GA-8PE800-L Schematics

Revision 1.1

SHEET	TITLE
01	COVER SHEET
02	BOM & PCB MODIFY HISTORY
03	BLOCK DIAGRAM
04	P4_478A
05	P4_478B
06	P4_478C
07	GMCH-BROOKDALE-G_A
08	GMCH-BROOKDALE-G_B
09	GMCH-BROOKDALE-G_C
10	DDR SERIAL TERMINATION
11	DDR1 & DDR2
12	DDR3 & DDR TERM.
13	AGP SLOT
14	ICH4_1
15	ICH4_2
16	FWH
17	ICS950211AF CLOCK GEN
18	PCI1 & PCI2 SLOT
19	PCI3 & PCI4 SLOT
20	PCI5 SLOT
21	LPC IO ITE 8702 & FLOPPY & FAN
22	FRONT USB2.0
23	FRONT PANEL

SHEET	TITLE
24	IDE CONNECTOR
25	PS/2 K/B & M/S
26	COM & PRT PORT
27	AC97 CODEC
28	LINE OUT/IN/MIC/FRONT AUDIO & GAME
29	VGA CONNECTOR
30	MISC. PWR & ATX POWER
31	VCORE PWM(FAN5093)
32	DDR POWER
33	REALTEK8100BL + Transformer
34	PCI ROUNTING
35	GPIO PIN LIST

GIGABYTE

Title: COVER SHEET

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Model Name: GA-8PE800-L

Version:1.1

29.3cm X 21.0cm 60+-15% C Type

Component value change history

DATE	Change Item	Reason
2003/05/06 1.1A	New BOM Release(ADD Realtek 8100BL)	
2003/05/14 1.1B	Change L16,L17,L18 由2.3uH --> 1.1uH	

Circuit or PCB layout change for next version

DATE	Change Item	Reason

GIGABYTE

Title	BOM & PCB MODIFY HISTORY	
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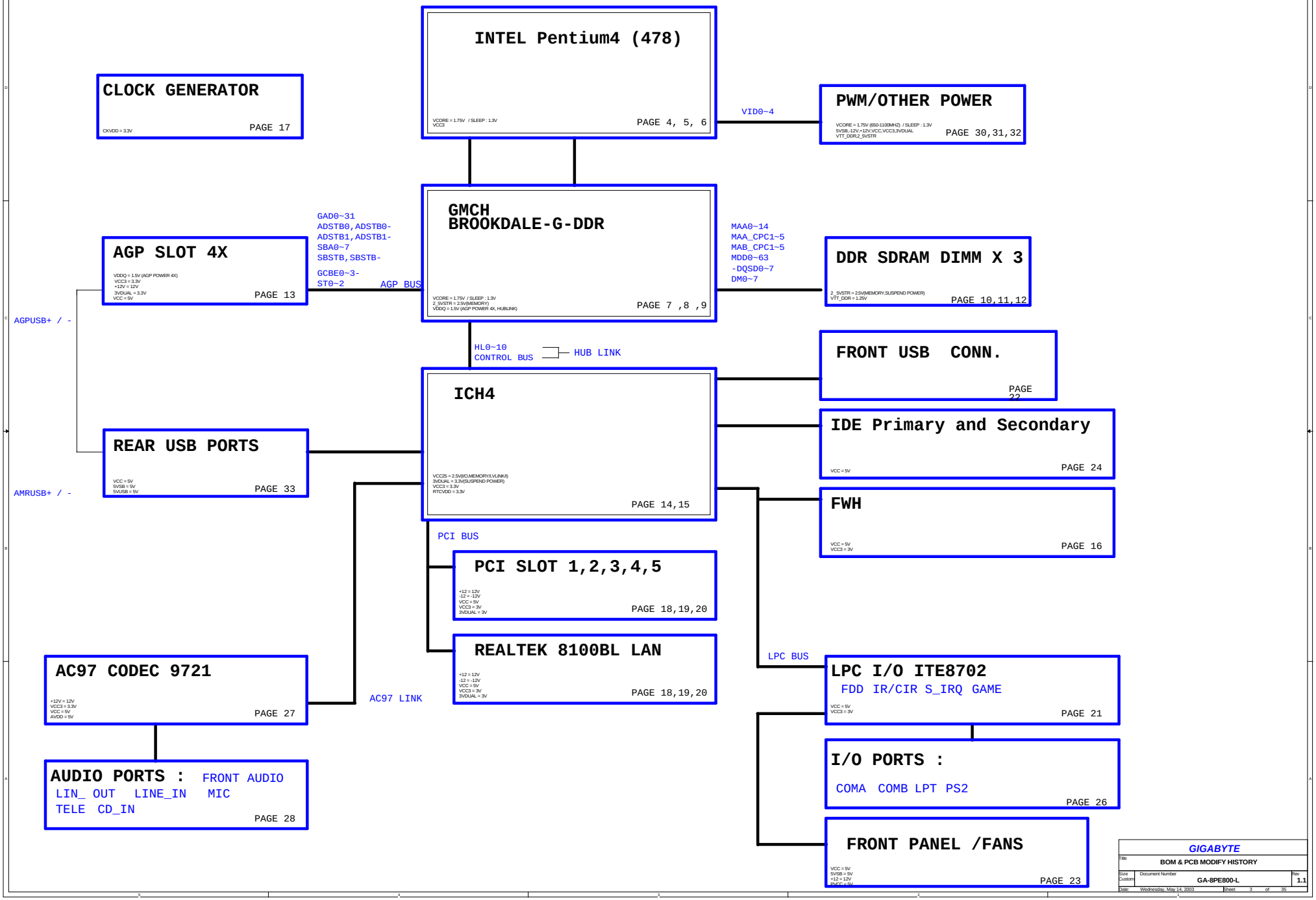
BLOCK DIAGRAM



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Title	BOM & PCB MODIFY HISTORY	
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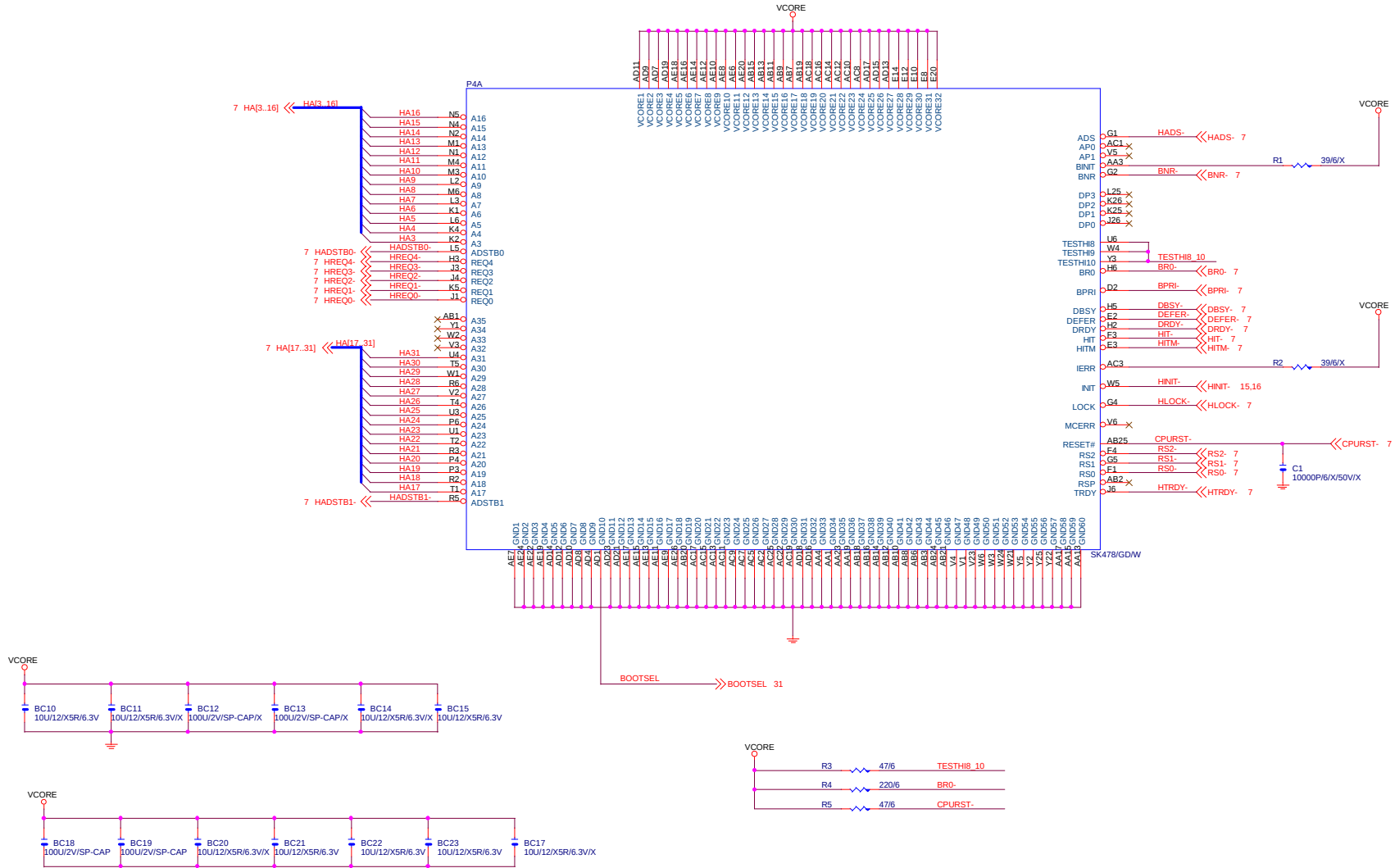

Title	P4 478A	
Size: Custom	Document Number: GA-8PE800-L	Rev: 1.1
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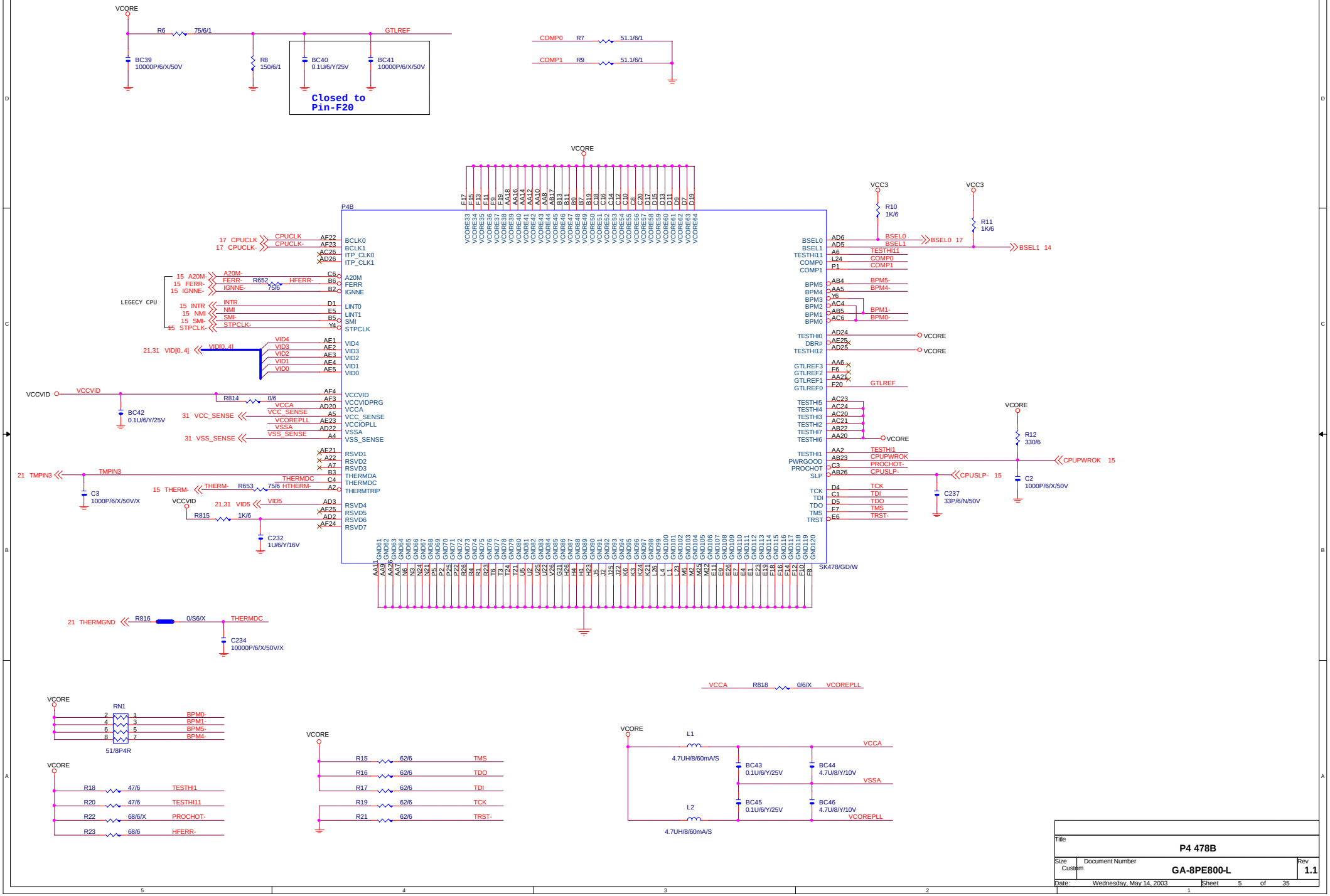

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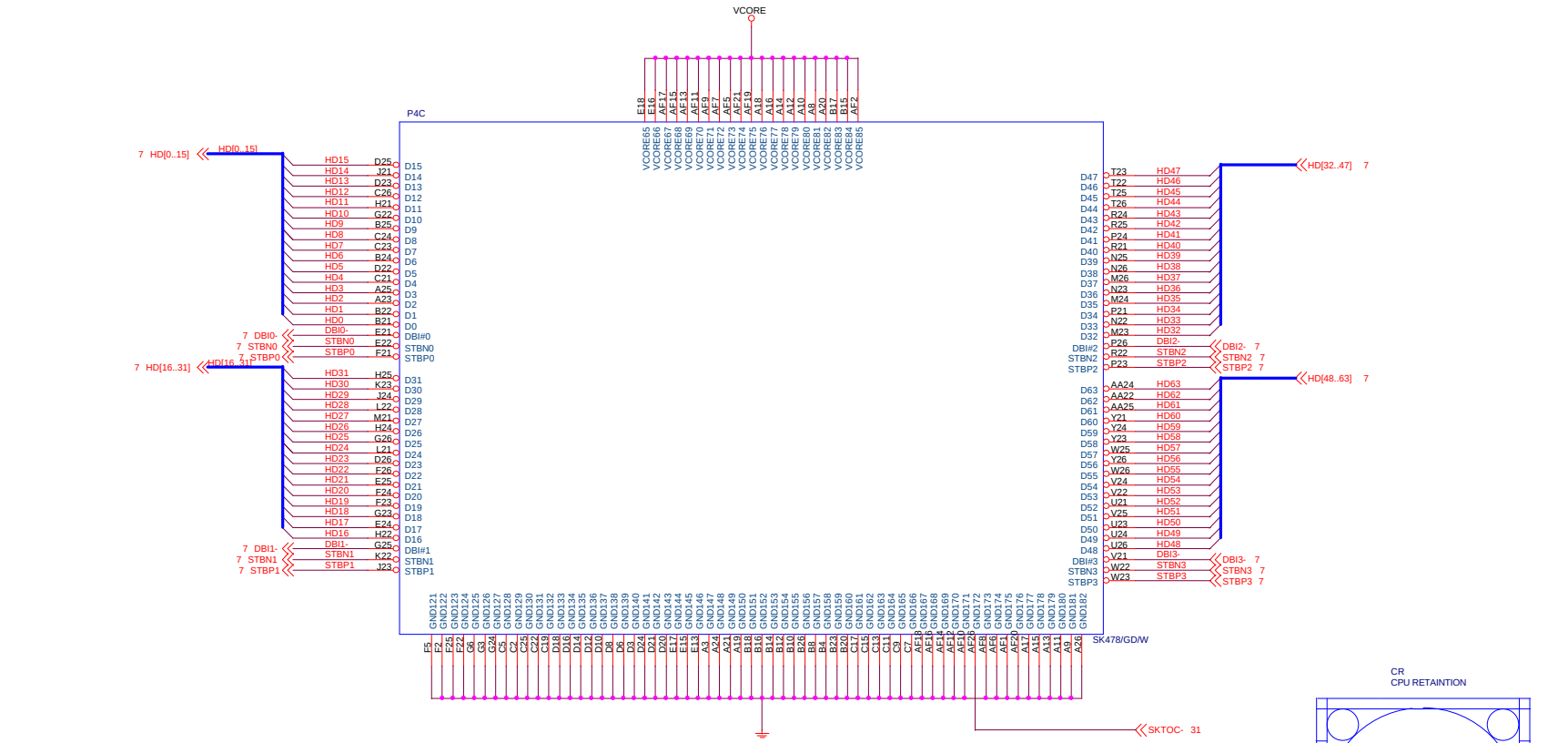
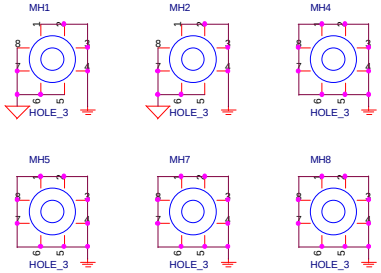
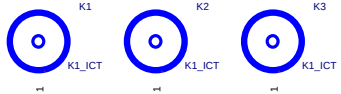
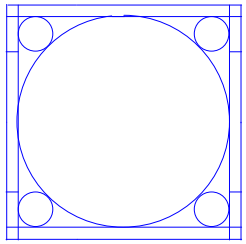
Size: Custom	Document Number: GA-8PE800-L	Rev: 1.1
Date: Wednesday, May 14, 2003	Sheet 5 of 35	







