

Model Name: 8I945GME

Revision 1.0

SHEET TITLE

01	COVER SHEET
02	BLOCK DIAGRAM
03	BOM & PCB MODIFY HISTORY
04	P4_LGA775_A
05	P4_LGA775_B
06	P4_LGA775_C
07	P4_LGA775_D, E, F, G
08	GMCH-LAKEPORT_HOST
09	GMCH-LAKEPORT_DDRII
10	GMCH-LAKEPORT_PCI E, DMI
11	GMCH-LAKEPORT_INT VGA
12	GMCH-LAKEPORT_GND
13	GMCH-LAKEPORT_PWR
14	DDRII CHANNEL A 1
15	DDRII CHANNEL B 2
16	DDRII TERMINATION
17	PCI EXPRESS*16 SLOT
18	ICH7 PCI, USB, DMI, LAN
19	ICH7 IDE, GPIO, SATA, CTRL
20	ICH7 VCC, GND
21	GB/CK410M CLOCK.
22	PCI SLOT 1, 2, 3
23	IDE/FLOPPY
24	ITE 8712 GBIX
25	COM_LPT
26	BIOS, CI, HWM, KB/MS
27	AC97 ALC655

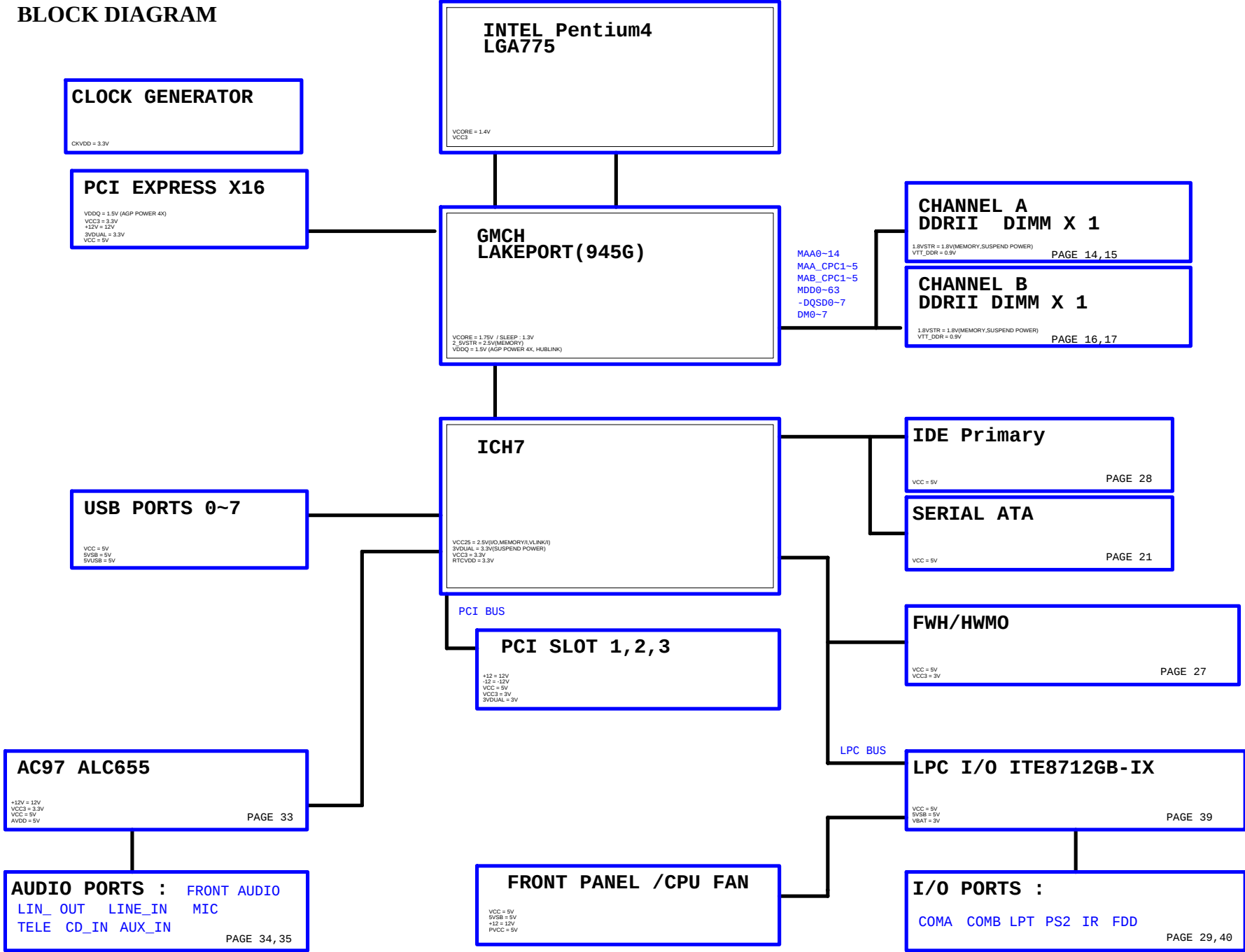
SHEET TITLE

28	REAR AUDIO JACK
29	DISCRETE POWER
30	VCORE PWM_ISL6556
31	ATX, OTHERS POWER
32	RTL8110S/RTL8100C
33	FRONT PANEL

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Cover Sheet		
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BLOCK DIAGRAM



Version: 1.0

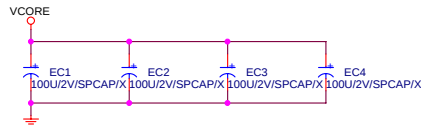
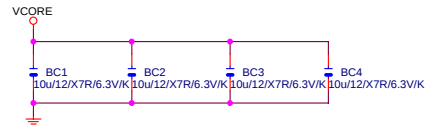
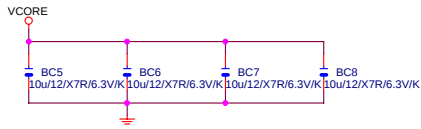
Component value change history

2005/10/26

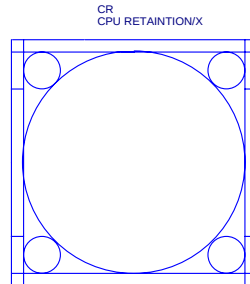
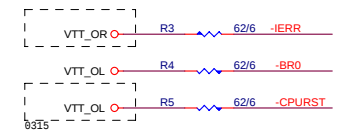
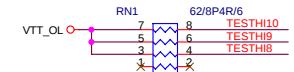
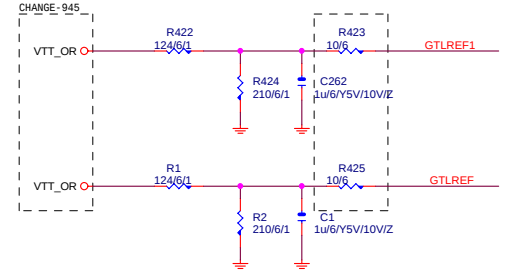
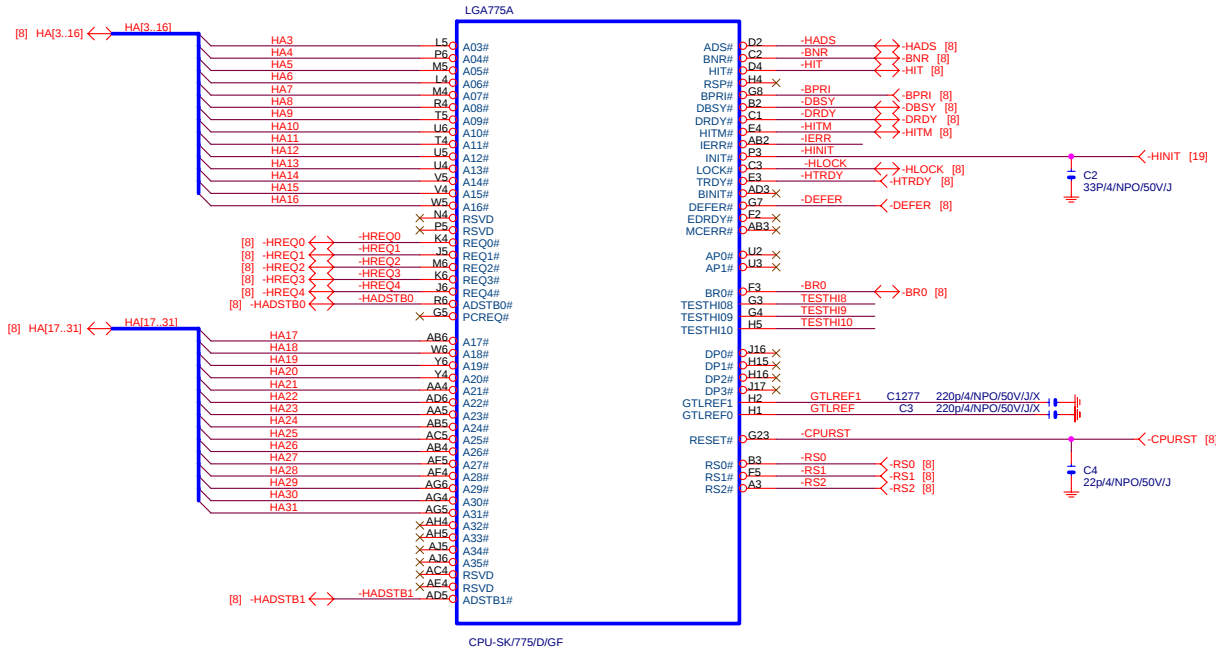
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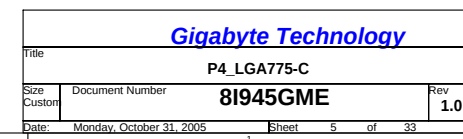
**Circuit or PCB layout change
for next version**

[illegible]

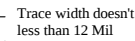


LGA775-D [DIP TYPE]



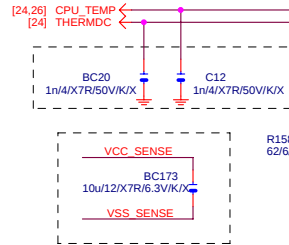


VCCA & VCOREPLL
define doesn't same as
old P4 design kit



-STPCLK

C10
33P/4/NPO/50V/J/X



10LI2-12100A-03=INDUCTOR 10uH 300mA TAI-TECH
10LI2-12100A-02=INDUCTOR 10uH 155mA TAIYO
10LI2-12100A-01=INDUCTOR 10uH 120mA TDK

[19,33] -SYS_RST > -SYS_RST AC2
 X AK3
 X AJ3
 FSBSEL0 G29
 FSBSEL1 H30
 FSBSEL2 G30

FSA	FSB	NA		
FSBSEL0	FSBSEL1	FSBSEL3	Clock	
1	0	1	100MHz	X
1	0	0	133MHz	
1	1	0	166MHz	
0	1	0	200MHz	RATIO
0	0	0	266MHz	2.66/3.33
				2.00/2.5



VTT_OL ○ R7 60.4k/1 COMP5
R8 60.4k/1 COMP4
R9 60.4k/1 COMP2
R11 60.4k/1 COMP3
R13 60.4k/1 COMP0
R14 60.4k/1 COMP1

C5
0.1u6/Y5V/25V/Z

VTT_OR ○ R1547 60.4k/1 COMP6
R1548 60.4k/1 COMP7

C1278
0.1u6/Y5V/25V/Z

VTT_OR ○ R17 130k/1 -PROCHOT
RN2 470/8P4V/6
7 8
5 8
3 8
1 8
R18 62k/6 TESTH2_7

VTT_GMCH ○

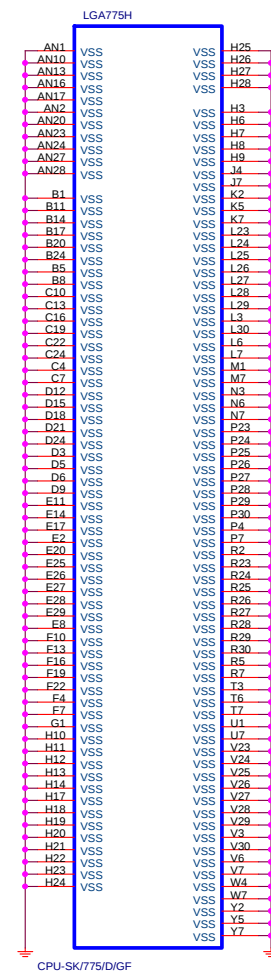
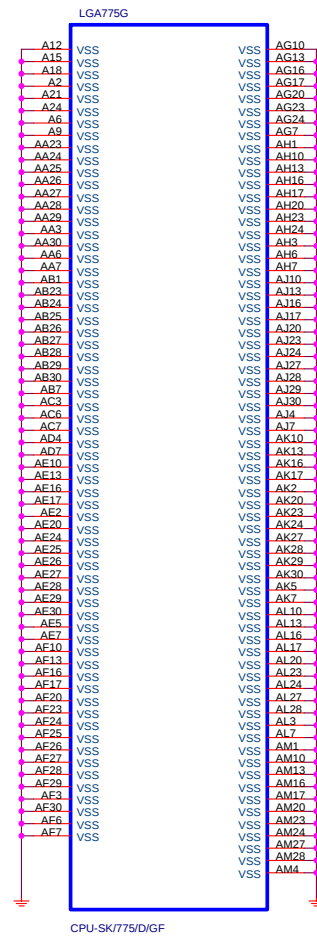
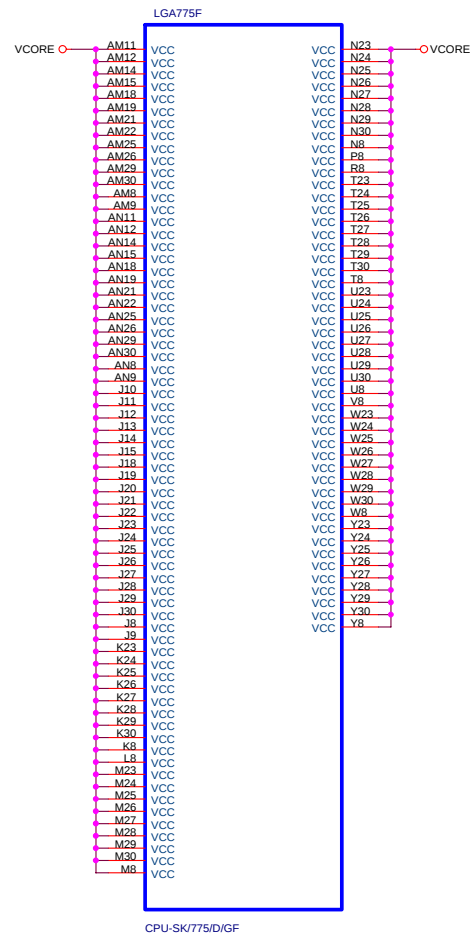
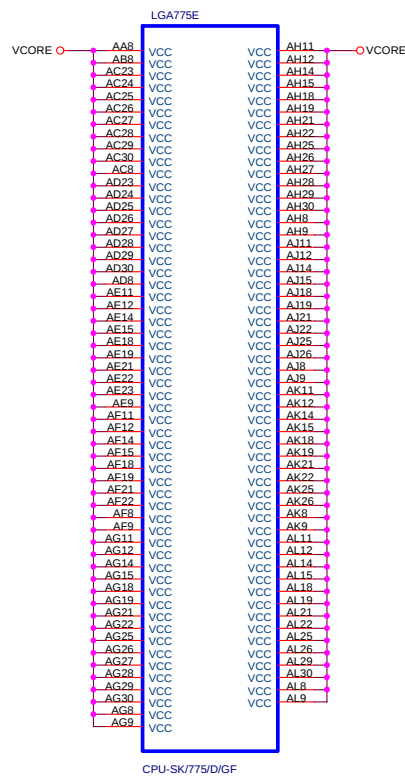
R19 62k/6 -THRMTRIP
R20 62k/6 -FERR

