

Model Name: GA-H110M-H DDR3

SHEET TITLE

01	COVER SHEET
02	BOM & PCB MODIFY HISTORY
03	BLOCK DIAGRAM
04	CPU_LGA1151-A
05	CPU_LGA1151-B-DDR4
06	CPU_LGA1151-C
07	CPU_LGA1151-D
08	DDR3 CHANNEL A
09	DDR3 CHANNEL B
10	PCH_CLK BUFFER
11	PCH_DMI,USB,PCIE
12	PCH_MISC
13	PCH SATA,PCIE,SATA_EXPRESS
14	PCH_PWR,GND
15	Dual BIOS
16	ITE 8628 LPC IO
17	HWM
18	FAN CTRL--SIO
19	PCI EXPRESS*16 SLOT
20	PCI EXPRESS*1 SLOT
21	SATA
22	ISL95858_856 PWM
23	ISL95858_856 MOS_VCORE
24	ISL95858_856 MOS_VCCGT
25	VCCSA_VCCIO_VCCPLL
26	RT8237_DDR_VDDQ
27	RT8237_PCH_VCC1_0_PCH

rev 1.0

SHEET TITLE

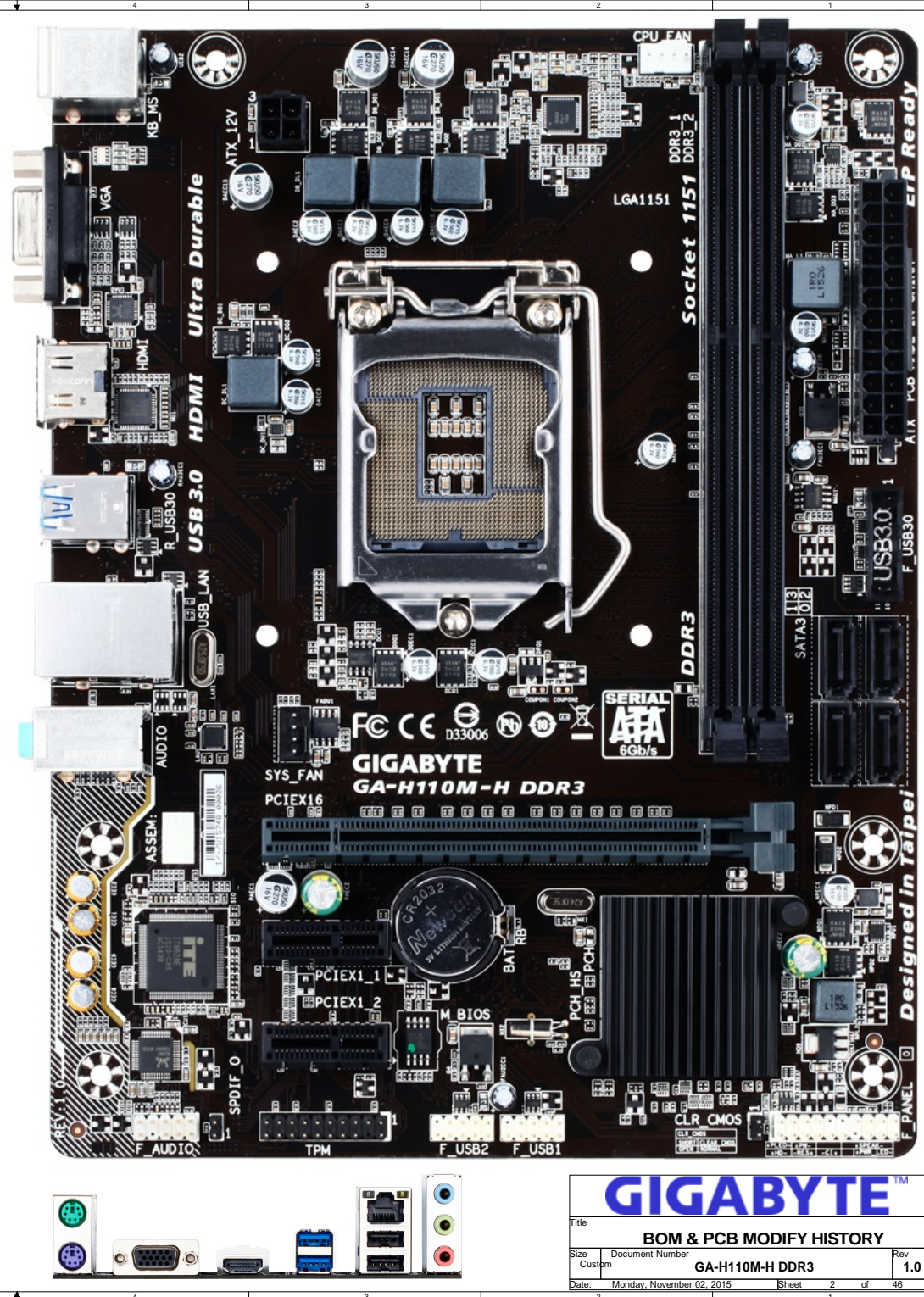
28	DISCRETE POWER
29	ATX POWER , A_-PROCHOT
30	KB_MS_USB
31	RTD2168 - DP to VGA - IC
32	RTD2168 - DP to VGA - Conn
33	R_USB30
34	REALTEK - RTL8111G
35	USB20_LAN CONNECTOR-RTL8111G
36	Realtek ALC887
37	REAR AUDIO JACK
38	F_USB30
39	F_USB20
40	COM , LPT , TPM
41	F_PANEL
42	HDMI
43	EMI/ESD
44	POWER MAP
45	TABLE LIST
46	NTC MAP
47	
48	
49	
50	
51	

Gigabyte Technology

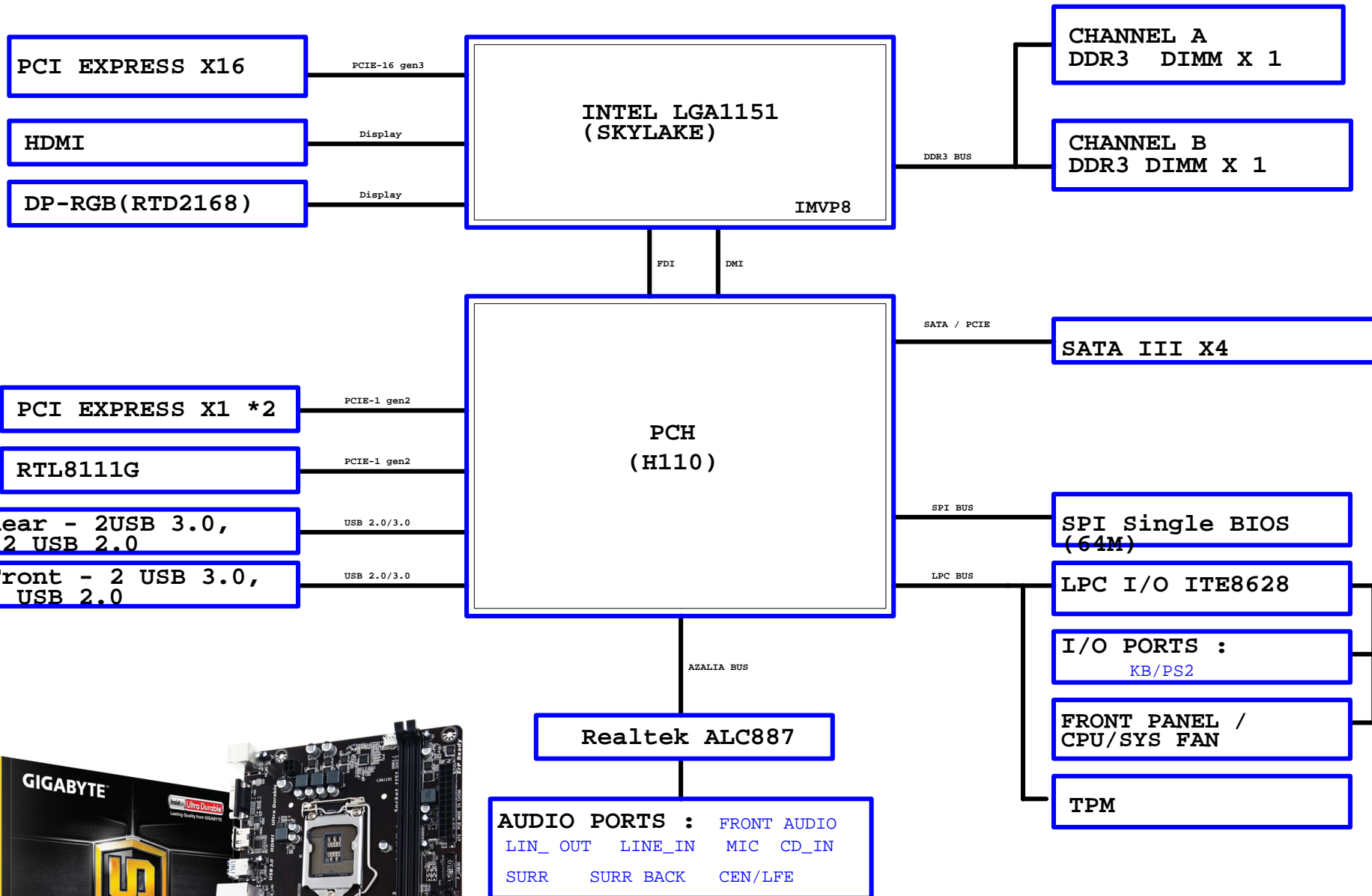
Title			
Cover Sheet			
Size	Document Number	Rev	
Custom	GA-H110M-H DDR3	1.0	
Date:	Monday, November 02, 2015	Sheet	1 of 46

rev1.0

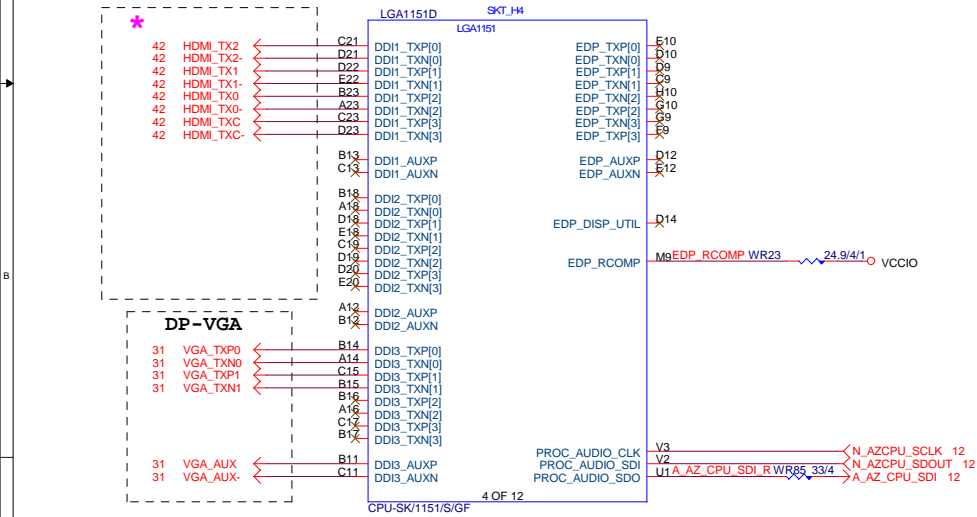
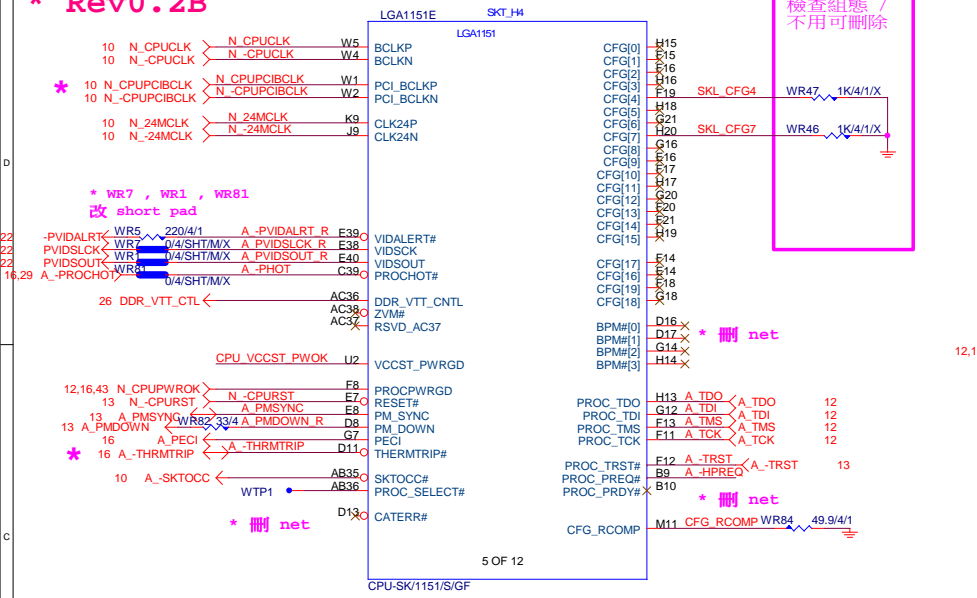
2015/09/15

[illegible]

BLOCK DIAGRAM



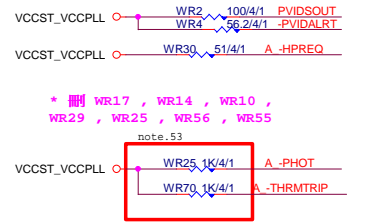
*** Rev0.2B**



```
G-15u : (CPU-SK/1151/S/15)
10SC1-F01151-11R / 10SC1-F01151-12R
G-FL : (CPU-SK/1151/S/GF)
10SC1-F01151-21R / 10SC1-F01151-22R
```

```
4 layer HDMI/DP/eDP/=====4/4/4//15
6 layer HDMI/DP/eDP/=====4/5.5/4//15
```

Impedance=85 +- 15%



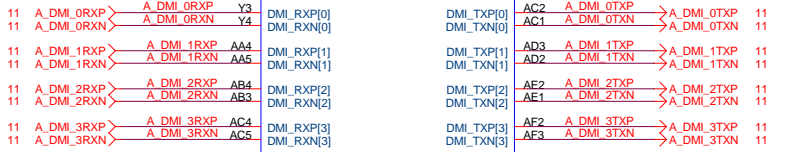
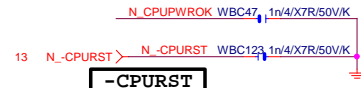
* 刪 WR91

12,16 N_PCH_VRMPWRGD

CPU_VCCST_PWOK

WR34 6.04K/4 WR3 2.8K/4

* 刪 net_N_CPU_VCCST_PWOK



```

PA EXP TXPI[0..15]    >> PA_EXP_TXPI[0..15]  19
PA EXP TXNI[0..15]    >> PA_EXP_TXNI[0..15]  19
PA EXP RXPI[0..15]    >> PA_EXP_RXPI[0..15]  19
PA EXP RXNI[0..15]    >> PA_EXP_RXNI[0..15]  19

```

```
4 layer PEG/DMI=====4/4/4//15
6 layer PEG/DMI=====4/5.5/4//15
```

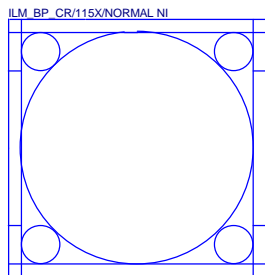
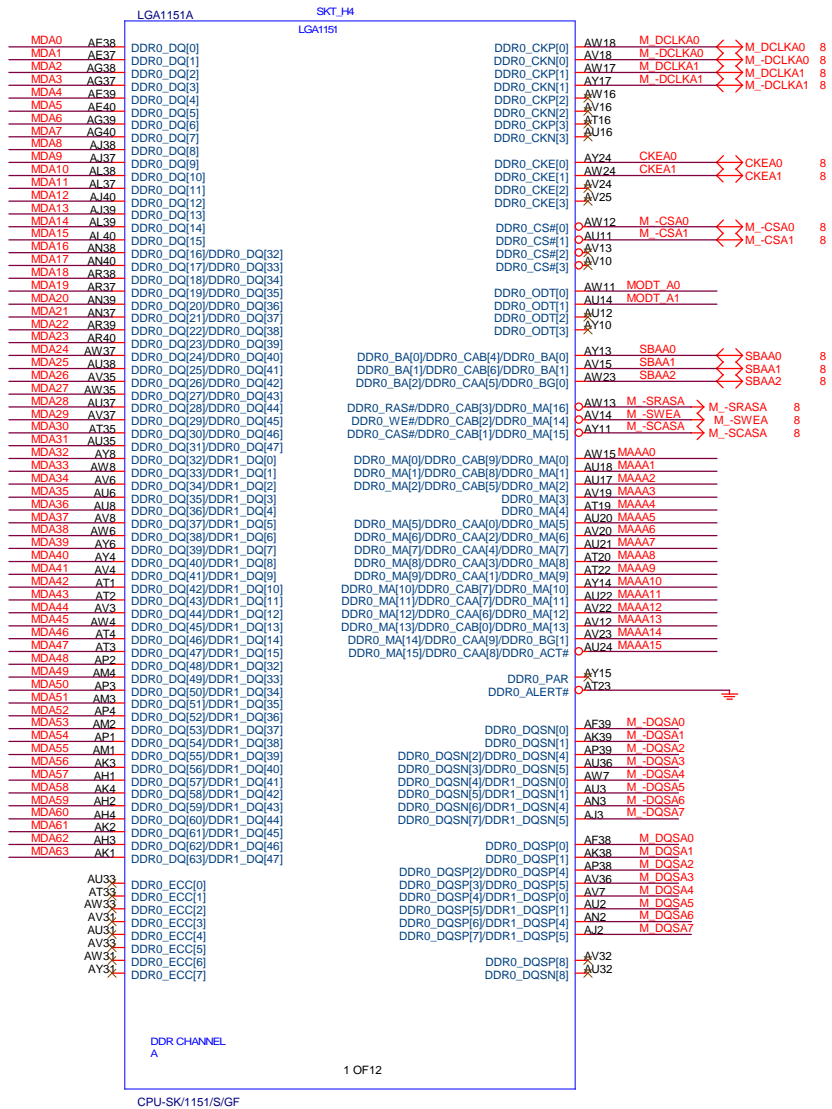
Impedance=85 +- 15%

```
W=12 mil out of CPU
S=15 mil out of CPU
```

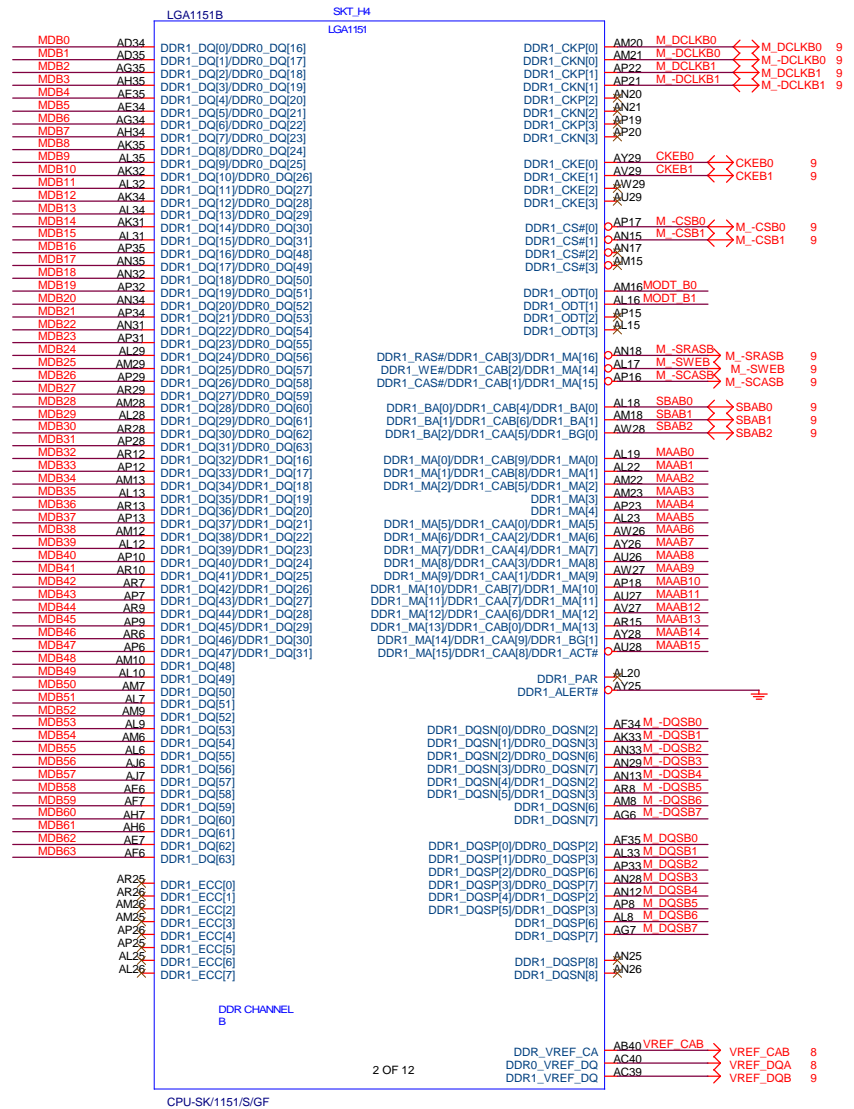
FOR BIOS			
Bifurcation Config.	Signals Lanes		
	CFG[6]	CFG[5]	CFG[2]
1x16	1	1	1
1x16 Reversed	1	1	0
2x8	1	0	1
2x8 Reversed	1	0	0
1x8+2x4	0	0	1
1x8+2x4 Reversed	0	0	0

