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SHEET

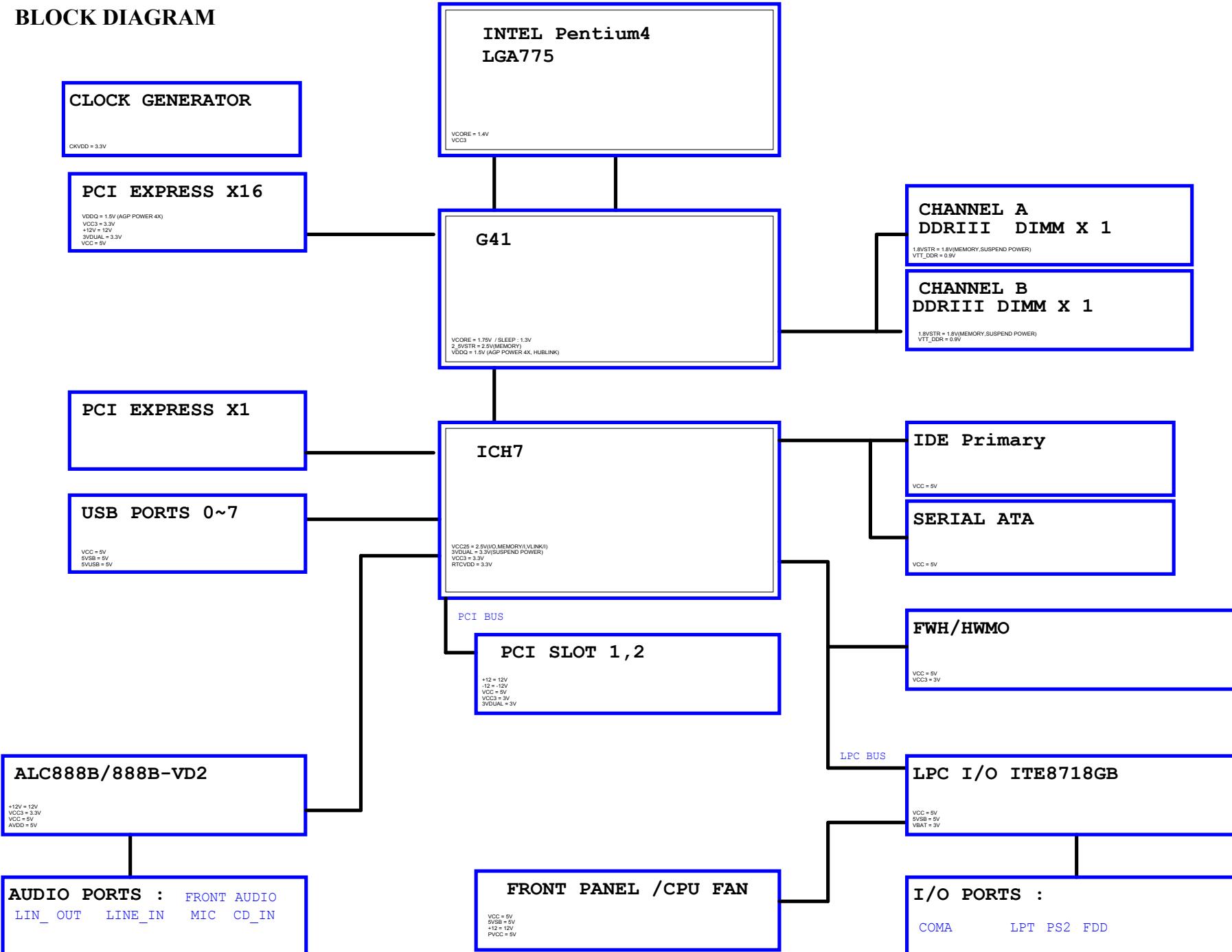
TITLE

28	REAR AUDIO JACK
29	DISCRETE POWER
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## BLOCK DIAGRAM



**Model Name : GA-G41MT-ES2L**

Version: 1.11

## Component value change history

2010/03/02

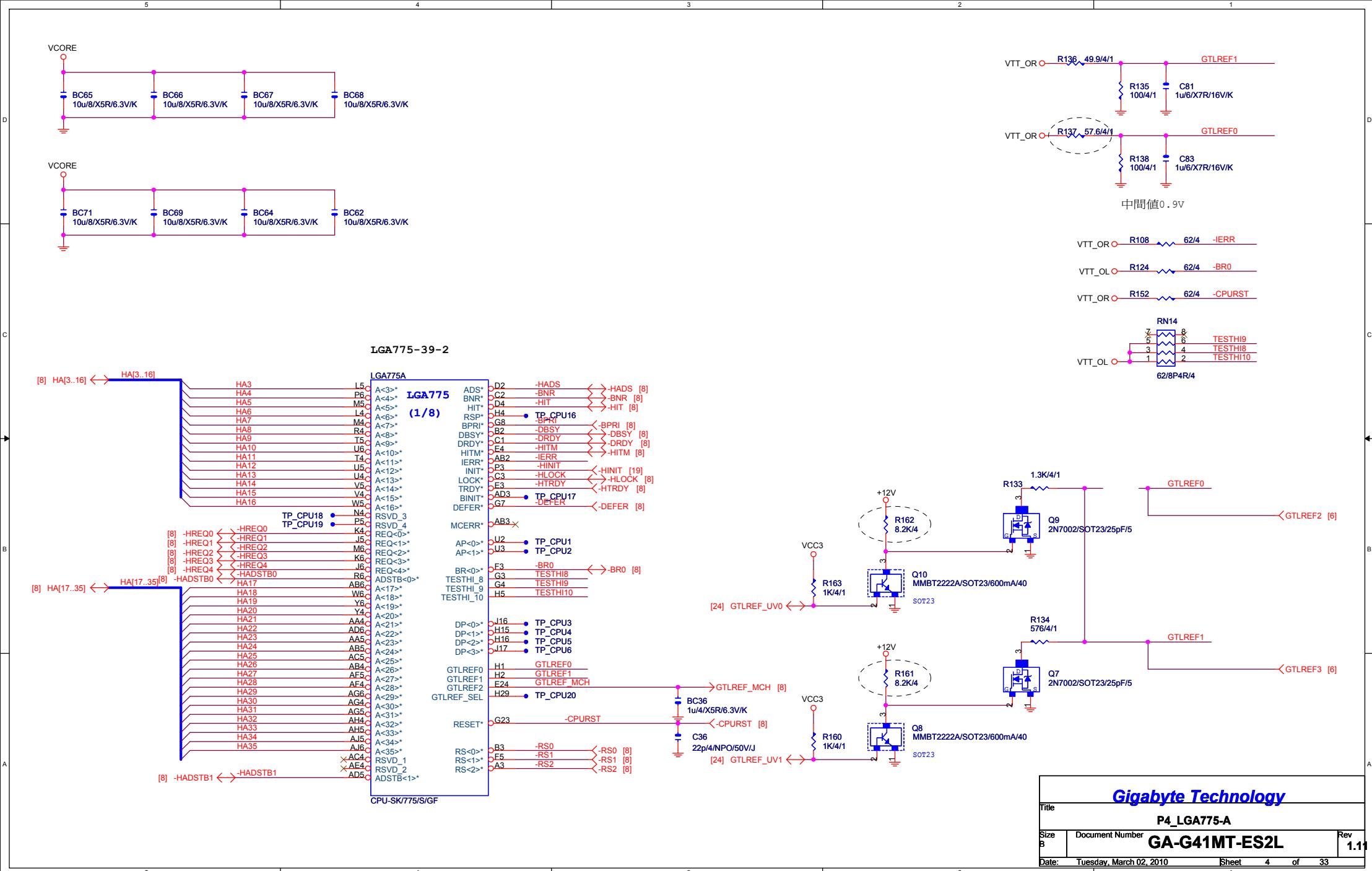
Circuit or PCB layout change  
for next version

