

SHEET TITLE

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02	BLOCK DIAGRAM
03	BOM & PCB MODIFY HISTORY
04	P4 LGA775 A
05	P4 LGA775 B
06	P4 LGA775 C
07	P4 LGA775 D,E,F,G
08	GMCH-LAKEPORT HOST
09	GMCH-LAKEPORT DDRII
10	GMCH-LAKEPORT PCI E, DMI
11	GMCH-LAKEPORT INT VGA
12	GMCH-LAKEPORT GND
13	GMCH-LAKEPORT PWR
14	DDRII CHANNEL A 1
15	DDRII CHANNEL B 2
16	DDRII TERMINATION
17	PCI EXPRESS*16 SLOT
18	ICH7 PCI, USB, DMI, LAN
19	ICH7 IDE, GPIO, SATA, CTRL
20	ICH7 VCC, GND
21	GB/CK410M-OC CLOCK.
22	PCI SLOT 1,2,3
23	IDE/FLOPPY
24	ITE 8718 GBIX
25	COM LPT
26	BIOS, CI, HWM, KB/MS
27	AZALIA ALC888

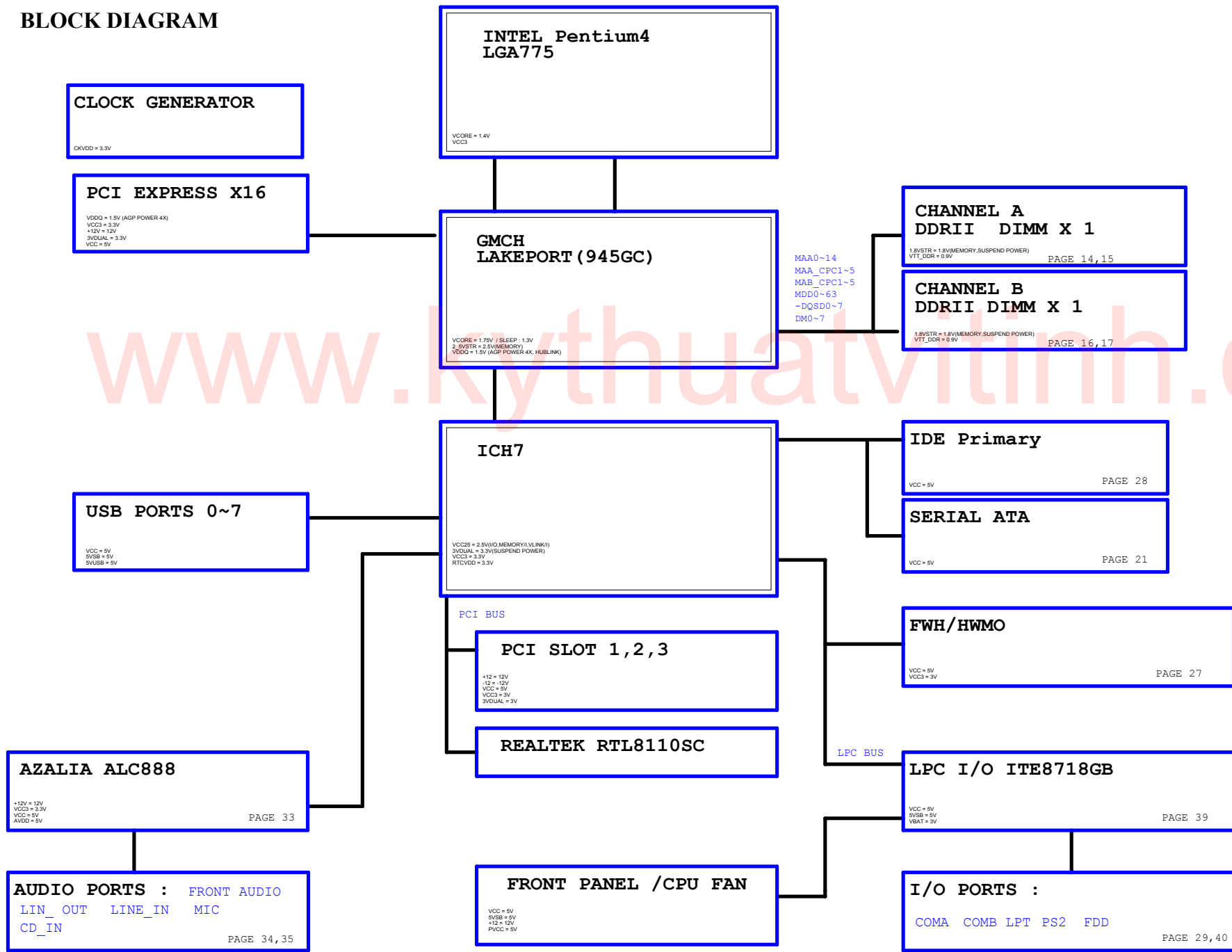
SHEET TITLE

28	REAR AUDIO JACK
29	DISCRETE POWER
30	VCORE PWM ISL6312
31	ATX, OTHERS POWER
32	REALTEK RTL8110SC
33	FRONT PANEL

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Title Cover Sheet		
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BLOCK DIAGRAM



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Model Name: 945GCM-S2

Version: 3.0

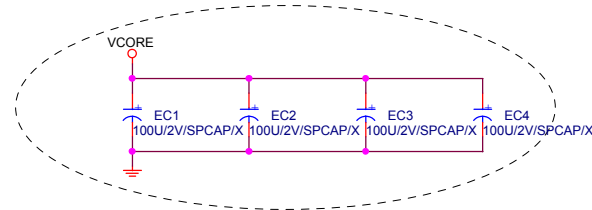
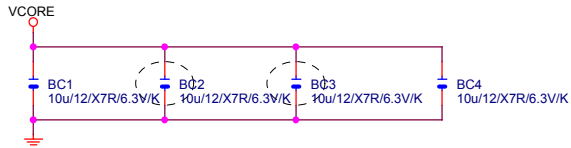
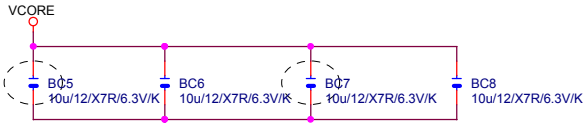
Component value change history

2007/01/03

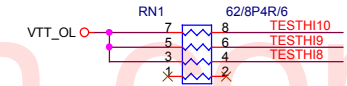
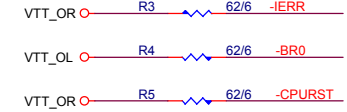
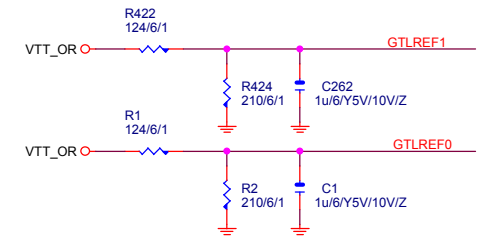
Data	Change Item	Reason
2006/04/14	1.RENAME 945ZM-S2-->8I945GZME-RH	(與8I945GZME SPEC完全不同,不可共用)
2006/04/17	SWAP NET	
2006/04/18	U87 ADD MASK GND PIN9	
2006/04/20	改BAT LIB/EMI	
2006/05/21	R1.0 LAYOUT	1. MODIFY EMI ISSUE 2.MODIFY PWM+VCC1_5(S3)+RESET+THRMTRIP
2006/06/06	PVT SCH SEND 工廠	
2006/07/03	COMP8 CHANGE 30/6/1	
	VTT PWRGD# ADD RC DELAY TIME	BOM: 9M945GZMER-00-10B
2006/08/29	PCB R2.0: AUDIO (VISTA)+SB_HS+SMD FUSE+VCORE (8C CAP)+方形CHOKE+螺絲孔	VCORE 5PCS E-CAP
2006/09/05	MODIFY AUDIO 1X3-->2X3 JACK.	
2006/09/18	MODIFY NAME: 945GZM-S2	
2006/09/21	MODIFY CHOKE FOOTPRINT	
2006/09/22	MODIFY NAME: 945PLM-DS2 R20	
2006/10/11	PBOM: 9M945PLMDR-00-20B	
2006/10/16	MODIFY NAME: 945GCM-DS2 R20 FROM 945PLM-DS2 R20	1.CHIPSET 945G SUPPORT FSB1066
2006/10/17	945GCM-DS2 R2.1 OC FSB1066(ICS954148)	
2006/10/20	945PLM-DS2 R2.1 OC FSB1066(ICS954148)	
2006/10/30	945GCM-S2 R2.1 OC FSB1066(ICS954148)	
2006/11/20	Dynamic O.C ISSUE REMOVE R1911,R1580	
	CHANG AP9T18GH LOW THRESOLD FIX MOS BURN OUT	
	R1707/R1905-->4.7/6	PBOM: 9M945CMS2R-00-21B
2006/11/23	REV 2.11:MODIFY 方型CHOKE	
2006/12/13	R3.0 MODIFY LAN RTL8110SC	
2006/12/14	MODIFY 78L05 SMD	
2007/01/03	PBOM: 9M945CMS2R-00-30A	

Circuit or PCB layout change for next version

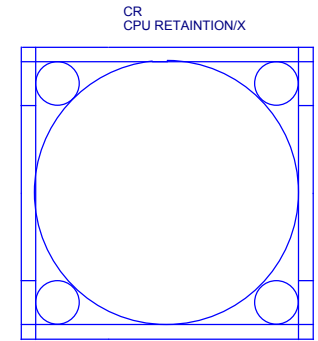
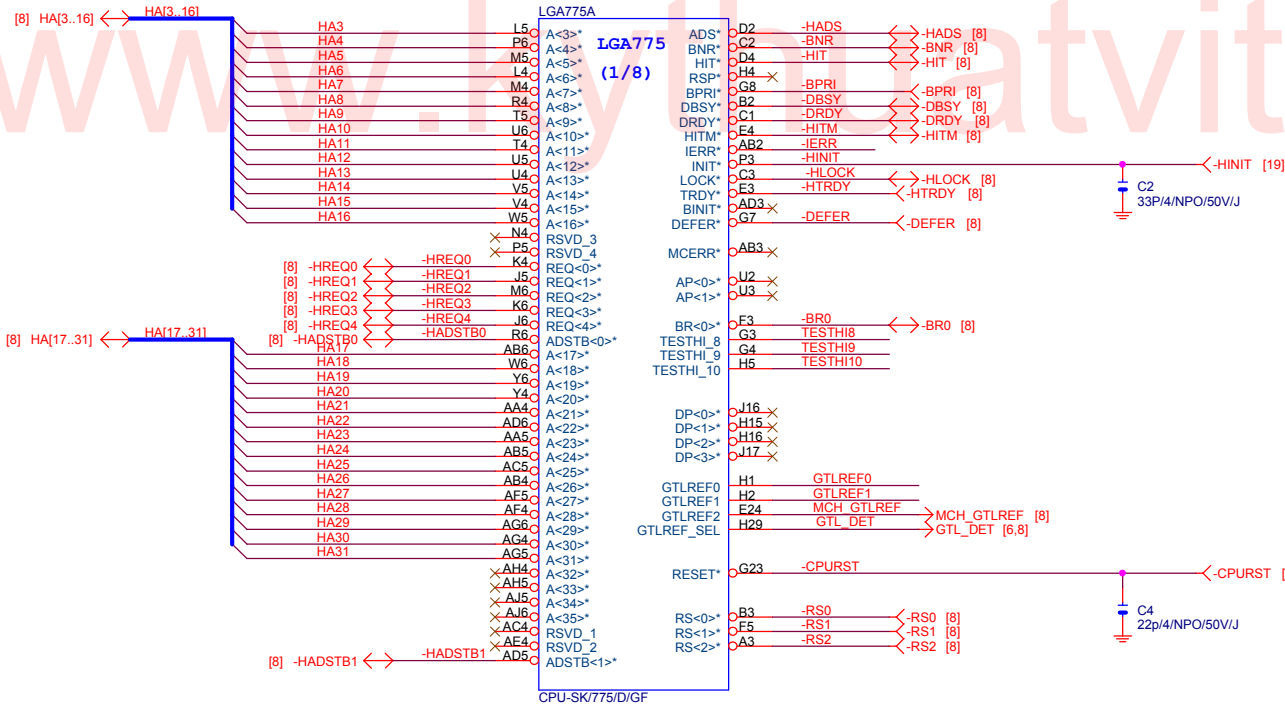
DATE	Change Item	Reason



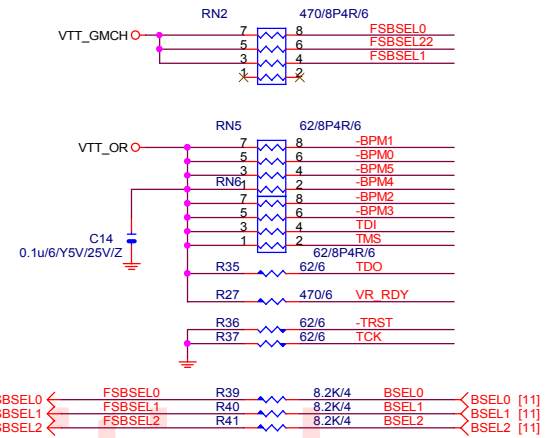
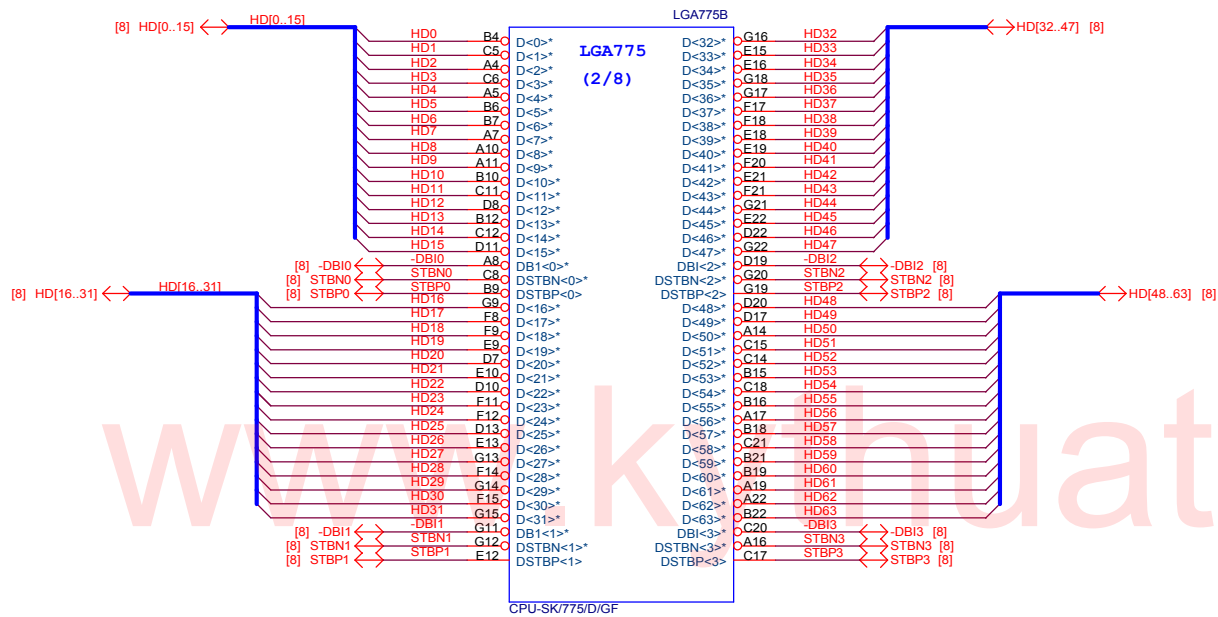
SP-CAP-MASK



LGA775-D [DIP TYPE]

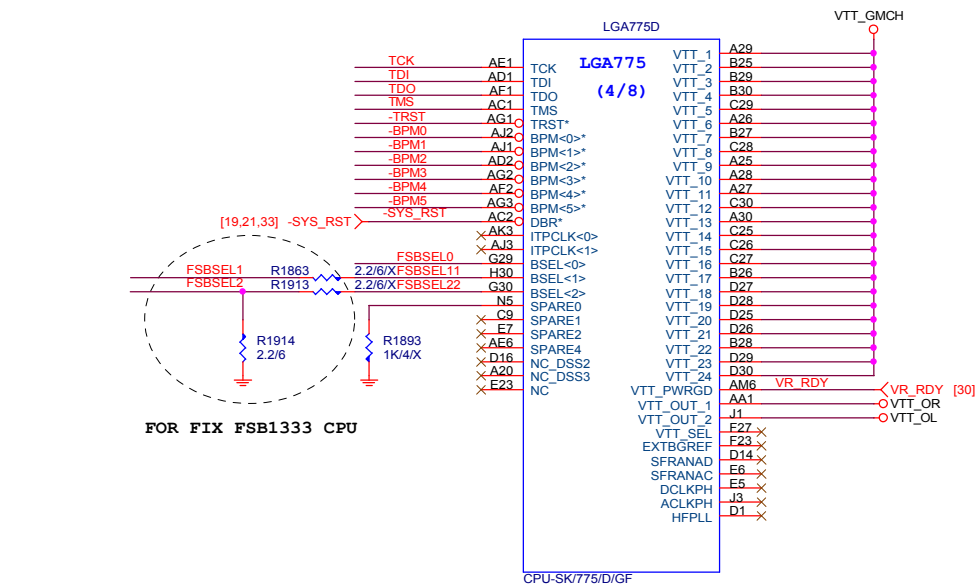
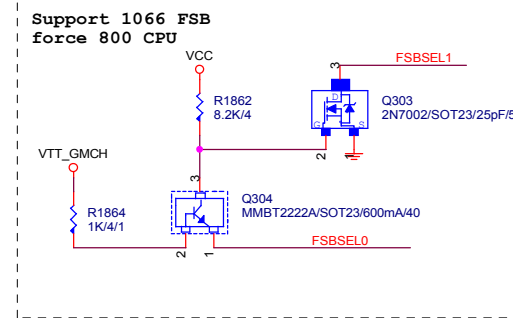


Gigabyte Technology		
Title P4_LGA775-A		
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CPU

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

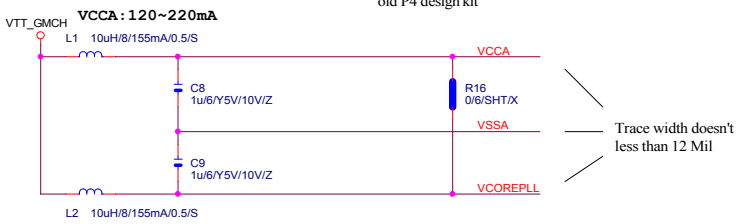


FOR FIX FSB1333 CPU

Gigabyte Technology

Title		P4_LGA775-B,D	
Size	Document Number	945GCM-S2	
Custom			Rev 3.0
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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

VCOREPLL : 100mA

CPU

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

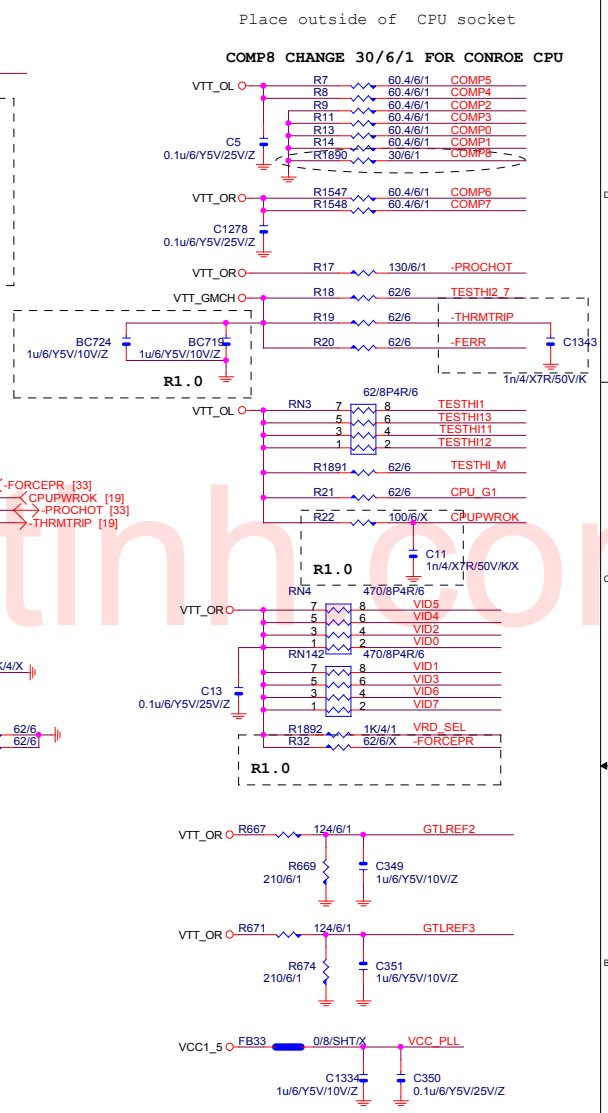
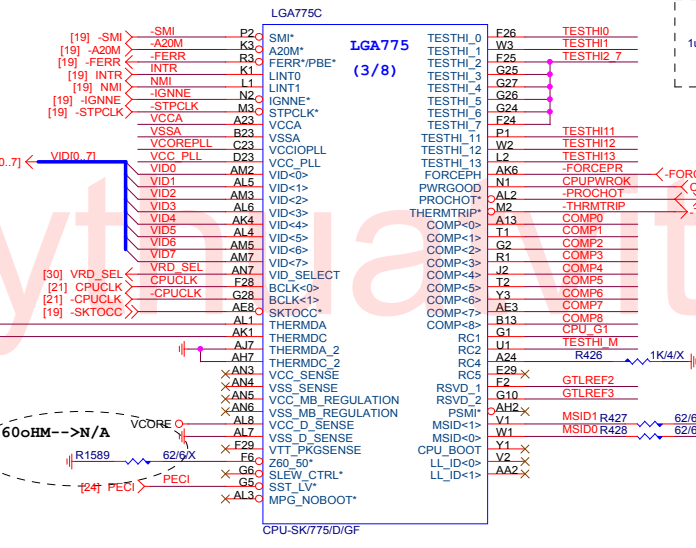
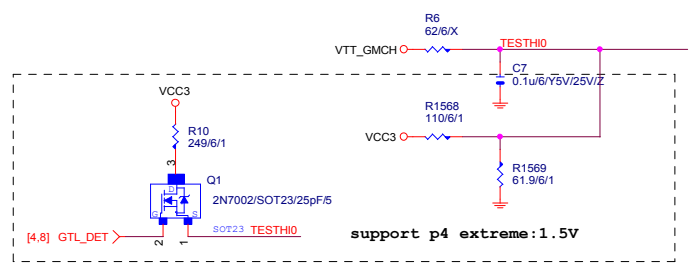
RATIO

