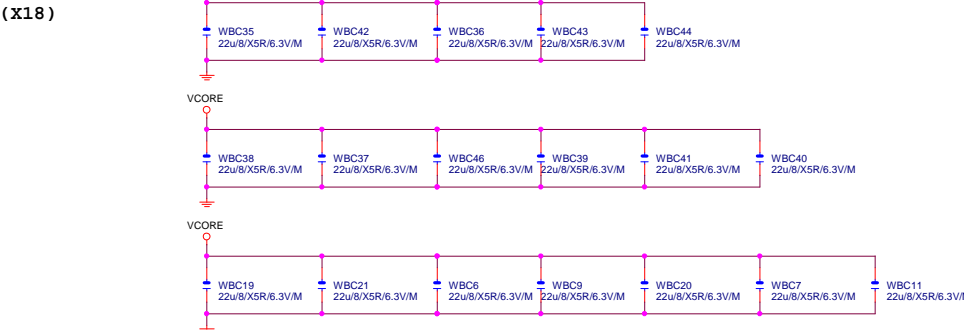
LGA1150 (F, J)



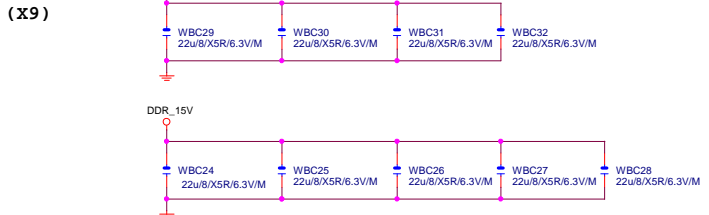
LGA1155 (G, H, I)



VCore CAP



DDR CAP

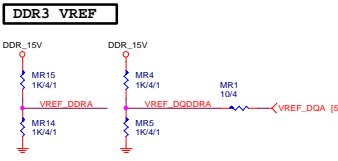
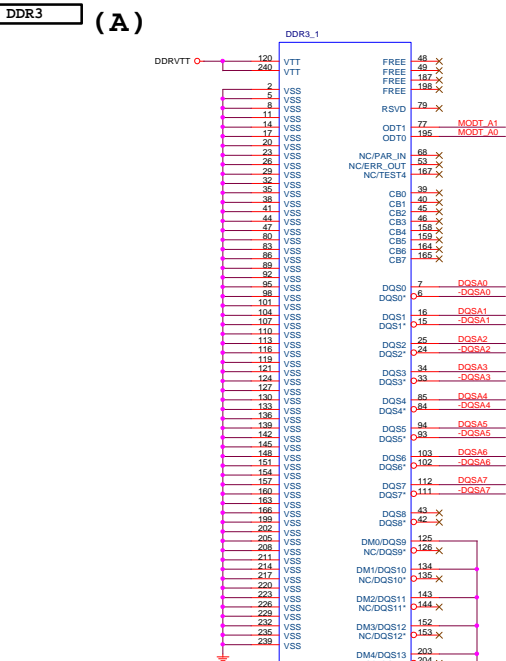


Gigabyte Technology

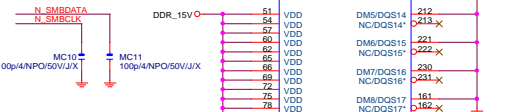
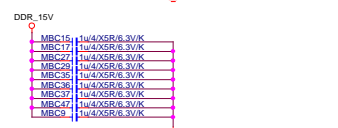
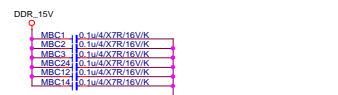
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DDR15V Decouple

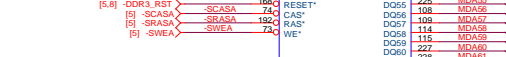
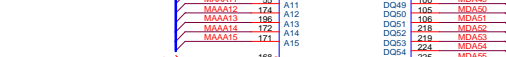
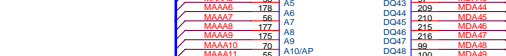
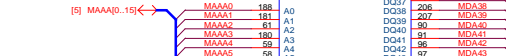
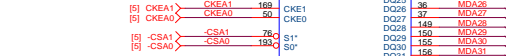
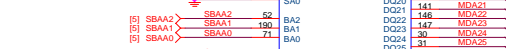
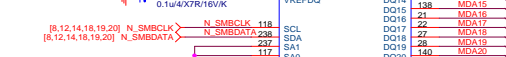
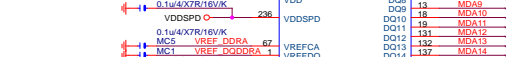
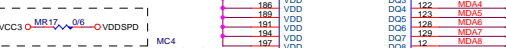


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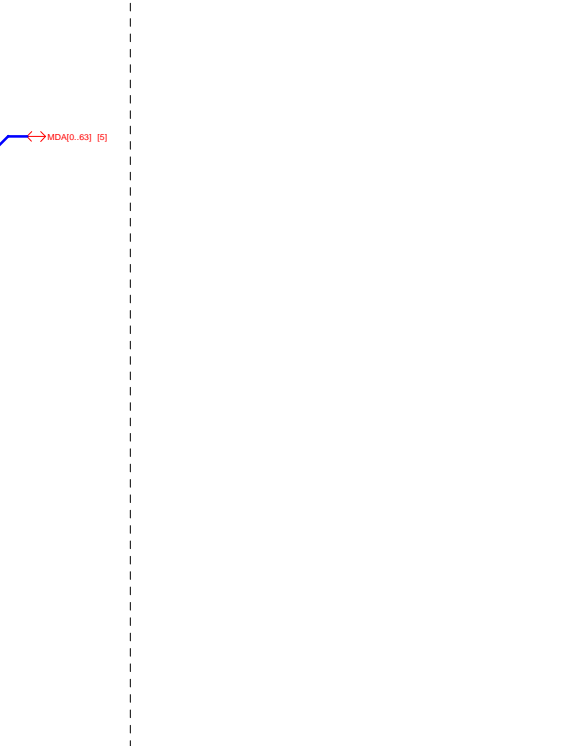


【技術通報R&D技術通報162】

VDDSPD SHORT PROTECT R0603-BH



DDR3240BK/V/D BLACK CONNECTOR

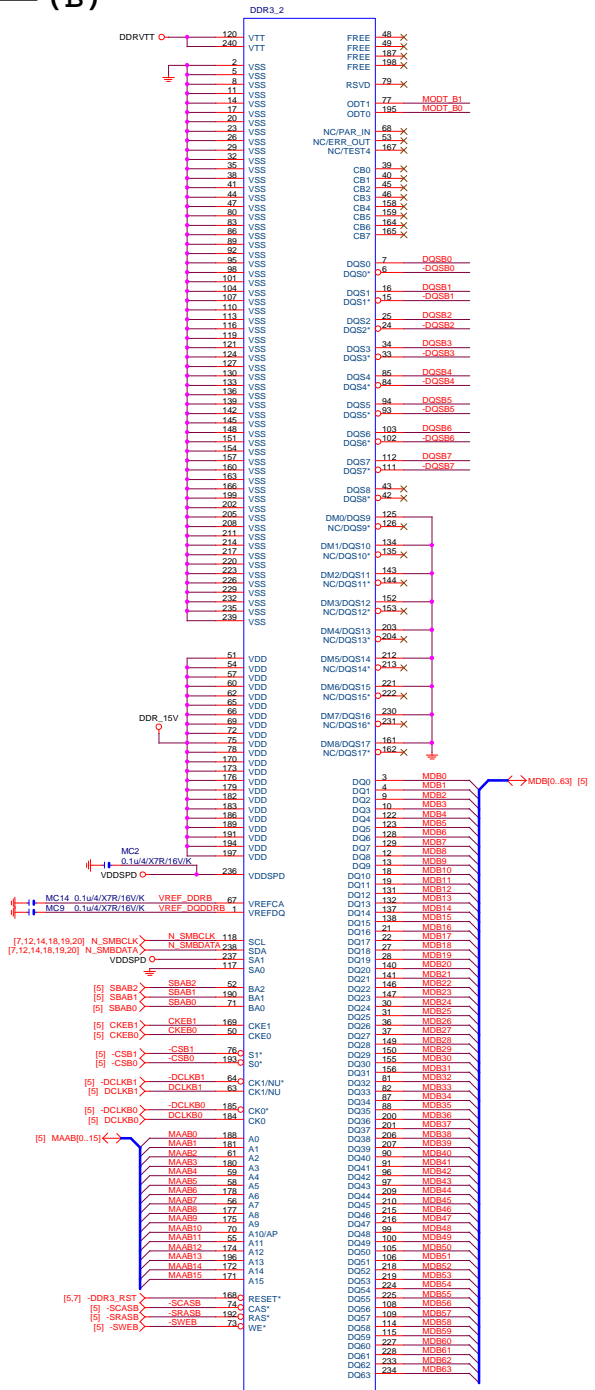


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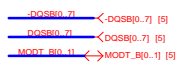
Gigabyte Technology
File: DDRIII CHANNEL A
Customer: GA-H81M-S2PT
Rev: 1.01
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DDR3

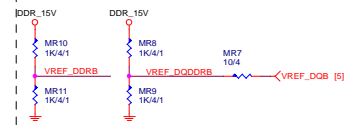
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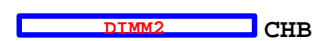
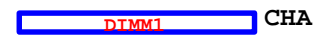
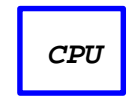
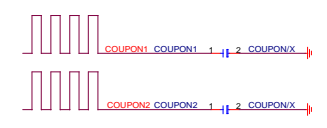
BLACK CONNECTOR



DDR3 VREF



COUPON

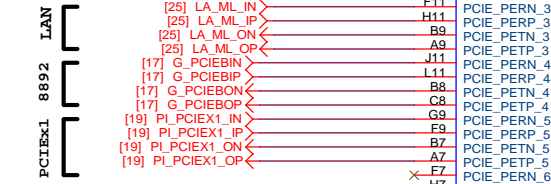
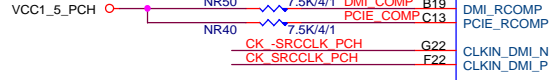
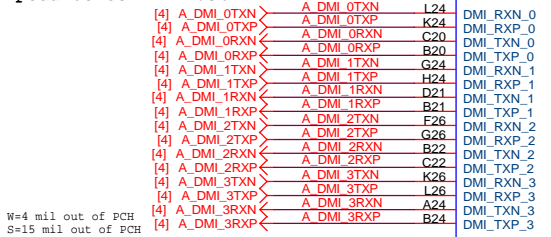


Gigabyte Technology
 DRIII CHANNEL B
 GA-H81M-S2PT
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PCH (B)

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

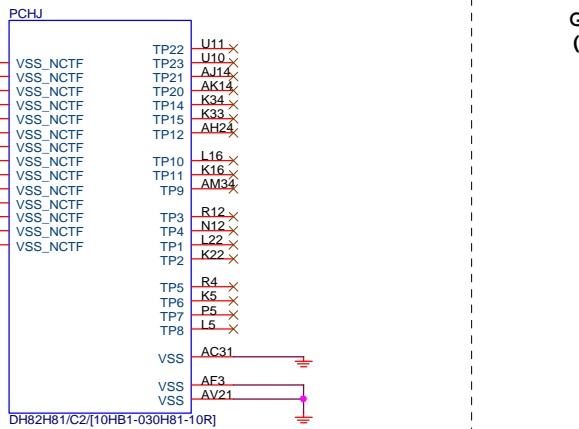
USB2.0 : 12/4.5/7.5/4.5/12 (breakout min 8/4/4/4/8)
Impedance=90 +- 17.5%



放靠近 Device & PCI-E Slot
Impedance=80 +- 17.5%

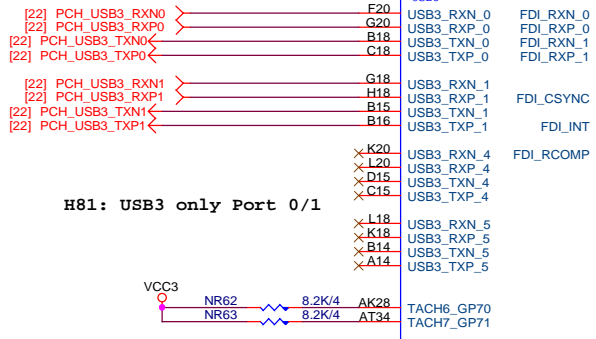
PCIEEX1:16/5/5/5/16 (breakout min 8/4/4/4/8)

PCH (J)



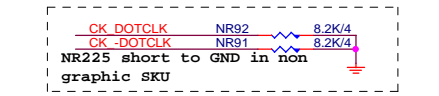
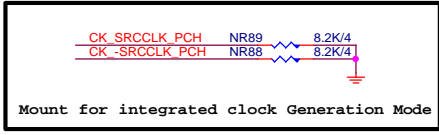
PCH (F)

H81: USB3 only Port 0/1



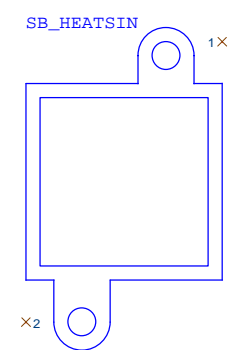
USB3.0:20/5/7/5/20 (breakout min 8/4/4/4/8) ; ONLY 3 VIAS
Impedance=85 +- 17.5%
Back Panel < 10000 MILLS
Front Panel < 6000 MILLS

PCH CLK PD



PCH H/S

GA-H81M-S2PT R1.0
(Z87N-WIFI HEATSINK-->BLACK)



PCH_HS
PCH_HS[12SP2-S03507-11R]

USB TABLE

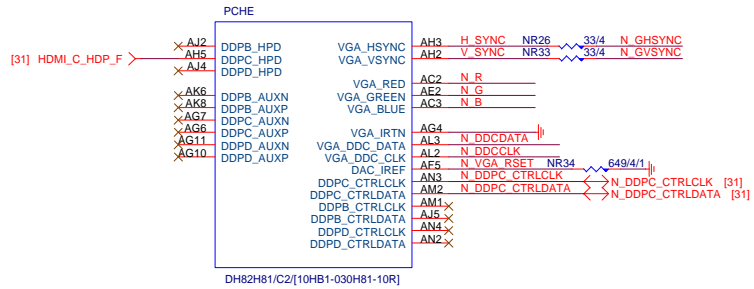
OC[3:0]# for Device 29 (ports 0-7)
OC[7:4]# for Device 26 (ports 8-13)

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

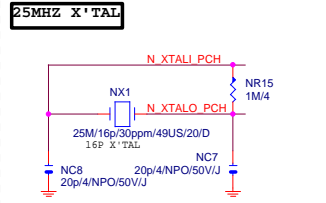
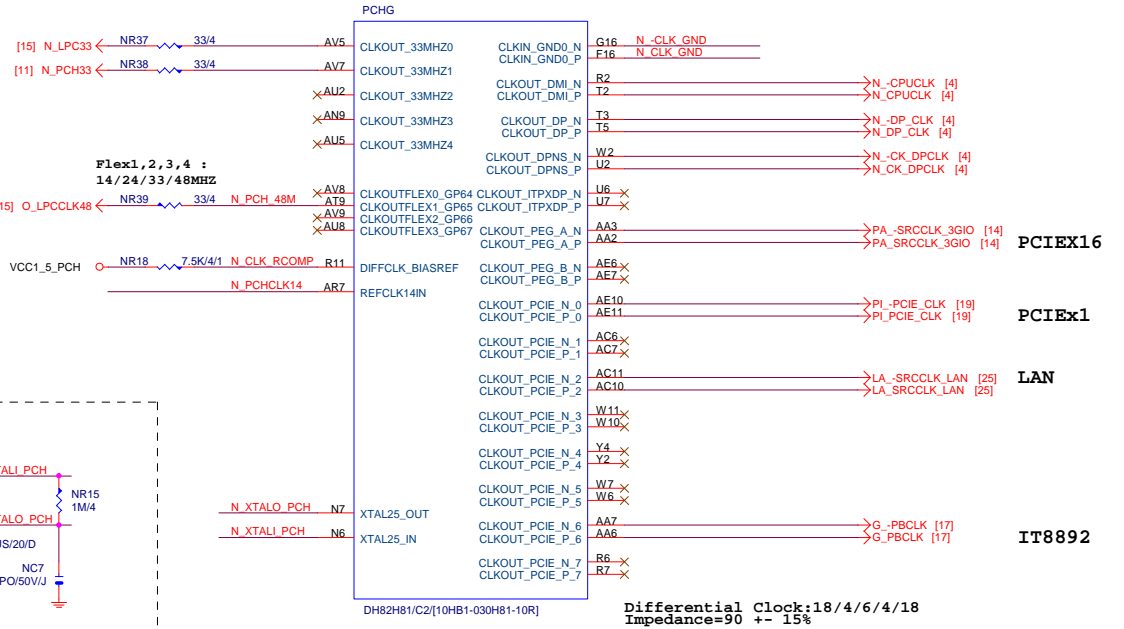
Gigabyte Technology

Title		PCH FDI,DMI,USB ,PCIE,NVRAM	
Size	Document Number	GA-H81M-S2PT	
Custom			Rev 1.01
Date:	Monday, May 19, 2014	Sheet	9 of 31

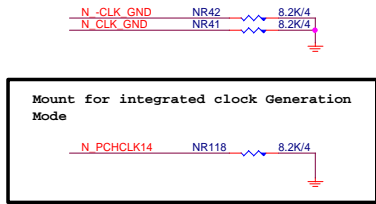
PCH (E)



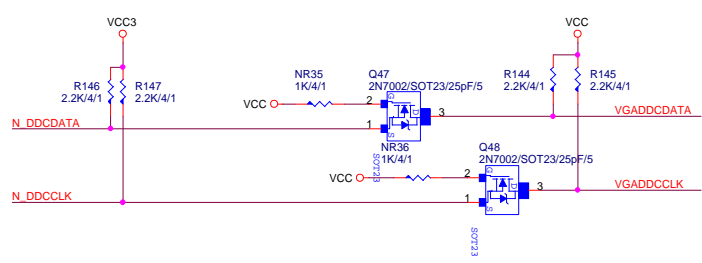
PCH (G)



