

# GIGABYTE 8I845GVMRZ Schematics

Revision 1.0

SHEET


TITLE

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04	P4_478A
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06	P4_478C
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13	ICH4-1 (HUB,PCI,CNR,AC97,USB) U12
14	ICH4-2
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20	IDE1, 2 CONNECTOR
21	PS/2 KB & MOUSE & F_USB
22	FLOPPY, COM & LPT & WOR & WOL CONNECTOR
23	FAN & H/W MONITOR ,CASE OPEN

SHEET

TITLE

24	FRONT PANEL,LED
25	AC97 CODEC <a href="#">REALTEK ALC655</a>
26	LINE OUT & FRONT AUDIO CONN
27	LINE IN,MIC,CDIN,AUX(CD-IN2) GAME PORT
28	MISC. PWR & ATX POWER (3VDUAL, VDDQ)
29	VCORE PWM(FAN5090)
30	DDR POWER (5VDUAL,2_5VSTR,VTT_DDR)
31	RTL8100C Transformer
32	GPIO PIN LIST
33	PCI ROUNTING

		
<b>GIGABYTE</b>		
Title <b>COVER SHEET</b>		
Size Custom	Document Number <b>8I845GVMRZ</b>	Rev <b>1.0</b>
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Model Name: 8I845GVMRZ

Version : 1.0

243.84mm X 209.98mm, 60+/-15%, C Type

Component value change history

PAGE	Change Item	Reason
08/06 0.1		
	Form 8VD667 change to 8I845GV	New project
08/28 1.0	背板零件修改為一般的 footprint	
	C26 change	
	EC32,EC36 default 上	
	R657 拉 tress	
	R734 330 歐母移除直接拉 tress	
	Printer,COM port 0612 180P 刪除	
	CPUSLP- add 1000P/4 電容	
	Support Willamatte CPU	
08/28 1.0	Add 8I845GV-C BOM	Remove Onboard LAN
09/12 1.0	1.0B BOM, C102 0603 change to 0402,	
	R313 1.07K change to 931	VCCVID change to 1.3V
	C953 remove	CPUSLP-
09/12 1.01	RN121 remove 修 trace,上 0/8P4R	For CH BOM
	RN120,RN122 Remove 0/8P4R,改為直接修 Trace	
	R561 改為直接修 Trace	
09/16 1.01	Add CH1 BOM	For 大陸地區客戶需求
	Add BIOS_WP( 3 Pin & Jumper)	
	Add WOL(WOL,R724,R725,BC330,BC331,Q50)	
	Add Rear USB choke (L15)	
	Add AUX_IN(AUX_IN,C831,C832)	
	Add Buzzer(BZ)	
	BIOS 2M change to 3M(U12)	
	包材修改為蜂巢式,免 Manual,Cable,IC SH,RM	
09/16 1.01	Add CH2 BOM	
	845GV chipset change to 845GL	CH1 修改部分CH2都修改,
	R163 8.2K/6 remove	但多將 Chipset change to GL
09/23 1.02	Socket 478 PCB 改為防呆孔位	
	-C,00,CH1,CH2 BOM 均加注 Clr_CMOS INSERT "1-2"	
09/24 1.02	新建 DL CKD BOM,移除彩盒,Manual,Add USB Port Cable	

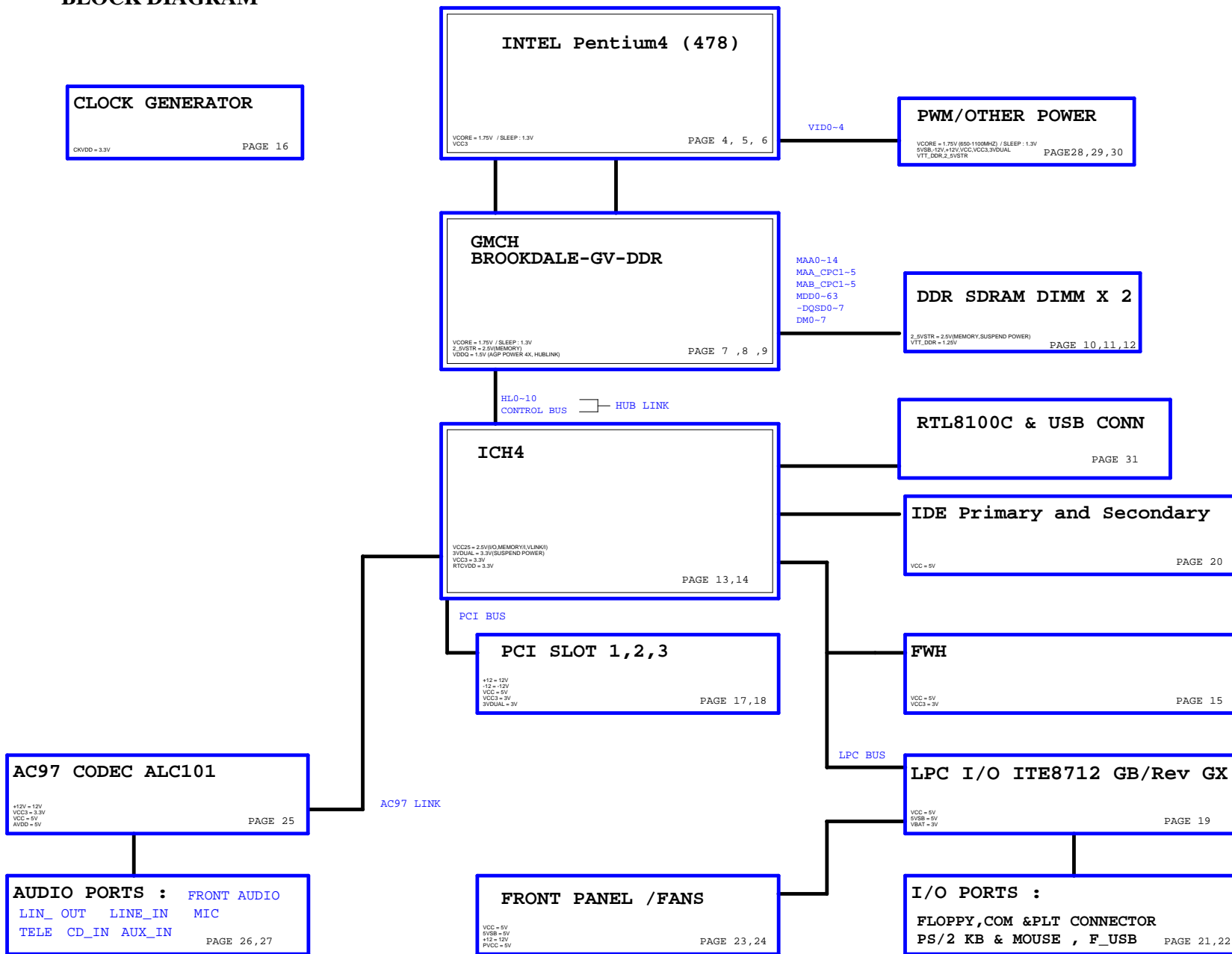
Circuit or PCB layout change for next version

PAGE	Change Item	Reason
09/24 1.02	新建 8I845GV-C 寧波(NB) BOM	
10/6 1.02	新增 8LD533-P 2.01 Model,只修改 Model name	
11/11 1.03	1.CPU trace 只走單線	
	2.Front Pannel change to 簡化線路	技術通報 118
	3.25Vstr 100u 5顆改 4.7 SMD,但1顆不上	P9,P12
	4.VTTDDR 排容CN17-30)改電容(BC342-361), 100u 3顆改4.7u,1顆不上	P12,P30
	5.Codec AVDD 10u改4.7u,4顆100u 改 2.2u(2顆原本就不上)	P25,26
	6.On.VGA U2 移除,改 0歐姆直接串,U3,U4,U8,U9移除	P8
	7.L1,L2,L3,L4,L6 改成 0/6(R956~R960)	EMI 建議 P5,9
	8. Front Audio AVDD 1K(R961) 對地,解決Pop issue	P26
	9.BC31 -35 因干涉移除掉預留位子	原本 P4
	10. Add 8I845GL support HT 線路	P4
	11. EC32,EC34 add EC72,EC73 8m co-layout	P29
	12. Vcore 3顆 3300u(EC34,37,70) 改為1500u(EC35,72,73)	P29
10/14 1.02	新增 8I845GV Mustek(MS) BOM	
	Add IDE Cable, change color box, RM 移到包材階	
10/8 1.02	新增 8I845GV NB BOM	
	CH1,CH2 BOM update to 1.0C	
10/16 1.02	BC260,BC261 add 1K/6	solve shutdown pop noise
10/21 1.02	新增 8I845GV HI BOM,移除 KTS Battery 替代料	
10/24 1.02	新建 8I845GVC DL CKD BOM,移除彩盒,Manual,Add USB Port Cable	
11/11 1.02	CH2 BOM update to 1.0D, for customer request 南北橋用專屬料號	
11/19 1.02	CH1,CH2 BOM 解決大陸方正 Speaker shutdown 有 noise issue	
	BC269 add 1K ohm, Q23 僅保留主料,替料全移除(替料AVDD 放電慢有 noise)	
11/28 1.03	Add 10E BOM, BC363 add 2.2u,EC1,EC65	Solve DC13 memory unstable
	add 100u, BC362,BC366 remove 4.7u	
	移除育富,鼎富 PCB	隔離孔過大,導致電源不穩
12/1 1.03	8I845GV 1.03 rename to 8LD533-P 2.02	
	Update 8I845GV-C BOM to 1.0E	For PCB 1.03
12/8 1.03	Update 8I845GV/8I845GV-C NB CKD 1.0E BOM	For PCB 1.03
12/10 1.02	Update 8I845GV/8I845GV-C DL 1.0C ECN	CKD BOM, Add Sponge
12/16 1.03	BOM 1.0F FB5 改成直接 short-wire	

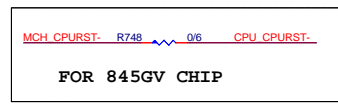
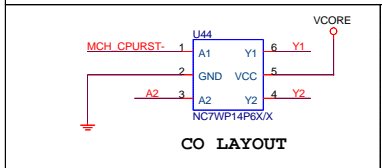
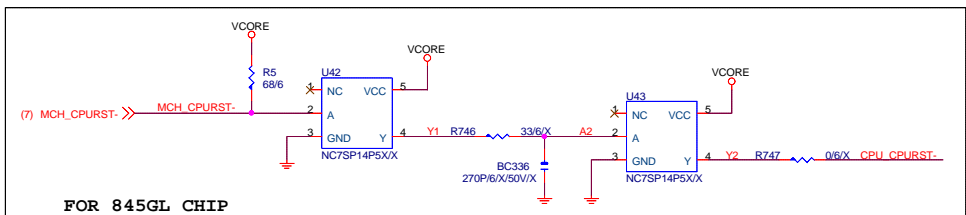
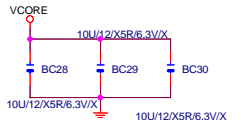
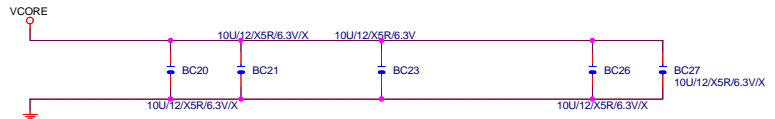
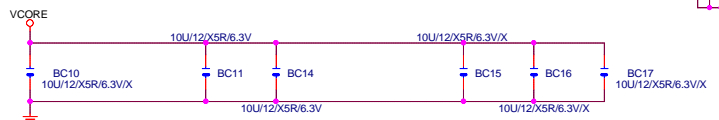
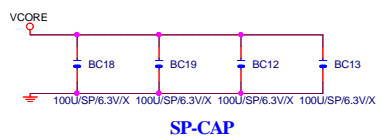
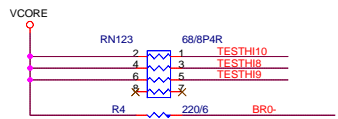
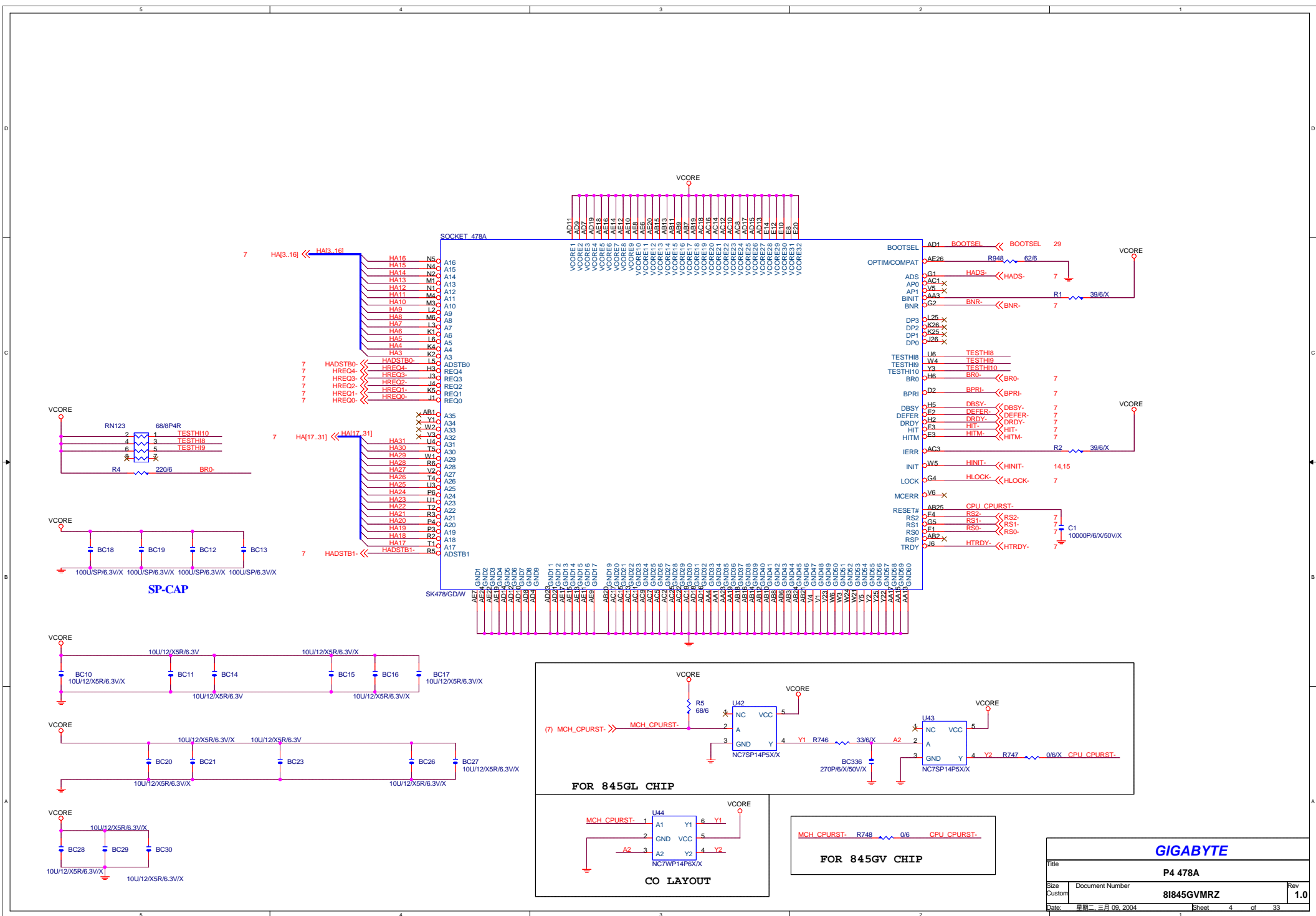
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BOM & PCB MODIFY HISTORY			
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Size	Document Number		Rev
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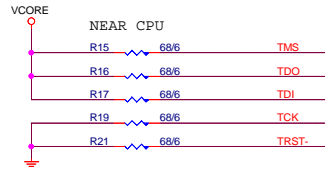
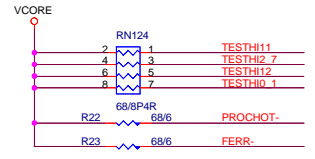
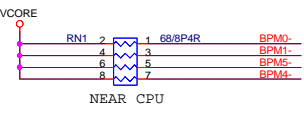
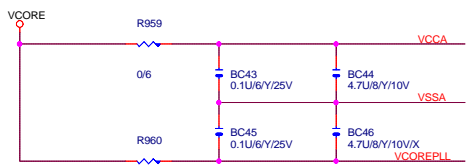
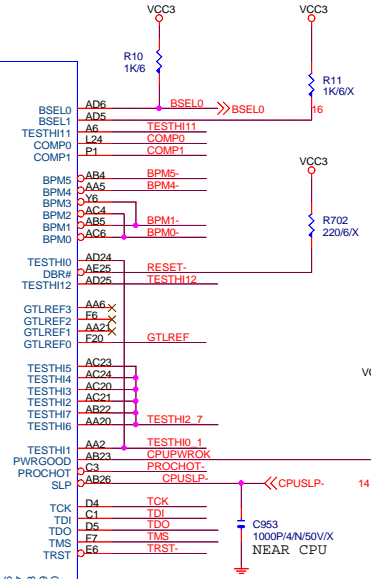
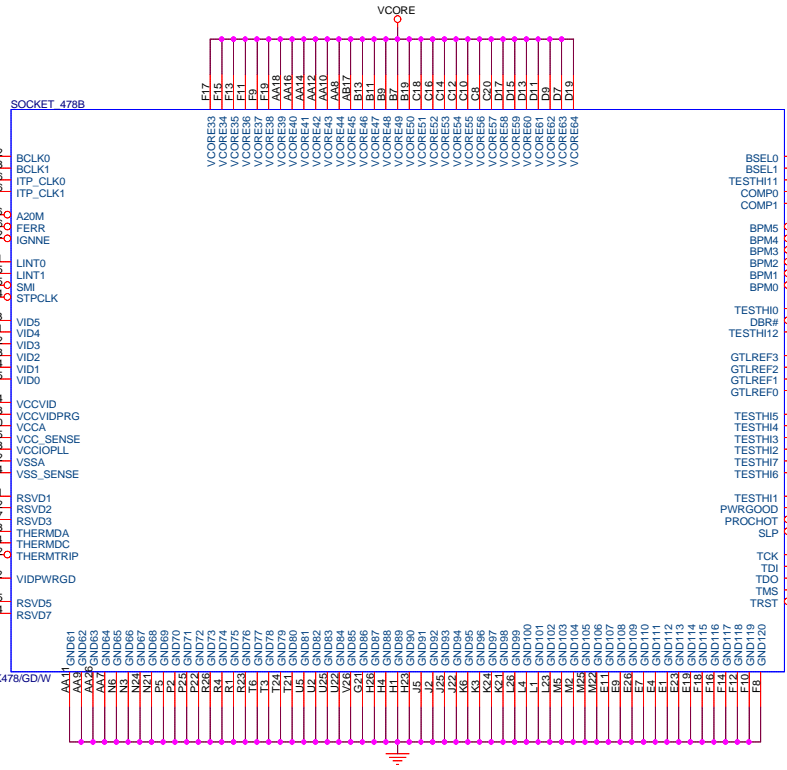
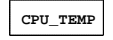
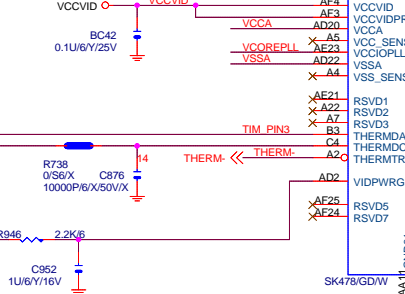
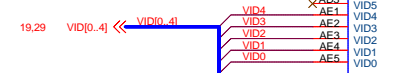
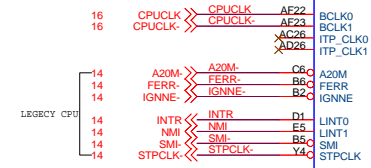
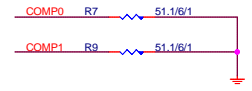
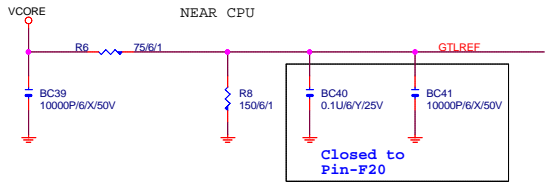
# BLOCK DIAGRAM



