GIGABYTE GA-8ILFT Schematics

Revision 1.01

COMPONENT SIDE
(1 oz. Copper)
VCC SIDE
(1 oz. Copper)
GND SIDE
(1 oz. Copper)
SOLDER SIDE
(1 oz. Copper)

GIGABYTE

Title: COVER SHEET		
Size: Custom	Document Number: GA-8ILFT-C	Rev: 1.01
Date: Thursday, May 23, 2002	Sheet 1 of 33	

Model Name: GA-8ILFT

Revision 1.01

229mm X 191mm, 60+/-15%, C Type

Component value change history

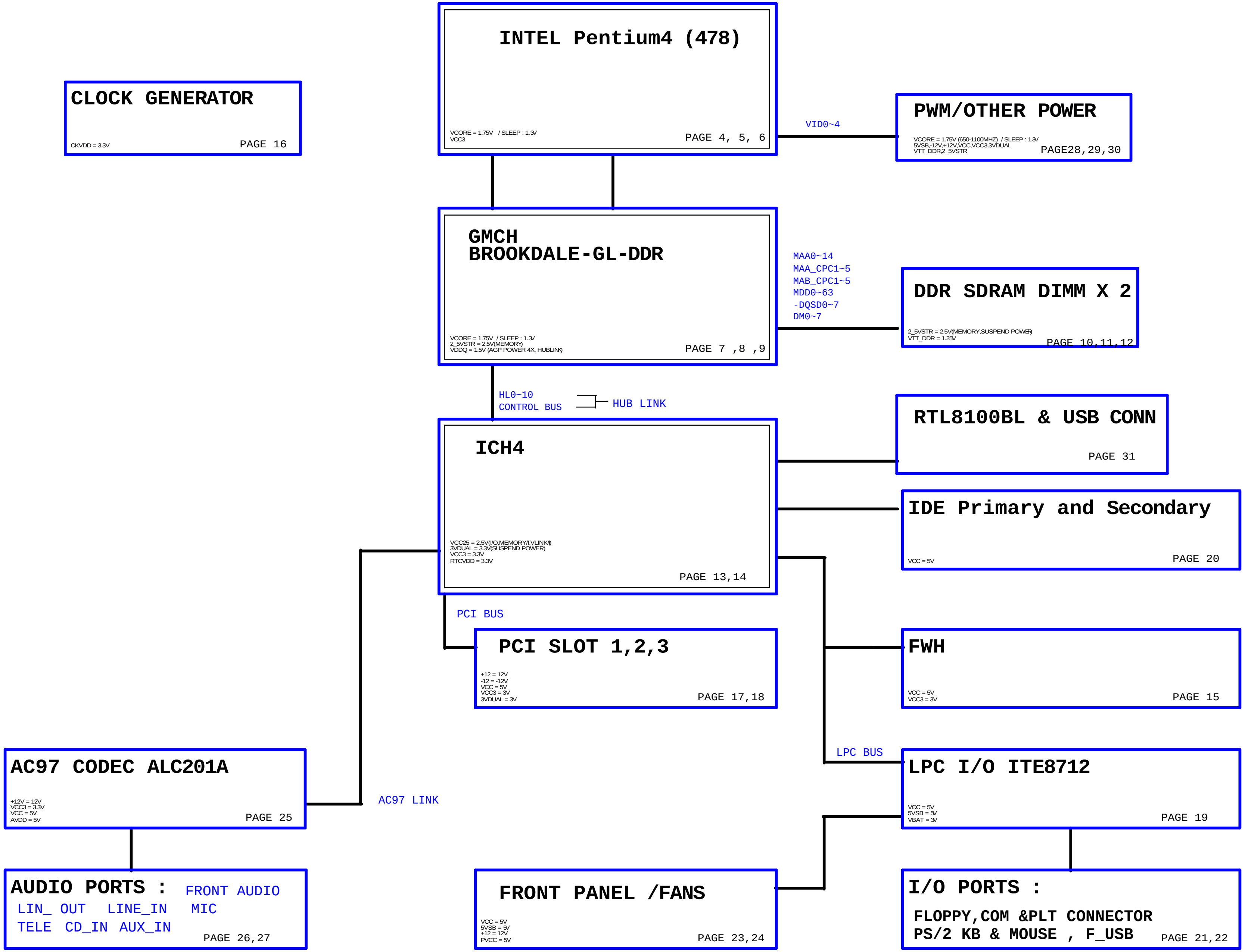
PAGE	Change Item	Reason

Circuit or PCB layout change for next version

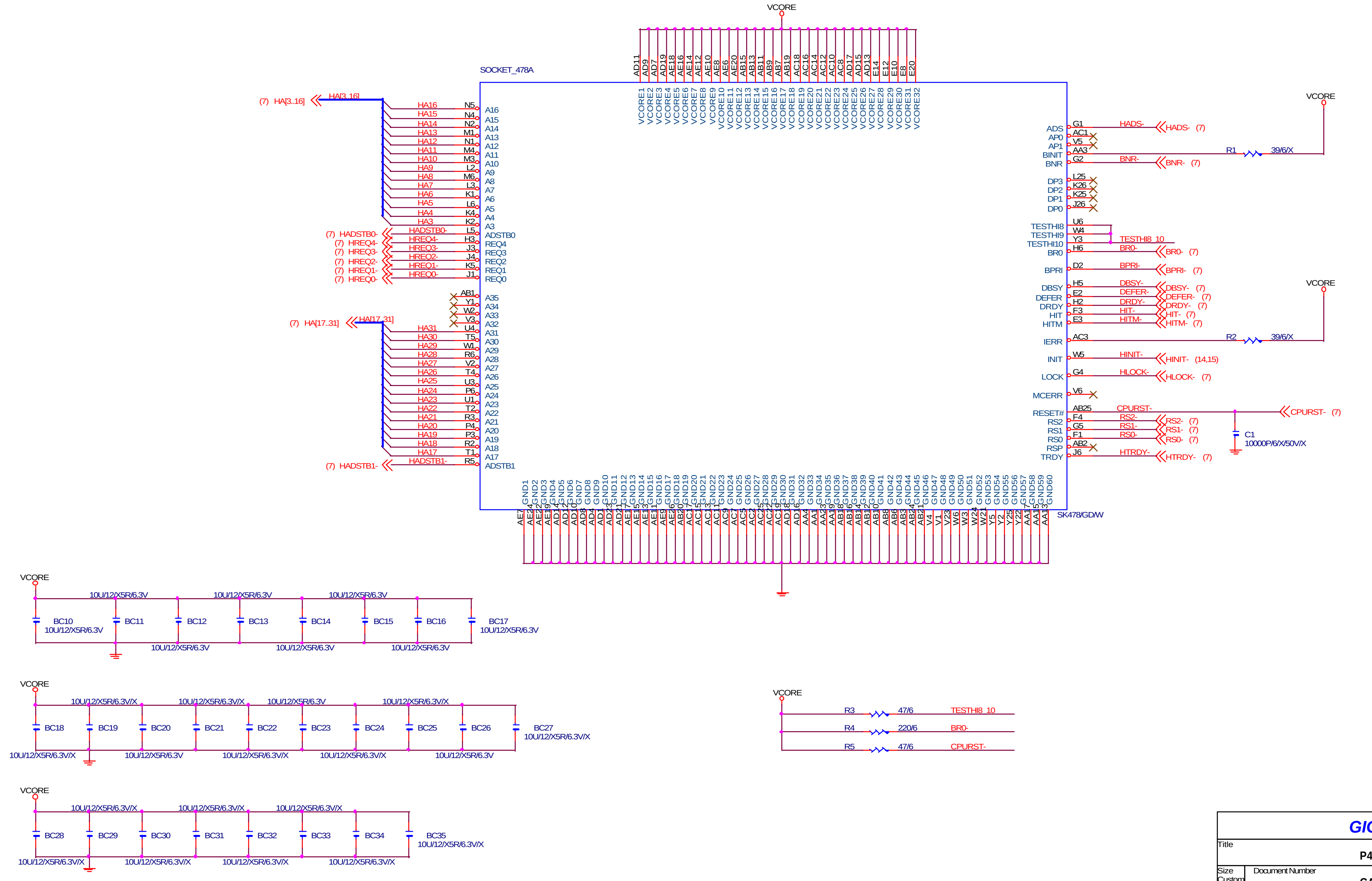
PAGE	Change Item	Reason

GIGABYTE			
Title: BOM & PCB MODIFY HISTORY			
Size: Custom	Document Number: GA-8ILFT-C		Rev: 1.01
Date: Thursday, May 23, 2002	Sheet 2	of 33	

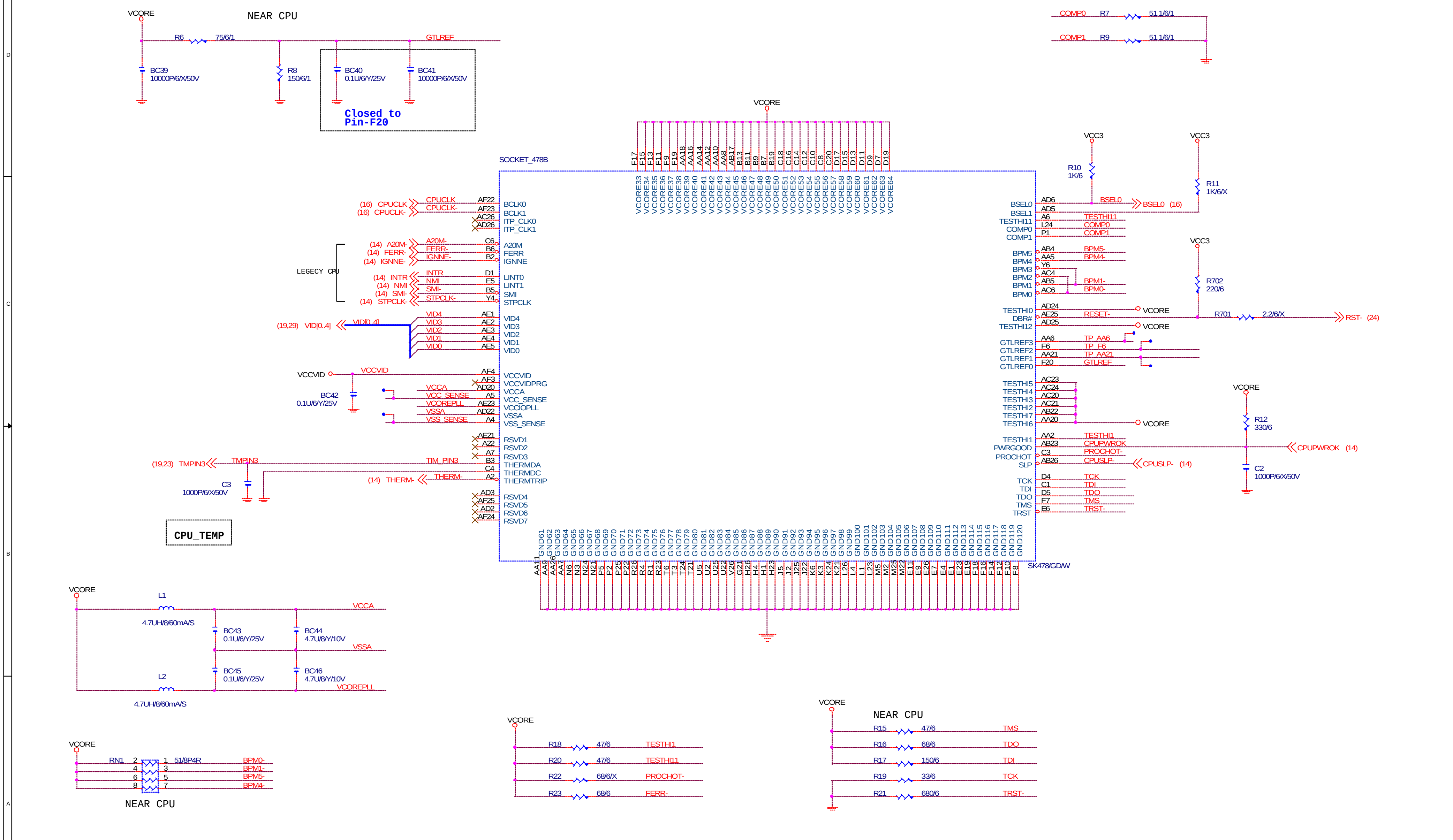
BLOCK DIAGRAM



GIGABYTE		
Title: BOM & PCB MODIFY HISTORY		
Size: Custom	Document Number: GA-8ILFT-C	Rev: 1.01
Date: Thursday, May 23, 2002	Sheet 3 of 33	

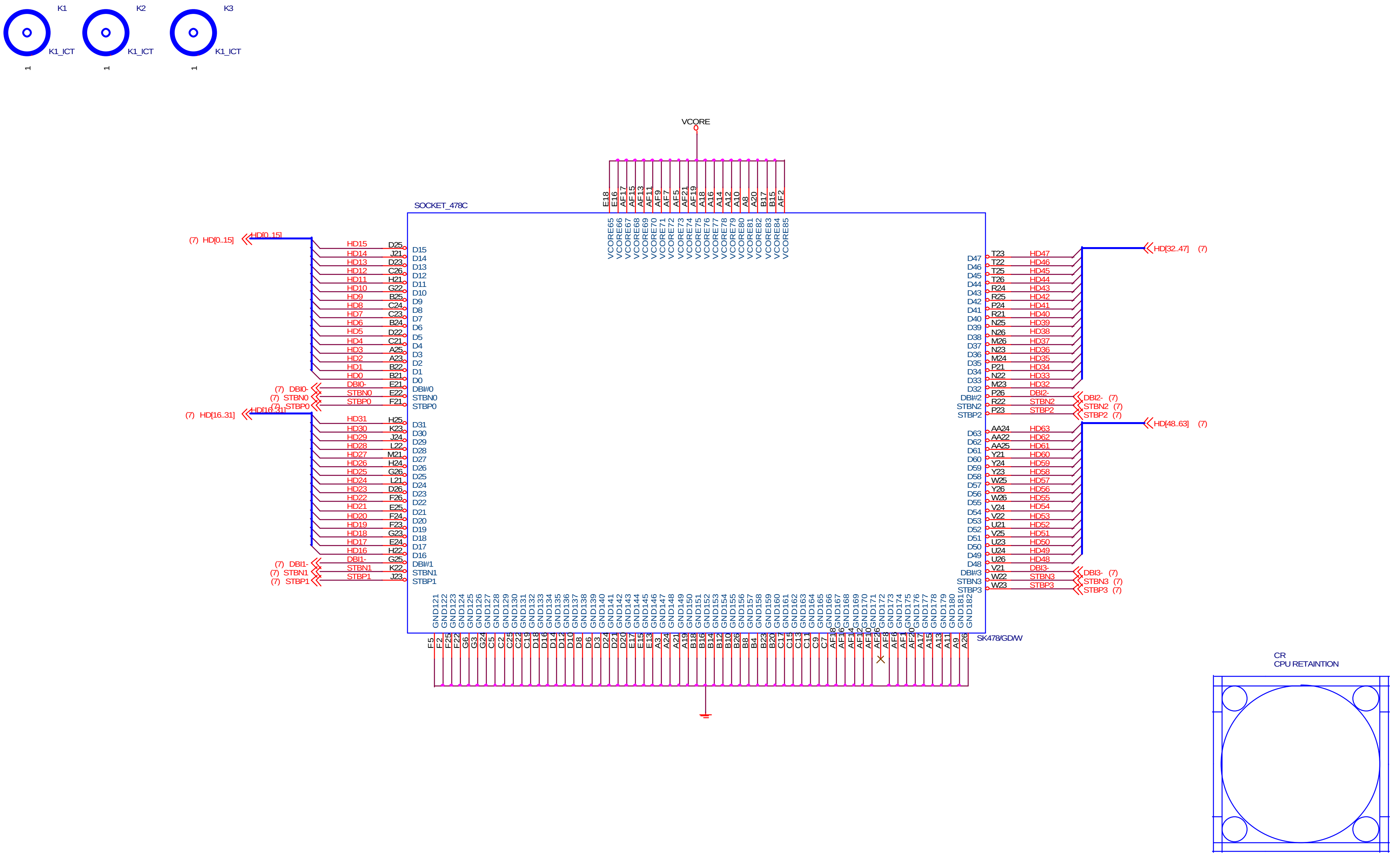


GIGABYTE		
Title	P4 478A	
Size Custom	Document Number GA-8ILFT-C	Rev 1.01
Date: Thursday, May 23, 2002	Sheet 4 of 33	



