

# GIGABYTE GA-6IEM Schematics

Revision:1.1A

SHEET

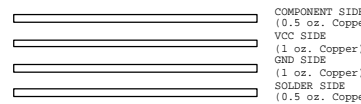
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05	SOCKET370 CPU-3
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TITLE

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PCB	群祥 ,育富 ,統盟
DESIGNER	WINFRED-LIN

	
<b>GIGABYTE</b>	
Title <b>COVER SHEET</b>	
Size Custom	Document Number <b>GA-6IEM</b>
Date: 星期一, 一月 03, 2000	Rev <b>1.1</b>
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# GA-6IEM REV:1.1A

## Component value change history 2001/10/19

Date	Change Item	Reason
2001/10/19	N/B Heat-Sink 用有固定柱	9M6IEM-00-01 change to 9M6IEM-00-10A
2001/10/19	IUCD 1.81 change to iucd1.9	
2001/10/19	D22,D23 1N4001 change to 1N4148	3VDUAL 轉 18DUAL sch.
	BC270,BC271 0.1u change to 1u	
	R600 470/6 change to 2.2K/6	
	R916 add 0/6	
	D28 1N5817 remove	
2001/10/19	R514 add 100/6/1	5VDUAL 轉 3VDUAL SCH.
	R513 add 165/6/1	
	Q32 add LX8117/TO223	
	D31,D32 1N4001/S remove	
	R457,R787 470/6 remove	
2001/10/19	C283,C284 1u/6 change to 2.2u/8	Audio LINE-IN CAP.
2001/10/19	R281,R795 33/6 change to 22/6	APIC Clock
	BC259 add 10P/6	APIC_ICH2 末端
2001/10/19	R865 220/6 change to 330/6	VTT voltage lower
2001/10/19	R83,RN15 2.2K/6 470/6	FDD pull-up
2001/10/19	R862 47/6 change to 8.2/6/1	Transient
	R856 12K/6 change to 8.2K/6	
	R867 1K/6 remove	
2001/10/19	U9 RTM560-50R change to ICS950508BF	WIN2000 install
2001/10/19	BC181 0.1u/6 remove	工廠插件 issue VCC3 by pass CAP.
2001/10/19	R697,R698,R809,R810 0/6 remove	add Front Audio
2001/10/19	R876 0/6 remove	RC431 VTTG PIN
2001/10/30	Q32 LX8117/TO223 change to APL1084/TO252	9M6IEM-00-10B
2001/10/31		ADD CASE OPEN FUNCTION 9M6IEM-00-10C
2001/11/02		FOR EMI SOLUTION 9M6IEM-00-11A

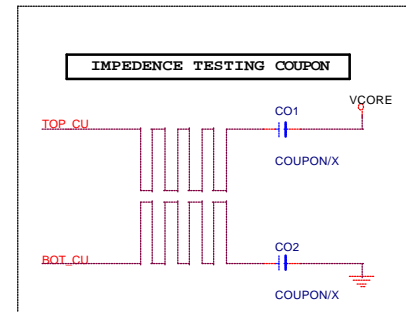
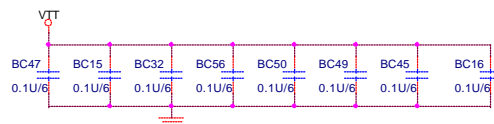
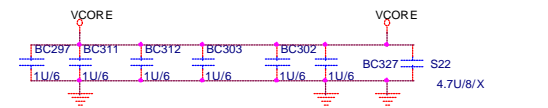
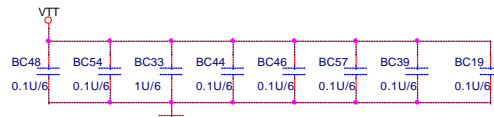
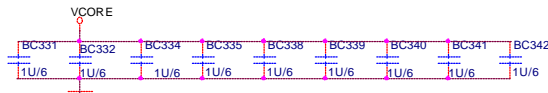
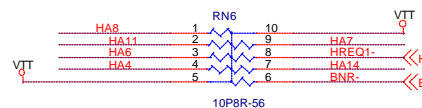
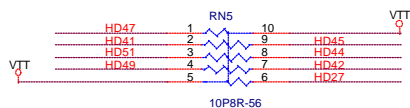
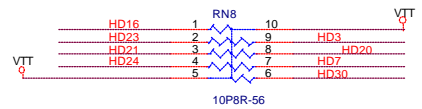
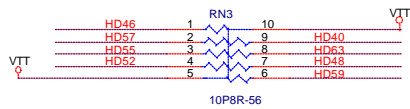
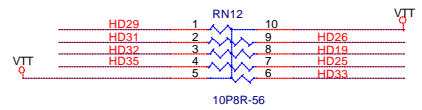
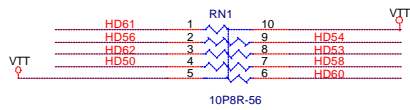
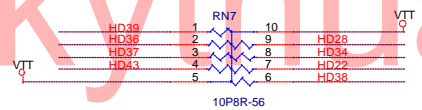
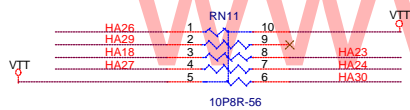
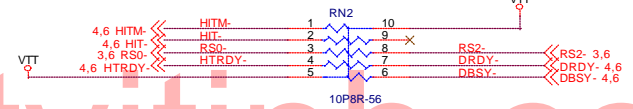
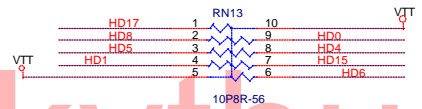
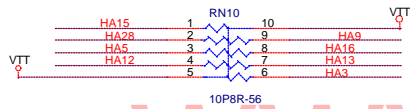
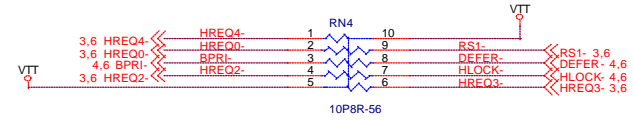
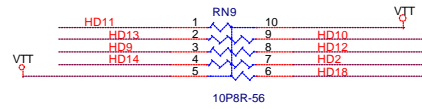
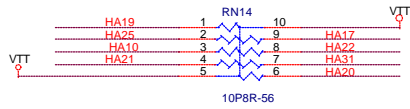
## Circuit or PCB layout change for next version

Date	Change Item	Reason
2001/10/12	SR0603 short 0 ohm	change package
2001/10/12		sample,solder side 文字面 remove
2001/10/12	工廠 open issue 1,2,4,5,6,7,8	
2001/10/12	C283,C284 0603 chnage to 0805	audio presition
2001/10/12	JP32 front USB	package pin error
2001/10/12	add BC259 0603	add APIC_ICH2 CAP.
2001/10/12	Q91,Q86 背板鋪銅	散熱
2001/10/12	3VDUAL 轉 18VDUAL SCH.	NOTE
2001/10/12	BC181 REMOVE	工廠插件 ISSUE
2001/10/12	DOTCLK 切割	
2001/10/12	clock GEN. PWROK add R2 0/6	clock GEN. change to ICS950508BF
2001/10/12	on-board VGA add 0/6	short A-GND to GND
2001/10/19	add pull up 12V resistor	WIN2000 copy and compare fail
	Q96 RC431 layout close to Q91	MOSFET
	REV1.1	
2001/11/02	FOR EMI SOLUTION	



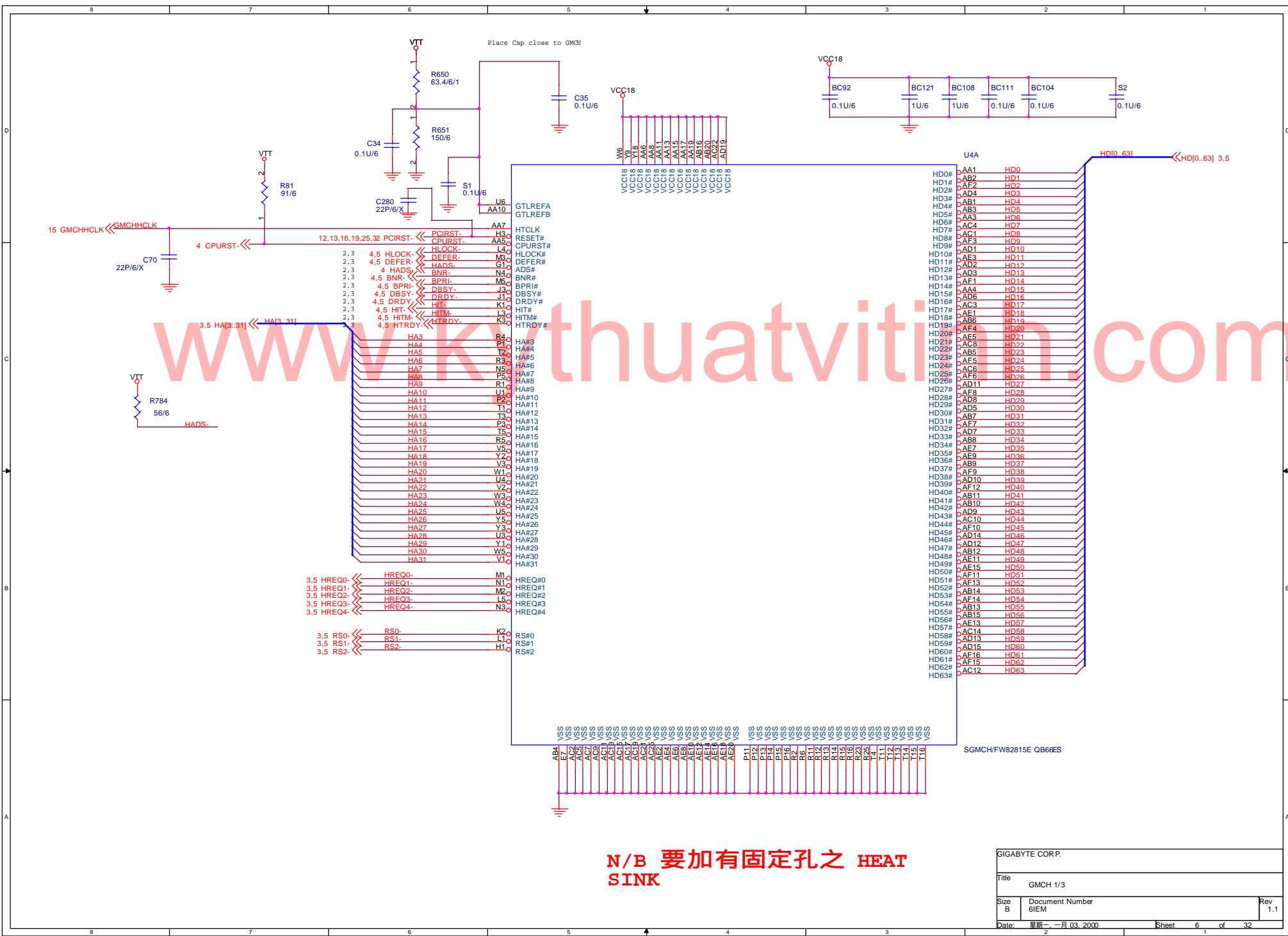


HD[0..63] 3,6  
 HA[3..31] 3,6



**GIGABYTE** GIGA-BYTE TECHNOLOGY Co., Ltd.  
 No. 6, Bau Chiang Road, Hsin-Tien, Taipei Hsien, Taiwan, R.O.C.  
 Tel : (886)89124888 Fax : (886)89124008

