

Model Name:GA-G31M-ES2C

Revision 2.4

SHEET

TITLE

01	COVER SHEET
02	BLOCK DIAGRAM
03	BOM & PCB MODIFY HISTORY
04	P4 LGA775 A
05	P4 LGA775 B,D
06	P4 LGA775 C
07	P4 LGA775 E,F,G,H
08	G31 HOST
09	G31 DDRII
10	G31 PCI E, DMI
11	G31 VGA
12	G31 GND
13	G31 PWR
14	PCI EXPRESS*16 SLOT
15	DDRII CHANNEL A
16	DDRII CHANNEL B
17	DDRII TERMINATION
18	ICH7 PCI, USB, DMI, LAN
19	ICH7 IDE, GPIO, SATA, CTRL
20	ICH7 VCC, GND
21	CK505 CLOCK.
22	PCI SLOT 1,2,PCIE*1
23	IDE/FLOPPY
24	ITE 8718 GB/HX
25	COM LPT
26	CI,HWM,KB/MS,DUALBIOS
27	ALC888B-VD2

SHEET

TITLE

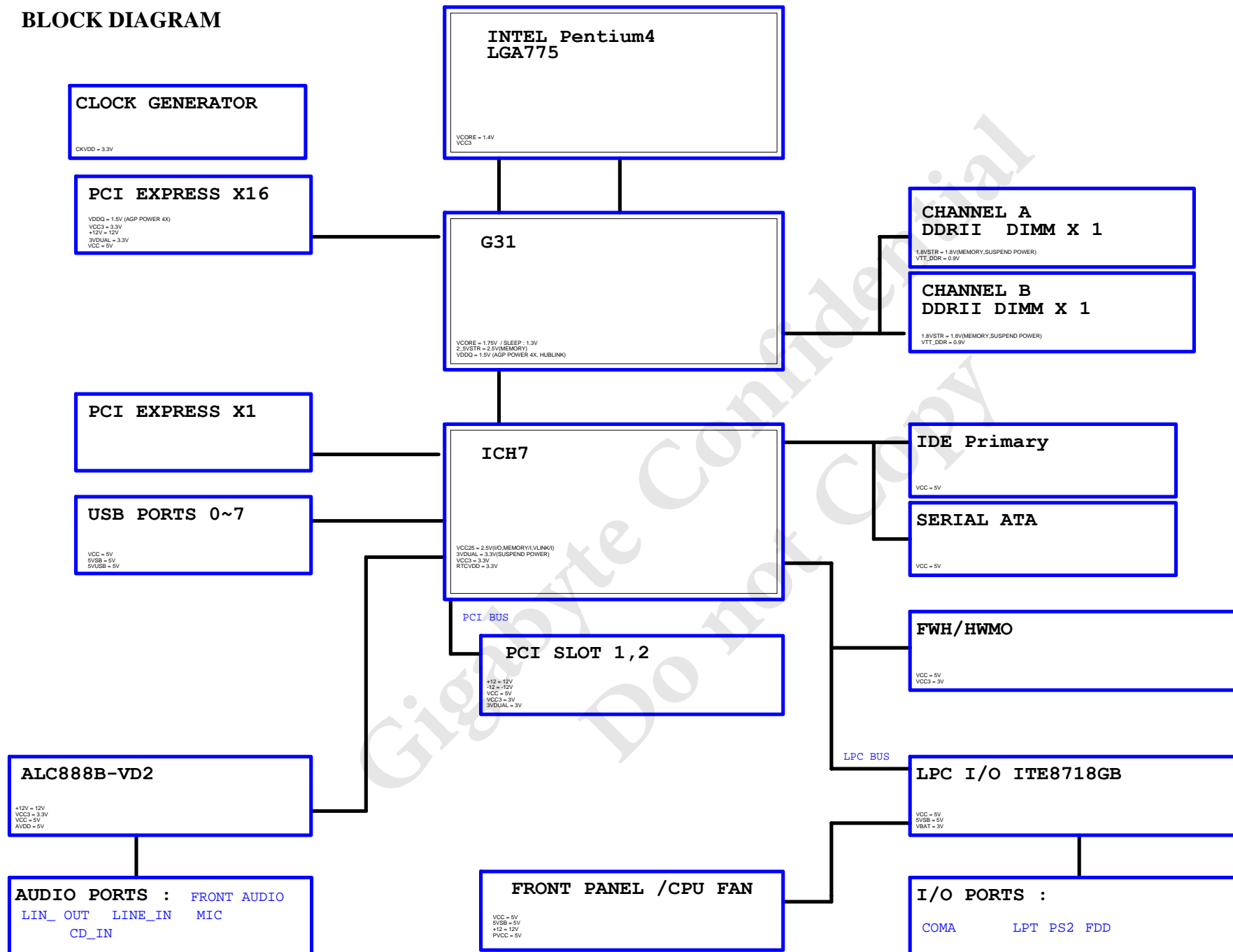
28	REAR AUDIO JACK
29	DISCRETE POWER
30	VCORE PWM ISL6312CRZ
31	ATX, OTHERS POWER
32	FRONT PANEL
33	ATHEROS AR8131M/AR8132M

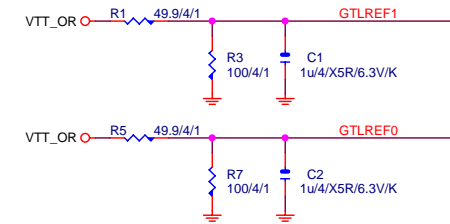
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Cover Sheet

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BLOCK DIAGRAM





VTT_OR R8 62/4 -IERR

VTT_OL R10 62/4 -BR0

VTT_OR R12 62/4 -CPURST

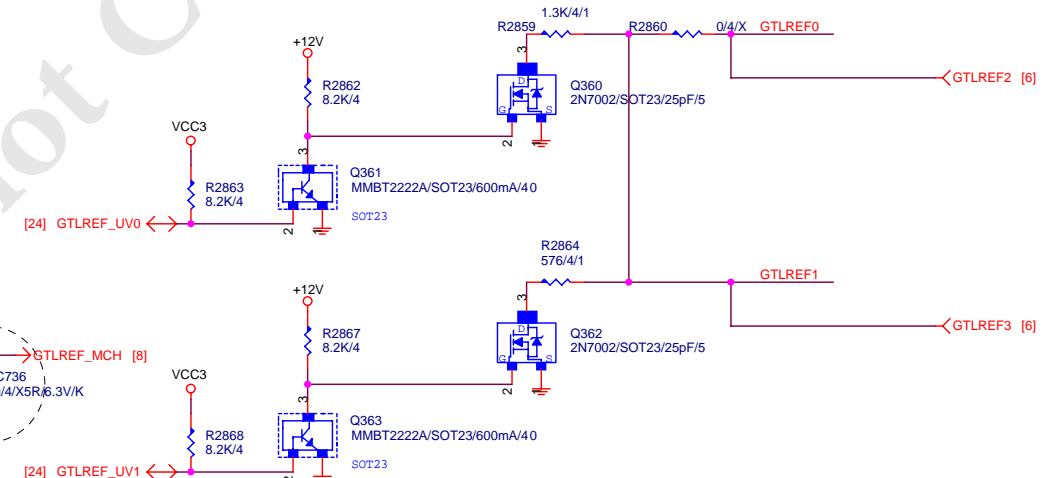
62/8P4R/4

TESTHI9

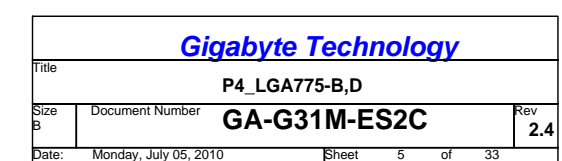
TESTHI8

TESTHI7

TESTHI6

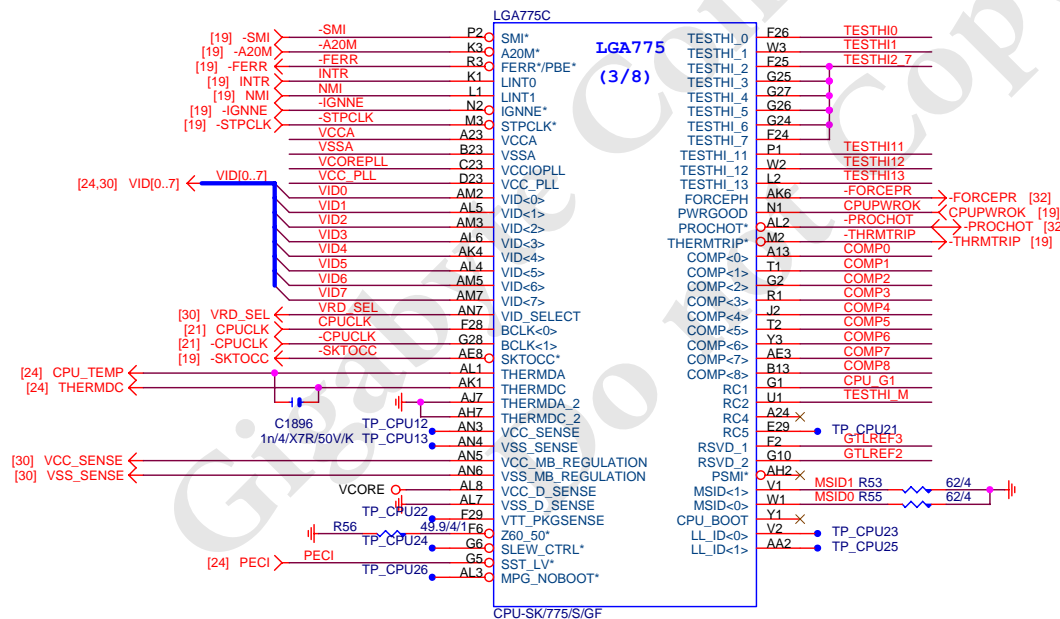
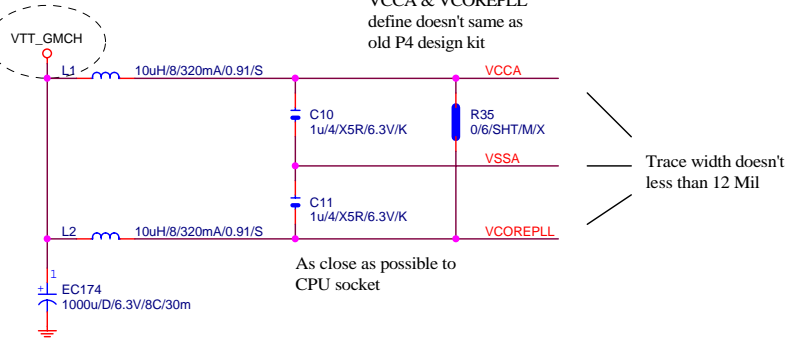
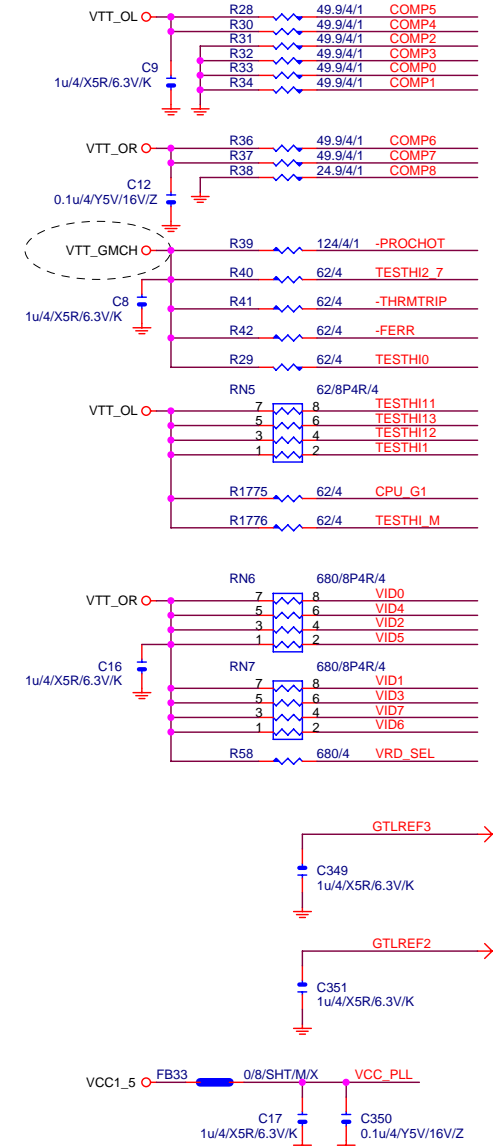


<i>Gigabyte Technology</i>			
P4_ LGA775-A			
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Note:

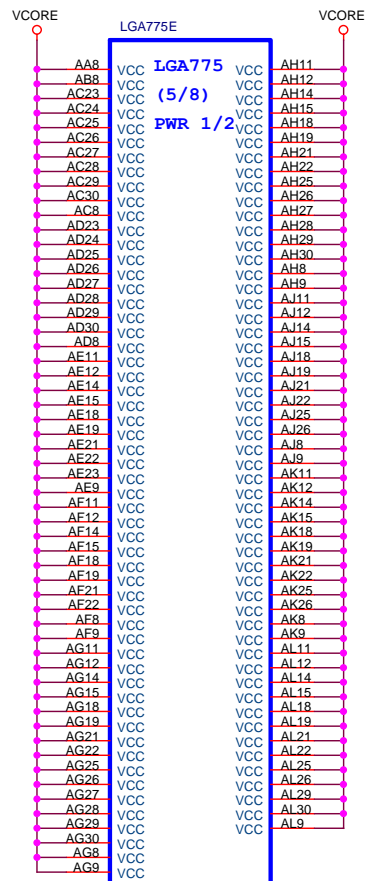
VCCA & VCOREPLL
define doesn't same as
old P4 design kit

