

Model Name:GA-P31-ES3G *Revision 1.0*

SHEET TITLE

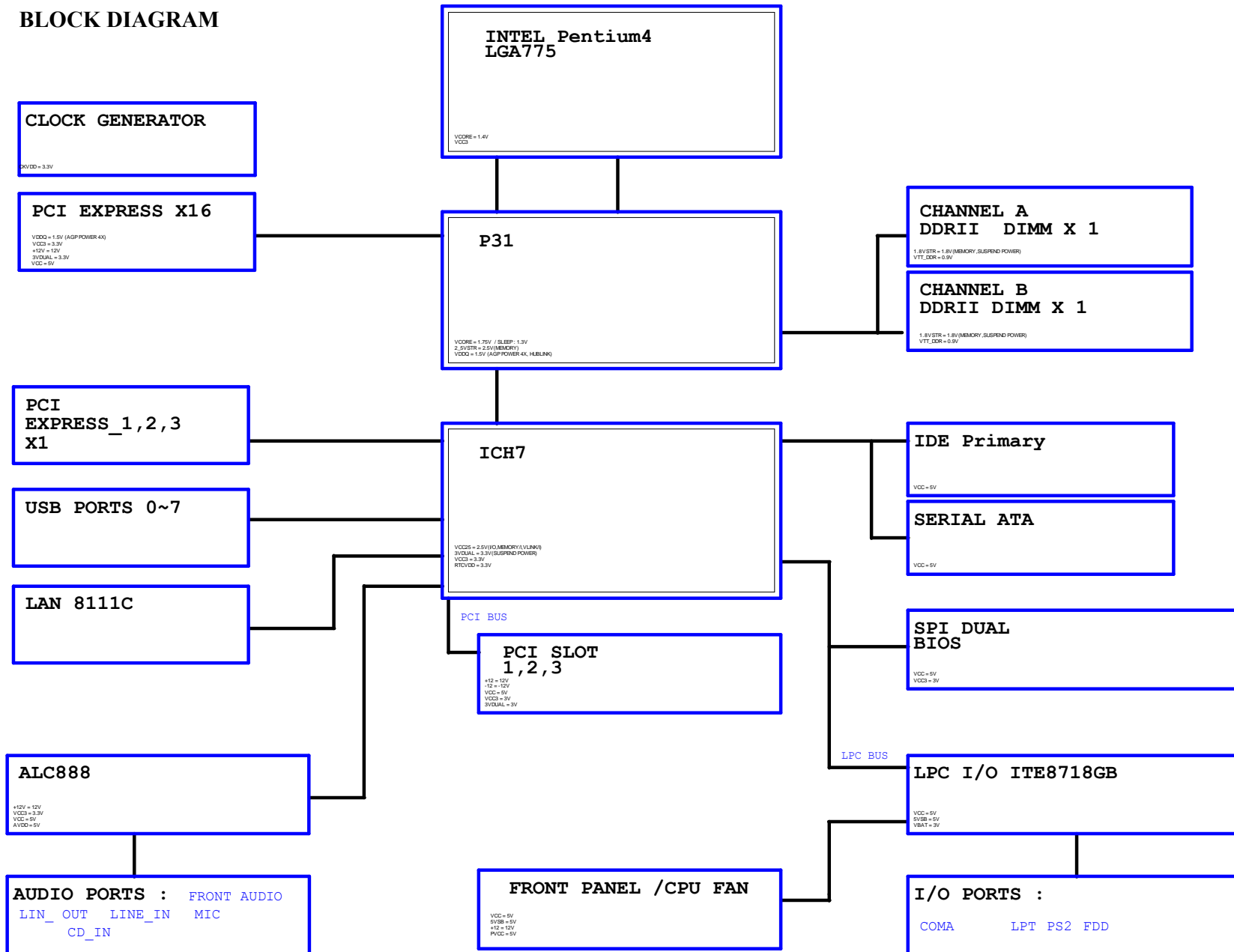
01	COVER SHEET
02	BLOCK DIAGRAM
03	BOM & PCB MODIFY HISTORY
04	P4 LGA775 A
05	P4 LGA775 B,D
06	P4 LGA775 C
07	P4 LGA775 E,F,G,H
08	P31 HOST
09	P31 DDRII
10	P31 PCI E, DMI
11	P31 VGA
12	P31 GND
13	P31 PWR
14	PCI EXPRESS*16 SLOT
15	DDRII CHANNEL A
16	DDRII CHANNEL B
17	DDRII TERMINATION
18	ICH7 PCI, USB, DMI, LAN
19	ICH7 IDE, GPIO, SATA, CTRL
20	ICH7 VCC, GND
21	CK505 CLOCK.
22	PCI SLOT 1,2,PCIE*1
23	IDE/FLOPPY
24	ITE 8718 GB/GX
25	COM LPT
26	CI,HWM,KB/MS,DUAL BIOS
27	ALC888

SHEET TITLE

28	REAR AUDIO JACK
29	DISCRETE POWER
30	VCORE PWM ISL6312
31	ATX, OTHERS POWER
32	FRONT PANEL
33	REALTEK RTL8111C
34	PCI SLOT3,PCIE*2,3

Gigabyte Technology			
Title Cover Sheet			
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BLOCK DIAGRAM



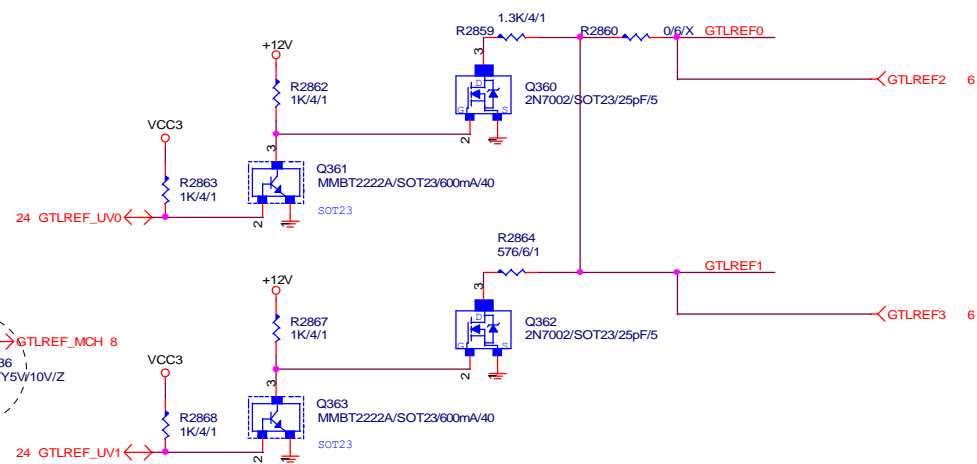
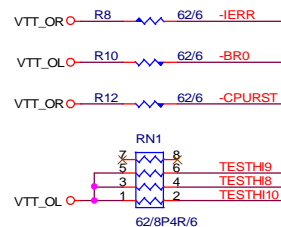
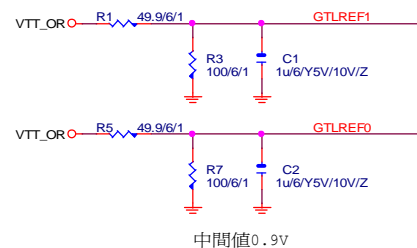
Gigabyte Technology			
BOM & PCB MODIFY HISTORY			
Doc. Number	GA-P31-ES3G		Rev. 1.0
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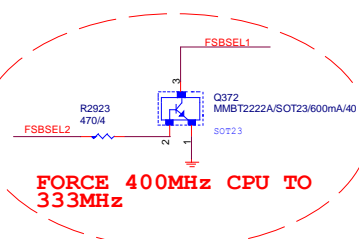
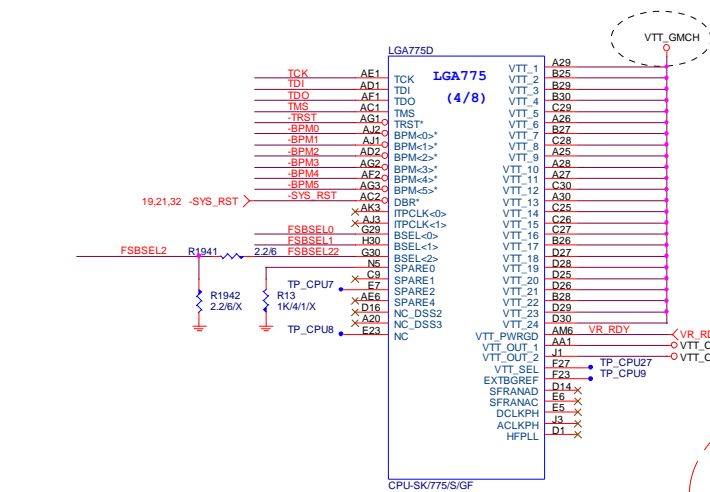
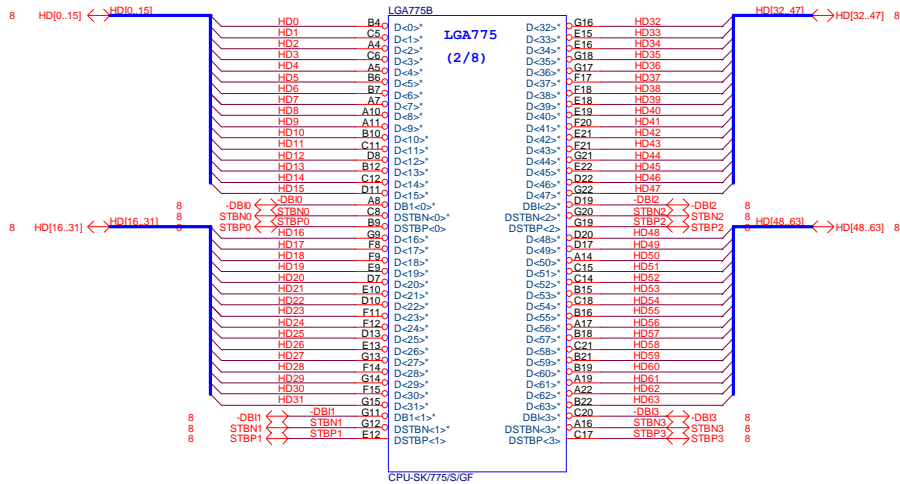
Component value change history

2007/08/02

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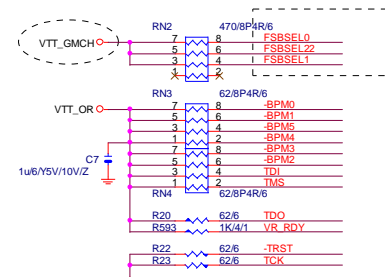


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Title				
P4_LGA775-A				
Size B	Document Number			Rev
	GA-P31-ES3G			1.
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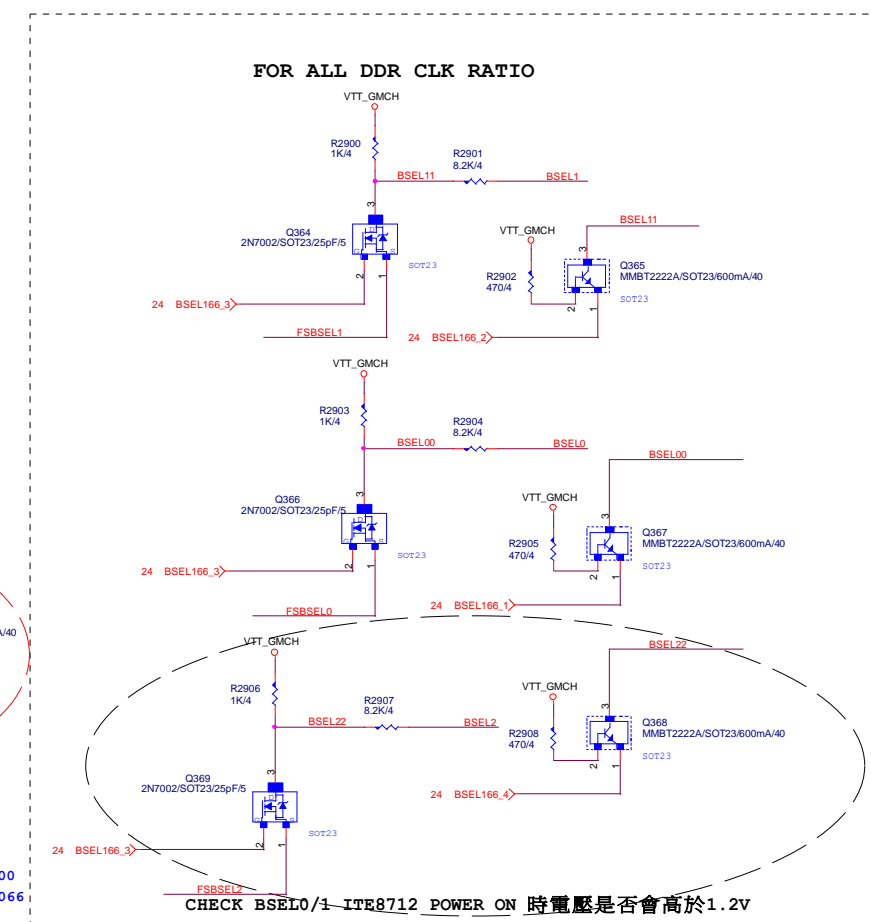