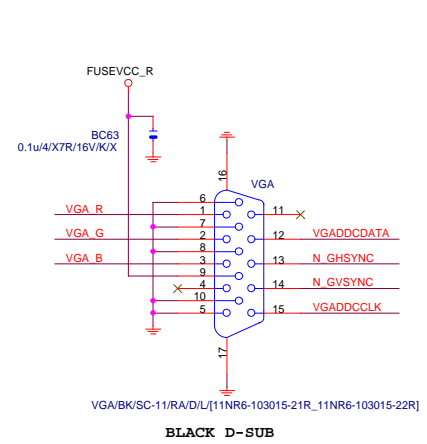
PCH CLK PD



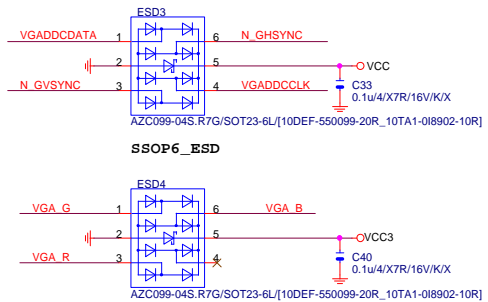
VGA DDC



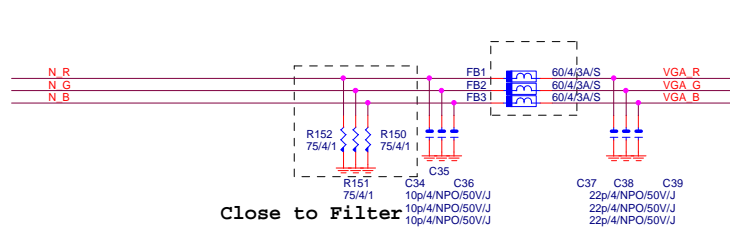
VGA CONNECTOR



VGA ESD



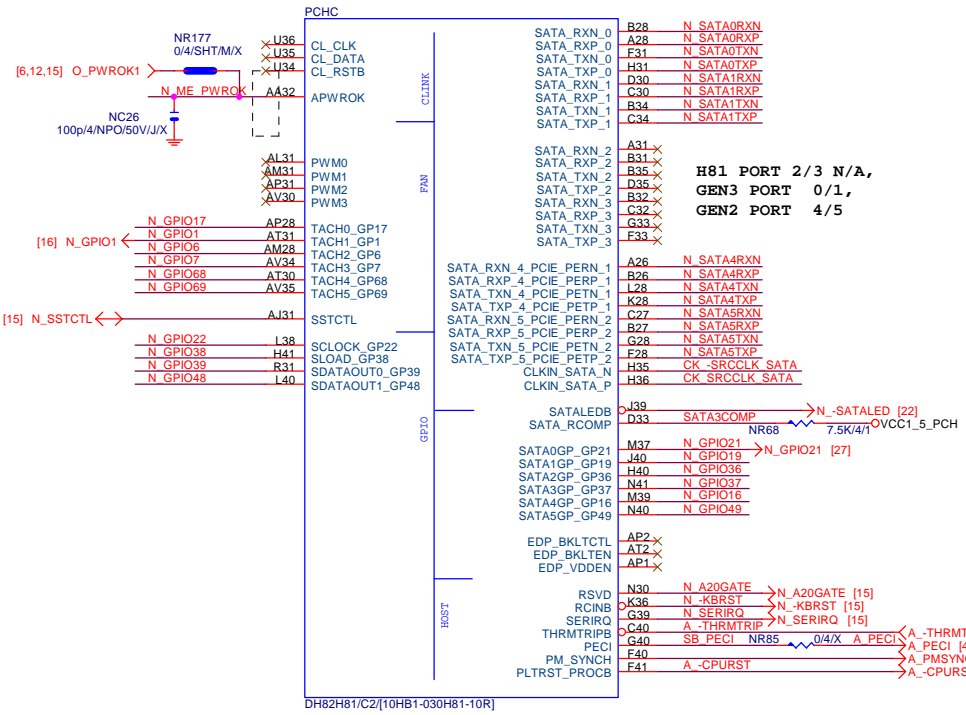
VGA DDC



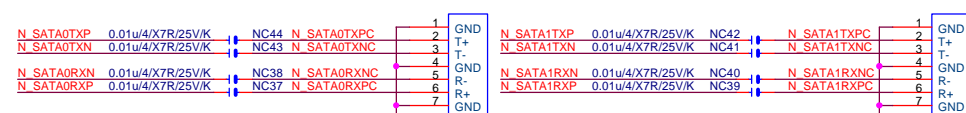
Gigabyte Technology		
Title PCH DISPLAY ,CLK BUFFER		
Size GA-H81M-S2PT		
Date: Monday, May 19, 2014	Document Number Rev 1.01	Sheet 10 of 31

PCH (C)

SATA3 : 20/7.5/4.5/7.5/20 (breakout min 8/4/4/4/8)
 Impedance=90 +- 17.5%
 SATA2 : 15/7.5/4.5/7.5/15 (breakout min 8/4/4/4/8)
 Impedance=90 +- 17.5%



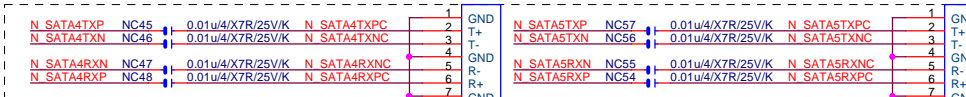
SATA CONNECTOR



SATA3.0 WHITE CONNECTOR

SATA3_0
SATA27/WH/H/OP/NA/D/1/B/PA66

** Z87/H87 Port 4&5 SATA3.0
 ** B85 Port 4&5 SATA2.0



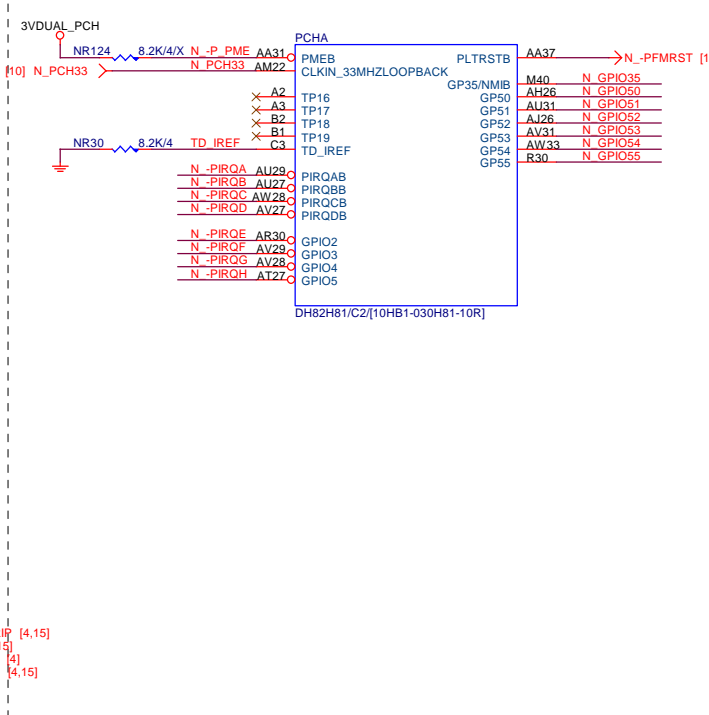
SATA3.0 BLACK CONNECTOR

SATA3_2
SATA27/BK/H/OP/NA/D/1/B

SATA2.0 BLACK CONNECTOR

SATA2_3
SATA27/BK/H/OP/NA/D/1/B

PCH (A)



ME PWROK

H81 N/A

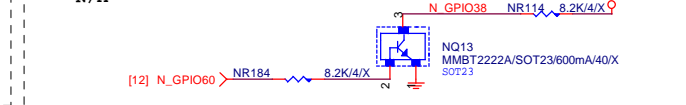
GPIO37 PU VCC3 ENABLE SBA

For H87&B85

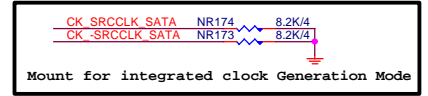


GPIO38 Ctrl

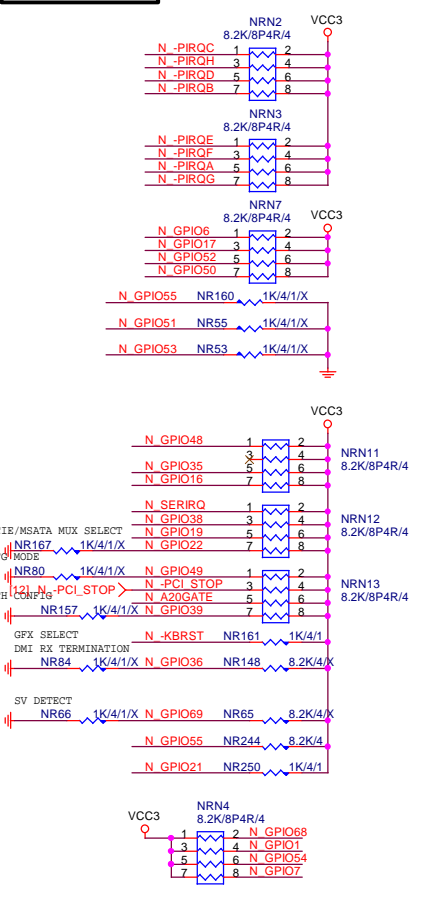
N/A



PCH CLK PD



PCH PU/PD



Gigabyte Technology

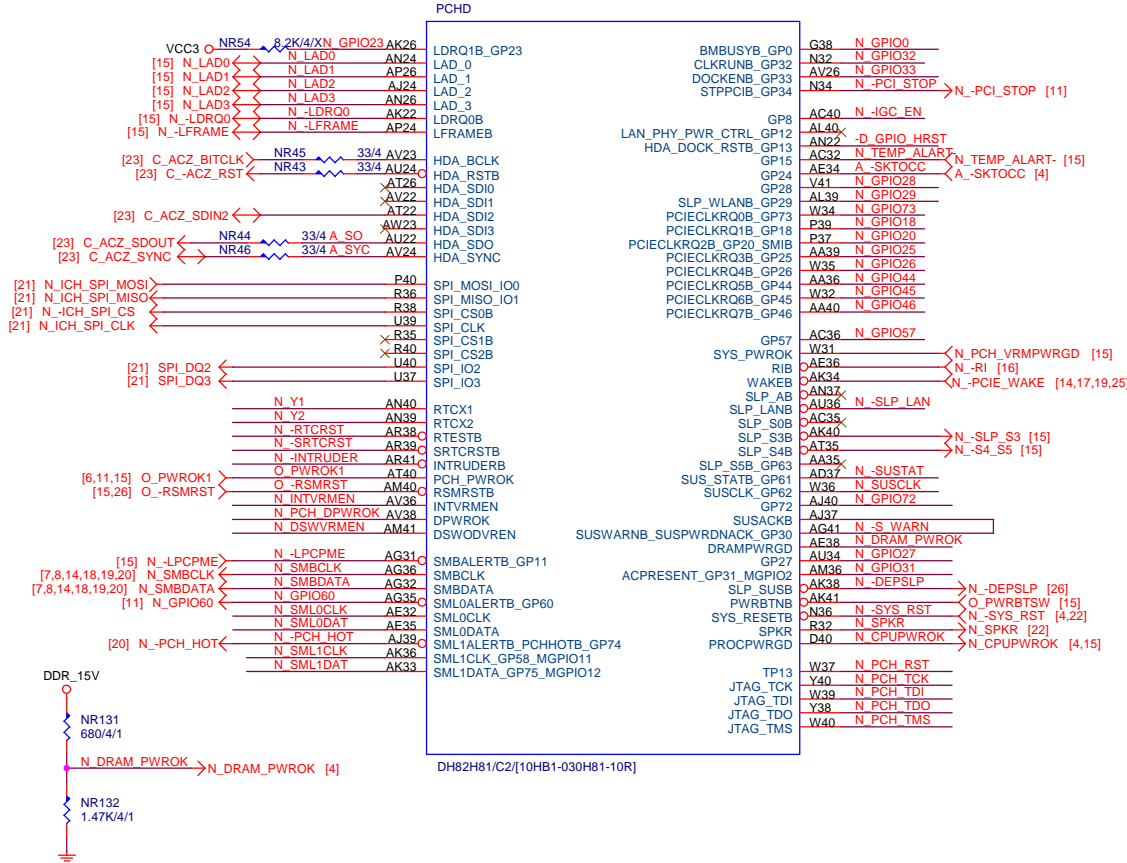
Title: PCH HOST , SATA, PCI
 GA-H81M-S2PT

Size: Document Number
 Date: Monday, May 19, 2014

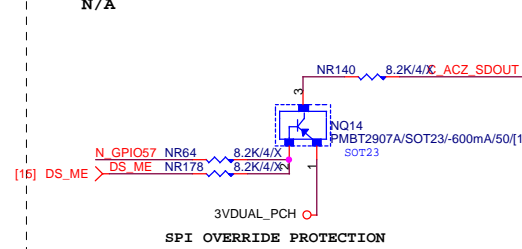
Sheet: 11 of 31

Rev: 1.01

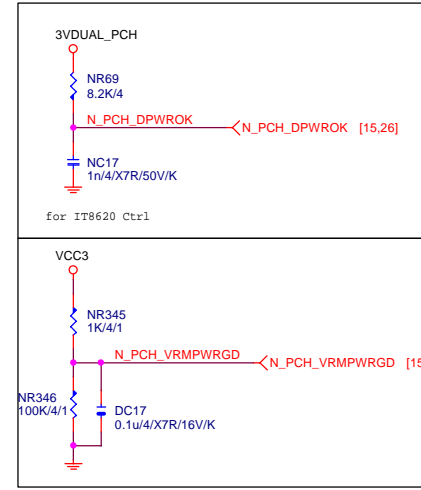
PCH (D)



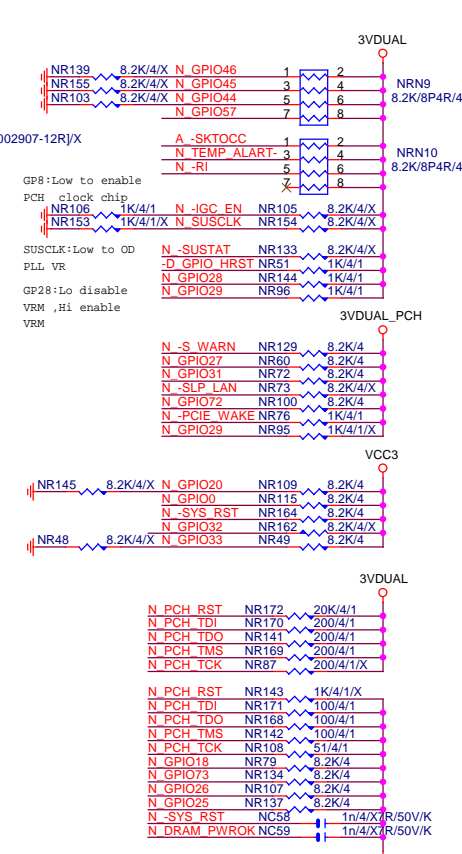
ACZ_SDOOUT



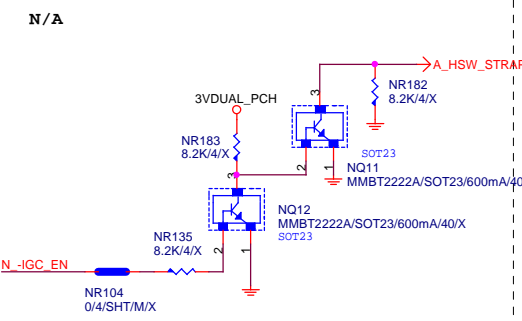
PCH_DPWROK



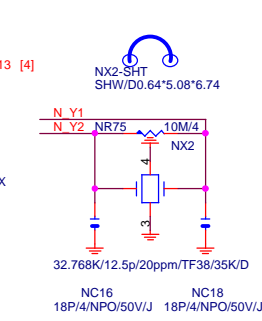
PCH PU/PD



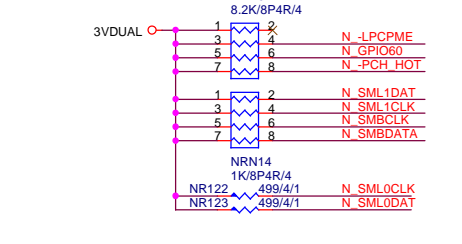
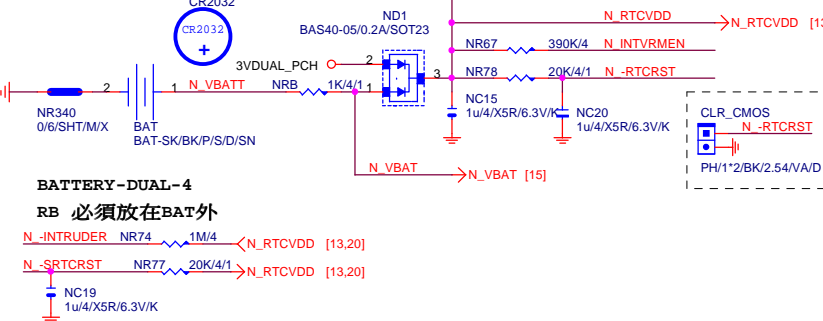
HSW_STRAP13