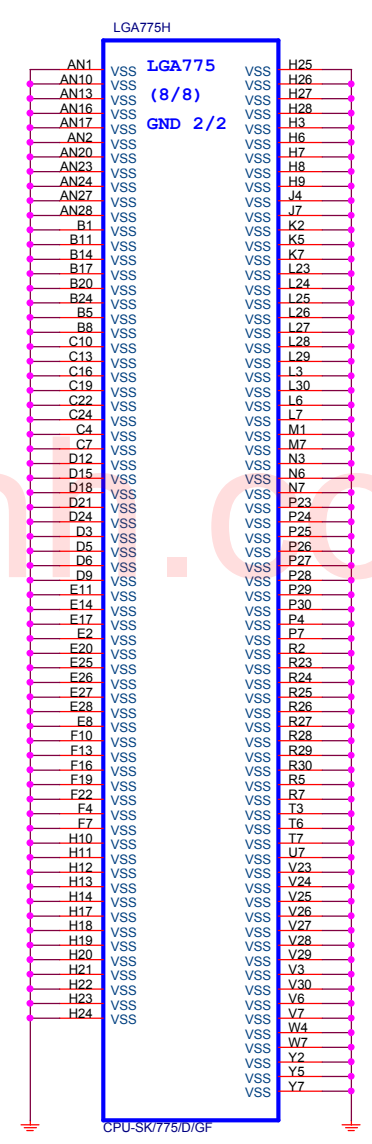
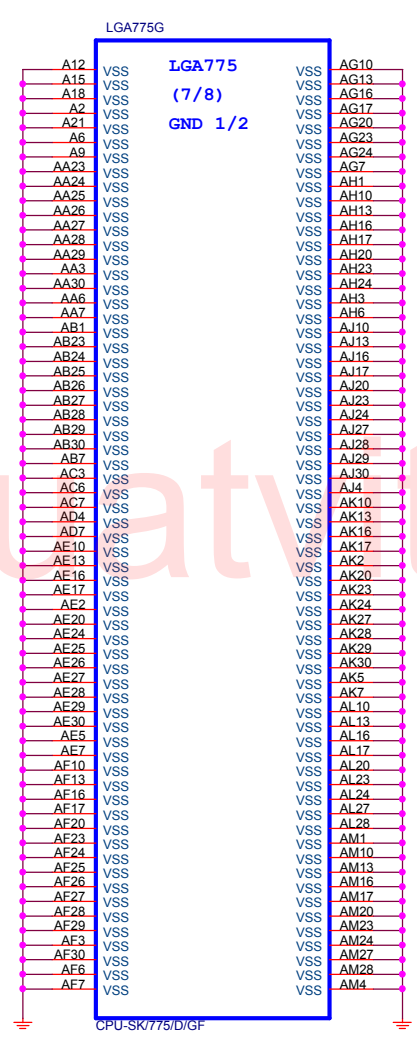
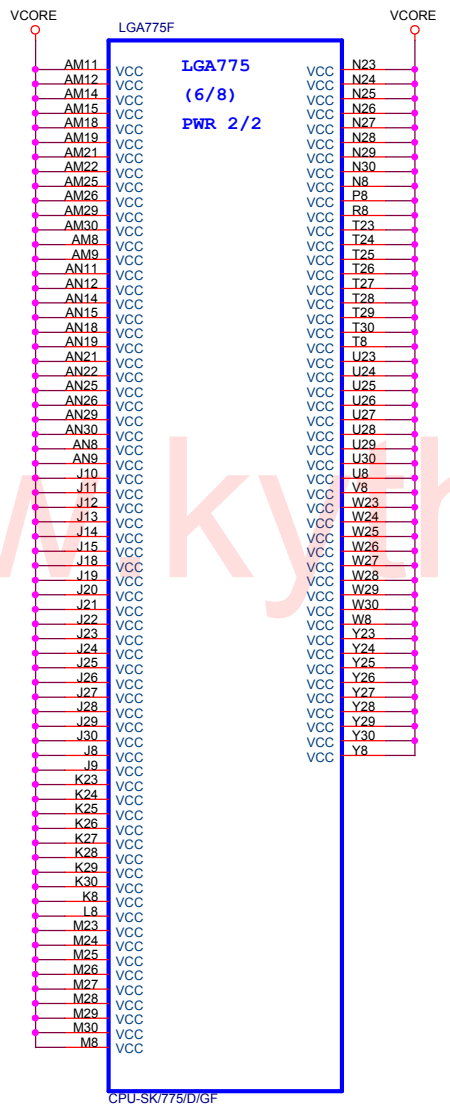
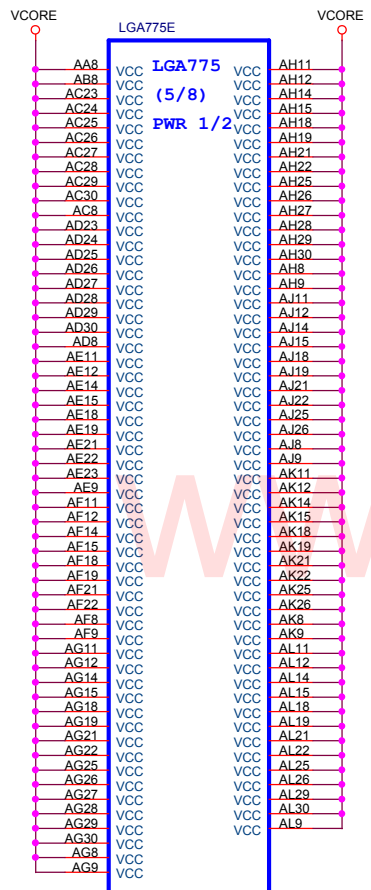
2.66/3.33
2.00/2.5

945 Design Guide rev1.5 spec.
VCCA=120~220mA
公板為125mA

10LI2-12100A-13=INDUCTOR 10uH 300mA TAI-TECH
10LI2-12100A-02=INDUCTOR 10uH 155mA TAIYO
10LI2-12100A-01=INDUCTOR 10uH 120mA TDK

限用兩種

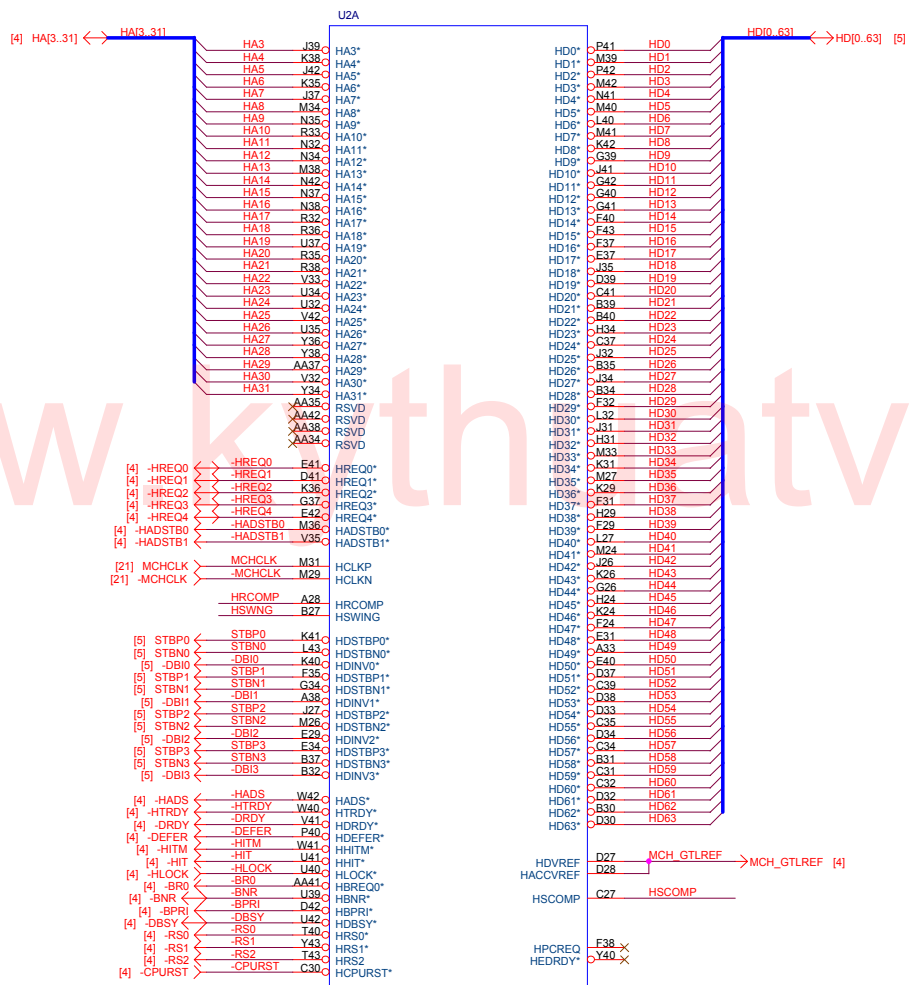




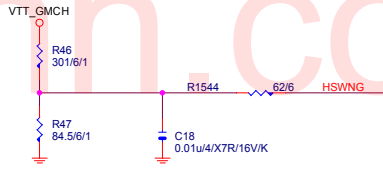
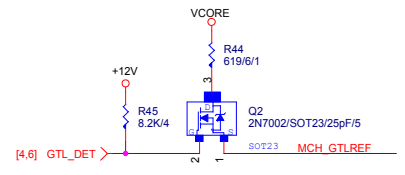
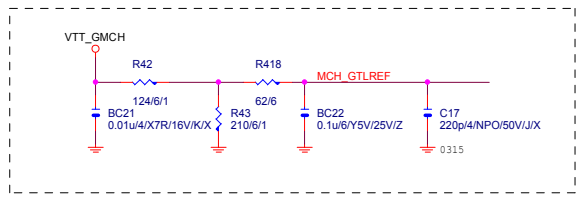
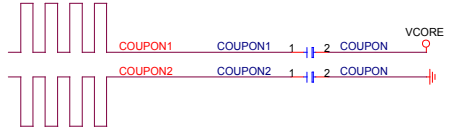
Gigabyte Technology		
Title P4_LGA775-E,F,G,H		
Size B	Document Number 945GCM-S2	Rev 3.0
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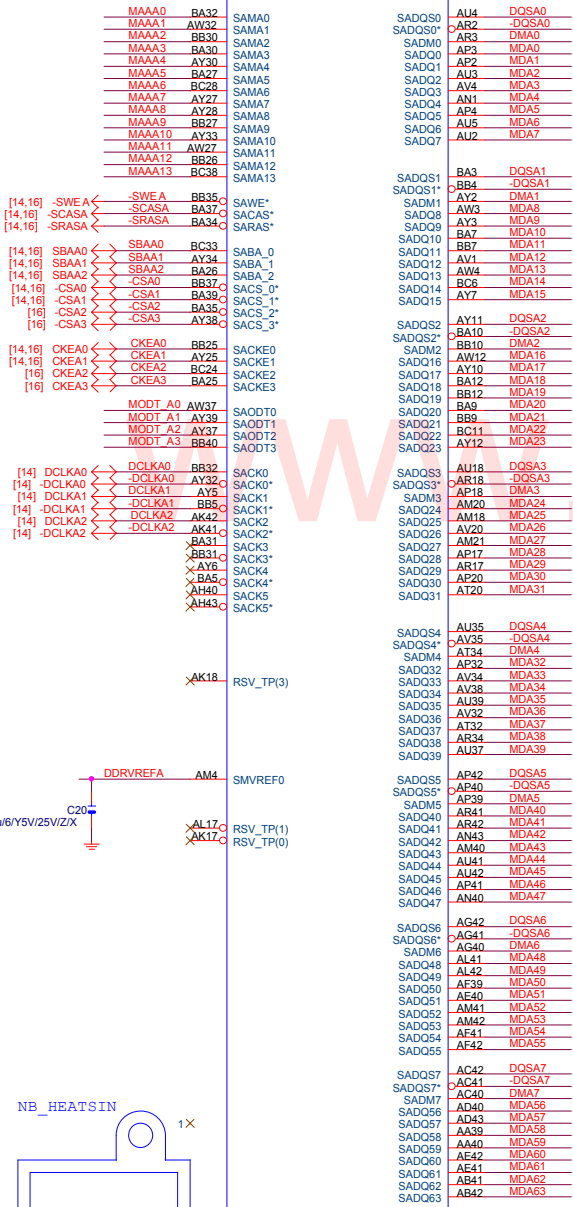


945GC/BGA1202[10HB1-033000-71R] Pb-Free



Gigabyte Technology			
Title GMCH-HOST			
Size Custom	Document Number	945GCM-S2	Rev 3.0
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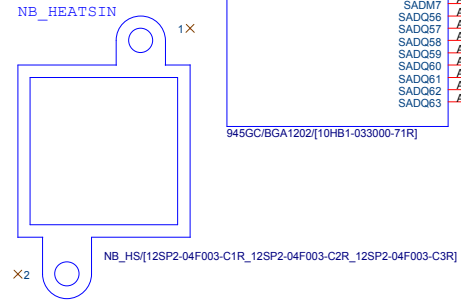
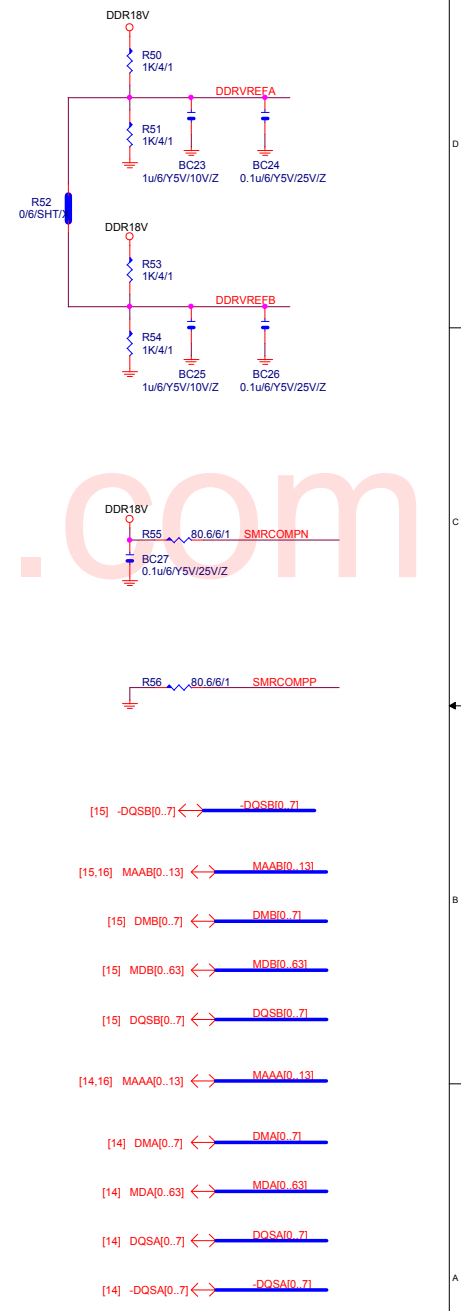
U2F

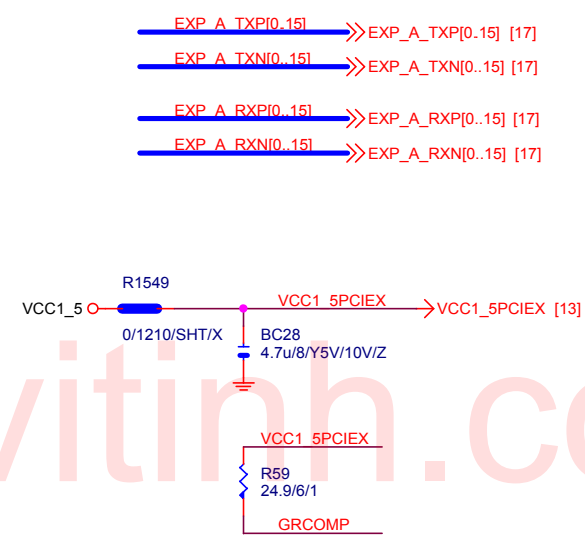
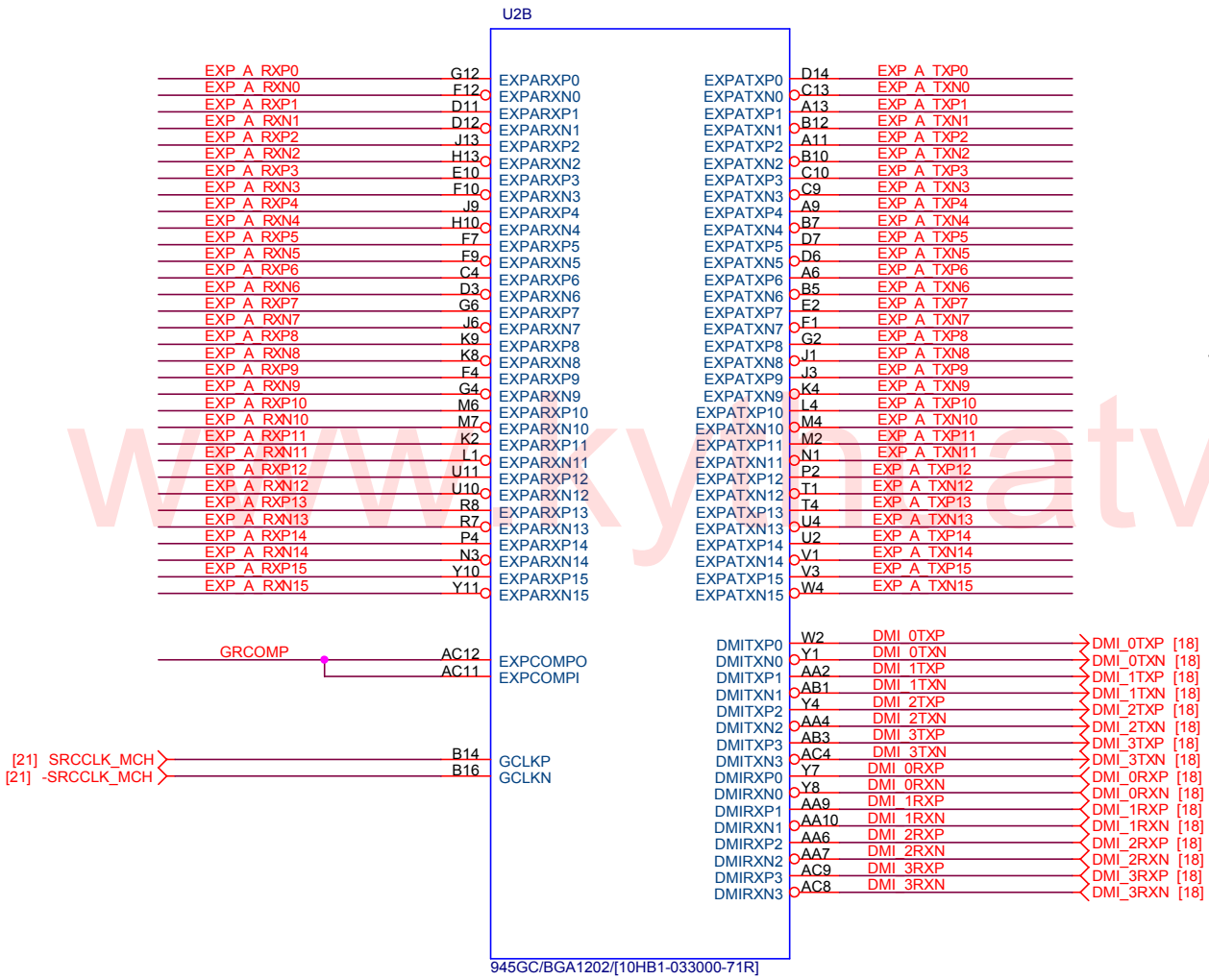


