

Model Name: GA-B250M-D3VX-SI rev 1.0

SHEET

TITLE

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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
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09	DDR4 CHANNEL B
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11	PCH_DMI,USB,PCIE
12	PCH_MISC
13	PCH_SATA,PCIE,SATA_EXPRESS
14	PCH_PWR
15	PCH_GND
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SHEET

TITLE

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31	RT8237_DDR_BEAD
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33	RT8237_PCH-BEAD
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35	NCT3933
36	ATX_POWER, A_-PROCHOT
37	KB_MS_USB
38	DVI_CONN
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40	RTD2168 - DP to VGA - Conn
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44	Realtek ALC887
45	REAR AUDIO JACK
46	ADUIO_LED
47	F_USB30
48	F_USB
49	R_USB30
50	F_PANEL
51	M.2_X4_(Q)
52	M.2X4_S5_SWITCH
53	COM, LPT, TPM
54	EMI-ESD
55	POWER MAP
56	NTC MAP

Gigabyte Technology

Title			
Cover Sheet			
Size	Document Number	Rev	
Custom	GA-B250M-D3VX-SI	1.0	
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rev1.0

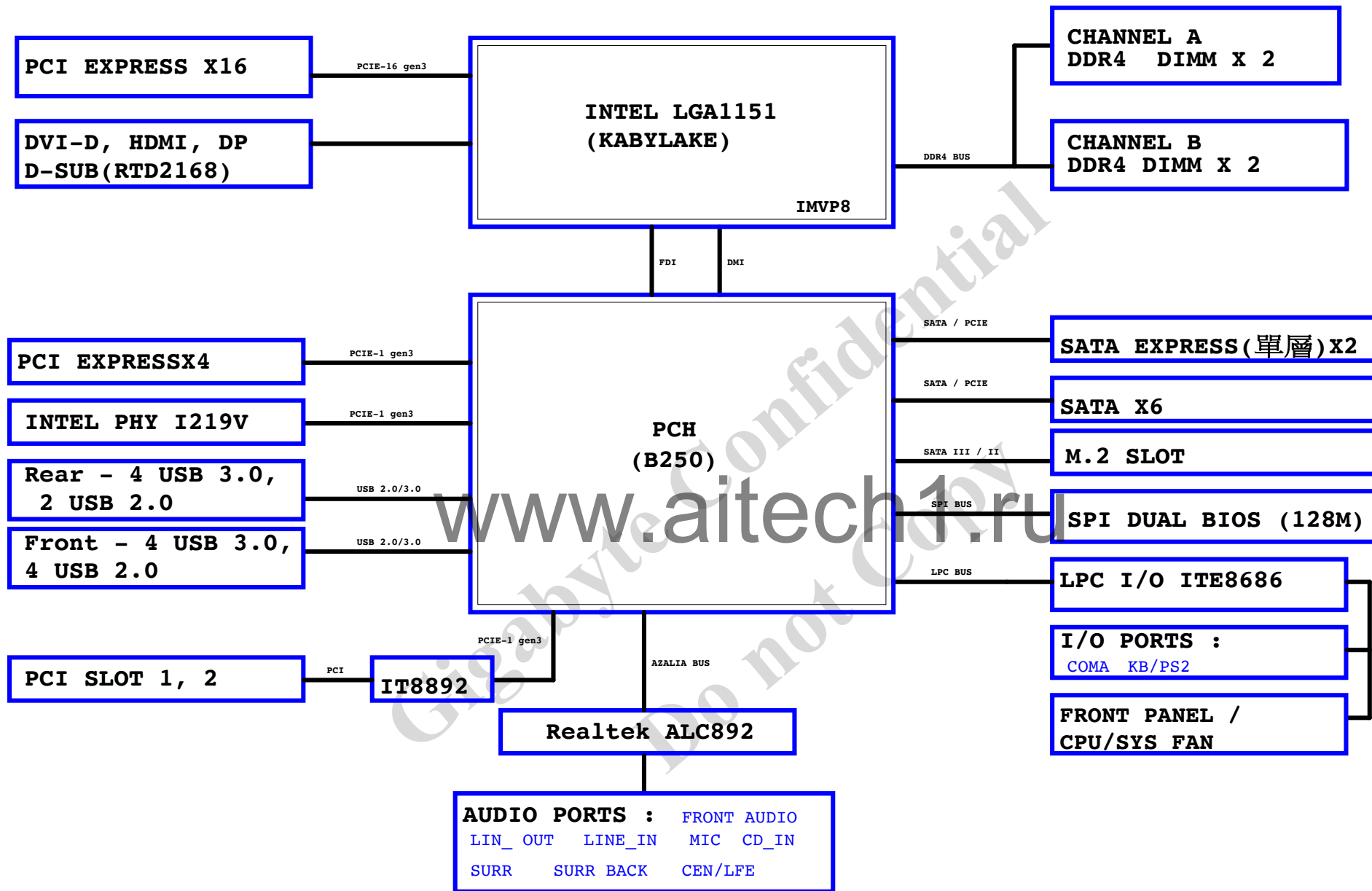
Circuit or PCB layout change

Component value change history

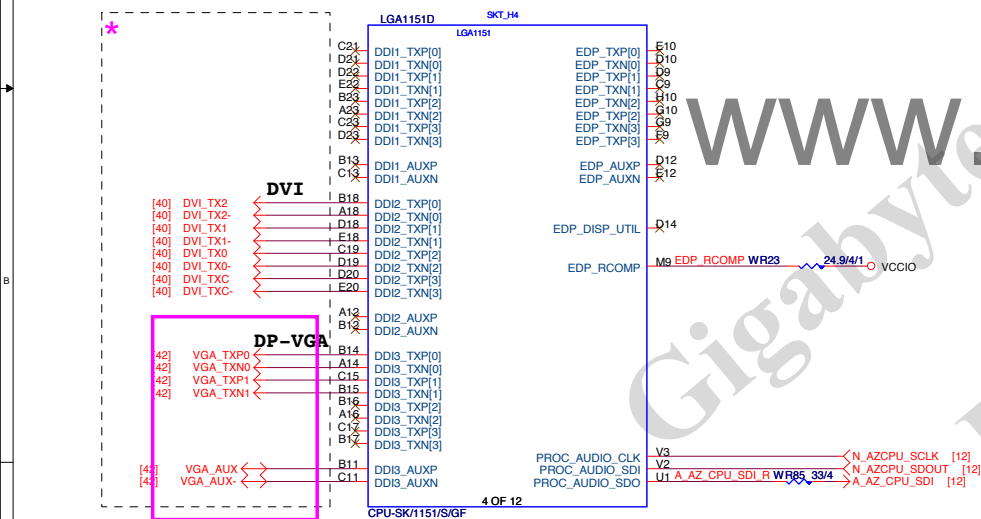
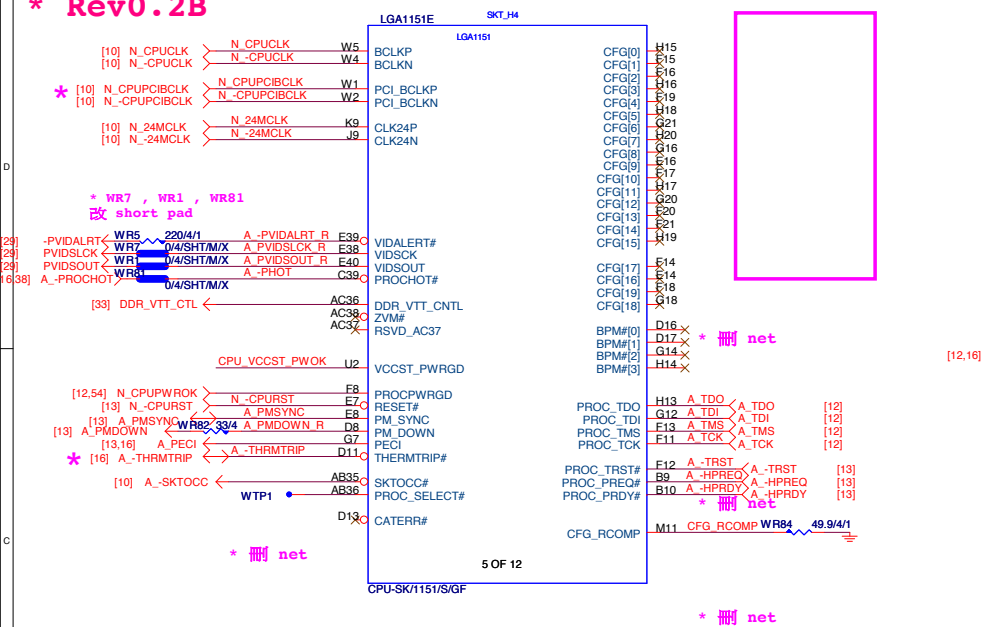
2016/11/03

[illegible][illegible]

BLOCK DIAGRAM



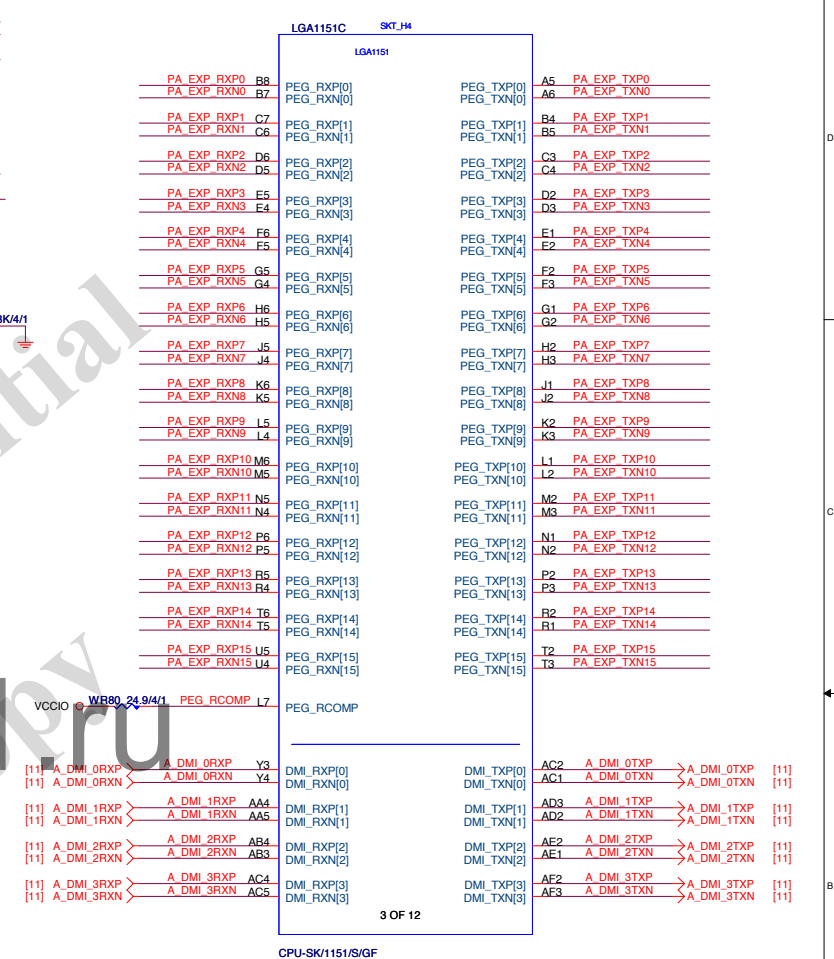
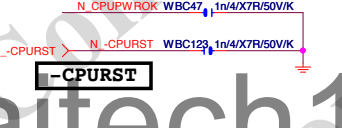
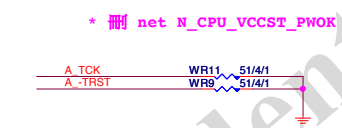
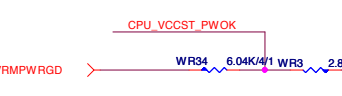
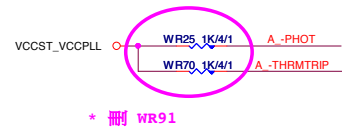
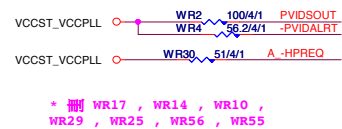
*** Rev0.2B**



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%



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

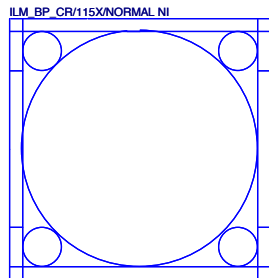
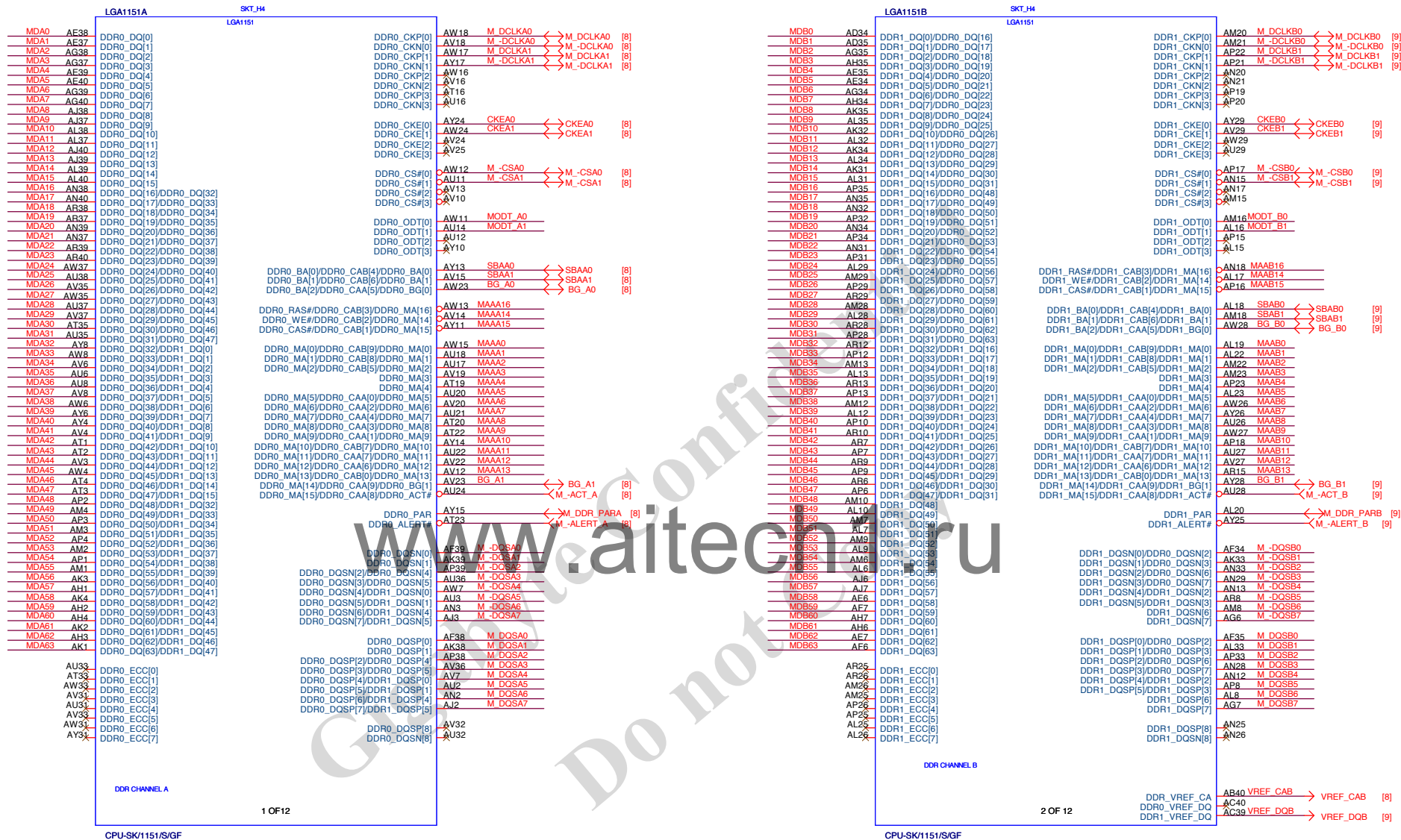
Impedance=85 +- 15%

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
	GA-B250M-D3VX-SI		1.0
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* 改DDR4 net



Need check the new CPU ME

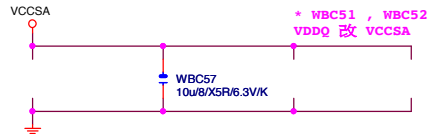
Gigabyte Technology

CPU LGA1151-B**GA-B250M-D3VX-S**

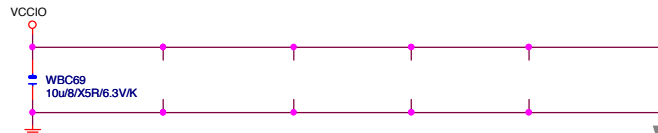
Rev	1.0
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Title			
CPU LGA1151-B			
Size	Document Number	Rev	
Custom	GA-B250M-D3VX-SI	1.0	
Date:	Thursday, December 08, 2016	Sheet	5 of 56

* 刪 WBC50 電容

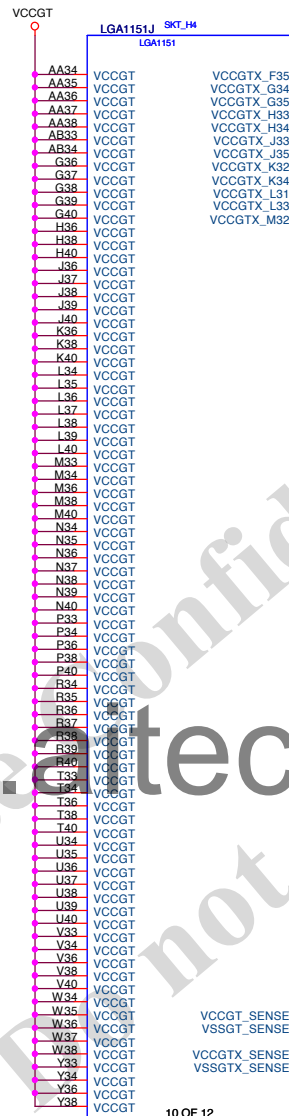
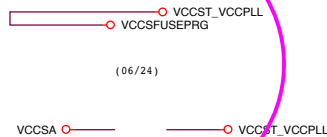


* 刪 WBC124, WBC125, WBC126, WBC127 電容

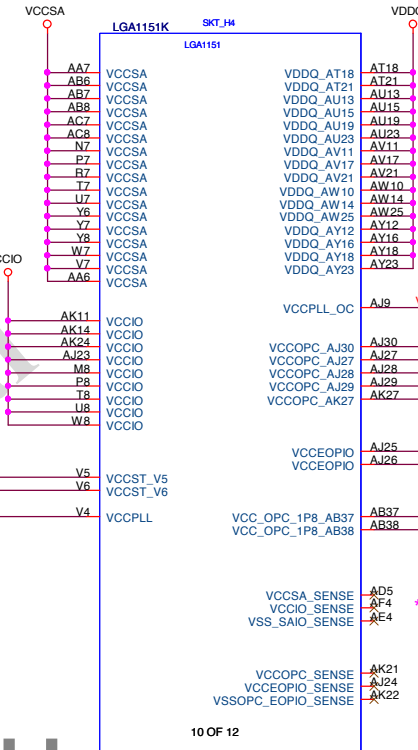
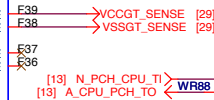


* 刪 VCCGT 電容

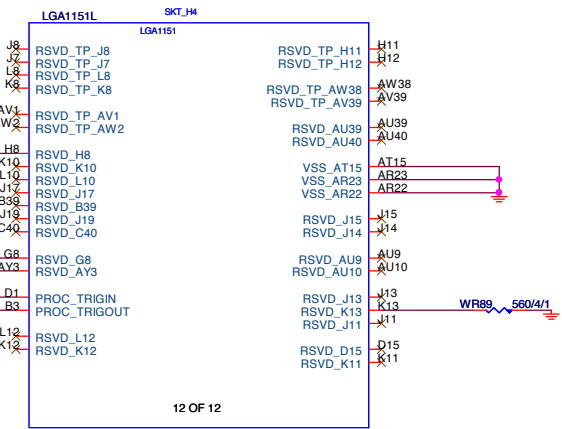
* WR94, WR59, WR86, WR60, WR61, WR62, WR63 改 short pad



