Model Name: 8I945GMF

Revision 1.1

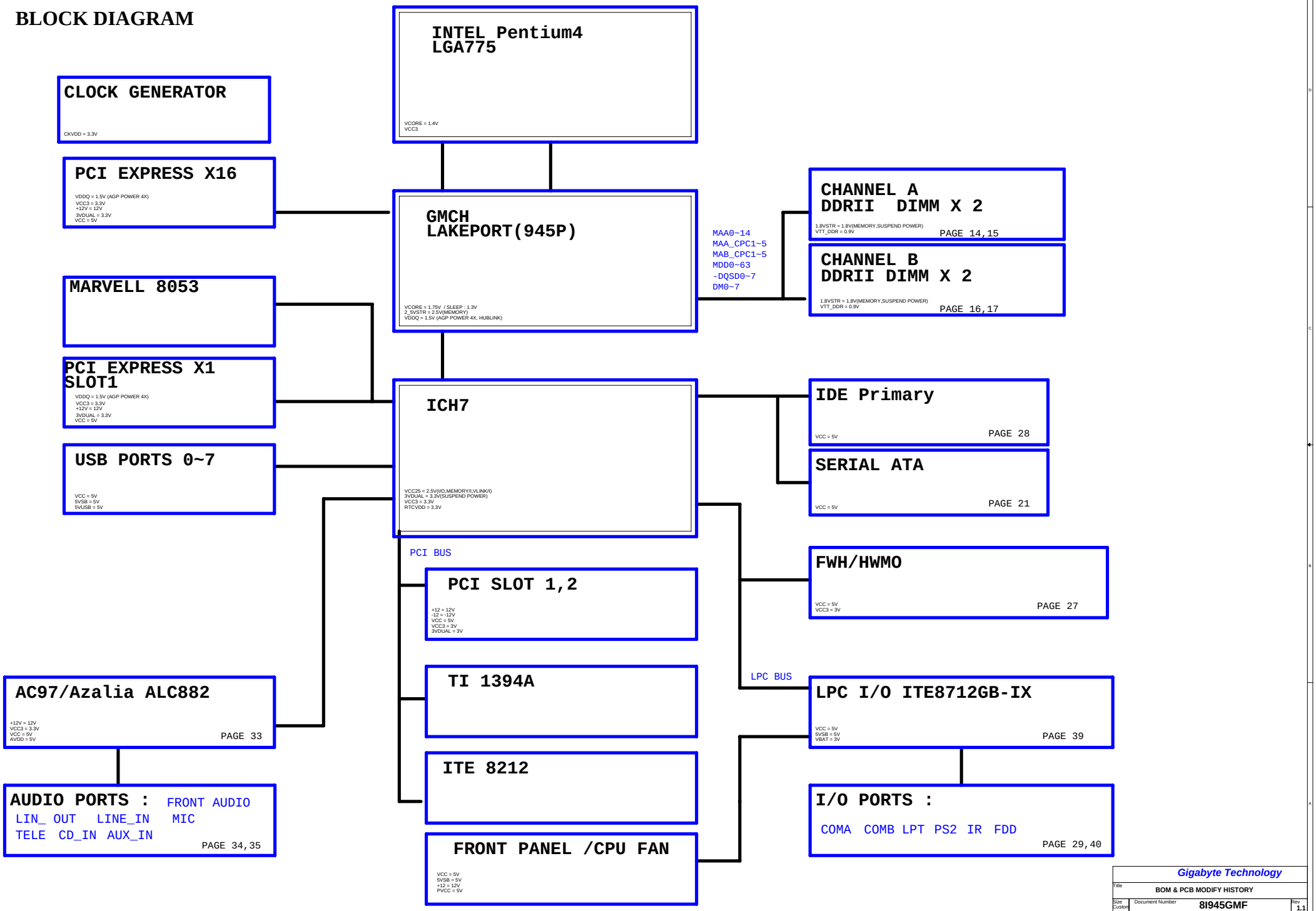
SHEET	TITLE
01	COVER SHEET
02	BLOCK DIAGRAM
03	BOM & PCB MODIFY HISTORY
04	P4_LGA775_A
05	P4_LGA775_B
06	P4_LGA775_C
07	P4_LGA775_D,E,F,G
08	GMCH-LAKEPORT_HOST
09	GMCH-LAKEPORT_DDRII
10	GMCH-LAKEPORT_PCI E, DMI
11	GMCH-LAKEPORT_INT VGA
12	GMCH-LAKEPORT_GND
13	GMCH-LAKEPORT_PWR
14	DDRII CHANNEL A 1,2
15	DDRII CHANNEL B 1,2
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 CLOCK.
22	PCI SLOT 1,2,PCIE*1
23	IDE/FLOPPY
24	ITE 8712 GBIX
25	COM_LPT
26	BIOS,CI,HWM,KB/MS
27	ALC882

SHEET	TITLE
28	REAR AUDIO JACK
29	TI TSB43AB23 1394
30	MARVELL 88E8053
31	VCORE PWM_ISL6556
32	DISCRETE POWER
33	ATX, OTHERS POWER
34	FRONT PANEL

Gigabyte Technology

Title	Cover Sheet	
Size: Custom	Document Number: 8I945GMF	Rev: 1.1
Date: Tuesday, November 08, 2005	Sheet 1 of 34	

BLOCK DIAGRAM



Gigabyte Technology

Title	BOM & PCB MODIFY HISTORY	
Size: Custom	Document Number: 8I945GMF	Rev: 1.1
Date: Tuesday, November 08, 2005	Sheet 2 of 34	

Model Name: 8I945GMF

Version: 1.1

Component value change history

2005/11/03

Data	Change Item	Reason
2005/03/02	945P+ICH7	NEW BOM
2005/03/18	REV 1.0 :9M8I945GMF-00-10A	1.945G/A2+ICH7R/A1
2005/03/21	BOM:9M8I945GMF-00-10A ECN	1.CR85:10/6->0/6
		2.DQ1,DQ2,DQ3,DQ4,DQ5,DQ6,DQ7,DQ8,DQ9 DQ10,DQ11,DQ12,DQ38,DQ39,DQ40,DQ41, DQ42,DQ43 change [10IF4-083918-01R _10IF4-492409- 01R_10IF4-098880-10R]
		3.Q37:10IF4-254003-01/10IF4-200408-01 10IF4-332003-01]
2005/03/21	BOM:9M8I945GMF-00-10A ECN	1.REMOVE CR86 2.CR85:0/6->0.1U/6
2005/03/30	BOM:9M8I845GMF-00-10A ECN	1.ALC882 改無鉛 2.PCIE-16 SLOT CHANGE
2005/04/04	BOM:9M8I945GMF-00-10A ECN	1.REMOVE SB_HS
2005/04/13	BOM:9M8I945GMF-00-10A ECN	1.包材變更:12BB2-EEI945-00--> 12BB2-M30000-00
2005/04/27	BOM:9M8I945GMF-00-10B MP	1.修改包材 2.ADD PWR LED
2005/05/01	BOM:9M8I945GMF-00-10B ECN	1.FIX FSB1066 CPU 高溫下頻率跳動issue
2005/05/05	BOM:9M8I845GMF-00-10B-ECN	1.包材加替料
2005/5/18	BOM:9M8I9145GMF-00-10C	1.LR6:4.99K/6/1-->4.75K/6/1 2.RF_ID connector change white
2005/06/06	BOM:9M8I945GMF-00-10D	1.1394 change ROHS
2005/07/25	BOM:9M8I945GMF-00-10E	1.FIX SVDO Issue
2005/10/03	BOM:9M8I945GMF-00-10E ECN	1.U11 Add WINBOND FLASH
2005/11/03	BOM:9M8I945GMF-00-11A	1.改版REV1.1

Circuit or PCB layout change for next version

DATE	Change Item	Reason

Gigabyte Technology

Title: BOM & PCB MODIFY HISTORY

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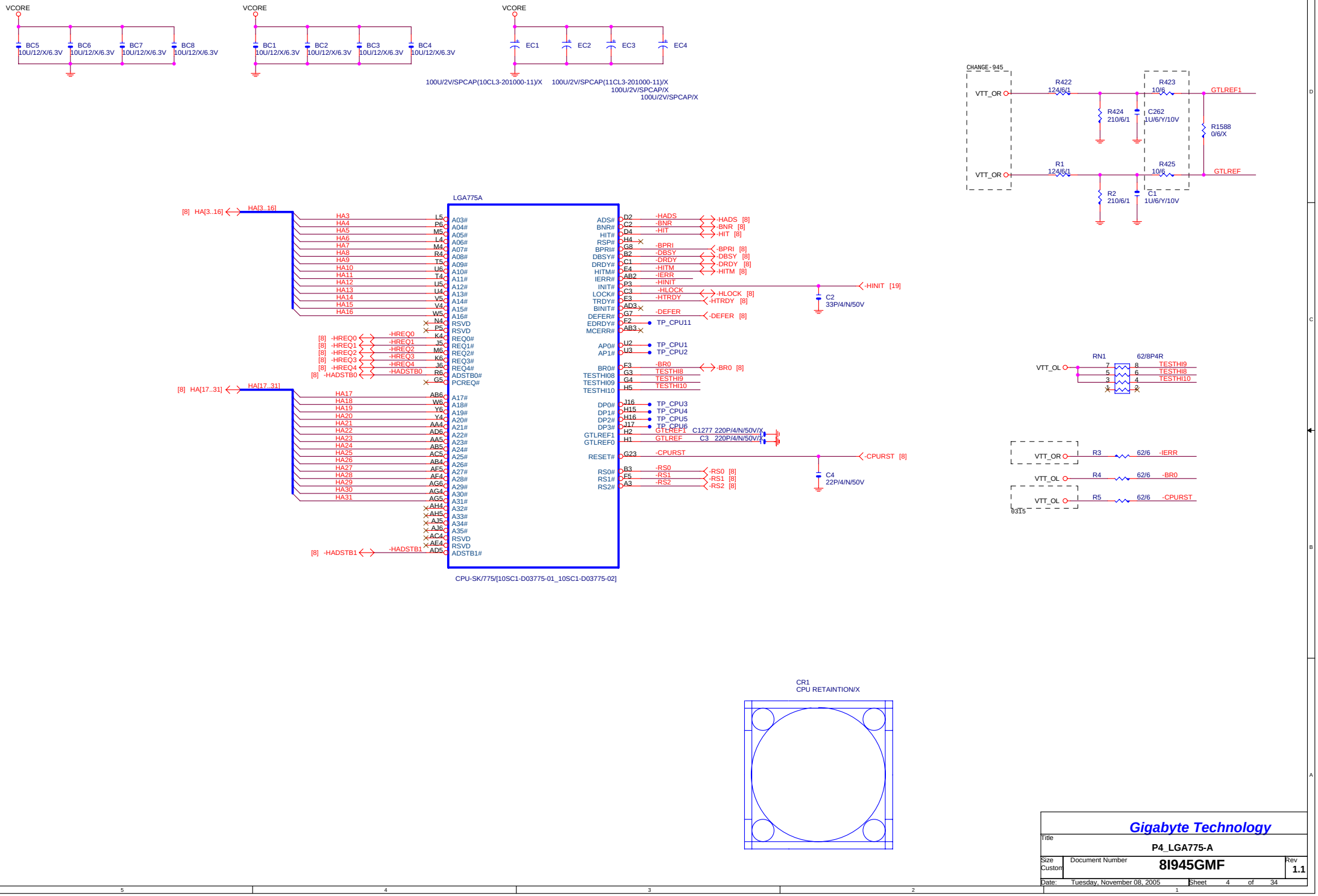
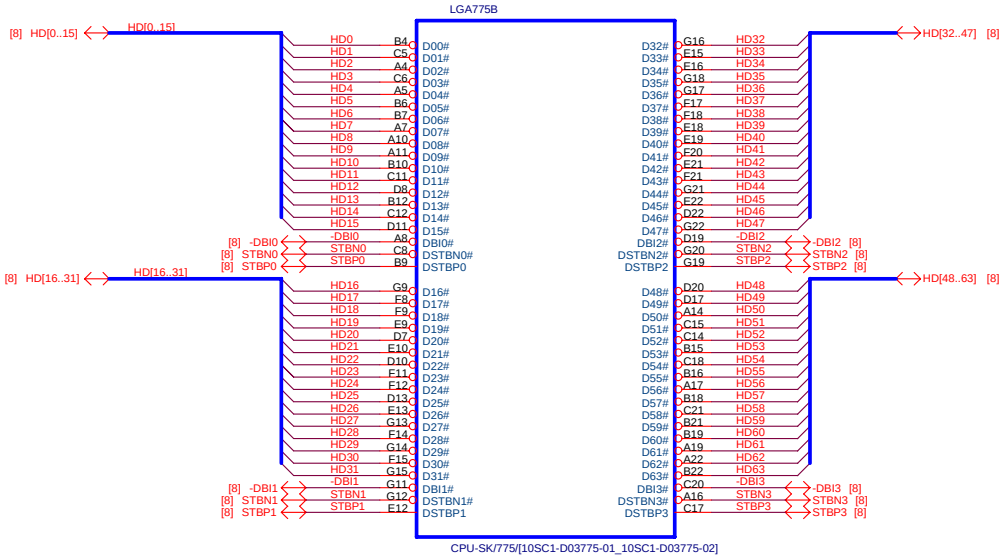


Gigabyte Technology			
Title	P4_LGA775-A		
Size: Custom	Document Number: 8I945GMF		Rev: 1.1
Date: Tuesday, November 08, 2005	Sheet 4 of 34		



Gigabyte Technology		
Title	P4_LGA775-C	
Size: Custom	Document Number: 8I945GMF	Rev: 1.1
Date: Tuesday, November 08, 2005	Sheet 5 of 34	

Note:

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

VCCA:120~220mA

VTT_GMCH — L1 10UH/0806/120mA/S/[10LI2-12100A-02_10LI2-12100A-13] — VCCA

C8 1U/6/Y/10V — BC9 4.7U/8/Y/10V/X — R16 0/SHT/X — VSSA

C9 1U/6/Y/10V — BC10 4.7U/8/Y/10V/X — VCOREPLL

L2 10UH/0806/120mA/S/[10LI2-12100A-02_10LI2-12100A-13]

VCOREPLL:100mA

Trace width doesn't less than 12 Mil

As close as possible to CPU socket

VCC3 — R10 249/6/1 — Q1 2N7002/S — SOT23 — TESTHI0 — [8] GTL_DET

VTT_GMCH — R6 62/6/X — TESTHI0 — C7 0.1U/6/Y/25V

VCC3 — R1568 110/6/1 — R1569 61.9/6/1

support p4 extreme:1.5V

Place outside of CPU socket

VTT_OL — R7 60.4/6/1 COMP5; R8 COMP4; R9 COMP2; R11 COMP3; R13 COMP0; R14 COMP1 — C5 0.1U/6/Y/25V

VTT_OR — R1547 COMP6; R1548 COMP7 — C1278 0.1U/6/Y/25V

VTT_OR — R17 130/6 -PROCHOT — RN2 470/8P4R

VTT_GMCH — FSBSEL0; FSBSEL2; FSBSEL1

R18 62/6 TESTHI2_7

R19 62/6 -THRMTRIP

R20 62/6 -FERR

Locate at ICH7 Side

VTT_OL — R21 62/6/X RSVD_G6; R22 100/6 CPUPWROK — C11 1N/4/X/50V

-STPCLK — C10 33P/4/N/50V

LGA775C

[19] -SMI P2; [19] -A20M K3; [19] -FERR R3; [19] INTR K1; [19] NMI L1; [19] -IGNNE N2; [19] -STPCLK M3

VCCA A23; VSSA B23; VCOREPLL C23

[31] VID[0..5] → VID0 AM2; VID1 AL5; VID2 AM3; VID3 AL6; VID4 AK4; VID5 AL4; AM5; AM7; AN7

R426 62/6 — [21] CPUCLK F28; [21] -CPUCLK G28; [19] -SKTOCC AE8

[24,26] CPU_TEMP; [24] THERMDC — AL1; AK1

TP_CPU12 AN3; TP_CPU13 AN4; VCC_SENSE AN5; VSS_SENSE AN6

TP_CPU10 — F29; F6

R1589 62/6/X; R427 62/6 MSID1 V1; R428 62/6 MSID0 W1; N5; AE6

SMI# A20M# FERR#/PBE# LINT0 LINT1 IGNNE# STPCLK# VCCA VSSA RSVD VCCIOPLL VID0 VID1 VID2 VID3 VID4 VID5 VID6 VID7 VID_SELECT BCLK0 BCLK1 SKTOCC# THERMDA THERMDC VCC_SENSE VSS_SENSE RSVD RSVD VTT_PKGSENSE IMPSEL MSID1 MSID0 RSVD RSVD

TESTHI00 F26 TESTHI0; TESTHI01 W3 TESTHI1; TESTHI11 P1 TESTHI11; TESTHI12 W2 TESTHI12; TESTHI02 F25; TESTHI03 G25; TESTHI04 G27; TESTHI05 G26; TESTHII06 G24; TESTHI07 F24 TESTHI2_7; RSVD AK6 -FORCEPR; RSVD G6 RSVD_G6

SLP# L2 TESTHI13; RSVD AH2; PWRGOOD N1 CPUPWROK; PROCHOT# AL2 -PROCHOT; THERMTRIP# M2 -THRMTRIP

COMP0 A13 COMP0; COMP1 T1 COMP1; COMP2 G2 COMP2; COMP3 R1 COMP3; COMP4 J2 COMP4; COMP5 T2 COMP5; COMP6 Y3 COMP6; COMP7 AE3 COMP7; RSVD C9; RSVD G10; RSVD D16; RSVD A20

N/C F23; N/C E23 TP_CPU9; N/C E7 TP_CPU8; N/C E24 TP_CPU7

CS_GTLREF H29 MCH_GTLREF [8]; GTLREF_SEL GTL_DET [8]; N/C J3

BOOTSELECT Y1; LL_ID0 V2; LL_ID1 AA2

CPU-SK/775/[10SC1-D03775-01_10SC1-D03775-02]

BC20 1N/4/X/50V/X — C12 1N/4/X/50V/X — 0318 — 0302-UP

VCC_SENSE — BC173 10U/12/X/6.3V/X — VSS_SENSE

LGA775D

TCK AE1; TDI AD1; TDO AE1; TMS AC1; -TRST AG1

-BPM0 AJ2; -BPM1 AJ1; -BPM2 AD2; -BPM3 AG2; -BPM4 AF2; -BPM5 AG3

[19,21,34] -SYS_RST → -SYS_RST AC2

AK3; AJ3

FSBSEL0 G29; FSBSEL1 H30; FSBSEL2 G30

TCK TDI TDO TMS TRST# BPM0# BPM1# BPM2# BPM3# BPM4# BPM5# DBR# ITPCLK0 ITPCLK1 BSEL0 BSEL1 BSEL2

VTT_GMCH

VTT A29; VTT B25; VTT B29; VTT B30; VTT C29; VTT A26; VTT B27; VTT C28; VTT A25; VTT A28; VTT A27; VTT C30; VTT A30; VTT C25; VTT C26; VTT C27; VTT B26; VTT D27; VTT D28; VTT D25; VTT D26; VTT B28; VTT D29; VTT D30

VTTPWRGD AM6 VTT_PWRGD → VTT_PWRGD [31,32]

VTT_OUT AA1 → VTT_OR; VTT_OUT J1 → VTT_OL; VTT_SEL F27 R38 1K/6/X → VCC3

CPU-SK/775/[10SC1-D03775-01_10SC1-D03775-02]

VTT_OR — R27 680/6 — VTT_PWRGD

VTT_OL — RN3 62/8P4R TESTHI12; TESTHI11; TESTHI1; TESTHI13

VTT_OR — RN4 680/8P4R VID5; VID4; VID2; VID0; R29 680/6 VID1; R30 680/6 VID3

C13 0.1U/6/Y/25V

R32 62/6 -FORCEPR

RN5 62/8P4R -BPM1; -BPM0; -BPM5; -BPM4; RN6 -BPM2; -BPM3; TDI; TMS

C14 0.1U/6/Y/25V

R35 62/6 TDO

R36 62/6 -TRST

R37 62/6 TCK

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

CPU

FSA	FSB	NA		
FSBSEL0	FSBSEL1	FSBSEL3	Clock	
1	0	1	100MHz	X
1	0	0	133MHz	
1	1	0	166MHz	RATIO
0	1	0	200MHz	2.66/3.33
0	0	0	266MHz	2.00/2.5

[21] FSBSEL0 — FSBSEL0 R39 8.2K/6 BSEL0 — BSEL0 [11]

[21] FSBSEL1 — FSBSEL1 R40 8.2K/6 BSEL1 — BSEL1 [11]

[21] FSBSEL2 — FSBSEL2 R41 8.2K/6 BSEL2 — BSEL2 [11]