**Place outside of CPU socket**

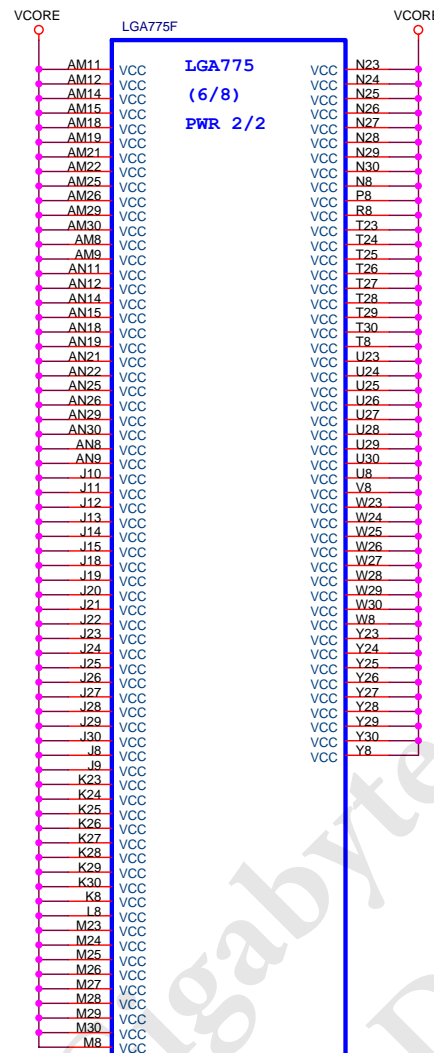
PECI:Platform Environment Control Interface

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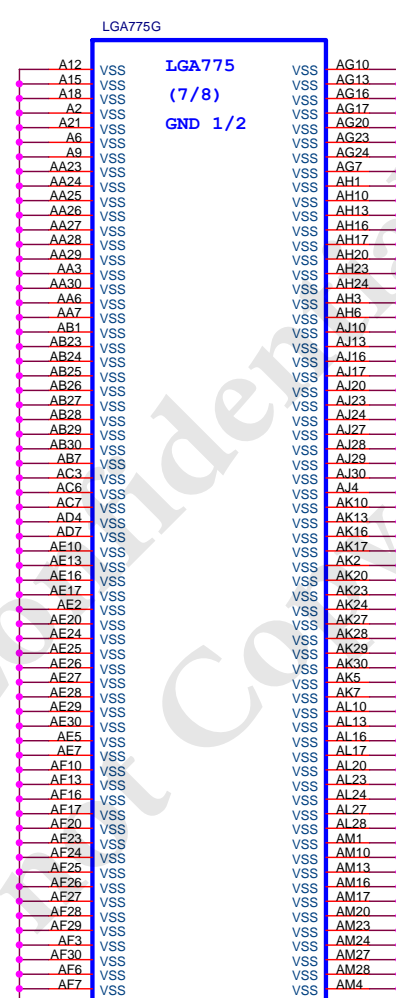
Title			P4_LGA775-C
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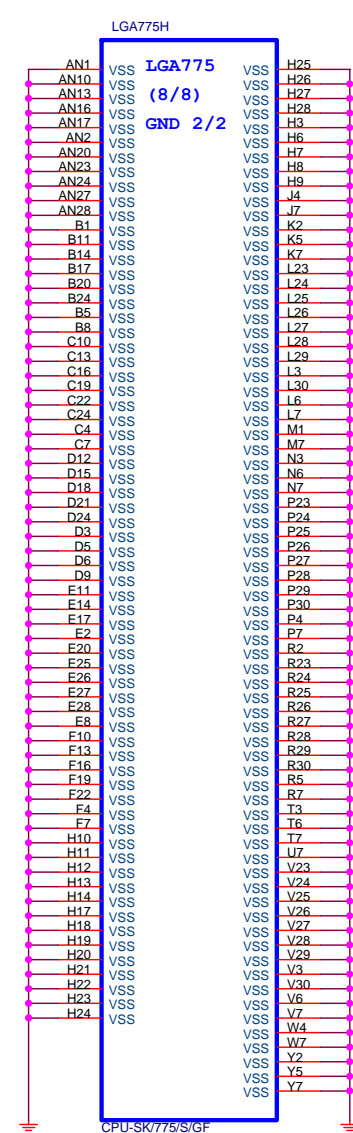
CPU-SK/775/S/GF



CPU-SK/775/S/GF



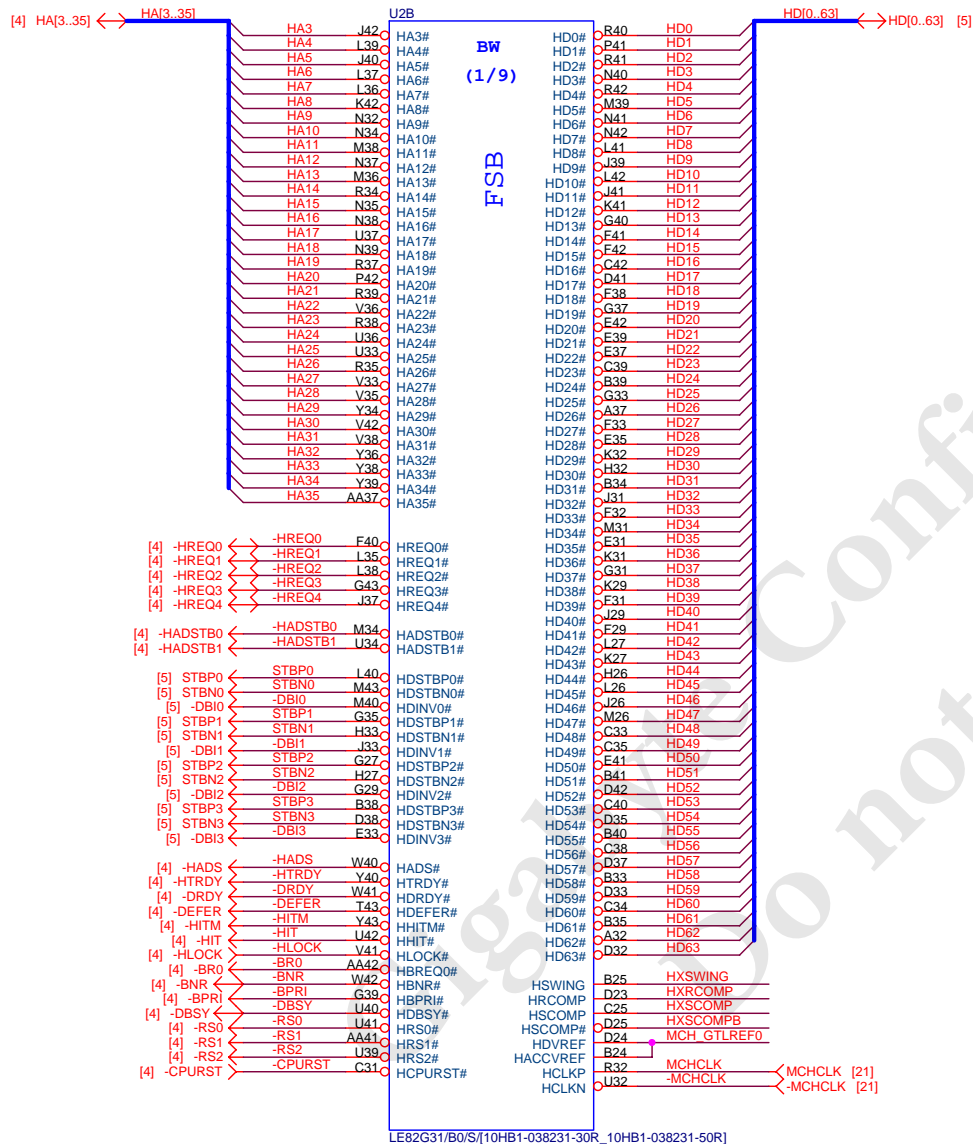
CPU-SK/775/S/GF



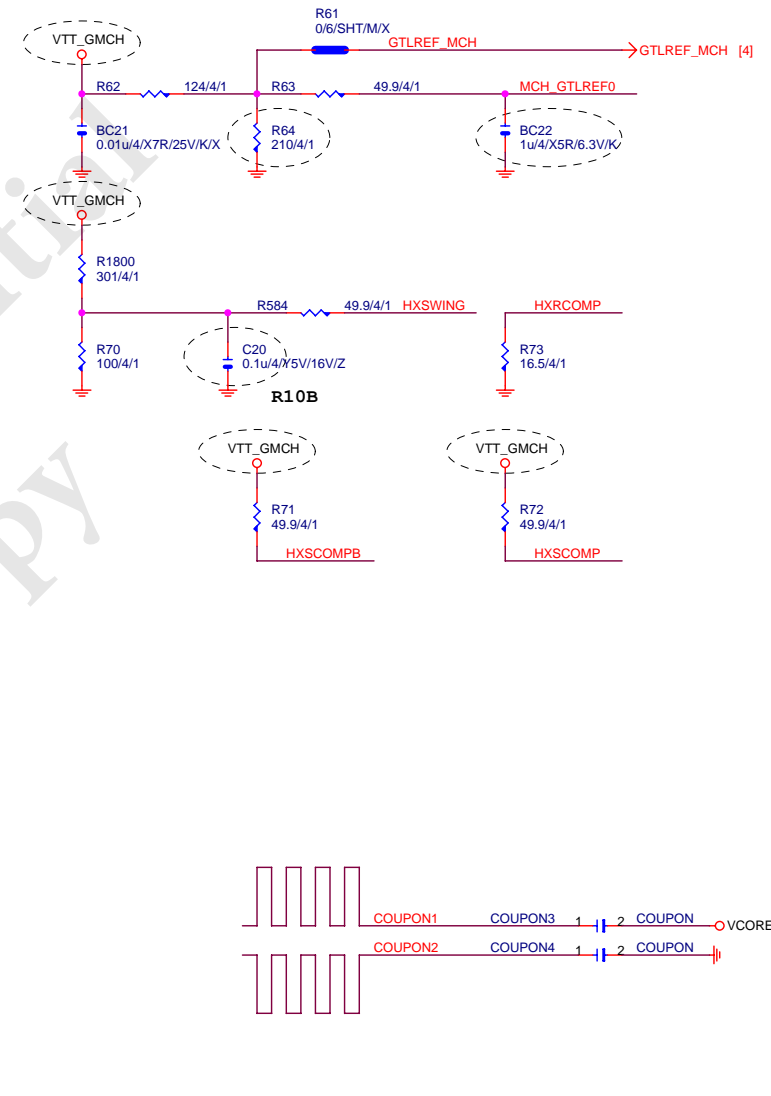
CPU-SK/775/S/GF

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CPU INTERFACE



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U2C

MAAA0 BA31	SMA_A0	SDQS_A0	AU4 DQS40
MAAA1 BA25	SMA_A1	SDQS_A0#	AR3 -DQS40
MAAA2 BA26	SMA_A2	SDM_A0	AR2 DMA0
MAAA3 BA25	SMA_A4		
MAAA4 AY25	SMA_A4	SDQ_A0	AR5 MDA0
MAAA5 BA23	SMA_A5	SDQ_A1	AR4 MDA1
MAAA6 AY24	SMA_A7	SDQ_A2	AY2 MDA2
MAAA7 AY23	SMA_A8	SDQ_A3	AV2 MDA3
MAAA8 BA22	SMA_A9	SDQ_A4	AP3 MDA4
MAAA9 BA22	SMA_A10	SDQ_A5	AP2 MDA5
MAAA10 AY33	SMA_A11	SDQ_A6	AU1 MDA6
MAAA11 AY33	SMA_A12	SDQ_A7	AV4 MDA7
MAAA12 AW21	SMA_A13		
MAAA13 AY38	SMA_A14		
MAAA14 BA21			
[15.17] -SWEA <-SWEA BA34	SWE_A#		
[15.17] -SCASA <-SCASA BA35	SCAS_A#		
[15.17] -SRASA <-SRASA BA35	SRAS_A#		
[15.17] SBAA0 <-SBAA0 BA33	SBS_A0		
[15.17] SBAA1 <-SBAA1 AW32	SBS_A1		
[15.17] SBAA2 <-SBAA2 BB21	SBS_A2		
[15.17] CSA0 <-CSA0 AW35	SCS_A0#		
[15.17] CSA1 <-CSA1 BA35	SCS_A1#		
[17] CSA2 <-CSA2 BA34	SCS_A2#		
[17] CSA3 <-CSA3 BB38	SCS_A3#		
[15.17] CKEA0 <-CKEA0 BC20	SCKE_A0		
[15.17] CKEA1 <-CKEA1 AY20	SCKE_A1		
[17] CKEA2 <-CKEA2 AY21	SCKE_A2		
[17] CKEA3 <-CKEA3 BA19	SCKE_A3		
MODT_A0 AY37			
MODT_A1 BA38			
BB35			
BA39			
[15] DCLKA0 <-DCLKA0 AU31	SCLK_A0		
[15] DCLKA0 <-DCLKA0 AU31	SCLK_A0#		
[15] DCLKA1 <-DCLKA1 AF27	SCLK_A1		
[15] DCLKA1 <-DCLKA1 AN27	SCLK_A1#		
[15] DCLKA2 <-DCLKA2 AV33	SCLK_A2		
[15] DCLKA2 <-DCLKA2 AV33	SCLK_A2#		
AE29	SCLK_A3		
AF31	SCLK_A3#		
AM26	SCLK_A4		
AM27	SCLK_A4#		
AT33	SCLK_A5		
AU33	SCLK_A5#		
SDQS_A5			
SDQS_A5#			
SDM_A5			
SDQ_A40			
SDQ_A41			
SDQ_A42			
SDQ_A43			
SDQ_A44			
SDQ_A45			
SDQ_A46			
SDQ_A47			
AG42 DQS46			
AG41 -DQS46			
AG40 DMA6			
SDQ_A48			
SDQ_A49			
SDQ_A50			
SDQ_A51			
SDQ_A52			
SDQ_A53			
SDQ_A54			
SDQ_A55			
AC42 DQS47			
AC41 -DQS47			
AC40 DMA7			
SDQ_A56			
SDQ_A57			
SDQ_A58			
SDQ_A59			
SDQ_A60			
SDQ_A61			
SDQ_A62			
SDQ_A63			
RESERVED			

DDR_0

AN21

LE82G31B0/S[10HB1-038231-30R_10HB1-038231-50R]