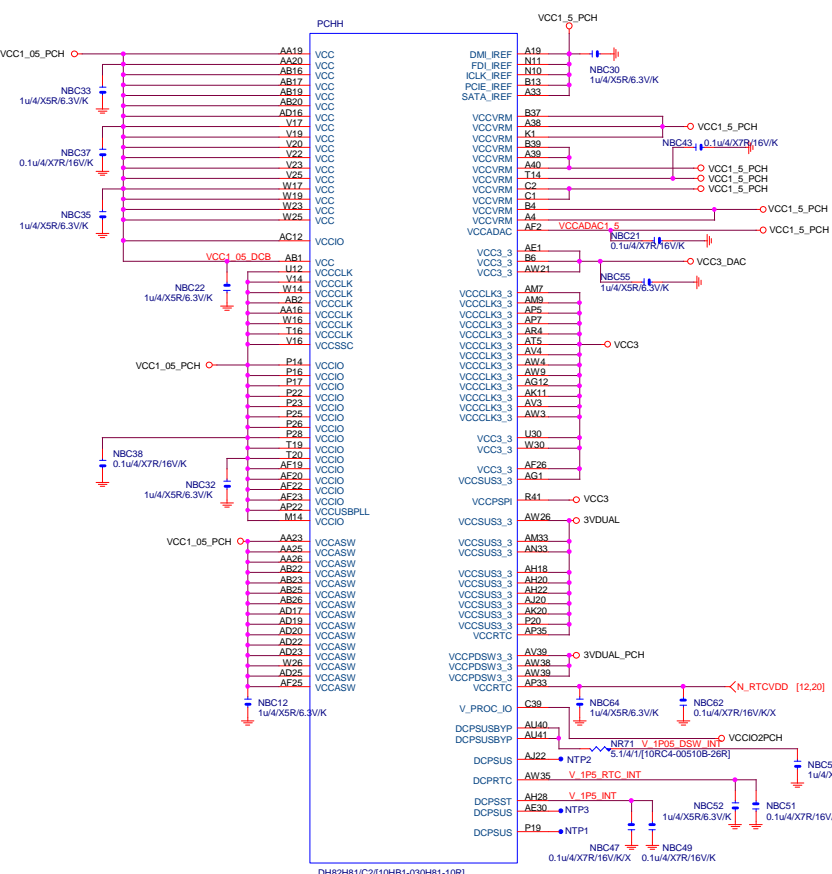
32.768KHZ



CLR_CMOS

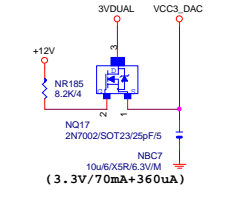


PCH (H)

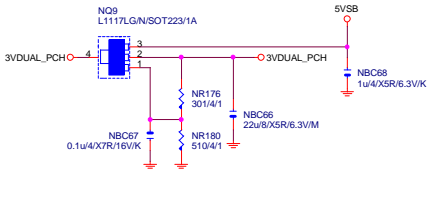


VCC3_DAC

Close北橋(注意震盪水波紋)



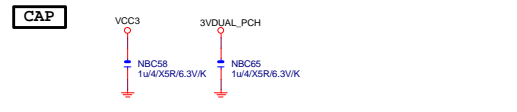
3VDUAL_PCH



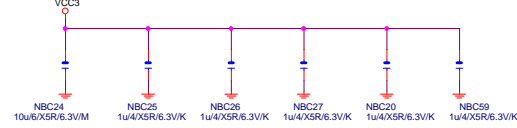
SHT_PWR

M3 POWER

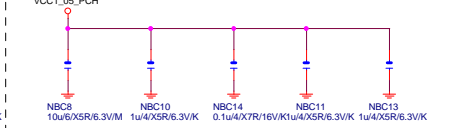
CAP



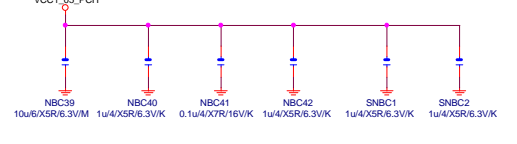
(3.3V) (X6)



(1.05V) (X5)



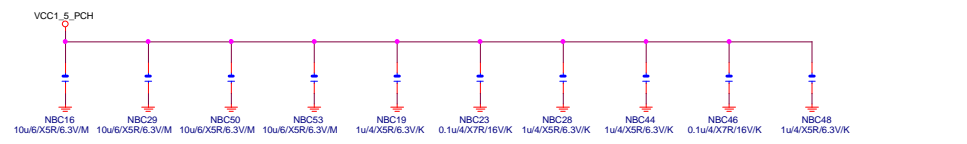
(1.05V) (X6)



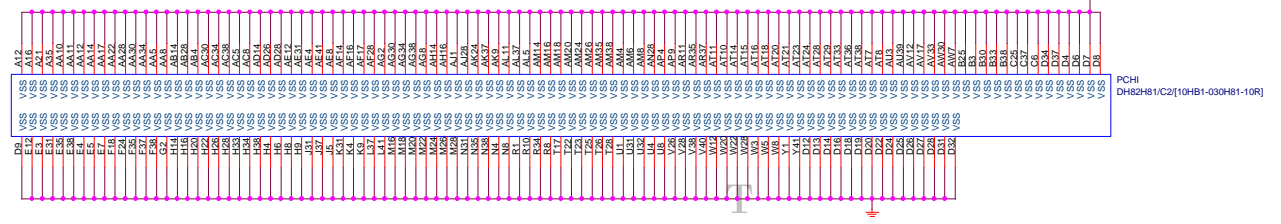
(1.05V)(X2)(3.3V)(X2)



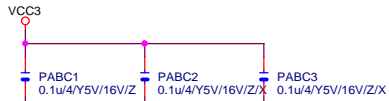
(1.05V) (X10)



PCH (I)

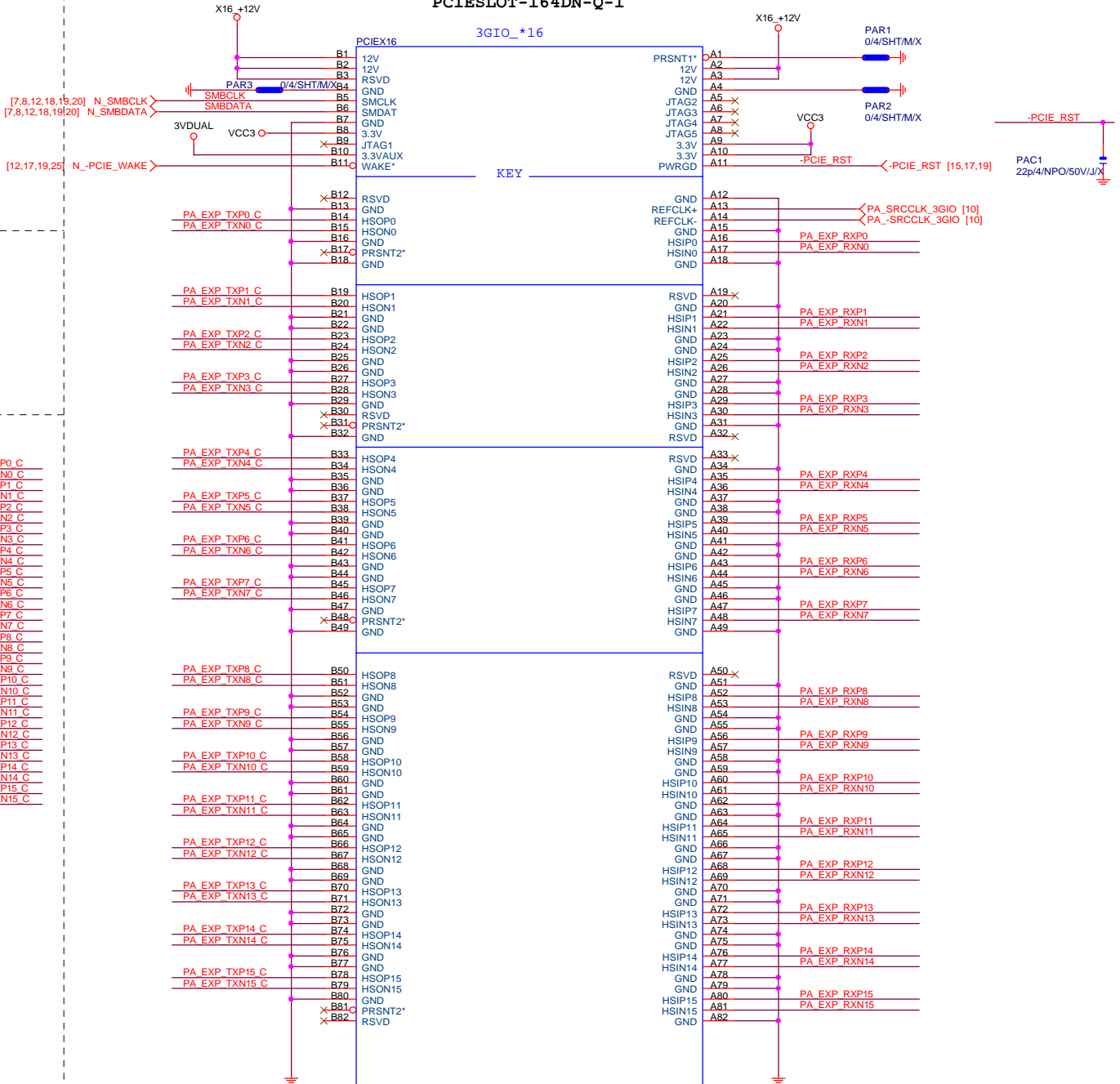


PCIEX16 CAP

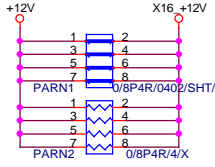


PCIEX16 SLOT

PCIESLOT-164DN-Q-1

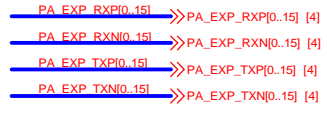


PCIEX16 PROTECT SHT



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	PAC19	0.22u/4/X5R/6.3V/K	PA_EXP_TXP7 C
PA_EXP_TXN7	PAC18	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



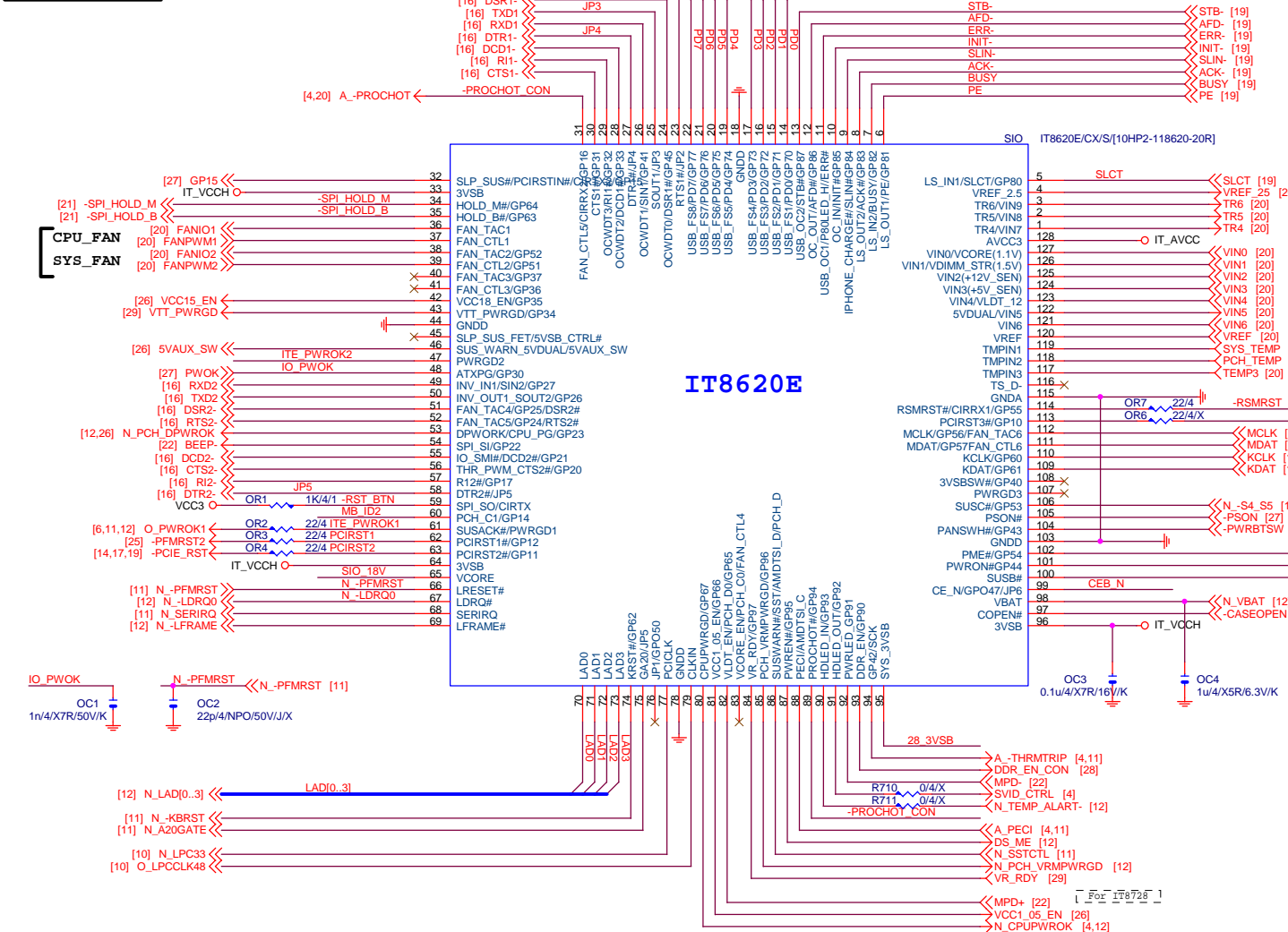
PCI-E/16X-164P/BK/LONG DOUBLE
BLACK CONNECTOR

Gigabyte Technology

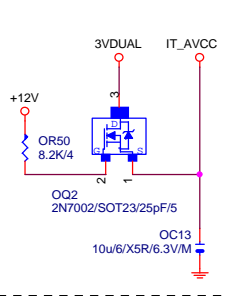
PCI EXPRESS * 16

Title		Rev	
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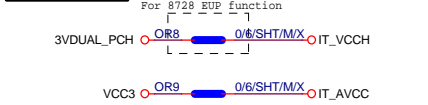
SIO IT8620E



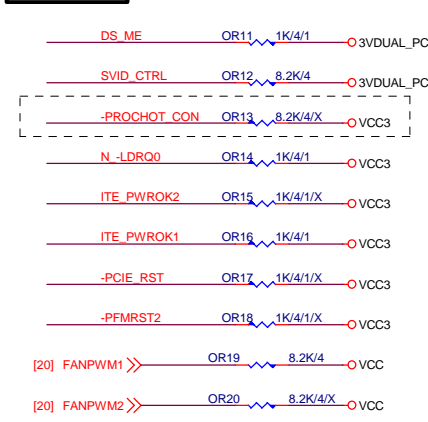
FIX AIX 插拔漏电



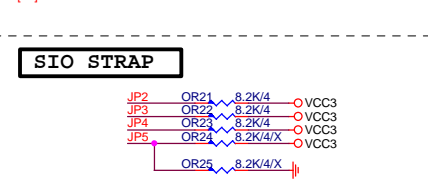
PWR_SHT



SIO PU



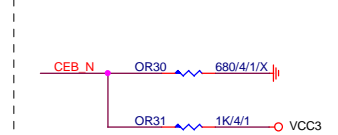
SIO STRAP



IT8620 NOTE

IT8728	
PIN121	VCORE_EN/PCH_C0
PIN120	VLDLT_EN/PCH_D0
PIN19	ATXPG
PIN31	PCH_C1
PIN53	SST/AMDTSI_D/MTRB#/PCH_D1
PIN55	PECI/AMDTSI_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

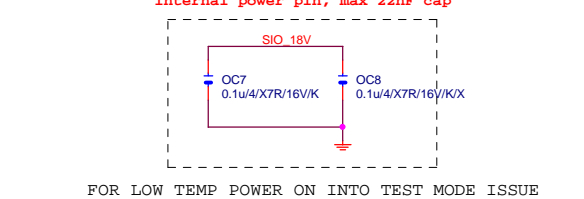
DUAL BIOS OPT STRAP



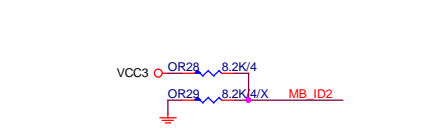
Power leakage



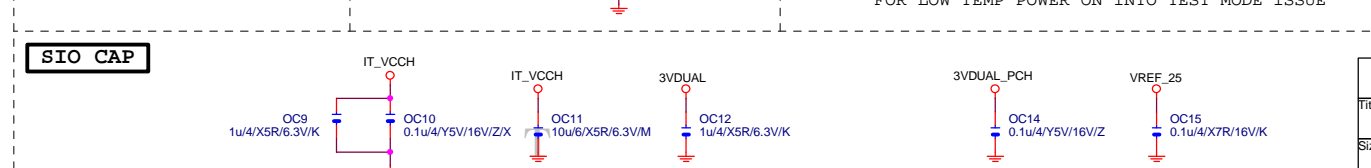
SIO_18V



MB ID



SIO CAP



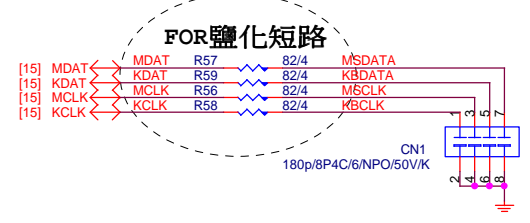
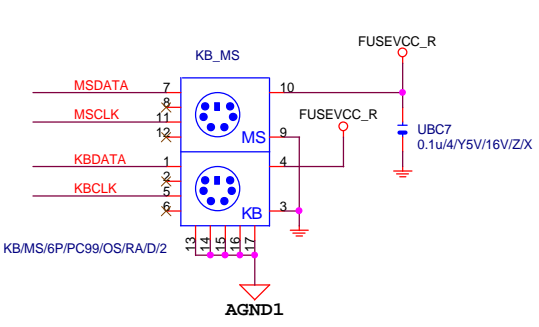
Gigabyte Technology

