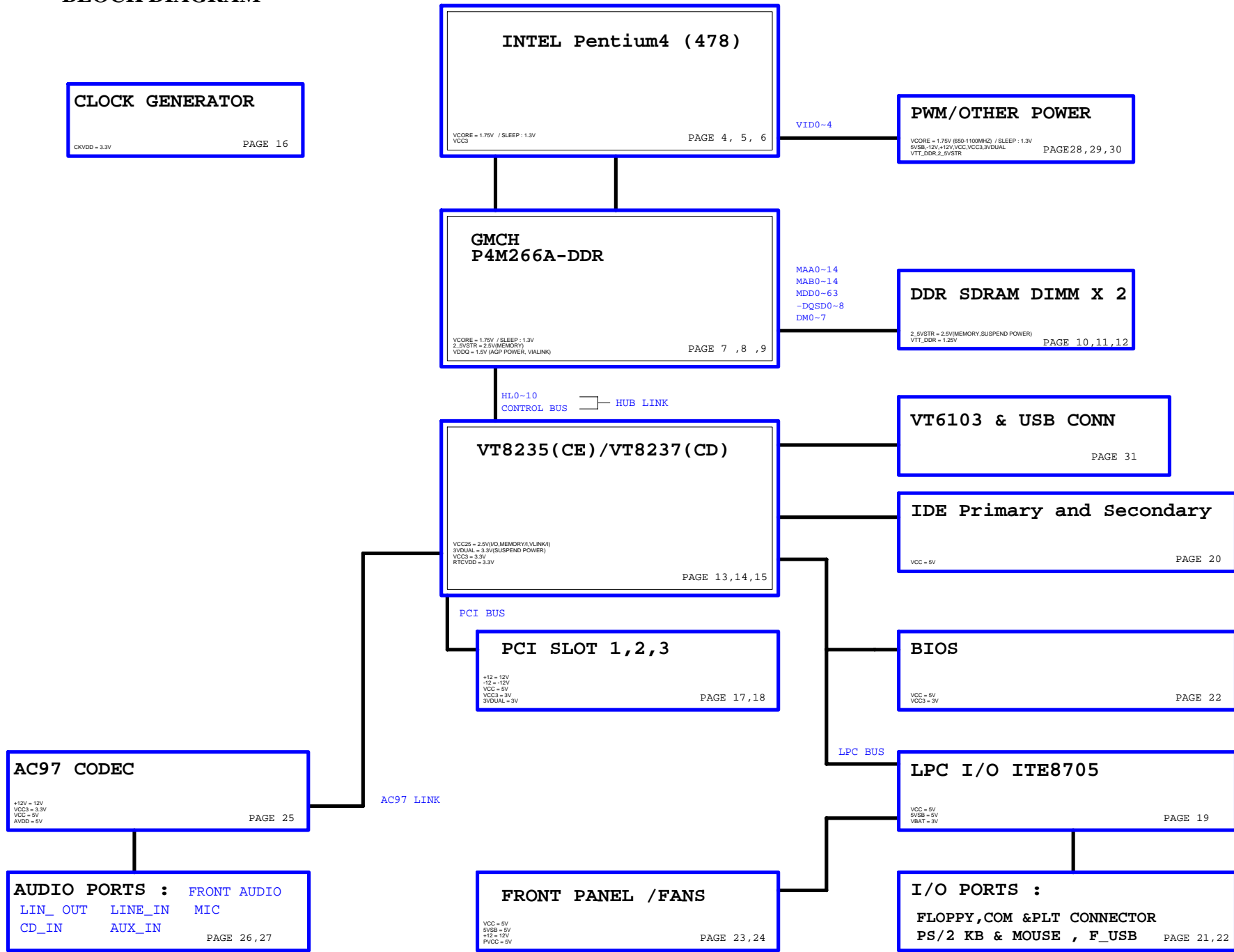
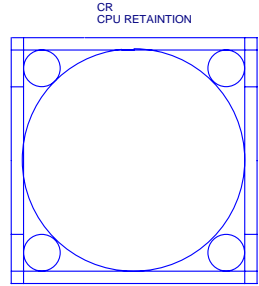
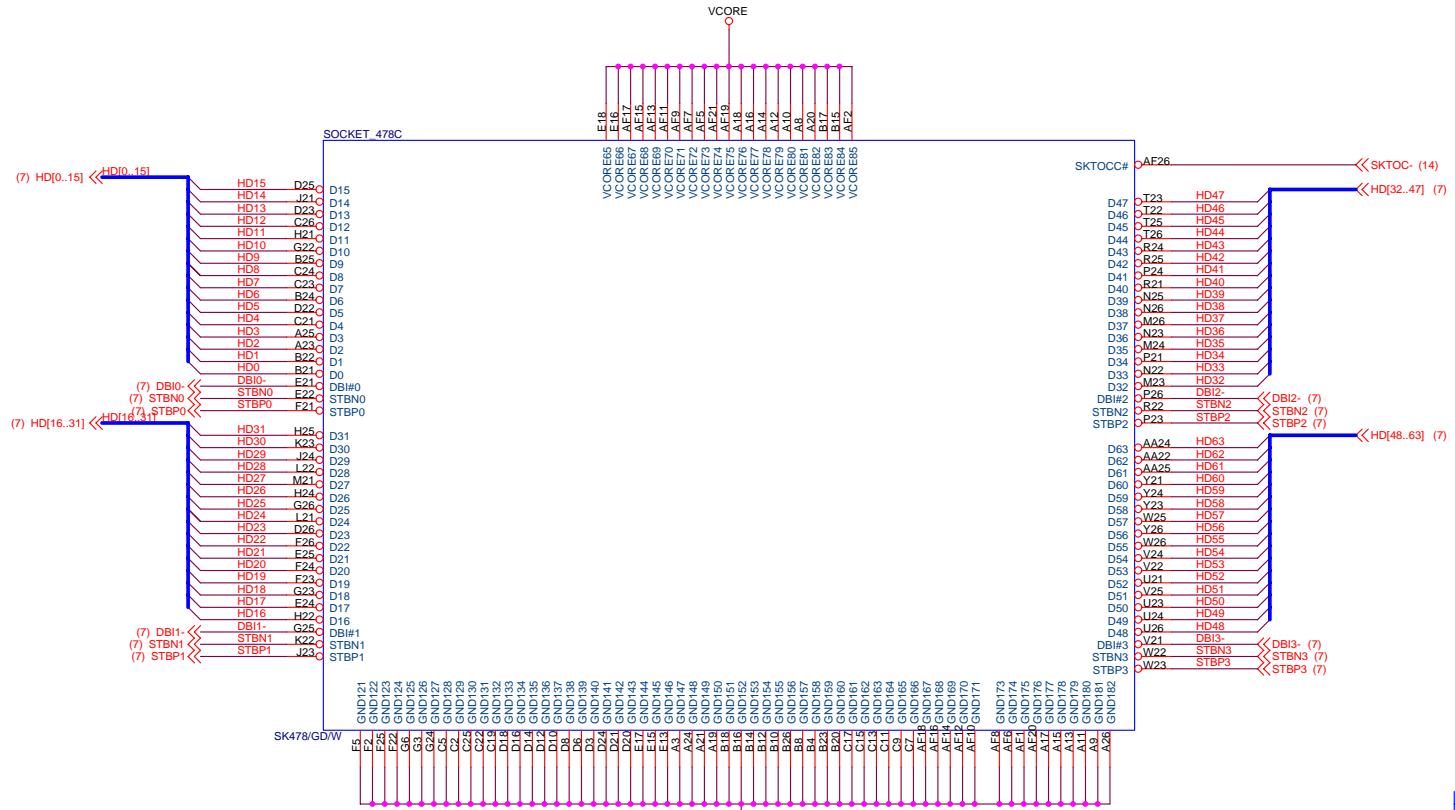
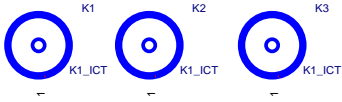


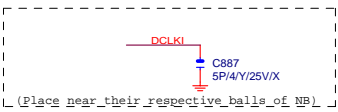
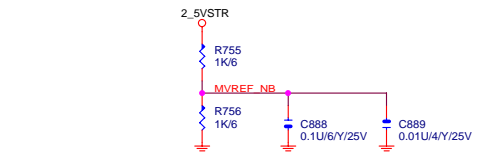
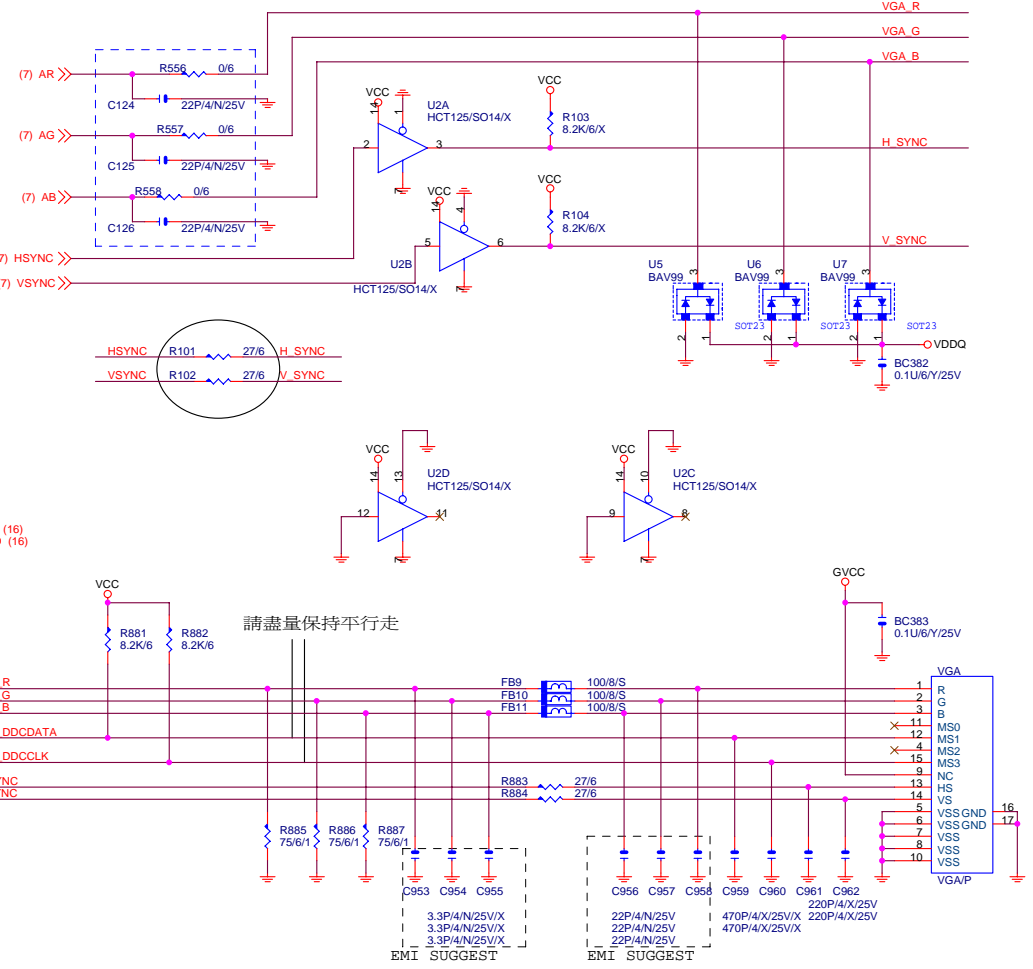
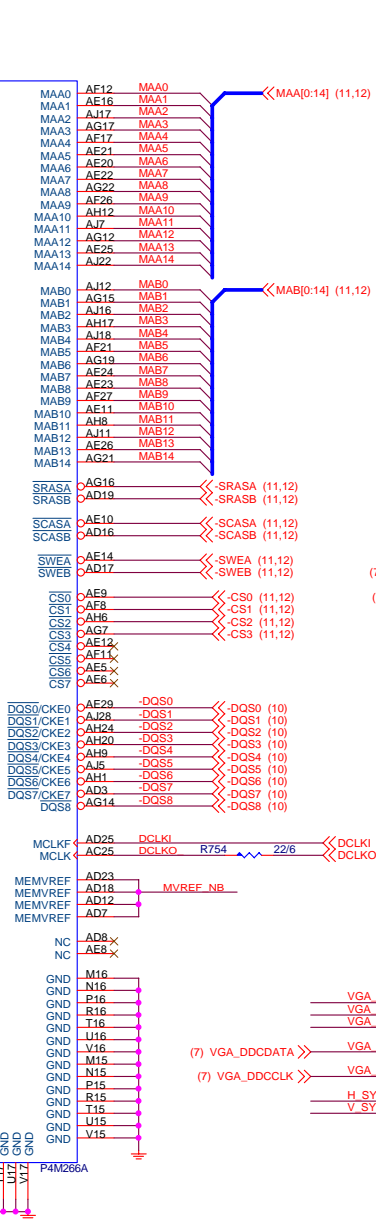
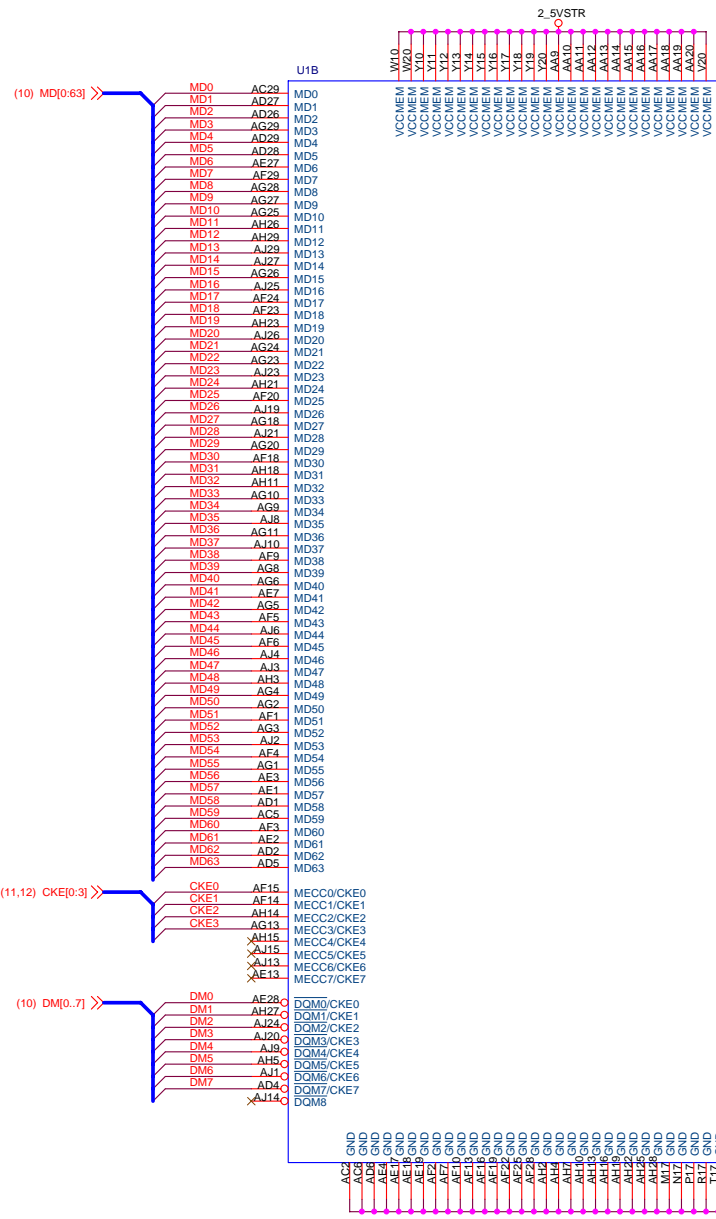
BLOCK DIAGRAM



GIGABYTE			
BOM & PCB MODIFY HISTORY			
File			
Size	Document Number	Rev	
Custom	8VM533M-RZ	1.03	
Date	2004.11.29	Sheet	3 of 34



GIGABYTE		
Title P4 478C		
Size Custom	Document Number 8VM533M-RZ	Rev 1.03
Date: 星期二, 六月 29, 2004	Sheet 6	of 34



GIGABYTE		
Title P4M266A_B (DDR, VGA CON)		
Size Custom	Document Number 8VM533M-RZ	Rev 1.03
Date: 星期二, 六月 29, 2004	Sheet 8	of 34

(11,12) MD_[0..63] << << MD[0..63] (8)