CR
CPU RETAINTION



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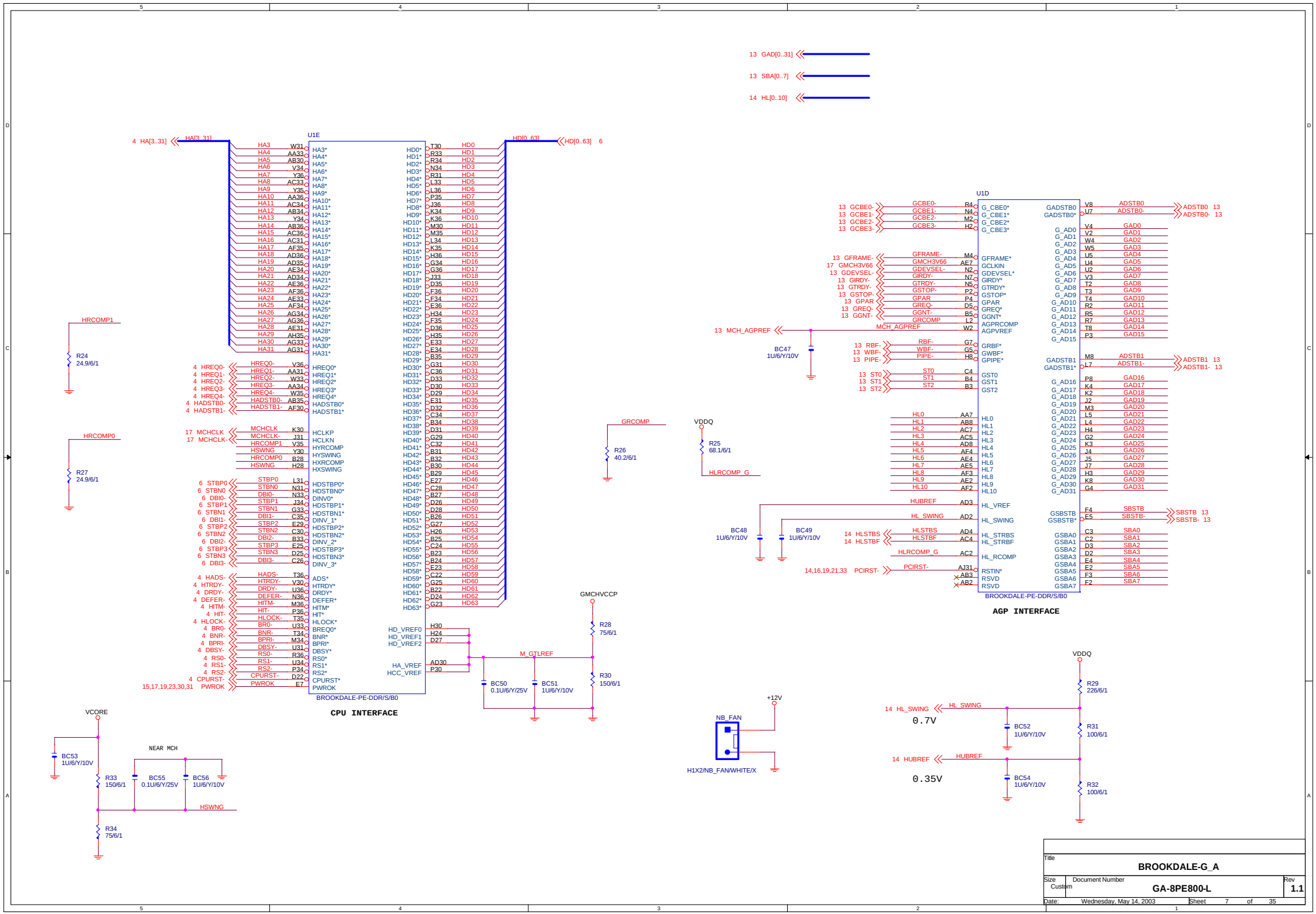
Size: Custom	Document Number: GA-8PE800-L	Rev: 1.1
Date: Wednesday, May 14, 2003	Sheet 6 of 35	


13 GAD[0..31]
13 SBA[0..7]
14 HL[0..10]
U1E
BROOKDALE-PE-DDR/S/B0
CPU INTERFACE
U1D
BROOKDALE-PE-DDR/S/B0
AGP INTERFACE
HRCOMP1
R24 24.9/6/1
HRCOMP0
R27 24.9/6/1
GRCOMP
R26 40.2/6/1
VDDQ
R25 68.1/6/1
HLRCOMP_G
MCH_AGPREF
BC47 1U/6/Y/10V
BC48 1U/6/Y/10V
BC49 1U/6/Y/10V
HUBREF
HL_SWING
M_GTLREF
GMCHVCCP
R28 75/6/1
R30 150/6/1
BC50 0.1U/6/Y/25V
BC51 1U/6/Y/10V
VCORE
NEAR MCH
BC53 1U/6/Y/10V
R33 150/6/1
BC55 0.1U/6/Y/25V
BC56 1U/6/Y/10V
HSWNG
R34 75/6/1
+12V
NB_FAN
H1X2/NB_FAN/WHITE/X
0.7V
0.35V
R29 226/6/1
BC52 1U/6/Y/10V
R31 100/6/1
BC54 1U/6/Y/10V
R32 100/6/1
Title
BROOKDALE-G_A
Size Custom
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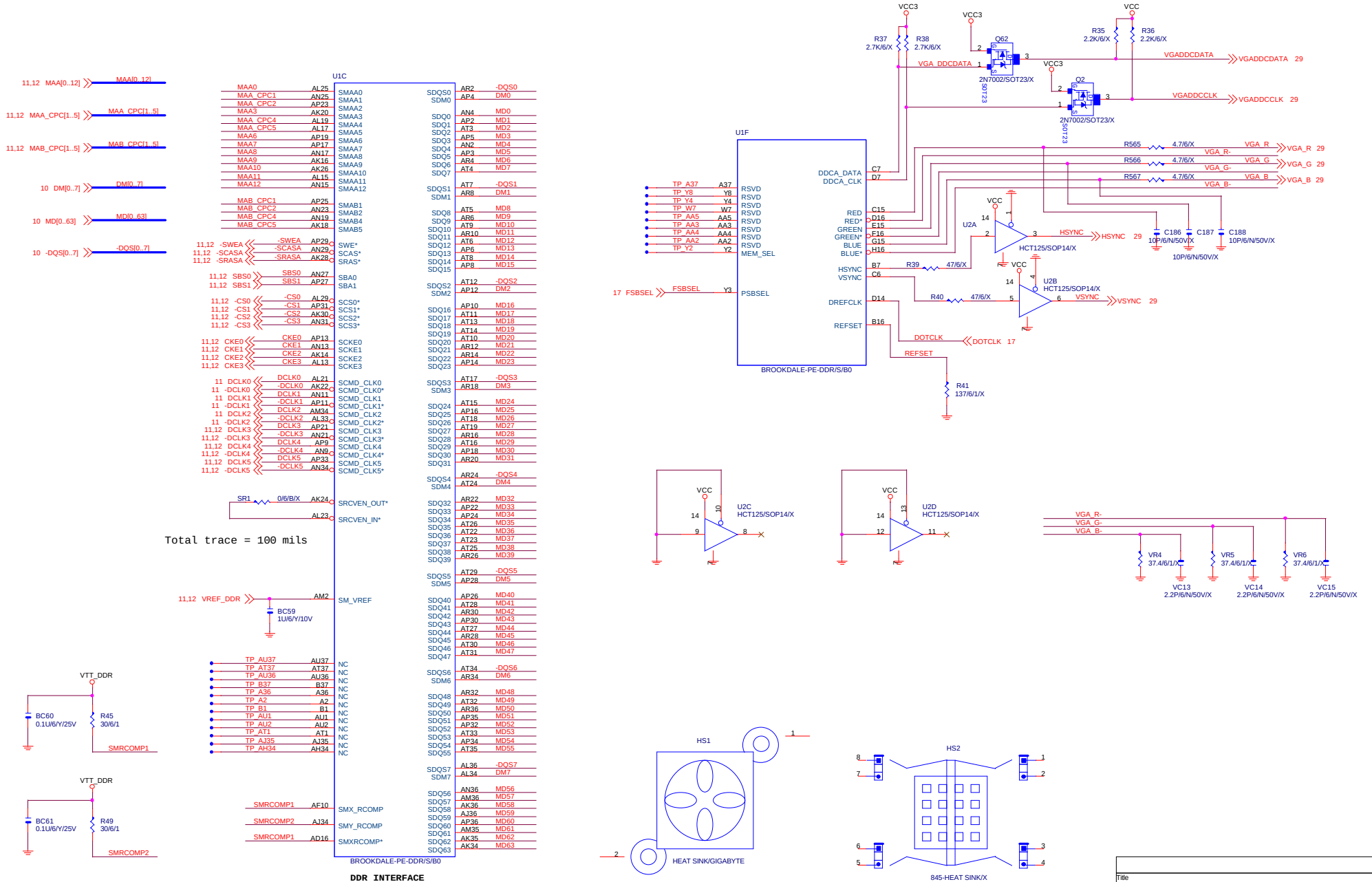
U1C
BROOKDALE-PE-DDR/S/B0
DDR INTERFACE
Total trace = 100 mils
U1F
BROOKDALE-PE-DDR/S/B0
U2A
U2B
U2C
U2D
HCT125/SOP14/X
HS1
HEAT SINK/GIGABYTE
HS2
845-HEAT SINK/X
Title
BROOKDALE-G_B
Size
Custom
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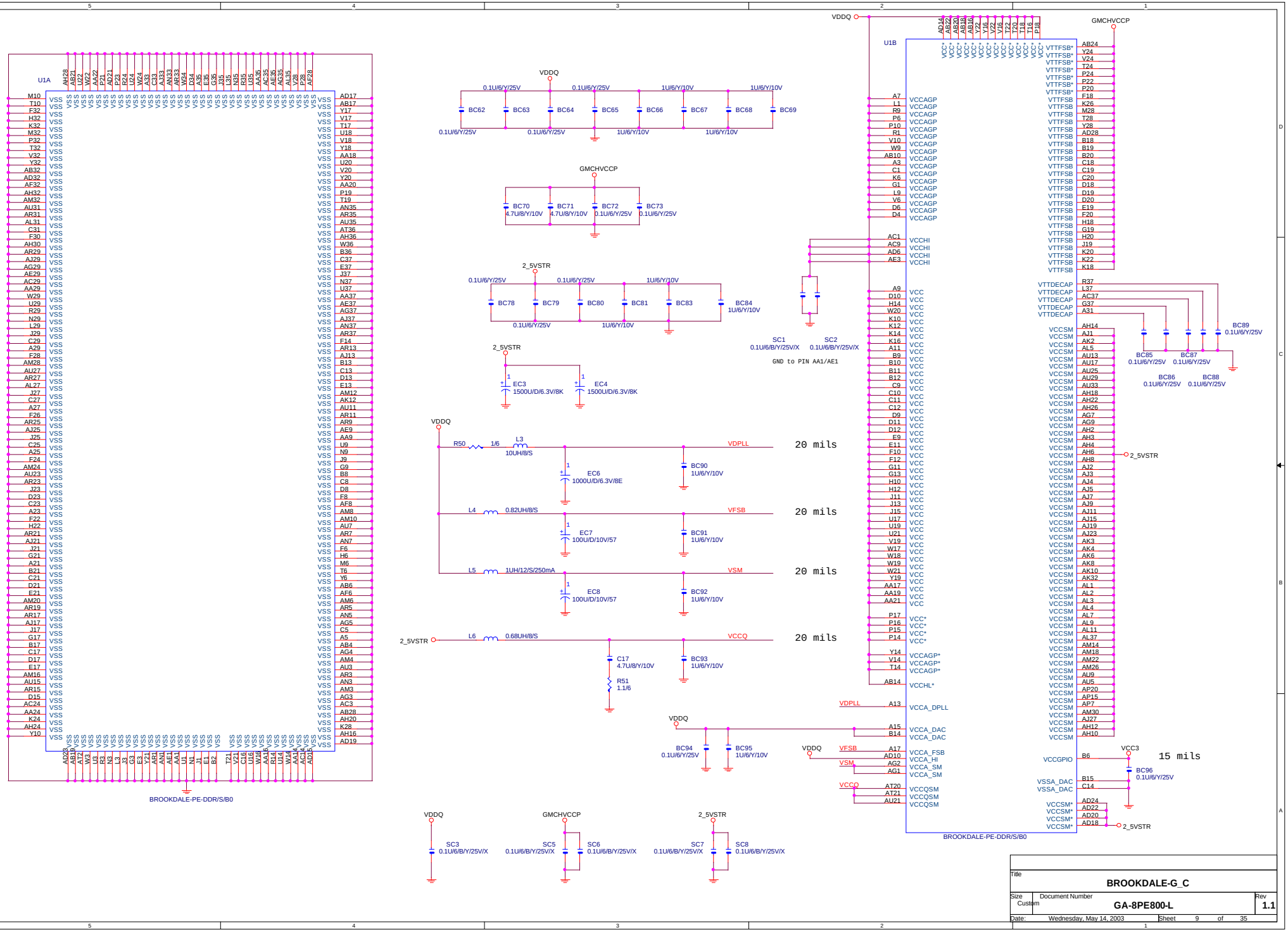

Title	BROOKDALE-G_C
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11,12 MD_[0..63] → MD[0..63] 8

11,12 DM_[0..7] → DM[0..7] 8

11,12 -DQS_[0..7] → -DQS[0..7] 8

DM_0	RN3	1	2 10/8P4R	DM0	
-DQS_0		3	4	-DQS0	
MD_2		5	6	MD2	
MD_6		7	8	MD6	
MD_0	RN5	1	2 10/8P4R	MD0	
MD_4		3	4	MD4	
MD_5		5	6	MD5	
MD_1		7	8	MD1	
MD_12	RN6	1	2 10/8P4R	MD12	
MD_13		3	4	MD13	
-DQS_1		5	6	-DQS1	
DM_1		7	8	DM1	
MD_14	RN7	1	2 10/8P4R	MD14	
MD_15		3	4	MD15	
MD_10		5	6	MD10	
MD_11		7	8	MD11	
-DQS_2	RN9	1	2 10/8P4R	-DQS2	
DM_2		3	4	DM2	
MD_18		5	6	MD18	
MD_22		7	8	MD22	
MD_29	RN11	1	2 10/8P4R	MD29	
MD_25		3	4	MD25	
-DQS_3		5	6	-DQS3	
DM_3		7	8	DM3	
MD_26	RN12	1	2 10/8P4R	MD26	
MD_30		3	4	MD30	
MD_27		5	6	MD27	
MD_31		7	8	MD31	
MD_32	RN13	1	2 10/8P4R	MD32	
MD_36		3	4	MD36	
MD_33		5	6	MD33	
MD_37		7	8	MD37	
MD_39	RN14	1	2 10/8P4R	MD39	
MD_35		3	4	MD35	
MD_40		5	6	MD40	
MD_44		7	8	MD44	
-DQS_4	RN15	1	2 10/8P4R	-DQS4	
DM_4		3	4	DM4	
MD_34		5	6	MD34	
MD_38		7	8	MD38	
MD_45	RN16	1	2 10/8P4R	MD45	
MD_41		3	4	MD41	
DM_5		5	6	DM5	
-DQS_5		7	8	-DQS5	
MD_48	RN17	1	2 10/8P4R	MD48	
MD_49		3	4	MD49	
MD_52		5	6	MD52	
MD_53		7	8	MD53	
MD_50	RN18	1	2 10/8P4R	MD50	
MD_51		3	4	MD51	
MD_60		5	6	MD60	
MD_61		7	8	MD61	
DM_6	RN19	1	2 10/8P4R	DM6	
-DQS_6		3	4	-DQS6	
MD_54		5	6	MD54	
MD_55		7	8	MD55	
MD_56	RN20	1	2 10/8P4R	MD56	
MD_57		3	4	MD57	
DM_7		5	6	DM7	
-DQS_7		7	8	-DQS7	
MD_59	RN21	7	8 10/8P4R	MD59	
MD_63		5	6	MD63	
MD_58		3	4	MD58	
MD_62		1	2	MD62	

MD_20	RN2	1	2 10/8P4R	MD20	
MD_16		3	4	MD16	
MD_17		5	6	MD17	
MD_21		7	8	MD21	
MD_42	RN4	1	2 10/8P4R	MD42	
MD_46		3	4	MD46	
MD_43		5	6	MD43	
MD_47		7	8	MD47	

MD_7	RN8	1	2 10/8P4R	MD7	
MD_3		3	4	MD3	
MD_8		5	6	MD8	
MD_9		7	8	MD9	
MD_19	RN10	1	2 10/8P4R	MD19	
MD_23		3	4	MD23	
MD_24		5	6	MD24	
MD_28		7	8	MD28	

2_5VSTR

BC97	0.1U/6/Y/25V
BC98	0.1U/6/Y/25V
BC99	0.1U/6/Y/25V
BC100	0.1U/6/Y/25V
BC101	0.1U/6/Y/25V
BC102	0.1U/6/Y/25V
BC103	0.1U/6/Y/25V
BC104	0.1U/6/Y/25V
BC105	0.1U/6/Y/25V
BC352	0.1U/6/Y/25V

