

Model Name: GA-Z77MX-D3H

Revision 1.0

SHEET

TITLE

01	COVER SHEET
02	BOM & PCB MODIFY HISTORY
03	BLOCK DIAGRAM
04	CPU_LGA1155-A
05	CPU_LGA1155-B
06	CPU_LGA1155-C
07	DDR III CHANNEL A 1,2
08	DDR III CHANNEL B 1,2
09	PCH_FDI,DMI,USB,PCIE,NVRAM
10	PCH_DP,CLK BUFFER
11	PCH_HOST,SATA,PCI
12	PCH_GPIO,CTRL,AUDIO
13	PCH_PWR,GND
14	PCI EXPRESS*16 Switch
15	PCI EXPRESS*16 SLOT
16	PCI EXPRESS*8 SLOT
17	PCI EXPRESS*4 SLOT
18	PCI EXPRESS*1 SLOT
19	ITE 8728 LPC IO
20	KB_USB,R_USB
21	HWM,FAN CTRL,OV,-PROCHOT
22	DUAL BIOS
23	FP,FUSB,SPK,SATALED
24	VIA VT2021
25	REAR AUDIO JACK
26	ARTHEROS AR8161/AR8151
27	DISCRETE POWER

SHEET

TITLE

28	ATX, CLK GEN
29	RT8120_CPU_VTT
30	RT8120_DDR POWER
31	VCORE CHIL CHL3564_1
32	VCORE CHIL CHL3564_2
33	TPM
34	HDMI/DVI,R_USB30

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Title			Cover Sheet
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**Model Name:** GA-Z77MX-D3H

Revision 1.0

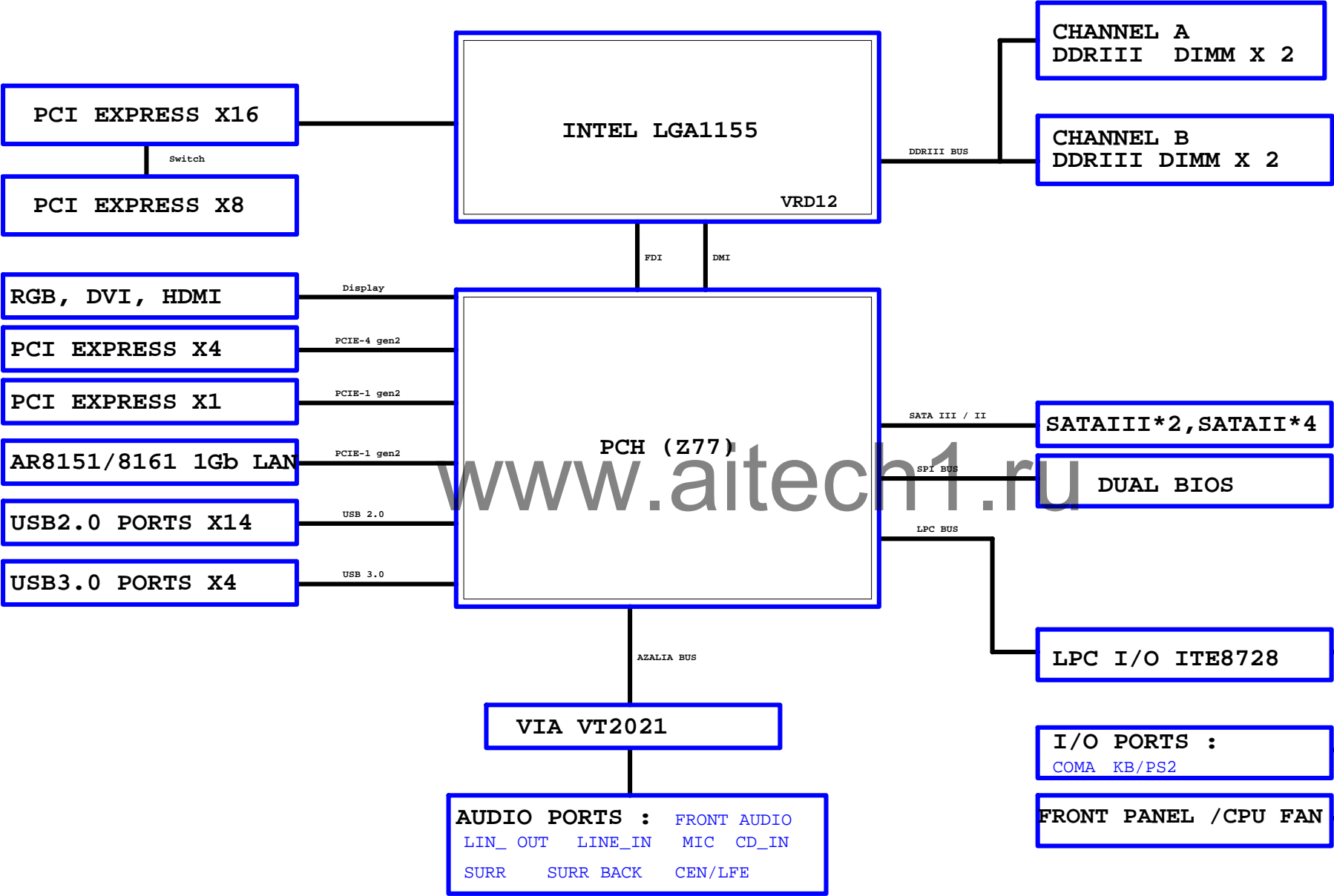
## Circuit or PCB layout change

### Component value change history

2012/01/30

[illegible][illegible]

BLOCK DIAGRAM





LGA1155A			
MAAA0	AV27	SA_MA[0]	SA_DQS[0]
MAAA1	AY24	SA_MA[1]	SA_DQS[0]
MAAA2	AW24	SA_MA[2]	SA_DQS[0]
MAAA3	AV23	SA_MA[3]	SA_DQS[0]
MAAA4	AV23	SA_MA[4]	SA_DQ[0]
MAAA5	AT24	SA_MA[5]	SA_DQ[1]
MAAA6	AT23	SA_MA[6]	SA_DQ[2]
MAAA7	AU22	SA_MA[7]	SA_DQ[3]
MAAA8	AV22	SA_MA[8]	SA_DQ[4]
MAAA9	AT22	SA_MA[9]	SA_DQ[5]
MAAA10	AV28	SA_MA[10]	SA_DQ[6]
MAAA11	AU21	SA_MA[11]	SA_DQ[7]
MAAA12	AT21	SA_MA[12]	SA_DQS[1]
MAAA13	AW32	SA_MA[13]	SA_DQS[1]
MAAA14	AU20	SA_MA[14]	SA_DQS[1]
MAAA15	AT20	SA_MA[15]	SA_DQS[1]
[7] -SWEA	-SCASA	SA_WE#	SA_DQ[8]
[7] -SCASA	-SRASA	SA_CAS#	SA_DQ[9]
[7] -SRASA		SA_RAS#	SA_DQ[10]
[7] SBAA0	SBAA0	SA_BS[0]	SA_DQ[11]
[7] SBAA1	SBAA1	SA_BS[1]	SA_DQ[12]
[7] SBAA2	SBAA2	SA_BS[2]	SA_DQ[13]
[7] -CSA0	-CSA0	SA_CS#	SA_DQ[14]
[7] -CSA1	-CSA1	SA_CS#	SA_DQ[15]
[7] -CSA2	-CSA2	SA_CS#	SA_DQS[2]
[7] -CSA3	-CSA3	SA_CS#	SA_DQS[2]
[7] CKEA0	CKEA0	SA_CKE[0]	SA_DQ[16]
[7] CKEA1	CKEA1	SA_CKE[1]	SA_DQ[17]
[7] CKEA2	CKEA2	SA_CKE[2]	SA_DQ[18]
[7] CKEA3	CKEA3	SA_CKE[3]	SA_DQ[19]
MODT_A0	AV31	SA_ODT[0]	SA_DQ[20]
MODT_A1	AU32	SA_ODT[1]	SA_DQ[21]
MODT_A2	AU30	SA_ODT[2]	SA_DQ[22]
MODT_A3	AW33	SA_ODT[3]	SA_DQ[23]
[7] DCLKA0	DCLKA0	SA_CK[0]	SA_DQS[3]
[7] -DCLKA0	-DCLKA0	SA_CK#	SA_DQS[3]
[7] DCLKA1	DCLKA1	SA_CK[1]	SA_DQ[24]
[7] -DCLKA1	-DCLKA1	SA_CK#	SA_DQ[25]
[7] DCLKA2	DCLKA2	SA_CK[2]	SA_DQ[26]
[7] -DCLKA2	-DCLKA2	SA_CK#	SA_DQ[27]
[7] DCLKA3	DCLKA3	SA_CK[3]	SA_DQ[28]
[7] -DCLKA3	-DCLKA3	SA_CK#	SA_DQ[29]
[7,8] -DDR3_RST	AW18	SM_DRAMRST#	SA_DQ[30]
			SA_DQ[31]
			SA_DQS[4]
			SA_DQS[4]
AV13	SA_DQS[8]		SA_DQ[32]
AV12	SA_DQS[8]		SA_DQ[33]
AU12	SA_ECC_CB[0]		SA_DQ[34]
AU14	SA_ECC_CB[1]		SA_DQ[35]
AW13	SA_ECC_CB[2]		SA_DQ[36]
AY13	SA_ECC_CB[3]		SA_DQ[37]
AU13	SA_ECC_CB[4]		SA_DQ[38]
AY12	SA_ECC_CB[5]		SA_DQ[39]
AW12	SA_ECC_CB[6]		SA_DQ[40]
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DDR\_0

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LGA1155[10SC1-F01155-21R\_10SC1-F01155-22R]

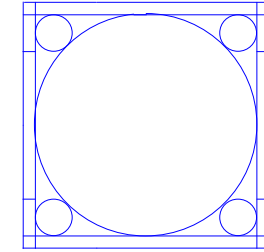
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MAAB1	AM20	SB_MA[1]	SB_DQS[0]
MAAB2	AM19	SB_MA[2]	SB_DQS[0]
MAAB3	AK18	SB_MA[3]	SB_DQ[0]
MAAB4	AP19	SB_MA[4]	SB_DQ[1]
MAAB5	AP18	SB_MA[5]	SB_DQ[2]
MAAB6	AM18	SB_MA[6]	SB_DQ[3]
MAAB7	AL18	SB_MA[7]	SB_DQ[4]
MAAB8	AY17	SB_MA[8]	SB_DQ[5]
MAAB9	AY17	SB_MA[9]	SB_DQ[6]
MAAB10	AN23	SB_MA[10]	SB_DQ[7]
MAAB11	AU17	SB_MA[11]	SB_DQ[8]
MAAB12	AT18	SB_MA[12]	SB_DQS[1]
MAAB13	AR26	SB_MA[13]	SB_DQS[1]
MAAB14	AY16	SB_MA[14]	SB_DQS[1]
MAAB15	AV16	SB_MA[15]	SB_DQS[1]
[8] -SWEB	-SWEB	SB_WE#	SB_DQ[8]
[8] -SCASB	-SCASB	SB_CAS#	SB_DQ[9]
[8] -SRASB	-SRASB	SB_RAS#	SB_DQ[10]
[8] SBAB0	SBAB0	SB_BS[0]	SB_DQ[11]
[8] SBAB1	SBAB1	SB_BS[1]	SB_DQ[12]
[8] SBAB2	SBAB2	SB_BS[2]	SB_DQ[13]
[8] -CSB0	-CSB0	SB_CS#	SB_DQ[14]
[8] -CSB1	-CSB1	SB_CS#	SB_DQ[15]
[8] -CSB2	-CSB2	SB_CS#	SB_DQS[2]
[8] -CSB3	-CSB3	SB_CS#	SB_DQS[2]
[8] CKEB0	CKEB0	SB_CKE[0]	SB_DQ[16]
[8] CKEB1	CKEB1	SB_CKE[1]	SB_DQ[17]
[8] CKEB2	CKEB2	SB_CKE[2]	SB_DQ[18]
[8] CKEB3	CKEB3	SB_CKE[3]	SB_DQ[19]
MODT_B0	AL26	SB_ODT[0]	SB_DQ[20]
MODT_B1	AP26	SB_ODT[1]	SB_DQ[21]
MODT_B2	AM26	SB_ODT[2]	SB_DQ[22]
MODT_B3	AK26	SB_ODT[3]	SB_DQ[23]
[8] DCLKB0	DCLKB0	SB_CK[0]	SB_DQS[3]
[8] -DCLKB0	-DCLKB0	SB_CK#	SB_DQS[3]
[8] DCLKB1	DCLKB1	SB_CK[1]	SB_DQ[24]
[8] -DCLKB1	-DCLKB1	SB_CK#	SB_DQ[25]
[8] DCLKB2	DCLKB2	SB_CK[2]	SB_DQ[26]
[8] -DCLKB2	-DCLKB2	SB_CK#	SB_DQ[27]
[8] DCLKB3	DCLKB3	SB_CK[3]	SB_DQ[28]
[8] -DCLKB3	-DCLKB3	SB_CK#	SB_DQ[29]
			SB_DQ[30]
			SB_DQ[31]
			SB_DQS[4]
			SB_DQS[4]
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DDR\_1

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LGA1155[10SC1-F01155-21R\_10SC1-F01155-22R]

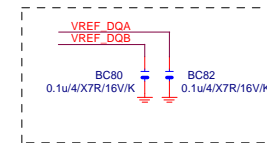
CR  
CPU RETAINTION/X



LGA1155\_P



ILM\_BP/1156/CSP/ILM\_BP/1156/CSP/12KRC-0F0001-04R\_12KRC-0F0001-05R]