FSA	FSB	FSC	Clock	
?	1	0	1	100MHz
?	1	0	0	133MHz 3/4
G31	0	1	0	200MHz 2/2.66/3.33/4
G31	0	0	0	266MHz 2/2.5/3/4
G31	0	0	1	333MHz 2/2.4
	0	1	1	400MHz

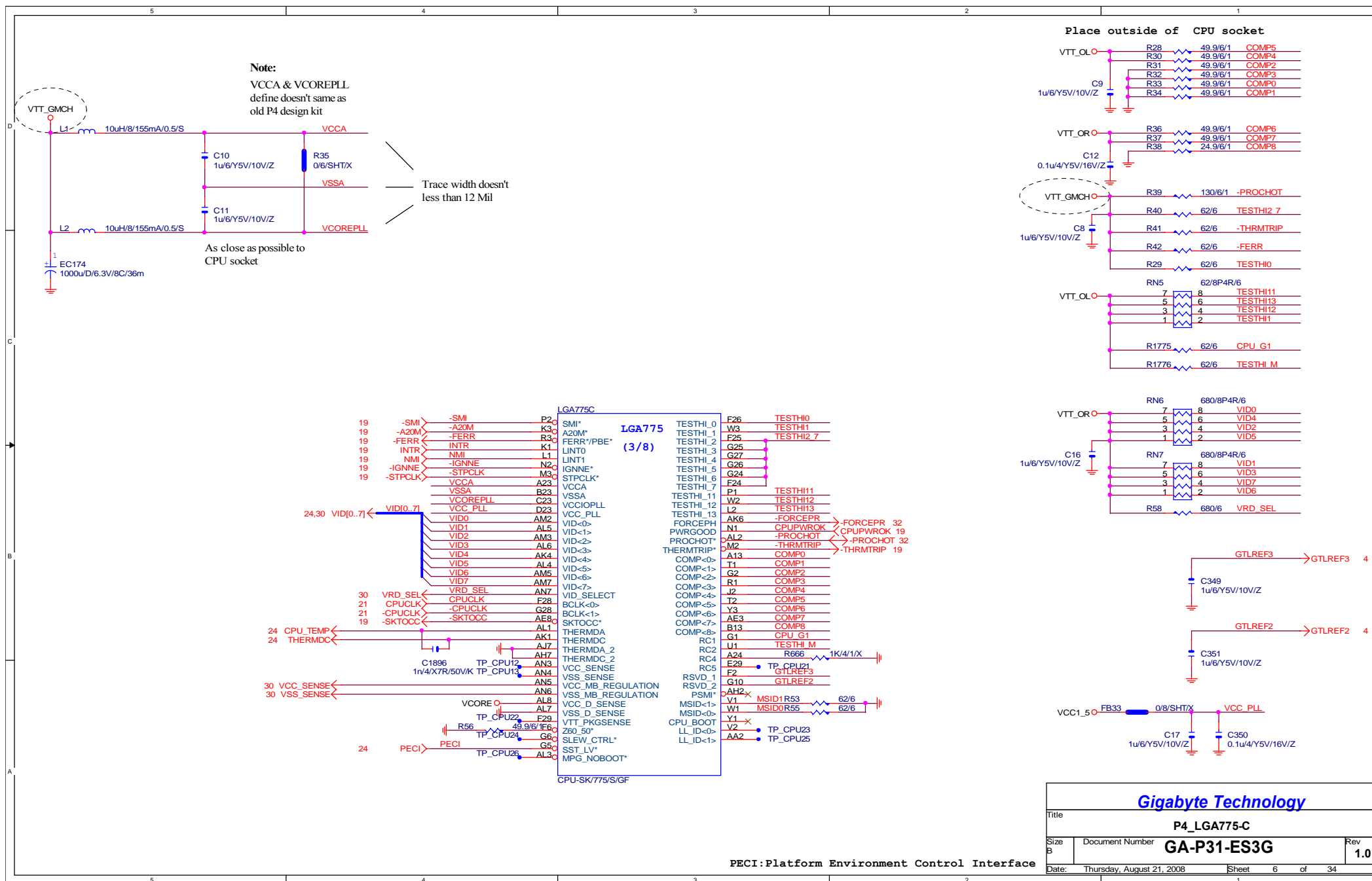
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533/667/800/1066
667/800

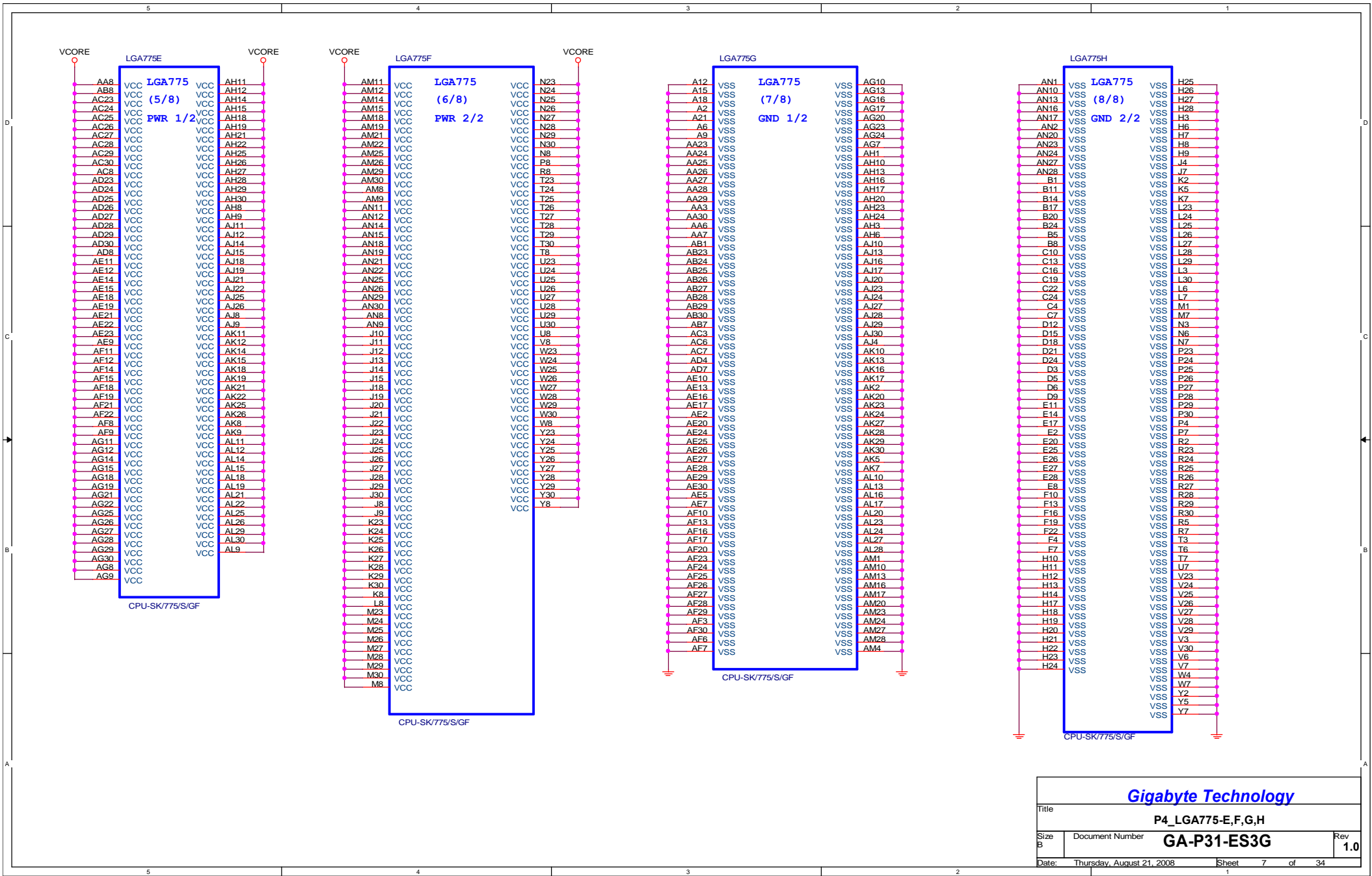


TO CLK GEN 21 FSBSEL0 FSBSEL1 R14 8.2K/4/X BSEL0 BSEL1
21 FSBSEL2 FSBSEL2 R16 8.2K/4/X BSEL2 BSEL2



CHECK BSEL0/1 ITE8712 POWER ON 時電壓是否會高於1.2V





Gigabyte Technology			
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P4_LGA775-E,F,G,H			
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L2C

BW
(3/9)

15.17 SWEA SCAS A#
15.17 SCAS A#
15.17 SRAS A#

15.17 SBA0 SBA0 A#
15.17 SBA1 SBA1 A#
15.17 SBA2 SBA2 A#

15.17 CSA0 CSA0 A#
15.17 CSA1 CSA1 A#
15.17 CSA2 CSA2 A#
15.17 CSA3 CSA3 A#

15.17 CKEA0 CKEA0 A#
15.17 CKEA1 CKEA1 A#
15.17 CKEA2 CKEA2 A#
15.17 CKEA3 CKEA3 A#

MODT_A0 MODT_A0 A#
MODT_A1 MODT_A1 A#

15 DCLKA0 DCLKA0 A#
15 DCLKA1 DCLKA1 A#
15 DCLKA2 DCLKA2 A#
15 DCLKA3 DCLKA3 A#

15 DCLKA4 DCLKA4 A#
15 DCLKA5 DCLKA5 A#
15 DCLKA6 DCLKA6 A#
15 DCLKA7 DCLKA7 A#

15 DCLKA8 DCLKA8 A#
15 DCLKA9 DCLKA9 A#
15 DCLKA10 DCLKA10 A#
15 DCLKA11 DCLKA11 A#

15 DCLKA12 DCLKA12 A#
15 DCLKA13 DCLKA13 A#
15 DCLKA14 DCLKA14 A#
15 DCLKA15 DCLKA15 A#

15 DCLKA16 DCLKA16 A#
15 DCLKA17 DCLKA17 A#
15 DCLKA18 DCLKA18 A#
15 DCLKA19 DCLKA19 A#

15 DCLKA20 DCLKA20 A#
15 DCLKA21 DCLKA21 A#
15 DCLKA22 DCLKA22 A#
15 DCLKA23 DCLKA23 A#

15 DCLKA24 DCLKA24 A#
15 DCLKA25 DCLKA25 A#
15 DCLKA26 DCLKA26 A#
15 DCLKA27 DCLKA27 A#

15 DCLKA28 DCLKA28 A#
15 DCLKA29 DCLKA29 A#
15 DCLKA30 DCLKA30 A#
15 DCLKA31 DCLKA31 A#

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15 DCLKA34 DCLKA34 A#
15 DCLKA35 DCLKA35 A#

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15 DCLKA47 DCLKA47 A#

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15 DCLKA58 DCLKA58 A#
15 DCLKA59 DCLKA59 A#

15 DCLKA60 DCLKA60 A#
15 DCLKA61 DCLKA61 A#
15 DCLKA62 DCLKA62 A#
15 DCLKA63 DCLKA63 A#

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15 DCLKA65 DCLKA65 A#
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15 DCLKA69 DCLKA69 A#
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15 DCLKA71 DCLKA71 A#

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15 DCLKA77 DCLKA77 A#
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15 DCLKA80 DCLKA80 A#
15 DCLKA81 DCLKA81 A#
15 DCLKA82 DCLKA82 A#
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15 DCLKA85 DCLKA85 A#
15 DCLKA86 DCLKA86 A#
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15 DCLKA89 DCLKA89 A#
15 DCLKA90 DCLKA90 A#
15 DCLKA91 DCLKA91 A#

