

Model Name: GA-B250M-D2V

rev 1.0

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_LGA1150-D
08	DDR4 CHANNEL A
09	DDR4 CHANNEL B
10	PCH_CLK BUFFER
11	PCH_DMI,USB,PCIE
12	PCH_MISC
13	PCH SATA,PCIE,SATA_EXPRESS
14	PCH PWR
15	PCH GND
16	ITE 8686 LPC IO
17	HWM
18	FAN CTRL--SIO
19	PCI EXPRESS*16 SLOT
20	PCI EXPRESSX1 SLOT *2
21	Single BIOS
22	M.2 X4 (Q)
23	M.2X4_S5 SWITCH
24	IT8892E/JX(NA)
25	PCI SLOT(NA)
26	LED POWER(NA)
27	ISL95858 PWM-IRON
28	ISL95858 VCORE-IRON

SHEET

TITLE

29	ISL95858 VCCGT-IRON
30	VCCSA_VCCIO_VCCPLL
31	RT8237_DDR_BEAD
32	RT8068A_VPP
33	RT8237_PCH-BEAD
34	DISCRETE POWER
35	ATX POWER , A_-PROCHOT
36	KB_MS/PS2
37	DVI CONN
38	RTD2168 - DP to VGA - IC
39	RTD2168 - DP to VGA - Conn
40	REALTEK 8111G
41	USB30_LAN CONNECTOR-8111G
42	Realtek ALC887
43	REAR AUDIO JACK
44	ADUIO LED
45	R_USB30_1
46	R_USB30_2
47	F_USB30
48	F_USB
49	F_PANEL
50	COM, TPM
51	EMI-ESD
52	POWER MAP
53	NTC MAP
54	
55	
56	

Gigabyte Technology

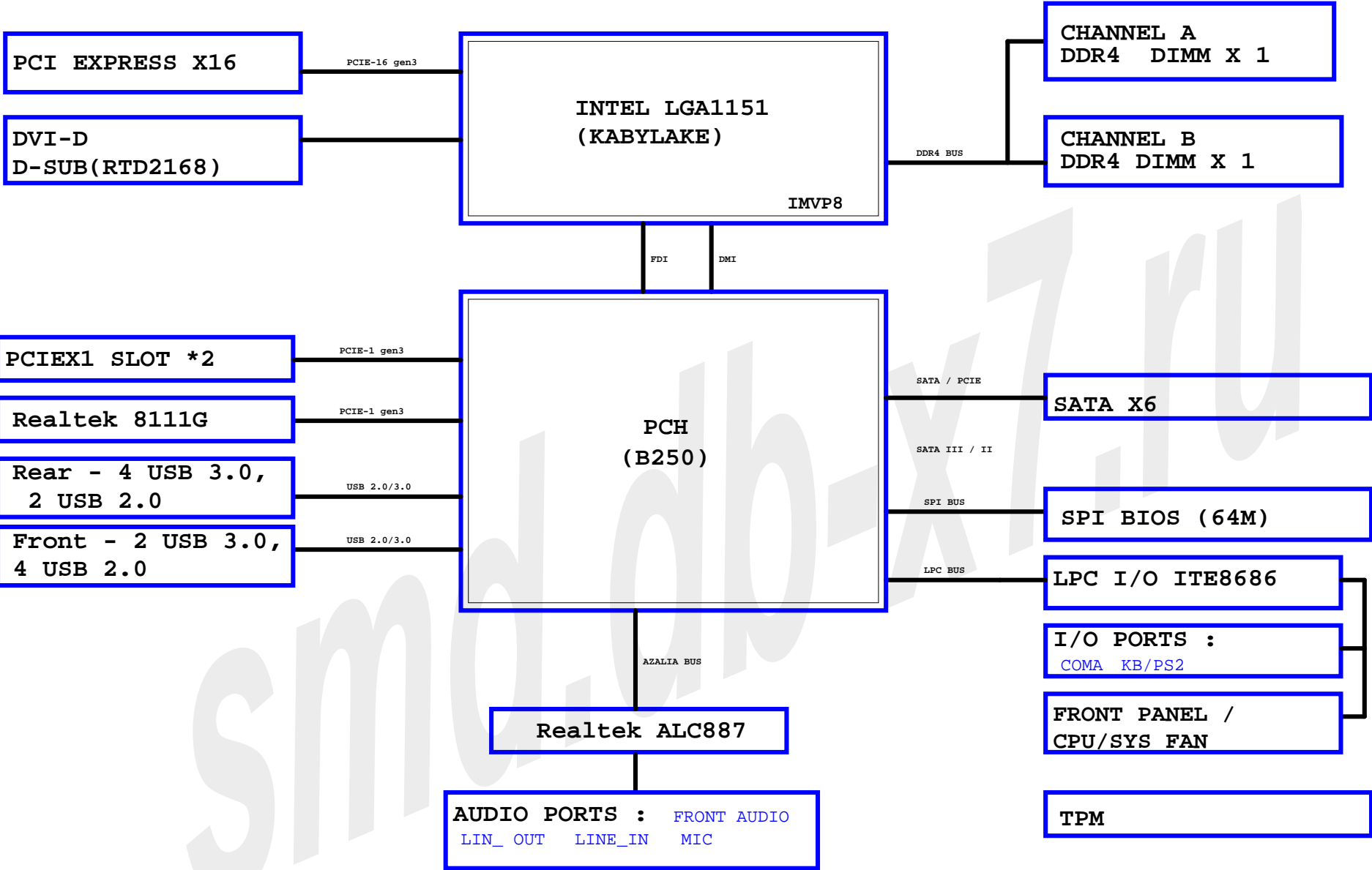
Title			Cover Sheet
Size	Document Number	GA-B250M-D2V	Rev
Custom			1.0
Date:	Wednesday, November 16, 2016	Sheet	1 of 53

rev1.0

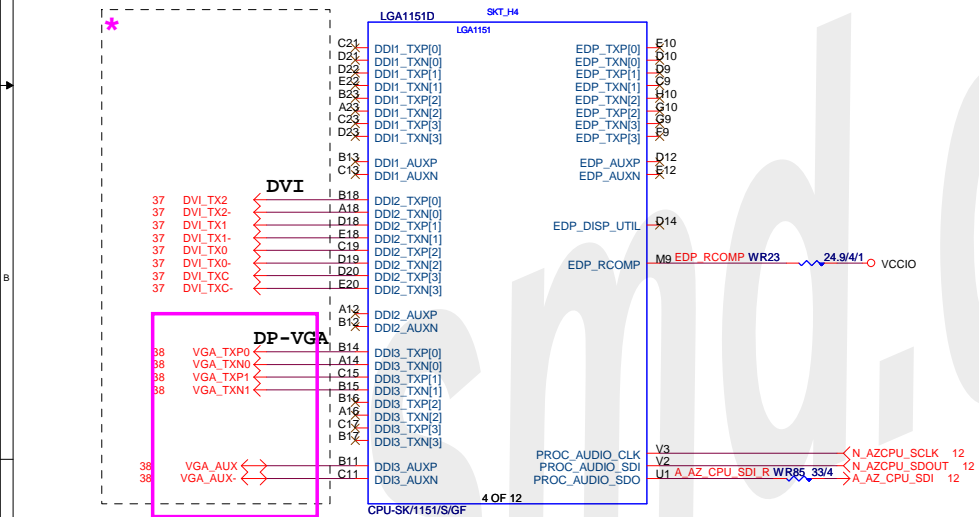
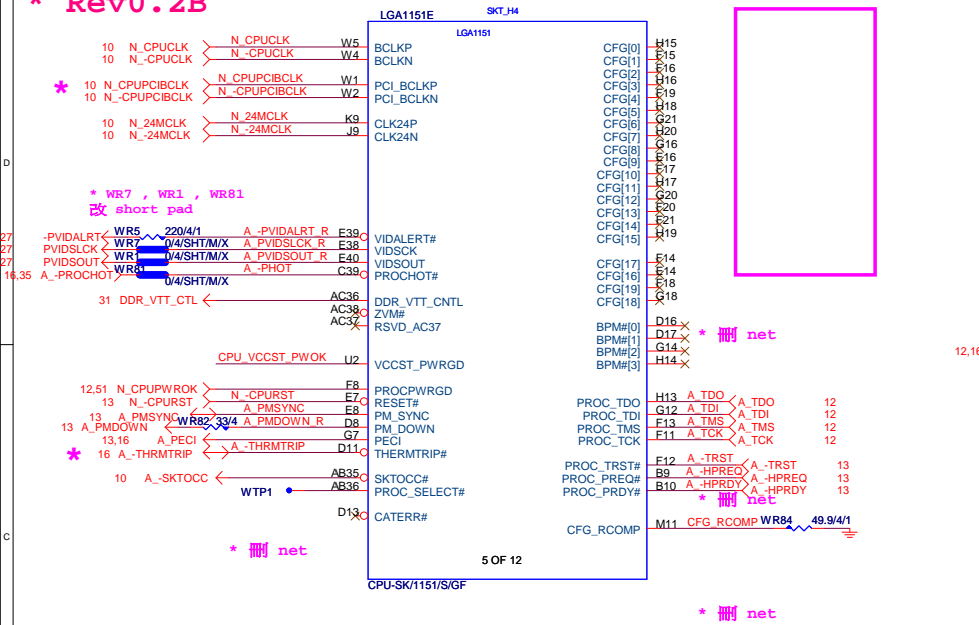
Circuit or PCB layout change

Component value change history

BLOCK DIAGRAM



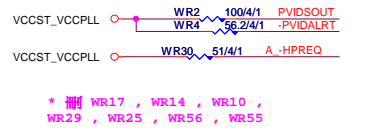
*** Rev0.2B**



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
```

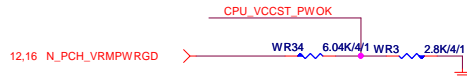
Impedance=85 +- 15%



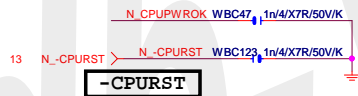
* 删除 WR17 , WR14 , WR10 ,
WR29 , WR25 , WR56 , WR55



* 删除 WR91



