

## GA-8GEM667 Schematics

*Revision 1.0*

SHEET

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20	LPC IO ITE 8712 & FLOPPY & FAN
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SHEET

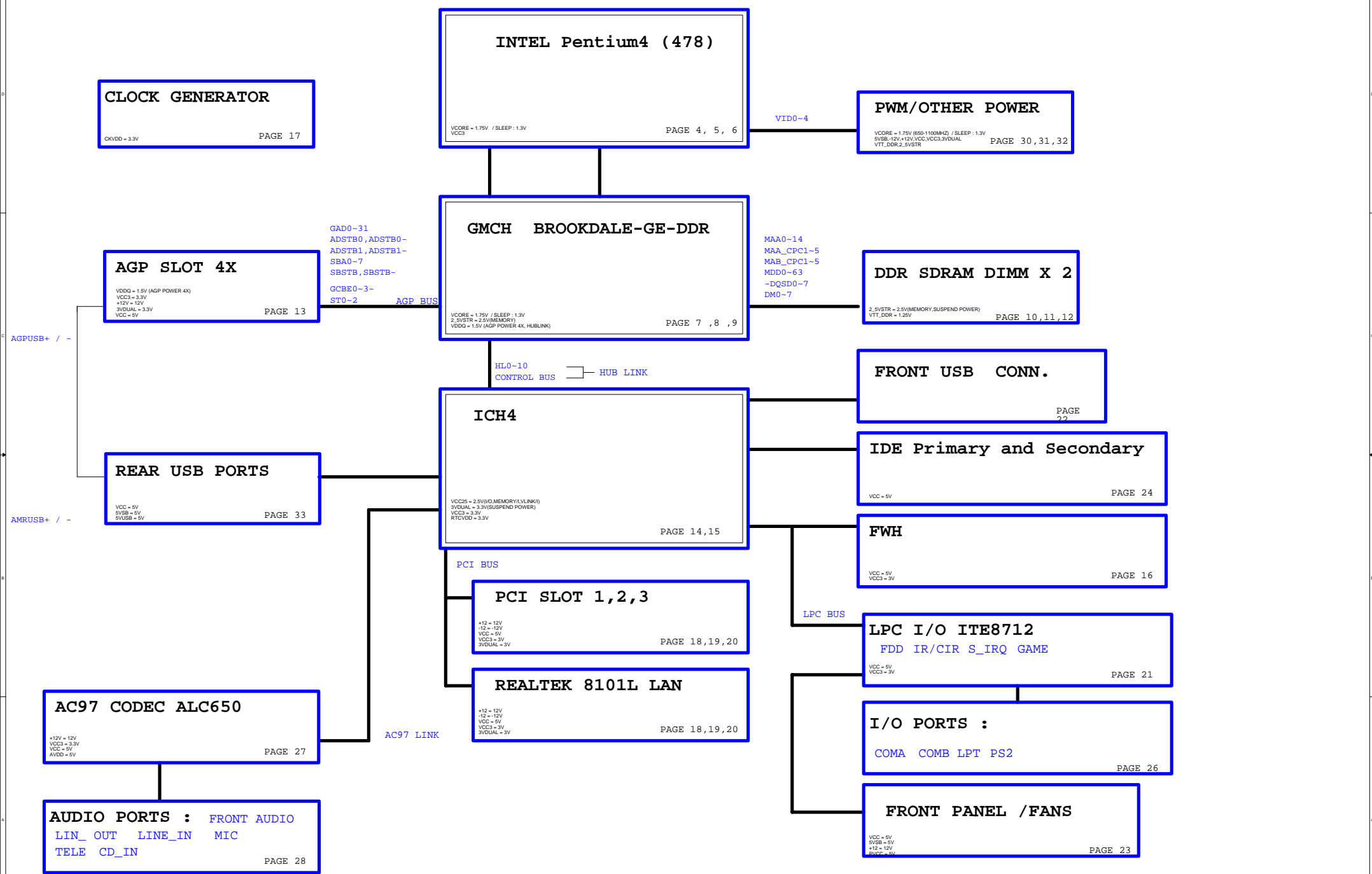
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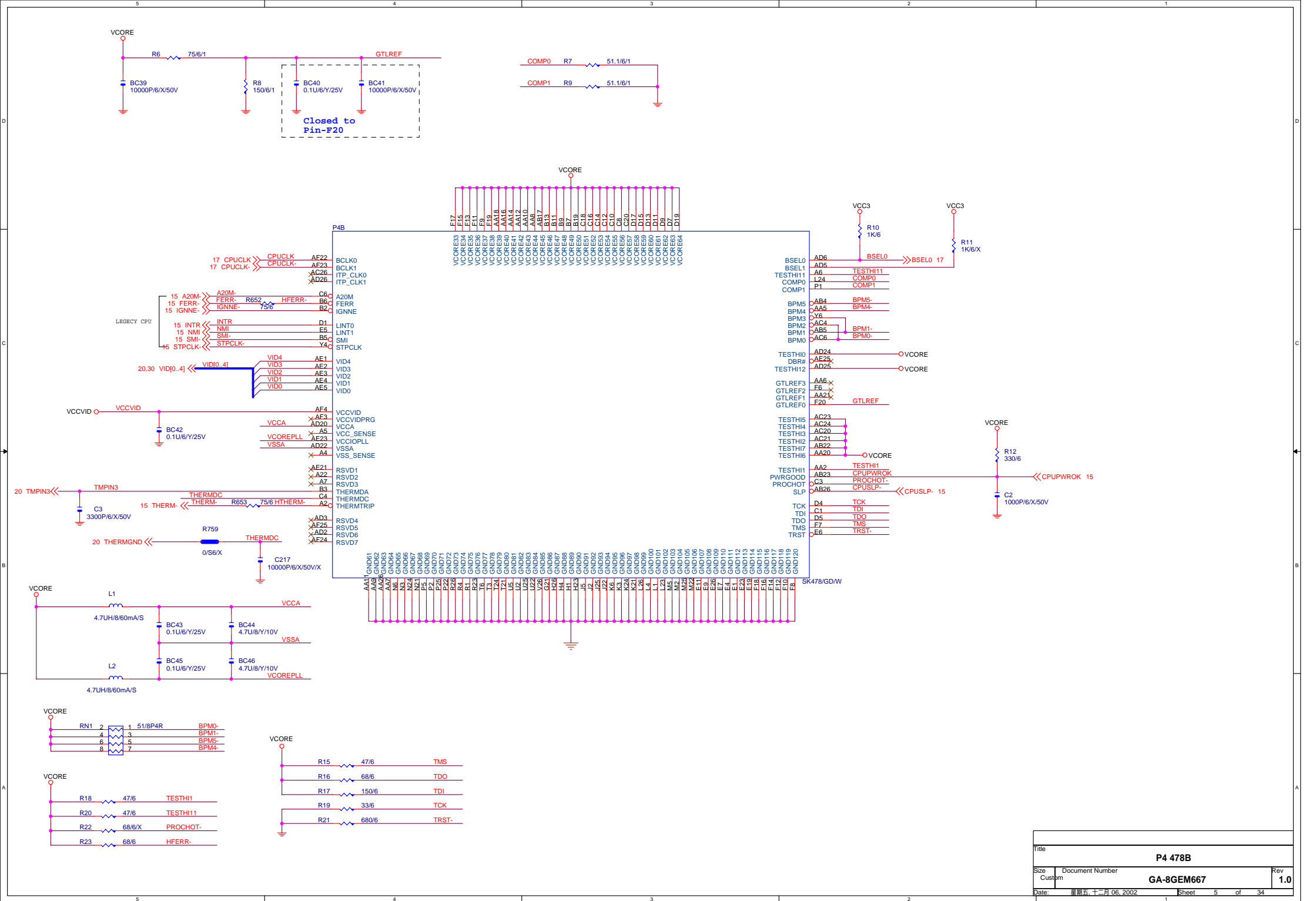
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Size Custom	Document Number		Rev
	<b>GA-8GEM667</b>		<b>1.0</b>
Date:	星期五, 十二月 06, 2002		Sheet 1 of 34

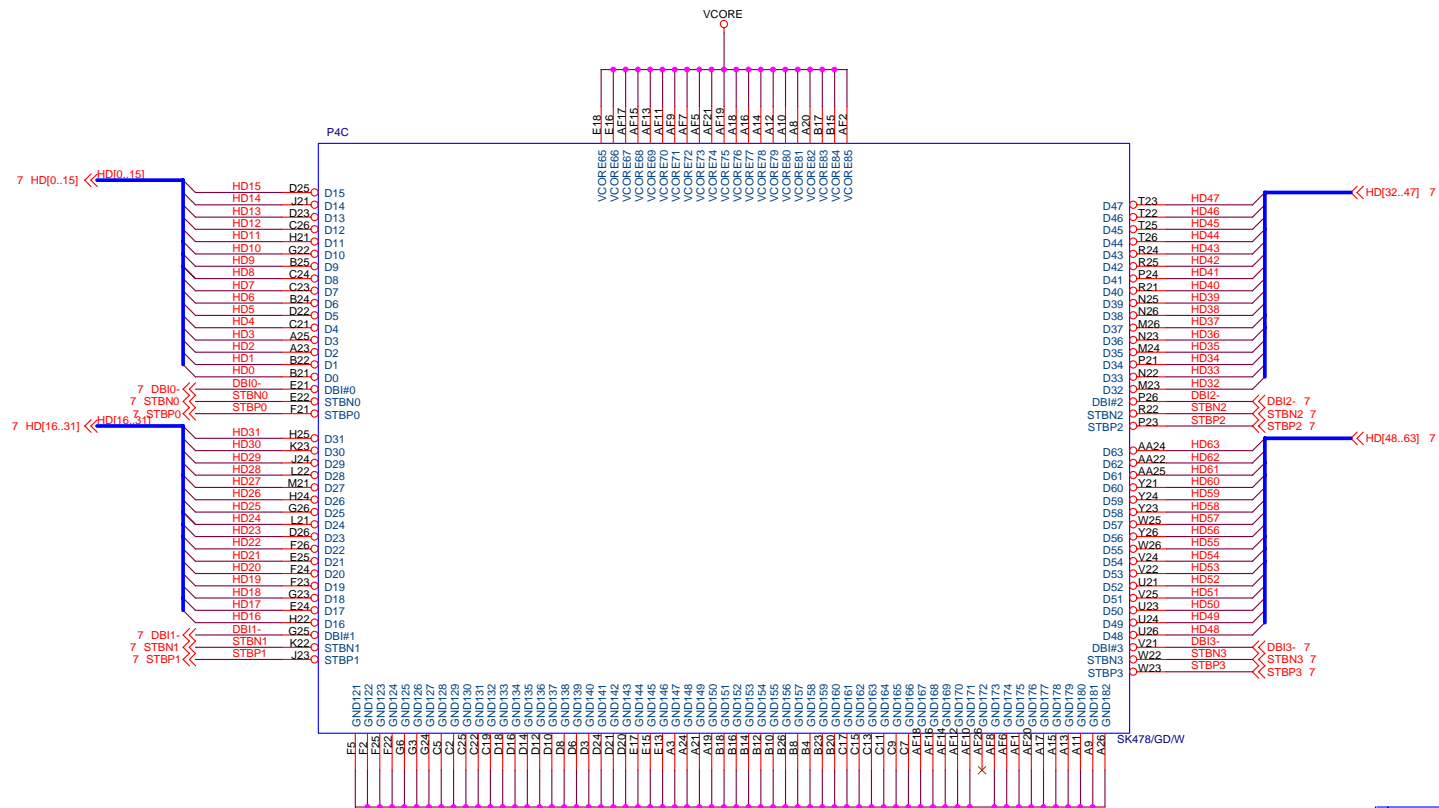
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<b>BOM &amp; PCB MODIFY HISTORY</b>			
Size Custom	Document Number		Rev
	<b>GA-8GEM667</b>		<b>1.0</b>
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BLOCK DIAGRAM

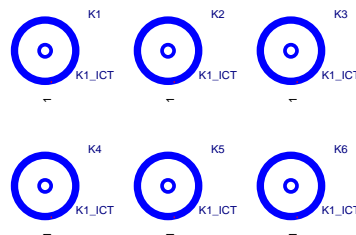
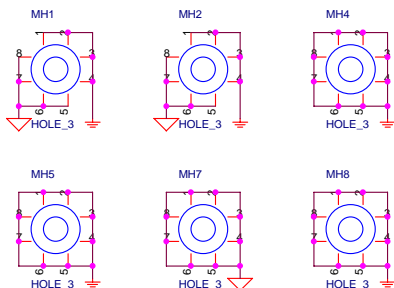
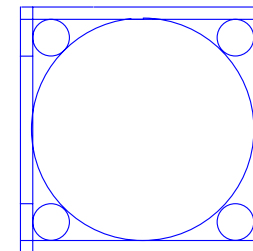