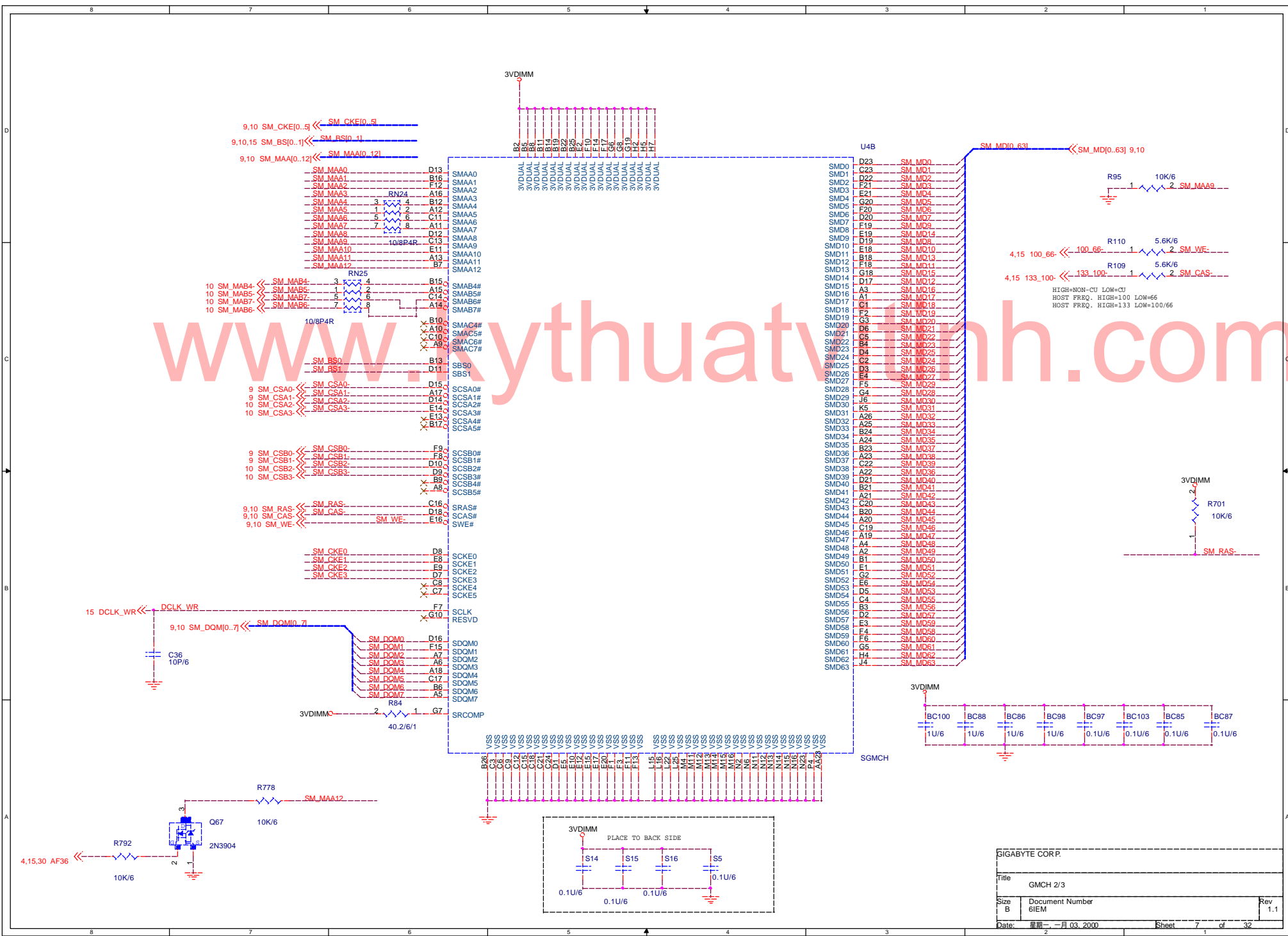
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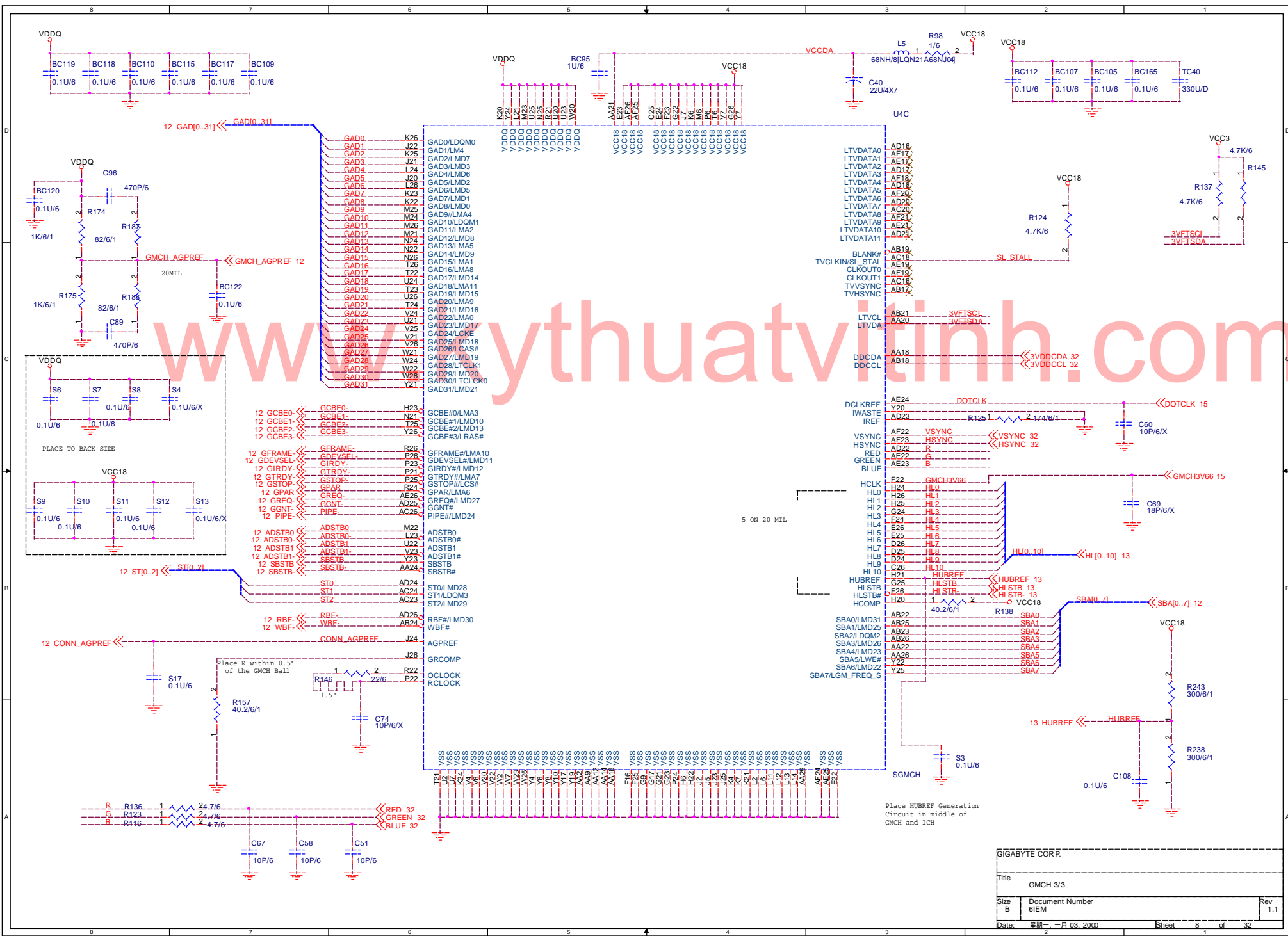
**N/B 要加有固定孔之 HEAT SINK**

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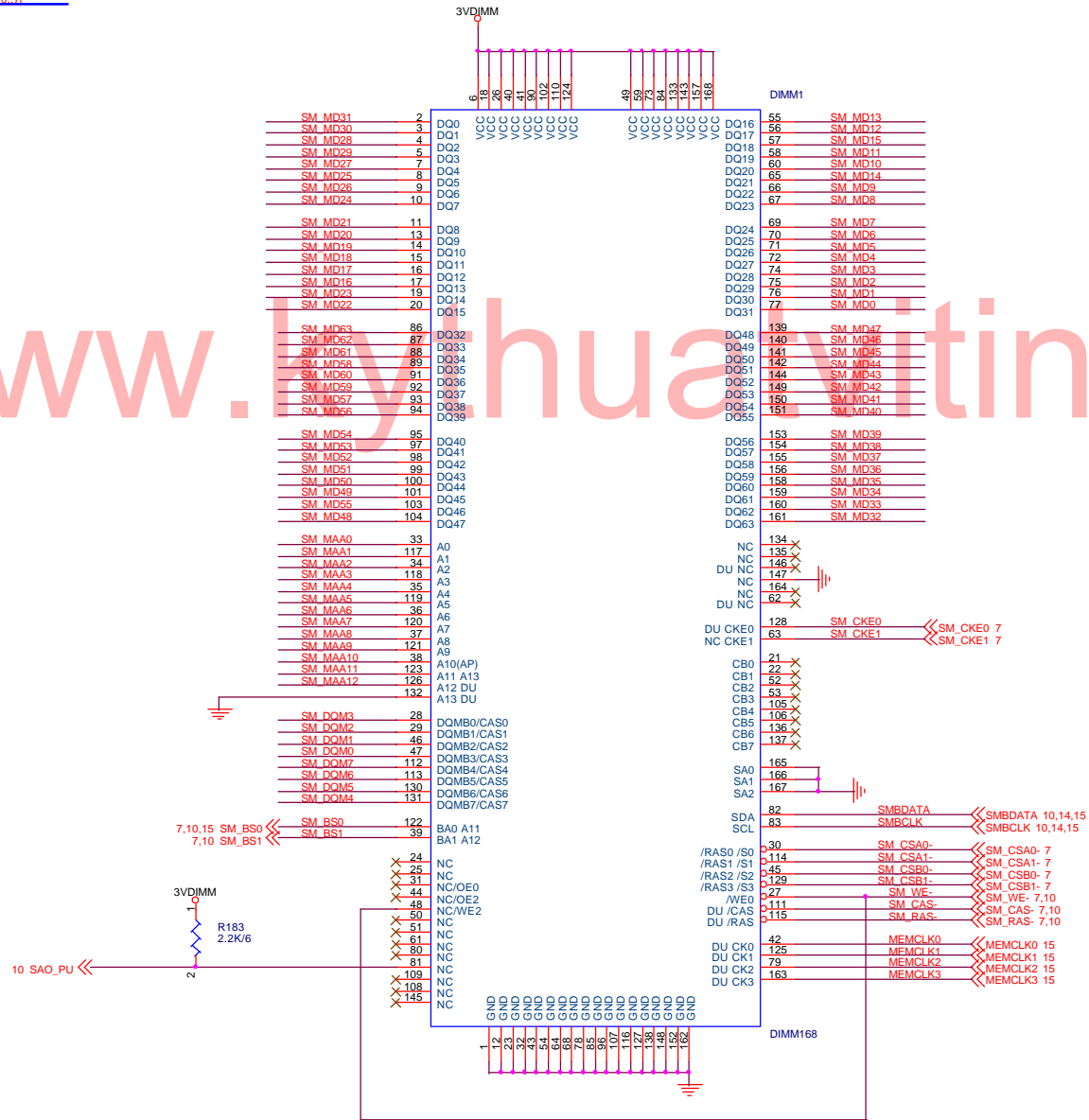


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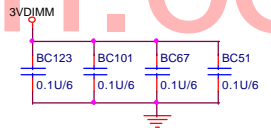
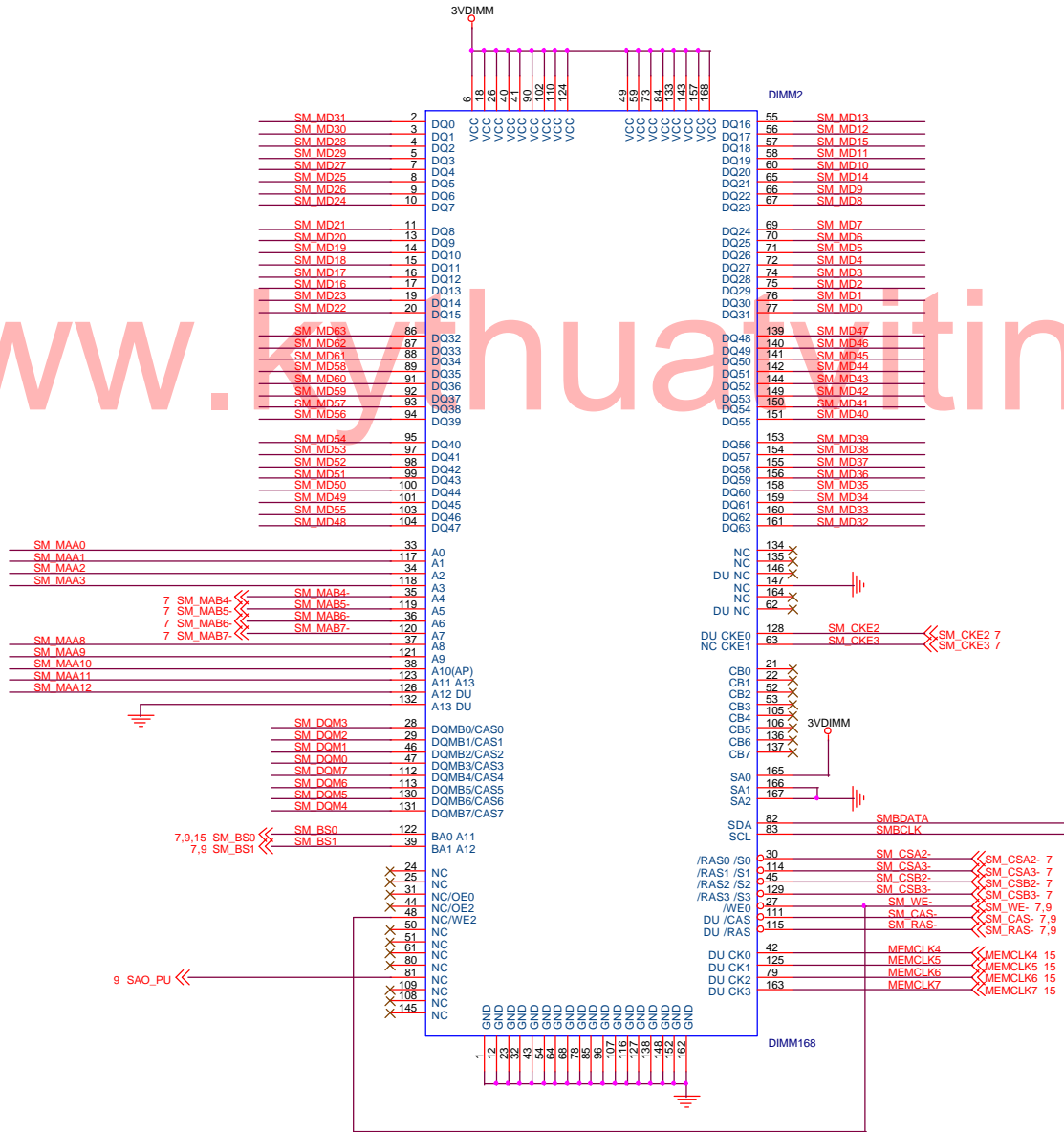
7,10 SM\_MDJ[0..63] << SM\_MDJ0\_631  
 7,10 SM\_MAA[0..12] << SM\_MAA0\_121  
 7,10 SM\_DQM[0..7] << SM\_DQM0\_71

