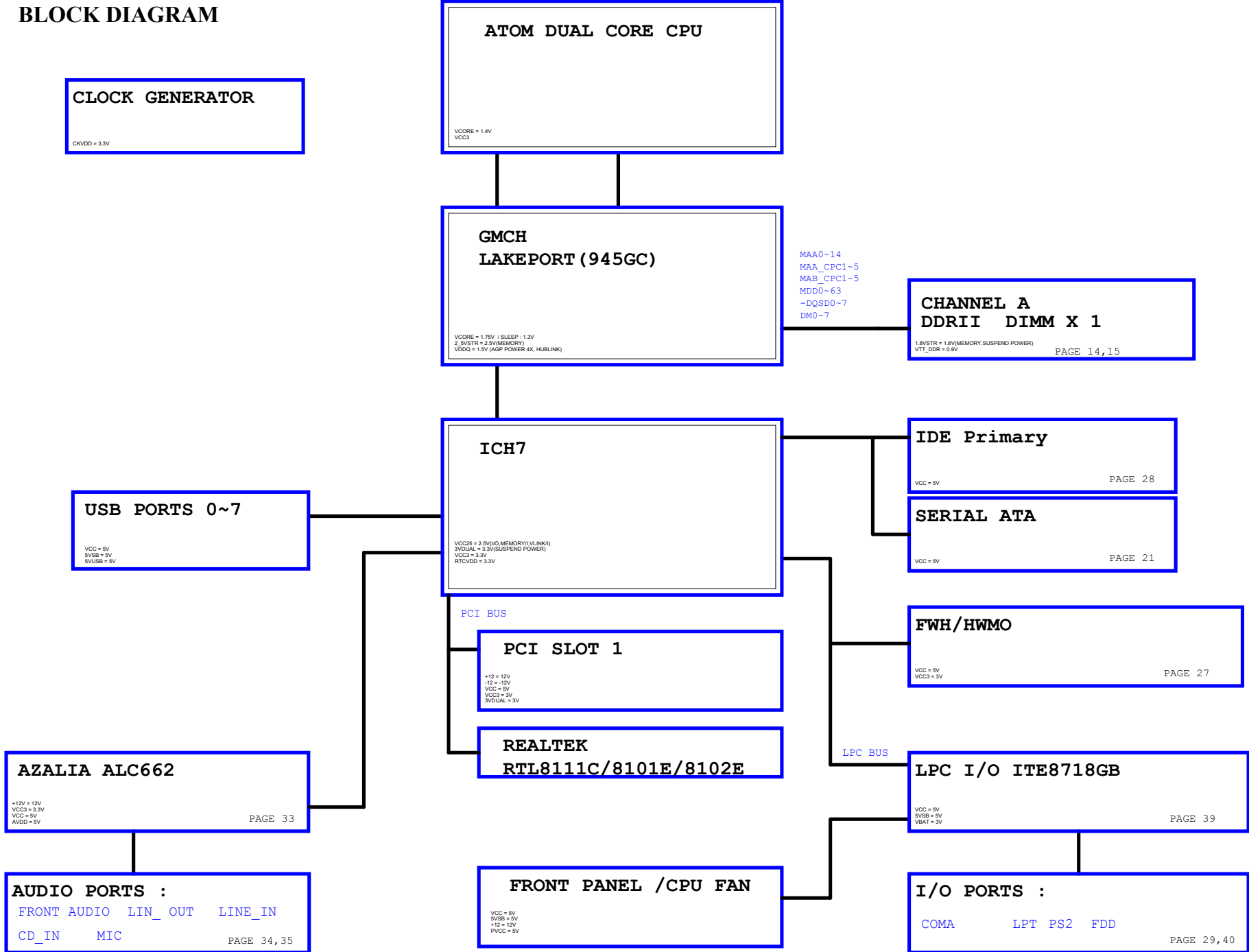


SHEET

TITLE

01	COVER SHEET
02	BLOCK DIAGRAM
03	BOM & PCB MODIFY HISTORY
04	ATOM DUAL CORE CPU
05	ATOM DUAL CORE CPU
06	GMCH-LAKEPORT HOST
07	GMCH-LAKEPORT DDRII
08	GMCH-LAKEPORT PCI E, DMI
09	GMCH-LAKEPORT INT VGA
10	GMCH-LAKEPORT GND
11	GMCH-LAKEPORT PWR
12	DDRII CHANNEL A
13	ICH7 PCI, USB, DMI, LAN
14	ICH7 IDE,GPIO,SATA,CTRL,DU BIOS
15	ICH7 VCC, GND
16	GB/CK505-OC CLOCK.
17	PCI SLOT
18	IDE
19	ITE 8718 GB
20	COM,LPT
21	CI,HWM,KB/MS
22	AZALIA ALC662
23	REAR AUDIO JACK
24	DISCRETE POWER
25	ATX,OTHERS POWER
26	REALTEK RTL8111C/8101E/8102E
27	VCORE PWM ISL6314
28	FRONT PANEL

BLOCK DIAGRAM



Model Name: GA-GC330UD

Version: 1.0

Component value change history

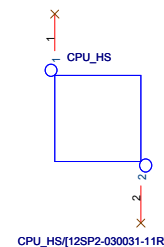
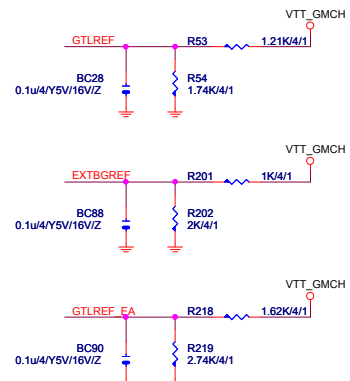
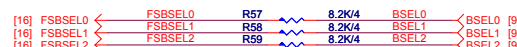
2009/02/23

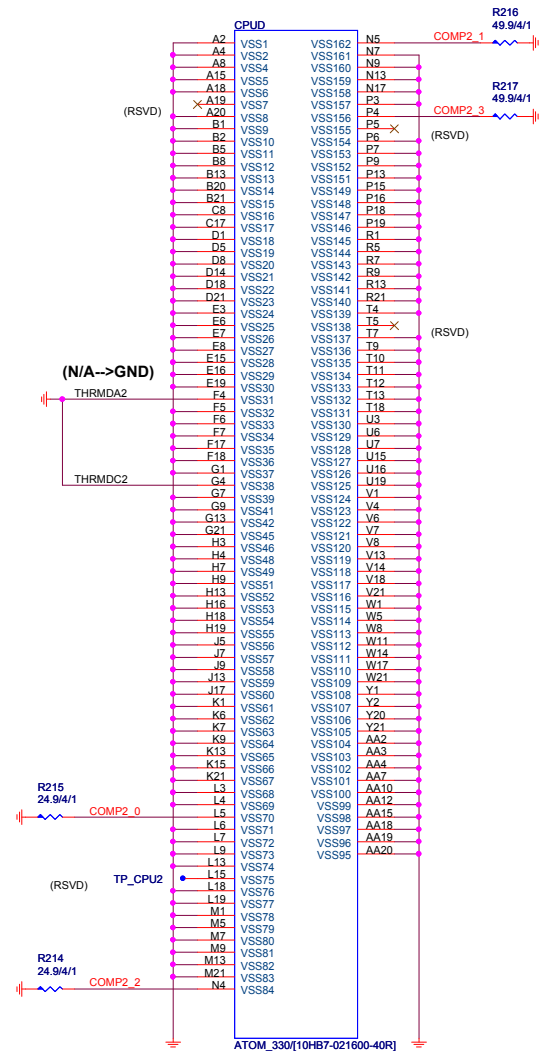
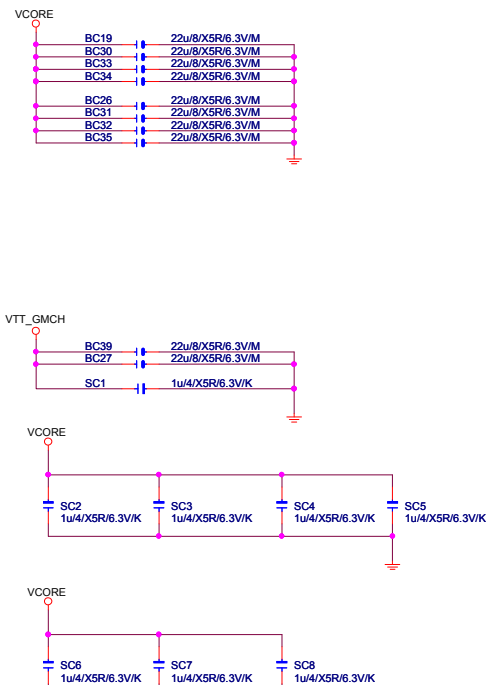
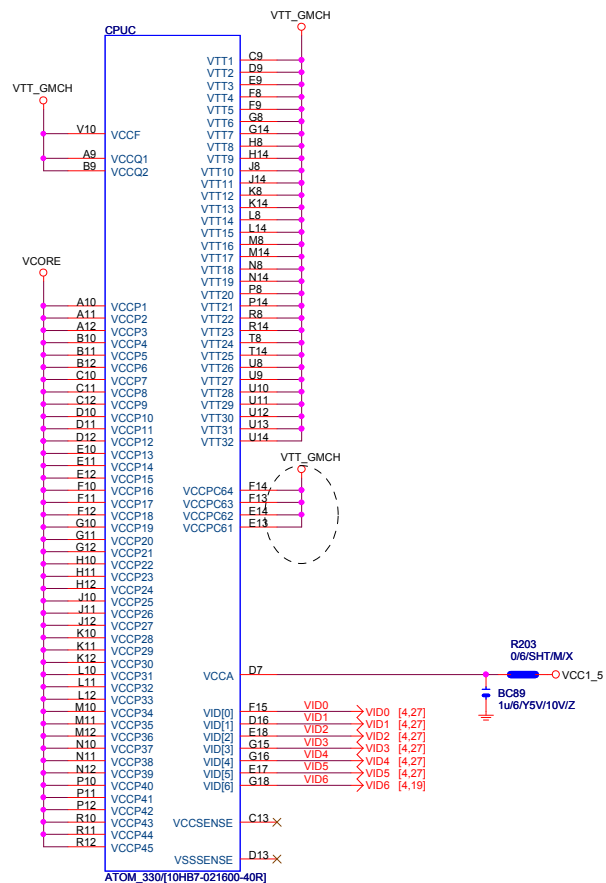
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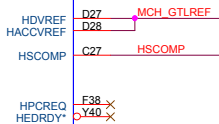
Circuit or PCB layout change
for next version

