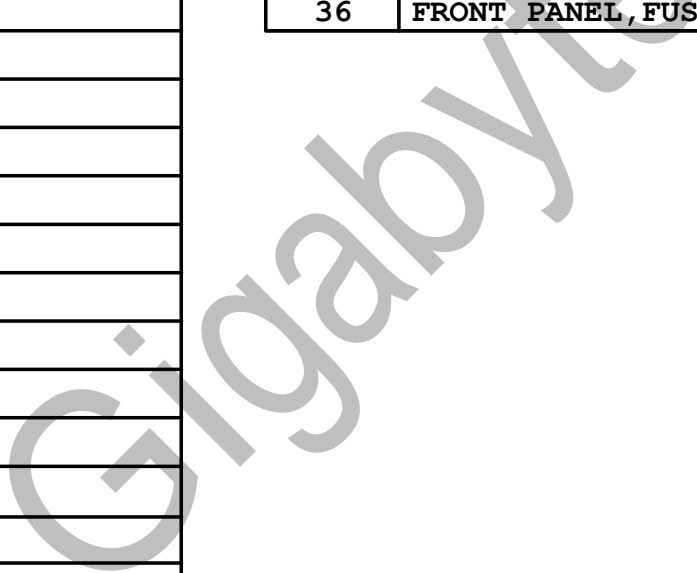


SHEET TITLE

01	COVER SHEET
02	BOM & PCB MODIFY HISTORY
03	BLOCK DIAGRAM
04	TABLE LIST
05	P4 LGA775 A
06	P4 LGA775 B,D
07	P4 LGA775 C
08	P4 LGA775 E,F,G,H
09	GMCH-BEARLAKE HOST
10	GMCH-BEARLAKE DDRII
11	GMCH-BEARLAKE PCI E, DMI
12	GMCH-BEARLAKE VGA
13	GMCH-BEARLAKE GND
14	GMCH-BEARLAKE PWR
15	DDRII CHANNEL A 1,2
16	DDRII CHANNEL B 1,2
17	DDRII TERMINATION
18	PCI EXPRESS*16 SLOT
19	ICH9 PCI, USB, DMI, LAN
20	ICH9 GPIO, CTRL
21	ICH9 SATA, FAN PWM
22	ICH9 VCC, GND
23	CLOCK GEN CK505
24	PCI EXPRESS*4 ,PCI SLOT 1,2
25	ITE8718GB
26	COM,LPT,CPU FAN,-PROHOT
27	BIOS,CI,HWM,KB/MS

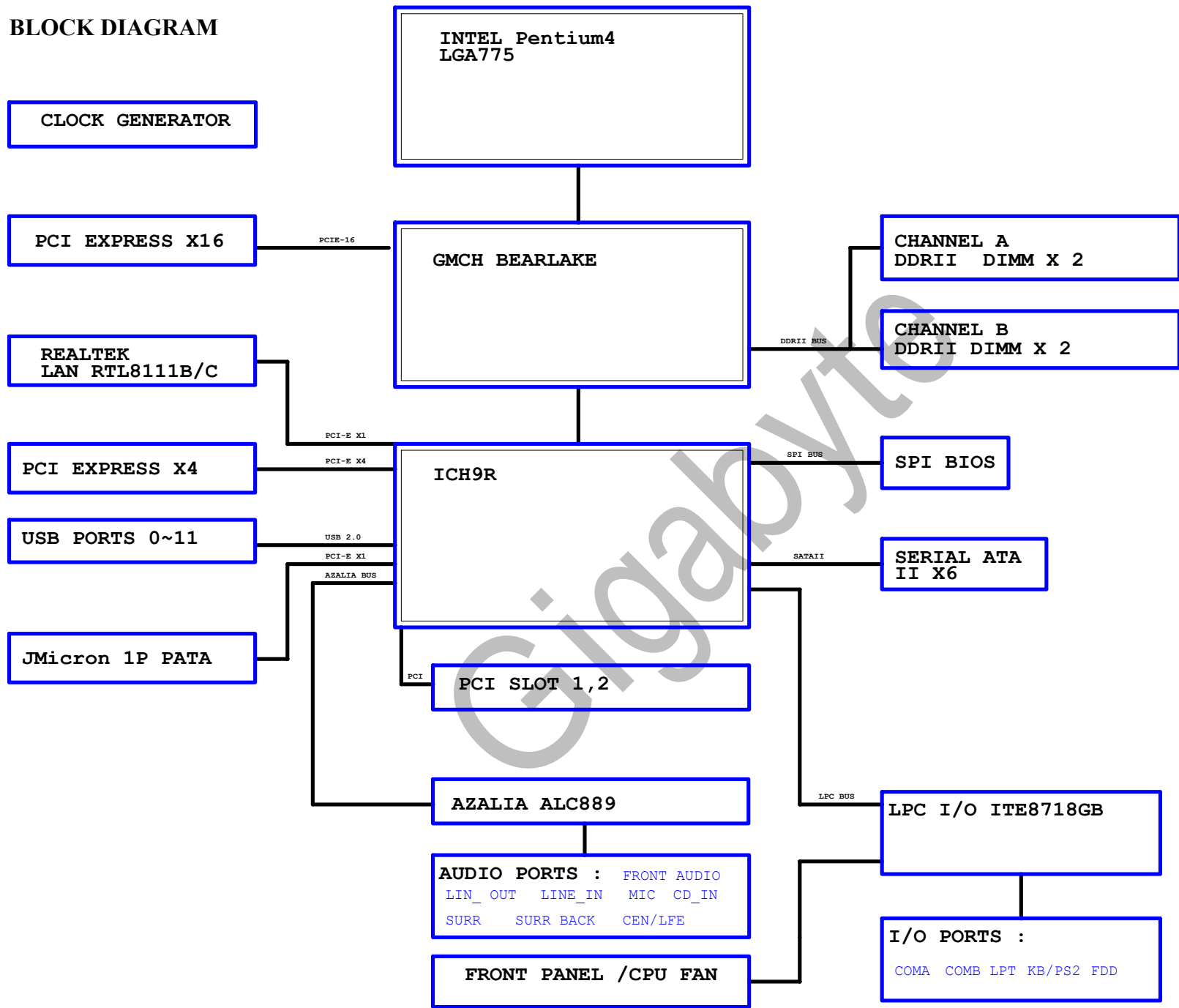
SHEET TITLE

28	AZALIA ALC889
29	AUDIO JACK
30	VCORE PWM ISL6327-6 PHASE
31	DISCRETE POWER
32	ATX POWER,SYS FAN
33	JMicron 1P PATA-JMB368
34	1394 TI TSB43AB23
35	LAN REALTEK RTL8111B/C
36	FRONT PANEL,FUSB,FDD





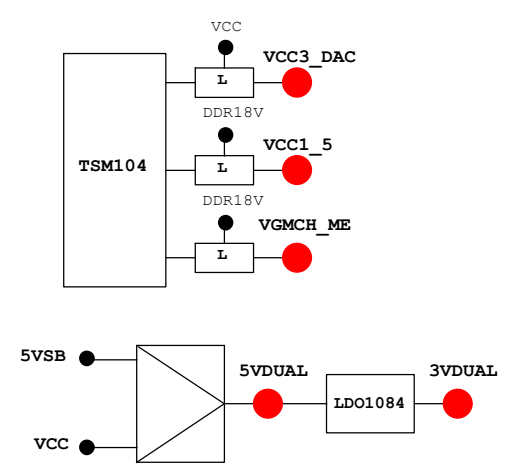
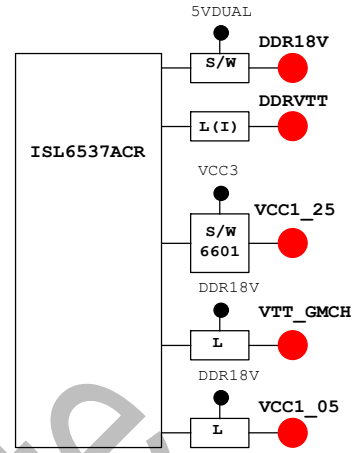
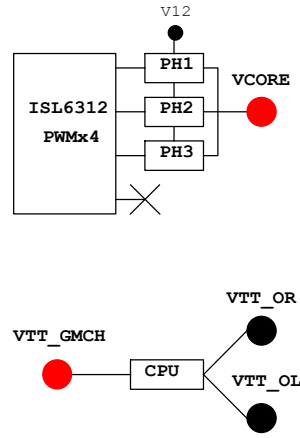
# BLOCK DIAGRAM



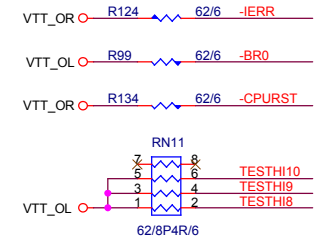
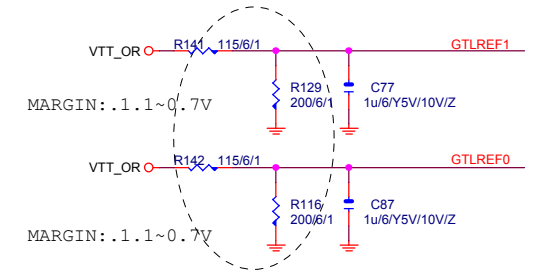
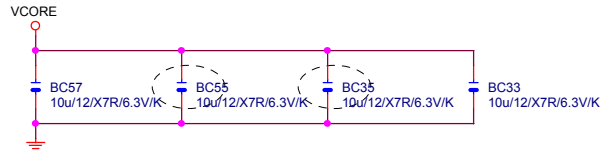
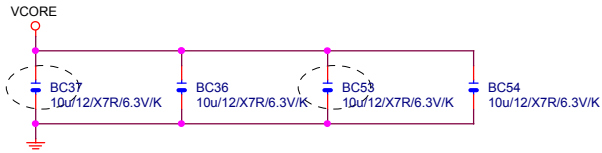
ICH8 GPIO LIST TABLE

PIN NAME	PWR WELL	AFTER/ FLTRST	USAGE	NOTE
GP0	MAIN	IN	-ACZ_DET	P/U 8.2K VCC3
GP1/TACH1	MAIN	IN	N/A	P/U 8.2K VCC3
GP2/PIRQE#	MAIN	IN	-PIRQE	P/U 8.2K VCC3
GP3/PIRQF#	MAIN	IN	-PIRQF	P/U 8.2K VCC3
GP4/PIRQG#	MAIN	IN	-PIRQG	P/U 8.2K VCC3
GP5/PIRQH#	MAIN	IN	-PIRQH	P/U 8.2K VCC3
GP6/TACH2	MAIN	IN	N/A	P/U 8.2K VCC3
GP7/TACH3	MAIN	IN	N/A	P/U 8.2K VCC3
GP8	STBY	IN	GPIO8	P/U 8.2K 3VDUAL
GP9	STBY	OUT	WOL_ONLY	P/D 100K GND
GP10	STBY	OUT	GPIO10	P/U 8.2K 3VDUAL
GP11/SMBALERT#	STBY	OUT	-SMBALRT	P/U 8.2K 3VDUAL
GP12	STBY	IN	MB_ID3	P/U 8.2K 3VDUAL
GP13	STBY	IN	-LPCPME	P/U 8.2K 3VDUAL
GP14	STBY	IN	GPIO14	P/U 8.2K 3VDUAL
GP15	STBY	OUT	GPIO15 (TP)	N/A
GP16	MAIN	IN	MB_ID1	P/U 8.2K VCC3
GP17/TACH0	MAIN	IN	N/A (OPT-ITE)	P/U 8.2K VCC3
GP18	MAIN	IN	MB_ID2	P/U 8.2K VCC3
GP19	MAIN	IN	GPIO19	P/U 8.2K VCC3
GP20	MAIN	OUT	GPIO20	N/A
GP21	MAIN	IN	GPIO21	P/U 8.2K VCC3
GP22	MAIN	IN	GPIO22	P/U 8.2K VCC3
GP23	MAIN	OUT	-LDRQ1	P/U 8.2K VCC3
GP24	STBY	OUT	GPIO24 (TP)	N/A
GP25	STBY	IN	MB_ID4	P/U 8.2K 3VDUAL
GP26/S4_STATE#	STBY	OUT	GPIO26	P/U 8.2K 3VDUAL
GP27	STBY	LOW	GPIO27	ENERGY-LAKE LED:GREEN
GP28	STBY	LOW	GPIO28	ENERGY-LAKE LED:YEL
GP29/OC5#	STBY	IN	-USBOC_F	P/U FUSEVCC1
GP30/OC6#	STBY	IN	-USBOC_F	P/U FUSEVCC1
GP31/OC7#	STBY	IN	-USBOC_F	P/U FUSEVCC1
GP32	MAIN	IN	MB_ID0	P/U 8.2K VCC3
GP33	MAIN	IN	GPIO33	P/U 8.2K VCC3
GP34	MAIN	IN	GPIO34	P/U 8.2K VCC3
GP35	MAIN	IN	N/A (TP)	N/A
GP36	MAIN	IN	GPIO36	P/U 8.2K VCC3
GP37	MAIN	IN	GPIO37	P/U 8.2K VCC3
GP38	MAIN	IN	GPIO38	P/U 8.2K VCC3
GP39	MAIN	IN	GPIO39	P/D 8.2K GND
GP48	MAIN	IN	GPIO48	P/U 8.2K VCC3
GP49	MAIN	IN	CPUPWROK	P/U 100 VTT_OL

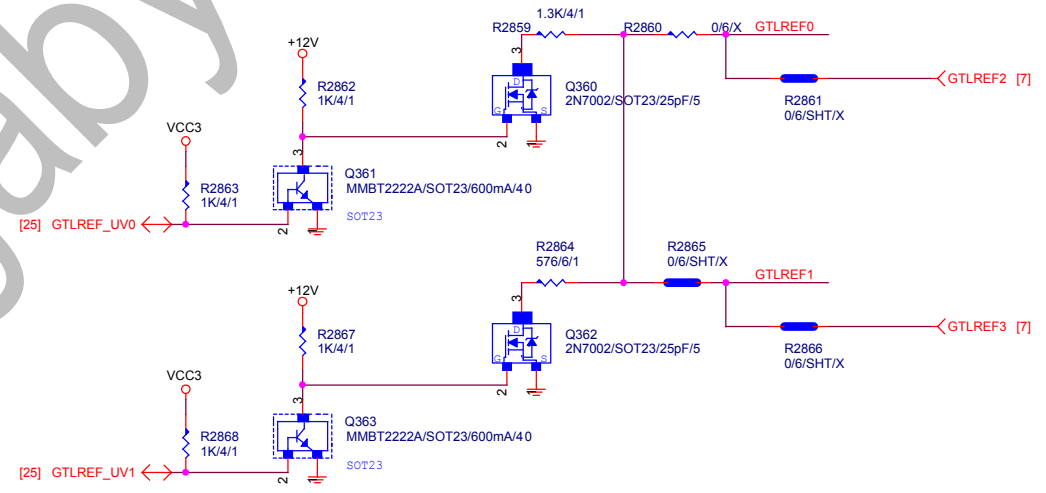
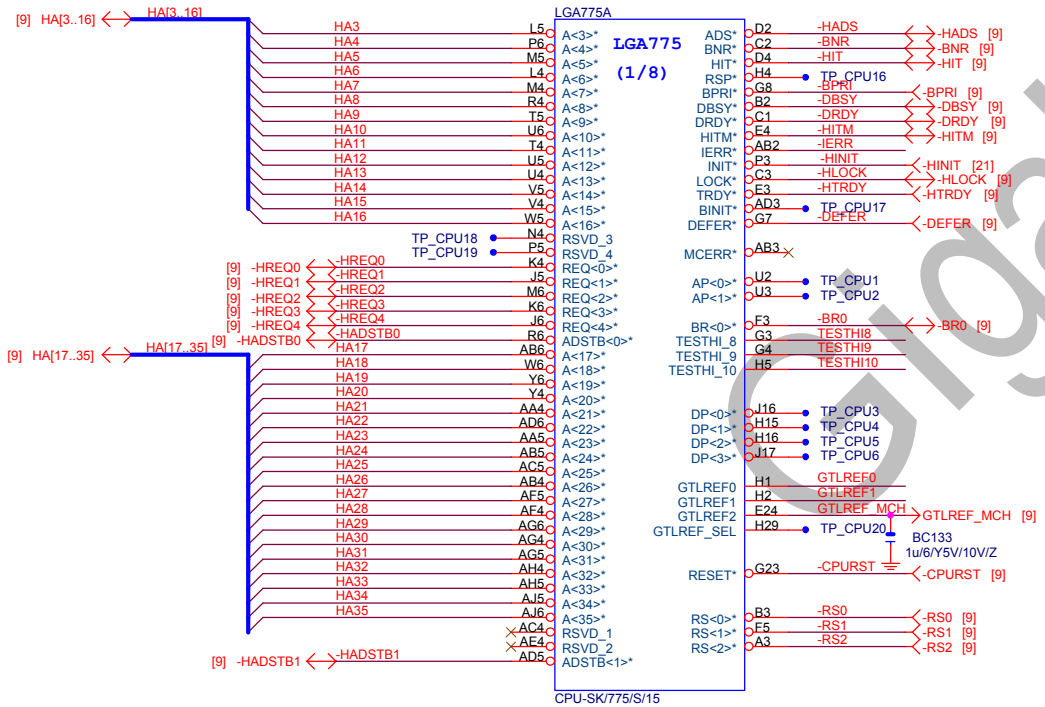
VCORE:3 PHASE PWM--ISL6312