<i>Gigabyte Technology</i>			
Title			
CPU LGA1151-A			
Size Custom	Document Number		Rev
	GA-H110M-H DDR3		1.0
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* 改DDR4 net



Need check the new CPU ME



8 MODT A[0..1] \longleftrightarrow MODT A[0..1]

9 MODT B[0..1] \leftrightarrow MODT B[0..1]

8 MDA[0..63] \longleftrightarrow MDA[0..63]

9 $\text{MDB}[0..63] \longleftrightarrow \text{MDB}[0..63]$



8 M-DQSA[0..7] ↔ M-DQSA[0..7]

8 MAAA[0..15] \longleftrightarrow MAAA[0..15]

9 MAAB[0..15] \longleftrightarrow MAABI[0..15]

9. M DQSB[0..7] \longleftrightarrow M DQSB[0..7]

9 M -DQSB[0..7] \longleftrightarrow M -DQSB[0..7]

DDR CHANNEL
B

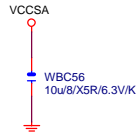
2 OF 12

Gigabyte Technology

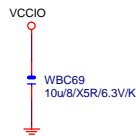
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CPU LGA1151-B			
Size Custom	Document Number		Rev
	GA-H110M-H DDR3		1.0
Date:	Monday, November 02, 2015	Sheet	5 of 46

* 刪 WBC50 電容

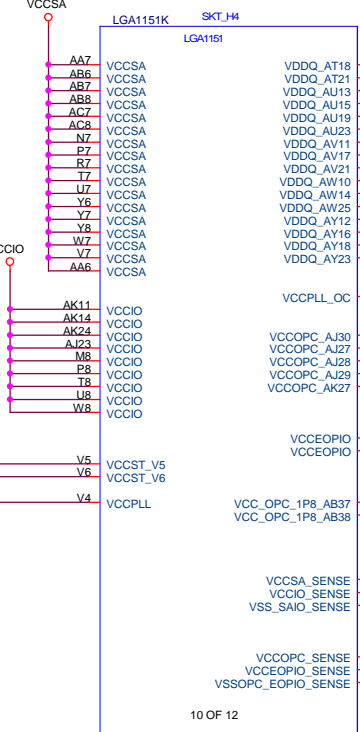
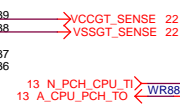
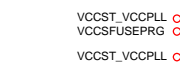
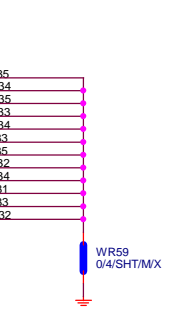
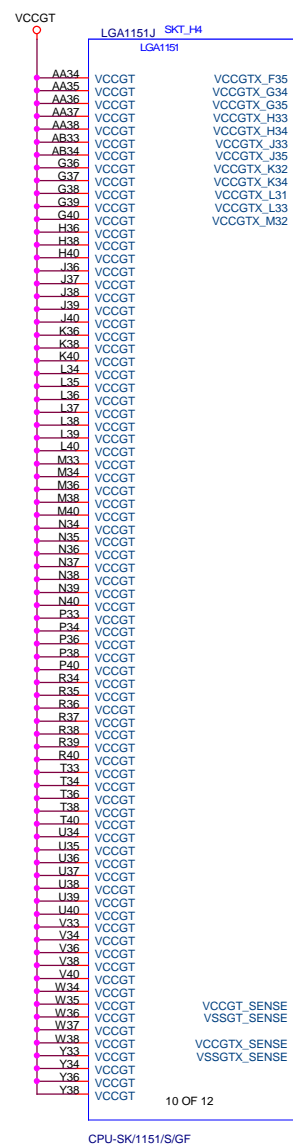
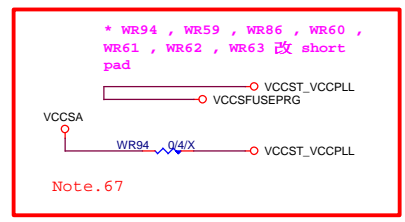
* _WBC51 , _WBC52
VDDQ 改 VCCSA



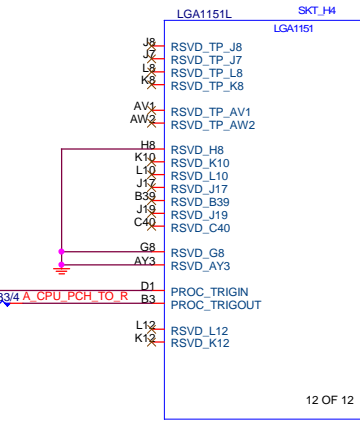
* 刪 WBC124 , WBC125 , WBC126 , WBC127 電容



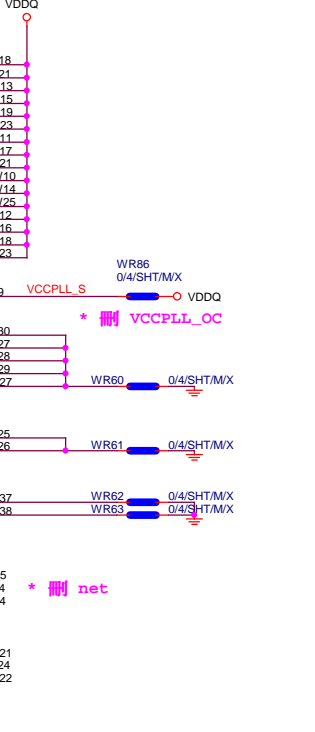
* 刪 VCCGT 電容



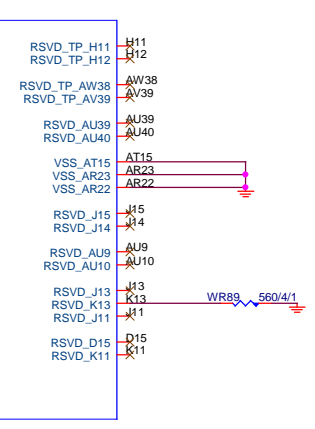
CPU-SK/1151/S/GF



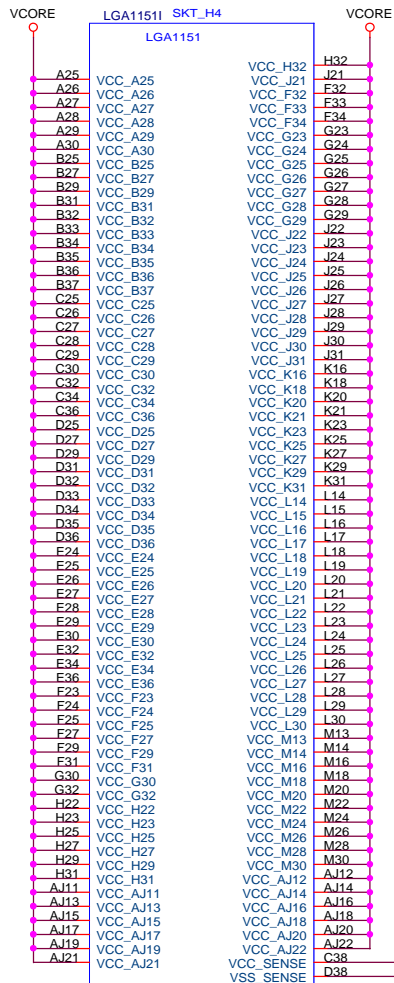
CPU-SK/1151/S/GF



CPU-SK/1151/S/GF



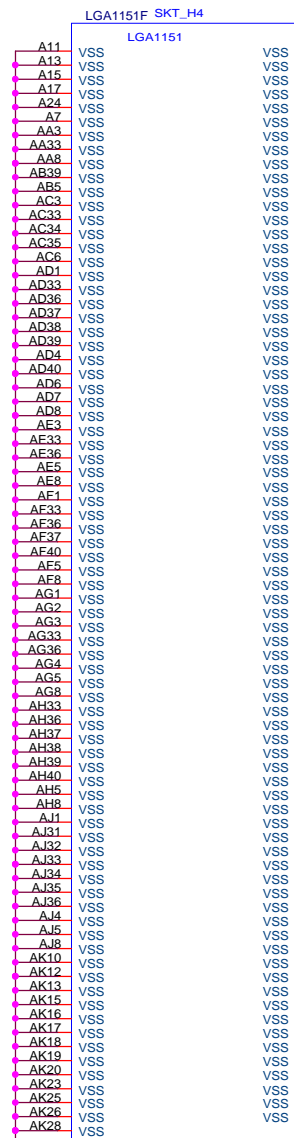
CPU-SK/1151/S/GF



9 OF 12

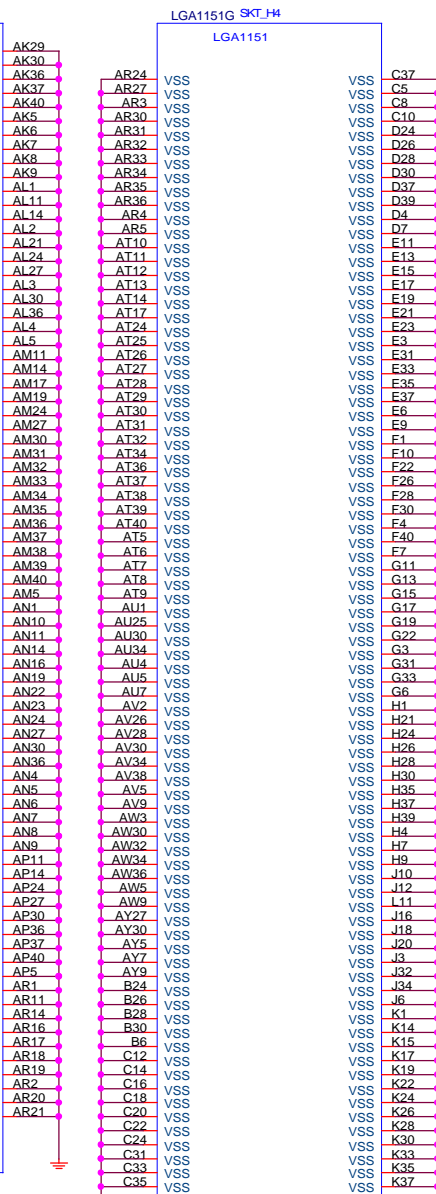
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* 刪 Vcore 電容



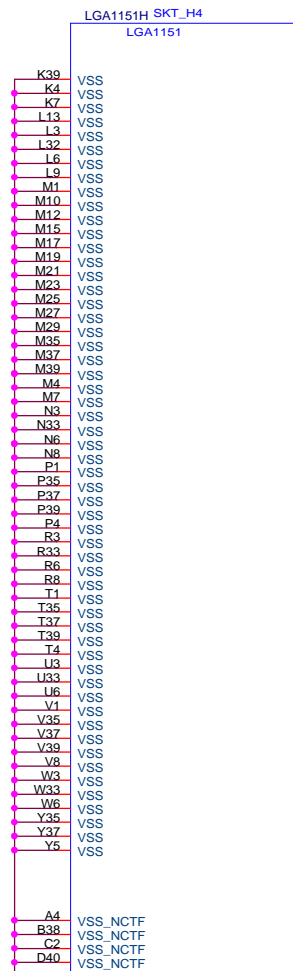
6 OF 12

CPU-SK/1151/S/GF



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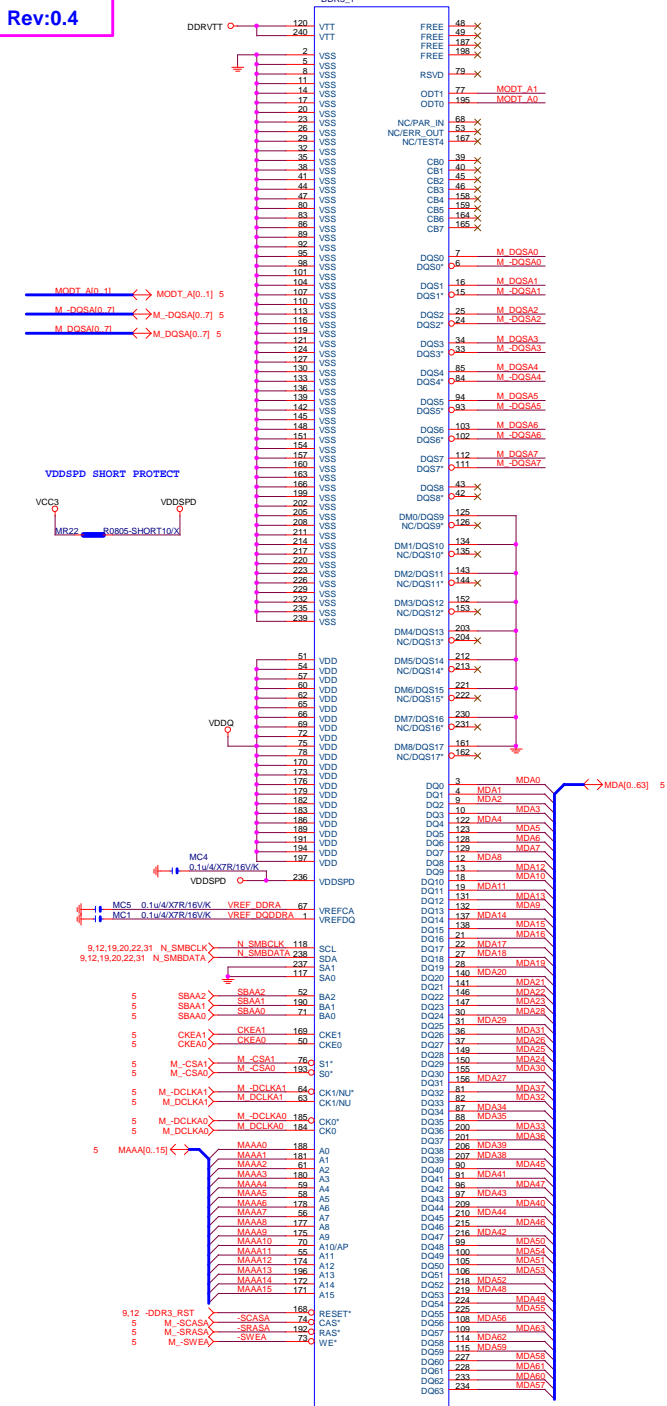
CPU-SK/1151/S/GF



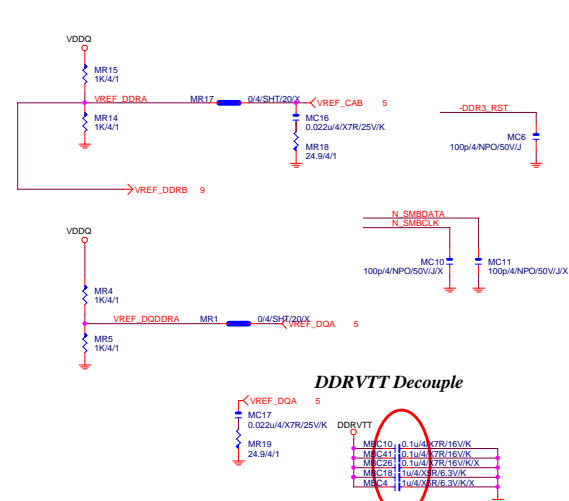
8 OF 12

CPU-SK/1151/S/GF

Rev:0.4

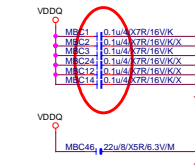


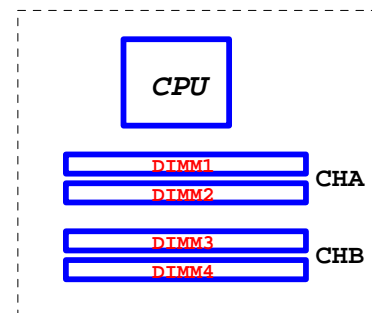
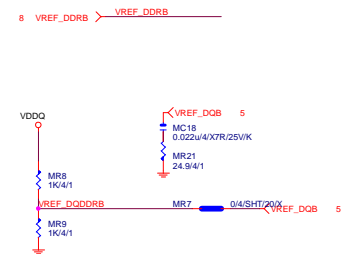
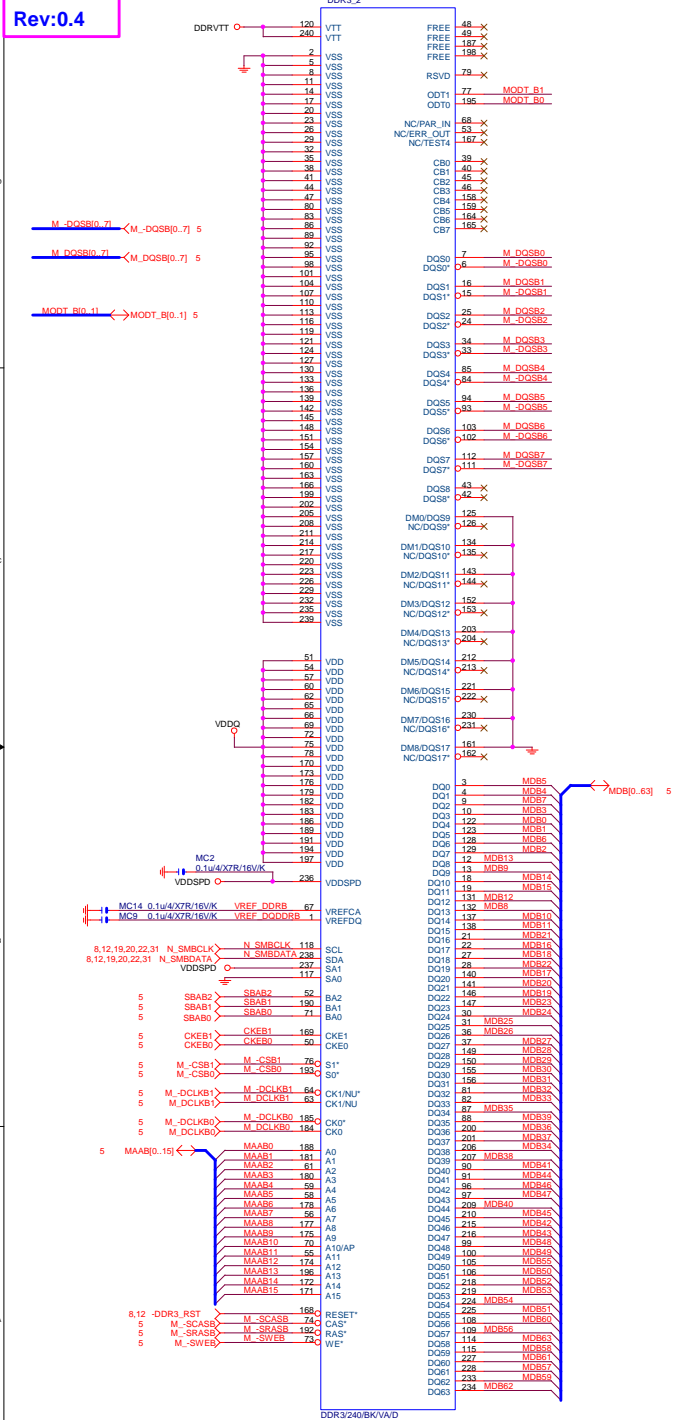
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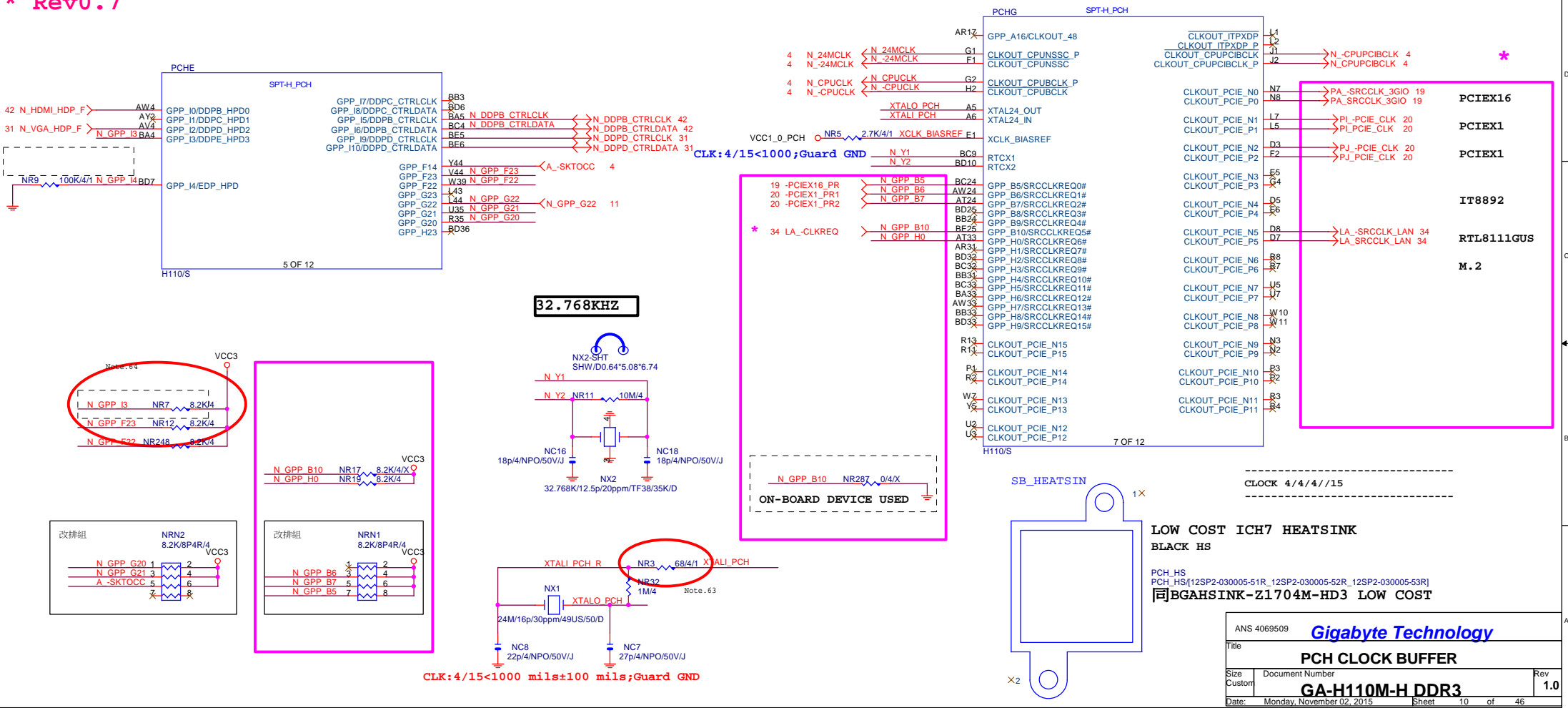
DDR TERMINATION CHANNEL A/B

