

SHEET

TITLE

01	COVER SHEET
02	BLOCK DIAGRAM
03	BOM & PCB MODIFY HISTORY
04	P4 LGA775 A
05	P4 LGA775 B,D
06	P4 LGA775 C
07	P4 LGA775 E,F,G,H
08	G41 HOST
09	G41 DDRII
10	G41 PCI E, DMI
11	G41 VGA
12	G41 GND
13	G41 PWR
14	PCI EXPRESS*16 SLOT
15	DDRII CHANNEL A
16	DDRII CHANNEL B
17	DDRII TERMINATION
18	ICH7 PCI, USB, DMI, LAN
19	ICH7 IDE, GPIO, SATA, CTRL
20	ICH7 VCC, GND
21	CK505 CLOCK.
22	PCI SLOT 1,2,PCIE*1
23	IDE/FLOPPY
24	ITE 8718 GB/HX
25	COM LPT
26	CI, HWM, KB/MS, DUALBIOS
27	ALC887/888B

SHEET

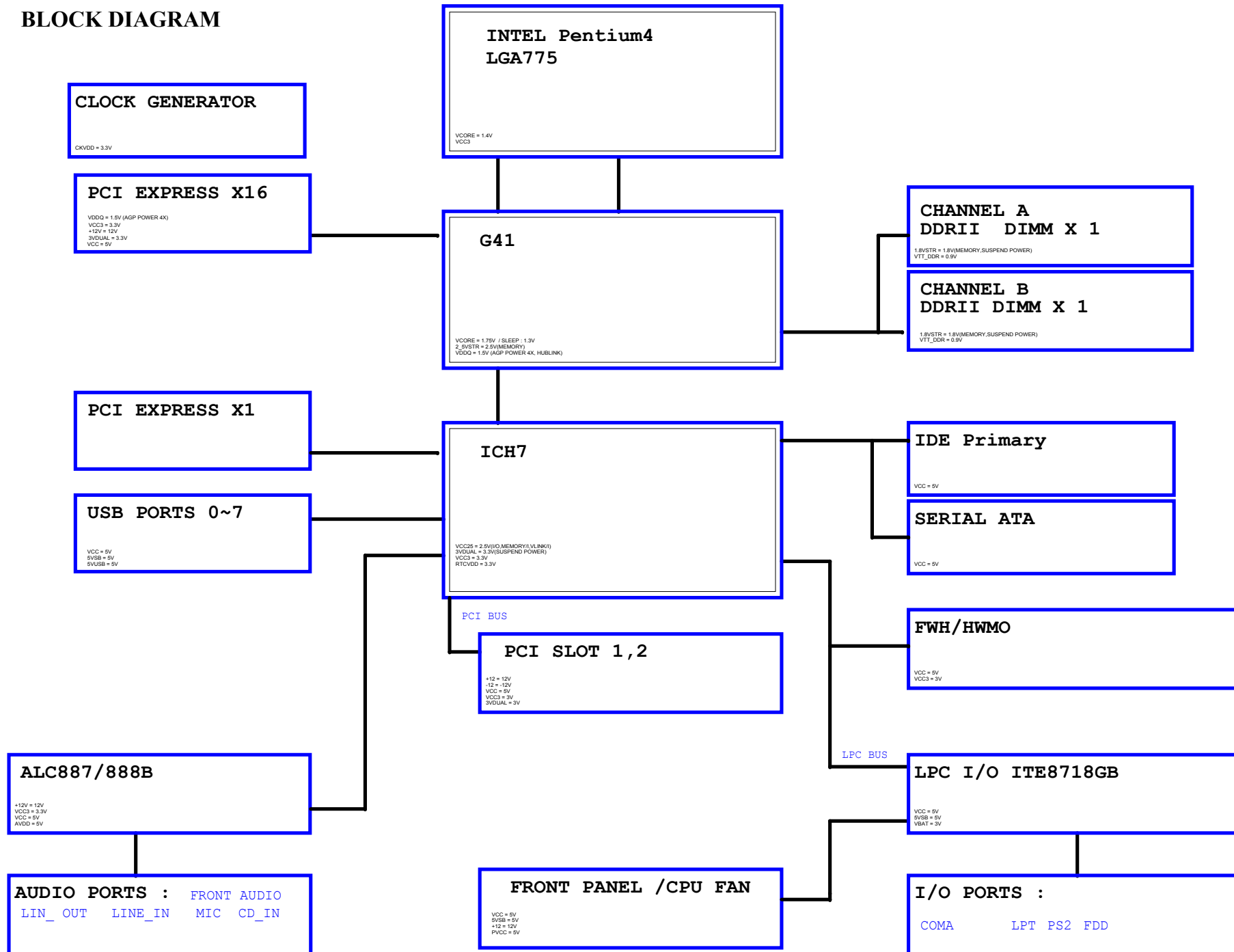
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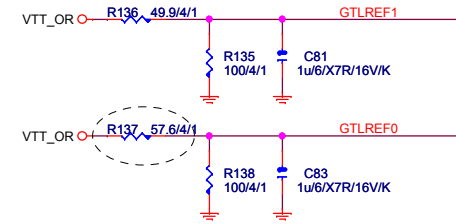
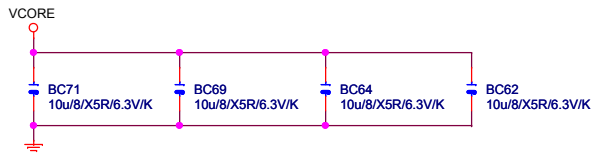
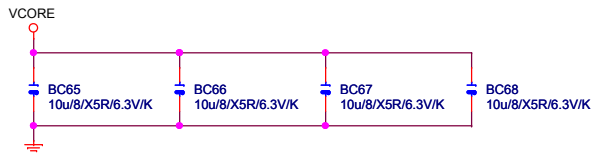
28	REAR AUDIO JACK
29	DISCRETE POWER
30	VCORE PWM ISL6312
31	ATX, OTHERS POWER
32	FRONT PANEL
33	REALTEK RTL8111C/RTL8111D

Gigabyte Technology

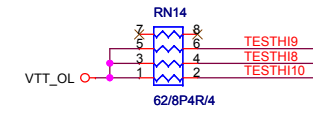
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Cover Sheet			
Size	Document Number	GA-G41M-ES2L	Rev
Custom			1.01
Date:	Wednesday, March 18, 2009	Sheet	1 of 33

BLOCK DIAGRAM

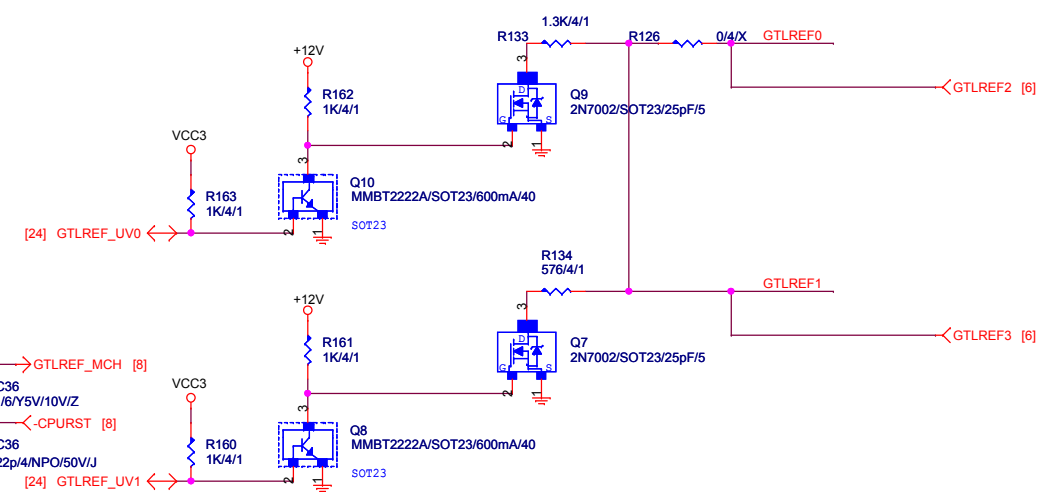
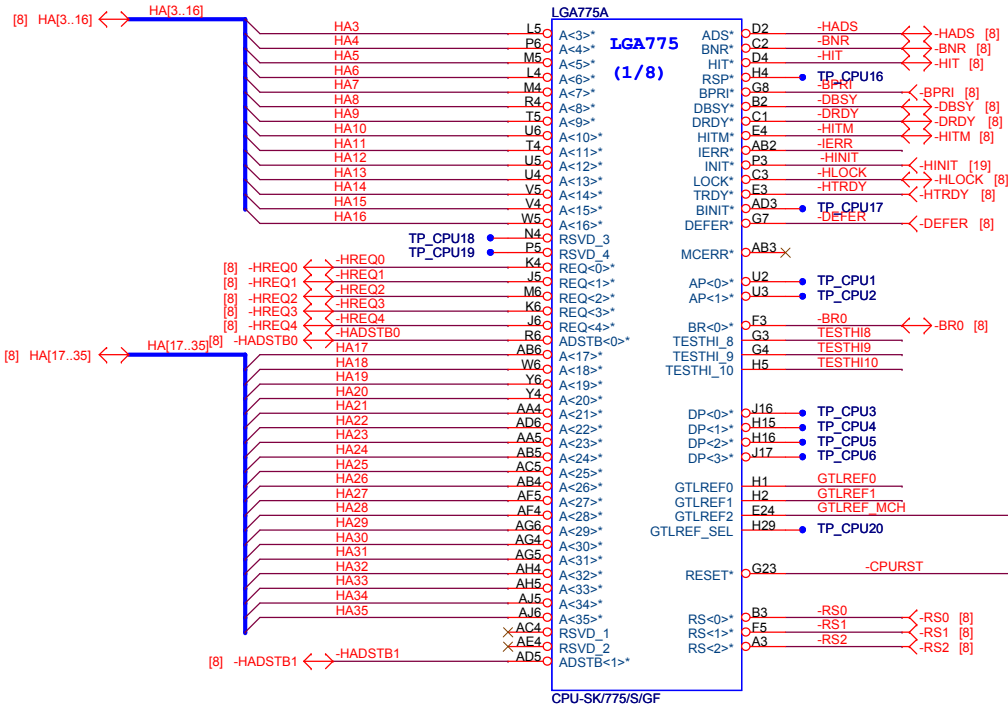




中間値 0.9V

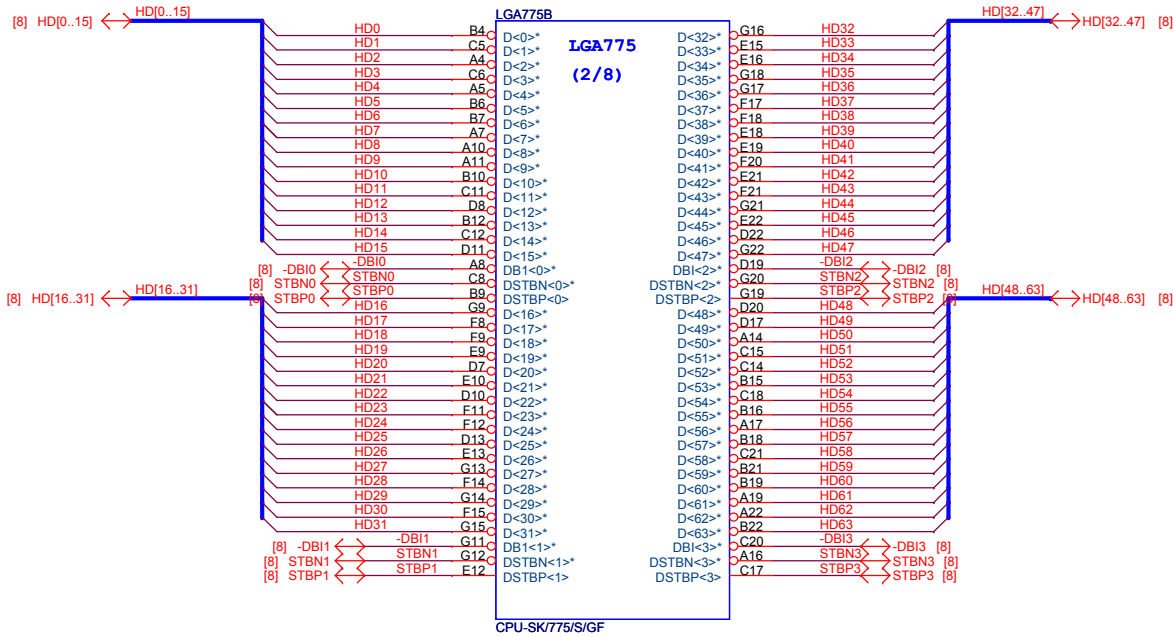


LGA775-39

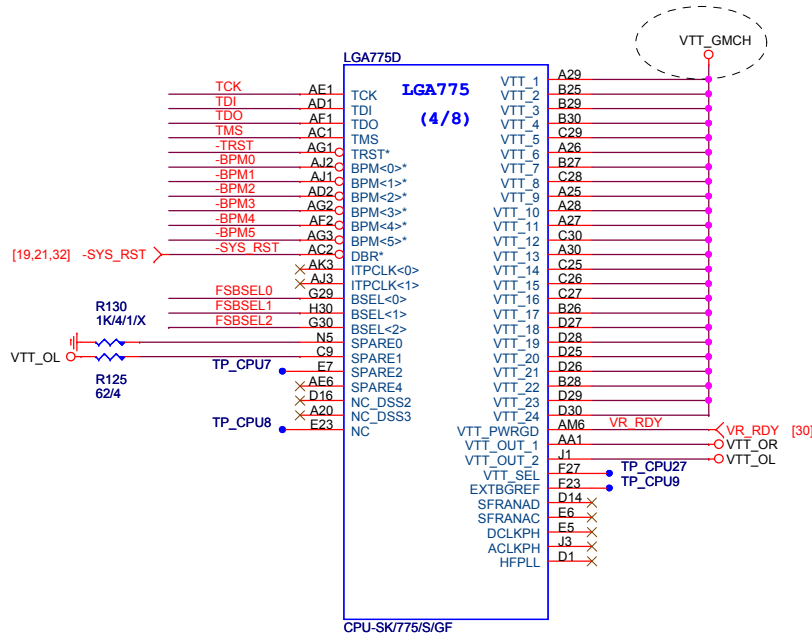


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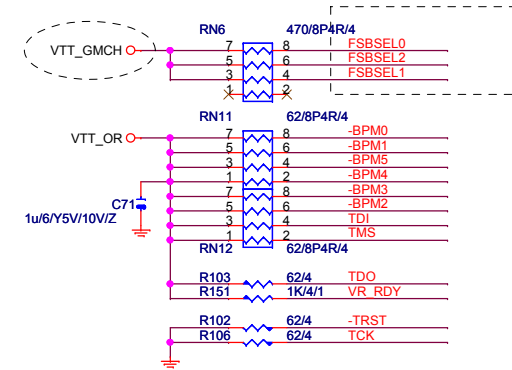
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Size	Document Number	GA-G41M-ES2L			Rev
B					1.01
Date:	Thursday, April 02, 2009	Sheet	4	of	33