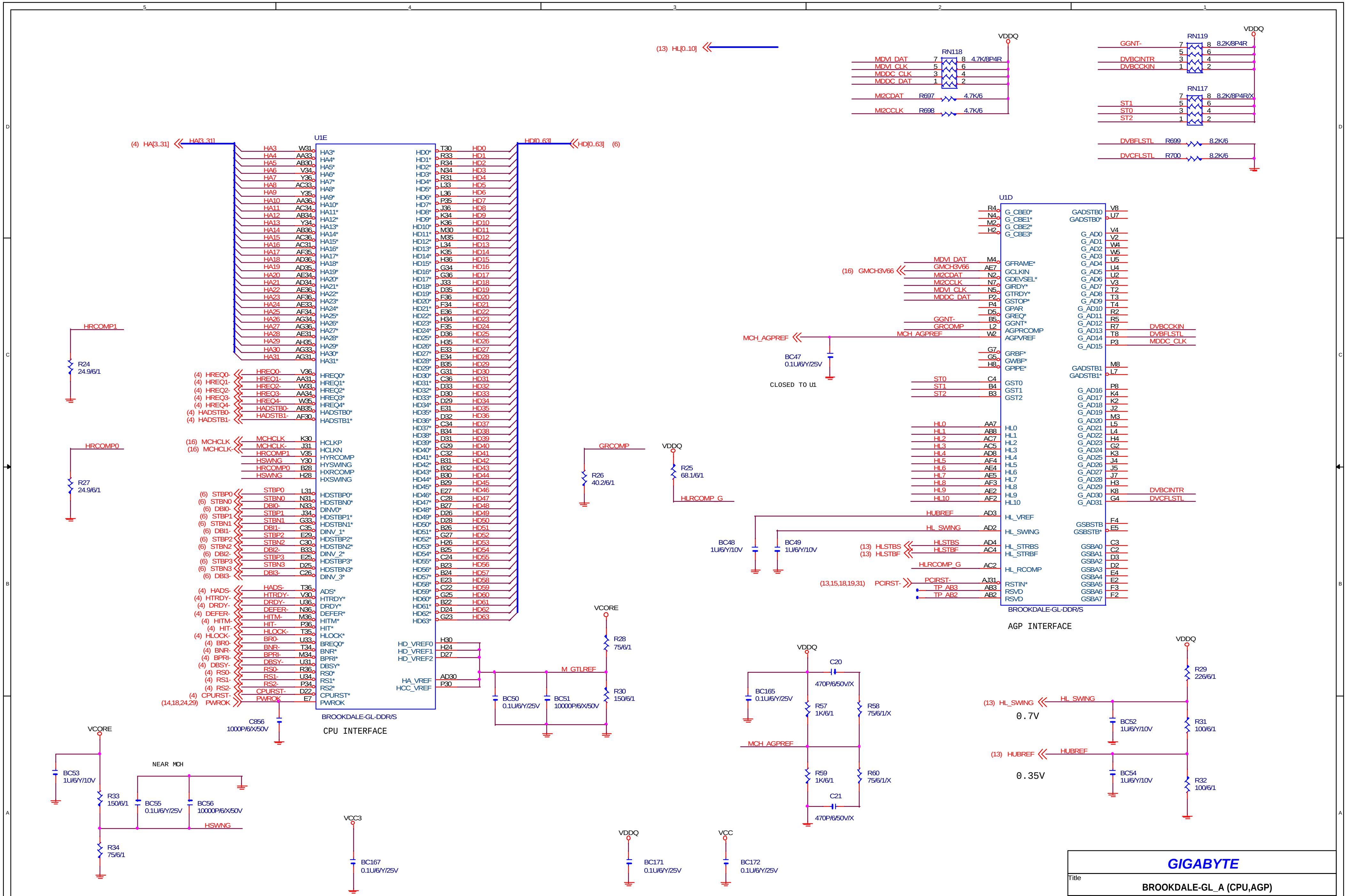
GIGABYTE

Title	P4 478B	
Size Custom	Document Number GA-8ILFT-C	Rev 1.01
Date: Thursday, May 23, 2002	Sheet 5 of 33	



GIGABYTE

Title	P4 478C	
Size Custom	Document Number GA-8ILFT-C	Rev 1.01
Date: Thursday, May 23, 2002	Sheet 6 of 33	

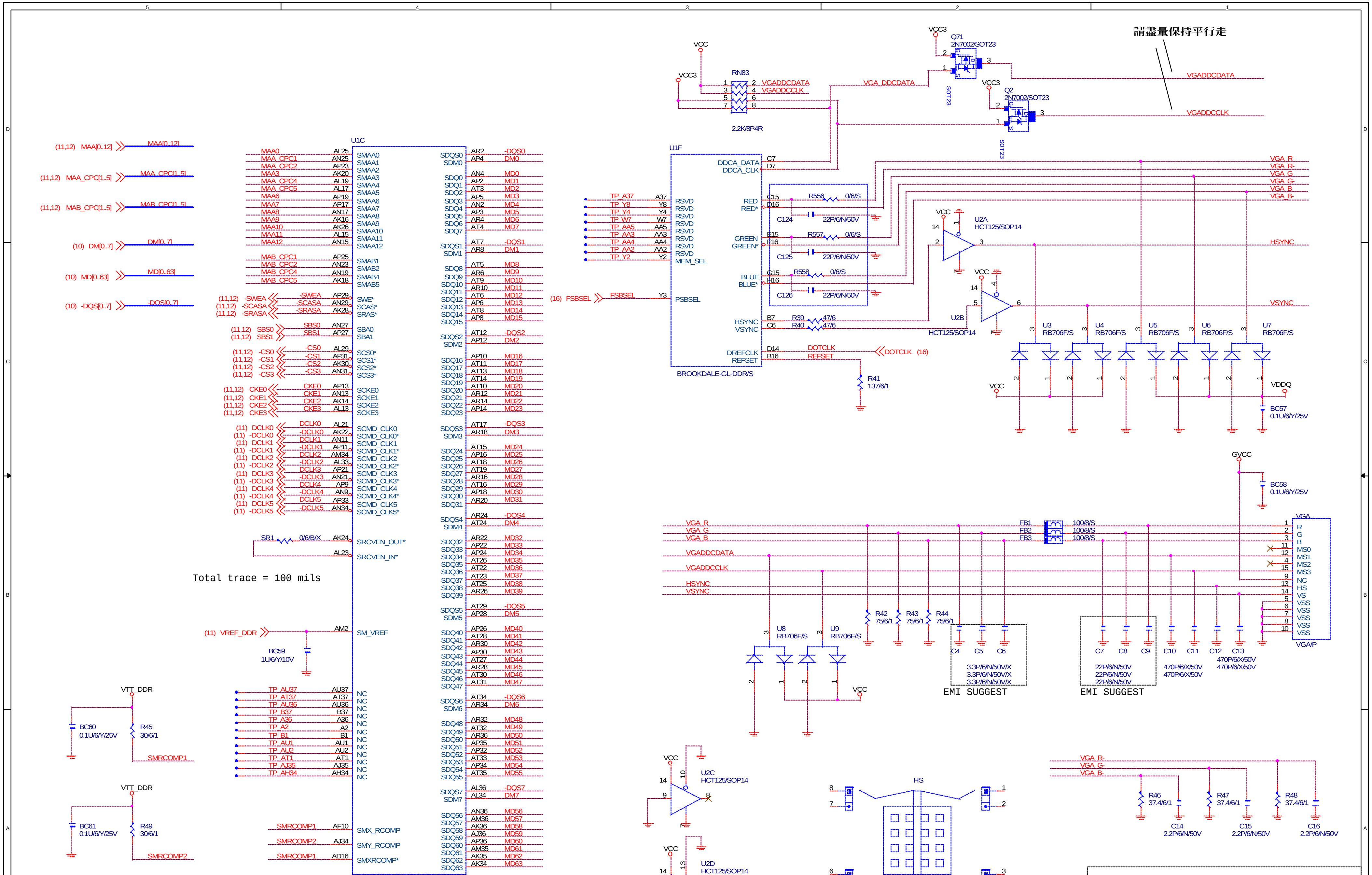


GIGABYTE

Title: BROOKDALE-GL_A (CPU,AGP)

Size	Document Number	Rev
Custom	GA-8ILFT-C	1.01

Date: Thursday, May 23, 2002 Sheet 7 of 33

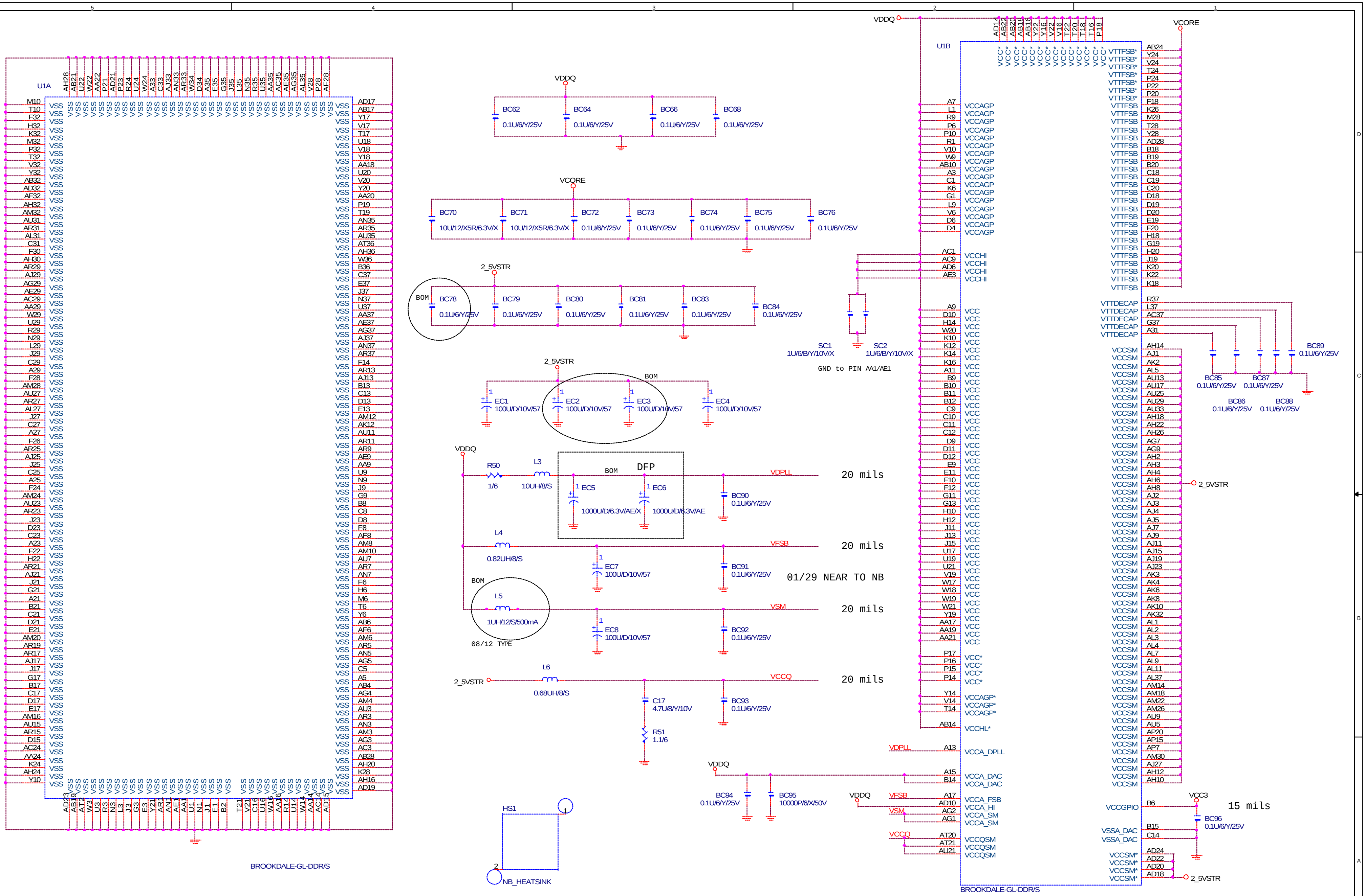


GIGABYTE

Title: BROOKDALE-GL_B (DDR,VGA)

Size: Custom | Document Number: GA-8ILFT-C | Rev: 1.01

Date: Thursday, May 23, 2002 | Sheet 8 of 33



GIGABYTE

Title: BROOKDALE-GL_C (POWER)