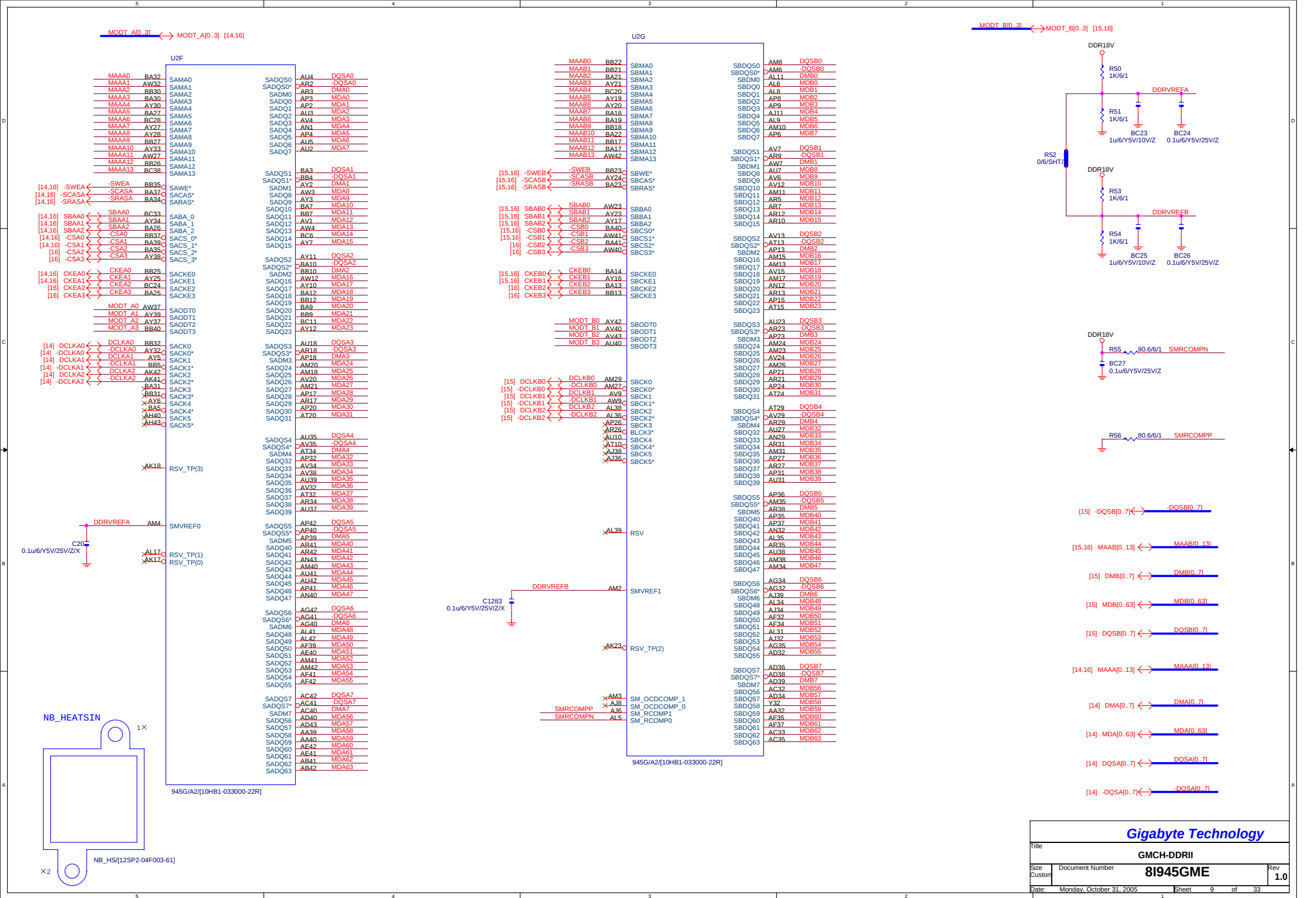
Locate at ICH7 Side

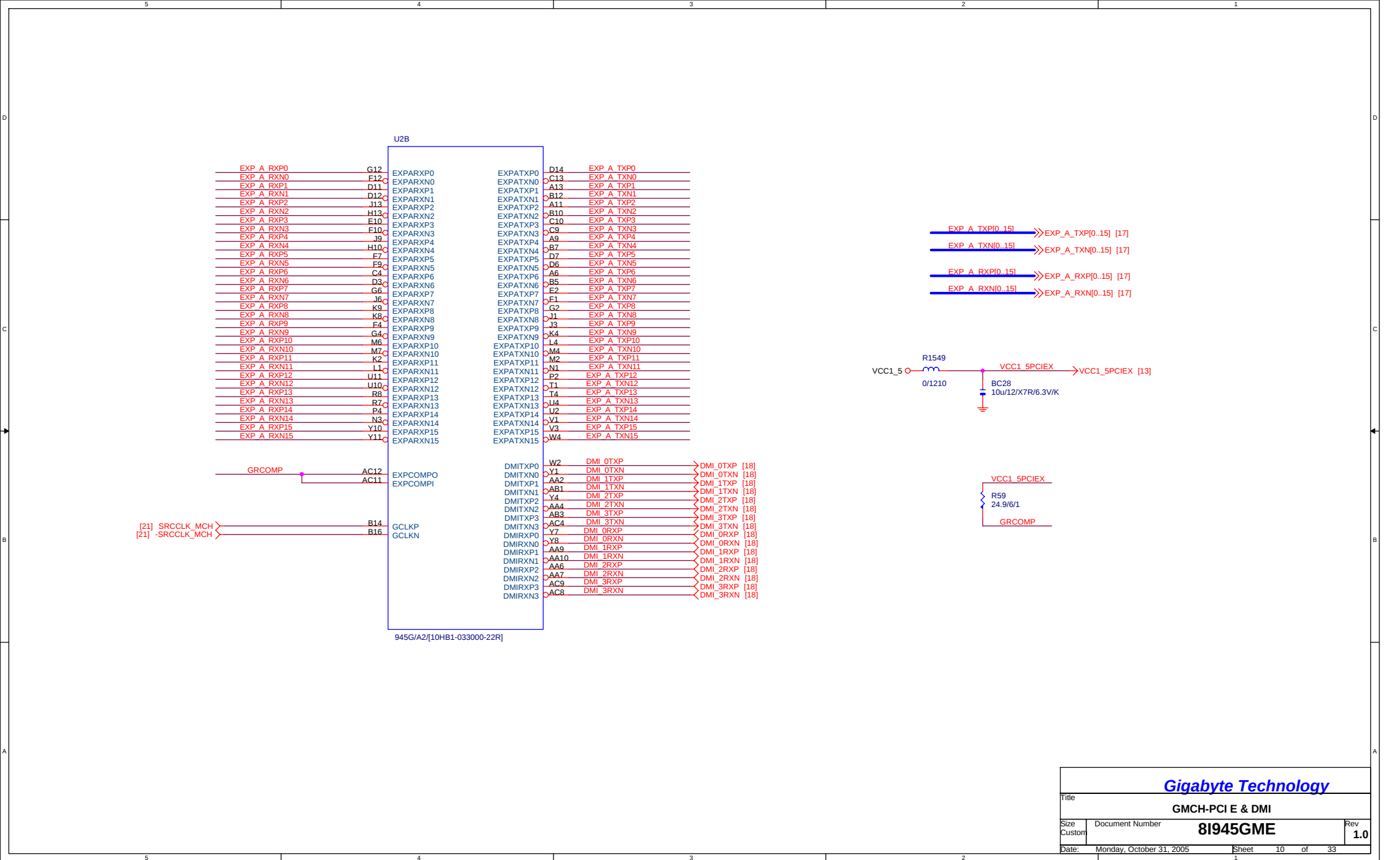
VTT_OL ○ R21 62k/6 RSVD_G6
R22 100k/6 CPUUPWROK

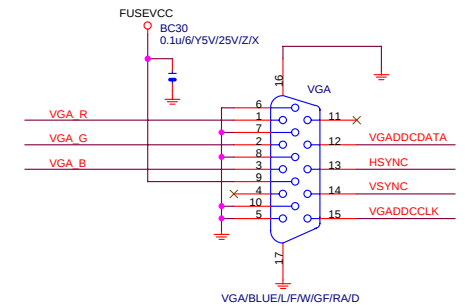
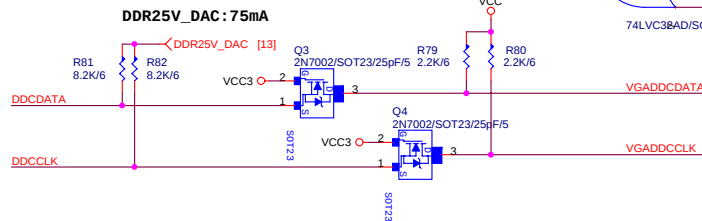
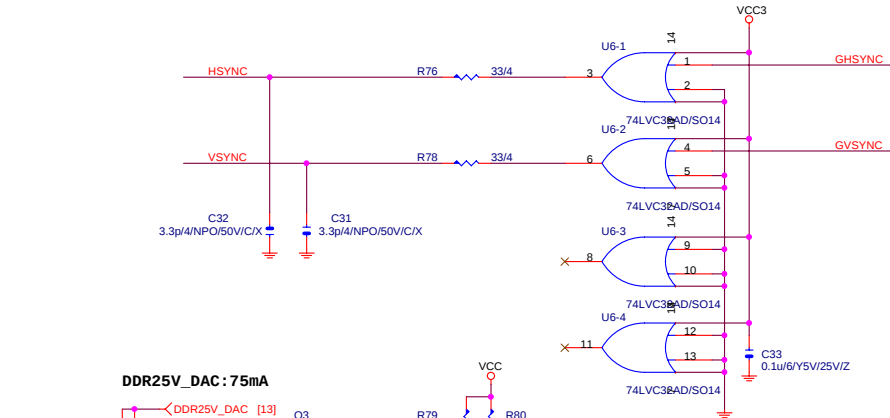
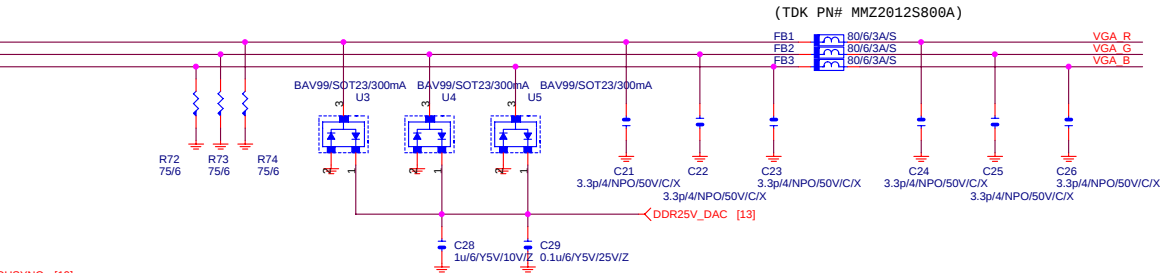
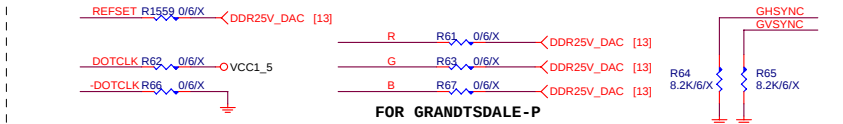
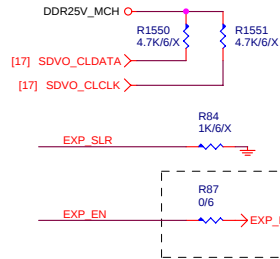
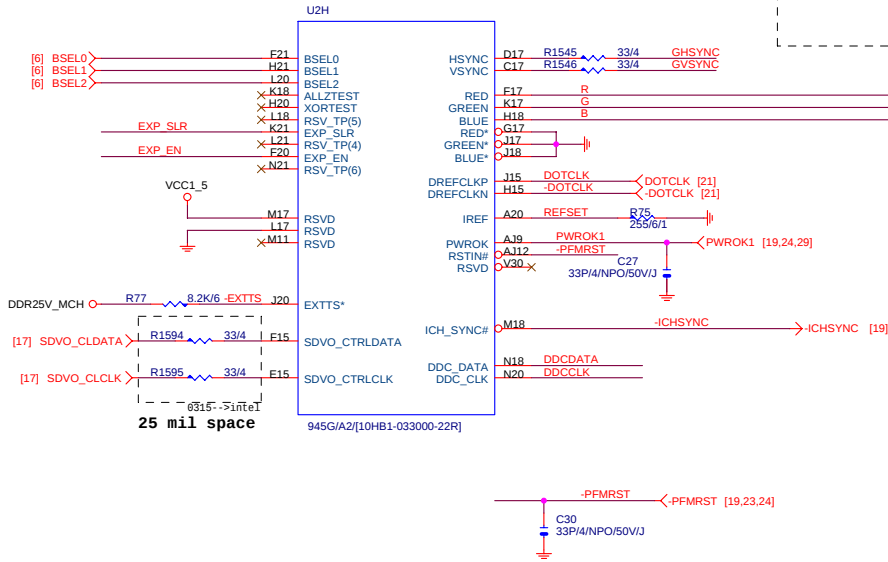
C11
1n4/X7R/50V/K

