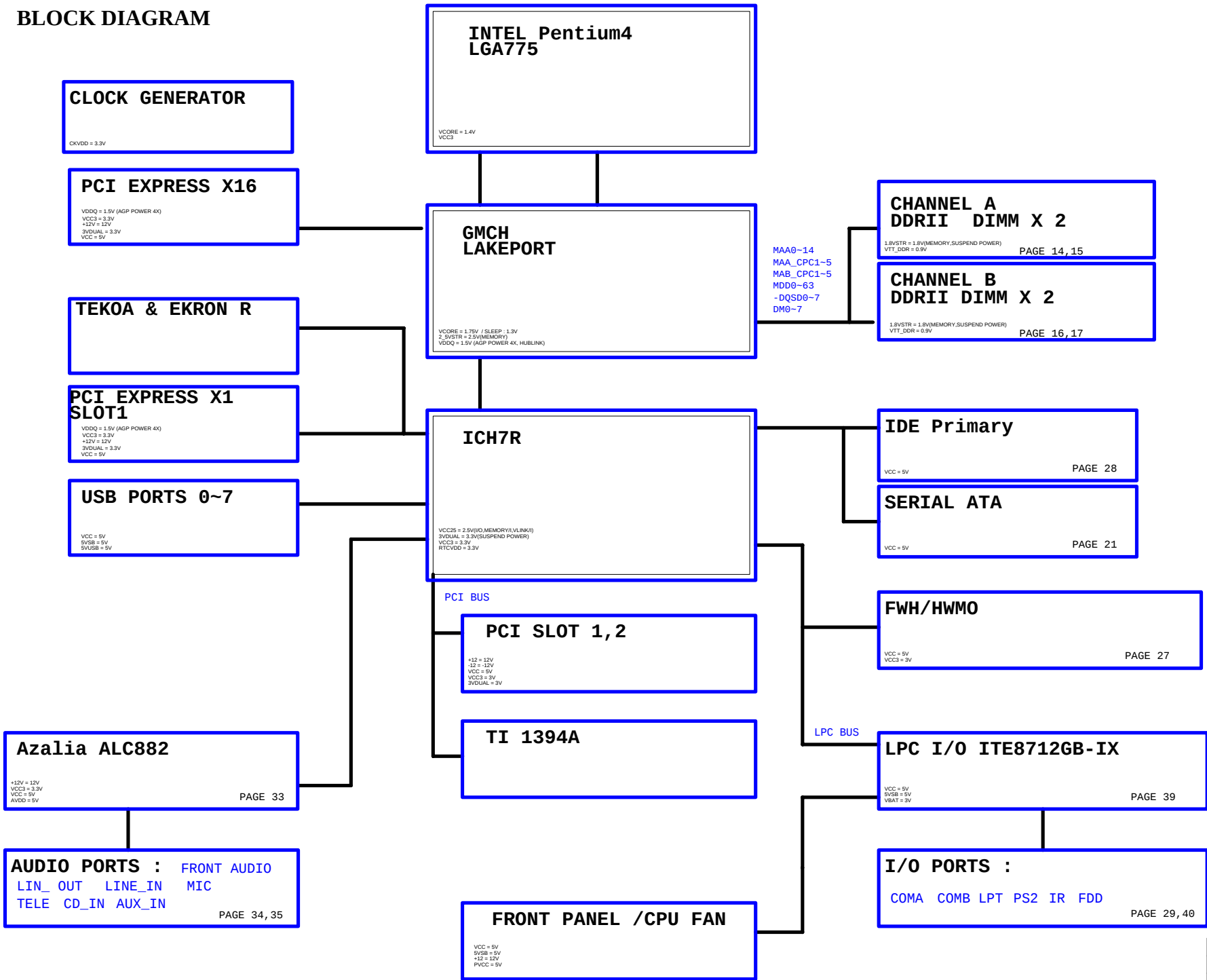


01	COVER SHEET
02	BLOCK DIAGRAM
03	BOM & PCB MODIFY HISTORY
04	P4_LGA775_A
05	P4_LGA775_B
06	P4_LGA775_C
07	P4_LGA775_D
08	GMCH-LAKEPORT_HOST
09	GMCH-LAKEPORT_DDRII
10	GMCH-LAKEPORT_PCI E, DMI
11	GMCH-LAKEPORT_INT VGA
12	GMCH-LAKEPORT_GND
13	GMCH-LAKEPORT_PWR
14	DDRII CHANNEL A 1,2
15	DDRII CHANNEL B 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

BLOCK DIAGRAM



Version: 1.01

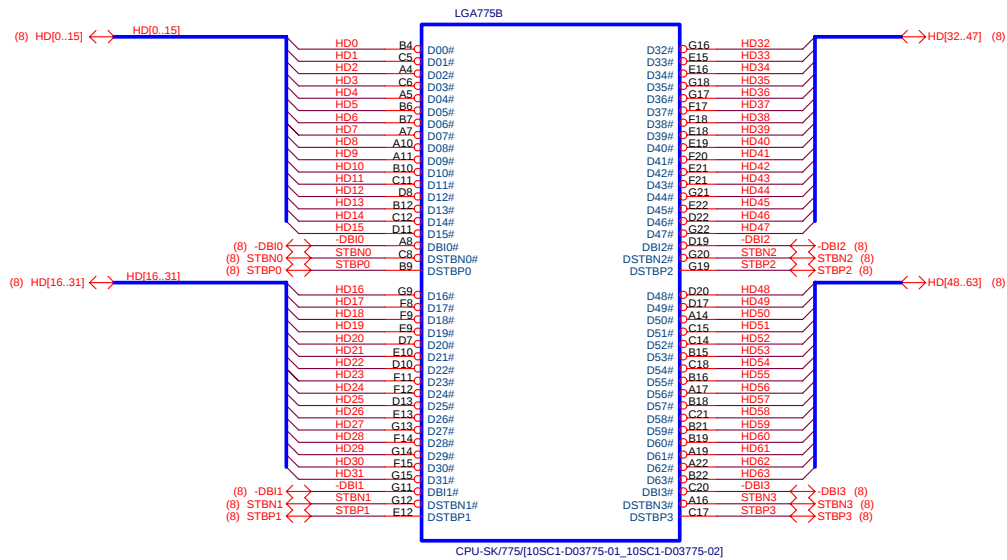
Component value change history

Data	Change Item	Reason
0525	Audio Jack change	*** 更換 AUDIO1由 A3R3/13P/B/[11NR6-403006-01_11NR6-403006-02]變為 A3R3/13P/B/[11NR6-403007-01_11NR6-403007-02] AUDIO2由 A3R3/13P/0B6/[11NR6-403006-71]變為 A3R3/13P/0B6/[11NR6-403007-51]
	VRM solution change	DC6由 33P/4/N/50V變為 100P/4/N/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] DEC23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 BC67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]
	Specification change	*** 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 57[11NH2-000203-11] DU1由 ALC882/B1/S/[10HP5-366882-10]變為 ALC882/B1/S/[10HP5-366882-10] LV2由 SST25/S04BA-14C-S26/S變為 SST25V512/S/[10HL4-131512-10] U26由 02573V/A3/PdFREEE變為 02573V/A3[10HB2-400573-22R] U8由 NH82001GB ICH7/A1變為 NH82001GH ICH7/A1/[10HB1-032001-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 LR95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/-PIN6/[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/-PIN5/[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

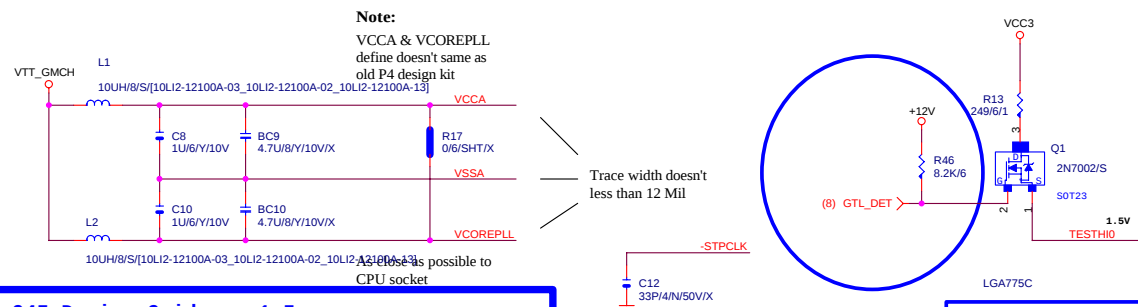
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<i>Intel Confidential</i>			
Title: BOM & PCB MODIFY HISTORY			
Size Custom	Document Number	8I945GMBX	Rev 1.01
Date:	Friday, July 01, 2005	Sheet 3 of 42	



Note:

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



945 Design Guide rev1.5 spec.

VCCA=120~220mA

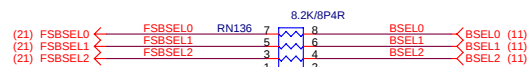
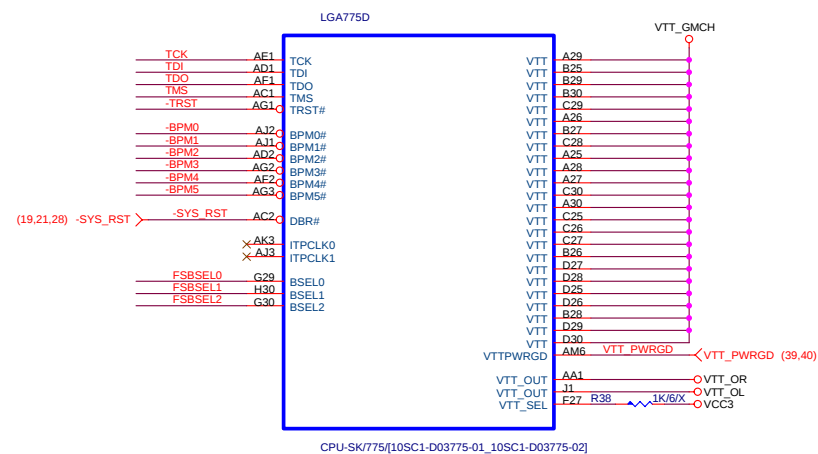
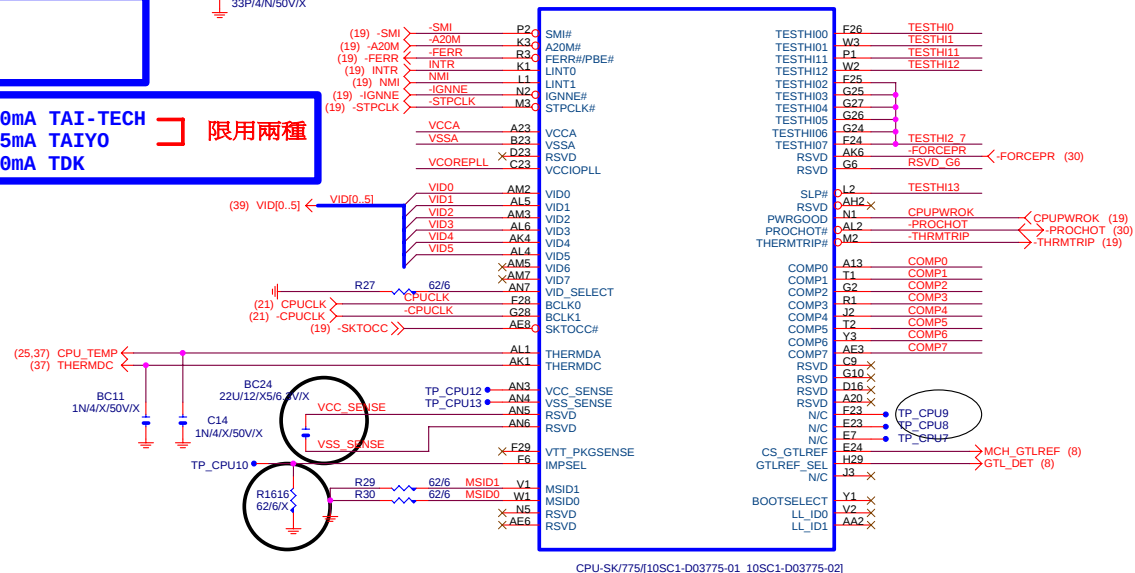
公板爲125mA

10LI2-12100A-03=INDUCTOR 10uH 300mA TAI-TECH

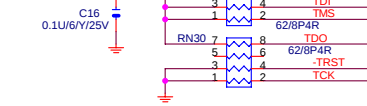
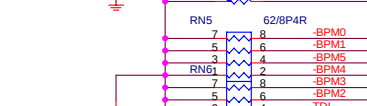
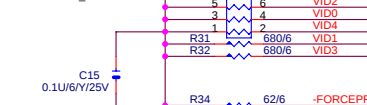
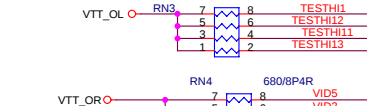
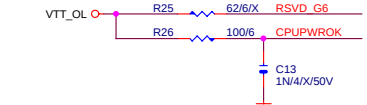
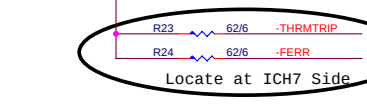
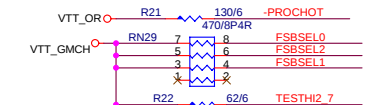
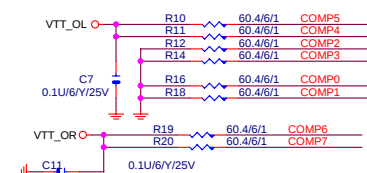
10LI2-12100A-02=INDUCTOR 10uH 155mA TAIYO