U2G



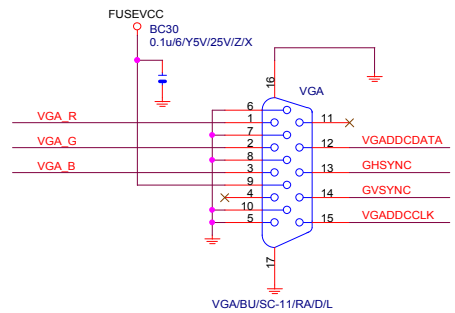
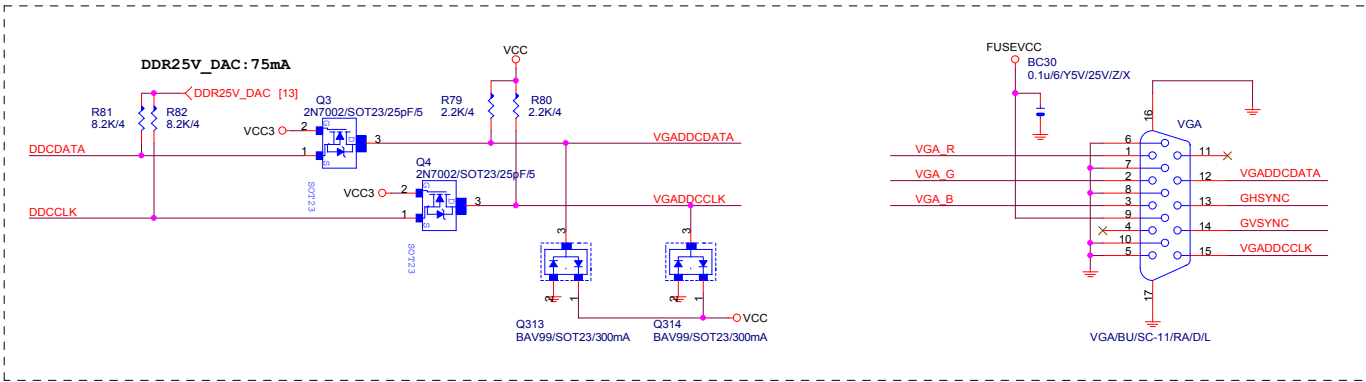
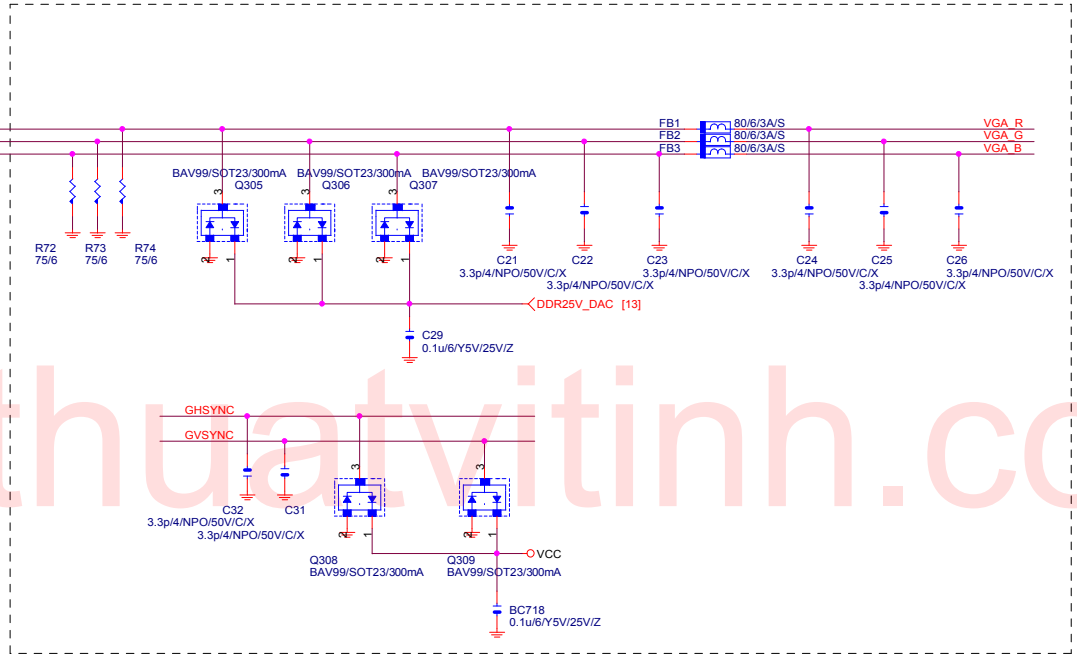
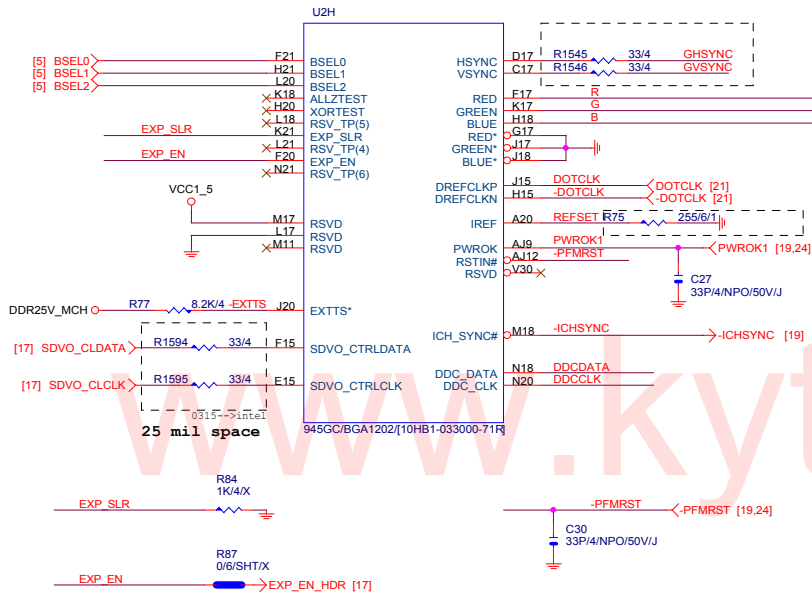
945GC/BGA1202[10HB1-033000-71R]





Gigabyte Technology

Title		
GMCH-PCI E & DMI		
Size	Document Number	Rev
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Gigabyte Technology		
Title: GMCH-INTERNAL VGA		
Size: Custom	Document Number: 945GCM-S2	Rev: 3.0
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U2C

A4	VSS	N2
A16	VSS	N6
A22	VSS	N8
A26	VSS	N13
A31	VSS	N15
A35	VSS	N24
B4	VSS	N26
B6	VSS	N27
B9	VSS	N29
B11	VSS	N31
B13	VSS	N33
B21	VSS	N36
B22	VSS	N39
B28	VSS	N43
B33	VSS	P3
B38	VSS	P14
C3	VSS	P15
C5	VSS	P24
C7	VSS	P26
C12	VSS	P27
C14	VSS	P29
C22	VSS	P30
C40	VSS	R6
D2	VSS	R9
D5	VSS	R12
D10	VSS	R14
D16	VSS	R30
D20	VSS	R31
D21	VSS	R34
E3	VSS	R37
E4	VSS	R39
E7	VSS	T2
E9	VSS	T7
F12	VSS	T12
F13	VSS	U3
F17	VSS	U5
F18	VSS	U9
F20	VSS	U12
F21	VSS	U14
F32	VSS	U31
F2	VSS	U33
F6	VSS	U36
F8	VSS	U38
F16	VSS	V2
F18	VSS	V8
F26	VSS	V11
F34	VSS	V12
F42	VSS	V14
G3	VSS	V24
G5	VSS	V36
G7	VSS	V37
G9	VSS	V38
G10	VSS	V39
G13	VSS	V43
G15	VSS	W3
G18	VSS	Y2
G20	VSS	Y5
G21	VSS	Y6
G24	VSS	Y9
G27	VSS	Y12
G29	VSS	Y14
G31	VSS	Y31
G32	VSS	Y35
G35	VSS	Y39
G38	VSS	Y42
H12	VSS	Y43
H17	VSS	Y44
H26	VSS	Y45
H27	VSS	Y46
H32	VSS	Y47
J2	VSS	Y48
J5	VSS	Y49
J7	VSS	Y50
J10	VSS	Y51
J12	VSS	Y52
J21	VSS	Y53
J24	VSS	Y54
J29	VSS	Y55
J38	VSS	Y56
J43	VSS	Y57
K3	VSS	Y58
K5	VSS	Y59
K6	VSS	Y60
K7	VSS	Y61
K10	VSS	Y62
K12	VSS	Y63
K13	VSS	Y64
K15	VSS	Y65
K20	VSS	Y66
K27	VSS	Y67
K32	VSS	Y68
K34	VSS	Y69
K37	VSS	Y70
K39	VSS	Y71
L2	VSS	Y72
L12	VSS	Y73
L13	VSS	Y74
L24	VSS	Y75
L26	VSS	Y76
L29	VSS	Y77
L31	VSS	Y78
L42	VSS	Y79
M3	VSS	Y80
M5	VSS	Y81
M8	VSS	Y82
M9	VSS	Y83
M10	VSS	Y84
M13	VSS	Y85
M20	VSS	Y86
M21	VSS	Y87
M35	VSS	Y88
M37	VSS	Y89

945GC/BGA1202[10HB1-033000-71R]

U2E

AD7	VSS	AD21
AD9	VSS	AD24
AD11	VSS	AD26
AD13	VSS	AD29
AD33	VSS	AD32
N24	VSS	AD34
AD37	VSS	AV2
AD42	VSS	AV10
N29	VSS	AV17
AF2	VSS	AV37
N33	VSS	AW10
AF5	VSS	BA4
N39	VSS	BA42
AF36	VSS	BB3
AF38	VSS	BB6
P14	VSS	BB11
AG30	VSS	BB14
AG31	VSS	BB19
AG33	VSS	BB34
AG36	VSS	BB39
P29	VSS	BB41
AG38	VSS	BC9
AG39	VSS	A40
AH42	VSS	D1
R12	VSS	D43
A10	VSS	R26
A30	VSS	R29
A31	VSS	U29
A33	VSS	V24
A35	VSS	V26
A37	VSS	V29
T2	VSS	W21
AK24	VSS	W23
AK26	VSS	W25
AK29	VSS	Y20
AK30	VSS	Y22
AL1	VSS	Y24
AL3	VSS	Y26
AL7	VSS	Y29
AL10	VSS	AA25
AL12	VSS	AA27
AL13	VSS	AA29
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AL18	VSS	AC26
AL21	VSS	AC29
AL23	VSS	
AL24	VSS	
AL27	VSS	
AL32	VSS	
AL33	VSS	
V38	VSS	
AL37	VSS	
AM3	VSS	
AM5	VSS	
AM7	VSS	
Y2	VSS	
AM3	VSS	
Y6	VSS	
AM36	VSS	
AM37	VSS	
AM39	VSS	
AN2	VSS	
Y14	VSS	
AN4	VSS	
Y35	VSS	
AN13	VSS	
Y37	VSS	
AN15	VSS	
AN17	VSS	
AN18	VSS	
AN20	VSS	
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AP29	VSS	
AP34	VSS	
AP38	VSS	
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AR6	VSS	
AR15	VSS	
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AU6	VSS	
AU9	VSS	
AU12	VSS	
AU13	VSS	
AU15	VSS	
AU17	VSS	
AU20	VSS	
AD18	VSS	
AD20	VSS	
AD22	VSS	
AD24	VSS	
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AD29	VSS	
AE19	VSS	
AE21	VSS	
AE23	VSS	
AE25	VSS	
AF18	VSS	
AF20	VSS	
AF22	VSS	
AF24	VSS	
AY1	VSS	
BC4	VSS	

VSS	AU21
VSS	AU24
VSS	AU26
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VSS	AU32
VSS	AU34
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VSS	AV17
VSS	AV37
VSS	AW10
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VSS	V26
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VSS	W21
VSS	W23
VSS	W25
VSS	Y20
VSS	Y22
VSS	Y24
VSS	Y26
VSS	Y29
VSS	AA25
VSS	AA27
VSS	AA29
VSS	AC19
VSS	AC26
VSS	AC29
NC	A42
NC	B2
NC	B3
NC	B4
NC	B42
NC	B43
NC	C2
NC	C42
NC	E35
NC	AW26
NC	AW27
NC	AW28
NC	AW29
NC	BA2
NC	BB1
NC	BB2
NC	BB43
NC	BC1
NC	BC2
NC	BC42
NC	BC43
RSVD	AK21
RSVD	AJ23
RSVD	AJ26
RSVD	AL20
RSVD	AL21
RSVD	AJ21
RSVD	AL26
RSVD	AK27
RSVD	AD30
RSVD	AC34
RSVD	Y30
RSVD	Y31
RSVD	AF31
RSVD	AD31
RSVD	U30
RSVD	V31
RSVD	AA30
RSVD	AC30
RSVD	AA3
RSVD	AG28
RSVD	AG28
RSVD	AG27
RSVD	AJ24
RSVD	AJ27
RSVD	AK40
RSVD	AW17
RSVD	AW19
RSVD	AY14
RSVD	BC16
RSVD	AJ25
RSVD	AG29

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1. 425~1.575V

- VCC1_5
- N17
- P17
- P20
- P21
- AA22
- AB21
- AB22
- AB23
- AC22
- AD14
- AE9
- AF7
- AF8
- AF9
- AF10
- AF11
- AF12
- AF13
- AF14
- AF30
- AG2
- AG3
- AG4
- AG5
- AG6
- AG7
- AG8
- AG9
- AG10
- AG11
- AG12
- AG13
- AG14
- AH1
- AH2
- AH4
- AJ5
- AJ13
- AJ14
- AK3
- AK4
- AK14
- AK15
- AK20
- R15
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- U17
- U18
- U19
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- U23
- U24
- U25
- U26
- W15
- W19
- W18
- W20
- W22
- W24
- W26
- W27
- Y15
- Y17
- Y18
- Y19
- Y21
- Y23
- Y26
- Y27
- AA15
- AA17
- AA18
- AA19
- AA20
- AA24
- AA26
- AB17
- AB18
- AB19
- AB20
- AB24
- AB25
- AB26
- AB27
- AC15
- AC17
- AC18
- AC20
- AC24
- AC26
- AC27
- AD15
- AD17
- AD19
- AD21
- AD23
- AD25
- AD26
- AE17
- AE18
- AE20
- AE22
- AE24
- AE26
- AE27
- AE15
- AE17
- AE19
- AE21
- AE23
- AE25
- AE26
- AE27
- AE29

1.7~1.9V

- VCCSM
- BB16
- AW15
- BB42
- BB13
- BC18
- BC22
- BC26
- BB20
- VCCSM
- AW24
- B046
- VCCSM
- BC31
- BB38
- BB33
- VCCSM
- BB28
- VCCSM
- BB24
- AW29
- VCCSM
- AW31
- VCCSM
- AW34
- AX41
- VCCSM
- AW42
- VCCSM
- AW23
- VCCSM
- AW18
- VCCSM
- BC40
- VCCSM
- AW35
- VCCSM
- AX43
- VCCSM
- AW20
- VCCSM
- AW21
- VCCSM
- AW13
- VCCSM
- AW21

1.14~1.26V

- VTT
- C23
- G23
- VTT
- P23
- E23
- VTT
- D23
- D24
- VTT
- D25
- VTT
- B25
- B24
- VTT
- B23
- B26
- VTT
- H23
- VTT
- J23
- K23
- L23
- VTT
- M23
- VTT
- E24
- VTT
- N23
- VTT
- A24
- VTT
- F27
- VTT
- E27
- VTT
- E26
- VTT
- C25
- VTT
- C26
- VTT

2.375~2.625V

- VCCA_DPLL
- B19
- VCCA_MPLL
- B20
- VCCA_HPPLL
- C21
- VCCA_DPLLA
- C19
- VCCA_DAC
- B18
- DDR25V_DAC
- C18
- D19
- VCCA_DAC
- VCC2
- VCCA_GPLL
- DDR25V_MCH
- B17
- VSSA_DAC
- A18

1.425~1.575V

- VCC_EXP
- AA13
- AD12
- AC5
- AA5
- V5
- V13
- AE2
- R13
- N12
- N10
- R5
- VCC_EXP
- N11
- AE3
- N9
- VCC_EXP
- AD10
- AD1
- VCC_EXP
- AC8
- VCC_EXP
- AD2
- VCC_EXP
- AD4
- VCC_EXP
- AD5
- VCC_EXP
- AD6
- VCC_EXP
- Y13
- VCC_EXP
- N6
- U8
- VCC_EXP
- AC13
- VCC_EXP
- U7
- VCC_EXP
- R10
- VCC_EXP
- U6
- VCC_EXP
- V6
- VCC_EXP
- V7
- VCC_EXP
- V9
- VCC_EXP
- V10

VCCA_EXPPLL=VCCA_GPLL=45mA (1.425V~1.575V)



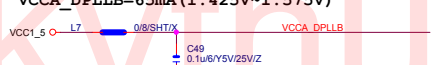
VCCA_HPPLL>50mA 公板為200mA (1.425V~1.575V)



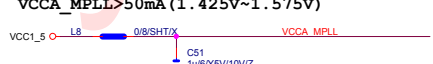
VCCA_DPLLA=65mA (1.425V~1.575V)



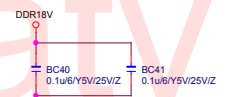
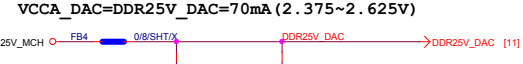
VCCA_DPLLB=65mA (1.425V~1.575V)



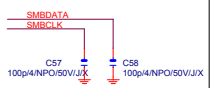
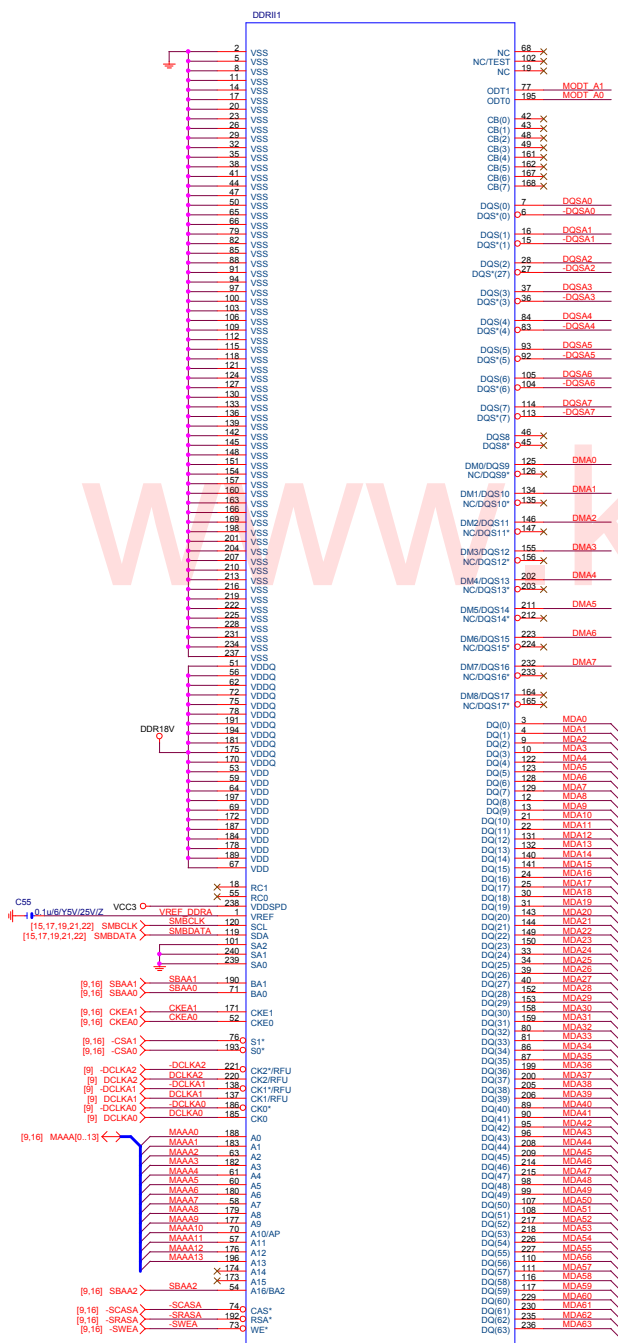
VCCA_MPLL>50mA (1.425V~1.575V)



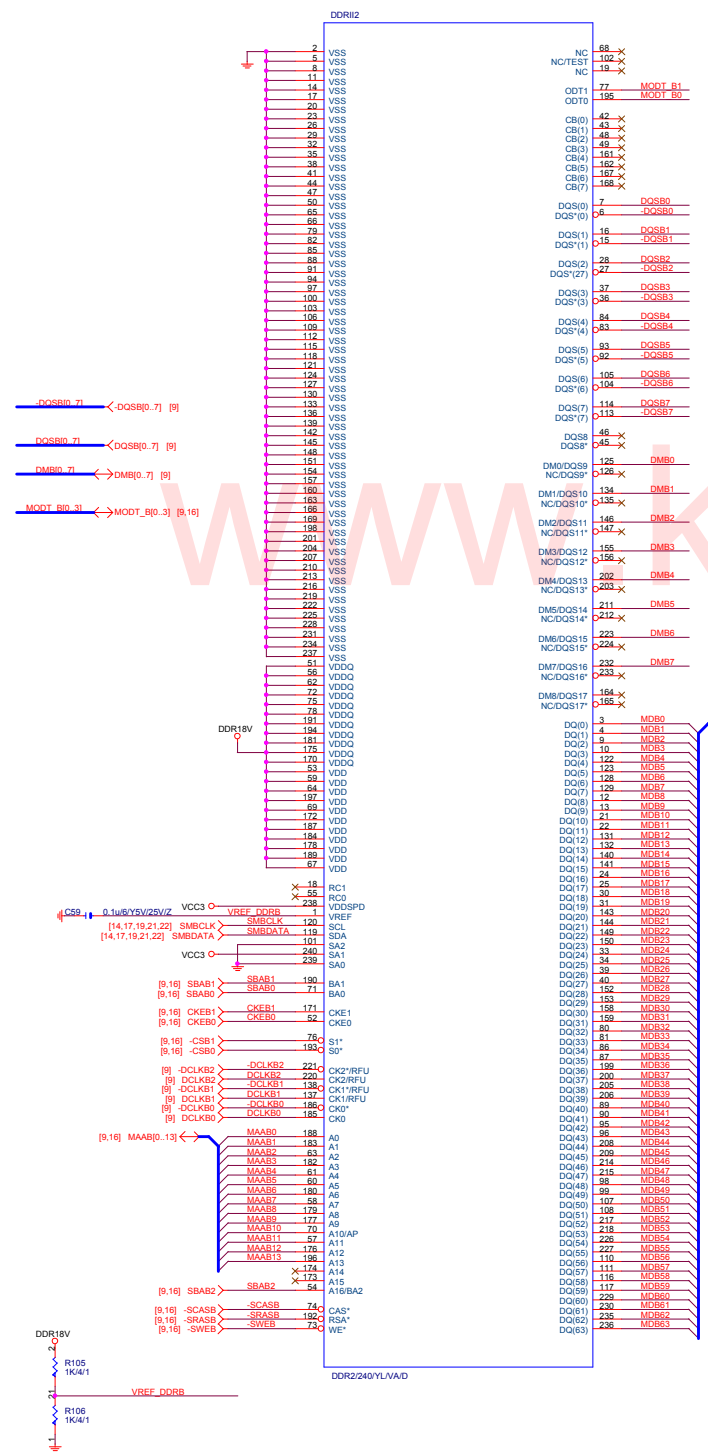
VCCA_DAC=DDR25V_DAC=70mA (2.375~2.625V)