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Title: P4_LGA775-B

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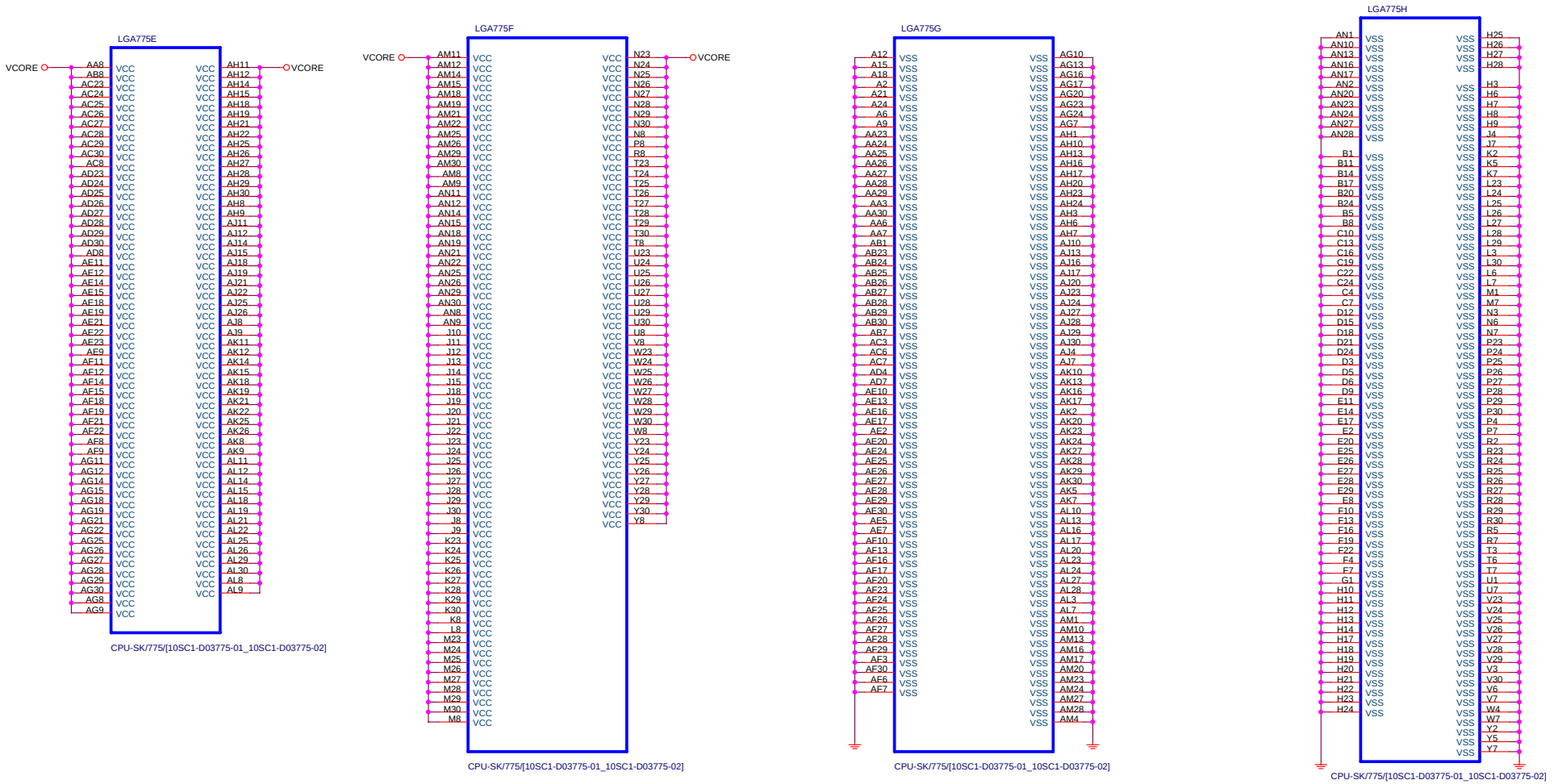
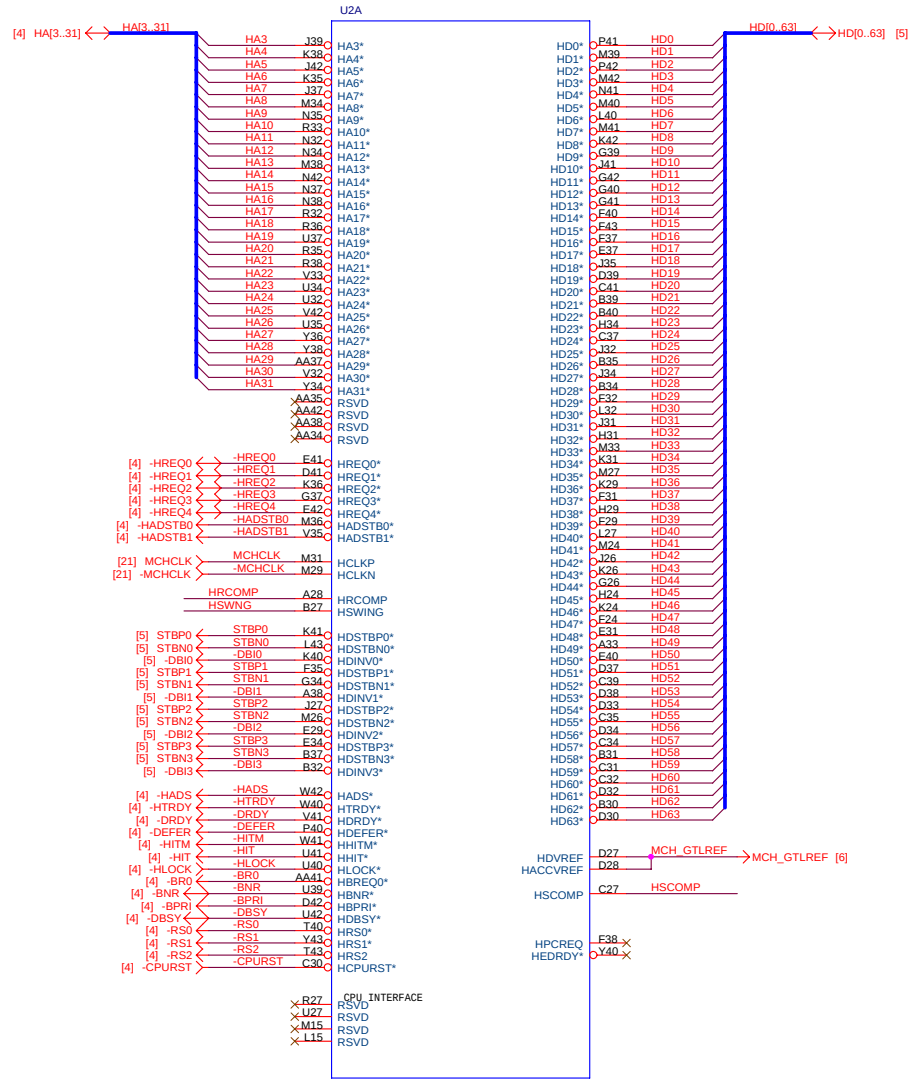
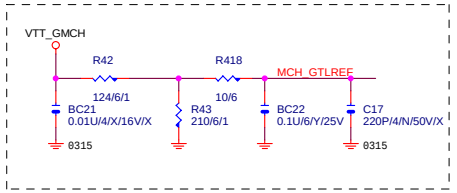
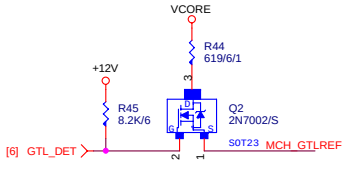
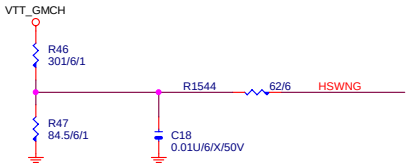


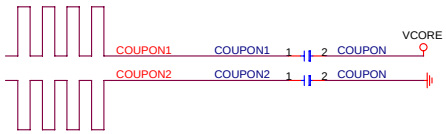
Gigabyte Technology			
Title	P4_LGA775-D		
Size: Custom	Document Number: 8I945GMF		Rev: 1.1
Date: Tuesday, November 08, 2005	Sheet 7 of 34		



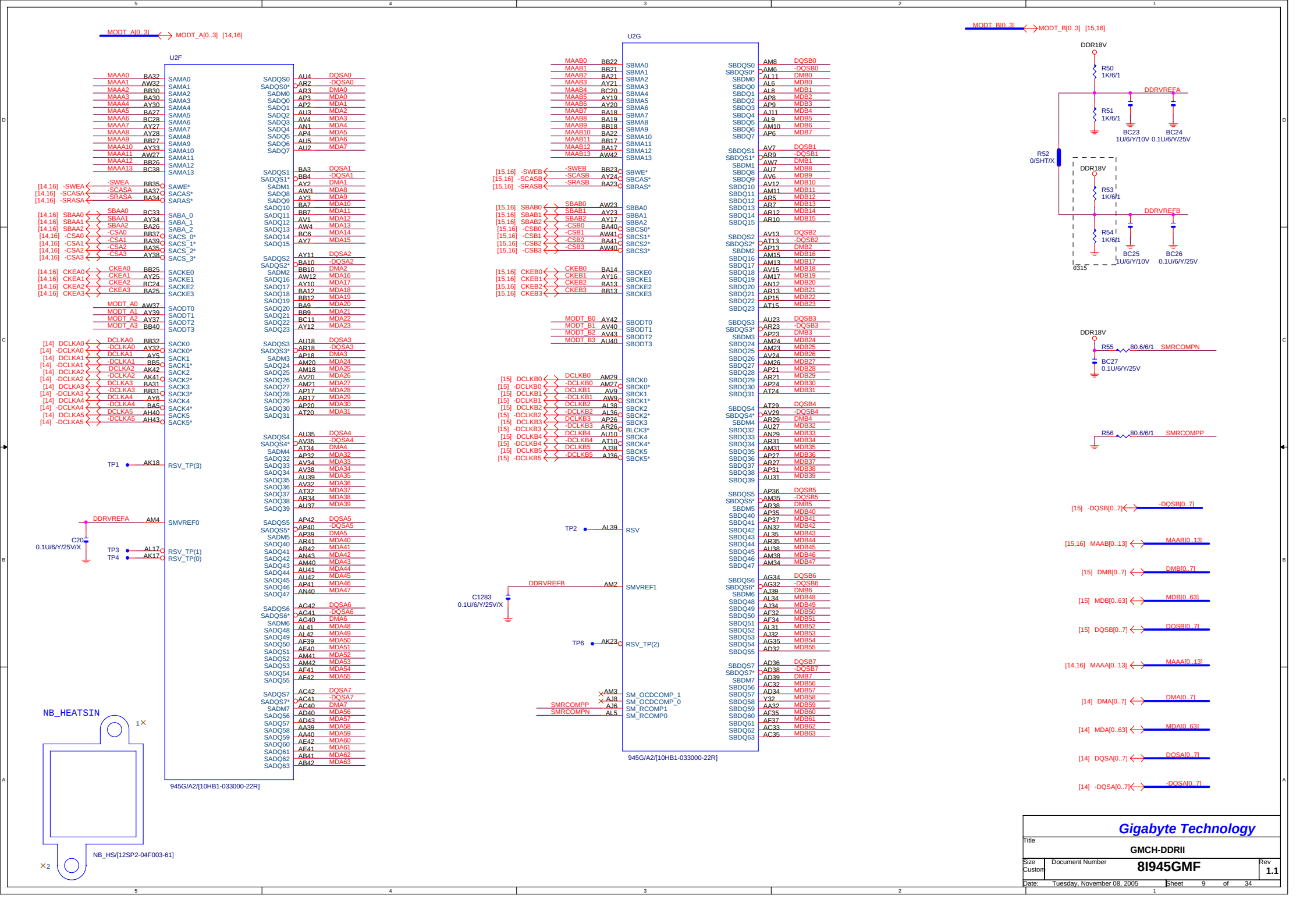








Gigabyte Technology		
Title: GMCH-HOST		
Size: Custom	Document Number: 8I945GMF	Rev: 1.1
Date: Tuesday, November 08, 2005	Sheet 8 of 34	


