

GIGABYTE GA-8IK1100 Schematics

Revision 2.0

SHEET

TITLE

SHEET

TITLE

01	COVER SHEET
02	BOM & PCB MODIFY HISTORY
03	BLOCK DIAGRAM
04	P4_478A
05	P4_478B
06	P4_478C
07	CANTERWOOD HOST
08	CANTERWOOD DDR
09	CANTERWOOD AGP, HUB, CSA, VGA
10	CANTERWOOD PWR
11	DDR1,2 CHANNEL A
12	DDR4,5 CHANNEL B
13	DDR3,6 CHANNELA, B
14	DDR TERMINATION
15	AGP PRO
16	ICH5 PCI, USB, HUB, LAN
17	ICH5 IDE, GPIO, SATA, CTRL
18	ICH5 VCC, GND
19	DUAL BIOS
20	CY28405/ICS952603 CLOCK GEN
21	PCI1,2
22	PCI3,4
23	PCI5
24	CODEC
25	AUDIO JACK
26	COM_LPT
27	IDE
28	H/W, FAN
29	KB_PS2, GAME PORT
30	FANEL
31	USB CONN
32	DDR AGP POWER
33	VCORE POWER

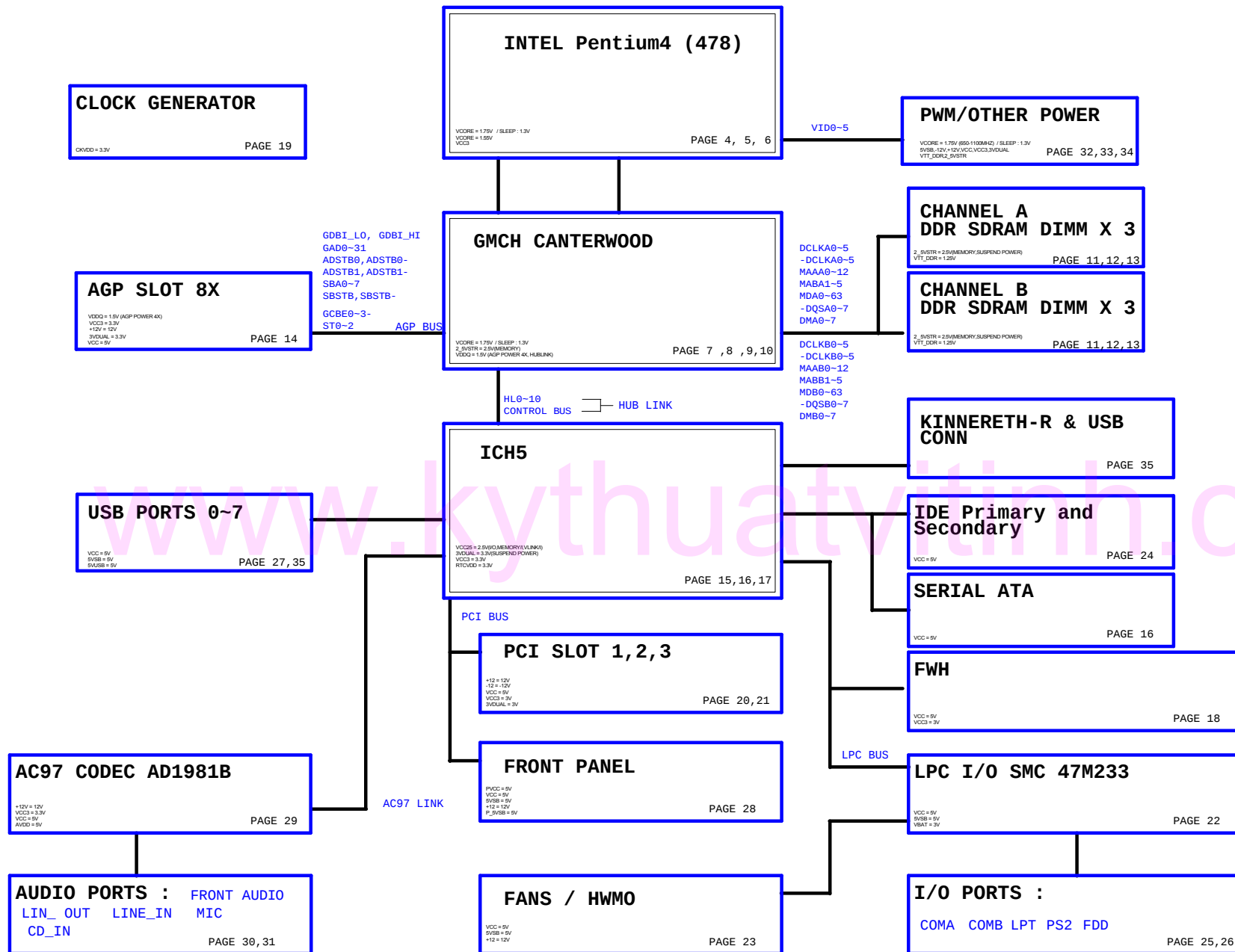
34	CSA KENAI II+ KINNERITH-1
35	CSA KENAI II+ KINNERITH-2
36	CSA KENAI II+ KINNERITH-3
37	ITE 8712GX
38	ATX, OTHERS POWER
39	TI 1394
40	TEST POINT
41	
42	
43	
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54	

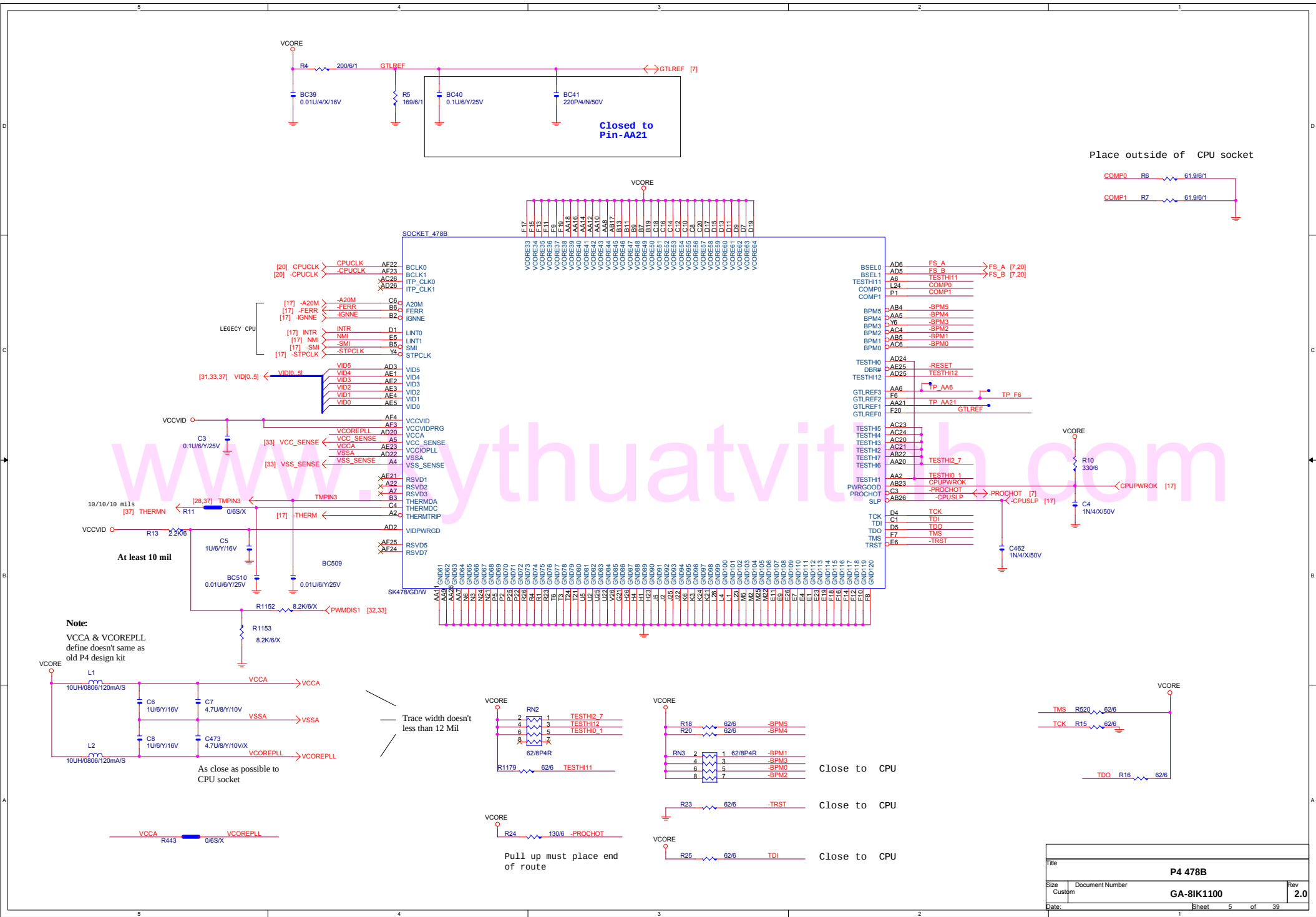
		COMPONENT SIDE (1 oz. Copper) VCC SIDE (1 oz. Copper) GND SIDE (1 oz. Copper) SOLDER SIDE (1 oz. Copper)
GIGABYTE CORP.		
Title COVER SHEET		
Size Custom	Document Number GA-8IK1100	Rev 2.0
Date:	Sheet 1 of 39	

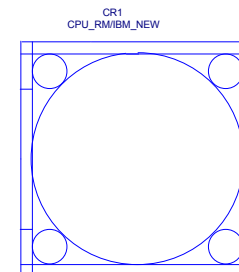
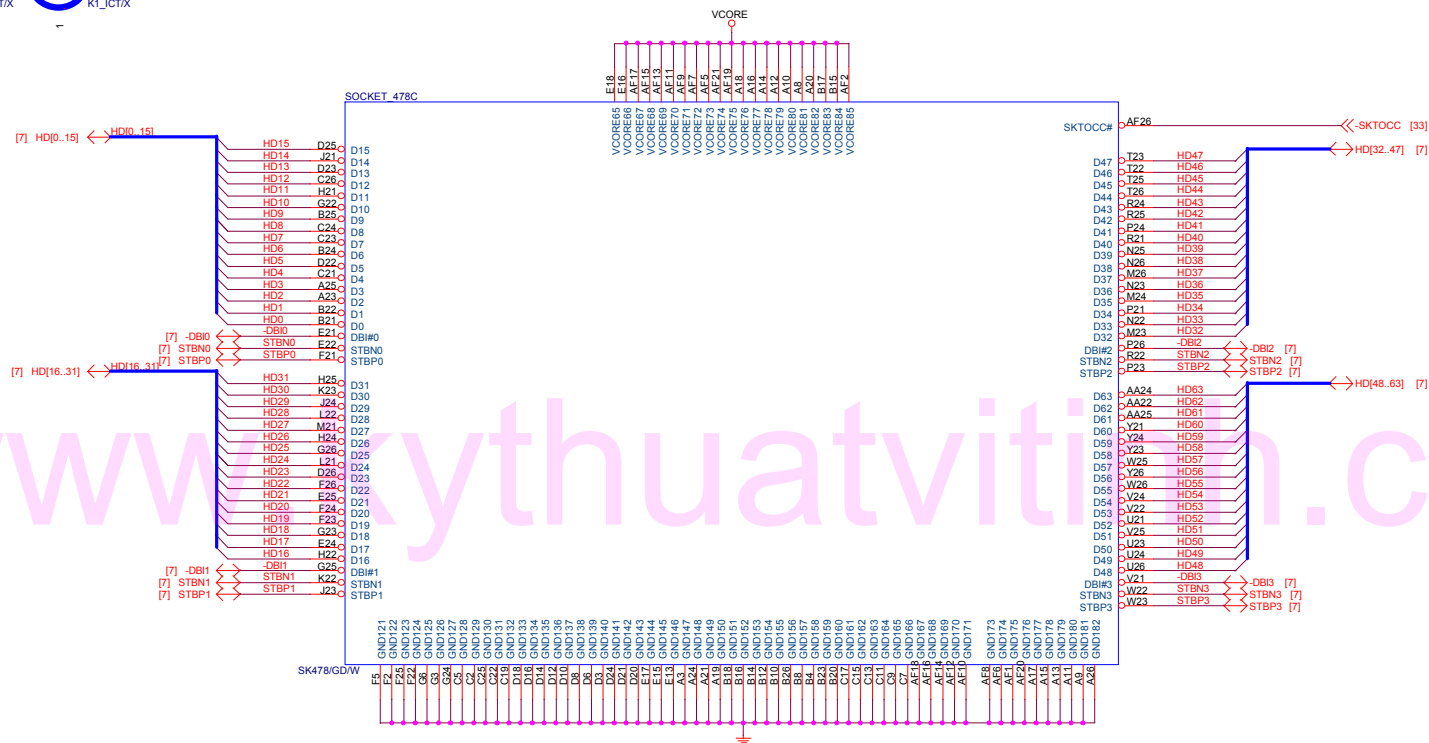
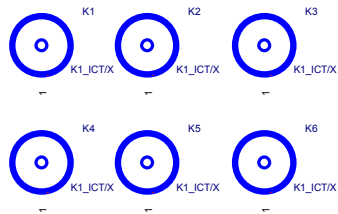
Version : 2.0
Component history

[illegible]