10LI2-12100A-01=INDUCTOR 10uH 120mA TDK

限用兩種

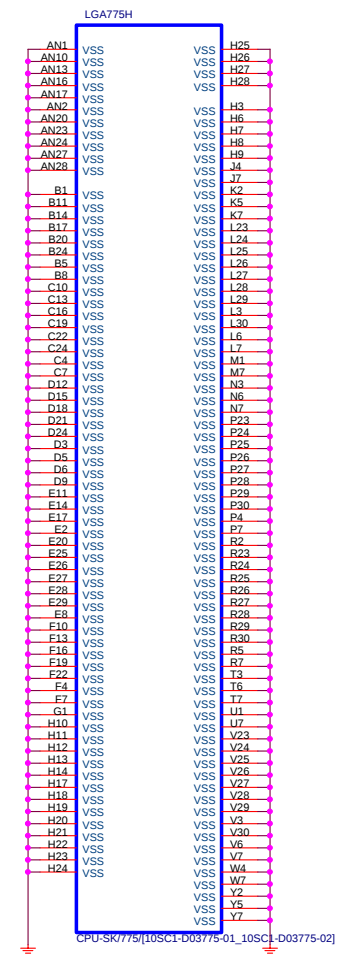
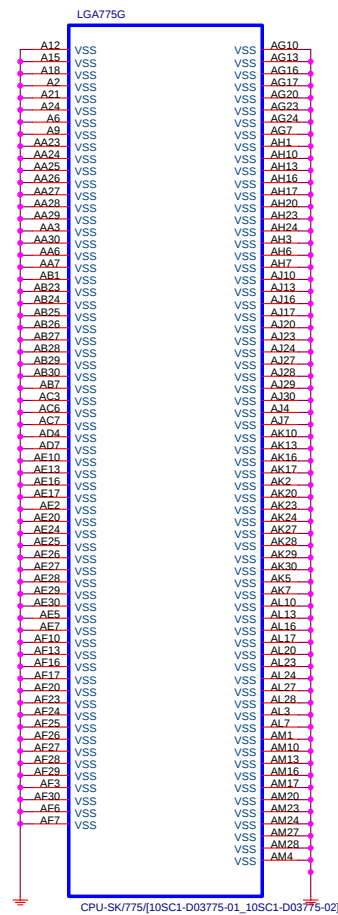
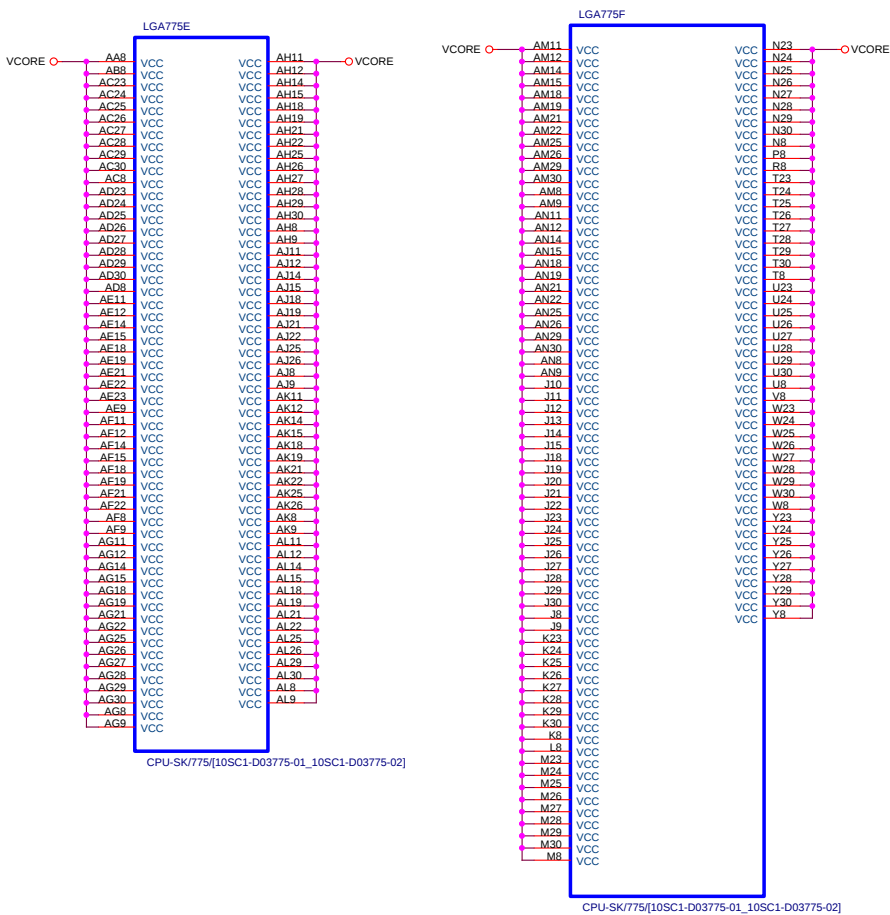


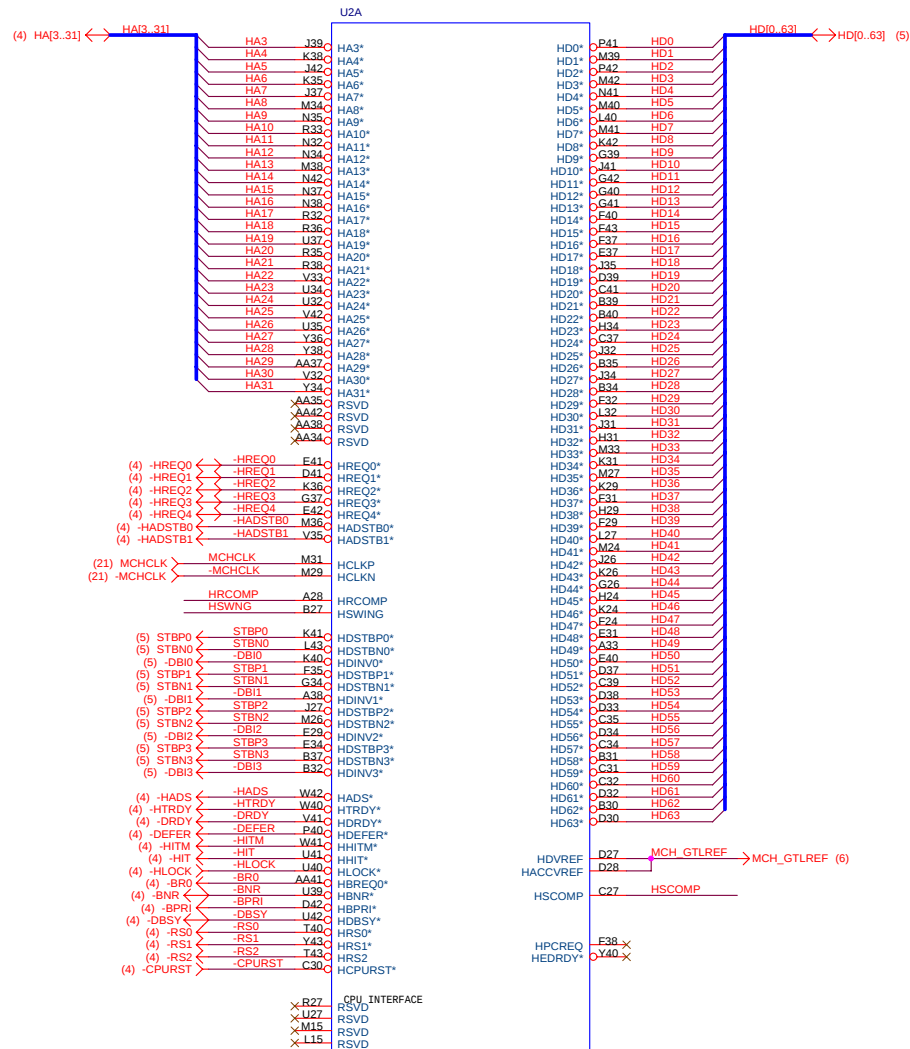
Place outside of CPU socket



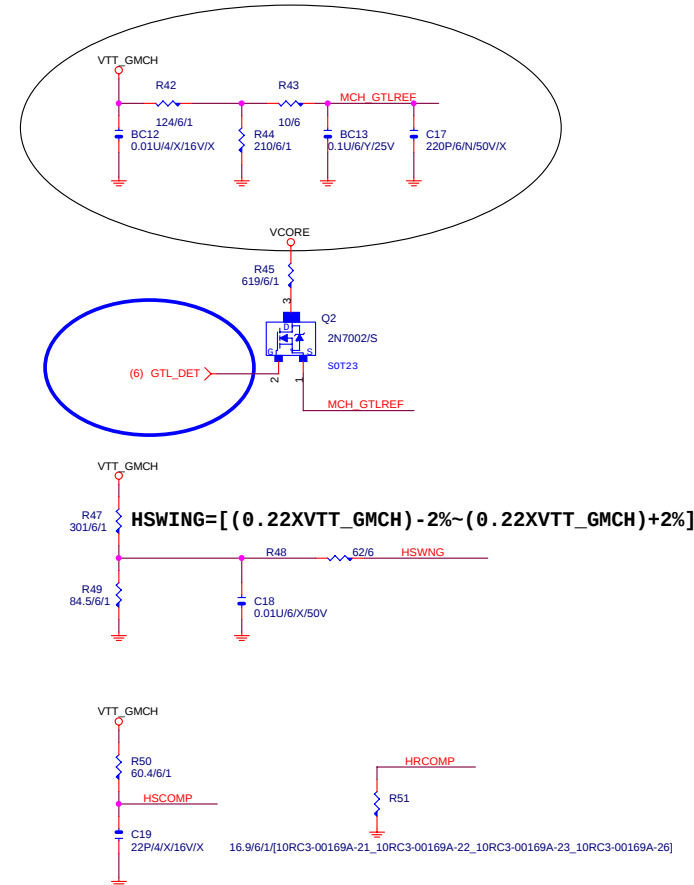
Intel Confidential

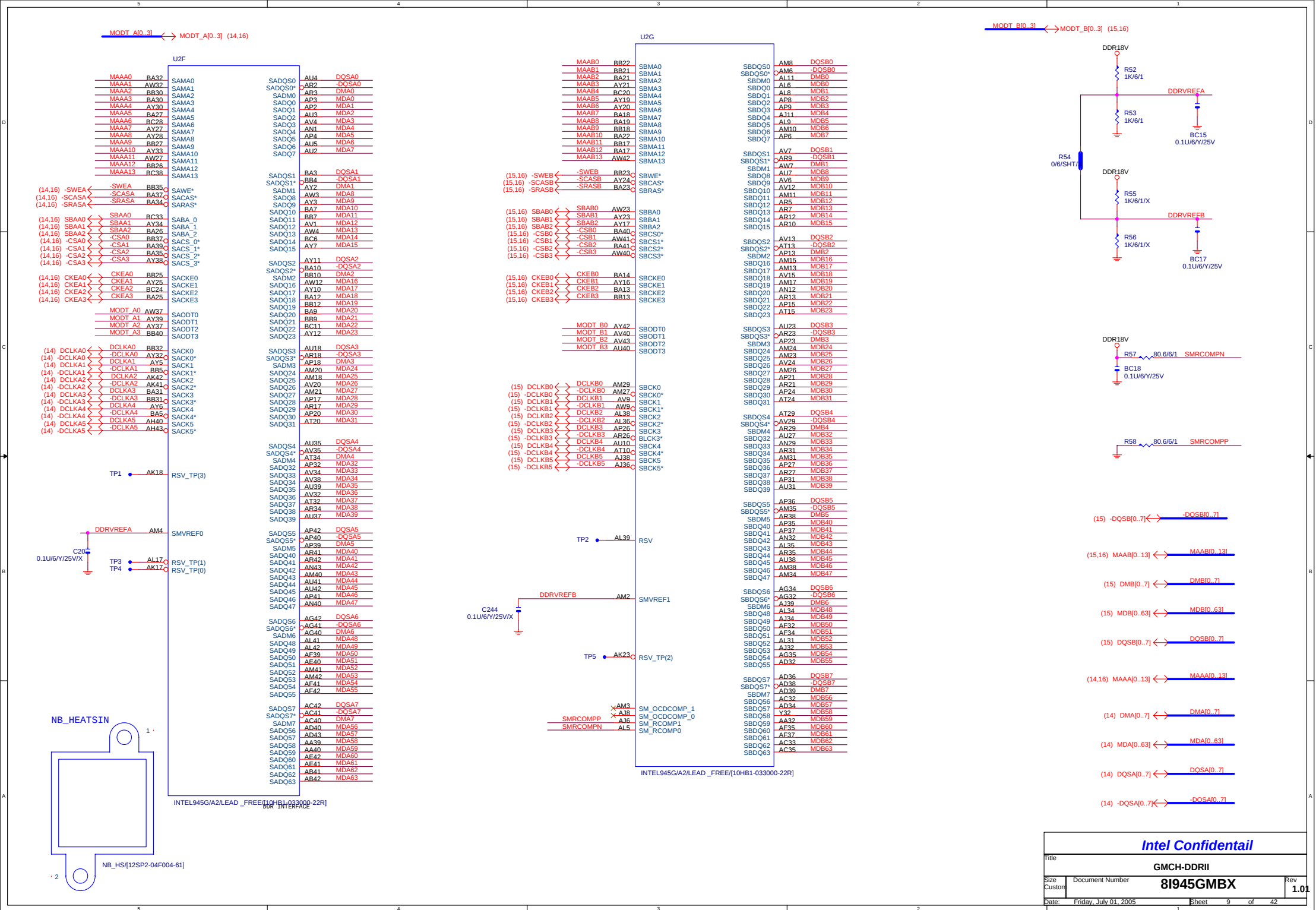
P4_LGA775-B

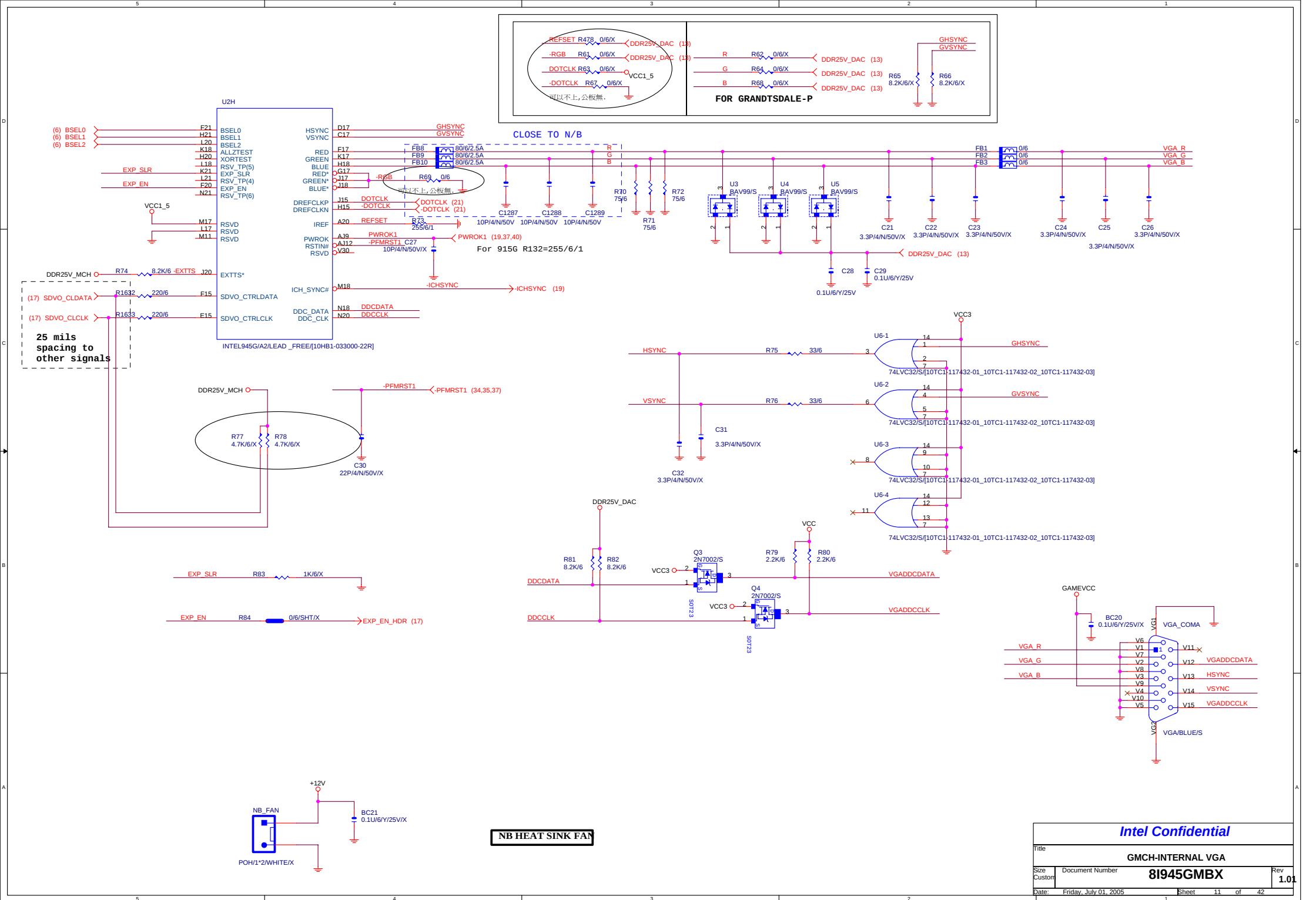




Intel 945GM/A2/LEAD_FREE(10HB) 10HB1-033000-11-REV:A1
10HB1-033000-21-REV:A2 FOR ACER







U2C

A4	VSS	N2
A16	VSS	N6
A22	VSS	N8
A26	VSS	N13
A31	VSS	N15
A35	VSS	N24
B4	VSS	N26
B6	VSS	N27
B9	VSS	N29
B11	VSS	N31
B13	VSS	N33
B21	VSS	N36
B22	VSS	N39
B28	VSS	N43
B33	VSS	P3
B38	VSS	P14
C3	VSS	P15
C5	VSS	P24
C7	VSS	P26
C12	VSS	P27
C14	VSS	P29
C22	VSS	P30
C40	VSS	R6
D2	VSS	R9
D5	VSS	R12
D10	VSS	R14
D16	VSS	R30
D20	VSS	R31
D21	VSS	R34
E3	VSS	R37
E4	VSS	R39
E7	VSS	T2
E9	VSS	T2
E12	VSS	T2
E13	VSS	T2
E17	VSS	T2
E18	VSS	T2
E20	VSS	T2
E21	VSS	T2
E32	VSS	T2
F2	VSS	T2
F6	VSS	T2
F13	VSS	T2
F18	VSS	T2
F26	VSS	T2
F34	VSS	T2
F42	VSS	T2
G3	VSS	T2
G5	VSS	T2
G7	VSS	T2
G9	VSS	T2
G10	VSS	T2
G13	VSS	T2
G15	VSS	T2
G18	VSS	T2
G20	VSS	T2
G21	VSS	T2
G24	VSS	T2
G27	VSS	T2
G29	VSS	T2
G31	VSS	T2
G32	VSS	T2
G35	VSS	T2
G38	VSS	T2
H12	VSS	T2
H17	VSS	T2
H26	VSS	T2
H27	VSS	T2
H32	VSS	T2
J2	VSS	T2
J5	VSS	T2
J7	VSS	T2
J10	VSS	T2
J12	VSS	T2
J21	VSS	T2
J24	VSS	T2
J29	VSS	T2
J38	VSS	T2
J43	VSS	T2
K3	VSS	T2
K5	VSS	T2
K6	VSS	T2
K7	VSS	T2
K10	VSS	T2
K12	VSS	T2
K13	VSS	T2
K15	VSS	T2
K20	VSS	T2
K27	VSS	T2
K32	VSS	T2
K34	VSS	T2
K37	VSS	T2
K39	VSS	T2
L2	VSS	T2
L12	VSS	T2
L24	VSS	T2
L26	VSS	T2
L29	VSS	T2
L31	VSS	T2
L42	VSS	T2
M3	VSS	T2
M5	VSS	T2
M8	VSS	T2
M9	VSS	T2
M10	VSS	T2
M13	VSS	T2
M20	VSS	T2
M21	VSS	T2
M35	VSS	T2
M37	VSS	T2