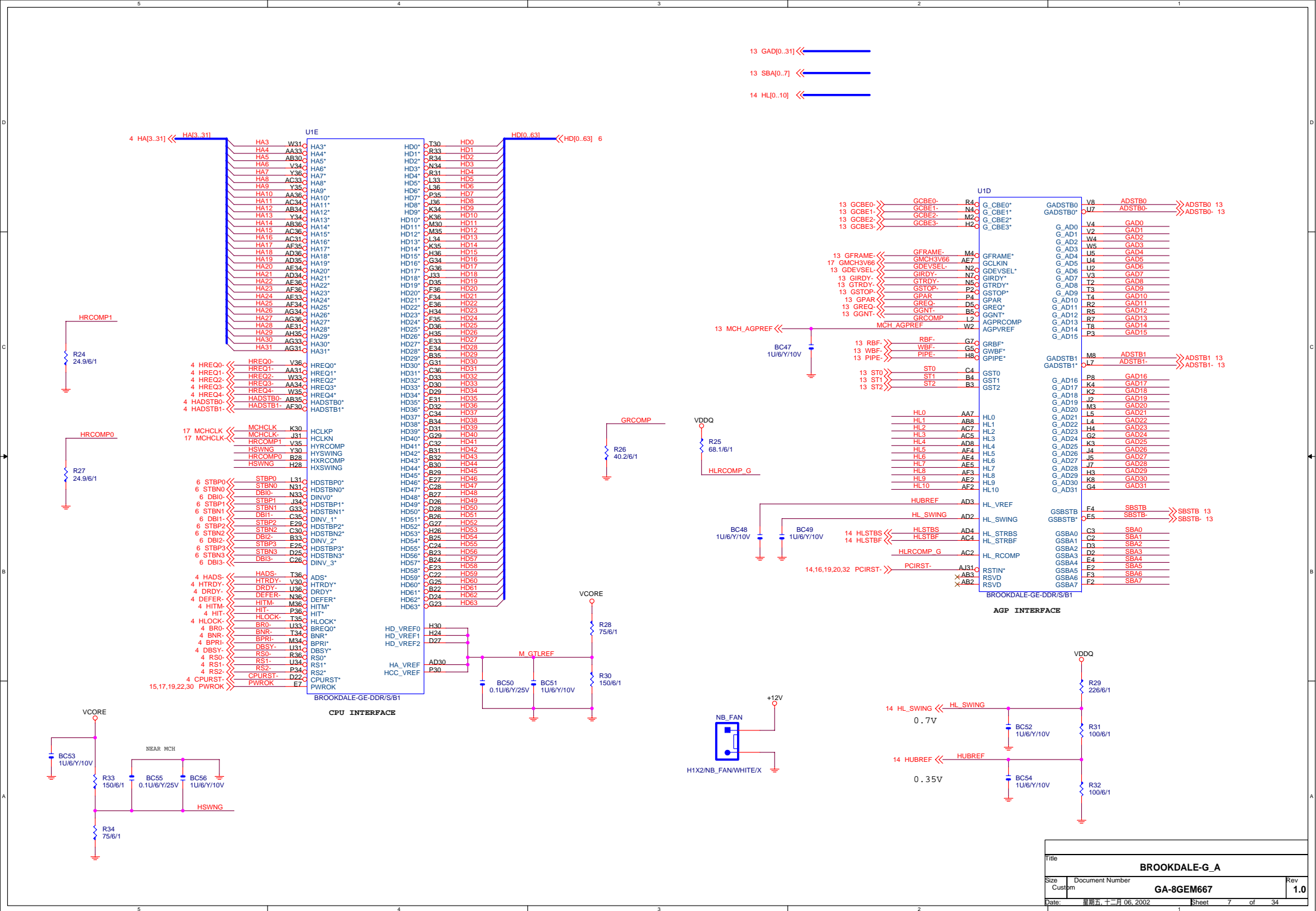


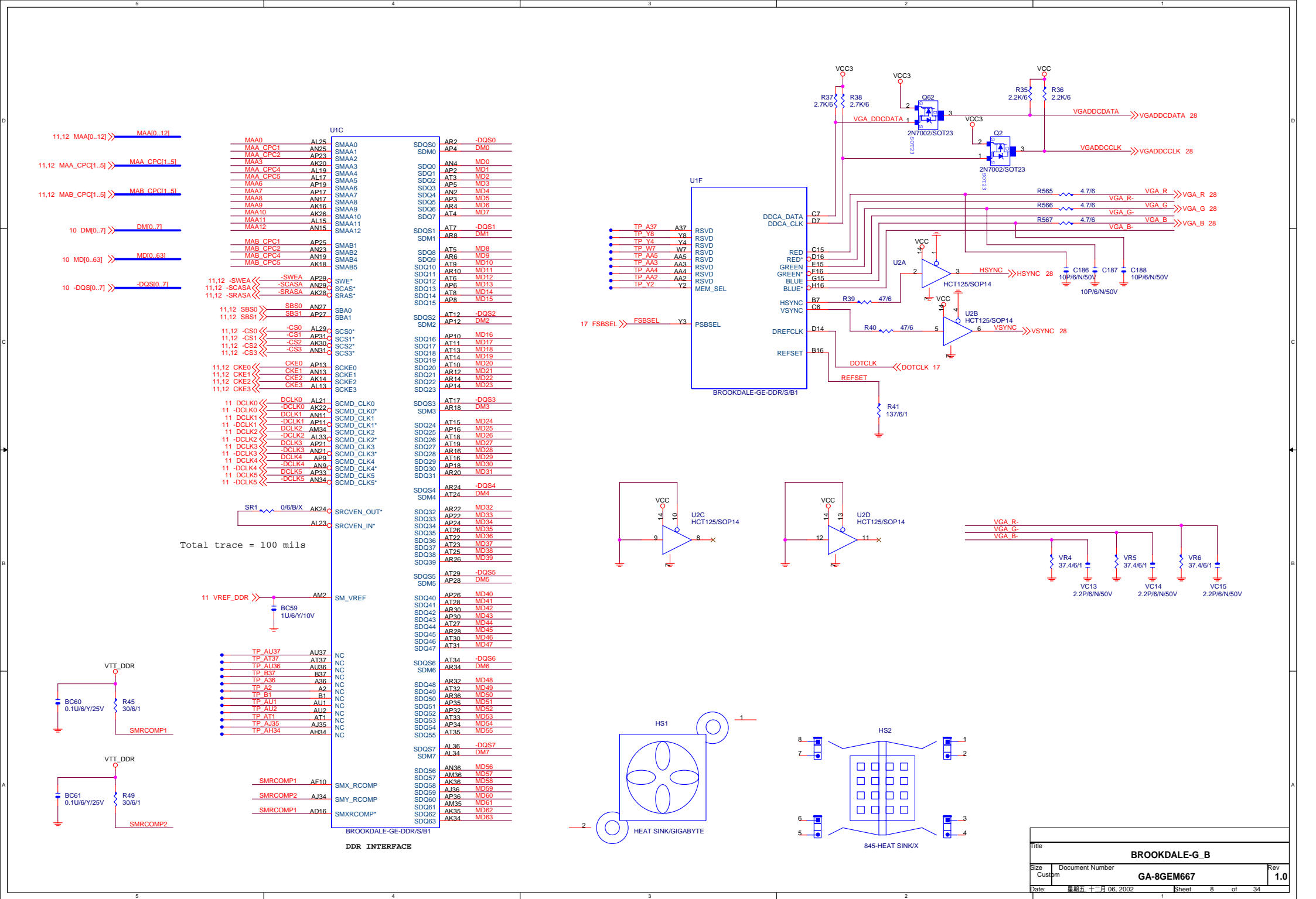


CR  
CPU RETENTION

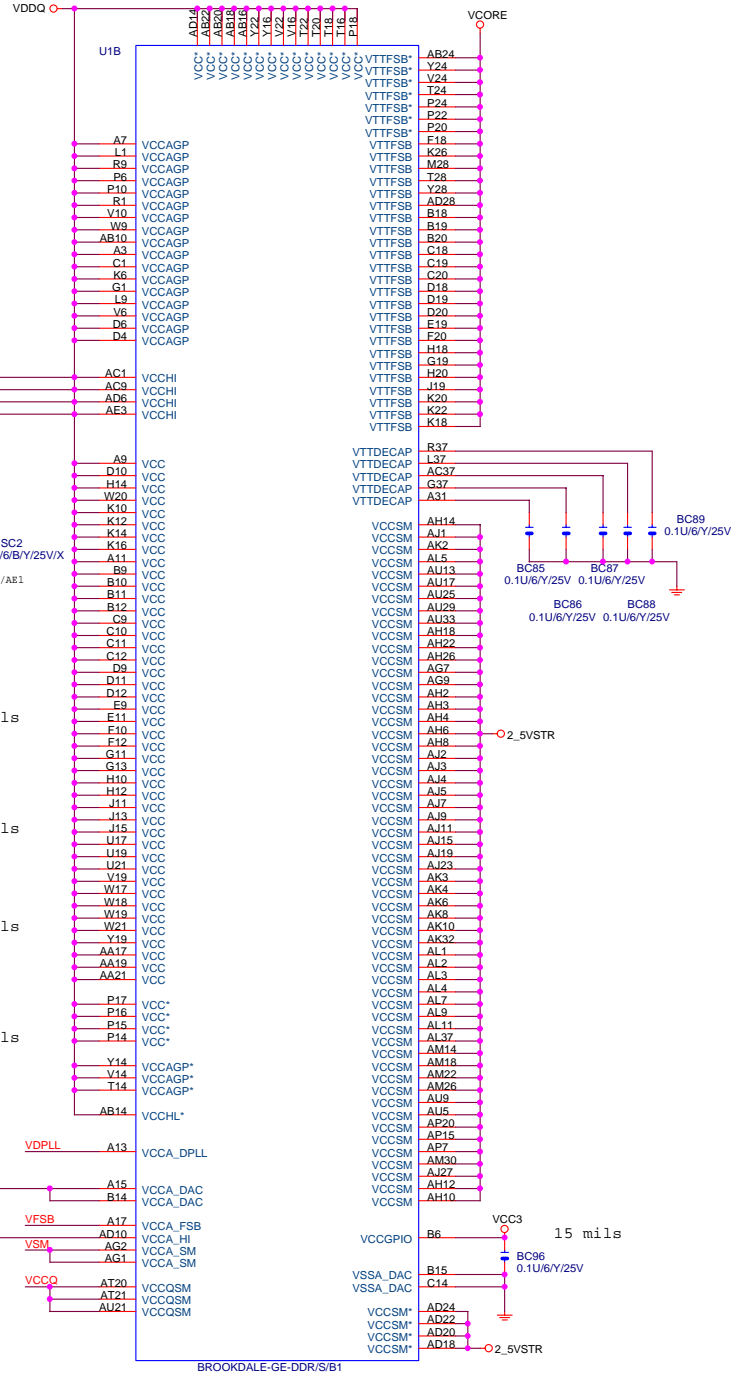
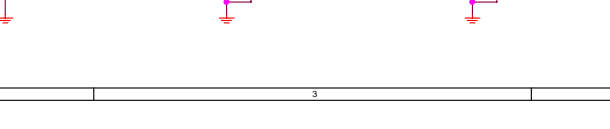
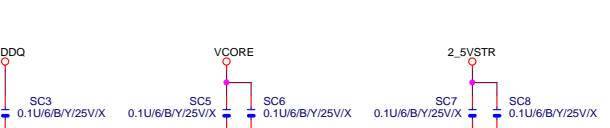
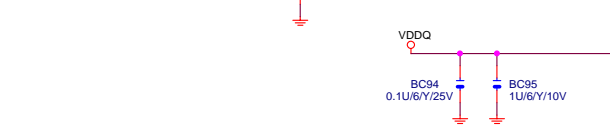
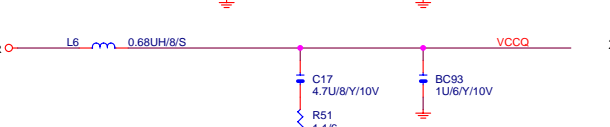
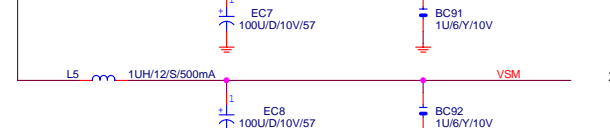
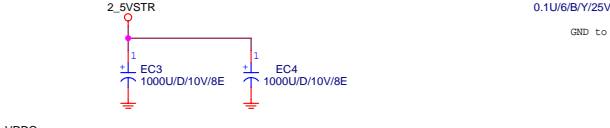
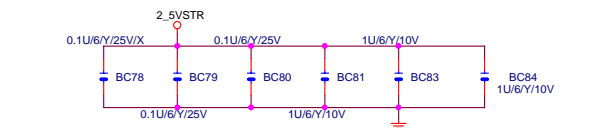
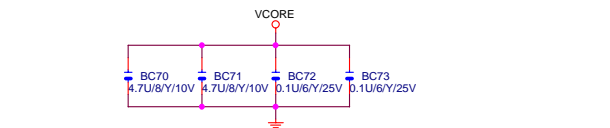
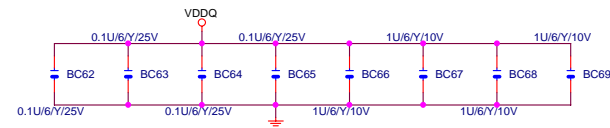
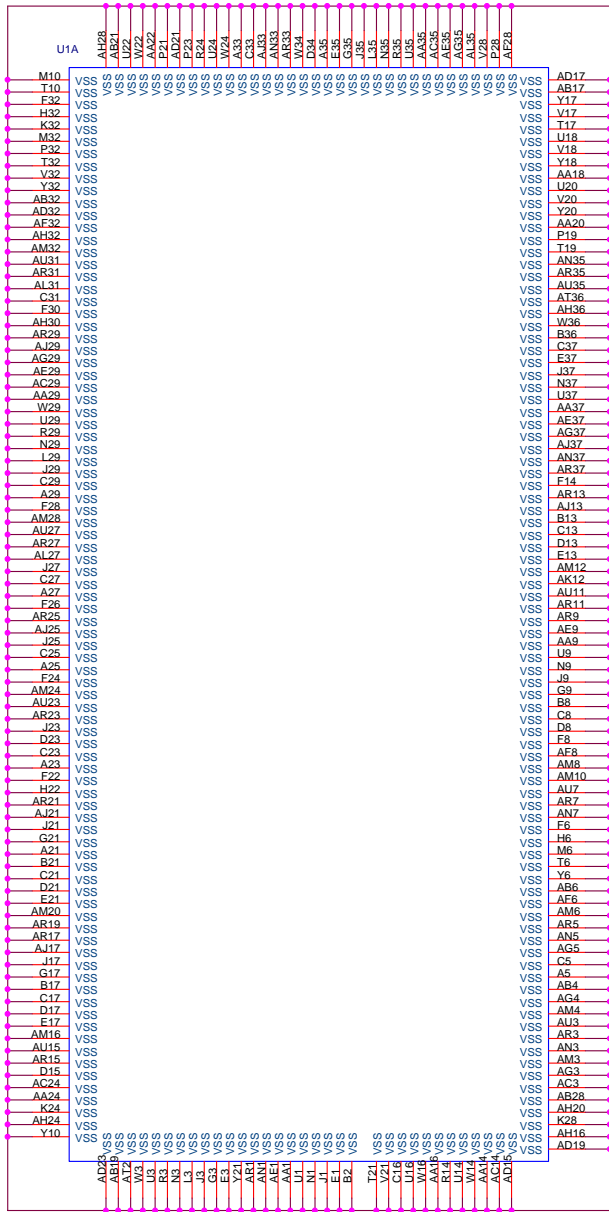