COUPON2 COUPON1 1 2 COUPON → 2_5VSTR

COUPON1 COUPON2 1 2 COUPON

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Title: **DDR SERIAL TERM.**

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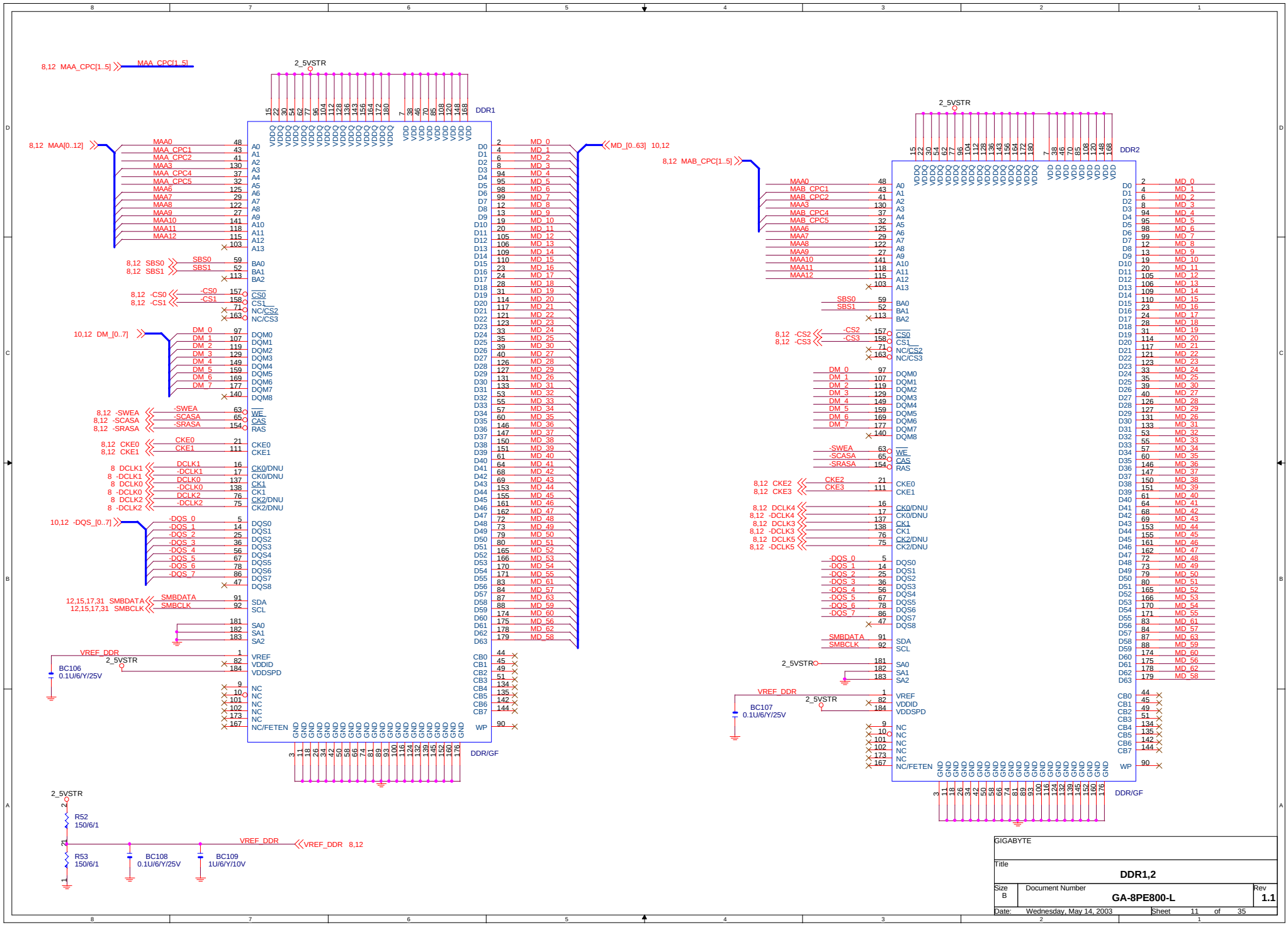
8,12 MAA_CPC[1..5]
MAA_CPC[1..5]
2_5VSTR
DDR1
8,12 MAA[0..12]
MAA0
MAA_CPC1
MAA_CPC2
MAA3
MAA_CPC4
MAA_CPC5
MAA6
MAA7
MAA8
MAA9
MAA10
MAA11
MAA12
8,12 SBS0
8,12 SBS1
SBS0
SBS1
8,12 -CS0
8,12 -CS1
-CS0
-CS1
10,12 DM_[0..7]
DM_0
DM_1
DM_2
DM_3
DM_4
DM_5
DM_6
DM_7
8,12 -SWEA
8,12 -SCASA
8,12 -SRASA
-SWEA
-SCASA
-SRASA
8,12 CKE0
8,12 CKE1
CKE0
CKE1
8 DCLK1
8 -DCLK1
8 DCLK0
8 -DCLK0
8 DCLK2
8 -DCLK2
DCLK1
-DCLK1
DCLK0
-DCLK0
DCLK2
-DCLK2
10,12 -DQS_[0..7]
-DQS_0
-DQS_1
-DQS_2
-DQS_3
-DQS_4
-DQS_5
-DQS_6
-DQS_7
12,15,17,31 SMBDATA
12,15,17,31 SMBCLK
SMBDATA
SMBCLK
SA0
SA1
SA2
VREF_DDR
2_5VSTR
BC106
0.1U/6/Y/25V
VREF
VDDID
VDDSPD
NC
NC/FETEN
MD_[0..63] 10,12
MD_0
MD_1
MD_2
MD_3
MD_4
MD_5
MD_6
MD_7
MD_8
MD_9
MD_10
MD_11
MD_12
MD_13
MD_14
MD_15
MD_16
MD_17
MD_18
MD_19
MD_20
MD_21
MD_22
MD_23
MD_24
MD_25
MD_26
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MD_47
MD_48
MD_49
MD_50
MD_51
MD_52
MD_53
MD_54
MD_55
MD_56
MD_57
MD_58
MD_59
MD_60
MD_61
MD_62
MD_63
CB0
CB1
CB2
CB3
CB4
CB5
CB6
CB7
WP
DDR/GF
2_5VSTR
R52
150/6/1
R53
150/6/1
VREF_DDR
VREF_DDR 8,12
BC108
0.1U/6/Y/25V
BC109
1U/6/Y/10V
2_5VSTR
DDR2
8,12 MAB_CPC[1..5]
MAA0
MAB_CPC1
MAB_CPC2
MAA3
MAB_CPC4
MAB_CPC5
MAA6
MAA7
MAA8
MAA9
MAA10
MAA11
MAA12
SBS0
SBS1
8,12 -CS2
8,12 -CS3
-CS2
-CS3
DM_0
DM_1
DM_2
DM_3
DM_4
DM_5
DM_6
DM_7
-SWEA
-SCASA
-SRASA
8,12 CKE2
8,12 CKE3
CKE2
CKE3
8,12 DCLK4
8,12 -DCLK4
8,12 DCLK3
8,12 -DCLK3
8,12 DCLK5
8,12 -DCLK5
-DQS_0
-DQS_1
-DQS_2
-DQS_3
-DQS_4
-DQS_5
-DQS_6
-DQS_7
SMBDATA
SMBCLK
2_5VSTR
SA0
SA1
SA2
VREF_DDR
2_5VSTR
BC107
0.1U/6/Y/25V
VREF
VDDID
VDDSPD
NC
NC/FETEN
MD_0
MD_1
MD_2
MD_3
MD_4
MD_5
MD_6
MD_7
MD_8
MD_9
MD_10
MD_11
MD_12
MD_13
MD_14
MD_15
MD_16
MD_17
MD_18
MD_19
MD_20
MD_21
MD_22
MD_23
MD_24
MD_25
MD_26
MD_27
MD_28
MD_29
MD_30
MD_31
MD_32
MD_33
MD_34
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MD_51
MD_52
MD_53
MD_54
MD_55
MD_56
MD_57
MD_58
MD_59
MD_60
MD_61
MD_62
MD_63
CB0
CB1
CB2
CB3
CB4
CB5
CB6
CB7
WP
DDR/GF
GIGABYTE
Title
DDR1,2
Size
B
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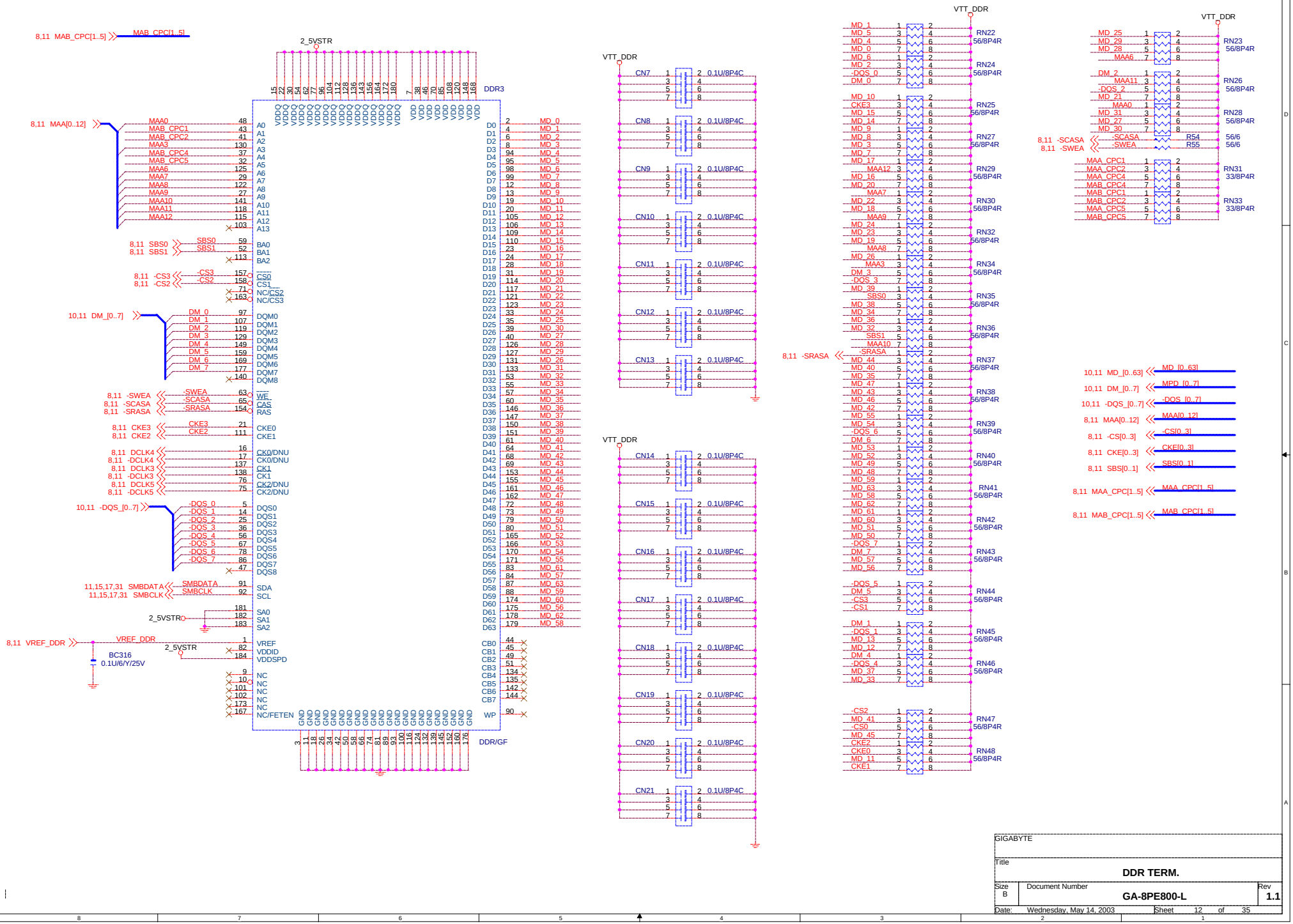
8,11 MAB_CPC[1..5]
MAB_CPC[1..5]
2_5VSTR
DDR3
8,11 MAA[0..12]
MAA0
MAB_CPC1
MAB_CPC2
MAA3
MAB_CPC4
MAB_CPC5
MAA6
MAA7
MAA8
MAA9
MAA10
MAA11
MAA12
8,11 SBS0
8,11 SBS1
SBS0
SBS1
8,11 -CS3
8,11 -CS2
-CS3
-CS2
10,11 DM_[0..7]
DM_0
DM_1
DM_2
DM_3
DM_4
DM_5
DM_6
DM_7
8,11 -SWEA
8,11 -SCASA
8,11 -SRASA
-SWEA
-SCASA
-SRASA
8,11 CKE3
8,11 CKE2
CKE3
CKE2
8,11 DCLK4
8,11 -DCLK4
8,11 DCLK3
8,11 -DCLK3
8,11 DCLK5
8,11 -DCLK5
10,11 -DQS_[0..7]
-DQS_0
-DQS_1
-DQS_2
-DQS_3
-DQS_4
-DQS_5
-DQS_6
-DQS_7
11,15,17,31 SMBDATA
11,15,17,31 SMBCLK
SMBDATA
SMBCLK
2_5VSTR
8,11 VREF_DDR
VREF_DDR
2_5VSTR
BC316
0.1U/6/Y/25V
DDR/GF
VTT_DDR
CN7
CN8
CN9
CN10
CN11
CN12
CN13
CN14
CN15
CN16
CN17
CN18
CN19
CN20
CN21
0.1U/8P4C
RN22
RN23
RN24
RN25
RN26
RN27
RN28
RN29
RN30
RN31
RN32
RN33
RN34
RN35
RN36
RN37
RN38
RN39
RN40
RN41
RN42
RN43
RN44
RN45
RN46
RN47
RN48
56/8P4R
33/8P4R
R54
R55
56/6
10,11 MD_[0..63]
MD_[0..63]
MPD_[0..7]
-DQS_[0..7]
MAA[0..12]
-CS[0..3]
CKE[0..3]
SBS[0..1]
MAA_CPC[1..5]
MAB_CPC[1..5]
GIGABYTE
Title
DDR TERM.
Size B
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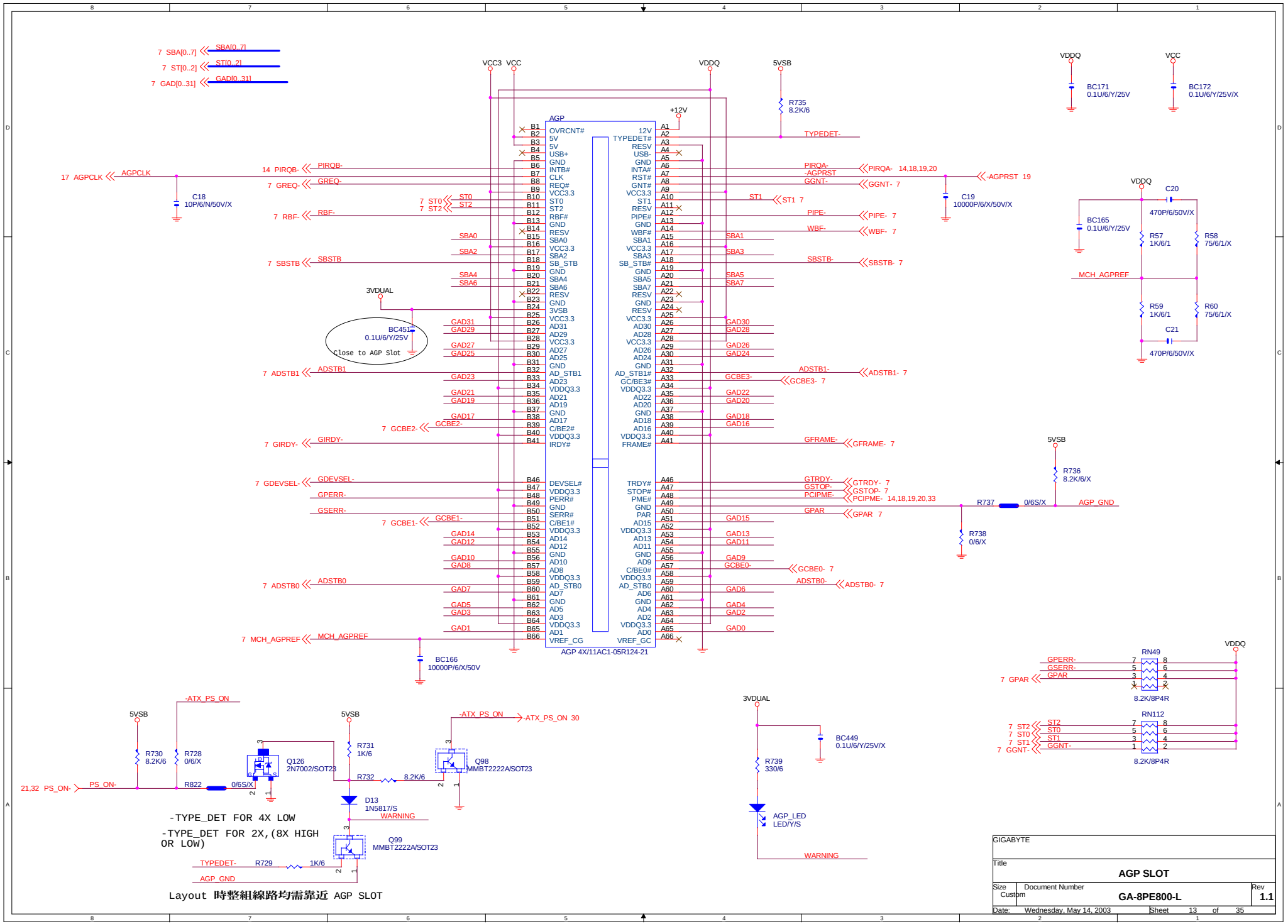
7 SBA[0..7] SBA[0..7]
7 ST[0..2] ST[0..2]
7 GAD[0..31] GAD[0..31]
VCC3 VCC
VDDQ
5VSB
+12V
AGP
AGP 4X/11AC1-05R124-21
R735 8.2K/6
TYPEDET-
BC171 0.1U/6/Y/25V
BC172 0.1U/6/Y/25V/X
17 AGPCLK AGPCLK
C18 10P/6/N/50V/X
14 PIRQB- PIRQB-
7 GREQ- GREQ-
7 RBF- RBF-
7 SBSTB SBSTB
3VDUAL
BC451 0.1U/6/Y/25V
Close to AGP Slot
7 ADSTB1 ADSTB1
7 GIRDY- GIRDY-
7 GDEVSEL- GDEVSEL-
GPERR-
GSERR-
7 GCBE1- GCBE1-
7 ADSTB0 ADSTB0
7 MCH_AGPREF MCH_AGPREF
BC166 10000P/6/X/50V
PIRQA- -AGPRST GGNT-
PIRQA- 14,18,19,20
-AGPRST 19
GGNT- 7
C19 10000P/6/X/50V/X
ST1 ST1 7
PIPE- PIPE- 7
WBF- WBF- 7
SBSTB- SBSTB- 7
ADSTB1- ADSTB1- 7
GCBE3- GCBE3- 7
GFRAME- GFRAME- 7
GTRDY- GTRDY- 7
GSTOP- GSTOP- 7
PCIPME- PCIPME- 14,18,19,20,33
GPAR GPAR 7
GCBE0- GCBE0- 7
ADSTB0- ADSTB0- 7
VDDQ
BC165 0.1U/6/Y/25V
C20 470P/6/50V/X
R57 1K/6/1
R58 75/6/1/X
MCH_AGPREF
R59 1K/6/1
R60 75/6/1/X
C21 470P/6/50V/X
5VSB
R736 8.2K/6/X
R737 0/6S/X
AGP_GND
R738 0/6/X
RN49
GPERR-
GSERR-
7 GPAR GPAR
8.2K/8P4R
RN112
7 ST2 ST2
7 ST0 ST0
7 ST1 ST1
7 GGNT- GGNT-
8.2K/8P4R
-ATX_PS_ON
5VSB
R730 8.2K/6
R728 0/6/X
21,32 PS_ON- PS_ON-
R822 0/6S/X
Q126 2N7002/SOT23
R731 1K/6
R732 8.2K/6
Q98 MMBT2222A/SOT23
-ATX_PS_ON 30
D13 1N5817/S
WARNING
Q99 MMBT2222A/SOT23
TYPEDET- R729 1K/6
AGP_GND
-TYPE_DET FOR 4X LOW
-TYPE_DET FOR 2X,(8X HIGH OR LOW)
Layout 時整組線路均需靠近 AGP SLOT
3VDUAL
BC449 0.1U/6/Y/25V/X
R739 330/6
AGP_LED LED/Y/S
WARNING
GIGABYTE
Title
AGP SLOT
Size Custom
Document Number GA-8PE800-L
Rev 1.1
Date: Wednesday, May 14, 2003
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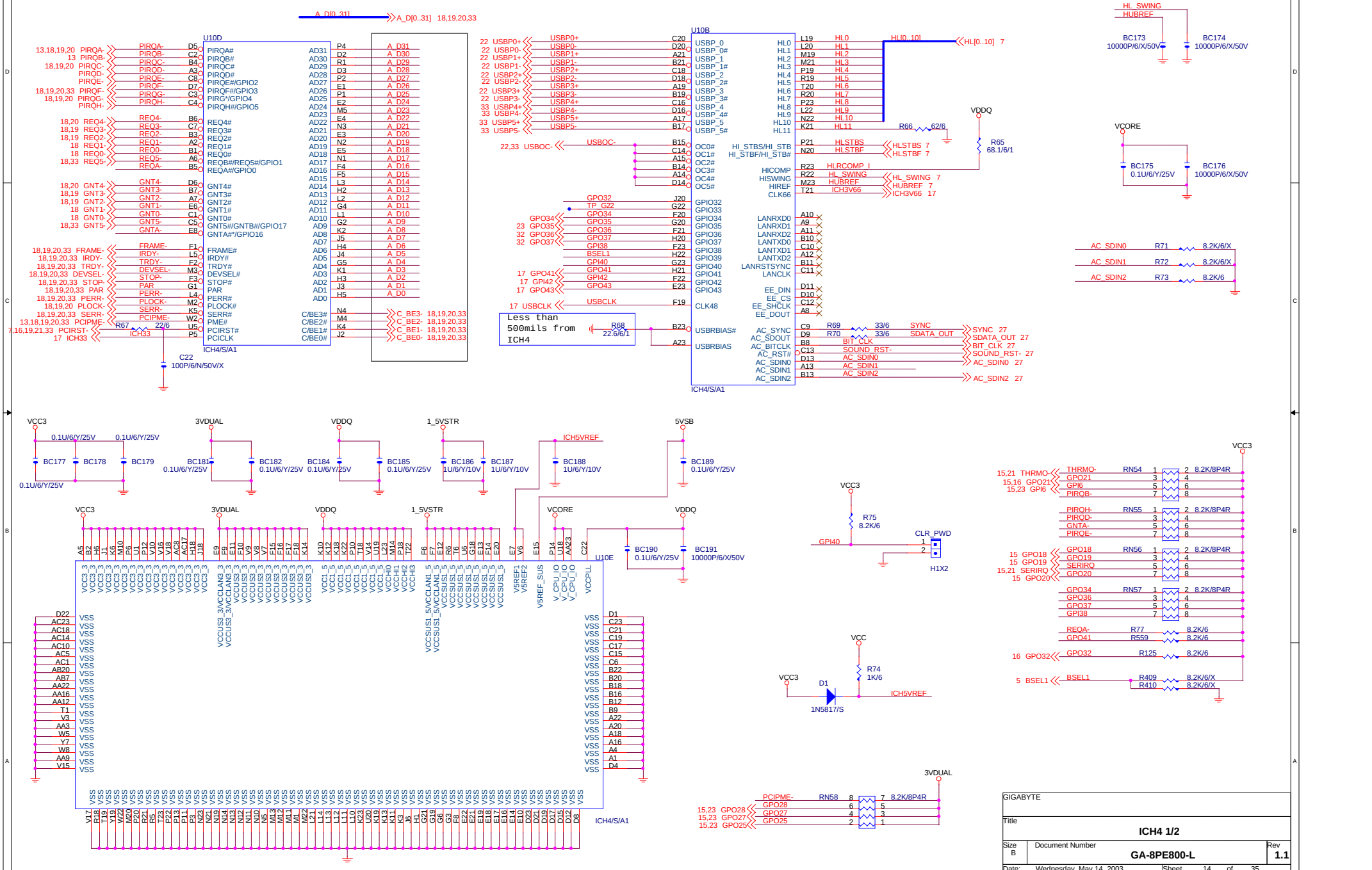
A_D[0..31]
A_D[0..31] 18,19,20,33
U10D
ICH4/S/A1
U10B
ICH4/S/A1
U10E
ICH4/S/A1
Less than 500mils from ICH4
R68 22.6/6/1
C22 100P/6/N/50V/X
HL_SWING
HUBREF
BC173 10000P/6/X/50V
BC174 10000P/6/X/50V
VCORE
BC175 0.1U/6/Y/25V
BC176 10000P/6/X/50V
VDDQ
R65 68.1/6/1
R66 62/6
AC_SDIN0 R71 8.2K/6/X
AC_SDIN1 R72 8.2K/6/X
AC_SDIN2 R73 8.2K/6
VCC3
3VDUAL
VDDQ
1_5VSTR
5VSB
ICH5VREF
VCORE
BC177 0.1U/6/Y/25V
BC178 0.1U/6/Y/25V
BC179 0.1U/6/Y/25V
BC181 0.1U/6/Y/25V
BC182 0.1U/6/Y/25V
BC184 0.1U/6/Y/25V
BC185 0.1U/6/Y/25V
BC186 1U/6/Y/10V
BC187 1U/6/Y/10V
BC188 1U/6/Y/10V
BC189 0.1U/6/Y/25V
BC190 0.1U/6/Y/25V
BC191 10000P/6/X/50V
R75 8.2K/6
GPI40
CLR_PWD
H1X2
R74 1K/6
D1
1N5817/S
ICH5VREF
RN54 8.2K/8P4R
RN55 8.2K/8P4R
RN56 8.2K/8P4R
RN57 8.2K/8P4R
RN58 8.2K/8P4R
R77 8.2K/6
R559 8.2K/6
R125 8.2K/6
R409 8.2K/6/X
R410 8.2K/6/X
GIGABYTE
Title
ICH4 1/2
Size B
Document Number
GA-8PE800-L
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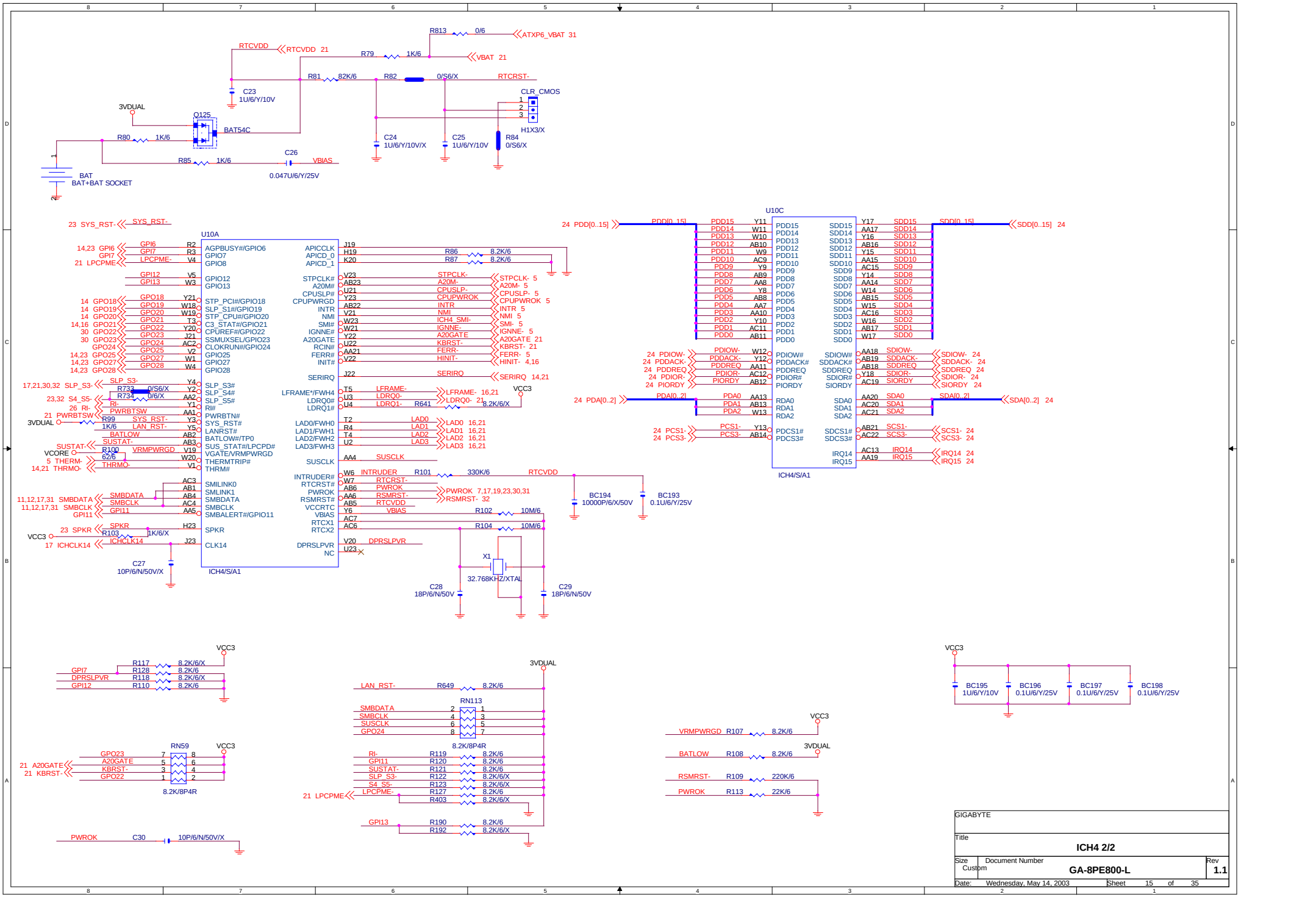
Date: Wednesday, May 14, 2003
Sheet 14 of 35