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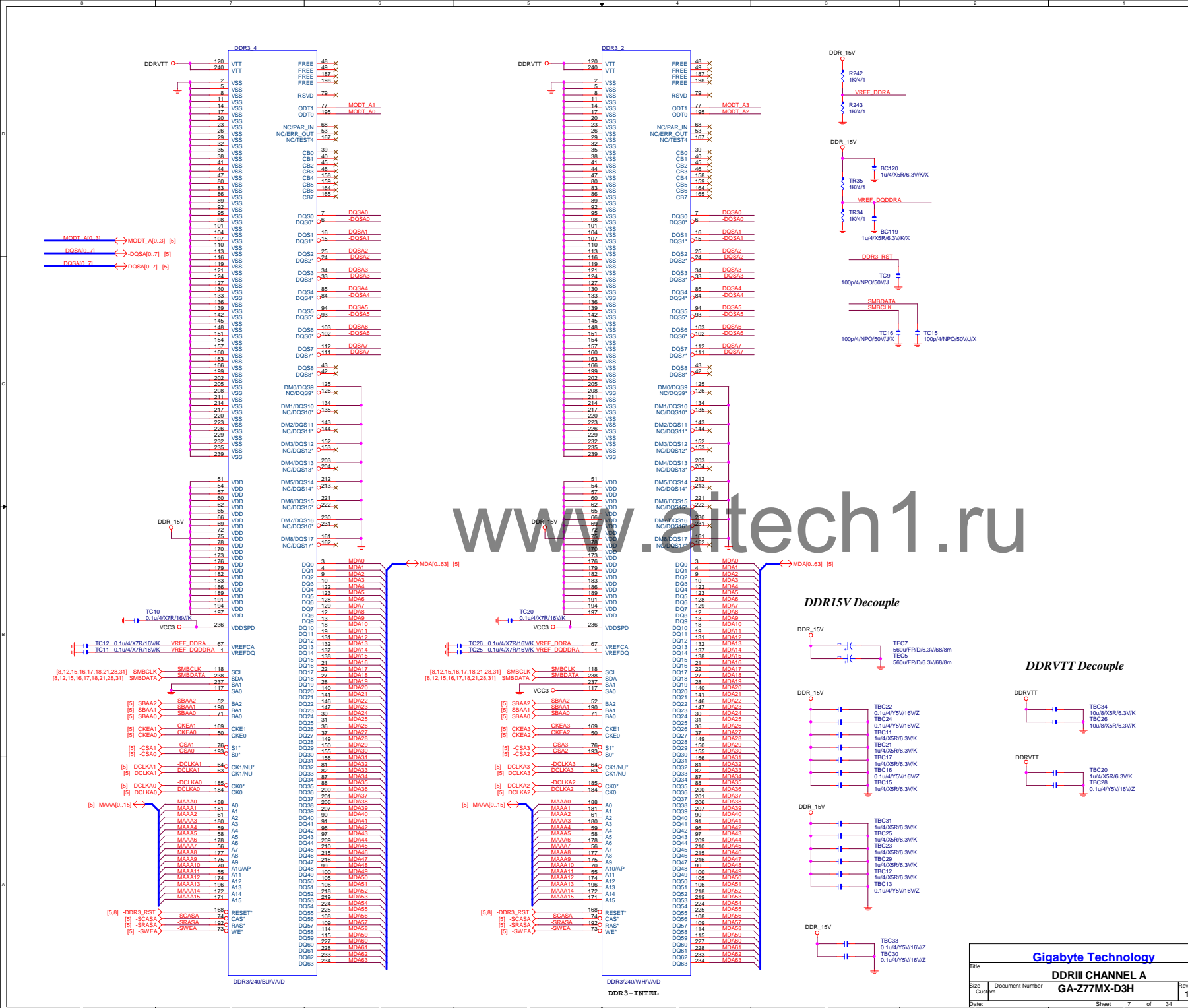
CPU LGA1156-B

GA-Z77MX-D3H

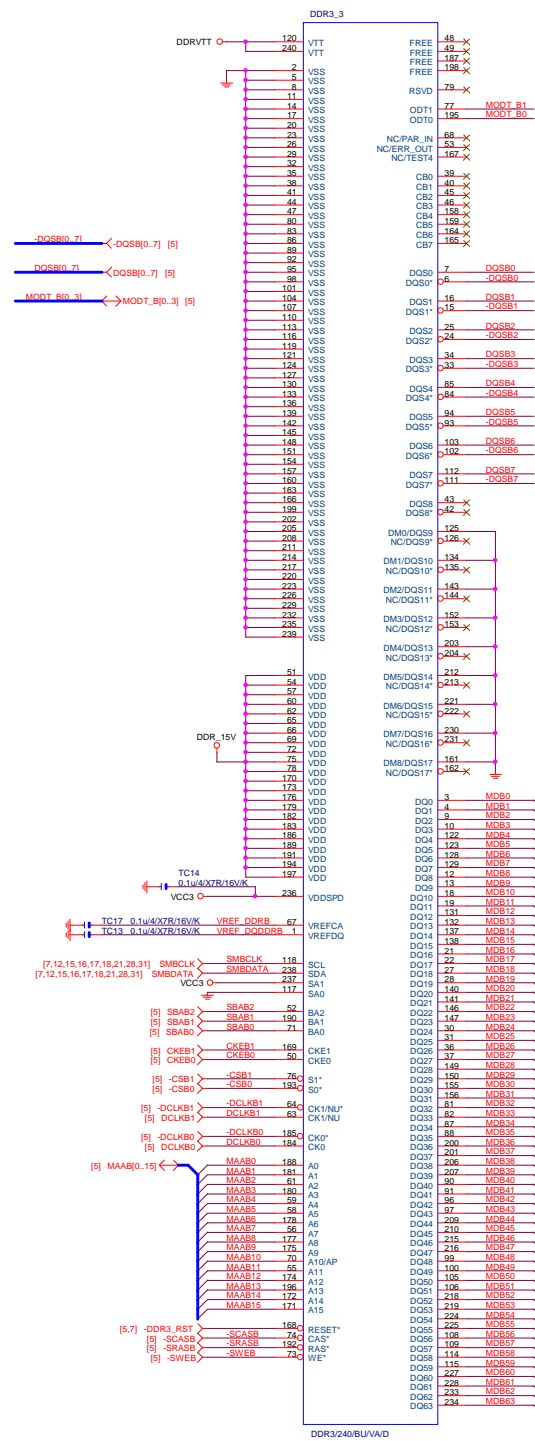
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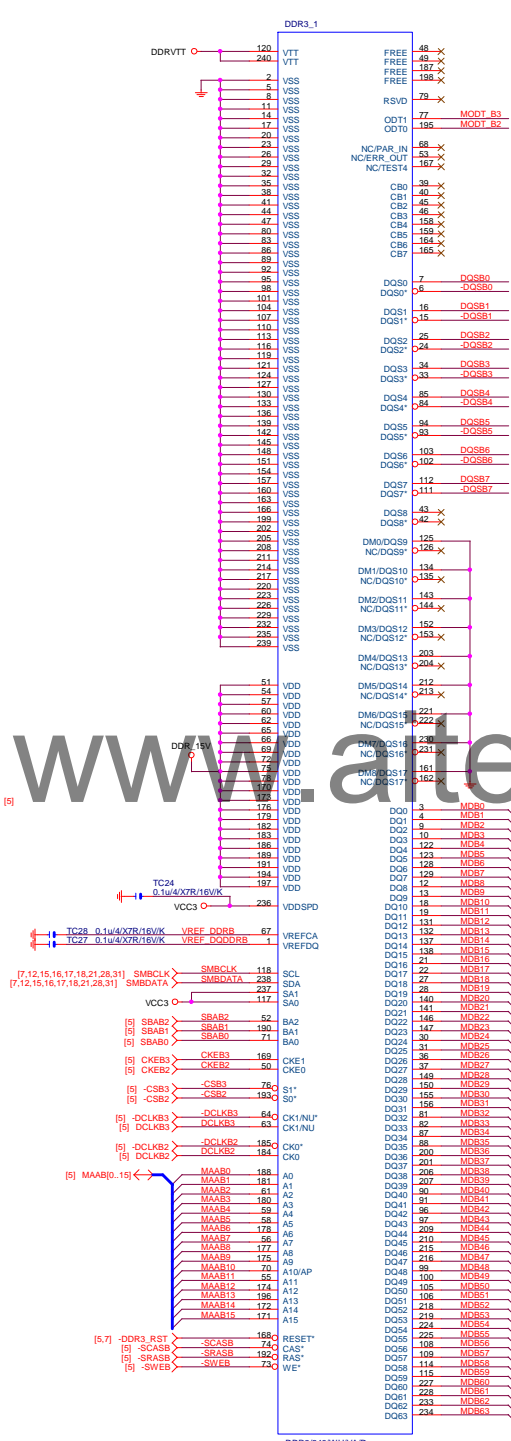




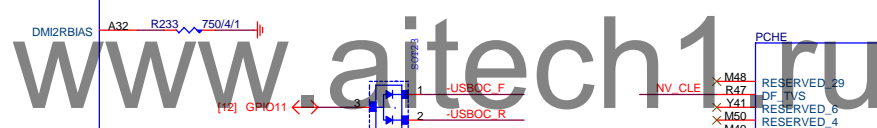




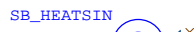
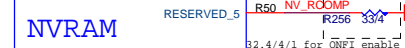
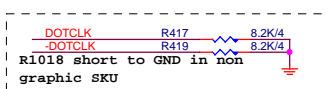
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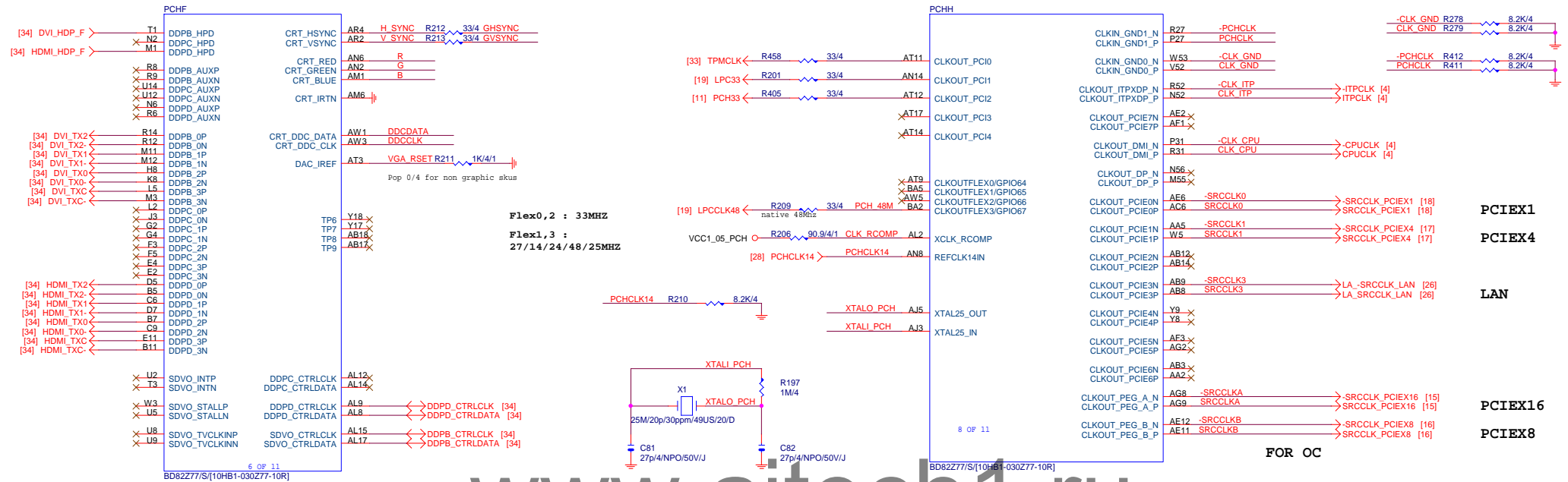




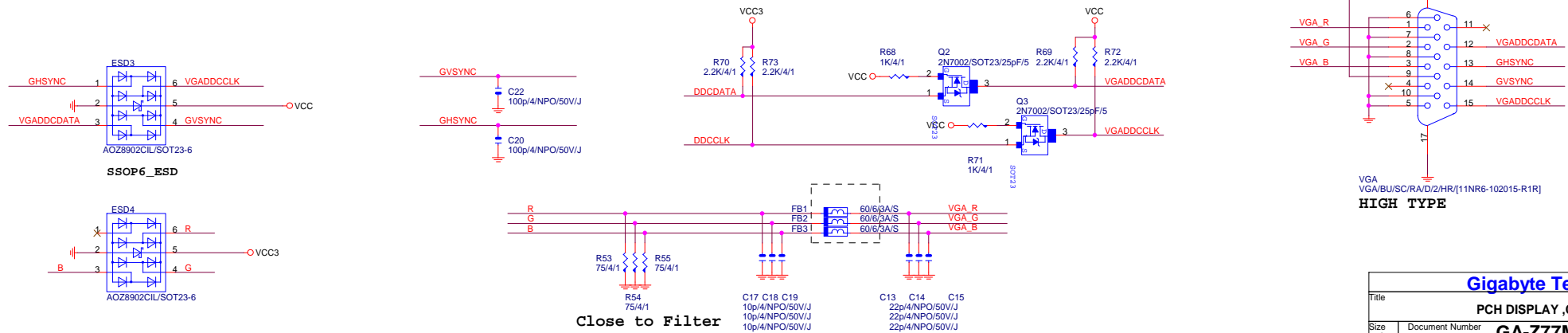


USB OC# Configure	
OC0#	USB0,1(F_USB30)
OC1#	USB2,3(R_USB30)
OC2#	USB4,5(F_USB1)
OC3#	USB6,7(F_USB2)
OC4#	USB8,9(USB_LAN)
OC5#	USB10~11(R_USB)
OC6#	USB12~13(KB_USB)
OC7#	GPIO14





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PCH DISPLAY, CLK BUFFER			
GA-Z77MX-D3H			
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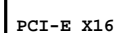
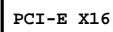
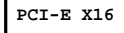
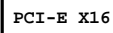