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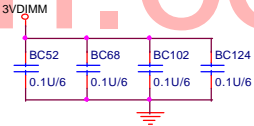
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 7,9 SM\_MAA[0..12] << SM\_MAA[0..12]  
 7,9 SM\_DQM[0..7] << SM\_DQM[0..7]



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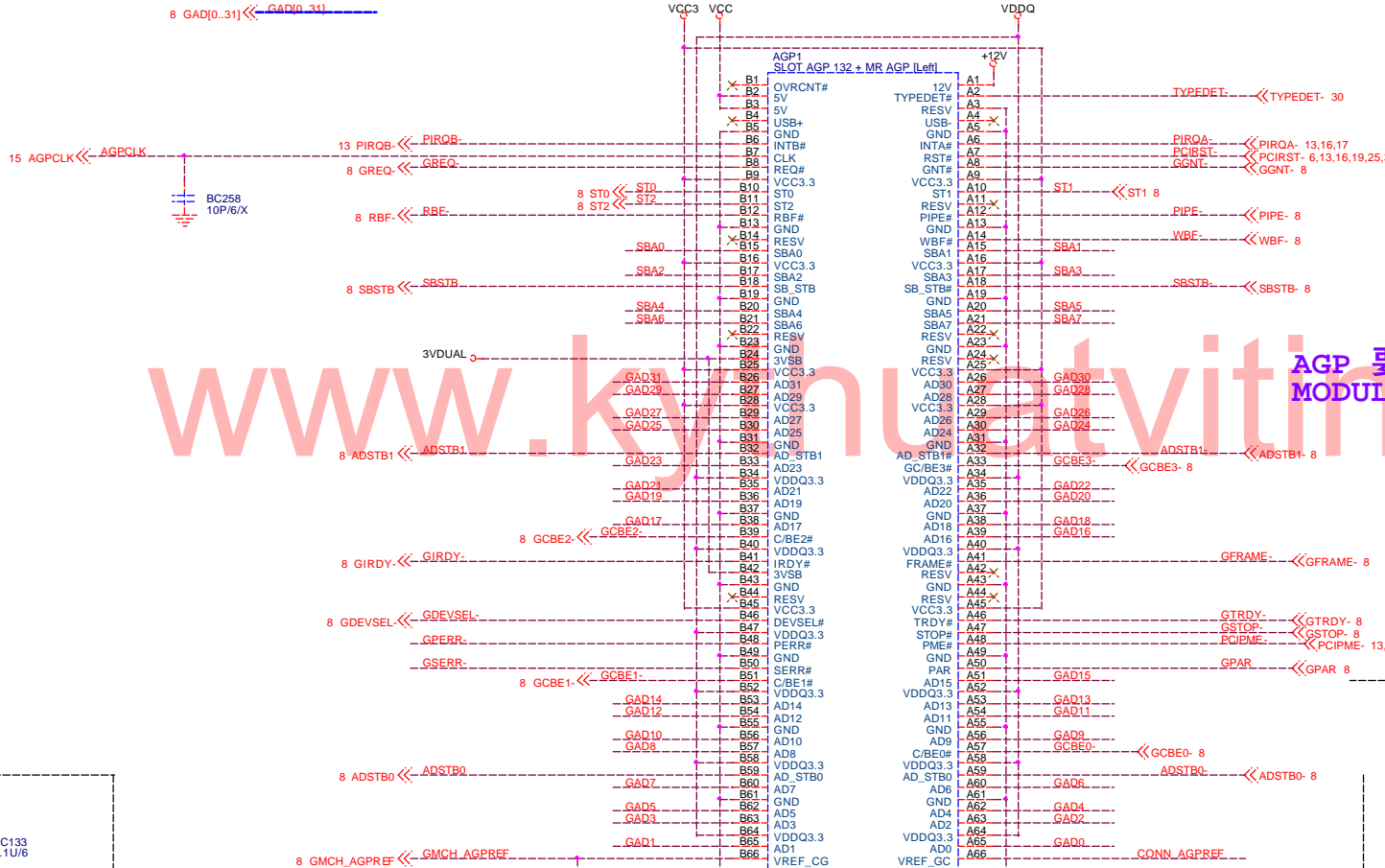
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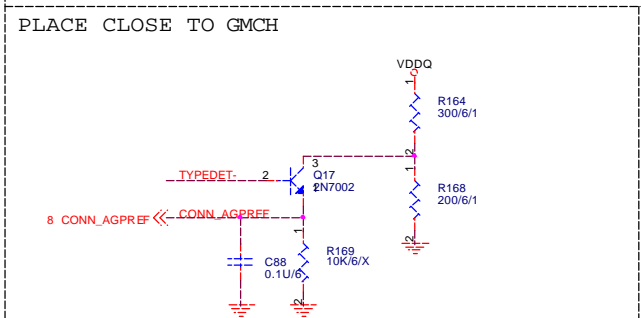
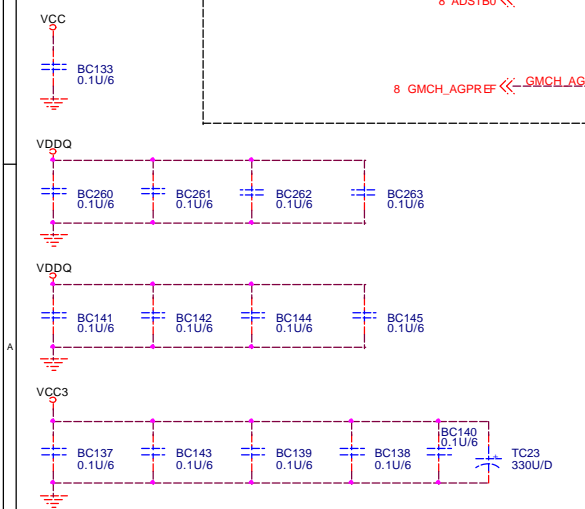


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8 SBA[0..7] << SBA[0..7]  
 8 ST[0..2] << ST[0..2]  
 8 GAD[0..31] << GAD[0..31]

