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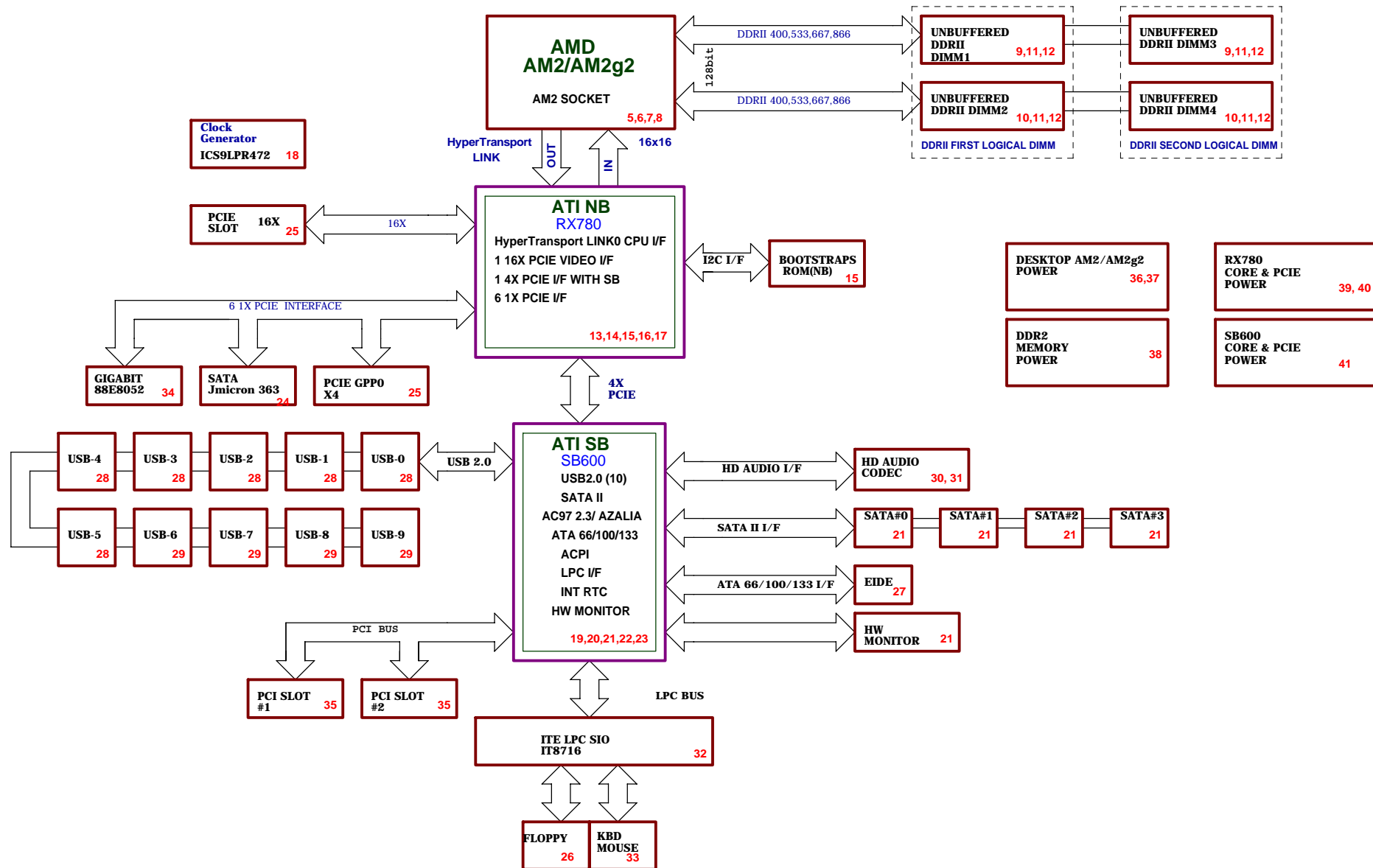
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RX780 CUSTOMER DESKTOP REFERENCE DESIGN

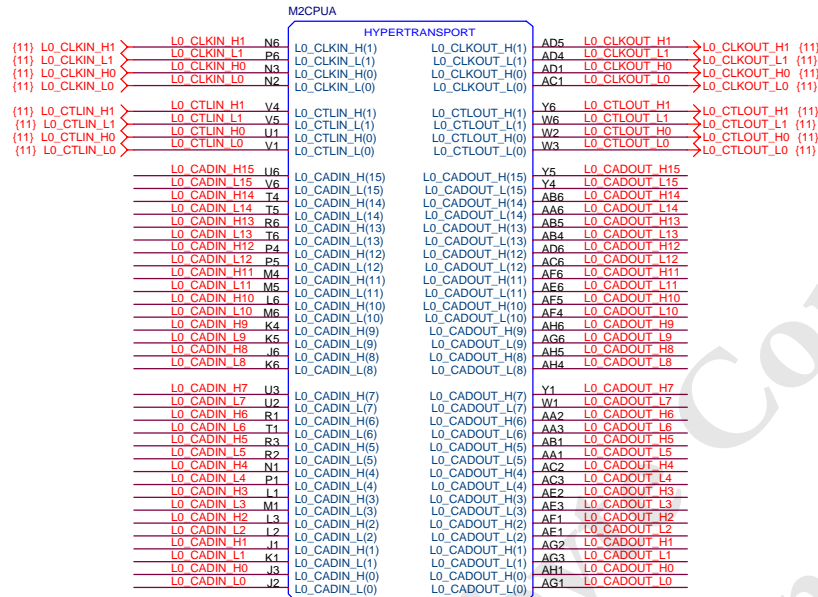


L0_CADIN_L[0..15] < L0_CADIN_L[0..15] (11)
 L0_CADIN_H[0..15] < L0_CADIN_H[0..15] (11)

L0_CADOUT_L[0..15] < L0_CADOUT_L[0..15] (11)
 L0_CADOUT_H[0..15] < L0_CADOUT_H[0..15] (11)

CPU_VDD_RUN = VCORE
 CPU_VDDA_RUN = VDDA25
 VLDT_RUN = VCC12_HT
 CPU_VDDIO_SUS = DDR18V
 CPU_VTT_SUS = DDRVTT

VLDT_A = VCC12_HT
 VLDT_B = HT12B



CPU-SK/940AM2/S/GF/[10SC1-A01940-31R]