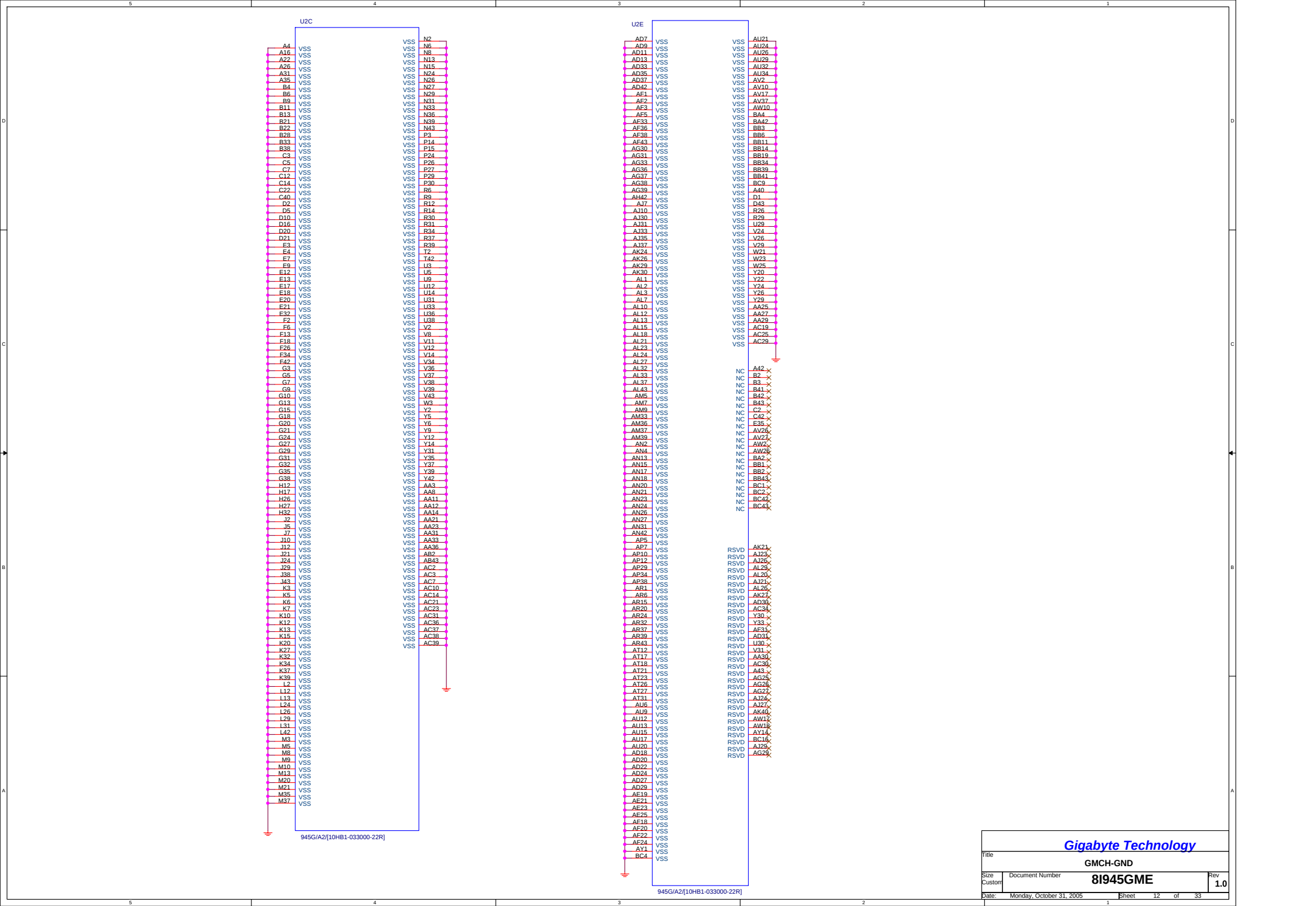
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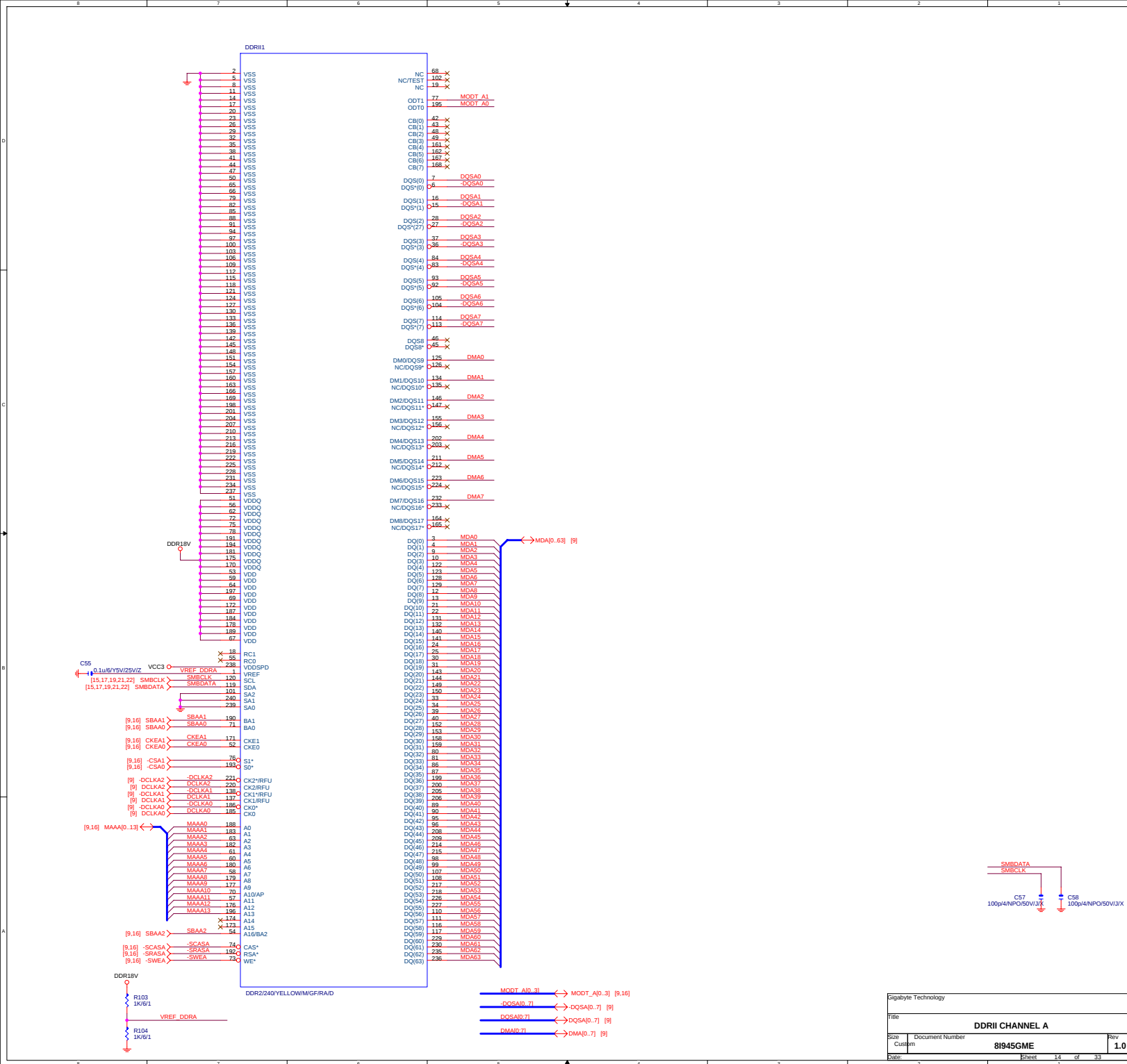


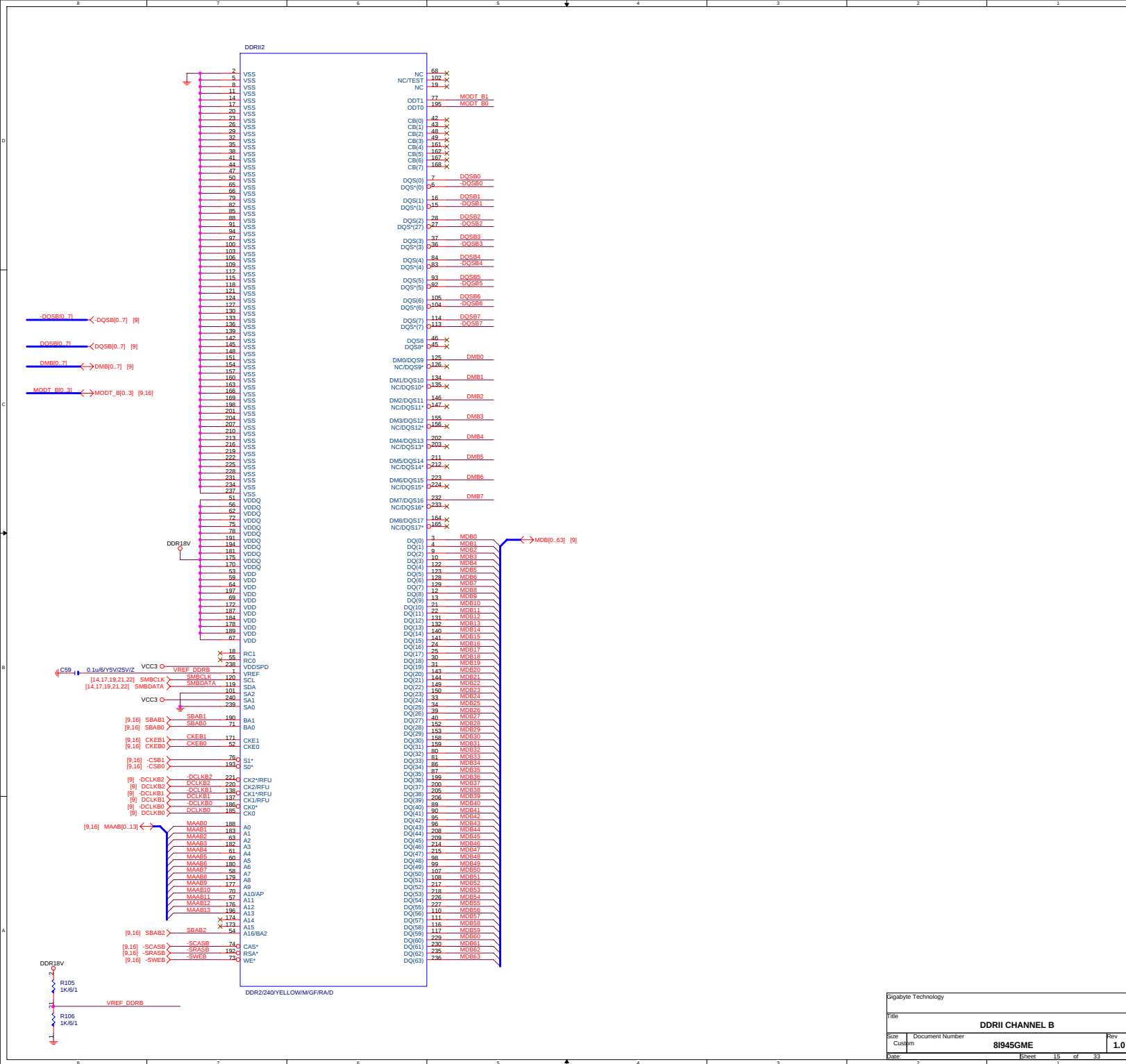






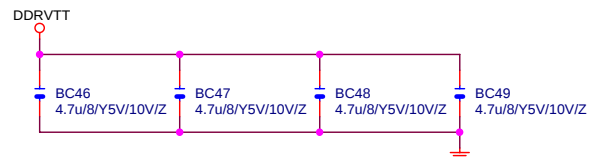






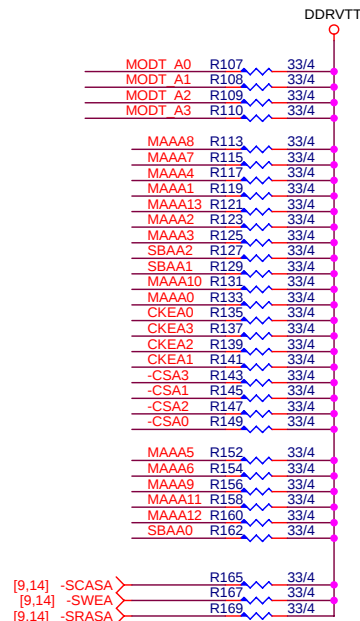
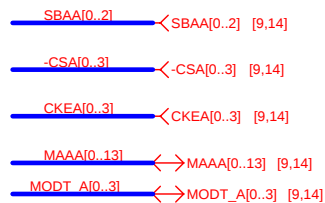
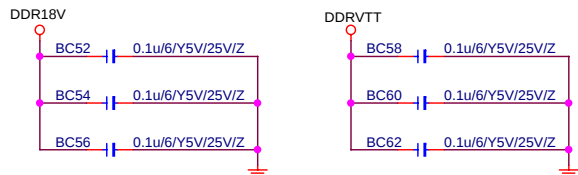
DDR TERMINATION CHANNEL A

DDRVTT Decouple



DDR18V Decouple

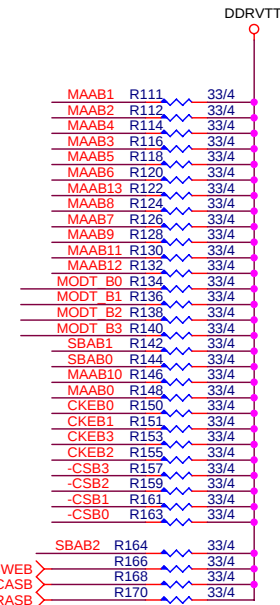
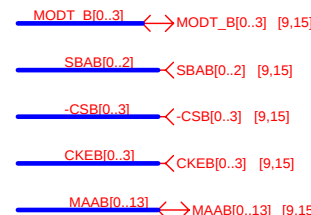
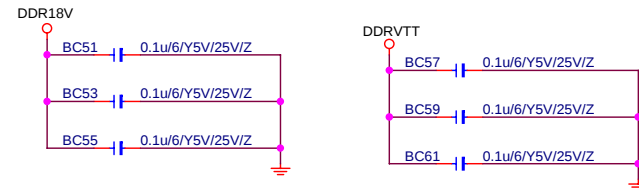
DDRVTT Decouple