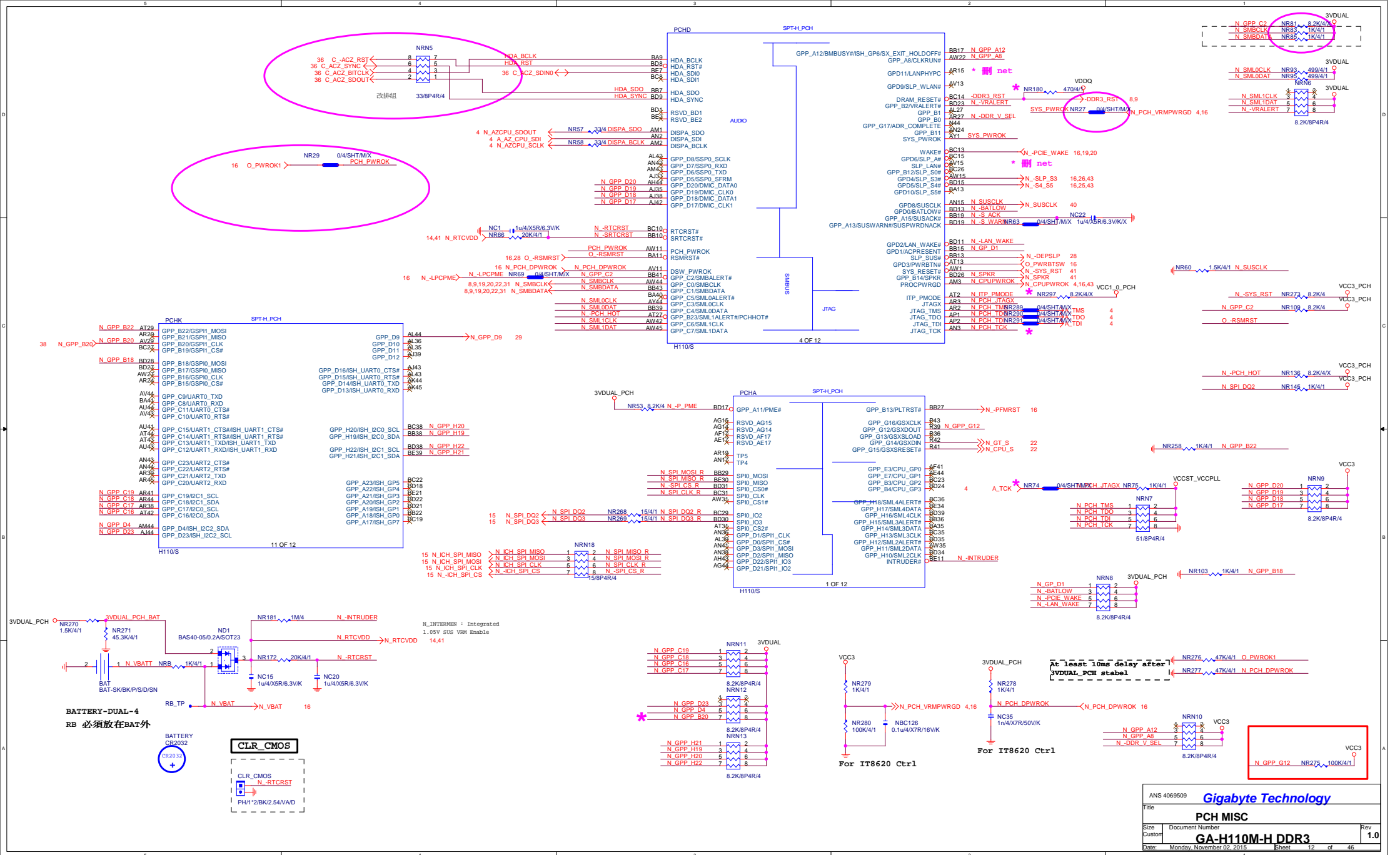
若Power source 端PWM IC
已有擺放，則可刪除

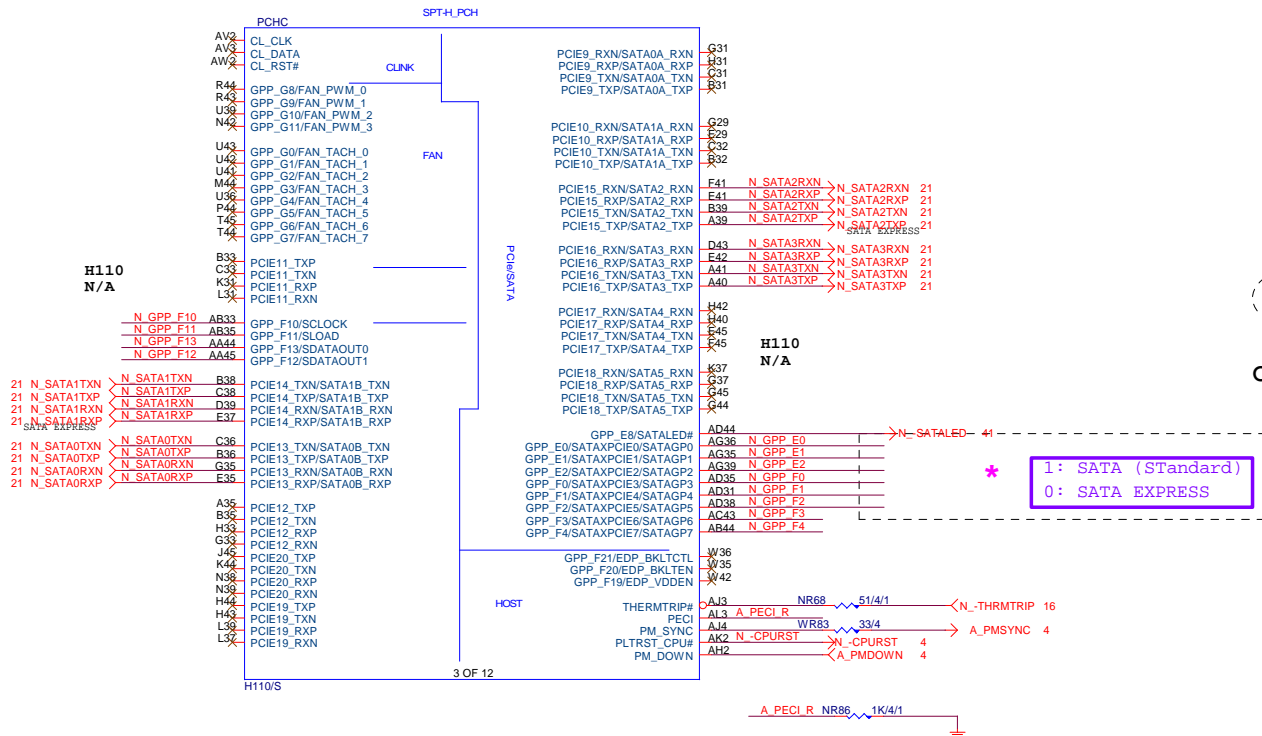




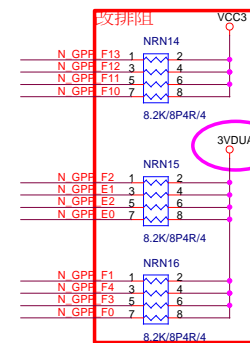
* Rev0.7

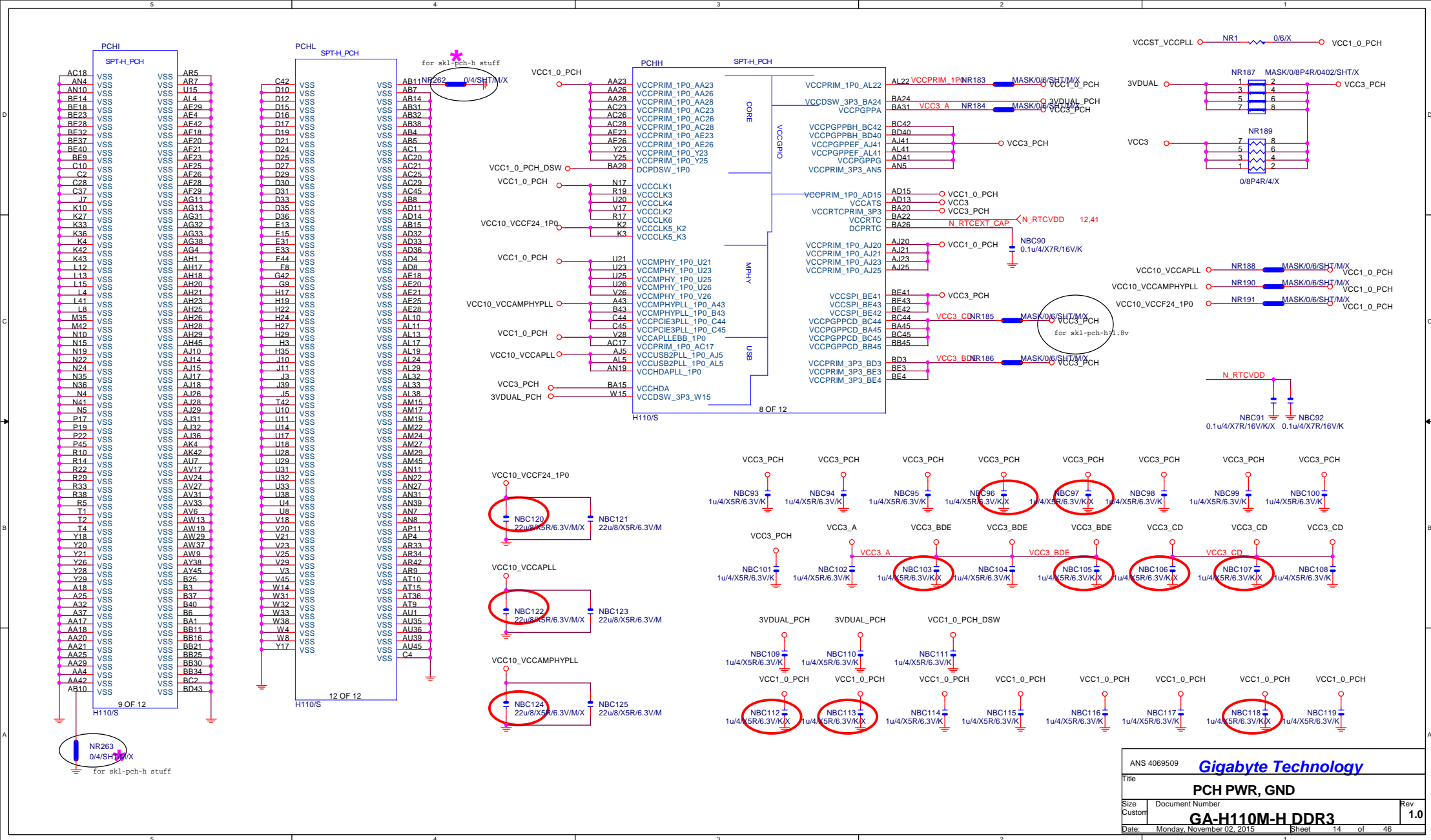






C1/D1 公版NC pin

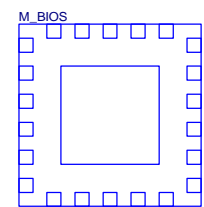
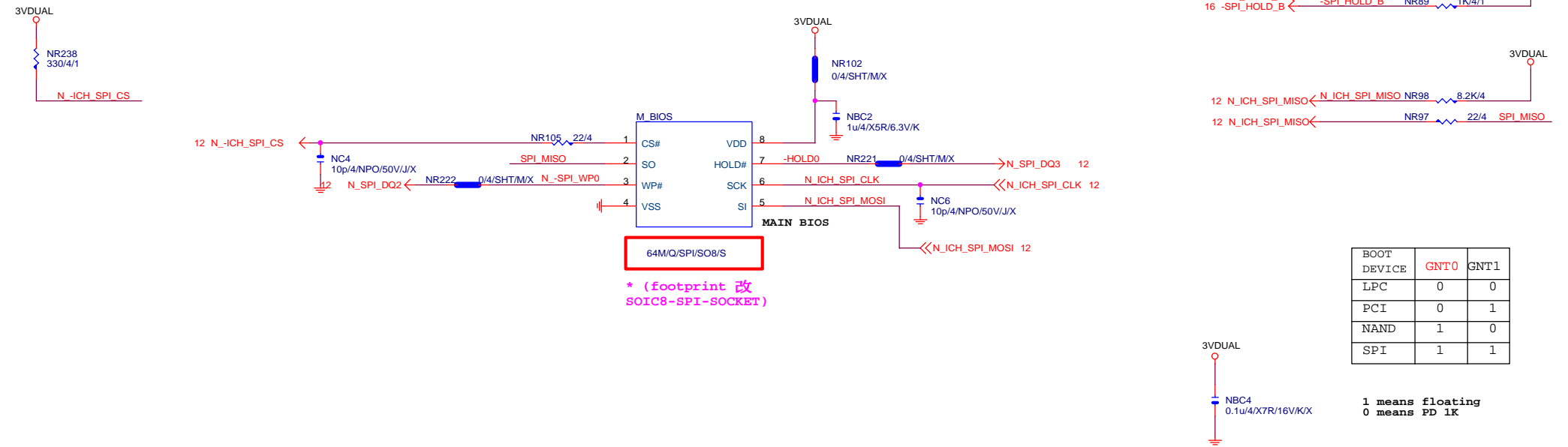




Rev 0.1

BIOS

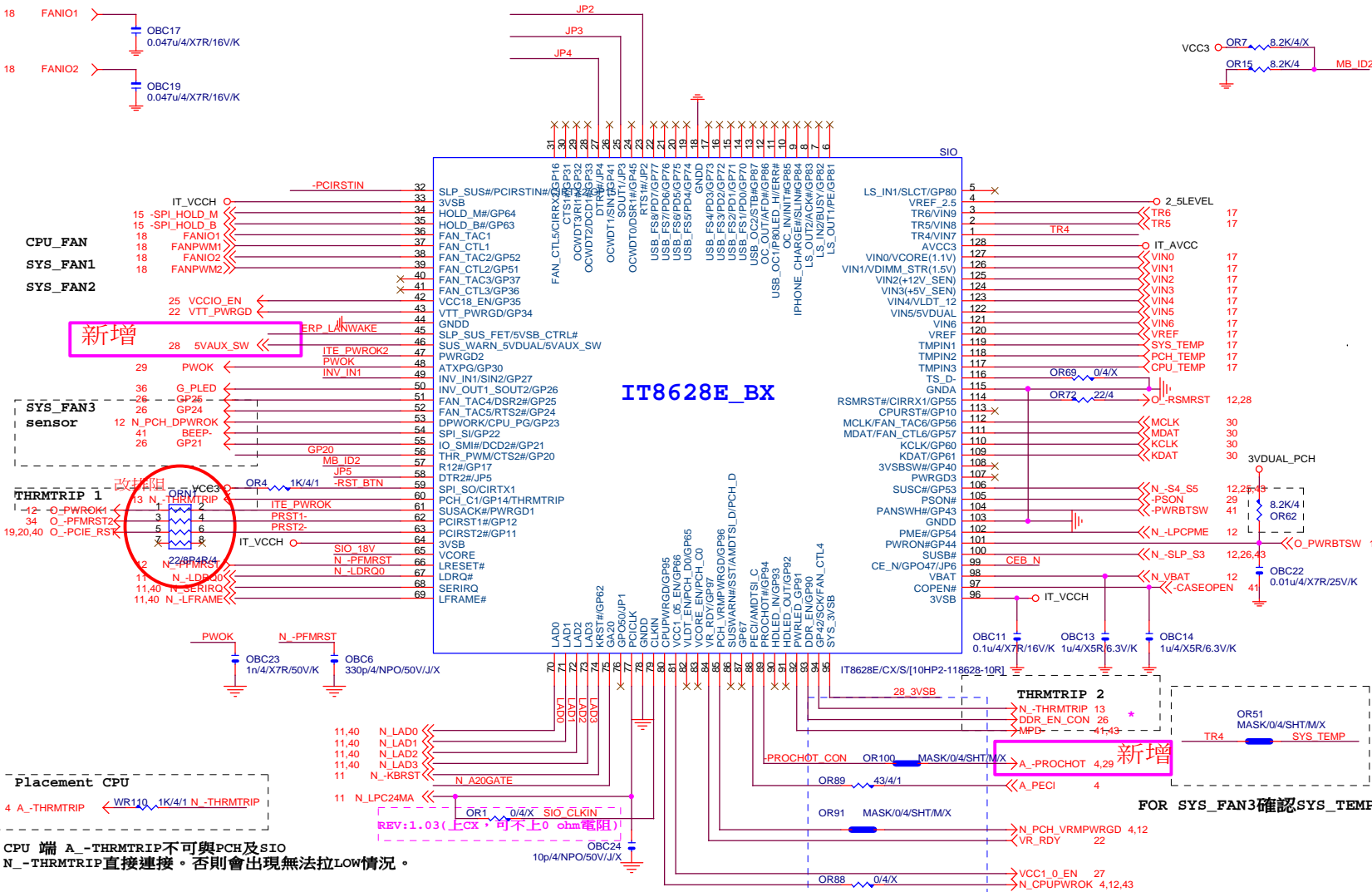
MOSI For DMI RX Termination Voltage



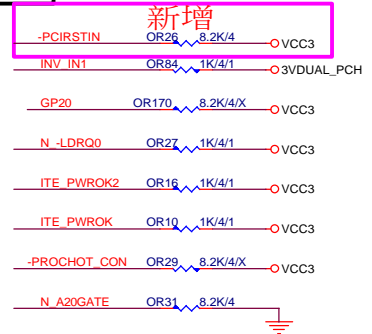
LCP/G-FL/1.27mm/200MIL/WHITE[10SL2-000008-31R]X

* 試産先上, PVT 移除

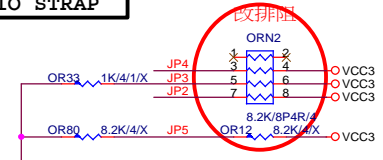
BIOS_PH



SIO PU



SIO STRAP

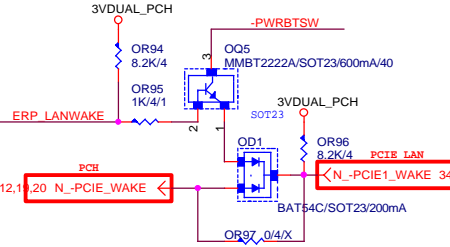


EUP control detect		
3VDUAL	OR47	100/4/1 28.3VSB

JP2	1	Disable WDT
JP2	0	Enable WDT to rest PWROK
JP3	0	SPI-Flash Disable
JP3	1	SPI-Flash Enable
JP4	1	k8 power sequency function is Disable
JP4	0	k8 power sequency function is Enable
JP5	1	anti-surge Disable
JP5	0	anti-surge Enable
JP3	1 1	The default value of EC Index 63h/6Bh/73h is 80h.
JP3	1 0	The default value of EC Index 63h/6Bh/73h is FFh
JP5	0 1	The default value of EC Index 63h/6Bh/73h is 00h.
JP5	0 0	The default value of EC Index 63h/6Bh/73h is 40h.