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

U2E

AD7	VSS	AU21
AD9	VSS	AU24
AD11	VSS	AU26
AD13	VSS	AU29
AD33	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
AF38	VSS	BB11
P14	VSS	BB14
P15	VSS	BB19
AG30	VSS	BB34
AG31	VSS	BB39
AG33	VSS	BB41
AG36	VSS	BC9
P29	VSS	A40
AG38	VSS	D1
AG39	VSS	D43
AH42	VSS	R26
R12	VSS	R29
A10	VSS	U29
R30	VSS	V24
R31	VSS	V26
A131	VSS	V29
A133	VSS	W21
A135	VSS	W23
A137	VSS	W25
T2	VSS	Y20
AK24	VSS	Y22
AK26	VSS	Y24
AK29	VSS	Y26
AK30	VSS	Y29
U9	VSS	AA25
AL1	VSS	AA27
AL2	VSS	AA29
AL3	VSS	AC19
AL7	VSS	AC25
AL10	VSS	AC29
AL12	VSS	
AL13	VSS	
AL15	VSS	
AL18	VSS	
AL21	VSS	
AL23	VSS	
AL24	VSS	
AL27	VSS	
AL32	VSS	
AL33	VSS	
V38	VSS	
AL37	VSS	
V39	VSS	
AM5	VSS	
W3	VSS	
Y2	VSS	
AM9	VSS	
Y5	VSS	
Y6	VSS	
AM36	VSS	
Y9	VSS	
Y12	VSS	
Y14	VSS	
AN2	VSS	
Y31	VSS	
Y35	VSS	
Y37	VSS	
Y39	VSS	
Y42	VSS	
AN18	VSS	
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AR24	VSS	
AR32	VSS	
AR37	VSS	
AR39	VSS	
AR43	VSS	
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AT26	VSS	
AT27	VSS	
AT31	VSS	
AU6	VSS	
AU9	VSS	
AU12	VSS	
AU13	VSS	
AU15	VSS	
AU17	VSS	
AU20	VSS	
AD18	VSS	
AD20	VSS	
AD22	VSS	
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AD27	VSS	
AD29	VSS	
AE19	VSS	
AE21	VSS	
AE23	VSS	
AE25	VSS	
AE18	VSS	
AE20	VSS	
AE22	VSS	
AE24	VSS	
AY1	VSS	
BC4	VSS	

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	Y20
VSS	Y22
VSS	Y24
VSS	Y26
VSS	Y29
VSS	AA25
VSS	AA27
VSS	AA29
VSS	AC19
VSS	AC25
VSS	AC29

NC	A42
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

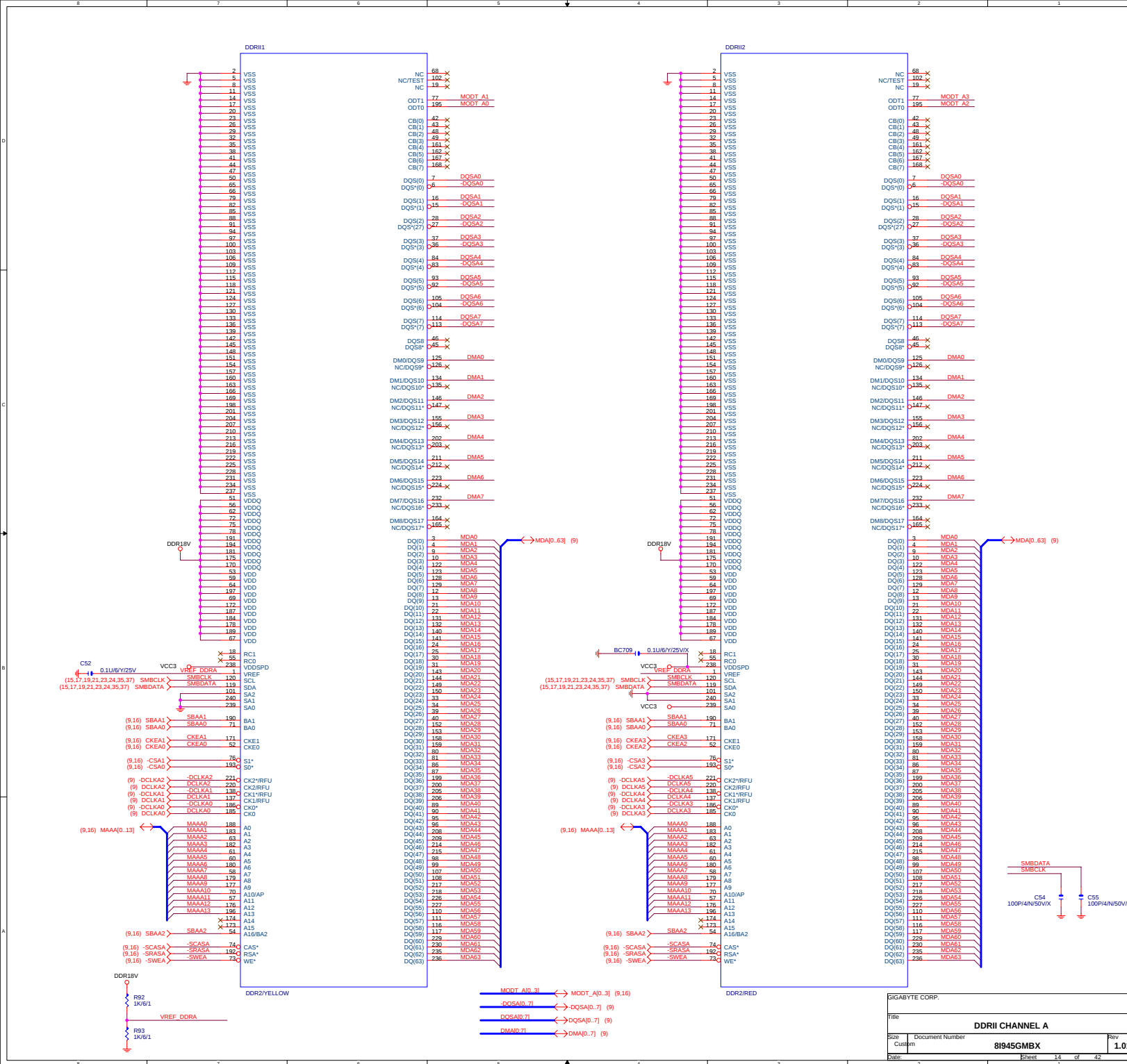
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RSVD	Y30
RSVD	Y33
RSVD	AF31
RSVD	AD31
RSVD	U30
RSVD	V31
RSVD	AA30
RSVD	AC30
RSVD	AA3
RSVD	AG25
RSVD	AG26
RSVD	AG27
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RSVD	BC16
RSVD	AJ29
RSVD	AC29

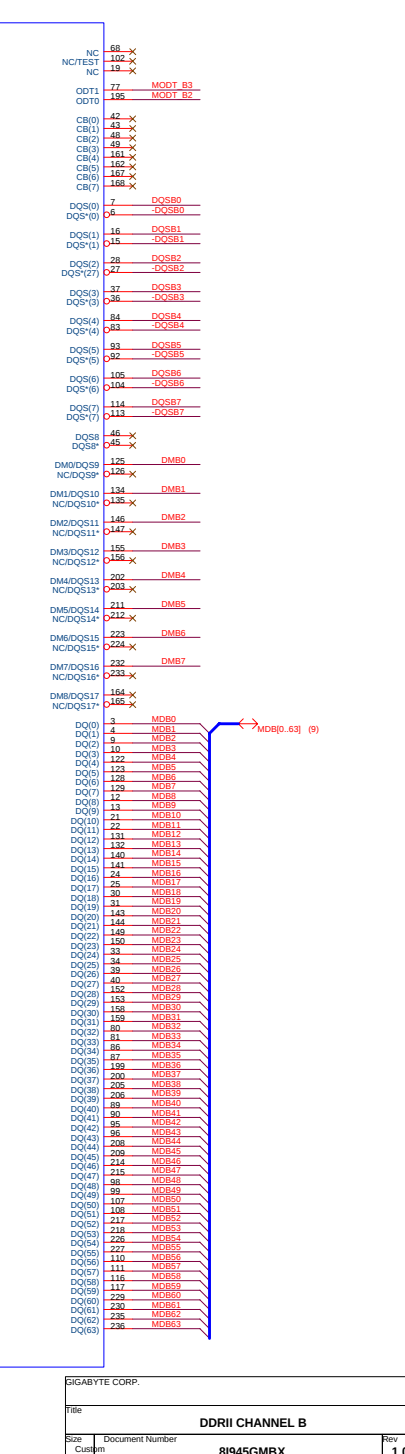
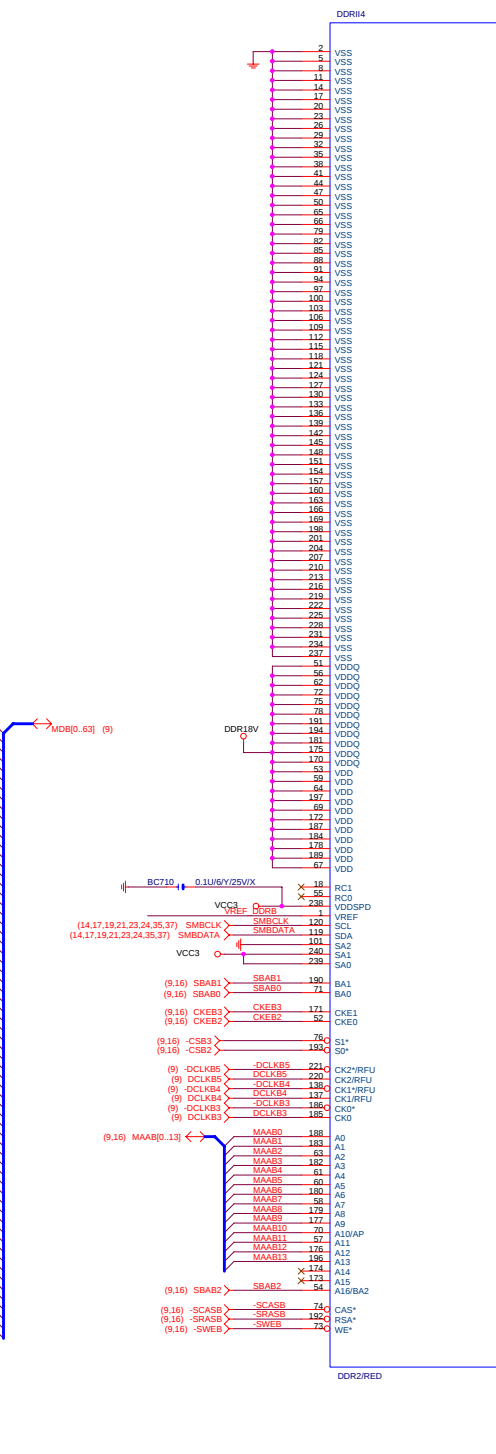
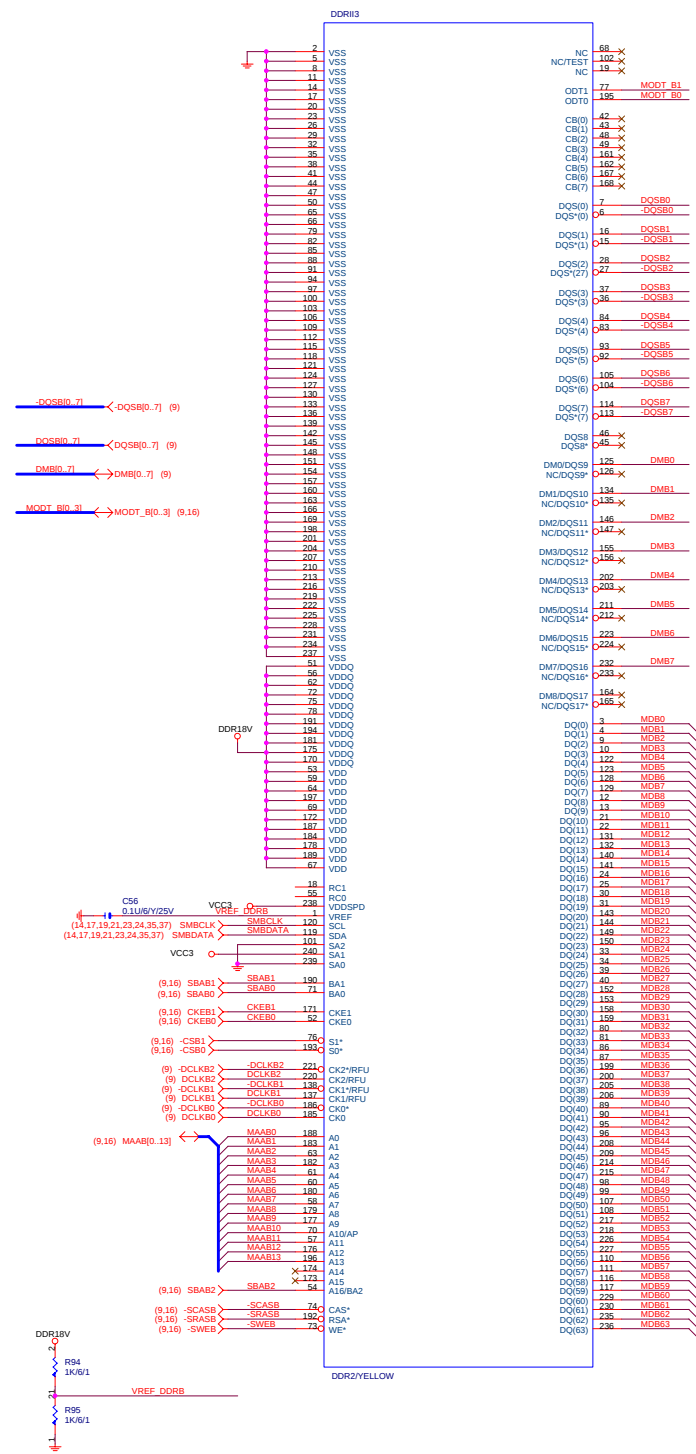
INTEL945G/A2/LEAD_FREE[10HB1-033000-22R]

