

GIGABYTE GA-8KNXP Schematics

Revision 2.0

SHEET

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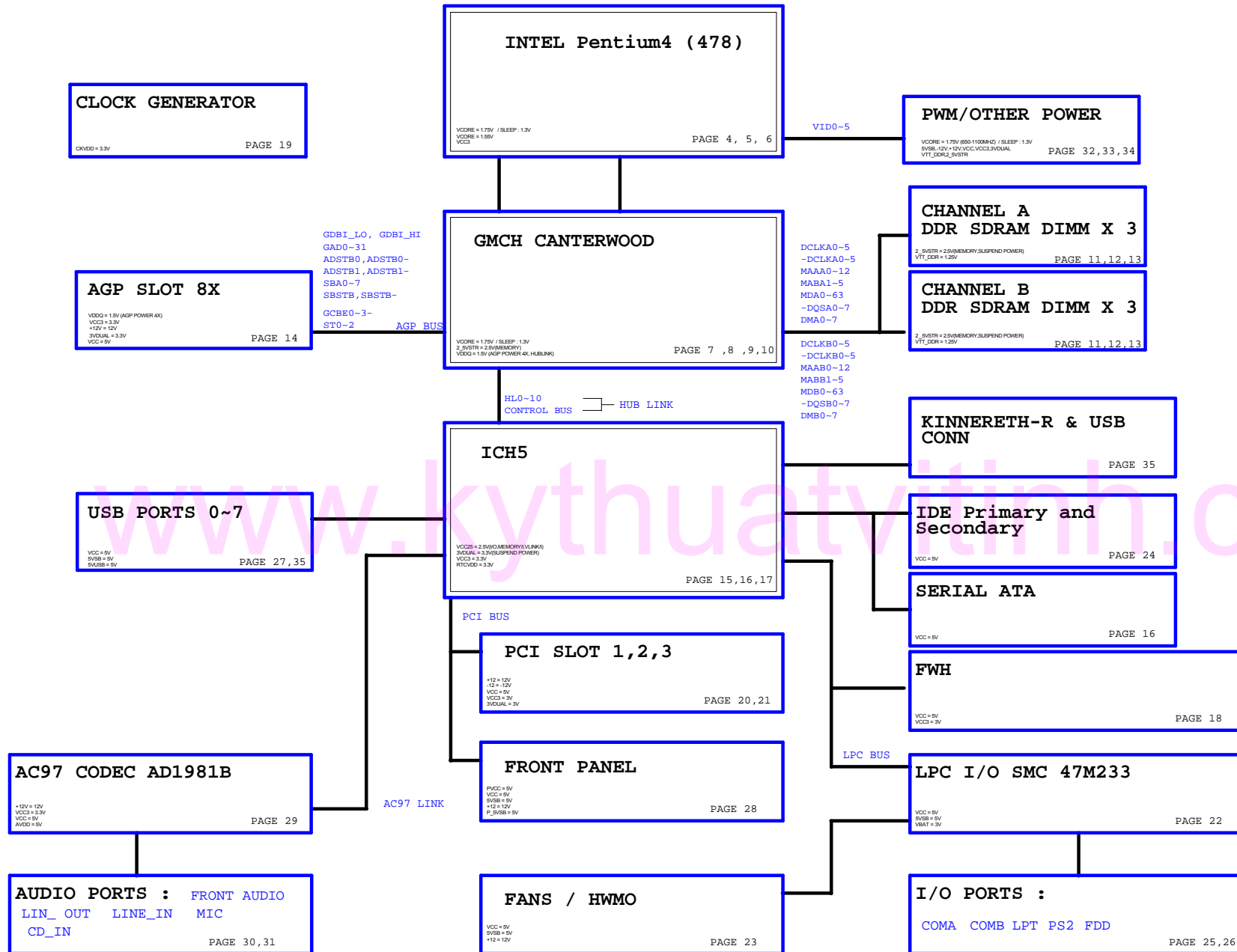
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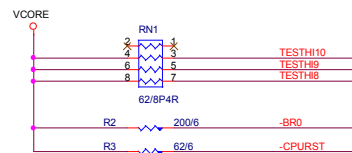
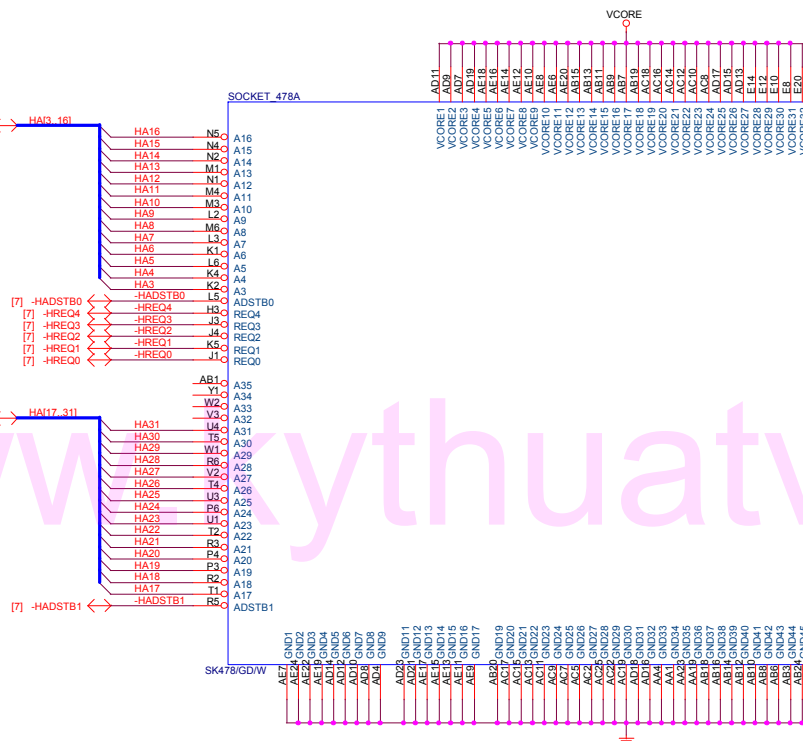
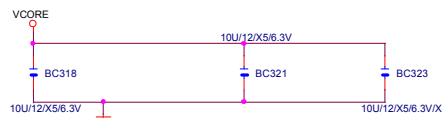
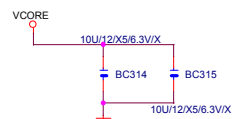
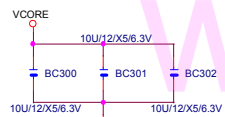
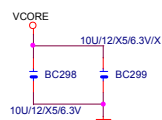
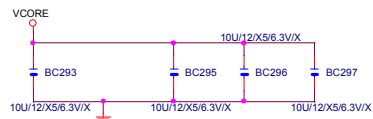
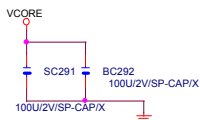
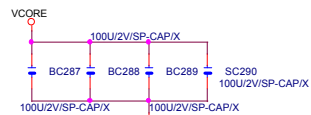
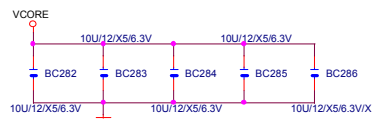
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GIGABYTE CORP.	
Title: COVER SHEET	
Size: Custom	Document Number: GA-8KNXP
Date:	Sheet 1 of 44
	Rev 2.0

Component history

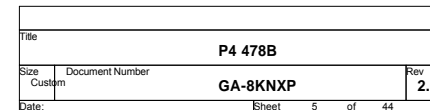
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Size Custom	Document Number GA-8KNXP		Rev 2.0
Date:	Sheet	2 of 44	

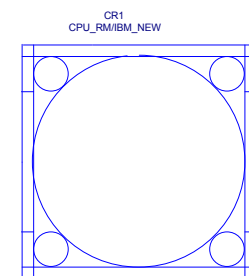
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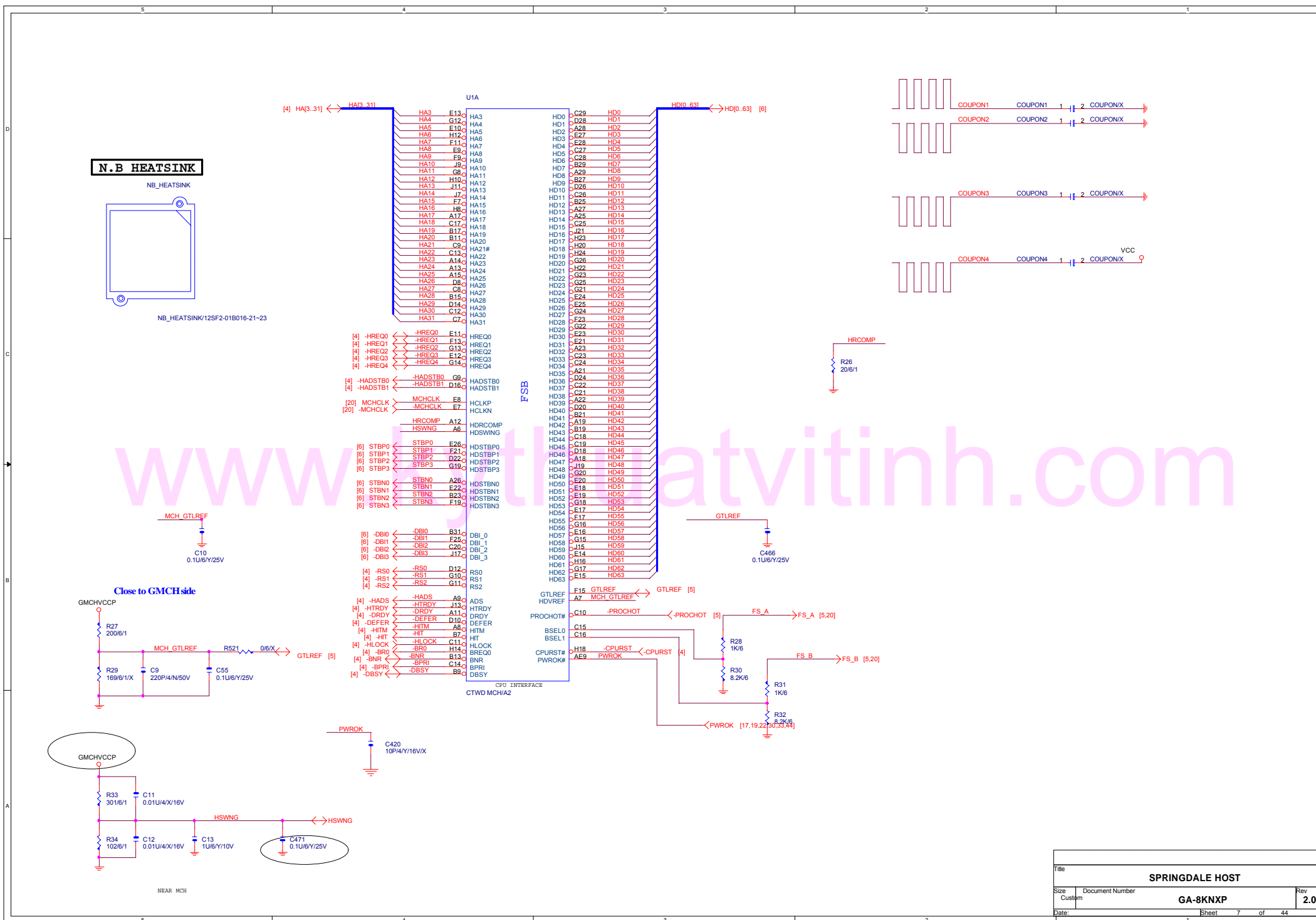