[illegible]

<i>Gigabyte Technology</i>			
BOM & PCB MODIFY HISTORY			
Size Custom	Document Number GA-GC330UD		Rev 1.0
Date:	Monday, February 23, 2009	Sheet	3 of 28

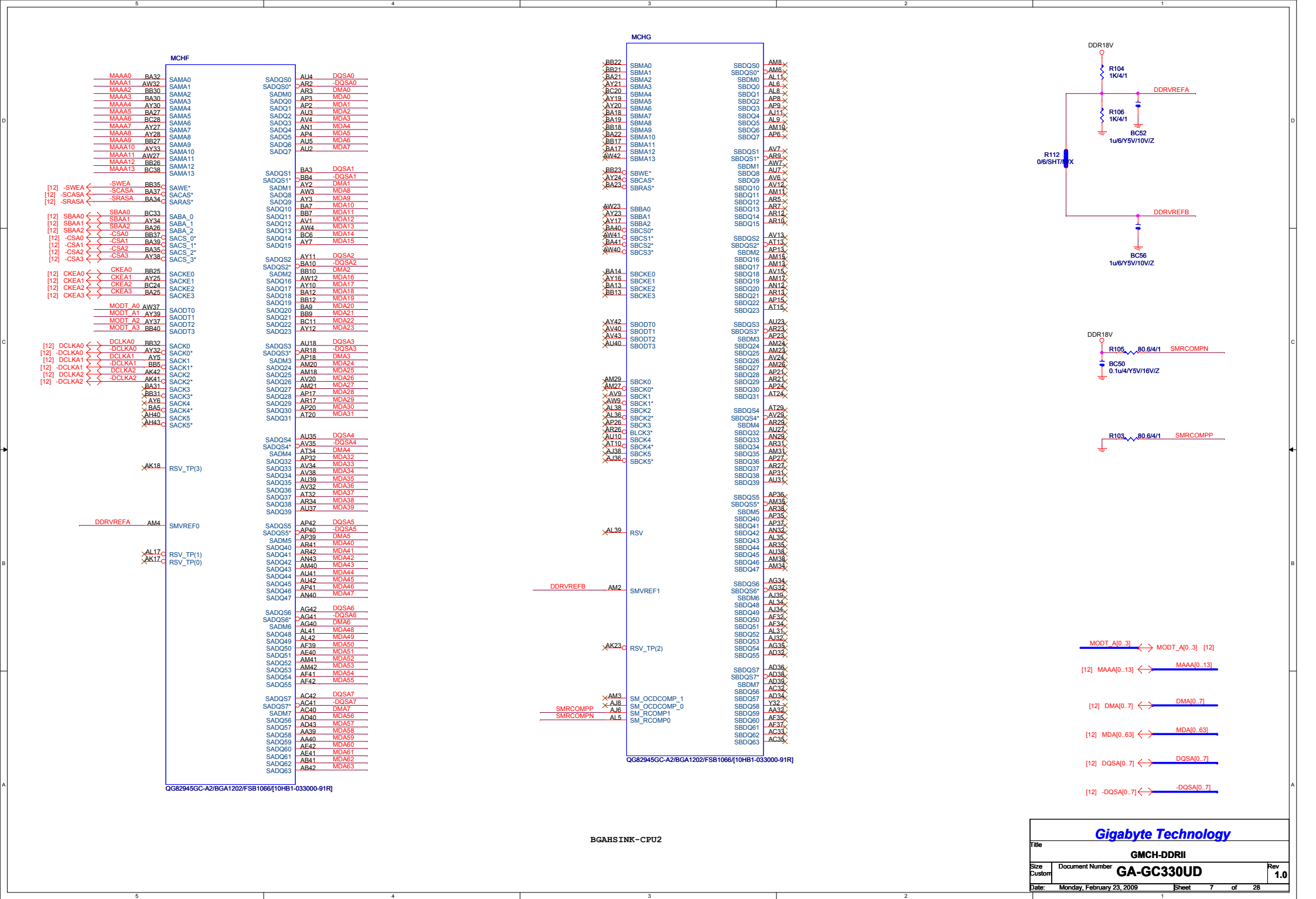






CPU INTERFACE	
R27	RSVD
U27	RSVD
M15	RSVD
L15	RSVD





MCHC		
A4	VSS	N2
A16	VSS	N6
A22	VSS	N8
A26	VSS	N13
A31	VSS	N15
A35	VSS	N26
B4	VSS	N27
B6	VSS	N29
B9	VSS	N31
B11	VSS	N33
B13	VSS	N36
B21	VSS	N39
B22	VSS	N43
B28	VSS	P3
B33	VSS	P14
B38	VSS	P15
C3	VSS	P24
C5	VSS	P26
C7	VSS	P27
C14	VSS	P29
C22	VSS	P30
C40	VSS	R6
D2	VSS	R9
D5	VSS	R12
D10	VSS	R14
D16	VSS	R30
D20	VSS	R31
D21	VSS	R34
E3	VSS	R37
E4	VSS	R39
E7	VSS	T2
E9	VSS	T42
E12	VSS	U3
E13	VSS	U5
E17	VSS	U9
E18	VSS	U12
E20	VSS	U14
E21	VSS	U31
E32	VSS	U33
F2	VSS	U36
F6	VSS	U38
F13	VSS	V2
F18	VSS	V8
F26	VSS	V11
F34	VSS	V12
F42	VSS	V14
G3	VSS	V34
G5	VSS	V36
G7	VSS	V37
G9	VSS	V38
G10	VSS	V39
G13	VSS	V43
G15	VSS	W3
G18	VSS	Y2
G20	VSS	Y5
G21	VSS	Y6
G24	VSS	Y9
G27	VSS	Y12
G29	VSS	Y14
G31	VSS	Y31
G32	VSS	Y35
G35	VSS	Y37
G38	VSS	Y39
H12	VSS	Y42
H17	VSS	AA3
H26	VSS	AA6
H27	VSS	AA11
H32	VSS	AA12
J2	VSS	AA14
J5	VSS	AA21
J7	VSS	AA23
J10	VSS	AA31
J12	VSS	AA33
J21	VSS	AA36
J24	VSS	AB2
J29	VSS	AB43
J38	VSS	AC2
J43	VSS	AC3
K3	VSS	AC7
K5	VSS	AC10
K6	VSS	AC14
K7	VSS	AC21
K10	VSS	AC23
K12	VSS	AC31
K13	VSS	AC36
K15	VSS	AC37
K20	VSS	AC38
K27	VSS	AC39
K32	VSS	
K34	VSS	
K37	VSS	
K39	VSS	
L2	VSS	
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L13	VSS	
L24	VSS	
L26	VSS	
L29	VSS	
L31	VSS	
L42	VSS	
M3	VSS	
M5	VSS	
M8	VSS	
M9	VSS	
M10	VSS	
M13	VSS	
M20	VSS	
M21	VSS	
M35	VSS	
M37	VSS	

QG82945GC-A2/BGA1202/FSB1066[10HB1-033000-91R]

MCHE		
AD7	VSS	AU21
AD9	VSS	AU26
AD11	VSS	AU29
AD13	VSS	AU32
AD33	VSS	AU34
AD35	VSS	AV2
AD37	VSS	AV10
AD42	VSS	AV17
AF1	VSS	AV37
AF2	VSS	AW10
AF3	VSS	BA4
AF5	VSS	BA42
AF33	VSS	BB3
AF36	VSS	BB6
AF38	VSS	BB11
AF43	VSS	BB14
AG30	VSS	BB19
AG31	VSS	BB34
AG33	VSS	BB39
AG36	VSS	BB41
AG37	VSS	BC9
AG38	VSS	A40
AG39	VSS	D1
AH42	VSS	D43
AJ7	VSS	R26
AJ10	VSS	R29
AJ30	VSS	U29
AJ31	VSS	V24
AJ33	VSS	V26
AJ35	VSS	V29
AJ37	VSS	W21
AK24	VSS	W23
AK26	VSS	W25
AK29	VSS	Y20
AK30	VSS	Y22
AL1	VSS	Y24
AL2	VSS	Y26
AL3	VSS	Y29
AL7	VSS	AA25
AL10	VSS	AA27
AL12	VSS	AA29
AL13	VSS	AC19
AL15	VSS	AC25
AL18	VSS	AC29
AL21	VSS	
AL23	VSS	
AL24	VSS	
AL27	VSS	
AL32	VSS	
AL33	VSS	
AL37	VSS	
AL43	VSS	
AM5	VSS	
AM7	VSS	
AM9	VSS	
AM33	VSS	
AM36	VSS	
AM37	VSS	
AM38	VSS	
AN2	VSS	
AN4	VSS	
AN13	VSS	
AN15	VSS	
AN17	VSS	
AN18	VSS	
AN20	VSS	
AN21	VSS	
AN23	VSS	
AN24	VSS	
AN26	VSS	
AN27	VSS	
AN31	VSS	
AN42	VSS	
AP5	VSS	
AP7	VSS	
AP10	VSS	
AP12	VSS	
AP29	VSS	
AP34	VSS	
AP38	VSS	
AR1	VSS	
AR6	VSS	
AR15	VSS	
AR20	VSS	
AR24	VSS	
AR32	VSS	
AR37	VSS	
AR39	VSS	
AR43	VSS	
AT12	VSS	
AT17	VSS	
AT18	VSS	
AT21	VSS	
AT23	VSS	
AT26	VSS	
AT27	VSS	
AT31	VSS	
AU6	VSS	
AU8	VSS	
AU12	VSS	
AU13	VSS	
AU15	VSS	
AU17	VSS	
AU20	VSS	
AD18	VSS	
AD20	VSS	
AD22	VSS	
AD24	VSS	
AD27	VSS	
AD29	VSS	
AE18	VSS	
AE21	VSS	
AE23	VSS	
AE25	VSS	
AF18	VSS	
AF20	VSS	
AF22	VSS	
AF24	VSS	
AY1	VSS	
BC4	VSS	