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15 DCLKA93 DCLKA93 A#
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15 DCLKA96 DCLKA96 A#
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15 DCLKA98 DCLKA98 A#
15 DCLKA99 DCLKA99 A#

15 DCLKA100 DCLKA100 A#

LEB2P31-SLAHXBGAT1226/10H1-038231-40R

CHANNEL A

L2D

BW
(4/9)

16.17 SWEA SCAS B#
16.17 SCAS B#
16.17 SRAS B#

16.17 SBA0 SBA0 B#
16.17 SBA1 SBA1 B#
16.17 SBA2 SBA2 B#

16.17 CSA0 CSA0 B#
16.17 CSA1 CSA1 B#
16.17 CSA2 CSA2 B#
16.17 CSA3 CSA3 B#

16.17 CKEA0 CKEA0 B#
16.17 CKEA1 CKEA1 B#
16.17 CKEA2 CKEA2 B#
16.17 CKEA3 CKEA3 B#

MODT_B0 MODT_B0 B#
MODT_B1 MODT_B1 B#

16 DCLKB0 DCLKB0 B#
16 DCLKB1 DCLKB1 B#
16 DCLKB2 DCLKB2 B#
16 DCLKB3 DCLKB3 B#

16 DCLKB4 DCLKB4 B#
16 DCLKB5 DCLKB5 B#
16 DCLKB6 DCLKB6 B#
16 DCLKB7 DCLKB7 B#

16 DCLKB8 DCLKB8 B#
16 DCLKB9 DCLKB9 B#
16 DCLKB10 DCLKB10 B#
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16 DCLKB15 DCLKB15 B#

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16 DCLKB25 DCLKB25 B#
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16 DCLKB29 DCLKB29 B#
16 DCLKB30 DCLKB30 B#
16 DCLKB31 DCLKB31 B#

16 DCLKB32 DCLKB32 B#
16 DCLKB33 DCLKB33 B#
16 DCLKB34 DCLKB34 B#
16 DCLKB35 DCLKB35 B#

16 DCLKB36 DCLKB36 B#
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LEB2P31-SLAHXBGAT1226/10H1-038231-40R

CHANNEL B

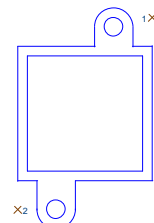
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16.17 MODT_B0[0..1] MODT_B0[0..1]
16 -DQS0[0..7] -DQS0[0..7]
16.17 MAAB0[0..14] MAAB0[0..14]
16 DMBO[0..7] DMBO[0..7]
16 DMBO[0..63] DMBO[0..63]
16 DQS0[0..7] DQS0[0..7]
15.17 MAAB0[0..14] MAAB0[0..14]
15 DMA0[0..7] DMA0[0..7]
15 DMA0[0..63] DMA0[0..63]
15 DQSA0[0..7] DQSA0[0..7]
15 -DQSA0[0..7] -DQSA0[0..7]

DDR18V
R74 1K/4/1
MCH_VREF
R75 1K/4/1
BC26 1uF/5V/10VZ

DDR18V
R1593 1K/4/1
SMRCOMPV0H
C321 0.01uF/4X7R/25V/K
R77 3K/4/1
SMRCOMPV0L
R1594 1K/4/1
C322 0.01uF/4X7R/25V/K

DDR18V
R79 20B/1 SMRCOMP3
BC27 0.1uF/4Y5V/16VZ
R80 20B/1 SMRCOMP2

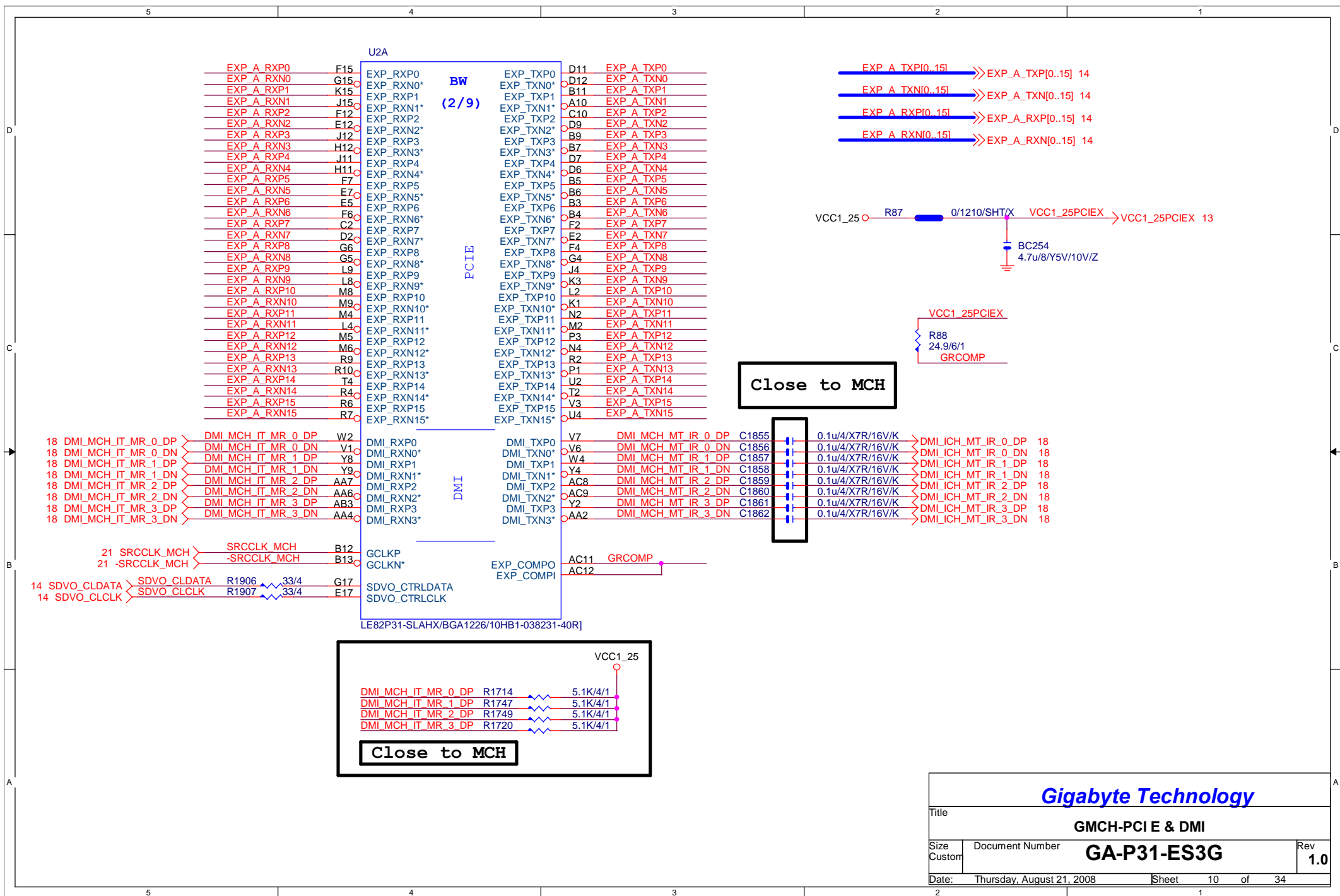
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BC28 0.1uF/4Y5V/16VZ
R82 20B/1 SMRCOMP0