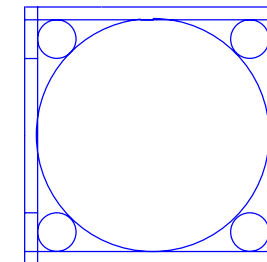
M2 CARZY_COOL

SOCKET_M2

CARZY_COOL/[12SP2-060110-01R_12SP2-060110-02R]X

SOCKET_M2

AM2RM/SC/OR/MB

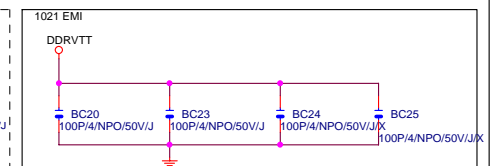
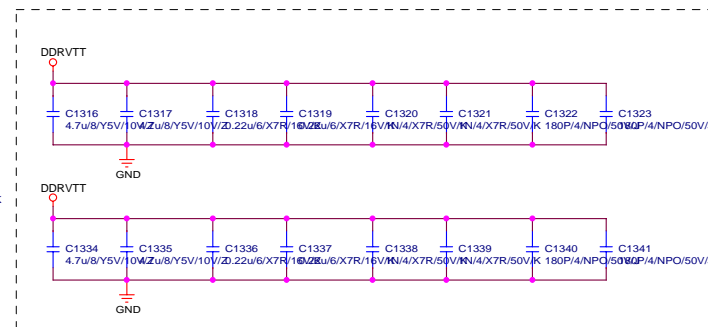
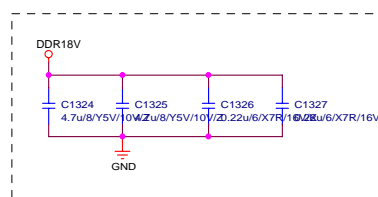
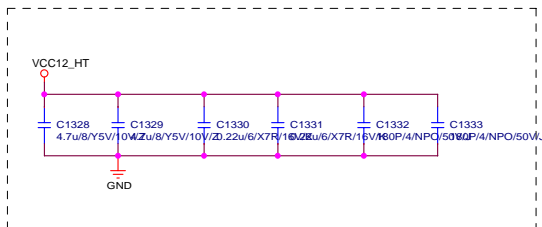
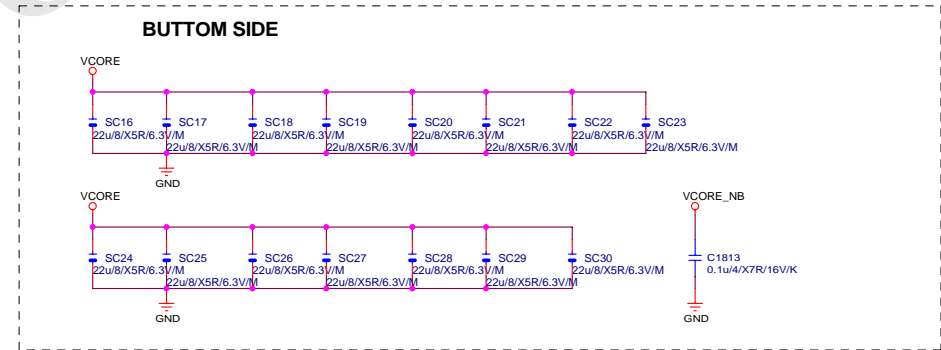
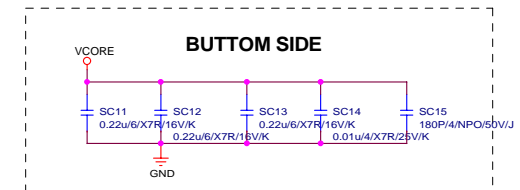
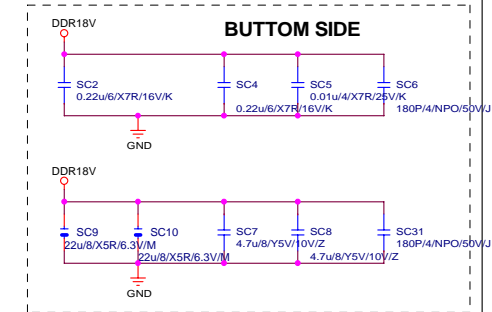
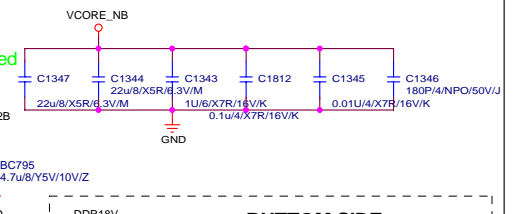
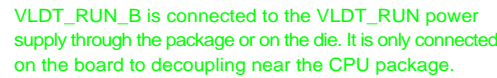
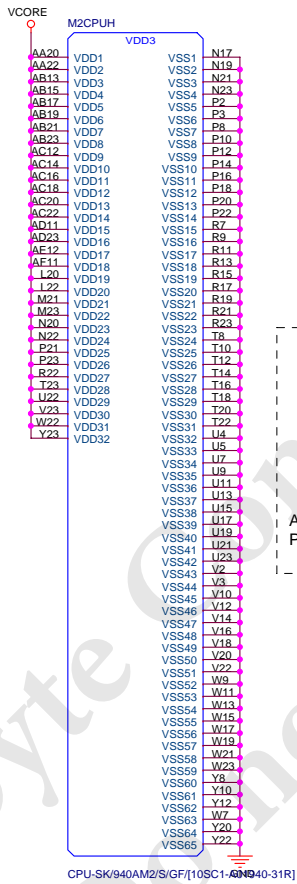
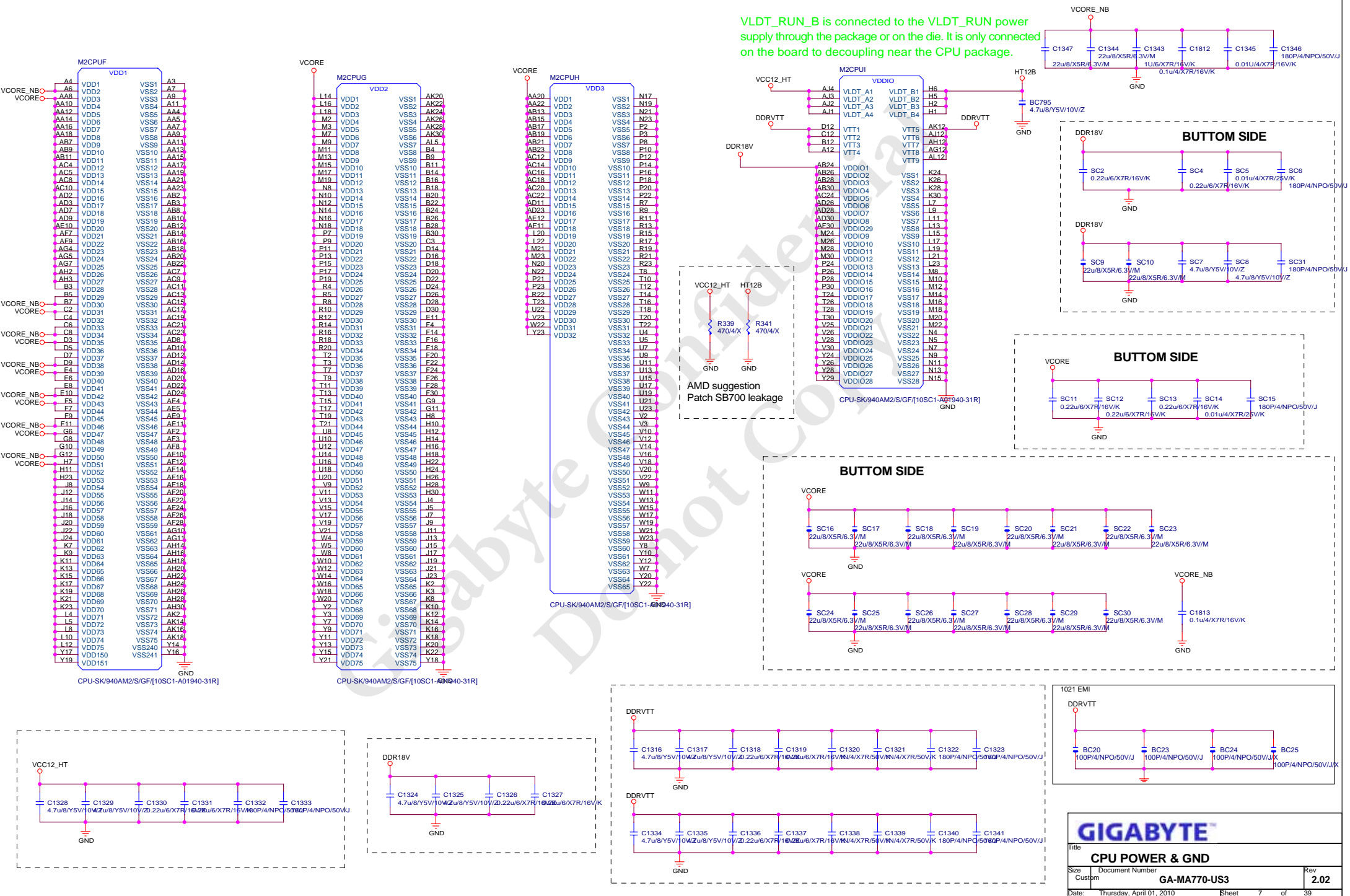