Title			P4 478C
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Title			BROOKDALE-G_C		
Size	Document Number	Rev			1.0
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11,12 MD\_[0..63] << <<MD[0..63] 8

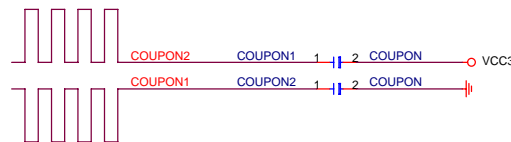
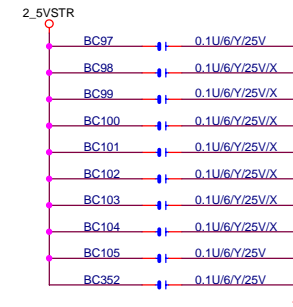
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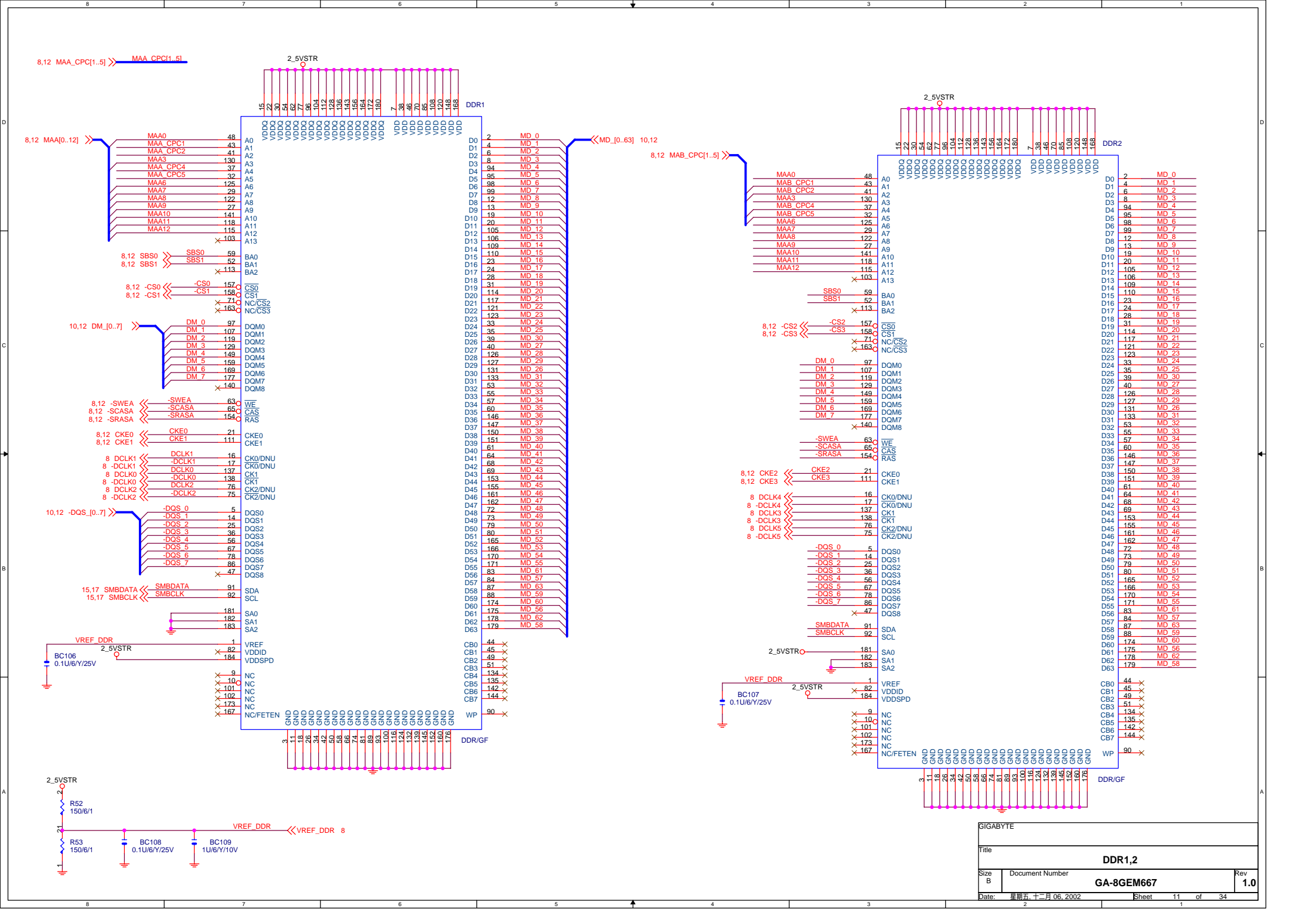
11,12 -DQS\_[0..7] << <<-DQS[0..7] 8

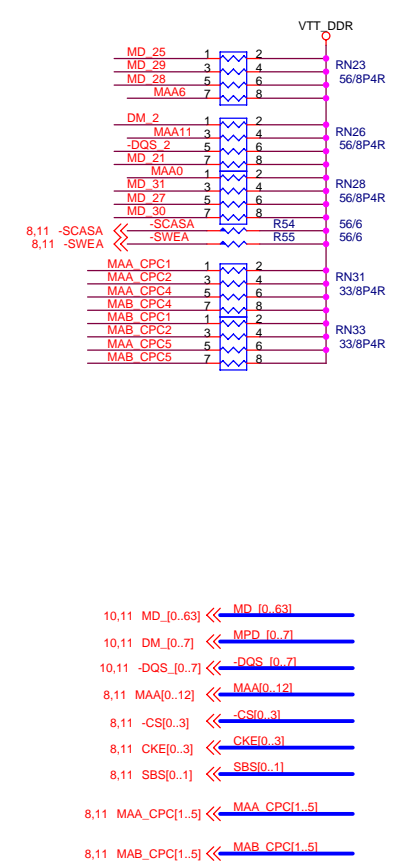
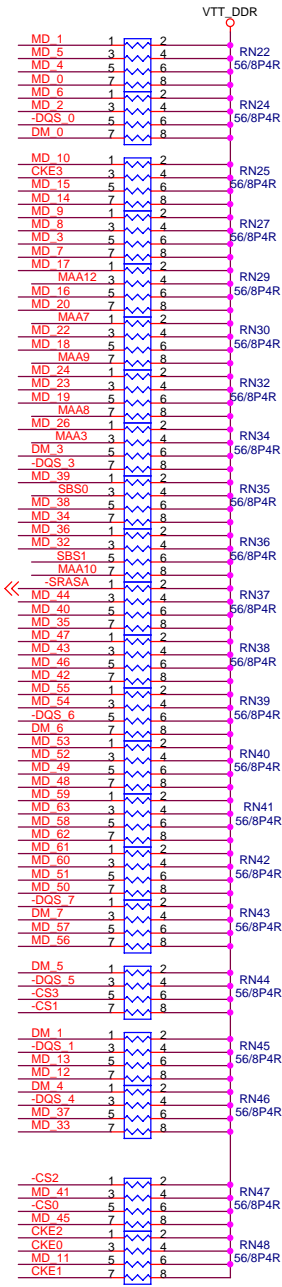
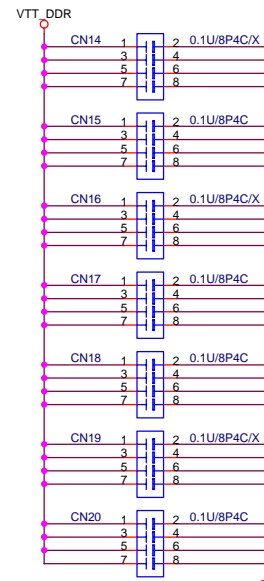
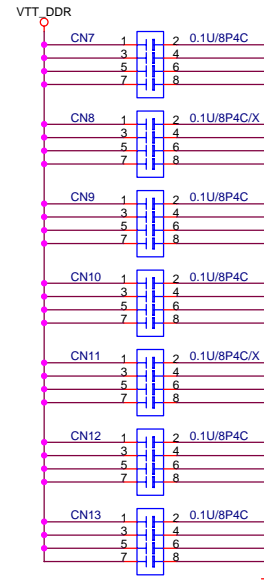
DM 0	RN3	1	2 0/8P4R/X	DM0
-DQS 0		3	4	-DQS0
MD 2		5	6	MD2
MD 6		7	8	MD6
MD 0	RN5	1	2 0/8P4R/X	MD0
MD 4		3	4	MD4
MD 5		5	6	MD5
MD 1		7	8	MD1
MD 12	RN6	1	2 0/8P4R/X	MD12
MD 13		3	4	MD13
-DQS 1		5	6	-DQS1
DM 1		7	8	DM1
MD 14	RN7	1	2 0/8P4R/X	MD14
MD 15		3	4	MD15
MD 10		5	6	MD10
MD 11		7	8	MD11
-DQS 2	RN9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