PC1-E X8

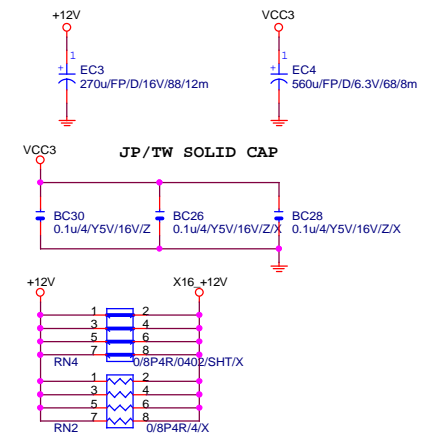
EXP A RXN10  
EXP A RXP15  
EXP A RXN15  
EXP A TXP15  
EXP A RXN14  
EXP A RXP14

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# EC6D\_8D10MM-RH



EXP A RXP0[0..15] >> EXP\_A\_RXP[0..15] [4,14]  
 EXP A RXN0[0..15] >> EXP\_A\_RXN[0..15] [4,14]  
 EXP A TXP0[0..15] >> EXP\_A\_TXP[0..15] [4,14]  
 EXP A TXN0[0..15] >> EXP\_A\_TXN[0..15] [4,14]

EXP A TXP0	C32	0.22u4/X5R/6.3V/K	EXP A TXP0C
EXP A TXN0	C30	0.22u4/X5R/6.3V/K	EXP A TXN0C
EXP A TXP1	C35	0.22u4/X5R/6.3V/K	EXP A TXP1C
EXP A TXN1	C37	0.22u4/X5R/6.3V/K	EXP A TXN1C
EXP A TXP2	C39	0.22u4/X5R/6.3V/K	EXP A TXP2C
EXP A TXN2	C41	0.22u4/X5R/6.3V/K	EXP A TXN2C
EXP A TXP3	C43	0.22u4/X5R/6.3V/K	EXP A TXP3C
EXP A TXN3	C45	0.22u4/X5R/6.3V/K	EXP A TXN3C
EXP A TXP4	C46	0.22u4/X5R/6.3V/K	EXP A TXP4C
EXP A TXN4	C49	0.22u4/X5R/6.3V/K	EXP A TXN4C
EXP A TXP5	C50	0.22u4/X5R/6.3V/K	EXP A TXP5C
EXP A TXN5	C51	0.22u4/X5R/6.3V/K	EXP A TXN5C
EXP A TXP6	C52	0.22u4/X5R/6.3V/K	EXP A TXP6C
EXP A TXN6	C54	0.22u4/X5R/6.3V/K	EXP A TXN6C
EXP A TXP7	C57	0.22u4/X5R/6.3V/K	EXP A TXP7C
EXP A TXN7	C58	0.22u4/X5R/6.3V/K	EXP A TXN7C
EXP A SW TXP8	C60	0.22u4/X5R/6.3V/K	EXP A SW TXP8C
EXP A SW TXN8	C61	0.22u4/X5R/6.3V/K	EXP A SW TXN8C
EXP A SW TXP9	C62	0.22u4/X5R/6.3V/K	EXP A SW TXP9C
EXP A SW TXN9	C63	0.22u4/X5R/6.3V/K	EXP A SW TXN9C
EXP A SW TXP10	C64	0.22u4/X5R/6.3V/K	EXP A SW TXP10C
EXP A SW TXN10	C65	0.22u4/X5R/6.3V/K	EXP A SW TXN10C
EXP A SW TXP11	C66	0.22u4/X5R/6.3V/K	EXP A SW TXP11C
EXP A SW TXN11	C67	0.22u4/X5R/6.3V/K	EXP A SW TXN11C
EXP A SW TXP12	C68	0.22u4/X5R/6.3V/K	EXP A SW TXP12C
EXP A SW TXN12	C70	0.22u4/X5R/6.3V/K	EXP A SW TXN12C
EXP A SW TXP13	C72	0.22u4/X5R/6.3V/K	EXP A SW TXP13C
EXP A SW TXN13	C73	0.22u4/X5R/6.3V/K	EXP A SW TXN13C
EXP A SW TXP14	C74	0.22u4/X5R/6.3V/K	EXP A SW TXP14C
EXP A SW TXN14	C75	0.22u4/X5R/6.3V/K	EXP A SW TXN14C
EXP A SW TXP15	C77	0.22u4/X5R/6.3V/K	EXP A SW TXP15C
EXP A SW TXN15	C78	0.22u4/X5R/6.3V/K	EXP A SW TXN15C

EXP A SW RXP8[0..15] >> EXP\_A\_SW\_RXP[8..15] [14]  
 EXP A SW RXN8[0..15] >> EXP\_A\_SW\_RXN[8..15] [14]  
 EXP A SW TXP8[0..15] >> EXP\_A\_SW\_TXP[8..15] [14]  
 EXP A SW TXN8[0..15] >> EXP\_A\_SW\_TXN[8..15] [14]

PCI-E REV:1.1--> 2.5GHZ

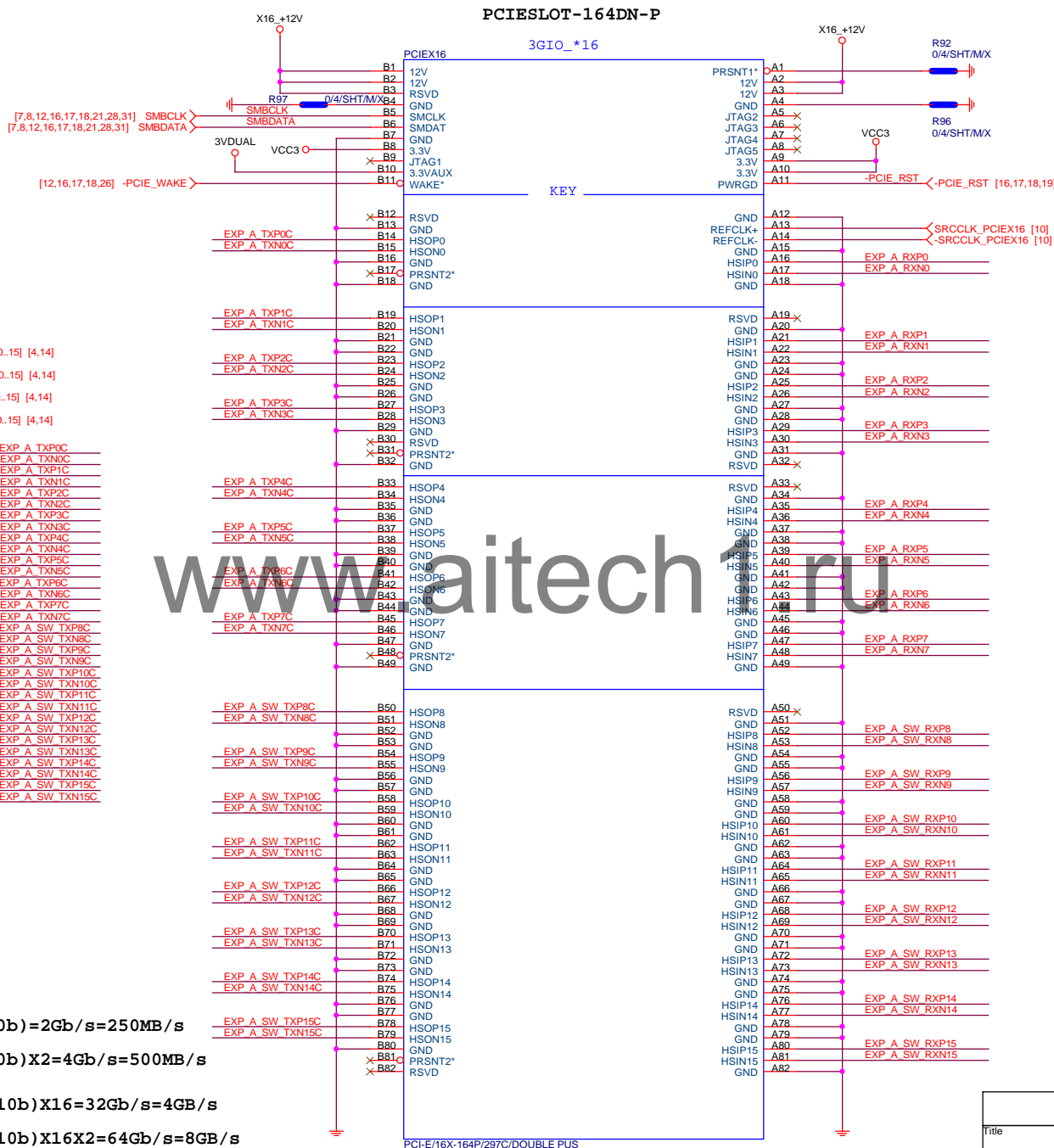
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PCE-E X1(雙向) BANDWITH=2.5GHZ\*(8b/10b)X2=4Gb/s=500MB/s

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

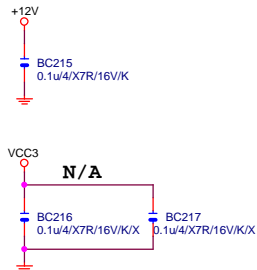
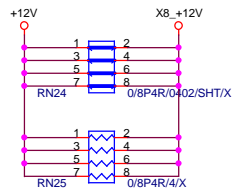
PCI-E REV:2.0--> 5GHZ



PCI-E/16X-164P/297C/DOUBLE PUS

<b>Gigabyte Technology</b>			
<b>PCI EXPRESS X 16 PORT</b>			
Size Custom	Document Number	<b>GA-Z77MX-D3H</b>	
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[7,8,12,15,17,18,21,28,31] SMBCLK  
[7,8,12,15,17,18,21,28,31] SMBDATA

[12,15,17,18,26] -PCIE\_WAKE

EXP\_B\_SW\_TXP8C  
EXP\_B\_SW\_TXN8C

EXP\_B\_SW\_TXP9C  
EXP\_B\_SW\_TXN9C

EXP\_B\_SW\_TXP10C  
EXP\_B\_SW\_TXN10C

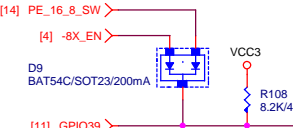
EXP\_B\_SW\_TXP11C  
EXP\_B\_SW\_TXN11C

EXP\_B\_SW\_TXP12C  
EXP\_B\_SW\_TXN12C

EXP\_B\_SW\_TXP13C  
EXP\_B\_SW\_TXN13C

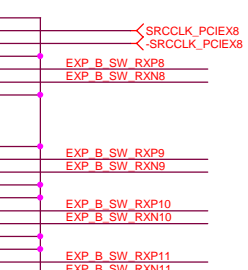
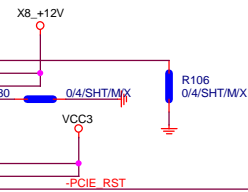
EXP\_B\_SW\_TXP14C  
EXP\_B\_SW\_TXN14C

EXP\_B\_SW\_TXP15C  
EXP\_B\_SW\_TXN15C



PCIEX8 3GIO\_\*8

PCI-E/16X-99P/BU/RIGHT PUSH

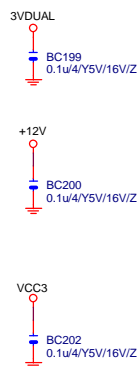


EXP\_B\_SW\_RXP8\_15] >>> EXP\_B\_SW\_RXP[8..15] [14]  
EXP\_B\_SW\_RXN8\_15] >>> EXP\_B\_SW\_RXN[8..15] [14]  
EXP\_B\_SW\_TXP8\_15] >>> EXP\_B\_SW\_TXP[8..15] [14]  
EXP\_B\_SW\_TXN8\_15] >>> EXP\_B\_SW\_TXN[8..15] [14]