R813 0/6 ATXP6_VBAT 31
RTCVDD RTCVDD 21
R79 1K/6 VBAT 21
R81 82K/6 R82 0/S6/X RTCRST-
C23 1U/6/Y/10V
CLR_CMOS
3VDUAL
Q125 BAT54C
H1X3/X
R80 1K/6
C24 1U/6/Y/10V/X
C25 1U/6/Y/10V
R84 0/S6/X
R85 1K/6 C26 VBIAS
0.047U/6/Y/25V
BAT
BAT+BAT SOCKET
U10A
U10C
ICH4/S/A1
SYS_RST-
SLP_S3-
SLP_S4-
SLP_S5-
PWRBTSW
LAN_RST-
BATLOW
SUSTAT-
VRMPWRGD
THERM-
THRMO-
SMBDATA
SMBCLK
GPI11
SPKR
ICHCLK14
C27 10P/6/N/50V/X
X1 32.768KHZ/XTAL
C28 18P/6/N/50V
C29 18P/6/N/50V
BC194 10000P/6/X/50V
BC193 0.1U/6/Y/25V
PDD[0..15]
PDA[0..2]
SDD[0..15]
SDA[0..2]
PDIOW-
PDDACK-
PDDREQ
PDIOR-
PIORDY
SDIOW-
SDDACK-
SDDREQ
SDIOR-
SIORDY
PCS1-
PCS3-
SCS1-
SCS3-
IRQ14
IRQ15
R86 8.2K/6
R87 8.2K/6
R641 8.2K/6/X
R101 330K/6 RTCVDD
R102 10M/6
R104 10M/6
R117 8.2K/6/X
R128 8.2K/6
R118 8.2K/6/X
R110 8.2K/6
RN59 8.2K/8P4R
R649 8.2K/6
RN113 8.2K/8P4R
R107 8.2K/6
R108 8.2K/6
R109 220K/6
R113 22K/6
C30 10P/6/N/50V/X
BC195 1U/6/Y/10V
BC196 0.1U/6/Y/25V
BC197 0.1U/6/Y/25V
BC198 0.1U/6/Y/25V
GIGABYTE
Title
ICH4 2/2
Size Custom
Document Number
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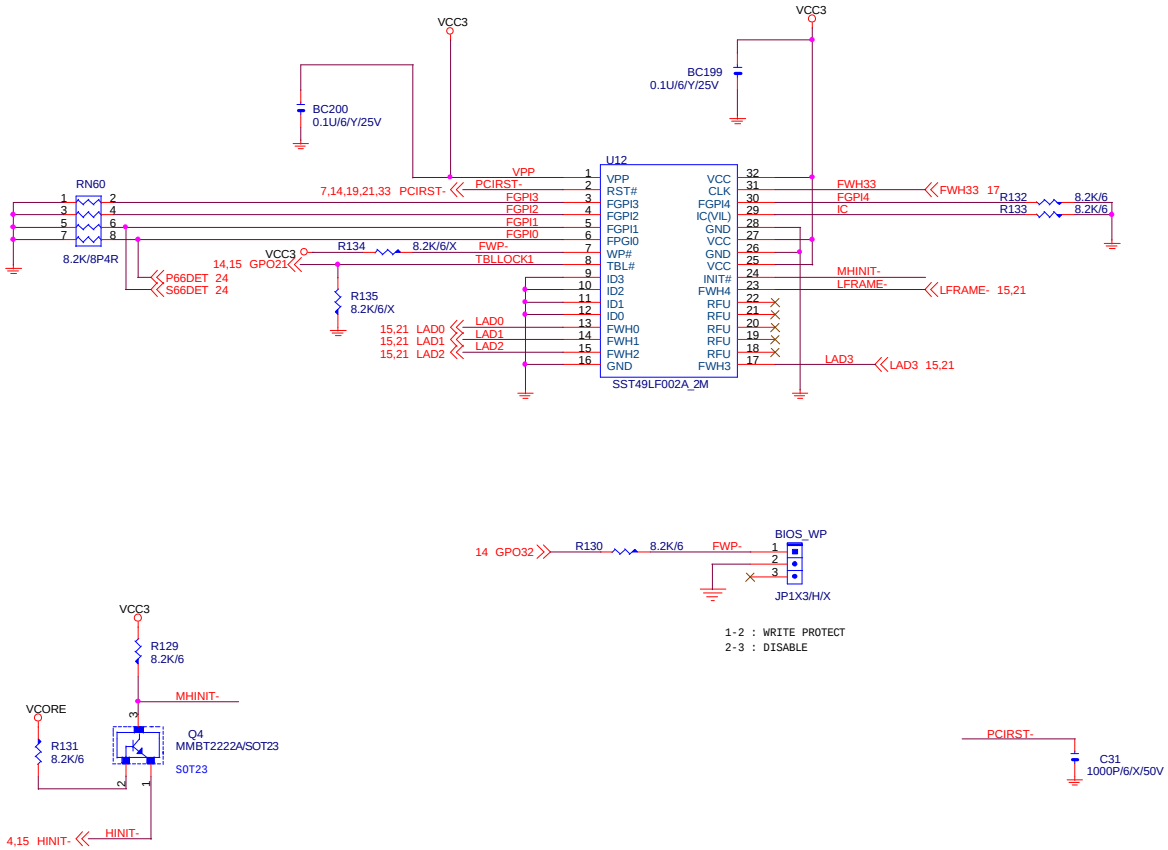
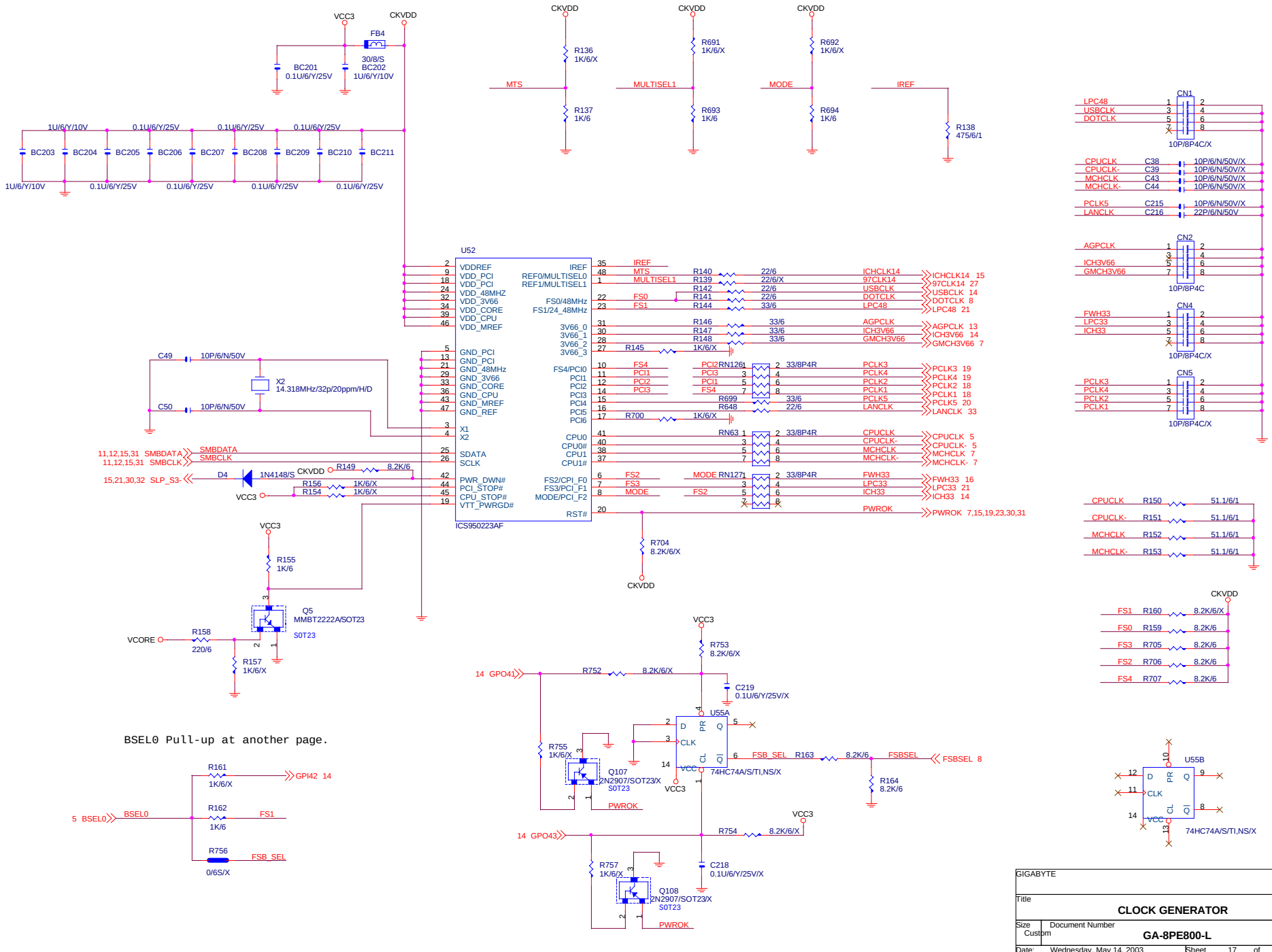


