

SHEET

TITLE

01	COVER SHEET
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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	G31 HOST
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10	G31 PCI E, DMI
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14	PCI EXPRESS*16 SLOT
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20	ICH7 VCC, GND
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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	ALC883

SHEET

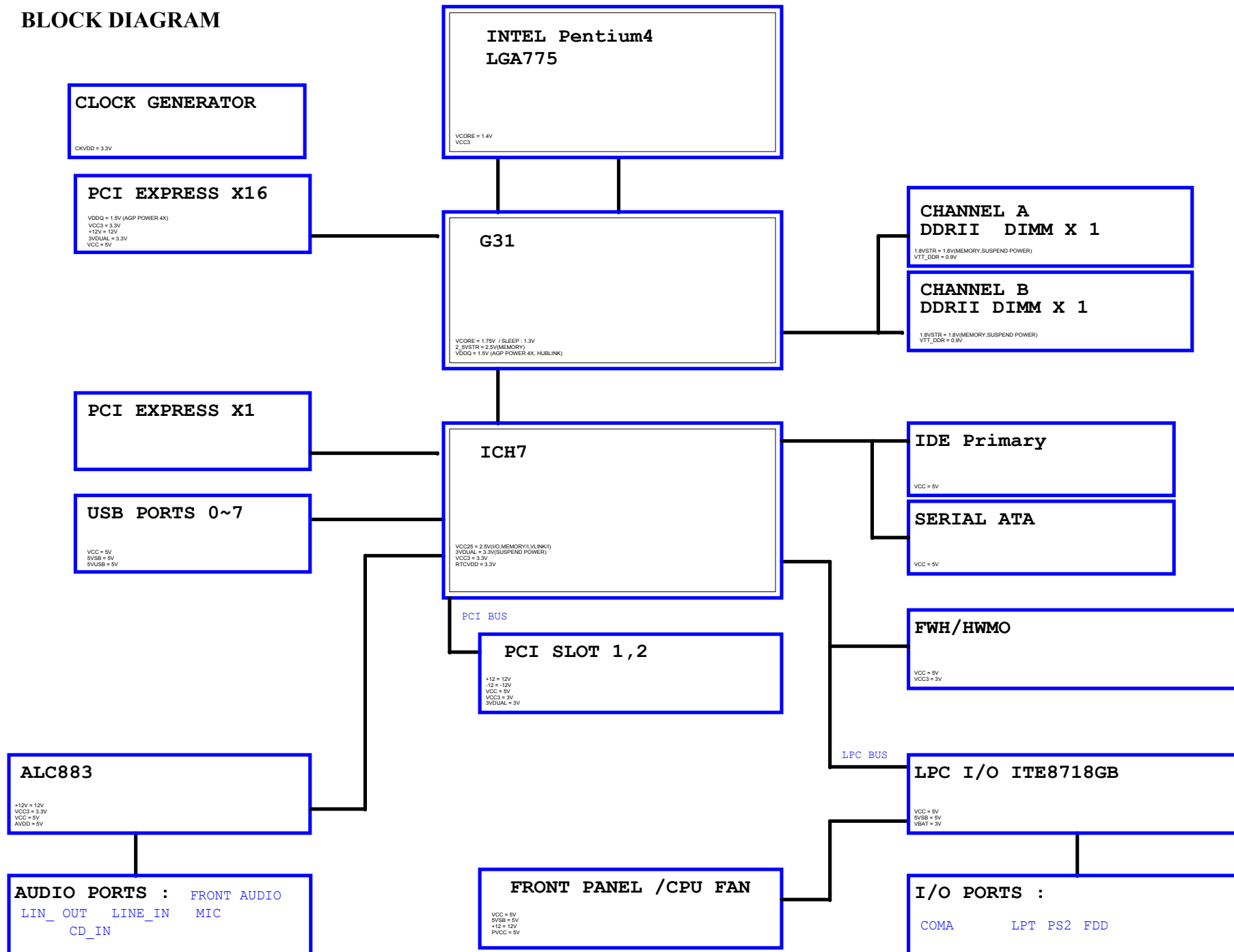
TITLE

28	REAR AUDIO JACK
29	DISCRETE POWER
30	VCORE PWM RT9214
31	ATX, OTHERS POWER
32	FRONT PANEL
33	REALTEK RTL8111C/8102E

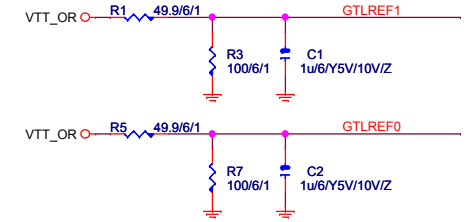
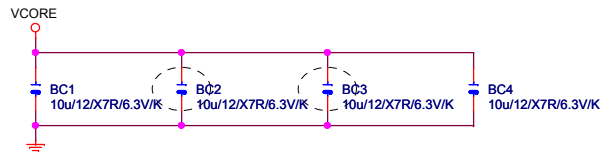
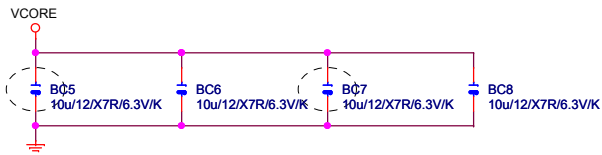
Gigabyte Technology

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Cover Sheet			
Size	Document Number	GA-G31M-ES2C	Rev
Custom			1.12
Date:	Friday, November 21, 2008	Sheet	1 of 33

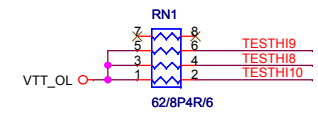
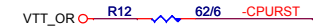
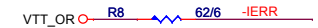
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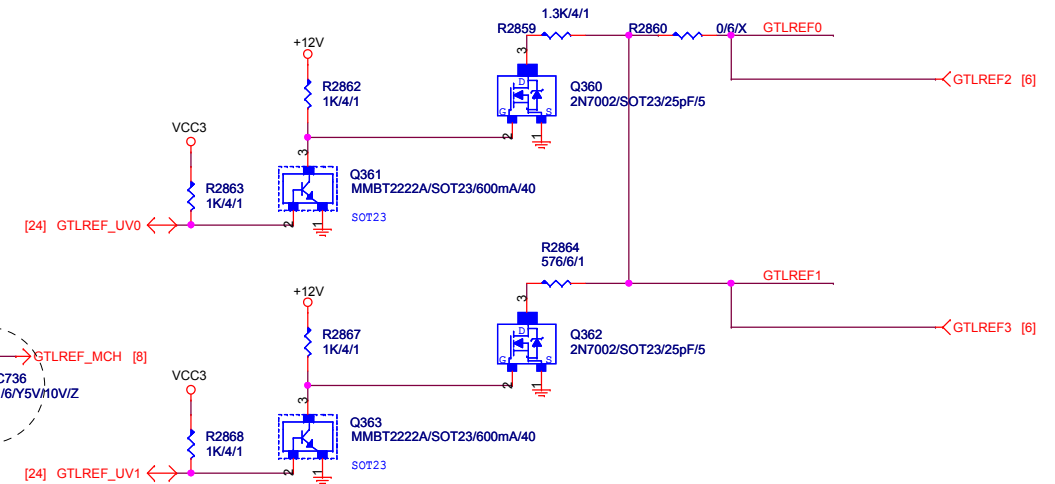
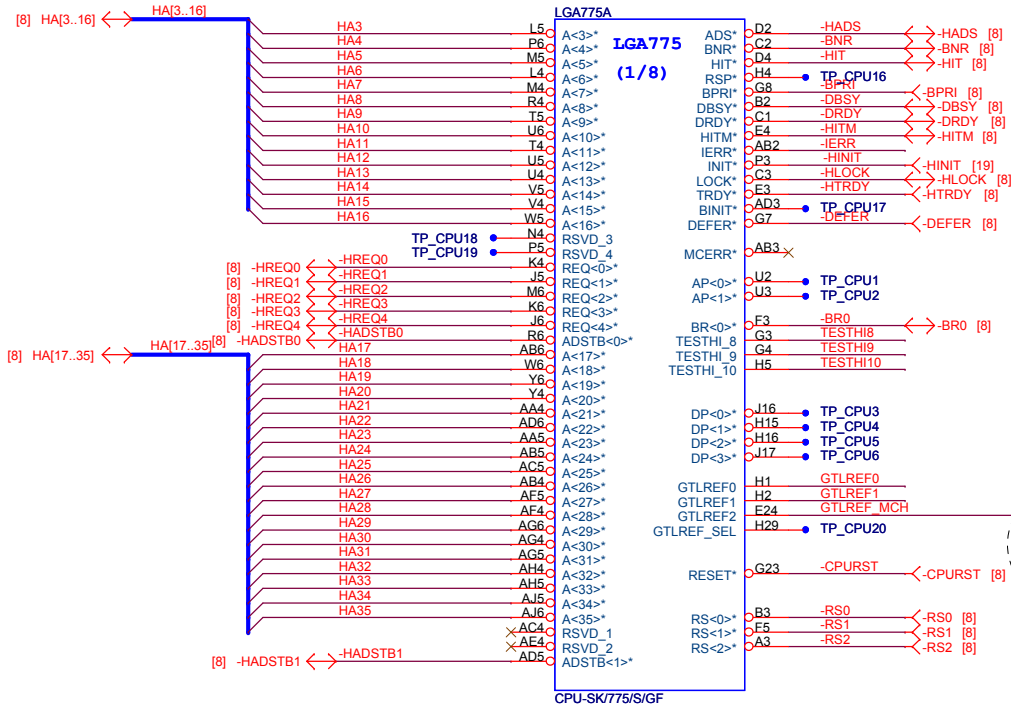




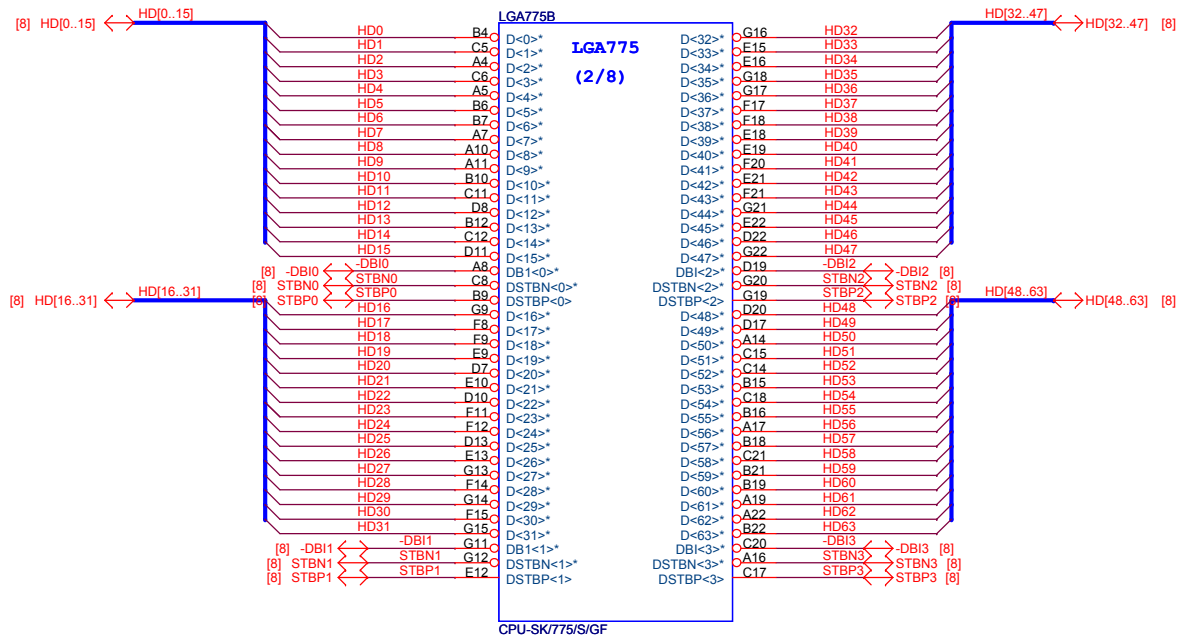
中間値0.9V



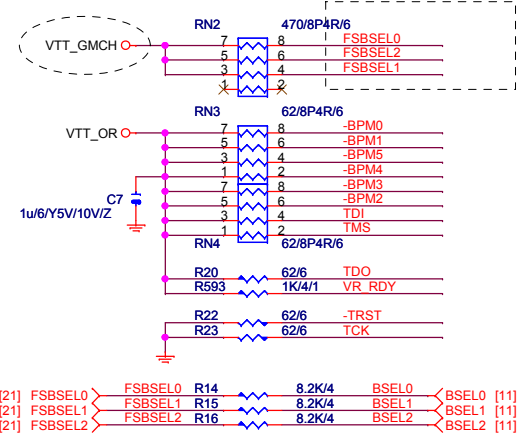
LGA775-39



<b>Gigabyte Technology</b>		
<b>P4_LGA775-A</b>		
Size	Document Number	Rev
3	<b>GA-G31M-ES2C</b>	<b>1.12</b>
Date:	Friday, November 21, 2008	Sheet 4 of 33



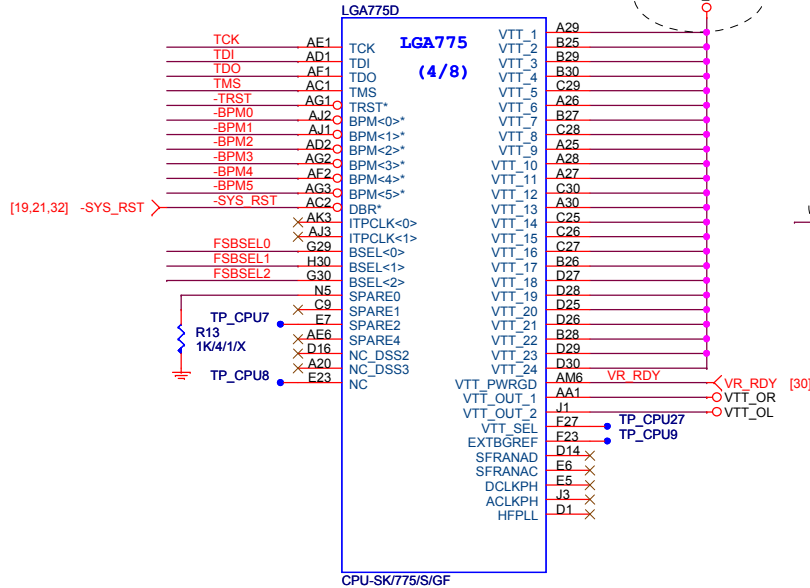
CPU-SK775/S/GF



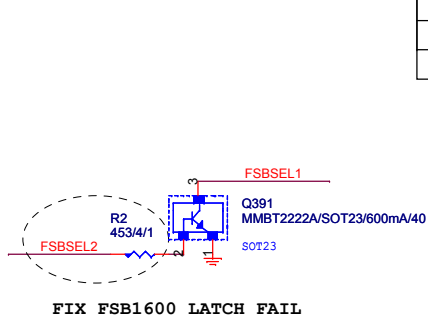
TO CLK GEN [21] FSBSEL0 FSBSEL1 FSBSEL2 TO NB [11] BSEL0 [11] BSEL1 [11] BSEL2 [11]

**CPU**

NA	FSB	FSA	Clock
FSBSEL3	FSBSEL1	FSBSEL0	Clock
1	0	1	100MHz
0	0	1	133MHz
0	1	1	166MHz
0	1	0	200MHz
0	0	0	266MHz



CPU-SK775/S/GF



FIX FSB1600 LATCH FAIL

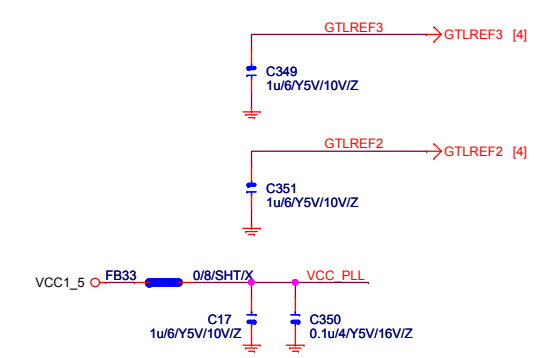
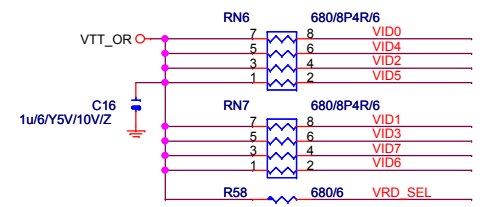
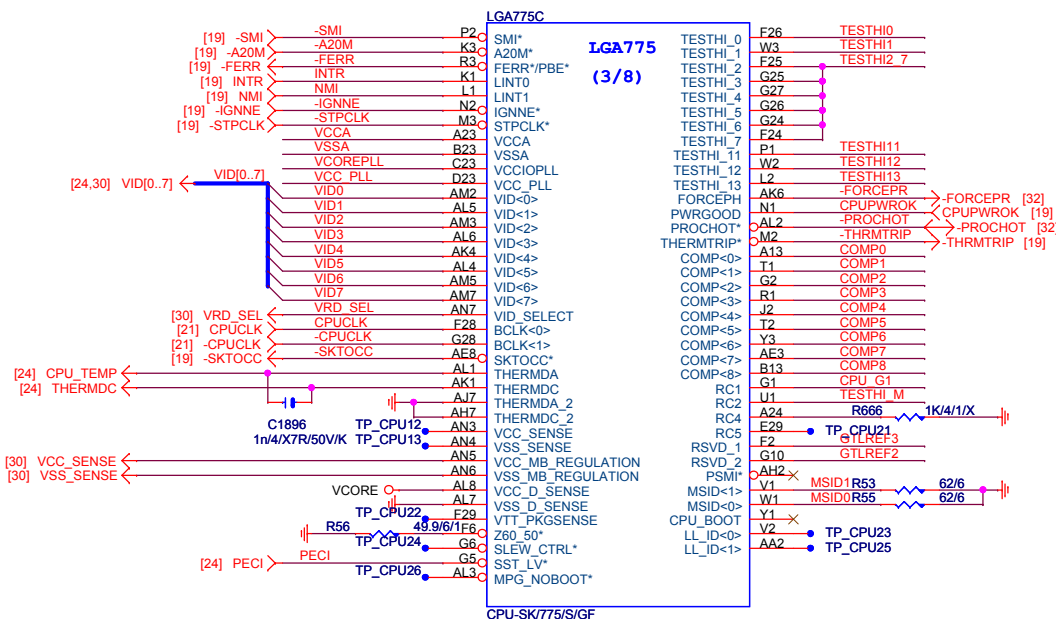
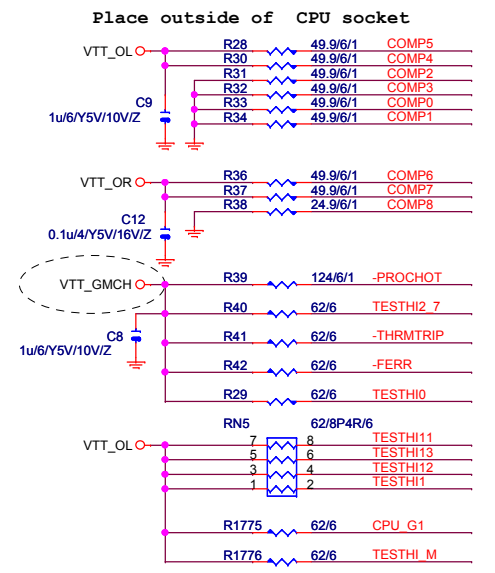
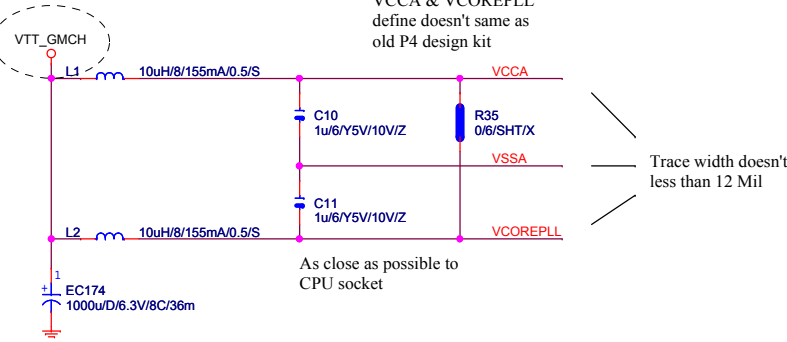
**Gigabyte Technology**