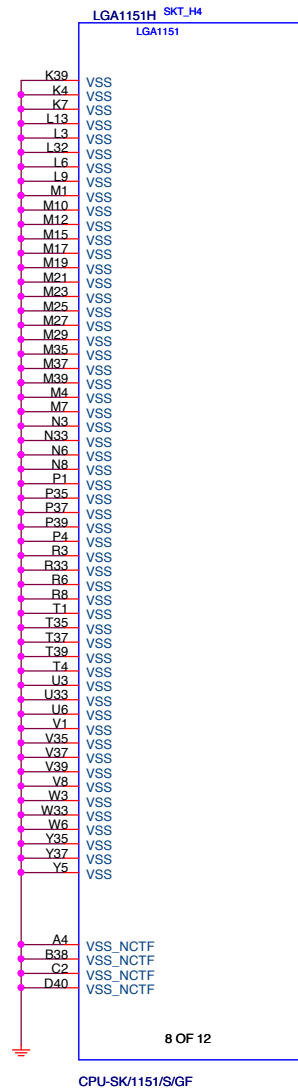
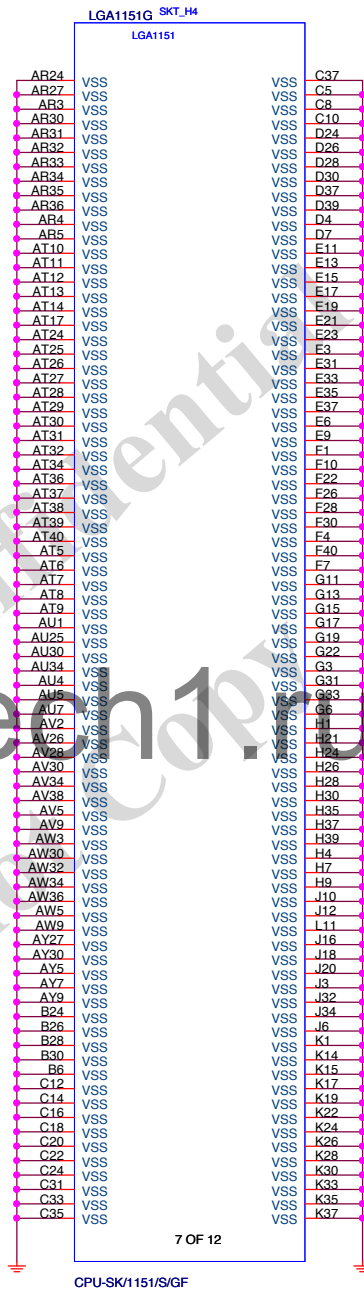
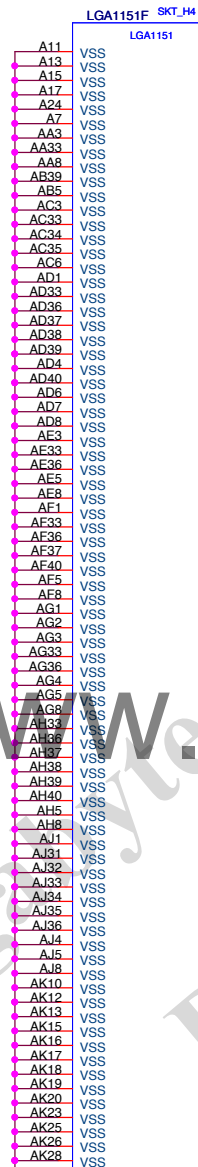
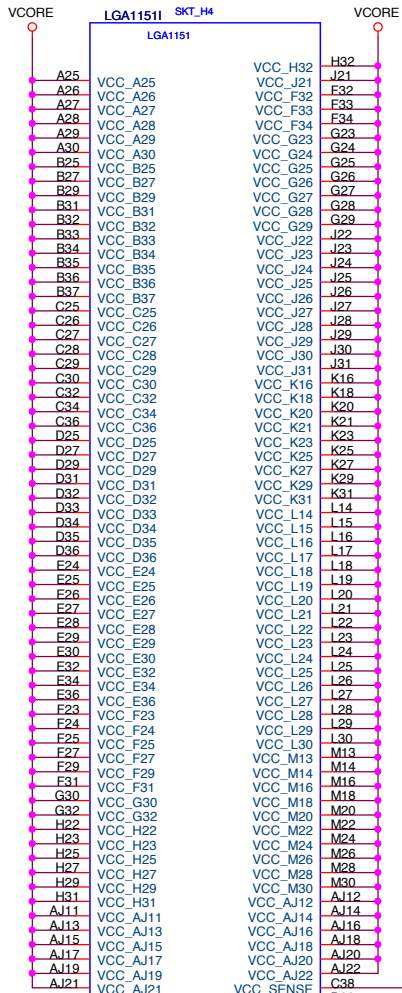
CPU-SK/1151/S/GF



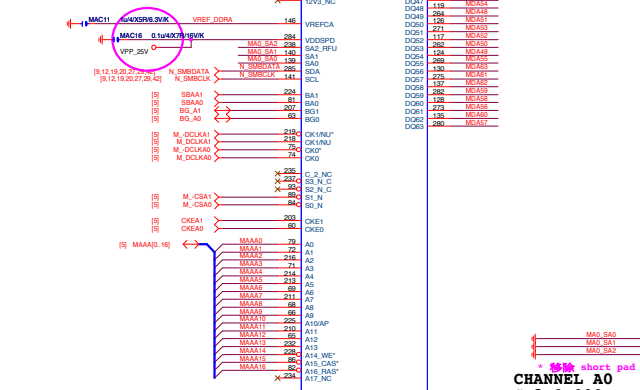
CPU-SK/1151/S/GF



CPU-SK/1151/S/GF



* 刪 Vcore 電容

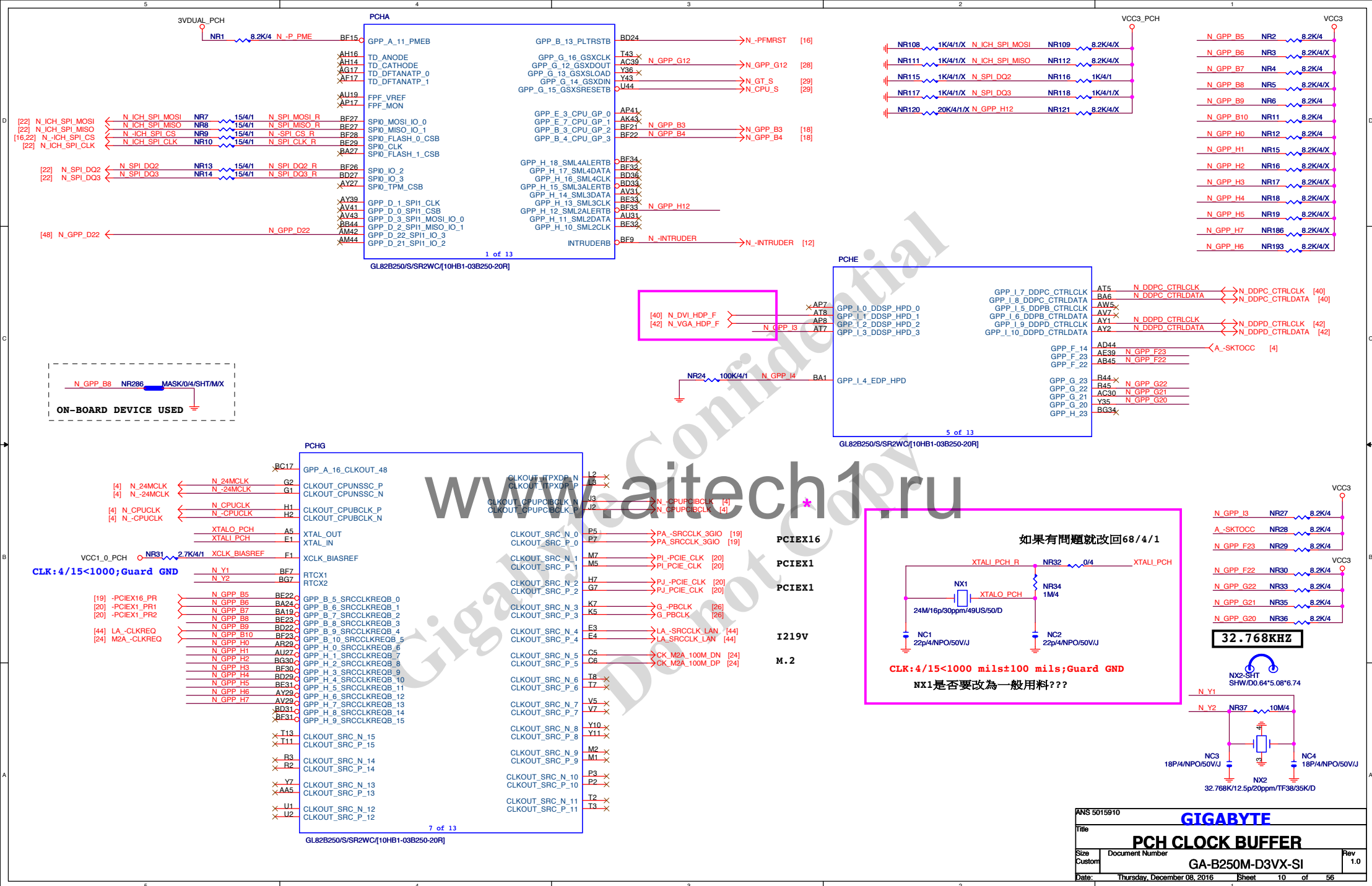


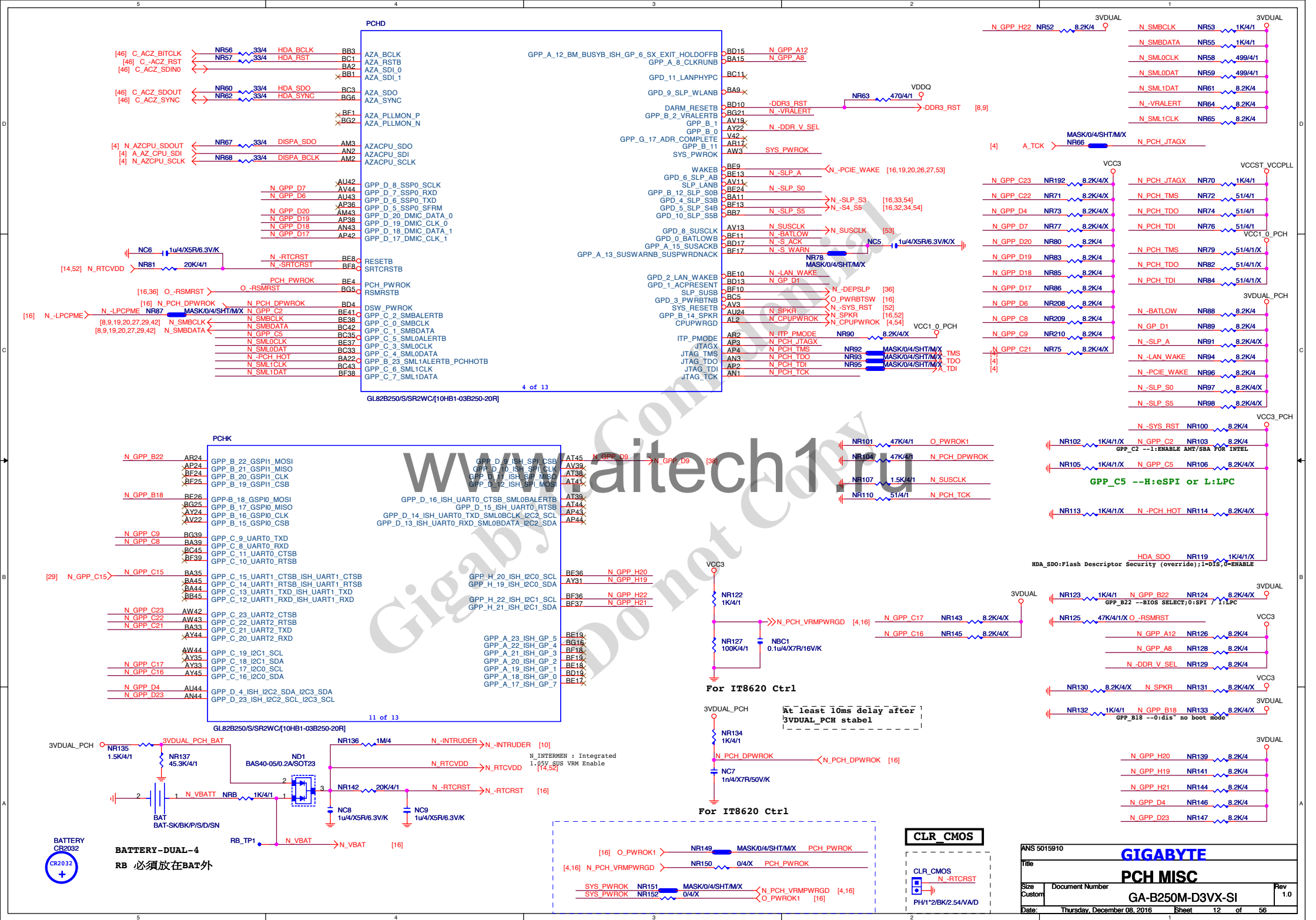
MA0 SA0
 MA0 SA1
 MA0 SA2
 * 移動 short pad
CHANNEL A0
SA2:0=000



• 耐電容

- 削電容





PCH1		
A25	VSS	A42
A30	VSS	D45
P22	VSS	BQ44
AV38	VSS	BE44
AV45	VSS	BF43
AV8	VSS	BF2
AY11	VSS	W29
AY19	VSS	A35
AY37	VSS	BQ23
AY4	VSS	A40
AY42	VSS	A41
AY8	VSS	AA17
B25	VSS	AA18
B3	VSS	AA20
B30	VSS	C1
B35	VSS	AA26
B4	VSS	AA28
B41	VSS	AA29
BA13	VSS	AB17
BA17	VSS	AC32
BA37	VSS	AE4
BA29	VSS	AE8
BA31	VSS	AF18
BA37	VSS	AF20
BA4	VSS	AF21
BA42	VSS	AF25
BB40	VSS	AF28
BC38	VSS	AF29
BC40	VSS	AF4
BC9	VSS	AF42
BD11	VSS	AG18
BD16	VSS	AG20
BD2	VSS	AG21
BD21	VSS	AG23
BD25	VSS	AG25
F2	VSS	AG26
F31	VSS	AG28
F6	VSS	AG29
F8	VSS	AH11
F39	VSS	AH13
F43	VSS	AH30
G4	VSS	AH32
G40	VSS	AH33
G42	VSS	AH38
F6	VSS	AJ1
Q9	VSS	AJ17
H11	VSS	AJ18
H13	VSS	AJ20
H17	VSS	AJ21
H19	VSS	AJ23
H22	VSS	AJ25
H24	VSS	AJ26
H27	VSS	AJ28
H29	VSS	AJ29
H33	VSS	AJ45
H35	VSS	AK10
H38	VSS	AK14
H4	VSS	AK16
H42	VSS	AK17
H9	VSS	AK18
J4	VSS	AK26
M36	VSS	AK28
M4	VSS	AM14
M8	VSS	AN14
M9	VSS	AP19
N13	VSS	AR22
N15	VSS	AR27
N19	VSS	AU29
N22	VSS	AU33
N24	VSS	AV1
N31	VSS	AV10
N42	VSS	AV15
P10	VSS	AV24
P12	VSS	AV27
AV35	VSS	AV33

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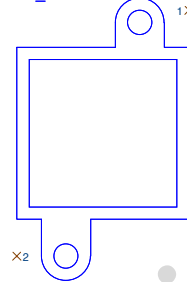
GL82B250/S/SR2WC[10HB1-03B250-20R]

PCHL		
BD34	VSS[70]	AB18
BD39	VSS[71]	AB20
BD7	VSS[72]	AB21
BE2	VSS[73]	AB25
BF43	VSS[74]	AB29
BF5	VSS[75]	AB4
BG18	VSS[76]	AB42
BG23	VSS[77]	AC10
BG28	VSS[78]	AC11
BG32	VSS[79]	AC14
BG37	VSS[80]	AC16
BG40	VSS[81]	AC38
BG9	VSS[83]	AC4
C1	VSS[84]	AC5
A12	VSS[85]	AC7
C2	VSS[86]	AC8
C37	VSS[87]	AD1
A6	VSS[88]	AD18
C9	VSS[89]	AD20
D1	VSS[90]	AD21
D10	VSS[91]	AD25
D12	VSS[92]	AD29
D15	VSS[93]	AD45
D16	VSS[94]	AE11
B12	VSS[95]	AE14
D19	VSS[96]	AE32
D21	VSS[97]	AE33
D24	VSS[98]	AE38
D25	VSS[99]	AK29
D29	VSS[100]	AK30
AG20	VSS[101]	AK32
D33	VSS[102]	AK35
D35	VSS[103]	AK39
D36	VSS[104]	AL4
D39	VSS[105]	AL42
D44	VSS[106]	AM10
D7	VSS[107]	AM11
P13	VSS[108]	AM13
P15	VSS[109]	AM17
P17	VSS[110]	AM19
P19	VSS[111]	AM24
P31	VSS[112]	AM27
P33	VSS[113]	AM29
P35	VSS[114]	AM32
P4	VSS[115]	AM33
P42	VSS[116]	AM4
P8	VSS[117]	AN45
R1	VSS[118]	AP10
B32	VSS[119]	AP11
T10	VSS[120]	AP13
T14	VSS[121]	AP15
T22	VSS[122]	AP22
T29	VSS[123]	AP27
T32	VSS[124]	AP31
T36	VSS[125]	AP33
T38	VSS[126]	AP34
Y38	VSS[127]	AP39
Y4	VSS[128]	W1
Y4	VSS[129]	W26
Y8	VSS[130]	V16
T42	VSS[131]	V17
T5	VSS[132]	V18
U4	VSS[133]	V30
AN14	VSS[134]	V32
V10	VSS[135]	V33
AR22	VSS[136]	V38
W3	VSS[137]	V4
AR13	VSS[138]	V8
AU29	VSS[139]	W18
AU33	VSS[140]	W20
AR31	VSS[141]	W21
AR33	VSS[142]	W23
AR4	VSS[143]	W25
AT10	VSS[144]	
AT13	VSS[145]	
AT35	VSS[146]	
AT37	VSS[147]	
AT42	VSS[148]	
AU11	VSS[149]	
AU17	VSS[150]	
BD30	VSS[151]	
W45	VSS[152]	
Y13	VSS[153]	
Y14	VSS[154]	
Y30	VSS[155]	
Y32	VSS[156]	
Y33	VSS[157]	
BG14	VSS[158]	

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GL82B250/S/SR2WC[10HB1-03B250-20R]

SB_HEATSIN



Only for B250M-Power

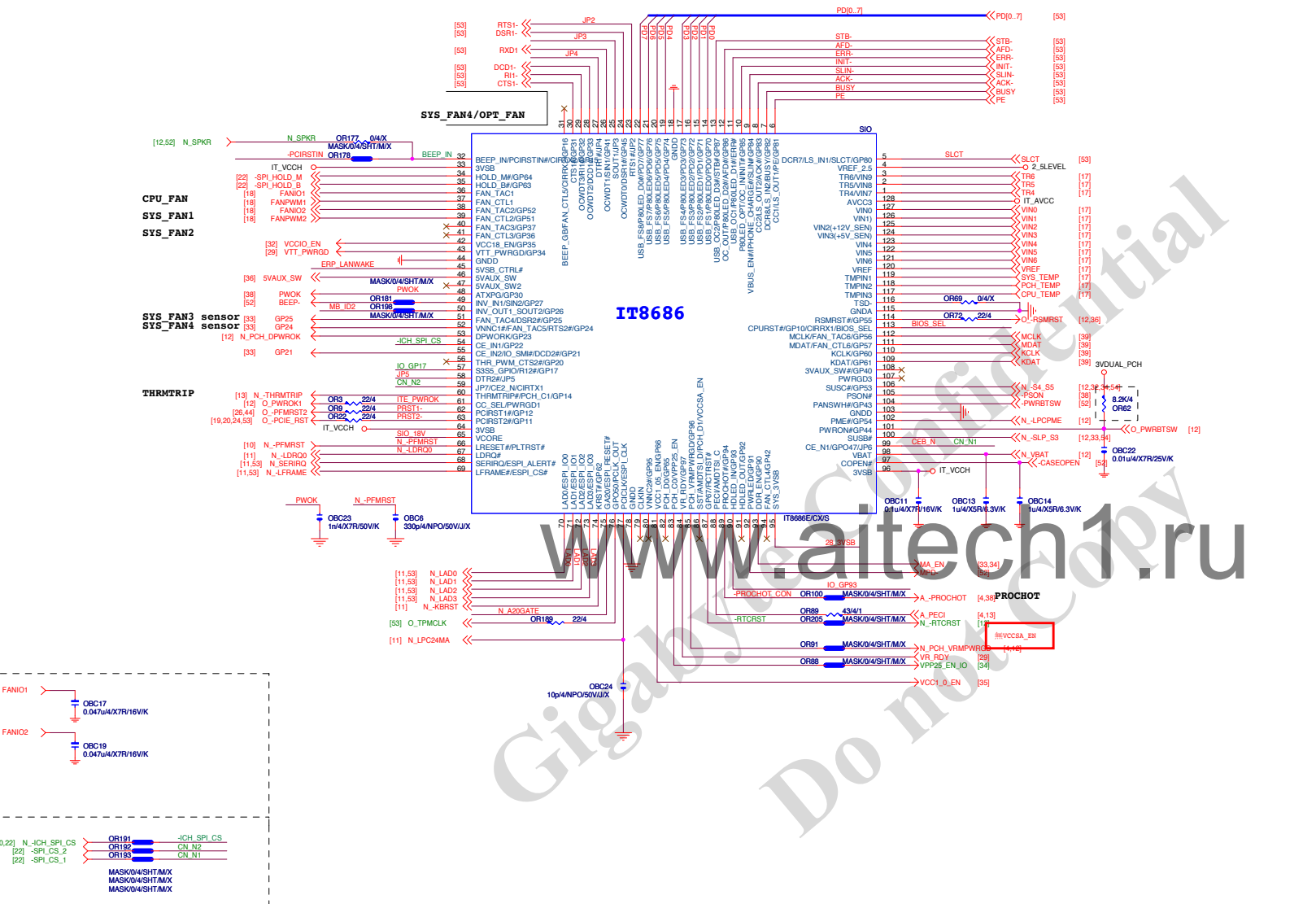
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PCH_HS[12SP2-S03507-31R]