```
*  net N_CPU_VCCST_PWOK
```



```

PA_EXP_TXP[0..15]    >> PA_EXP_TXP[0..15]  19
PA_EXP_TXN[0..15]    >> PA_EXP_TXN[0..15]  19
PA_EXP_RXP[0..15]    >> PA_EXP_RXP[0..15]  19
PA_EXP_RXN[0..15]    >> PA_EXP_RXN[0..15]  19

```

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

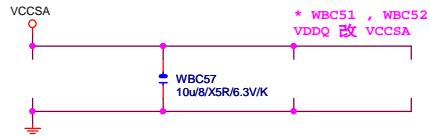
Impedance=85 +- 15%

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

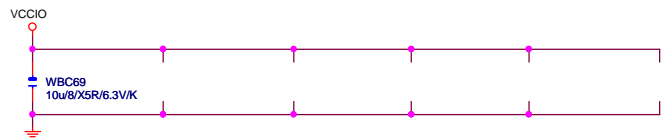
Bifurcation Config.	Signals Lanes		
	CFG[6]	CFG[5]	CFG[2]
1x16	1	1	1
1x16 Reversed	1	1	0
2x8	1	0	1
2x8 Reversed	1	0	0
1x8+2x4	0	0	1
1x8+2x4 Reversed	0	0	0

<i>Gigabyte Technology</i>			
Title			
CPU LGA1151-A			
Size Custom	Document Number		Rev
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* 刪 WBC50 電容

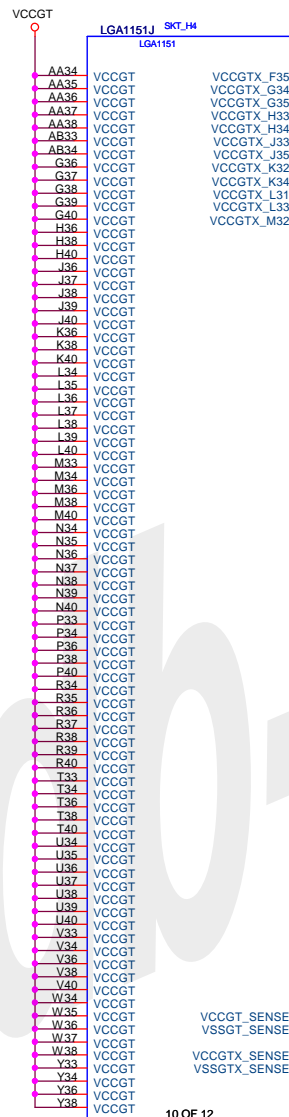
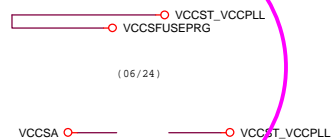


* 刪 WBC124, WBC125, WBC126, WBC127 電容

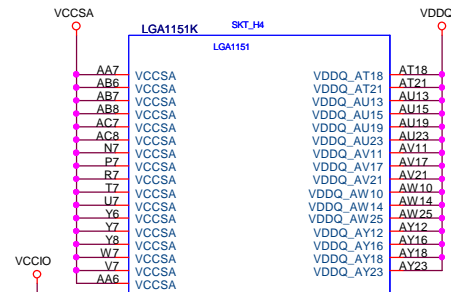


* 刪 VCCGT 電容

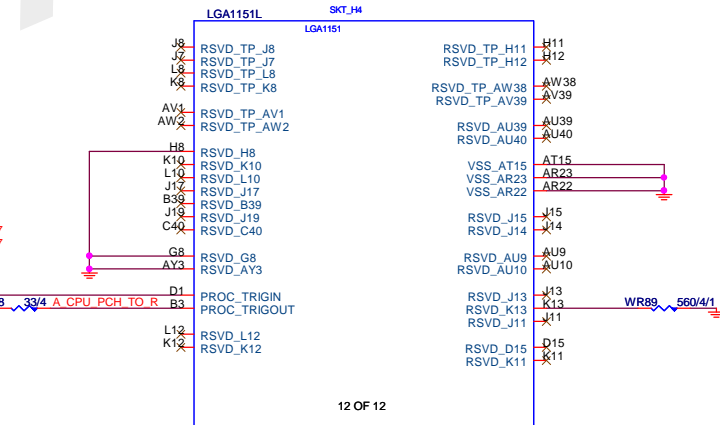
* 刪 WR94, WR59, WR86, WR60, WR61, WR62, WR63 改 short pad



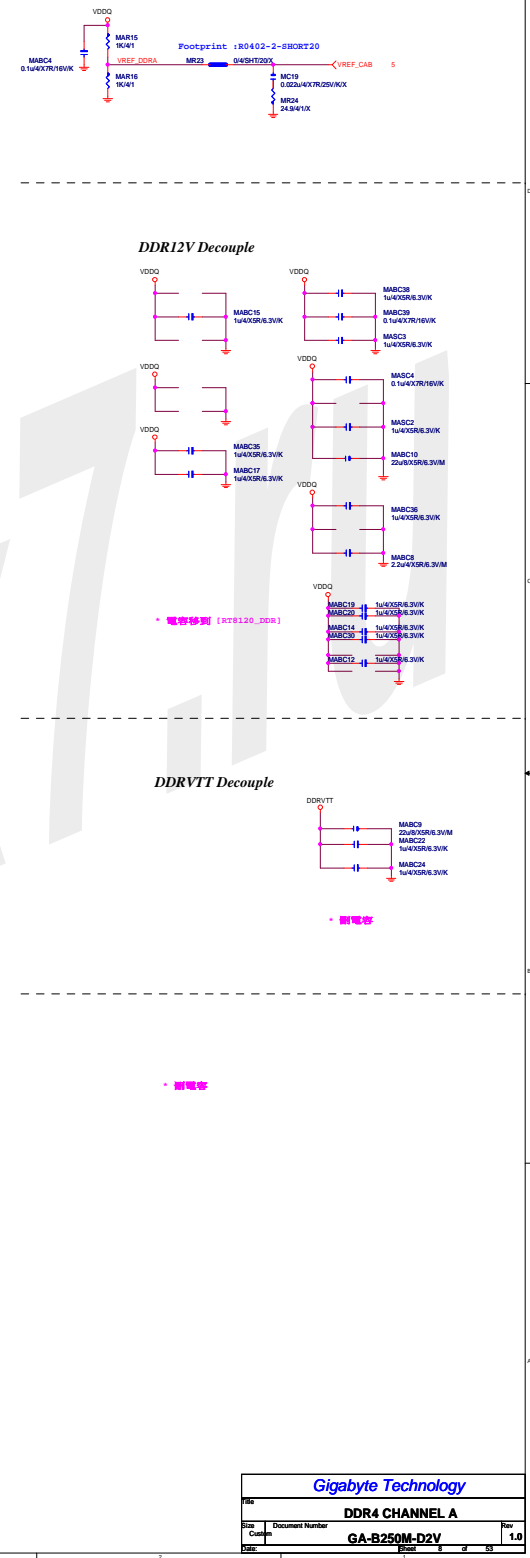
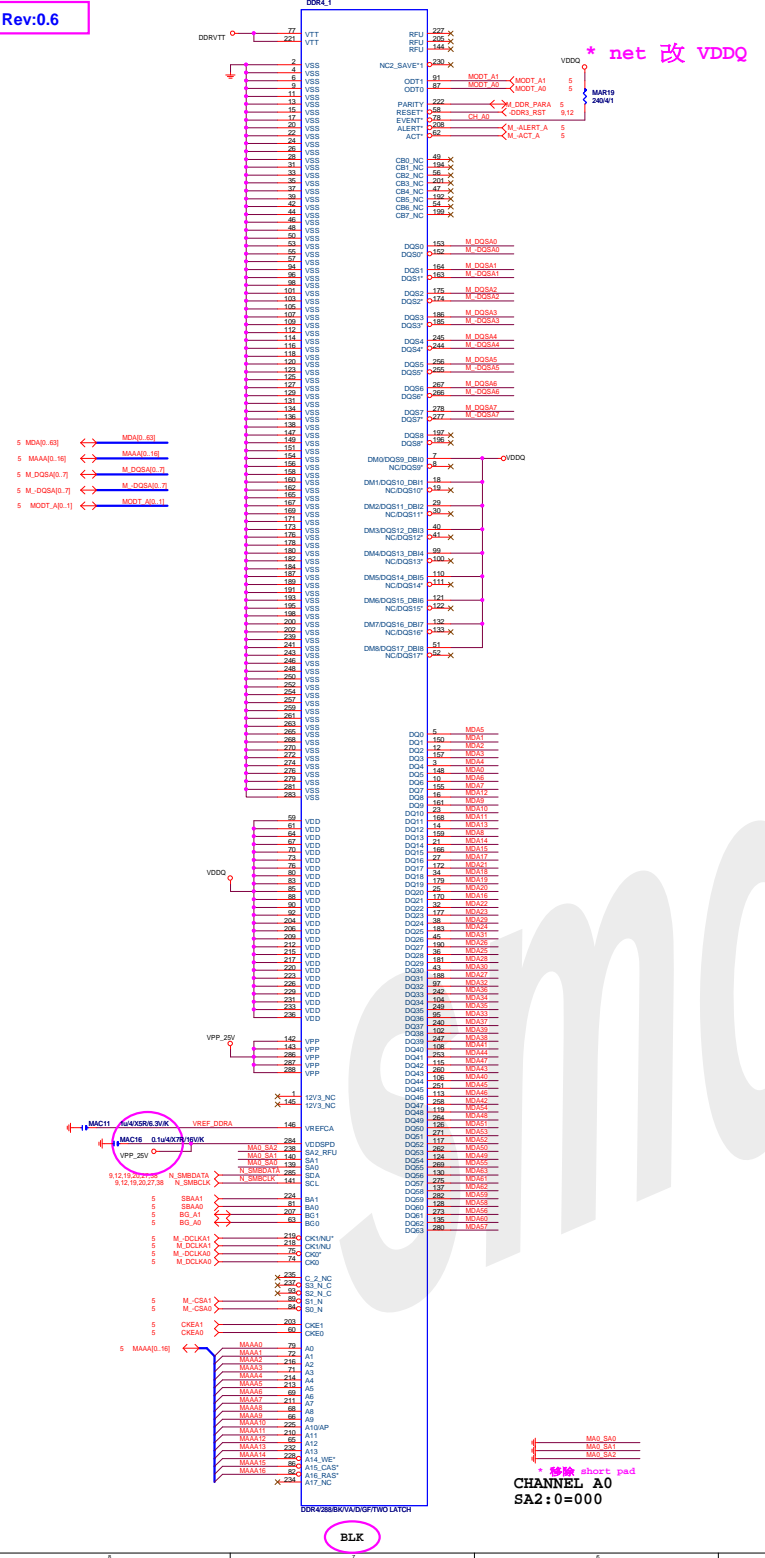
CPU-SK/1151/S/GF

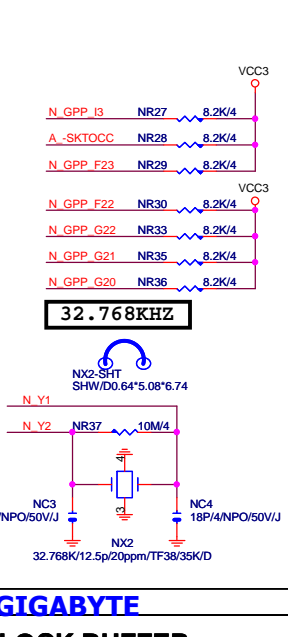
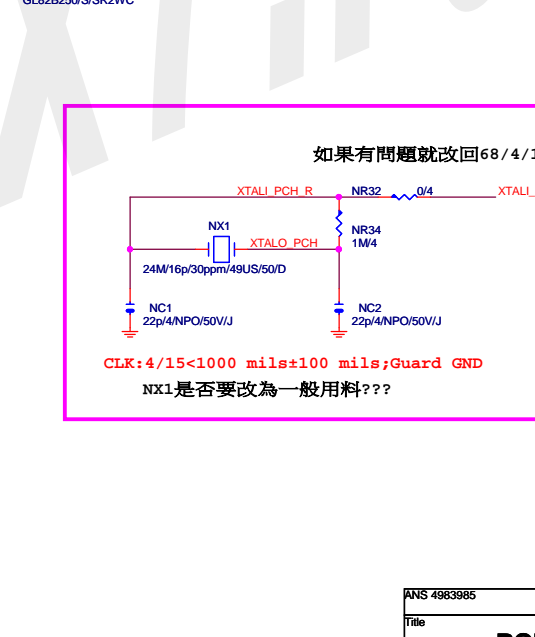
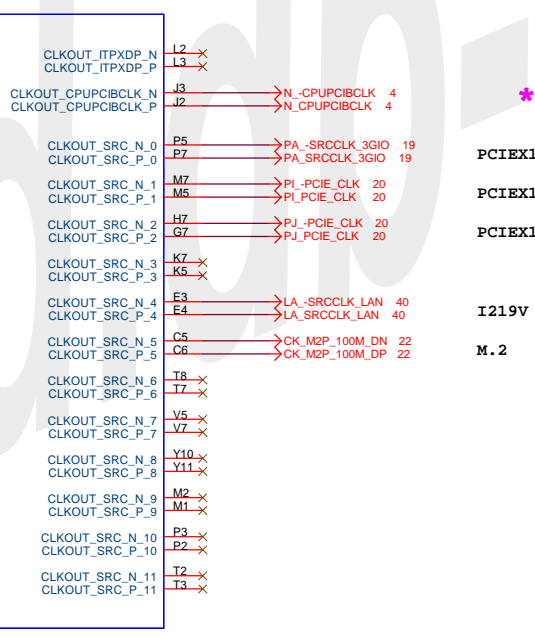
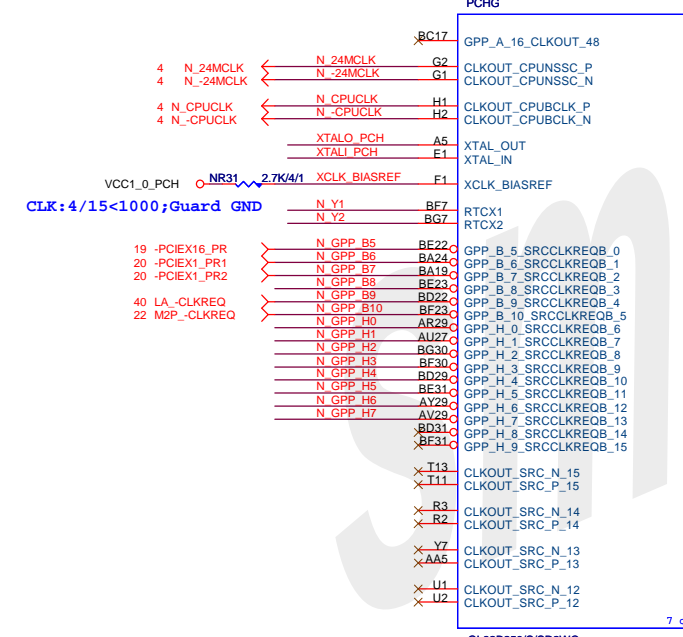
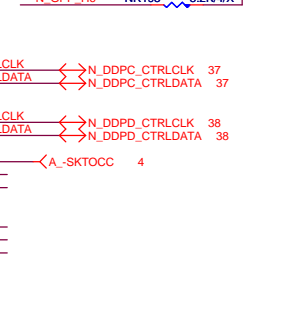
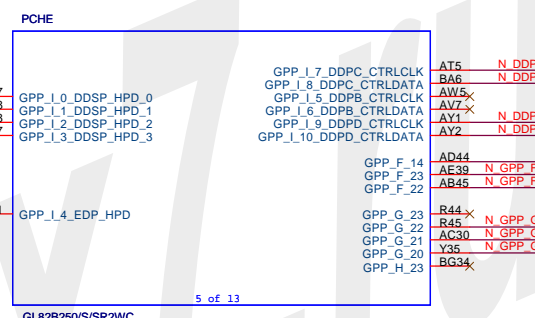
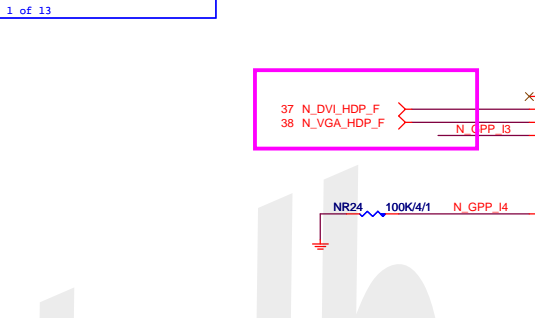
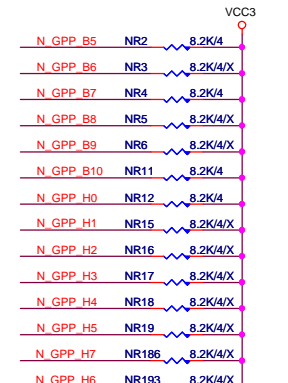
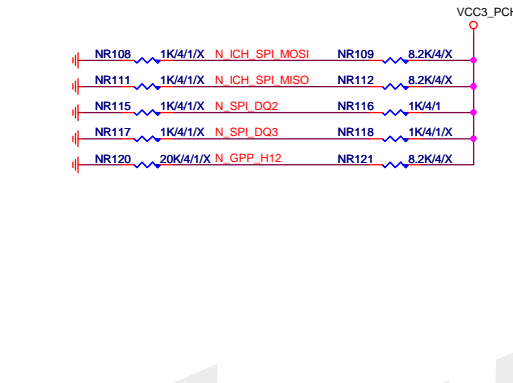
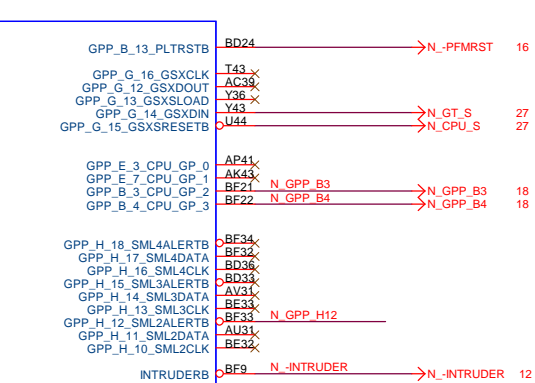
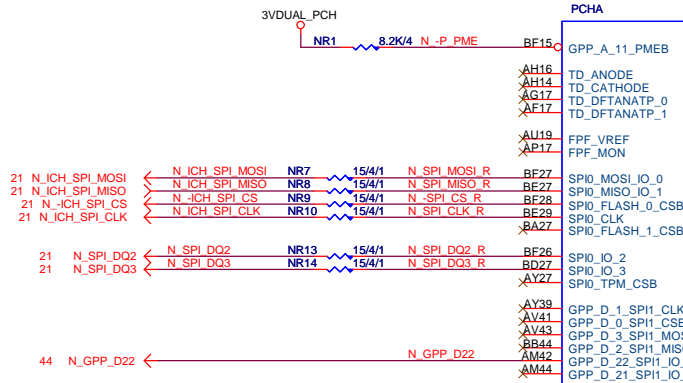


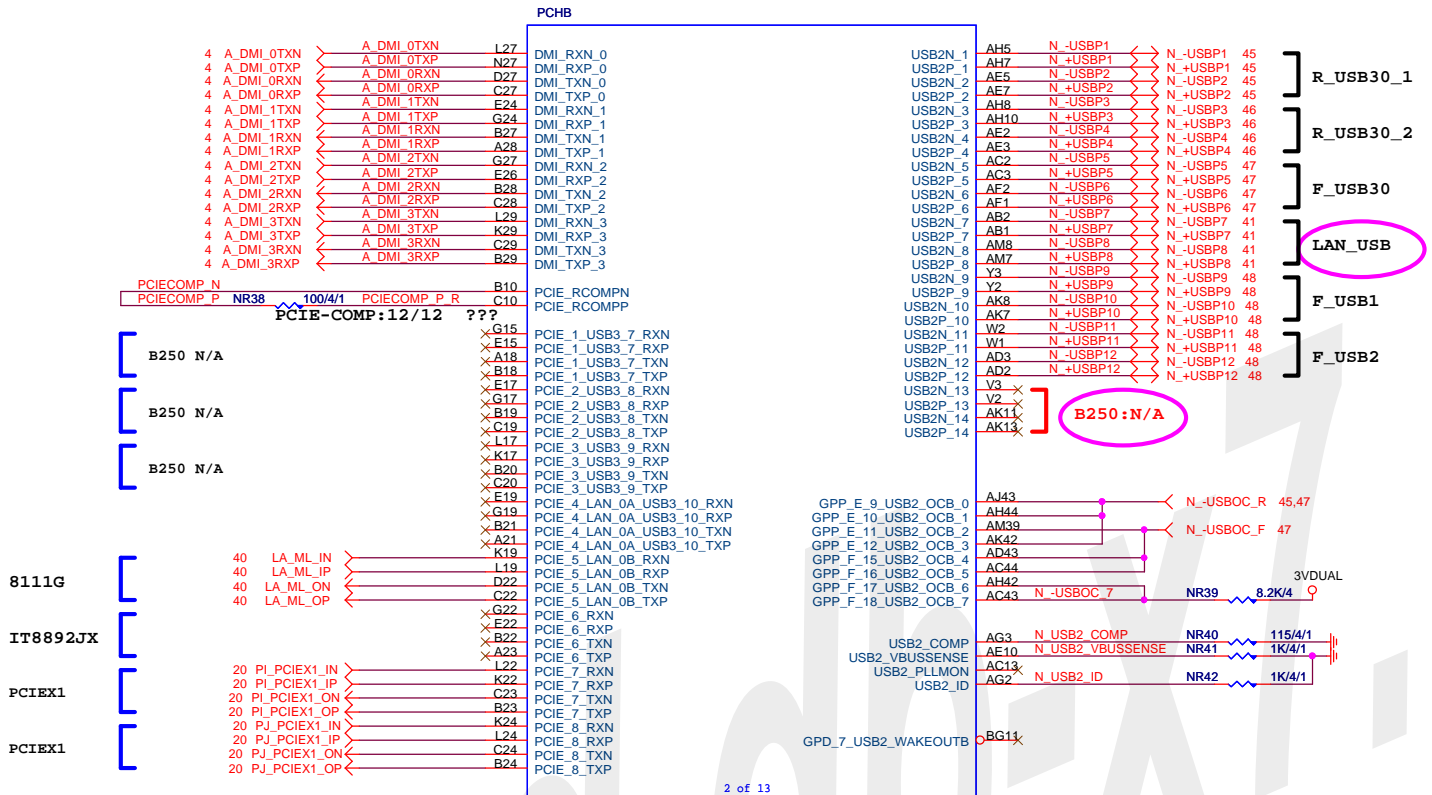
CPU-SK/1151/S/GF



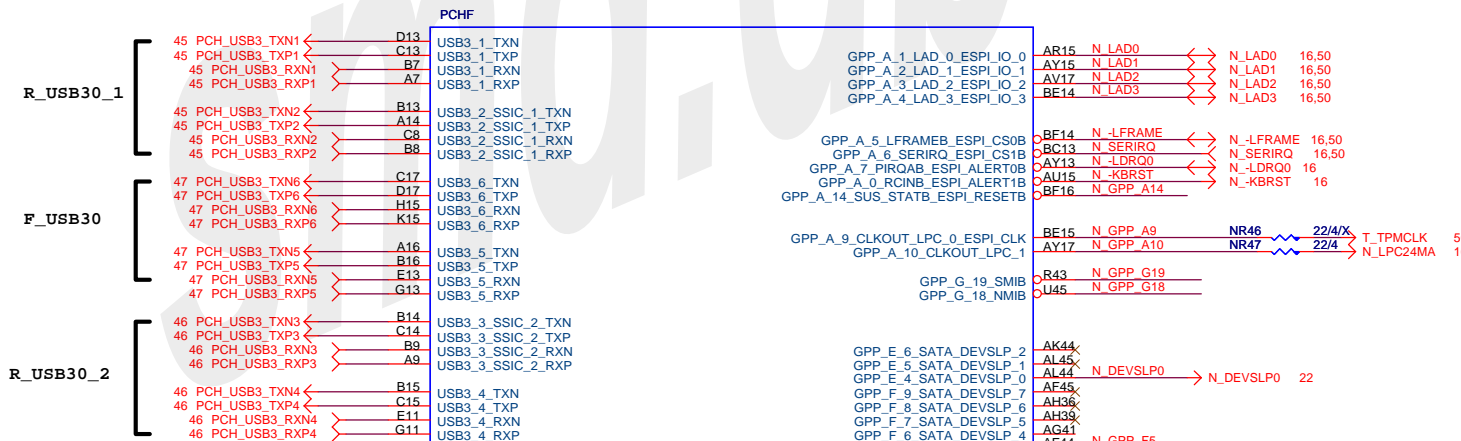
CPU-SK/1151/S/GF





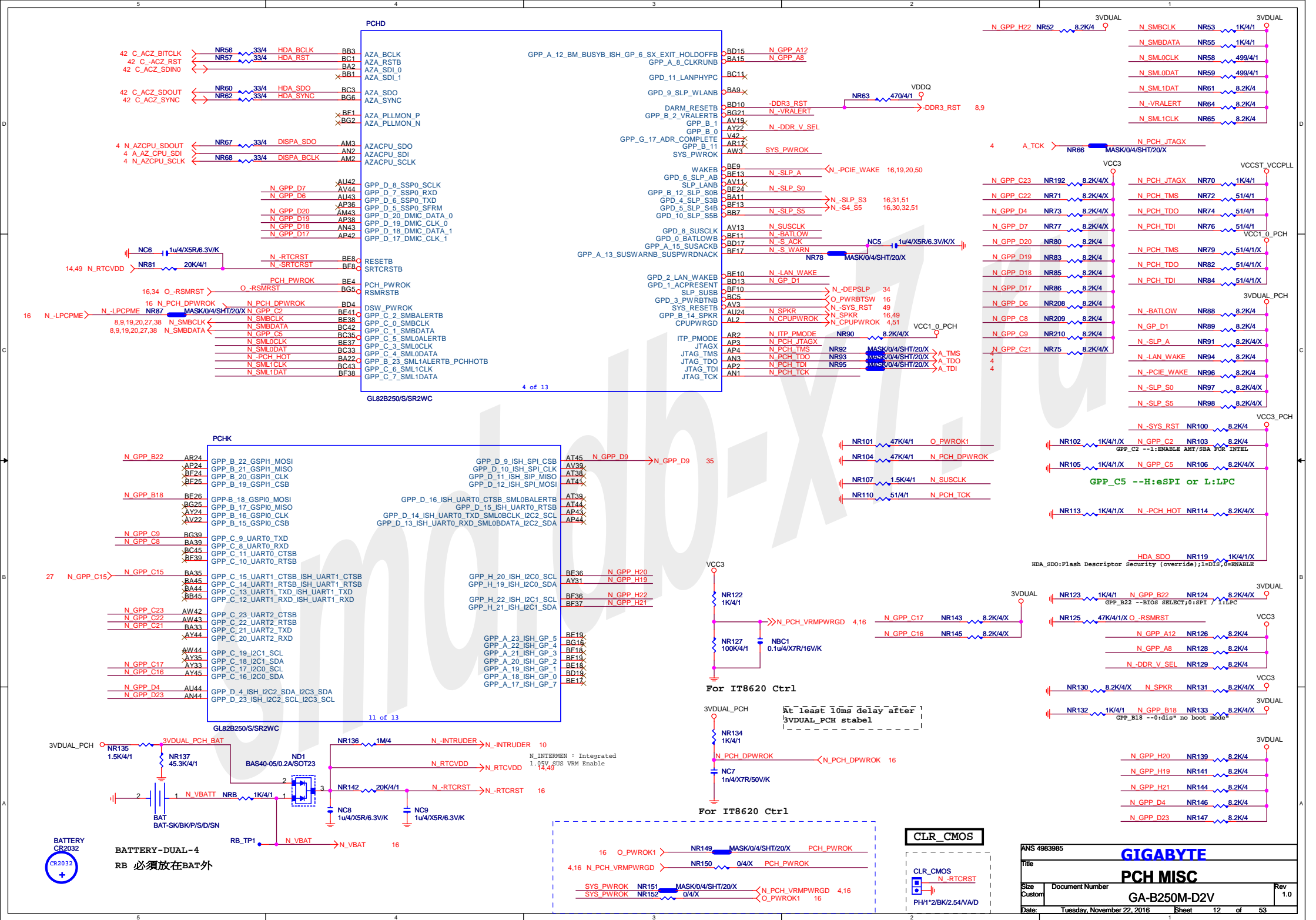


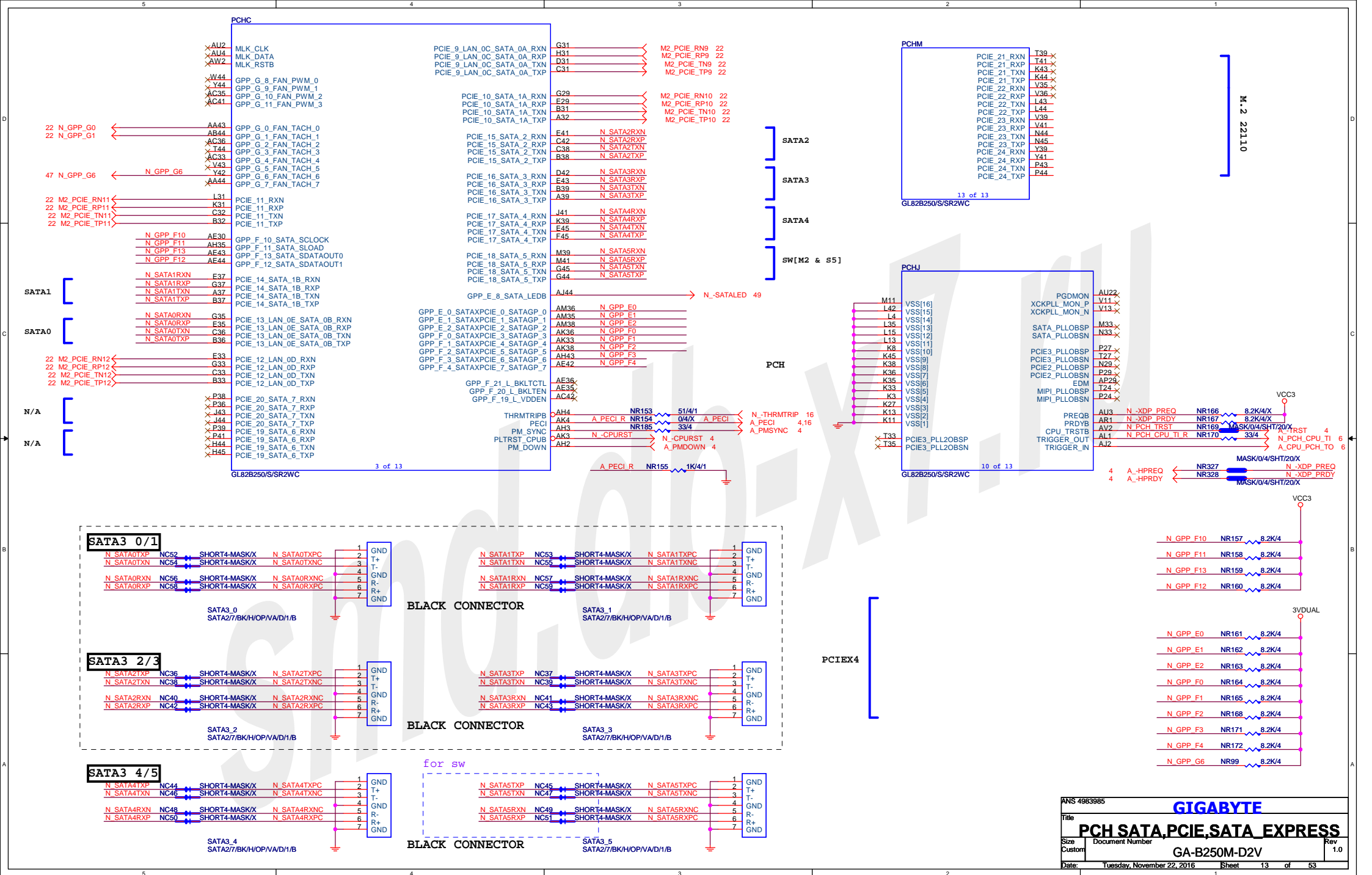
GL82B250/S/SR2WC

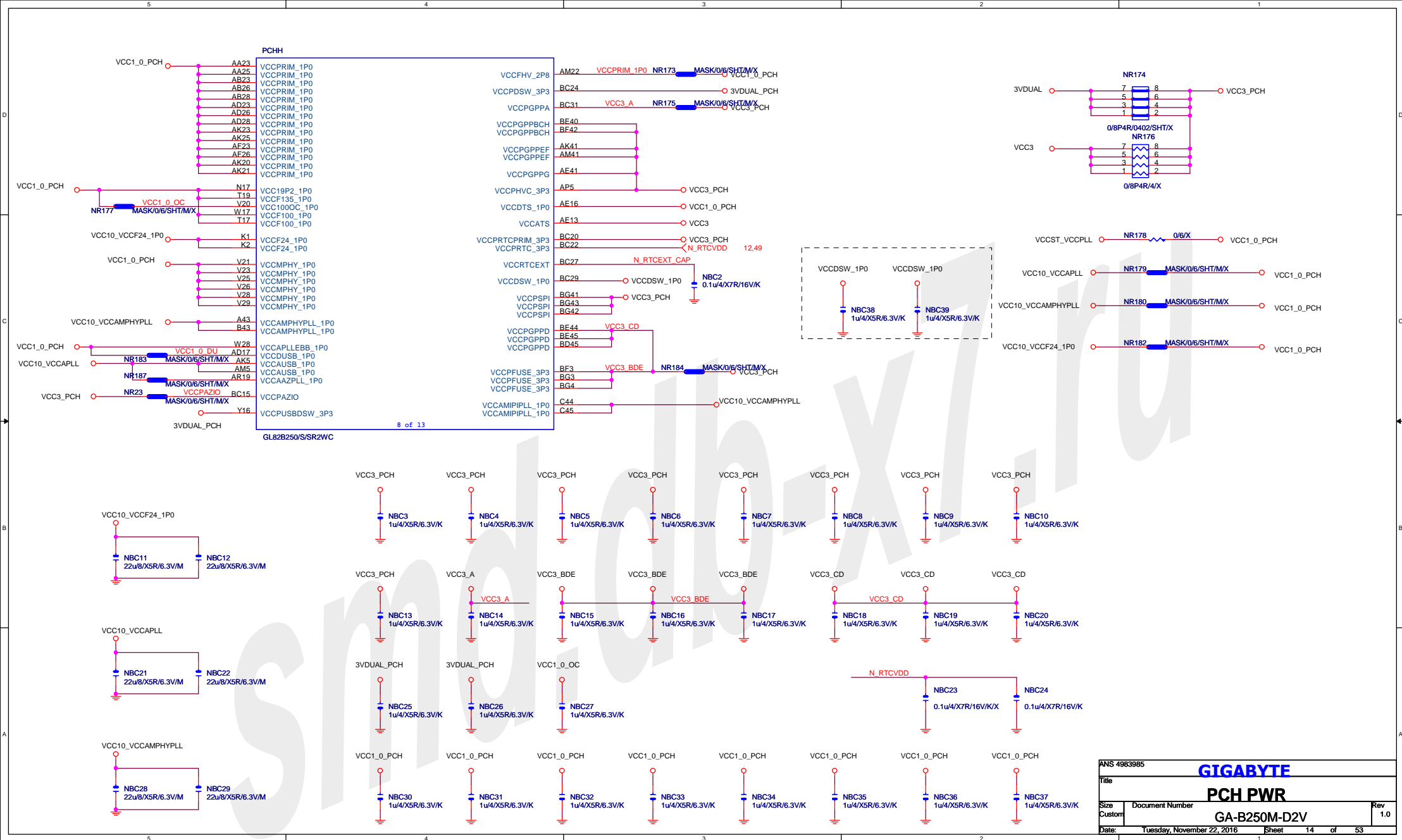


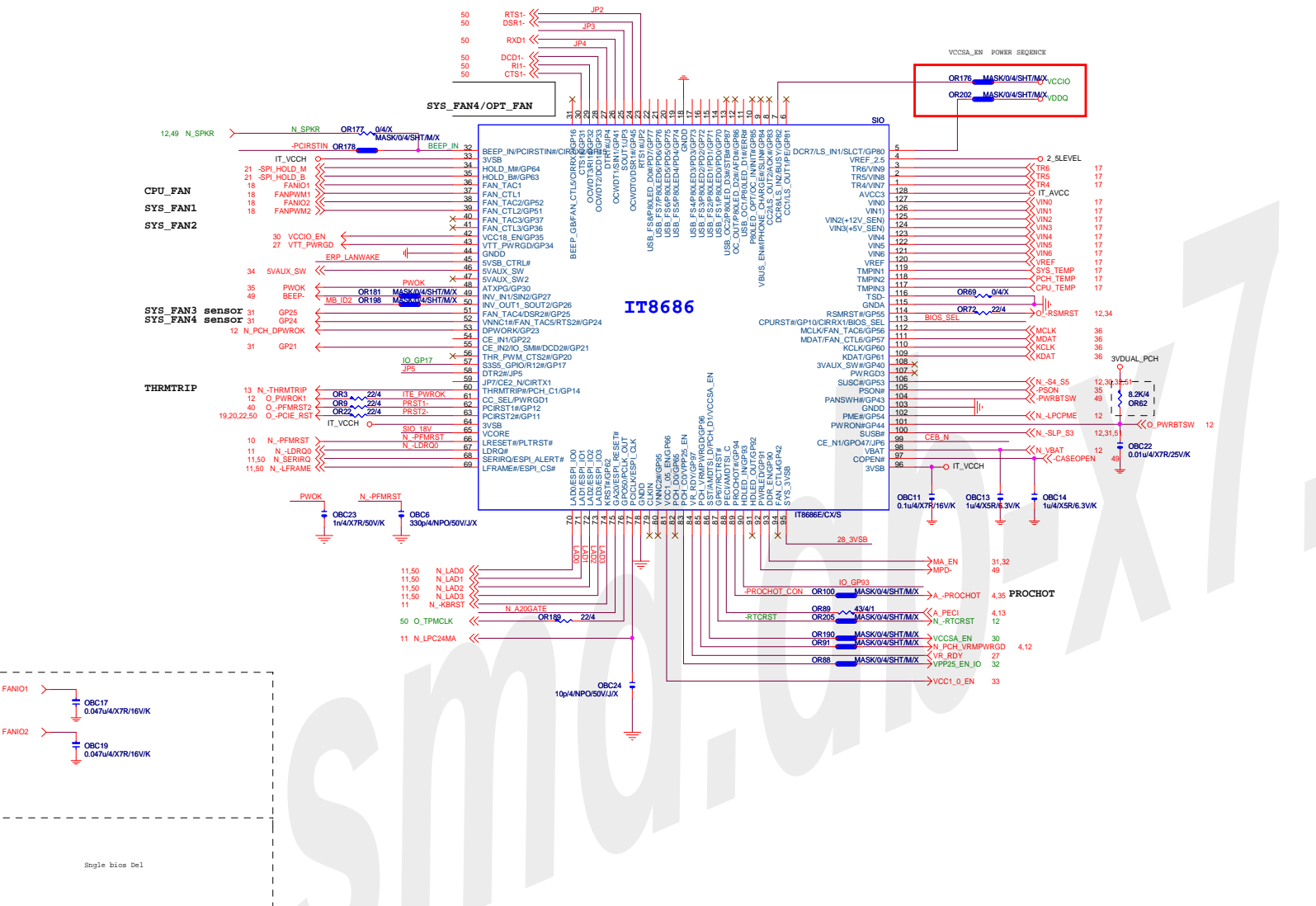
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GL82B250/S/SR2WC



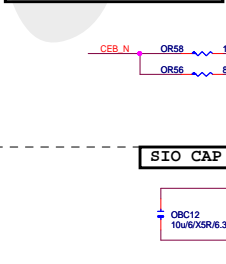






FAN TABLE	
CPU_FAN	FAN_CTL1 FAN_TAC1
SYS_FAN1	FAN_CTL2 FAN_TAC2
SYS_FAN2	FAN_CTL3 FAN_TAC3
SYS_FAN3	FAN_CTL4 FAN_TAC4
OPT_FAN or SYS_FAN4	FAN_CTL5 FAN_TAC5
THRMTRIP	PIN56
PROCHOT	PIN89

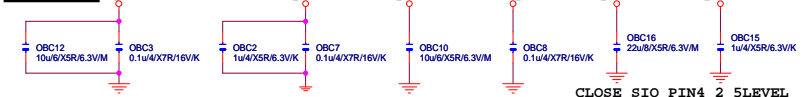
DUAL BIOS OPT STRAP



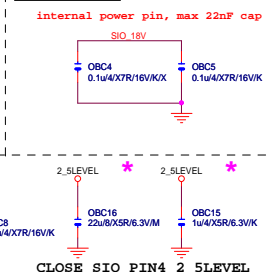
Placement CPU
4 A-THRMTRIP <WR10 1K/4/1 N-THRMTRIP

CPU 端 A-THRMTRIP不可與PCH及SIO
N-THRMTRIP直接連接，
否則會出現無法拉LOW情況。

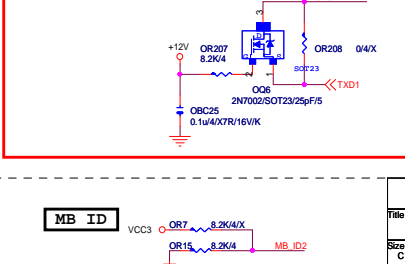
SIO CAP



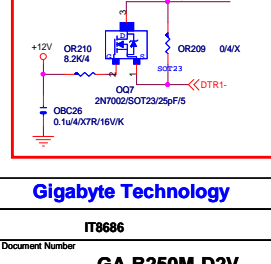
SIO 18V