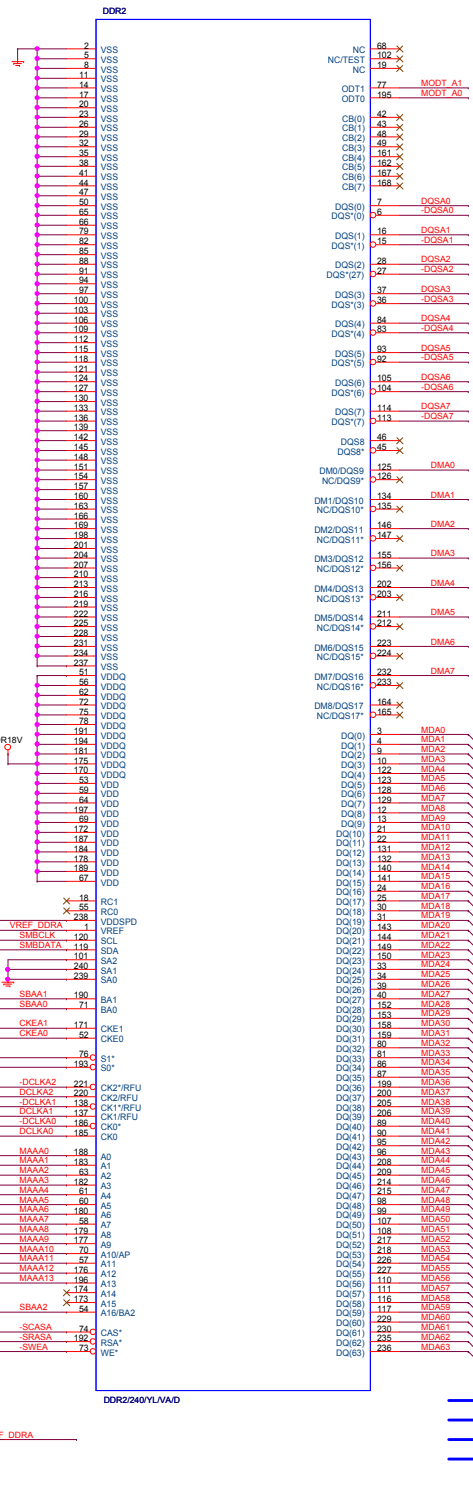
VSS	AU21
VSS	AU26
VSS	AU29
VSS	AU32
VSS	AU34
VSS	AV2
VSS	AV10
VSS	AV17
VSS	AV37
VSS	AW10
VSS	BA4
VSS	BA42
VSS	BB3
VSS	BB6
VSS	BB11
VSS	BB14
VSS	BB19
VSS	BB34
VSS	BB39
VSS	BB41
VSS	BC9
VSS	A40
VSS	D1
VSS	D43
VSS	R26
VSS	R29
VSS	U29
VSS	V24
VSS	V26
VSS	V29
VSS	W21
VSS	W23
VSS	W25
VSS	Y20
VSS	Y22
VSS	Y24
VSS	Y26
VSS	Y29
VSS	AA25
VSS	AA27
VSS	AA29
VSS	AC19
VSS	AC25
VSS	AC29

NC	A42
NC	B2
NC	B3
NC	B41
NC	B42
NC	B43
NC	C2
NC	C42
NC	E35
NC	AV26
NC	AV27
NC	AW2
NC	AW29
NC	BA2
NC	BB1
NC	BB2
NC	BB43
NC	BC1
NC	BC2
NC	BC43
NC	BC45

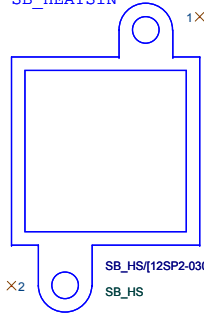
RSVD	AK21
RSVD	AJ23
RSVD	AJ26
RSVD	AL29
RSVD	AL20
RSVD	AJ21
RSVD	AL26
RSVD	AK27
RSVD	AD30
RSVD	AC34
RSVD	Y30
RSVD	Y33
RSVD	AF31
RSVD	AD31
RSVD	U30
RSVD	V31
RSVD	AA30
RSVD	AC30
RSVD	A43
RSVD	AG28
RSVD	AG28
RSVD	AG27
RSVD	AJ24
RSVD	AJ27
RSVD	AK40
RSVD	AW17
RSVD	AW18
RSVD	AT14
RSVD	BC18
RSVD	AJ25
RSVD	AG29

QG82945GC-A2/BGA1202/FSB1066[10HB1-033000-91R]

Gigabyte Technology		
Title		
GMCH-GND		
Size	Document Number	Rev
Custom	GA-GC330UD	1.0
Date:	Monday, February 23, 2009	Sheet 10 of 28

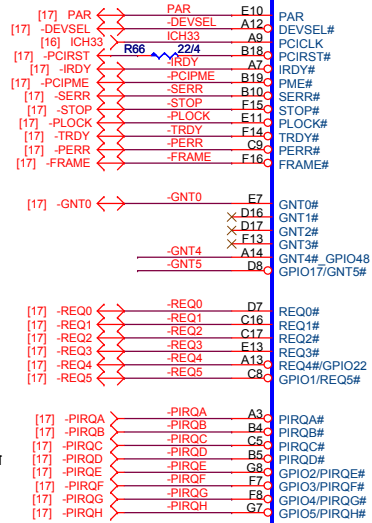


NEW
SB_HS:BGHSINK_SB-N
SB_HEATSIN



NEW SB_HS 對邊

ICHA



ICH7/A1[10HB1-032801-N2R]

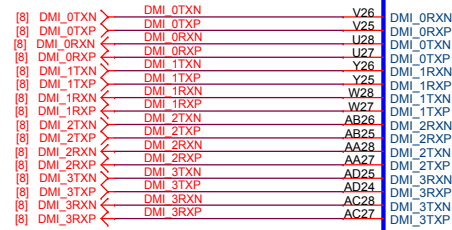
Pb-Free

01=SPI
10=PCI
11=LPC (DEFAULT)

