Model Name: GA-P35-S3 Rev1.02

SHEET	TITLE
01	COVER SHEET
02	BOM & PCB MODIFY HISTORY
03	BLOCK DIAGRAM
04	POWER MAP
05	P4_LGA775_A
06	P4_LGA775_B
07	P4_LGA775_C
08	P4_LGA775_D
09	GMCH-BEARLAKE_HOST
10	GMCH-BEARLAKE DDRII
11	GMCH-BEARLAKE_PCI E, DMI
12	GMCH-BEARLAKE_INT VGA
13	GMCH-BEARLAKE_GND
14	GMCH-BEARLAKE_PWR
15	DDRII CHANNEL A 1,2
16	DDRII CHANNEL B 1,2
17	DDRII TERMINATION
18	PCI EXPRESS*16 SLOT
19	ICH9 PCI, USB, DMI, LAN
20	ICH9 GPIO, CTRL
21	ICH9 SATA, FAN PWM
22	ICH9 VCC, GND
23	CLOCK GEN CK505
24	PCI EXPRESS*1 ,PCI SLOT 1,2
25	ITE8718/GB,RESET DRIVE
26	COM,LPT
27	BIOS,CI,HWM,KB/MS

SHEET	TITLE
28	AZALIA ALC889A
29	AUDIO JACK
30	VCORE PWM ISL6327
31	DISCRETE POWER
32	ATX POWER
33	JMicron JMB363
34	LAN REALTEK RTL8111B
35	FRONT PANEL,FUSB,FDD

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Title: Cover Sheet

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Model Name: GA-P35-S3 Rev1.02

Component value change history

Data	Change Item	Reason
1.0A	9MP35D3RR-00-10A --> 9MP35S3R-00-10A	
	ICH9 + 電解電容	
1.0B	1. NB_HEATSINL 12SP2-04F004-71R/72R/73R/74R --> 12SP2-040008-11R/12R/13R	
	2. EC42 1000u/D/6.3V/8C/36m --> 820u/FP/D/2.5V/88/7m	
1.0C	1. REMOVE R2038 8.2K/4	
1.0D	1. C1388 1u/6/Y5V/10V/Z --> 1u/6/X5R/10V/K (STR Fail on high temp.)	
1.0I	1. CE2,CE3 100u/D/10V/57 --> 100u//D/16V/5B	

Circuit or PCB layout change for next version

DATE	Change Item	Reason
0.1	EVT release	
0.2	1. CHOKE 0.5uH 1.2uH 2uH Footprint Change	
	2. BSEL166_4 GP46 --> GP41	
	3. DDR18V_OV1~OV3 ITE8718 --> ICH9 GPIO	
	4. ADD CPU GTLREF_UV0~UV1 GPIO CONTROL	
1.0	1. Remove All 0 ohm	
	2. OS-CON CAP 底下的零件要移除 (AUDIO)	
	3. DL15 FOOTPRINT CHANGE "CHOKE08U-15A_1P-2"	
	4. LGA775 FOOTPRINT CHANGE "LGA775-39"	
	5. SB_HEATSIN1 --> SB_HEATSINK	
	6. BEARLAKE機種PCB要導入文字面	
	7. 5VDUAL PROTECT ADD D18	
1.01	1.北橋 HEATSINK 擋住 MODEL 文字面	
	2. DL9~DL14 "CHOKE05U-30A-1PQ-1" --> "CHOKE05U-30A-1PQ-2"	
	3. -PWRBTSW ADD 限流電阻 R2077=33/4	
1.02	1. 移除"Ultra Durable 2"	
	2. ADD NB_HEATSINK 外框	
	3. 文字面修改 DDRII 800/1066 (OC)--> DDRII 800/1066	

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Title: BOM & PCB MODIFY HISTORY

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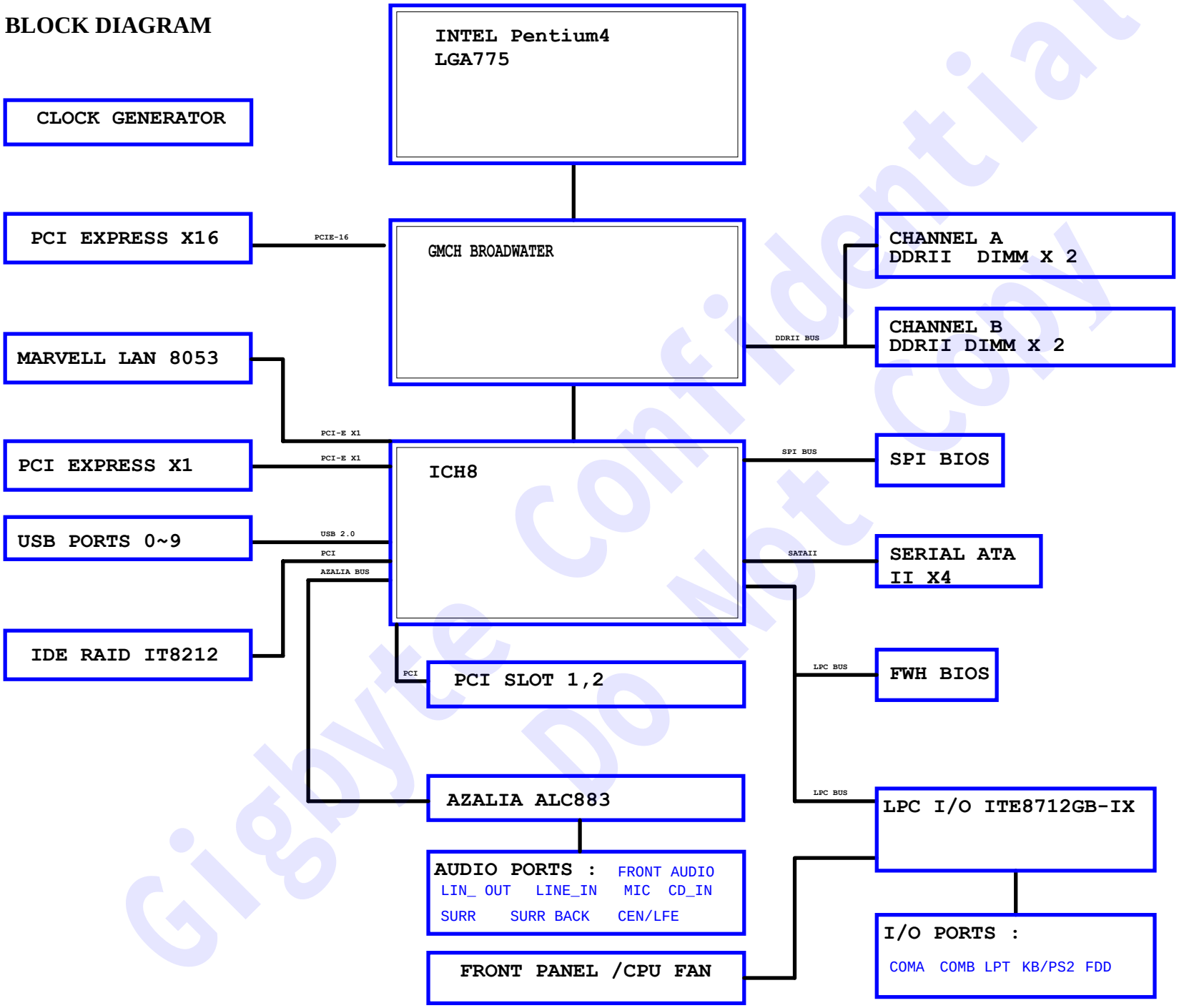
BLOCK DIAGRAM



Gigabyte Technology		
Title: BLOCK DIAGRAM		
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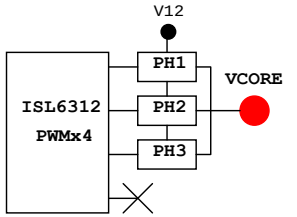
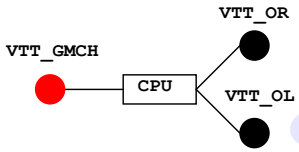
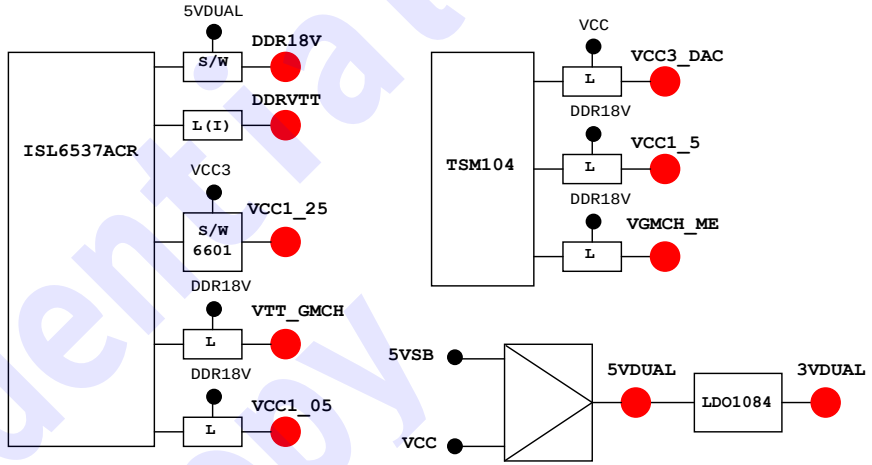
ICH8 GPIO LIST TABLE

PIN NAME	PWR WELL	AFTER/ PLTRST	USAGE	NOTE
GP0	MAIN	IN	-ACZ_DET	P/U 8.2K VCC3
GP1/TACH1	MAIN	IN	ICH_FAN_TACH1	P/U 8.2K VCC3
GP2/PIRQE#	MAIN	IN	-PIRQE	P/U 8.2K VCC3
GP3/PIRQF#	MAIN	IN	-PIRQF	P/U 8.2K VCC3
GP4/PIRQG#	MAIN	IN	-PIRQG	P/U 8.2K VCC3
GP5/PIRQH#	MAIN	IN	-PIRQH	P/U 8.2K VCC3
GP6/TACH2	MAIN	IN	ICH_FAN_TACH2	P/U 8.2K VCC3
GP7/TACH3	MAIN	IN	ICH_FAN_TACH3	P/U 8.2K VCC3
GP8	STBY	IN	GPIO8(DUALBIOS_INPUT)	P/U 8.2K 3VDUAL
GP9	STBY	OUT	WOL_ONLY	P/D 100K GND
GP10	STBY	IN	CLGPIO1	P/U 8.2K 3VDUAL
GP11/SMBALERT#	STBY	OUT	-SMBALRT	P/U 8.2K 3VDUAL
GP12	STBY	IN	MB_ID0	P/U 8.2K 3VDUAL
GP13	STBY	IN	-LPCPME	P/U 8.2K 3VDUAL
GP14	STBY	IN	CLGPIO2	P/U 8.2K 3VDUAL
GP15	STBY	OUT	LAN_DISABLE(STP_PCI-)	N/A
GP16	MAIN	OUT/LOW	RESET	N/A
GP17/TACH0	MAIN	IN	ICH_FAN_TACH0	P/U 8.2K VCC3
GP18	MAIN	OUT	MB_ID1	P/U 8.2K VCC3
GP19	MAIN	IN	SATA1GP	P/U 8.2K VCC3
GP20	MAIN	OUT	-SPI_WP0	P/U 1K 3VCL
GP21	MAIN	IN	SATA0GP	P/U 8.2K VCC3
GP22	MAIN	IN	SCLOCK	P/U 8.2K VCC3
GP23	MAIN	OUT	-LDRQ1	P/U 8.2K VCC3
GP24	STBY	OUT	CLGPIO0	P/U 8.2K 3VDUAL
GP25	STBY	IN	MB_ID2(STP_CPU-)	P/U 8.2K 3VDUAL
GP26/S4_STATE#	STBY	OUT	S4_STATE#	P/U 8.2K 3VDUAL
GP27	STBY	OUT/LOW	GPIO27(EL_STATE0)	P/U 8.2K 3VDUAL
GP28	STBY	OUT/LOW	PWR_LED(EL_STATE1)	N/A
GP29/OC5#	STBY	IN	-USBOC_R	P/U FUSEVCC
GP30/OC6#	STBY	IN	-USBOC_R	P/U FUSEVCC
GP31/OC7#	STBY	IN	-USBOC_R	P/U FUSEVCC
GP32	MAIN	OUT	DUAL_BIOS	P/U 100K+1M VCC3
GP33	MAIN	OUT	DUAL_BIOS	P/U 8.2K VCC3
GP34	MAIN	OUT/LOW	GPIO34/SMB_RST	N/A
GP35	MAIN	OUT	SATACLKREQ#	N/A
GP36	MAIN	IN	SATA2GP	P/U 8.2K VCC3
GP37	MAIN	IN	SATA3GP	P/U 8.2K VCC3
GP38	MAIN	IN	SLOAD	P/U 8.2K VCC3
GP39	MAIN	IN	GPIO39	P/D 8.2K GND
GP48	MAIN	IN	GPIO48	P/U 8.2K VCC3
GP49	MAIN	IN	CPUPWROK	P/U 100 VTT_OL

VCORE:3 PHASE PWM--ISL6312







Gigabyte Technology			
Title: TABLE LIST			
Size: B	Document Number: P35-S3		Rev: 1.02
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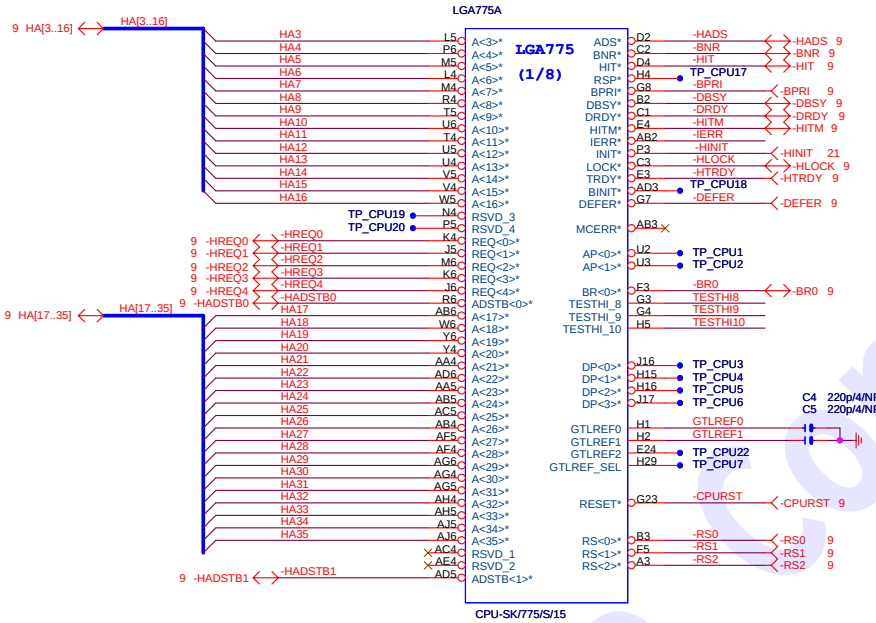
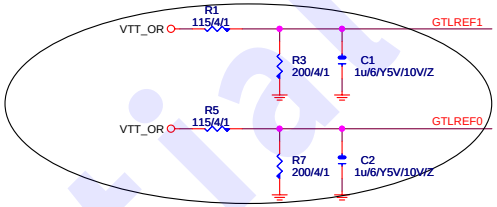
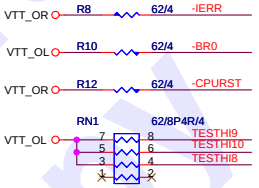
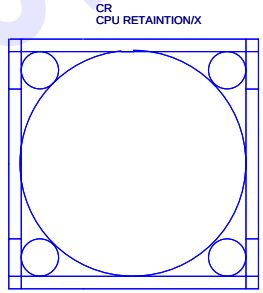
HA/REQ:4/11 50+-15%

ADSTB:4/14 50+-15%

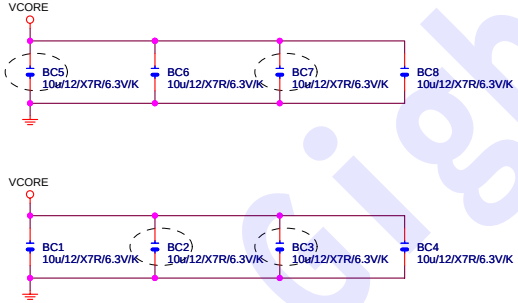


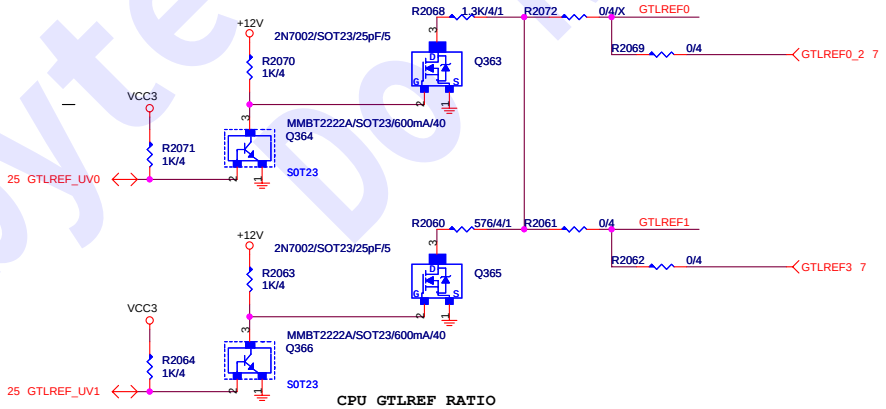






Impedance=50 +- 15% for 4 -layer





CPU GTLREF RATIO

GTLREF_UV0	GTLREF_UV1	Ratio Set
HIGH	HIGH	0.67
LOW	HIGH	0.65
HIGH	LOW	0.63
LOW	LOW	0.615

Gigabyte Technology			
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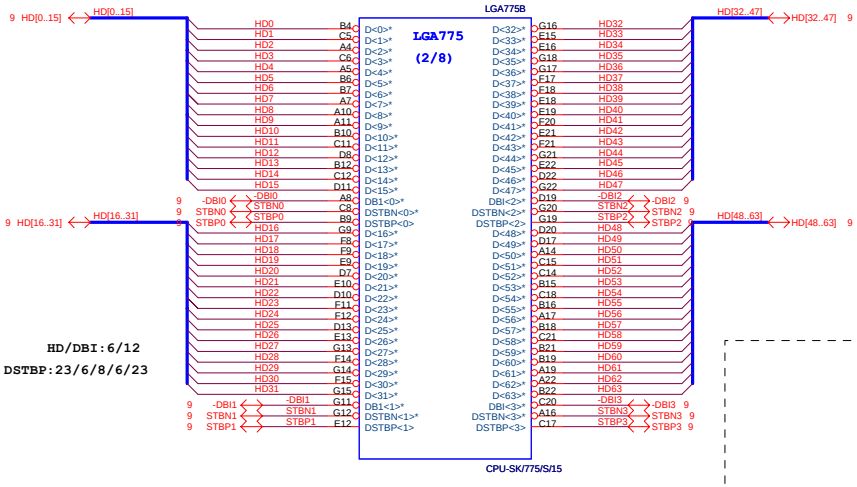