945 Design Guide rev1.5 spec.
 VCCA_EXPPLL=VCCA_GPLL=45mA (1.425V~1.575V)
 VCCA_HPPLL>50mA 公板為200mA (1.425V~1.575V)
 VCCA_DPLLA=65mA (1.425V~1.575V)
 VCCA_DPLLB=65mA (1.425V~1.575V)
 VCCA_MPLL>50mA (1.425V~1.575V)
 VCCA_DAC=DDR25V_DAC=70mA (2.375~2.625V)



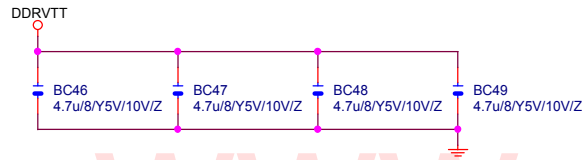
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Title DDR11 CHANNEL A		
Size	Document Number	Rev.
Count	945GCM-S2	3.0
Date		Sheet 14 of 33



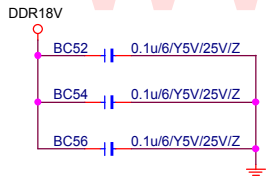
Gigabyte Technology			
Title DDR2 CHANNEL B			
Size	Document Number	Rev.	
Column	945GCM-S2	3.0	
Date		Sheet	15 of 33

DDR TERMINATION CHANNEL A

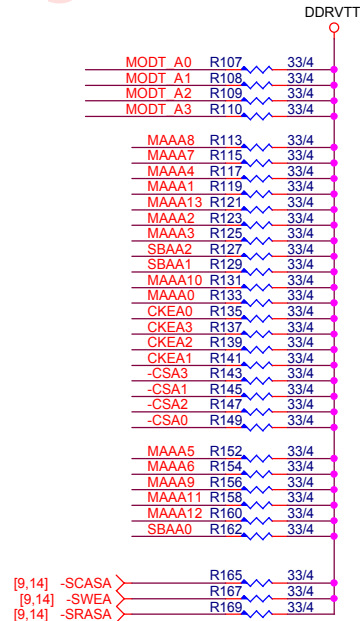
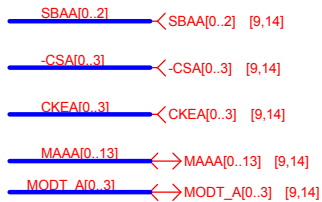
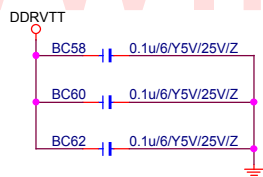
DDRVTT Decouple



DDR18V Decouple

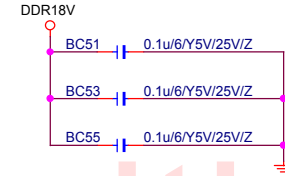


DDRVTT Decouple

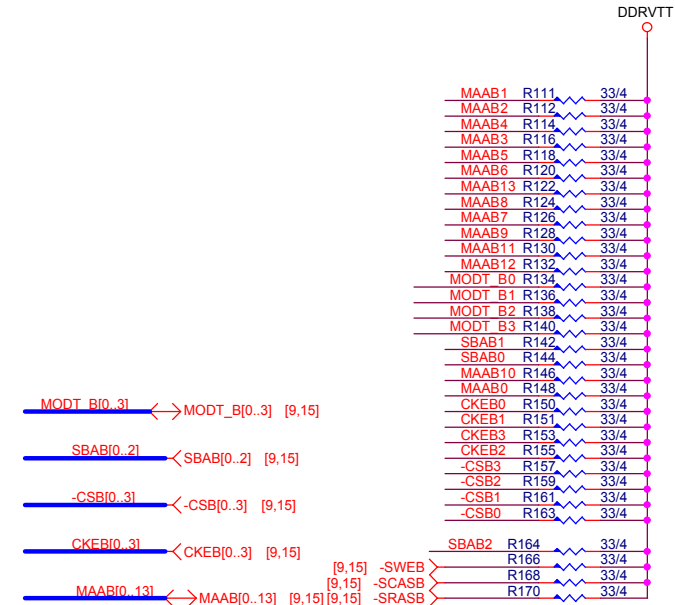
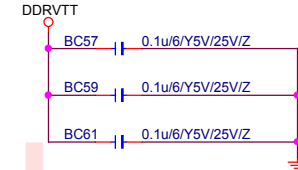


DDR TERMINATION CHANNEL B

DDR18V Decouple

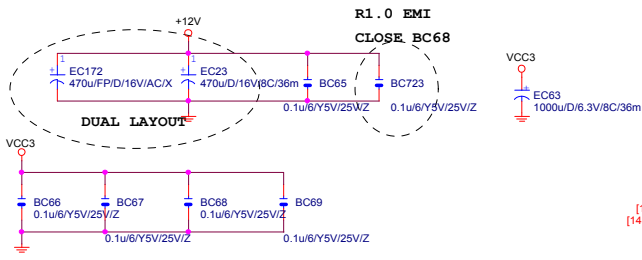


DDRVTT Decouple



Gigabyte Technology

Title		
DDRII TERMINATOR		
Size Custom	Document Number	Rev
	945GCM-S2	3.0
Date:	Wednesday, January 03, 2007	Sheet 16 of 33

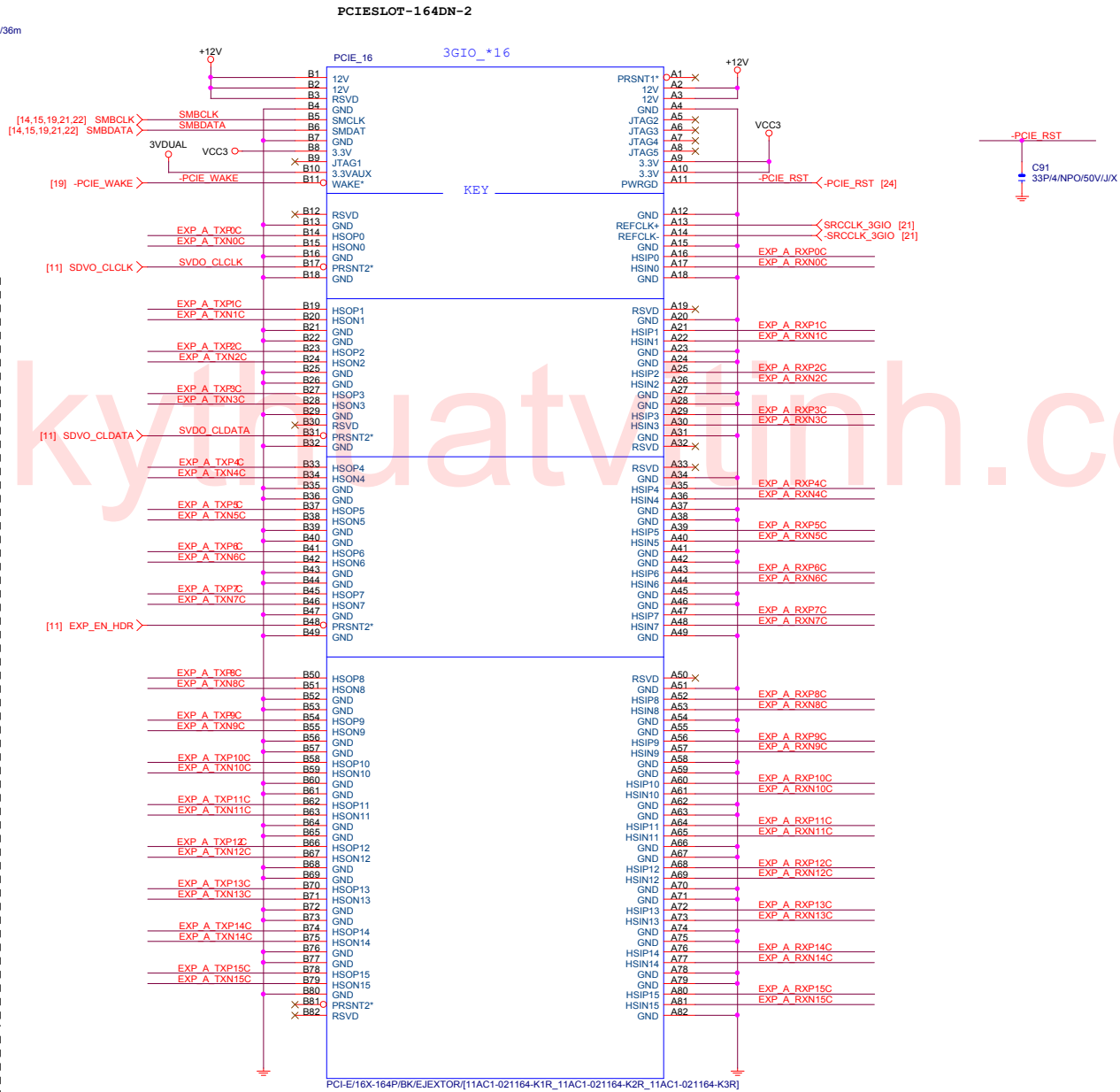


EXP A TXP0	C92	0.1u/4Y5V/16V/Z	EXP A TXP0C
EXP A TXN0	C93	0.1u/4Y5V/16V/Z	EXP A TXN0C
EXP A TXP1	C94	0.1u/4Y5V/16V/Z	EXP A TXP1C
EXP A TXN1	C95	0.1u/4Y5V/16V/Z	EXP A TXN1C
EXP A TXP2	C96	0.1u/4Y5V/16V/Z	EXP A TXP2C
EXP A TXN2	C97	0.1u/4Y5V/16V/Z	EXP A TXN2C
EXP A TXP3	C98	0.1u/4Y5V/16V/Z	EXP A TXP3C
EXP A TXN3	C99	0.1u/4Y5V/16V/Z	EXP A TXN3C
EXP A TXP4	C100	0.1u/4Y5V/16V/Z	EXP A TXP4C
EXP A TXN4	C101	0.1u/4Y5V/16V/Z	EXP A TXN4C
EXP A TXP5	C102	0.1u/4Y5V/16V/Z	EXP A TXP5C
EXP A TXN5	C103	0.1u/4Y5V/16V/Z	EXP A TXN5C
EXP A TXP6	C104	0.1u/4Y5V/16V/Z	EXP A TXP6C
EXP A TXN6	C105	0.1u/4Y5V/16V/Z	EXP A TXN6C
EXP A TXP7	C106	0.1u/4Y5V/16V/Z	EXP A TXP7C
EXP A TXN7	C107	0.1u/4Y5V/16V/Z	EXP A TXN7C
EXP A TXP8	C108	0.1u/4Y5V/16V/Z	EXP A TXP8C
EXP A TXN8	C109	0.1u/4Y5V/16V/Z	EXP A TXN8C
EXP A TXP9	C110	0.1u/4Y5V/16V/Z	EXP A TXP9C
EXP A TXN9	C111	0.1u/4Y5V/16V/Z	EXP A TXN9C
EXP A TXP10	C112	0.1u/4Y5V/16V/Z	EXP A TXP10C
EXP A TXN10	C113	0.1u/4Y5V/16V/Z	EXP A TXN10C
EXP A TXP11	C114	0.1u/4Y5V/16V/Z	EXP A TXP11C
EXP A TXN11	C115	0.1u/4Y5V/16V/Z	EXP A TXN11C
EXP A TXP12	C116	0.1u/4Y5V/16V/Z	EXP A TXP12C
EXP A TXN12	C117	0.1u/4Y5V/16V/Z	EXP A TXN12C
EXP A TXP13	C118	0.1u/4Y5V/16V/Z	EXP A TXP13C
EXP A TXN13	C119	0.1u/4Y5V/16V/Z	EXP A TXN13C
EXP A TXP14	C120	0.1u/4Y5V/16V/Z	EXP A TXP14C
EXP A TXN14	C121	0.1u/4Y5V/16V/Z	EXP A TXN14C
EXP A TXP15	C122	0.1u/4Y5V/16V/Z	EXP A TXP15C
EXP A TXN15	C123	0.1u/4Y5V/16V/Z	EXP A TXN15C

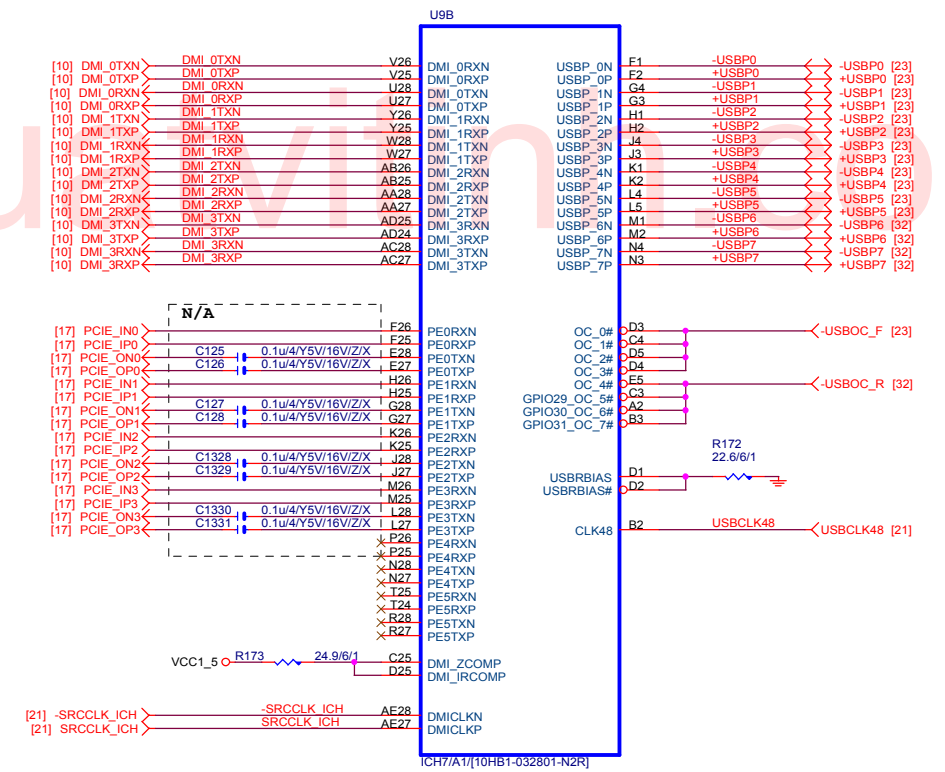
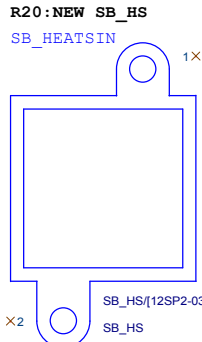
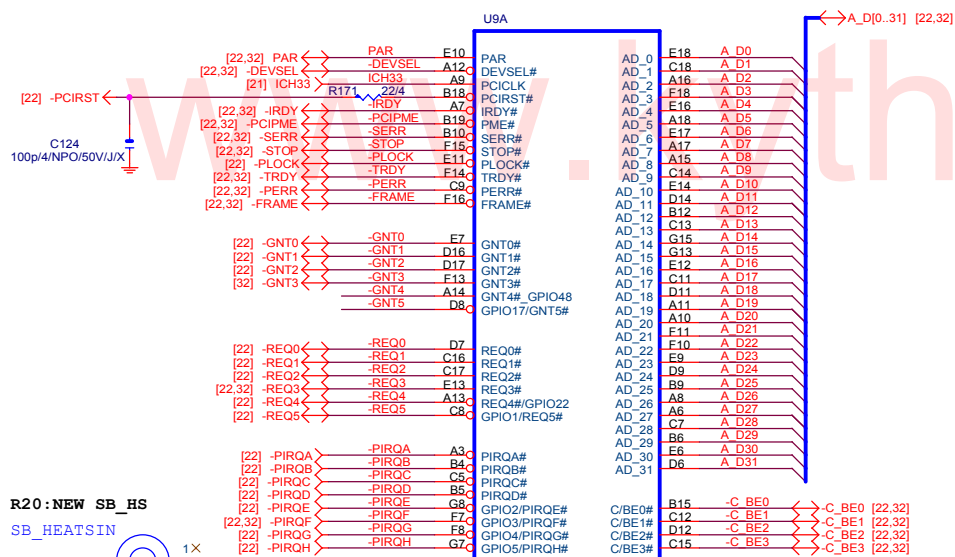
EXP A RXP0	SR1	04/SHT/X	EXP A RXP0C
EXP A RXN0	SR2	04/SHT/X	EXP A RXN0C
EXP A RXP1	SR3	04/SHT/X	EXP A RXP1C
EXP A RXN1	SR4	04/SHT/X	EXP A RXN1C
EXP A RXP2	SR5	04/SHT/X	EXP A RXP2C
EXP A RXN2	SR6	04/SHT/X	EXP A RXN2C
EXP A RXP3	SR7	04/SHT/X	EXP A RXP3C
EXP A RXN3	SR8	04/SHT/X	EXP A RXN3C
EXP A RXP4	SR9	04/SHT/X	EXP A RXP4C
EXP A RXN4	SR10	04/SHT/X	EXP A RXN4C
EXP A RXP5	SR11	04/SHT/X	EXP A RXP5C
EXP A RXN5	SR12	04/SHT/X	EXP A RXN5C
EXP A RXP6	SR13	04/SHT/X	EXP A RXP6C
EXP A RXN6	SR14	04/SHT/X	EXP A RXN6C
EXP A RXP7	SR15	04/SHT/X	EXP A RXP7C
EXP A RXN7	SR16	04/SHT/X	EXP A RXN7C
EXP A RXP8	SR17	04/SHT/X	EXP A RXP8C
EXP A RXN8	SR18	04/SHT/X	EXP A RXN8C
EXP A RXP9	SR19	04/SHT/X	EXP A RXP9C
EXP A RXN9	SR20	04/SHT/X	EXP A RXN9C
EXP A RXP10	SR21	04/SHT/X	EXP A RXP10C
EXP A RXN10	SR22	04/SHT/X	EXP A RXN10C
EXP A RXP11	SR23	04/SHT/X	EXP A RXP11C
EXP A RXN11	SR24	04/SHT/X	EXP A RXN11C
EXP A RXP12	SR25	04/SHT/X	EXP A RXP12C
EXP A RXN12	SR26	04/SHT/X	EXP A RXN12C
EXP A RXP13	SR27	04/SHT/X	EXP A RXP13C
EXP A RXN13	SR28	04/SHT/X	EXP A RXN13C
EXP A RXP14	SR29	04/SHT/X	EXP A RXP14C
EXP A RXN14	SR30	04/SHT/X	EXP A RXN14C
EXP A RXP15	SR31	04/SHT/X	EXP A RXP15C
EXP A RXN15	SR32	04/SHT/X	EXP A RXN15C

[18] PCIE_OP0	PCIE_OP0	SR49	04/X	EXP A TXP0C
[18] PCIE_ON0	PCIE_ON0	SR50	04/X	EXP A TXN0C
[18] PCIE_OP1	PCIE_OP1	SR51	04/X	EXP A TXP1C
[18] PCIE_ON1	PCIE_ON1	SR52	04/X	EXP A TXN1C
[18] PCIE_OP2	PCIE_OP2	SR37	04/X	EXP A TXP2C
[18] PCIE_ON2	PCIE_ON2	SR38	04/X	EXP A TXN2C
[18] PCIE_OP3	PCIE_OP3	SR39	04/X	EXP A TXP3C
[18] PCIE_ON3	PCIE_ON3	SR40	04/X	EXP A TXN3C