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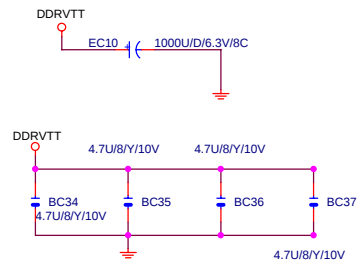
GMCH-GND

Title		GMCH-GND	
Size		Document Number	
Custom		81945GMBX	
Date	Friday, July 01, 2005	Sheet	12 of 42
		Rev	1.01

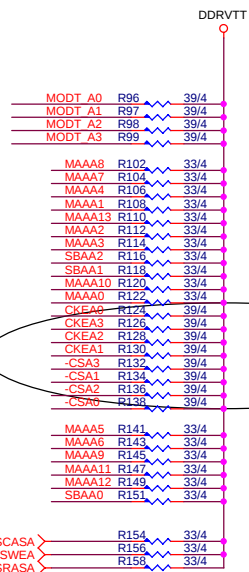
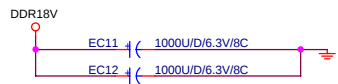




DDRVTT Decouple

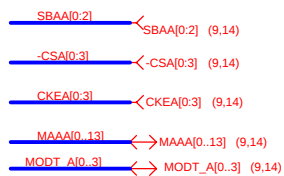
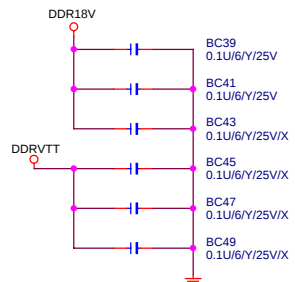


DDR TERMINATION CHANNEL A

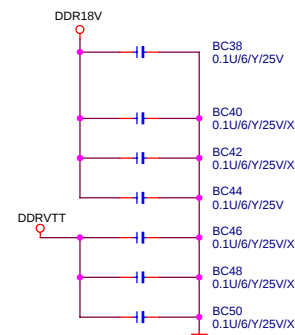


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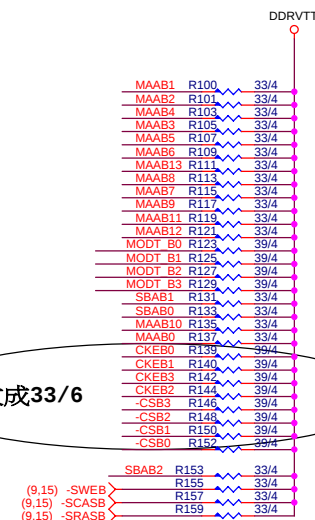
DDR18V Decouple



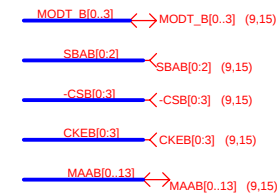
DDR18V Decouple

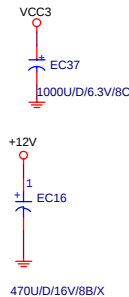


CHANNEL B



全部改成33/6





(14,15,19,21,23,24,35,37) SMBCLK
(14,15,19,21,23,24,35,37) SMBDATA

(23) -PE_WAKE

(11) SDVO_CLKCLK

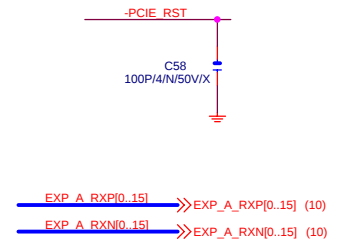
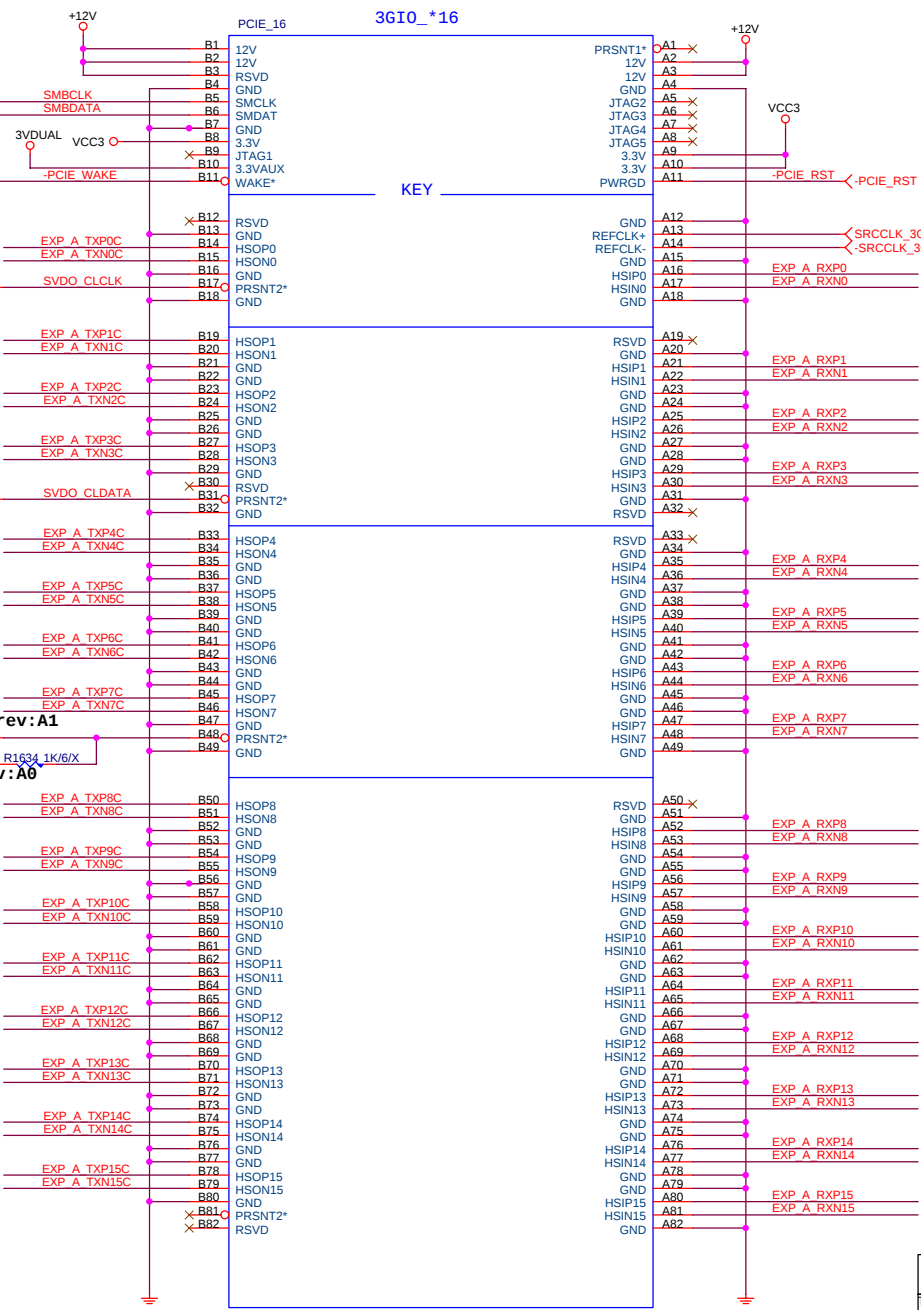
(11) SDVO_CLDATA

1.1K ohm for rev:A1
(11) EXP_EN_HDR

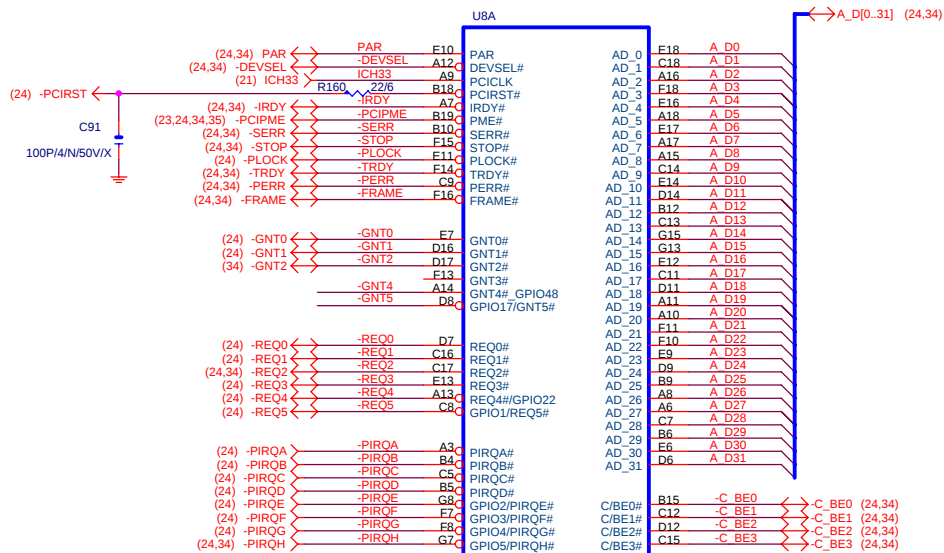
51 ohm for rev:A0

R1634 for TEST
reserved only

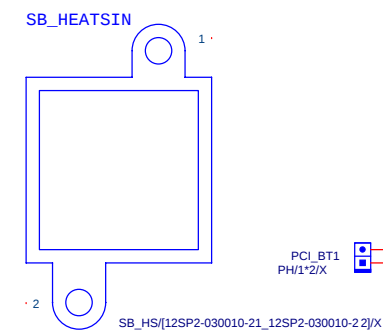
EXP A TXP0	C59	0.1U/6Y/25V	EXP A TXP0C
EXP A TXN0	C60	0.1U/6Y/25V	EXP A TXN0C
EXP A TXP1	C61	0.1U/6Y/25V	EXP A TXP1C
EXP A TXN1	C62	0.1U/6Y/25V	EXP A TXN1C
EXP A TXP2	C63	0.1U/6Y/25V	EXP A TXP2C
EXP A TXN2	C64	0.1U/6Y/25V	EXP A TXN2C
EXP A TXP3	C65	0.1U/6Y/25V	EXP A TXP3C
EXP A TXN3	C66	0.1U/6Y/25V	EXP A TXN3C
EXP A TXP4	C67	0.1U/6Y/25V	EXP A TXP4C
EXP A TXN4	C68	0.1U/6Y/25V	EXP A TXN4C
EXP A TXP5	C69	0.1U/6Y/25V	EXP A TXP5C
EXP A TXN5	C70	0.1U/6Y/25V	EXP A TXN5C
EXP A TXP6	C71	0.1U/6Y/25V	EXP A TXP6C
EXP A TXN6	C72	0.1U/6Y/25V	EXP A TXN6C
EXP A TXP7	C73	0.1U/6Y/25V	EXP A TXP7C
EXP A TXN7	C74	0.1U/6Y/25V	EXP A TXN7C
EXP A TXP8	C75	0.1U/6Y/25V	EXP A TXP8C
EXP A TXN8	C76	0.1U/6Y/25V	EXP A TXN8C
EXP A TXP9	C77	0.1U/6Y/25V	EXP A TXP9C
EXP A TXN9	C78	0.1U/6Y/25V	EXP A TXN9C
EXP A TXP10	C79	0.1U/6Y/25V	EXP A TXP10C
EXP A TXN10	C80	0.1U/6Y/25V	EXP A TXN10C
EXP A TXP11	C81	0.1U/6Y/25V	EXP A TXP11C
EXP A TXN11	C82	0.1U/6Y/25V	EXP A TXN11C
EXP A TXP12	C83	0.1U/6Y/25V	EXP A TXP12C
EXP A TXN12	C84	0.1U/6Y/25V	EXP A TXN12C
EXP A TXP13	C85	0.1U/6Y/25V	EXP A TXP13C
EXP A TXN13	C86	0.1U/6Y/25V	EXP A TXN13C
EXP A TXP14	C87	0.1U/6Y/25V	EXP A TXP14C
EXP A TXN14	C88	0.1U/6Y/25V	EXP A TXN14C
EXP A TXP15	C89	0.1U/6Y/25V	EXP A TXP15C
EXP A TXN15	C90	0.1U/6Y/25V	EXP A TXN15C



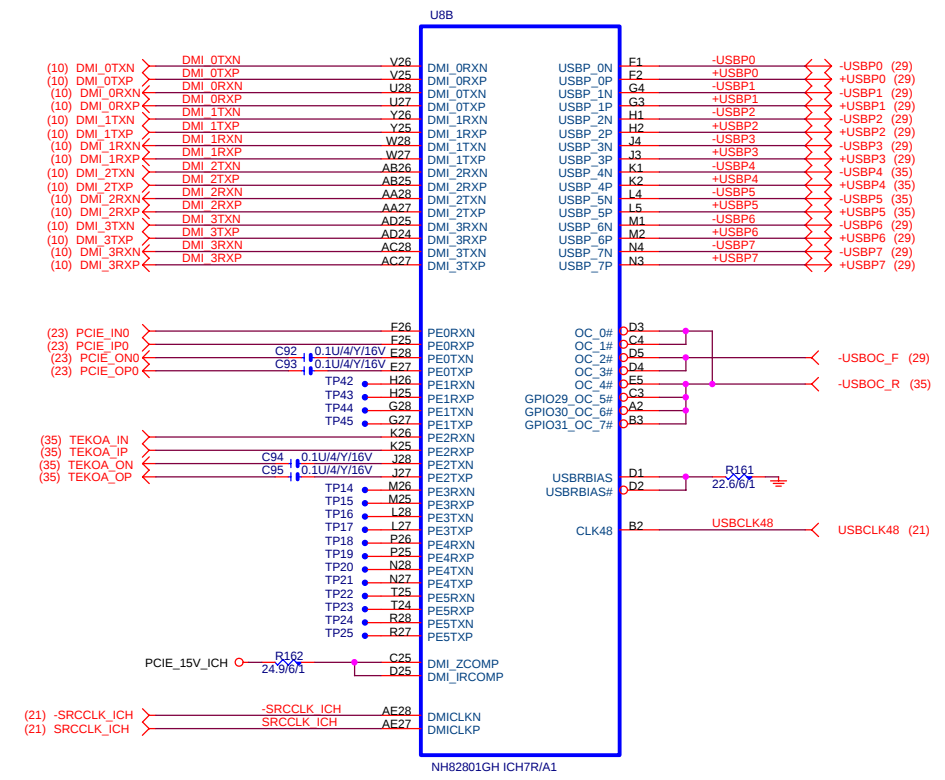
PCI-E16([11AC1-021164-61])