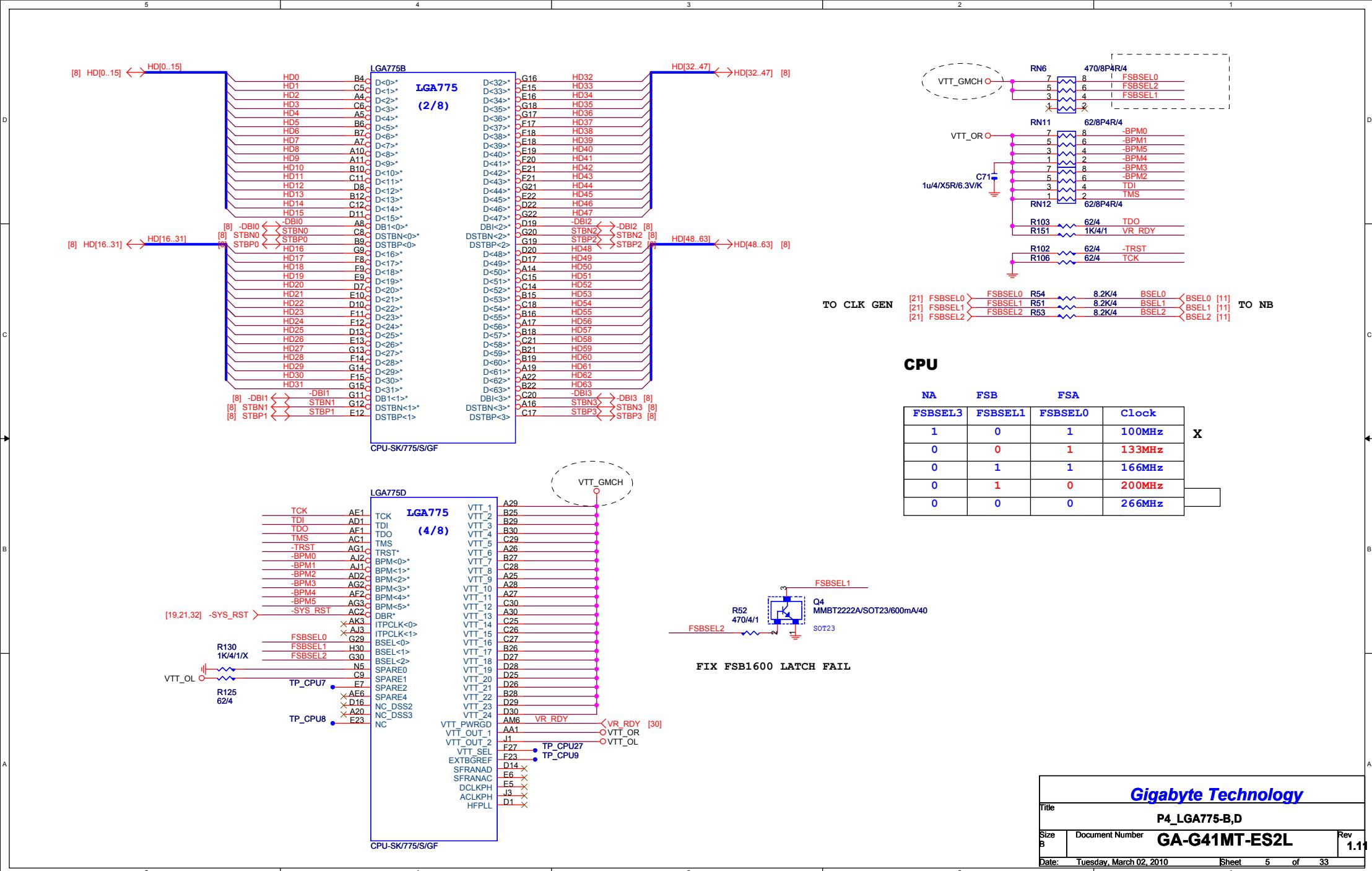
Gigabyte Technology

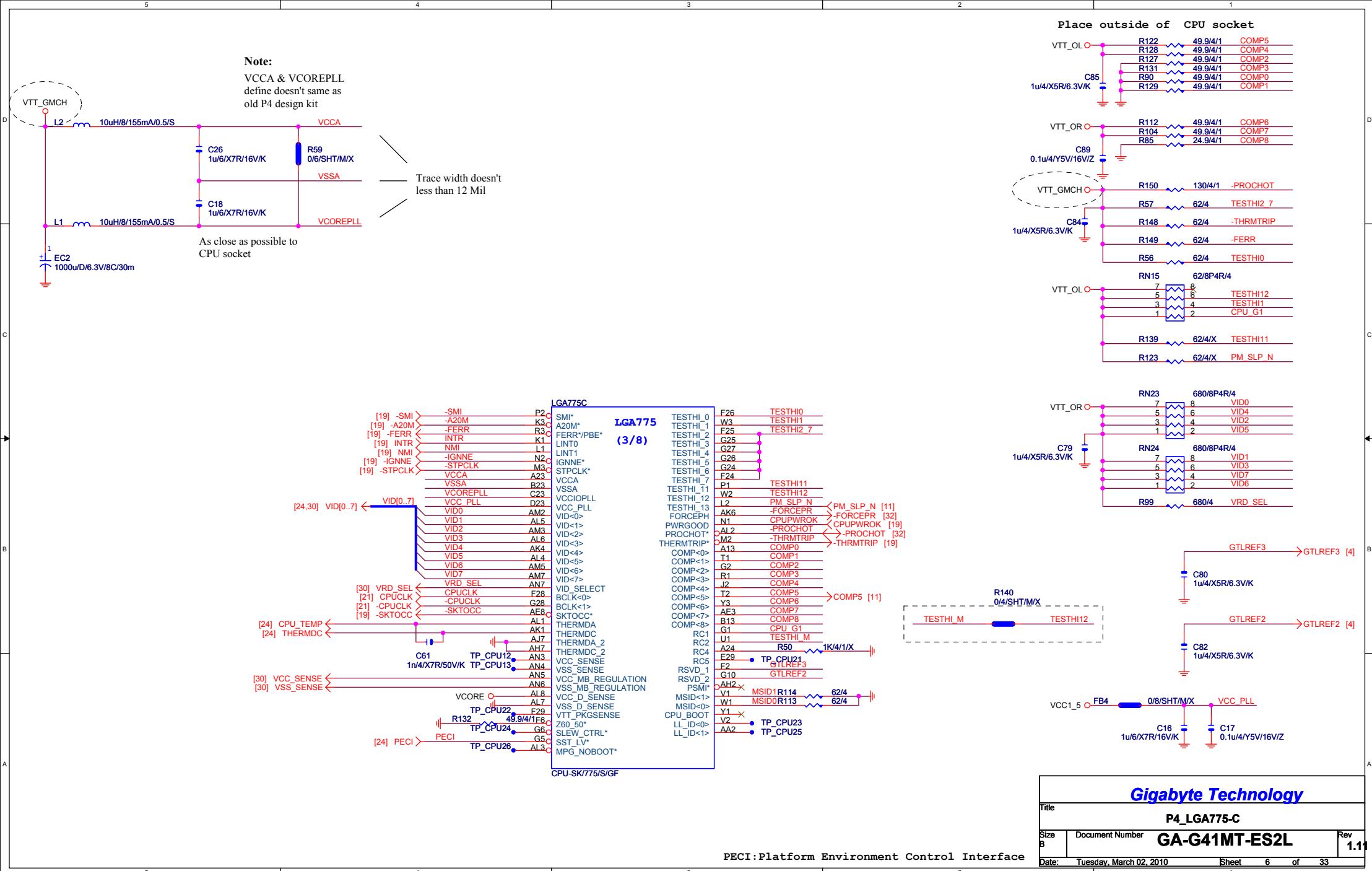
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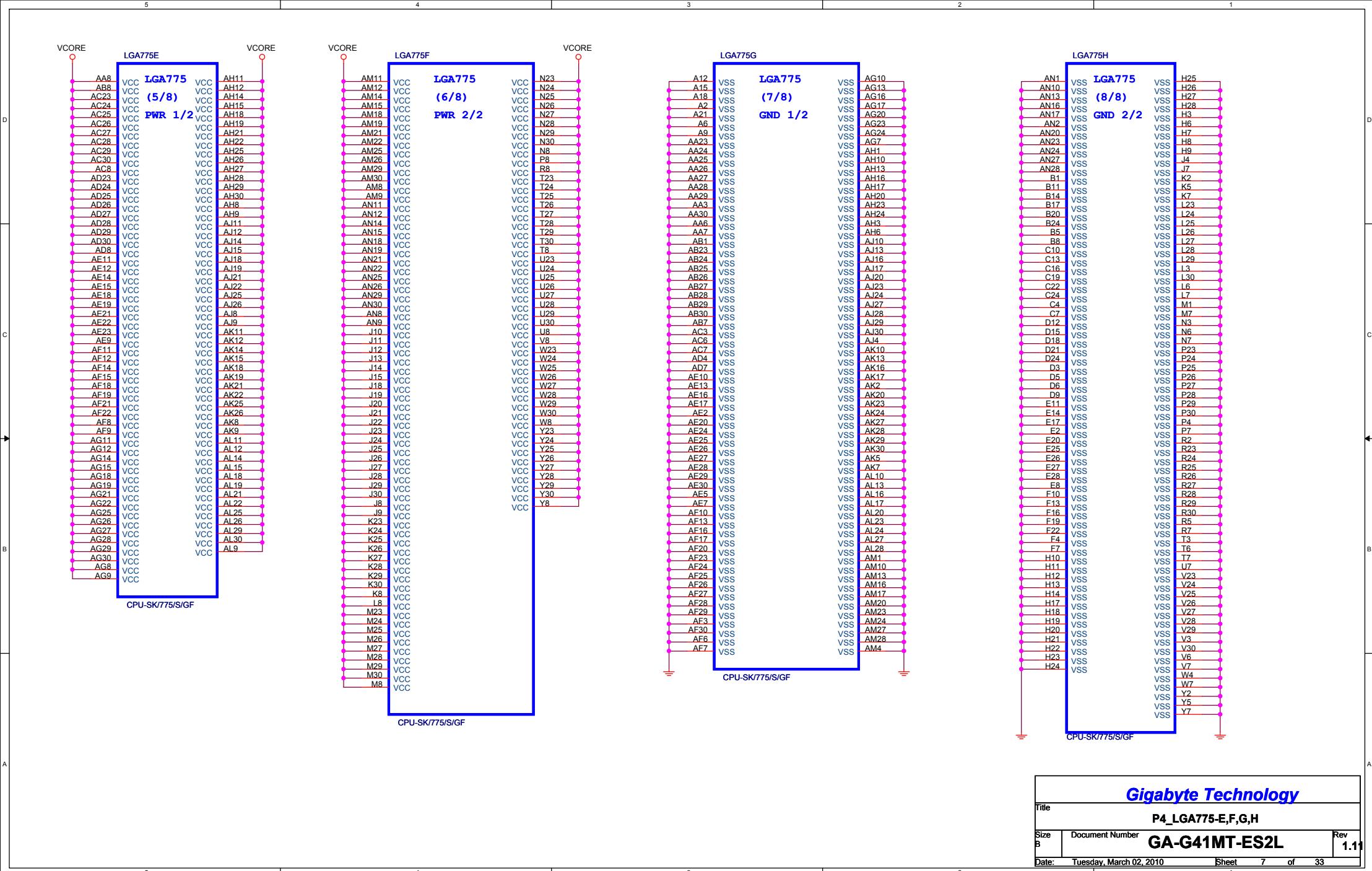
Document Number **GA-G41MT-ES2L** Rev **1.1**

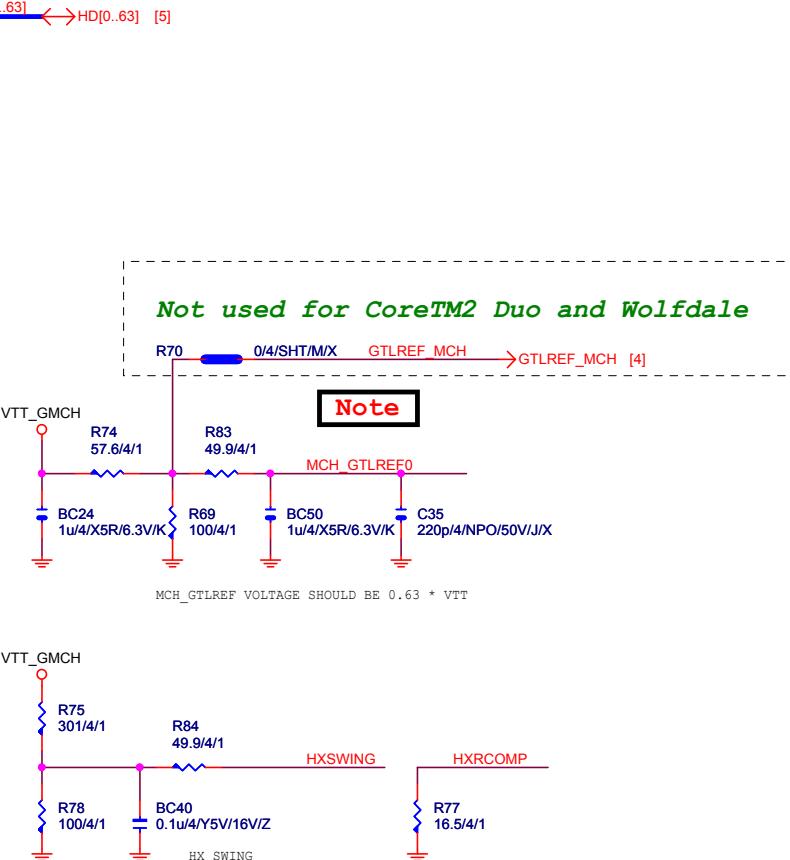
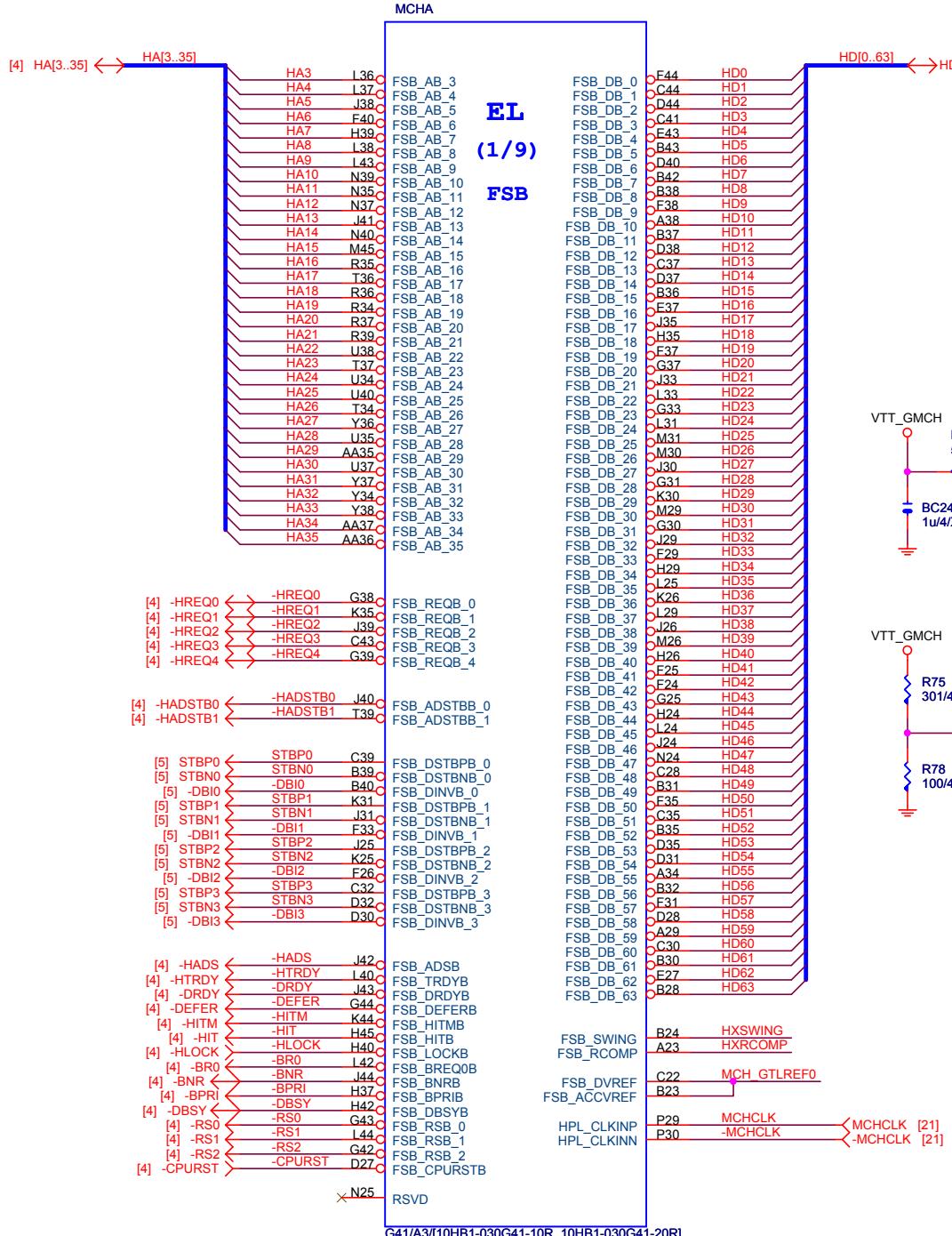
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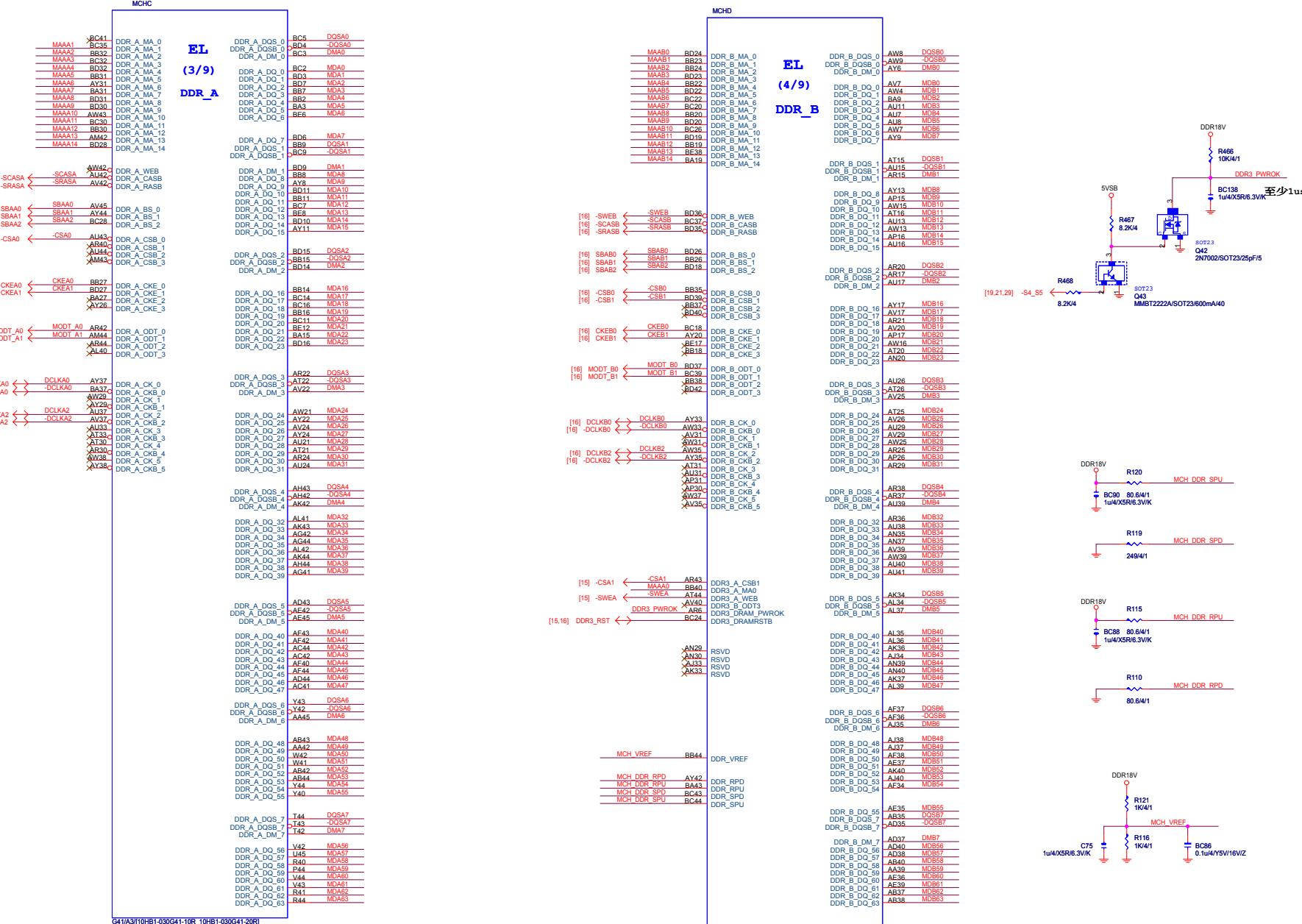






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GMCH-HOST	
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graph LR
    MDA[MDA[0..63]] --> MAA[MAAA[0..14]]
    MDA --> MODT[MODT A[0..1]]
    MDA --> DQSA[D-QSA[0..7]]
    MDA --> DMA[DMA[0..7]]
    MAA --> MAA[MAAA[0..14]]
    MODT --> MODT[MODT A[0..1]]
    DQSA --> DQSA[DMA[0..7]]
    DMA --> DMA[DMA[0..7]]