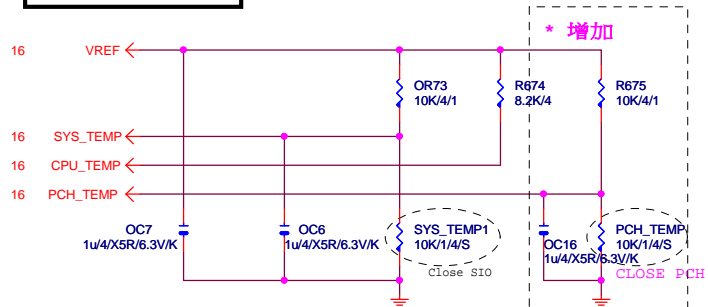
for LPC/eSPI power mode



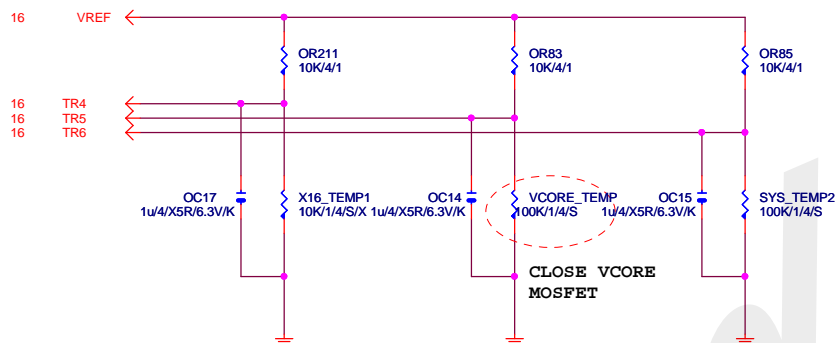
for LPC/eSPI power mode



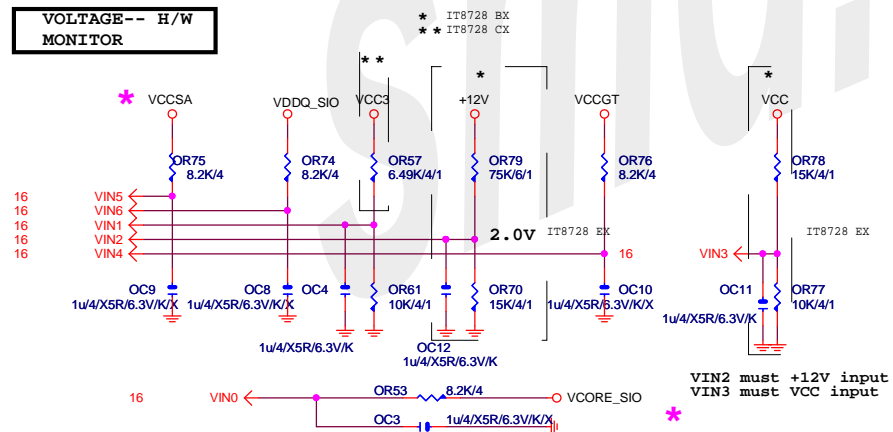
TEMP H/W MONITOR



5個FAN時使用

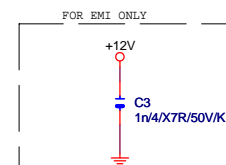
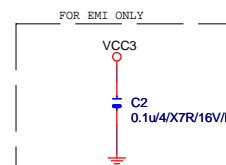


VOLTAGE-- H/W MONITOR



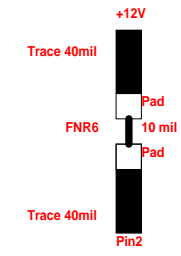
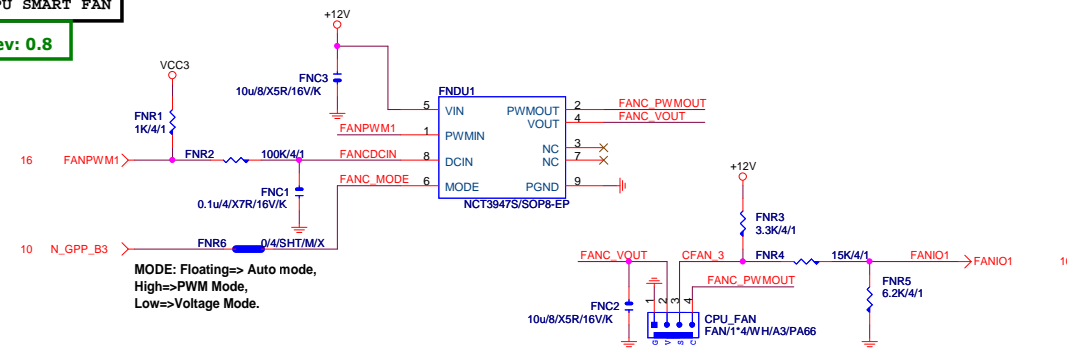
The division voltage of VIN2 & VIN3 must be around 2.9V

★Update 2015-04.24

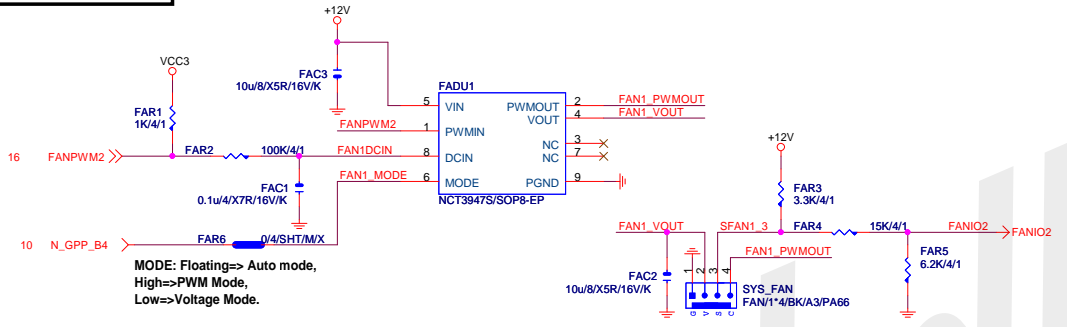


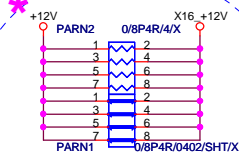
Gigabyte Technology

Title		
HWM,KB/MS, FAN CTRL		
Size	Document Number	Rev
Custom	GA-B250M-D2V	1.0
Date:	Wednesday, November 16, 2016	Sheet 17 of 53



A. SYSTEM FAN1



**+12 - protect
short-wire test**

PA_EXP_RXP[0..15] >> PA_EXP_RXP[0..15] 4
PA_EXP_RXN[0..15] >> PA_EXP_RXN[0..15] 4
PA_EXP_TXP[0..15] >> PA_EXP_TXP[0..15] 4
PA_EXP_TXN[0..15] >> PA_EXP_TXN[0..15] 4

PA_EXP_TXP0	PAC5	0.22u4/X5R6.3V/K	PA_EXP_TXP0_C
PA_EXP_TXN0	PAC4	0.22u4/X5R6.3V/K	PA_EXP_TXN0_C
PA_EXP_TXP1	PAC6	0.22u4/X5R6.3V/K	PA_EXP_TXP1_C
PA_EXP_TXN1	PAC7	0.22u4/X5R6.3V/K	PA_EXP_TXN1_C
PA_EXP_TXP2	PAC8	0.22u4/X5R6.3V/K	PA_EXP_TXP2_C
PA_EXP_TXN2	PAC9	0.22u4/X5R6.3V/K	PA_EXP_TXN2_C
PA_EXP_TXP3	PAC10	0.22u4/X5R6.3V/K	PA_EXP_TXP3_C
PA_EXP_TXN3	PAC11	0.22u4/X5R6.3V/K	PA_EXP_TXN3_C
PA_EXP_TXP4	PAC12	0.22u4/X5R6.3V/K	PA_EXP_TXP4_C
PA_EXP_TXN4	PAC13	0.22u4/X5R6.3V/K	PA_EXP_TXN4_C
PA_EXP_TXP5	PAC14	0.22u4/X5R6.3V/K	PA_EXP_TXP5_C
PA_EXP_TXN5	PAC15	0.22u4/X5R6.3V/K	PA_EXP_TXN5_C
PA_EXP_TXP6	PAC16	0.22u4/X5R6.3V/K	PA_EXP_TXP6_C
PA_EXP_TXN6	PAC17	0.22u4/X5R6.3V/K	PA_EXP_TXN6_C
PA_EXP_TXP7	PAC18	0.22u4/X5R6.3V/K	PA_EXP_TXP7_C
PA_EXP_TXN7	PAC19	0.22u4/X5R6.3V/K	PA_EXP_TXN7_C
PA_EXP_TXP8	PAC21	0.22u4/X5R6.3V/K	PA_EXP_TXP8_C
PA_EXP_TXN8	PAC20	0.22u4/X5R6.3V/K	PA_EXP_TXN8_C
PA_EXP_TXP9	PAC22	0.22u4/X5R6.3V/K	PA_EXP_TXP9_C
PA_EXP_TXN9	PAC23	0.22u4/X5R6.3V/K	PA_EXP_TXN9_C
PA_EXP_TXP10	PAC24	0.22u4/X5R6.3V/K	PA_EXP_TXP10_C
PA_EXP_TXN10	PAC25	0.22u4/X5R6.3V/K	PA_EXP_TXN10_C
PA_EXP_TXP11	PAC26	0.22u4/X5R6.3V/K	PA_EXP_TXP11_C
PA_EXP_TXN11	PAC27	0.22u4/X5R6.3V/K	PA_EXP_TXN11_C
PA_EXP_TXP12	PAC28	0.22u4/X5R6.3V/K	PA_EXP_TXP12_C
PA_EXP_TXN12	PAC29	0.22u4/X5R6.3V/K	PA_EXP_TXN12_C
PA_EXP_TXP13	PAC30	0.22u4/X5R6.3V/K	PA_EXP_TXP13_C
PA_EXP_TXN13	PAC31	0.22u4/X5R6.3V/K	PA_EXP_TXN13_C
PA_EXP_TXP14	PAC32	0.22u4/X5R6.3V/K	PA_EXP_TXP14_C
PA_EXP_TXN14	PAC33	0.22u4/X5R6.3V/K	PA_EXP_TXN14_C
PA_EXP_TXP15	PAC34	0.22u4/X5R6.3V/K	PA_EXP_TXP15_C
PA_EXP_TXN15	PAC35	0.22u4/X5R6.3V/K	PA_EXP_TXN15_C

PCIEX16:16/5/5/5/16

PCI-E REV:1.1--> 2.5GHZ