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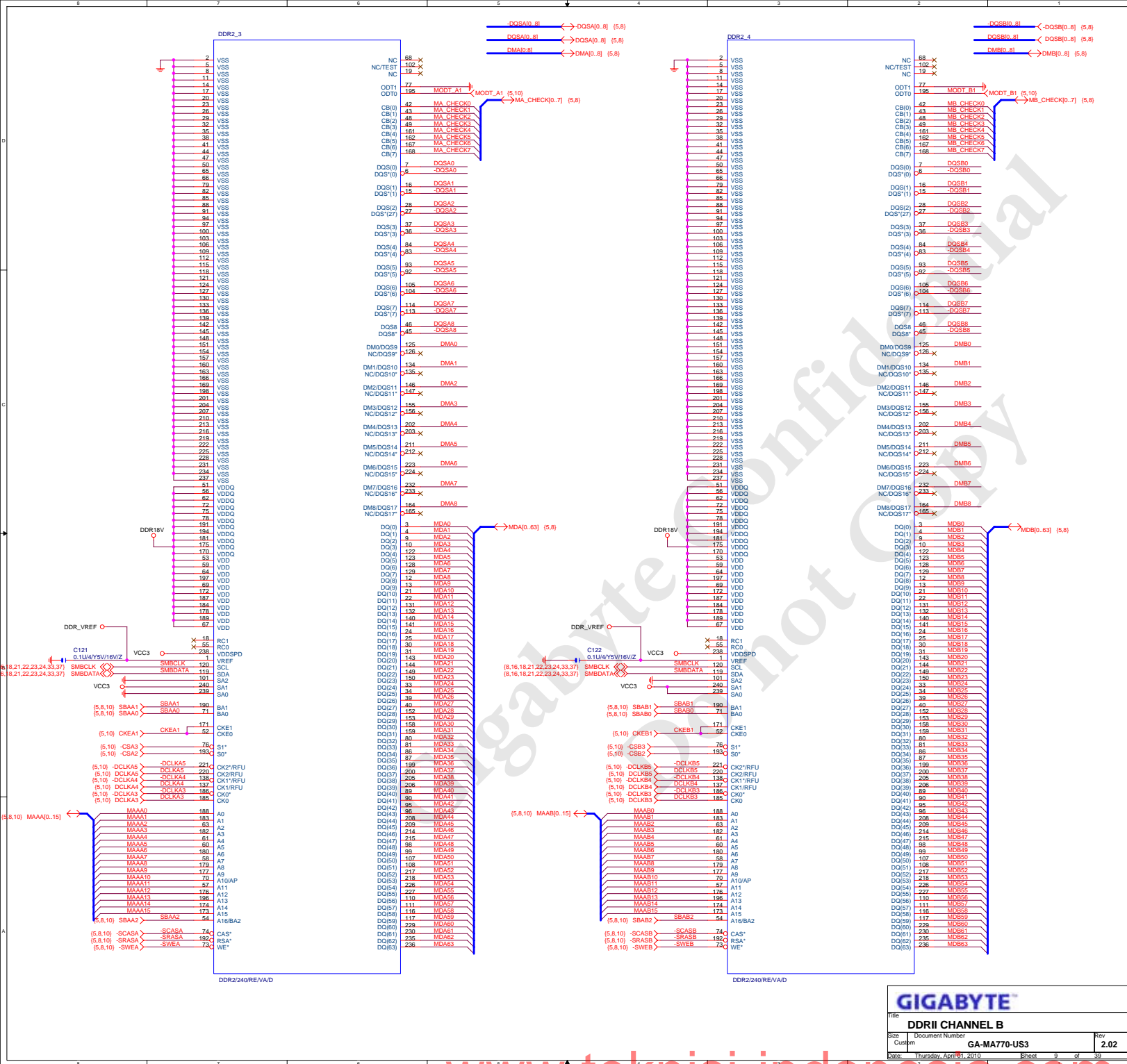
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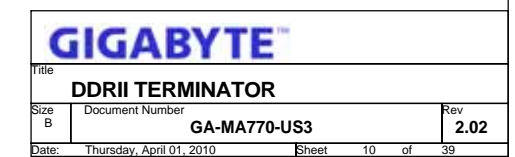
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Custom GA-MA770-US3 2.02