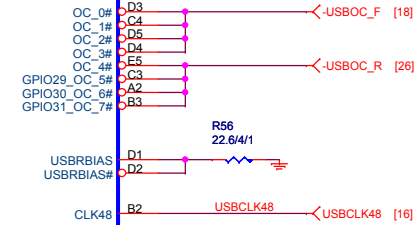
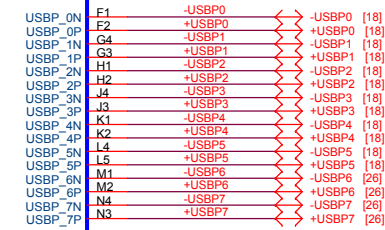
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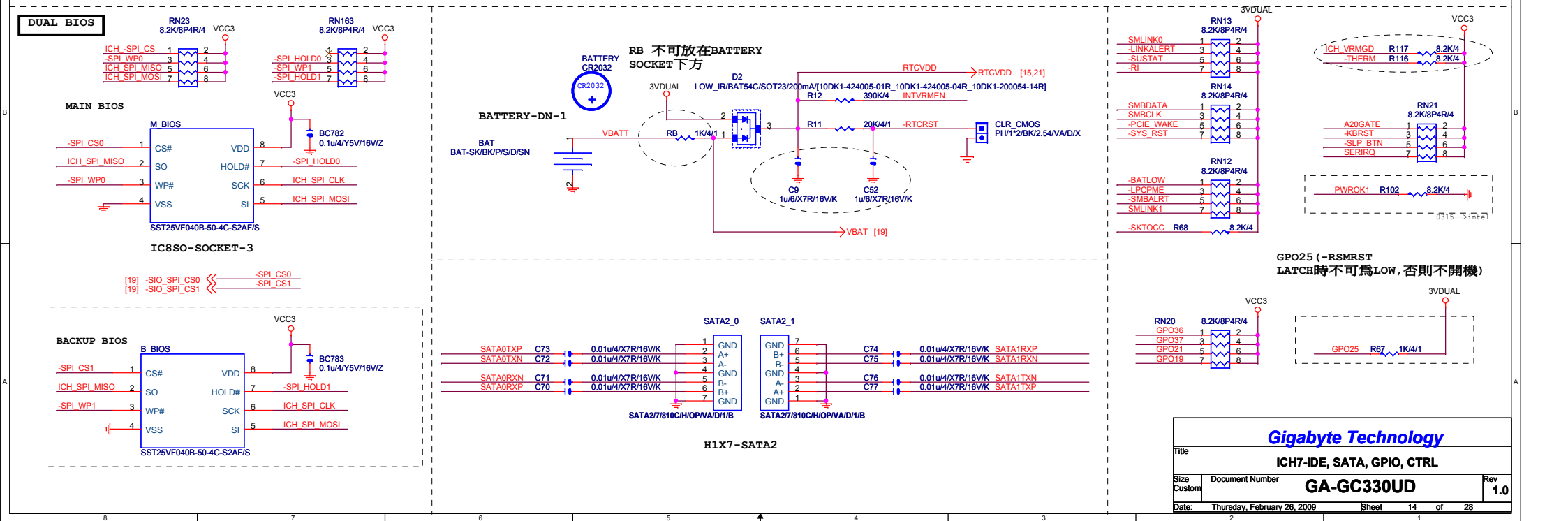
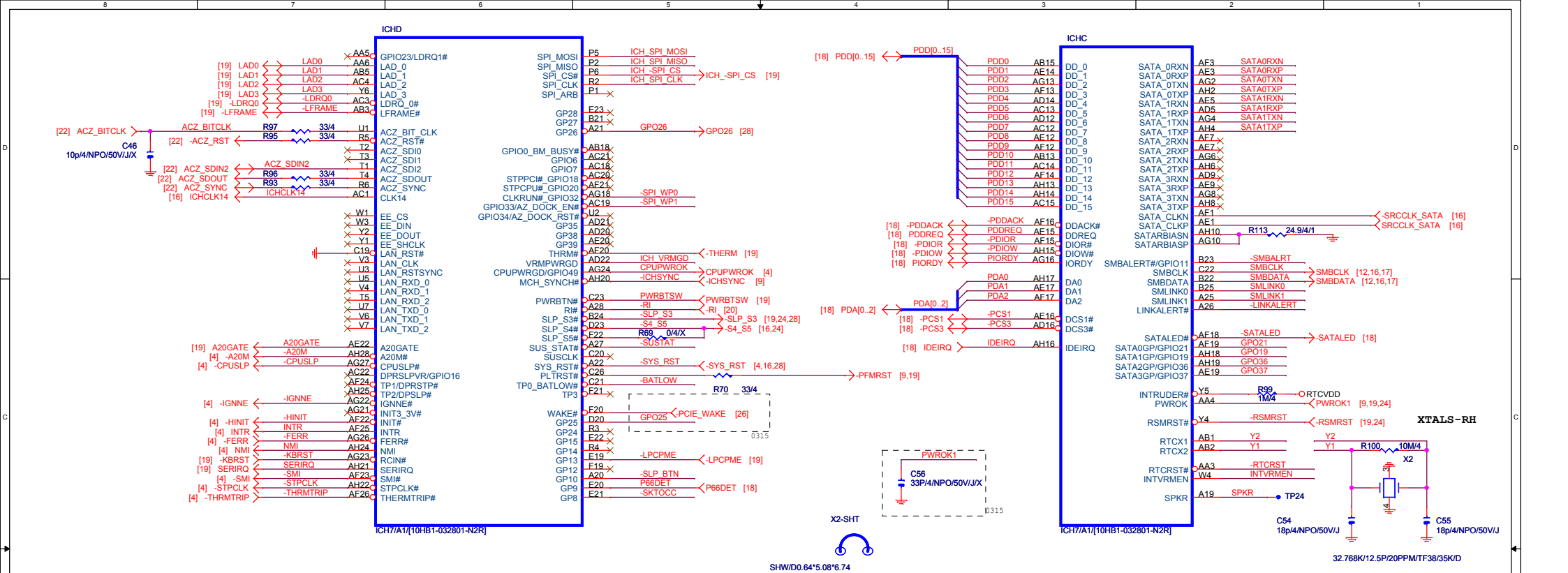
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ICHB