MODT_A[0..3]
MODT_A[0..3] [14,16]
U2F
MAAA0 BA32
MAAA1 AW32
MAAA2 BB30
MAAA3 BA30
MAAA4 AY30
MAAA5 BA27
MAAA6 BC28
MAAA7 AY27
MAAA8 AY28
MAAA9 BB27
MAAA10 AY33
MAAA11 AW27
MAAA12 BB26
MAAA13 BC38
SAMA0
SAMA1
SAMA2
SAMA3
SAMA4
SAMA5
SAMA6
SAMA7
SAMA8
SAMA9
SAMA10
SAMA11
SAMA12
SAMA13
[14,16] -SWEA BB35
[14,16] -SCASA BA37
[14,16] -SRASA BA34
-SWEA
-SCASA
-SRASA
SAWE*
SACAS*
SARAS*
[14,16] SBAA0 BC33
[14,16] SBAA1 AY34
[14,16] SBAA2 BA26
[14,16] -CSA0 BB37
[14,16] -CSA1 BA39
[14,16] -CSA2 BA35
[14,16] -CSA3 AY38
SBAA0
SBAA1
SBAA2
-CSA0
-CSA1
-CSA2
-CSA3
SABA_0
SABA_1
SABA_2
SACS_0*
SACS_1*
SACS_2*
SACS_3*
[14,16] CKEA0 BB25
[14,16] CKEA1 AY25
[14,16] CKEA2 BC24
[14,16] CKEA3 BA25
CKEA0
CKEA1
CKEA2
CKEA3
SACKE0
SACKE1
SACKE2
SACKE3
MODT_A0 AW37
MODT_A1 AY39
MODT_A2 AY37
MODT_A3 BB40
SAODT0
SAODT1
SAODT2
SAODT3
[14] DCLKA0 BB32
[14] -DCLKA0 AY32
[14] DCLKA1 AY5
[14] -DCLKA1 BB5
[14] DCLKA2 AK42
[14] -DCLKA2 AK41
[14] DCLKA3 BA31
[14] -DCLKA3 BB31
[14] DCLKA4 AY6
[14] -DCLKA4 BA5
[14] DCLKA5 AH40
[14] -DCLKA5 AH43
DCLKA0
-DCLKA0
DCLKA1
-DCLKA1
DCLKA2
-DCLKA2
DCLKA3
-DCLKA3
DCLKA4
-DCLKA4
DCLKA5
-DCLKA5
SACK0
SACK0*
SACK1
SACK1*
SACK2
SACK2*
SACK3
SACK3*
SACK4
SACK4*
SACK5
SACK5*
TP1 AK18
RSV_TP(3)
DDRVREFA AM4
SMVREF0
C20
0.1U/6/Y/25V/X
TP3 AL17
TP4 AK17
RSV_TP(1)
RSV_TP(0)
SADQS0 AU4 DQSA0
SADQS0* AR2 -DQSA0
SADM0 AR3 DMA0
SADQ0 AP3 MDA0
SADQ1 AP2 MDA1
SADQ2 AU3 MDA2
SADQ3 AV4 MDA3
SADQ4 AN1 MDA4
SADQ5 AP4 MDA5
SADQ6 AU5 MDA6
SADQ7 AU2 MDA7
SADQS1 BA3 DQSA1
SADQS1* BB4 -DQSA1
SADM1 AY2 DMA1
SADQ8 AW3 MDA8
SADQ9 AY3 MDA9
SADQ10 BA7 MDA10
SADQ11 BB7 MDA11
SADQ12 AV1 MDA12
SADQ13 AW4 MDA13
SADQ14 BC6 MDA14
SADQ15 AY7 MDA15
SADQS2 AY11 DQSA2
SADQS2* BA10 -DQSA2
SADM2 BB10 DMA2
SADQ16 AW12 MDA16
SADQ17 AY10 MDA17
SADQ18 BA12 MDA18
SADQ19 BB12 MDA19
SADQ20 BA9 MDA20
SADQ21 BB9 MDA21
SADQ22 BC11 MDA22
SADQ23 AY12 MDA23
SADQS3 AU18 DQSA3
SADQS3* AR18 -DQSA3
SADM3 AP18 DMA3
SADQ24 AM20 MDA24
SADQ25 AM18 MDA25
SADQ26 AV20 MDA26
SADQ27 AM21 MDA27
SADQ28 AP17 MDA28
SADQ29 AR17 MDA29
SADQ30 AP20 MDA30
SADQ31 AT20 MDA31
SADQS4 AU35 DQSA4
SADQS4* AV35 -DQSA4
SADM4 AT34 DMA4
SADQ32 AP32 MDA32
SADQ33 AV34 MDA33
SADQ34 AV38 MDA34
SADQ35 AU39 MDA35
SADQ36 AV32 MDA36
SADQ37 AT32 MDA37
SADQ38 AR34 MDA38
SADQ39 AU37 MDA39
SADQS5 AP42 DQSA5
SADQS5* AP40 -DQSA5
SADM5 AP39 DMA5
SADQ40 AR41 MDA40
SADQ41 AR42 MDA41
SADQ42 AN43 MDA42
SADQ43 AM40 MDA43
SADQ44 AU41 MDA44
SADQ45 AU42 MDA45
SADQ46 AP41 MDA46
SADQ47 AN40 MDA47
SADQS6 AG42 DQSA6
SADQS6* AG41 -DQSA6
SADM6 AG40 DMA6
SADQ48 AL41 MDA48
SADQ49 AL42 MDA49
SADQ50 AF39 MDA50
SADQ51 AE40 MDA51
SADQ52 AM41 MDA52
SADQ53 AM42 MDA53
SADQ54 AF41 MDA54
SADQ55 AF42 MDA55
SADQS7 AC42 DQSA7
SADQS7* AC41 -DQSA7
SADM7 AC40 DMA7
SADQ56 AD40 MDA56
SADQ57 AD43 MDA57
SADQ58 AA39 MDA58
SADQ59 AA40 MDA59
SADQ60 AE42 MDA60
SADQ61 AF41 MDA61
SADQ62 AB41 MDA62
SADQ63 AB42 MDA63
945G/A2/[10HB1-033000-22R]
NB_HEATSIN
1
2
NB_HS/[12SP2-04F003-61]
U2G
MAAB0 BB22
MAAB1 BB21
MAAB2 BA21
MAAB3 AY21
MAAB4 BC20
MAAB5 AY19
MAAB6 AY20
MAAB7 BA18
MAAB8 BA19
MAAB9 BB18
MAAB10 BA22
MAAB11 BB17
MAAB12 BA17
MAAB13 AW42
SBMA0
SBMA1
SBMA2
SBMA3
SBMA4
SBMA5
SBMA6
SBMA7
SBMA8
SBMA9
SBMA10
SBMA11
SBMA12
SBMA13
[15,16] -SWEB BB23
[15,16] -SCASB AY24
[15,16] -SRASB BA23
-SWEB
-SCASB
-SRASB
SBWE*
SBCAS*
SBRAS*
[15,16] SBAB0 AW23
[15,16] SBAB1 AY23
[15,16] SBAB2 AY17
[15,16] -CSB0 BA40
[15,16] -CSB1 AW41
[15,16] -CSB2 BA41
[15,16] -CSB3 AW40
SBAB0
SBAB1
SBAB2
-CSB0
-CSB1
-CSB2
-CSB3
SBBA0
SBBA1
SBBA2
SBCS0*
SBCS1*
SBCS2*
SBCS3*
[15,16] CKEB0 BA14
[15,16] CKEB1 AY16
[15,16] CKEB2 BA13
[15,16] CKEB3 BB13
CKEB0
CKEB1
CKEB2
CKEB3
SBCKE0
SBCKE1
SBCKE2
SBCKE3
MODT_B0 AY42
MODT_B1 AV40
MODT_B2 AV43
MODT_B3 AU40
SBODT0
SBODT1
SBODT2
SBODT3
[15] DCLKB0 AM29
[15] -DCLKB0 AM27
[15] DCLKB1 AV9
[15] -DCLKB1 AW9
[15] DCLKB2 AL38
[15] -DCLKB2 AL36
[15] DCLKB3 AP26
[15] -DCLKB3 AR26
[15] DCLKB4 AU10
[15] -DCLKB4 AT10
[15] DCLKB5 AJ38
[15] -DCLKB5 AJ36
DCLKB0
-DCLKB0
DCLKB1
-DCLKB1
DCLKB2
-DCLKB2
DCLKB3
-DCLKB3
DCLKB4
-DCLKB4
DCLKB5
-DCLKB5
SBCK0
SBCK0*
SBCK1
SBCK1*
SBCK2
SBCK2*
SBCK3
BLCK3*
SBCK4
SBCK4*
SBCK5
SBCK5*
TP2 AL39
RSV
C1283
0.1U/6/Y/25V/X
DDRVREFB AM2
SMVREF1
TP6 AK23
RSV_TP(2)
AM3
AJ8
AJ6
AL5
SMRCOMPP
SMRCOMPN
SM_OCDCOMP_1
SM_OCDCOMP_0
SM_RCOMP1
SM_RCOMP0
SBDQS0 AM8 DQSB0
SBDQS0* AM6 -DQSB0
SBDM0 AL11 DMB0
SBDQ0 AL6 MDB0
SBDQ1 AL8 MDB1
SBDQ2 AP8 MDB2
SBDQ3 AP9 MDB3
SBDQ4 AJ11 MDB4
SBDQ5 AL9 MDB5
SBDQ6 AM10 MDB6
SBDQ7 AP6 MDB7
SBDQS1 AV7 DQSB1
SBDQS1* AR9 -DQSB1
SBDM1 AW7 DMB1
SBDQ8 AU7 MDB8
SBDQ9 AV6 MDB9
SBDQ10 AV12 MDB10
SBDQ11 AM11 MDB11
SBDQ12 AR5 MDB12
SBDQ13 AR7 MDB13
SBDQ14 AR12 MDB14
SBDQ15 AR10 MDB15
SBDQS2 AV13 DQSB2
SBDQS2* AT13 -DQSB2
SBDM2 AP13 DMB2
SBDQ16 AM15 MDB16
SBDQ17 AM13 MDB17
SBDQ18 AV15 MDB18
SBDQ19 AM17 MDB19
SBDQ20 AN12 MDB20
SBDQ21 AR13 MDB21
SBDQ22 AP15 MDB22
SBDQ23 AT15 MDB23
SBDQS3 AU23 DQSB3
SBDQS3* AR23 -DQSB3
SBDM3 AP23 DMB3
SBDQ24 AM24 MDB24
SBDQ25 AM23 MDB25
SBDQ26 AV24 MDB26
SBDQ27 AM26 MDB27
SBDQ28 AP21 MDB28
SBDQ29 AR21 MDB29
SBDQ30 AP24 MDB30
SBDQ31 AT24 MDB31
SBDQS4 AT29 DQSB4
SBDQS4* AV29 -DQSB4
SBDM4 AR29 DMB4
SBDQ32 AU27 MDB32
SBDQ33 AN29 MDB33
SBDQ34 AR31 MDB34
SBDQ35 AM31 MDB35
SBDQ36 AP27 MDB36
SBDQ37 AR27 MDB37
SBDQ38 AP31 MDB38
SBDQ39 AU31 MDB39
SBDQS5 AP36 DQSB5
SBDQS5* AM35 -DQSB5
SBDM5 AR38 DMB5
SBDQ40 AP35 MDB40
SBDQ41 AP37 MDB41
SBDQ42 AN32 MDB42
SBDQ43 AL35 MDB43
SBDQ44 AR35 MDB44
SBDQ45 AU38 MDB45
SBDQ46 AM38 MDB46
SBDQ47 AM34 MDB47
SBDQS6 AG34 DQSB6
SBDQS6* AG32 -DQSB6
SBDM6 AJ39 DMB6
SBDQ48 AL34 MDB48
SBDQ49 AJ34 MDB49
SBDQ50 AF32 MDB50
SBDQ51 AF34 MDB51
SBDQ52 AL31 MDB52
SBDQ53 AJ32 MDB53
SBDQ54 AG35 MDB54
SBDQ55 AD32 MDB55
SBDQS7 AD36 DQSB7
SBDQS7* AD38 -DQSB7
SBDM7 AD39 DMB7
SBDQ56 AC32 MDB56
SBDQ57 AD34 MDB57
SBDQ58 Y32 MDB58
SBDQ59 AA32 MDB59
SBDQ60 AF35 MDB60
SBDQ61 AF37 MDB61
SBDQ62 AC33 MDB62
SBDQ63 AC35 MDB63
945G/A2/[10HB1-033000-22R]
MODT_B[0..3] [15,16]
DDR18V
R50 1K/6/1
DDRVREFA
R51 1K/6/1
BC23 1U/6/Y/10V
BC24 0.1U/6/Y/25V
R52 0/SHT/X
DDR18V
R53 1K/6/1
DDRVREFB
R54 1K/6/1
BC25 1U/6/Y/10V
BC26 0.1U/6/Y/25V
0315
DDR18V
R55 80.6/6/1 SMRCOMPN
BC27 0.1U/6/Y/25V
R56 80.6/6/1 SMRCOMPP
[15] -DQSB[0..7]
-DQSB[0..7]
[15,16] MAAB[0..13]
MAAB[0..13]
[15] DMB[0..7]
DMB[0..7]
[15] MDB[0..63]
MDB[0..63]
[15] DQSB[0..7]
DQSB[0..7]
[14,16] MAAA[0..13]
MAAA[0..13]
[14] DMA[0..7]
DMA[0..7]
[14] MDA[0..63]
MDA[0..63]
[14] DQSA[0..7]
DQSA[0..7]
[14] -DQSA[0..7]
-DQSA[0..7]
Gigabyte Technology
Title
GMCH-DDRII
Size
Custom
Document Number
8I945GMF
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1.1
Date: Tuesday, November 08, 2005
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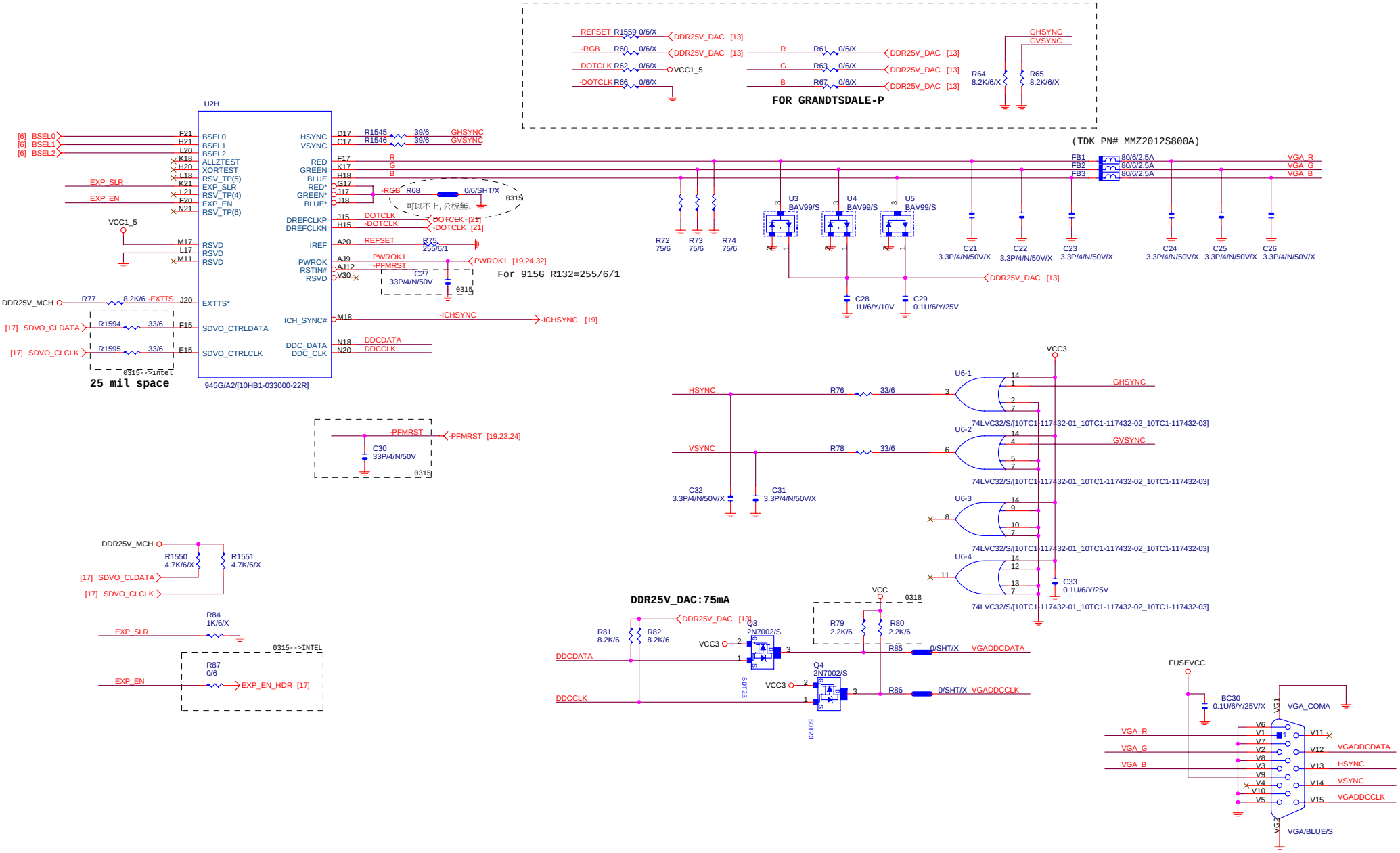
Gigabyte Technology		
Title: GMCH-PCI E & DMI		
Size: Custom	Document Number: 8I945GMF	Rev: 1.1
Date: Tuesday, November 08, 2005	Sheet 10 of 34	


FOR GRANDTSDALE-P
(TDK PN# MMZ2012S800A)
U2H
945G/A2/[10HB1-033000-22R]
25 mil space
For 915G R132=255/6/1
DDR25V_DAC:75mA
可以不上,公板無.
74LVC32/S/[10TC1-117432-01_10TC1-117432-02_10TC1-117432-03]
Gigabyte Technology
GMCH-INTERNAL VGA
8I945GMF
1.1
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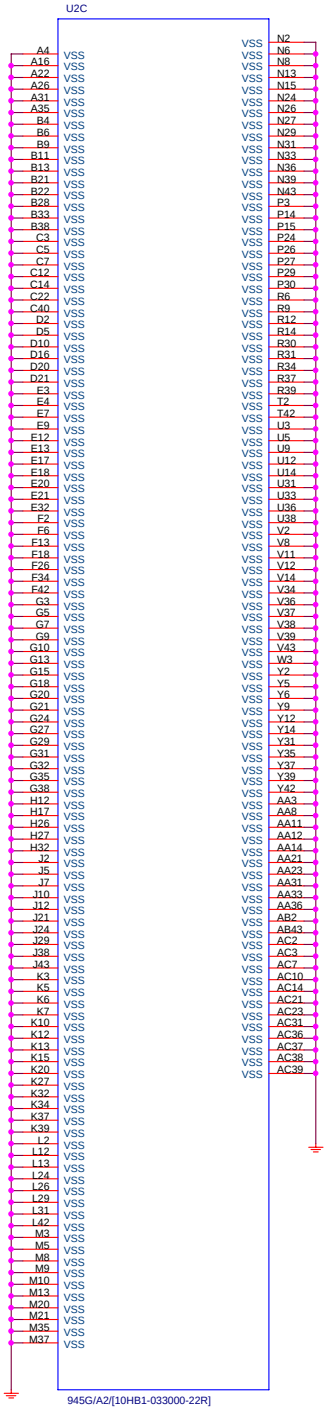
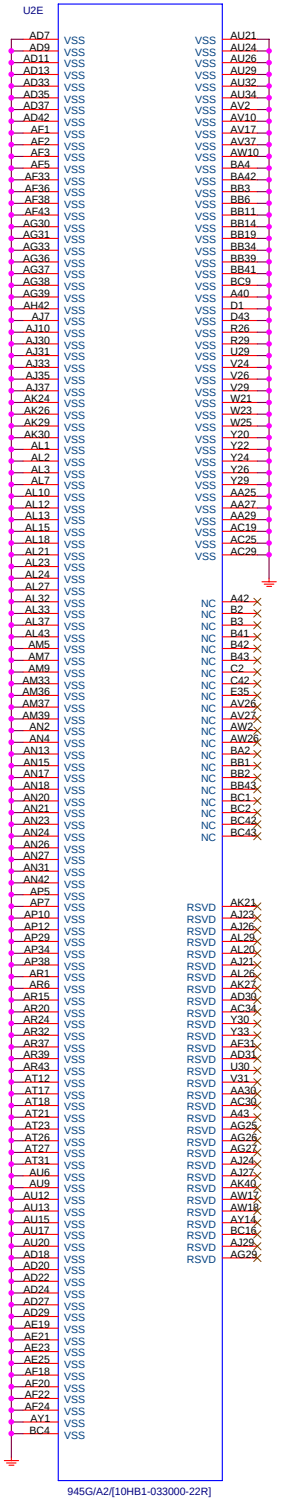
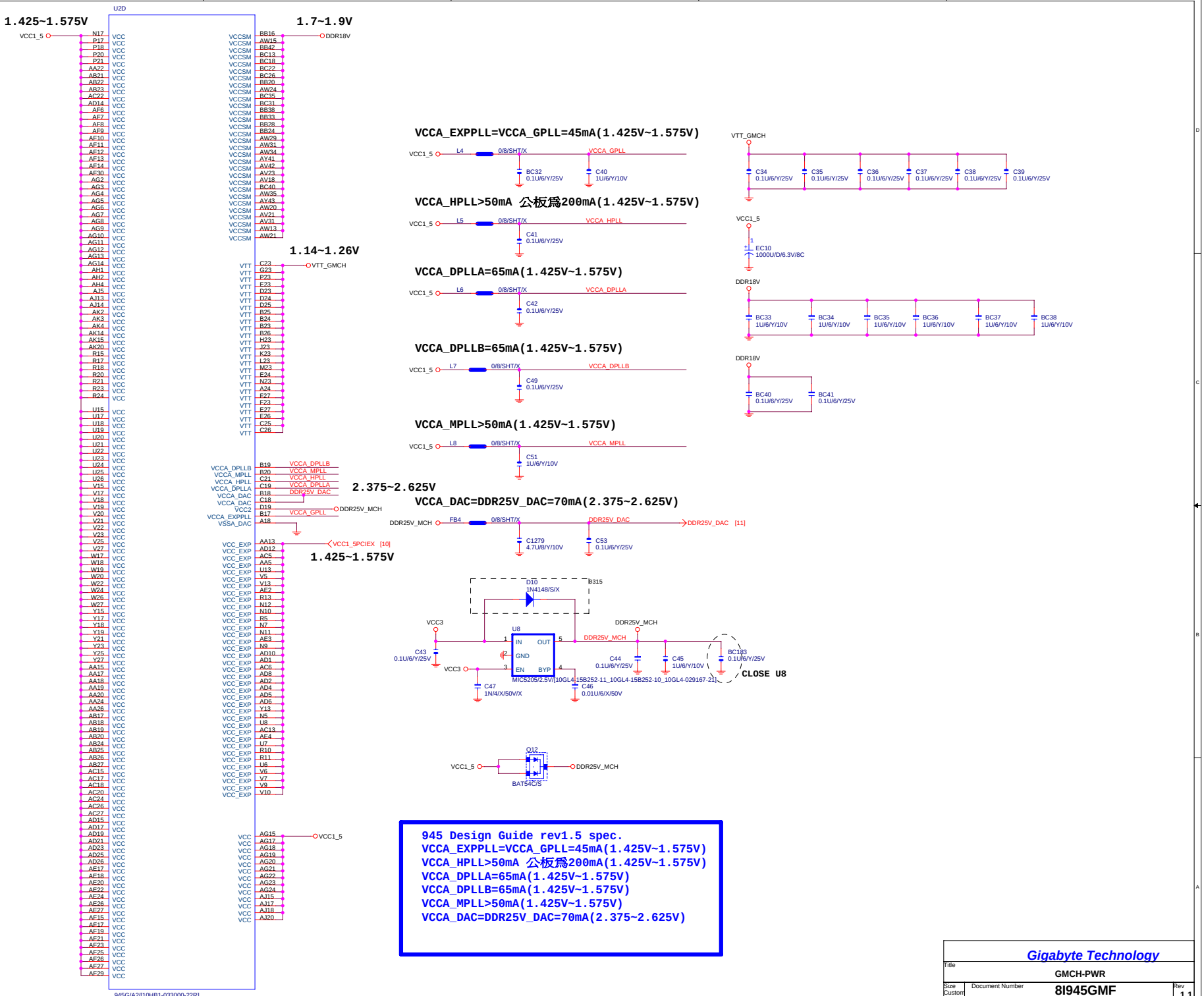


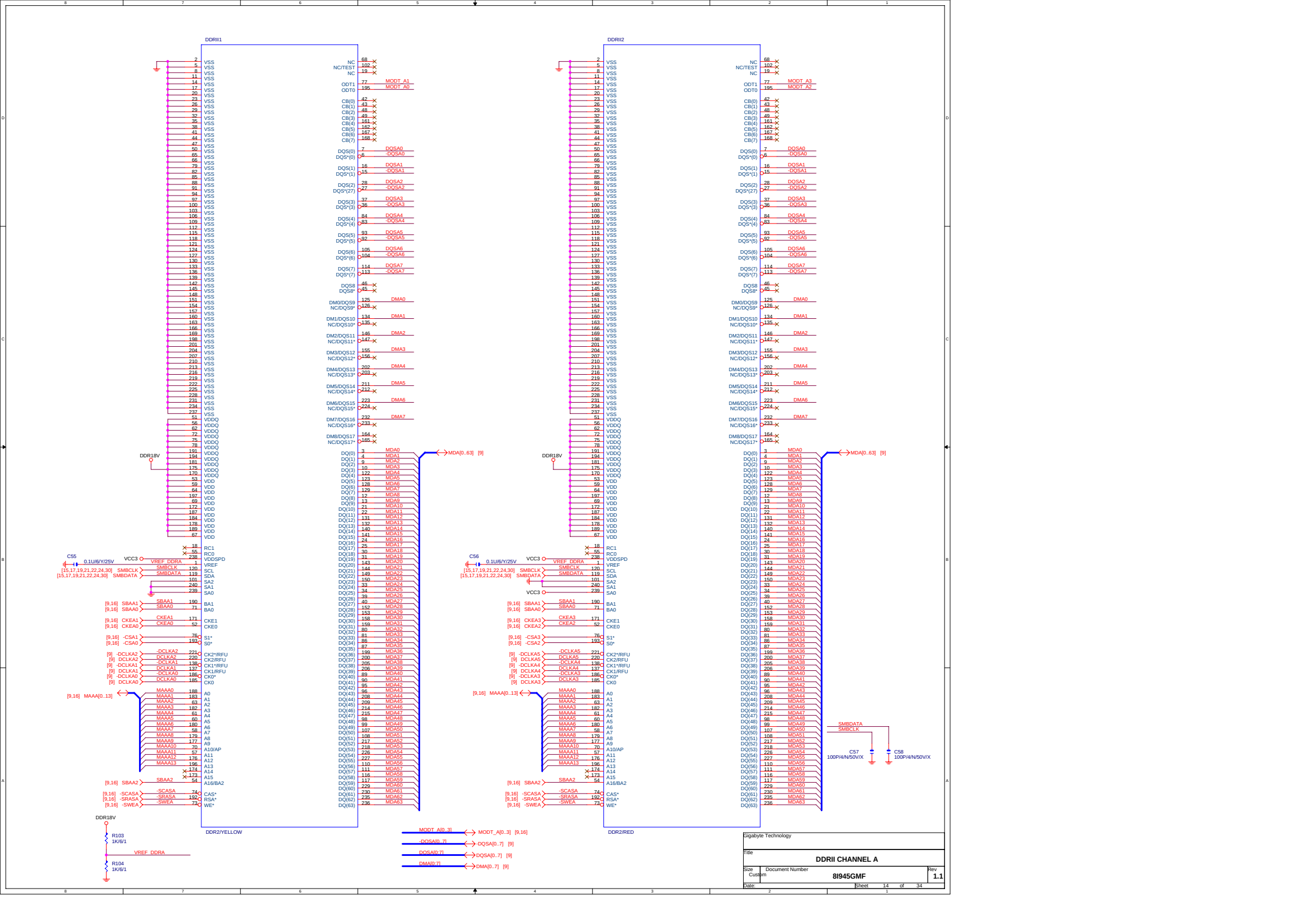


Gigabyte Technology		
Title	GMCH-GND	
Size: Custom	Document Number: 8I945GMF	Rev: 1.1
Date: Tuesday, November 08, 2005	Sheet 12 of 34	