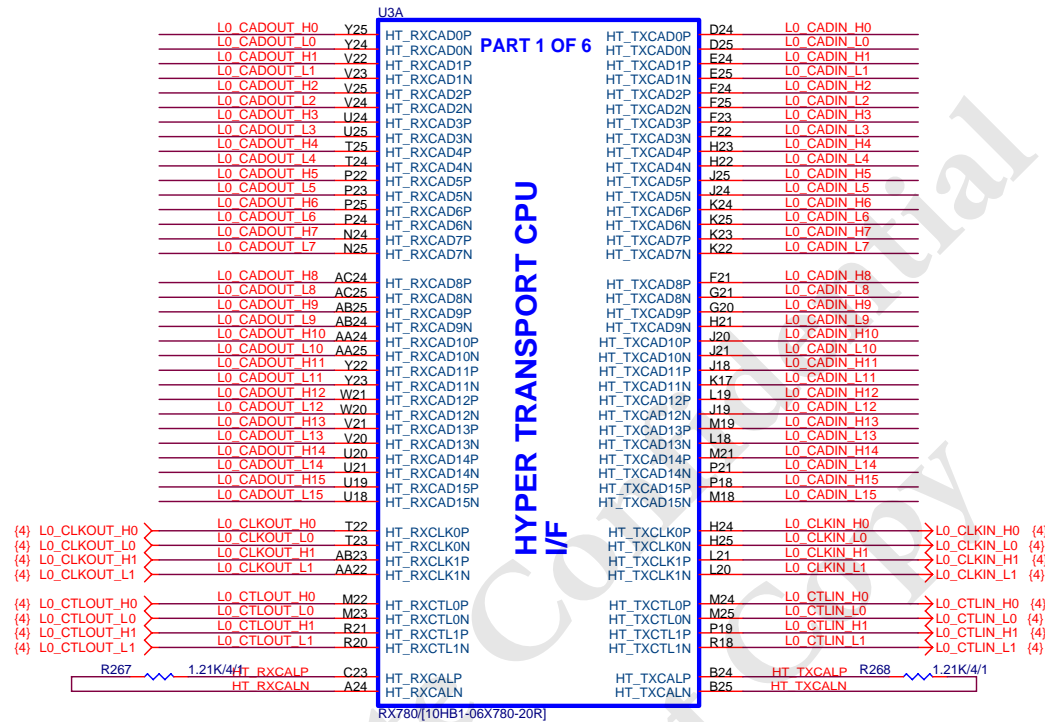
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CPU POWER & GND			
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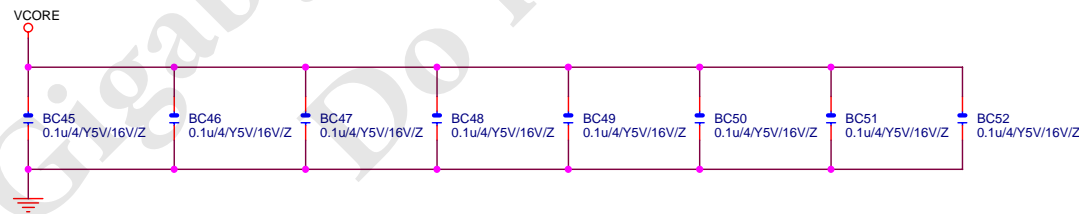
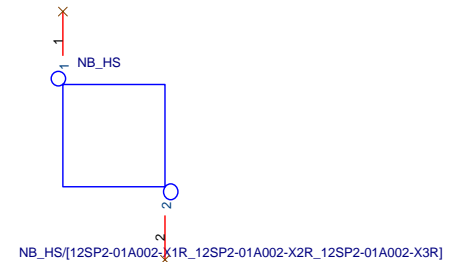