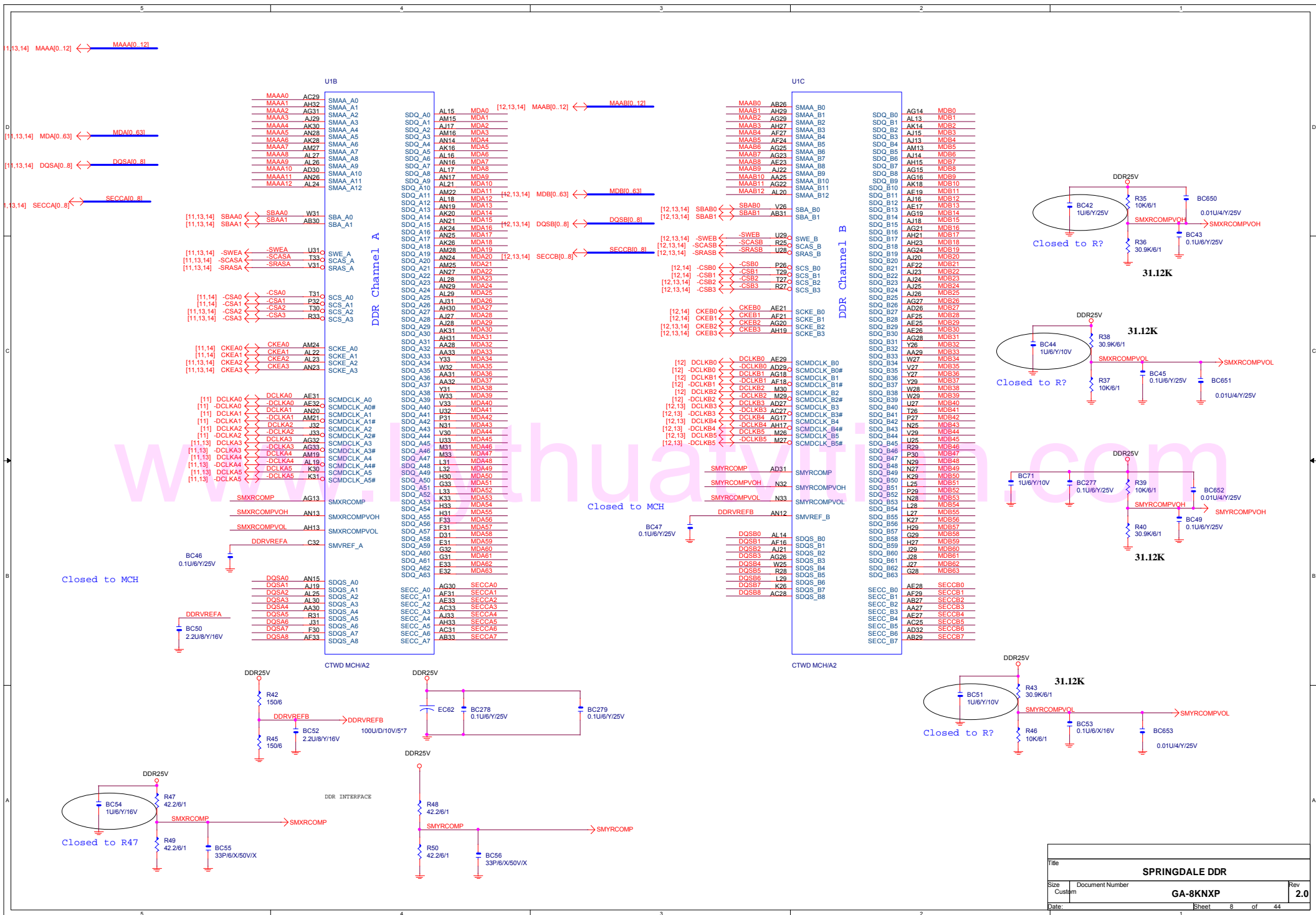


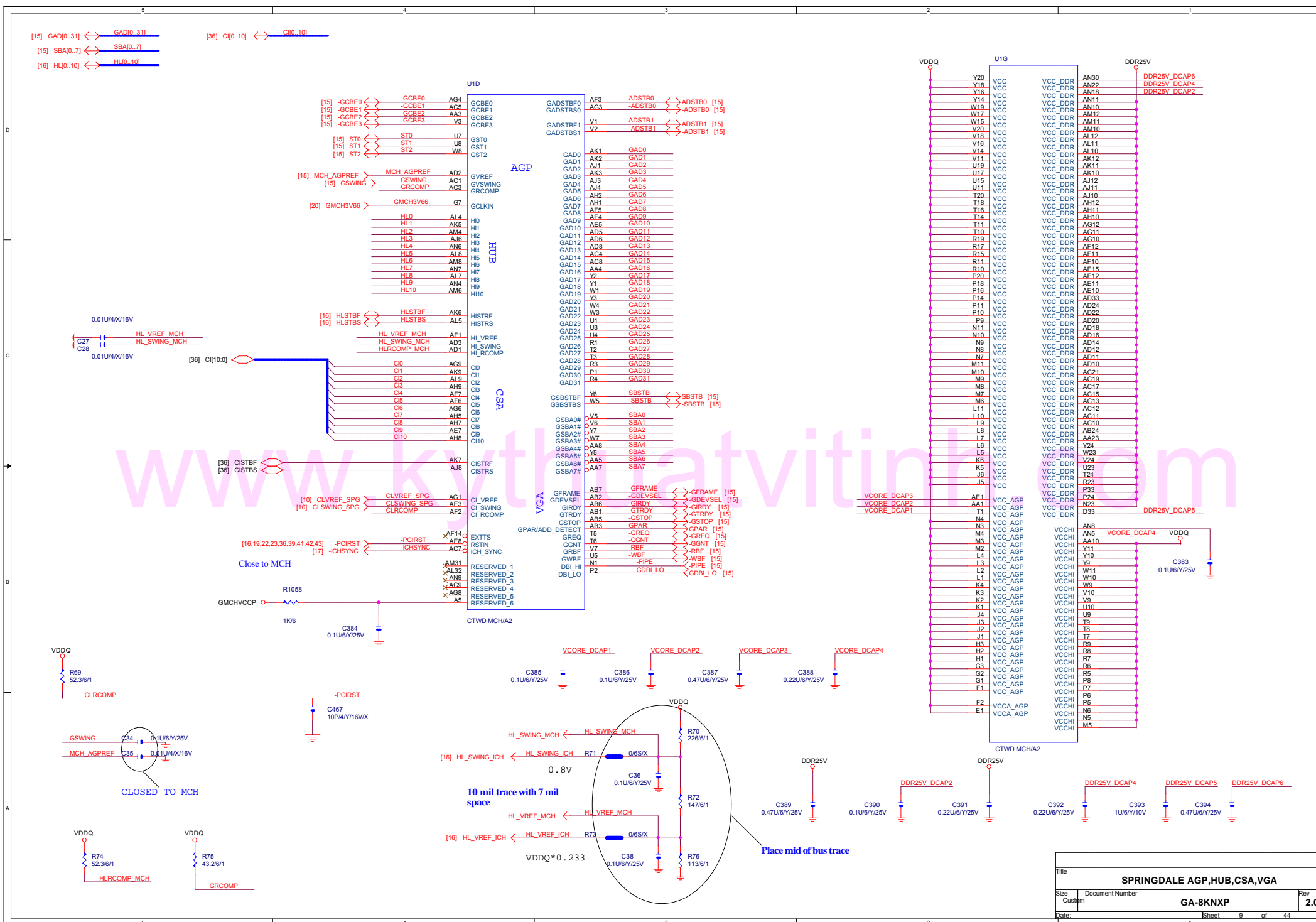
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P4 478A		
Size	Document Number	Rev
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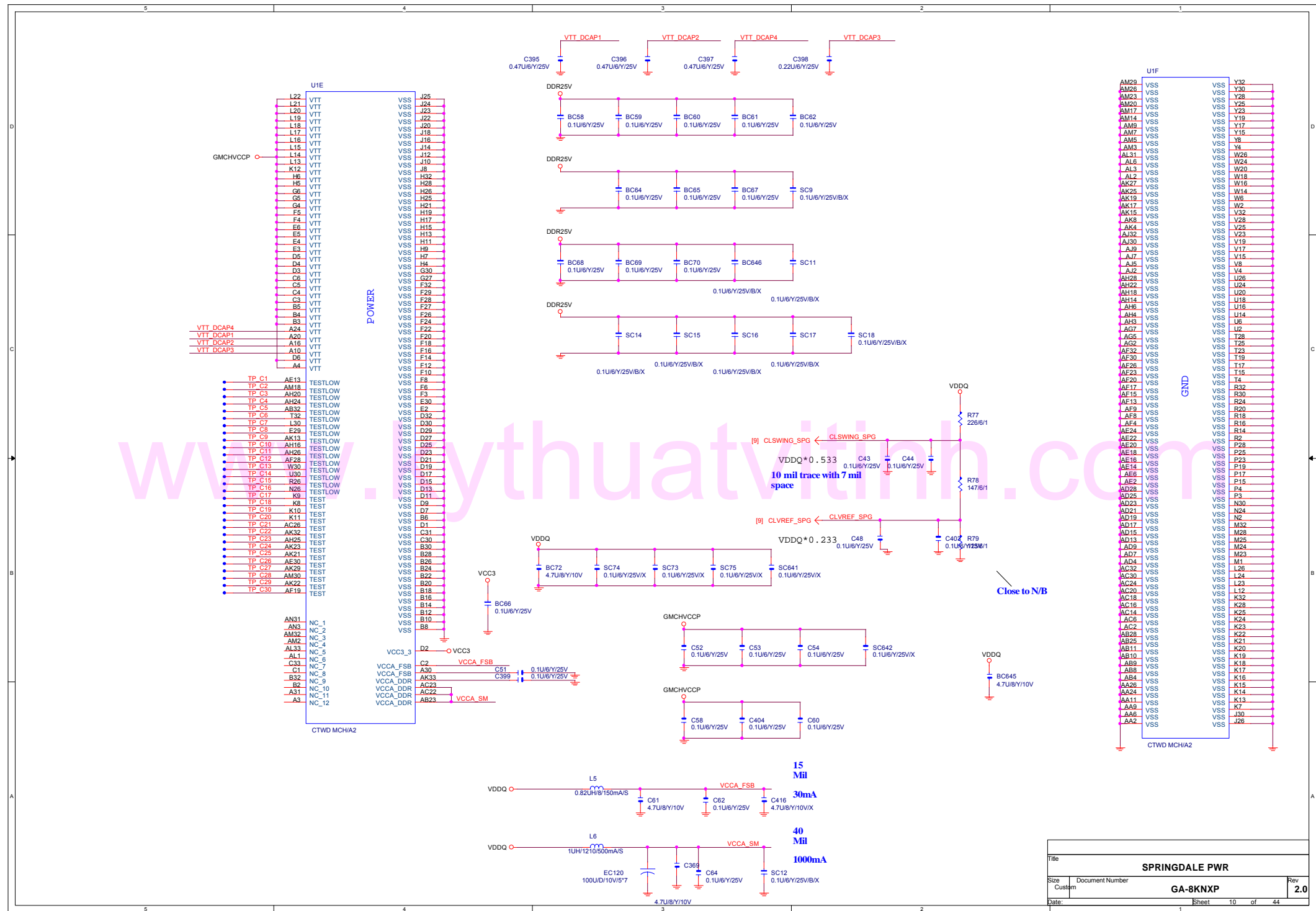












Title		
SPRINGDALE PWR		
Size	Document Number	Rev
Custom	GA-8KNXP	2.0
Date	Sheet	10 of 44