Title: ITE 8620 LPC IO

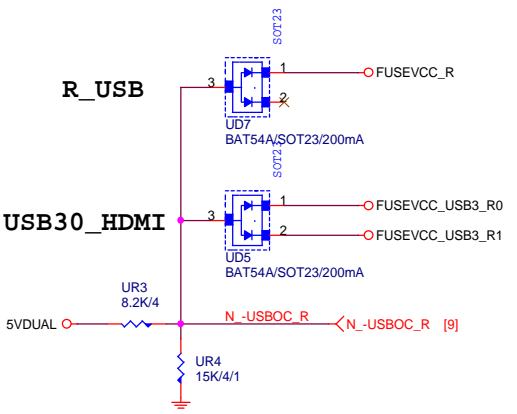
Size: Custom Document Number: **GA-H81M-S2PT** Rev: 1.01

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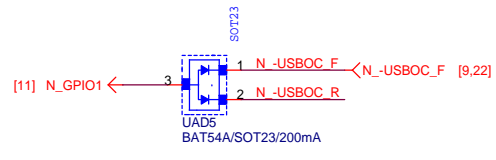
KB/MS



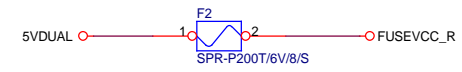
-USBOC_R



USB POWER PROTECT

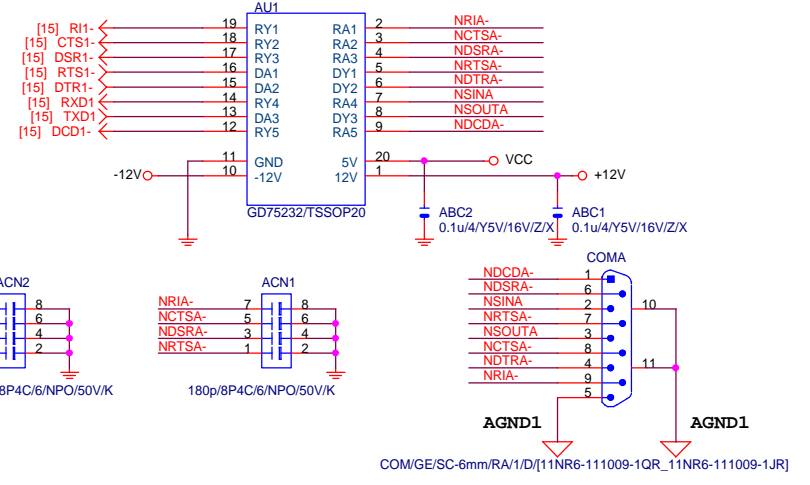


R_USB PWR

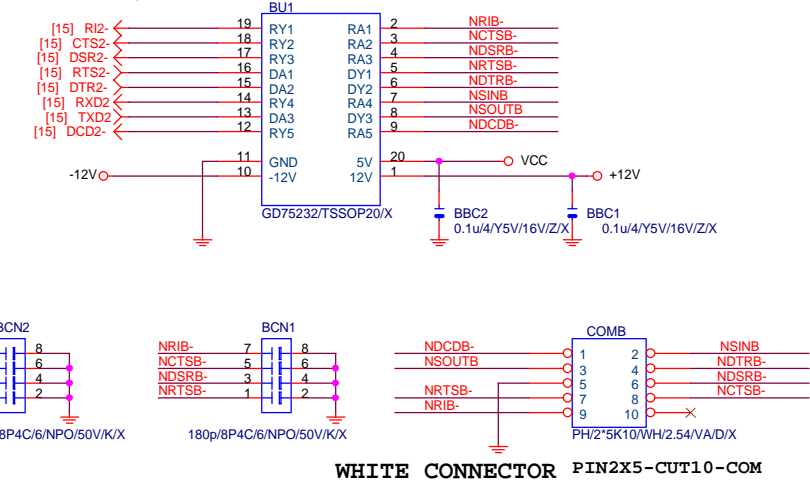


Close to connector
KB_MS_USB 2-Port 2.0A

COMA

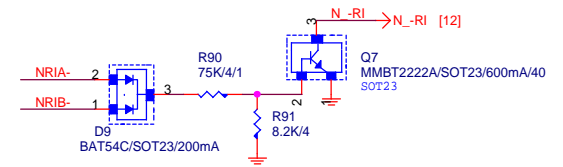


COMB GA-H81M-S2P R1.0 N/A



WHITE CONNECTOR P1N2X5-CUT10-COM

COM RI

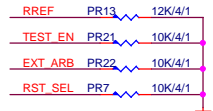
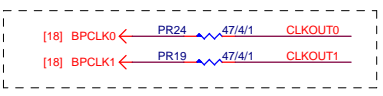
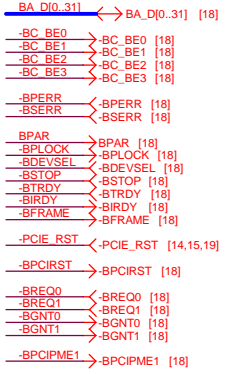


Gigabyte Technology

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PCIe TO PCI

PCI:5/4/5 Impedance=50 +- 15%



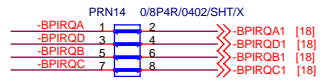
High: Enable PCI CLK 66MHz
Low: Disable PCI CLK 66MHz



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



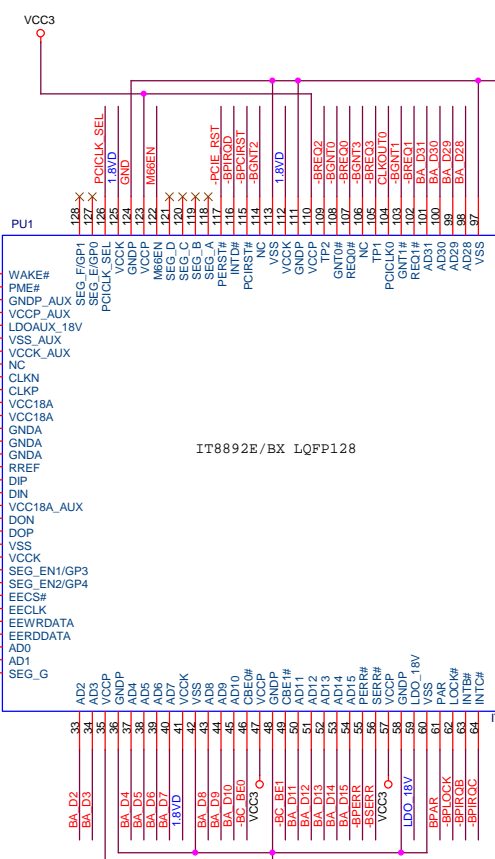
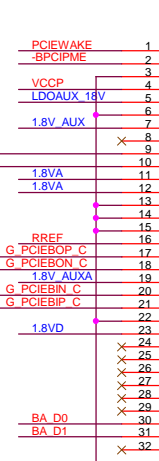
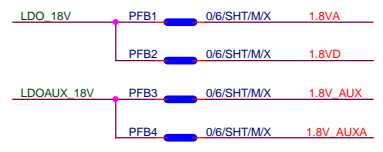
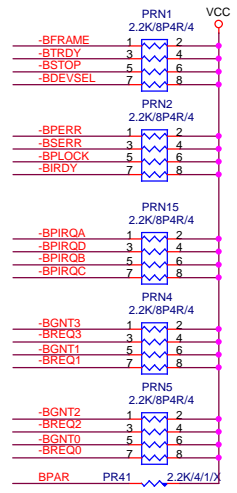
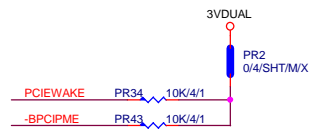
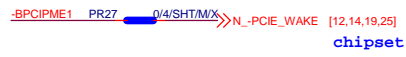
IT8892



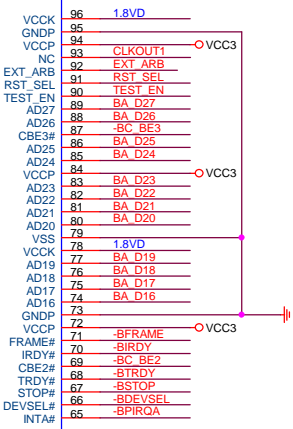
PCI slot



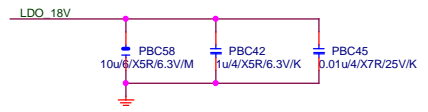
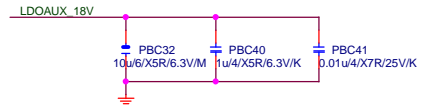
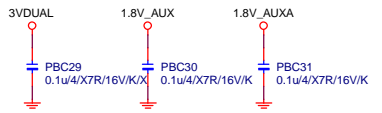
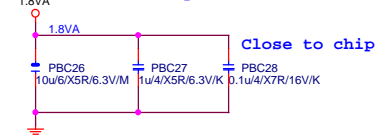
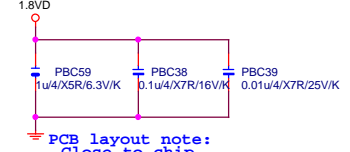
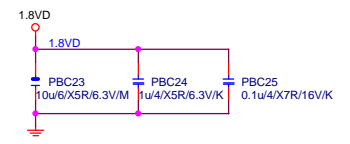
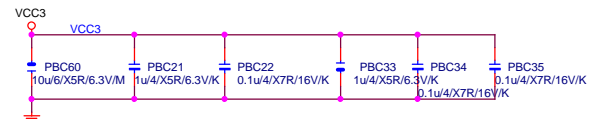
PCI slot



IT8892E/BX LQFP128



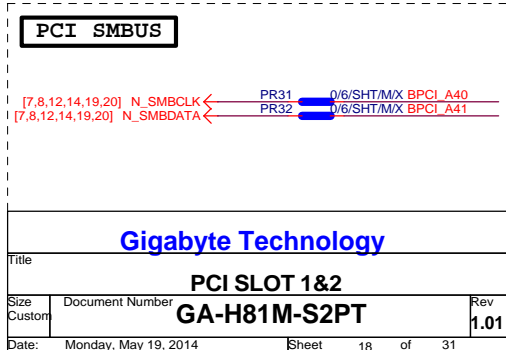
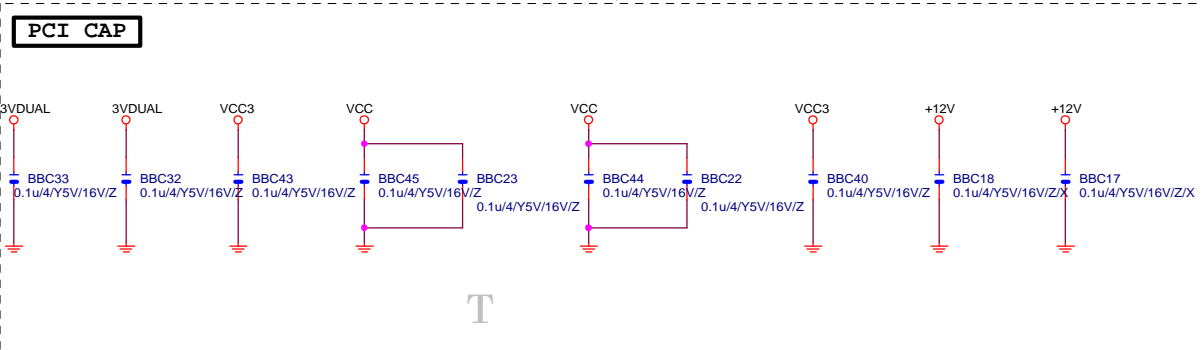
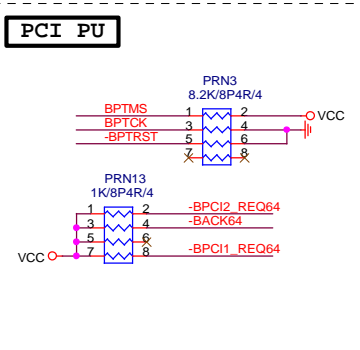
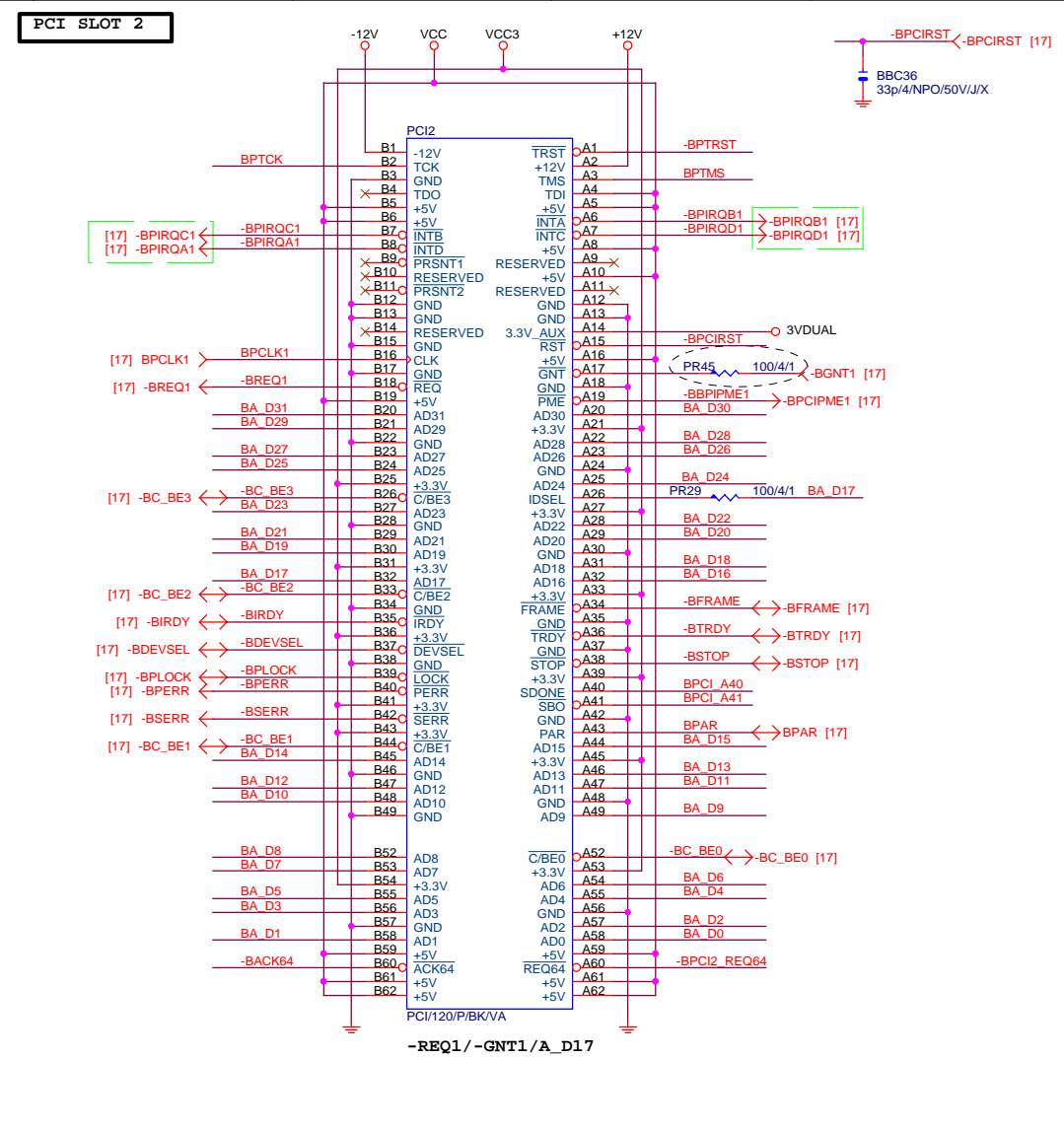
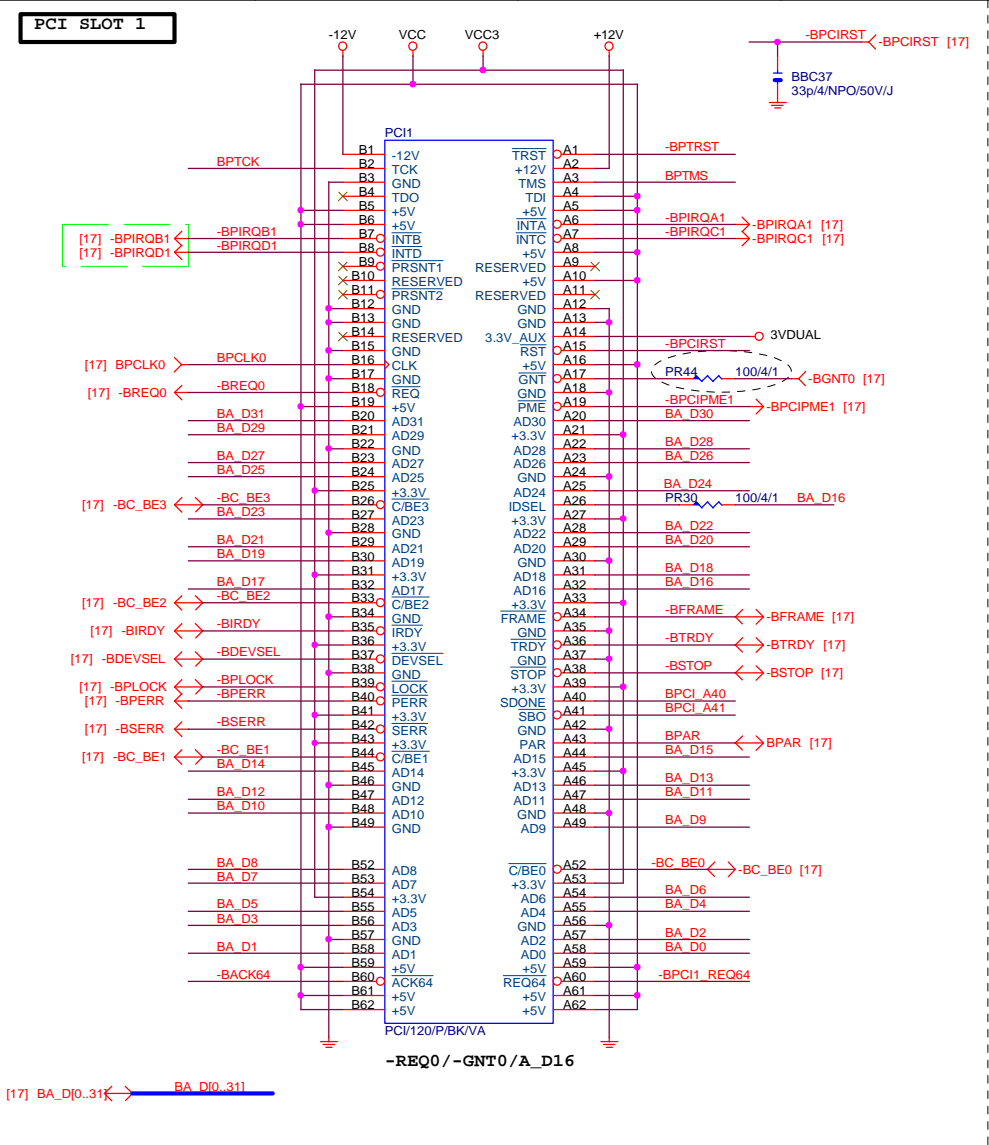
IT8892E/FX/S[10HP2-698892-40R]