**Title**  
P4\_LGA775-B,D

<b>Size</b>	Document Number	<b>Rev</b>
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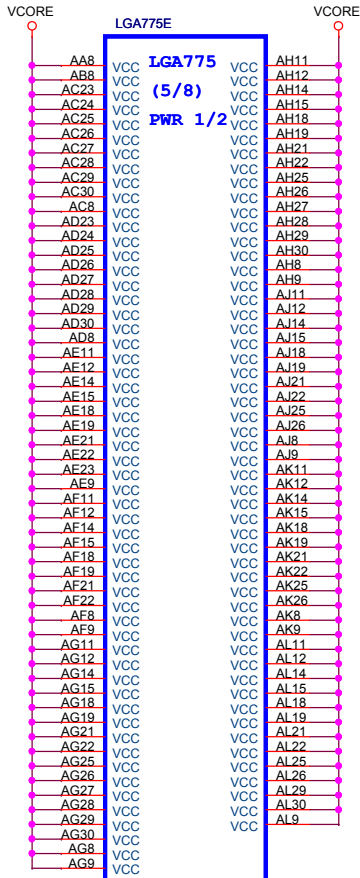
Date: Friday, November 21, 2008 Sheet 5 of 33

**Note:**  
VCCA & VCOREPLL  
define doesn't same as  
old P4 design kit

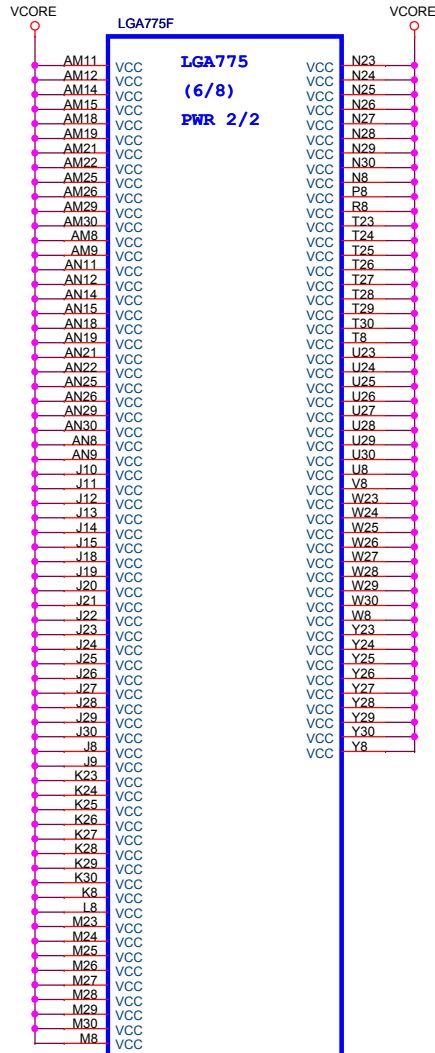


<b>Gigabyte Technology</b>		
<b>P4_LGA775-C</b>		
Size B	Document Number	Rev 1.12
	<b>GA-G31M-ES2C</b>	
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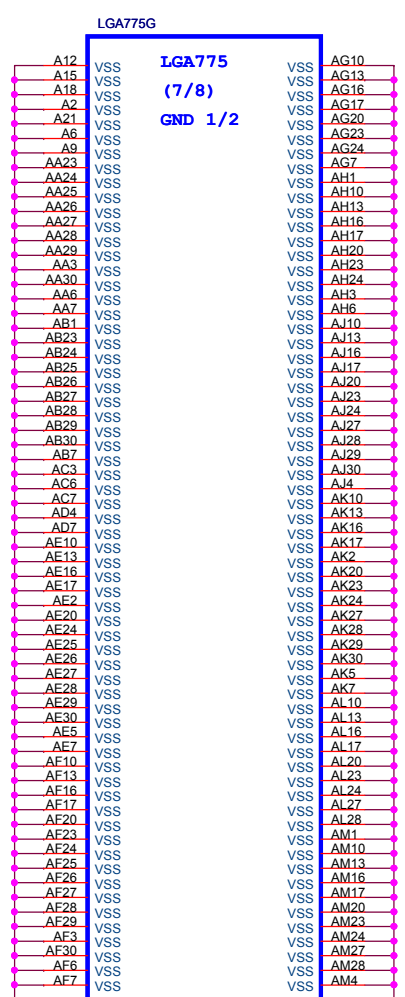
PECI: Platform Environment Control Interface



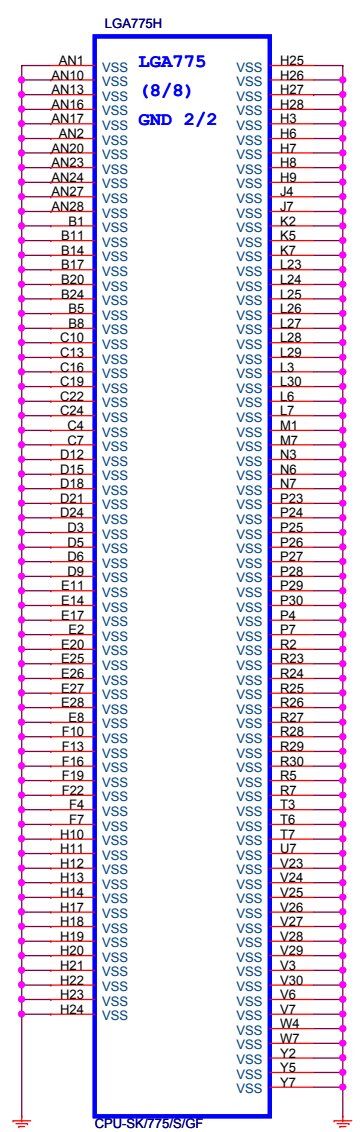
CPU-SK/775/S/GF



CPU-SK/775/S/GF

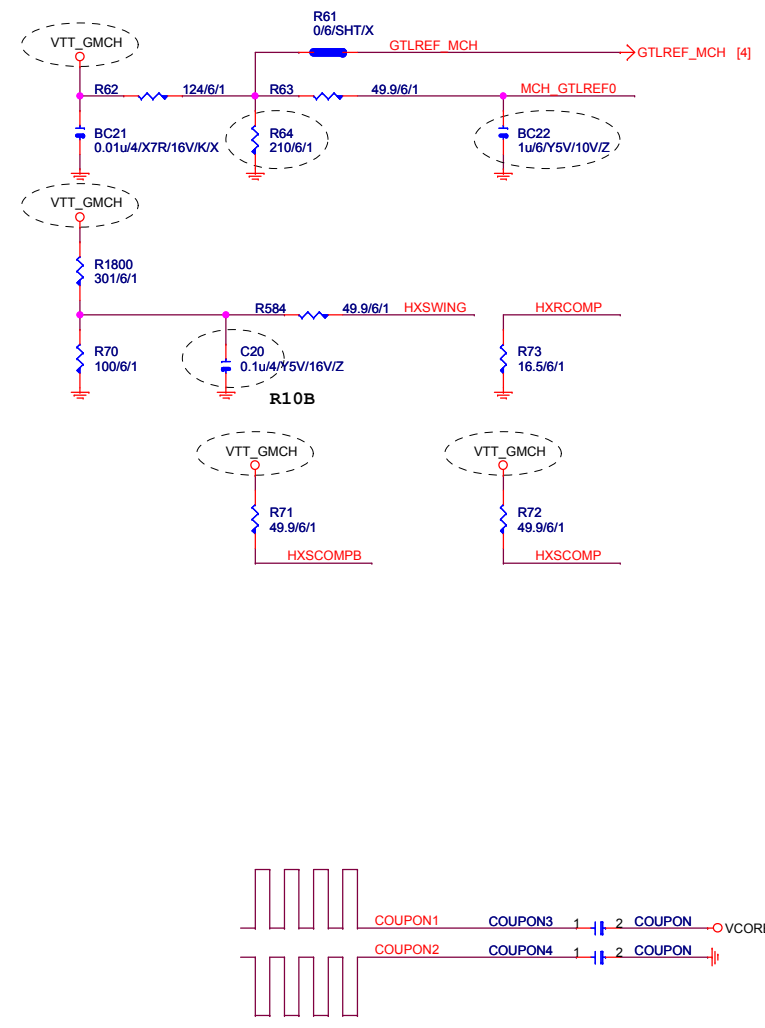
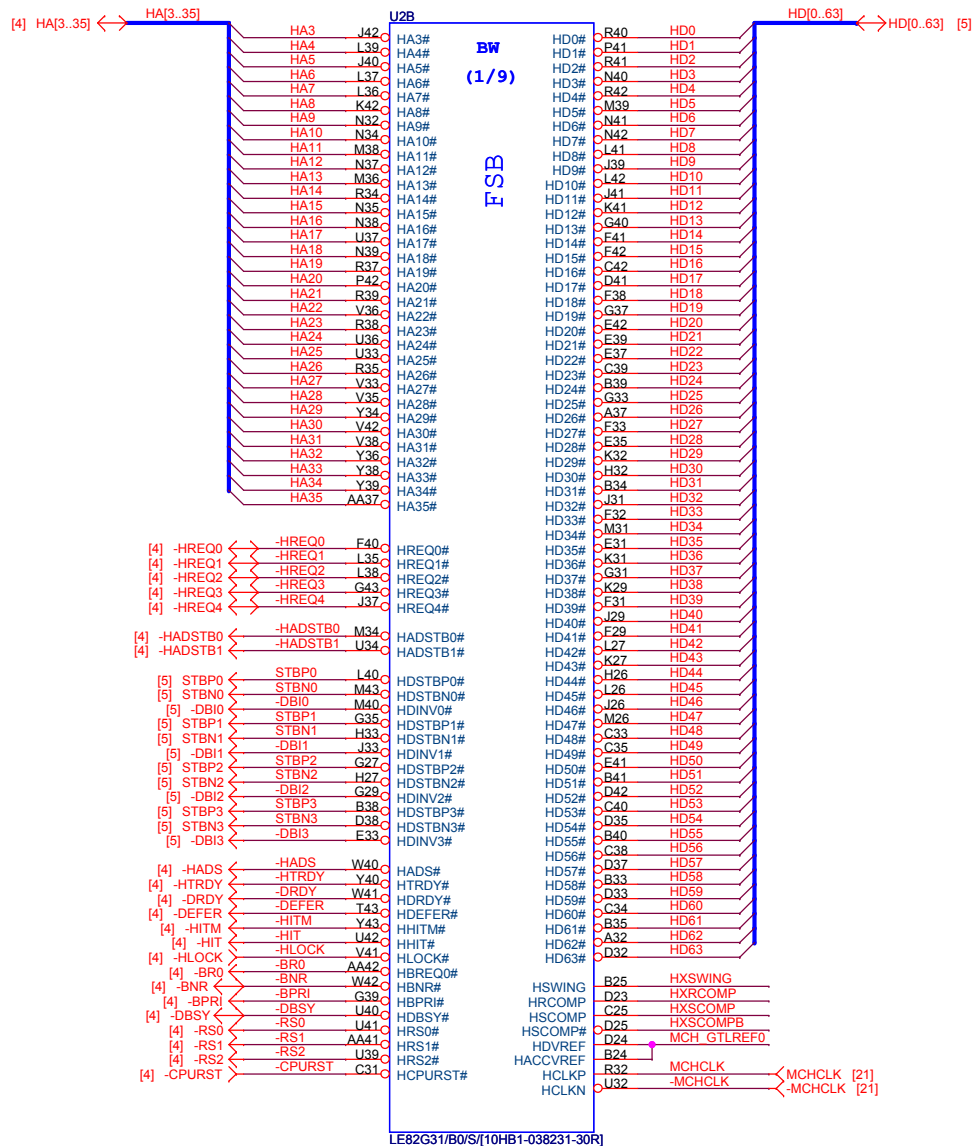


CPU-SK/775/S/GF



CPU-SK/775/S/GF

<b>Gigabyte Technology</b>		
Title <b>P4_LGA775-E,F,G,H</b>		
Size <b>B</b>	Document Number <b>GA-G31M-ES2C</b>	Rev <b>1.12</b>
Date: <b>Friday, November 21, 2008</b>	Sheet <b>7</b> of <b>33</b>	



<b>Gigabyte Technology</b>			
<b>Title</b>			
<b>GMCH-HOST</b>			
<b>Size</b>	Document Number	<b>GA-G31M-ES2C</b>	
<b>Rev</b>	<b>1.12</b>		
<b>Date:</b>	Friday, November 21, 2008	<b>Sheet</b>	8 of 33



U2C

MAAA0	BA31	SMA_A0	SDQS_A0	AW4	DOSA0
MAAA1	BB25	SMA_A1	SDQS_A1	AR3	-DOSA0
MAAA2	BA26	SMA_A2	SDM_A0	AR2	DMA0
MAAA3	AV25	SMA_A3			
MAAA4	AW25	SMA_A4	SDQ_A0	AR5	MDA0
MAAA5	BA23	SMA_A5	SDQ_A1	AR4	MDA1
MAAA6	AV24	SMA_A6	SDQ_A2	AV3	MDA2
MAAA7	AV23	SMA_A7	SDQ_A3	MAA7	MDA3
MAAA8	BB23	SMA_A8	SDQ_A4	AP3	MDA4
MAAA9	BA22	SMA_A9	SDQ_A5	MAA9	MDA5
MAAA10	AV33	SMA_A10	SDQ_A6	AW1	MDA6
MAAA11	BB22	SMA_A11	SDQ_A7	AV4	MDA7
MAAA12	AV21	SMA_A12			
MAAA13	AV38	SMA_A13	SDQS_A1	BB3	DOSA1
MAAA14	BA21	SMA_A14	SDQS_A1#	BA4	-DOSA1
			SDM_A1	BA2	DM1
(15,17) -SWEA	← -SWEA	BB34C	SWE_A#	AV2	MDA8
(15,17) -SCASA	← -SCASA	AY35C	SCAS_A#	AW2	MDA9
(15,17) -SRASA	← -SRASA	BB33C	SRAS_A#	AV3	MDA10
				AV6	MDA11
(15,17) SBA0	← SBA0	BA33	SBS_A0	AW2	MDA12
(15,17) SBA1	← SBA1	BB21	SBS_A1	AW2	MDA13
(15,17) SBA2	← SBA2	BB21	SBS_A2	BA5	MDA14
				BA4	MDA15
(15,17) CSA0	← CSA0	AW35C	SCS_A0#	BB9	DOSA2
(15,17) CSA1	← CSA1	BA35C	SCS_A1#	BA8	-DOSA2
(17) CSA2	← CSA2	BA34C	SCS_A2#	AV9	DM12
(17) CSA3	← CSA3	BB38C	SCS_A3#		
				AV7	MDA16
(15,17) CKEA0	← CKEA0	BC20	SCKE_A0	BC7	MDA17
(15,17) CKEA1	← CKEA1	AV20	SCKE_A1	AW11	MDA18
(17) CKEA2	← CKEA2	AV21	SCKE_A2	AV11	MDA19
(17) CKEA3	← CKEA3	BA19	SCKE_A3	BB6	MDA20
				BA6	MDA21
				BA10	MDA22
				BB20	MDA23
				BB31	
				AV12	MDA24
				CKE8	MDA25
				CKE8	MDA26
				CKE8	MDA27
				CKE8	MDA28
				CKE8	MDA29
				CKE8	MDA30
				CKE8	MDA31
				CKE8	MDA32
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				CKE8	MDA34
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LE82G31B0S[10HB1-038231-30R]

CHANNEL A

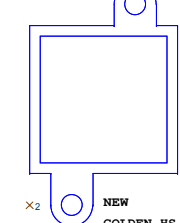
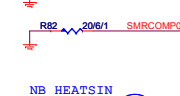
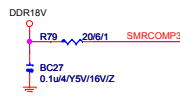
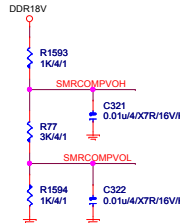
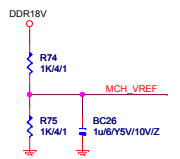
U2D

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MAAB2	BA17	SMA_B2	SDM_B0	AR7	DM80
MAAB3	BC16	SMA_B3			
MAAB4	AW15	SMA_B4	SDQ_B0	AN7	MD80
MAAB5	BA15	SMA_B5	SDQ_B1	AN8	MD81
MAAB6	BB15	SMA_B6	SDQ_B2	AN9	MD82
MAAB7	BA14	SMA_B7	SDQ_B3	AN7	MD83
MAAB8	AY15	SMA_B8	SDQ_B4	AN5	MD84
MAAB9	BB14	SMA_B9	SDQ_B5	AN6	MD85
MAAB10	AW18	SMA_B10	SDQ_B6	AN6	MD86
MAAB11	BB13	SMA_B11	SDQ_B7	AW7	MD87
MAAB12	BA13	SMA_B12			
MAAB13	AY20	SMA_B13	SDQS_B1	AR12	DQS81
MAAB14	AY13	SMA_B14	SDQS_B1#	AP12	-DQS81
			SDM_B1	AW9	DM81
				AT11	MD88
				AW11	MD89
				AP13	MD90
				AR13	MD91
				AR11	MD92
				AW9	MD93
				AV12	MD94
				AU12	MD95
				AP16	DQS82
				AR15	-DQS82
				AW13	DM82
				AU15	MD96
				AV13	MD97
				AU17	MD98
				AT17	MD99
				AU13	MD920
				AM13	MD921
				AW15	MD922
				AW17	MD923
				AT24	DQS83
				AU26	-DQS83
				AP23	DM83
				AV24	MD924
				AT23	MD925
				AT28	MD926
				AP26	MD927
				AV23	MD928
				AM23	MD929
				AR24	MD930
				AN26	MD931
				AW39	DQS84
				AU39	-DQS84
				AU37	DM84
				AW37	MD932
				AV38	MD933
				AN36	MD934
				AN37	MD935
				AV35	MD936
				AR35	MD937
				AN35	MD938
				AV32	MD939
				AL35	DQS85
				AL34	-DQS85
				AM37	DM85
				AM35	MD940
				AM38	MD941
				AJ34	MD942
				AL38	MD943
				AR39	MD944
				AM24	MD945
				AL37	MD946
				AL32	MD947
				AG35	DQS86
				AG36	-DQS86
				AG39	DM86
				AG38	MD948
				AJ38	MD949
				AF35	MD950
				AF33	MD951
				AJ37	MD952
				AL35	MD953
				AG33	MD954
				AF34	MD955
				AC36	DQS87
				AC37	-DQS87
				AD38	DM87
				AD36	MD956
				AD34	MD957
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				AD34	MD960
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				AC34	MD962
				AA33	MD963

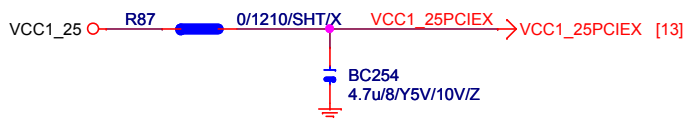
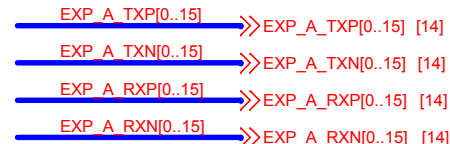
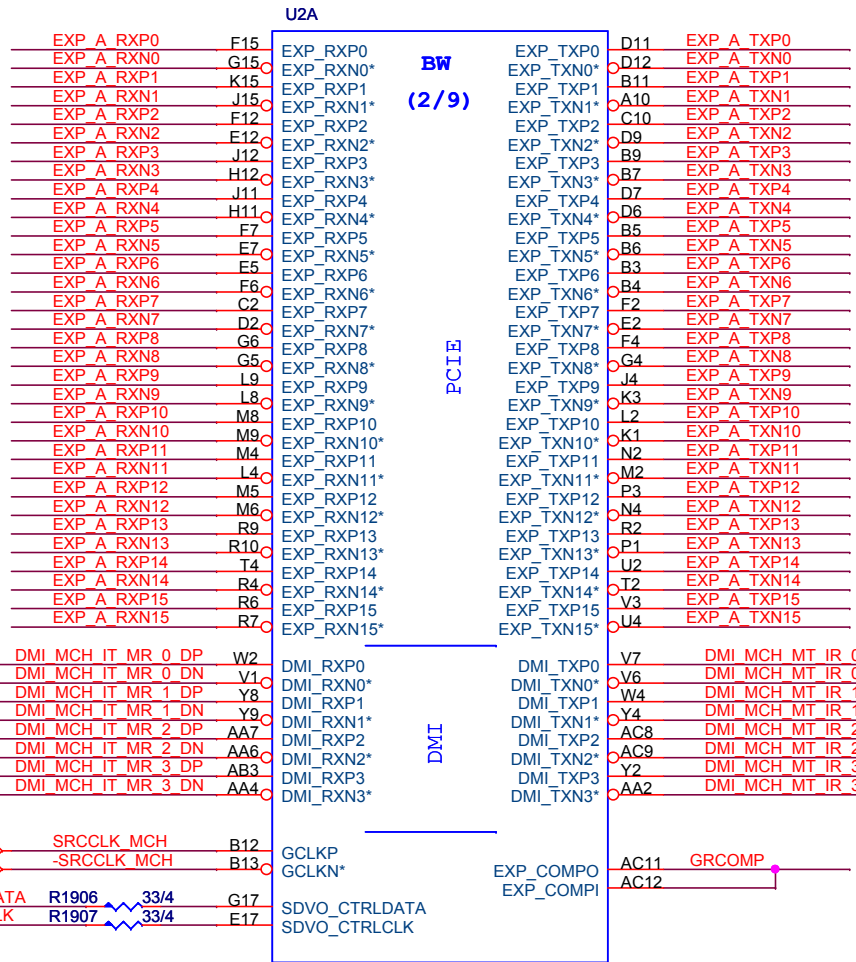
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CHANNEL B

