

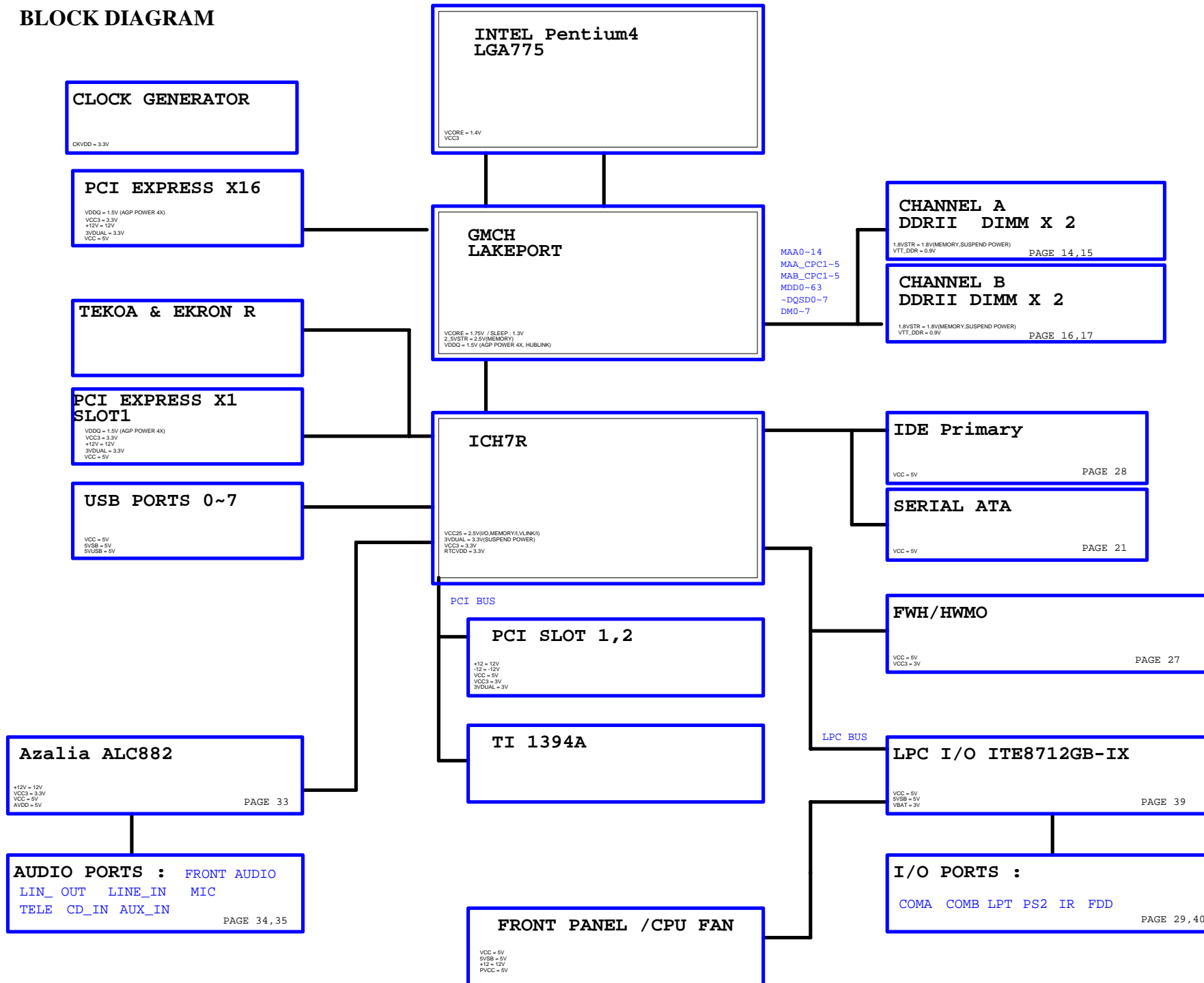
01	COVER SHEET
02	BLOCK DIAGRAM
03	BOM & PCB MODIFY HISTORY
04	P4_LGA775_A
05	P4_LGA775_B
06	P4_LGA775_C
07	P4_LGA775_D
08	GMCH-LAKEPORT_HOST
09	GMCH-LAKEPORT_DDRII
10	GMCH-LAKEPORT_PCI E, DMI
11	GMCH-LAKEPORT_INT VGA
12	GMCH-LAKEPORT_GND
13	GMCH-LAKEPORT_PWR
14	DDRII CHANNEL A 1,2
15	DDRII CHANNEL B 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	CY28411 CKG
22	ATX,ATX_12V CONNECT,FWH BIOS
23	PCI EXPRESS*1 SLOT
24	PCI SLOT 1,2
25	H/W MONITOR,FAN
26	IDE
27	KB_PS2

28	FRONT PANEL
29	FRONT USB,REAL USB CONNECT
30	PROCESSOR HOT
31	AZALIA CODEC ALC880
32	AUDIO JACK 1
33	AUDIO JACK 2
34	TI1394A
35	TEKOA & EKRON R
36	TEKOA & EKRON R
37	ITE 8712GB
38	COM_LPT
39	VCORE PWM
40	DISCRETE POWER
41	GPIO DEFINE
42	GPIO DEFINE

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Title		
Cover Sheet		
Size	Document Number	Rev
Custom	8I945GMBX	1.01
Date:	Friday, July 01, 2005	Sheet 1 of 42

BLOCK DIAGRAM



Model Name: 8I945GMBX

Version: 1.01

Component value change history

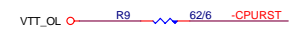
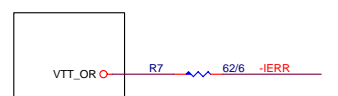
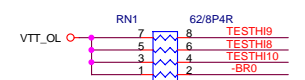
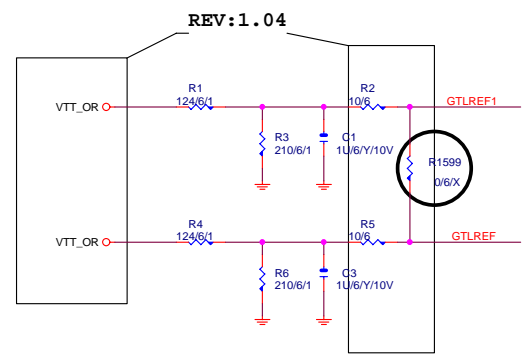
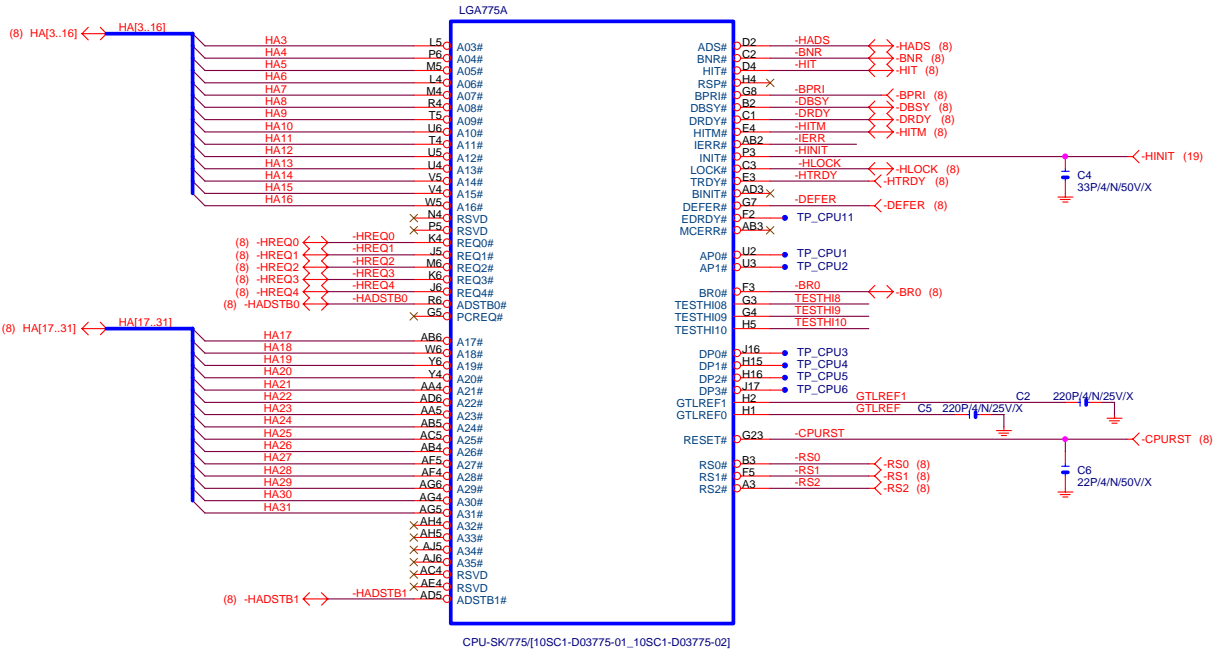
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	VRM solution change	DC6由 33P/4N/50V變為 180P/4N/50V DEC10由 680U/D/4V/89變為 560U/D/2.5V/8*8/[11C04-885600-01_11C04-885600-02] DEC12由 680U/D/4V/89變為 560U/D/2.5V/8*8/[11C04-885600-01_11C04-885600-02] DEC13由 680U/D/4V/89變為 560U/D/2.5V/8*8/[11C04-885600-01_11C04-885600-02] DEC6由 680U/D/4V/89變為 560U/D/2.5V/8*8/[11C04-885600-01_11C04-885600-02] DEC9由 680U/D/4V/89變為 560U/D/2.5V/8*8/[11C04-885600-01_11C04-885600-02] DR21由 2.87K/6/1變為 2.2K/6/1 *** 增加 BC2值為 10U/12/X/6.3V BC4值為 10U/12/X/6.3V BC6值為 10U/12/X/6.3V BC694值為 0.1U/6/Y/25V BC7值為 10U/12/X/6.3V BC711值為 0.1U/6/Y/25V DEC19值為 560U/D/2.5V/8*8/[11C04-885600-01_11C04-885600-02] *** 刪除 DEC20值為 680U/D/4V/89 DEC4值為 1500U/D/16V/AK DEC5值為 680U/D/4V/89 DEC7值為 680U/D/4V/89
	Specification change	S/[11NH2-000203-11] CU1由 ALC882/B1/S/[10HP5-366882-10]變為 ALC882/B1/S/[10HP5-366882-10] U26由 82573V/A3/PBPRBE變為 82573V/A3/[10HB2-400573-22R] U8由 NH82801GB ICH7/A1變為 NH82801GH ICH7/A1/[10HB1-032801-Q1R] *** 增加 BC107值為 0.1U/6/Y/25V BC108值為 0.1U/6/Y/25V EF_LED1值為 PH/1*2/BLACK EF_LED2值為 PH/1*2/BLACK IBC24值為 0.1U/6/Y/25V LBC12值為 10U/8/Y/10V LBC45值為 0.1U/6/Y/25V LBC54值為 10U/8/Y/10V LEC1值為 100U/D/10V/57 LR41值為 2.2K/6 LR60值為 0/6 LR71值為 1/6 LR72值為 1/6 LRV5值為 8.2K/6 LRN10值為 10/8P4R LRN9值為 10/8P4R Q277值為 BAT54A/S Q278值為 MMBT2222A/SOT23 Q279值為 MMBT2222A/S R1645值為 0/6 R1650值為 330/6 R1651值為 330/6 R1652值為 1K/6 *** 刪除 INFO_LINK值為 H2X3/-PING/[11NH2-000203-31_11NH2-000203-33] LBC44值為 1U/6/Y/10V LR53值為 0/12 LR54值為 0/12 NVM_PROT值為 PH/1*2/BLACK RF_ID值為 H2X3/-PINS/[11NH2-000203-11]
0615	Removed EF_LED1/EF_LED2 fixed can't boot issue	DC6 change to 33PF

Circuit or PCB layout change for next version

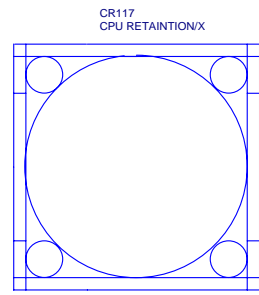
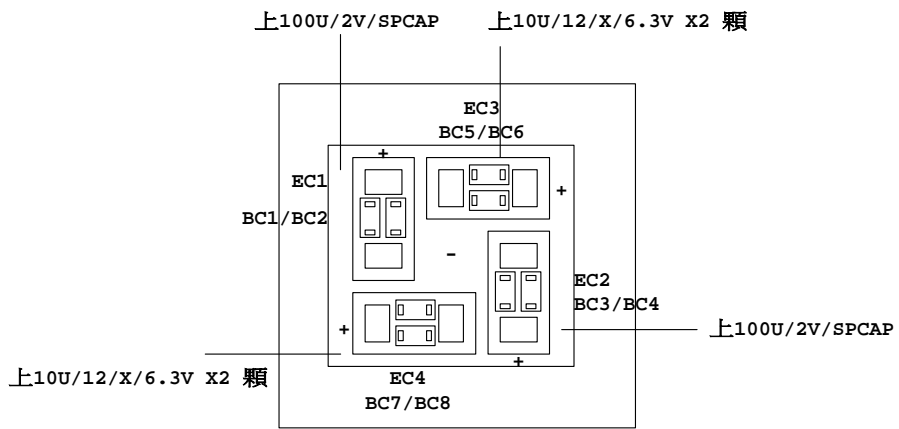
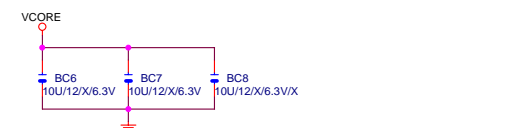
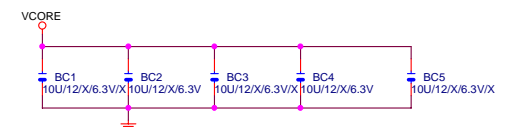
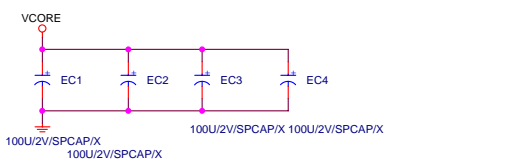
DATE	Change Item	Reason
	EMI solution	FB1由 80/6/2.5A變為 0/6 FB2由 80/6/2.5A變為 0/6 FB3由 80/6/2.5A變為 0/6 *** 增加 CL287值為 10P/4N/50V CL288值為 10P/4N/50V CL289值為 10P/4N/50V FB10值為 80/6/2.5A FB8值為 80/6/2.5A FB9值為 80/6/2.5A R401由 8.66K/6/1變為 10K/6/1 R403由 2.61K/6/1變為 620/6/1
	-Prochot solution	R213由 33/6變為 0/6 R214由 33/6變為 0/6
	PCIEx1 slot LAN C&C solution	

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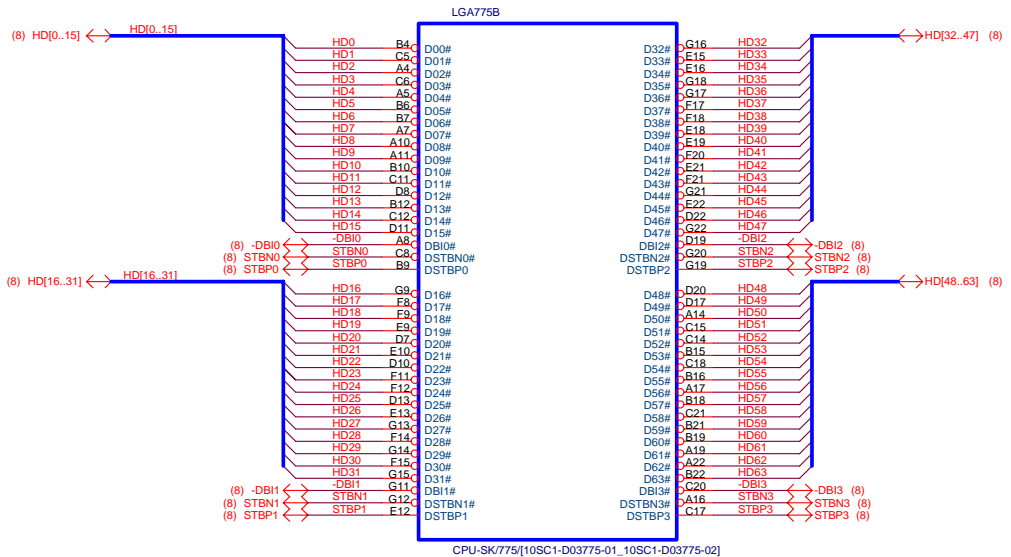
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Size	Document Number	8I945GMBX	
Custom		Rev	1.01
Date:	Friday, July 01, 2005	Sheet	3 of 42



SP-CAP X 4PCS



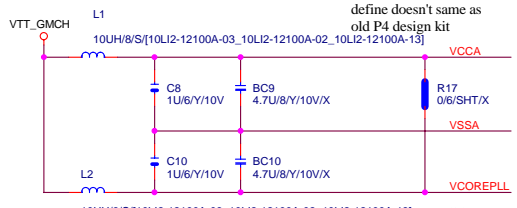
Intel Confidential		
Title P4_LGA775-A		
Size Custom	Document Number 81945GMBX	Rev 1.01
Date: Friday, July 01, 2005	Sheet 4	of 42



Intel Confidential

Title		
P4_LGA775-C		
Size	Document Number	Rev
Custom	81945GMBX	1.01
Date:	Friday, July 01, 2005	Sheet 5 of 42

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

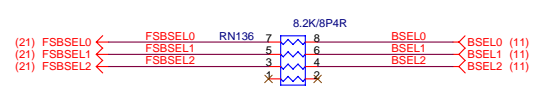
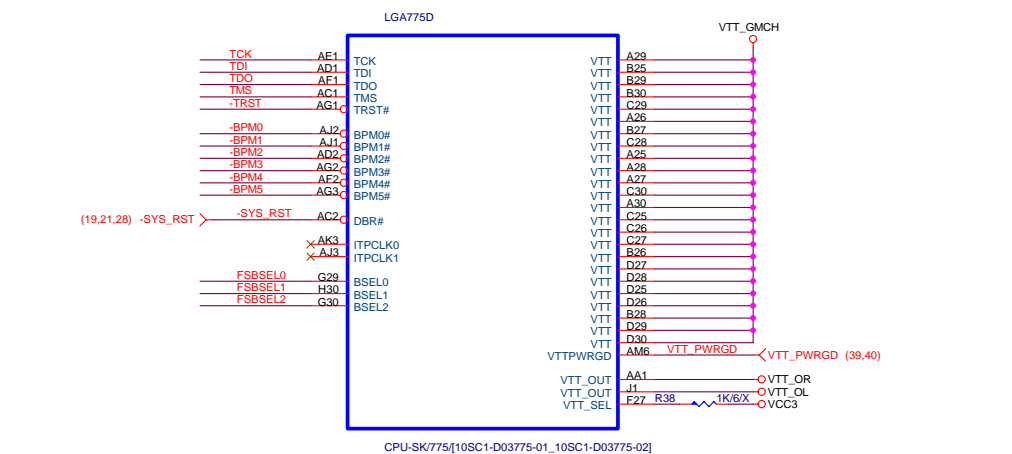
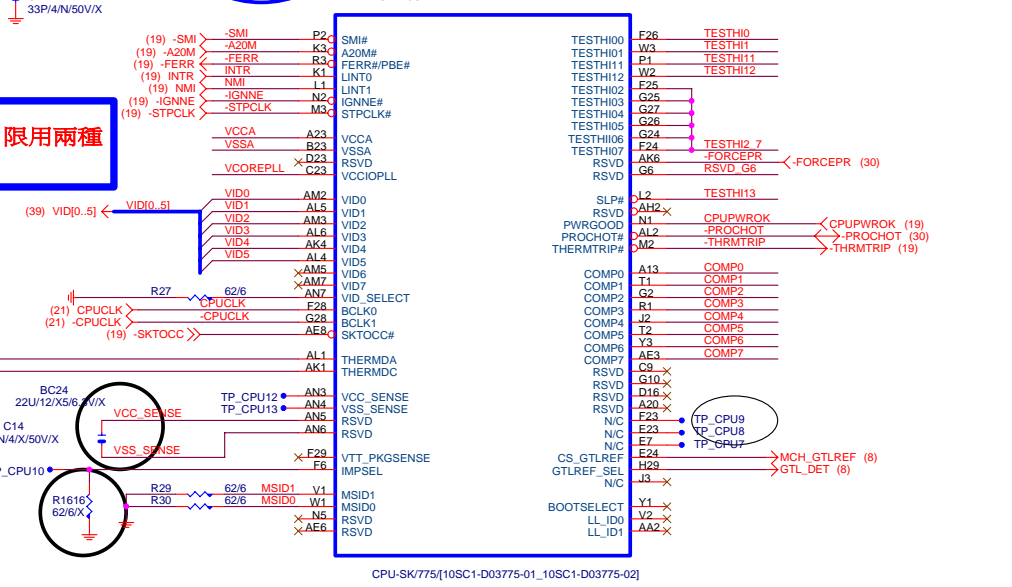
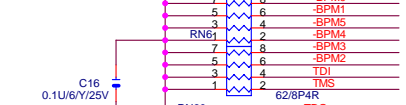
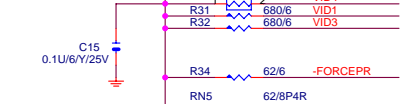
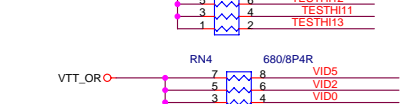
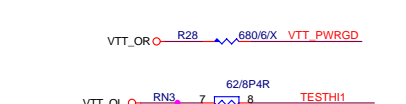
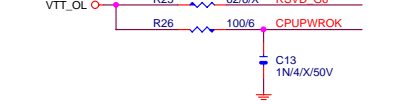
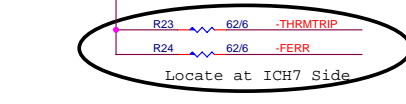
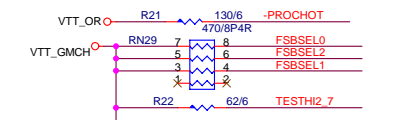
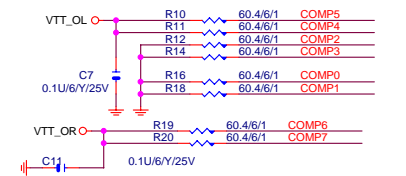
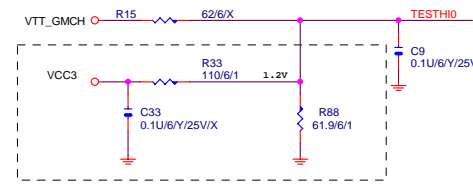
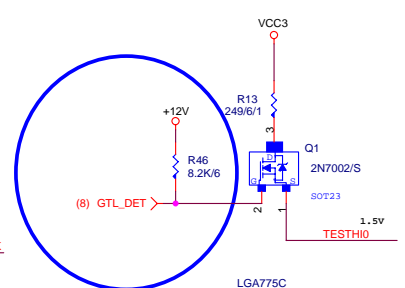


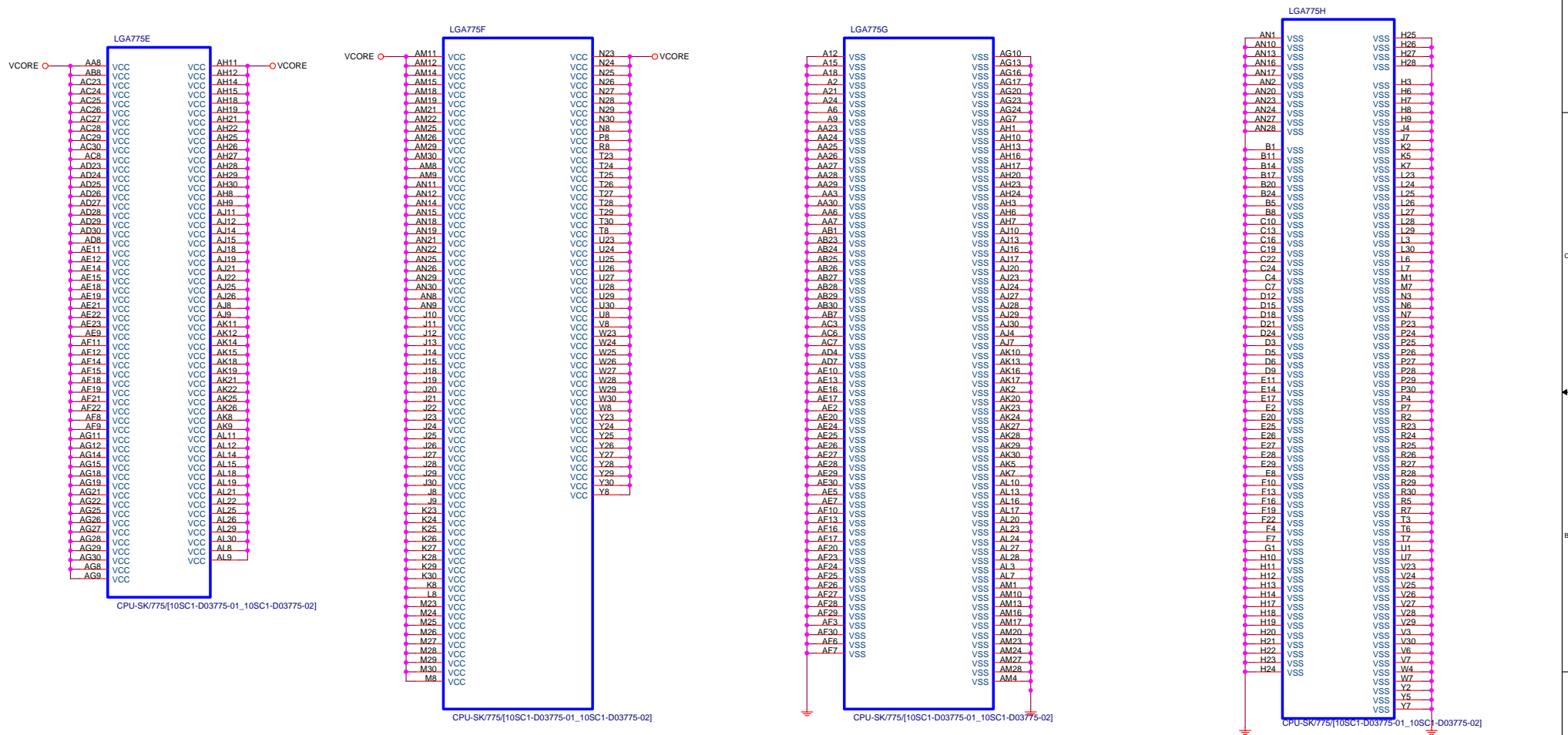
Trace width doesn't
 less than 12 Mil

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

10LI2-12100A-03=INDUCTOR 10uH 300mA TAI-TECH
 10LI2-12100A-02=INDUCTOR 10uH 155mA TAIYO
 10LI2-12100A-01=INDUCTOR 10uH 120mA TDK