PCB layout note: Close to chip

PCB layout note: Close to chip

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ITE IT8892E		
GA-H81M-S2PT		
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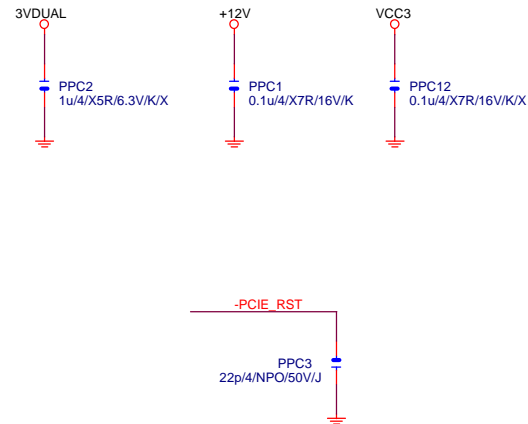
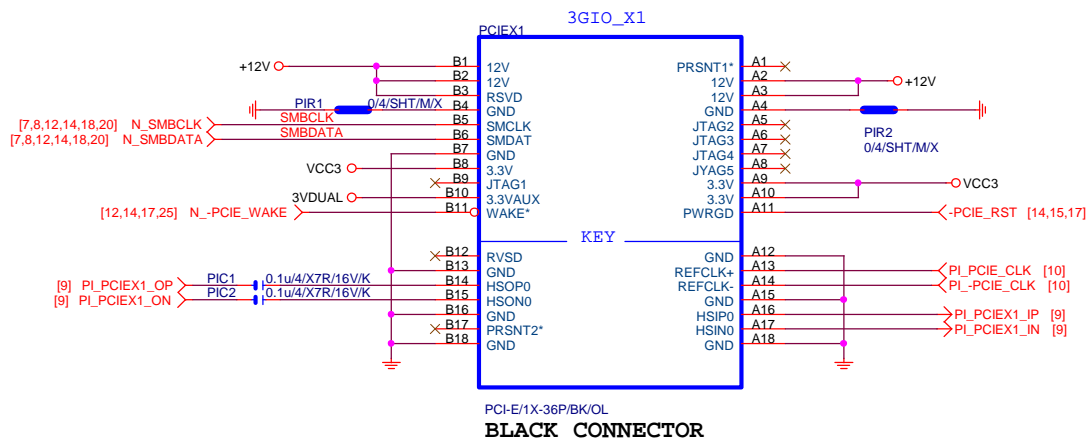
Gigabyte Technology

PCI SLOT 1&2

Size Custom	Document Number	Rev
	GA-H81M-S2PT	1.01

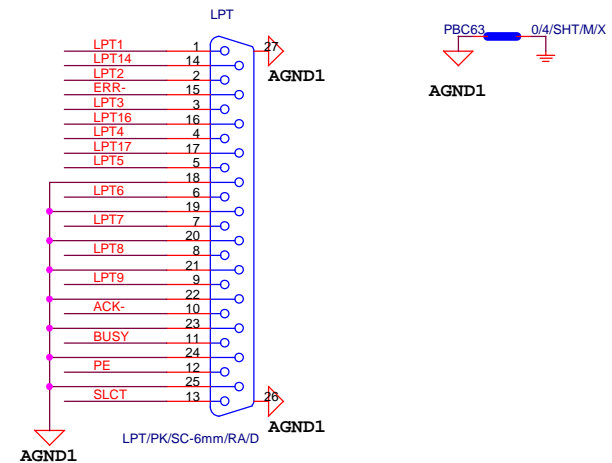
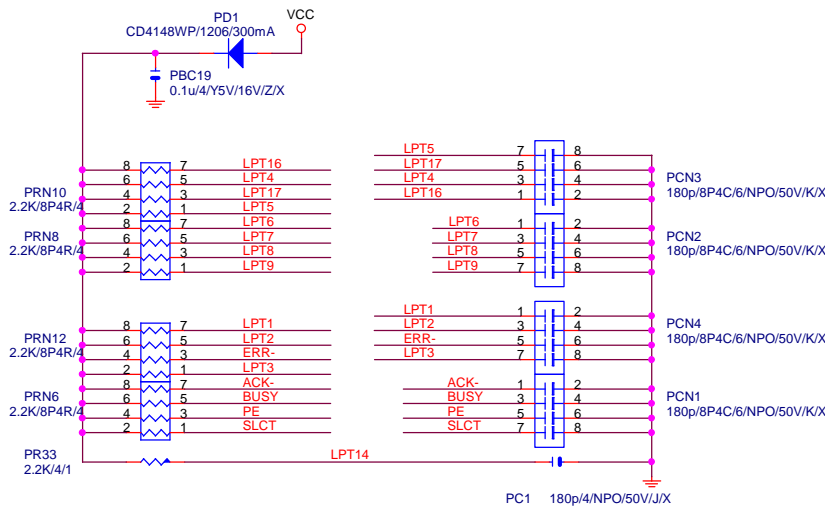
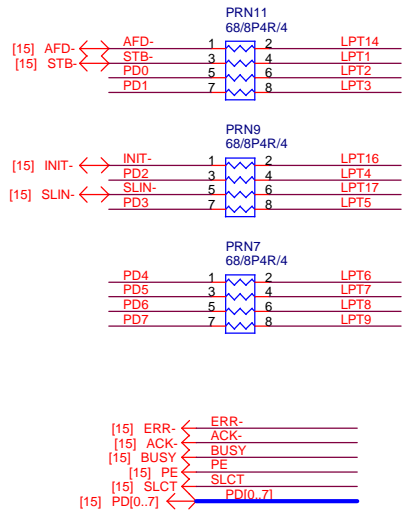
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PCIEX1 SLOT



LPT PORT

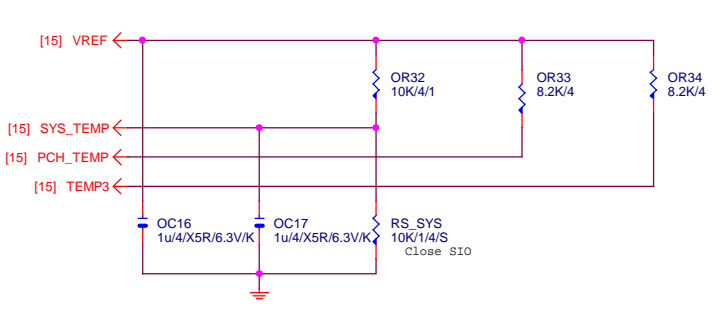
【技術通報R&D技術通報151】
33ohm Change to 68ohm



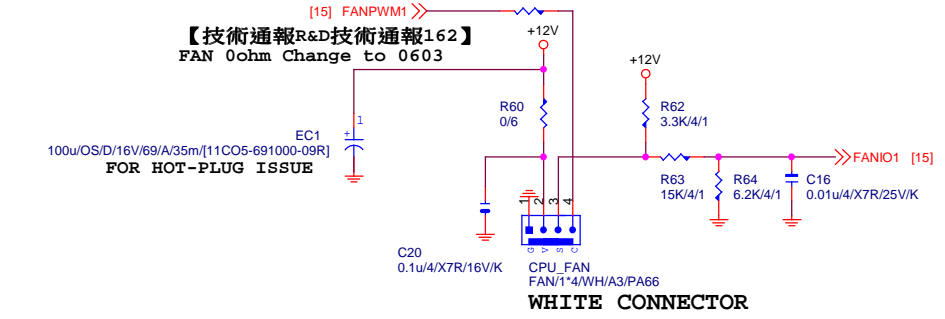
Gigabyte Technology

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LPT		
Size B	Document Number	Rev
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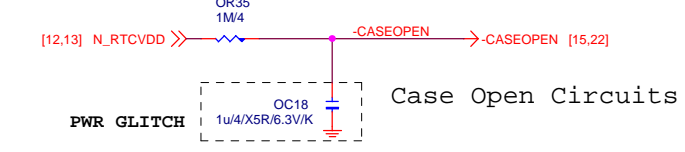
TEMP H/W MONITOR



CPU SMART FAN

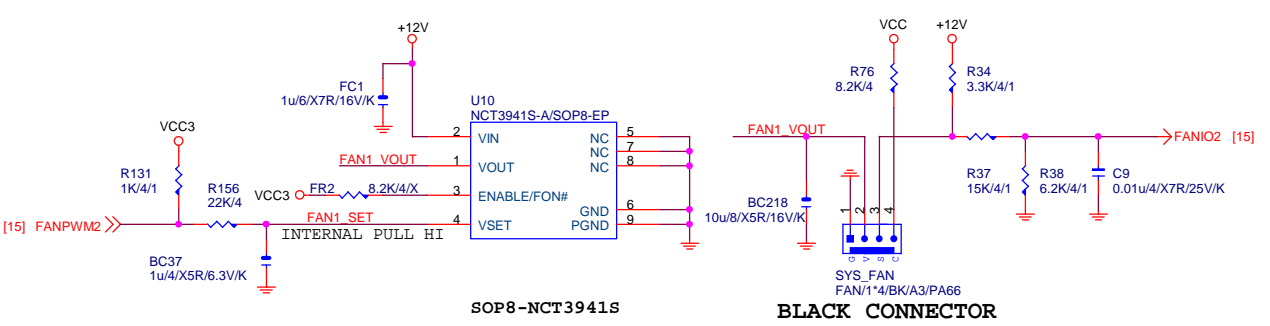


CASE OPEN

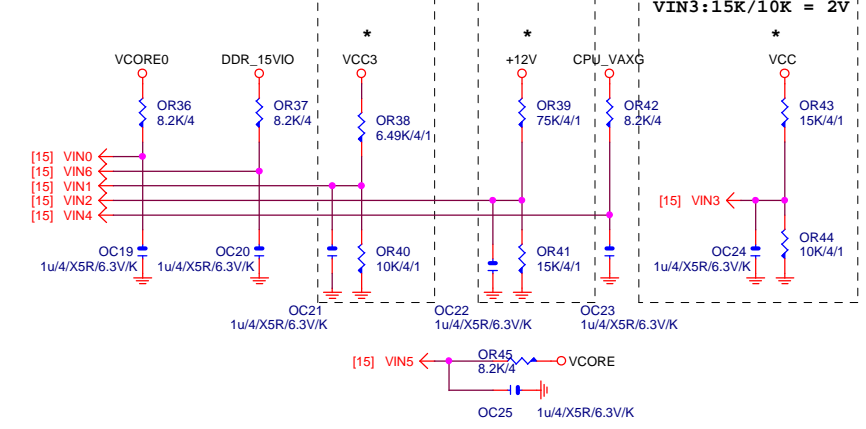


SYS SMART FAN

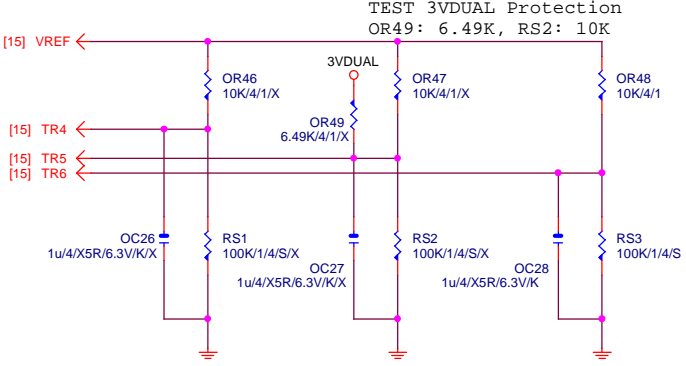
Linear SYS_FAN



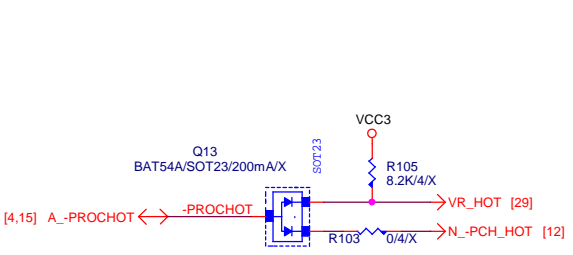
VOLTAGE-- H/W MONITOR



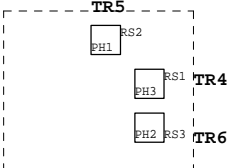
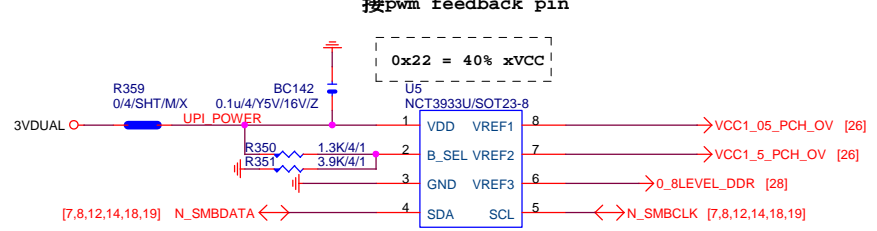
THERMISTOR MONITOR



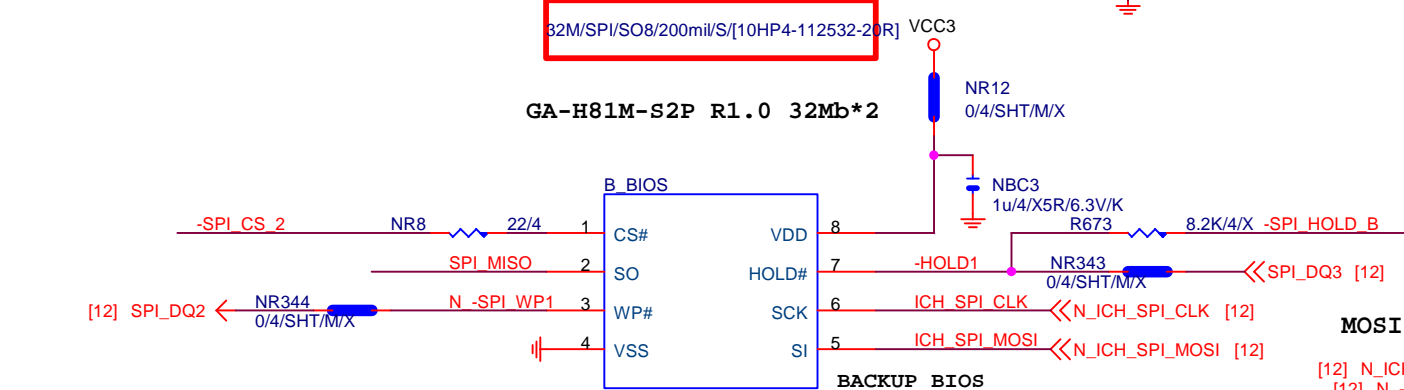
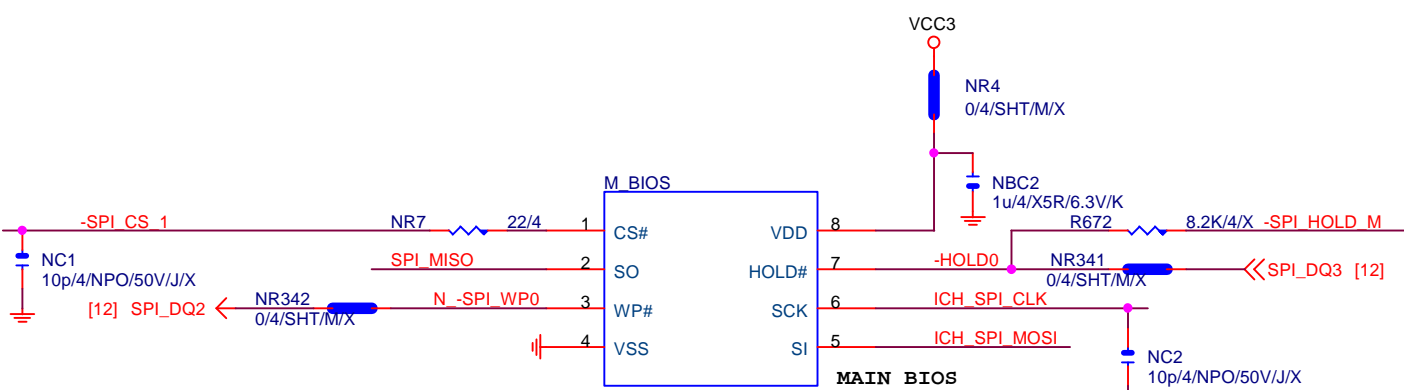
-PROHOT