GIGABYTE		
Title	FWH(DUAL BIOS)	
Size B	Document Number GA-8PE800-L	Rev 1.1
Date: Wednesday, May 14, 2003	Sheet 16 of 35	


VCC3
CKVDD
FB4
30/8/S
BC201 0.1U/6/Y/25V
BC202 1U/6/Y/10V
BC203 BC204 BC205 BC206 BC207 BC208 BC209 BC210 BC211
1U/6/Y/10V
0.1U/6/Y/25V
R136 1K/6/X
R691 1K/6/X
R692 1K/6/X
MTS
MULTISEL1
MODE
IREF
R137 1K/6
R693 1K/6
R694 1K/6
R138 475/6/1
U52
ICS950223AF
VDDREF
VDD_PCI
VDD_48MHZ
VDD_3V66
VDD_CORE
VDD_CPU
VDD_MREF
GND_PCI
GND_48MHz
GND_3V66
GND_CORE
GND_CPU
GND_MREF
GND_REF
REF0/MULTISEL0
REF1/MULTISEL1
FS0/48MHz
FS1/24_48MHz
3V66_0
3V66_1
3V66_2
3V66_3
FS4/PCI0
PCI1
PCI2
PCI3
PCI4
PCI5
PCI6
CPU0
CPU0#
CPU1
CPU1#
PWR_DWN#
PCI_STOP#
CPU_STOP#
VTT_PWRGD#
RST#
X1
X2
SDATA
SCLK
R140 22/6
R139 22/6/X
R142 22/6
R141 22/6
R144 33/6
R146 33/6
R147 33/6
R148 33/6
R145 1K/6/X
R700 1K/6/X
R699 33/6
R648 22/6
RN63 33/8P4R
RN126 33/8P4R
RN127 33/8P4R
ICHCLK14
97CLK14
USBCLK
DOTCLK
LPC48
AGPCLK
ICH3V66
GMCH3V66
PCLK3
PCLK4
PCLK2
PCLK1
LANCLK
CPUCLK
CPUCLK-
MCHCLK
MCHCLK-
FWH33
LPC33
ICH33
PWROK
C49 10P/6/N/50V
C50 10P/6/N/50V
X2 14.318MHz/32p/20ppm/H/D
SMBDATA
SMBCLK
D4 1N4148/S
R149 8.2K/6
R156 1K/6/X
R154 1K/6/X
R704 8.2K/6/X
R155 1K/6
Q5 MMBT2222A/SOT23
R158 220/6
R157 1K/6/X
VCORE
BSEL0 Pull-up at another page.
R161 1K/6/X
R162 1K/6
R756 0/6S/X
GPI42 14
BSEL0
FS1
FSB_SEL
R753 8.2K/6/X
R752 8.2K/6/X
C219 0.1U/6/Y/25V/X
U55A
74HC74A/S/TI,NS/X
R755 1K/6/X
Q107 2N2907/SOT23/X
R163 8.2K/6
FSBSEL
R164 8.2K/6
R754 8.2K/6/X
R757 1K/6/X
Q108 2N2907/SOT23/X
C218 0.1U/6/Y/25V/X
U55B
CN1
CN2
CN4
CN5
10P/8P4C/X
10P/8P4C
CPUCLK C38 10P/6/N/50V/X
CPUCLK- C39 10P/6/N/50V/X
MCHCLK C43 10P/6/N/50V/X
MCHCLK- C44 10P/6/N/50V/X
PCLK5 C215 10P/6/N/50V/X
LANCLK C216 22P/6/N/50V
R150 51.1/6/1
R151 51.1/6/1
R152 51.1/6/1
R153 51.1/6/1
R160 8.2K/6/X
R159 8.2K/6
R705 8.2K/6
R706 8.2K/6
R707 8.2K/6
GIGABYTE
Title
CLOCK GENERATOR
Size Custom
Document Number GA-8PE800-L
Rev 1.1
Date: Wednesday, May 14, 2003
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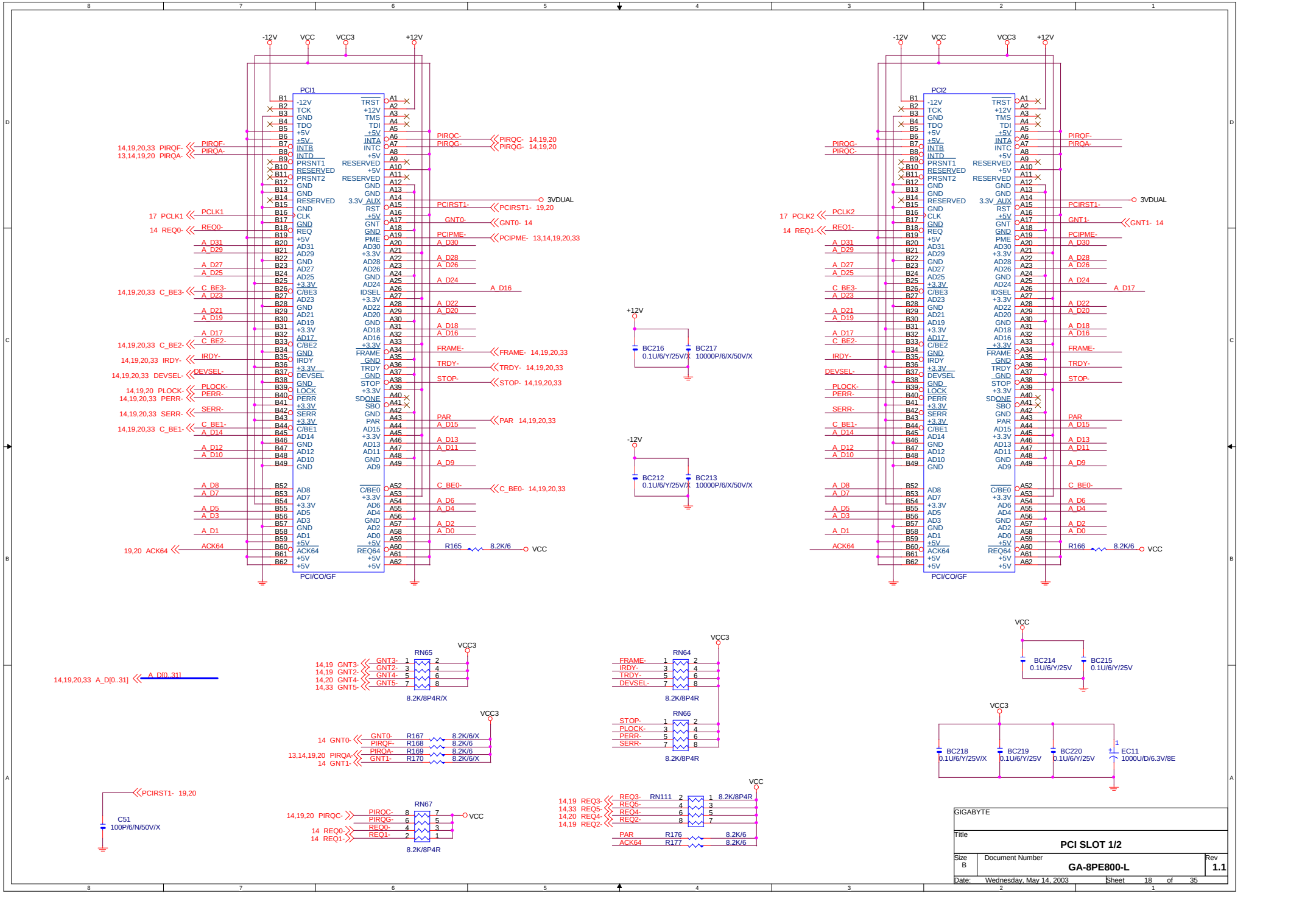
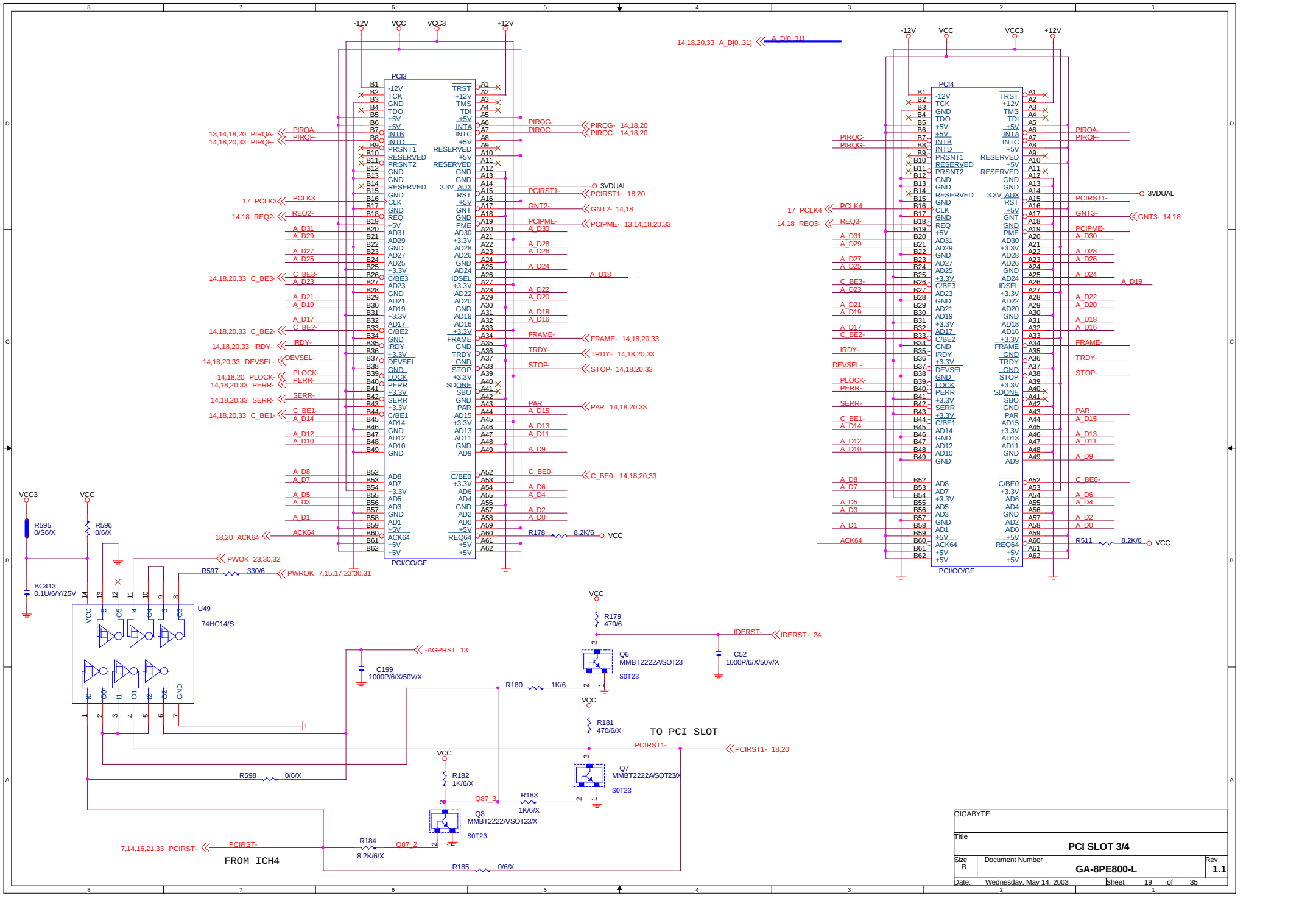


GIGABYTE		
Title	PCI SLOT 1/2	
Size B	Document Number GA-8PE800-L	Rev 1.1
Date: Wednesday, May 14, 2003	Sheet 18 of 35	


PCI3
PCI4
PCI/CO/GF
U49
74HC14/S
TO PCI SLOT
FROM ICH4
R595 0/S6/X
R596 0/6/X
BC413 0.1U/6/Y/25V
R597 330/6
R598 0/6/X
R178 8.2K/6
R179 470/6
R180 1K/6
R181 470/6/X
R182 1K/6/X
R183 1K/6/X
R184 8.2K/6/X
R185 0/6/X
R511 8.2K/6
C199 1000P/6/X/50V/X
C52 1000P/6/X/50V/X
Q6 MMBT2222A/SOT23
Q7 MMBT2222A/SOT23/X
Q8 MMBT2222A/SOT23/X
S0T23
PWOK 23,30,32
PWROK 7,15,17,23,30,31
-AGPRST 13
IDERST- 24
PCIRST1- 18,20
PCIRST- 7,14,16,21,33
ACK64 18,20
A_D[0..31] 14,18,20,33
PIRQA- 13,14,18,20
PIRQF- 14,18,20,33
PIRQG- 14,18,20
PIRQC- 14,18,20
PCLK3 17
REQ2- 14,18
PCLK4 17
REQ3- 14,18
C_BE3- 14,18,20,33
C_BE2- 14,18,20,33
IRDY- 14,18,20,33
DEVSEL- 14,18,20,33
PLOCK- 14,18,20
PERR- 14,18,20,33
SERR- 14,18,20,33
C_BE1- 14,18,20,33
FRAME- 14,18,20,33
TRDY- 14,18,20,33
STOP- 14,18,20,33
PAR 14,18,20,33
C_BE0- 14,18,20,33
GNT2- 14,18
GNT3- 14,18
PCIPME- 13,14,18,20,33
3VDUAL
GIGABYTE
Title
PCI SLOT 3/4
Size B
Document Number
GA-8PE800-L
Rev 1.1
Date: Wednesday, May 14, 2003
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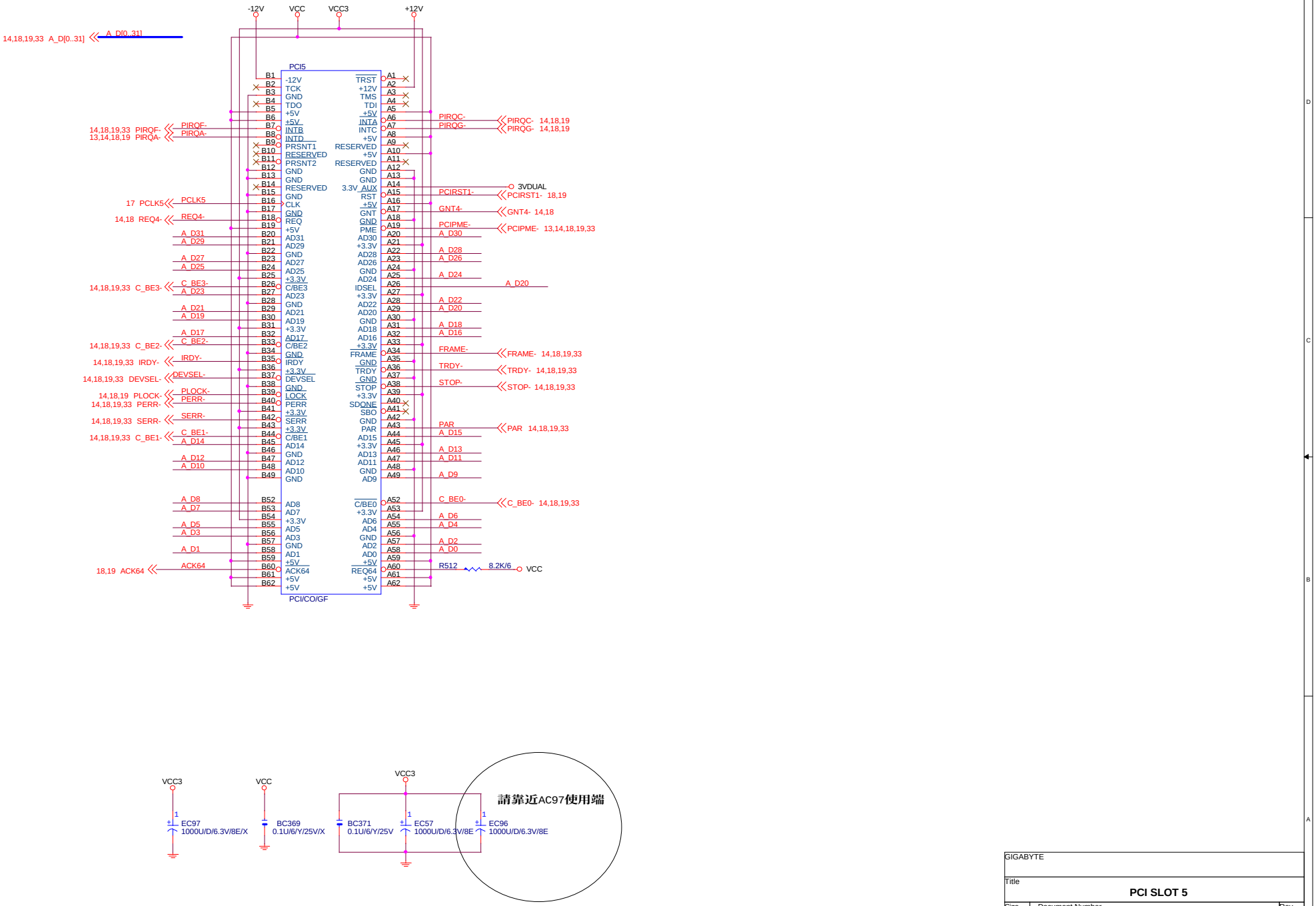
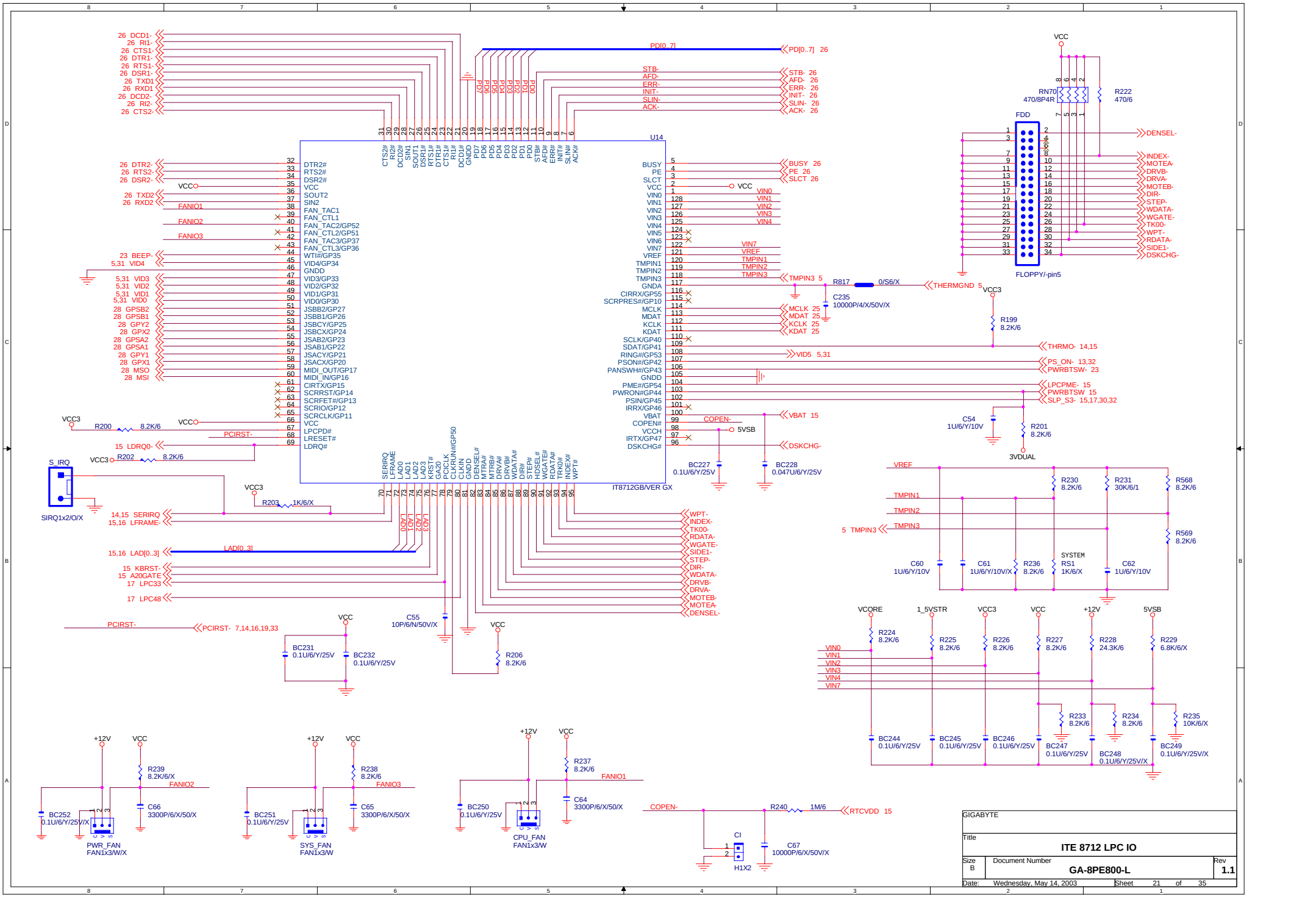