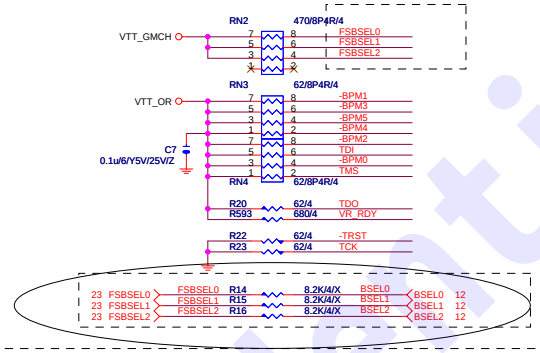

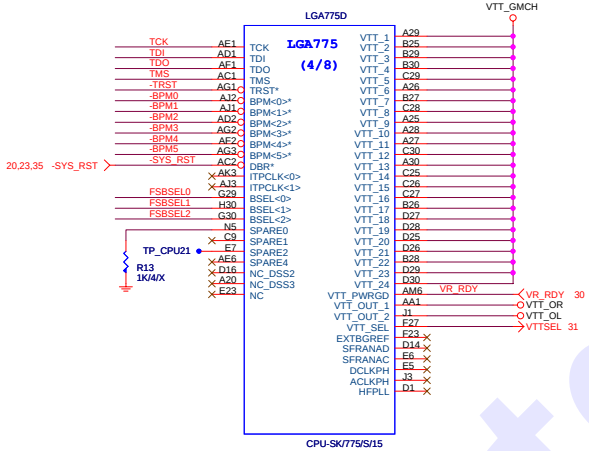

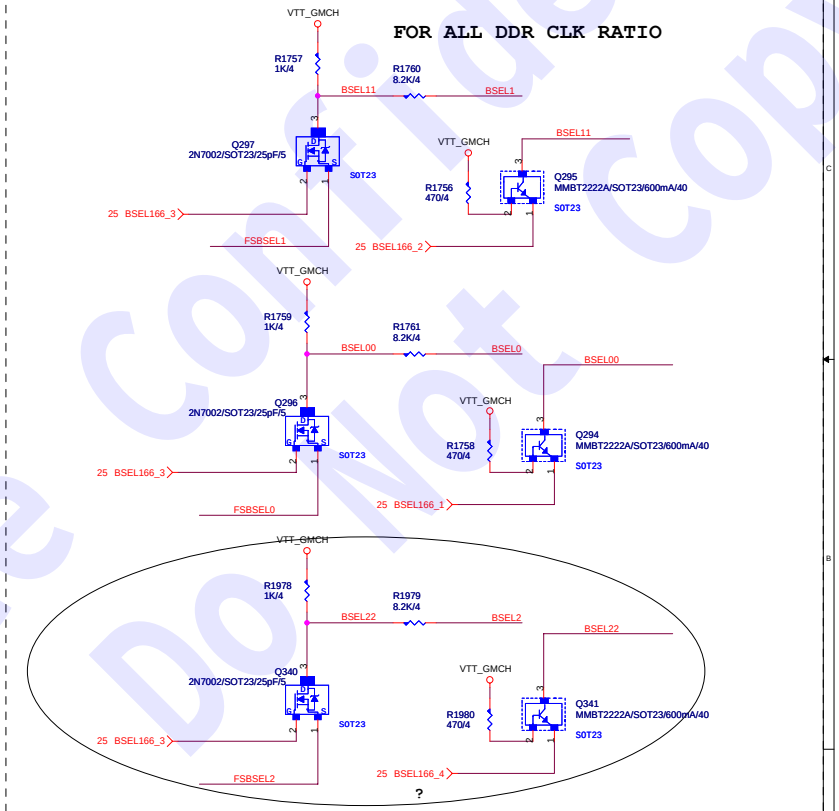

	FSA	FSB	FSC			
	FSBSEL0	FSBSEL1	FSBSEL2	Clock		
?	1	0	1	100MHz		
?	1	0	0	133MHz	3/4	400/533
G33	0	1	0	200MHz	2/2.66/3.33/4	400/533/667/800
G33	0	0	0	266MHz	2/2.5/3	533/667/800
G33	0	0	1	333MHz	2/2.4	667/800

Gigabyte Technology			
Title	P4_LGA775-B,D		
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Note:

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

Trace width doesn't less than 12 Mil

As close as possible to CPU socket

VTT_GMCH L1 10UH/8/S/[10LI2-12100A-13R_10LI2-12100A-02R]

C10 1u/6/Y5V/10V/Z

C11 1u/6/Y5V/10V/Z/X

L2 10UH/8/S/[10LI2-12100A-13R_10LI2-12100A-02R]

VCCA R35 0/6/SHT/X VSSA VCOREPLL

Place outside of CPU socket

COMP4~7 可以不上

VTT_OL C9 0.1u/6/Y5V/25V/Z

R28 49.9/4/1 COMP5
R30 49.9/4/1 COMP4
R31 49.9/4/1 COMP2
R32 49.9/4/1 COMP3
R33 49.9/4/1 COMP0
R34 49.9/4/1 COMP1

VTT_OR C12 0.1u/6/Y5V/25V/Z

R36 49.9/4/1 COMP6
R37 49.9/4/1 COMP7
R38 24.9/4/1 COMP8

VTT_GMCH C8 0.1u/6/Y5V/25V/Z

R39 130/4 -PROCHOT
R40 62/4 TESTHI2_7
R41 62/4 -THRMTRIP
R42 62/4 -FERR
R29 62/4 TESTHI0

VTT_OL RN5 62/8P4R/4

7 8 TESTHI12
5 6 TESTHI1
3 4 TESTHI11
1 2 TESTHI13

R43 100/4/X CPUPWROK C13 1n/4/X7R/50V/K/X

R1775 62/4 CPU_G1
R1776 62/4 TESTHI_M

VTT_OR RN6 680/8P4R/4

7 8 VID2
5 6 VID0
3 4 VID4
1 2 VID5

RN7 680/8P4R/4

7 8 VID7
5 6 VID1
3 4 VID3
1 2 VID6

R58 1K/4 VRD_SEL
R60 62/4 -FORCEPR

LGA775C

LGA775 (3/8)

21 -SMI	-SMI	P2	SMI*
21 -A20M	-A20M	K3	A20M*
21 -FERR	-FERR	R3	FERR*/PBE*
21 INTR	INTR	K1	LINT0
21 NMI	NMI	L1	LINT1
21 -IGNNE	-IGNNE	N2	IGNNE*
20,21,31 -STPCLK	-STPCLK	M3	STPCLK*
	VCCA	A23	VCCA
	VSSA	B23	VSSA
	VCOREPLL	C23	VCCIOPLL
	VCC_PLL	D23	VCC_PLL
30 VID[0..7]	VID0	AM2	VID<0>
	VID1	AL5	VID<1>
	VID2	AM3	VID<2>
	VID3	AL6	VID<3>
	VID4	AK4	VID<4>
	VID5	AL4	VID<5>
	VID6	AM5	VID<6>
	VID7	AM7	VID<7>
30 VRD_SEL	VRD_SEL	AN7	VID_SELECT
23 CPUCLK	CPUCLK	F28	BCLK<0>
23 -CPUCLK	-CPUCLK	G28	BCLK<1>
20 -SKTOCC	-SKTOCC	AE8	SKTOCC*
		AL1	THERMDA
		AK1	THERMDC
		AJ7	THERMDA_2
		AH7	THERMDC_2
26 VCC_SENSE		AN3	VCC_SENSE
		AN4	VSS_SENSE
26 VSS_SENSE		AN5	VCC_MB_REGULATION
		AN6	VSS_MB_REGULATION
VCORE		AL8	VCC_D_SENSE
		AL7	VSS_D_SENSE
		F29	VTT_PKGSENSE
		F6	Z60_50*
		G6	SLEW_CTRL*
21,25 PECI		G5	SST_LV*
		AL3	MPG_NOBOOT*

	TESTHI_0	F26	TESTHI0
	TESTHI_1	W3	TESTHI1
	TESTHI_2	F25	TESTHI2_7
	TESTHI_3	G25	
	TESTHI_4	G27	
	TESTHI_5	G26	
	TESTHI_6	G24	
	TESTHI_7	F24	
	TESTHI_11	P1	TESTHI11
	TESTHI_12	W2	TESTHI12
	TESTHI_13	L2	TESTHI13
	FORCEPH	AK6	-FORCEPR
	PWRGOOD	N1	CPUPWROK
	PROCHOT*	AL2	-PROCHOT
	THERMTRIP*	M2	-THRMTRIP
	COMP<0>	A13	COMP0
	COMP<1>	T1	COMP1
	COMP<2>	G2	COMP2
	COMP<3>	R1	COMP3
	COMP<4>	J2	COMP4
	COMP<5>	T2	COMP5
	COMP<6>	Y3	COMP6
	COMP<7>	AE3	COMP7
	COMP<8>	B13	COMP8
	RC1	G1	CPU_G1
	RC2	U1	TESTHI_M
	RC4	A24	
	RC5	E29	TP_CPU10
	RSVD_1	F2	GTLREF3
	RSVD_2	G10	GTLREF2
	PSMI*	AH2	
	MSID<1>	V1	MSID1
	MSID<0>	W1	MSID0
	CPU_BOOT	Y1	TP_CPU12
	LL_ID<0>	V2	TP_CPU13
	LL_ID<1>	AA2	TP_CPU15

CPU-SK/775/S/15

TESTHI13 -FORCEPR 26
CPUPWROK 20
-PROCHOT 20,26
-THRMTRIP 21

-STPCLK C14 33p/4/NPO/50V/J/X

25,27 CPU_TEMP R44 0/4/SHT/X
25 THERMDC R45 0/4/SHT/X

C1282 1n/4/X7R/50V/K/X C15 1n/4/X7R/50V/K/X

R666 1K/4/X

R53 62/4
R55 62/4

R56 62/4

TP_CPU11 TP_CPU14 TP_CPU16

R667 49.9/4/1/X GTLREF3 GTLREF3 5

R669 100/4/1/X C349 1u/6/Y5V/10V/Z

R671 49.9/4/1/X GTLREF2 R2075 0/4 GTLREF0_2 5

R674 100/4/1/X C351 1u/6/Y5V/10V/Z

FB33 MASK-50

VCC1_5 0/8/SHT-50/MASK/X C17 1u/6/Y5V/10V/Z C350 0.1u/6/Y5V/25V/Z/X VCC_PLL VCC_PLL

R1989 0/4/X

25,31 FANPWM2 -STPCLK

PECI:Platform Environment Control Interface

Gigabyte Technology		
Title: P4_LGA775-C		
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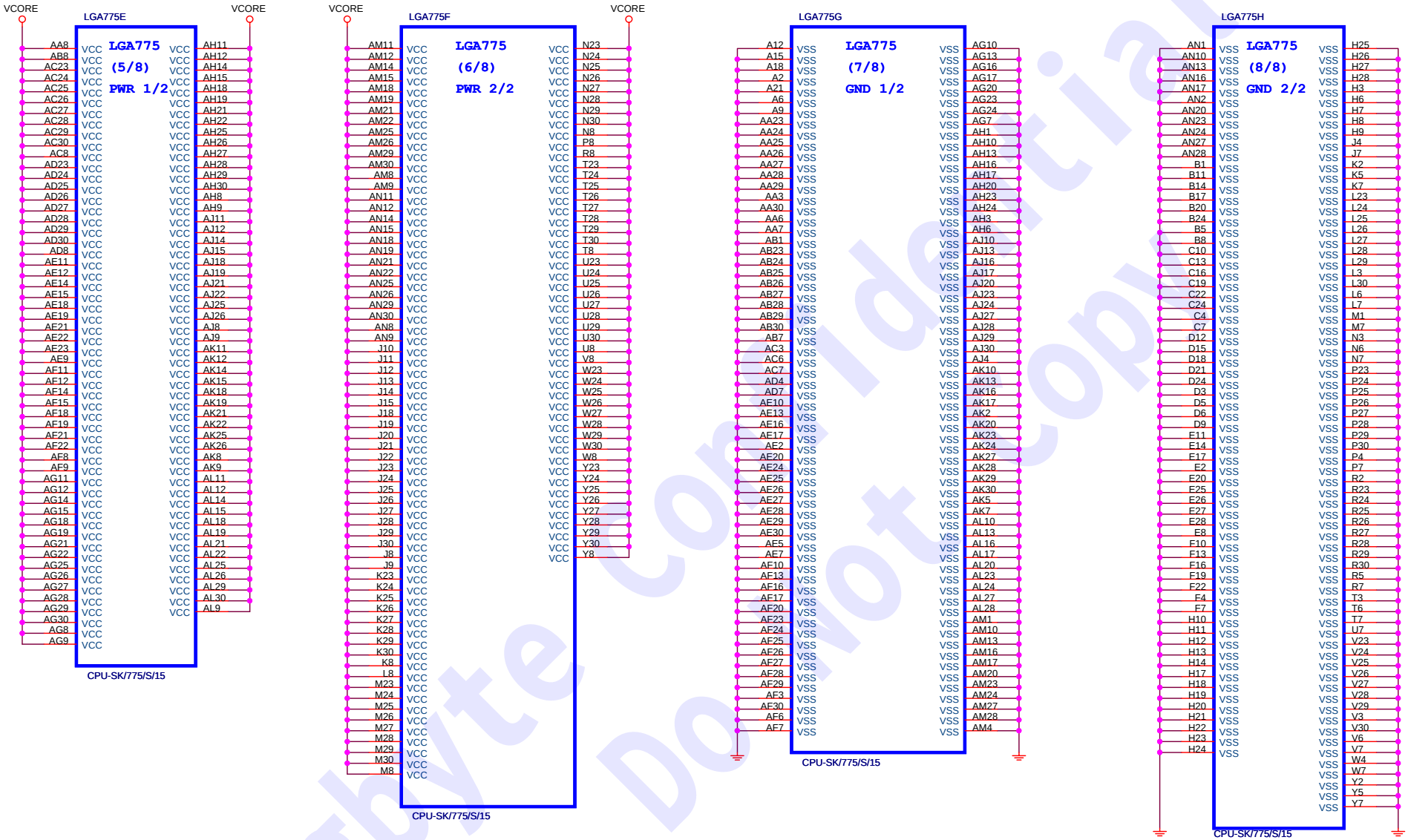

Gigabyte Technology		
Title: P4_LGA775-E,F,G,H		
Size: B	Document Number: P35-S3	Rev: 1.02
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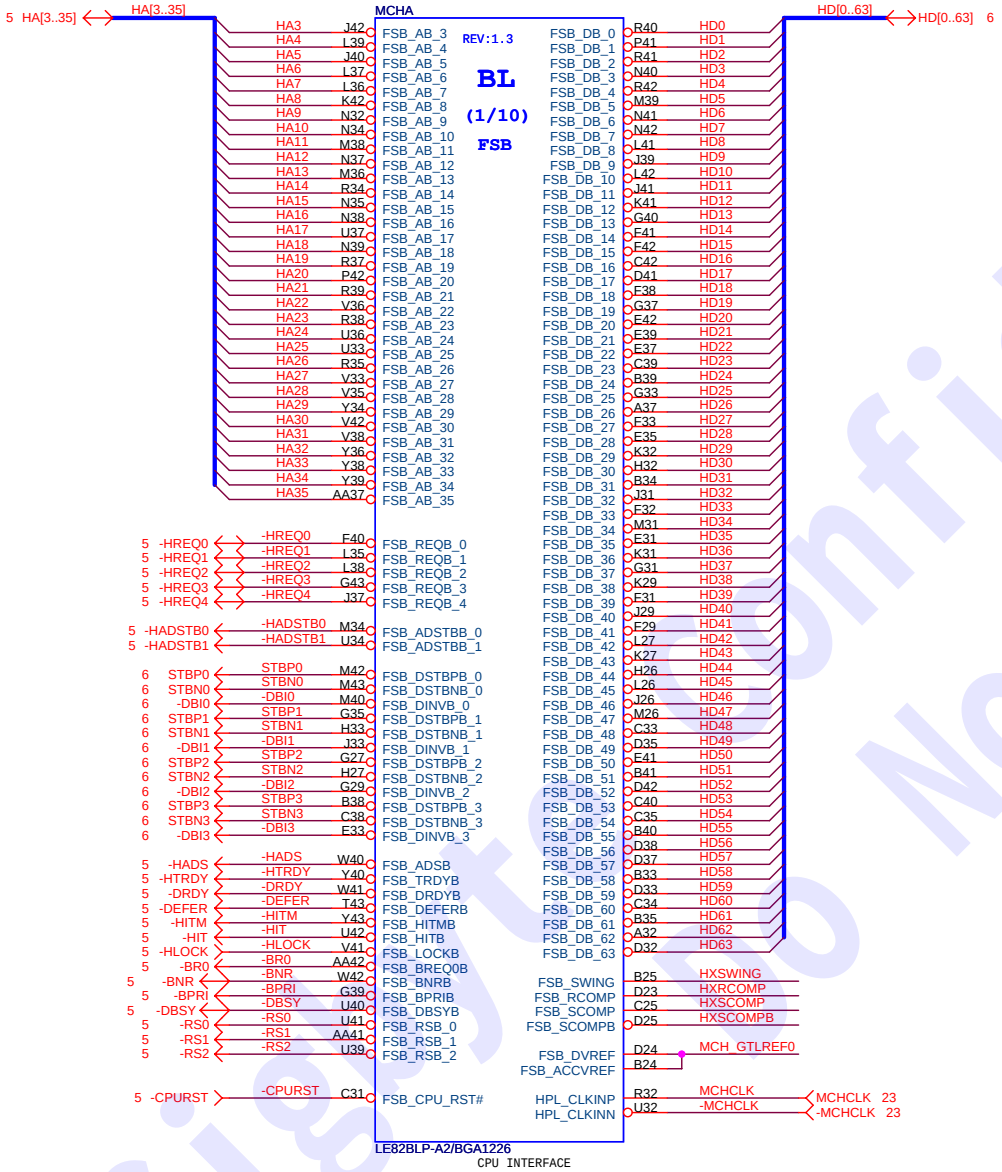

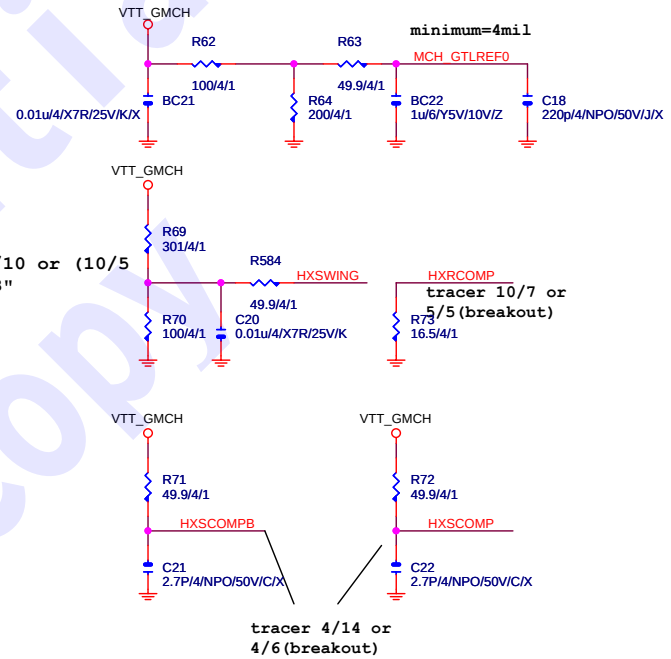

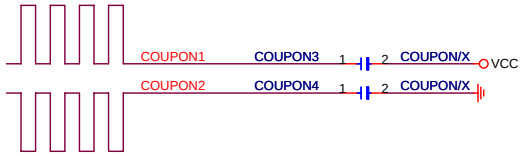

Gigabyte Technology			
Title: GMCH-HOST			
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MCHB

REV:1.3

BL (2/10) DDR_A

MAAA0 BB30 DDR_A_MA_0
MAAA1 AY25 DDR_A_MA_1
MAAA2 BA23 DDR_A_MA_2
MAAA3 BB23 DDR_A_MA_3
MAAA4 AY23 DDR_A_MA_4
MAAA5 BB22 DDR_A_MA_5
MAAA6 BA22 DDR_A_MA_6
MAAA7 BB21 DDR_A_MA_7
MAAA8 AW21 DDR_A_MA_8
MAAA9 BA21 DDR_A_MA_9
MAAA10 BB31 DDR_A_MA_10
MAAA11 AY21 DDR_A_MA_11
MAAA12 BC20 DDR_A_MA_12
MAAA13 AY38 DDR_A_MA_13
MAAA14 BA19 DDR_A_MA_14