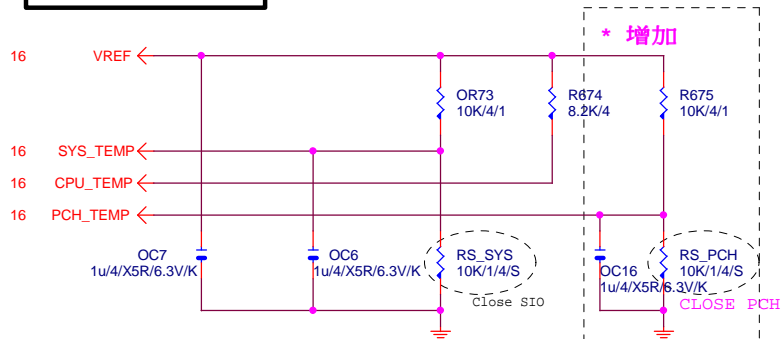
ERP WAKE on LAN (依LAN組態選擇)

Realtek/ATHEROS LAN

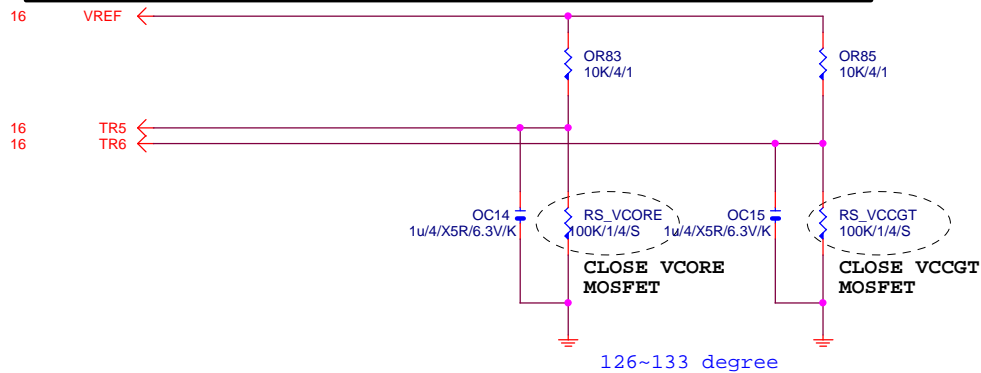


TEMP H/W MONITOR

REV 1.08



RS_VCORE, RS_VCCGT, CLOSE CPU_VCORE & VCCGT MOSFET

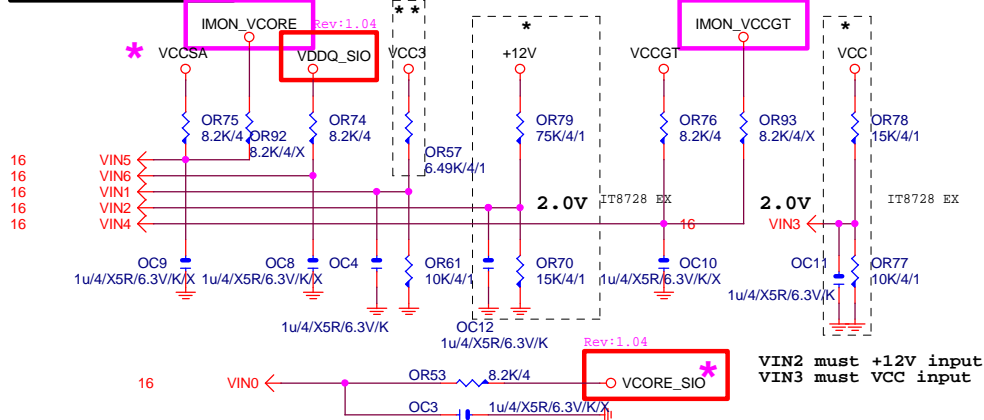
~~PROCHOT: 有mos heartsink不用prochot function~~

VOLTAGE-- H/W MONITOR

Connect to PWM

* IT8728 BX
** IT8728 CX

Connect to PWM



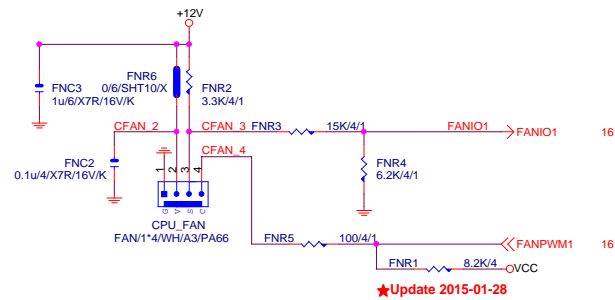
The division voltage of VIN2 & VIN3 must be around 2.9V

Gigabyte Technology

Title			HWM,KB/MS, FAN CTRL		
Size	Document Number				Rev
Custom	GA-H110M-H DDR3				1.0
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CPU SMART FAN

Rev: 0.7

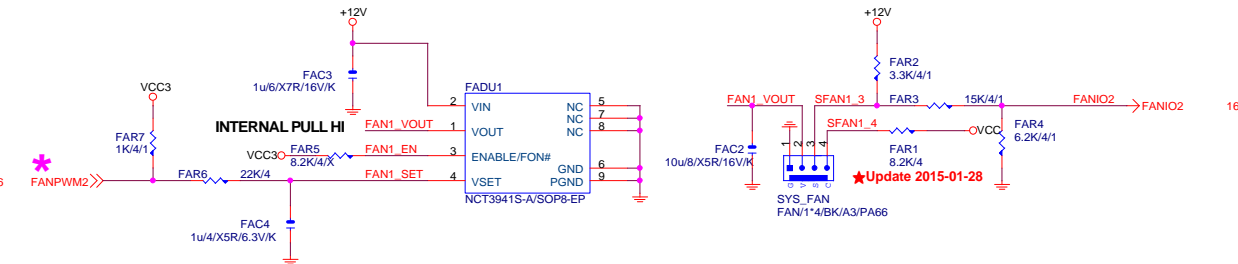


SYSTEM FAN1

Linear SYS_FAN

Enable Function (NCT3941S)
Full Turn On Function (NCT3941S-A)

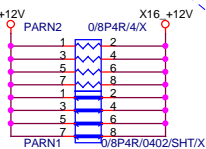
A.



Gigabyte Technology

Title			FAN CTRL		
Size			Document Number		
Custom			GA-H110M-H DDR3		
Date:			Monday, November 02, 2015		
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Rev			1.0		

Rev 0.2

+12V_protect
short-wire test

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

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

PCIE16:16/5/5/5/16

PCI-E REV:1.1--> 2.5GHZ

PCE-E X1(單向) BANDWIDTH=2.5GHz*(8b/10b)=2Gb/s=250MB/s

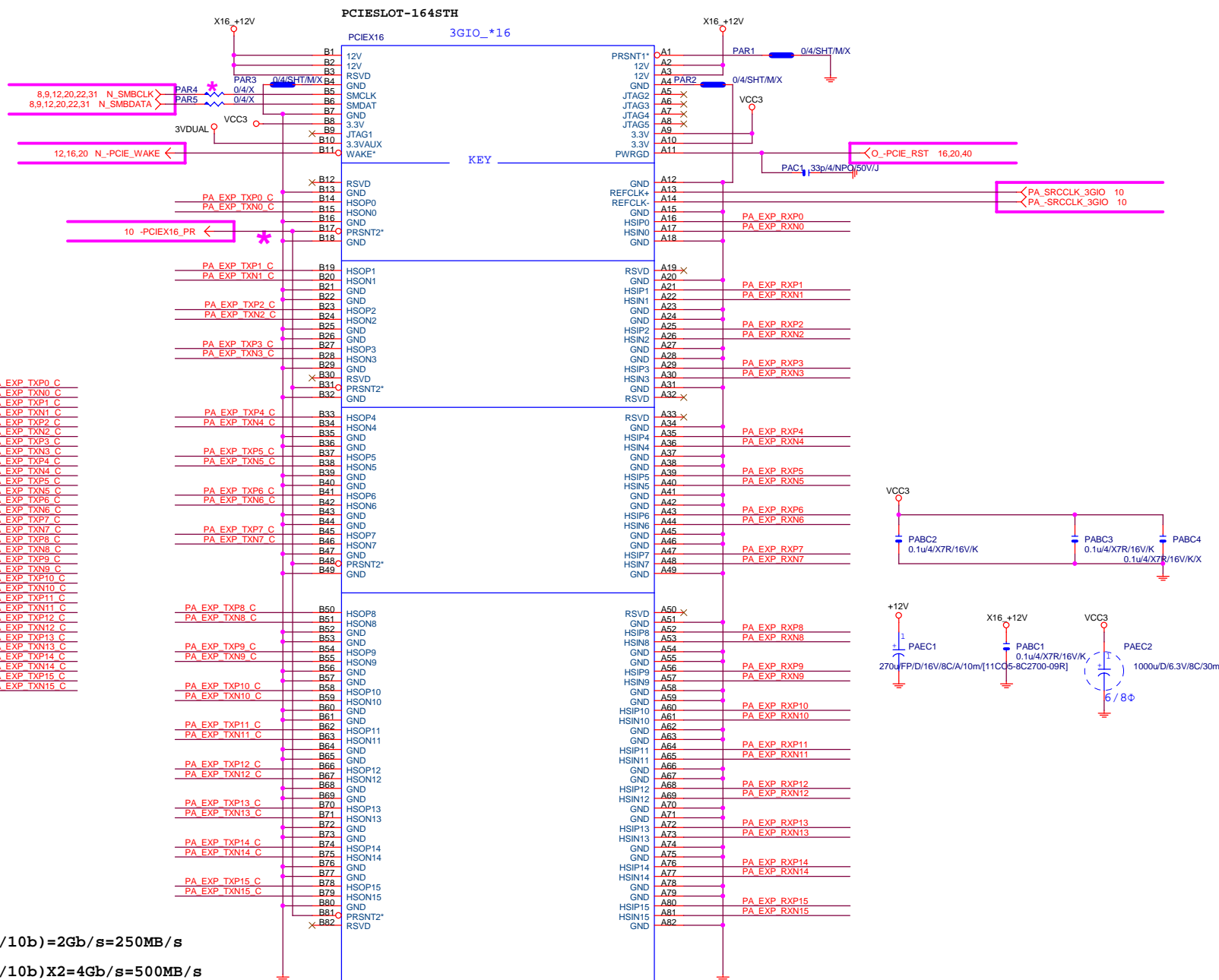
PCE-E X1(雙向) BANDWIDTH=2.5GHz*(8b/10b)X2=4Gb/s=500MB/s

PCE-E X16(單向) BANDWIDTH=2.5GHz*(8b/10b)X16=32Gb/s=4GB/s

PCE-E X16(雙向) BANDWIDTH=2.5GHz*(8b/10b)X16X2=64Gb/s=8GB/s

PCI-E REV:2.0--> 5GHZ

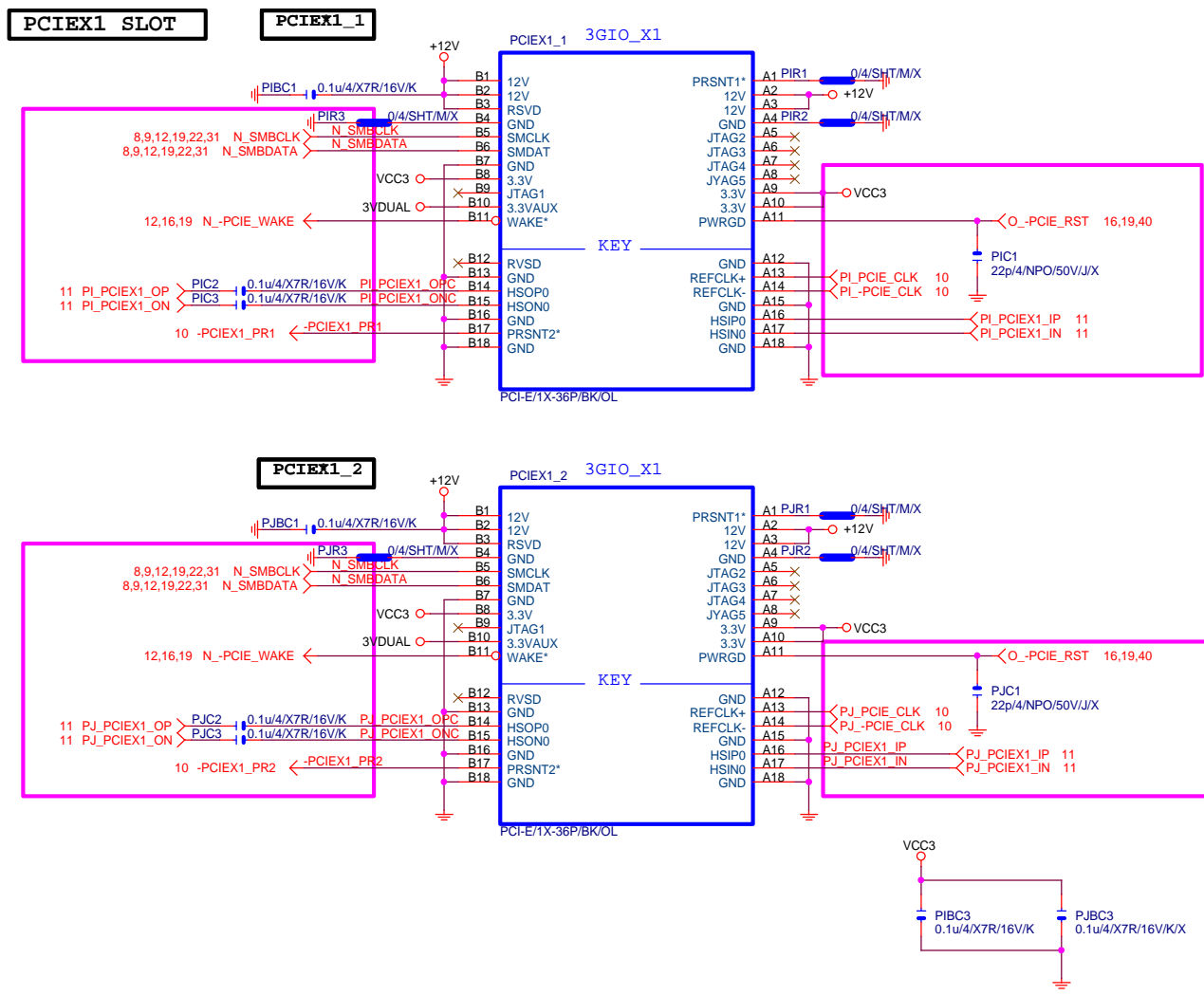
PCIESLOT-1645TH



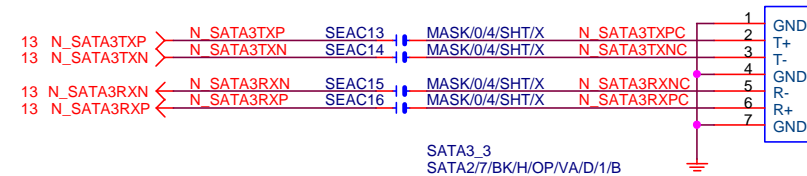
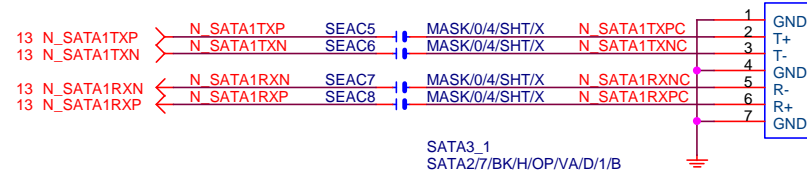
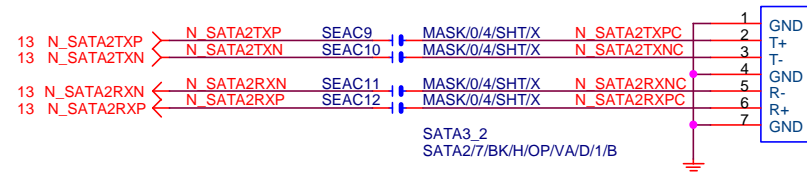
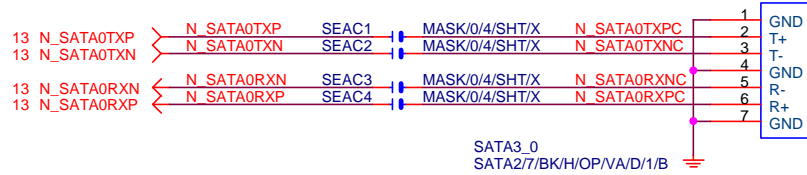
PCI-E/16X-164P/GY/LONG DOUBLE/HK*2

Gigabyte Technology

Title		
PCI EXPRESS * 16		
Size	Document Number	Rev
Custom	GA-H110M-H DDR3	1.0
Date:	Monday, November 02, 2015	Sheet 19 of 46