(11,12) DM_[0..7] >> >> DM[0..7] (8)

(11,12) -DQS_[0..8] << << -DQS[0..8] (8)

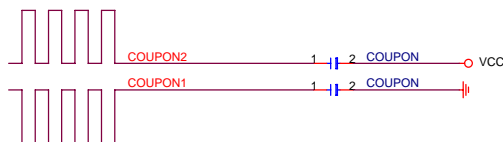
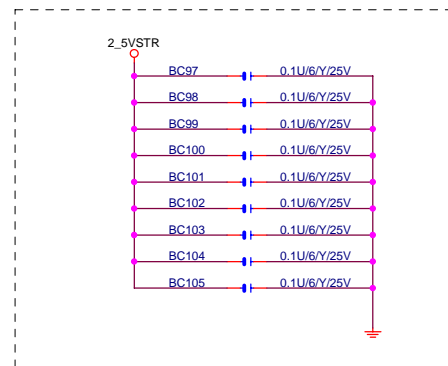
MD 6	RN3	1	2 0/8P4R/X	MD6
MD 2		3	4	MD2
DM 0		5	6	DM0
-DQS 0		7	8	-DQS0
MD 1	RN5	1	2 0/8P4R/X	MD1
MD 5		3	4	MD5
MD 4		5	6	MD4
MD 0		7	8	MD0
DM 1	RN6	1	2 0/8P4R/X	DM1
-DQS 1		3	4	-DQS1
MD 13		5	6	MD13
MD 12		7	8	MD12
MD 11	RN7	1	2 0/8P4R/X	MD11
MD 10		3	4	MD10
MD 14		5	6	MD14
MD 15		7	8	MD15
MD 22	RN9	1	2 0/8P4R/X	MD22
MD 18		3	4	MD18
DM 2		5	6	DM2
-DQS 2		7	8	-DQS2
-DQS 3	RN11	1	2 0/8P4R/X	-DQS3
DM 3		3	4	DM3
MD 29		5	6	MD29
MD 25		7	8	MD25
MD 31	RN12	1	2 0/8P4R/X	MD31
MD 27		3	4	MD27
MD 30		5	6	MD30
MD 26		7	8	MD26
MD 37	RN13	1	2 0/8P4R/X	MD37
MD 33		3	4	MD33
MD 36		5	6	MD36
MD 32		7	8	MD32
MD 40	RN14	1	2 0/8P4R/X	MD40
MD 44		3	4	MD44
MD 35		5	6	MD35
MD 39		7	8	MD39
MD 38	RN15	1	2 0/8P4R/X	MD38
MD 34		3	4	MD34
DM 4		5	6	DM4
-DQS 4		7	8	-DQS4
DM 5	RN16	1	2 0/8P4R/X	DM5
-DQS 5		3	4	-DQS5
MD 41		5	6	MD41
MD 45		7	8	MD45
MD 49	RN17	1	2 0/8P4R/X	MD49
MD 53		3	4	MD53
MD 52		5	6	MD52
MD 48		7	8	MD48
MD 61	RN18	1	2 0/8P4R/X	MD61
MD 60		3	4	MD60
MD 51		5	6	MD51
MD 55		7	8	MD55
MD 50	RN19	1	2 0/8P4R/X	MD50
MD 54		3	4	MD54
-DQS 6		5	6	-DQS6
DM 6		7	8	DM6
-DQS 7	RN20	1	2 0/8P4R/X	-DQS7
DM 7		3	4	DM7
MD 56		5	6	MD56
MD 57		7	8	MD57
MD 59	RN21	1	2 0/8P4R/X	MD59
MD 63		3	4	MD63
MD 58		5	6	MD58
MD 62		7	8	MD62

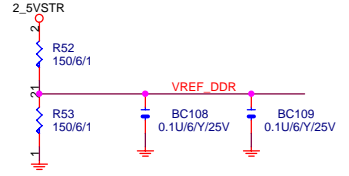
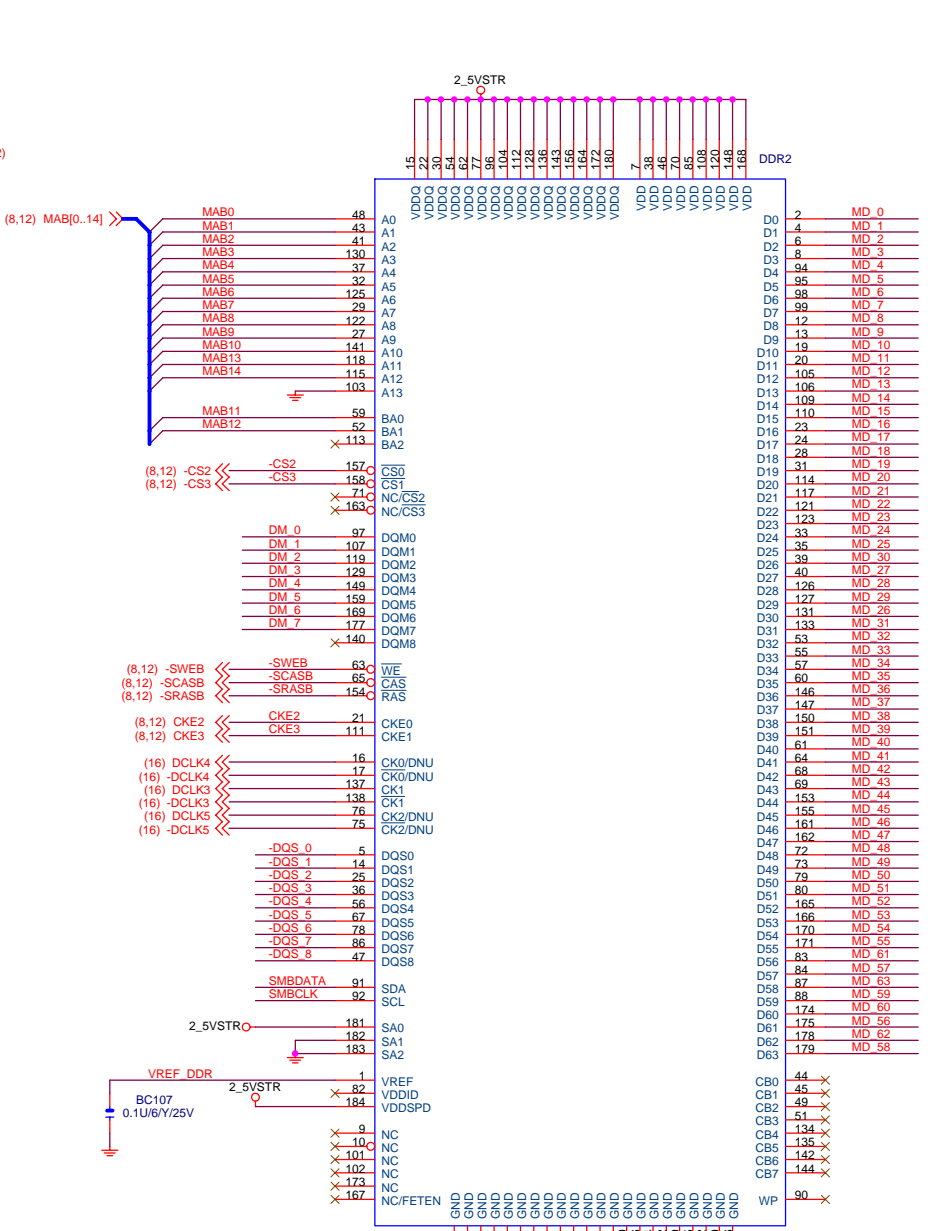
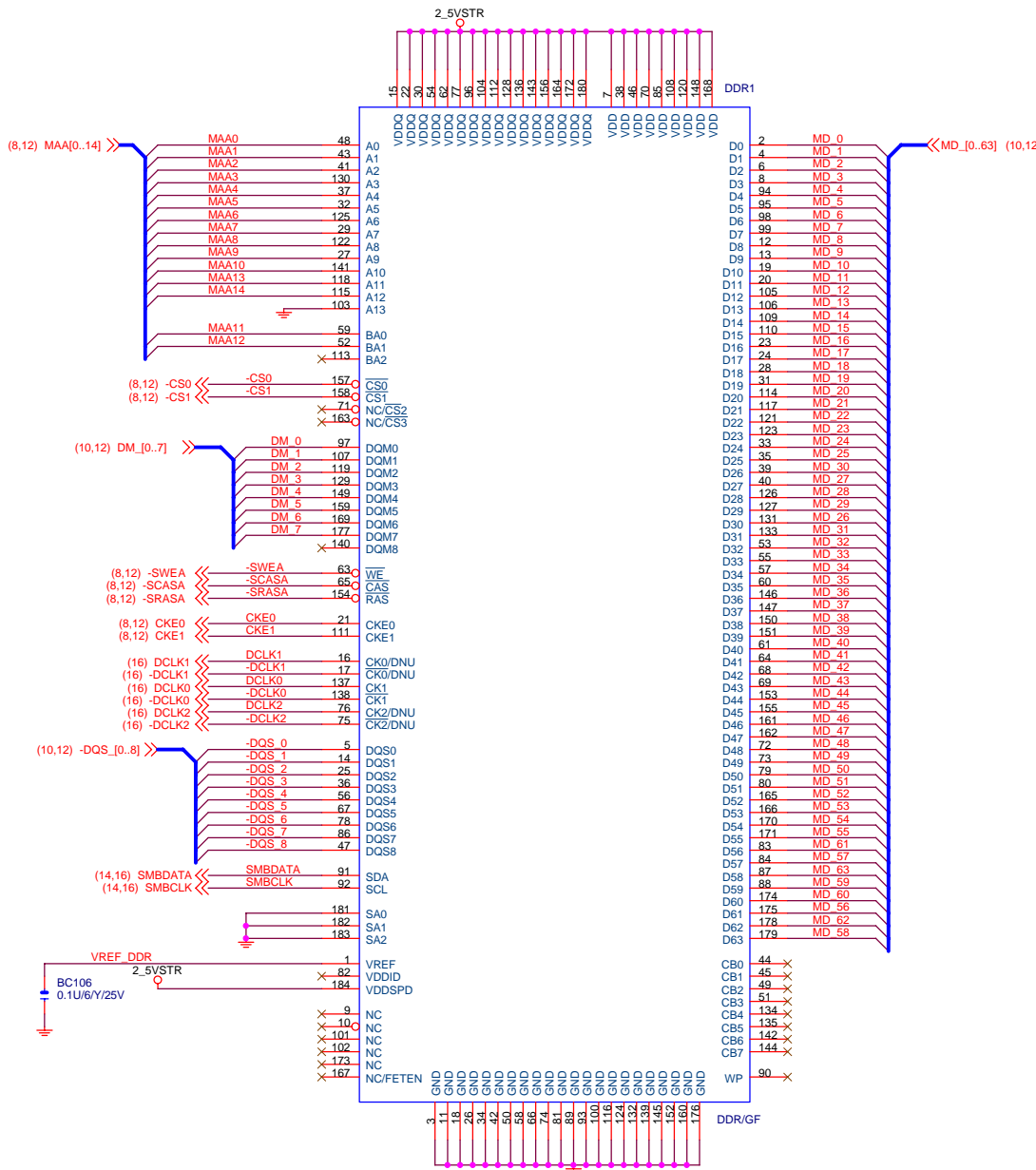
MD 21	RN2	1	2 0/8P4R/X	MD21
MD 17		3	4	MD17
MD 16		5	6	MD16
MD 20		7	8	MD20
MD 47	RN4	1	2 0/8P4R/X	MD47
MD 43		3	4	MD43
MD 46		5	6	MD46
MD 42		7	8	MD42

MD 9	RN8	1	2 0/8P4R/X	MD9
MD 8		3	4	MD8
MD 3		5	6	MD3
MD 7		7	8	MD7
MD 28	RN10	1	2 0/8P4R/X	MD28
MD 24		3	4	MD24
MD 23		5	6	MD23
MD 19		7	8	MD19

-DQS 8 R879 0/6S/X -DQS8

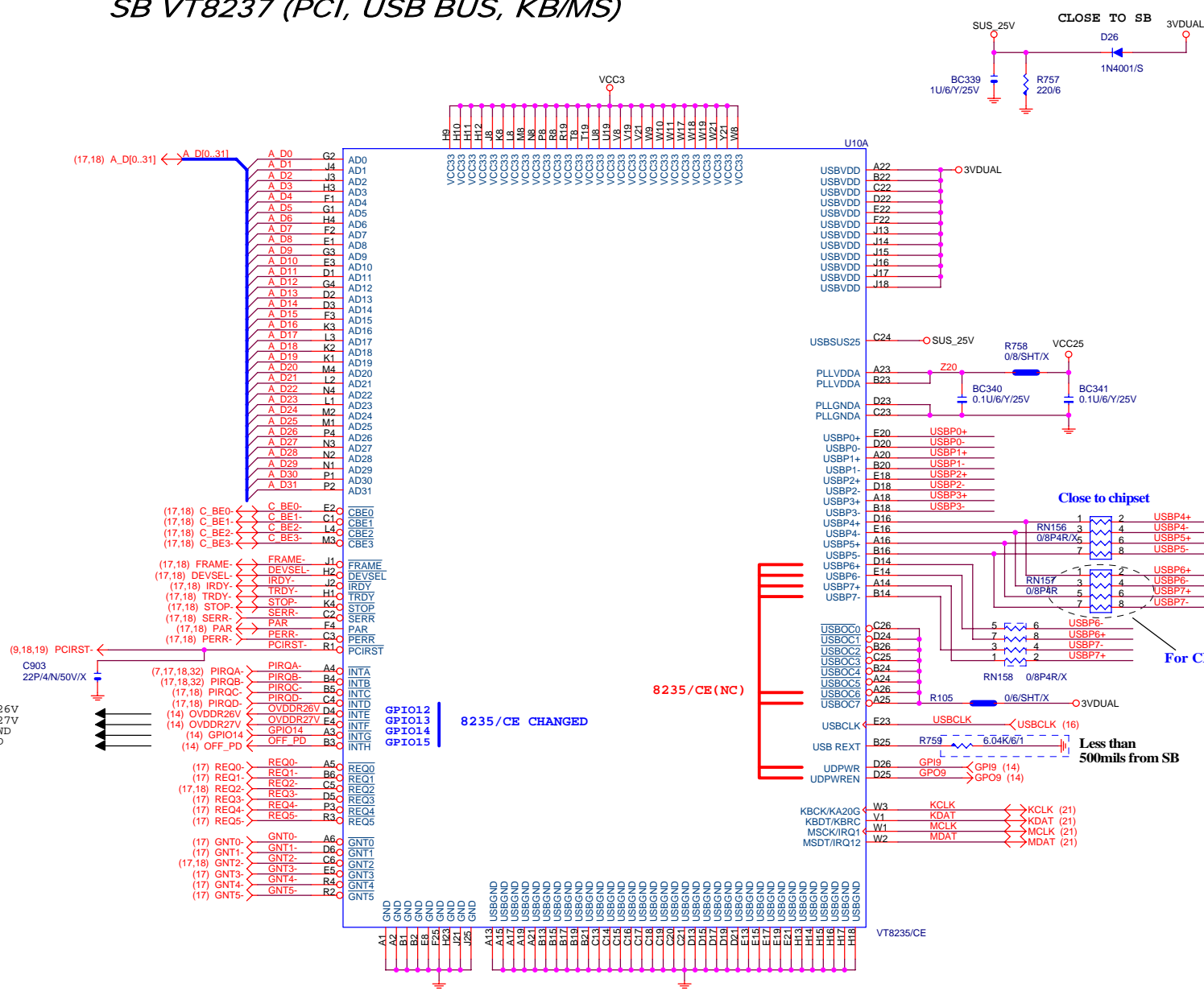
BETWEEN DIMM1 & DIMM2





GIGABYTE		
Title DDR1,2		
Size B	Document Number 8VM533M-RZ	Rev 1.03
Date:	星期三, 六月 29, 2004	Sheet 11 of 34

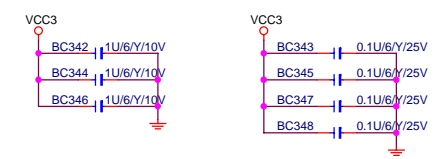
SB VT8237 (PCI, USB BUS, KB/MS)



AGPUSB, CNRUSB DEFAULT NO POP
USB CONTROLLER MUST NOT BEEN FLOATING.