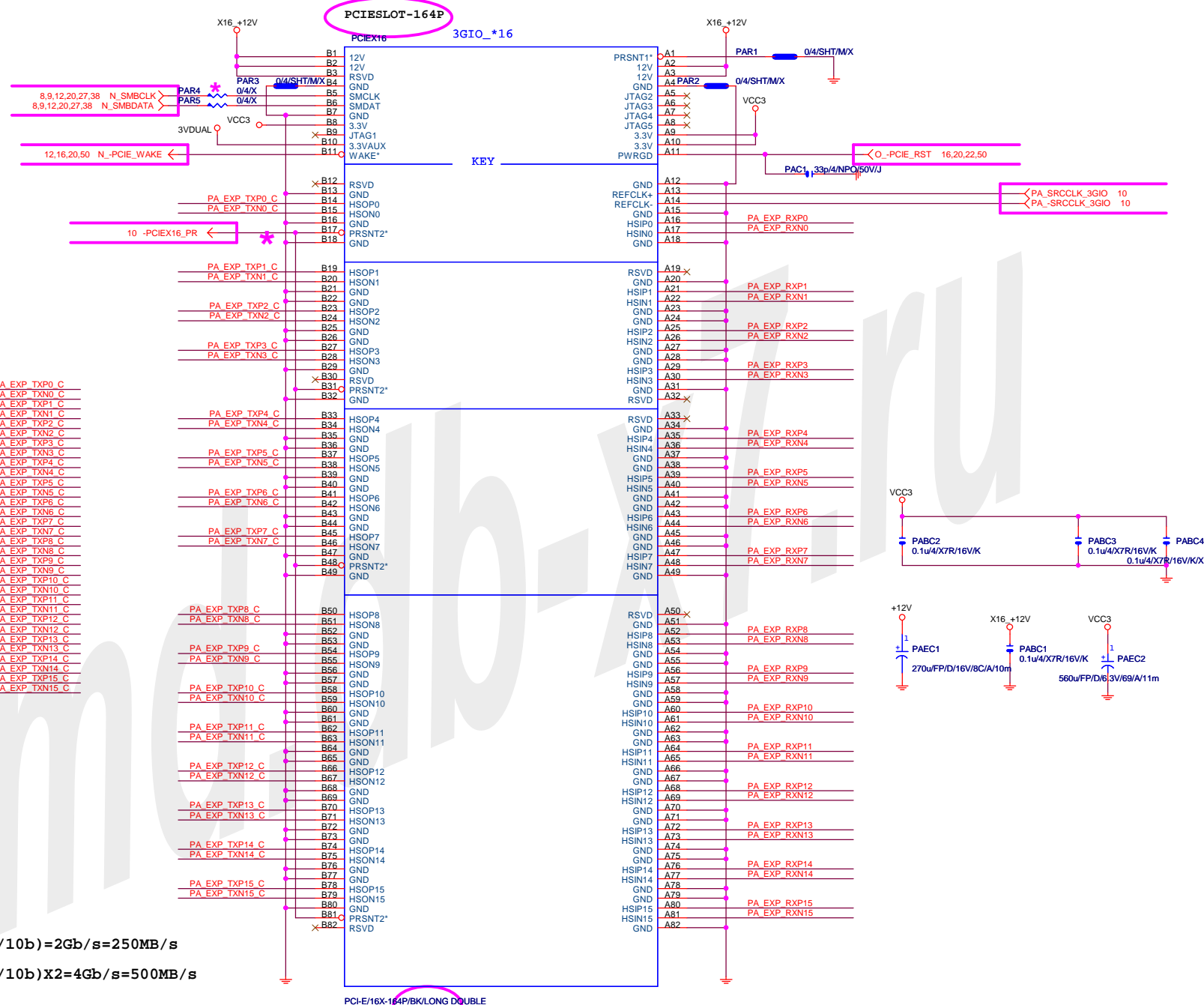
PCE-E X1(單向) BANDWITH=2.5GHz*(8b/10b)=2Gb/s=250MB/s

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

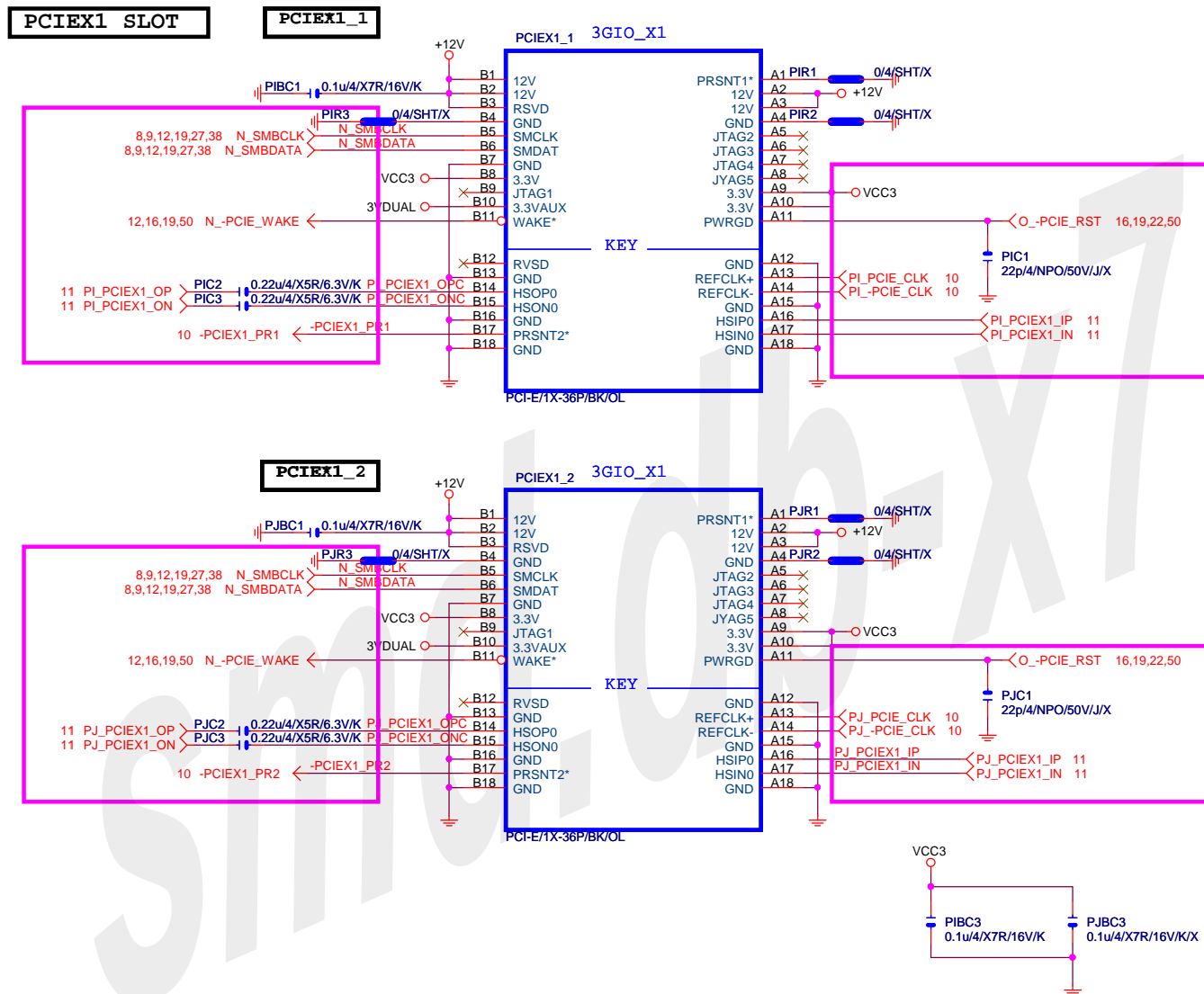
PCE-E X16(單向) BANDWITH=2.5GHz*(8b/10b)X16=32Gb/s=4GB/s

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

PCI-E REV:2.0--> 5GHZ



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



Gigabyte Technology

Title

PCIE_X4

Size

Document Number

Rev

GA-B250M-D2V

1.0

Date:

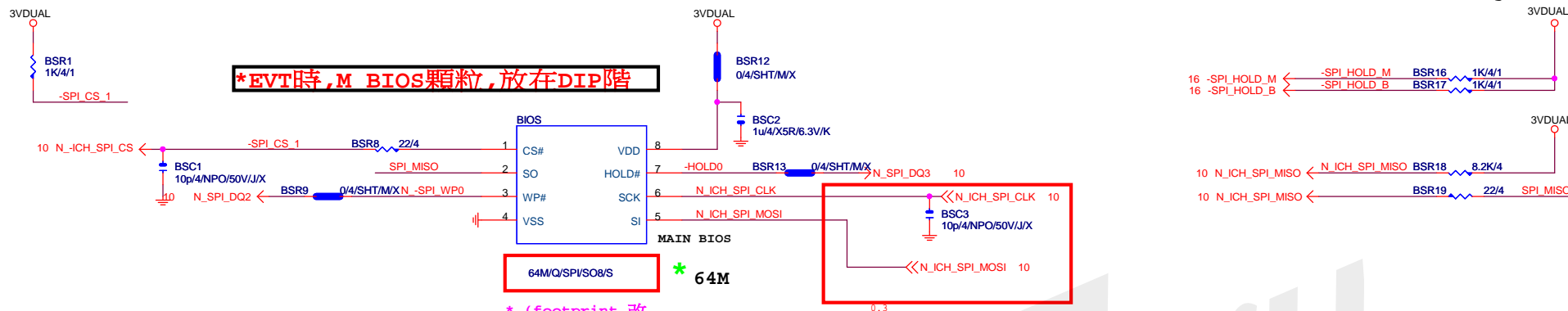
Wednesday, November 16, 2016

Sheet

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*EVT時,M BIOS顆粒,放在DIP階

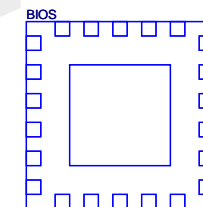
64M/Q/SPI/SO8/S * 64M

* (footprint 改 SOIC8-SPI-SOCKET)

* (MP footprint 改 IC8-BIOS)

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

1 means floating
0 means PD 1K



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

* 試產先上, PVT 移除

Gigabyte Technology

Title

BIOS

Size Custom

Document Number

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Rev 0.1

M.2 Lane4 from PCH port12

M.2 Lane3 from PCH port11

M.2 Lane2 from PCH port10

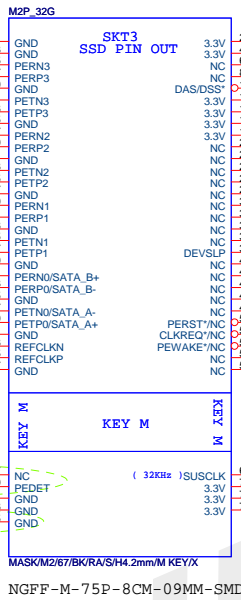
M.2 Lane1 from PCH port9

支援SATA and M.2 function

需與M2-CLKREQ對應

SATA : GND.
PCIE : NC

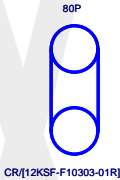
M2插卡時為Low



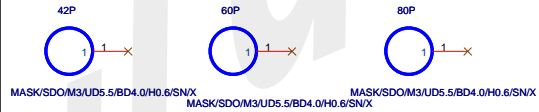
NGFF-M-75P-8CM-09MM-SMD

M2PSATAE_PERST_N M2PR11 Q4/SHT/X
M2P_CLKREQ

DIP螺柱



SMD螺柱



	5	4	3	2	1
D					
C					
B					
A					
	5	4	3	2	1

smd.db-x7.ru

Gigabyte Technology			
M.2X4_S4~S5 SWITCH			
Title			
Size	Document Number	GA-B250M-D2V	
Custom		Rev	1.0
Date:	Wednesday, November 16, 2016	Sheet	23 of 53

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Gigabyte Technology		
File		
IT8892E		
Size	Document Number	Rev
Custom	GA-B250M-D2V	1.0
Date	Wednesday, November 16, 2016	Sheet 24 of 53

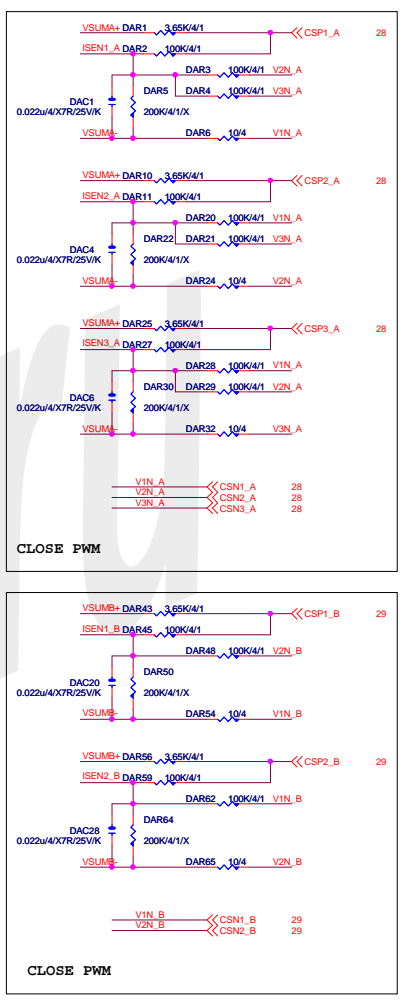
smd.db-x7.ru

GIGABYTE™			
Title			
PCI SLOT 1&2			
Size	Document Number		Rev
Custom	GA-B250M-D2V		1.0
Date:	Wednesday, November 16, 2016	Sheet	25 of 53

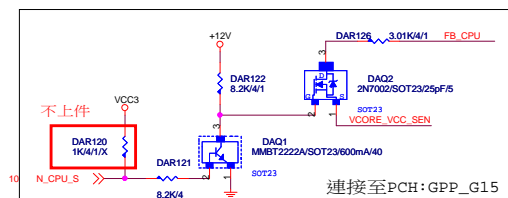
Rev 0.1

smd.db-x7.ru

Gigabyte Technology			
Title			
ASM1085 POWER			
Size Custom	Document Number		Rev
	GA-B250M-D2V		1.0
Date:	Wednesday, November 16, 2016	Sheet	26 of 53

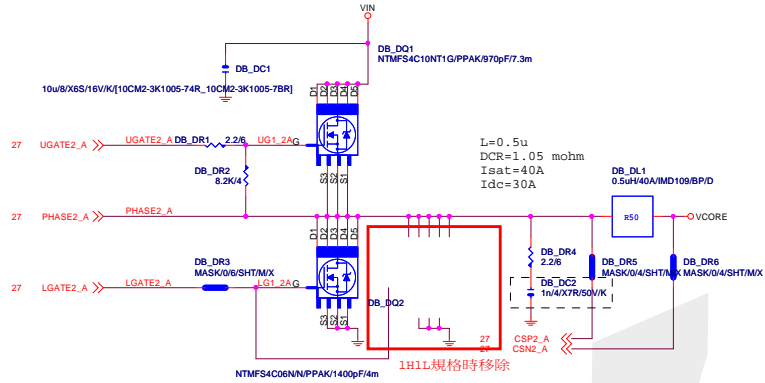
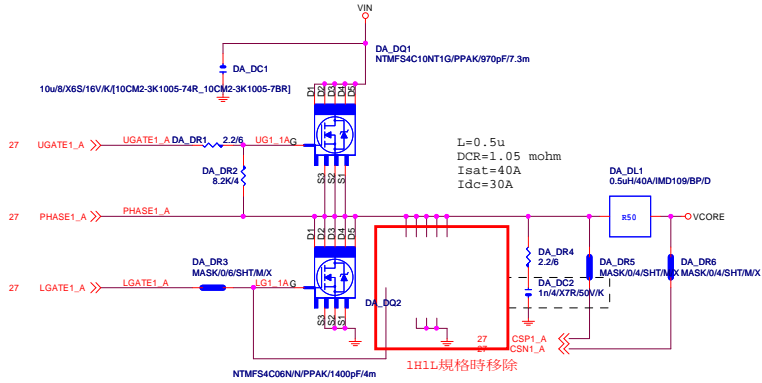


VCOE	ISL95858	ISL95868	VCCGT	ISL95858	ISL95868
DAR137	X	V	DAR140	X	V
DAR138	V	X	DAR141	V	X
DAR139	X	V	DAR142	X	V
DAC15	V	X	DAC27	V	X
DAR79	V	X	DAR80	V	X
DAR33	V	X	DAR51	V	X

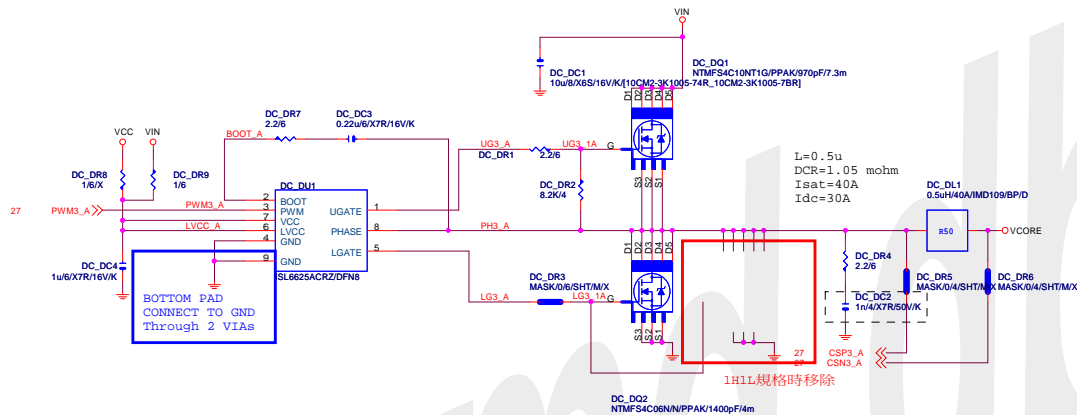