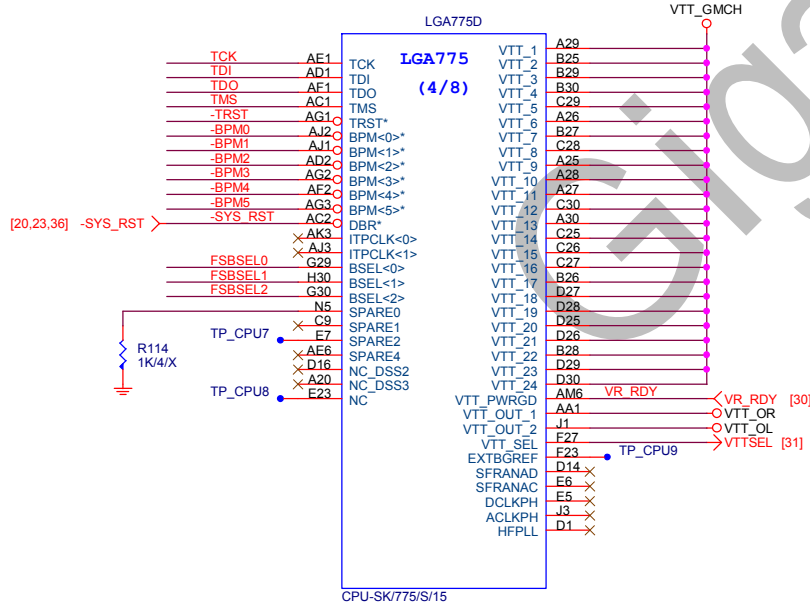
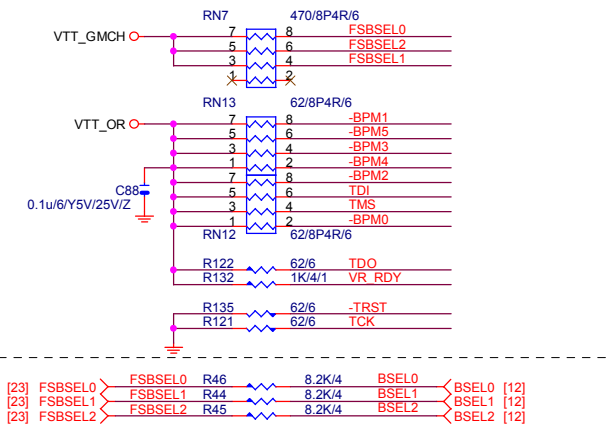
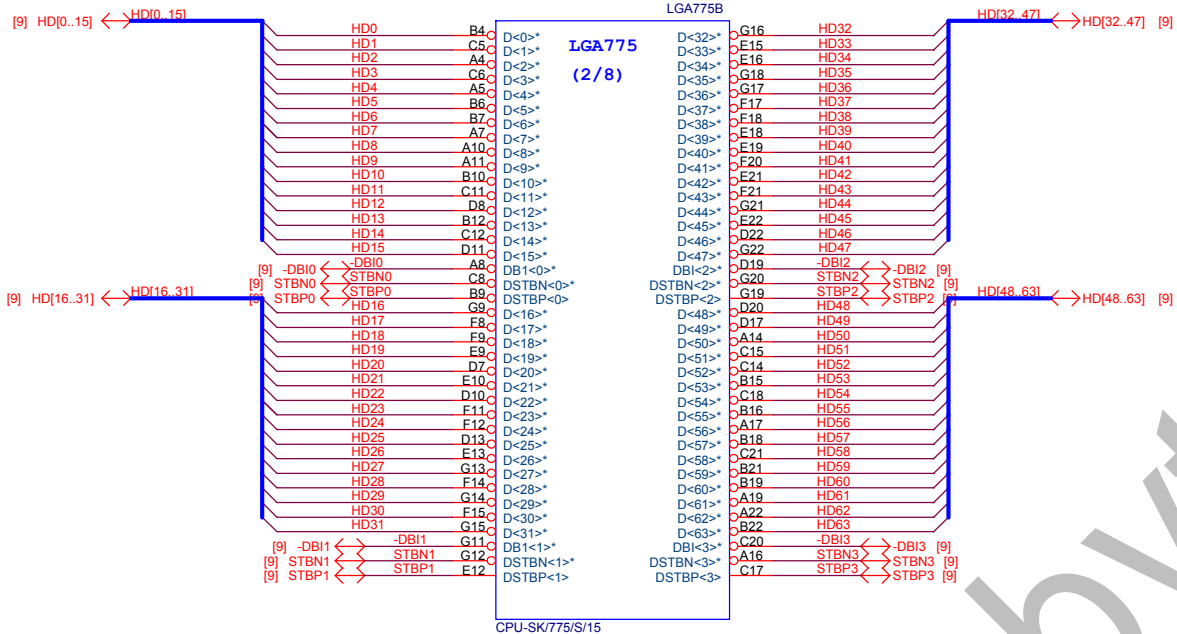
Gigabyte Technology			
Title			
TABLE LIST			
Size B	Document Number	G33M-DS2R	Rev 1.01
Date:	Tuesday, April 03, 2007	Sheet 4	of 36



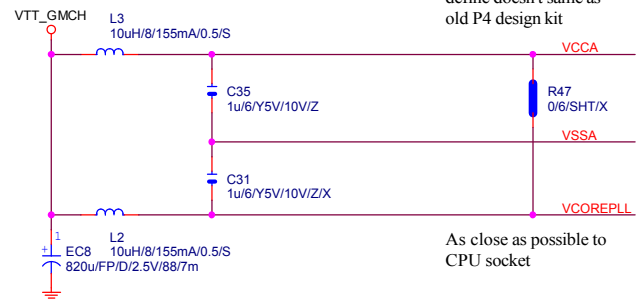
LGA775-39: FOOTPRINT



<b>Gigabyte Technology</b>		
Title		
<b>P4_LGA775-A</b>		
Size	Document Number	Rev
B	<b>G33M-DS2R</b>	<b>1.01</b>
Date:	Tuesday, April 03, 2007	Sheet 5 of 36



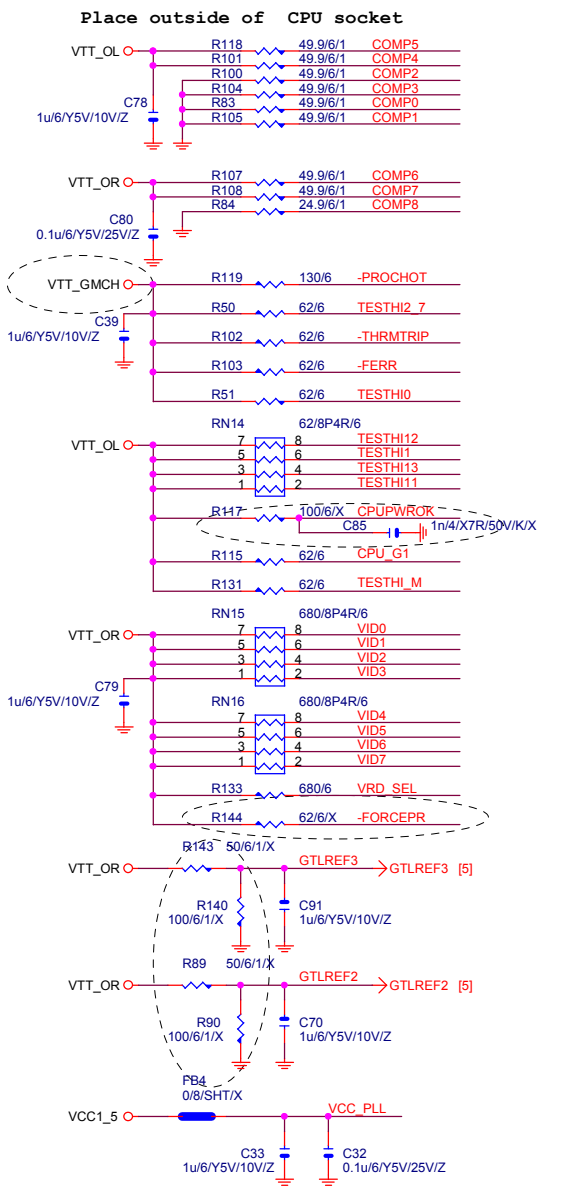
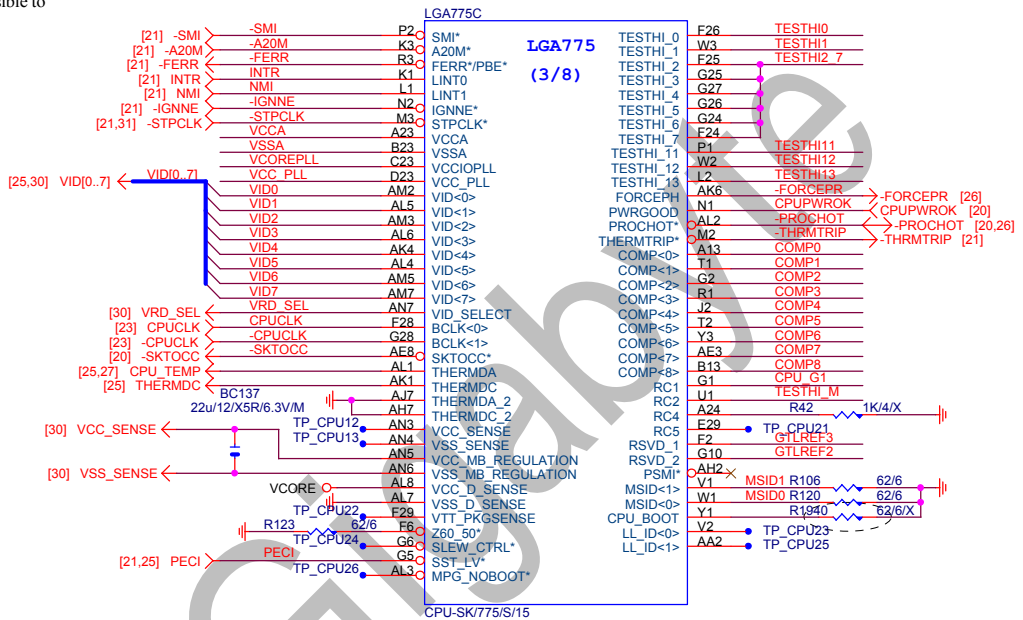
<b>Gigabyte Technology</b>		
Title <b>P4_LGA775-B,D</b>		
Size B	Document Number <b>G33M-DS2R</b>	Rev <b>1.01</b>
Date:	Tuesday, April 03, 2007	Sheet 6 of 36



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

Trace width doesn't  
less than 12 Mil

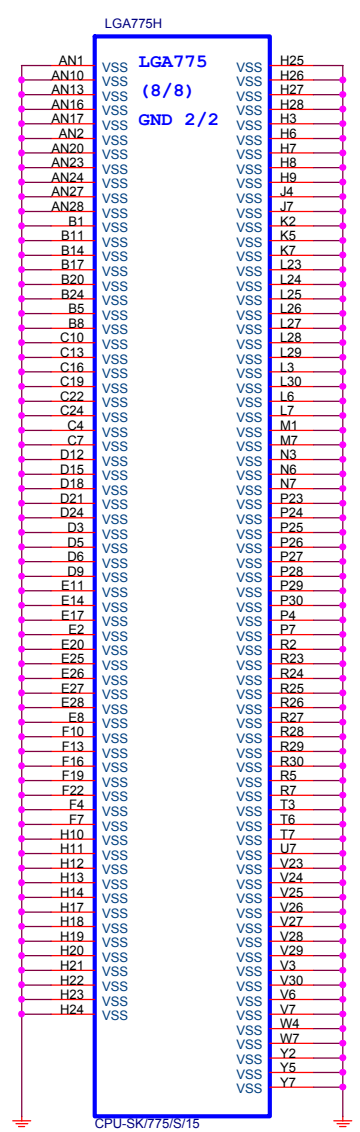
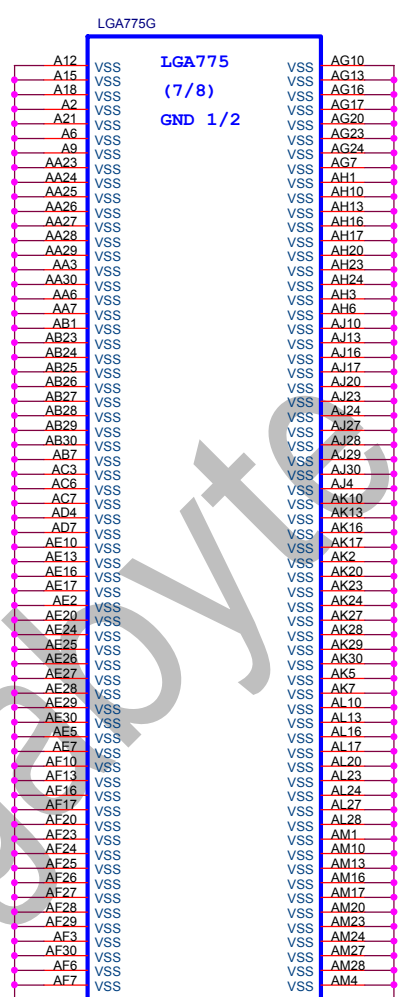
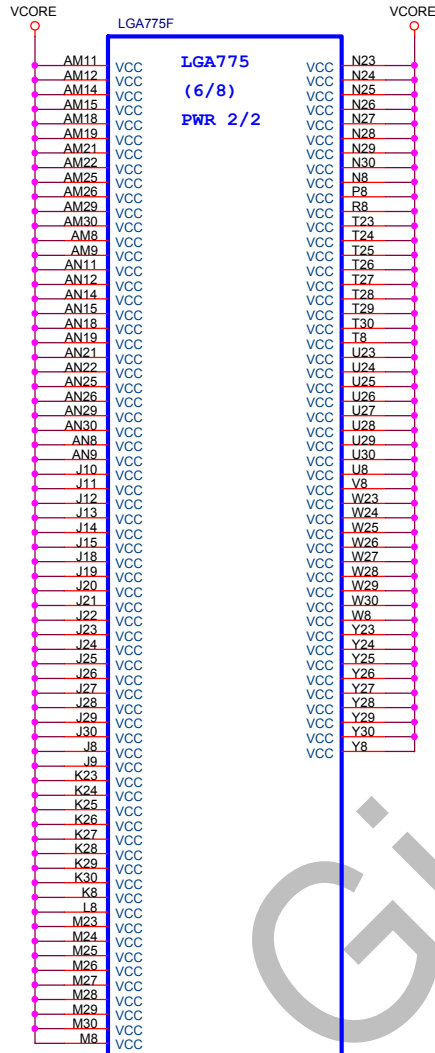
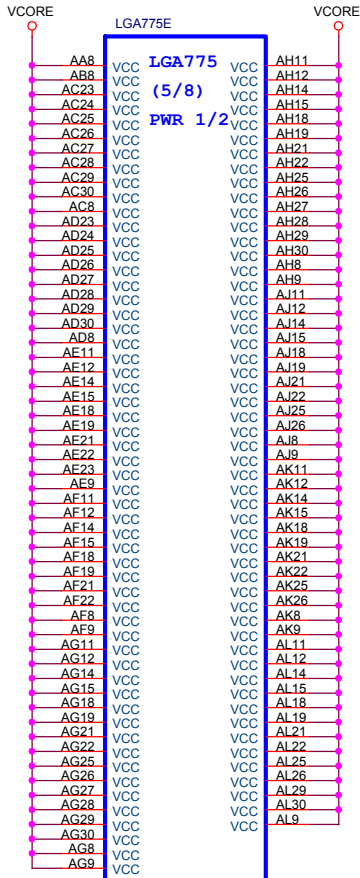
As close as possible to  
CPU socket



**Gigabyte Technology**

Title		
<b>P4_LGA775-C</b>		
Size B	Document Number	Rev
	<b>G33M-DS2R</b>	<b>1.01</b>
Date:	Tuesday, April 03, 2007	Sheet 7 of 36

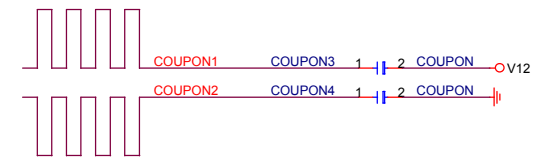
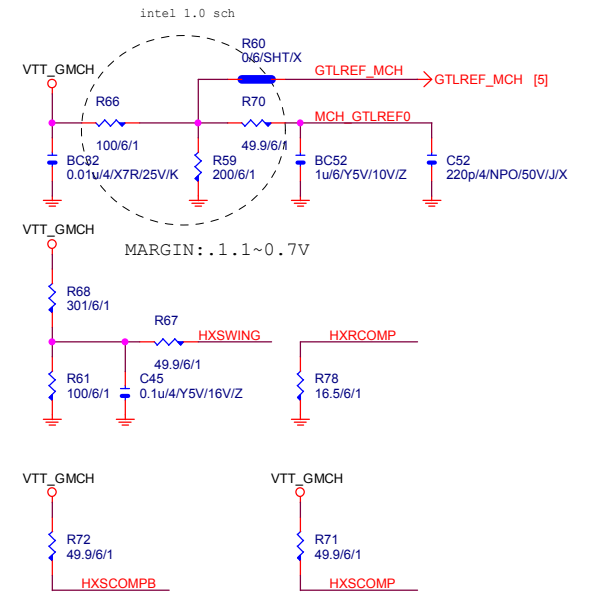
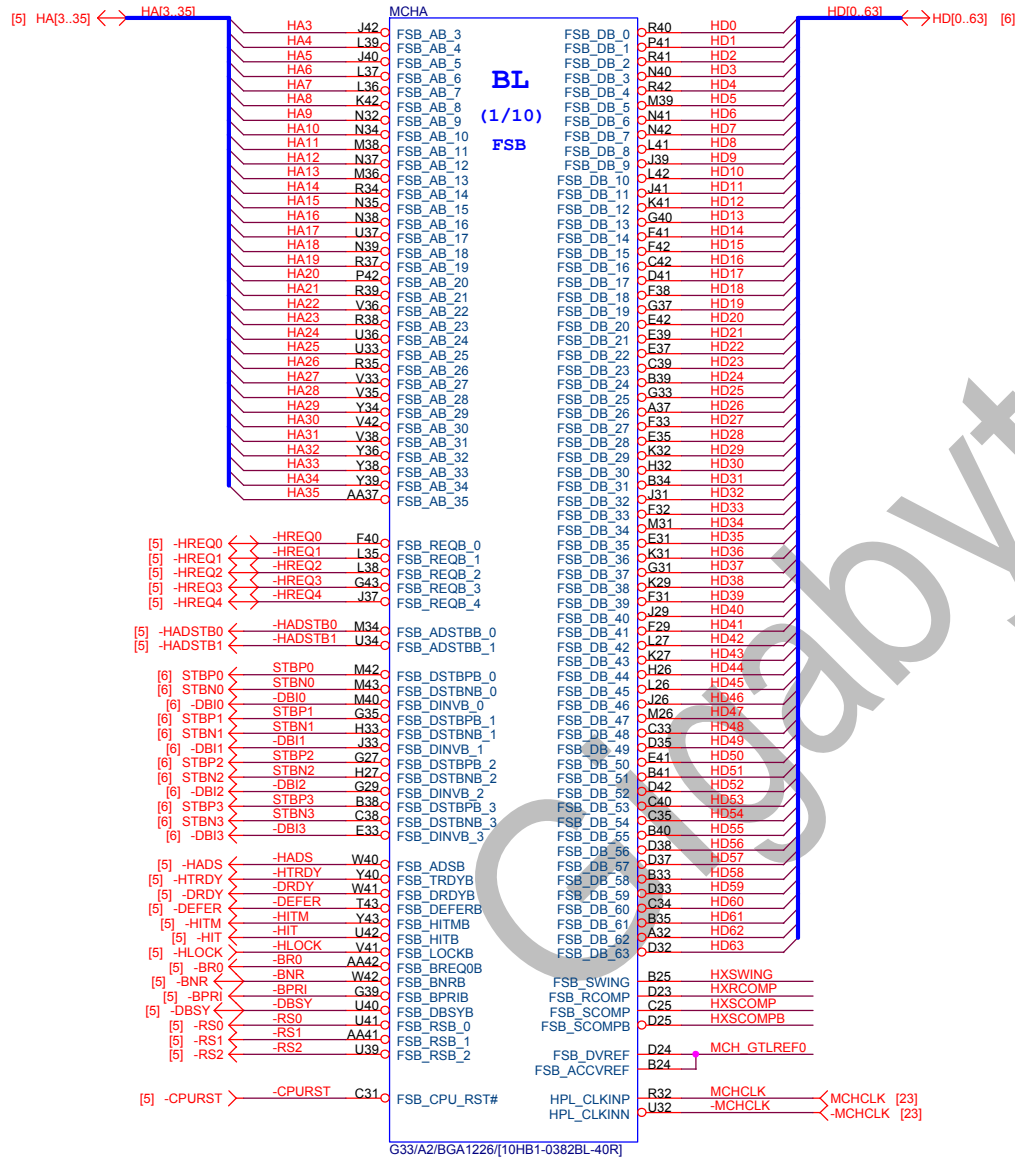
PECI:Platform Environment Control Interface