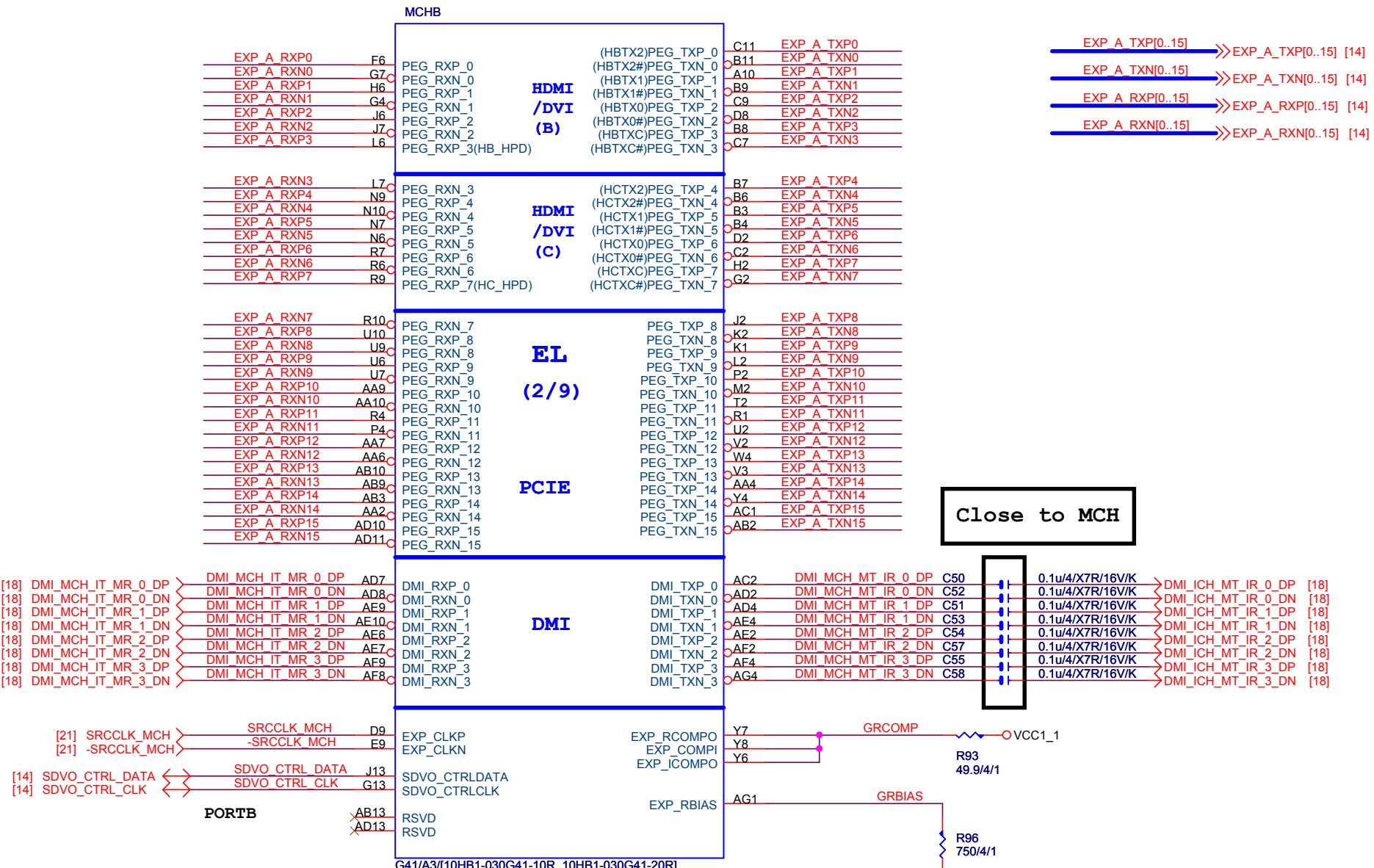
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The diagram illustrates the connections between memory management units (MDA) and direct memory access (DMA) components. It shows that one MDA unit connects to four different functional blocks: MAA, MODT A, D-QSA, and DMA. Each of these blocks then connects to its own corresponding component (e.g., MAA connects to MAA, MODT A connects to MODT A, etc.). The connections are represented by arrows pointing from the source block to the target block.

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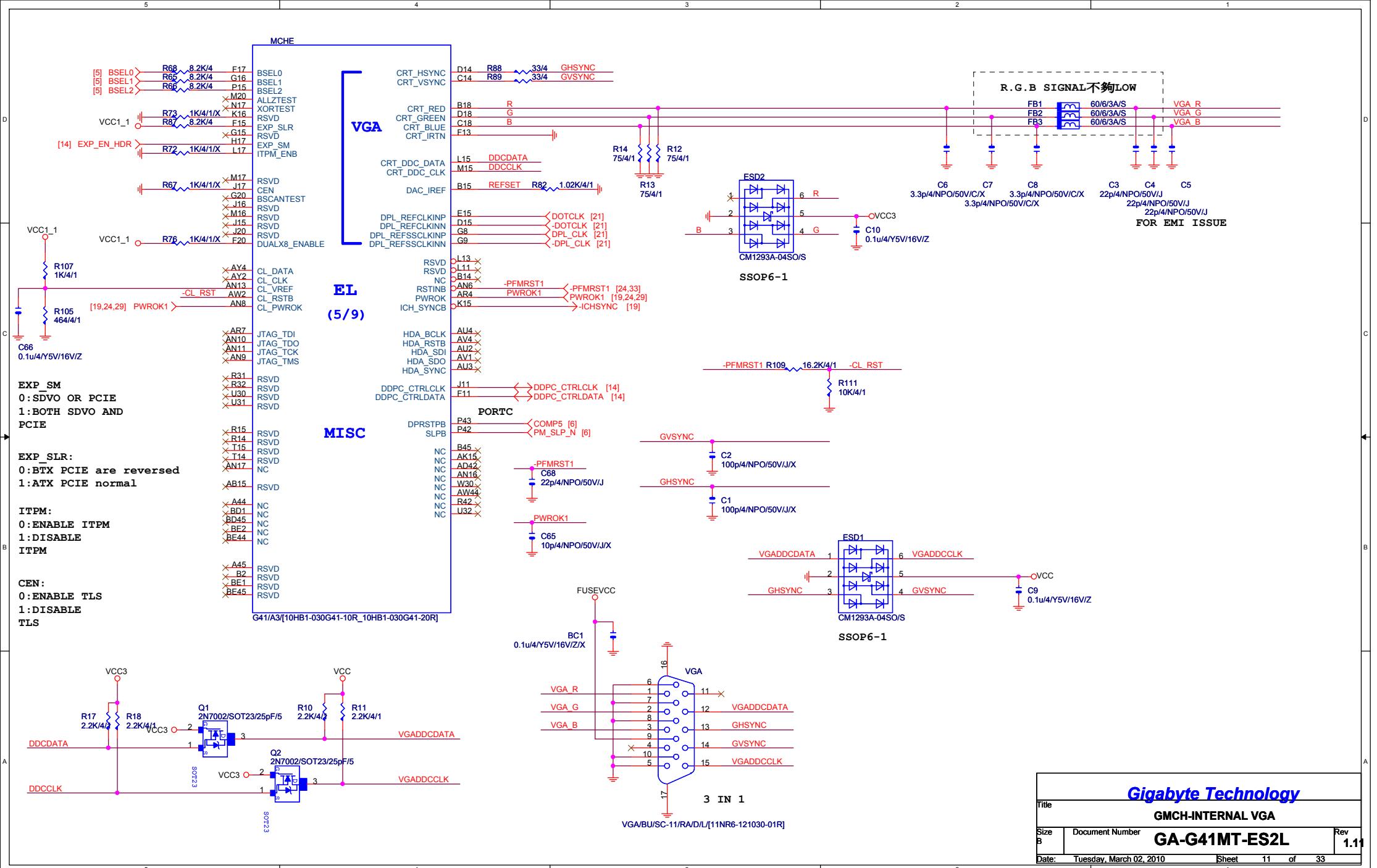


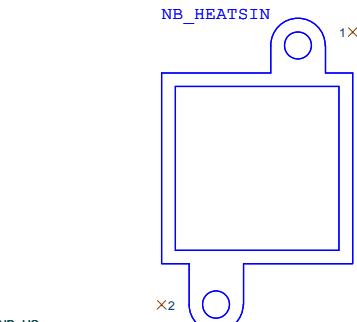
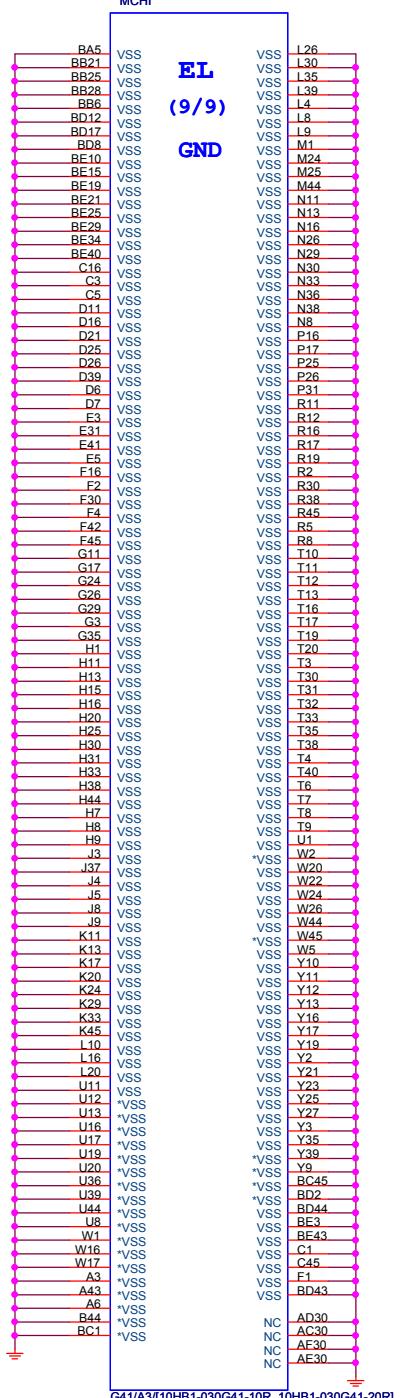
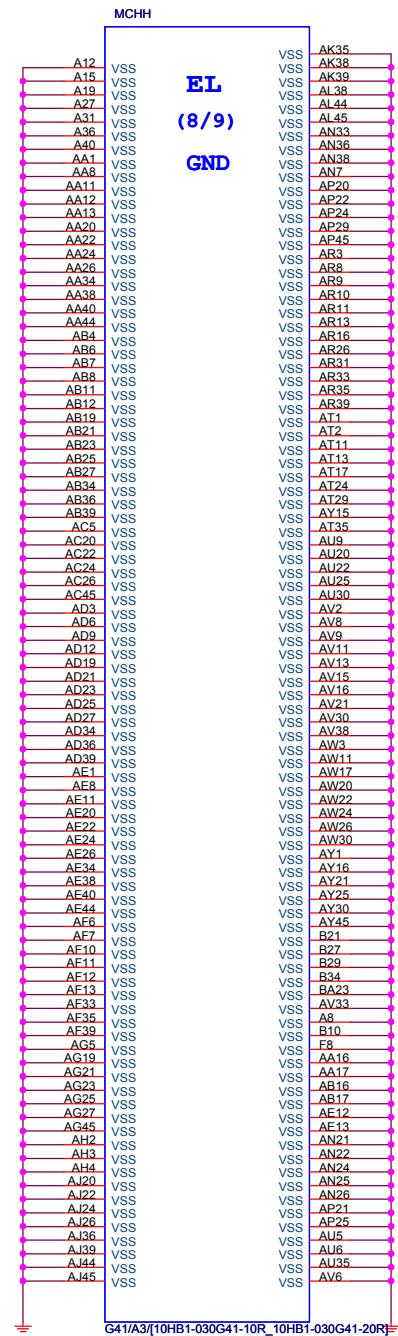
EXP\_A\_TXP[0..15] >> EXP\_A\_TXP[0..15] [14]  
 EXP\_A\_TXN[0..15] >> EXP\_A\_TXN[0..15] [14]  
 EXP\_A\_RXP[0..15] >> EXP\_A\_RXP[0..15] [14]  
 EXP\_A\_RXN[0..15] >> EXP\_A\_RXN[0..15] [14]

Close to MCH

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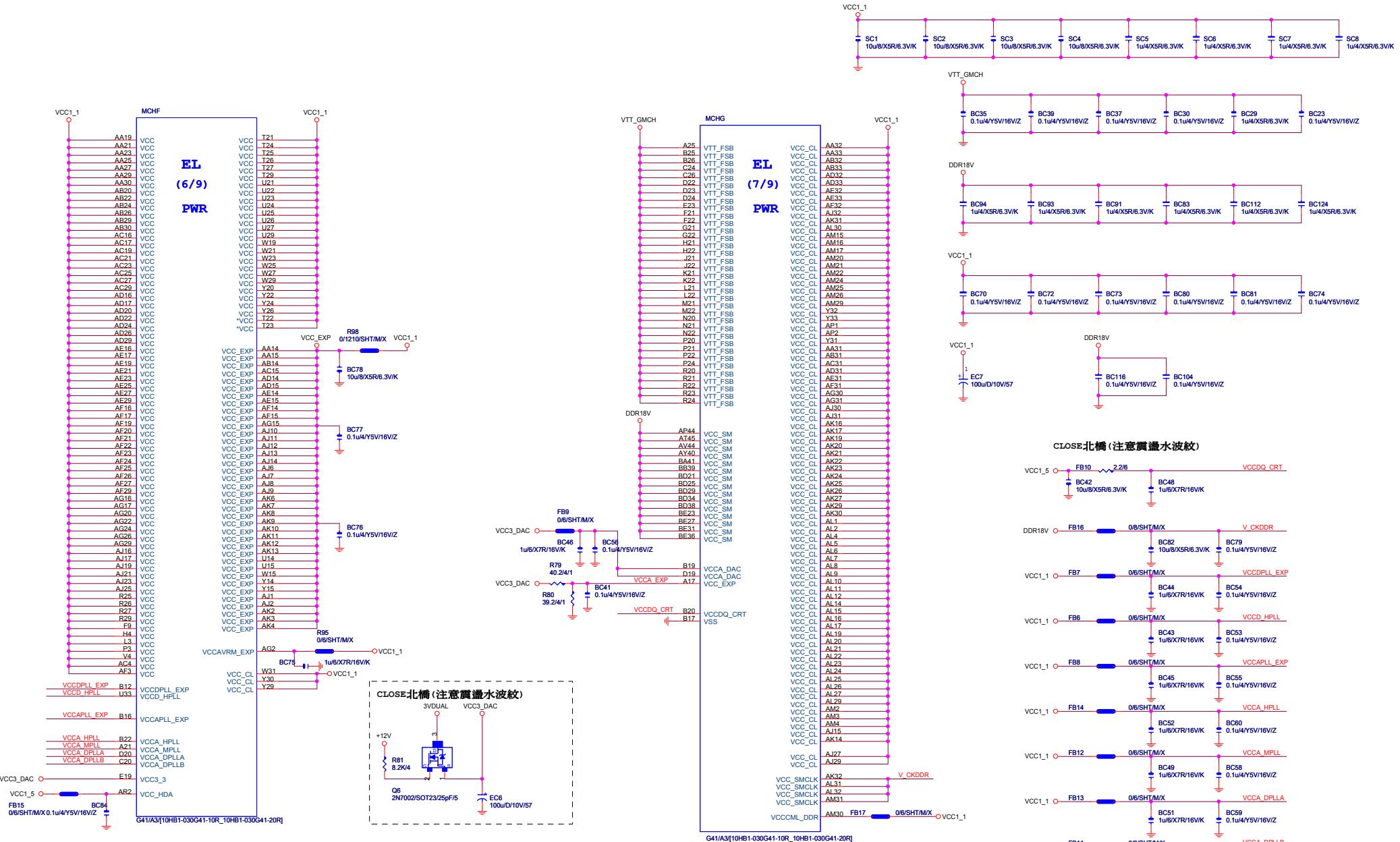