Size	Document Number	Rev
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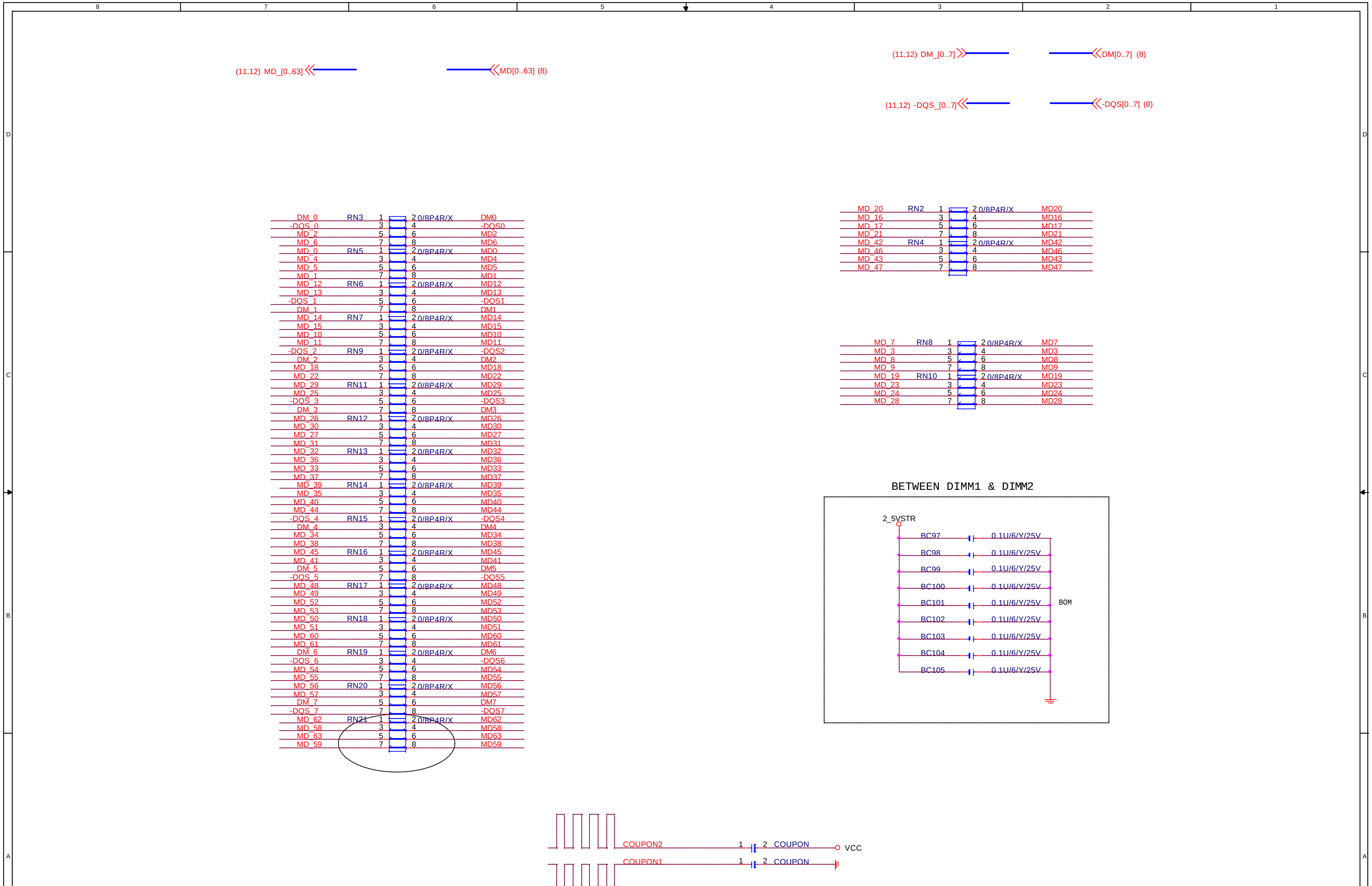
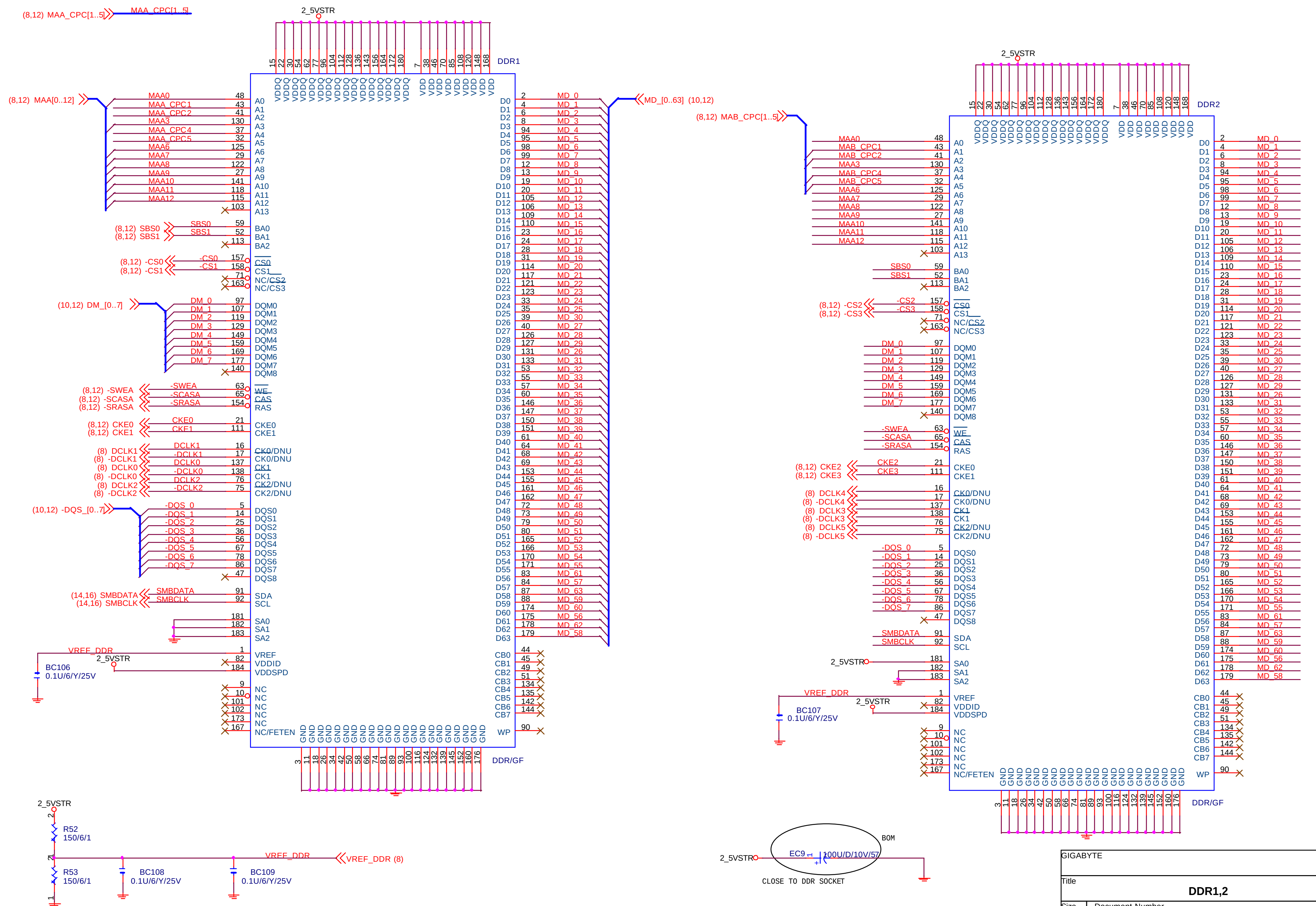
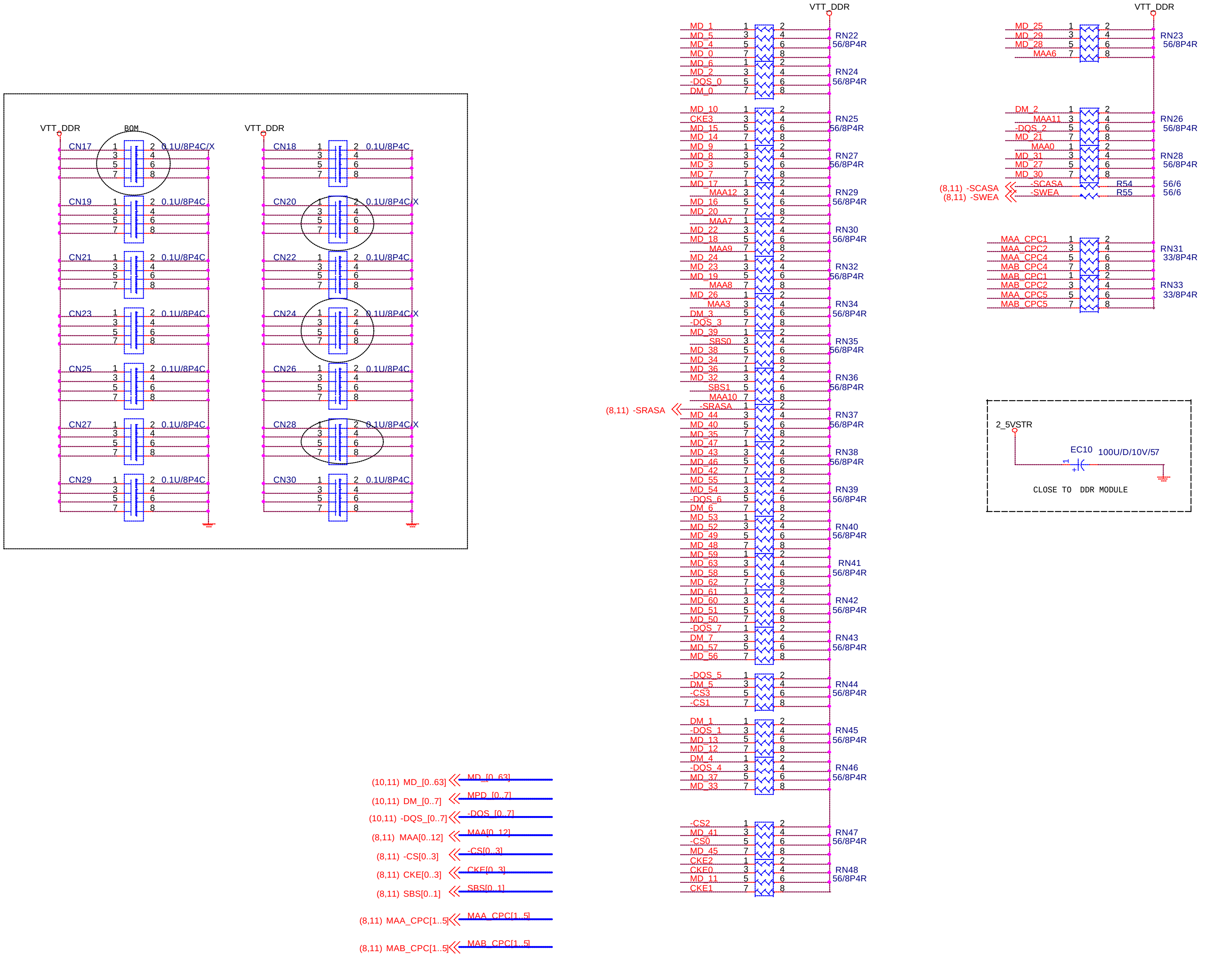
Date: Thursday, May 23, 2002 Sheet 9 of 33



GIGABYTE		
Title: DDR SERIAL TERM.		
Size: B	Document Number: GA-8ILFT-C	Rev: 1.01
Date: Thursday, May 23, 2002	Sheet 10 of 33	

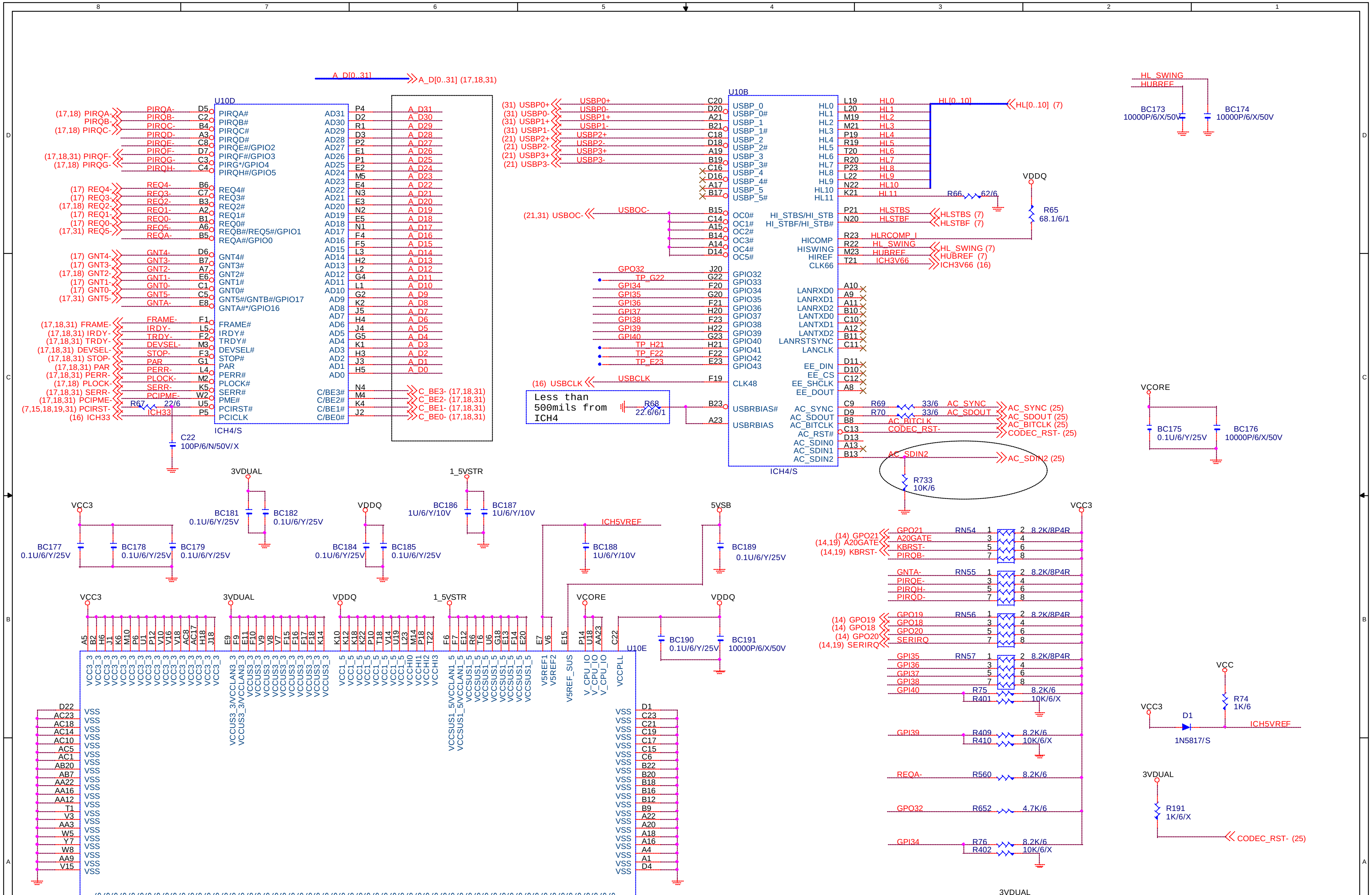


GIGABYTE			
Title	DDR1,2		
Size B	Document Number	GA-8ILFT-C	Rev 1.01
Date: Thursday, May 23, 2002		Sheet 11 of 33	