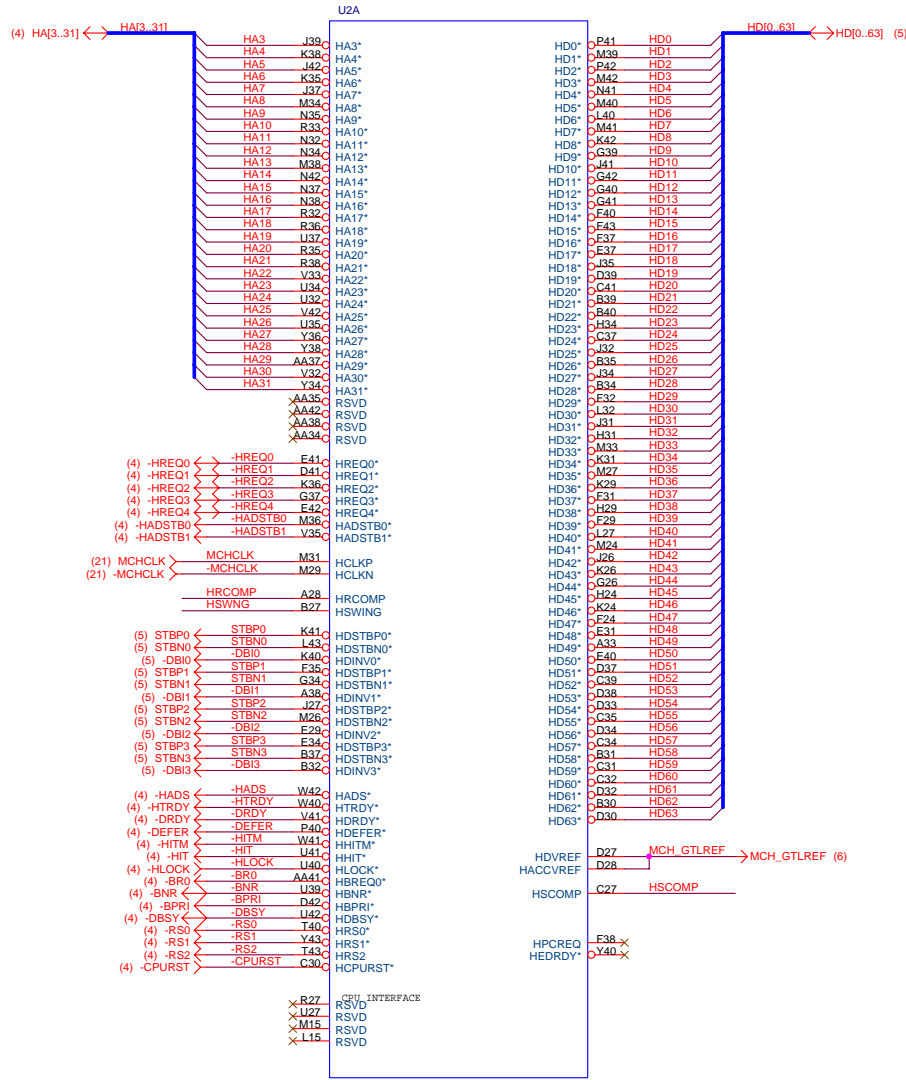
限用兩種



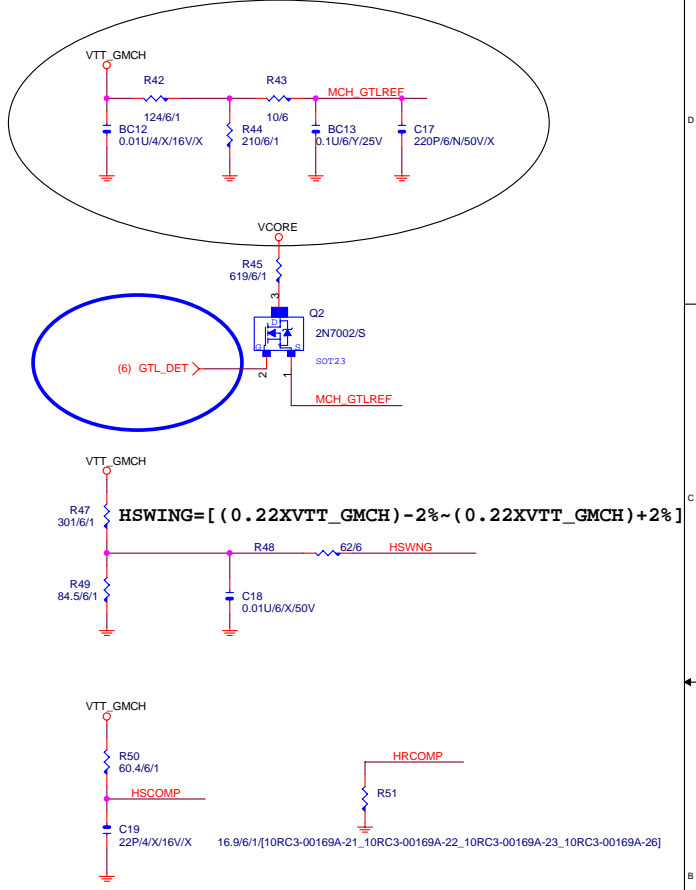


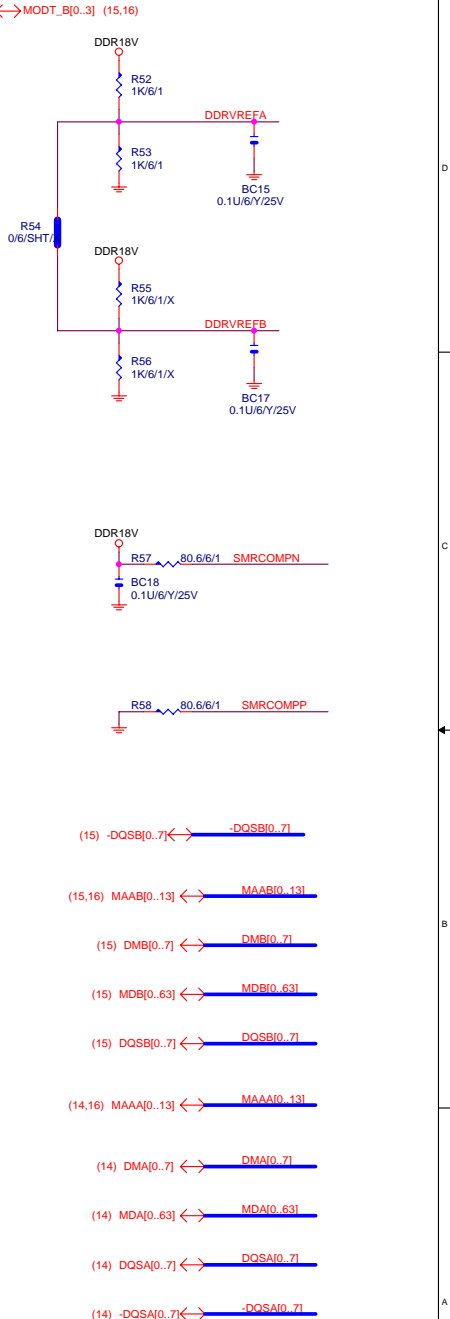
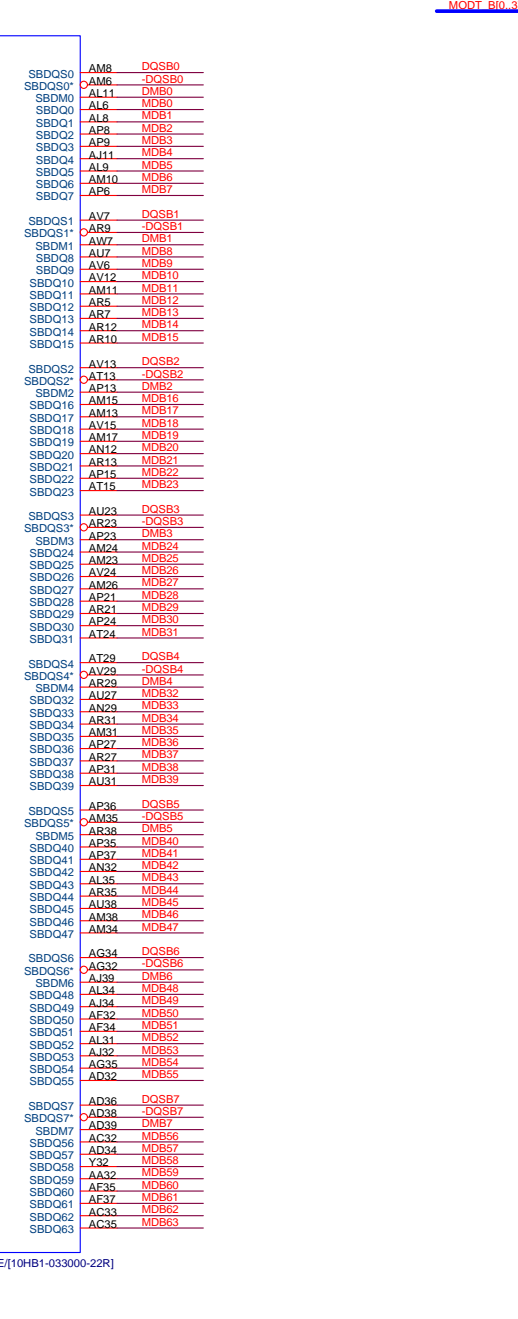
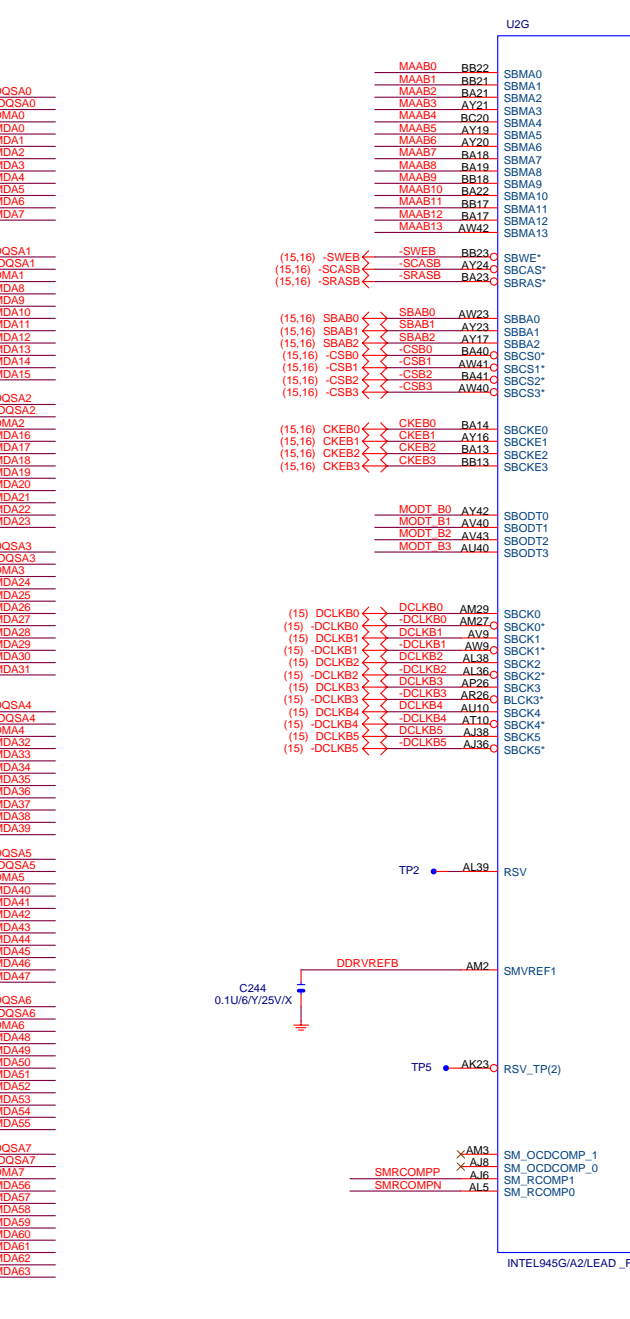
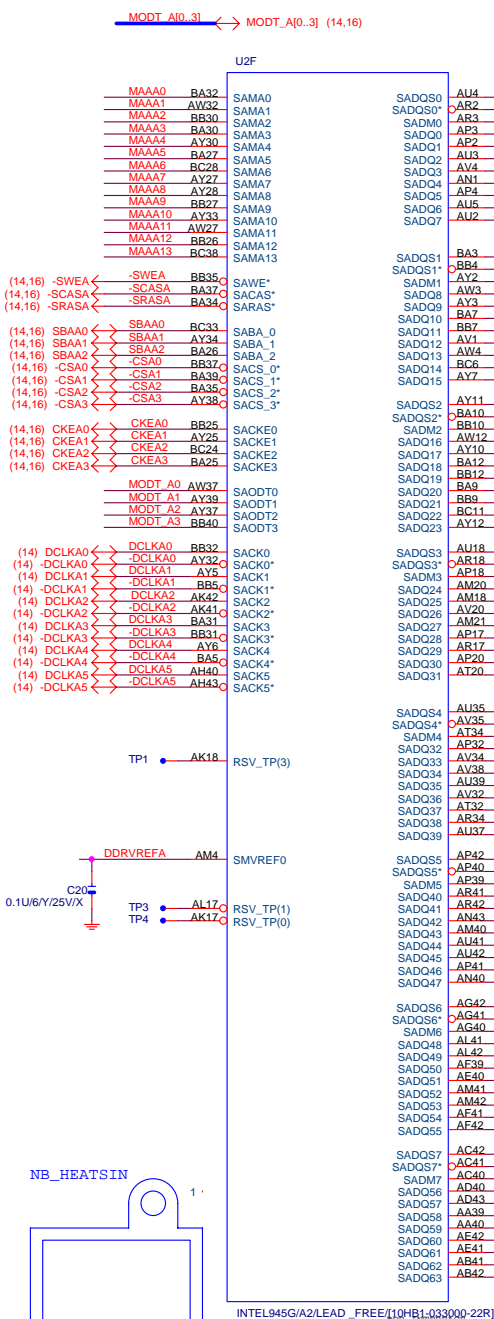
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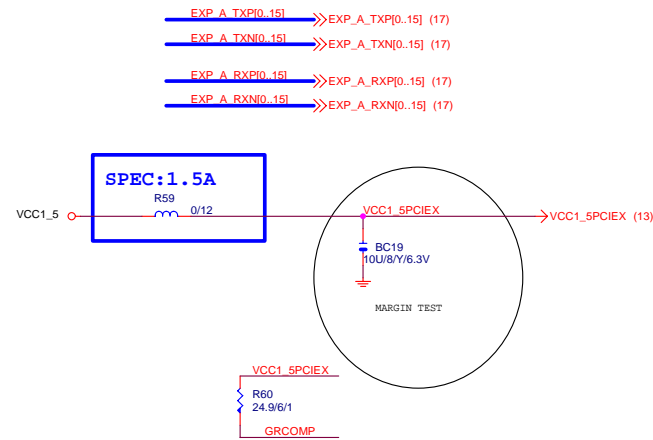
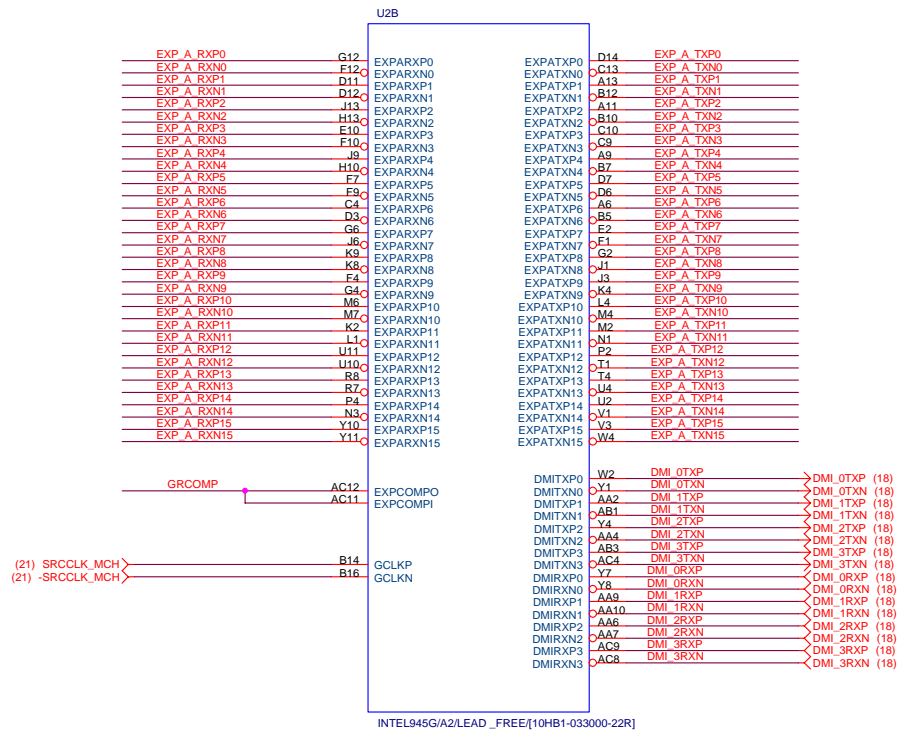
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P4_LGA775-D		
Size	Document Number	Rev
Custom	8I945GMBX	1.01
Date:	Friday, July 01, 2005	Sheet 7 of 42

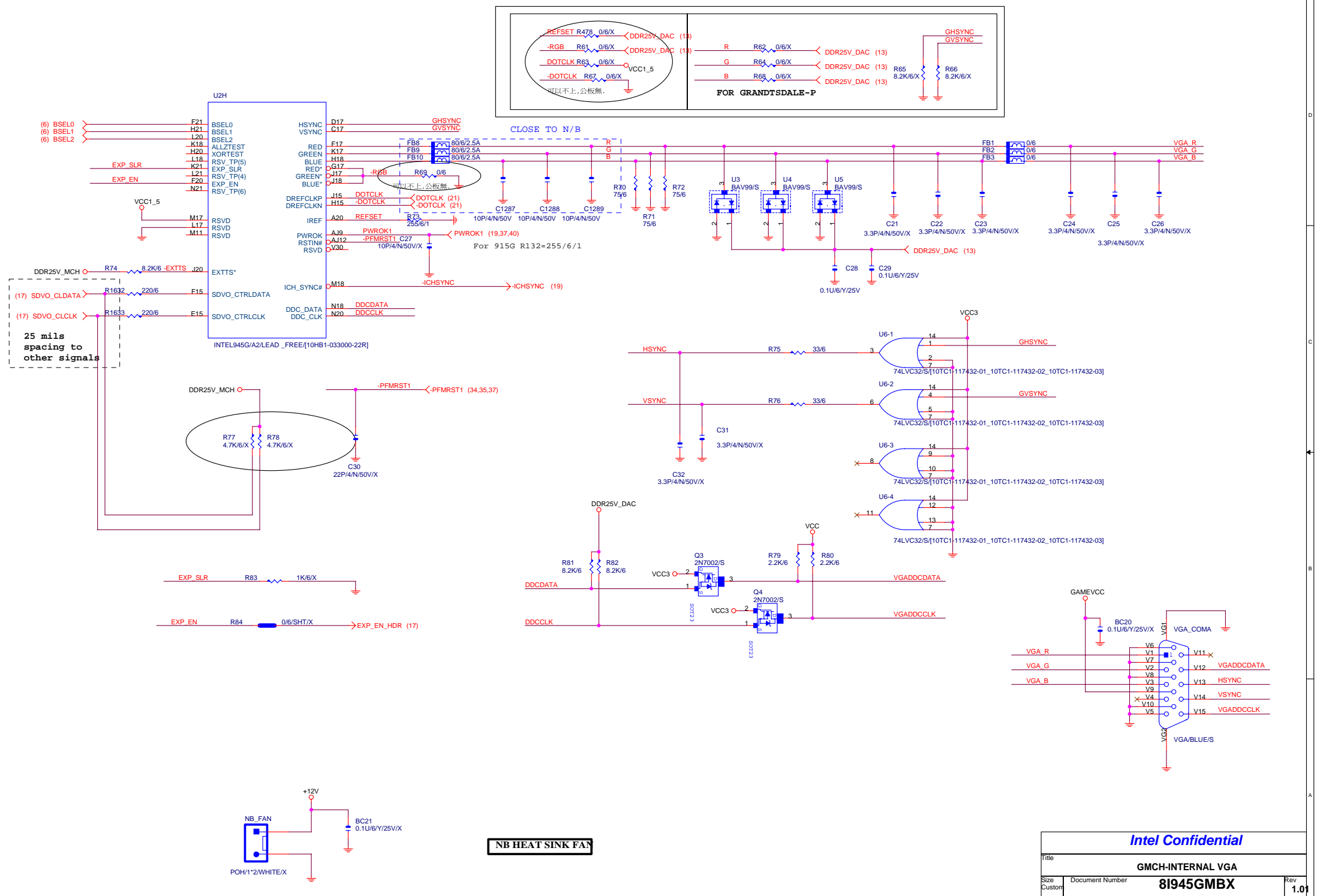


INTEL945G/A2/LEAD_FREE(10HB1-033000-11-REV:A1
 10HB1-033000-21-REV:A2 FOR ACER









NB HEAT SINK FAN

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GMCH-INTERNAL VGA		
Size Custom	Document Number	Rev 1.01
81945GMBX		
Date: Friday, July 01, 2005	Sheet 11	of 42

U2C

A4	VSS	N2
A16	VSS	N6
A22	VSS	AD0
A26	VSS	AD11
A31	VSS	AD13
A35	VSS	N15
B4	VSS	N24
B6	VSS	N26
B9	VSS	N27
B11	VSS	N29
B13	VSS	AF1
B21	VSS	AF2
B22	VSS	N33
B28	VSS	N36
B33	VSS	N39
B38	VSS	N43
C3	VSS	P3
C5	VSS	P14
C7	VSS	P15
C12	VSS	P24
C14	VSS	P26
C22	VSS	P27
C40	VSS	P29
D2	VSS	P30
D5	VSS	R6
D10	VSS	R9
D16	VSS	R12
D20	VSS	R14
D21	VSS	R30
E3	VSS	R31
E4	VSS	R34
E7	VSS	R37
E9	VSS	R39
E12	VSS	T2
E13	VSS	T42
E17	VSS	U3
E18	VSS	U8
E20	VSS	U12
E21	VSS	U14
E32	VSS	U31
F2	VSS	U33
F6	VSS	U36
F13	VSS	U38
F18	VSS	V2
F26	VSS	V8
F34	VSS	V11
F42	VSS	V12
G3	VSS	V14
G5	VSS	V24
G7	VSS	V36
G9	VSS	V37
G10	VSS	V38
G13	VSS	V39
G15	VSS	V43
G18	VSS	W3
G20	VSS	W12
G21	VSS	W5
G24	VSS	W6
G27	VSS	W9
G29	VSS	W14
G31	VSS	W19
G32	VSS	W22
G35	VSS	W31
G38	VSS	W35
H12	VSS	W42
H17	VSS	Y3
H26	VSS	Y36
H27	VSS	Y37
H32	VSS	Y39
I2	VSS	Y42
I5	VSS	AA3
I7	VSS	AA8
I10	VSS	AA11
I12	VSS	AA12
I21	VSS	AA14
I24	VSS	AA21
I38	VSS	AA23
I43	VSS	AA31
K3	VSS	AP5
K5	VSS	AP33
K6	VSS	AP36
K7	VSS	AP7
K10	VSS	AP10
K12	VSS	AP12
K13	VSS	AP21
K15	VSS	AP34
K20	VSS	AP38
K27	VSS	AR1
K32	VSS	AR6
K34	VSS	AR15
K37	VSS	AR20
L2	VSS	AR22
L12	VSS	AR24
L13	VSS	AR32
L24	VSS	AR37
L26	VSS	AR39
L29	VSS	AR43
L42	VSS	AT12
M3	VSS	AT17
M5	VSS	AT18
M8	VSS	AT21
M9	VSS	AT23
M10	VSS	AT26
M13	VSS	AT27
M20	VSS	AT31
M21	VSS	AU6
M35	VSS	AU9
M37	VSS	AU12
		AU13
		AL15
		AL17
		AU20
		AD18
		AD20
		AD22
		AD24
		AD27
		AD29
		AE19
		AE21
		AE23
		AE25
		AF18
		AF20
		AF22
		AF24
		AY1
		BC4