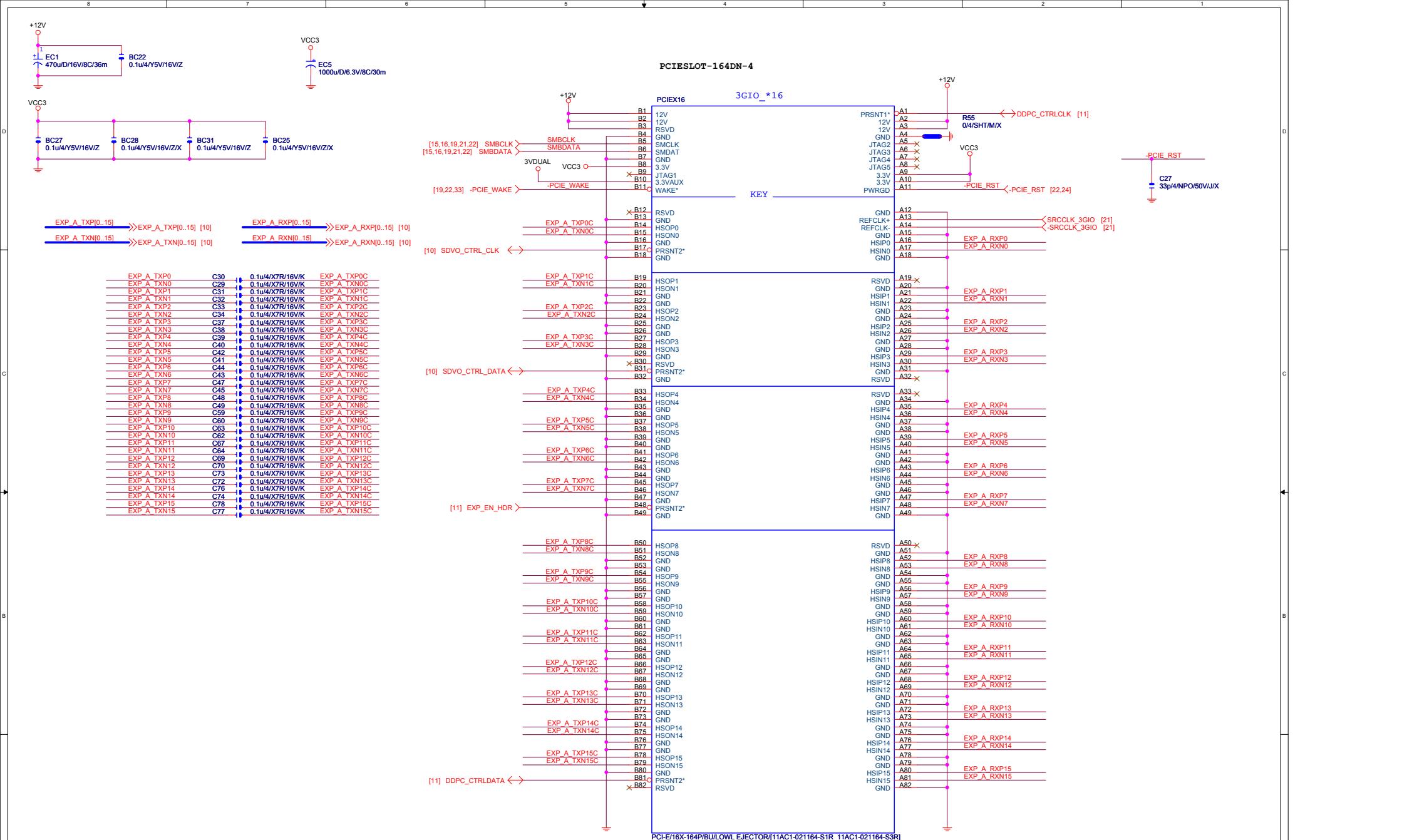
NB\_HEATSINK/[12SP2-04A004-42R\_12SP2-04A004-43R]

BGASINK445A-L GRAY 20MM

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Title

PCI EXPRESS \* 16

Size

Custom

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Rev

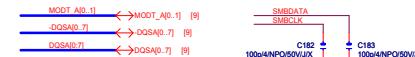
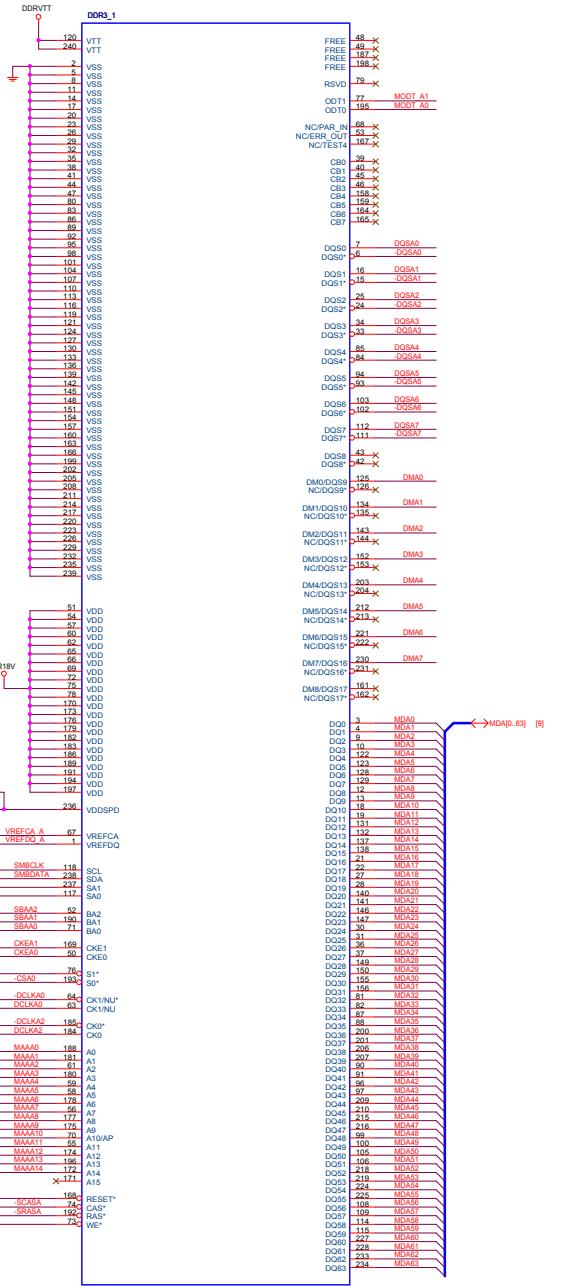
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Date:

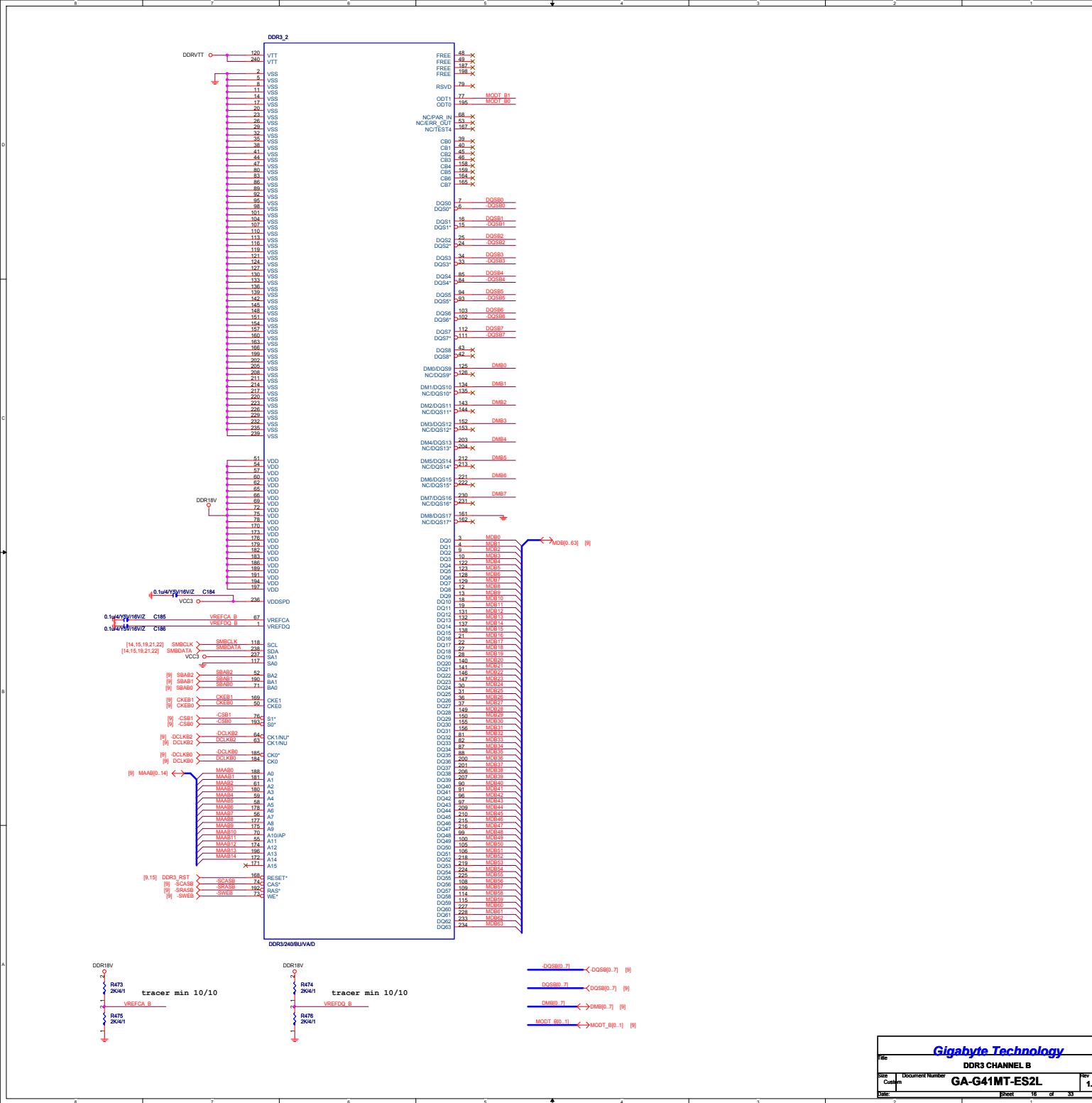
Tuesday, March 02, 2010

Sheet

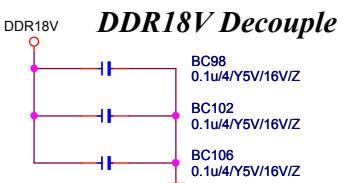
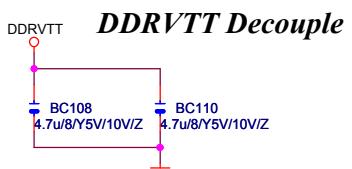
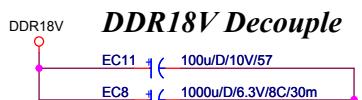
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**Gigabyte Technology**  
**DDR3 CHANNEL A**  
**GA-G41MT-ES2L**

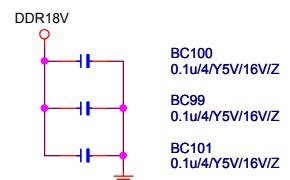


**DDR TERMINATION  
CHANNEL A**

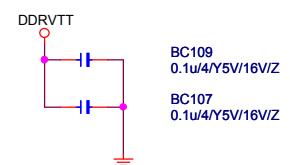


**DDR TERMINATION  
CHANNEL B**

**DDR18V Decouple**



**DDRVTT Decouple**



**Gigabyte Technology**

Title

DDRII TERMINATOR

Size  
Custom

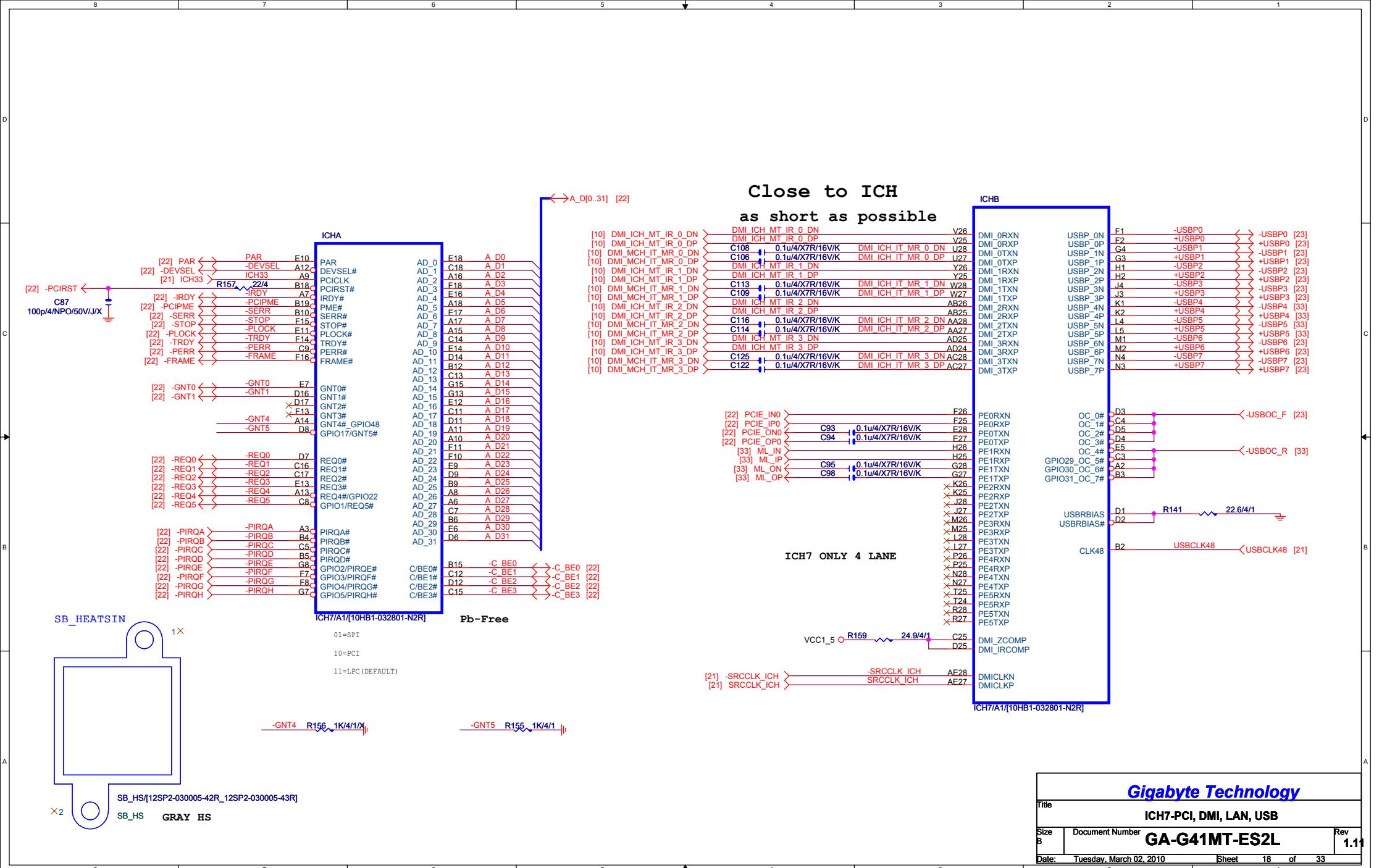
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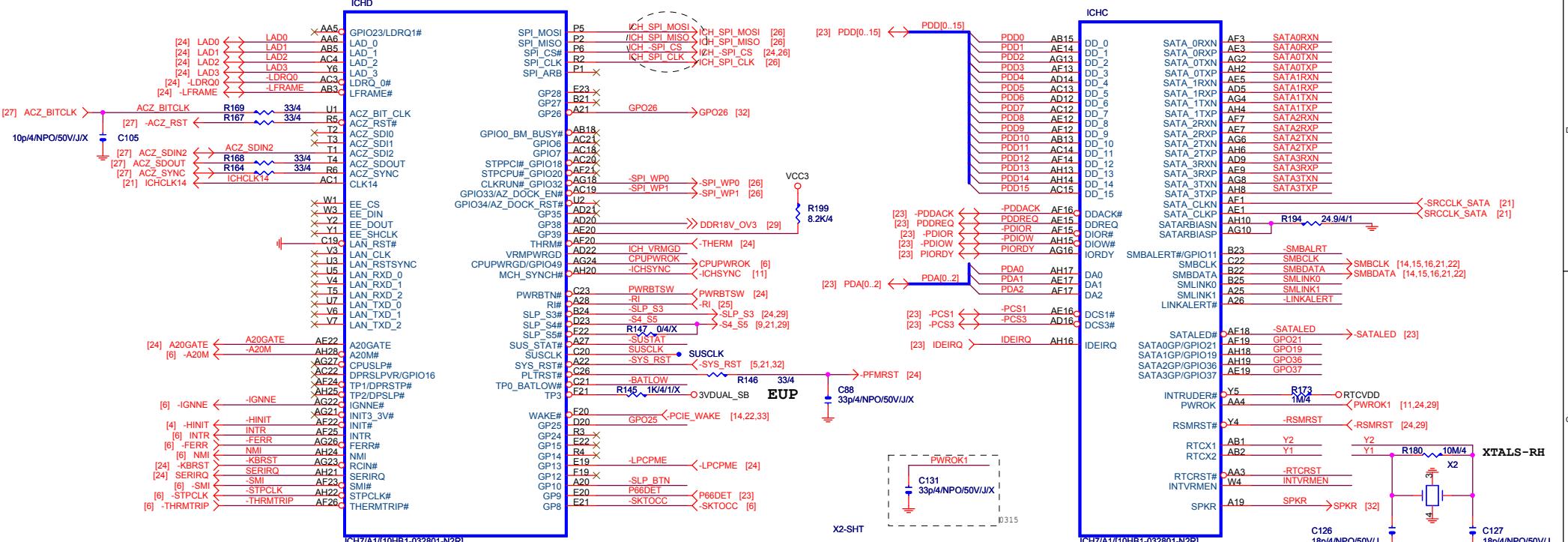
**GA-G41MT-ES2L**