ANS 5015910			
GIGABYTE			
Title			
PCH GND			
Size	Document Number	Rev	
Custom	GA-B250M-D3VX-SI	1.0	
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SIO IT8686 REV:0.1

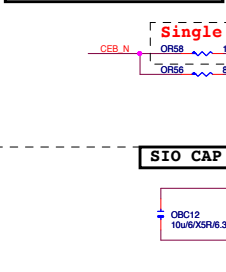
IT8686 LPT+COMA



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

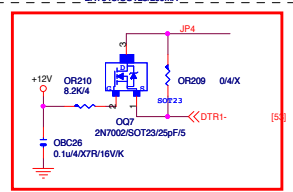
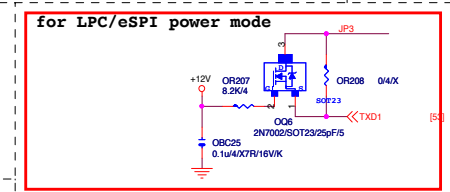
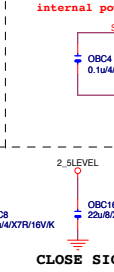


Placement CPU

[4] A-THRMTRIP <=VR10 1K4/1 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 18V



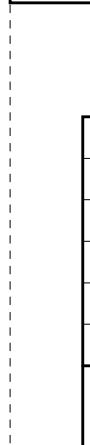
PWR SHT



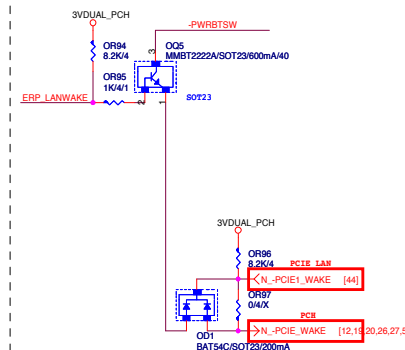
SIO PU



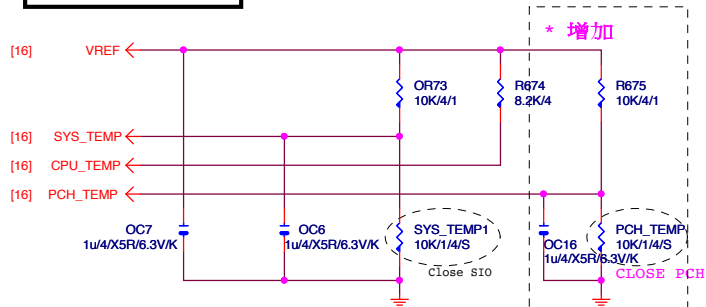
SIO STRAP



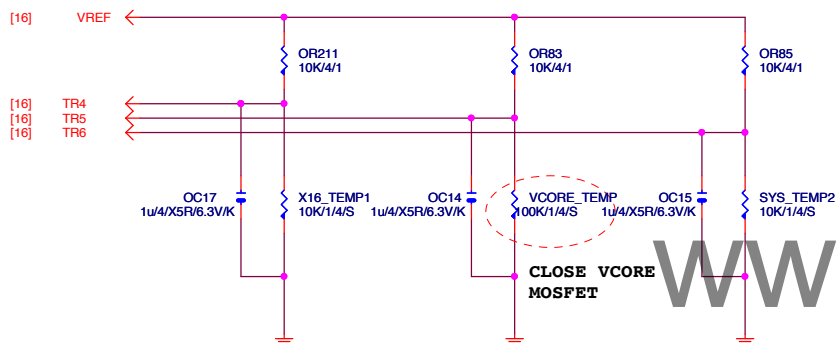
JP2	1	Disable WDT to rest PWROK
JP2	0	Enable WDT to rest PWROK
JP3		Dual-BIOS CS pin mode select bit "0" See the below table
JP4	1	LPC/ESPI power VCCBT = 3.3V
JP4	0	LPC/ESPI power VCCBT = 1.8V
JP5	0	ESPI I/F
JP6	1	Enable Dual BIOS Function (for GigaByte Only)
JP6	0	Disable Dual BIOS Function (for GigaByte Only)
JP7		Dual-BIOS CE pin mode select bit "1" See the below table
JP7	1 1	CE pin disable (Hold pin mode)
JP7	1 0	CE mode 1
JP3	0 1	CE mode 2
JP3	0 0	CE mode 3



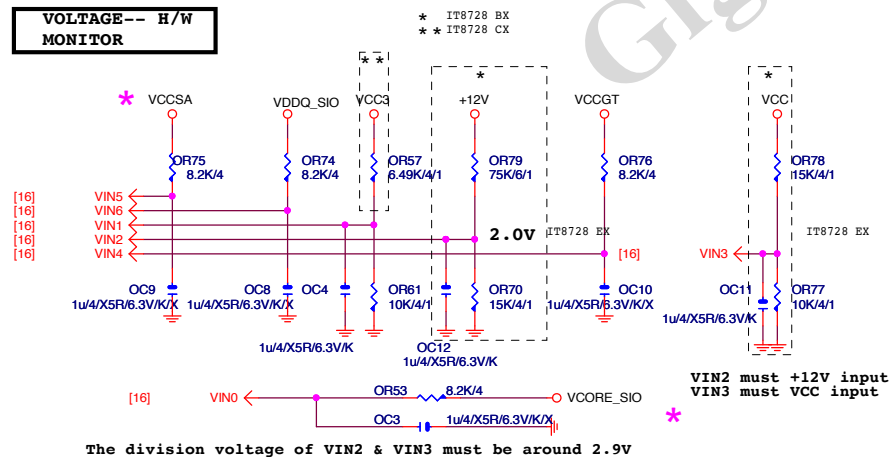
TEMP H/W MONITOR



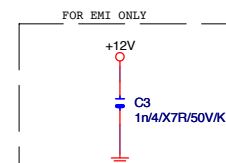
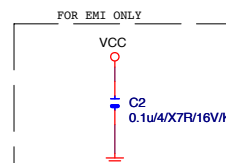
5個FAN時使用



VOLTAGE-- H/W MONITOR



★Update 2015-04.24

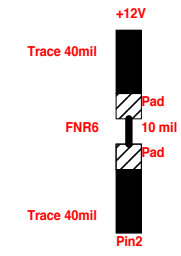
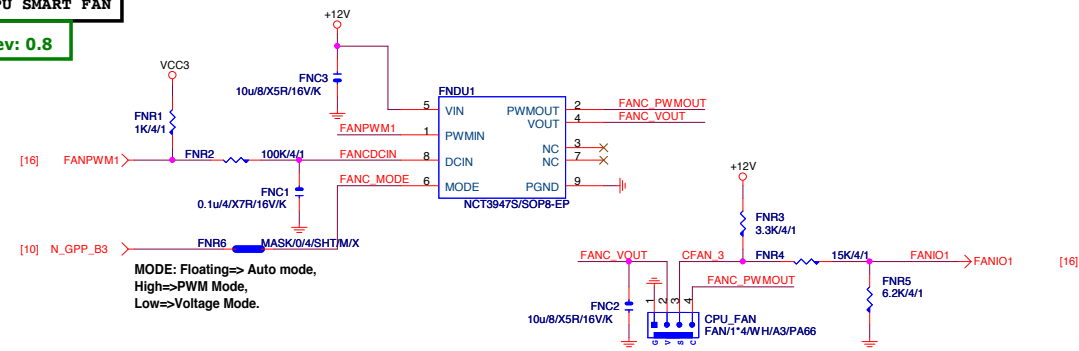


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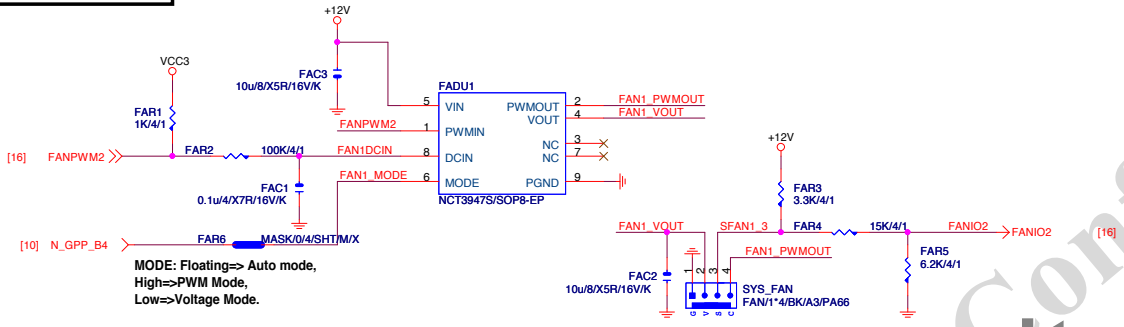
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HWM,KB/MS, FAN CTRL		
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CPU SMART FAN

Rev: 0.8

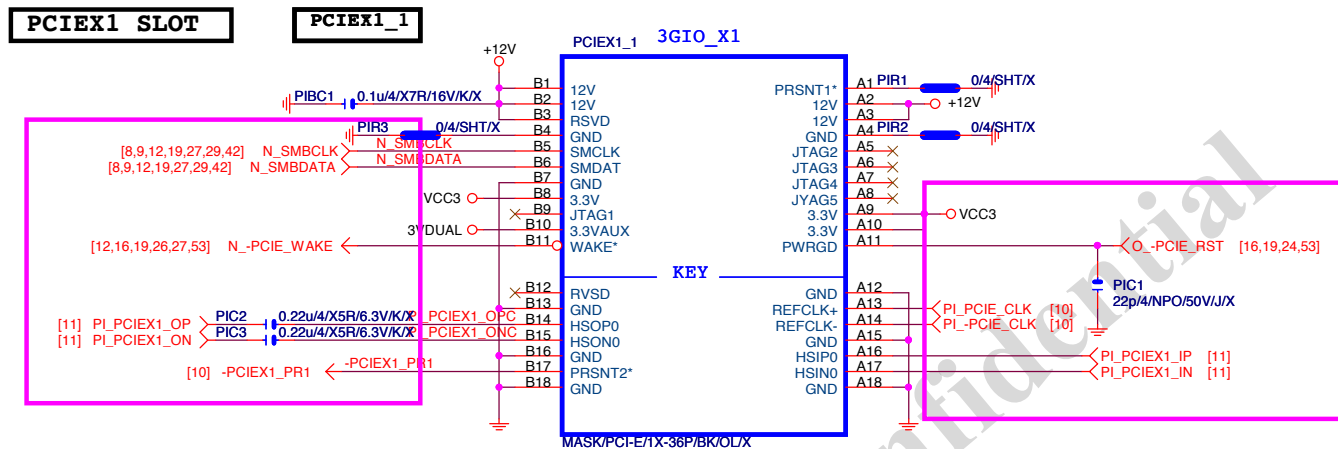


A. SYSTEM FAN1

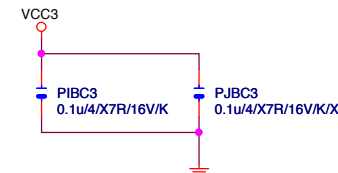
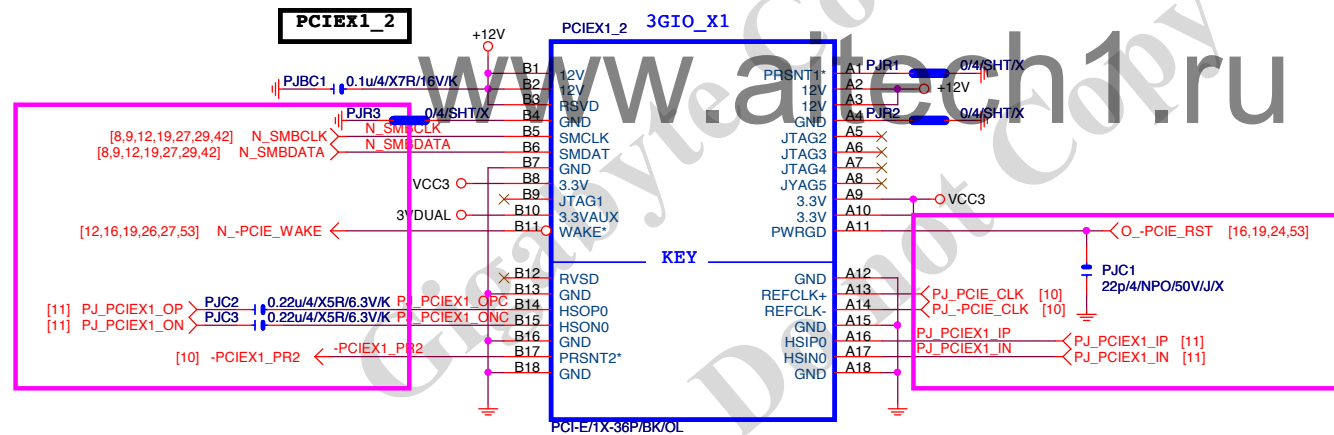


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Gigabyte Technology			
Title			
FAN CTRL			
Size	Document Number	Rev	
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MASK

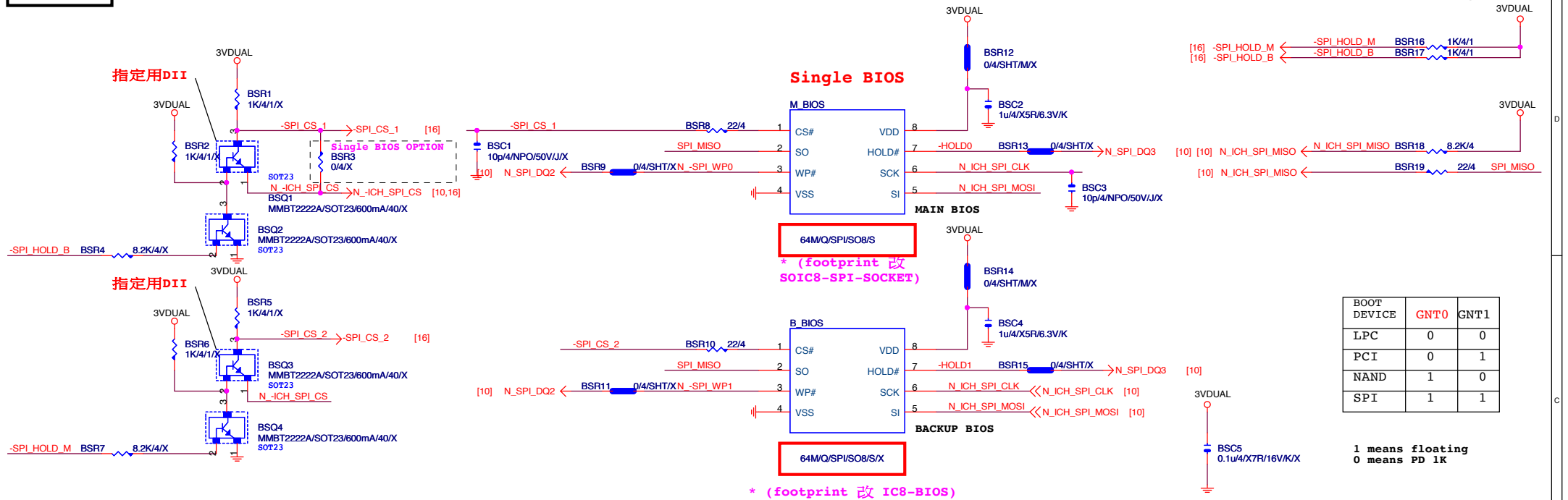


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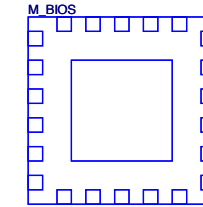
Title					Rev 1.0
PCIE X4					
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DUAL BIOS

MOSI For DMI RX Termination Voltage



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

* 試産先上, PVT 移除

Gigabyte Technology

Title			BIOS
Size	Document Number	GA-B250M-D3VX-SI	
Custom			Rev 1.0
Date:	Thursday, December 08, 2016	Sheet	22 of 56

M.2 Lane4 from PCH port18



M.2 Lane3 from PCH port17



M.2 Lane2 from PCH port16

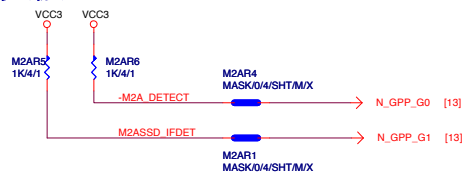


M.2 Lane1 from PCH port15



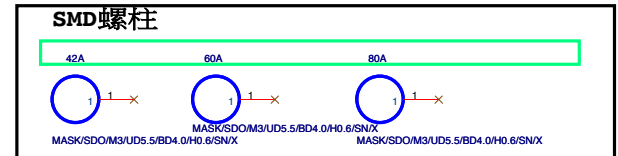
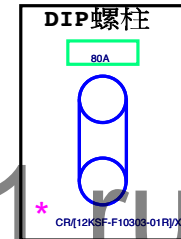
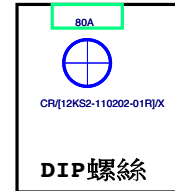
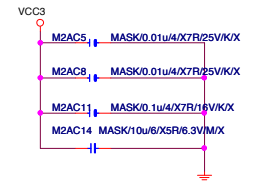
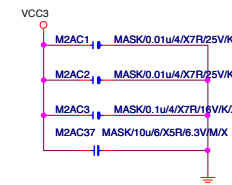
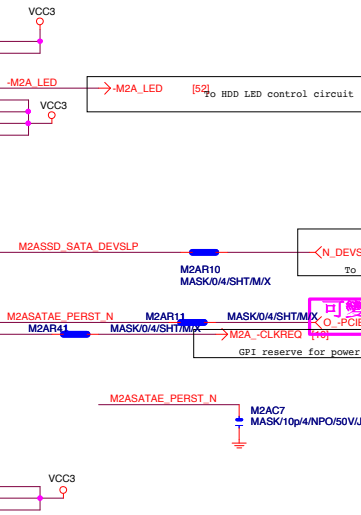
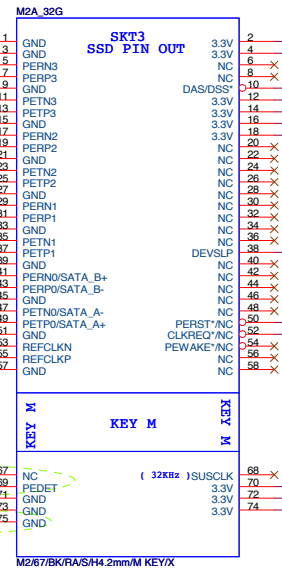
需與M2_-CLKREQ對應