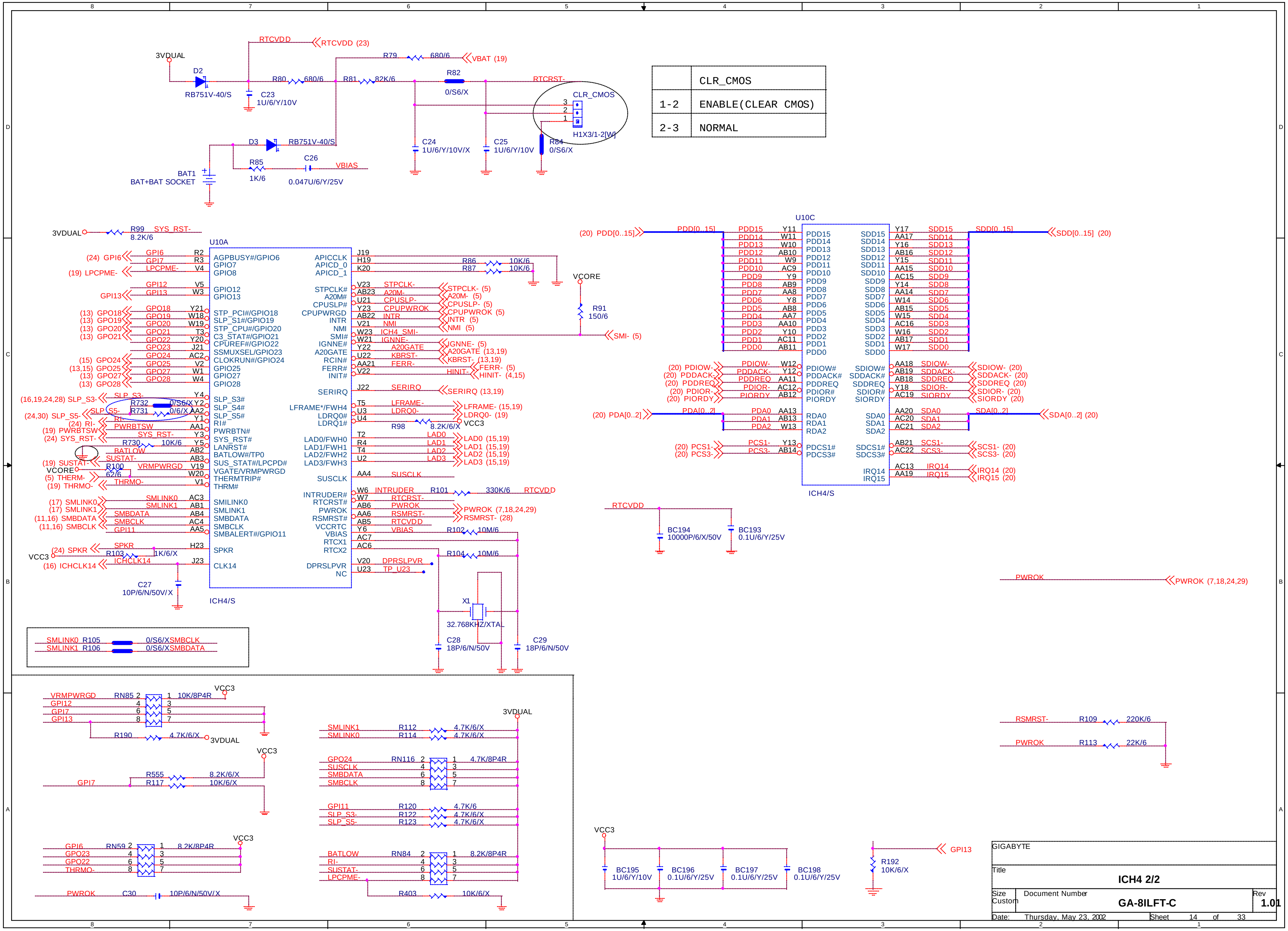


CLOSE TO DDR TERMINATOR(1 CAP. FOR 2 R-PACKS)

GIGABYTE			
Title	DDR TERM.		
Size B	Document Number GA-8ILFT-C		Rev 1.01
Date: Thursday, May 23, 2002	Sheet 12 of 33		



GIGABYTE	
Title	ICH4 1/2
Size B	Document Number GA-8ILFT-C
Rev	1.01
Date: Thursday, May 23, 2002	Sheet 13 of 33



	CLR_CMOS
1-2	ENABLE(CLEAR CMOS)
2-3	NORMAL

GIGABYTE

Title: ICH4 2/2

Size: Custom | Document Number: GA-8ILFT-C | Rev: 1.01

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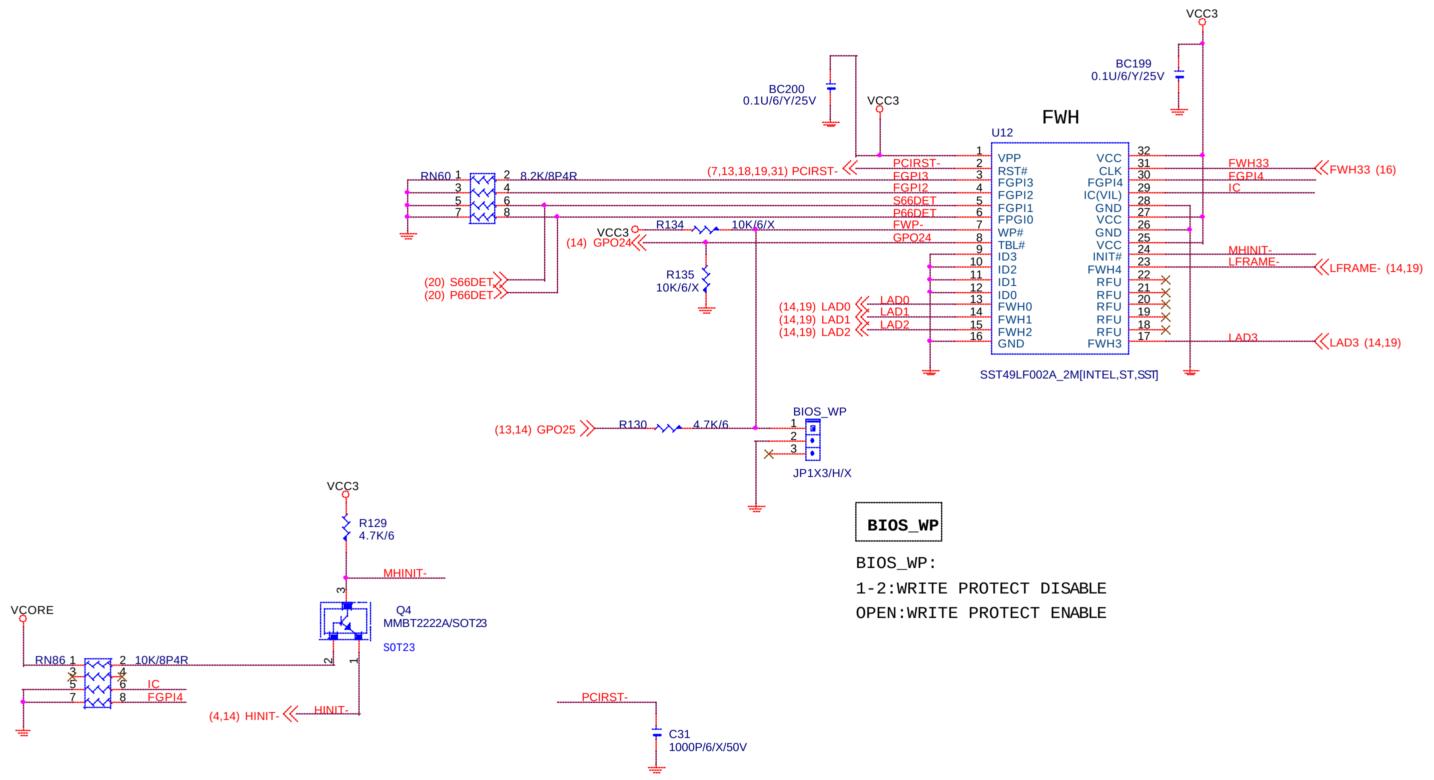

GIGABYTE			
Title	FWH		
Size B	Document Number GA-8ILFT-C		Rev 1.01
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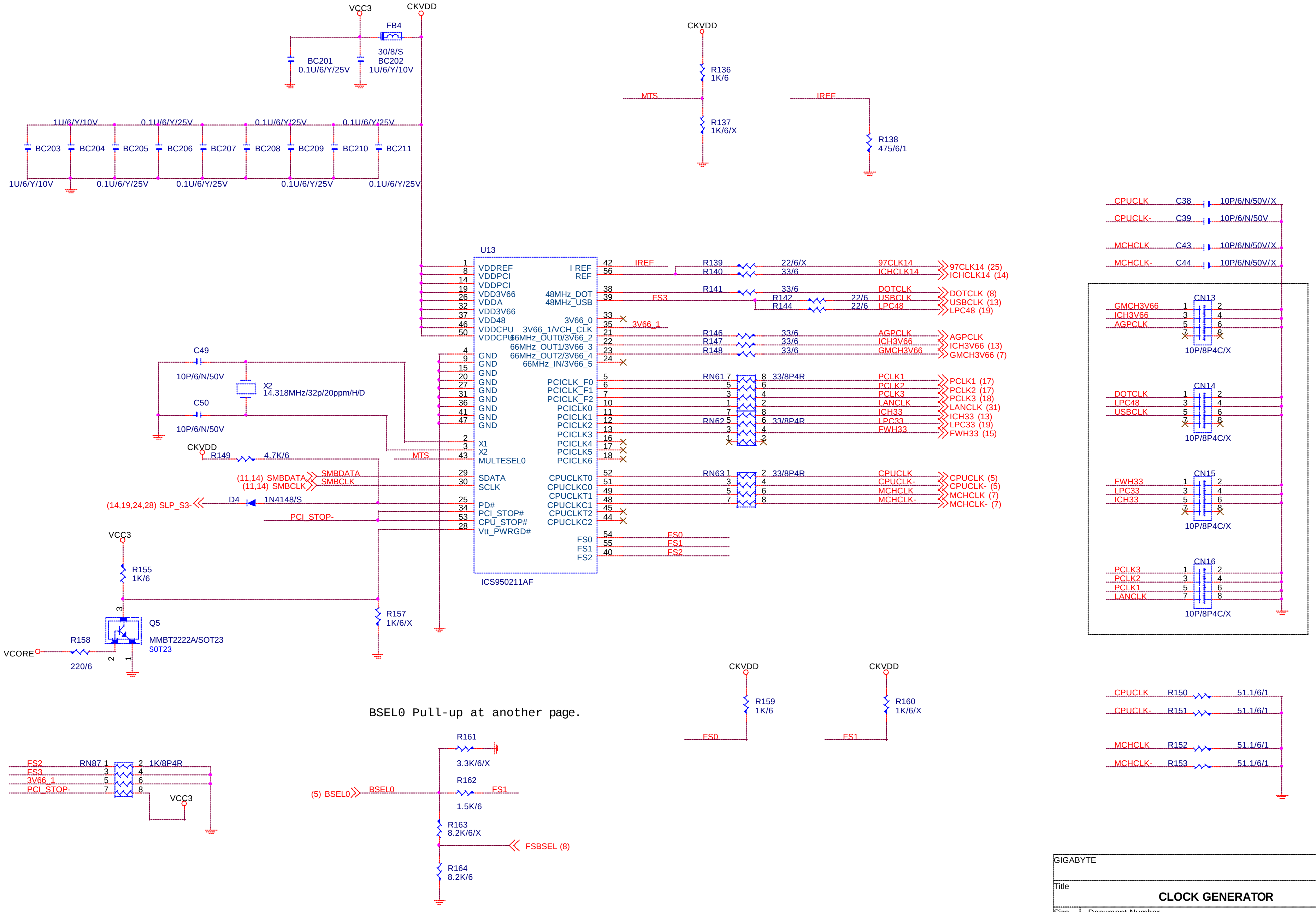