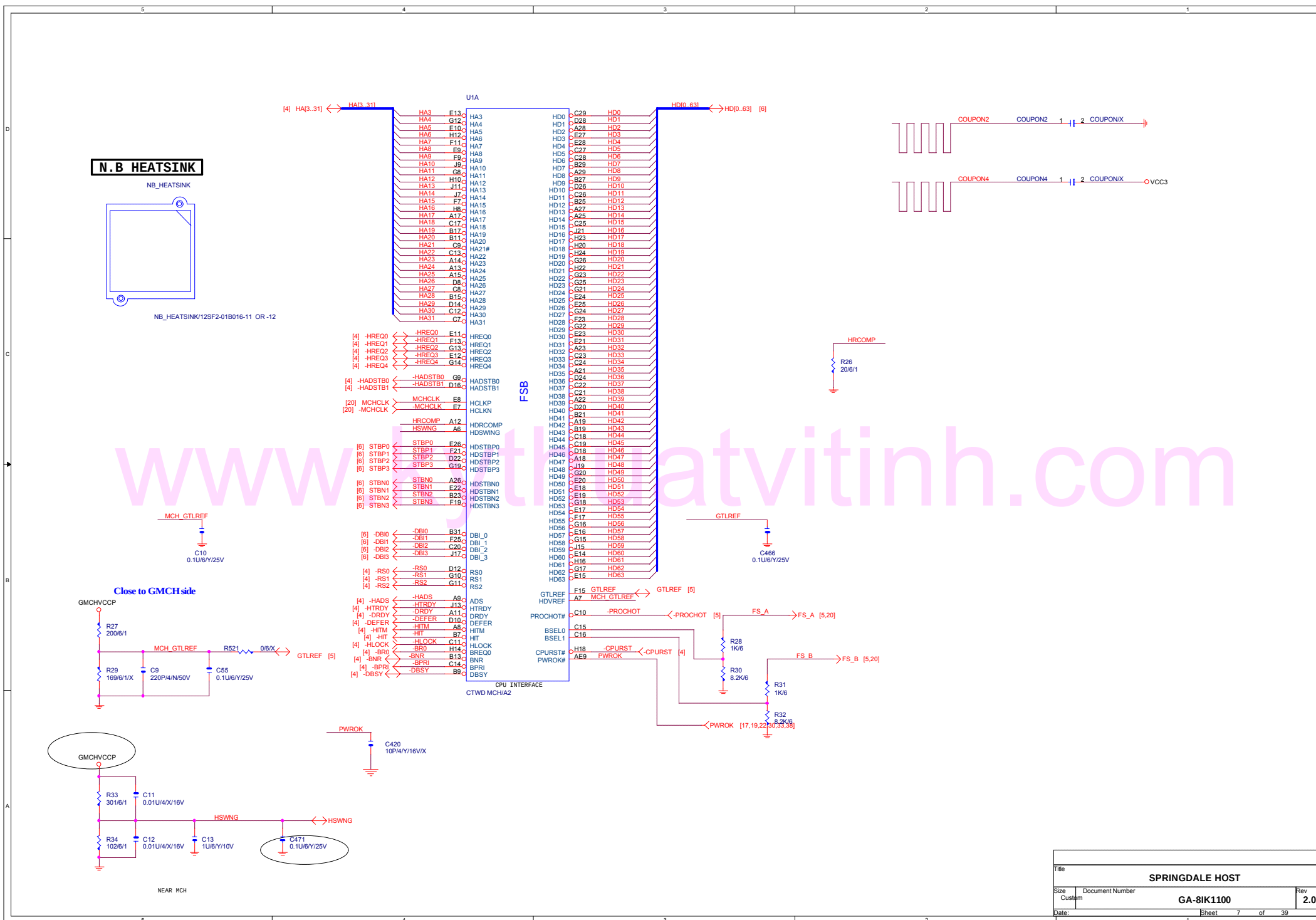
BLOCK DIAGRAM

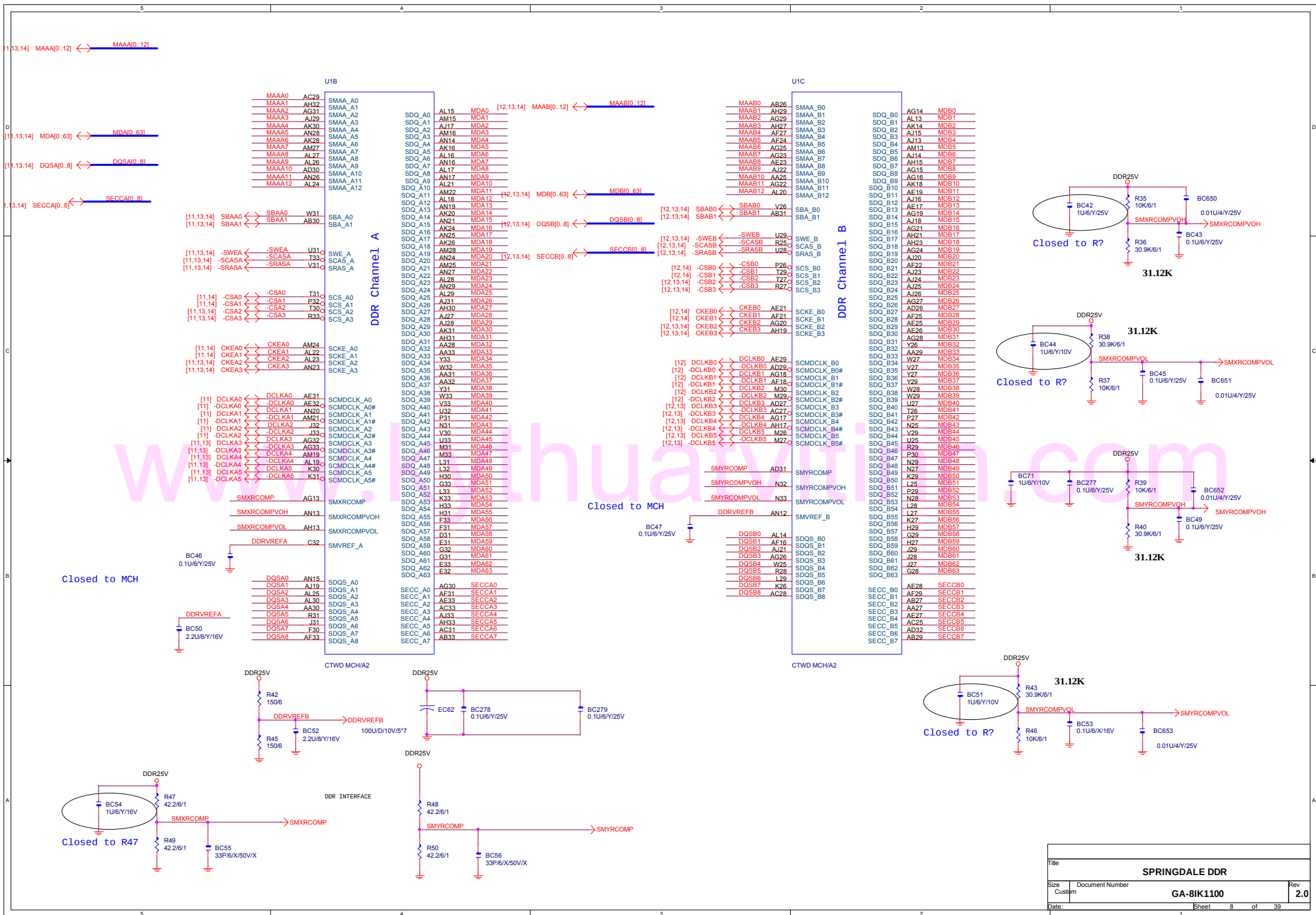


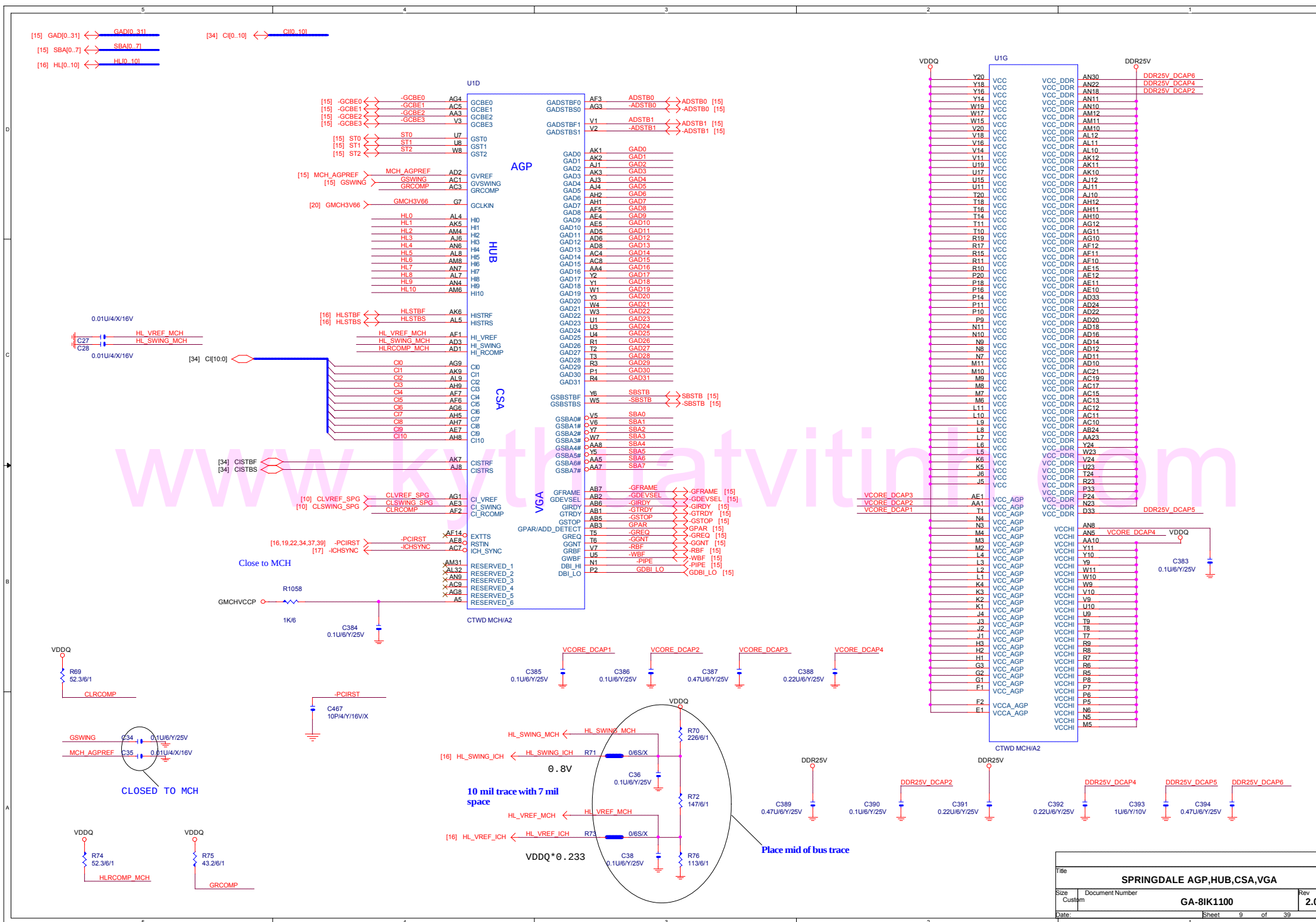




Title			P4 478C
Size	Document Number	GA-8IK1100	
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[8,13,14] SECCA[0..7] <- SECCA0..71

DDR25V

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

MAAA0 48
MAAA1 43
MAAA2 41
MAAA3 130
MAAA4 37
MAAA5 125
MAAA6 29
MAAA7 122
MAAA8 27
MAAA9 141
MAAA10 118
MAAA11 115
MAAA12 103

[8,13,14] SBAA0 59
[8,13,14] SBAA1 52
[8,13,14] SBAA2 113

[8,14] -CSA0 157
[8,14] -CSA1 158
[8,14] -CSA2 71
[8,14] -CSA3 163

DQM0 97
DQM1 107
DQM2 119
DQM3 129
DQM4 149
DQM5 159
DQM6 169
DQM7 177
DQM8 140

[8,13,14] -SWEA 63
[8,13,14] -SCASA 65
[8,13,14] -SRASA 154

[8,14] CKEA0 21
[8,14] CKEA1 111

[8] DCLKA1 16
[8] DCLKA2 17
[8] DCLKA3 137
[8] DCLKA4 138
[8] DCLKA5 76
[8] DCLKA6 75

[8,13,14] DQSA[0..8] <-

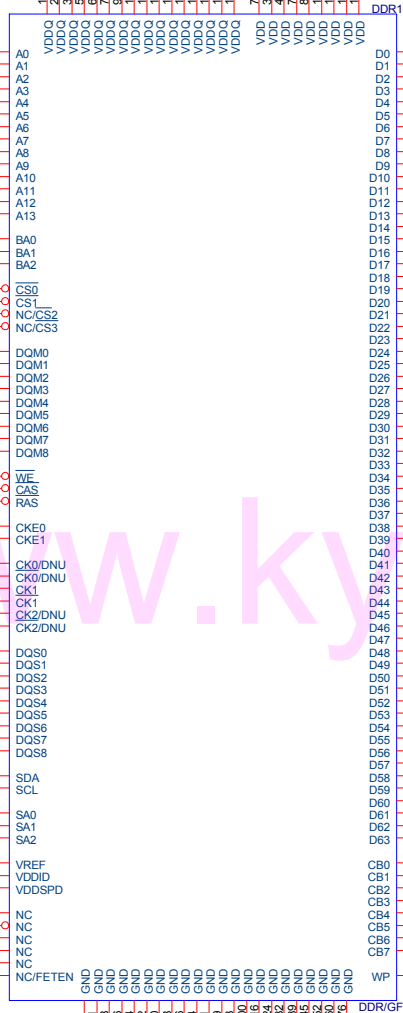
DQSA0 5
DQSA1 14
DQSA2 25
DQSA3 36
DQSA4 56
DQSA5 67
DQSA6 78
DQSA7 86
DQSA8 47

[12,13,17,33,38] SMBDATA 91
[12,13,17,33,38] SMBCLK 92

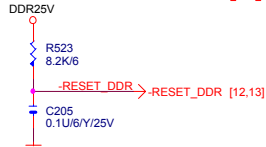
SA0 181
SA1 182
SA2 183

VREF_DDRA 1
VDDID 82
VDDSPD 184

[12,13] -RESET_DDR <-
NC 9
NC 101
NC 102
NC 173
NC 167



For
Register
DDR
Support



MAAA0 48
MAAA1 43
MAAA2 41
MAAA3 130
MAAA4 37
MAAA5 125
MAAA6 29
MAAA7 122
MAAA8 27
MAAA9 141
MAAA10 118
MAAA11 115
MAAA12 103

SBAA0 59
SBAA1 52
SBAA2 113

[8,13,14] -CSA2 157
[8,13,14] -CSA3 158
[8,13,14] -CSA4 71
[8,13,14] -CSA5 163

DQM0 97
DQM1 107
DQM2 119
DQM3 129
DQM4 149
DQM5 159
DQM6 169
DQM7 177
DQM8 140

[8,13,14] -SWEA 63
[8,13,14] -SCASA 65
[8,13,14] -SRASA 154

[8,13,14] CKEA2 21
[8,13,14] CKEA3 111

[8,13] DCLKA4 16
[8,13] DCLKA5 17
[8,13] DCLKA6 137
[8,13] DCLKA7 138
[8,13] DCLKA8 76
[8,13] DCLKA9 75

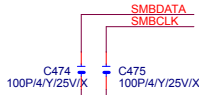
DQSA0 5
DQSA1 14
DQSA2 25
DQSA3 36
DQSA4 56
DQSA5 67
DQSA6 78
DQSA7 86
DQSA8 47

[12,13] SMBDATA 91
[12,13] SMBCLK 92

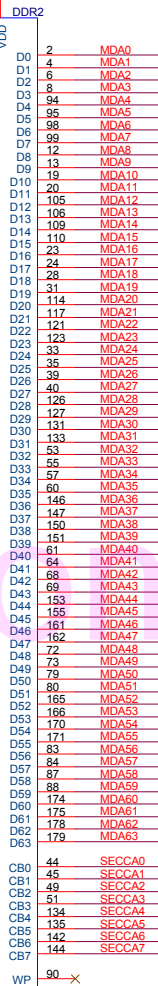
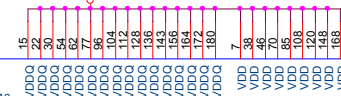
SA0 181
SA1 182
SA2 183

VREF_DDRA 1
VDDID 82
VDDSPD 184

[12,13] -RESET_DDR <-
NC 9
NC 101
NC 102
NC 173
NC 167



DDR25V



GIGABYTE CORP.