[8,13,14] SECCA[0..7] <- SECCA0..71

DDR25V

[8,13,14] MAAA[0..12] <-

MAAA0

MAAA1

MAAA2

MAAA3

MAAA4

MAAA5

MAAA6

MAAA7

MAAA8

MAAA9

MAAA10

MAAA11

MAAA12

MAAA13

MAAA14

MAAA15

MAAA16

MAAA17

MAAA18

MAAA19

MAAA20

MAAA21

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MAAA306

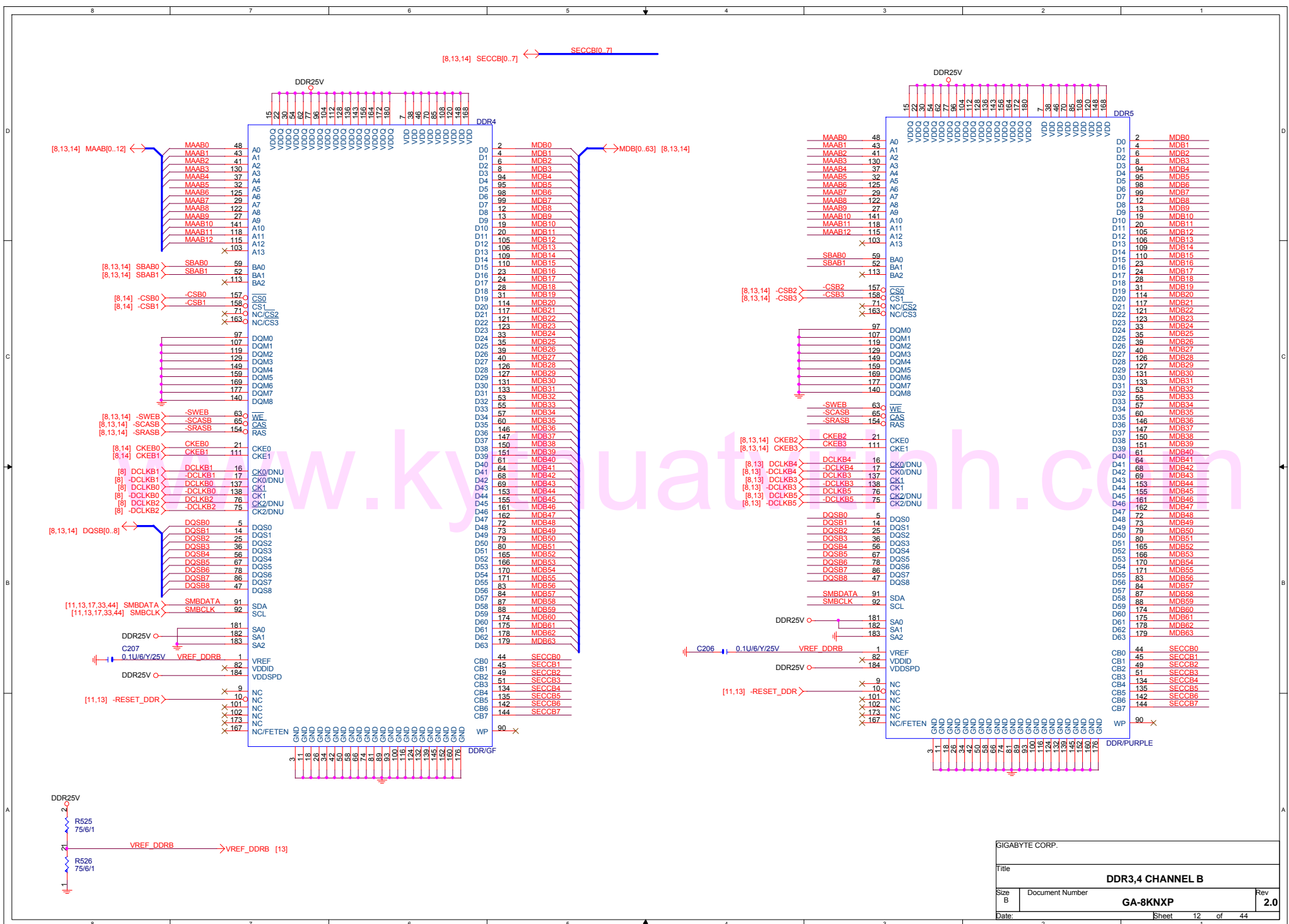
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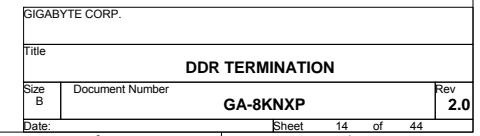
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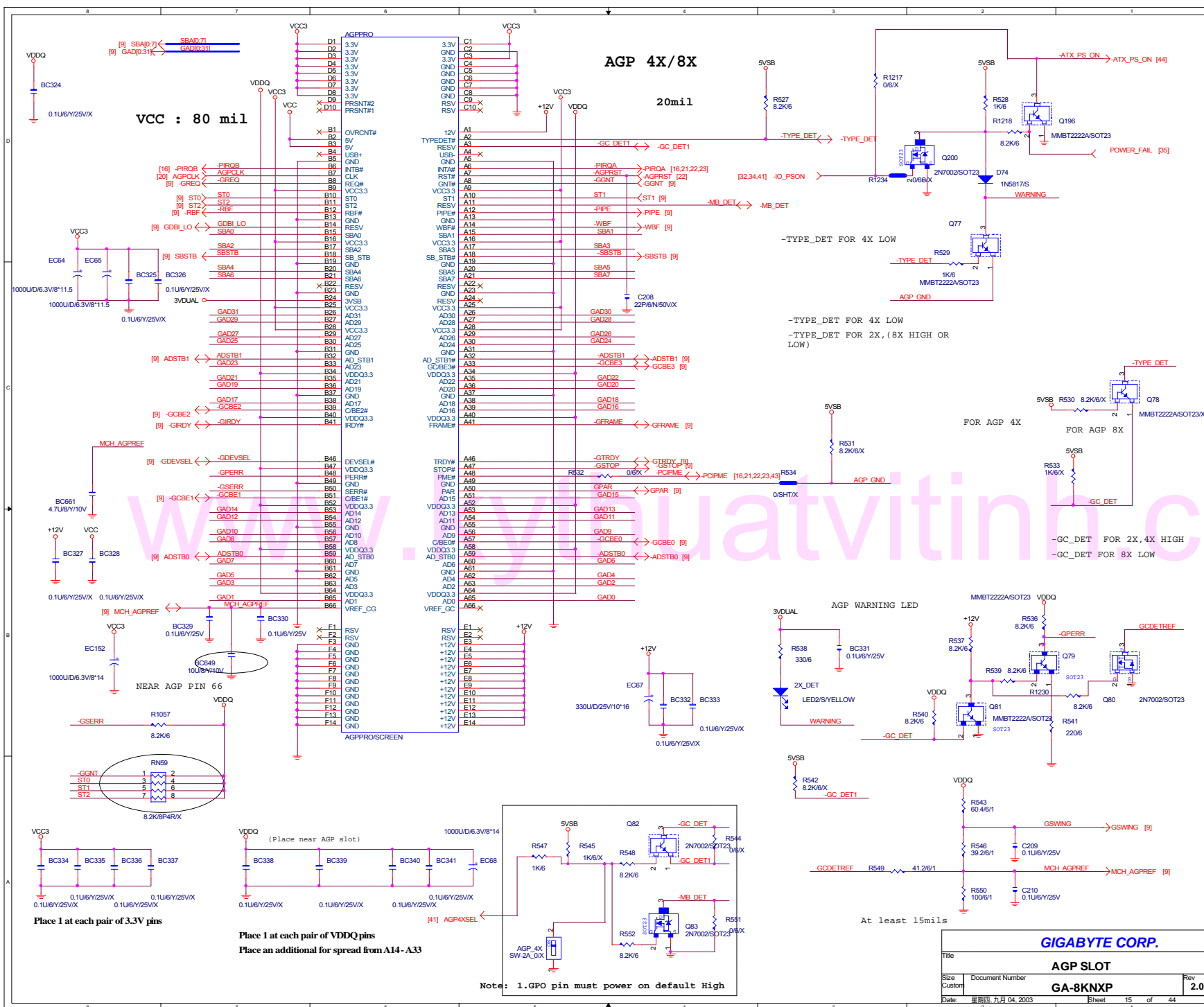
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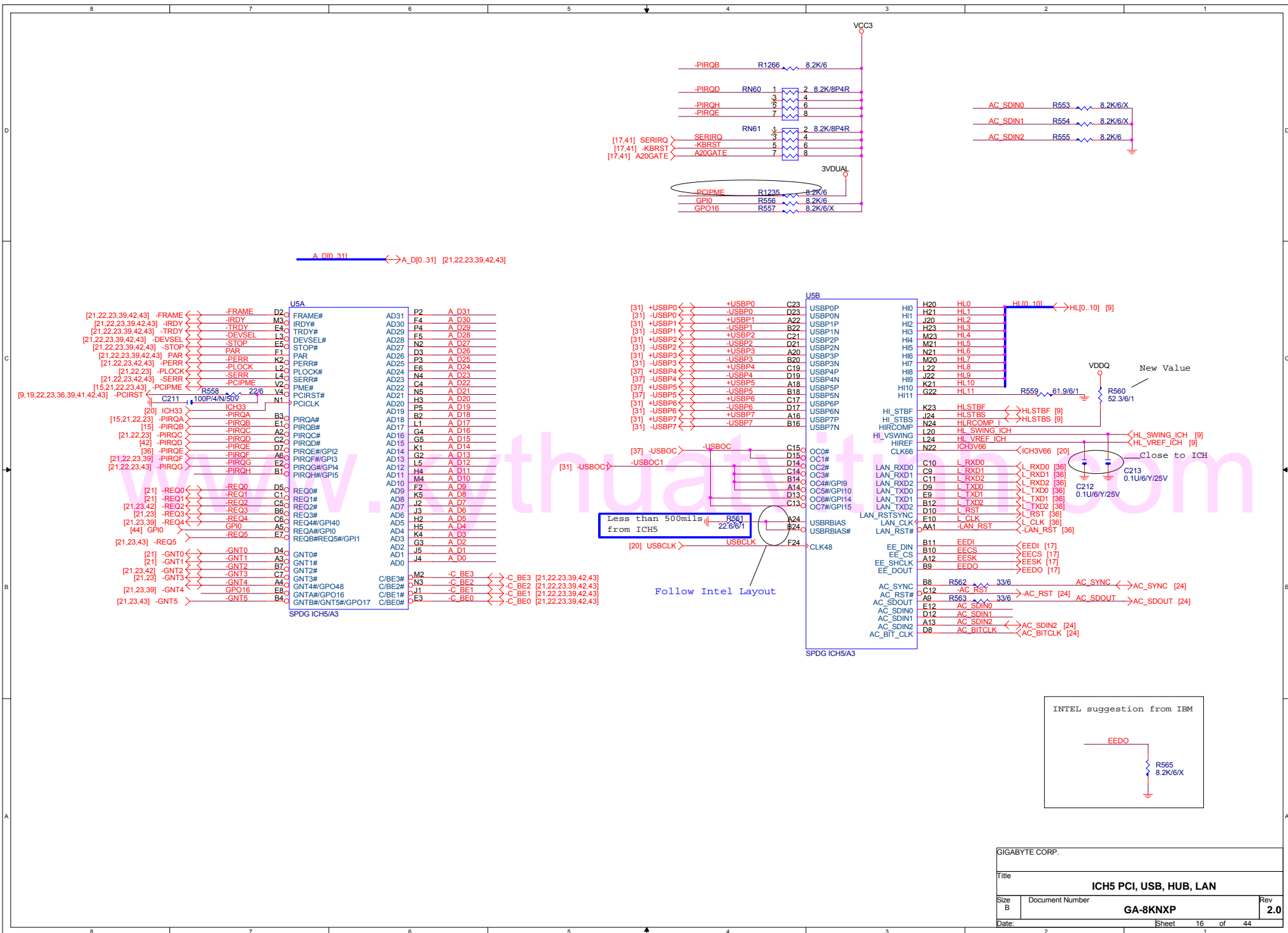
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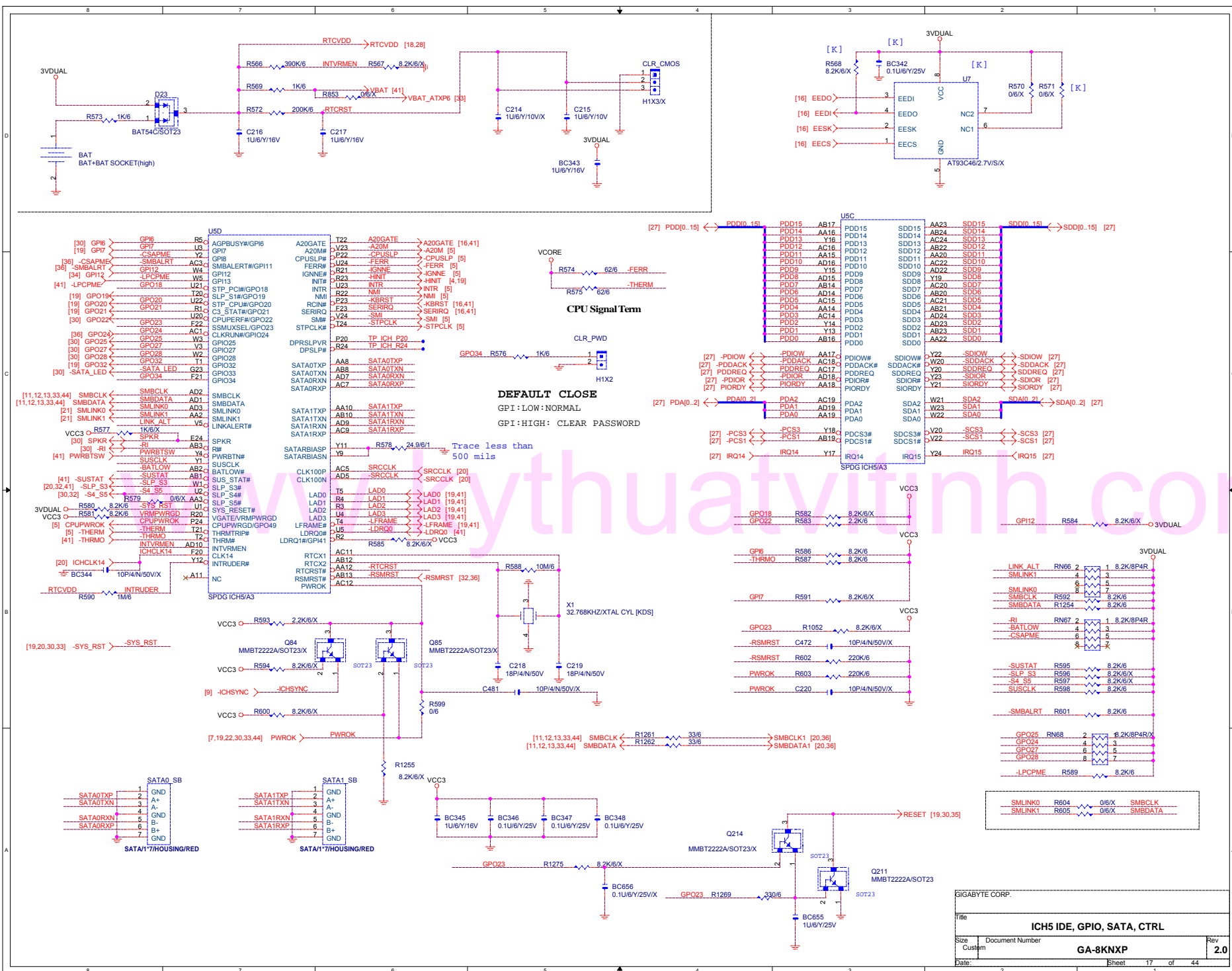