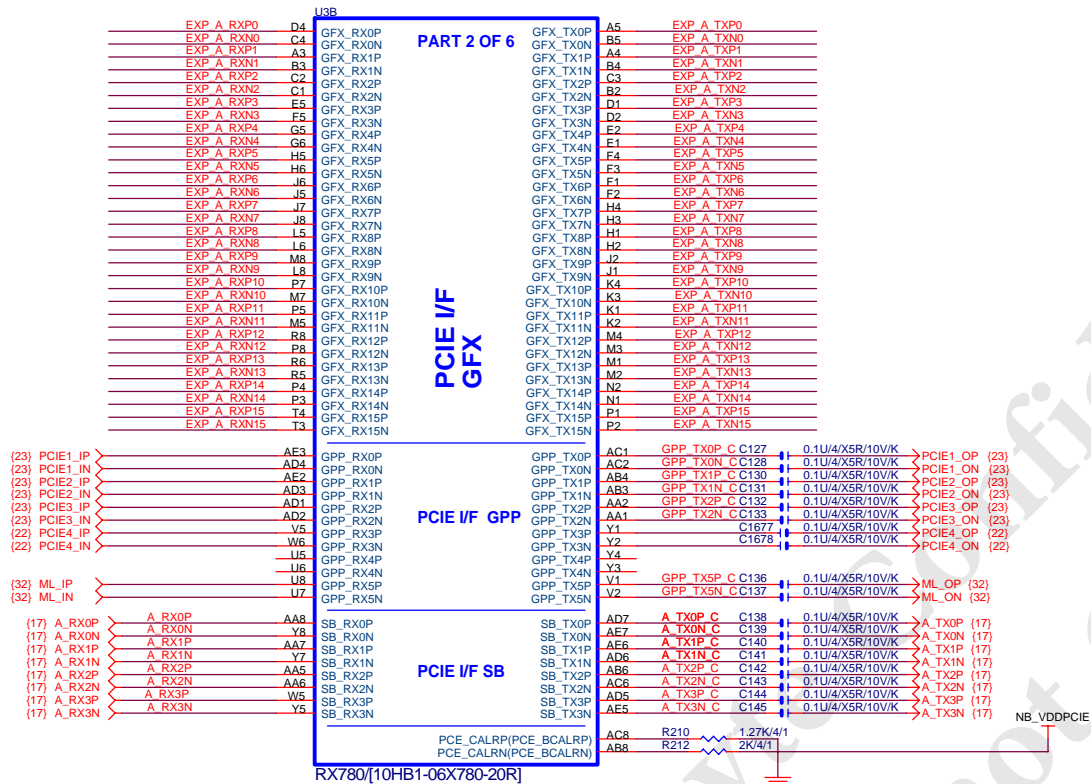
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L0 CADOUT L[0..15] <L0_CADOUT_L[0..15] (4)
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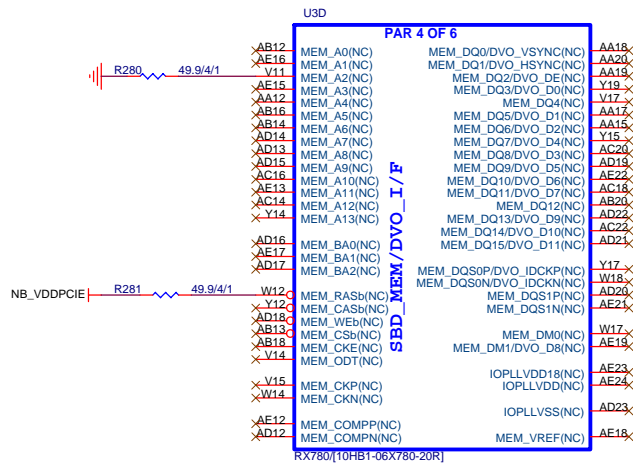
GIGABYTE™		
Title RD780-HT LINK I/F		
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EXP A_RXP[0..15] >> EXP_A_RXP[0..15] (21) EXP A_TXP[0..15] >> EXP_A_TXP[0..15] (21)
EXP A_RXN[0..15] >> EXP_A_RXN[0..15] (21) EXP A_TXN[0..15] >> EXP_A_TXN[0..15] (21)



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RD780-PCIE I/F			
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DFT_GPIO5: STRAP_DEBUG_BUS_GPIO_ENABLEb

(13) DFT_GPIO5 << R240 3K/4/X

Enables the Test Debug Bus using GPIO.
1 : Disable (Can still be enabled using nbcfg register access)
0 : Enable

DFT_GPIO[4:2]: STRAP_PCIE_GPP_CFG[2:0]

(13) DFT_GPIO4 << R246 3K/4/X

(13) DFT_GPIO3 << R242 3K/4/X

(13) DFT_GPIO2 << R243 3K/4/X

These pin straps are used to configure PCI-E GPP mode.
000 : 00001
001 : 00010
010 : 01011
011 : 00100
100 : 01010
101 : 01100
111 : 01011

DFT_GPIO1: LOAD_EEPROM_STRAPS

(13) DFT_GPIO1 << R244 3K/4/X

Selects Loading of STRAPS from EPROM
1 : Bypass the loading of EEPROM straps and use Hardware Default Values
0 : I2C Master can load strap values from EEPROM if connected, or use default values if not connected

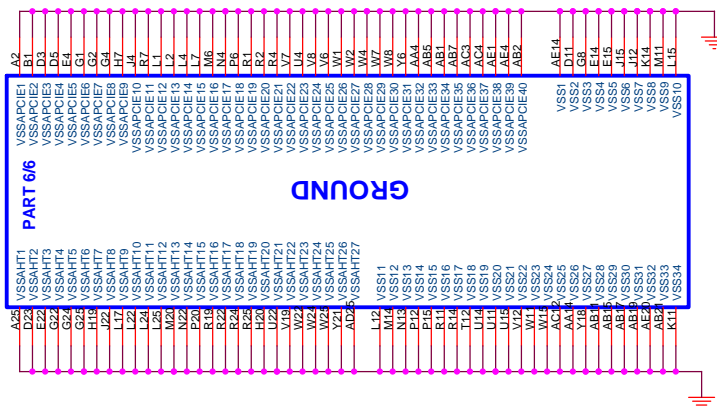
DFT_GPIO0: STRAP_DEBUG_BUS_PCIE_ENABLEb

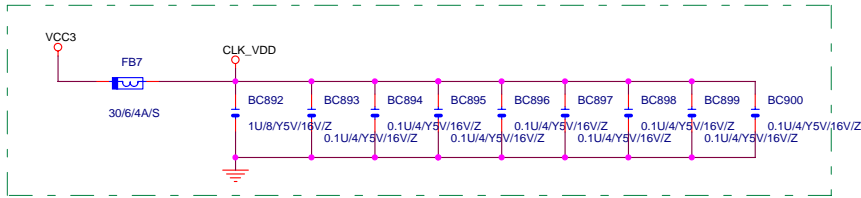
(13) DFT_GPIO0 << R245 3K/4/X

Enables the Test Debug Bus using PCIE bus
1 : Disable (Can still be enabled using nbcfg register access)
0 : Enable