CHANNEL A

U2D

MAAB0 BB17	SMA_B0	SDQS_B0	AV6 DQS80
MAAB1 AY17	SMA_B1	SDQS_B0#	AU5 -DQS80
MAAB2 BA17	SMA_B2	SOM_B0	AR7 DMB0
MAAB3 BC16	SMA_B4		
MAAB4 AW15	SMA_B4	SDQ_B0	AN7 MDB0
MAAB5 BA15	SMA_B5	SDQ_B1	AN6 MDB1
MAAB6 BB15	SMA_B6	SDQ_B2	AV5 MDB2
MAAB7 BA14	SMA_B7	SDQ_B3	AW7 MDB3
MAAB8 BB14	SMA_B8	SDQ_B4	AN5 MDB5
MAAB9 BB14	SMA_B9	SDQ_B5	AN6 MDB6
MAAB10 AW18	SMA_B10	SDQ_B6	AN9 MDB8
MAAB11 BB13	SMA_B11	SDQ_B7	AU7 MDB7
MAAB12 BA13	SMA_B12		
MAAB13 AY28	SMA_B13		
MAAB14 AY13	SMA_B14		
[16.17] -SWEB <-SWEB BA27C	SWE_B#		
[16.17] -SCASB <-SCASB AW28C	SCAS_B#		
[16.17] -SRASB <-SRASB AW28C	SRAS_B#		
[16.17] SBAB0 <-SBAB0 AY19	SBS_B0		
[16.17] SBAB1 <-SBAB1 BA18	SBS_B1		
[16.17] SBAB2 <-SBAB2 BC12	SBS_B2		
[16.17] CSB0 <-CSB0 BB27C	SCS_B0#		
[16.17] CSB1 <-CSB1 BB30C	SCS_B1#		
[17] CSB2 <-CSB2 AY27C	SCS_B2#		
[17] CSB3 <-CSB3 AY31C	SCS_B3#		
[16.17] CKEB0 <-CKEB0 AY12	SCKE_B0		
[16.17] CKEB1 <-CKEB1 AW12	SCKE_B1		
[16.17] CKEB2 <-CKEB2 BA11	SCKE_B2		
[17] CKEB3 <-CKEB3 BA28	SCKE_B3		
MODT_B1	SODT_B0		
BB20	SODT_B1		
BB21	SODT_B2		
BB22	SODT_B3		
[16] DCLKB0 <-DCLKB0 AY31	SCLK_B0		
[16] DCLKB0 <-DCLKB0 AW31C	SCLK_B0#		
[16] DCLKB1 <-DCLKB1 AU27	SCLK_B1		
[16] DCLKB1 <-DCLKB1 AT27C	SCLK_B1#		
[16] DCLKB2 <-DCLKB2 AY32	SCLK_B2		
[16] DCLKB2 <-DCLKB2 AT32C	SCLK_B2#		
AR18 MDA35	SCLK_B3		
AU21 MDA26	SCLK_B4		
AT21 MDA27	SCLK_B5		
AP17 MDA28			
AN17 MDA29			
AP20 MDA30			
AV20 MDA31			
AR41 DQS44			
AR40 -DQS44			
AU43 DMA4			
SDQS_A4			
SDQS_A4#			
SDM_A4			
SDQ_A32			
SDQ_A33			
SDQ_A34			
SDQ_A35			
SDQ_A36			
SDQ_A37			
SDQ_A38			
SDQ_A39			
AL41 DQS45			
AL40 -DQS45			
AM43 DMA3			
SDM_A6			
AN41 MDA40			
AM39 MDA41			
AK42 MDA42			
AK41 MDA43			
AN40 MDA44			
AN42 MDA45			
AL42 MDA46			
AL39 MDA47			
AG42 DQS46			
AG41 -DQS46			
AG40 DMA6			
SDQ_A48			
SDQ_A49			
SDQ_A50			
SDQ_A51			
SDQ_A52			
SDQ_A53			
SDQ_A54			
SDQ_A55			
AC42 DQS47			
AC41 -DQS47			
AC40 DMA7			
SDQ_A56			
SDQ_A57			
SDQ_A58			
SDQ_A59			
SDQ_A60			
SDQ_A61			
SDQ_A62			
SDQ_A63			
RESERVED			

DDR_1

MCH_VREF

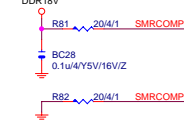
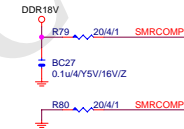
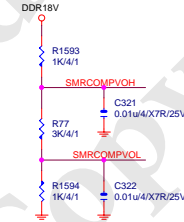
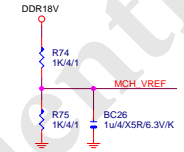
AM6

AN21

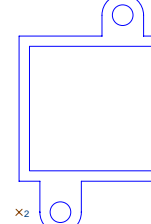
LE82G31B0/S[10HB1-038231-30R_10HB1-038231-50R]

CHANNEL B

[15.17] MODT_A[0..1] <-MODT_A[0..1]
[16.17] MODT_B[0..1] <-MODT_B[0..1]
[16] -DQS80_7 <-DQS80_7
[16.17] MAAB[0..14] <-MAAB[0..14]
[16] DMB[0..7] <-DMB[0..7]
[16] MDB[0..63] <-MDB[0..63]
[16] DQS80_7 <-DQS80_7
[15.17] MAA[0..14] <-MAA[0..14]
[15] DMA[0..7] <-DMA[0..7]
[15] MDA[0..63] <-MDA[0..63]
[15] DQS[0..7] <-DQS[0..7]
[15] -DQS[0..7] <-DQS[0..7]



NB_HEATSINK

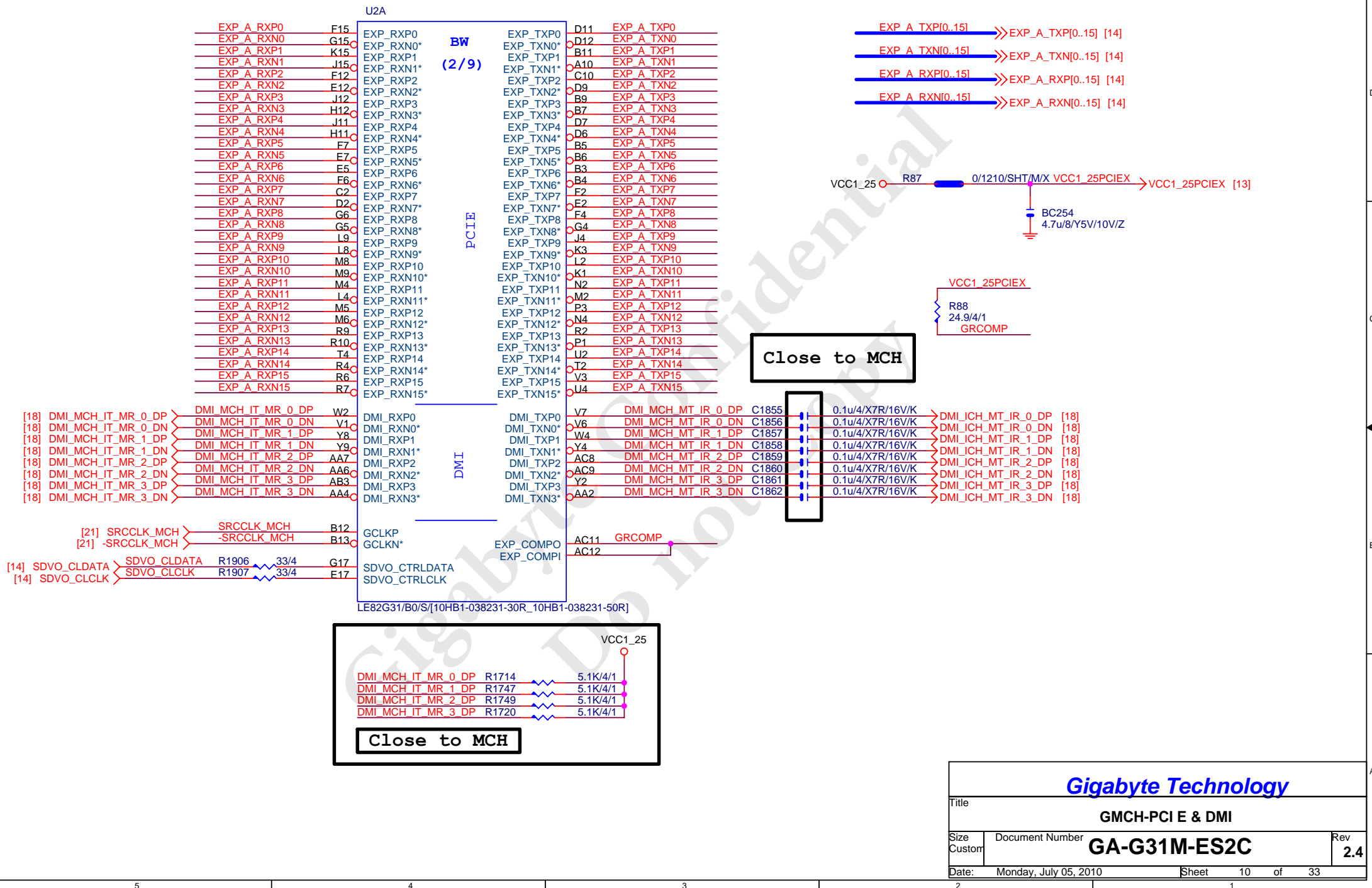


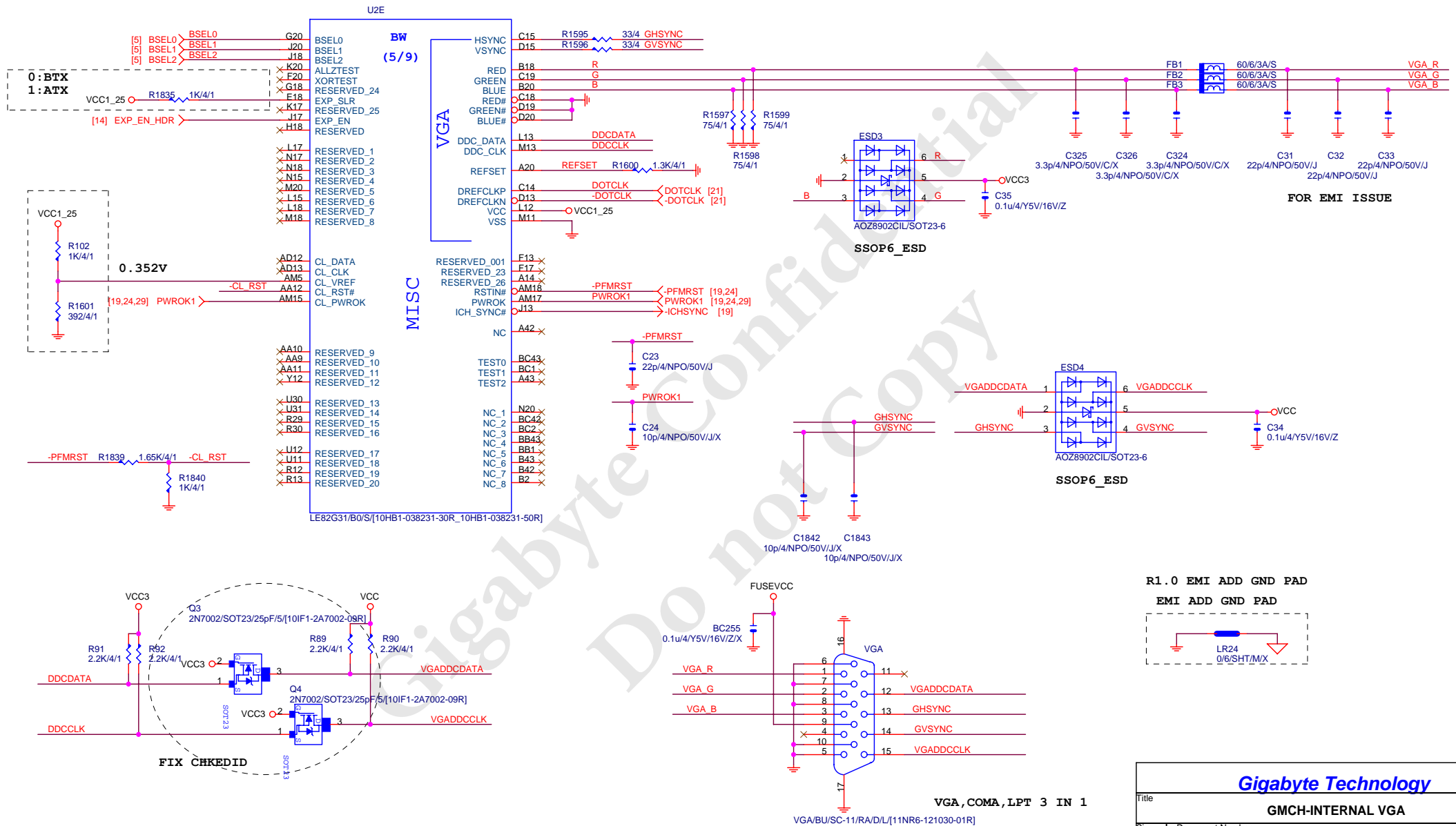
NB_HS

NB_HEATSINK[12SP2-04A004-41R_12SP2-04A004-42R_12SP2-04A004-43R]