INTEL945G/A2/LEAD_FREE[10HB1-033000-22R]

U2E

AD7	VSS	AU21
N8	VSS	AU24
AD11	VSS	AU26
AD13	VSS	AU29
N15	VSS	AU32
N24	VSS	AU34
AD37	VSS	AV2
AD42	VSS	AV10
N29	VSS	AV17
AF1	VSS	AV37
AF2	VSS	AW10
N33	VSS	BA4
AF5	VSS	BA42
N39	VSS	BB3
AF36	VSS	BB6
P3	VSS	BB11
P14	VSS	BB14
P15	VSS	BB19
P24	VSS	BB34
P26	VSS	BB39
P27	VSS	BB41
P29	VSS	BC9
P30	VSS	A40
R6	VSS	D1
R9	VSS	D43
AM42	VSS	R26
R12	VSS	R29
A10	VSS	U29
A130	VSS	V24
A131	VSS	V26
A133	VSS	V29
A135	VSS	W21
A137	VSS	W23
T2	VSS	W25
AK24	VSS	W29
AK26	VSS	Y22
AK29	VSS	Y24
AK30	VSS	Y26
U8	VSS	Y29
AL1	VSS	AA25
AL3	VSS	AA27
AL7	VSS	AA29
AL10	VSS	AC19
AL12	VSS	AC25
AL13	VSS	AC29
AL15	VSS	
AL18	VSS	
AL21	VSS	
AL23	VSS	
AL24	VSS	
AL27	VSS	
AL32	VSS	
AL33	VSS	
AL37	VSS	
V39	VSS	
V43	VSS	
W3	VSS	
W12	VSS	
W5	VSS	
W6	VSS	
W9	VSS	
W14	VSS	
W19	VSS	
W22	VSS	
W31	VSS	
W35	VSS	
W42	VSS	
Y3	VSS	
Y36	VSS	
Y37	VSS	
Y39	VSS	
Y42	VSS	
AA3	VSS	
AA8	VSS	
AA11	VSS	
AA12	VSS	
AA14	VSS	
AA21	VSS	
AA23	VSS	
AA31	VSS	
AP5	VSS	
AP33	VSS	
AP36	VSS	
AP7	VSS	
AP10	VSS	
AP12	VSS	
AP21	VSS	
AP34	VSS	
AP38	VSS	
AR1	VSS	
AR6	VSS	
AR15	VSS	
AR20	VSS	
AR22	VSS	
AR24	VSS	
AR32	VSS	
AR37	VSS	
AR39	VSS	
AR43	VSS	
AT12	VSS	
AT17	VSS	
AT18	VSS	
AT21	VSS	
AT23	VSS	
AT26	VSS	
AT27	VSS	
AT31	VSS	
AU6	VSS	
AU9	VSS	
AU12	VSS	
AU13	VSS	
AL15	VSS	
AL17	VSS	
AU20	VSS	
AD18	VSS	
AD20	VSS	
AD22	VSS	
AD24	VSS	
AD27	VSS	
AD29	VSS	
AE19	VSS	
AE21	VSS	
AE23	VSS	
AE25	VSS	
AF18	VSS	
AF20	VSS	
AF22	VSS	
AF24	VSS	
AY1	VSS	
BC4	VSS	

INTEL945G/A2/LEAD_FREE[10HB1-033000-22R]

VSS	AU21
VSS	AU24
VSS	AU26
VSS	AU29
VSS	AU32
VSS	AU34
VSS	AV2
VSS	AV10
VSS	AV17
VSS	AV37
VSS	AW10
VSS	BA4
VSS	BA42
VSS	BB3
VSS	BB6
VSS	BB11
VSS	BB14
VSS	BB19
VSS	BB34
VSS	BB39
VSS	BB41
VSS	BC9
VSS	A40
VSS	D1
VSS	D43
VSS	R26
VSS	R29
VSS	U29
VSS	V24
VSS	V26
VSS	V29
VSS	W21
VSS	W23
VSS	W25
VSS	W29
VSS	Y22
VSS	Y24
VSS	Y26
VSS	Y29
VSS	AA25
VSS	AA27
VSS	AA29
VSS	AC19
VSS	AC25
VSS	AC29
NC	AA2
NC	B2
NC	B3
NC	B41
NC	B42
NC	B43
NC	C2
NC	C42
NC	E35
NC	AV26
NC	AV27
NC	AW2
NC	AW26
NC	BA2
NC	BB1
NC	BB2
NC	BB43
NC	BC1
NC	BC2
NC	BC42
NC	BC43
RSVD	AK21
RSVD	AJ23
RSVD	AJ26
RSVD	AL29
RSVD	AL20
RSVD	AJ21
RSVD	AL26
RSVD	AK27
RSVD	AD30
RSVD	AC34
RSVD	Y30
RSVD	Y33
RSVD	AF31
RSVD	AD31
RSVD	U30
RSVD	V31
RSVD	AA30
RSVD	AC30
RSVD	AA3
RSVD	AG25
RSVD	AG26
RSVD	AG27
RSVD	AJ24
RSVD	AJ27
RSVD	AK40
RSVD	AW17
RSVD	AW19
RSVD	AY14
RSVD	BC16
RSVD	AJ29
RSVD	AG29

1.425~1.575V

1.7~1.9V

VTT_GMCH

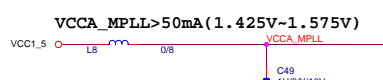
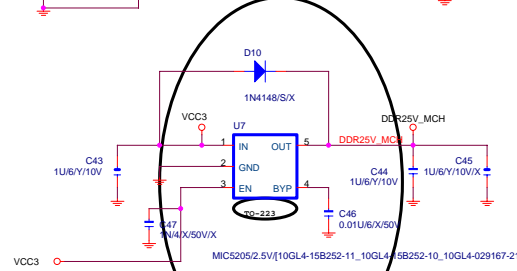
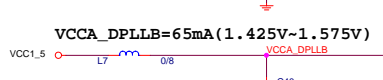
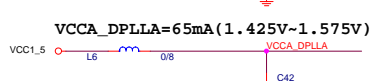
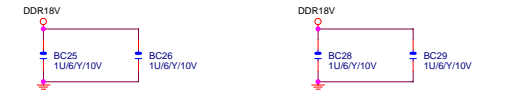
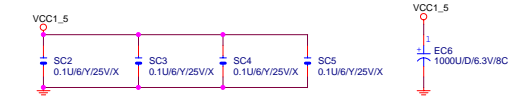
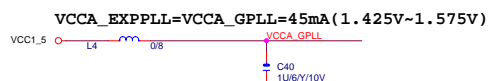
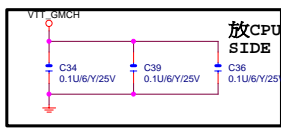
放CPU SIDE

- VCC1_5
- N17 VCC
- P18 VCC
- F20 VCC
- P21 VCC
- AA22 VCC
- AA21 VCC
- AB22 VCC
- AB23 VCC
- AC22 VCC
- AD14 VCC
- AF9 VCC
- AF7 VCC
- AF8 VCC
- AF9 VCC
- AF10 VCC
- AF11 VCC
- AF12 VCC
- AF13 VCC
- AF14 VCC
- AF30 VCC
- AG2 VCC
- AG3 VCC
- AG4 VCC
- AG5 VCC
- AG6 VCC
- AG7 VCC
- AG8 VCC
- AG9 VCC
- AG10 VCC
- AG11 VCC
- AG12 VCC
- AG13 VCC
- AG14 VCC
- AH1 VCC
- AH2 VCC
- AH4 VCC
- AJ5 VCC
- AJ13 VCC
- AJ14 VCC
- AK3 VCC
- AK4 VCC
- AK14 VCC
- AK15 VCC
- AK20 VCC
- R17 VCC
- R18 VCC
- R20 VCC
- R21 VCC
- R23 VCC
- R24 VCC
- LI5 VCC
- LI7 VCC
- LI8 VCC
- LI9 VCC
- LI20 VCC
- LI22 VCC
- LI23 VCC
- LI24 VCC
- LI25 VCC
- LI26 VCC
- LI5 VCC
- VII7 VCC
- VII8 VCC
- VII9 VCC
- VII10 VCC
- VII11 VCC
- VII12 VCC
- VII13 VCC
- VII14 VCC
- VII15 VCC
- VII16 VCC
- VII17 VCC
- VII18 VCC
- VII19 VCC
- VII20 VCC
- VII21 VCC
- VII22 VCC
- VII23 VCC
- VII24 VCC
- AA15 VCC
- AA17 VCC
- AA18 VCC
- AA19 VCC
- AA20 VCC
- AA24 VCC
- AA26 VCC
- AB17 VCC
- AB18 VCC
- AB19 VCC
- AB20 VCC
- AB24 VCC
- AB25 VCC
- AB26 VCC
- AB27 VCC
- AC15 VCC
- AC17 VCC
- AC18 VCC
- AC20 VCC
- AC24 VCC
- AC26 VCC
- AC27 VCC
- AD15 VCC
- AD17 VCC
- AD19 VCC
- AD21 VCC
- AD23 VCC
- AD25 VCC
- AD26 VCC
- AE17 VCC
- AE18 VCC
- AE20 VCC
- AE22 VCC
- AE24 VCC
- AE26 VCC
- AE27 VCC
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- AE25 VCC
- AE26 VCC
- AE27 VCC
- AE29 VCC

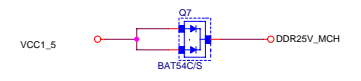
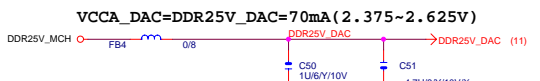
- BB16 VCC
- AW15 VCC
- BB24 VCC
- BC13 VCC
- BC18 VCC
- BC22 VCC
- BC26 VCC
- BB20 VCC
- AW24 VCC
- BB26 VCC
- BC31 VCC
- BC38 VCC
- BB33 VCC
- BB28 VCC
- BB24 VCC
- AW25 VCC
- AW31 VCC
- AW34 VCC
- AX41 VCC
- AW42 VCC
- AW23 VCC
- AV18 VCC
- BC40 VCC
- AW38 VCC
- AX43 VCC
- AW20 VCC
- AW21 VCC
- AW31 VCC
- AW13 VCC
- AW21 VCC
- VTT C23
- G23 VTT
- P23 VTT
- E23 VTT
- D23 VTT
- D24 VTT
- D25 VTT
- B25 VTT
- B24 VTT
- B23 VTT
- B26 VTT
- H23 VTT
- E23 VTT
- K23 VTT
- L23 VTT
- D25 VTT
- B23 VTT
- B26 VTT
- H23 VTT
- E23 VTT
- K23 VTT
- L23 VTT
- F23 VTT
- E27 VTT
- E26 VTT
- C25 VTT
- C26 VTT
- VTT
- AA13 VCC
- AD12 VCC
- AC5 VCC
- AA5 VCC
- LI13 VCC
- V5 VCC
- V13 VCC
- AE2 VCC
- R13 VCC
- N12 VCC
- N10 VCC
- R5 VCC
- N7 VCC
- N11 VCC
- AE3 VCC
- N9 VCC
- AD10 VCC
- AD1 VCC
- AC6 VCC
- AD8 VCC
- AD2 VCC
- AD4 VCC
- AD5 VCC
- AD6 VCC
- Y13 VCC
- NE VCC
- U8 VCC
- VCC EXP AE4
- U7 VCC
- R10 VCC
- R11 VCC
- U6 VCC
- V6 VCC
- Y7 VCC
- V9 VCC
- V10 VCC

- VCC EXP AA13
- VCC EXP AD12
- VCC EXP AC5
- VCC EXP AA5
- VCC EXP LI13
- VCC EXP V5
- VCC EXP V13
- VCC EXP AE2
- VCC EXP R13
- VCC EXP N12
- VCC EXP N10
- VCC EXP R5
- VCC EXP N7
- VCC EXP N11
- VCC EXP AE3
- VCC EXP N9
- VCC EXP AD10
- VCC EXP AD1
- VCC EXP AC6
- VCC EXP AD8
- VCC EXP AD2
- VCC EXP AD4
- VCC EXP AD5
- VCC EXP AD6
- VCC EXP Y13
- VCC EXP NE
- VCC EXP U8
- VCC EXP AC13
- VCC EXP AE4
- VCC EXP U7
- VCC EXP R10
- VCC EXP R11
- VCC EXP U6
- VCC EXP V6
- VCC EXP Y7
- VCC EXP V9
- VCC EXP V10

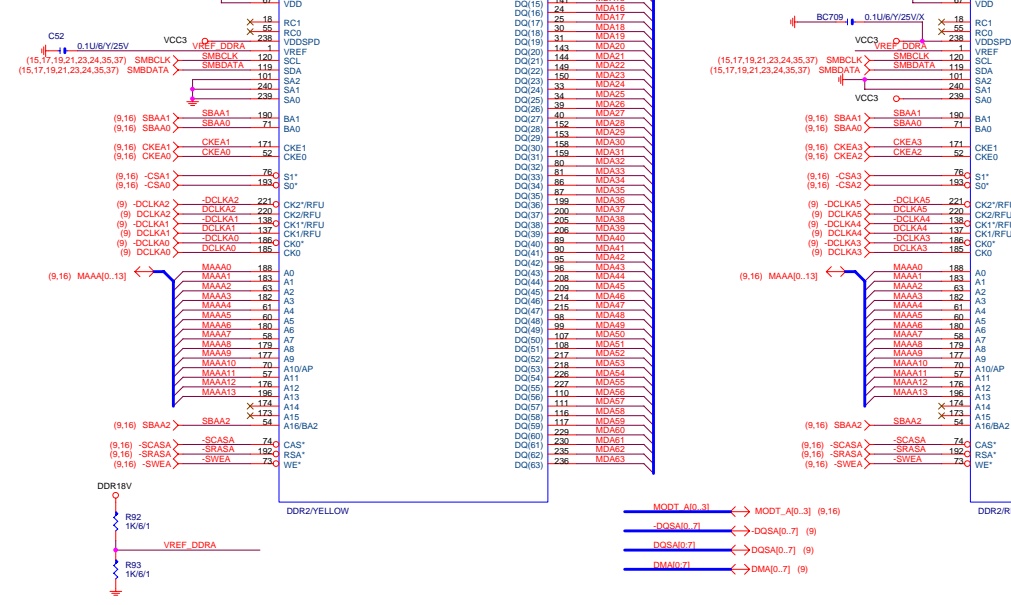
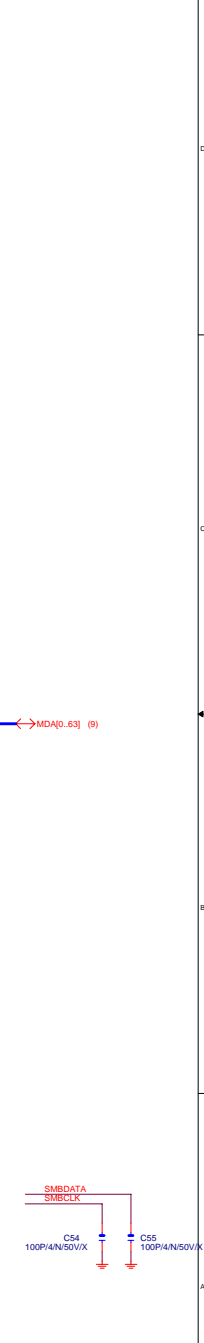
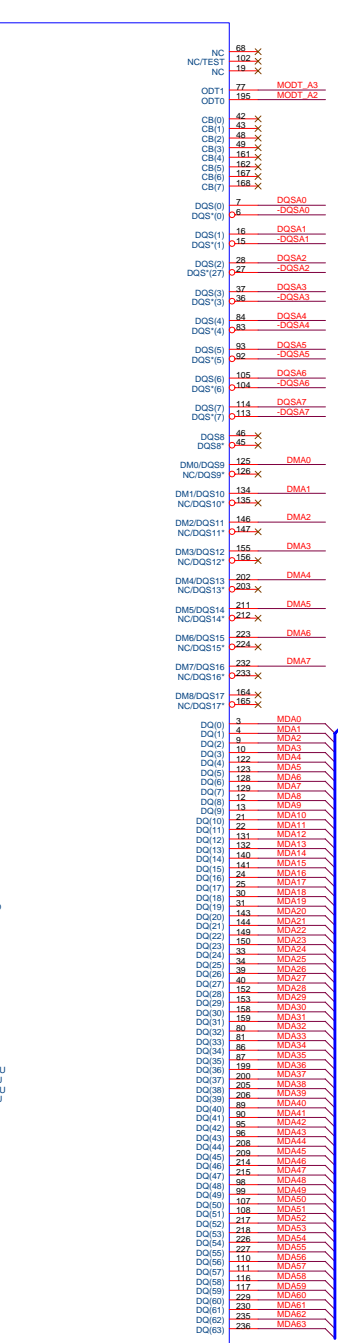
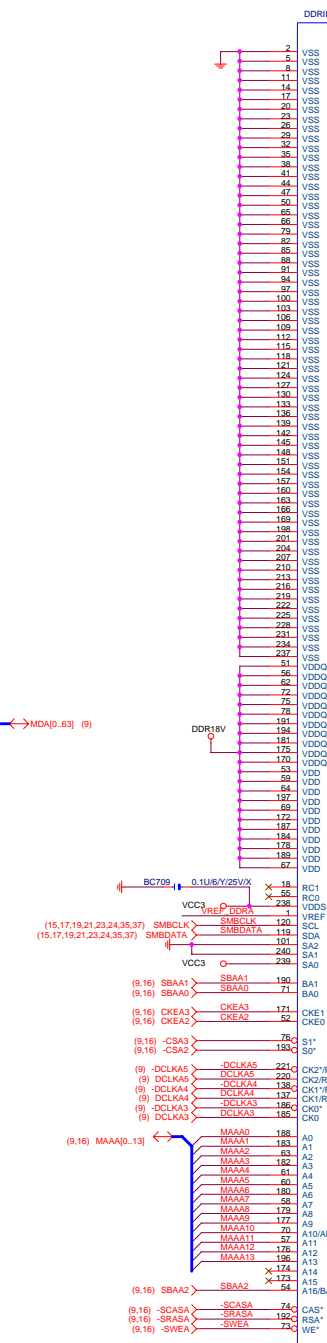
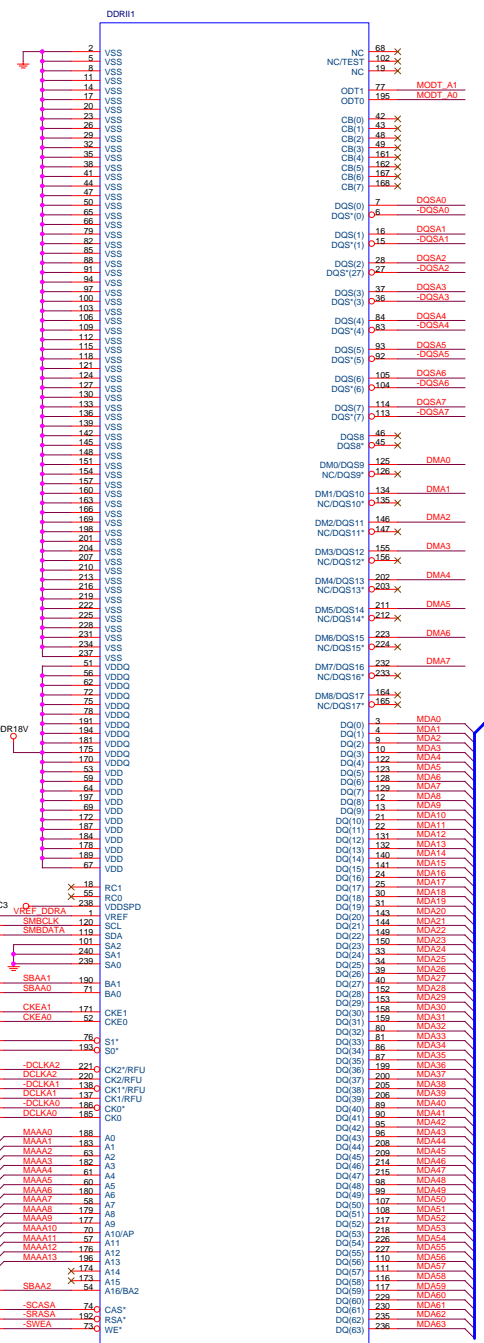
- VCC AG15
- AG17 VCC
- AG18 VCC
- AG19 VCC
- AG20 VCC
- AG21 VCC
- AG22 VCC
- AG23 VCC
- AG24 VCC
- AG15 VCC
- AJ17 VCC
- AJ18 VCC
- AJ20 VCC



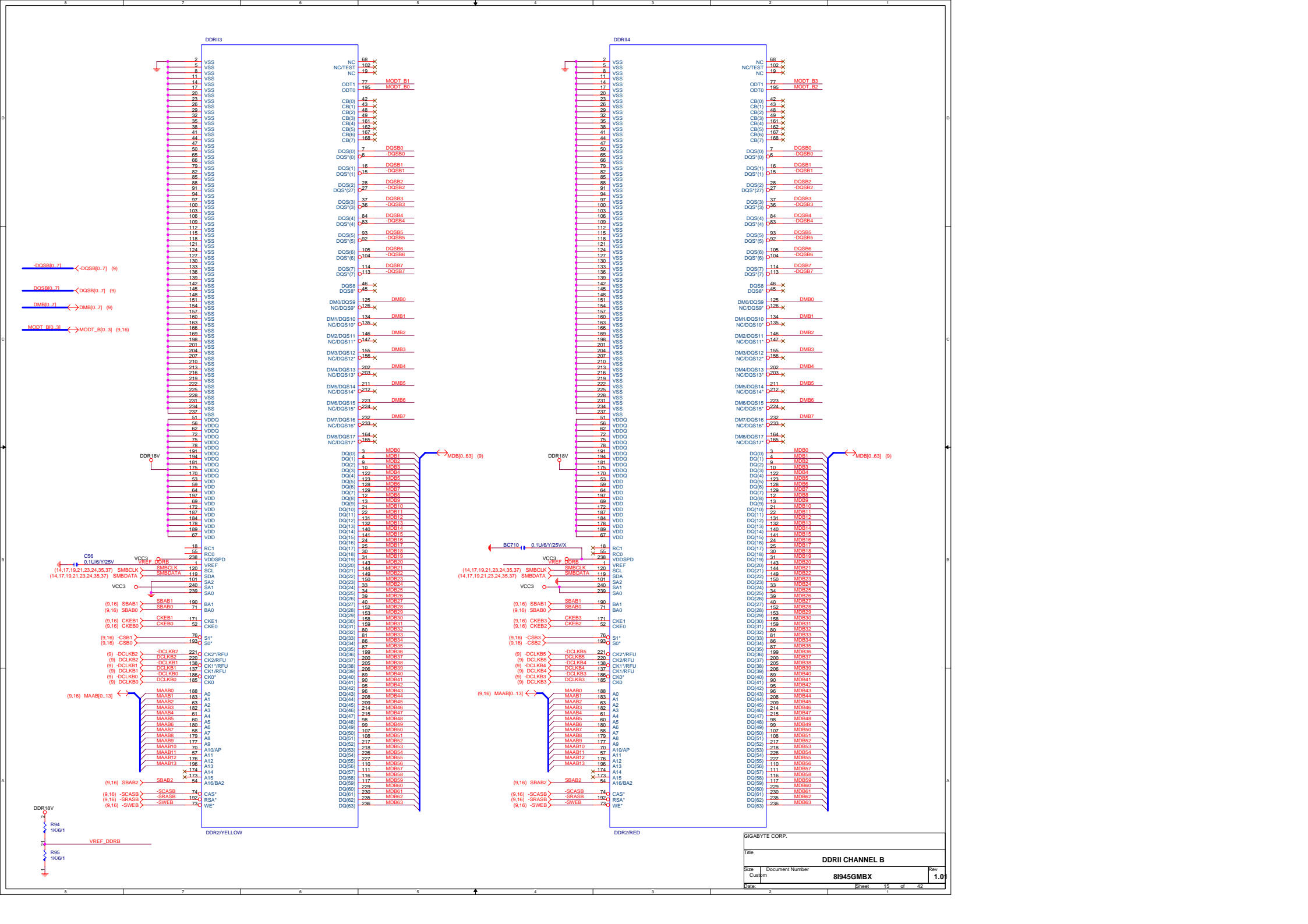
<VCC1_5PCIE_X (10)
1.425~1.575V



945 Design Guide rev1.5 spec.
VCCA_EXPPLL=VCCA_GPLL=45mA (1.425V~1.575V)
VCCA_HPLL>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)

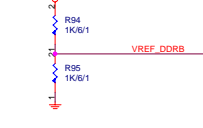


SIGABYTE CORP.	
Title	DDR11 CHANNEL A
Size	Document Number
Custom	81945GMBX
Date	Sheet 14 of 42



-DQSB0_7I ← **DQSB0(0..7)** (9)
DQSB0_7I ← **DQSB0(0..7)** (9)
DMB0_7I ← **DMB0(0..7)** (9)
MODT_B0_3I ← **MODT_B(0..3)** (9, 16)

C58
 $0.1\mu F/\pm 25V$
VCC3
REF DRB
SMBCLK
SMBDATA
VCC3
SBAB1
SBAB0
CKEB1
CKEB0
CSB1
CSB0
DCLKB2
DCLKB1
DCLKB0
MAAB0
MAAB1
MAAB2
MAAB3
MAAB4
MAAB5
MAAB6
MAAB7
MAAB8
MAAB9
MAAB10
MAAB11
MAAB12
MAAB13
SCASB
SRASB
SWEB