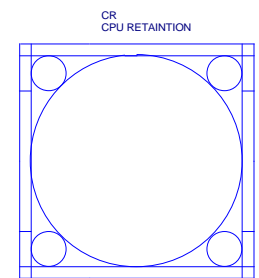
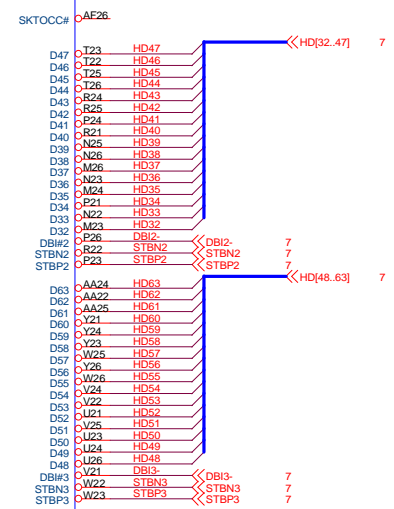
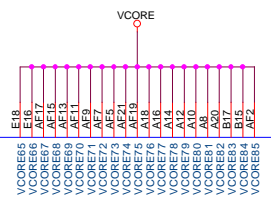
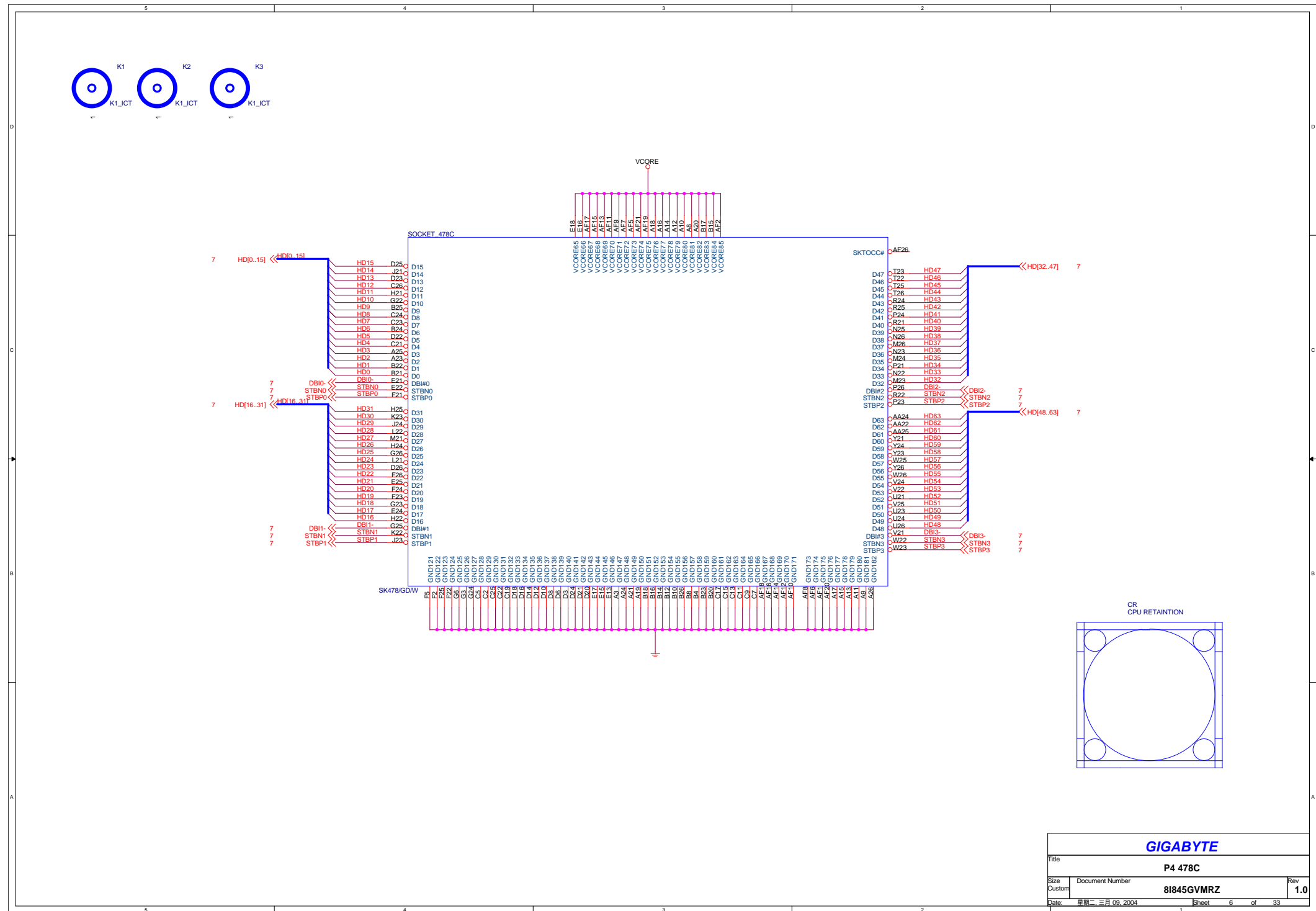
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File	Document Number	Rev
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Custom		
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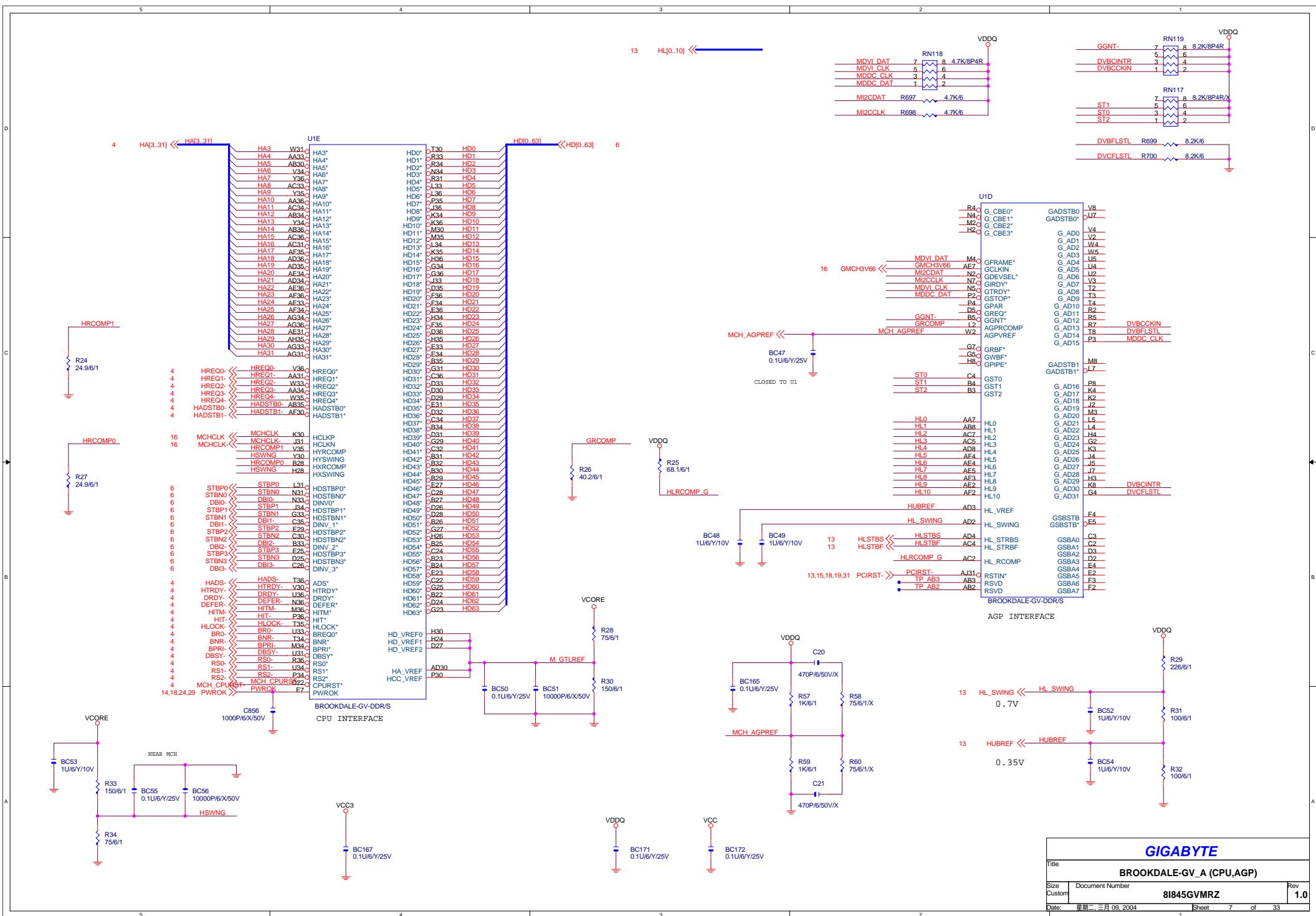
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P4 478A		
Title	Document Number	
Size	81845GVMRZ	
Custom	Rev 1.0	
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<b>GIGABYTE</b>		
P4 478B		
Size Custom	Document Number	Rev
	81845GVMRZ	1.0
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Size	Document Number	Rev
Custom	<b>81845GVMRZ</b>	<b>1.0</b>
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<b>GIGABYTE</b>		
<b>BROOKDALE-GV_A (CPU,AGP)</b>		
Title	Document Number	Rev
	<b>81845GVMRZ</b>	<b>1.0</b>
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11,12 MD[0..63] << <<MD[0..63] 8

11,12 DM[0..7] >> >>DM[0..7] 8

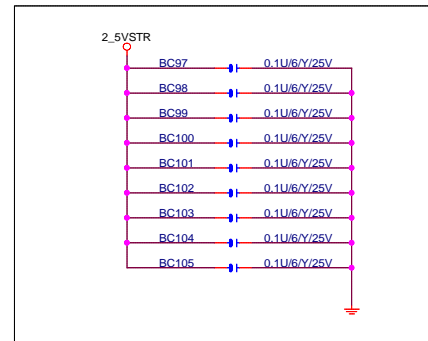
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DM 0	RN3	1	2 0/8P4R/X	DM0
-DQS 0		3	4	-DQS0
MD 2		5	6	MD2
MD 6		7	8	MD6
MD 0	RN5	1	2 0/8P4R/X	MD0
MD 4		3	4	MD4
MD 5		5	6	MD5
MD 1		7	8	MD1
MD 12	RN6	1	2 0/8P4R/X	MD12
MD 13		3	4	MD13
-DQS 1		5	6	-DQS1
DM 1		7	8	DM1
MD 14	RN7	1	2 0/8P4R/X	MD14
MD 15		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 28	RN12	1	2 0/8P4R/X	MD28
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 62	RN21	1	2 0/8P4R/X	MD62
MD 58		3	4	MD58
MD 63		5	6	MD63
MD 59		7	8	MD59

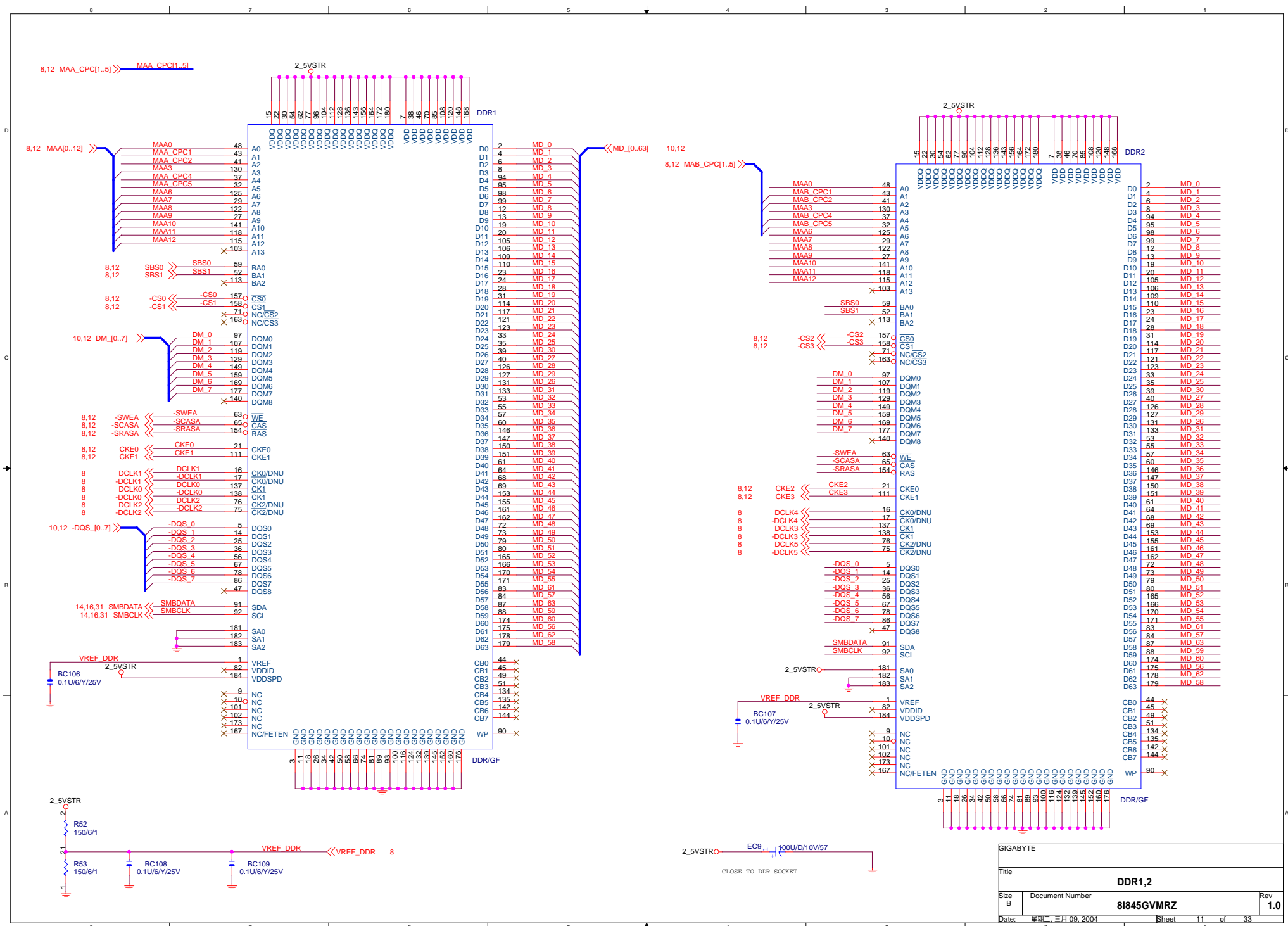
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MD 16		3	4	MD16
MD 17		5	6	MD17
MD 21		7	8	MD21
MD 42	RN4	1	2 0/8P4R/X	MD42
MD 46		3	4	MD46
MD 43		5	6	MD43
MD 47		7	8	MD47