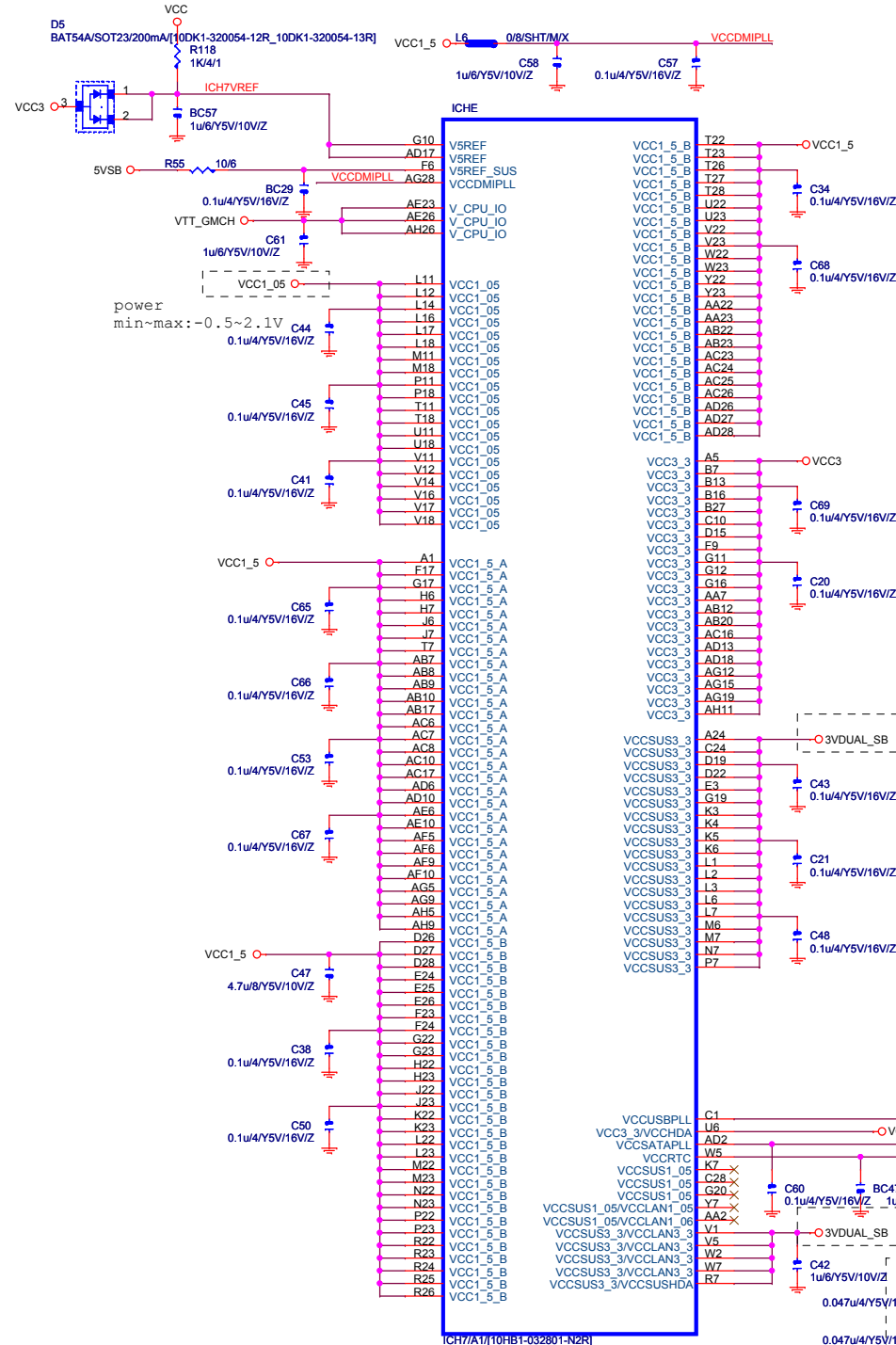
ICH7 ONLY 4 LANE





A4	VSS1	VSS101	R14
A23	VSS2	VSS102	R15
B1	VSS3	VSS103	R16
B8	VSS4	VSS104	R17
B11	VSS5	VSS105	R18
B14	VSS6	VSS106	T8
B17	VSS7	VSS107	T12
B20	VSS8	VSS108	T13
B26	VSS9	VSS109	T14
B28	VSS10	VSS110	T15
C2	VSS11	VSS111	T16
C6	VSS12	VSS112	T17
D10	VSS13	VSS113	U4
D13	VSS14	VSS114	U12
D18	VSS15	VSS115	U13
D21	VSS16	VSS116	U14
D24	VSS17	VSS117	U15
E1	VSS18	VSS118	U16
E2	VSS19	VSS119	U17
E8	VSS20	VSS120	U25
E15	VSS21	VSS121	U26
F3	VSS22	VSS122	U2
F4	VSS23	VSS123	V2
F5	VSS24	VSS124	V13
F12	VSS25	VSS125	V15
F27	VSS26	VSS126	V27
F28	VSS27	VSS127	V28
G1	VSS28	VSS128	V6
G2	VSS29	VSS129	W24
G5	VSS30	VSS130	W25
G6	VSS31	VSS131	W26
G9	VSS32	VSS132	Y3
G14	VSS33	VSS133	Y24
G18	VSS34	VSS134	Y27
G21	VSS35	VSS135	Y28
G24	VSS36	VSS136	AA1
G25	VSS37	VSS137	AA24
G26	VSS38	VSS138	AA25
H3	VSS39	VSS139	AA26
H4	VSS40	VSS140	AB4
H24	VSS41	VSS141	AB6
H27	VSS43	VSS143	AB11
H28	VSS44	VSS144	AB14
J1	VSS45	VSS145	AB16
J5	VSS46	VSS146	AB19
J24	VSS47	VSS147	AB21
J25	VSS48	VSS148	AB24
J26	VSS49	VSS149	AB27
J26	VSS50	VSS150	AB28
K24	VSS51	VSS151	AC2
K27	VSS52	VSS152	AC9
K28	VSS53	VSS153	AC11
L13	VSS54	VSS154	AC6
L15	VSS55	VSS155	AC7
L24	VSS56	VSS156	AC8
L25	VSS57	VSS157	AC10
L26	VSS58	VSS158	AC17
M3	VSS59	VSS159	AD6
M4	VSS60	VSS160	AD10
M5	VSS61	VSS161	AE6
M12	VSS62	VSS162	AE10
M13	VSS63	VSS163	AE5
M14	VSS64	VSS164	AE2
M15	VSS65	VSS165	AE4
M16	VSS66	VSS166	AE8
M17	VSS67	VSS167	AE11
M24	VSS68	VSS168	AE13
M27	VSS69	VSS169	AE18
M28	VSS70	VSS170	AE21
N1	VSS71	VSS171	AE24
N2	VSS72	VSS172	AE2
N5	VSS73	VSS173	AF4
N6	VSS74	VSS174	AF8
N11	VSS75	VSS175	AF11
N12	VSS76	VSS176	AF27
N13	VSS77	VSS177	AF28
N14	VSS78	VSS178	AG1
N15	VSS79	VSS179	AG3
N16	VSS80	VSS180	AG7
N17	VSS81	VSS181	AG14
N18	VSS82	VSS182	AG17
N24	VSS83	VSS183	AG20
N25	VSS84	VSS184	AG26
N26	VSS85	VSS185	AH1
P3	VSS86	VSS186	AH3
P4	VSS87	VSS187	AH7
P12	VSS88	VSS188	AH12
P13	VSS89	VSS189	AH23
P14	VSS90	VSS190	AH27
P15	VSS91	VSS191	C27
P16	VSS92	VSS192	E4
P17	VSS93	VSS193	AG11
P24	VSS94	VSS194	
P27	VSS95		
P28	VSS96		
R1	VSS97		
R11	VSS98		
R12	VSS99		
R13	VSS100		

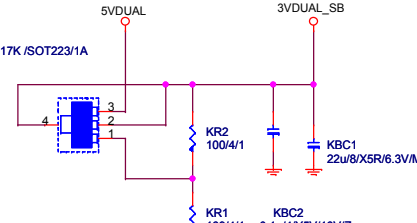
ICH7/A1/[10HB1-032801-N2R]



ICH7/A1/[10HB1-032801-N2R]

3VDUAL_SB

KQ1 APE1117K /SOT223/1A



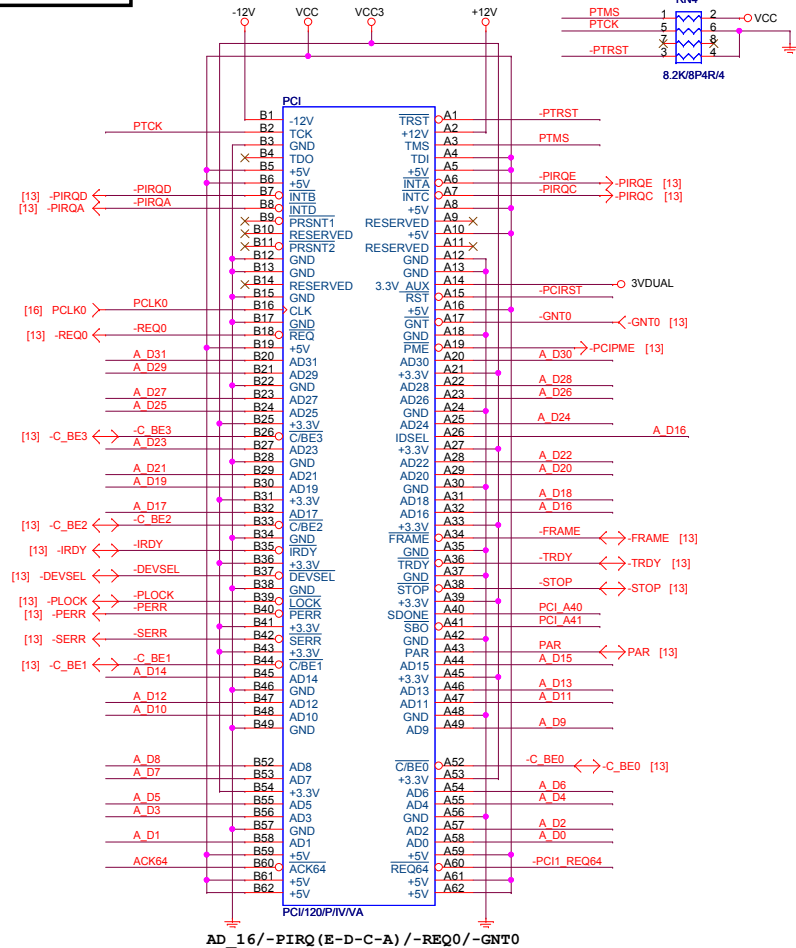
ESD

FOR 漏電

Gigabyte Technology		
Title ICH7-PWR & GND		
Size B	Document Number	GA-GC330UD
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		Rev 1.0

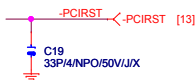


PCI SLOT



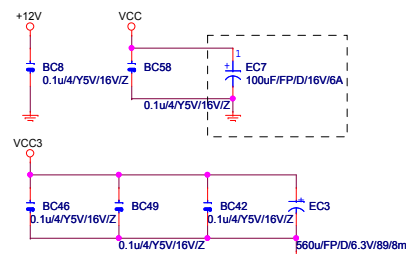
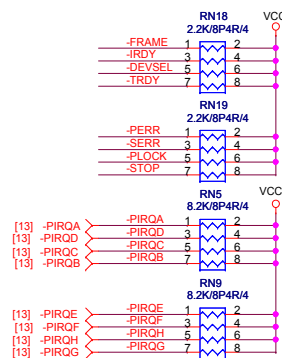
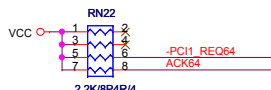
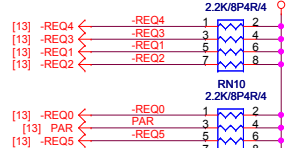
AD_16/-PIRQ (E-D-C-A) /-REQ0/-GNT0

[13] A_D[0..31] ↔ A_D[0..31]



Place close to PCI1

[12,14,16] SMBCLK ↔ PCI_A40
[12,14,16] SMBDATA ↔ PCI_A41



Gigabyte Technology		
PCI SLOT 1, 2/PCIEX1		
GA-GC330UD		
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A circuit diagram showing a resistor labeled R130 with a value of 1K/4/1. One end of the resistor is connected to a VCC supply pin. The other end is connected to the -IDERST pin of the ADXL345, which is also labeled with a reference [19].

[illegible]

The schematic diagram illustrates the USB1 interface. At the top, a black box labeled "USB1" is connected to four signal lines. Two lines are labeled "[13] +USBP1" and "[13] -USBP1", with a double-headed arrow between them. The other two lines are labeled "[13] -USBP0" and "[13] +USBP0", also with a double-headed arrow between them. Below these, a blue square component labeled "ESD1" (CM1293A-04SO/S) is shown. It has four pins: pin 1 is connected to "-USBP1", pin 2 is connected to ground, pin 3 is connected to "+USBP0", and pin 4 is connected to "-USBP0". Pin 6 is connected to "+USBP1", and pin 5 is connected to ground. To the right of the ESD1 component, a red line labeled "FUSEVCC1" is connected to a blue capacitor labeled "BC780 0.1uF/4Y5V/16VIZ", which is then connected to ground. The text "SSOP6 ESD" is centered at the bottom.