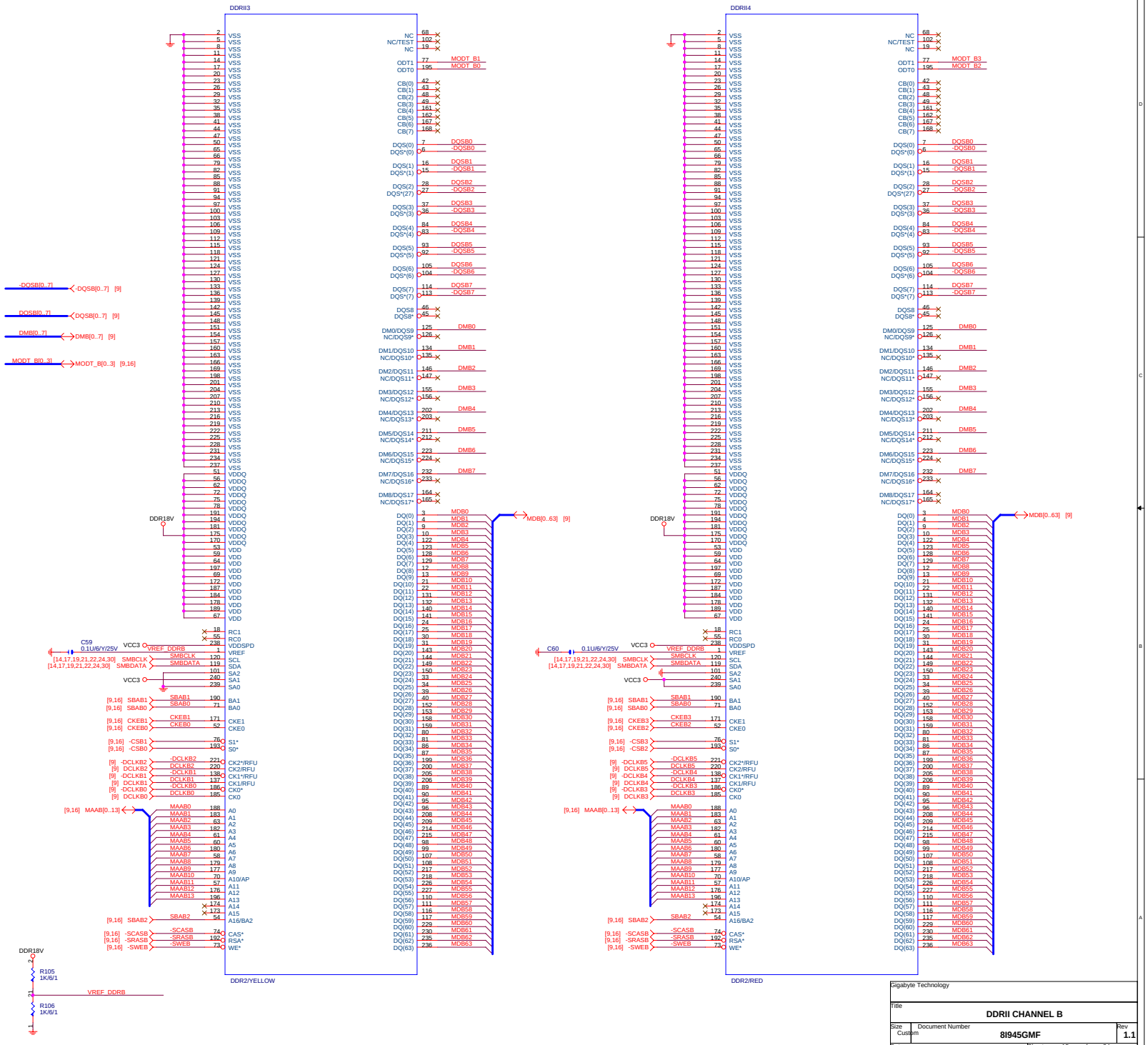


945 Design Guide rev1.5 spec.
VCCA_EXPPLL=VCCA_GPLL=45mA(1.425V~1.575V)
VCCA_HPLL>50mA 公板爲200mA(1.425V~1.575V)
VCCA_DPLLA=65mA(1.425V~1.575V)
VCCA_DPLLB=65mA(1.425V~1.575V)
VCCA_MPLL>50mA(1.425V~1.575V)
VCCA_DAC=DDR25V_DAC=70mA(2.375~2.625V)

Gigabyte Technology		
Title	GMCH-PWR	
Size: Custom	Document Number: 8I945GMF	Rev: 1.1
Date: Tuesday, November 08, 2005	Sheet 13 of 34	



Gigabyte Technology	
Title	DDRII CHANNEL A
Size: Custom	Document Number: 8I945GMF
Rev	1.1
Date:	Sheet 14 of 34



Gigabyte Technology	
Title	DDRII CHANNEL B
Size: Custom	Document Number: 8I945GMF
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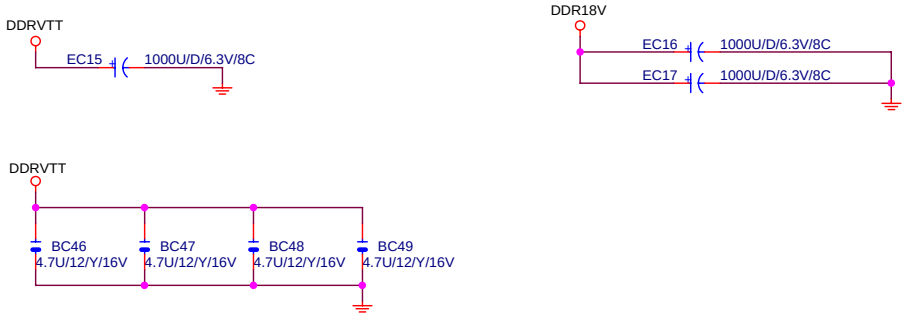
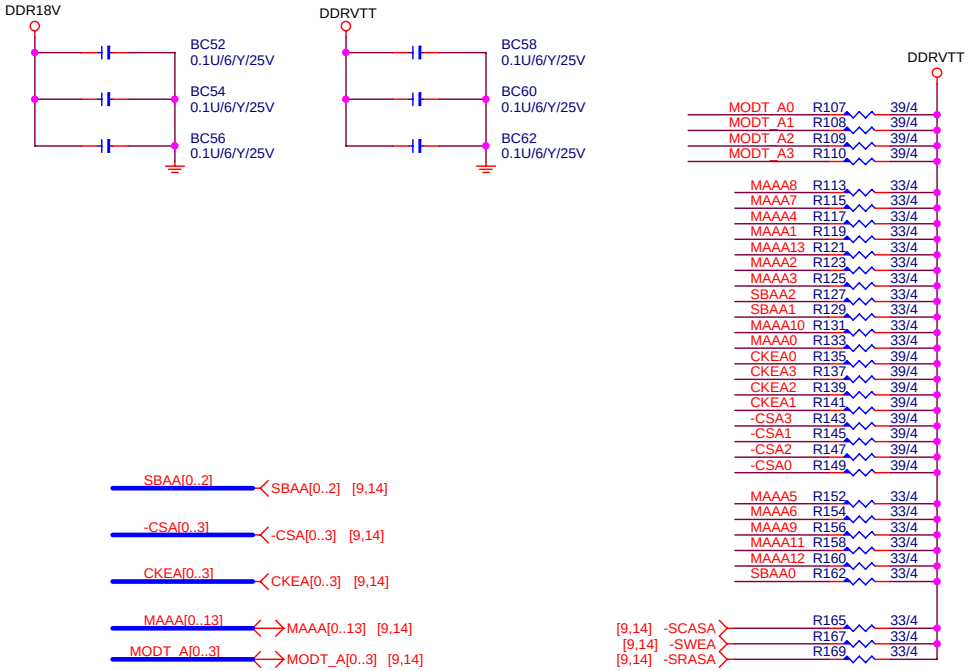
DDR TERMINATION CHANNEL A

DDRVTT Decouple



DDR18V Decouple

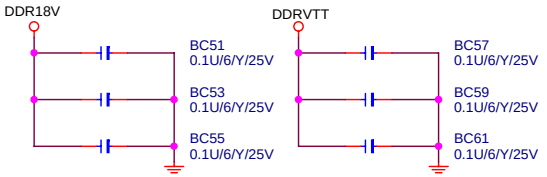
DDRVTT Decouple

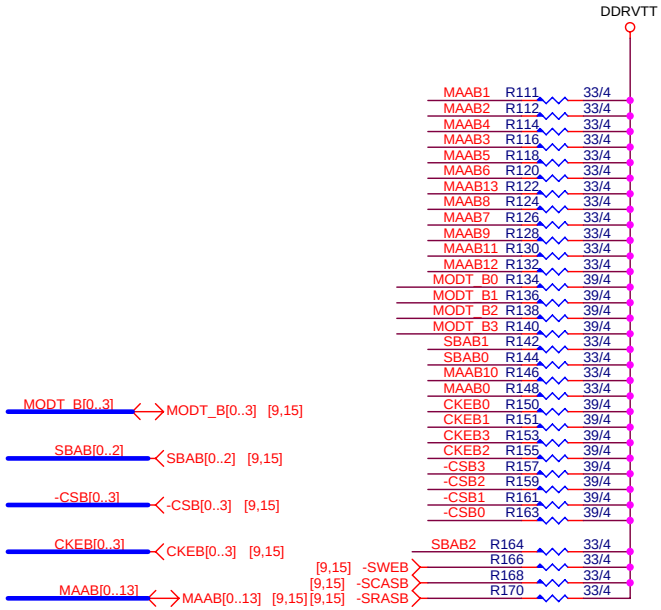


DDR TERMINATION CHANNEL B

DDR18V Decouple

DDRVTT Decouple



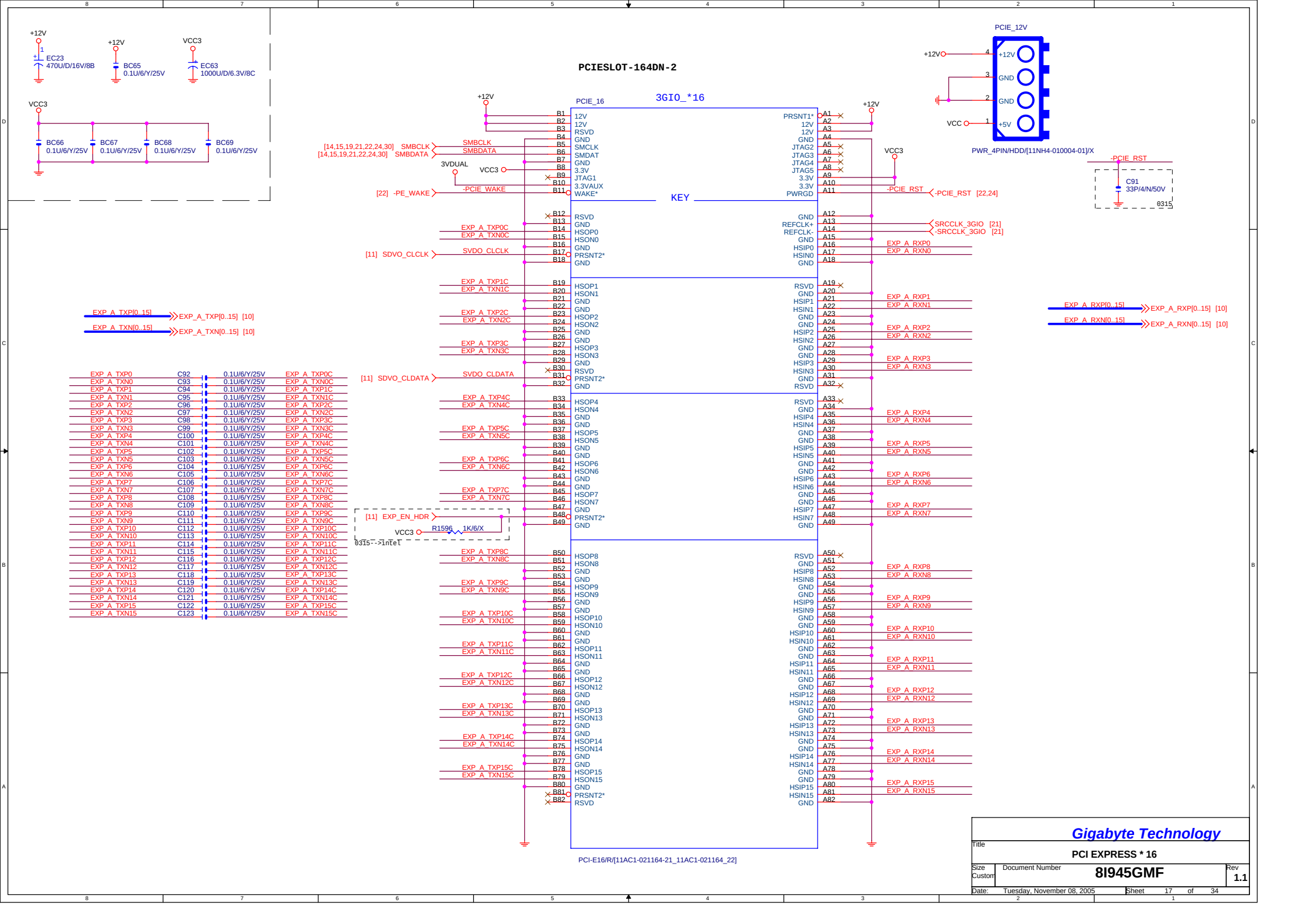


Gigabyte Technology

Title: DDRII TERMINATOR

Size: Custom | Document Number: 8I945GMF | Rev: 1.1

Date: Tuesday, November 08, 2005 | Sheet 16 of 34


PCIESLOT-164DN-2
3GIO_*16
PCIE_16
KEY
+12V
VCC3
3VDUAL
EC23 470U/D/16V/8B
BC65 0.1U/6/Y/25V
EC63 1000U/D/6.3V/8C
BC66 0.1U/6/Y/25V
BC67 0.1U/6/Y/25V
BC68 0.1U/6/Y/25V
BC69 0.1U/6/Y/25V
PCIE_12V
PWR_4PIN/HDD/[11NH4-010004-01]/X
-PCIE_RST
C91 33P/4/N/50V
SMBCLK
SMBDATA
-PCIE_WAKE
-PE_WAKE
SVDO_CLCLK
SVDO_CLDATA
EXP_EN_HDR
R1596 1K/6/X
SRCCLK_3GIO
-SRCCLK_3GIO
EXP_A_TXP[0..15]
EXP_A_TXN[0..15]
EXP_A_RXP[0..15]
EXP_A_RXN[0..15]
PCI-E16/R/[11AC1-021164-21_11AC1-021164_22]
Gigabyte Technology
PCI EXPRESS * 16
8I945GMF
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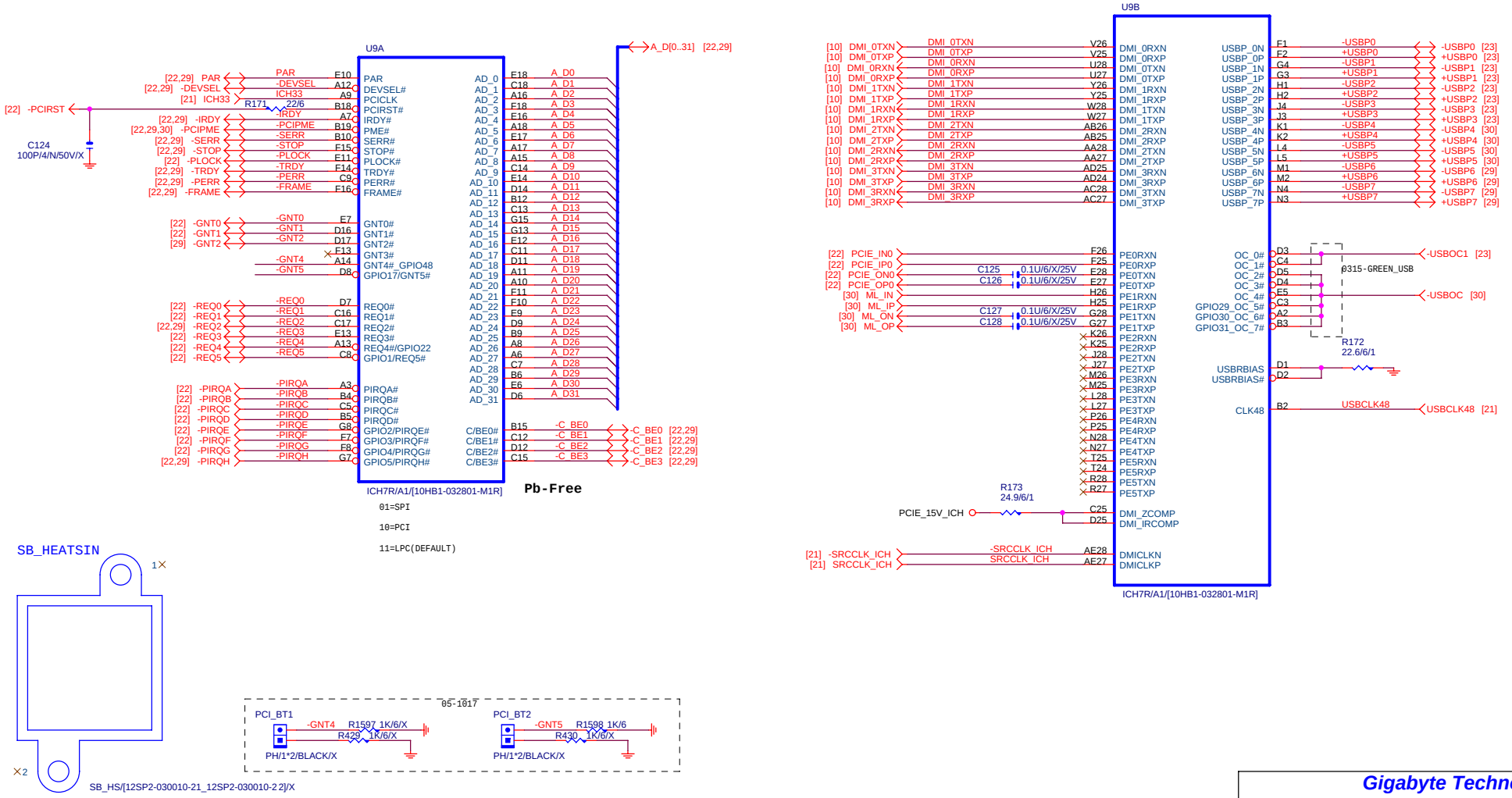
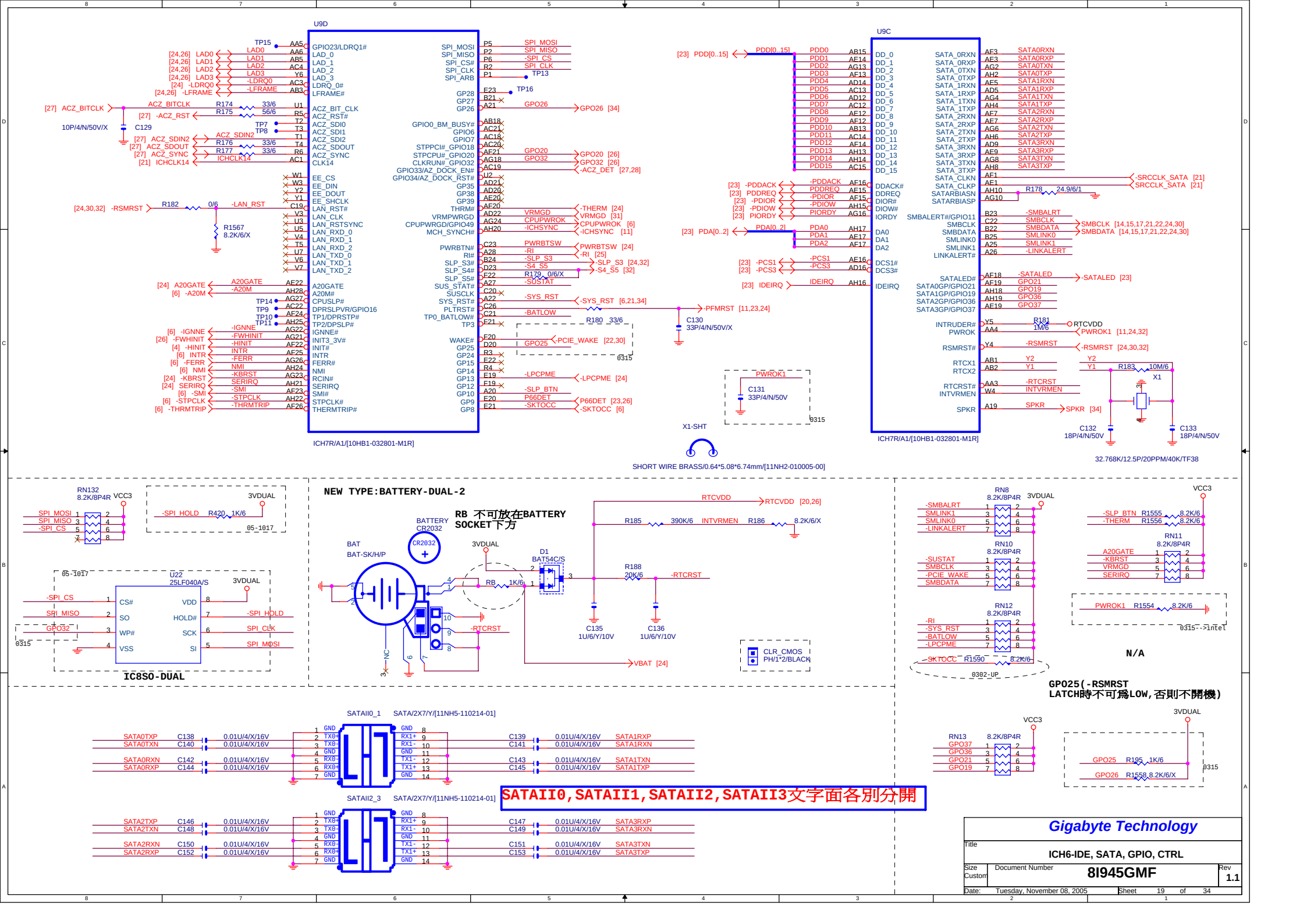
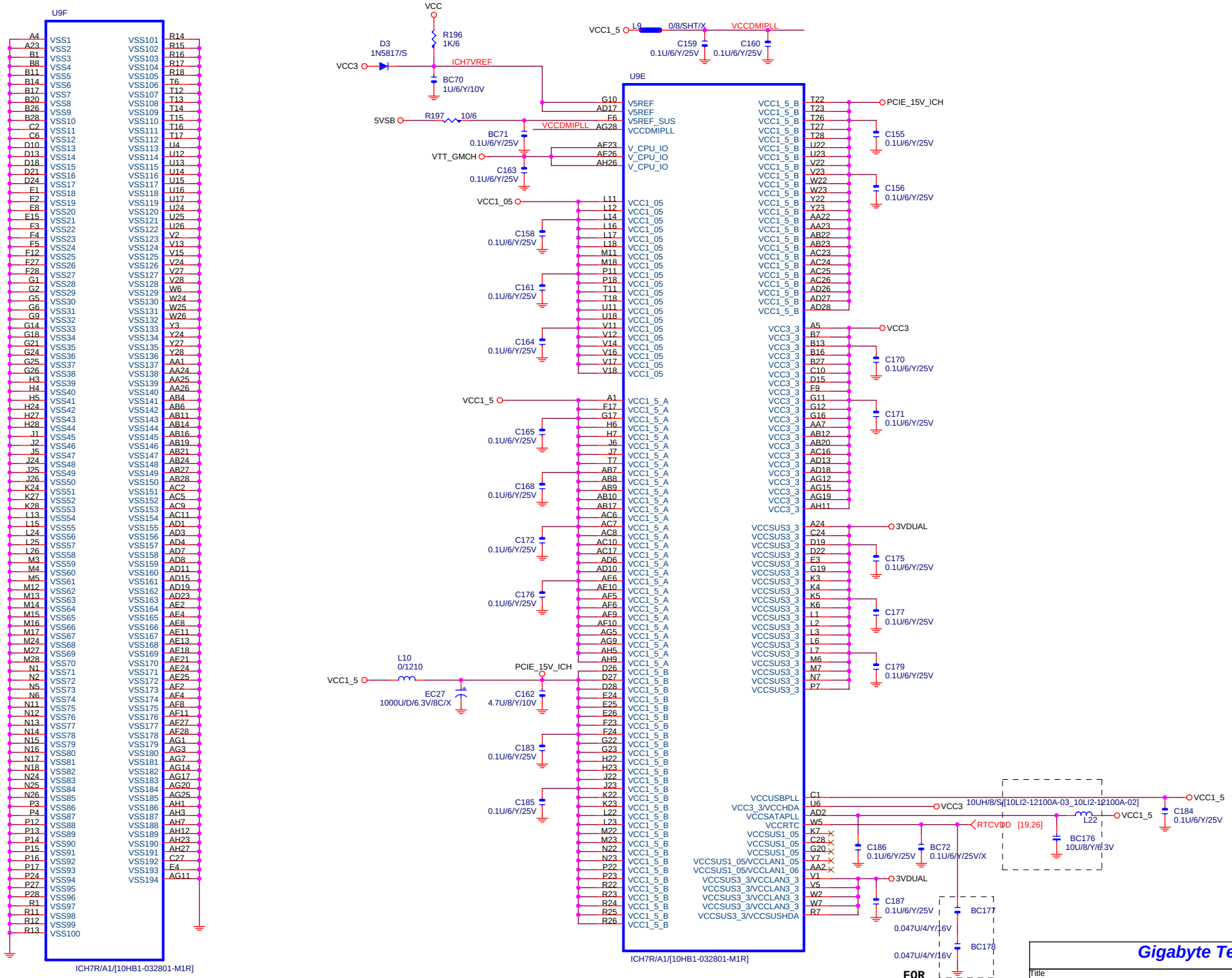