不使用USB
UDPWR / UDPWREN時, UDPWR必須PULL-DOWN



Decoupling capacitors

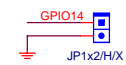
CLEAR PASSWORD

CLEAR PASSWORD	
OPEN	Normal
CLOSE	CLR_PWD

CLEAR_PASSWD



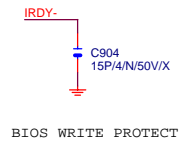
CLR_PWD



GIGABYTE

SB VT8235CE (PCI, USB BUS, KB/MS)

Title	SB VT8235CE (PCI, USB BUS, KB/MS)	
Size B	Document Number	Rev
	8VM533M-RZ	1.03
Date:	星期二, 六月 29, 2004	Sheet 13 of 34



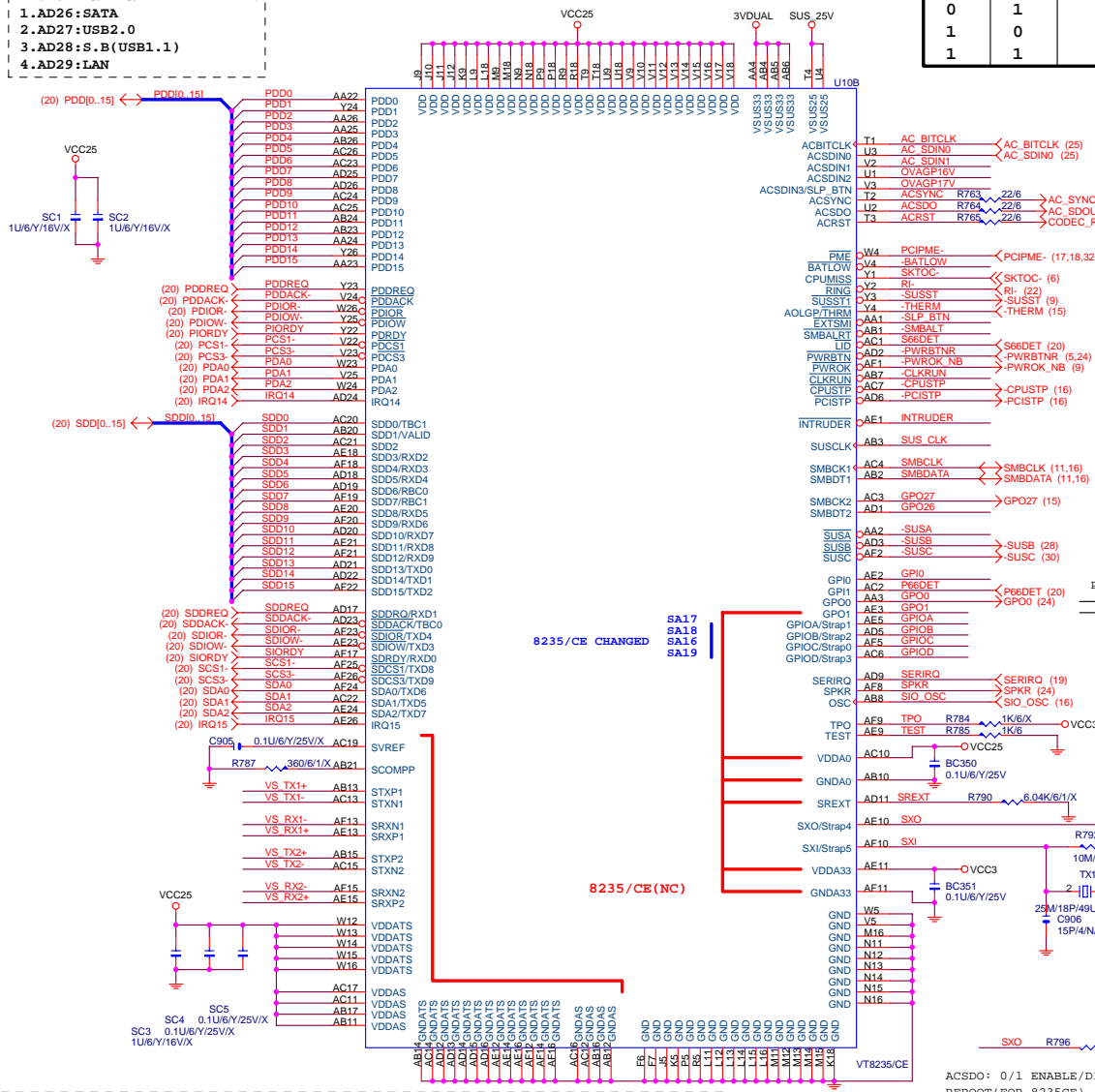
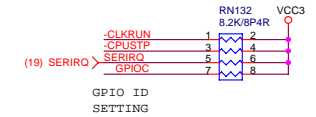
BIOS WRITE PROTECT

SB VT8237 (SATA, IDE, AC97, POWER MANAGEMENT, PGIO)

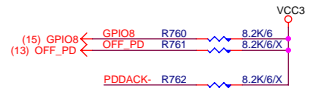
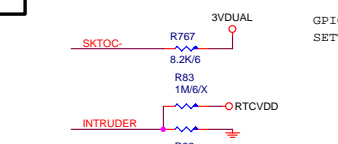
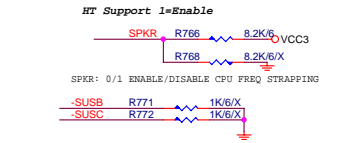
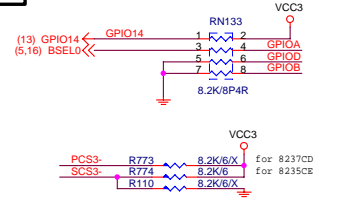
- VT8237 INTERNAL IDSEL LIST:
- 1.AD26:SATA
 - 2.AD27:USB2.0
 - 3.AD28:S.B(USB1.1)
 - 4.AD29:LAN

P/SDA1	P/SDA0	GTL Driving Strength
0	0	WEAK
0	1	MIDDLE WEAK
1	0	STRONG
1	1	STRONGEST

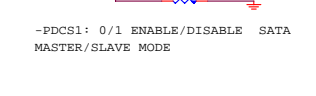
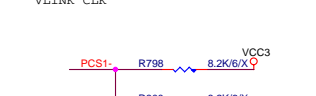
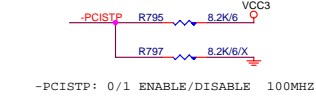
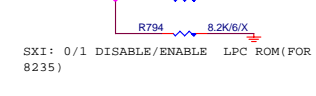
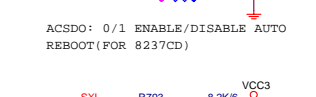
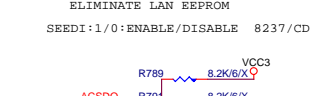
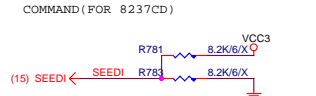
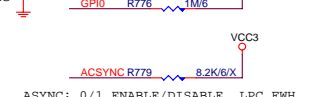
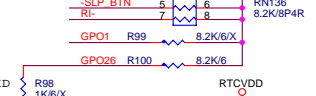
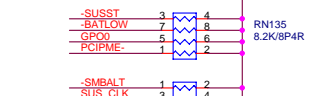
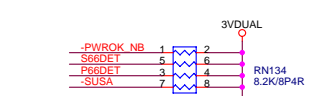
GPIOB
0 ---> IOQ=12
1 ---> IOQ=1



GPIOD = GTL Pull 0 --> Enable
1 --> Disable



-PDDACK: 0/1 ENABLE/DISABLE EXTERNAL SATA PHY (FOR 8237CD)



GIGABYTE		
SB VT8235CE (SATA,IDE, AC97, POWER , GPIO)		
Size	Document Number	Rev
Custom	8VM533M-RZ	1.03
Date:	星期二, 六月 29, 2004	Sheet 14 of 34

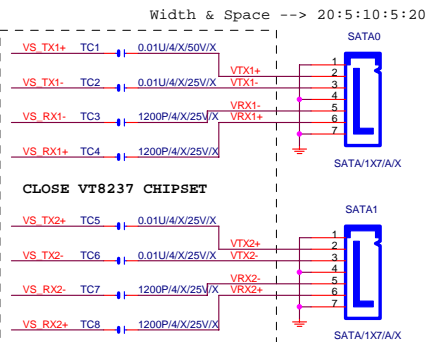
For 8235CE
SDA0 => GTL Driving Strength
SDA1 => GTL Driving Strength
SDA2 => ROMSIP 0=Disable

For 8237 CD
PDA0 => GTL Driving Strength
PDA1 => GTL Driving Strength
PDA2 => ROMSIP 0=Disable

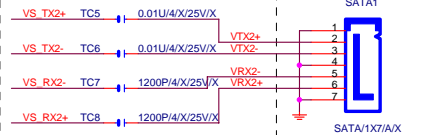
ELIMINATE LAN EEPROM
-SDCS1: 0/1: ENABLE/DISABLE

ELIMINATE LAN EEPROM
SEED1: 1/0: ENABLE/DISABLE

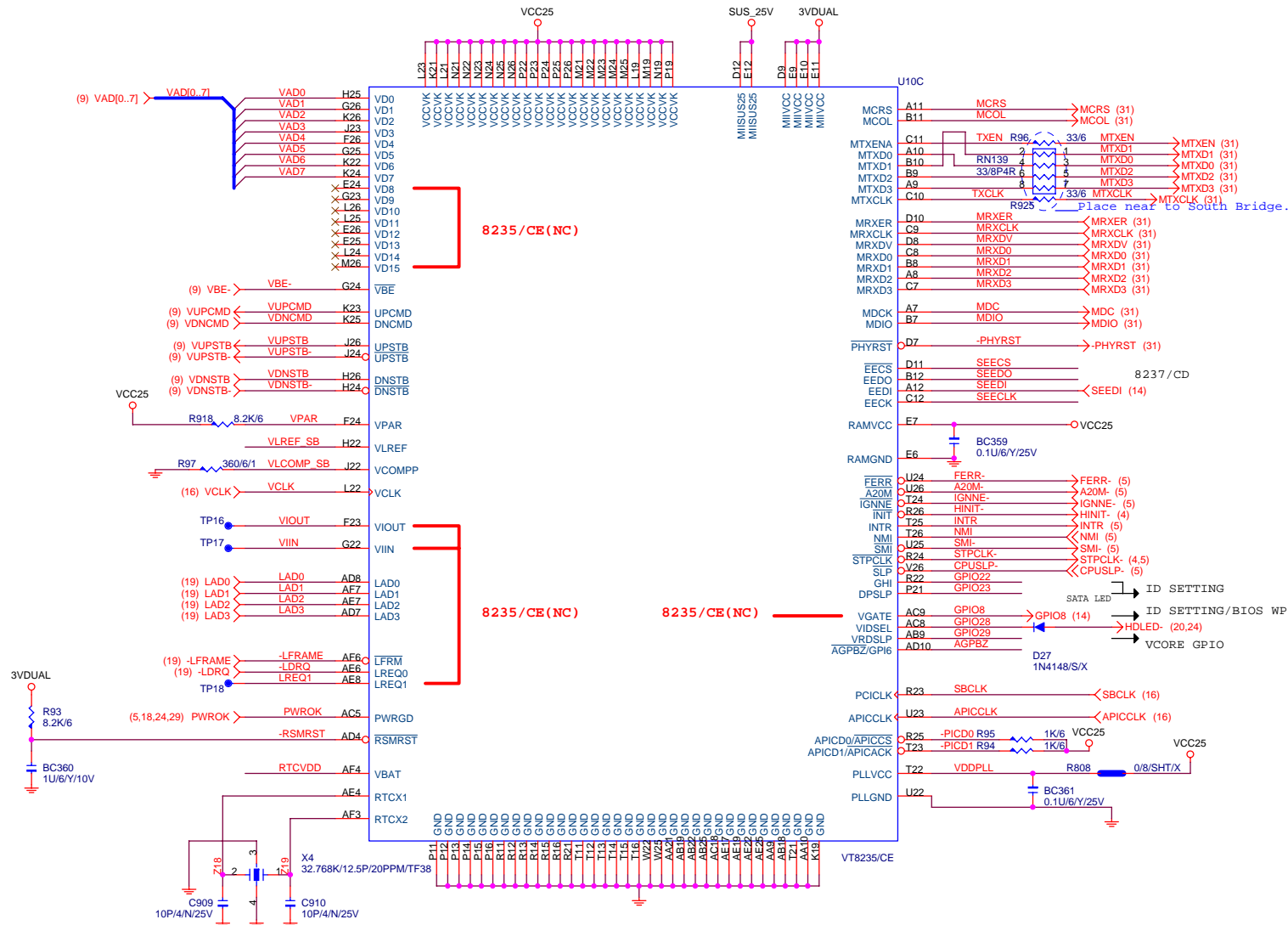
ACSDO: 0/1 ENABLE/DISABLE AUTO REBOOT (FOR 8235CE)



CLOSE VT8237 CHIPSET



-PCIS1: 0/1 ENABLE/DISABLE SATA MASTER/SALVE MODE



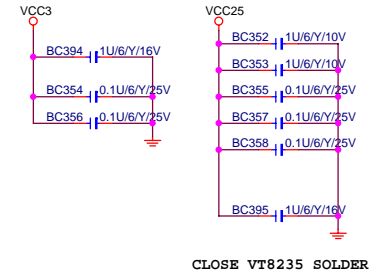
8235 / CE (NC)

8235 / CE (NC)

8235 / CE (NC)

FOR 8233A-CE
The voltage level of
VLREF_SB is 0.9V
0.625V FOR
8235-CD

Decoupling capacitors

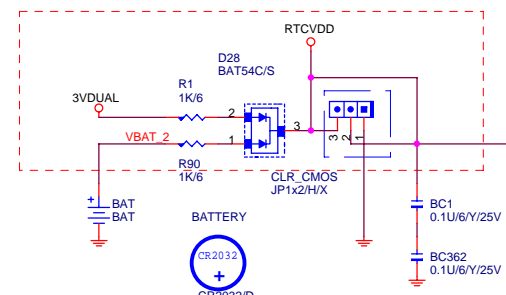


CLOSE VT8235 SOLDER

Internal MAC P.U

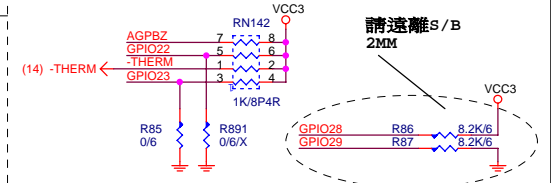


LAN EEPROM



CLR_CMOS_S
JU1x2/R(2-3)/X

CLR_CMOS 1-2	
SHORT	CLEAR CMOS
OPEN	NORMAL (Default)