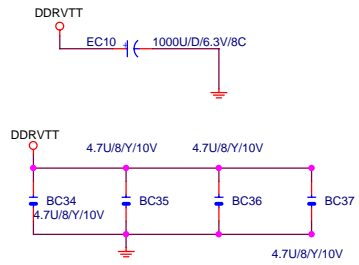


$BCT10$
 $0.1\mu F/\pm 25V/X$
VCC3 DRB
SMBCLK
SMBDATA
VCC3
SBAB1
SBAB0
CKEB3
CKEB2
CSB3
CSB2
DCLKB5
DCLKB4
DCLKB3
MAAB0
MAAB1
MAAB2
MAAB3
MAAB4
MAAB5
MAAB6
MAAB7
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MAAB9
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MAAB11
MAAB12
MAAB13
SCASB
SRASB
SWEB

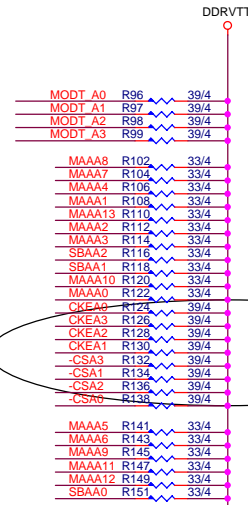
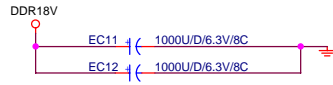


SIGABYTE CORP.		
Title	DDR II CHANNEL B	
Size	Document Number	Rev
Custom	81945GMBX	1.0
Date	Sheet	15 of 42

DDRVTT Decouple

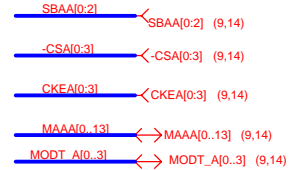
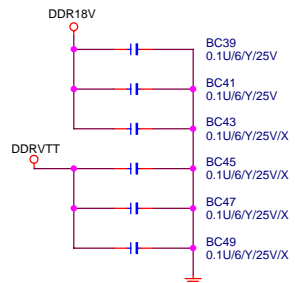


DDR TERMINATION CHANNEL A



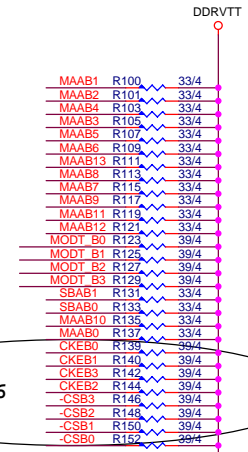
全部改成33/6

DDR18V Decouple



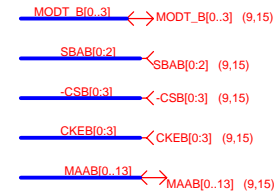
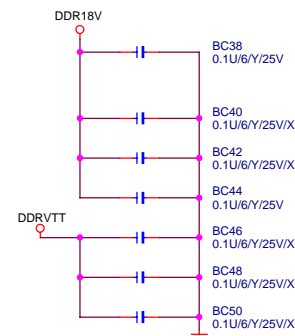
DDRVTT Decouple

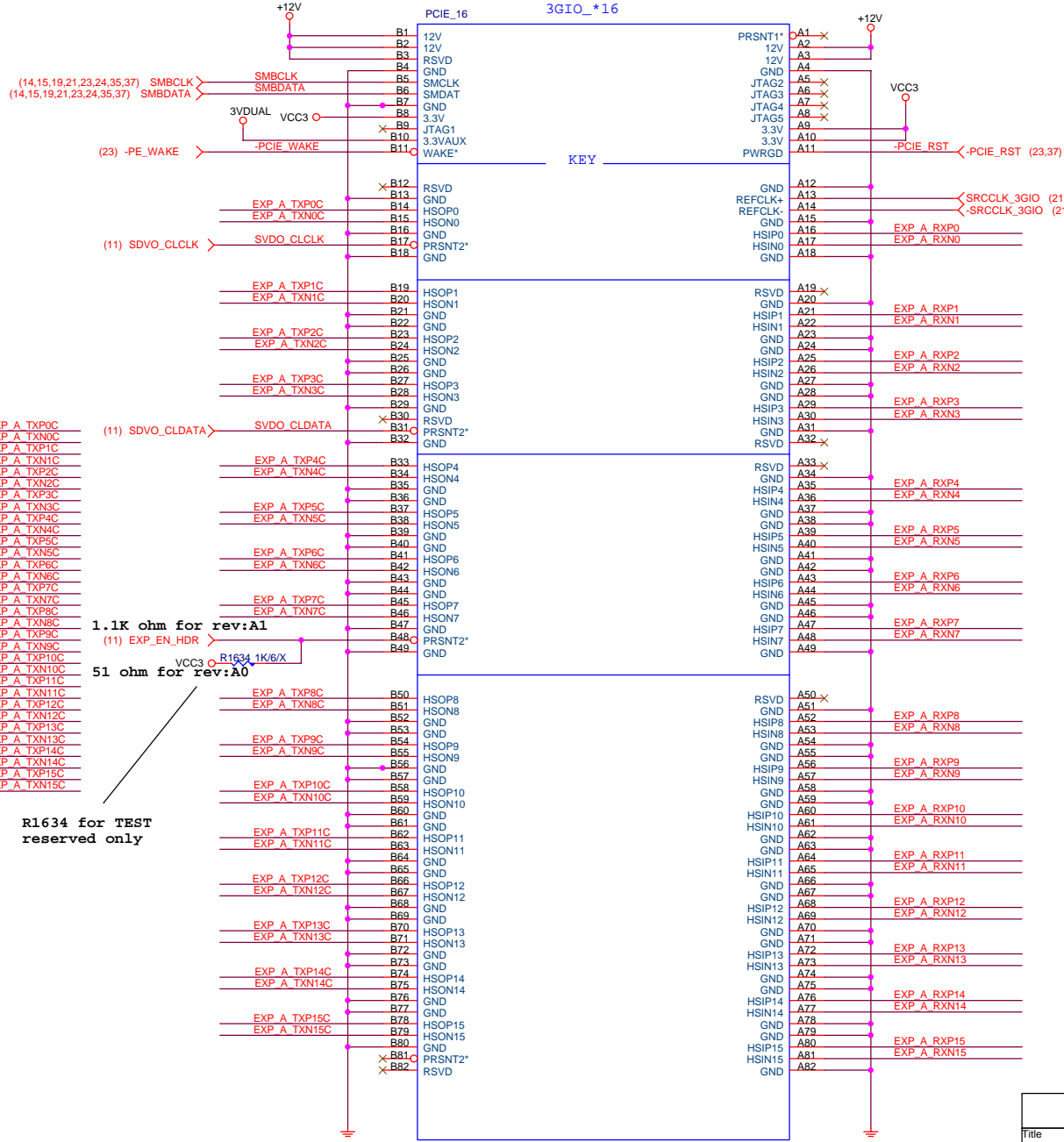
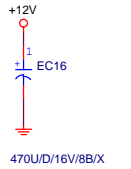
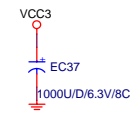
CHANNEL B



全部改成33/6

DDR18V Decouple





EXP_A_TXP[0..15] >>> EXP_A_TXP[0..15] (10)
 EXP_A_TXN[0..15] >>> EXP_A_TXN[0..15] (10)

EXP_A_TXP0	C59	0.1u/6V/25V	EXP_A_TXP0C
EXP_A_TXN0	C60	0.1u/6V/25V	EXP_A_TXN0C
EXP_A_TXP1	C61	0.1u/6V/25V	EXP_A_TXP1C
EXP_A_TXN1	C62	0.1u/6V/25V	EXP_A_TXN1C
EXP_A_TXP2	C63	0.1u/6V/25V	EXP_A_TXP2C
EXP_A_TXN2	C64	0.1u/6V/25V	EXP_A_TXN2C
EXP_A_TXP3	C65	0.1u/6V/25V	EXP_A_TXP3C
EXP_A_TXN3	C66	0.1u/6V/25V	EXP_A_TXN3C
EXP_A_TXP4	C67	0.1u/6V/25V	EXP_A_TXP4C
EXP_A_TXN4	C68	0.1u/6V/25V	EXP_A_TXN4C
EXP_A_TXP5	C69	0.1u/6V/25V	EXP_A_TXP5C
EXP_A_TXN5	C70	0.1u/6V/25V	EXP_A_TXN5C
EXP_A_TXP6	C71	0.1u/6V/25V	EXP_A_TXP6C
EXP_A_TXN6	C72	0.1u/6V/25V	EXP_A_TXN6C
EXP_A_TXP7	C73	0.1u/6V/25V	EXP_A_TXP7C
EXP_A_TXN7	C74	0.1u/6V/25V	EXP_A_TXN7C
EXP_A_TXP8	C75	0.1u/6V/25V	EXP_A_TXP8C
EXP_A_TXN8	C76	0.1u/6V/25V	EXP_A_TXN8C
EXP_A_TXP9	C77	0.1u/6V/25V	EXP_A_TXP9C
EXP_A_TXN9	C78	0.1u/6V/25V	EXP_A_TXN9C
EXP_A_TXP10	C79	0.1u/6V/25V	EXP_A_TXP10C
EXP_A_TXN10	C80	0.1u/6V/25V	EXP_A_TXN10C
EXP_A_TXP11	C81	0.1u/6V/25V	EXP_A_TXP11C
EXP_A_TXN11	C82	0.1u/6V/25V	EXP_A_TXN11C
EXP_A_TXP12	C83	0.1u/6V/25V	EXP_A_TXP12C
EXP_A_TXN12	C84	0.1u/6V/25V	EXP_A_TXN12C
EXP_A_TXP13	C85	0.1u/6V/25V	EXP_A_TXP13C
EXP_A_TXN13	C86	0.1u/6V/25V	EXP_A_TXN13C
EXP_A_TXP14	C87	0.1u/6V/25V	EXP_A_TXP14C
EXP_A_TXN14	C88	0.1u/6V/25V	EXP_A_TXN14C
EXP_A_TXP15	C89	0.1u/6V/25V	EXP_A_TXP15C
EXP_A_TXN15	C90	0.1u/6V/25V	EXP_A_TXN15C

1.1K ohm for rev:A1
 (11) EXP_EN_HDR
 51 ohm for rev:A0

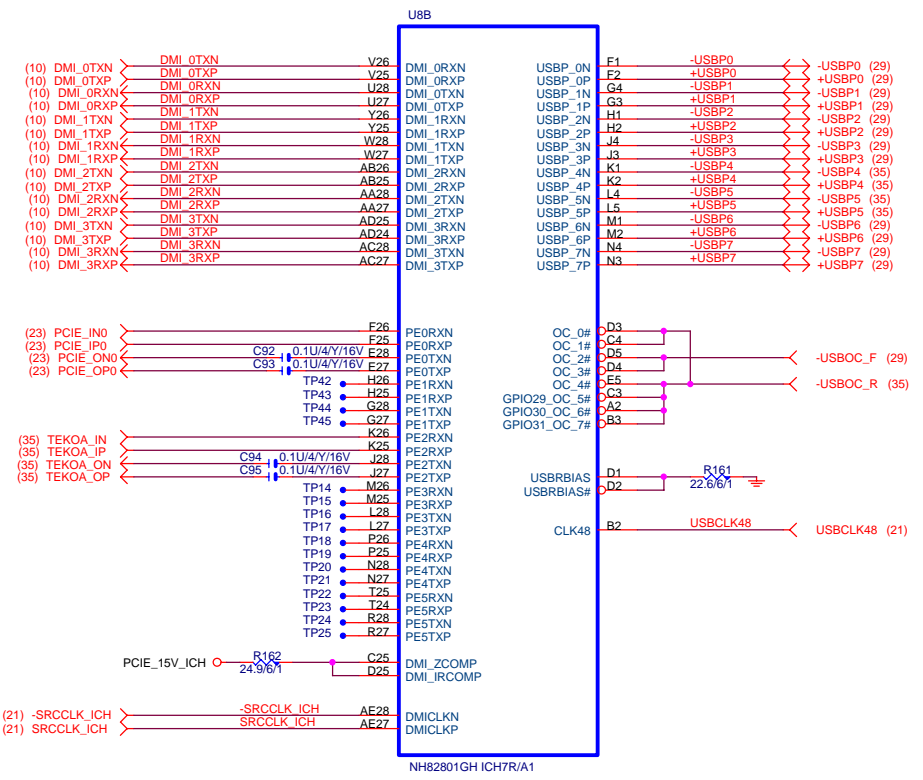
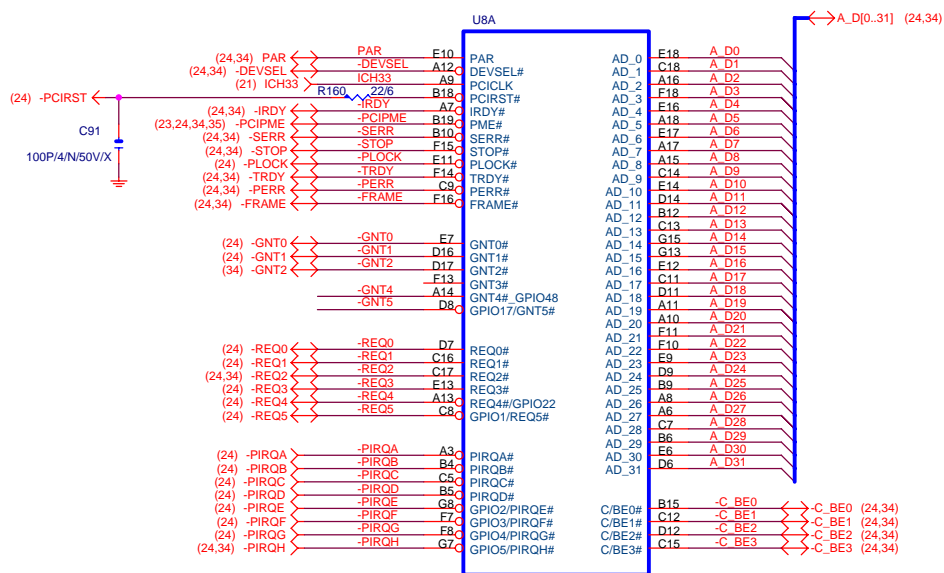
R1634 for TEST reserved only

PCI-E16[11AC1-021164-61]

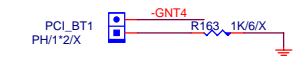
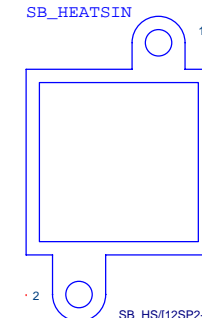
Intel Confidential

PCI EXPRESS * 16

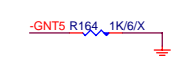
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Size	Document Number	81945GMBX	
Custom			Rev 1.01
Date:	Friday, July 01, 2005	Sheet	17 of 42



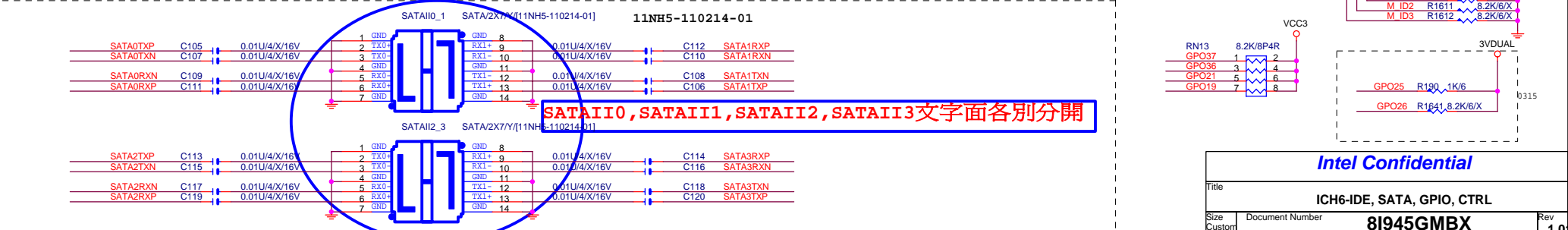
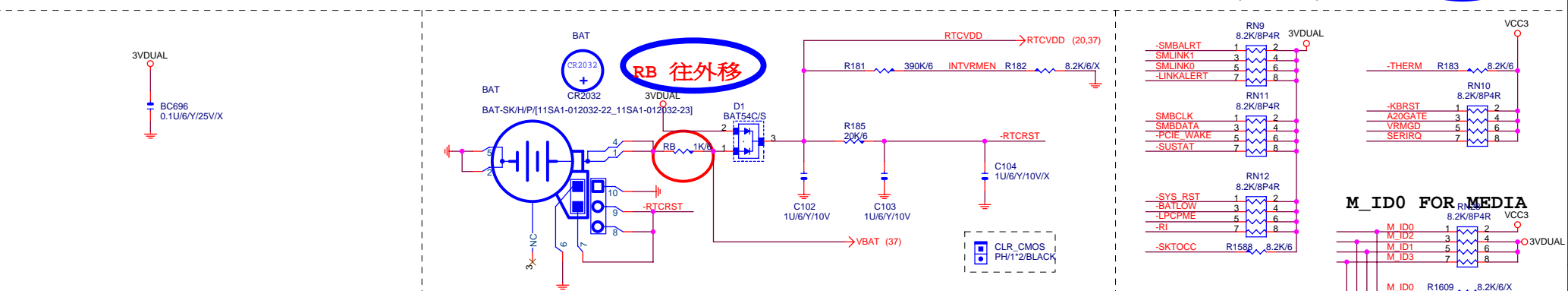
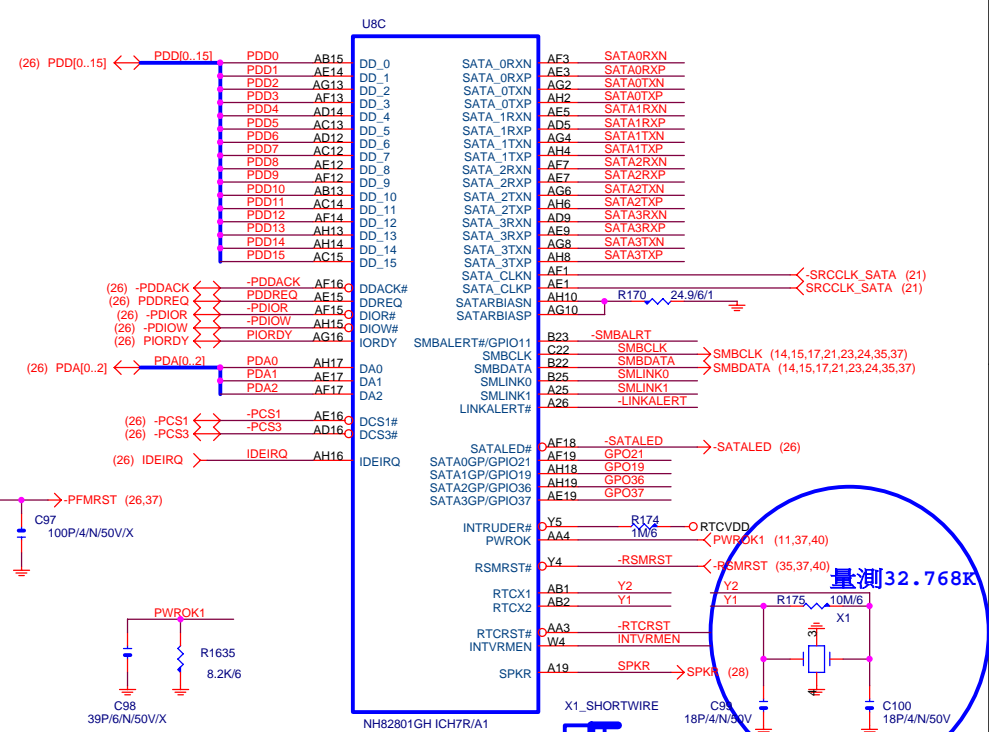
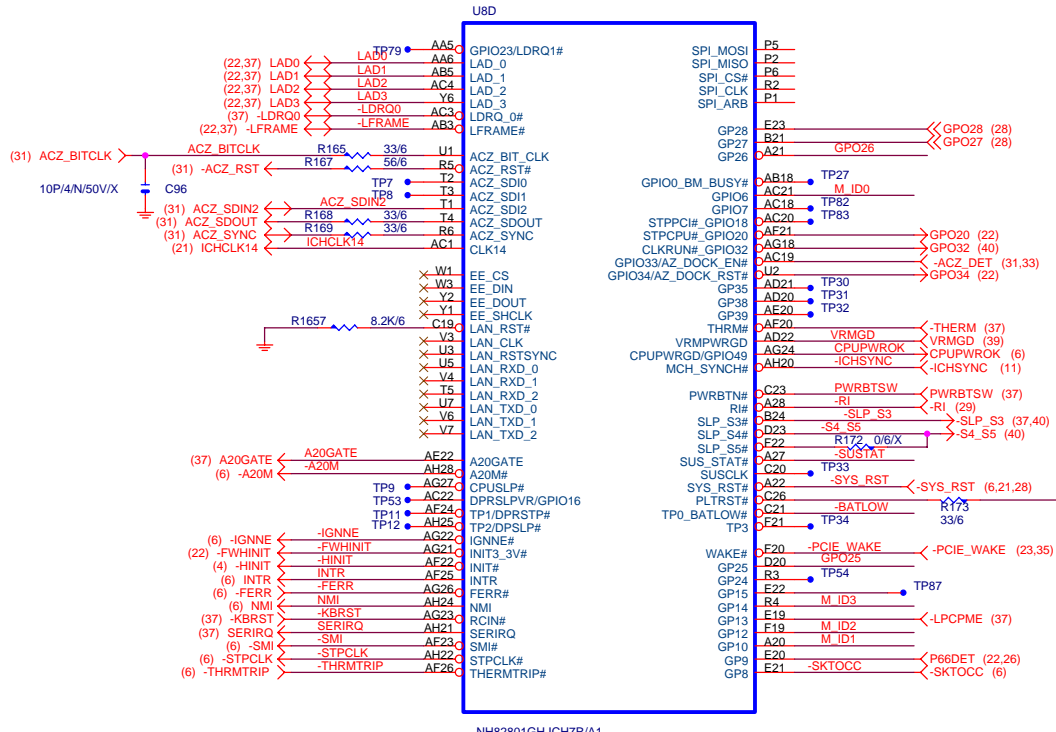
10HB1-032801-M1 REV:NON



PCI_BT2: OPEN FWH
CLOSE SPI

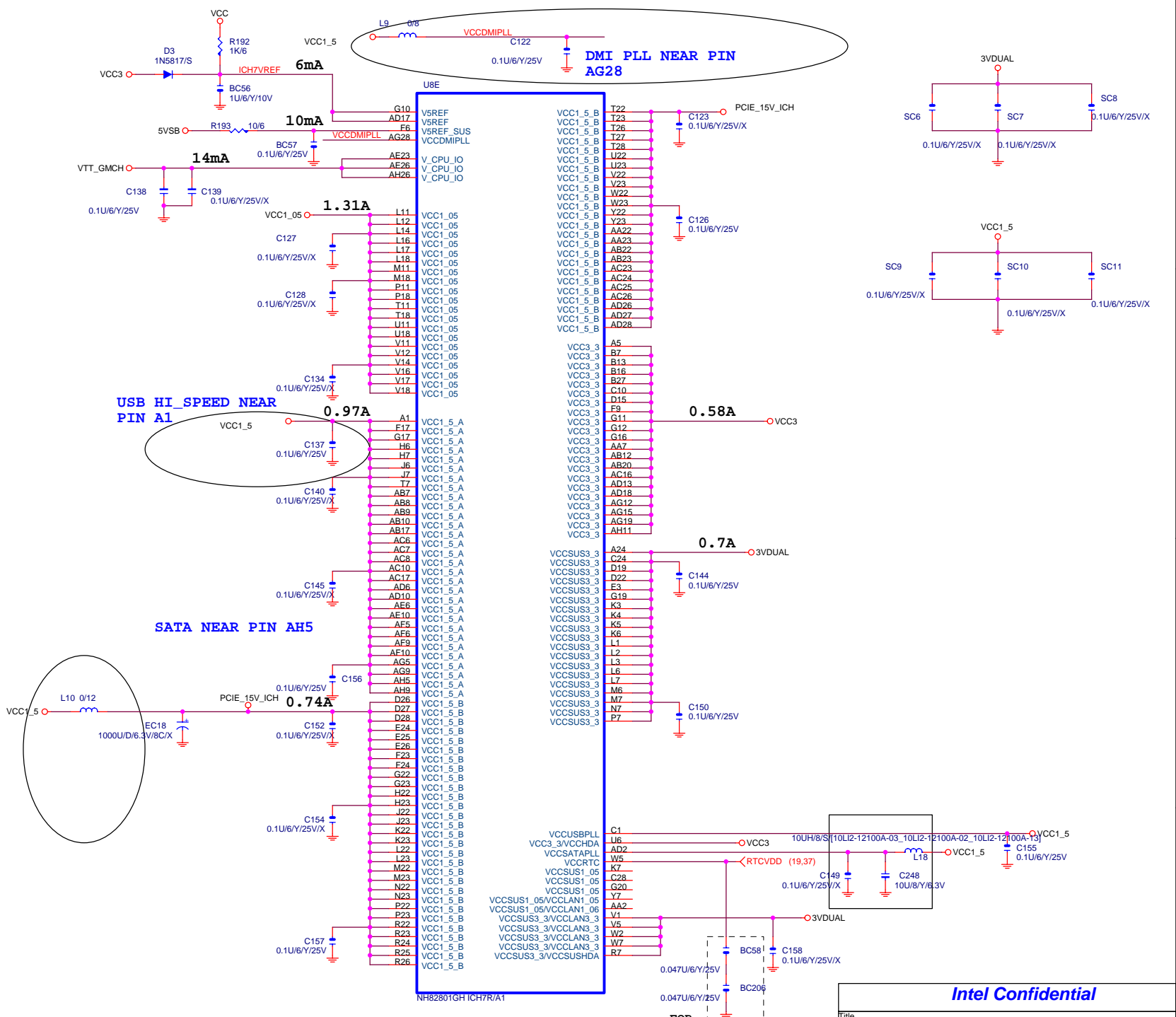


Intel Confidential		
Title ICH6-PCI, DMI, LAN, USB		
Size B	Document Number 81945GMBX	Rev 1.01
Date: Friday, July 01, 2005	Sheet 18	of 42