240MILS **160MILS**

5V DUAL

F1

SMD1812P260/6V

F2

SMD1812P260/6V

FUSEVCC

BC5
0.1u/4/Y5V/16V/Z/X

FUSEVCC1

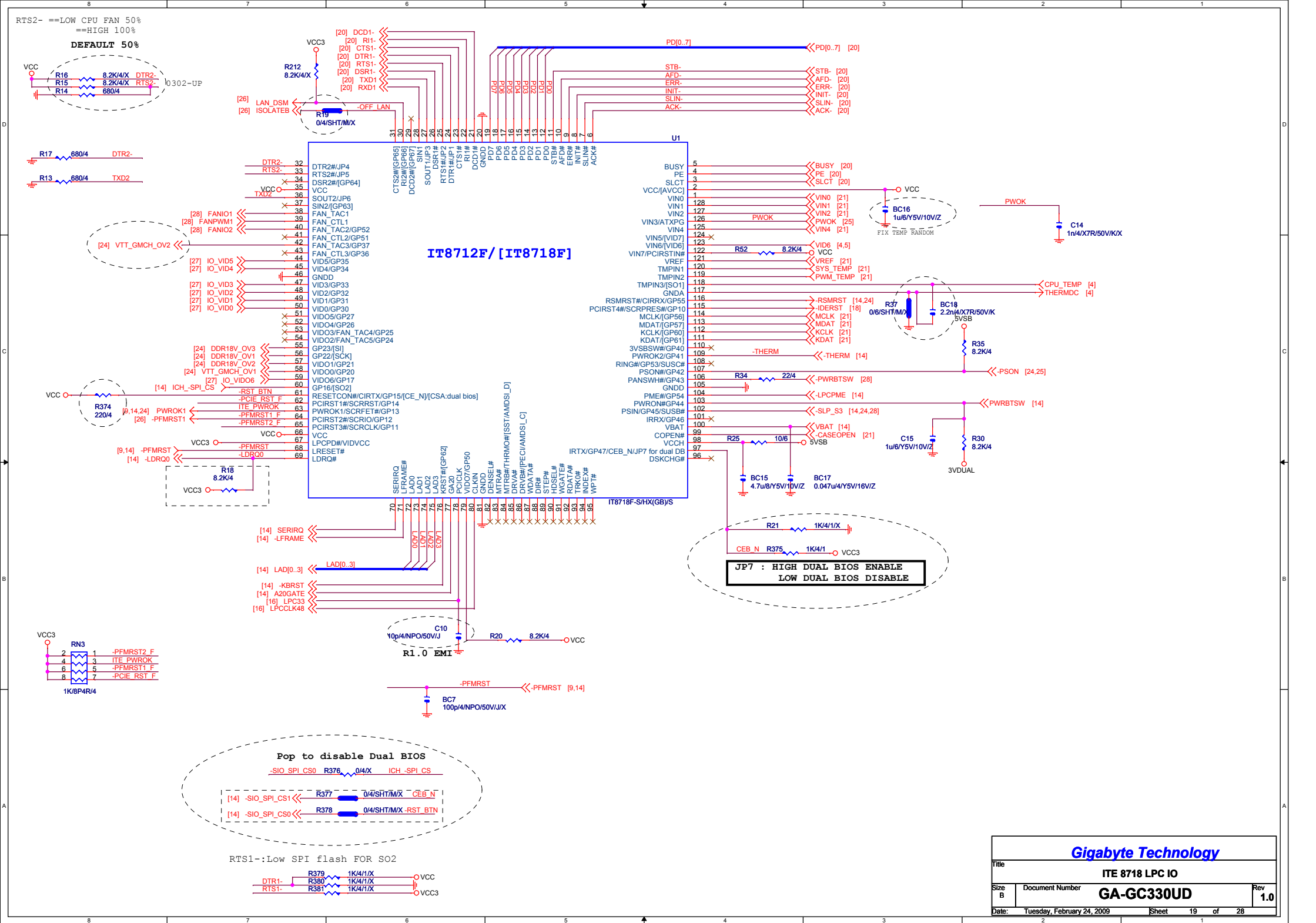
BC37
0.1u/4/Y5V/16V/Z/X

R64
150K/4/1

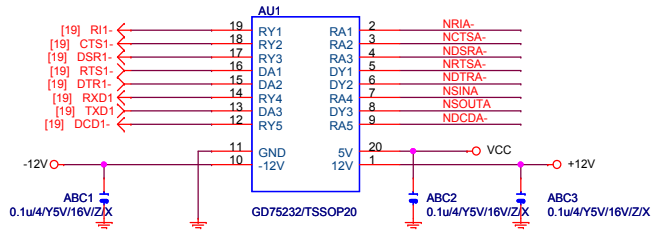
R65
270K/4

-USBOC_F [13]

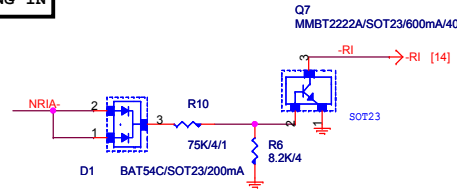
Title			
IDE,FDD,F_USB			
Size B	Document Number	GA-GC330UD	Rev 1.0
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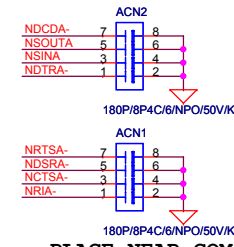
COMA



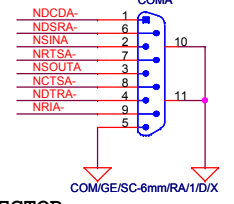
RING IN



EXTERNAL COMA

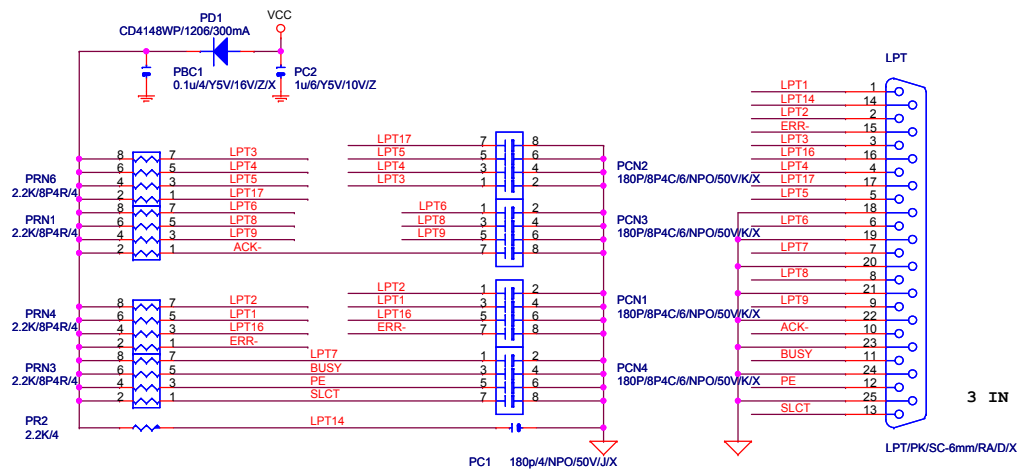
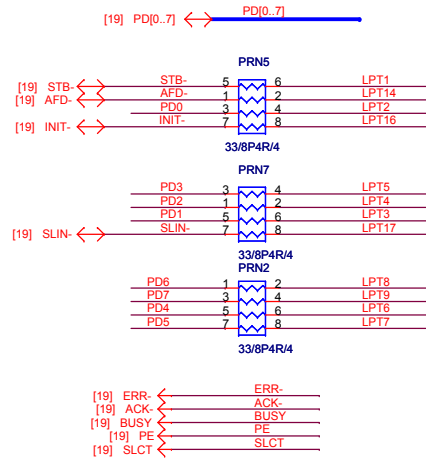