**Gigabyte Technology**

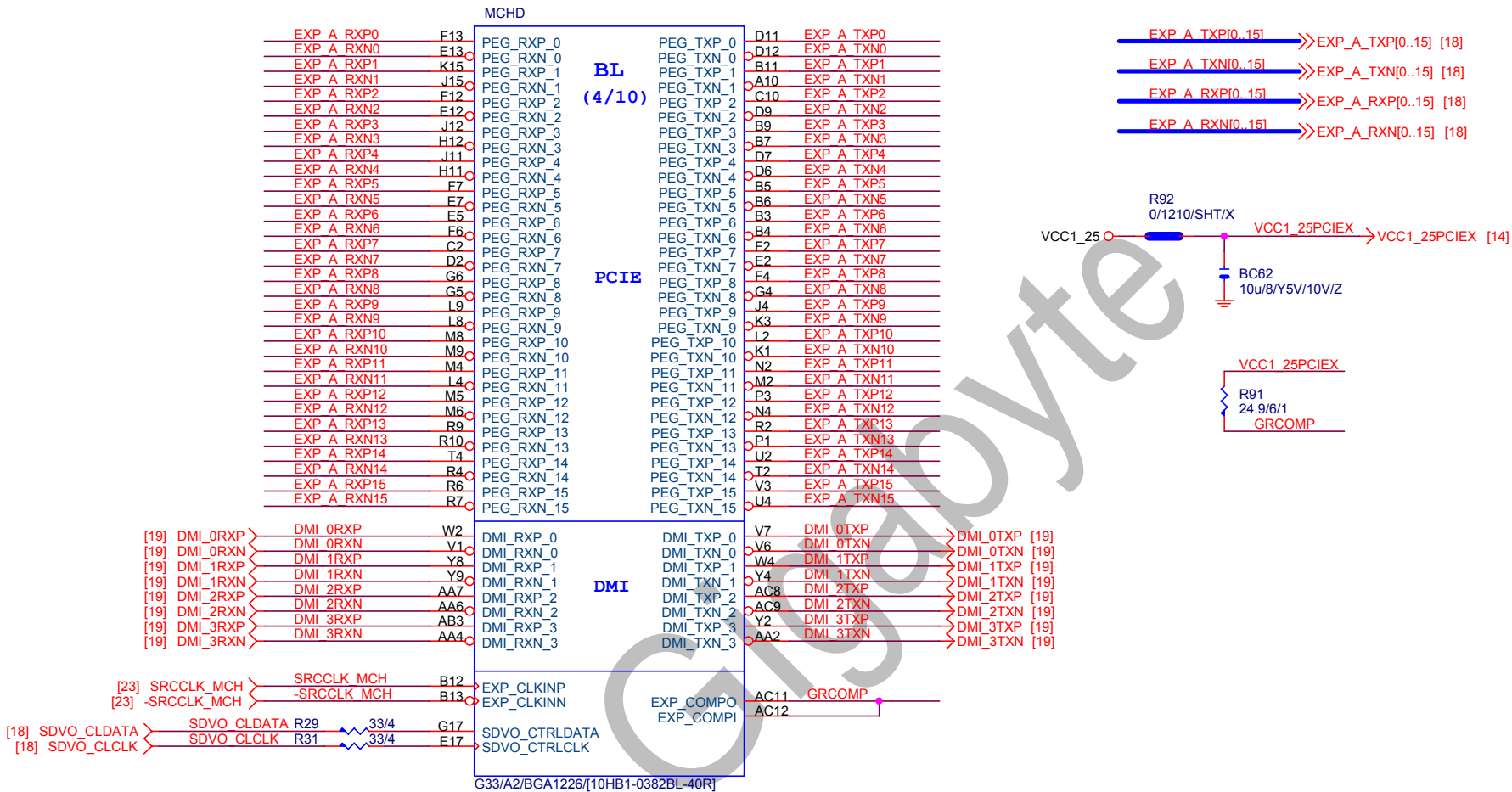
Title			P4_LGA775-E,F,G,H		
Size	Document Number	G33M-DS2R			Rev
B					1.01
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<b>Gigabyte Technology</b>		
Title		
<b>GMCH-HOST</b>		
Size	Document Number	Rev
B	<b>G33M-DS2R</b>	<b>1.01</b>
Date:	Tuesday, April 03, 2007	Sheet 9 of 36

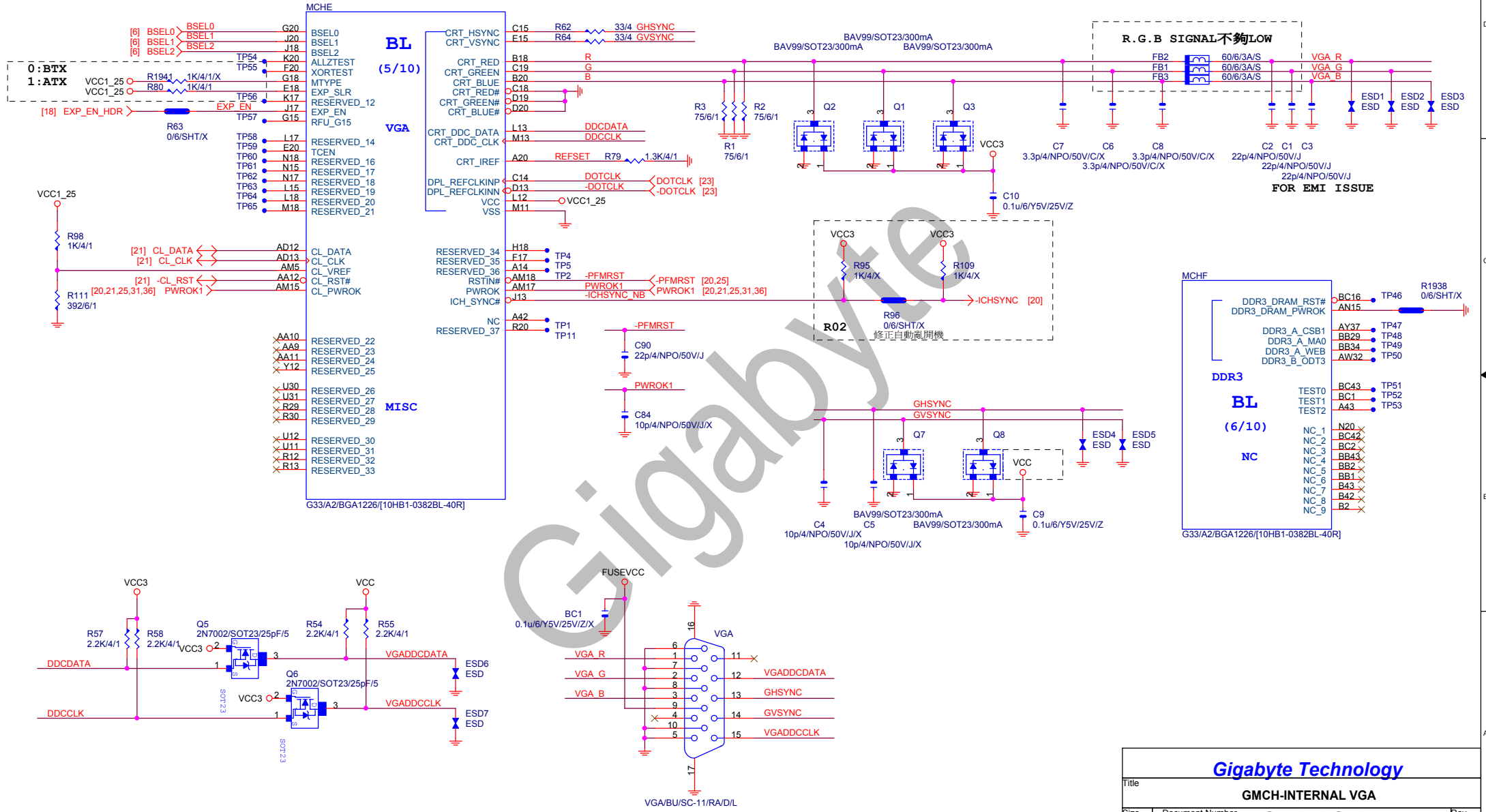




G33/A2/BGA1226([10HB1-0382BL-40R])

**Gigabyte Technology**

Title		
GMCH-PCI E & DMI		
Size	Document Number	Rev
Custom	<b>G33M-DS2R</b>	<b>1.01</b>
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<b>Gigabyte Technology</b>		
Title <b>GMCH-INTERNAL VGA</b>		
Size B	Document Number <b>G33M-DS2R</b>	Rev <b>1.01</b>
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MCHG		
BC37	VSS_1	VSS_181
BC32	VSS_2	VSS_182
BC28	VSS_3	VSS_183
BC24	VSS_4	VSS_184
BC10	VSS_5	VSS_185
BC5	VSS_6	VSS_186
BB7	VSS_7	VSS_187
AY41	VSS_8	VSS_188
AY4	VSS_9	VSS_189
AW43	VSS_10	VSS_190
AW41	VSS_11	VSS_191
AV37	VSS_12	VSS_192
AV35	VSS_13	VSS_193
AV27	VSS_14	VSS_194
AV23	VSS_15	VSS_195
AV21	VSS_16	VSS_196
AV17	VSS_17	VSS_197
AV11	VSS_18	VSS_198
AV9	VSS_19	VSS_199
AV7	VSS_20	VSS_200
AV2	VSS_21	VSS_201
AU42	VSS_22	VSS_202
AU38	VSS_23	VSS_203
AU32	VSS_24	VSS_204
AU24	VSS_25	VSS_205
AU20	VSS_26	VSS_206
AU6	VSS_27	VSS_207
AL4	VSS_28	VSS_208
AT31	VSS_29	VSS_209
AT29	VSS_30	VSS_210
AT15	VSS_31	VSS_211
AT13	VSS_32	VSS_212
AT12	VSS_33	VSS_213
AR38	VSS_34	VSS_214
AR33	VSS_35	VSS_215
AR32	VSS_36	VSS_216
AR27	VSS_37	VSS_217
AR26	VSS_38	VSS_218
AR23	VSS_39	VSS_219
AR21	VSS_40	VSS_220
AR20	VSS_41	VSS_221
AR17	VSS_42	VSS_222
AR9	VSS_43	VSS_223
AR6	VSS_44	VSS_224
AP43	VSS_45	VSS_225
AP24	VSS_46	VSS_226
AP18	VSS_47	VSS_227
AP1	VSS_48	VSS_228
AN38	VSS_49	VSS_229
AN31	VSS_50	VSS_230
AN29	VSS_51	VSS_231
AN24	VSS_52	VSS_232
AN23	VSS_53	VSS_233
AN20	VSS_54	VSS_234
AN13	VSS_55	VSS_235
AN12	VSS_56	VSS_236
AN11	VSS_57	VSS_237
AN4	VSS_58	VSS_238
AM42	VSS_59	VSS_239
AM40	VSS_60	VSS_240
AM36	VSS_61	VSS_241
AM33	VSS_62	VSS_242
AM29	VSS_63	VSS_243
AM24	VSS_64	VSS_244
AM23	VSS_65	VSS_245
AM20	VSS_66	VSS_246
AM11	VSS_67	VSS_247
AM9	VSS_68	VSS_248
AM7	VSS_69	VSS_249
AM4	VSS_70	VSS_250
AL36	VSS_71	VSS_251
AL33	VSS_72	VSS_252
AL31	VSS_73	VSS_253
AK43	VSS_74	VSS_254
AJ39	VSS_75	VSS_255
AJ36	VSS_76	VSS_256
AJ33	VSS_77	VSS_257
AJ32	VSS_78	VSS_258
AH42	VSS_79	VSS_259
AG37	VSS_80	VSS_260
AG34	VSS_81	VSS_261
AF43	VSS_82	VSS_262
AF37	VSS_83	VSS_263
AF36	VSS_84	VSS_264
AF10	VSS_85	VSS_265
AF9	VSS_86	VSS_266
AF8	VSS_87	VSS_267
AF7	VSS_88	VSS_268
AF6	VSS_89	VSS_269
AF5	VSS_90	VSS_270

G33/A2/BGA1226/(10HB1-0382BL-40R)

BL  
(7/10)  
GND

MCHH		
N5	VSS_91	VSS_271
M37	VSS_92	VSS_272
M35	VSS_93	VSS_273
M33	VSS_94	VSS_274
M27	VSS_95	VSS_275
M21	VSS_96	VSS_276
M20	VSS_97	VSS_277
M17	VSS_98	VSS_278
M15	VSS_99	VSS_279
M10	VSS_100	VSS_280
M7	VSS_101	VSS_281
M1	VSS_102	VSS_282
L40	VSS_103	VSS_283
L33	VSS_104	VSS_284
L32	VSS_105	VSS_285
L31	VSS_106	VSS_286
L29	VSS_107	VSS_287
L24	VSS_108	VSS_288
L20	VSS_109	VSS_289
L11	VSS_110	VSS_290
L7	VSS_111	VSS_291
AC7	VSS_112	VSS_292
AC5	VSS_113	VSS_293
AB43	VSS_114	VSS_294
AB25	VSS_115	VSS_295
AB23	VSS_116	VSS_296
AB21	VSS_117	VSS_297
AB19	VSS_118	VSS_298
AB2	VSS_119	VSS_299
AB1	VSS_120	VSS_300
AA38	VSS_121	VSS_301
AA35	VSS_122	VSS_302
AA24	VSS_123	VSS_303
AA22	VSS_124	VSS_304
AA20	VSS_125	VSS_305
AA8	VSS_126	VSS_306
AA5	VSS_127	VSS_307
Y42	VSS_128	VSS_308
H31	VSS_129	VSS_309
H29	VSS_130	VSS_310
H21	VSS_131	VSS_311
H20	VSS_132	VSS_312
H17	VSS_133	VSS_313
H15	VSS_134	VSS_314
H13	VSS_135	VSS_315
G42	VSS_136	VSS_316
G38	VSS_137	VSS_317
G32	VSS_138	VSS_318
G21	VSS_139	VSS_319
G13	VSS_140	VSS_320
G12	VSS_141	VSS_321
G11	VSS_142	VSS_322
G9	VSS_143	VSS_323
G7	VSS_144	VSS_324
G1	VSS_145	VSS_325
F37	VSS_146	VSS_326
F35	VSS_147	VSS_327
F27	VSS_148	VSS_328
F21	VSS_149	VSS_329
F18	VSS_150	VSS_330
F15	VSS_151	VSS_331
F3	VSS_152	VSS_332
E43	VSS_153	VSS_333
E32	VSS_154	VSS_334
E24	VSS_155	VSS_335
E21	VSS_156	VSS_336
E11	VSS_157	VSS_337
E9	VSS_158	VSS_338
E3	VSS_159	VSS_339
D40	VSS_160	VSS_340
D31	VSS_161	VSS_341
D21	VSS_162	VSS_342
D17	VSS_163	VSS_343
D15	VSS_164	VSS_344
D3	VSS_165	VSS_345
C26	VSS_166	VSS_346
C11	VSS_167	VSS_347
C6	VSS_168	VSS_348
C5	VSS_169	VSS_349
C4	VSS_170	VSS_350
B37	VSS_171	VSS_351
B32	VSS_172	VSS_352
B31	VSS_173	VSS_353
B26	VSS_174	VSS_354
B23	VSS_175	VSS_355
B22	VSS_176	VSS_356
B19	VSS_177	VSS_357
B14	VSS_178	VSS_358
D16	VSS_179	VSS_359
M11	VSS_180????	VSS_360

G33/A2/BGA1226/(10HB1-0382BL-40R)

BL  
(8/10)  
GND

B10	VSS_271
A39	VSS_272
A34	VSS_273
A26	VSS_274
A18	VSS_275
A12	VSS_276
A7	VSS_277
BC41	VSS_278
BC3	VSS_279
BA1	VSS_280
AY40	VSS_281
AF23	VSS_282
AF21	VSS_283
AF19	VSS_284
AE18	VSS_285
AC18	VSS_286
AA18	VSS_287
V29	VSS_288
U29	VSS_289
U27	VSS_290
R21	VSS_291
E1	VSS_292
C43	VSS_293
C1	VSS_294
A41	VSS_295
A5	VSS_296
A3	VSS_297
V30	VSS_298

**Gigabyte Technology**

Title		
GMCH-GND		
Size Custom	Document Number	Rev
	<b>G33M-DS2R</b>	<b>1.01</b>
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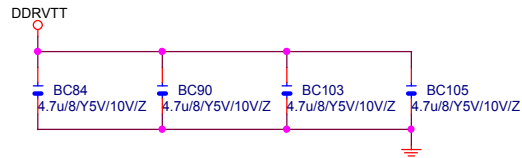
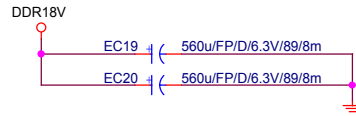
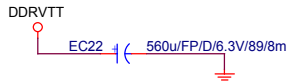






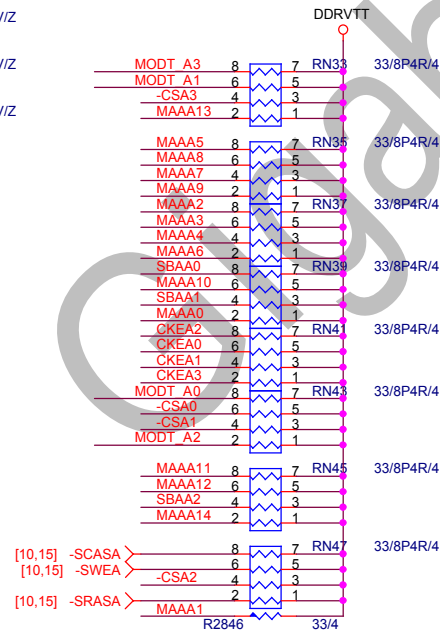
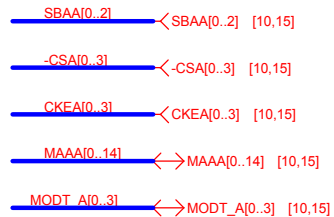
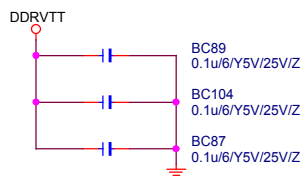
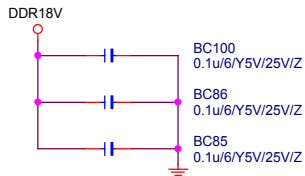
# DDR TERMINATION CHANNEL A