MD 7	RN8	1	2 0/8P4R/X	MD7
MD 3		3	4	MD3
MD 8		5	6	MD8
MD 9		7	8	MD9
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MD 28		7	8	MD28

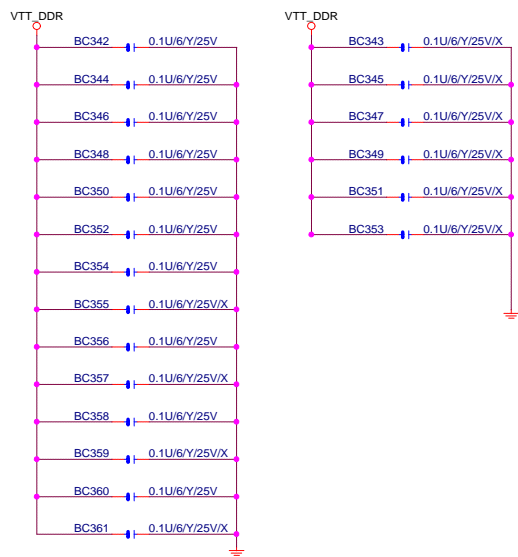
BETWEEN DIMM1 & DIMM2



SIGABYTE		
Title		
<b>DDR SERIAL TERM.</b>		
Size B	Document Number	Rev
	<b>81845GVMRZ</b>	<b>1.0</b>
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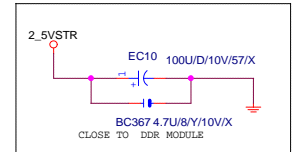
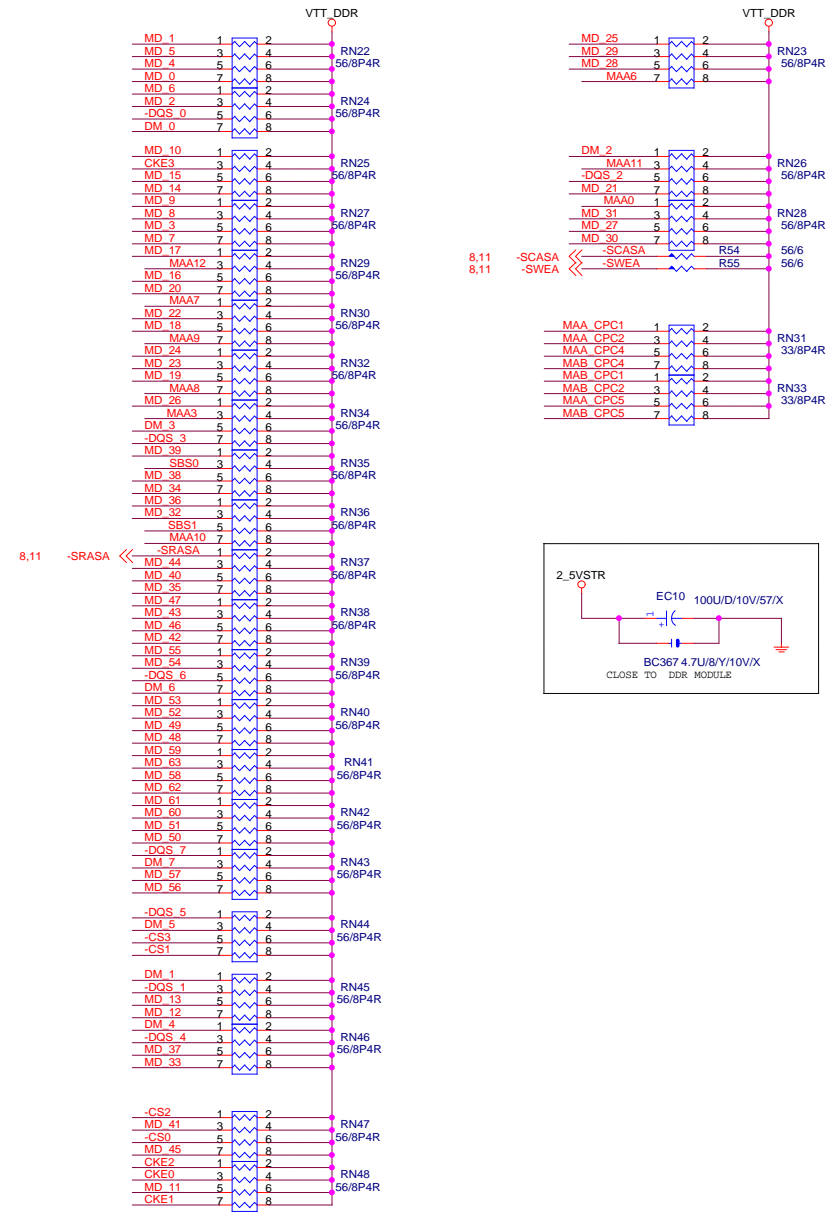


SIGNAL BYTE		
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<b>DDR1,2</b>		
Size	Document Number	Rev
B	<b>81845GVMRZ</b>	<b>1.0</b>
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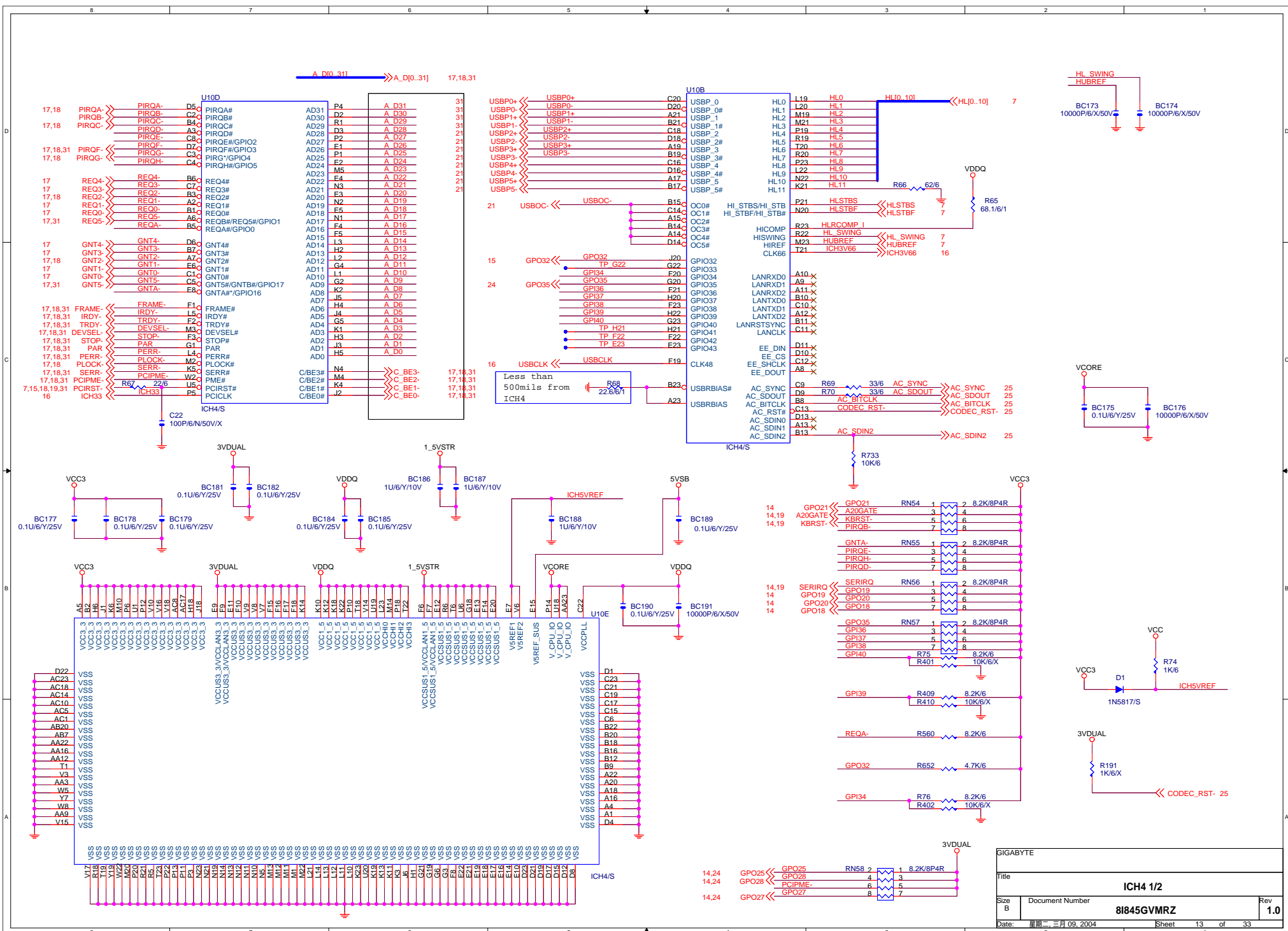


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- 10,11 DM\_[0..7] << MPD [0..7]
- 10,11 -DQS\_[0..7] << -DQS [0..7]
- 8,11 MAA[0..12] << MAA[0..12]
- 8,11 -CS[0..3] << -CS[0..3]
- 8,11 CKE[0..3] << CKE[0..3]
- 8,11 SBS[0..1] << SBS[0..1]
- 8,11 MAA\_CPC[1..5] << MAA\_CPC[1..5]
- 8,11 MAB\_CPC[1..5] << MAB\_CPC[1..5]

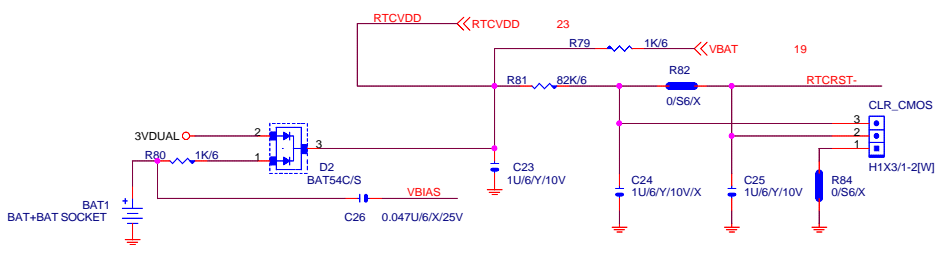
CLOSE TO DDR TERMINATOR(1 CAP. FOR 2 R-PACKS)



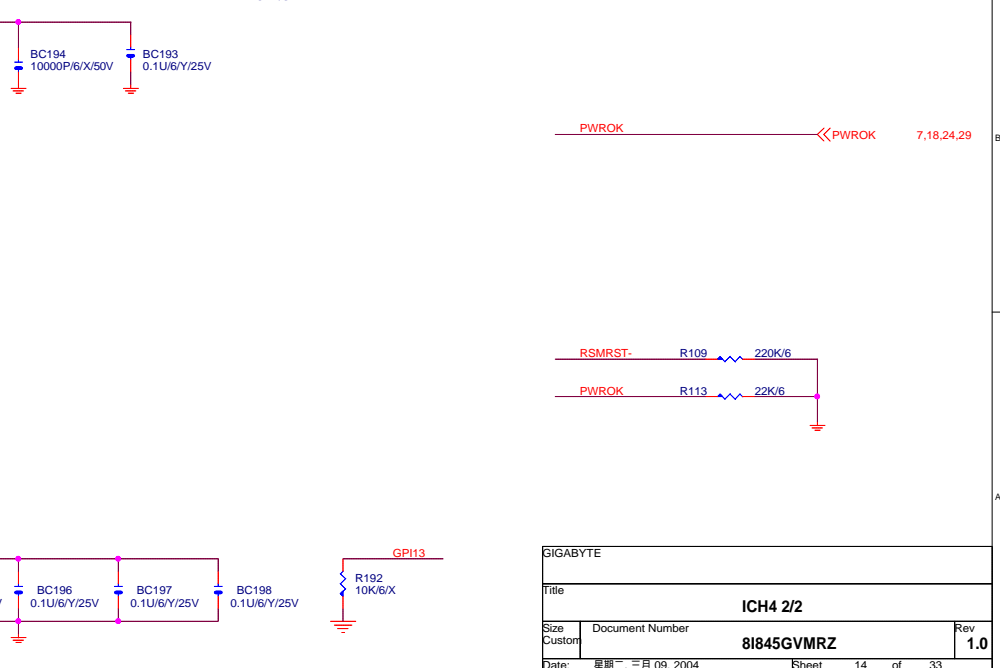
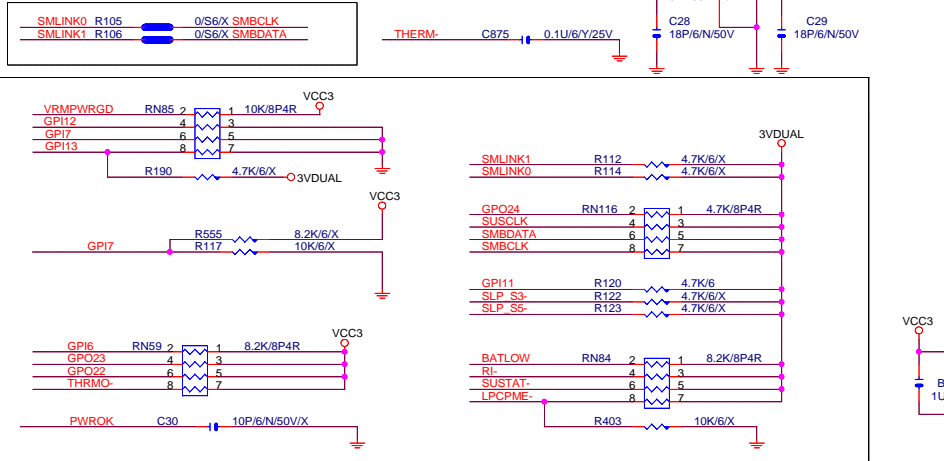
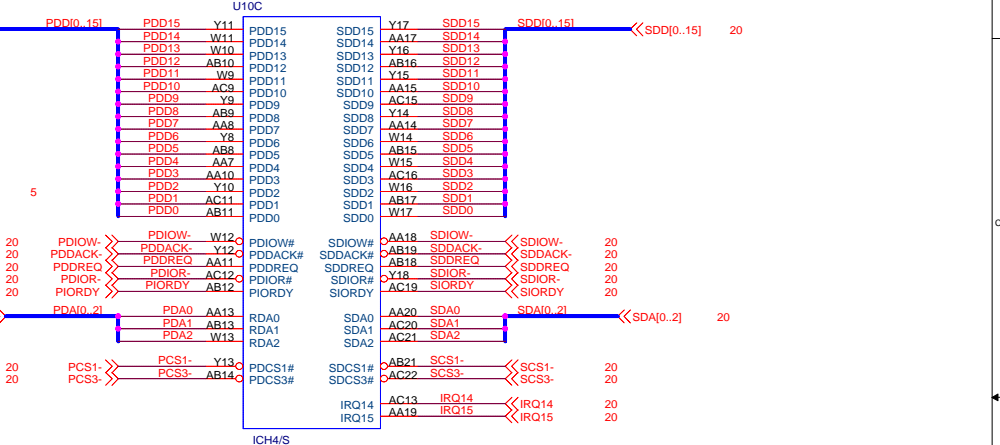
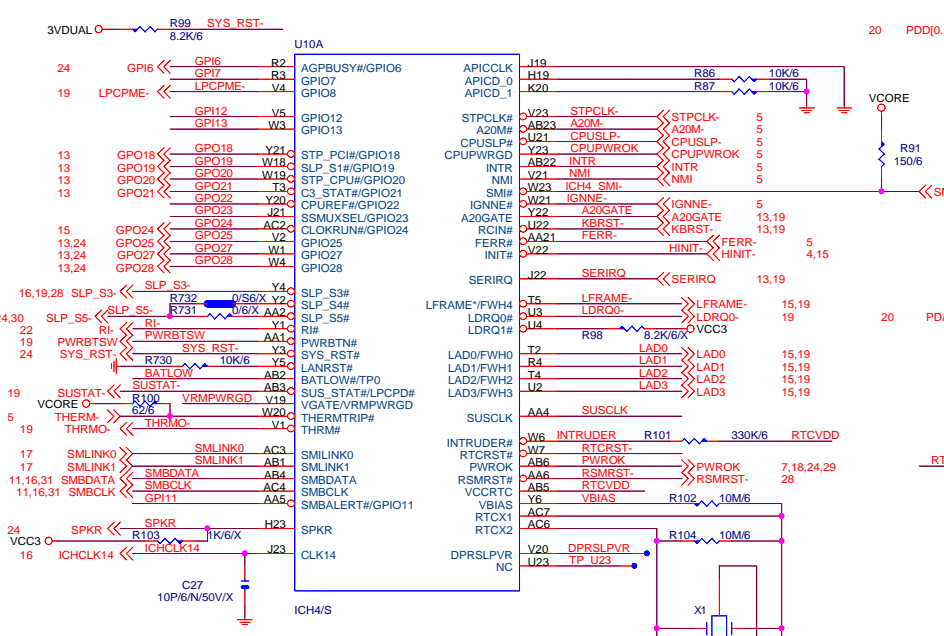
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<b>DDR TERM.</b>		
Size B	Document Number	Rev
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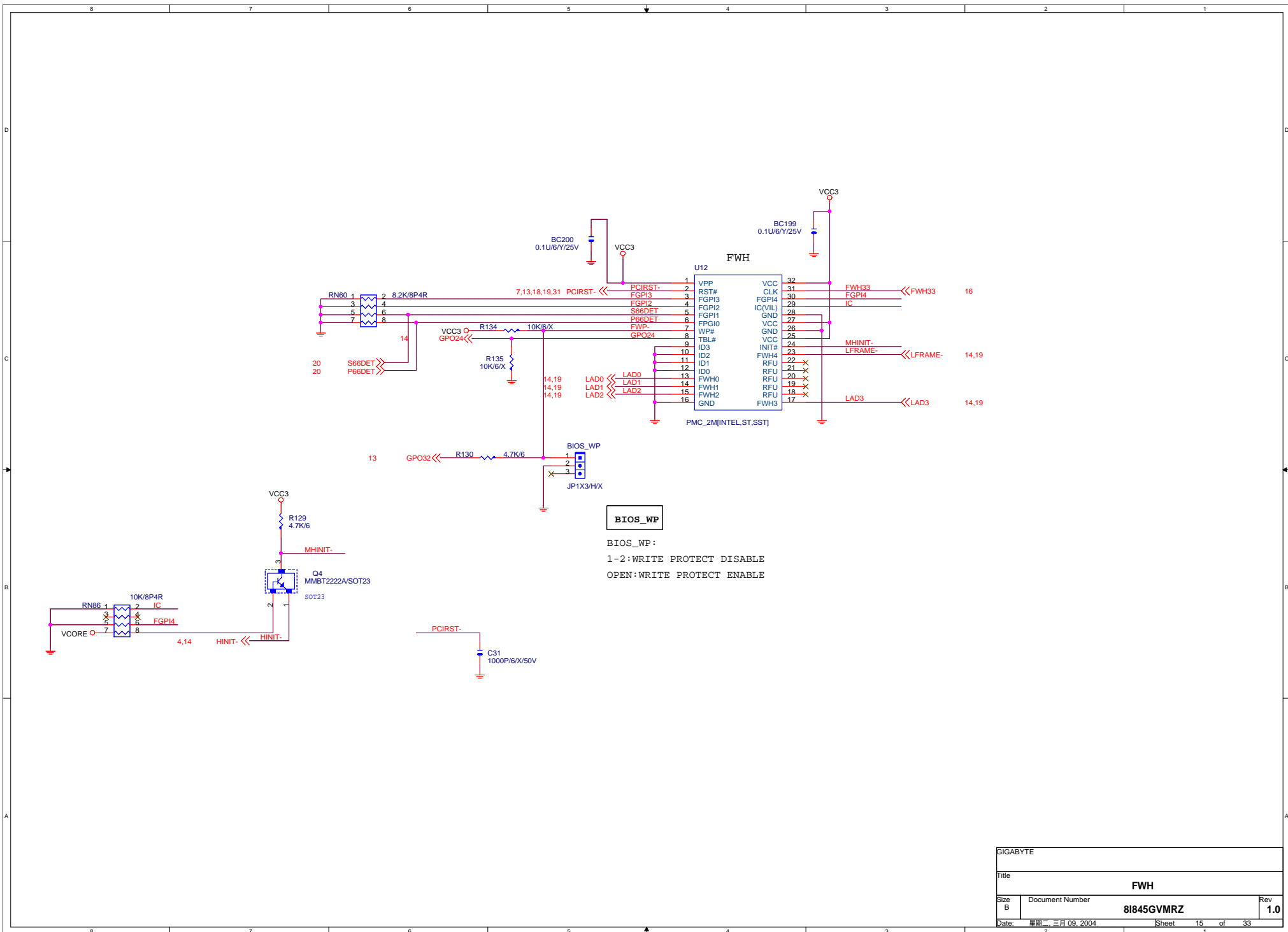
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Size	Document Number	Rev
B	<b>81845GVMRZ</b>	<b>1.0</b>
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	CLR_CMOS
1-2	ENABLE (CLEAR CMOS)
2-3	NORMAL