GIGABYTE		
Title	PCI SLOT 5	
Size B	Document Number GA-8PE800-L	Rev 1.1
Date: Wednesday, May 14, 2003	Sheet 20 of 35	


U14
IT8712GB/VER GX
PD[0..7]
LAD[0..3]
FDD
FLOPPY/-pin5
RN70
470/8P4R
R222
470/6
R817
0/S6/X
C235
10000P/4/X/50V/X
R199
8.2K/6
R200
8.2K/6
R202
8.2K/6
R203
1K/6/X
C54
1U/6/Y/10V
R201
8.2K/6
3VDUAL
S_IRQ
SIRQ1x2/O/X
R230
8.2K/6
R231
30K/6/1
R568
8.2K/6
R569
8.2K/6
C60
1U/6/Y/10V
C61
1U/6/Y/10V/X
R236
8.2K/6
SYSTEM
RS1
1K/6/X
C62
1U/6/Y/10V
C55
10P/6/N/50V/X
R206
8.2K/6
BC227
0.1U/6/Y/25V
BC228
0.047U/6/Y/25V
BC231
0.1U/6/Y/25V
BC232
0.1U/6/Y/25V
R224
8.2K/6
R225
8.2K/6
R226
8.2K/6
R227
8.2K/6
R228
24.3K/6
R229
6.8K/6/X
R233
8.2K/6
R234
8.2K/6
R235
10K/6/X
BC244
0.1U/6/Y/25V
BC245
0.1U/6/Y/25V
BC246
0.1U/6/Y/25V
BC247
0.1U/6/Y/25V
BC248
0.1U/6/Y/25V/X
BC249
0.1U/6/Y/25V/X
R239
8.2K/6/X
C66
3300P/6/X/50/X
BC252
0.1U/6/Y/25V/X
PWR_FAN
FAN1x3/W/X
R238
8.2K/6
C65
3300P/6/X/50/X
BC251
0.1U/6/Y/25V
SYS_FAN
FAN1x3/W
R237
8.2K/6
C64
3300P/6/X/50/X
BC250
0.1U/6/Y/25V
CPU_FAN
FAN1x3/W
R240
1M/6
C67
10000P/6/X/50V/X
H1X2
GIGABYTE
ITE 8712 LPC IO
GA-8PE800-L
Rev 1.1
Wednesday, May 14, 2003
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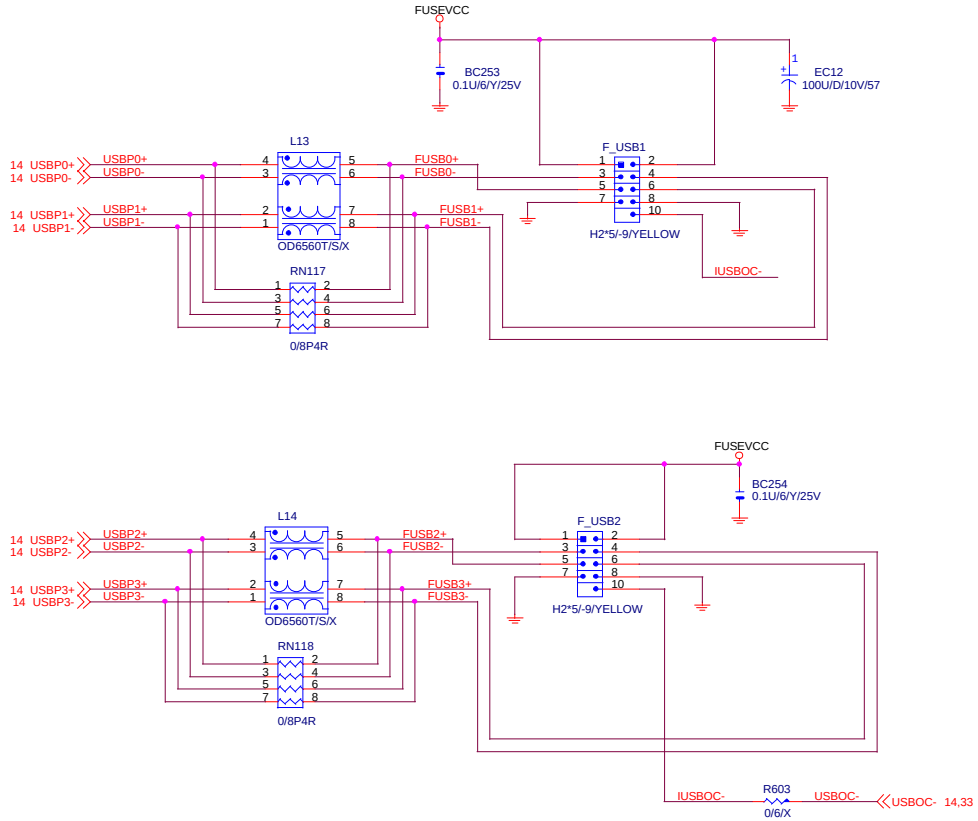
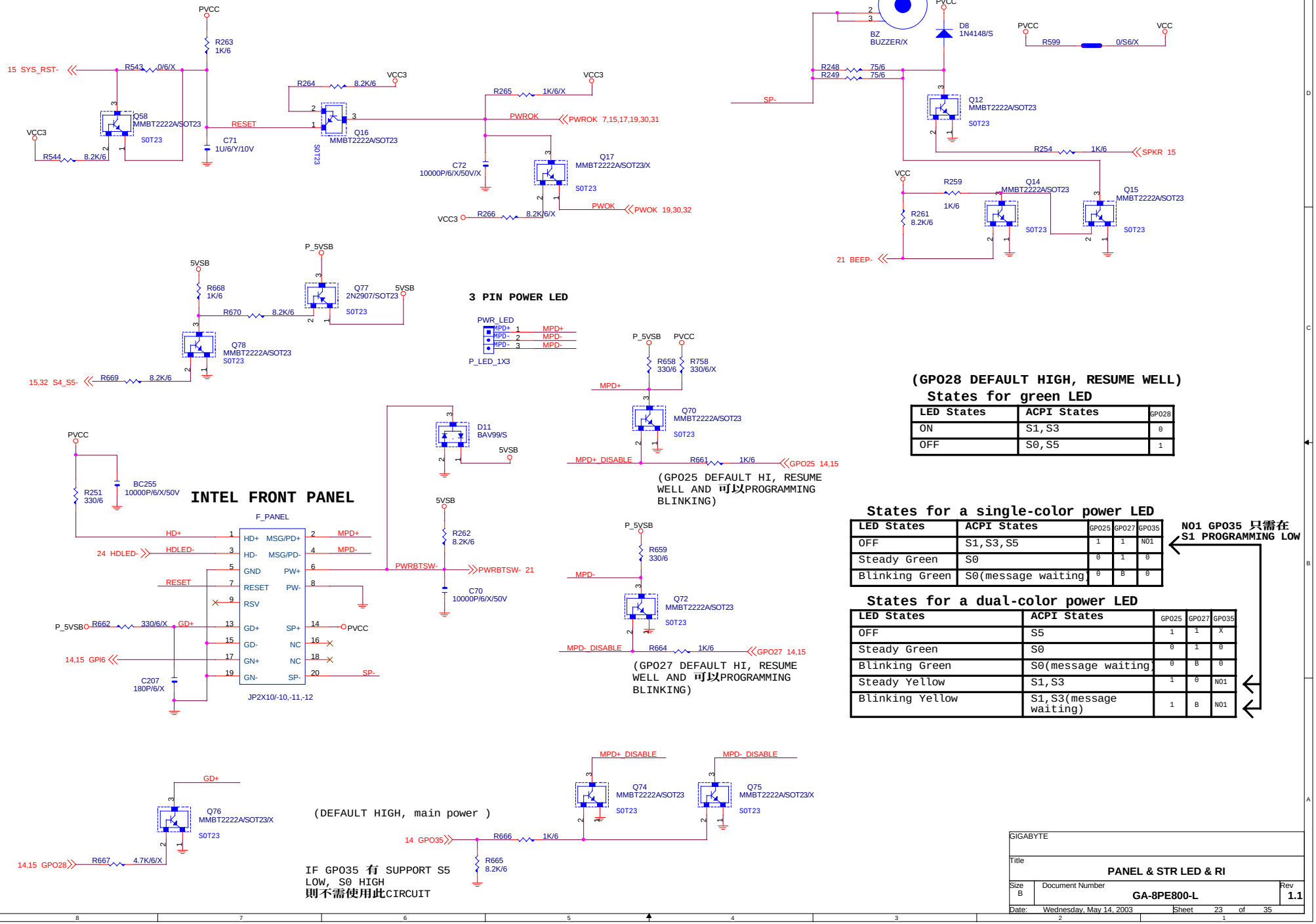
ICH4 USB2.0



GIGABYTE		
Title	ICH USB+LAN PORT	
Size: B	Document Number: GA-8PE800-L	Rev: 1.1
Date: Wednesday, May 14, 2003	Sheet 22 of 35	


PVCC
R263 1K/6
15 SYS_RST-
R543 0/6/X
Q58 MMBT2222A/SOT23 SOT23
VCC3
R544 8.2K/6
RESET
C71 1U/6/Y/10V
R264 8.2K/6
VCC3
Q16 MMBT2222A/SOT23 SOT23
R265 1K/6/X
VCC3
PWROK
PWROK 7,15,17,19,30,31
C72 10000P/6/X/50V/X
Q17 MMBT2222A/SOT23/X SOT23
PWOK
PWOK 19,30,32
VCC3
R266 8.2K/6/X
VCC
BZ
BZ BUZZER/X
PVCC
D8 1N4148/S
PVCC
R599 0/S6/X
VCC
R248 75/6
R249 75/6
SP-
Q12 MMBT2222A/SOT23 SOT23
R254 1K/6
SPKR 15
VCC
R259 1K/6
Q14 MMBT2222A/SOT23 SOT23
Q15 MMBT2222A/SOT23 SOT23
R261 8.2K/6
21 BEEP-
5VSB
R668 1K/6
P_5VSB
Q77 2N2907/SOT23 SOT23
5VSB
R670 8.2K/6
Q78 MMBT2222A/SOT23 SOT23
15,32 S4_S5-
R669 8.2K/6
3 PIN POWER LED
PWR_LED
MPD+ 1 MPD+
MPD- 2 MPD-
MPD- 3 MPD-
P_LED_1X3
P_5VSB
PVCC
R658 330/6
R758 330/6/X
MPD+
Q70 MMBT2222A/SOT23 SOT23
MPD+_DISABLE
R661 1K/6
GPO25 14,15
(GPO25 DEFAULT HI, RESUME WELL AND 可以PROGRAMMING BLINKING)
(GPO28 DEFAULT HIGH, RESUME WELL)
States for green LED
LED States | ACPI States | GPO28
ON | S1,S3 | 0
OFF | S0,S5 | 1
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
PVCC
R251 330/6
BC255 10000P/6/X/50V
INTEL FRONT PANEL
F_PANEL
HD+ 1
24 HDLED- HDLED- 3
HD- MSG/PD- 4
GND PW+ 6
RESET 7
RESET PW- 8
RSV 9
P_5VSB R662 330/6/X GD+ 13
GD+ SP+ 14
PVCC
GD- NC 16
14,15 GPI6 17
GN+ NC 18
C207 180P/6/X 19
GN- SP- 20
SP-
JP2X10/-10,-11,-12
MPD+ 2
MPD- 4
D11 BAV99/S
5VSB
PWRBTSW-
PWRBTSW- 21
5VSB
R262 8.2K/6
C70 10000P/6/X/50V
P_5VSB
R659 330/6
MPD-
Q72 MMBT2222A/SOT23 SOT23
MPD-_DISABLE
R664 1K/6
GPO27 14,15
(GPO27 DEFAULT HI, RESUME WELL AND 可以PROGRAMMING BLINKING)
GD+
Q76 MMBT2222A/SOT23/X SOT23
14,15 GPO28
R667 4.7K/6/X
(DEFAULT HIGH, main power)
MPD+_DISABLE
Q74 MMBT2222A/SOT23 SOT23
MPD-_DISABLE
Q75 MMBT2222A/SOT23/X SOT23
14 GPO35
R666 1K/6
R665 8.2K/6
IF GPO35 有 SUPPORT S5 LOW, S0 HIGH
則不需使用此CIRCUIT
GIGABYTE
Title
PANEL & STR LED & RI
Size B
Document Number
GA-8PE800-L
Rev 1.1
Date: Wednesday, May 14, 2003
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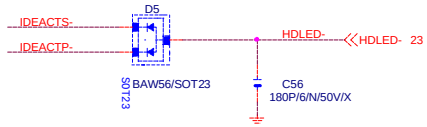
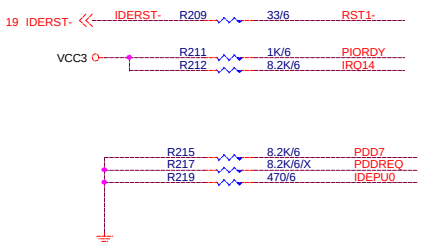
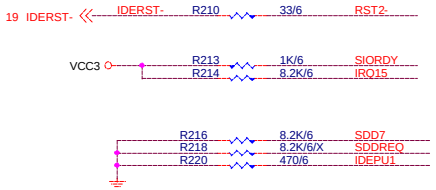
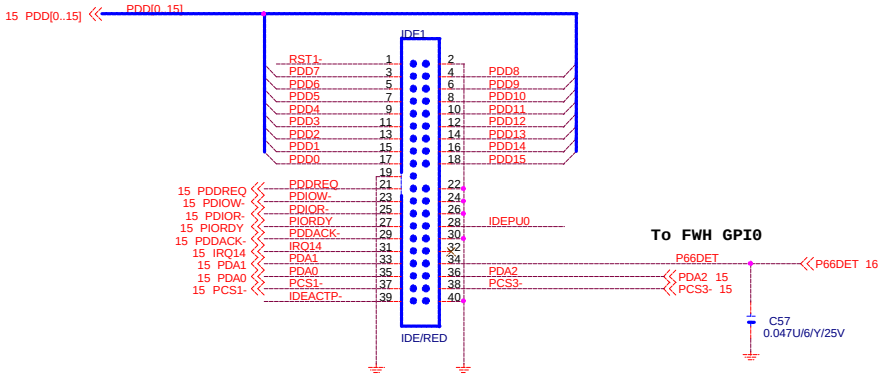


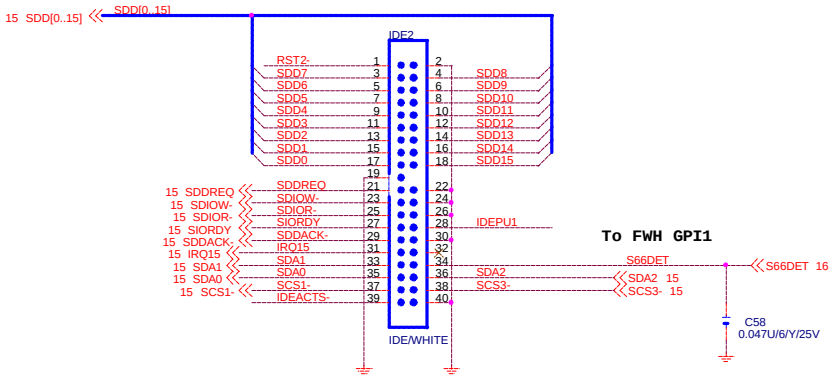




PRIMARY IDE CONNECTOR



SECONDARY IDE CONNECTOR



GIGABYTE		
Title: IDE CONNECTOR		
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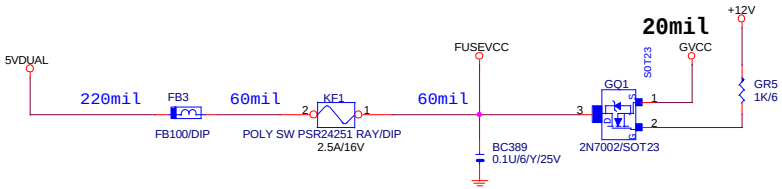