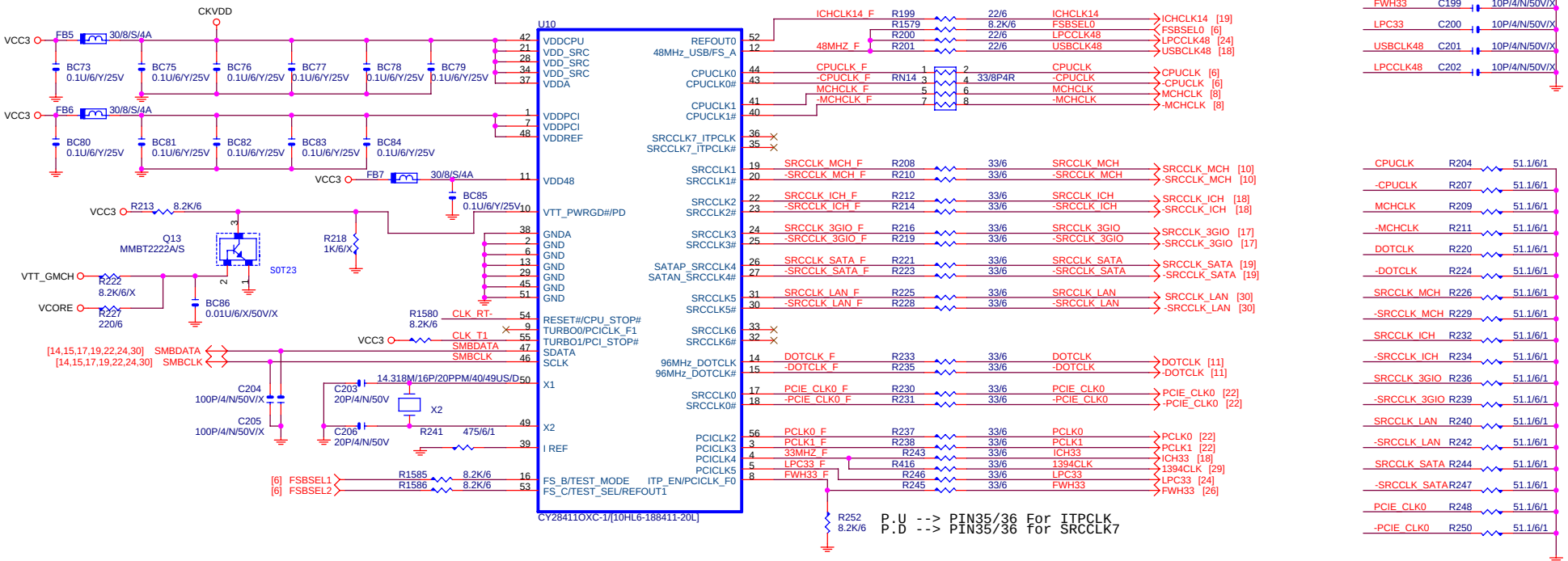
Gigabyte Technology			
Title	ICH6-PCI, DMI, LAN, USB		
Size B	Document Number 8I945GMF		Rev 1.1
Date: Tuesday, November 08, 2005	Sheet 18 of 34		


U9D
ICH7R/A1/[10HB1-032801-M1R]
U9C
ICH7R/A1/[10HB1-032801-M1R]
SHORT WIRE BRASS/0.64*5.08*6.74mm/[11NH2-010005-00]
32.768K/12.5P/20PPM/40K/TF38
NEW TYPE:BATTERY-DUAL-2
RB 不可放在BATTERY SOCKET下方
IC8S0-DUAL
N/A
GP025(-RSMRST LATCH時不可爲LOW,否則不開機)
SATAII0_1 SATA/2X7/Y/[11NH5-110214-01]
SATAII2_3 SATA/2X7/Y/[11NH5-110214-01]
SATAII0,SATAII1,SATAII2,SATAII3文字面各別分開
Gigabyte Technology
ICH6-IDE, SATA, GPIO, CTRL
8I945GMF
Rev 1.1
Tuesday, November 08, 2005
Sheet 19 of 34

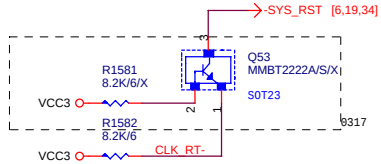


Gigabyte Technology

Title	ICH6-PWR & GND	
Size B	Document Number 8I945GMF	Rev 1.1
Date: Tuesday, November 08, 2005	Sheet 20 of 34	

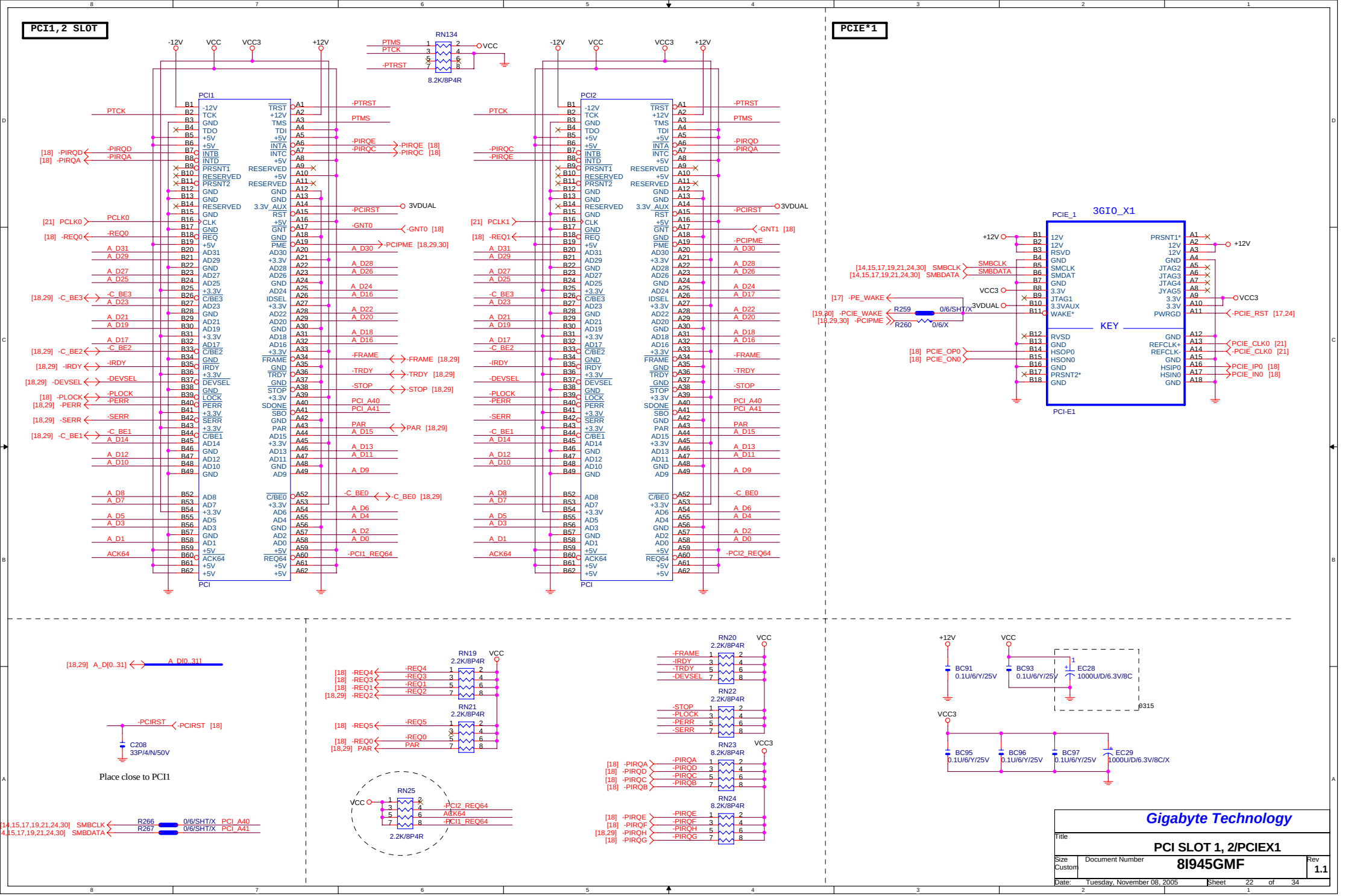


CY28411OXC-1無RESET,不可上Q53,否則CPU_STOP#產生,造成CPURST- DELAY 200ms(spec>1ms)



FOR CLOCK GEN RST

Gigabyte Technology		
Title: CK410M		
Size: Custom	Document Number: 8I945GMF	Rev: 1.1
Date: Tuesday, November 08, 2005	Sheet 21 of 34	


PCI1,2 SLOT
PCIE*1
PCI1
PCI2
PCIE_1
3GIO_X1
KEY
PCI-E1
RN134
8.2K/8P4R
RN19
2.2K/8P4R
RN20
2.2K/8P4R
RN21
2.2K/8P4R
RN22
2.2K/8P4R
RN23
8.2K/8P4R
RN24
8.2K/8P4R
RN25
2.2K/8P4R
-12V
VCC
VCC3
+12V
3VDUAL
PCI
Place close to PCI1
C208
33P/4/N/50V
R266
R267
0/6/SHT/X
R259
R260
0/6/X
BC91
0.1U/6/Y/25V
BC93
0.1U/6/Y/25V
EC28
1000U/D/6.3V/8C
BC95
0.1U/6/Y/25V
BC96
0.1U/6/Y/25V
BC97
0.1U/6/Y/25V
EC29
1000U/D/6.3V/8C/X
Gigabyte Technology
PCI SLOT 1, 2/PCIEX1
8I945GMF
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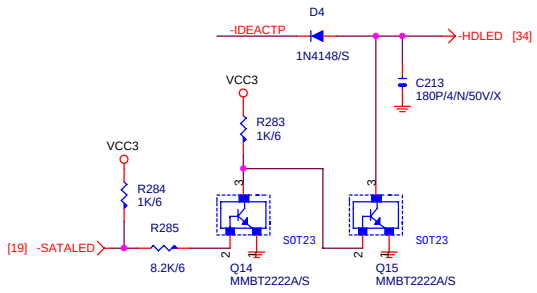
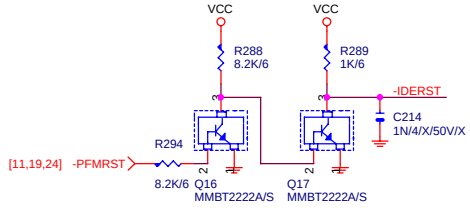
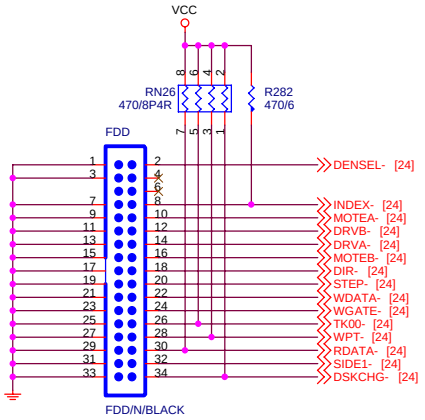
IDE/SATA LED



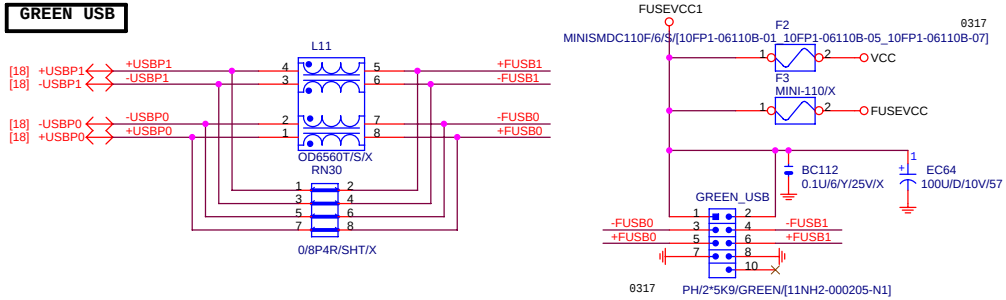
IDE RESET



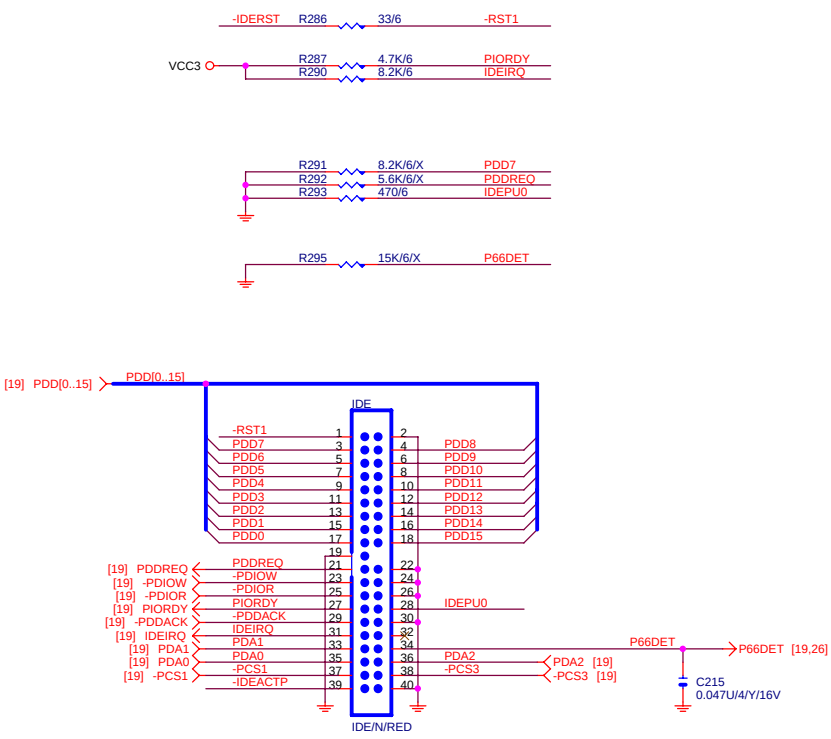
FLOPPY



GREEN USB

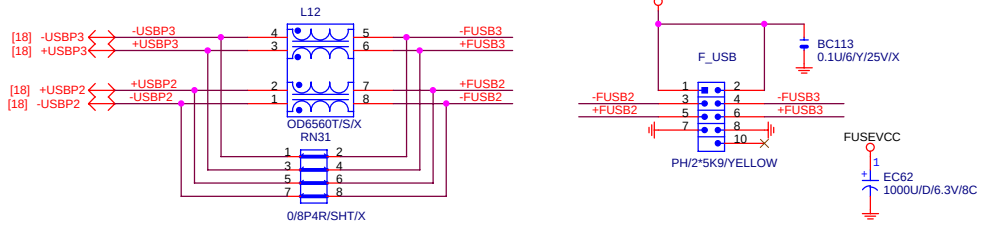


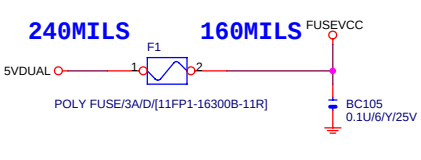
IDE

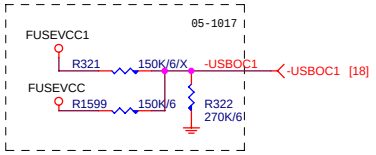


Close to connector

FRONT USB







Gigabyte Technology		
Title: IDE,FDD,F_USB		
Size: B	Document Number: 8I945GMF	Rev: 1.1
Date: Tuesday, November 08, 2005	Sheet 23 of 34	

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

VCC
R1561 8.2K/6 DTR2-
R1562 8.2K/6/X RTS2-
R1587 680/6
0302-UP

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

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

R347 680/6/X DTR2-
R348 680/6 TXD2

R353 8.2K/6
VCC
[34] -RST_BTN
ITE_PWROK

VTT_GMCH R358 0/6/X -LPCPD
[11,19,23] -PFMRST -PFMRST
[19] -LDRQ0 -LDRQ0

R1565 8.2K/6
VCC3

[25] DCD1- [25] RI1- [25] CTS1- [25] DTR1- [25] RTS1- [25] DSR1- [25] TXD1 [25] RXD1 [25] DCD2- [25] RI2- [25] CTS2-

PD[0..7] PD[0..7] [25]