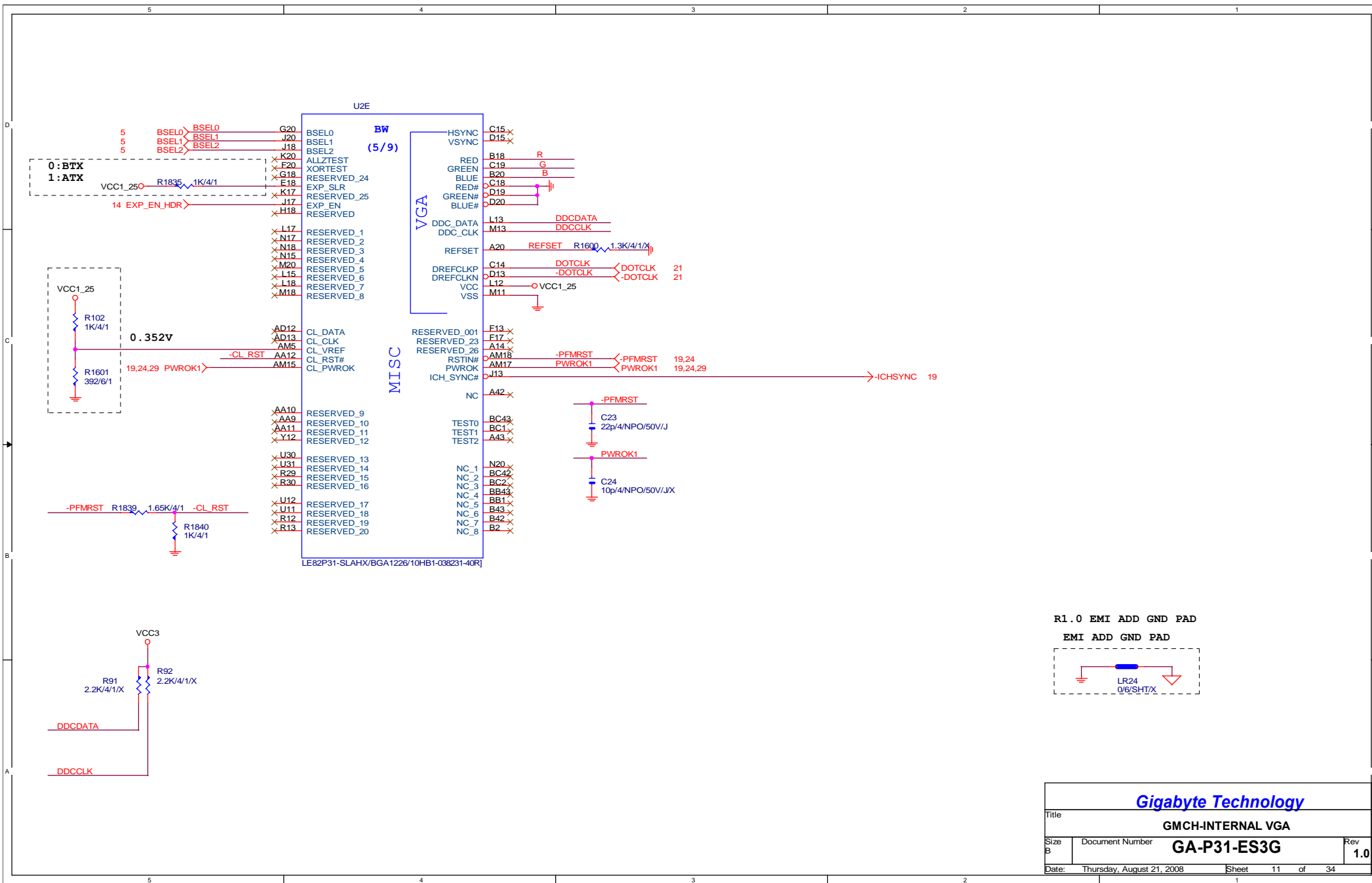


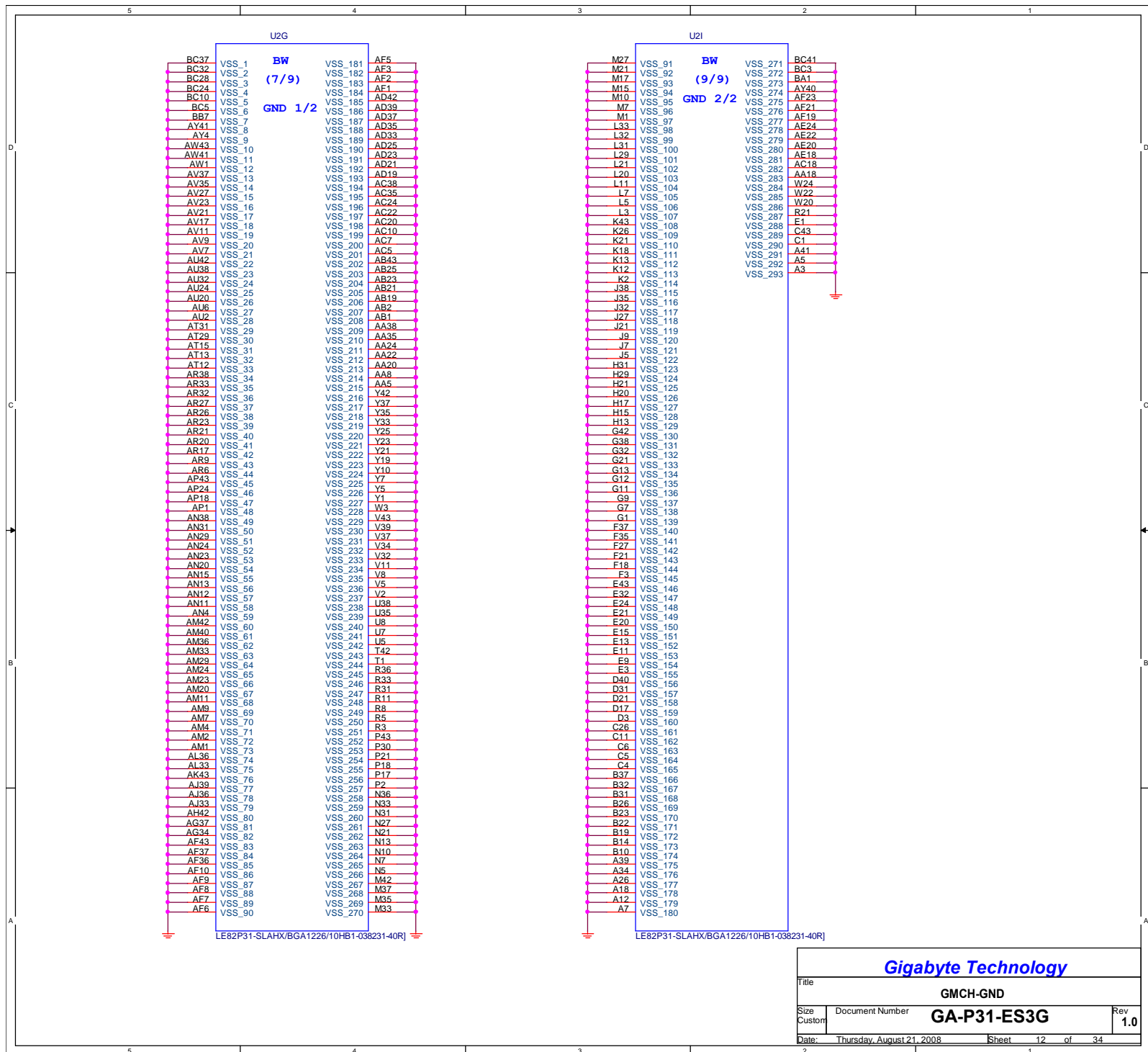
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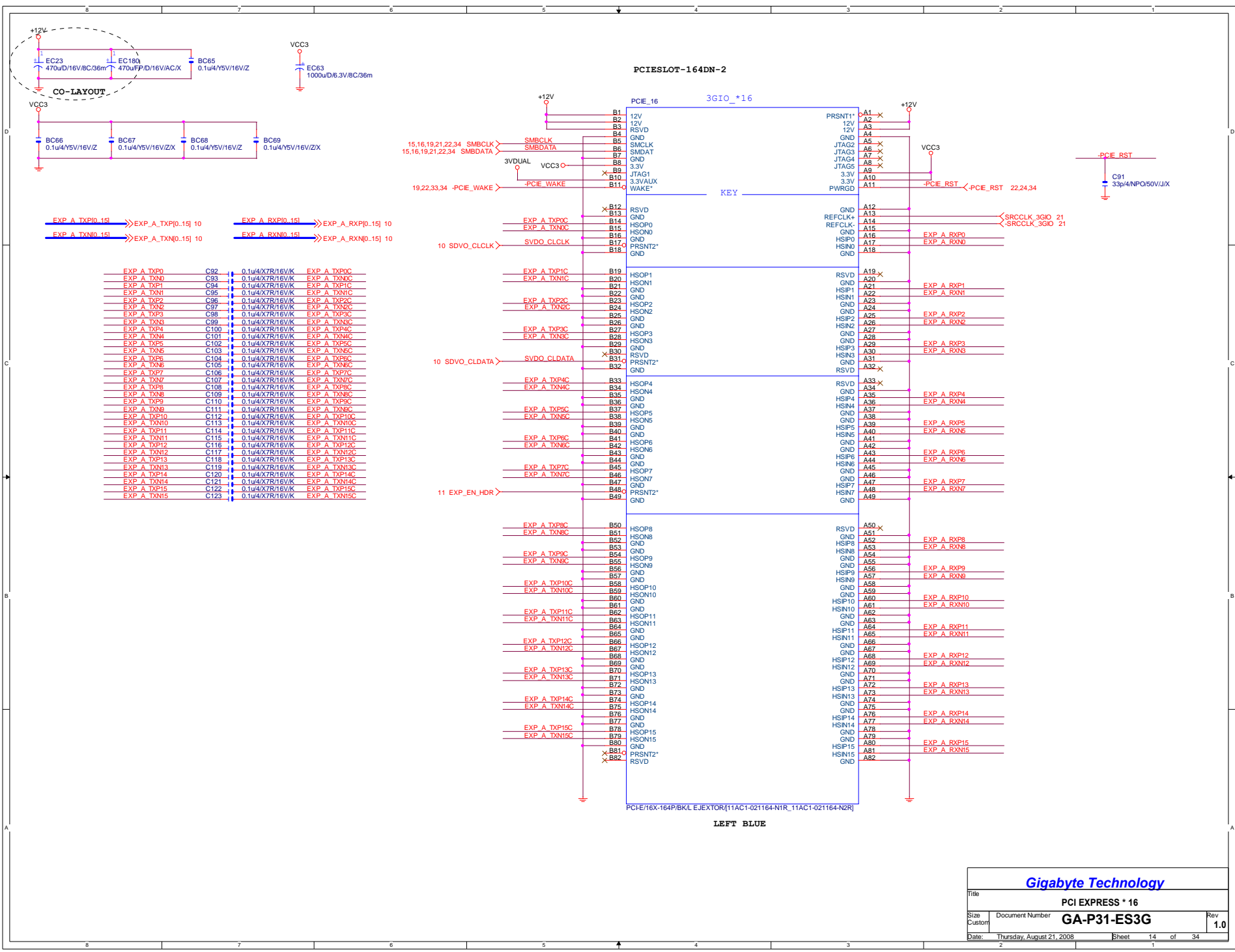
Gigabyte Technology

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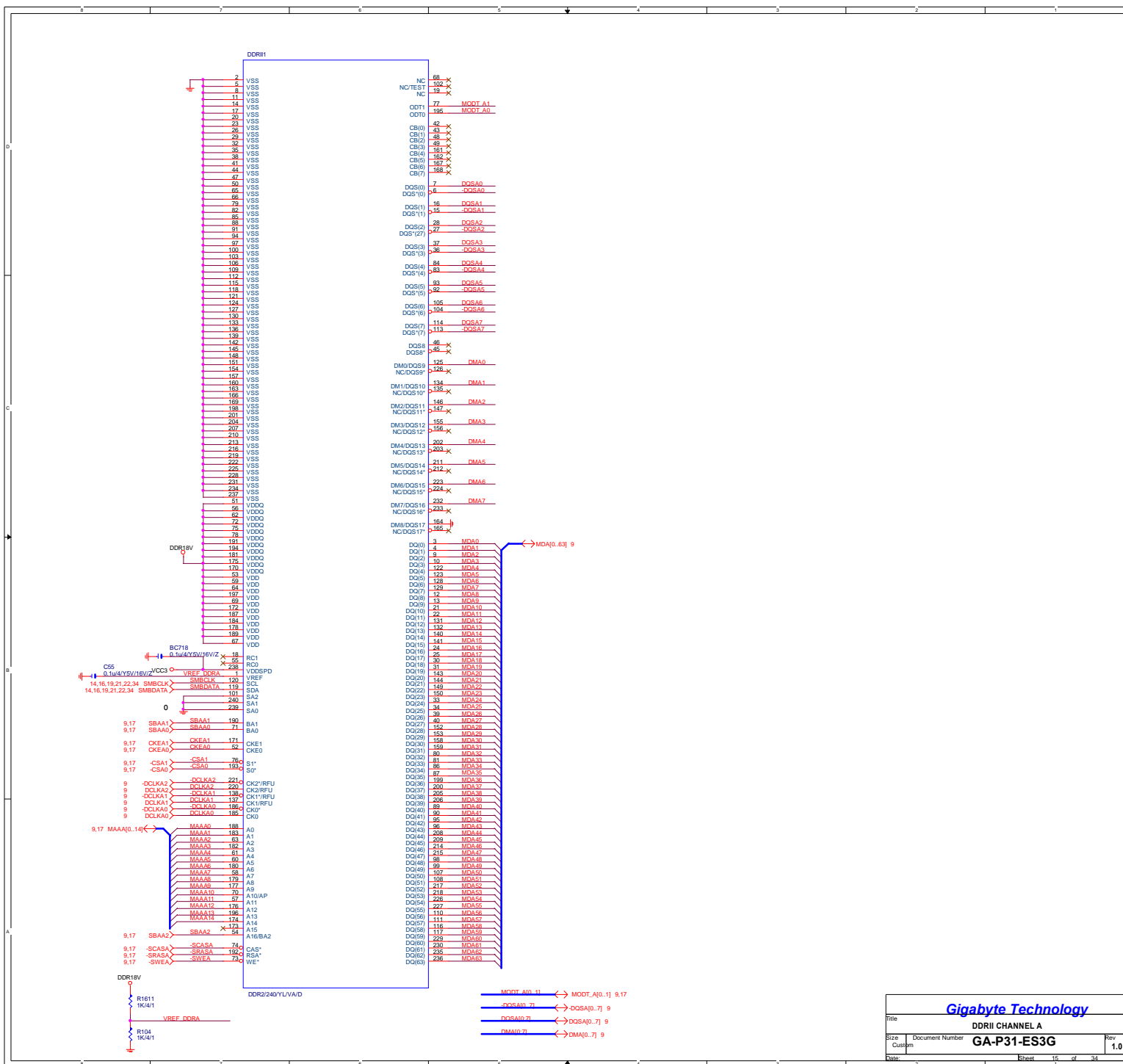