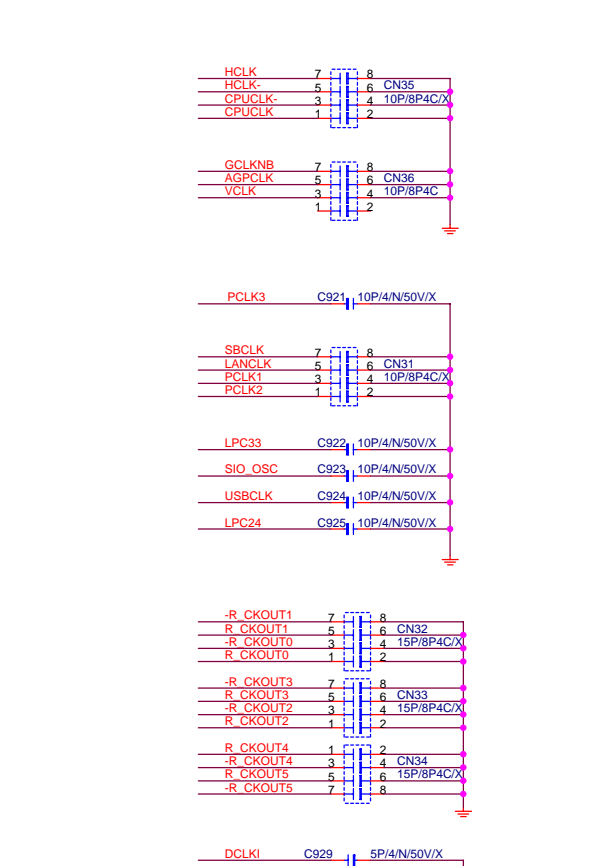
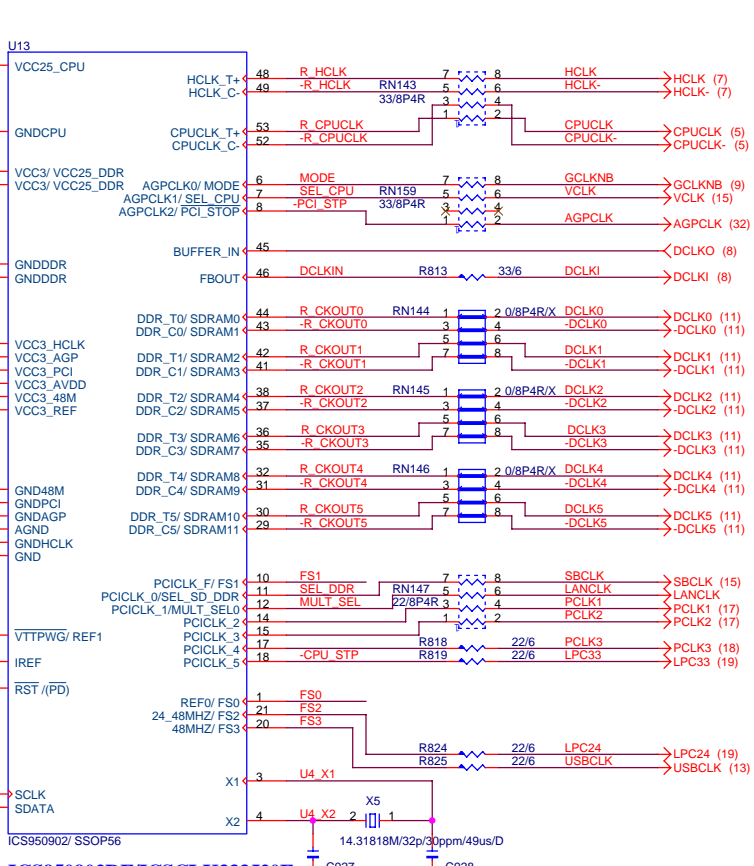
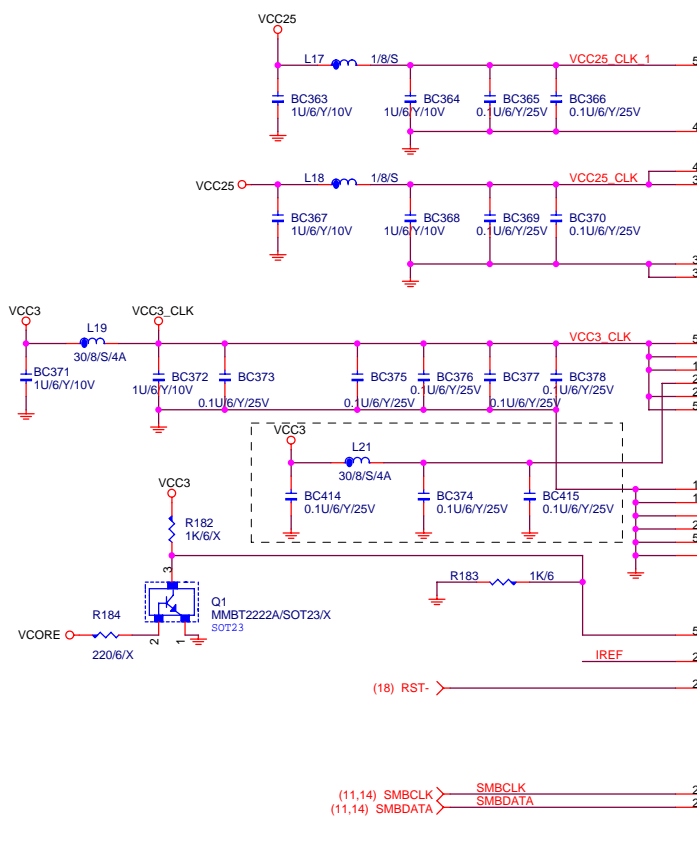
請遠離S/B
2MM

GIGABYTE

Title: SB VT8235CE (Vlink, CPU, LPC, LAN, I2C)

Size B	Document Number	Rev
	8VM533M-RZ	1.03

Date: 星期三, 六月 29, 2004 Sheet 15 of 34



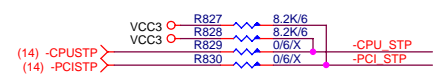
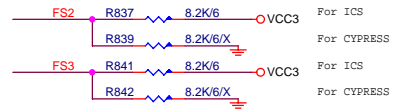
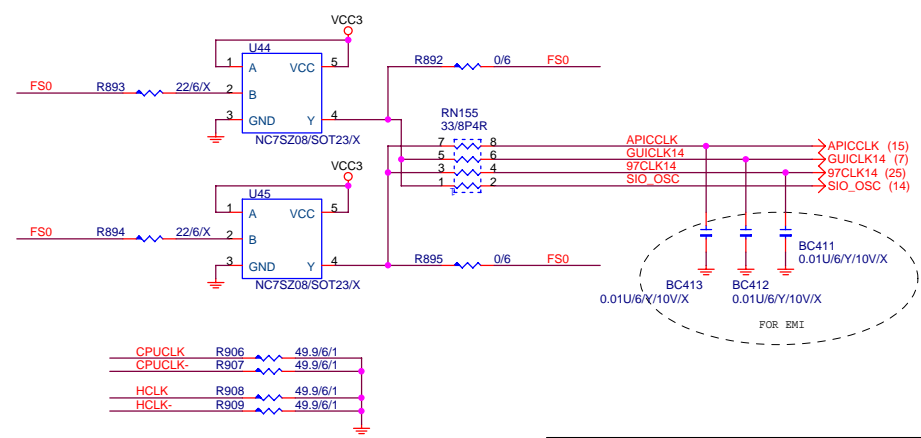
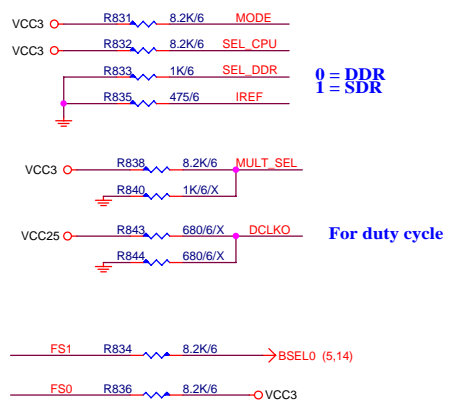
CLOCK FREQUENCY TABLE

Frequency table for CY28341-2 (Default)
 Frequency table for CY28341-3

FS3	FS2	FS1	FS0	CPUCLK	AGPCLK	PCICLK
0	0	0	1	100.00	66.70	33.30
0	0	1	1	133.33	66.67	33.33
1	1	1	0	200.00	66.67	33.33

Frequency table for ICS950902

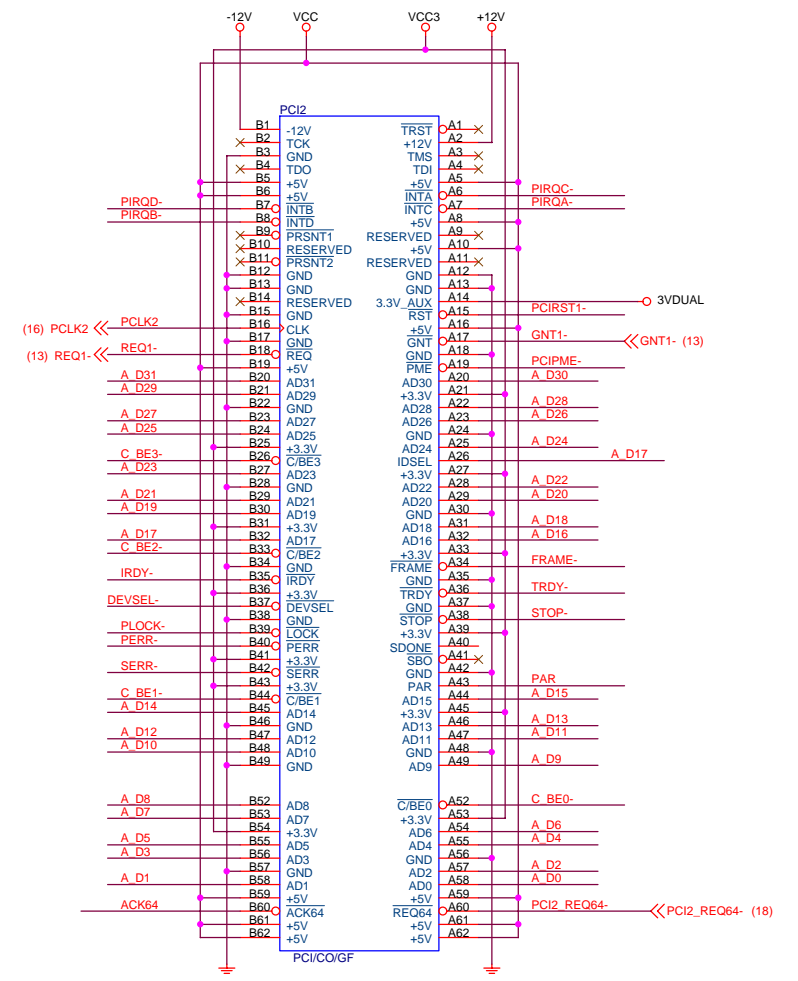
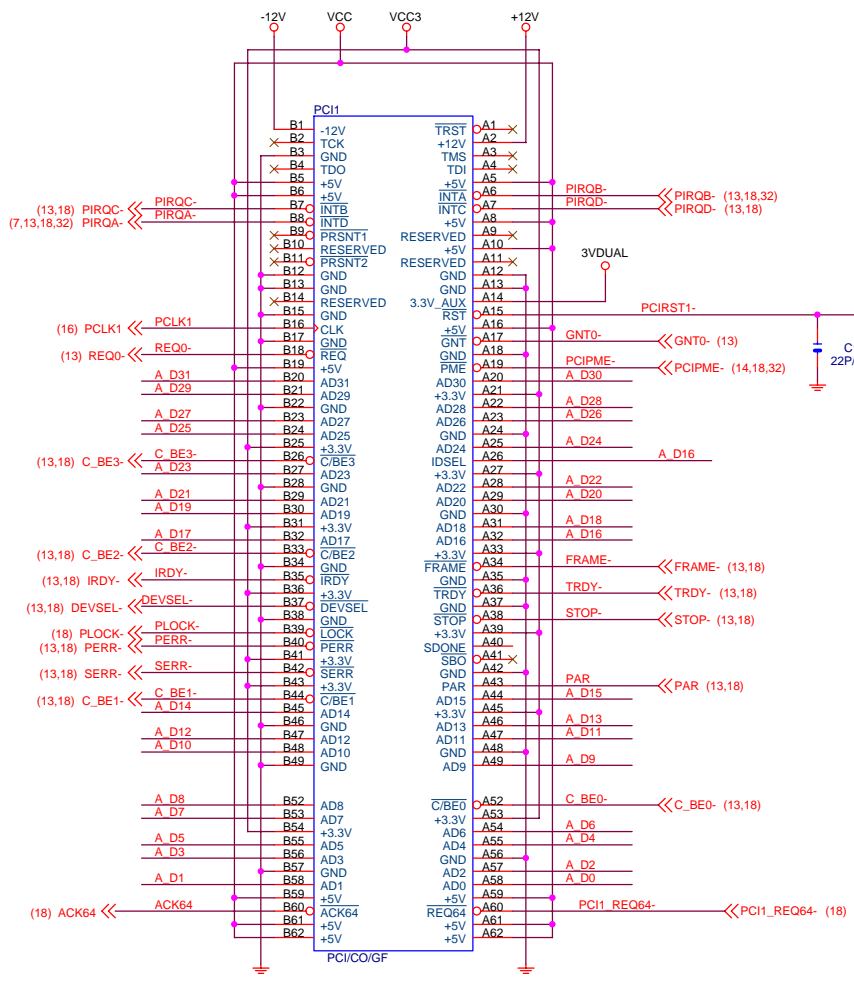
FS3	FS2	FS1	FS0	CPUCLK	AGPCLK	PCICLK
1	1	0	1	100.00	66.60	33.30
1	1	1	1	133.30	66.60	33.30
1	1	1	0	200.00	66.60	33.30



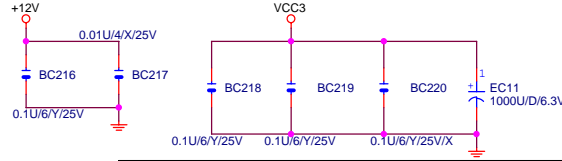
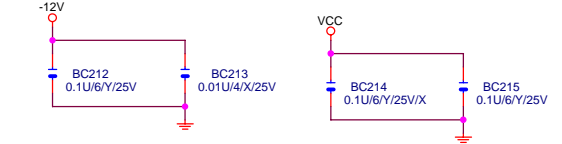
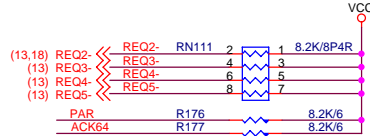
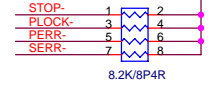
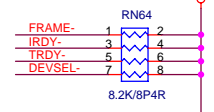
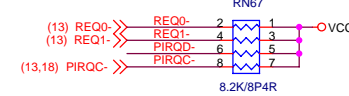
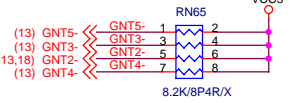
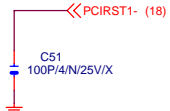
GIGABYTE

CLOCK GENERATOR

Title	8VM533M-RZ		Rev	1.03
Size	Document Number			
Custom				
Date:	星期三, 六月 29, 2004	Sheet	16	of 34