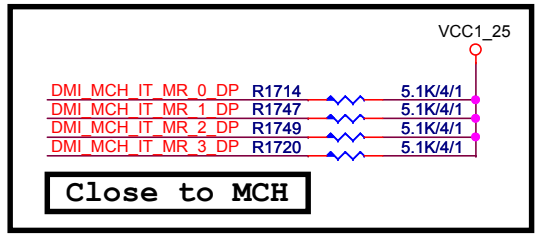
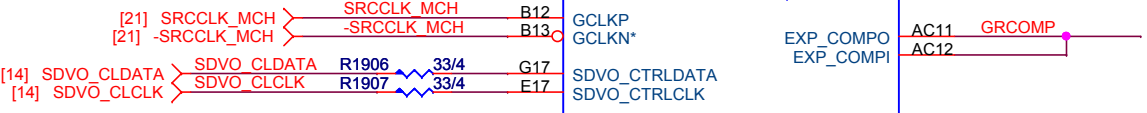
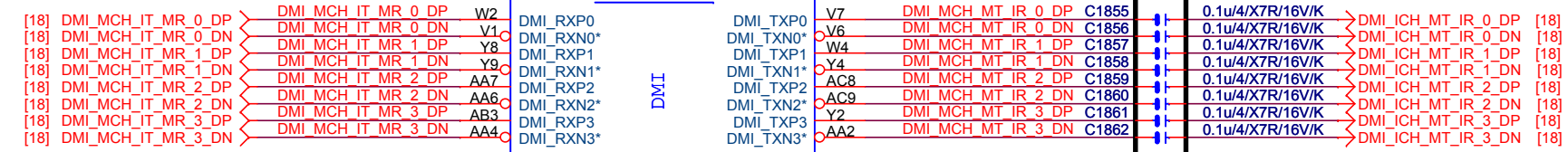
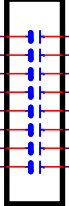
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(16) -DQS8[0..7]	← -DQS8[0..7]
(16,17) MAAB[0..14]	← MAAB[0..14]
(16) DM8[0..7]	← DM8[0..7]
(16) MD8[0..63]	← MD8[0..63]
(16,17) DQS8[0..7]	← DQS8[0..7]
(15,17) MAAA[0..14]	← MAAA[0..14]
(15) DMA[0..7]	← DMA[0..7]
(15) MDA[0..63]	← MDA[0..63]
(15) DQSA[0..7]	← DQSA[0..7]
(15) -DQSA[0..7]	← -DQSA[0..7]



NB\_HS[12SP2-04A004-31R\_12SP2-04A004-32R\_12SP2-04A004-33R]



**Close to MCH**

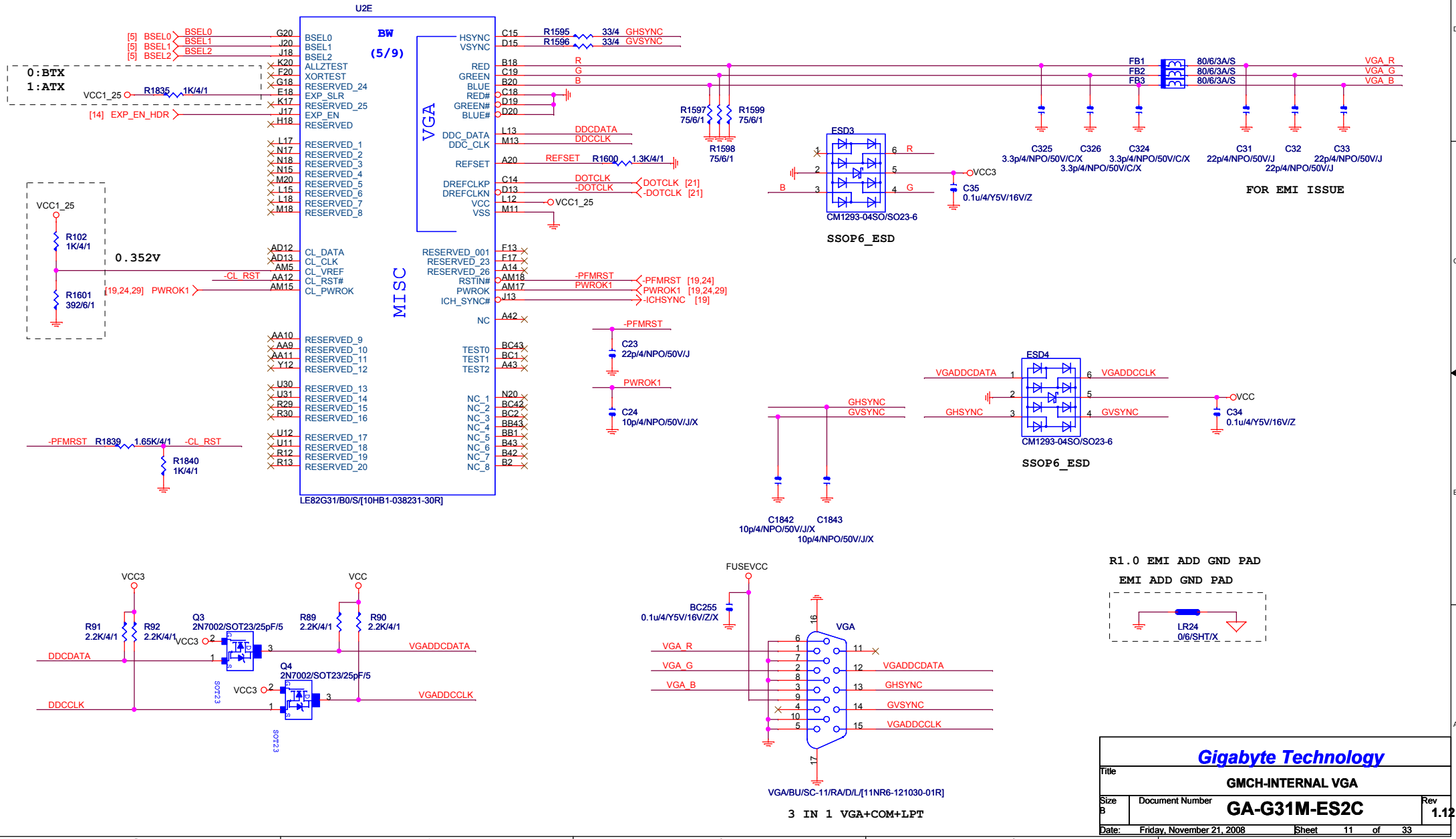


**Gigabyte Technology**

Title: **GMCH-PCI E & DMI**

Size: Custom Document Number **GA-G31M-ES2C** Rev **1.12**

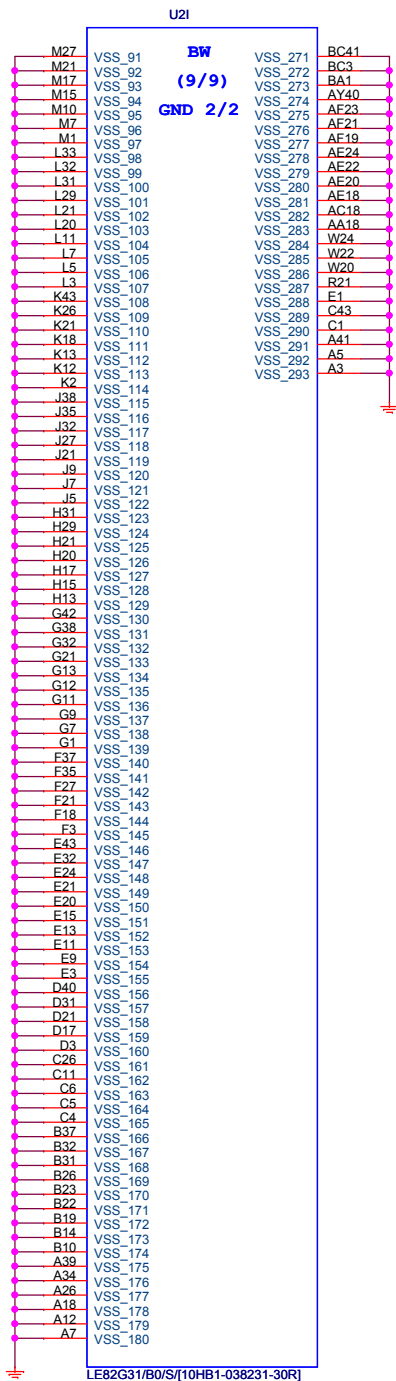
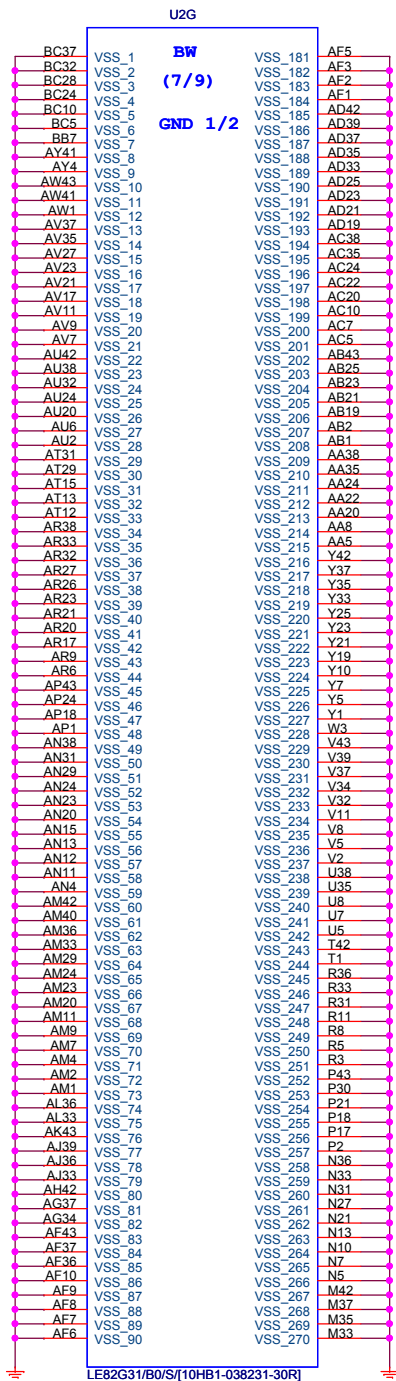
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R1.0 EMI ADD GND PAD  
EMI ADD GND PAD

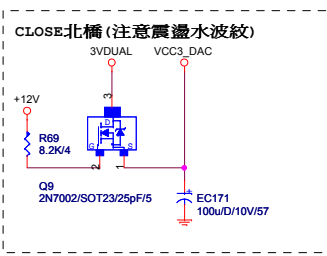
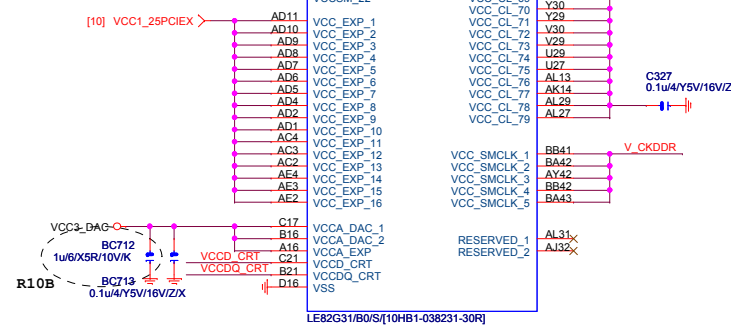
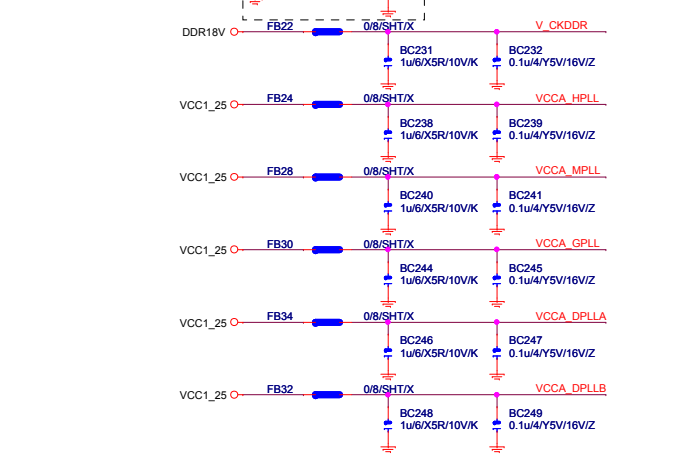
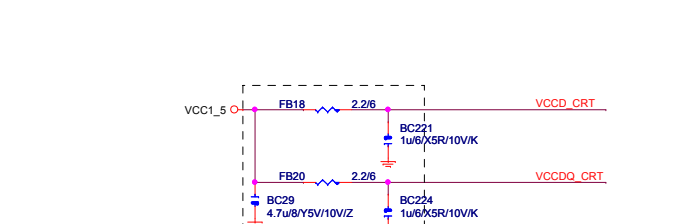
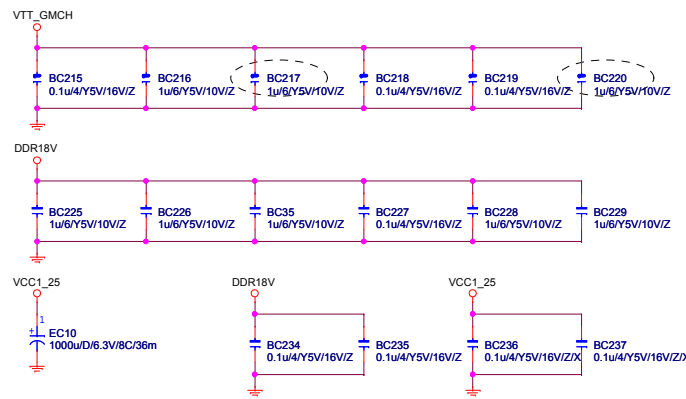
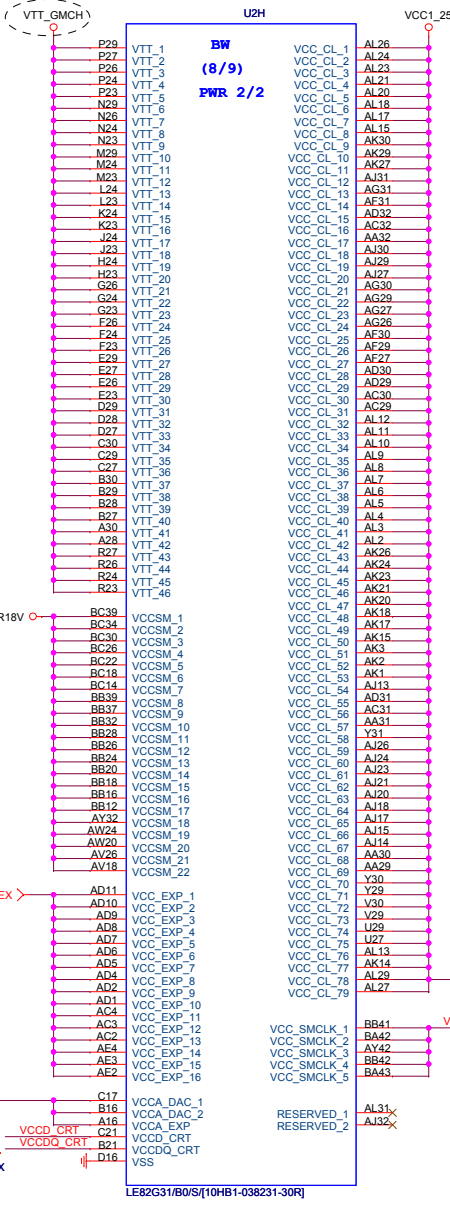
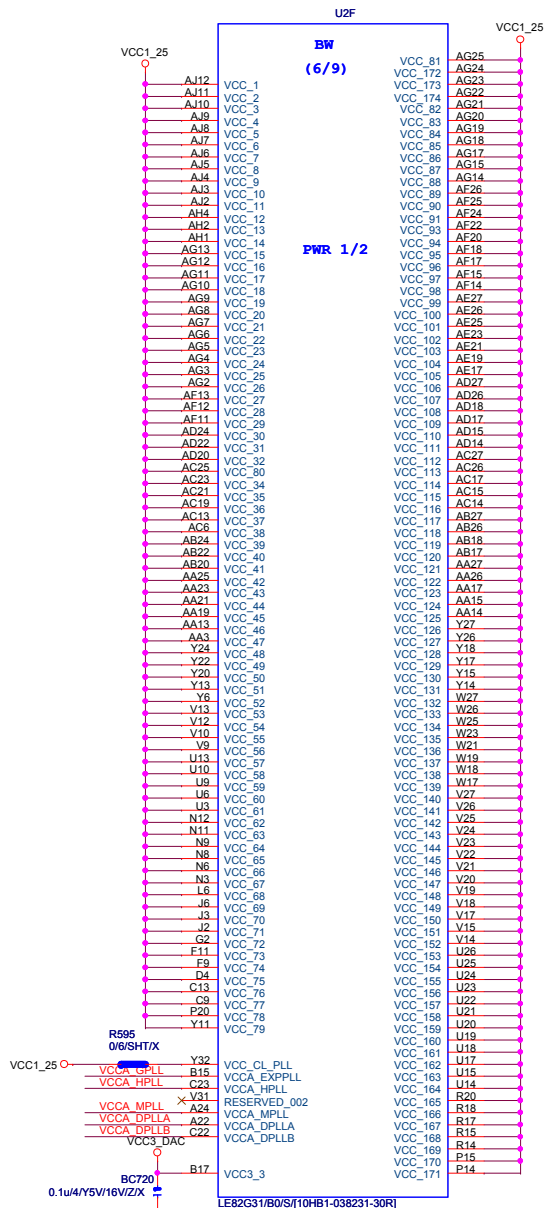
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Title <b>GMCH-INTERNAL VGA</b>		
Size B	Document Number <b>GA-G31M-ES2C</b>	Rev <b>1.12</b>
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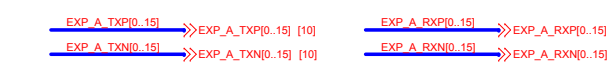
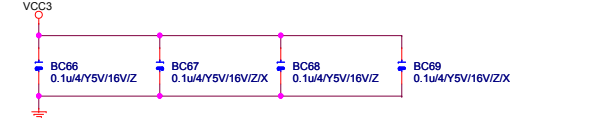
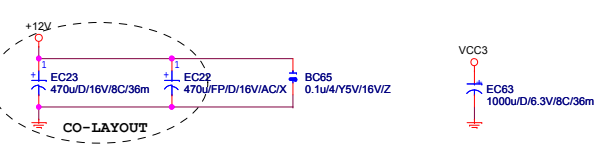
VGA/BU/SC-11/RA/D/L[11NR6-121030-01R]  
3 IN 1 VGA+COM+LPT