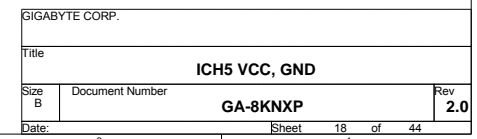
CHANNEL B

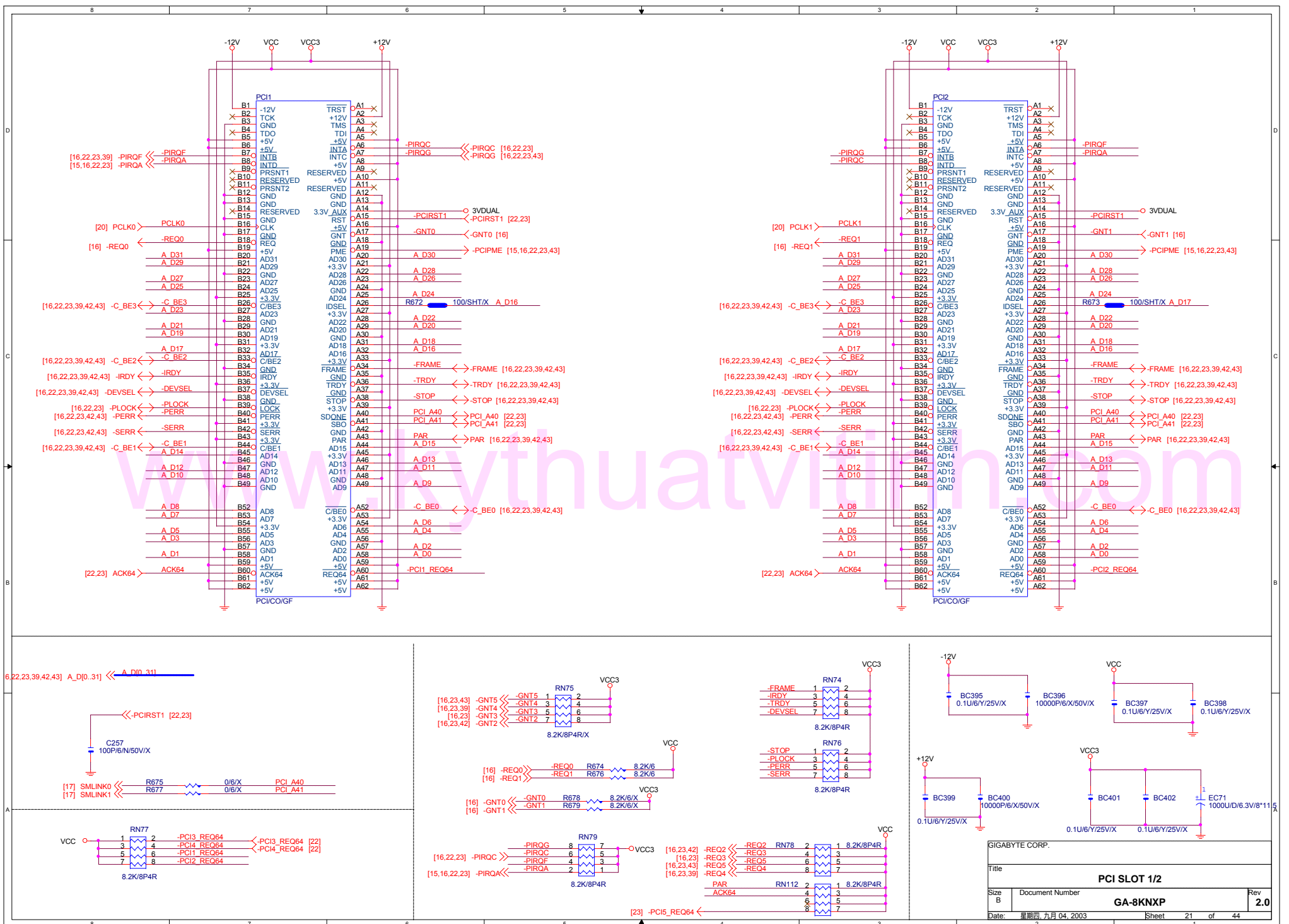




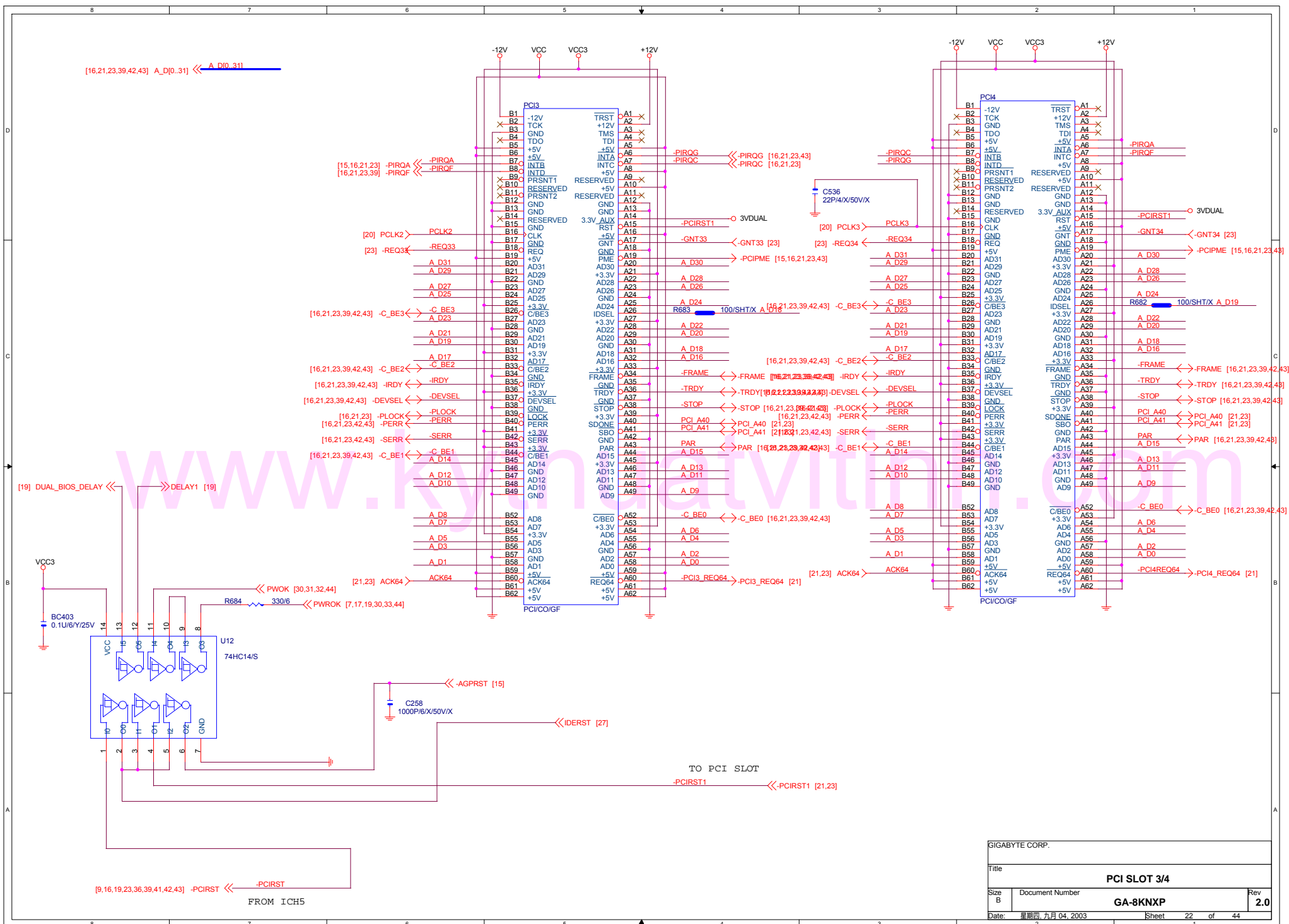


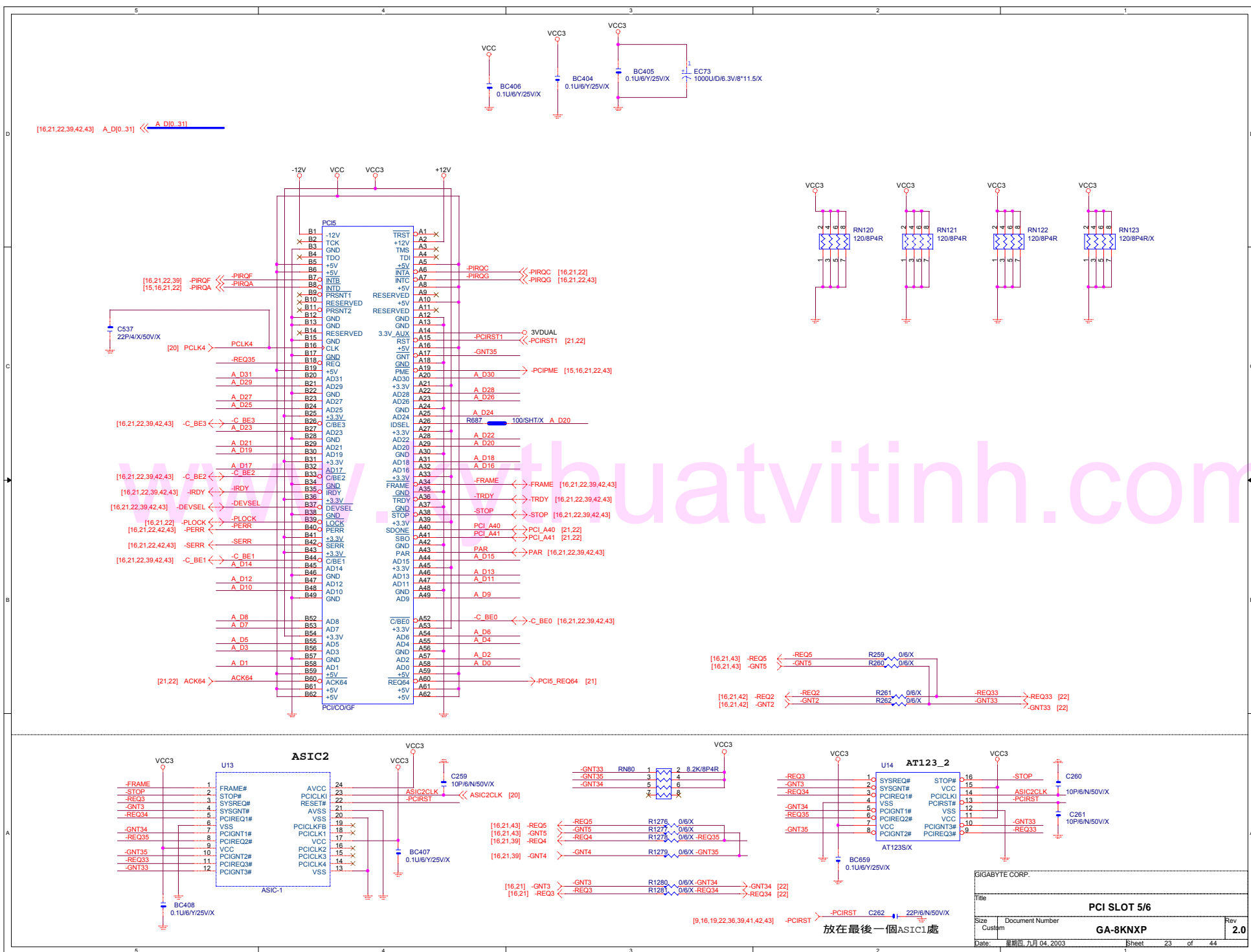






GIGABYTE CORP.		
Title		
PCI SLOT 1/2		
Size	Document Number	Rev
B	GA-8KNXP	2.0
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Filter Cap design:

	Pin-29	Pin-30	Pin-31	Pin-32
ALC655 Rev D	1000pf	1000pf	1uf	Front-MIC2
ALC655 Rev C	1000pf	1000pf	1uf	X
ALC658	X	X	JD4	X
ALC650	1000pf	1000pf	1uf	1uf

FOR ALC 201A,650

[25] SPDIF >>

Support ALC650
If 14.318MHz
external CLK
is used
CR9 0/6

RA, RB, RC, RD For AD1885
RA CR5 0/6/X
RD CR6 4.7K/6/X
RB CR7 0/6/X
RC CR8 0/6/X

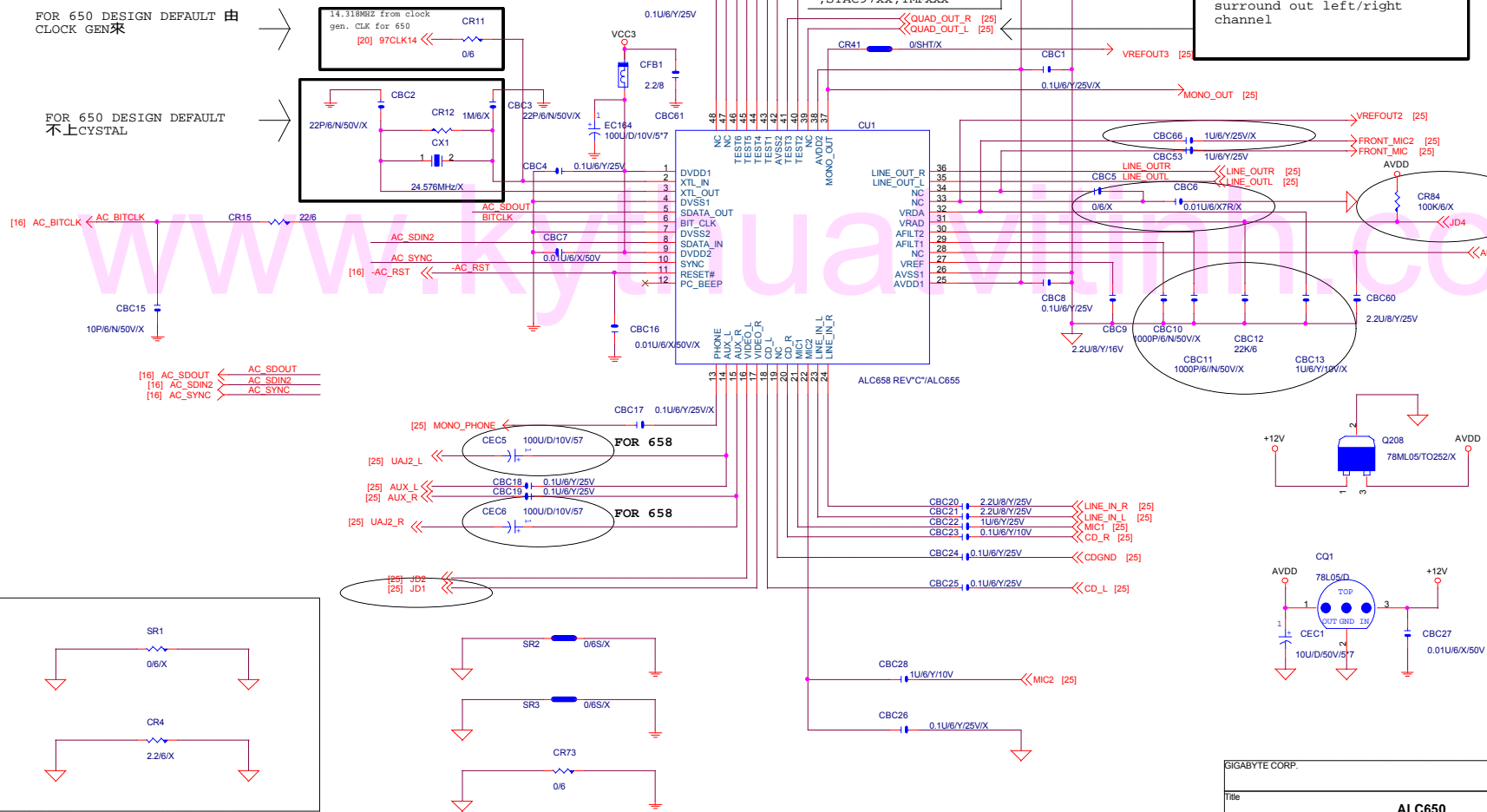
RE CR10 0/SHT/X
RE For AD1881,ALCxxx
,STAC97xx, YMFxxx

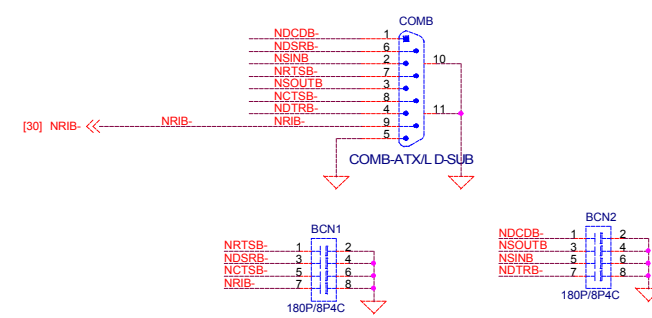
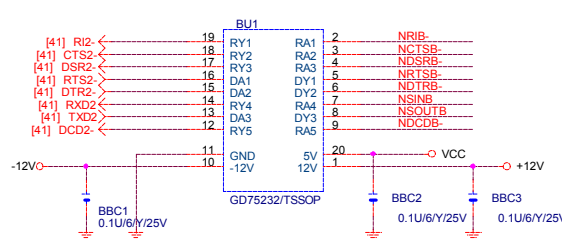
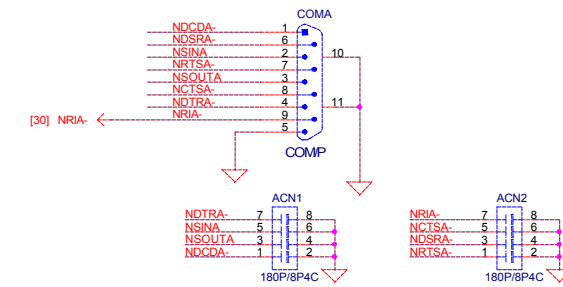
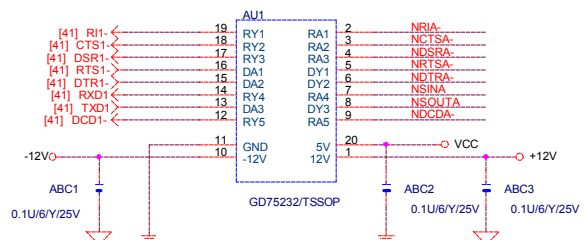
FOR ALC650
surround out left/right
channel

FOR ALC650 install CR2
center out/low freq. effect out
GPIO0 CONTROL 6_CHANNEL SWITCH

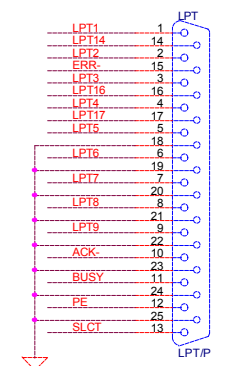
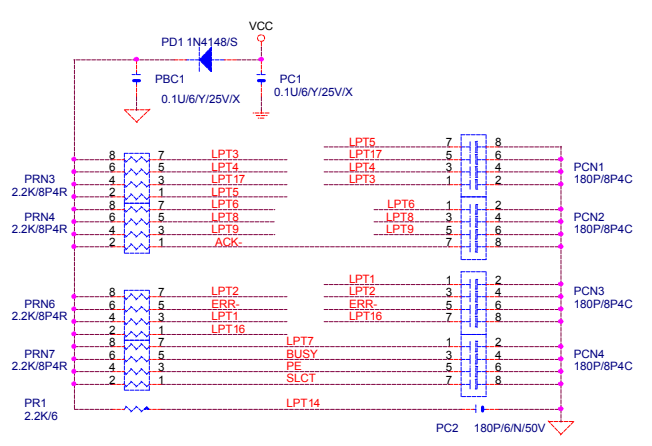
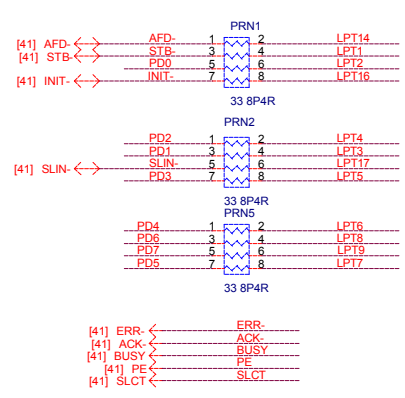
FOR 650 DESIGN DEFAULT 由
CLOCK GEN來

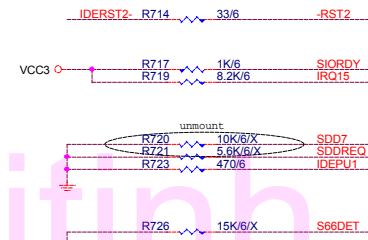
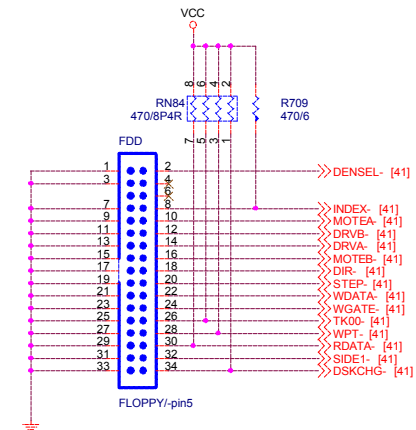
FOR 650 DESIGN DEFAULT
不上CRYSTAL