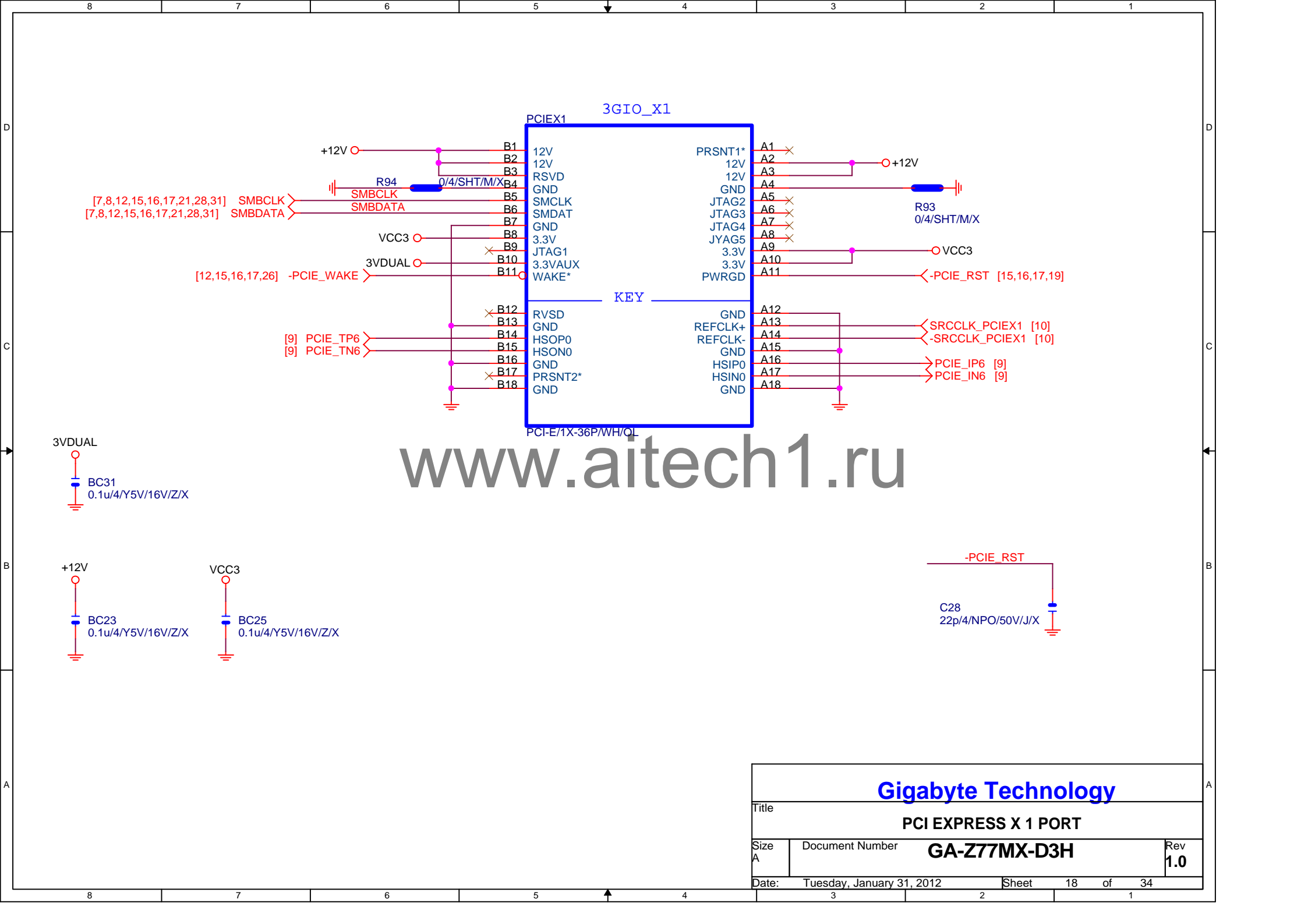
EXP_B_SW_TXP8	C202	0.22u4/X5R/6.3V/K	EXP_B_SW_TXP8C
EXP_B_SW_TXN8	C203	0.22u4/X5R/6.3V/K	EXP_B_SW_TXN8C
EXP_B_SW_TXP9	C204	0.22u4/X5R/6.3V/K	EXP_B_SW_TXP9C
EXP_B_SW_TXN9	C205	0.22u4/X5R/6.3V/K	EXP_B_SW_TXN9C
EXP_B_SW_TXP10	C206	0.22u4/X5R/6.3V/K	EXP_B_SW_TXP10C
EXP_B_SW_TXN10	C207	0.22u4/X5R/6.3V/K	EXP_B_SW_TXN10C
EXP_B_SW_TXP11	C208	0.22u4/X5R/6.3V/K	EXP_B_SW_TXP11C
EXP_B_SW_TXN11	C209	0.22u4/X5R/6.3V/K	EXP_B_SW_TXN11C
EXP_B_SW_TXP12	C210	0.22u4/X5R/6.3V/K	EXP_B_SW_TXP12C
EXP_B_SW_TXN12	C211	0.22u4/X5R/6.3V/K	EXP_B_SW_TXN12C
EXP_B_SW_TXP13	C212	0.22u4/X5R/6.3V/K	EXP_B_SW_TXP13C
EXP_B_SW_TXN13	C213	0.22u4/X5R/6.3V/K	EXP_B_SW_TXN13C
EXP_B_SW_TXP14	C214	0.22u4/X5R/6.3V/K	EXP_B_SW_TXP14C
EXP_B_SW_TXN14	C215	0.22u4/X5R/6.3V/K	EXP_B_SW_TXN14C
EXP_B_SW_TXP15	C216	0.22u4/X5R/6.3V/K	EXP_B_SW_TXP15C
EXP_B_SW_TXN15	C217	0.22u4/X5R/6.3V/K	EXP_B_SW_TXN15C

Gigabyte Technology

Title			
PCI EXPRESS X 8 PORT			
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Custom			
Date: Tuesday, January 31, 2012			
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Rev 1.0			



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Gigabyte Technology

Title

PCI EXPRESS X 1 PORT

Size  
A

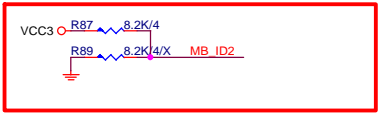
Document Number

GA-Z77MX-D3H

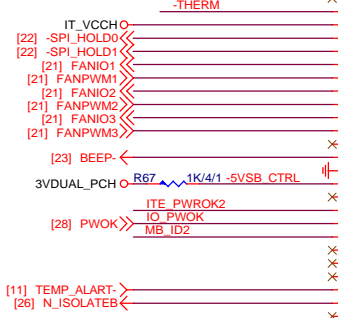
Rev  
1.0

Date: Tuesday, January 31, 2012

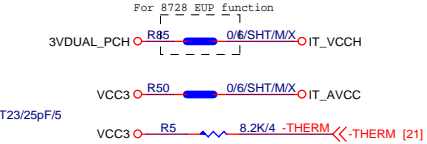
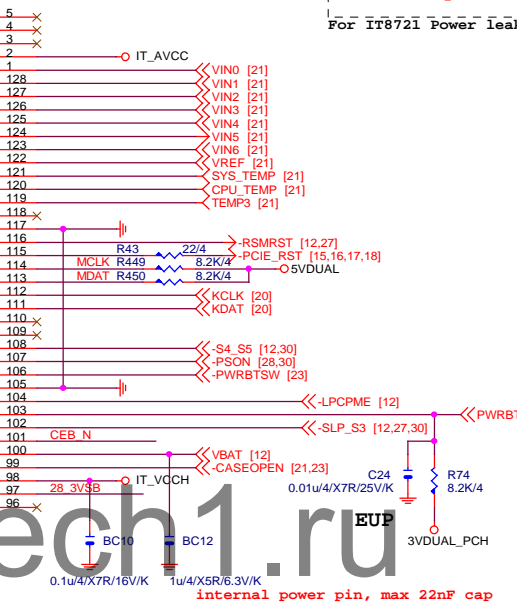
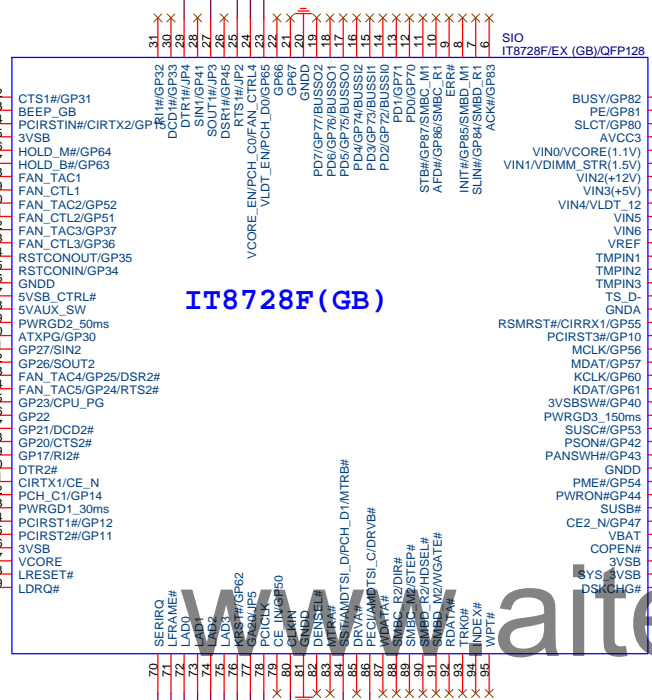
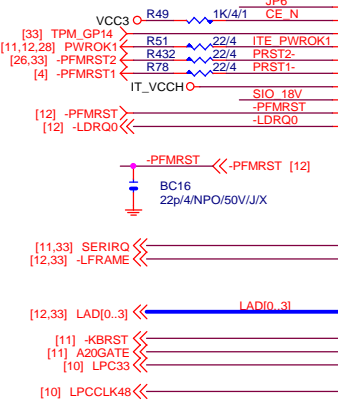
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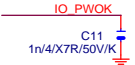
For IT8728



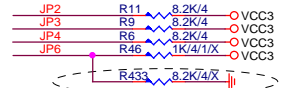
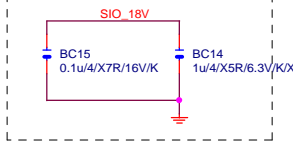
### IT8728F(GB)



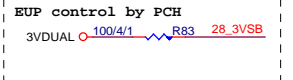
For IT8721 Power leakage



For IT8728



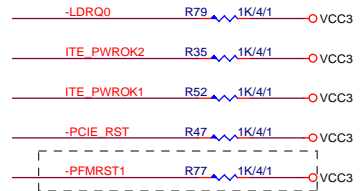
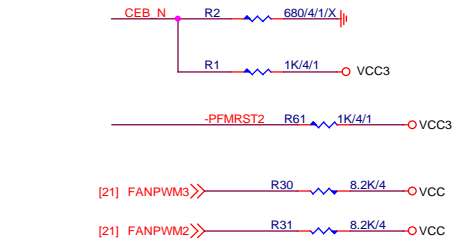
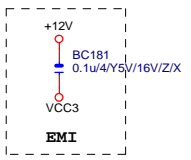
IT8728-EX  
PULL DOWN ENABLE OVP



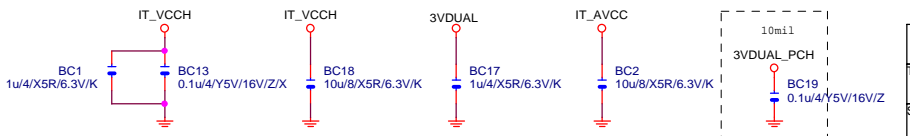
JP3--- High SPI-Flash Disable  
Low SPI-Flash Enable

FOR LOW TEMP POWER ON INTO TEST MODE ISSUE

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



PCIRST1 is OD in  
IT8728

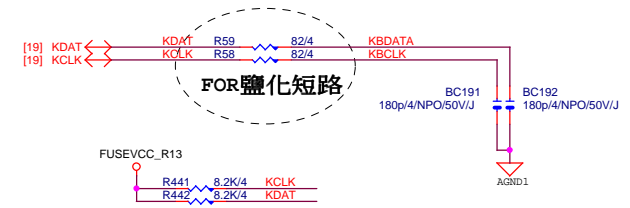


Gigabyte Technology			
ITE 8728 LPC IO			
Size B	Document Number	GA-Z77MX-D3H	
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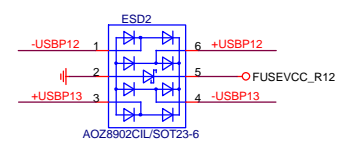
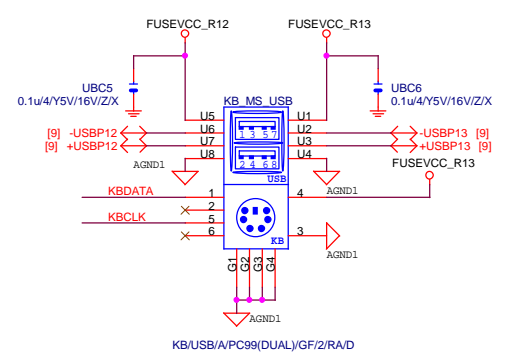
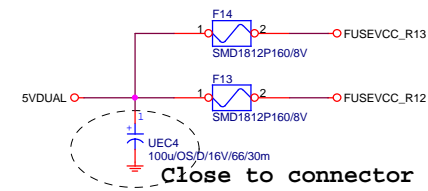
COM

COM RI

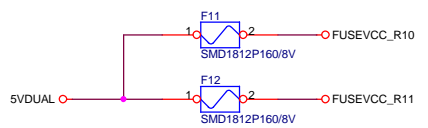
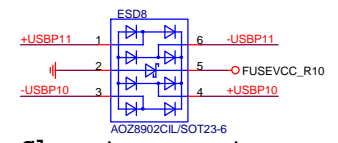
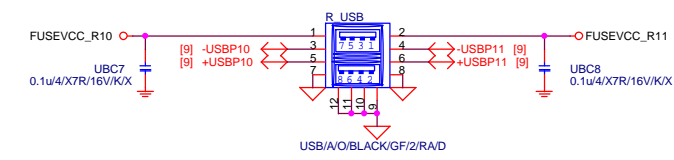
KB/MS



USB2.0 PWR



R\_USB

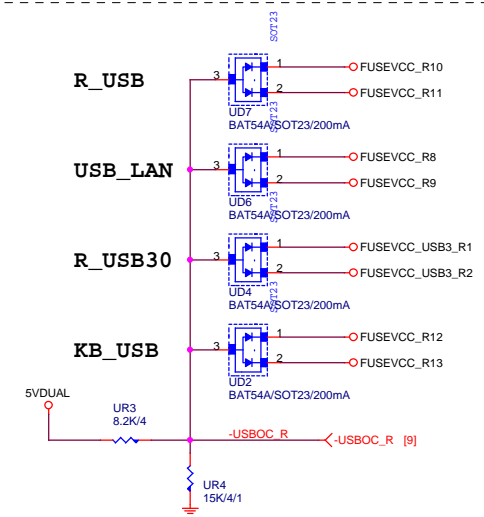


R\_USB

USB\_LAN

R\_USB30

KB\_USB

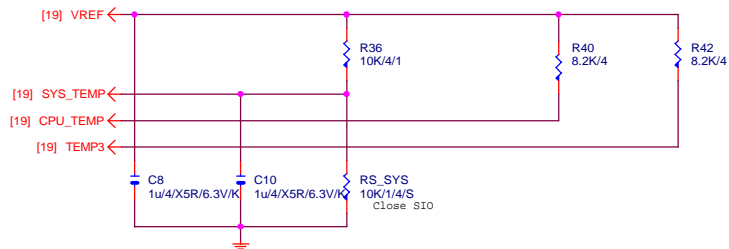


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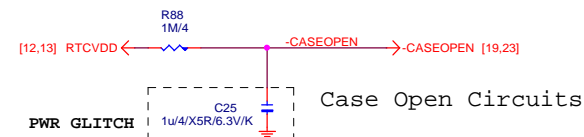
Gigabyte Technology

Title			COM,-RI,KB_USB, R_USB	
Size			GA-Z77MX-D3H	
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Rev			1.0	