Title

DDR1,2 CHANNEL A

Size

Document Number

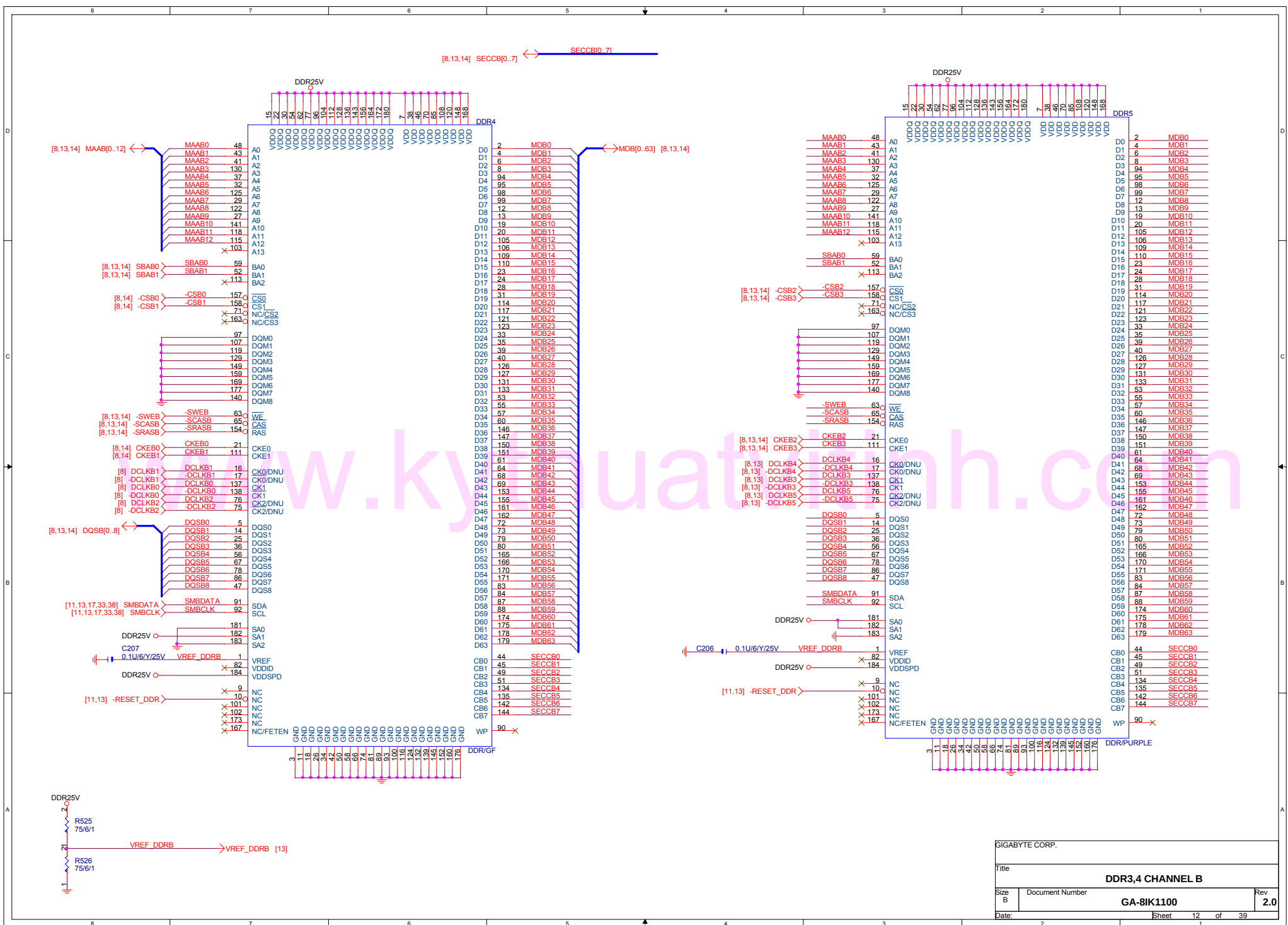
GA-8IK1100

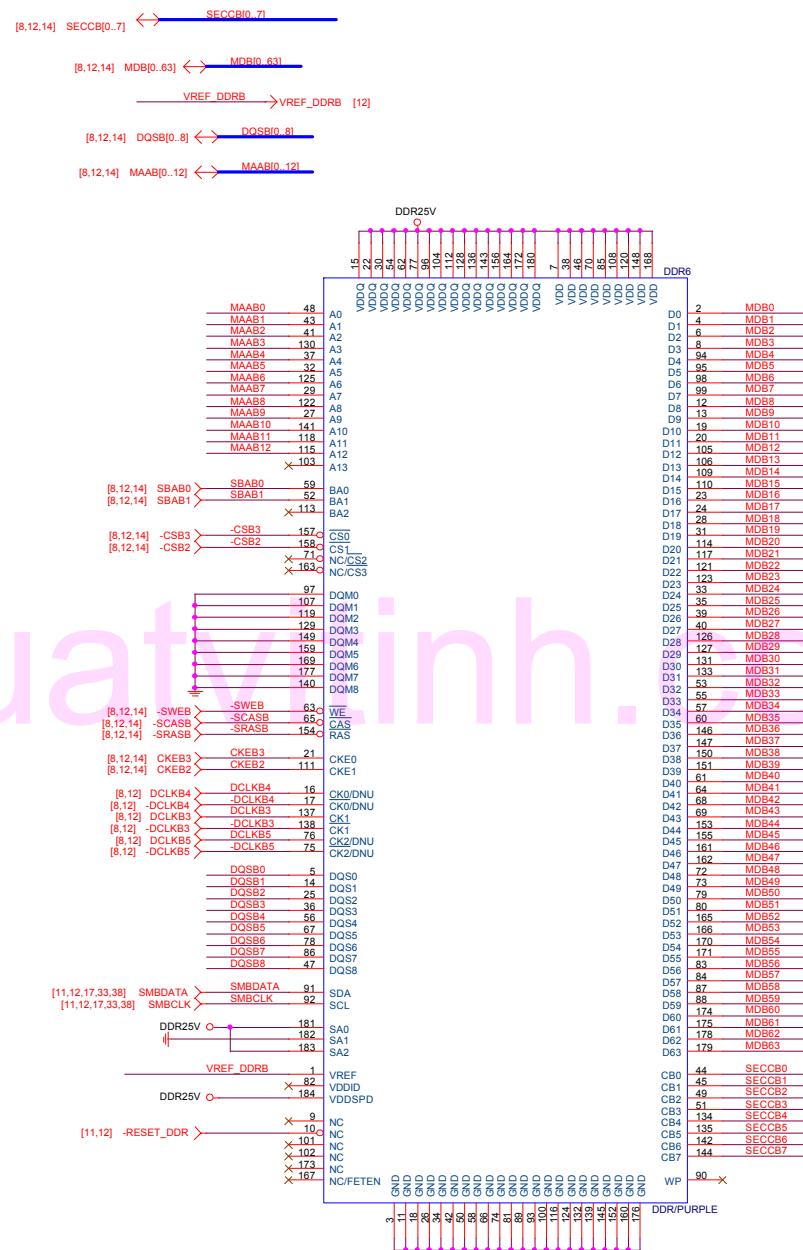
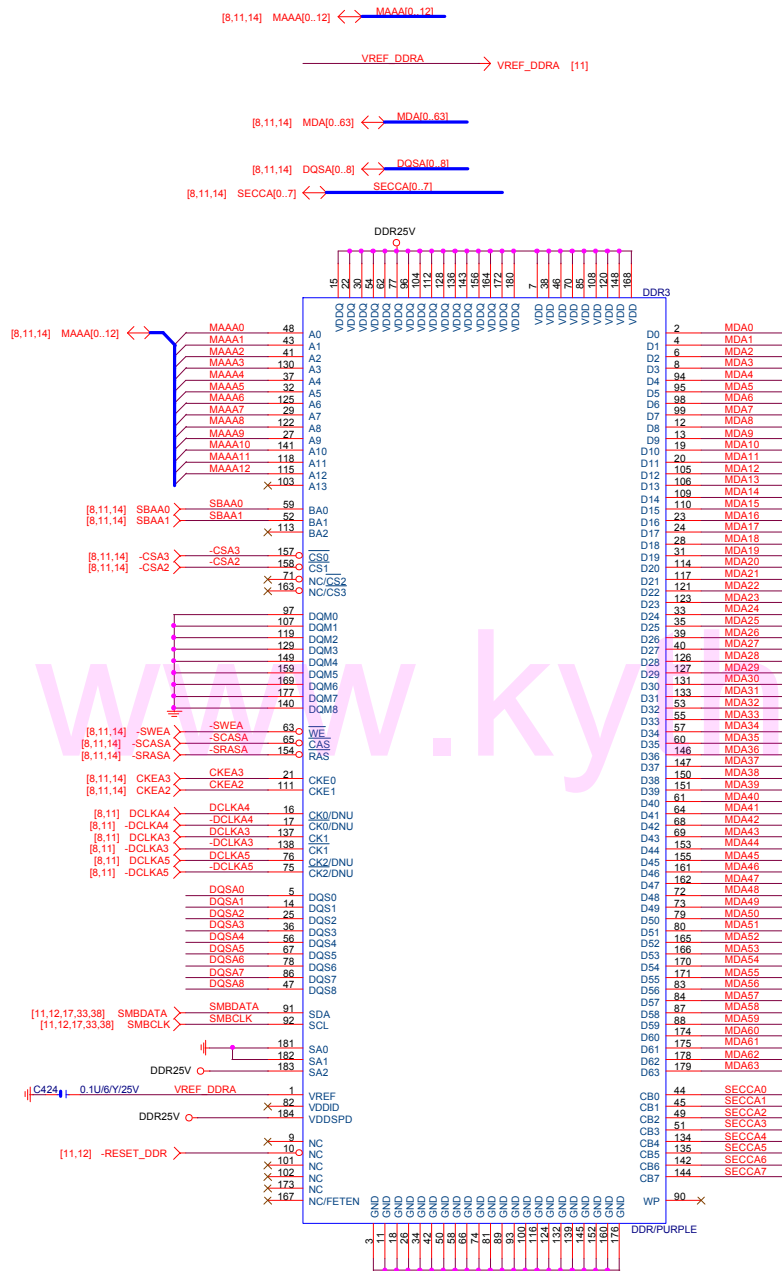
Rev

2.0

Date:

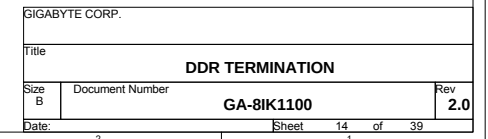
Sheet 11 of 39

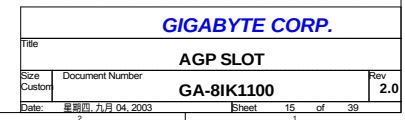


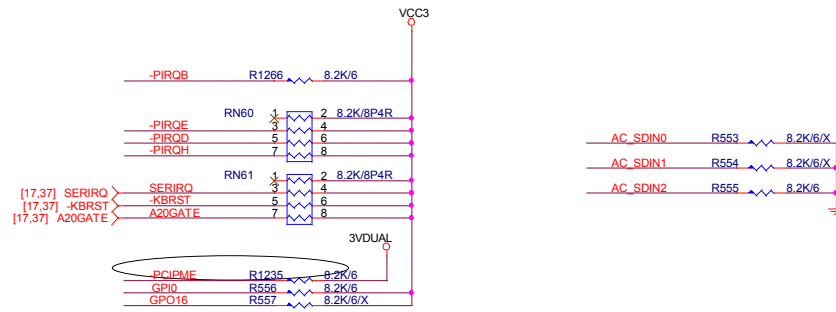


GIGABYTE CORP.			
Title			
DDR1,2 CHANNEL A			
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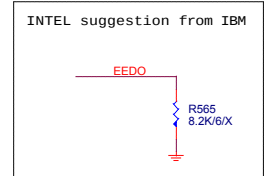
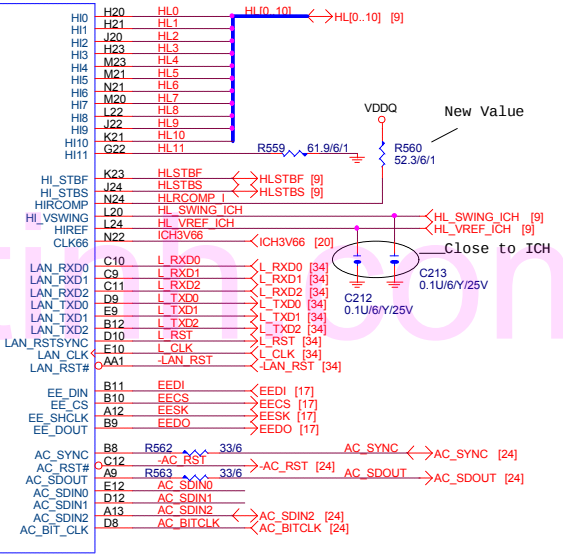
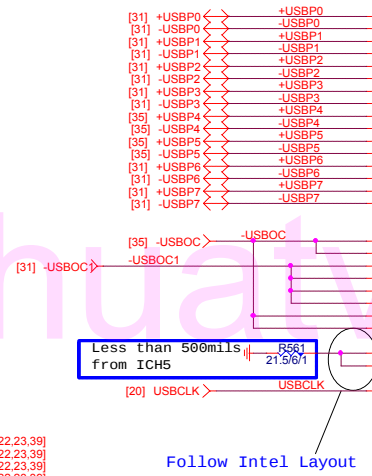
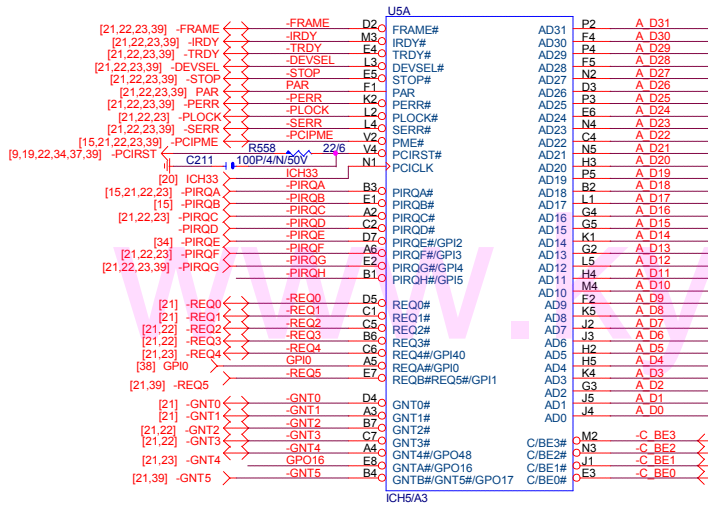
CHANNEL B