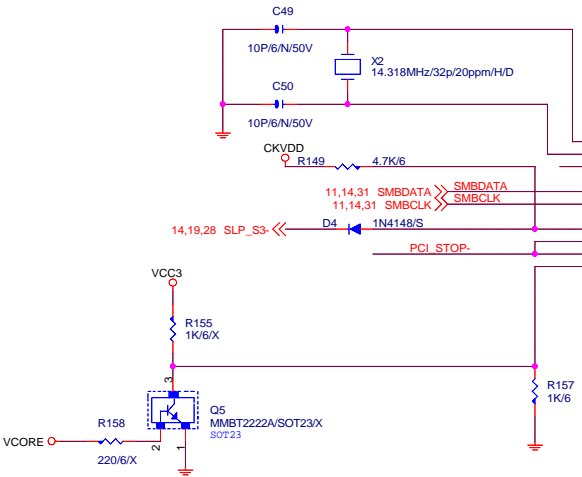
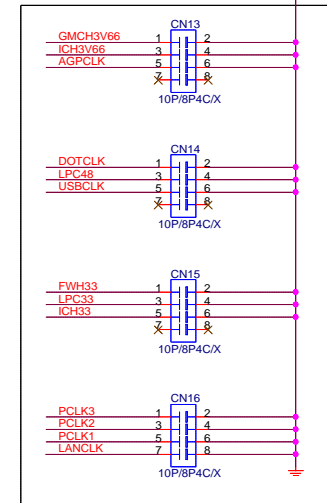
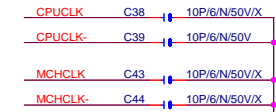
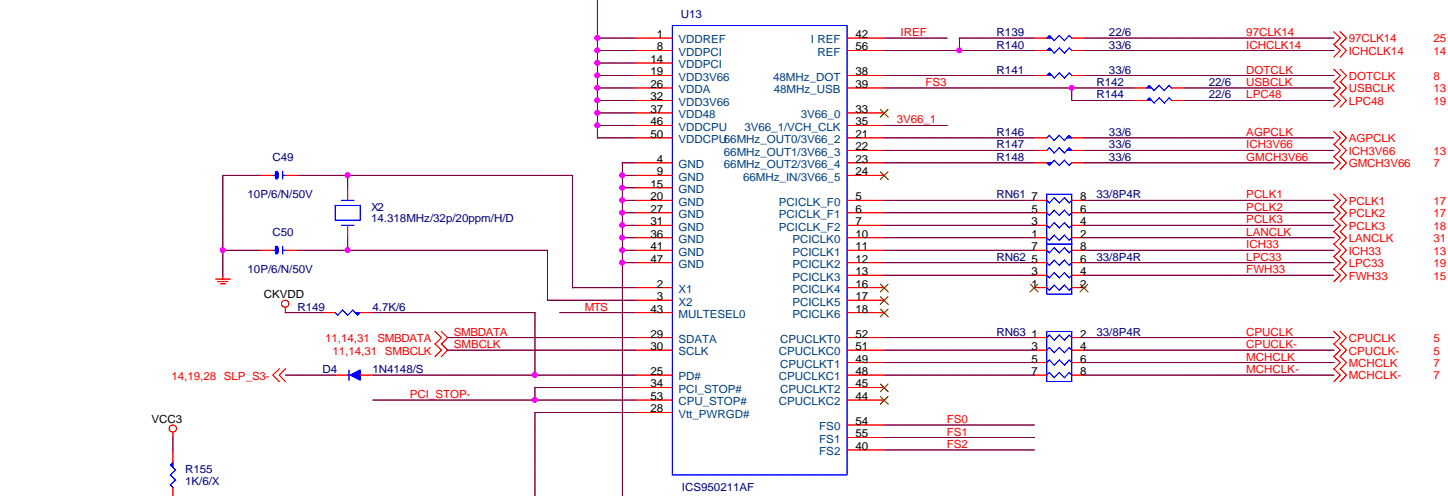
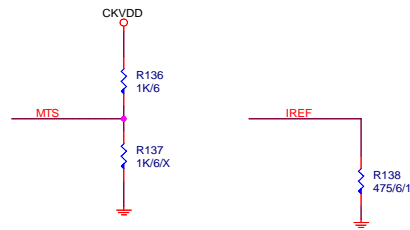
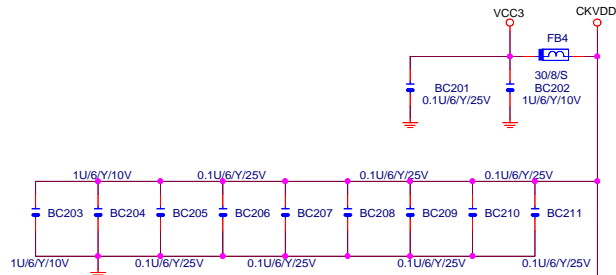


SIGABYTE		
Title ICH4 2/2		
Size Custom	Document Number 81845GVMRZ	Rev 1.0
Date: 星期二, 三月 09, 2004	Sheet 14	of 33

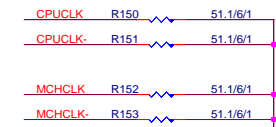
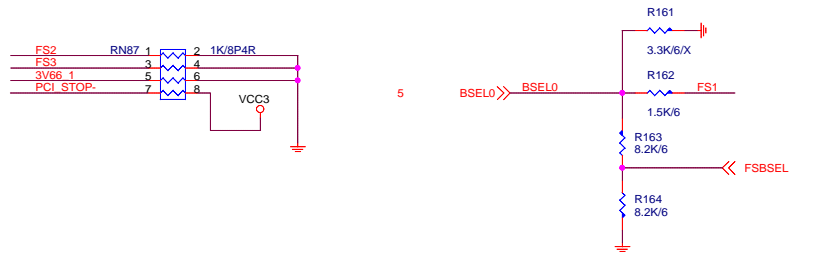


SIGABYTE		
Title		
FWH		
Size B	Document Number	Rev
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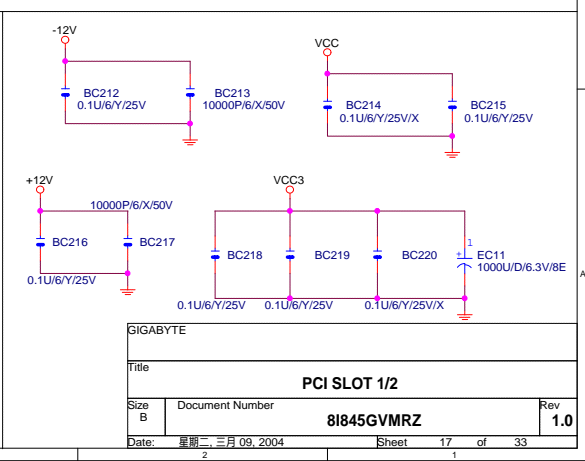
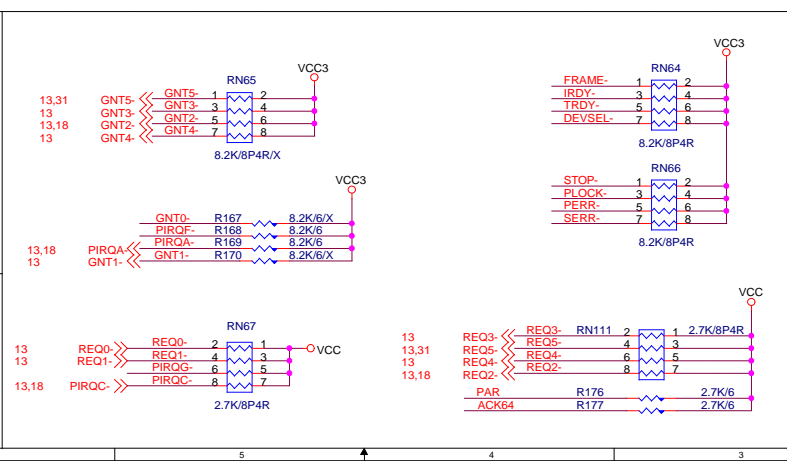
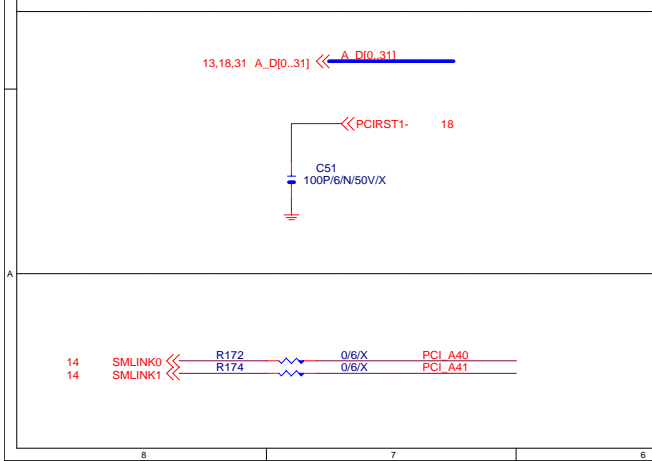
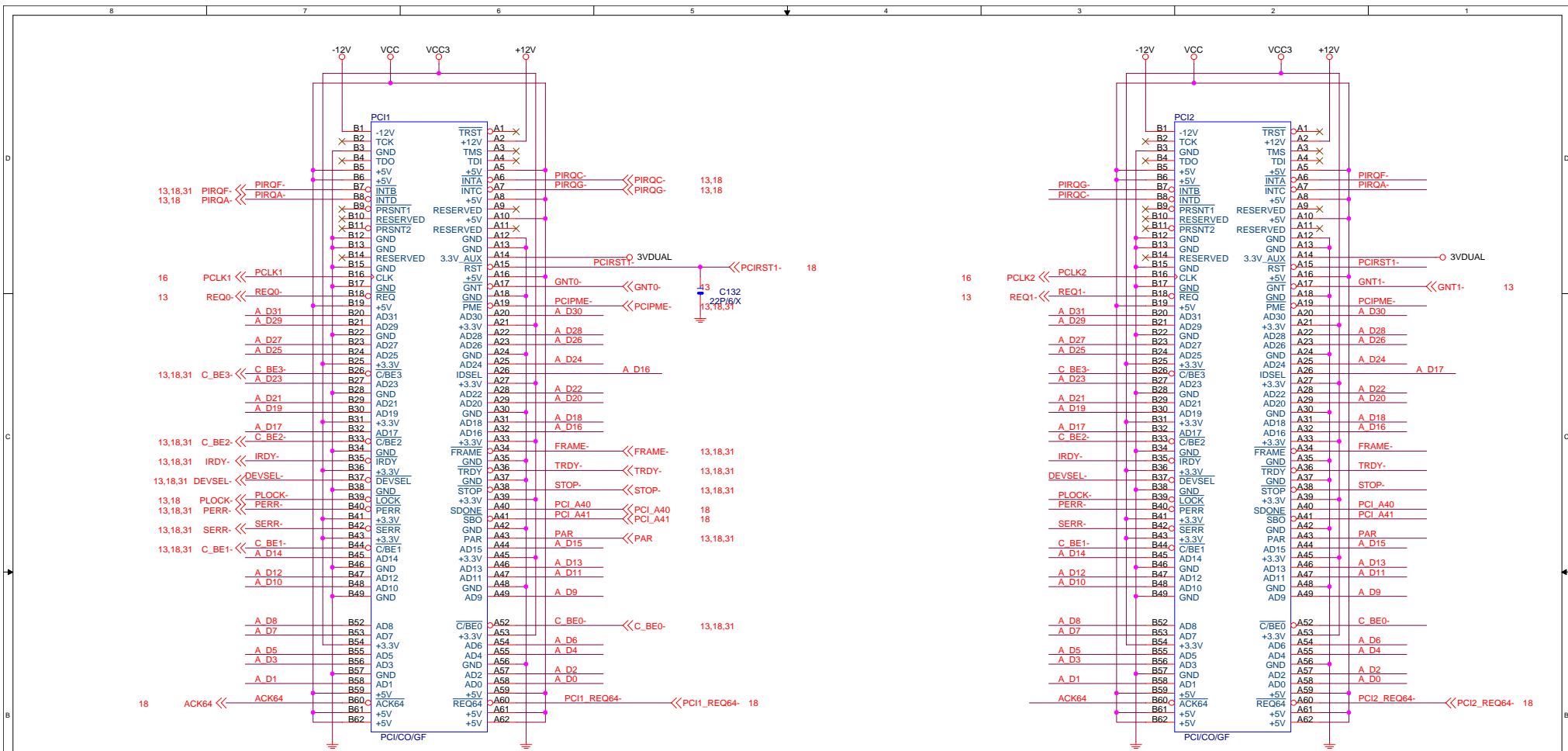




BSEL0 Pull-up at another page.