DDR TERMINATION CHANNEL B

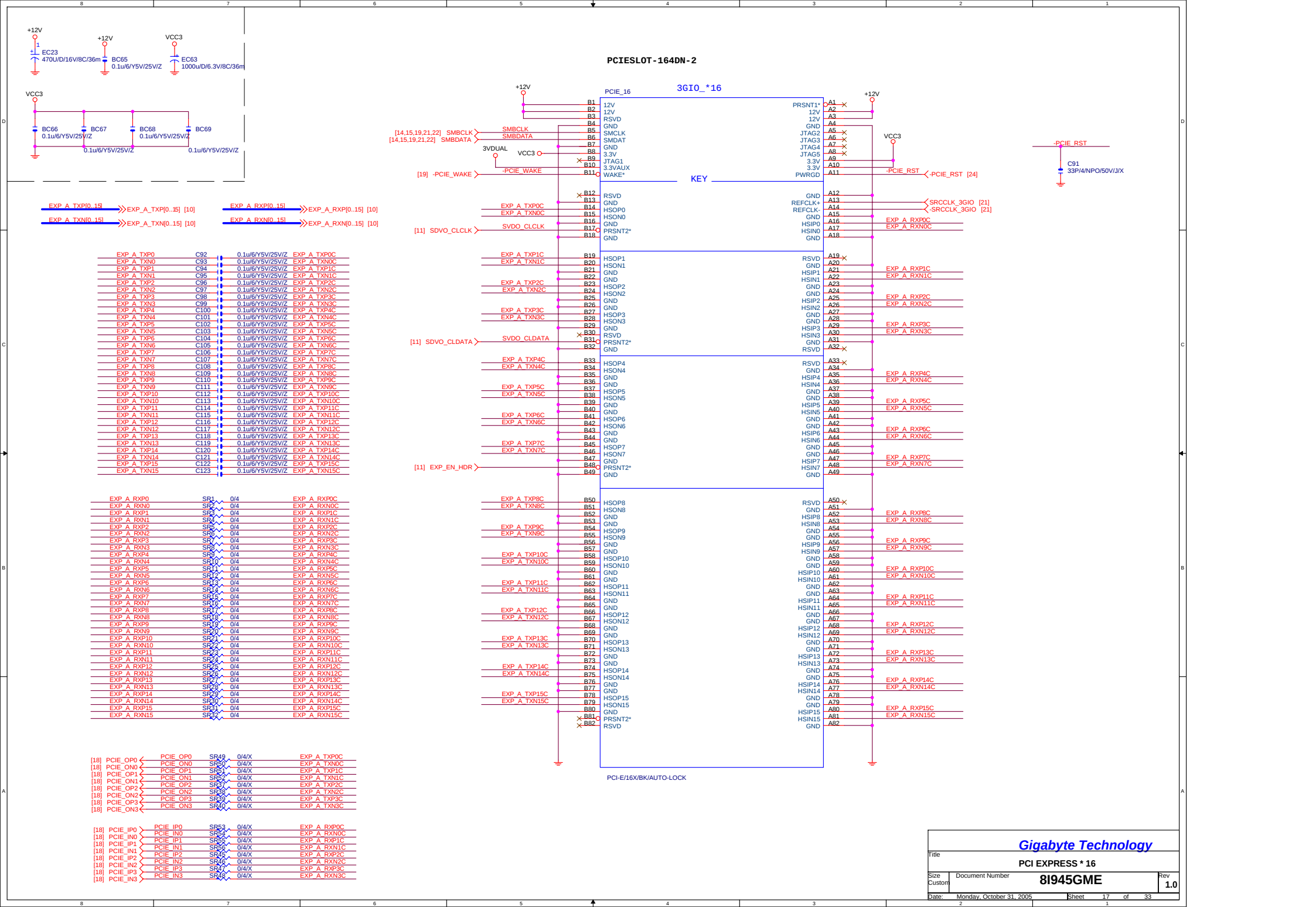
DDR18V Decouple

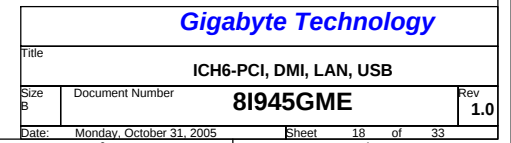
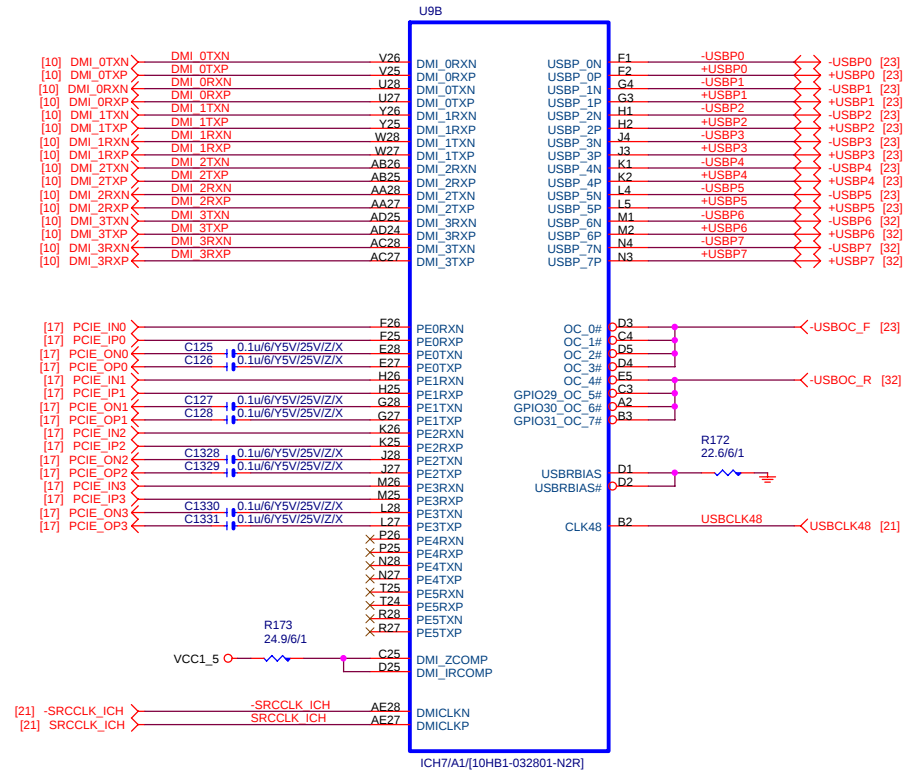
DDRVTT Decouple

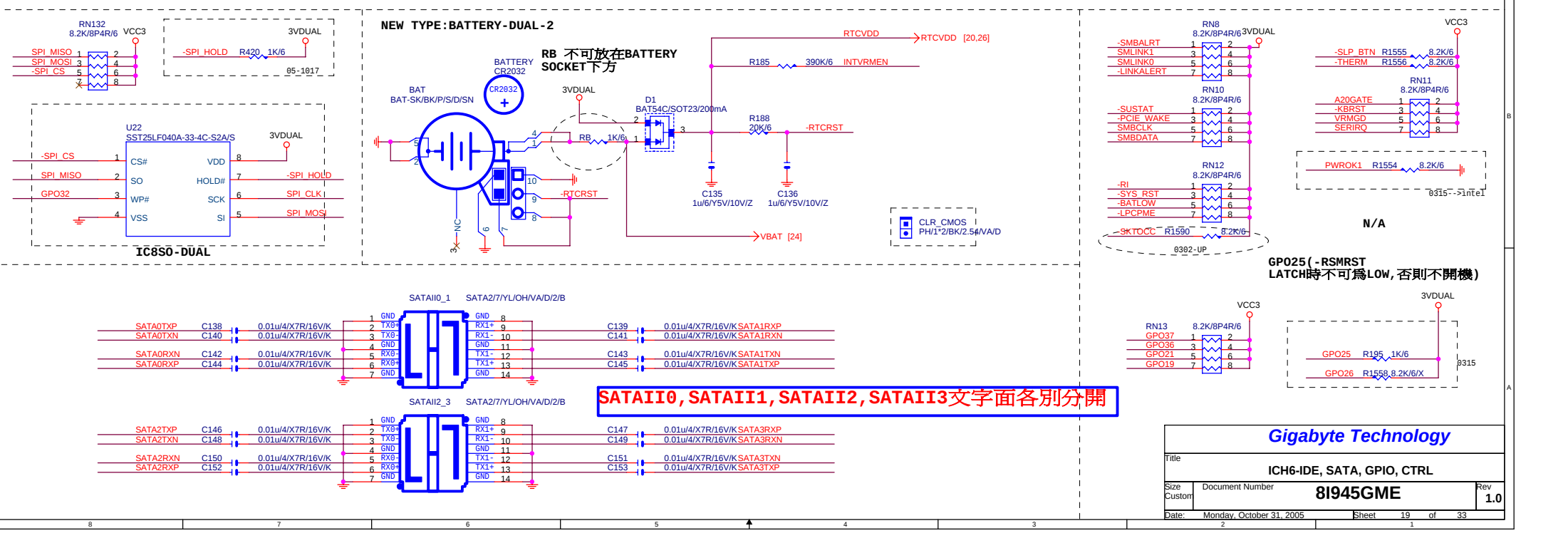
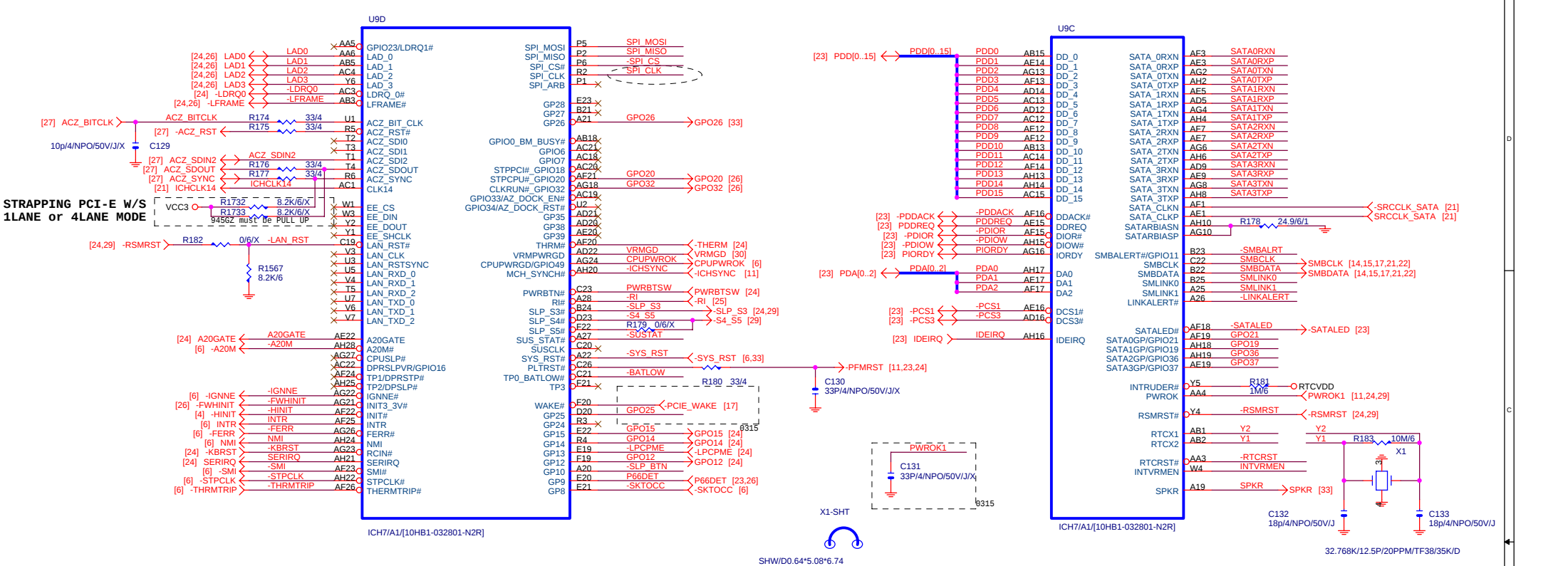