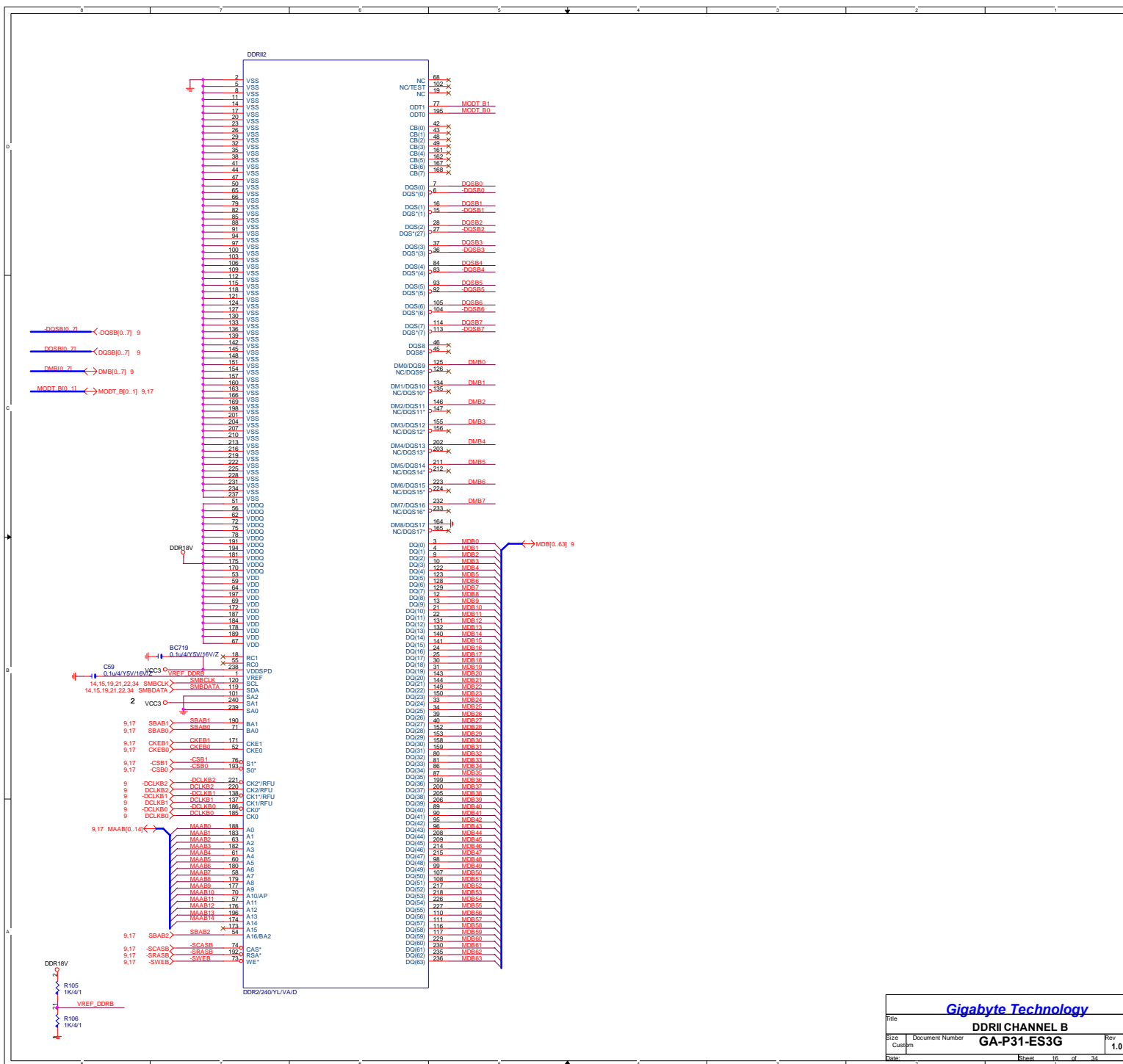






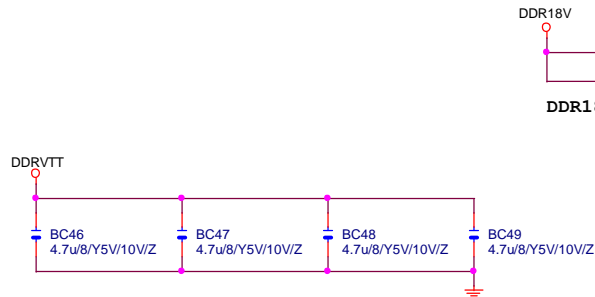
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Size	Document Number	GA-P31-ES3G	Rev 1.0
Custom			
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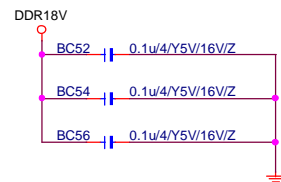


DDR TERMINATION CHANNEL A

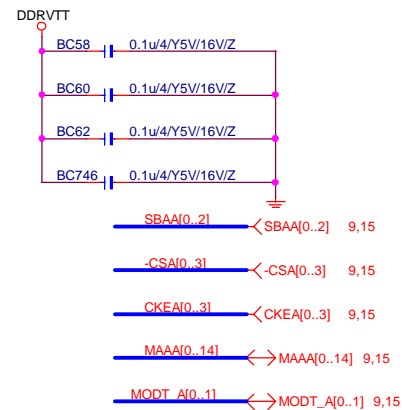
DDRVTT Decouple



DDR18V Decouple

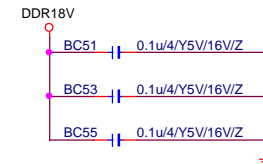


DDRVTT Decouple

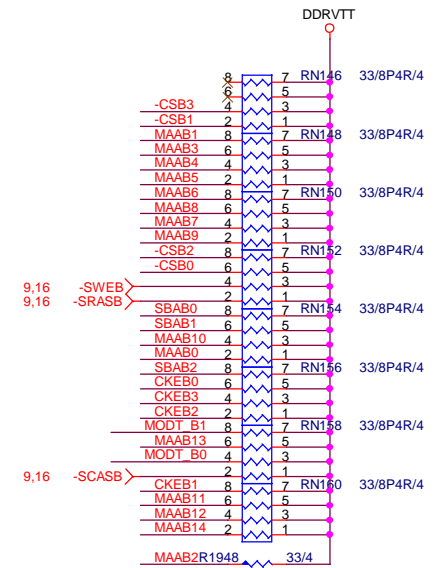
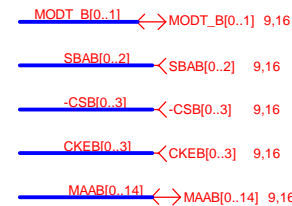
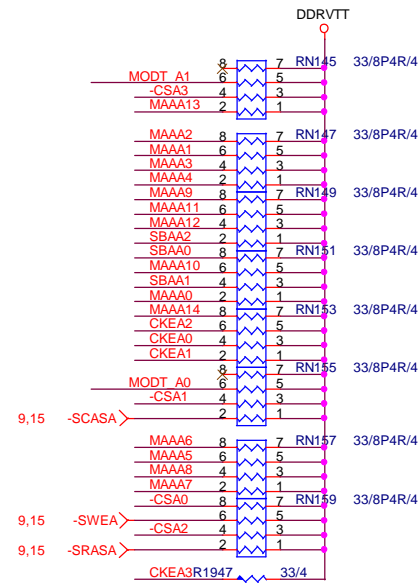
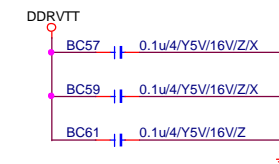


DDR TERMINATION CHANNEL B

DDR18V Decouple



DDRVTT Decouple

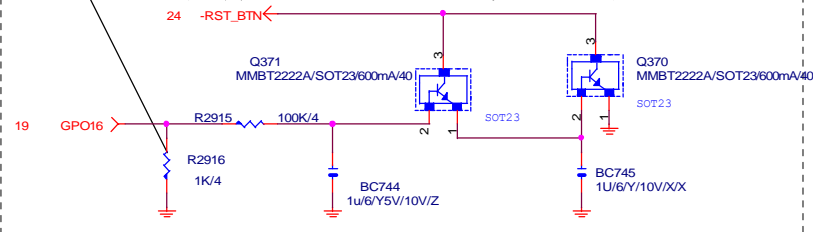


Gigabyte Technology

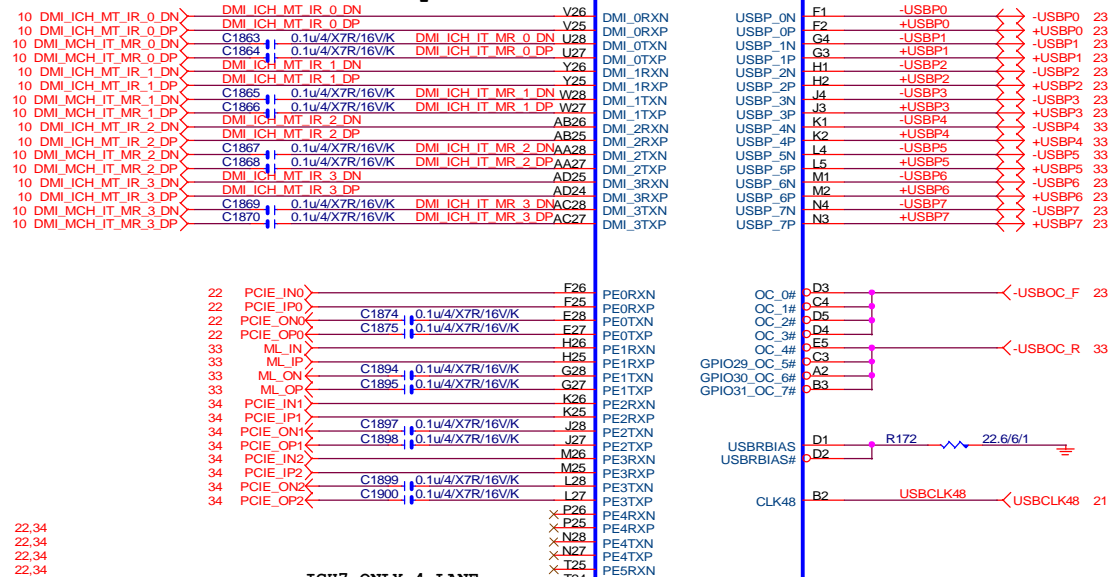
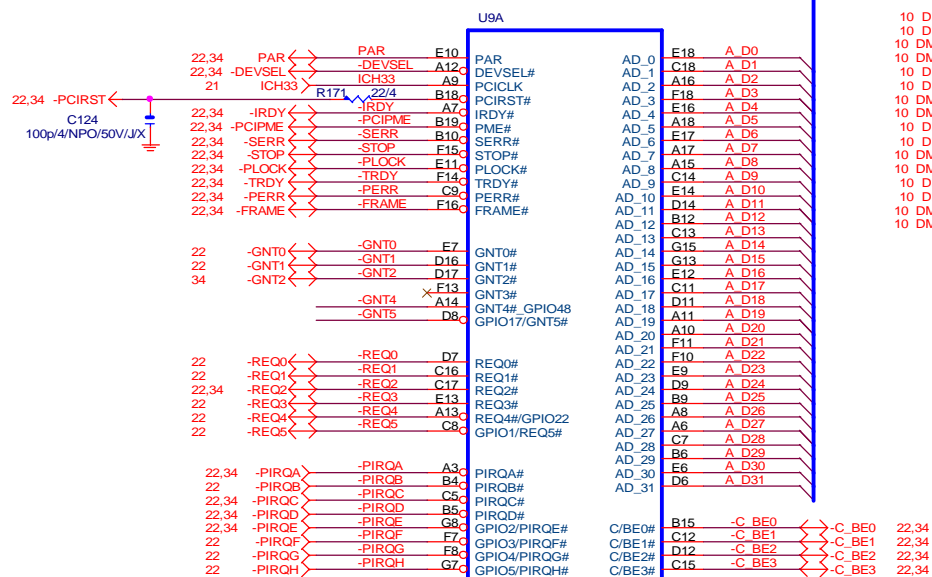
Title			DDRII TERMINATOR
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FOR ICH7R POWER ON 瞬間會HIGH 到1.8V 之後0V,必須PULL DOWN 1K/6

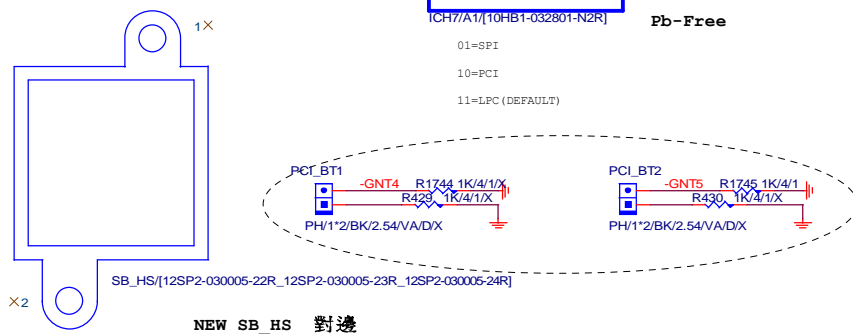
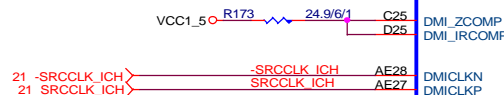
H/W
RESET