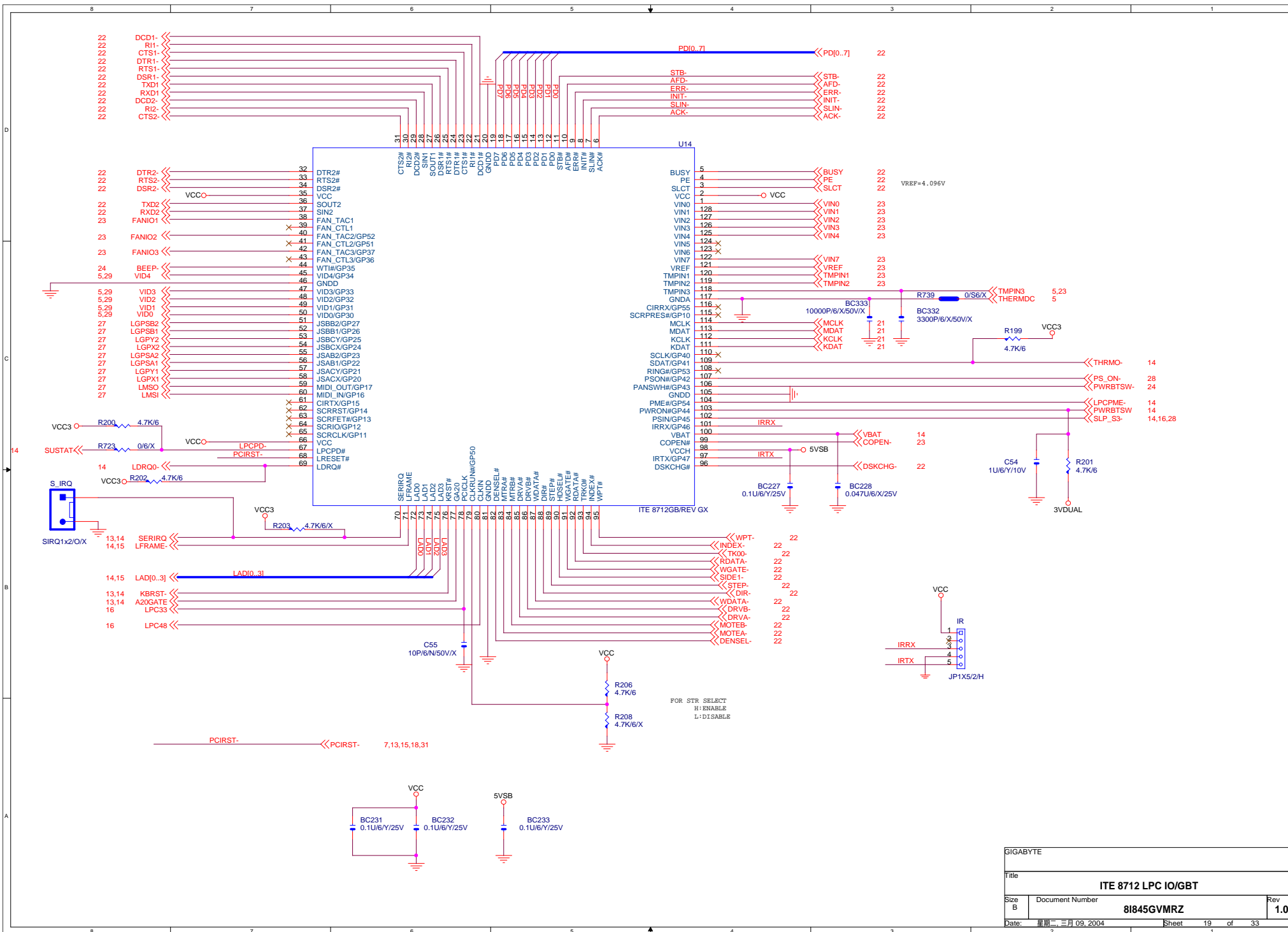


SIGABYTE			
Title			
<b>CLOCK GENERATOR</b>			
Size	Document Number		Rev
Custom	<b>81845GVMRZ</b>		<b>1.0</b>
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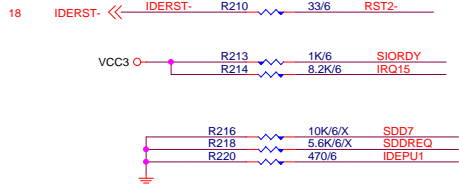
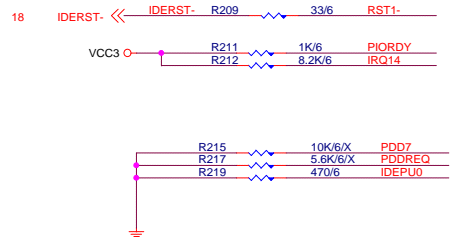
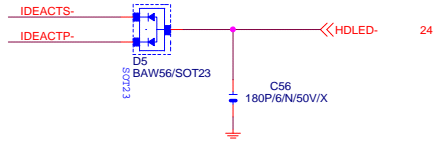


SIGABYTE		
Title		
<b>PCI SLOT 1/2</b>		
Size	Document Number	Rev
B	<b>81845GVMRZ</b>	<b>1.0</b>
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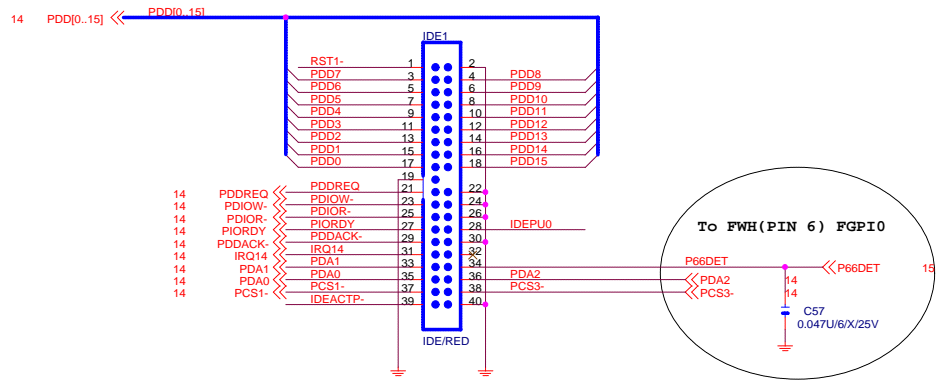




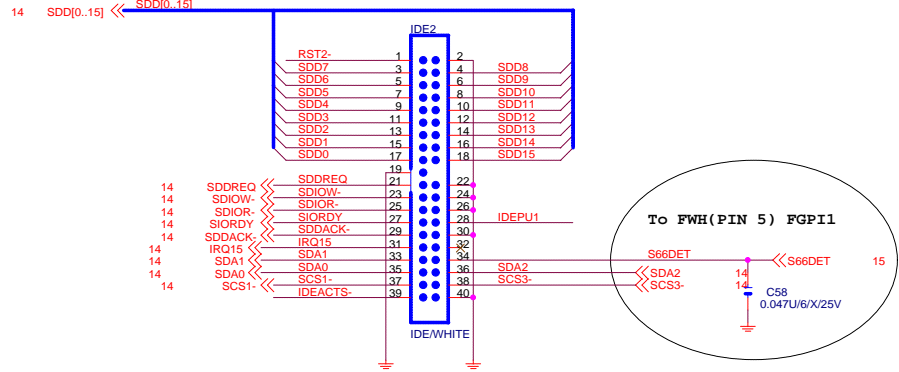
SIGABYTE		
Title <b>ITE 8712 LPC IO/GBT</b>		
Size B	Document Number <b>81845GVMRZ</b>	Rev <b>1.0</b>
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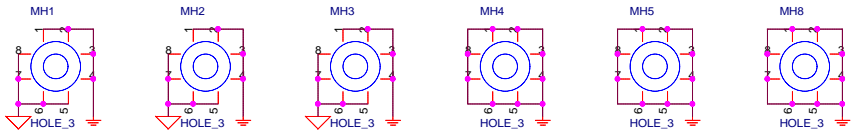
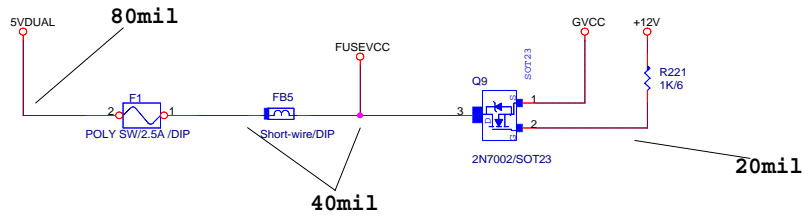
PRIMARY IDE CONNECTOR



SECONDARY IDE CONNECTOR

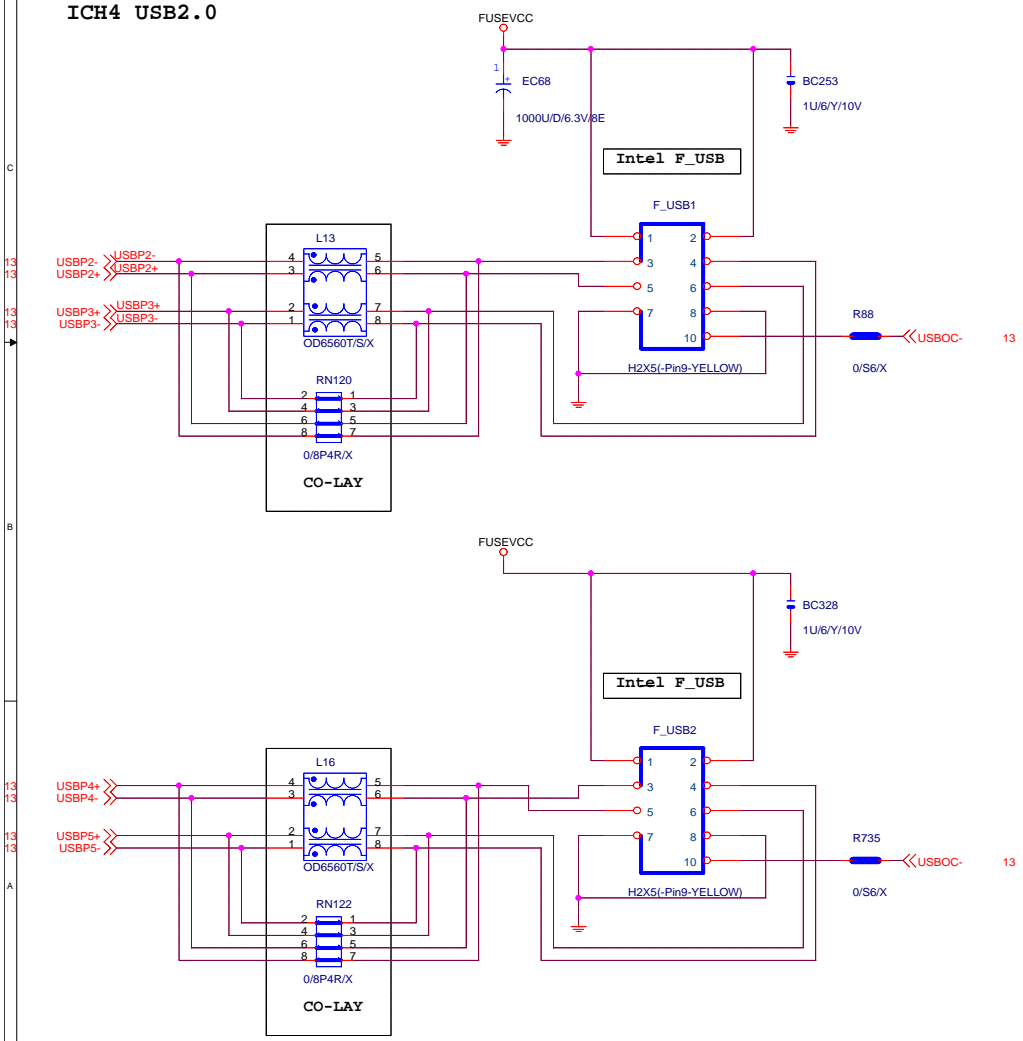


GIGABYTE		
Title <b>IDE CONNECTOR</b>		
Size B	Document Number <b>81845GVMRZ</b>	Rev <b>1.0</b>
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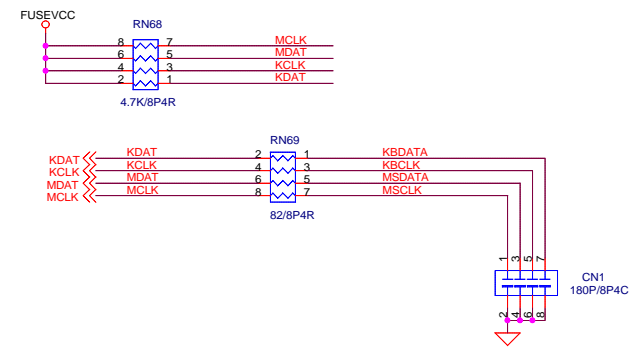
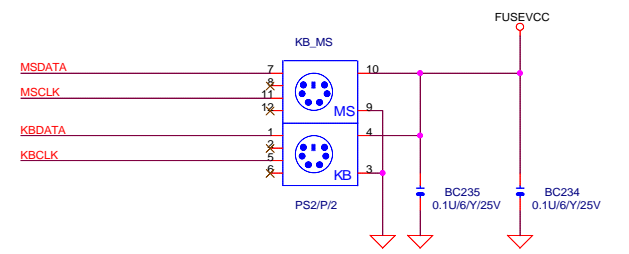
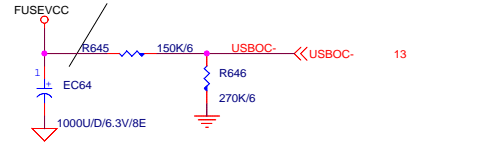


**FRONT USB CONN**

**ICH4 USB2.0**

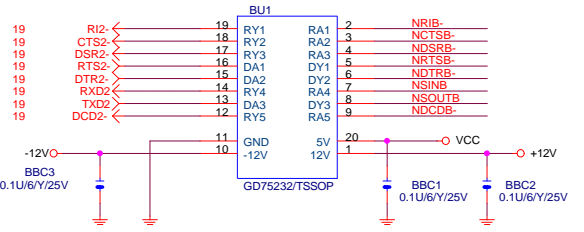
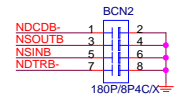
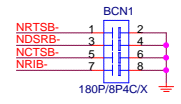
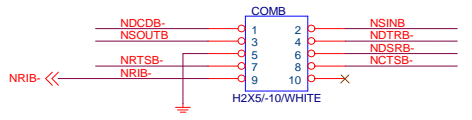
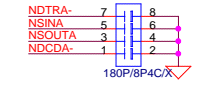
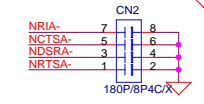
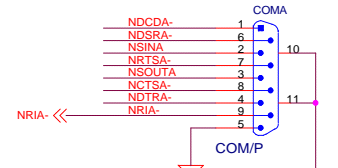
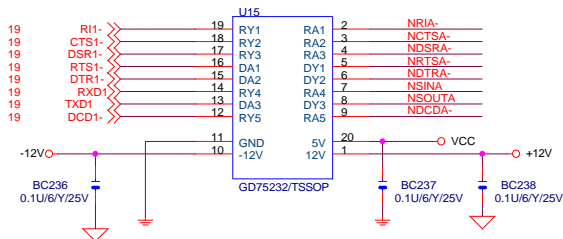


**EC64 要靠近USB\_PORT的FUSEVCC**

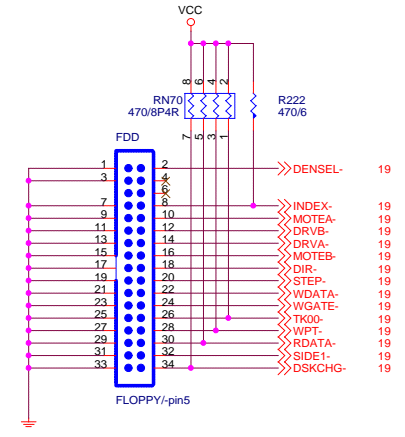


SIGABYTE		
Title		
<b>KB &amp; PS2 MOUSE &amp; IR</b>		
Size	Document Number	Rev
B	<b>81845GVMRZ</b>	<b>1.0</b>
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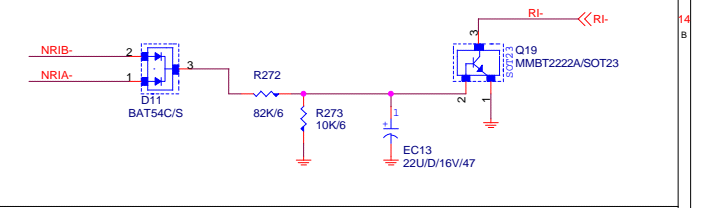
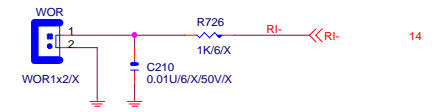
# COMA