U8F		
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	Y2
F6	VSS24	Y13
F12	VSS25	Y15
F27	VSS26	V24
F28	VSS27	V27
G1	VSS28	V28
G2	VSS29	W6
G5	VSS30	W24
G6	VSS31	W25
G9	VSS32	W26
G14	VSS33	Y3
G18	VSS34	Y24
G21	VSS35	VSS135
G24	VSS36	VSS136
G25	VSS37	VSS137
G26	VSS38	VSS138
H3	VSS39	VSS139
H4	VSS40	VSS140
H5	VSS41	VSS141
H24	VSS42	VSS142
H28	VSS43	VSS143
J1	VSS44	VSS144
J2	VSS45	VSS145
J5	VSS46	VSS146
J24	VSS47	VSS147
J25	VSS48	VSS148
J26	VSS49	VSS149
K24	VSS50	VSS150
K27	VSS51	VSS151
K28	VSS52	VSS152
L13	VSS53	VSS153
L15	VSS54	VSS154
L24	VSS55	VSS155
L25	VSS56	VSS156
L26	VSS57	VSS157
M3	VSS58	VSS158
M4	VSS59	VSS159
M5	VSS60	VSS160
M12	VSS61	VSS161
M13	VSS62	VSS162
M14	VSS63	VSS163
M15	VSS64	VSS164
M16	VSS65	VSS165
M17	VSS66	VSS166
M24	VSS67	VSS167
M27	VSS68	VSS168
M28	VSS69	VSS169
N1	VSS70	VSS170
N11	VSS71	VSS171
N5	VSS72	VSS172
N6	VSS73	VSS173
N11	VSS74	VSS174
N12	VSS75	VSS175
N13	VSS76	VSS176
N14	VSS77	VSS177
N15	VSS78	VSS178
N16	VSS79	VSS179
N17	VSS80	VSS180
N18	VSS81	VSS181
N24	VSS82	VSS182
N25	VSS83	VSS183
N26	VSS84	VSS184
N35	VSS85	VSS185
P4	VSS86	VSS186
P12	VSS87	VSS187
P13	VSS88	VSS188
P14	VSS89	VSS189
P15	VSS90	VSS190
P16	VSS91	VSS191
P17	VSS92	VSS192
P24	VSS93	VSS193
P27	VSS94	VSS194
P28	VSS95	VSS195
R1	VSS96	AG11
R11	VSS97	
R12	VSS98	
R13	VSS99	
	VSS100	

NH82801GH ICH7R/A1



USB HI_SPEED NEAR PIN A1
VCC1_5
0.97A

SATA NEAR PIN AH5
VCC1_5
0.74A

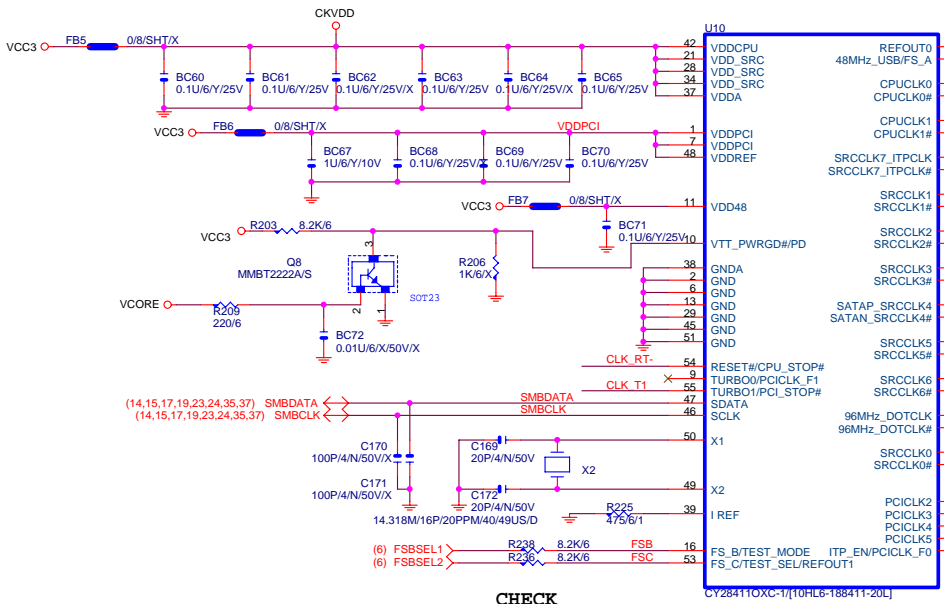
DMI PLL NEAR PIN AG28
VCCDMIPLL
0.1U/6/Y/25V

VCC3_3
0.58A

VCC3_3
0.7A

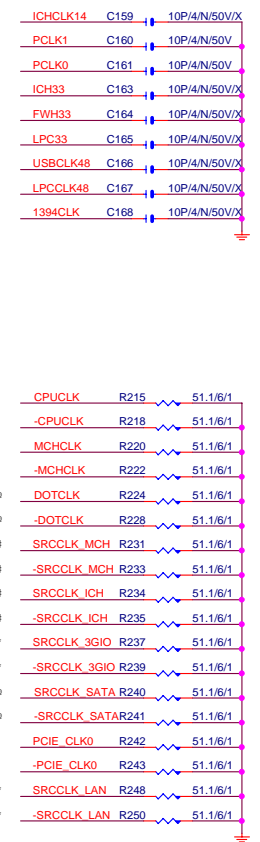
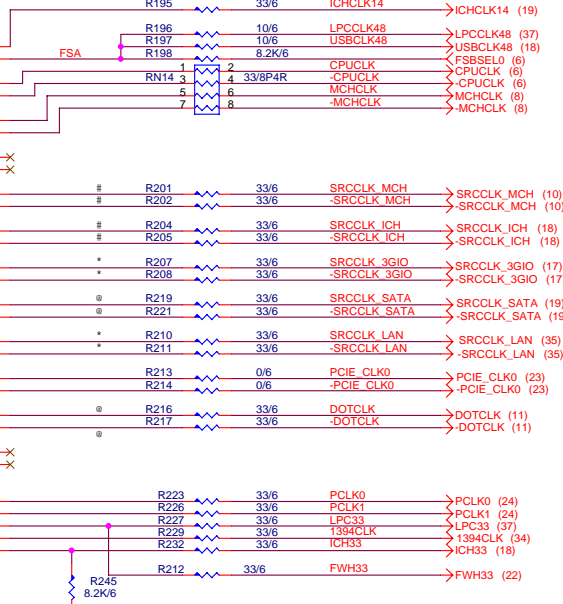
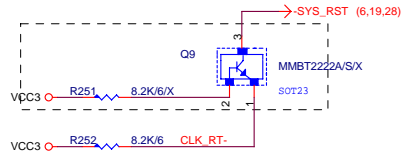
FOR 漏電

Intel Confidential		
ICH6-PWR & GND		
Size B	Document Number	Rev
	81945GMBX	1.01
Date:	Friday, July 01, 2005	Sheet 20 of 42



**CHECK
14.318M
COUNTER**

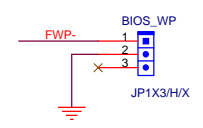
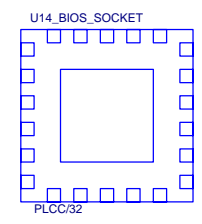
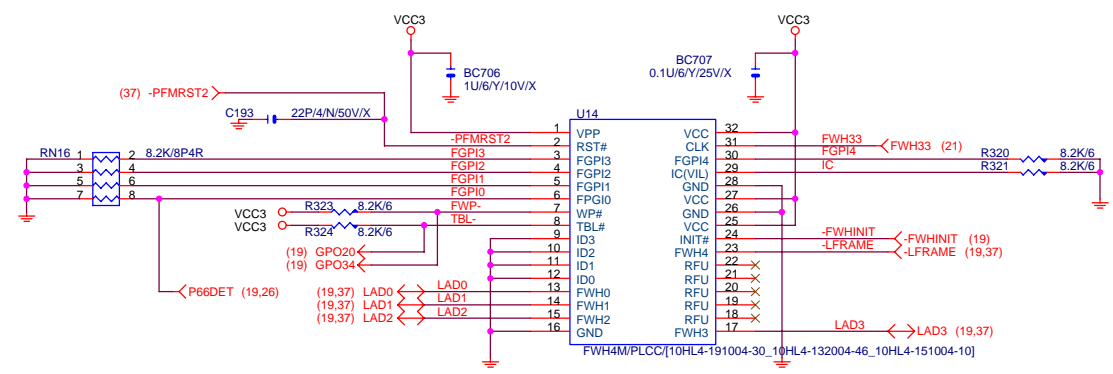
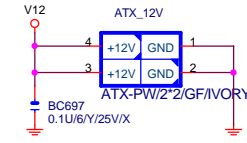
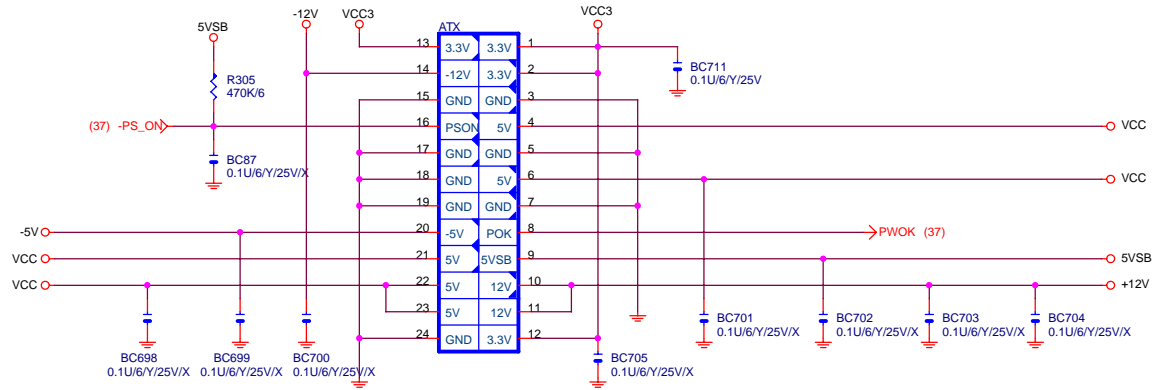
CY284110XC-1無RESET,不可上Q53,否則CPU_STOP#產生,造成CPURST- DELAY 200ms (spec>1ms)



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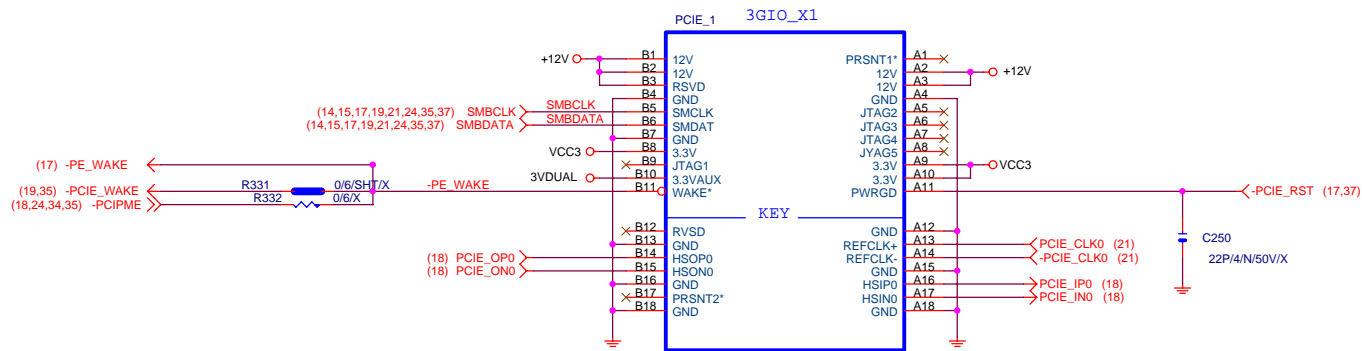
Title			ICS954148AF		
Size	Document Number		81945GMBX		Rev
Custom					1.01
Date:	Friday, July 01, 2005	Sheet	21	of	42

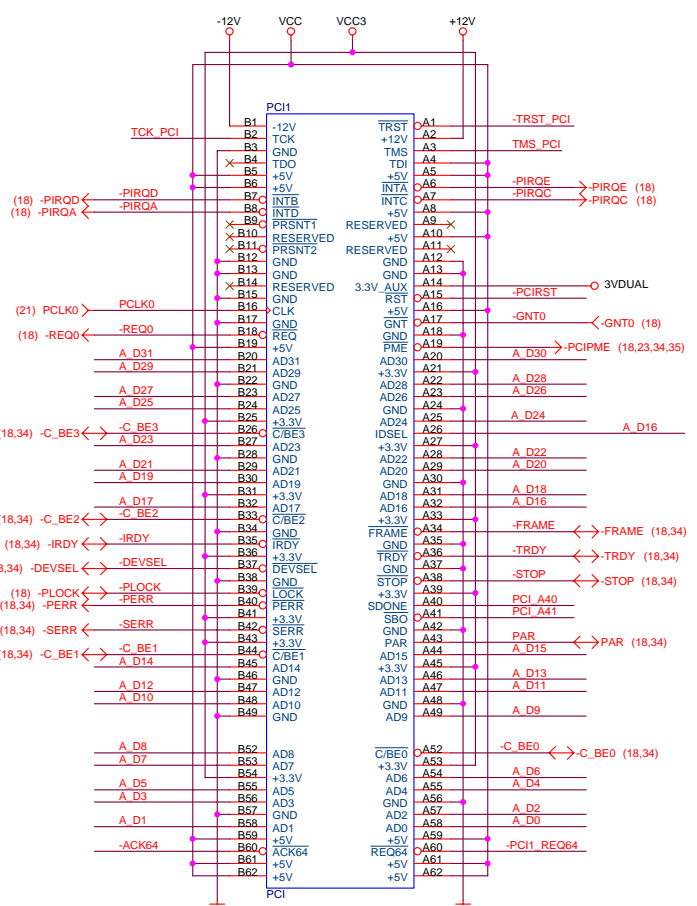
ATX POWER CONNECTOR



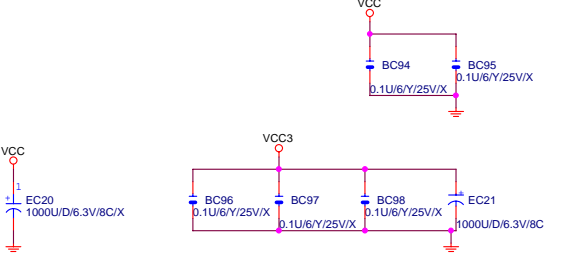
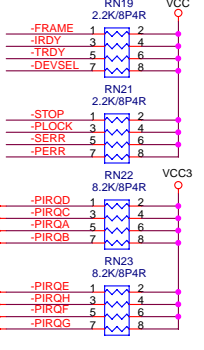
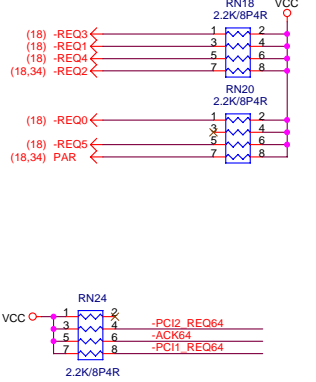
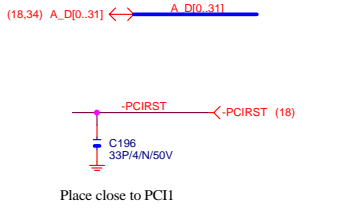
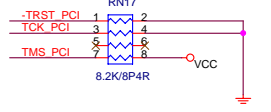
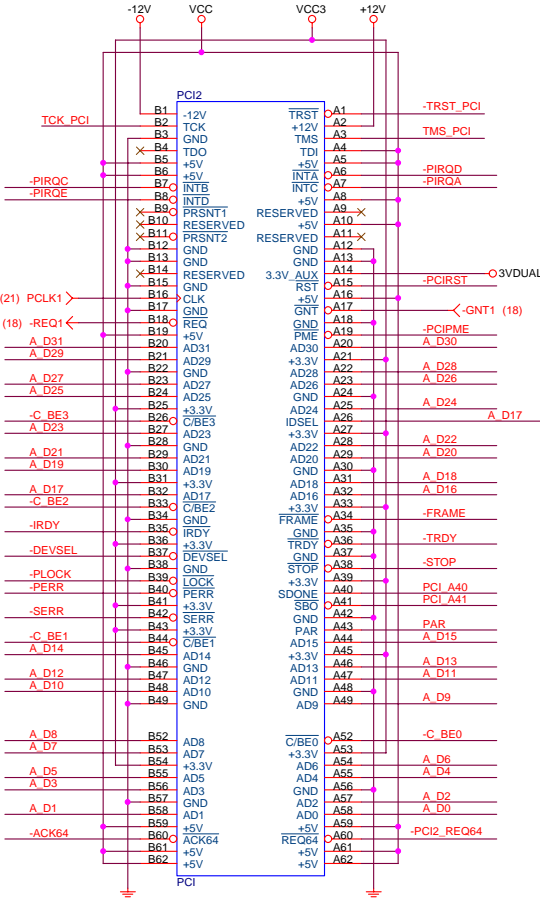
GIGABYTE

Title			
ATX POWER CONNECTOR,DUAL BIOS			
Size	Document Number	81945GMBX	Rev
B			1.01
Date:	Friday, July 01, 2005	Sheet	22 of 42



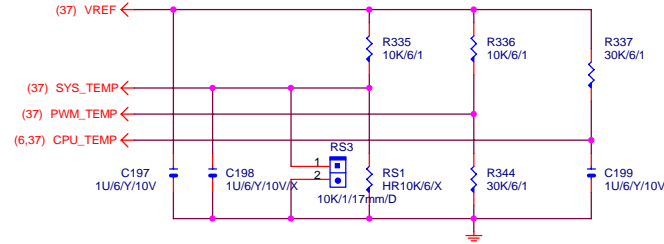


AD16/-PIRQ (E-D-C-A) / -REQ0/-GNT0



Intel Confidential			
PCI SLOT 1, 2			
Size Custom	Document Number	81945GMBX	
Date	Friday, July 01, 2005	Sheet	24 of 42
			Rev 1.01

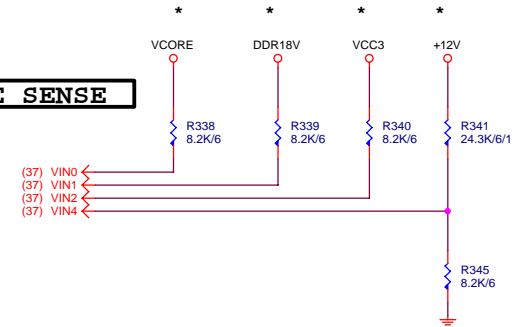
TEMP. SENSE



RS3 CLOSE TO MCH,CO-LAYOUT WITH RS1



VOLTAGE SENSE



CPU/SYS FAN

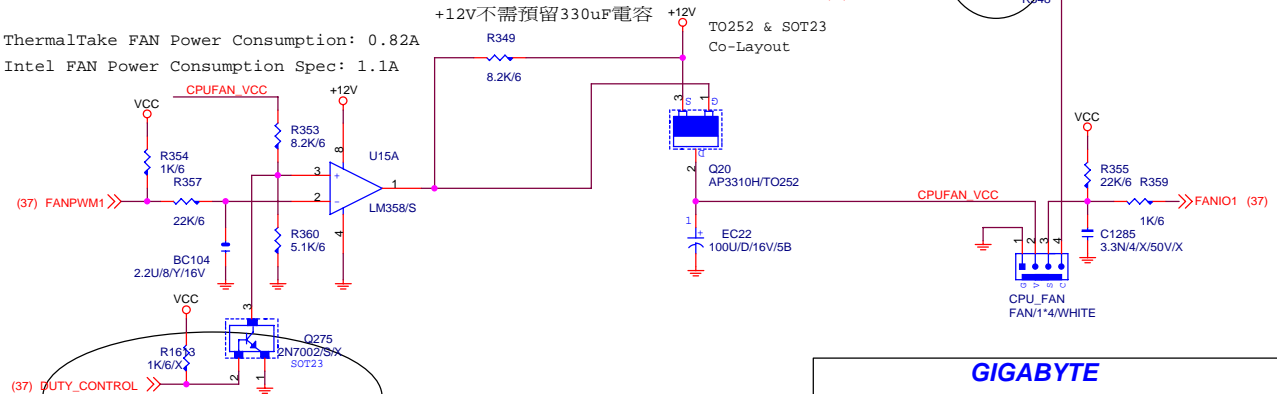
If use PBSS5240 lpcs : (non airflow)

CPUFAN_VCC=12V: Temp=40 deg
CPUFAN_VCC=11V: Temp=82 deg
CPUFAN_VCC=10V: Temp=70 deg
CPUFAN_VCC= 9V: Temp=110 deg
CPUFAN_VCC= 8V: Temp>200 deg

If use PBSS5240 lpcs : (with airflow)

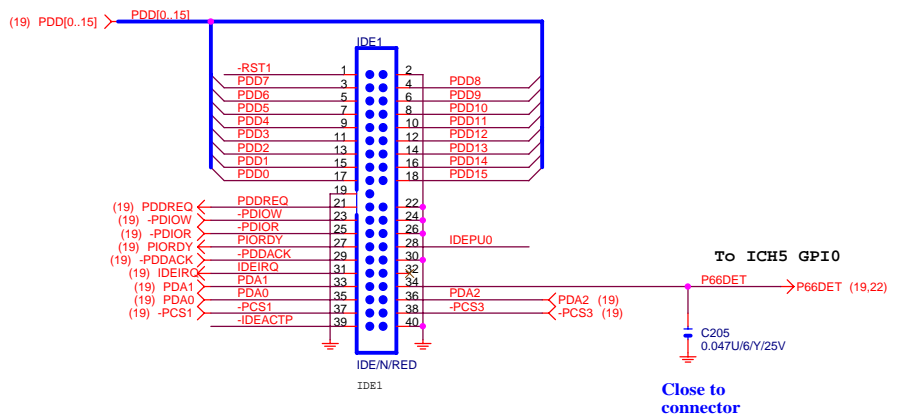
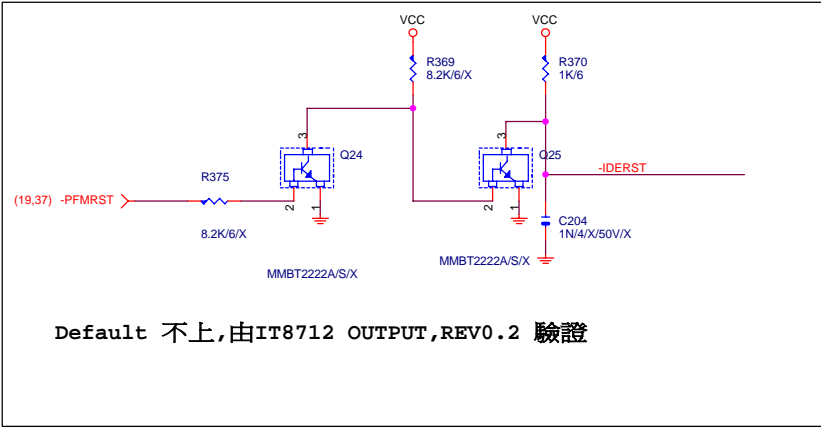
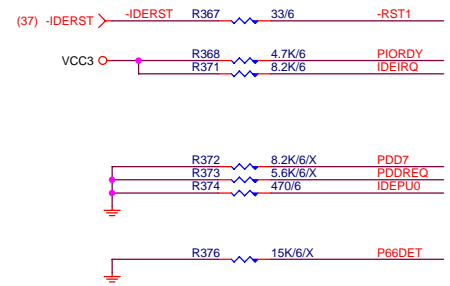
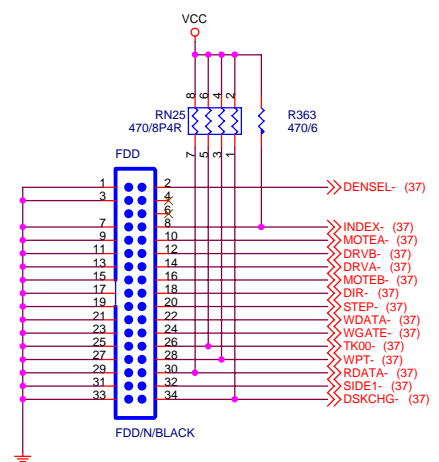
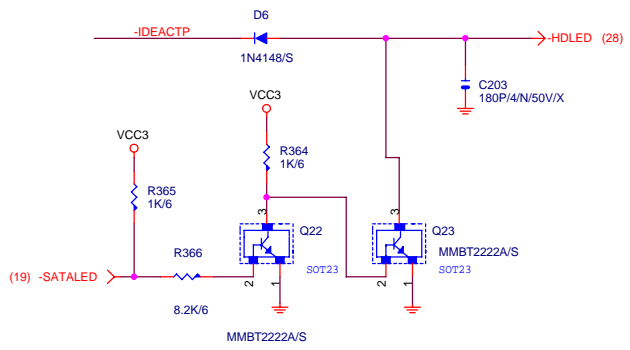
CPUFAN_VCC=12V: Temp=33 deg
CPUFAN_VCC=11V: Temp=62 deg
CPUFAN_VCC=10V: Temp=86 deg
CPUFAN_VCC= 9V: Temp=117 deg
CPUFAN_VCC= 8V: Temp>122 deg