Close to ICH
as short as possible



ICH7 ONLY 4 LANE



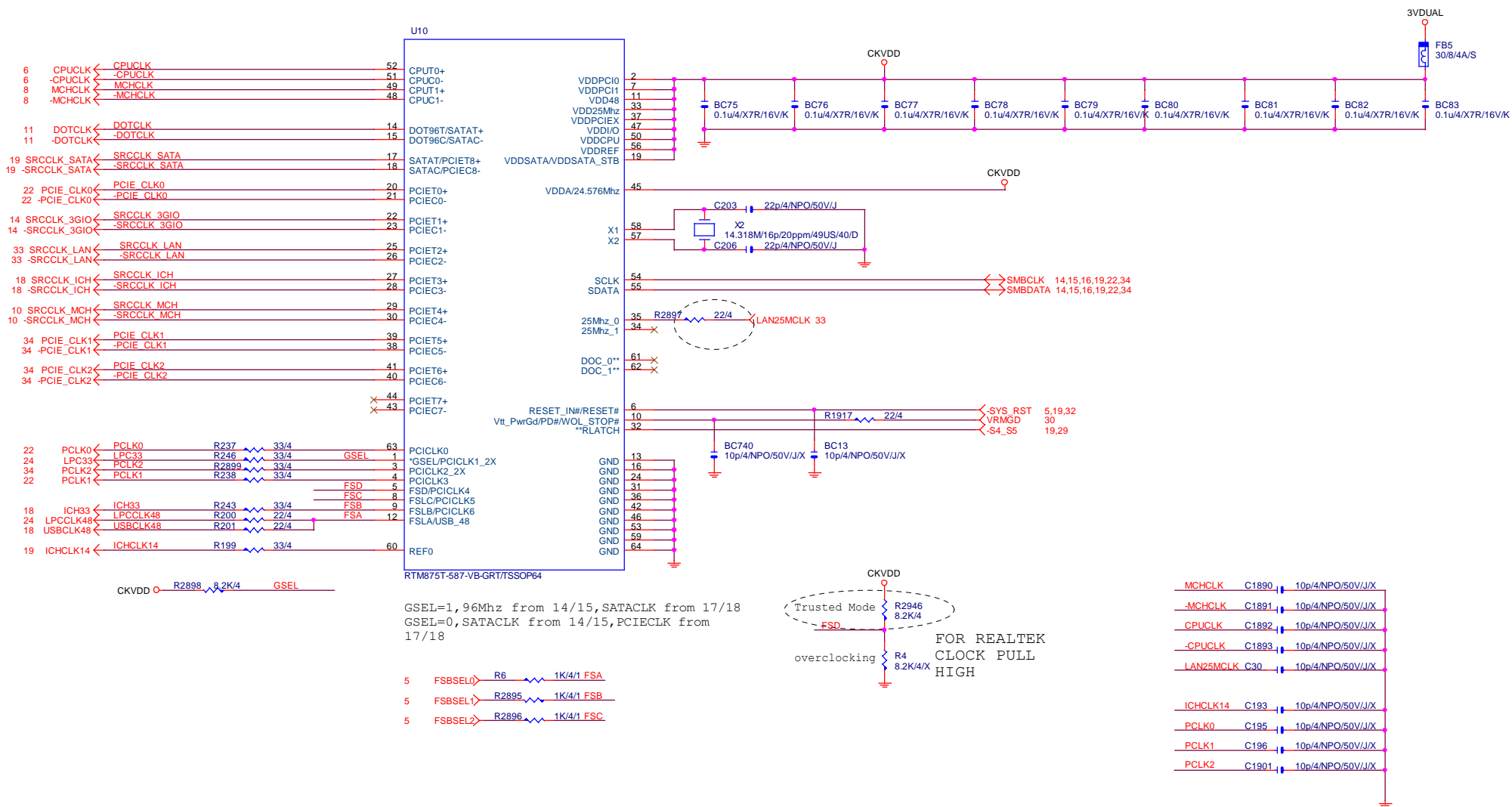
Gigabyte Technology

Title			
ICH7-PCI, DMI, LAN, USB			
Size	Document Number	Rev	
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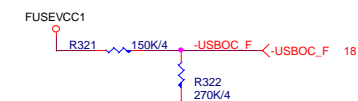
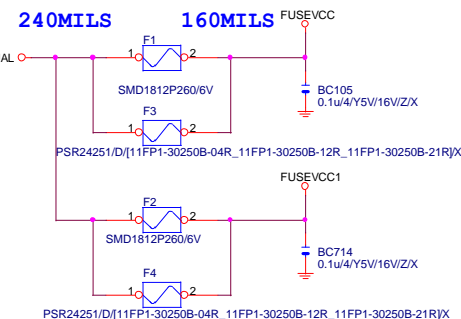
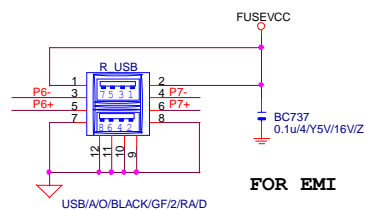
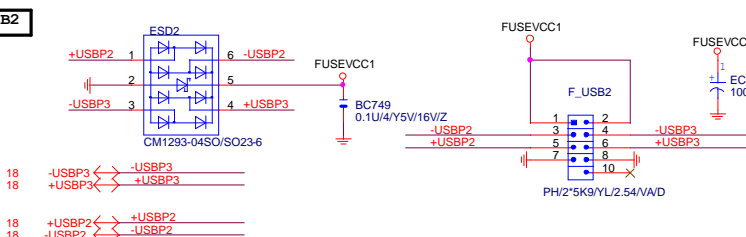
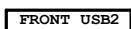
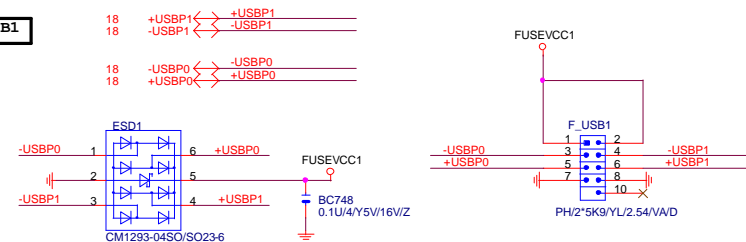
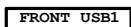
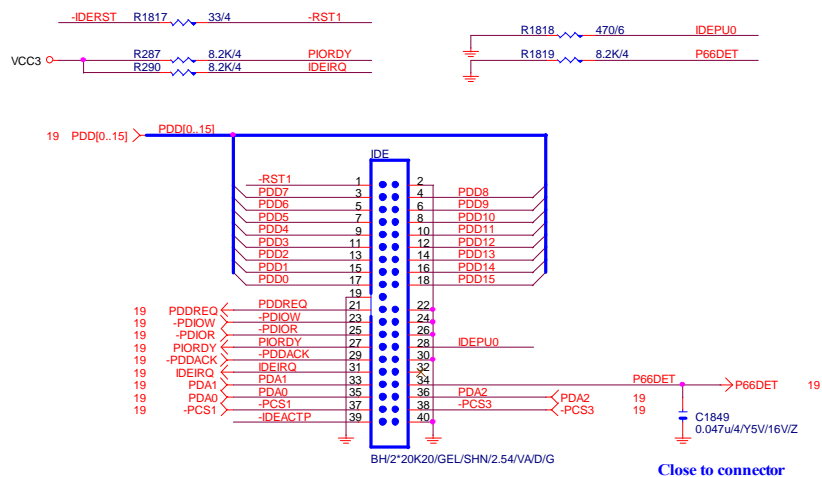
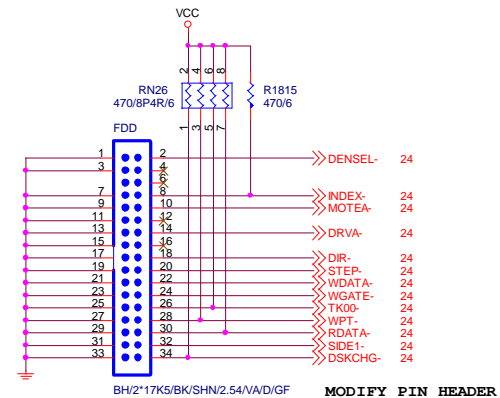
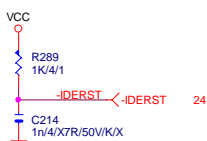
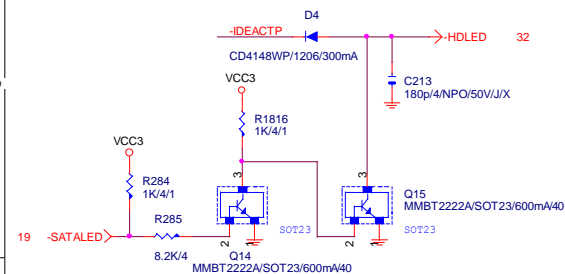


CLK GEN CK505

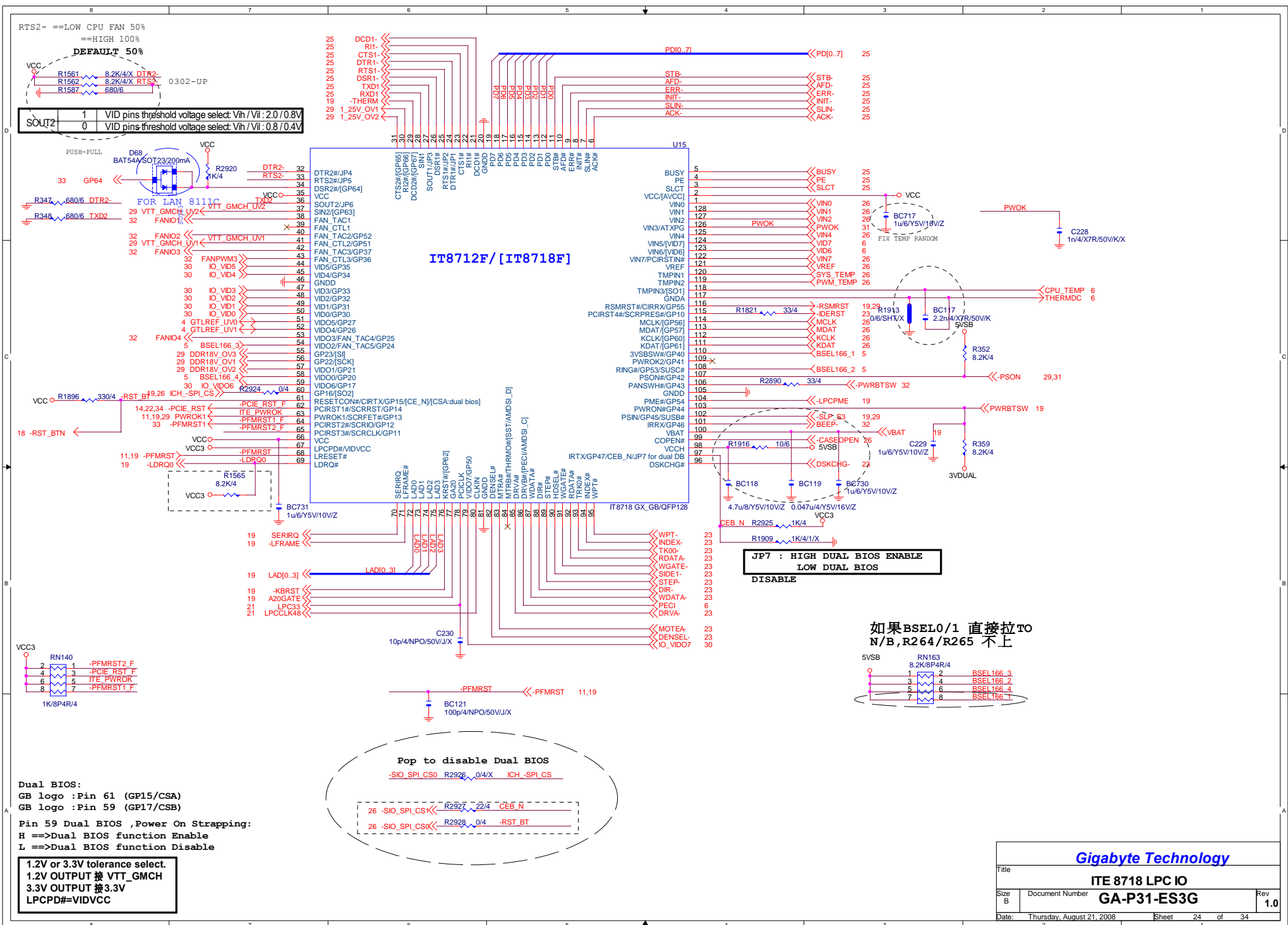


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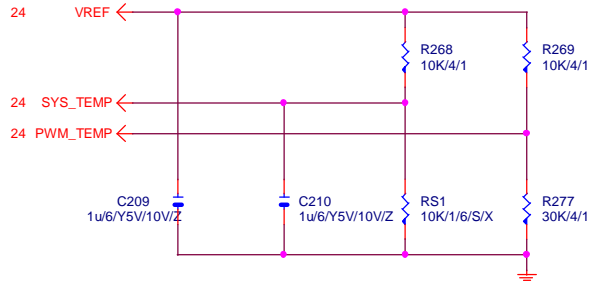
Title	CK505 CLK GEN		
Size	Document Number	GA-P31-ES3G	
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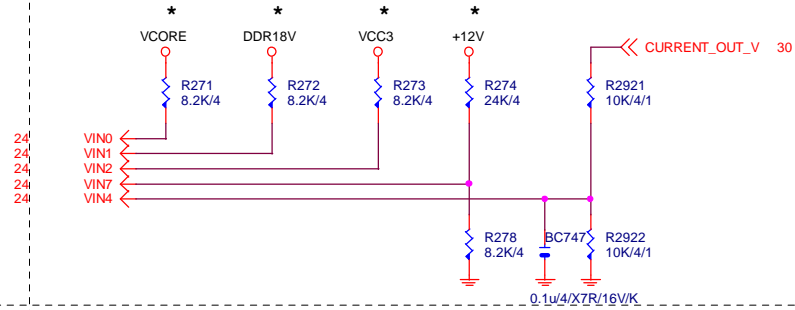
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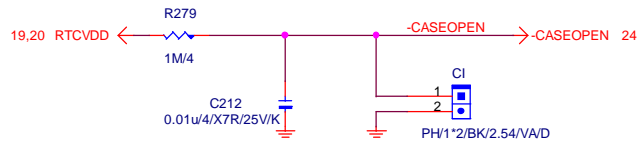
TEMP H/W MONITOR