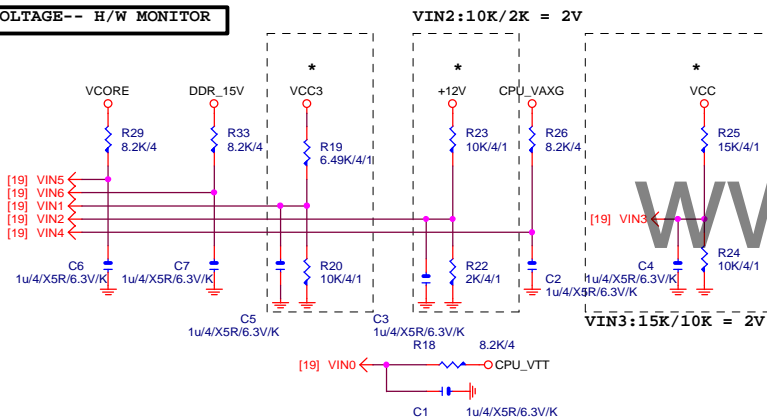
# TEMP H/W MONITOR



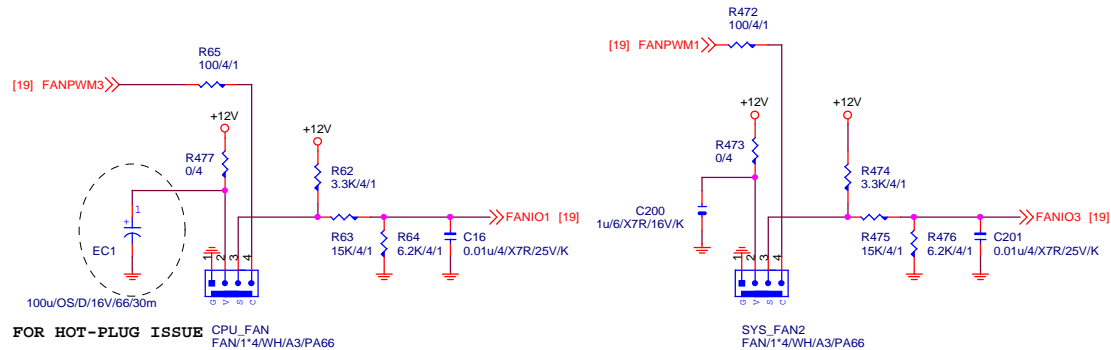
# CASE OPEN



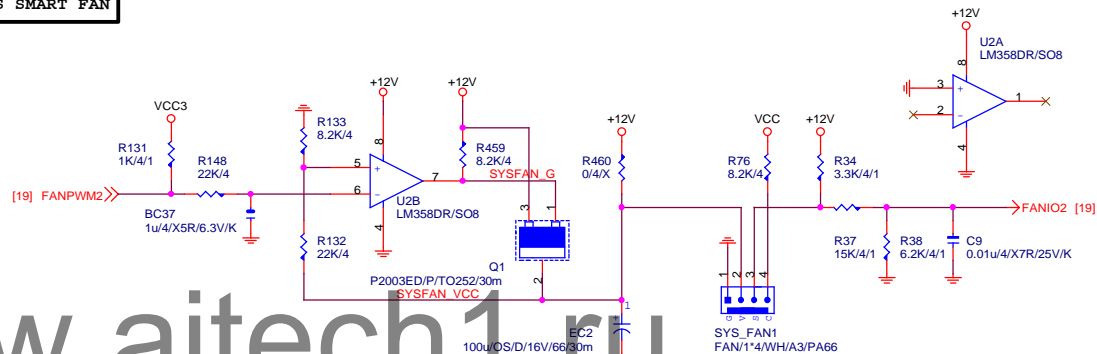
# VOLTAGE-- H/W MONITOR



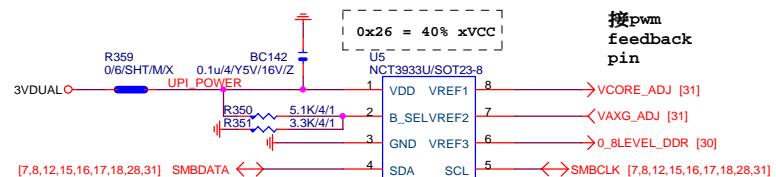
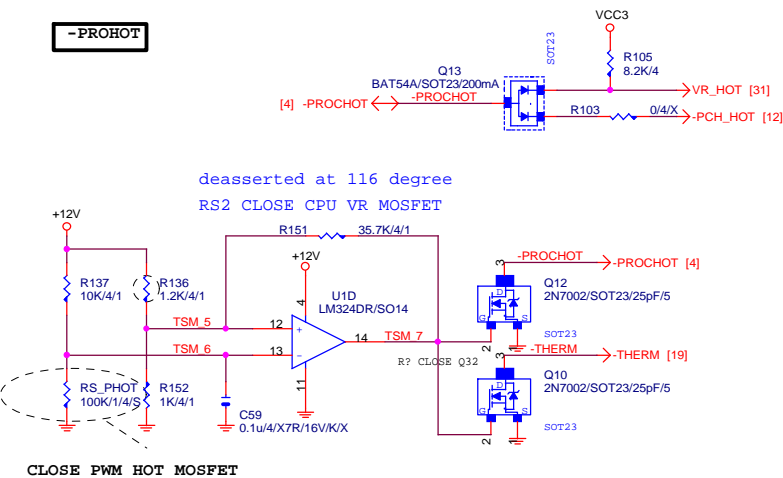
# CPU SMART FAN



# SYS SMART FAN

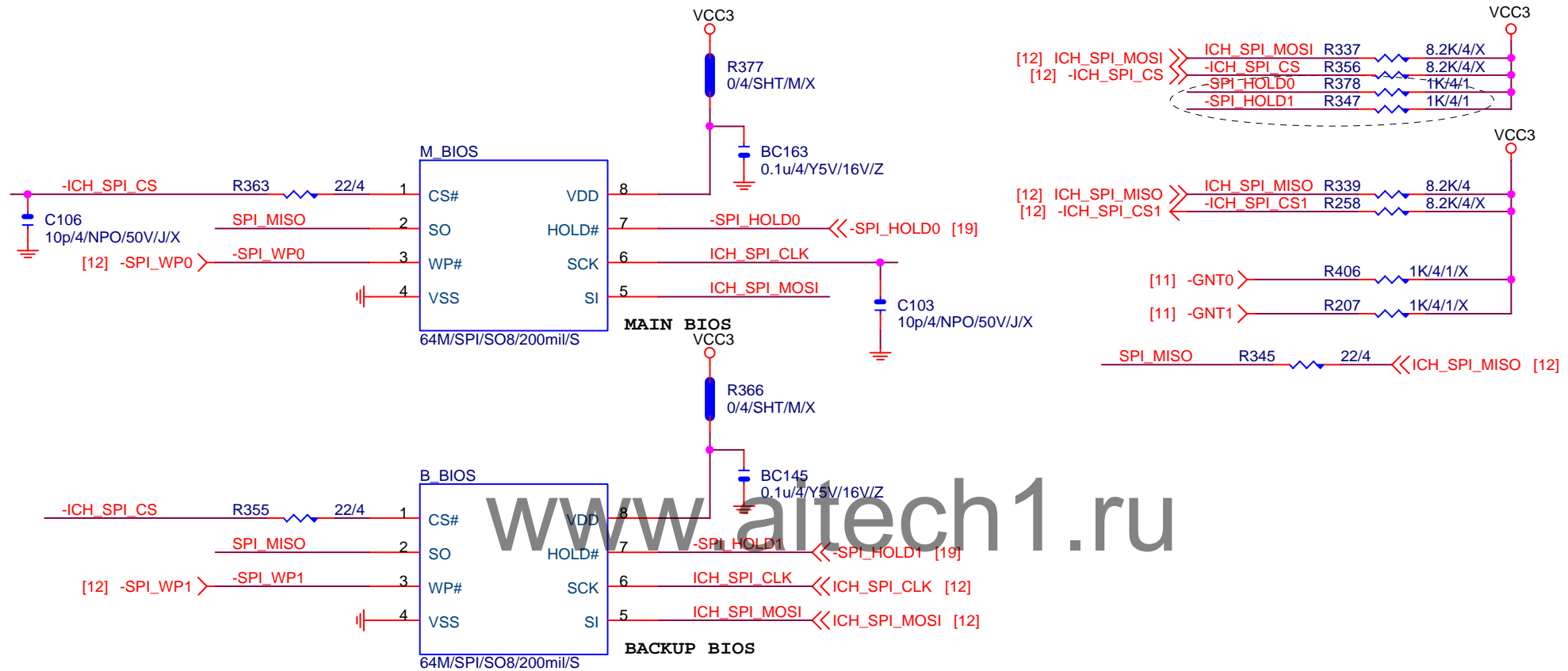


# -PROHOT



Gigabyte Technology			
Title			
HWM,FAN CTRL,OV			
Size			
Custom			
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# DUAL BIOS