OV NCT3933

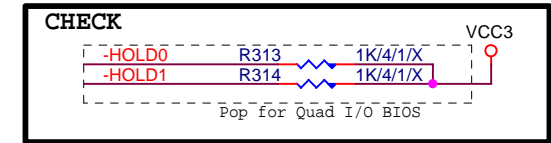
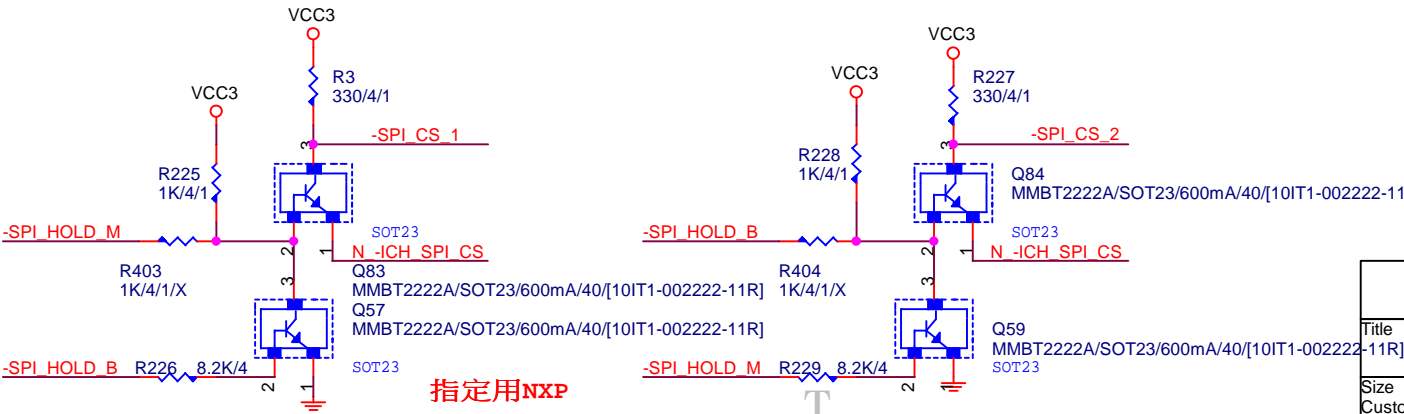
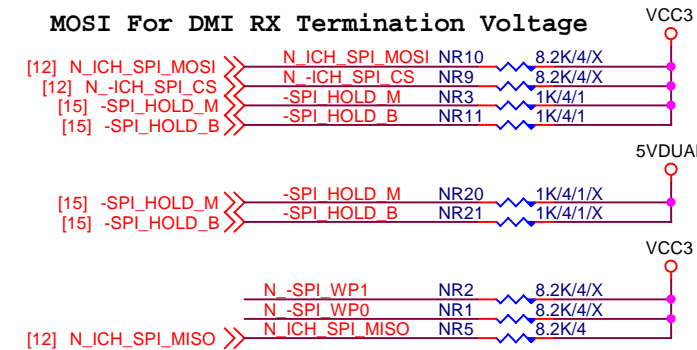


Gigabyte Technology			
HWM,FAN CTRL,OV			
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BOOT DEVICE	GNT0	GNT1
LPC	0	0
PCI	0	1
NAND	1	0
SPI	1	1

1 means floating
0 means PD 1K

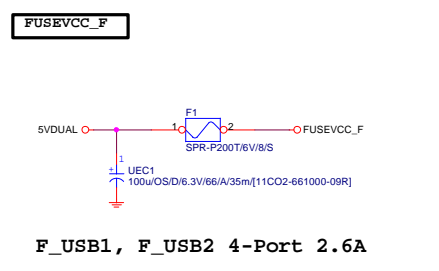
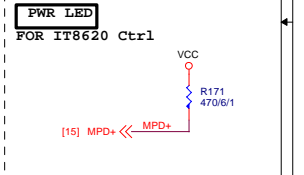
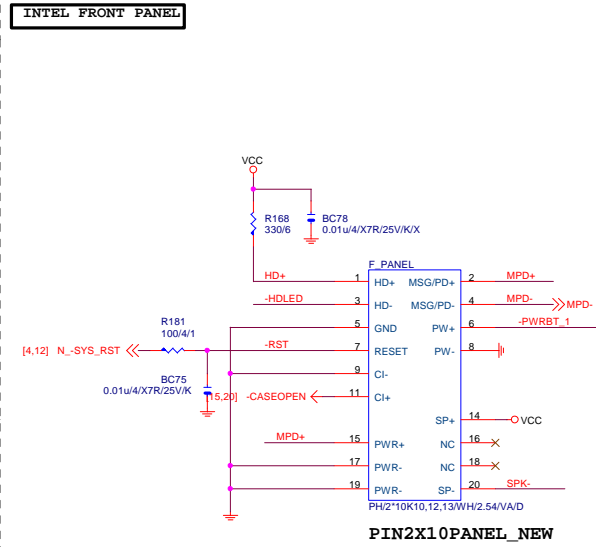
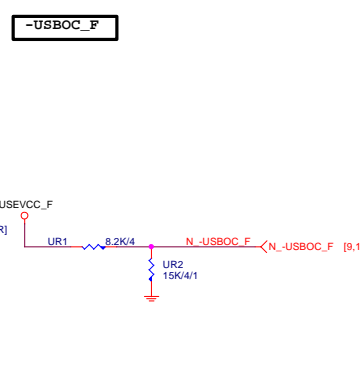
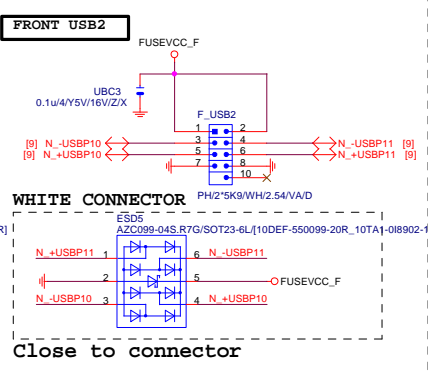
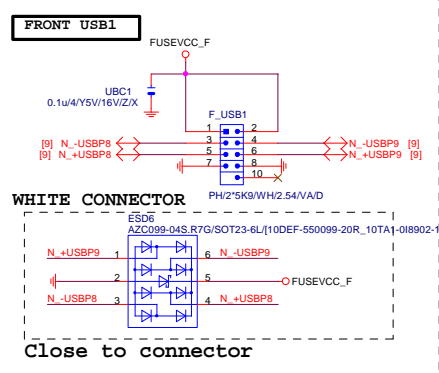
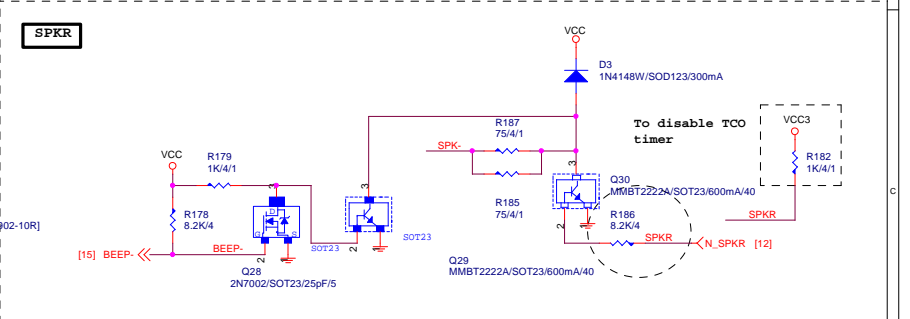
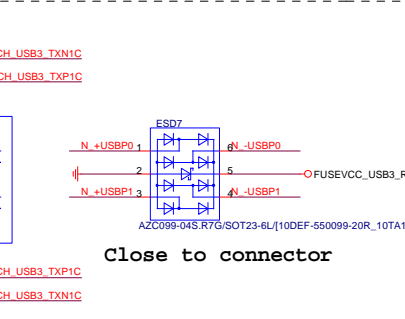
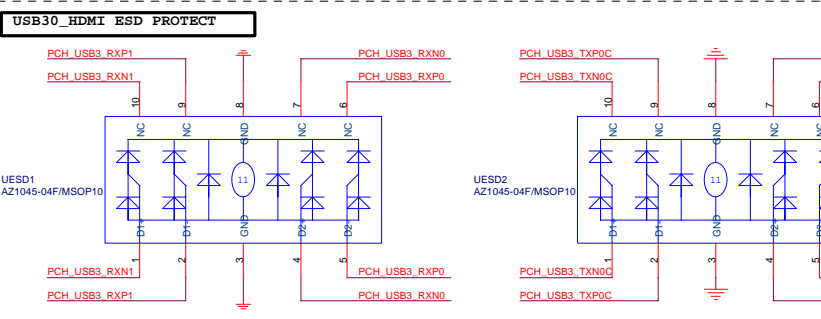
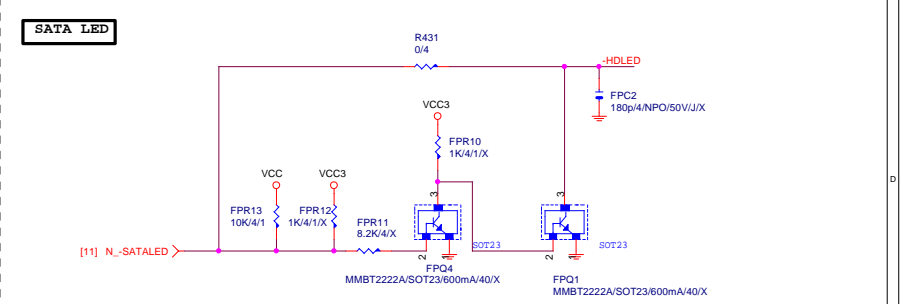
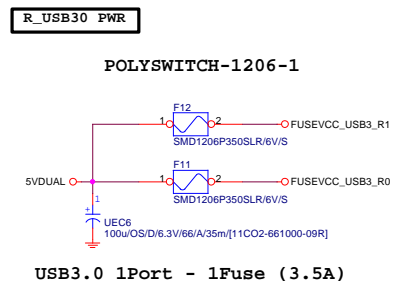
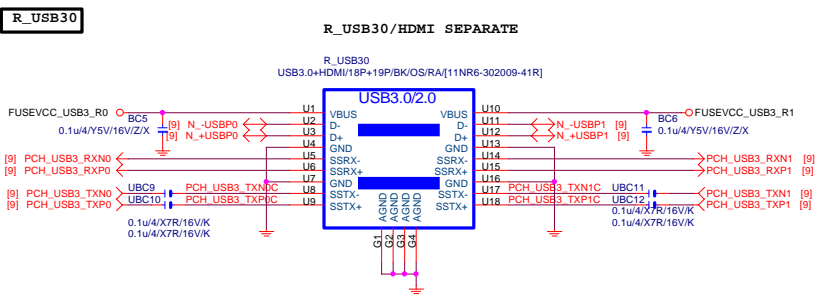


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DUAL BIOS

GA-H81M-S2PT

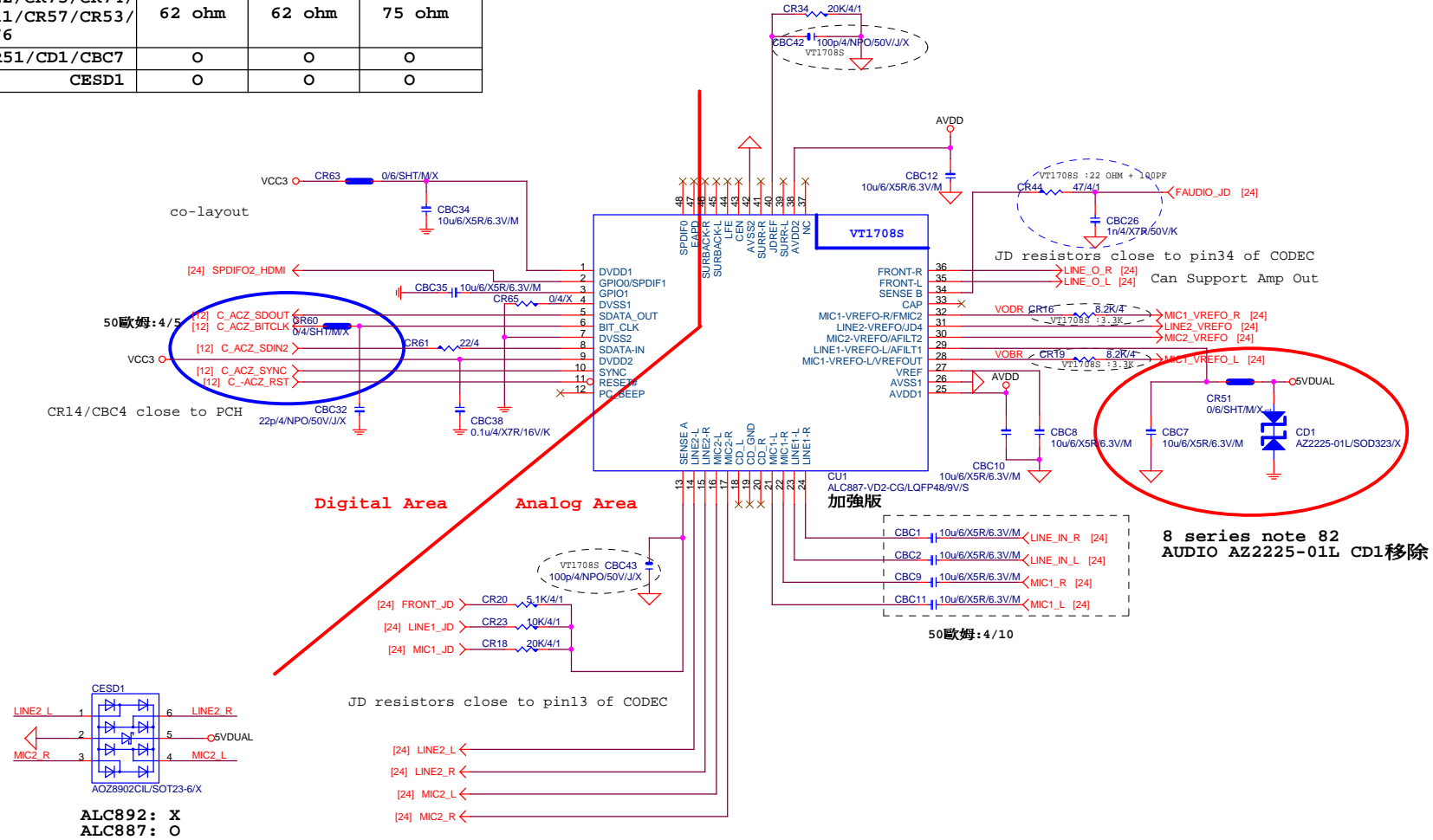
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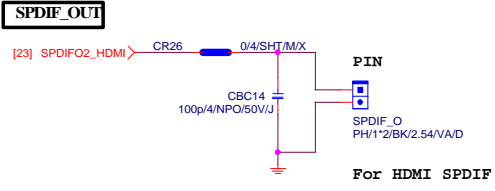
Gigabyte Technology	
FP_F_USB,USB PWR,SPKR,SATA LED	
GA-H81M-S2PT	
Size Custom	Document Number
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AZALIA CODEC **ALC892/ALC887-VD2/VT1708-CE Colay**

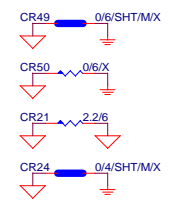
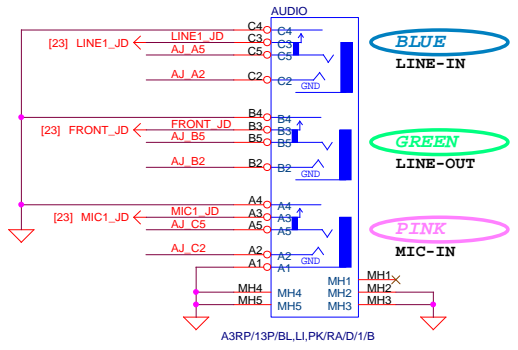
	ALC892	ALC887-VD2	VT1708S-CE
CR44/CBC26	47ohm+1nF	47ohm+1nF	22ohm+100P
CBC42/CBC43	X	X	100P/4
CR6/CR7/CR58/CR54/ CR67/CR68/CR69/CR70	22K/4	22K/4	10K/4/1
CR5/CR8/CR1/CR14/ CR17/CR22/CR73/CR74/ CR13/CR11/CR57/CR53/ CR75/CR76	62 ohm	62 ohm	75 ohm
CR51/CD1/CBC7	O	O	O
CESD1	O	O	O