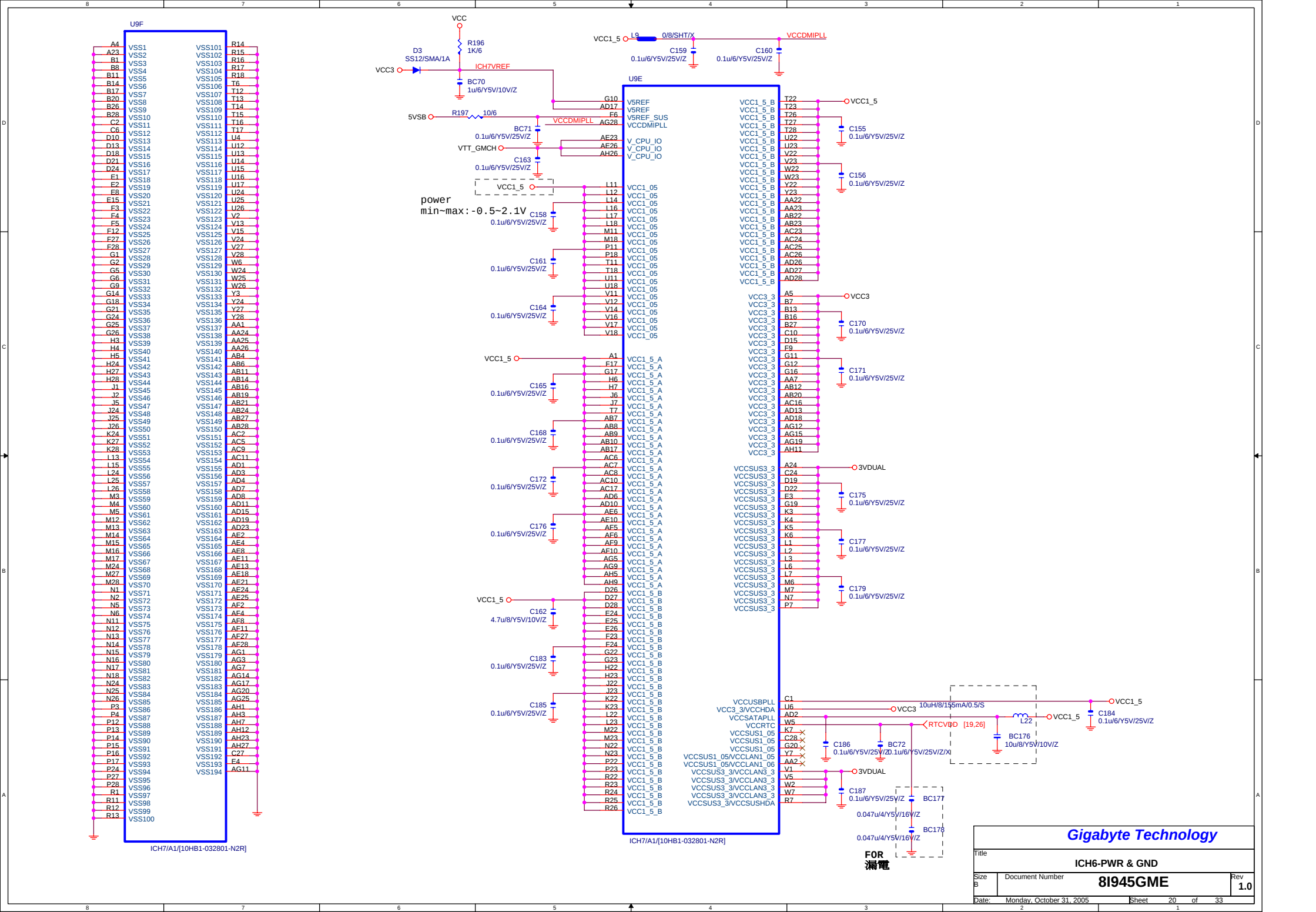
Gigabyte Technology

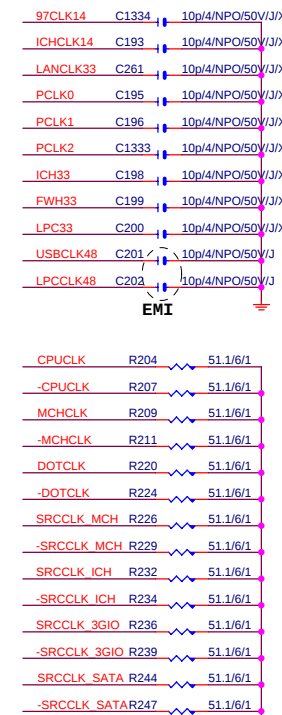
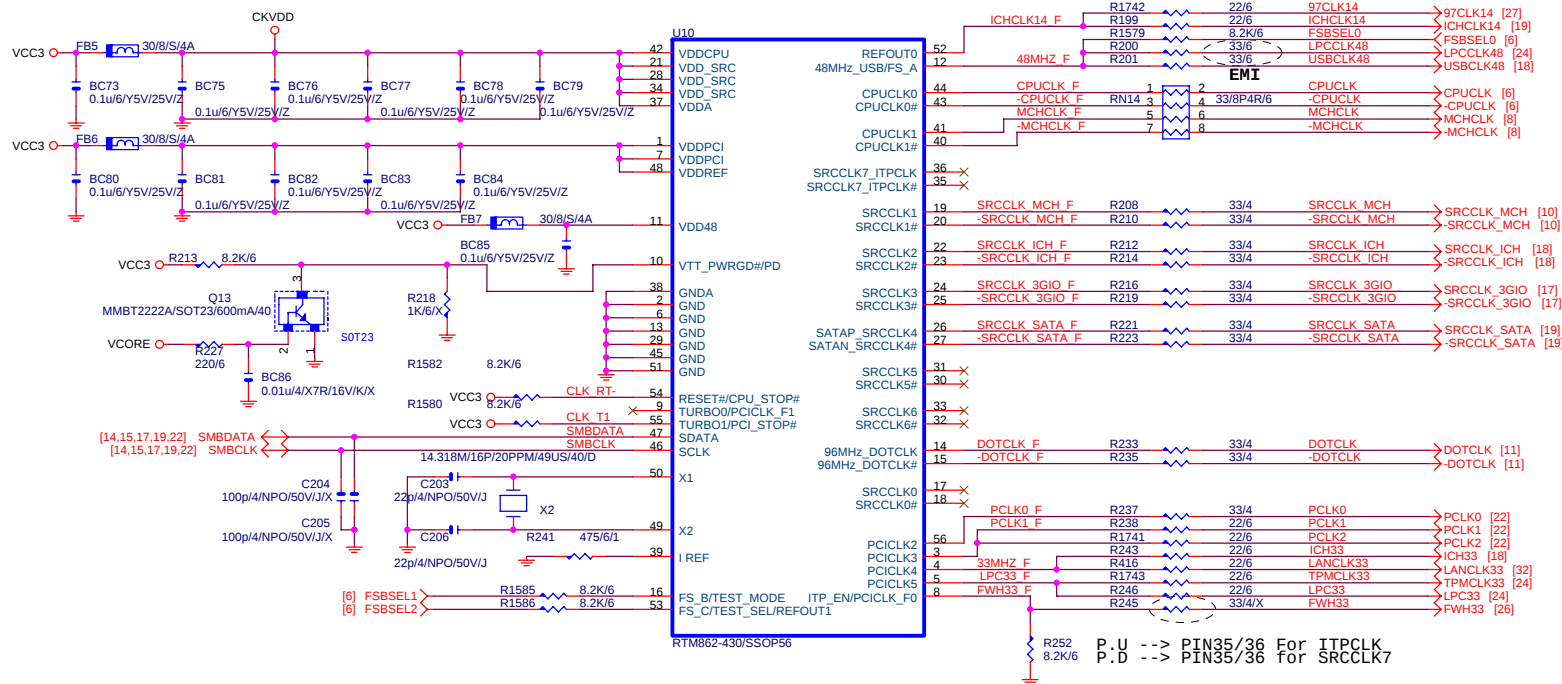
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Size	Document Number	Rev	
Custom	8I945GME	1.0	
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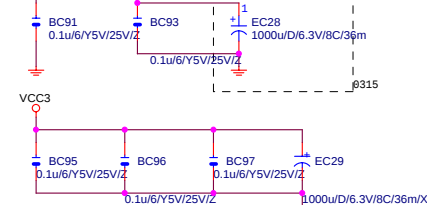
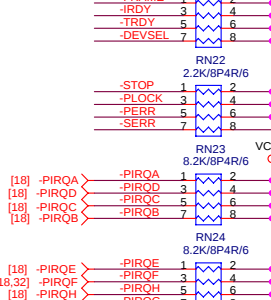
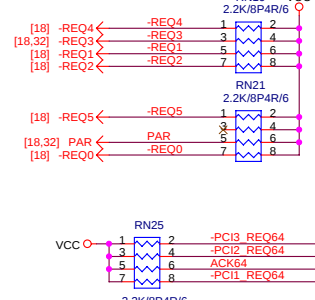
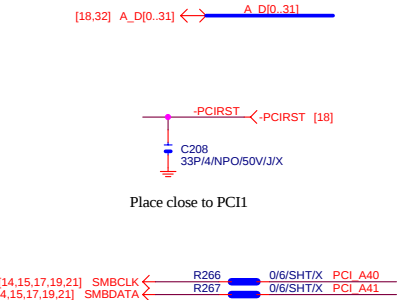
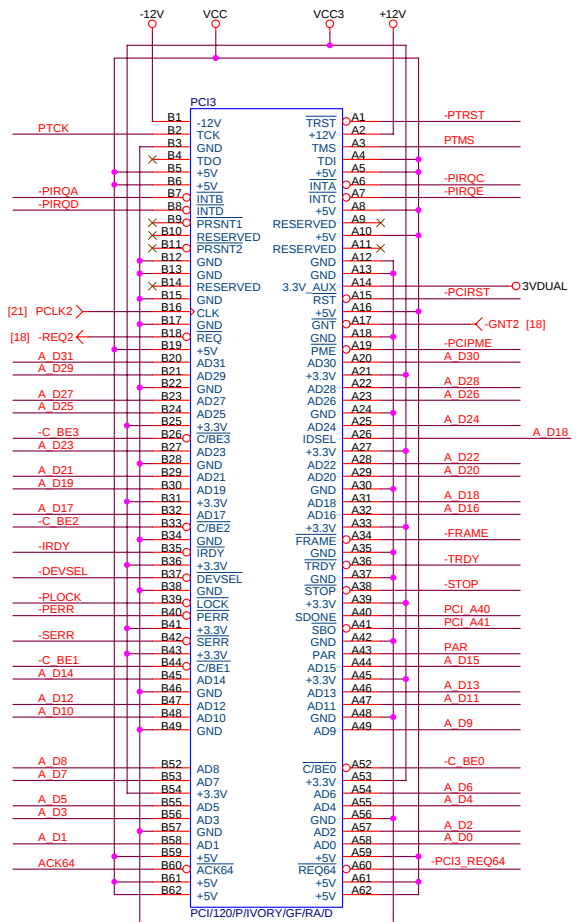
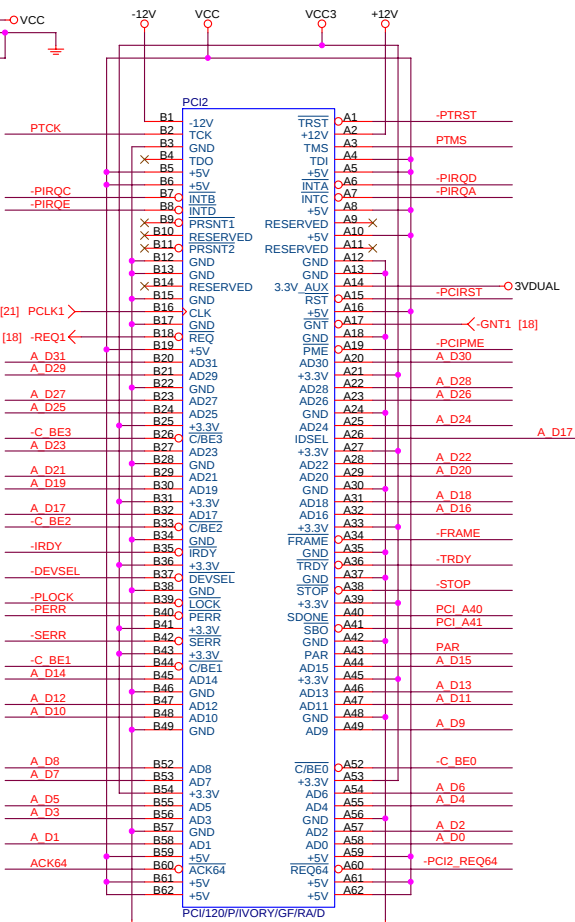
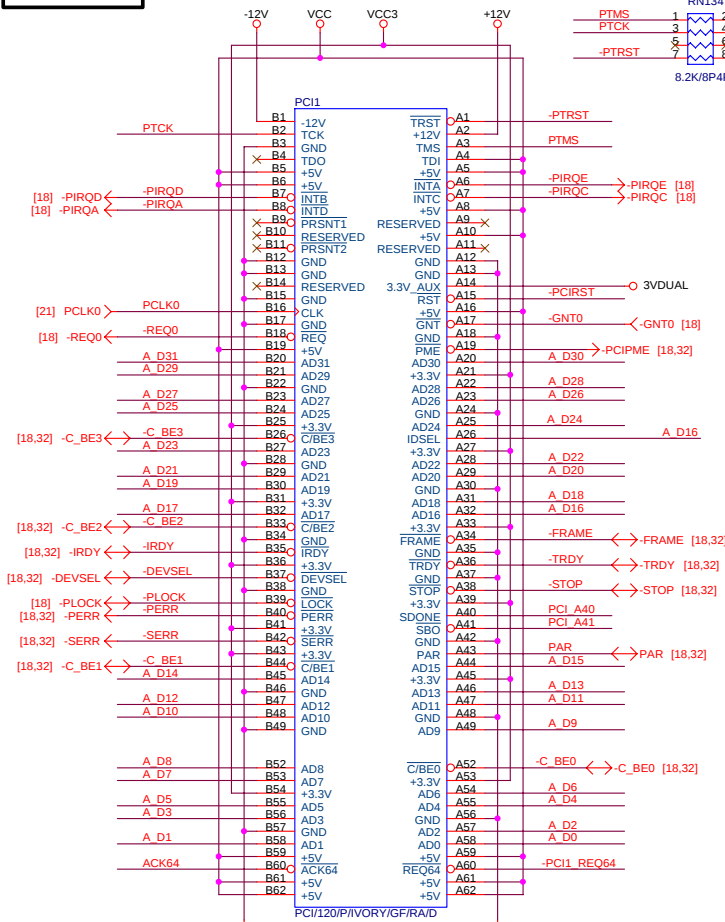




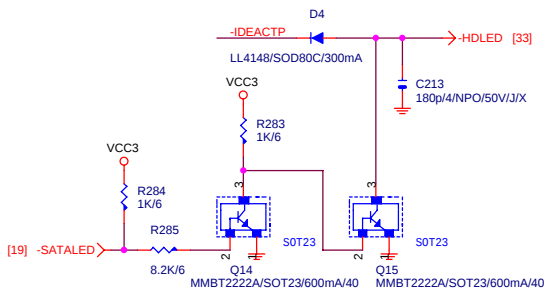




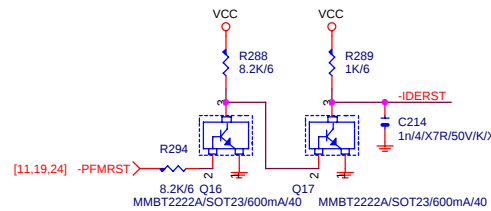
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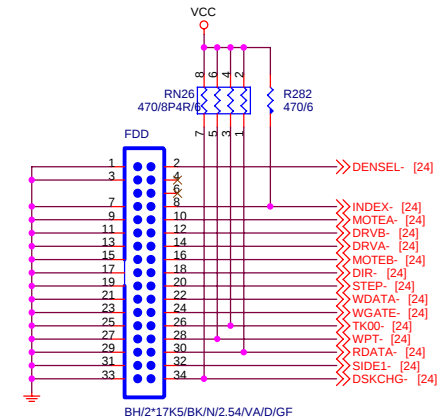
IDE/SATA LED