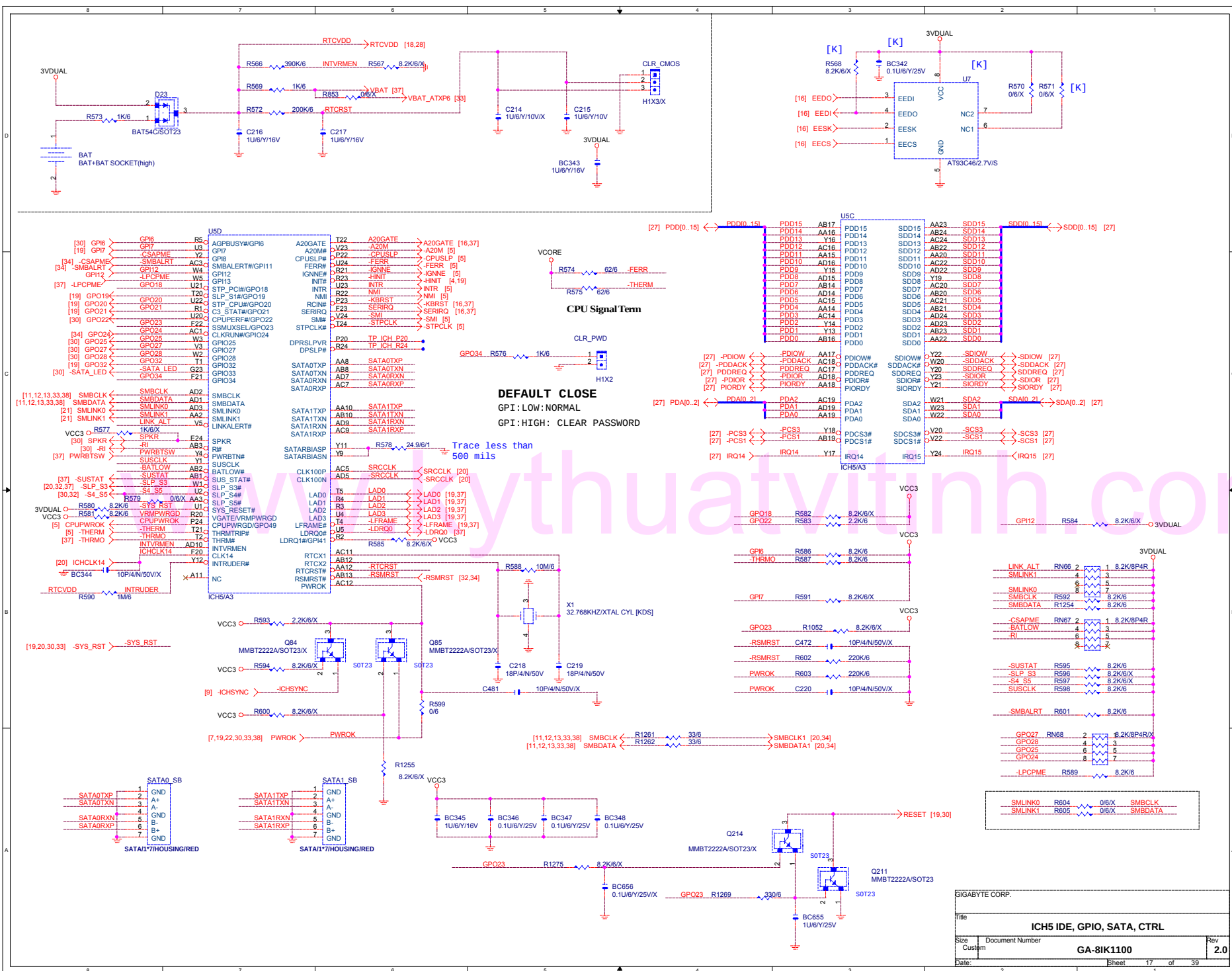


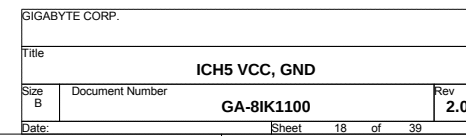


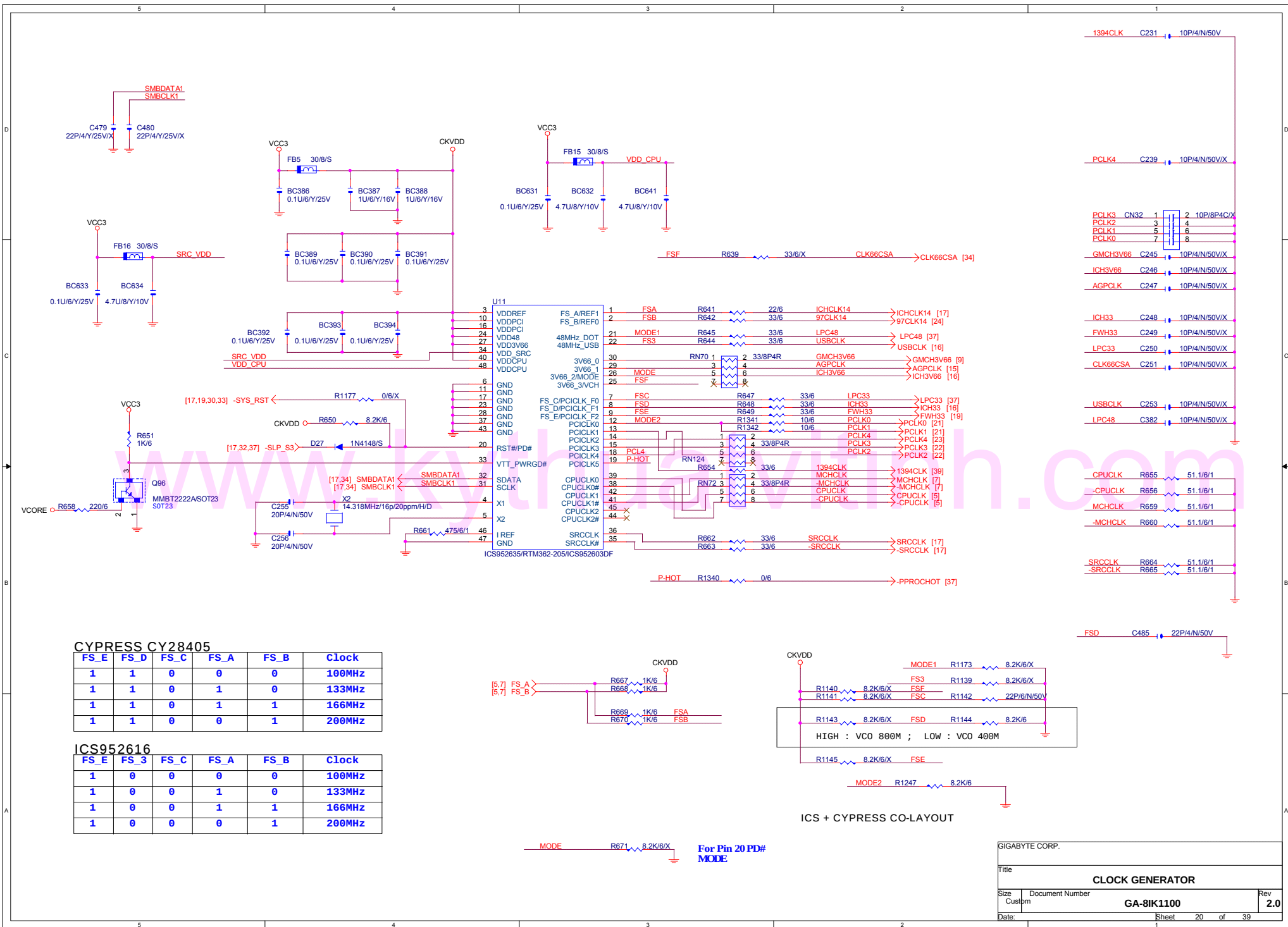


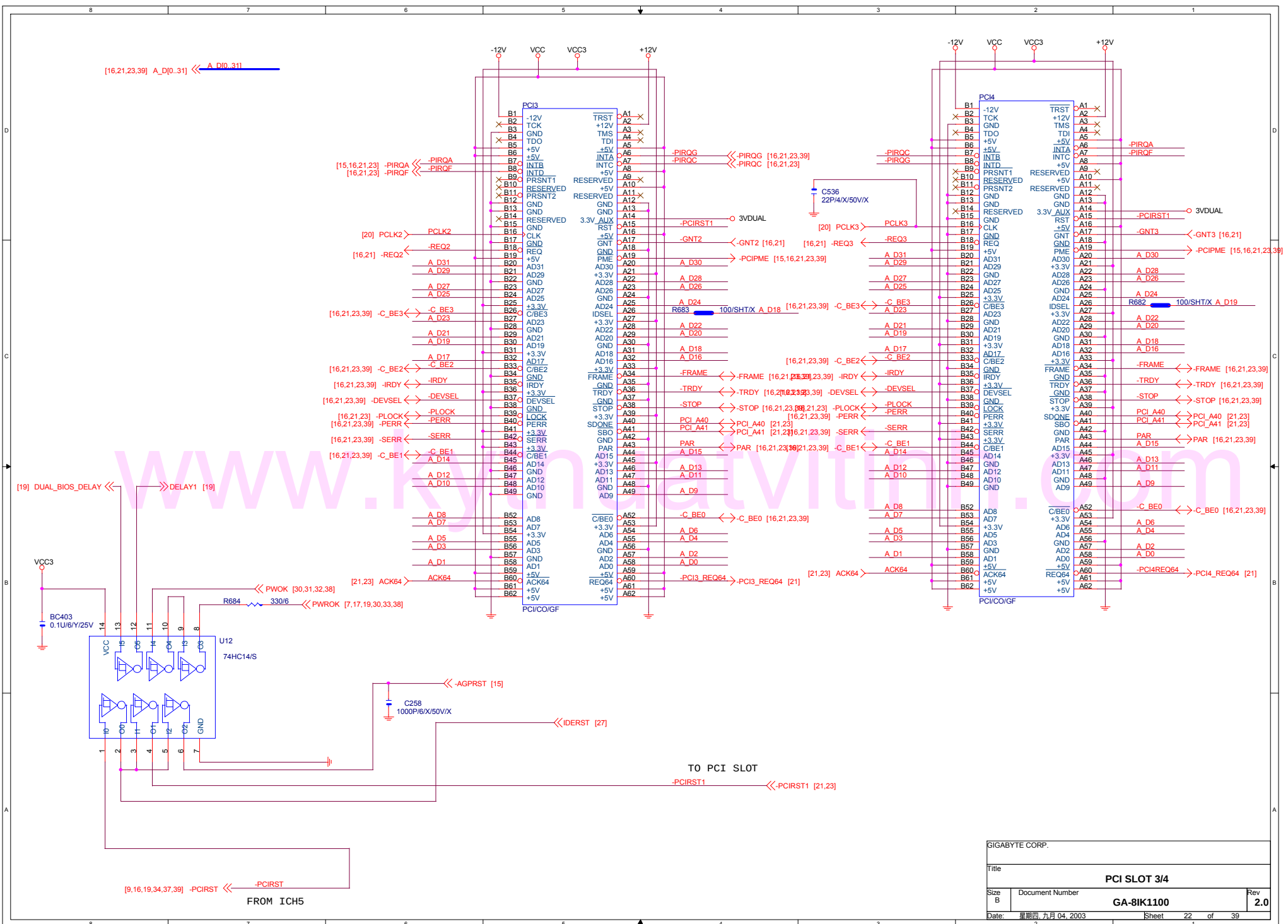
A_D10_311 <-> A_D0..31 [21,22,23,39]



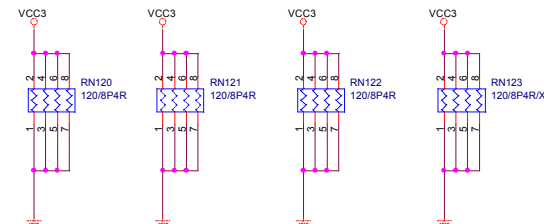
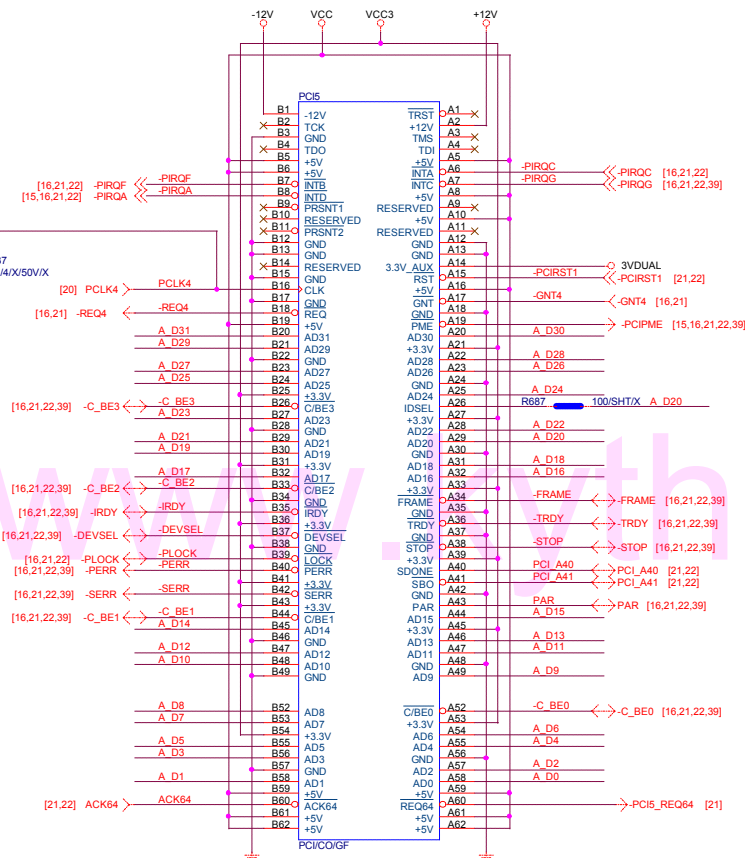
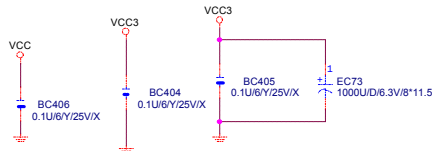








[16,21,22,39] A_D[0..31] << A_D[0..31]