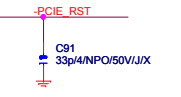
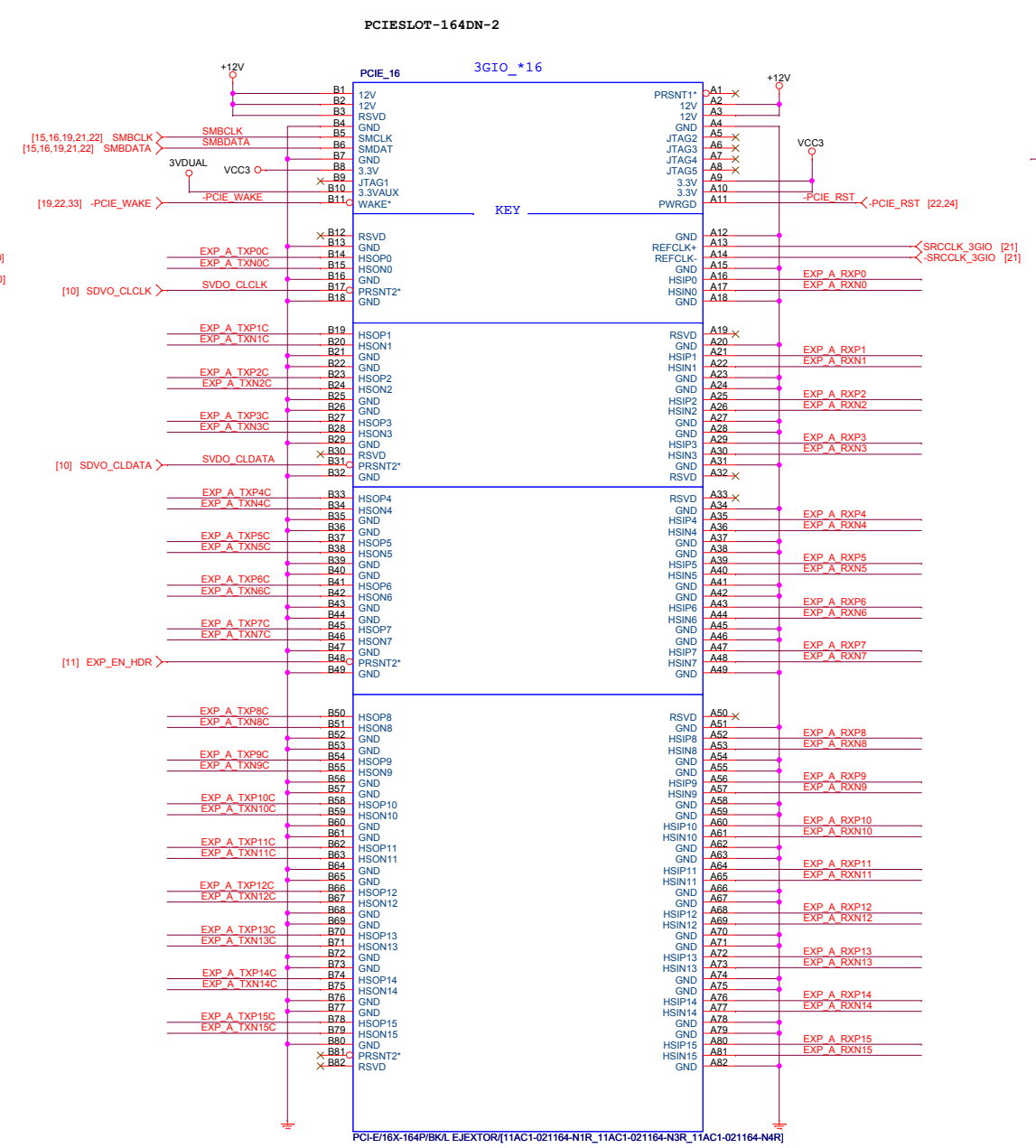
**Gigabyte Technology**

Title		
GMCH-GND		
Size	Document Number	Rev
Custom	<b>GA-G31M-ES2C</b>	1.12
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EXP_A_TXP0	C92	0.1uF/4X7R/16V/K	EXP_A_TXP0C
EXP_A_TXN0	C93	0.1uF/4X7R/16V/K	EXP_A_TXN0C
EXP_A_TXP1	C94	0.1uF/4X7R/16V/K	EXP_A_TXP1C
EXP_A_TXN1	C95	0.1uF/4X7R/16V/K	EXP_A_TXN1C
EXP_A_TXP2	C96	0.1uF/4X7R/16V/K	EXP_A_TXP2C
EXP_A_TXN2	C97	0.1uF/4X7R/16V/K	EXP_A_TXN2C
EXP_A_TXP3	C98	0.1uF/4X7R/16V/K	EXP_A_TXP3C
EXP_A_TXN3	C99	0.1uF/4X7R/16V/K	EXP_A_TXN3C
EXP_A_TXP4	C100	0.1uF/4X7R/16V/K	EXP_A_TXP4C
EXP_A_TXN4	C101	0.1uF/4X7R/16V/K	EXP_A_TXN4C
EXP_A_TXP5	C102	0.1uF/4X7R/16V/K	EXP_A_TXP5C
EXP_A_TXN5	C103	0.1uF/4X7R/16V/K	EXP_A_TXN5C
EXP_A_TXP6	C104	0.1uF/4X7R/16V/K	EXP_A_TXP6C
EXP_A_TXN6	C105	0.1uF/4X7R/16V/K	EXP_A_TXN6C
EXP_A_TXP7	C106	0.1uF/4X7R/16V/K	EXP_A_TXP7C
EXP_A_TXN7	C107	0.1uF/4X7R/16V/K	EXP_A_TXN7C
EXP_A_TXP8	C108	0.1uF/4X7R/16V/K	EXP_A_TXP8C
EXP_A_TXN8	C109	0.1uF/4X7R/16V/K	EXP_A_TXN8C
EXP_A_TXP9	C110	0.1uF/4X7R/16V/K	EXP_A_TXP9C
EXP_A_TXN9	C111	0.1uF/4X7R/16V/K	EXP_A_TXN9C
EXP_A_TXP10	C112	0.1uF/4X7R/16V/K	EXP_A_TXP10C
EXP_A_TXN10	C113	0.1uF/4X7R/16V/K	EXP_A_TXN10C
EXP_A_TXP11	C114	0.1uF/4X7R/16V/K	EXP_A_TXP11C
EXP_A_TXN11	C115	0.1uF/4X7R/16V/K	EXP_A_TXN11C
EXP_A_TXP12	C116	0.1uF/4X7R/16V/K	EXP_A_TXP12C
EXP_A_TXN12	C117	0.1uF/4X7R/16V/K	EXP_A_TXN12C
EXP_A_TXP13	C118	0.1uF/4X7R/16V/K	EXP_A_TXP13C
EXP_A_TXN13	C119	0.1uF/4X7R/16V/K	EXP_A_TXN13C
EXP_A_TXP14	C120	0.1uF/4X7R/16V/K	EXP_A_TXP14C
EXP_A_TXN14	C121	0.1uF/4X7R/16V/K	EXP_A_TXN14C
EXP_A_TXP15	C122	0.1uF/4X7R/16V/K	EXP_A_TXP15C
EXP_A_TXN15	C123	0.1uF/4X7R/16V/K	EXP_A_TXN15C

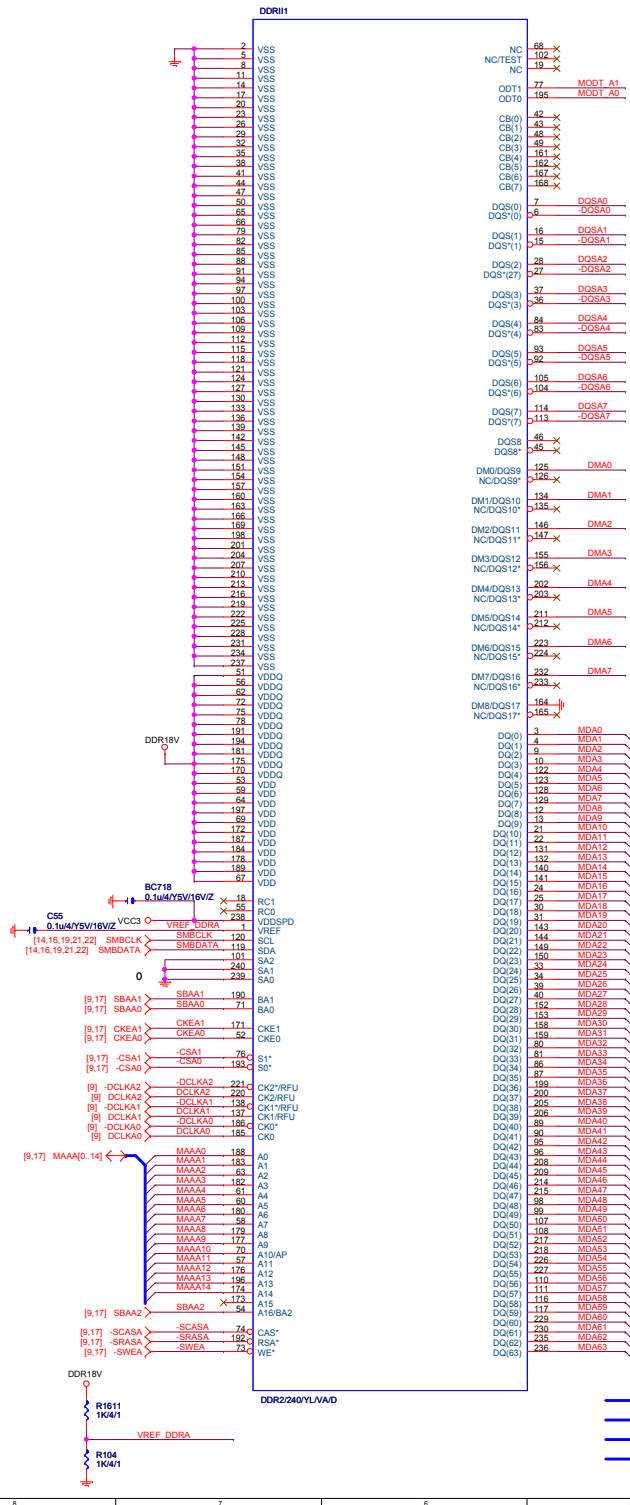


PCIE/16X-164P/BK/L EJECTOR(11AC1-021164-N1R\_11AC1-021164-N3R\_11AC1-021164-N4R)

LEFT BLUE

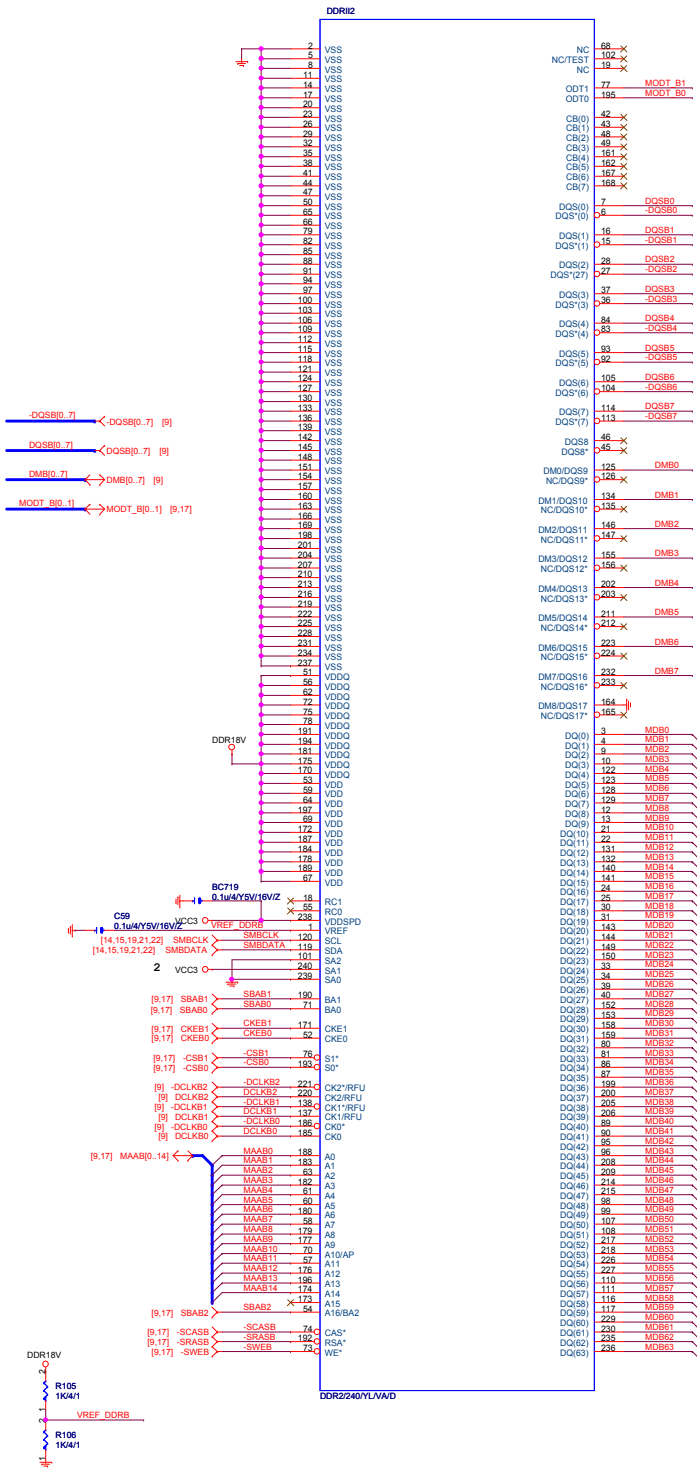
**Gigabyte Technology**

Title		
PCI EXPRESS * 16		
Size		Rev
Custom	Document Number	1.12
<b>GA-G31M-ES2C</b>		
Date:	Friday, November 21, 2008	Sheet 14 of 33



**Gigabyte Technology**

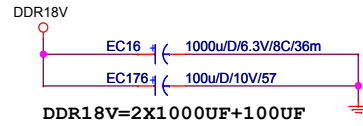
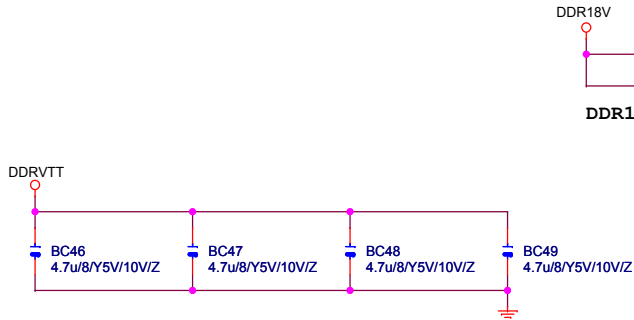
<b>DDR1 CHANNEL A</b>			
File	DDR1 CHANNEL A		
Size	Document Number	<b>GA-G31M-ES2C</b>	
Rev	1.12		
Date	Sheet	15 of 33	



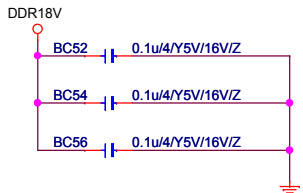


# DDR TERMINATION CHANNEL A

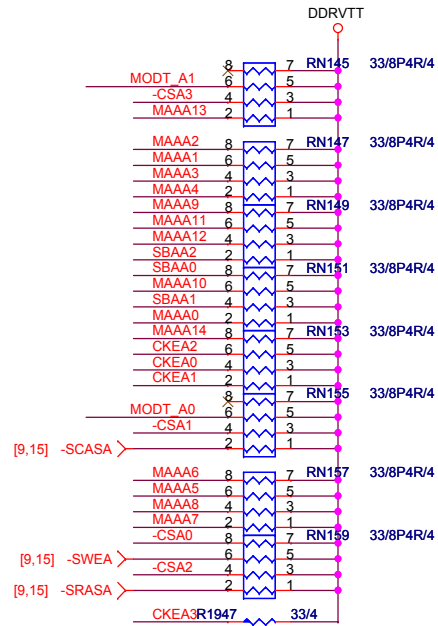
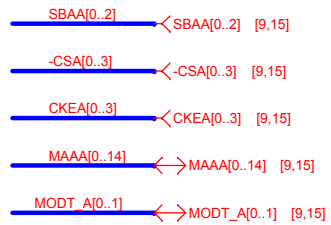
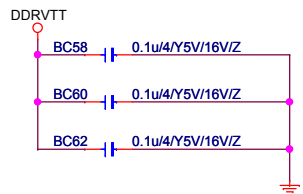
## DDRVTT Decouple



## DDR18V Decouple

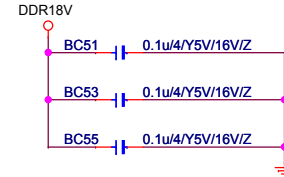


## DDRVTT Decouple

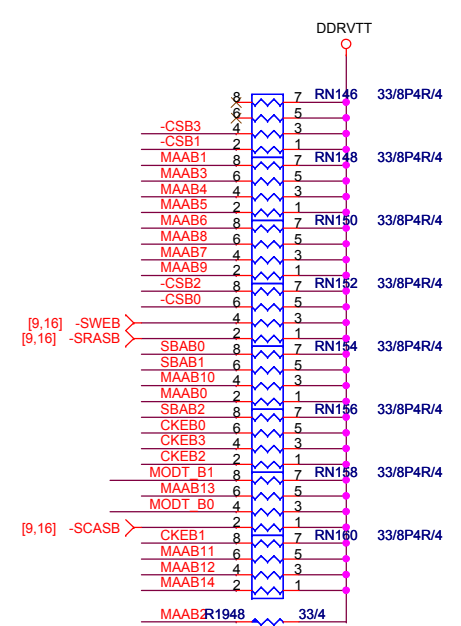
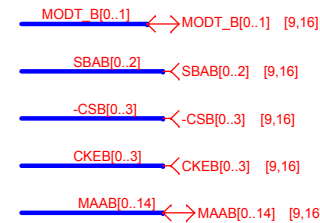
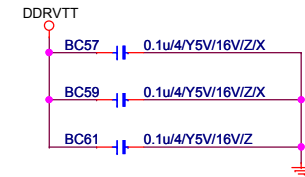


# DDR TERMINATION CHANNEL B

## DDR18V Decouple

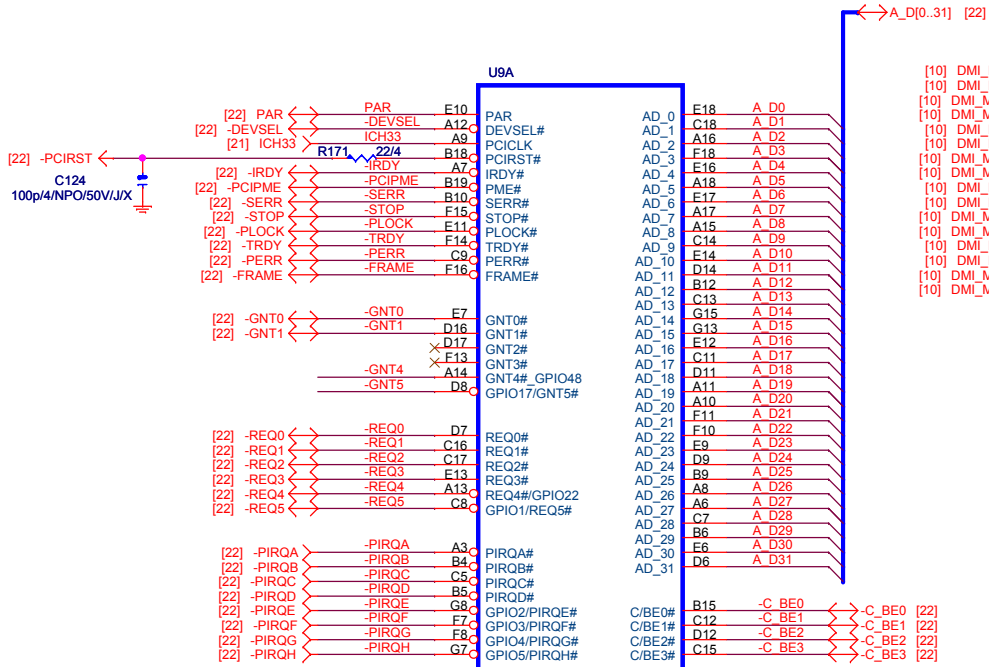


## DDRVTT Decouple

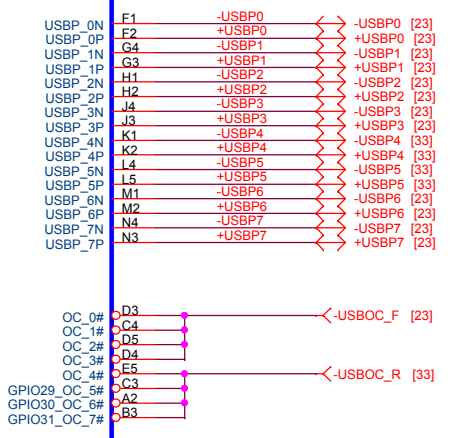
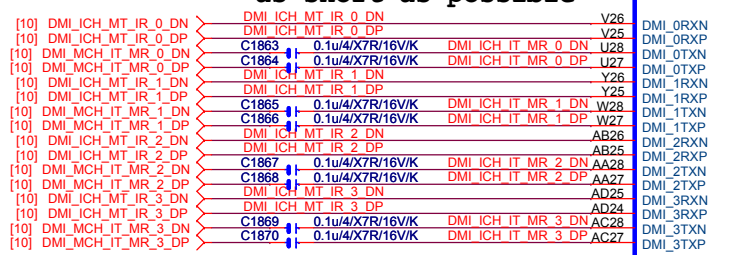


**Gigabyte Technology**

Title		
DDRII TERMINATOR		
Size Custom	Document Number	Rev
	<b>GA-G31M-ES2C</b>	<b>1.12</b>
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Close to ICH  
as short as possible