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RD780 STRAP		
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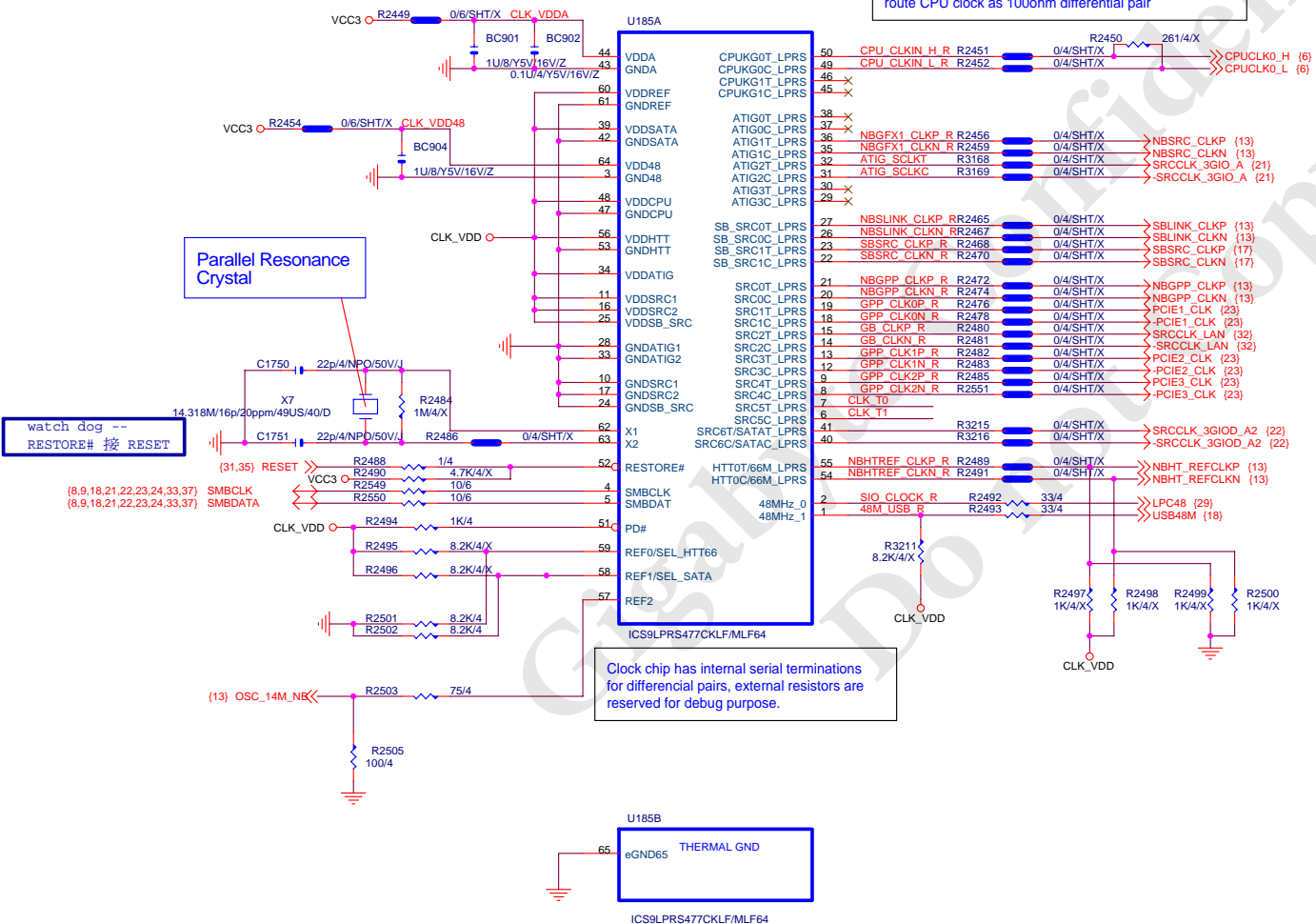
[illegible]



- 1- PLACE ALL THE SERIES TERMINATION RESISTORS AS CLOSE TO U800 AS POSSIBLE
- 2- ROUTE ALL SRCCLKTx AND SRCCLKCx AS DIFFERENT PAIR RULE
- 3- PUT DECOUPLING CAPS CLOSE TO U800 POWER PIN



Place R800/801 less than 500 mils away from U800
R851 less than 100 mils away from R800/801
route CPU clock as 100ohm differential pair