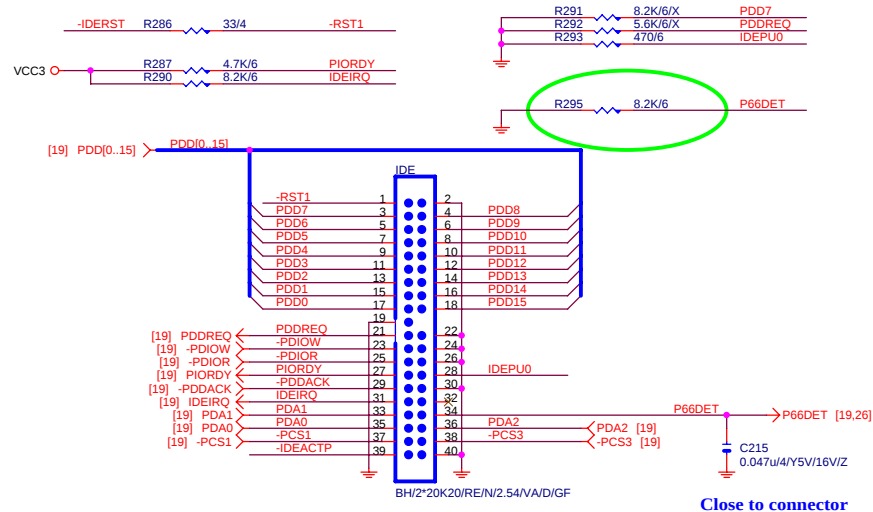
IDE RESET



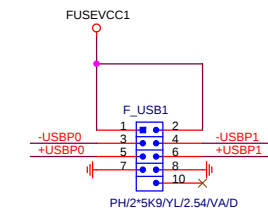
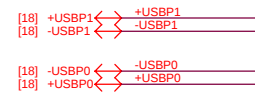
FLOPPY



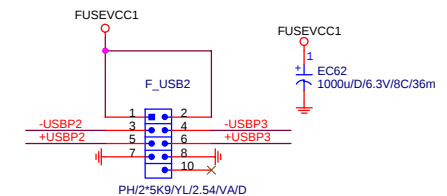
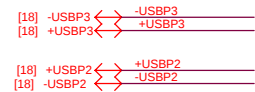
IDE



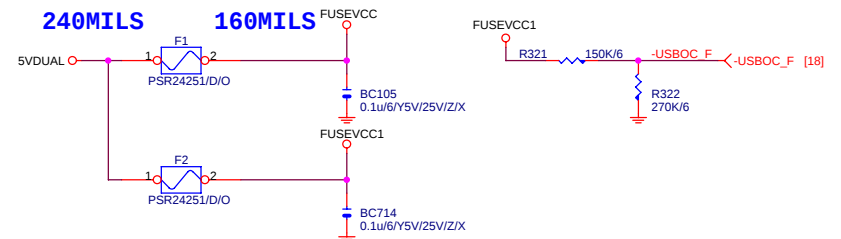
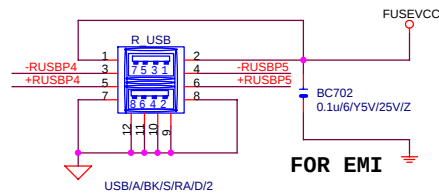
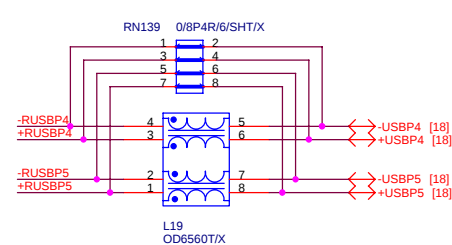
FRONT USB1



FRONT USB2



Close to connector



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Title			
IDE,FDD,F_USB			
Size			
B			
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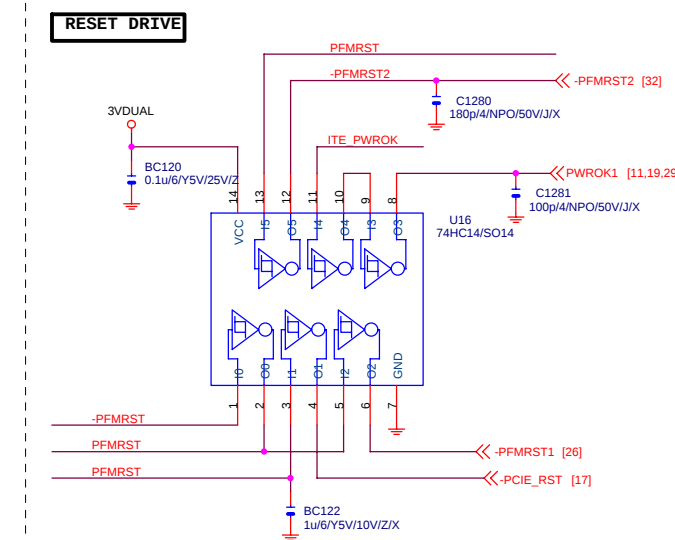
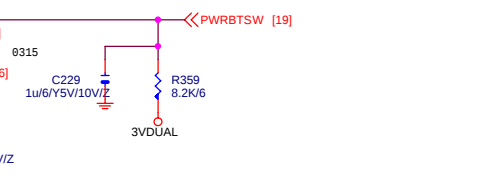
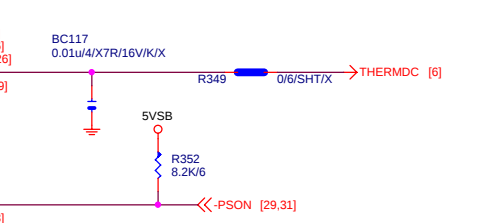
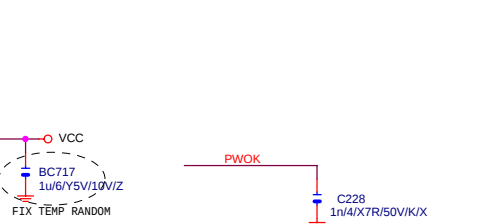
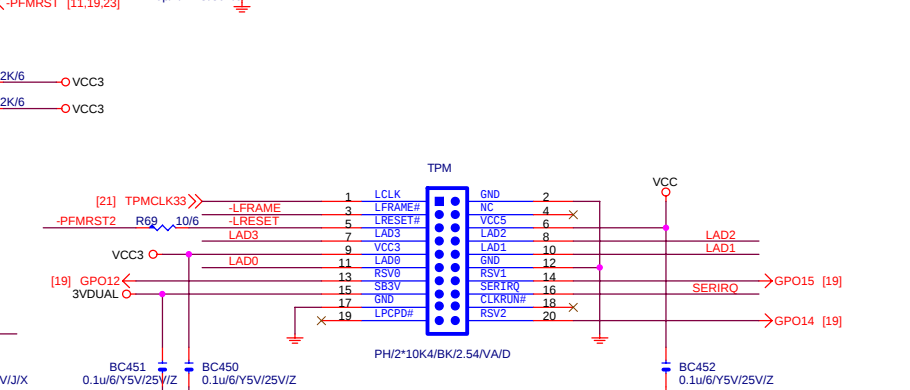
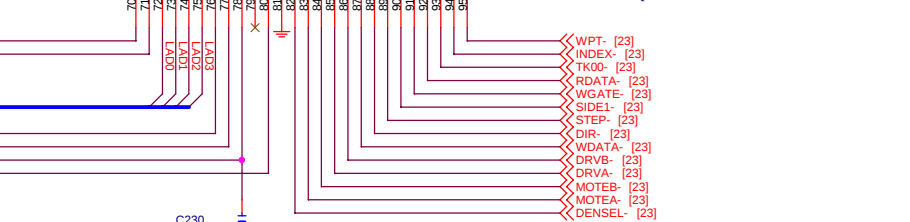
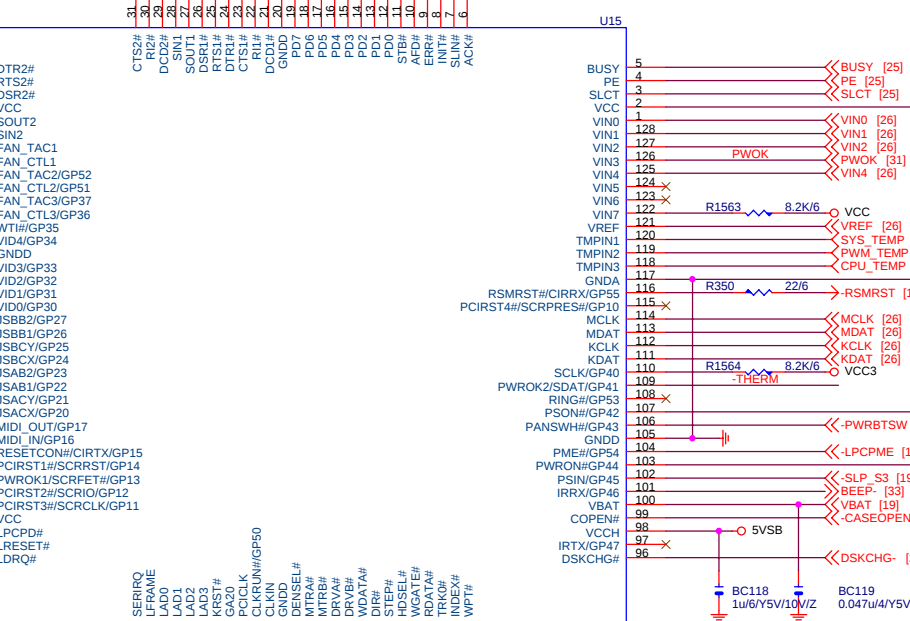
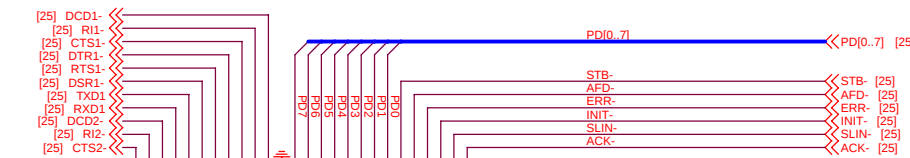
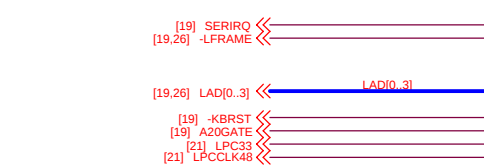
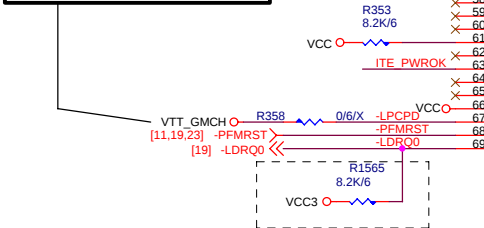
RTS2- ==LOW CPU FAN 50%
==HIGH 100%
DEFAULT 50%



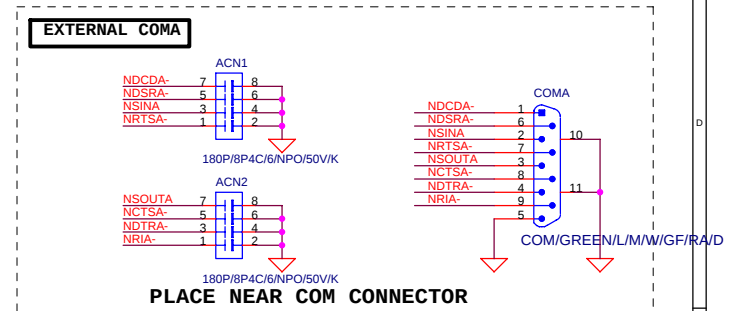
SOUT2	1	VID pins threshold voltage select: Vih / Vil : 2.0 / 0.8V
	0	VID pins threshold voltage select: Vih / Vil : 0.8 / 0.4V



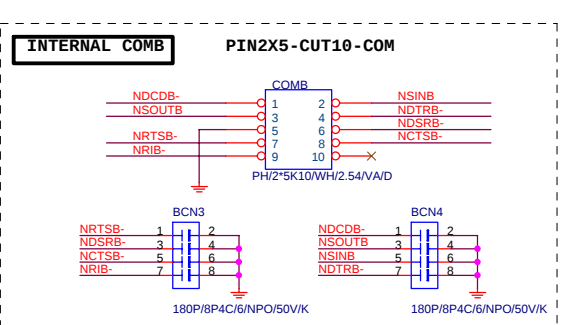
1.2V or 3.3V tolerance select.
1.2V OUTPUT 接 VTT_GMCH
3.3V OUTPUT 接 3.3V
LPCPD# =VIDVCC



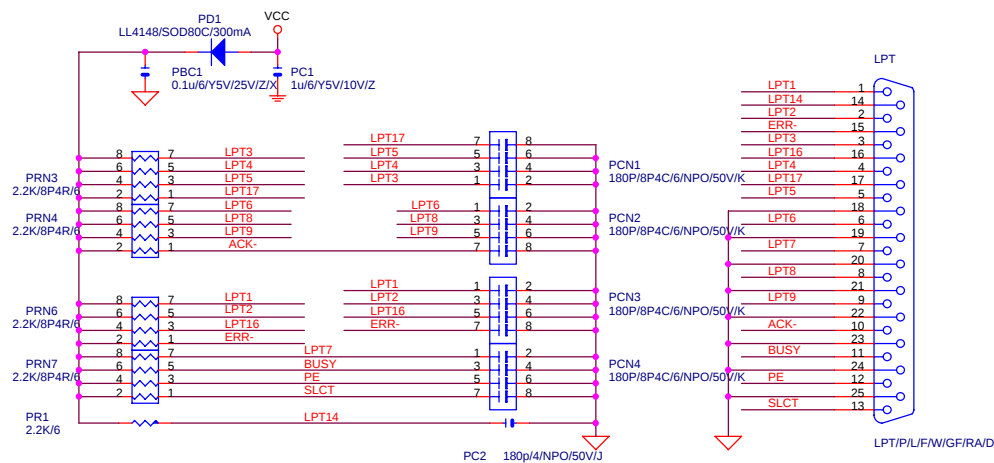
COMA



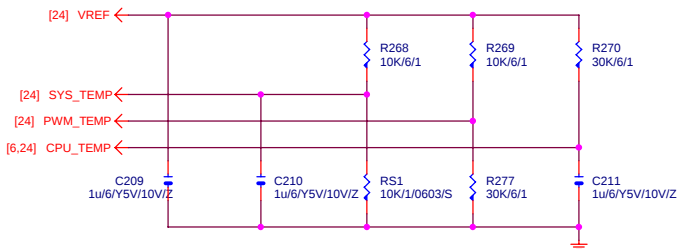
COMB



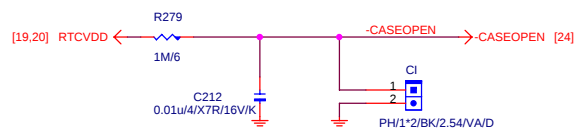
LPT PORT	
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TEMP H/W MONITOR