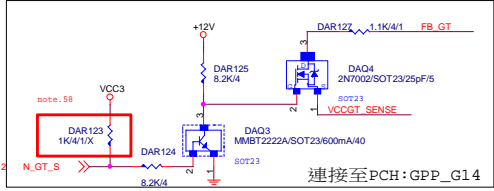
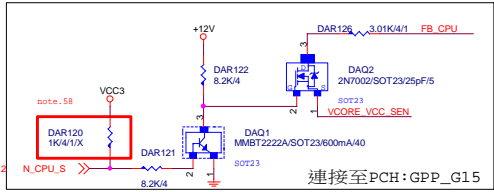
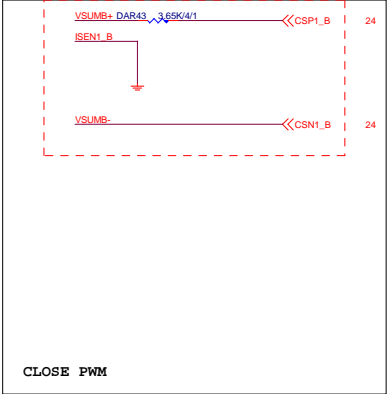
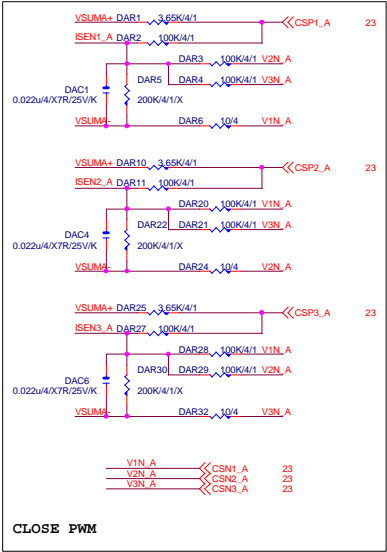
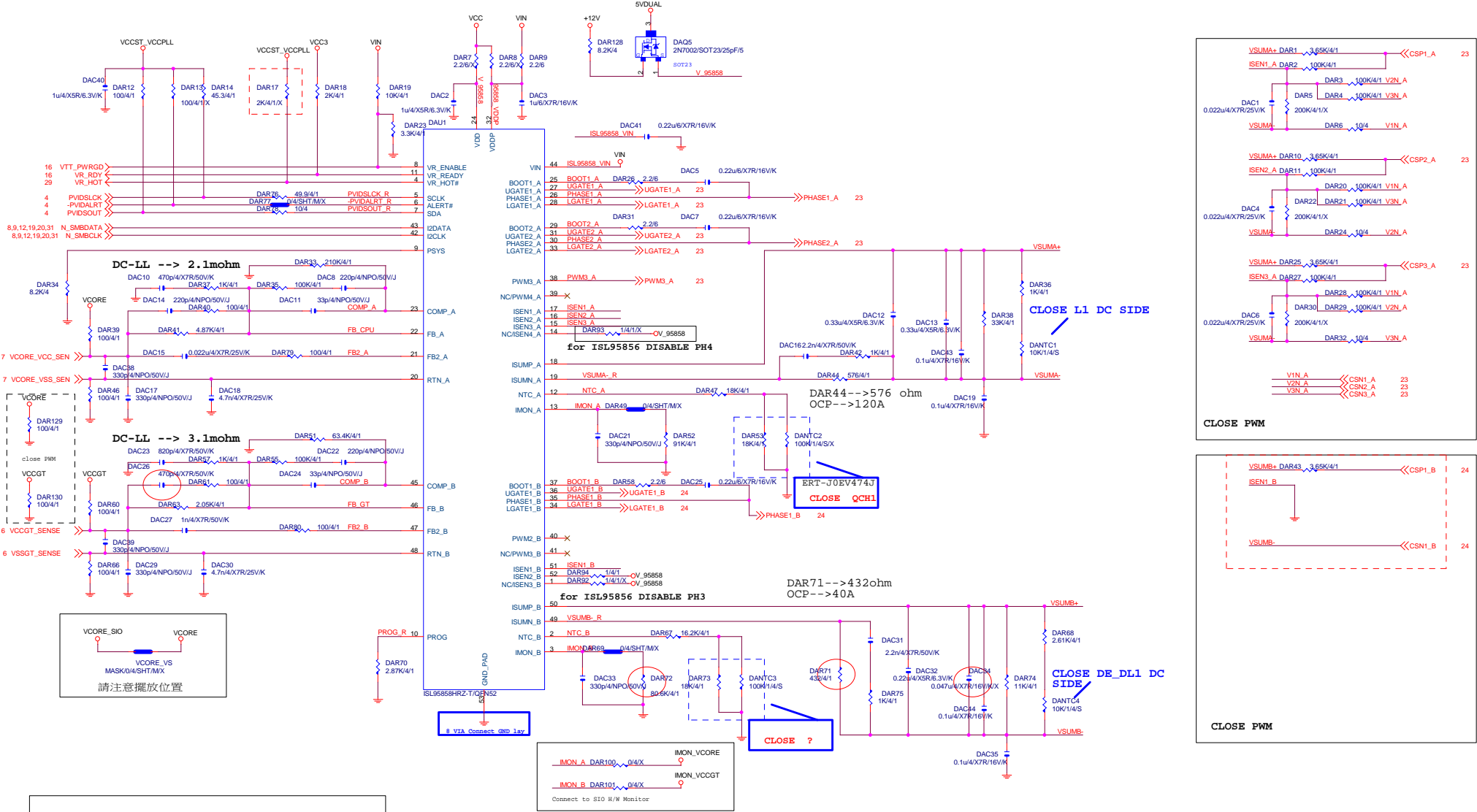


Rev 0.6

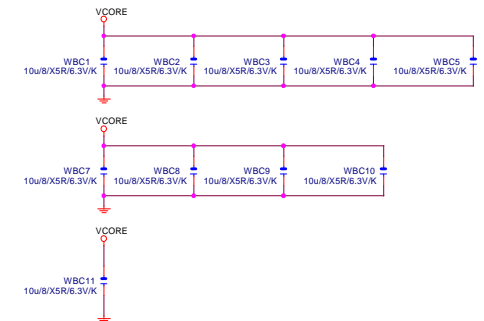
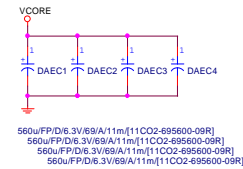
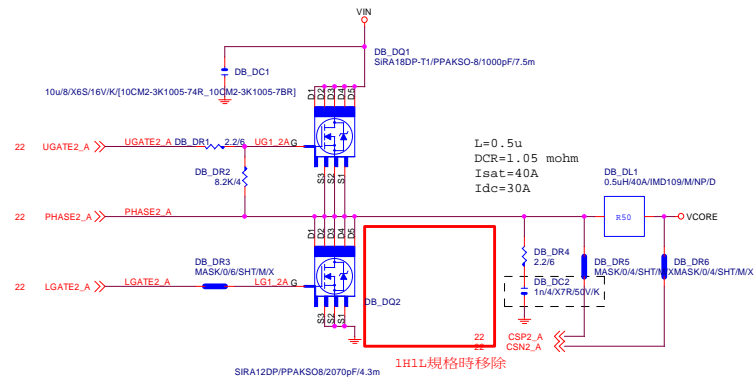


Gigabyte Technology

Title			
SATA EXPRESS			
Size	Document Number		Rev
Custom	GA-H110M-H DDR3		1.0
Date:	Monday, November 02, 2015	Sheet	21 of 46

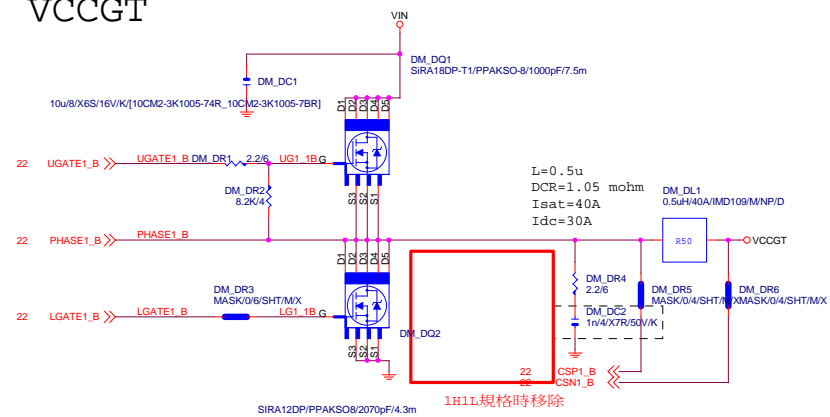


VCORE

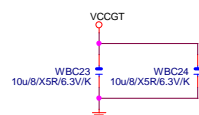
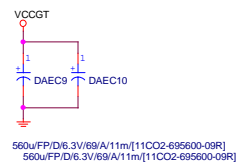
**GIGABYTE™**

Title			
ISL95858_MOS			
Size	Document Number	Rev	
Custom	GA-H110M-H DDR3	1.0	
Date:	Monday, November 02, 2015	Sheet	23 of 46

VCCGT



VCCGT CAP 560u*2PCS
22u*2PCS

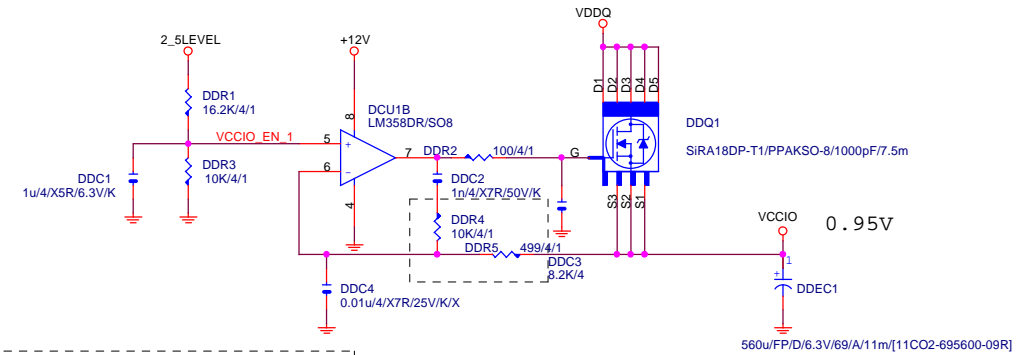
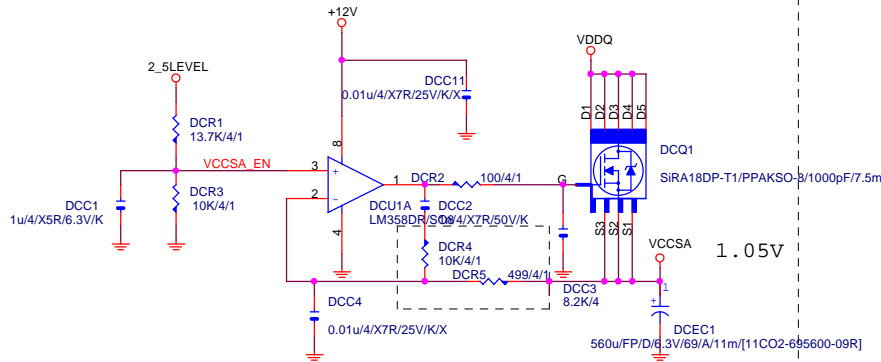
**GIGABYTE™**

Title			
ISL95858_MOS			
Size	Document Number	Rev	
Custom	GA-H110M-H DDR3	1.0	
Date:	Monday, November 02, 2015	Sheet	24 of 46

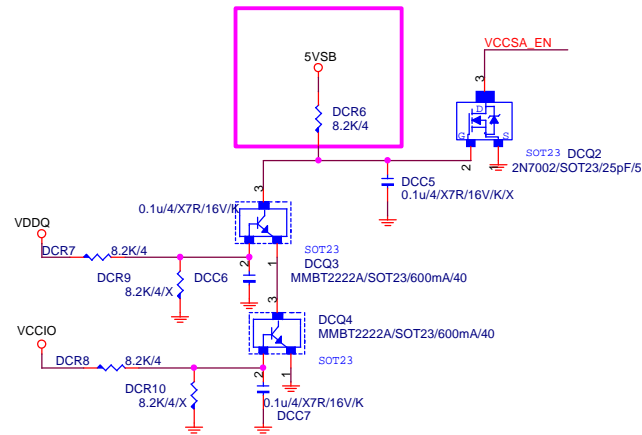
VCCSA

REV:0.4

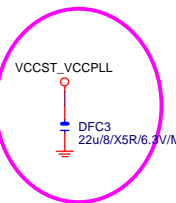
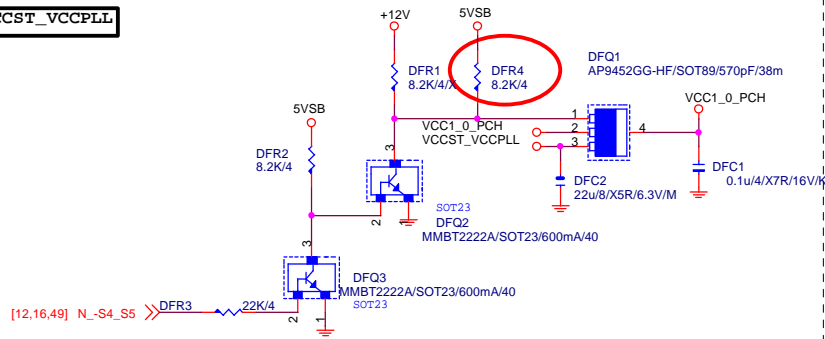
VCCIO



VCCIO_EN_1 DDR10 0/4/SHT/M/X VCCIO_EN 16
Connect to IT8620

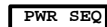


VCCST_VCCPLL

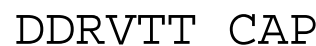


GIGABYTE™			
Title VCCSA_VCCIO			
Size	Document Number	Rev	
Custom	GA-H110M-H DDR3	1.0	
Date:	Monday, November 02, 2015	Sheet	25 of 46

DDR3

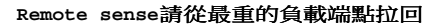


10u*1PCS



RT8237 DDR3 POWER

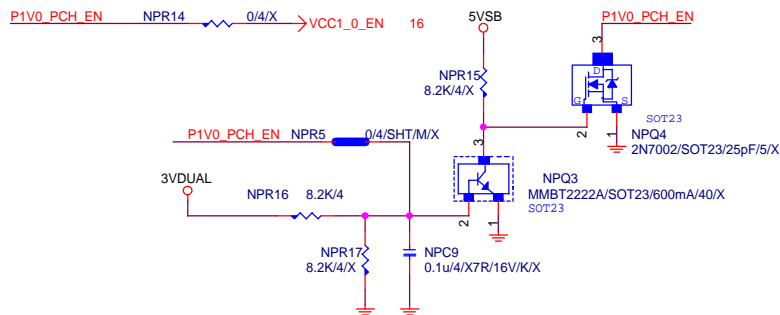
Size	Document Number	Rev
Custom	GA-H110M-H DDR3	1.0
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VCC1_0_PCH

NPC10
22u/8/X5R/6.3V/M

請放置CHOKE一出來的地方



請放置CHOKE一出來的地方

GIGABYTE™

RT8237_PCH POWER

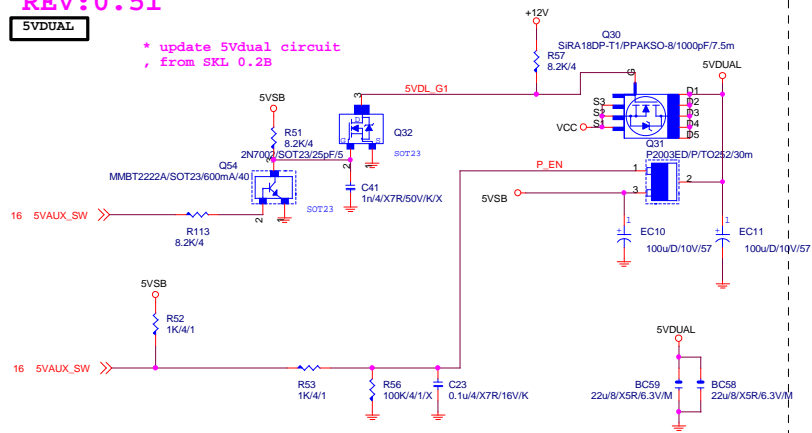
Size	Document Number	Rev
Custom	GA-H110M-H DDR3	1.0

Date:	Monday, November 02, 2015	Sheet	27	of	46
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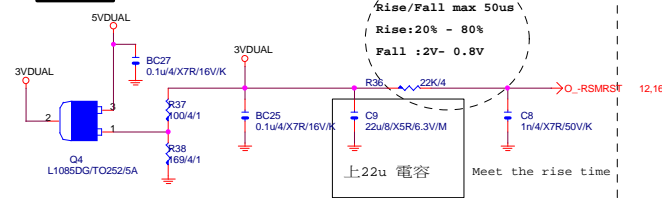
REV:0.51

5VDUAL

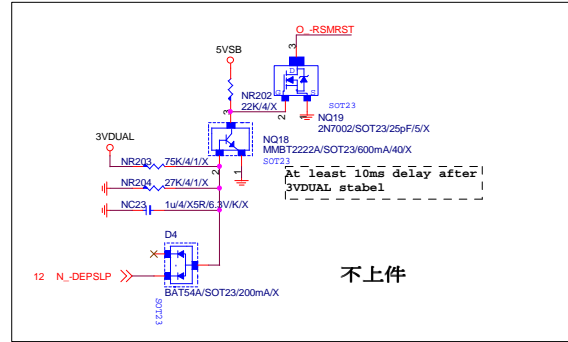
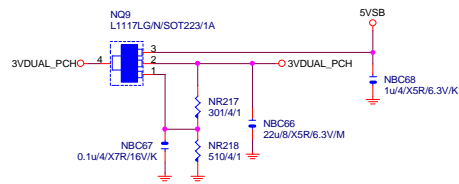
* update 5Vdual circuit
 , from SKL 0.2B



3VDUAL



3VDUAL_PCH

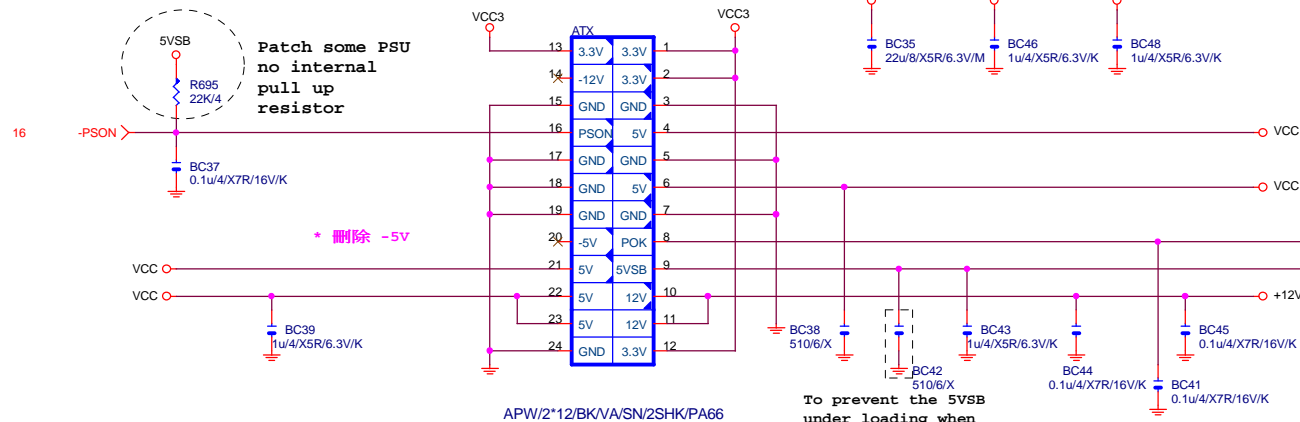


不上件

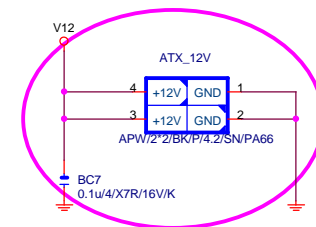
Gigabyte Technology

Title			
DISCRETE POWER			
Size	Document Number	GA-H110M-H DDR3	
Custom			Rev 1.0
Date:	Monday, November 02, 2015	Sheet 28	of 46

ATXX24 POWER CONNECTOR

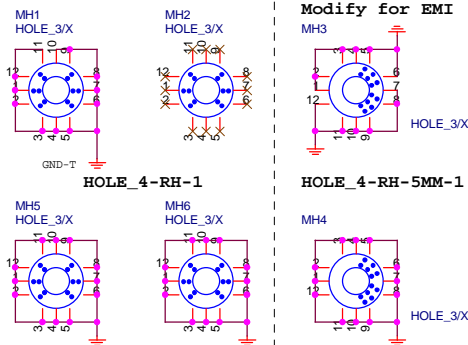


ATXX4 POWER CONNECTOR

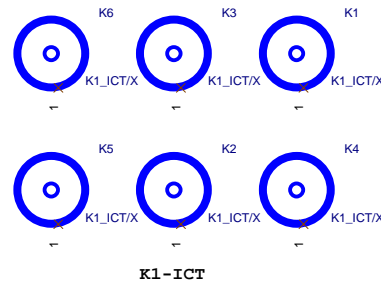


螺絲孔

MH1:GND-T
FOR EMI
TEST驗證

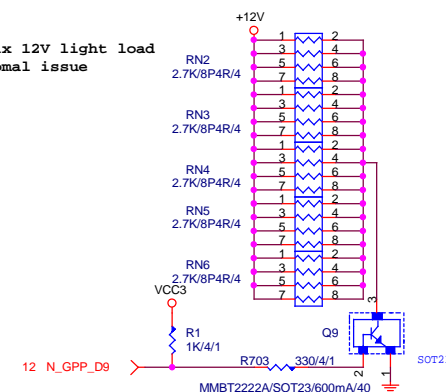


固定孔/光學點



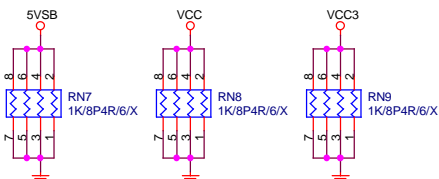
+12V DUMMY LOAD

To fix 12V light load
abnormal issue



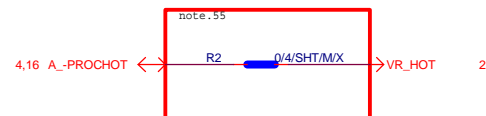
【技術通報R&D技術通報153】

DUMMY LOAD

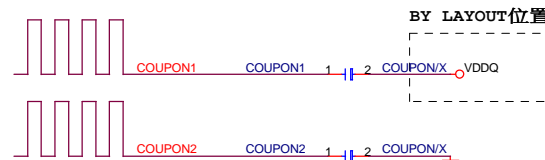


-PROHOT

* 保留 ?