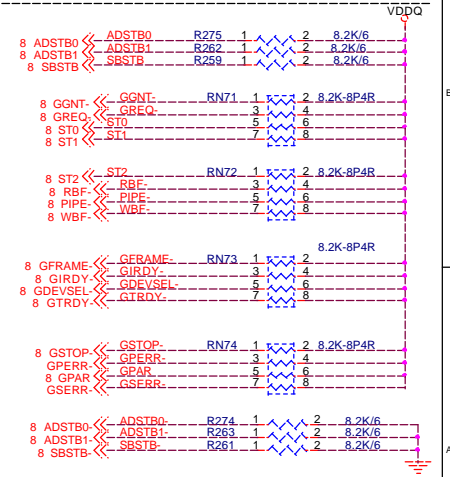


www.knowbitvith.com AGP 要加 RETENTION MODULE



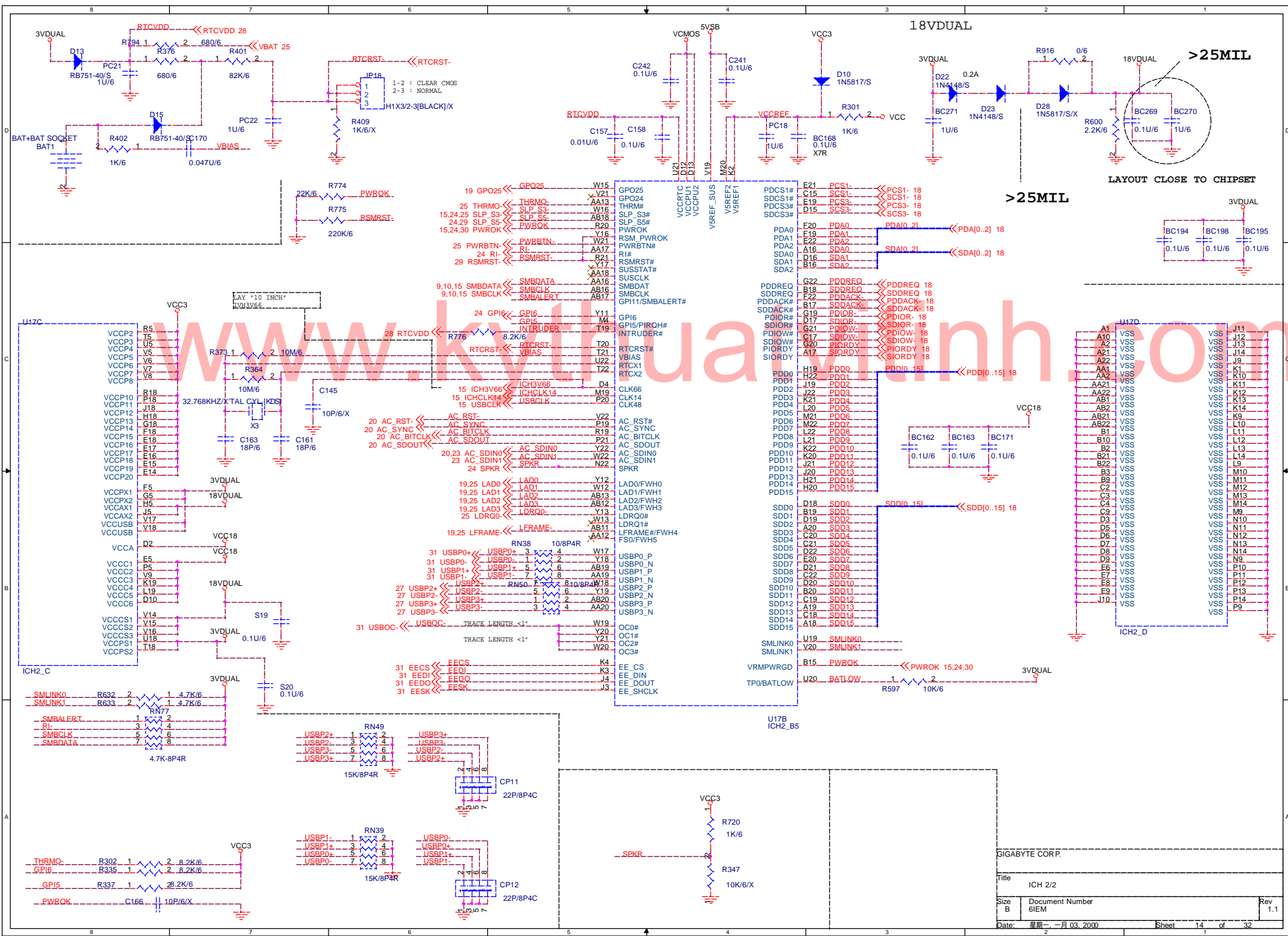
**ADD RM**

PLACE CLOSE TO GMCH

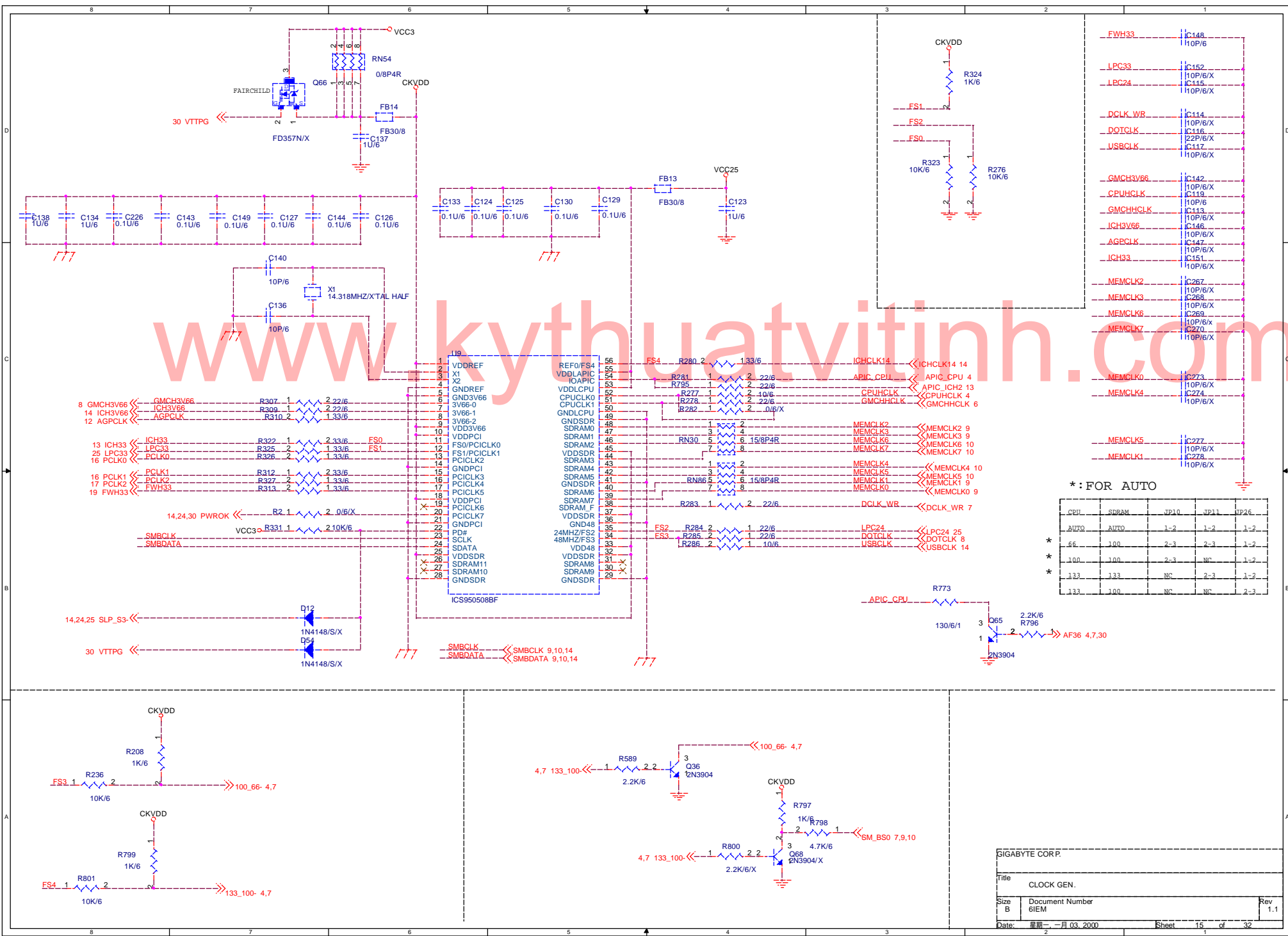


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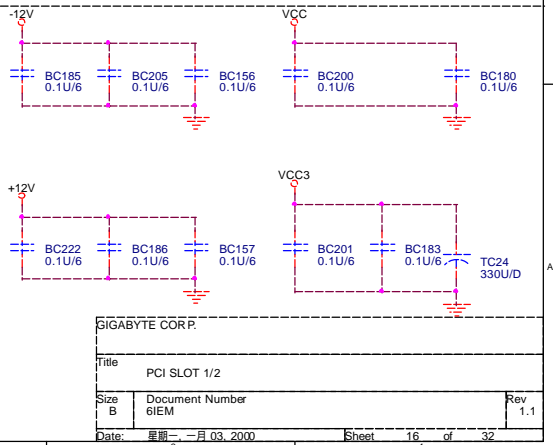
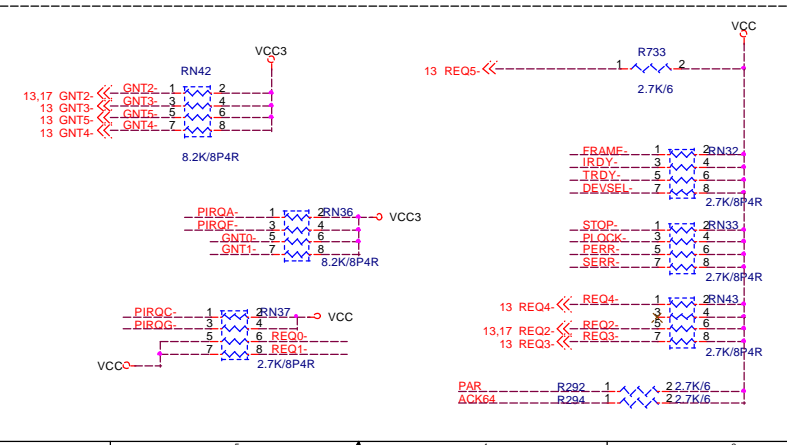
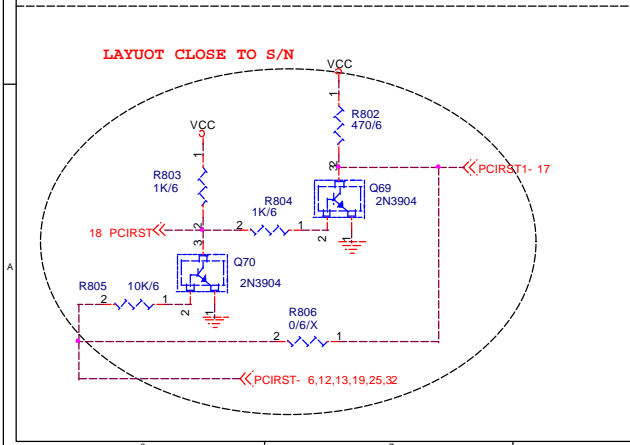
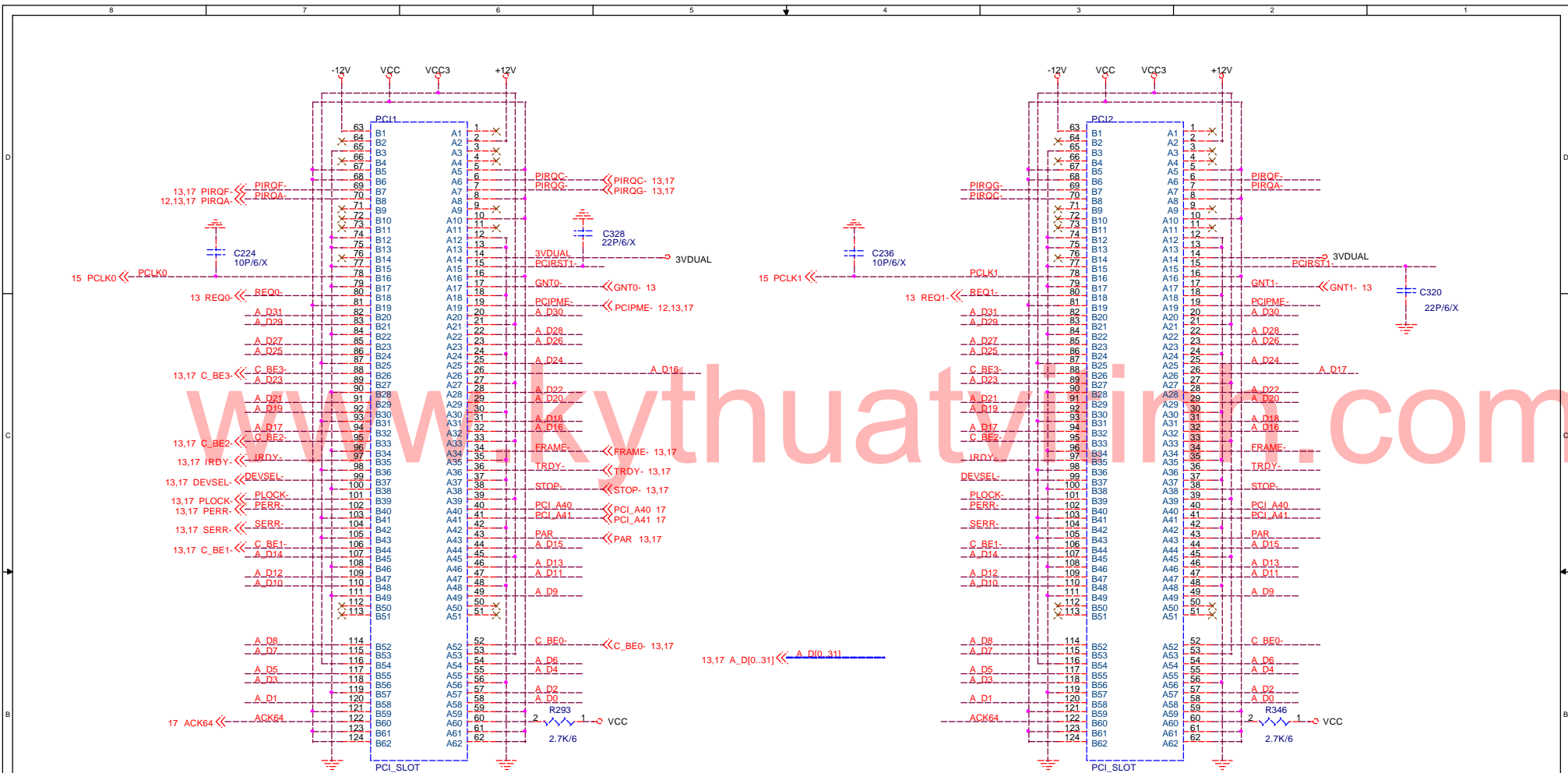
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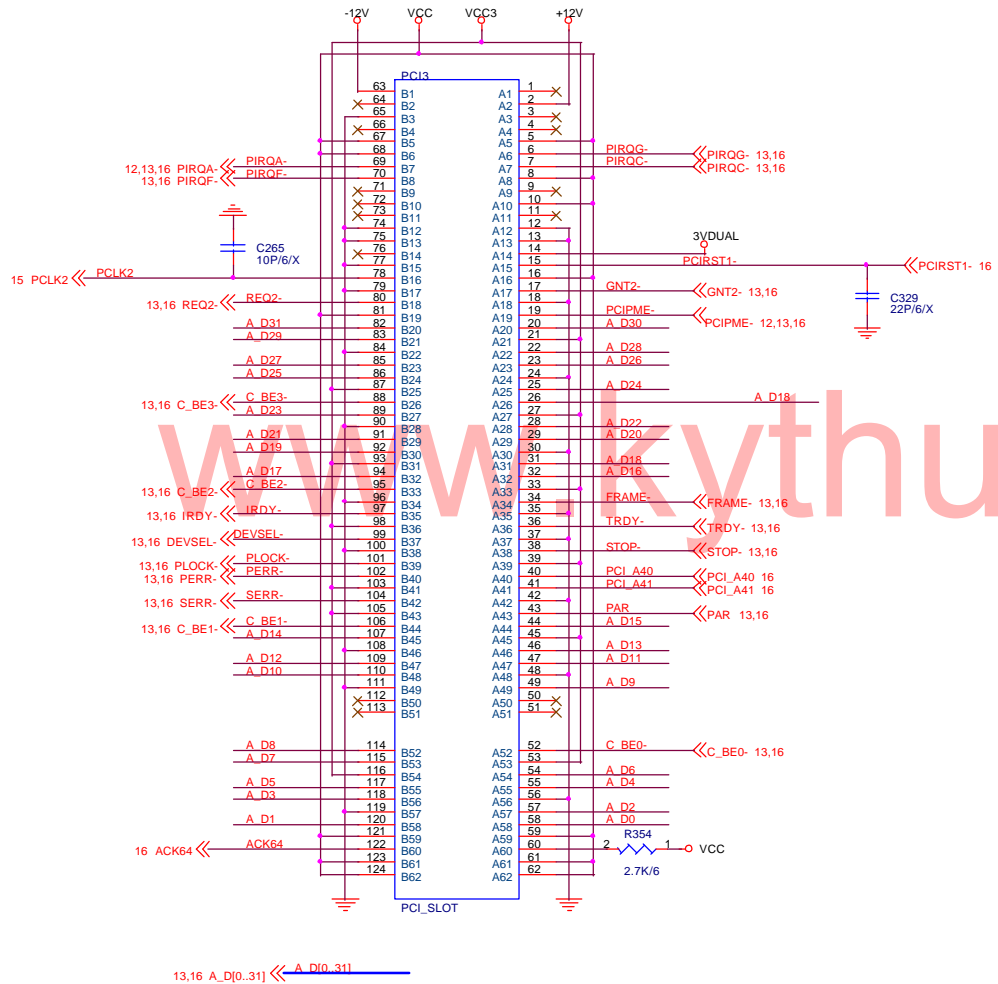
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\*: FOR AUTO

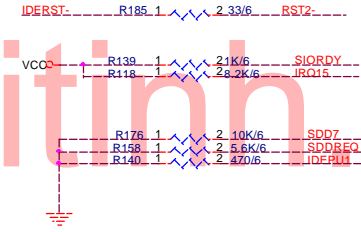
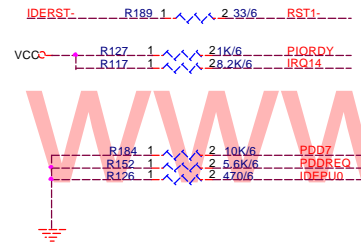
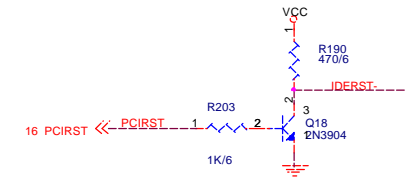
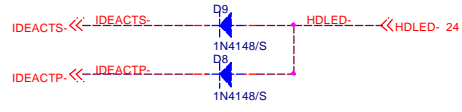
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* 66	100	2-3	2-3	1-2
* 100	100	2-3	NC	1-2
* 133	133	NC	2-3	1-2
133	100	NC	NC	2-3



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Title	PCI SLOT 1/2	
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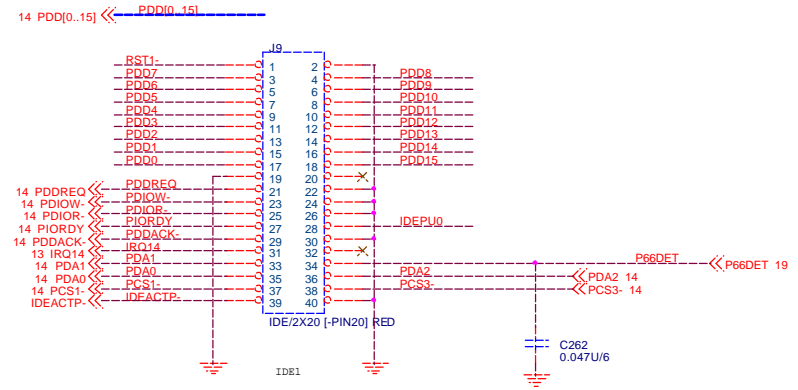


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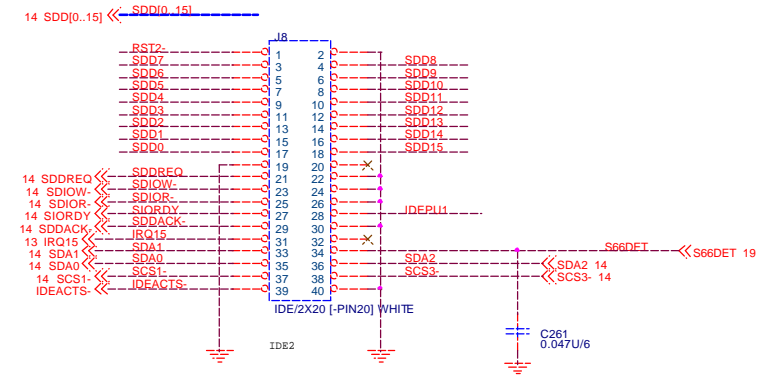