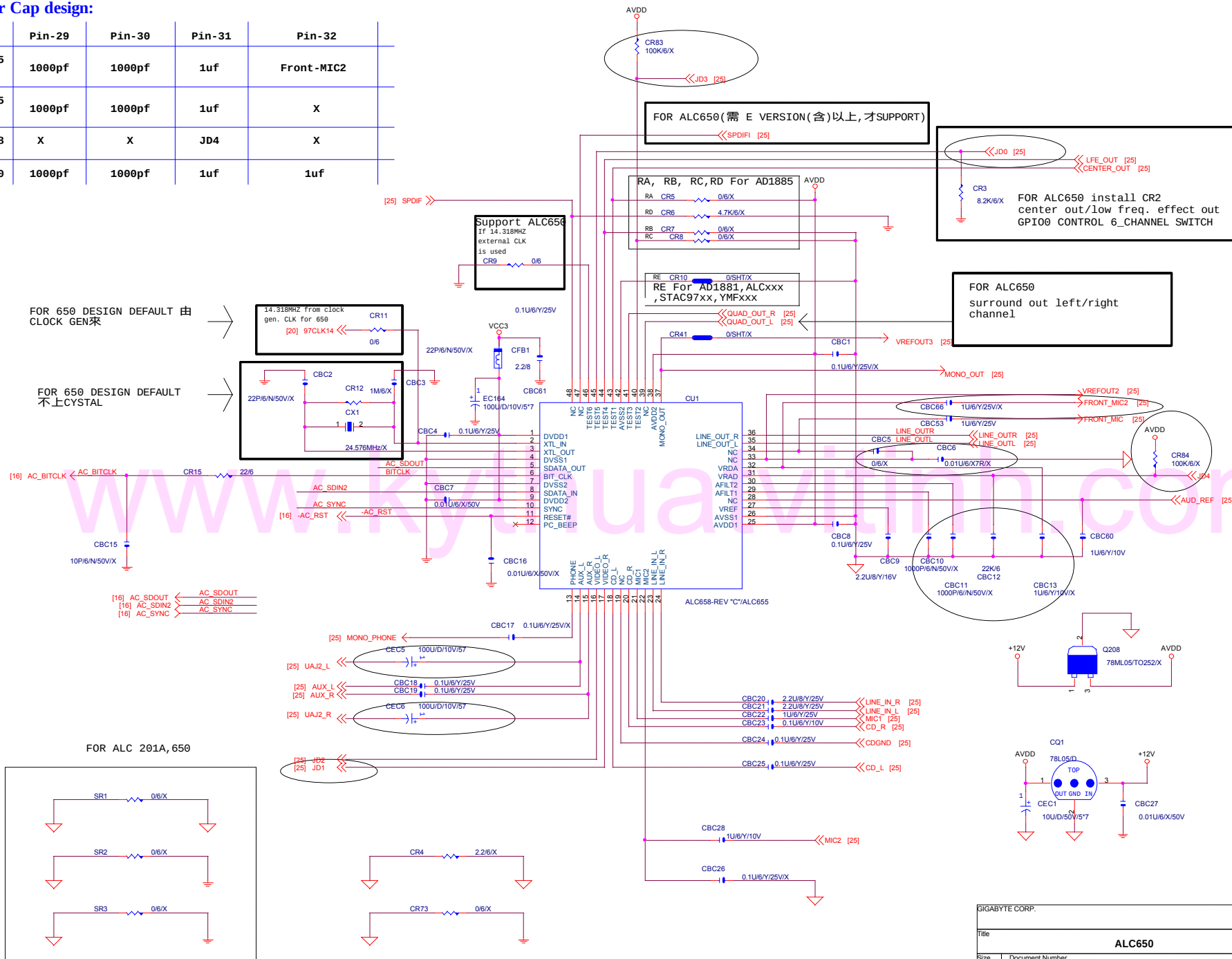


[21,22] -PCIRST1 << -PCIRST1 C262 22P/8/N/50V/X

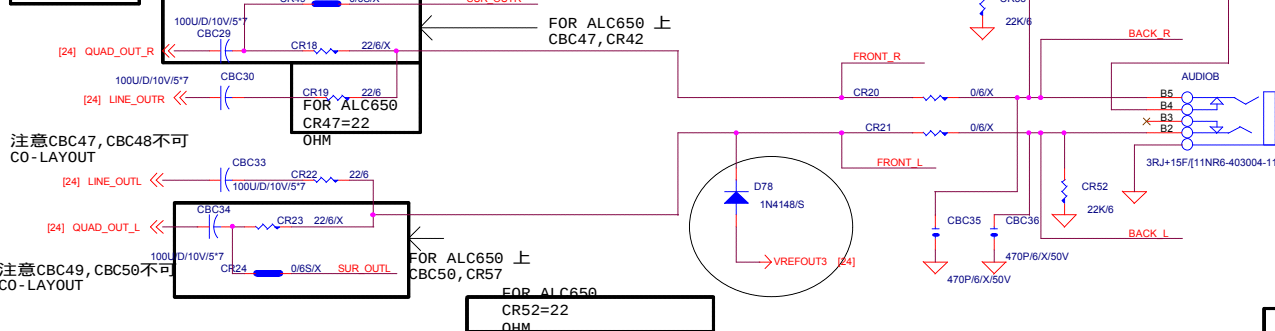
GIGABYTE CORP.			
Title			
PCI SLOT 5/6			
Size	Document Number	Rev	
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Filter Cap design:

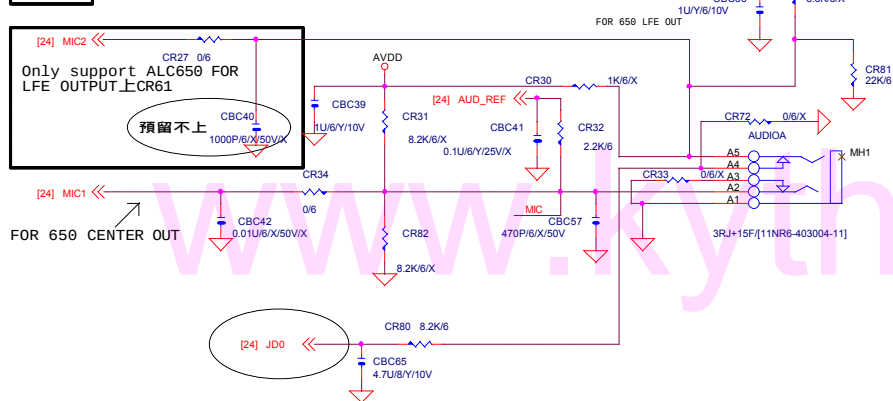
	Pin-29	Pin-30	Pin-31	Pin-32	
ALC655 Rev D	1000pf	1000pf	1uf	Front-MIC2	
ALC655 Rev C	1000pf	1000pf	1uf	X	
ALC658	X	X	JD4	X	
ALC650	1000pf	1000pf	1uf	1uf	



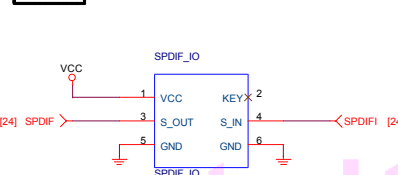
LINE OUT



MIC



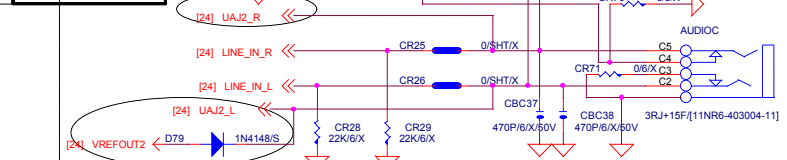
SPDIF



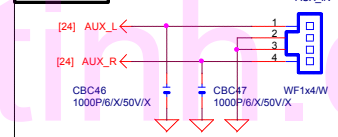
INTEL FRONT AUDIO



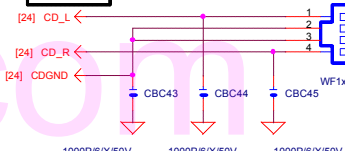
LINE-IN



AUX IN DEFAULT NO POP



CD IN



For ADI 1980/5 上 2X8 PIN

LINE IN(C)

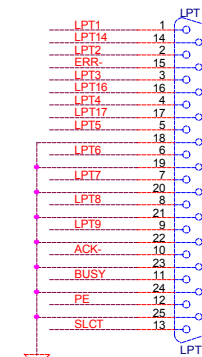
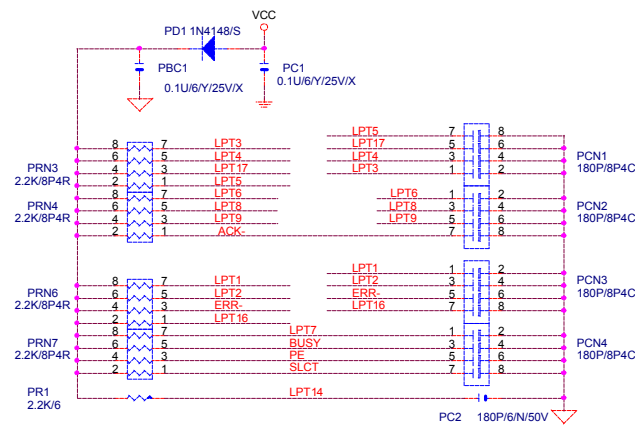
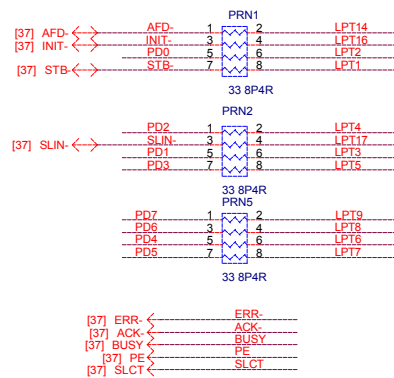
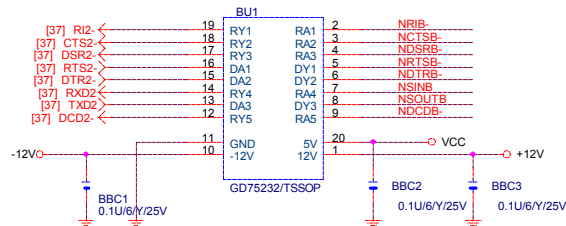
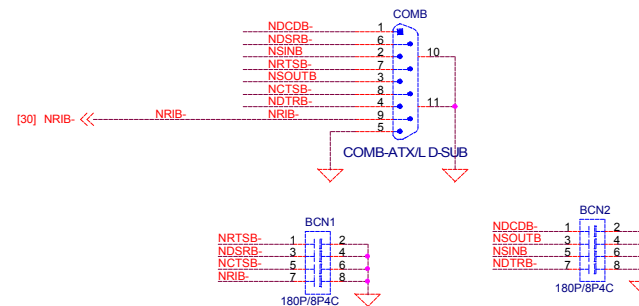
LINE OUT(B)

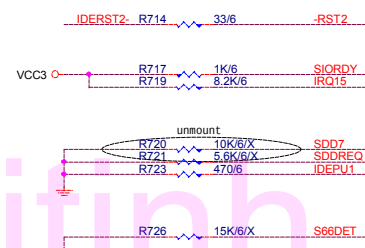
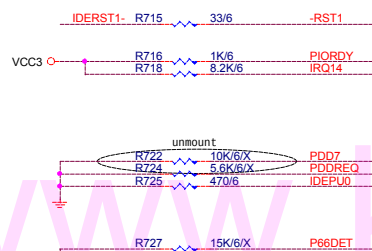
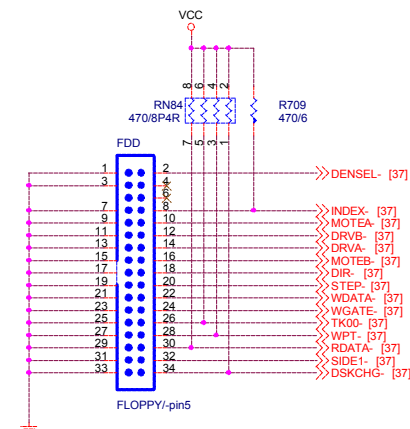
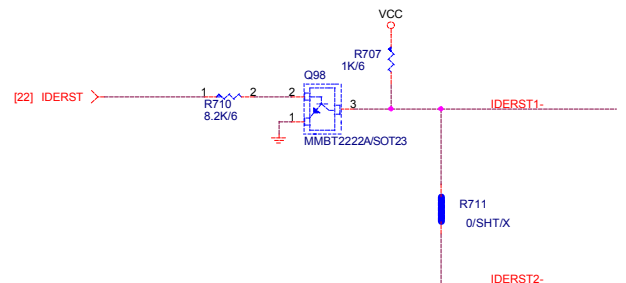
MIC IN(A)

AUDIO PANEL

GIGABYTE CORP.

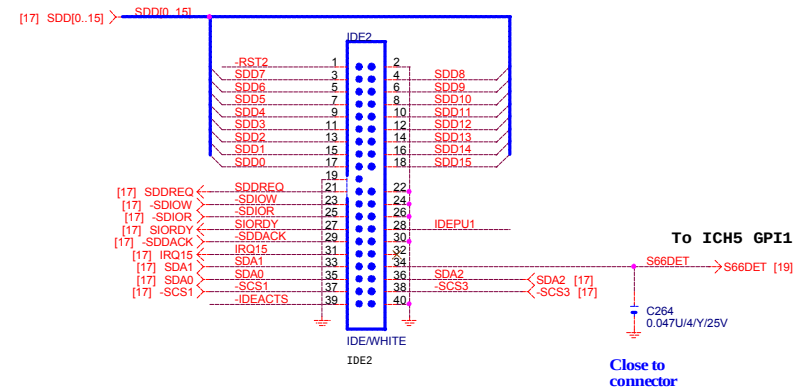
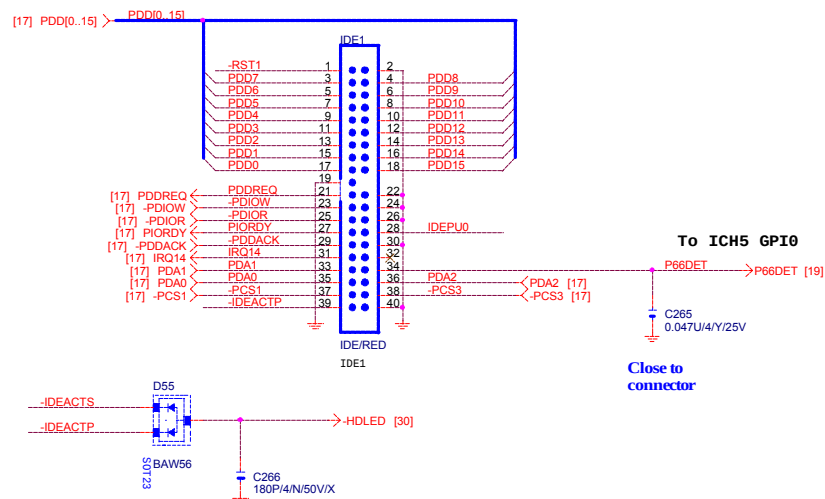
Title			
AUDIO OUTPUT, GAME PORT			
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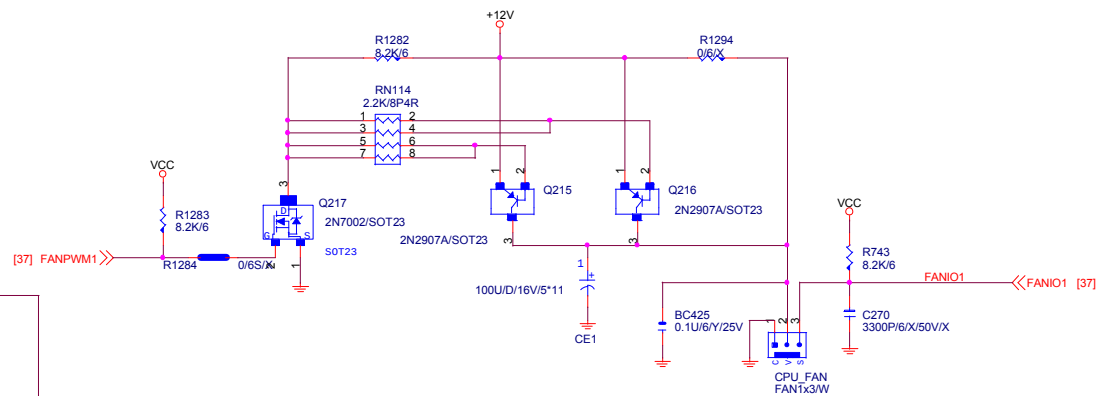
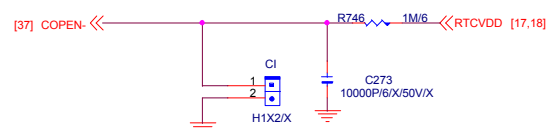
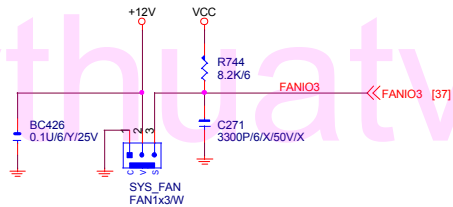
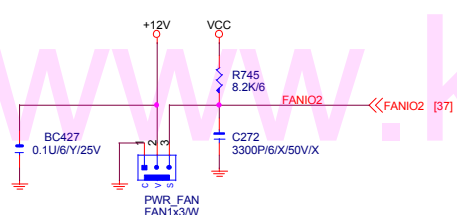
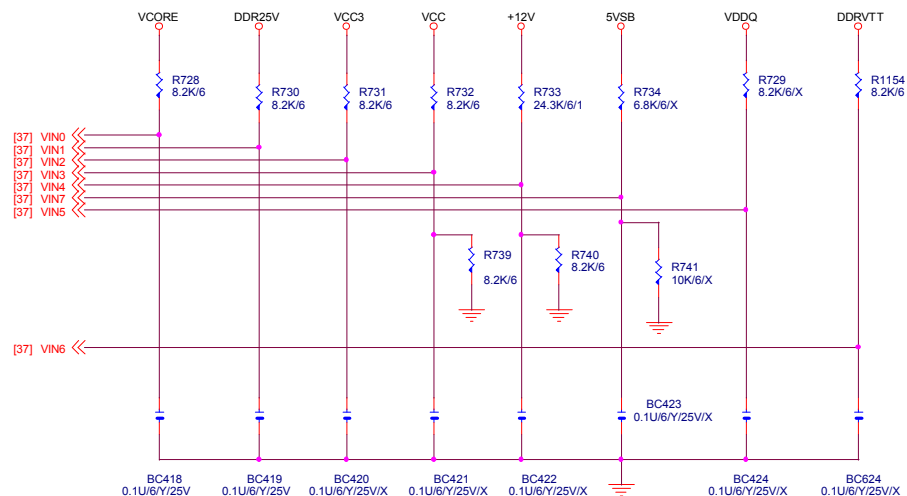
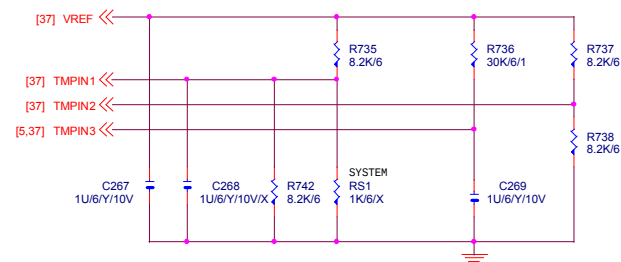