ThermalTake FAN Power Consumption: 0.82A
Intel FAN Power Consumption Spec: 1.1A

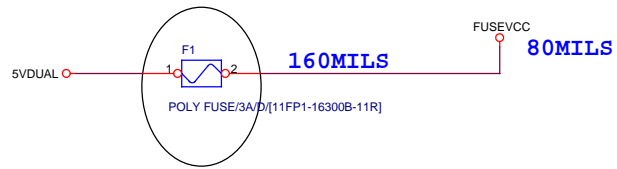


default is high
gpios pin 可以3.3v or 5v
if 3pin fan 則開機後將 program is low

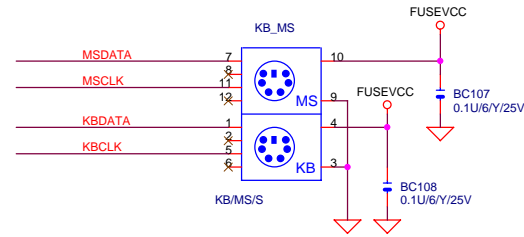
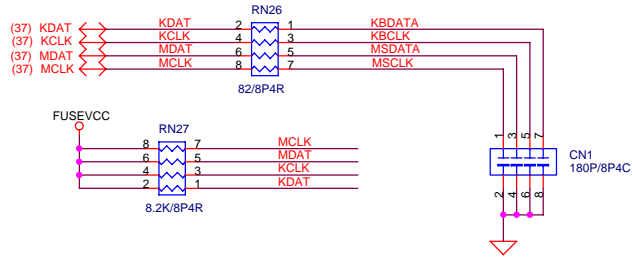
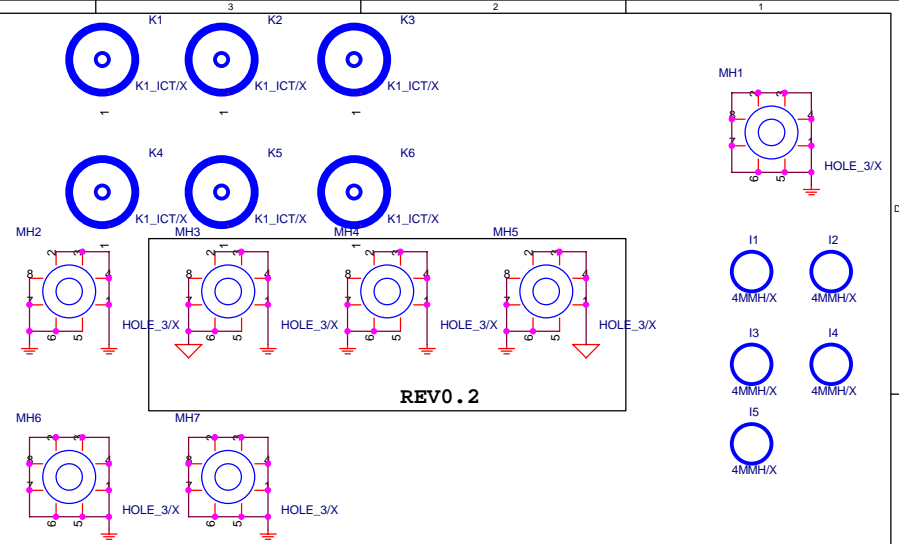
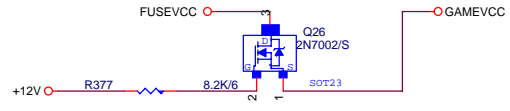
GIGABYTE		
Title: HWM/FANC/BIOS		
Size Custom	Document Number: 8I945GMBX	Rev: 1.01
Date: Friday, July 01, 2005	Sheet: 25	of 42



PRIMARY IDE CONNECTOR



240MILS

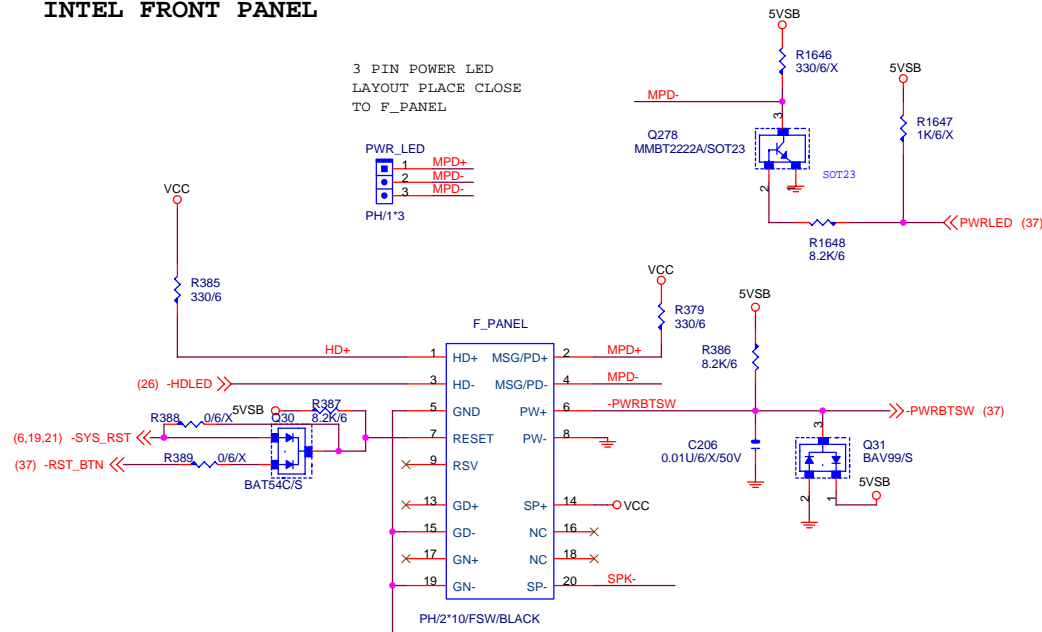
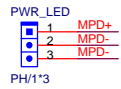


GIGABYTE CORP.

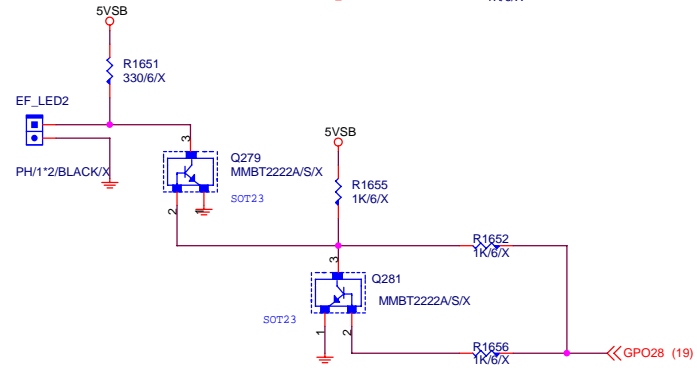
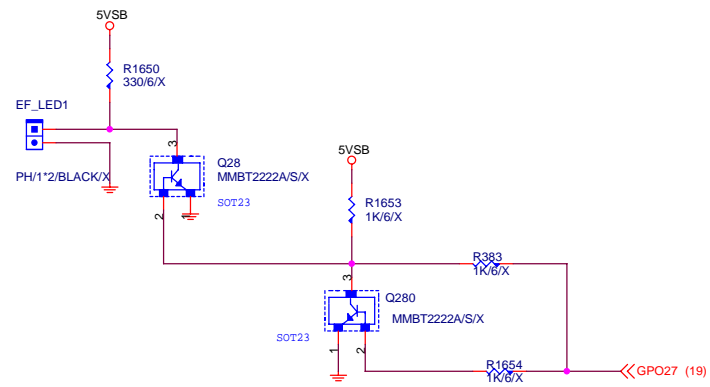
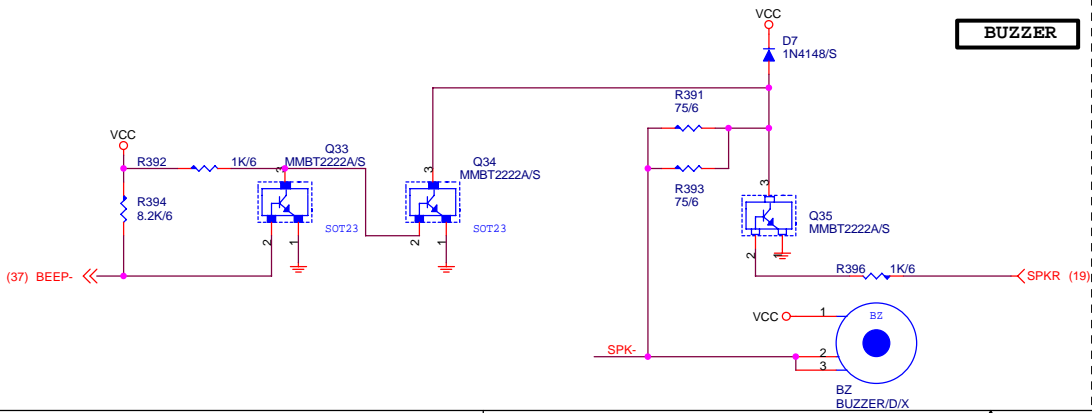
Title		
KB & PS2 MOUSE & IR		
Size B	Document Number	Rev 1.01
8I945GMBX		Date:
Sheet 27 of 42		1

INTEL FRONT PANEL

3 PIN POWER LED
LAYOUT PLACE CLOSE
TO F_PANEL

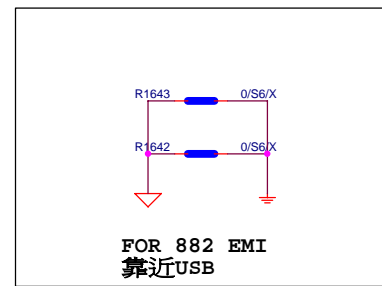
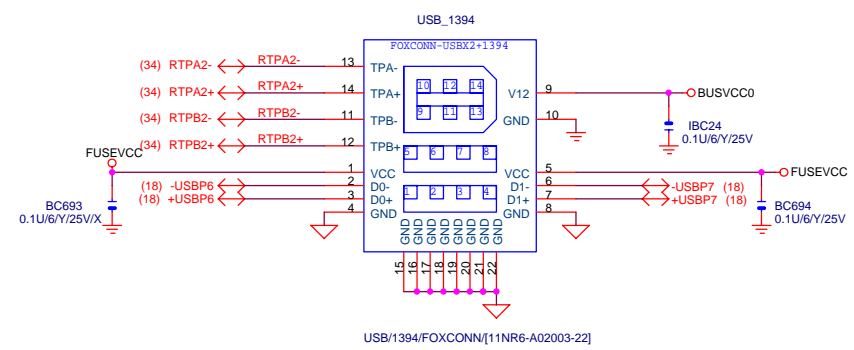
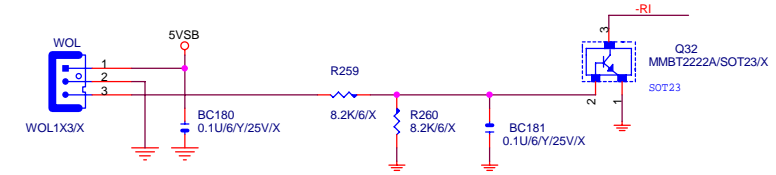
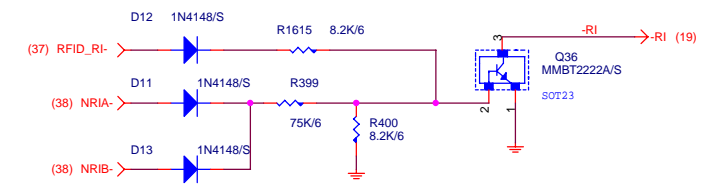
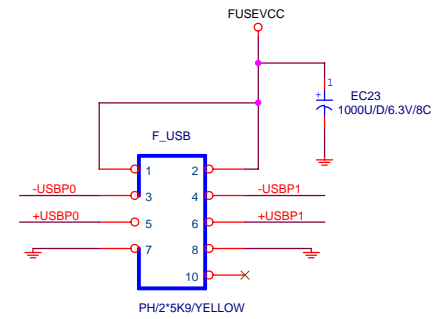
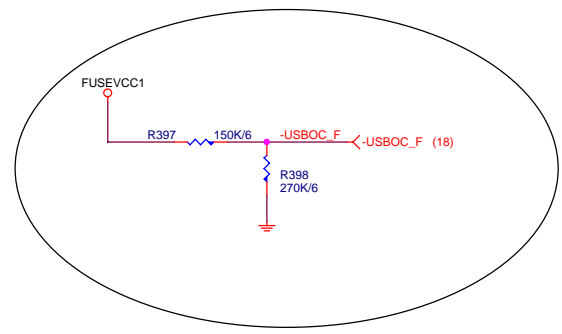
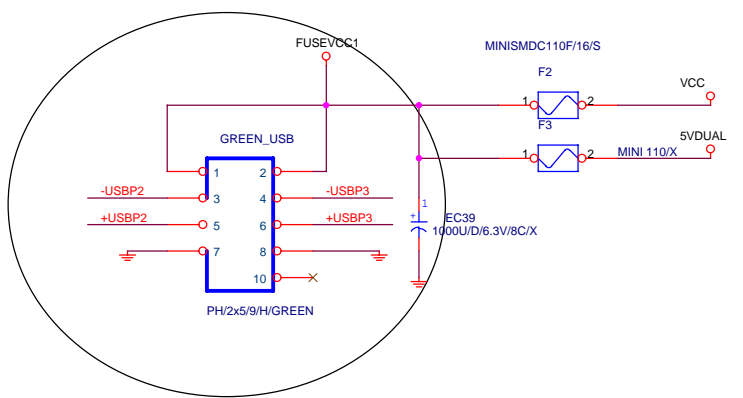


BUZZER



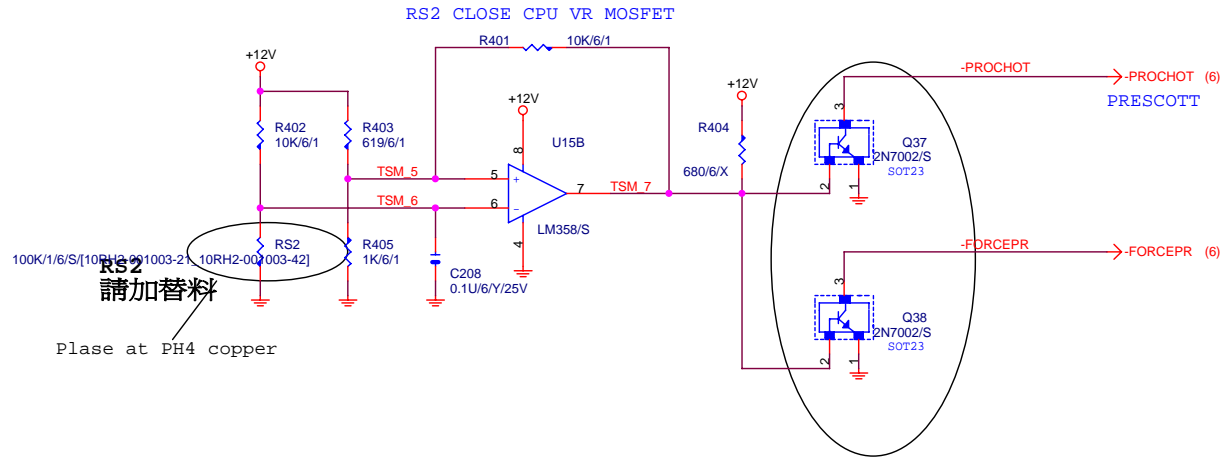
Intel Confidential		
FRONT PANEL		
8I945GMBX		Rev 1.01
Date:	Friday, July 01, 2005	Sheet 28 of 42

FRONT USB

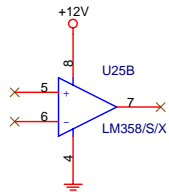
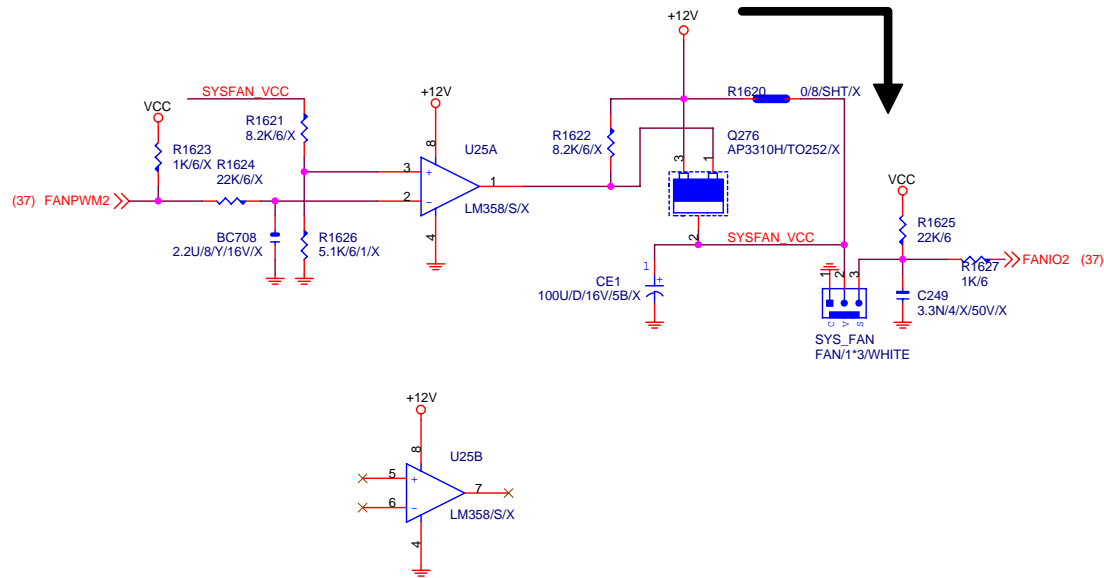


Intel Confidential			
Title			
FRONT USB CONNECTOR			
Size	Document Number	81945GMBX	Rev
B			1.01
Date:	Friday, July 01, 2005	Sheet	29 of 42

asserted at 131 degree
deasserted at 116 degree

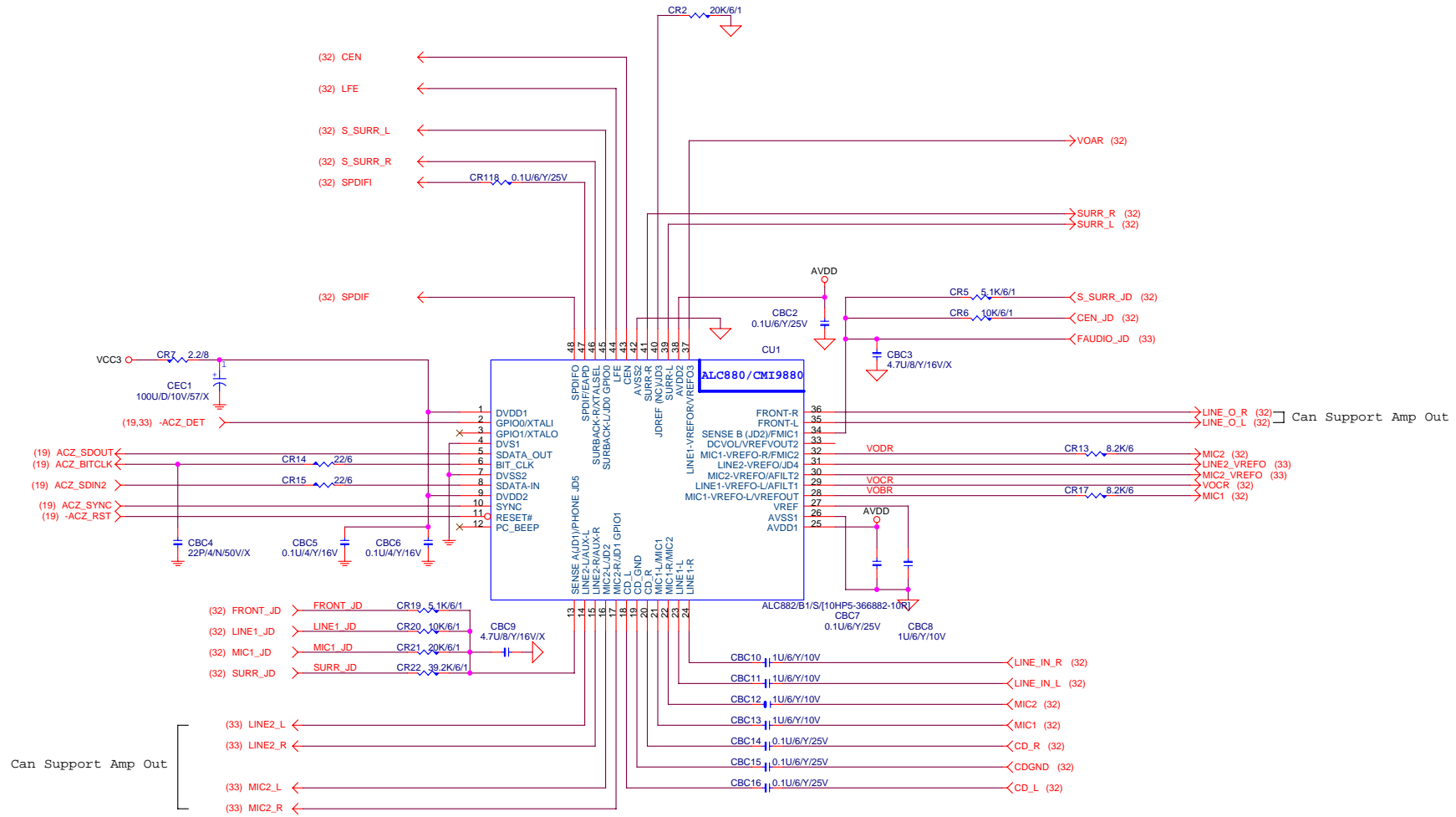


SYS_FAN SMART FAN



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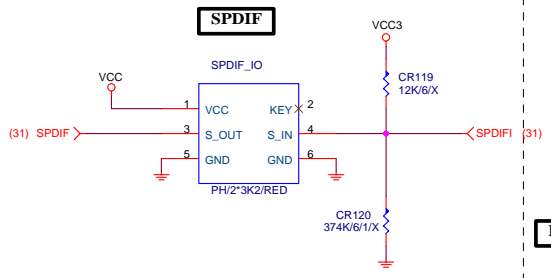
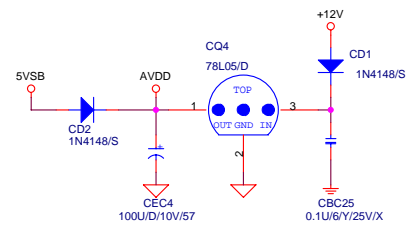
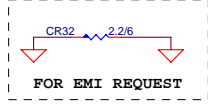
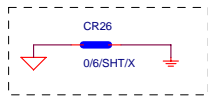
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Size B			Document Number		
			81945GMBX		
Date: Friday, July 01, 2005			Sheet 30 of 42		
			Rev 1.0		



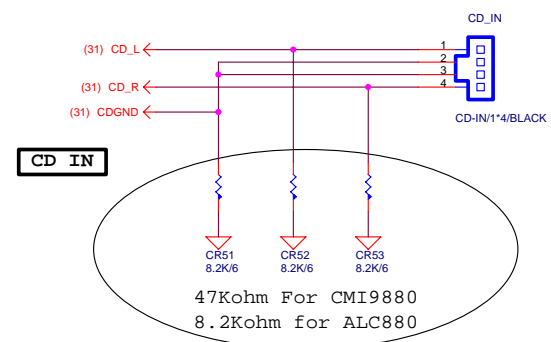
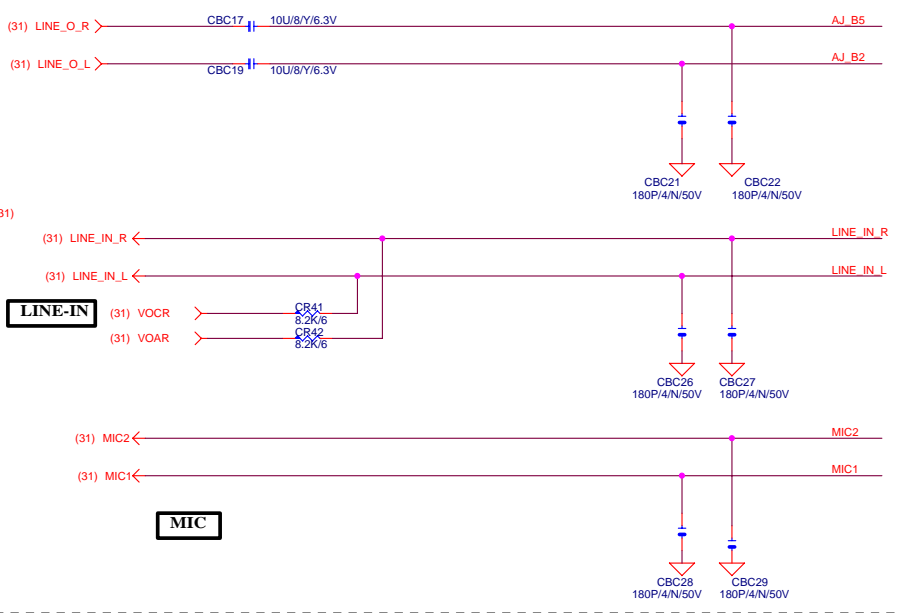
Can Support Amp Out

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Title			AC97 ALC658		
Size	Document Number	81945GMBX			Rev
Custom					1.01
Date:	Friday, July 01, 2005	Sheet	31	of	42