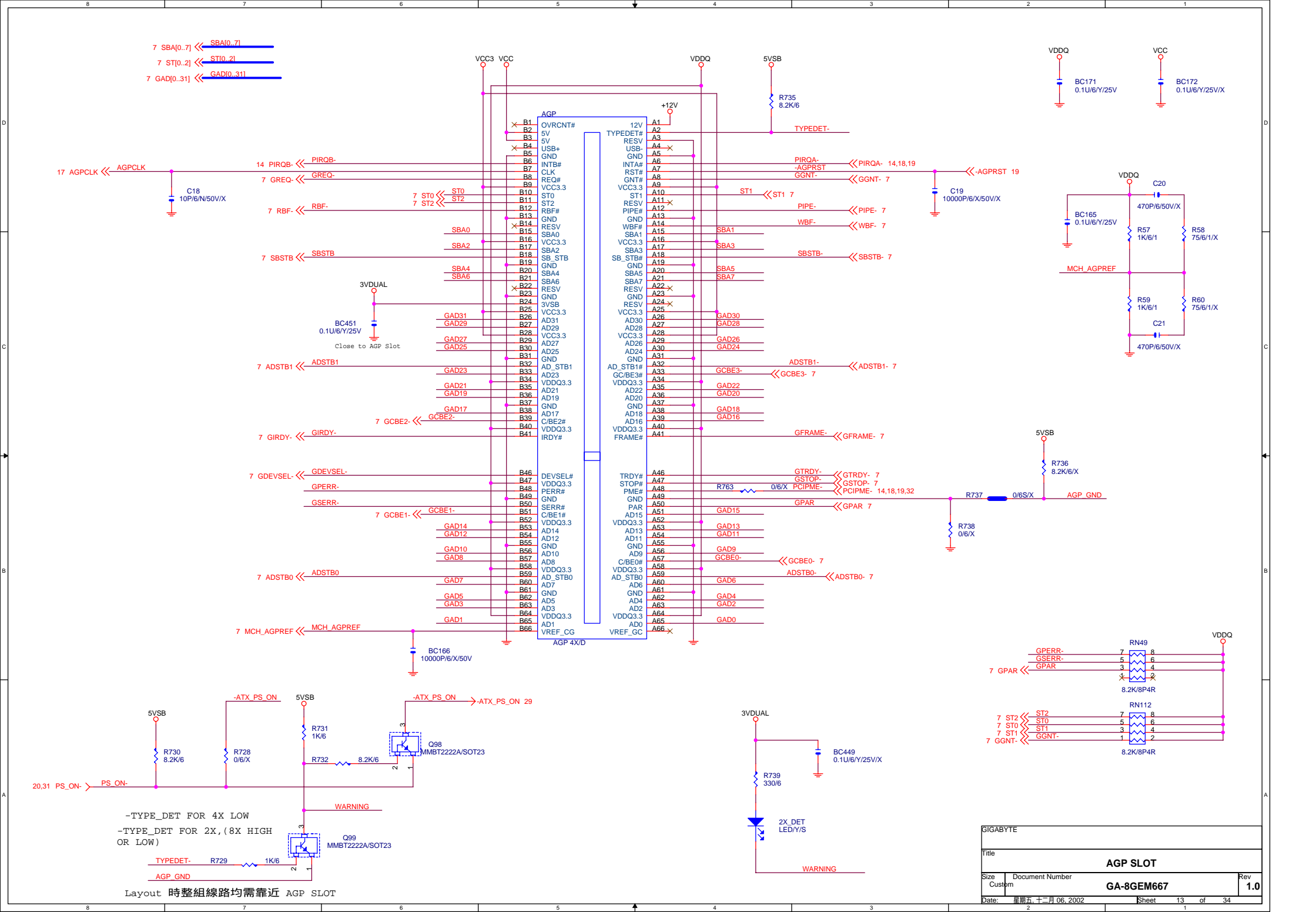
MD 20	RN2	1	2 0/8P4R/X	MD20
MD 16		3	4	MD16
MD 17		5	6	MD17
MD 21		7	8	MD21
MD 42	RN4	1	2 0/8P4R/X	MD42
MD 46		3	4	MD46
MD 43		5	6	MD43
MD 47		7	8	MD47

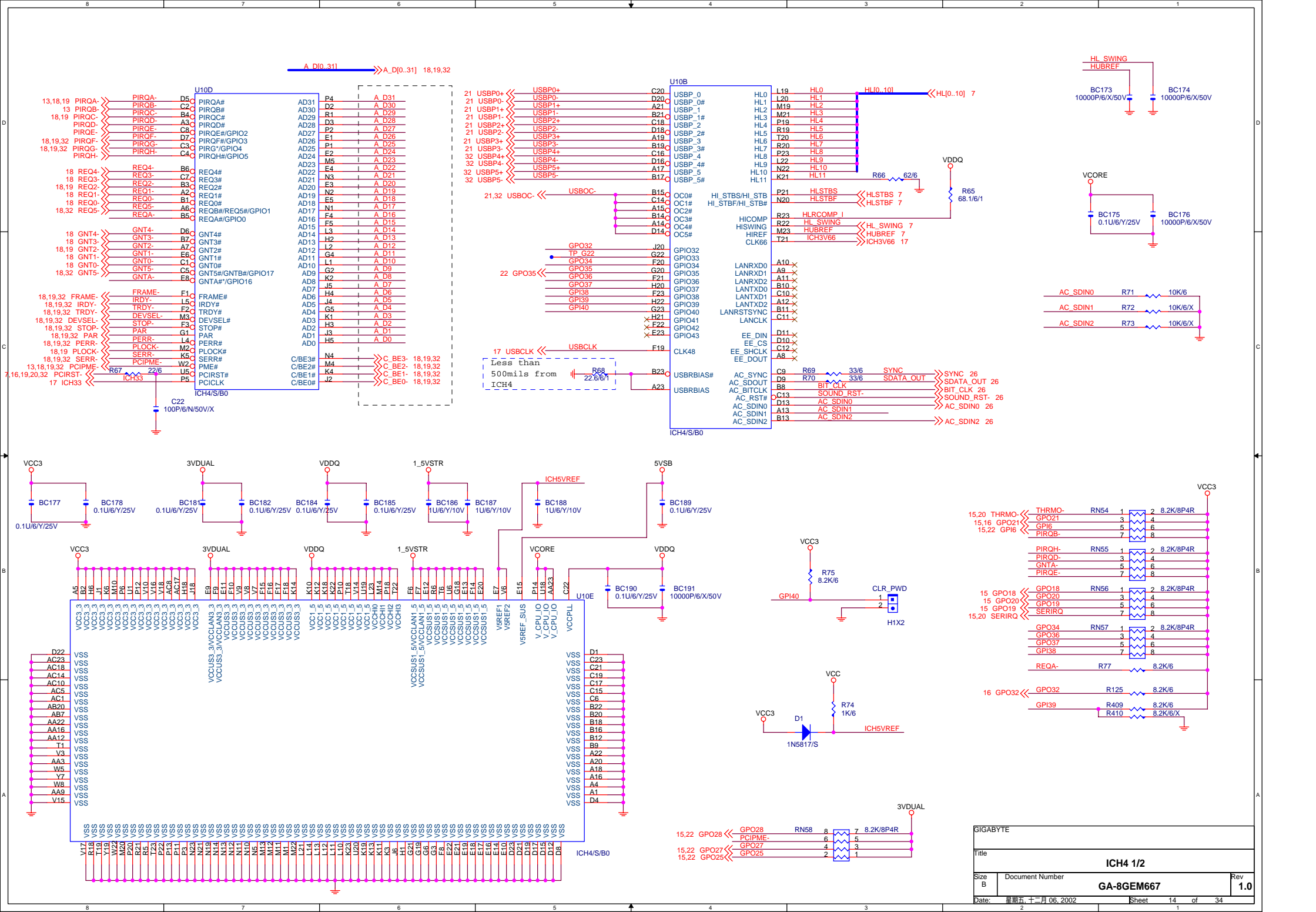
MD 7	RN8	1	2 0/8P4R/X	MD7
MD 3		3	4	MD3
MD 8		5	6	MD8
MD 9		7	8	MD9
MD 19	RN10	1	2 0/8P4R/X	MD19
MD 23		3	4	MD23
MD 24		5	6	MD24
MD 28		7	8	MD28