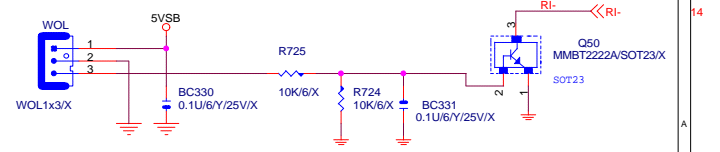
# FLOPPY



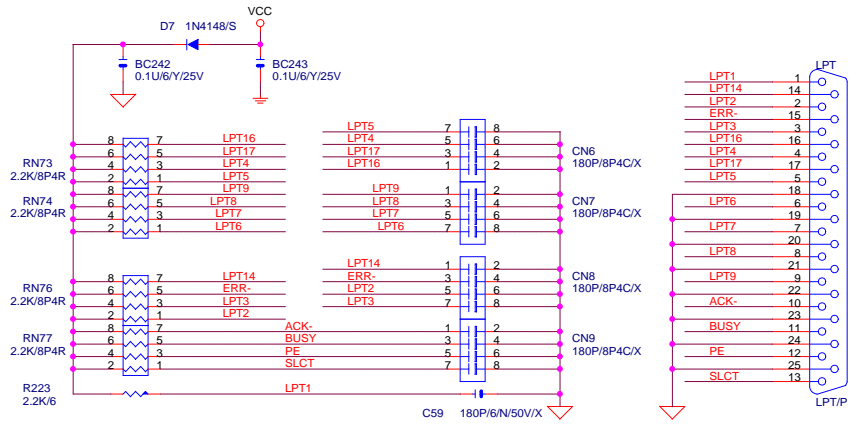
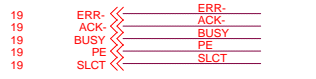
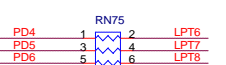
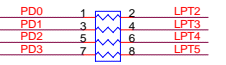
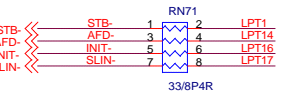
# WOR



# WOL

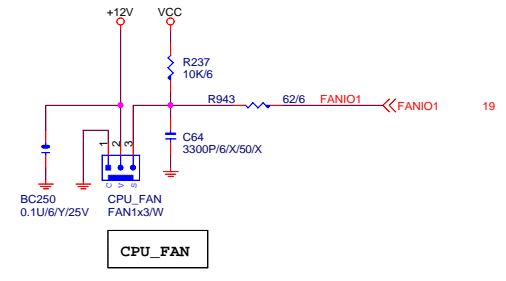
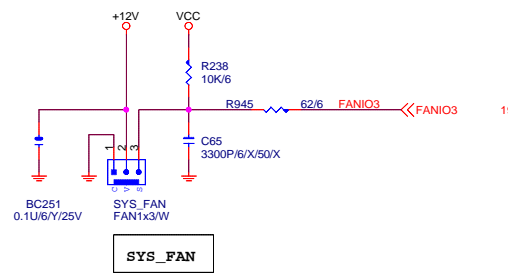
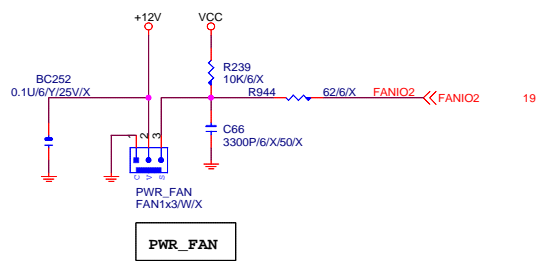
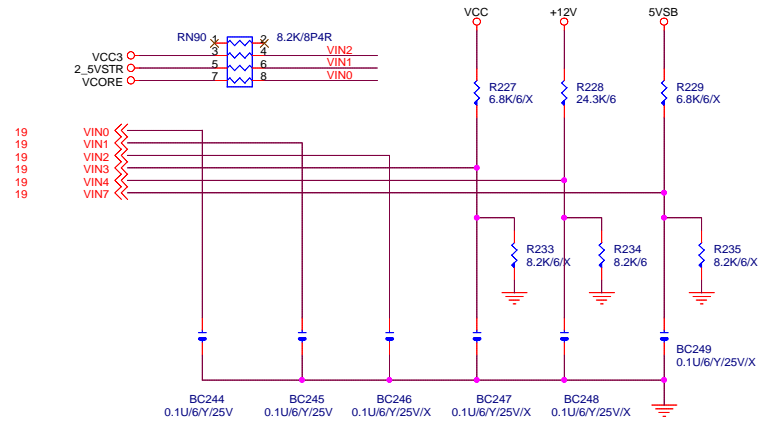
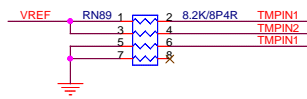
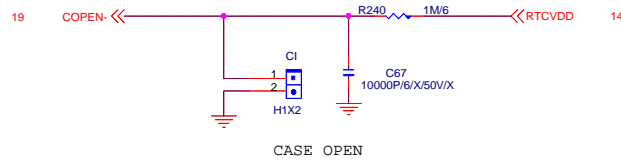
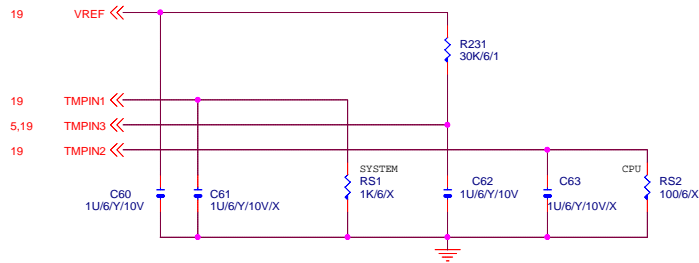


19 PD[0..7] << PD[0..7]



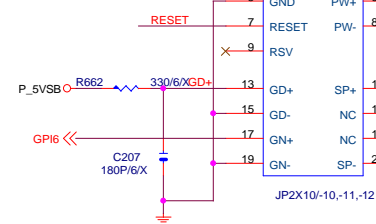
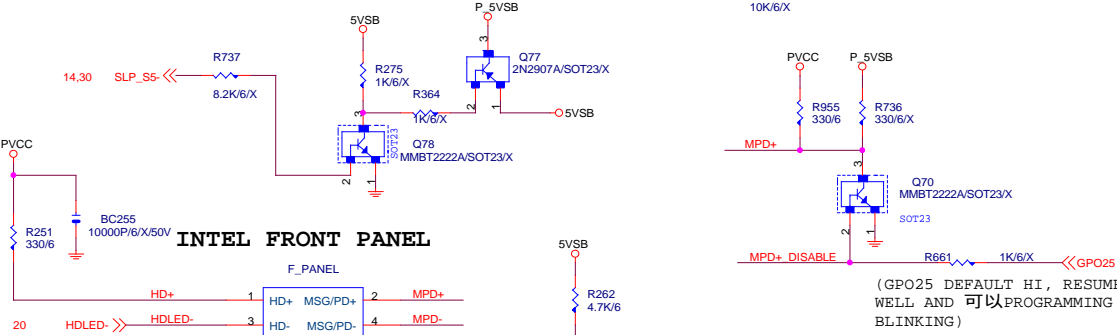
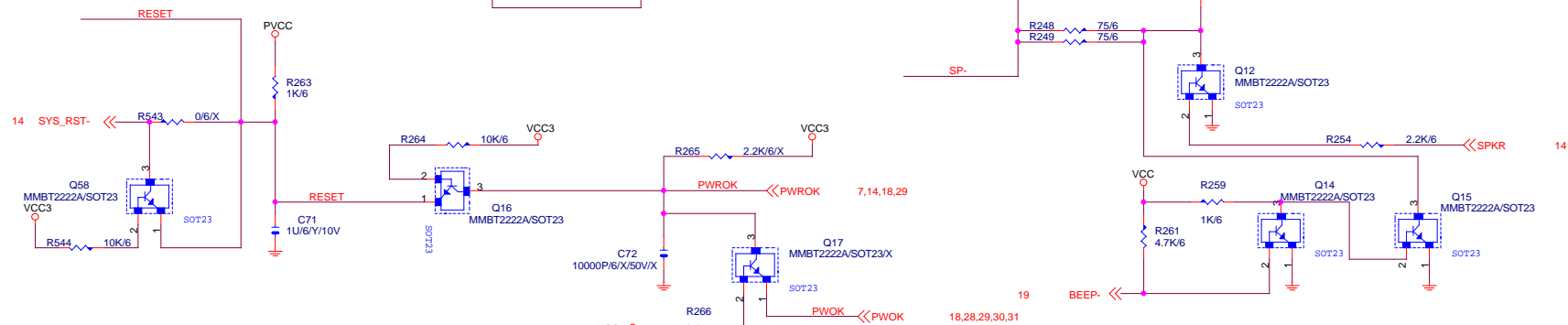
GIGABYTE			
Title <b>COM &amp; WOR &amp; WOL &amp; LPT PORT &amp; FLOOPY</b>			
Size B	Document Number <b>81845GVMRZ</b>	Rev <b>1.0</b>	
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# Hardware Monitor circuits

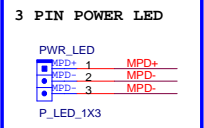
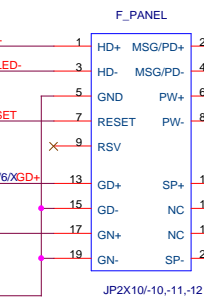


SIGABYTE		
Title		
<b>FAN/ HW MONITOR</b>		
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**INTEL FRONT PANEL**



(GPO28 DEFAULT HIGH, RESUME WELL)  
States for green LED

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

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

**STR\_LED/DIMM LED**

**States for a single-color power LED**

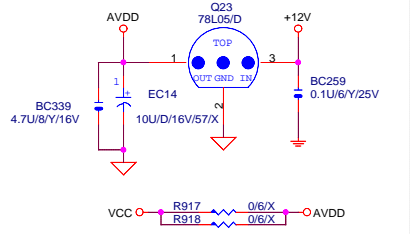
LED States	ACPI States	GPO25	GPO27	GPO35
OFF	S1, S3, S5	1	1	NO1
Steady Green	S0	0	1	0
Blinking Green	S0(message waiting)	0	B	0

NO1 GPO35 只需在  
S1 PROGRAMMING  
LOW

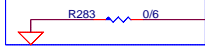
**States for a dual-color power LED**

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

# AVDD

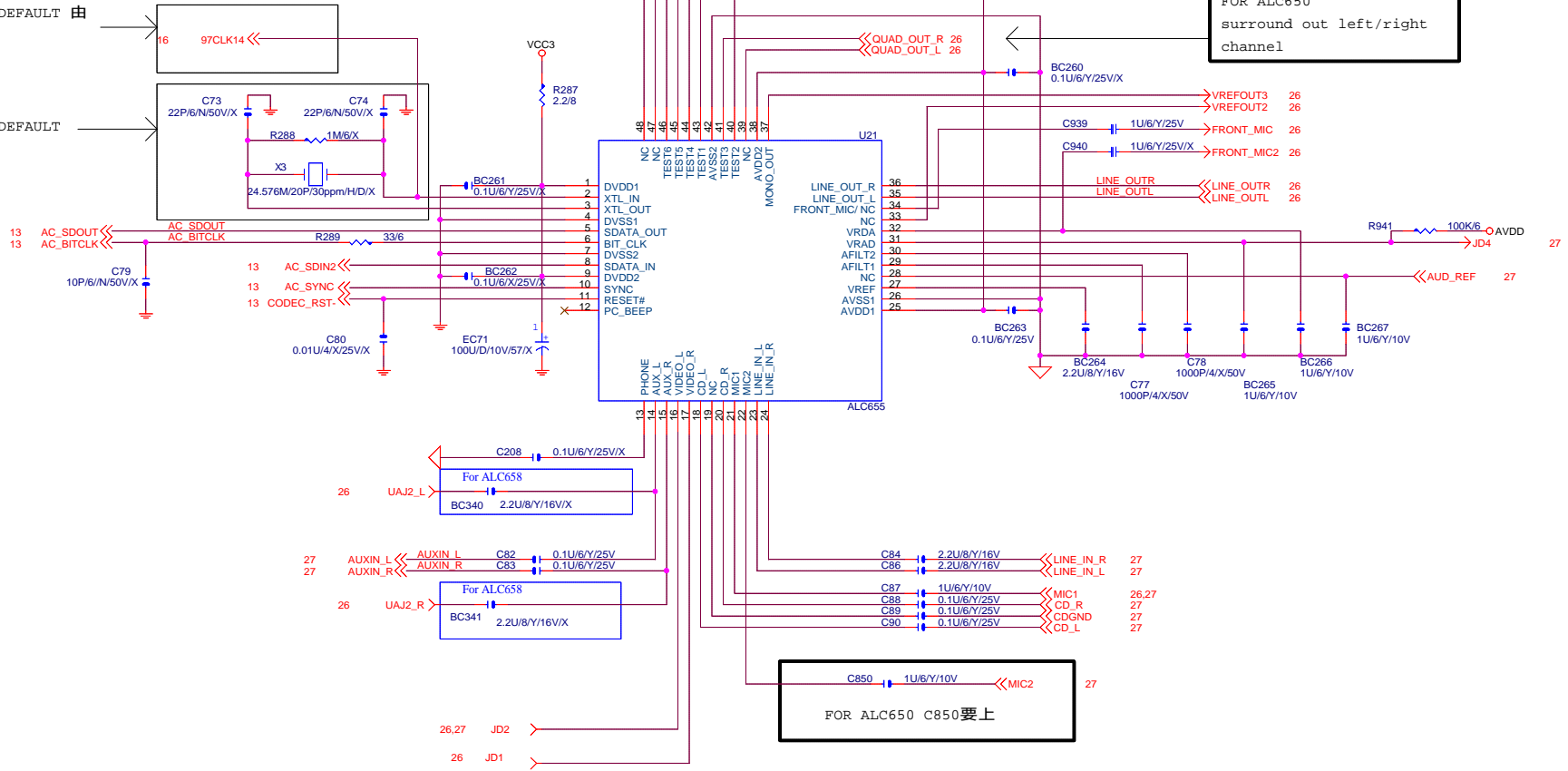


If 14.318MHZ external CLK is used  
INSTALL R283



FOR 101 DEFAULT  
FOR 650 DESIGN DEFAULT 由  
CLOCK GEN 来

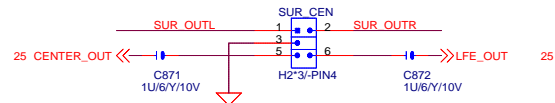
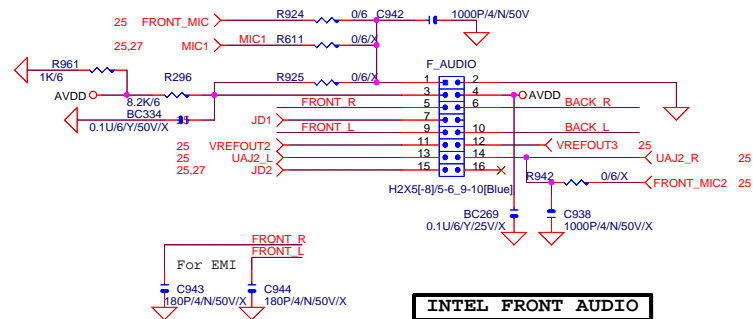
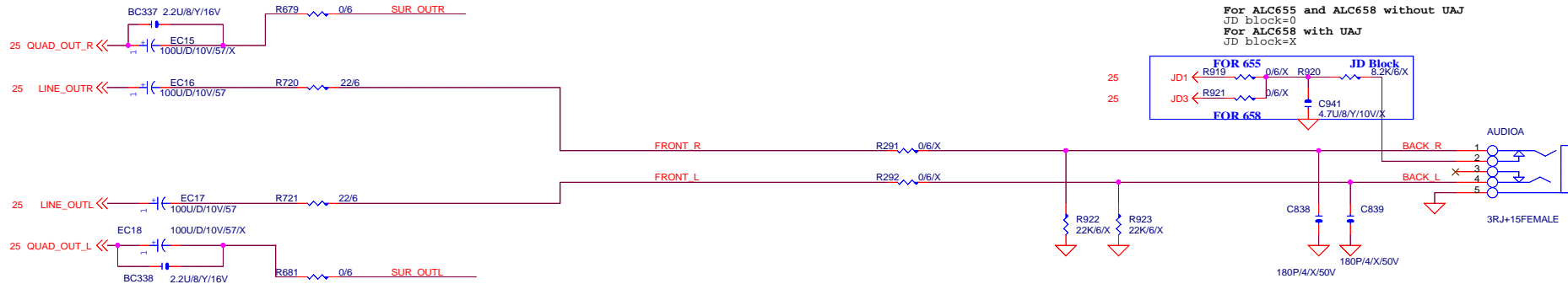
FOR 650 DESIGN DEFAULT  
不上 CRYSTAL