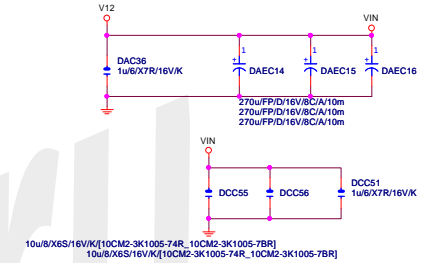


REV:0.1

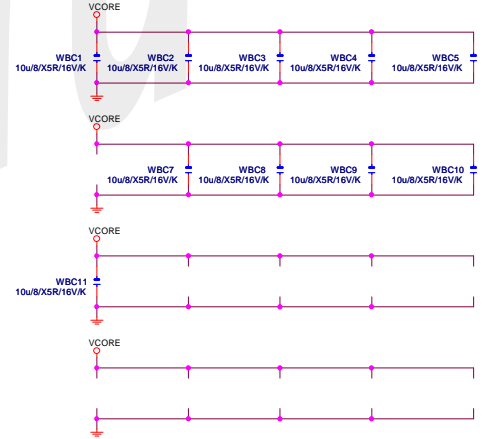
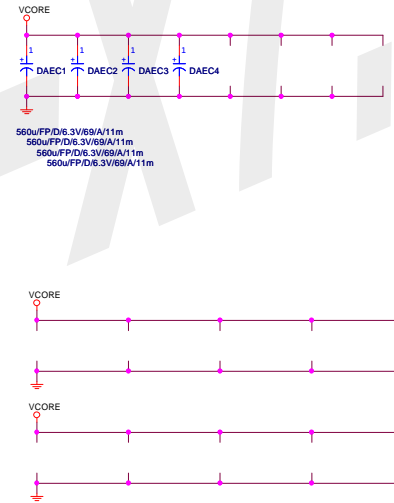
VCORE



VIN CAP 270u*3PCS

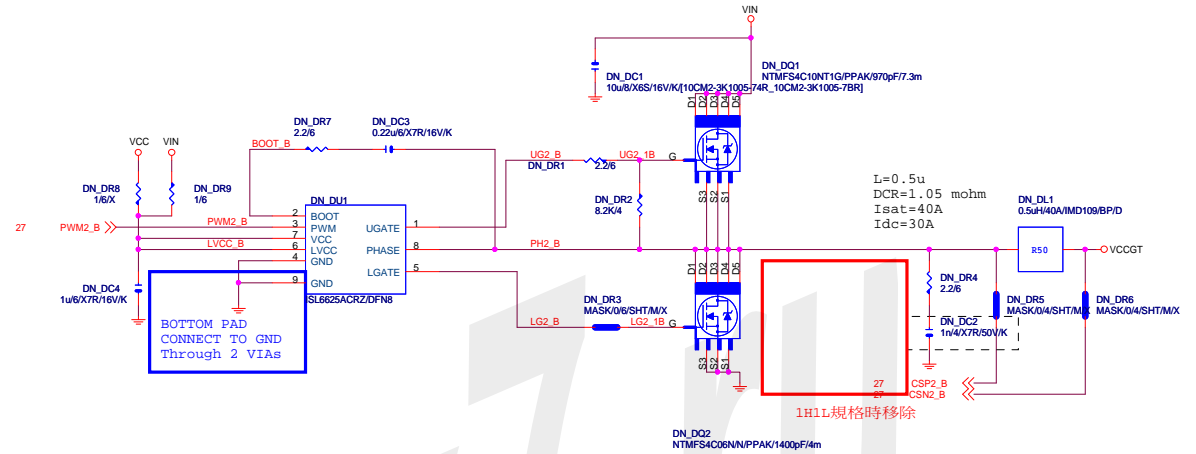
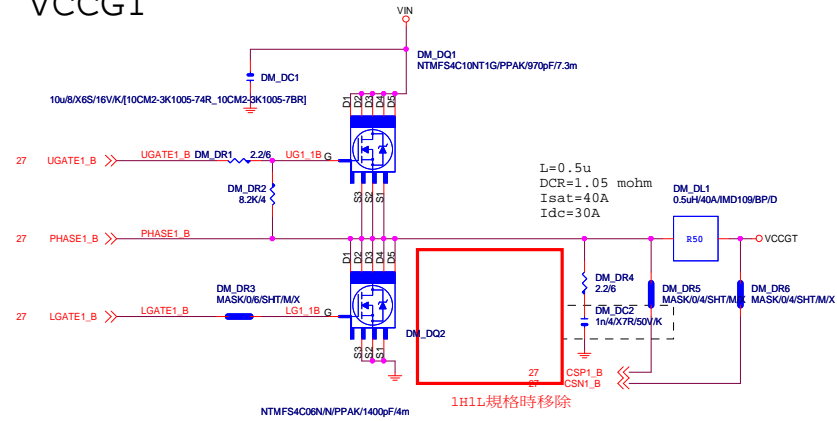
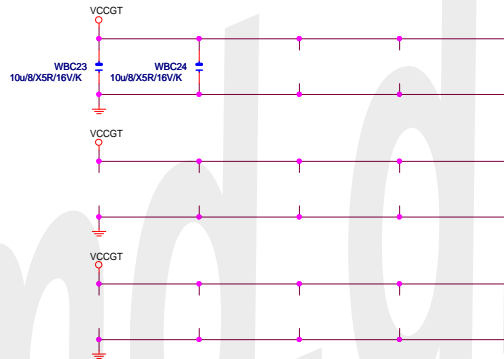
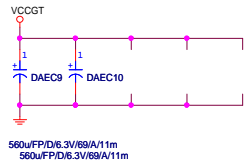


VCORE CAP 560u*4PCS
10u*10PCS

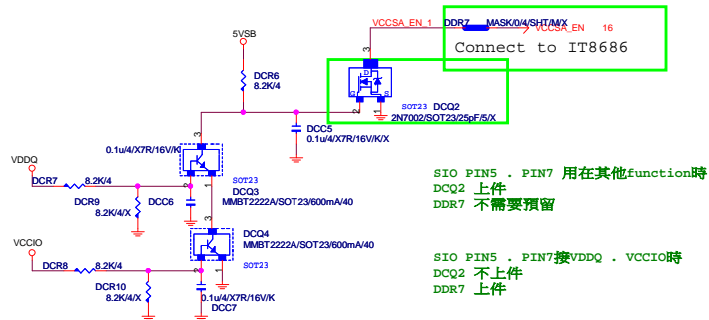
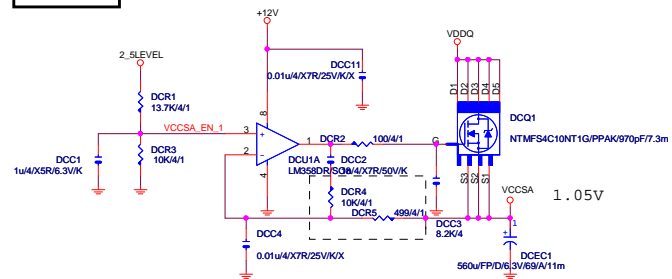


GIGABYTE™			
File	ISL95868_MOS		
Size	Document Number	Rev	1.0
Custom	GA-B250M-D2V		
Date	Wednesday, November 16, 2016	Sheet	28 of 53

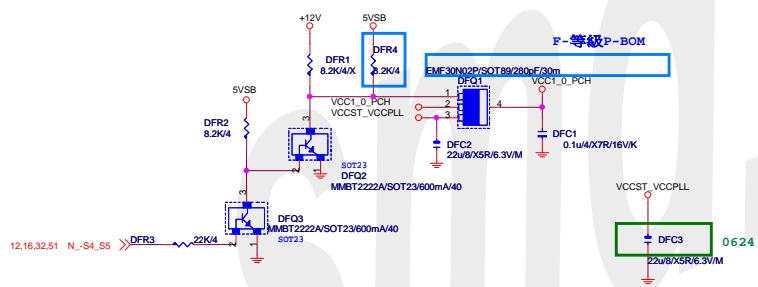
VCCGT

VCCGT CAP 560u*2PCS
10u*2PCS

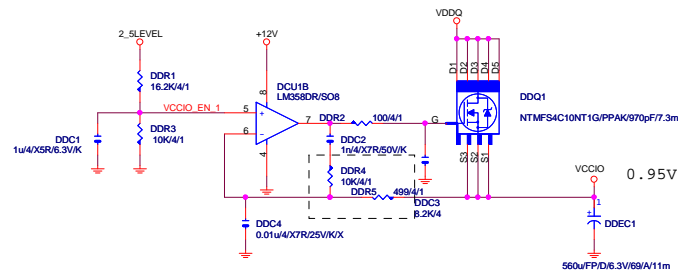
VCCSA



VCCST_VCCPLL



VCCIO



Connect to IT8686

VCCGT
放CPU端.

GIGABYTE™

File VCCSA_VCCIO_no 44E
Size Document Number GA-B250M-D2V
Date: Wednesday, November 16, 2016 Sheet 30 of 53

REV:0.2

DDR4

CHOKE與CAP料號可變

DDR VIN CAP
560u*2PCS

SUPPORT DDR4 1.2V

L=1u
DCR=2.5 mohm
Isat=35A
Idc=28A請放置CHOKE一出來位置.先預留.
請自行確認ripple後再決定是否上件

Remote sense請從最重的負載端點拉回

PIN7-->20mil
PIN1-->6mil
PIN2-->6mil
PIN5-->6mil
PIN3-->6milMOSFET請依MOSFET使用規則,自行選擇
ON-->10IF9-040406-10R[NTMFS4C06N/N/PPAK/1400pF/4m]
VISHAY-->10IF9-040012-10R[SIRA12DP/PPAKS08/2070pF/4.3m]16 GP25
16 GP24
16 GP21MA_DR46 9.1K/4/1
MA_DR21 26.1K/4/1
MA_DR22 6.8K/4/1

上件

MA_DR38.MA_DC15

VPP_25V使用8120.8068A.RT8237時上件

PWR SEQ

CLOSE TO DDR POWER PLANE

For power sequence require

VPP_25V使用8120時上件

MAU1上RT9045時上件(不可MASK)

DDRVTT

NCT3103S/SOP8/2A/[10GL2-203103-01R]

MAU1
VIN
GND
VREF1
VOUT
VREF2
ENABLE
VCNTL
BOOT_SEL1.1A MAX
DDRVTT4 DDR_VTT_CTL
2,16,51 N_SLP_S3
DDRVTT_CTL MAR110
N_SLP_S3 MAR111
MASK/0/4/SHT/M/10/X
DDRVTT_EN
MASK/0/4/SHT/M/10/X
DDRVTT_BOOT

GIGABYTE™

RT8237_DDR4 POWER

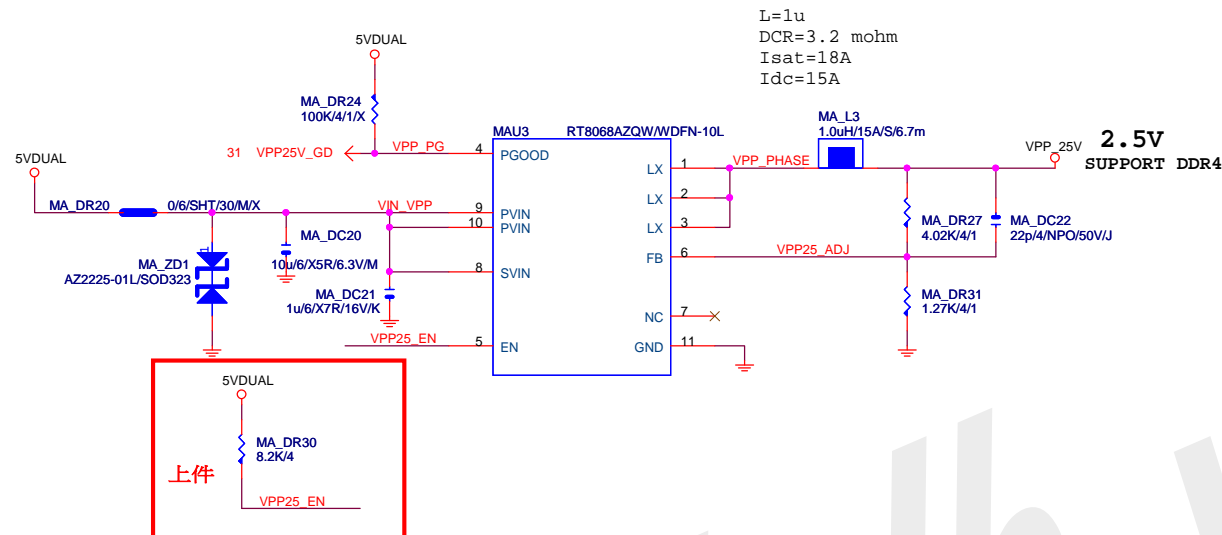
Size Custom Document Number GA-B250M-D2V Rev 1.0

Date: Wednesday, November 16, 2016 Sheet 31 of 53

REV:0.1

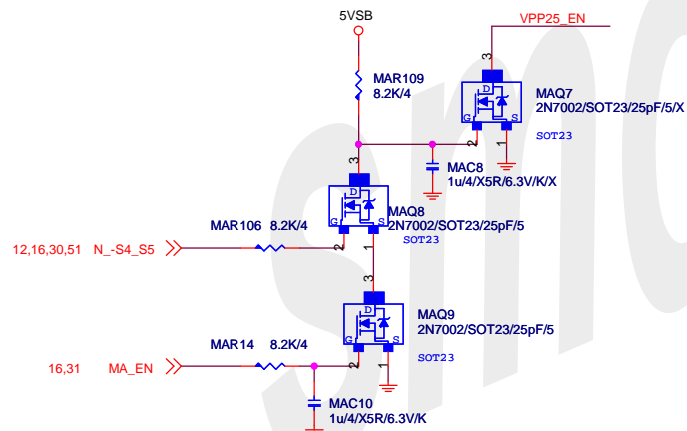
VPP_25V

CHOKE與CAP料號可變



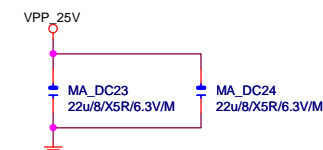
PWR_SEQ

* 刪 MA_DR32



VPP CAP 22u*1PCS

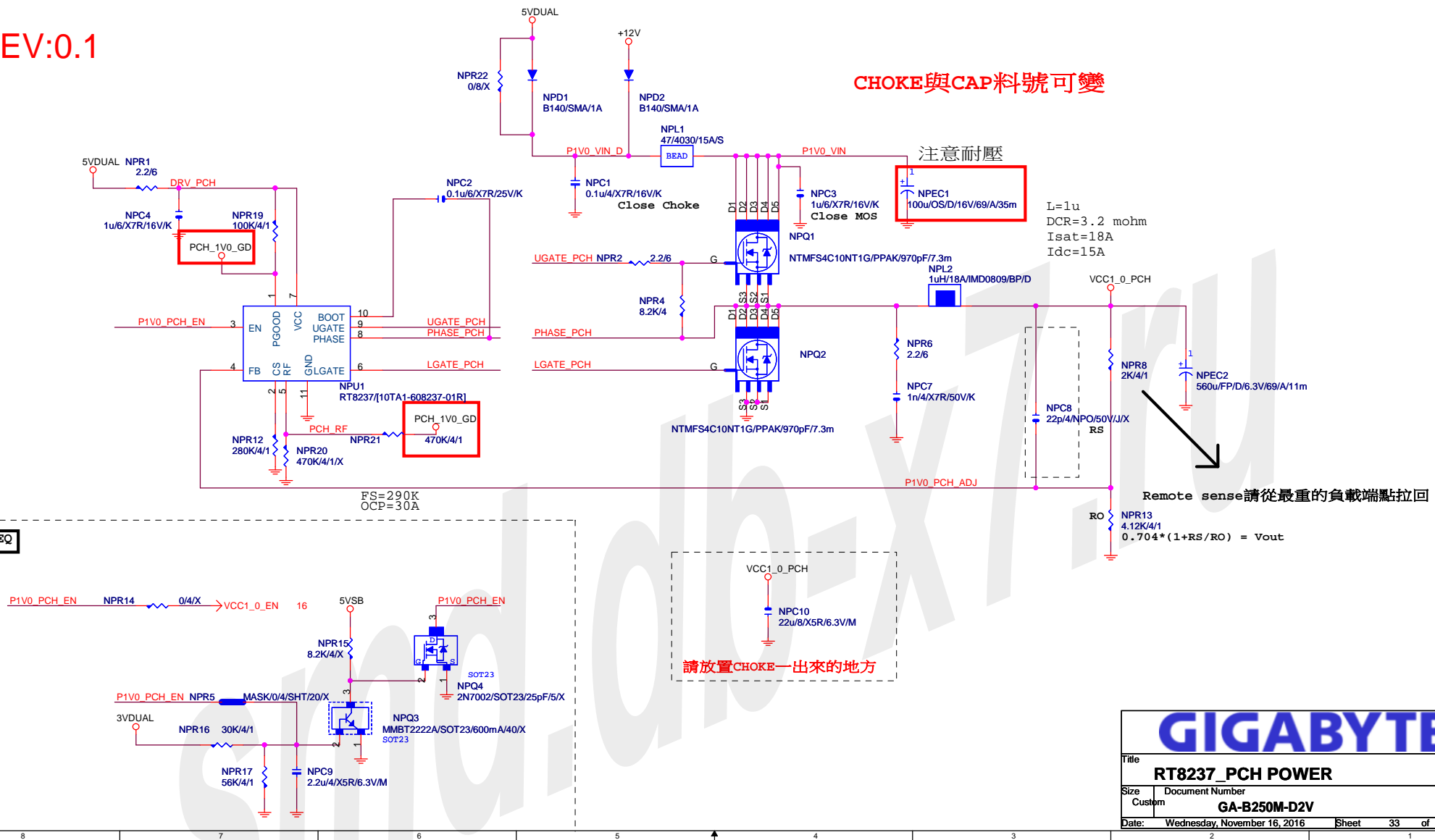
* 大電容 x0



GIGABYTE™			
Title RT8068A_VPP25 POWER			
Size Custom	Document Number GA-B250M-D2V	Rev 1.0	
Date: Wednesday, November 16, 2016	Sheet 32	of 53	

REV:0.1

CHOKE與CAP料號可變



GIGABYTE™			
Title			
RT8237_PCH POWER			
Size	Document Number	Rev	
Custom	GA-B250M-D2V	1.0	
Date:	Wednesday, November 16, 2016	Sheet	33 of 53