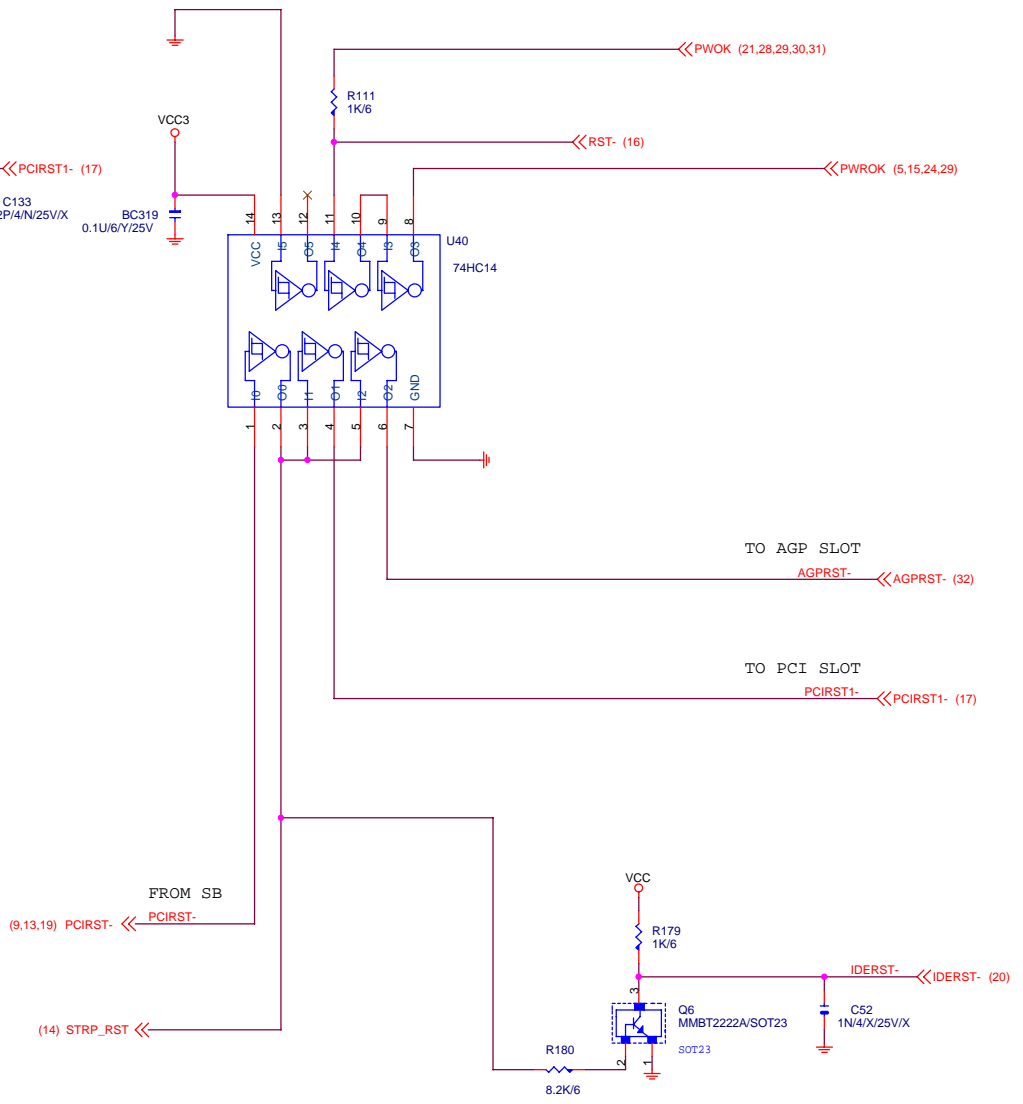
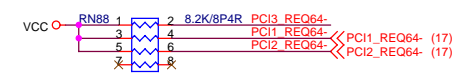
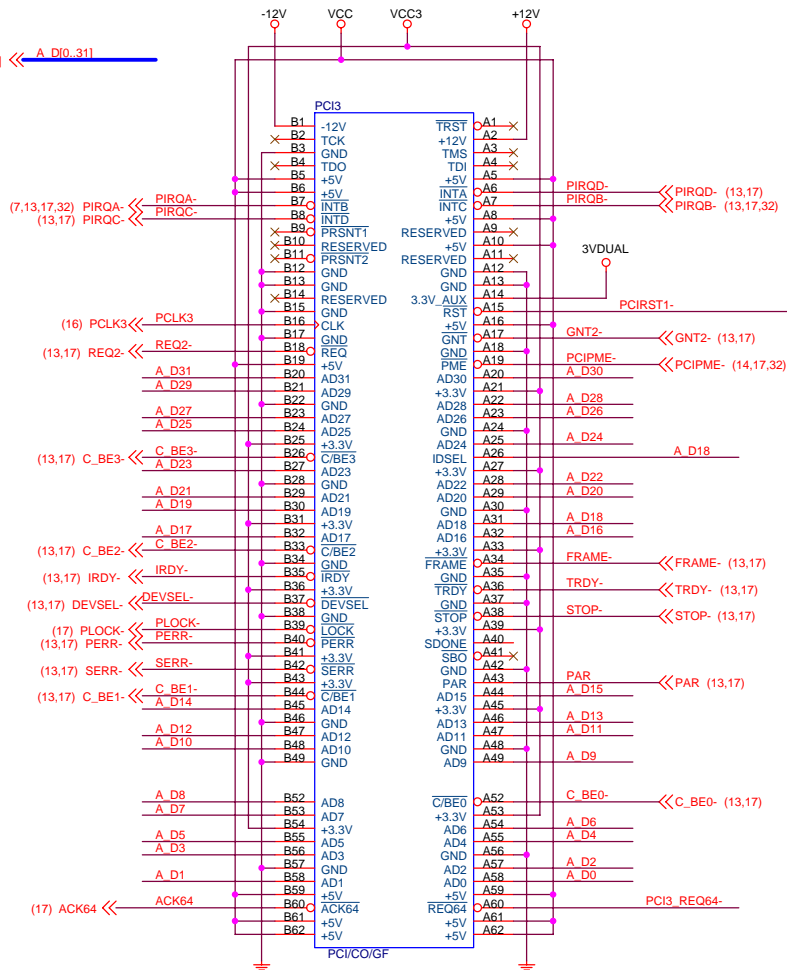


(13,18) A_D[0..31] << A_D[0..31]

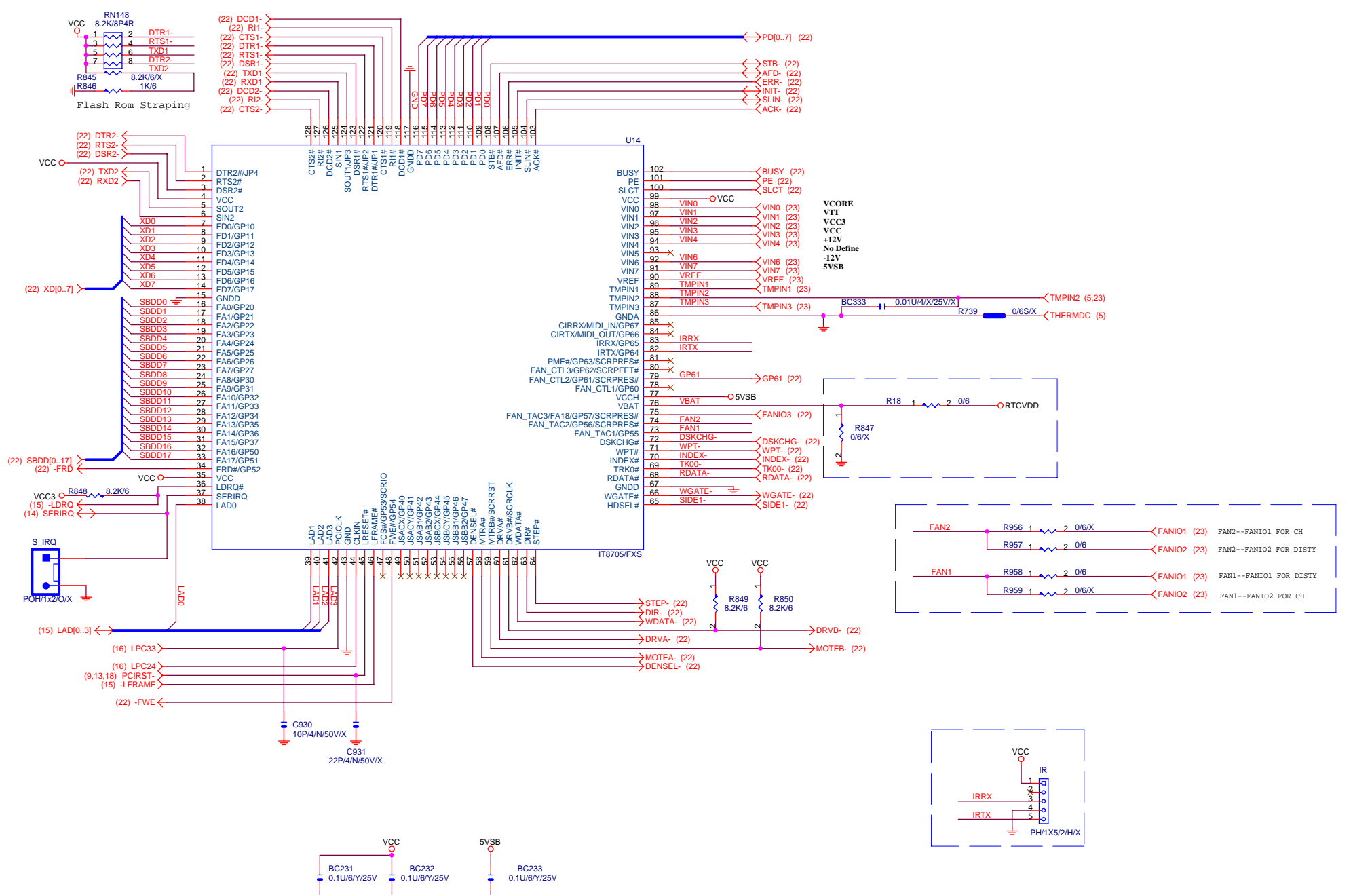


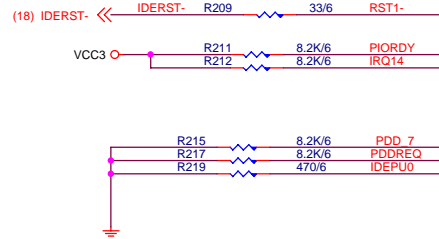
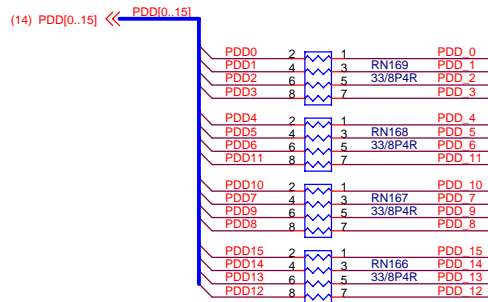
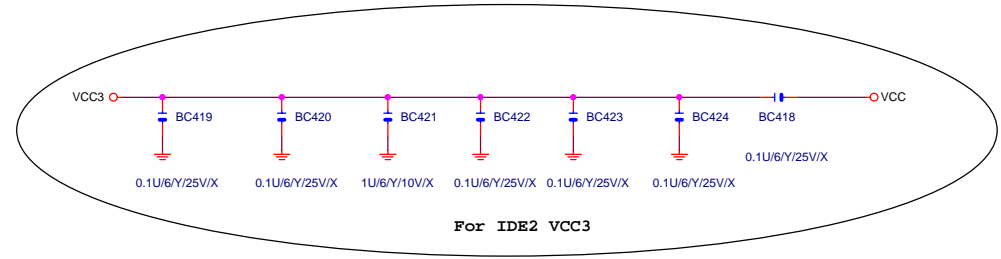
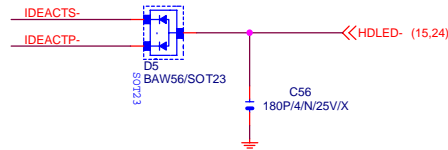
GIGABYTE		
PCI SLOT 1/2		
Title	Document Number	Rev
	8VM533M-RZ	1.03
Date:	星期二, 六月 29, 2004	Sheet 17 of 34

(13,17) A_D[0..31] << A_D[0..31]

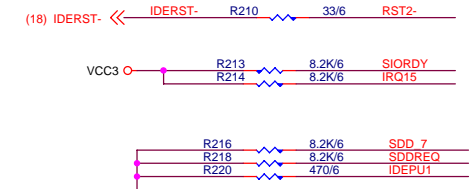
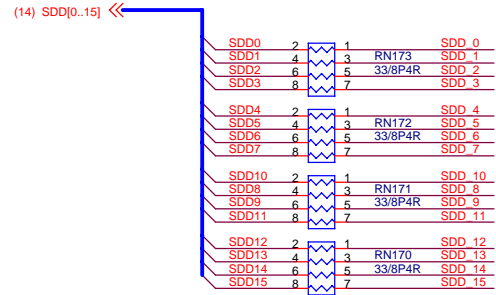
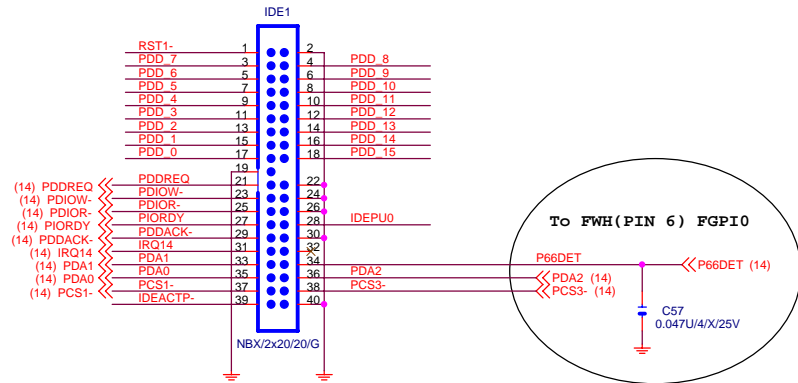


GIGABYTE		
PCI SLOT 3		
Title		
Size B	Document Number	Rev
	8VM533M-RZ	1.03
Date:	星期二, 六月 29, 2004	Sheet 18 of 34

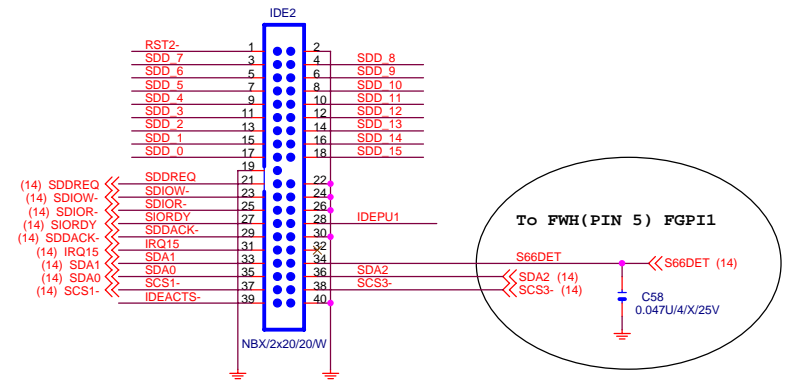




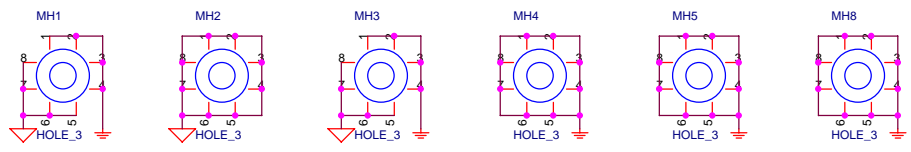
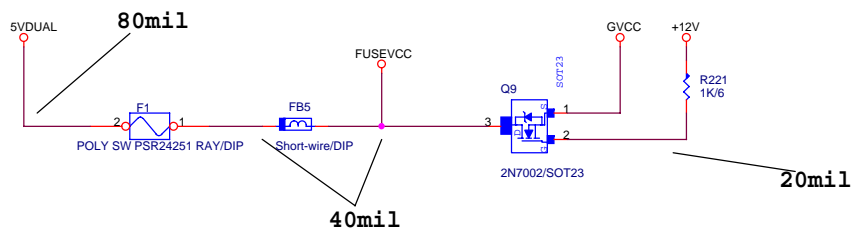
PRIMARY IDE CONNECTOR



SECONDARY IDE CONNECTOR

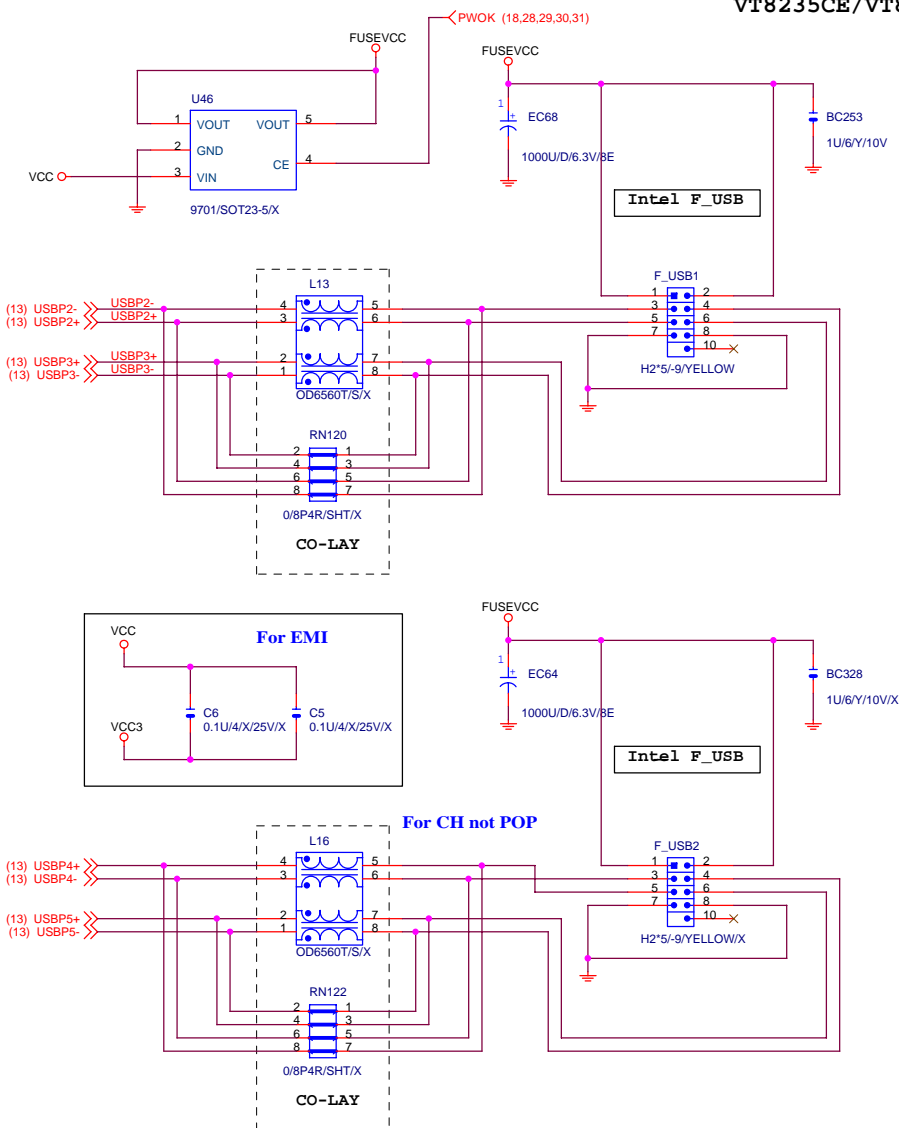


GIGABYTE		
IDE CONNECTOR		
Title		
Size B	Document Number	Rev
	8VM533M-RZ	1.03
Date:	星期二, 六月 29, 2004	Sheet 20 of 34