支援SATA and M.2 function

SATA : GND.
PCIE : NC

M2插卡時為Low

* Footprint : NGFF-M-8CM-09MM-SMD-MASK

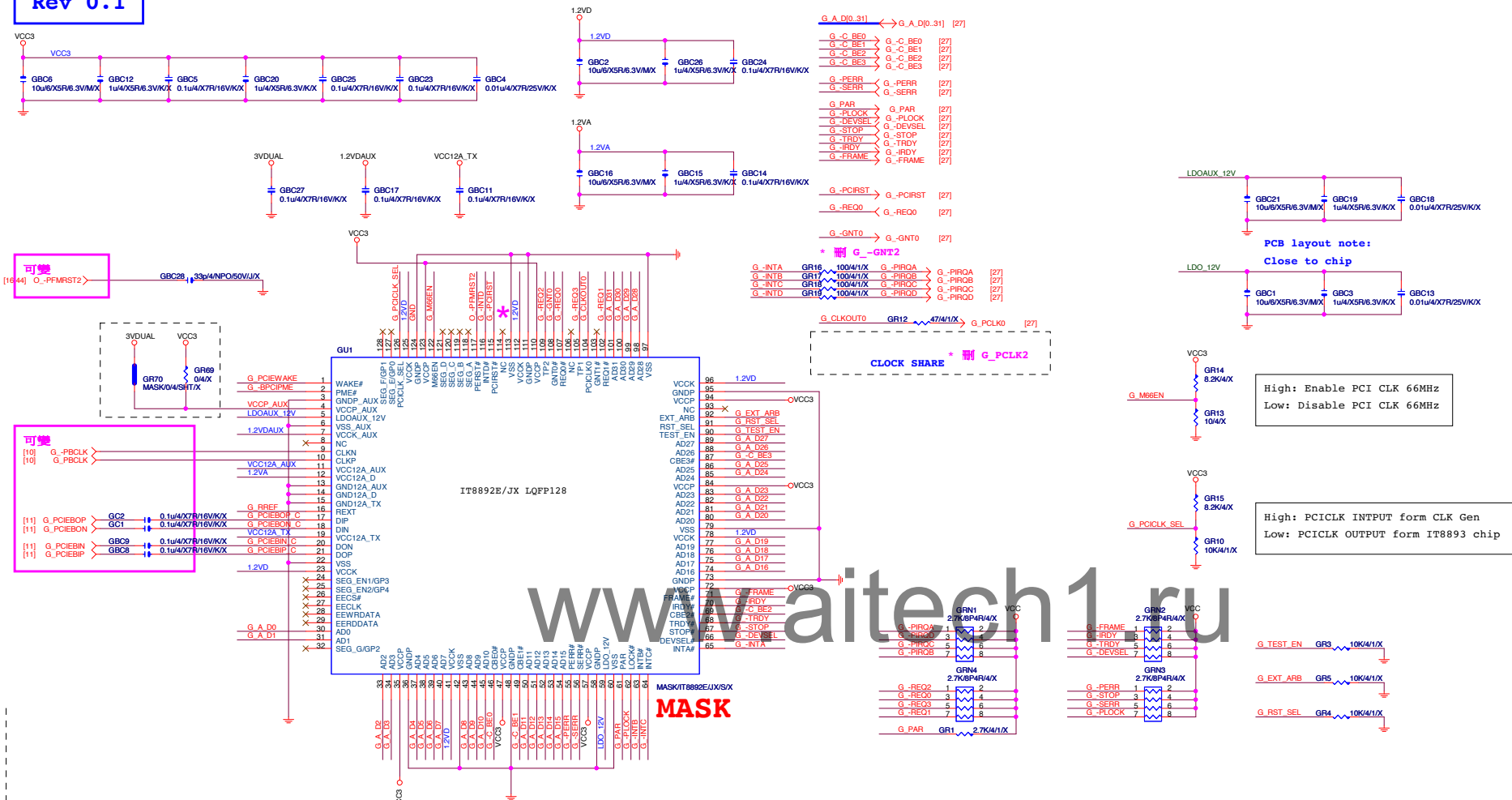


* Footprint : HOLE_C236D165-A

M.2 有插卡 /沒插卡 GPP_G0	M.2插何種卡? GPP_G1	SATA Express 插何種硬碟? GPP_E0/E2/F1	I015 (S0)	I016 (S1)	I017	I018	I019 (S0)	IP20 (S1)
有插卡 (Low)	SATA Mode (Low)	SATA (Hi)	SATA (M.2)	PCIE x1	PCIE x1	PCIE x1	PCIE x1	SATA
		SATA Express (Low)	SATA (M.2)	PCIE x1	PCIE x1	PCIE x1	SATA Express	
	PCIE Mode (Hi)	SATA (Hi)		PCIE x4 (For M.2)			SATA	SATA
		SATA Express (Low)		PCIE x4 (For M.2)			SATA Express	
沒插卡 (Hi)	Don't Care (Hi)	SATA (Hi)		PCIE x4			SATA	SATA
		SATA Express (Low)		PCIE x4			SATA Express	

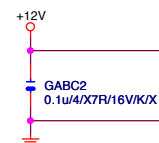
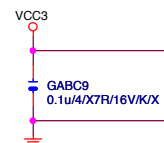
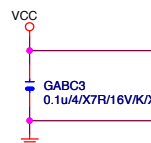
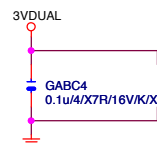
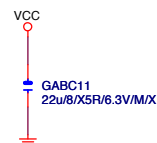
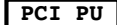
Gigabyte Technology

Title	M.2 X4		
Size	Custom	Document Number	Rev
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Component change note	
IT8892FX	GR70, GR74, GR76, GR78, GR66 : ON GR69, GR73, GR75, GR77, GR67 : NC GR44 resistor is 12k ohm GL14, GL10, GL16, GL17 : ON GL19, GL21, GL23, GL25 : NC
IT8892JX	GR70, GR73, GR75, GR78, GR66 : ON GR69, GR74, GR76, GR77, GR67 : NC GR44 resistor is 18k ohm GL14, GL10, GL16, GL17 : ON GL19, GL21, GL23, GL25 : NC
External LDO Power (IT8892JX)	GR69, GR73, GR75, GR77, GR67 : ON GR70, GR78, GR66 : NC GR44 resistor is 18k ohm GL19, GL21, GL23, GL25 : ON GL14, GL10, GL16, GL17 : ON

MASK

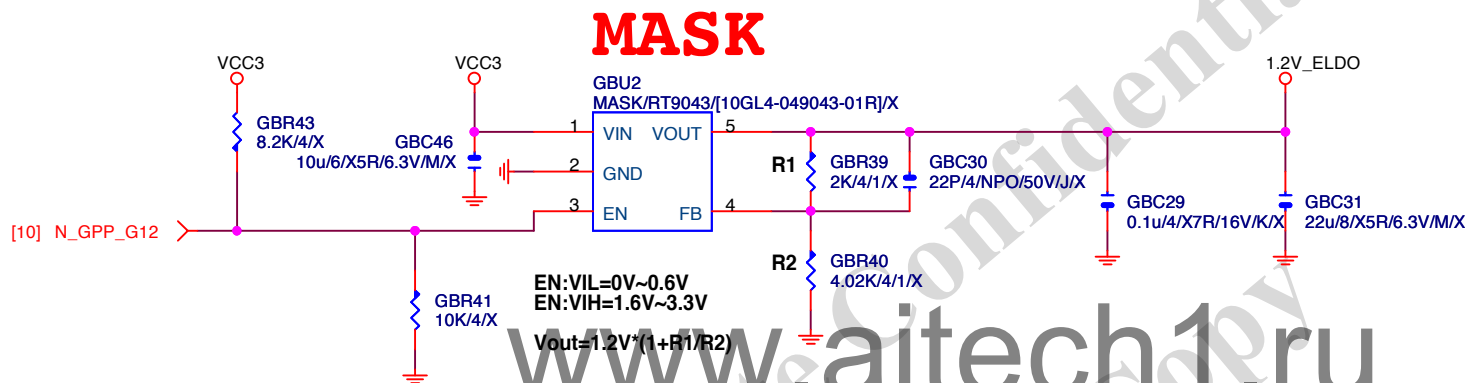


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Title	PCI SLOT 1&2
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Size Custom	Document Number GA-B250M-D3VX-SI	Rev 1.0
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Rev 0.1



Gigabyte Technology

Title

ASM1085 POWER

Size
Custom

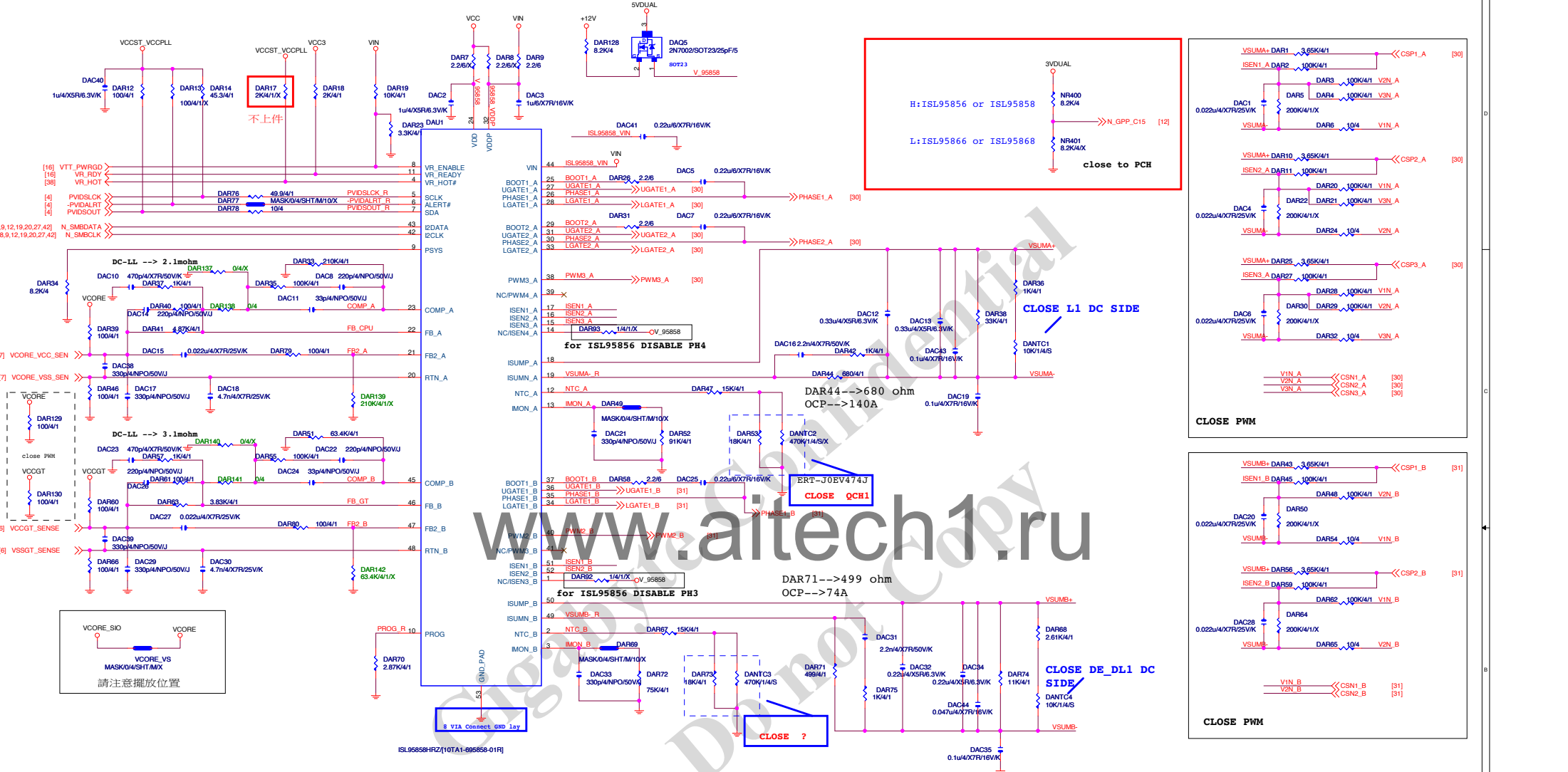
Document Number

GA-B250M-D3VX-SI

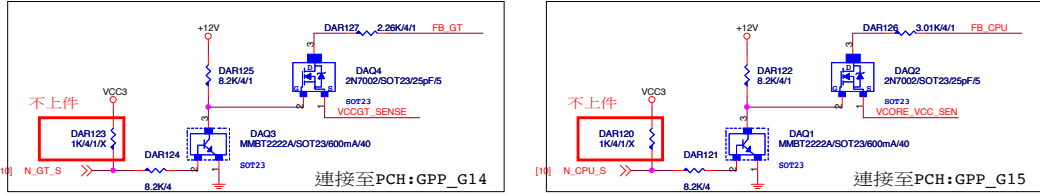
Rev
1.0

Date: Thursday, December 08, 2016

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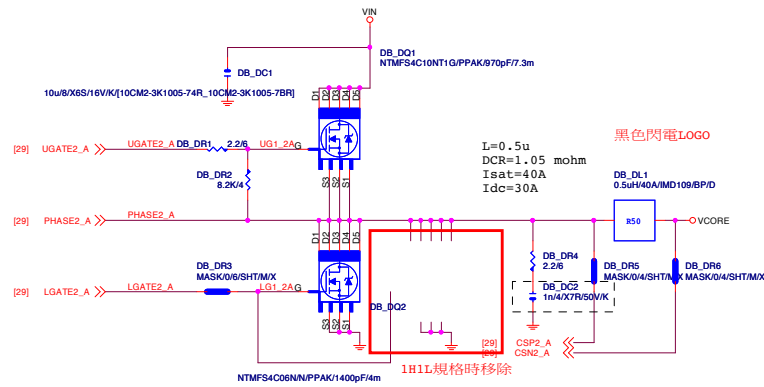
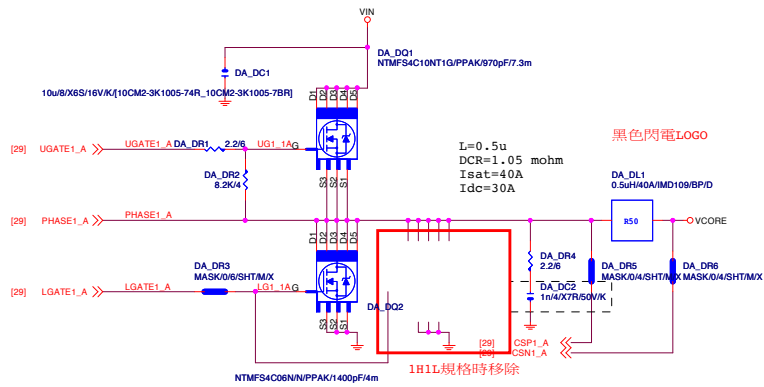


VCCGT	ISL9585B	ISL9586B	VCC3	ISL9585B	ISL9586B
DAR137	X	V	DAR140	X	V
DAR138	V	X	DAR141	V	X
DAR139	X	V	DAR142	X	V
DAR145	V	X	DAR27	V	X
DAR79	V	X	DAR80	V	X
DAR33	V	X	DAR51	V	X

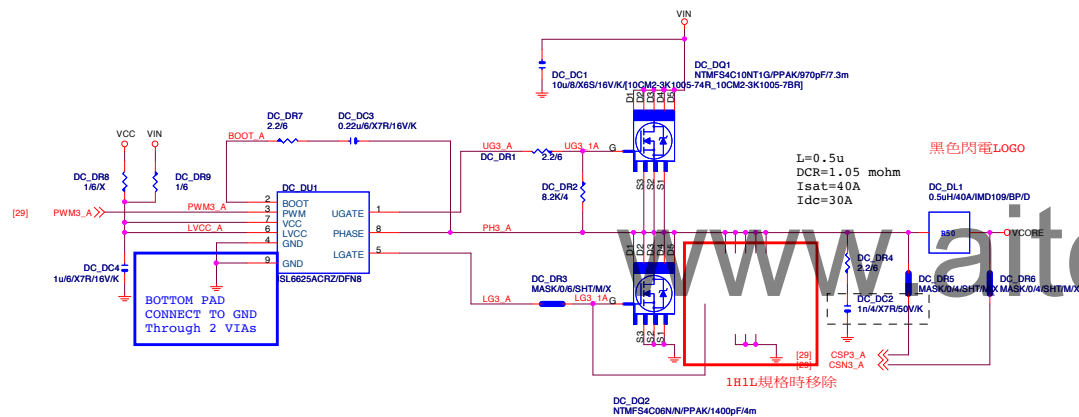
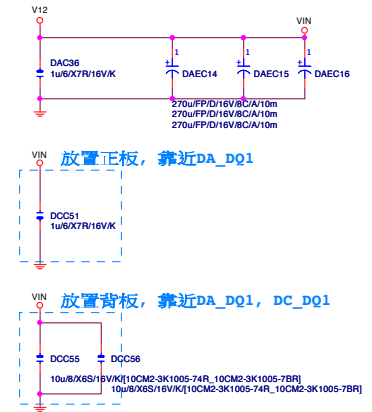
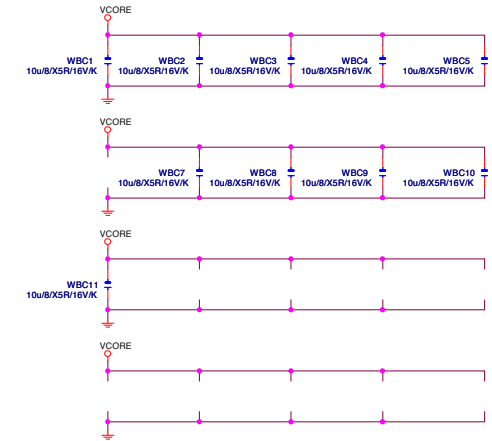
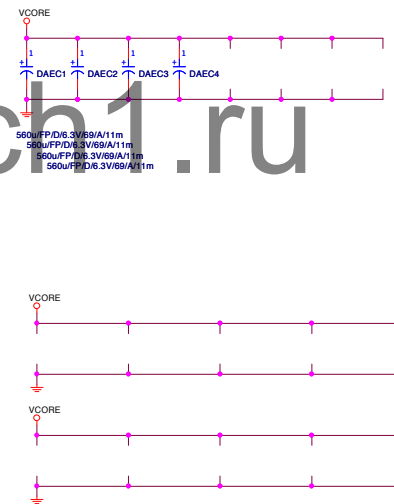


REV:0.1

VCORE



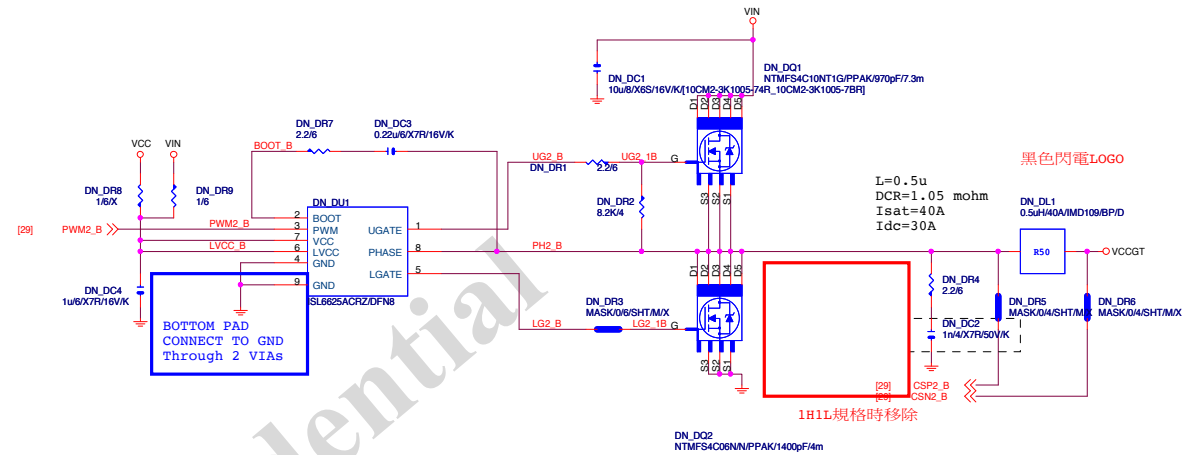
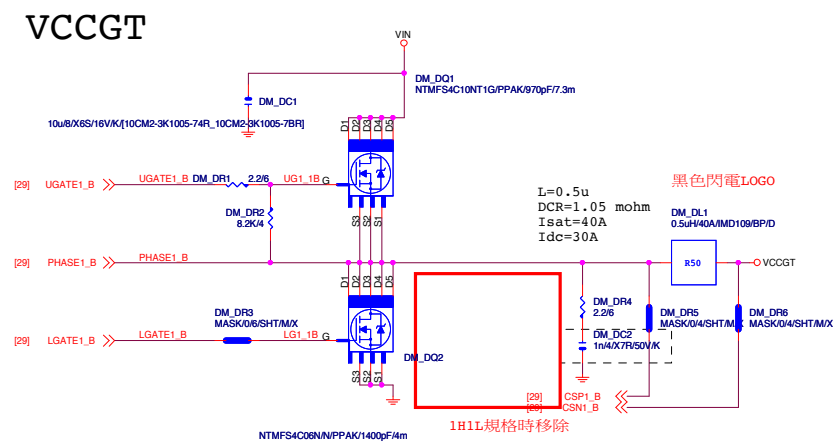
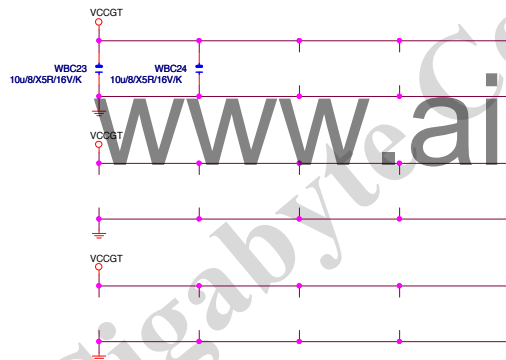
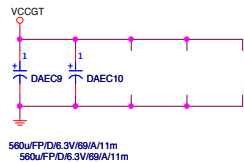
VIN CAP 270u*3PCS