BGASINK445A-L

GRAY 20MM





U2G

BC37	VSS_1	BW	VSS_181	AF5
BC32	VSS_2	(7/9)	VSS_182	AF3
BC28	VSS_3		VSS_183	AF2
BC24	VSS_4		VSS_184	AF1
BC10	VSS_5		VSS_185	AD42
BC5	VSS_6	GND 1/2	VSS_186	AD39
BB7	VSS_7		VSS_187	AD37
AY41	VSS_8		VSS_188	AD35
AY4	VSS_9		VSS_189	AD33
AW43	VSS_10		VSS_190	AD25
AW41	VSS_11		VSS_191	AD23
AW1	VSS_12		VSS_192	AD21
AV37	VSS_13		VSS_193	AD19
AV35	VSS_14		VSS_194	AC38
AV27	VSS_15		VSS_195	AC35
AV23	VSS_16		VSS_196	AC24
AV21	VSS_17		VSS_197	AC22
AV17	VSS_18		VSS_198	AC20
AV11	VSS_19		VSS_199	AC10
AV9	VSS_20		VSS_200	AC7
AV7	VSS_21		VSS_201	AC5
AU42	VSS_22		VSS_202	AB43
AU38	VSS_23		VSS_203	AB25
AU32	VSS_24		VSS_204	AB23
AU24	VSS_25		VSS_205	AB21
AU20	VSS_26		VSS_206	AB19
AU16	VSS_27		VSS_207	AB2
AU2	VSS_28		VSS_208	AB1
AT31	VSS_29		VSS_209	AA38
AT29	VSS_30		VSS_210	AA35
AT15	VSS_31		VSS_211	AA24
AT13	VSS_32		VSS_212	AA22
AT12	VSS_33		VSS_213	AA20
AR38	VSS_34		VSS_214	AA8
AR33	VSS_35		VSS_215	Y42
AR32	VSS_36		VSS_216	Y37
AR27	VSS_37		VSS_217	Y35
AR26	VSS_38		VSS_218	Y33
AR23	VSS_39		VSS_219	Y25
AR21	VSS_40		VSS_220	Y23
AR20	VSS_41		VSS_221	Y21
AR17	VSS_42		VSS_222	Y19
AR9	VSS_43		VSS_223	Y10
AR6	VSS_44		VSS_224	Y7
AP43	VSS_45		VSS_225	Y5
AP24	VSS_46		VSS_226	Y1
AP18	VSS_47		VSS_227	W3
AP1	VSS_48		VSS_228	V43
AN38	VSS_49		VSS_229	V39
AN31	VSS_50		VSS_230	V37
AN29	VSS_51		VSS_231	V34
AN24	VSS_52		VSS_232	V32
AN23	VSS_53		VSS_233	V11
AN20	VSS_54		VSS_234	V8
AN15	VSS_55		VSS_235	V5
AN13	VSS_56		VSS_236	V2
AN12	VSS_57		VSS_237	U38
AN11	VSS_58		VSS_238	U35
AN4	VSS_59		VSS_239	U8
AM42	VSS_60		VSS_240	U7
AM40	VSS_61		VSS_241	U5
AM36	VSS_62		VSS_242	T42
AM33	VSS_63		VSS_243	T1
AM29	VSS_64		VSS_244	R36
AM24	VSS_65		VSS_245	R33
AM23	VSS_66		VSS_246	R31
AM20	VSS_67		VSS_247	R11
AM11	VSS_68		VSS_248	R8
AM9	VSS_69		VSS_249	R5
AM7	VSS_70		VSS_250	R3
AM4	VSS_71		VSS_251	P43
AM2	VSS_72		VSS_252	P30
AM1	VSS_73		VSS_253	P21
AL36	VSS_74		VSS_254	P18
AL33	VSS_75		VSS_255	P17
AK43	VSS_76		VSS_256	P2
AJ39	VSS_77		VSS_257	N36
AJ36	VSS_78		VSS_258	N33
AJ33	VSS_79		VSS_259	N31
AH42	VSS_80		VSS_260	N27
AG37	VSS_81		VSS_261	N21
AG34	VSS_82		VSS_262	N13
AF43	VSS_83		VSS_263	N10
AF37	VSS_84		VSS_264	N7
AF36	VSS_85		VSS_265	N5
AF10	VSS_86		VSS_266	M42
AF9	VSS_87		VSS_267	M37
AF8	VSS_88		VSS_268	M35
AF7	VSS_89		VSS_269	M33
AF6	VSS_90		VSS_270	

LE82G31/B0/S/[10HB1-038231-30R_10HB1-038231-50R]

M27	VSS_91	BW	VSS_271	BC41
M21	VSS_92	(9/9)	VSS_272	BC3
M17	VSS_93		VSS_273	BA1
M15	VSS_94		VSS_274	AY40
M10	VSS_95	GND 2/2	VSS_275	AF23
M7	VSS_96		VSS_276	AF21
M1	VSS_97		VSS_277	AF19
L33	VSS_98		VSS_278	AE24
L32	VSS_99		VSS_279	AE22
L31	VSS_100		VSS_280	AE20
L29	VSS_101		VSS_281	AE18
L21	VSS_102		VSS_282	AC18
L20	VSS_103		VSS_283	AA18
L11	VSS_104		VSS_284	W24
L7	VSS_105		VSS_285	W22
L5	VSS_106		VSS_286	W20
L3	VSS_107		VSS_287	R21
K43	VSS_108		VSS_288	E1
K26	VSS_109		VSS_289	C43
K21	VSS_110		VSS_290	C1
K18	VSS_111		VSS_291	A41
K13	VSS_112		VSS_292	A5
K12	VSS_113		VSS_293	A3
K2	VSS_114			
J38	VSS_115			
J35	VSS_116			
J32	VSS_117			
J27	VSS_118			
J21	VSS_119			
J9	VSS_120			
J7	VSS_121			
J5	VSS_122			
H31	VSS_123			
H29	VSS_124			
H21	VSS_125			
H20	VSS_126			
H17	VSS_127			
H15	VSS_128			
H13	VSS_129			
G42	VSS_130			
G38	VSS_131			
G32	VSS_132			
G21	VSS_133			
G13	VSS_134			
G12	VSS_135			
G11	VSS_136			
G9	VSS_137			
G7	VSS_138			
G1	VSS_139			
F37	VSS_140			
F35	VSS_141			
F27	VSS_142			
F21	VSS_143			
F18	VSS_144			
F3	VSS_145			
E43	VSS_146			
E32	VSS_147			
E24	VSS_148			
E21	VSS_149			
E20	VSS_150			
E15	VSS_151			
E13	VSS_152			
E11	VSS_153			
E9	VSS_154			
E3	VSS_155			
D40	VSS_156			
D31	VSS_157			
D21	VSS_158			
D17	VSS_159			
D3	VSS_160			
C26	VSS_161			
C11	VSS_162			
C6	VSS_163			
C5	VSS_164			
C4	VSS_165			
B37	VSS_166			
B32	VSS_167			
B31	VSS_168			
B26	VSS_169			
B23	VSS_170			
B22	VSS_171			
B19	VSS_172			
B14	VSS_173			
B10	VSS_174			
A39	VSS_175			
A34	VSS_176			
A26	VSS_177			
A18	VSS_178			
A12	VSS_179			
A7	VSS_180			

LE82G31/B0/S/[10HB1-038231-30R_10HB1-038231-50R]

Gigabyte Technology

Title

GMCH-GND

Size
Custom

Document Number

GA-G31M-ES2C

Rev
2.4

Date:

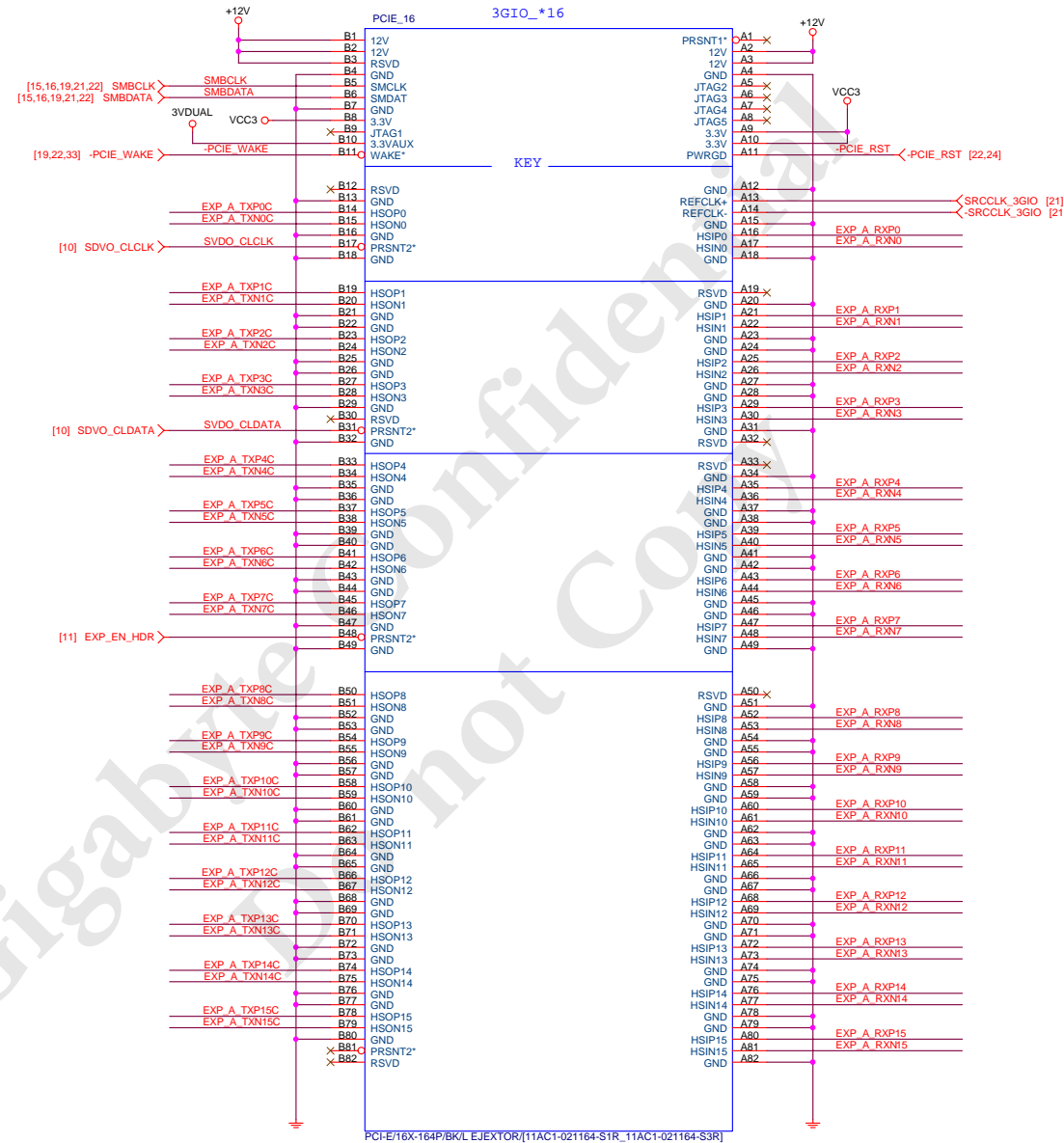
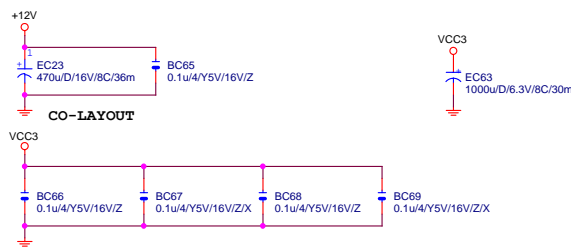
Monday, July 05, 2010