FRONT USB CONN

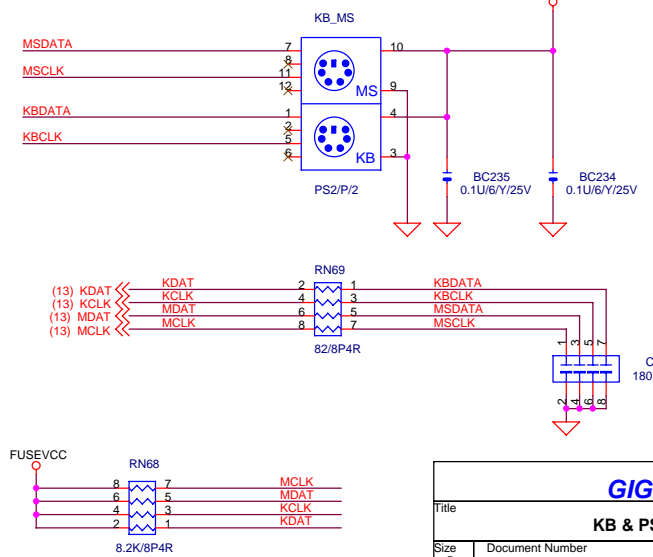
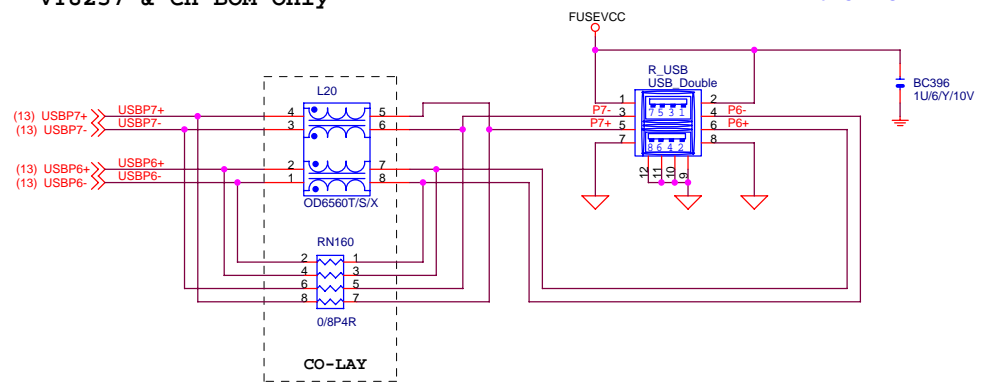
VT8235CE/VT8237 USB2.0



REAR USB CONN

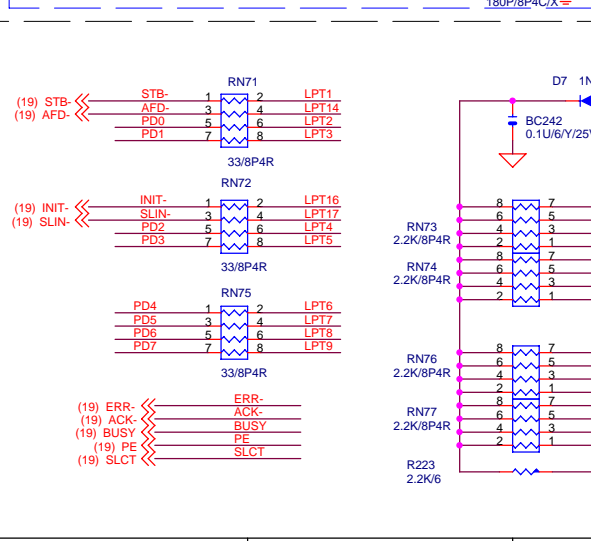
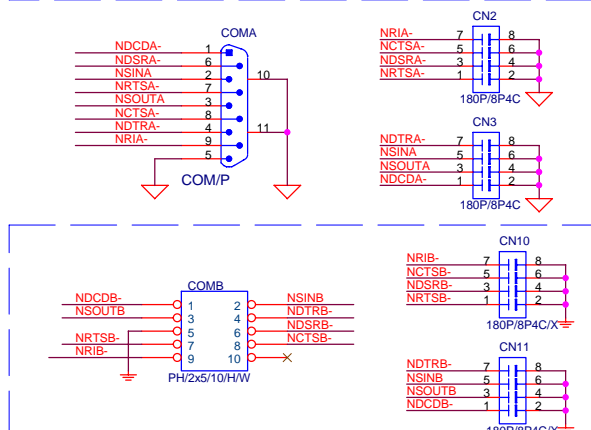
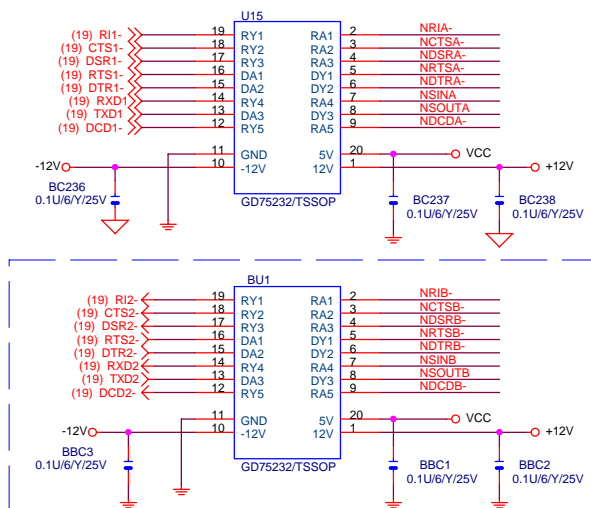
VT8237 & CH BOM Only

For CH POP

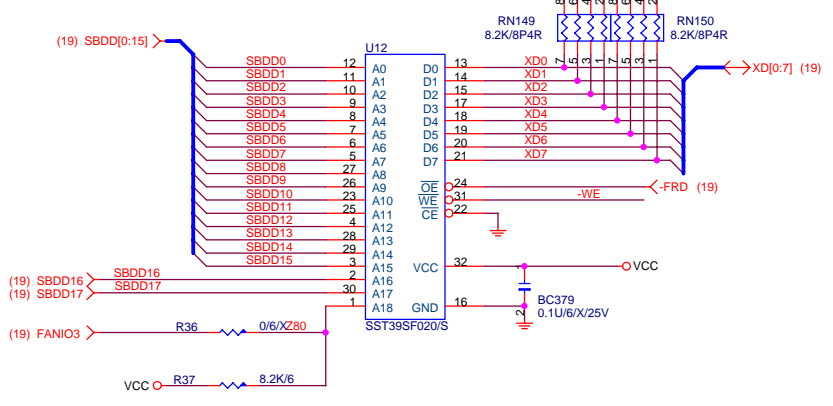


GIGABYTE		
KB & PS2 MOUSE & IR		
Title	Document Number	Rev
	8VM533M-RZ	1.03
Date: 星期二, 六月 29, 2004	Sheet 21	of 34

COMA

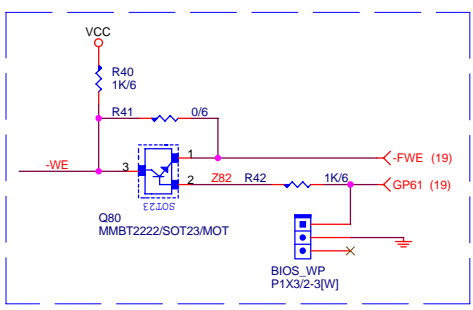


2M BIOS

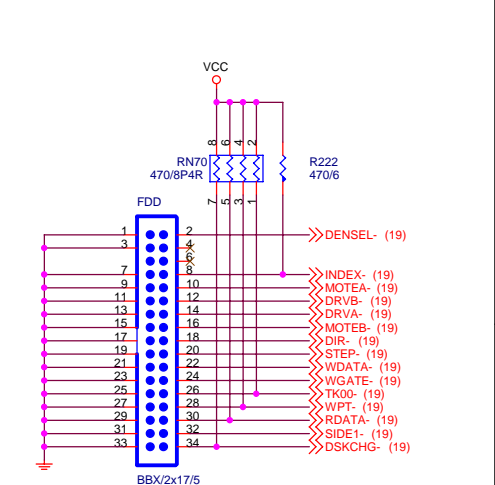


BIOS_WP: BIOS WRITE PROTECT

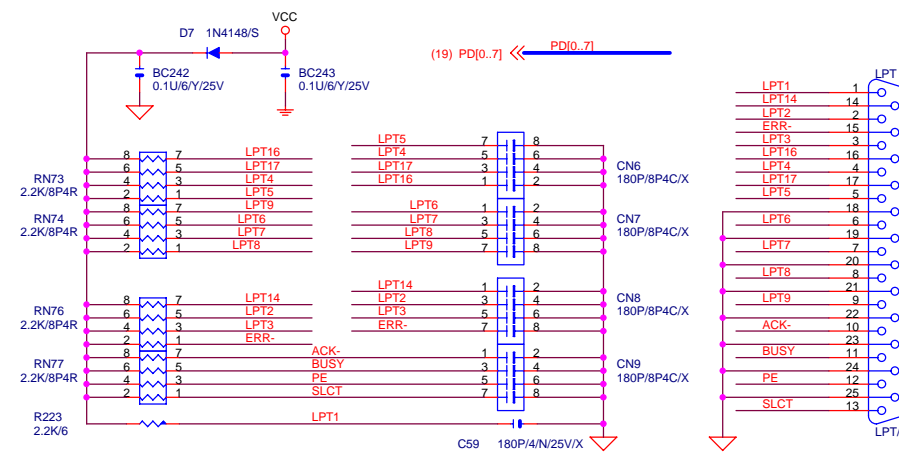
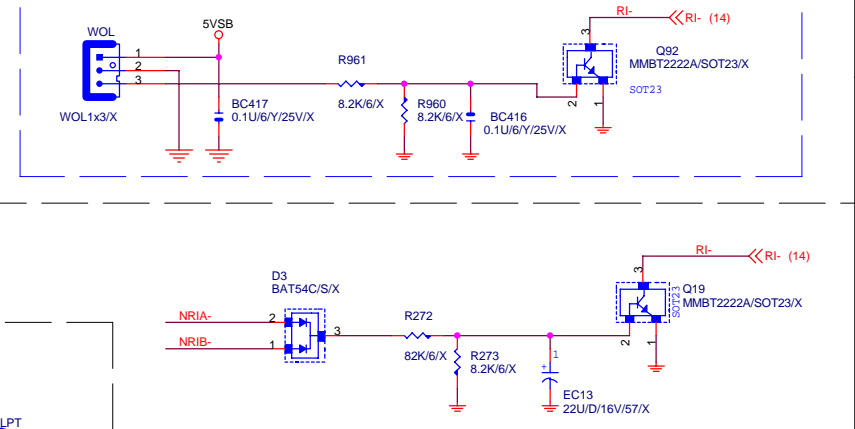
PIN	BIOS_WP
1-2	WRITE PROTECT
2-3	WRITE ENABLE (default)



FLOPPY



WOL

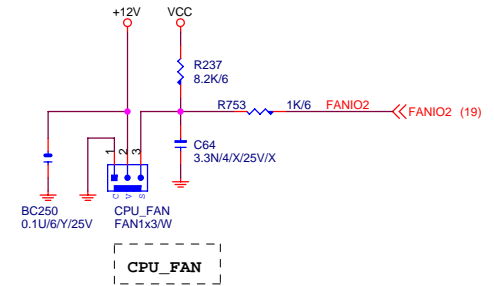
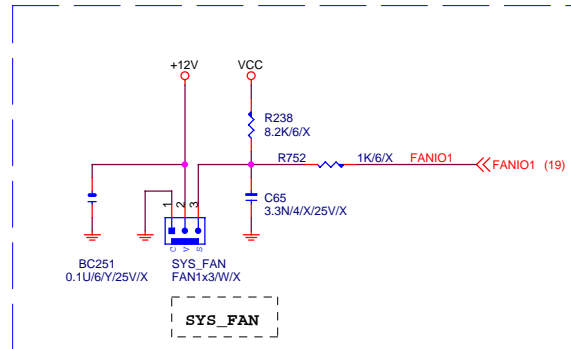
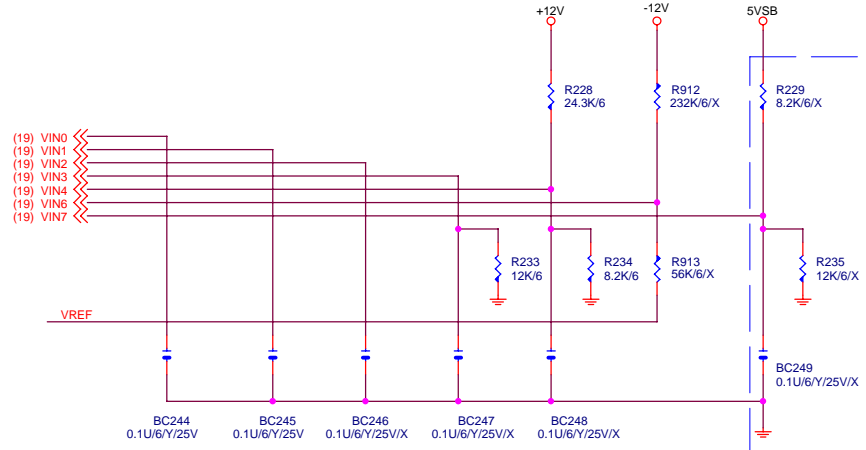
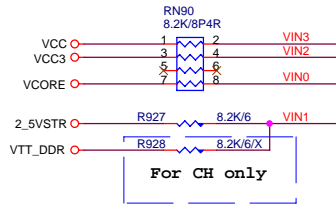
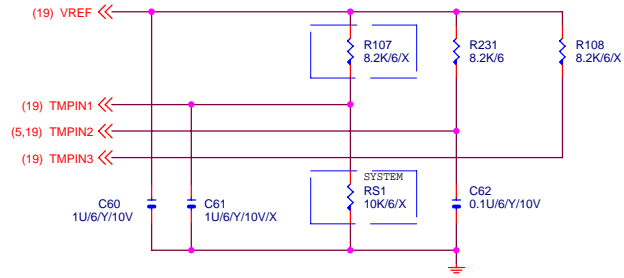