3 IN 1 VGA+LPT+COMA

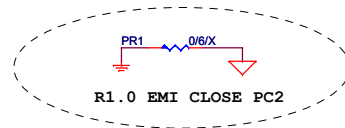


PLACE NEAR COM CONNECTOR

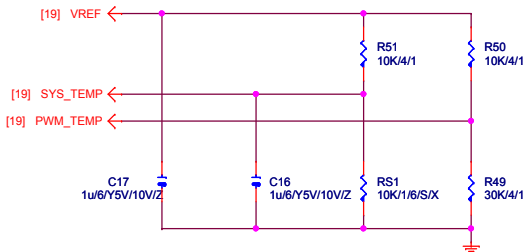
LPT PORT



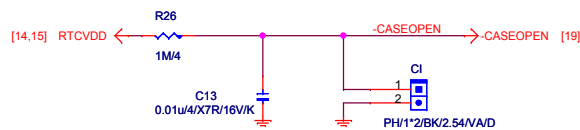
3 IN 1 VGA+LPT+COMA



TEMP H/W MONITOR

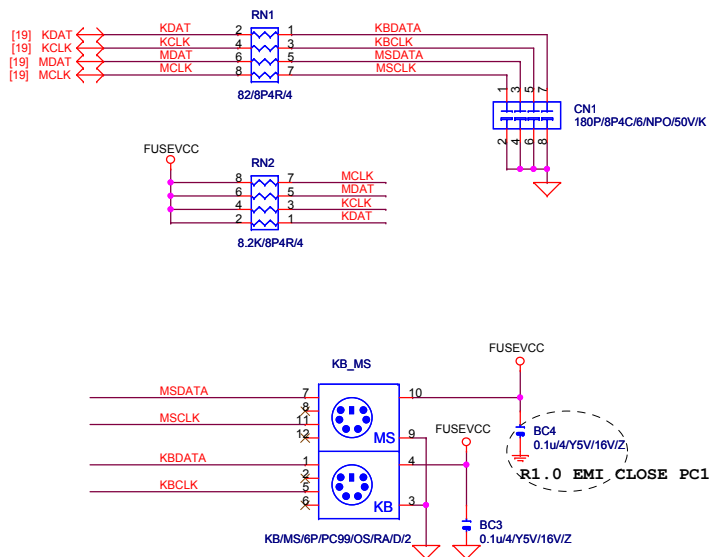


CASE OPEN

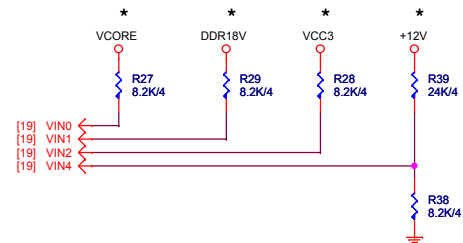


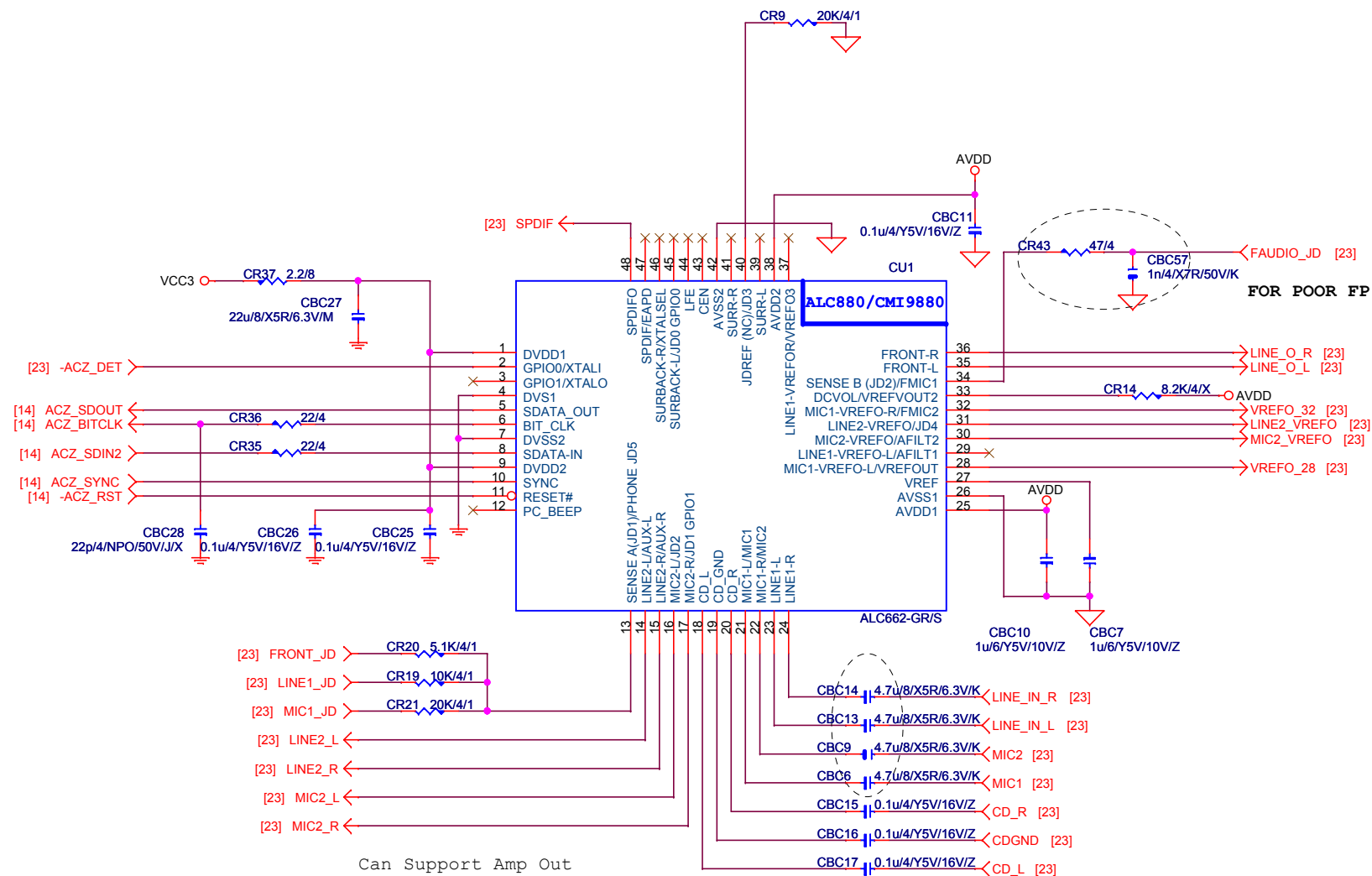
Case Open Circuits

KB/MS



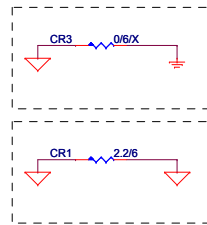
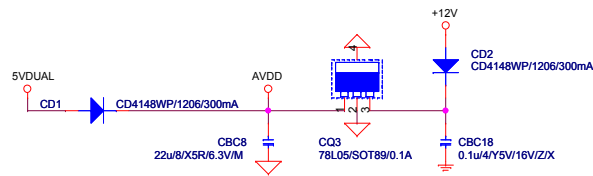
VOLTAGE-- H/W MONITOR



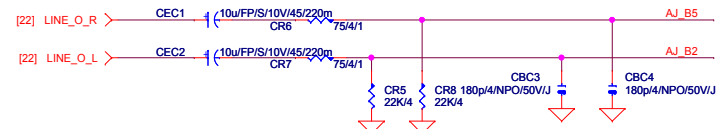
**Gigabyte Technology**

Title			AZALIA ALC662	
Size			GA-GC330UD	
Custom			Rev 1.0	
Date:	Monday, February 23, 2009		Sheet	22 of 28

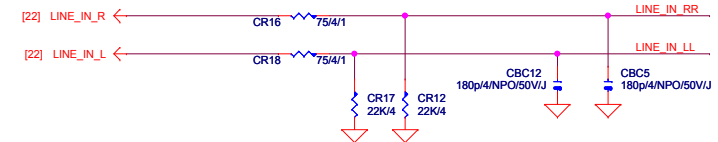
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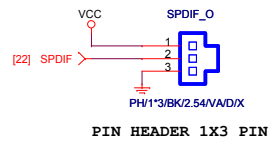
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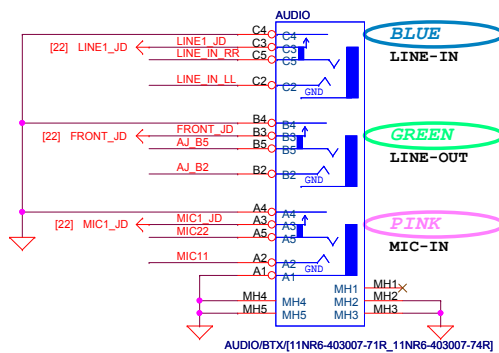
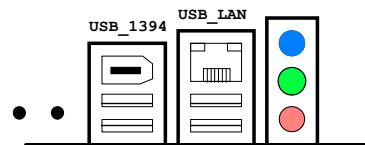
LINE-IN



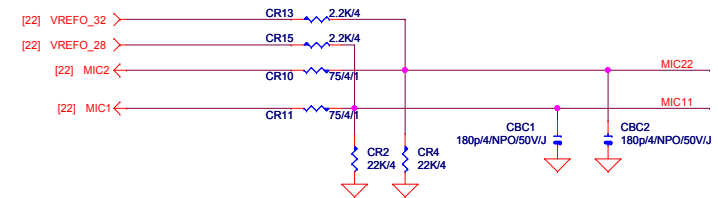
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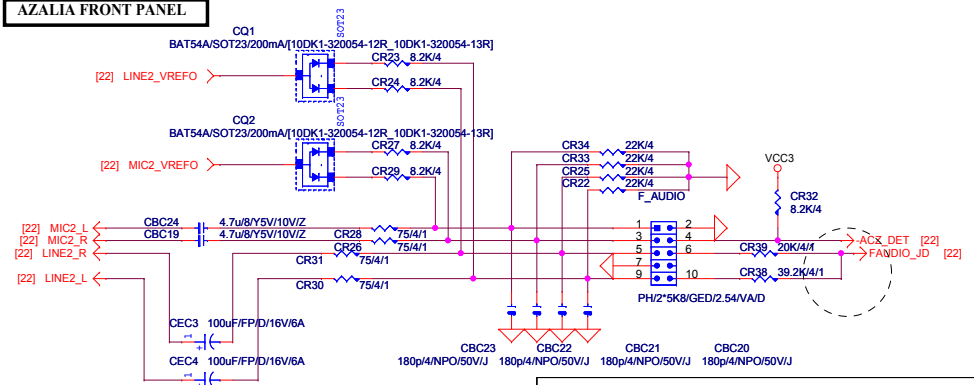
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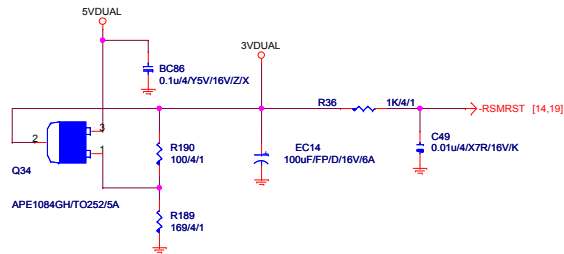
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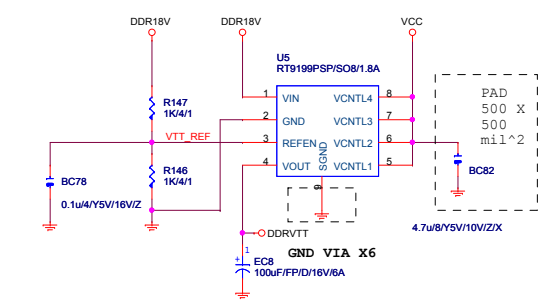
AZALIA FRONT PANEL