SIGABYTE		
Title <b>AC97 CODEC</b>		
Size B	Document Number <b>81845GVMRZ</b>	Rev <b>1.0</b>
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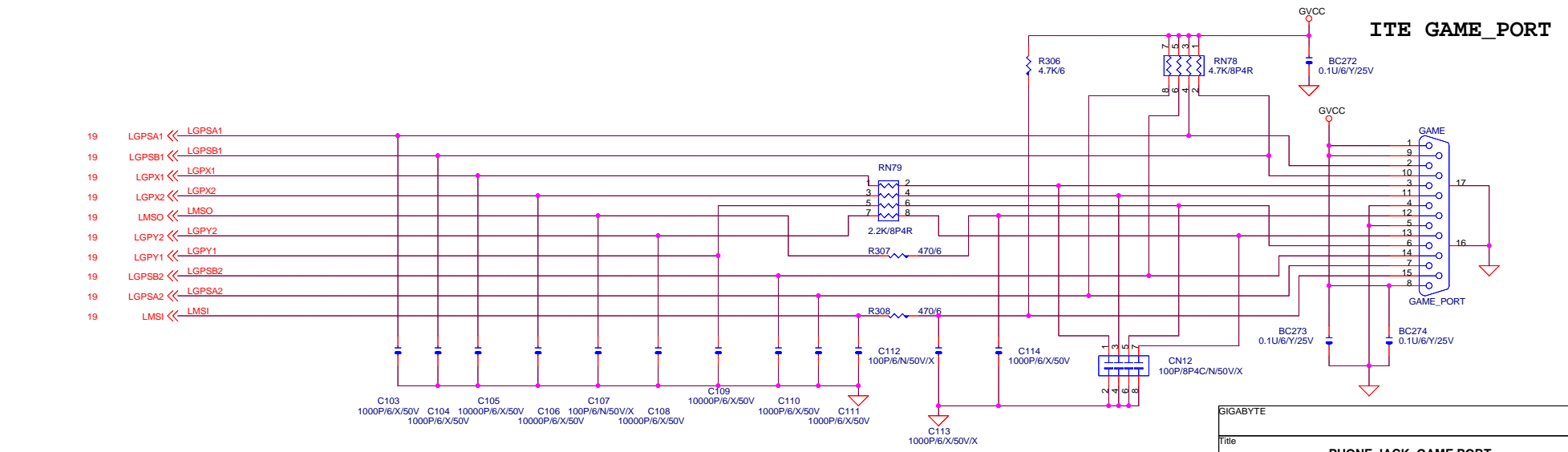
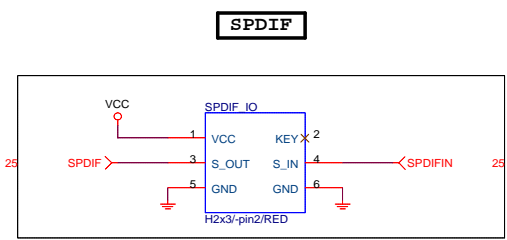
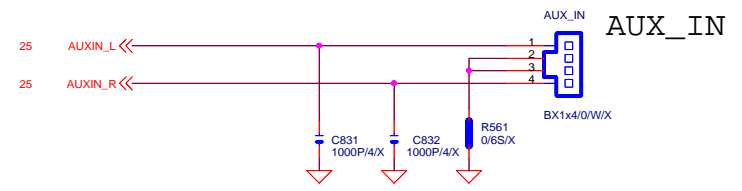
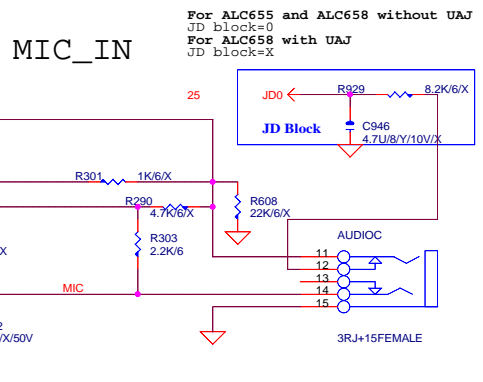
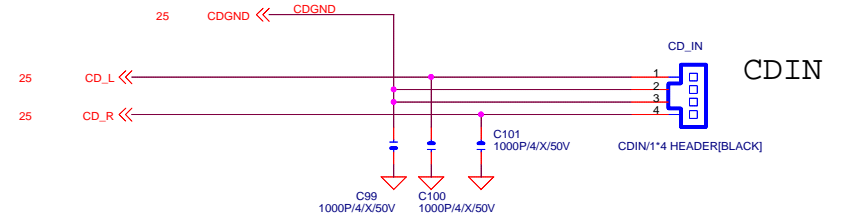
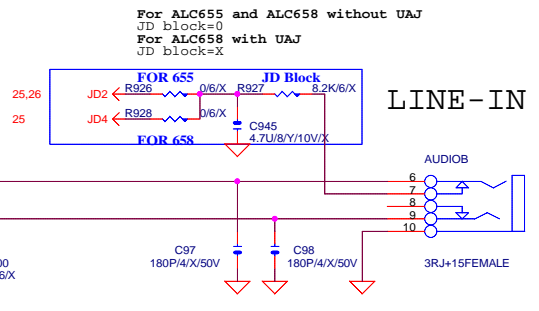
# LINE-OUT

For ALC655 and ALC658 without UAJ  
 JD block=0  
 For ALC658 with UAJ  
 JD block=X



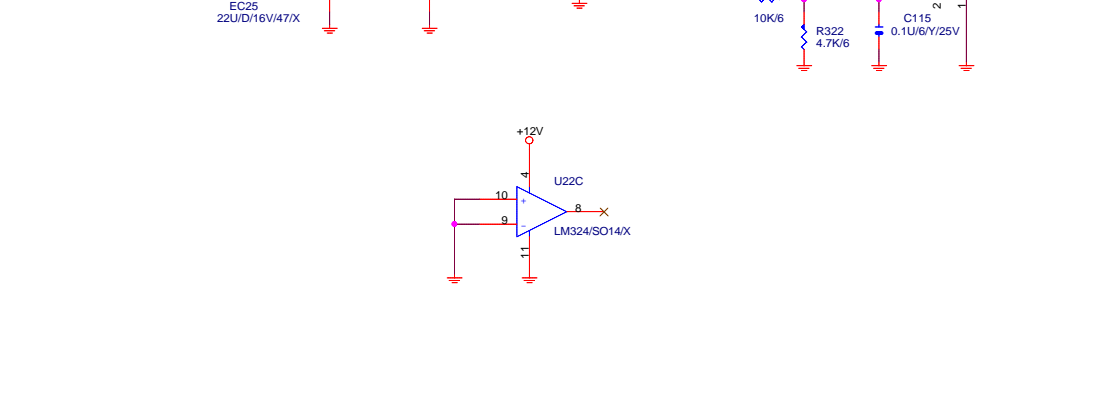
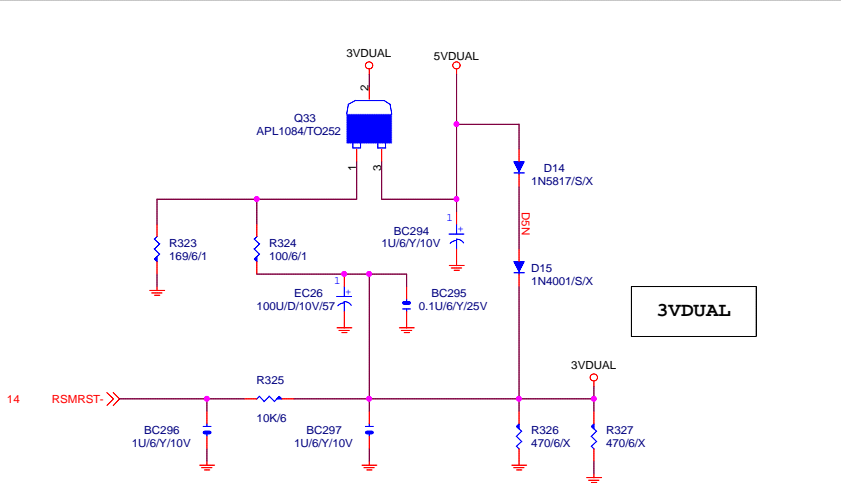
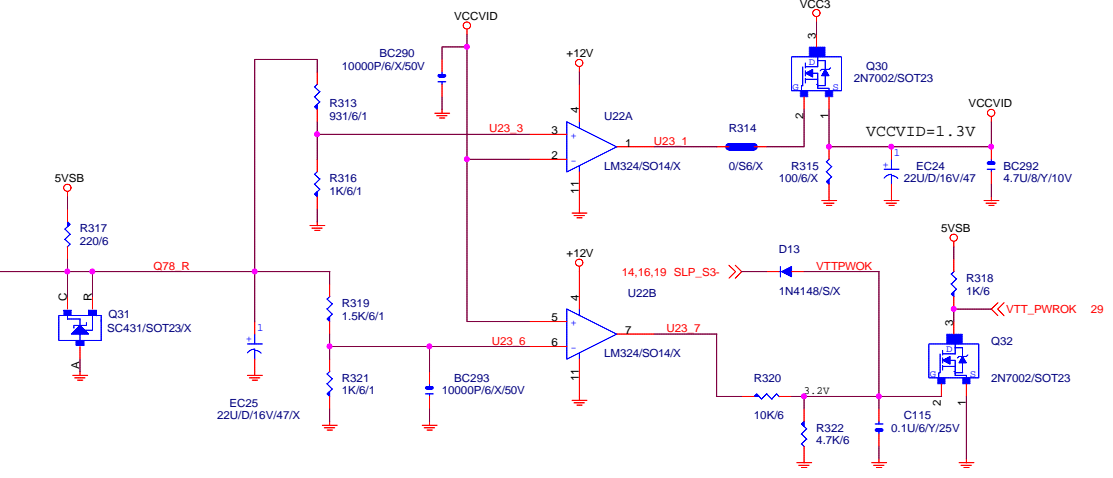
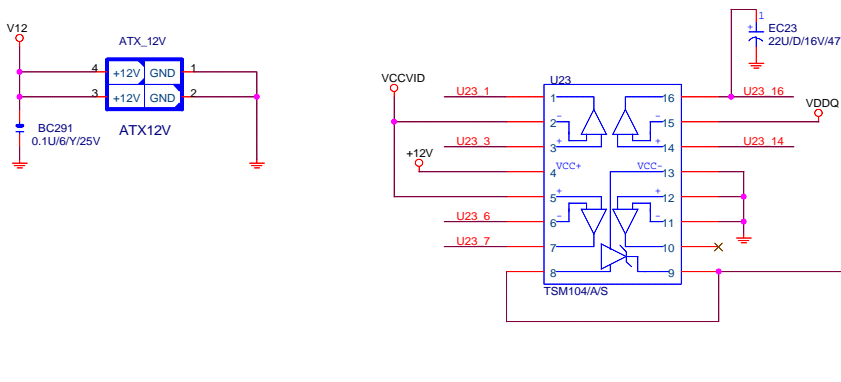
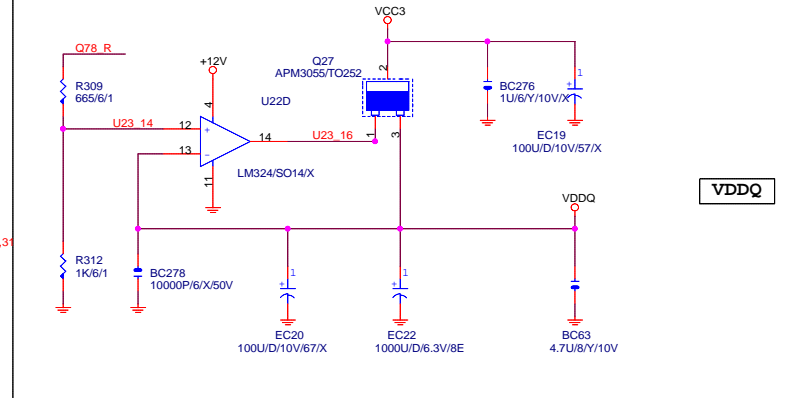
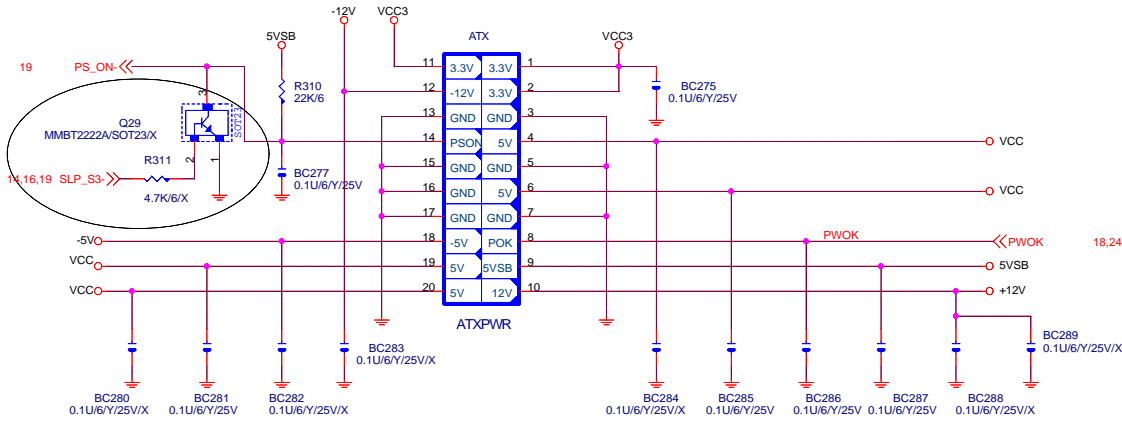
FOR SUPPORT 6 CHANNEL,  
 SURROUND OUT  
 SURR\_CEN\_LFE CENTER OUT, LOW  
 FREQUENCY  
 EFFECT OUT

SIGNAL BYTE		
Title		
<b>LJACK LINE OUT</b>		
Size B	Document Number	Rev
	<b>81845GVMRZ</b>	<b>1.0</b>
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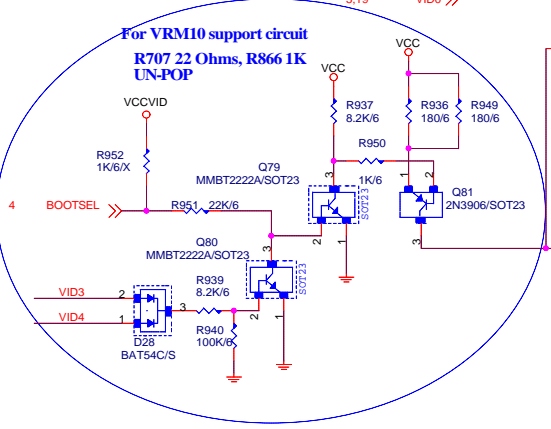
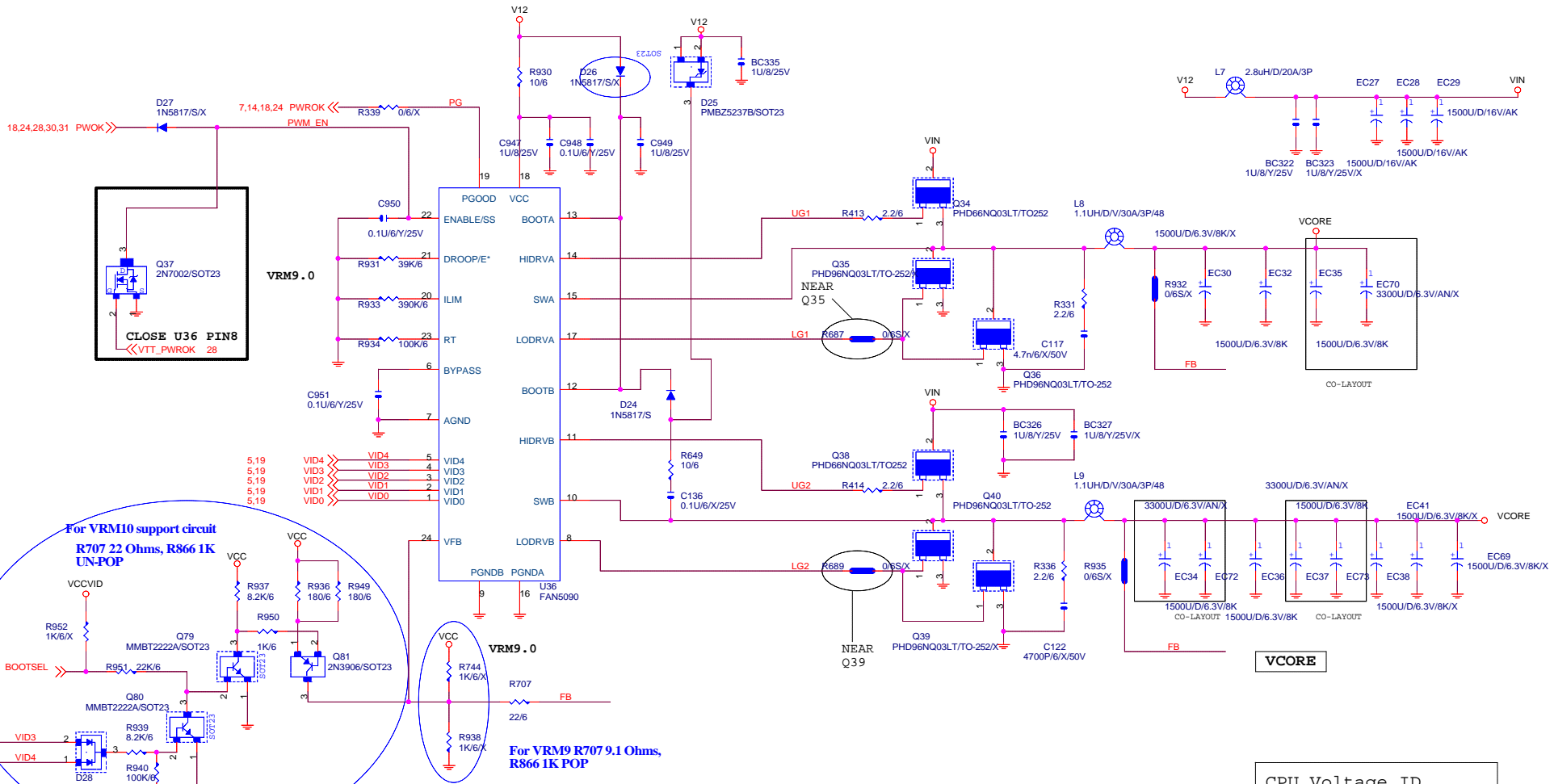