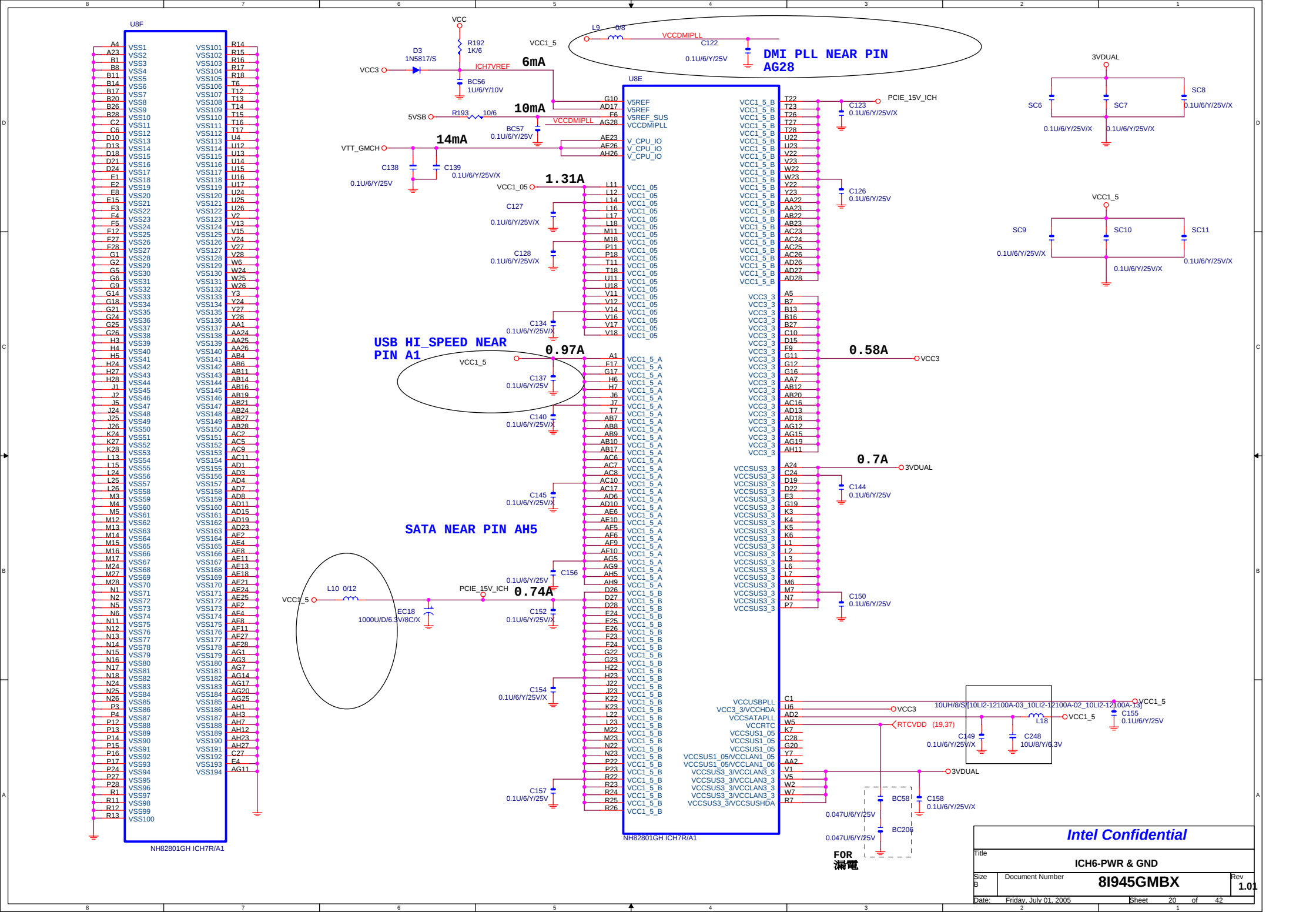


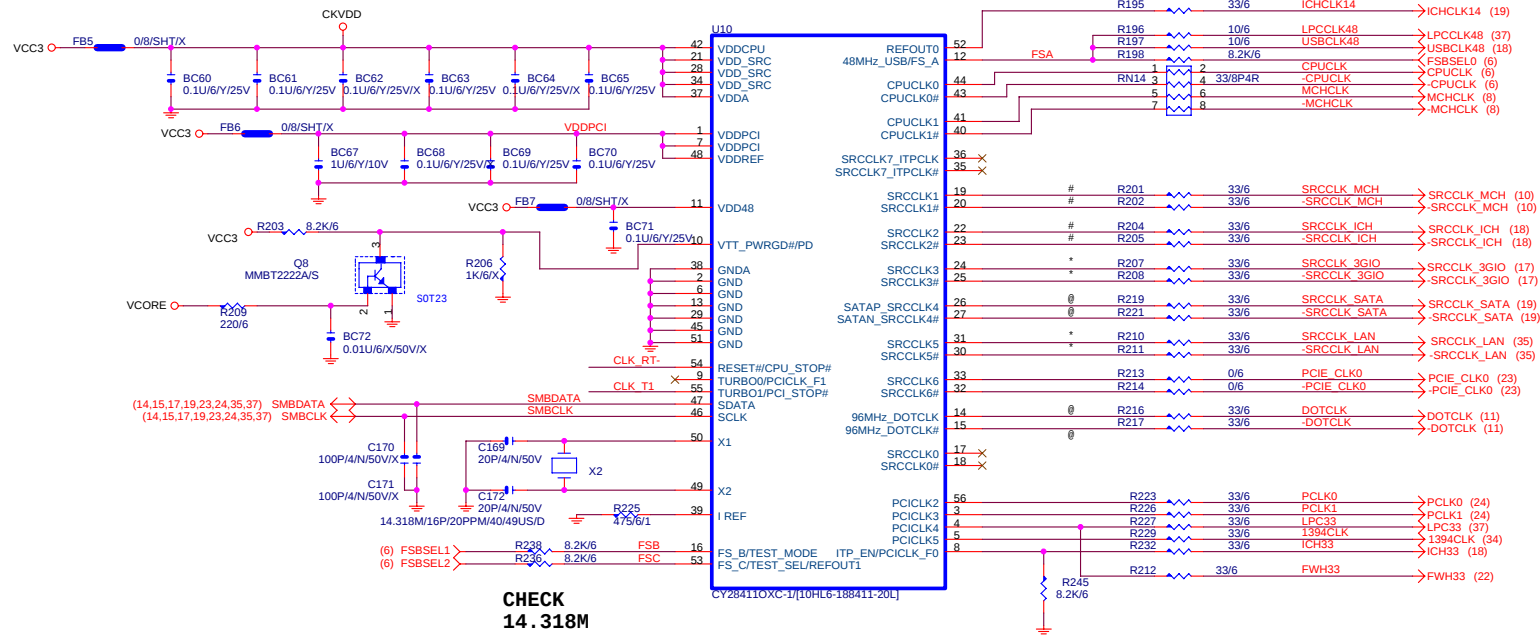
10HB1-032801-M1 REV:NON



PCI_BT2: OPEN FWH
CLOSE SPI

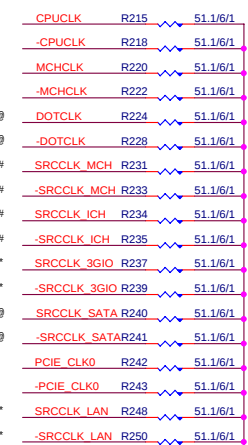
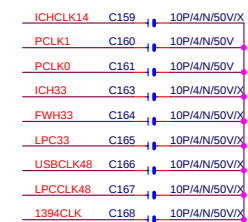
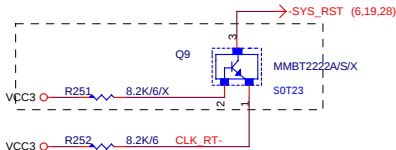






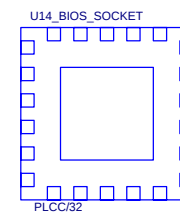
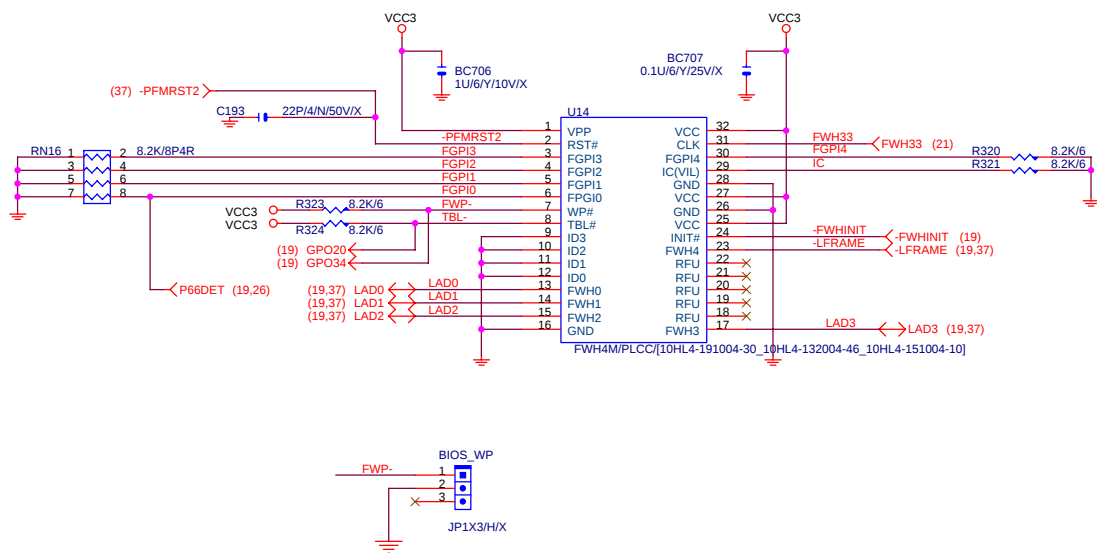
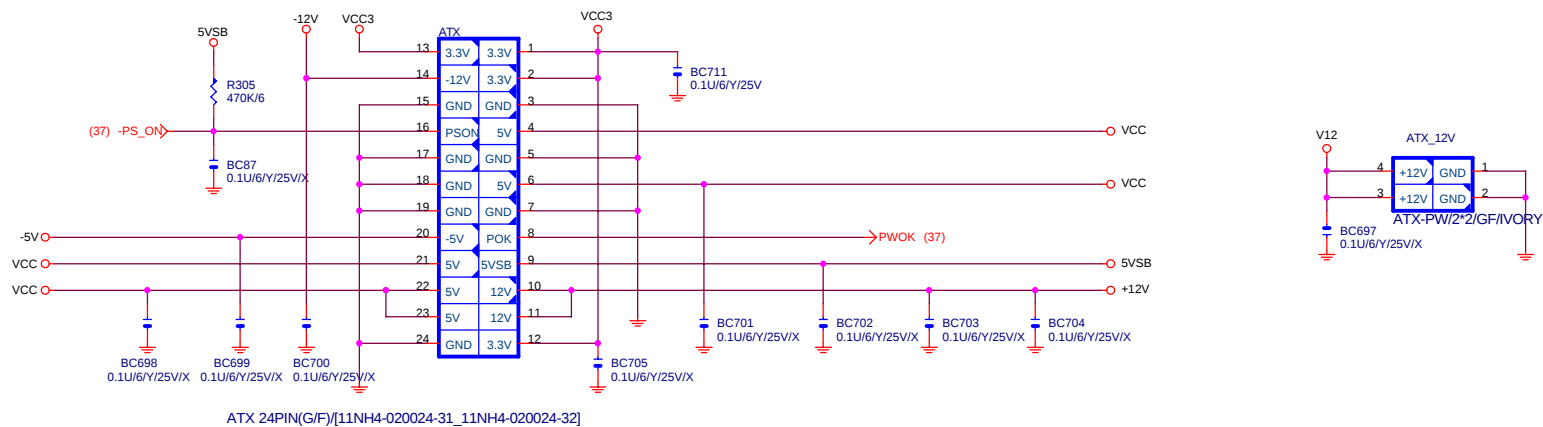
CHECK
14.318M
COUNTER

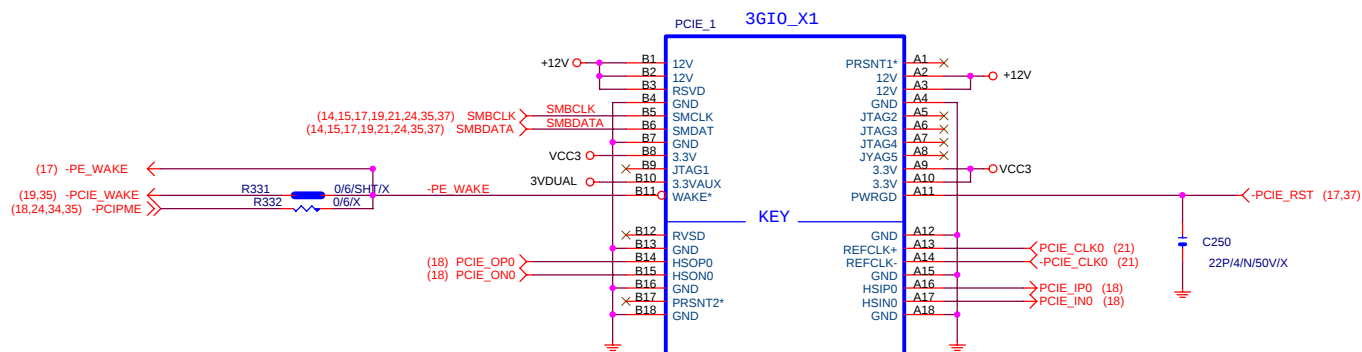
CY284110XC-1無RESET,不可上Q53,否則CPU_STOP#產生,造成CPURST- DELAY 200ms(spec>1ms)



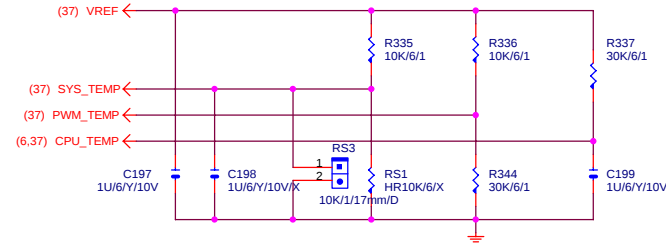
Intel Confidential			
Title			
ICS954148AF			
Size			
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1.01			

ATX POWER CONNECTOR





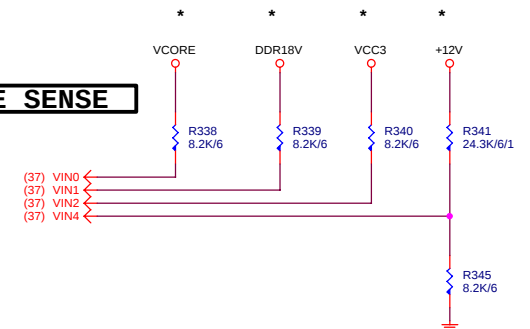
TEMP. SENSE



RS3 CLOSE TO MCH,CO-LAYOUT WITH RS1



VOLTAGE SENSE



CPU/SYS FAN

If use PBSS5240 1pcs : (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
```

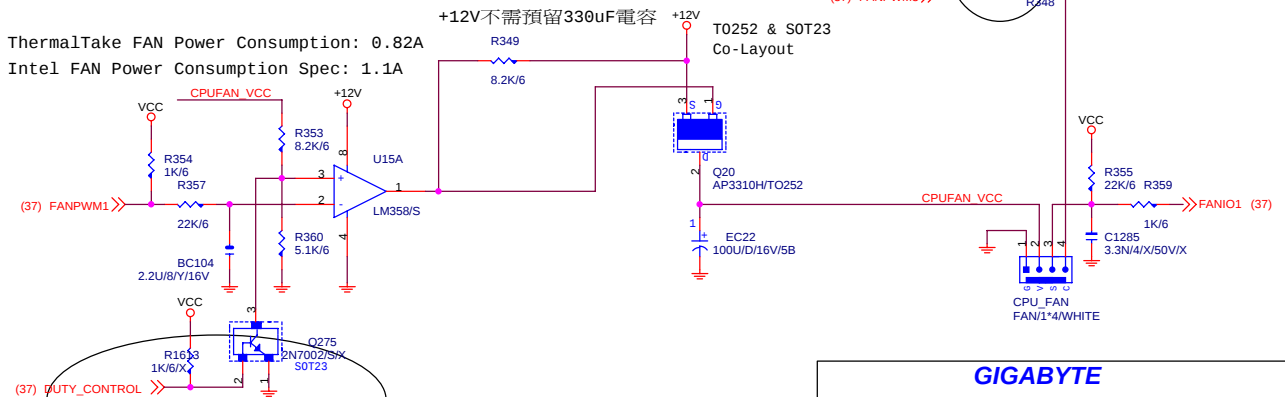
If use PBSS5240 1pcs : (with airflow)