PRIMARY IDE CONNECTOR

SECONDARY IDE CONNECTOR

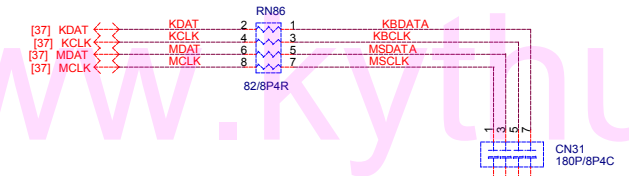
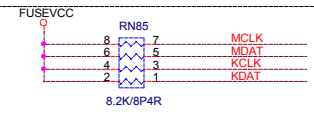
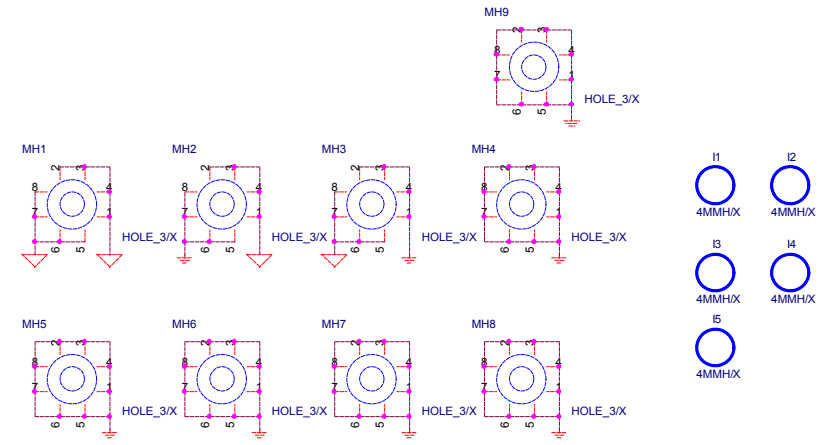
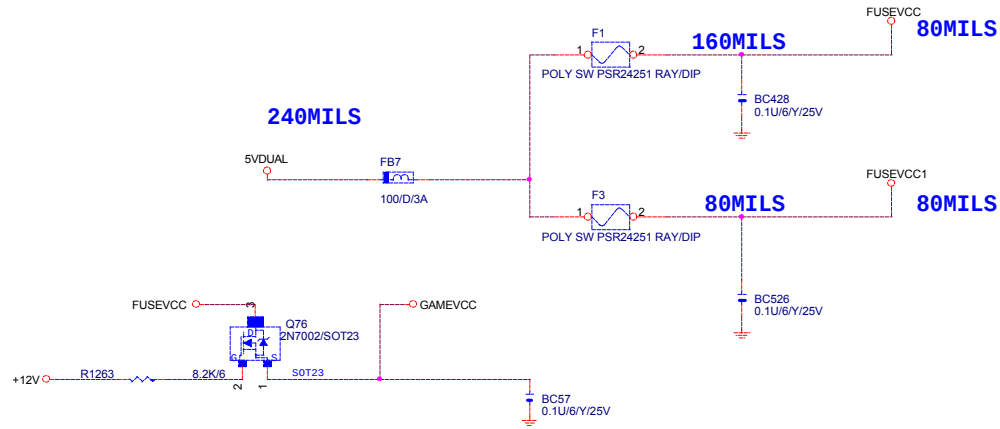


Hardware Monitor circuits

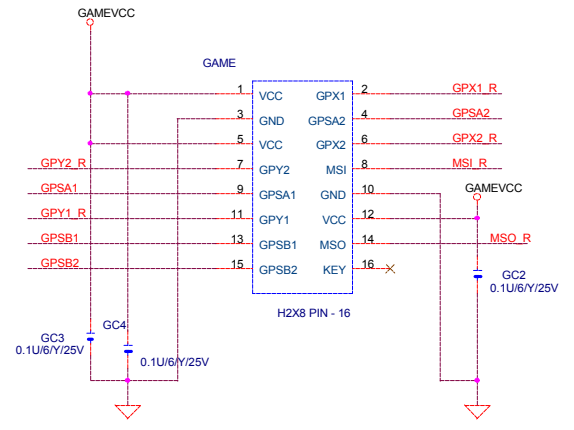
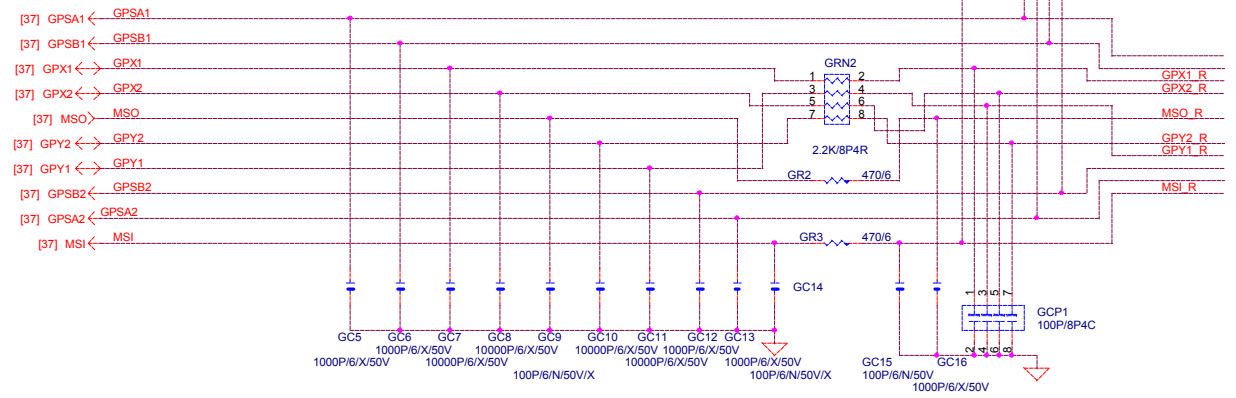
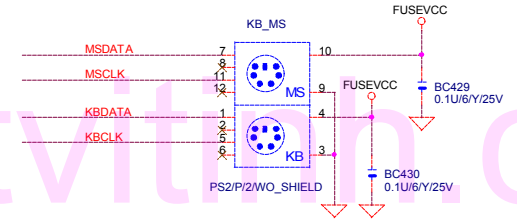


NORBRIDGE FAN

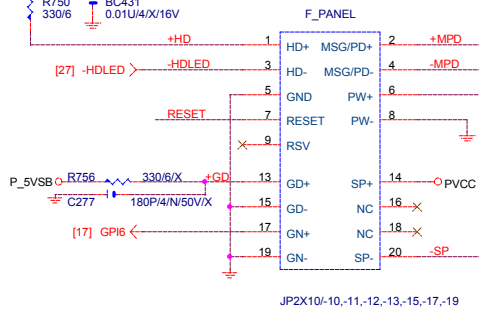
GIGABYTE CORP.		
Title		
FAN/HWMO		
Size	Document Number	Rev
B	GA-8IK1100	2.0
Date:	日期: 九月 04, 2003	Sheet 28 of 39



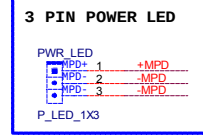
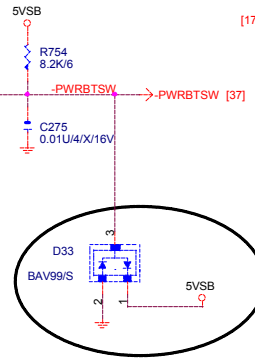
GAME_PORT



INTEL FRONT PANEL



Pad trace same as pad width



States for green LED

LED States	ACPI States	GP028
ON	S1, S3	0
OFF	S0, S5	1

(GP022 DEFAULT HIGH, main power)

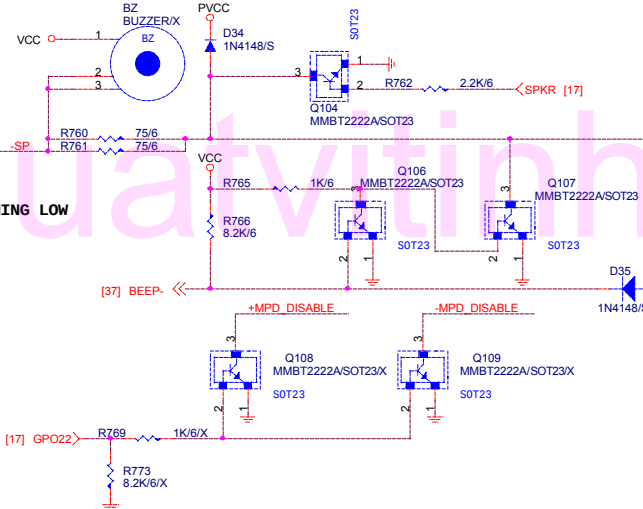
States for a single-color power LED

LED States	ACPI States	GP025	GP027	GP022
OFF	S1, S3, S5	1	1	N01
Steady Green	S0	1	1	1
Blinking Green	S0(message waiting)	1	8	1

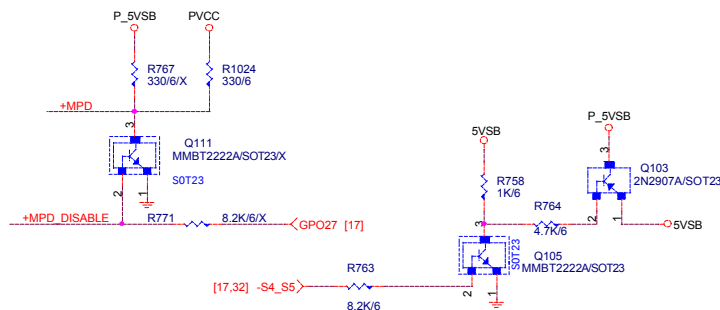
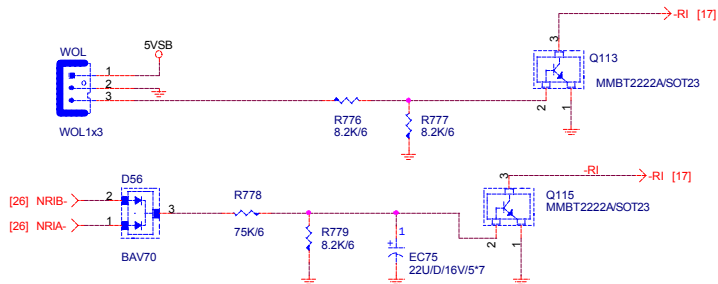
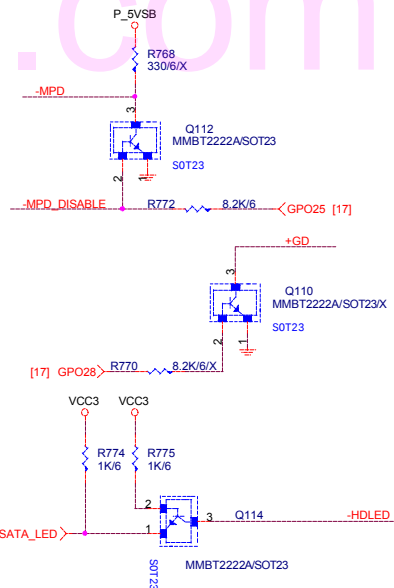
N01 GP022 只需在S1 PROGRAMMING LOW

States for a dual-color power LED

LED States	ACPI States	GP025	GP027	GP022
OFF	S5	1	1	X
Steady Green	S0	1	1	1
Blinking Green	S0(message waiting)	1	8	1
Steady Yellow	S1, S3	1	9	N01
Blinking Yellow	S1, S3(message waiting)	1	8	N01

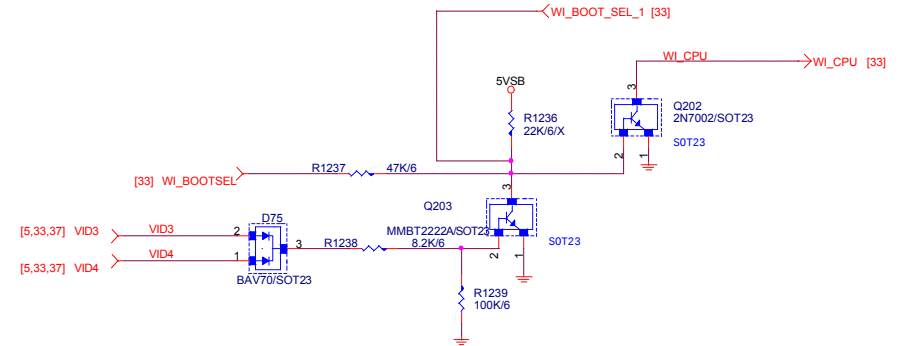
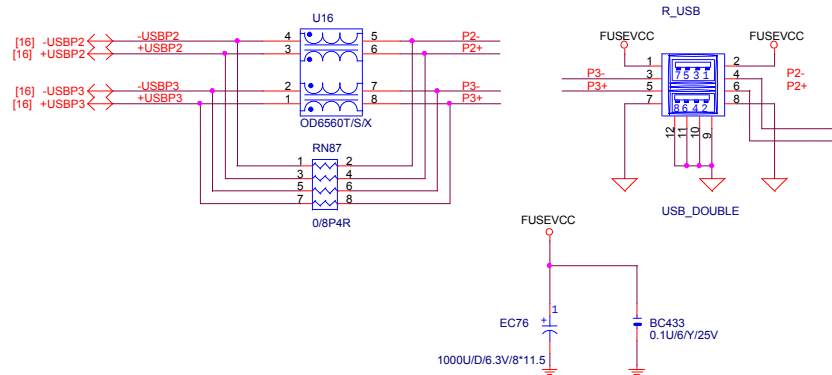