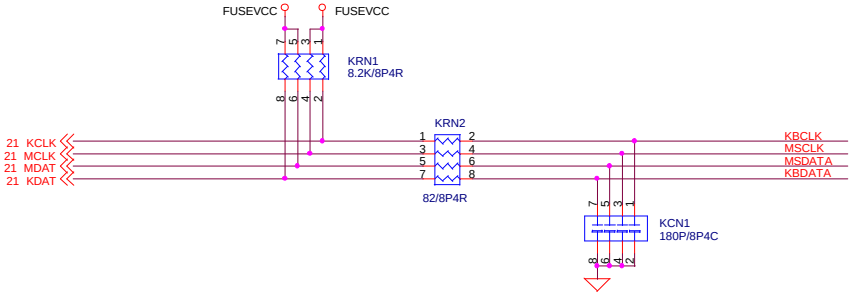

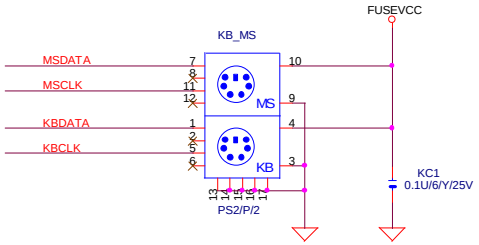

模組化線路

GIGABYTE CORP.		
Title: KB & PS2 MOUSE & IR		
Size: B	Document Number: GA-8PE800-L	Rev: 1.1
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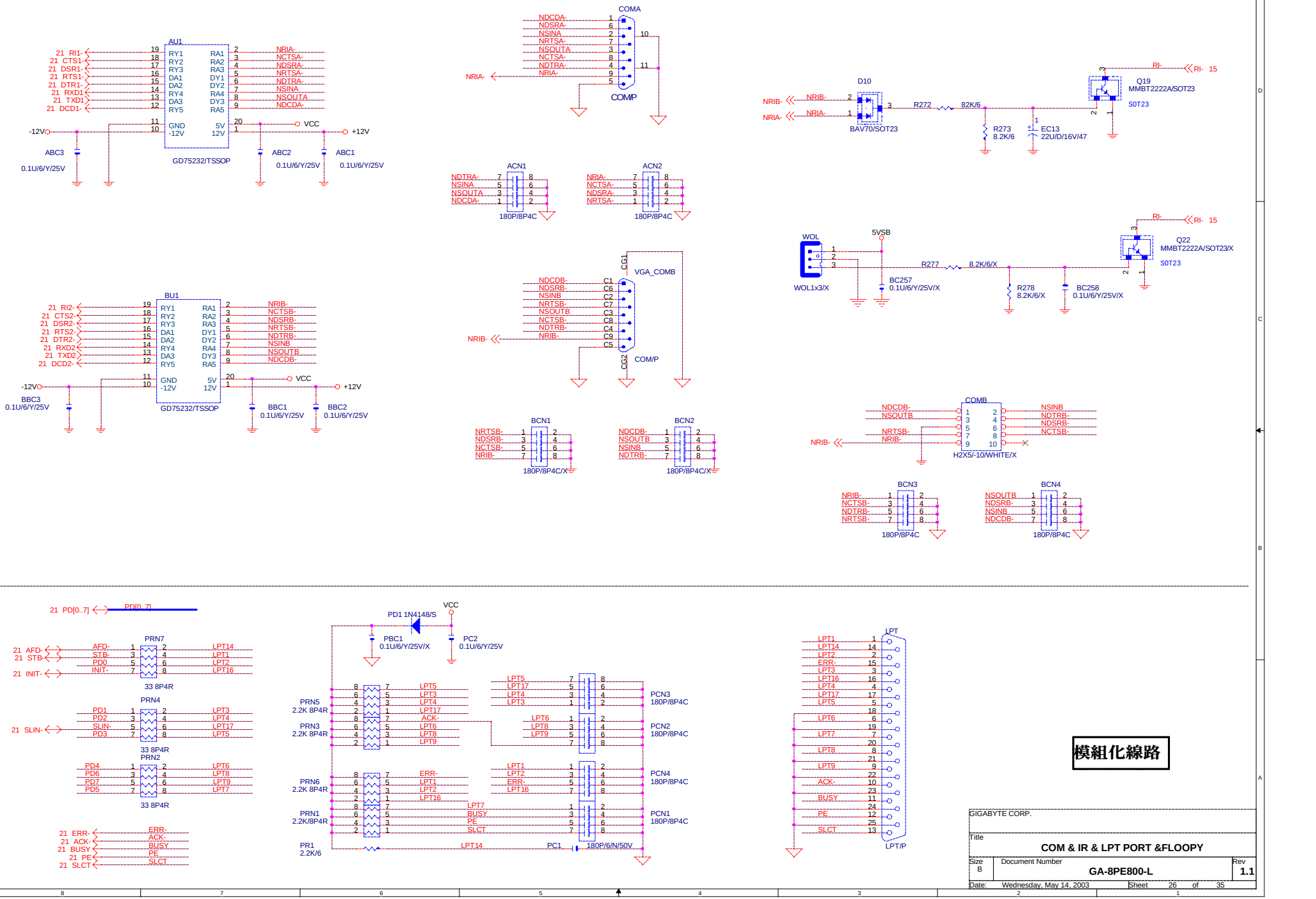

模組化線路

GIGABYTE CORP.		
Title: COM & IR & LPT PORT &FLOOPY		
Size: B	Document Number: GA-8PE800-L	Rev: 1.1
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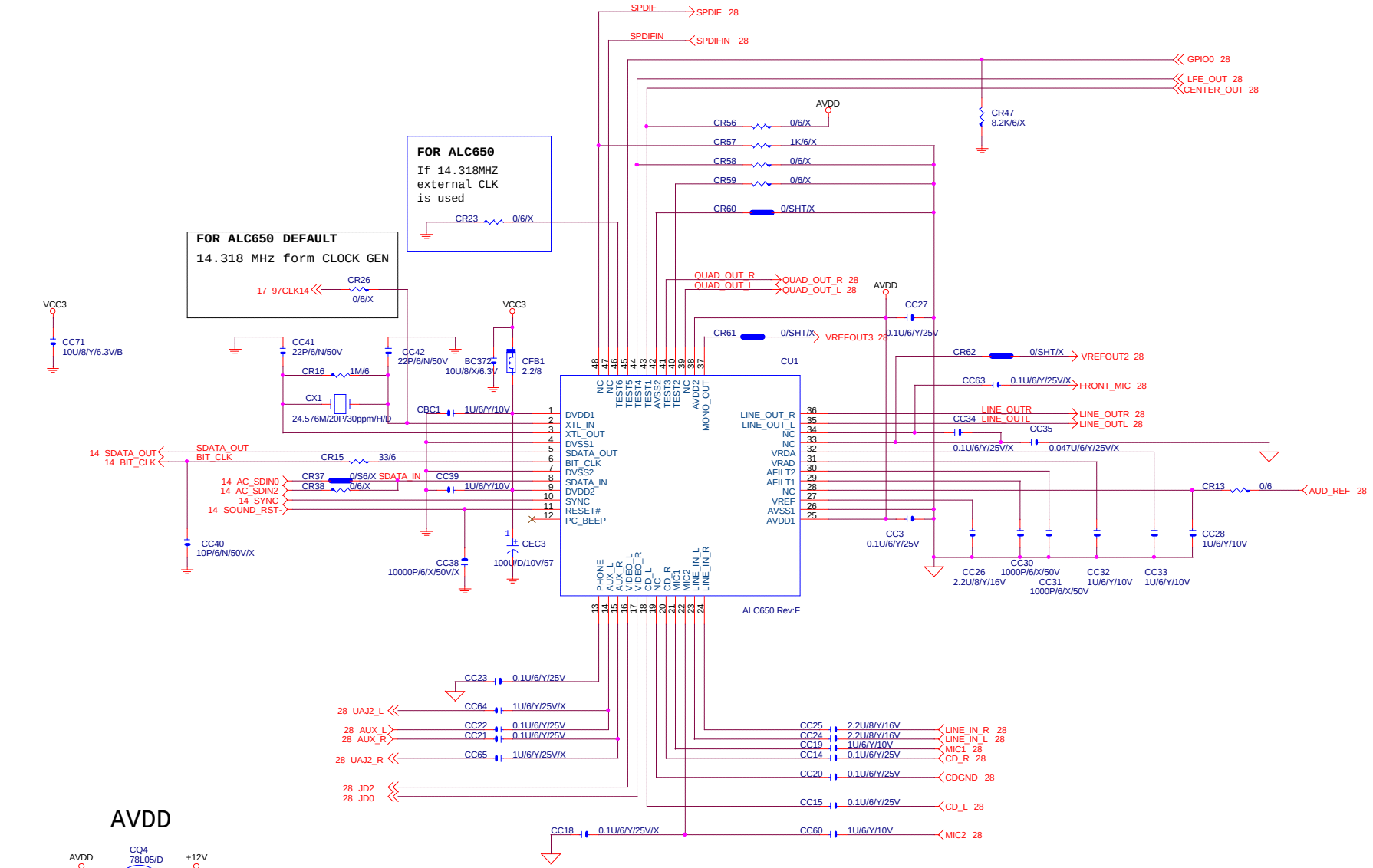

模組化線路

GIGABYTE CORP.		
Title: AC97		
Size: B	Document Number: GA-8PE800-L	Rev: 1.1
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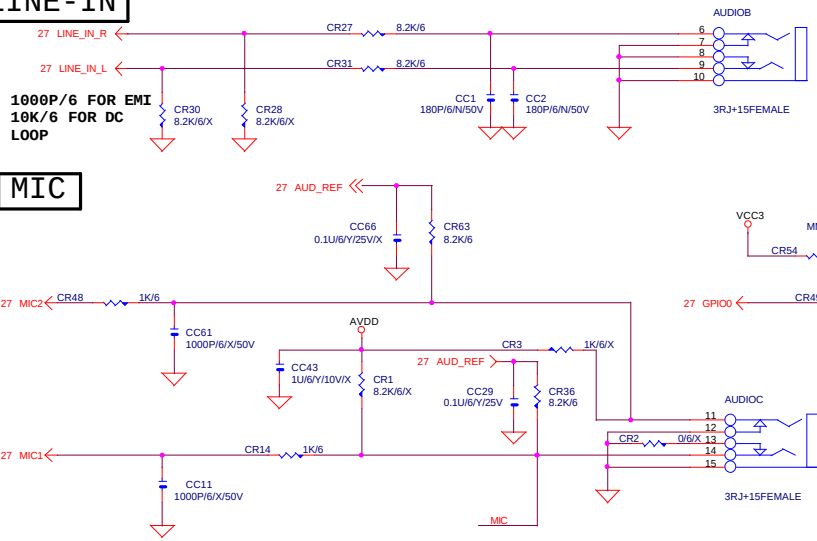
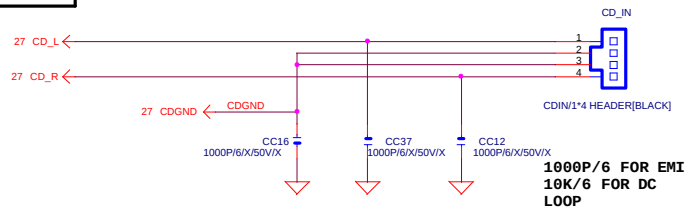
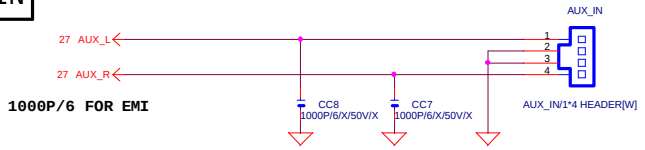
LINE-IN



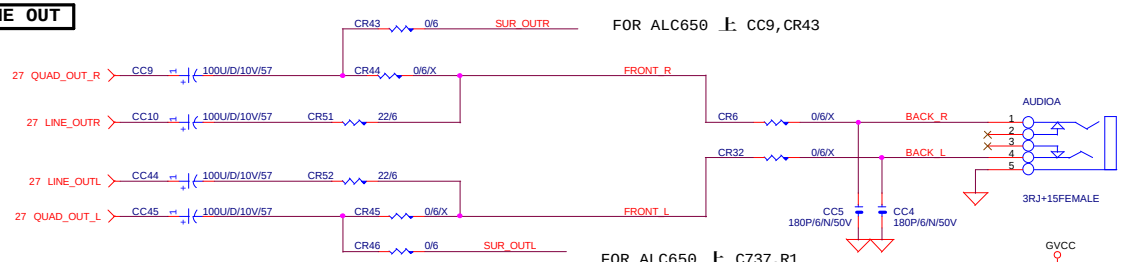
CDIN



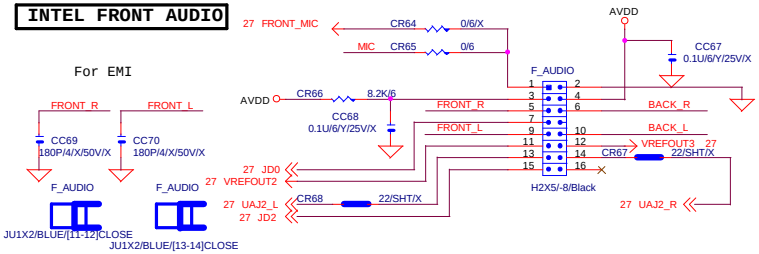
AUX_IN



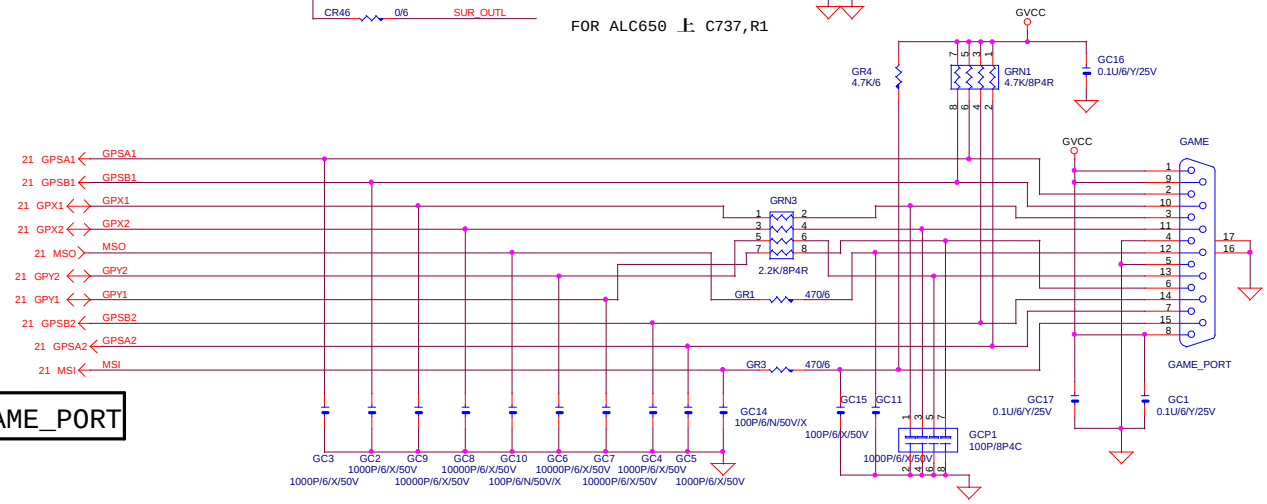
LINE OUT

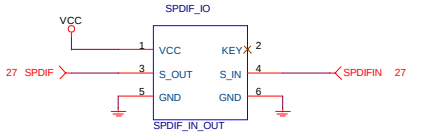


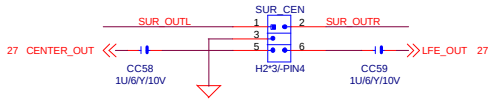
INTEL FRONT AUDIO



GAME_PORT







FOR SUPPORT 6 CHANNEL, SURROUND OUT
CENTER OUT,LOW FREQUENCY EFFECT OUT

模組化線路

GIGABYTE CORP.		
Title	PHONE JACK, GAME PORT	
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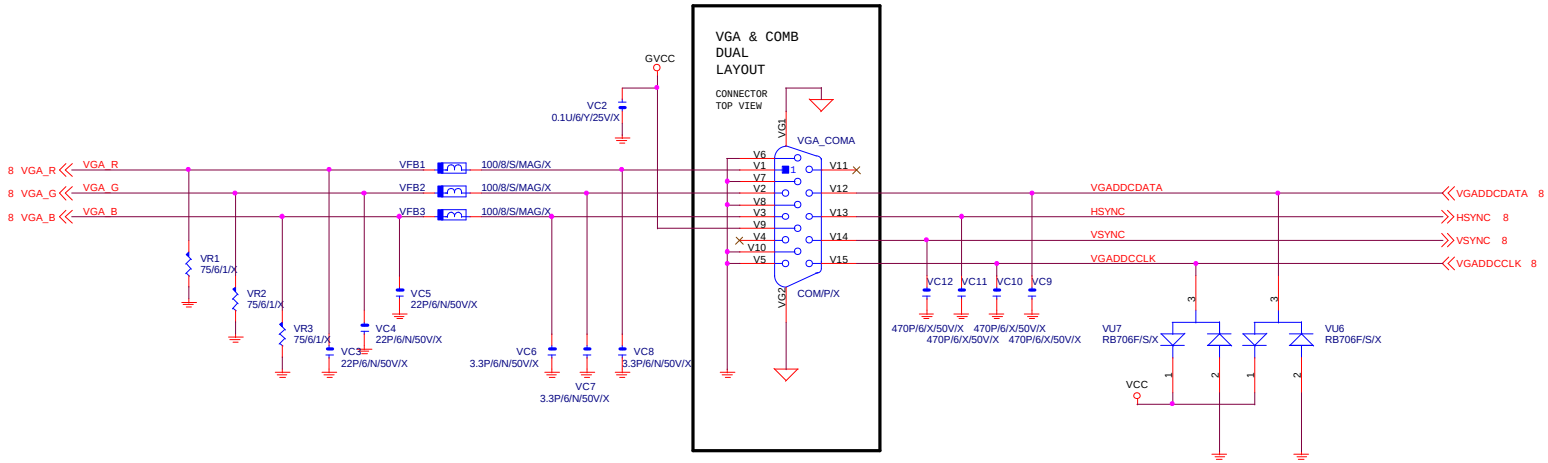