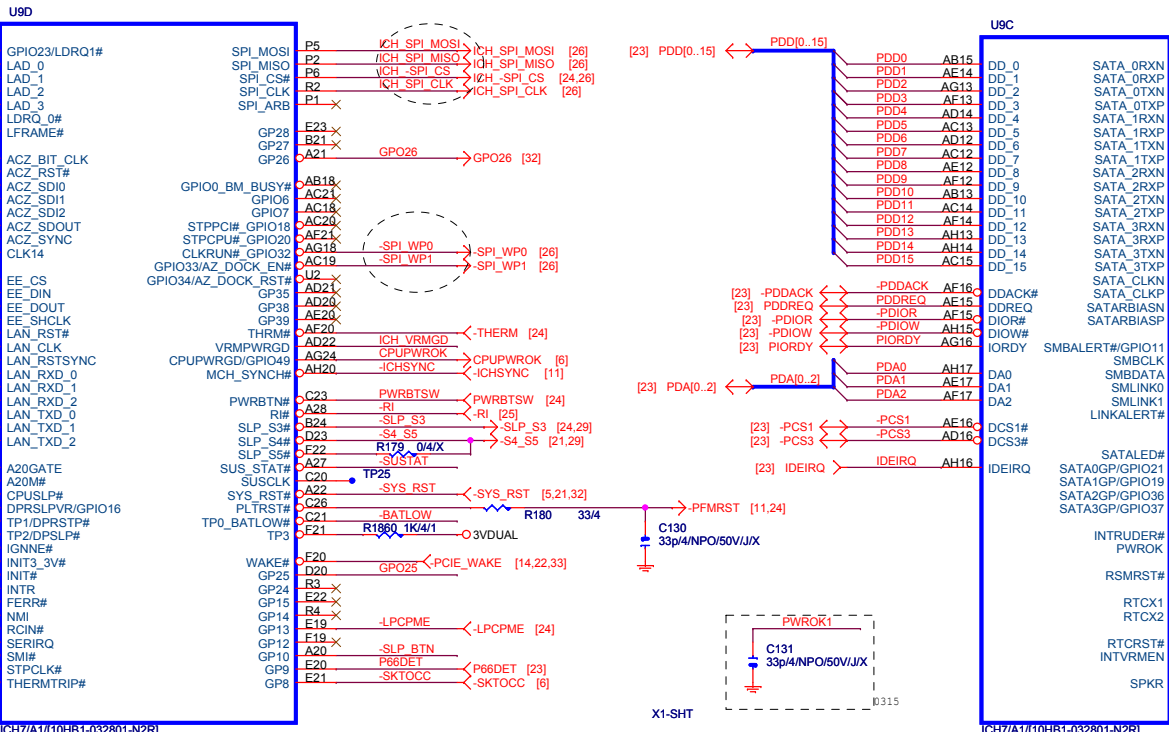


**Gigabyte Technology**

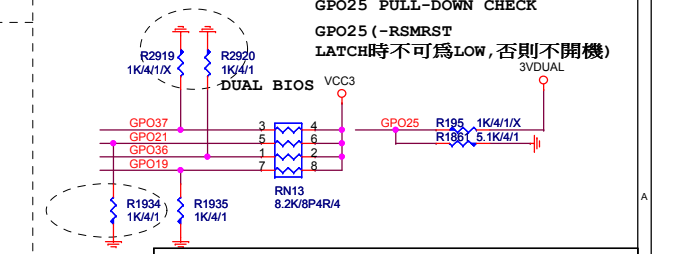
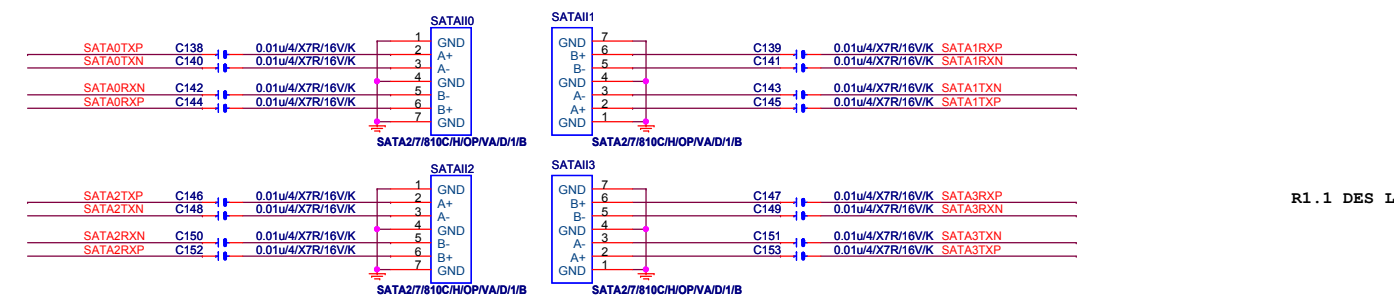
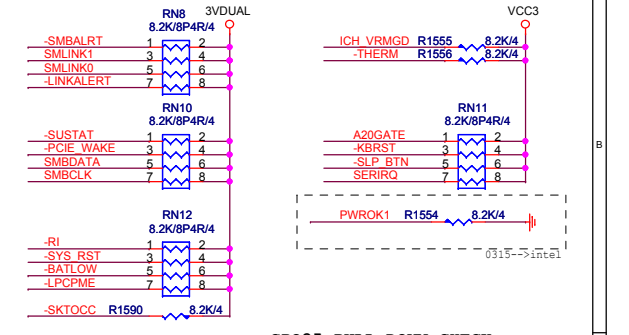
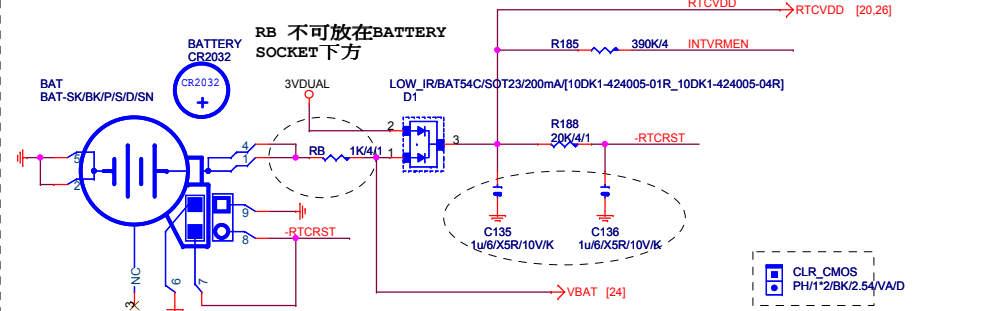
Title: ICH7-PCI, DMI, LAN, USB

Size: Document Number: GA-G31M-ES2C Rev: 1.12

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NEW TYPE : BATTERY-DUAL-4



R1.1 DES LITE DESIGN

**Gigabyte Technology**

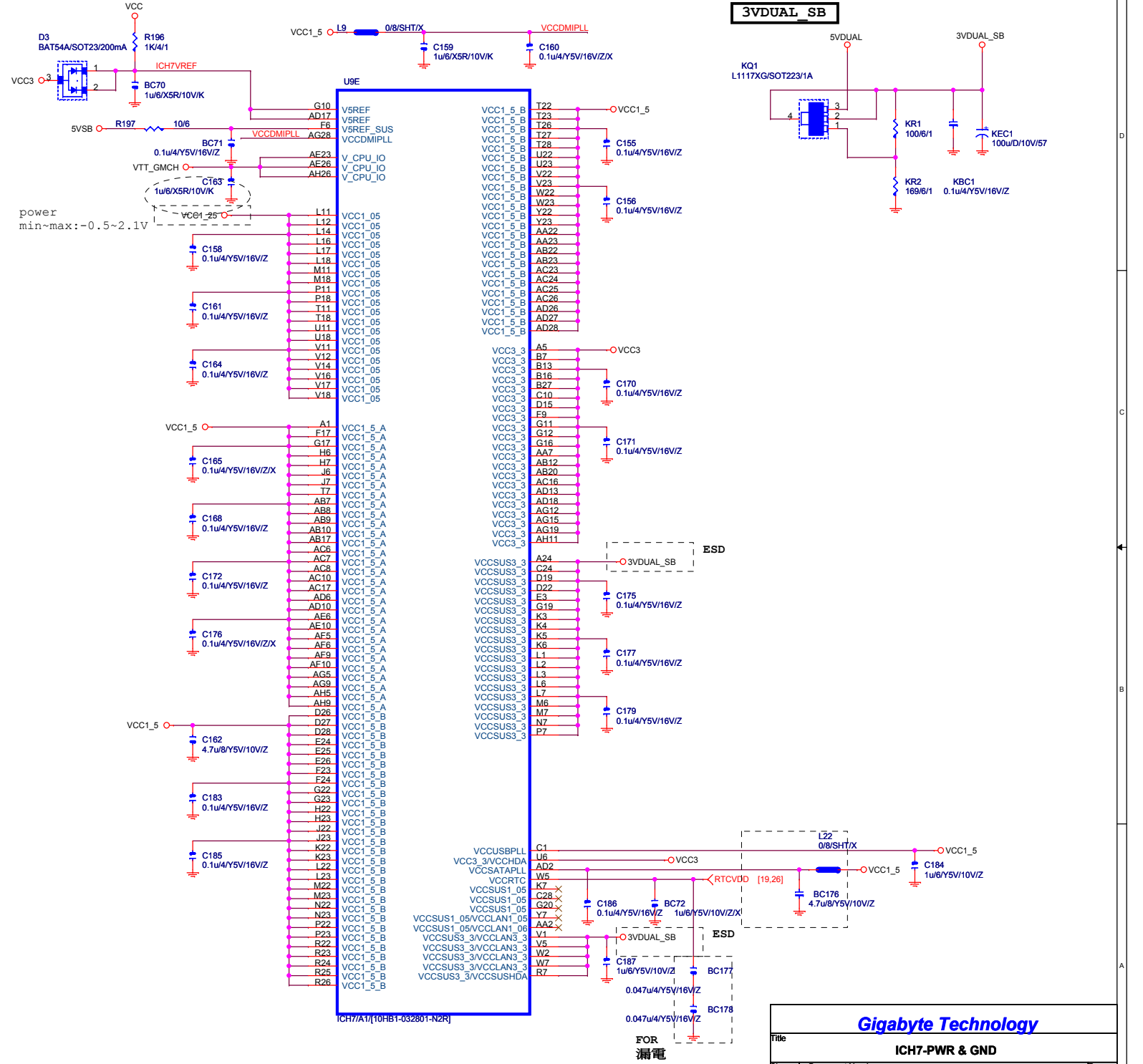
Title: ICH7-IDE, SATA, GPIO, CTRL

Size Custom Document Number: GA-G31M-ES2C

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Rev 1.12

U9F		
A4	VSS1	VSS101
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
H28	VSS44	VSS144
J1	VSS45	VSS145
J5	VSS46	VSS146
J24	VSS47	VSS147
J25	VSS48	VSS148
J25	VSS49	VSS149
J26	VSS50	VSS150
K24	VSS51	VSS151
K27	VSS52	VSS152
K28	VSS53	VSS153
L13	VSS54	VSS154
L15	VSS55	VSS155
L24	VSS56	VSS156
L25	VSS57	VSS157
L26	VSS58	VSS158
M3	VSS59	VSS159
M4	VSS60	VSS160
M5	VSS61	VSS161
M12	VSS62	VSS162
M13	VSS63	VSS163
M14	VSS64	VSS164
M15	VSS65	VSS165
M16	VSS66	VSS166
M17	VSS67	VSS167
M24	VSS68	VSS168
M27	VSS69	VSS169
M28	VSS70	VSS170
N1	VSS71	VSS171
N2	VSS72	VSS172
N6	VSS73	VSS173
N11	VSS74	VSS174
N12	VSS75	VSS175
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
P13	VSS89	VSS189
P14	VSS90	VSS190
P15	VSS91	VSS191
P16	VSS92	VSS192
P17	VSS93	VSS193
P24	VSS94	VSS194
P27	VSS95	VSS195
P28	VSS96	VSS196
R1	VSS97	VSS197
R11	VSS98	VSS198
R12	VSS99	VSS199
R13	VSS100	VSS200



**Gigabyte Technology**

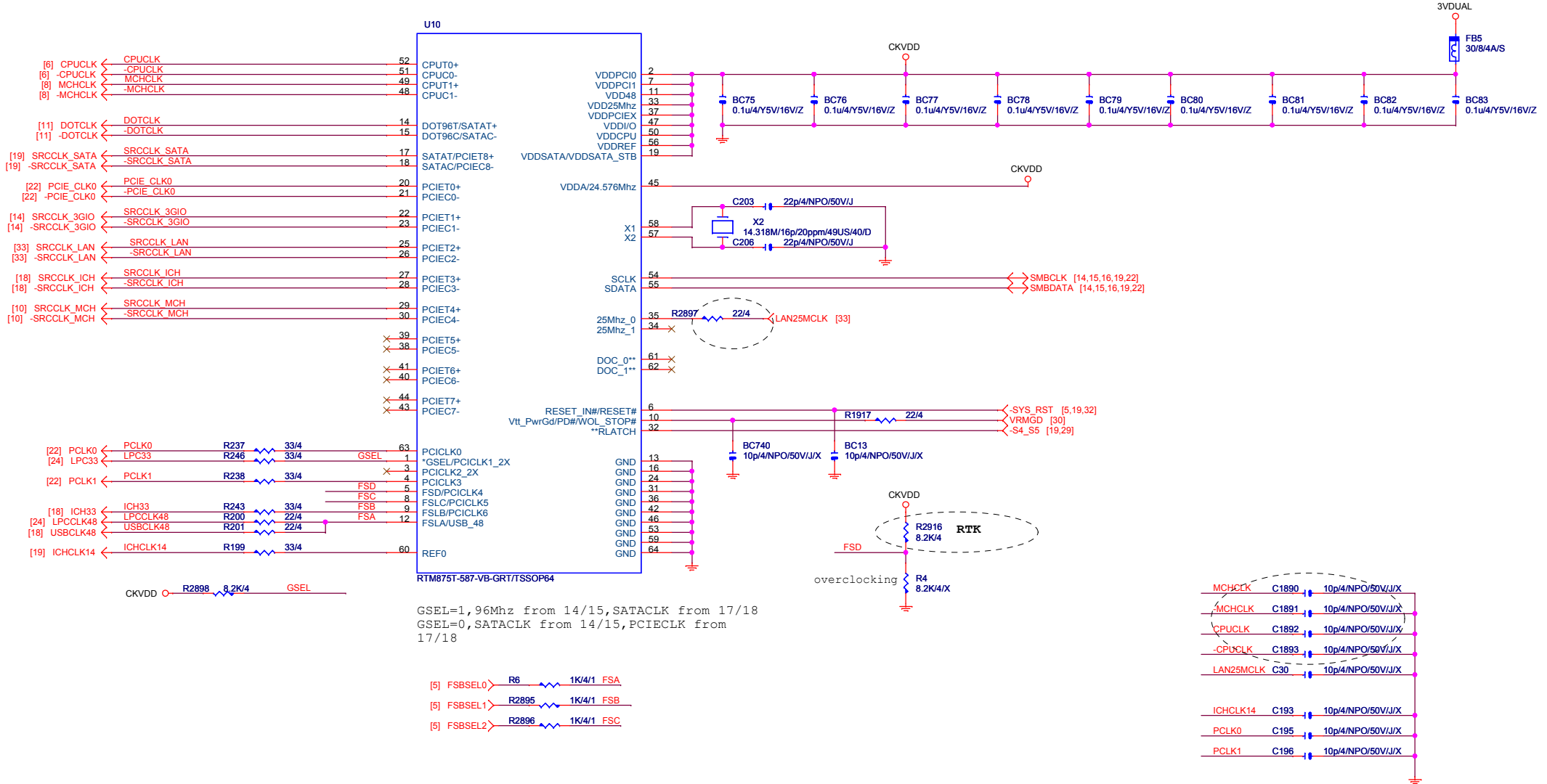
**Title** ICH7-PWR & GND

**Size** Document Number **GA-G31M-ES2C** **Rev** **1.12**

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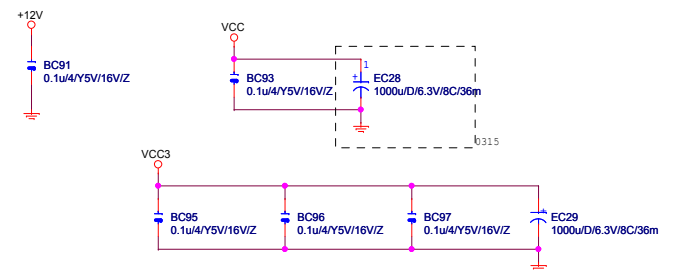
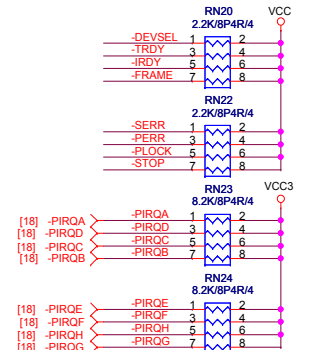
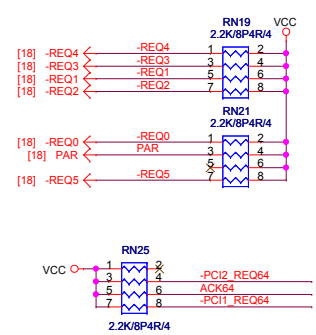
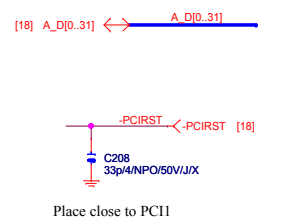
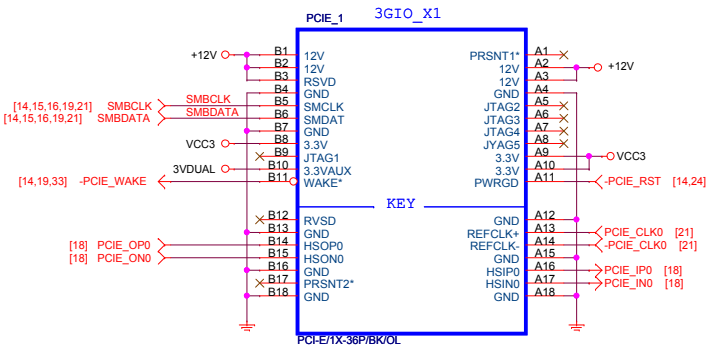
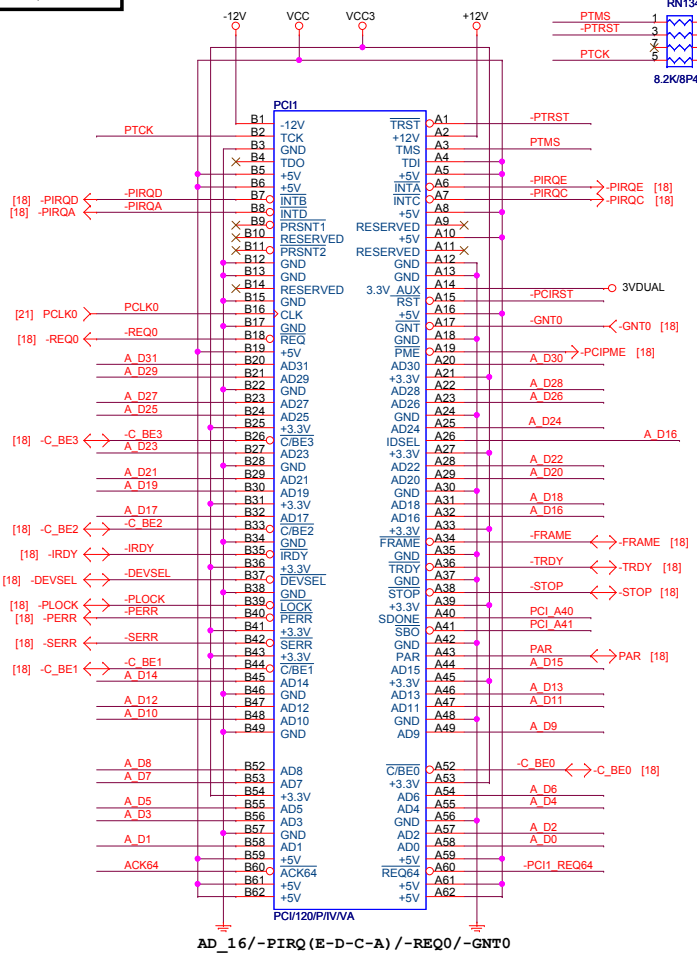
FOR  
漏電

CLK GEN CK505



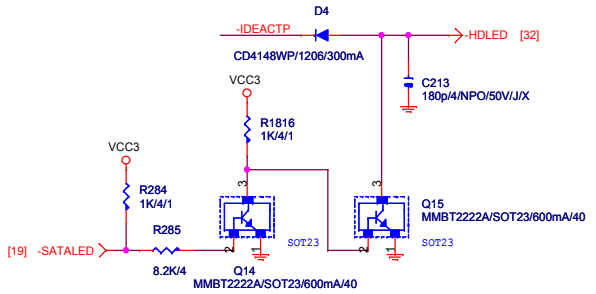
**PCI1, 2 SLOT**

**PCIEX1**

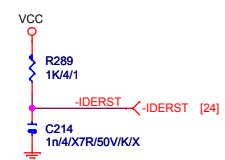


<b>Gigabyte Technology</b>		
<b>PCI SLOT 1, 2/PCIEX1</b>		
<b>GA-G31M-ES2C</b>		
Rev	1.12	
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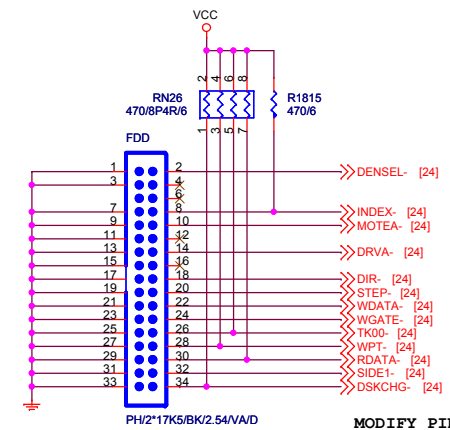
**IDE/SATA LED**