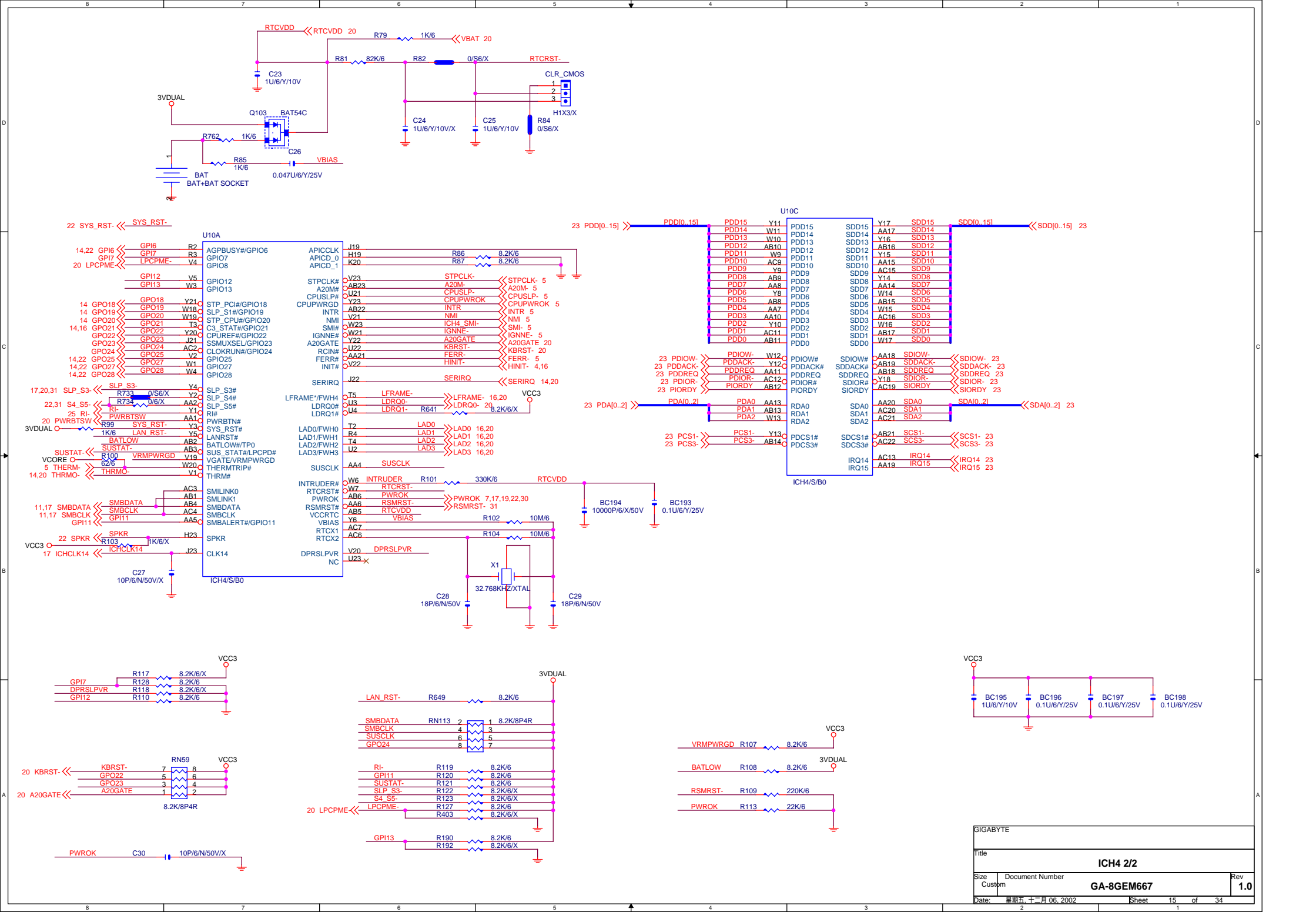










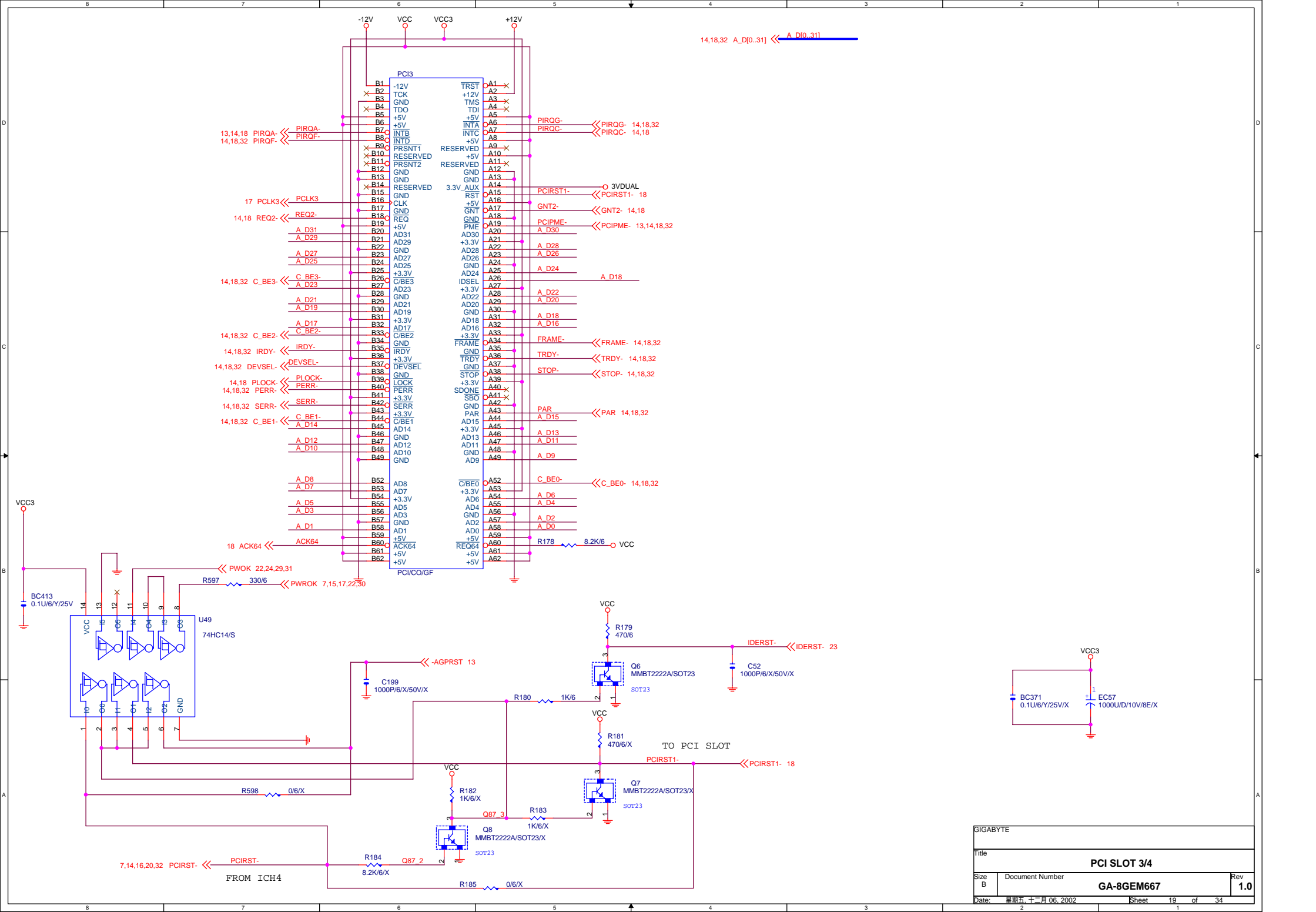


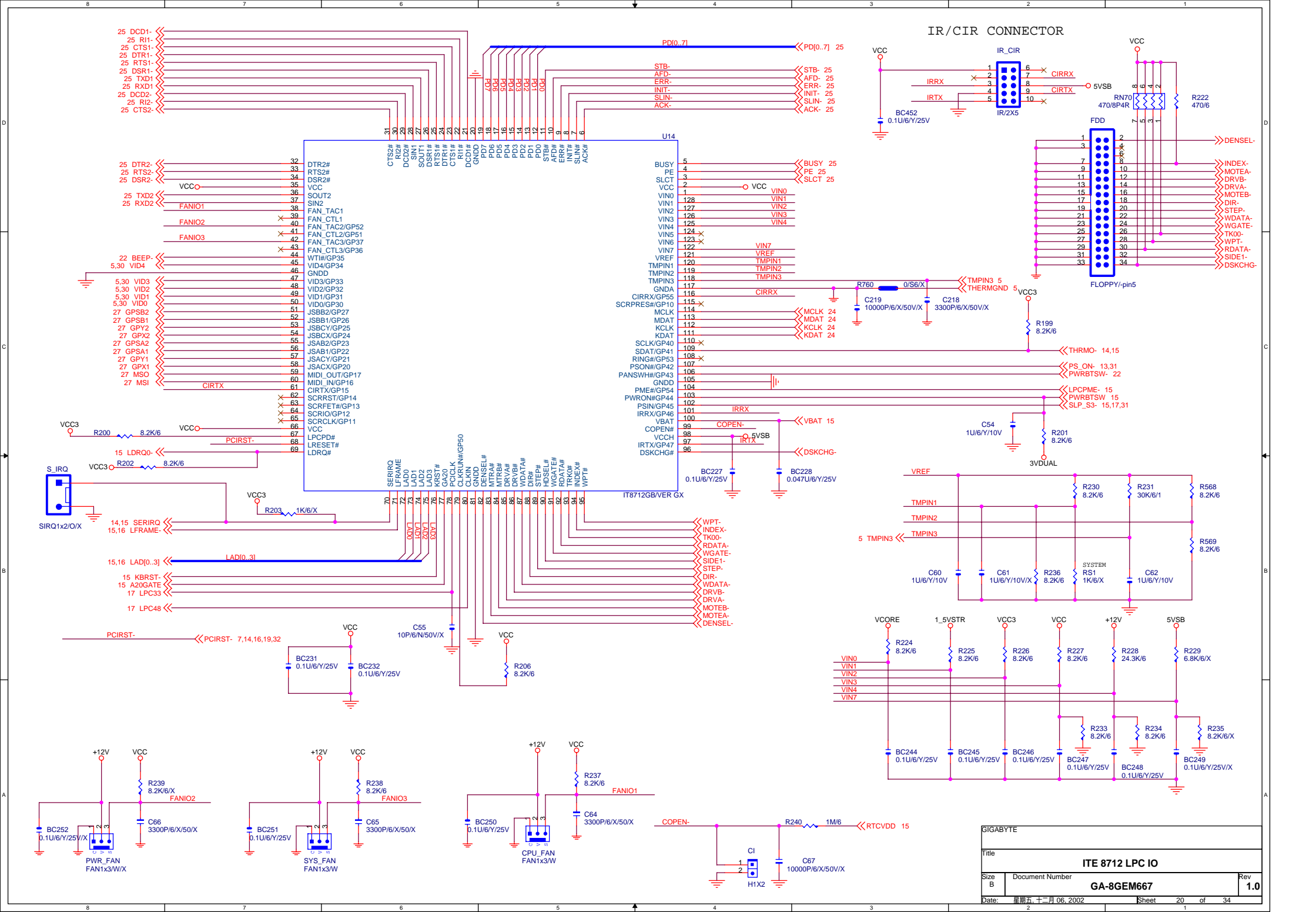




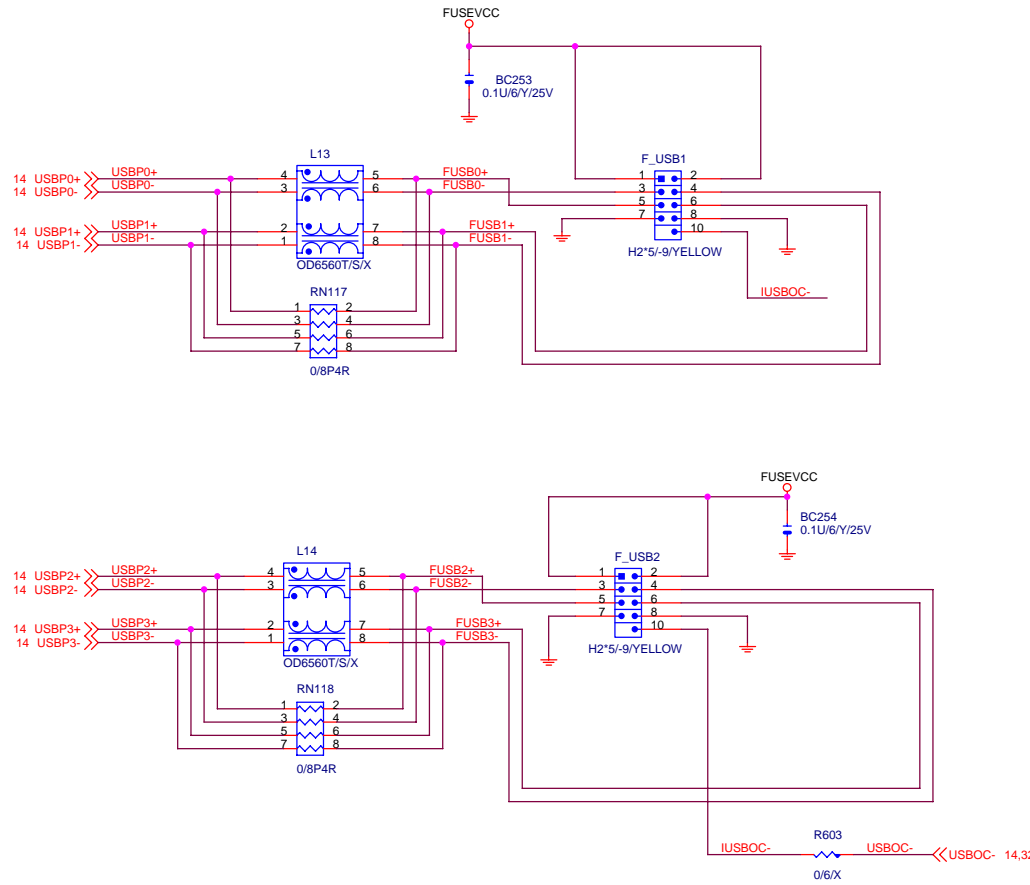


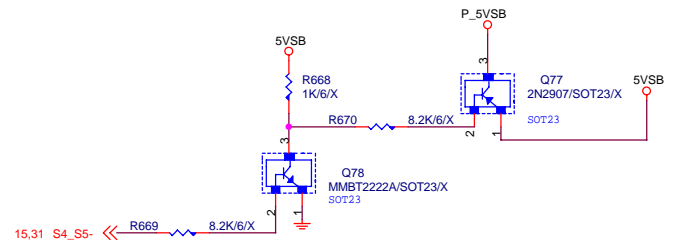
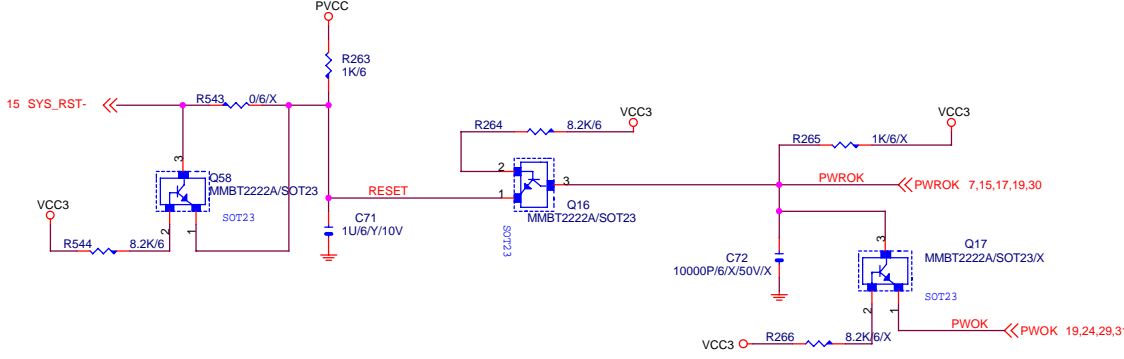
GIGABYTE			
Title <b>PCI SLOT 1/2</b>			
Size B	Document Number <b>GA-8GEM667</b>		Rev <b>1.0</b>
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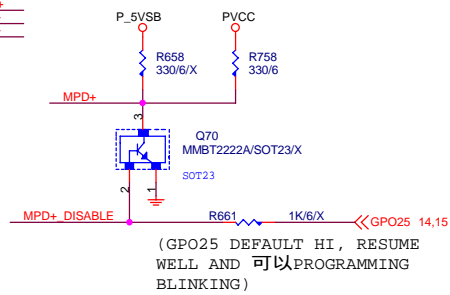
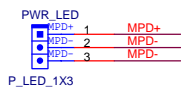