15,17 -SWEA BA33 -SWEA DDR_A_WEB
15,17 -SCASA AW35 -SCASA DDR_A_CASB
15,17 -SRASA AY33 -SRASA DDR_A_RASB

15,17 SBAA0 BA31 SBAA0 DDR_A_BS_0
15,17 SBAA1 AY31 SBAA1 DDR_A_BS_1
15,17 SBAA2 AY20 SBAA2 DDR_A_BS_2

15,17 -CSA0 BA34 -CSA0 DDR_A_CSB_0
15,17 -CSA1 AY35 -CSA1 DDR_A_CSB_1
15,17 -CSA2 BB33 -CSA2 DDR_A_CSB_2
15,17 -CSA3 BB38 -CSA3 DDR_A_CSB_3

15,17 CKEA0 AY19 CKEA0 DDR_A_CKE_0
15,17 CKEA1 AW18 CKEA1 DDR_A_CKE_1
15,17 CKEA2 BB19 CKEA2 DDR_A_CKE_2
15,17 CKEA3 BA18 CKEA3 DDR_A_CKE_3

MODT_A0 BB35 DDR_A_ODT_0
MODT_A1 BA38 DDR_A_ODT_1
MODT_A2 BA35 DDR_A_ODT_2
MODT_A3 BA39 DDR_A_ODT_3

15 DCLKA0 AR31 DCLKA0 DDR_A_CK_0
15 -DCLKA0 AU31 -DCLKA0 DDR_A_CKB_0
15 DCLKA1 AP27 DCLKA1 DDR_A_CK_1
15 -DCLKA1 AN27 -DCLKA1 DDR_A_CKB_1
15 DCLKA2 AV33 DCLKA2 DDR_A_CK_2
15 -DCLKA2 AW33 -DCLKA2 DDR_A_CKB_2
15 DCLKA3 AP29 DCLKA3 DDR_A_CK_3
15 -DCLKA3 AP31 -DCLKA3 DDR_A_CKB_3
15 DCLKA4 AM26 DCLKA4 DDR_A_CK_4
15 -DCLKA4 AM27 -DCLKA4 DDR_A_CKB_4
15 DCLKA5 AT33 DCLKA5 DDR_A_CK_5
15 -DCLKA5 AU33 -DCLKA5 DDR_A_CKB_5

6.5/5/6.5 Length max=5.0"
MCH die to DIMM0/1 pin =6" max
FOR channel A

TP1 AN21 RESERVED_1

DDR_A_DQS_0 AP2 DQSA0
DDR_A_DQSB_0 AP3 -DQSA0
DDR_A_DM_0 AN2 DMA0

DDR_A_DQ_0 AM1 MDA0
DDR_A_DQ_1 AN3 MDA1
DDR_A_DQ_2 AR2 MDA2
DDR_A_DQ_3 AR3 MDA3
DDR_A_DQ_4 AL3 MDA4
DDR_A_DQ_5 AM2 MDA5
DDR_A_DQ_6 AR5 MDA6
DDR_A_DQ_7 AR4 MDA7

DDR_A_DQS_1 AW2 DQSA1
DDR_A_DQSB_1 AW1 -DQSA1
DDR_A_DM_1 AW3 DMA1

DDR_A_DQ_8 AV4 MDA8
DDR_A_DQ_9 AV3 MDA9
DDR_A_DQ_10 BA4 MDA10
DDR_A_DQ_11 BB3 MDA11
DDR_A_DQ_12 AU2 MDA12
DDR_A_DQ_13 AU1 MDA13
DDR_A_DQ_14 AY2 MDA14
DDR_A_DQ_15 AY3 MDA15

DDR_A_DQS_2 AY7 DQSA2
DDR_A_DQSB_2 BA6 -DQSA2
DDR_A_DM_2 BB6 DMA2

DDR_A_DQ_16 BB5 MDA16
DDR_A_DQ_17 AY6 MDA17
DDR_A_DQ_18 BA9 MDA18
DDR_A_DQ_19 BB9 MDA19
DDR_A_DQ_20 BA5 MDA20
DDR_A_DQ_21 BB4 MDA21
DDR_A_DQ_22 BC7 MDA22
DDR_A_DQ_23 AY9 MDA23

DDR_A_DQS_3 AT20 DQSA3
DDR_A_DQSB_3 AU18 -DQSA3
DDR_A_DM_3 AN18 DMA3

DDR_A_DQ_24 AT18 MDA24
DDR_A_DQ_25 AR18 MDA25
DDR_A_DQ_26 AU21 MDA26
DDR_A_DQ_27 AT21 MDA27
DDR_A_DQ_28 AP17 MDA28
DDR_A_DQ_29 AN17 MDA29
DDR_A_DQ_30 AP20 MDA30
DDR_A_DQ_31 AN20 MDA31

DDR_A_DQS_4 AR41 DQSA4
DDR_A_DQSB_4 AR40 -DQSA4
DDR_A_DM_4 AU43 DMA4

DDR_A_DQ_32 AV42 MDA32
DDR_A_DQ_33 AU40 MDA33
DDR_A_DQ_34 AP42 MDA34
DDR_A_DQ_35 AN39 MDA35
DDR_A_DQ_36 AV40 MDA36
DDR_A_DQ_37 AV41 MDA37
DDR_A_DQ_38 AR42 MDA38
DDR_A_DQ_39 AP41 MDA39

DDR_A_DQS_5 AL41 DQSA5
DDR_A_DQSB_5 AL40 -DQSA5
DDR_A_DM_5 AM43 DMA5

DDR_A_DQ_40 AN41 MDA40
DDR_A_DQ_41 AM39 MDA41
DDR_A_DQ_42 AK42 MDA42
DDR_A_DQ_43 AK41 MDA43
DDR_A_DQ_44 AN40 MDA44
DDR_A_DQ_45 AN42 MDA45
DDR_A_DQ_46 AL42 MDA46
DDR_A_DQ_47 AL39 MDA47

DDR_A_DQS_6 AG42 DQSA6
DDR_A_DQSB_6 AG41 -DQSA6
DDR_A_DM_6 AG40 DMA6

DDR_A_DQ_48 AJ40 MDA48
DDR_A_DQ_49 AH43 MDA49
DDR_A_DQ_50 AF39 MDA50
DDR_A_DQ_51 AE40 MDA51
DDR_A_DQ_52 AJ42 MDA52
DDR_A_DQ_53 AJ41 MDA53
DDR_A_DQ_54 AF41 MDA54
DDR_A_DQ_55 AF42 MDA55

DDR_A_DQS_7 AC42 DQSA7
DDR_A_DQSB_7 AC41 -DQSA7
DDR_A_DM_7 AC40 DMA7

DDR_A_DQ_56 AD40 MDA56
DDR_A_DQ_57 AD43 MDA57
DDR_A_DQ_58 AB41 MDA58
DDR_A_DQ_59 AA40 MDA59
DDR_A_DQ_60 AE42 MDA60
DDR_A_DQ_61 AE41 MDA61
DDR_A_DQ_62 AC39 MDA62
DDR_A_DQ_63 AB42 MDA63

LE82BLP-A2/BGA1226

DDR INTERFACE

MCHC

REV:1.3

BL (3/10) DDR_B

MAAB0 AW15 DDR_B_MA_0
MAAB1 BB15 DDR_B_MA_1
MAAB2 BA15 DDR_B_MA_2
MAAB3 AY15 DDR_B_MA_3
MAAB4 BA14 DDR_B_MA_4
MAAB5 BB14 DDR_B_MA_5
MAAB6 AW12 DDR_B_MA_6
MAAB7 BA13 DDR_B_MA_7
MAAB8 BB13 DDR_B_MA_8
MAAB9 AY13 DDR_B_MA_9
MAAB10 BA17 DDR_B_MA_10
MAAB11 AY12 DDR_B_MA_11
MAAB12 BA11 DDR_B_MA_12
MAAB13 AY27 DDR_B_MA_13
MAAB14 BB11 DDR_B_MA_14

16,17 -SWEB BB25 -SWEB DDR_B_WEB
16,17 -SCASB AW26 -SCASB DDR_B_CASB
16,17 -SRASB AY24 -SRASB DDR_B_RASB

16,17 SBAB0 BB17 SBAB0 DDR_B_BS_0
16,17 SBAB1 AY17 SBAB1 DDR_B_BS_1
16,17 SBAB2 AY11 SBAB2 DDR_B_BS_2

16,17 -CSB0 BA25 -CSB0 DDR_B_CSB_0
16,17 -CSB1 BA29 -CSB1 DDR_B_CSB_1
16,17 -CSB2 BA26 -CSB2 DDR_B_CSB_2
16,17 -CSB3 BA30 -CSB3 DDR_B_CSB_3

16,17 CKEB0 AW11 CKEB0 DDR_B_CKE_0
16,17 CKEB1 BC12 CKEB1 DDR_B_CKE_1
16,17 CKEB2 BA10 CKEB2 DDR_B_CKE_2
16,17 CKEB3 BB10 CKEB3 DDR_B_CKE_3

MODT_B0 BB27 DDR_B_ODT_0
MODT_B1 AW29 DDR_B_ODT_1
MODT_B2 BA27 DDR_B_ODT_2
MODT_B3 AY29 DDR_B_ODT_3

16 DCLKB0 AW31 DCLKB0 DDR_B_CK_0
16 -DCLKB0 AV31 -DCLKB0 DDR_B_CKB_0
16 DCLKB1 AU27 DCLKB1 DDR_B_CK_1
16 -DCLKB1 AT27 -DCLKB1 DDR_B_CKB_1
16 DCLKB2 AV32 DCLKB2 DDR_B_CK_2
16 -DCLKB2 AT32 -DCLKB2 DDR_B_CKB_2
16 DCLKB3 AR29 DCLKB3 DDR_B_CK_3
16 -DCLKB3 AU29 -DCLKB3 DDR_B_CKB_3
16 DCLKB4 AV29 DCLKB4 DDR_B_CK_4
16 -DCLKB4 AW27 -DCLKB4 DDR_B_CKB_4
16 DCLKB5 AN33 DCLKB5 DDR_B_CK_5
16 -DCLKB5 AP32 -DCLKB5 DDR_B_CKB_5

6.5/5/6.5 Length max=5.0"
MCH die to DIMM2/3 pin =7" max
FOR channel B

TP45 BA2 RESERVED_2
TP46 AW42 RESERVED_3
TP47 AN32 RESERVED_4
TP48 AM31 RESERVED_5
TP49 AG32 RESERVED_6
TP16 AF32 RESERVED_7
TP17 AP21 RESERVED_8
TP50 AA39 RESERVED_9

TP2 AM21 RESERVED_10
MCH_VREF AM6 DDR_VREF

SMRCOMPXPD AL4 DDR_RCOMPXPD
SMRCOMPXPU AL2 DDR_RCOMPXPU
SMRCOMPYPD BB40 DDR_RCOMPYPD
SMRCOMPYPU BA40 DDR_RCOMPYPU
SMRCOMPVOL AM8 DDR_RCOMPVOL
SMRCOMPVOH AM10 DDR_RCOMPVOH

DDR_B_DQS_0 AV6 DQSB0
DDR_B_DQSB_0 AU5 -DQSB0
DDR_B_DM_0 AR7 DMB0

DDR_B_DQ_0 AN7 MDB0
DDR_B_DQ_1 AN8 MDB1
DDR_B_DQ_2 AW5 MDB2
DDR_B_DQ_3 AW7 MDB3
DDR_B_DQ_4 AN5 MDB4
DDR_B_DQ_5 AN6 MDB5
DDR_B_DQ_6 AN9 MDB6
DDR_B_DQ_7 AU7 MDB7

DDR_B_DQS_1 AR12 DQSB1
DDR_B_DQSB_1 AP12 -DQSB1
DDR_B_DM_1 AW9 DMB1

DDR_B_DQ_8 AT11 MDB8
DDR_B_DQ_9 AU11 MDB9
DDR_B_DQ_10 AP13 MDB10
DDR_B_DQ_11 AR13 MDB11
DDR_B_DQ_12 AR11 MDB12
DDR_B_DQ_13 AU9 MDB13
DDR_B_DQ_14 AV12 MDB14
DDR_B_DQ_15 AU12 MDB15

DDR_B_DQS_2 AP15 DQSB2
DDR_B_DQSB_2 AR15 -DQSB2
DDR_B_DM_2 AW13 DMB2

DDR_B_DQ_16 AU15 MDB16
DDR_B_DQ_17 AV13 MDB17
DDR_B_DQ_18 AU17 MDB18
DDR_B_DQ_19 AT17 MDB19
DDR_B_DQ_20 AU13 MDB20
DDR_B_DQ_21 AM13 MDB21
DDR_B_DQ_22 AV15 MDB22
DDR_B_DQ_23 AW17 MDB23

DDR_B_DQS_3 AT24 DQSB3
DDR_B_DQSB_3 AU26 -DQSB3
DDR_B_DM_3 AP23 DMB3

DDR_B_DQ_24 AV24 MDB24
DDR_B_DQ_25 AT23 MDB25
DDR_B_DQ_26 AT26 MDB26
DDR_B_DQ_27 AP26 MDB27
DDR_B_DQ_28 AU23 MDB28
DDR_B_DQ_29 AW23 MDB29
DDR_B_DQ_30 AR24 MDB30
DDR_B_DQ_31 AN26 MDB31

DDR_B_DQS_4 AW39 DQSB4
DDR_B_DQSB_4 AU39 -DQSB4
DDR_B_DM_4 AU37 DMB4

DDR_B_DQ_32 AW37 MDB32
DDR_B_DQ_33 AV38 MDB33
DDR_B_DQ_34 AN36 MDB34
DDR_B_DQ_35 AN37 MDB35
DDR_B_DQ_36 AU35 MDB36
DDR_B_DQ_37 AR35 MDB37
DDR_B_DQ_38 AN35 MDB38
DDR_B_DQ_39 AR37 MDB39

DDR_B_DQS_5 AL35 DQSB5
DDR_B_DQSB_5 AL34 -DQSB5
DDR_B_DM_5 AM37 DMB5

DDR_B_DQ_40 AM35 MDB40
DDR_B_DQ_41 AM38 MDB41
DDR_B_DQ_42 AJ34 MDB42
DDR_B_DQ_43 AL38 MDB43
DDR_B_DQ_44 AR39 MDB44
DDR_B_DQ_45 AM34 MDB45
DDR_B_DQ_46 AL37 MDB46
DDR_B_DQ_47 AL32 MDB47

DDR_B_DQS_6 AG35 DQSB6
DDR_B_DQSB_6 AG36 -DQSB6
DDR_B_DM_6 AG39 DMB6

DDR_B_DQ_48 AG38 MDB48
DDR_B_DQ_49 AJ38 MDB49
DDR_B_DQ_50 AF35 MDB50
DDR_B_DQ_51 AF33 MDB51
DDR_B_DQ_52 AJ37 MDB52
DDR_B_DQ_53 AJ35 MDB53
DDR_B_DQ_54 AG33 MDB54
DDR_B_DQ_55 AF34 MDB55

DDR_B_DQS_7 AC36 DQSB7
DDR_B_DQSB_7 AC37 -DQSB7
DDR_B_DM_7 AD38 DMB7

DDR_B_DQ_56 AD36 MDB56
DDR_B_DQ_57 AC33 MDB57
DDR_B_DQ_58 AA34 MDB58
DDR_B_DQ_59 AA36 MDB59
DDR_B_DQ_60 AD34 MDB60
DDR_B_DQ_61 AF38 MDB61
DDR_B_DQ_62 AC34 MDB62
DDR_B_DQ_63 AA33 MDB63

LE82BLP-A2/BGA1226

NB_HEATSINK

NB_HEATSINK/[12SP2-040008-11R_12SP2-040008-12R_12SP2-040008-13R]

15,17 MODT_A[0..3] MODT_A[0..3]
16,17 MODT_B[0..3] MODT_B[0..3]
16 -DQSB[0..7] -DQSB[0..7]
16,17 MAAB[0..14] MAAB[0..14]
16 DMB[0..7] DMB[0..7]
16 MDB[0..63] MDB[0..63]
16 DQSB[0..7] DQSB[0..7]
15,17 MAAA[0..14] MAAA[0..14]
15 DMA[0..7] DMA[0..7]
15 MDA[0..63] MDA[0..63]
15 DQSA[0..7] DQSA[0..7]
15 -DQSA[0..7] -DQSA[0..7]

DDR18V
BC728 0.1u/6/Y5V/25V/Z
R74 1K/4/1
tracer min 10/10
MCH_VREF
R75 1K/4/1
BC26 0.1u/6/Y5V/25V/Z

R82 19.1/4/1 SMRCOMPXPD
tracer min 5/10(1:2)

DDR18V
R81 19.1/4/1 SMRCOMPXPU
BC28 0.1u/6/Y5V/25V/Z

R80 19.1/4/1 SMRCOMPYPD

DDR18V
R79 19.1/4/1 SMRCOMPYPU
BC27 0.1u/6/Y5V/25V/Z

DDR18V
R1593 1K/4/1
SMRCOMPVOH
SMRCOMPVOH=0.8XDDR18V
C321 0.1u/4/Y5V/16V/Z
R77 3K/4/1
SMRCOMPVOL
SMRCOMPVOL=0.2XDDR18V
R1594 1K/4/1
C322 0.1u/4/Y5V/16V/Z

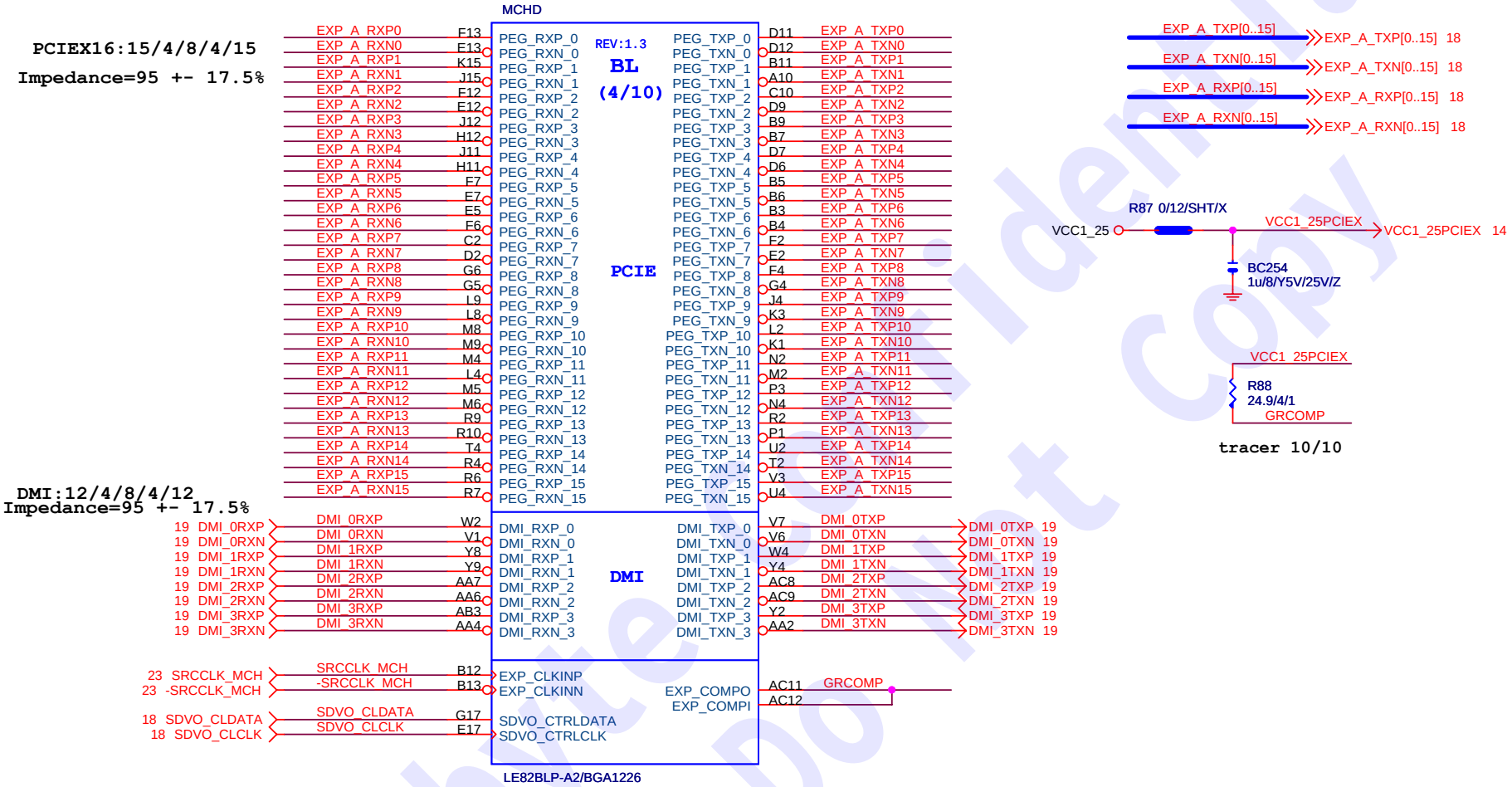
NB_HEATSINK1

NB_HEATSINK/[12SP2-040008-11R_12SP2-040008-12R_12SP2-040008-13R]/X

Gigabyte Technology			
Title: GMCH-DDRII			
Size: Custom	Document Number: P35-S3		Rev: 1.02
Date: Wednesday, August 15, 2007	Sheet 10 of 35		