The schematic shows the NQ9 L1117LG/N/SOT223/1A voltage regulator. Pin 4 is connected to 3VDUAL_PCH. Pin 3 is connected to 5VSB. Pin 1 is connected to 3VDUAL_PCH. The circuit includes two capacitors: NBC67 (0.1uF/4X7R/16V/K) and NBC68 (1uF/4X5R/6.3V/K).

5VDUAL

3VDUAL

BC27
0.1u4/X7R/16V/K

R37
100/4/1

R38
169/4/1

BC25
0.1u4/X7R/16V/K

R36
22K/4

C9
22u8/X5R/6.3V/M

C8
1n4/X7R/50V/K

Q4
L1085DG/TO252/5A

O_-RSMRST 12,16

上22u 电容

Meet the rise time

Rise/Fall max 50us
Rise:20% - 80%
Fall :2V- 0.8V

5VSB

NR202 22K/4/X

NR203 75K/4/1/X

NR204 27K/4/1/X

NC23 1u/4/X5R/6.3V/K/X

D4 BAT54A/SOT23/200mA/X

NMQ18 MMBT2222A/SOT23/600mA/40/X SOT23

NMQ19 2N7002/SOT23/25pF/5/X

O-RSMRST

3VDUAL

At least 10ms delay after 3VDUAL stabil

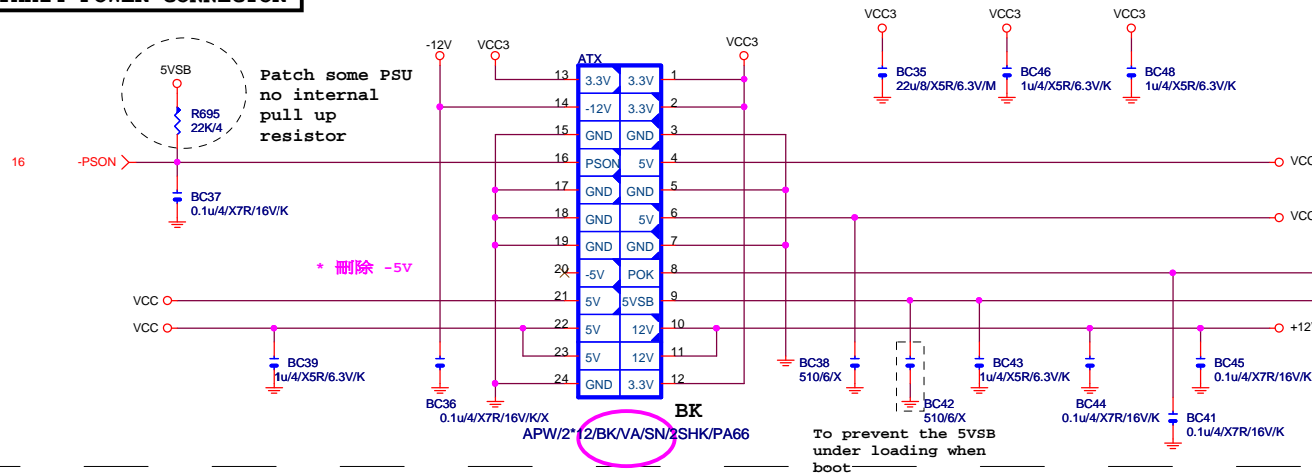
12 N_DEPSLP

Gigabyte

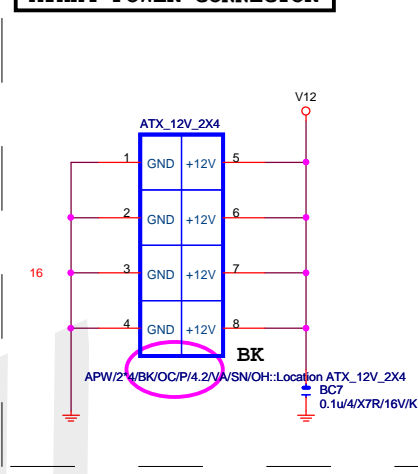
Gigabyte Technology

Title			
DISCRETE POWER			
Size	Document Number		Rev
Custom	GA-B250M-D2V		1.0
Date:	Wednesday, November 16, 2016	Sheet	34 of 53

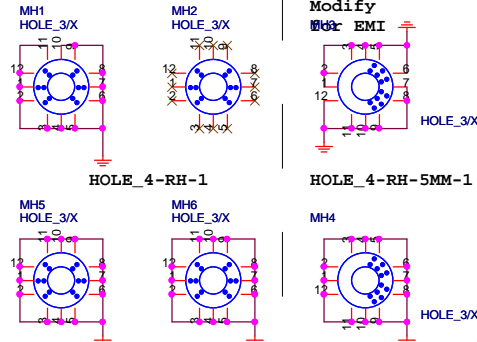
ATXX24 POWER CONNECTOR



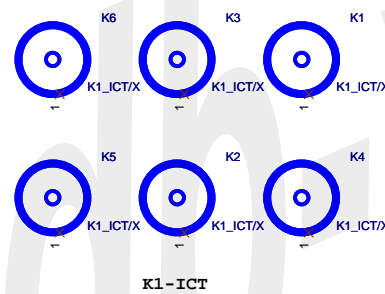
ATXX4 POWER CONNECTOR



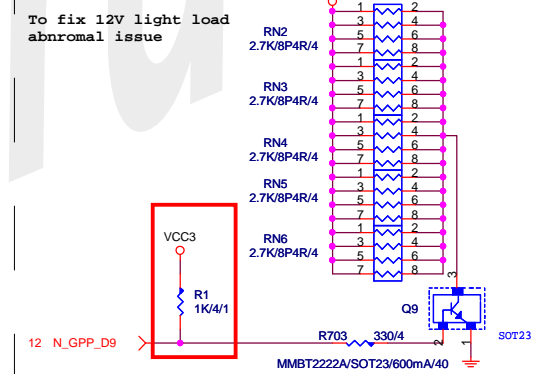
螺絲孔



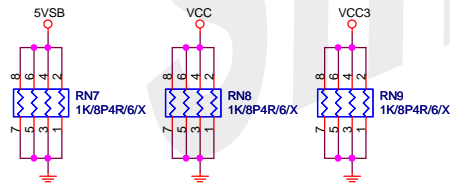
固定孔/光學點



+12V DUMMY LOAD



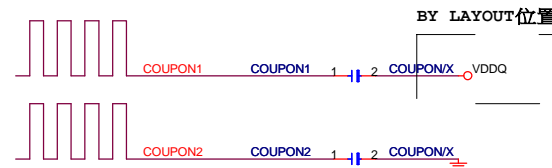
DUMMY LOAD



-PROHOT

4.16 A-PROCHOT <-> A-PROCHOTR2 MASK/0/4/SHT/M/X >-> VR_HOT 27

COUPON



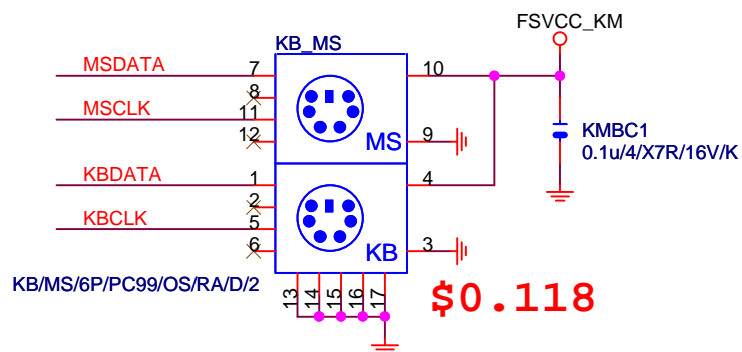
【技術通報R&D技術通報153】

Gigabyte Technology

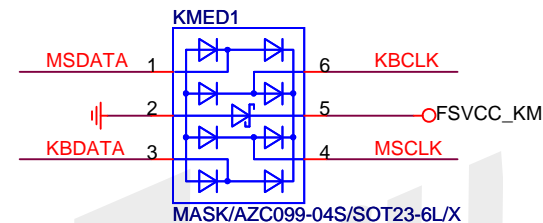
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ATX POWER CONNECTOR		
Size	Document Number	GA-B250M-D2V
Custom		Rev 1.0
Date:	Wednesday, November 16, 2016	Sheet 35 of 53

KB_MS_USB

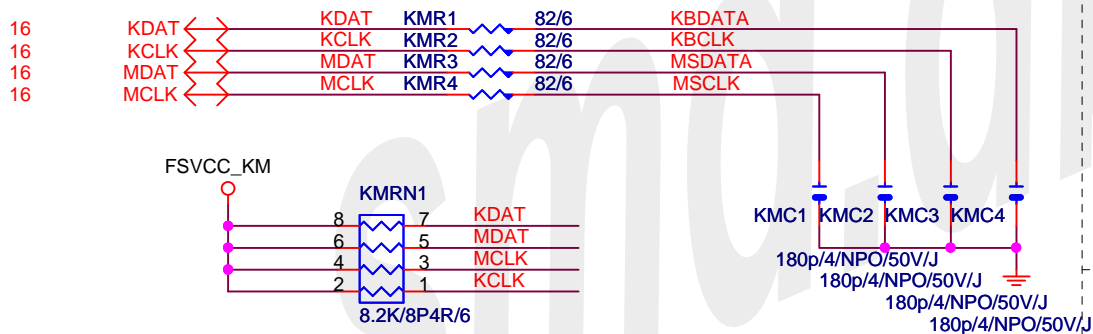
Rev: 81



ESD



KB_MS_USB DAMPING/PU



KB_MS_USB PWR

USB OC PROTECT

Gigabyte Technology

Title

KB_MS_USB

Size

Document Number

GA-B250M-D2V

Rev

1.0

Date:

Wednesday, November 16, 2016

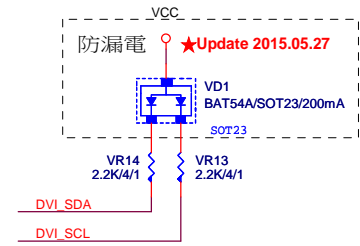
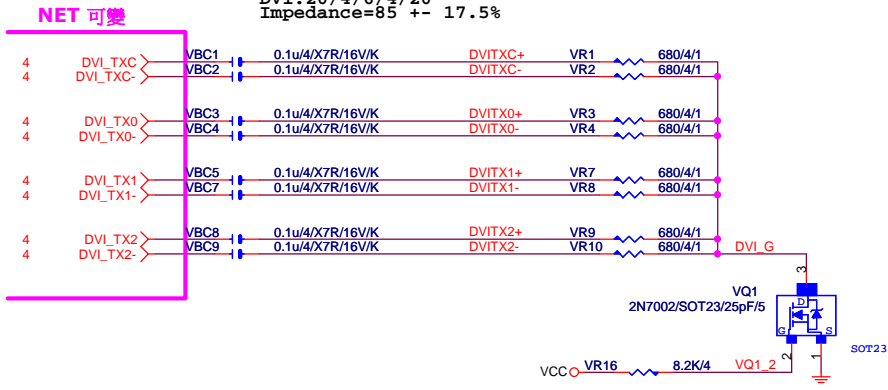
Sheet

36

of

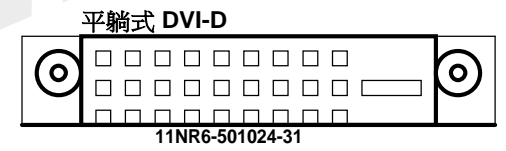
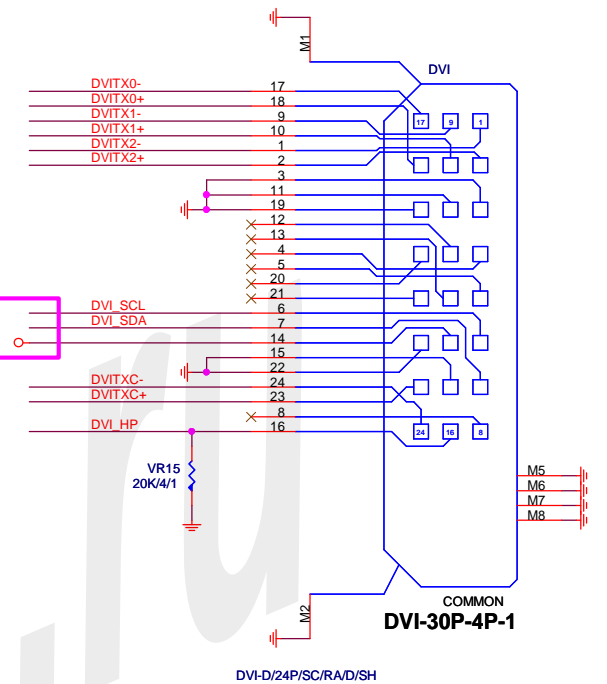
53

DVI: 20/4/6/4/20
Impedance=85 +- 17.5%

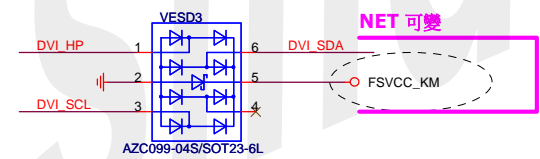
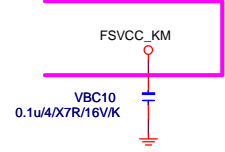


NET 可變

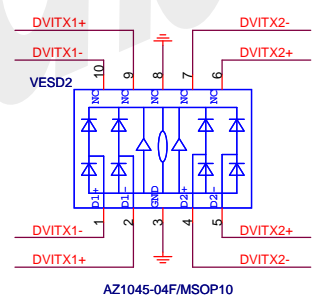
* FSVCC_KM



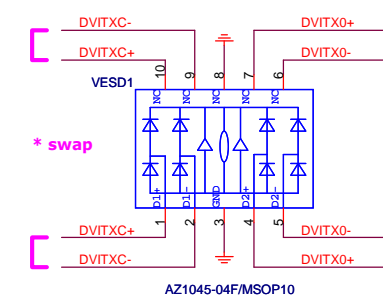
NET 可變



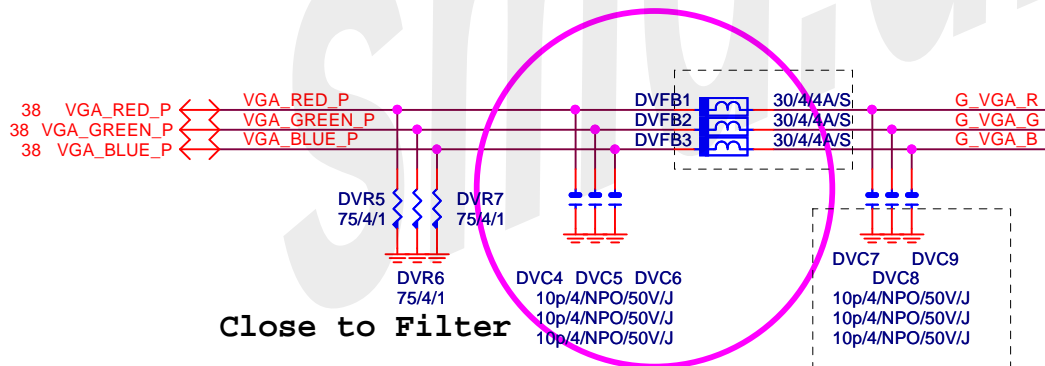
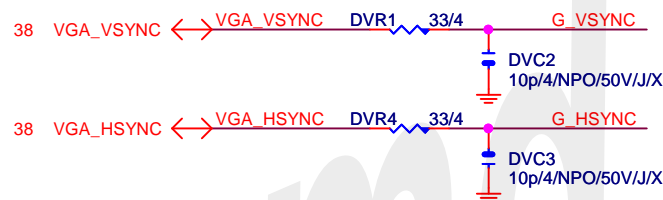
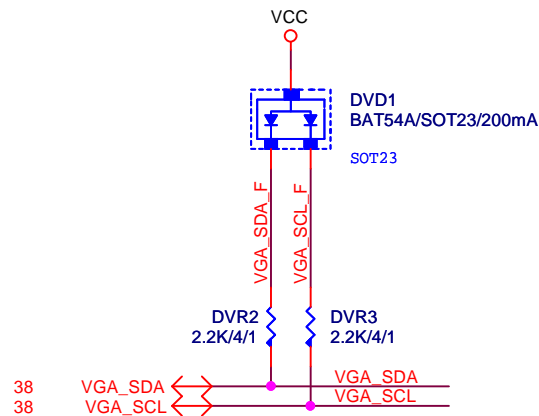
Close to connector



Close to connector

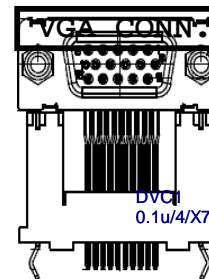


Close to connector

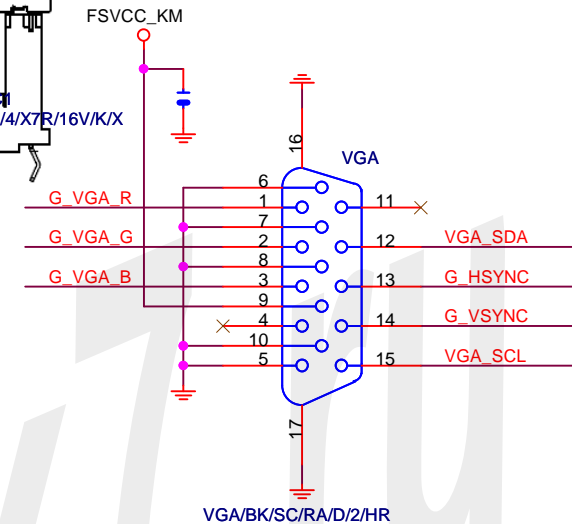


Close to Filter

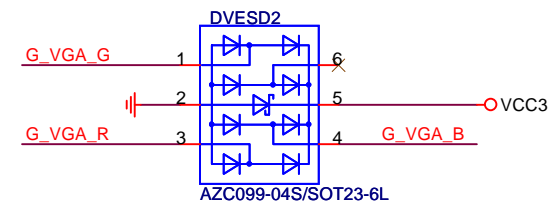