GIGABYTE

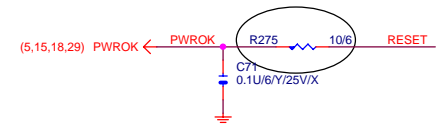
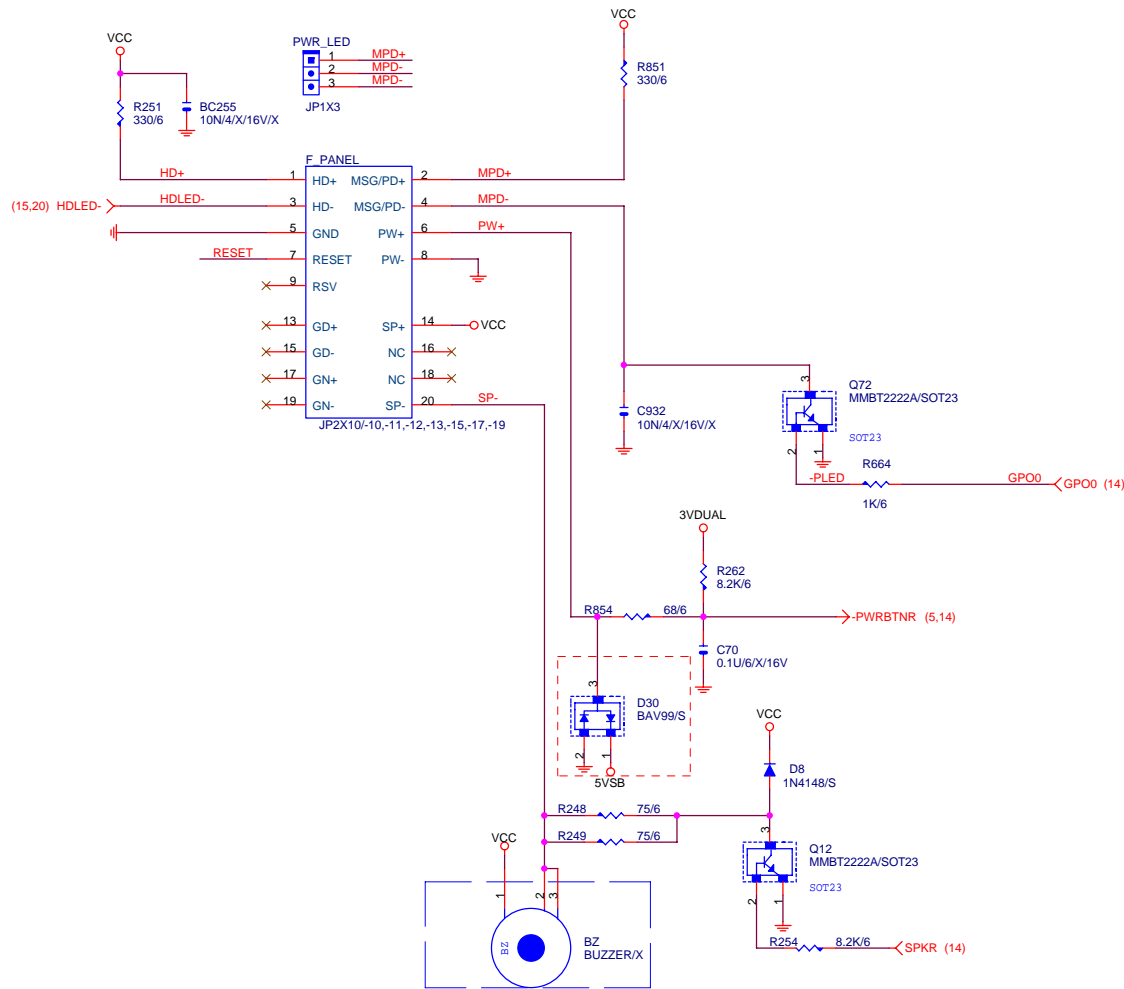
BIOS, COM, WOR, WOL, LPT, FDD

Title	BIOS, COM, WOR, WOL, LPT, FDD	
Size B	Document Number	Rev
	8VM533M-RZ	1.03
Date:	星期二, 六月 29, 2004	Sheet 22 of 34

Hardware Monitor circuits



GIGABYTE		
Title		
FAN/ HW MONITOR		
Size B	Document Number	Rev
	8VM533M-RZ	1.03
Date:	星期三, 六月 29, 2004	Sheet 23 of 34



States for a single-color power LED

LED States	ACPI States	GP025	GP027	GP035
OFF	S1,S3,S5	1	1	NO1
Steady Green	S0	0	1	0
Blinking Green	S0(message waiting)	0	B	0

NO1 GP035 只需在
S1 PROGRAMMING
← LOW

States for a dual-color power LED

LED States	ACPI States	GP025	GP027	GP035
OFF	S5	1	1	X
Steady Green	S0	0	1	0
Blinking Green	S0(message waiting)	0	B	0
Steady Yellow	S1,S3	1	0	NO1
Blinking Yellow	S1,S3(message waiting)	1	B	NO1

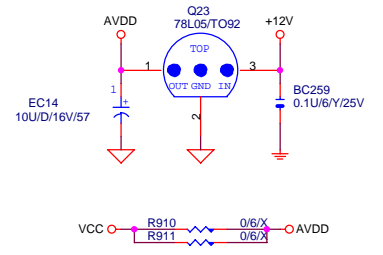
(GPO28 DEFAULT HIGH, RESUME WELL)

States for green LED

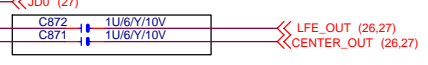
LED States	ACPI States	GP028
ON	S1,S3	0
OFF	S0,S5	1

GIGABYTE		
PANEL & STR LED		
Title		
Size B	Document Number	Rev
	8VM533M-RZ	1.03
Date:	星期二, 六月 29, 2004	Sheet 24 of 34

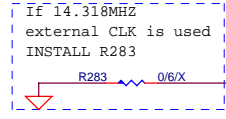
AVDD



For ALC655



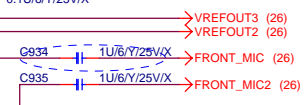
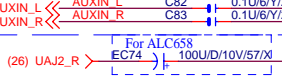
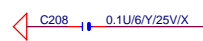
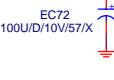
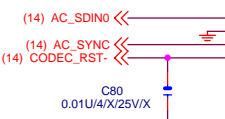
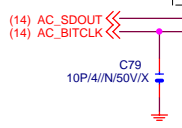
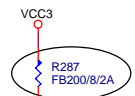
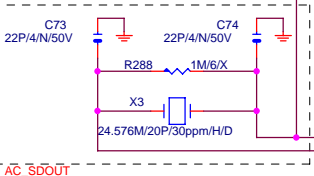
FOR ALC650
center out/low freq. effect out



FOR 655/VT1617

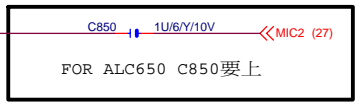


FOR VT1616



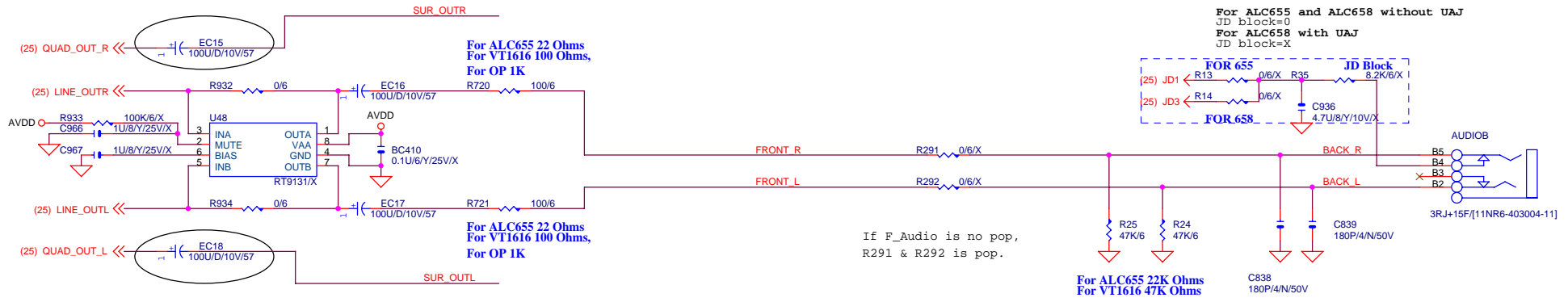
For ALC655

For ALC655

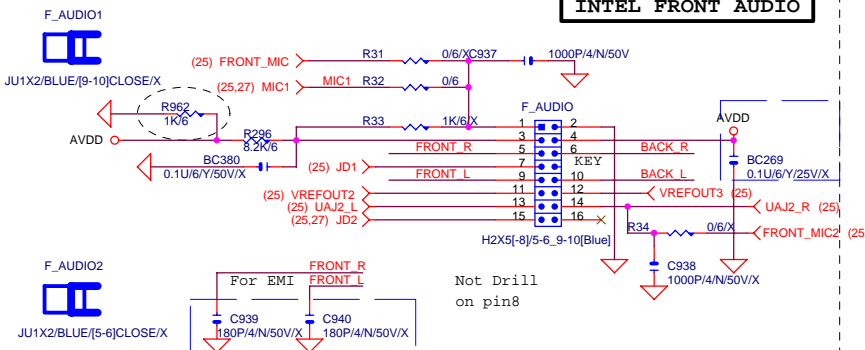


GIGABYTE		
AC97 CODEC		
Title	Document Number	
Size B	8VM533M-RZ	
Date:	星期二, 六月 29, 2004	Rev 1.03
Sheet	25	of 34

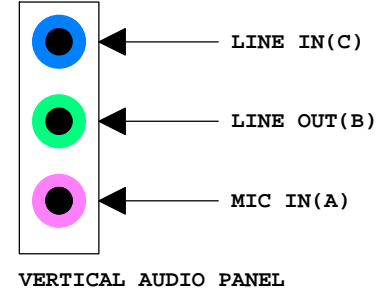
LINE-OUT



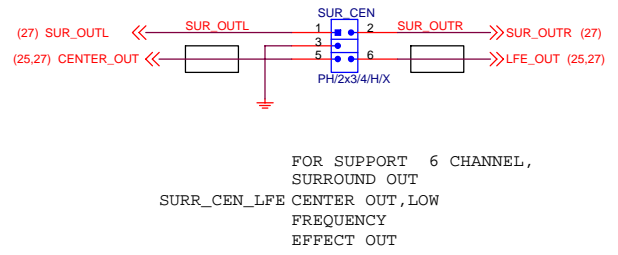
INTEL FRONT AUDIO



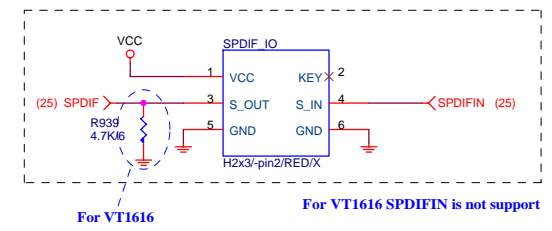
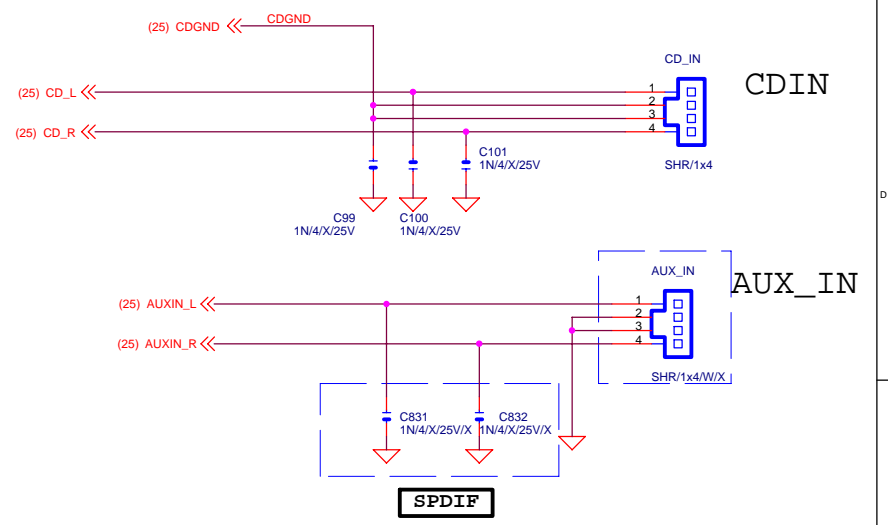
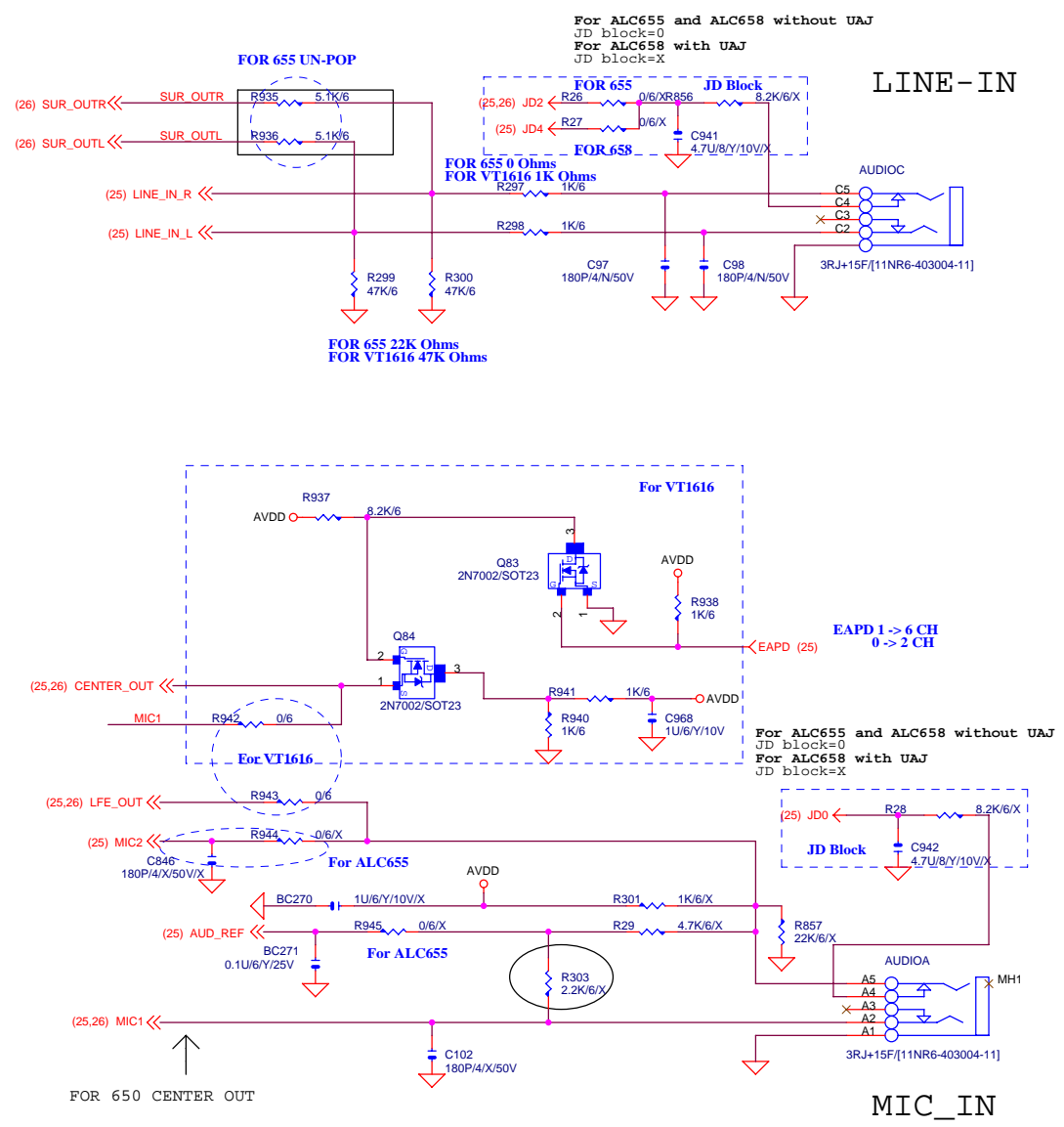
直立式 Audio Jack