PCIEX16:15/4/8/4/15
Impedance=95 +- 17.5%

DMI:12/4/8/4/12
Impedance=95 +- 17.5%



tracer 10/10

Gigabyte Technology			
Title: GMCH-PCI E & DMI			
Size: Custom	Document Number: P35-S3		Rev: 1.02
Date: Wednesday, August 15, 2007	Sheet 11 of 35		

FOR DDR2
FOR DDR3
0: BTX
1: ATX

MCHE
REV:1.3
BL (5/10)
VGA
MISC
LE82BLP-A2/BGA1226

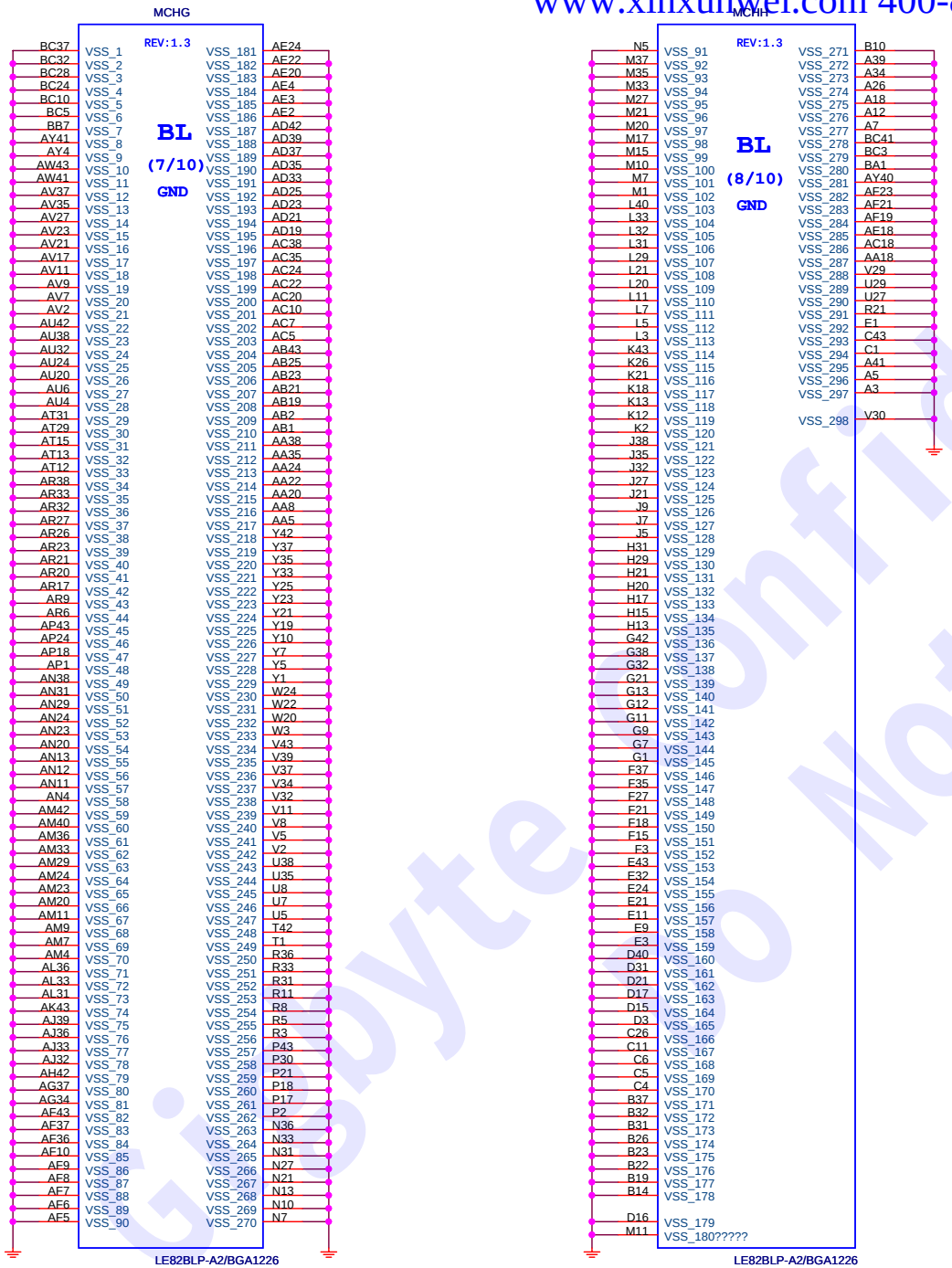
MCHF
REV:1.3
DDR3
BL (6/10)
NC
LE82BLP-A2/BGA1226

0.349V
CL_VREF:4/10
CL_RST:4/7
BW+ICH8 不要上(SAMPLE)
BW+ICH7 要上

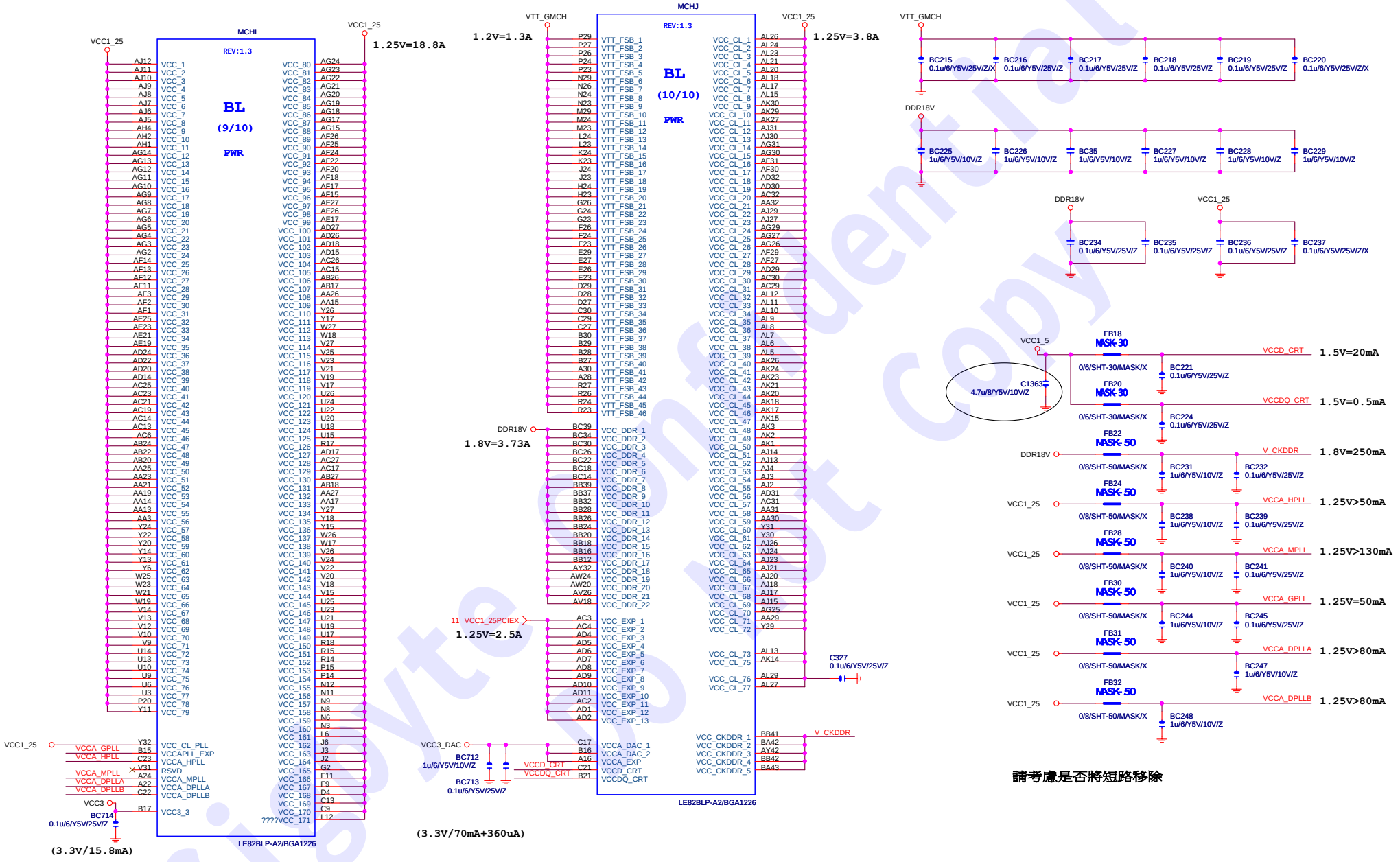
COM/GE/SC/RA/1/D/DUAL LAYOUT

Gigabyte Technology

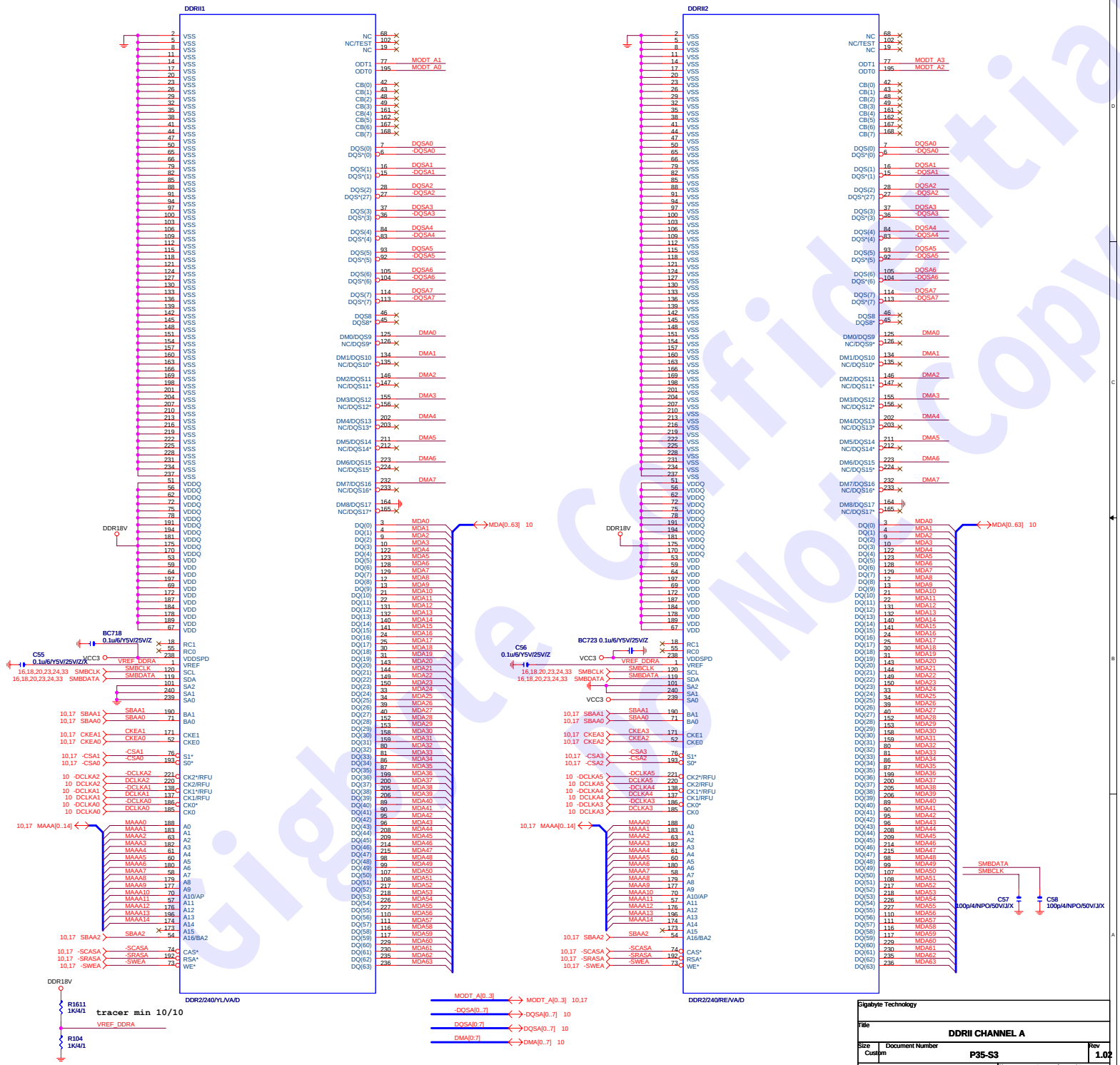
Title: GMCH-INTERNAL VGA
Size: B
Document Number: P35-S3
Rev: 1.02
Date: Wednesday, August 15, 2007
Sheet 12 of 35



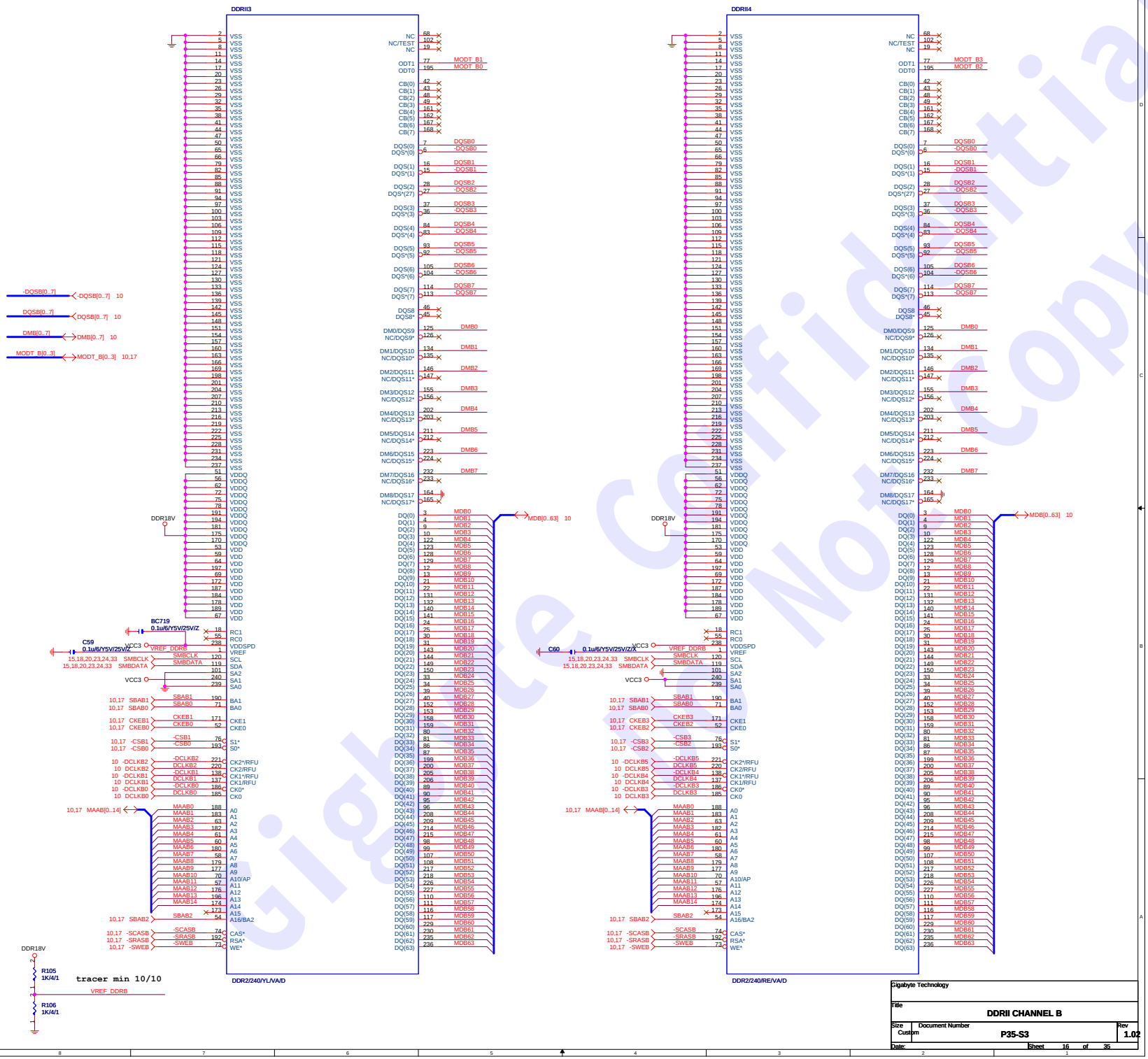
Gigabyte Technology			
Title: GMCH-GND			
Size: Custom	Document Number: P35-S3		Rev: 1.02
Date: Wednesday, August 15, 2007	Sheet 13 of 35		



Gigabyte Technology			
Title	GMCH-PWR		
Size: Custom	Document Number: P35-S3		Rev: 1.02
Date: Wednesday, August 15, 2007	Sheet 14 of 35		



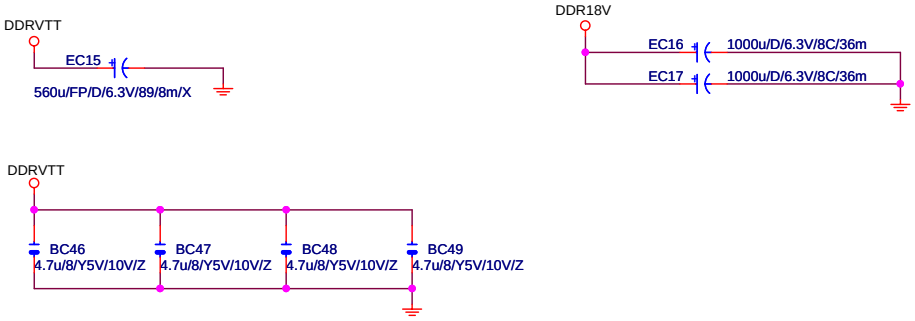
Gigabyte Technology			
Title	DDRII CHANNEL A		
Size: Custom	Document Number: P35-S3		Rev: 1.02
Date:	Sheet 15 of 35		



Gigabyte Technology		
Title	DDRII CHANNEL B	
Size: Custom	Document Number: P35-S3	Rev: 1.02
Date:	Sheet 16 of 35	