GIGABYTE

Title: **CLOCK GENERATOR**

Size	Document Number	Rev
Custom	GA-8ILFT-C	1.01

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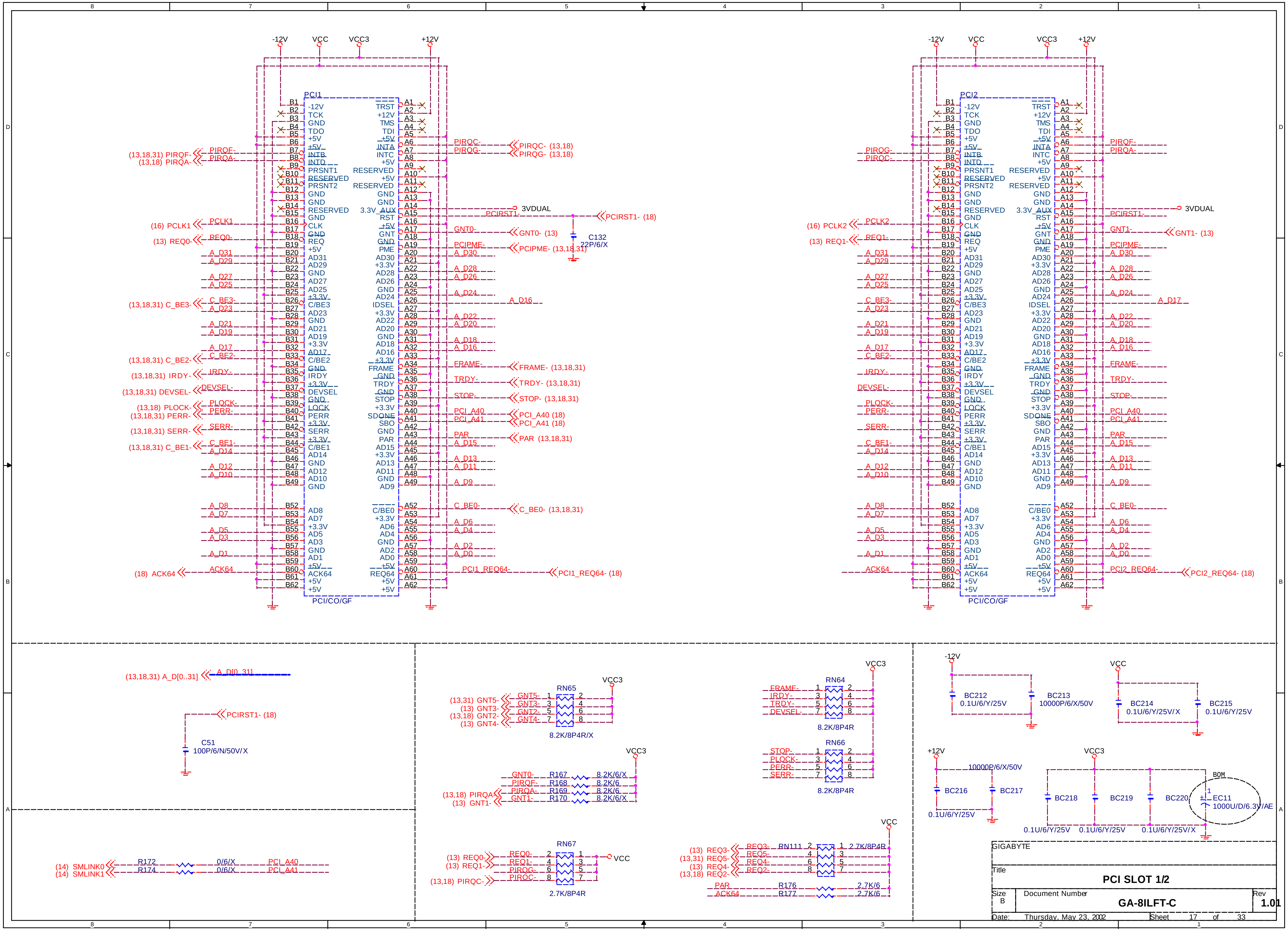
PCI1
PCI/CO/GF
PCI2
PCI/CO/GF
-12V
VCC
VCC3
+12V
3VDUAL
C132
22P/6/X
(13,18,31) A_D[0..31]
(18) PCIRST1-
C51
100P/6/N/50V/X
RN65
8.2K/8P4R/X
RN64
8.2K/8P4R
RN66
8.2K/8P4R
RN67
2.7K/8P4R
RN111
2.7K/8P4R
R167
R168
R169
R170
R172
R174
R176
R177
BC212
0.1U/6/Y/25V
BC213
10000P/6/X/50V
BC214
0.1U/6/Y/25V/X
BC215
0.1U/6/Y/25V
BC216
BC217
BC218
BC219
BC220
EC11
1000U/D/6.3V/AE
BOM
GIGABYTE
Title
PCI SLOT 1/2
Size
B
Document Number
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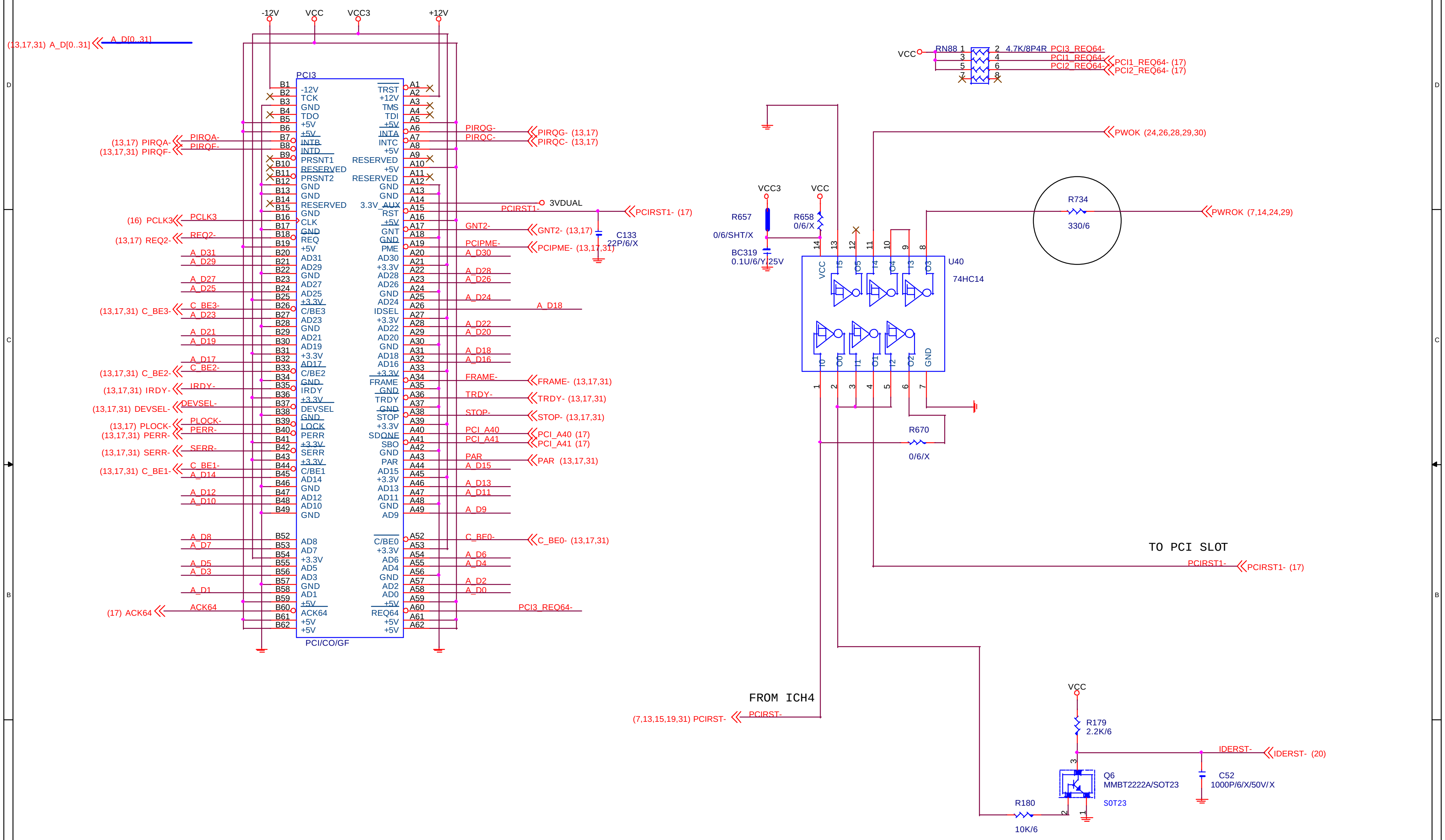

GIGABYTE

Title

PCI SLOT 3

Size	Document Number	Rev
B	GA-8ILFT-C	1.01

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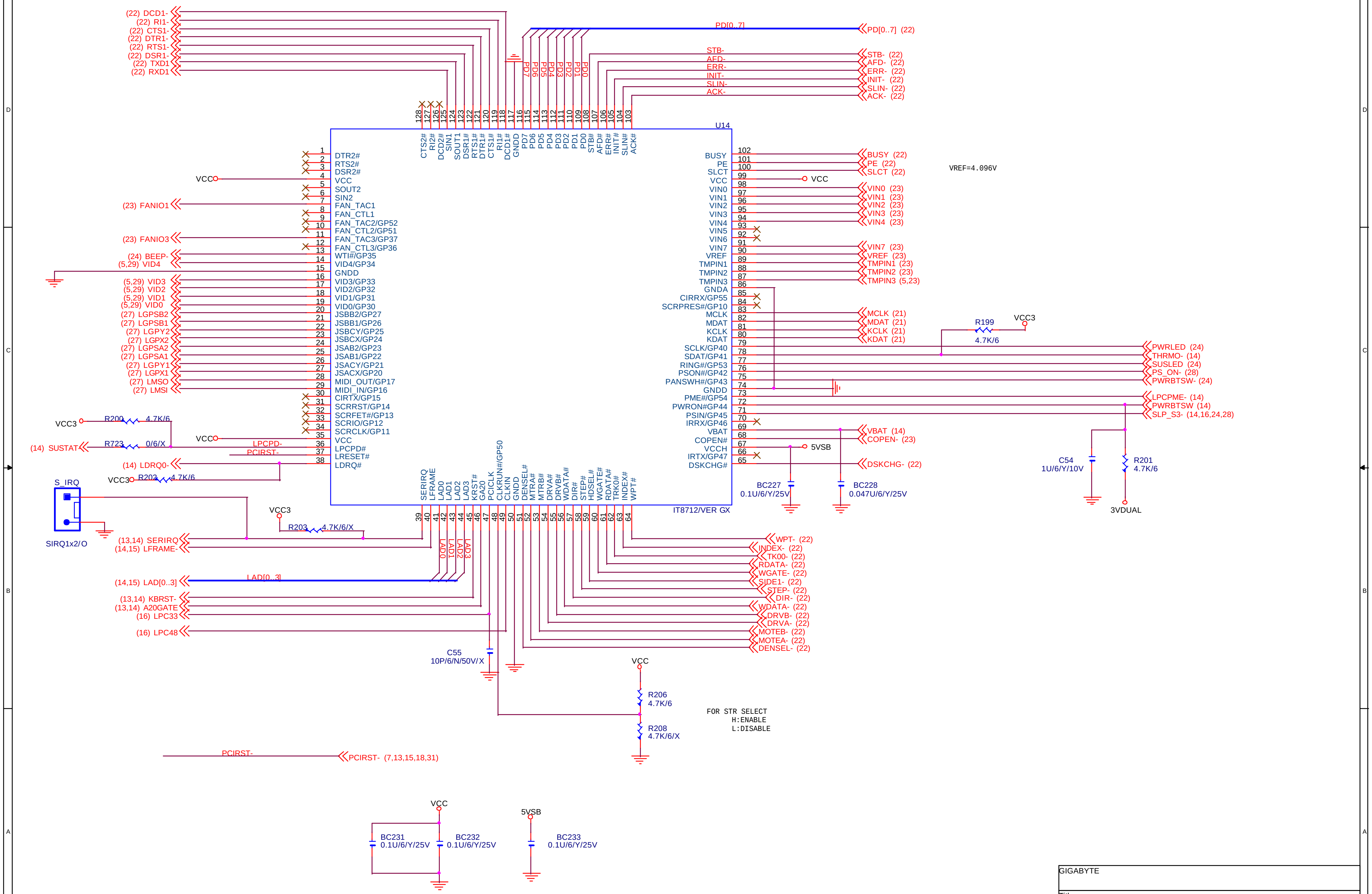

GIGABYTE

Title
ITE 8712 LPC IO

Size	Document Number	Rev
B	GA-8ILFT-C	1.01

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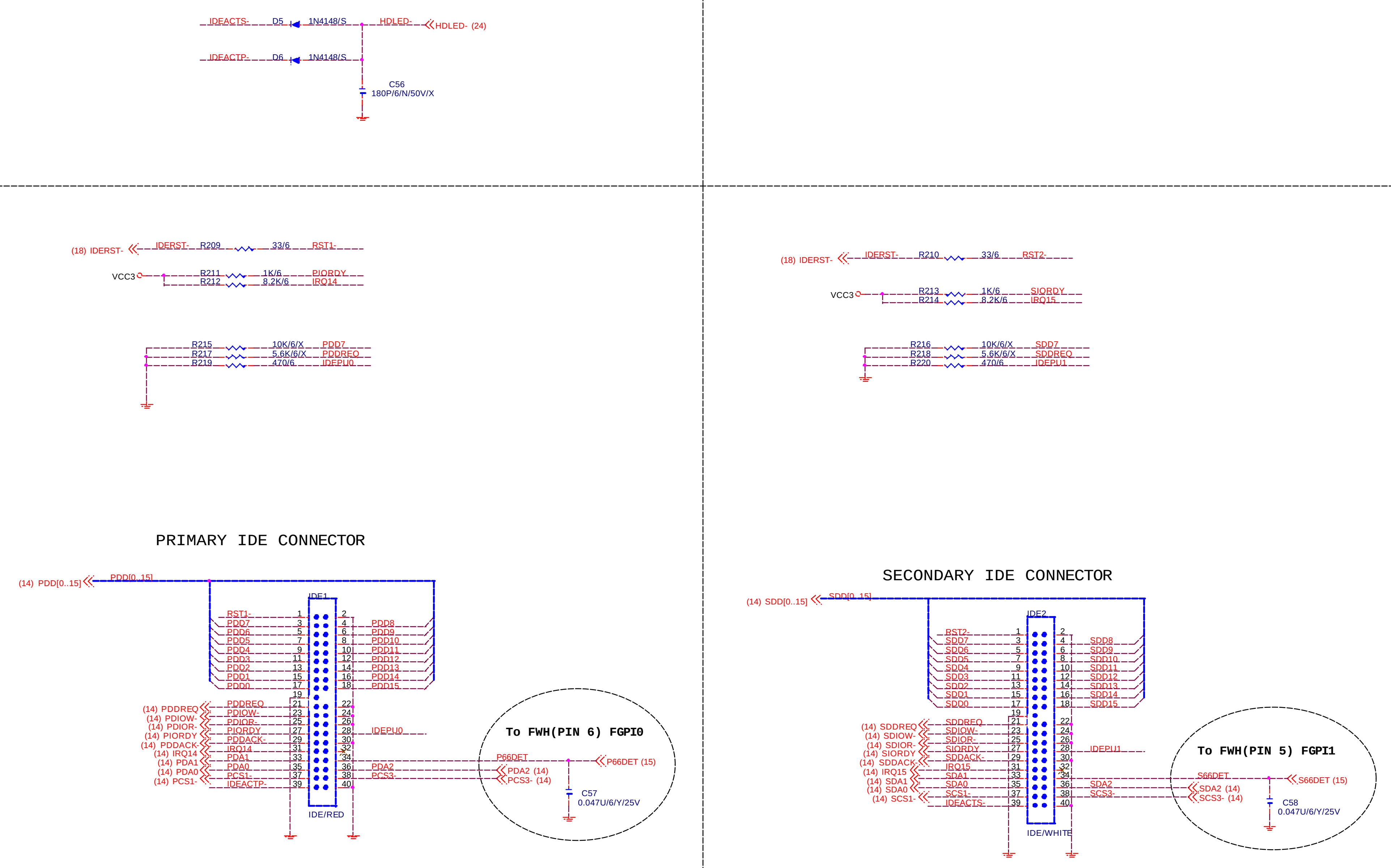

GIGABYTE		
Title: IDE CONNECTOR		
Size: B	Document Number: GA-8ILFT-C	Rev: 1.01
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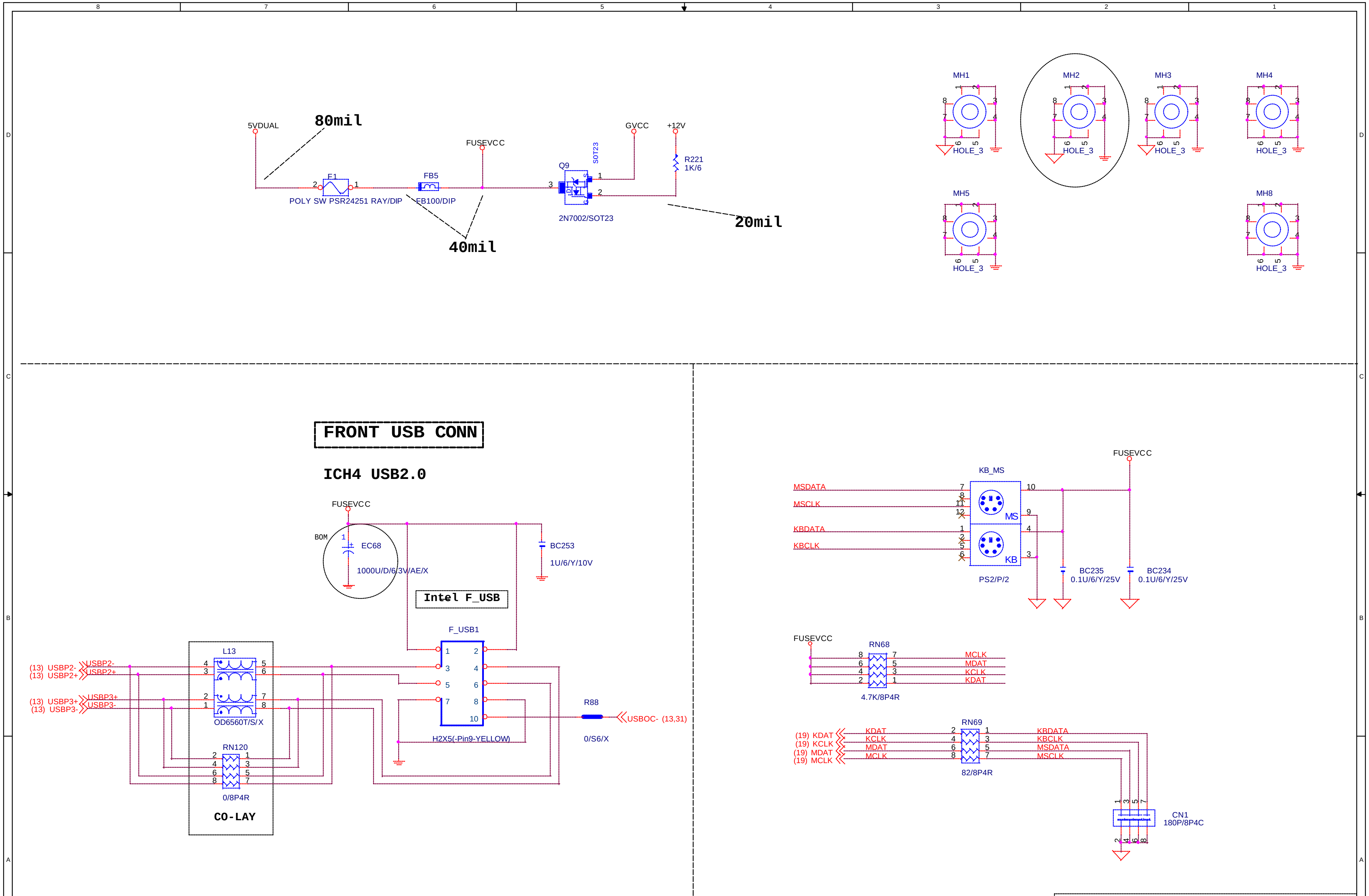