## DDRVTT Decouple



## DDR18V Decouple

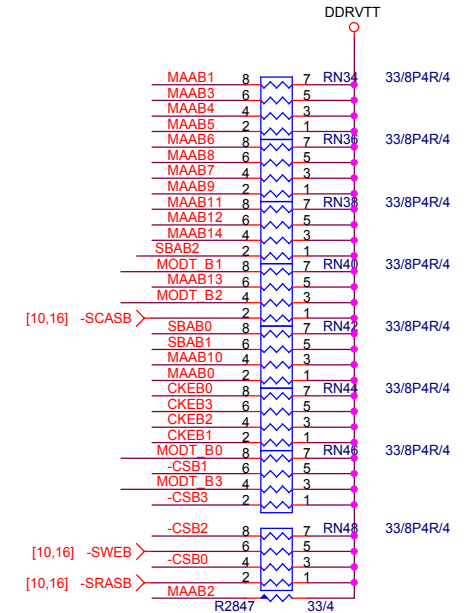
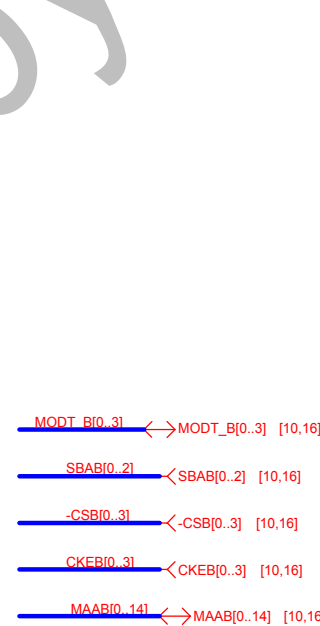
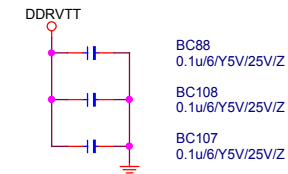
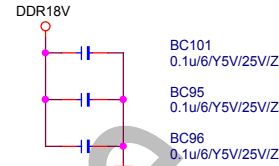
## DDRVTT Decouple



# DDR TERMINATION CHANNEL B

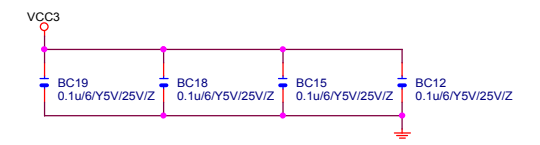
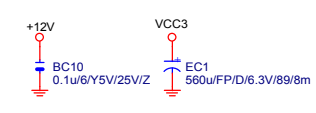
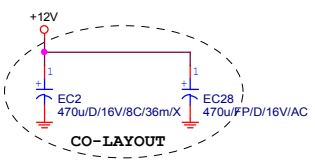
## DDR18V Decouple

## DDRVTT Decouple



Gigabyte Technology

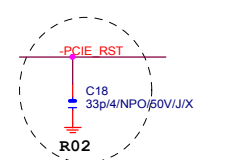
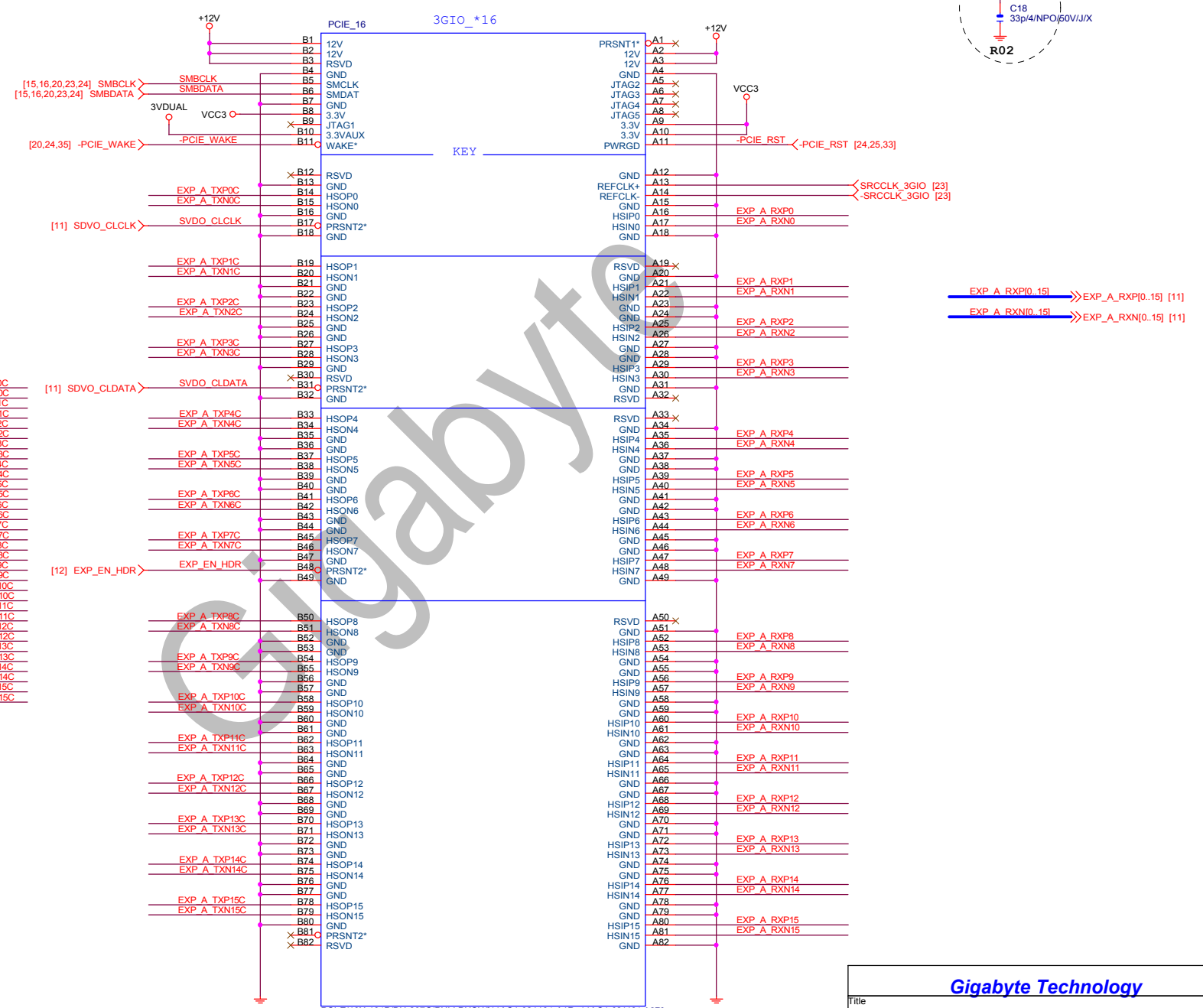
Title			DDR II TERMINATOR		
Size	Document Number	G33M-DS2R			Rev
Custom					1.01
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EXP A TXP0\_15] >>> EXP\_A\_TXP0[0..15] [11]  
 EXP A TXN0\_15] >>> EXP\_A\_TXN0[0..15] [11]

EXP A TXP0	C28	0.1u4/Y5V/16V/Z	EXP A TXP0C
EXP A TXN0	C27	0.1u4/Y5V/16V/Z	EXP A TXN0C
EXP A TXP1	C29	0.1u4/Y5V/16V/Z	EXP A TXP1C
EXP A TXN1	C34	0.1u4/Y5V/16V/Z	EXP A TXN1C
EXP A TXP2	C37	0.1u4/Y5V/16V/Z	EXP A TXP2C
EXP A TXN2	C38	0.1u4/Y5V/16V/Z	EXP A TXN2C
EXP A TXP3	C40	0.1u4/Y5V/16V/Z	EXP A TXP3C
EXP A TXN3	C41	0.1u4/Y5V/16V/Z	EXP A TXN3C
EXP A TXP4	C43	0.1u4/Y5V/16V/Z	EXP A TXP4C
EXP A TXN4	C44	0.1u4/Y5V/16V/Z	EXP A TXN4C
EXP A TXP5	C47	0.1u4/Y5V/16V/Z	EXP A TXP5C
EXP A TXN5	C46	0.1u4/Y5V/16V/Z	EXP A TXN5C
EXP A TXP6	C49	0.1u4/Y5V/16V/Z	EXP A TXP6C
EXP A TXN6	C48	0.1u4/Y5V/16V/Z	EXP A TXN6C
EXP A TXP7	C51	0.1u4/Y5V/16V/Z	EXP A TXP7C
EXP A TXN7	C50	0.1u4/Y5V/16V/Z	EXP A TXN7C
EXP A TXP8	C55	0.1u4/Y5V/16V/Z	EXP A TXP8C
EXP A TXN8	C56	0.1u4/Y5V/16V/Z	EXP A TXN8C
EXP A TXP9	C59	0.1u4/Y5V/16V/Z	EXP A TXP9C
EXP A TXN9	C60	0.1u4/Y5V/16V/Z	EXP A TXN9C
EXP A TXP10	C64	0.1u4/Y5V/16V/Z	EXP A TXP10C
EXP A TXN10	C61	0.1u4/Y5V/16V/Z	EXP A TXN10C
EXP A TXP11	C66	0.1u4/Y5V/16V/Z	EXP A TXP11C
EXP A TXN11	C65	0.1u4/Y5V/16V/Z	EXP A TXN11C
EXP A TXP12	C68	0.1u4/Y5V/16V/Z	EXP A TXP12C
EXP A TXN12	C67	0.1u4/Y5V/16V/Z	EXP A TXN12C
EXP A TXP13	C71	0.1u4/Y5V/16V/Z	EXP A TXP13C
EXP A TXN13	C69	0.1u4/Y5V/16V/Z	EXP A TXN13C
EXP A TXP14	C73	0.1u4/Y5V/16V/Z	EXP A TXP14C
EXP A TXN14	C72	0.1u4/Y5V/16V/Z	EXP A TXN14C
EXP A TXP15	C75	0.1u4/Y5V/16V/Z	EXP A TXP15C
EXP A TXN15	C74	0.1u4/Y5V/16V/Z	EXP A TXN15C

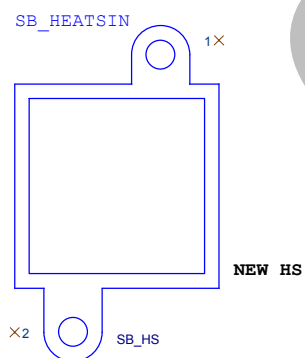
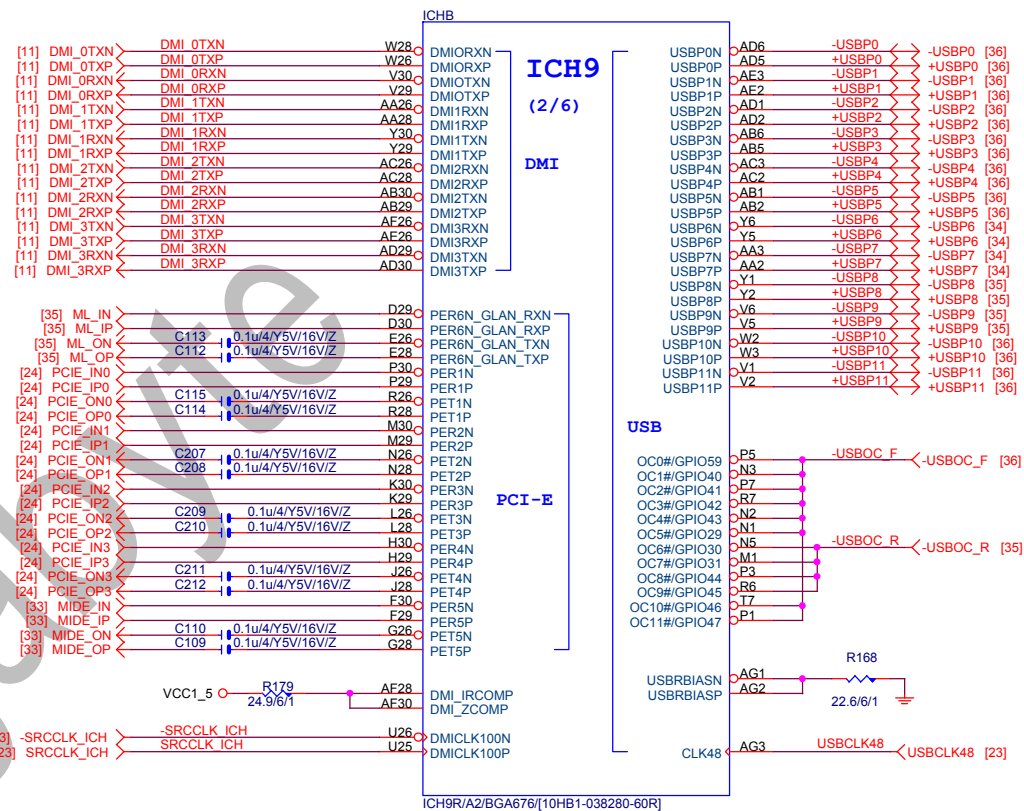
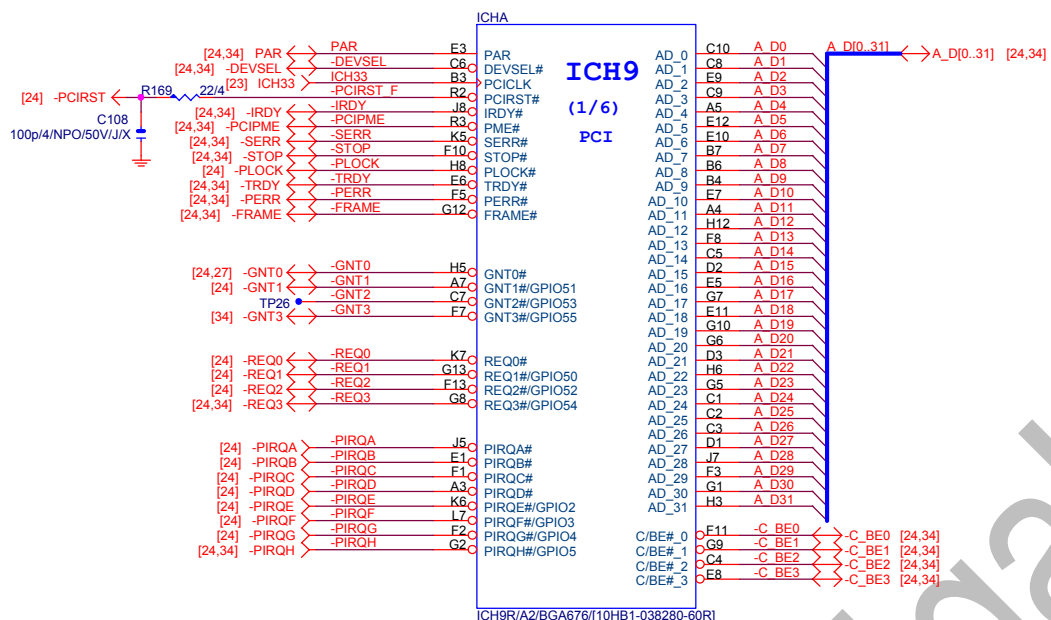
PCIESLOT-164DN-2



Gigabyte Technology

Title		
PCI EXPRESS * 16		
Size	Document Number	Rev
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BLUE

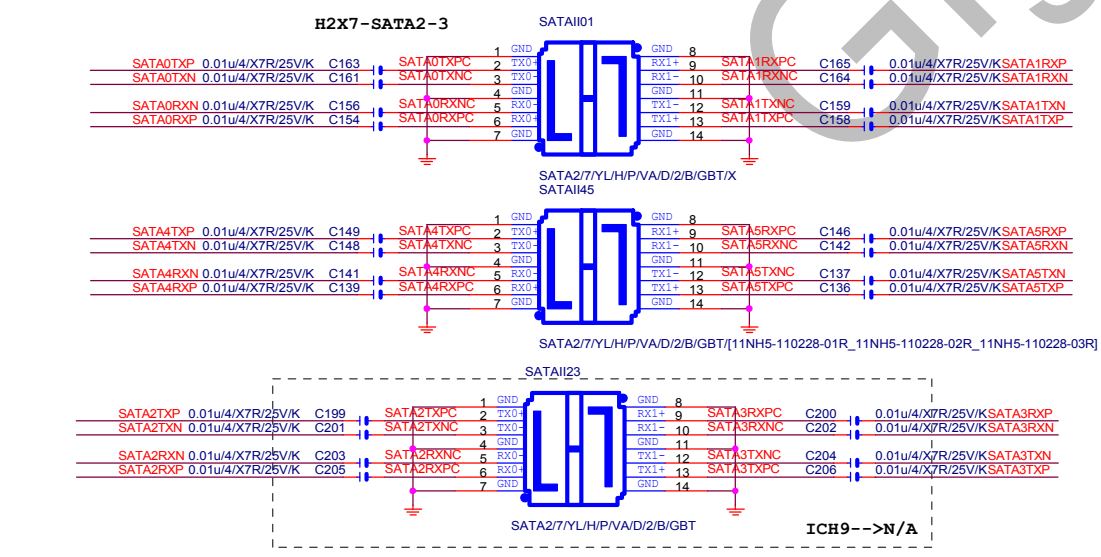
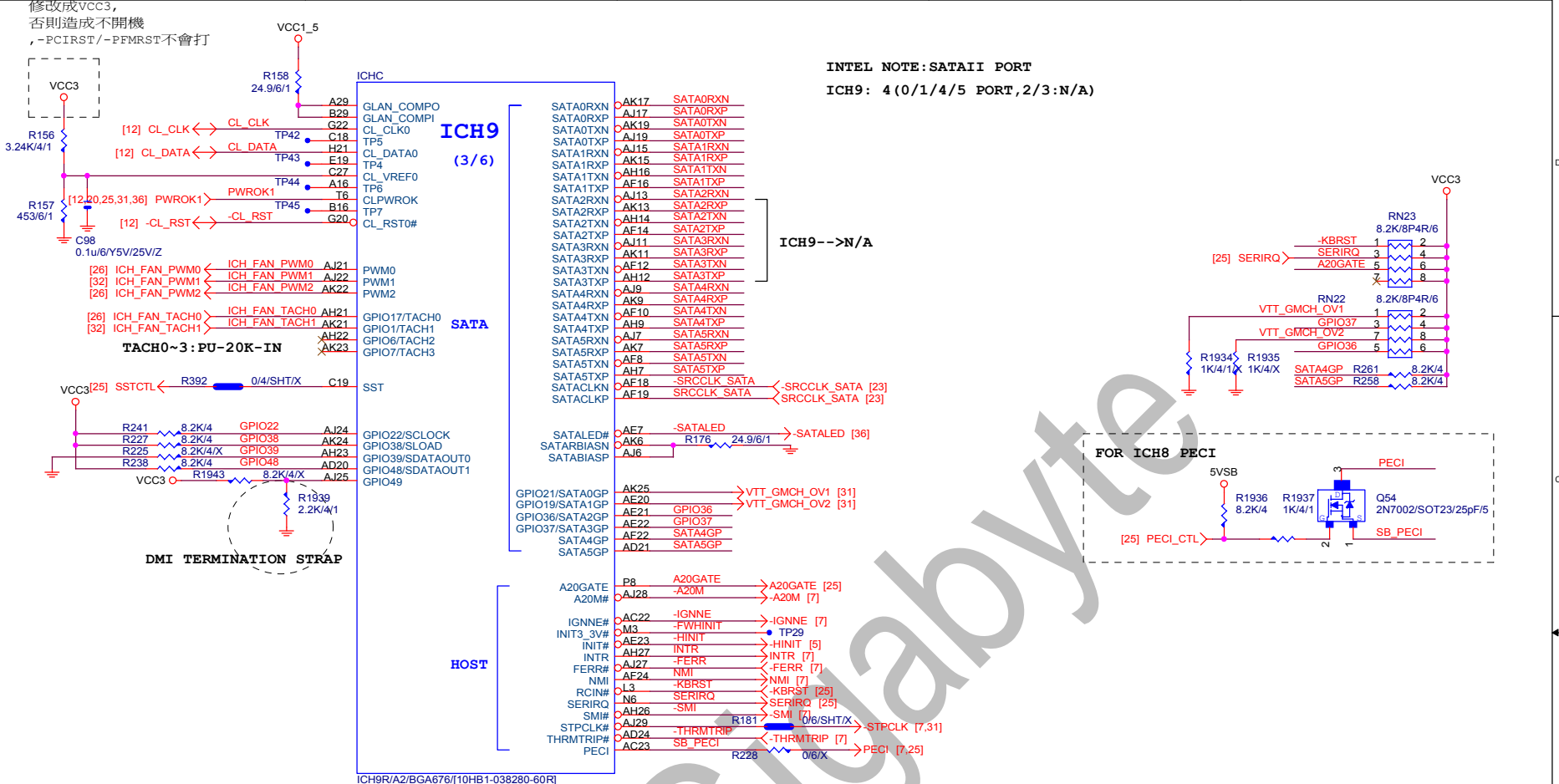