DIMM LED

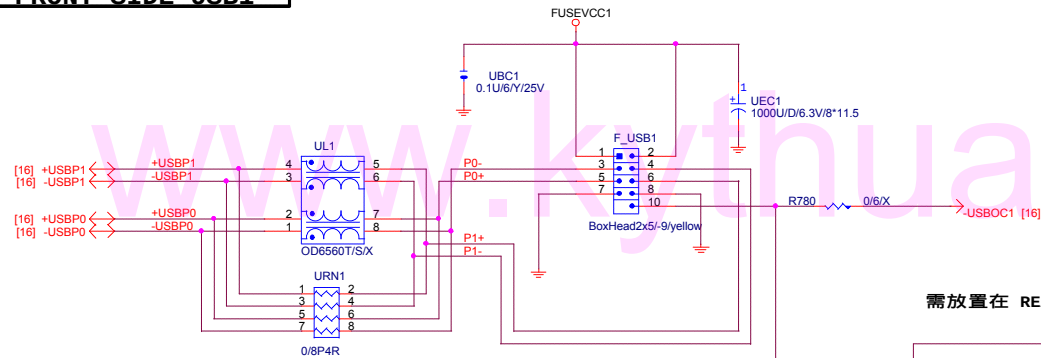


GIGABYTE CORP.		
Title		
Size	Document Number	Rev
B	GA-8IK1100	2.0
Date:	Sheet	30 of 39

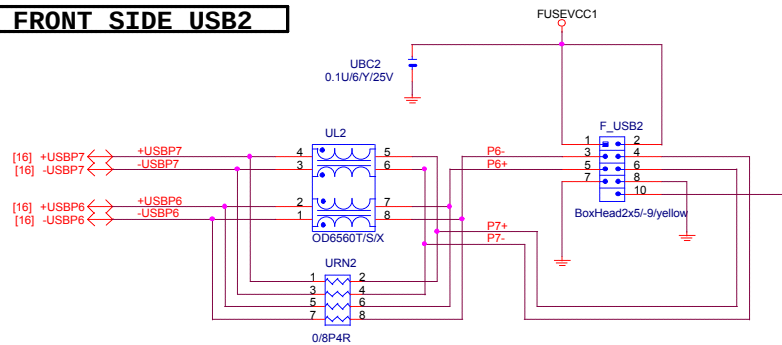
REAR USB



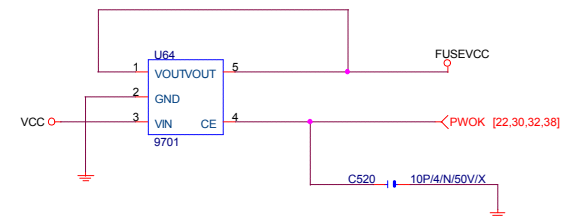
FRONT SIDE USB1



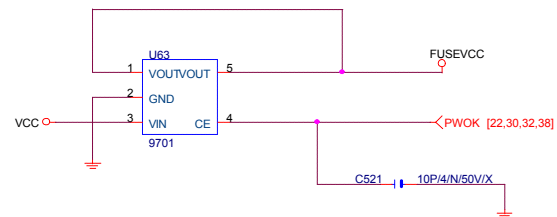
FRONT SIDE USB2



需放置在 REAR USB

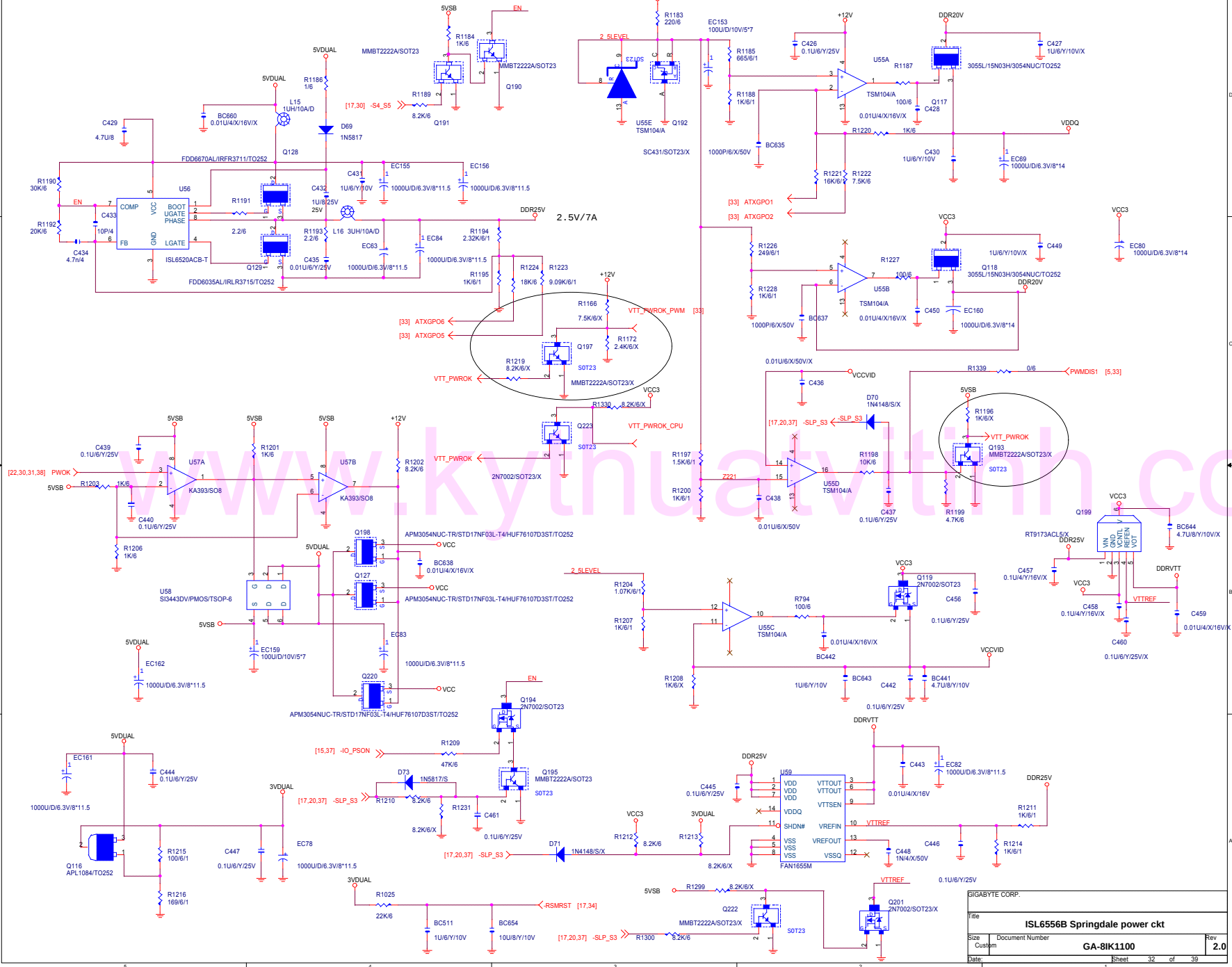


需放置在 REAR USB

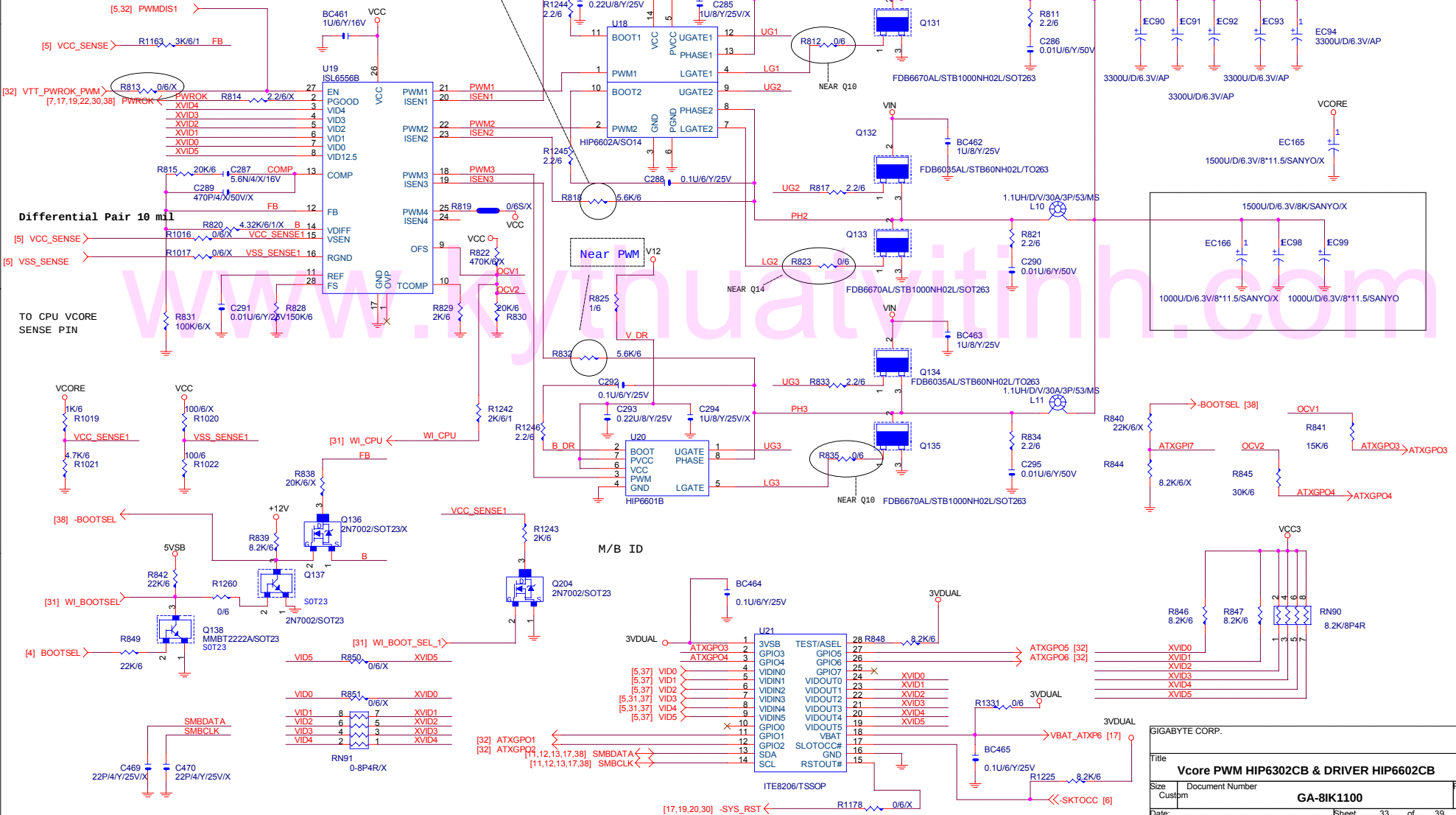
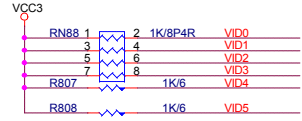