COUPON



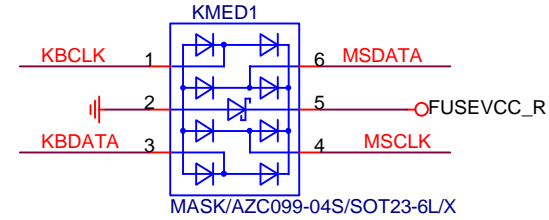
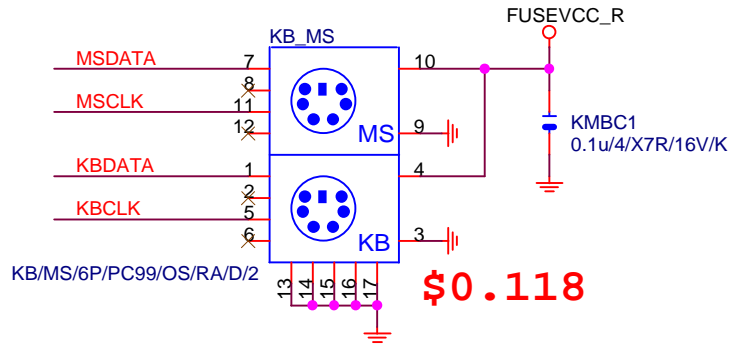
Gigabyte Technology

Title		
ATX POWER CONNECTOR		
Size	Document Number	Rev
Custom	GA-H110M-H DDR3	1.0
Date:	Monday, November 02, 2015	Sheet 29 of 46

KB_MS_USB

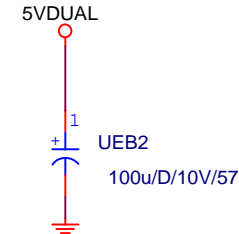
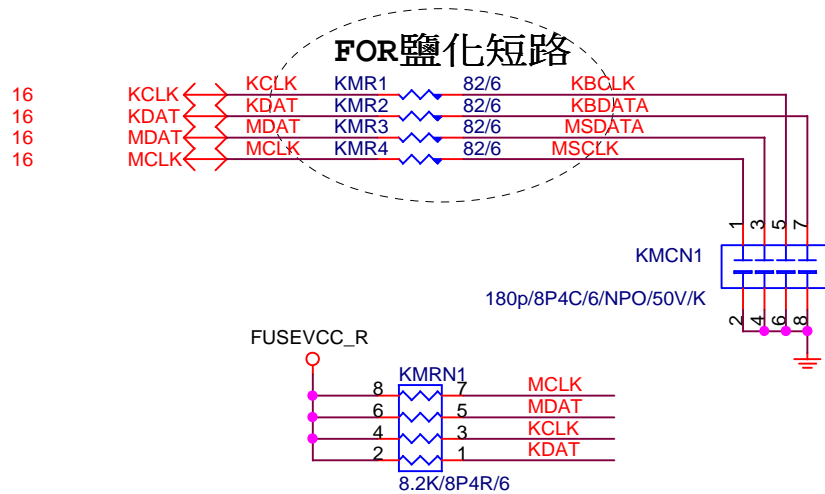
Rev: 0.7

ESD



KB_MS_USB DAMPING/PU

KB_MS_USB PWR



Gigabyte Technology

Title

KB_MS_USB

Size A

Document Number

GA-H110M-H DDR3

Rev 1.0

Date:

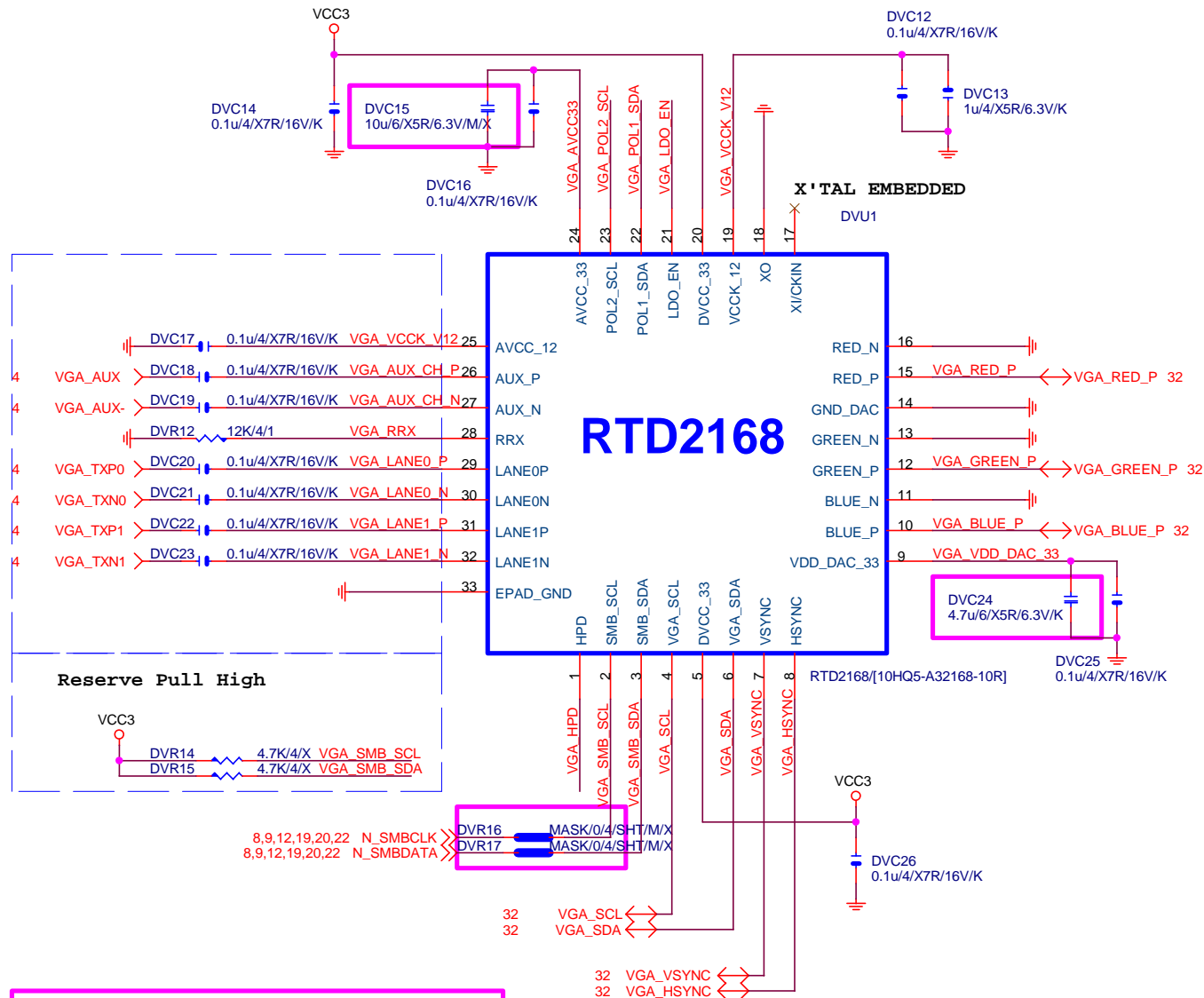
Monday, November 02, 2015

Sheet

30

of

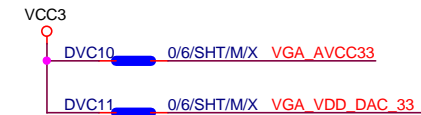
46



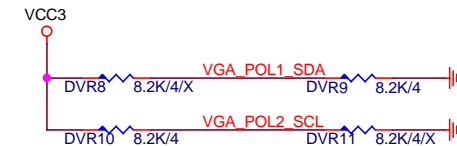
放置PCH端



POWER

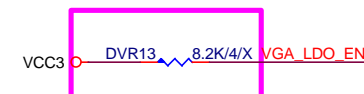


Power on latch



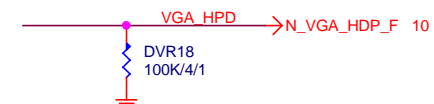
		POL1_SDA(PIN22)	
		0	1
POL2_SCL (PIN23)	0	X	EP MODE
	1	ROM ONLY MODE	EEPROM MODE

Embedded LDO

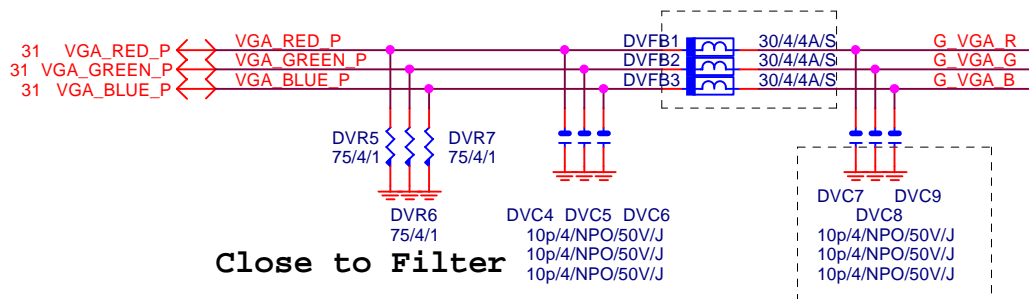
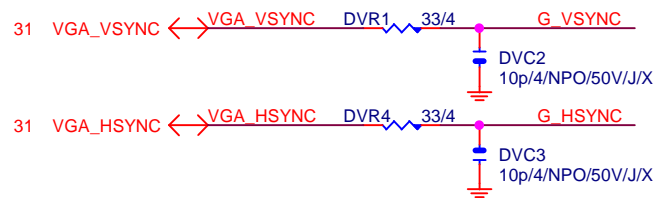
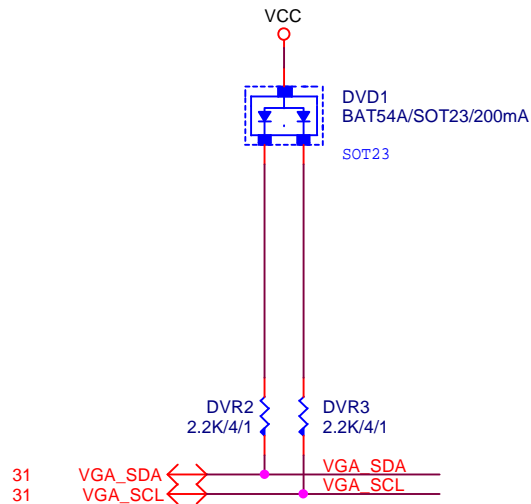


LDO_EN(PIN21)	
0	1
VCCK_V12 from External 1.2V	VCCK_V12 from Embedded LDO

DP HPD



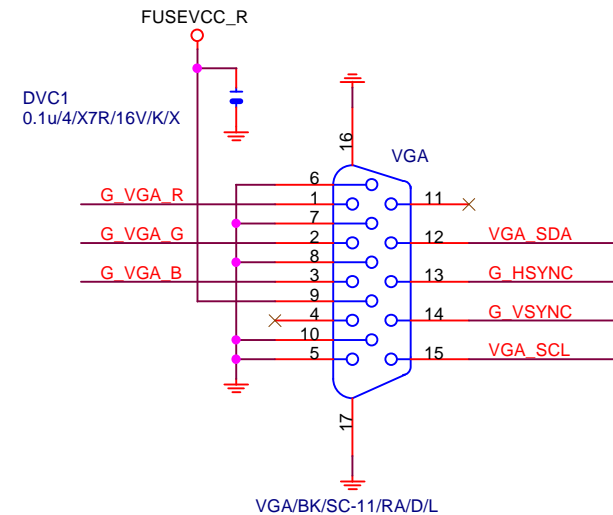
VGA SIGNAL R1.03



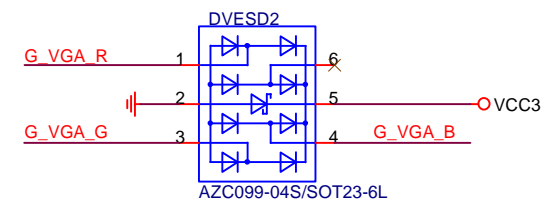
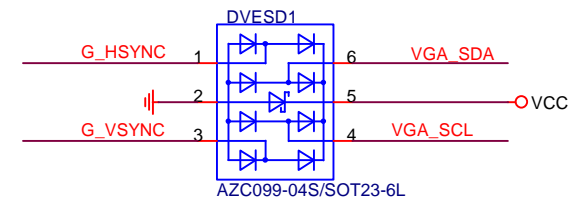
Close to Filter

FOR EMI

VGA CONN.



VGA ESD

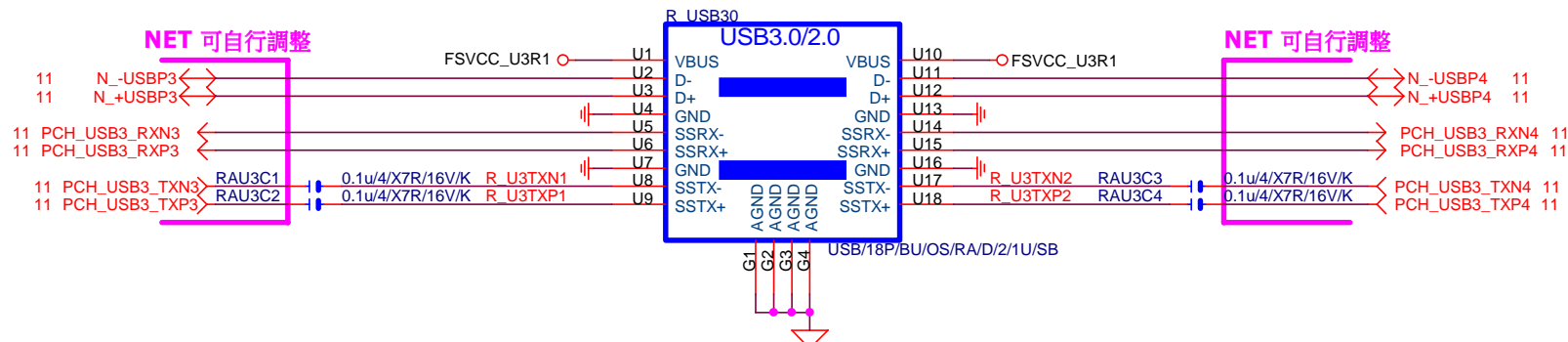


Gigabyte Technology
NXP-PTN3356

Title		
Size	Document Number	Rev
Custom	GA-H110M-H DDR3	1.0
Date:	Monday, November 02, 2015	Sheet 32 of 46

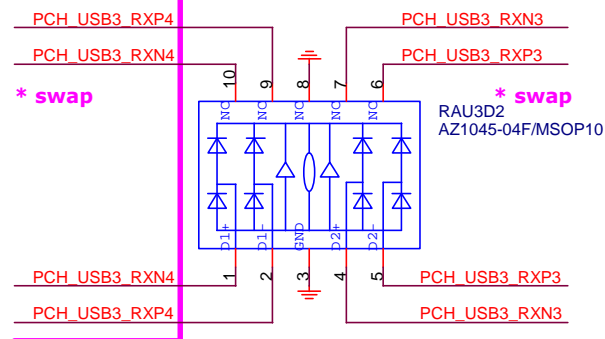
Rev: 0.7

ESD 可自行SWAP PIN ,CONN端 NET 名稱 不可

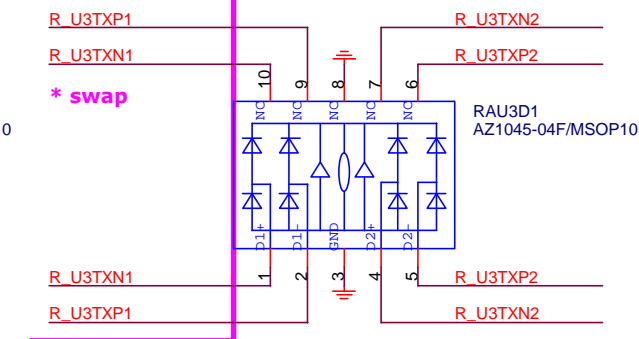


ESD

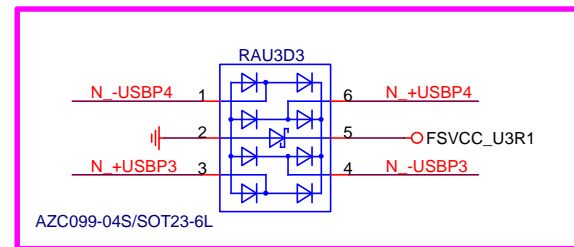
NET 可自行調整



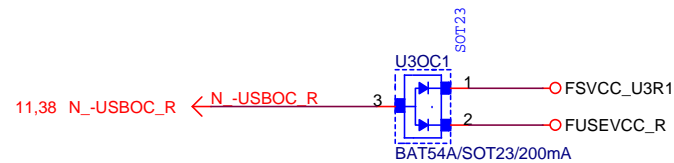
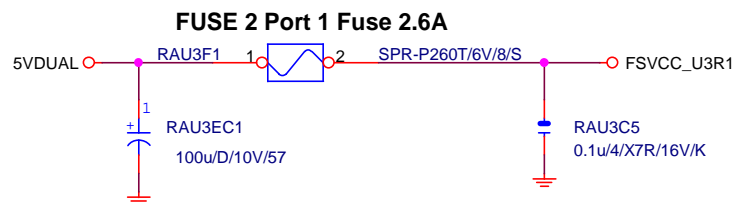
NET 可自行調整



NET 可自行調整

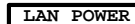
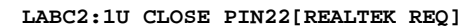
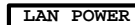


FUSE

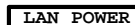
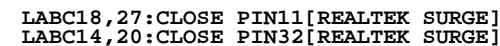
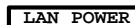


Gigabyte Technology

Title		R_USB30,USB_OC	
Size	Document Number	GA-H110M-H DDR3	
Custom		Rev 1.0	
Date:	Monday, November 02, 2015	Sheet	33 of 46



(CLOSE LAU1 PIN23)



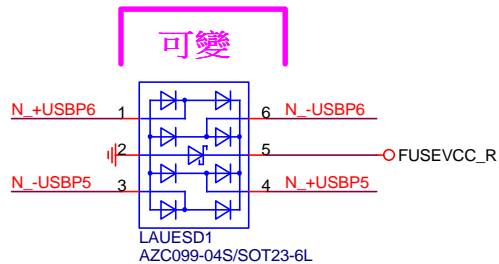
Title	Realtek RTL8111GUS
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Size Custom	Document Number GA-H110M-H DDR3	Rev 1.0
Date:	Monday, November 02, 2015	Sheet 34 of 46