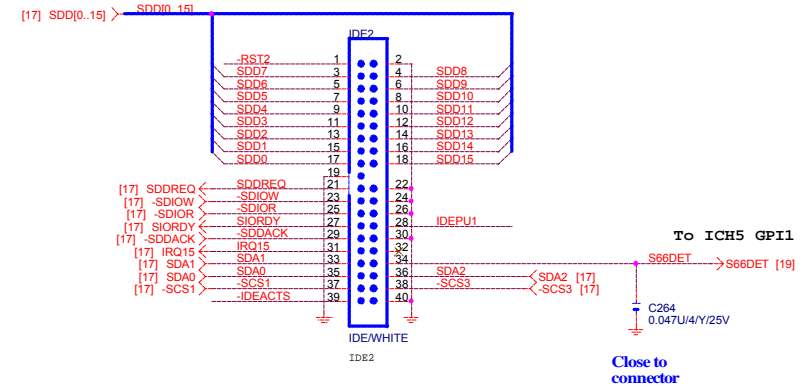


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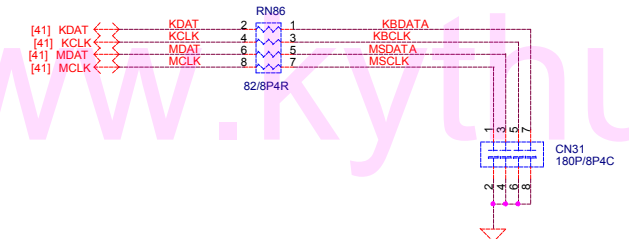
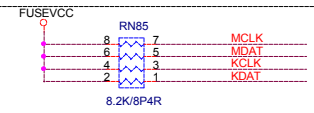
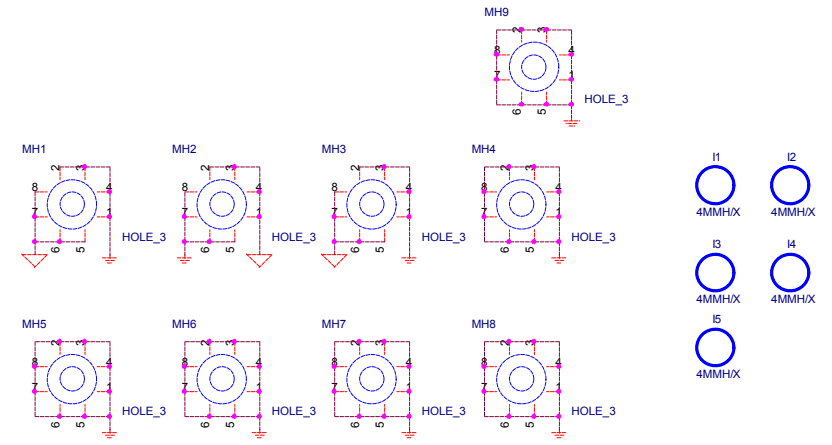
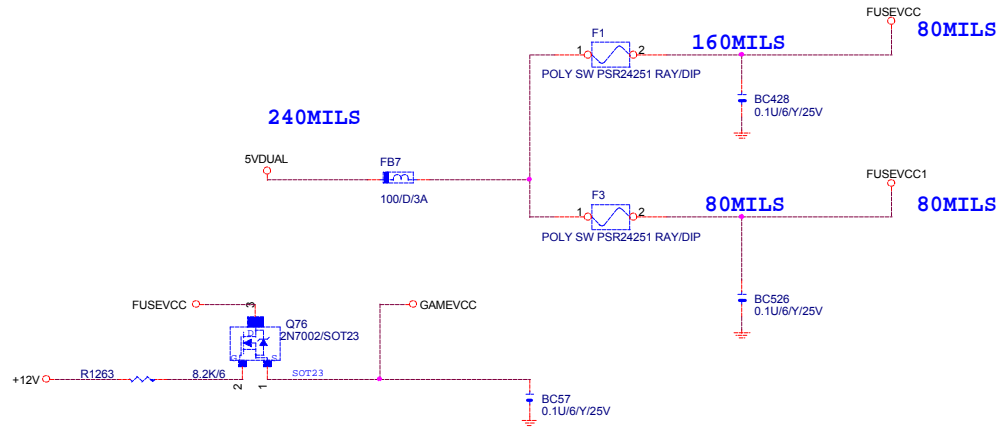


SECONDARY IDE CONNECTOR

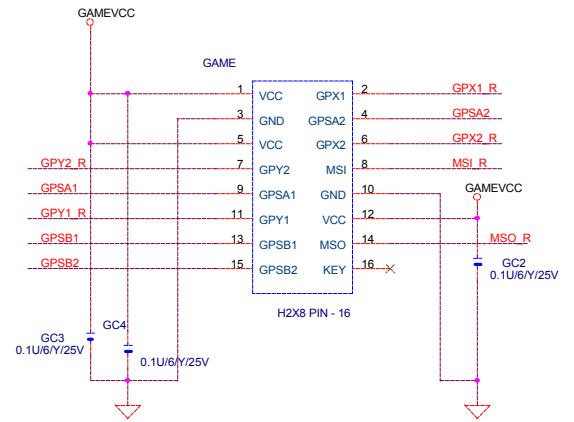
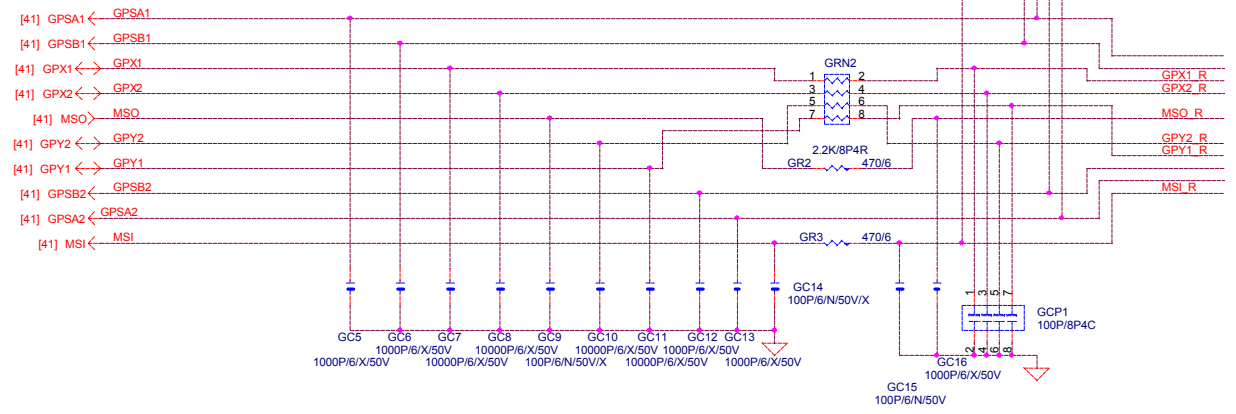
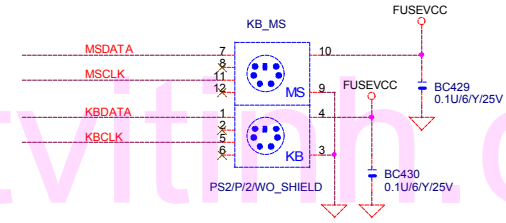


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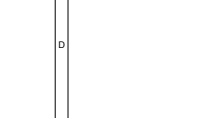
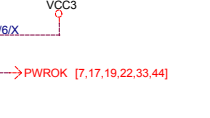
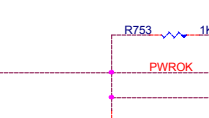
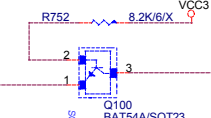
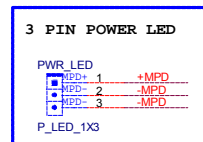
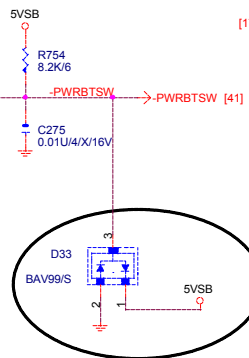
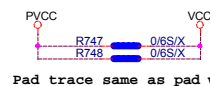
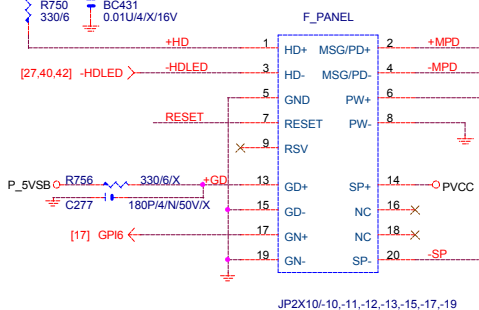




GAME_PORT



INTEL FRONT PANEL



States for green LED

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

(GPO22 DEFAULT HIGH, main power)

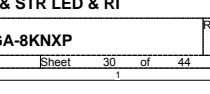
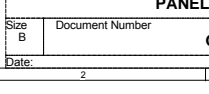
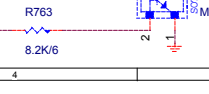
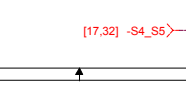
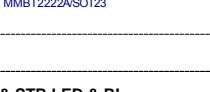
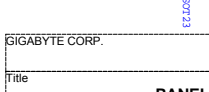
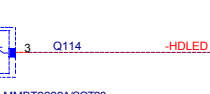
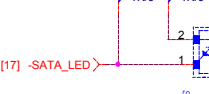
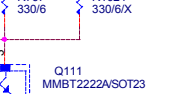
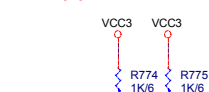
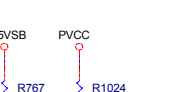
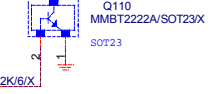
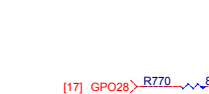
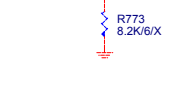
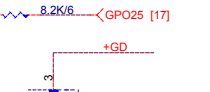
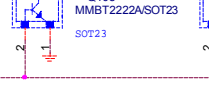
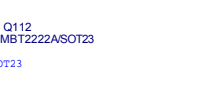
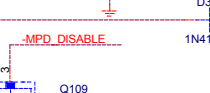
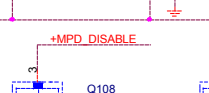
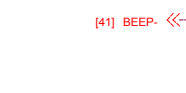
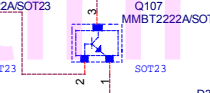
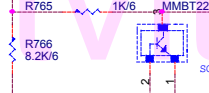
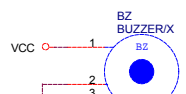
States for a single-color power LED

LED States	ACPI States	GPIO25	GPIO27	GPIO22
OFF	S1, S3, S5	1	1	NO1
Steady Green	S0	1	1	1
Blinking Green	S0(message waiting)	1	B	1

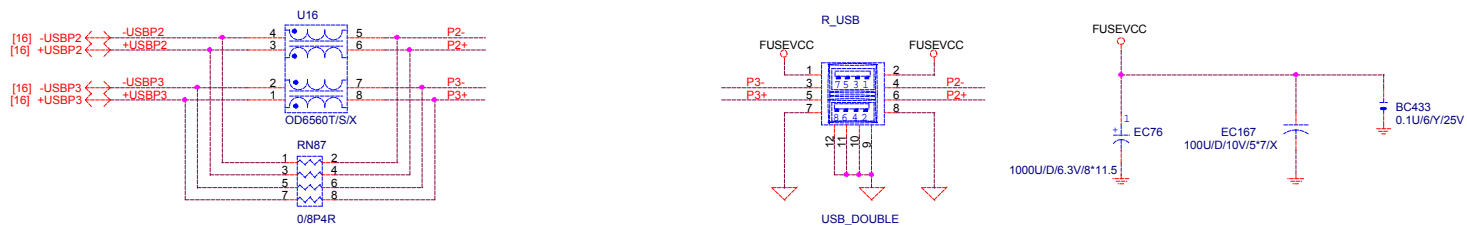
NO1 GPO22 只需在S1 PROGRAMMING LOW

States for a dual-color power LED

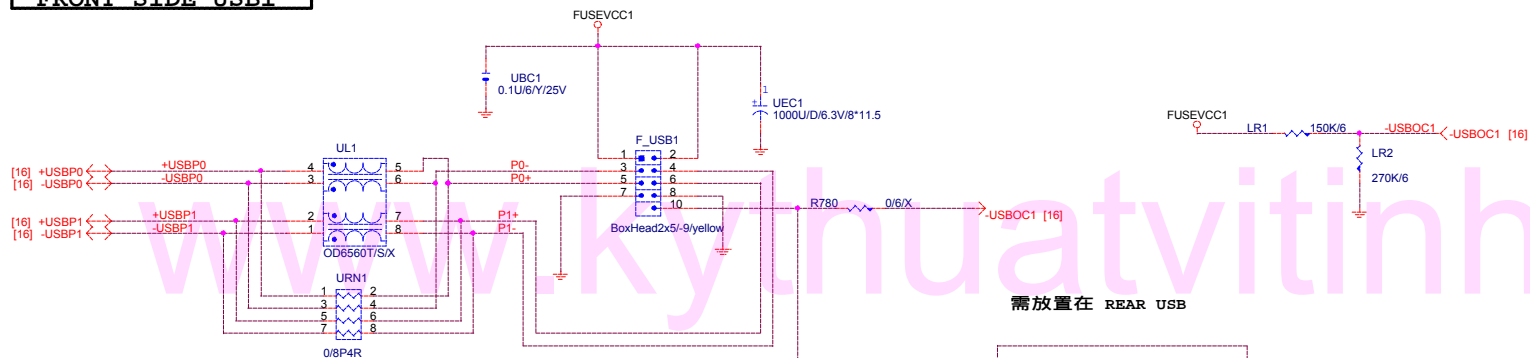
LED States	ACPI States	GPIO25	GPIO27	GPIO22
OFF	S5	1	1	X
Steady Green	S0	1	1	1
Blinking Green	S0(message waiting)	1	B	1
Steady Yellow	S1, S3	1	0	NO1
Blinking Yellow	S1, S3(message waiting)	1	B	NO1



REAR USB

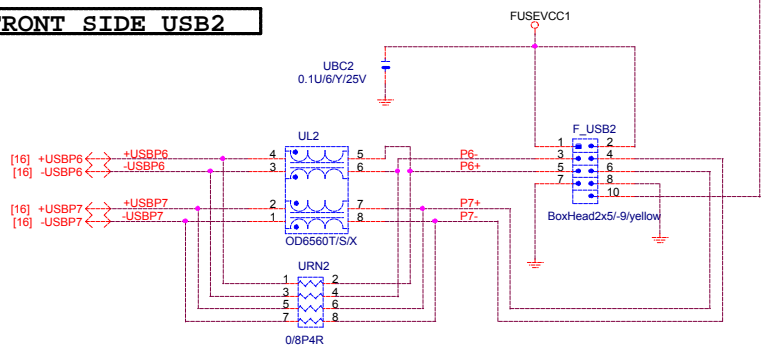


FRONT SIDE USB1

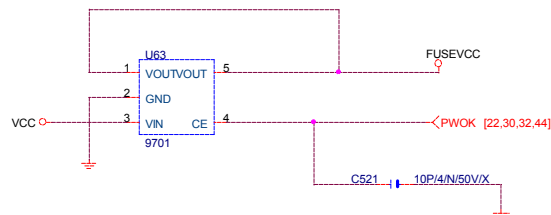
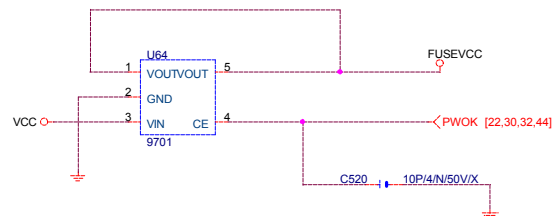