CPU-SK775/S/GF

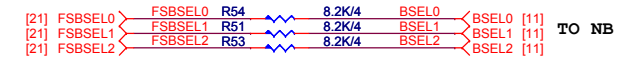


CPU-SK775/S/GF



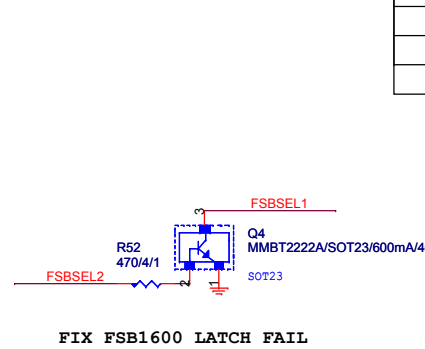
TO CLK GEN

TO NB



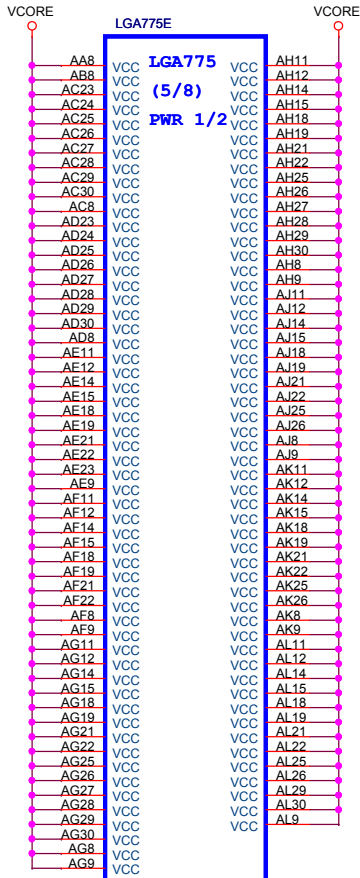
CPU

NA	FSB	FSA	Clock
FSBSEL3	FSBSEL1	FSBSEL0	Clock
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0	0	1	1.33MHz
0	1	1	1.66MHz
0	1	0	2.00MHz
0	0	0	2.66MHz

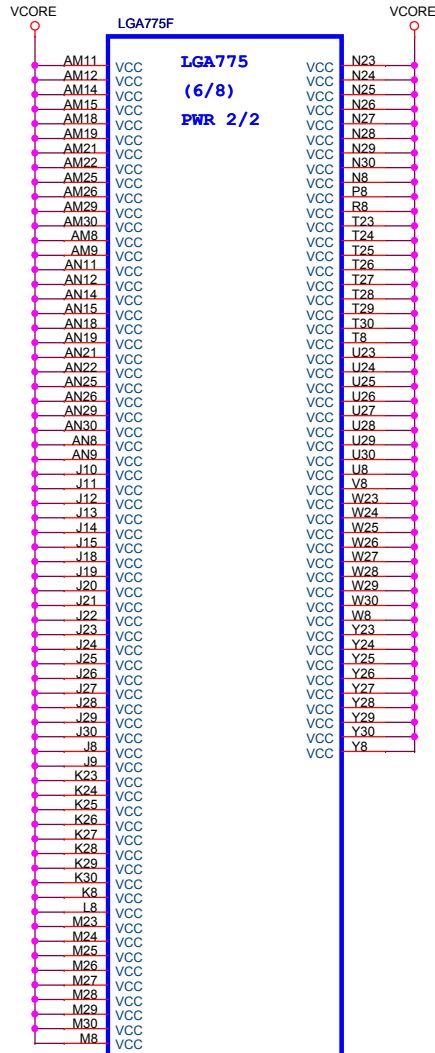


FIX FSB1600 LATCH FAIL

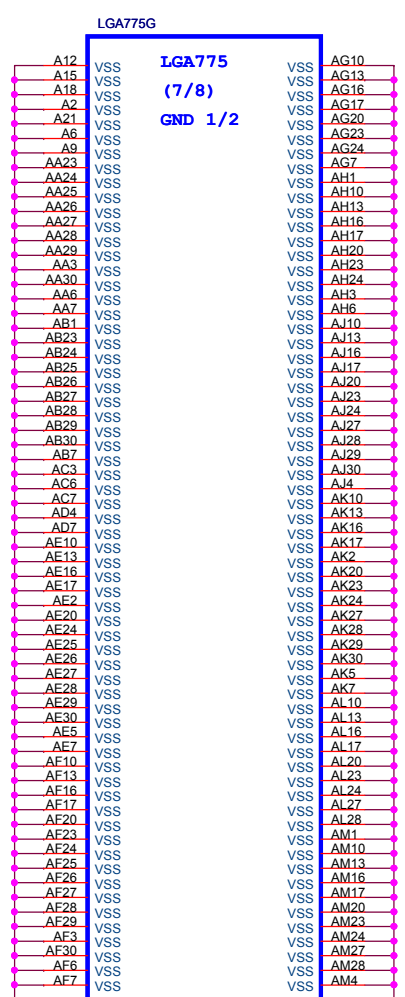
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Size B	Document Number GA-G41M-ES2L	Rev 1.01
Date: Tuesday, March 10, 2009	Sheet 5	of 33



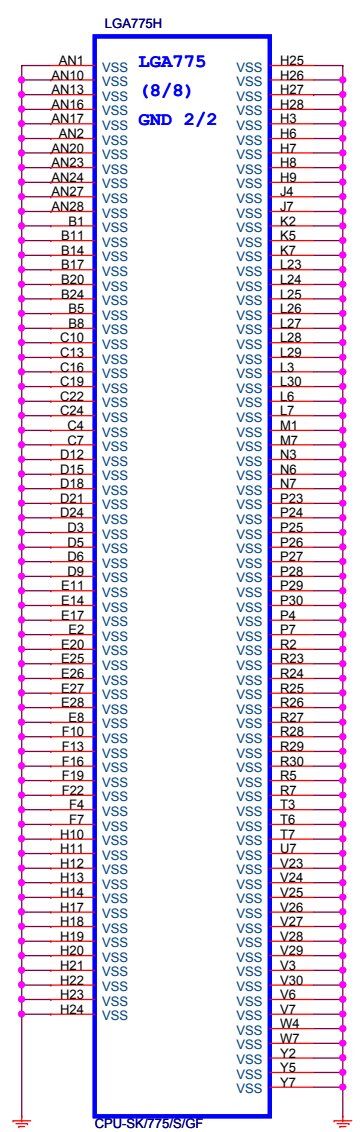
CPU-SK/775/S/GF



CPU-SK/775/S/GF

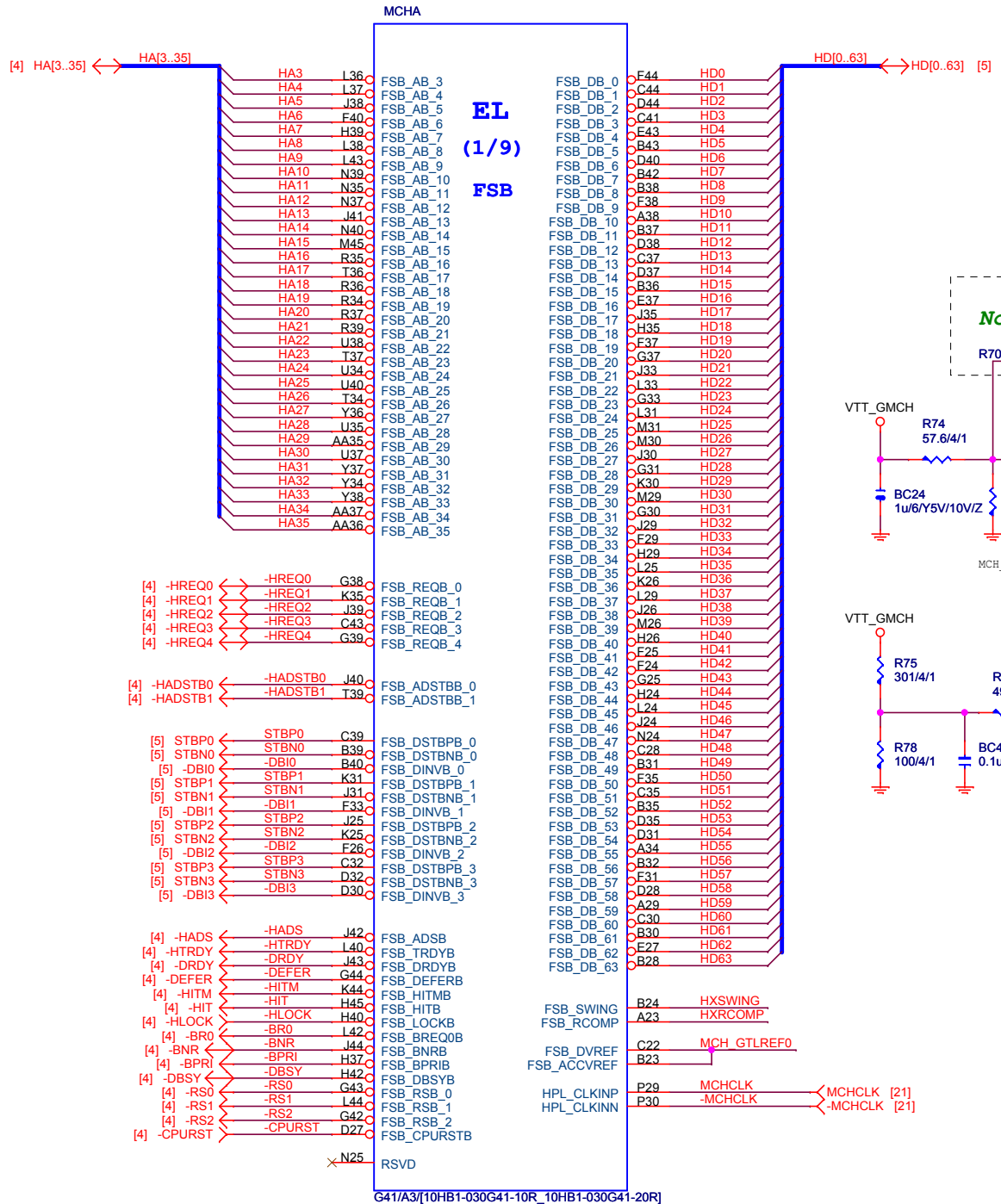


CPU-SK/775/S/GF

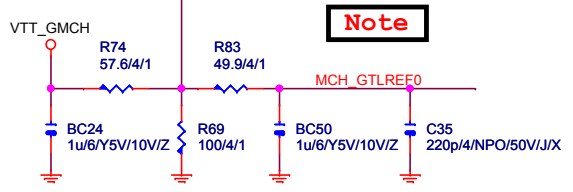


CPU-SK/775/S/GF

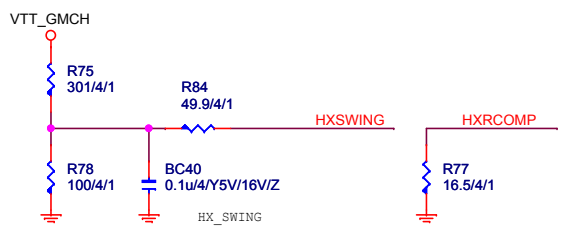
Gigabyte Technology		
Title P4_LGA775-E,F,G,H		
Size B	Document Number GA-G41M-ES2L	Rev 1.01
Date: Tuesday, March 10, 2009	Sheet 7	of 33