USB_LAN CONNECTOR R1.06

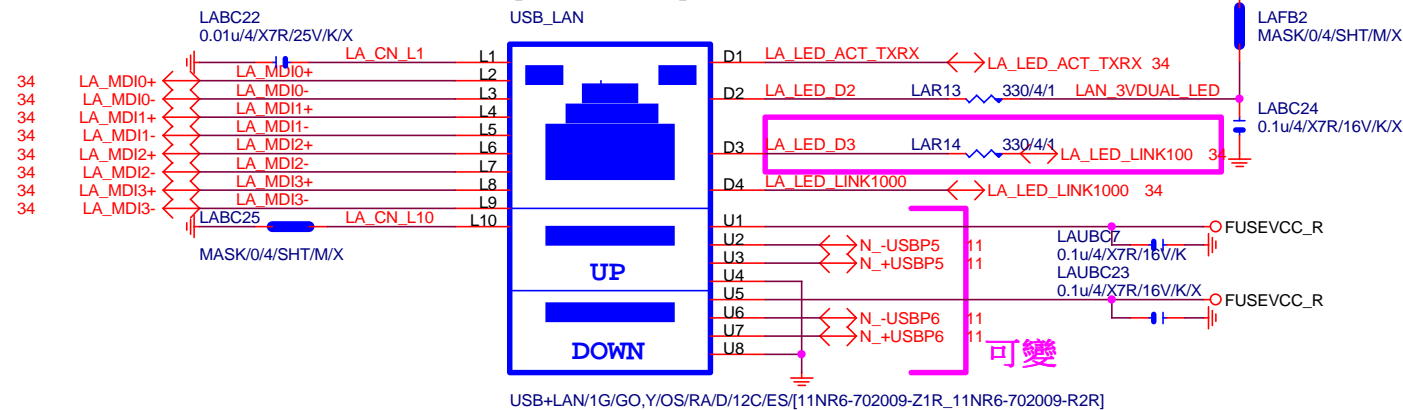
RMA ESD PROTECT

note:可變更USB NAME



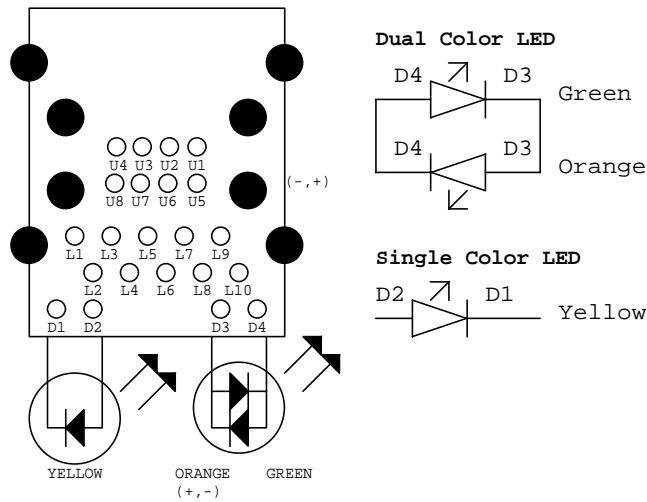
USB_LAN CONNECTOR

note:可變更USB NAME



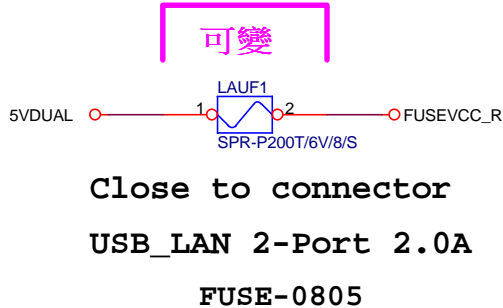
LA_MDI-->100歐姆:[20/4/8/4/20]

USB_LAN LAYOUT示意圖



USB POWER

note:可變更FUSE



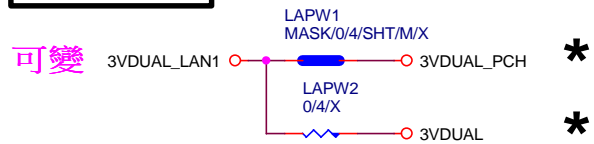
EMI SHORT PAD

PS:視EMI需求

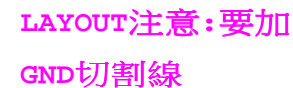
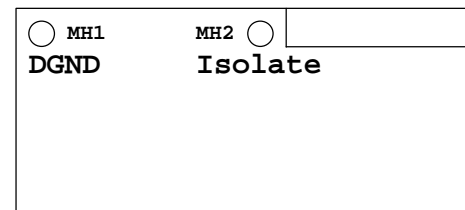
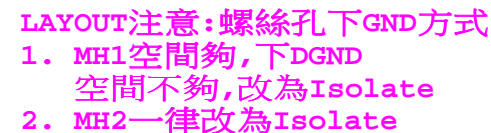


LAN POWER

note: lan power連接及電流



Gigabyte Technology			
LAN CONNECTOR-RTL8111G			
Size	Document Number		Rev
Custom	GA-H110M-H DDR3		1.0
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音效區域印刷

Gigabyte Technology

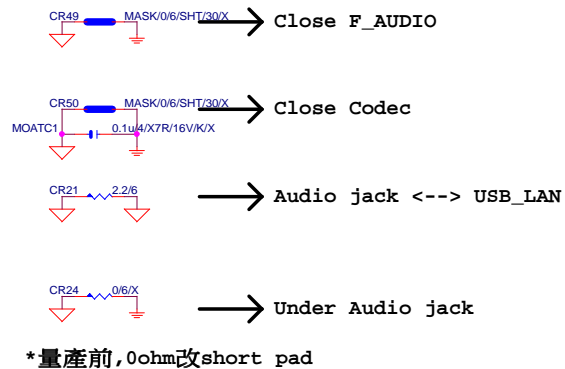
Title	HD AUDIO ALC887
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Size Custom	Document Number	GA-H110M-H DDR3
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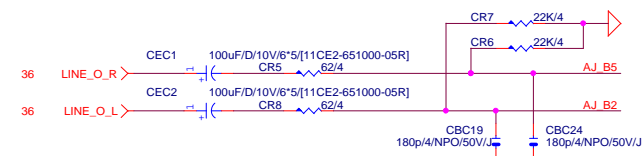
Re
1

Date: Monday, November 02, 2015 Sheet 36 of 46

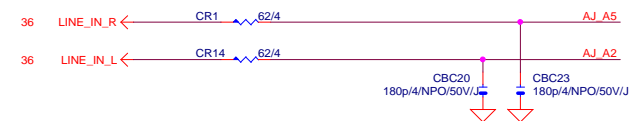
Rev 0.5



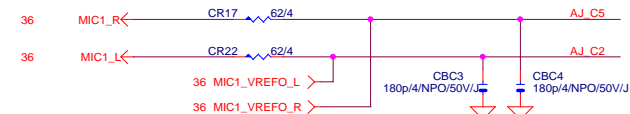
LINE-OUT



LINE-IN



MIC-IN

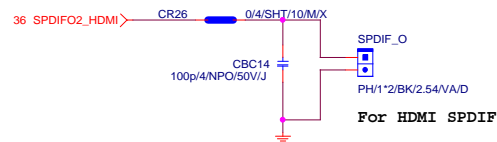


SURROUND

CEN/LFE

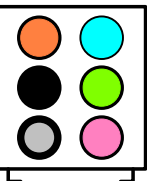
SURRBACK

SPDIF_OUT



SPDIF_IN

AZALIA JACK

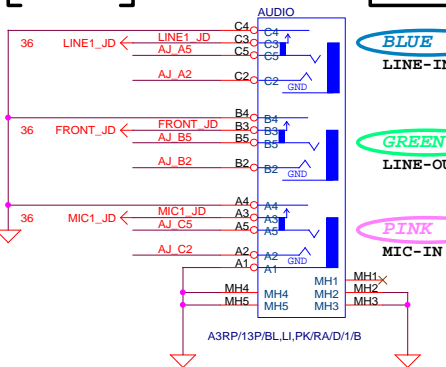


AZALIA JACK

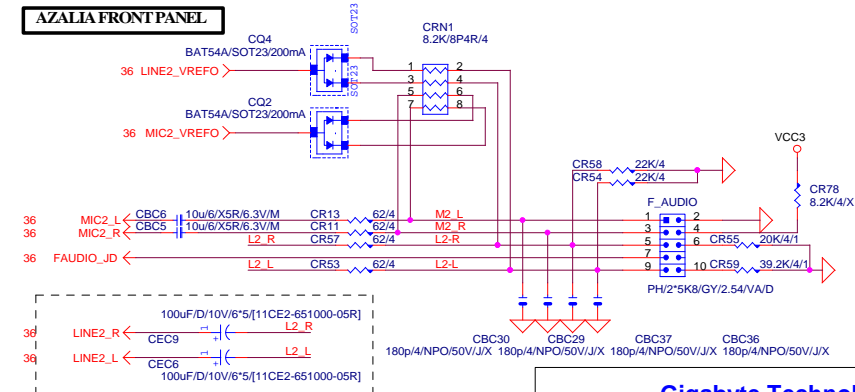
BLUE
LINE-IN

GREEN
LINE-OUT

PINK
MIC-IN



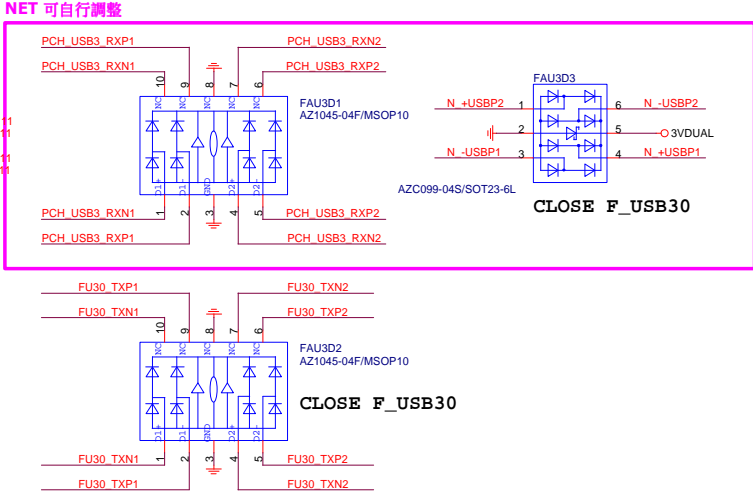
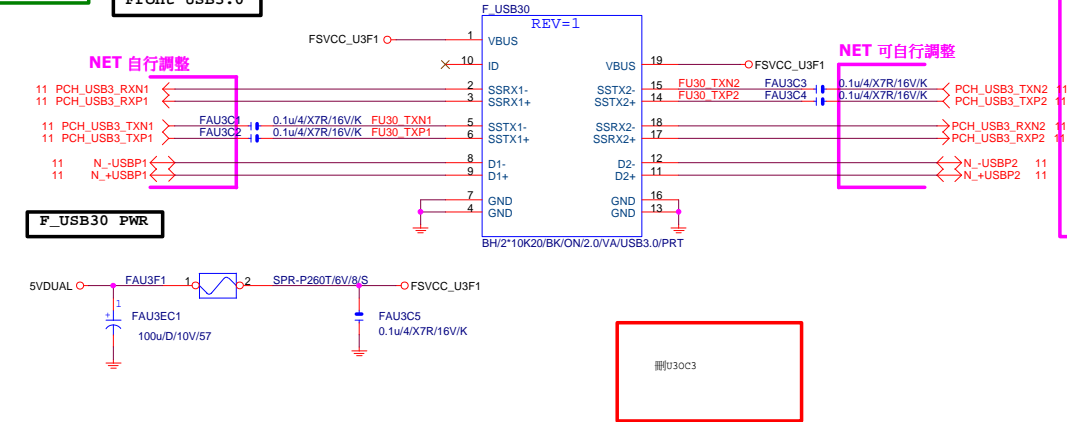
AZALIA FRONT PANEL



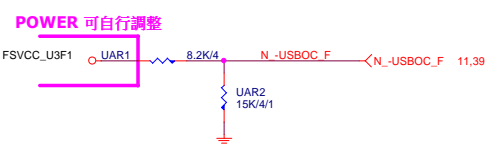
Gigabyte Technology

Title			
AUDIO JACK			
Size	Document Number	GA-H110M-H DDR3	Rev
Custom			1.0
Date:	Monday, November 02, 2015	Sheet	37 of 46

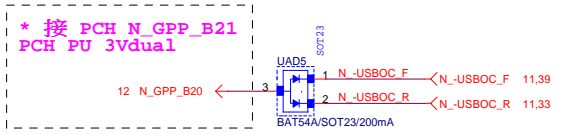
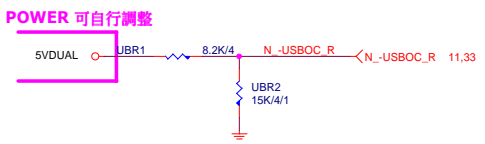
Front USB3.0



-USBOC_F

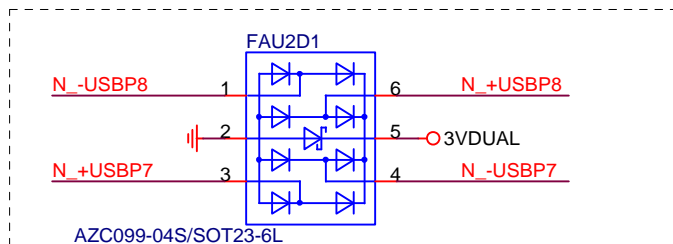
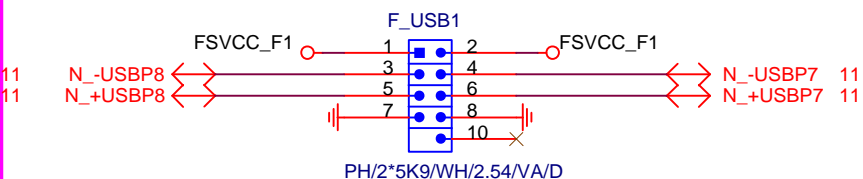


-USBOC_R



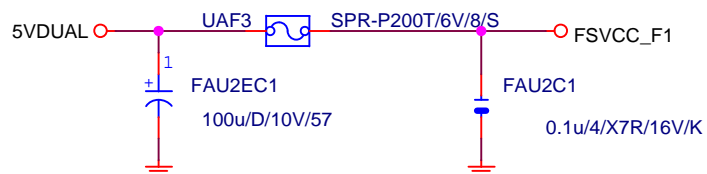
NET 可變

FUSB2X5-HS



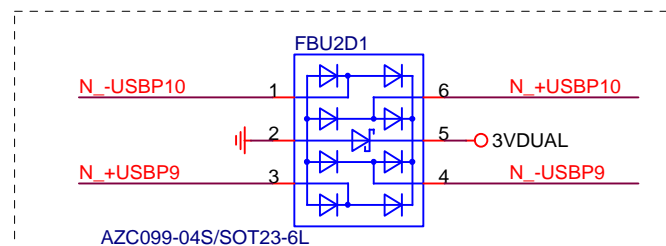
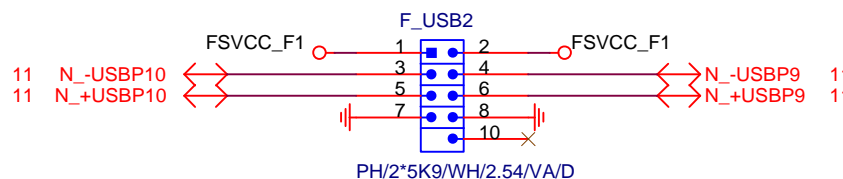
Close to connector

FUSE 2 Port 1 Fuse 2A



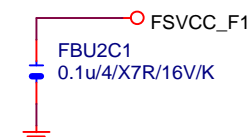
NET 可變

FUSB2X5-HS

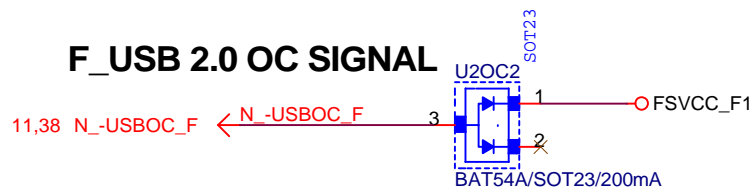


Close to connector

FUSE 2 Port 1 Fuse 2A



F_USB 2.0 OC SIGNAL



Gigabyte Technology

Title

USB2.0

Size
A

Document Number

GA-H110M-H DDR3

Rev
1.0

Date:

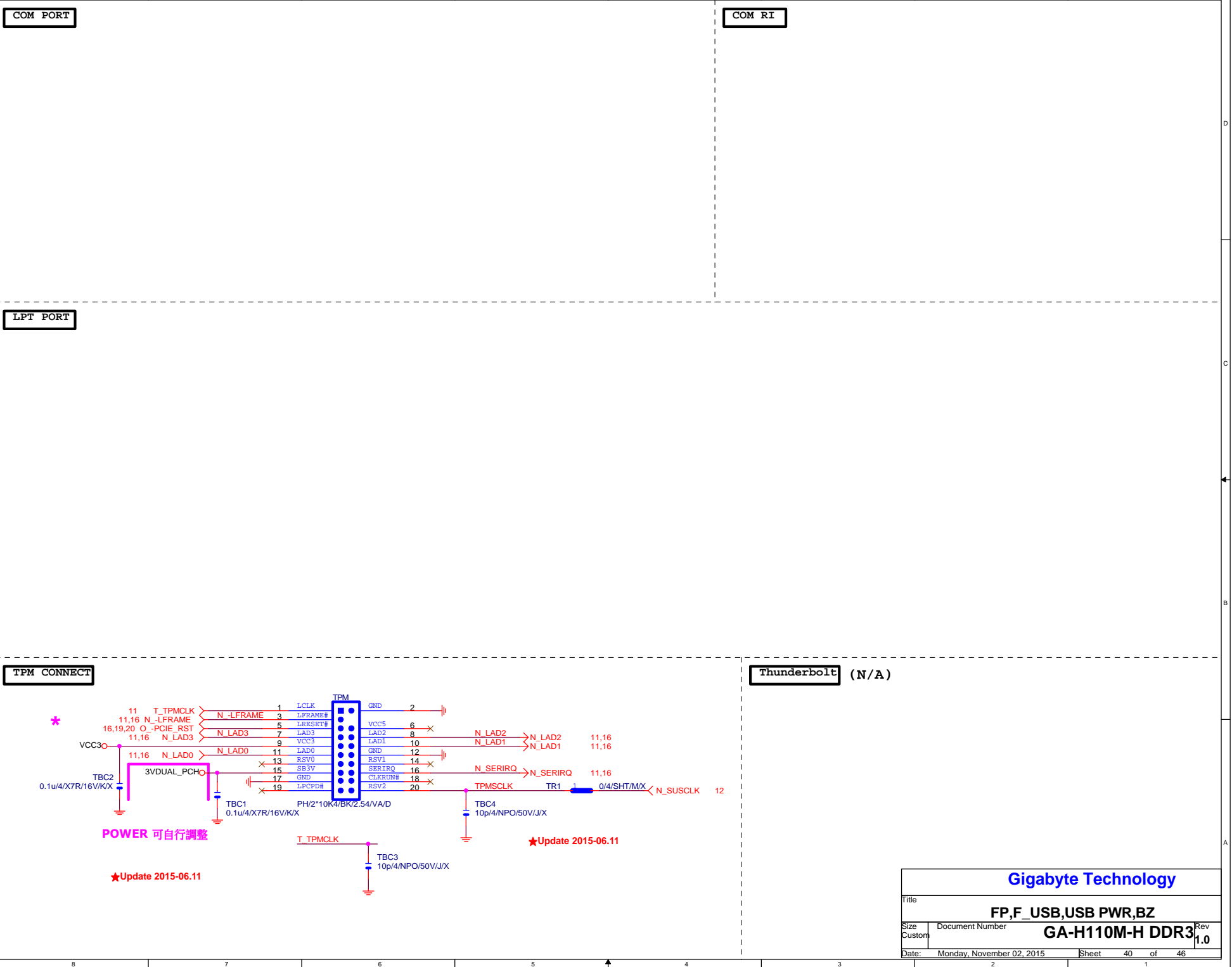
Monday, November 02, 2015

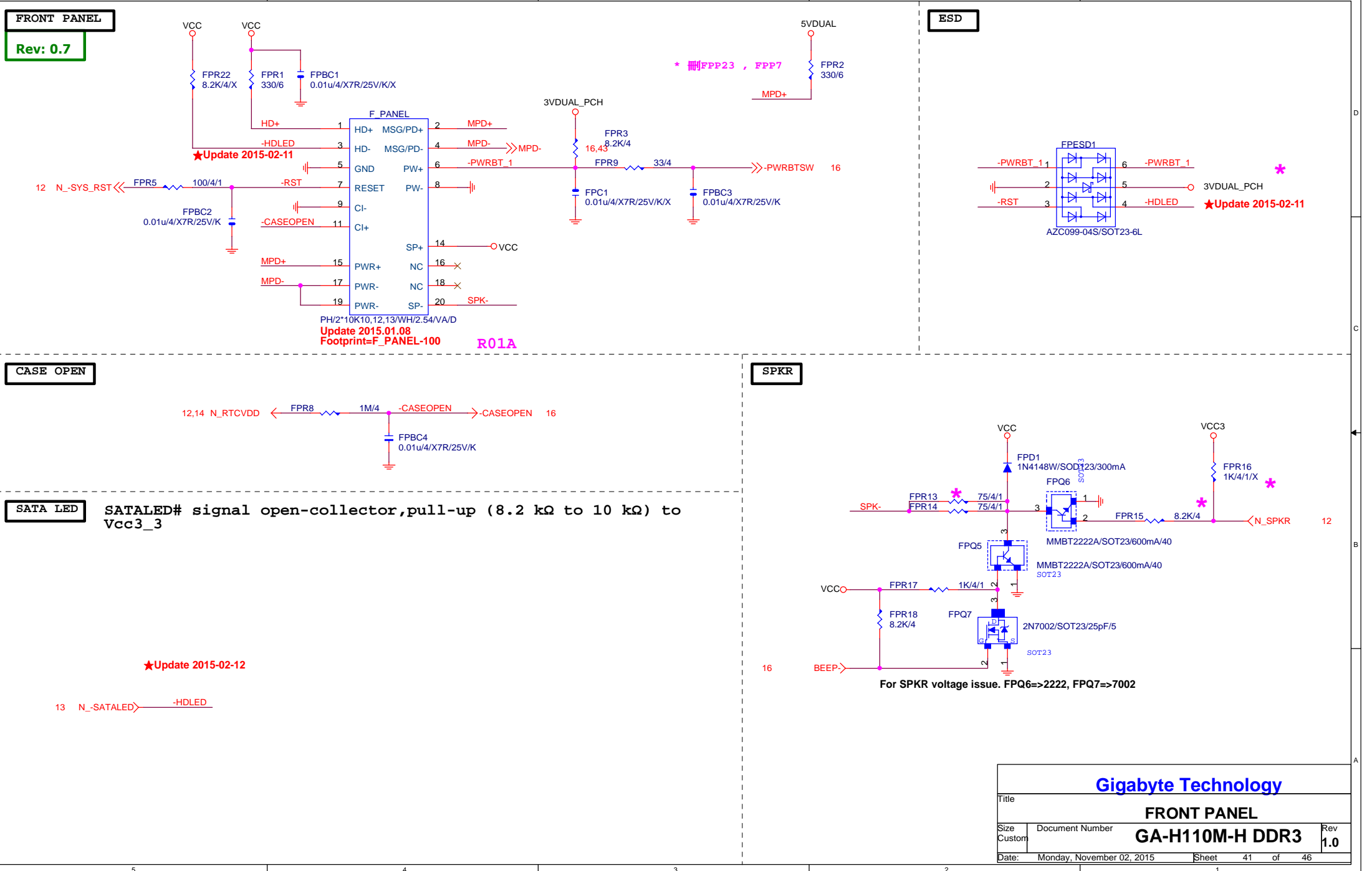
Sheet

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of

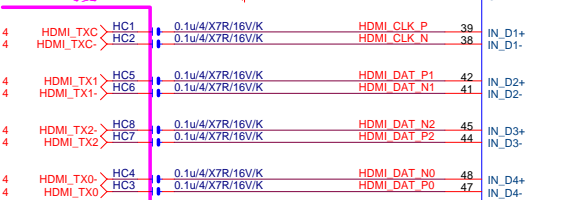
46



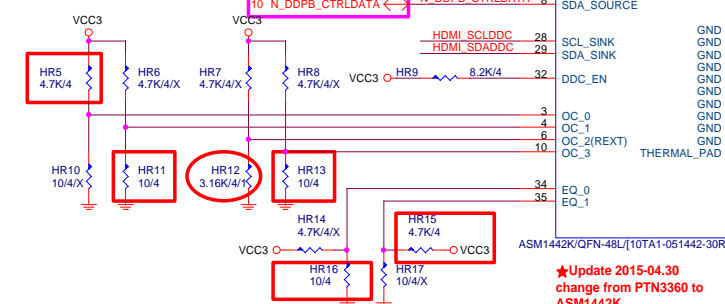
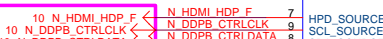


HDMI LEVEL SHIFT

NET 可變



Port 自行調整



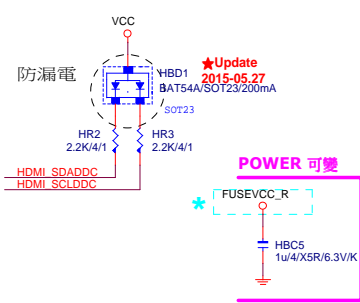
PTN3360:PIN 4/10/34/35 NC PIN,都不上值;只上HR12:10K
ASM1442:紅色框要上,HR12:3.16K

HDMI:20/4/6/4/20
Impedance=85 ± 17.5%

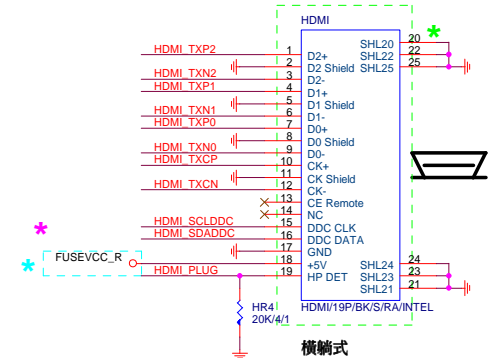
Port 自行調整



【技術通報R&D技術通報150】
HDMI eye diagram1.4版(deep color)會fail
原因: 因目前的HDMI訊號過長,造成RISING TIME過慢,而會壓到eye diagram
改善: ASMEDIA ASM1442 : 3.16K(PIN6 PULL DOWN電阻) 10ohm(PIN4 PULL DOWN電阻)

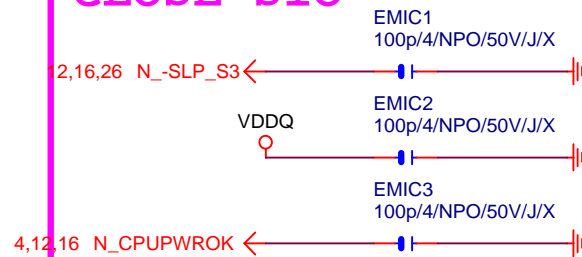


POWER 可變



橫躺式

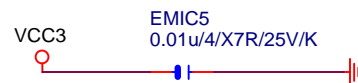
CLOSE SIO



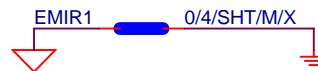
CLOSE PCH



close to PCH (NR17)



R_USB30_2 & DVI 之間



close to SIO (PIN92)MPD-

**GIGABYTE™**

Title

EMI/ESDSize
A

Document Number

GA-H110M-H DDR3

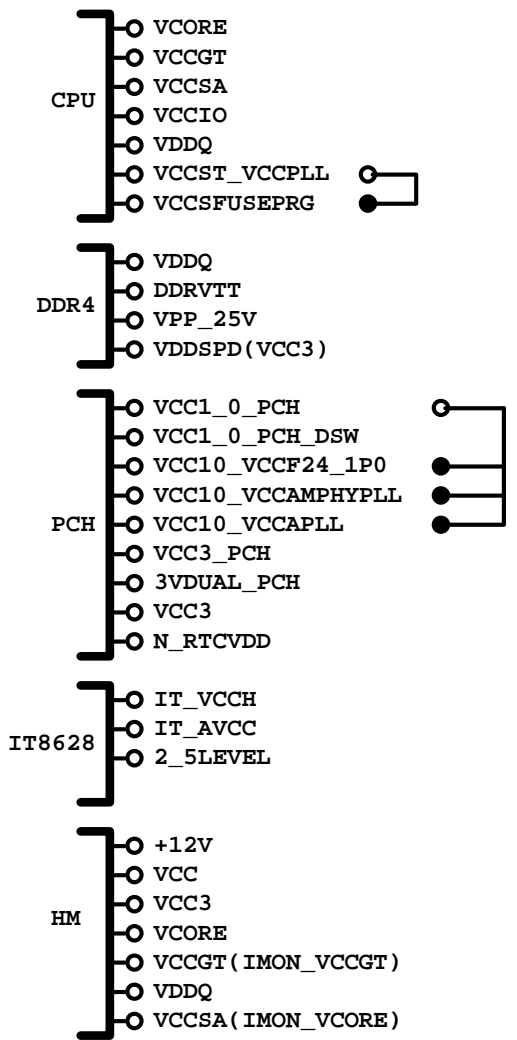
Rev

1.0

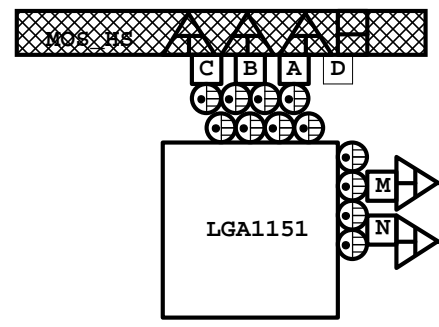
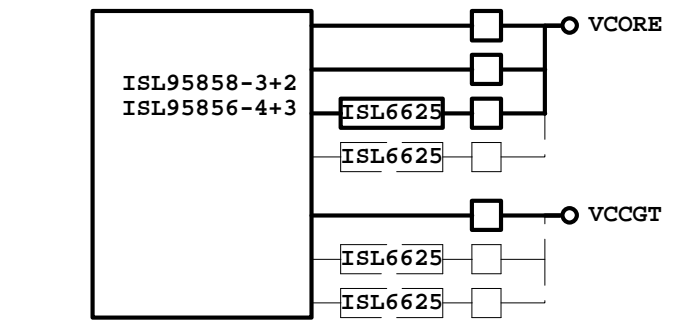
Date: Monday, November 02, 2015

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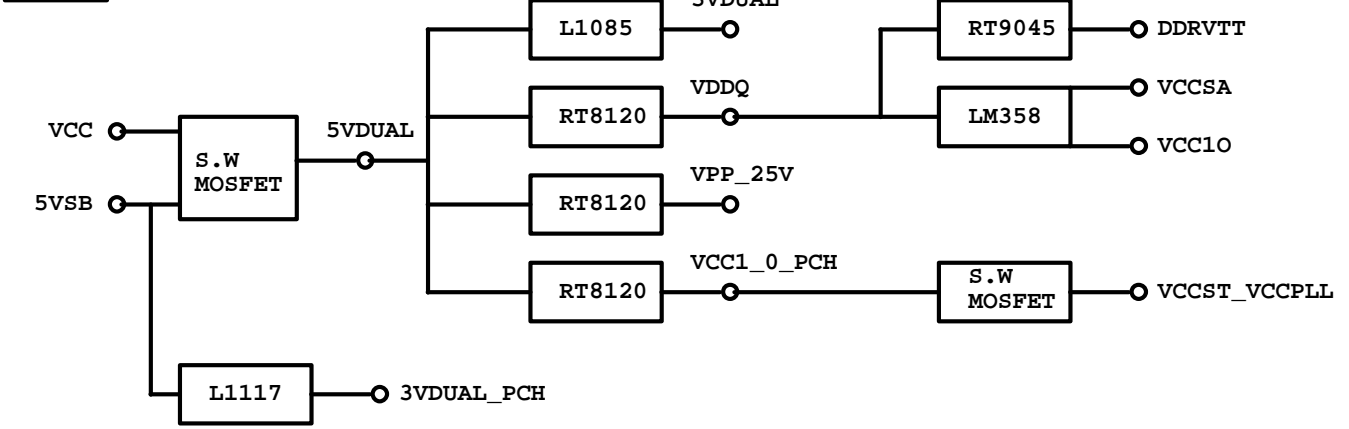
POWER BLOCK MAP



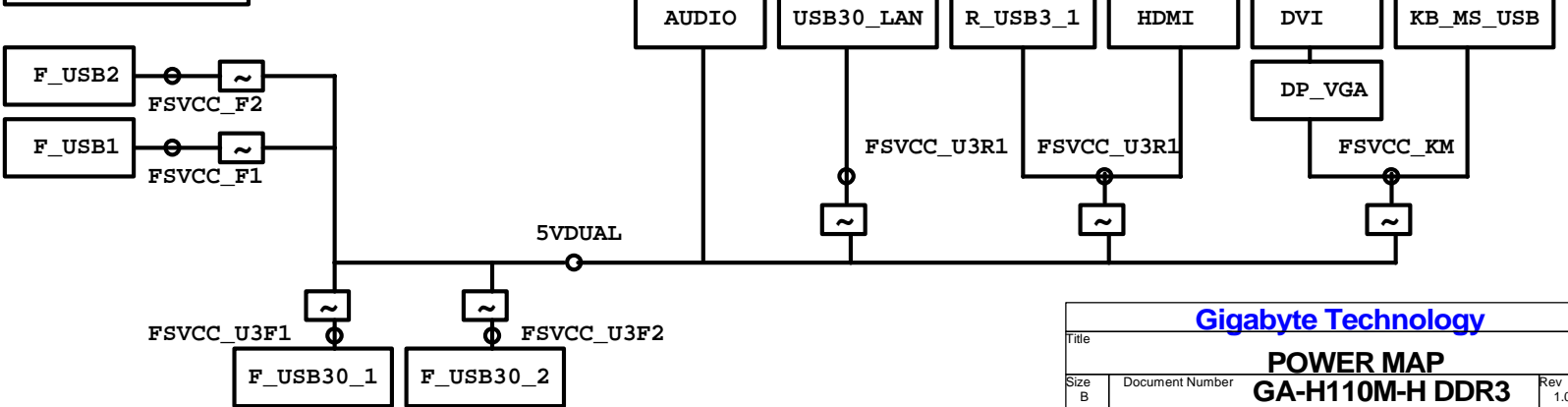
VCORE/VCCGT



POWER



FUSE POWER F/R



固態電容料號.請自行修改

日系黑色固態	Capture Value
11C02-C85600-01R	560u/FP/D/6.3V/68/C/8m
11C05-C82700-01R	270u/FP/D/16V/88/C/12m
11C05-C61000-01R	100u/OS/D/16V/66/C/30m
11C02-C51000-01R	100u/FP/D/6.3V/65/C/13m

日系一般固態	Capture Value
11C02-685600-01R	560u/FP/D/6.3V/68/8m
11C05-882700-01R	270u/FP/D/16V/88/12m
11C05-661000-03R	100u/OS/D/16V/66/30m
11C02-651000-02R	100u/OS/D/6.3V/66/30m

台系固態	Capture Value
11C02-661000-09R	100u/OS/D/6.3V/66/A/35m
11C05-691000-09R	100u/OS/D/16V/69/A/35m
11C05-8C2700-09R	270u/FP/D/16V/8C/A/10m
11C02-695600-09R	560u/FP/D/6.3V/69/A/11m

IRON CHOKE

	料號	Capture Value	SIZE	Footprint
DIP	11LC5-M4500C-01R	0.5uH/40A/IMD109/M/D	10*10	CHOKE05U-40A-1PQ-3
DIP	11LC5-M2500C-01R	0.5uH/20A/IMD0809/M/D	8*8	CHOKE1U-R50M-IF

Ferrite

	料號	Capture Value	SIZE	Footprint
DIP	11LC5-F3500C-11R	0.5uH/32A/INCG109/FSI/D	10*10	CHOKE05U-40A-1PQ-3
DIP	11LC5-F2500C-11R	0.5uH/25A/INC0809/F/D	8*8	CHOKE1U-R50M-IF
SMD	未建(SIUC1007-R30M-JJ1W)		10*7	CHOKE11X8MM-SMD

BEAD

	料號	Capture Value	SIZE	Footprint
DIP	10LFB-15470A-01R	47/4030/15A/S	4*3	BEADC8B-BPH_SMD

PWM料號

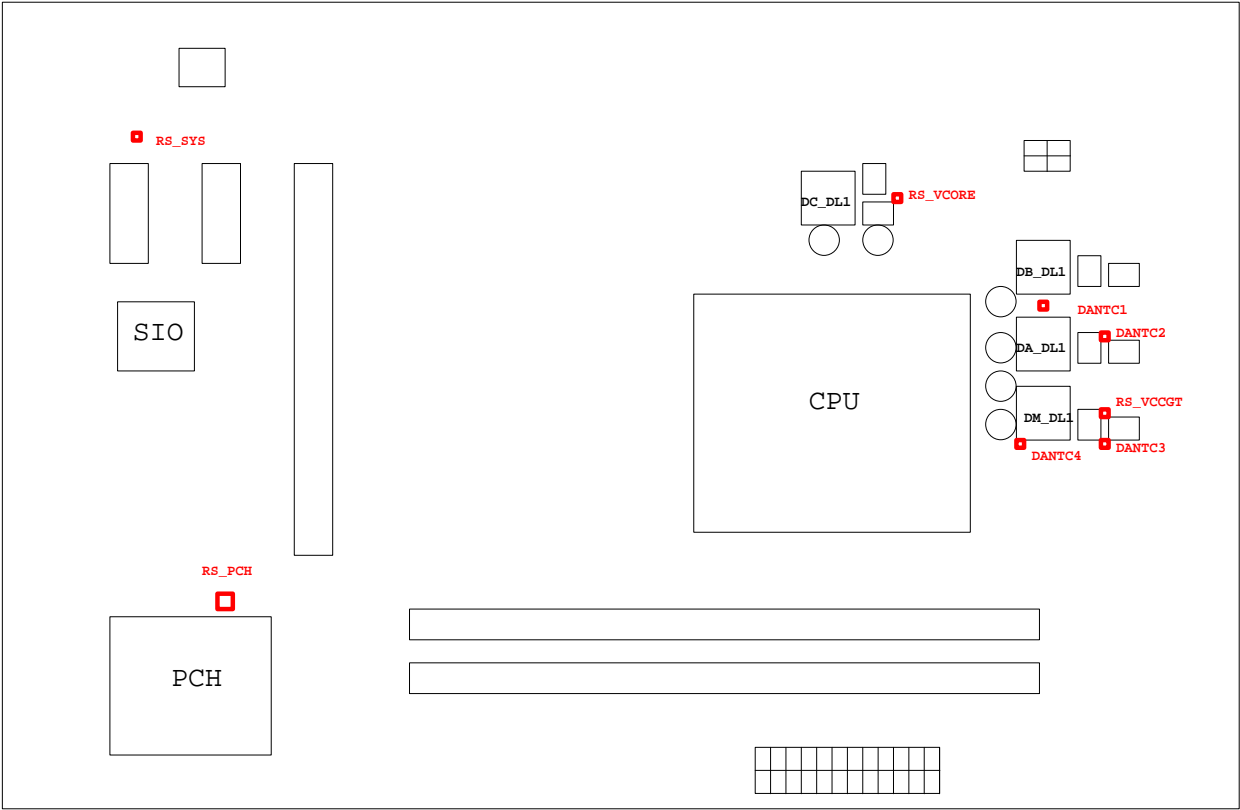
		料號	Capture Value	Footprint
PWM	ISL95856	10TA1-695856-01R		IC52QFN-6x6-G
PWM	ISL95858	10TA1-695858-01R		IC52QFN-6x6-G
PWM	IR35201	10TA1-635201-00R		IC56QFN-9VRS4339
PWM	IR3570	10TA1-603570-00R		IC40MLFP-ISL95835

GIGABYTE™

TitleRT8120_DDR4 POWER

SizeCustomDocument NumberGA-H110M-H DDR3Rev1.0

Date:Monday, November 02, 2015Sheet45of46



熱敏電阻	擺放靠近位置	走線方式
DANTC4	DM_DL1	Differential
DANTC1	DA_DL1	Differential
DANTC3	DM_DQ1	Differential
DANTC2	DA_DQ1	Differential
RS_VCORE	DA_DQ1	N/A
RS_VCCGT	DM_DQ1	N/A
RS_PCH	PCH	N/A
RS_SYS	CU1	N/A