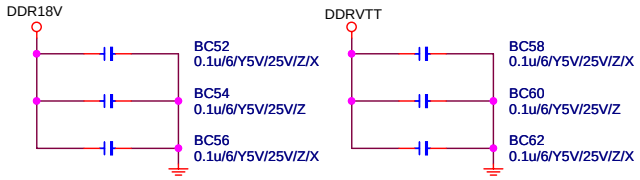
DDR TERMINATION CHANNEL A

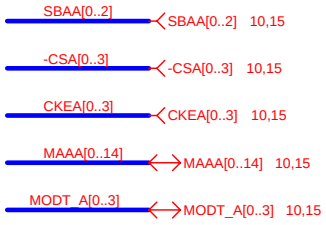
DDRVTT Decouple

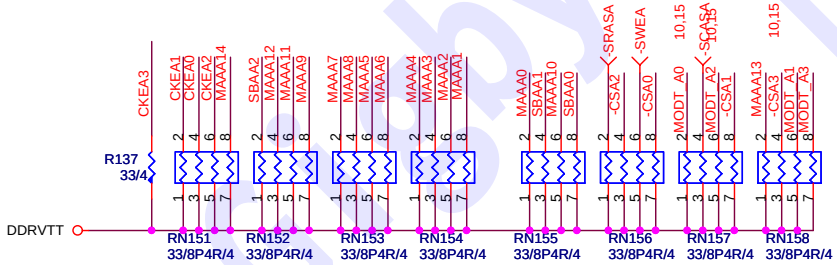


DDR18V Decouple

DDRVTT Decouple



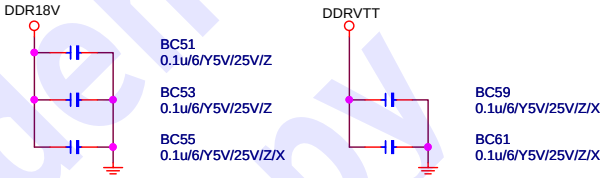


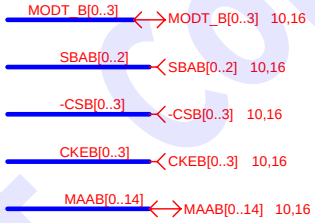


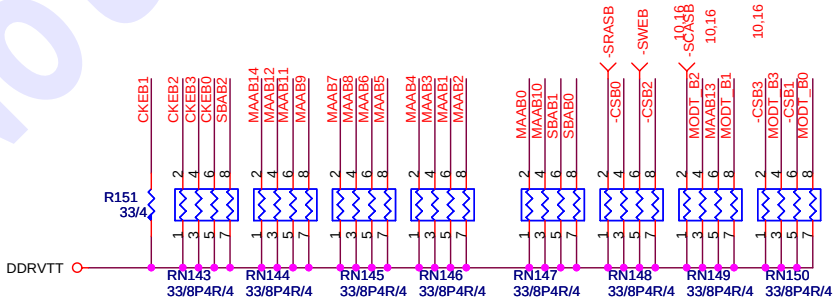
DDR TERMINATION CHANNEL B

DDR18V Decouple

DDRVTT Decouple







Gigabyte Technology		
Title: DDRII TERMINATOR		
Size: Custom	Document Number: P35-S3	Rev: 1.02
Date: Wednesday, August 15, 2007	Sheet 17 of 35	

+12V
EC68
EC173
CO-LAYOUT
470u/FP/D/16V/AC/X
470u/D/16V/8C/36m

VCC3
BC66 0.1u/6/Y5V/25V/Z/X
BC67 0.1u/6/Y5V/25V/Z/X
BC68 0.1u/6/Y5V/25V/Z/X
BC69 0.1u/6/Y5V/25V/Z/X

+12V
BC65 0.1u/6/Y5V/25V/Z/X
VCC3
EC63 1000u/D/6.3V/8C/36m

PCIESLOT-164DN-2
PCIE_16
3GIO_*16

PCIEX16:15/4/8/4/15

KEY

-PCIE_RST
C91 33p/4/NPO/50V/J

C1402 33p/4/NPO/50V/J/X
C1403 33p/4/NPO/50V/J/X

EXP_A_TXP[0..15] → EXP_A_TXP[0..15] 11
EXP_A_TXN[0..15] → EXP_A_TXN[0..15] 11

EXP_A_RXP[0..15] → EXP_A_RXP[0..15] 11
EXP_A_RXN[0..15] → EXP_A_RXN[0..15] 11

EXP_A_TXP0	C92	0.1u/4/Y5V/16V/Z	EXP_A_TXP0C
EXP_A_TXN0	C93	0.1u/4/Y5V/16V/Z	EXP_A_TXN0C
EXP_A_TXP1	C94	0.1u/4/Y5V/16V/Z	EXP_A_TXP1C
EXP_A_TXN1	C95	0.1u/4/Y5V/16V/Z	EXP_A_TXN1C
EXP_A_TXP2	C96	0.1u/4/Y5V/16V/Z	EXP_A_TXP2C
EXP_A_TXN2	C97	0.1u/4/Y5V/16V/Z	EXP_A_TXN2C
EXP_A_TXP3	C98	0.1u/4/Y5V/16V/Z	EXP_A_TXP3C
EXP_A_TXN3	C99	0.1u/4/Y5V/16V/Z	EXP_A_TXN3C
EXP_A_TXP4	C100	0.1u/4/Y5V/16V/Z	EXP_A_TXP4C
EXP_A_TXN4	C101	0.1u/4/Y5V/16V/Z	EXP_A_TXN4C
EXP_A_TXP5	C102	0.1u/4/Y5V/16V/Z	EXP_A_TXP5C
EXP_A_TXN5	C103	0.1u/4/Y5V/16V/Z	EXP_A_TXN5C
EXP_A_TXP6	C104	0.1u/4/Y5V/16V/Z	EXP_A_TXP6C
EXP_A_TXN6	C105	0.1u/4/Y5V/16V/Z	EXP_A_TXN6C
EXP_A_TXP7	C106	0.1u/4/Y5V/16V/Z	EXP_A_TXP7C
EXP_A_TXN7	C107	0.1u/4/Y5V/16V/Z	EXP_A_TXN7C
EXP_A_TXP8	C108	0.1u/4/Y5V/16V/Z	EXP_A_TXP8C
EXP_A_TXN8	C109	0.1u/4/Y5V/16V/Z	EXP_A_TXN8C
EXP_A_TXP9	C110	0.1u/4/Y5V/16V/Z	EXP_A_TXP9C
EXP_A_TXN9	C111	0.1u/4/Y5V/16V/Z	EXP_A_TXN9C
EXP_A_TXP10	C112	0.1u/4/Y5V/16V/Z	EXP_A_TXP10C
EXP_A_TXN10	C113	0.1u/4/Y5V/16V/Z	EXP_A_TXN10C
EXP_A_TXP11	C114	0.1u/4/Y5V/16V/Z	EXP_A_TXP11C
EXP_A_TXN11	C115	0.1u/4/Y5V/16V/Z	EXP_A_TXN11C
EXP_A_TXP12	C116	0.1u/4/Y5V/16V/Z	EXP_A_TXP12C
EXP_A_TXN12	C117	0.1u/4/Y5V/16V/Z	EXP_A_TXN12C
EXP_A_TXP13	C118	0.1u/4/Y5V/16V/Z	EXP_A_TXP13C
EXP_A_TXN13	C119	0.1u/4/Y5V/16V/Z	EXP_A_TXN13C
EXP_A_TXP14	C120	0.1u/4/Y5V/16V/Z	EXP_A_TXP14C
EXP_A_TXN14	C121	0.1u/4/Y5V/16V/Z	EXP_A_TXN14C
EXP_A_TXP15	C122	0.1u/4/Y5V/16V/Z	EXP_A_TXP15C
EXP_A_TXN15	C123	0.1u/4/Y5V/16V/Z	EXP_A_TXN15C

PCI-E REV:1.1--> 2.5GHZ

PCE-E X1(單向) BANDWITH=2.5GHz*(8b/10b)=2Gb/s=250MB/s

PCE-E X1(雙向) BANDWITH=2.5GHz*(8b/10b)X2=4Gb/s=500MB/s

PCE-E X16(單向) BANDWITH=2.5GHz*(8b/10b)X16=32Gb/s=4GB/s

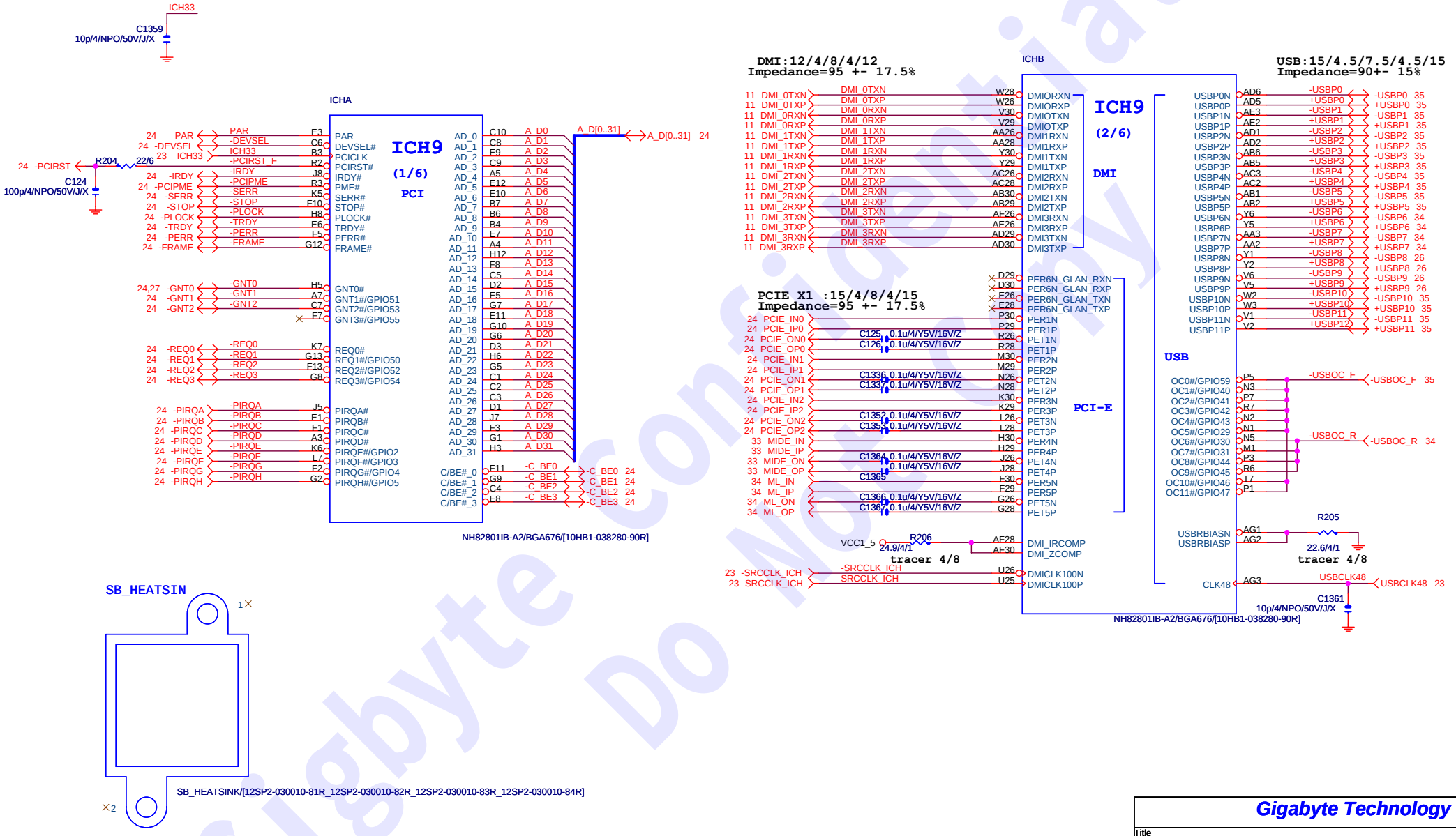
PCE-E X16(雙向) BANDWITH=2.5GHz*(8b/10b)X16X2=64Gb/s=8GB/s

PCI-E REV:2.0--> 5GHZ

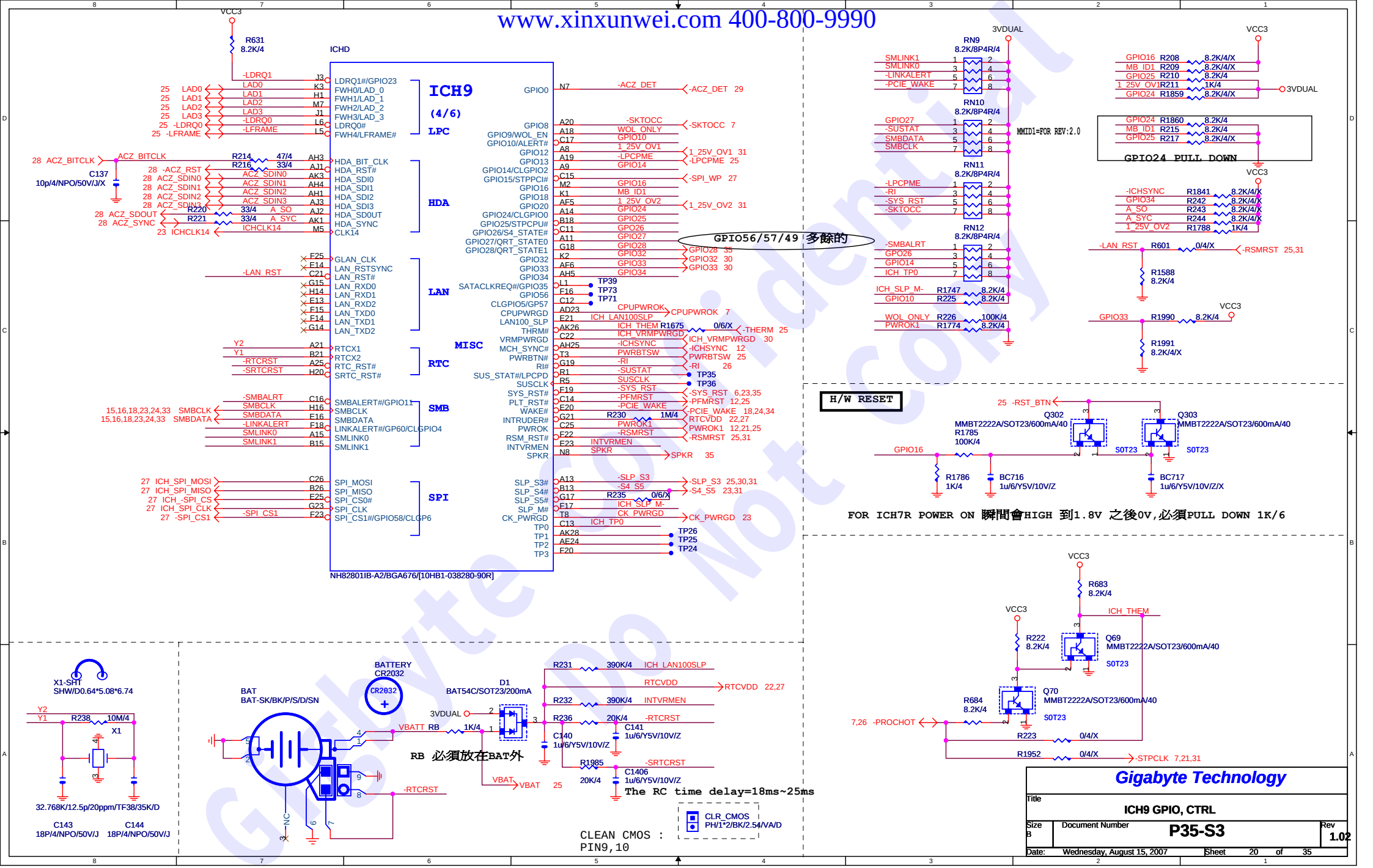
PCI-E/16X-164P/BU-297C/RIGHT PUSH

Gigabyte Technology

Title	PCI EXPRESS * 16	
Size: Custom	Document Number: P35-S3	Rev: 1.02
Date: Wednesday, August 15, 2007	Sheet 18 of 35	



Gigabyte Technology		
Title: ICH9-PCI, DMI, LAN, USB		
Size: B	Document Number: P35-S3	Rev: 1.02
Date: Wednesday, August 15, 2007	Sheet 19 of 35	



ICHC

ICH9 (3/6)

NH82801IB-A2/BGA676/[10HB1-038280-90R]

SATA

HOST

ICH9R

SATA:15/4/8/4/15
Impedance=95 +- 17.5%

SATARBIASN=4MIL

CL_VREF:4/10

GPIO49/DMI Termination Voltage
:LOW FOR DESKTOP

Can't SWAP PIN

The ICH8 integrated GbE LAN test mode is activated any time the ICH8 GPIO39 signal is not at a low logic level.

Workaround
Under investigation. Possible workaround is to use a weak pulldown resistor on GPIO39 to ensure signal is always low

SATAII0_1

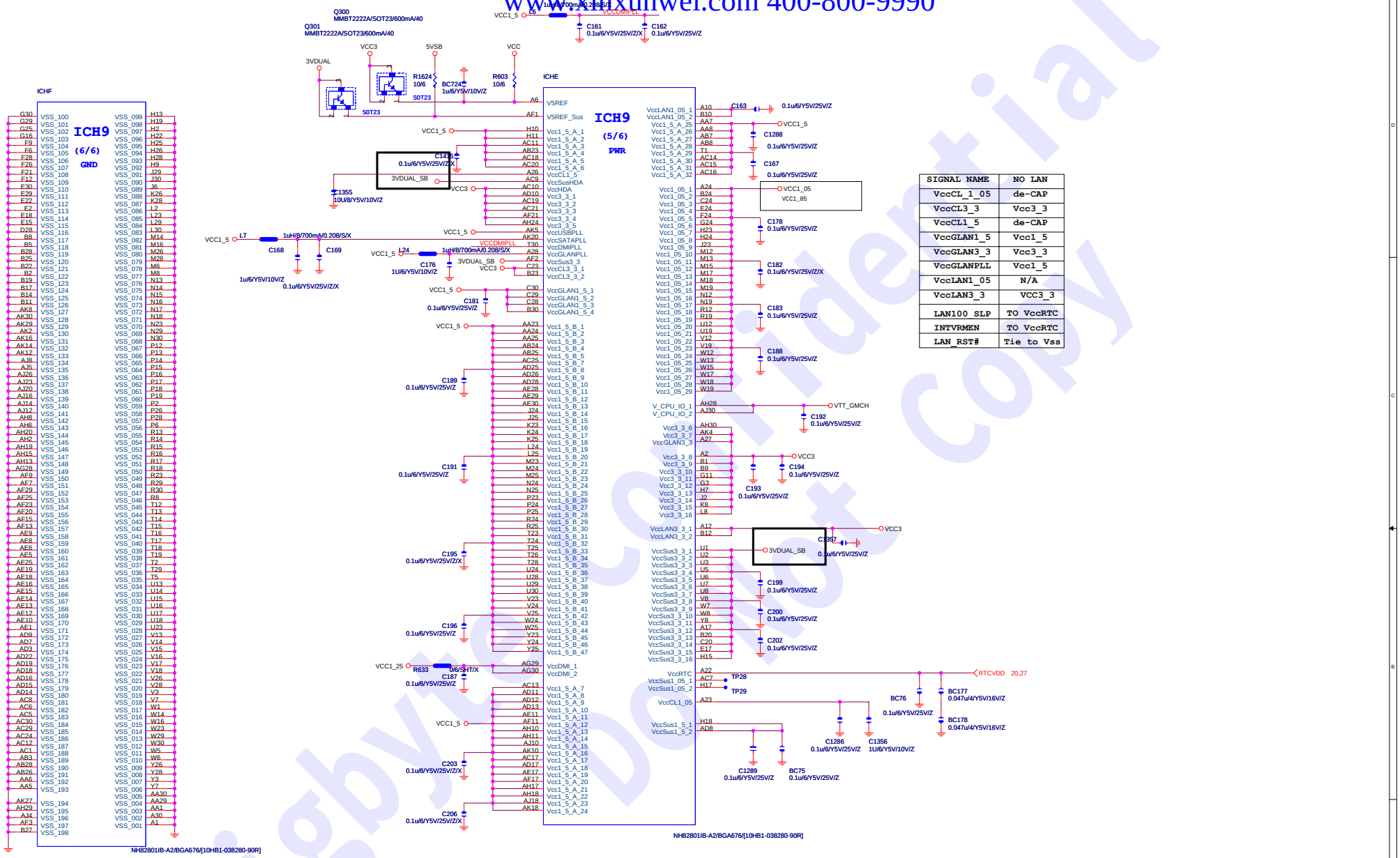
SATAII2_3

SATAII4_5

SATA2/7/YL/H/P/VA/D/2/B/GBT

SATA2/7/YL/H/P/VA/D/2/B/GBT/X

Gigabyte Technology			
Title	ICH9- SATA, FAN CTRL		
Size: Custom	Document Number: P35-S3		Rev: 1.02
Date: Wednesday, August 15, 2007		Sheet 21 of 35	