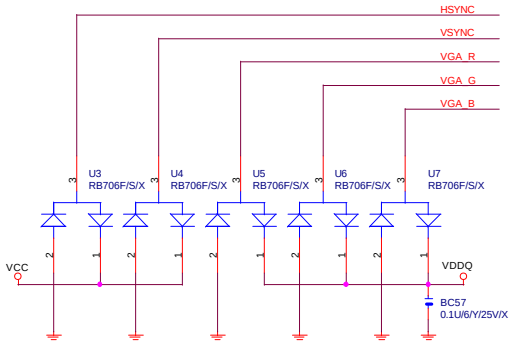

模組化線路

Title	VGA CONNECTOR	
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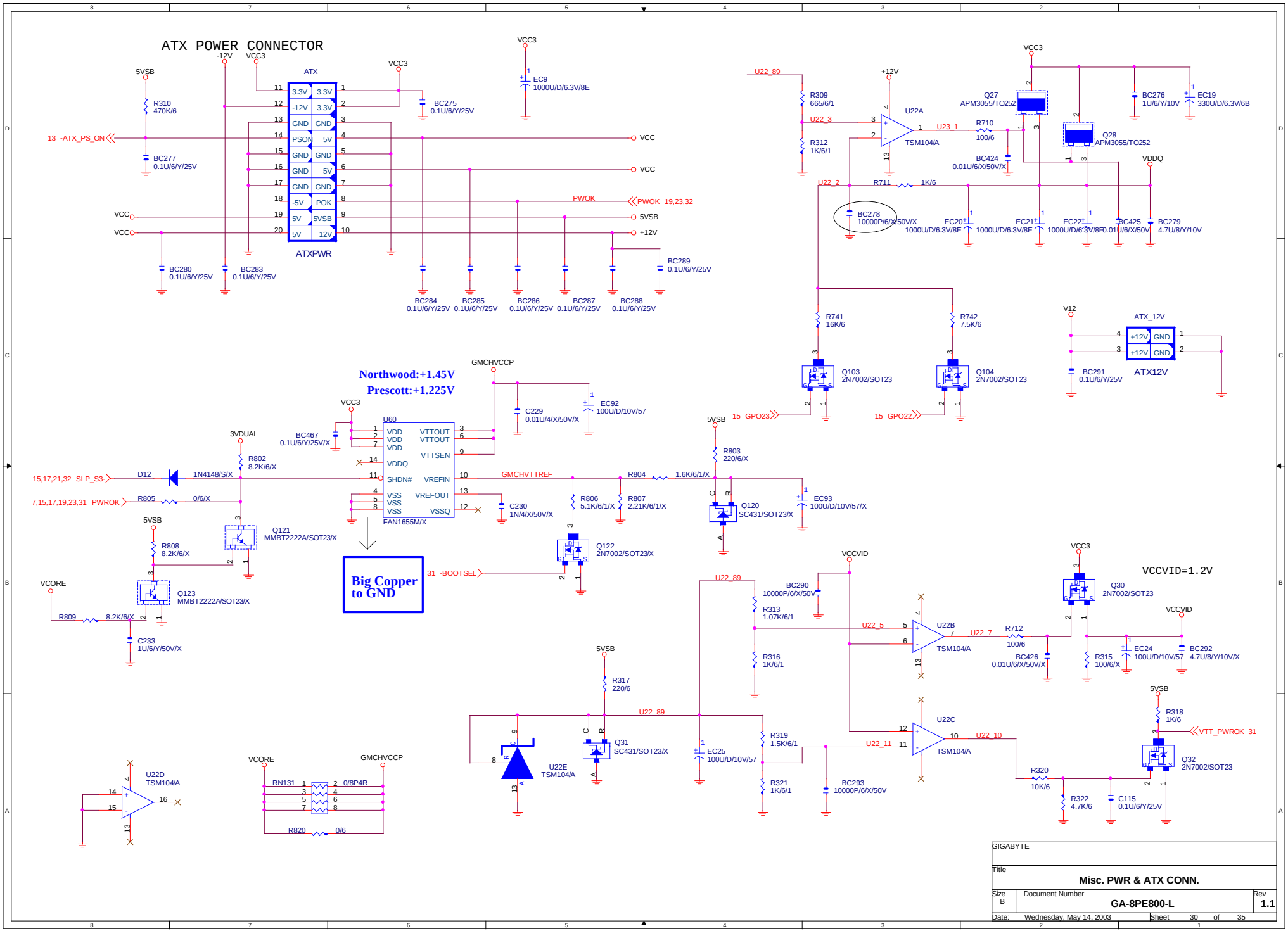
ATX POWER CONNECTOR
ATXPWR
Northwood:+1.45V
Prescott:+1.225V
Big Copper to GND
VCCVID=1.2V
FAN1655M/X
GIGABYTE
Misc. PWR & ATX CONN.
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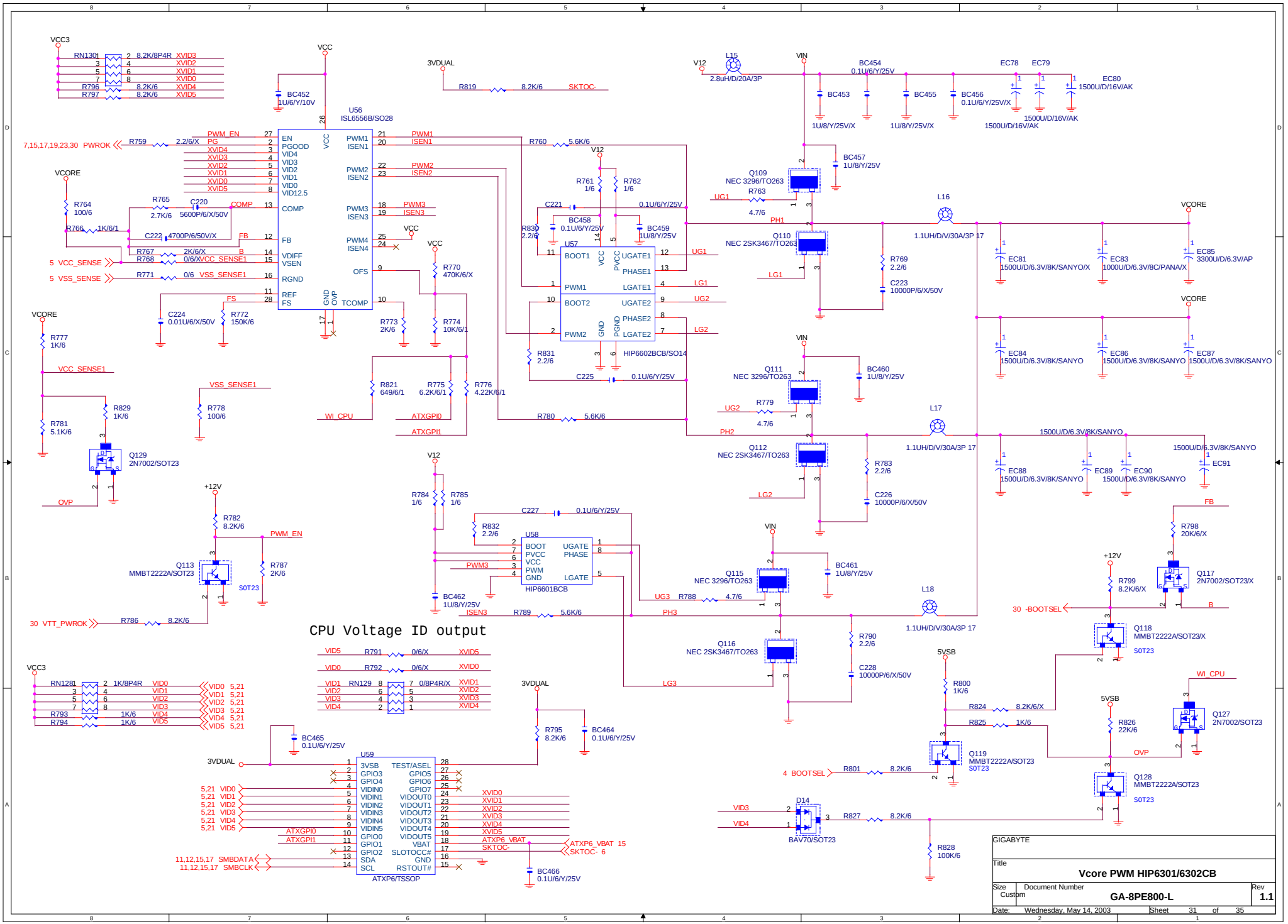
CPU Voltage ID output
U56
ISL6556B/SO28
U57
HIP6602BCB/SO14
U58
HIP6601BCB
U59
ATXP6/TSSOP
Q109 NEC 3296/TO263
Q110 NEC 2SK3467/TO263
Q111 NEC 3296/TO263
Q112 NEC 2SK3467/TO263
Q115 NEC 3296/TO263
Q116 NEC 2SK3467/TO263
Q113 MMBT2222A/SOT23
Q129 2N7002/SOT23
Q117 2N7002/SOT23/X
Q118 MMBT2222A/SOT23/X
Q119 MMBT2222A/SOT23
Q127 2N7002/SOT23
Q128 MMBT2222A/SOT23
D14 BAV70/SOT23
L15 2.8uH/D/20A/3P
L16 1.1UH/D/V/30A/3P 17
L17 1.1UH/D/V/30A/3P 17
L18 1.1UH/D/V/30A/3P 17
GIGABYTE
Title
Vcore PWM HIP6301/6302CB
Size Custom
Document Number GA-8PE800-L
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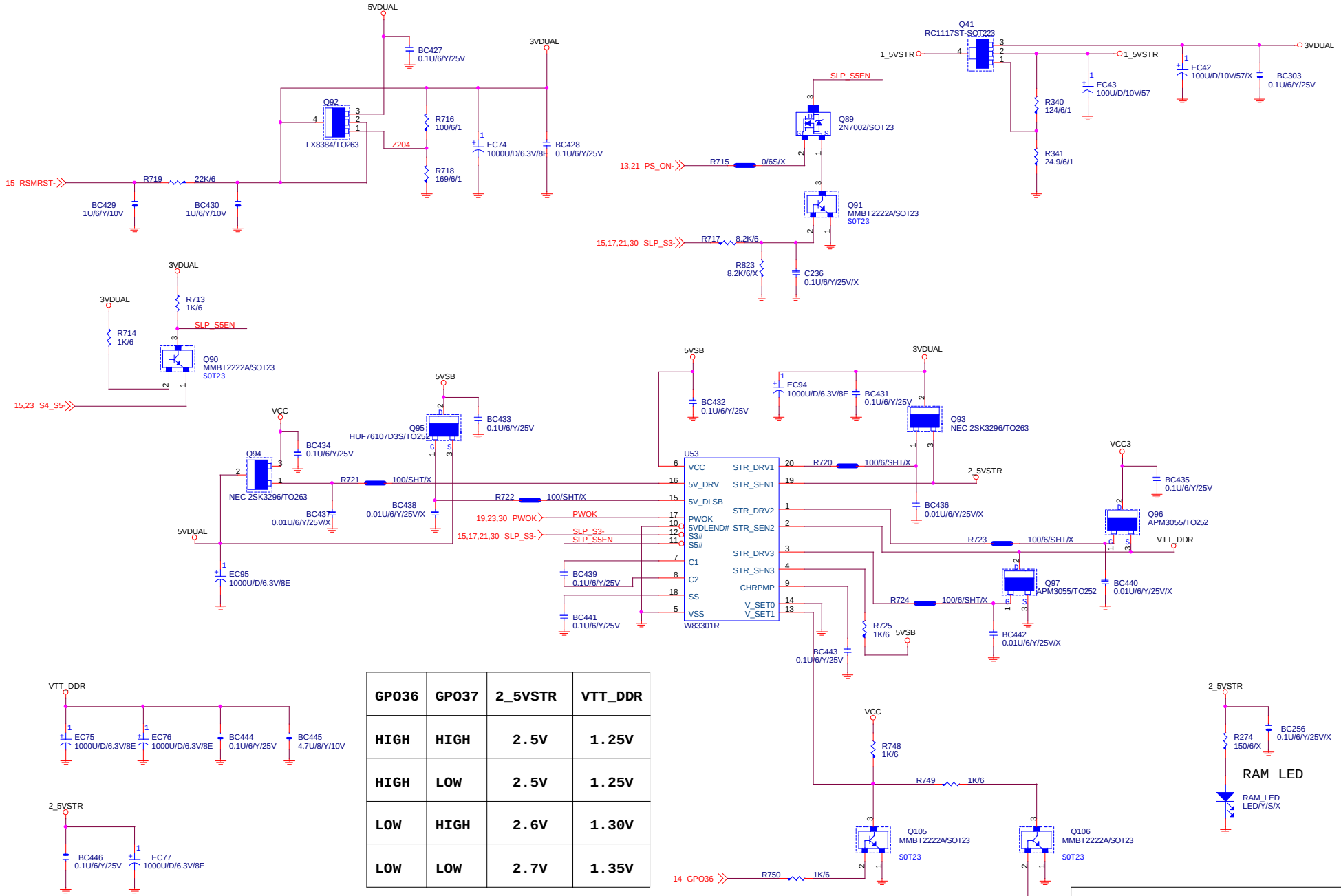

GPO36	GPO37	2_5VSTR	VTT_DDR
HIGH	HIGH	2.5V	1.25V
HIGH	LOW	2.5V	1.25V
LOW	HIGH	2.6V	1.30V
LOW	LOW	2.7V	1.35V

GIGABYTE

Title: DDR POWER

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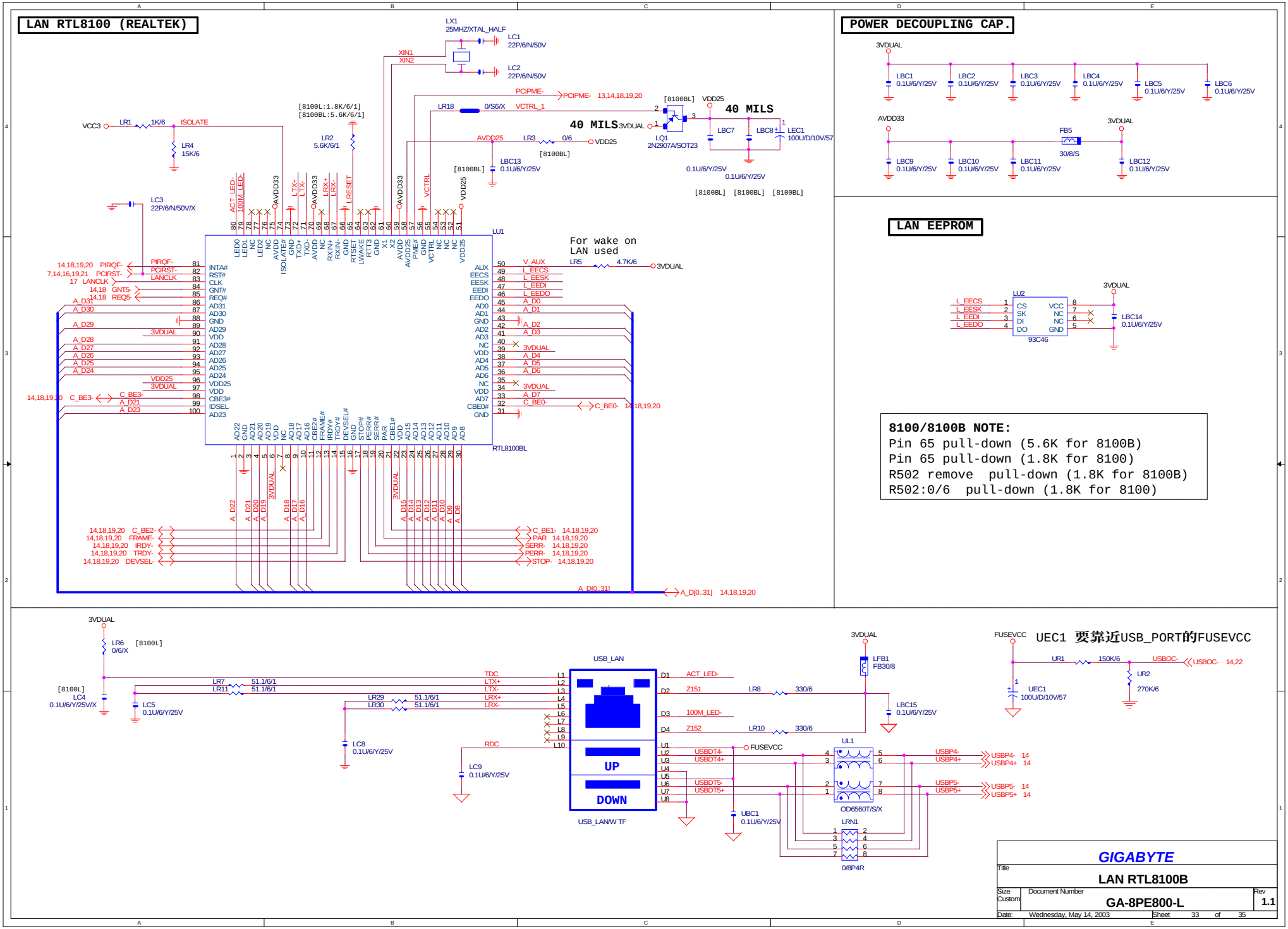
LAN RTL8100 (REALTEK)
POWER DECOUPLING CAP.
LAN EEPROM
For wake on LAN used
8100/8100B NOTE:
Pin 65 pull-down (5.6K for 8100B)
Pin 65 pull-down (1.8K for 8100)
R502 remove pull-down (1.8K for 8100B)
R502:0/6 pull-down (1.8K for 8100)
UEC1 要靠近USB_PORT的FUSEVCC
40 MILS
RTL8100BL
USB_LAN
USB_LANW TF
UP
DOWN
93C46
OD6560T/S/X
0/8P4R
GIGABYTE
LAN RTL8100B
GA-8PE800-L
1.1
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GIGABYTE GA-8PE667 PCI ROUNTING LIST *Revision : 0.1*

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-	
PCI SLOT4	19	A,C,F,G	PCLK4	REQ3-	GNT3-	
PCI SLOT5	20	C,F,G,A	PCLK5	REQ4-	GNT4-	
LAN	21	F	LANCLK	REQ5-	GNT5-	

GIGABYTE

Title: PCI ROUNT LIST

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GIGABYTE GA-8PE667 GPIO LIST

Revision 0.1

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.

GIGABYTE		
Title: GPIO LIST		
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