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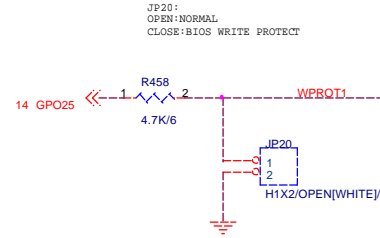
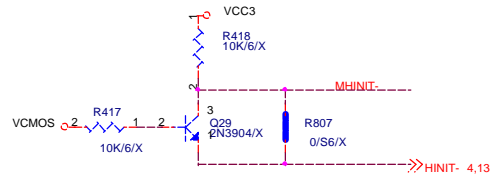
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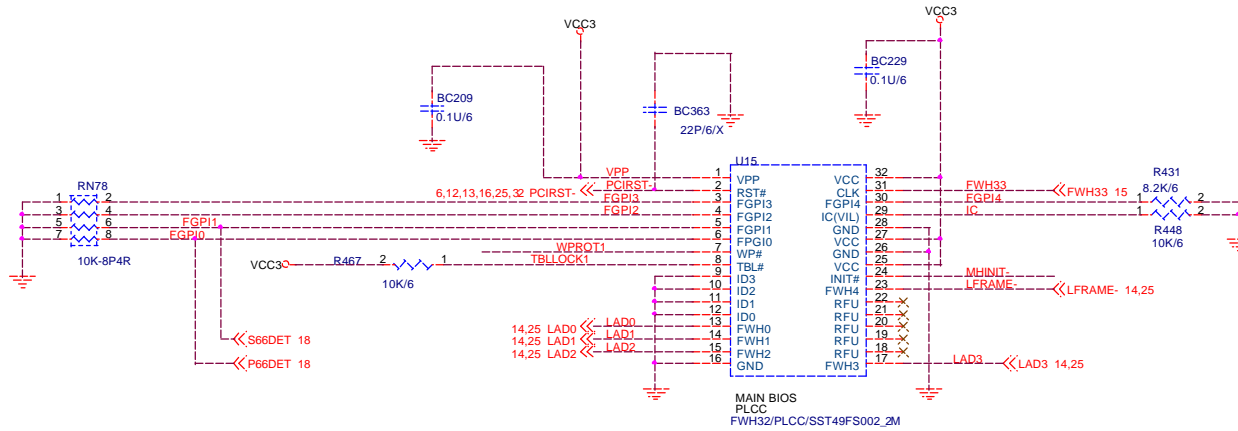
SECONDARY IDE CONNECTOR



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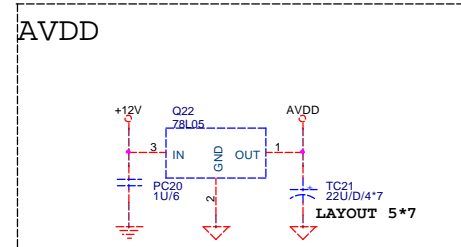
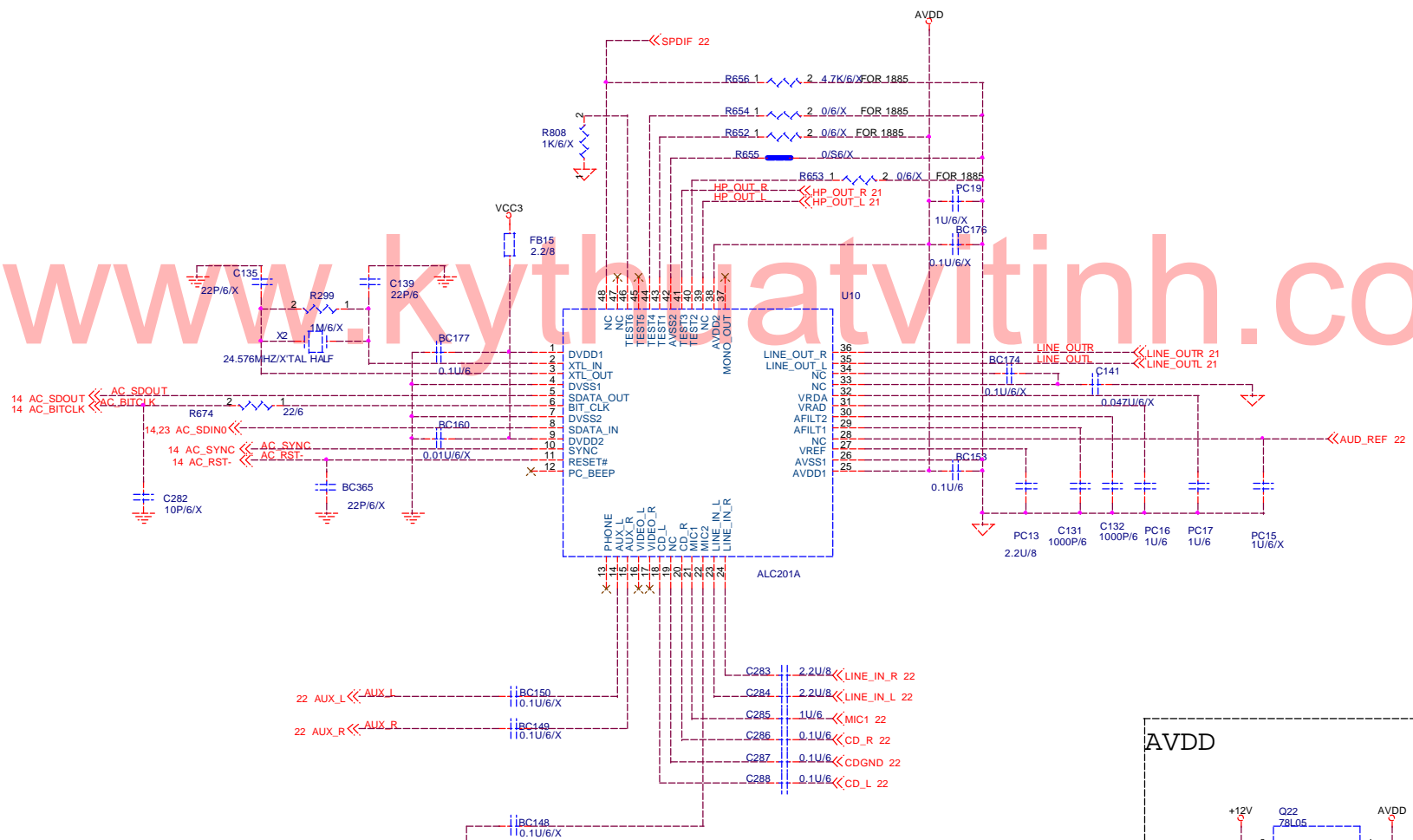


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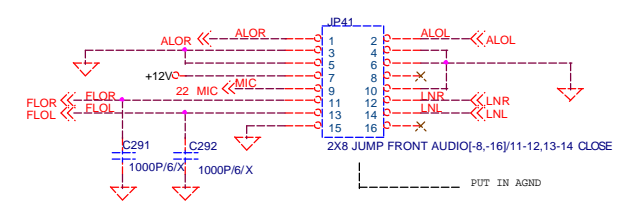
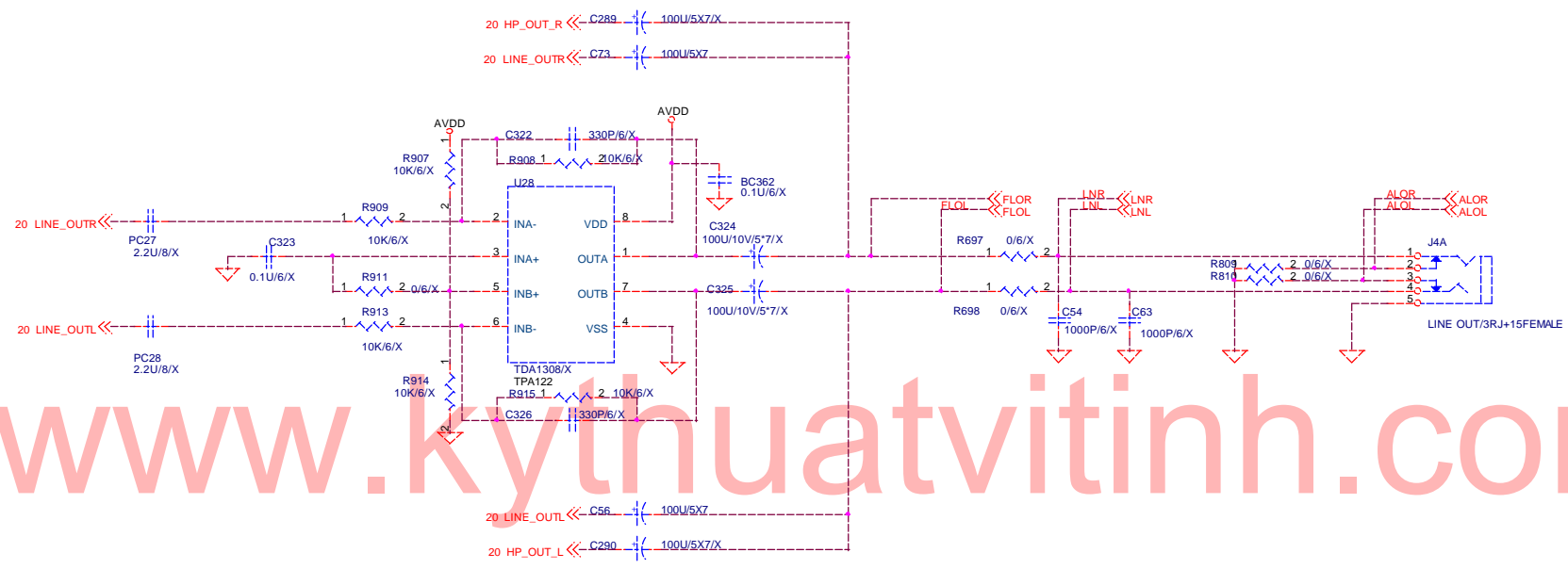
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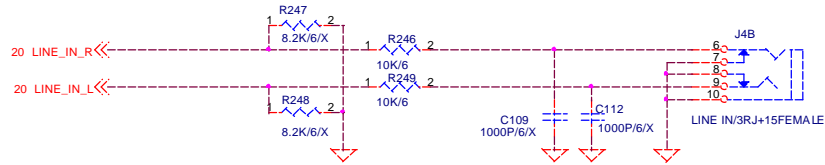
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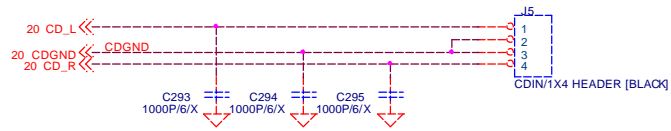


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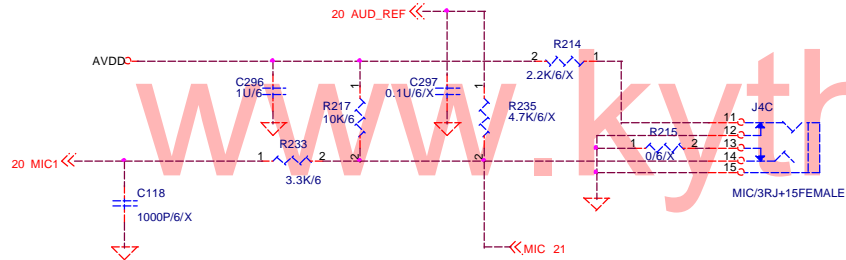
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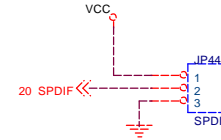
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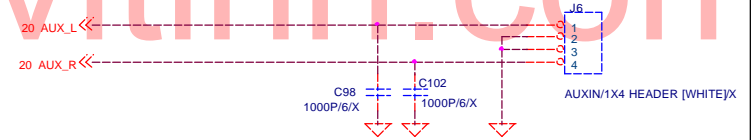
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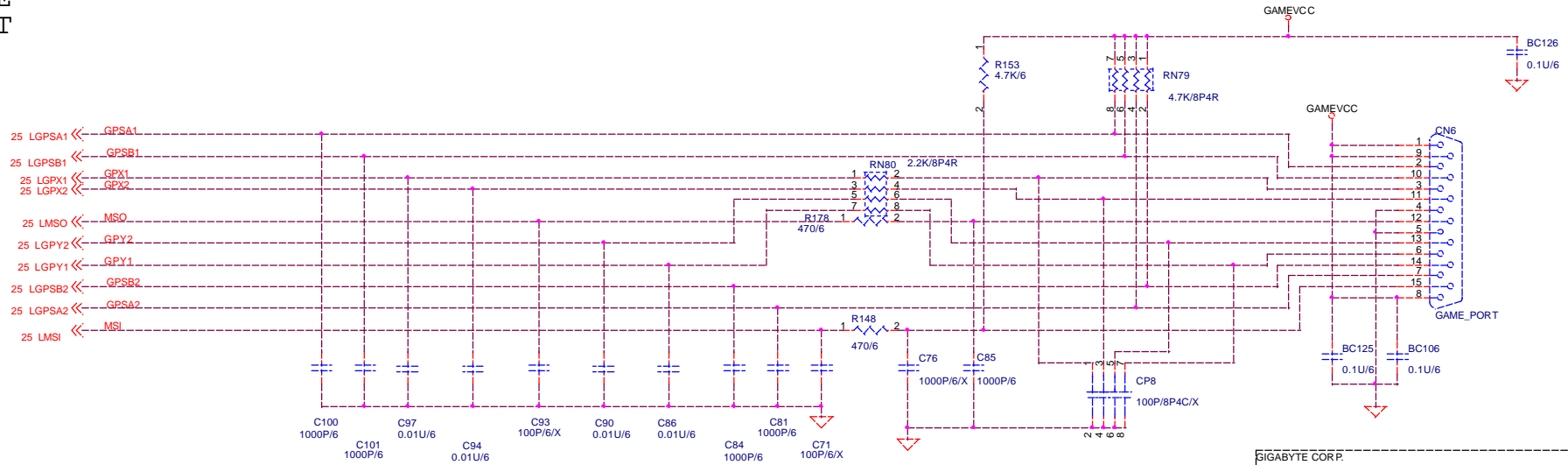
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AUX IN