STB- AFD- ERR- INIT- SLIN- ACK-
STB- [25] AFD- [25] ERR- [25] INIT- [25] SLIN- [25] ACK- [25]

VCC3 R345 8.2K/6/X -THERM -THERM [19]
VCC R346 8.2K/6/X PWOK

U15

32	DTR2#	[25] DTR2-	
33	RTS2#	[25] RTS2-	
34	DSR2#	[25] DSR2-	
35	VCC	VCC	
36	SOUT2	TXD2	[25] TXD2
37	SIN2	RXD2	[25] RXD2
38	FAN_TAC1		[34] FANIO1
39	FAN_CTL1		[34] FANPWM1
40	FAN_TAC2/GP52		[34] FANIO2
41	FAN_CTL2/GP51		[34] FANPWM2
42	FAN_TAC3/GP37		
43	FAN_CTL3/GP36		[34] FANPWM3
44	WTI#/GP35		[31] IO_VID5
45	VID4/GP34		[31] IO_VID4
46	GNDD		
47	VID3/GP33		[31] IO_VID3
48	VID2/GP32		[31] IO_VID2
49	VID1/GP31		[31] IO_VID1
50	VID0/GP30		[31] IO_VID0
51	JSBB2/GP27		
52	JSBB1/GP26		
53	JSBCY/GP25		
54	JSBCX/GP24		
55	JSAB2/GP23		
56	JSAB1/GP22		
57	JSACY/GP21		
58	JSACX/GP20		
59	MIDI_OUT/GP17		
60	MIDI_IN/GP16		
61	RESETCON#/CIRTX/GP15		
62	PCIRST1#/SCRRST/GP14		
63	PWROK1/SCRFET#/GP13		
64	PCIRST2#/SCRIO/GP12		
65	PCIRST3#/SCRCLK/GP11		
66	VCC		
67	LPCPD#		
68	LRESET#		
69	LDRQ#		

5	BUSY	BUSY [25]	
4	PE	PE [25]	
3	SLCT	SLCT [25]	
2	VCC	VCC	
1	VIN0	VIN0 [26]	
128	VIN1	VIN1 [26]	
127	VIN2	VIN2 [26]	
126	VIN3	PWOK [33]	PWOK
125	VIN4	VIN4 [26]	
124	VIN5		
123	VIN6		
122	VIN7	R1563 8.2K/6 VCC	
121	VREF	VREF [26]	
120	TMPIN1	SYS_TEMP [26]	
119	TMPIN2	PWM_TEMP [26]	
118	TMPIN3	CPU_TEMP [6,26]	
117	GNDA		
116	RSMRST#/CIRRX/GP55	R350 22/6 -RSMRST [19,30,32]	
115	PCIRST4#/SCRPRES#/GP10		
114	MCLK	MCLK [26]	
113	MDAT	MDAT [26]	
112	KCLK	KCLK [26]	
111	KDAT	KDAT [26]	
110	SCLK/GP40	R1564 8.2K/6 VCC3	
109	PWROK2/SDAT/GP41	-THERM	
108	RING#/GP53		
107	PSON#/GP42	-PSON [33]	
106	PANSWH#/GP43	-PWRBTSW [34]	
105	GNDD		
104	PME#/GP54	-LPCPME [19]	
103	PWRON#GP44	PWRBTSW [19]	
102	PSIN/GP45	-SLP_S3 [19,32]	
101	IRRX/GP46	BEEP- [34]	
100	VBAT	VBAT [19]	
99	COPEN#	-CASEOPEN [26]	
98	VCCH	5VSB	
97	IRTX/GP47	DUTY_CONTROL [34]	
96	DSKCHG#	DSKCHG- [23]	

70	SERIRQ	[19] SERIRQ	
72	LFRAME	[19,26] -LFRAME	
73	LAD0	LAD0	
74	LAD1	LAD1	
75	LAD2	LAD2	
76	LAD3	LAD3	
77	KRST#	[19] -KBRST	
78	GA20	[19] A20GATE	
79	PCICLK	[21] LPC33	
80	CLKIN	[21] LPCCLK48	
81	GNDD		
82	DENSEL#	DENSEL- [23]	
83	MTRA#	MOTEA- [23]	
84	MTRB#	MOTEB- [23]	
85	DRVA#	DRVA- [23]	
86	DRVB#	DRVB- [23]	
87	WDATA#	WDATA- [23]	
88	DIR#	DIR- [23]	
89	STEP#	STEP- [23]	
90	HDSEL#	SIDE1- [23]	
91	WGATE#	WGATE- [23]	
92	RDATA#	RDATA- [23]	
93	TRK0#	TK00- [23]	
94	INDEX#	INDEX- [23]	
95	WPT#	WPT- [23]	

IT8712GB/IX4/[10HP2-118712-53]

[19,26] LAD[0..3] LAD[0..3]

C230 10P/4/N/50V/X

-PFMRST -PFMRST [11,19,23]
BC121 100P/6/N/50V/X

-LPCPD R363 8.2K/6 VCC3
ITE_PWROK R364 8.2K/6 VCC3

PWOK
C228 1N/4/X/50V/X

BC117 0.01U/4/X/16V/X
R349 0/6/SHT/X THERMDC [6]

5VSB
R352 8.2K/6
3VDUAL
R359 8.2K/6
C229 1U/6/Y/10V
0315

BC118 1U/6/Y/10V
BC119 0.047U/4/Y/16V

5VDUAL
RF_ID
TXD2 RXD2 RFID_RI- [25]
BC179 0.1U/6/Y/25V/X
PH/2*3K5/[11NH2-000203-41]
0317

RESET DRIVE

PFMRST
-PFMRST2
C1280 180P/4/N/50V/X
3VDUAL
BC120 0.1U/6/Y/25V
ITE_PWROK
PWROK1 [11,19,32]
C1281 100P/4/N/50V/X
U16 74HC14/SO14
-PFMRST
PFMRST
PFMRST
-PFMRST1 [26,29,30]
-PCIE_RST [17,22]
BC122 1U/6/Y/10V/X

Gigabyte Technology	
Title	ITE 8712 LPC IO
Size B	Document Number 8I945GMF
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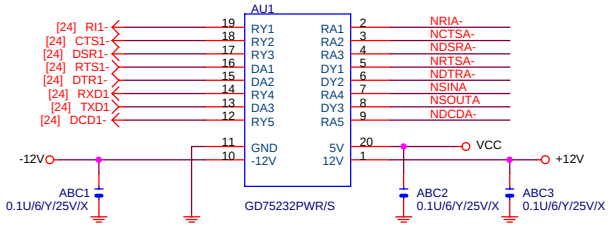
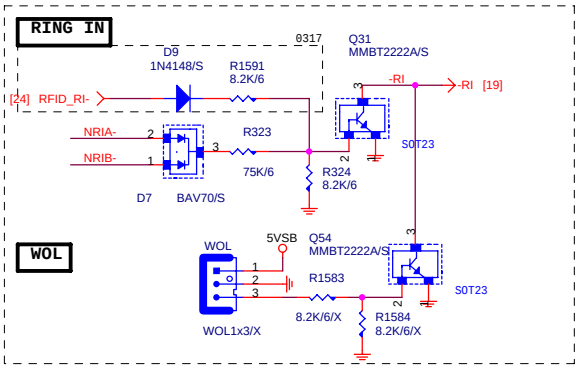
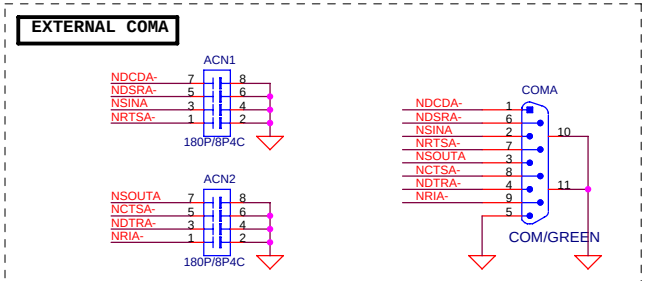
COMA



RING IN

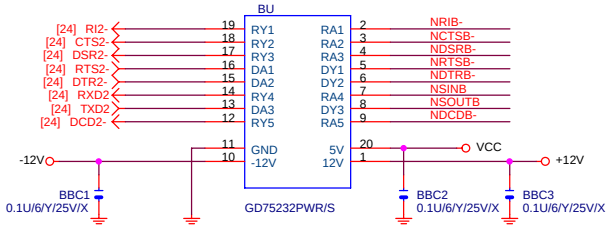


EXTERNAL COMA

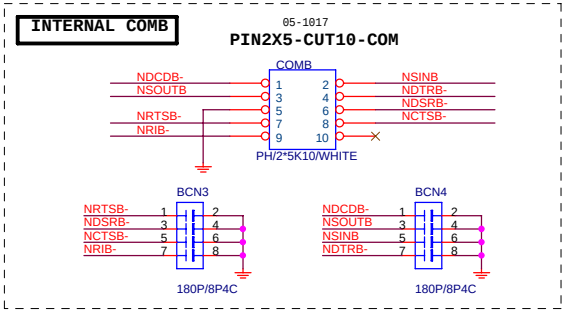


PLACE NEAR COM CONNECTOR

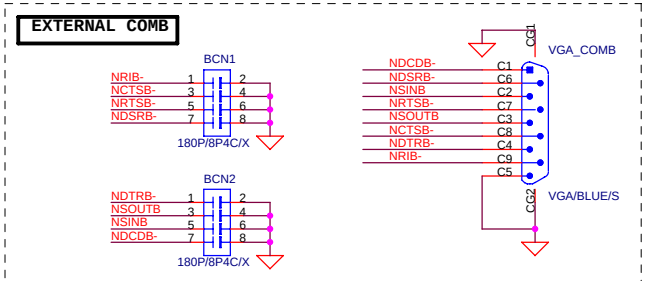
COMB



INTERNAL COMB

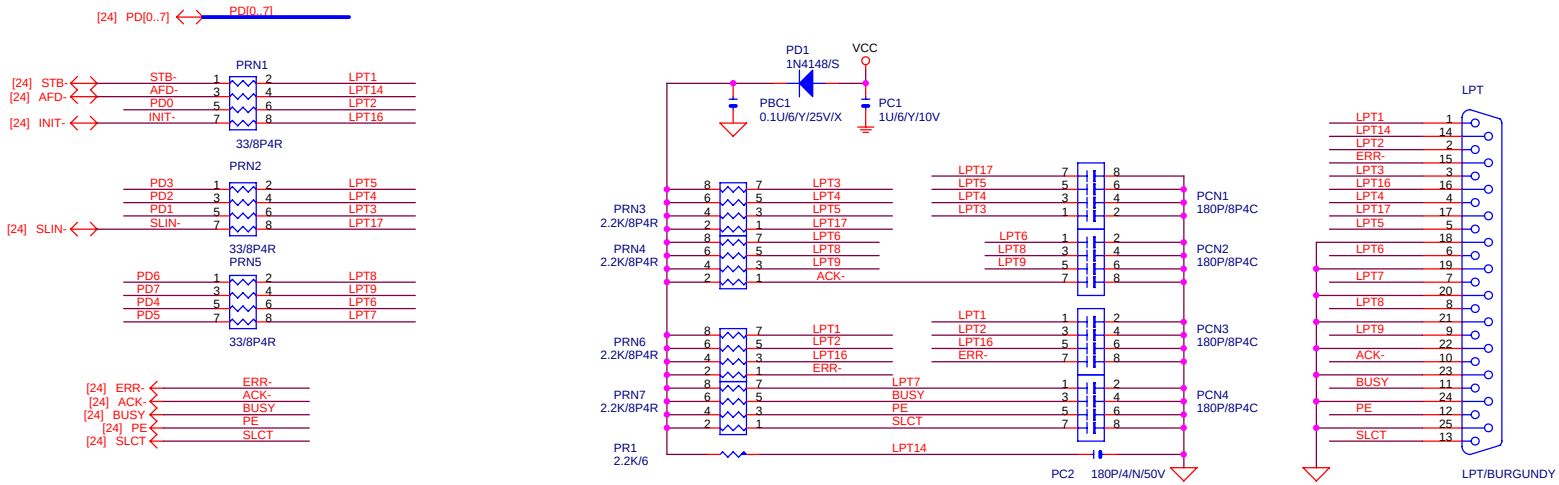


EXTERNAL COMB



PLACE NEAR VGA_COM CONNECTOR

LPT PORT



Gigabyte Technology		
Title: **COM & LPT PORT**		
Size: B	Document Number: **8I945GMF**	Rev: **1.1**
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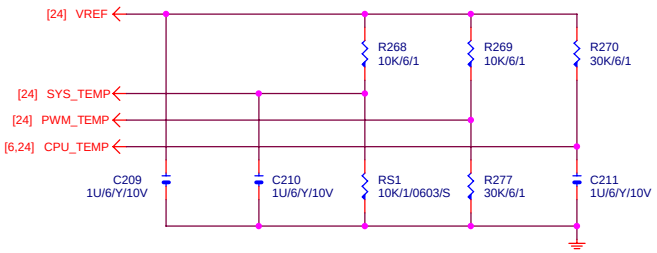
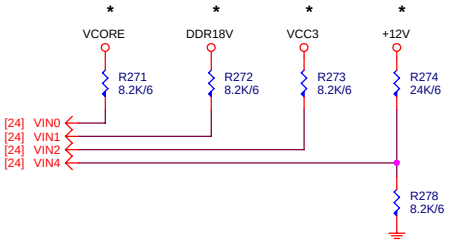
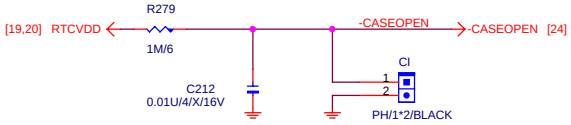
TEMP H/W MONITOR



VOLTAGE-- H/W MONITOR

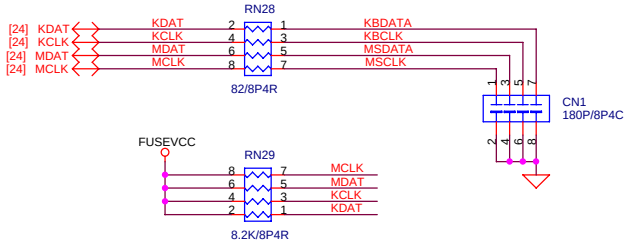


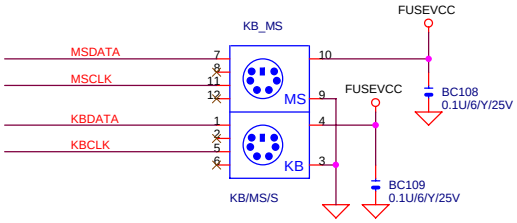
CASE OPEN



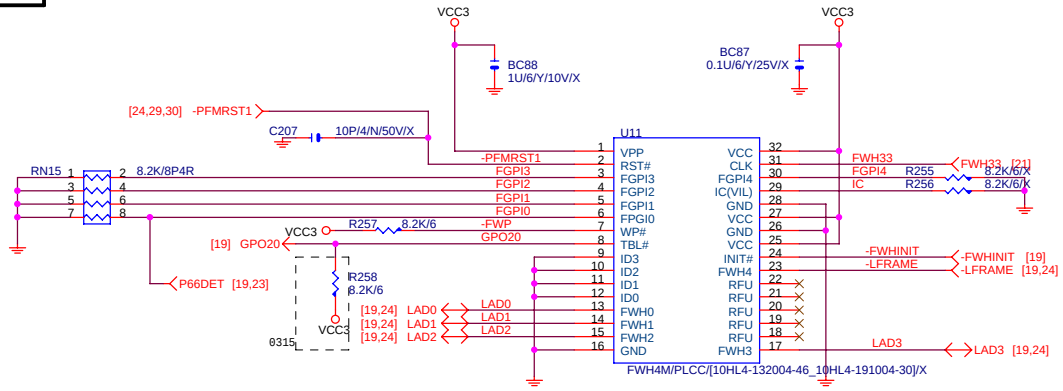
Case Open Circuits

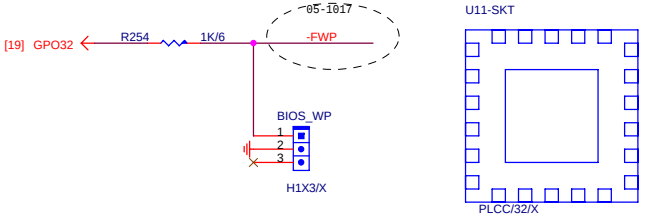
KB/MS





FWM BIOS





Gigabyte Technology		
Title: BIOS/HW-MONITOR/CI/KB/MS		
Size: B	Document Number: 8I945GMF	Rev: 1.1
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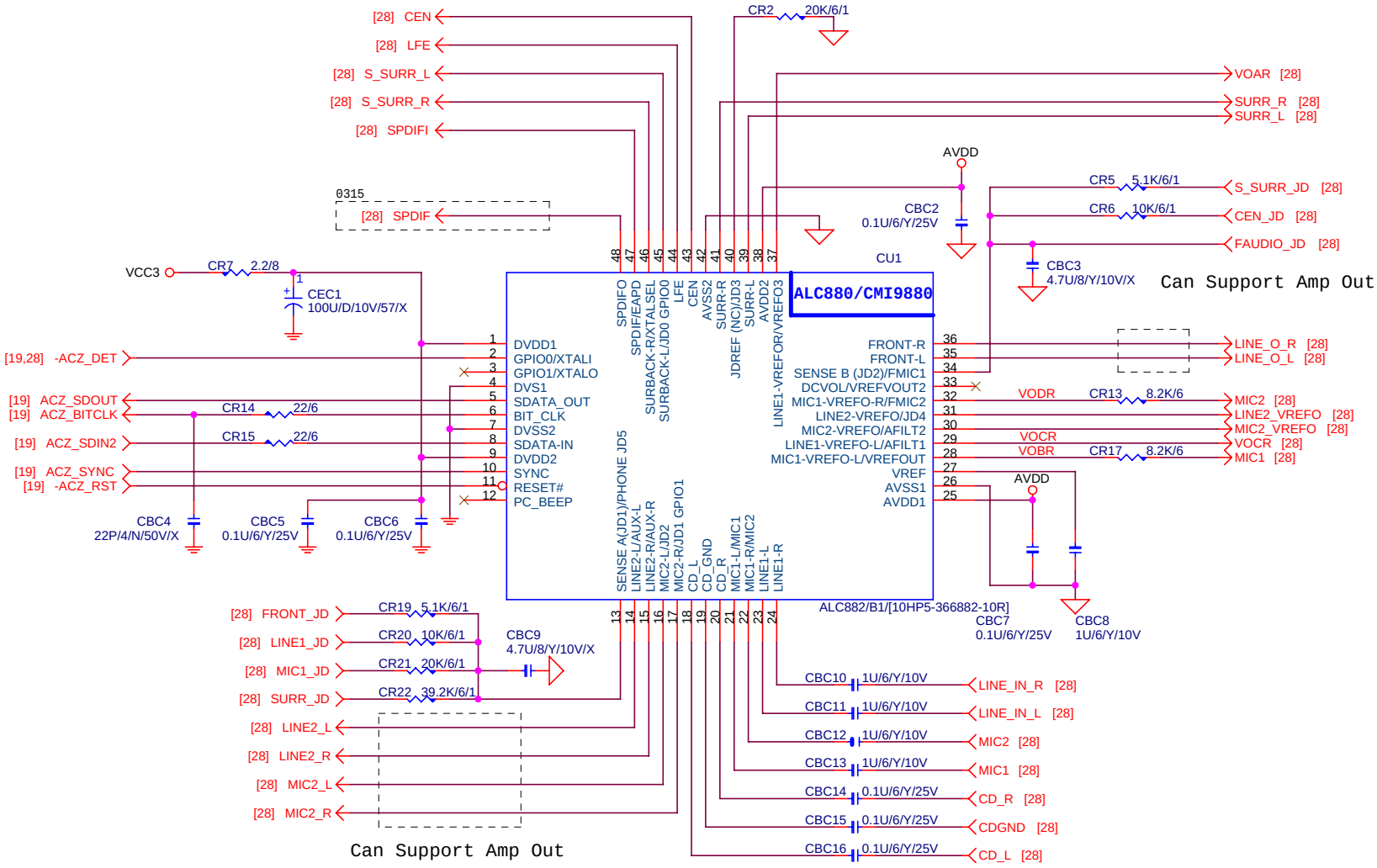
AZALIA CODEC