# ICH4 USB2.0





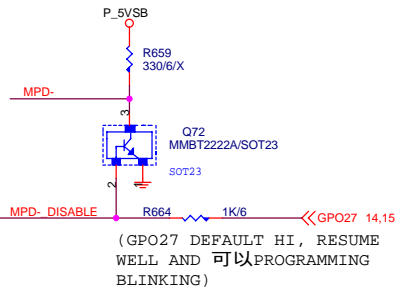
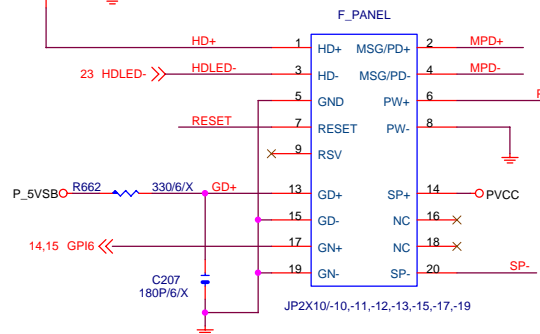
3 PIN POWER LED



(GPO28 DEFAULT HIGH, RESUME WELL)

States for green LED		
LED States	ACPI States	GPO28
ON	S1,S3	0
OFF	S0,S5	1

INTEL FRONT PANEL



States for a single-color power LED

LED States	ACPI States	GPO25	GPO27	GPO35
OFF	S1,S3,S5	1	1	NO1
Steady Green	S0	0	1	0
Blinking Green	S0(message waiting)	0	B	0

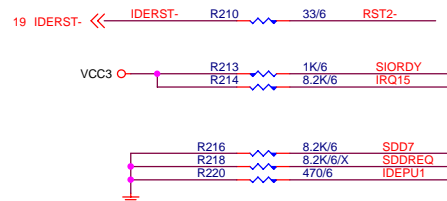
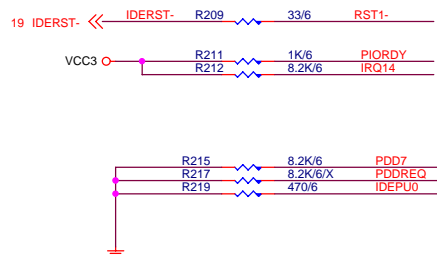
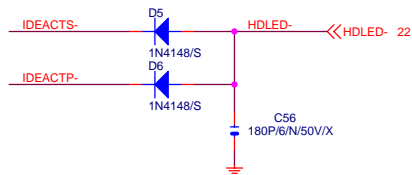
NO1 GPO35 只需在 S1 PROGRAMMING LOW

States for a dual-color power LED

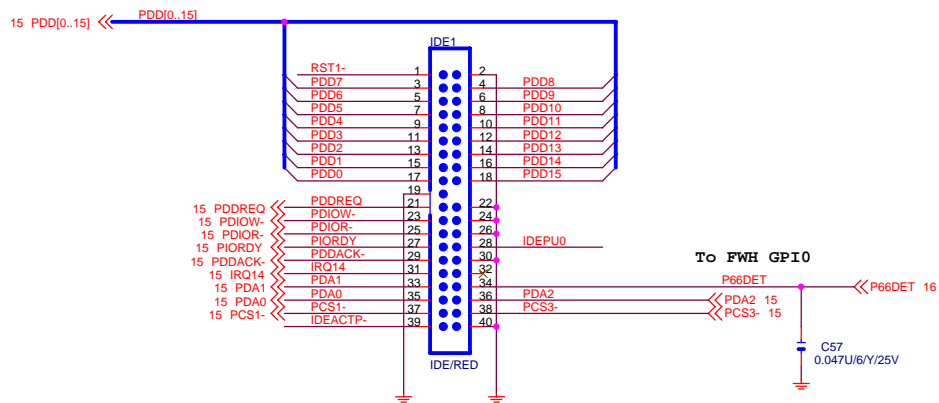
LED States	ACPI States	GPO25	GPO27	GPO35
OFF	S5	1	1	X
Steady Green	S0	0	1	0
Blinking Green	S0(message waiting)	0	B	0
Steady Yellow	S1,S3	1	0	NO1
Blinking Yellow	S1,S3(message waiting)	1	B	NO1

(DEFAULT HIGH, main power )

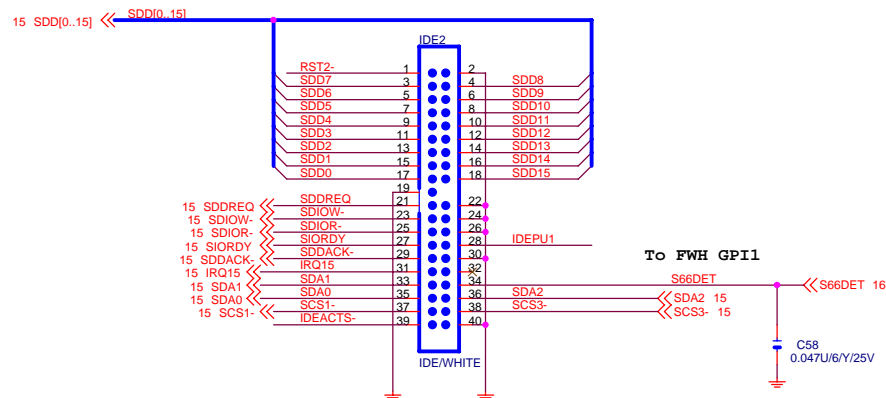
IF GPO35 有 SUPPORT S5 LOW, S0 HIGH 則不需使用此CIRCUIT