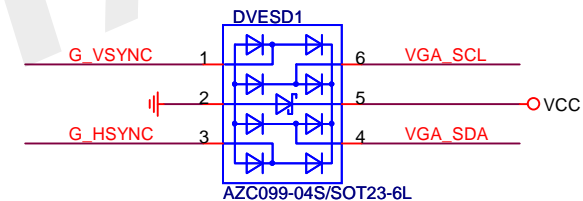
FOR EMI



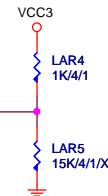
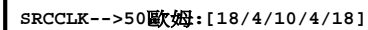
架高型VGA (BLACK)



VGA ESD

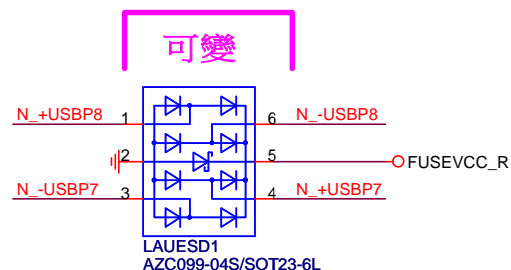


Gigabyte Technology
DP-VGA RTD2168

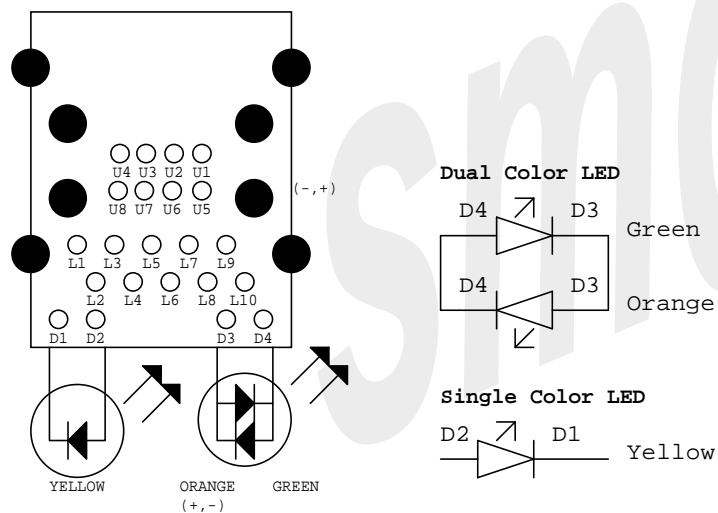


R1.06

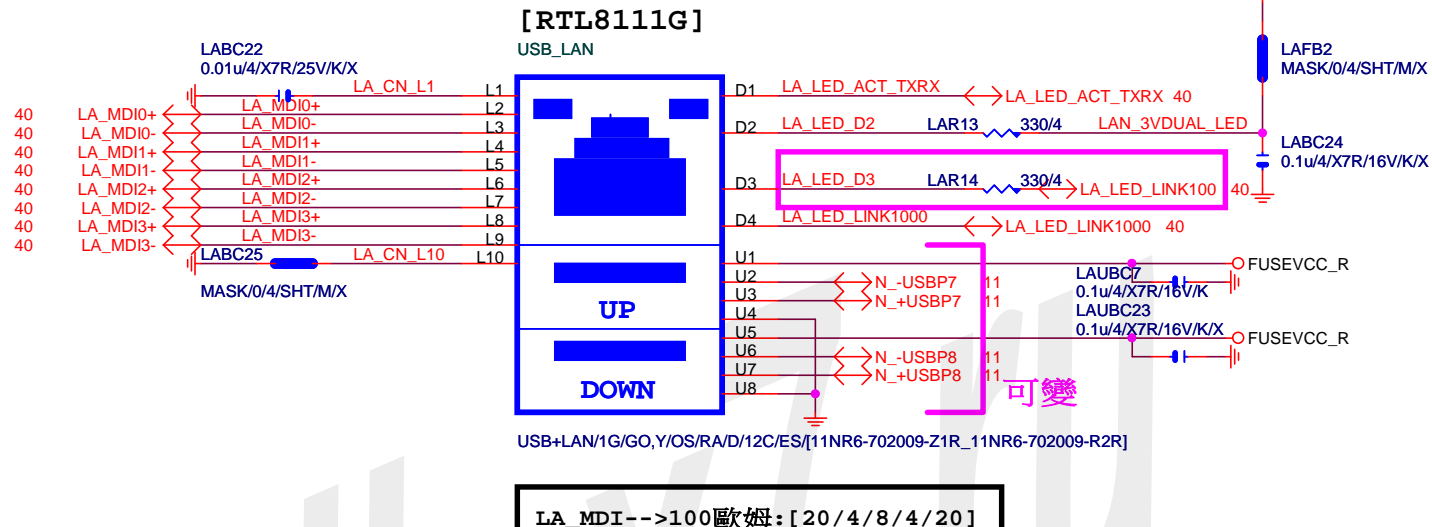
note:可變更USB NAME



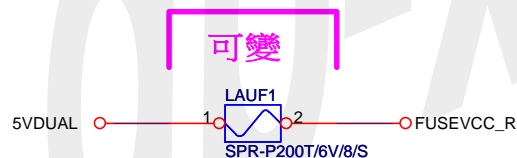
USB_LAN_LAYOUT示意图



note:可變更USB NAME



note:可變更FUSE



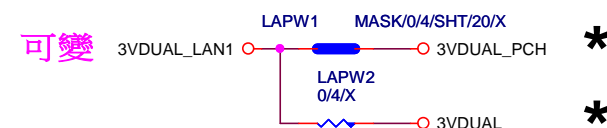
Close to connector
USB_LAN 2-Port 2.0A
FUSE-0805

EMI SHORT PAD

PS:視EMI需求



note: lan power連接及電流

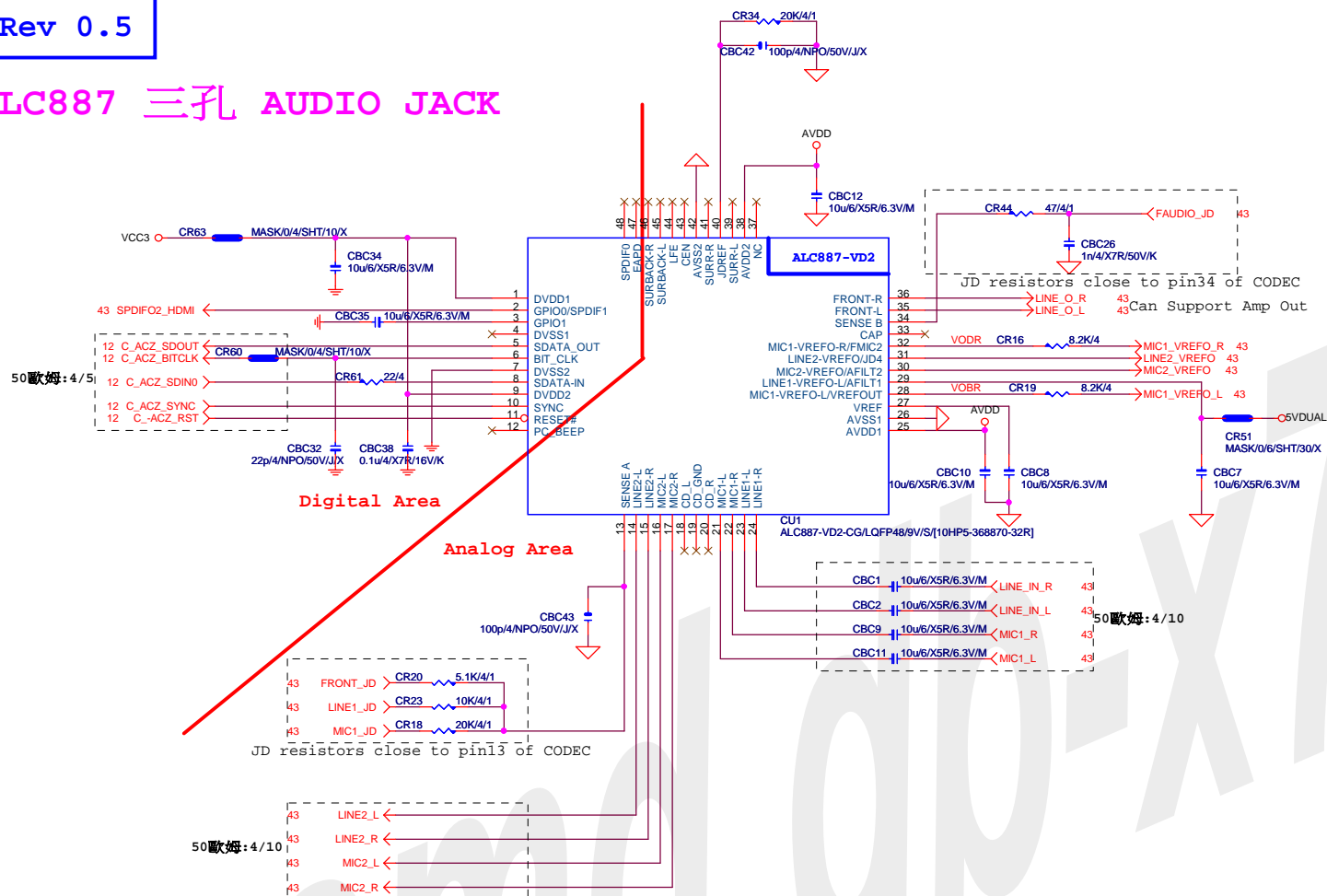


Gigabyte Technology

LAN CONNECTOR-RTL8111HS

Size Custom	Document Number GA-B250M-D2V	Rev 1.0
Date: Wednesday, November 16, 2016	Sheet 41 of 53	

ALC887 三孔 AUDIO JACK



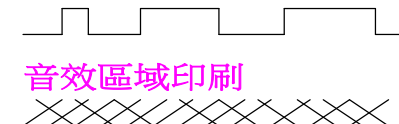
LAYOUT注意: 螺絲孔下GND方式

1. MH1空間夠, 下DGND
2. MH2一律改為Isolate

<input type="radio"/> MH1	<input type="radio"/> MH2
DGND	Isolate

LAYOUT注意: 要加

GND切割線



Rev 0.5

CR49 MASK/0/6/SHT/20/X → Close F_AUDIO

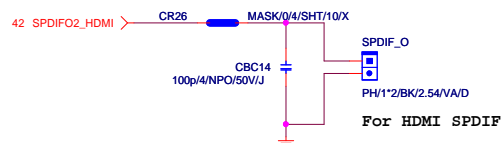
CR50 MASK/0/6/SHT/20/X → Close Codec
MOA/TC1 0.1uF/X7R/16V/K/X

CR21 2.2/6 → Audio jack <--> USB_LAN

CR24 0.6/X → Under Audio jack

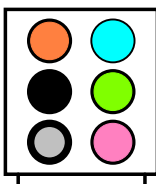
*量産前,0ohm改short pad

SPDIF_OUT



SPDIF_IN

AZALIA JACK

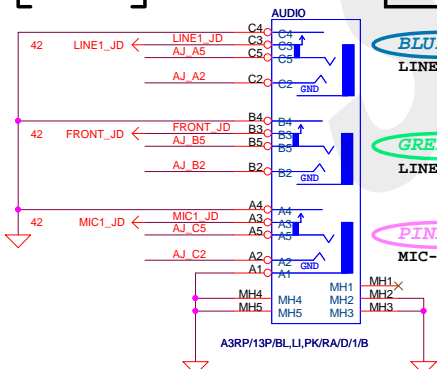


AZALIA JACK

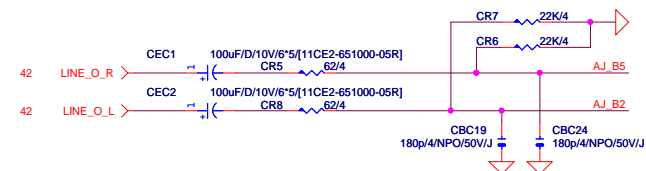
BLUE
LINE-IN

GREEN
LINE-OUT

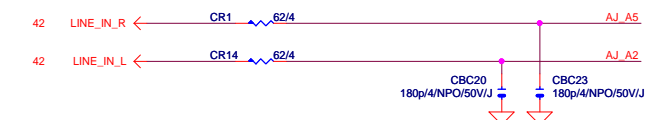
PINK
MIC-IN



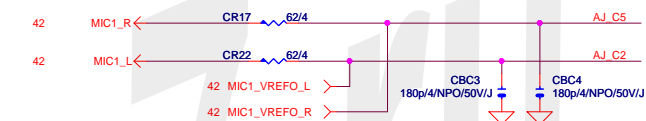
LINE-OUT



LINE-IN



MIC-IN

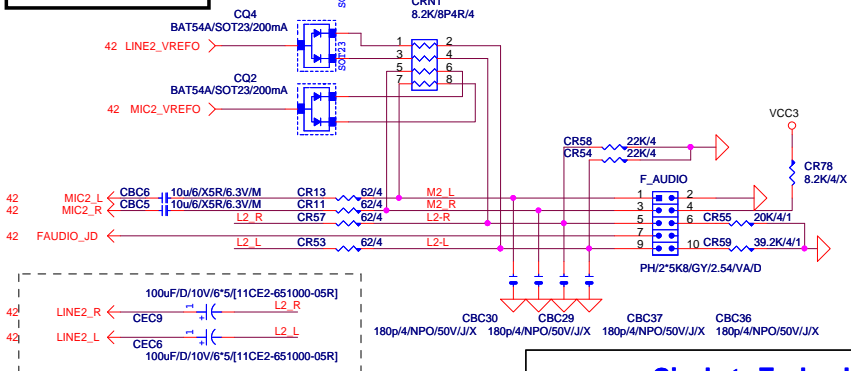


SURROUND

CEN/LFE

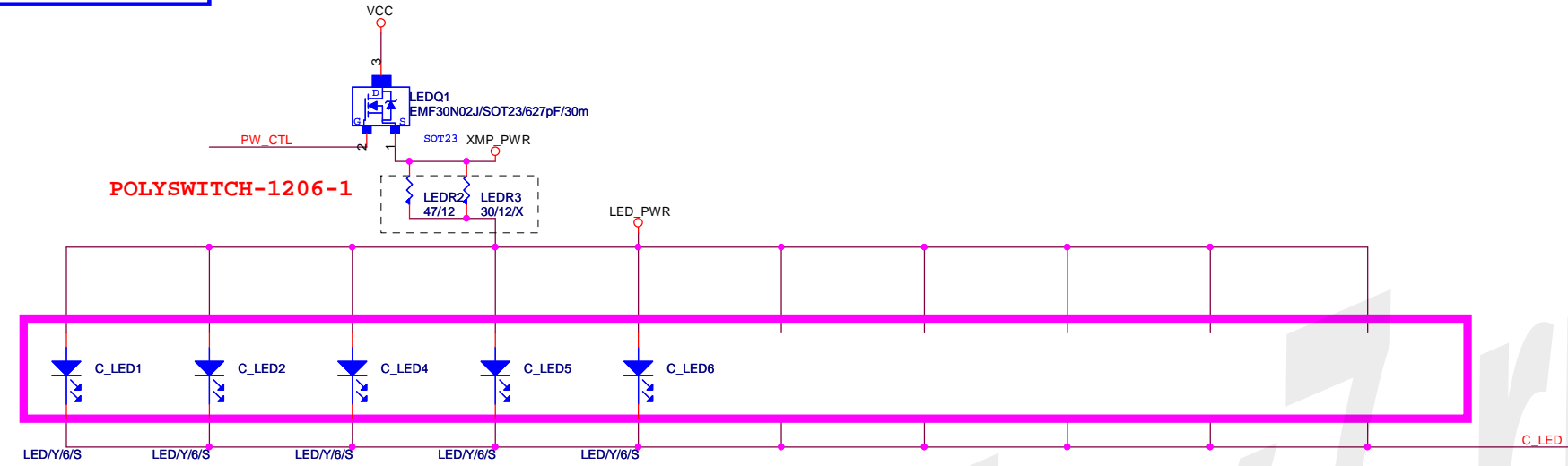
SURR BACK

AZALIA FRONT PANEL



Gigabyte Technology

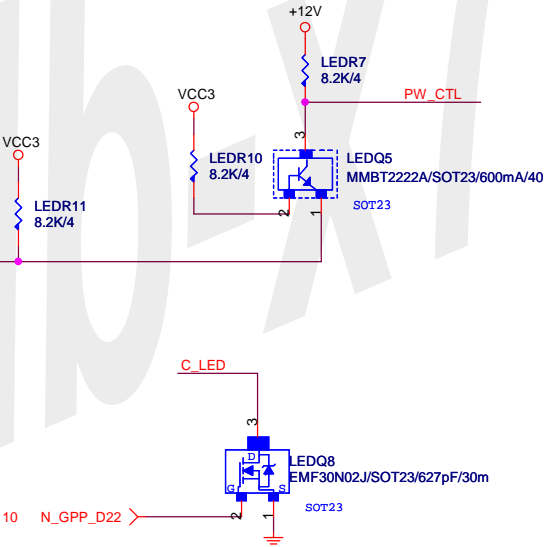
Title			
AUDIO JACK			
Size	Document Number		Rev
Custom	GA-B250M-D2V		1.0
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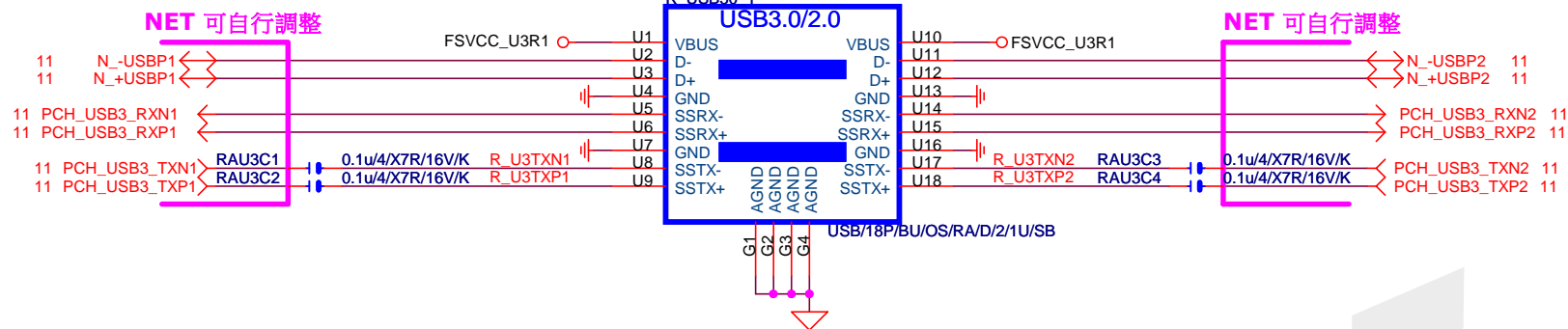
Ambient LED Control

	N_GPP_D22
Full Mode	H
OFF Mode	L

10 N_GPP_D22
ON/OFF

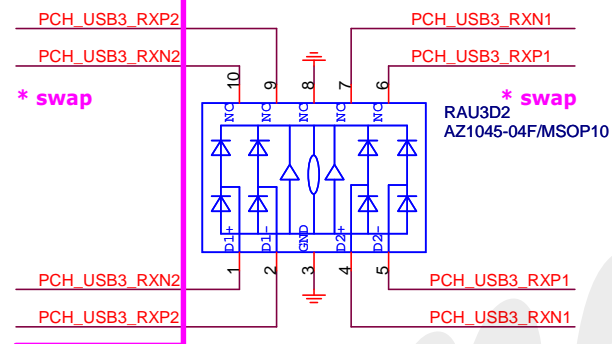


Title			Amient Single LED	
Size	Document Number	Rev		
Custom	GA-B250M-D2V	1.0		
Date:	Wednesday, November 16, 2016	Sheet	44	of 53

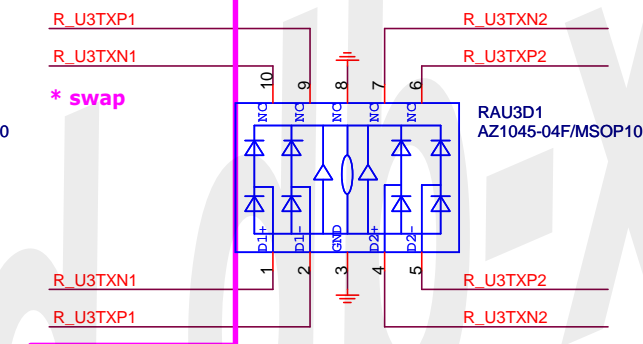


ESD

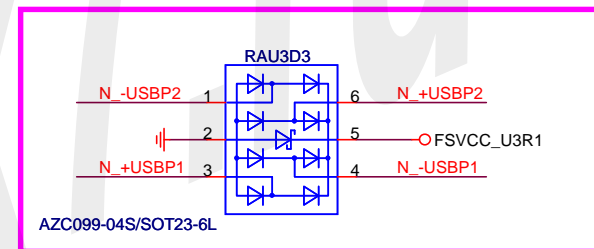
NET 可自行調整



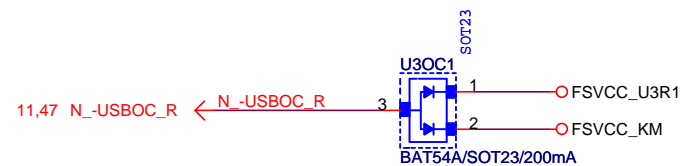
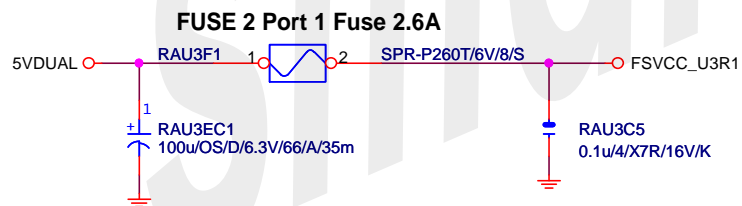
NET 可自行調整



NET 可自行調整

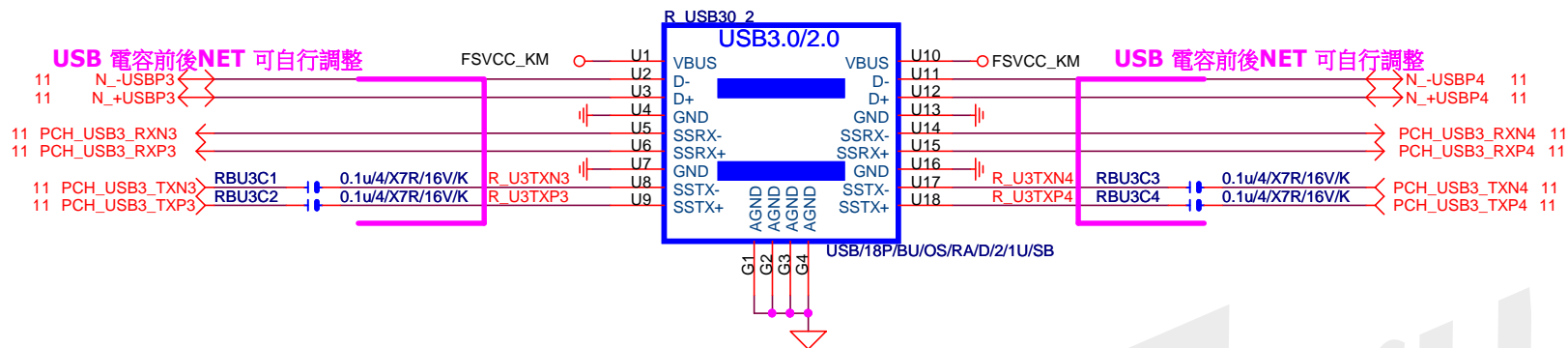


FUSE

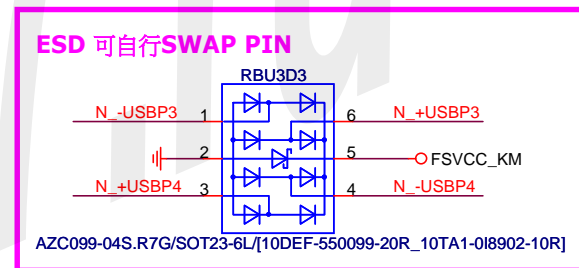
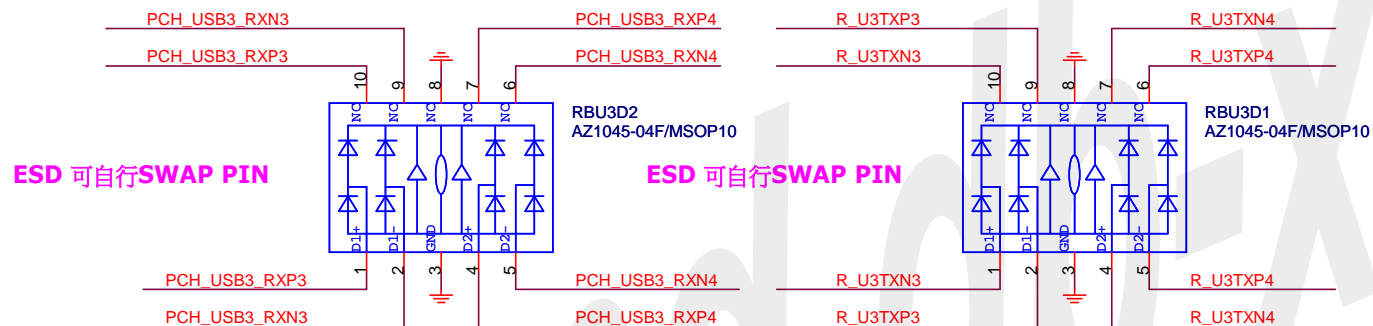