B65使用64M BIOS

使用H67暫用32M

H61使用32M BIOS

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

1 means floating  
0 means PD 1K

**Gigabyte Technology**

Title

**DUAL BIOS**

Size  
A

Document Number

**GA-Z77MX-D3H**

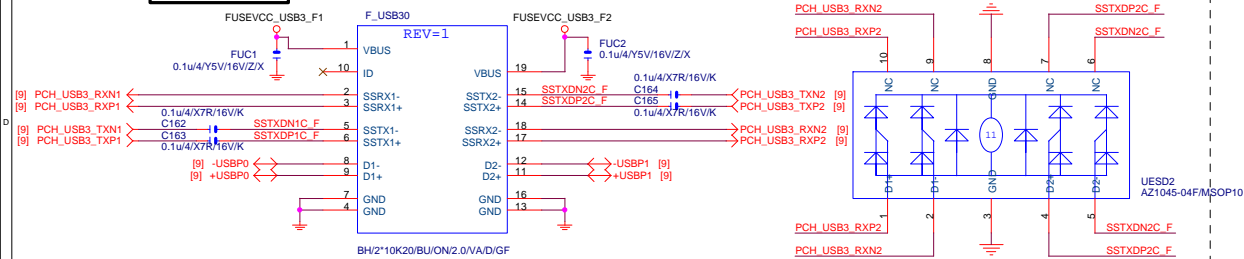
Rev  
**1.0**

Date: Tuesday, January 31, 2012

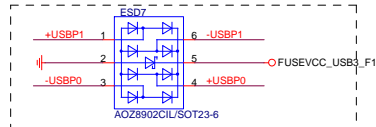
Sheet 22 of 34



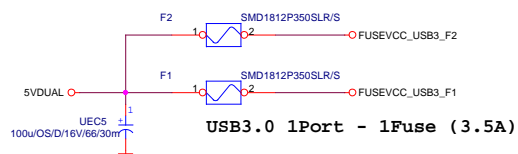
# Front USB3.0



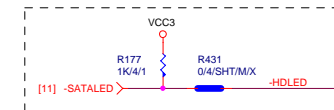
## BLUE



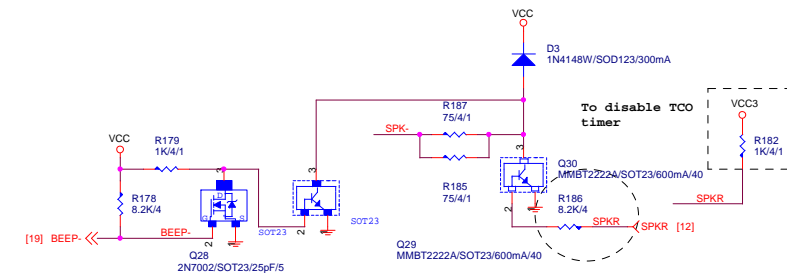
Close to connector



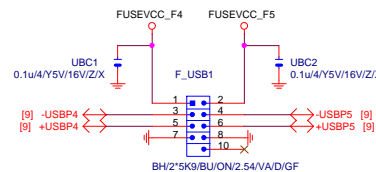
# SATA LED



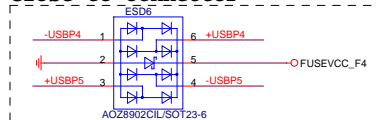
# SPKR



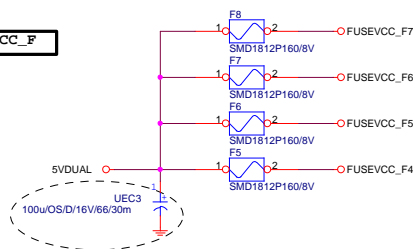
# FRONT USB1



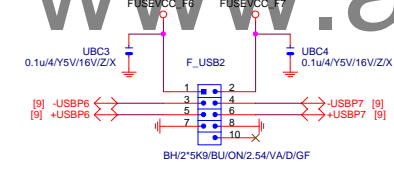
Close to connector



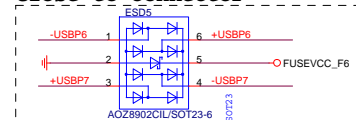
# FUSEVCC\_F



# FRONT USB2



Close to connector



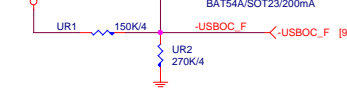
## F\_USB2



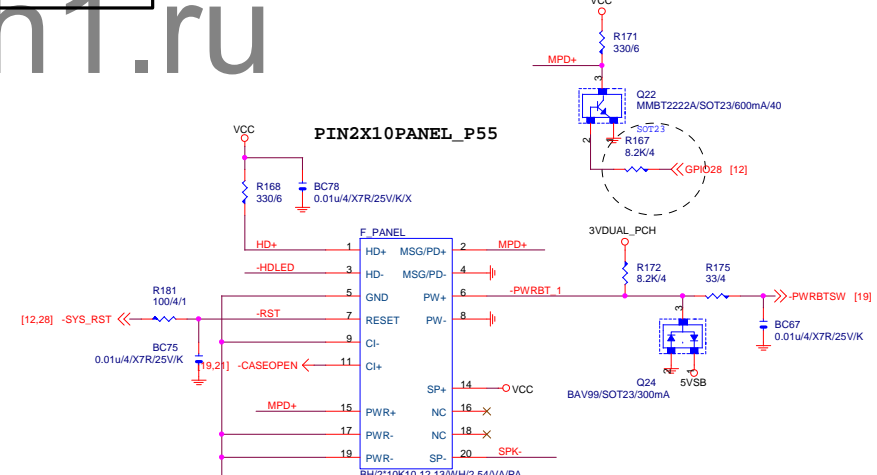
## F\_USB30



## F\_USB1



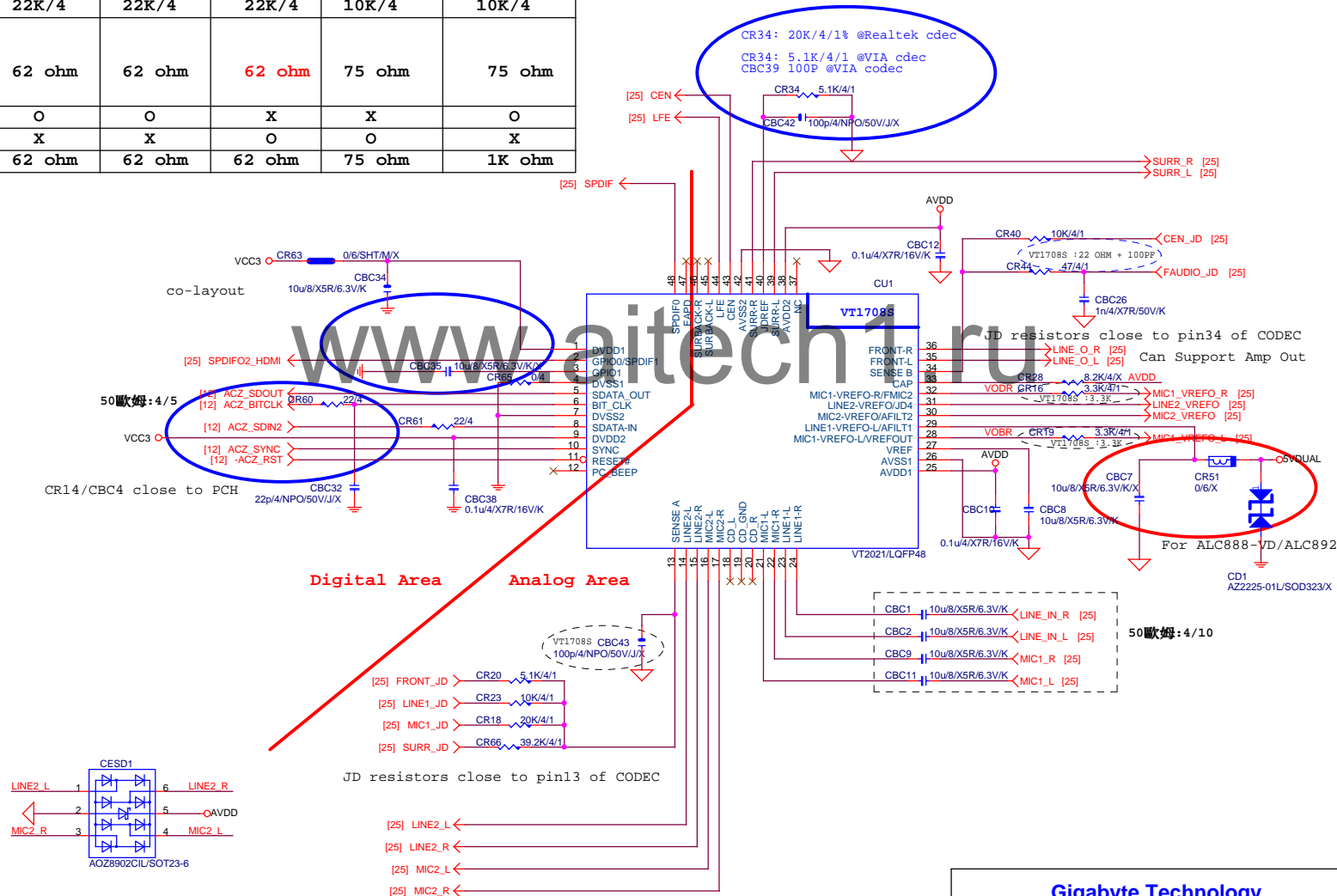
# INTEL FRONT PANEL



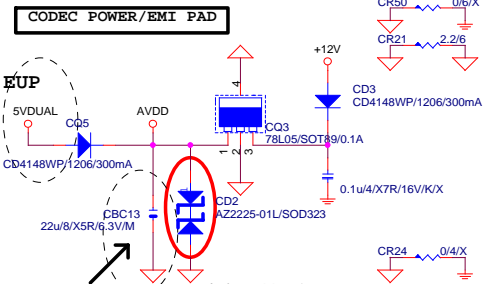
Gigabyte Technology

Title	FP,F_USB,USB PWR,SPKR,SATA LED		
Size	Custom	Document Number	GA-Z77MX-D3H
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	ALC662	ALC887-VD2	ALC889	VT1708S	VT1708SCE
CR65	X	X	O	O	X
CR64	X	X	X	X	0.1u/4
CBC35	O	O	X	X	O
CR44/CBC6	47ohm+1nF	47ohm+1nF	47ohm+1nF	22ohm+100P	22ohm+100P
CR31	X	O	O	O	O
CR30	O	X	X	X	X
CBC1/CBC2	22uF/X5R	22uF/X5R	22uF/X5R	22uF/X5R	22uF/X5R
CR20	5.11K/4/1	5.11K/4/1	5.11K/4/1	5.1K/4/1	5.1K/4/1
CR34	20K/4/1	20K/4/1	20K/4/1	5.1K/4/1	20K/4/1
CBC39/CBC40	N/A	N/A	N/A	100P/4	100P/4
CR6/CR7/CR54/CR58	22K/4	22K/4	22K/4	10K/4	10K/4
CR5/CR8/CR11/CR4/ CR17/CR22/CR45/CR33/ CR47/CR40/CR26/CR37/ CR13/CR11/CR57/CR53	62 ohm	62 ohm	62 ohm	75 ohm	75 ohm
CR51/CD1/CBC7	O	O	X	X	O
CD2/CD3/CQ3/CQ5	X	X	O	O	X
CR1/CR14/CR17/CR22	62 ohm	62 ohm	62 ohm	75 ohm	1K ohm

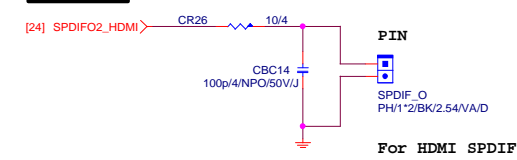


# CODEC POWER/EMI PAD

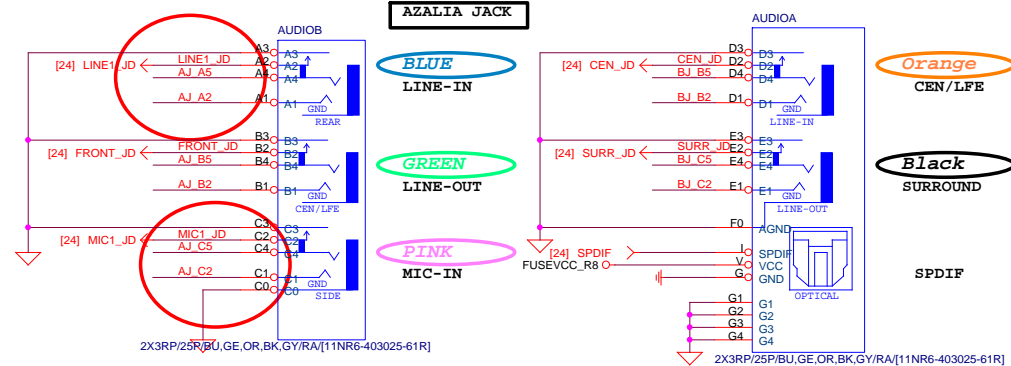
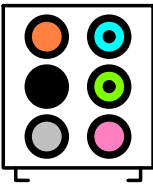


上ALC892時,此顆電容要保留  
ADD CD2 For ESD PROTECT DIODE

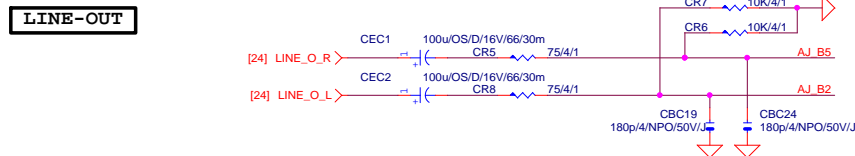
# SPDIF\_OUT



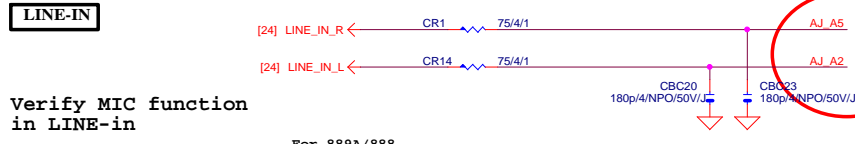
# AZALIA JACK



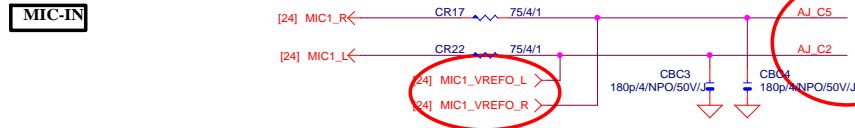
# LINE-OUT



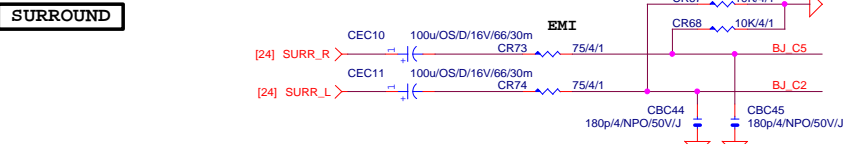
# LINE-IN



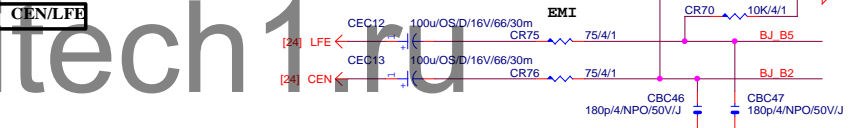
# MIC-IN



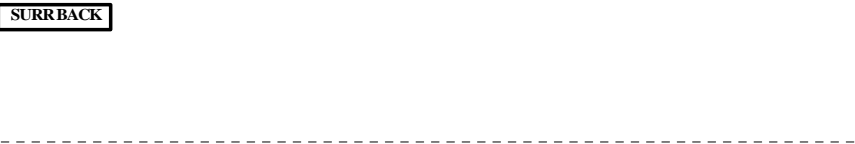
# SURROUND



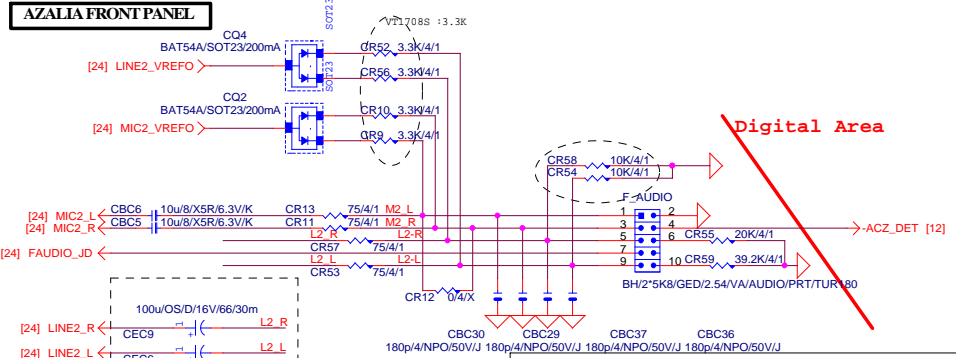
# CEN/LFE



# SURRBACK

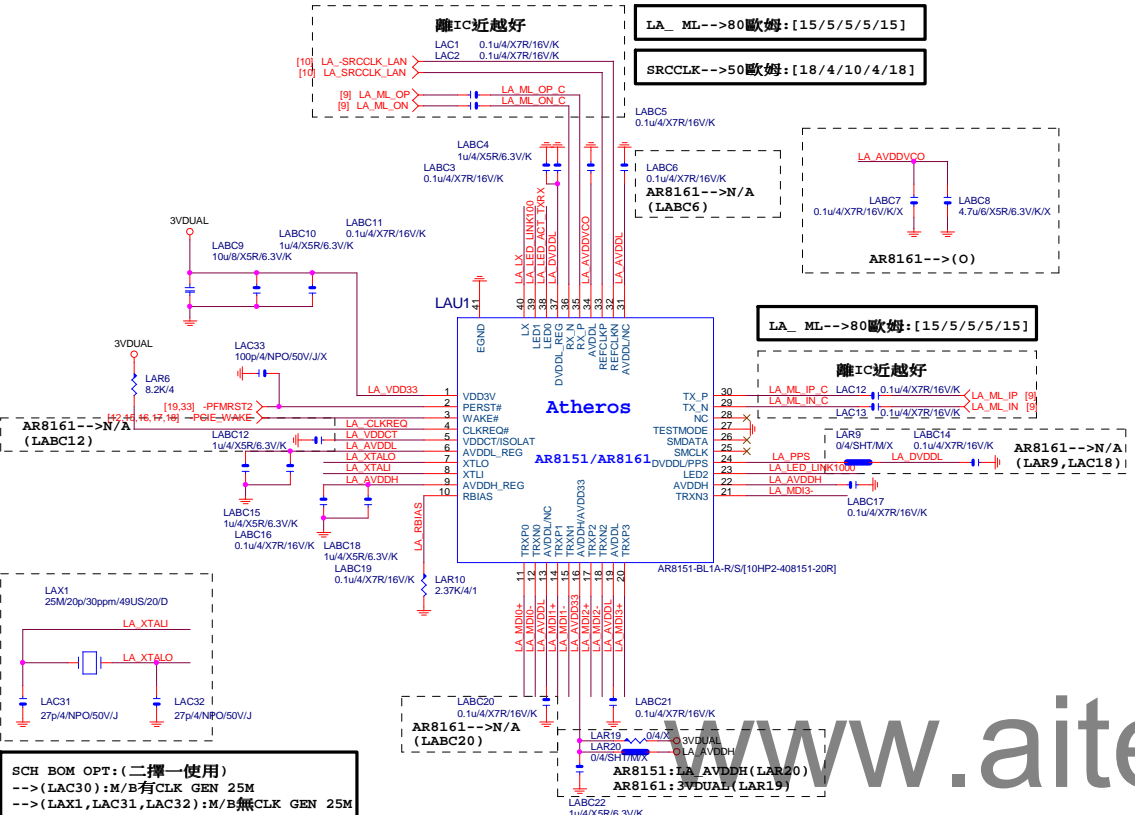


# AZALIA FRONT PANEL

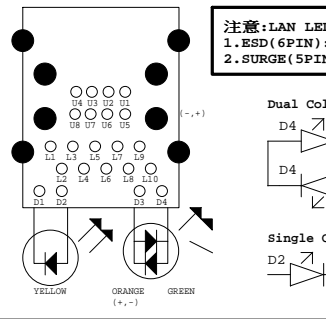
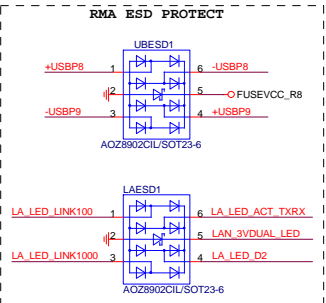