**IDE RESET**



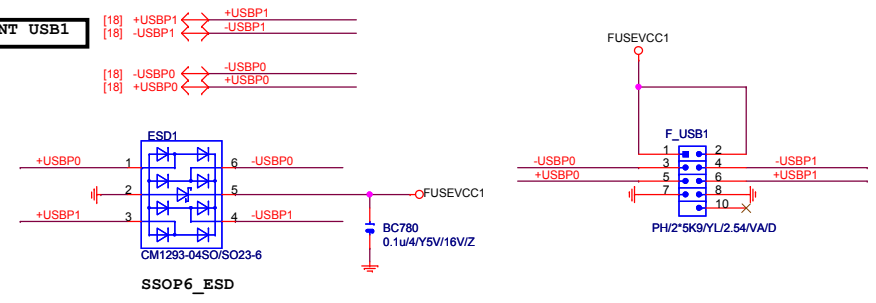
**FLOPPY**



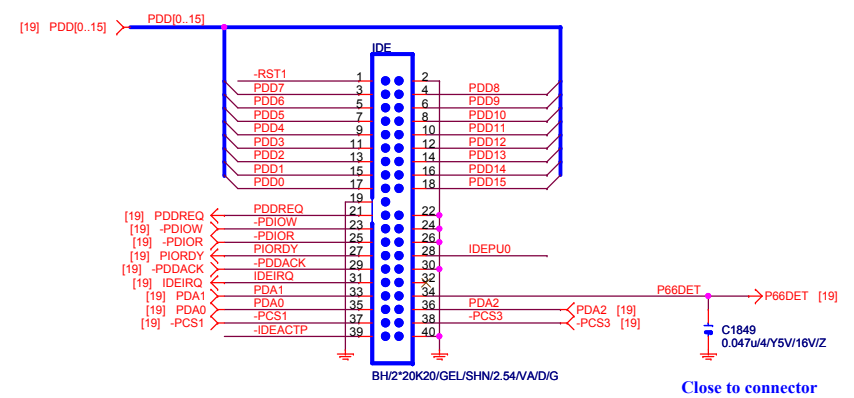
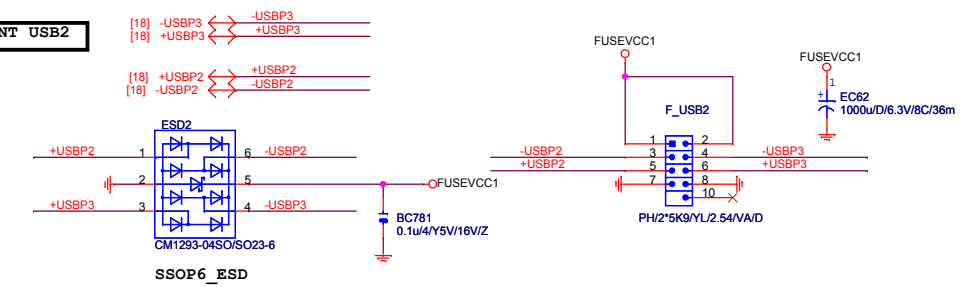
**MODIFY PIN HEADER**



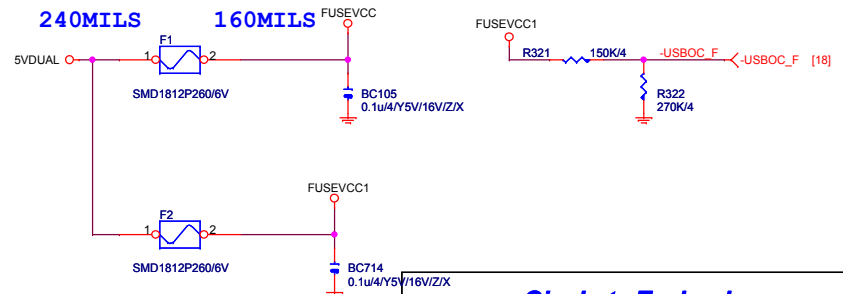
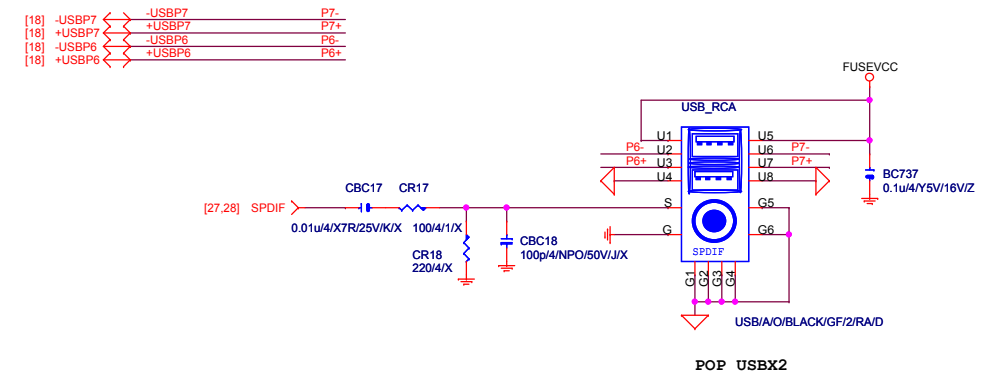
**FRONT USB1**



**FRONT USB2**



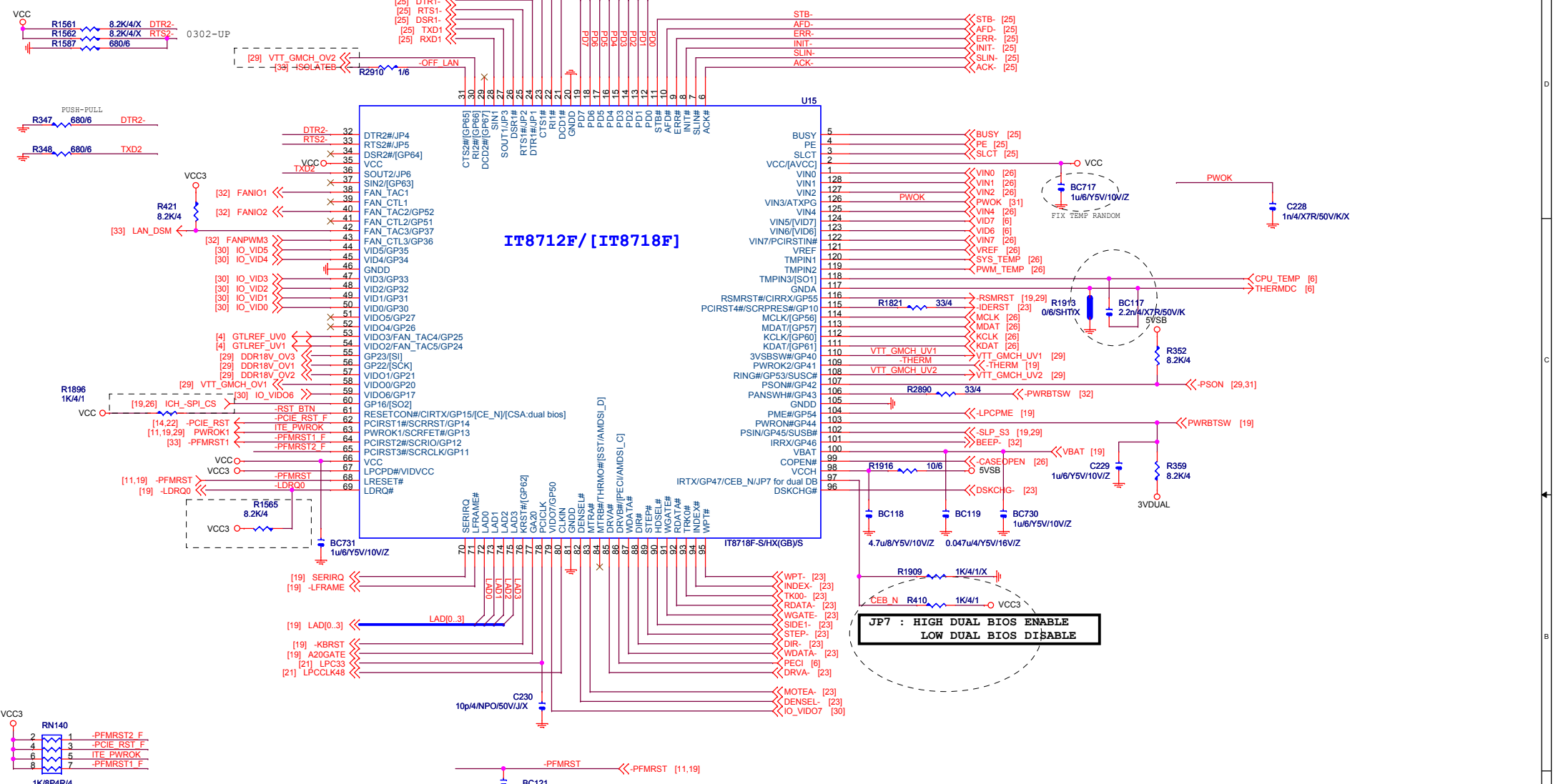
**Close to connector**



**Gigabyte Technology**

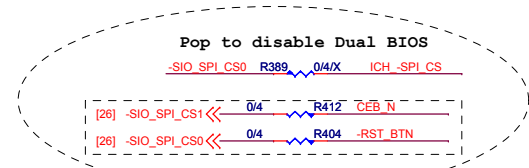
Title			
IDE,FDD,F USB,USB RCA			
Size	Document Number	Rev	
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RTS2- ==LOW CPU FAN 50%  
 ==HIGH 100%  
**DEFAULT 50%**



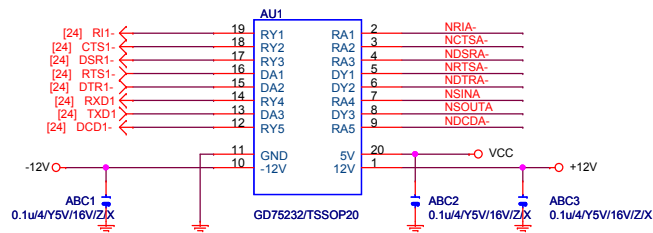
**Dual BIOS:**  
 GB logo : Pin 61 (GP15/CSA)  
 GB logo : Pin 59 (GP17/CSB)  
**Pin 59 Dual BIOS ,Power On Strapping:**  
 H ==>Dual BIOS function Enable  
 L ==>Dual BIOS function Disable

**1.2V or 3.3V tolerance select.**  
 1.2V OUTPUT 接 VTT\_GMCH  
 3.3V OUTPUT 接 3.3V  
 LPCPD#=#VIDVCC

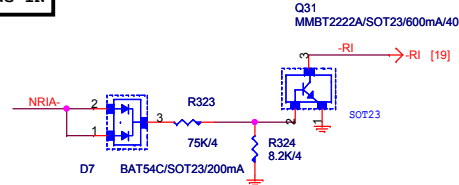




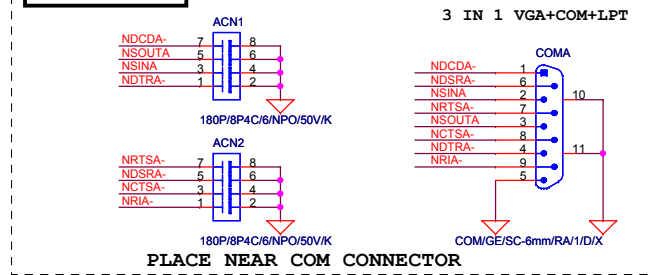
**COMA**



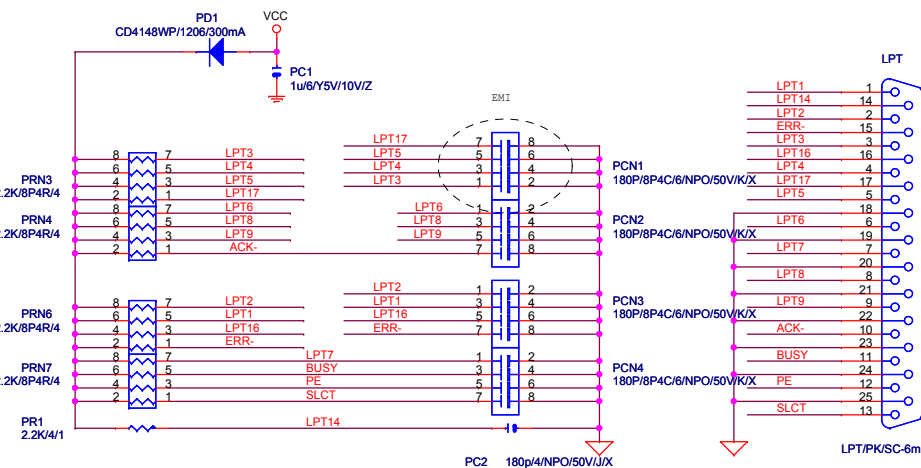
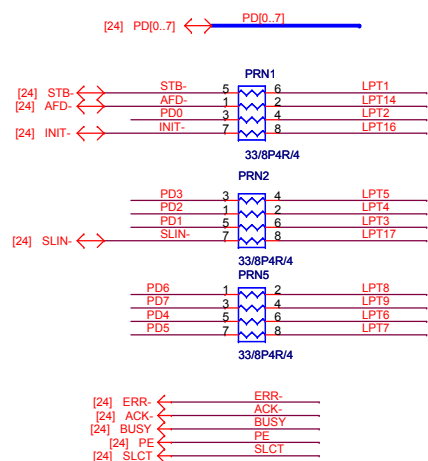
**RING IN**



**EXTERNAL COMA**

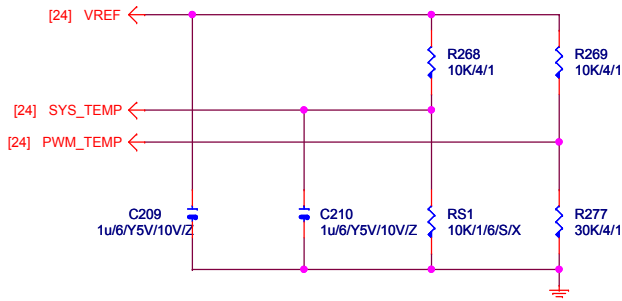


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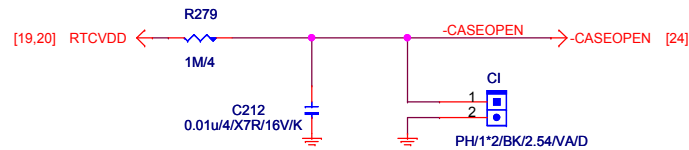