Rev  
1.11

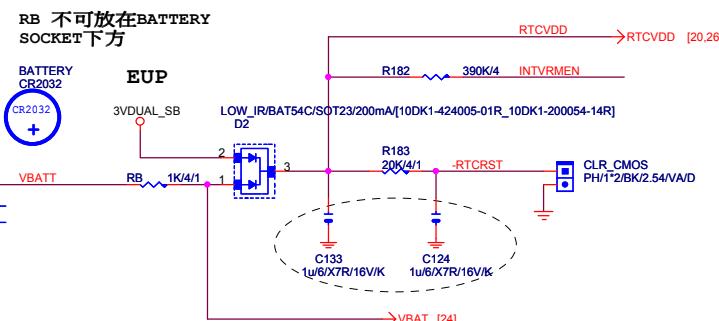
Date: Tuesday, March 02, 2010

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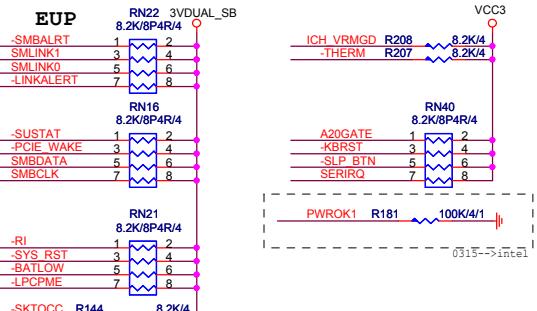
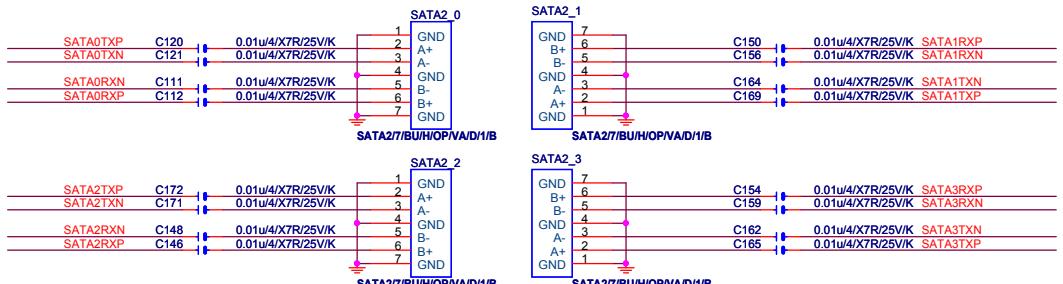


SHW/D0.64\*5.08\*6.7

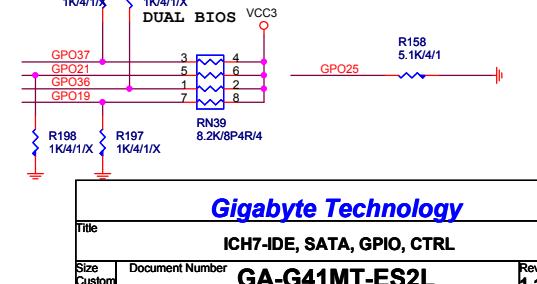


H1X7-SATA2-HS

## **BLUE**



GPO25 PULL-DOWN CHECK  
GPO25 (-RSMRST  
LATCH時不可為LOW,否則不開機)

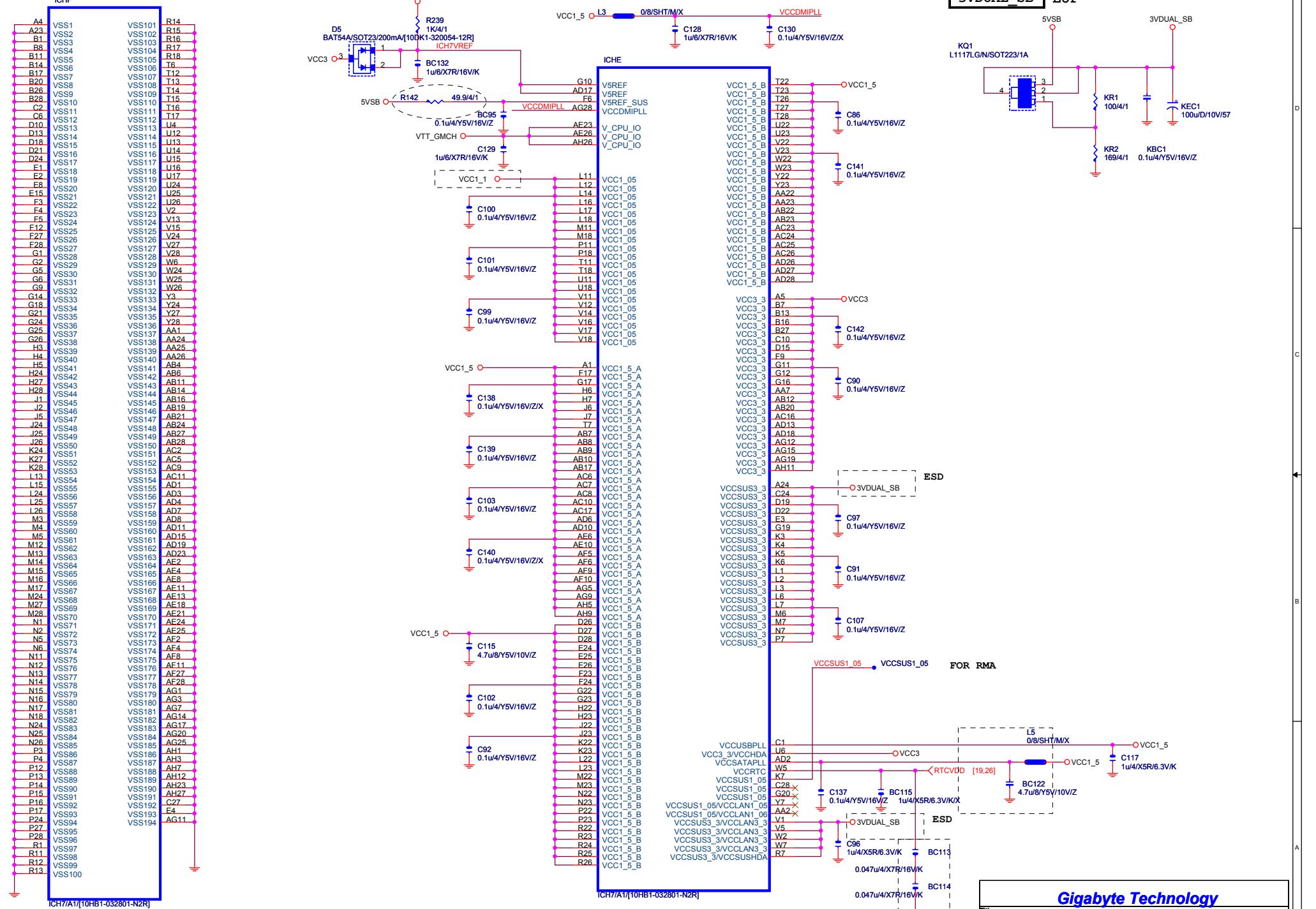


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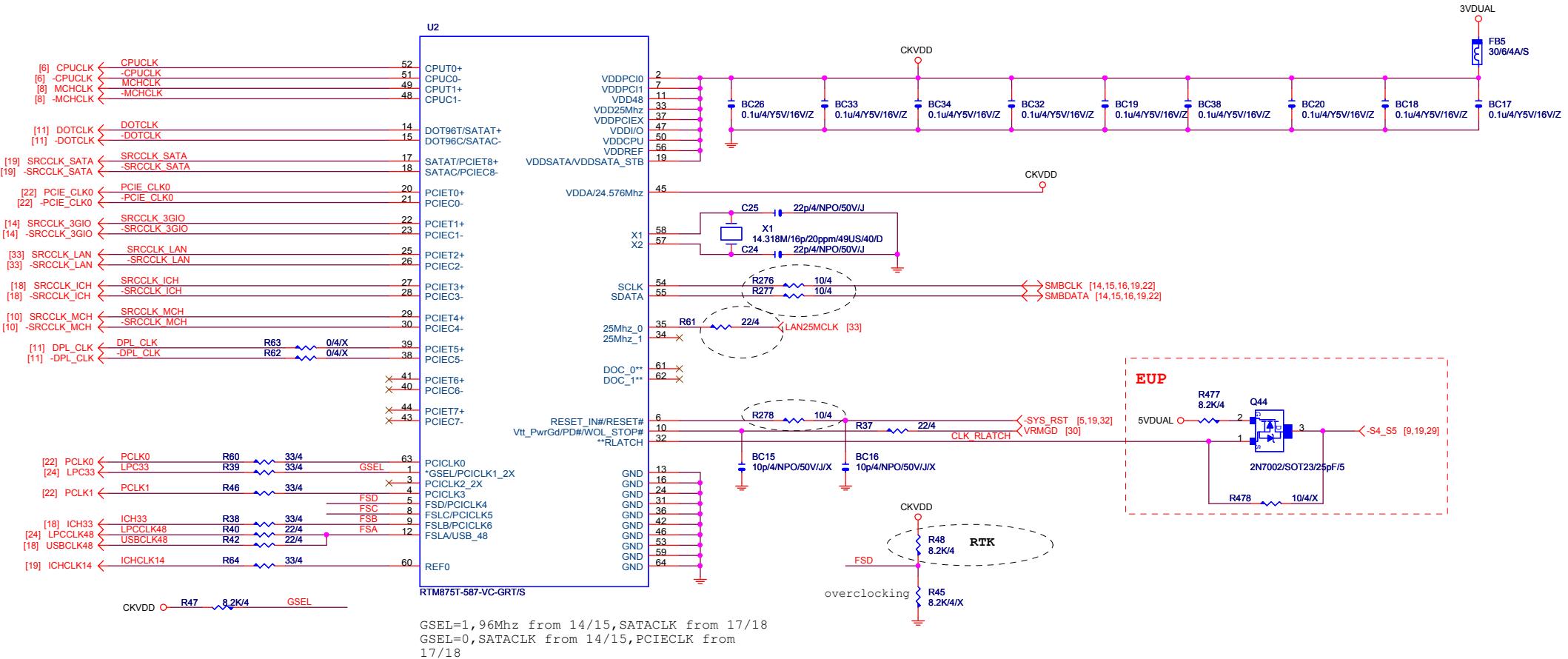
#### **ICH7-IDE, SATA, GPIO, CTRL**