Not used for CoreTM2 Duo and Wolfdale

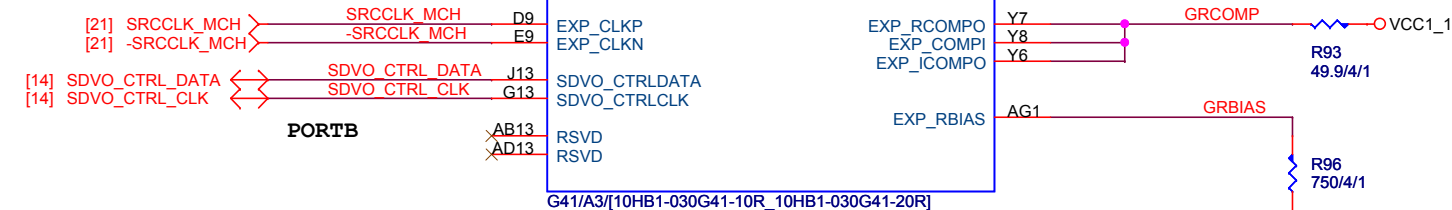
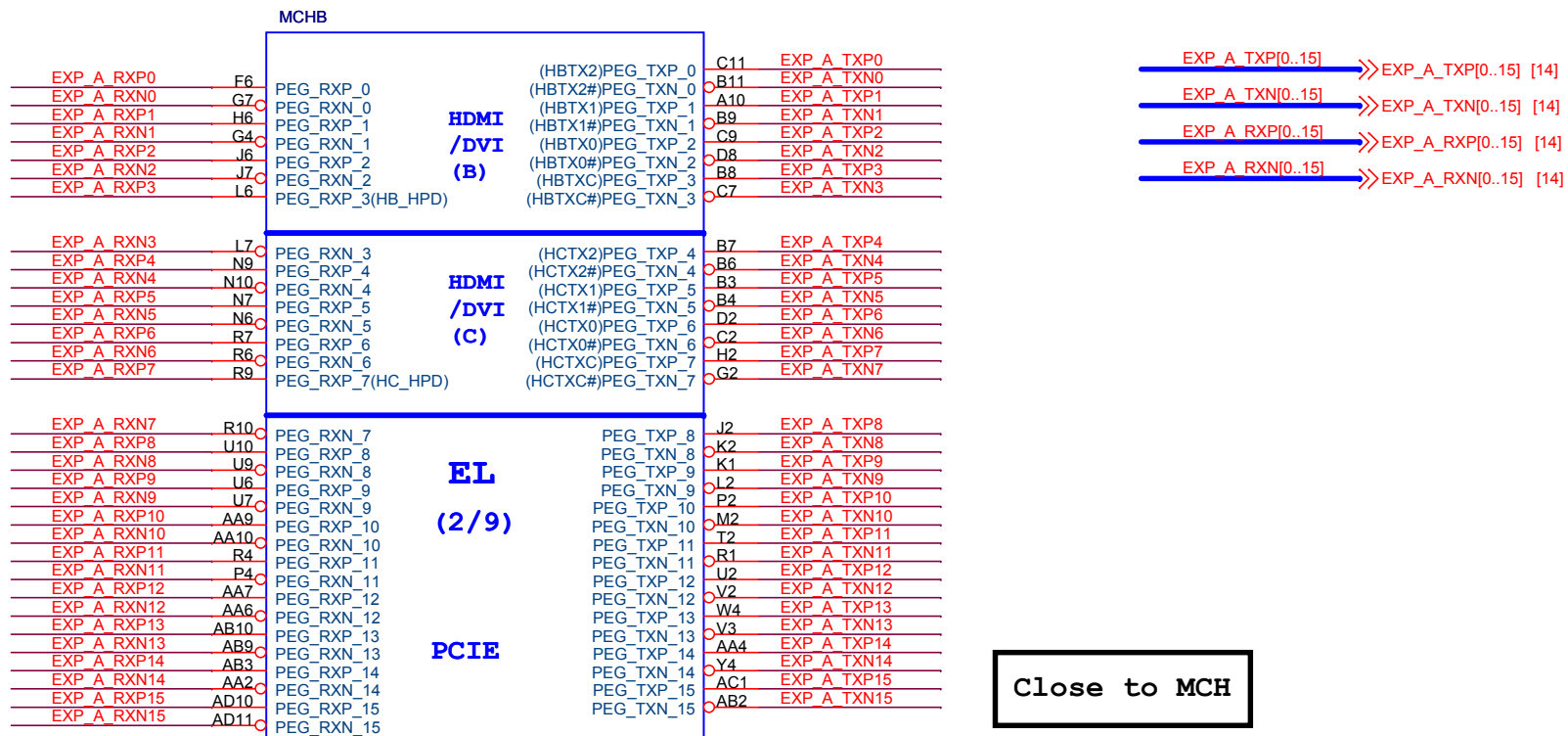


MCH_GTLREF VOLTAGE SHOULD BE 0.63 * VTT



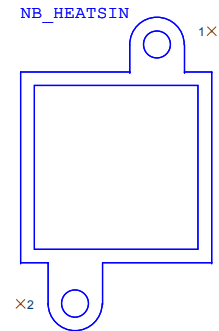
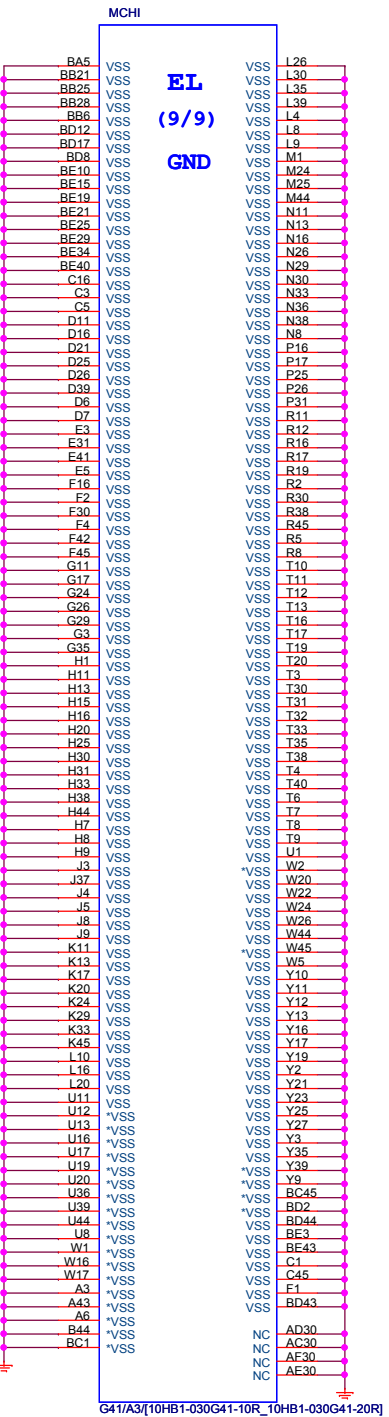
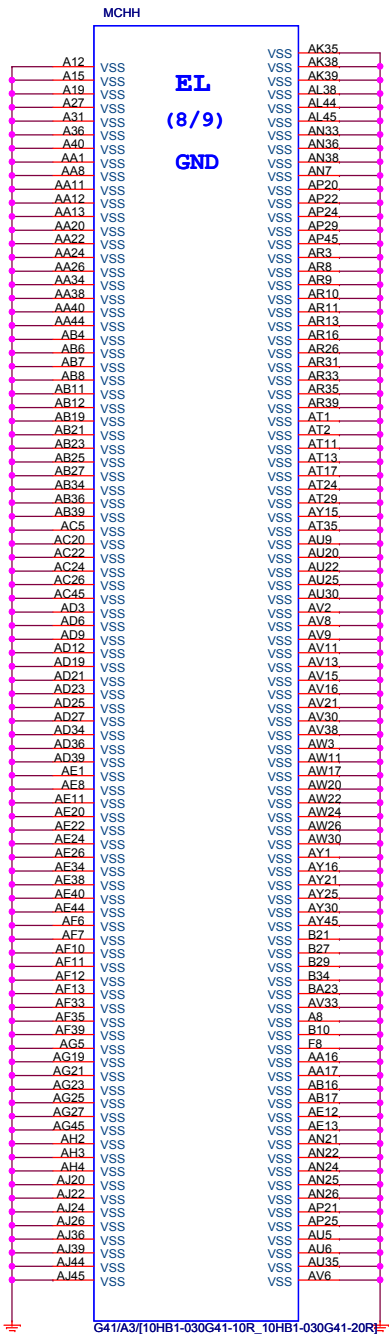
G41/A3/[10HB1-030G41-10R_10HB1-030G41-20R]

Gigabyte Technology		
GMCH-HOST		
Title		
Size	Document Number	Rev
Custom	GA-G41M-ES2L	1.01
Date:	Wednesday, March 18, 2009	Sheet 8 of 33



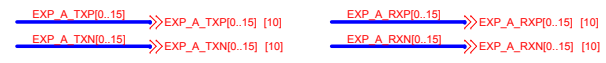
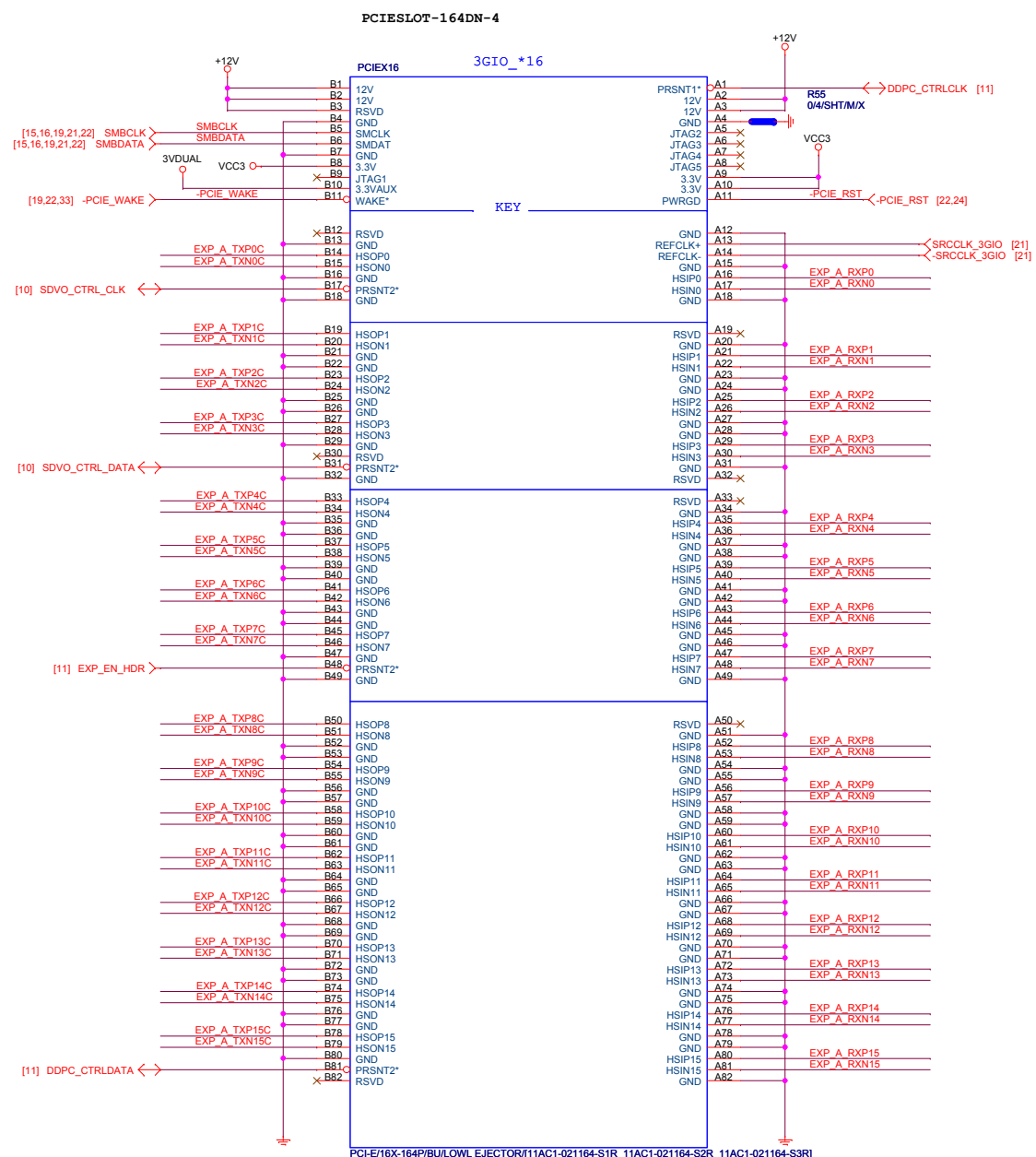
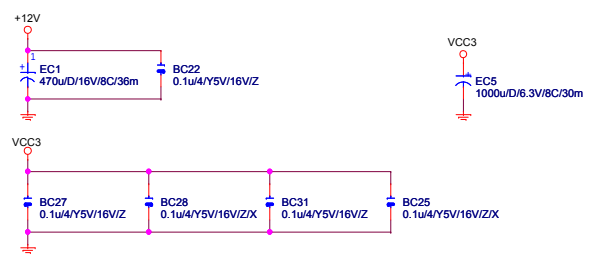
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Gigabyte Technology		
Title GMCH-PCI E & DMI		
Size Custom	Document Number GA-G41M-ES2L	Rev 1.01
Date:	Wednesday, March 18, 2009	Sheet 10 of 33



NB_HS
NB_HEATSINK[12SP2-04A004-42R_12SP2-04A004-43R]
BGASINK445A-L GRAY 20MM

Gigabyte Technology		
GMCH-GND		
Title	Document Number	Rev
	GA-G41M-ES2L	1.01
Date:	Wednesday, March 18, 2009	Sheet 12 of 33



EXP_A_TXP0	C30	0.1u/4/X7R/16V/K	EXP_A_TXP0C
EXP_A_TXN0	C29	0.1u/4/X7R/16V/K	EXP_A_TXN0C
EXP_A_TXP1	C31	0.1u/4/X7R/16V/K	EXP_A_TXP1C
EXP_A_TXN1	C32	0.1u/4/X7R/16V/K	EXP_A_TXN1C
EXP_A_TXP2	C33	0.1u/4/X7R/16V/K	EXP_A_TXP2C
EXP_A_TXN2	C34	0.1u/4/X7R/16V/K	EXP_A_TXN2C
EXP_A_TXP3	C37	0.1u/4/X7R/16V/K	EXP_A_TXP3C
EXP_A_TXN3	C38	0.1u/4/X7R/16V/K	EXP_A_TXN3C
EXP_A_TXP4	C39	0.1u/4/X7R/16V/K	EXP_A_TXP4C
EXP_A_TXN4	C40	0.1u/4/X7R/16V/K	EXP_A_TXN4C
EXP_A_TXP5	C42	0.1u/4/X7R/16V/K	EXP_A_TXP5C
EXP_A_TXN5	C41	0.1u/4/X7R/16V/K	EXP_A_TXN5C
EXP_A_TXP6	C44	0.1u/4/X7R/16V/K	EXP_A_TXP6C
EXP_A_TXN6	C43	0.1u/4/X7R/16V/K	EXP_A_TXN6C
EXP_A_TXP7	C47	0.1u/4/X7R/16V/K	EXP_A_TXP7C
EXP_A_TXN7	C45	0.1u/4/X7R/16V/K	EXP_A_TXN7C
EXP_A_TXP8	C48	0.1u/4/X7R/16V/K	EXP_A_TXP8C
EXP_A_TXN8	C49	0.1u/4/X7R/16V/K	EXP_A_TXN8C
EXP_A_TXP9	C59	0.1u/4/X7R/16V/K	EXP_A_TXP9C
EXP_A_TXN9	C60	0.1u/4/X7R/16V/K	EXP_A_TXN9C
EXP_A_TXP10	C63	0.1u/4/X7R/16V/K	EXP_A_TXP10C
EXP_A_TXN10	C62	0.1u/4/X7R/16V/K	EXP_A_TXN10C
EXP_A_TXP11	C67	0.1u/4/X7R/16V/K	EXP_A_TXP11C
EXP_A_TXN11	C64	0.1u/4/X7R/16V/K	EXP_A_TXN11C
EXP_A_TXP12	C69	0.1u/4/X7R/16V/K	EXP_A_TXP12C
EXP_A_TXN12	C70	0.1u/4/X7R/16V/K	EXP_A_TXN12C
EXP_A_TXP13	C73	0.1u/4/X7R/16V/K	EXP_A_TXP13C
EXP_A_TXN13	C72	0.1u/4/X7R/16V/K	EXP_A_TXN13C
EXP_A_TXP14	C76	0.1u/4/X7R/16V/K	EXP_A_TXP14C
EXP_A_TXN14	C74	0.1u/4/X7R/16V/K	EXP_A_TXN14C
EXP_A_TXP15	C78	0.1u/4/X7R/16V/K	EXP_A_TXP15C
EXP_A_TXN15	C77	0.1u/4/X7R/16V/K	EXP_A_TXN15C