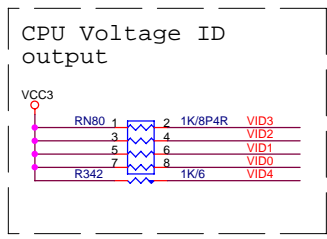
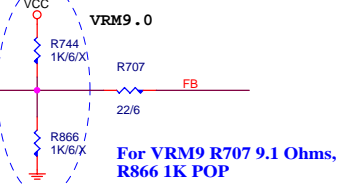
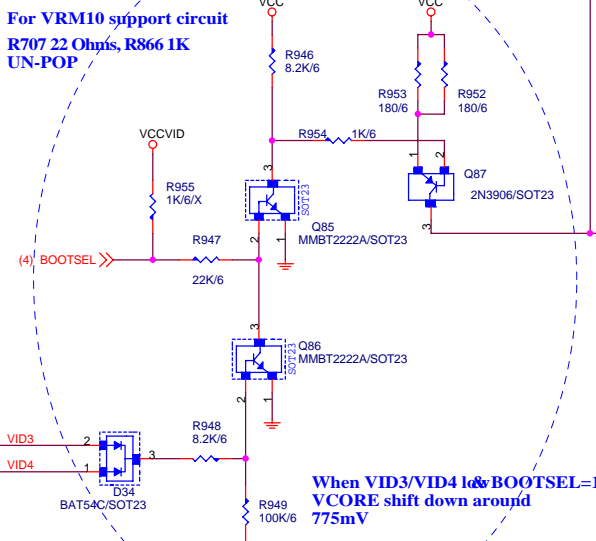
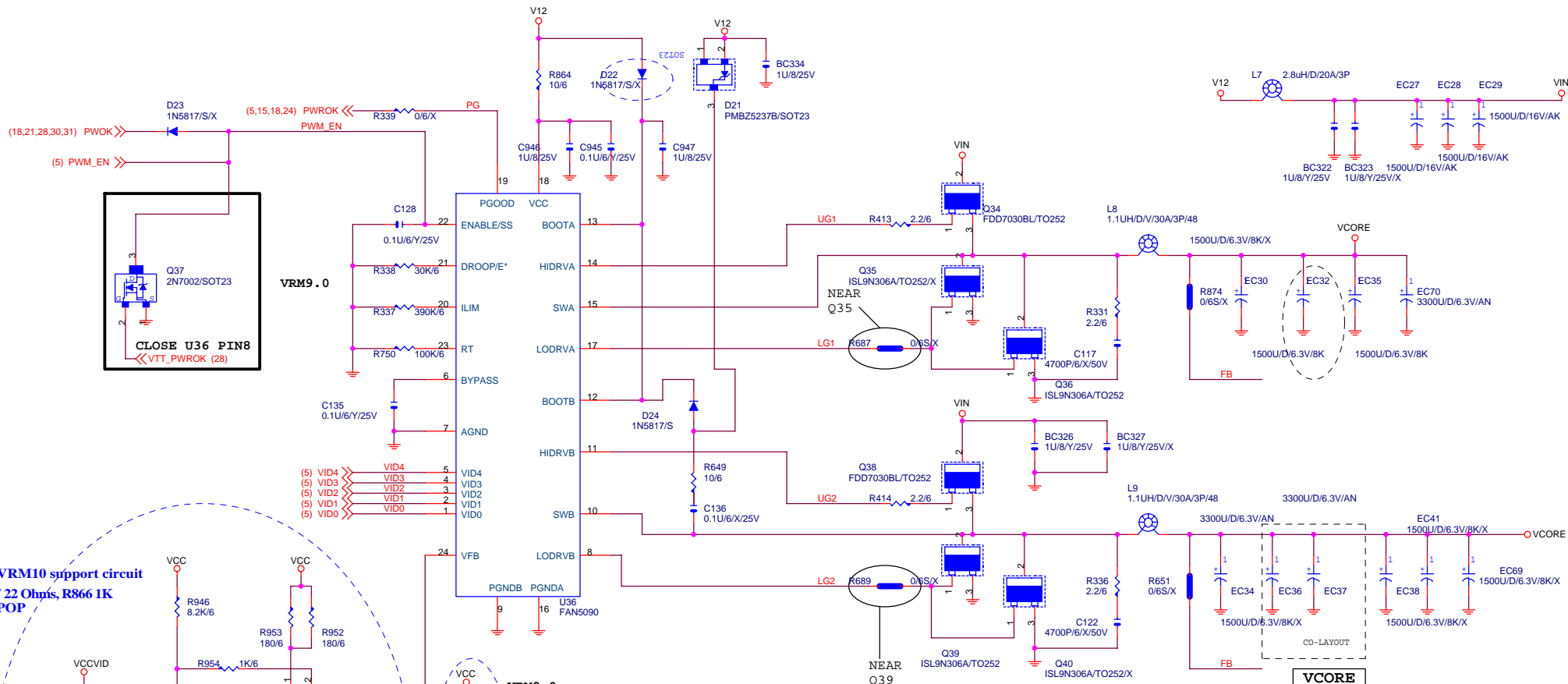


GBT 6 Chanel CONN

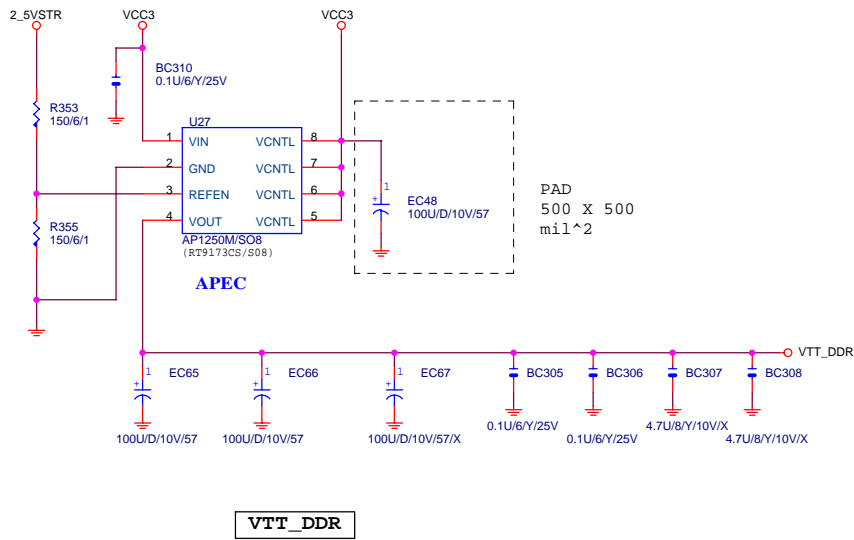


GIGABYTE		
LJACK LINE OUT		
Title		
Size B	Document Number	Rev
	8VM533M-RZ	1.03
Date:	星期二, 六月 29, 2004	Sheet 26 of 34

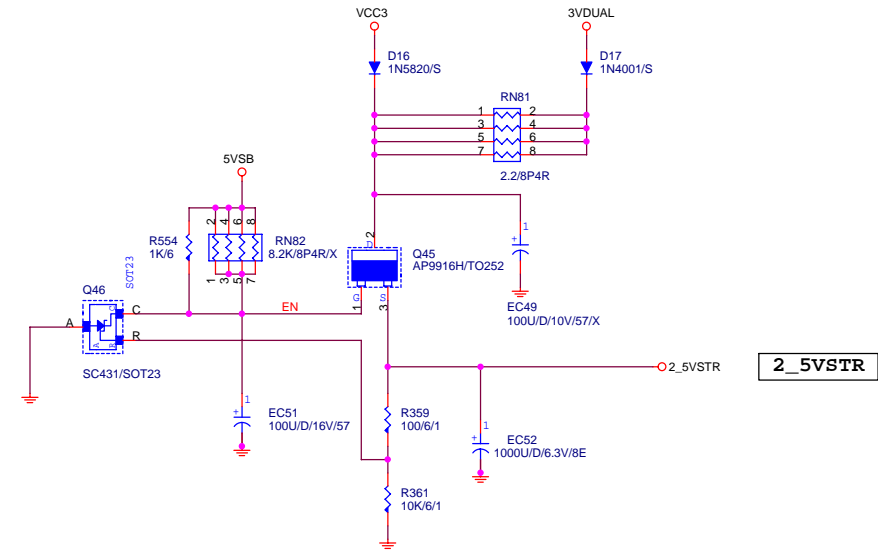




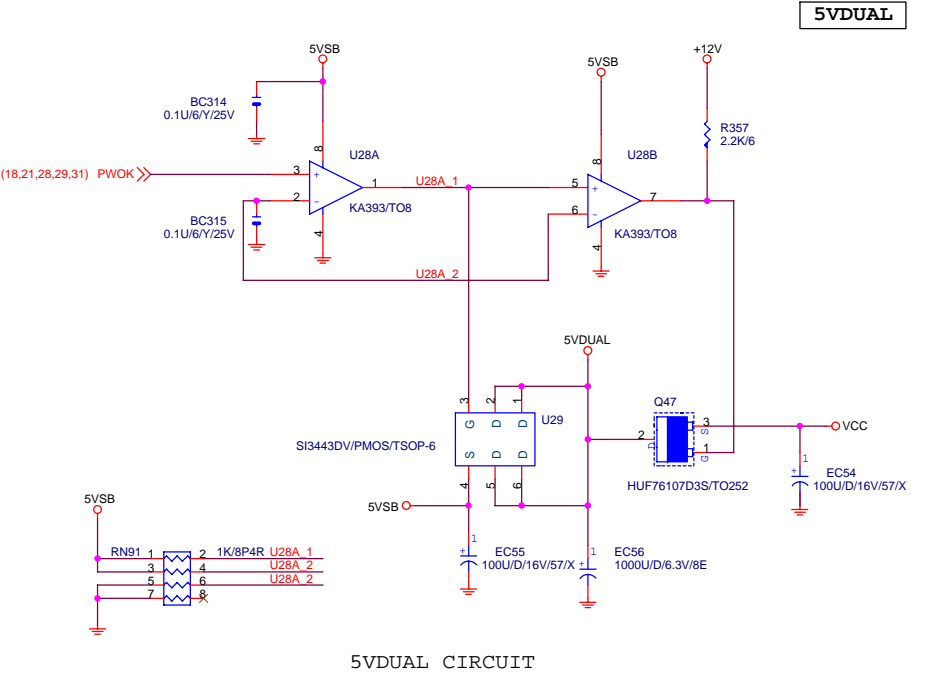
1.25V VTT_DDR LINEAR SOLUTION



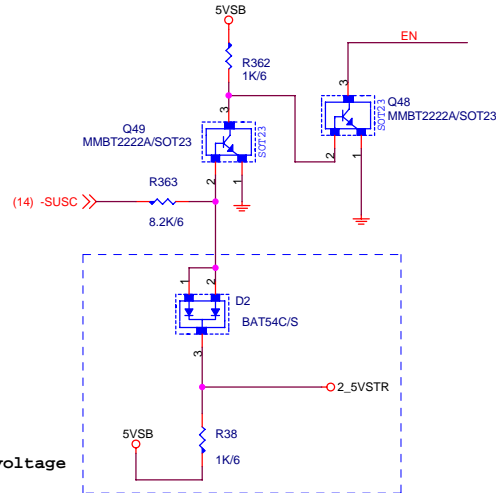
VTT_DDR



2_5VSTR

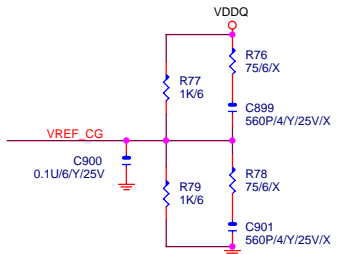
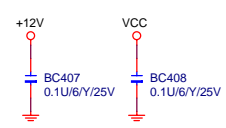
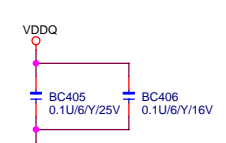
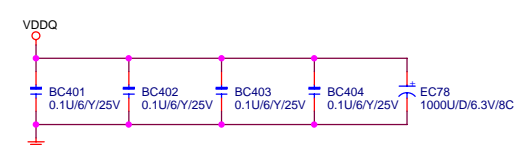
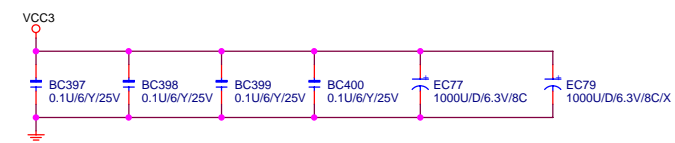
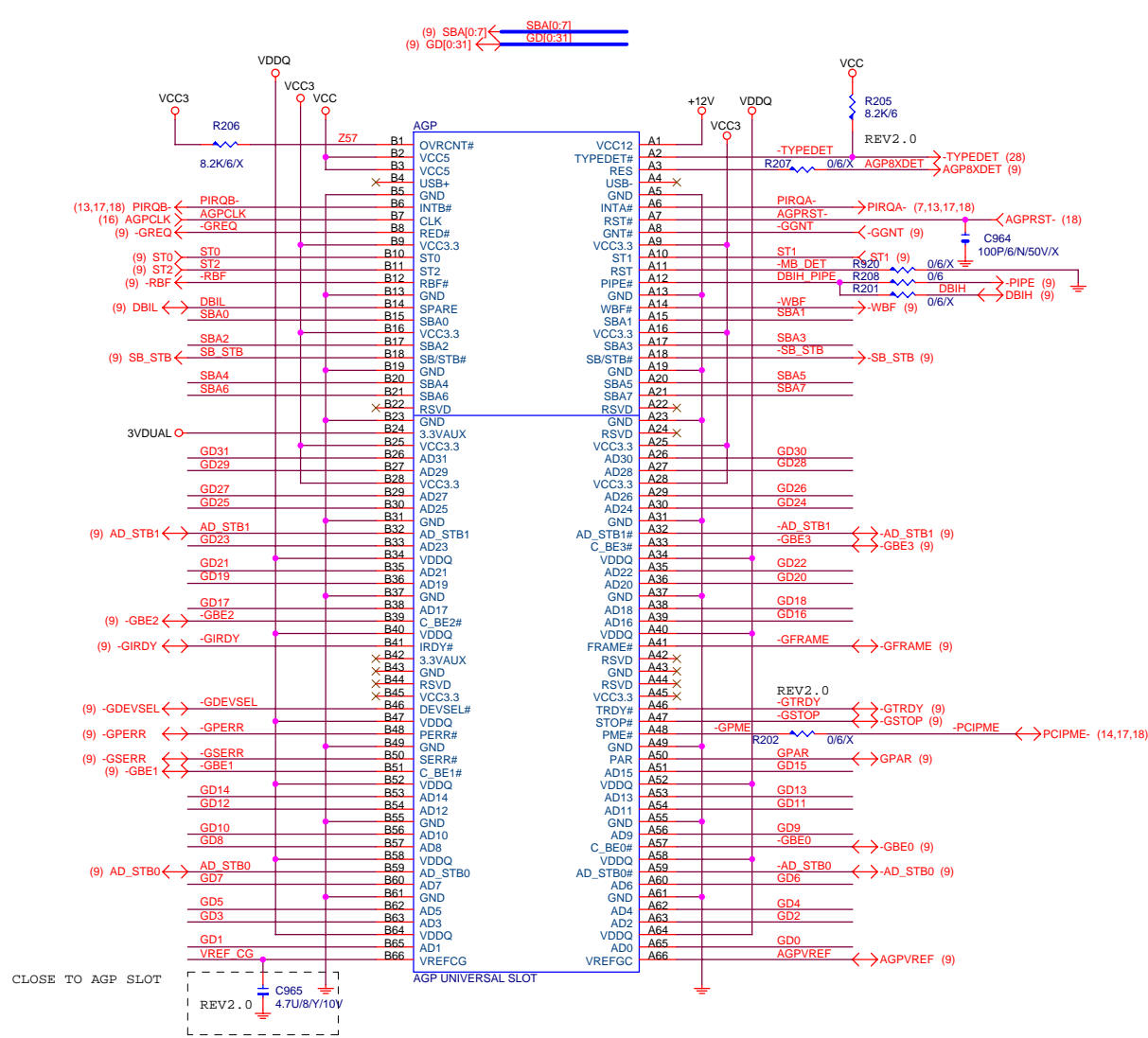


5VDUAL CIRCUIT



DDR Over voltage Protect

GIGABYTE		
DDR POWER		
Size B	Document Number	Rev
	8VM533M-RZ	1.03
Date:	星期三, 六月 29, 2004	Sheet 30 of 34



GIGABYTE		
AGP SLOT		
Title		
Size B	Document Number	Rev
	8VM533M-RZ	1.03
Date:	星期三, 六月 29, 2004	Sheet 32 of 34

GIGABYTE 8VM533M-RZ PCI ROUNTING LIST

Revision 1.03

PCI DEVICE	IDSEL	INT	CLOCK	REQ	GNT
PCI SLOT1	16	B,C,D,A	PCLK1	REQ0-	GNT0-
PCI SLOT2	17	C,D,A,B	PCLK2	REQ1-	GNT1-
PCI SLOT3	18	D,A,B,C	PCLK3	REQ2-	GNT2-
	19				
	20				
	21				
	26				
	28				
	23				
	NA				

GIGABYTE		
Title PCI ROUNT LIST		
Size Custom	Document Number 8VM533M-RZ	Rev 1.03
Date: 星期二 六月 29, 2004	Sheet 34 of 34	