ALC892: X
ALC887: O



SPDIF_OUT

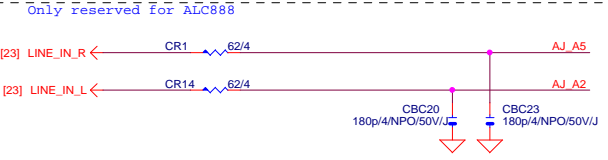


LINE-OUT

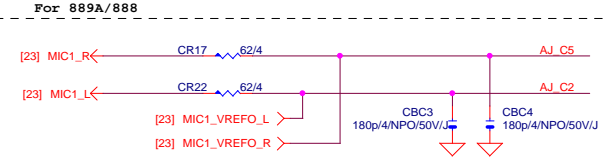


LINE-IN

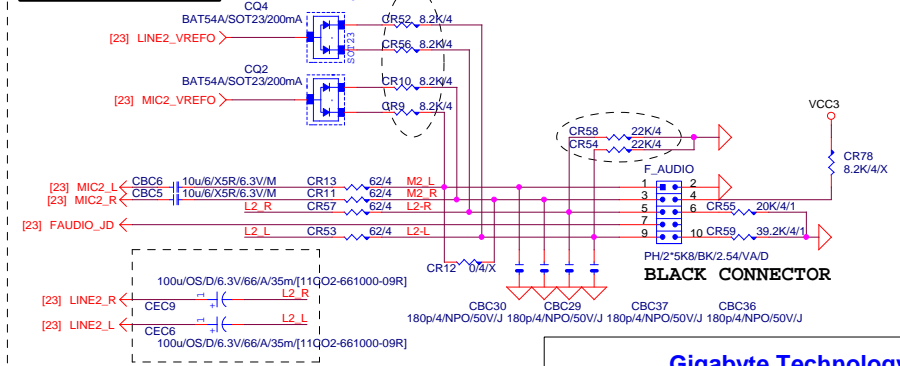
Verify MIC function in LINE-in



MIC-IN

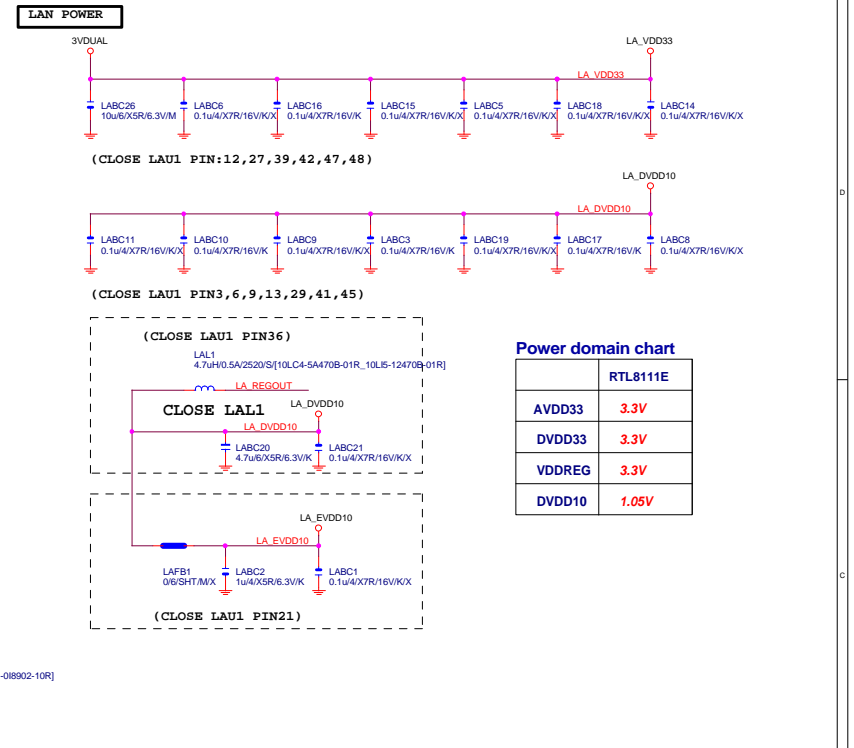
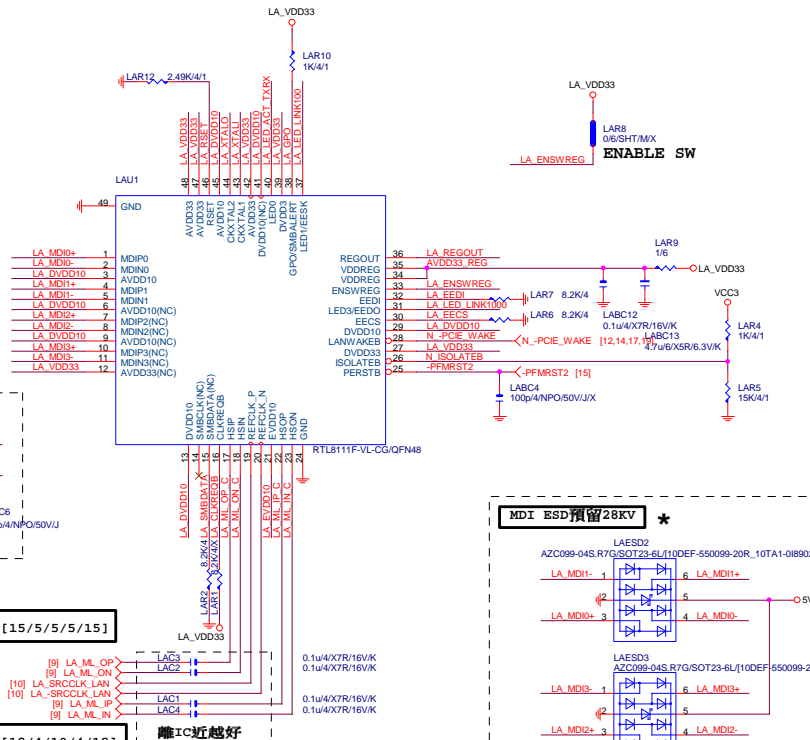


AZALIA FRONT PANEL



Gigabyte Technology			
AUDIO JACK			
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LAN:RTL8111F/VB/VL



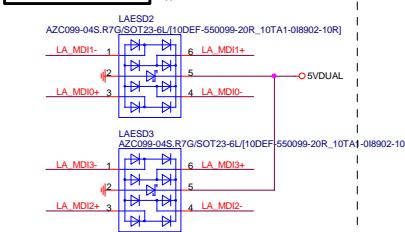
Power domain chart

	RTL8111E
AVDD33	3.3V
DVDD33	3.3V
VDDREG	3.3V
DVDD10	1.05V

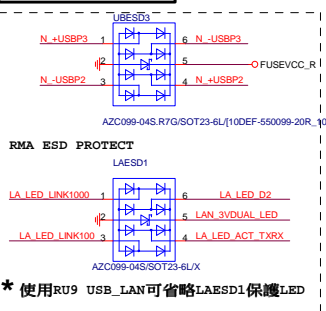
LA_ML-->80歐姆:[15/5/5/5/15]

SRCCLK-->50歐姆:[18/4/10/4/18]

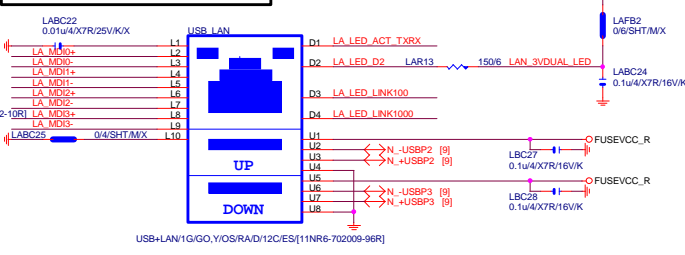
MDI ESD預留28KV *



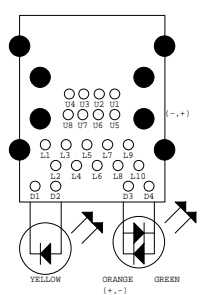
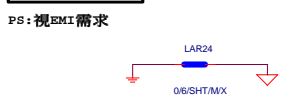
USB LAN CONNECTOR



LA_MDI-->100歐姆:[20/4/8/4/20]



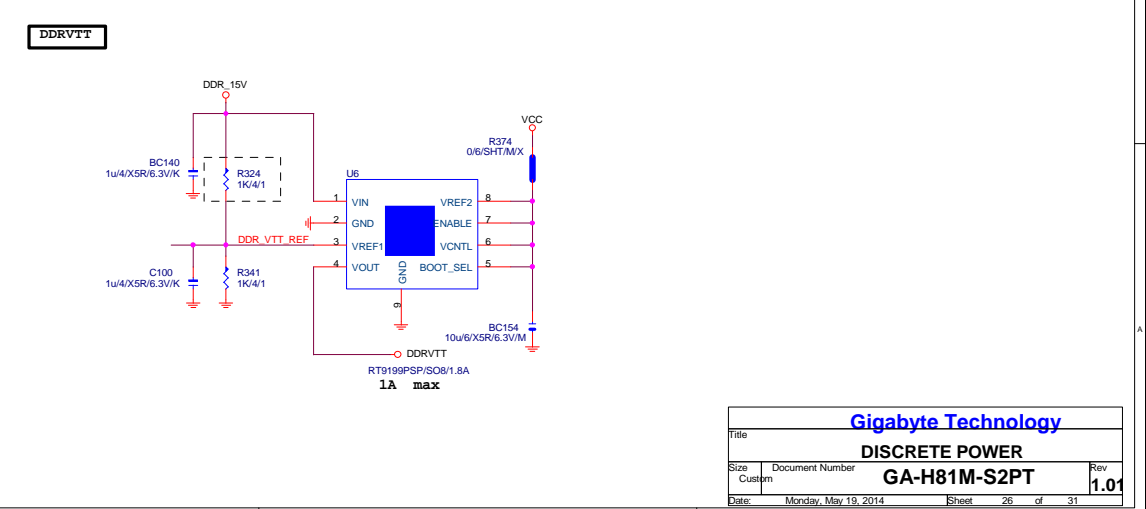
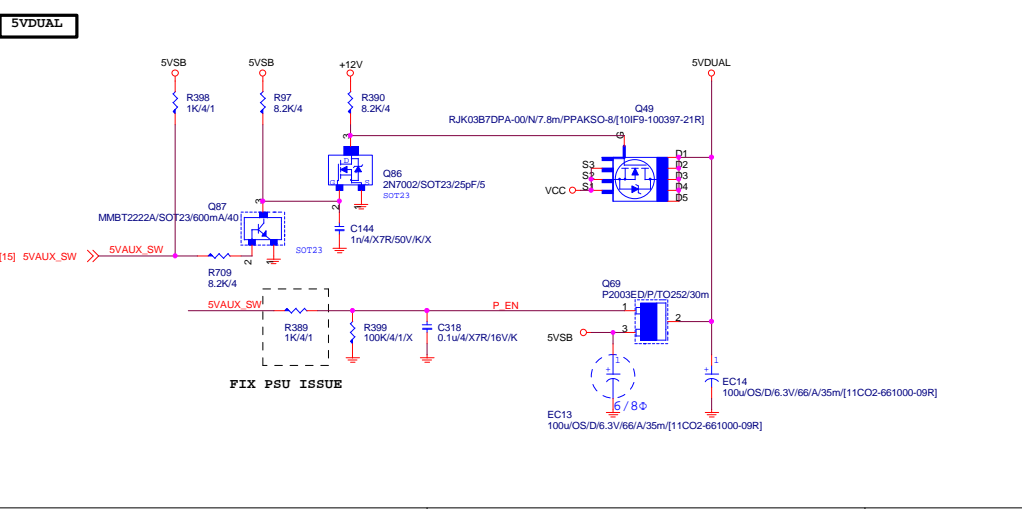
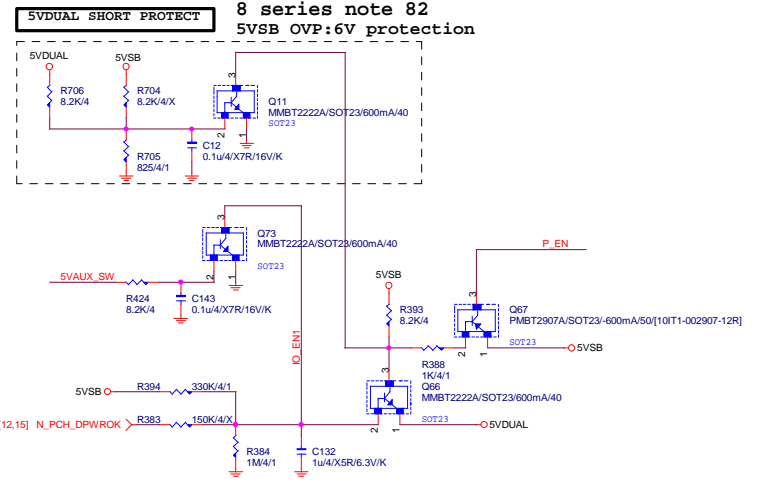
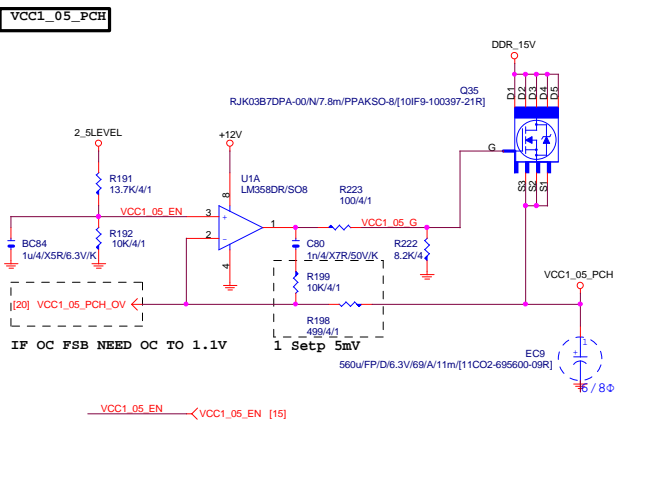
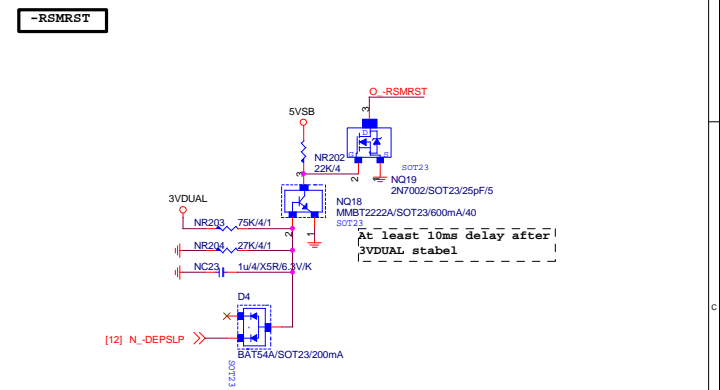
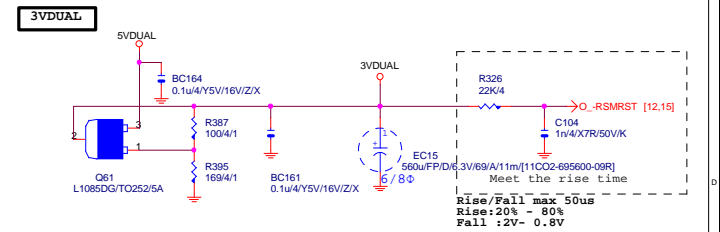
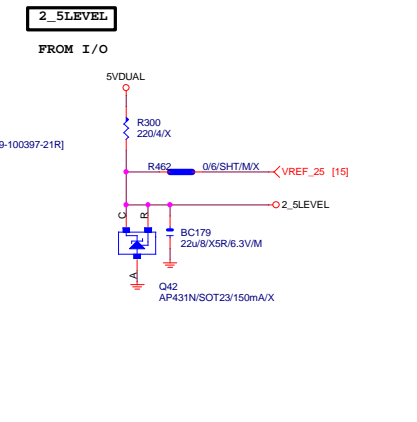
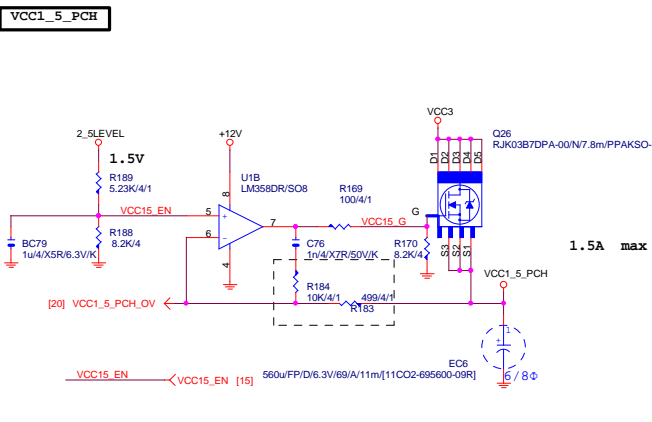
EMI SHORT PAD



注意:USB PORT(目前:暫代6,7PORT)
USB-->90歐姆:[15/4.5/7.5/4.5/15]

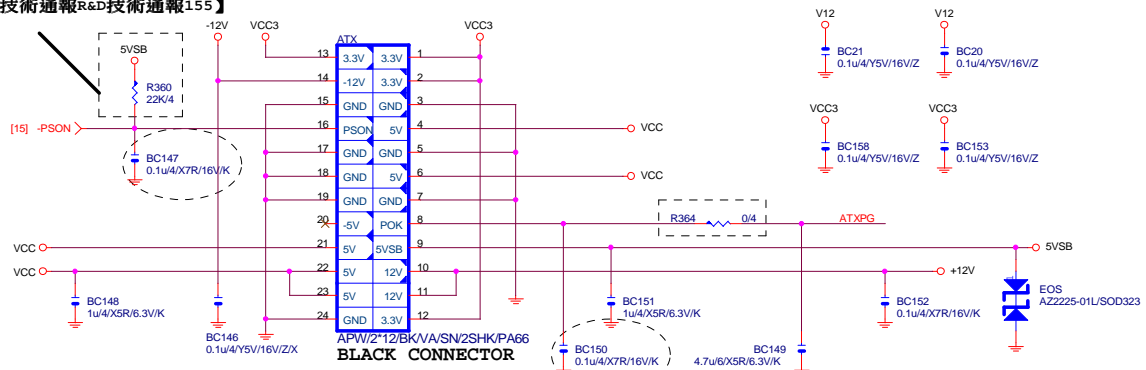
BOM NOTICE *

料號	規格	廠商
11NR6-702009-96R	1G LAN (12core)	UDE(RU9 ESD+)
[LED獨立走線,可省略外加AZC099料件LAESD1]		
1. 9KV ESD BOM: USB LAN (RU9):11NR6-702009-96R		
2. 28KV ESD BOM: USB LAN (RU9):11NR6-702009-96R		
LAESD2,LAESD3:上件AZC398-04S		