Sheet

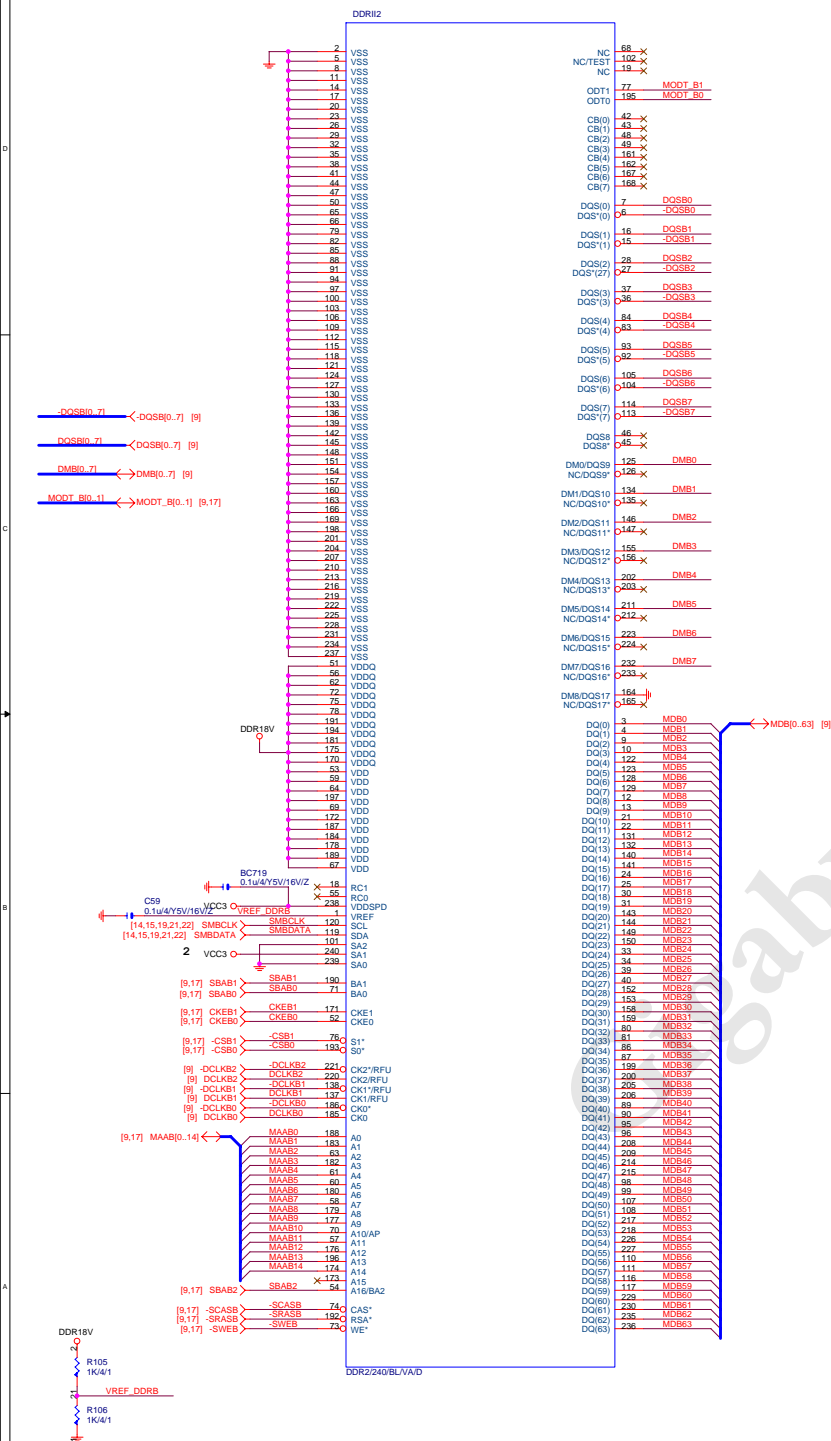
12 of

33



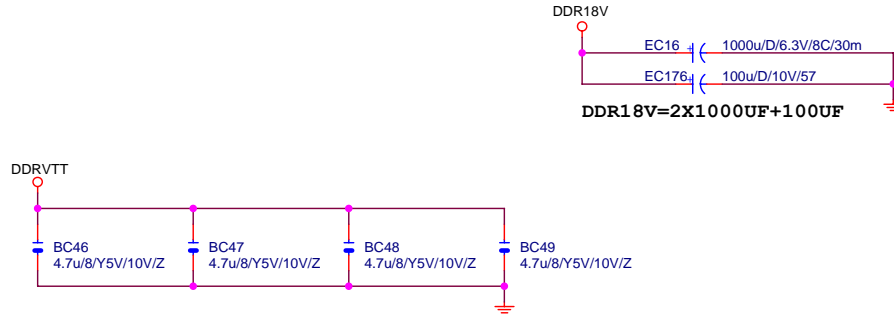


LOW LEFT BLUE

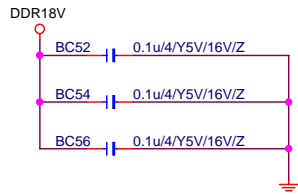


DDR TERMINATION CHANNEL A

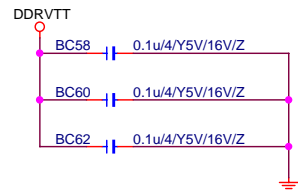
DDRVTT Decouple



DDR18V Decouple



DDRVTT Decouple



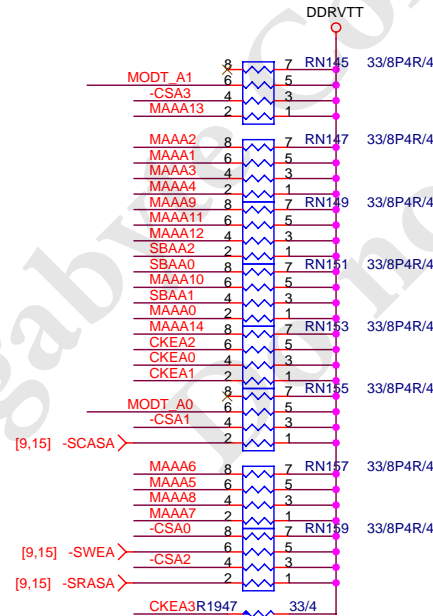
SBAA[0..2] <- SBAA[0..2] [9,15]

-CSA[0..3] <- -CSA[0..3] [9,15]

CKEA[0..3] <- CKEA[0..3] [9,15]

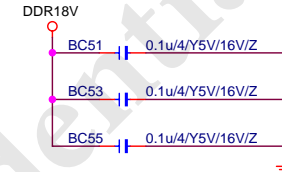
MAAA[0..14] <-> MAAA[0..14] [9,15]

MODT_A[0..1] <-> MODT_A[0..1] [9,15]

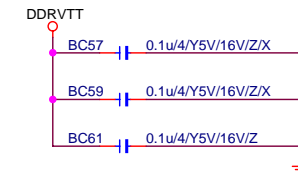


DDR TERMINATION CHANNEL B

DDR18V Decouple



DDRVTT Decouple



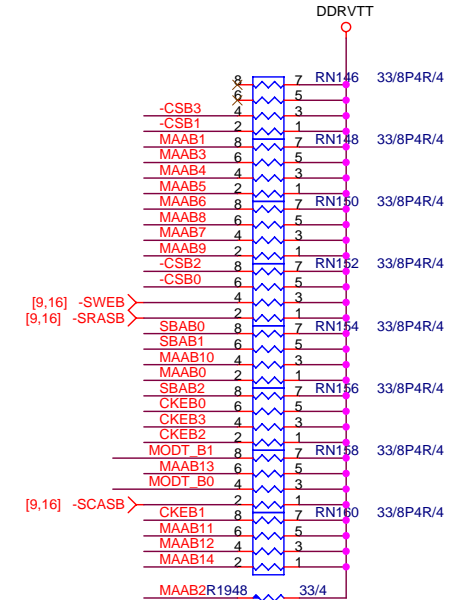
MODT_B[0..1] <-> MODT_B[0..1] [9,16]

SBAB[0..2] <- SBAB[0..2] [9,16]

-CSB[0..3] <- -CSB[0..3] [9,16]

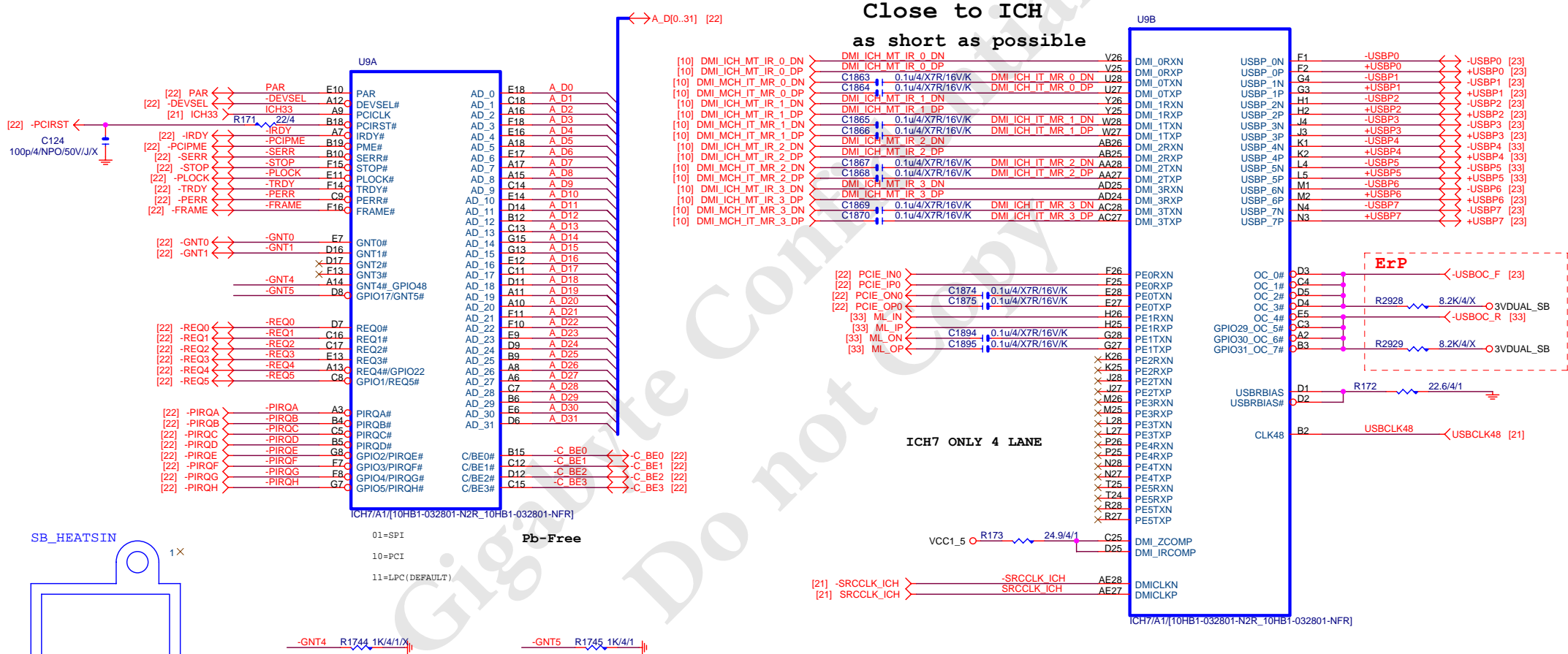
CKEB[0..3] <- CKEB[0..3] [9,16]

MAAB[0..14] <-> MAAB[0..14] [9,16]



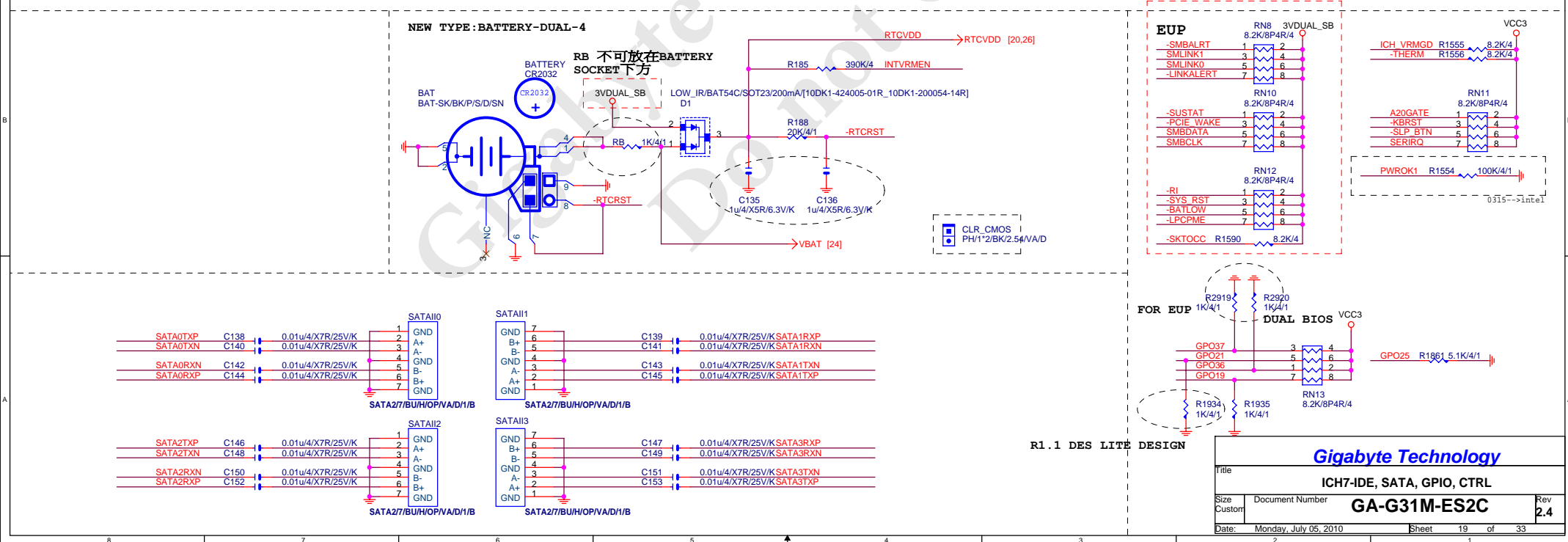
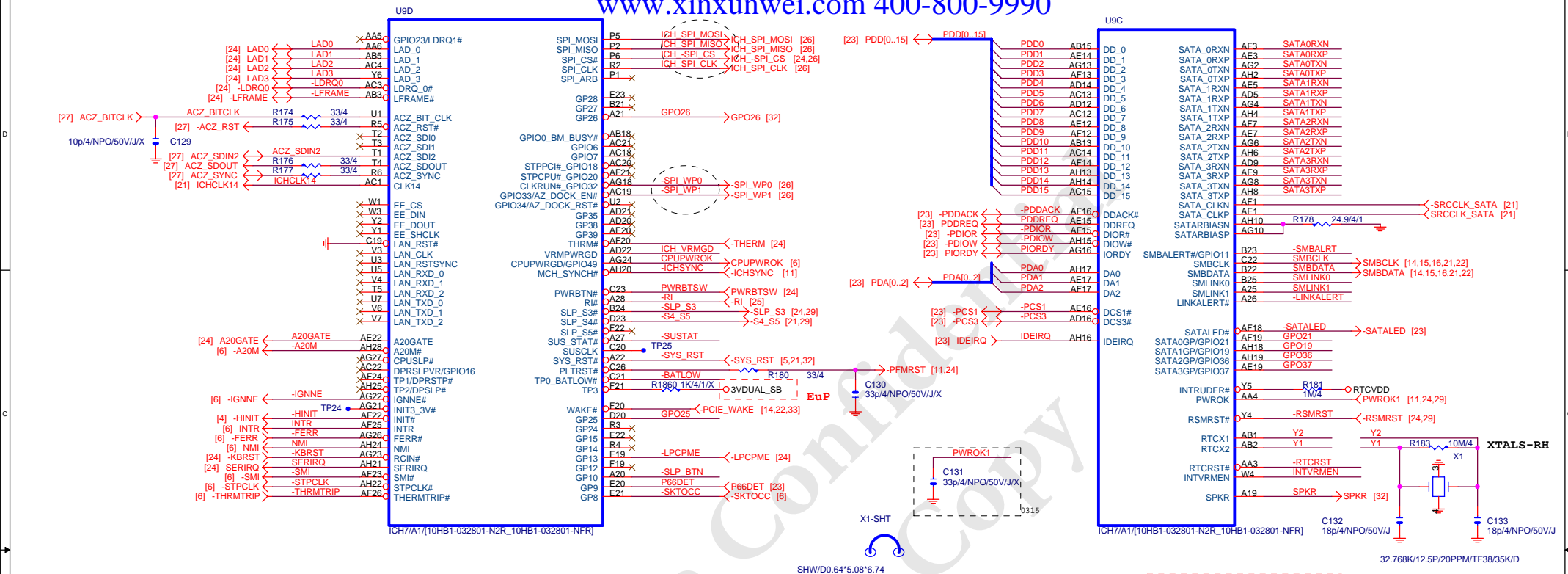
Gigabyte Technology

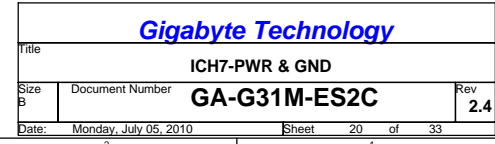
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Size	Document Number	GA-G31M-ES2C	
Custom		Rev	2.4
Date:	Monday, July 05, 2010	Sheet	17 of 33