[18] PCIE_IP0	PCIE_IP0	SR53	04/X	EXP A RXP0C
[18] PCIE_IN0	PCIE_IN0	SR54	04/X	EXP A RXN0C
[18] PCIE_IP1	PCIE_IP1	SR55	04/X	EXP A RXP1C
[18] PCIE_IN1	PCIE_IN1	SR56	04/X	EXP A RXN1C
[18] PCIE_IP2	PCIE_IP2	SR45	04/X	EXP A RXP2C
[18] PCIE_IN2	PCIE_IN2	SR46	04/X	EXP A RXN2C
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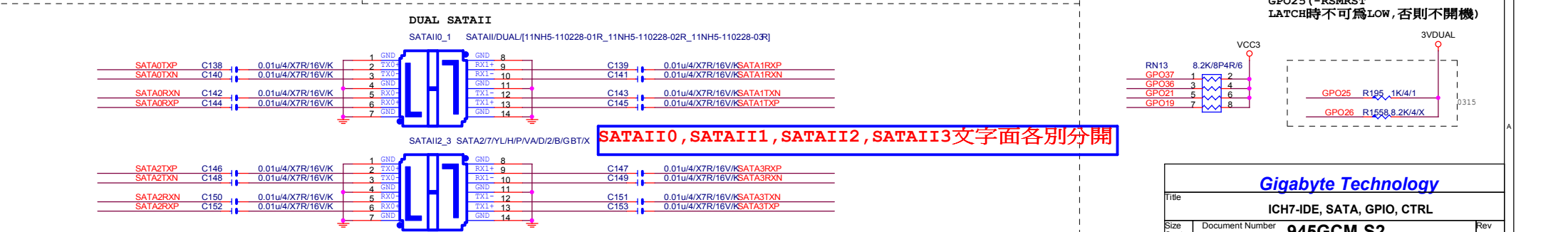
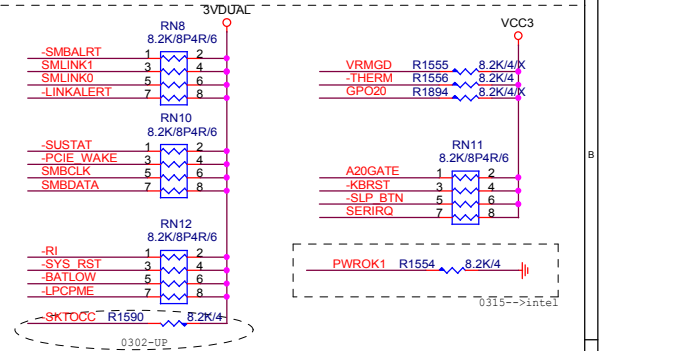
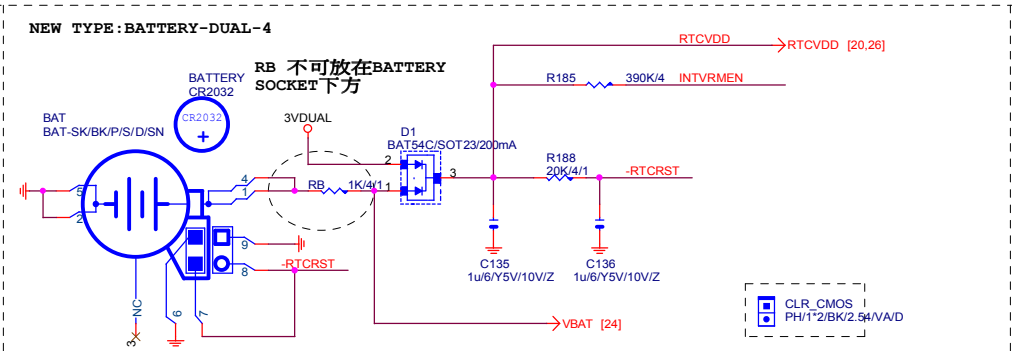
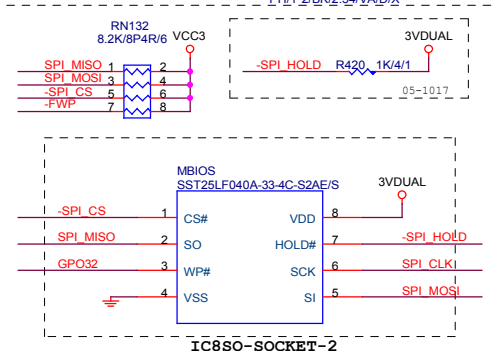
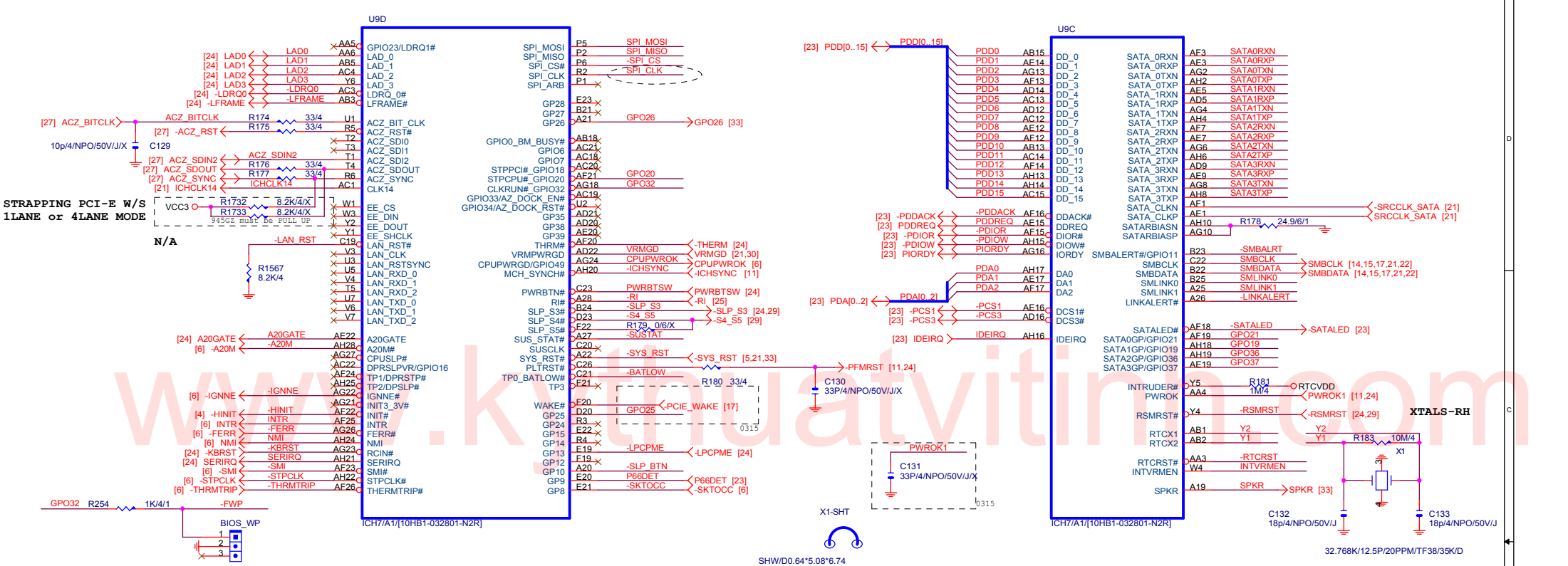


PCI-E/16x-164P/BK/EJEXTOR/[11AC1-021164-K1R_11AC1-021164-K2R_11AC1-021164-K3R]

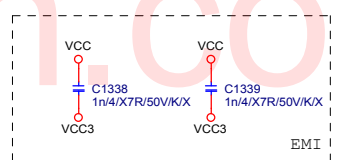
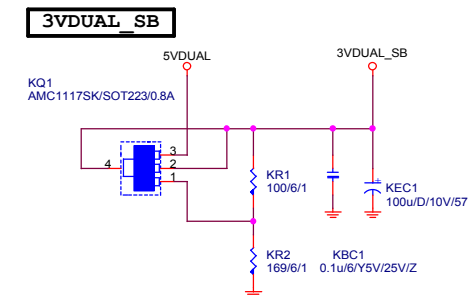
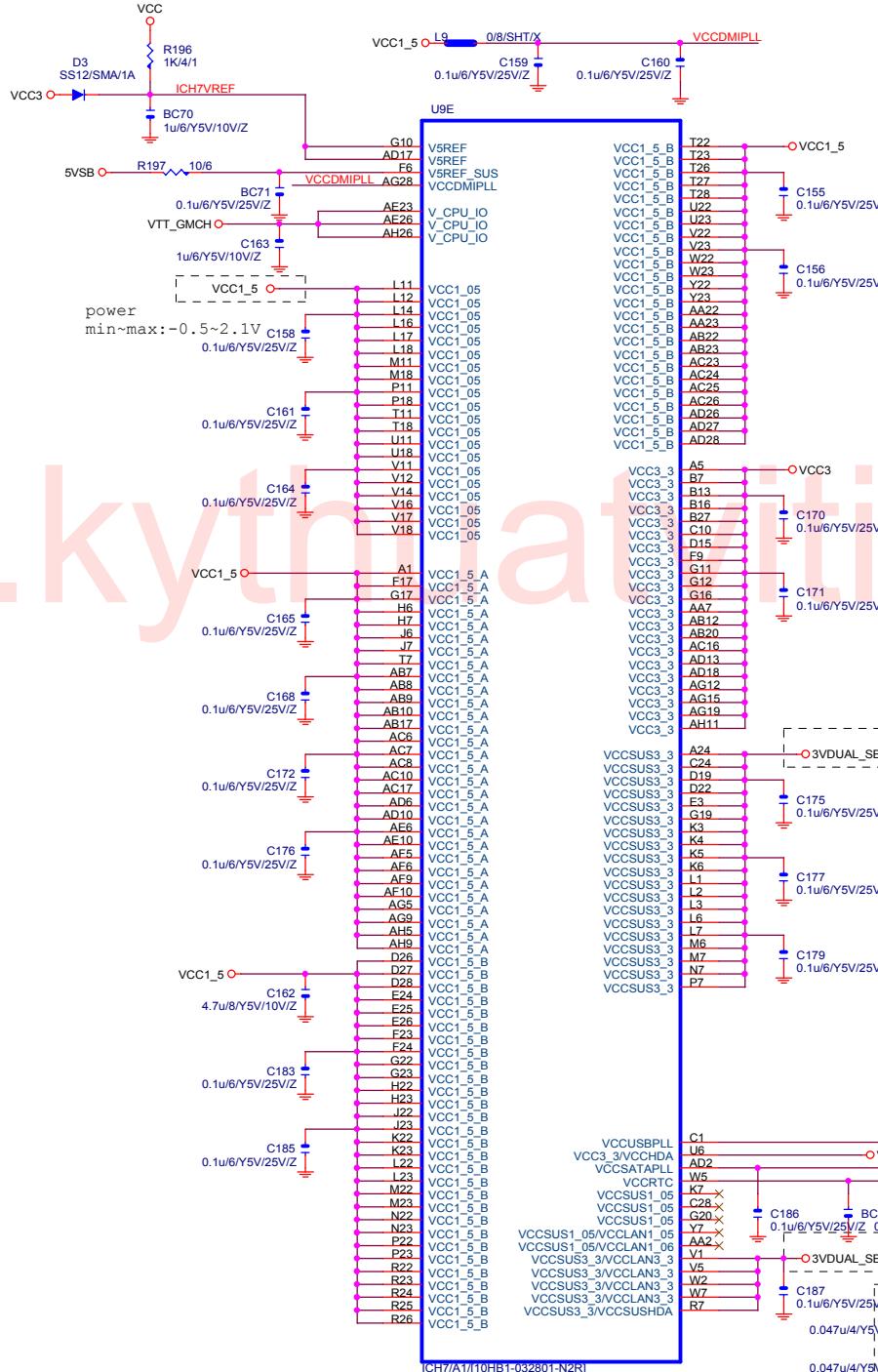


ICH7/A1/(10HB1-032801-N2R)
 01=SPI
 10=PCI
 11=LPC (DEFAULT)

Pb-Free
 C/BE0# B15 -C BE0 [22,32]
 C/BE1# C12 -C BE1 [22,32]
 C/BE2# D12 -C BE2 [22,32]
 C/BE3# C15 -C BE3 [22,32]



U9F		
A4	VSS1	R14
A23	VSS2	R15
B1	VSS3	R16
B8	VSS4	R17
B11	VSS5	R18
B14	VSS6	T6
B17	VSS7	T12
B20	VSS8	T13
B26	VSS9	T14
B28	VSS10	T15
C2	VSS11	T16
C6	VSS12	T17
D10	VSS13	U4
D13	VSS14	U12
D18	VSS15	U13
D21	VSS16	U14
D24	VSS17	U15
E1	VSS18	U16
E2	VSS19	U17
E8	VSS20	U24
E15	VSS21	U25
F3	VSS22	U26
F4	VSS23	U27
F12	VSS24	U28
F27	VSS25	V2
F28	VSS26	V4
G1	VSS27	V7
G2	VSS28	V8
G5	VSS29	W6
G6	VSS30	W24
G9	VSS31	W25
G9	VSS32	W26
G14	VSS33	Y3
G18	VSS34	Y4
G21	VSS35	Y7
G24	VSS36	Y28
G25	VSS37	AA1
G26	VSS38	AA24
H3	VSS39	AA25
H4	VSS40	AA26
H5	VSS41	AB4
H27	VSS42	AB8
H28	VSS43	AB11
H28	VSS44	AB14
J1	VSS45	AB16
J2	VSS46	AB19
J5	VSS47	AB21
J24	VSS48	AB24
J25	VSS49	AB27
J26	VSS50	AB28
K24	VSS51	AC2
K27	VSS52	AC5
K28	VSS53	AC9
L13	VSS54	AC11
L15	VSS55	AD1
L24	VSS56	AD3
L25	VSS57	AD4
L26	VSS58	AD7
M3	VSS59	AD8
M4	VSS60	AD11
M5	VSS61	AD15
M12	VSS62	AD19
M13	VSS63	AD23
M14	VSS64	AE2
M15	VSS65	AE4
M16	VSS66	AE8
M17	VSS67	AE11
M24	VSS68	AE13
M27	VSS69	AE18
M28	VSS70	AE21
N1	VSS71	AE24
N2	VSS72	N2
N5	VSS73	AF2
N6	VSS74	AF4
N11	VSS75	AF8
N12	VSS76	AF11
N13	VSS77	AF27
N14	VSS78	AF29
N15	VSS79	AG1
N16	VSS80	AG3
N17	VSS81	AG7
N18	VSS82	AG14
N24	VSS83	AG17
N25	VSS84	AG20
N26	VSS85	AG25
P3	VSS86	AH1
P4	VSS87	AH3
P12	VSS88	AH7
P13	VSS89	AH12
P14	VSS90	AH23
P15	VSS91	AH27
P16	VSS92	C27
P17	VSS93	E4
P24	VSS94	AG11
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P28	VSS96	
R1	VSS97	
R11	VSS98	
R12	VSS99	
R13	VSS100	