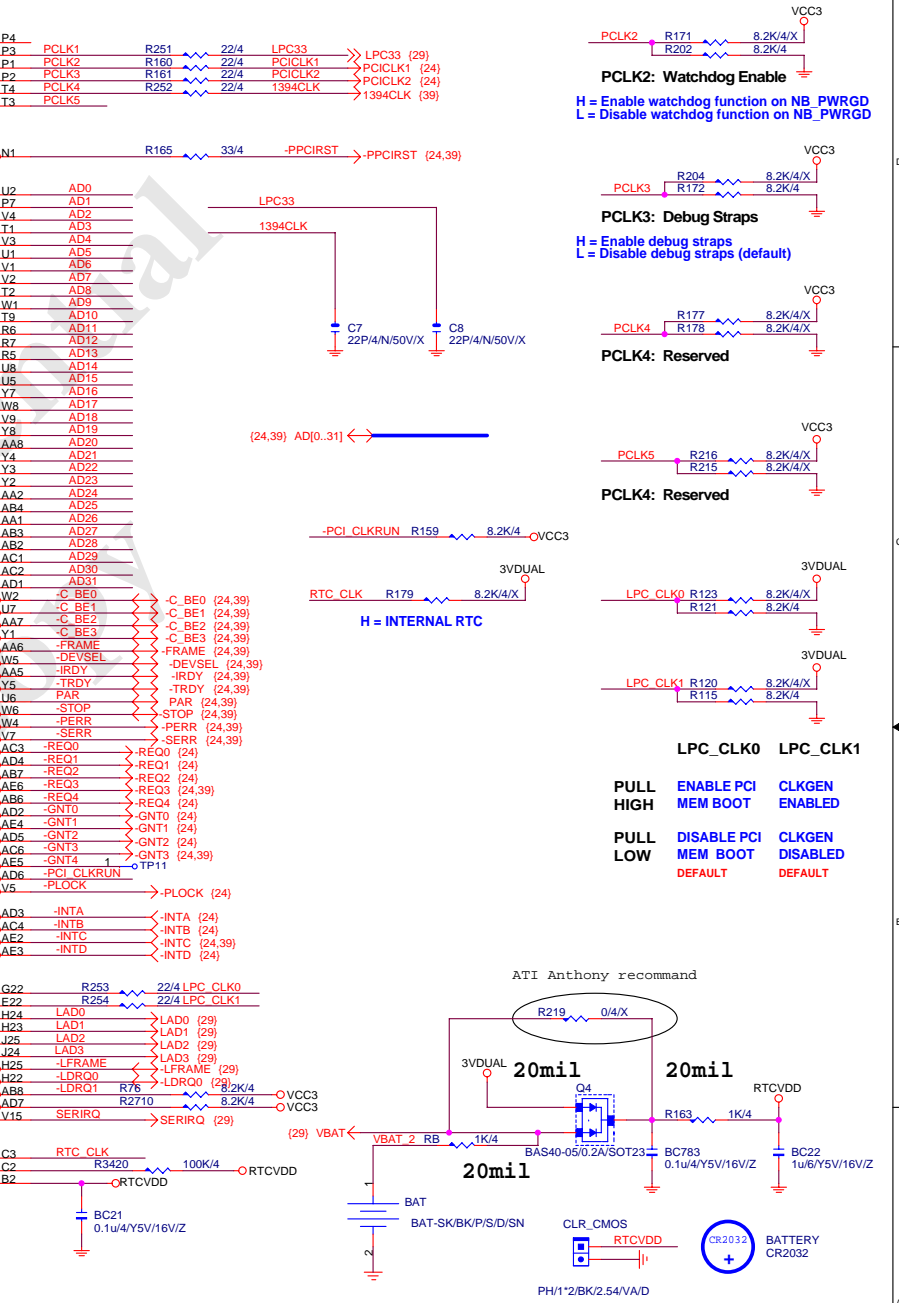
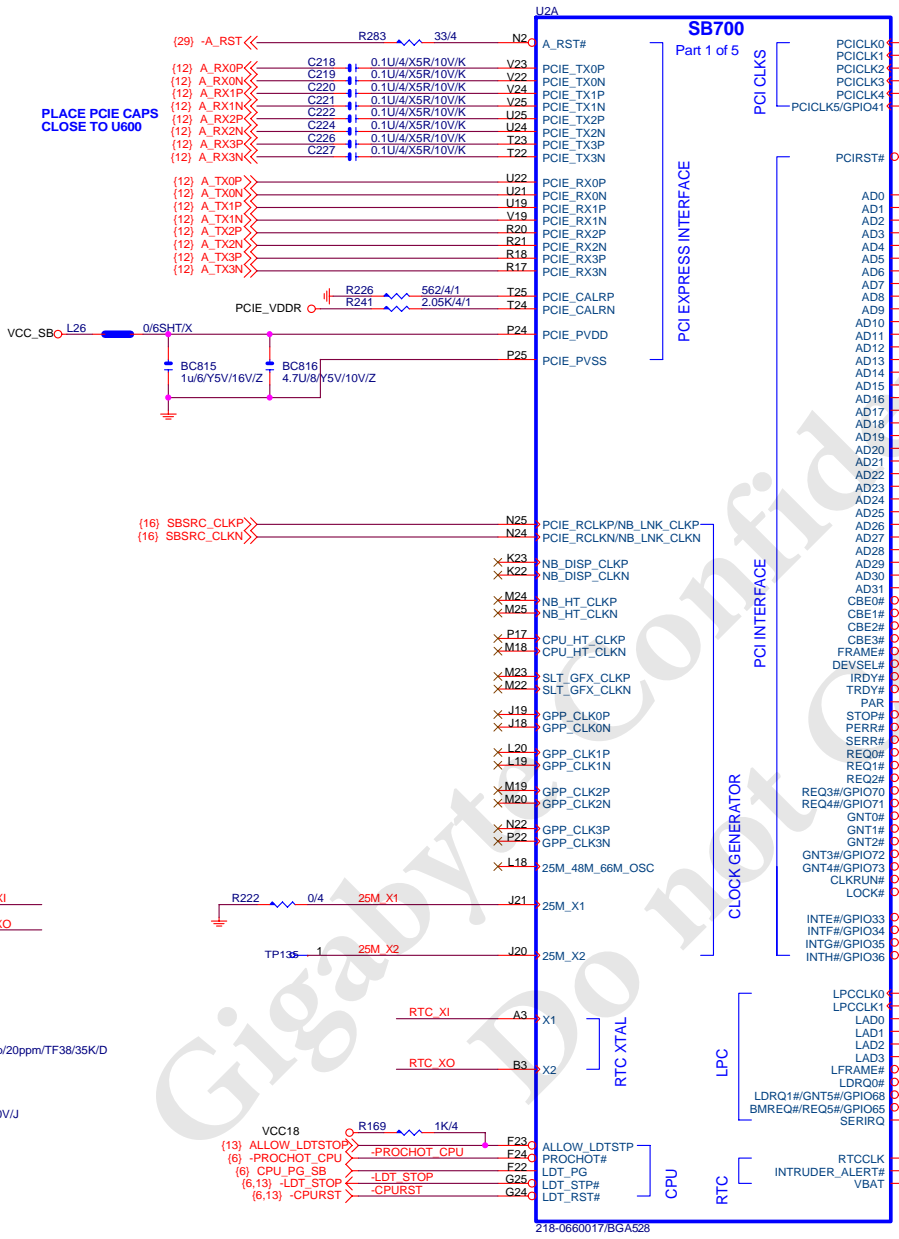
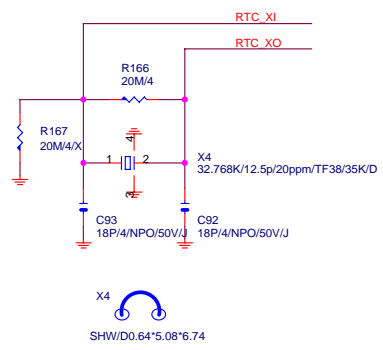
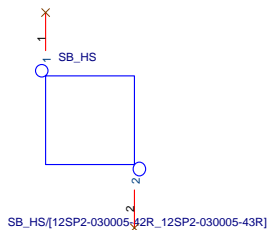


Clock chip has internal serial terminations for differential pairs, external resistors are reserved for debug purpose.



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ICS9LPRS472			
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S.B HEATSINK