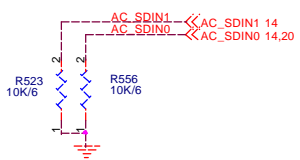


GAME PORT

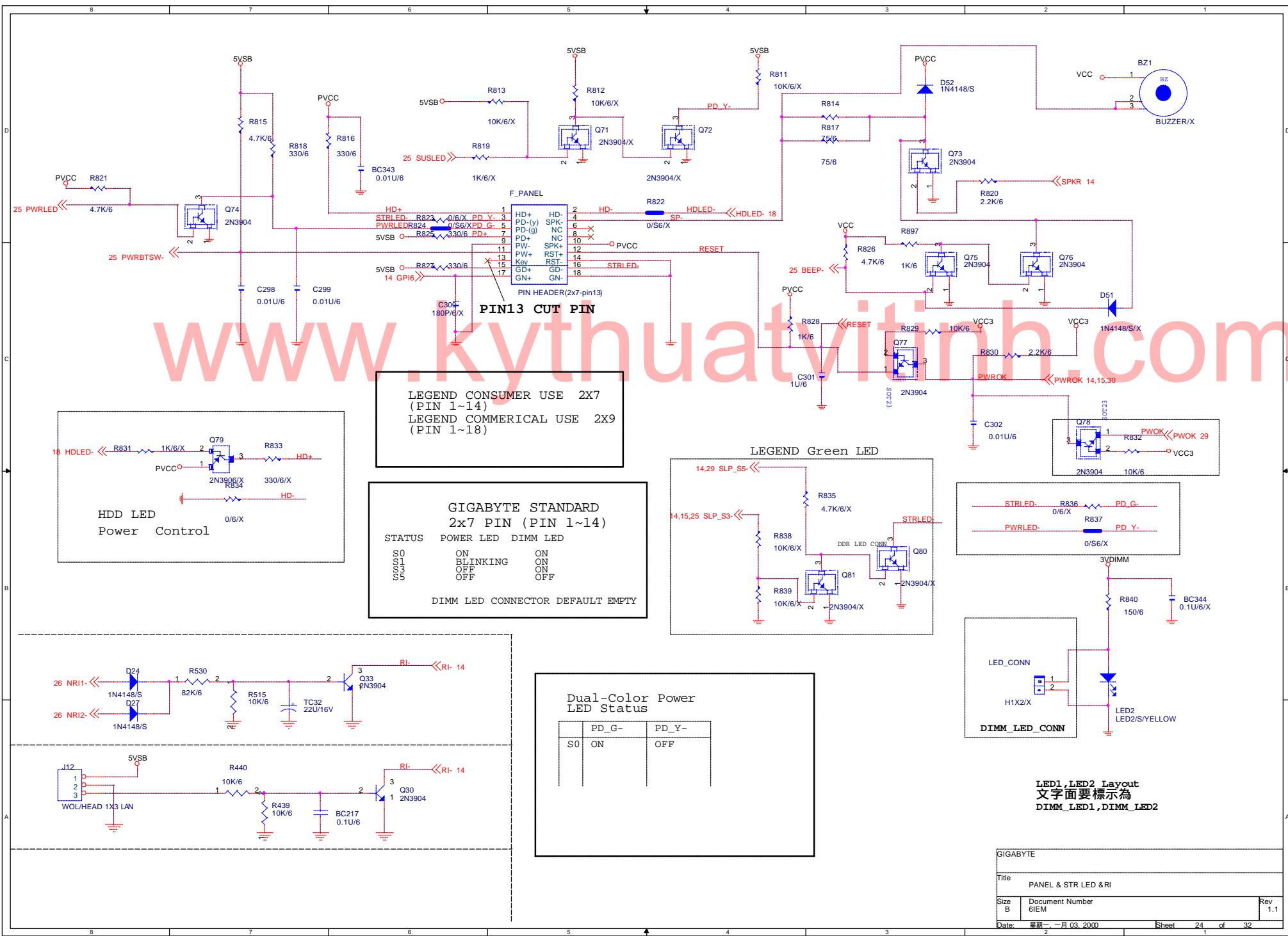


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GIGABYTE	
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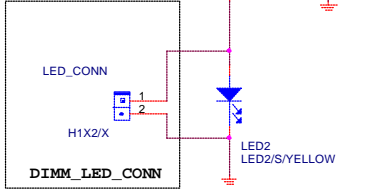
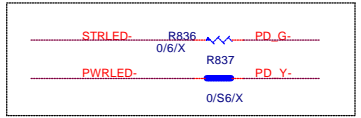
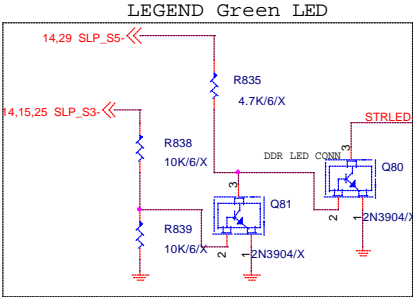
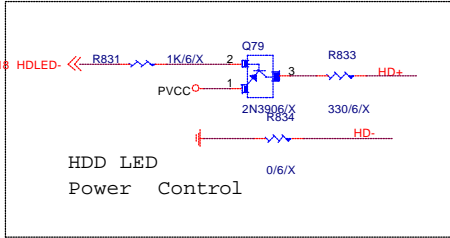
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LEGEND CONSUMER USE 2X7 (PIN 1~14)  
 LEGEND COMMERCIAL USE 2X9 (PIN 1~18)

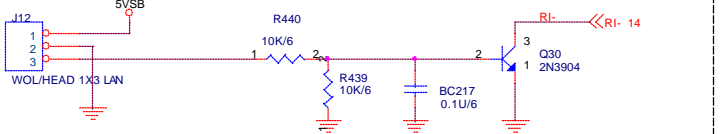
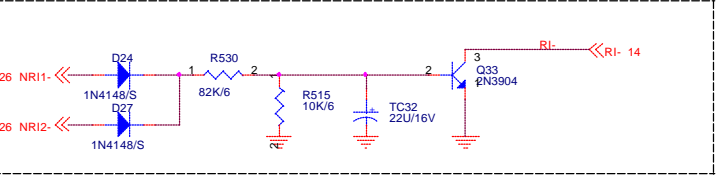
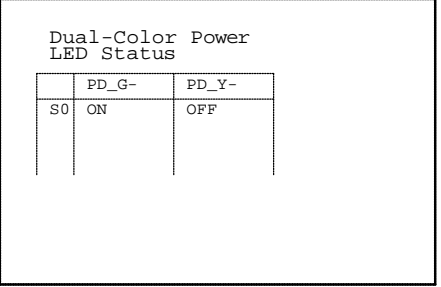
GIGABYTE STANDARD 2x7 PIN (PIN 1~14)

STATUS	POWER LED	DIMM LED
S0	ON	ON
S01	BLINKING	ON
S03	OFF	ON
S5	OFF	OFF

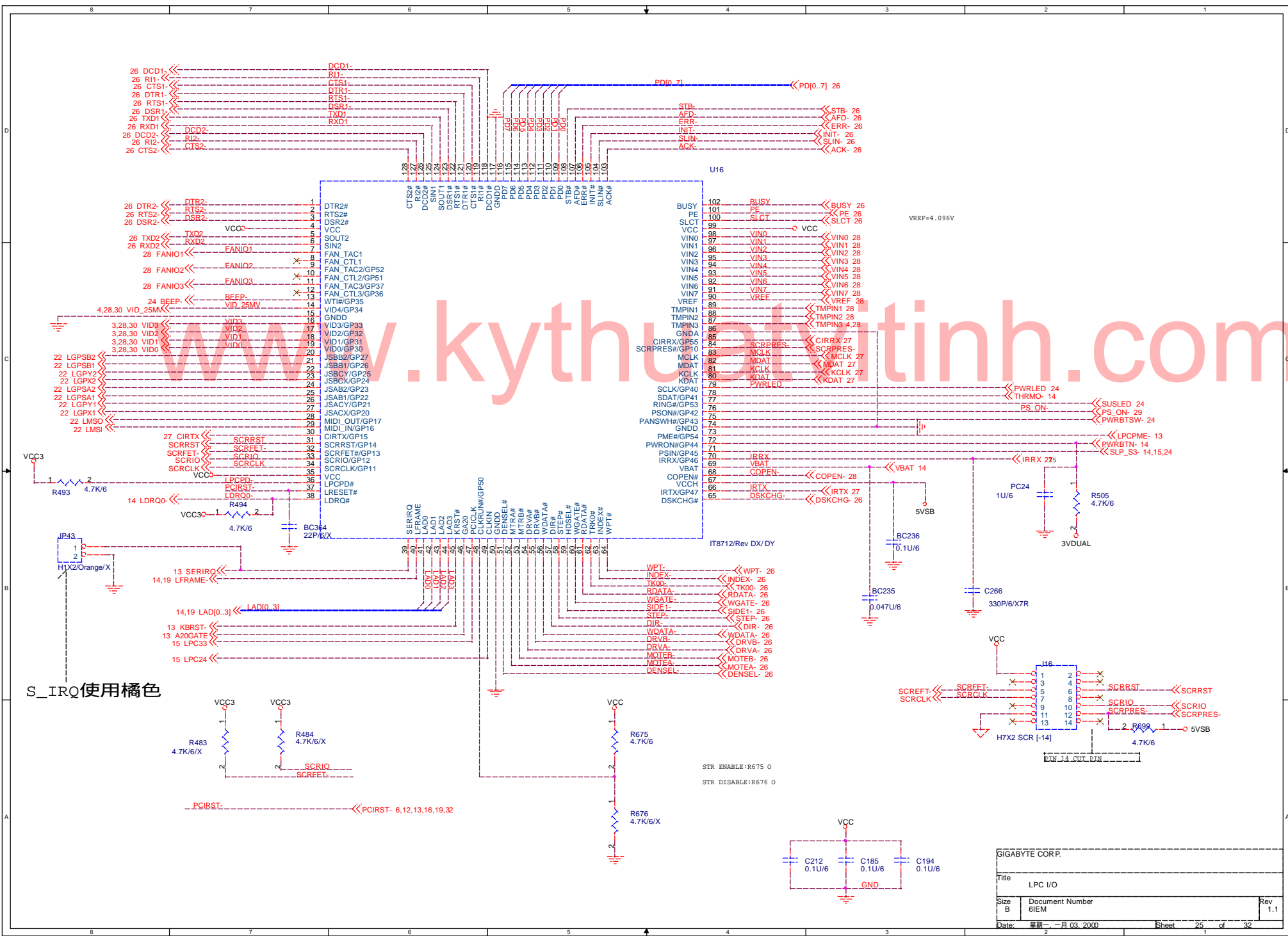
DIMM LED CONNECTOR DEFAULT EMPTY



LED1, LED2 Layout  
 文字面要標示為  
 DIMM\_LED1, DIMM\_LED2



GIGABYTE		
Title	PANEL & STR LED & RI	
Size B	Document Number 61EM	Rev 1.1
Date:	星期一 一月 03, 2000	Sheet 24 of 32

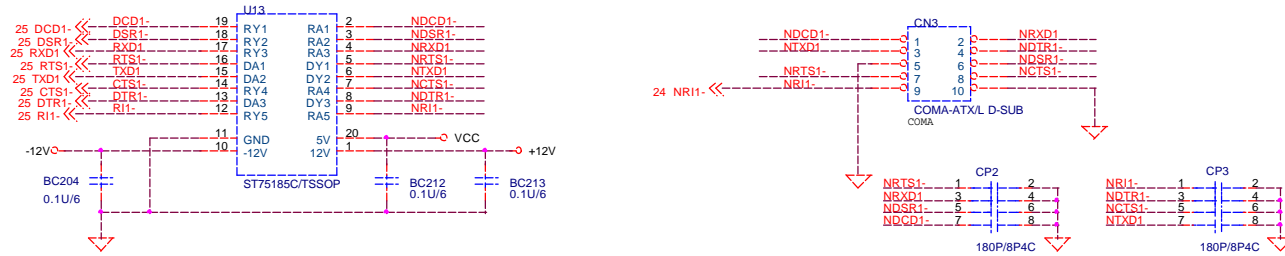


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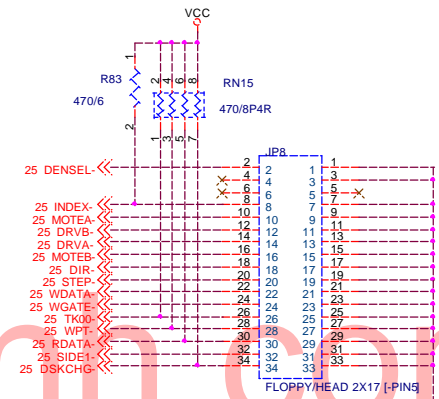
S\_IRQ使用橘色