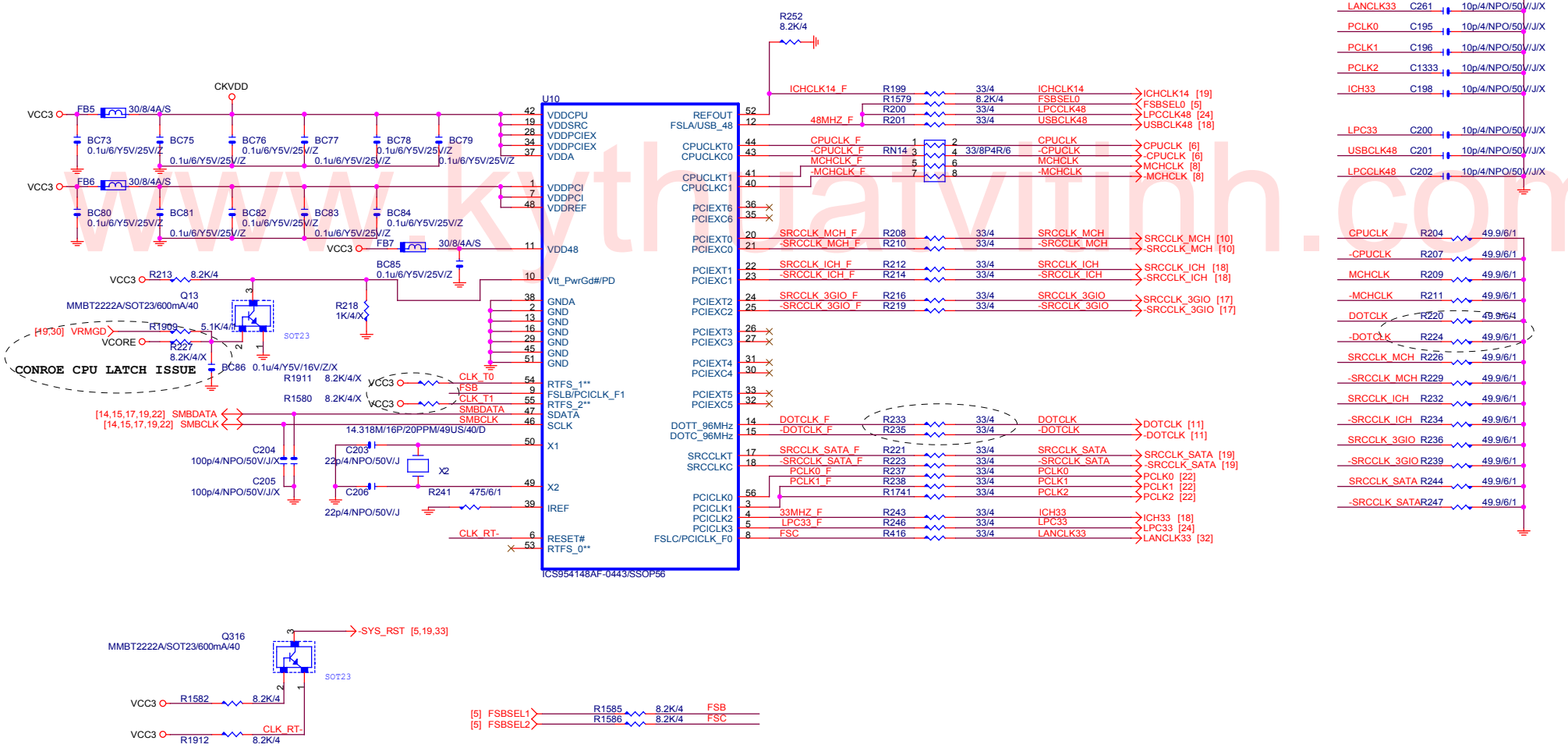


ESD

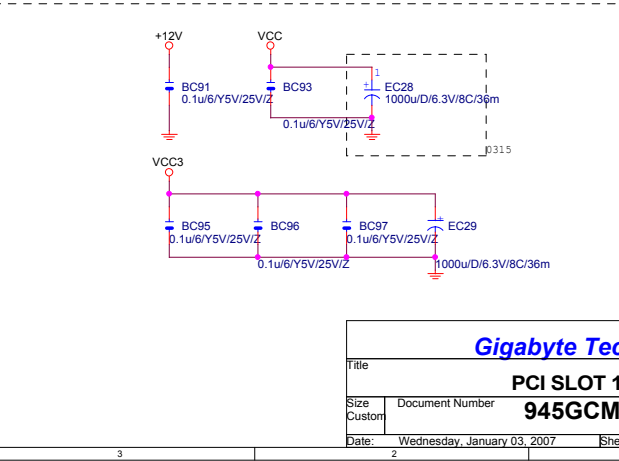
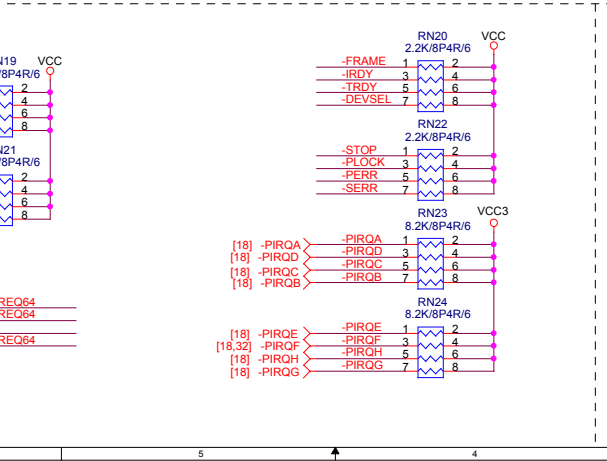
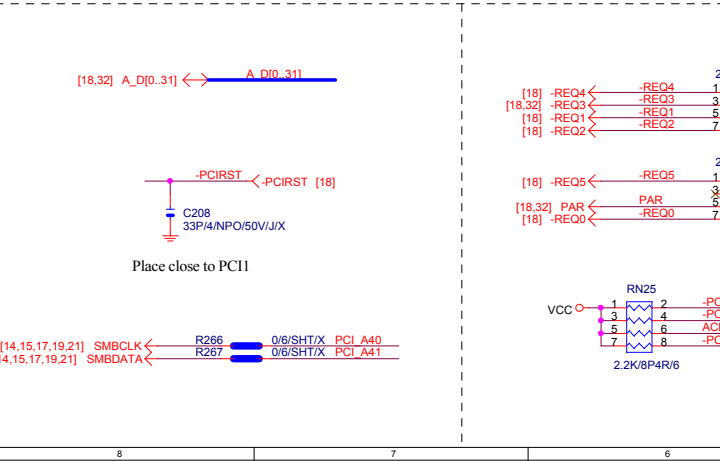
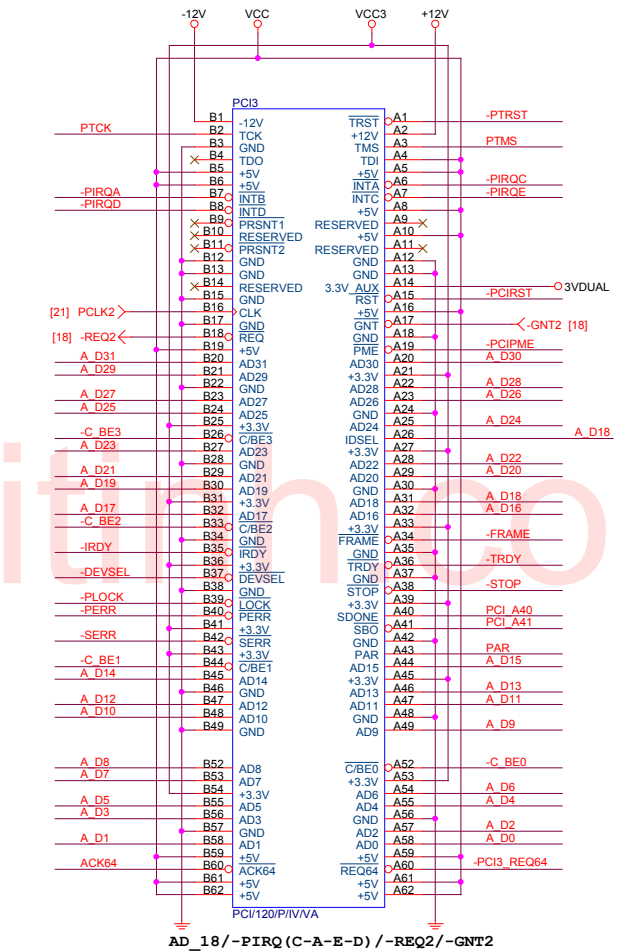
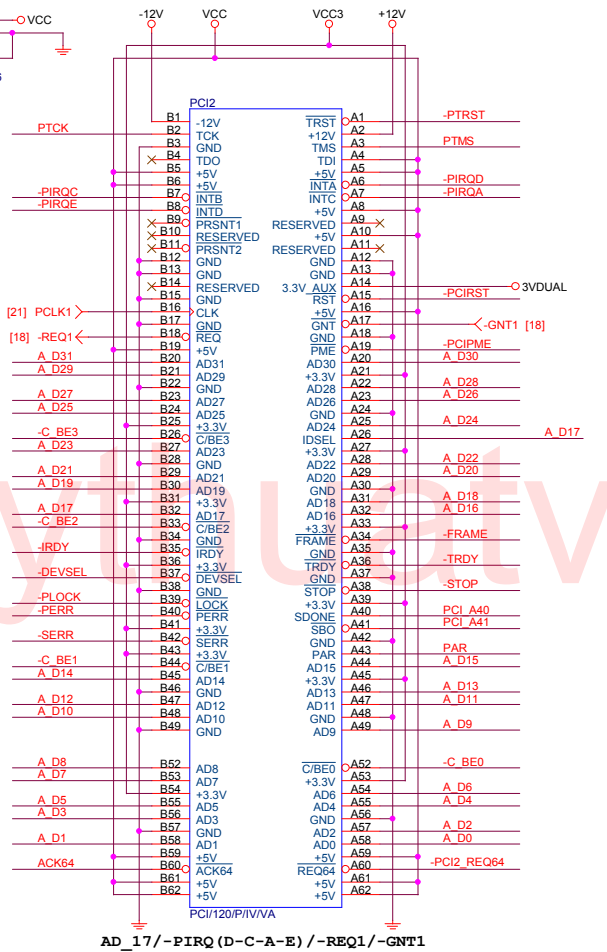
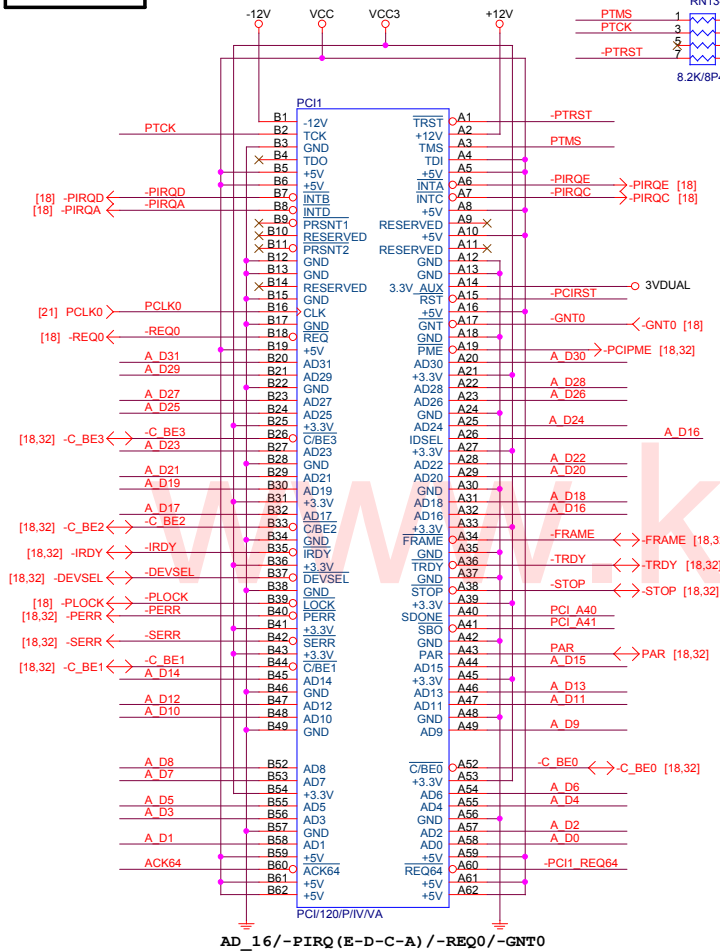
ESD

FOR 漏電

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ICHT7-PWR & GND		
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PCI1, 2 SLOT

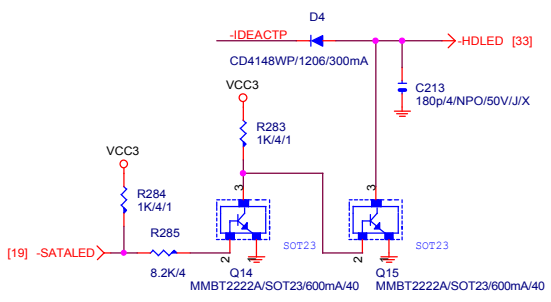


Gigabyte Technology

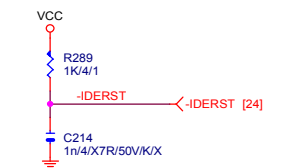
PCI SLOT 1, 2/PCIEX1
945GCM-S2

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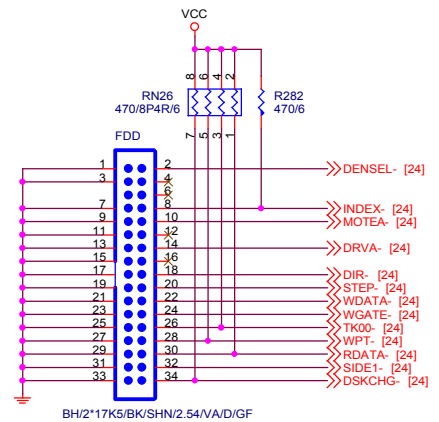
IDE/SATA LED



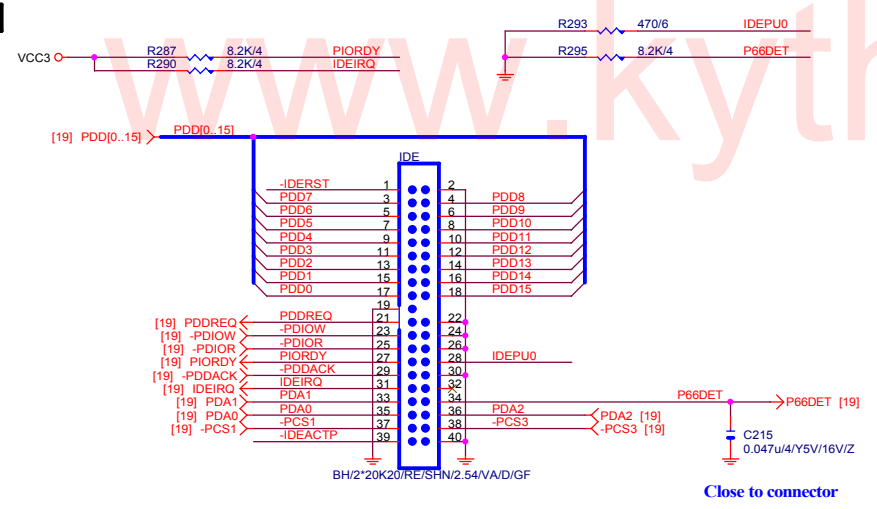
IDE RESET



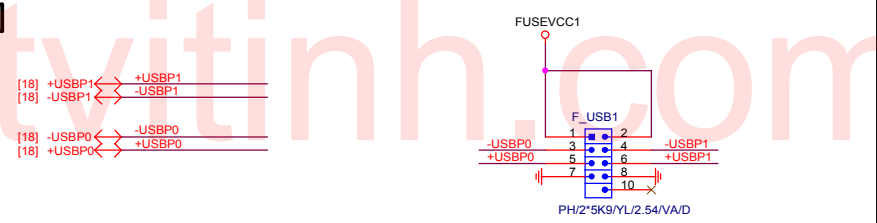
FLOPPY



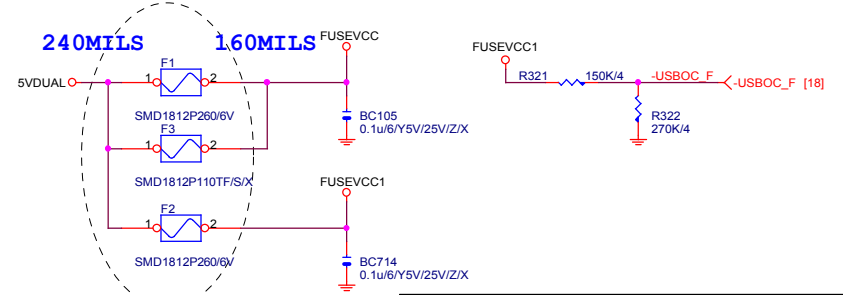
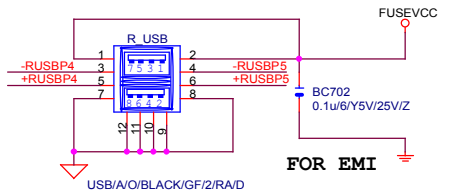
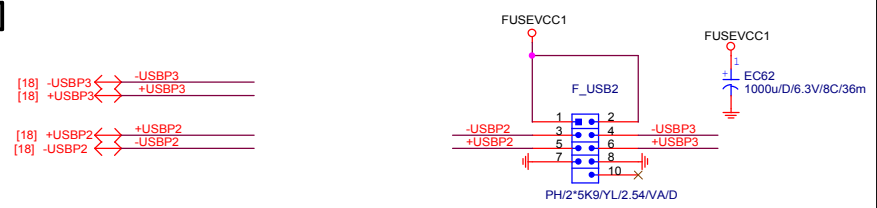
IDE



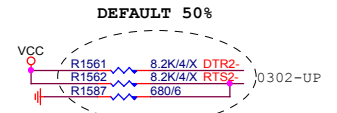
FRONT USB1



FRONT USB2



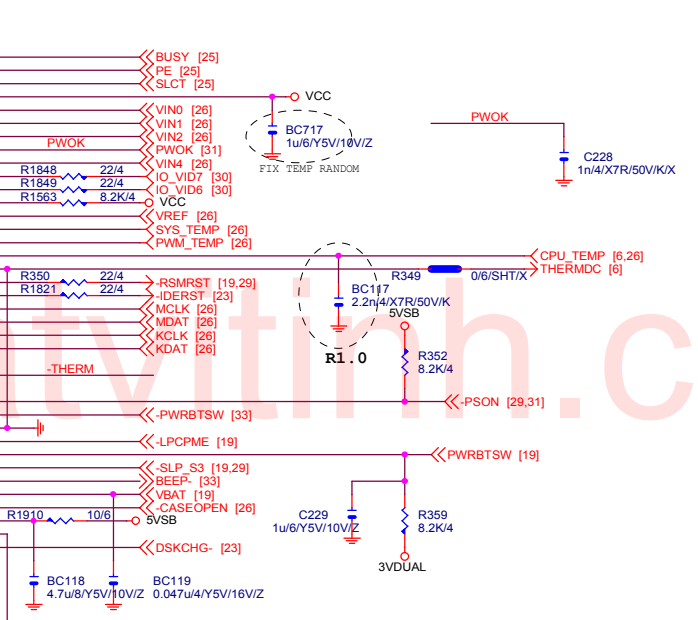
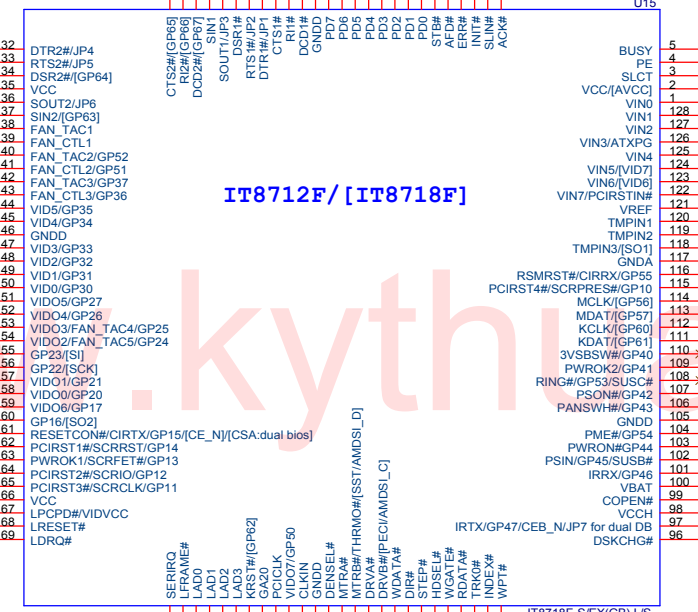
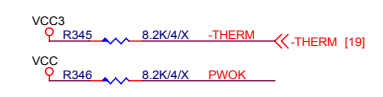
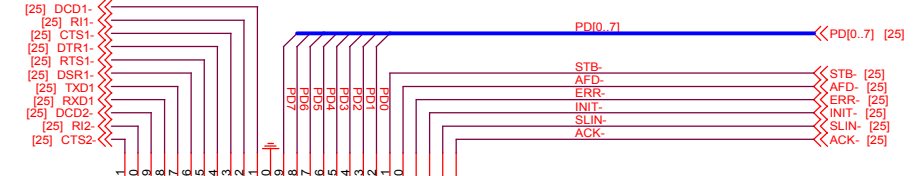
RTS2- ==LOW CPU FAN 50%
 ==HIGH 100%
DEFAULT 50%



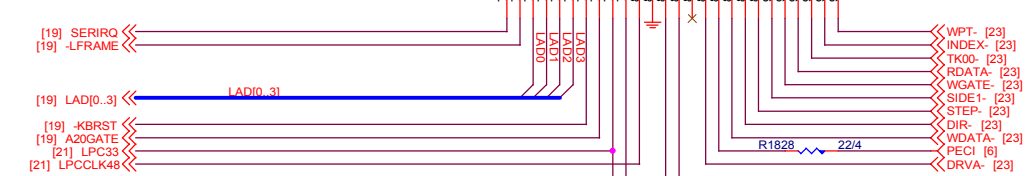
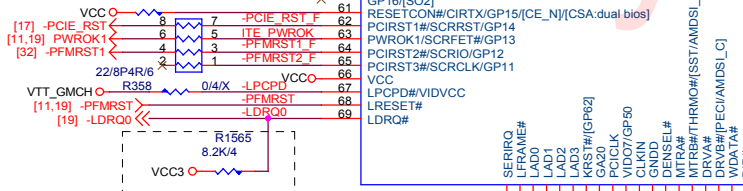
SOUT2	1	VID pins threshold voltage select: Vih / Vil : 2.0 / 0.8V
	0	VID pins threshold voltage select: Vih / Vil : 0.8 / 0.4V



- [25] DTR2- 32
- [25] RTS2- 33
- [25] DSR2- 34
- [25] TXD2 36
- [25] RXD2 37
- [33] FANIO1 38
- [33] FANPWM1 39
- [33] FANIO2 40
- [33] FANPWM3 43
- [30] IO_VID5 44
- [30] IO_VID4 45
- [30] IO_VID3 47
- [30] IO_VID2 48
- [30] IO_VID1 49
- [30] IO_VID0 50
- [51] 51
- [52] 52
- [53] 53
- [54] 54
- [55] 55
- [56] 56
- [57] 57
- [58] 58
- [59] 59
- [60] 60
- [61] 61
- [62] 62
- [63] 63
- [64] 64
- [65] 65
- [66] 66
- [67] 67
- [68] 68
- [69] 69



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JP7 : HIGH DUAL BIOS DISABLE
LOW DUAL BIOS ENABLE

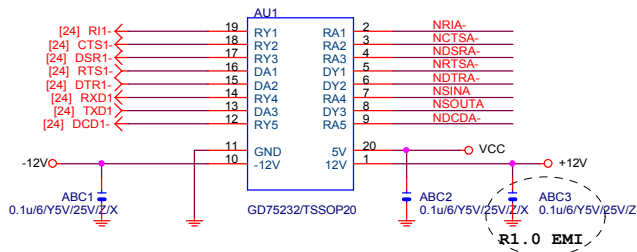


Dual BIOS:
 GB logo :Pin 61 (GP15/CSA)
 GB logo :Pin 59 (GP17/CSB)
 Pin 59 Dual BIOS ,Power On Strapping:
 H ==>Dual BIOS function Enable
 L ==>Dual BIOS function Disable

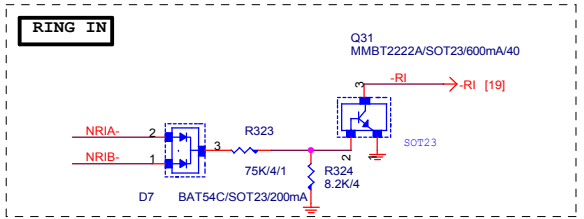
1.2V or 3.3V tolerance select
 1.2V OUTPUT 接 VTT_GMCH
 3.3V OUTPUT 接 3.3V
 LPCPD#=#VIDVCC

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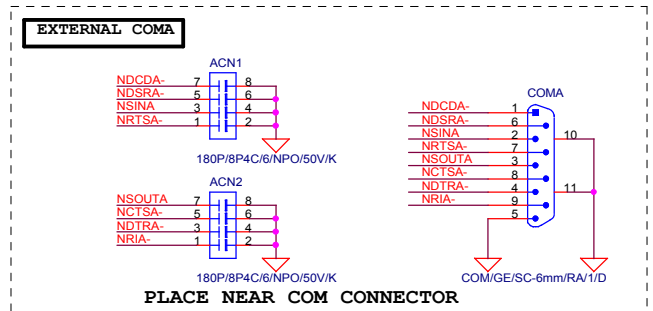
COMA



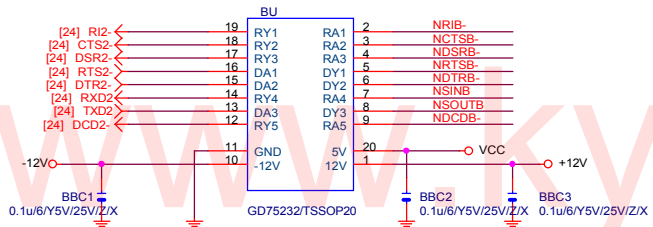
RING IN



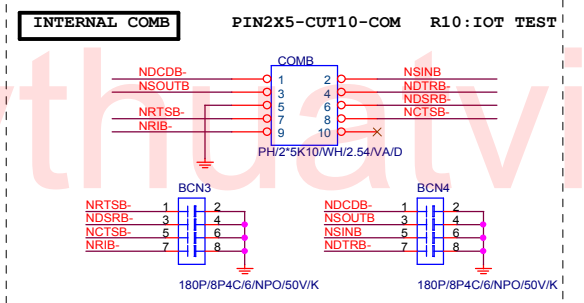
EXTERNAL COMA



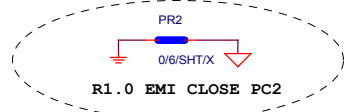
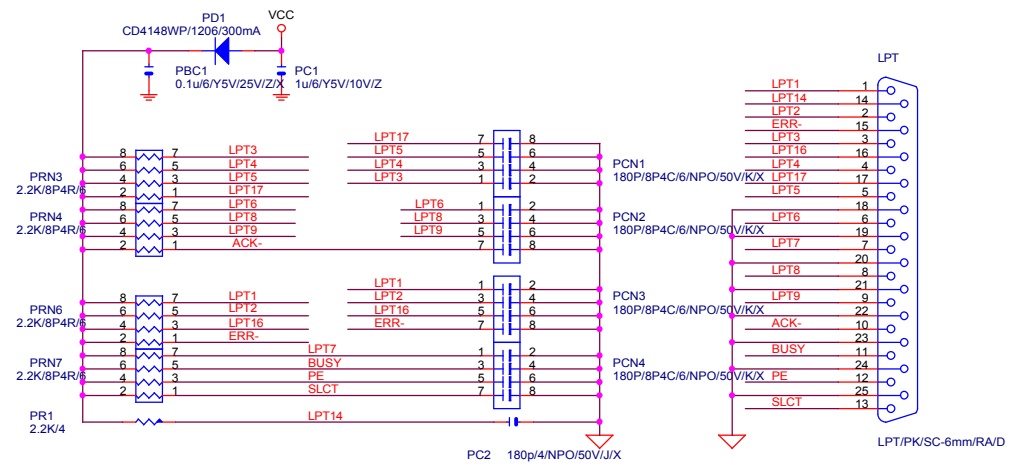
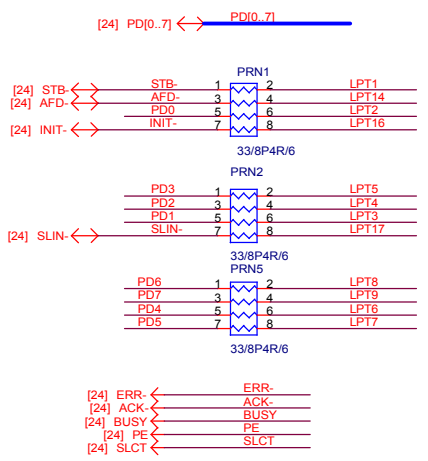
COMB