VOLTAGE-- H/W MONITOR

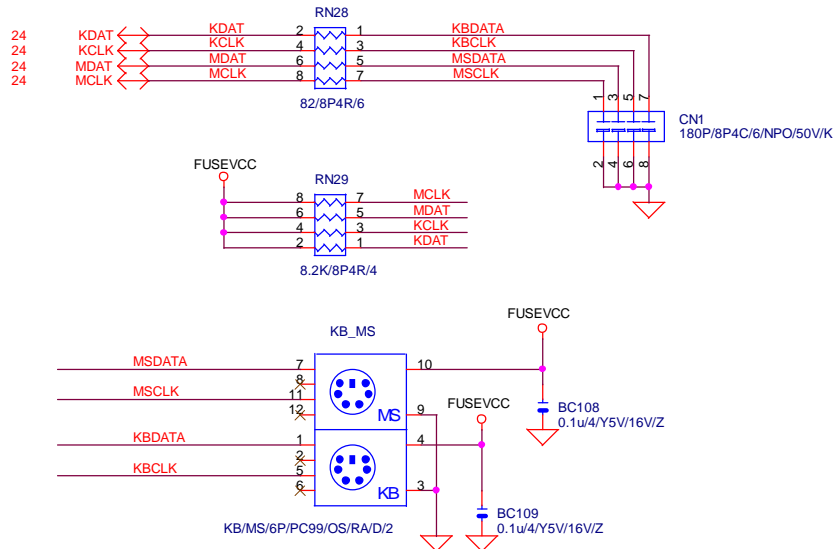


CASE OPEN

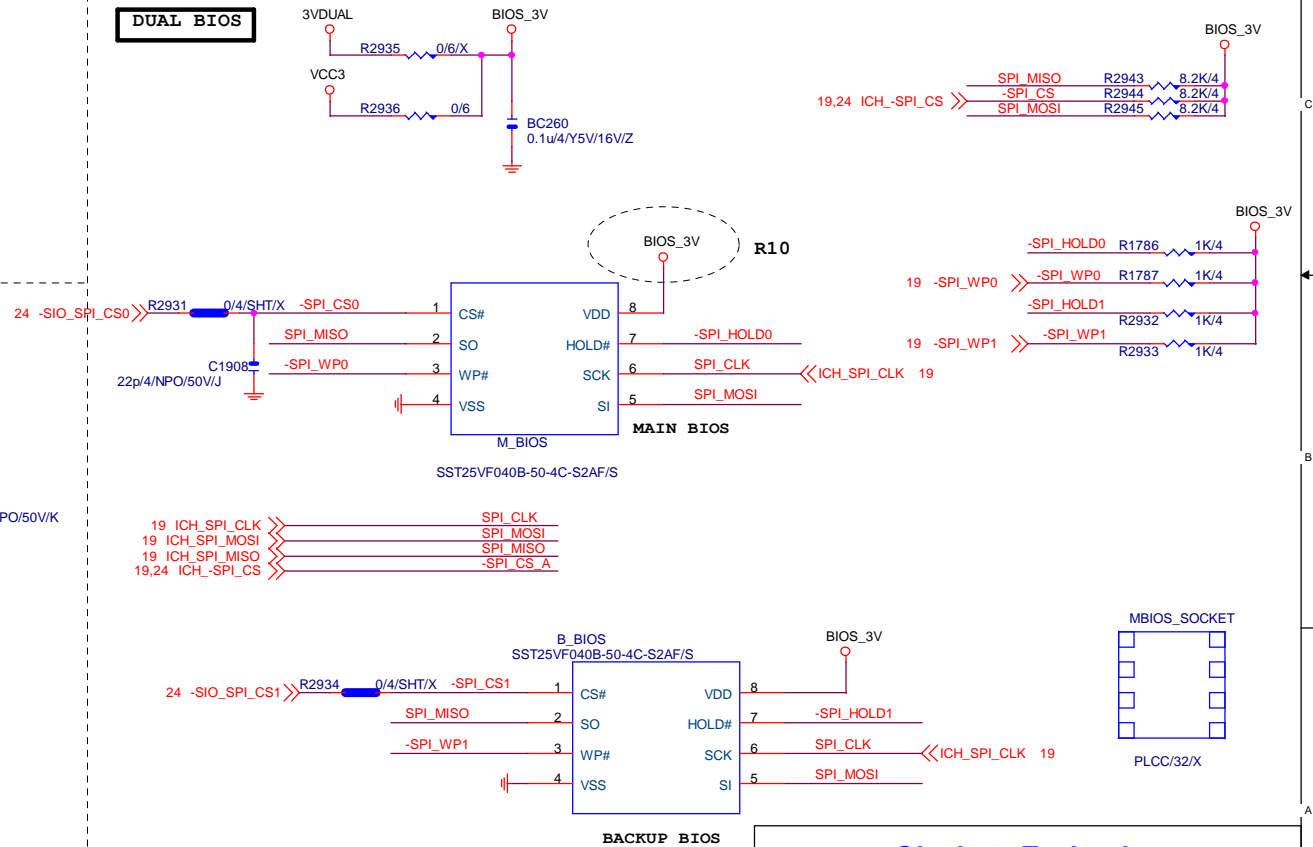


Case Open Circuits

KB/MS

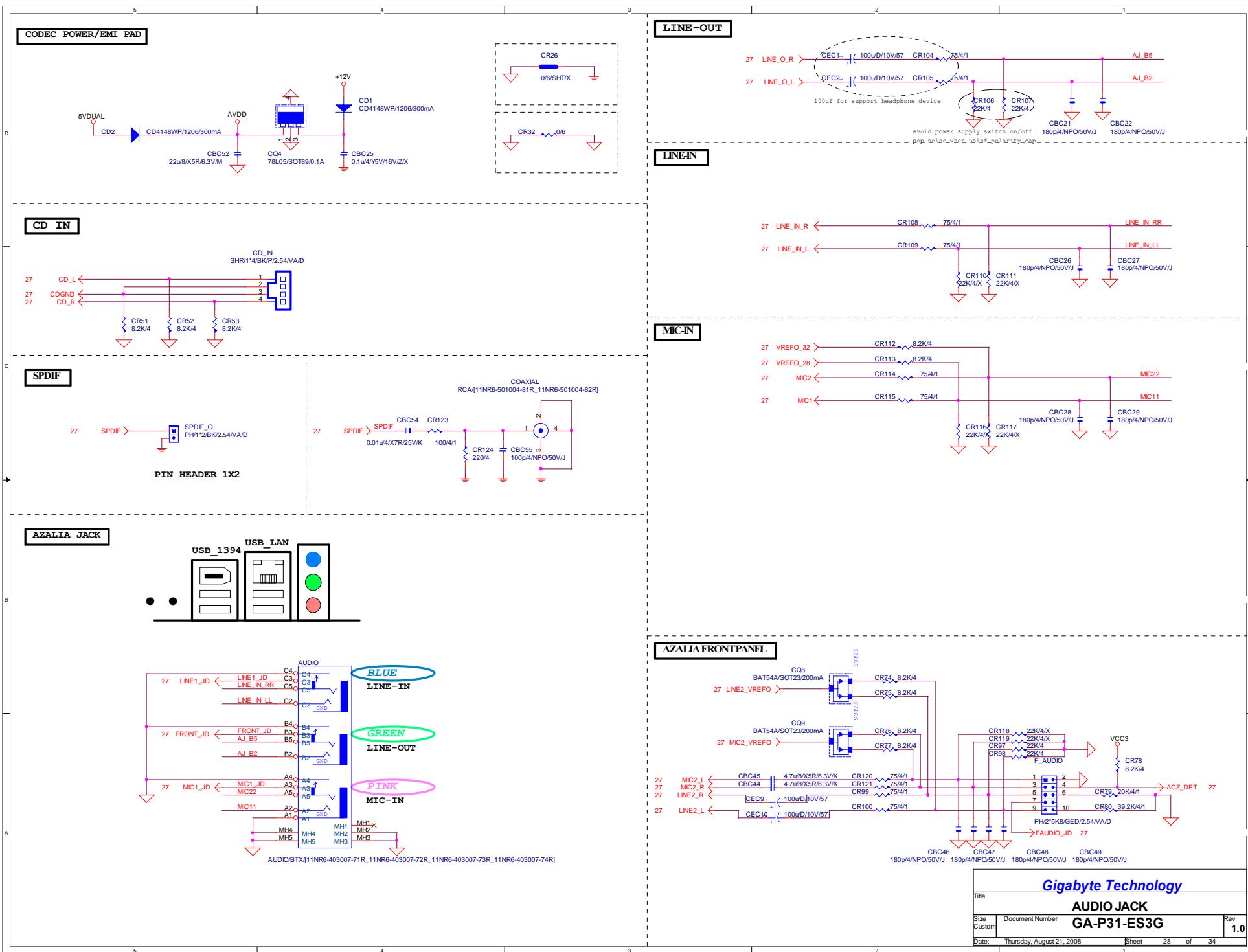


DUAL BIOS

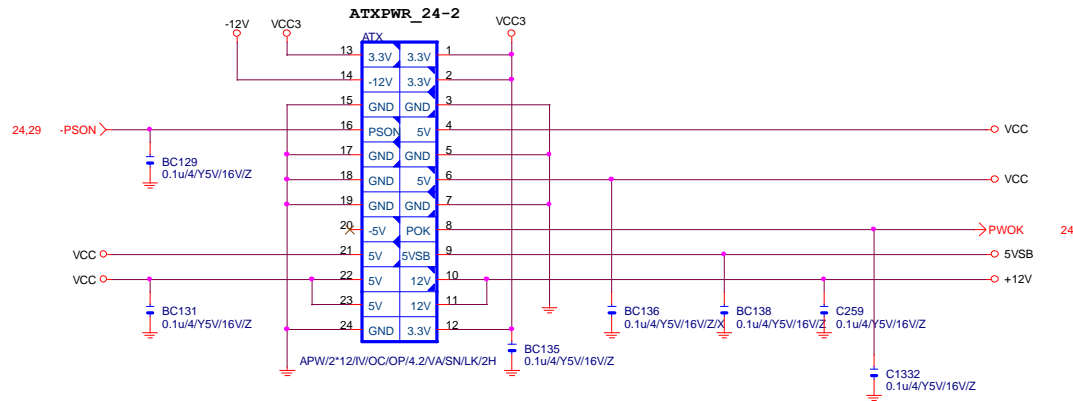


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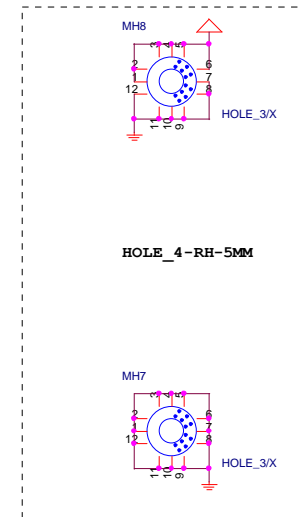
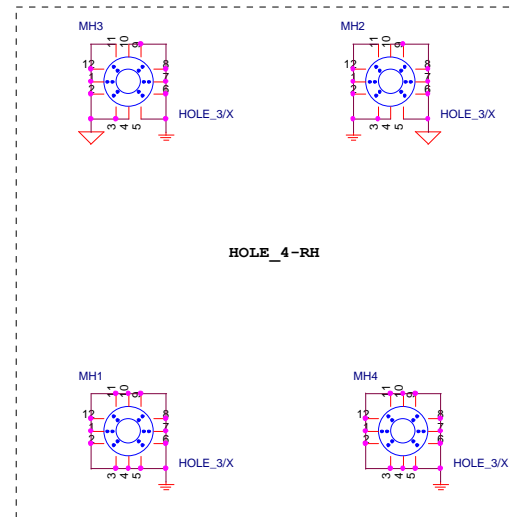
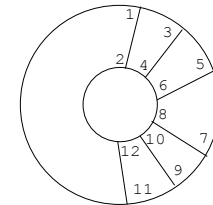
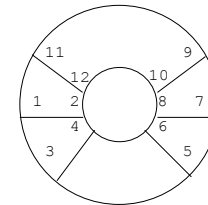
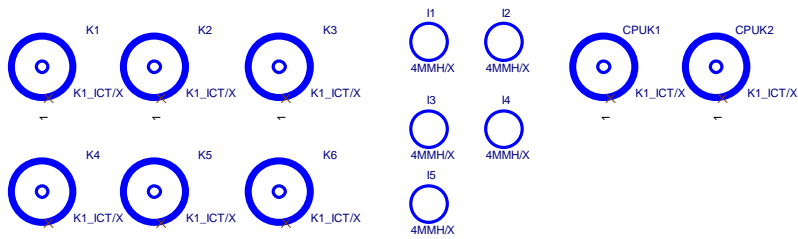
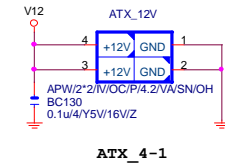
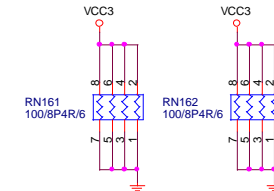
Title			HW-MONITOR/CI/KB/MS/BIOS	
Size	Document Number	GA-P31-ES3G		Rev
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ATX POWER CONNECTOR



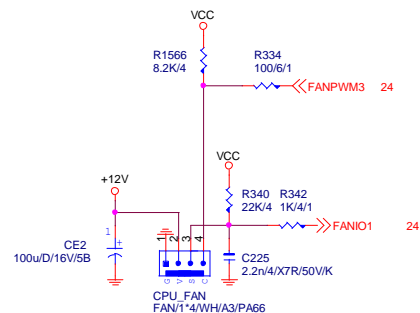
FIX PWR AcBel (ATX-400C-A2ADB)



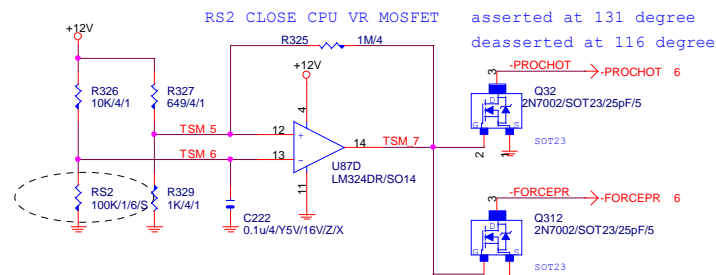