## PRIMARY IDE CONNECTOR

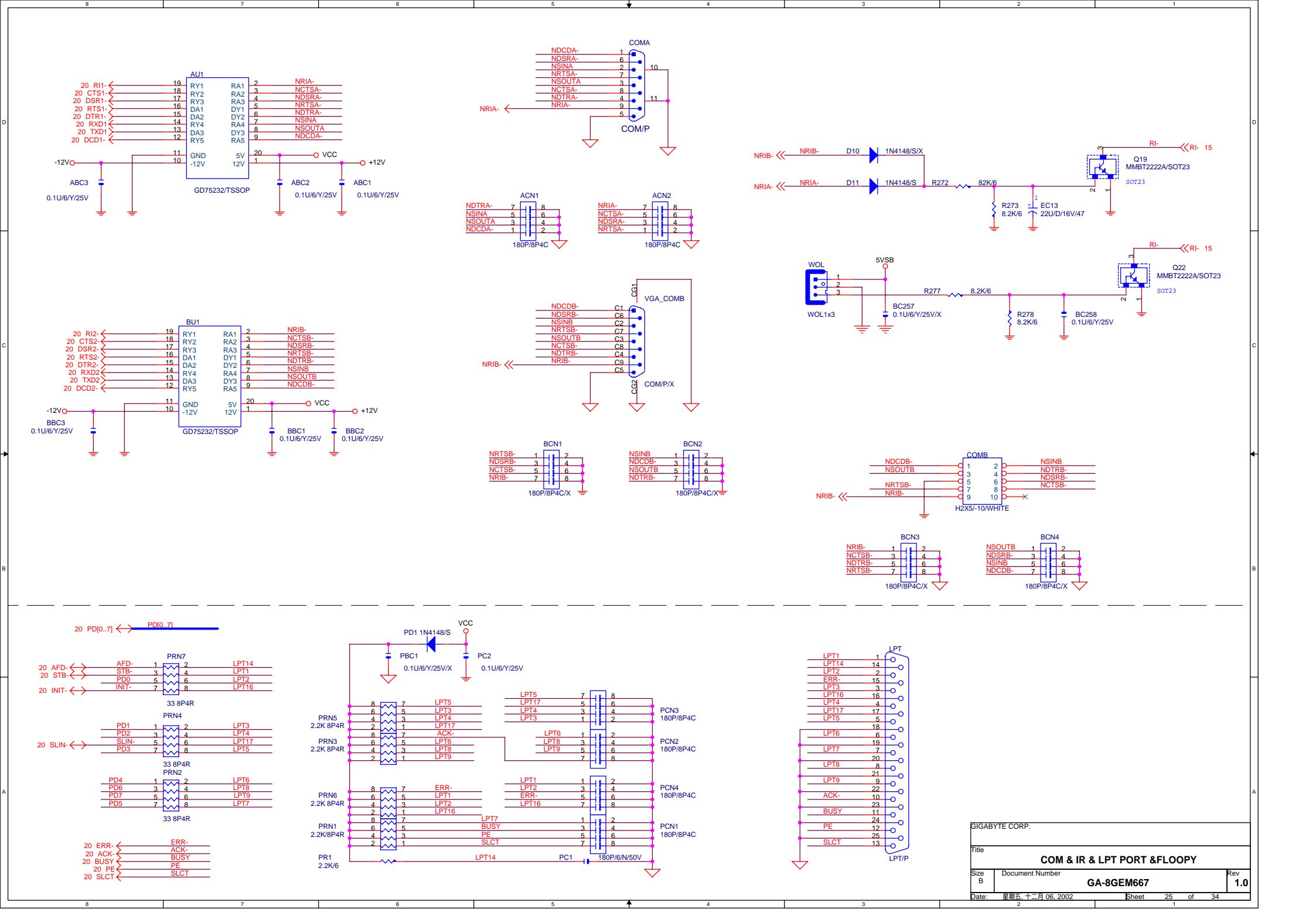


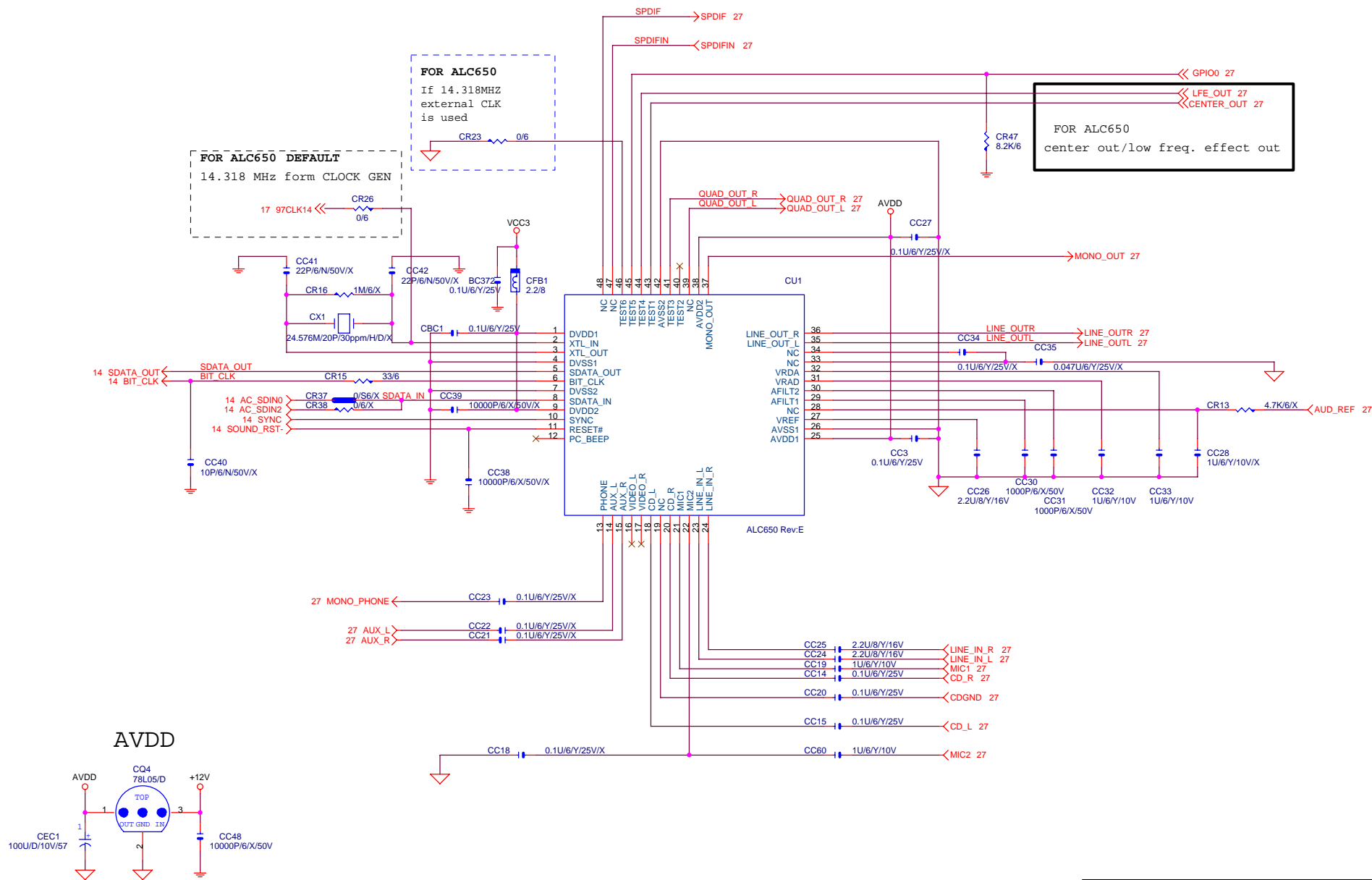
## SECONDARY IDE CONNECTOR



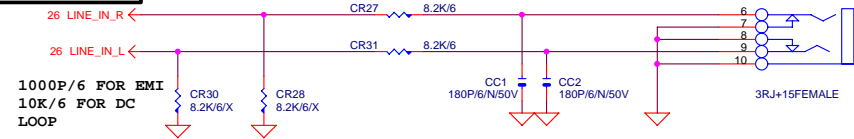




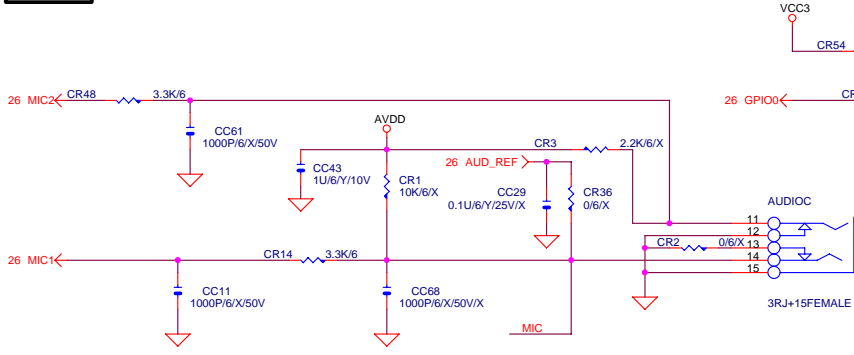




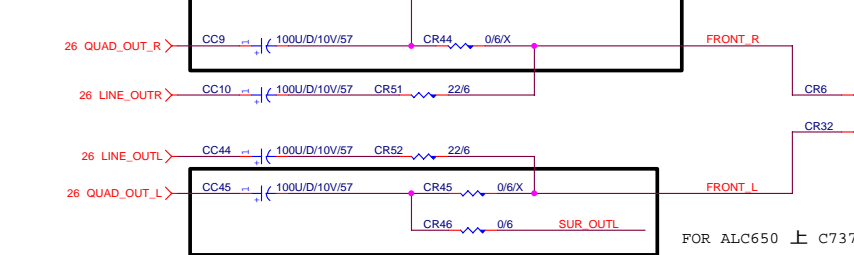
# LINE-IN



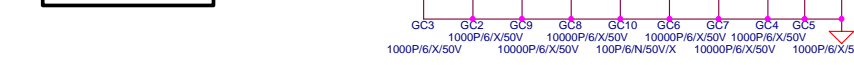
# MIC



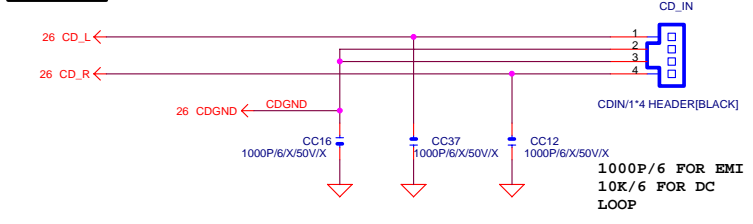
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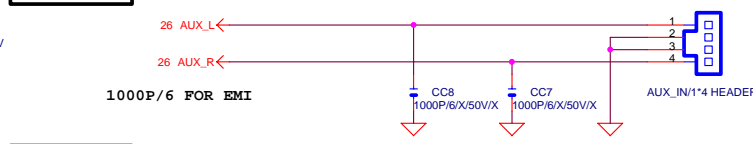
# GAME\_PORT



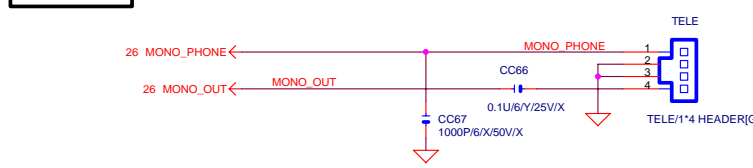
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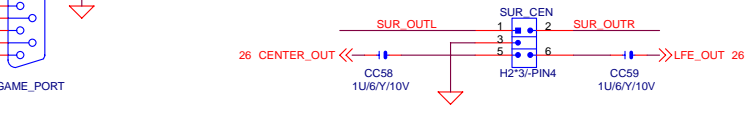
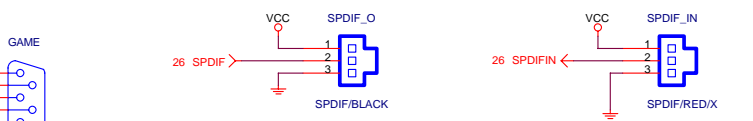
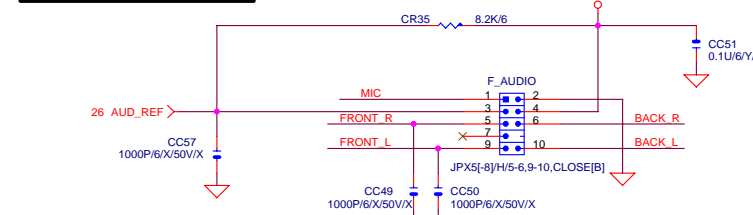
# AUX\_IN



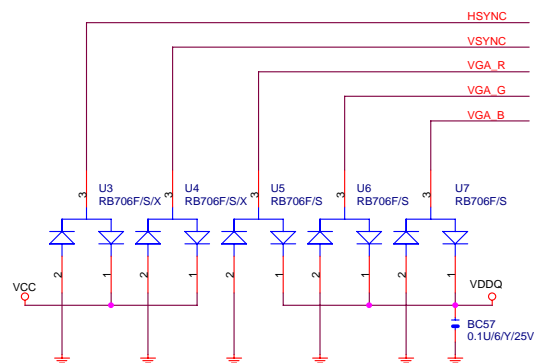
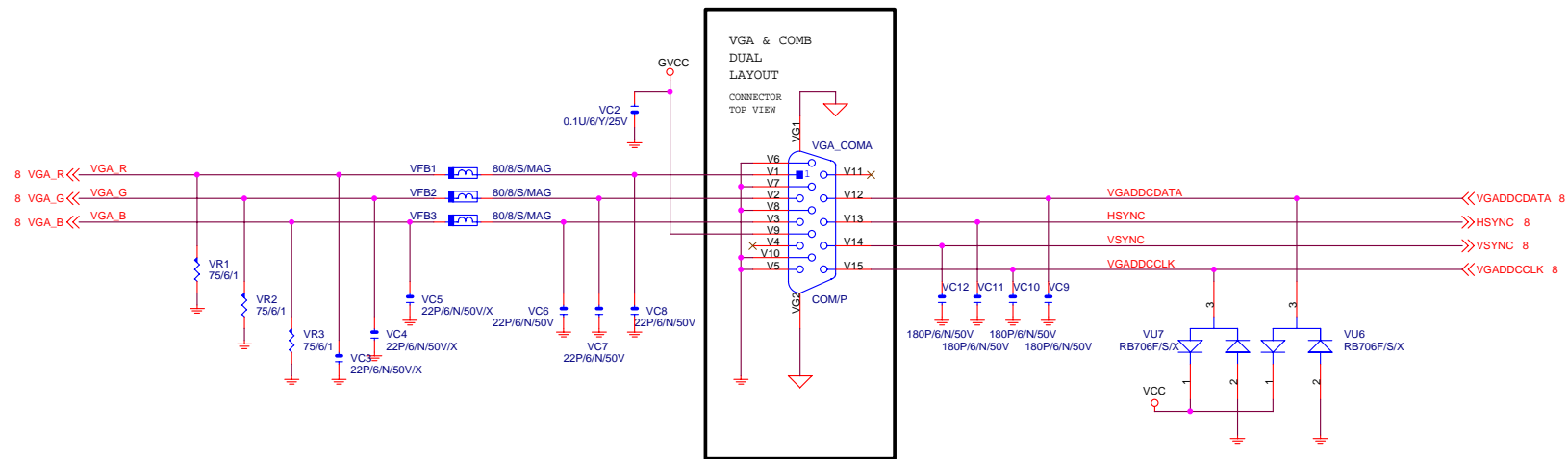
# TELE



# INTEL FRONT AUDIO

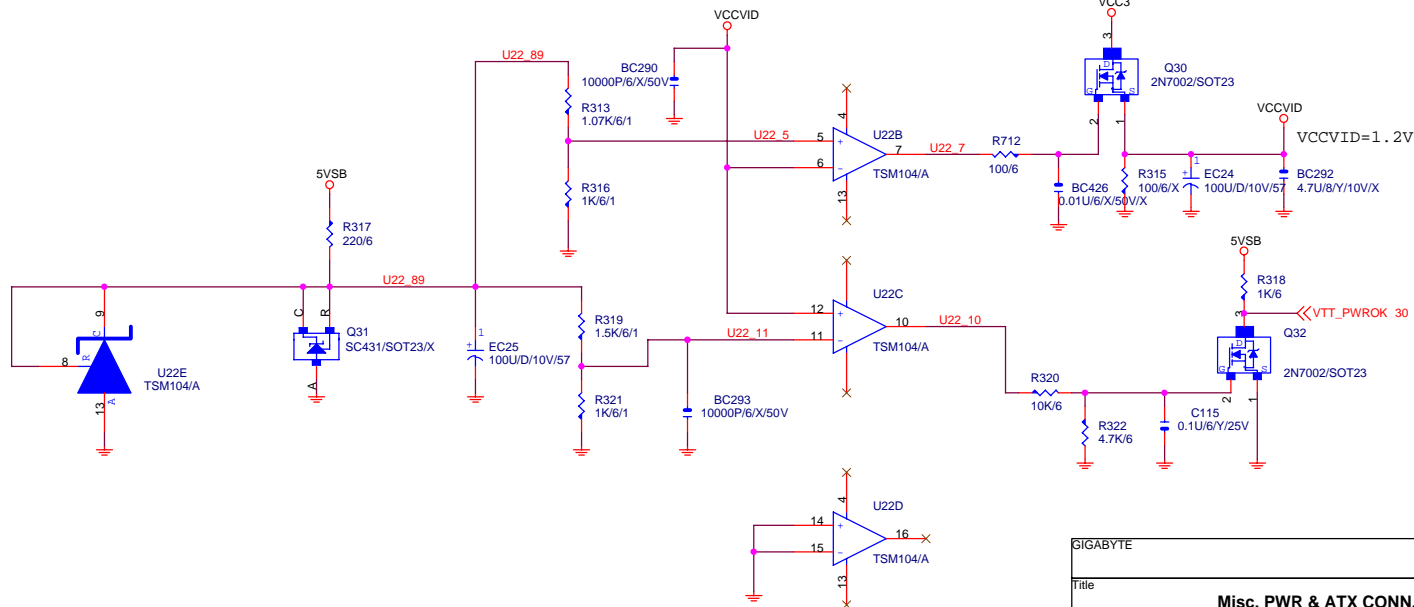
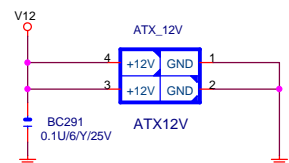
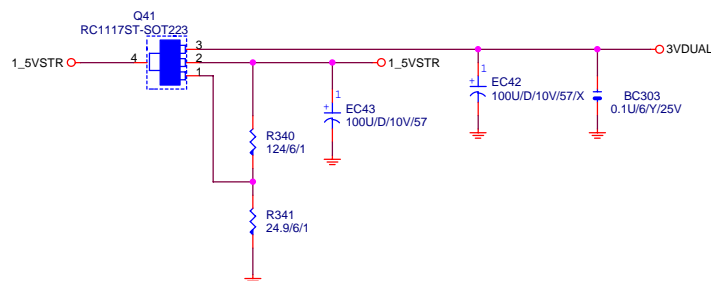
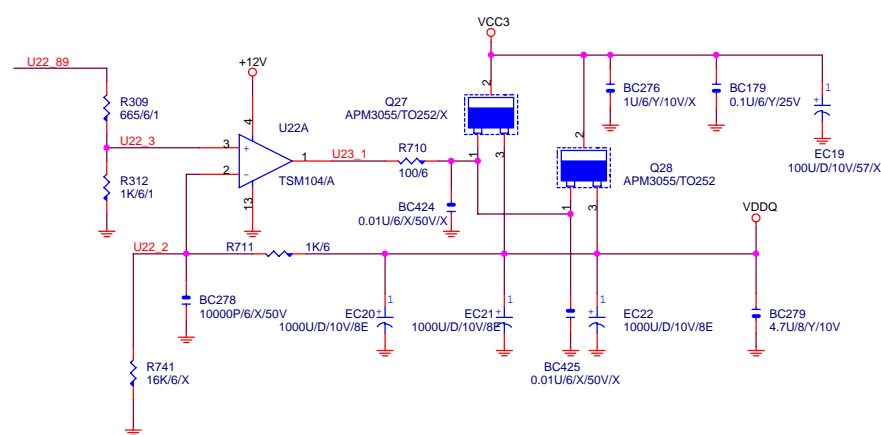
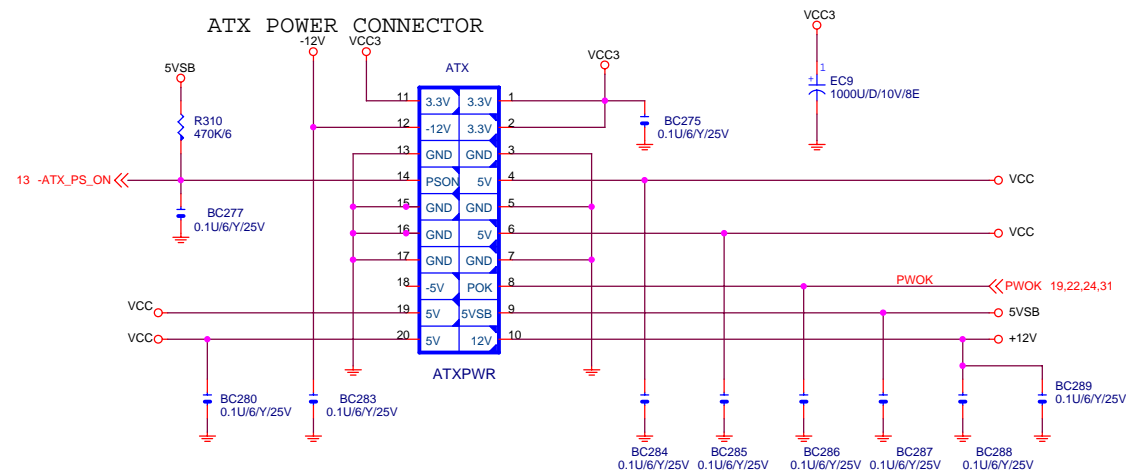