INTERNAL COMB PIN2X5-CUT10-COM R10:IOT TEST

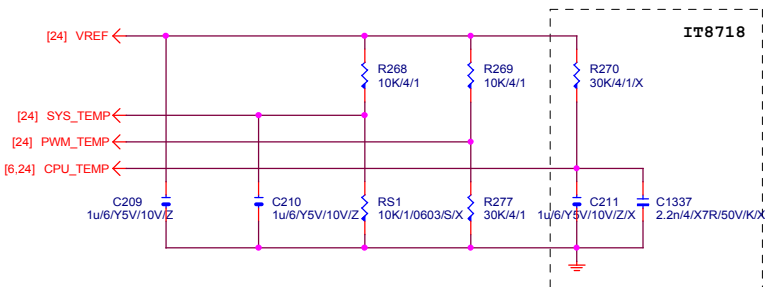


LPT PORT

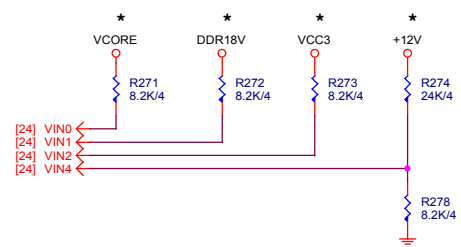


Gigabyte Technology		
COM & LPT PORT		
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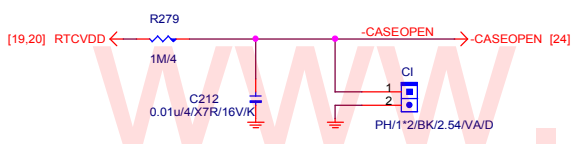
TEMP H/W MONITOR



VOLTAGE-- H/W MONITOR

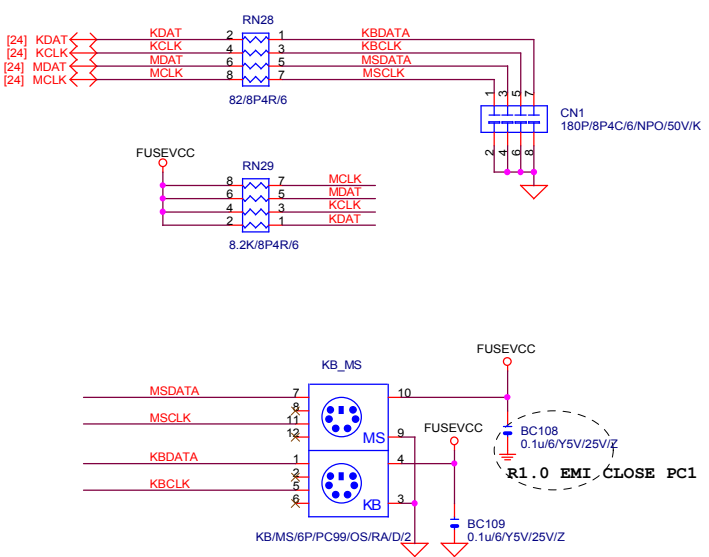


CASE OPEN

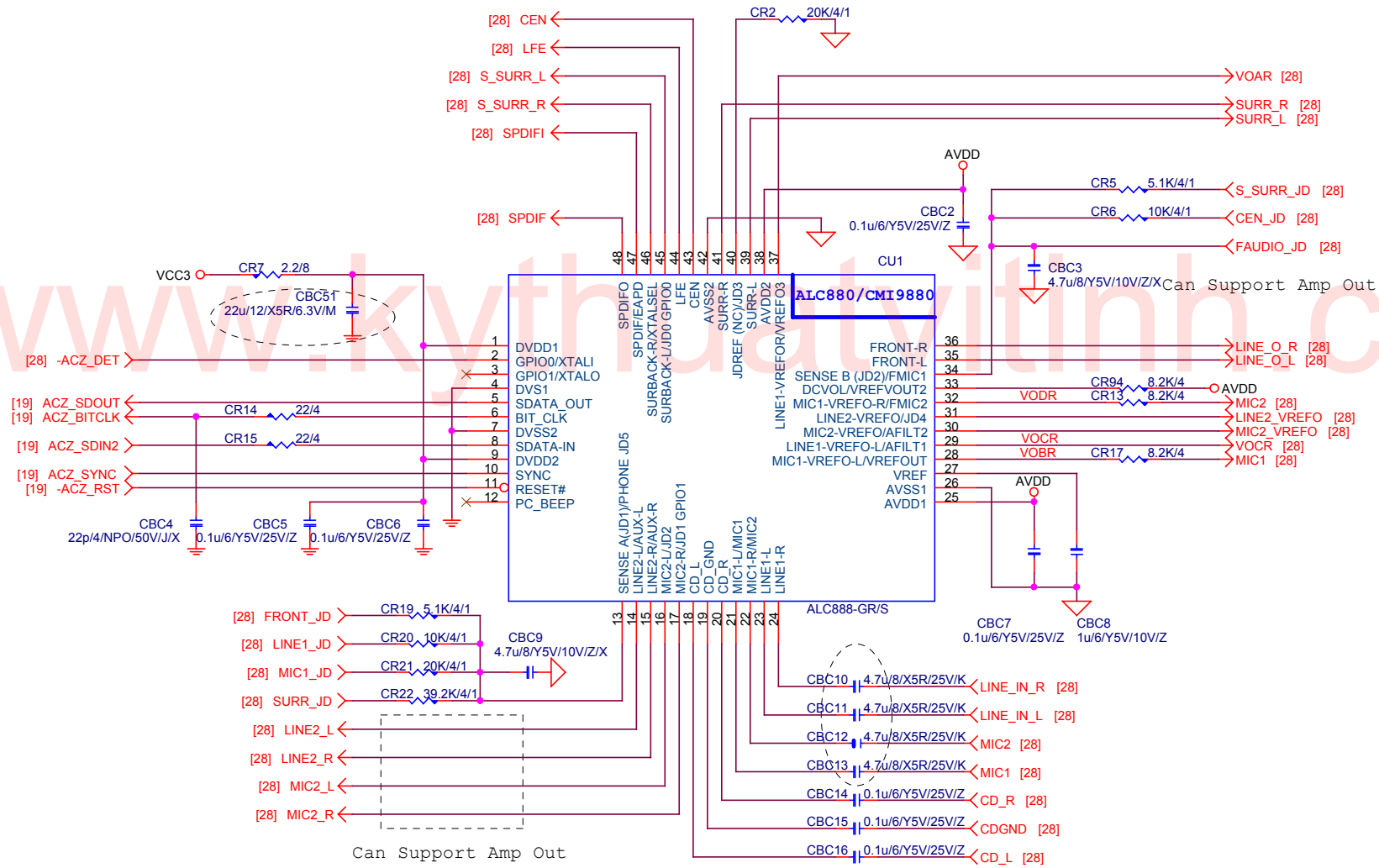


Case Open Circuits

KB/MS



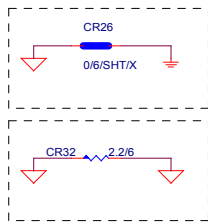
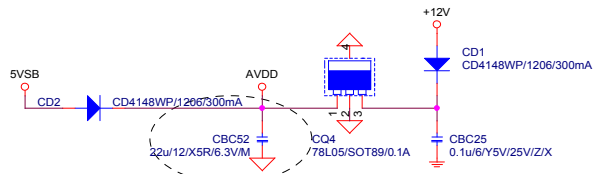
Gigabyte Technology		
BIOS/HW-MONITOR/CI/KB/MS		
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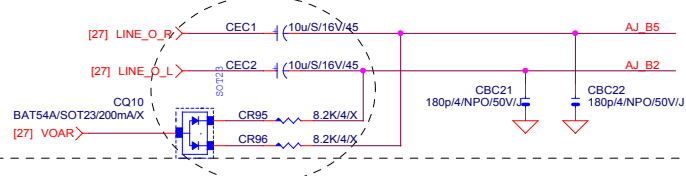
Gigabyte Technology

Title		
AZALIA ALC888		
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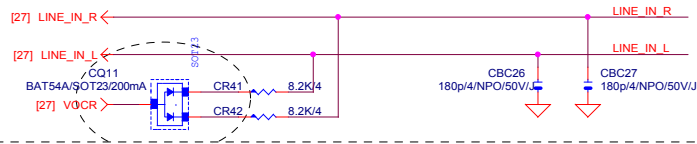
CODEC POWER/EMI PAD



LINE-OUT



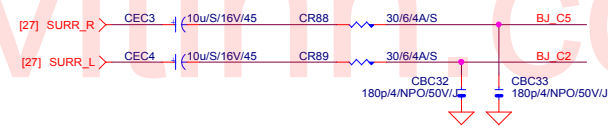
LINE-IN



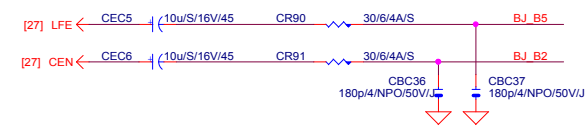
MIC-IN



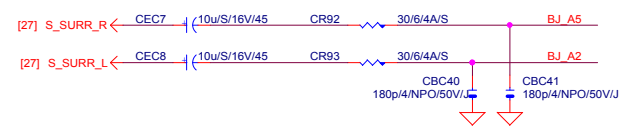
SURROUND



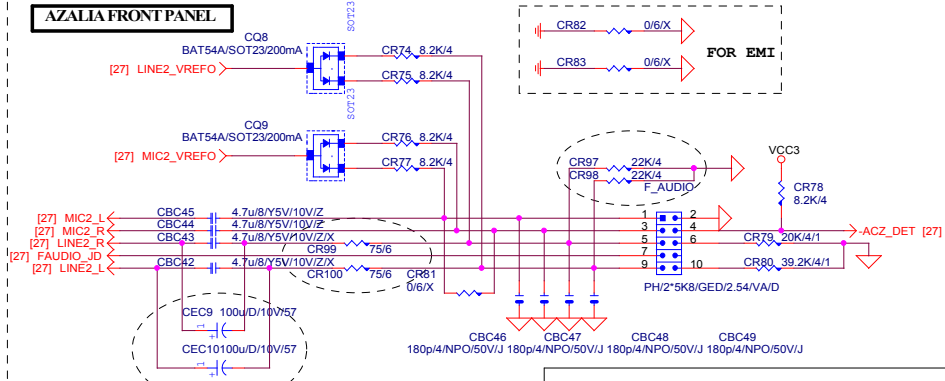
CEN/LFE



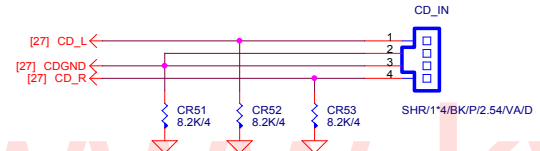
SURRBACK



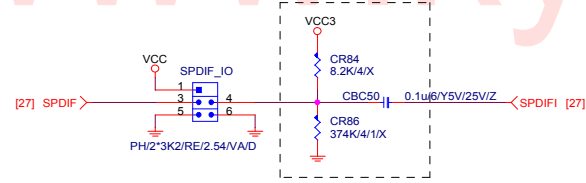
AZALIA FRONT PANEL



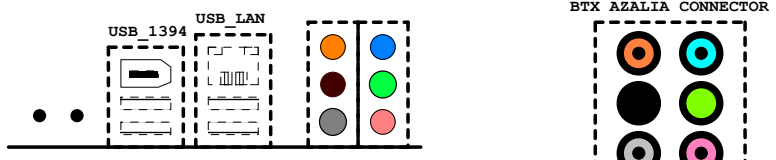
CD IN



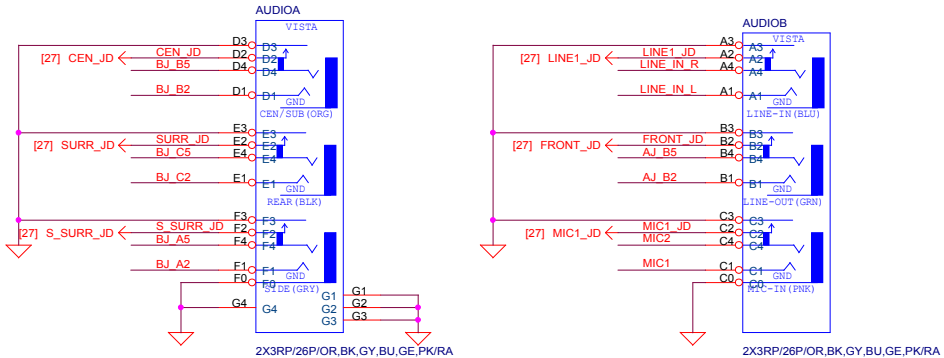
SPDIF



AZALIA JACK

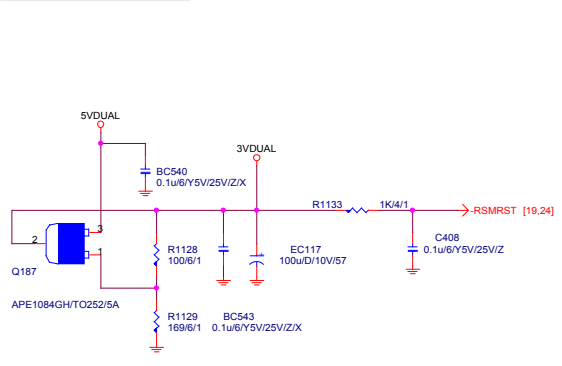


3RP/26P/OR, BK, GY, BU, GE, PK/RA/D/1/B
VISTA規範: REAR-->BLK, CEN/SUB-->ORG

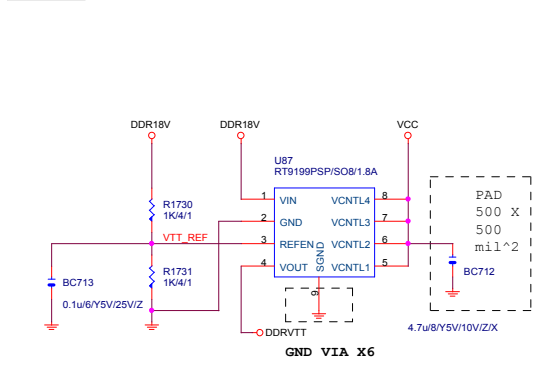


Gigabyte Technology			
AUDIO JACK			
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Custom			
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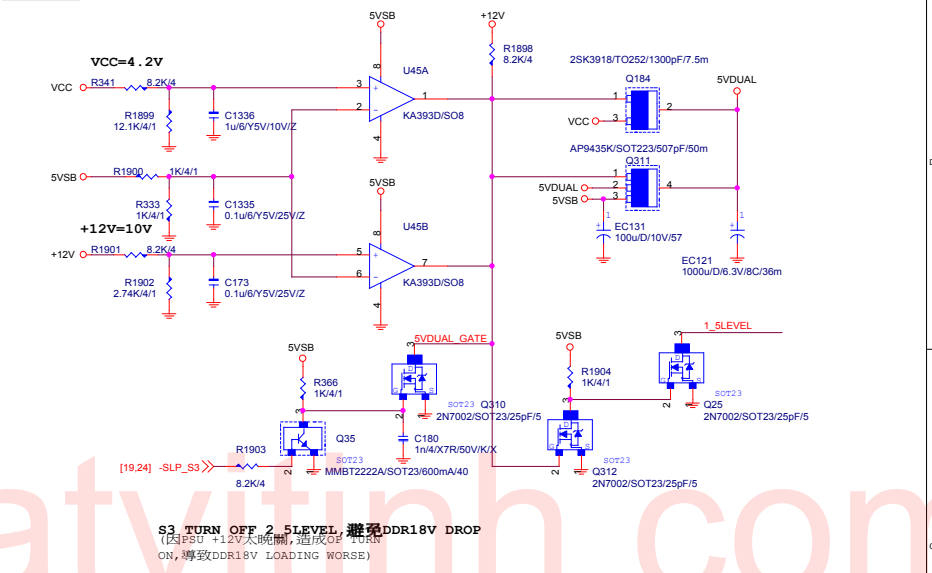
3VDUAL



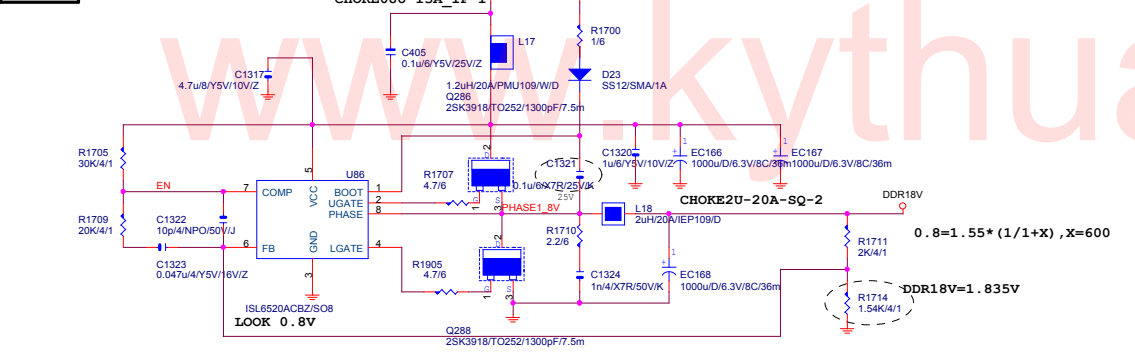
DDRVTT



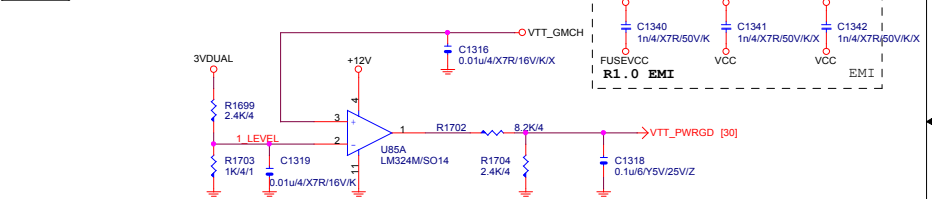
5VDUAL



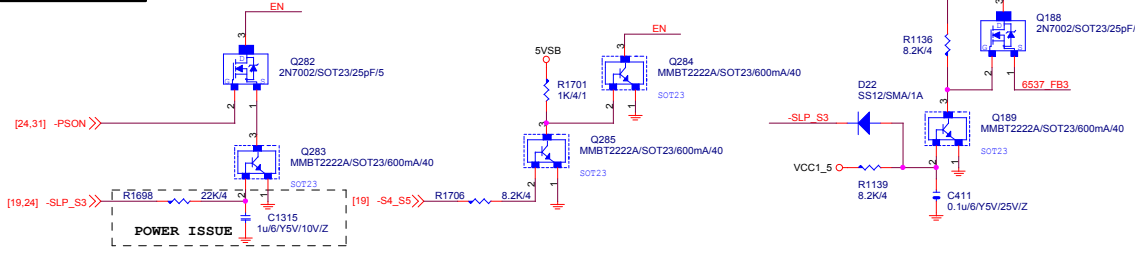
DDR18V



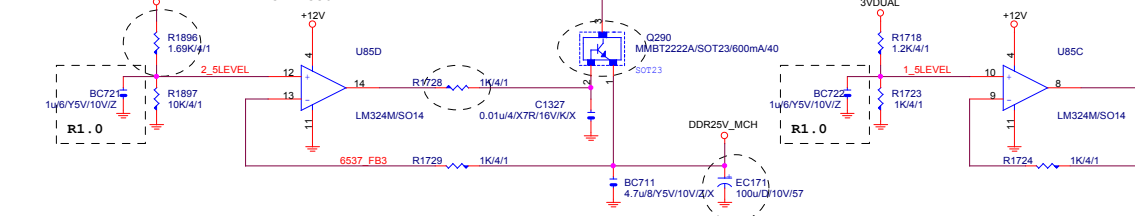
POWER

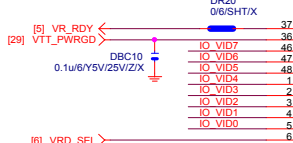
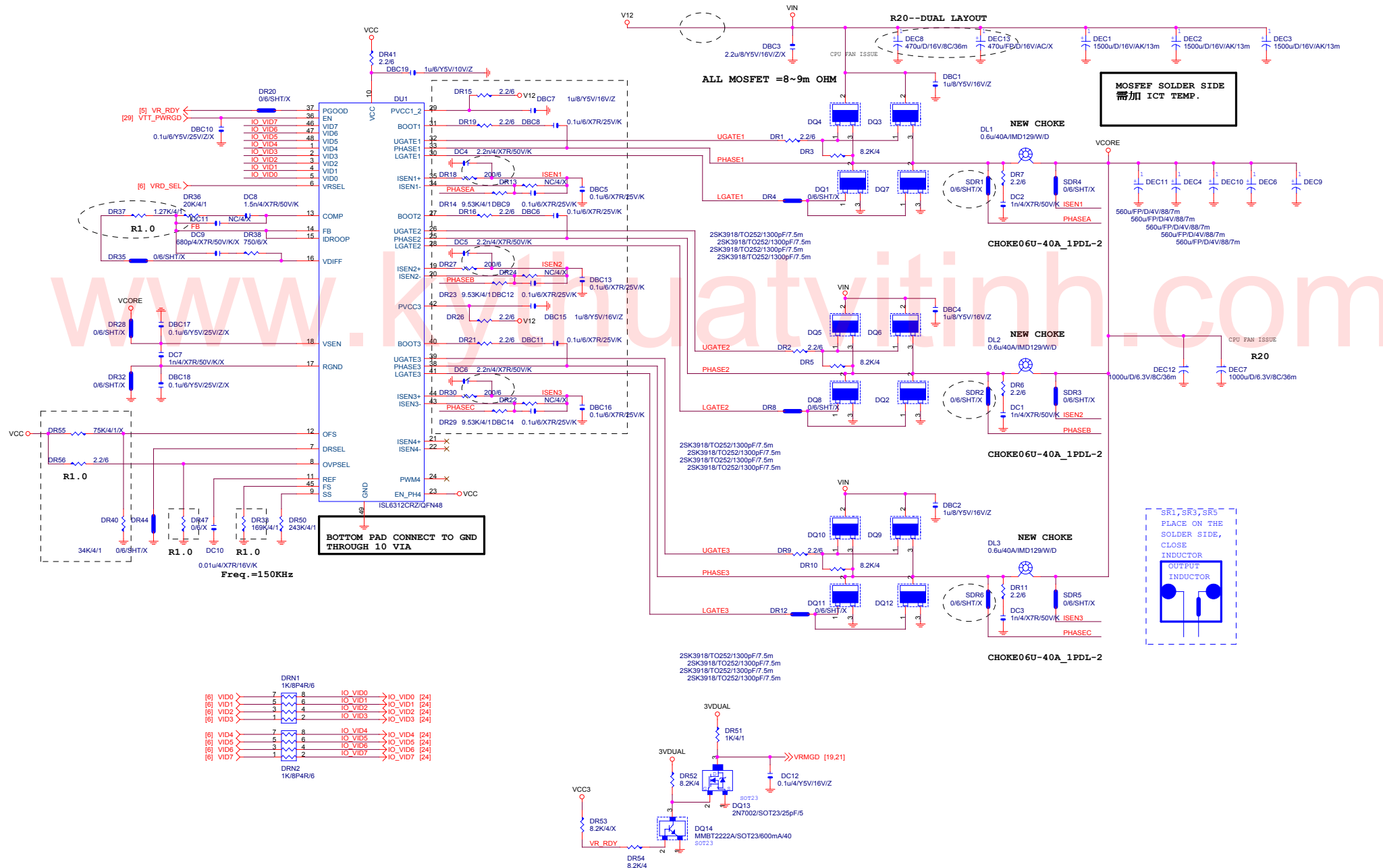