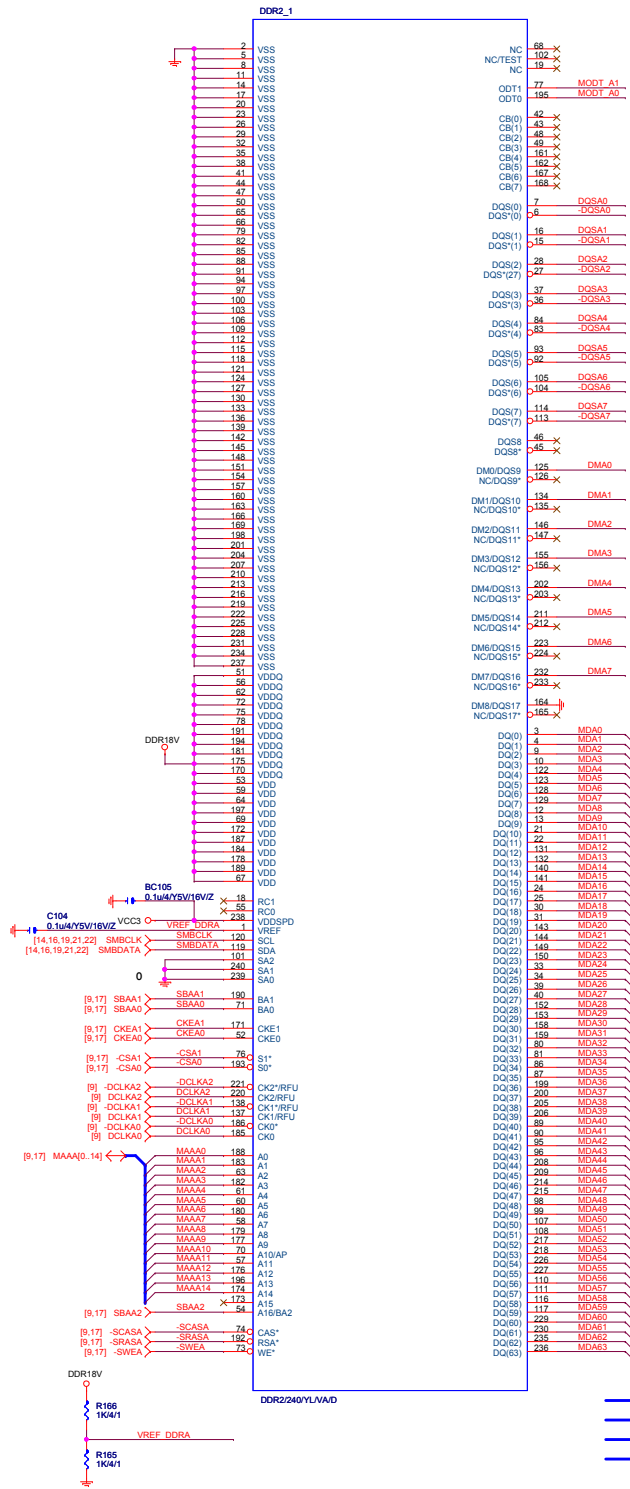
LOWV LEFT BLUE

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Title: PCI EXPRESS * 16

Size: Custom Document Number: **GA-G41M-ES2L** Rev: 1.0

Date: Tuesday, March 10, 2009 Sheet 14 of 33



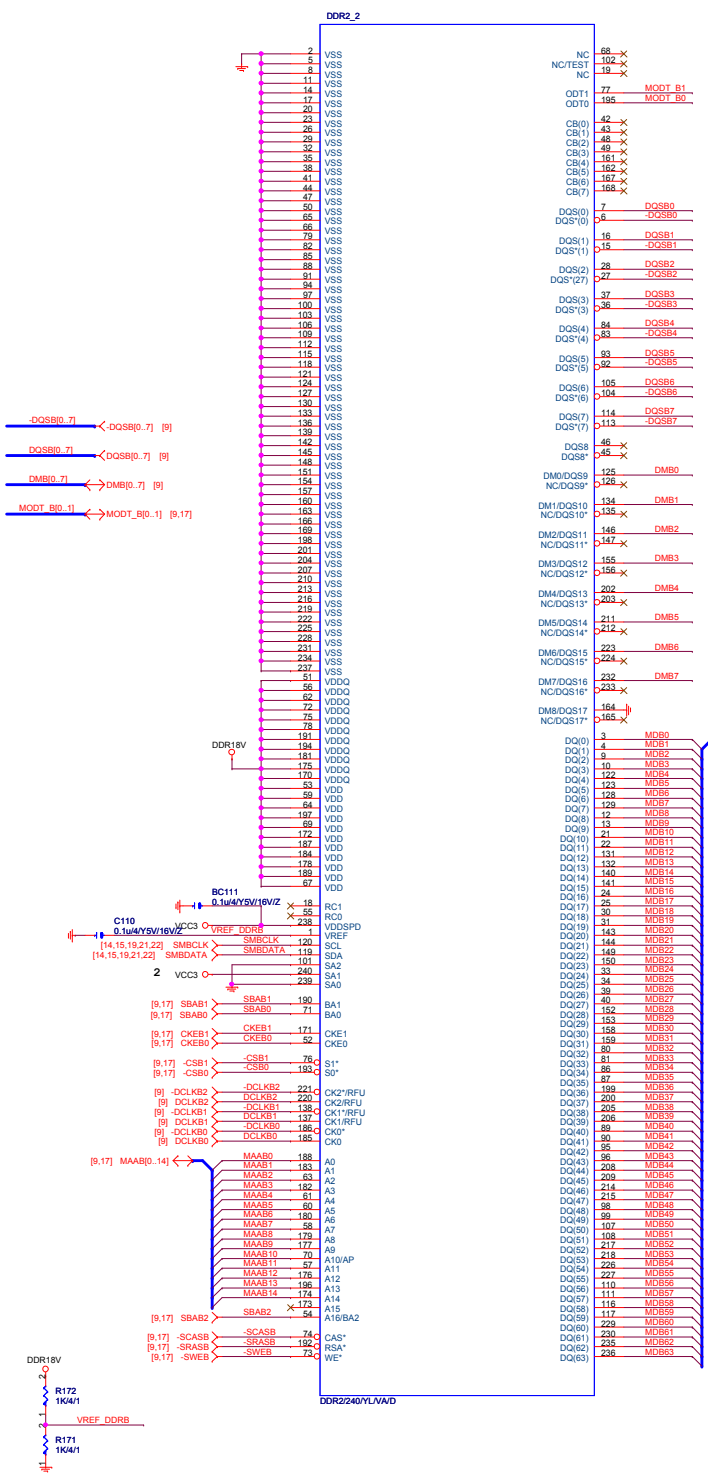
Gigabyte Technology

DDRII CHANNEL A

GA-G41M-ES2L

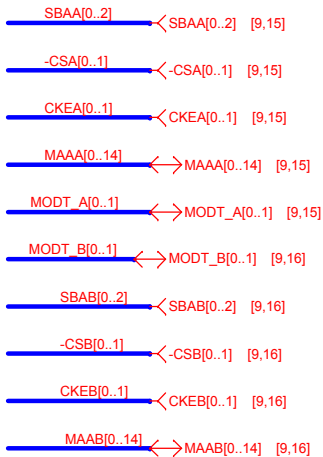
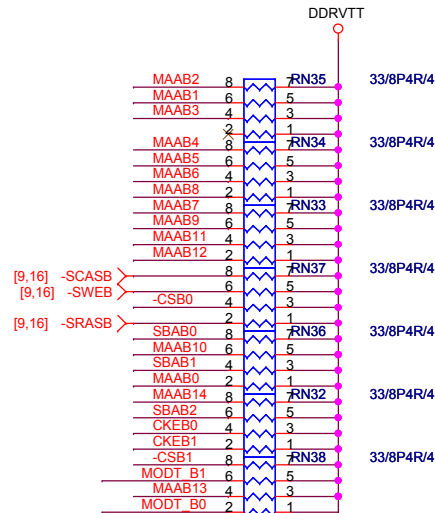
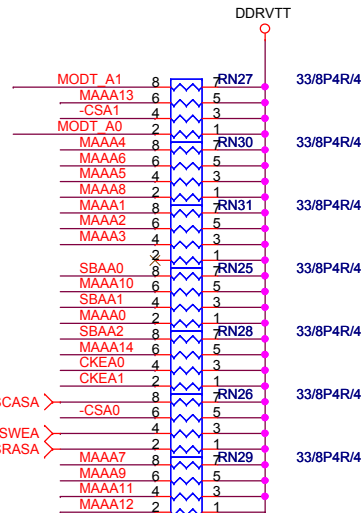
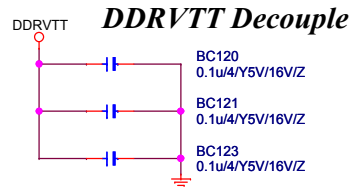
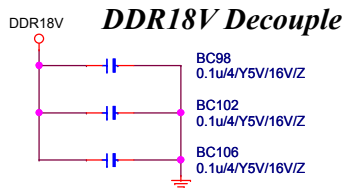
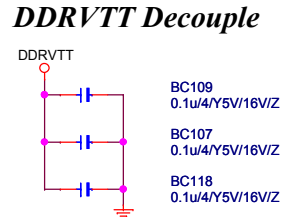
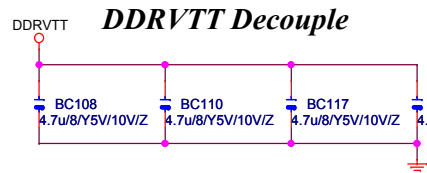
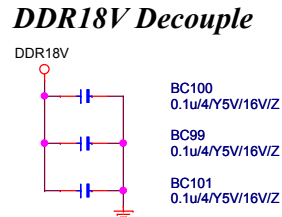
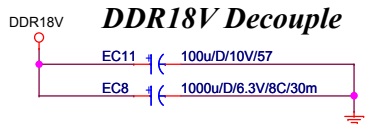
Rev 1.01