GIGABYTE		
Title: KB & PS2 MOUSE & IR		
Size: B	Document Number: GA-8ILFT-C	Rev: 1.01
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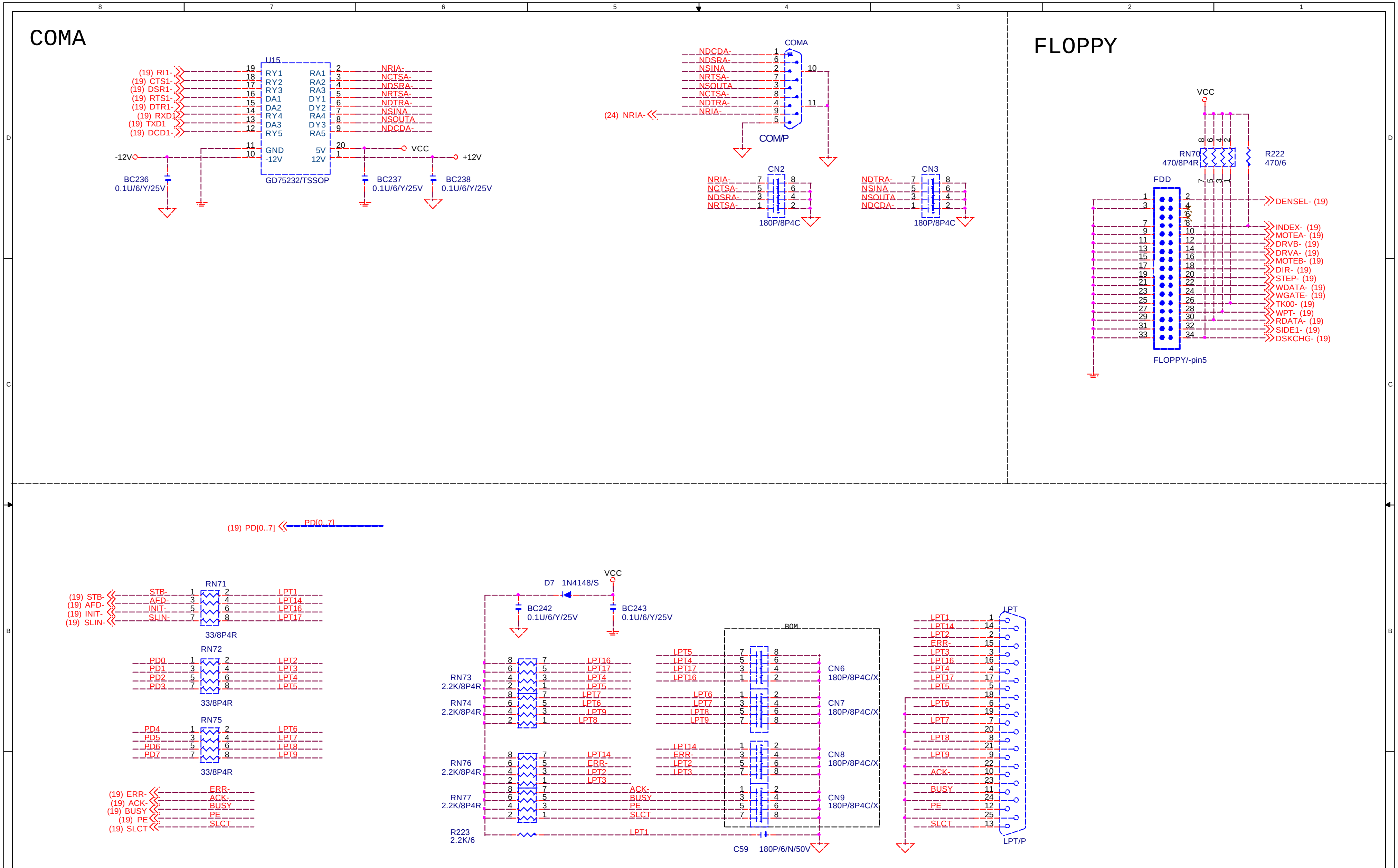

GIGABYTE

Title

COM & IR & LPT PORT &FLOPPY

Size	Document Number	Rev
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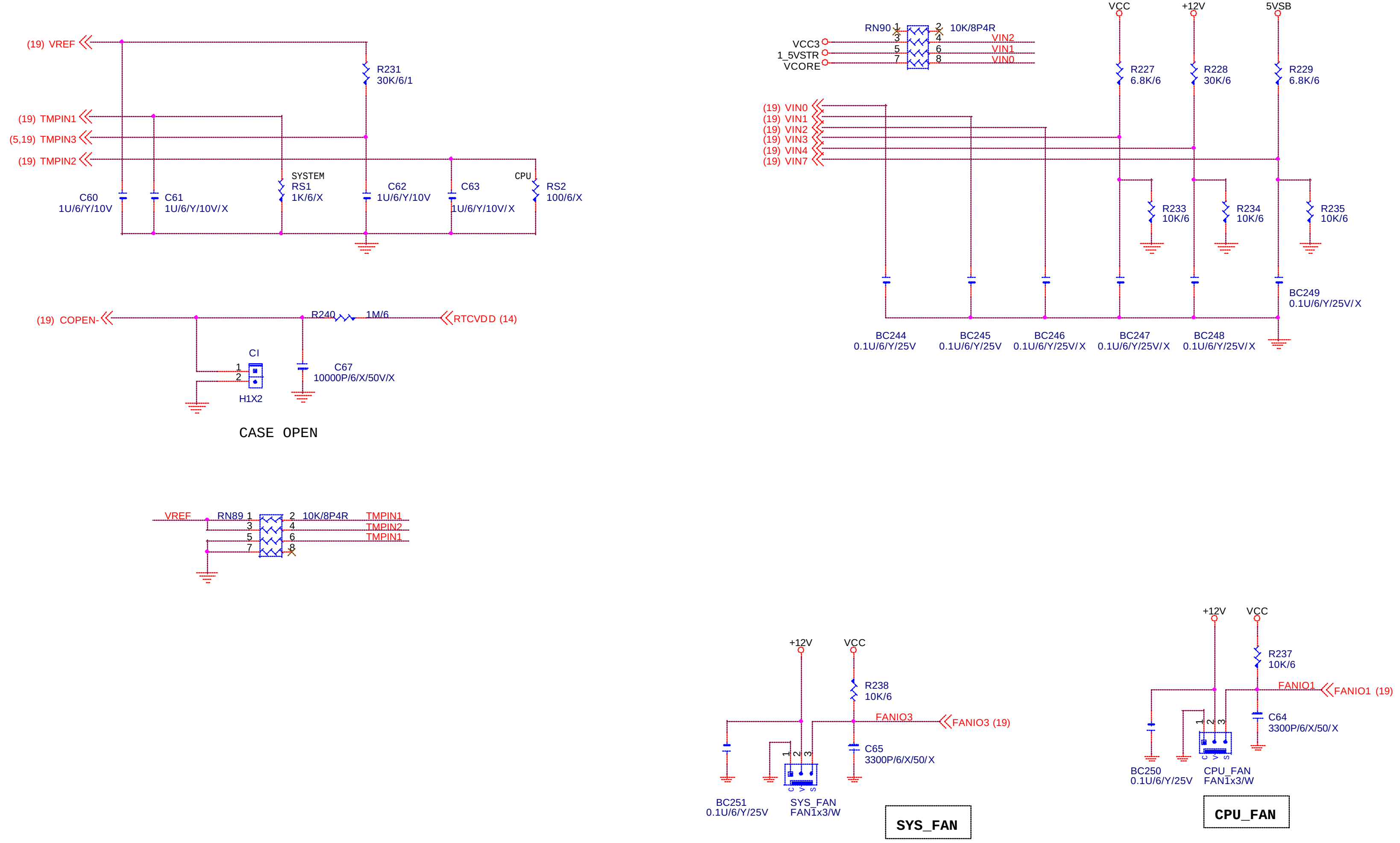
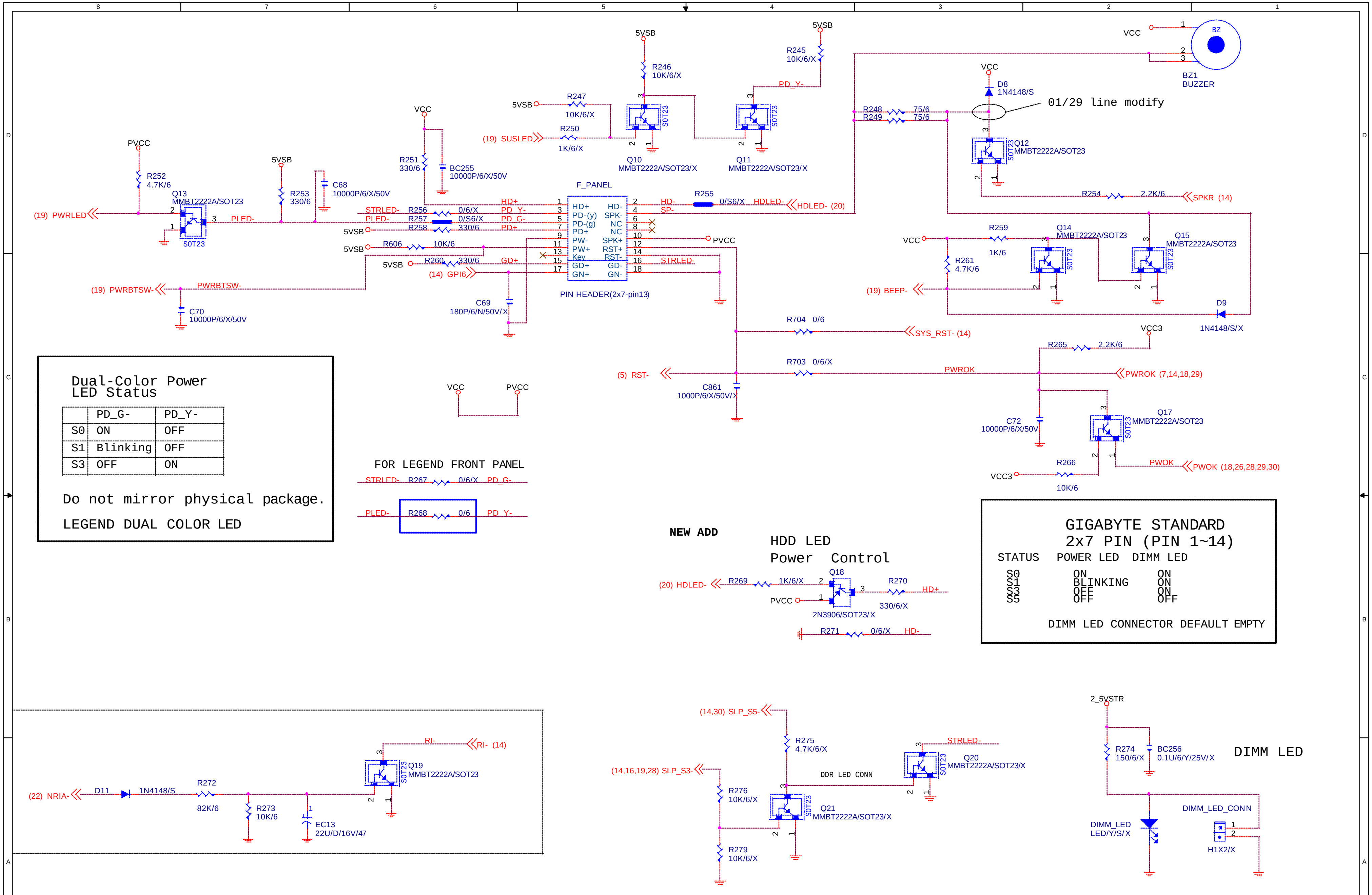
Hardware Monitor circuits



GIGABYTE		
Title: FAN/ HW MONITOR		
Size: B	Document Number: GA-8ILFT-C	Rev: 1.01
Date: Thursday, May 23, 2002	Sheet 23 of 33	



Dual-Color Power LED Status

	PD_G-	PD_Y-
S0	ON	OFF
S1	Blinking	OFF
S3	OFF	ON

Do not mirror physical package.