POWER SEQUENCY



FIX DATA-SW ISSUE

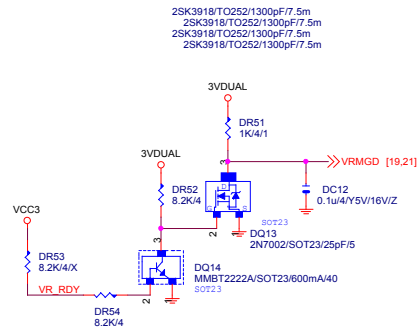
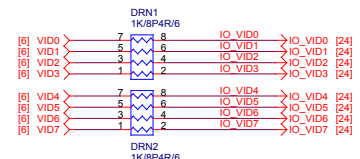
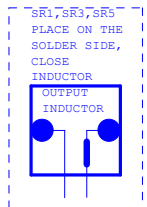




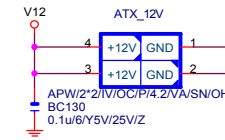
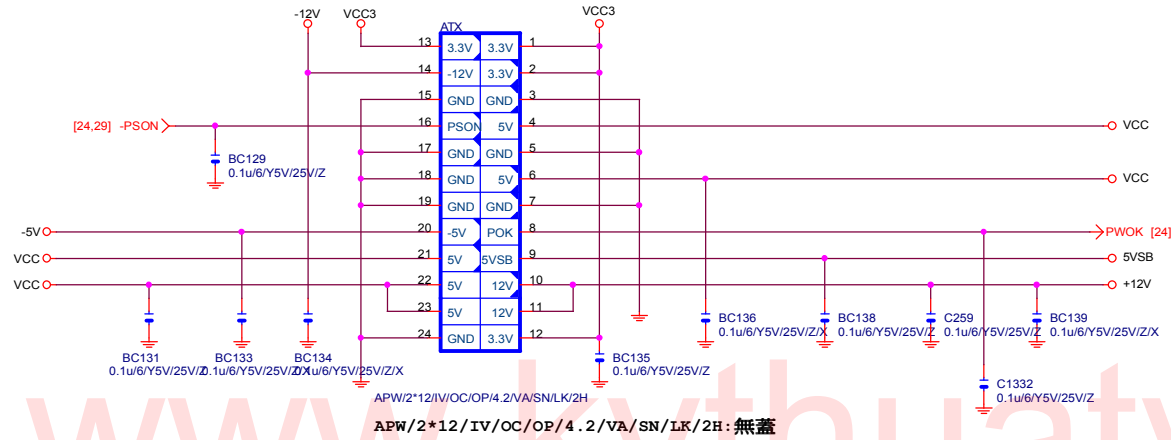
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BOTTOM PAD CONNECT TO GND THROUGH 10 VIA

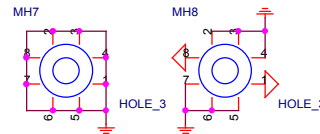
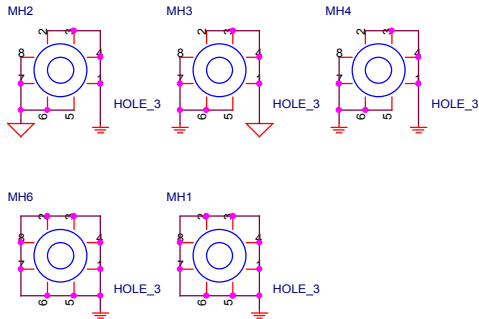
MOSFET SOLDER SIDE 帶加 ICT TEMP.



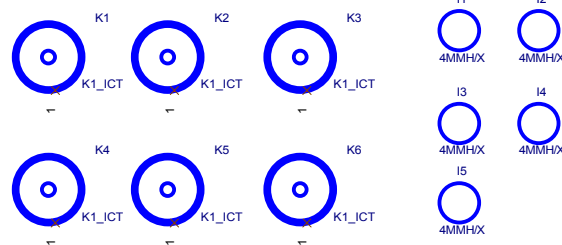
ATXPWR_24-2
ATX POWER CONNECTOR



HOLE_3-RH-2



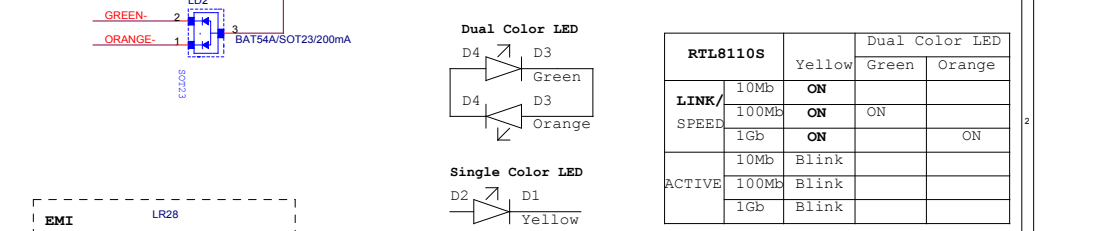
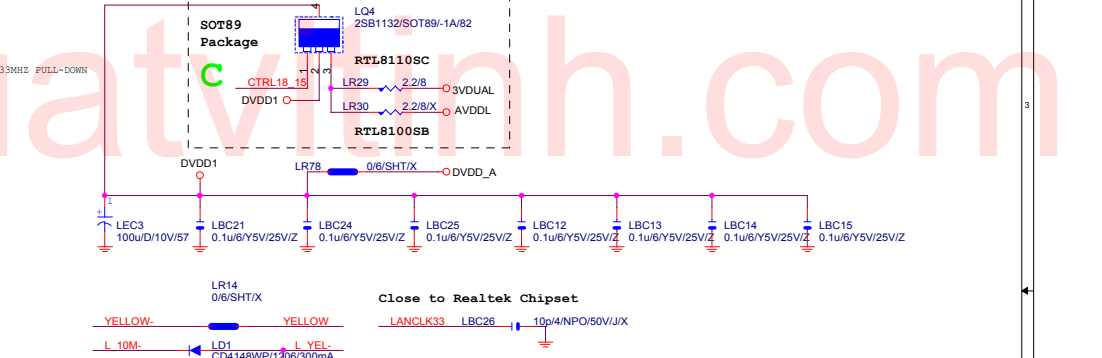
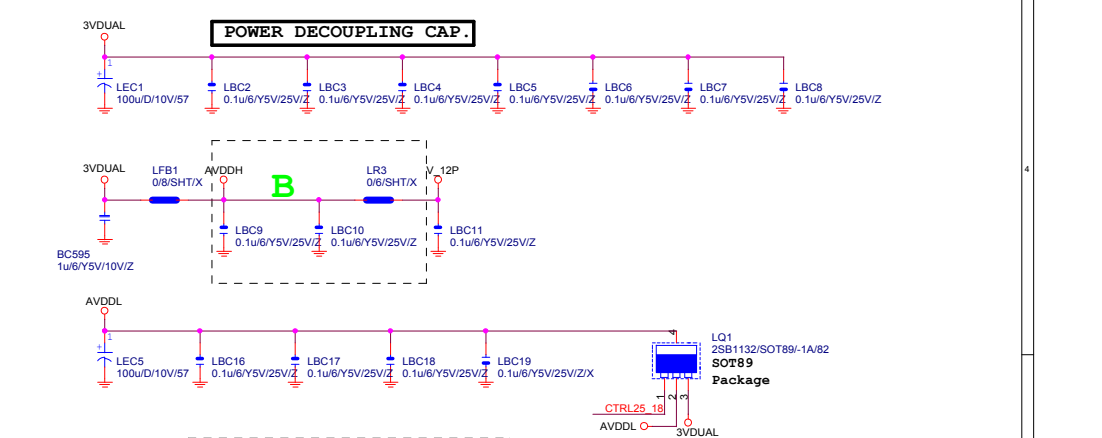
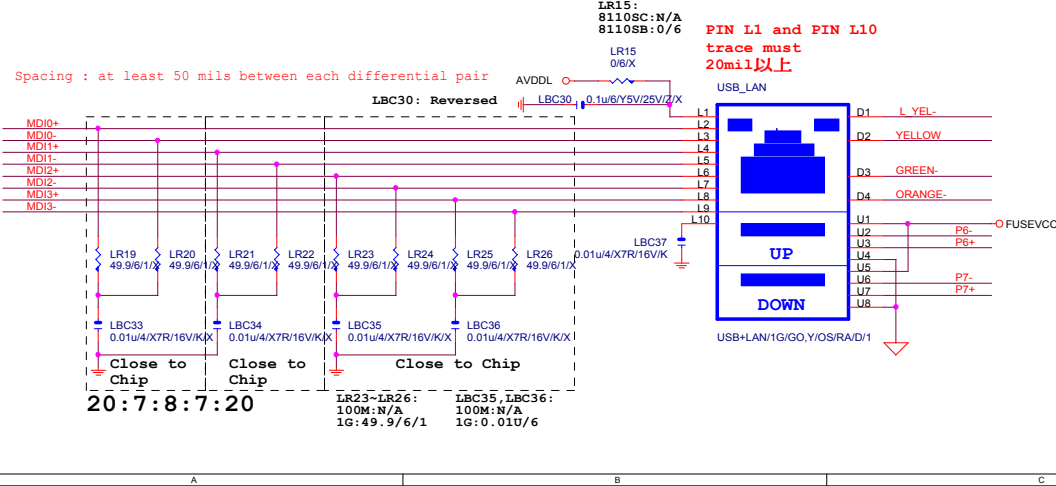
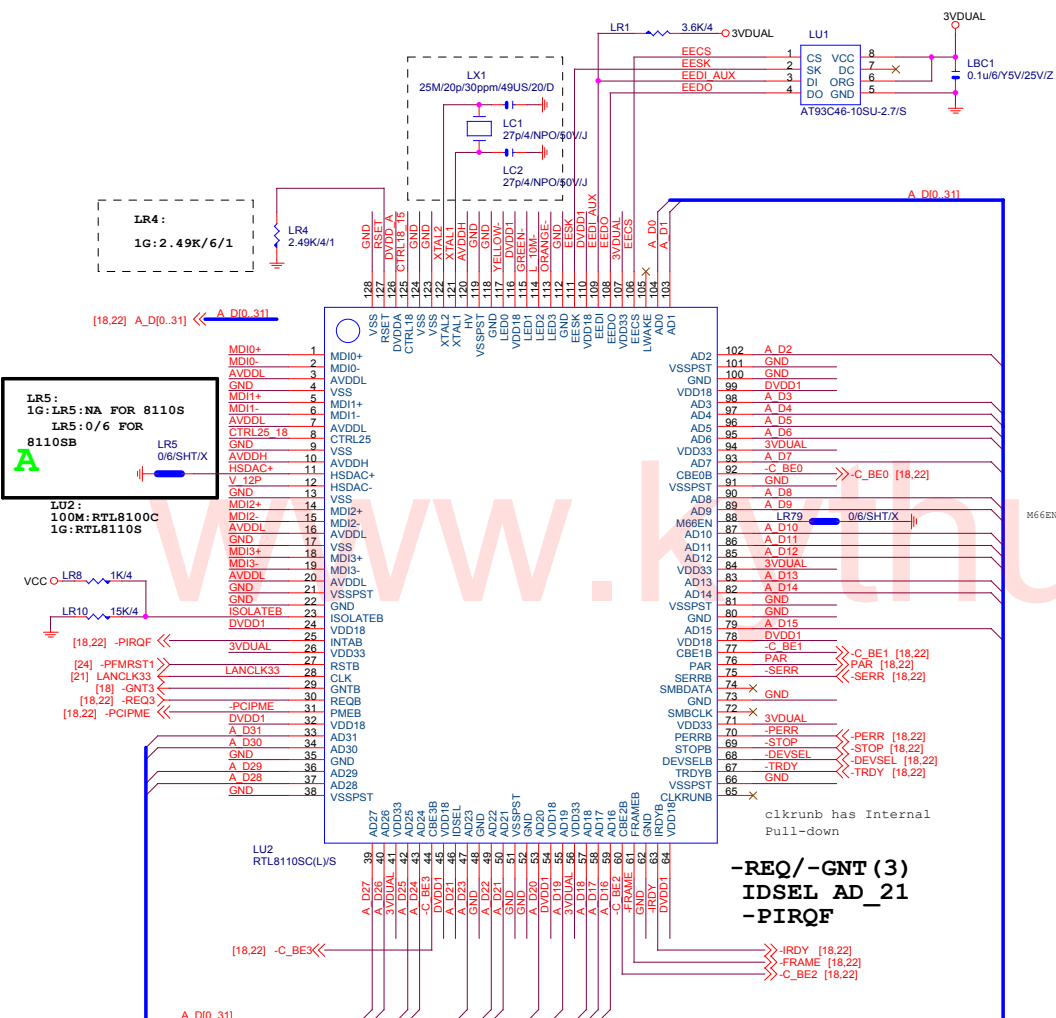
HOLE_3-RH-5MM



Gigabyte Technology

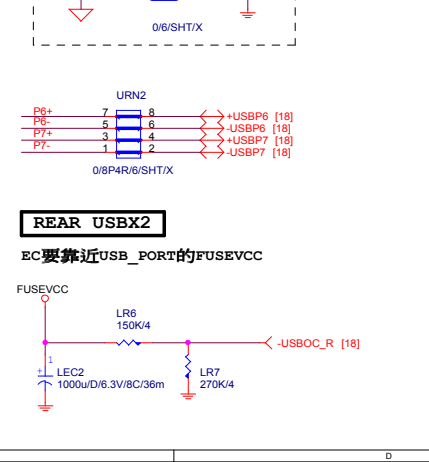
ATX POWER CONNECTOR

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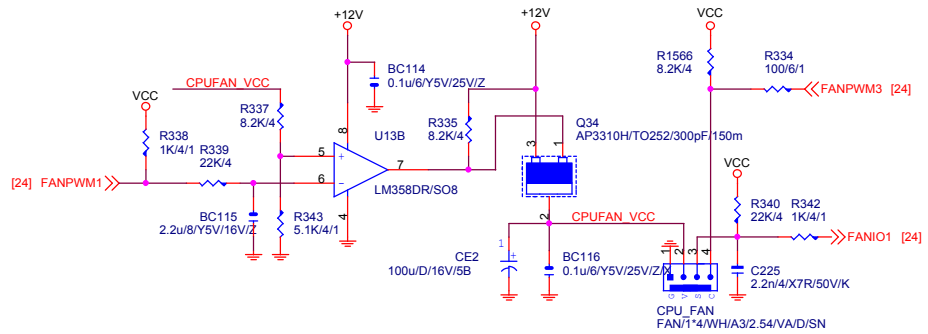


RTL8110S		Dual Color LED		
		Yellow	Green	Orange
LINK/SPEED	10Mb	ON		
	100Mb	ON	ON	
	1Gb	ON		ON
ACTIVE	10Mb	Blink		
	100Mb	Blink		
	1Gb	Blink		

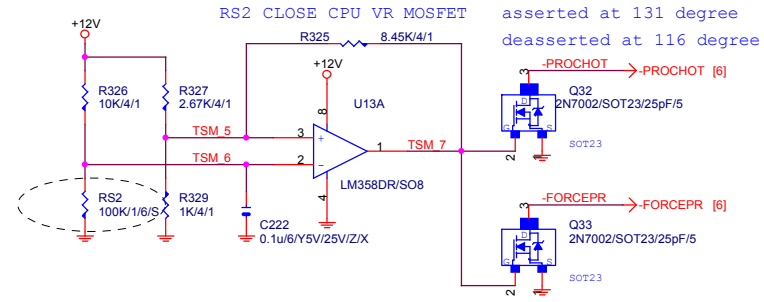
	RTL8100C	RTL8110S/ RTL8169S	RTL8110SB/ RTL8169SB	RTL8110SC
AVDDH	N/A	3.3AVDD	3.3AVDD	3.3AVDD
V_12P	2.5AVDD	N/A	3.3AVDD	3.3AVDD
AVDDL	3.3AVDD	2.5AVDD	2.5AVDD	1.8AVDD
V_DAC	N/A	2.5AVDD	2.5AVDD	N/A
DVDD	2.5VDD	1.8VDD	1.2VDD	1.5VDD
DVDD_A	N/A	1.8AVDD	1.2AVDD	1.5AVDD



CPU SMART FAN SMART FAN

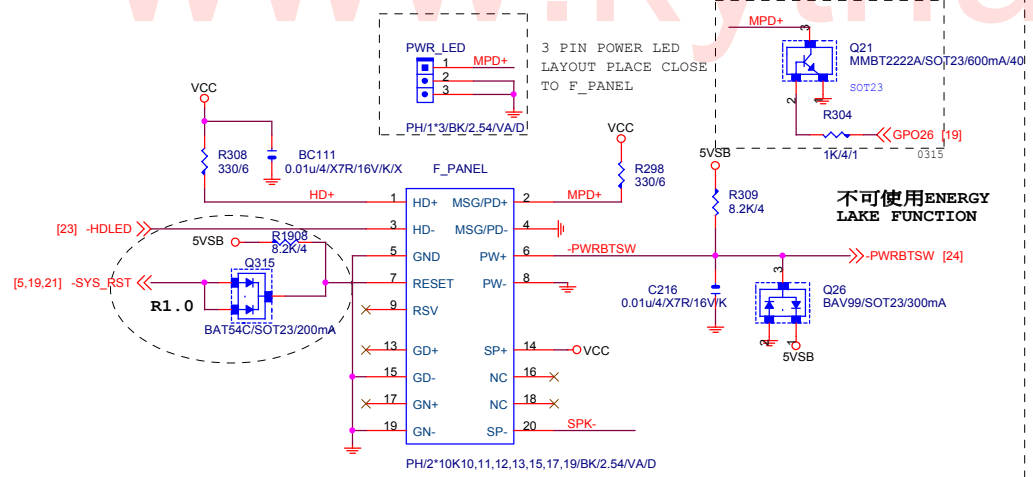


PROCESSOR HOT

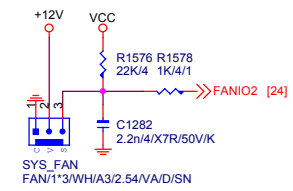


INTEL FRONT PANEL

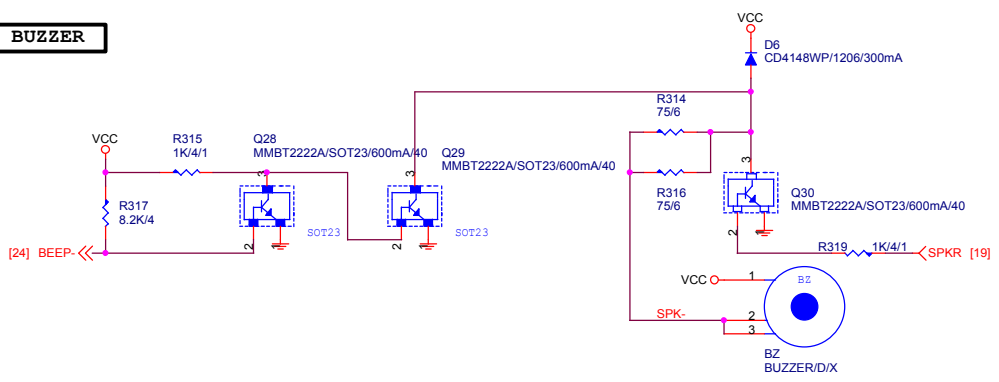
MPD- : (GPIO25--VCCSUS3+HI+HI+DEFINED (C3/C4/S/1/S3/S/4/S5))-->INTEL



SYS_FAN



BUZZER



Gigabyte Technology		
FRONT PANEL		
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