<b>Gigabyte Technology</b>		
Title <b>ICH9-PCI, DMI, LAN, USB</b>		
Size B	Document Number <b>G33M-DS2R</b>	Rev <b>1.0</b>
Date:	Tuesday, April 03, 2007	Sheet 19 of 36



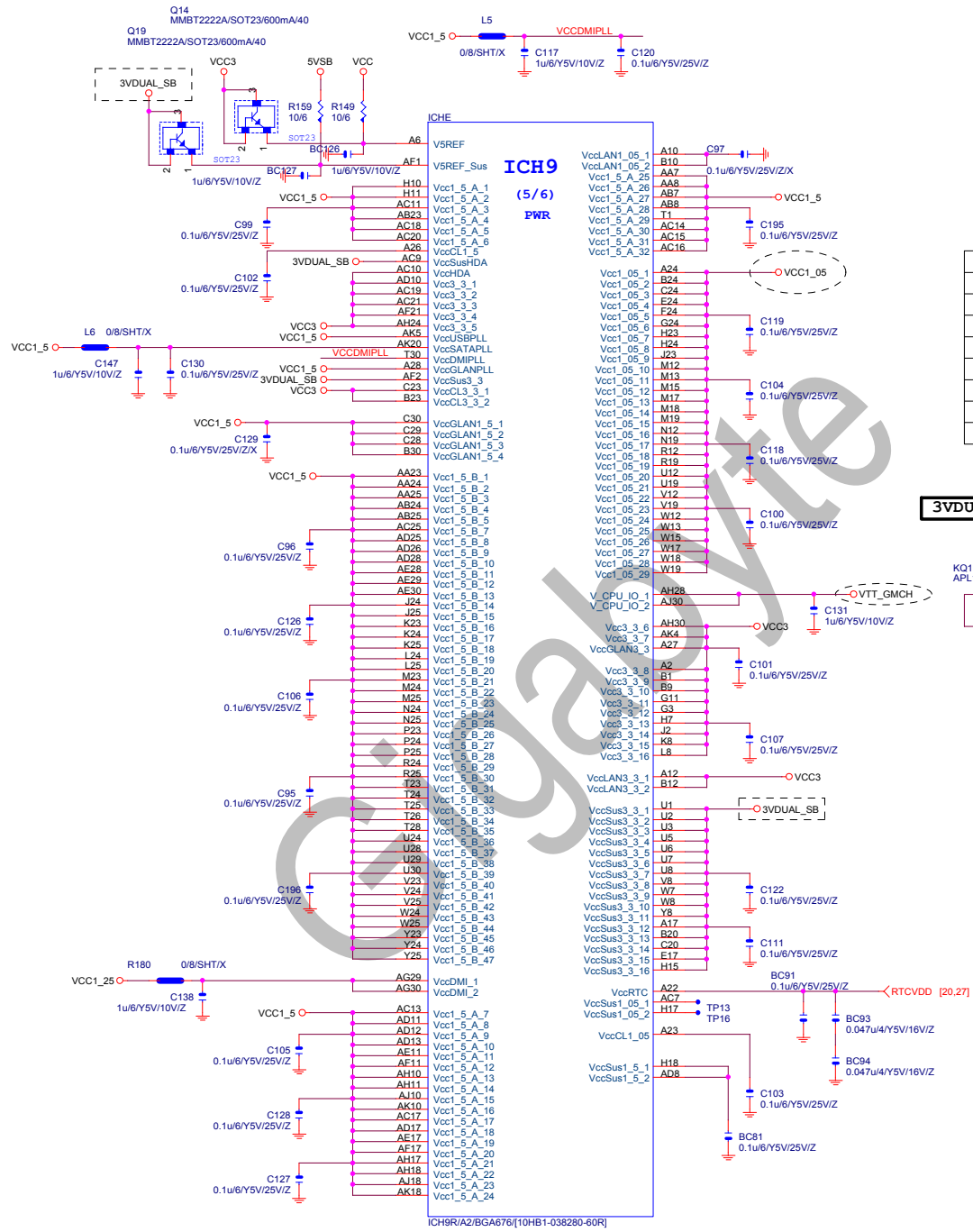
修改成VCC3,  
否則造成不開機  
,-PCIRST/-PFMRST不會打

INTEL NOTE:SATAII PORT  
ICH9: 4(0/1/4/5 PORT,2/3:N/A)



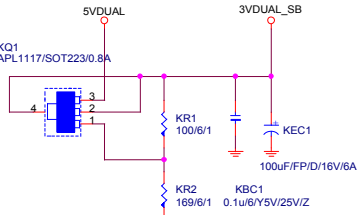
<b>Gigabyte Technology</b>		
Title <b>ICH9- SATA, FAN CTRL</b>		
Size Custom	Document Number <b>G33M-DS2R</b>	Rev <b>1.01</b>
Date: Tuesday, April 03, 2007	Sheet 21	of 36

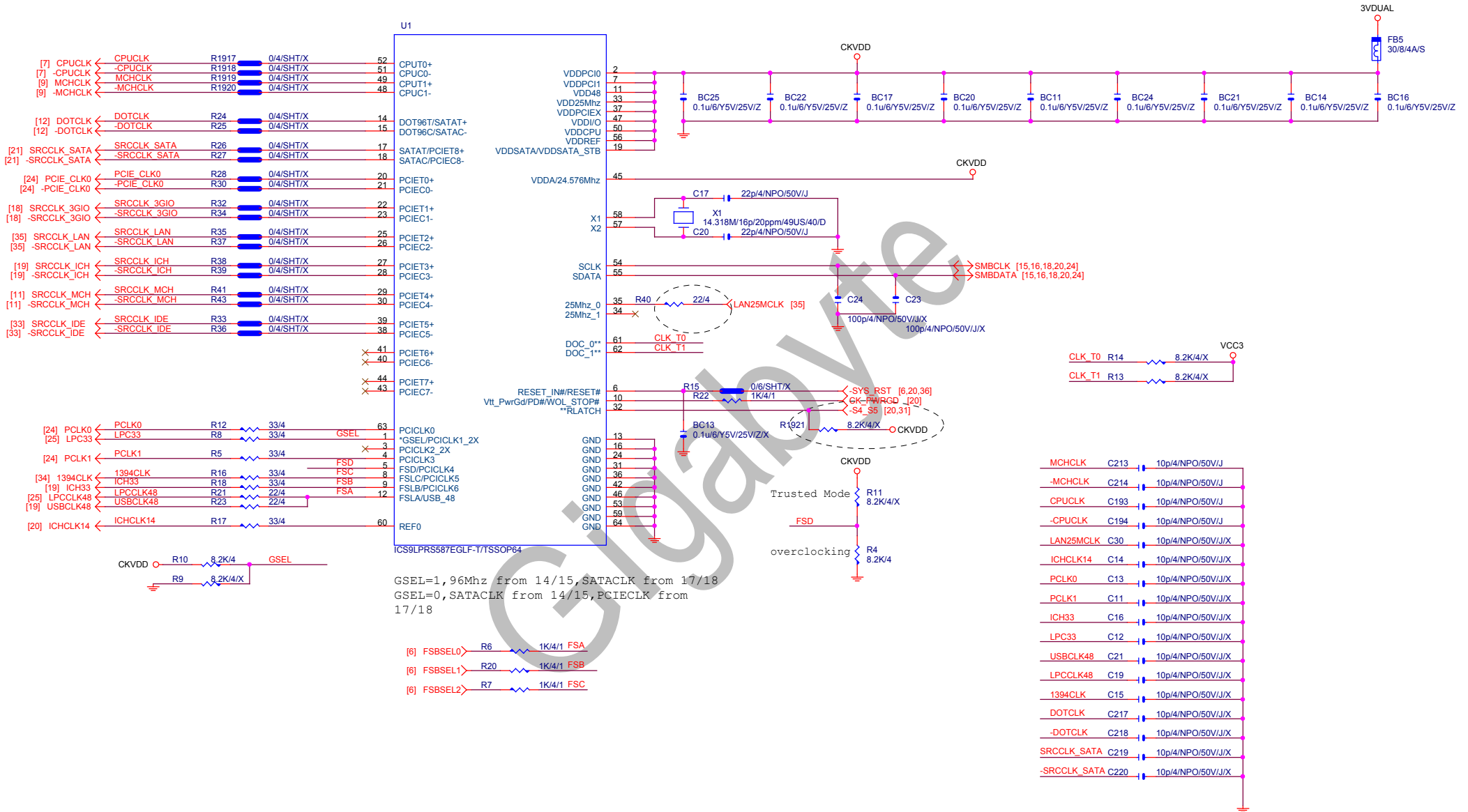
G30	VSS_100	H13
G29	VSS_101	H19
G28	VSS_102	H22
G16	VSS_103	H25
F9	VSS_104	H26
F8	VSS_105	H9
F28	VSS_106	H29
F26	VSS_107	J29
F21	VSS_108	J30
F12	VSS_109	J6
E30	VSS_110	K26
E29	VSS_111	K28
E22	VSS_112	L2
E2	VSS_113	L23
E18	VSS_114	L29
E15	VSS_115	L30
D28	VSS_116	M14
D8	VSS_117	M16
B5	VSS_118	M28
B28	VSS_119	M8
B25	VSS_120	M28
B22	VSS_121	M8
B2	VSS_122	M13
B19	VSS_123	M14
B17	VSS_124	M16
B14	VSS_125	M28
B11	VSS_126	N17
AK3	VSS_127	N18
AK30	VSS_128	N23
AK29	VSS_129	N29
AK2	VSS_130	N30
AK16	VSS_131	AA23
AK14	VSS_132	AA24
AK12	VSS_133	AA25
A18	VSS_134	P14
A15	VSS_135	P15
A126	VSS_136	P16
A123	VSS_137	P17
A120	VSS_138	P18
A116	VSS_139	P19
A114	VSS_140	P2
A112	VSS_141	P26
AH8	VSS_142	P28
AH6	VSS_143	P6
AH20	VSS_144	R13
AH2	VSS_145	R14
AH19	VSS_146	R15
AH15	VSS_147	R16
AH13	VSS_148	R17
AG28	VSS_149	R18
AF9	VSS_150	R23
AF7	VSS_151	R29
AF29	VSS_152	R30
AF25	VSS_153	R8
AF23	VSS_154	T12
AF20	VSS_155	T13
AF15	VSS_156	T14
AF13	VSS_157	T16
AE9	VSS_158	T16
AE8	VSS_159	T17
AE6	VSS_160	T18
AE5	VSS_161	T19
AE25	VSS_162	T2
AE19	VSS_163	T29
AE18	VSS_164	T5
AE16	VSS_165	U13
AE15	VSS_166	U15
AE14	VSS_167	U16
AE13	VSS_168	U16
AE12	VSS_169	U17
AE10	VSS_170	U23
AD9	VSS_171	V13
AD7	VSS_172	V14
AD3	VSS_173	V15
AD22	VSS_174	V16
AD19	VSS_175	V17
AD18	VSS_176	V18
AD16	VSS_177	V26
AD15	VSS_178	V28
AD14	VSS_179	V3
AC8	VSS_180	V3
AC5	VSS_181	V18
AC3	VSS_182	W14
AC30	VSS_183	W16
AC24	VSS_184	W23
AC12	VSS_185	W30
AC1	VSS_186	W5
AB28	VSS_187	W6
AB26	VSS_188	Y28
AA6	VSS_189	Y3
AA5	VSS_190	Y7
AK27	VSS_191	AA29
AH29	VSS_192	AA1
AJ4	VSS_193	AA2
AF3	VSS_194	AA3
B27	VSS_195	AA4
	VSS_196	AA5
	VSS_197	AA6
	VSS_198	AA7
	VSS_199	AA8
	VSS_200	AA9
	VSS_201	AA10



SIGNAL NAME	NO LAN
VccCL_1_05	de-CAP
VccCL3_3	Vcc3_3
VccCL1_5	de-CAP
VccGLAN1_5	Vcc1_5
VccGLAN3_3	Vcc3_3
VccGLANPLL	Vcc1_5
VccLAN1_05	N/A
VccLAN3_3	Vcc3_3

**3VDUAL\_SB**

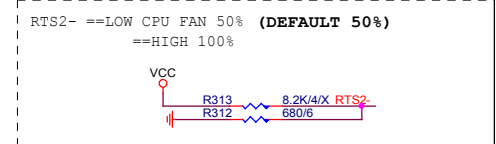
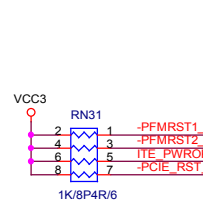
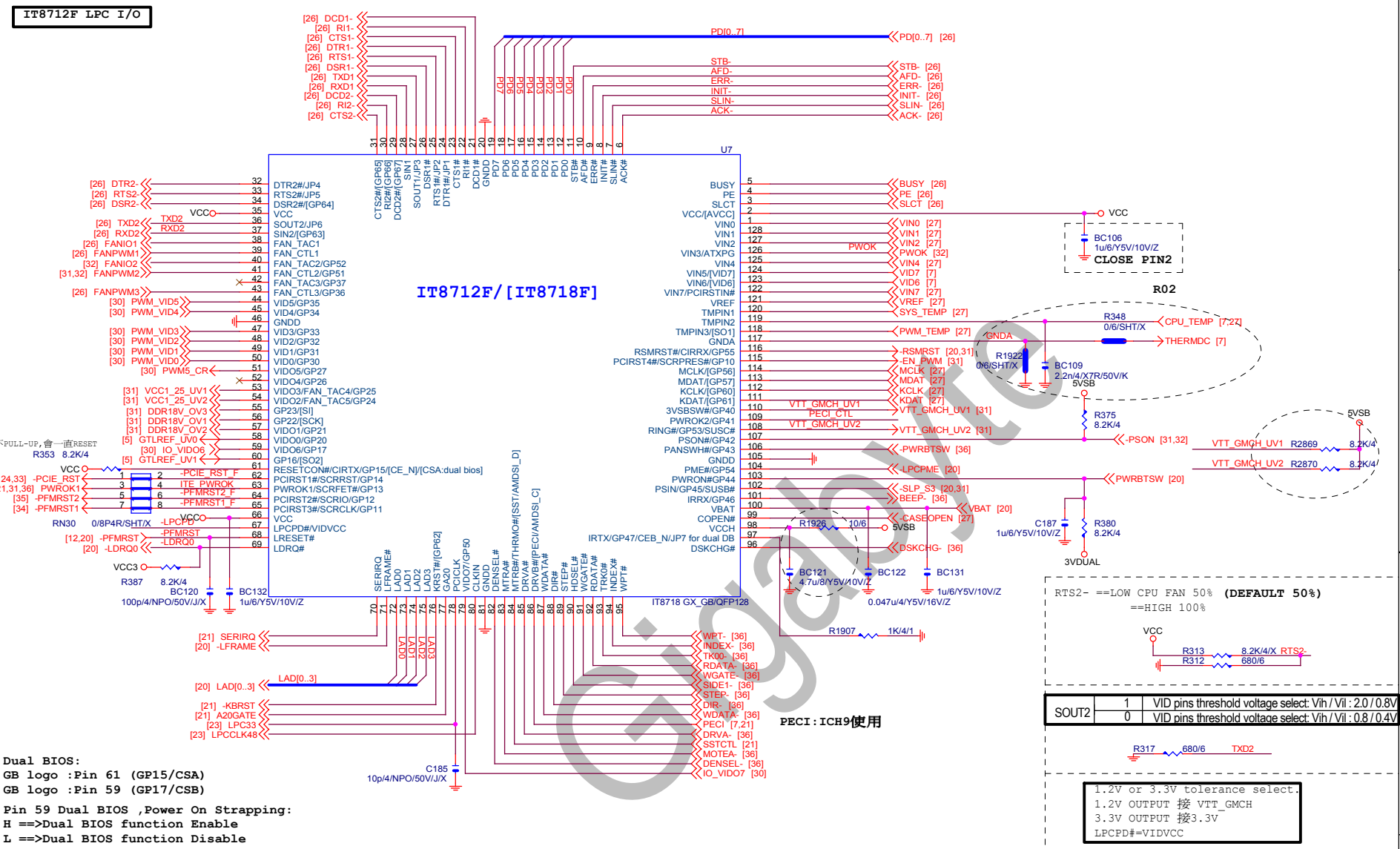




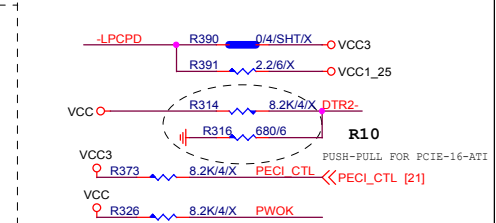
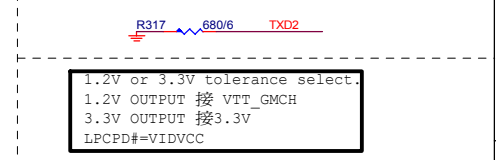




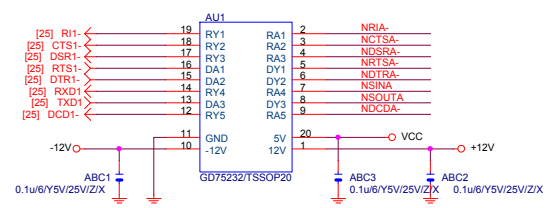
**IT8712F LPC I/O**



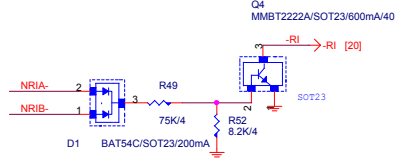
SOUT2	1	VID pins threshold voltage select: Vih / Vil : 2.0 / 0.8V
	0	VID pins threshold voltage select: Vih / Vil : 0.8 / 0.4V