Date: _____ Sheet 15 of 33

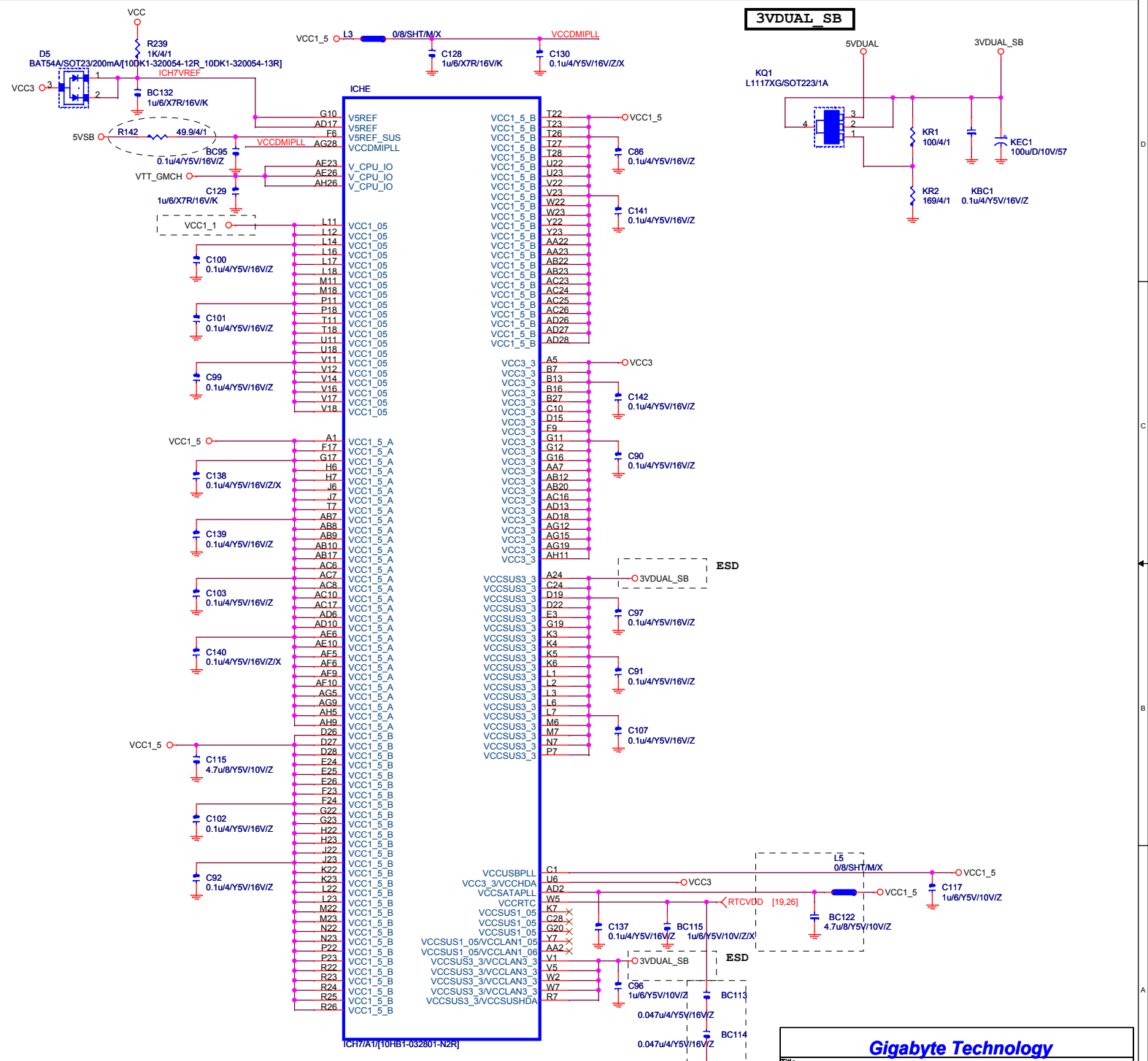


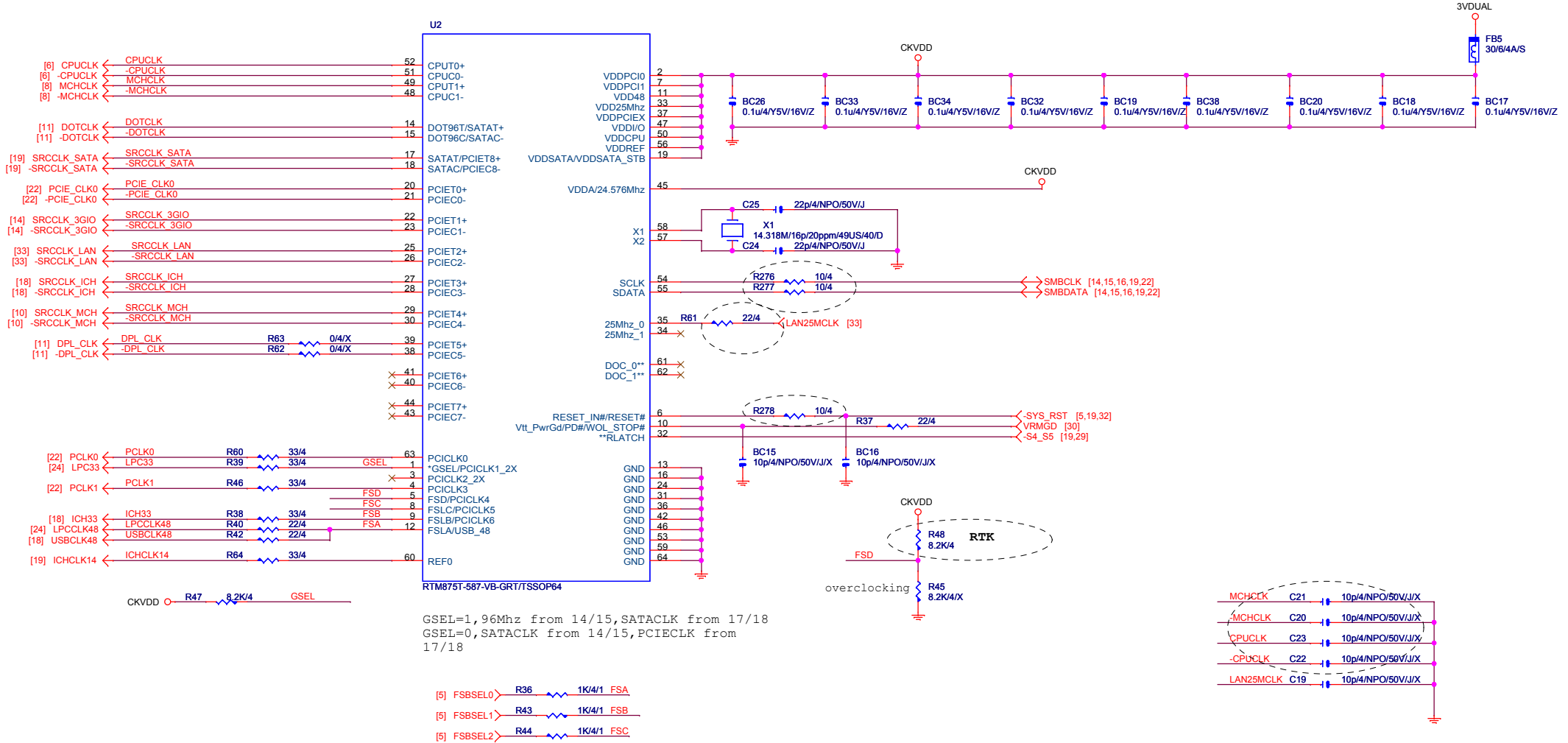
DDR TERMINATION CHANNEL A

DDR TERMINATION CHANNEL B

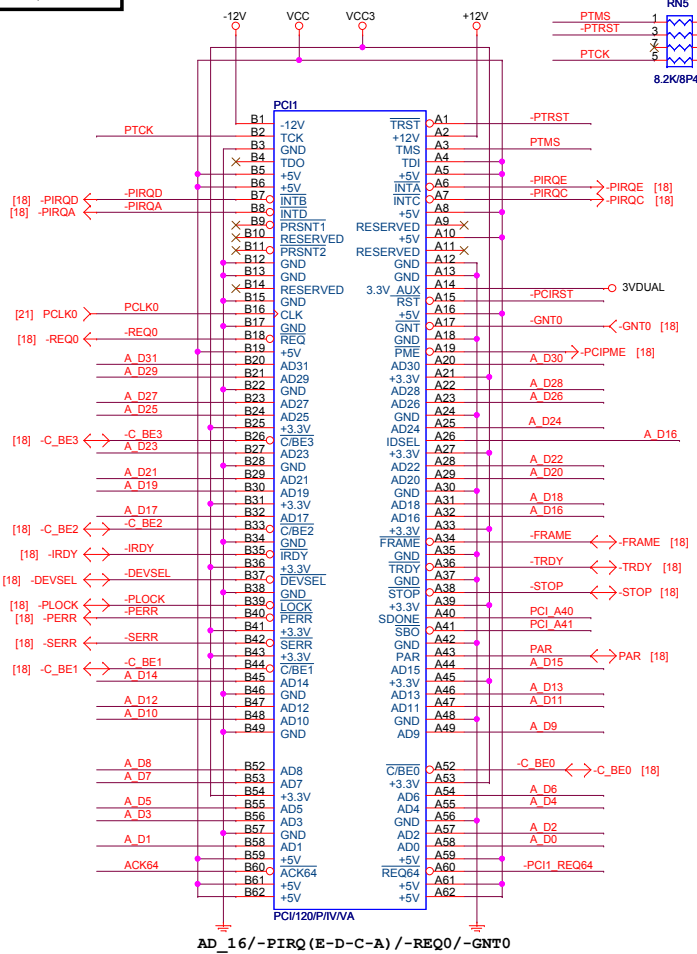


ICHF		
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A23	VSS2	VSS102
B1	VSS3	VSS103
B8	VSS4	VSS104
B11	VSS5	VSS105
B14	VSS6	VSS106
B17	VSS7	VSS107
B20	VSS8	VSS108
B26	VSS9	VSS109
B28	VSS10	VSS110
C2	VSS11	VSS111
D6	VSS12	VSS112
D10	VSS13	VSS113
D13	VSS14	VSS114
D18	VSS15	VSS115
D21	VSS16	VSS116
D24	VSS17	VSS117
E1	VSS18	VSS118
E2	VSS19	VSS119
E8	VSS20	VSS120
E15	VSS21	VSS121
F3	VSS22	VSS122
F4	VSS23	VSS123
F5	VSS24	VSS124
F2	VSS25	VSS125
F27	VSS26	VSS126
F28	VSS27	VSS127
G1	VSS28	VSS128
G2	VSS29	VSS129
G5	VSS30	VSS130
G6	VSS31	VSS131
G9	VSS32	VSS132
G14	VSS33	VSS133
G18	VSS34	VSS134
G21	VSS35	VSS135
G24	VSS36	VSS136
G25	VSS37	VSS137
G26	VSS38	VSS138
H3	VSS39	VSS139
H4	VSS40	VSS140
H24	VSS41	VSS141
H27	VSS42	VSS142
H28	VSS43	VSS143
J1	VSS44	VSS144
J2	VSS45	VSS145
J5	VSS46	VSS146
J24	VSS47	VSS147
J25	VSS48	VSS148
J26	VSS49	VSS149
K24	VSS50	VSS150
K27	VSS51	VSS151
K28	VSS52	VSS152
L13	VSS53	VSS153
L15	VSS54	VSS154
L24	VSS55	VSS155
L25	VSS56	VSS156
L26	VSS57	VSS157
M3	VSS58	VSS158
M4	VSS59	VSS159
M5	VSS60	VSS160
M12	VSS61	VSS161
M13	VSS62	VSS162
M14	VSS63	VSS163
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M27	VSS68	VSS168
M28	VSS69	VSS169
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N11	VSS74	VSS174
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N13	VSS76	VSS176
N14	VSS77	VSS177
N15	VSS78	VSS178
N16	VSS79	VSS179
N17	VSS80	VSS180
N18	VSS81	VSS181
N24	VSS82	VSS182
N25	VSS83	VSS183
N26	VSS84	VSS184
P3	VSS85	VSS185
P4	VSS86	VSS186
P12	VSS87	VSS187
P13	VSS88	VSS188
P14	VSS89	VSS189
P15	VSS90	VSS190
P16	VSS91	VSS191
P17	VSS92	VSS192
P24	VSS93	VSS193
P27	VSS94	VSS194
P28	VSS95	VSS195
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R11	VSS97	VSS197
R12	VSS98	VSS198
R13	VSS99	VSS199
	VSS100	VSS200

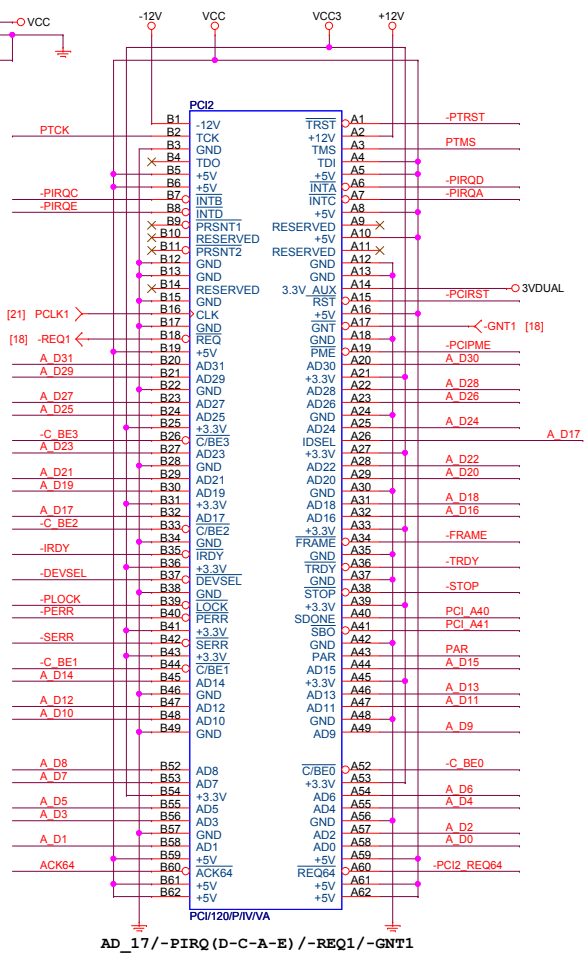




PCI1, 2 SLOT

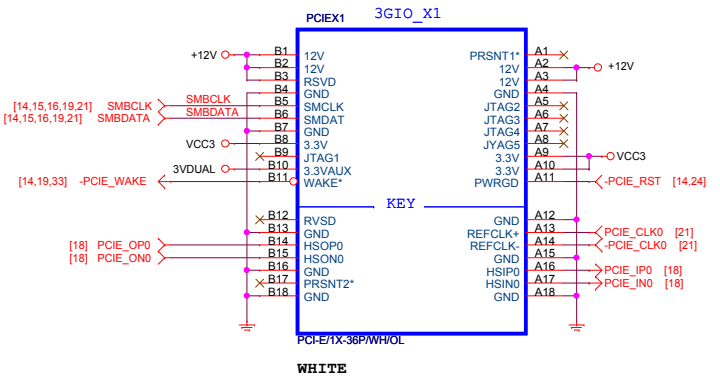


AD_16/-PIRQ (E-D-C-A) /-REQ0/-GNT0



AD_17/-PIRQ (D-C-A-E) /-REQ1/-GNT1

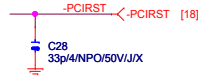
PCIEX*1



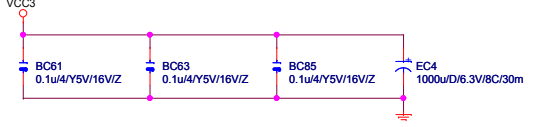
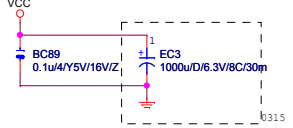
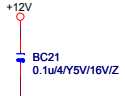
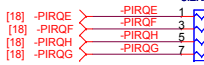
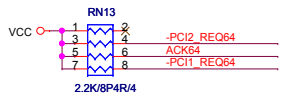
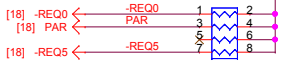
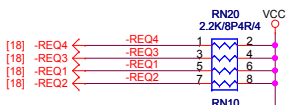
PCIEX1 3GIO_X1