SA-S41MT-F201

GA-G41MT-ES2L | 1.11

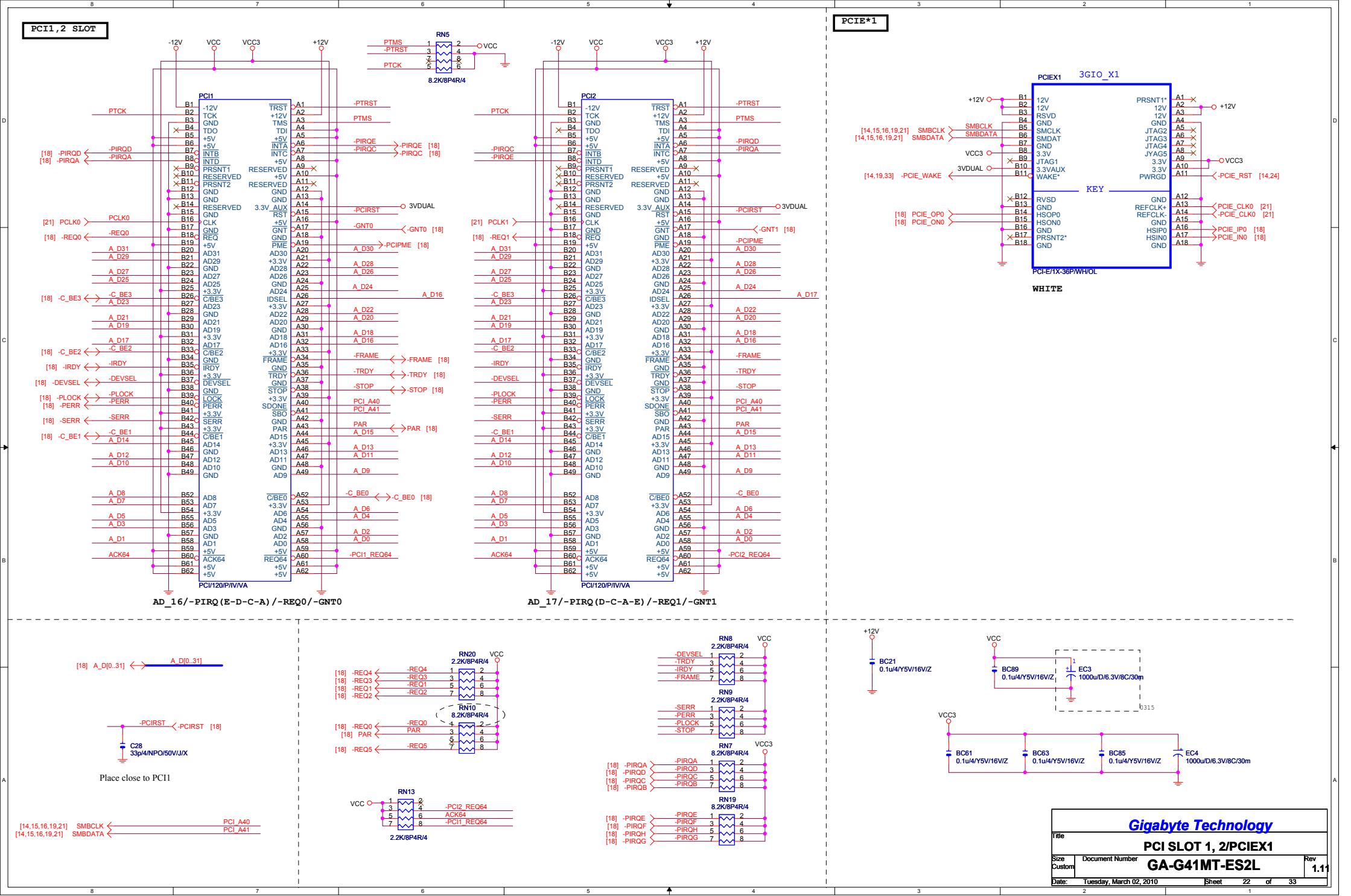


CLK GEN CK505

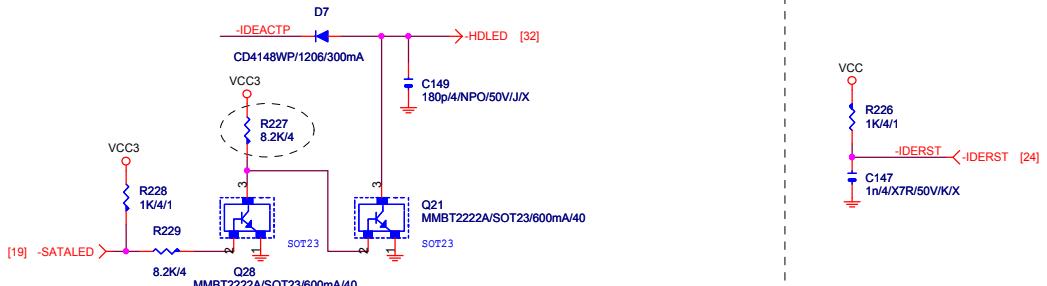


GSEL=1, 96Mhz from 14/15, SATACLK from 17/18  
GSEL=0, SATACLK from 14/15, PCIECLK from  
17/18

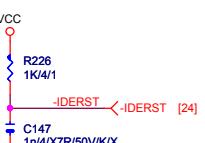
[5] FSBSEL0 > R36 1K/4/1 FSA  
[5] FSBSEL1 > R43 1K/4/1 FSB  
[5] FSBSEL2 > R44 1K/4/1 FSC



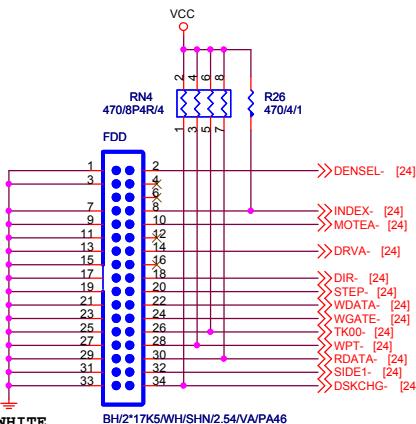
## IDE/SATA LED



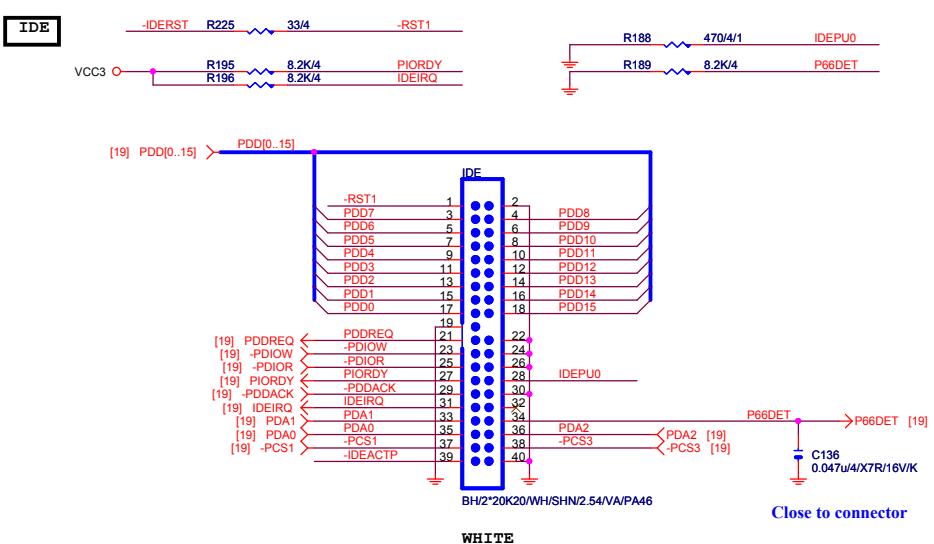
## IDE RESET



## FLOPPY

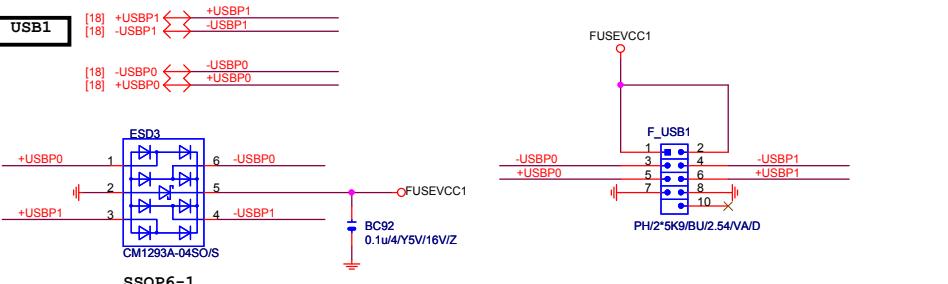


## IDE

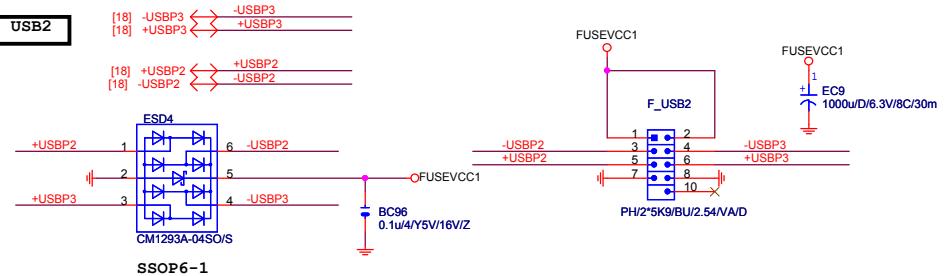


Close to connector

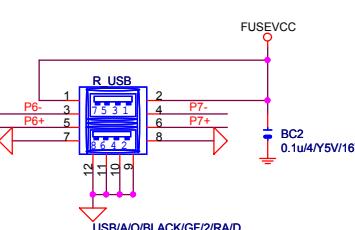
## FRONT USB1



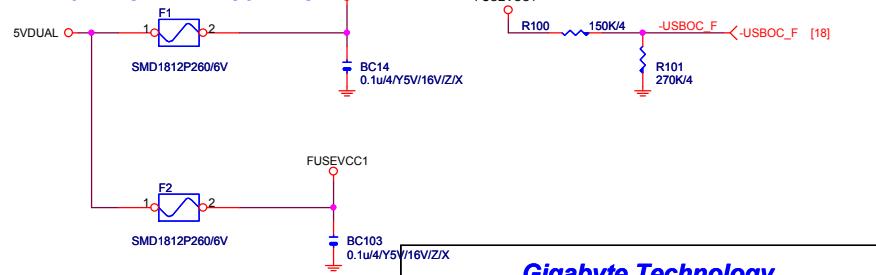
## FRONT USB2



[18] -USBP7  
[18] +USBP7  
[18] -USBP6  
[18] +USBP6



240MILS 160MILS FUSEVCC



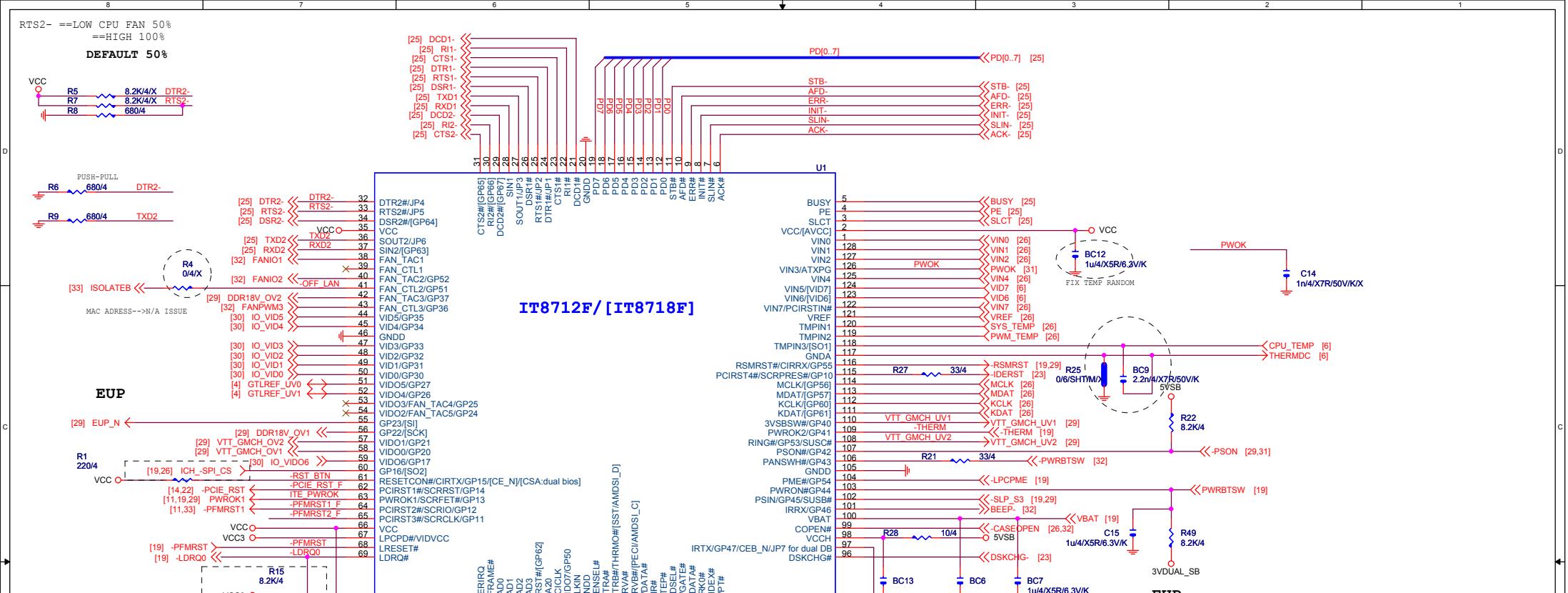
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IDE,FDD,F\_USB,R\_USB

GA-G41MT-ES2L

Rev 1.11

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Dual BIOS:  
GB logo :Pin 61 (GP15/CSA)  
GB logo :Pin 59 (GP17/CSB)

Pin 59 Dual BIOS ,Power On Strapping  
H ==>Dual BIOS function Enable  
L ==>Dual BIOS function Disable

1.2V or 3.3V tolerance select.  
1.2V OUTPUT 接 VTT\_GMCH  
3.3V OUTPUT 接 3.3V  
LPCRD#=VIDVCC