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Title			
AUDIO JACK			
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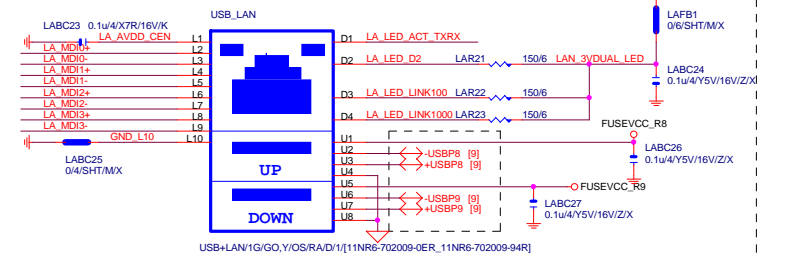
# LAN:AR8151/AR8161



## USB LAN CONNECTOR



## LA MDI-->100歐姆:[20/4/8/4/20]



注意:USB PORT(目前:暫定6,7PORT)

USB-->90歐姆:[15/4.5/7.5/4.5/15]

料號	規格	廠商
11NR6-702009-0ER 1G LAN(12core)		UDE
11NR6-702009-91R 1G LAN(8 core)		FOXCONN
11NR6-702009-92R 1G LAN(8 core)		UDE
11NR6-702009-11R 1G LAN(12core/RED)		UDE
11NR6-702009-12R 1G LAN(8 core/RED)		FOXCONN

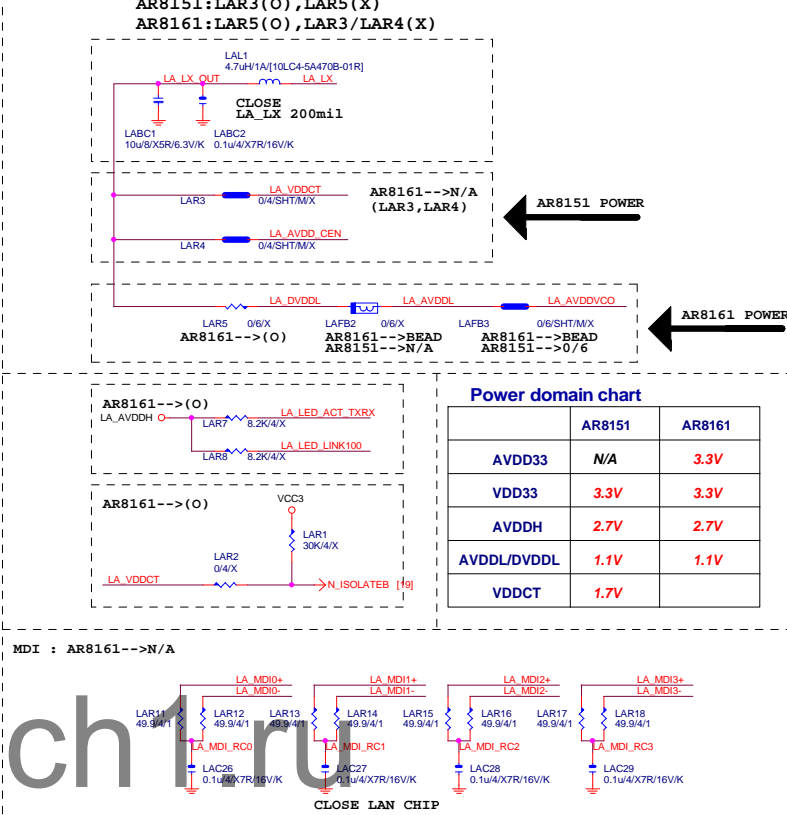
**USB LAN BOM區分:**

1.(紅色/12CORE/三倍):USB+LAN/1G/GO,Y/OS/RA/D/1/RED

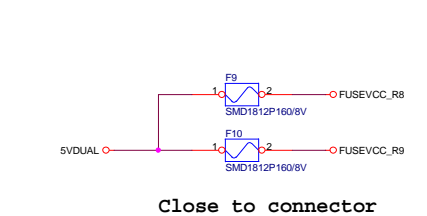
2.(黑色/12CORE):USB+LAN/1G/GO,Y/OS/RA/D/1

3.(黑色/8CORE):USB+LAN/1G/GO,Y/OS/RA/D/8C

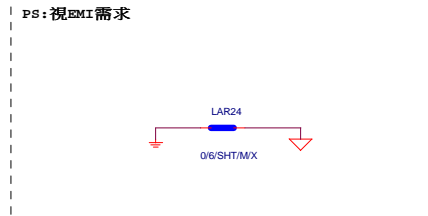
# LAN POWER



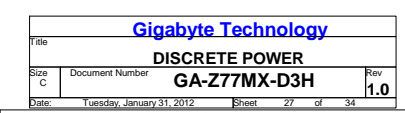
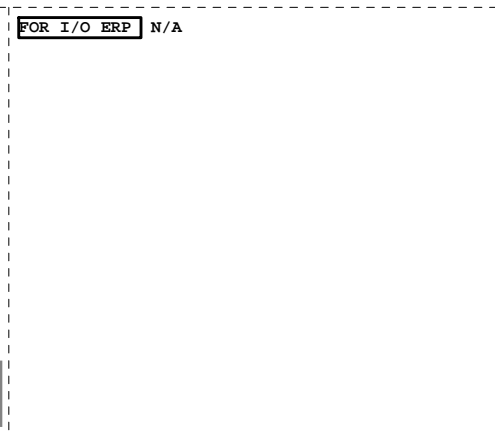
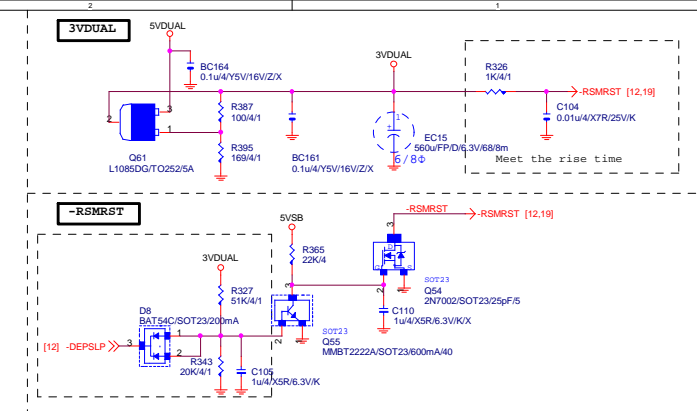
## USB X3 POWER



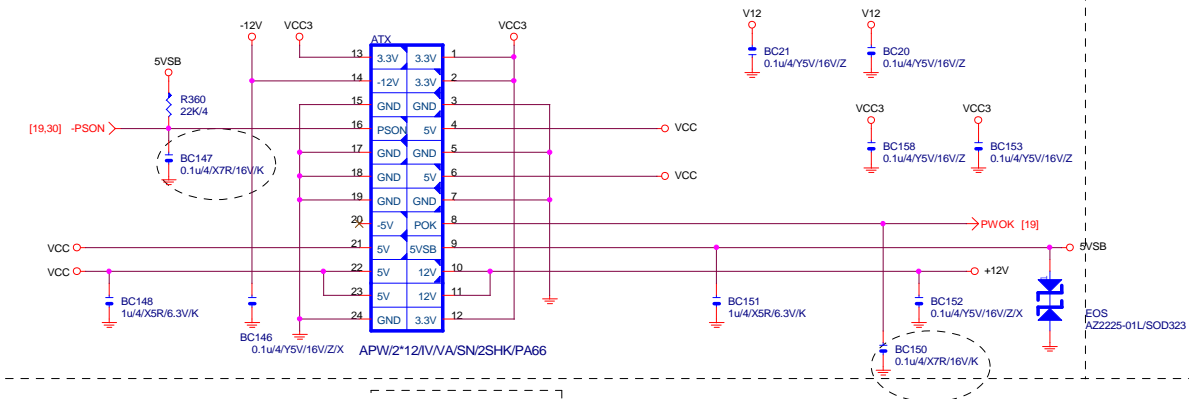
## EMI SHORT PAD



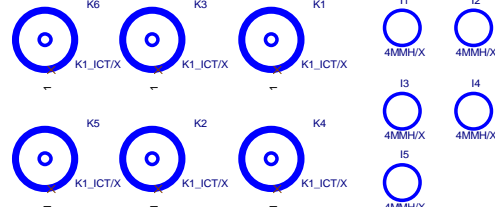
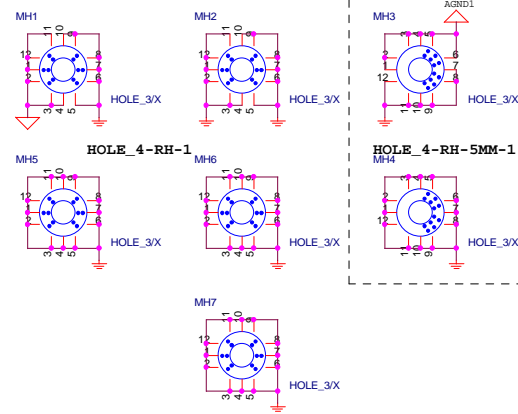
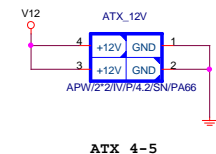
Gigabyte Technology		
ARTHEROS AR8151/AR8161		
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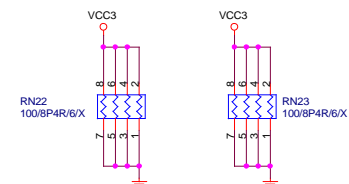
# ATXX24 POWER CONNECTOR



# ATXX4 POWER CONNECTOR



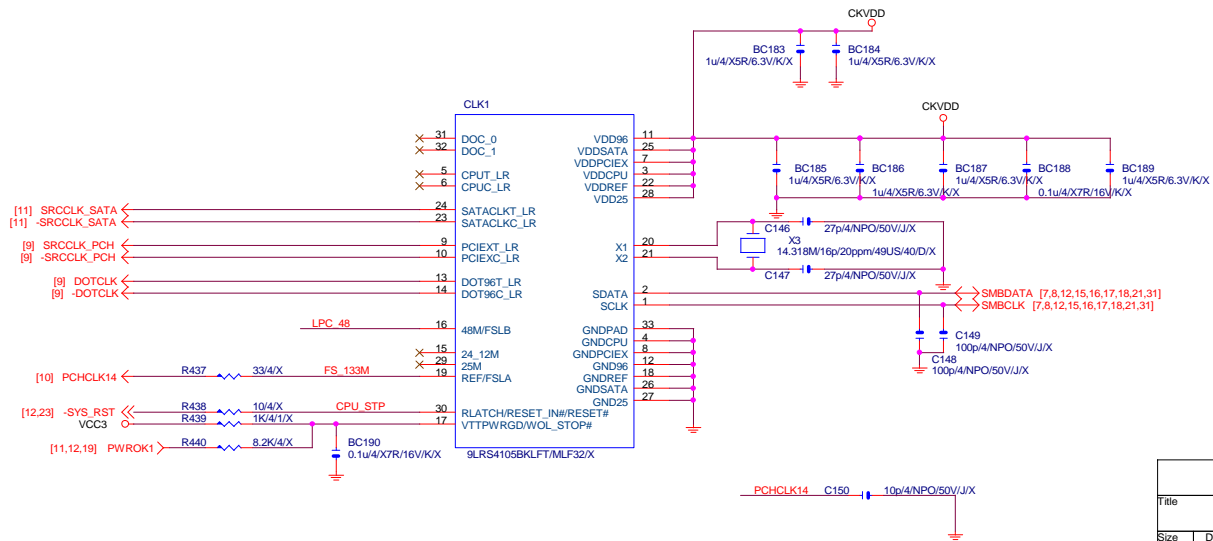
## FIX PWR MINMUN LOAD



To prevent the 5VSB under loading when boot

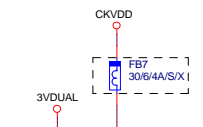
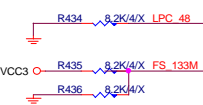
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# CLK GEN