WHITE

[18] A_D[0..31] ↔ A_D0..31



Place close to PC11

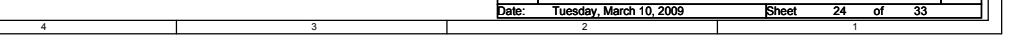
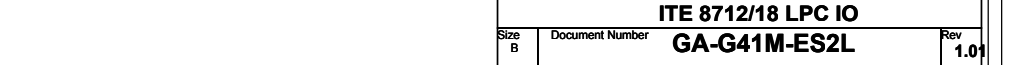
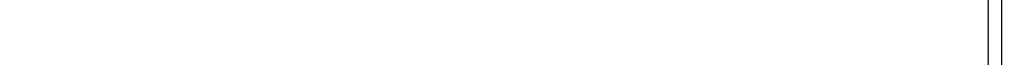
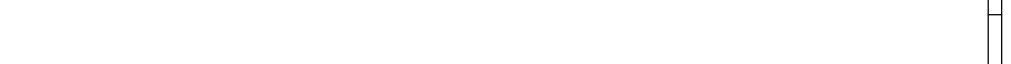
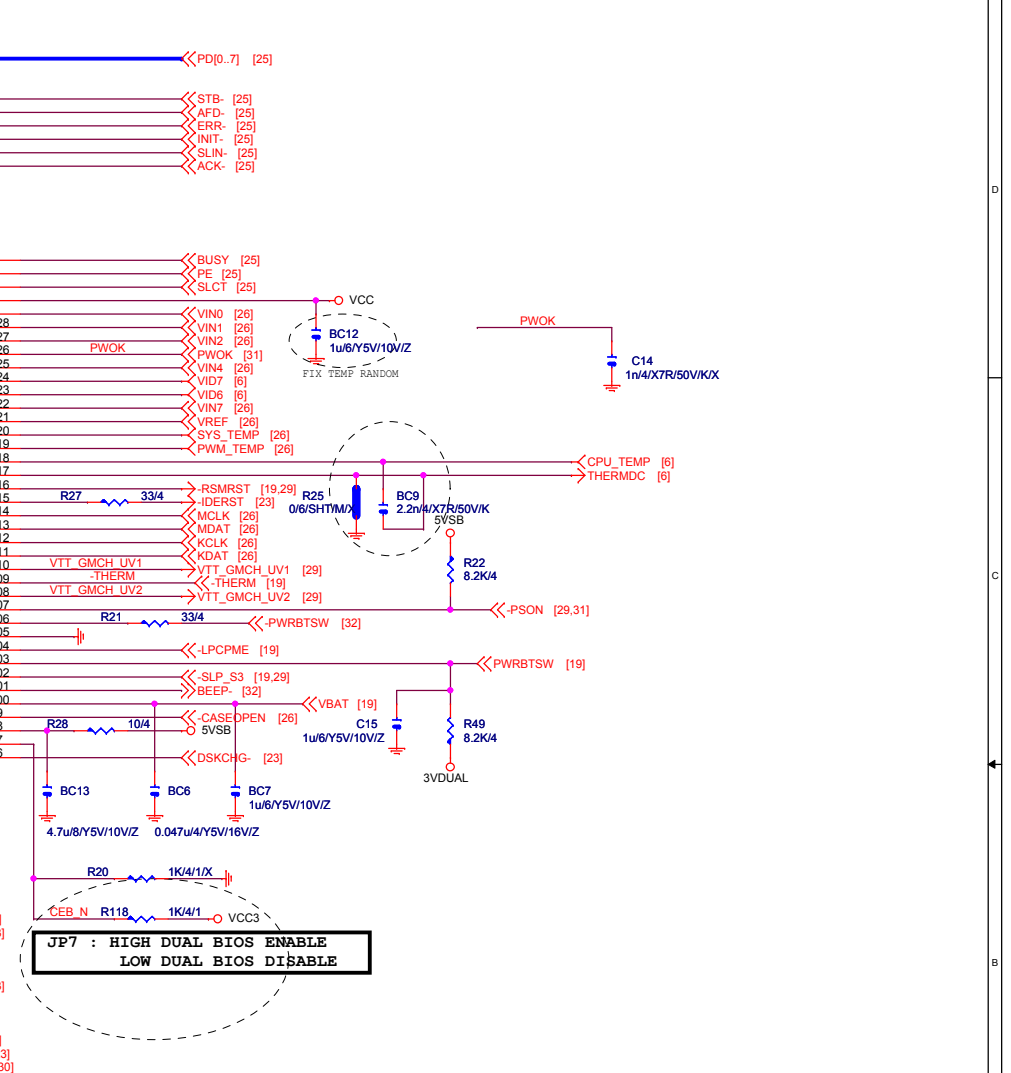
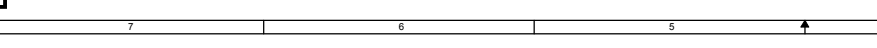
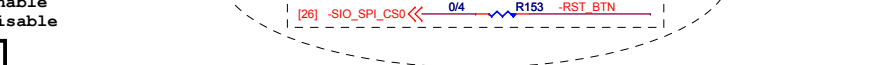
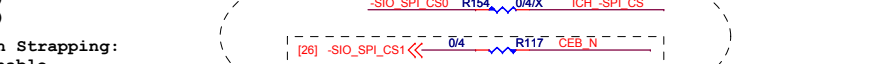
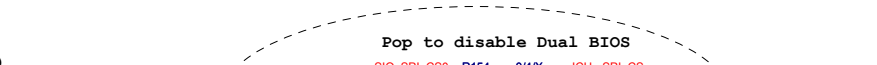
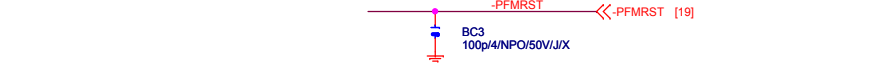
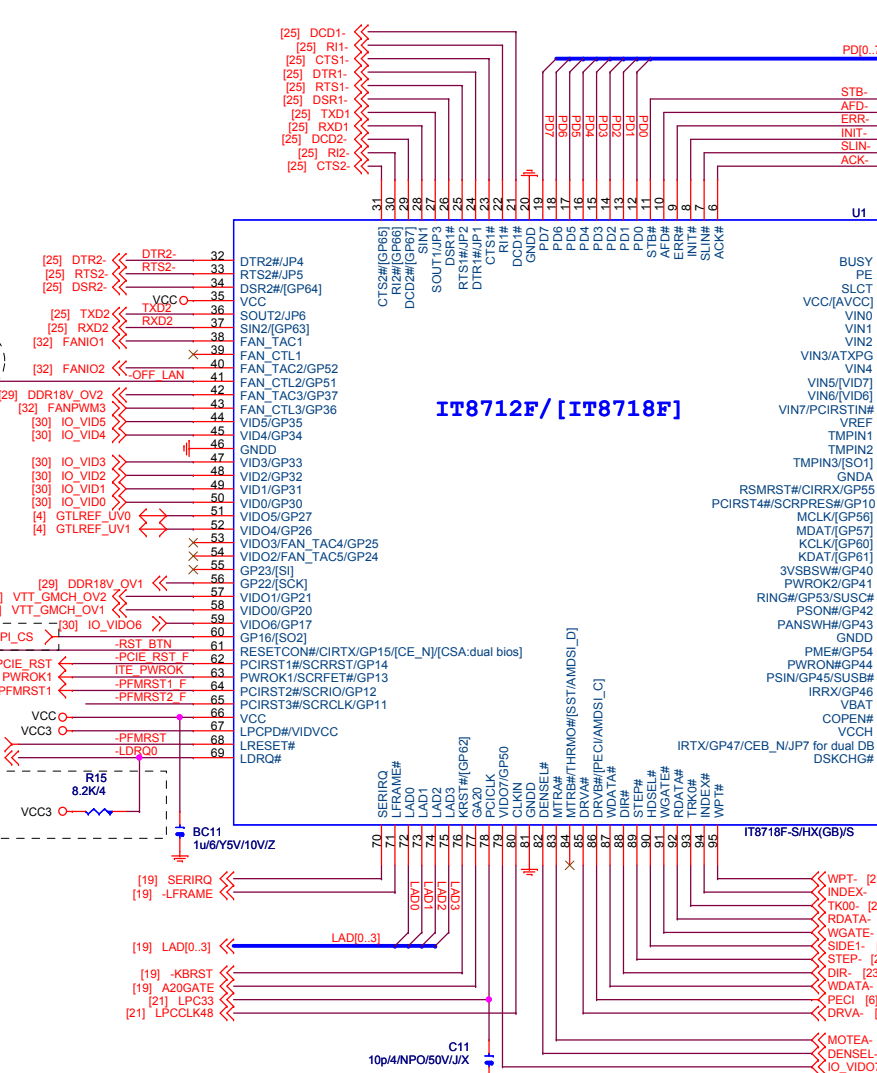
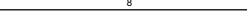
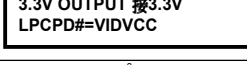
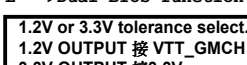
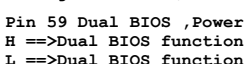
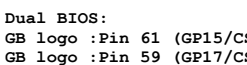
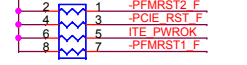
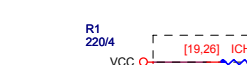
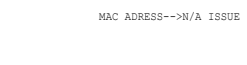
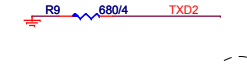
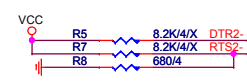


Gigabyte Technology

Title			PCI SLOT 1, 2/PCIEX1		
Size	Document Number	Rev		1.01	
Custom	GA-G41M-ES2L				
Date:	Tuesday, March 10, 2009	Sheet	22	of	33

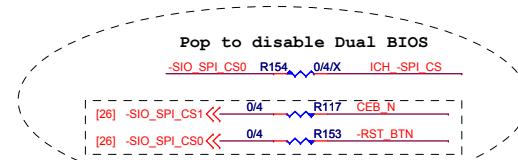
RTS2- ==LOW CPU FAN 50%
 ==HIGH 100%

DEFAULT 50%



Dual BIOS:
 GB logo : Pin 61 (GP15/CSA)
 GB logo : Pin 59 (GP17/CSB)
 Pin 59 Dual BIOS ,Power On Strapping:
 H ==>Dual BIOS function Enable
 L ==>Dual BIOS function Disable

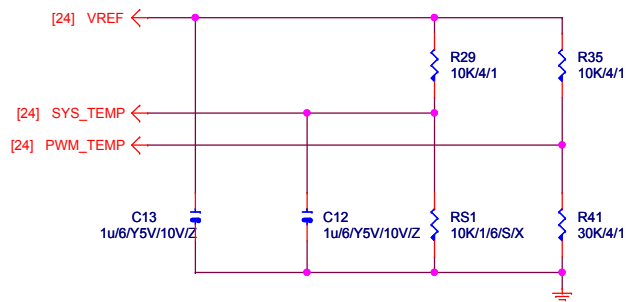
1.2V or 3.3V tolerance select.
 1.2V OUTPUT 接 VTT_GMCH
 3.3V OUTPUT 接 3.3V
 LPCPD#=#VIDVCC



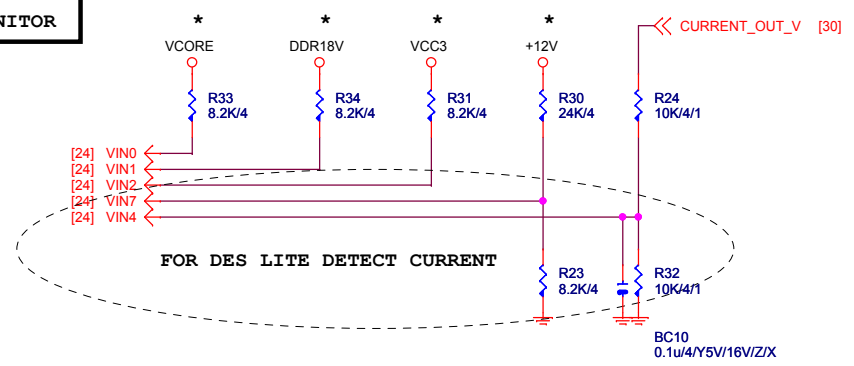
JP7 : HIGH DUAL BIOS ENABLE
 LOW DUAL BIOS DISABLE

Gigabyte Technology		
Title ITE 8712/18 LPC IO		
Size B	Document Number GA-G41M-ES2L	Rev 1.0†
Date: Tuesday, March 10, 2009	Sheet 24	of 33