GIGABYTE CORP.		
Title: LPC I/O		
Size B	Document Number: 61EM	Rev: 1.1
Date: 星期一 一月 03, 2000	Sheet: 25	of 32

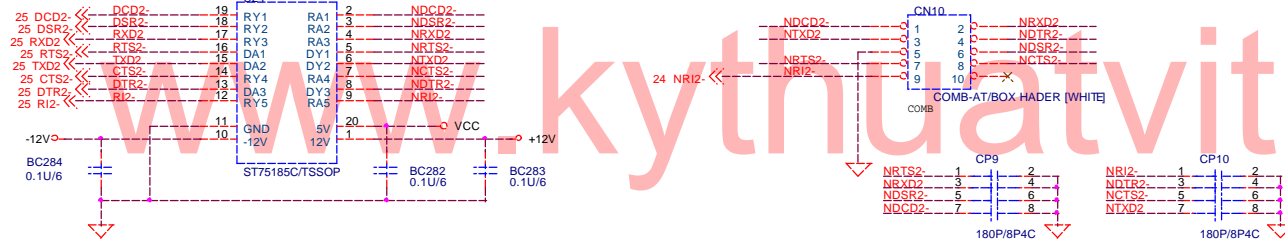
### COMA



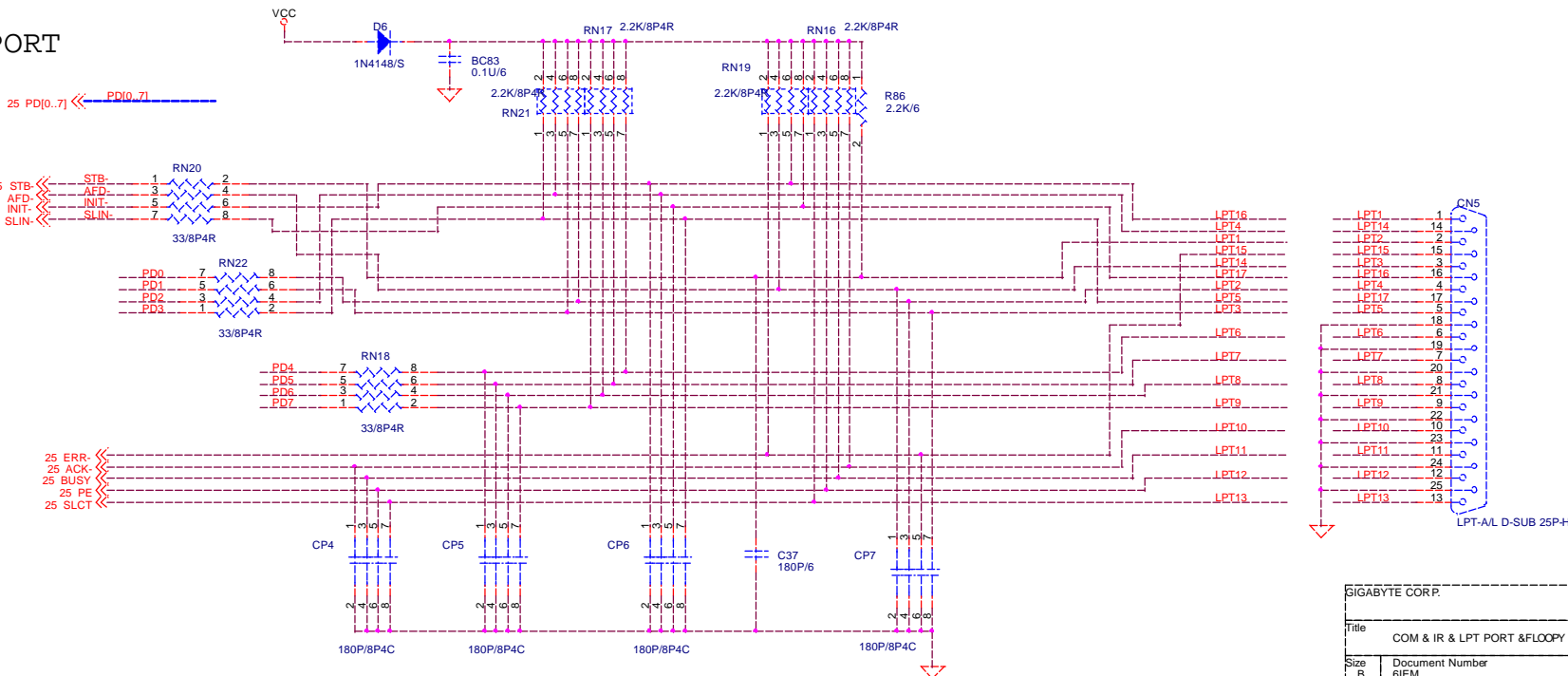
### FLOPPY



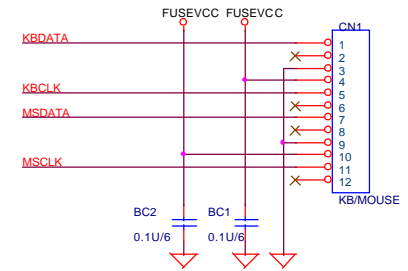
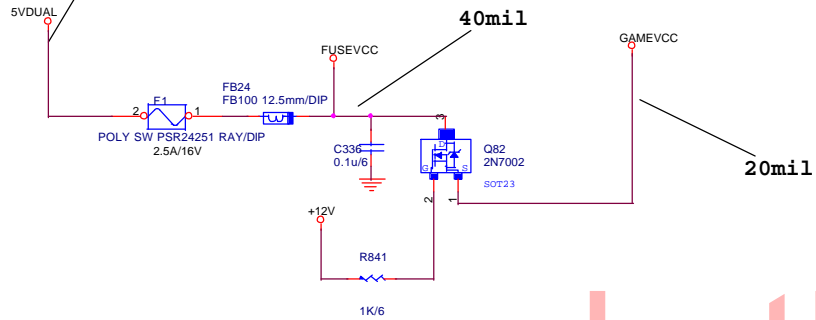
### COMB



### PRT PORT

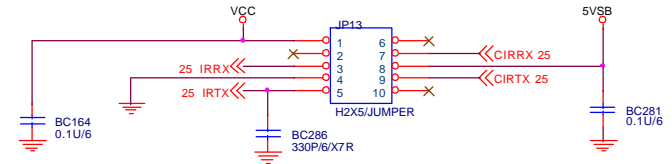
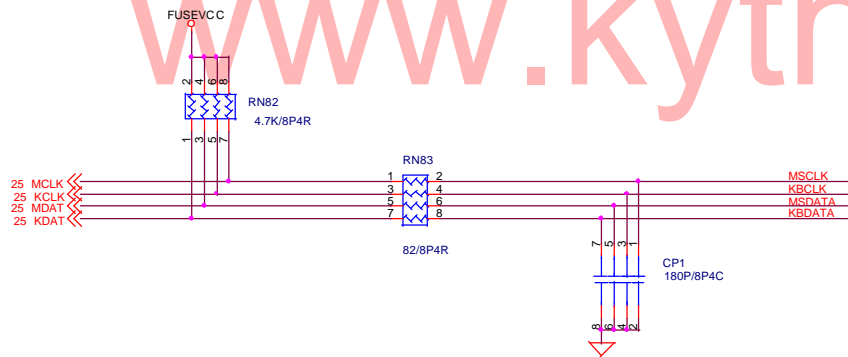


Layout 40mil



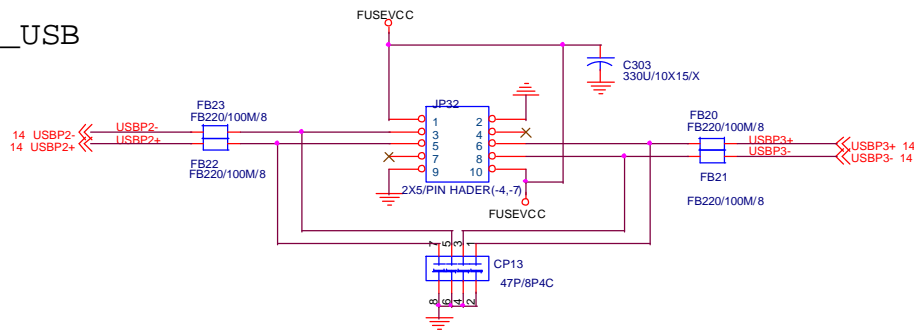
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IR/CIR CONNECTOR



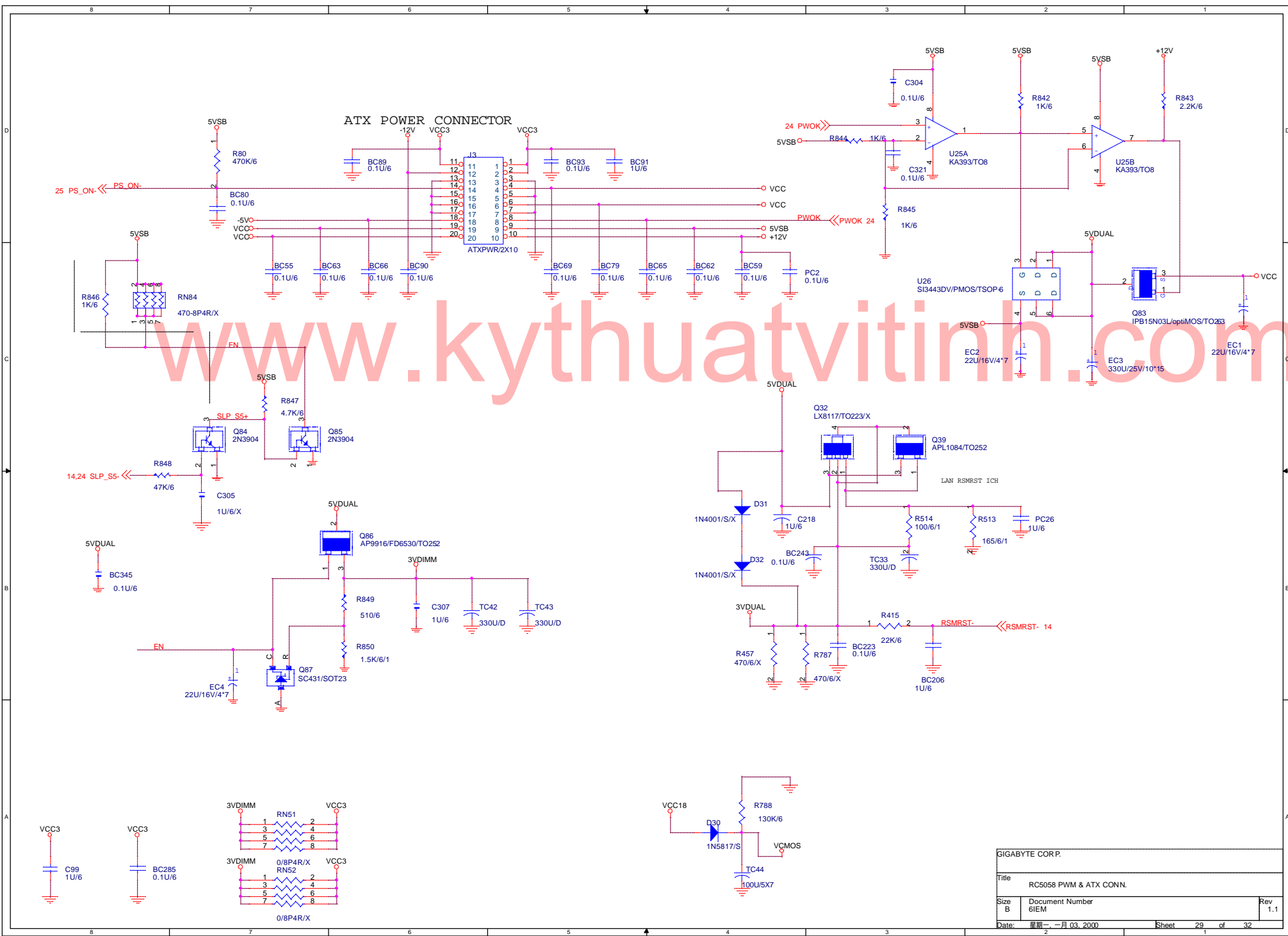
PIN TYPE MUST MATCH PHYSICAL LAYOUT  
THE KBVCC OF PIN 8 IS FOR CIR WAKE-UP FUNCTION.