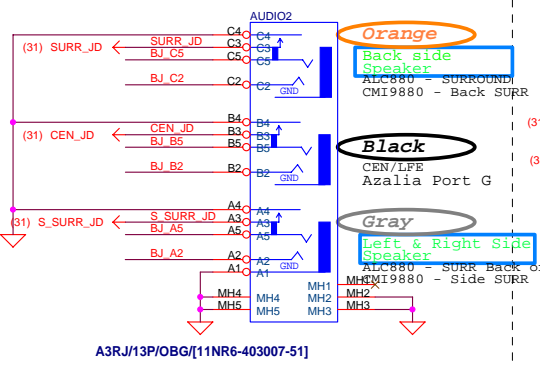
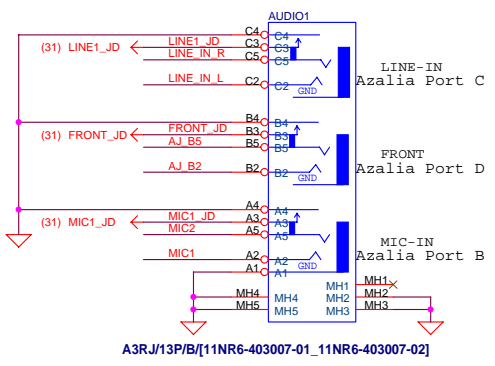


**LINE OUT
FRONT OUT**

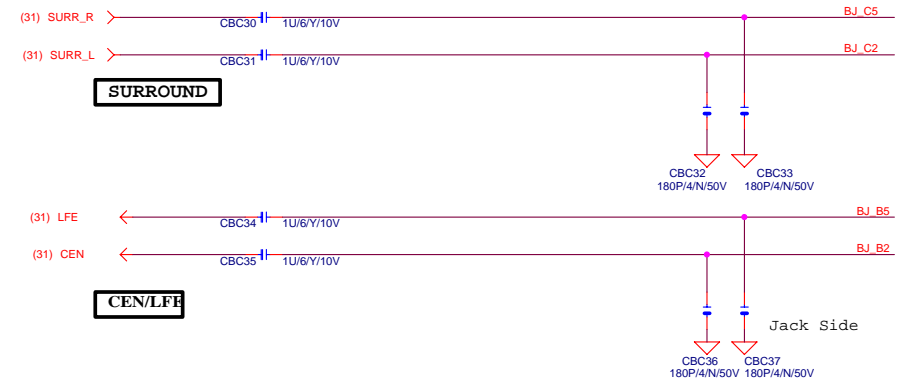


Azalia Jack
Normal --> pin4/pin3 open
Plug jack --> pin4/pin3 close

CMI9880 Port A is Side SURROUND, Port H is Back SURROUND
ALC880 Port A is SURROUND, Port H is SIDE



SURROUND

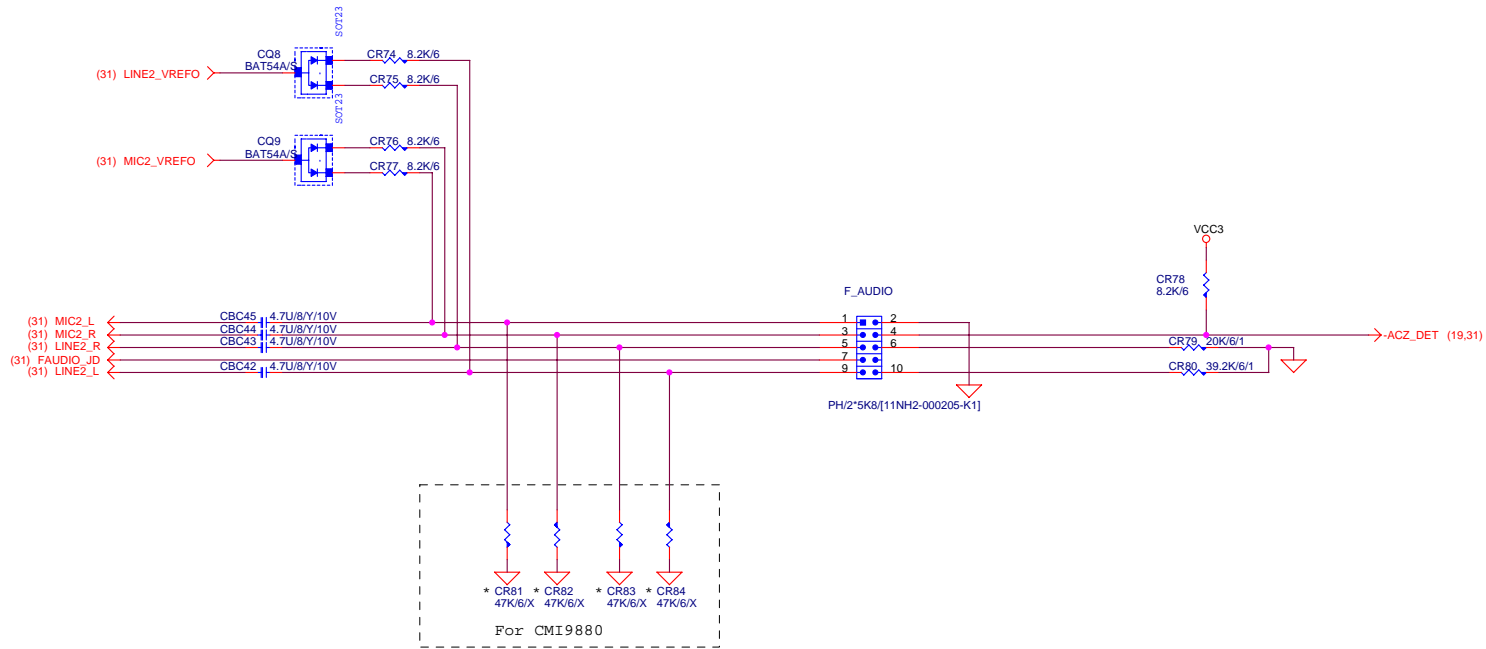


SURR BACK



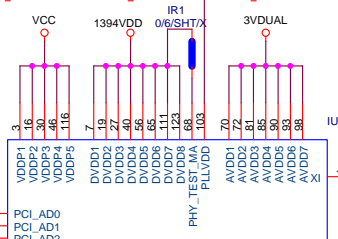
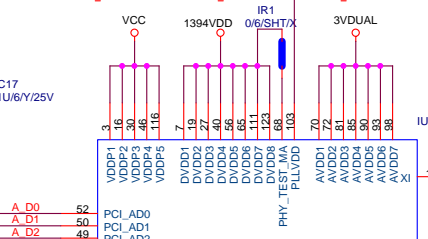
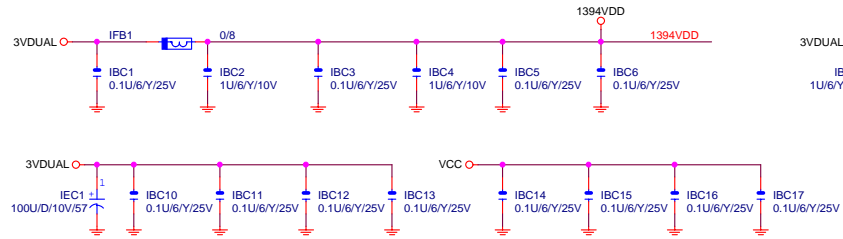
Intel Confidential		
AUDIO JACK		
8I945GMBX		
Title	Document Number	Rev
		1.01
Date: Friday, July 01, 2005	Sheet	32 of 42

Azalia Port F
Azalia Port E



Intel Confidential

Title			FRONT AUDIO CONNECTOR		
Size	Document Number	81945GMBX			Rev
Custom					1.01
Date:	Friday, July 01, 2005	Sheet	33	of	42



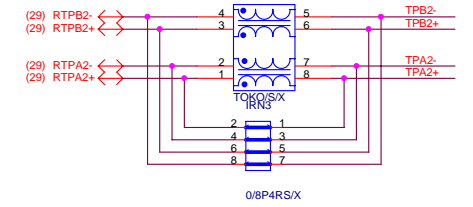
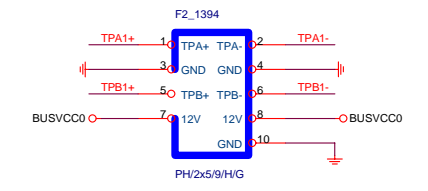
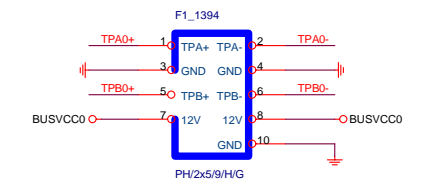
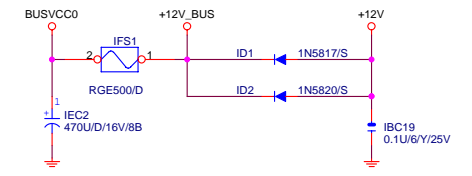
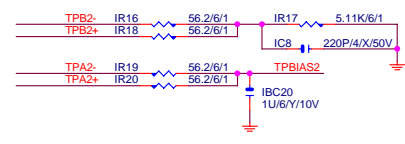
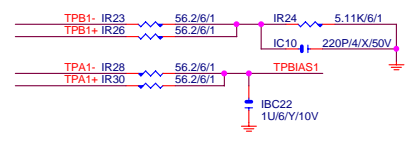
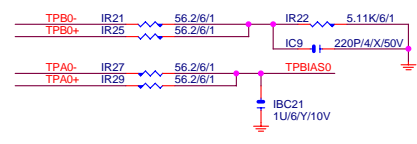
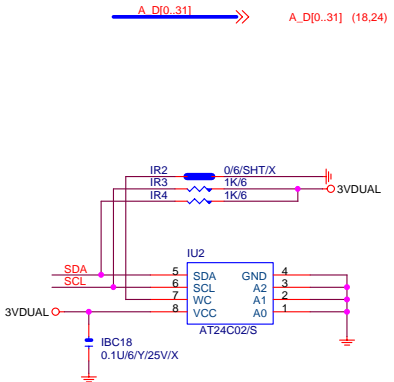
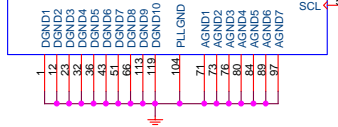
TSB43AB23/S

A D0	52	PCI_AD0
A D1	50	PCI_AD1
A D2	49	PCI_AD2
A D3	48	PCI_AD3
A D4	47	PCI_AD4
A D5	45	PCI_AD5
A D6	44	PCI_AD6
A D7	42	PCI_AD7
A D8	39	PCI_AD8
A D9	38	PCI_AD9
A D10	37	PCI_AD10
A D11	34	PCI_AD11
A D12	35	PCI_AD12
A D13	33	PCI_AD13
A D14	31	PCI_AD14
A D15	29	PCI_AD15
A D16	14	PCI_AD16
A D17	13	PCI_AD17
A D18	11	PCI_AD18
A D19	10	PCI_AD19
A D20	9	PCI_AD20
A D21	8	PCI_AD21
A D22	6	PCI_AD22
A D23	5	PCI_AD23
A D24	128	PCI_AD24
A D25	127	PCI_AD25
A D26	125	PCI_AD26
A D27	124	PCI_AD27
A D28	122	PCI_AD28
A D29	121	PCI_AD29
A D30	120	PCI_AD30
A D31	118	PCI_AD31

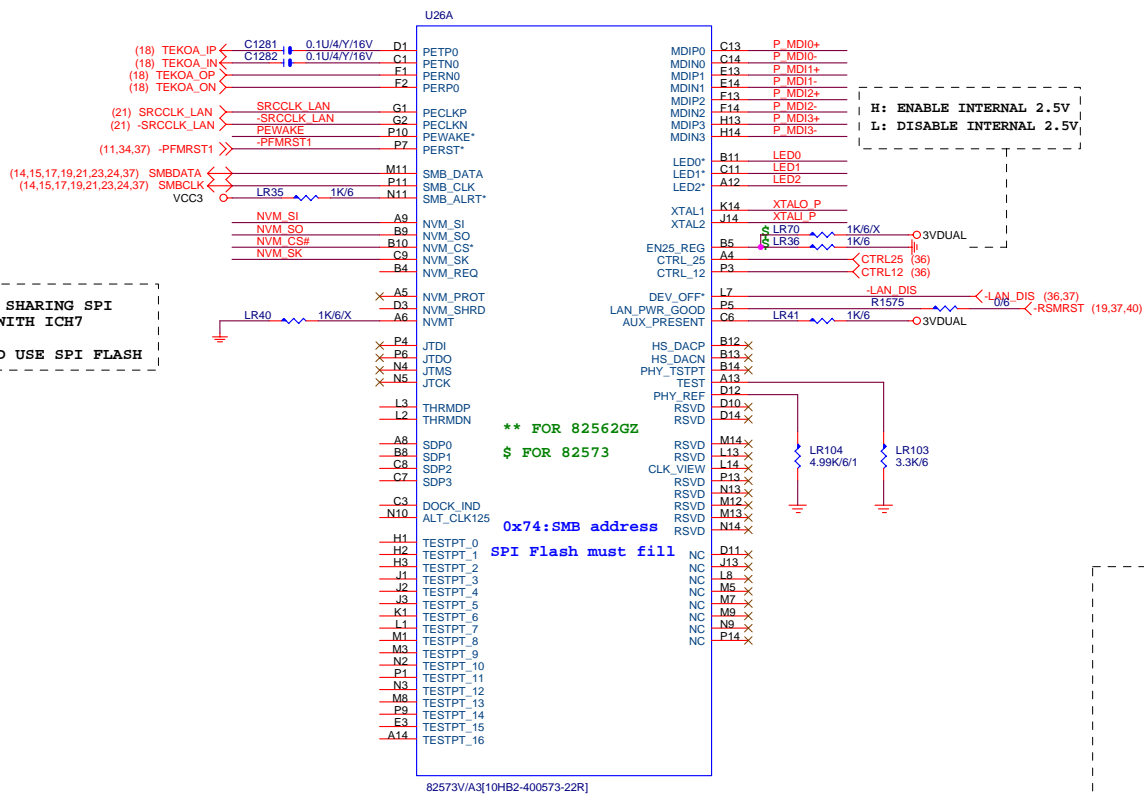
(18,24) -C_BE0	41	PCI_C/BE0
(18,24) -C_BE1	15	PCI_C/BE1
(18,24) -C_BE2	2	PCI_C/BE2
(18,24) -C_BE3	2	PCI_C/BE3
(18,24) PAR	26	PCI_PAR
(18,24) -FRAME	17	PCI_FRAME
(18,24) -IRDY	18	PCI_IRDY
(18,24) -TRDY	20	PCI_TRDY
(18,24) -DEVSEL	21	PCI_DEVSEL
(18,24) -STOP	22	PCI_STOP
(18,24) -STOP	4	PCI_IDSEL

(18,24) -REQ0	115	PCI_REQ
(18) -GNT2	114	PCI_GNT
(18,24) -PERR	24	PCI_PERR
(18,24) -SERR	25	PCI_SERR

(21) 1394CLK	112	PCI_PCLK
(11,35,37) -PFMRST1	53	PCI_RST
(18,24) -PIRQH	109	PCI_INTA
(18,23,24,35) -PCIPME	117	PCI_PME

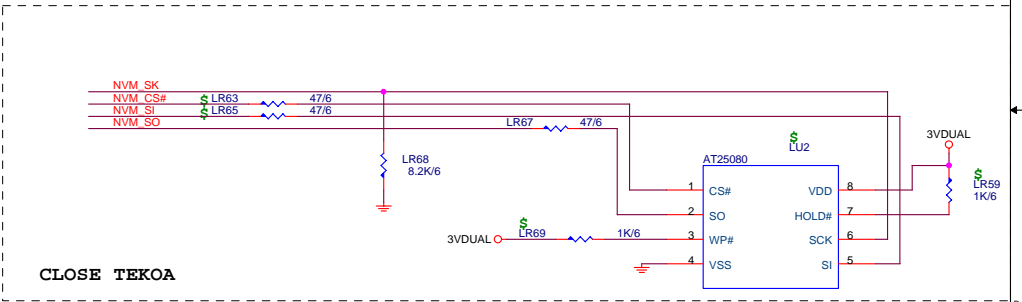
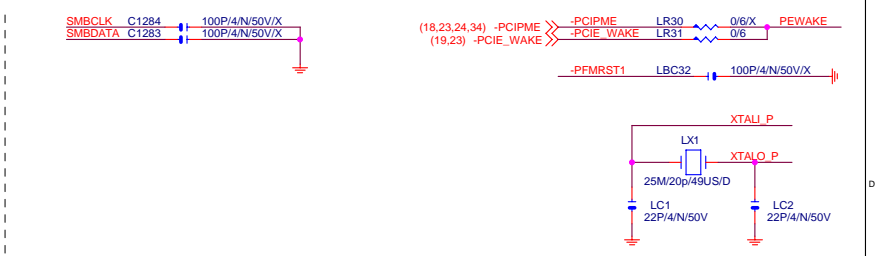


GIGABYTE		
Ti1394A		
Title	Document Number	Rev
	8I945GMBX	1.01
Date:	Friday, July 01, 2005	Sheet 34 of 42



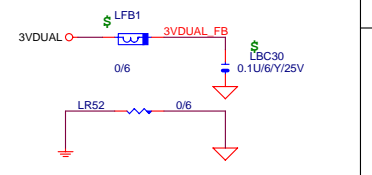
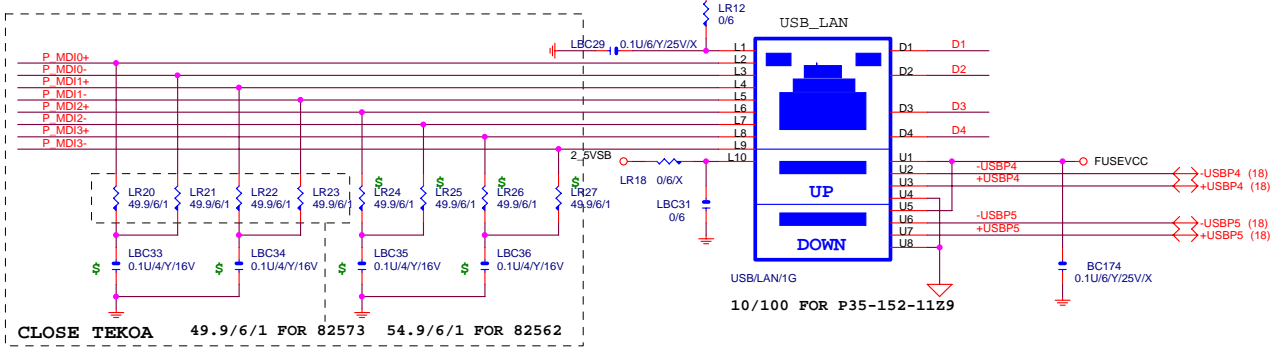
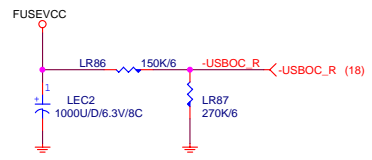
B4/D3: SHARING SPI FLASH WITH ICH7

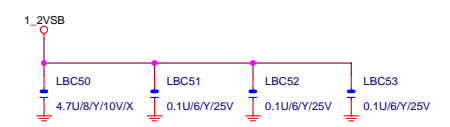
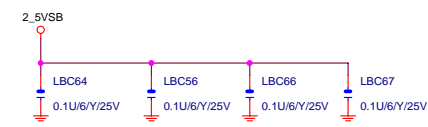
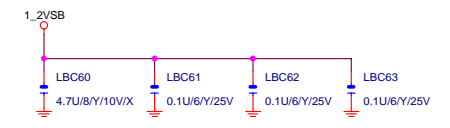
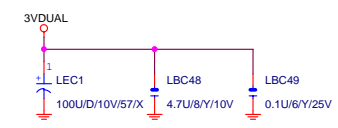
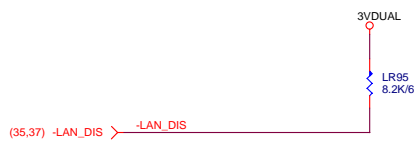
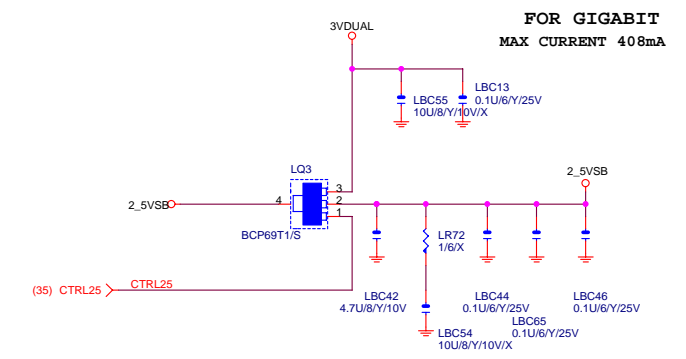
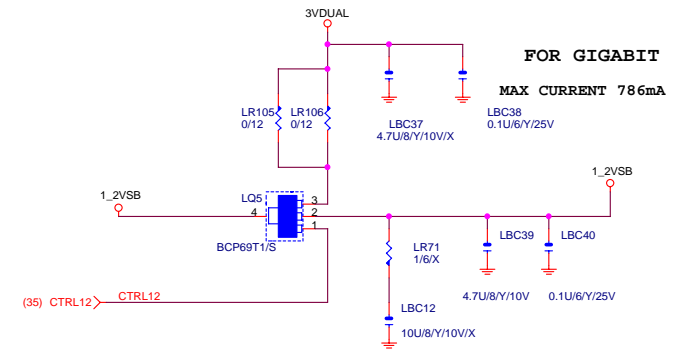
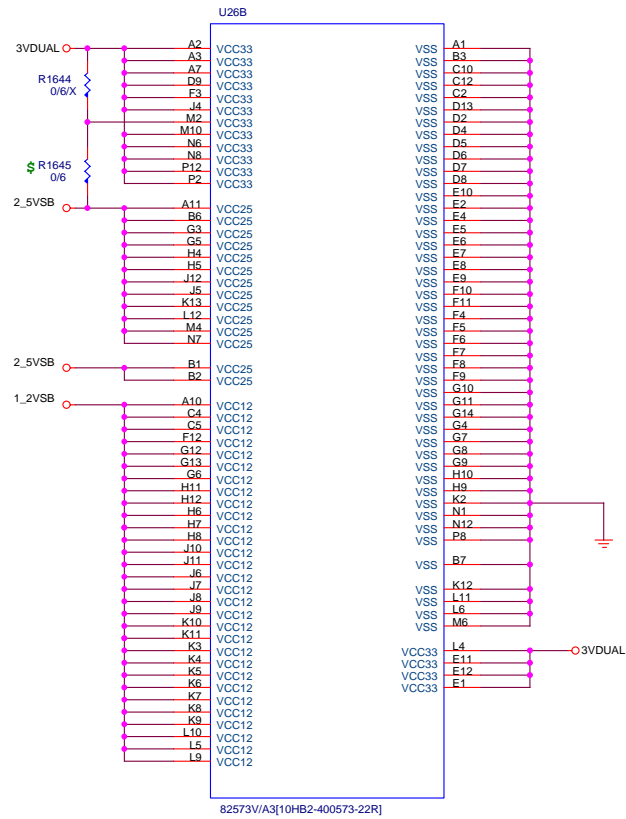
A6: P.D USE SPI FLASH



CLOSE TEKOA

FWH+4Mb	DEDICATE 82573E	LR63,65,67:47 ; LR68:8.2K ; LRN7:0 ; LU2 ; LR59 ; LR69
4Mb+4Mb	DEDICATE 82573E & ICH	LR63,65,67:47 ; LR68:8.2K ; LRN7:0 ; LU2 ; LR59 ; LR69 ; R1569,R1571,1573:47 ; R1567,R1568:8.2K ; R1570,1572:0 ; U27 ; R1639 ; R1640
ICH 8Mb	SHARE 82573E & ICH	R1570,1572,1573:47 ; LR63,65,R1569,1571,LRN6,RN135:0 ; U27 ; R1639 ; R1640