SIGNAL NAME	NO LAN
VccCL_1_05	de-CAP
VccCL3_3	Vcc3_3
VccCL1_5	de-CAP
VccGLAN1_5	Vcc1_5
VccGLAN3_3	Vcc3_3
VccGLANPLL	Vcc1_5
VccLAN1_05	N/A
VccLAN3_3	VCC3_3
LAN100_SLP	TO VccRTC
INTVRMEN	TO VccRTC
LAN_RST#	Tie to Vss

Gigabyte Technology			
Title: ICH9-PWR & GND			
Size: C	Document Number: P35-S3		Rev: 1.02
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CLK GEN CK505

U49

ICS9LPRS587EGLF-T/TSSOP64

50歐姆:[18/4/10/4/18]

50歐姆:[18/4/10/4/18]

50歐姆:[18/4/10/4/18]

50歐姆:[4/10]

50歐姆:[4/10]

50歐姆:[4/10]

GSEL=1,96Mhz from 14/15,SATACLK from 17/18
GSEL=0,SATACLK from 14/15,PCIECLK from 17/18

Trusted Mode

overclocking

Title	CK505 CLK GEN
Size	Custom
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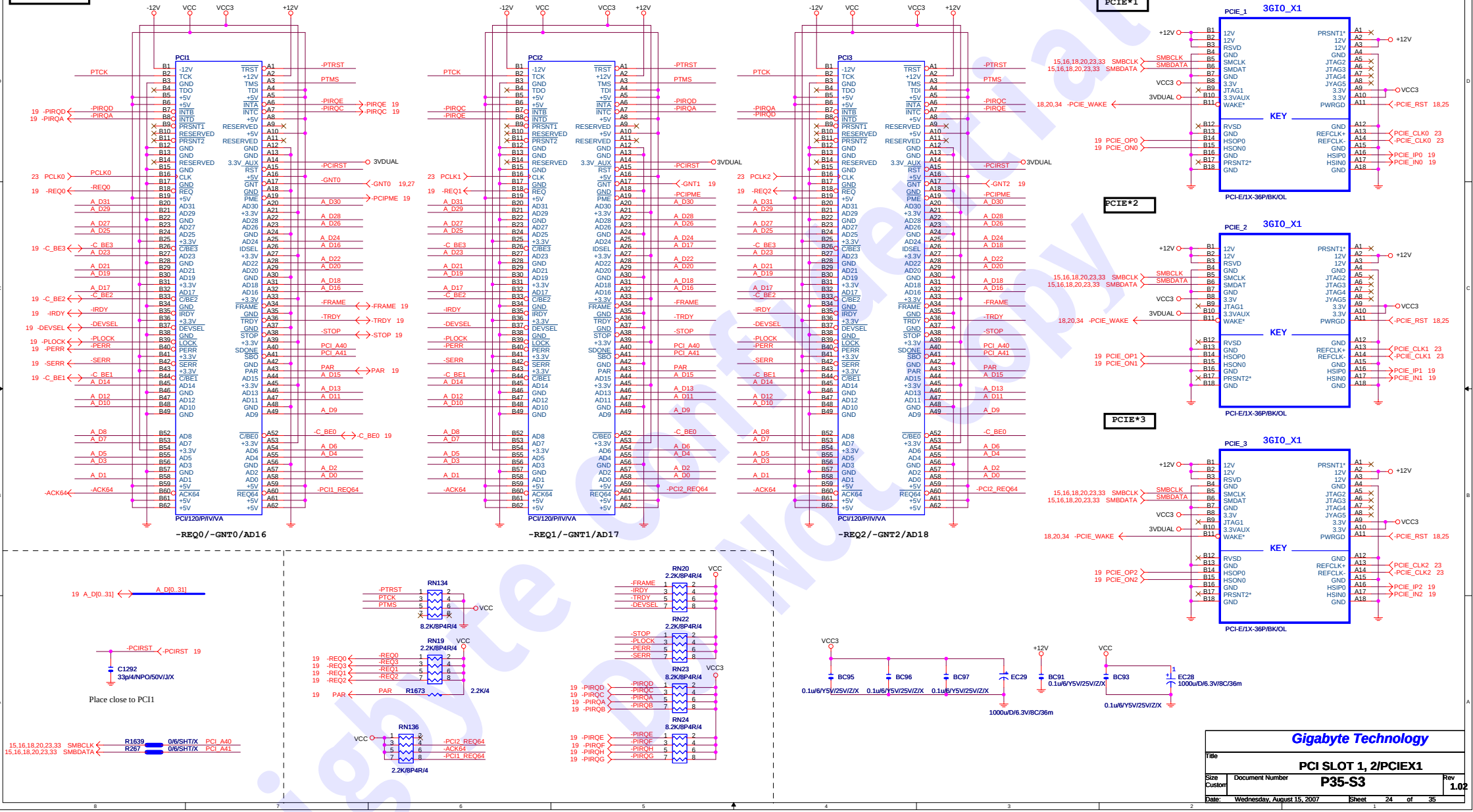
Gigabyte Technology

PCI1,2 SLOT



Title	PCI SLOT 1, 2/PCIEX1
Size	Custom
Document Number	P35-S3
Rev	1.02
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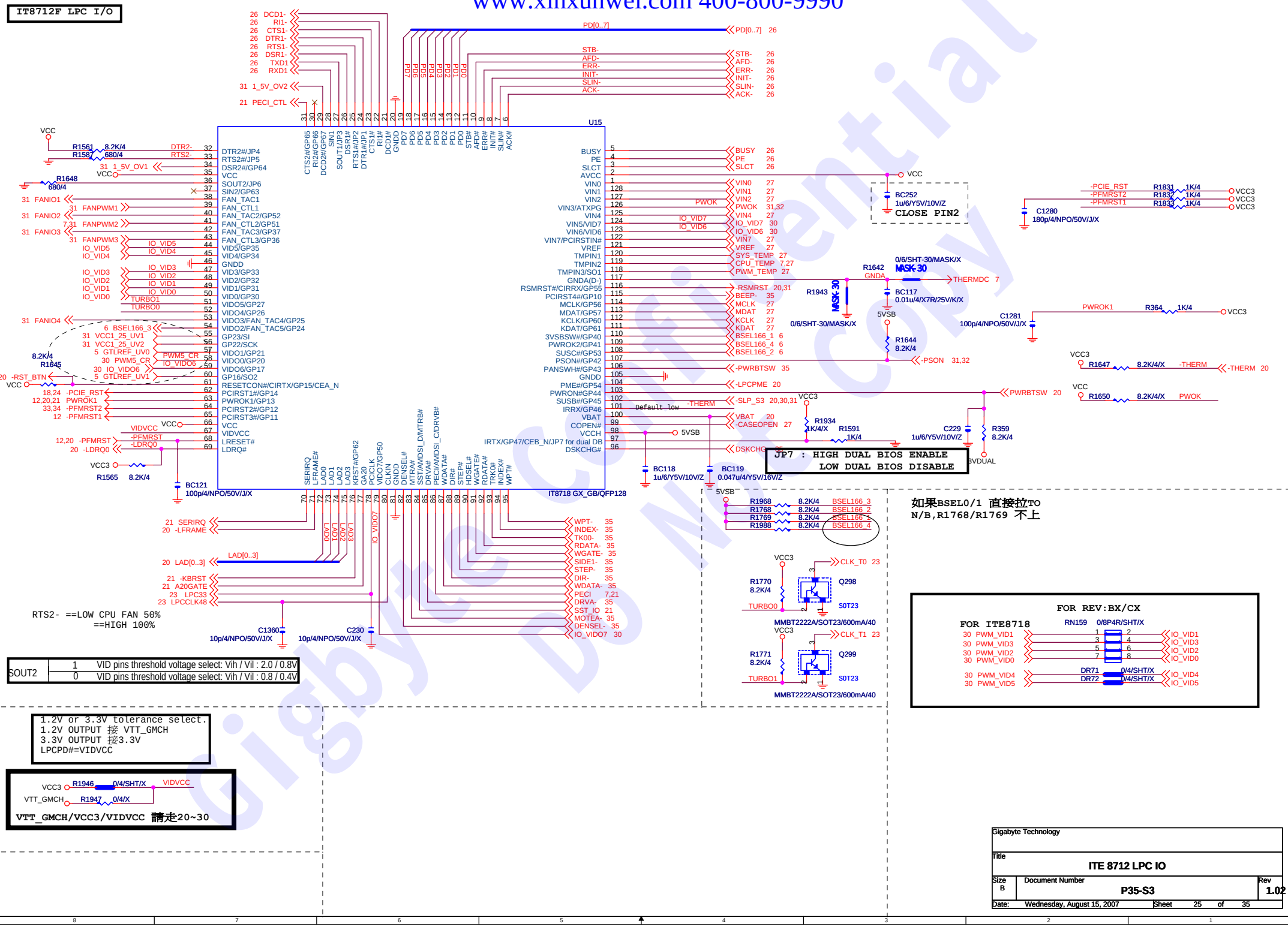
IT8712F LPC I/O



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

Gigabyte Technology		
Title	ITE 8712 LPC IO	
Size: B	Document Number: P35-S3	Rev: 1.02
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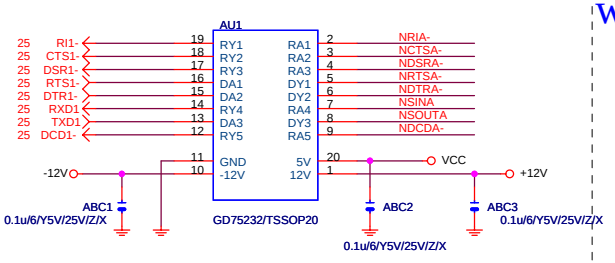
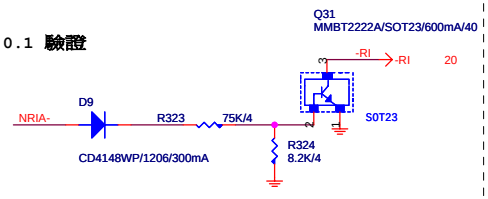
COMA

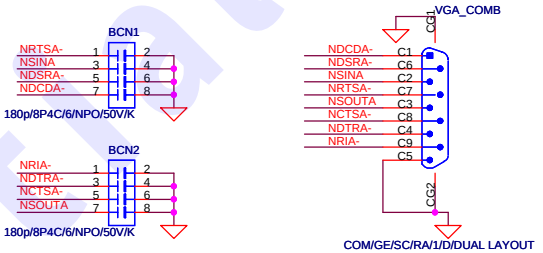


COM RI

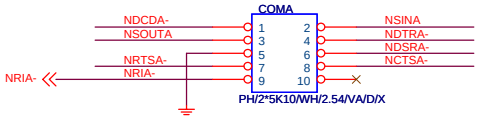
REV:0.1 驗證

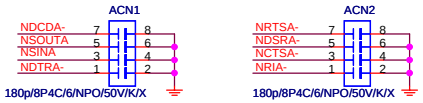


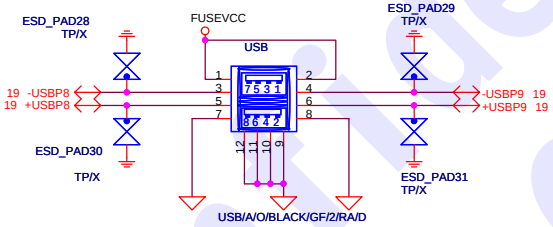
EXTERNAL COMB



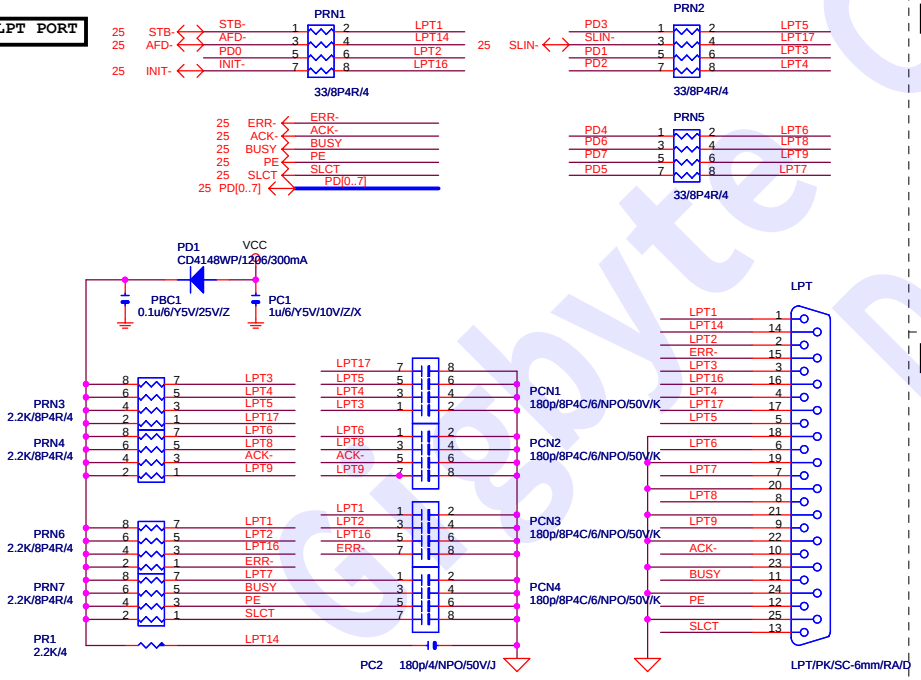
PLACE NEAR VGA_COM CONNECTOR



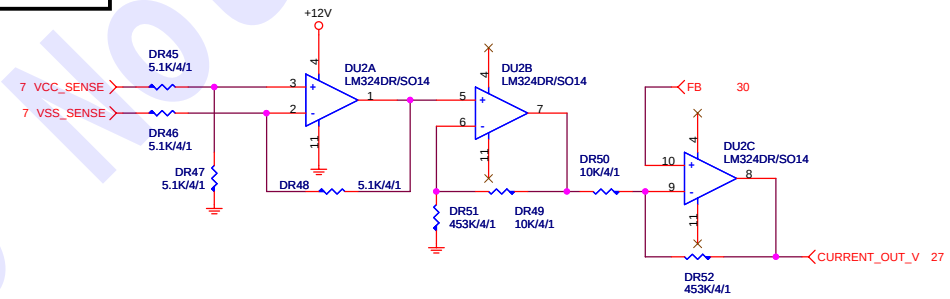




LPT PORT



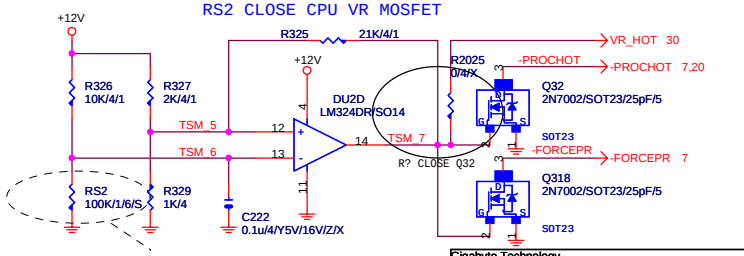
DYNAMIC CURRENT OC



-PROHOT

asserted at 131 degree
deasserted at 116 degree

RS2 CLOSE CPU VR MOSFET



CLOSE PWM HOT MOSFET

Gigabyte Technology		
Title: COM & LPT PORT		
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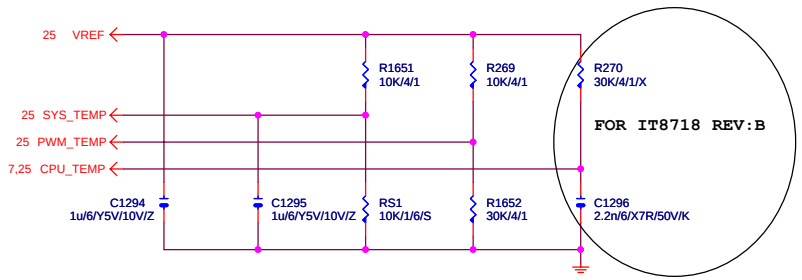
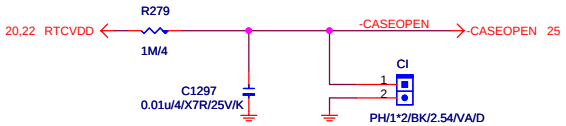
TEMP H/W MONITOR

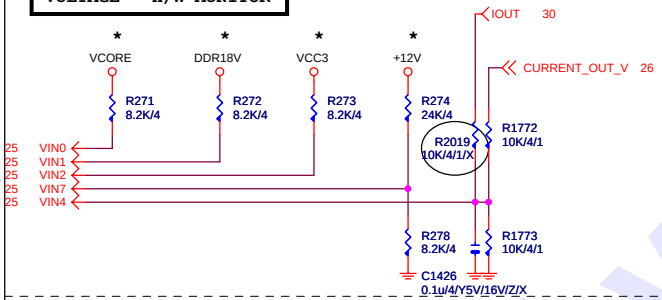


CASE OPEN

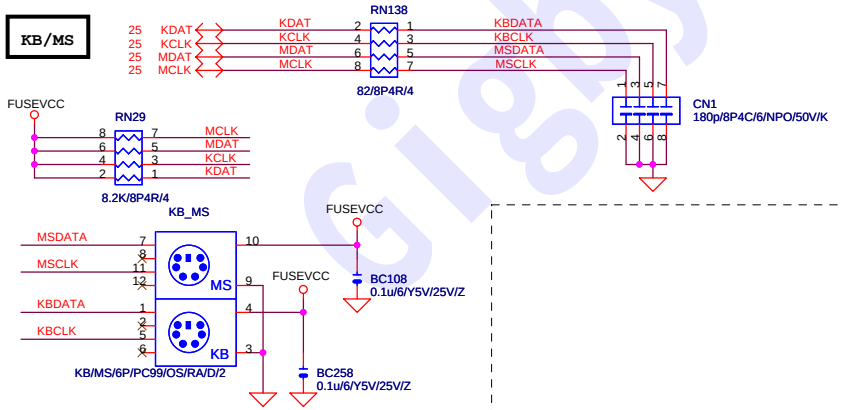


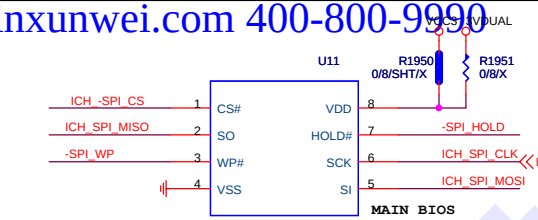
Case Open Circuits

VOLTAGE-- H/W MONITOR

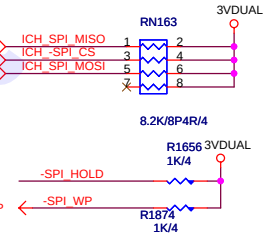


KB/MS

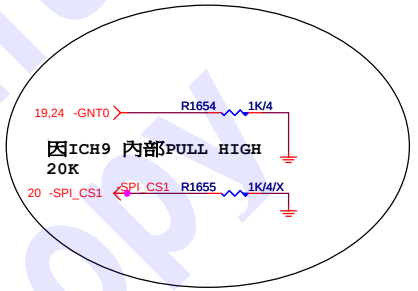


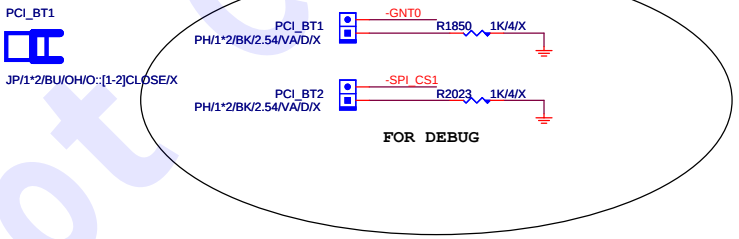


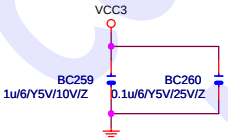
SST25VF080B-50-4C-S2AF/S/[10HP4-112580-11R_10HP4-172580-01R_10HP4-152580-11R]
MXIC(4K)/SST(4K)