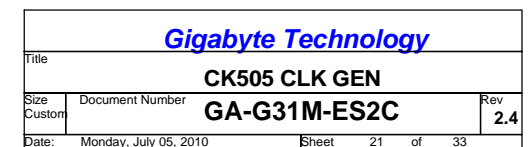


Gigabyte Technology

Title				ICH7-PCI, DMI, LAN, USB					
Size	Document Number					GA-G31M-ES2C		Rev	2.4
Date:	Monday, July 05, 2010					Sheet	18	of	33

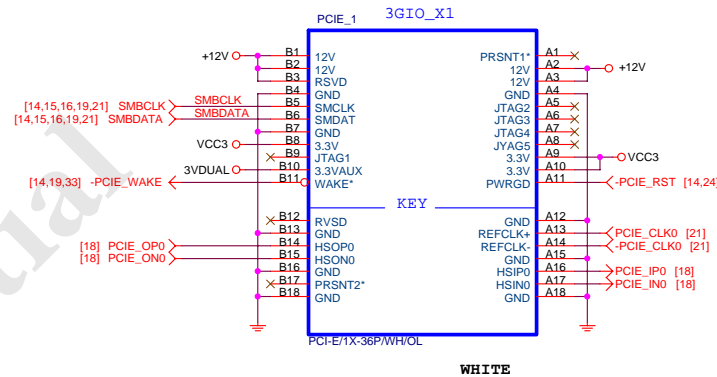
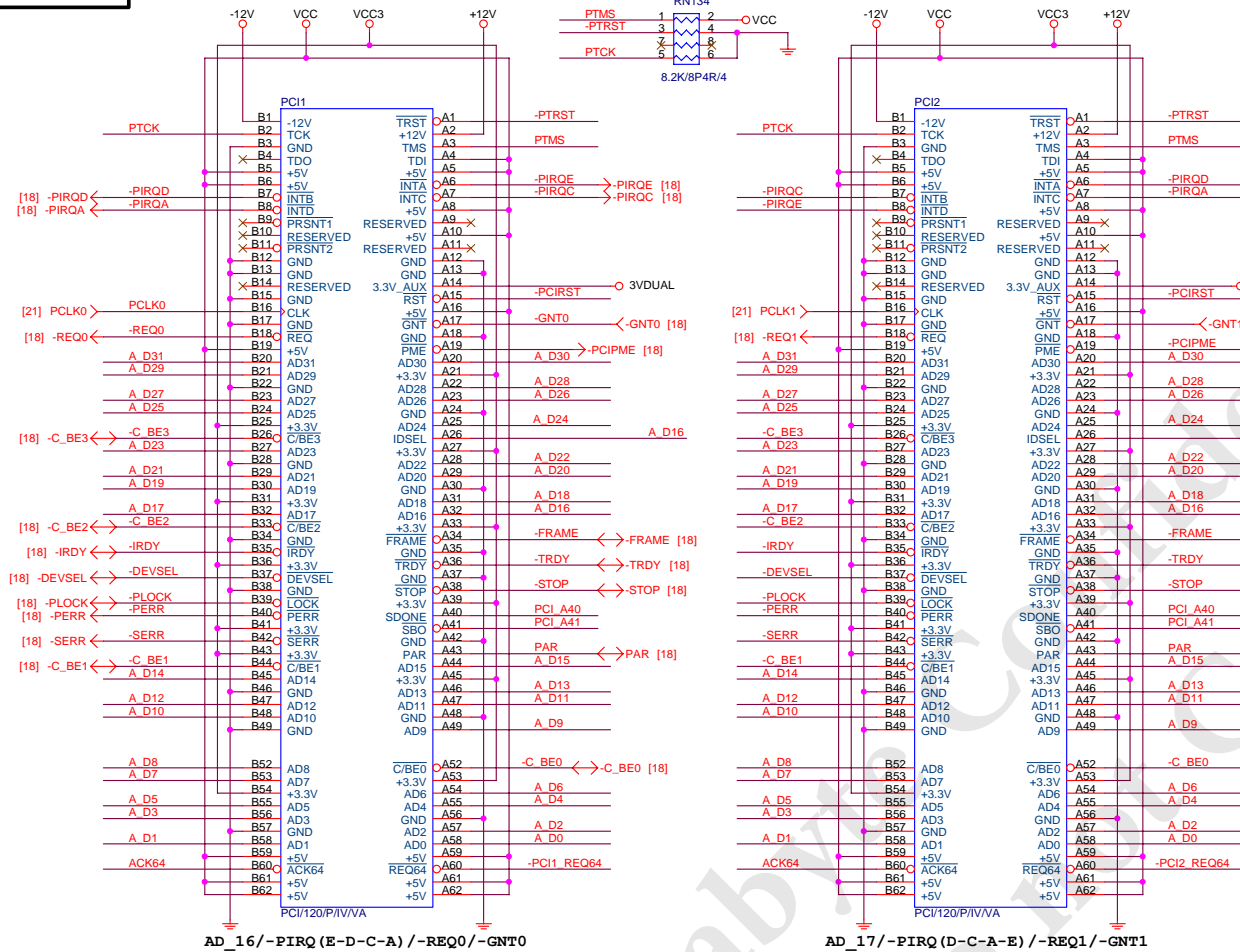






PCI1, 2 SLOT

921P*1



[18] A_D[0..31] ↔ A_D0..31

-PCIRST ↔ -PCIRST [18]

Place close to PCI1

[18] -REQ4 ↔ -REQ4
[18] -REQ3 ↔ -REQ3
[18] -REQ1 ↔ -REQ1
[18] -REQ2 ↔ -REQ2

[18] -REQ0 ↔ -REQ0
[18] PAR ↔ PAR
[18] -REQ5 ↔ -REQ5

RN19 2.2K/8P4R/4
R2930 2.2K/4
R2931 8.2K/4
R2932 2.2K/4

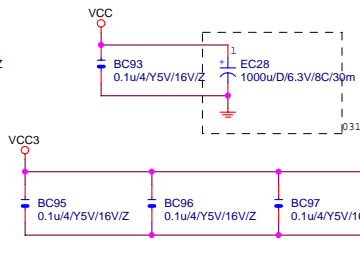
RN20 2.2K/8P4R/4
-DEVSEL 1
-TRDY 3
-IRDY 4
-FRAME 7

RN22 2.2K/8P4R/4
-SERR 1
-PERR 3
-PLOCK 4
-STOP 7

RN23 8.2K/8P4R/4
[18] -PIRQA ↔ -PIRQA
[18] -PIROD ↔ -PIROD
[18] -PIROC ↔ -PIROC
[18] -PIROB ↔ -PIROB

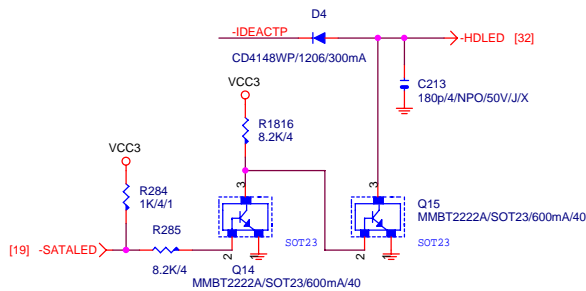
RN24 8.2K/8P4R/4
[18] -PIRQE ↔ -PIRQE
[18] -PIROF ↔ -PIROF
[18] -PIROH ↔ -PIROH
[18] -PIROG ↔ -PIROG

BC91 0.1u/4/Y5V/16V/Z

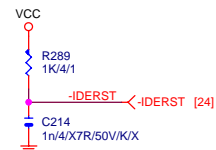


Gigabyte Technology			
Title			
PCI SLOT 1, 2/PCIEX1			
Size			
Custom			
Document Number			
GA-G31M-ES2C			
Date:			
Monday, July 05, 2010			
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2.4			

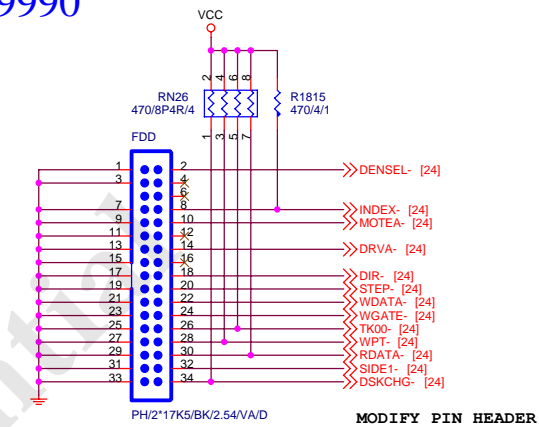
IDE/SATA LED



IDE RESET

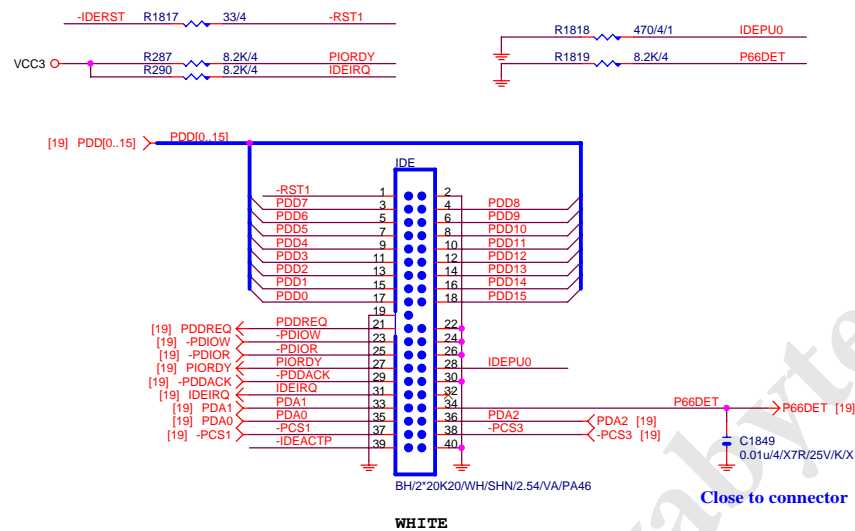


FLOPPY



MODIFY PIN HEADER

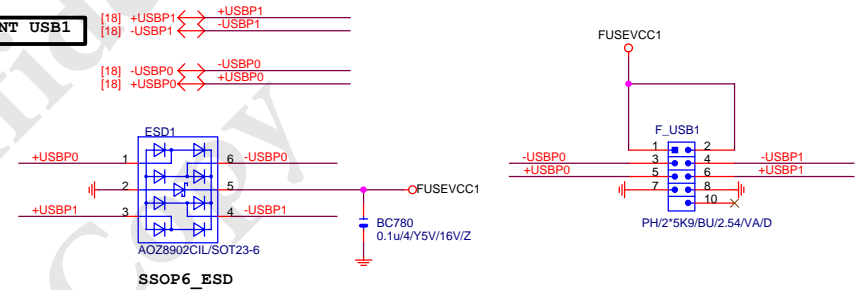
IDE



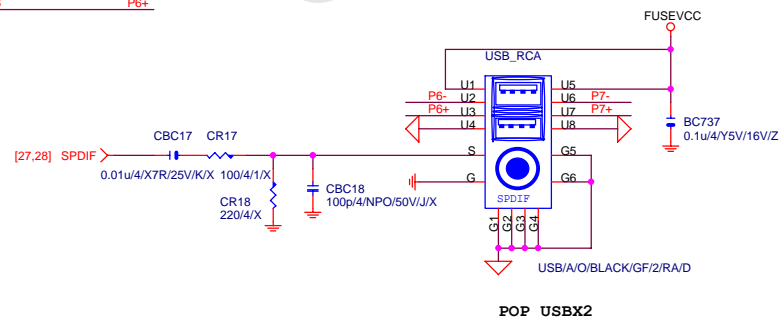
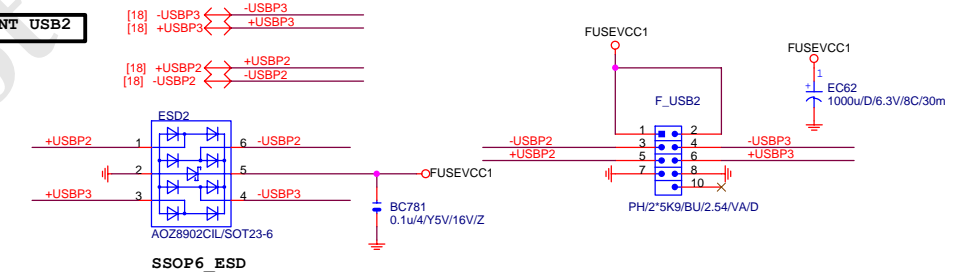
WHITE

Close to connector

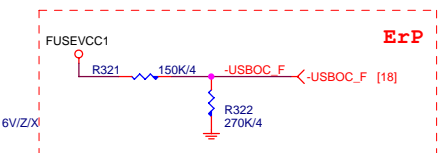
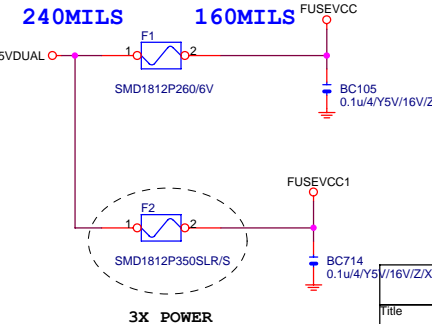
FRONT USB1