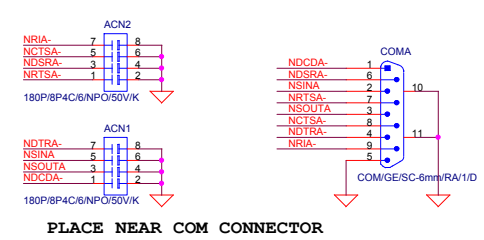
**COMA**



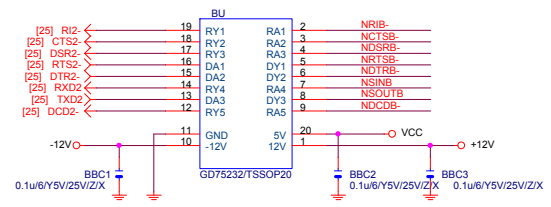
**COM RI**



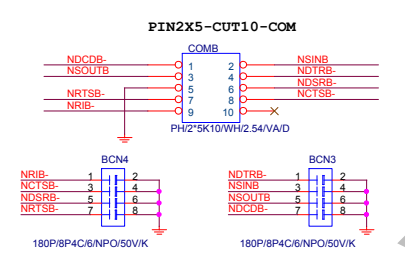
**EXTERNAL COMA**



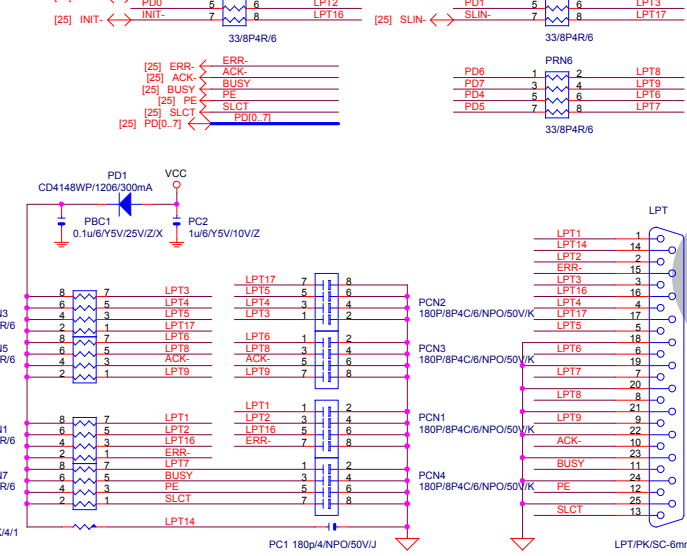
**COMB**



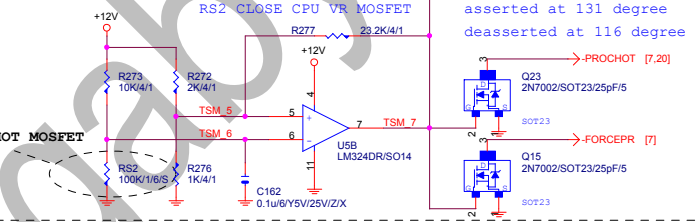
**INTERNAL COMB**



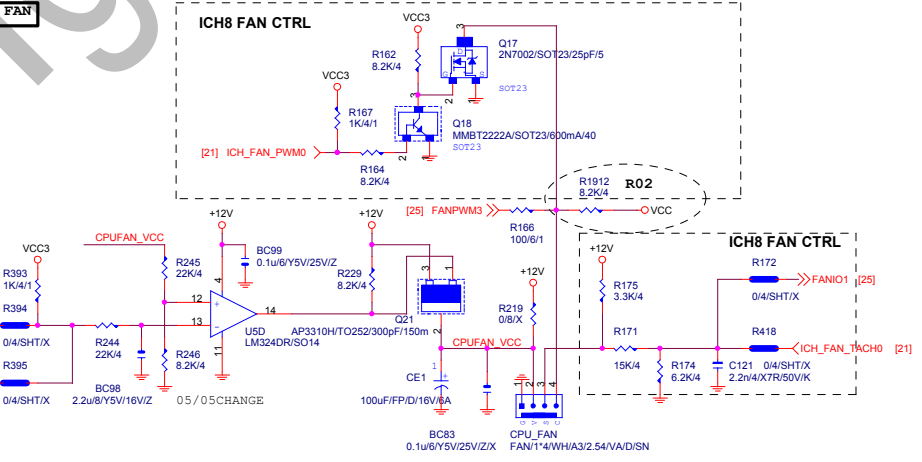
**LPT PORT**



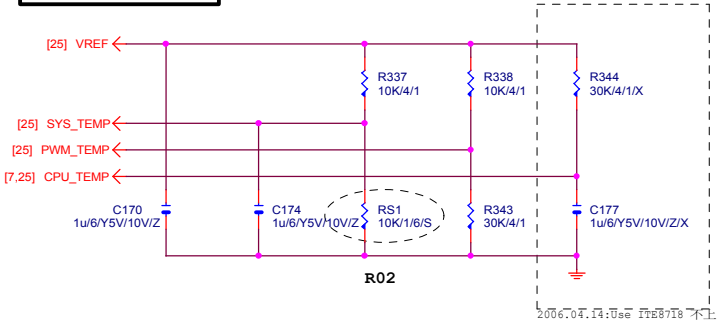
**-PROHOT**



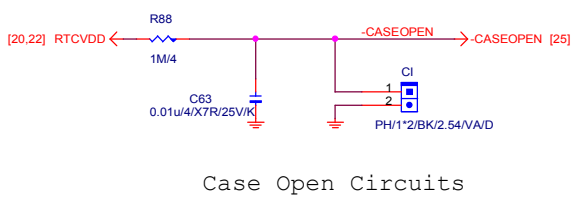
**CPU SMART FAN**



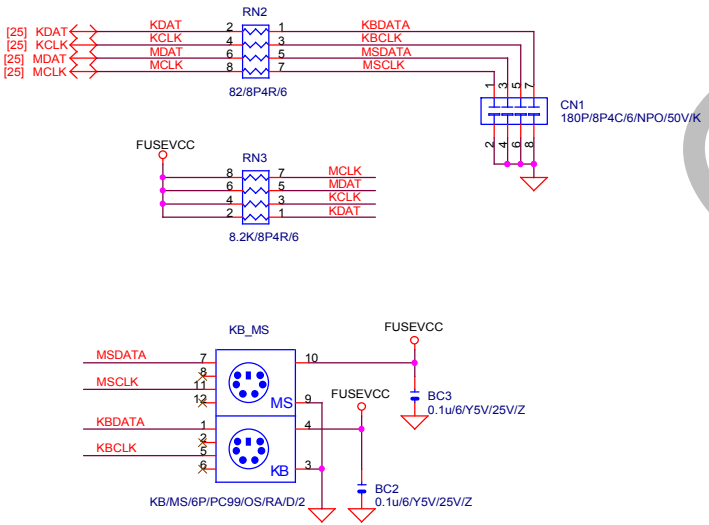
**TEMP H/W MONITOR**



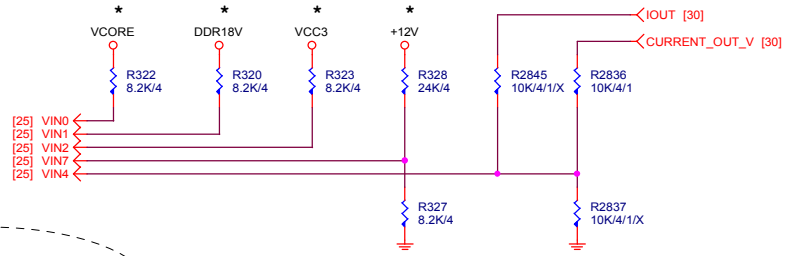
**CASE OPEN**



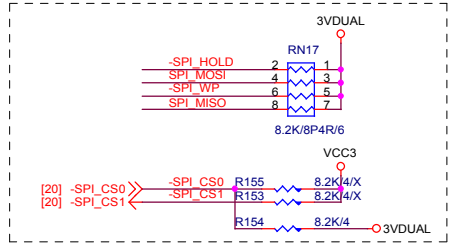
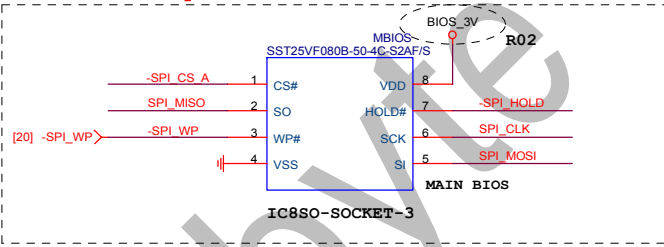
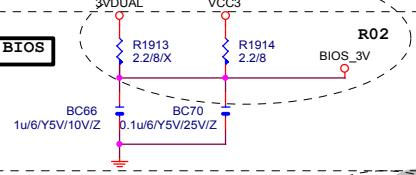
**KB/MS**



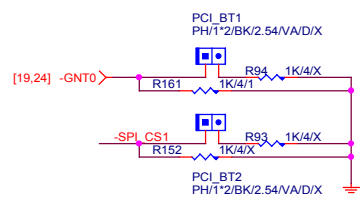
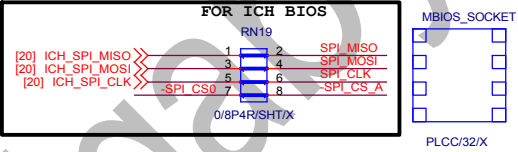
**VOLTAGE-- H/W MONITOR**



**SPI BIOS**

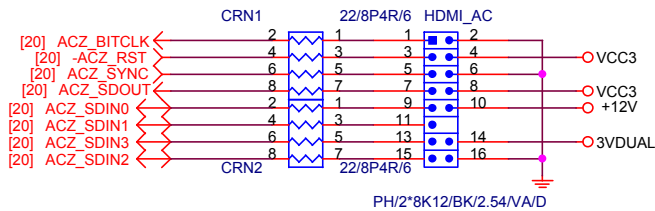
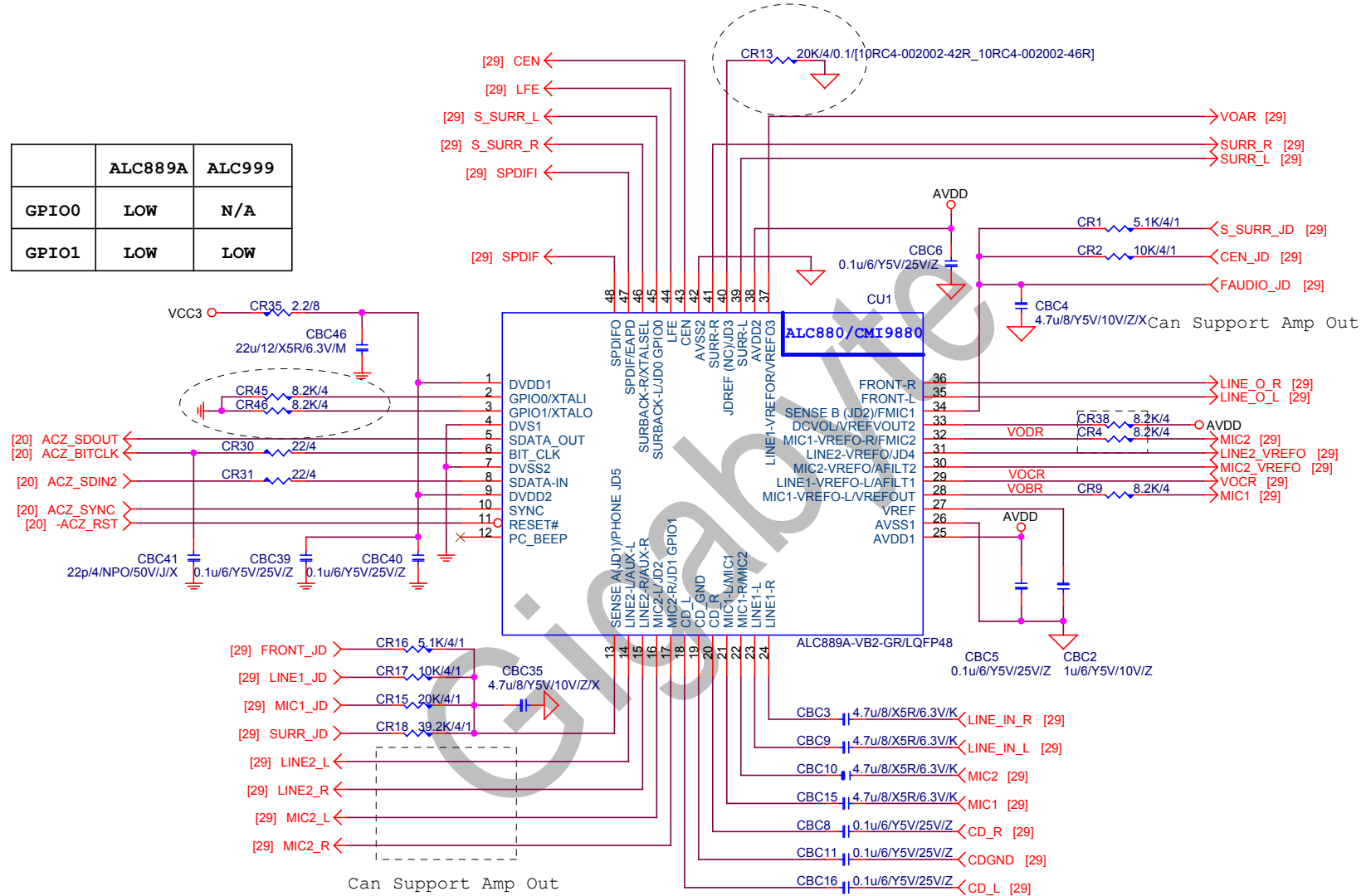


**FOR ICH BIOS**



BOOT DEVICE	GNT0	CS1
SPI	0	1
PCI	1	0
FWH	1	1

	ALC889A	ALC999
GPI00	LOW	N/A
GPI01	LOW	LOW



**Gigabyte Technology**

**AZALIA ALC889**

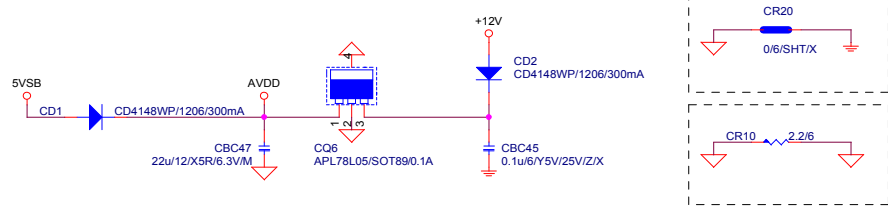
**G33M-DS2R**

Rev **1.01**

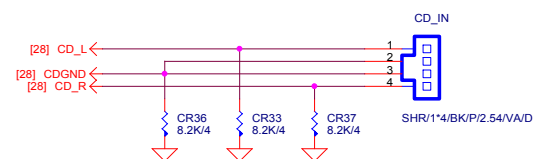
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**CODEC POWER/EMI PAD**

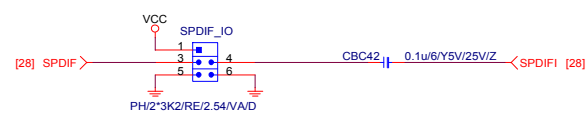
**CO-LAYOUT**



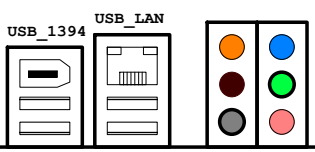
**CD IN**



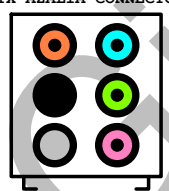
**SPDIF**



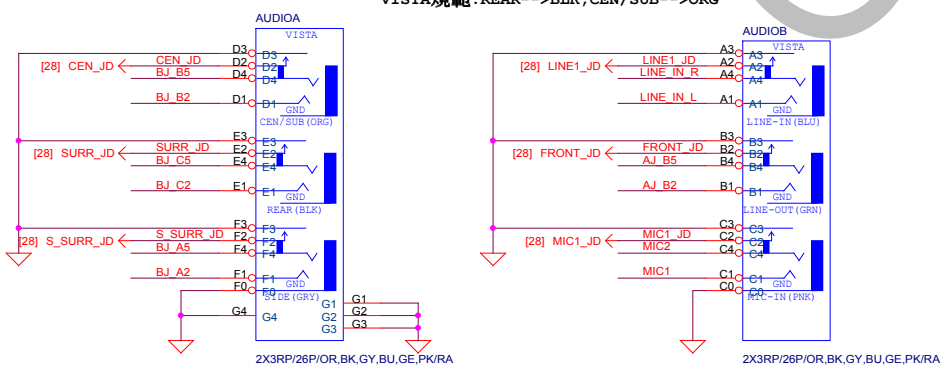
**AZALIA JACK**



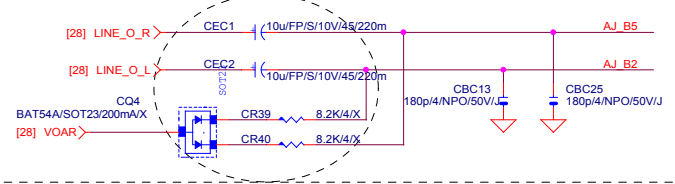
**BTX AZALIA CONNECTOR**



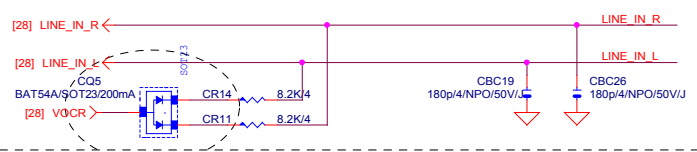
3RP/26P/OR, BK, GY, BU, GE, PK/RA/D/1/B  
VISTA規範: REAR-->BLK, CEN/SUB-->ORG