F\_USB



GIGABYTE CORP.		
Title KB & PS2 MOUSE & IR		
Size B	Document Number 6IEM	Rev 1.1
Date: 星期二, 一月 03, 2000	Sheet 27	of 32



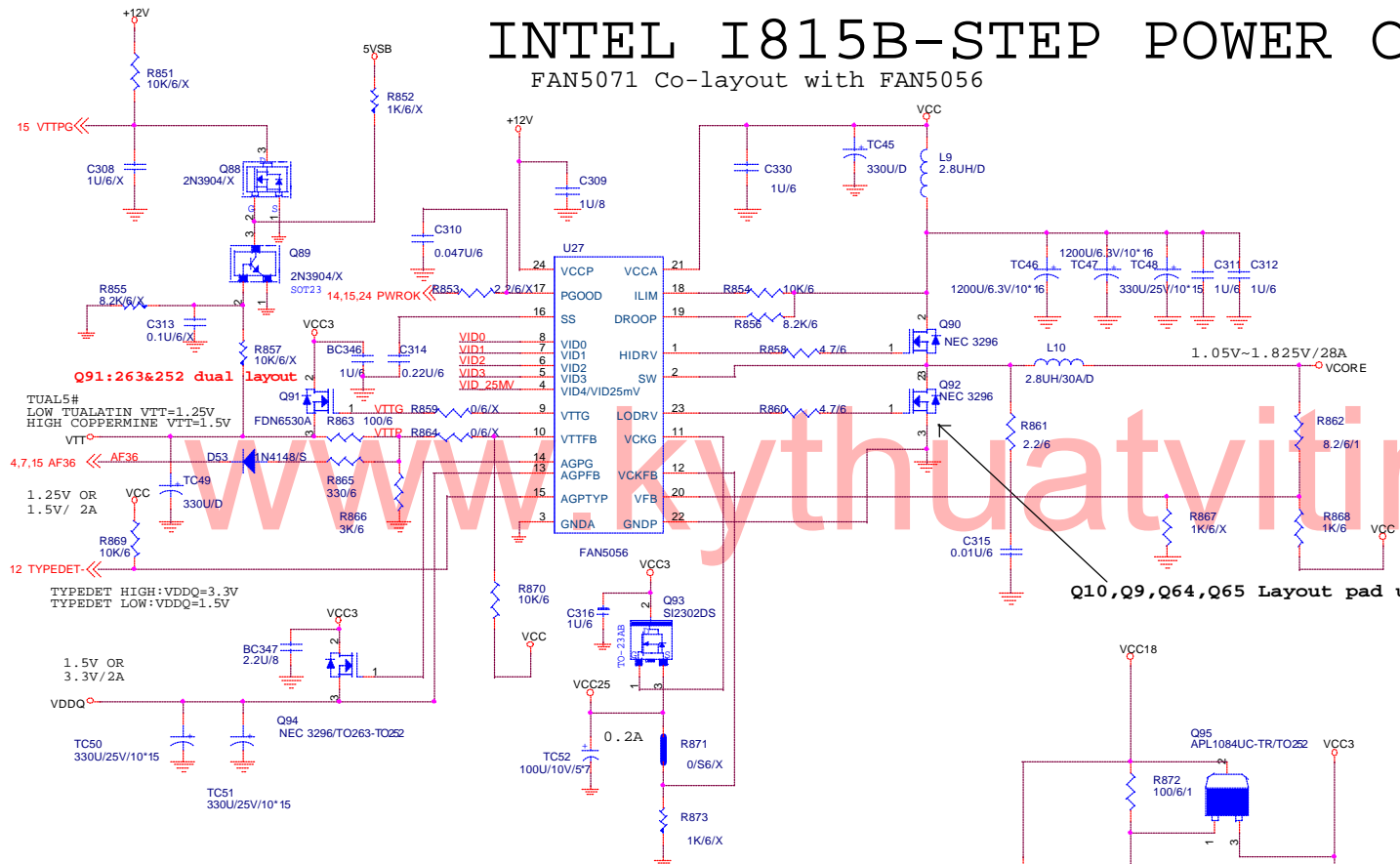


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GIGABYTE CORP.		
Title	RC5058 PWM & ATX CONN.	
Size B	Document Number	Rev
	6IEM	1.1
Date:	星期一 一月 03, 2000	Sheet 29 of 32

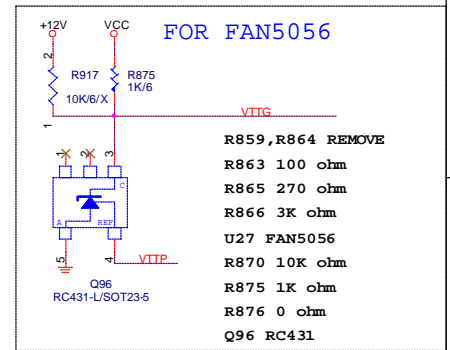
# INTEL I815B-STEP POWER CKT

FAN5071 Co-layout with FAN5056



Q10, Q9, Q64, Q65 Layout pad use TO252+TO263 Dual Layout

LAYOUT CLOSE TO Q91



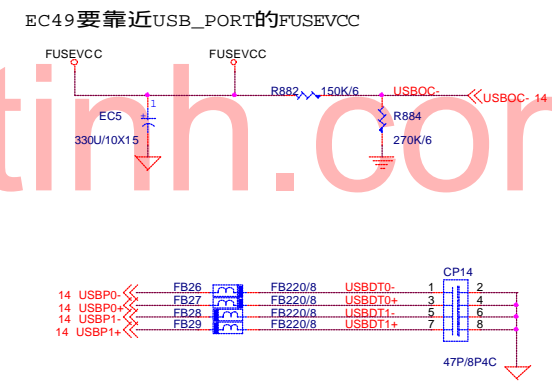
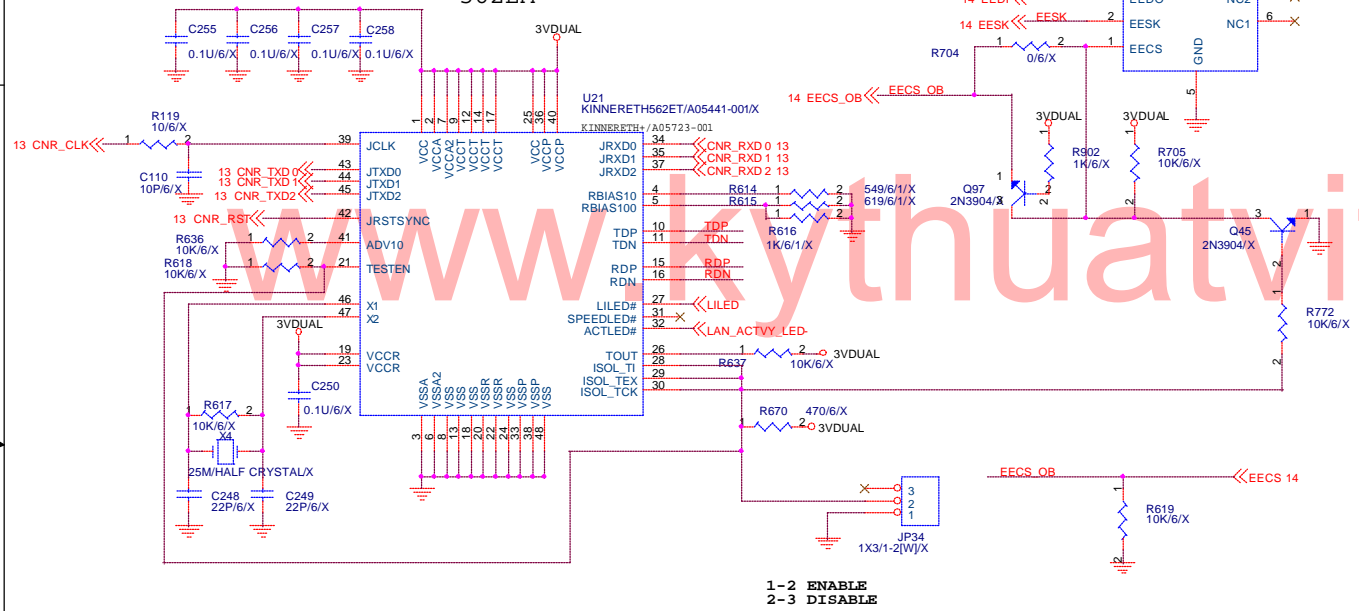
- R859, R864 REMOVE
- R863 100 ohm
- R865 270 ohm
- R866 3K ohm
- U27 FAN5056
- R870 10K ohm
- R871 1K ohm
- R875 0 ohm
- R876 0 ohm
- Q96 RC431

- VID0 <-> VID0 3.25.28
- VID1 <-> VID1 3.25.28
- VID2 <-> VID2 3.25.28
- VID3 <-> VID3 3.25.28
- VID\_25MV <-> VID\_25MV 4.25.28

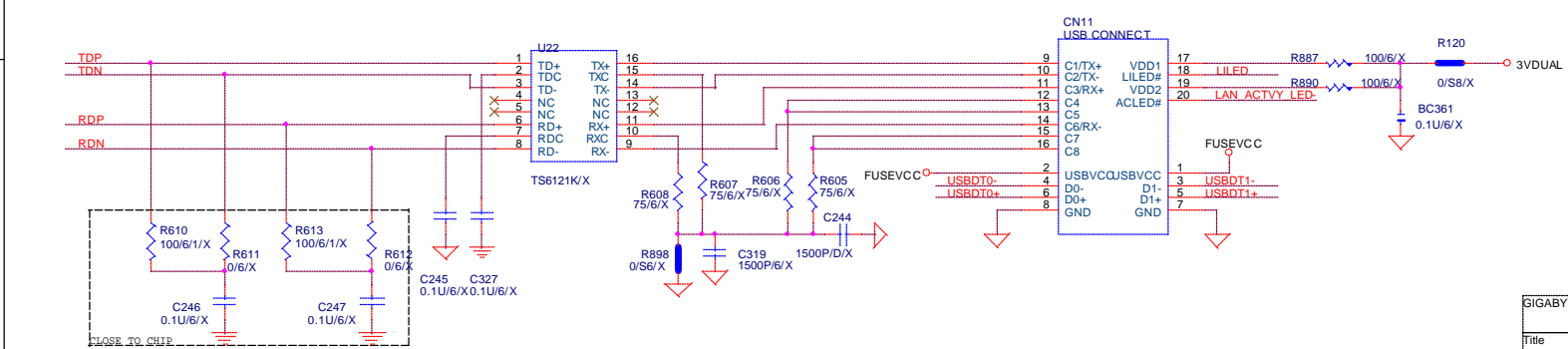
GILAD: BASIC HOME LAN 562EH  
 KINNERETH: BASIC10/100  
 562ET  
 KINNERETH+: 10/100 AOL  
 562EM

PCIRST ->> PCIRST- 6,12,13,16,19,25,32

**8100/8100B NOTE:**  
 Pin 65 pull-down (5.9K 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)



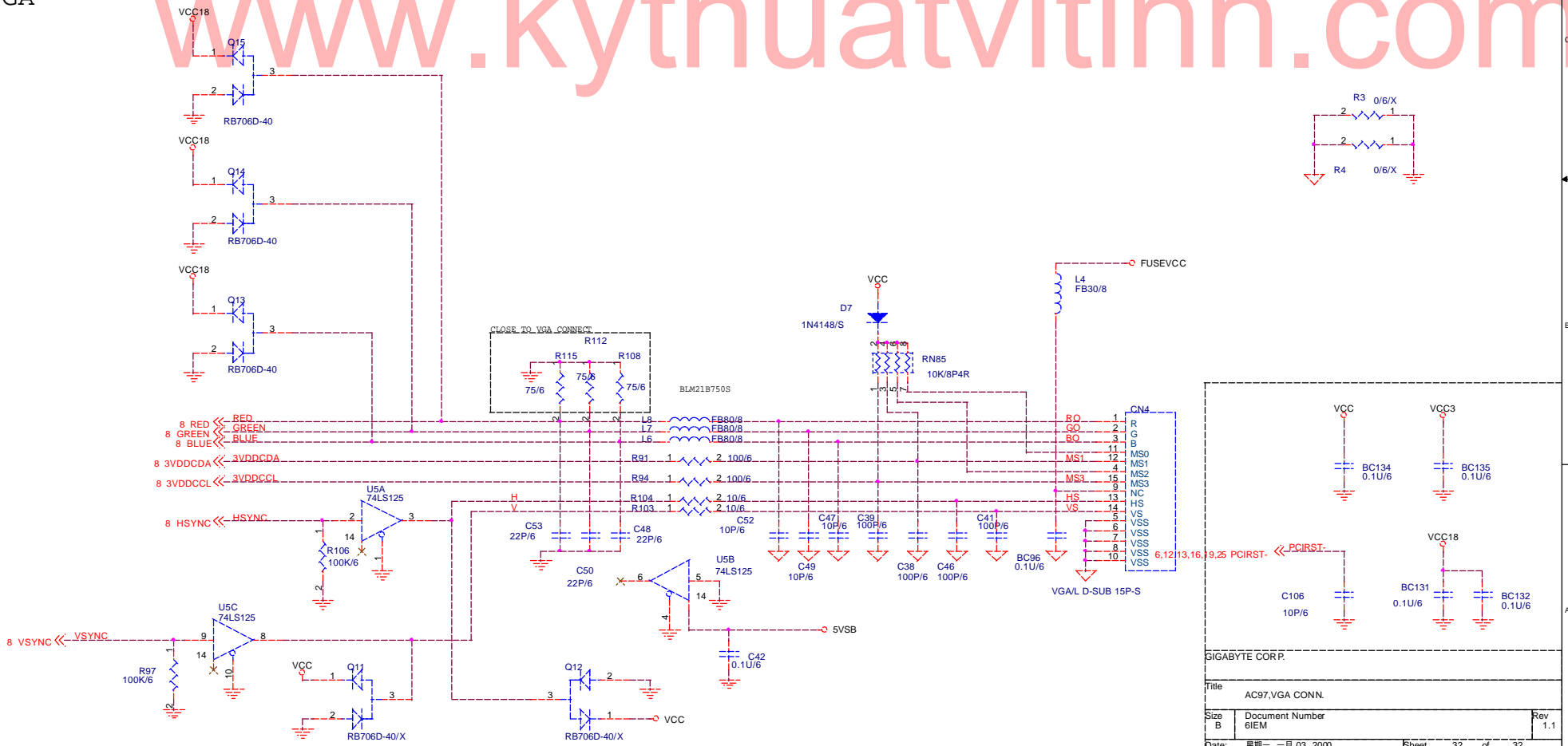
1-2 ENABLE  
 2-3 DISABLE



GIGABYTE CORP.			
Title			
RTL8100			
Size	Document Number	Rev	
Custom	GIEM	1.1	
Date:	日期: 一月 03, 2000	Sheet	31 of 32

VGA

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GIGABYTE CORP.		
Title	AC97,VGA CONN.	
Size	Document Number	Rev
B	61EM	1.1
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