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

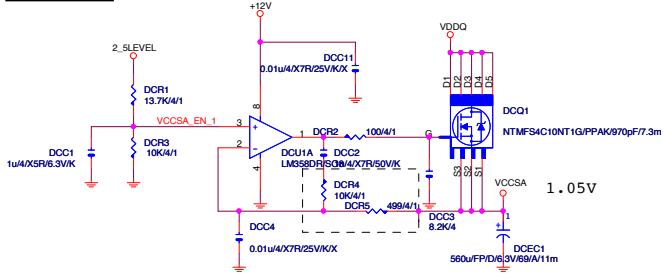
GIGABYTE™

File	ISL95868_MOS		
Size	Document Number	GA-B250M-D3VX-SI	Rev 1.0
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VCCGT

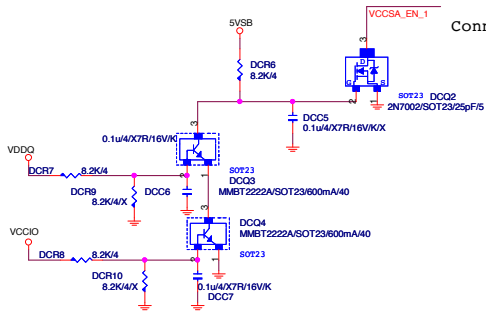
VCCGT CAP 560u*2PCS
10u*2PCS

VCCSA

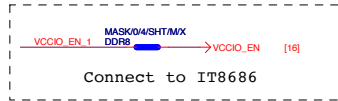
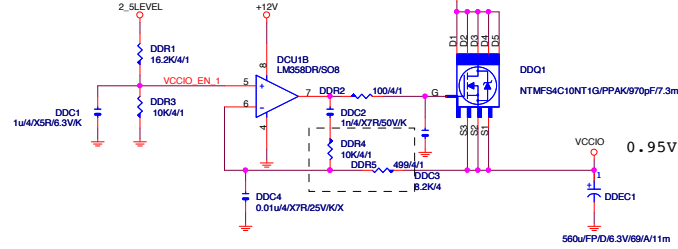


Connect to IT8793

Connect to IT8686

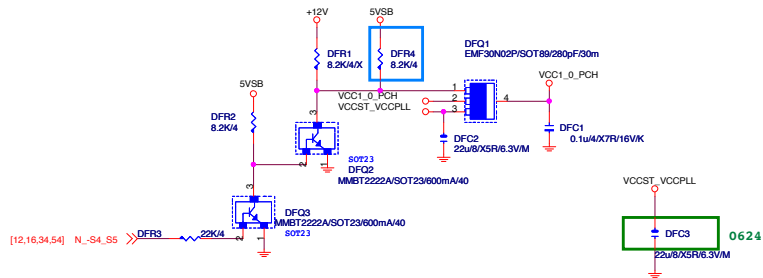


VCCIO

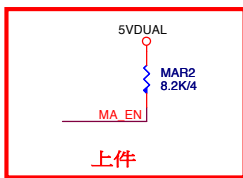


VCCGT
放CPU端。

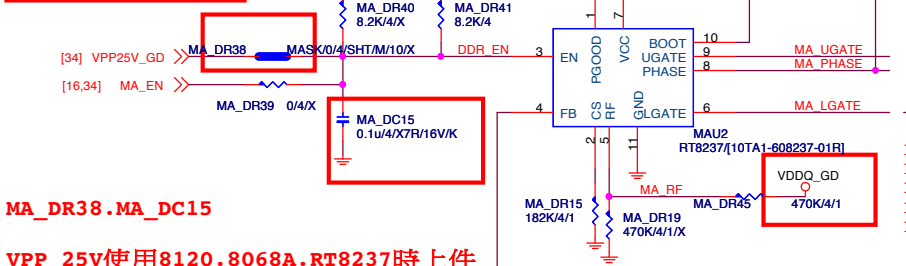
VCCST_VCCPLL



DDR4



上件



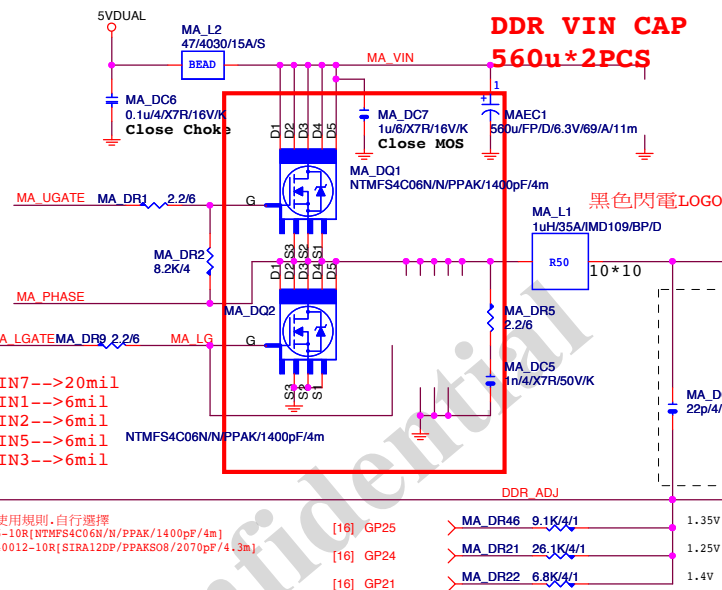
MA DR38.MA DC15

VPP 25V使用8120.8068A.RT8237時上件



FS=290K
OCP=40A

MOSFET請依MOSFET使用規則,自行選擇
ON-->10IP9-040406-10R[NTMFS4C6N/PPAK/1400pF/4m]
VISHAY-->10IP9-040012-10R[SRA12DP/PPAKS08/2070pF/4.3m]



CHOKES與CAP料號可變

DDR VIN CAP
560u*2PCS

黑色閃電LOGO

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

PWR SEQ

CLOSE TO DDR POWER PLANE

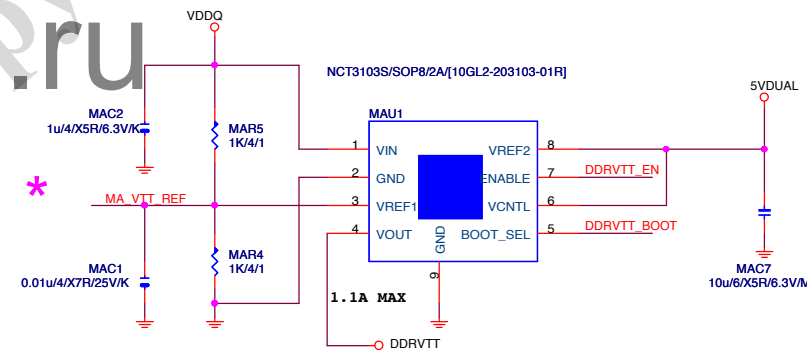
For power sequence require

VPP_25V使用8120時上件

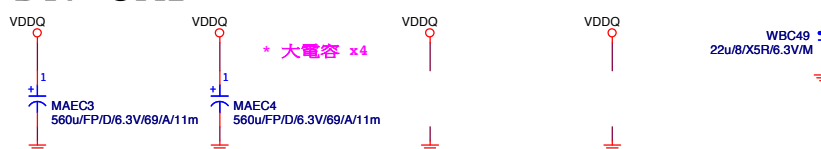
MAU1上RT9045時上件(不可MASK)

MA VTT RE

DDRVTT



DDR CAP 560u*4PCS 22u*2PCS

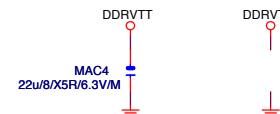


* 大電容 x4

WBC49
22u/8/X5R/6.3V/M

DDRVTT CAP

* 大電容 x0



[4] DDR_VTT_CTL >> DDR VTT CTL MAR110 MASK/0/4/SHTM/10/X DDRVTT_EN
[12.16.54] N -SLP S3 >> N -SLP_S3 MAR111 MASK/0/4/SHTM/10/X DDRVTT_BOOT

GIGABYTE™

RT8237_DDR4 POWER

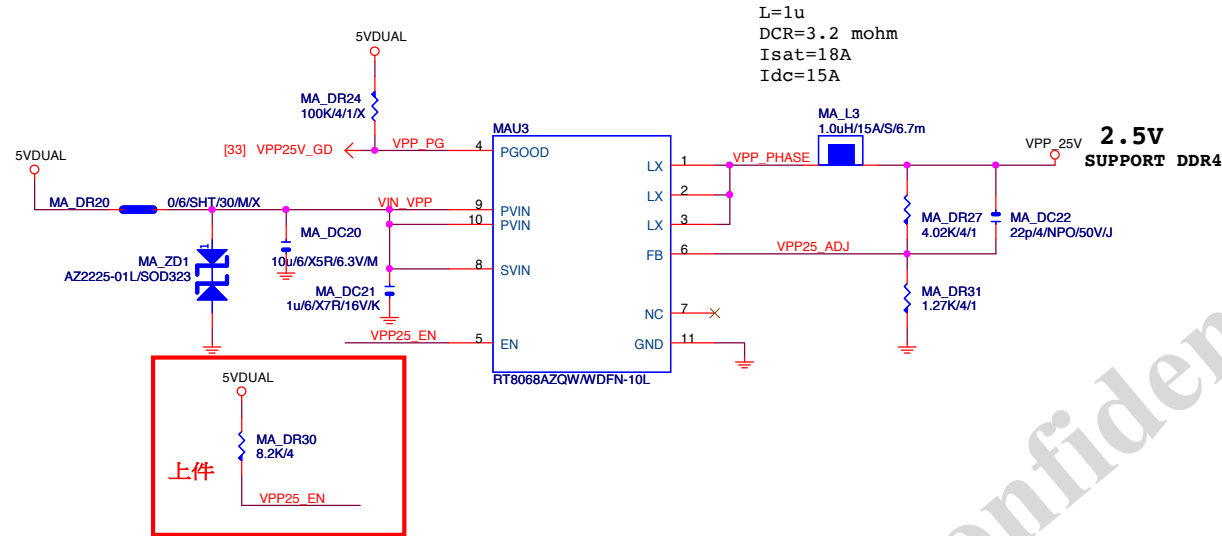
Size Custom	Document Number GA-B250M-D3VX-SI	Rev 1.0
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Date: Thursday, December 08, 2016 Sheet 33 of 56

REV:0.1

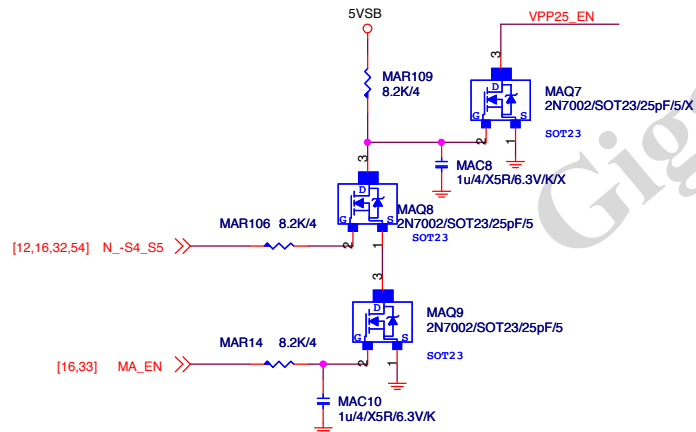
VPP_25V

CHOKE與CAP料號可變



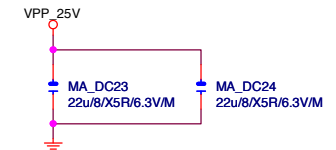
PWR_SEQ

* 耐 MA_DR32



VPP CAP 22u*1PCS

* 大電容 x0

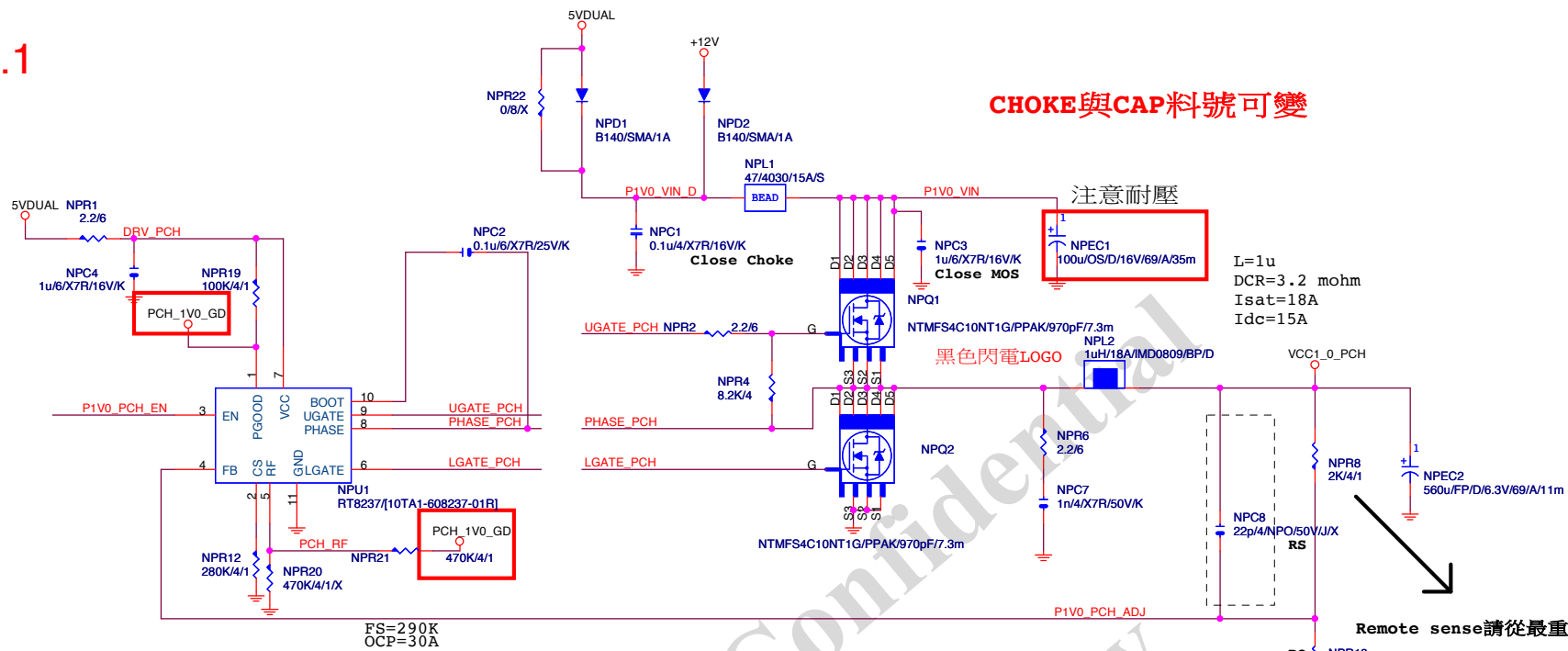


GIGABYTE™

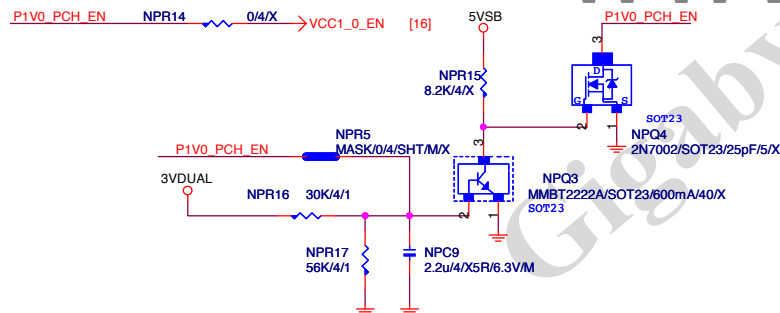
Title		
RT8068A_VPP25 POWER		
Size	Document Number	Rev
Custom	GA-B250M-D3VX-SI	1.0
Date:	Thursday, December 08, 2016	Sheet 34 of 56

REV:0.1

CHOKES與CAP料號可變



PWR SEQ



GIGABYTE™

Title		
RT8237_PCH POWER		
Size	Document Number	Rev
Custom	GA-B250M-D3VX-SI	1.0
Date:	Thursday, December 08, 2016	Sheet 35 of 56

REV:0.51

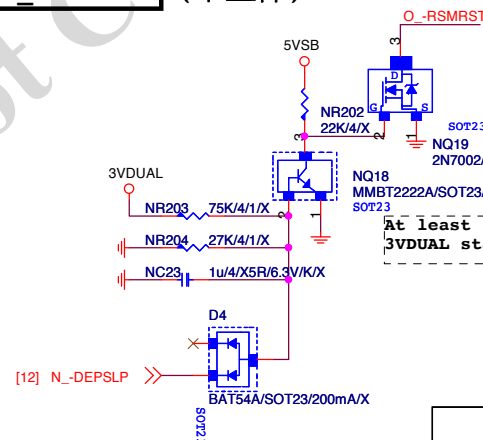
[16] 5VAUX_SW



上22u 電容

Meet the rise time

0-RSMRST (不上件)



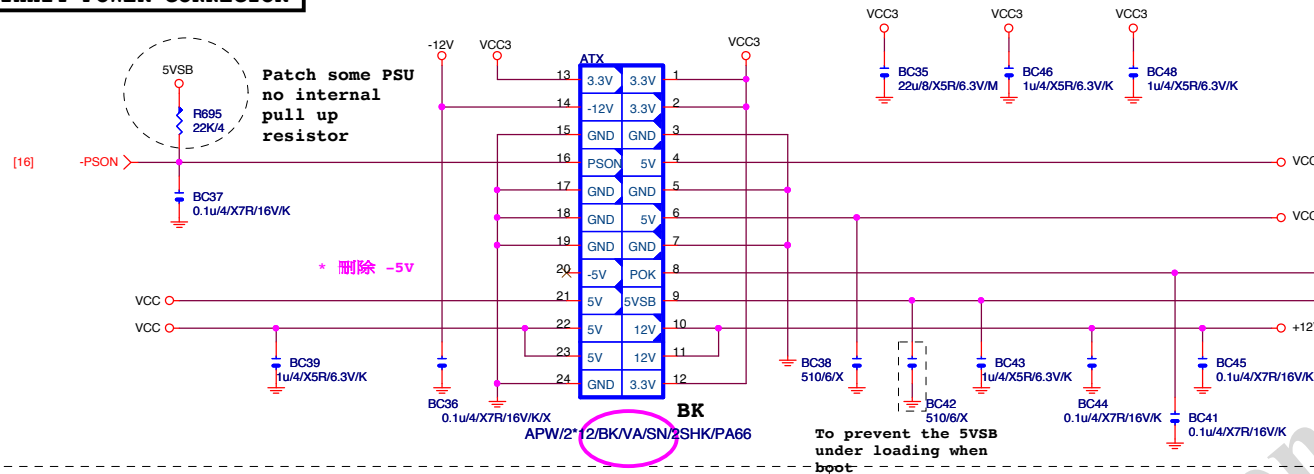
At least 10ms delay after
3VDUAL stabel

[12] N.-D.