SIBYBYTE		
Title		
<b>PHONE JACK, GAME PORT</b>		
Size	Document Number	Rev
B	<b>81845GVMRZ</b>	<b>1.0</b>
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# ATX POWER CONNECTOR

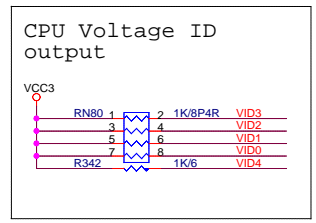
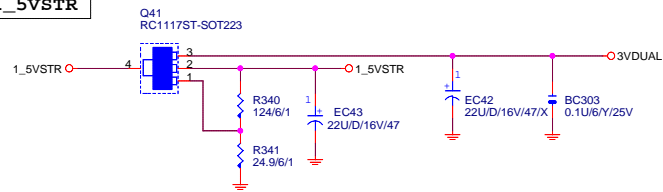


SIGABYTE		
Title		
<b>Misc. PWR &amp; ATX CONN.</b>		
Size B	Document Number	Rev
	<b>81845GVMRZ</b>	<b>1.0</b>
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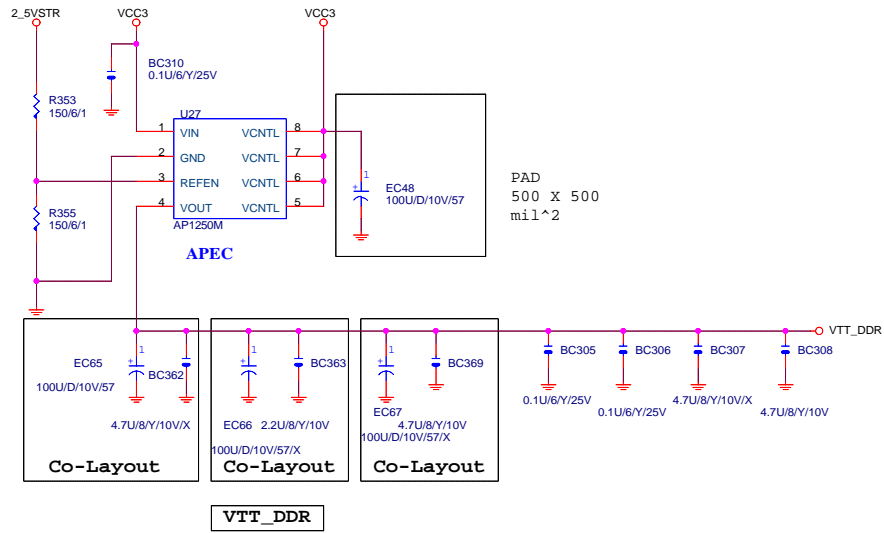
When VID3/VID4=0 & BOOTSEL=1  
VCORE shift down around 775mV

1\_5VSTR

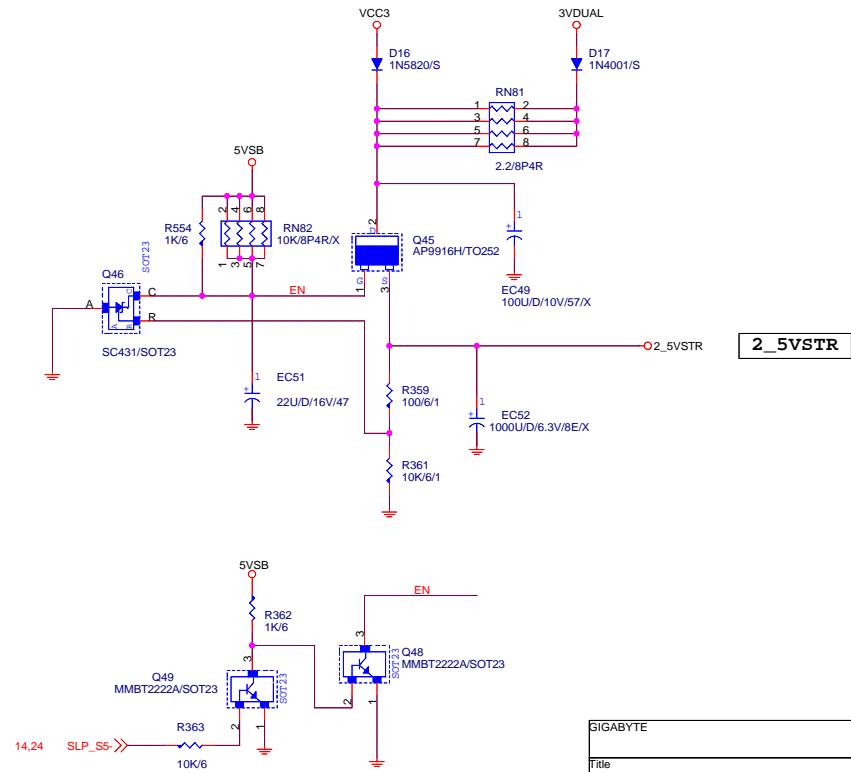
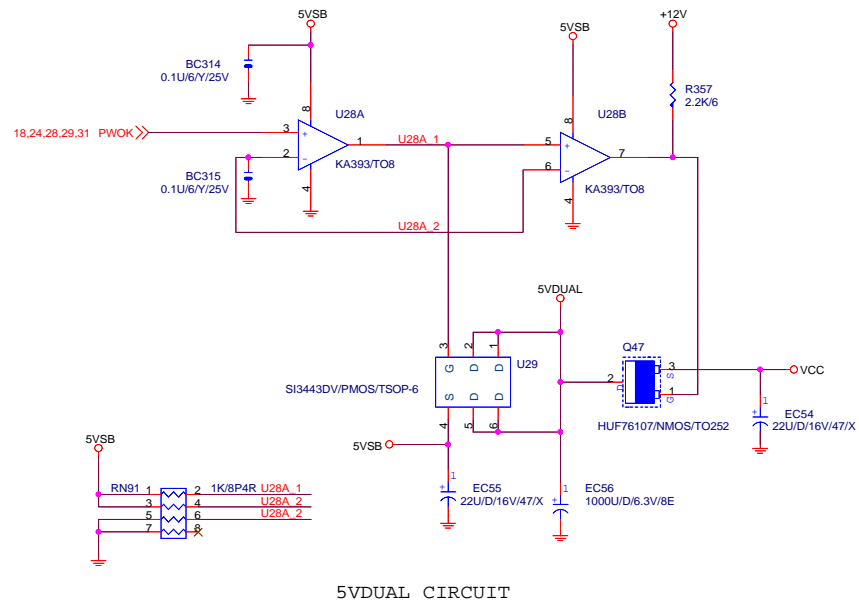


<b>GIGABYTE</b>			
Title <b>VCORE PWM (FAN5090)</b>			
Size	Document Number	Rev	
Custom	<b>8I845GVMRZ</b>	<b>1.0</b>	
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# 1.25V VTT\_DDR LINEAR SOLUTION



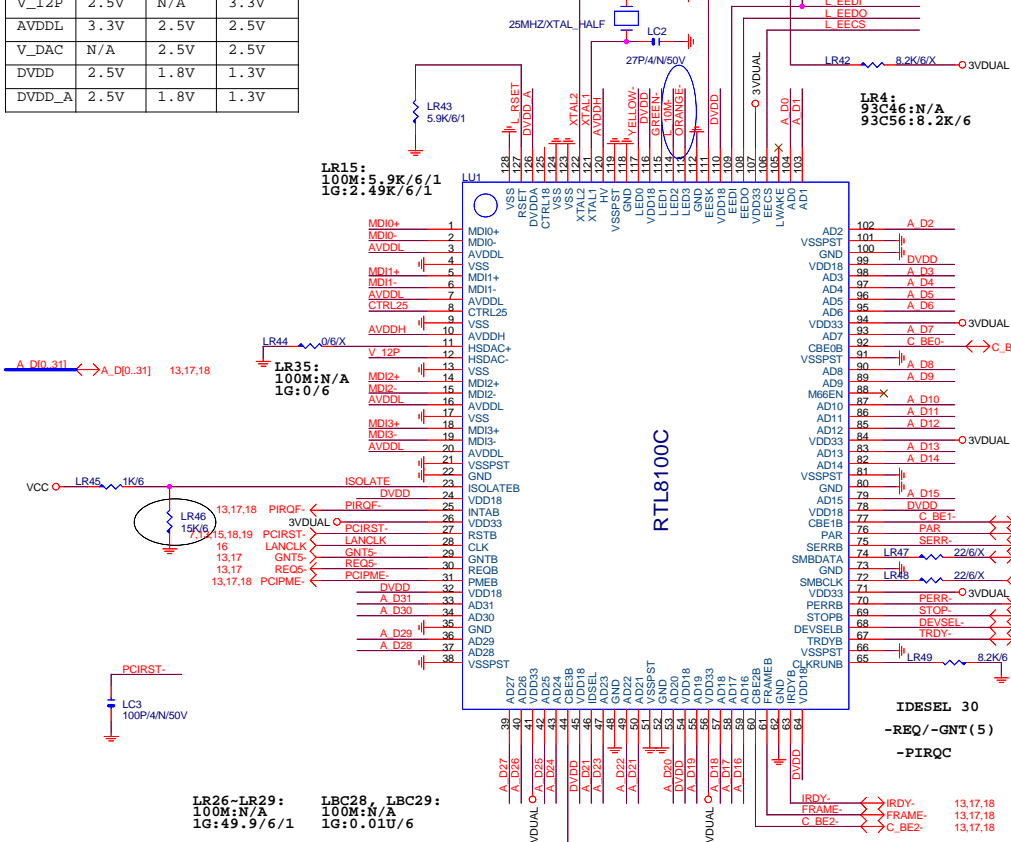
# 5VDUAL



SIGABYTE		
Title		
<b>DDR POWER</b>		
Size B	Document Number	Rev
	<b>8I845GVMRZ</b>	<b>1.0</b>
Date:	星期二, 三月 09, 2004	Sheet 30 of 33

	10/100	Giga	Giga
	8100C	8110S	8110SB
AVDDH	N/A	3.3V	3.3V
V_12P	2.5V	N/A	3.3V
AVDDL	3.3V	2.5V	2.5V
V_DAC	N/A	2.5V	2.5V
DVDD	2.5V	1.8V	1.3V
DVDD_A	2.5V	1.8V	1.3V

LU1:  
100M:RTL8100C  
1G:RTL8110S



LR15:  
100M:5.9K/6/1  
1G:2.49K/6/1

LR35:  
100M:N/A  
1G:0/0/6

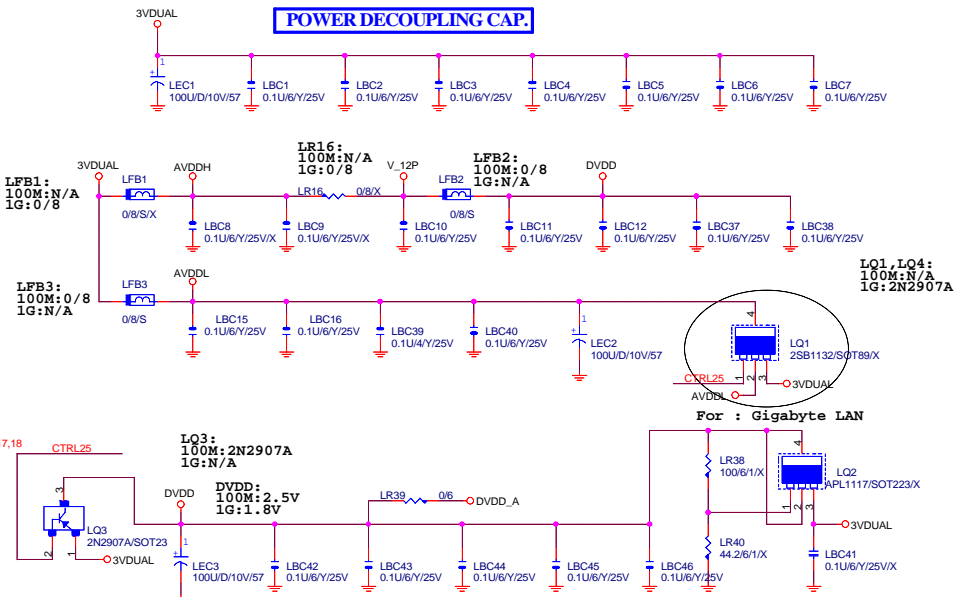
LR26-LR29:  
100M:N/A  
1G:49.9/6/1

LBC28, LBC29:  
100M:N/A  
1G:0.01U/6

LBC23:  
100M:N/A  
1G:N/A

LR17:  
100M:N/A  
1G:0/0/6

IDESSEL 30  
-REQ/-GNT(5)  
-PTRQC



**POWER DECOUPLING CAP.**

LFB1:  
100M:N/A  
1G:0/0/8

LR16:  
100M:N/A  
1G:0/0/8

LFB2:  
100M:0/8  
1G:N/A

LQ1, LQ4:  
100M:N/A  
1G:2N2907A

LQ3:  
100M:2N2907A  
1G:N/A

DVDD:  
100M:2.5V  
1G:1.8V



**LAN EEPROM**

LU2  
93C46/S08

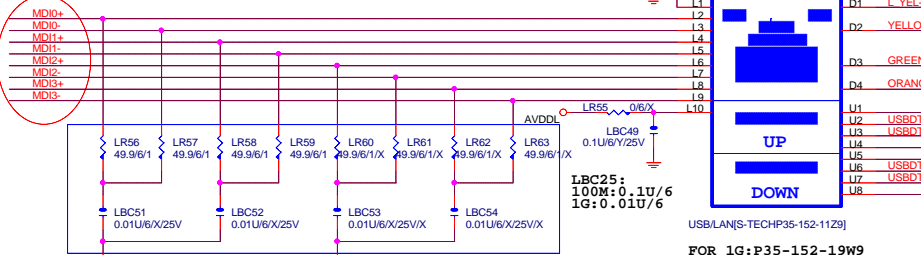
**When Inetl & GBT Gigabit (8110S)**

Note: LEDSI-0 must set to 00 in EEPROM

	Status	Dual Color LED		
		Yellow	Green	Orange
RTL8110S Gigabit	10Mb	---	OFF	OFF
	100Mb	---	ON	OFF
	1Gb	---	OFF	ON
	Link	ON	---	---
RTL8100C 10M/100M	Active	Blink	---	---
	10Mb	---	ON	OFF
	100Mb	---	ON	OFF
	Link	---	ON	---

Title			<b>GIGABYTE</b>	
Size			<b>LAN RTL8100C</b>	
Custom	Document Number	<b>81845GVMRZ</b>		Rev
Date	日期	三月 09, 2004	Sheet	31 of 33

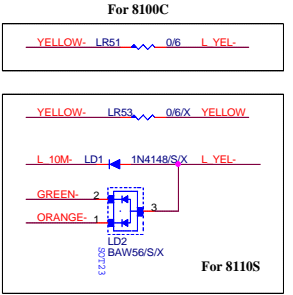
Spacing : at least 50 mils between each differential pair



LR56, LR57, LBC51 Close to Lan Chip  
Realtek suggestion (TX+, TX-).

LR58, LR59, LBC52 Close to Lan Chip  
Realtek Suggestion (RX+, RX-).

FOR 1G:P35-152-19W9  
FOR 100M:P35-152-11Z9



**For 8100C**

**For 8110S**



# GIGABYTE 8I845GVMRZ GPIO LIST

Revision 1.0

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	Document Number	Rev
Custom	8I845GVMRZ	1.0
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# GIGABYTE 8I845GVMRZ 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-
	19				
	20				
	21				
	26				
	28				
	23				
	NA				

<b>GIGABYTE</b>		
Title		
PCI ROUNT LIST		
Size	Document Number	Rev
Custom	8I845GVMRZ	1.0
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