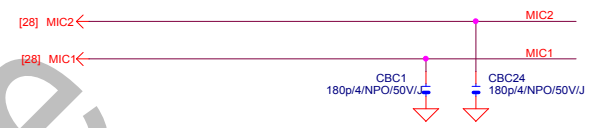
**LINE-OUT**



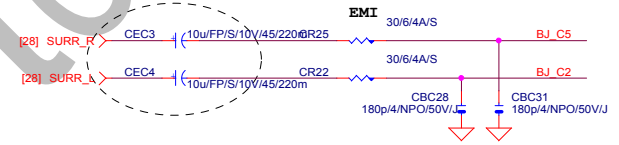
**LINE-IN**



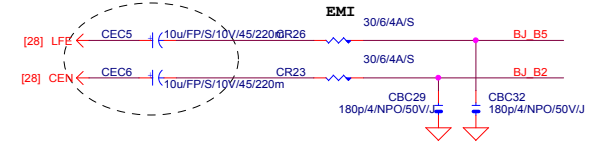
**MIC-IN**



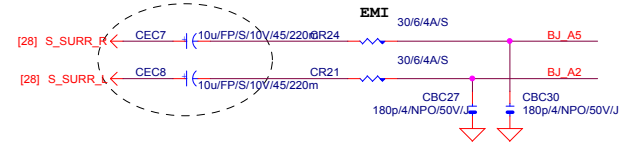
**SURROUND**



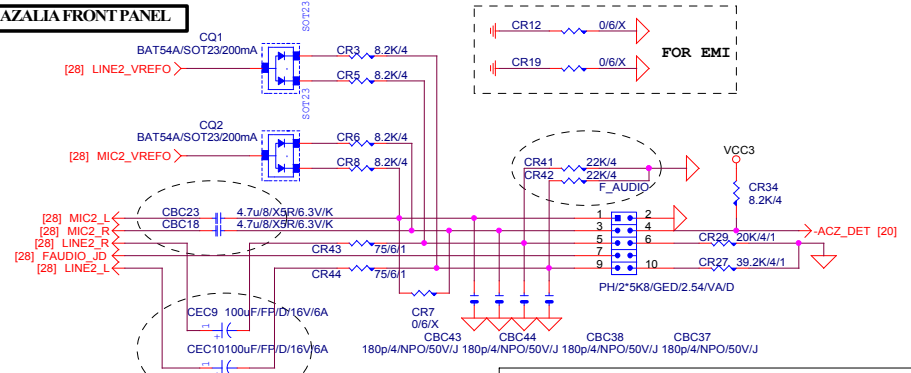
**CEN/LFE**



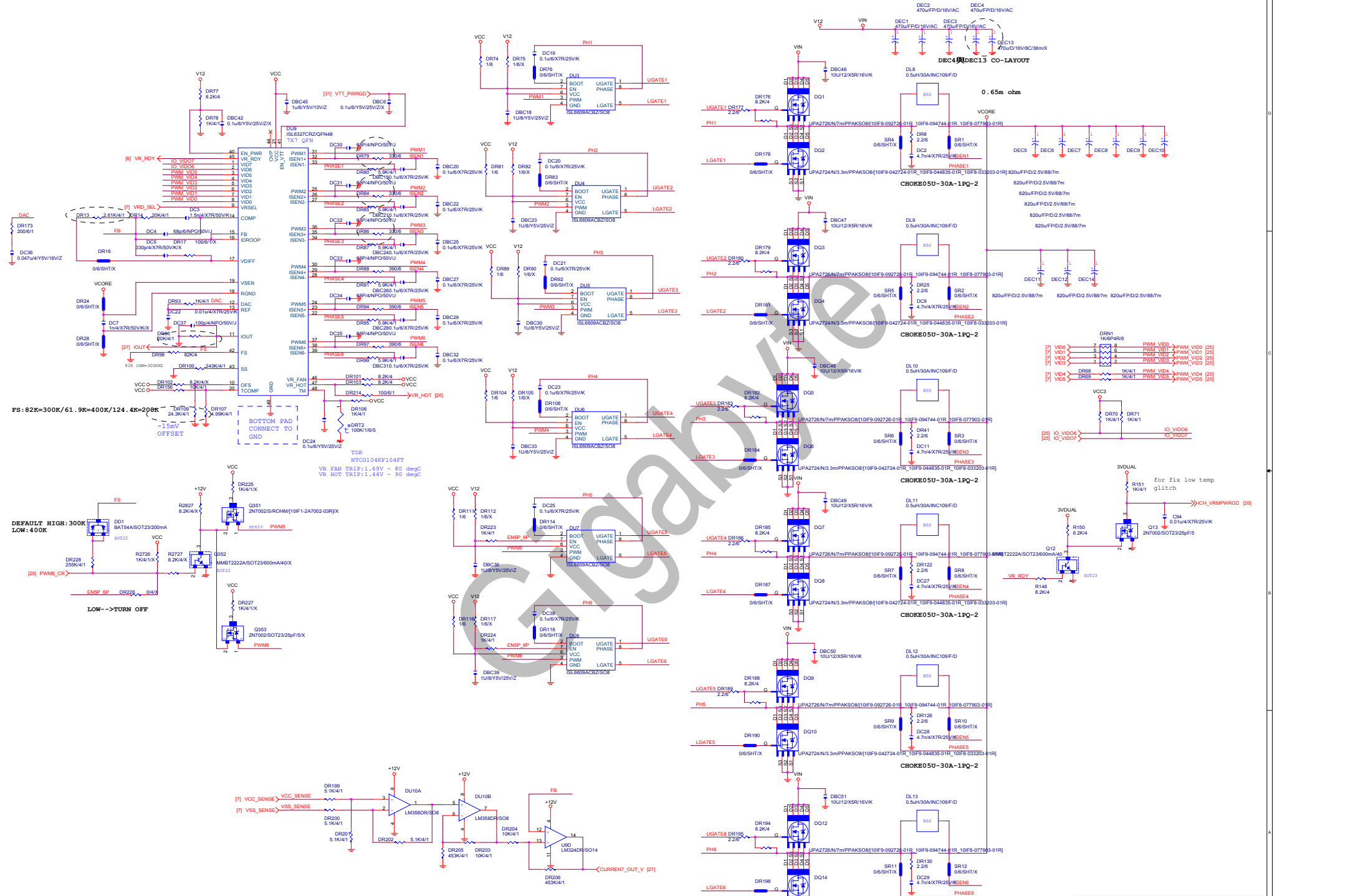
**SURRBACK**



**AZALIA FRONT PANEL**



<b>Gigabyte Technology</b>		
<b>AUDIO JACK</b>		
<b>G33M-DS2R</b>		
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FS: 82K=300K/61.9K=400K/124.4K=200K

DEFAULT HIGH: 300K  
LOW: 400K

LOW --> TURN OFF

[7] VCC\_SENSE  
[7] VSS\_SENSE

[7] VCC\_SENSE  
[7] VSS\_SENSE

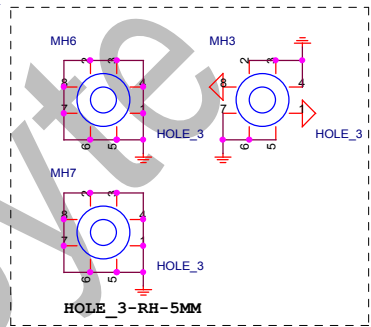
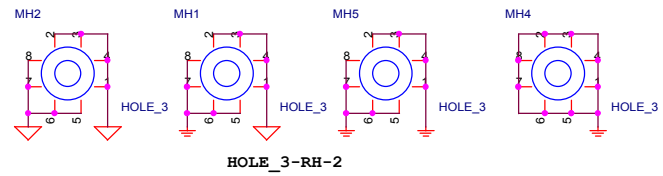
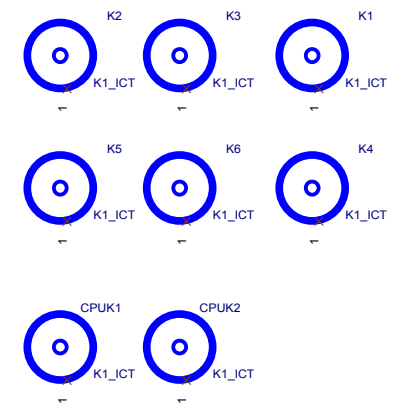
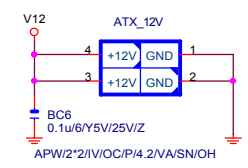
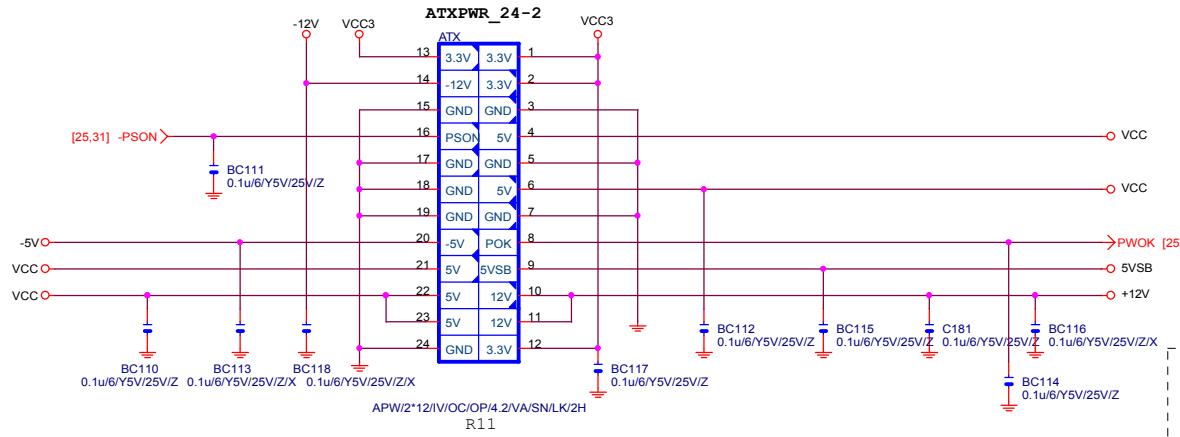
[7] VCC\_SENSE  
[7] VSS\_SENSE

[7] VCC\_SENSE  
[7] VSS\_SENSE

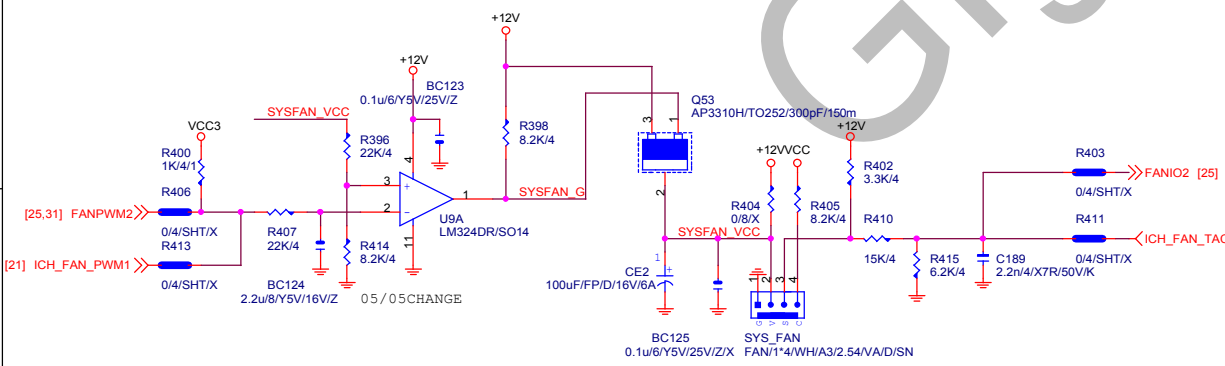
[7] VCC\_SENSE  
[7] VSS\_SENSE



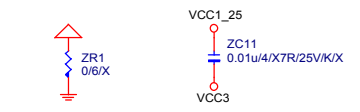
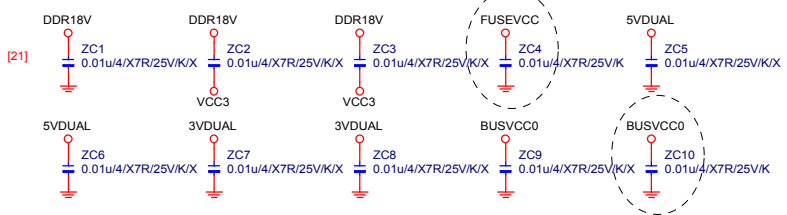
# ATX POWER CONNECTOR



## SYS SMART FAN



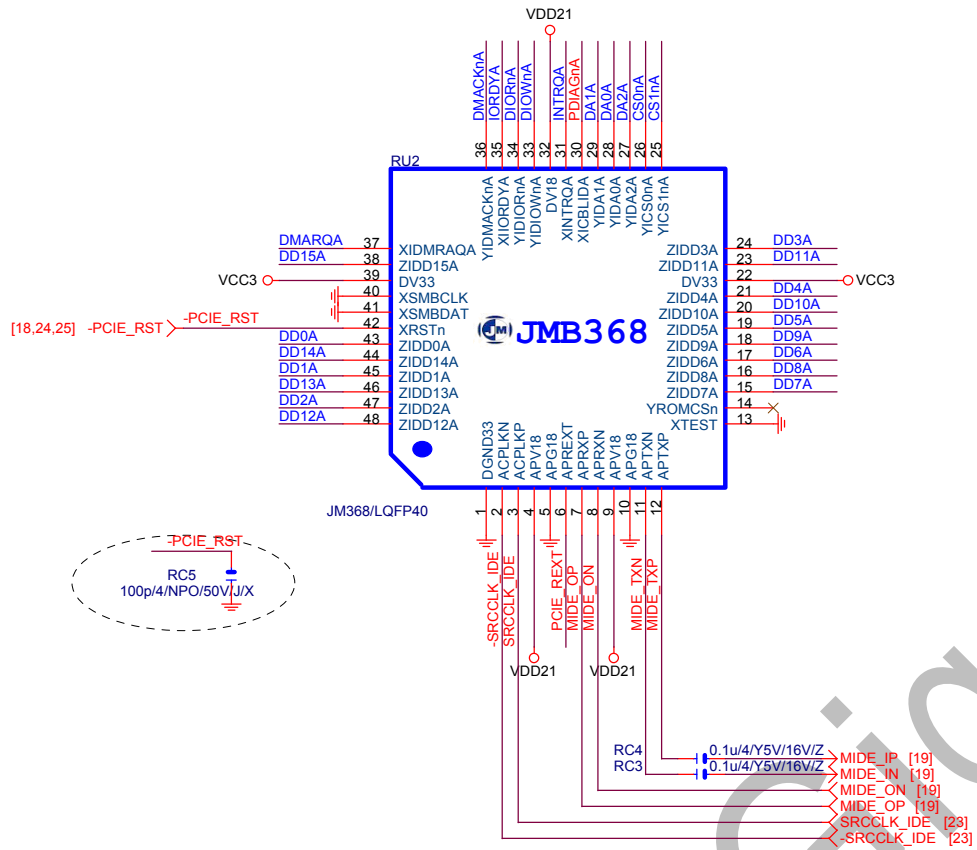
- Position (1635,-7765) , 0.01uF cap DDR18V to GND
- Position (1980,-7715) , 0.01uF cap DDR18V to VCC3
- Position (2195,-7795) , 0.01uF cap DDR18V to VCC3
- Position (5405,-430) , 0.01uF cap FuseVcc to GND
- Position (7945,-1345) , 0.01uF cap 5VDual to GND
- Position (4725,-8935) , 0.01uF cap 5Vdual to GND
- Position (-245,-1425) , 0.01uF cap 3Vdual to GND
- Position (-680,-705) , 0.01uF cap 3Vdual to GND
- Position (-845,-3750) , 0.01uF cap BUSVCC0 to GND
- Position (-175,-1325) , 0.01uF cap BUSVCC0 to GND



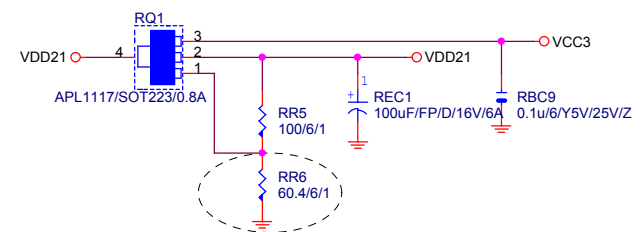
<b>Gigabyte Technology</b>		
<b>ATX PWR/SYS FAN</b>		
<b>G33M-DS2R</b>		Rev <b>1.01</b>
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JMicron 1P PATA

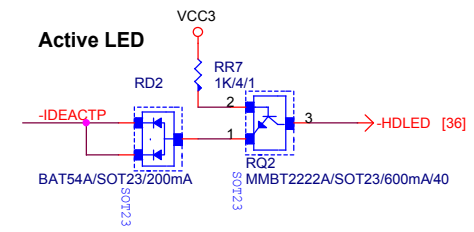


3.3V to 2.1V Voltage Regulator

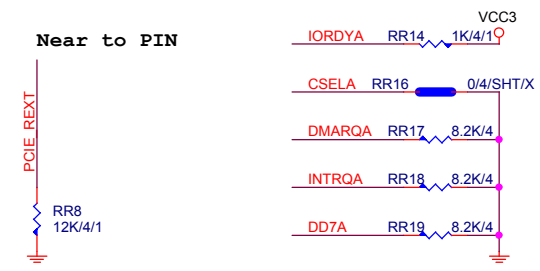


JMicron suggest JMB368 to 2.1V

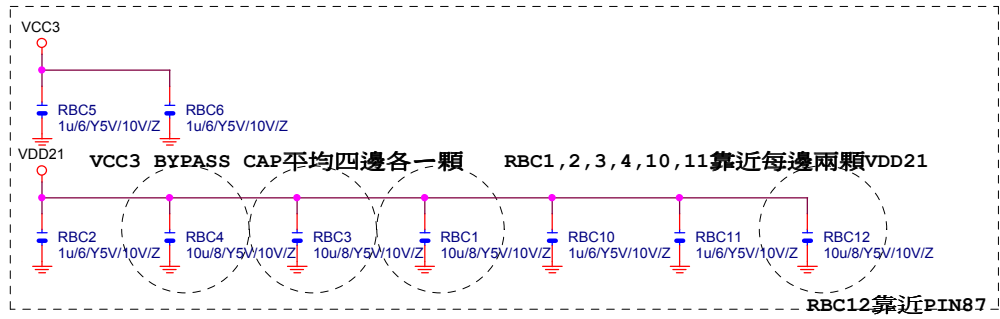
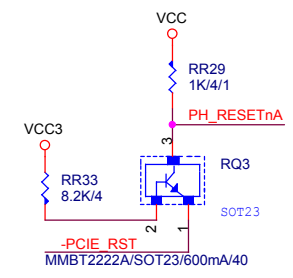
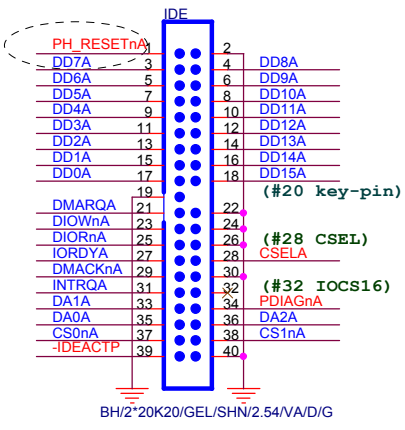
Active LED