LEGEND DUAL COLOR LED

GIGABYTE STANDARD 2x7 PIN (PIN 1~14)

STATUS	POWER LED	DIMM LED
S0	ON	ON
S1	BLINKING	ON
S3	OFF	ON
S5	OFF	OFF

DIMM LED CONNECTOR DEFAULT EMPTY

GIGABYTE

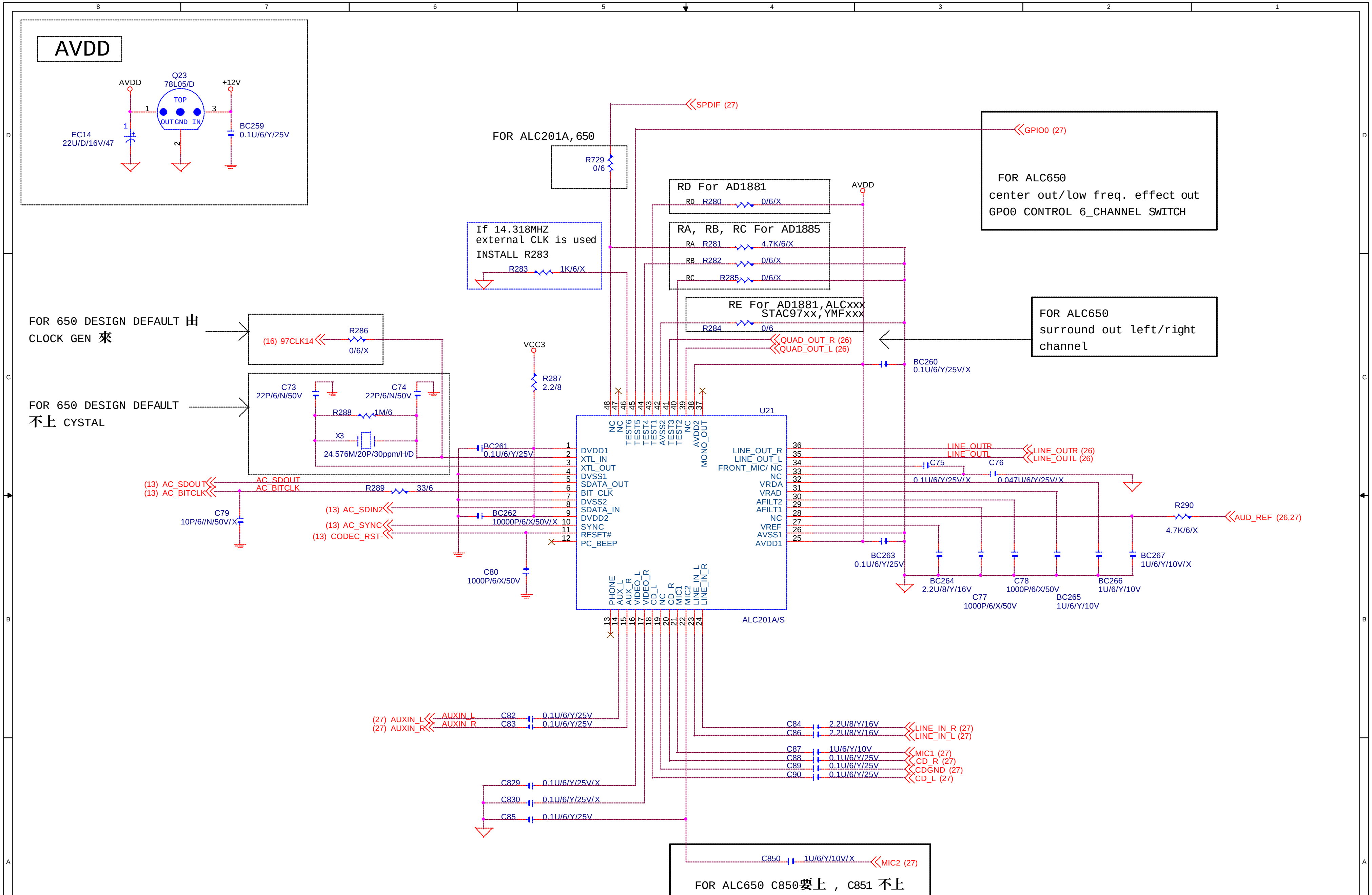
Title: PANEL & STR LED & RI

Size: B

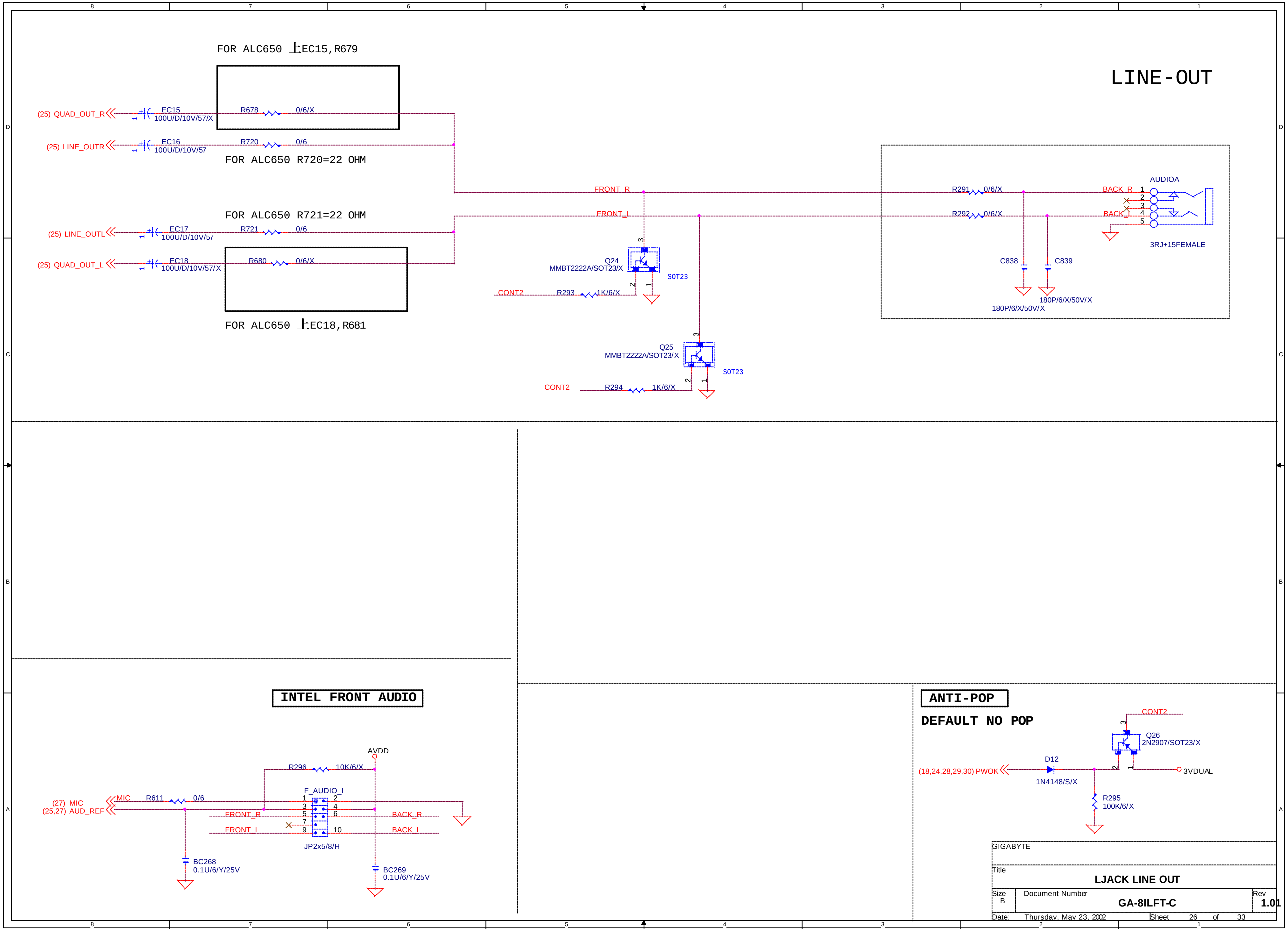
Document Number: GA-8ILFT-C

Rev: 1.01

Date: Thursday, May 23, 2002



GIGABYTE			
Title	AC97 CODEC		
Size B	Document Number GA-8ILFT-C		Rev 1.01
Date: Thursday, May 23, 2002	Sheet 25 of 33		


LINE-OUT
FOR ALC650 上EC15,R679
(25) QUAD_OUT_R
EC15
100U/D/10V/57/X
R678
0/6/X
(25) LINE_OUTR
EC16
100U/D/10V/57
R720
0/6
FOR ALC650 R720=22 OHM
FOR ALC650 R721=22 OHM
(25) LINE_OUTL
EC17
100U/D/10V/57
R721
0/6
(25) QUAD_OUT_L
EC18
100U/D/10V/57/X
R680
0/6/X
FOR ALC650 上EC18,R681
FRONT_R
FRONT_L
Q24
MMBT2222A/SOT23/X
SOT23
CONT2
R293
1K/6/X
Q25
MMBT2222A/SOT23/X
SOT23
CONT2
R294
1K/6/X
R291
0/6/X
R292
0/6/X
BACK_R
BACK_L
AUDIOA
3RJ+15FEMALE
C838
C839
180P/6/X/50V/X
180P/6/X/50V/X
INTEL FRONT AUDIO
AVDD
R296
10K/6/X
F_AUDIO_I
(27) MIC
(25,27) AUD_REF
MIC
R611
0/6
FRONT_R
FRONT_L
BACK_R
BACK_L
JP2x5/8/H
BC268
0.1U/6/Y/25V
BC269
0.1U/6/Y/25V
ANTI-POP
DEFAULT NO POP
CONT2
Q26
2N2907/SOT23/X
D12
1N4148/S/X
(18,24,28,29,30) PWOK
3VDUAL
R295
100K/6/X
GIGABYTE
Title
LJACK LINE OUT
Size
B
Document Number
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1.01
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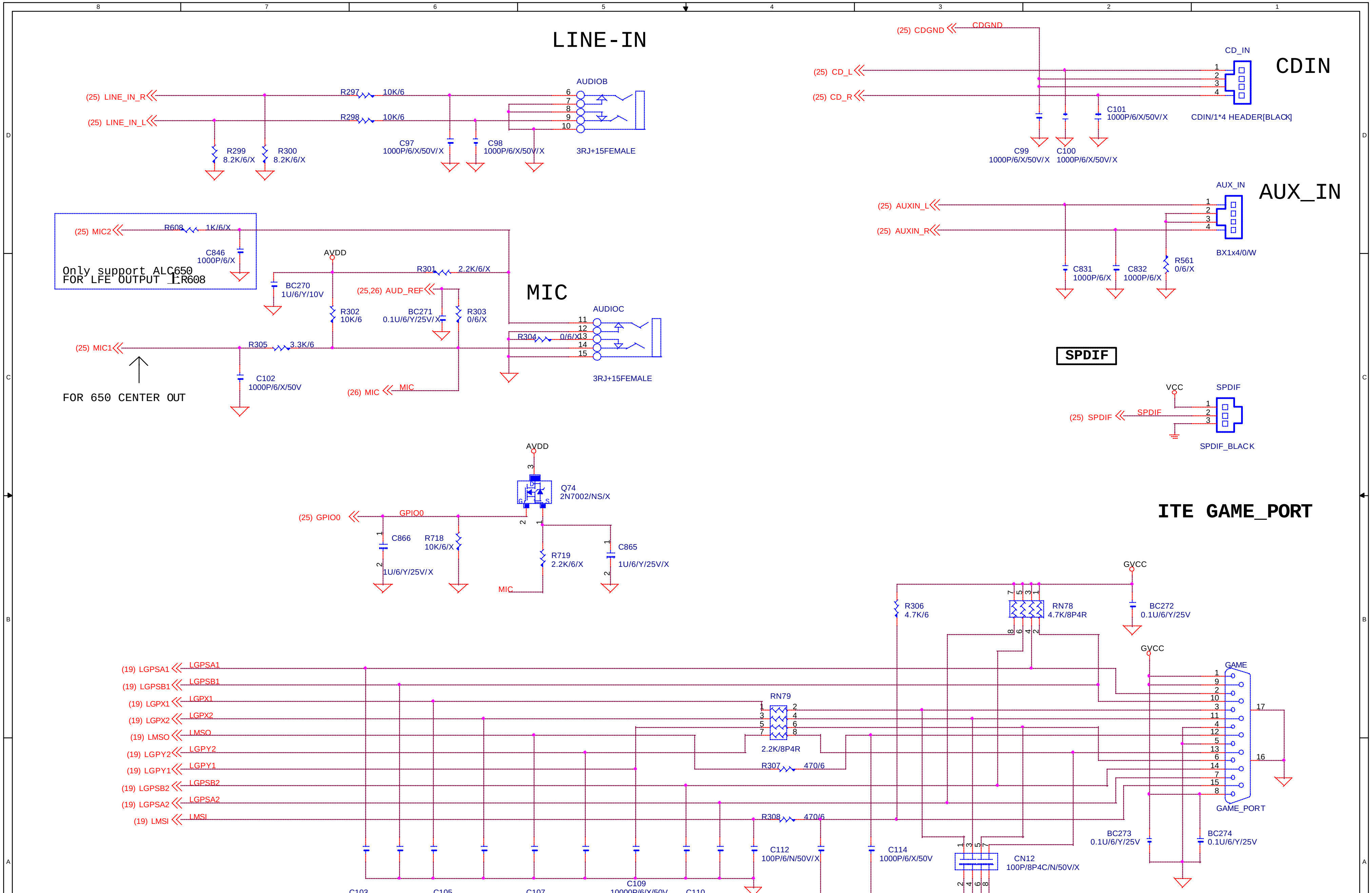
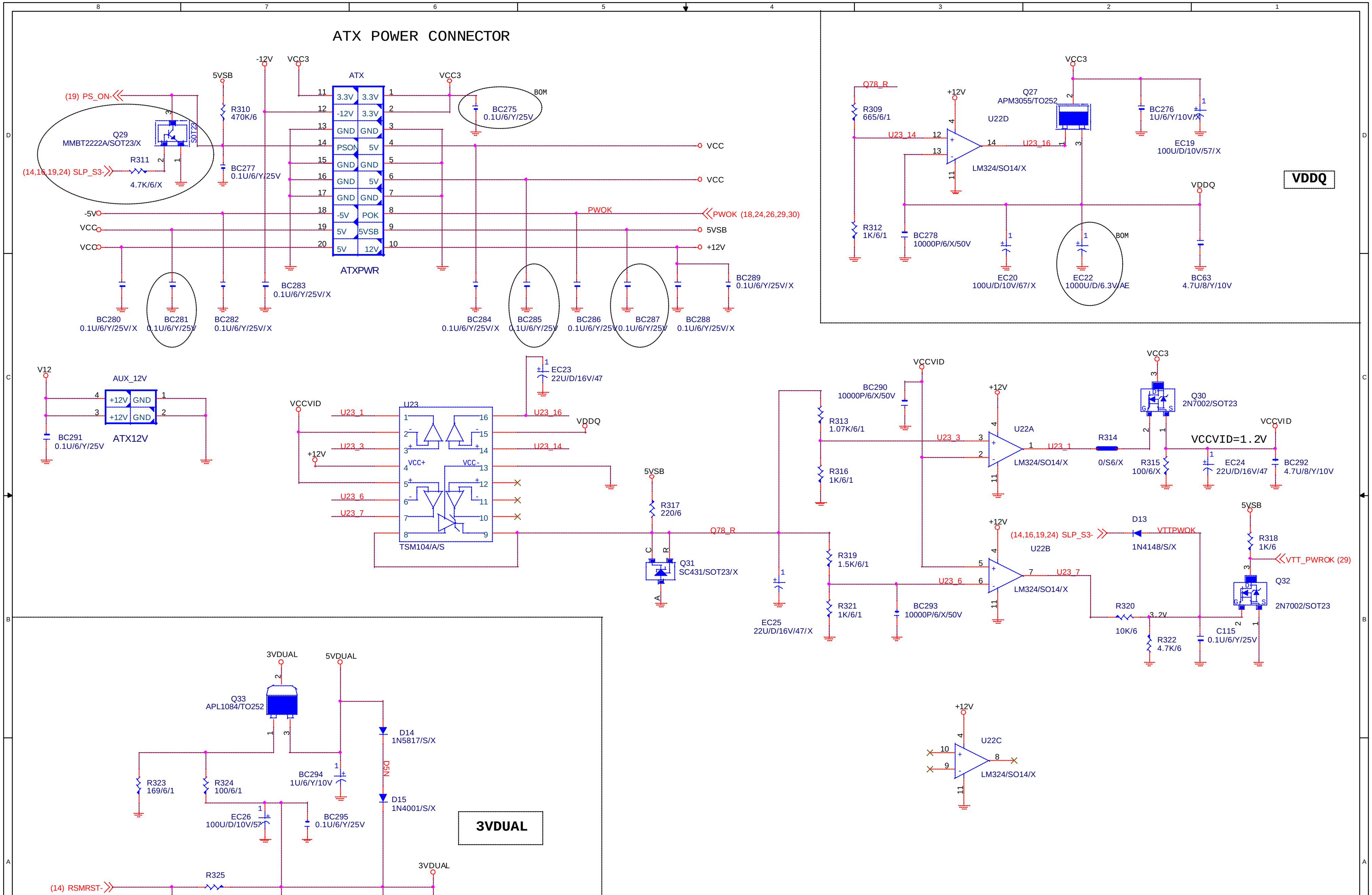


GIGABYTE		
Title	PHONE JACK, GAME PORT	
Size B	Document Number GA-8ILFT-C	Rev 1.01
Date: Thursday, May 23, 2002	Sheet 27 of 33	



GIGABYTE

Title
Misc. PWR & ATX CONN.