## CPU Frequency Selection

FS	CPU
0	100M <Default>
1	133M



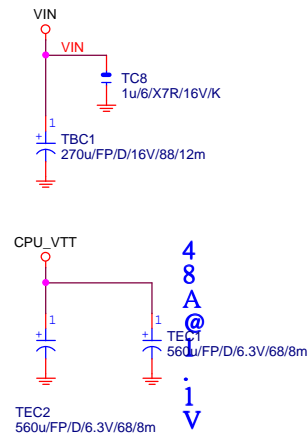
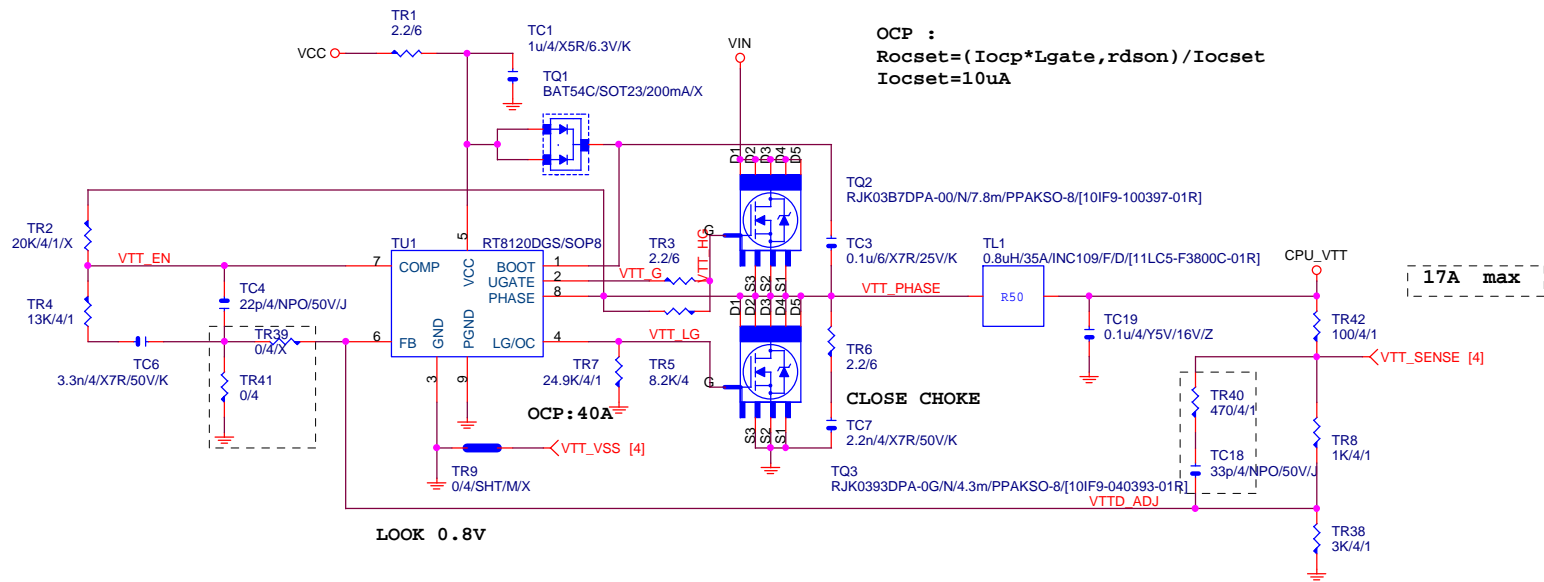
## Gigabyte Technology

## ATX CONNECTOR

## GA-Z77MX-D3H

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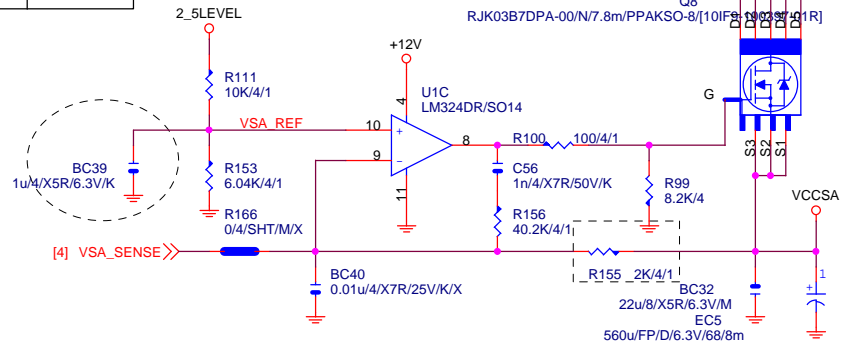
# CPU\_VTT



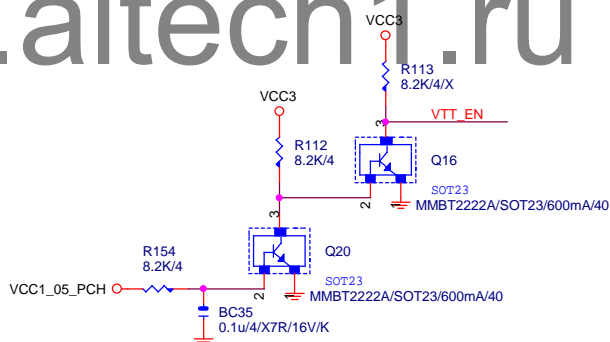
# VCCSA

PDG 0.8

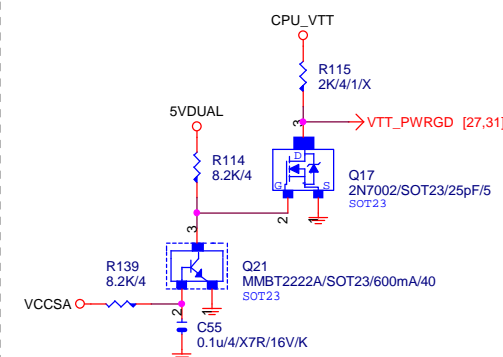
	VSA_SEL
HI	0.85V
LO	0.925V



# CPU\_VTT PWR SEQ



# VTT\_PWRGD



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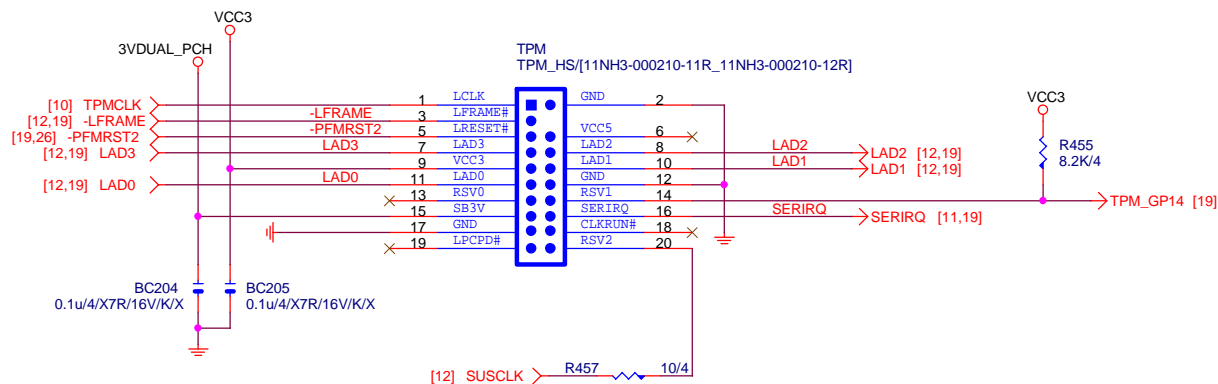








# TPM



# LPT PORT

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Title

**LPT, TPM**

Size  
Custom

Document Number

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Rev  
**1.0**

Date:

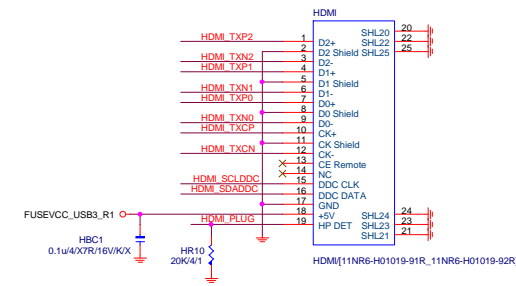
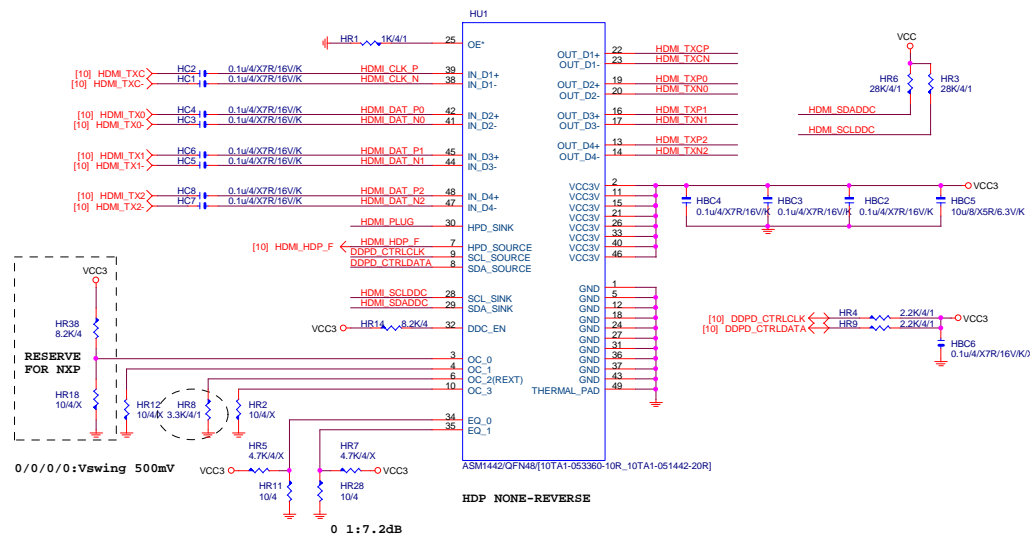
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Sheet

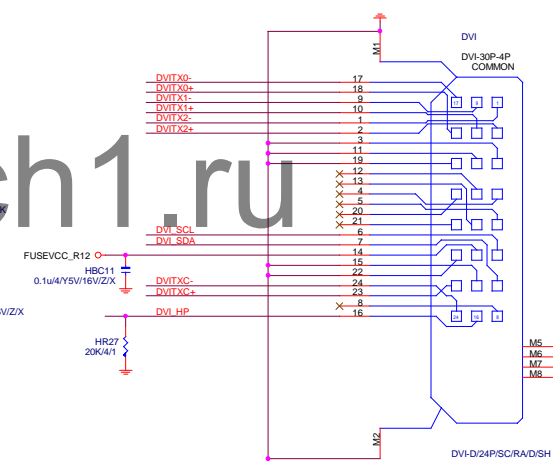
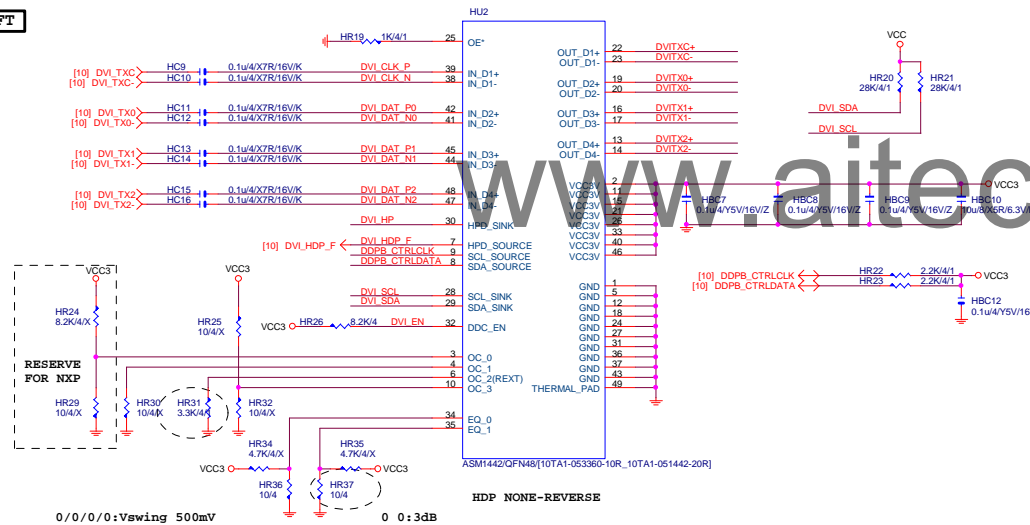
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of

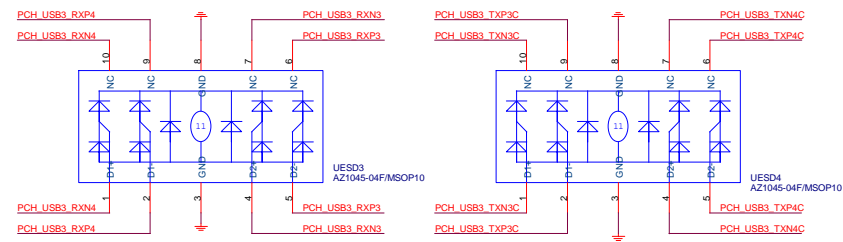
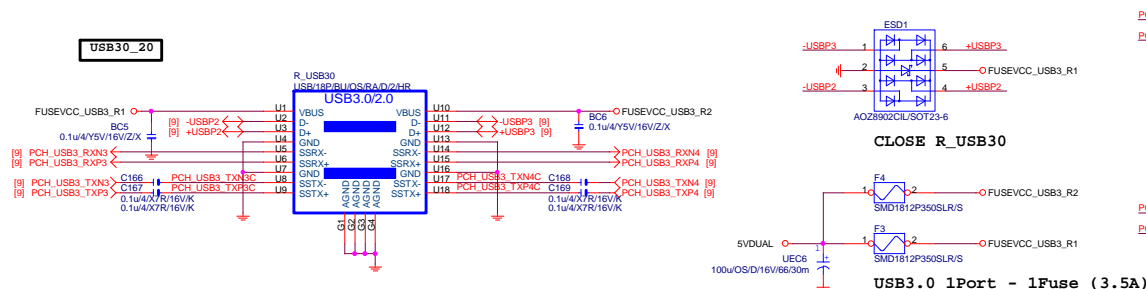
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### DVI LEVEL SHIFT



### USB30\_20



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