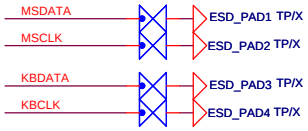


BOOT DEVICE	GNT0	CS1
SPI	0	1
PCI	1	0
FWH	1	1









Gigabyte Technology

Title: BIOS/HW-MONITOR/CI/KB/MS

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AZALIA CODEC

	ALC889A	ALC999
GPIO0	LOW	N/A
GPIO1	LOW	LOW

ALC889 Need Use 20K 0.1%

CR2 20K/4/0.1

For ALC883:CBC50=470P/6
For ALC880:CBC50=10/6

CBC50 470p/6/NPO/50V/J

CU1 ALC880/CMI9880

ALC889A-VB2-GR/LQFP48

Can Support Amp Out

For Power On-Off POP Noise

Can Support Amp Out

CRN1 22/8P4R/6/X

CRN2 22/8P4R/6/X

HDMI_AC

PH/2*8K12/BK/2.54/VA/D/X

Gigabyte Technology

Title: ALC889A

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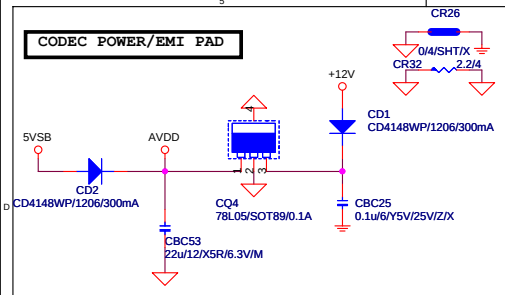
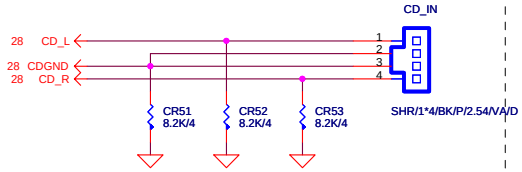
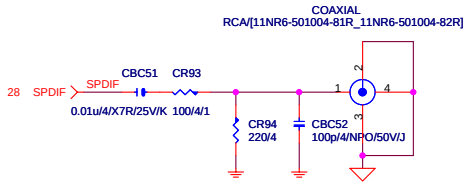
CODEC POWER/EMI PAD



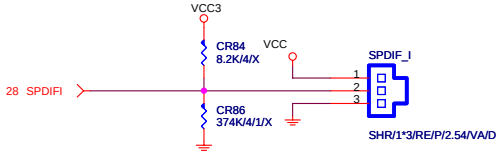
CO-LAYOUT

CD IN

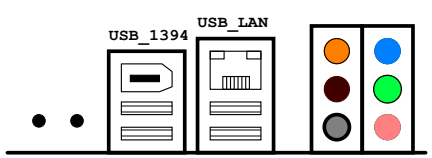


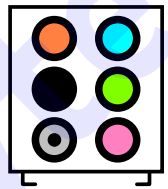


SPDIF



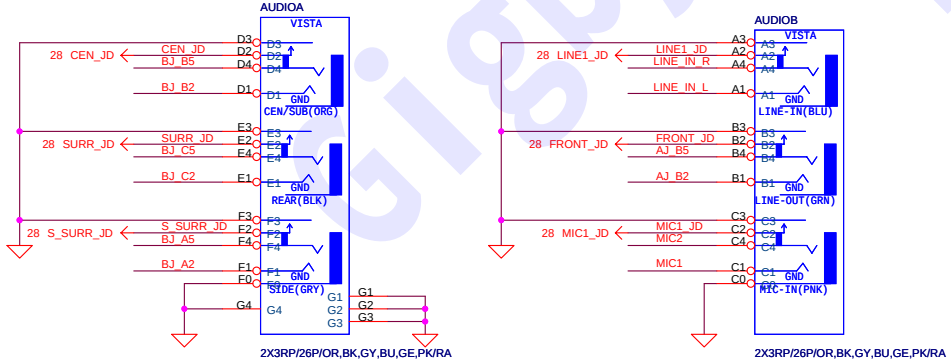
AZALIA JACK



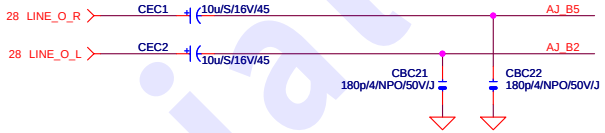


3RP/26P/OR,BK,GY,BU,GE,PK/RA/D/1/B

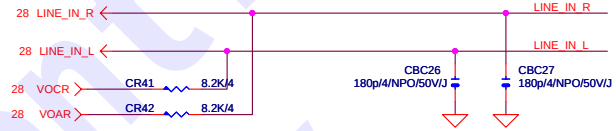
VISTA規範:REAR-->BLK,CEN/SUB-->ORG



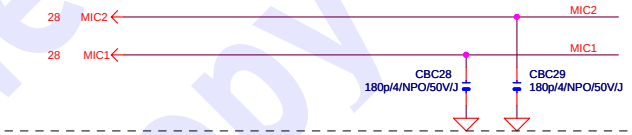
LINE-OUT



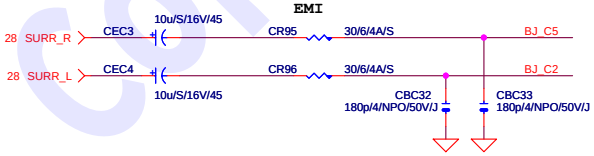
LINE-IN



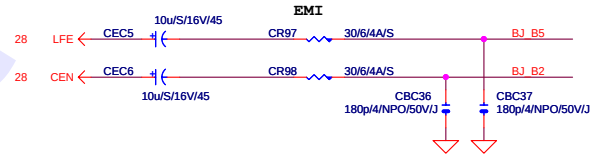
MIC-IN



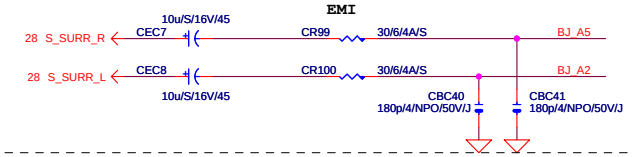
SURROUND



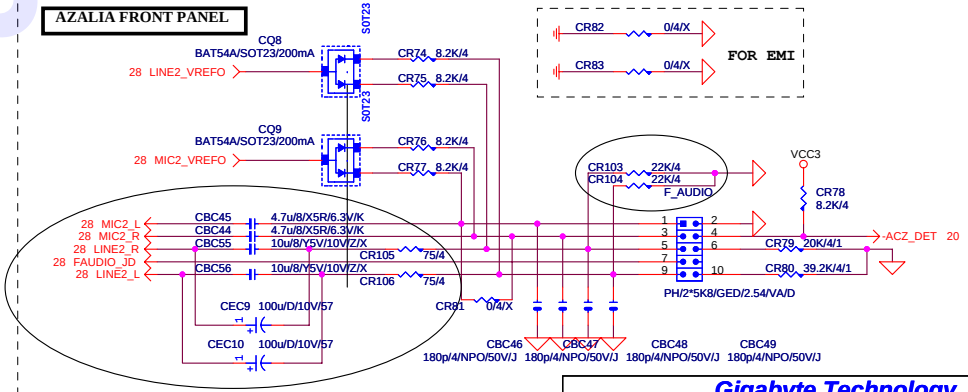
CEN/LFE



SURR BACK



AZALIA FRONT PANEL



Gigabyte Technology

Title: AUDIO JACK

Size: Custom | Document Number: P35-S3 | Rev: 1.02

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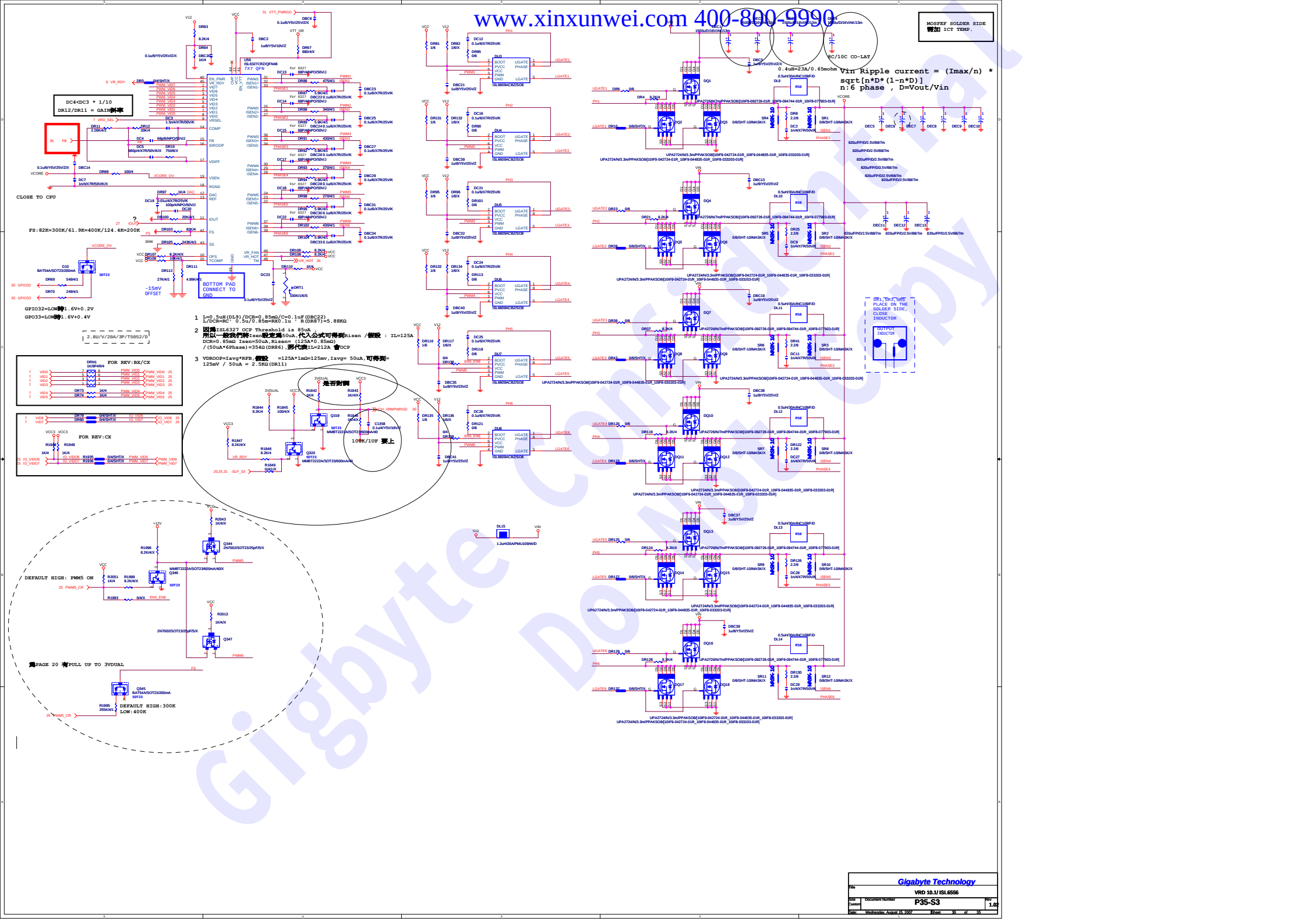

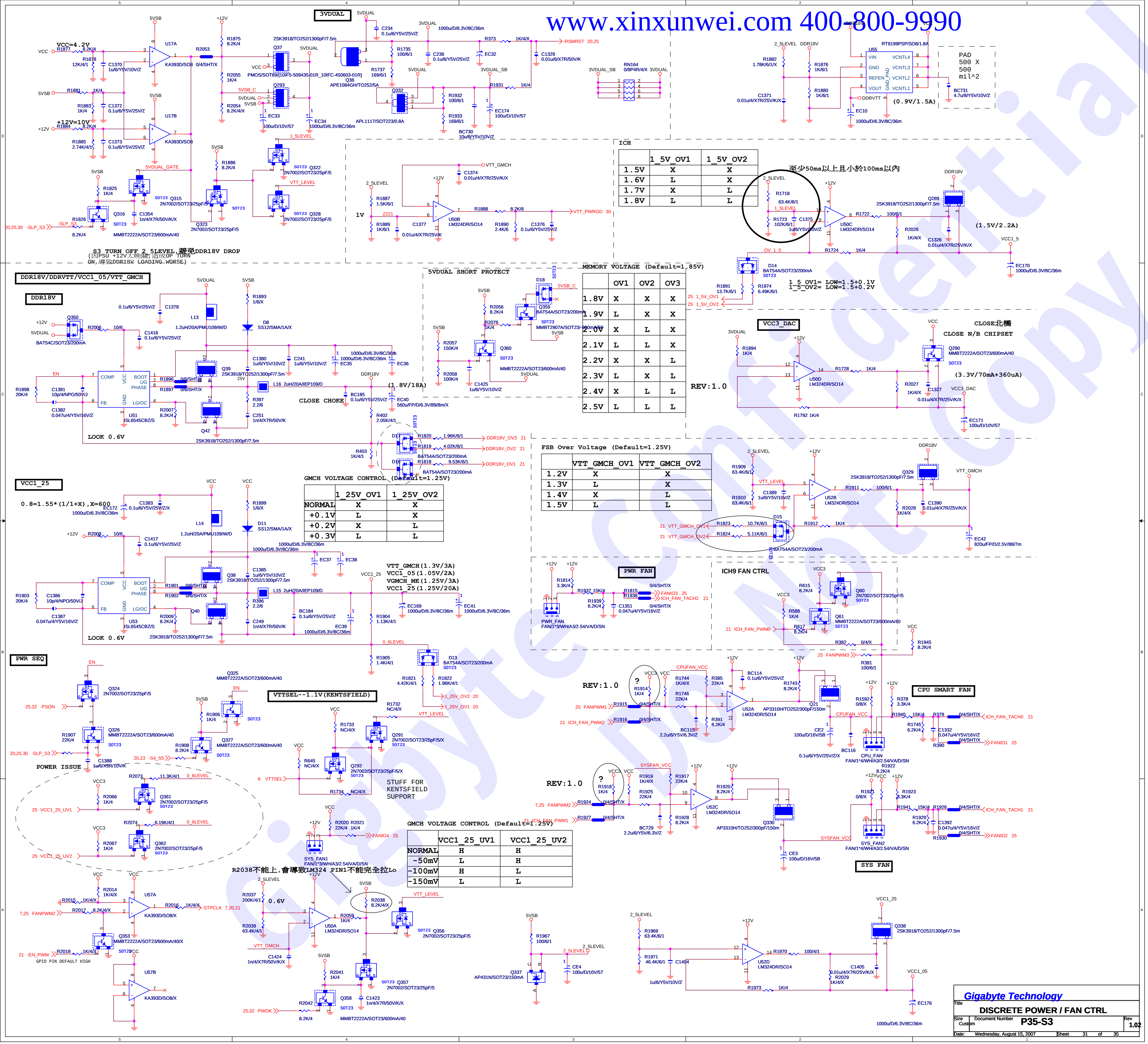

ICH

	1_5V_OV1	1_5V_OV2
1.5V	X	X
1.6V	L	X
1.7V	X	L
1.8V	L	L

MEMORY VOLTAGE (Default=1.85V)

	OV1	OV2	OV3
1.8V	X	X	X
1.9V	L	X	X
2.0V	X	L	X
2.1V	L	L	X
2.2V	X	X	L
2.3V	L	X	L
2.4V	X	L	L
2.5V	L	L	L

FSB Over Voltage (Default=1.25V)

	VTT_GMCH_OV1	VTT_GMCH_OV2
1.2V	X	X
1.3V	L	X
1.4V	X	L
1.5V	L	L

GMCH VOLTAGE CONTROL (Default=1.25V)

	1_25V_OV1	1_25V_OV2
NORMAL	X	X
+0.1V	L	X
+0.2V	X	L
+0.3V	L	L

GMCH VOLTAGE CONTROL (Default=1.25V)

	VCC1_25_UV1	VCC1_25_UV2
NORMAL	H	H
-50mV	L	H
-100mV	H	L
-150mV	L	L

Gigabyte Technology

Title: DISCRETE POWER / FAN CTRL

Size: Custom | Document Number: P35-S3 | Rev: 1.02

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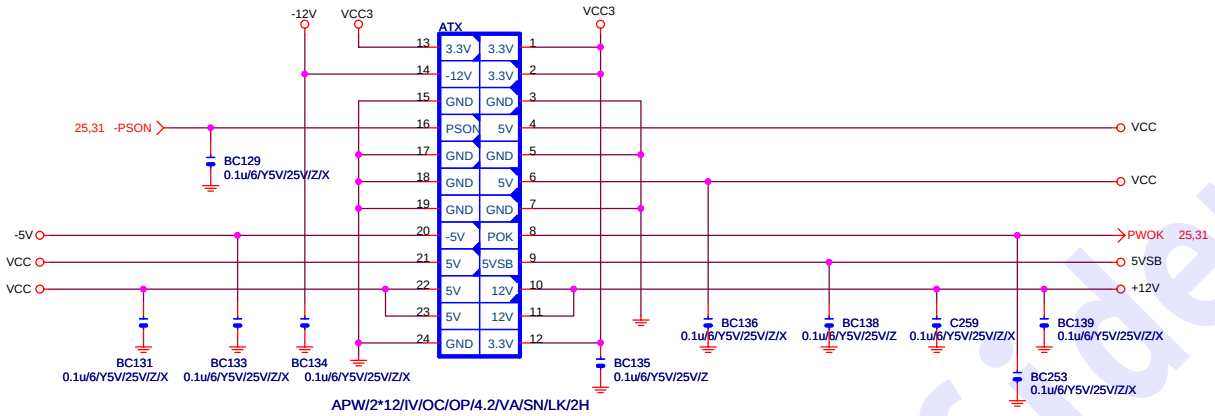
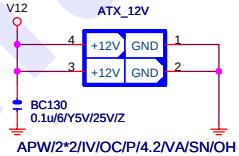
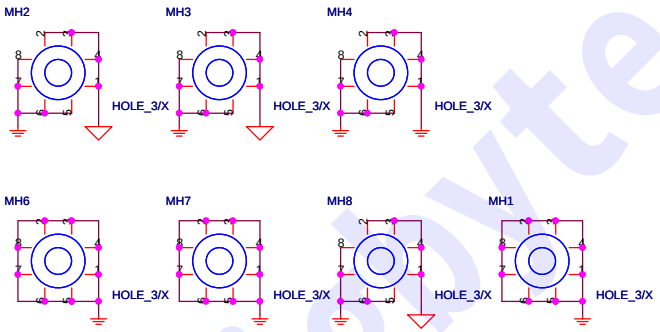
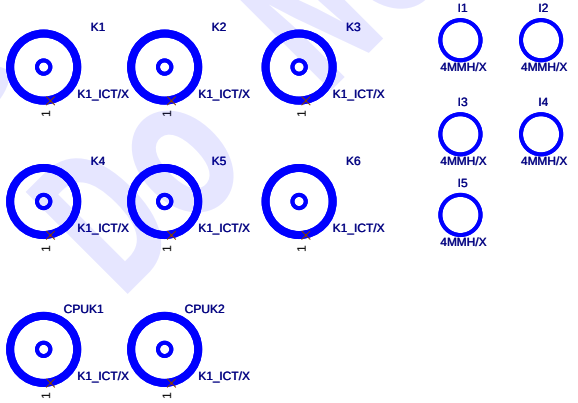
ATX POWER CONNECTOR





HOLE_3-2--->有鉛





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3.3V to 1.8V Voltage Regulator