Size	Document Number	Rev
B	GA-8ILFT-C	1.01

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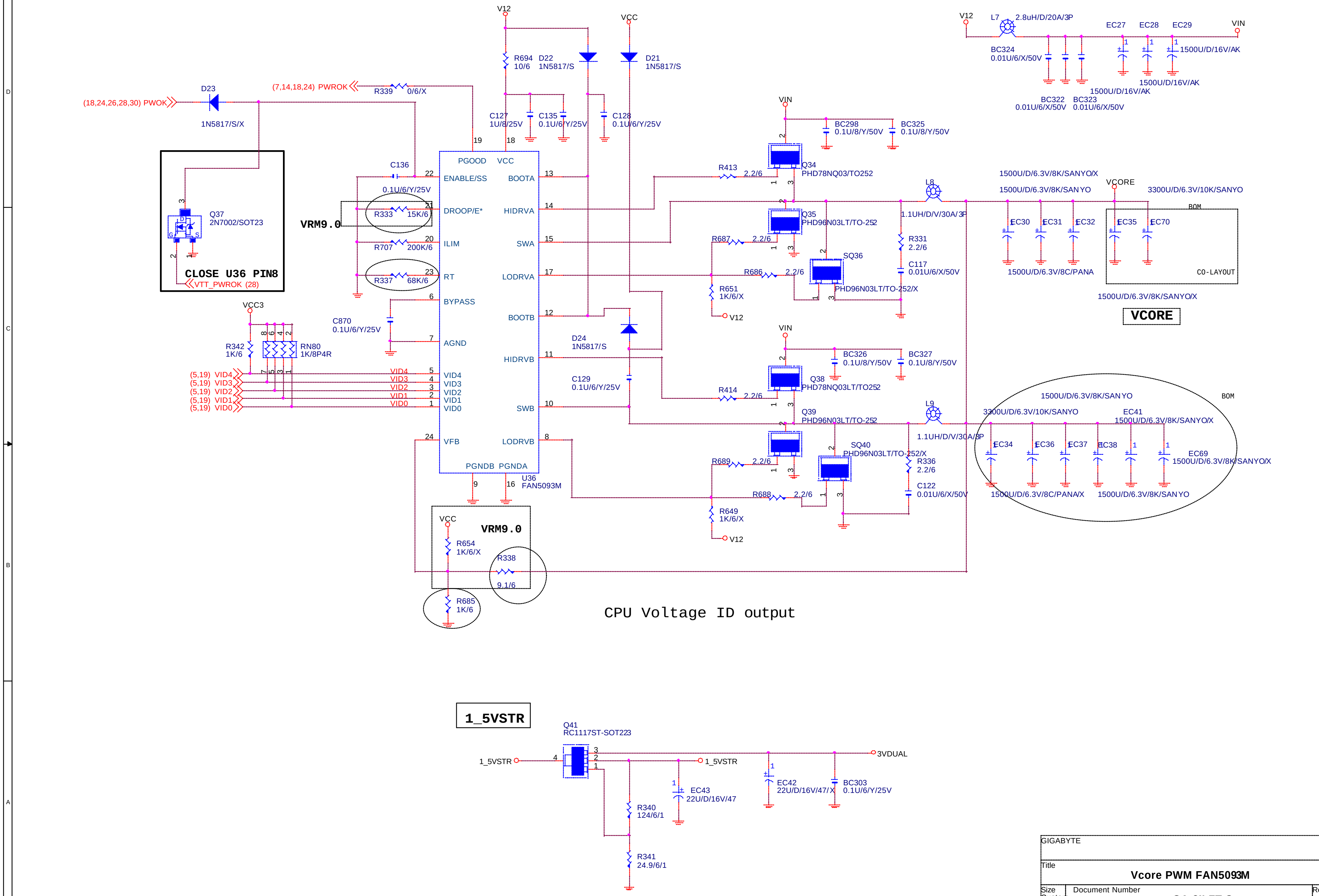
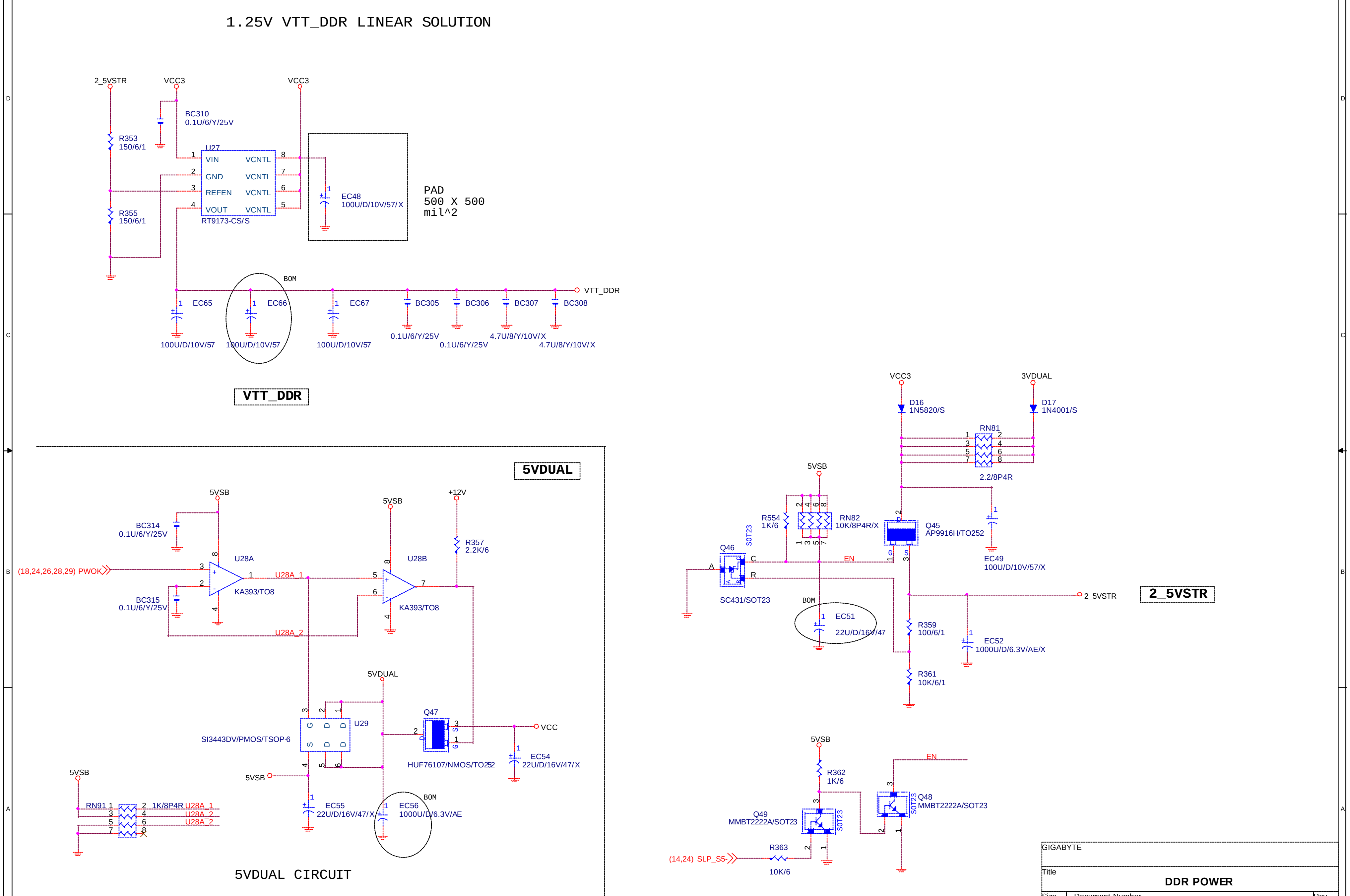
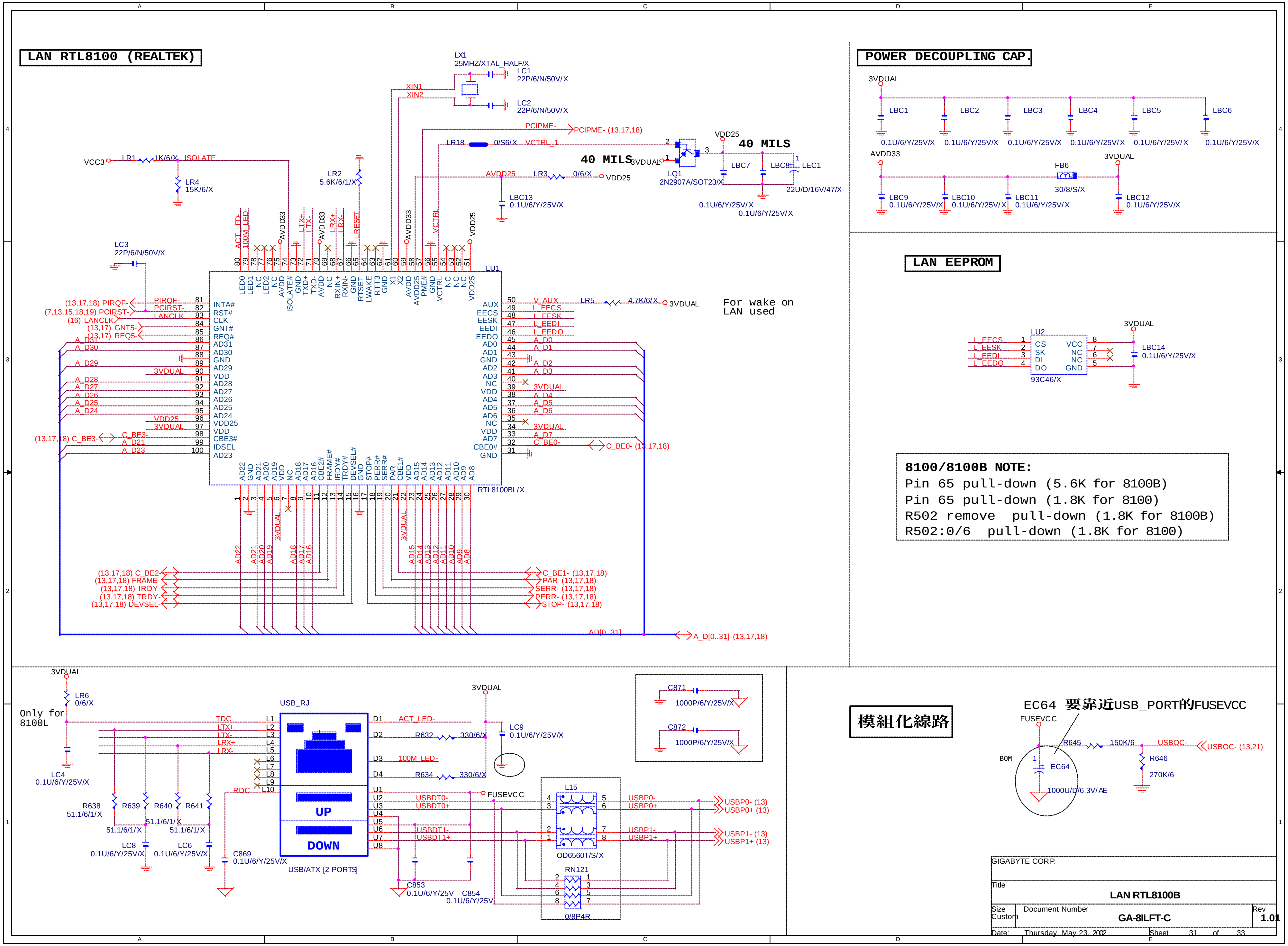


GIGABYTE		
Title: Vcore PWM FAN5093M		
Size: Custom	Document Number: GA-8ILFT-C	Rev: 1.01
Date: Thursday, May 23, 2002	Sheet 29 of 33	



GIGABYTE			
Title	DDR POWER		
Size B	Document Number	GA-8ILFT-C	Rev 1.01
Date: Thursday, May 23, 2002	Sheet 30 of 33		



8100/8100B NOTE:

Pin 65 pull-down (5.6K for 8100B)

Pin 65 pull-down (1.8K for 8100)

R502 remove pull-down (1.8K for 8100B)

R502:0/6 pull-down (1.8K for 8100)

GIGABYTE CORP.		
Title: LAN RTL8100B		
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GIGABYTE GA-8ILFT GPIO LIST

Revision 1.01

SHEET		TITLE
GPI		
PIRQB-		PULL 8.2K TO VCC3
PIRQD-		PULL 8.2K TO VCC3
PIRQE-		PULL 8.2K TO VCC3
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		
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, BIOS WRITE PROTECT.
GPO26		NOT IMPLEMENTED
GPO27		PULL 8.2K TO 3VDUAL, LAN 100/10 DETECT.
GPO28		PULL 8.2K TO 3VDUAL

GIGABYTE			
Title: GPIO LIST			
Size: Custom	Document Number: GA-8ILFT-C		Rev: 1.01
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GIGABYTE GA-8ILFL-T PCI ROUNTING LIST

Revision 1.01

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-	
	19					
	20					
	21					
	26					
	28					
	23					
	NA					

GIGABYTE

Title: PCI ROUNT LIST

Size: Custom | Document Number: GA-8ILFT-C | Rev: 1.01

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