需放置在 REAR USB

FRONT SIDE USB2

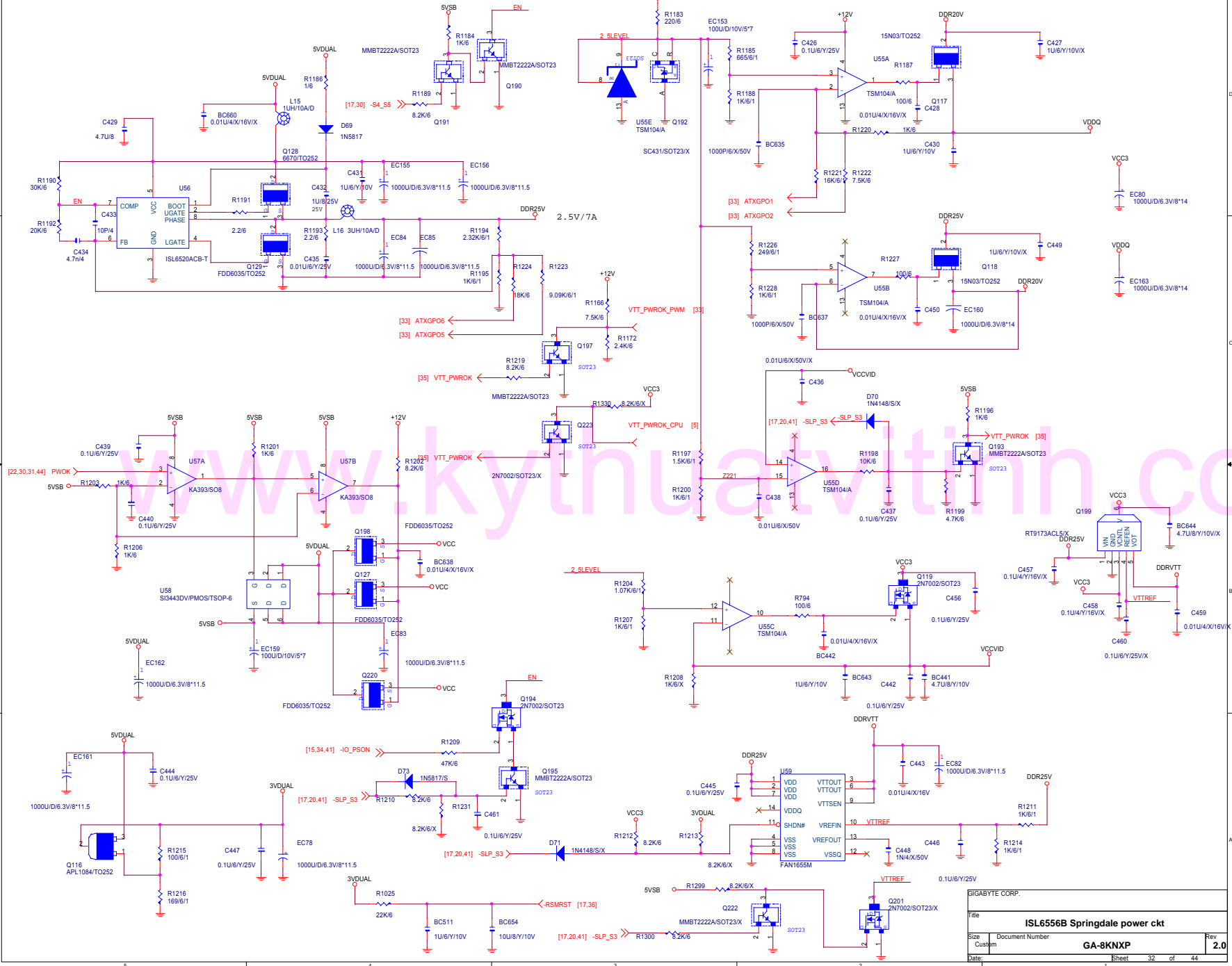


需放置在 REAR USB

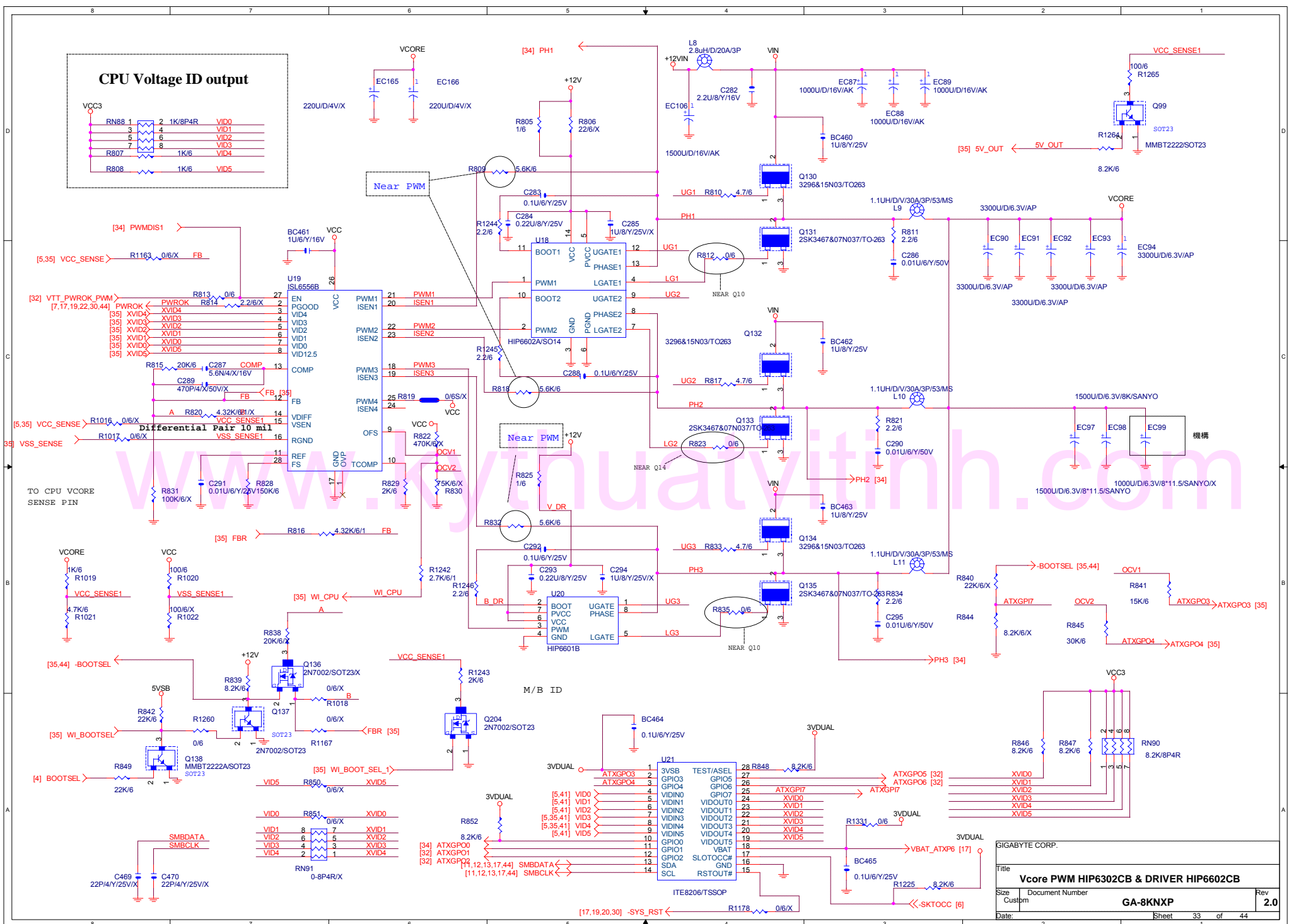


DDR25V FOR DDR DIMM & NB

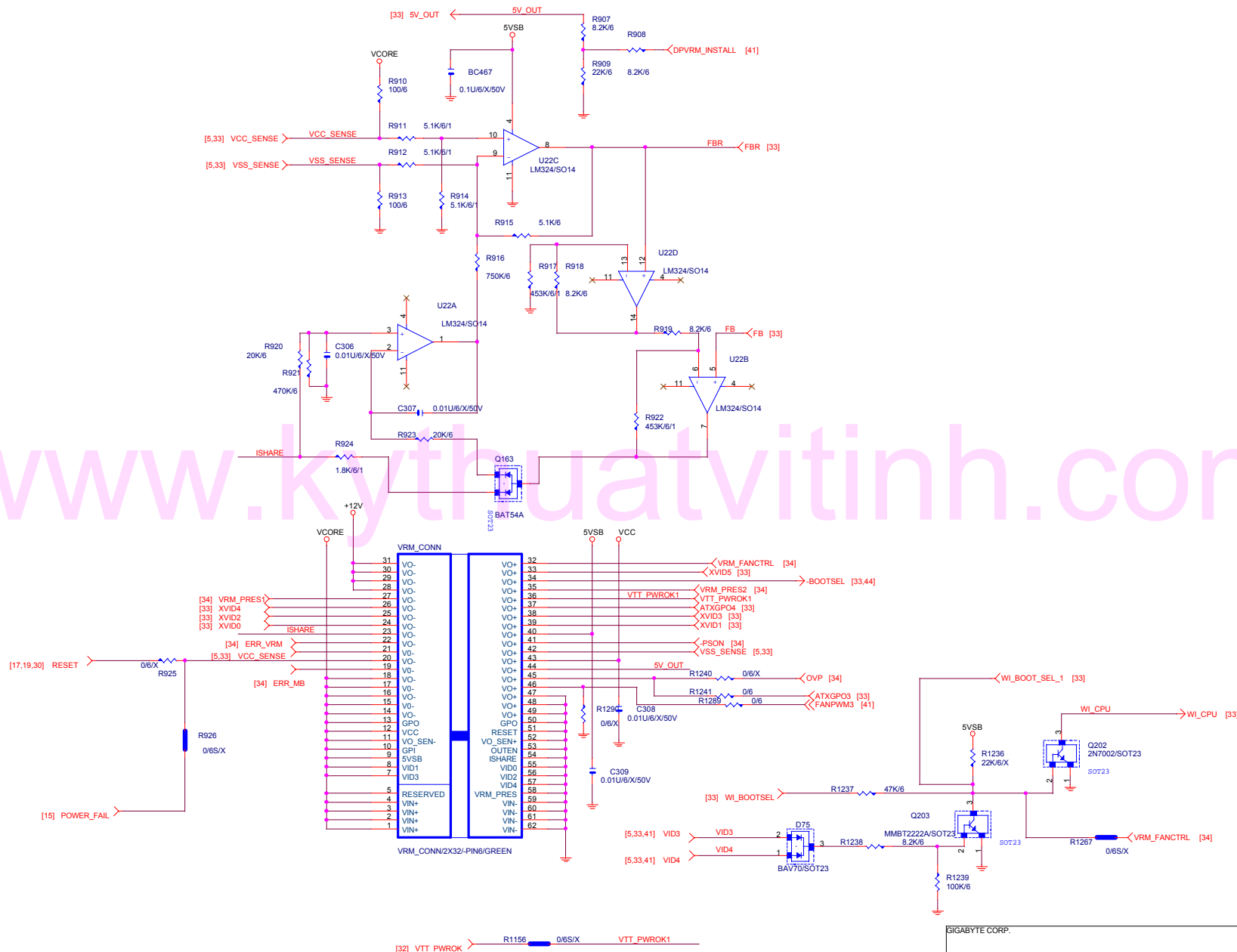
VDDQ FOR AGP 4X/8X



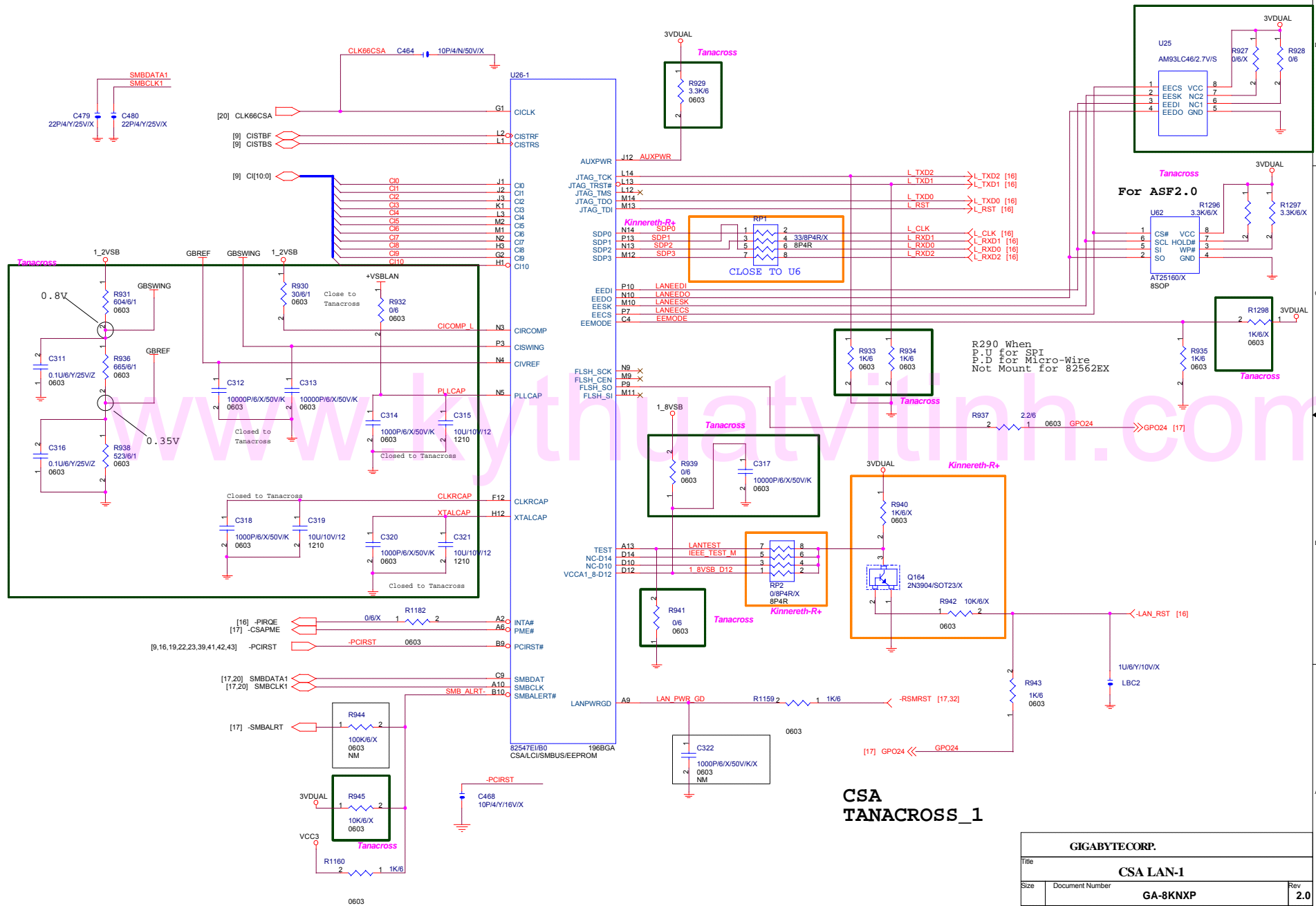
SILICON CORP.			
File			
ISL6556B Springdale power ckt			
Size			
Custom			
Date			
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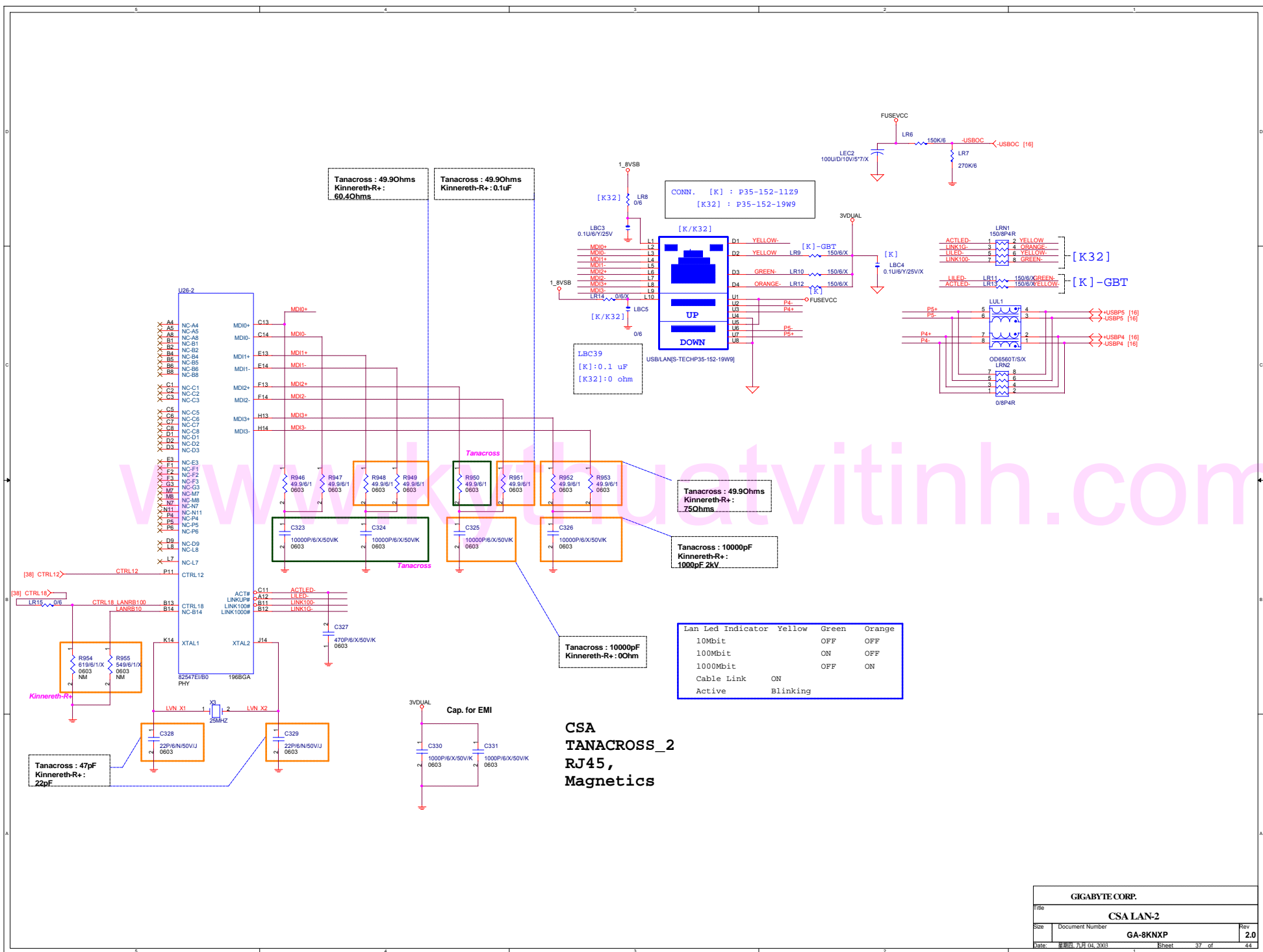