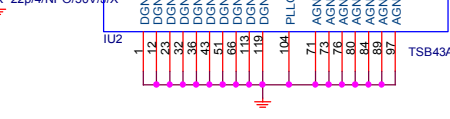
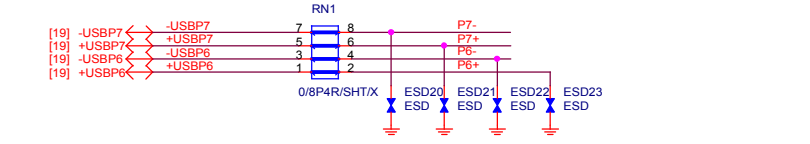
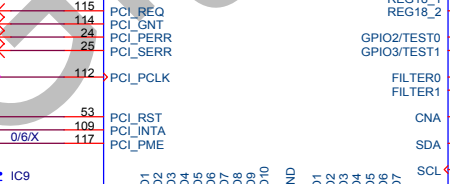
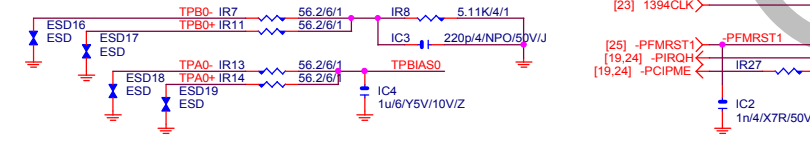
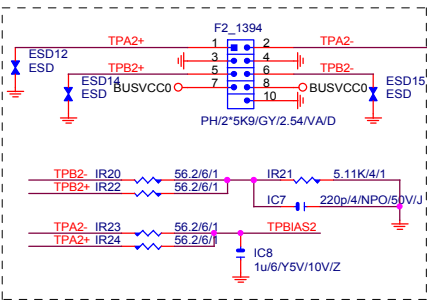
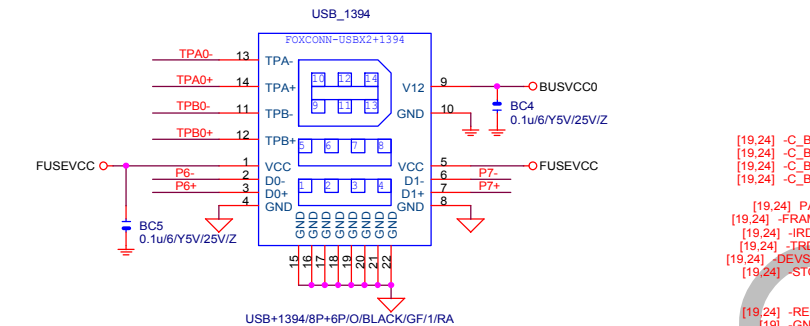
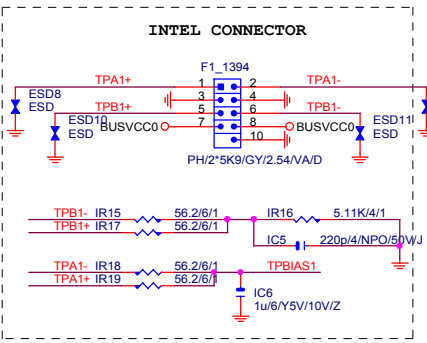
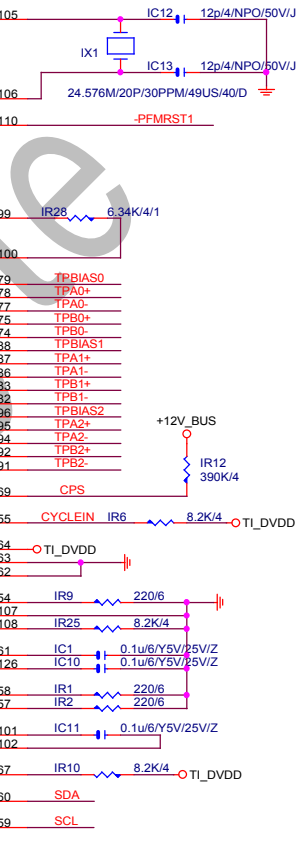
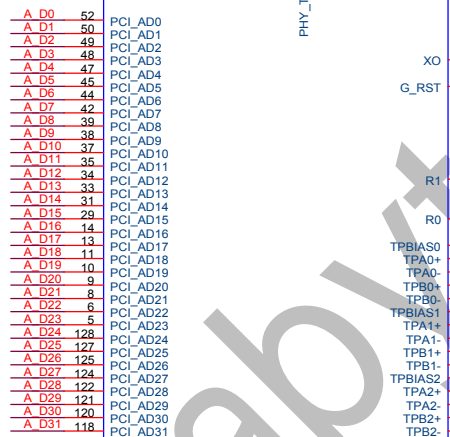
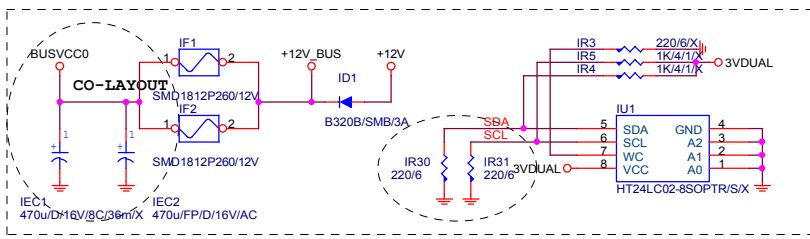
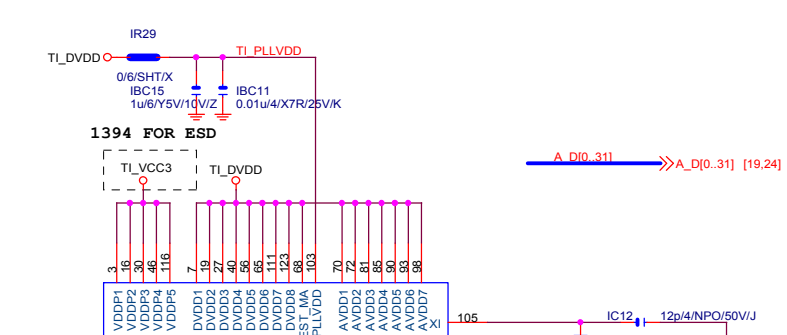
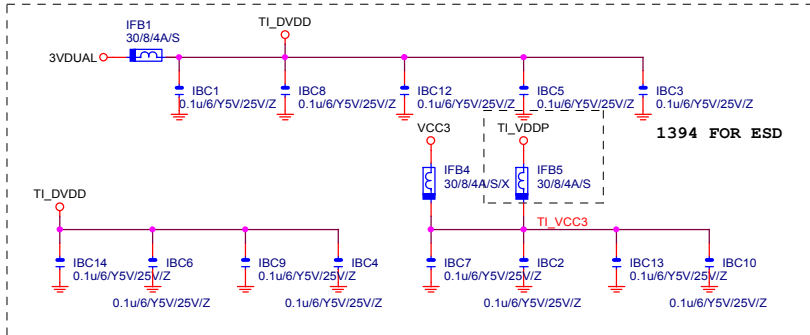
Near to PIN



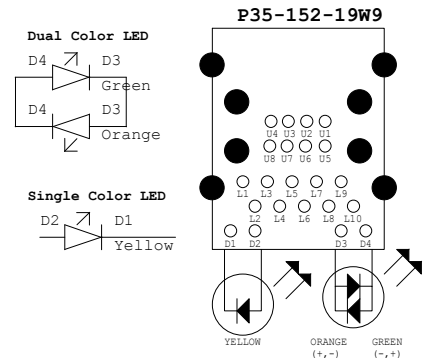
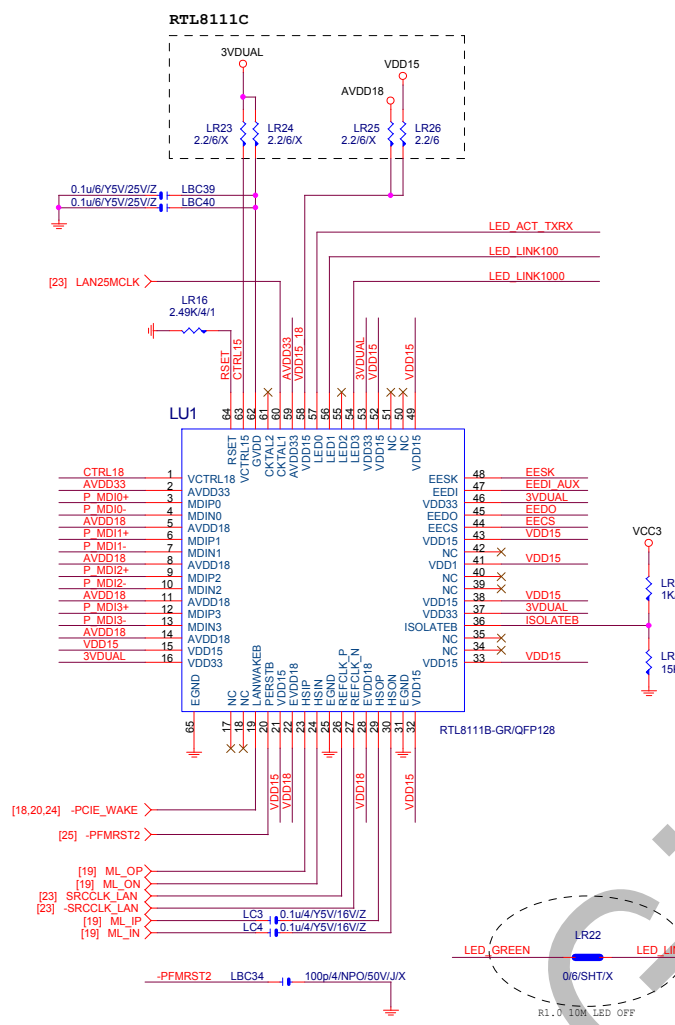
IDE Connector



Gigabyte Technology		
Title JMicron 1P PATA		
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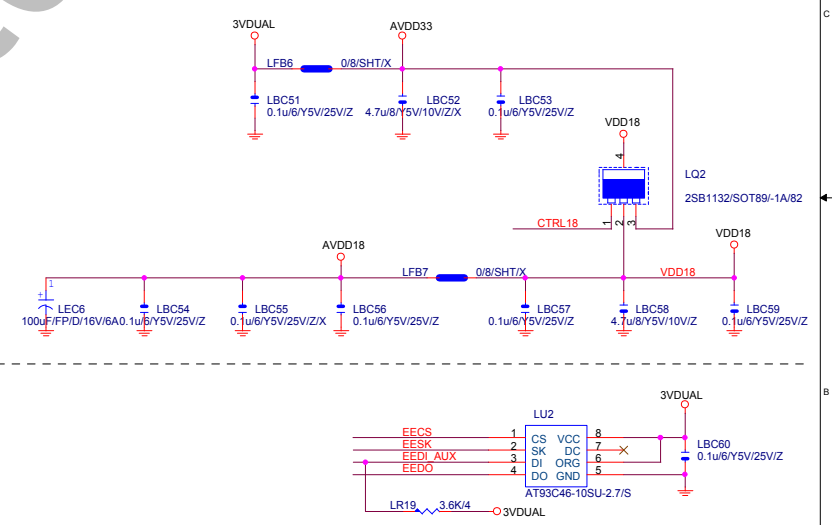
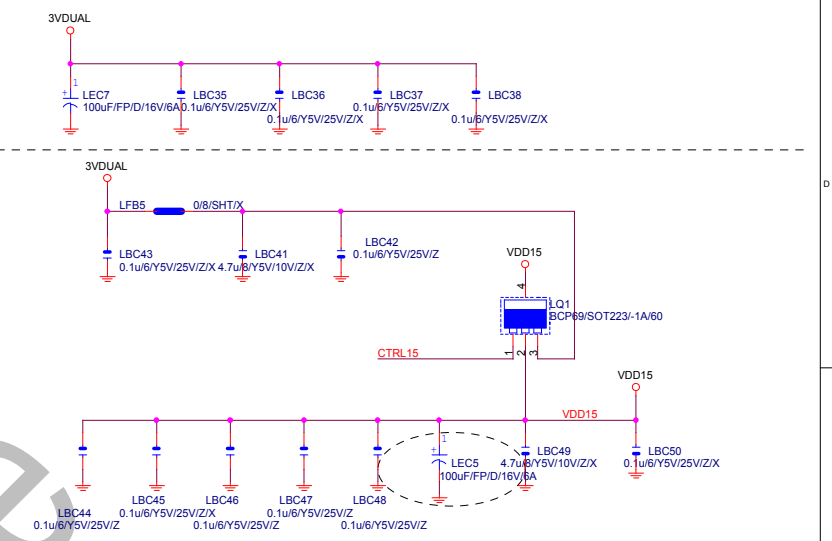


**PCIe-1G LAN**

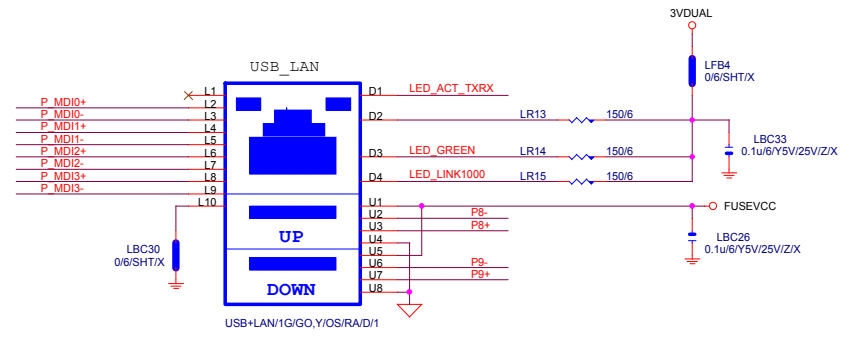


**Power domain chart**

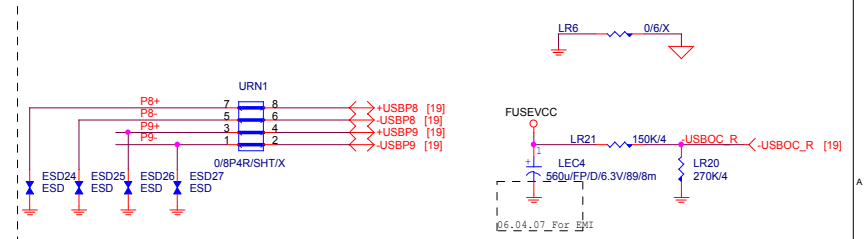
	RTL8111B / RTL8101E	RTL8111C
AVDD33	3.3V	3.3V
AVDD18	1.8V	1.2V
EVDD18	1.8V	1.2V
DVDD15	1.5V	1.2V



**USB LAN CONNECTOR**



**USB LAN**



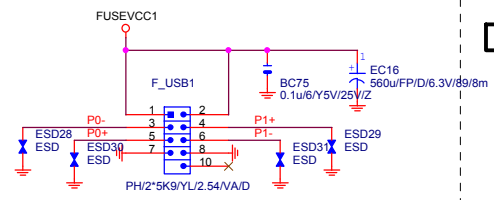
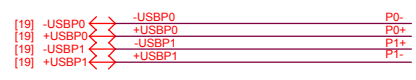
**Gigabyte Technology**

Title: **REALTEK RTL8111B/C**

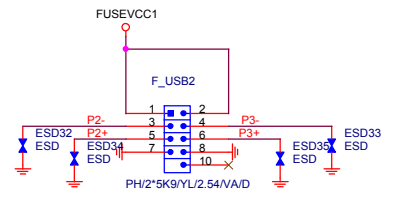
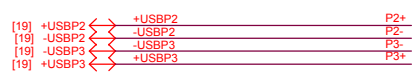
Size Custom: Document Number **G33M-DS2R** Rev **1.01**

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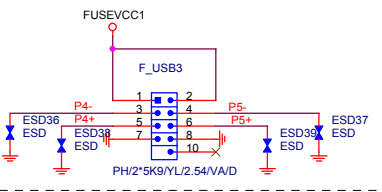
**FRONT USB1** 0,1,2,3,4,5,10,11-->EHCI#1  
6,7,8,9-->EHCI#2



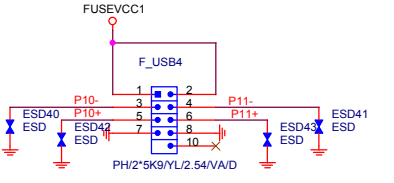
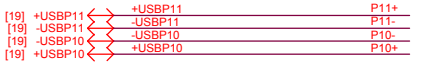
**FRONT USB2**



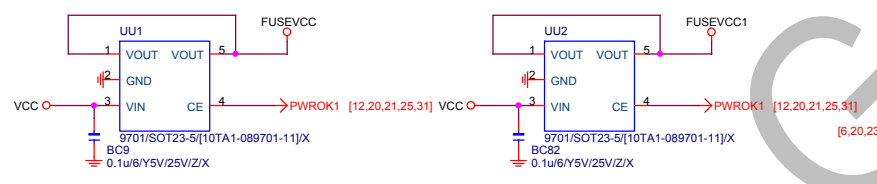
**FRONT USB3**



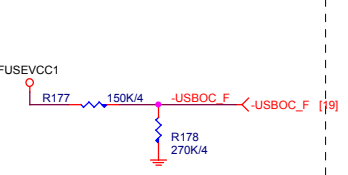
**FRONT USB4**



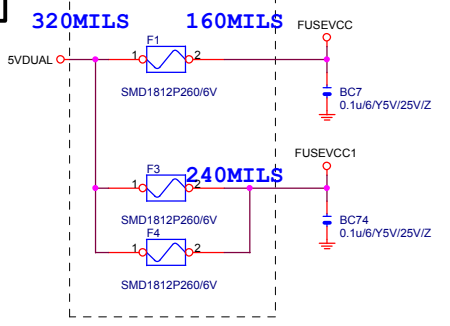
**USB DROP**



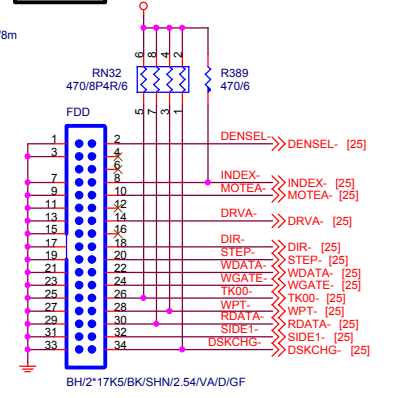
**FRONT USB OC1**



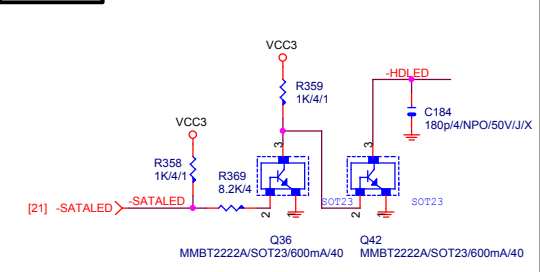
**USB POWER**



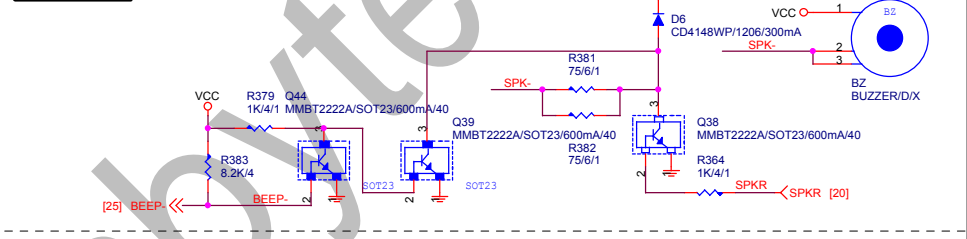
**FLOPPY**



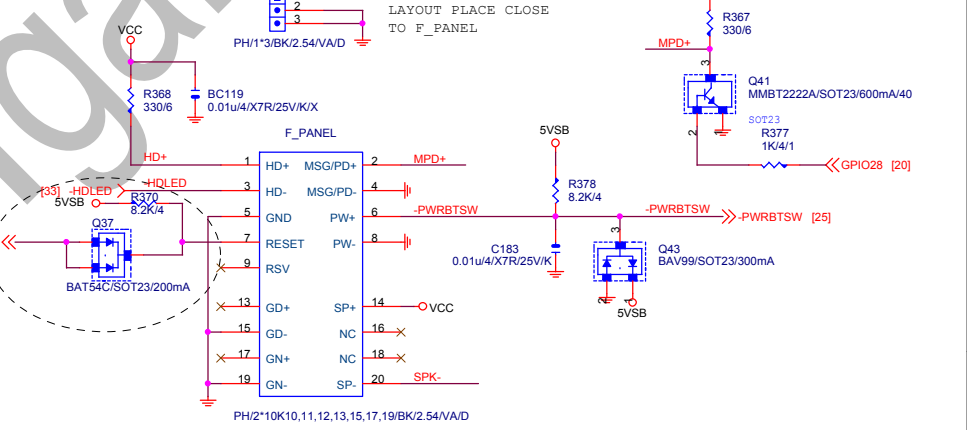
**SATA LED**



**BUZZER**



**INTEL FRONT PANEL**



<b>Gigabyte Technology</b>			
Title <b>FP,F_USB,USB PWR,FDD,BZ</b>			
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