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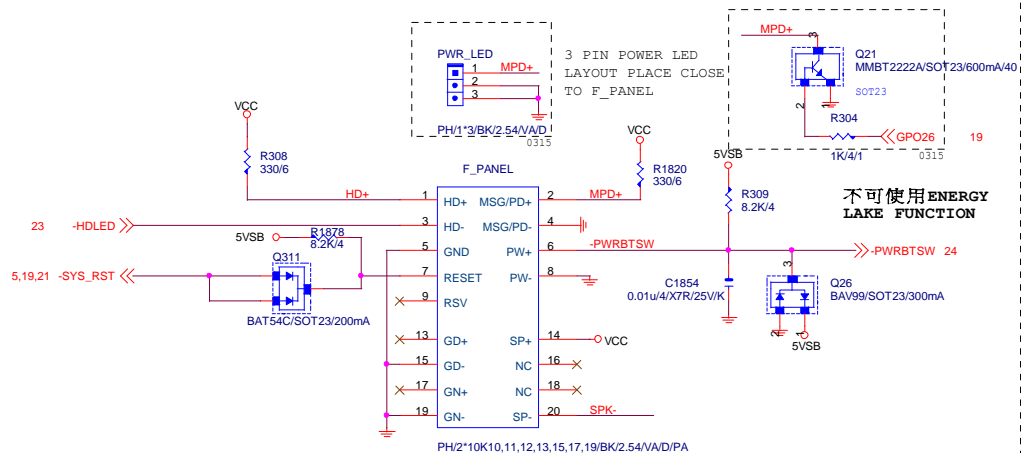
CPU SMART FAN SMART FAN



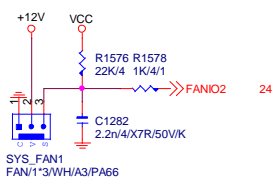
PROCESSOR HOT



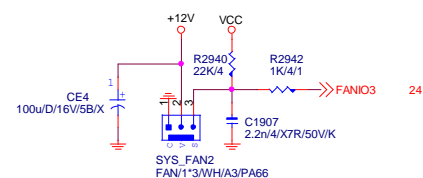
INTEL FRONT PANEL



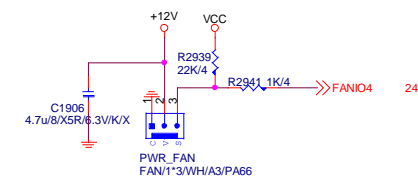
SYS_FAN1



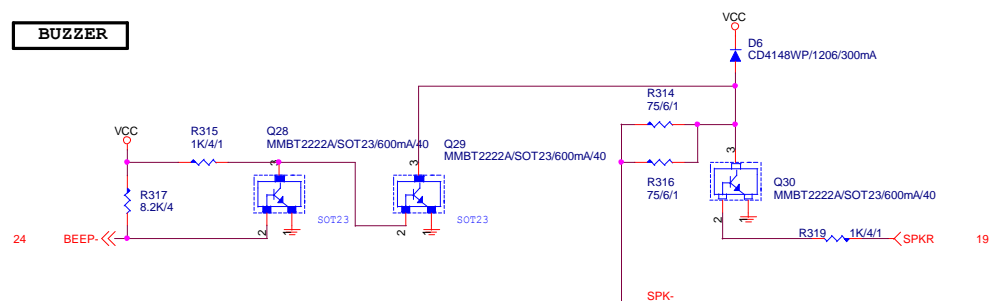
SYS_FAN2



PWR_FAN



BUZZER

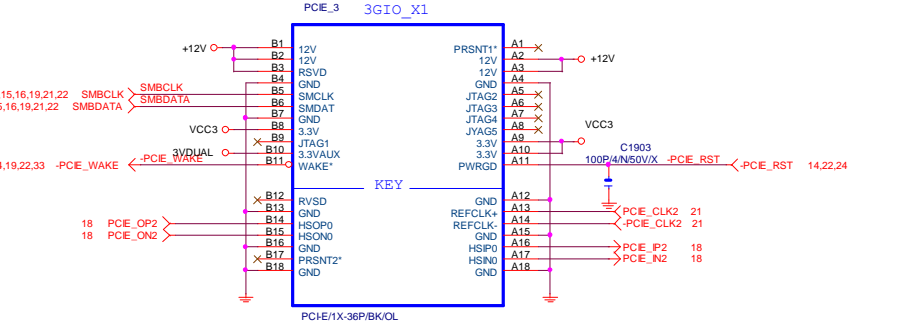
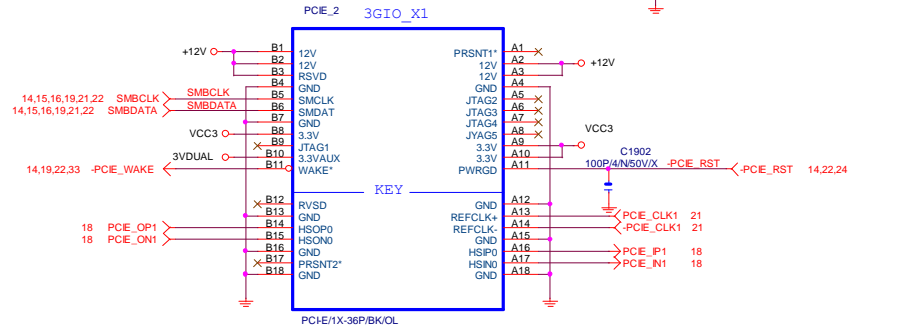
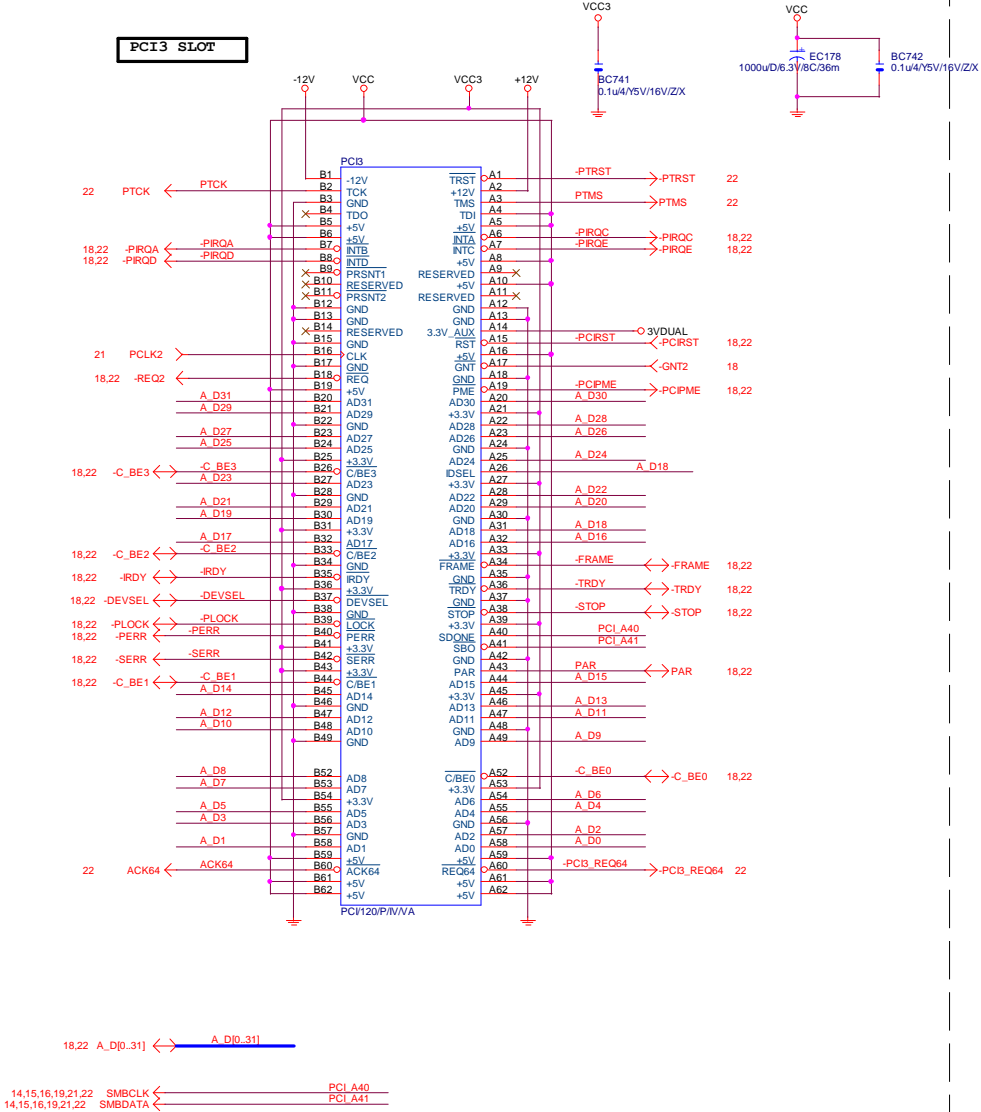


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Title		
FRONT PANEL / FAN CTRL		
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PCI3 SLOT

PCIE_2/3



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PCI SLOT 3,PCIE2,3			
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1.0			
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