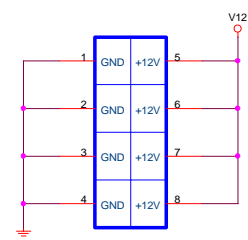
ATXX24 POWER CONNECTOR

【技術通報R&D技術通報155】



APW12*12/BKVA/SN2SHK/PA66
BLACK CONNECTOR

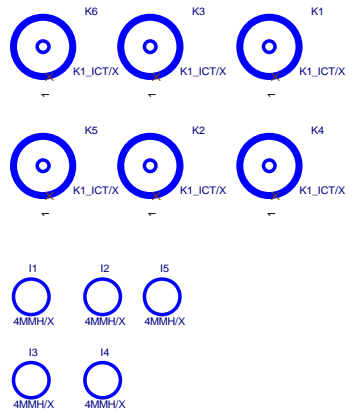
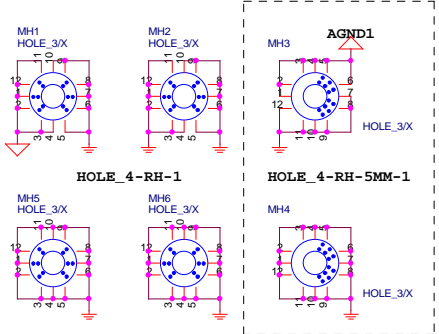
ATXX4 POWER CONNECTOR



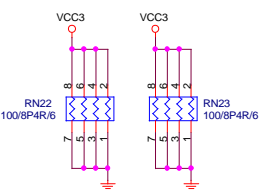
ATX_12V_2X4
APW12*4/BK/OC/P4.2/VA/SN/OH:Location ATX_12V_2X4

BLACK CONNECTOR

MB LOCATION

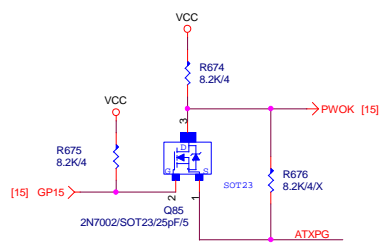


FIX PWR MINMUN LOAD



PWOK PATCH

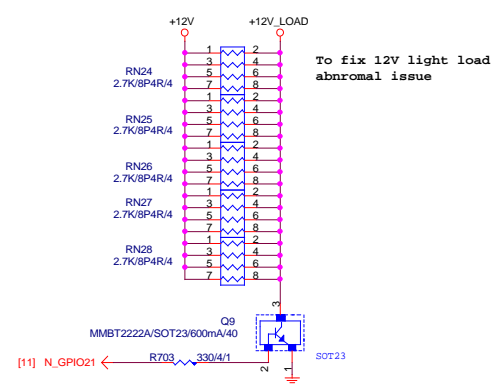
【技術通報R&D技術通報154】



CLK GEN

N/A

【技術通報R&D技術通報153】



To fix 12V light load abnormal issue

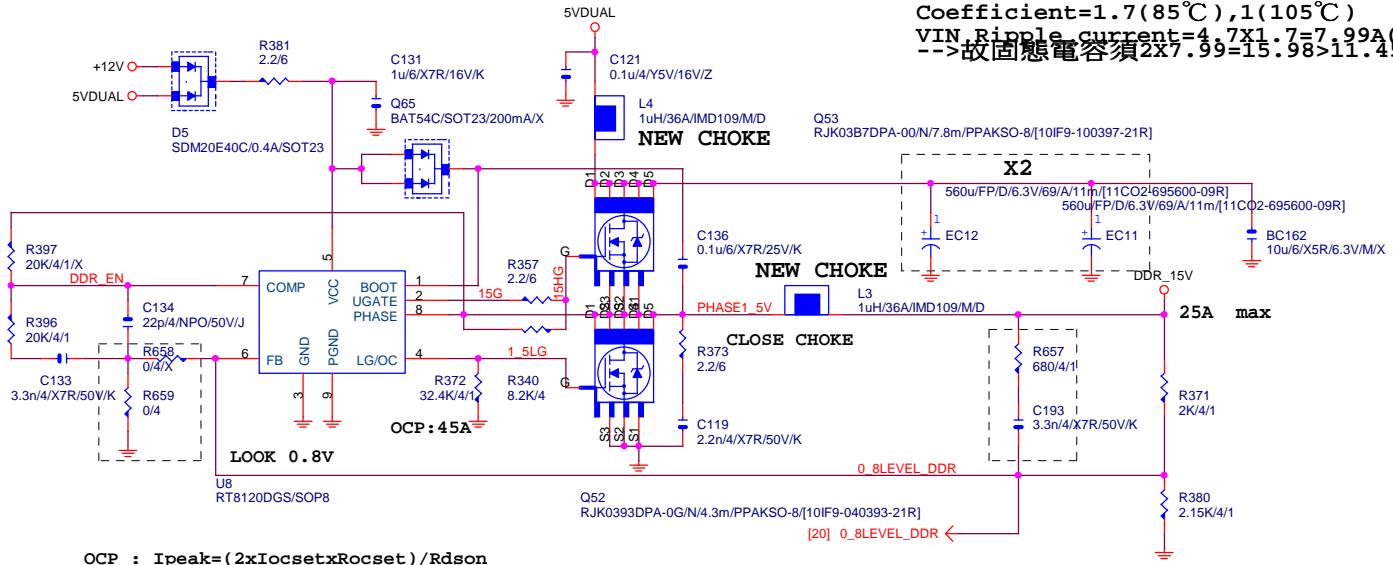
Gigabyte Technology

ATX CONNECTOR

Size Custom Document Number GA-H81M-S2PT Rev 1.01

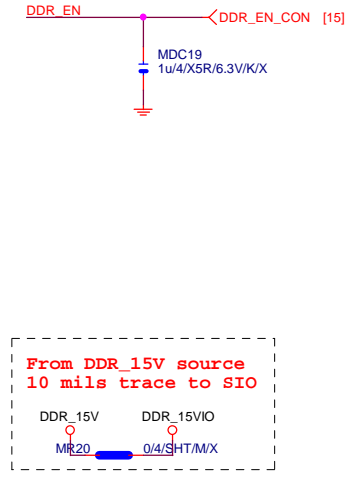
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DDR15V



VIN=5V, VOUT=1.5V, IOU=25A, PHASE=1
 IRMS=11.45A
 560u/FP/D/6.3V/68/8m RIPPLE CURRENT=4.7A
 Coefficient=1.7(85°C), 1(105°C)
 VIN Ripple current=4.7x1.7=7.99A(85°C)
 --->故固態電容須2x7.99=15.98>11.45A

PWR SEQ



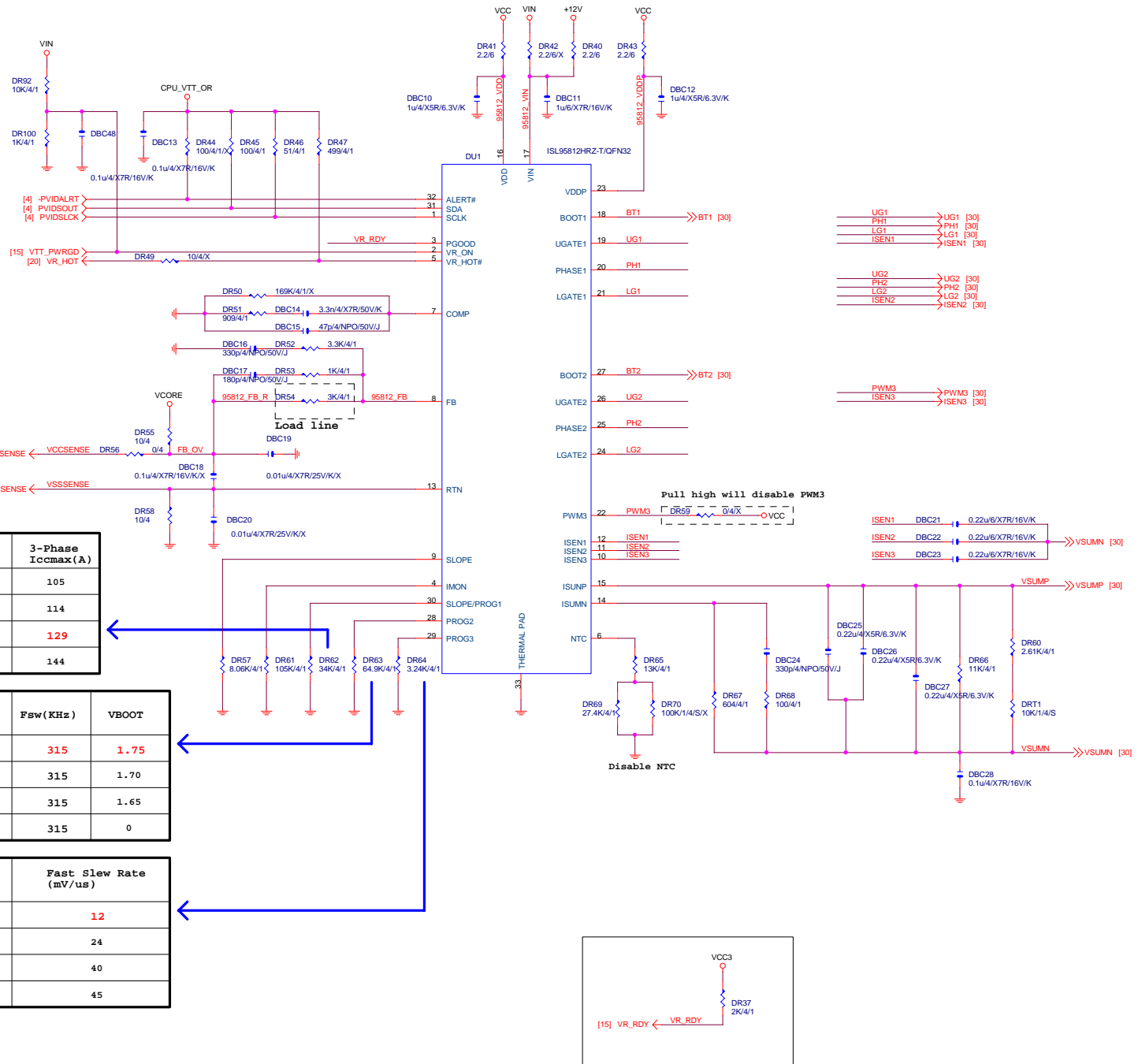
VCC1_05_ME

Z81 N/A

VCC3_ME

H81 N/A

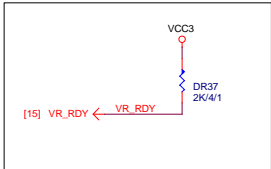
Gigabyte Technology		
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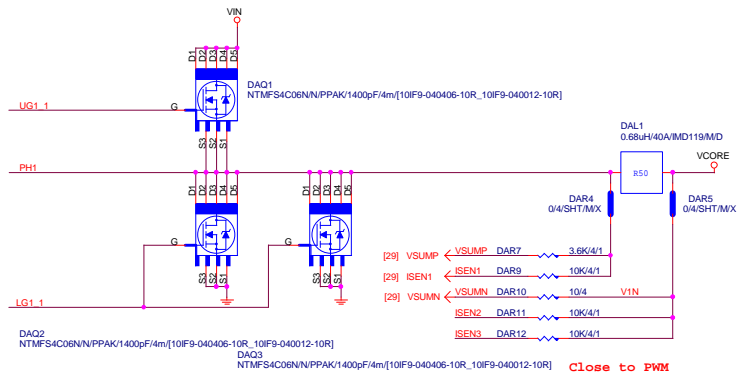
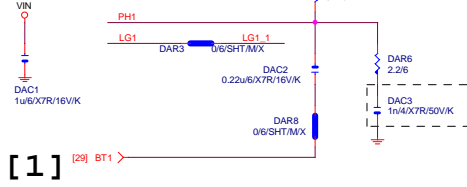
R_PROG1 (Kohm)	3-Phase Iccmax (A)
24.9	105
28.7	114
34.0	129
42.2	144

R_PROG2 (Kohm)	Fsw (KHz)	VBOOT
64.9	315	1.75
73.2	315	1.70
80.6	315	1.65
90.9	315	0

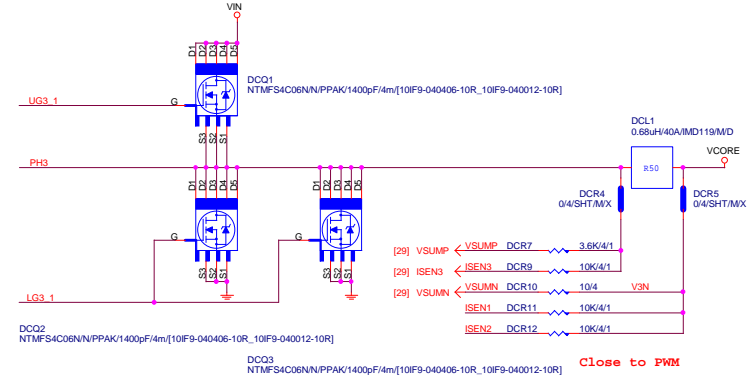
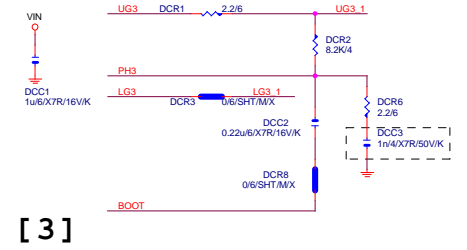
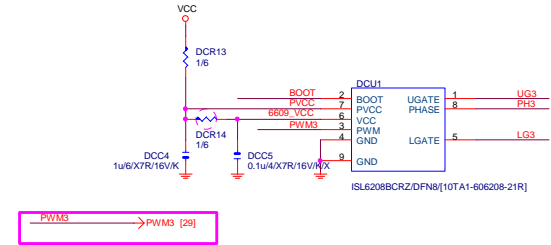
R_PROG3 (Kohm)	Fast Slew Rate (mV/us)
3.24	12
5.76	24
9.31	40
13.3	45



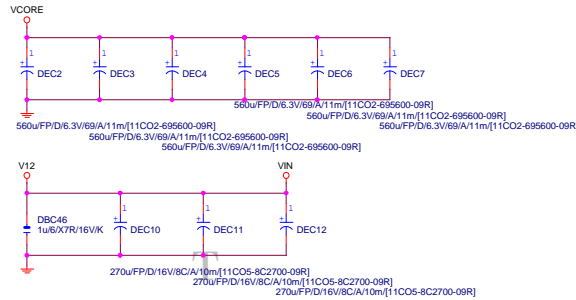
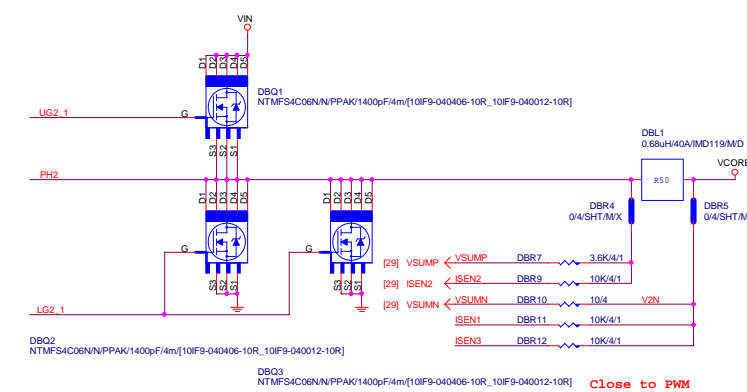
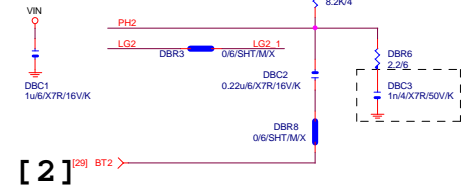
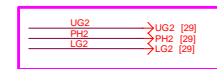
PHASE 1



PHASE 3



PHASE 2

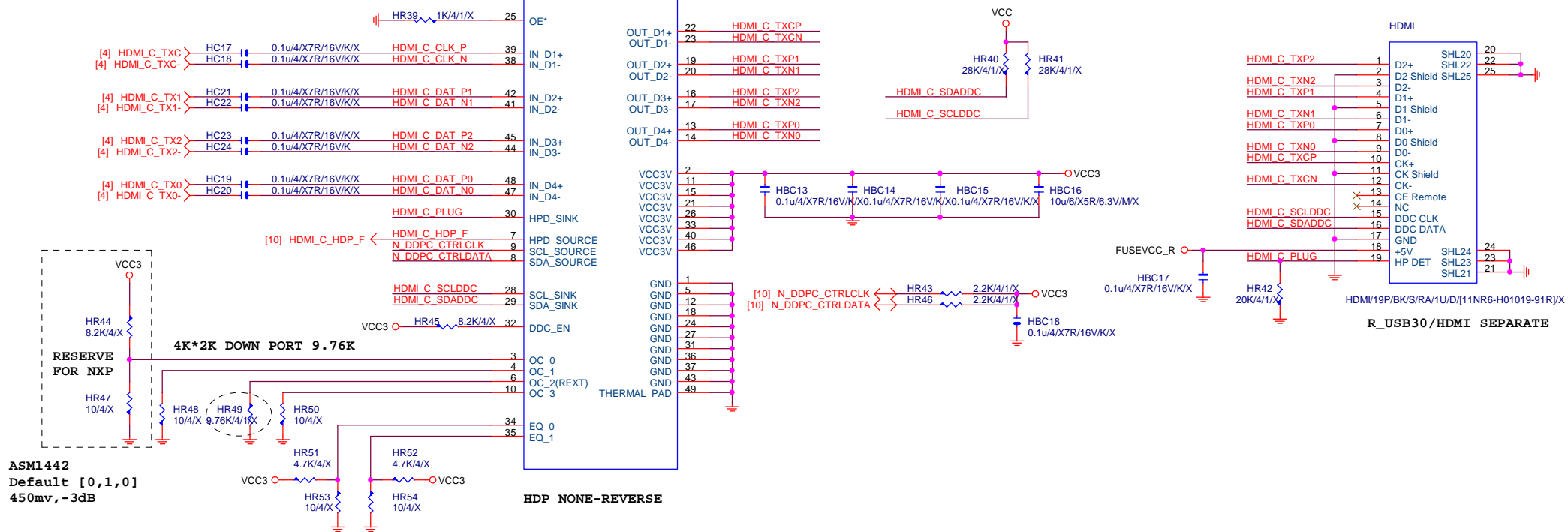


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HDMI LEVEL SHIFT

GA-H81M-S2P R1.0 N/A

HU1
PTN3360DBS/HVQFN48/[10TA1-053360-20R]X



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