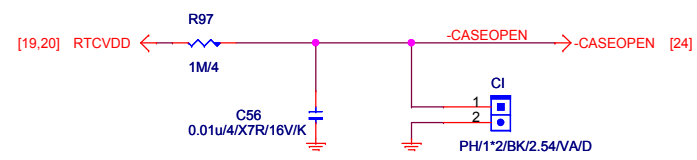
TEMP H/W MONITOR



VOLTAGE-- H/W MONITOR

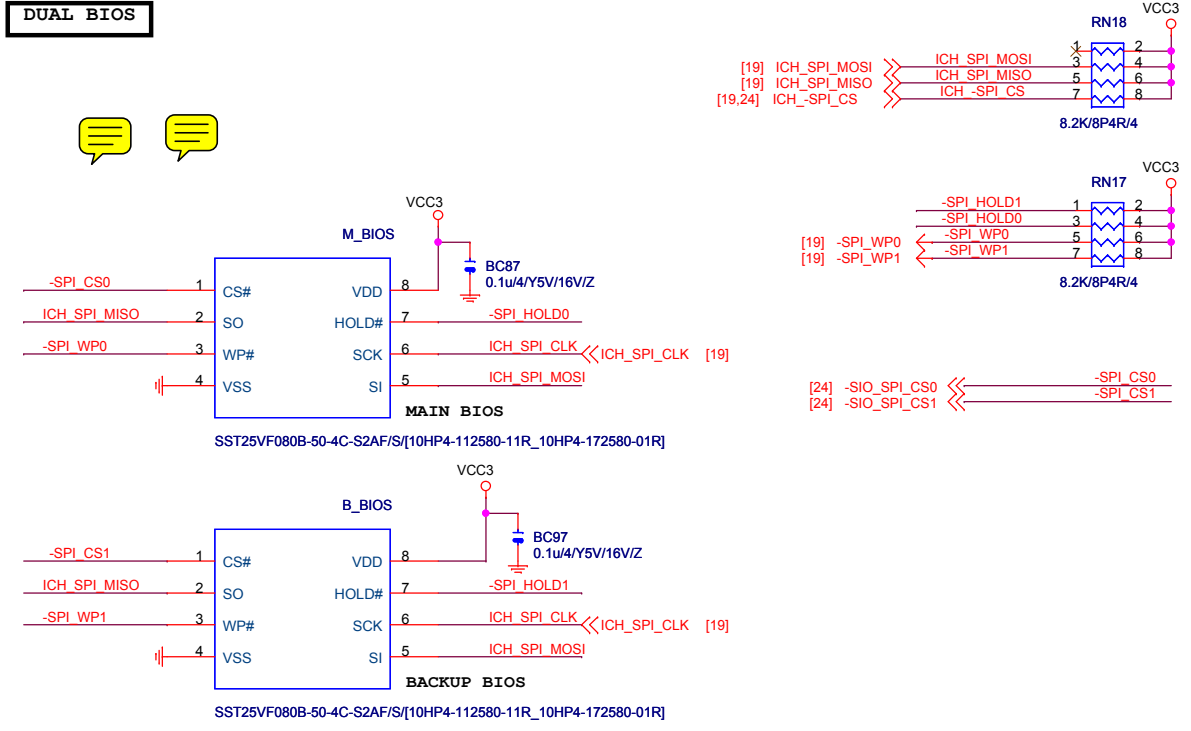


CASE OPEN

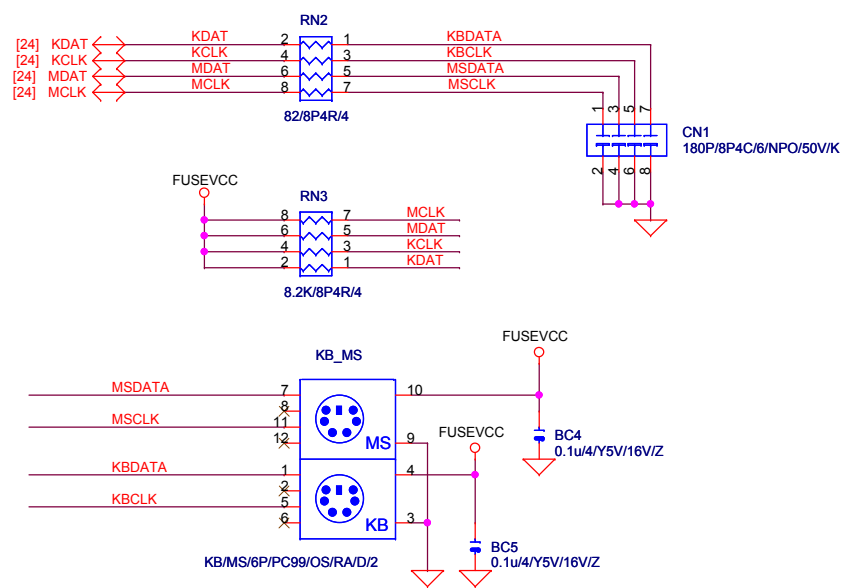


Case Open Circuits

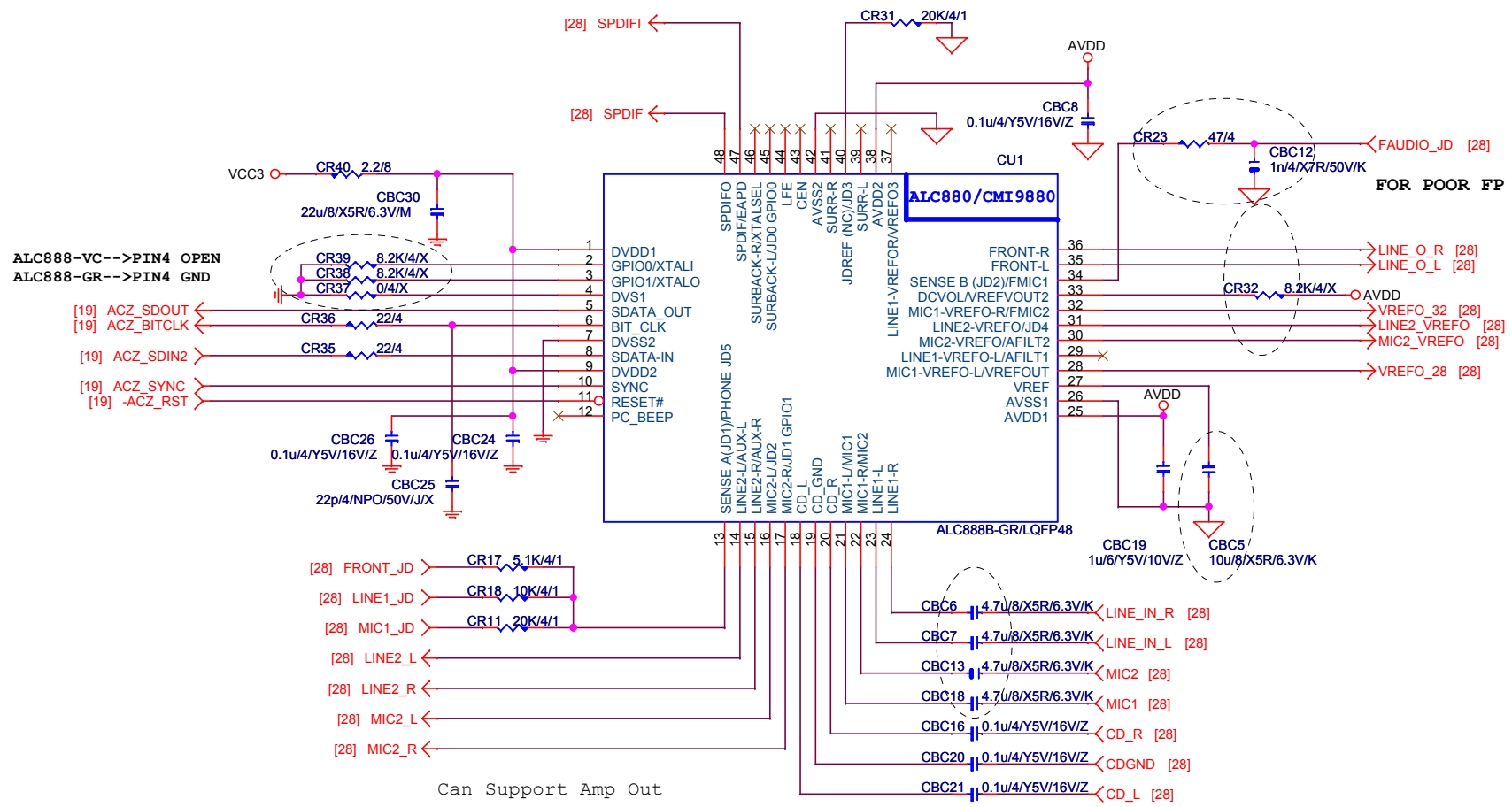
DUAL BIOS



KB/MS



Gigabyte Technology			
HW-MONITOR/CI/KB/MS/BIOS			
Size	Document Number	GA-G41M-ES2L	
Custom			Rev 1.01
Date:	Tuesday, March 10, 2009	Sheet	26 of 33

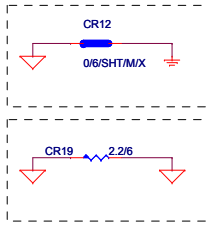
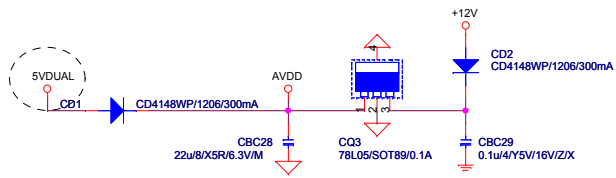


Can Support Amp Out

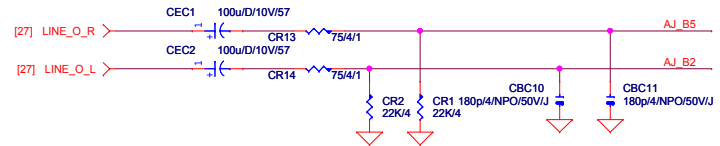
Gigabyte Technology

Title		
AZALIA ALC888B		
Size Custom	Document Number	Rev
	GA-G41M-ES2L	1.01
Date:	Tuesday, March 10, 2009	Sheet 27 of 33

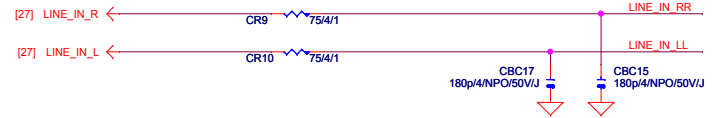
CODEC POWER/EMI PAD



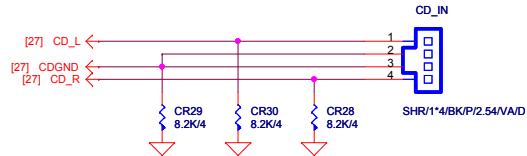
LINE-OUT



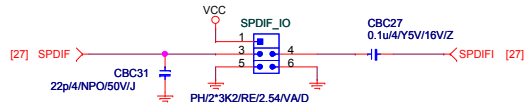
LINE-IN



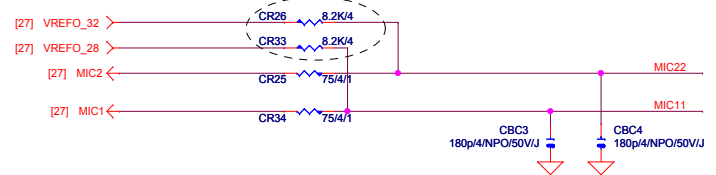
CD IN



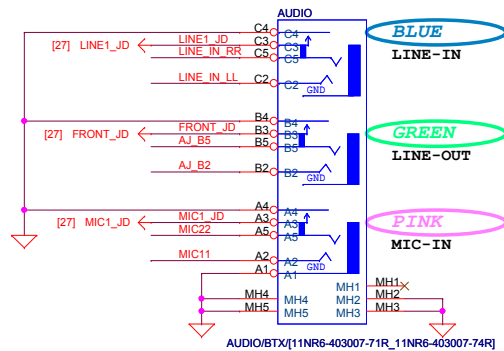
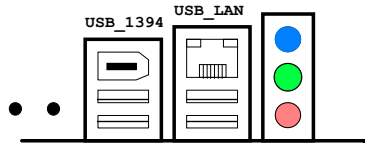
SPDIF IN



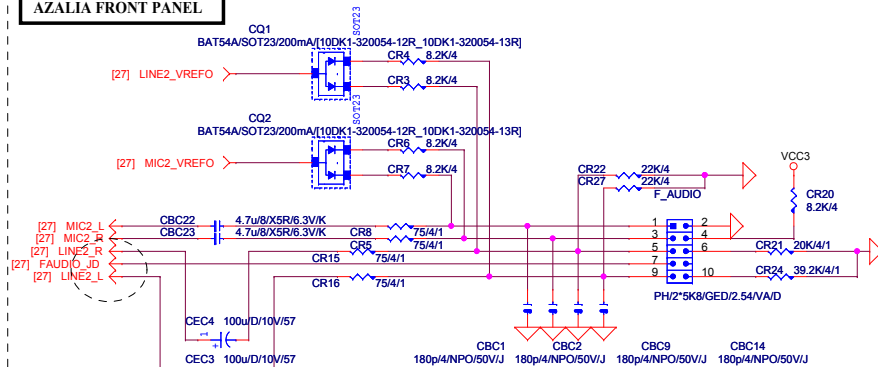
MIC-IN



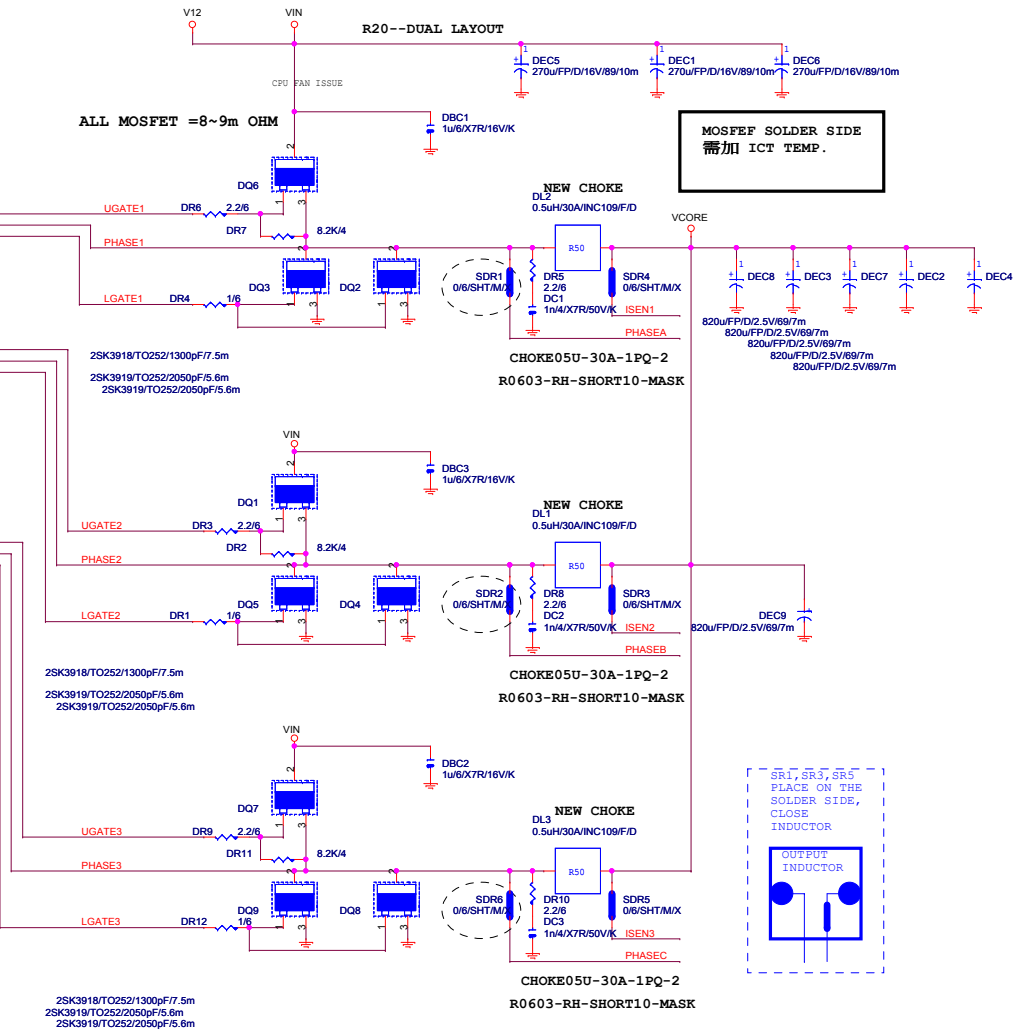
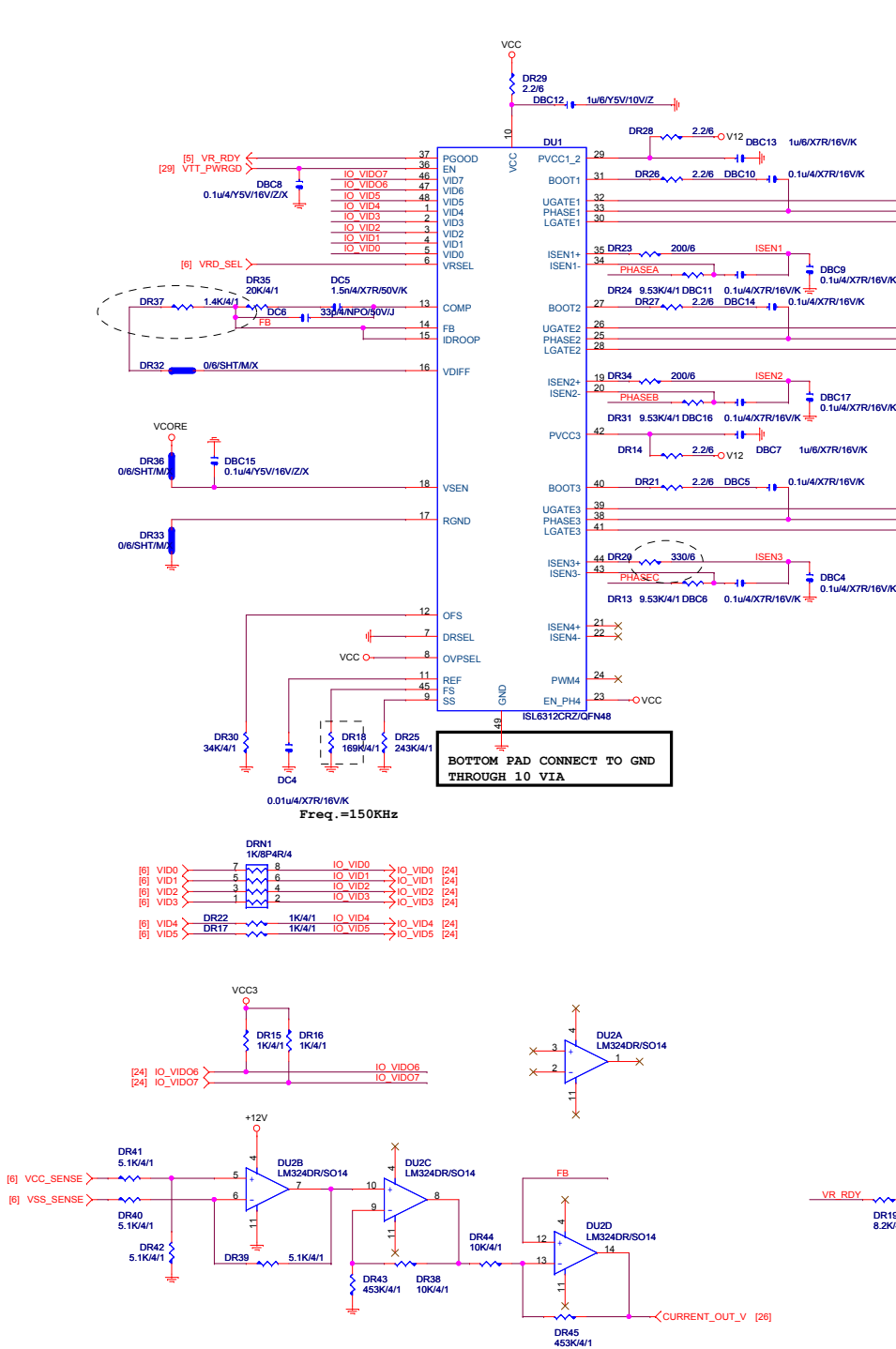
AZALIA JACK