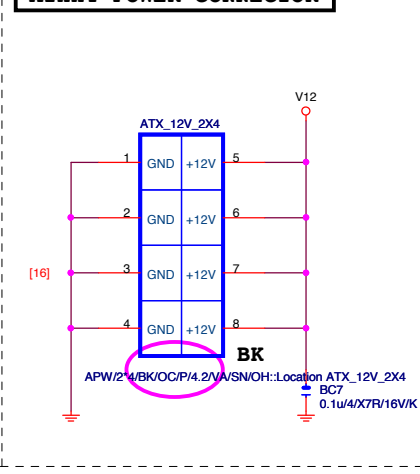
Gigabyte Technology

Title			
DISCRETE POWER			
Size	Document Number		Rev
Custom	GA-B250M-D3VX-SI		1.0
Date:	Thursday, December 08, 2016	Sheet	36 of 56

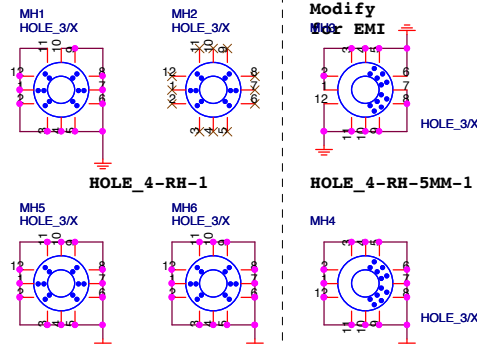
ATXX24 POWER CONNECTOR



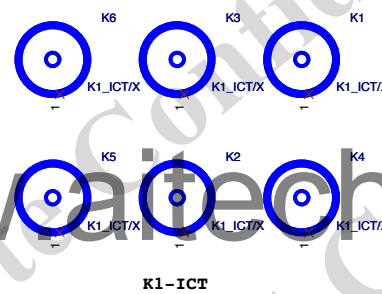
ATXX4 POWER CONNECTOR



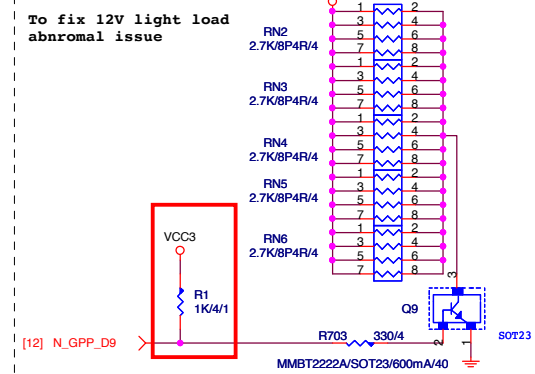
螺絲孔



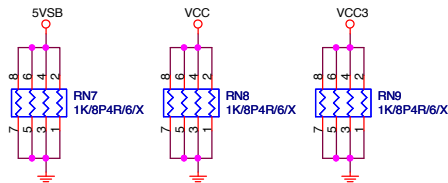
固定孔/光學點



+12V DUMMY LOAD



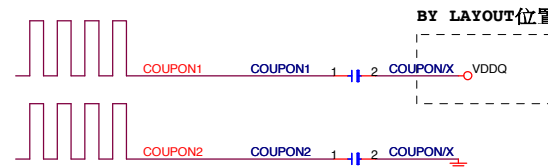
DUMMY LOAD



-PROHOT

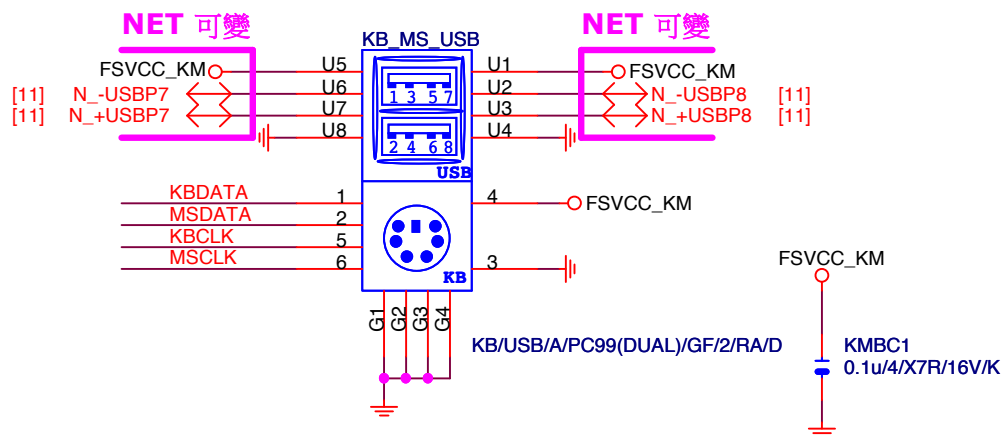


COUPON

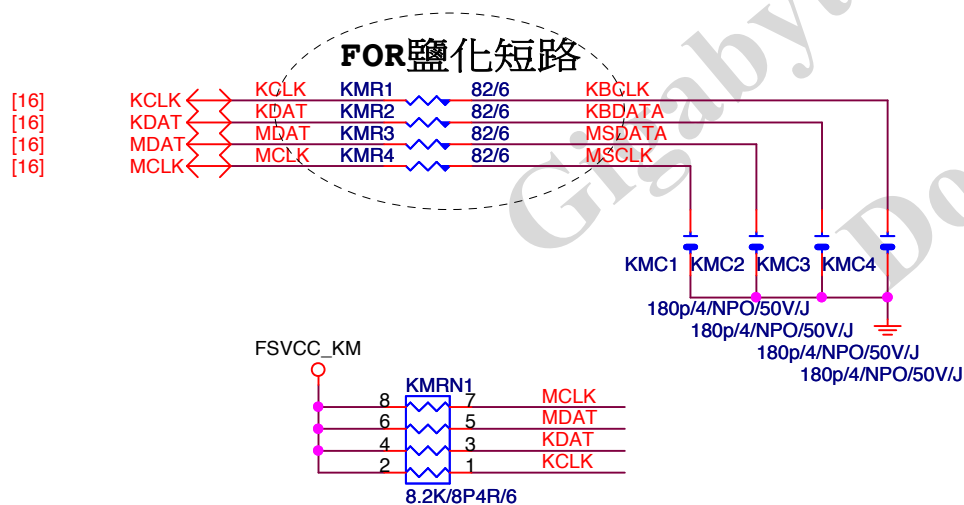


Gigabyte Technology

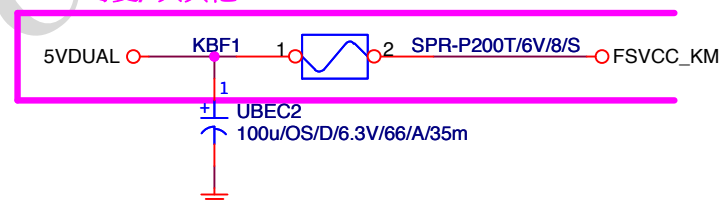
Title					Rev 1.0
ATX POWER CONNECTOR					
Size Custom	Document Number GA-B250M-D3VX-SI				Rev 1.0
Date:	Thursday, December 08, 2016		Sheet	38 of 56	

Rev: 0.7[illegible]

KB MS USB PWR



NET 可變，與其他USB SHARE



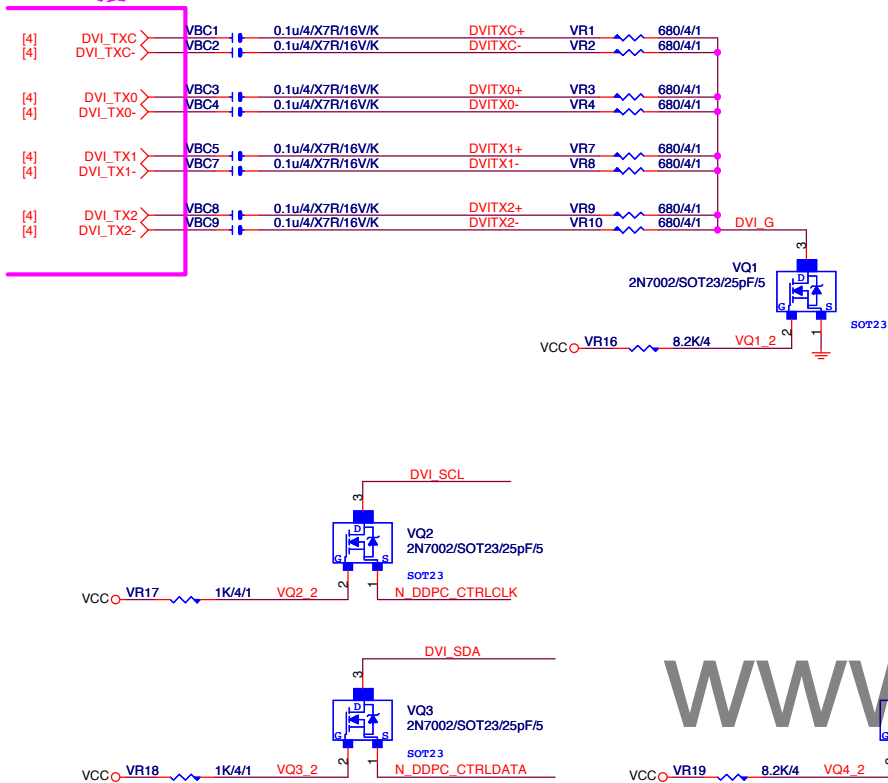
USB OC PROTECT

DVI

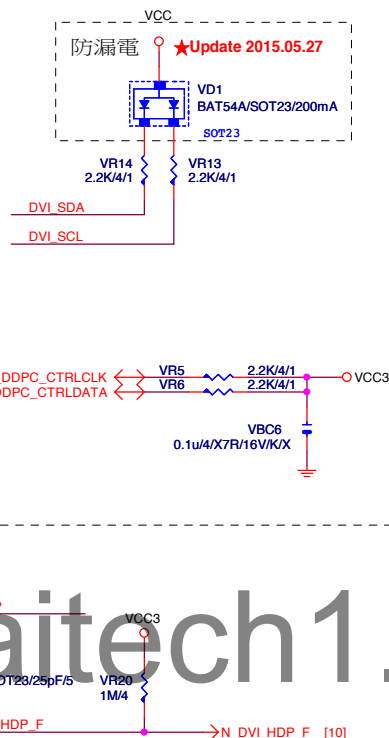
Rev: 0.8

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

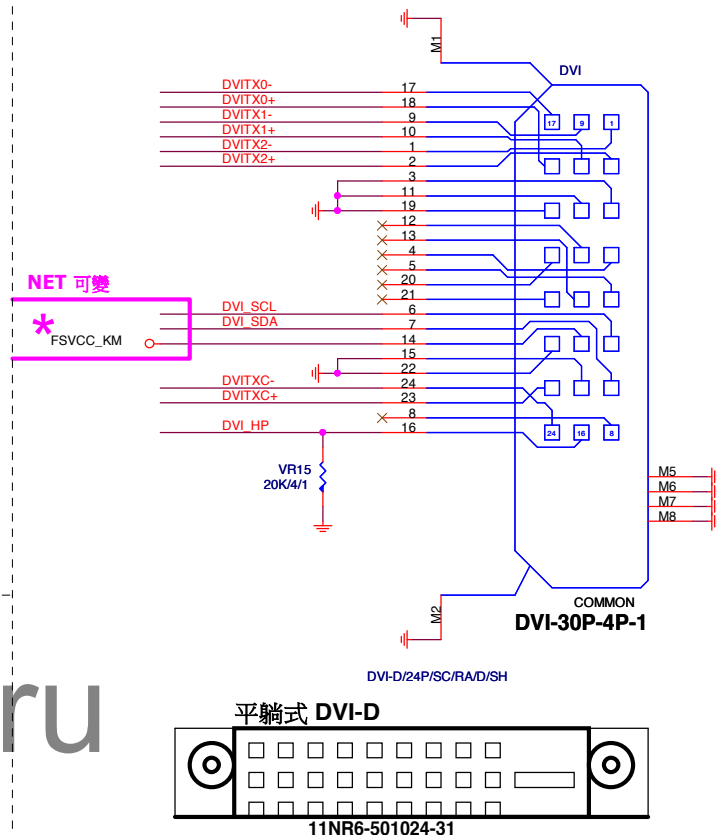
NET 可變



DVI PU

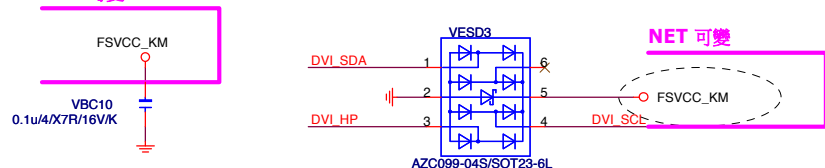


DVI CONN

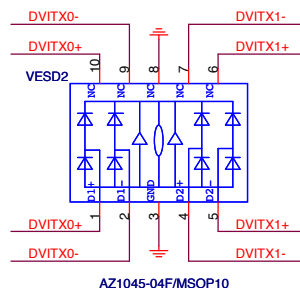


ESD

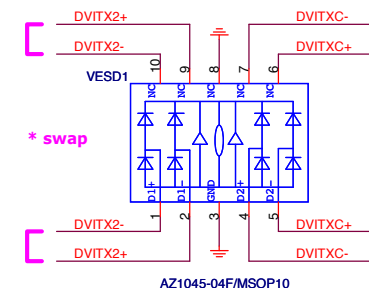
NET 可變



Close to connector



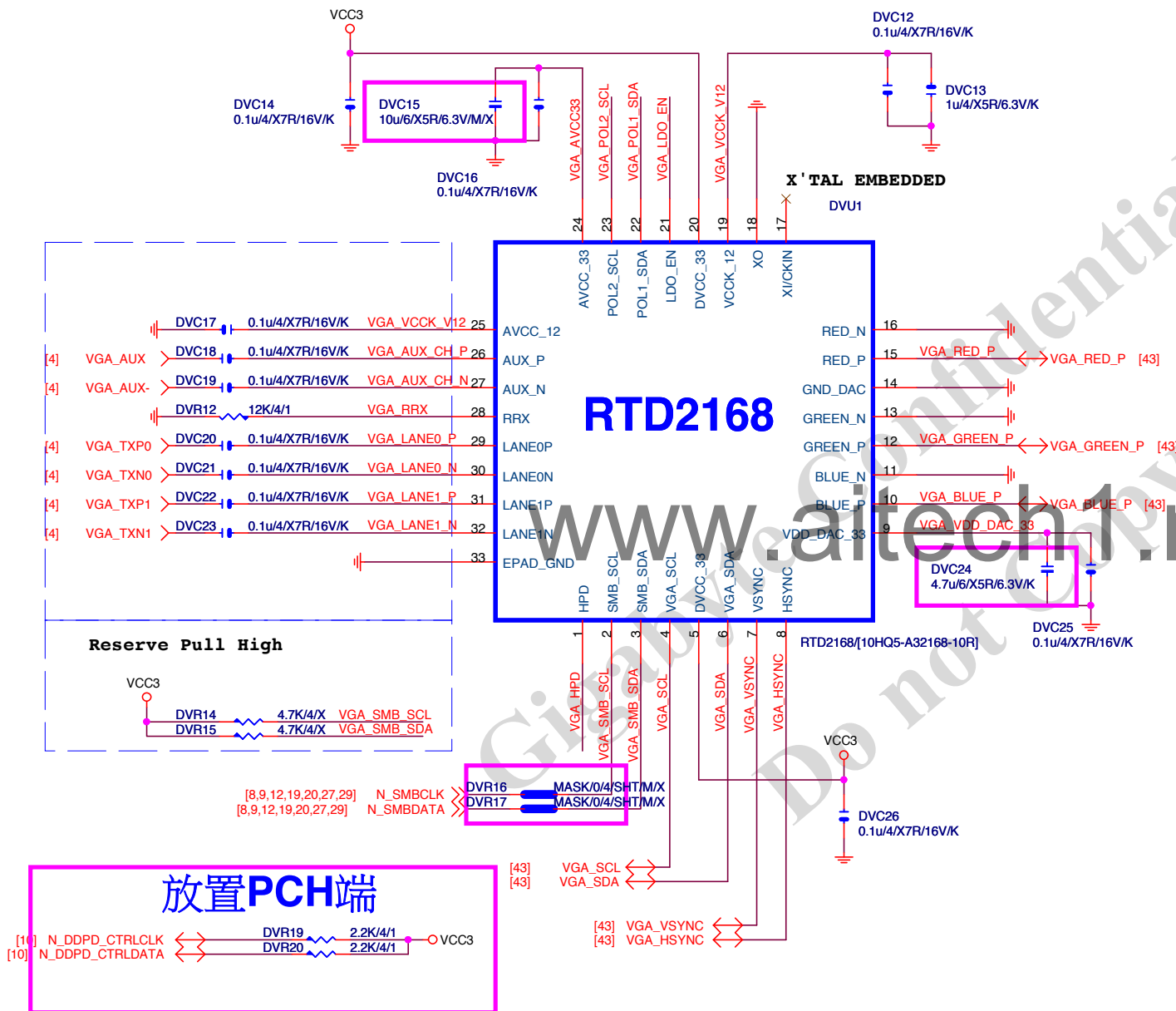
Close to connector



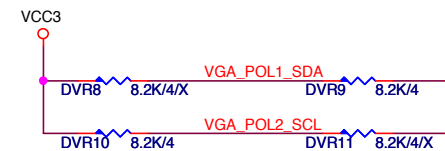
Close to connector

Gigabyte Technology

Title			
DVI			
Size Custom	Document Number	GA-B250M-D3VX-S	Rev 1.0
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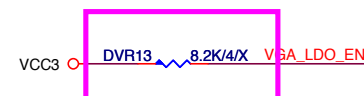
**POWER**

Power on latch



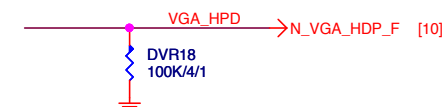
		POL1_SDA(PIN22)	
		0	1
POL2_SCL (PIN23)	0	X	EP MODE
	1	ROM ONLY MODE	EEPROM MODE

Embedded LDO

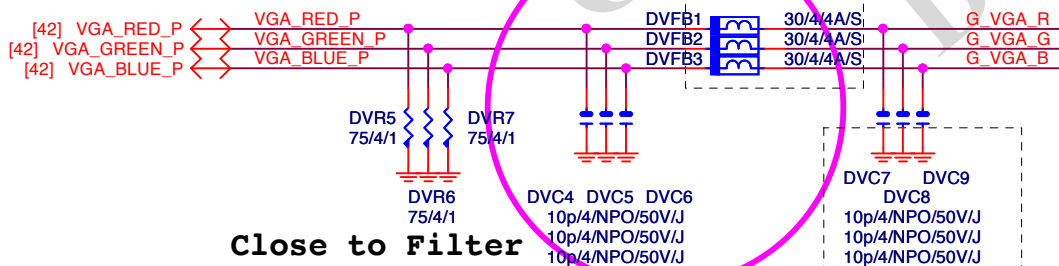
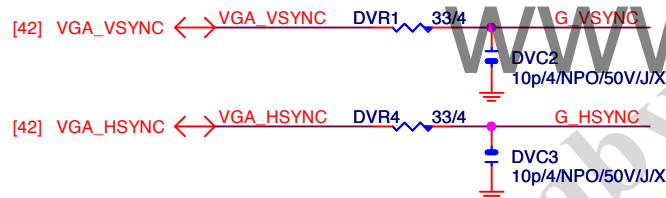
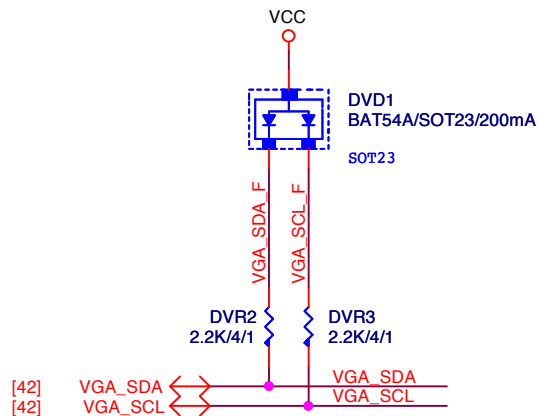


LDO_EN(PIN21)	
0	1
VCCK_V12 from External 1.2V	VCCK_V12 from Embedded LDO

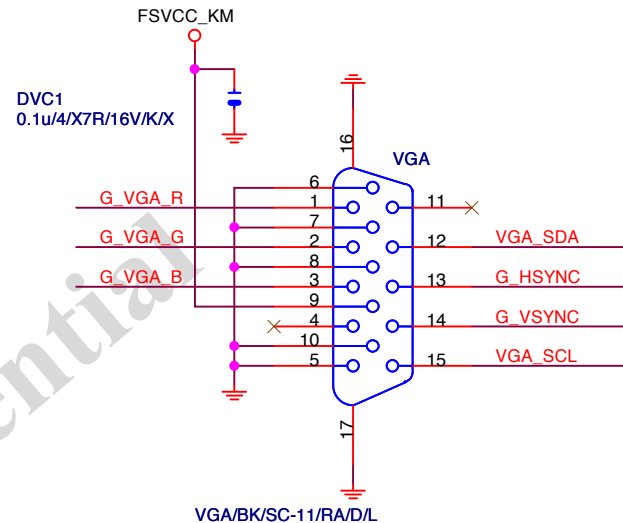
DP HPD



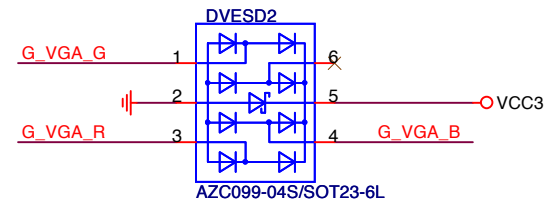
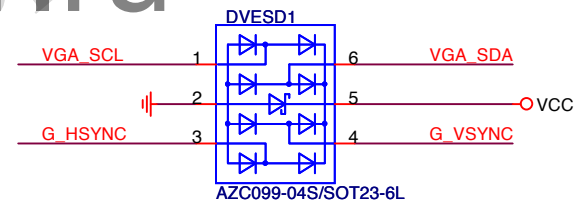
VGA SIGNAL R1.03



VGA CONN.