Gigabyte Technology

Title	AC97 ALC658	
Size: Custom	Document Number: 8I945GMF	Rev: 1.1
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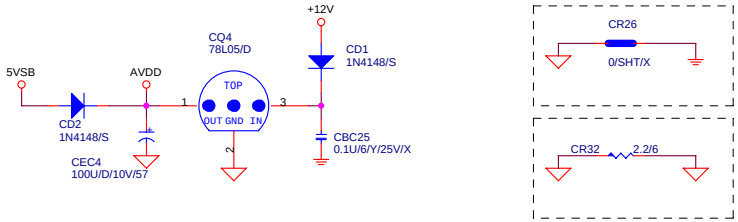
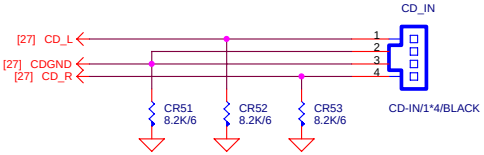
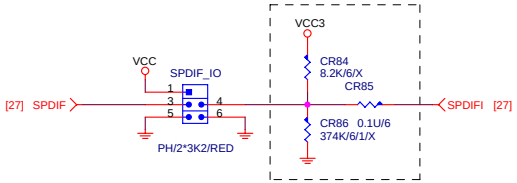
CODEC POWER/EMI PAD



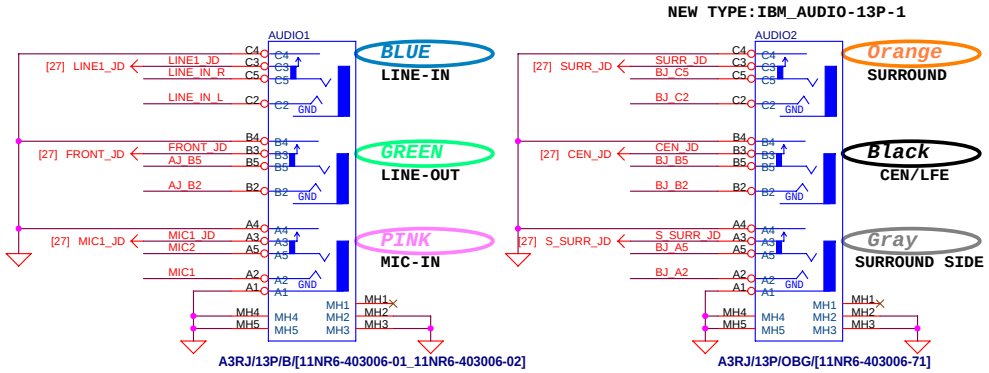
CD IN



SPDIF

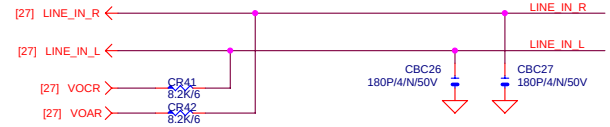


AZALIA JACK

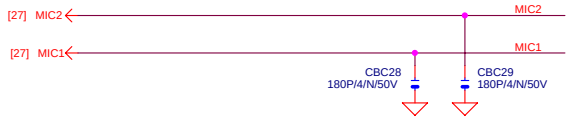


LINE-OUT

LINE-IN

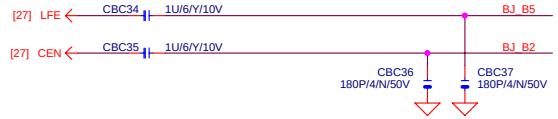


MIC-IN



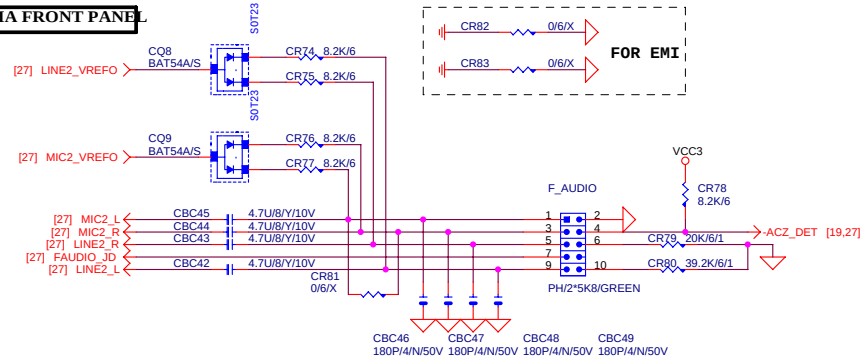
SURROUND

CEN/LFE



SURR BACK

AZALIA FRONT PANEL



Gigabyte Technology

Title: AUDIO JACK

Size: Custom | Document Number: 8I945GMF | Rev: 1.1

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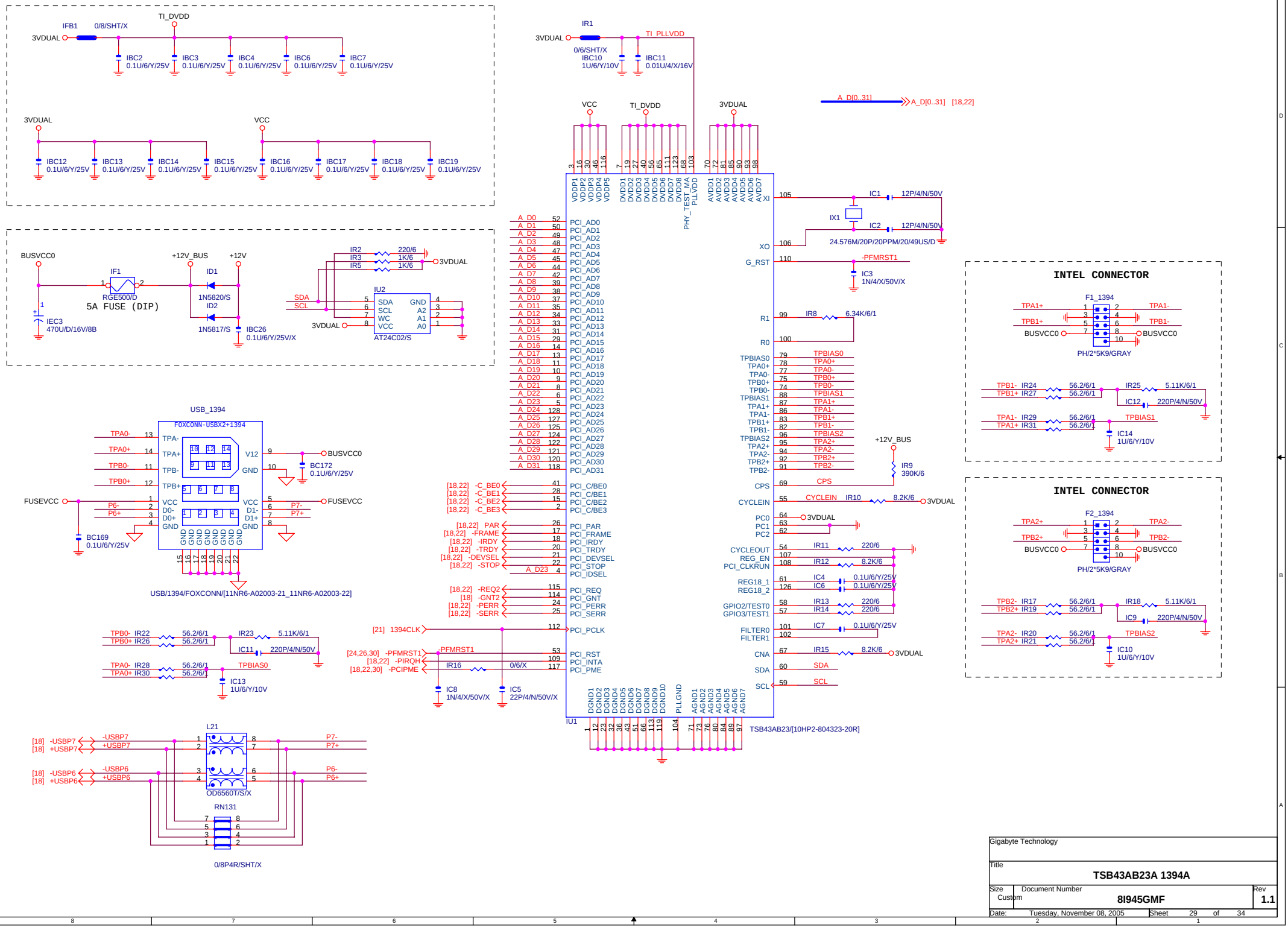
IFB1 0/8/SHT/X
TI_DVDD
3VDUAL
IBC2 0.1U/6/Y/25V
IBC3 0.1U/6/Y/25V
IBC4 0.1U/6/Y/25V
IBC6 0.1U/6/Y/25V
IBC7 0.1U/6/Y/25V
3VDUAL
VCC
IBC12 0.1U/6/Y/25V
IBC13 0.1U/6/Y/25V
IBC14 0.1U/6/Y/25V
IBC15 0.1U/6/Y/25V
IBC16 0.1U/6/Y/25V
IBC17 0.1U/6/Y/25V
IBC18 0.1U/6/Y/25V
IBC19 0.1U/6/Y/25V
IR1
3VDUAL
0/6/SHT/X
IBC10 1U/6/Y/10V
TI_PLLVDD
IBC11 0.01U/4/X/16V
VCC
TI_DVDD
3VDUAL
A_D[0..31]
A_D[0..31] [18,22]
BUSVCC0
IF1
RGE500/D
5A FUSE (DIP)
IEC3 470U/D/16V/8B
+12V_BUS
+12V
ID1
1N5820/S
ID2
1N5817/S
IBC26 0.1U/6/Y/25V/X
IR2 220/6
IR3 1K/6
IR5 1K/6
3VDUAL
SDA
SCL
IU2
SDA GND
SCL A2
WC A1
VCC A0
AT24C02/S
USB_1394
FOXCONN-USBX2+1394
TPA0- TPA- V12 BUSVCC0
TPA0+ TPA+ GND
TPB0- TPB-
TPB0+ TPB+
FUSEVCC VCC D0- D0+ GND
P6- P6+
VCC D1- D1+ GND
P7- P7+
FUSEVCC
BC169 0.1U/6/Y/25V
BC172 0.1U/6/Y/25V
USB/1394/FOXCONN/[11NR6-A02003-21_11NR6-A02003-22]
IU1
TSB43AB23/[10HP2-804323-20R]
VDDP1 VDDP2 VDDP3 VDDP4 VDDP5
DVDD1 DVDD2 DVDD3 DVDD4 DVDD5 DVDD6 DVDD7 DVDD8
PHY_TEST_MA PLLVDD
AVDD1 AVDD2 AVDD3 AVDD4 AVDD5 AVDD6 AVDD7
XI XO G_RST R1 R0
CPS CYCLEIN
PC0 PC1 PC2
CYCLEOUT REG_EN PCI_CLKRUN
REG18_1 REG18_2
GPIO2/TEST0 GPIO3/TEST1
FILTER0 FILTER1
CNA SDA SCL
DGND1 DGND2 DGND3 DGND4 DGND5 DGND6 DGND7 DGND8 DGND9 DGND10 PLLGND
AGND1 AGND2 AGND3 AGND4 AGND5 AGND6 AGND7
IC1 12P/4/N/50V
IX1
IC2 12P/4/N/50V
24.576M/20P/20PPM/20/49US/D
-PFMRST1
IC3 1N/4/X/50V/X
IR8 6.34K/6/1
TPBIAS0 TPA0+ TPA0- TPB0+ TPB0- TPBIAS1 TPA1+ TPA1- TPB1+ TPB1- TPBIAS2 TPA2+ TPA2- TPB2+ TPB2-
+12V_BUS
IR9 390K/6
IR10 8.2K/6
3VDUAL
IR11 220/6
IR12 8.2K/6
IC4 0.1U/6/Y/25V
IC6 0.1U/6/Y/25V
IR13 220/6
IR14 220/6
IC7 0.1U/6/Y/25V
IR15 8.2K/6
3VDUAL
PCI_AD0 PCI_AD1 PCI_AD2 PCI_AD3 PCI_AD4 PCI_AD5 PCI_AD6 PCI_AD7 PCI_AD8 PCI_AD9 PCI_AD10 PCI_AD11 PCI_AD12 PCI_AD13 PCI_AD14 PCI_AD15 PCI_AD16 PCI_AD17 PCI_AD18 PCI_AD19 PCI_AD20 PCI_AD21 PCI_AD22 PCI_AD23 PCI_AD24 PCI_AD25 PCI_AD26 PCI_AD27 PCI_AD28 PCI_AD29 PCI_AD30 PCI_AD31
PCI_C/BE0 PCI_C/BE1 PCI_C/BE2 PCI_C/BE3
PCI_PAR PCI_FRAME PCI_IRDY PCI_TRDY PCI_DEVSEL PCI_STOP PCI_IDSEL
PCI_REQ PCI_GNT PCI_PERR PCI_SERR
PCI_PCLK
PCI_RST PCI_INTA PME
[21] 1394CLK
[24,26,30] -PFMRST1
[18,22] -PIRQH
[18,22,30] -PCIPME
IR16 0/6/X
IC8 1N/4/X/50V/X
IC5 22P/4/N/50V/X
TPB0- IR22 56.2/6/1
TPB0+ IR26 56.2/6/1
IR23 5.11K/6/1
IC11 220P/4/N/50V
TPA0- IR28 56.2/6/1
TPA0+ IR30 56.2/6/1
TPBIAS0
IC13 1U/6/Y/10V
L21
[18] -USBP7
[18] +USBP7
[18] -USBP6
[18] +USBP6
OD65607T/S/X
RN131
0/8P4R/SHT/X
INTEL CONNECTOR
F1_1394
TPA1+ TPA1-
TPB1+ TPB1-
BUSVCC0 BUSVCC0
PH/2*5K9/GRAY
TPB1- IR24 56.2/6/1
TPB1+ IR27 56.2/6/1
IR25 5.11K/6/1
IC12 220P/4/N/50V
TPA1- IR29 56.2/6/1
TPA1+ IR31 56.2/6/1
TPBIAS1
IC14 1U/6/Y/10V
INTEL CONNECTOR
F2_1394
TPA2+ TPA2-
TPB2+ TPB2-
BUSVCC0 BUSVCC0
PH/2*5K9/GRAY
TPB2- IR17 56.2/6/1
TPB2+ IR19 56.2/6/1
IR18 5.11K/6/1
IC9 220P/4/N/50V
TPA2- IR20 56.2/6/1
TPA2+ IR21 56.2/6/1
TPBIAS2
IC10 1U/6/Y/10V
Gigabyte Technology
Title
TSB43AB23A 1394A
Size Custom
Document Number 8I945GMF
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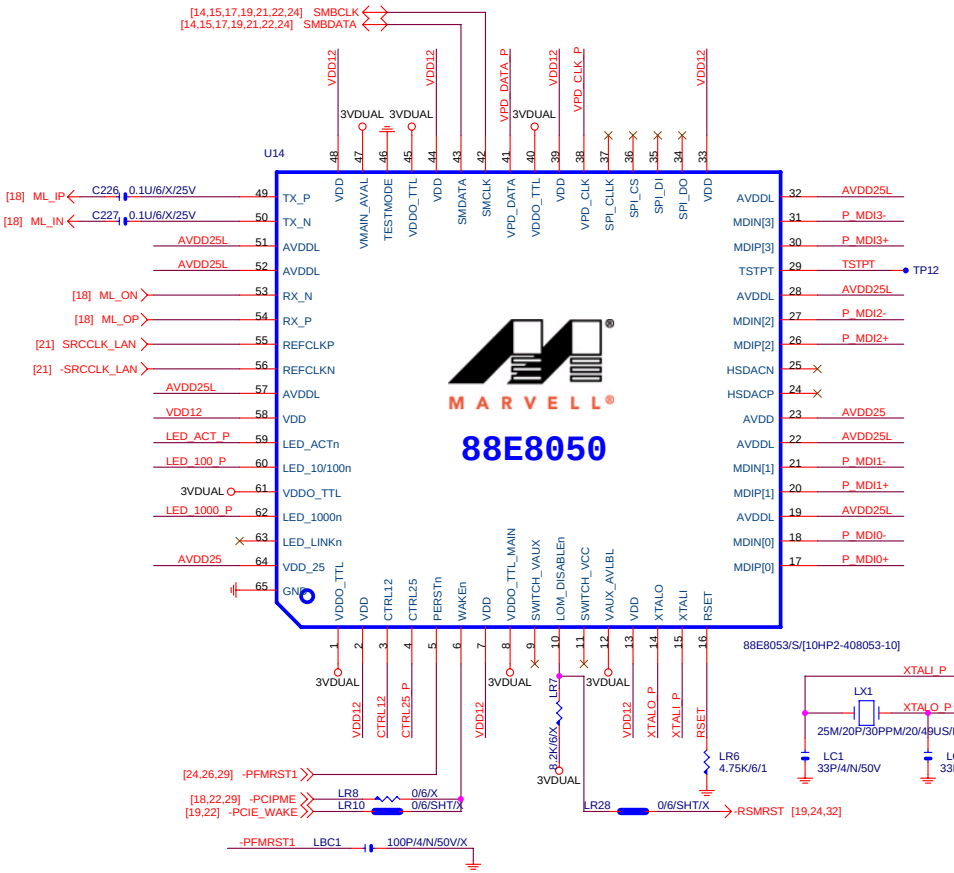
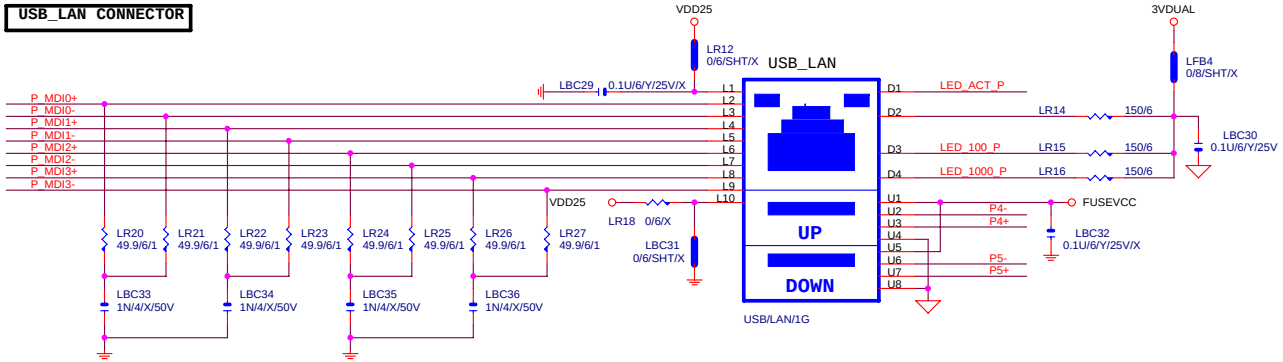
PCIE-1G LAN

 # Layout Check 注意事項

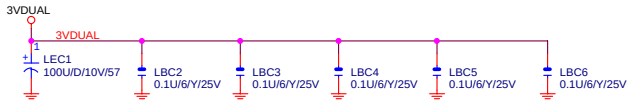
1. LU1 PIN65 需下內層GND,打 12 VIA
2. 3VDUAL , VCC3 , VDD15_L , AVDD25_L
   至少走20mil寬,並且電容擺設每兩pin至少放一顆Bypass Cap.
3. X'TAL 25MHz 兩訊號線,TRACE 愈短愈好,線寬12mil
4. MDI正負0~3,TRACE 8:7:8 , 每對之間保持 40mil