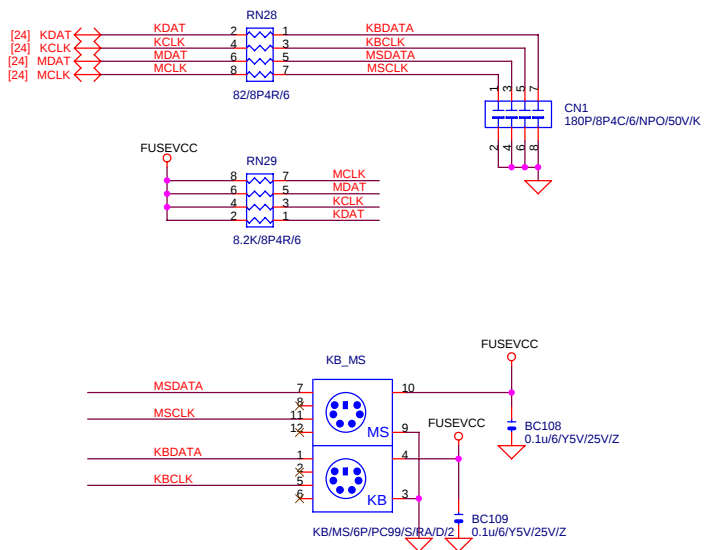


CASE OPEN

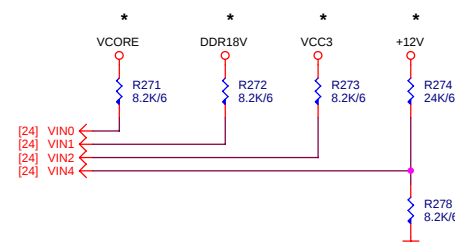


Case Open Circuits

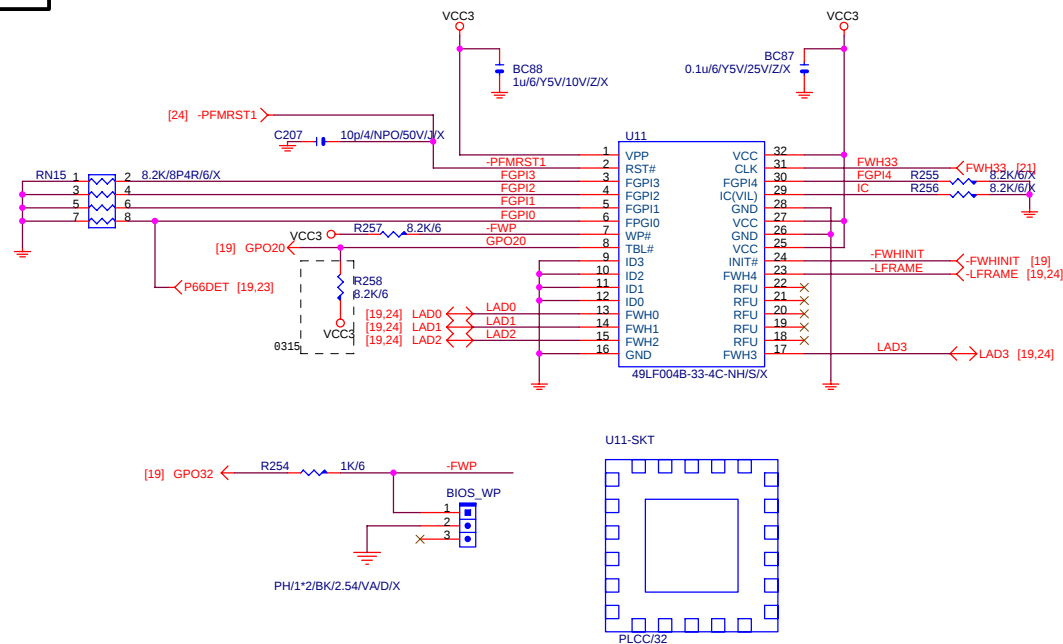
KB/MS

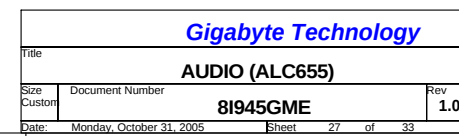


VOLTAGE -- H/W MONITOR

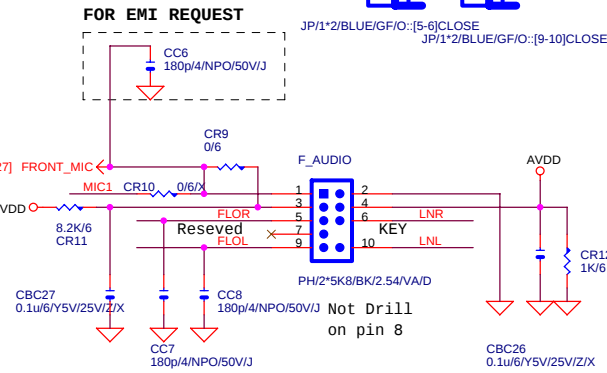


FWM BIOS

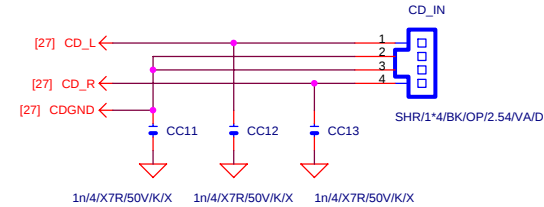




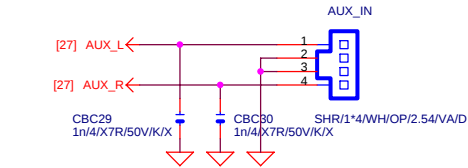
INTEL FRONT AUDIO



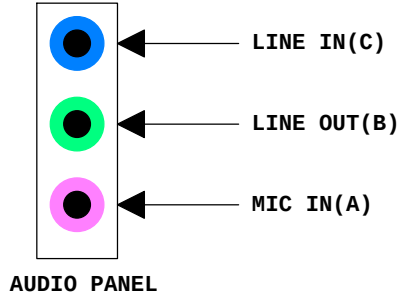
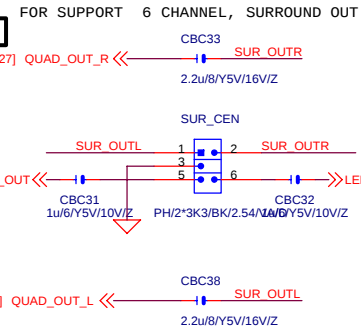
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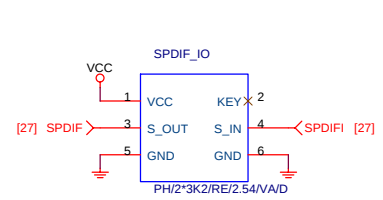
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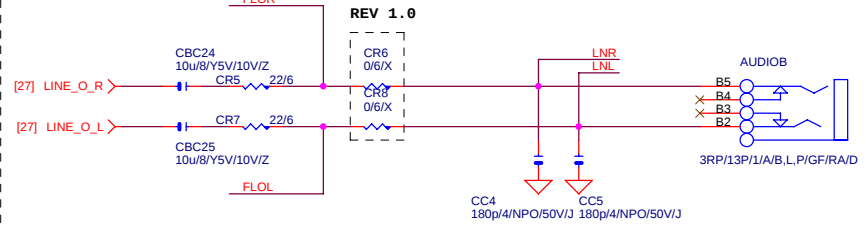
SUR_CEN