FRONT USB2



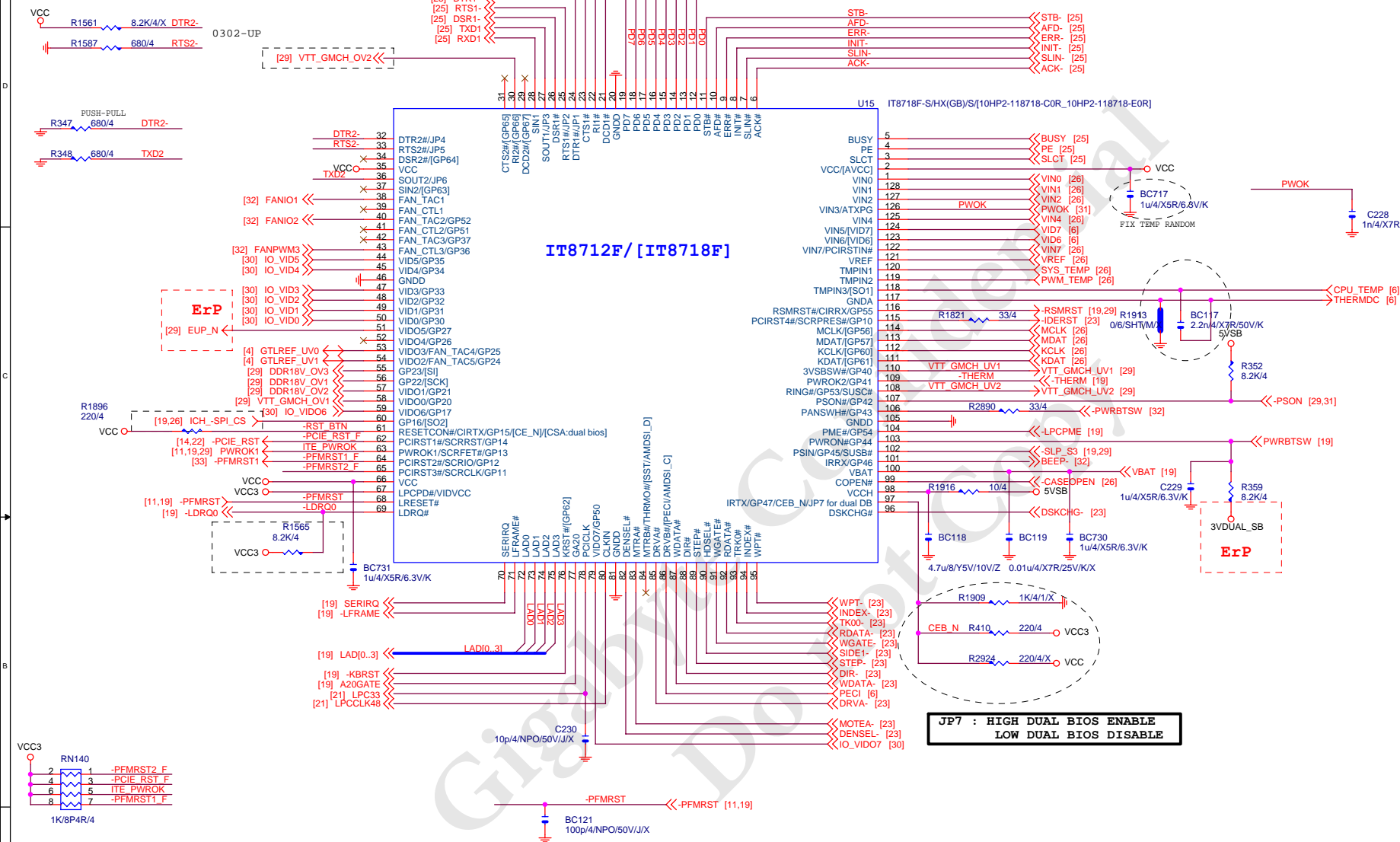
POP USBX2



Gigabyte Technology

Title		
IDE,FDD,F_USB,USB_RCA		
GA-G31M-ES2C		
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RTS2- ==LOW CPU FAN 50%
 ==HIGH 100%
DEFAULT 50%



**JP7 : HIGH DUAL BIOS ENABLE
 LOW DUAL BIOS DISABLE**

Pop to disable Dual BIOS

SIO SPI CS0 R389 0/4/X ICH-SPI CS

[26] -SIO_SPI_CS0<< 0/4 R412 CEB_N
[26] -SIO_SPI_CS0<< 0/4 R404 -RST_BTN

Dual BIOS:
 GB logo :Pin 61 (GP15/CSA)
 GB logo :Pin 59 (GP17/CSB)

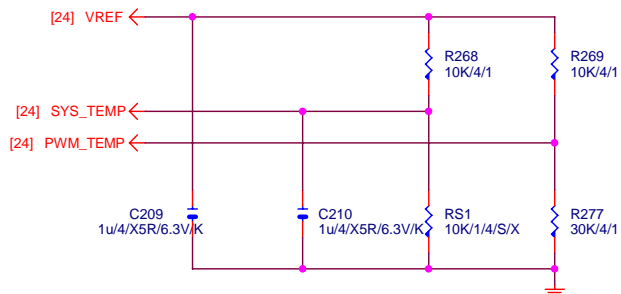
Pin 59 Dual BIOS ,Power On Strapping:
 H ==>Dual BIOS function Enable
 L ==>Dual BIOS function Disable

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

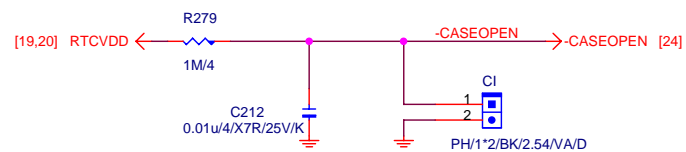
Gigabyte Technology

Title			
ITE 8712/18 LPC IO			
Size	Document Number	Rev	
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TEMP H/W MONITOR

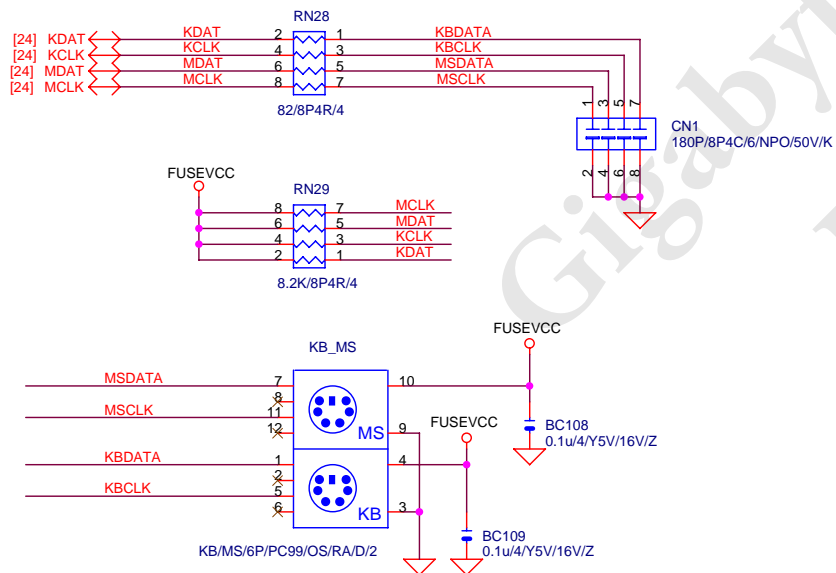


CASE OPEN

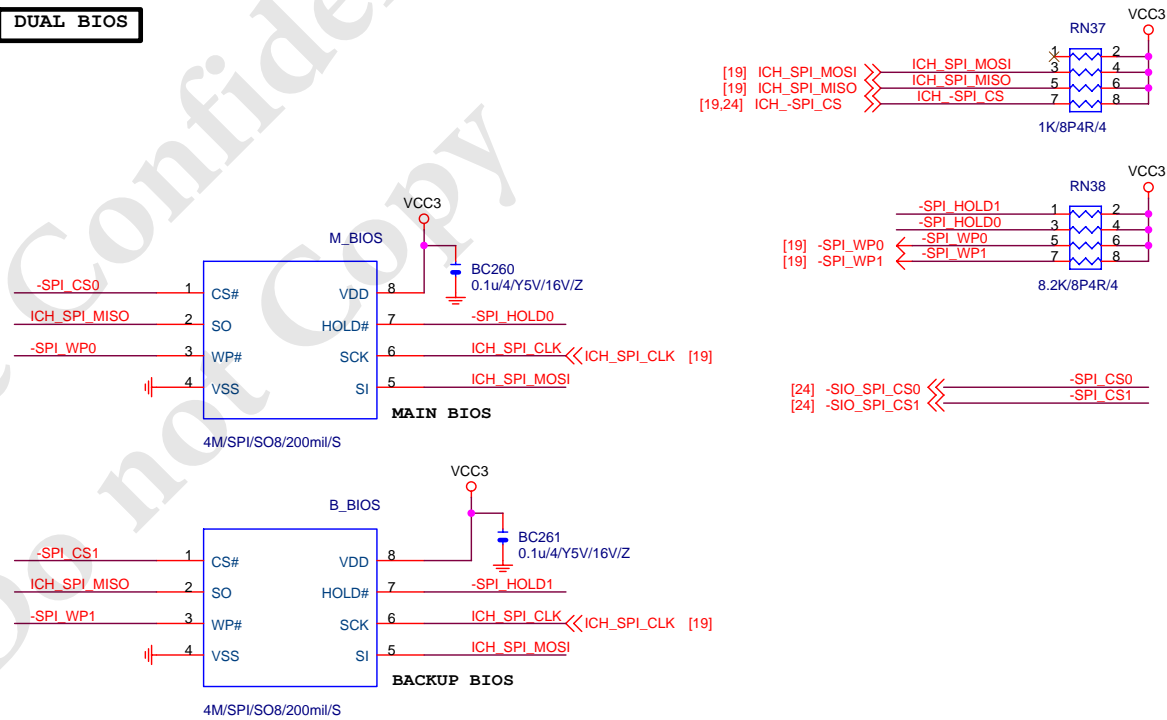


Case Open Circuits

KB/MS



DUAL BIOS



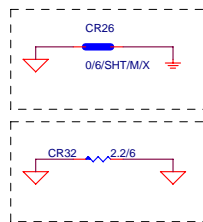
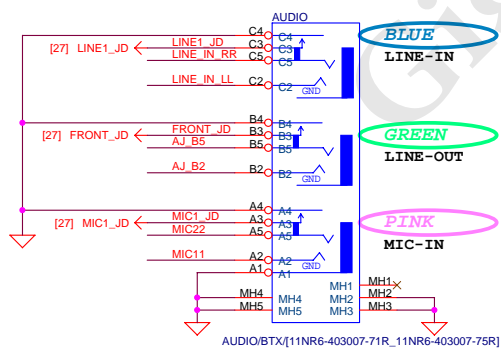
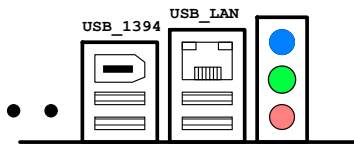
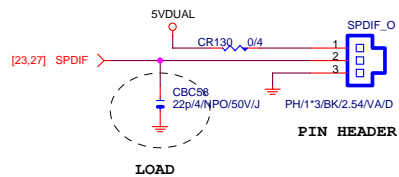
Gigabyte Technology

Title	HW-MONITOR/CI/KB/MS/BIOS
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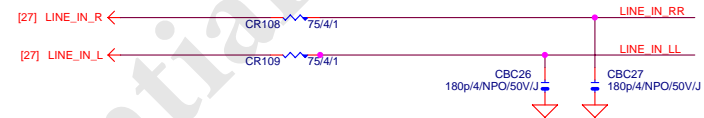
Size Custom	Document Number GA-G31M-ES2C	Rev 2.4
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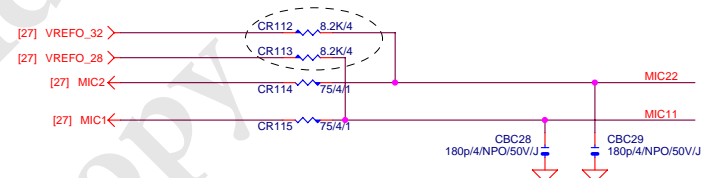
AZALIA JACK