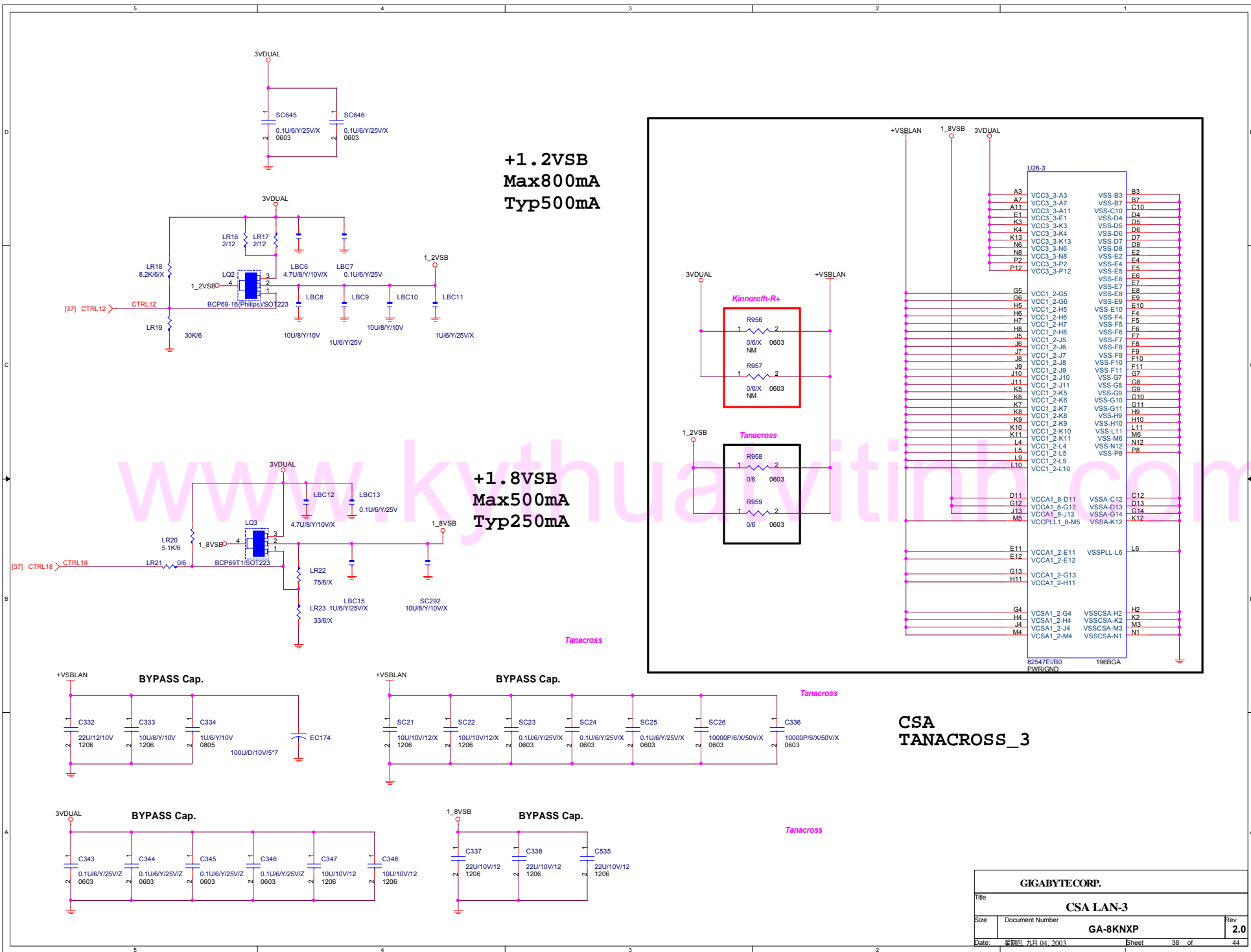
DUAL POWER

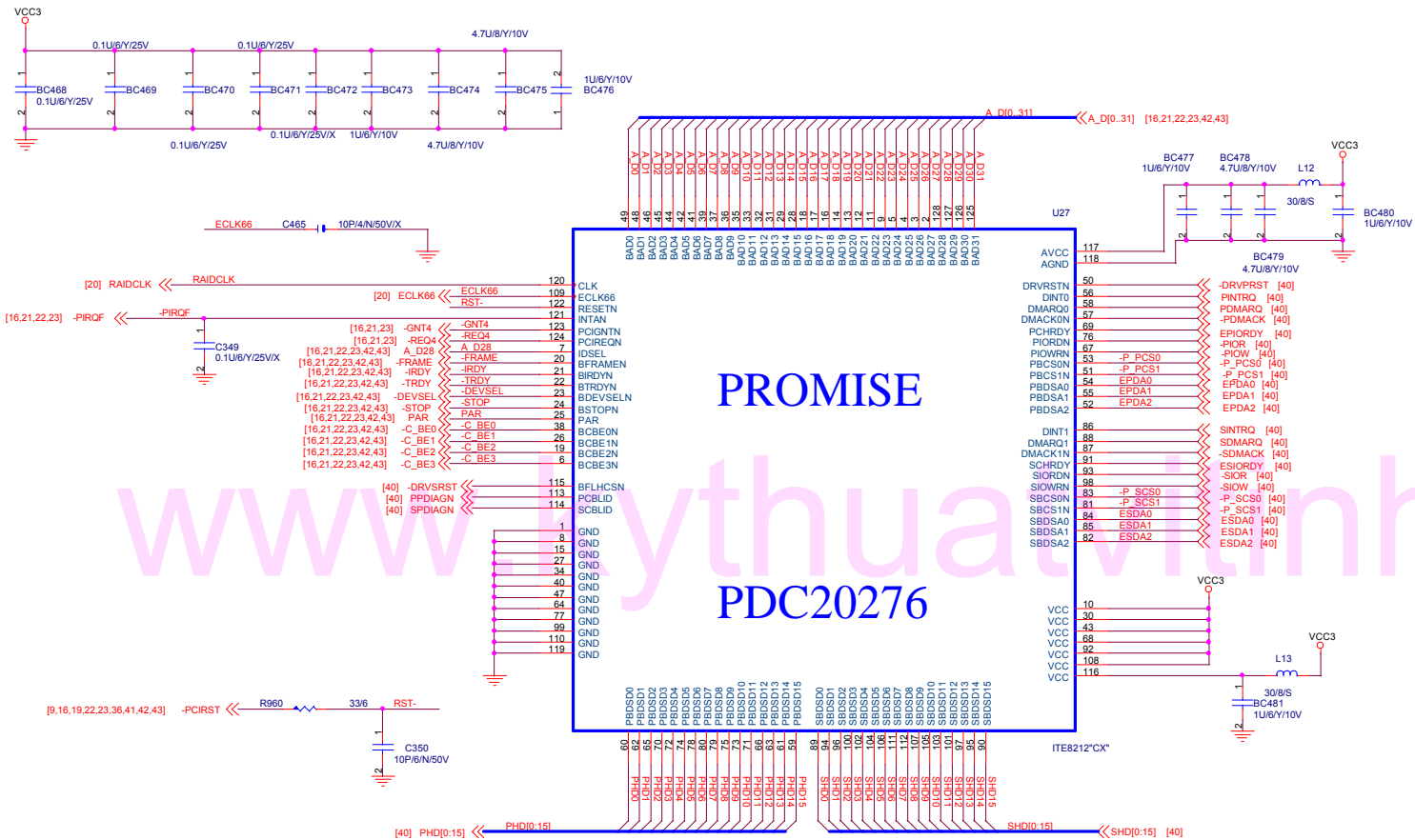


SISGABYTE CORP.			
Title			
Dual Power 2			
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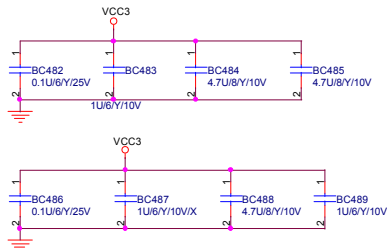




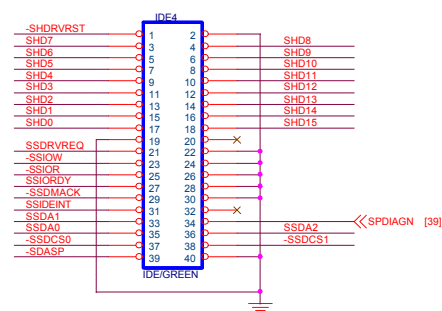
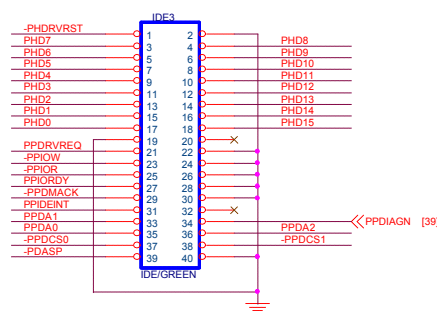
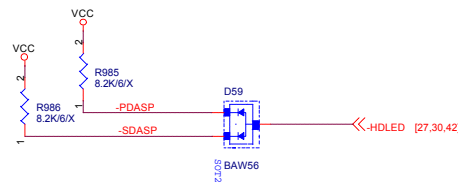
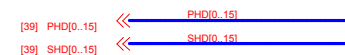
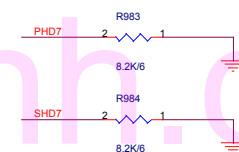
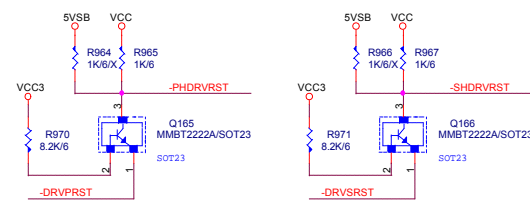
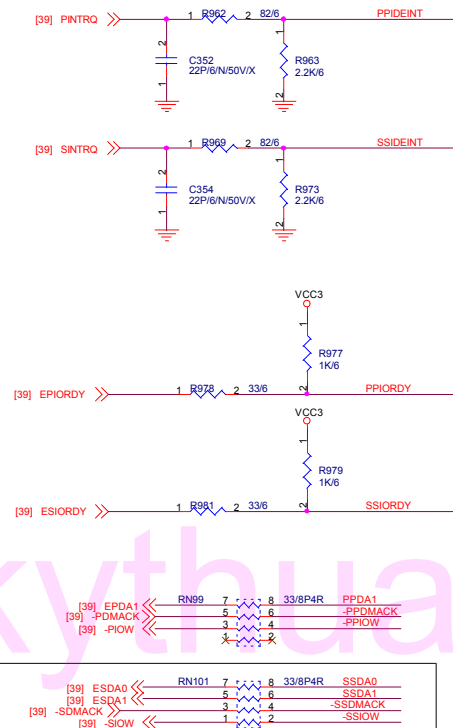