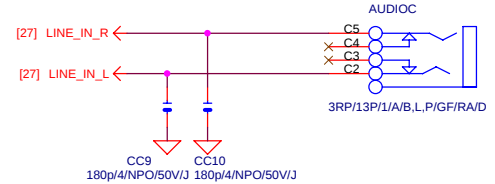
SPDIF_IO



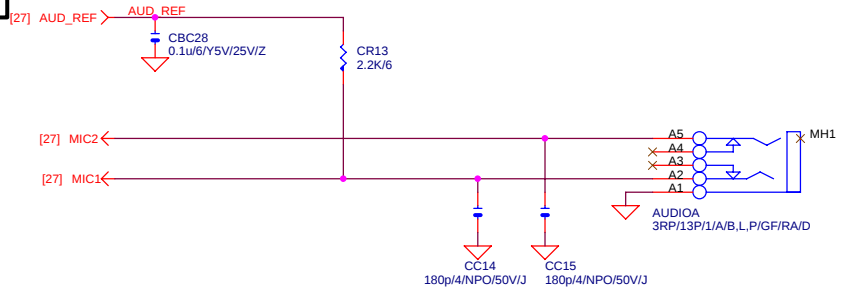
LINE OUT



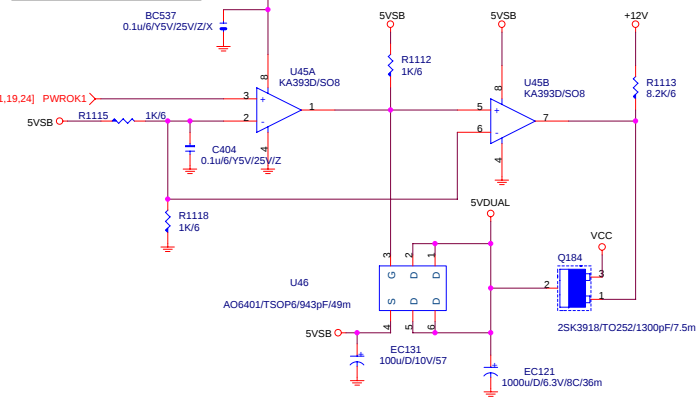
LINE-IN



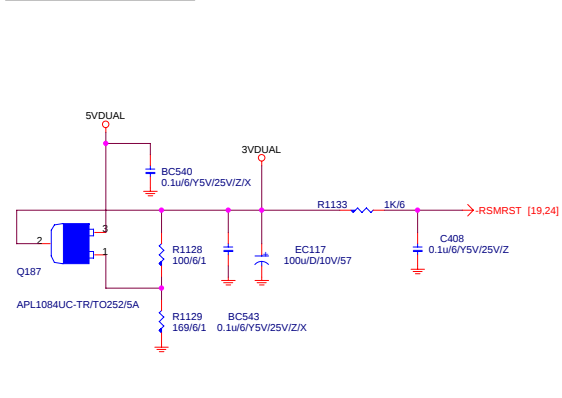
MIC



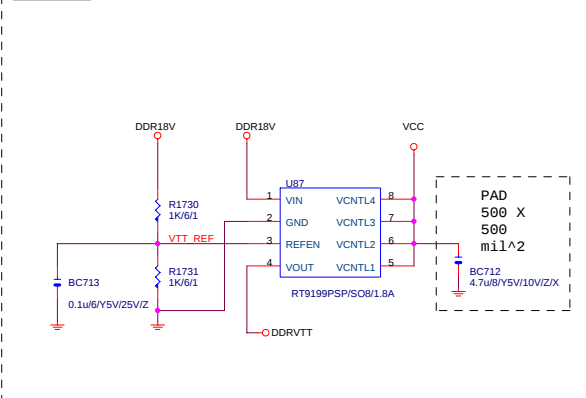
5VDUAL CIRCUIT



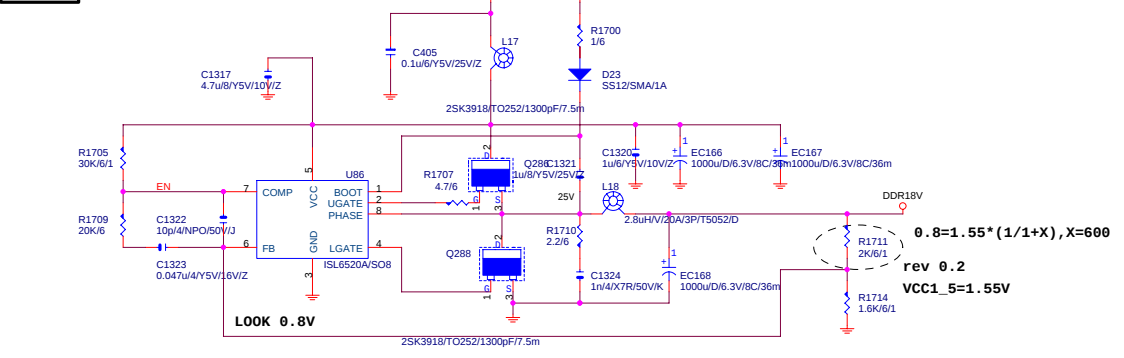
3VDUAL CIRCUIT



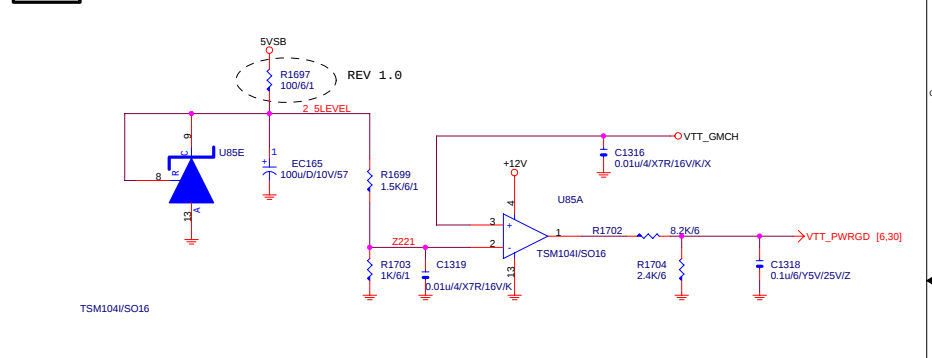
DDRVTT



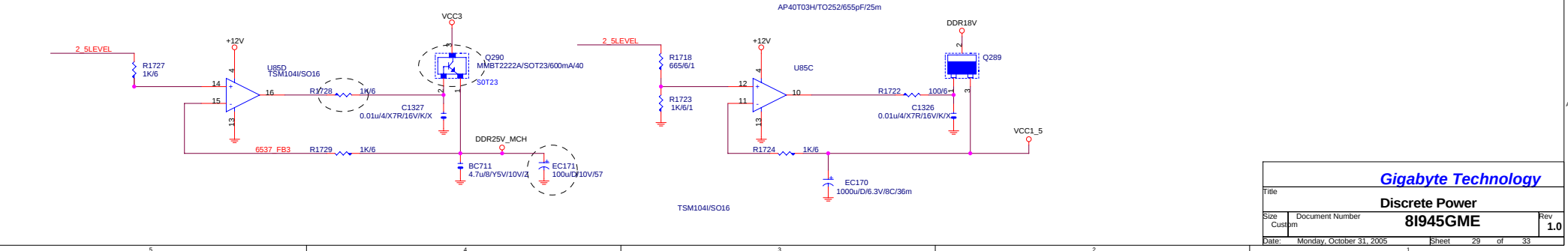
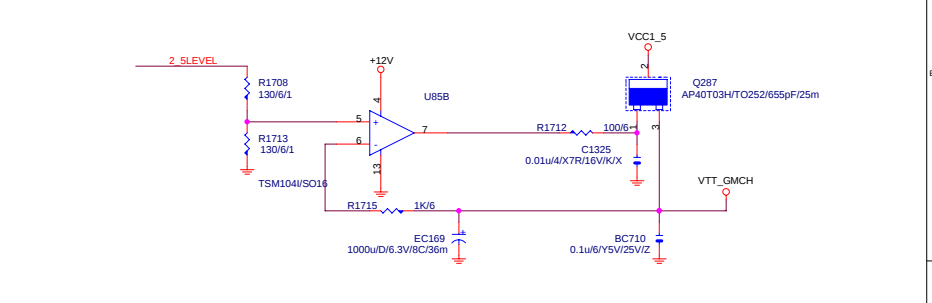
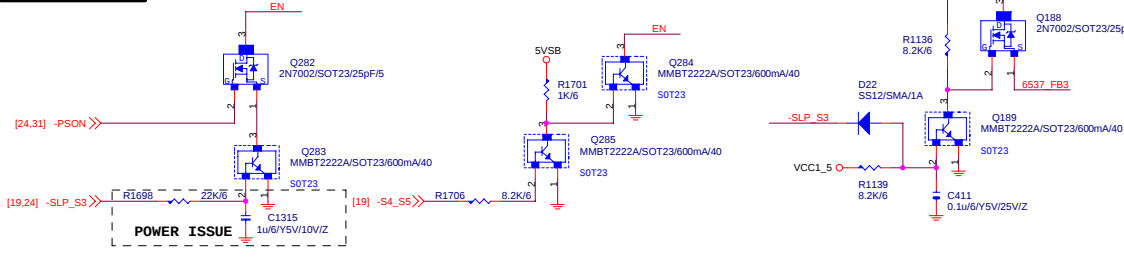
DDR18V

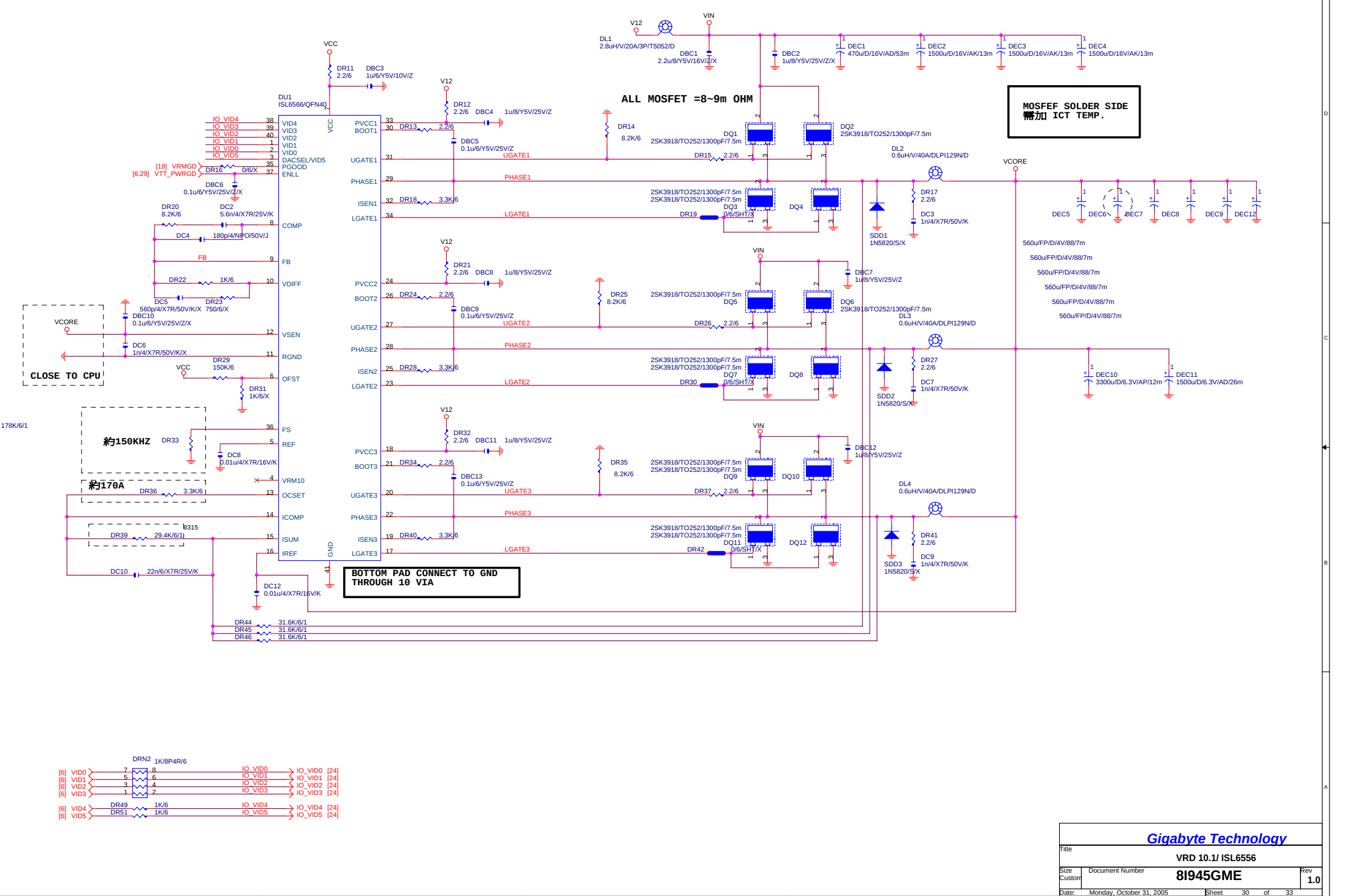


POWER

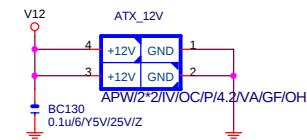
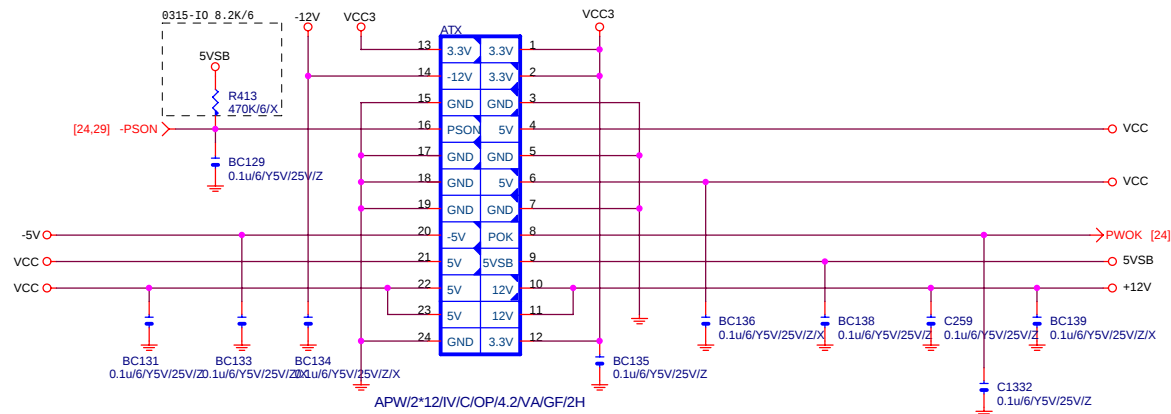


POWER SEQUENCY

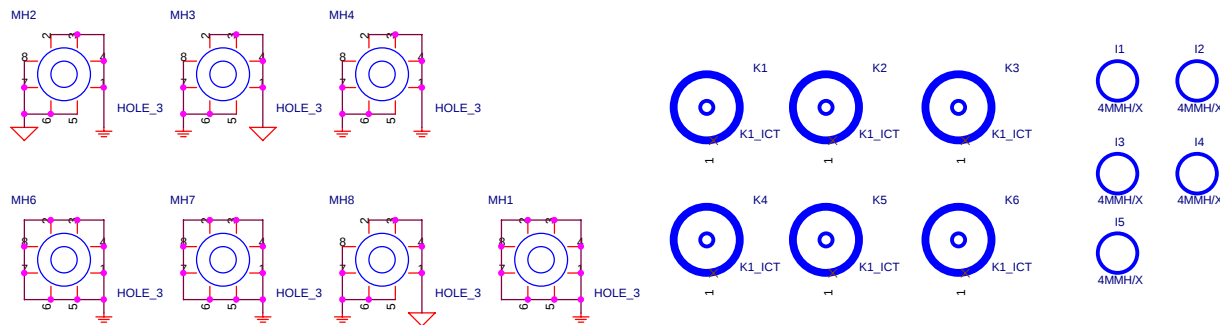




ATX POWER CONNECTOR



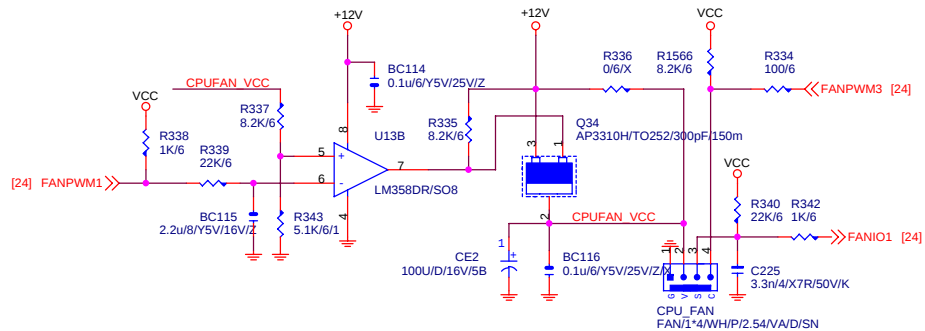
HOLE_3-2--->有鉛



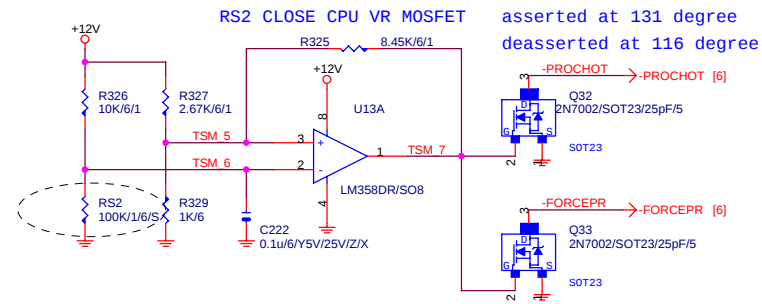
Gigabyte Technology

Title			
ATX POWER CONNECTOR			
Size	Document Number	8I945GME	Rev 1.0
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CPU SMART FAN SMART FAN

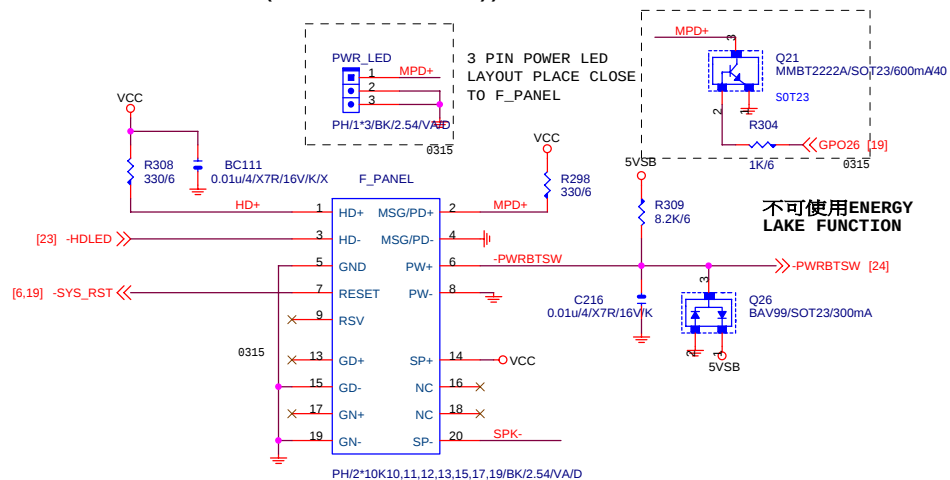


PROCESSOR HOT

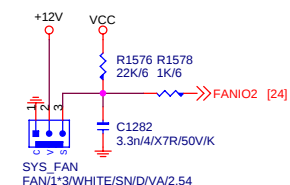


INTEL FRONT PANEL

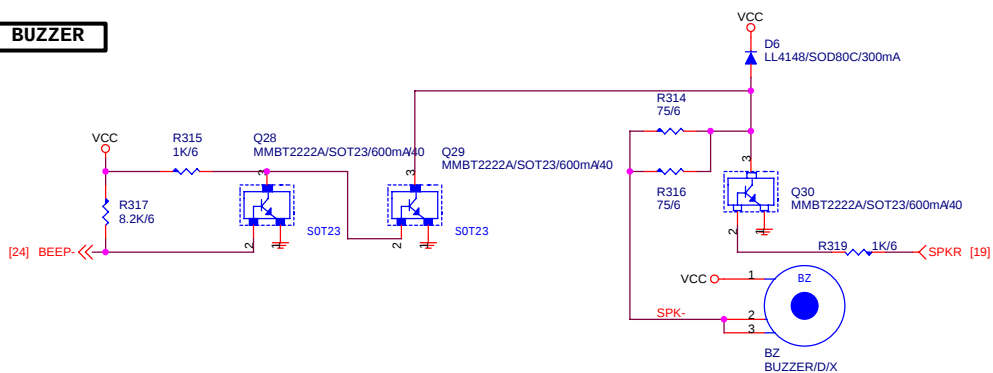
MPD- : (GPIO25 - -VCCSUS3+HI+HI+DEFINED(C3/C4/S/1/S3/S/4/S5)) - ->INTEL



SYS_FAN



BUZZER



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Title			
FRONT PANEL			
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