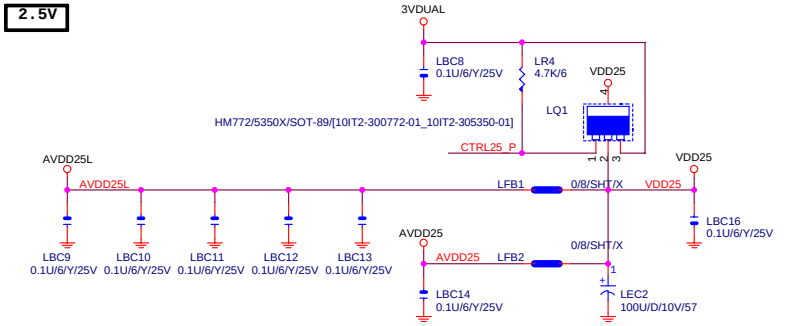
USB_LAN CONNECTOR



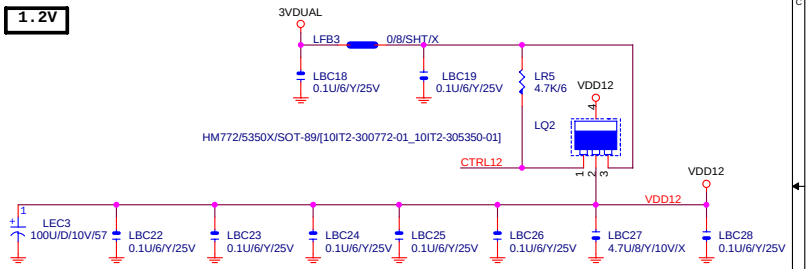
3VDUAL



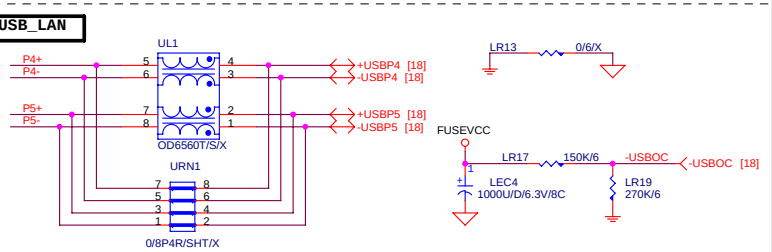
2.5V



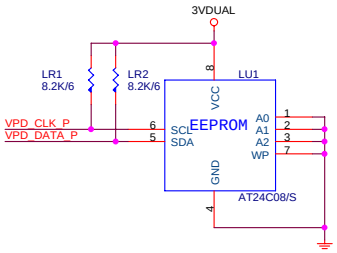
1.2V



USB_LAN



EEPROM



Gigabyte Technology

Title: MARVELL 88E8001

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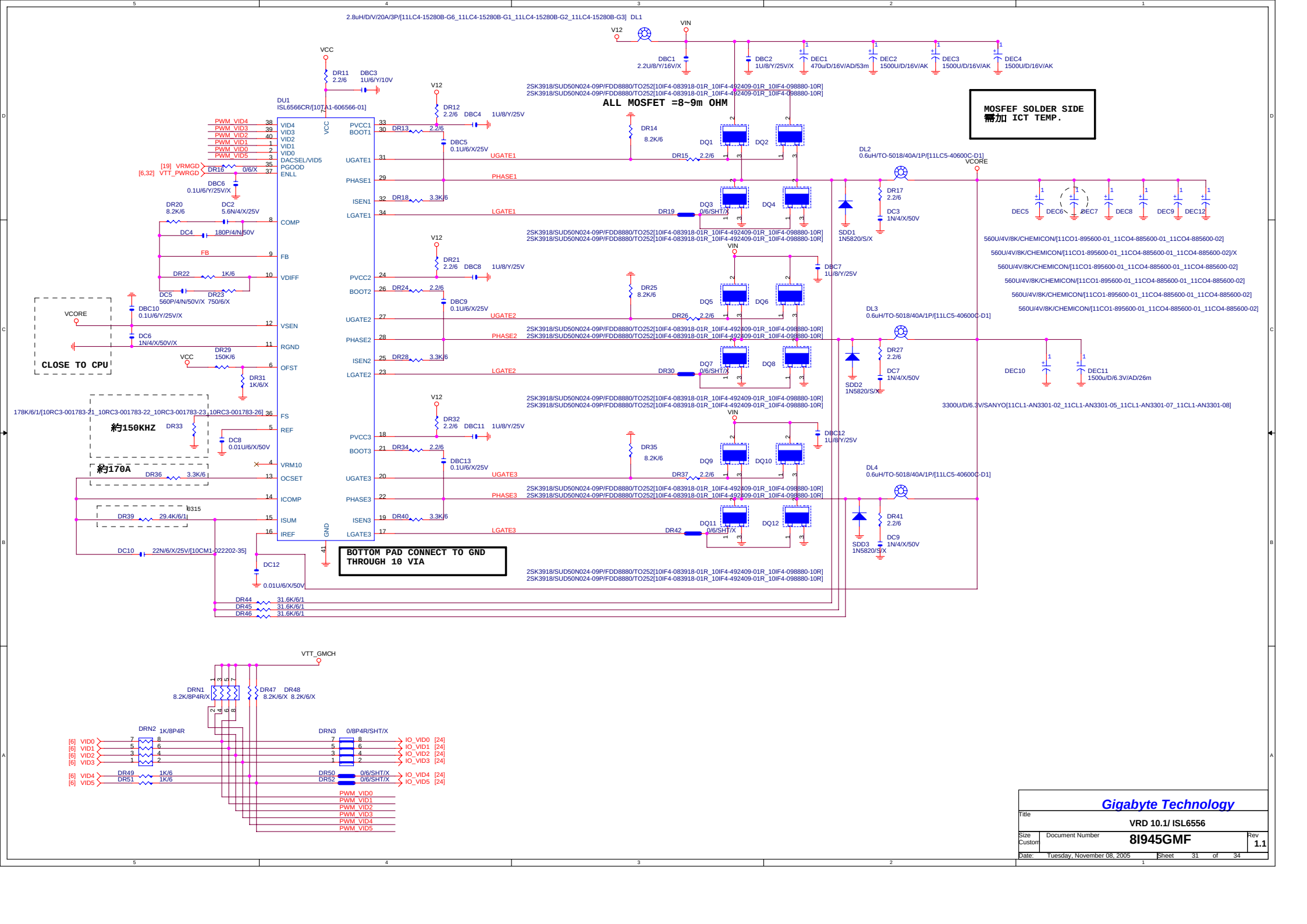
2.8uH/D/V/20A/3P/[11LC4-15280B-G6_11LC4-15280B-G1_11LC4-15280B-G2_11LC4-15280B-G3] DL1
ALL MOSFET =8~9m OHM
MOSFEF SOLDER SIDE
需加 ICT TEMP.
DU1
ISL6566CR/[10TA1-606566-01]
CLOSE TO CPU
約150KHZ
約170A
BOTTOM PAD CONNECT TO GND
THROUGH 10 VIA
2SK3918/SUD50N024-09P/FDD8880/TO252[10IF4-083918-01R_10IF4-492409-01R_10IF4-098880-10R]
560U/4V/8K/CHEMICON/[11CO1-895600-01_11CO4-885600-01_11CO4-885600-02]
3300U/D/6.3V/SANYO[11CL1-AN3301-02_11CL1-AN3301-05_11CL1-AN3301-07_11CL1-AN3301-08]
Gigabyte Technology
VRD 10.1/ ISL6556
8I945GMF
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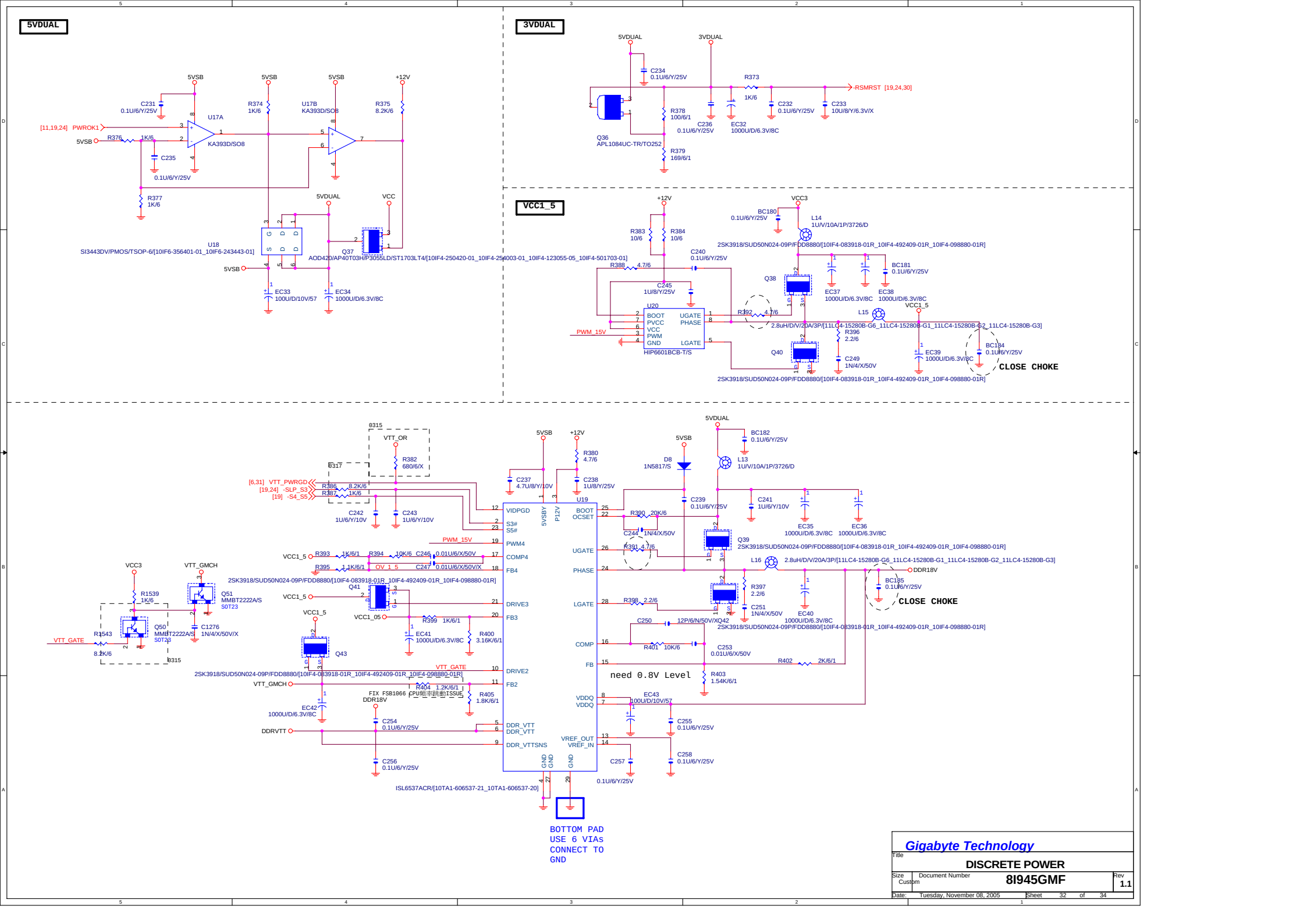
5VDUAL
3VDUAL
VCC1_5
U18
SI3443DV/PMOS/TSOP-6/[10IF6-356401-01_10IF6-243443-01]
Q37
AOD420/AP40T03H/P3055LD/ST1703LT4/[10IF4-250420-01_10IF4-254003-01_10IF4-123055-05_10IF4-501703-01]
U20
HIP6601BCB-T/S
2SK3918/SUD50N024-09P/FDD8880/[10IF4-083918-01R_10IF4-492409-01R_10IF4-098880-01R]
CLOSE CHOKE
Q36
APL1084UC-TR/TO252
U17A
KA393D/SO8
U17B
KA393D/SO8
Q38
Q40
Q39
Q41
Q43
Q51
MMBT2222A/S
S0T23
Q50
MMBT2222A/S
S0T23
U19
ISL6537ACR/[10TA1-606537-21_10TA1-606537-20]
FIX FSB1066 CPU超率跳動ISSUE
need 0.8V Level
BOTTOM PAD
USE 6 VIAs
CONNECT TO
GND
Gigabyte Technology
DISCRETE POWER
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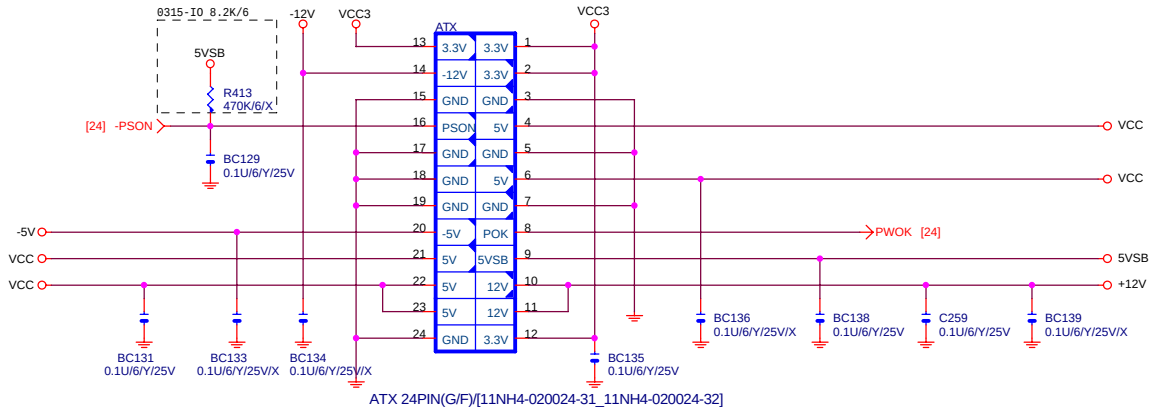
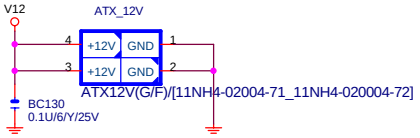
ATX POWER CONNECTOR

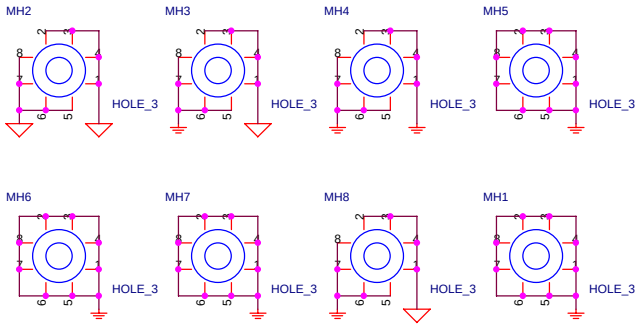


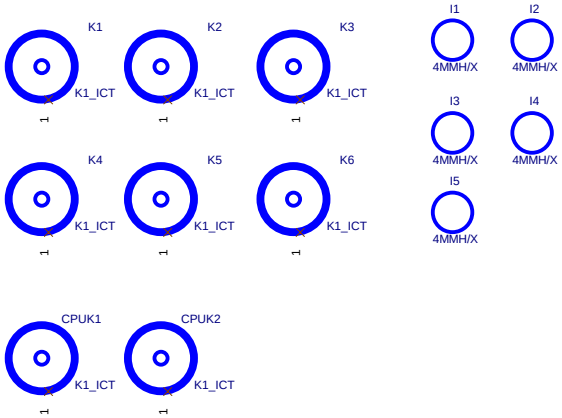
ATX 24PIN(G/F)/[11NH4-020024-31_11NH4-020024-32]



ATX12V(G/F)/[11NH4-020004-71_11NH4-020004-72]

HOLE_3-2--->有鉛





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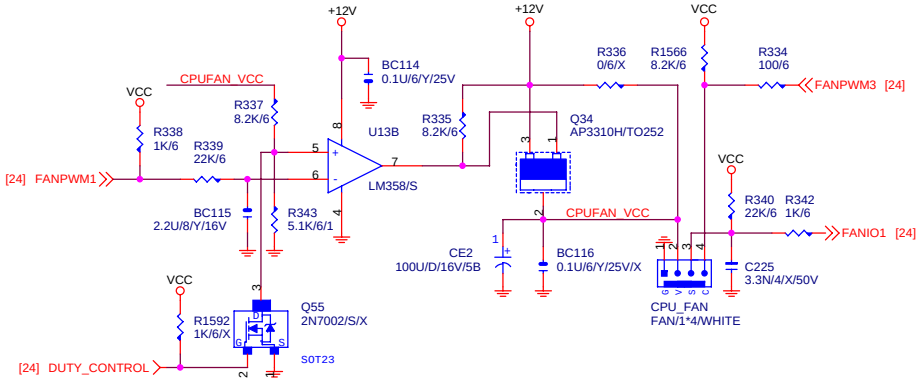
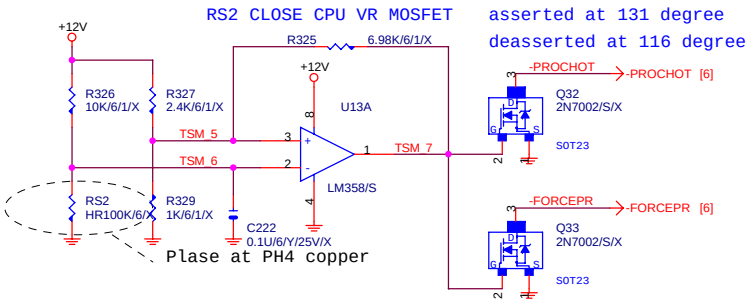
CPU SMART FAN — SMART FAN

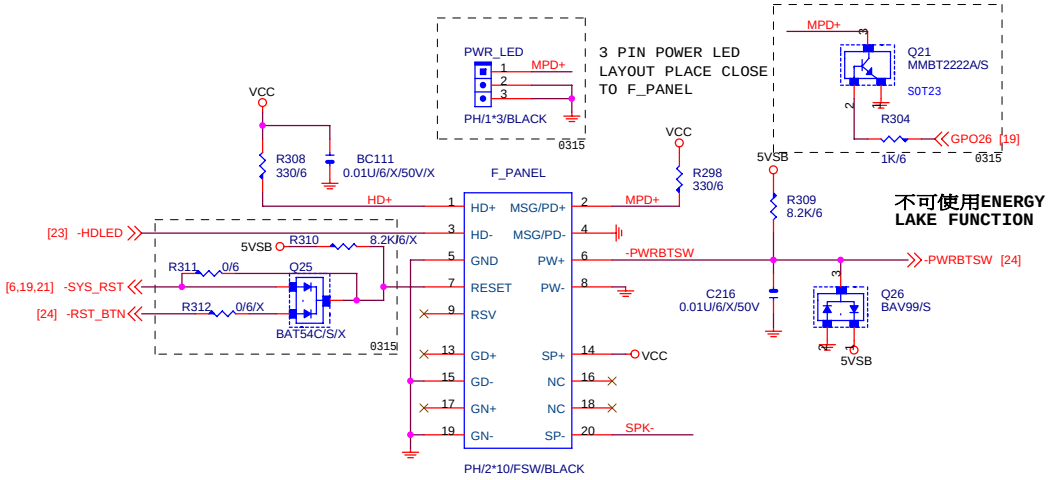


PROCESSOR HOT

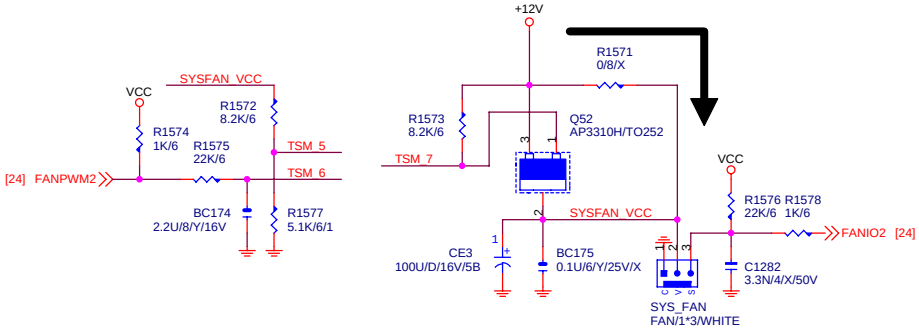


INTEL FRONT PANEL

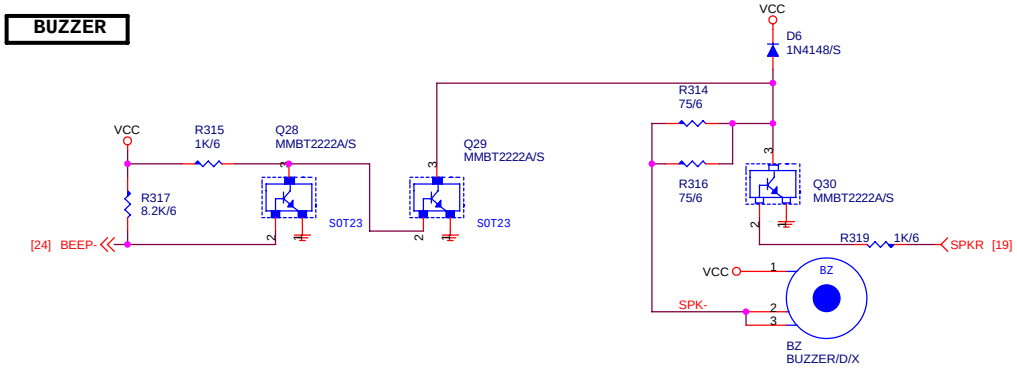
MPD-:(GPIO25--VCCSUS3+HI+HI+DEFINED(C3/C4/S/1/S3/S/4/S5))-->INTEL



SYS_FAN — SMART FAN



BUZZER



Gigabyte Technology		
Title: FRONT PANEL		
Size: Custom	Document Number: 8I945GMF	Rev: 1.1
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