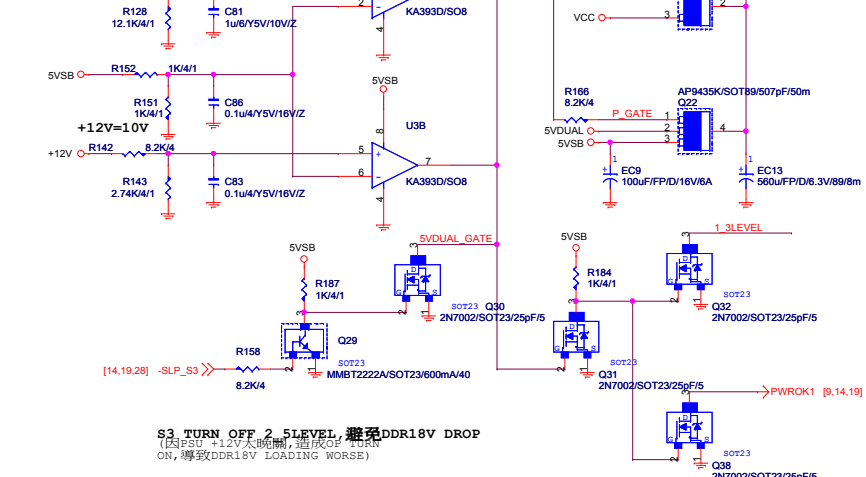
3VDUAL CIRCUIT



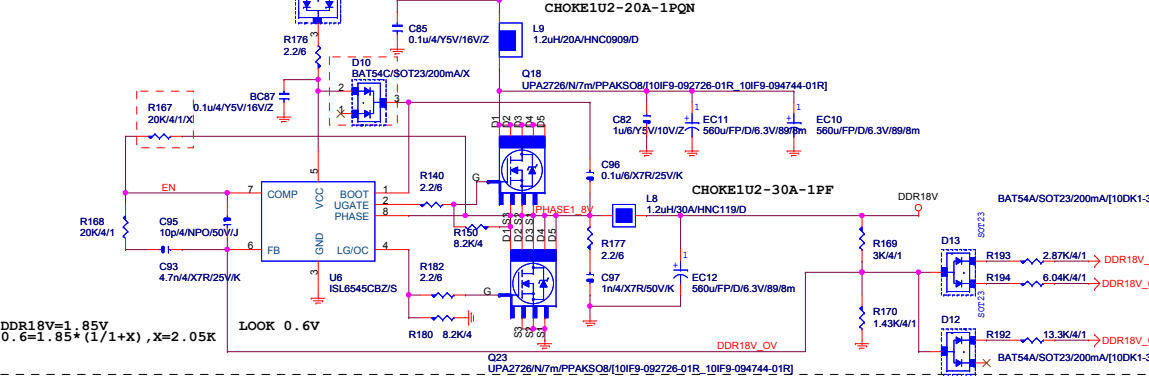
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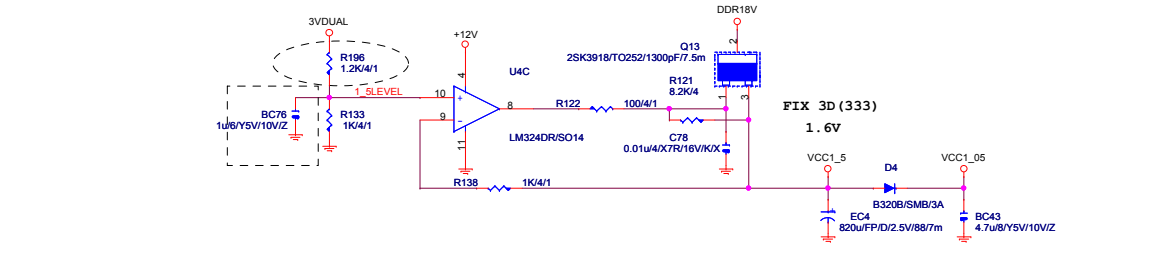
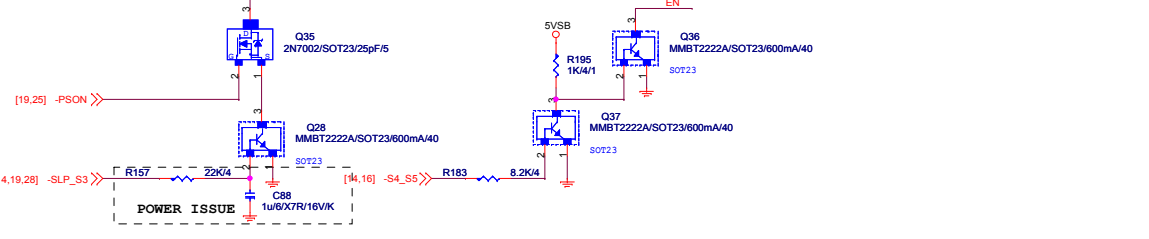
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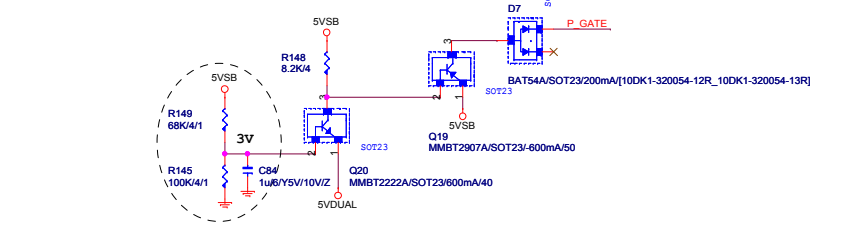
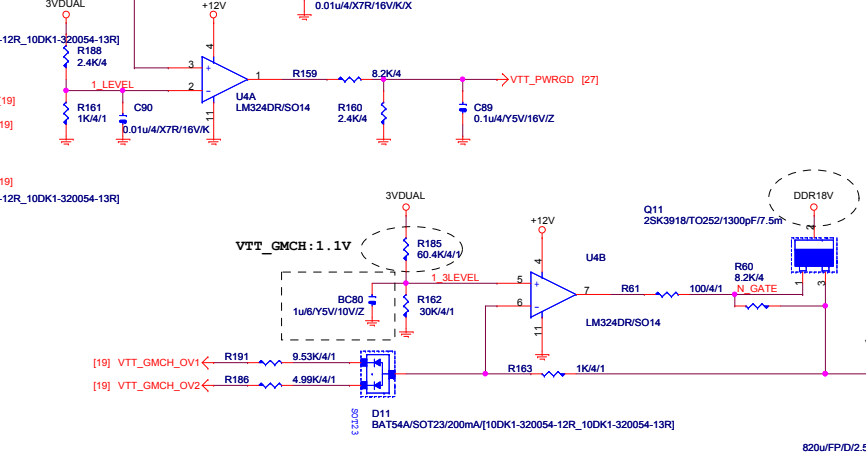
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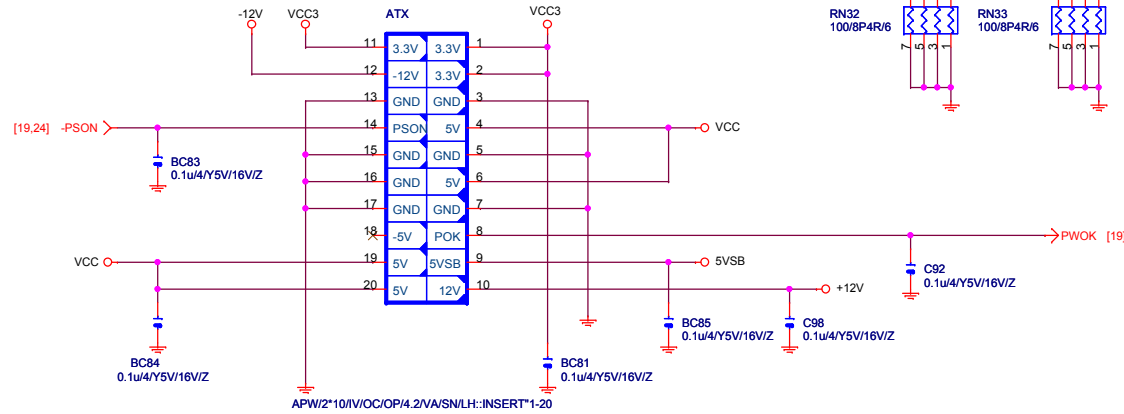
POWER SEQUENCE



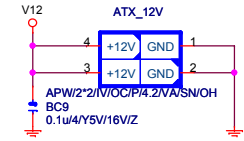
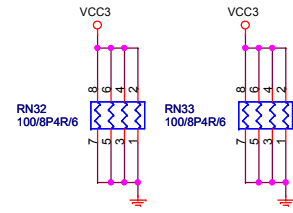
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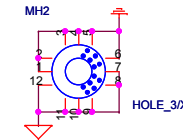
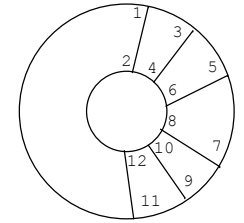
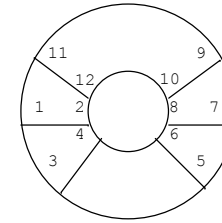
ATX POWER CONNECTOR



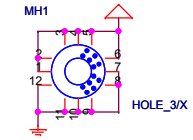
FIX PWR AcBel (ATX-400C-A2ADB)



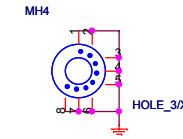
ATX_4-1



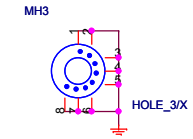
HOLE_4-RH-5MM-1



HOLE_4-RH-5MM-1



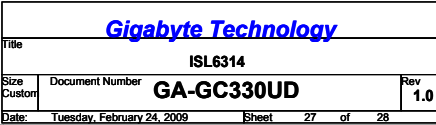
HOLE_4-RH-5MM-5PIN-1



HOLE_4-RH-5MM-5PIN-1

Gigabyte Technology

Title			ATX POWER CONNECTOR
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			Rev 1.0



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MPD- : (GPIO25--VCCSUS3+HI+HI+DEFINED(C3/C4/S/1/S3/S/4/S5))-->INTEL
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SYS_FAN
FAN1*3/WH/A3/PA66

[illegible]