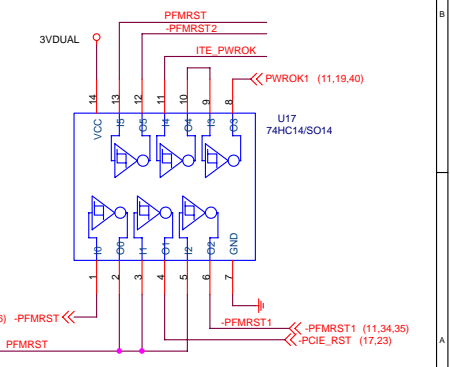
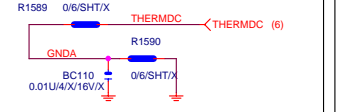
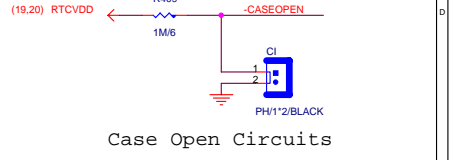
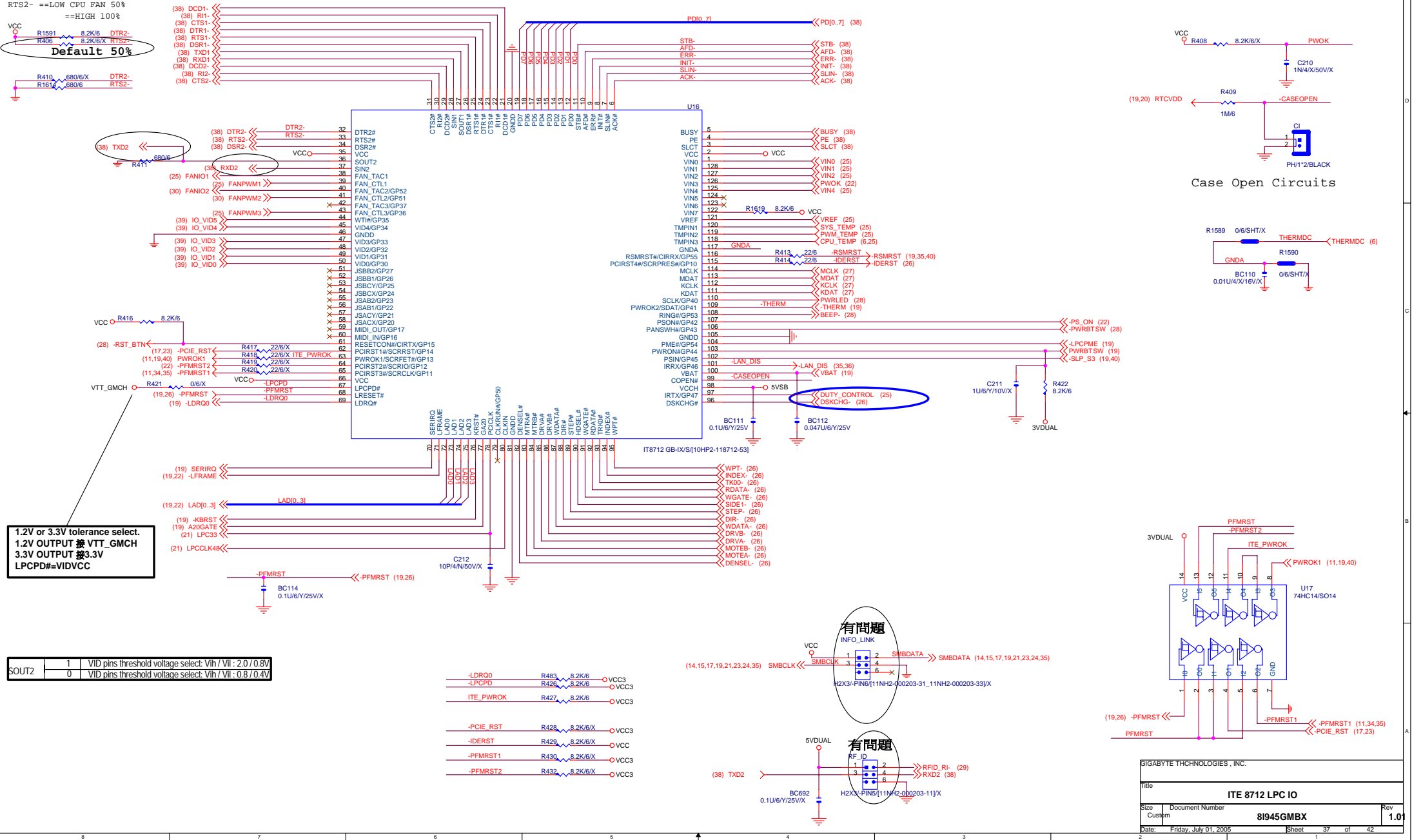


GIGABYTE		
Title TEKOA & EKRON - 2		
Size Custom	Document Number 8I945GMBX	Rev 1.01
Date: Friday, July 01, 2005	Sheet 36	of 42

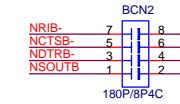
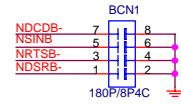
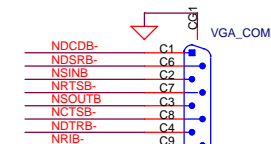
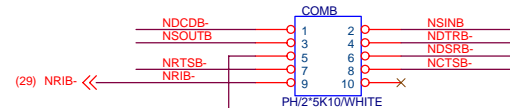
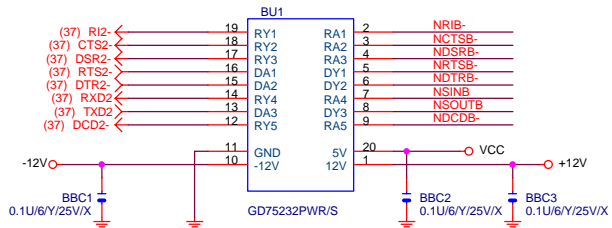
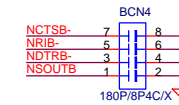
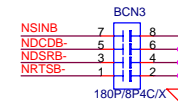
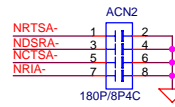
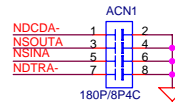
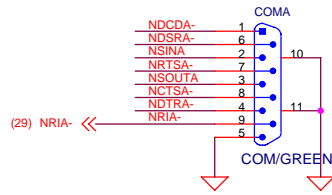
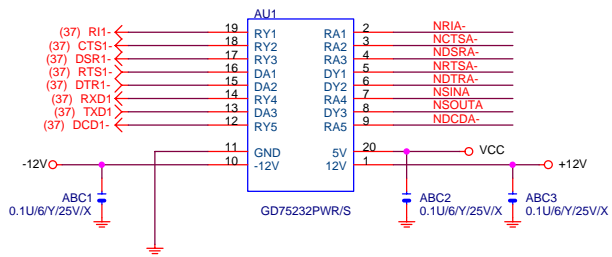
RTS2- ==LOW CPU FAN 50%
 ==HIGH 100%
Default 50%

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

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

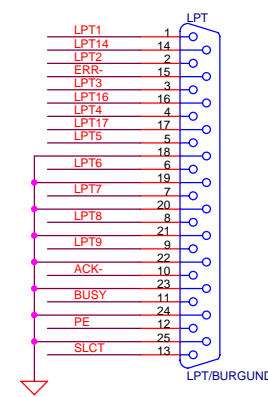
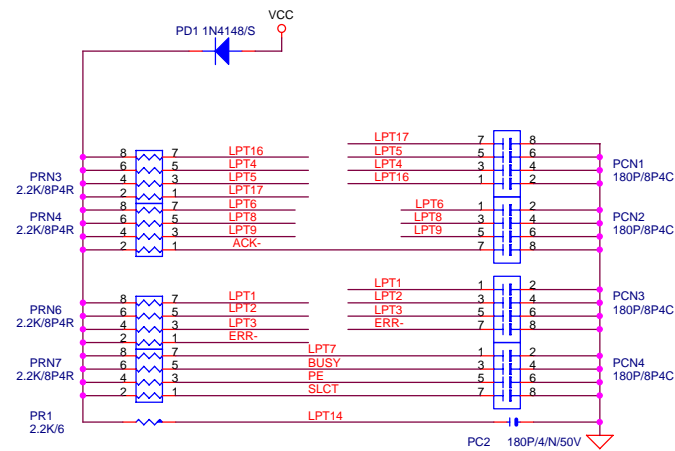
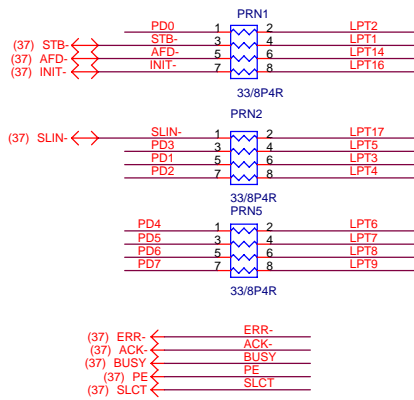


GIGABYTE TECHNOLOGIES, INC.			
Title			
ITE 8712 LPC IO			
Size	Document Number	Rev	
Cuspm	81945GMBX		1.01
Date:	Friday, July 01, 2005	Sheet	37 of 42



PLACE NEAR VGA_COM CONNECTOR

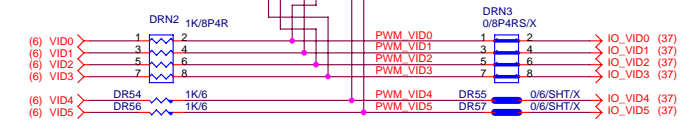
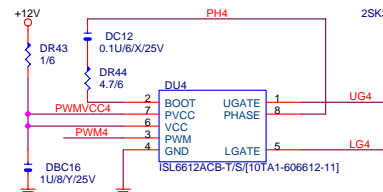
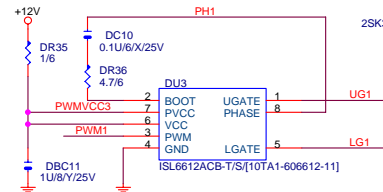
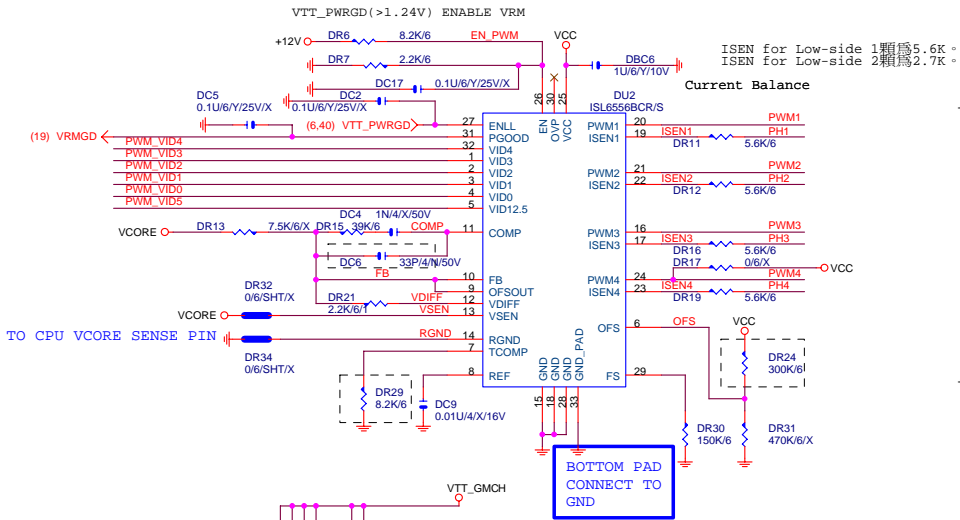
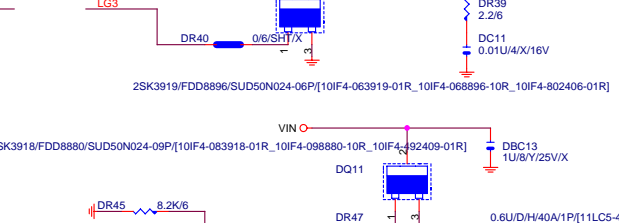
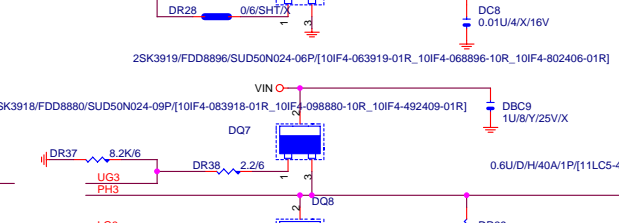
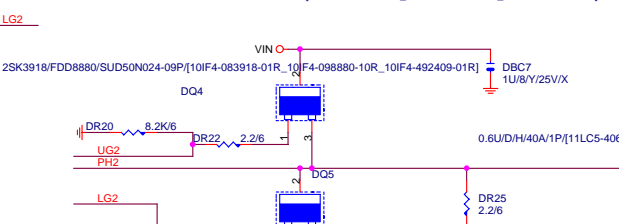
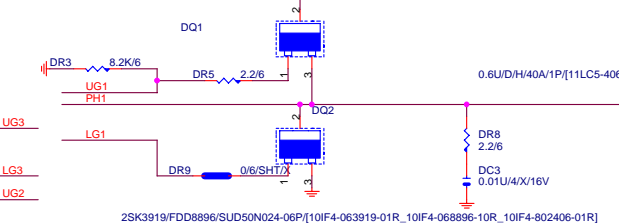
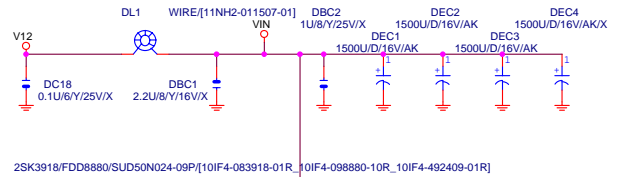
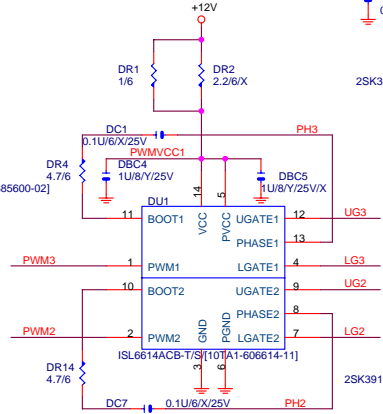
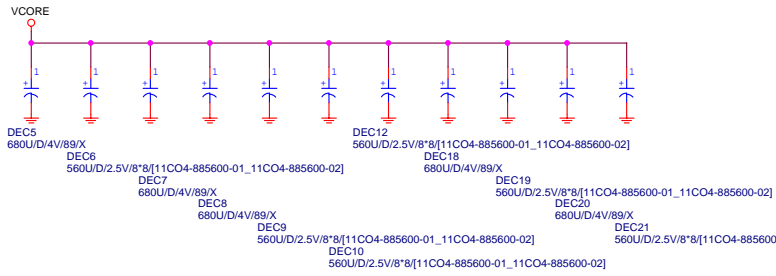
(37) PD0..7 ↔ PD0..7



GIGABYTE TECHNOLOGIES, INC.

Title		COM & IR & LPT PORT & FLOOPY	
Size	Document Number	Rev	
B		81945GMBX	
Date:	Friday, July 01, 2005	Sheet	38 of 42
		1	1.01

560uF改為8*8: 11CO4-885600-01 & 02



For Dynamic VID Test: (93.07.12)

BC15: 10U/12/X/6.3V-->22U/12/X/6.3V

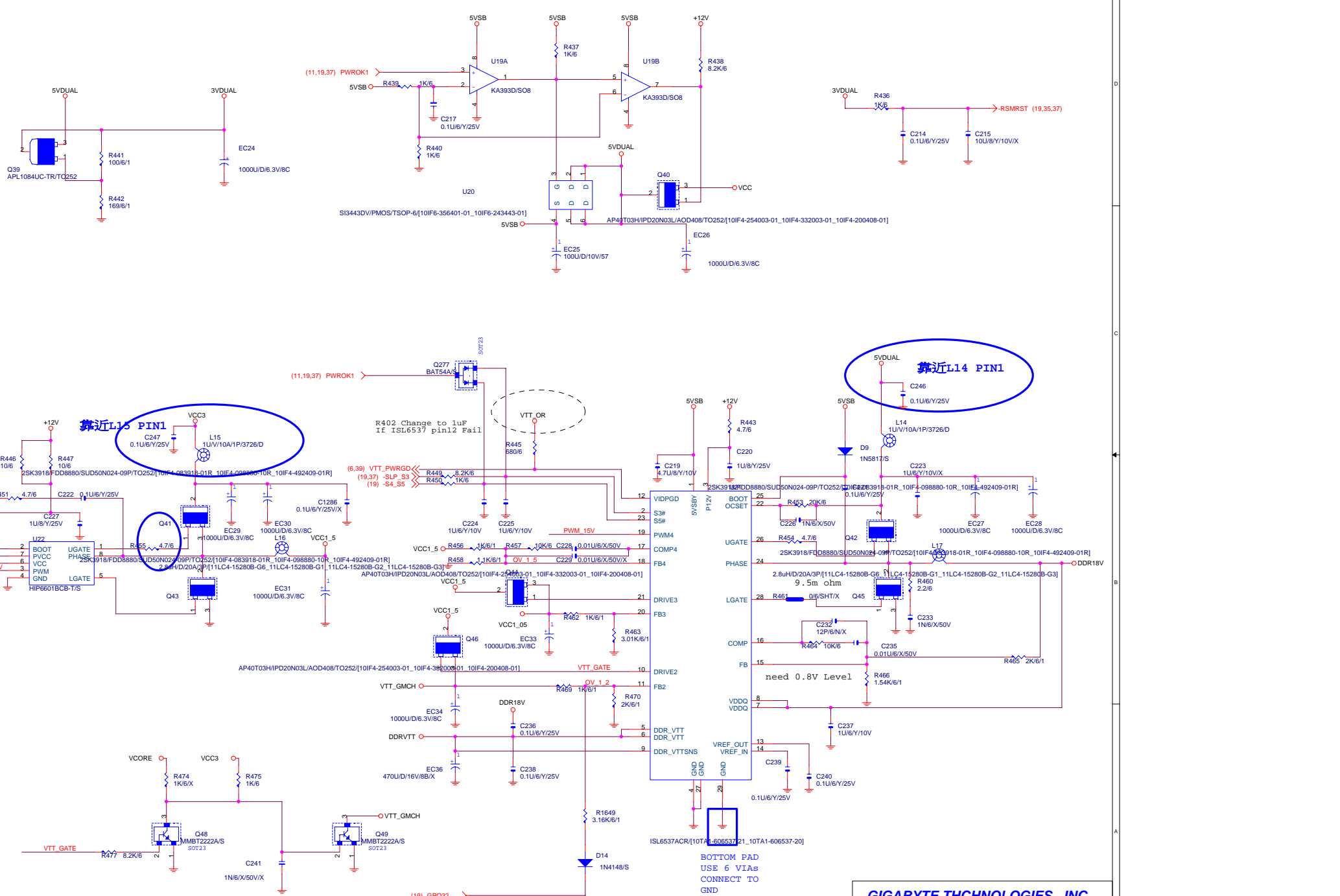
DC7: 0.01U/4/X/16V-->1000P/4/X/50V

DEC13: 3300U/D/6.3V/AN-->1000U/D/6.3V/AC

DEC11: 3300U/D/6.3V/AN-->N/A

Gigabyte Technology

Title		VRD 10.1/ ISL6556	
Size	Document Number	81945GMBX	
Custom		Rev	1.01
Date:	Friday, July 01, 2005	Sheet	39 of 42



GIGABYTE THCHNOLOGIES, INC.			
Title DISCRETE POWER			
Size	Document Number	81945GMBX	
Custom		Rev	1.0
Date:	Friday, July 01, 2005	Sheet	40 of 42

INTEL ICH7 GPIO Implementation

紅字表示CPI/O 同PIN

GPI PIN

Pin Name	Pin Type	Power Well			GPIO Application
GPIO[0]	I/O	VCC3	GPI/BM_BUSY#	(NA)	(NA)
GPIO[1]	I/O	VCC	-REQ[5]	(P.U VCC)	-REQ[5]
GPIO[5:2]	I/OD	VCC	-PIRQ[H:E]	(P.U VCC)	-PIRQ[H:E]
GPIO[6]	I/O	VCC3	GPI	(NA)	M_ID0 FOR MEDIA
GPIO[7]	I/O	VCC3	GPI	(NA)	DUALBIOS_INPUT
GPIO[8]	I/O	3VDUAL	GPI	(P.U 3VDUAL)	-SKTOCC
GPIO[9]	I/O	3VDUAL	GPI	(NA)	P66DET
GPIO[10]	I/O	3VDUAL	GPI	(NA)	M_ID1 FOR MB_ID
GPIO[11]	I/O	3VDUAL	-SMBALERT	(P.U 3VDUAL)	-SMBALRT
GPIO[12]	I/O	3VDUAL	GPI	(NA)	M_ID2 FOR MB_ID
GPIO[13]	I/O	3VDUAL	GPI	(P.U 3VDUAL)	-LPCPME
GPIO[14]	I/O	3VDUAL	GPI	(NA)	M_ID3 FOR MB_ID
GPIO[15]	I/O	3VDUAL	GPI	(NA)	-ACZ_DET
GPIO[16]	I/O	VCC3	GPO	P.D 20K(INT.)	HW RESET
GPIO[17]	I/O	VCC3	GPO/-GNT[5]	(NA)	GPO/-GNT[5]
GPIO[18]	I/O	VCC3	GPO/toggle	(NA)	(NA)
GPIO[19]	I/O	VCC3	SATA1GP	(P.U VCC3)	SATA1GP
GPIO[20]	I/O	VCC3	GPO	(P.U VCC3)	TBL-
GPIO[21]	I/O	VCC3	SATA0GP	(P.U VCC3)	SATA0GP
GPIO[22]	I/O	VCC3	-REQ[4]	(P.U VCC)	-REQ[4]
GPIO[23]	I/O	VCC3	LDRQ1#	(NA)	(NA)
GPIO[24]	I/O	3VDUAL	GPO/reset not cleared	(NA)	(NA)
GPIO[25]	I/O	3VDUAL	GPO	(NA)	PWD_LED
GPIO[26]	I/O	3VDUAL	EL_RSVD	(P.D)	-SPI_WP
GPIO[27]	I/O	3VDUAL	EL_STATE0	(NA)	(NA)
GPIO[28]	I/O	3VDUAL	EL_STATE1	(NA)	(NA)
GPIO[29]	I/O	3VDUAL	OC5#	(P.U VCC 分壓)	OC5#
GPIO[30]	I/O	3VDUAL	OC6#	(P.U VCC 分壓)	OC6#
GPIO[31]	I/O	3VDUAL	OC7#	(P.U VCC 分壓)	OC7#
GPIO[32]	I/O	VCC3	GPO	(NA)	DUAL BIOS
GPIO[33]	I/O	VCC3	GPO	(NA)	DUAL BIOS
GPIO[34]	I/O	VCC3	GPO	(P.U VCC3)	FWP-
GPIO[35]	I/O	VCC3	SATACLKREQ#	(NA)	(NA)
GPIO[36]	I	VCC3	SATA2GP	(P.U VCC3)	SATA2GP
GPIO[37]	I	VCC3	SATA3GP	(P.U VCC3)	SATA3GP

GPO PIN

Pin Name	Pin Number	Power Well	Pin Type		GPIO Application
GPIO[38]	I/O	VCC3	GPI	(NA)	(NA)
GPIO[39]	I/O	VCC3	GPI	(NA)	(NA)
GPIO[40:47]			NOT IMPLEMENTED		NOT IMPLEMENTED
GPIO[48]	I/O	VCC3	-GNT[4]	(NA)	-GNT[4]
GPIO[49]	I/O	VTT_GMCH	CPUPWRGD	(P.U VTT_OL)	CPUPWROK
PC11	PCLK0	-PCIRST	-REQ0/-GNT0	-PIROE	A_D16
PC12	PCLK1	-PCIRST	-REQ1/-GNT1	-PIROD	A_D17
PC13	PCLK2	-PCIRST	-REQ2/-GNT2	-PIROC	A_D18
1394b	1394CLK	-PFMRST2	-REQ3/-GNT3	-PIROH	A_D23
IT8212	RAIDCLK	-PFMRST2	-REQ4/-GNT4	-PIROG	A_D22

ICH6 GPIO Table:

NAME	PWR LANE	USAGE	NAME	PWR LANE	USAGE
GPI0	V5REF	M/B ID (-REQ6)	GPI41	VCC3	M/B ID
GPI1	V5REF	-REQ5	GPO48	VCC3	-GNT4
GPI2	V5REF	-PIRQE	GPO49	V-CPUIO	CPUPWOK
GPI3	V5REF	-PIRQF			
GPI4	V5REF	-PIRQG			
GPI5	V5REF	-PIRQH			
GPI6	VCC3	-SLP BTN			
GPI7	VCC3	DUAL BIOS			
GPI8	3VDAUL	-LANWAKE			
GPI9	3VDAUL	-USBOC4			
GPI10	3VDAUL	-USBOC5			
GPI11	3VDAUL	-SMBALT			
GPI12	VCC3	ATX DET			
GPI13	3VDAUL	-LPCPME			
GPI14	3VDAUL	-USBOC6			
GPI15	3VDAUL	-USBOC7			
GPO16	VCC3	CPU OV1 (-GNT6)			
GPO17	VCC3	-GNT5			
GPO18	VCC3	CPU OV2			
GPO19	VCC3	DUAL BIOS			
GPO20	VCC3	BIOS T-BLOCK			
GPO21	VCC3	DUAL BIOS			
GPO23	VCC3	DDR OV0			
GPI024	3VDAUL	GREEN LED			
GPI025	3VDAUL	DDR OV1			
GPI26	VCC3	SATA GP0			
GPI027	3VDAUL	+PWRLED			
GPI028	3VDAUL	-PWRLED			
GPI29	VCC3	SATA GP1			
GPI30	VCC3	SATA GP2			
GPI31	VCC3	SATA GP3			
GPI032	VCC3	BIOS WP			
GPI033	VCC3	AZALIA DET			
GPI034	VCC3	PWRLED			
GPI40	V5REF	-REQ4			

PWROK/RESET Table:

ITE8712BHX PIN	NET NAME	TARGET
PIN62/-PCIRST1	-PCIE_RST	1. PCI-E * 1 Slot1 2. PCI-E * 1 Slot2 3. PCI-E * 1 Slot3 4. PCI-E * 16 Slot
PIN64/-PCIRST2	-PFMRST2	1. Onboard PCI Lan 2. Onboard 1394 Chip 3. OnBoard FWH
PIN65/-PCIRST3	-PFMRST1	1. Onboard PCI-E Lan 2. Onboard SATA Chip 3. GMCH
PIN115/-PCIRST4	-PFMRST -IDERST	Reserved For IDE
PIN63/PWROK1	PWROK1	1. GMCH 2. ICH6 3. 5VDUAL SWITCH 4. DPS CONTROL
PIN109/PWROK2	-THERM	1. ICH6

GIGABYTE THCNLOGIES , INC.

Title		GPIO/RESET TABLE	
Size	Document Number	81945GMBX	Rev
Custom			1.01
Date:	Friday, July 01, 2005	Sheet	42 of 42