```

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

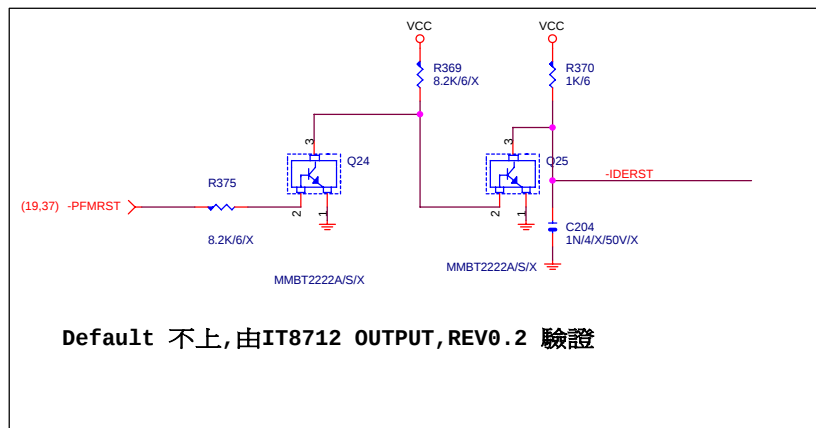
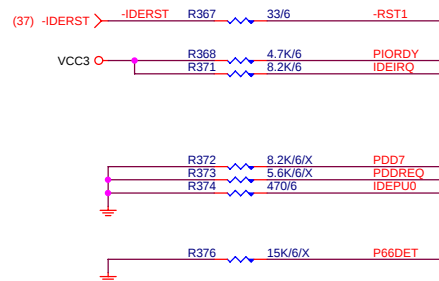
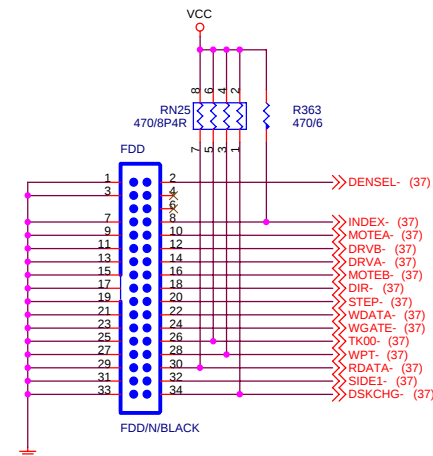
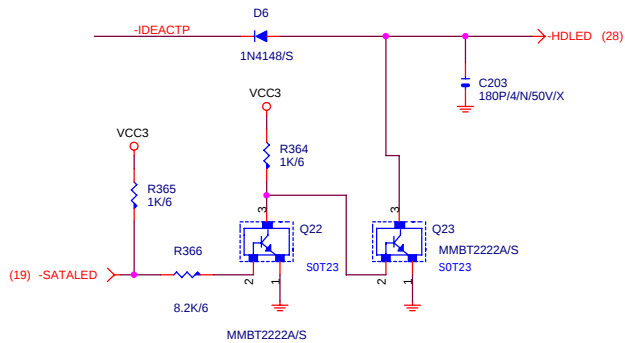
```

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

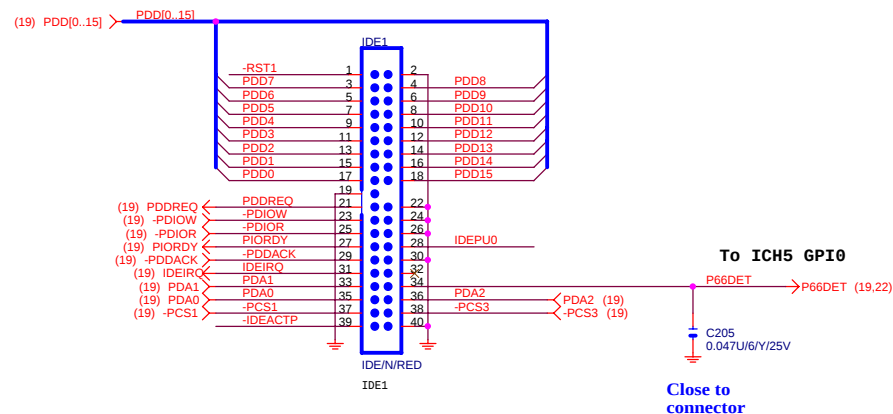


default is high
gpiox pin 可以3.3v or 5v
if 3pin fan 則開機後將program is low

GIGABYTE			
Title			
HWM/FAN/CI/BIOS			
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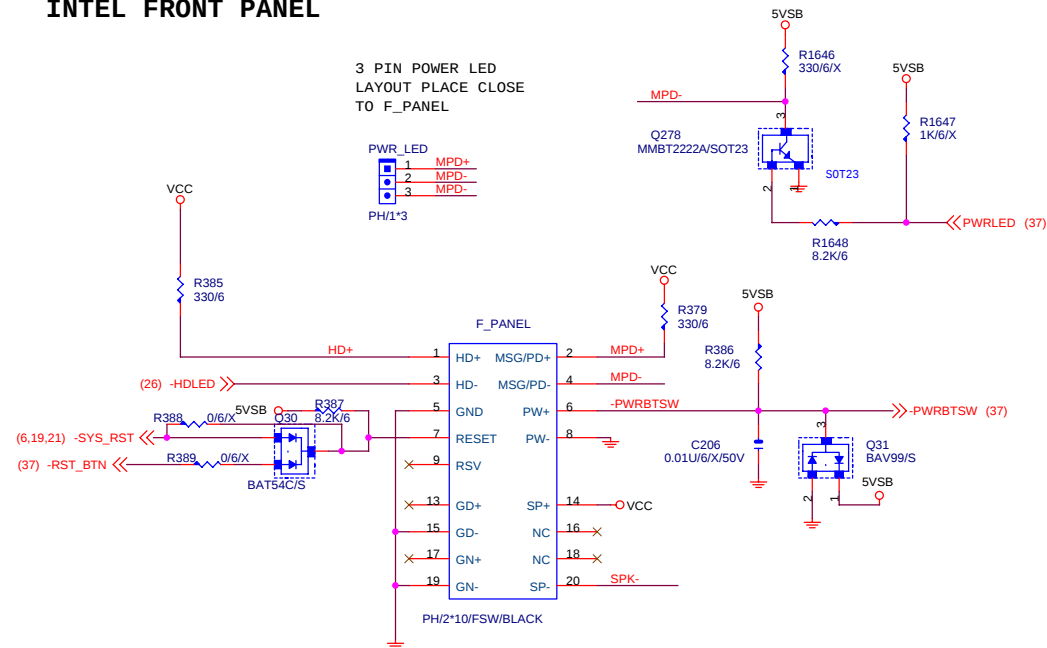
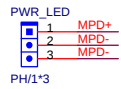
Default 不上,由IT8712 OUTPUT,REV0.2 驗證



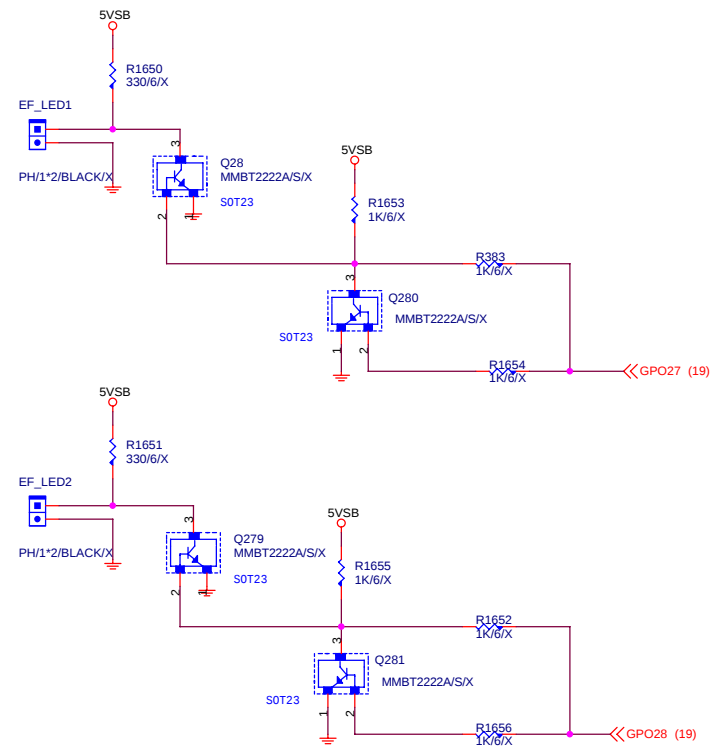
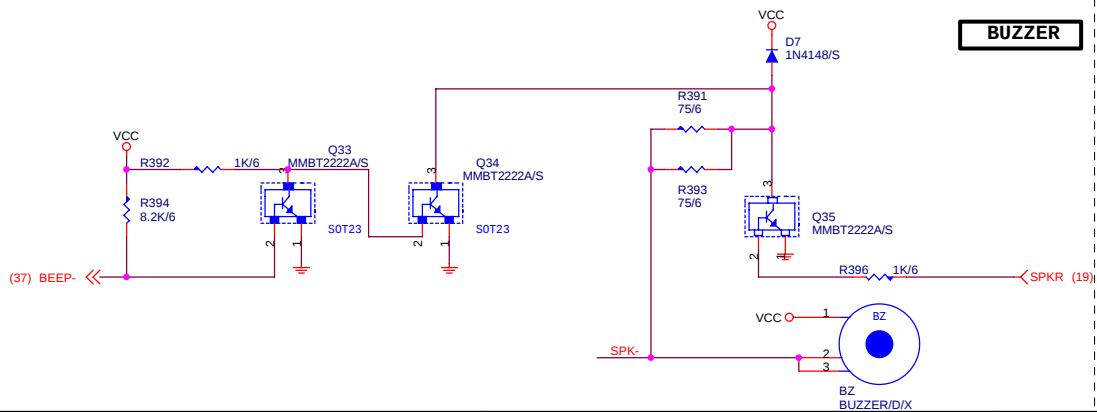
PRIMARY IDE CONNECTOR

INTEL FRONT PANEL

3 PIN POWER LED
LAYOUT PLACE CLOSE
TO F_PANEL



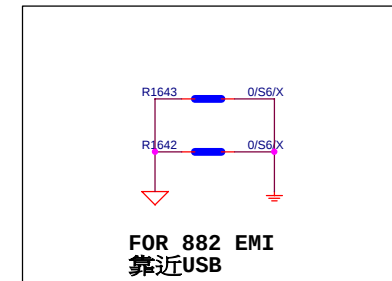
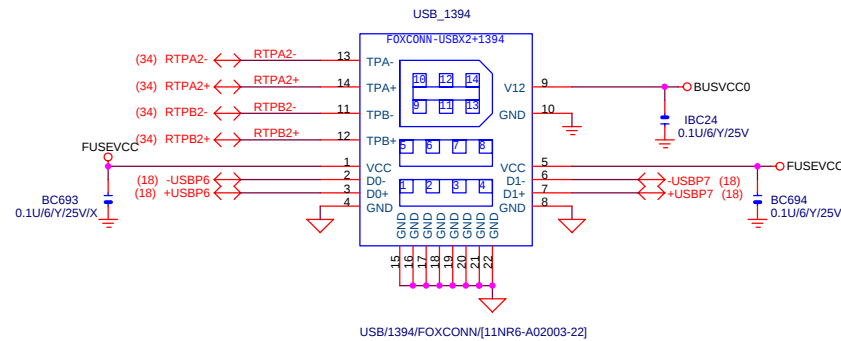
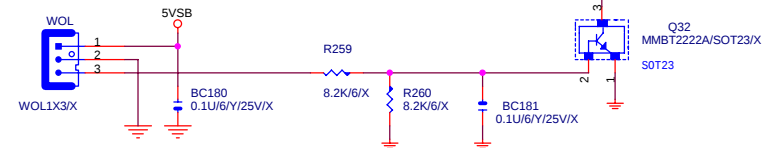
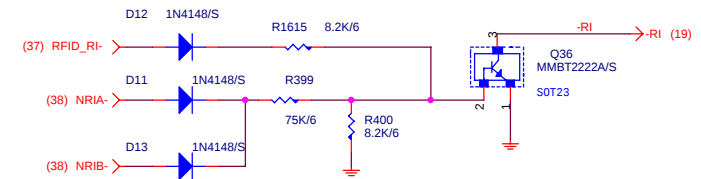
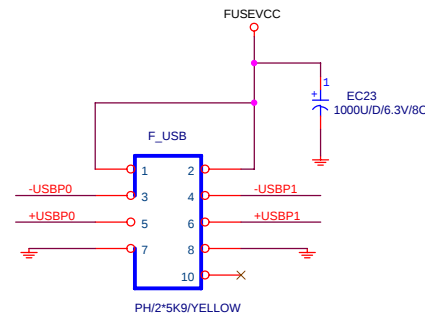
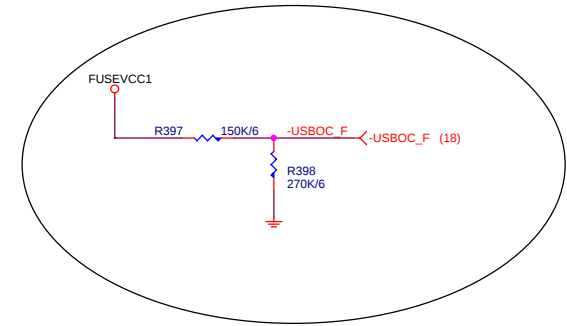
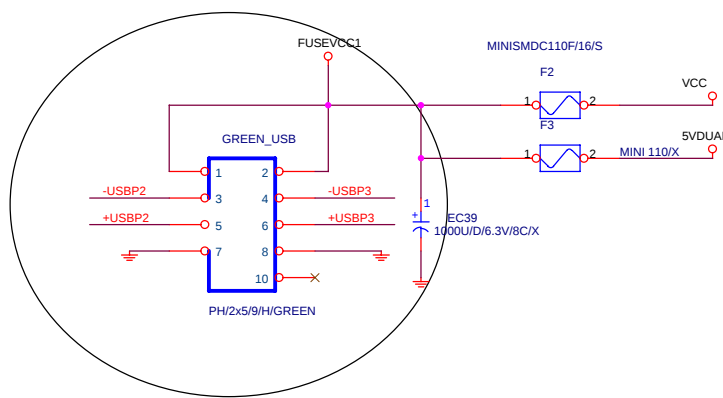
BUZZER



Intel Confidential

Title			
FRONT PANEL			
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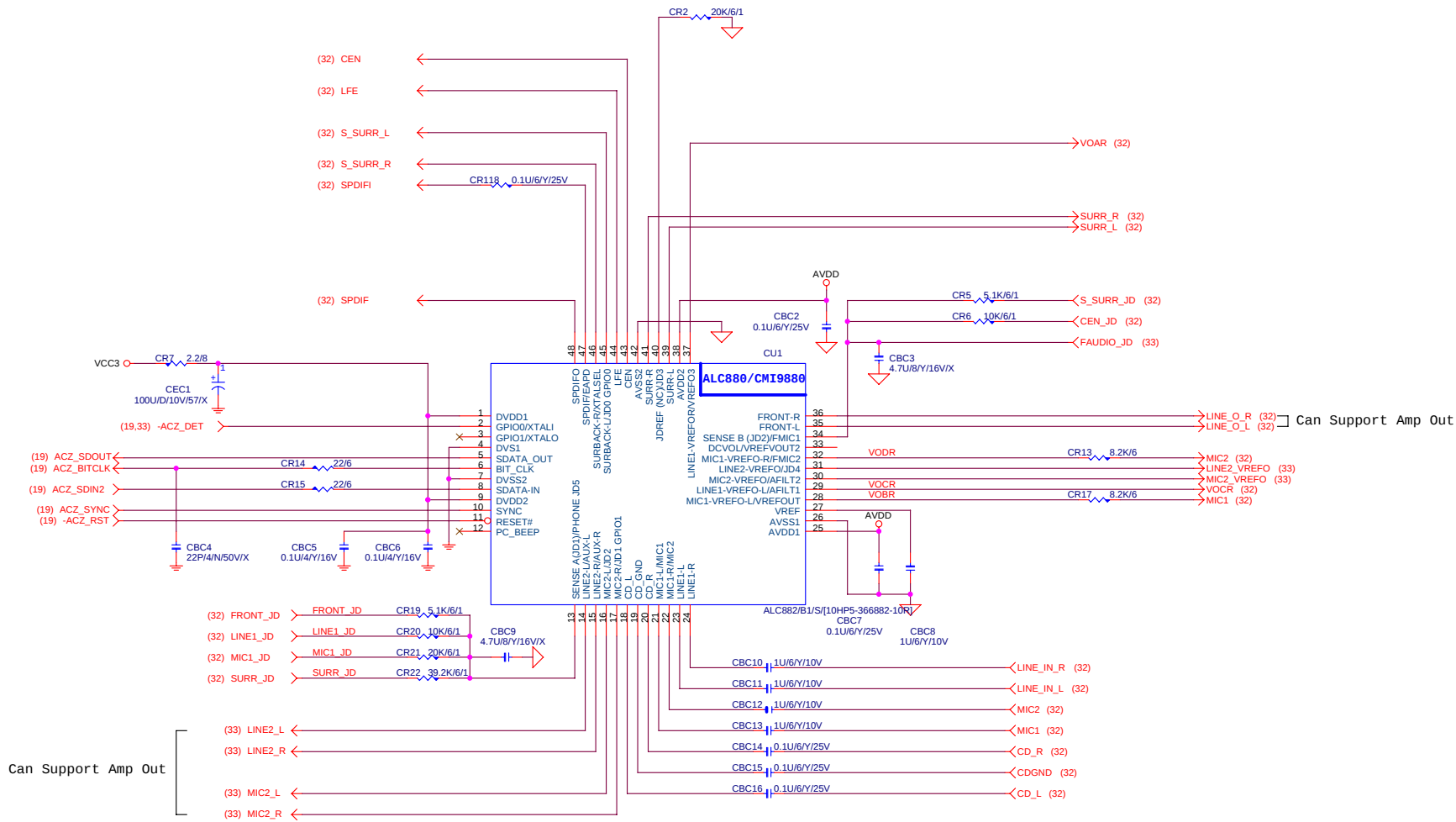
FRONT USB

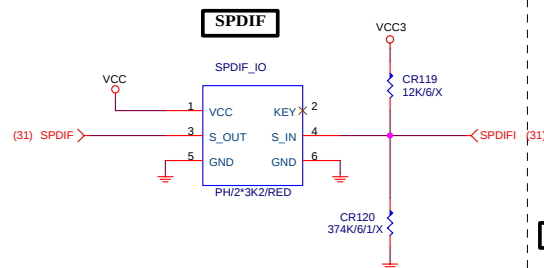
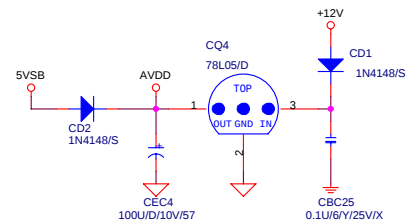
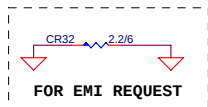
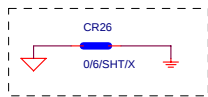


[illegible]

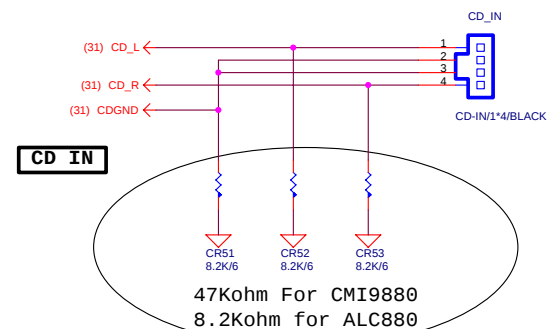
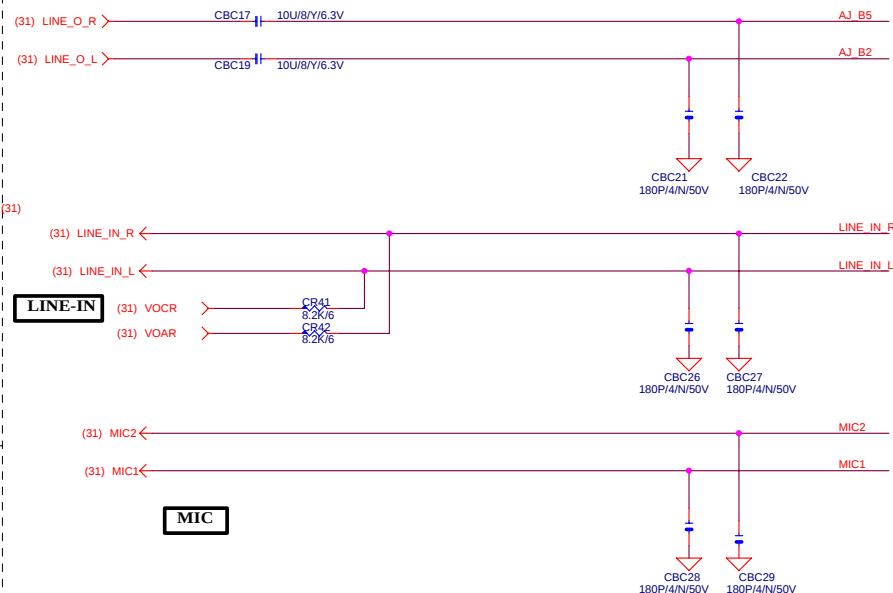
The diagram illustrates a fan speed control system. The main circuit consists of a +12V supply, a BC708 PNP transistor, and an LM358 op-amp (U25A). The op-amp's non-inverting input (pin 3) is connected to a voltage divider (R1621, R1624) and a feedback network (R1622, R1620). Its inverting input (pin 2) is connected to a fan