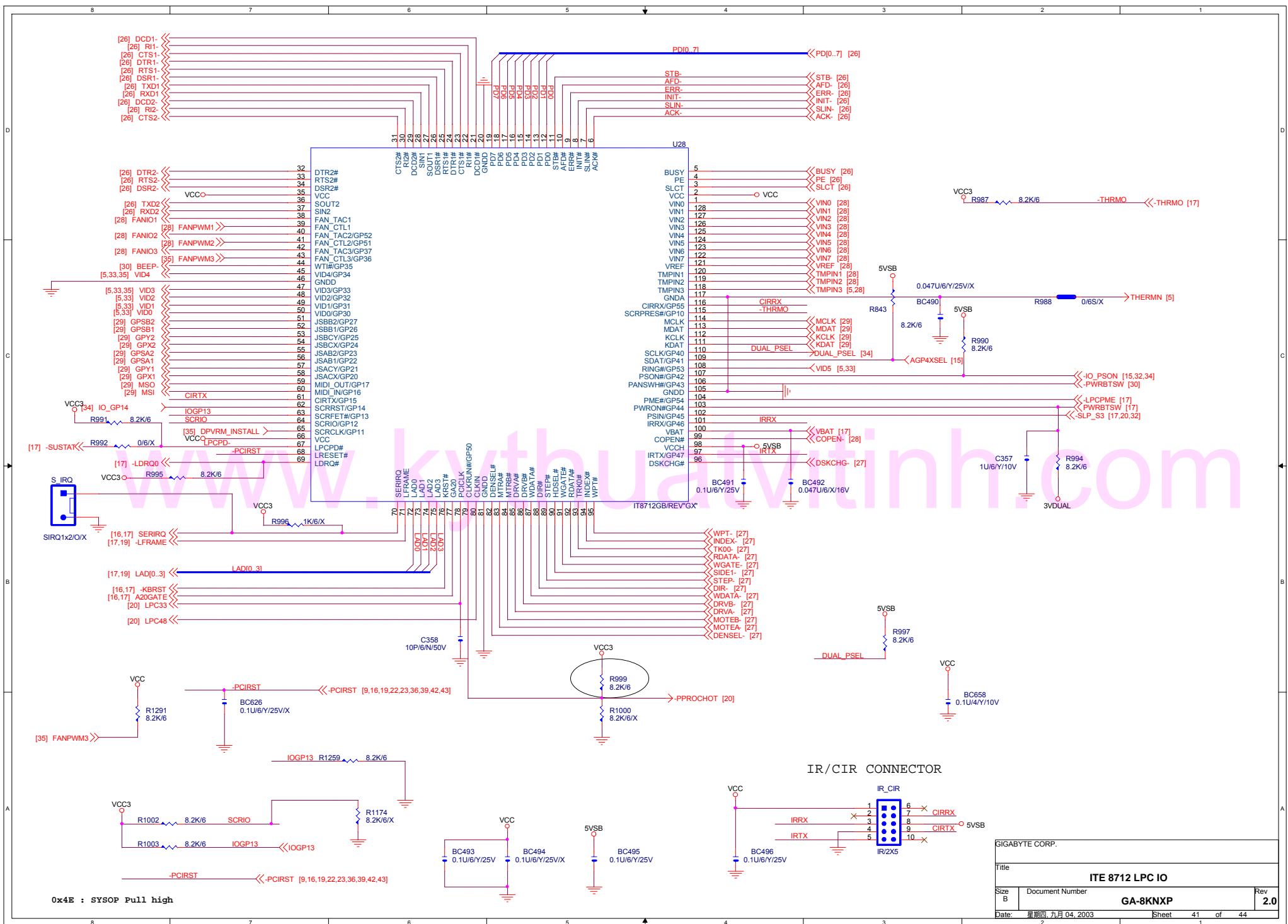


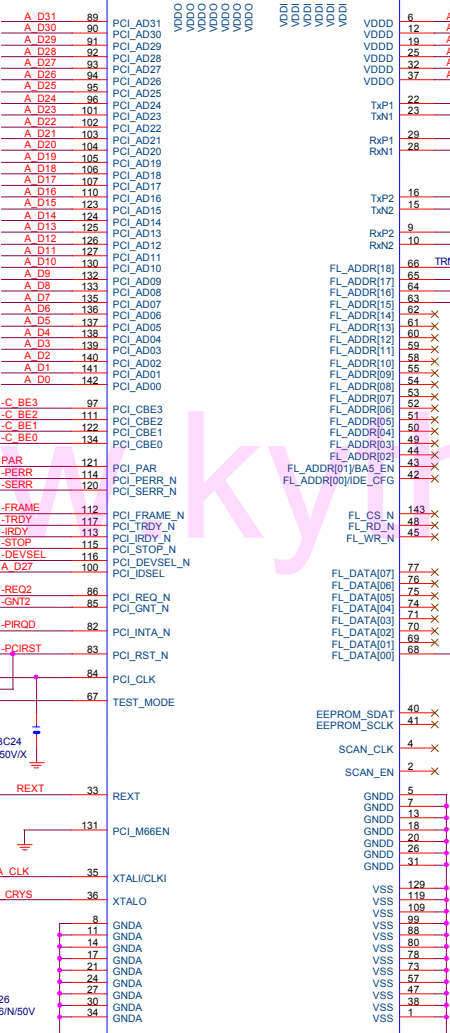
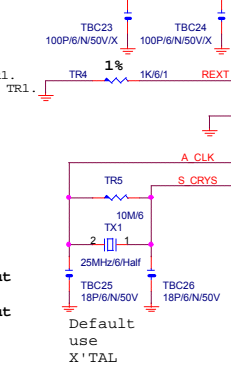
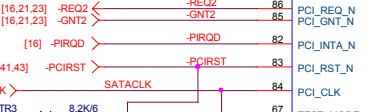
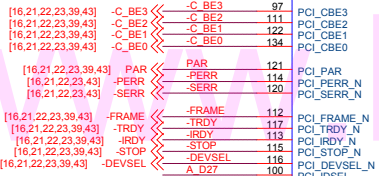
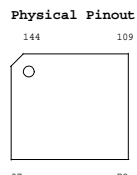
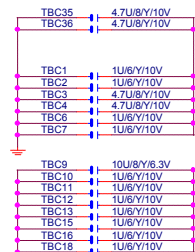
WIDER TRACE FOR POWER



GIGABYTECORP.			
Title			
ATA133 & IDE RAID			
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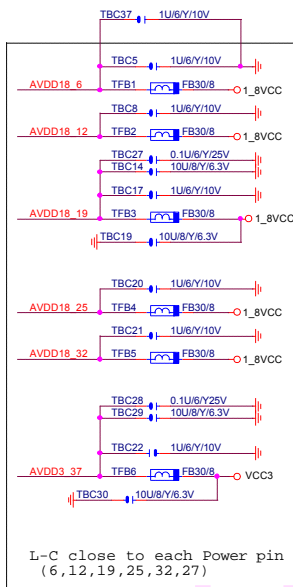




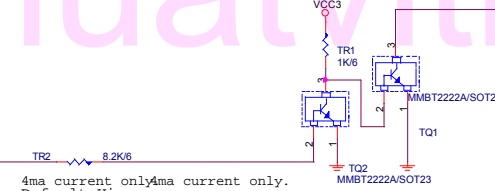
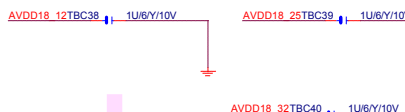
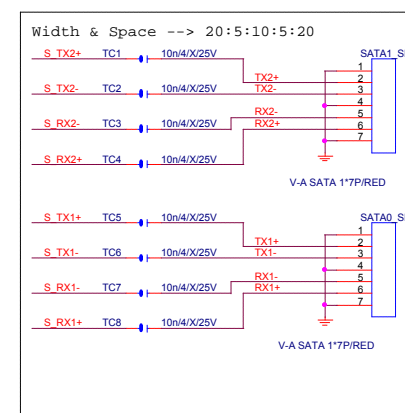
Si3112 REV1.21(10HP2-F23122-20)

From LDO or OP+MOS 1.8VCC

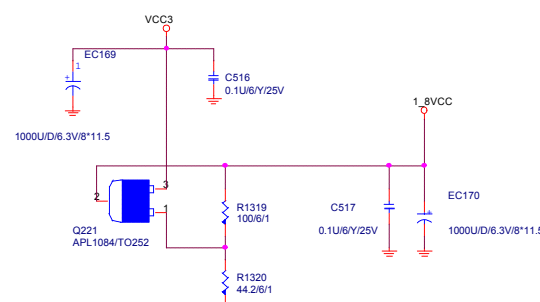
From M/B VCC3



L-C close to each Power pin (6,12,19,25,32,27)



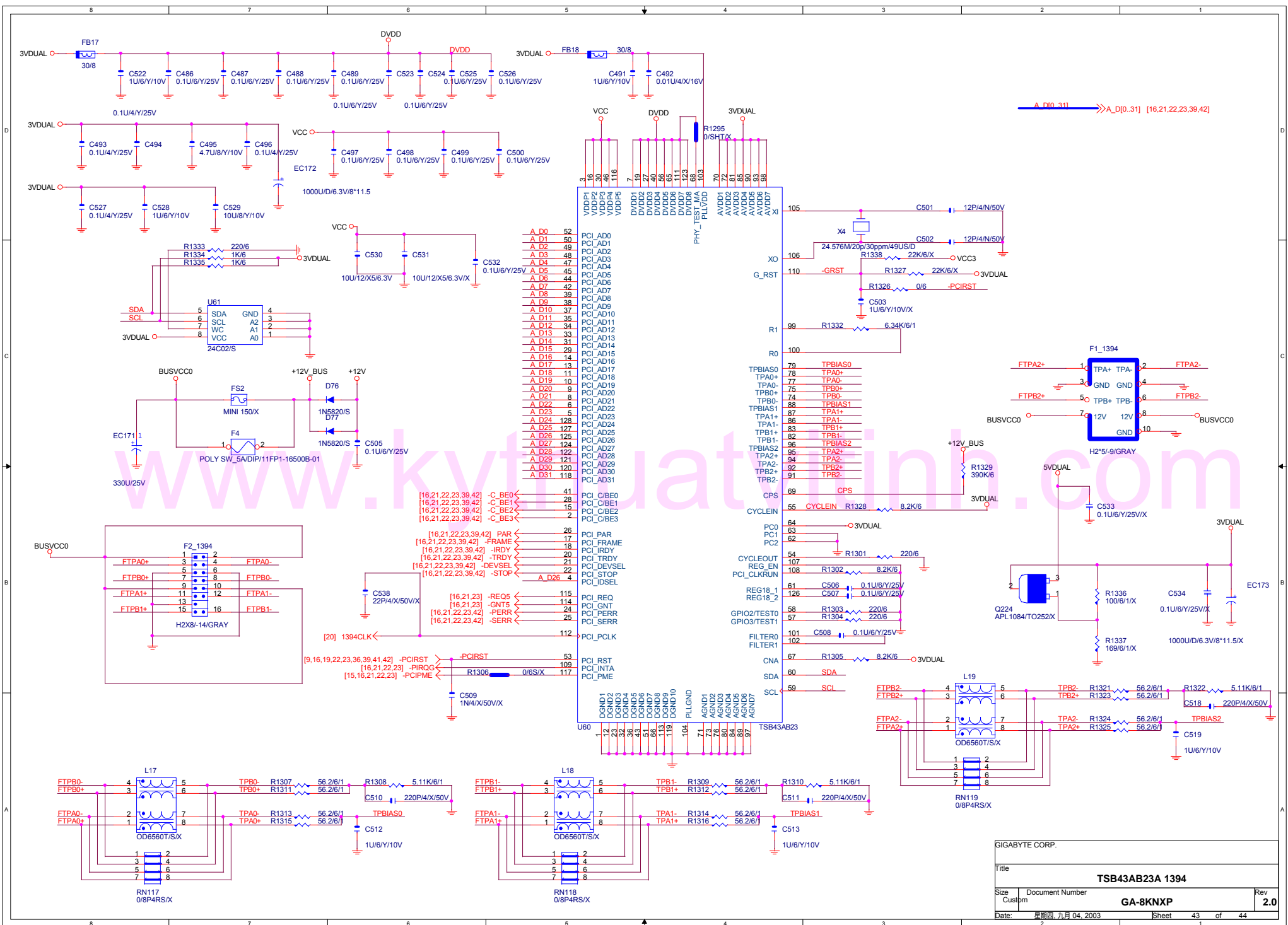
4ma current only 4ma current only. Default Hi



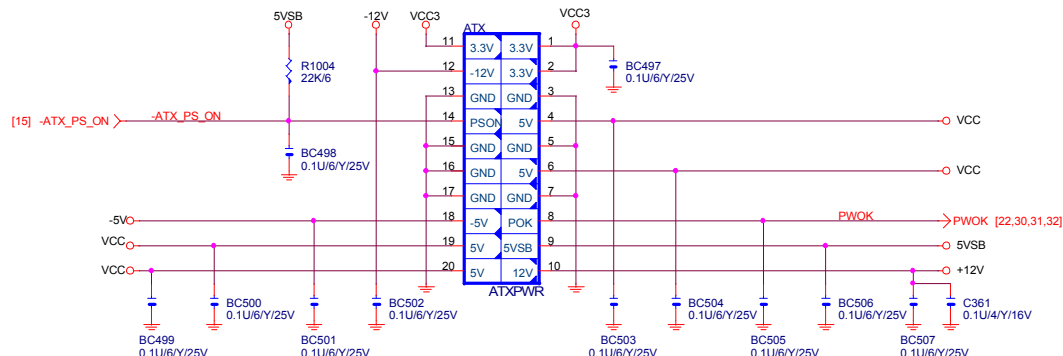
1. TX+/- & RX+/- 儘可能Reference GND, 換層時須在其Via hole旁5mil處左右各打一個GND Via.
1. TX+/- & RX+/- 兩旁最好能包地。



GIGABYTE			
Silicon Image Si3112(S-ATA)			
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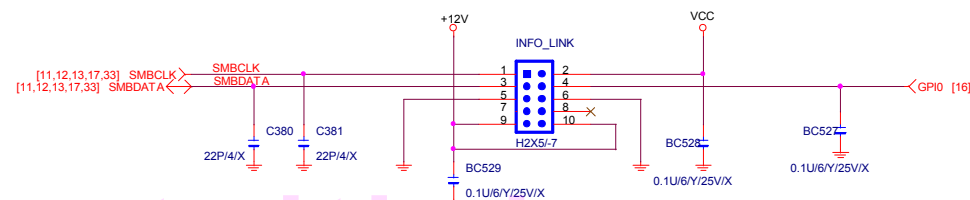


ATX POWER CONNECTOR



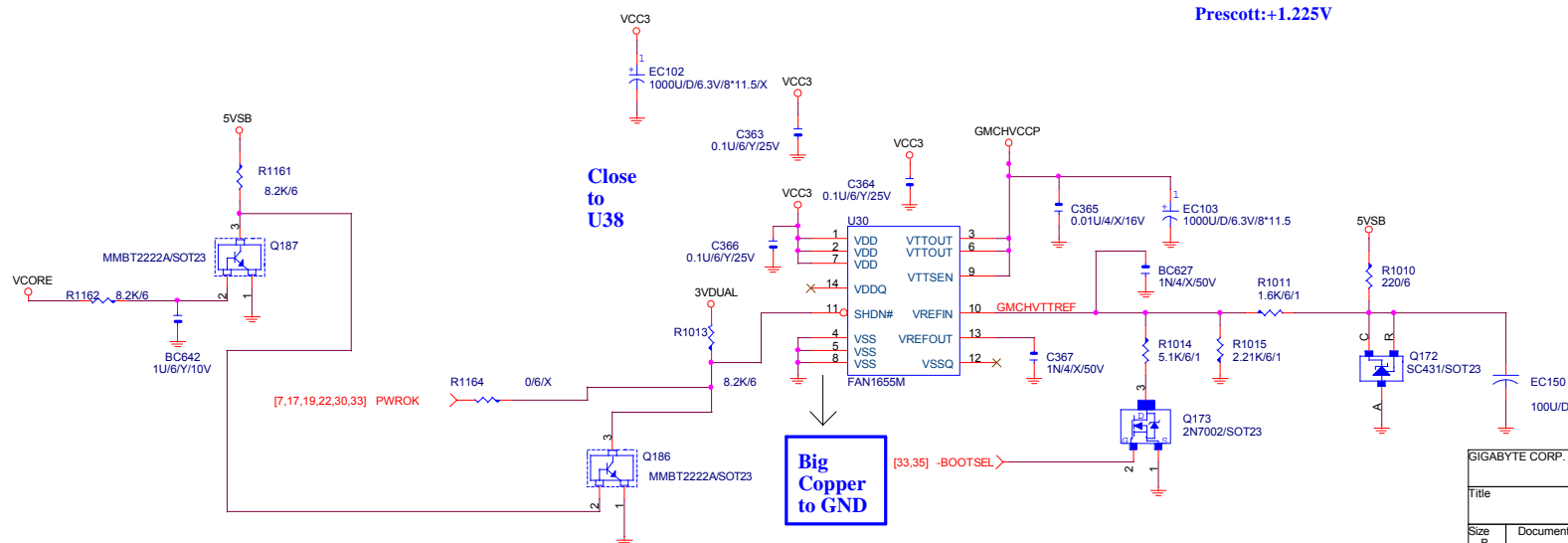
SMBUS CONN.

SMB CONNECTOR



PIN 7 為防呆

Northwood:+1.45V
Prescott:+1.225V



Close to U38

Big Copper to GND

GIGABYTE CORP.		
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