Gigabyte Technology

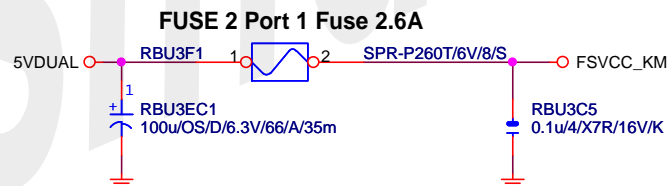
Title		
R_USB30,USB_OC		
Size	Document Number	Rev
Custom	GA-B250M-D2V	1.0
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ESD

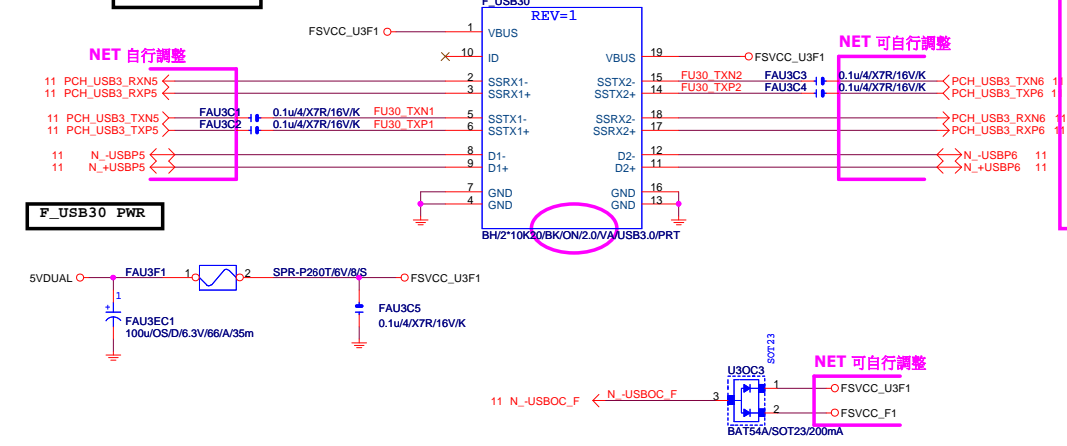


FUSE

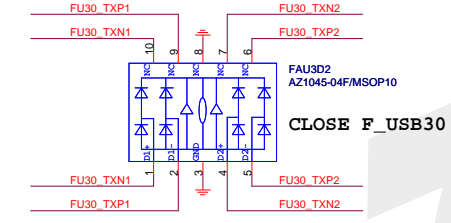
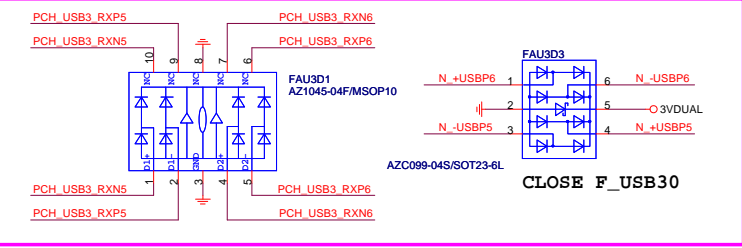


Gigabyte Technology			
Title			
R_USB30,USB_OC			
Size	Document Number	GA-B250M-D2V	
Custom			Rev 1.0
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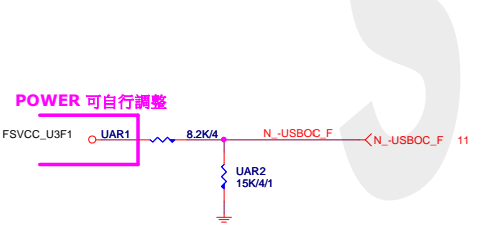
Front USB3.0



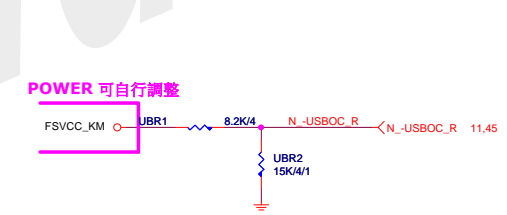
NET 可自行調整



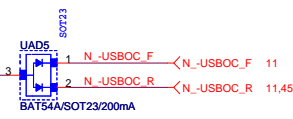
-USBOC_F



-USBOC_R

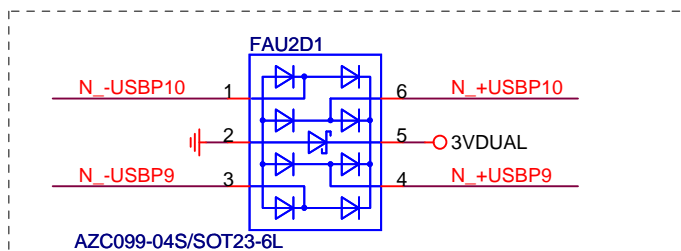
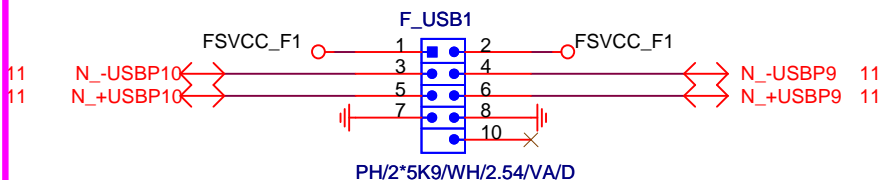


* 接 PCH
N_GPP_G6(SMI) &
PCH PU 3Vdual



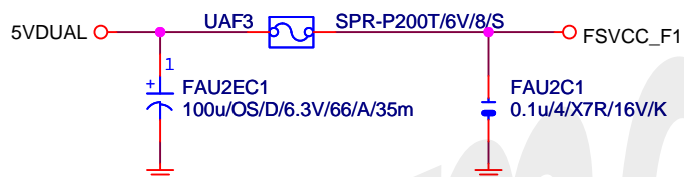
NET 可變

FUSB2X5-HS



Close to connector

FUSE 2 Port 1 Fuse 2A

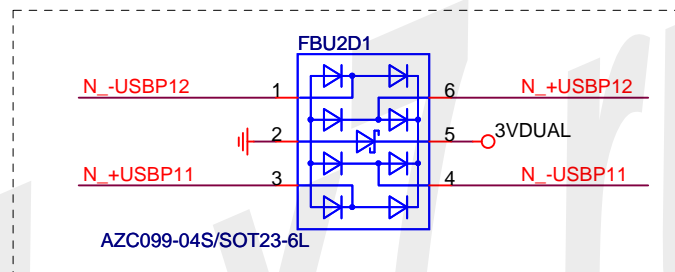
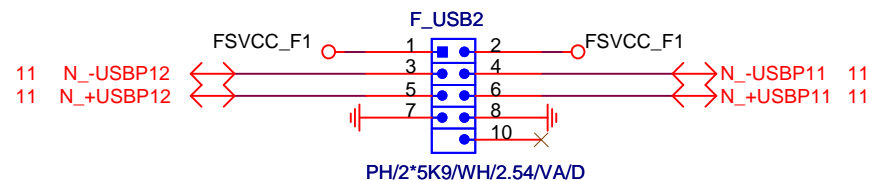


F_USB 2.0 OC SIGNAL



NET 可變

FUSB2X5-HS

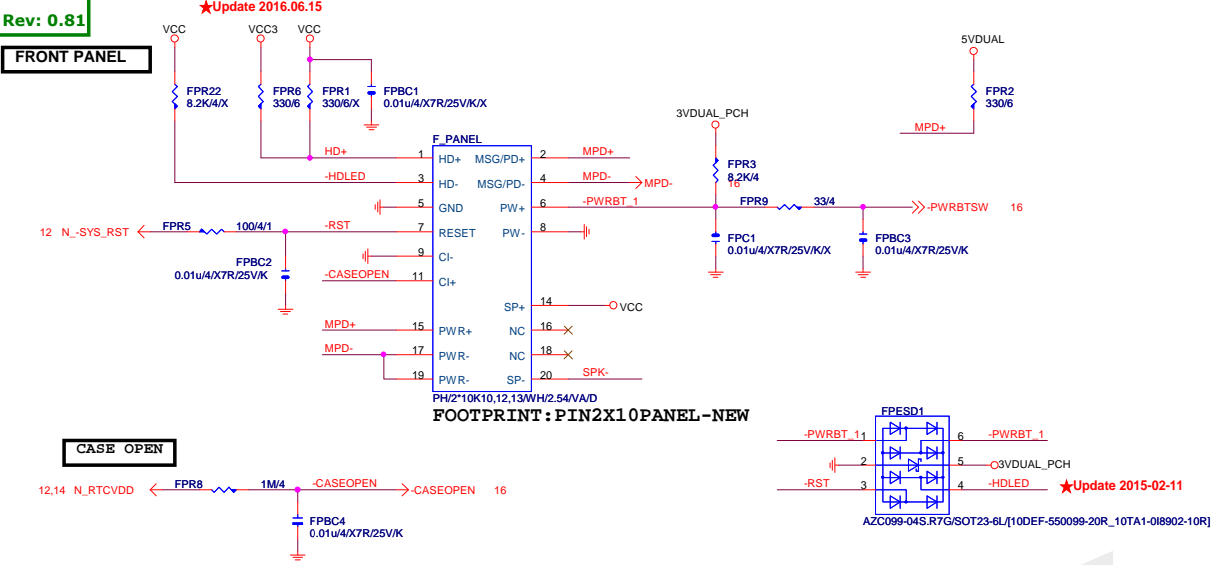


Close to connector

FUSE 2 Port 1 Fuse 2A

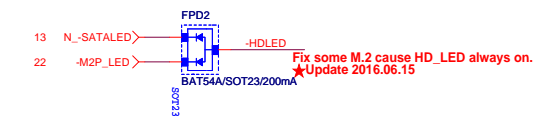
Gigabyte Technology			
Title			
USB2.0			
Size A	Document Number		Rev
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FRONT PANEL

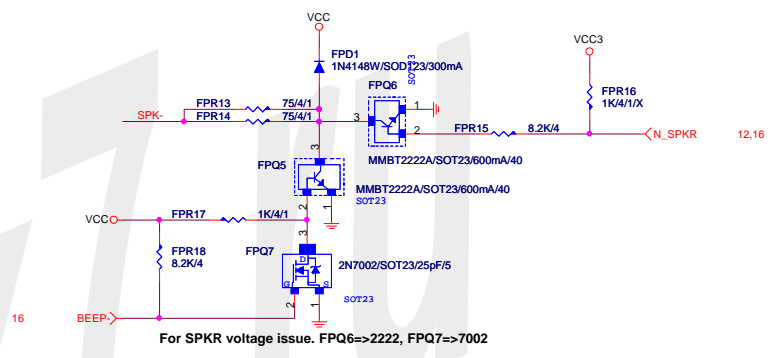


FRONT PANEL SHORT

SATA/M.2 LED

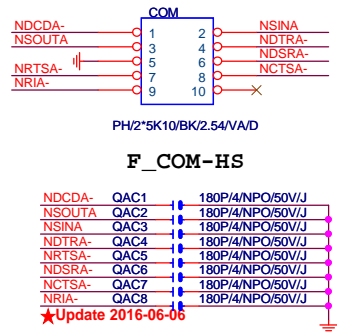
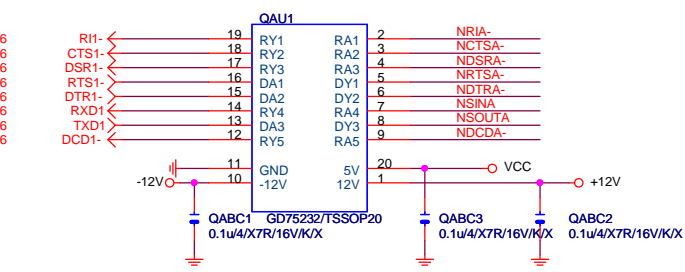


SPKR



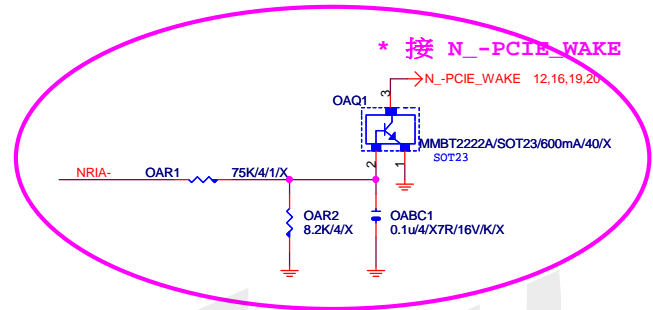
COM PORT

Rev: 0.7



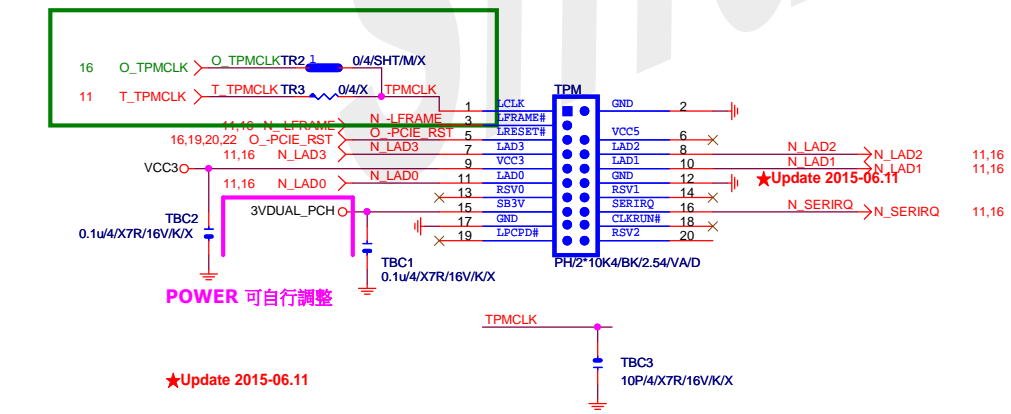
COM RI

N/A



LPT PORT

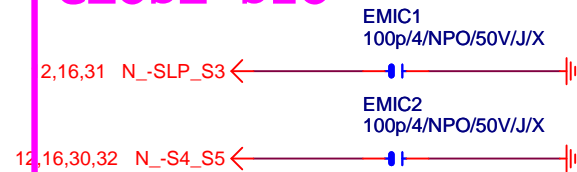
TPM CONNECT



Thunderbolt

★Update 2015-12-29

CLOSE SIO

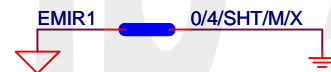


CLOSE PCH



close to PCH (NR17)

R_USB30_2 & DVI 之間



close to FRONT PANEL

GIGABYTE™

Title

EMI/ESDSize
A

Document Number

GA-B250M-D2V

Rev

1.0

Date:

Wednesday, November 16, 2016

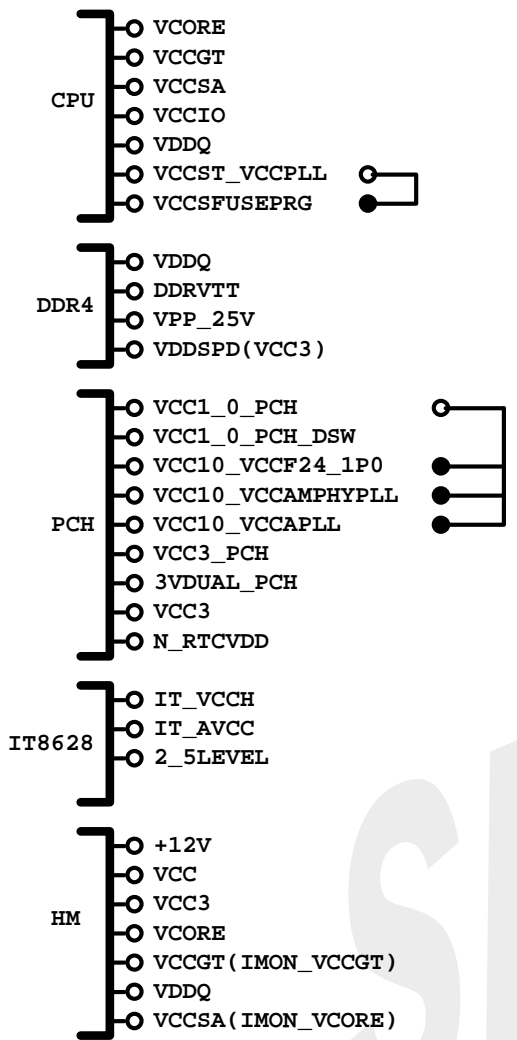
Sheet

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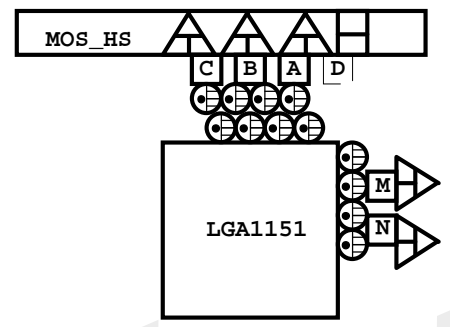
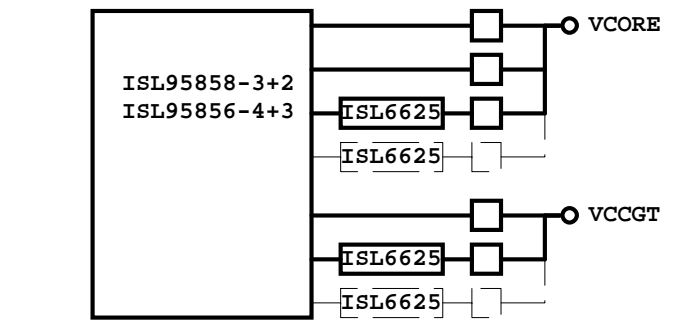
of

53

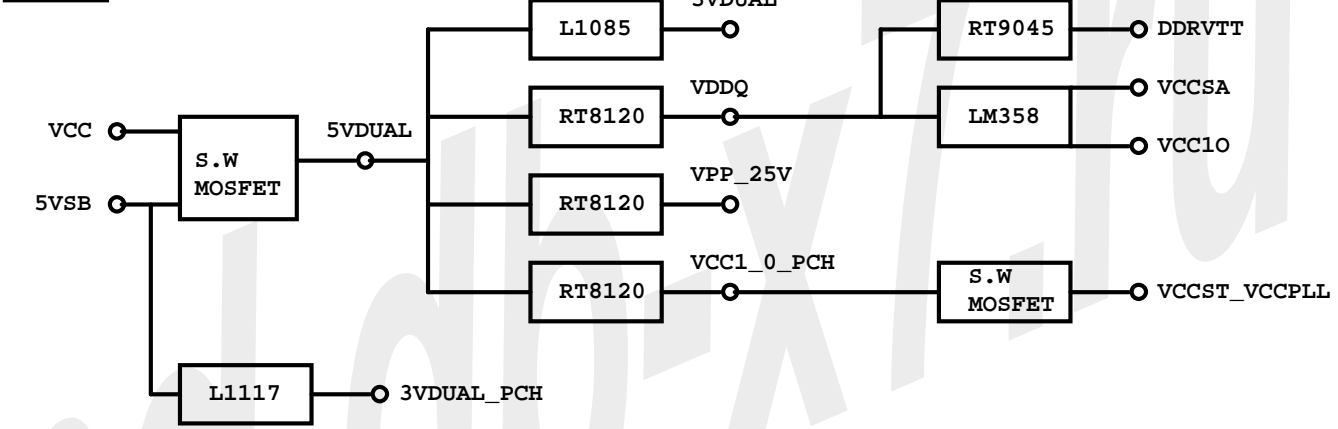
POWER BLOCK MAP



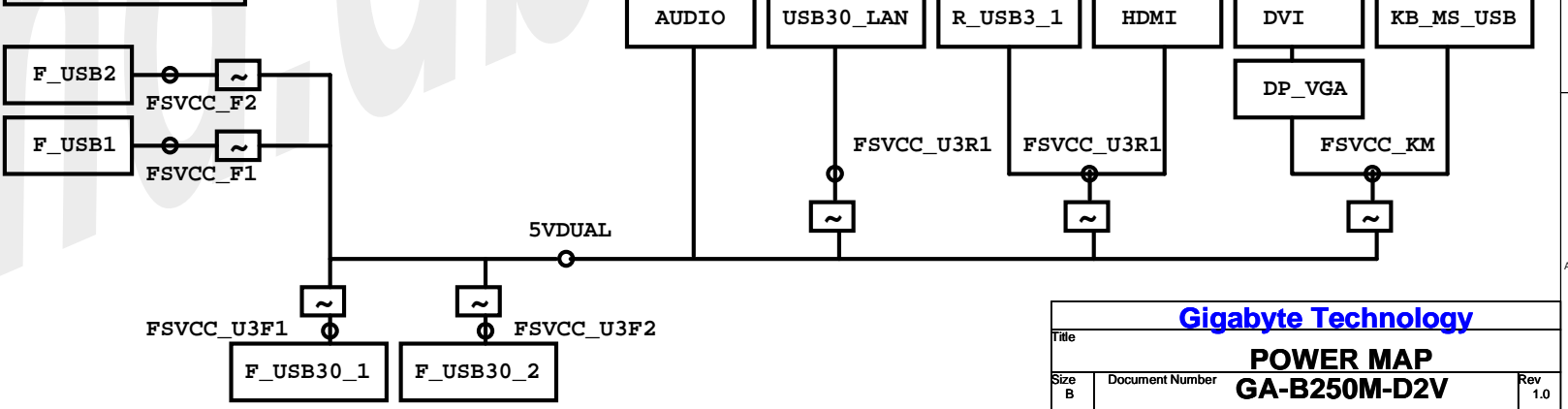
VCORE/VCCGT



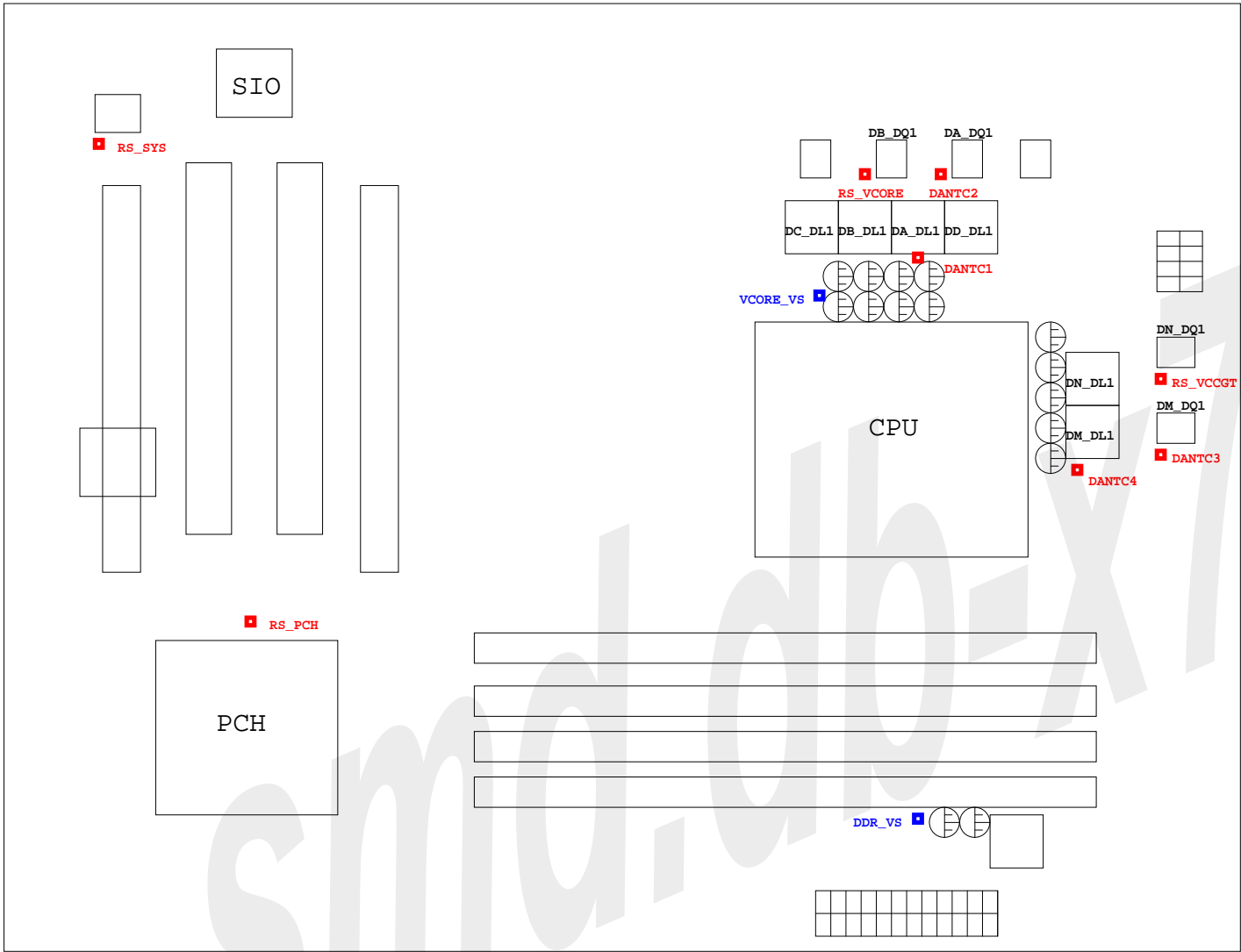
POWER



FUSE POWER F/R



Gigabyte Technology			
Title			
POWER MAP			
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熱敏電阻	擺放靠近位置	走線方式
DANTC1	DA_DL1	N/A
DANTC2	DA_DQ1	Differential
DANTC3	DM_DQ1	N/A
DANTC4	DM_DL1	Differential
RS_VCORE	DB_DQ1	N/A
RS_VCCGT	DN_DQ1	N/A
RS_PCH	PCH	N/A
RS_SYS	CU1	N/A