DDR25V FOR DDR DIMM & NB

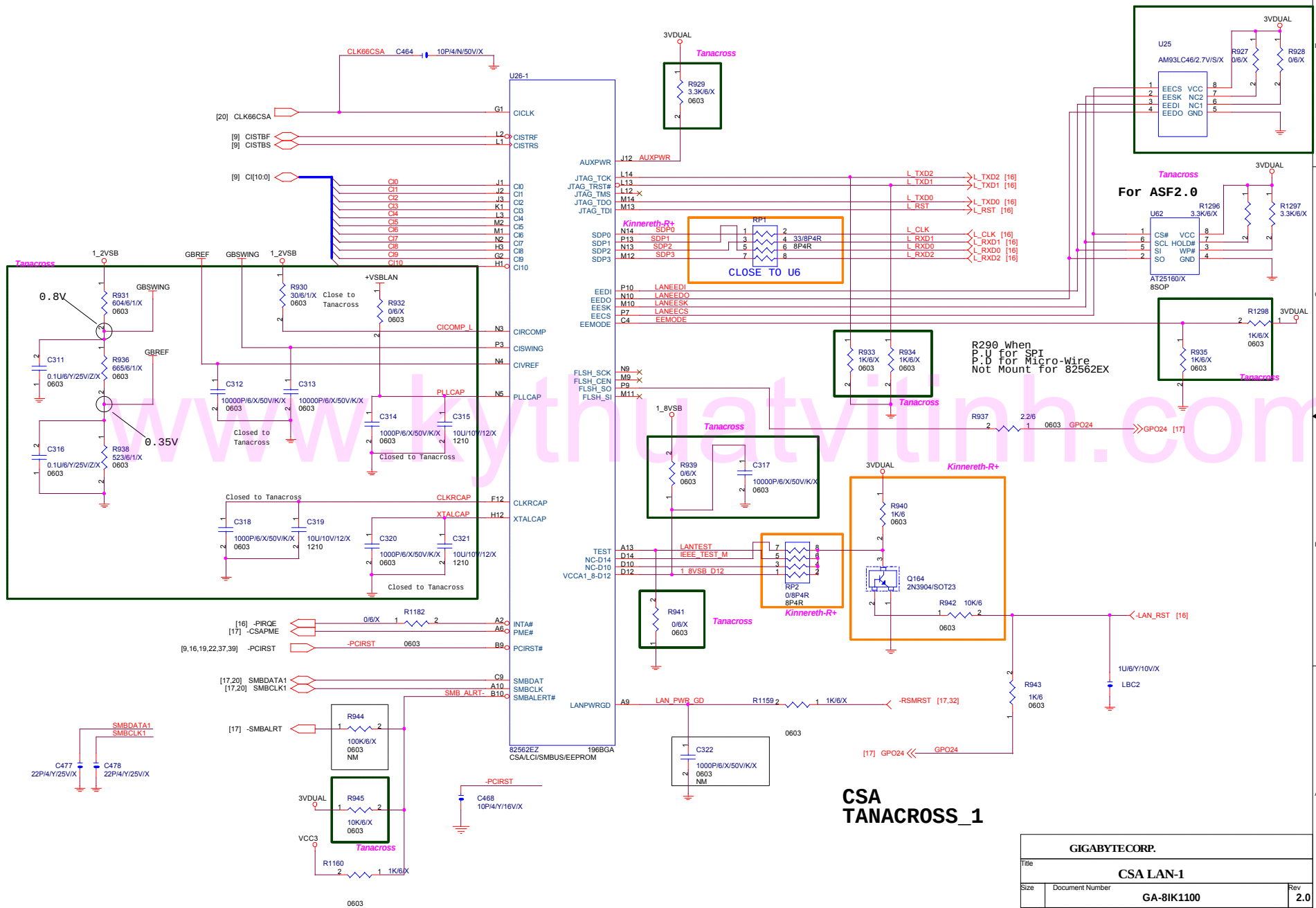
VDDQ FOR AGP 4X/8X

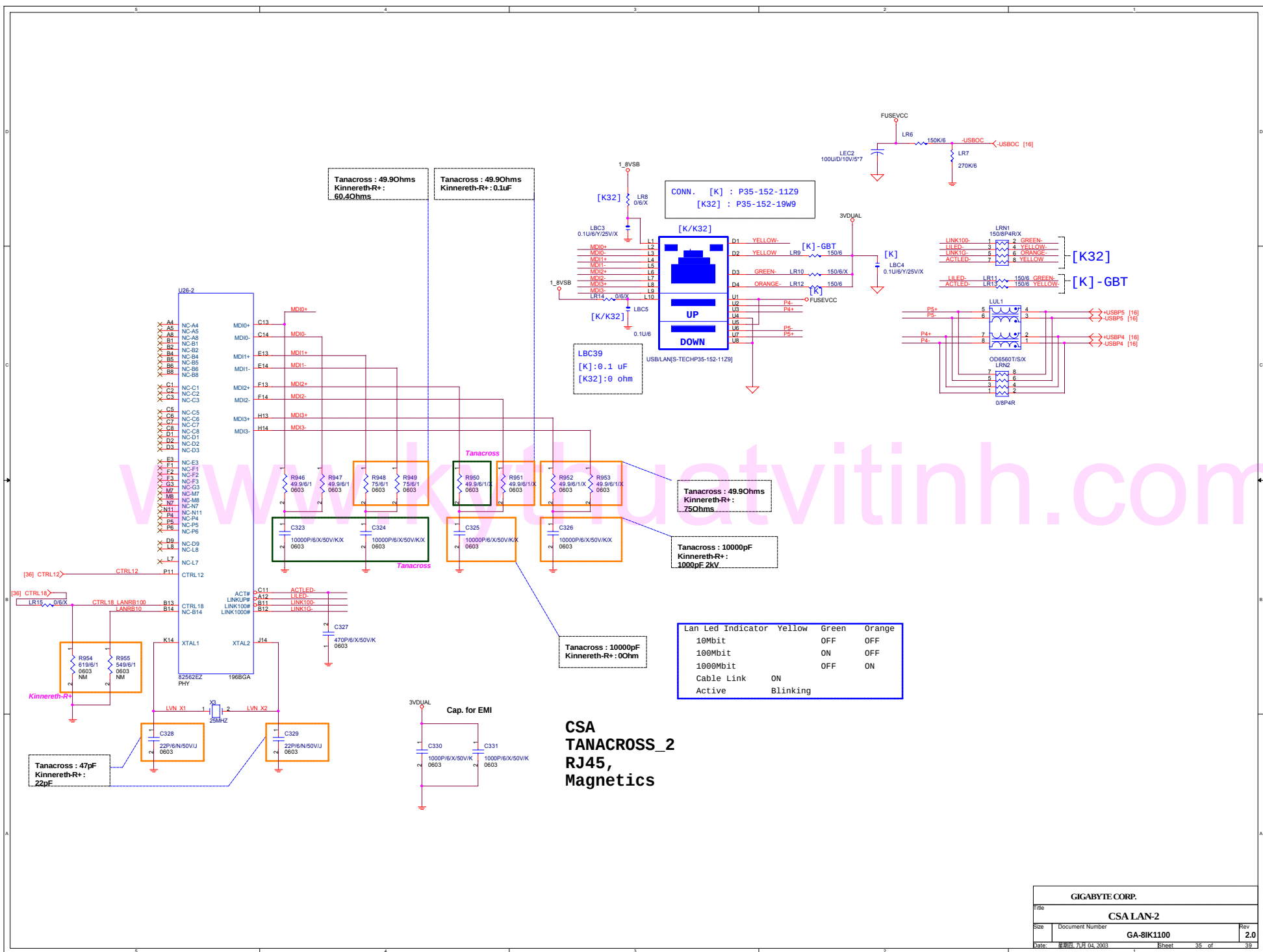


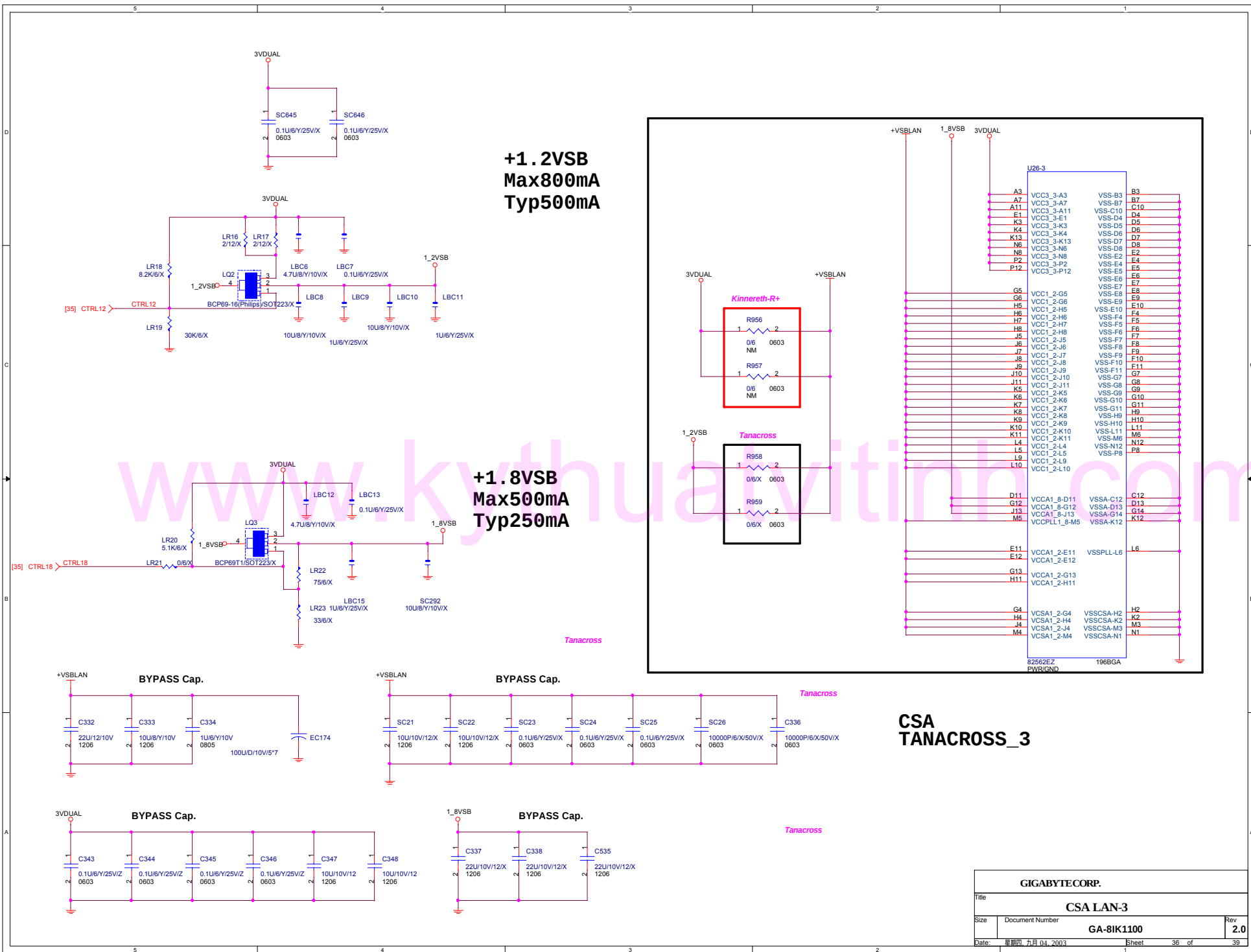
CPU Voltage ID output

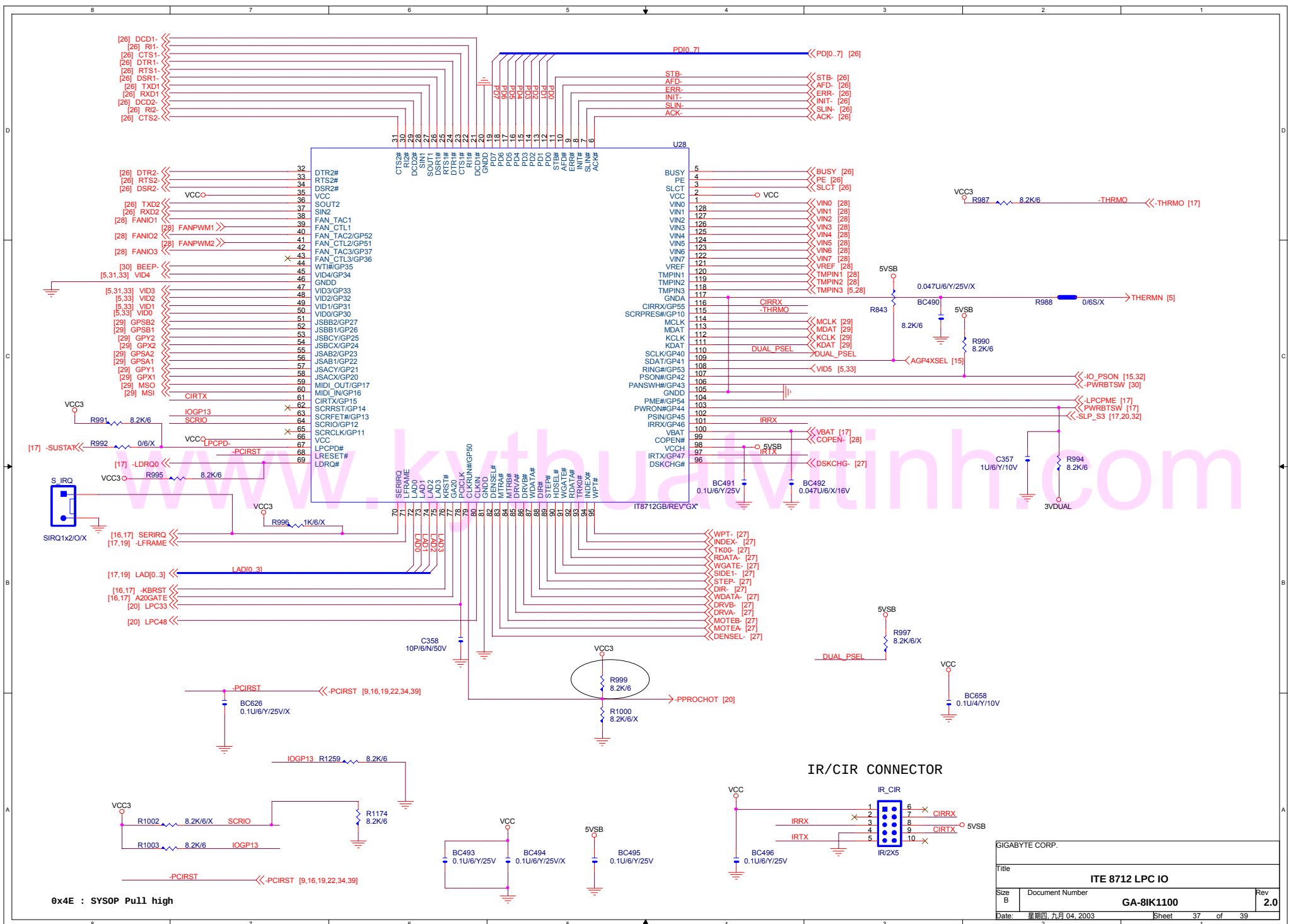


GIGABYTE CORP.			
Title			
Vcore PWM HIP6302CB & DRIVER HIP6602CB			
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Custom			2.0
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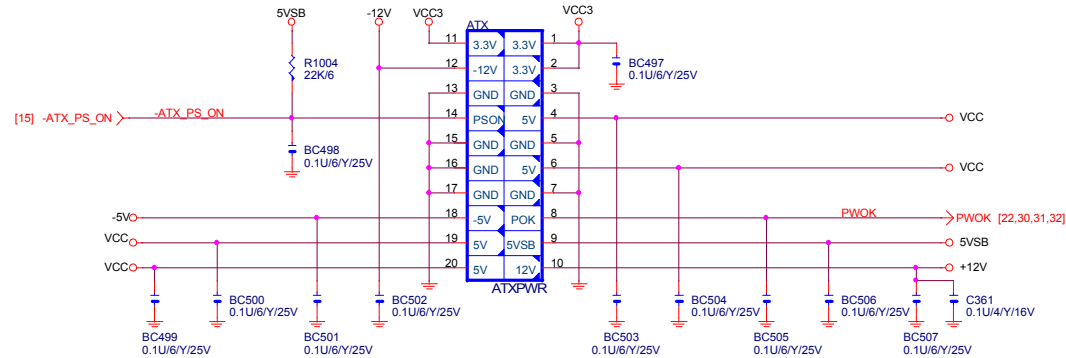






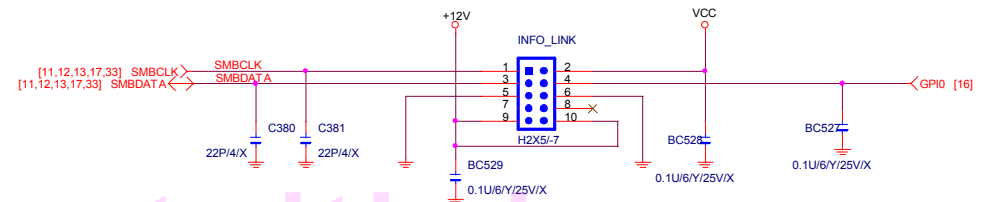


ATX POWER CONNECTOR



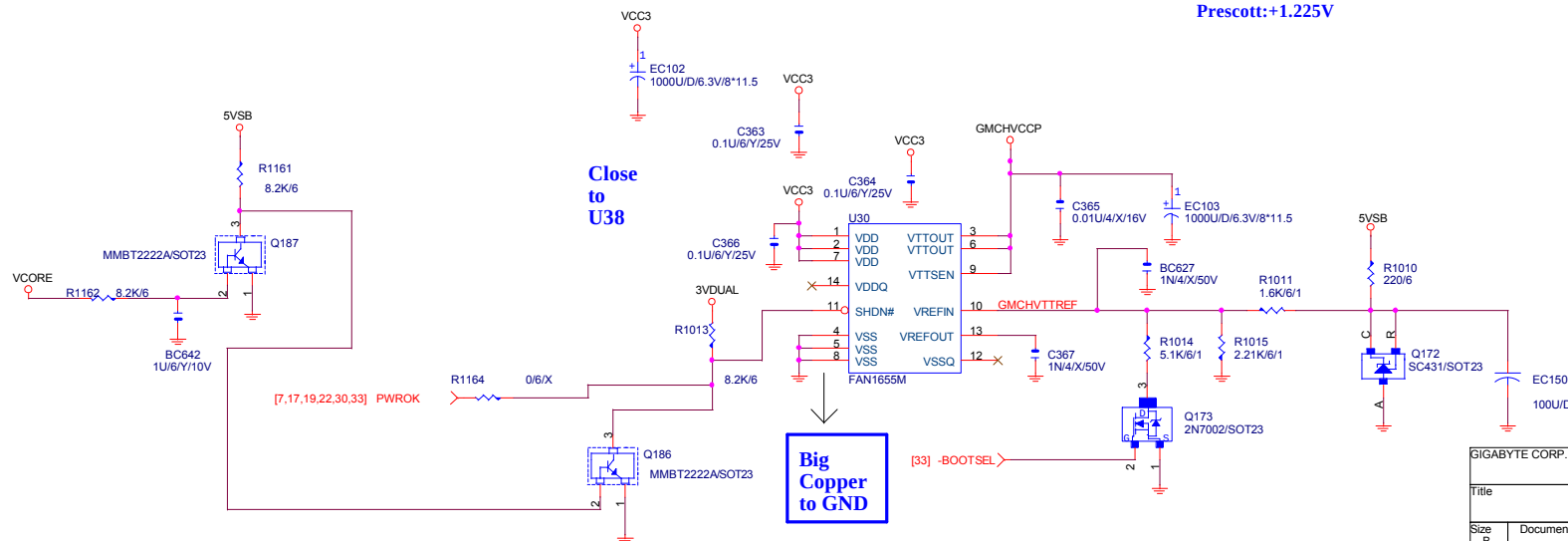
SMBUS CONN.

SMB CONNECTOR



PIN 7 為防呆

Northwood:+1.45V
Prescott:+1.225V



Close
to
U38

Big
Copper
to GND

GIGABYTE CORP.		
Title		
Misc. PWR & ATX CONN.		
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