speed sensor (Q276, AP3310H) and a feedback network (R1622, R1620). The op-amp's output (pin 1) drives the base of the BC708 transistor, which controls the fan (SYS_FAN FAN1*3/WHITE). A +12V supply is also connected to the fan. A secondary circuit (U25B) is shown at the bottom, which is a simple op-amp buffer.

Title			
FAN CONTROL			
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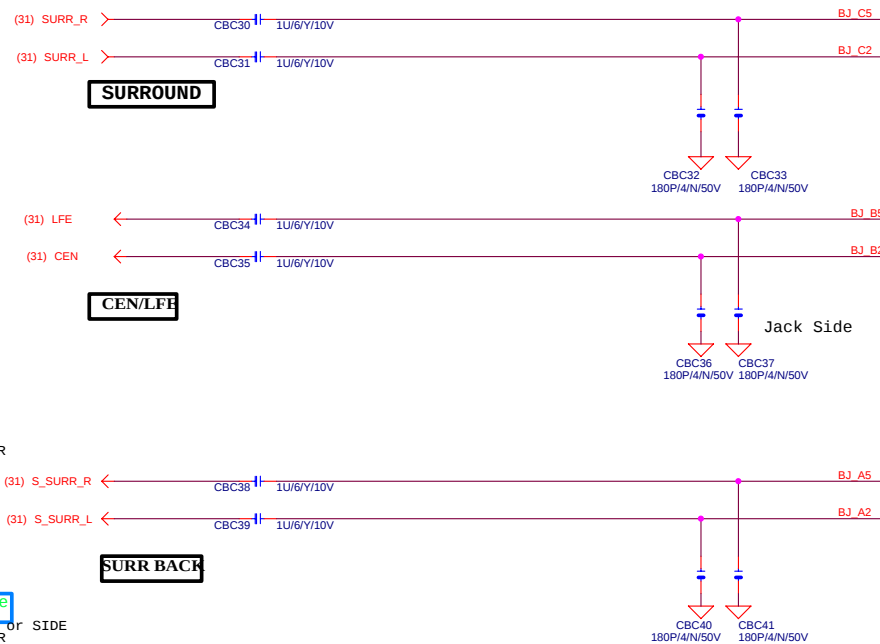
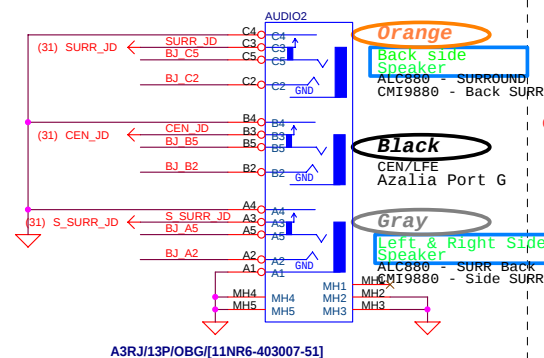
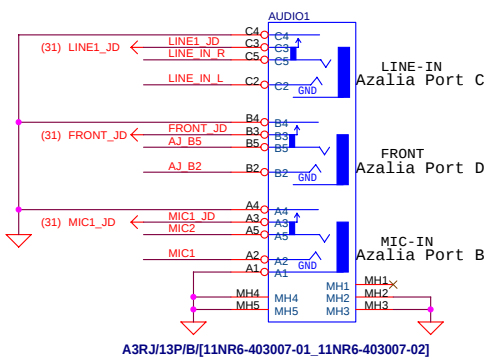
LINE OUT FRONT OUT



CD IN

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

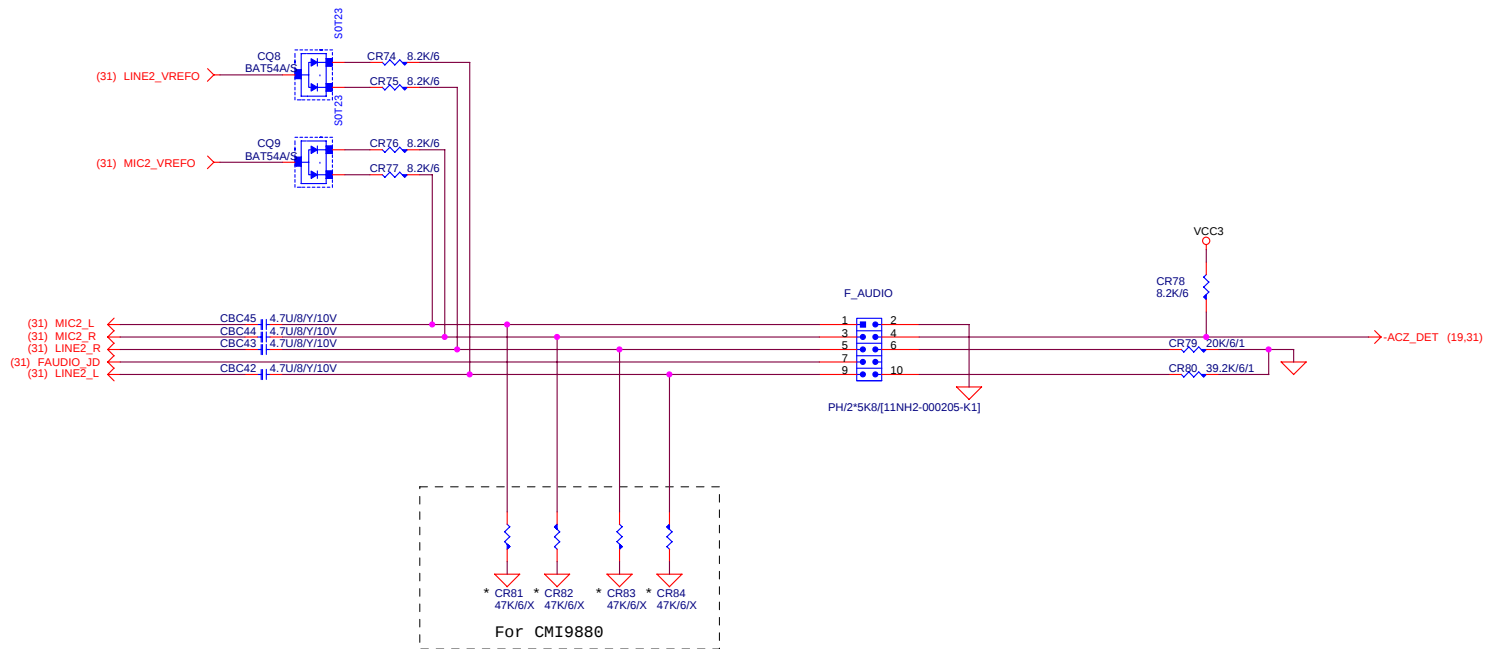
CEN/LFE

SURR BACK

Intel Confidential			
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AUDIO JACK			
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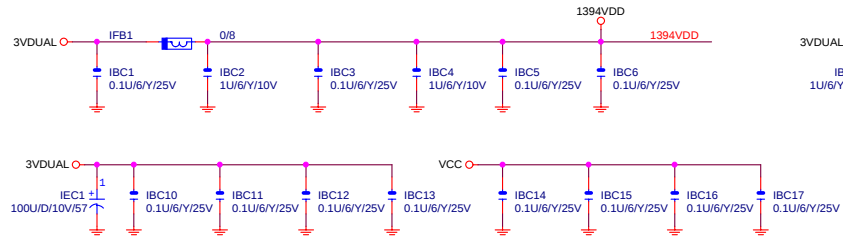
Azalia Port F

Azalia Port E



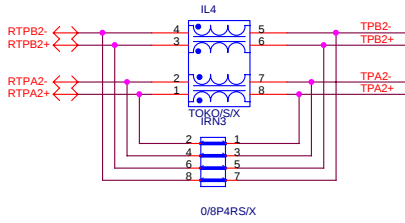
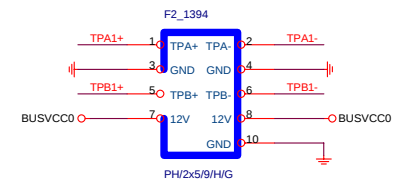
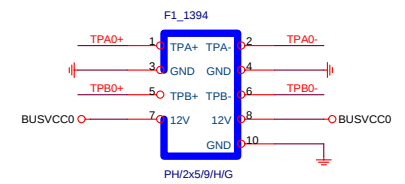
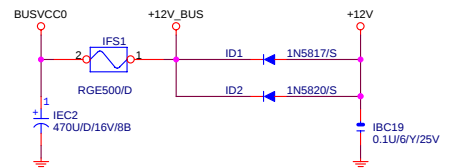
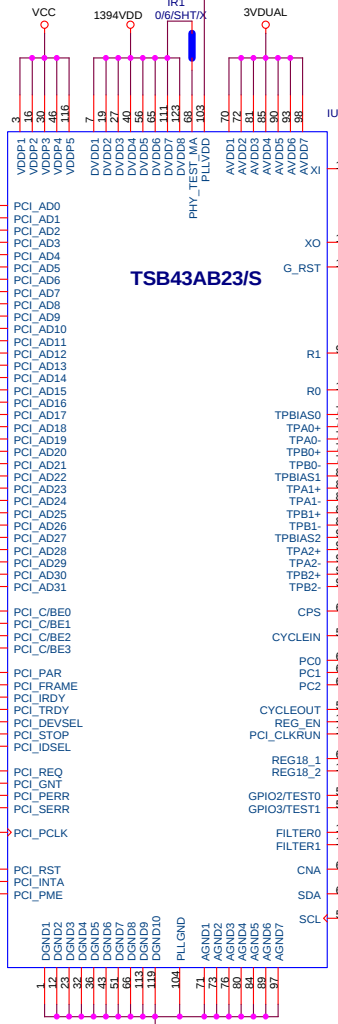
Intel Confidential

Title			
FRONT AUDIO CONNECTOR			
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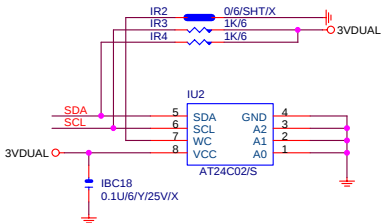


- A D0 52 PCI_AD0
- A D1 50 PCI_AD1
- A D2 49 PCI_AD2
- A D3 48 PCI_AD3
- A D4 47 PCI_AD4
- A D5 45 PCI_AD5
- A D6 44 PCI_AD6
- A D7 42 PCI_AD7
- A D8 39 PCI_AD8
- A D9 38 PCI_AD9
- A D10 37 PCI_AD10
- A D11 34 PCI_AD11
- A D12 35 PCI_AD12
- A D13 33 PCI_AD13
- A D14 31 PCI_AD14
- A D15 29 PCI_AD15
- 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
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- A D30 120 PCI_AD30
- A D31 118 PCI_AD31

TSB43AB23/S

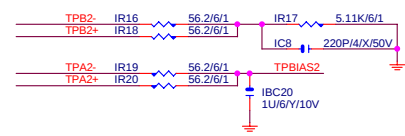
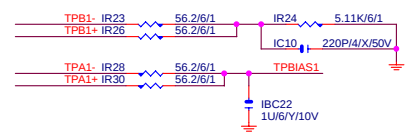
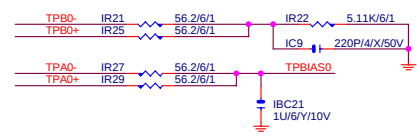