VGA ESD



Gigabyte Technology
DP-VGA RTD2168

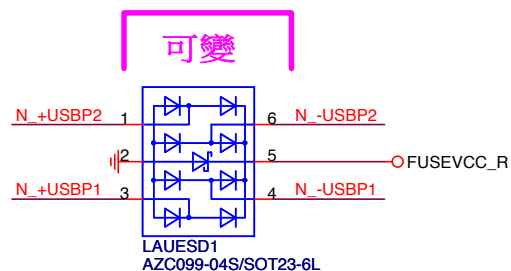
Size Document Number GA-B250M-D3VX-SI Rev 1.0

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R1.1

RMA ESD PROTECT

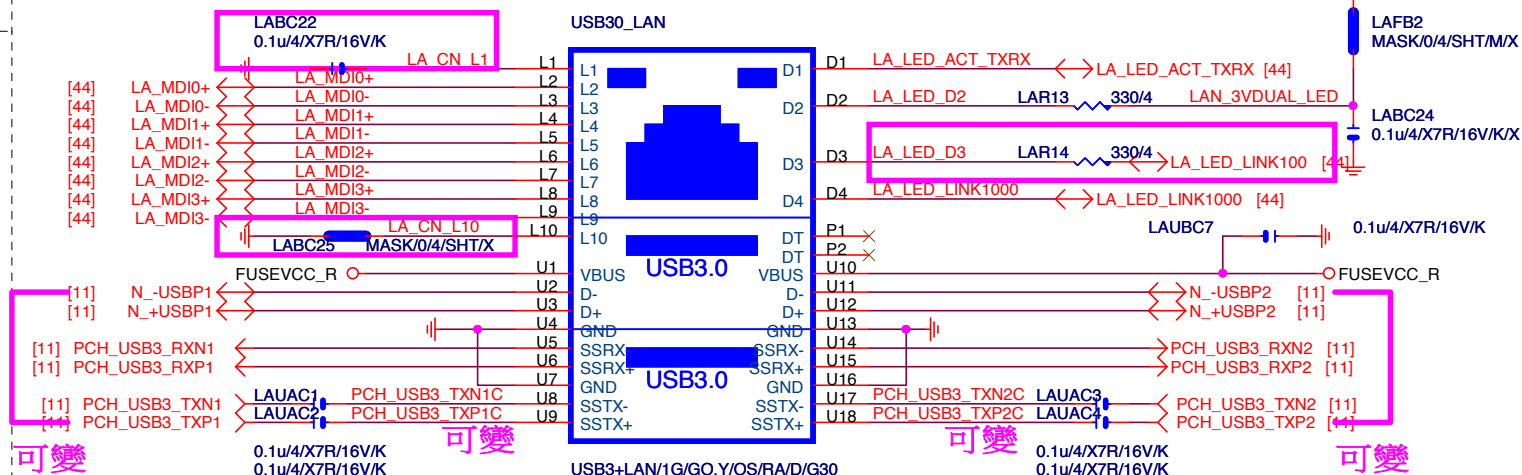
note:可變更USB NAME



USB LAN CONNECTOR

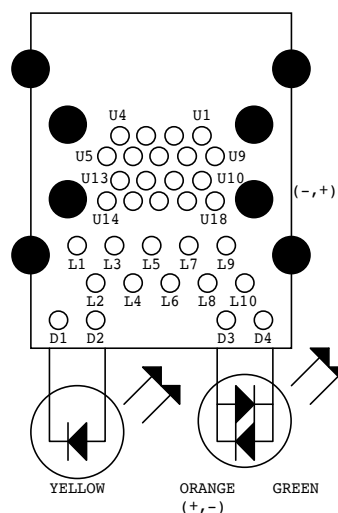
note:可變更USB NAME

[I219]

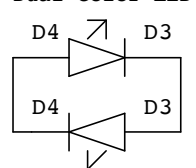


LA MDI-->100歐姆:[20/4/8/4/20]

USB30 LAN LAYOUT示意圖



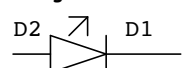
Dual Color LED



Green

Orange

Single Color LED



Yellow

LAN COVER

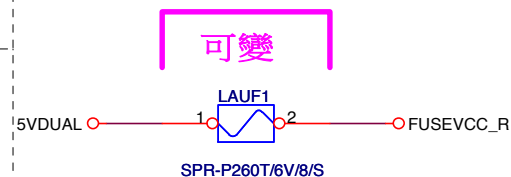
FOOT PRINT:LAN COVER

可變 [視SPEC需求]

[-D3H不加蓋]

USB POWER

note:可變更FUSE



**Close to connector
FUSE-0805**

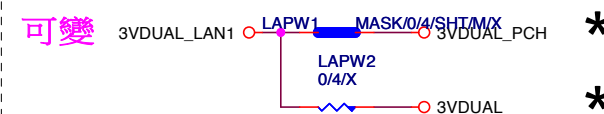
EMI SHORT PAD

PS:視EMI需求



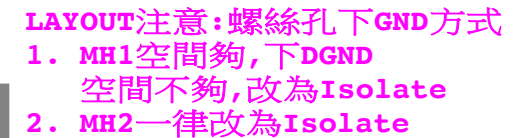
LAN POWER

note: lan power連接及電流



	<i>Gigabyte Technology</i>
Title	<i>LAN CONNECTOR-I219</i>

Size Custom	Document Number GA-B250M-D3VX-SI	Rev 1.0
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<input type="radio"/> MH1	<input type="radio"/> MH2	
DGND	Isolate	

Rev 0.5

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

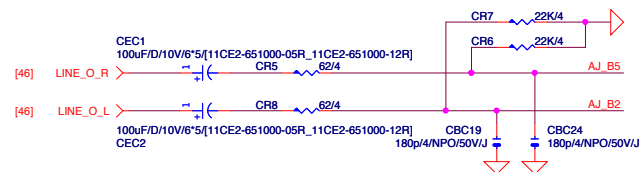
CR50 MASK/0/6/SHT/20/X → Close Codec
MOA/TC1 0.1uF/X7R/16V/K/X

CR21 2.2/6 → Audio jack <--> USB_LAN

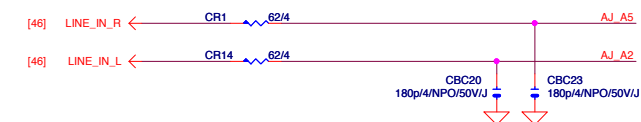
CR24 0.6/X → Under Audio jack

*量産前,0ohm改short pad

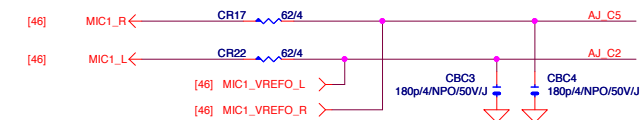
LINE-OUT



LINE-IN



MIC-IN

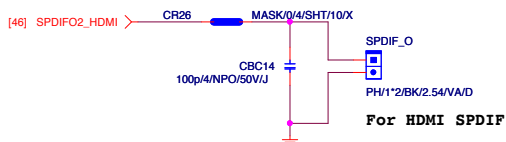


SURROUND

CEN/LFE

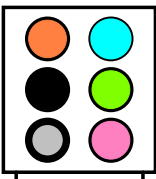
SURR BACK

SPDIF_OUT



SPDIF_IN

AZALIA JACK

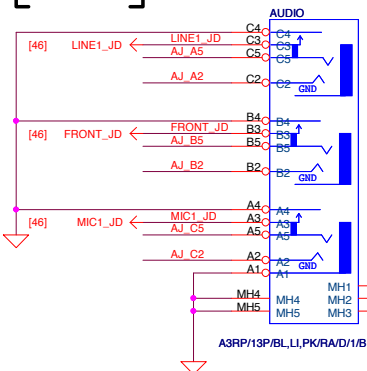


AZALIA JACK

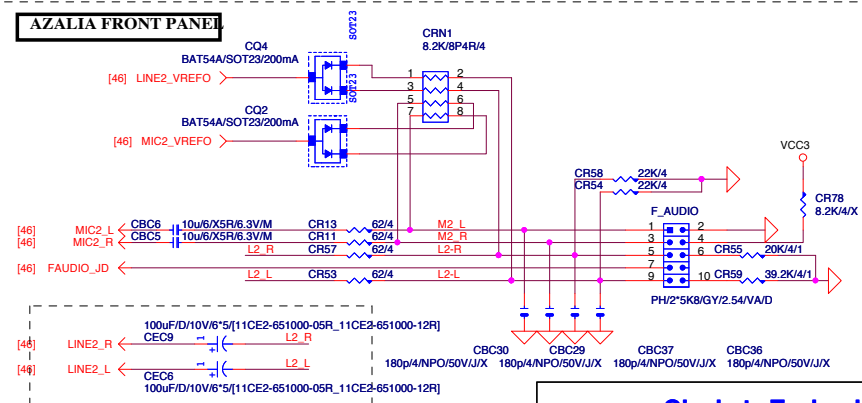
BLUE
LINE-IN

GREEN
LINE-OUT

PINK
MIC-IN

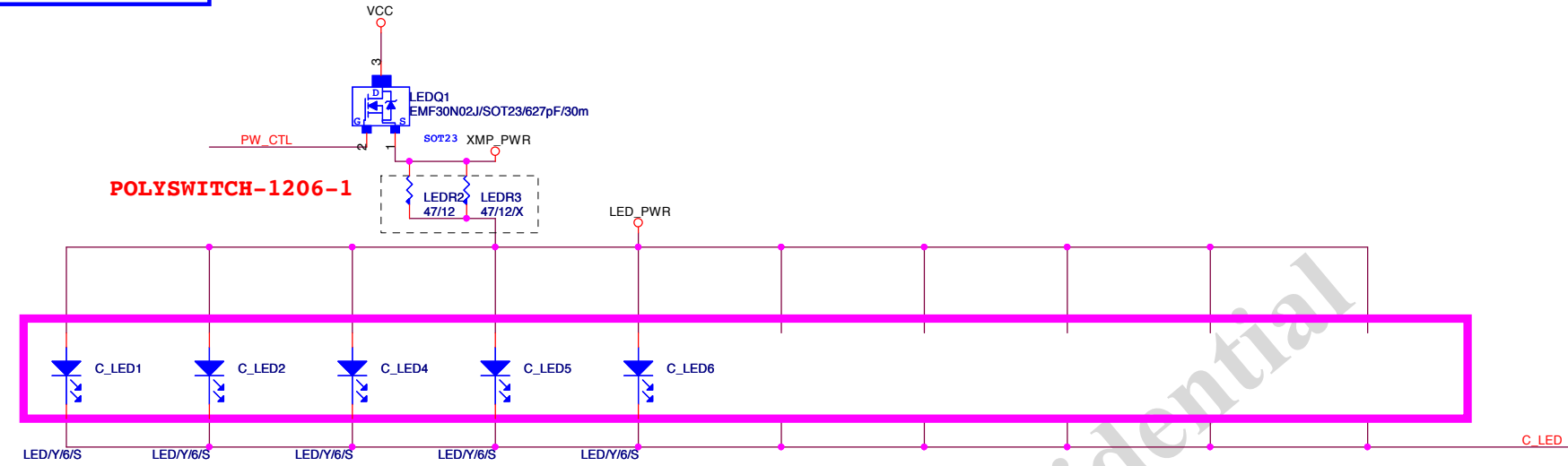


AZALIA FRONT PANEL



Gigabyte Technology

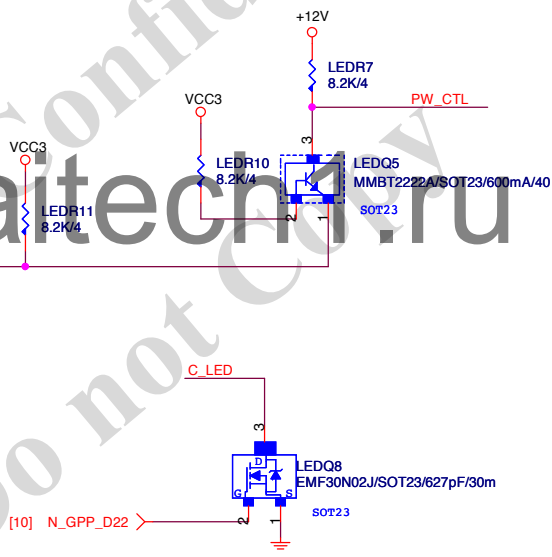
Title		
AUDIO JACK		
Size	Document Number	Rev
Custom	GA-B250M-D3VX-SI	1.0
Date:	Thursday, December 08, 2016	Sheet 47 of 56



Ambient LED Control

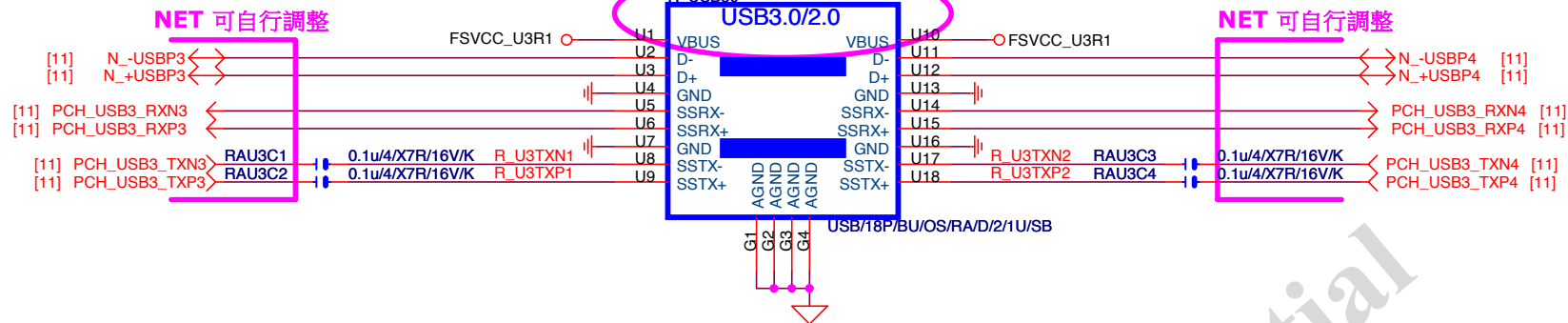
	N_GPP_D22
Full Mode	H
OFF Mode	L

[10] N_GPP_D22
ON/OFF



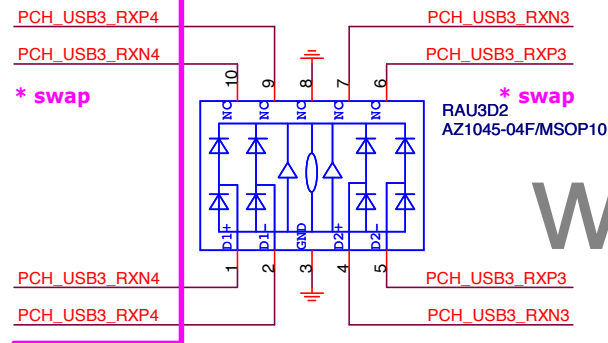
Rev: 0.7

ESD 可自行SWAP PIN ,CONN端 NET 名稱 不可

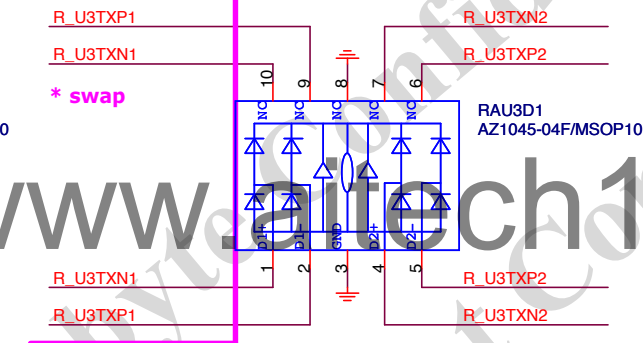


ESD

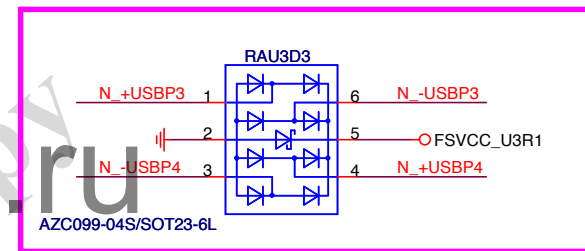
NET 可自行調整



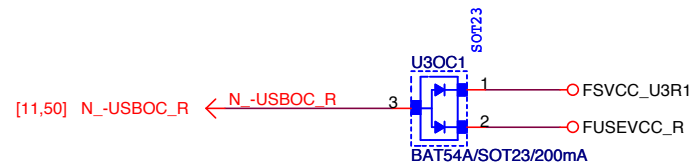
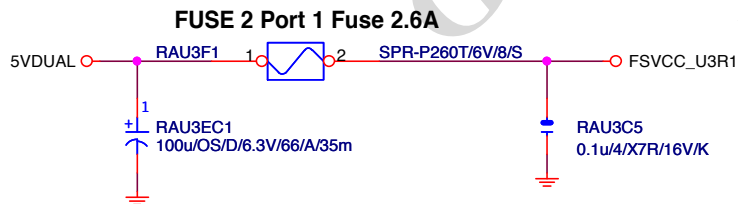
NET 可自行調整



NET 可自行調整

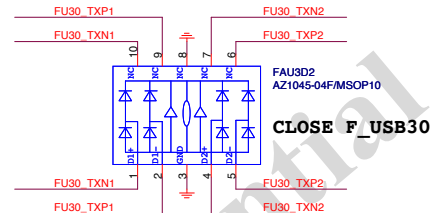
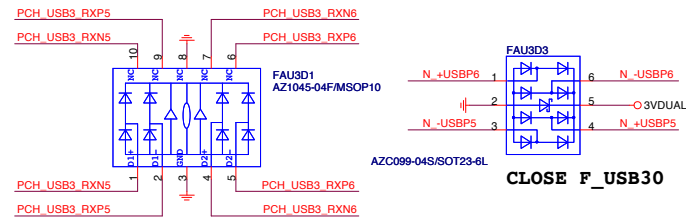


FUSE

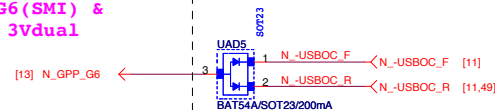
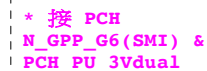
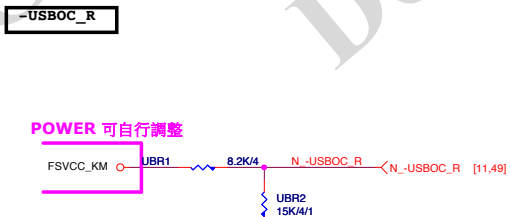


Gigabyte Technology

Title		R_USB30,USB_OC	
Size	Document Number	GA-B250M-D3VX-S	
Custom		Rev	1.0
Date:	Thursday, December 08, 2016	Sheet	49 of 56



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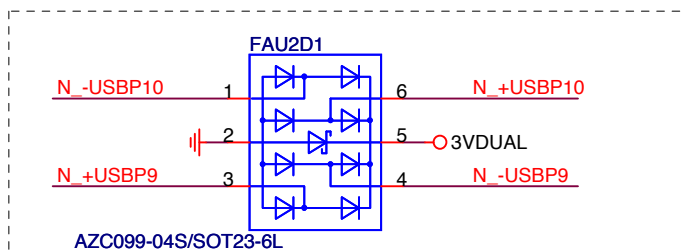
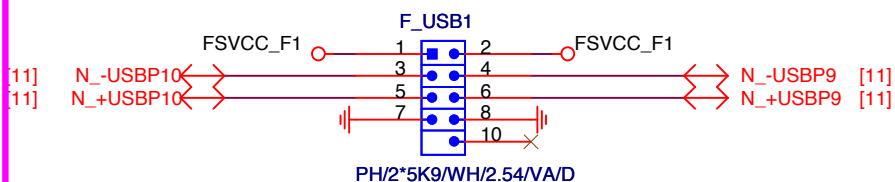


Rev: 0.7

FRONT USB1

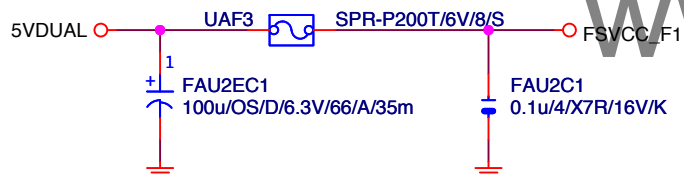
NET 可變

FUSB2X5-HS



Close to connector

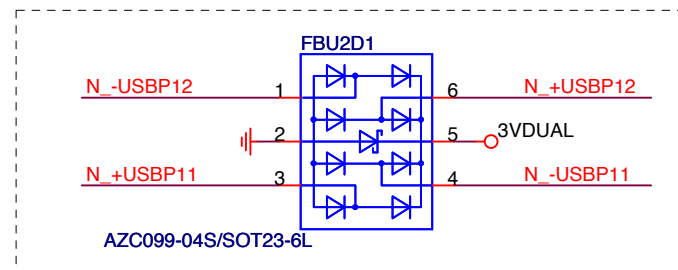
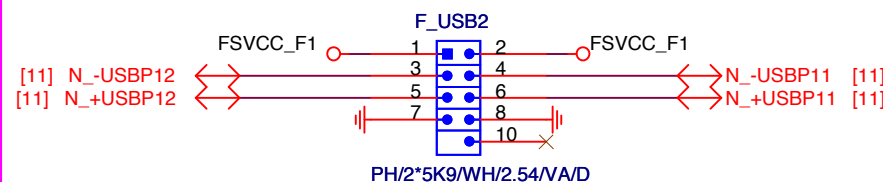
FUSE 2 Port 1 Fuse 2A