Pop to disable Dual BIOS

-SIO SPI CS0 R154 0/4/X ICH -SPI CS

0/4 R117 CEB N

0/4 R153 -BST BTN

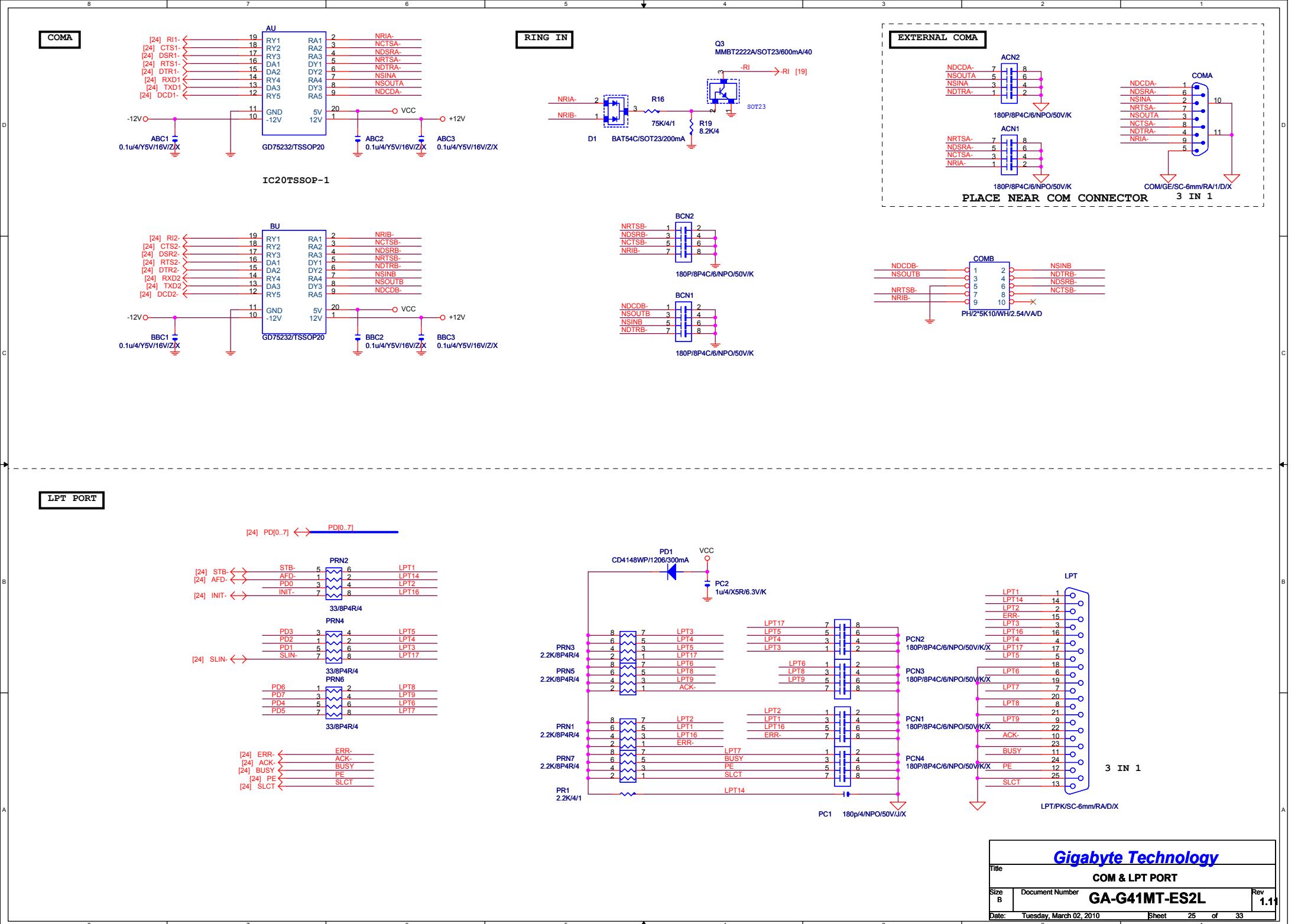
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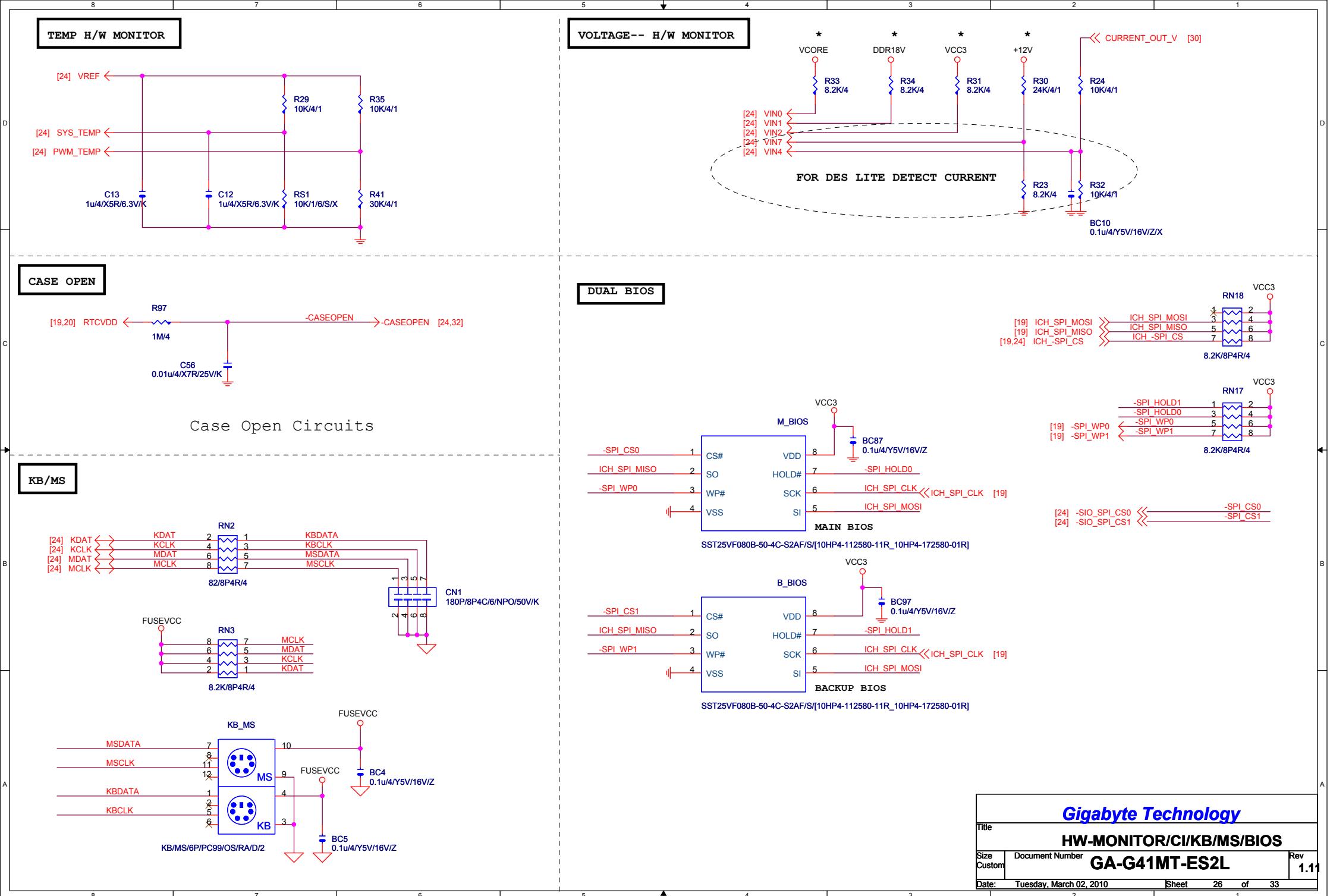
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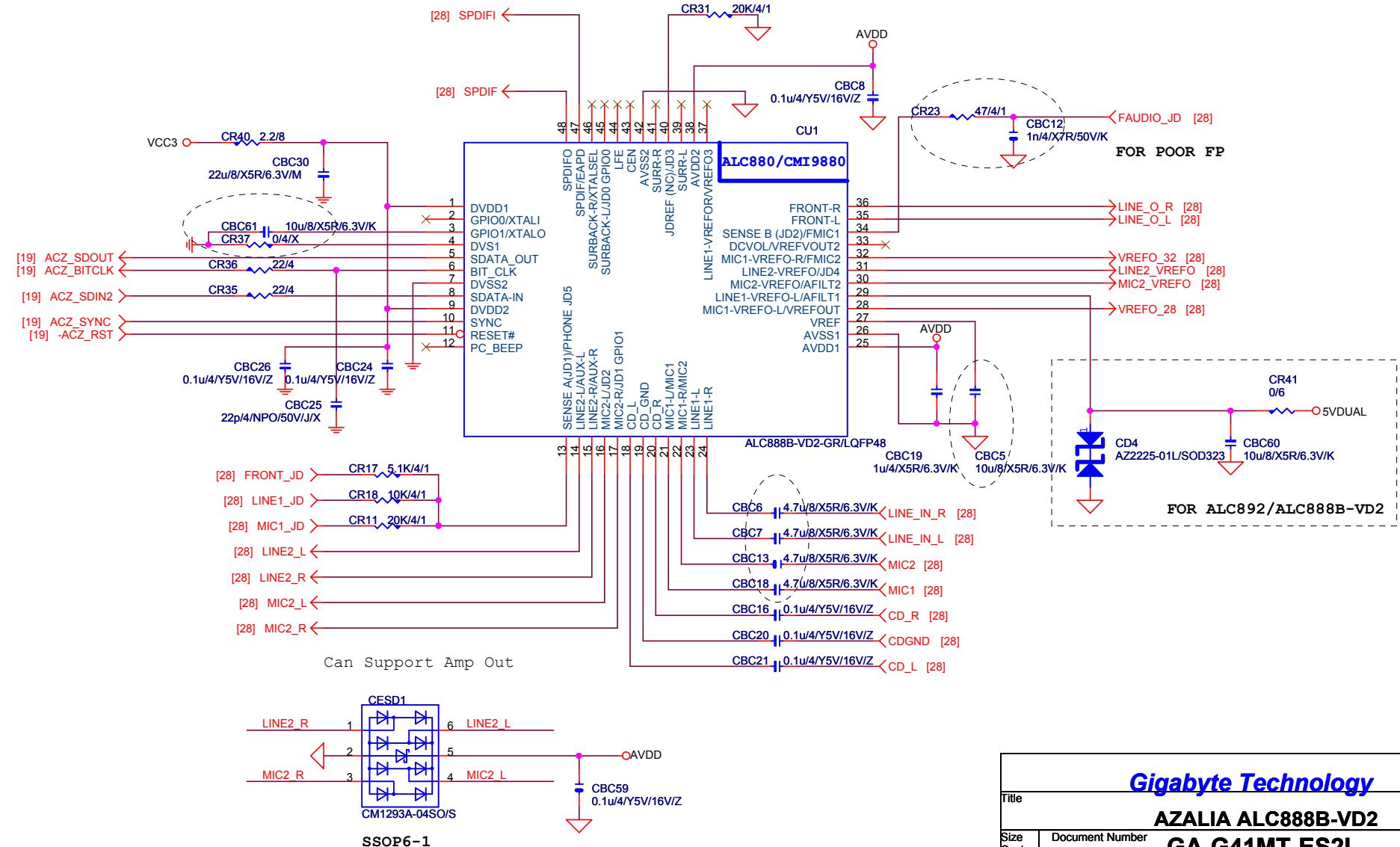
Gigabyte Technology

ITE 8712/18 | PC 10

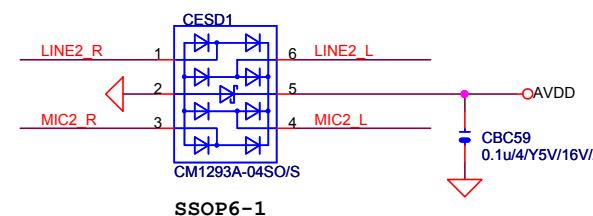
Size B Document Number **GA-G41MT-ES2L** Rev 1.11  
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Can Support Amp Out



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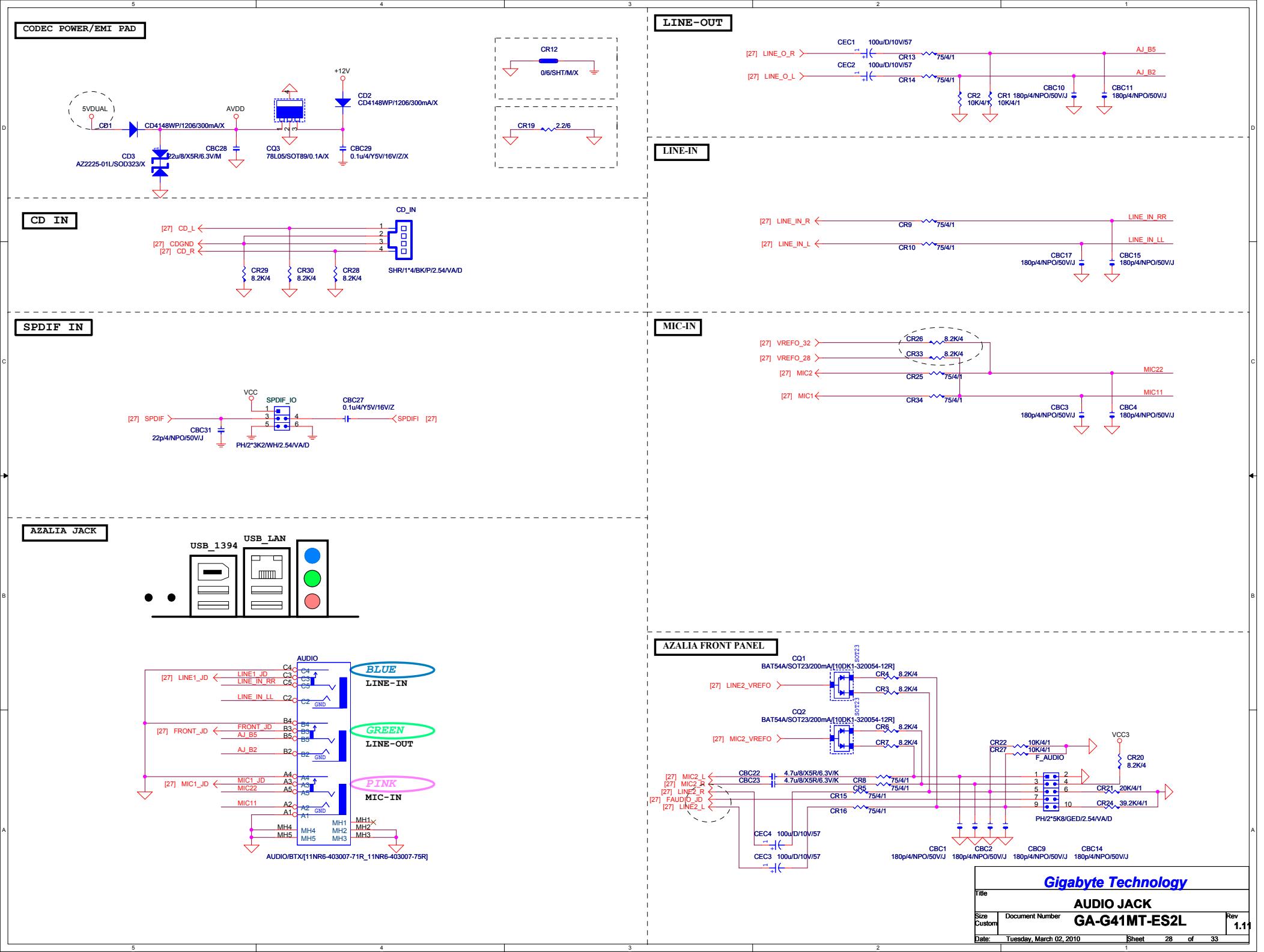
AZALIA AL C888B-VD2