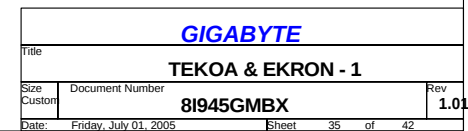
A D[0..31] >>> A_D[0..31] (18,24)

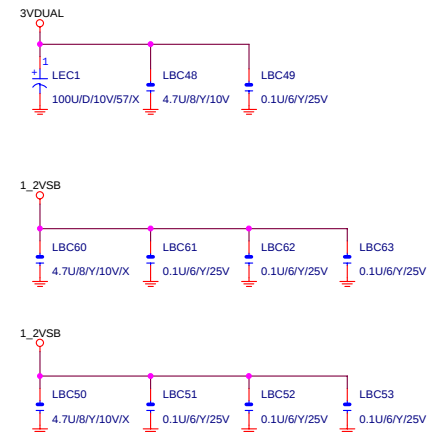
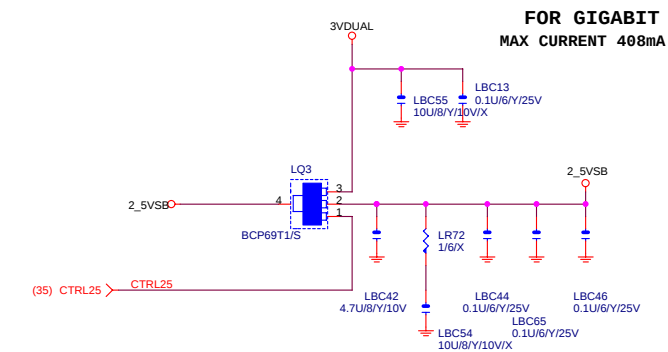
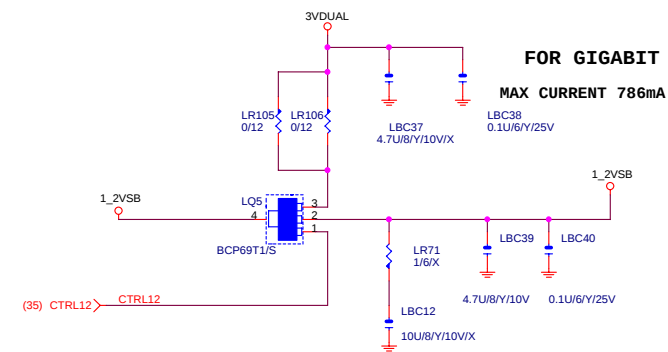
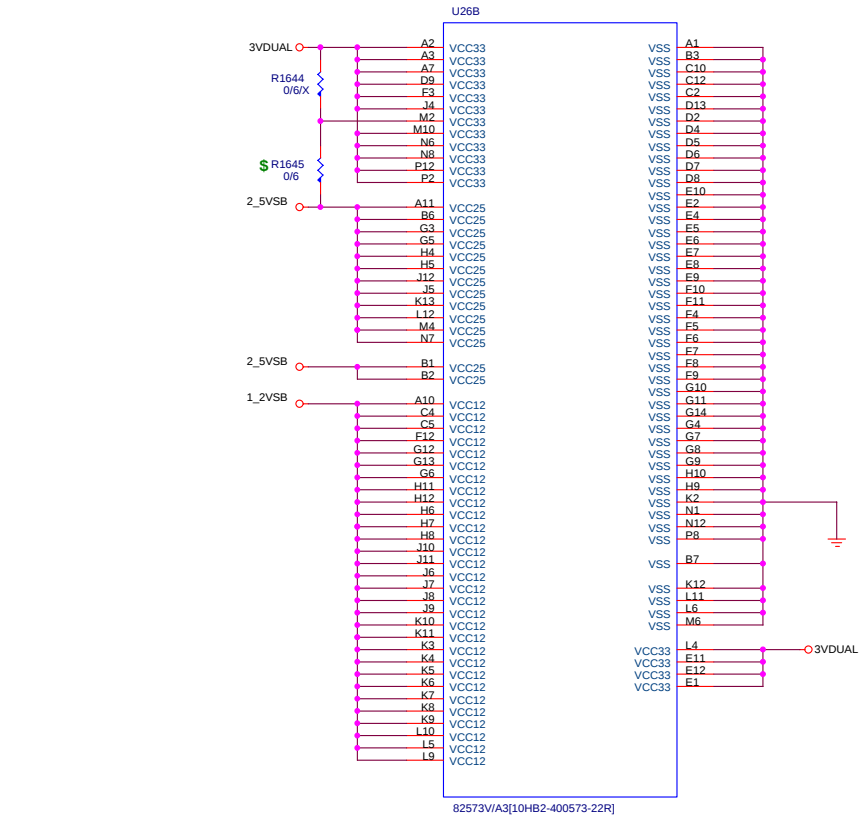


R1219 0/6 FOR ATMEL AT24C02N-10SI-2.7V ATC ATC24LC02W

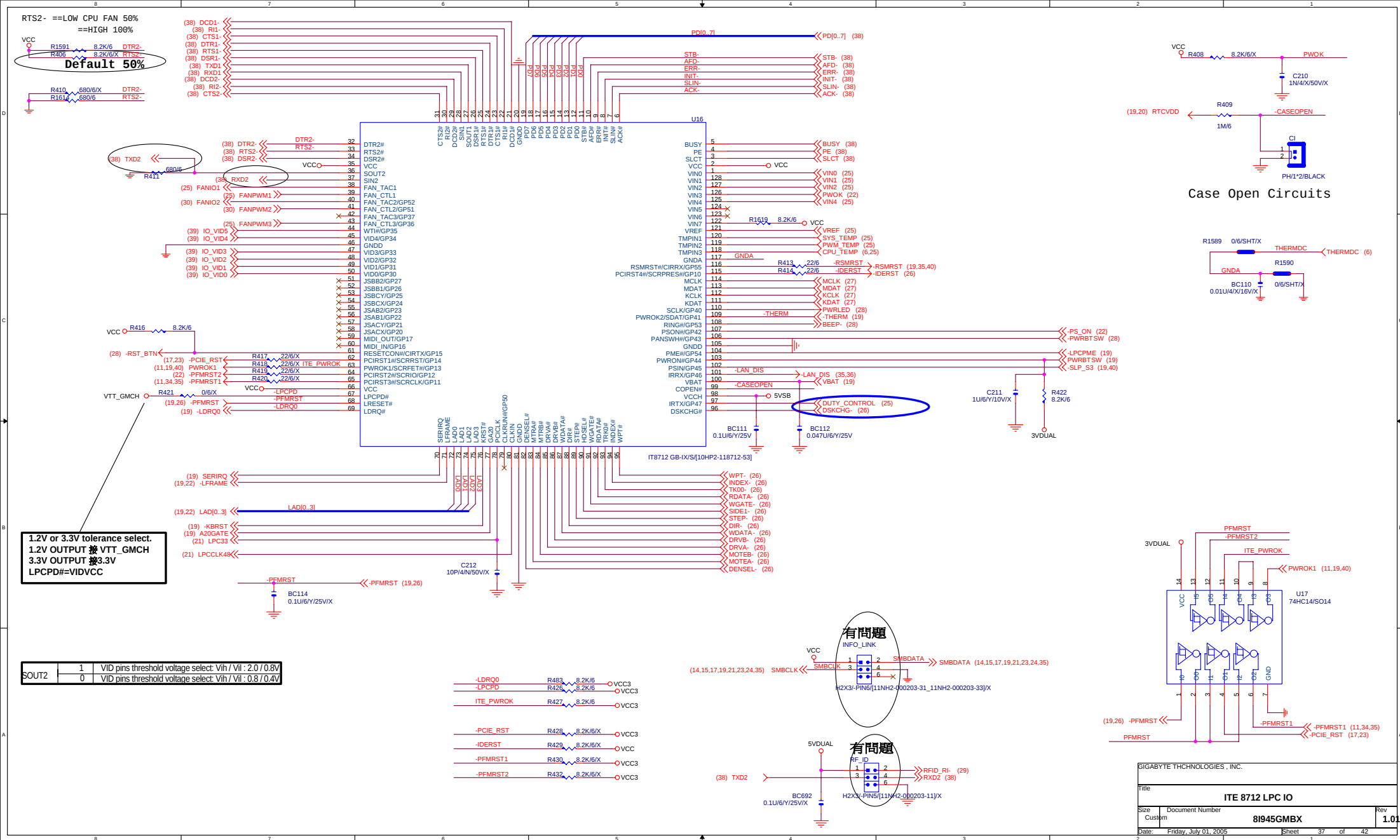
- (18,24) -C_BE0 41 PCI_CBE0
- (18,24) -C_BE1 28 PCI_CBE1
- (18,24) -C_BE2 15 PCI_CBE2
- (18,24) -C_BE3 2 PCI_CBE3
- (18,24) PAR 26 PCI_PAR
- (18,24) -FRAME 17 PCI_FRAME
- (18,24) -IRDY 18 PCI_IRDY
- (18,24) -TRDY 20 PCI_TRDY
- (18,24) -DEVSEL 21 PCI_DEVSEL
- (18,24) -STOP 22 PCI_STOP
- (18,24) -STOP 4 PCI_DSSEL
- (18,24) -REQ2 115 PCI_REQ
- (18,24) -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 -PFMRST1
- (18,24) -PIRQH 109 PCI_INTA
- (18,23,24,35) -PCIPME 117 PCI_PME

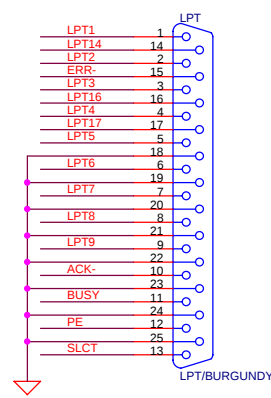
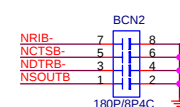
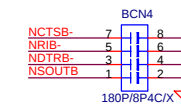


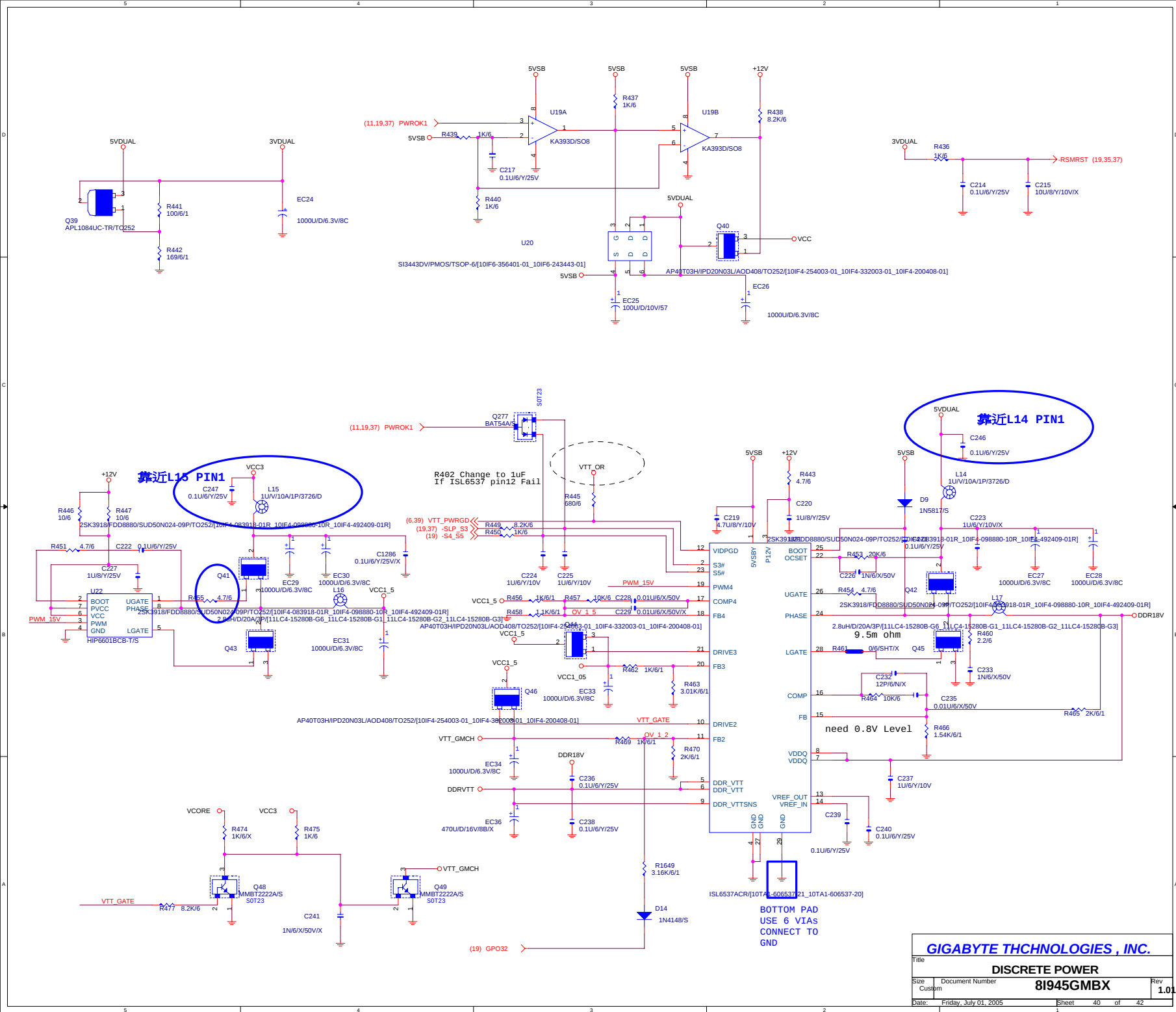




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INTEL ICH7 GPIO Implementation

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
PCI1	PCLK0	-PCIRST	-REQ0/-GNT0	-PIRQE	A_D16
PCI2	PCLK1	-PCIRST	-REQ1/-GNT1	-PIRQD	A_D17
PCI3	PCLK2	-PCIRST	-REQ2/-GNT2	-PIRQC	A_D18
1394b	1394CLK	-PFMRST2	-REQ3/-GNT3	-PIRQH	A_D23
IT8212	RAIDCLK	-PFMRST2	-REQ4/-GNT4	-PIRQG	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	GP048	VCC3	-GNT4
GPI2	V5REF	-PIRQE	GP049	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			
GP016	VCC3	CPU OV1 (-GNT6)			
GP017	VCC3	-GNT5			
GP018	VCC3	CPU OV2			
GP019	VCC3	DUAL BIOS			
GP020	VCC3	BIOS T-BLOCK			
GP021	VCC3	DUAL BIOS			
GP023	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			

PWR0K/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

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