FRONT USB2

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

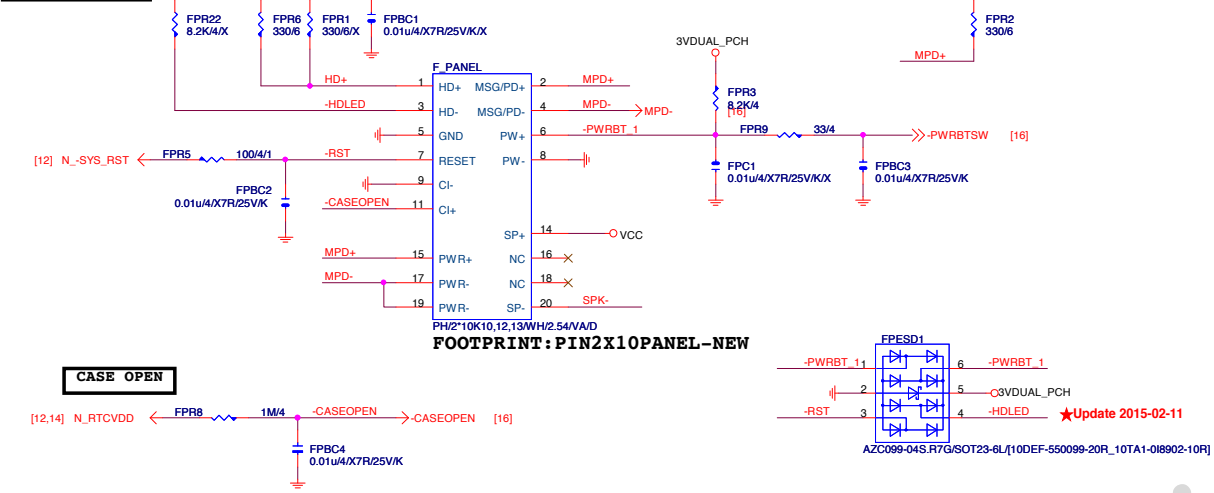
GA-B250M-D3VX-S1

Rev
1.0

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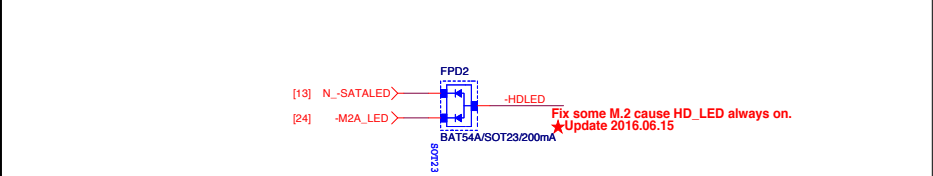
FRONT PANEL



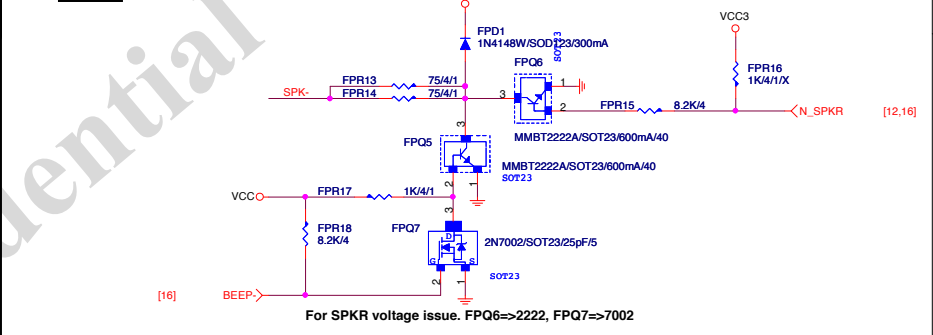
FRONT PANEL SHORT



SATA/M.2 LED



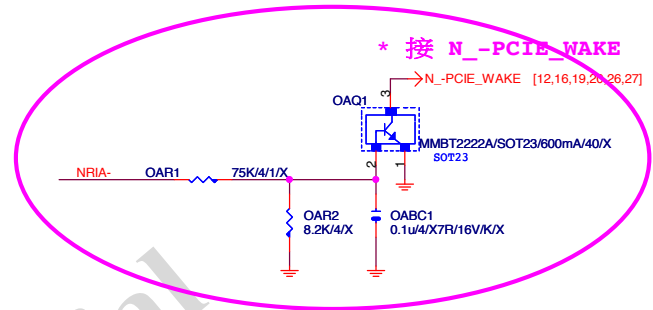
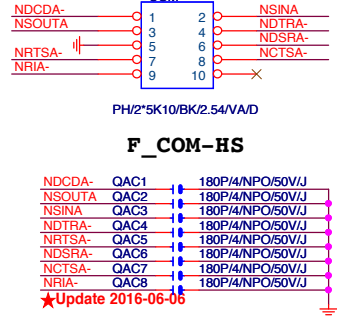
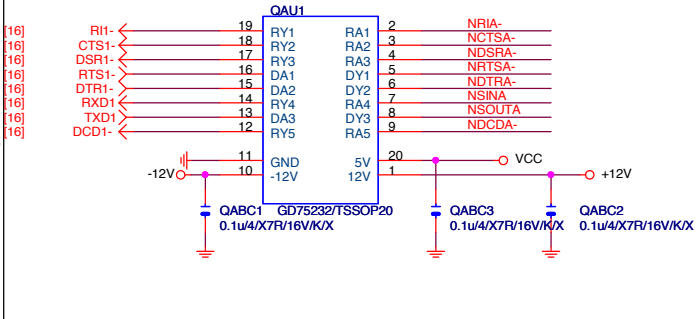
SPKR



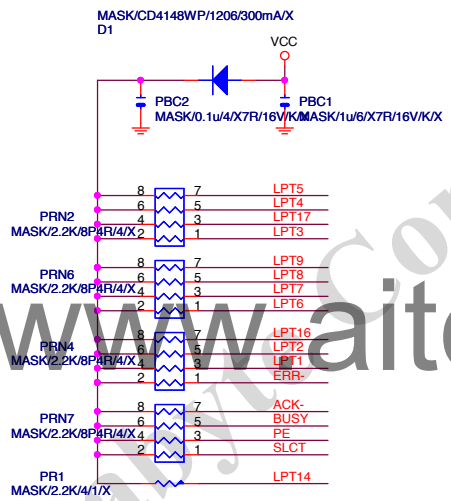
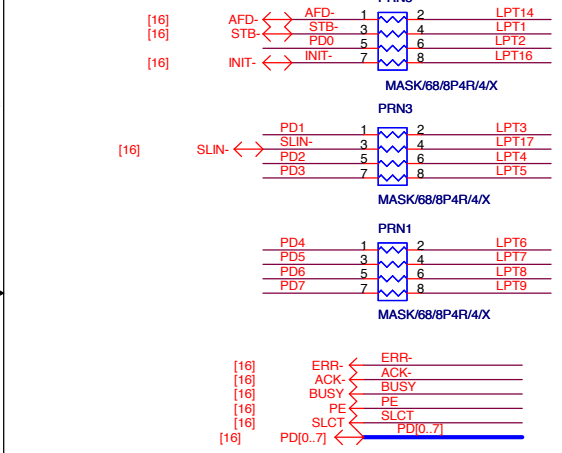
www.aitech1.ru

COM PORT Rev: 0.7

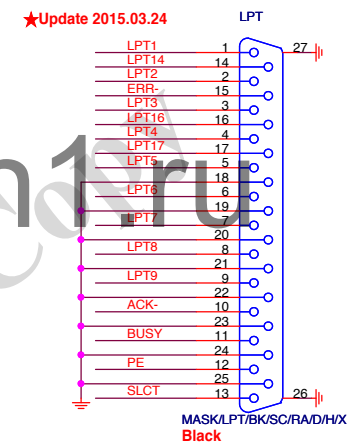
COM RI N/A



LPT PORT MASK



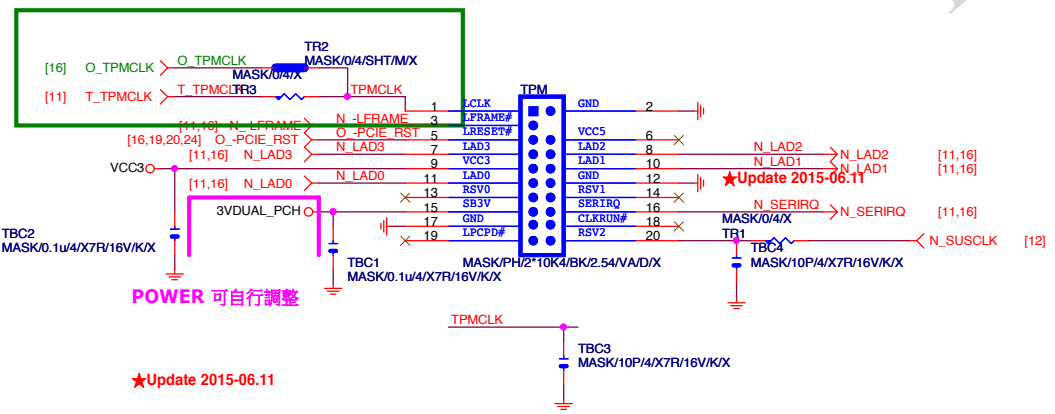
R&D技術通報151 有使用PRINT PORT的
MODEL, 需使用新料號:10HP2-118728-72R。(CHIP IT8728F/EX (GB) ITE/SMD
QFP128 PRINTPORT SORTING)料件。串電阻33 ohm改為68 ohm。



TPM CONNECT MASK

Thunderbolt

★Update 2015-12-29



CLOSE SIOEMIC1
100p/4/NPO/50V/J/X

[12,16,33] N_-SLP_S3 ←

EMIC2
100p/4/NPO/50V/J/X

[12,16,32,34] N_-S4_S5 ←

CLOSE PCHEMIC4
100p/4/NPO/50V/J/X

[4,12] N_CPUPWROK ←

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Title

EM/ESDSize
A

Document Number

GA-B250M-D3VX-SI

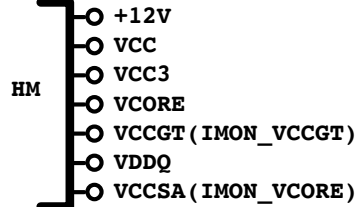
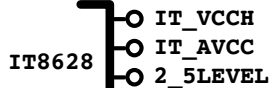
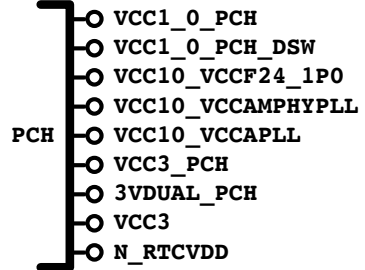
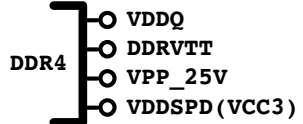
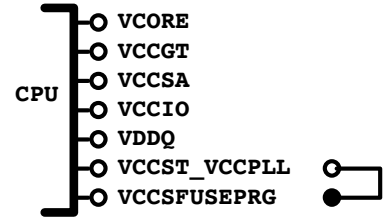
Rev

1.0

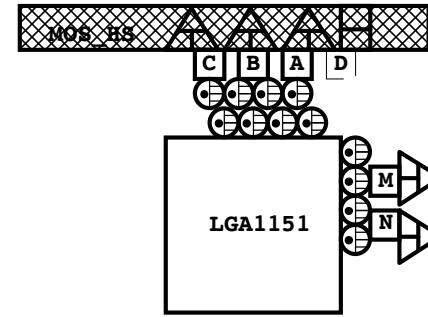
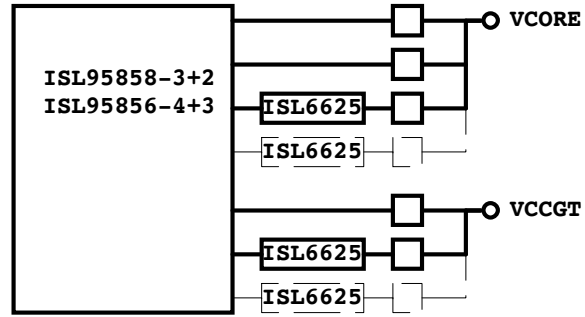
Date: Thursday, December 08, 2016

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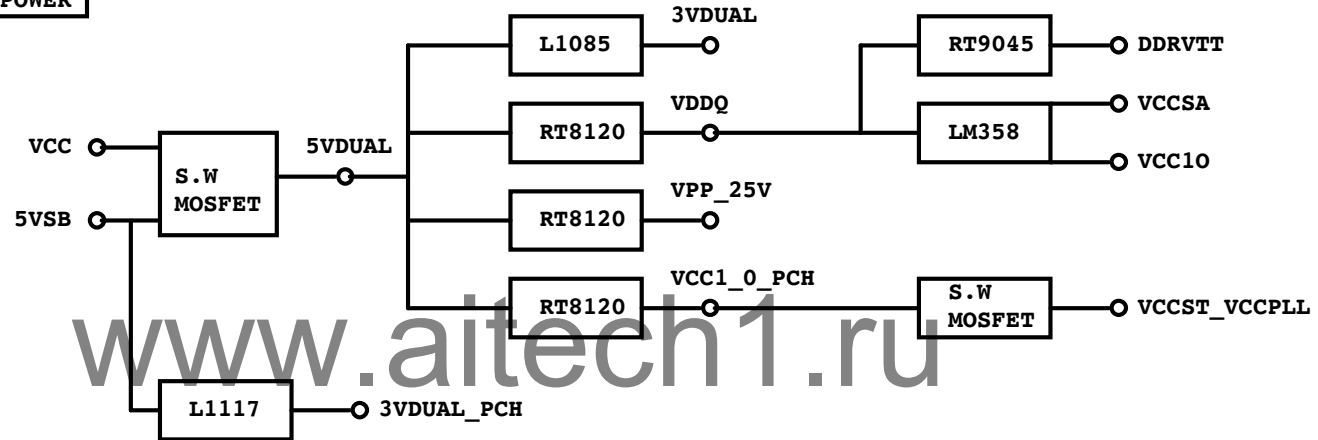
POWER BLOCK MAP



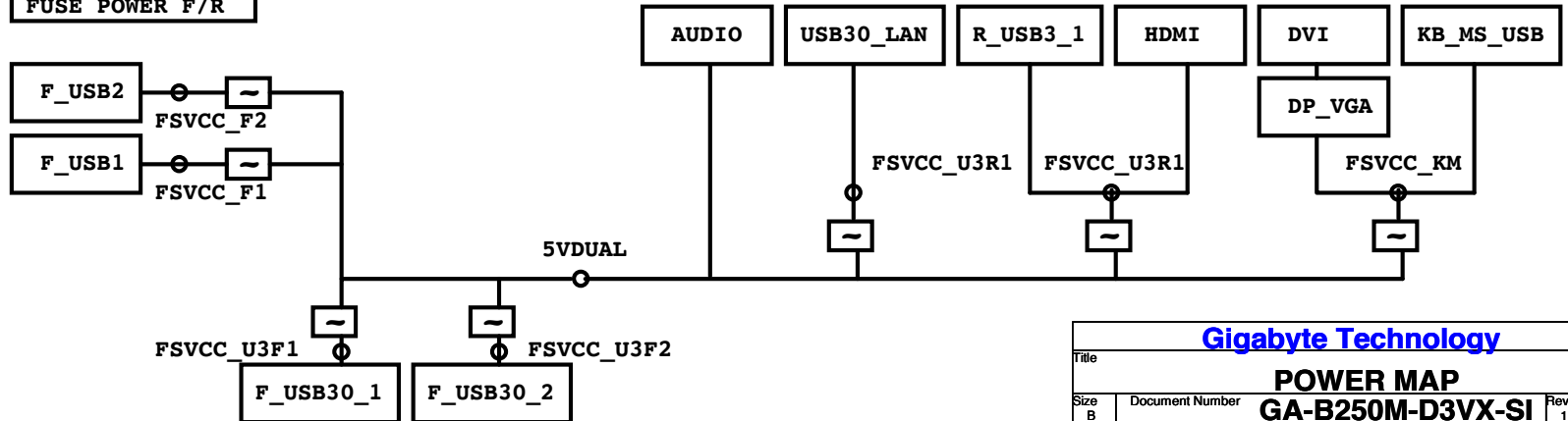
VCORE/VCCGT



POWER

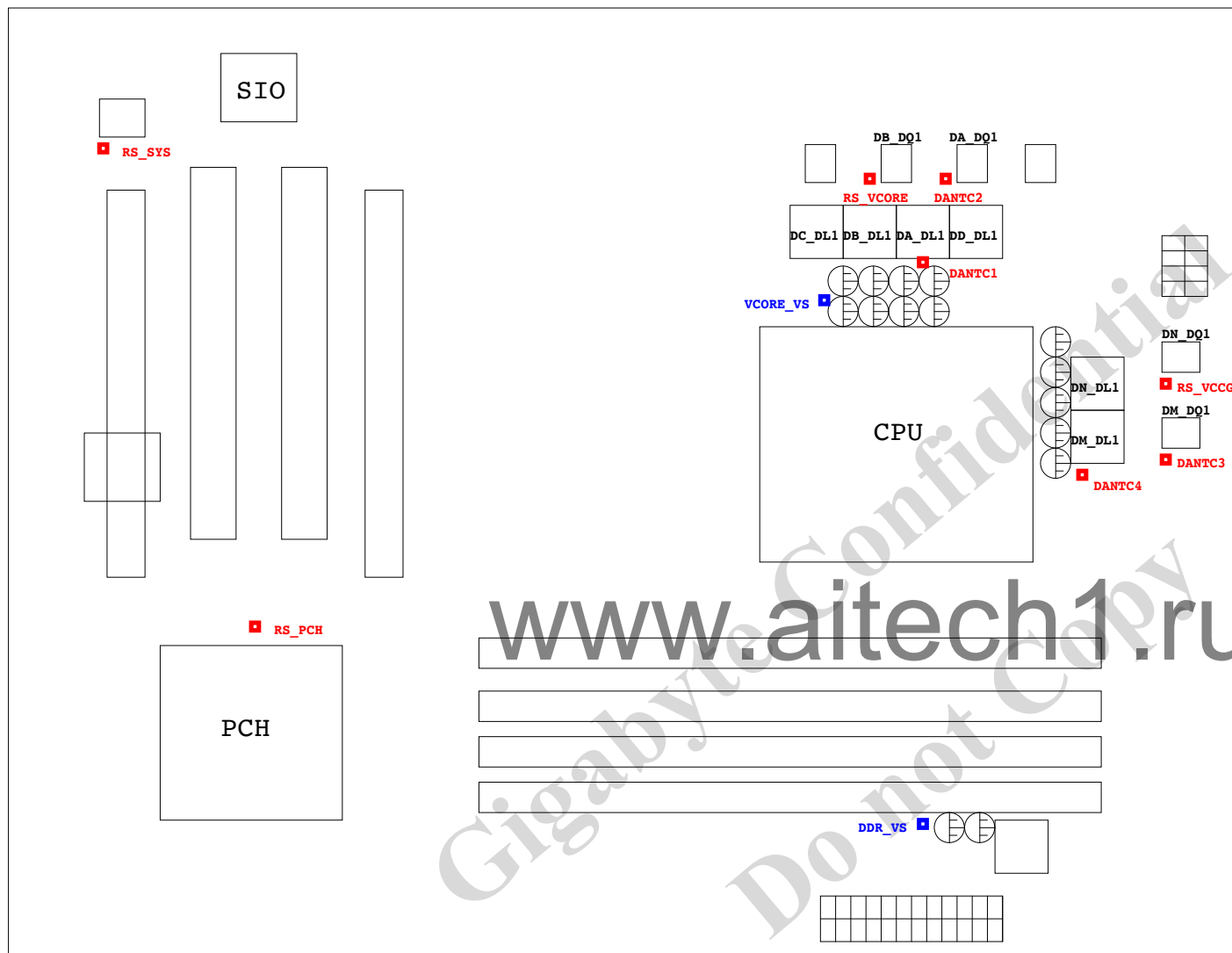


FUSE POWER F/R



Gigabyte Technology

Title			
POWER MAP			
Size	Document Number	GA-B250M-D3VX-SI	Rev
B			1.0
Date:	Thursday, December 08, 2016	Sheet	55 of 56



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