AZALIA FRONT PANEL

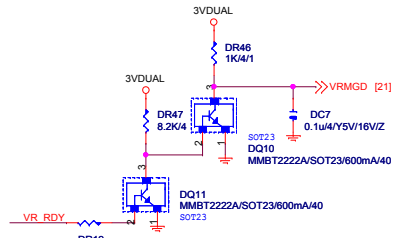


Gigabyte Technology		
AUDIO JACK		
Title	Document Number	Rev
	GA-G41M-ES2L	1.0
Date:	Tuesday, March 10, 2009	Sheet 28 of 33

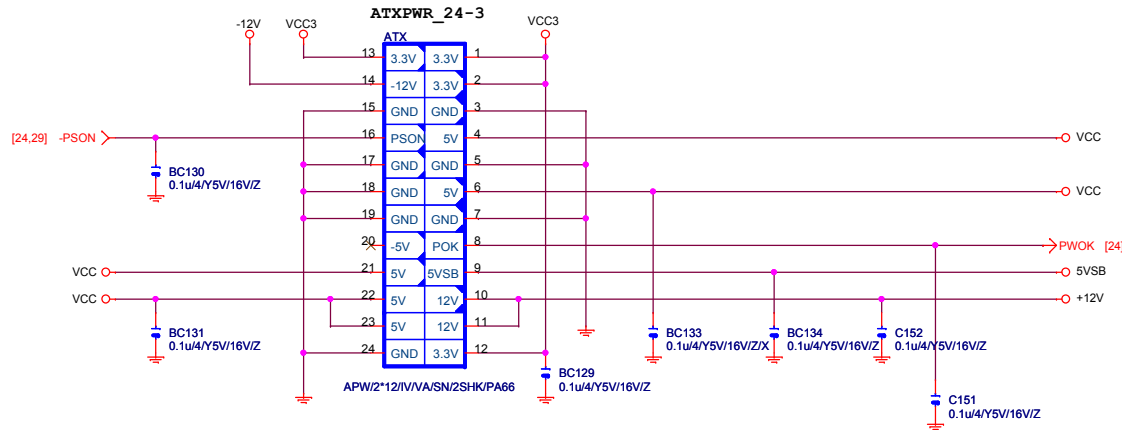


MOSFET SOLDER SIDE
需加 ICT TEMP.

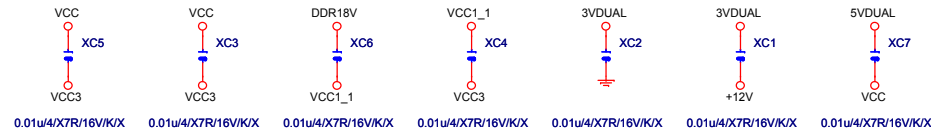
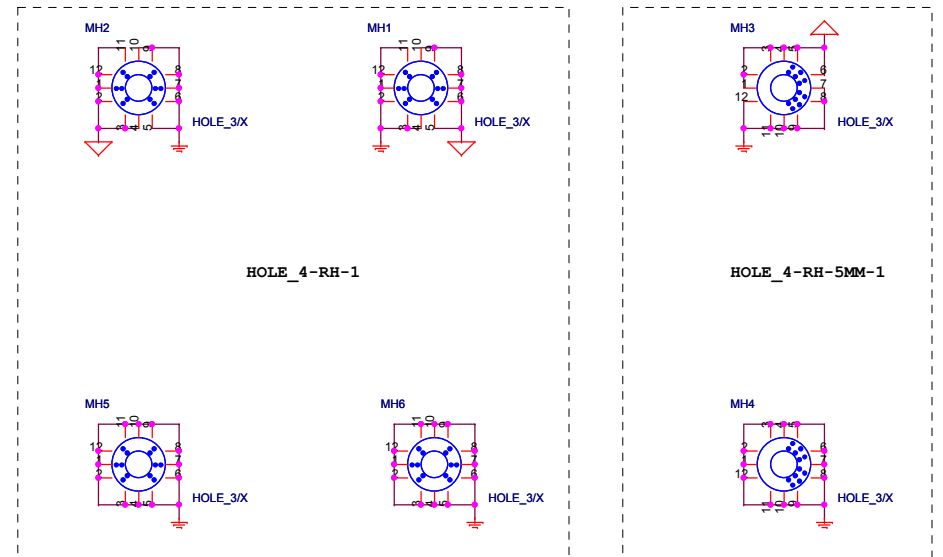
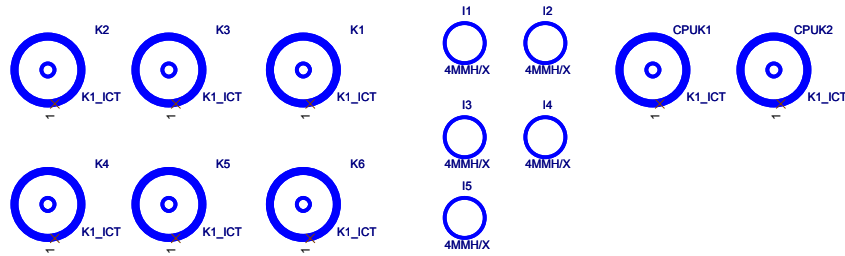
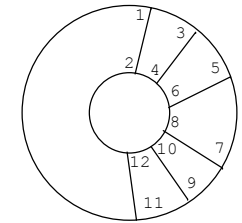
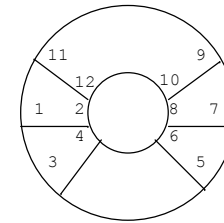
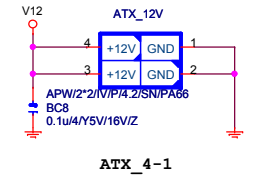
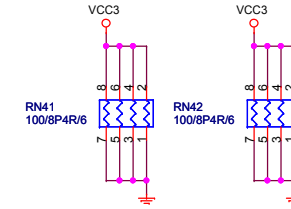
S1, S2, S3
PLACE ON THE
SOLDER SIDE,
CLOSE
INDUCTOR



ATX POWER CONNECTOR



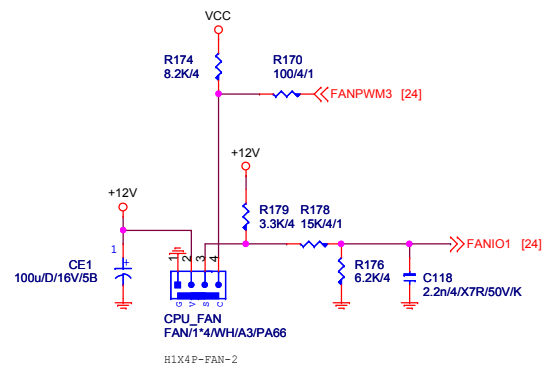
FIX PWR AcBel (ATX-400C-A2ADB)



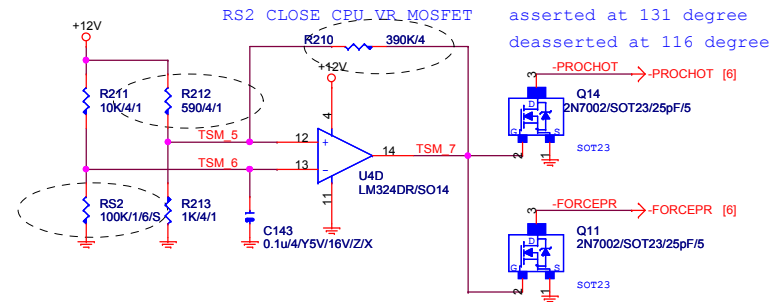
Gigabyte Technology

Title			ATX POWER CONNECTOR		
Size B	Document Number	GA-G41M-ES2L			Rev
					1.0
Date:	Friday, April 03, 2009	Sheet	31	of	33

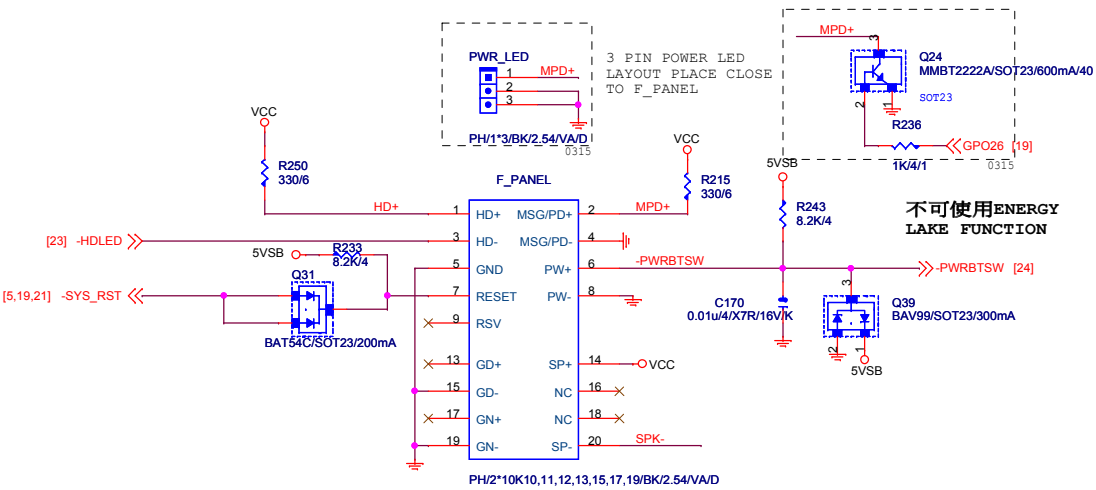
CPU SMART FAN SMART FAN



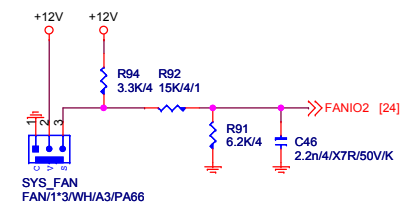
PROCESSOR HOT



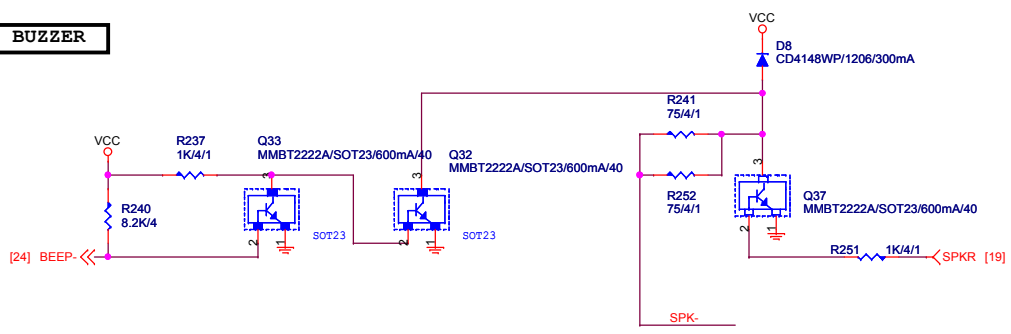
INTEL FRONT PANEL



SYS_FAN



BUZZER



Gigabyte Technology		
FRONT PANEL		
Size Custom	Document Number GA-G41M-ES2L	Rev 1.01
Date: Tuesday, March 10, 2009	Sheet 32	of 33