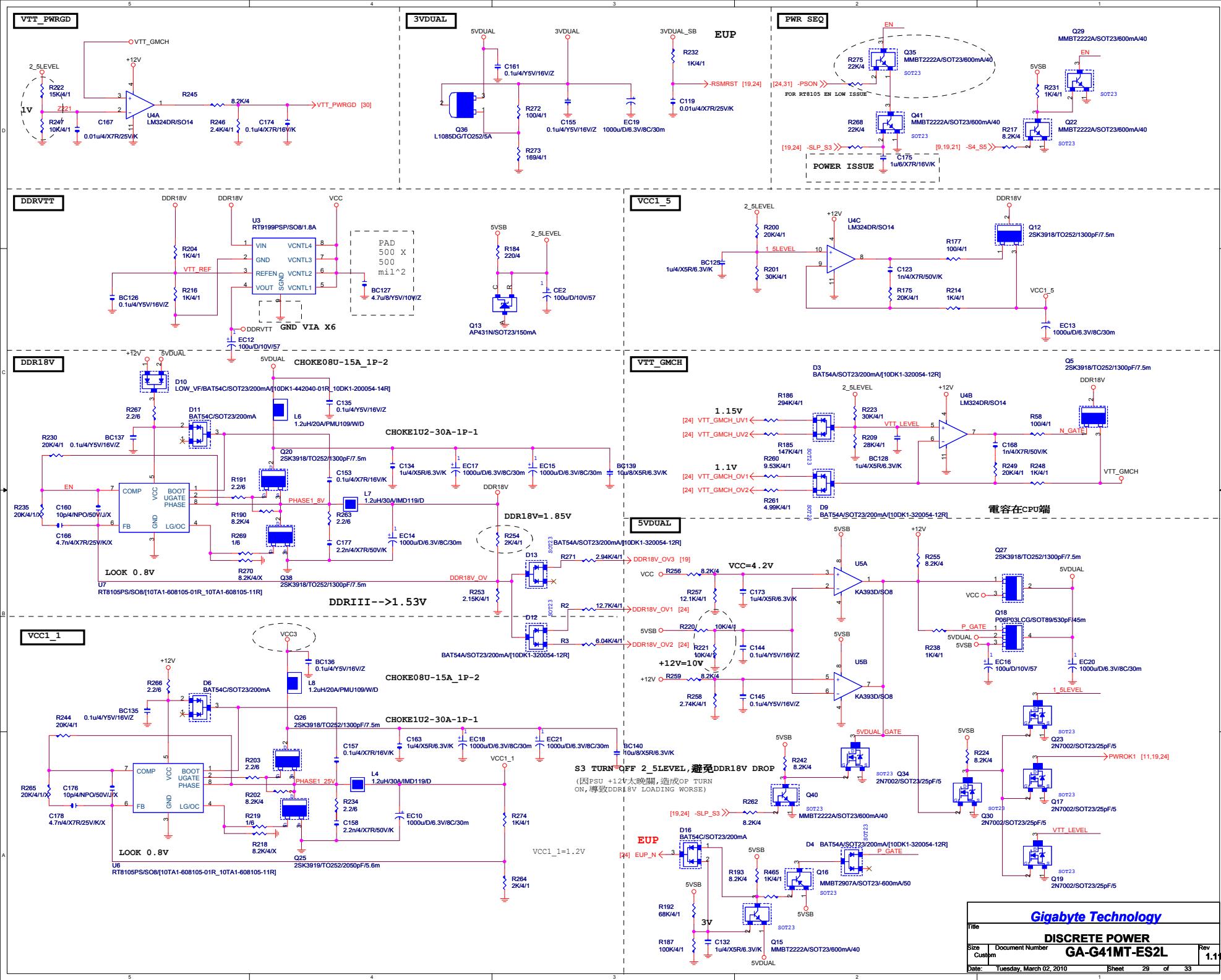
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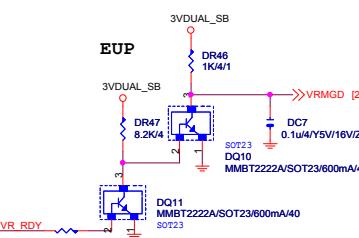
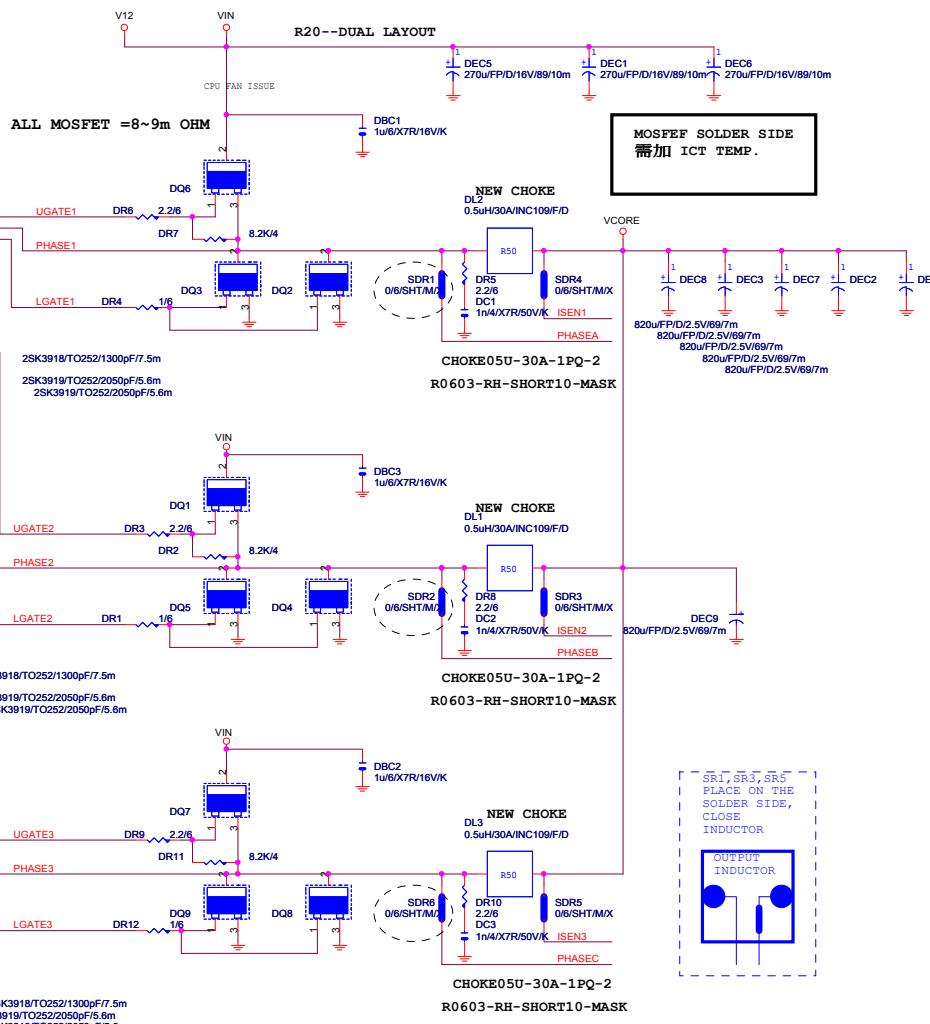
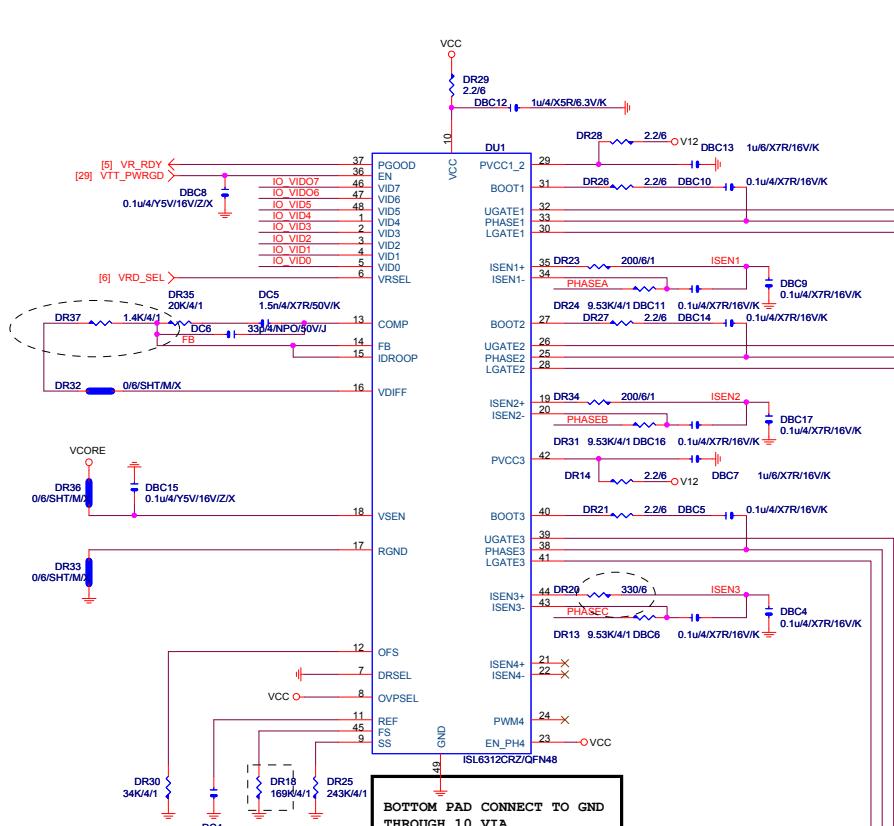
GA-G41MT-ES2L 1.1

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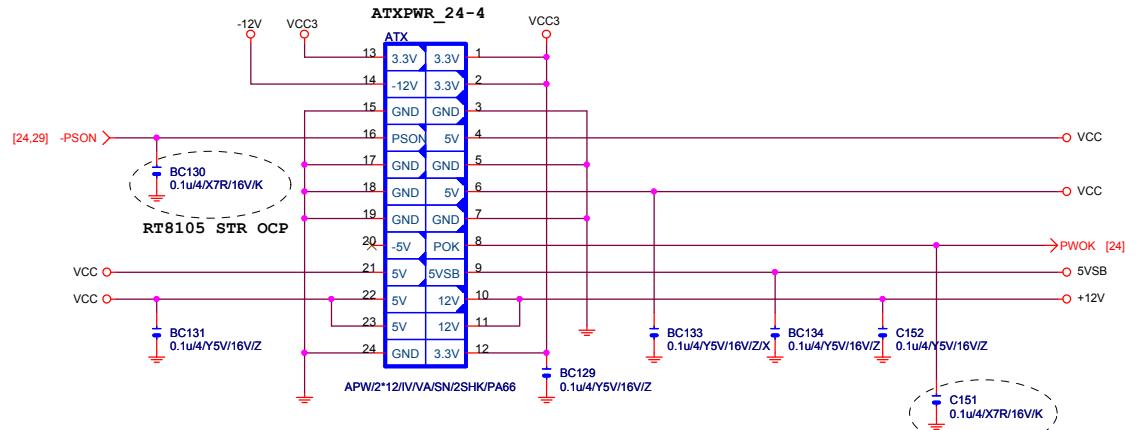
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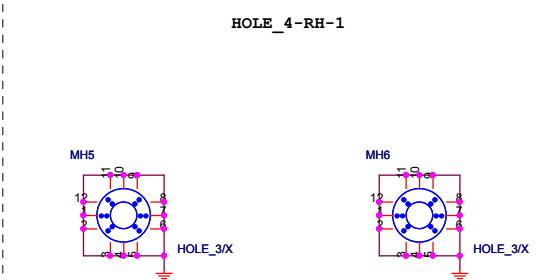
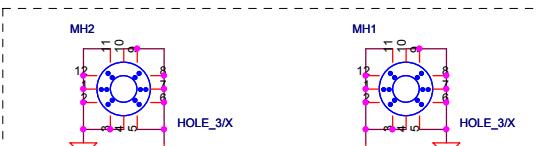
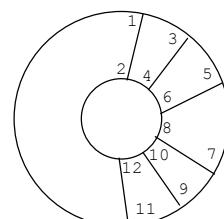
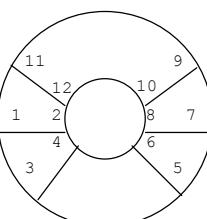
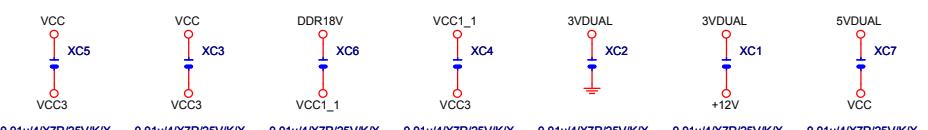
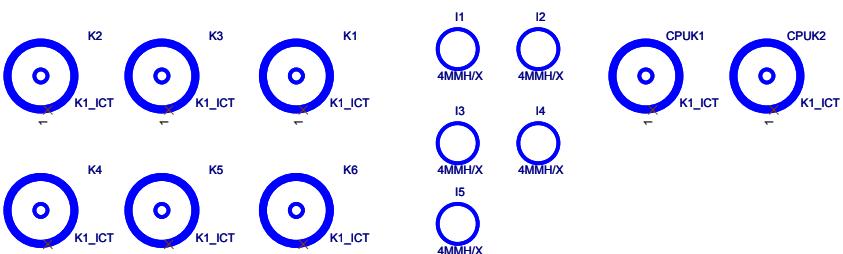
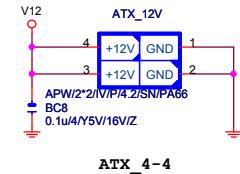
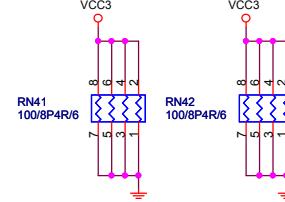




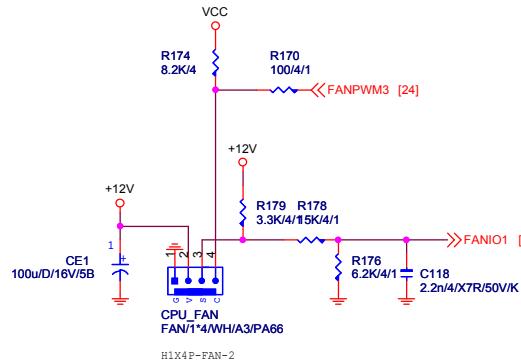
## ATX POWER CONNECTOR



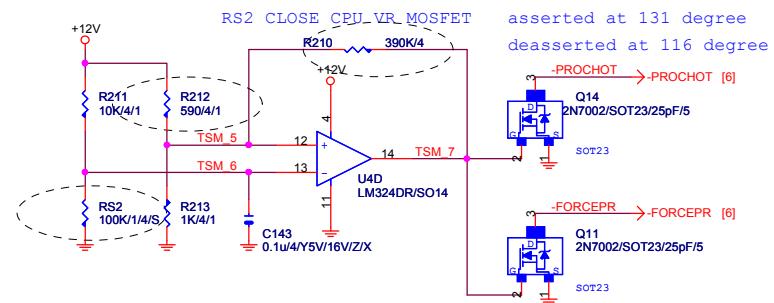
FIX PWR AcBel (ATX-400C-A2ADB)



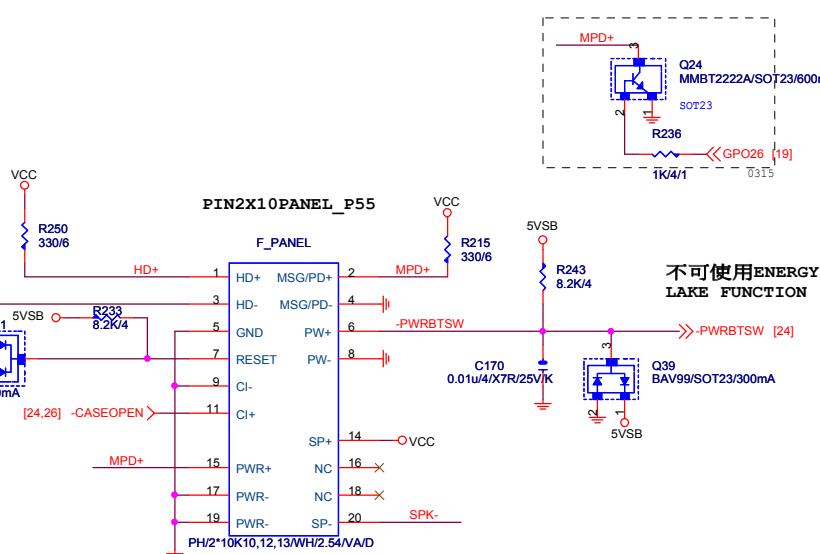
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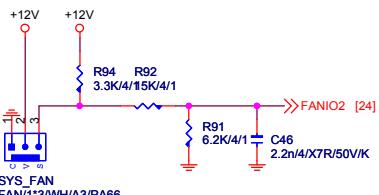
PROCESSOR HOT



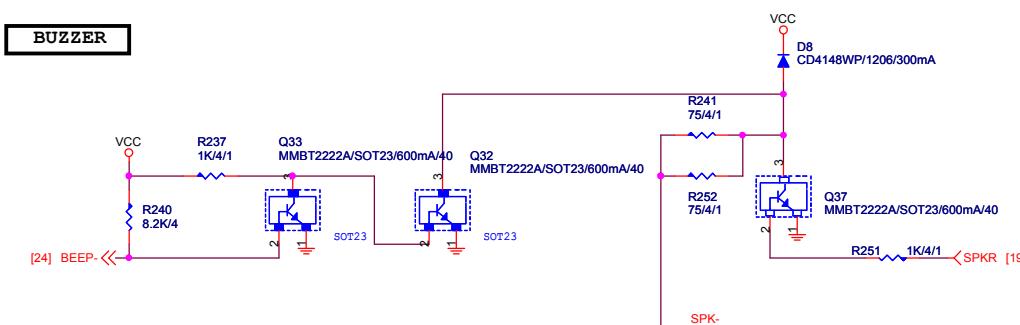
INTEL FRONT PANEL



SYS\_FAN



BUZZER



Gigabyte Technology

FRONT PANEL		Rev
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