LPT/PK/SC-6mm/RA/D/X  
3 IN 1 VGA+COM+LPT

**TEMP H/W MONITOR**

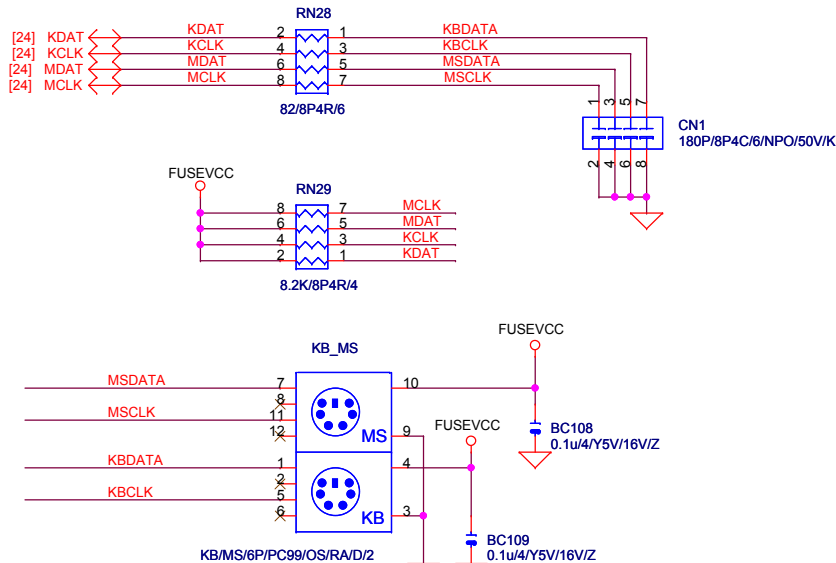


**CASE OPEN**

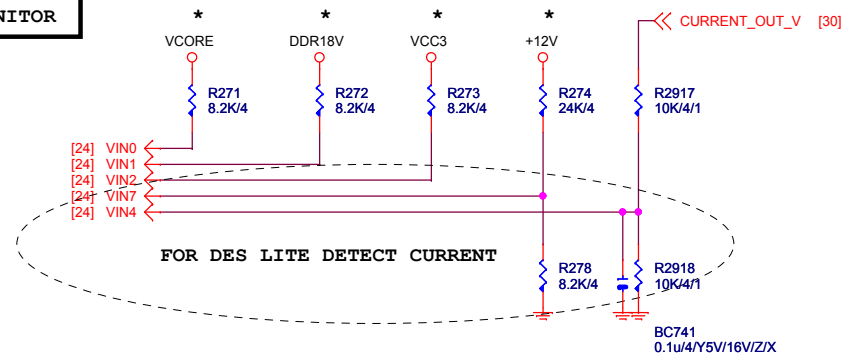


Case Open Circuits

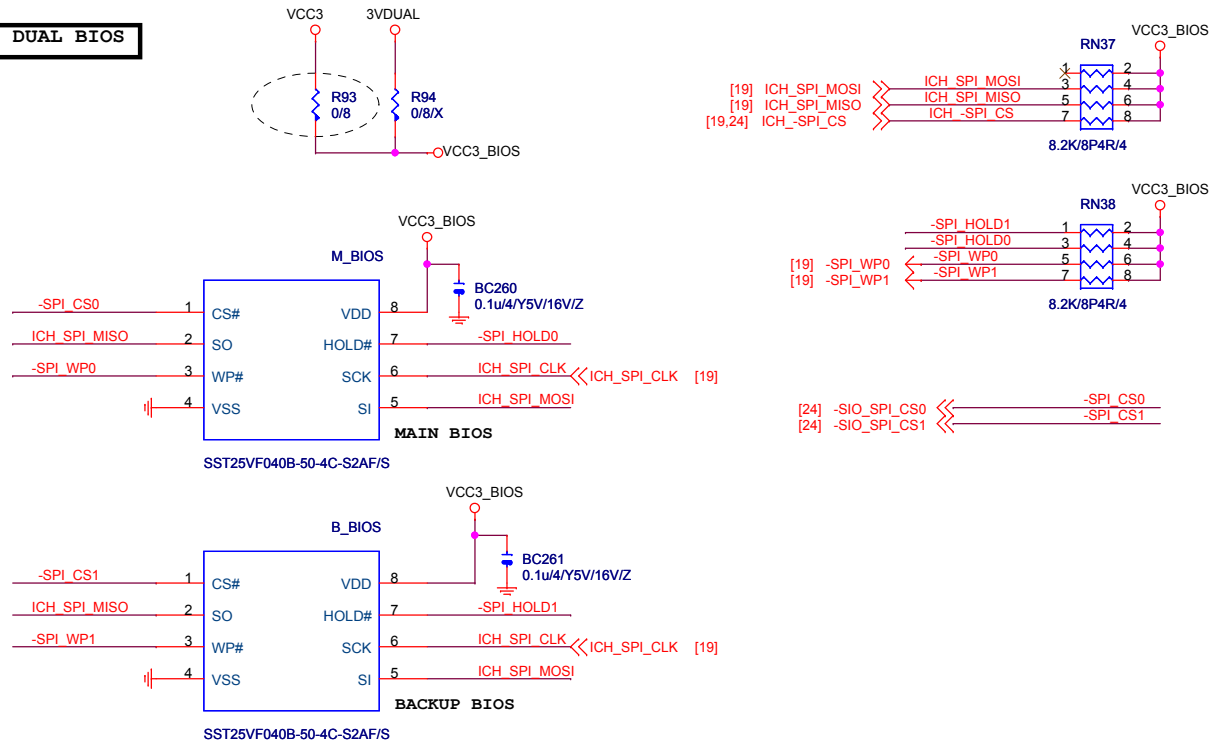
**KB/MS**



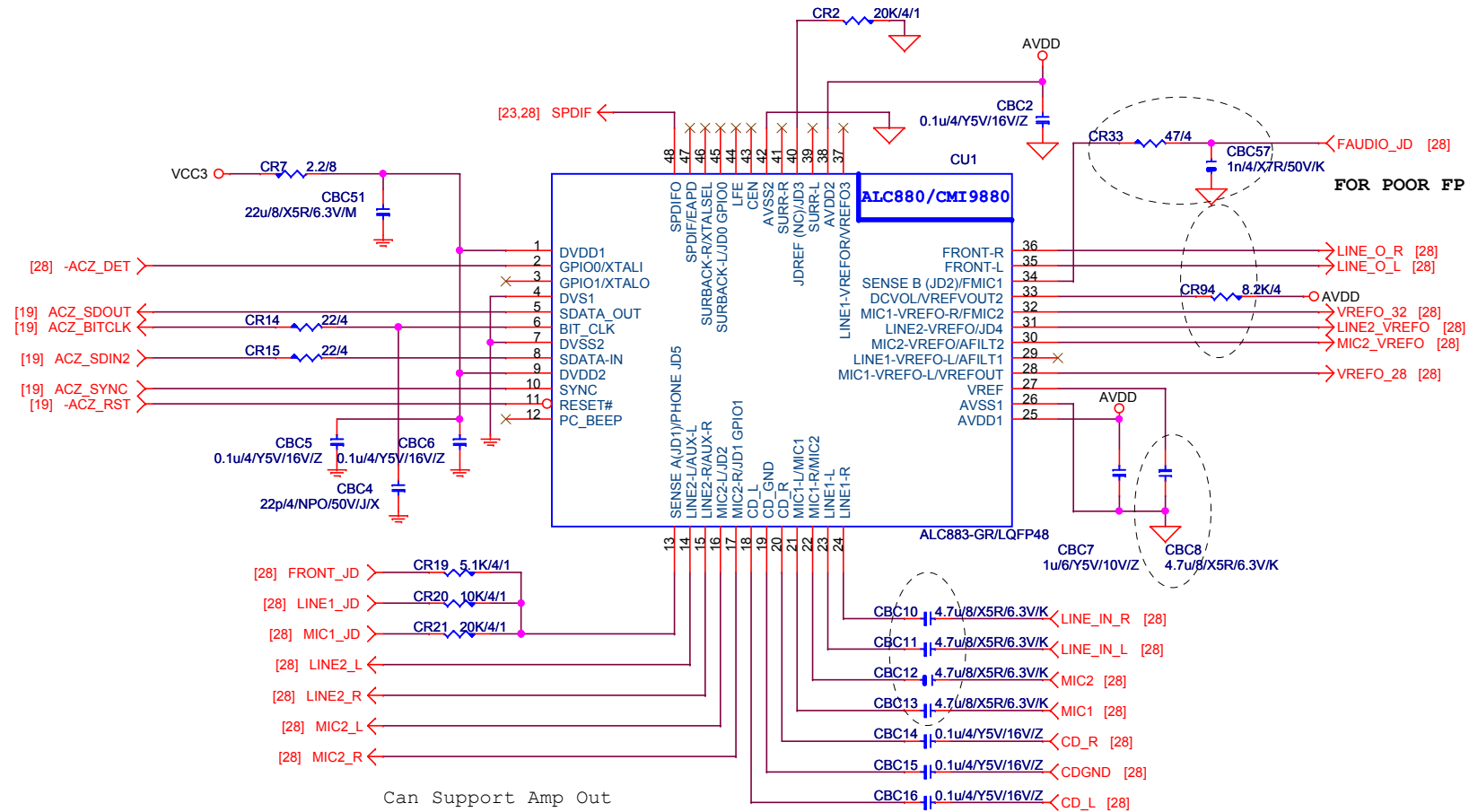
**VOLTAGE-- H/W MONITOR**



**DUAL BIOS**



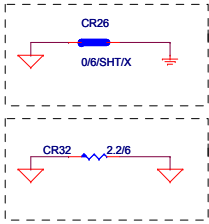
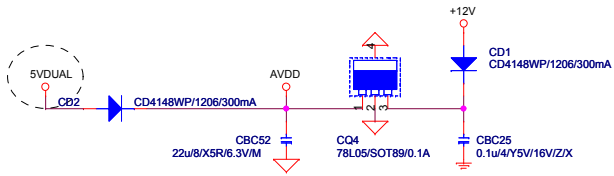
<b>Gigabyte Technology</b>		
<b>HW-MONITOR/CI/KB/MS/BIOS</b>		
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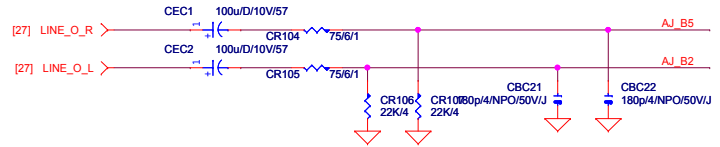
Can Support Amp Out

<b>Gigabyte Technology</b>		
<b>Title</b>		
<b>AZALIA ALC883</b>		
Size Custom	Document Number	Rev
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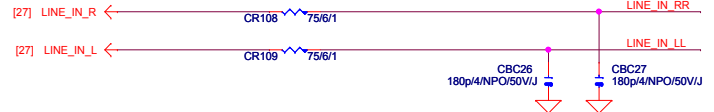
**CODEC POWER/EMI PAD**



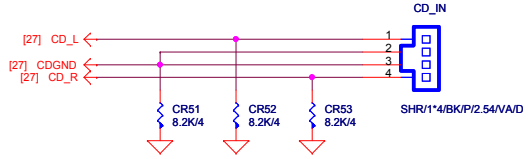
**LINE-OUT**



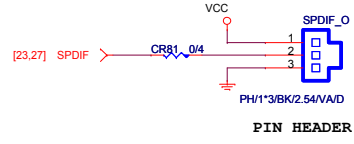
**LINE-IN**



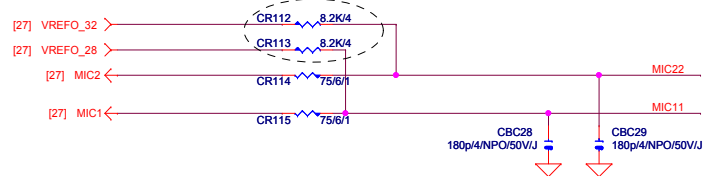
**CD IN**



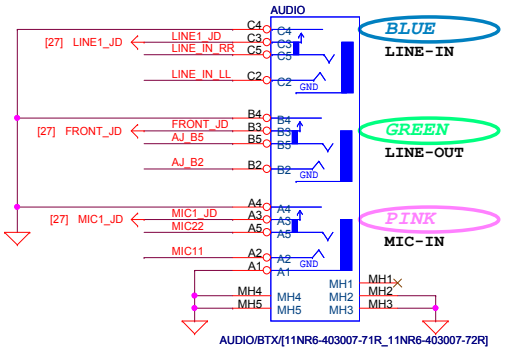
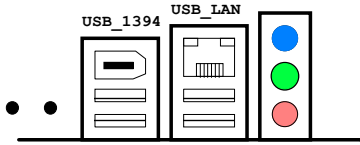
**SPDIF IN**



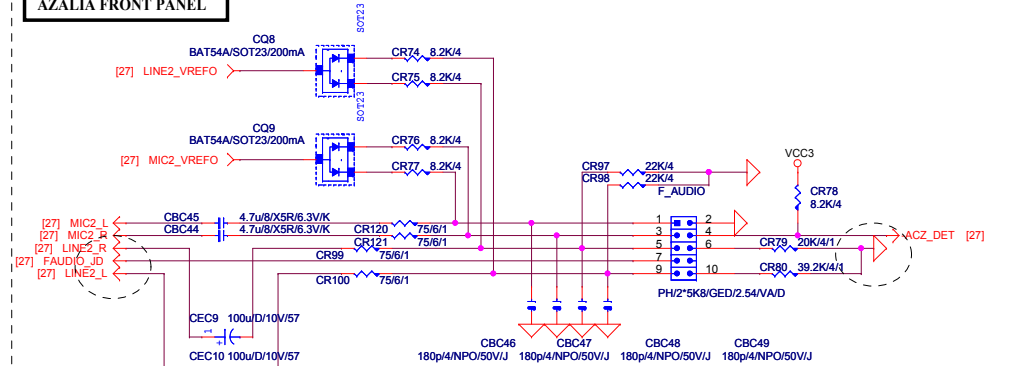
**MIC-IN**



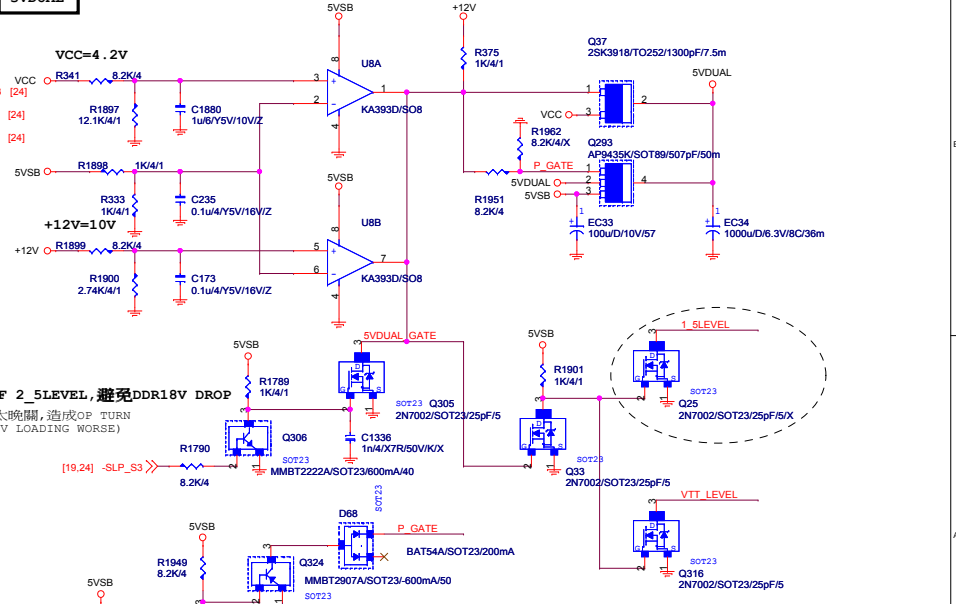
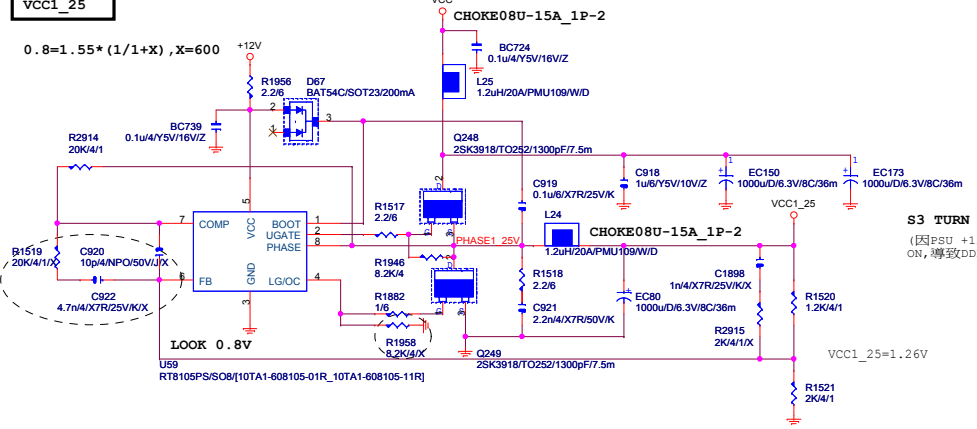
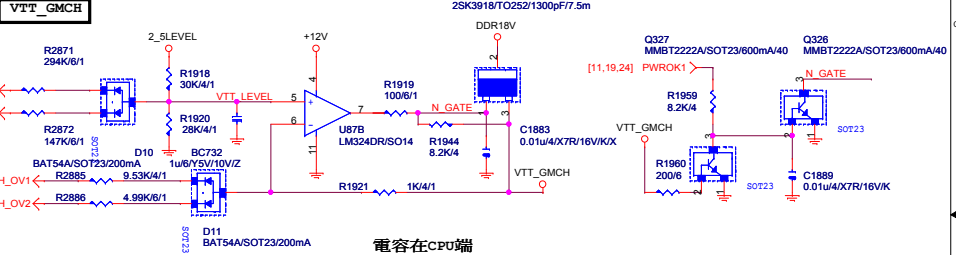
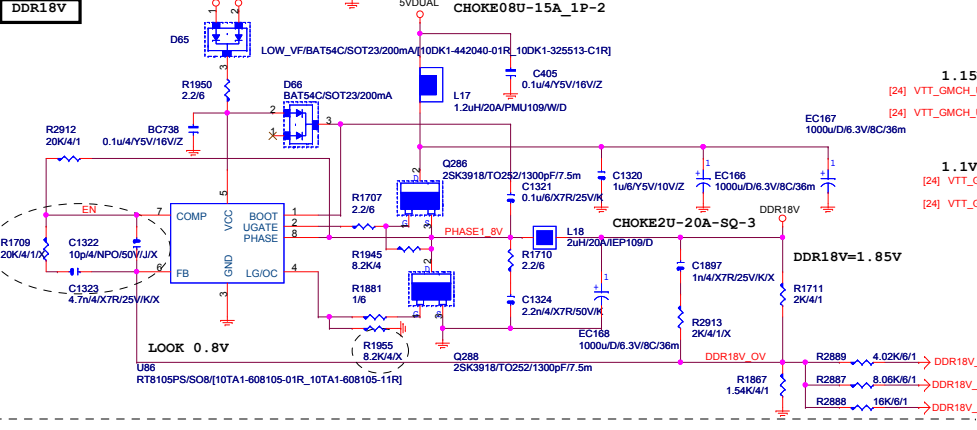
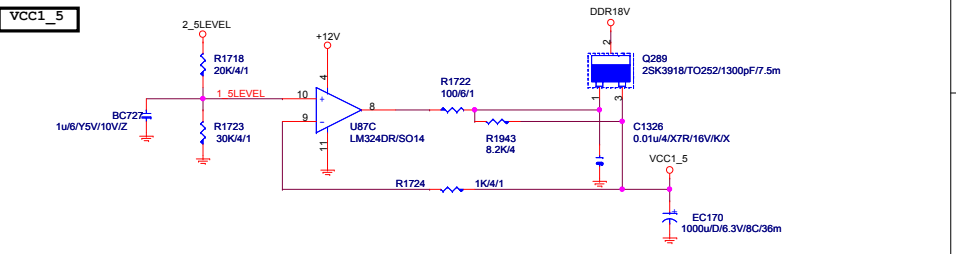
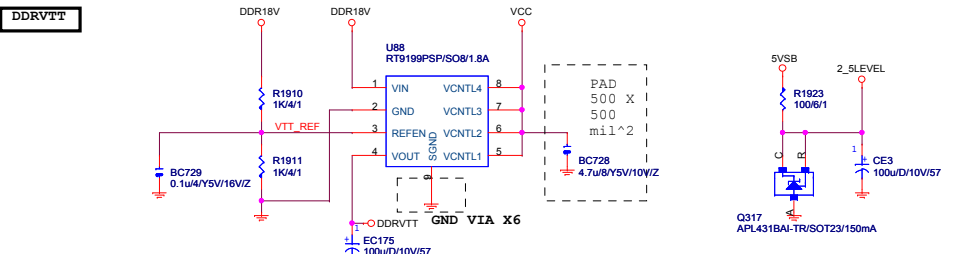
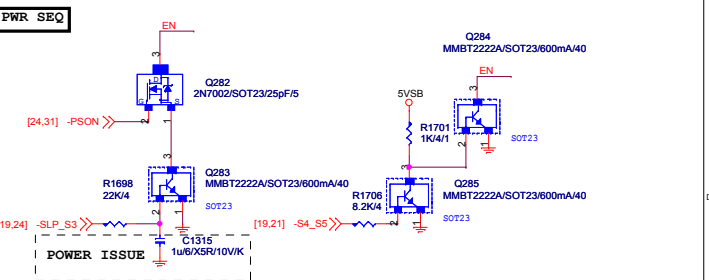
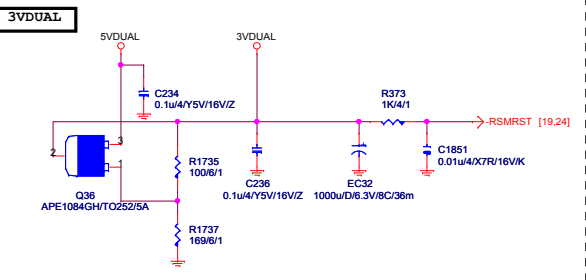
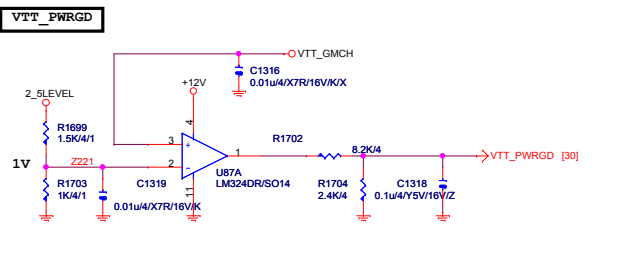
**AZALIA JACK**



**AZALIA FRONT PANEL**

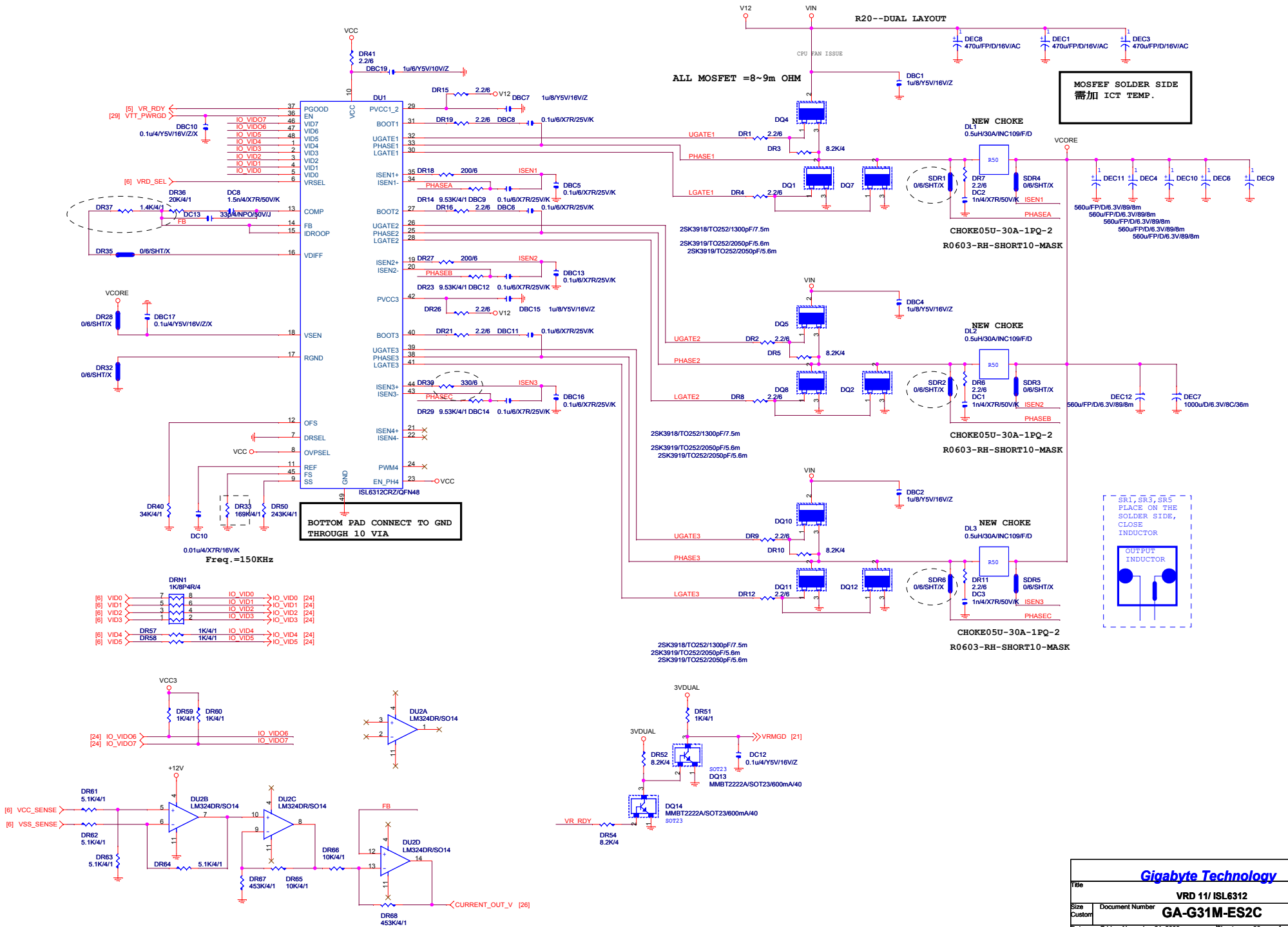


<b>Gigabyte Technology</b>		
<b>AUDIO JACK</b>		
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S3 TURN OFF 2\_5LEVEL, 避免DDR18V DROP  
(因PSU +12V太晚關, 造成OP TURN ON, 導致DDR18V LOADING WORSE)