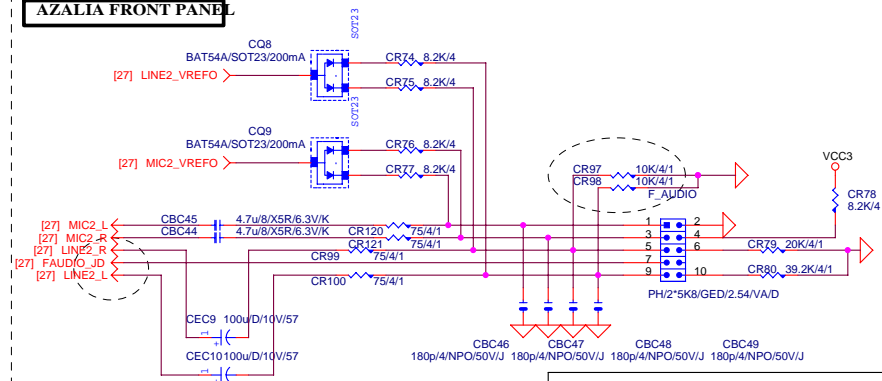
LINE-IN

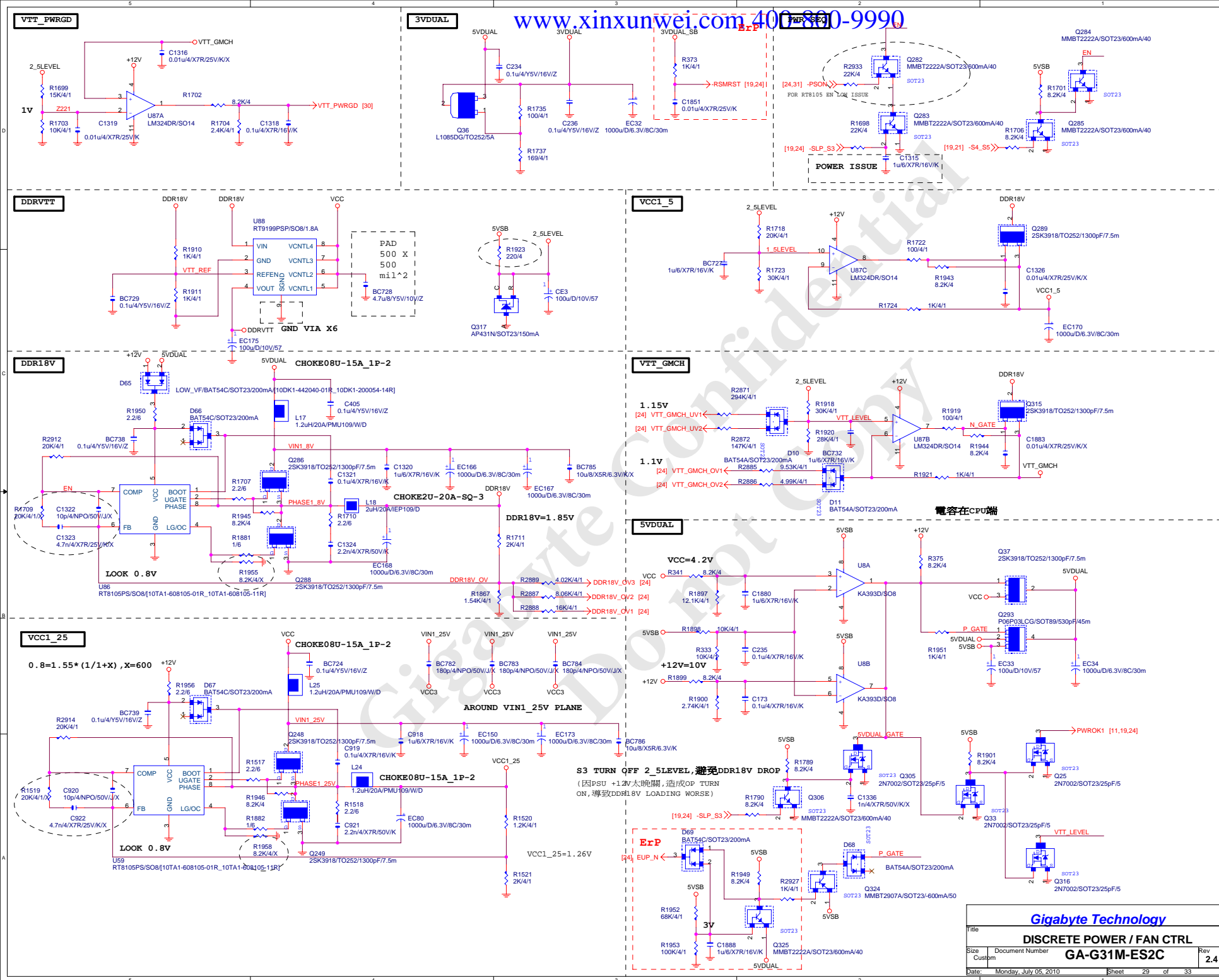


MIC-IN



AZALIA FRONT PANEL





www.xinxunwei.com 400-800-9990

ALL MOSFET = 8~9m OHM

R20--DUAL LAYOUT

MOSFET SOLDER SIDE
需加 ICT TEMP.

NEW CHOKE
DL1 0.5uH/30A/INC109/F/D

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

NEW CHOKE
DL2 0.5uH/30A/INC109/F/D

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

NEW CHOKE
DL3 0.5uH/30A/INC109/F/D

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

VRD 11/ ISL6312

GA-G31M-ES2C

Rev 2.4

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www.xinxunwei.com 400-800-9990

ALL MOSFET = 8~9m OHM

R20--DUAL LAYOUT

MOSFET SOLDER SIDE
需加 ICT TEMP.

NEW CHOKE
DL1 0.5uH/30A/INC109/F/D

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

NEW CHOKE
DL2 0.5uH/30A/INC109/F/D

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

NEW CHOKE
DL3 0.5uH/30A/INC109/F/D

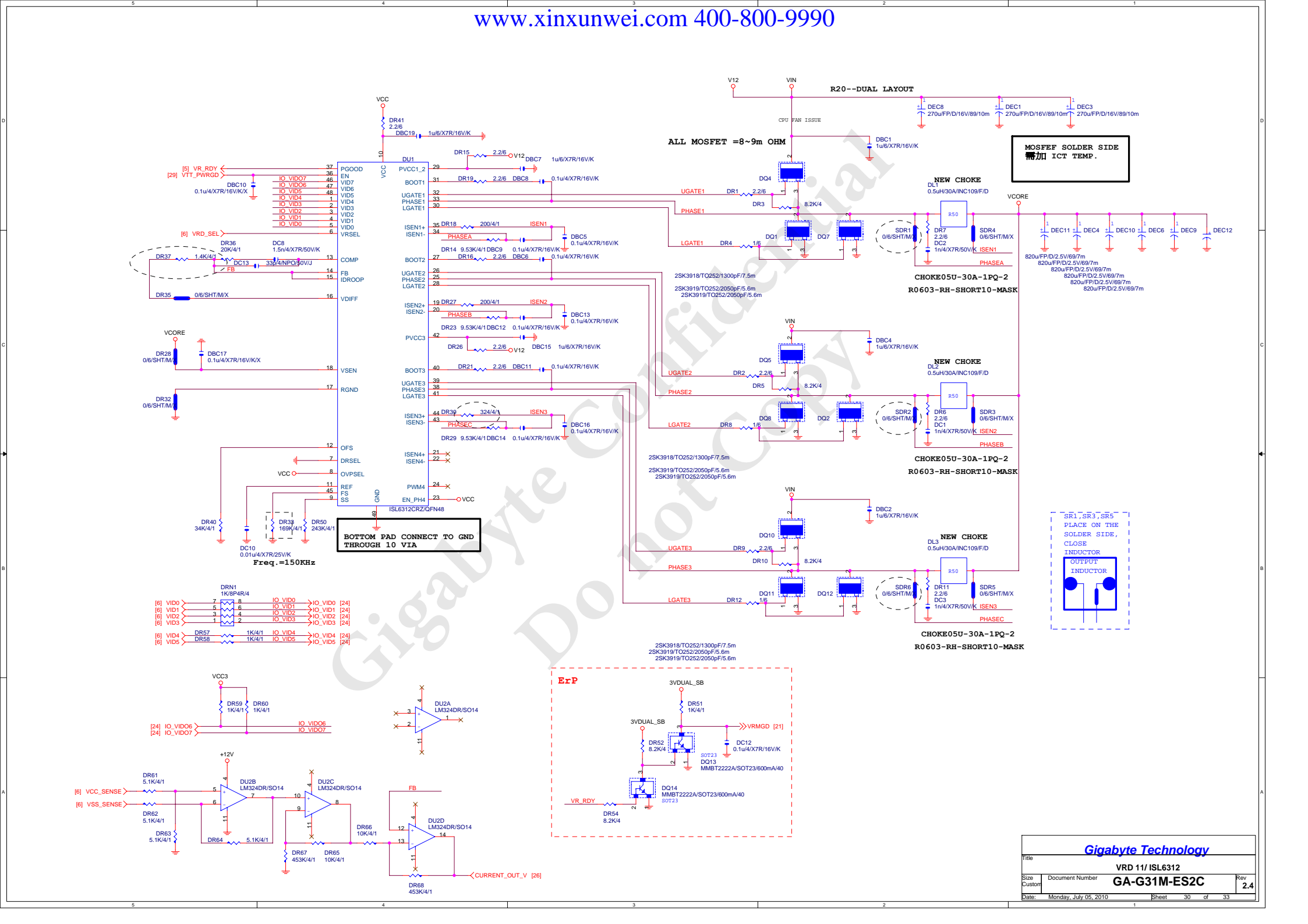
CHOKE05U-30A-1PQ-2
R0603-RH-SHORT10-MASK

VRD 11/ ISL6312

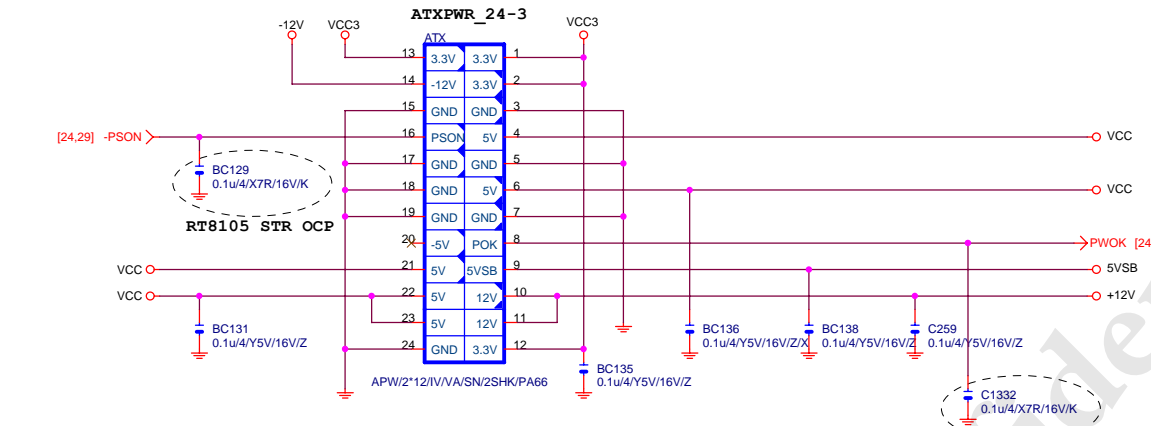
GA-G31M-ES2C

Rev 2.4

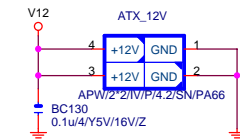
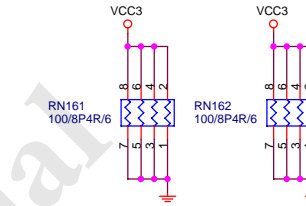
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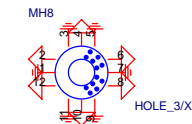
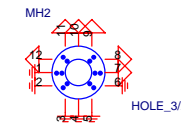
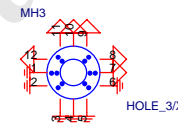
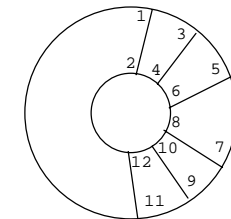
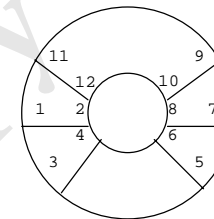
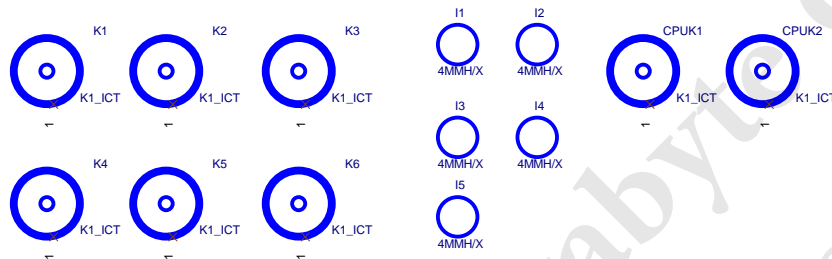
ATX POWER CONNECTOR



FIX PWR AcBel (ATX-400C-A2ADB)

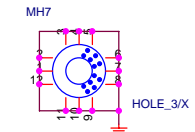
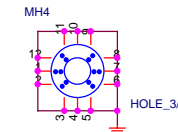
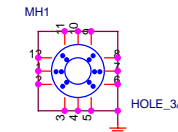
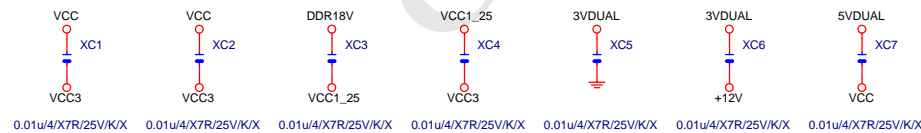


ATX_4-1



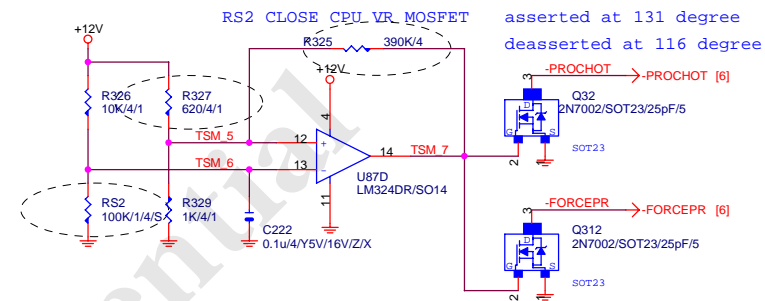
HOLE_4-RH-1

HOLE_4-RH-5MM-1



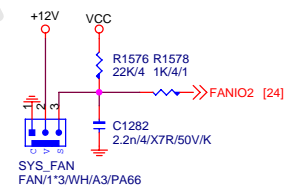
Gigabyte Technology

Title		
ATX POWER CONNECTOR		
Size B	Document Number	Rev
	GA-G31M-ES2C	2.4
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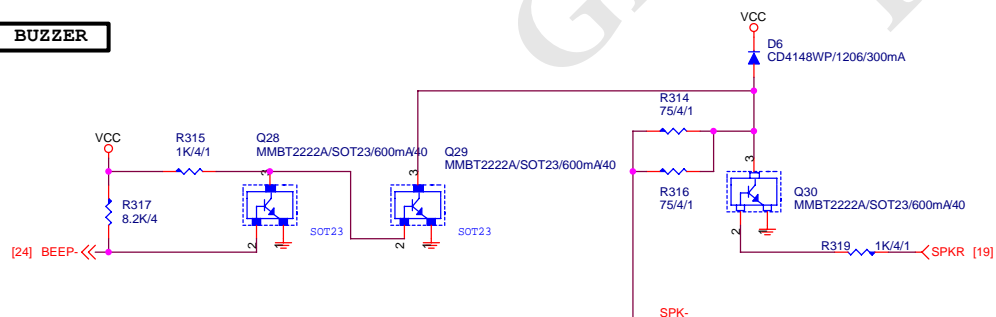


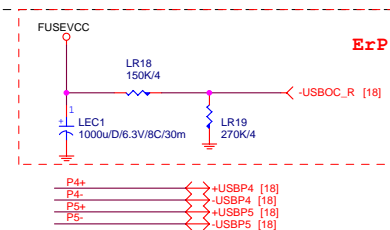
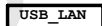
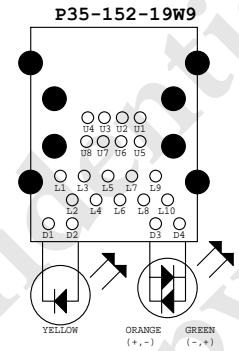
INTEL FRONT PANEL

SYS FAN



BUZZER





<i>Gigabyte Technology</i>			
Title ATHEROS AR8131M/AR8132M			
Size Custom	Document Number	GA-G31M-ES2C	Rev 2.
Date:	Monday, July 05, 2010	Sheet	33 of 33