GIGABYTE CORP.			
Title	PHONE JACK, GAME PORT		
Size	Document Number	Rev	
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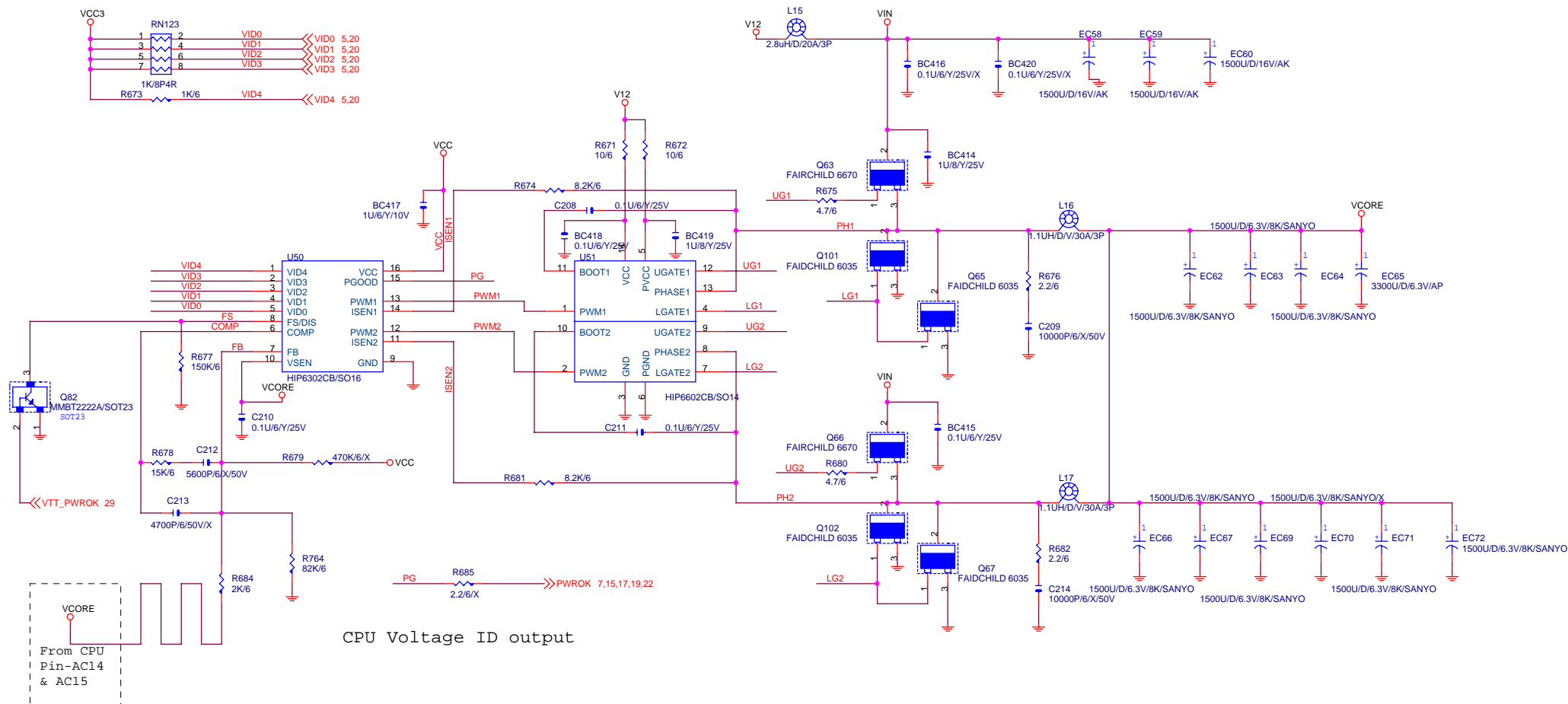


Title			VGA CONNECTOR
Size	Document Number	Rev	
Custom	GA-8GEM667	1.0	
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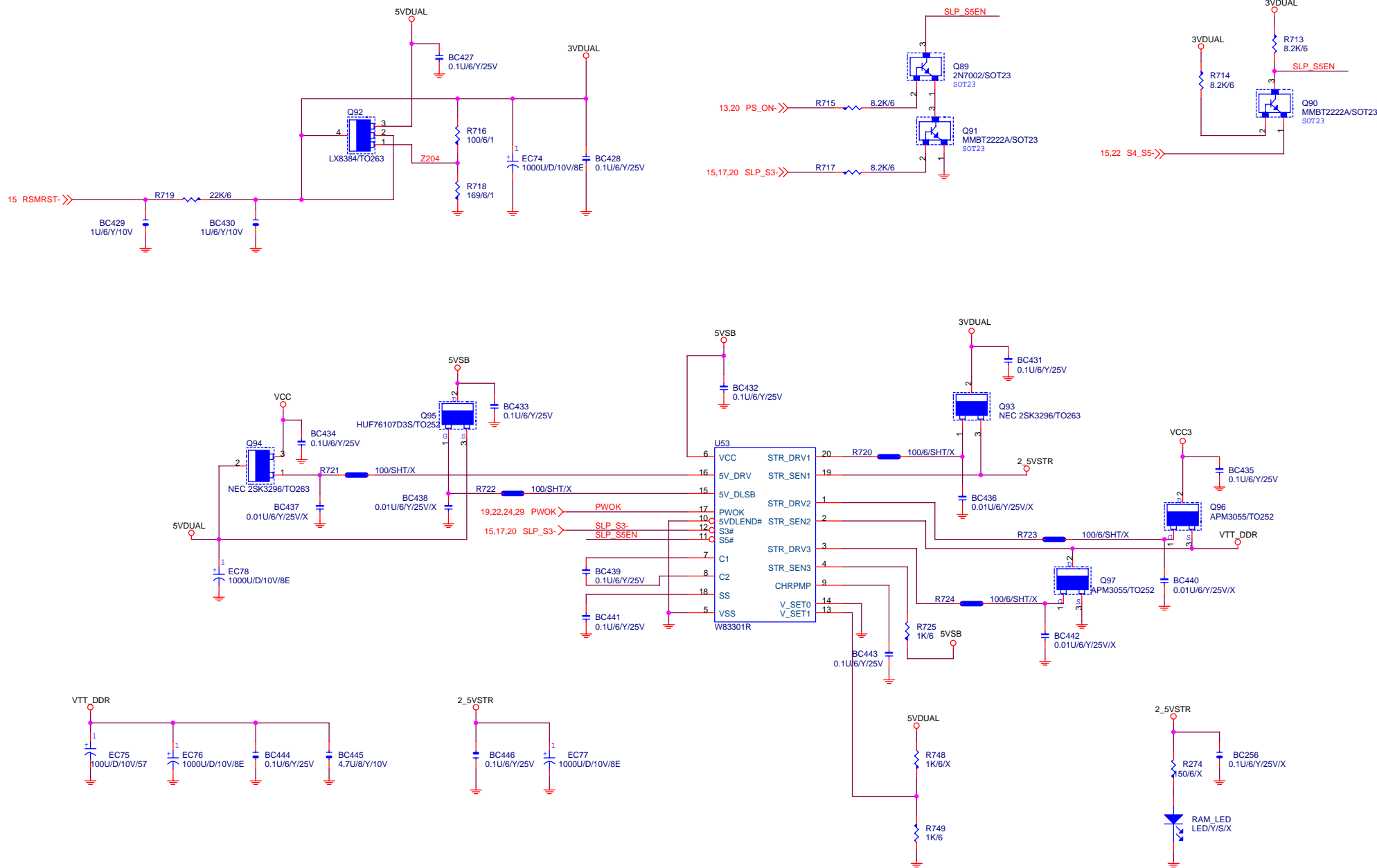
# ATX POWER CONNECTOR



GIGABYTE		
Title		
Misc. PWR & ATX CONN.		
Size	Document Number	Rev
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CPU Voltage ID output







GIGABYTE GA-8GEM667 PCI ROUNTING LIST    Revision : 1.0

PCI DEVICE	IDSEL	INT	CLOCK	REQ	GNT	
PCI SLOT1	16	C,F,G,A	PCLK1	REQ0-	GNT0-	
PCI SLOT2	17	F,G,A,C	PCLK2	REQ1-	GNT1-	
PCI SLOT3	18	G,A,C,F	PCLK3	REQ2-	GNT2-	
LAN	21	F	LANCLK	REQ5-	GNT5-	

GIGABYTE GA-8GEM667 GPIO LIST

Revision 1.0

SHEET

TITLE

GPI		
GPI0/REQA-		PULL DOWN 15K, detect IDE1 connector type.
GPI1/REQ5-		PULL DOWN 15K, detect IDE2 connector type.
GPI2/PIRQE-		PULL 8.2K TO VCC3
GPI3/PIRQF-		PULL 8.2K TO VCC3
GPI4/PIRQG-		PULL 8.2K TO VCC3
GPI5/PIRQH-		PULL 8.2K TO VCC3
GPI6		PULL 8.2K TO VCC3 (GREEN_BUTTON)
GPI7		NOT IMPLEMENTED
GPI8		PULL 8.2K TO 3VDUAL, LPC PME.
GPI9	NA	NOT IMPLEMENTED
GPI10	NA	NOT IMPLEMENTED
GPI11		PULL 4.7K TO 3VDUAL (SMBALERT)
GPI12		PULL DOWN 10K.
GPI13		PULL DOWN 10K, CNR_PRIMARY
GPI14	NA	NOT IMPLEMENTED
GPI15	NA	NOT IMPLEMENTED

SHEET

TITLE

GPO		
GPO16		PULL 8.2K TO VCC3
GPO17		PULL 8.2K TO VCC3 (GNT5-)
GPO18		PULL 8.2K TO VCC3
GPO19		PULL 8.2K TO VCC3
GPO20		PULL 8.2K TO VCC3
GPO21		PULL 8.2K TO VCC3
GPO22		PULL 8.2K TO VCC3
GPO23		PULL 8.2K TO VCC3
GPO24		PULL 1K TO 3VDUAL (TOP BLOCK)
GPO25		PULL 4.7K TO 3VDUAL, POWER LED CONTROL.
GPO26		NOT IMPLEMENTED
GPO27		PULL 8.2K TO 3VDUAL, POWER LED CONTROL.
GPO28		PULL 8.2K TO 3VDUAL, GREEN LED.
GPO32		PULL 8.2K TO 3VDUAL, BIOS WRITE PROTECT.
GPO35		PULL DOWN 10K, POWER LED CONTROL.
GPI40		CLEAR PASSWORD SELECT.