電容在CPU端



[5] VR\_RDY  
 [29] VTT\_PWRGD

[6] VRD\_SEL

VCORE

VCC

[6] VID0  
 [6] VID1  
 [6] VID2  
 [6] VID3  
 [6] VID4  
 [6] VID5

[24] IO\_VID0  
 [24] IO\_VID1  
 [24] IO\_VID2  
 [24] IO\_VID3  
 [24] IO\_VID4  
 [24] IO\_VID5

[6] VCC\_SENSE  
 [6] VSS\_SENSE

**BOTTOM PAD CONNECT TO GND THROUGH 10 VIA**

CURRENT\_OUT\_V [26]

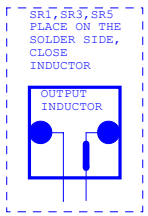
ALL MOSFET = 8~9m OHM

**MOSFET SOLDER SIDE 需加 ICT TEMP.**

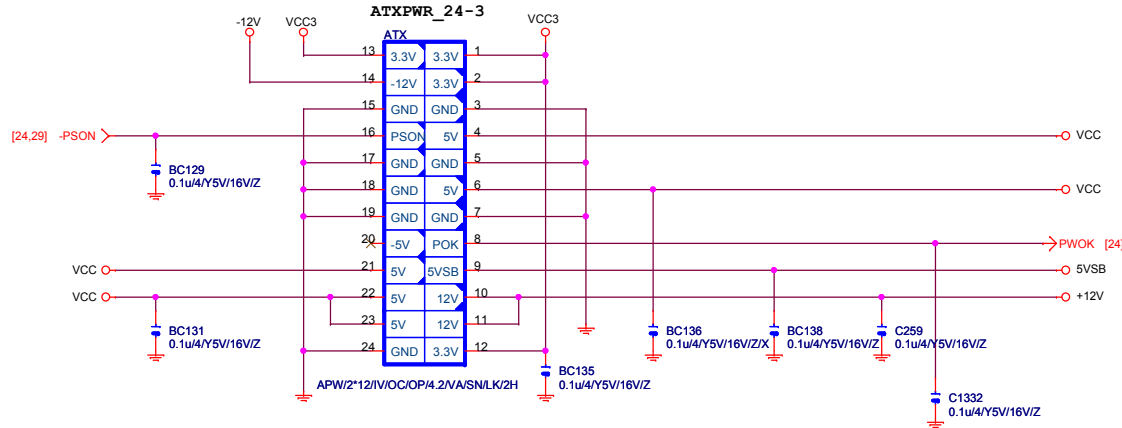
CHOKE05U-30A-1PQ-2  
 R0603-RH-SHORT10-MASK

CHOKE05U-30A-1PQ-2  
 R0603-RH-SHORT10-MASK

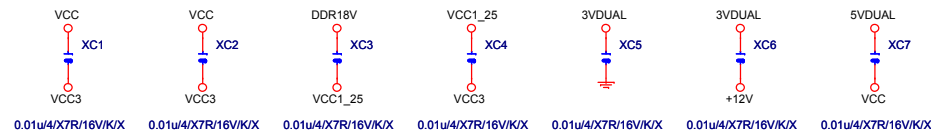
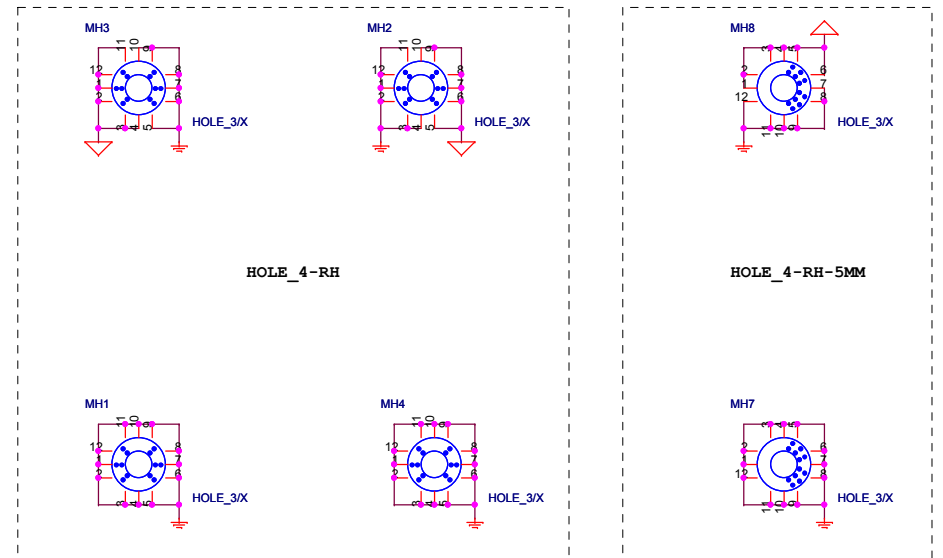
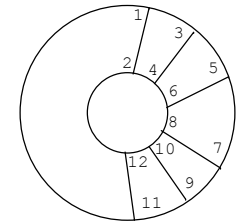
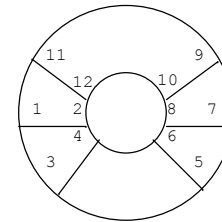
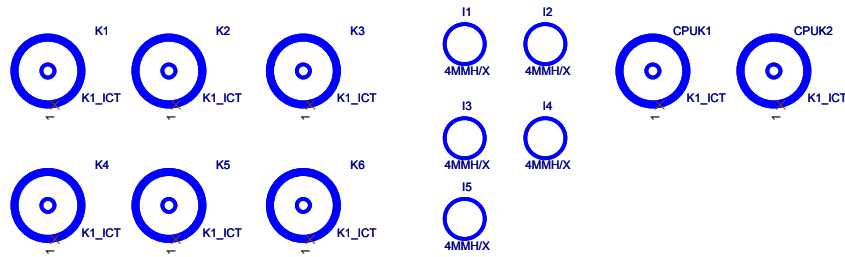
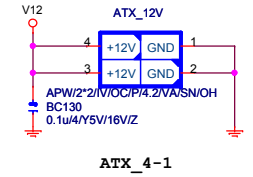
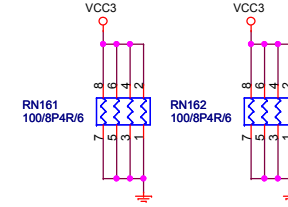
CHOKE05U-30A-1PQ-2  
 R0603-RH-SHORT10-MASK



# ATX POWER CONNECTOR



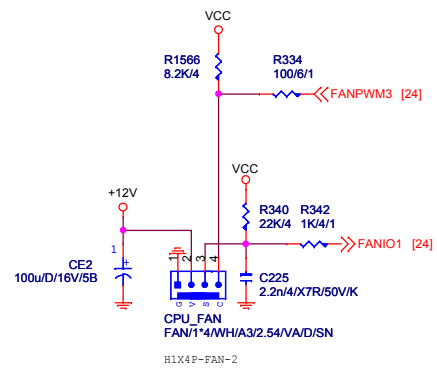
## FIX PWR AcBel (ATX-400C-A2ADB)



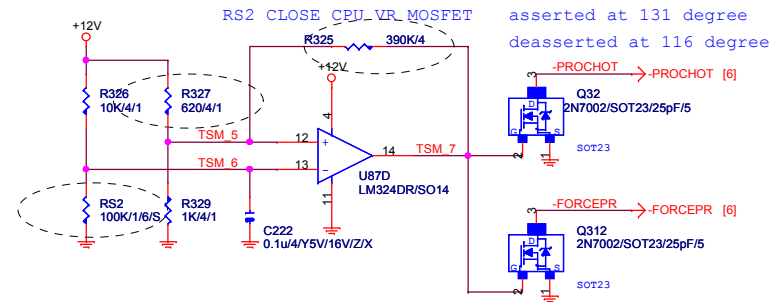
**Gigabyte Technology**

Title		<b>ATX POWER CONNECTOR</b>	
Size B	Document Number	<b>GA-G31M-ES2C</b>	
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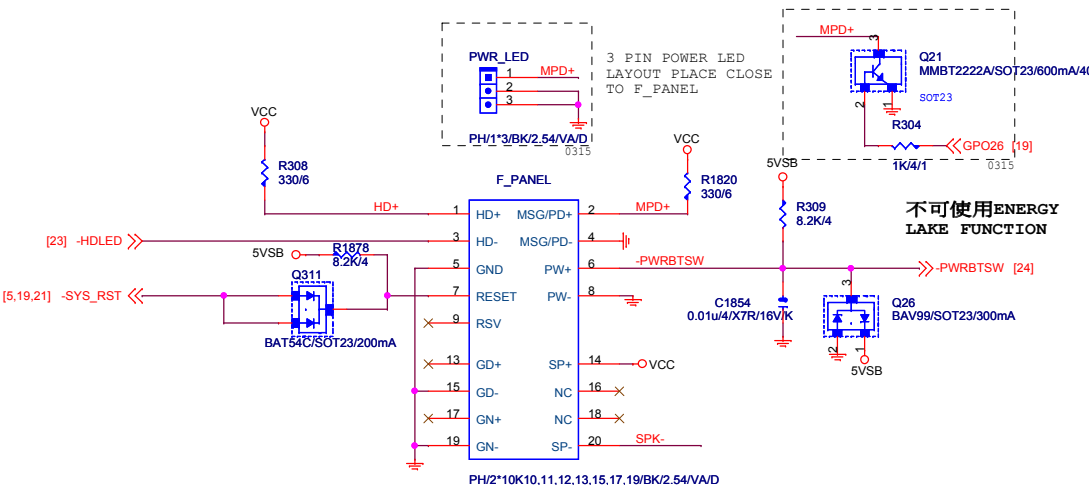
**CPU SMART FAN SMART FAN**



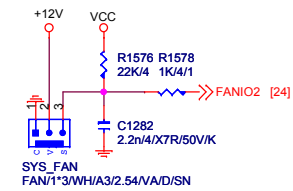
**PROCESSOR HOT**



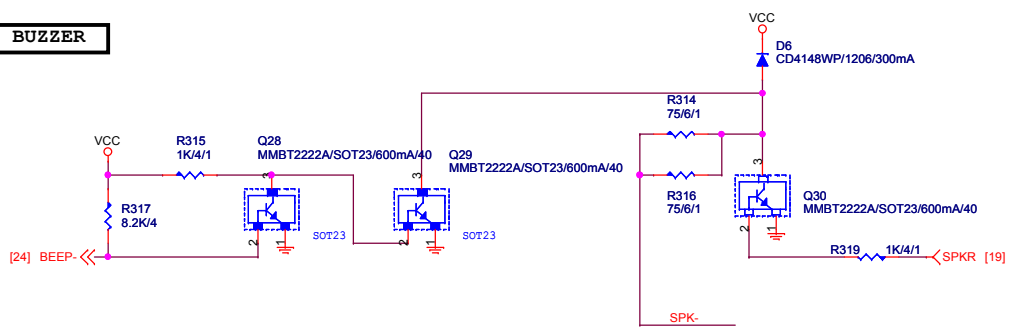
**INTEL FRONT PANEL**



**SYS\_FAN**



**BUZZER**

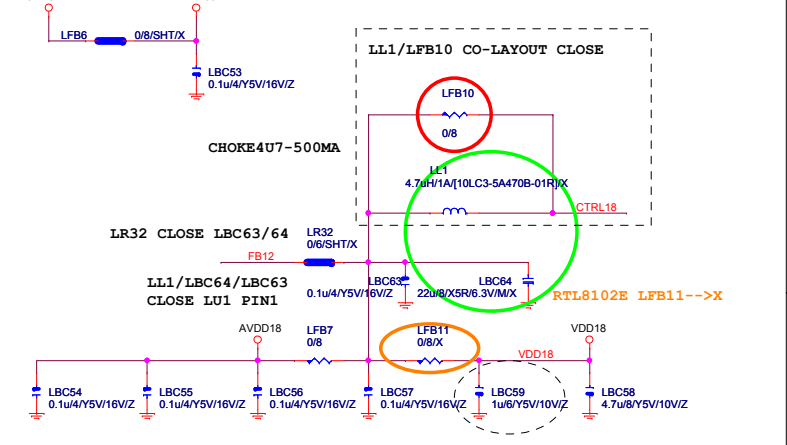
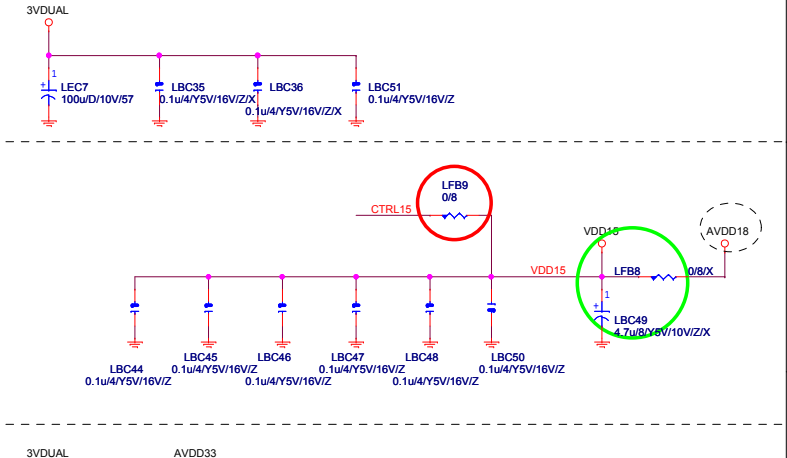
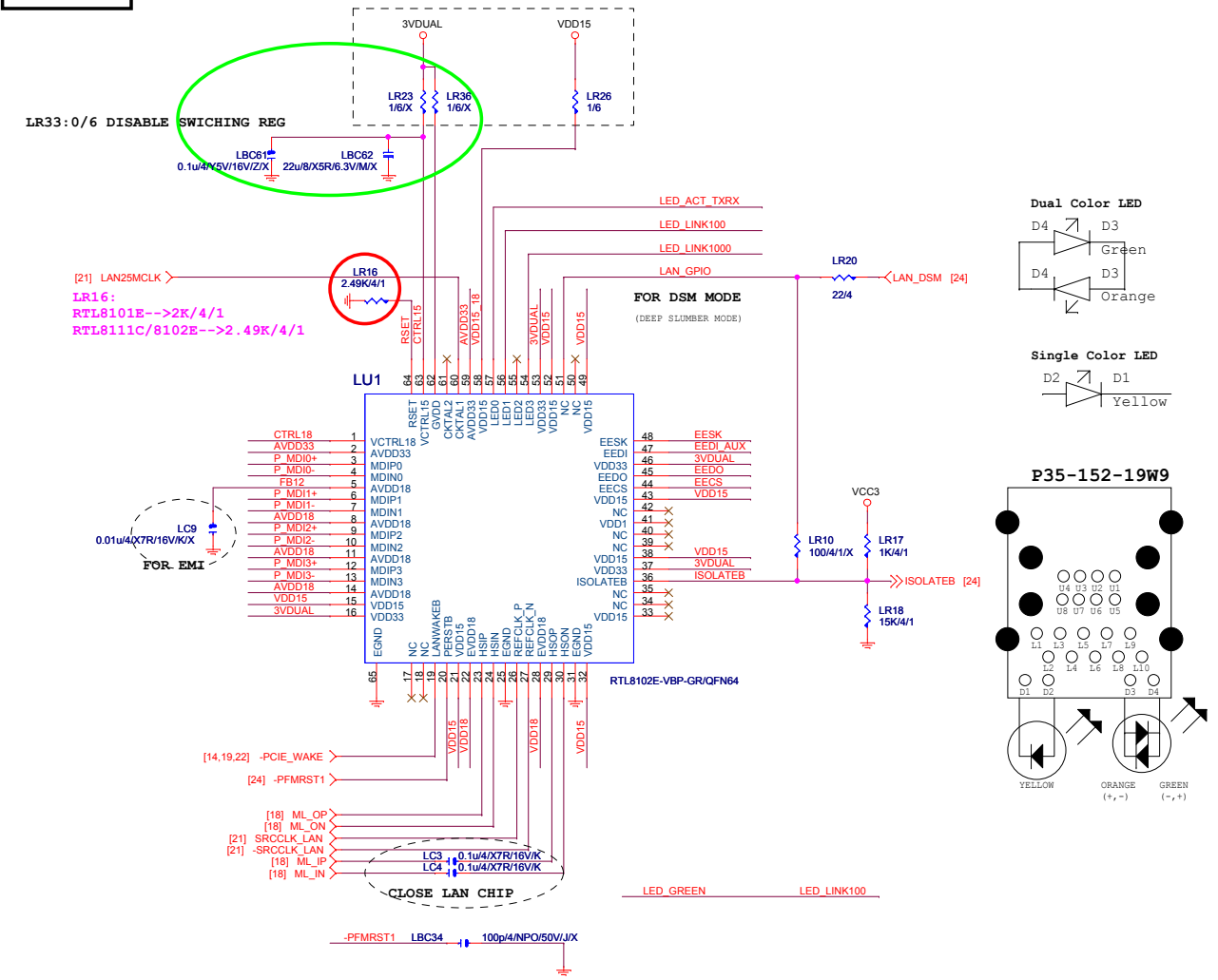


<b>Gigabyte Technology</b>		
<b>FRONT PANEL</b>		
<b>GA-G31M-ES2C</b>		Rev 1.12
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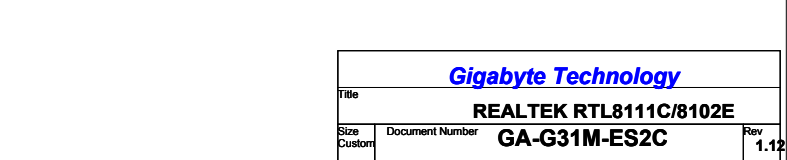
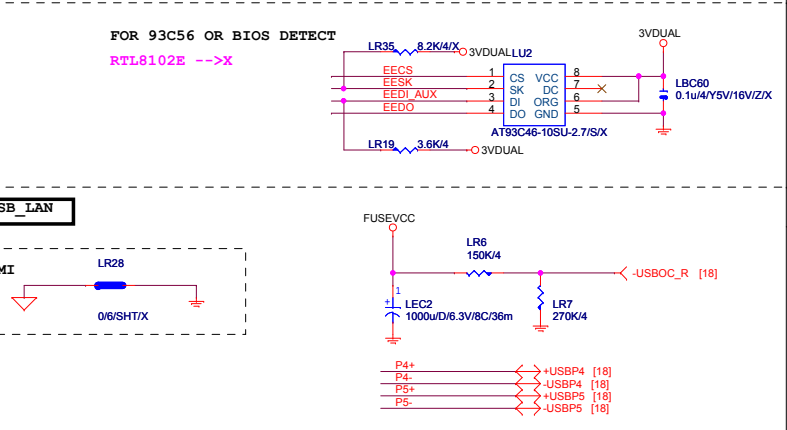
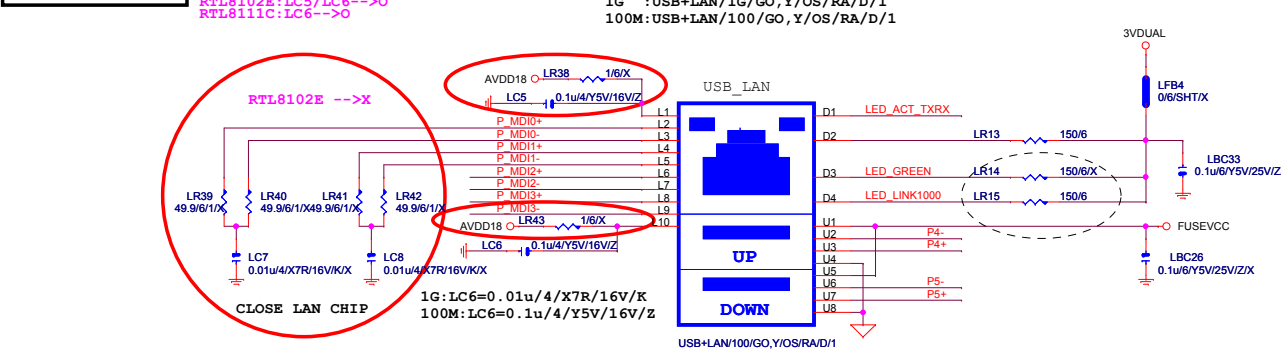


PCIE-1G LAN

RTL8111C



USB\_LAN CONNECTOR



<b>Gigabyte Technology</b>			
Title	<b>REALTEK RTL8111C/8102E</b>		
Size Custom	Document Number	<b>GA-G31M-ES2C</b>	
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