APL1117/SOT223/0.8A

RQ1 · VCC_1.8V · VCC3 · RR21 100/4/1 · RR22 44.2/4/1 · RBC1 0.1u/4/Y5V/16V/Z · RBC2 10u/8/Y5V/10V/Z · REC1 100u/D/10V/57

68/4/1 FOR JMB368
VCC1.8V=2.1V

JMB368/LQFP40/X

RU2 · JMB368

JMB363/GBB363/3

RU1 · JMicron · JMB363 · LQFP 100 14x14

25,34 -PFMRST2 · RC3 100P/4/N/50V/X

VCC3 · RBC3 RBC4 RBC5 RBC6 RBC7 RBC8 0.1u/4/Y5V/16V/Z · RBC9 10u/8/Y5V/16V/Z
close to IC

VCC3 · RBC10 10u/8/Y5V/10V/Z · RBC11 0.1u/4/Y5V/16V/Z · RBC12 0.1u/4/Y5V/16V/Z · REC2 · RBC13 0.1u/4/Y5V/16V/Z
Close to pin42 and pin53 · 100u/D/10V/57

PCIE_REXT1 · SATA_REXT1 · SATA_REXT0 · RR31 12K/4/1 · RR32 12K/4/1 · RR33 12K/4/1
Near to PIN

VCC_1.8V · DVDD_1.8V · RBC14 RBC15 RBC16 RBC17 RBC18 0.1u/4/Y5V/16V/Z
close to IC

RR19 0/4/X · 25MCLK_IDE 23 · 會漏電 · XTALI · RC1 33P/4/NPO/50V/J · RR20 1M/4 · RX1 25M/20p/30ppm/49US/20/D · RC2 33P/4/NPO/50V/J · XTALO

PH_IORDY RR29 1K/4 · CSELA RR30 0/4/SHT/X · PH_DMARQ RR34 8.2K/4 · PH_INTRQ RR35 8.2K/4 · DD7A RR36 8.2K/4

VCC3 · RR23 8.2K/4 · RR24 8.2K/4 · SMB_CLK · SMB_DAT · RR25 0/4/X · RR26 0/4/X · SMBCLK 15,16,18,20,23,24 · SMBDATA 15,16,18,20,23,24

VCC_1.8V · ASVDD_1.8V · RBC19 RBC20 RBC21 10u/8/Y5V/10V/Z 0.1u/4/Y5V/16V/Z
Close to pin58

VCC_1.8V · ASVDD_1.8V · RBC22 RBC23 RBC24 10u/8/Y5V/10V/Z 0.1u/4/Y5V/16V/Z
Close to pin47

VCC_1.8V · APVDD_1.8V · RBC25 RBC26 0.1u/4/Y5V/16V/Z 10u/8/Y5V/10V/Z
CLOSE TO pin22

VCC_1.8V · APVDD_1.8V · RBC27 RBC28 10u/8/Y5V/10V/Z 0.1u/4/Y5V/16V/Z · RBC29 1n/4/X7R/50V/K
close to pin17

IDE Connector

IDE1 · BH/2*20K20/GEL/SHN/2.54/VA/D/G

(#20 key-pin) · (#28 CSEL) · (#32 IOCS16)

VCC · RR37 1K/4 · PH_RESETnA · VCC3 · RR38 8.2K/4 · RQ3 MMBT2222A/SOT23/600mA/40 · S0T23 · RESETnA · -PFMRST2 RR43 0/4/X
OLNY FOR JMB368

DASPnXA · HD_LEDn · RD1 BAW56/SOT23/300mA · VCC3 · MMBT2222A/SOT23/600mA/40 · RR27 1K/4 · RQ2 · -HDLED · -HDLED 35 · RC4 180P/4/N/50V/X · RR28 0/4/X

SATA Connector

SATA:15/4/8/4/15
Impedance=95 +- 17.5%

SATA_TXP0 RC7 0.01u/4/X7R/25V/K · SATA_TXN0 RC9 0.01u/4/X7R/25V/K · SATA_RXN0 RC11 0.01u/4/X7R/25V/K · SATA_RXP0 RC13 0.01u/4/X7R/25V/K
RC8 0.01u/4/X7R/25V/K · RC10 0.01u/4/X7R/25V/K · RC12 0.01u/4/X7R/25V/K · RC14 0.01u/4/X7R/25V/K
SATA_RXP1 · SATA_RXN1 · SATA_TXN1 · SATA_TXP1

CSATAII0_1
SATA2/7/PU/H/P/VA/D/2/B/GBT

JMB368 REMOVE

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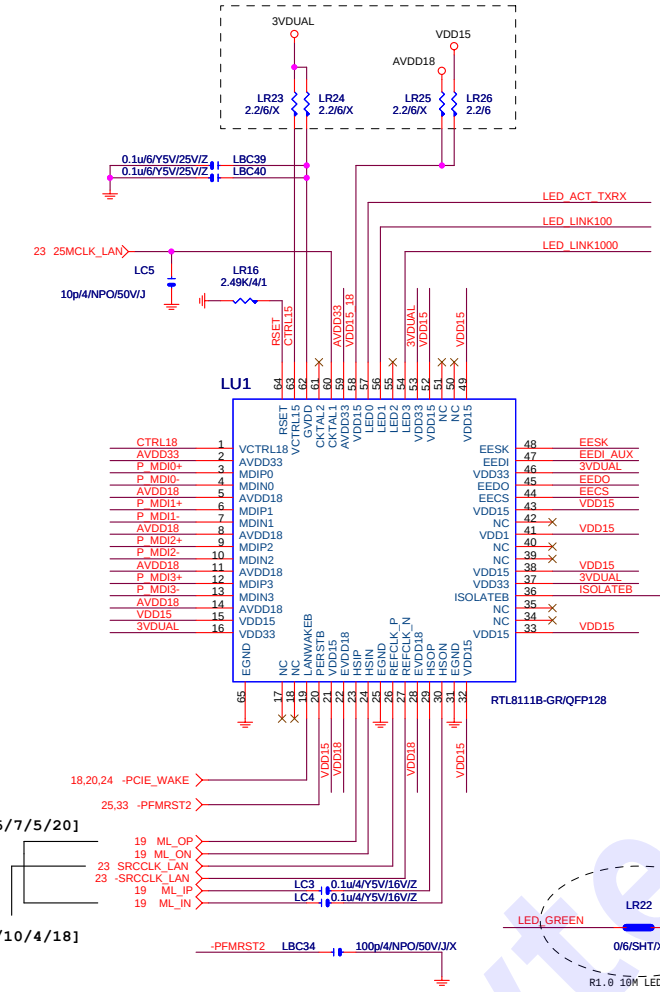
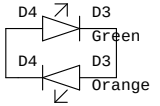
PCIE-1G LAN

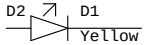
RTL8111C



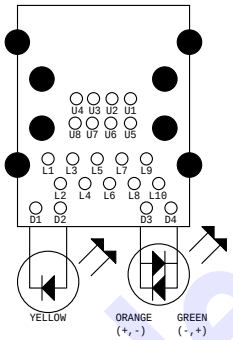
Dual Color LED



Single Color LED

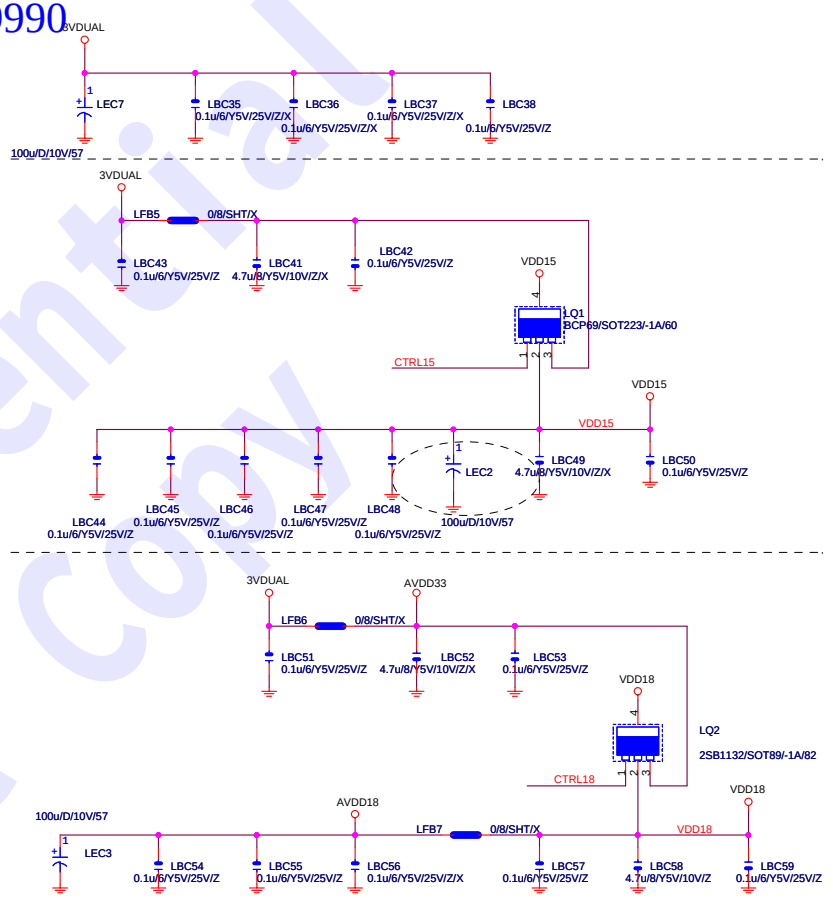


P35-152-19W9



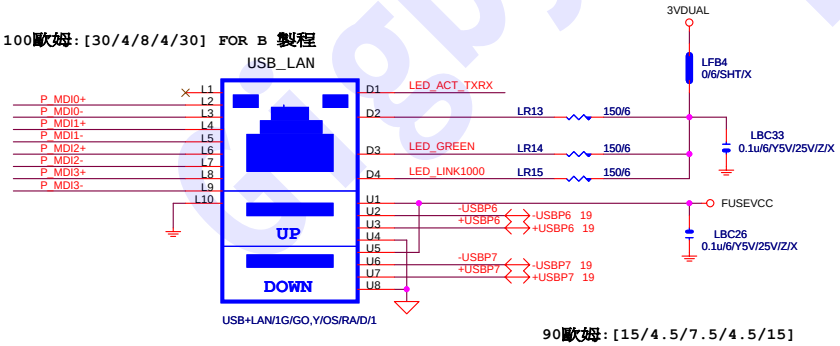
Power domain chart

	RTL8111B / RTL8101E	RTL8111C
AVDD33	3.3V	3.3V
AVDD18	1.8V	1.2V
EVDD18	1.8V	1.2V
DVDD15	1.5V	1.2V



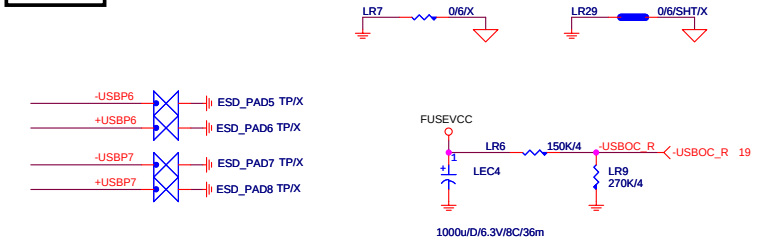
USB_LAN CONNECTOR

LAN 100歐姆:[30/4/8/4/30] FOR B 製程



90歐姆:[15/4.5/7.5/4.5/15]

USB_LAN



Gigabyte Technology

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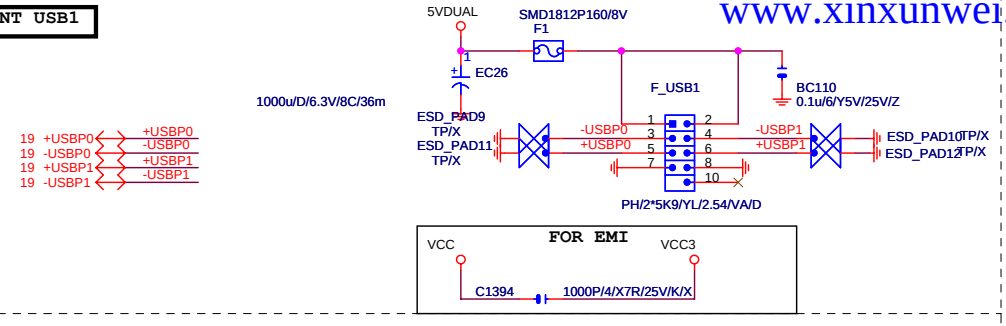
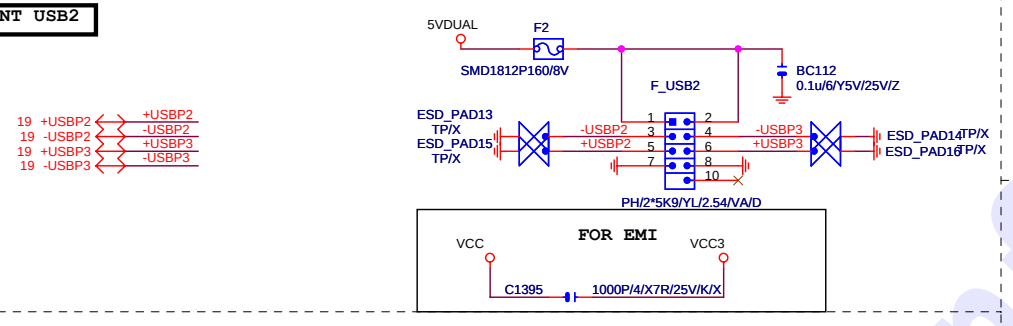
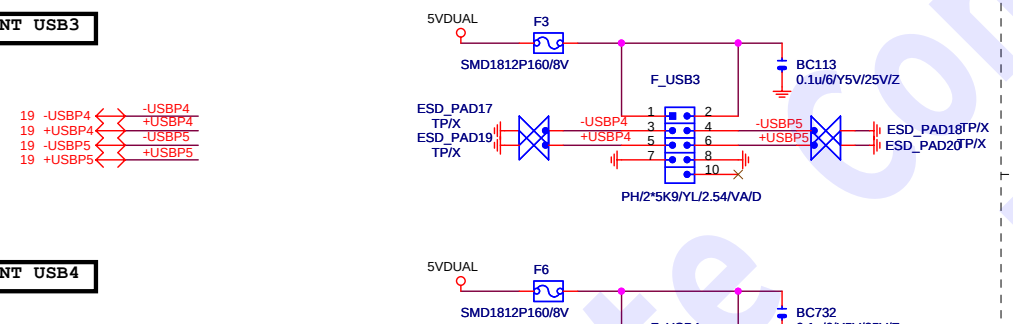
FRONT USB1



FRONT USB2



FRONT USB3



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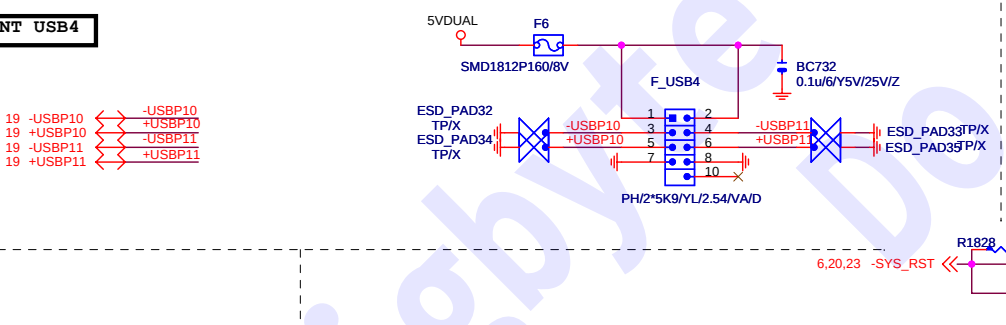
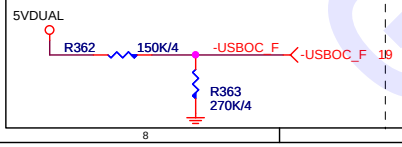
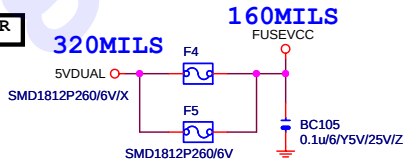


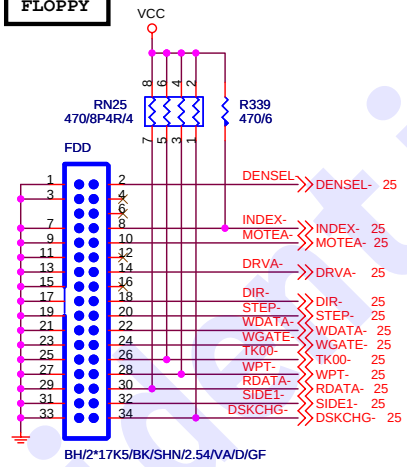
FRONT USB OC1



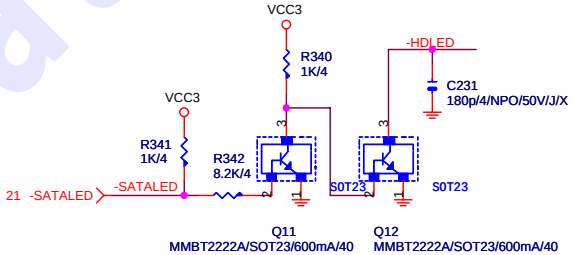
USB POWER

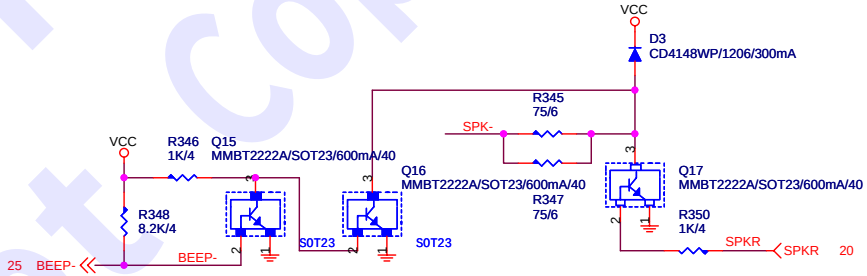


FLOPPY

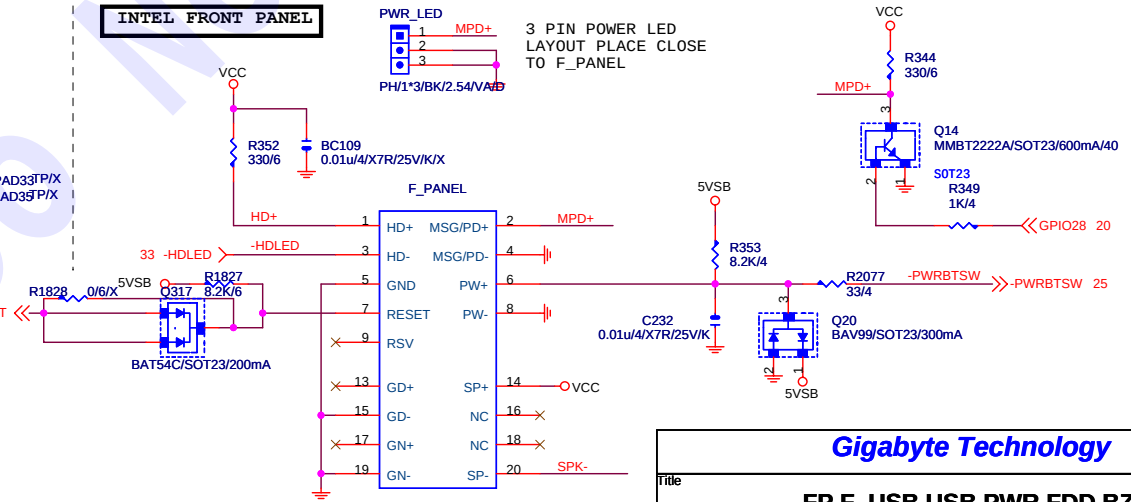


SATA LED





INTEL FRONT PANEL



Gigabyte Technology		
Title: FP,F_USB,USB PWR,FDD,BZ		
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