CLR_CMOS	
SHORT	CLEAR CMOS
OPEN	NORMAL

NOT ADD ICT FOR RTCVDD PIN

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ATI SB600-PCIW/PCI/CPU/LPC

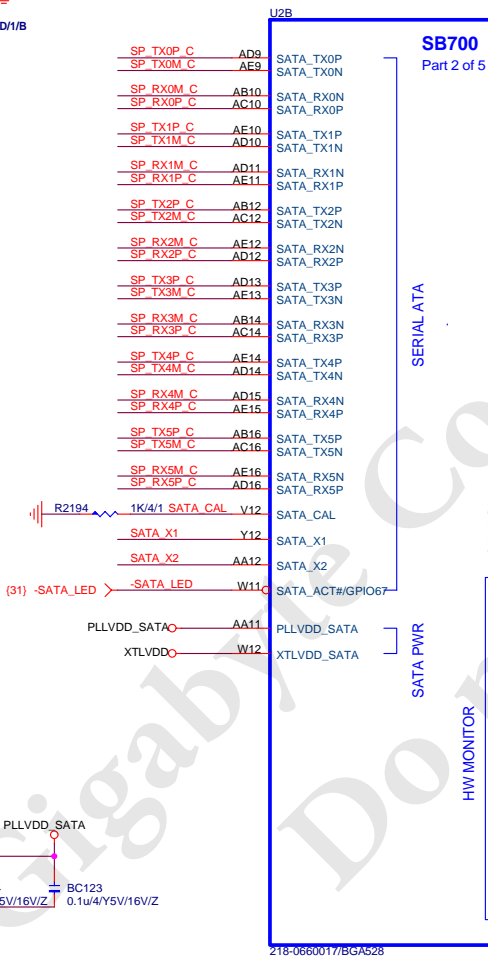
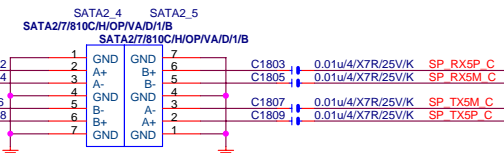
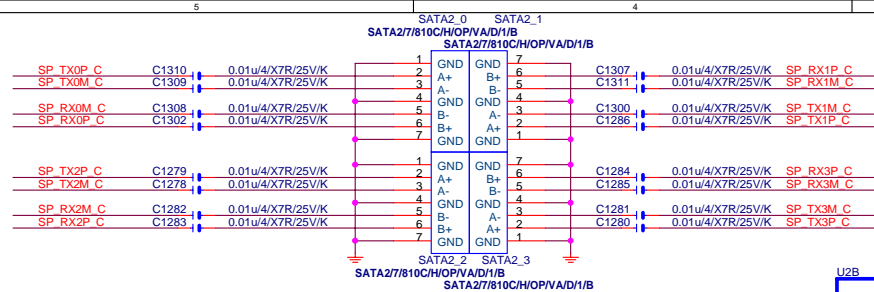
GA-MA770-US3

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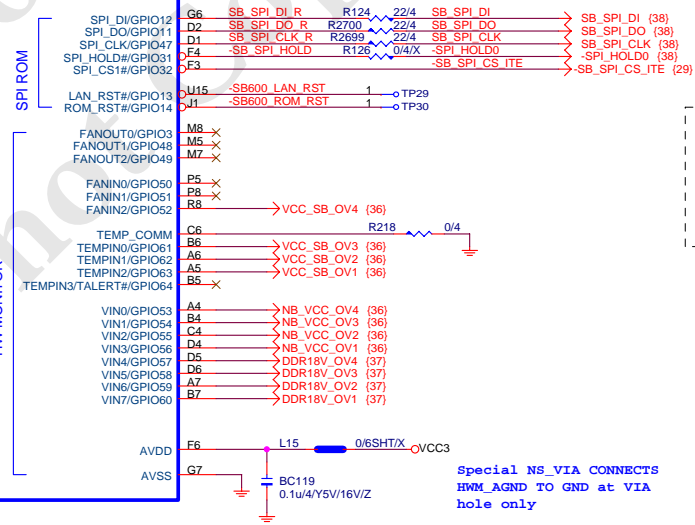
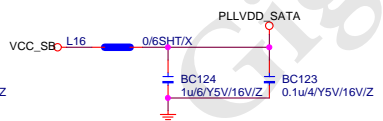
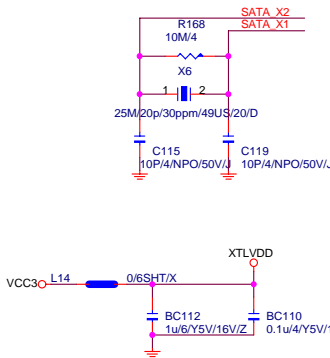
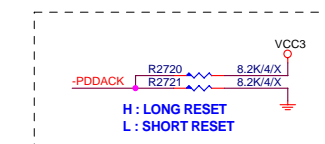
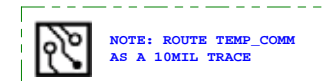
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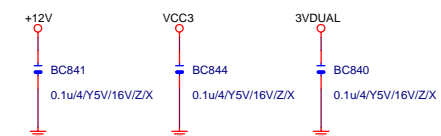


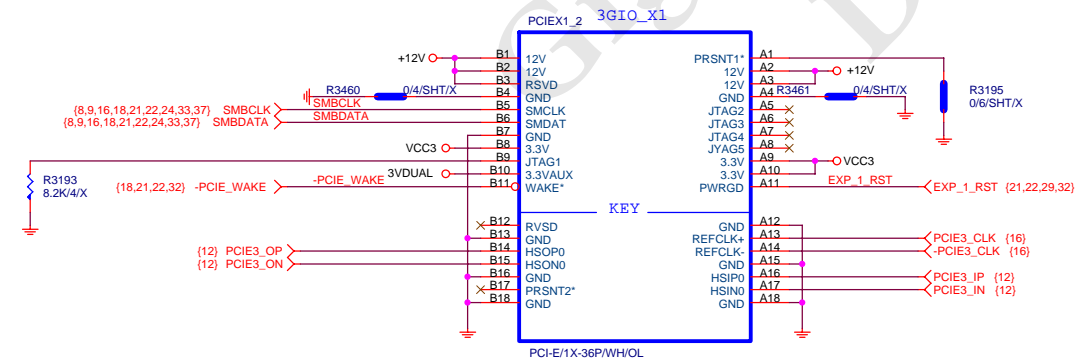
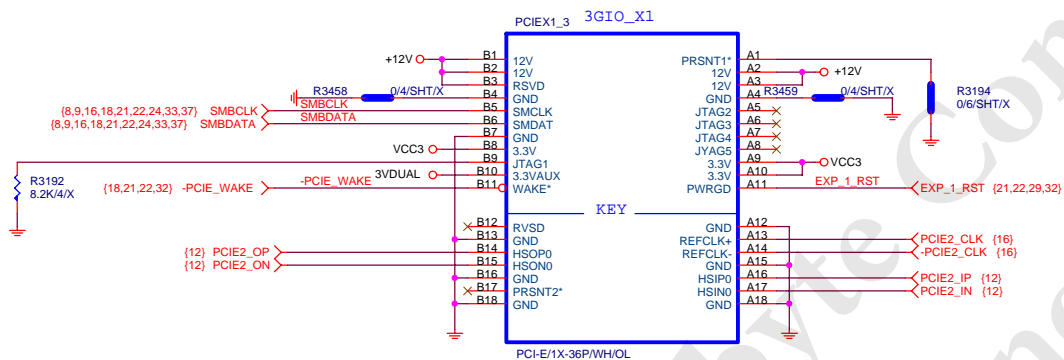
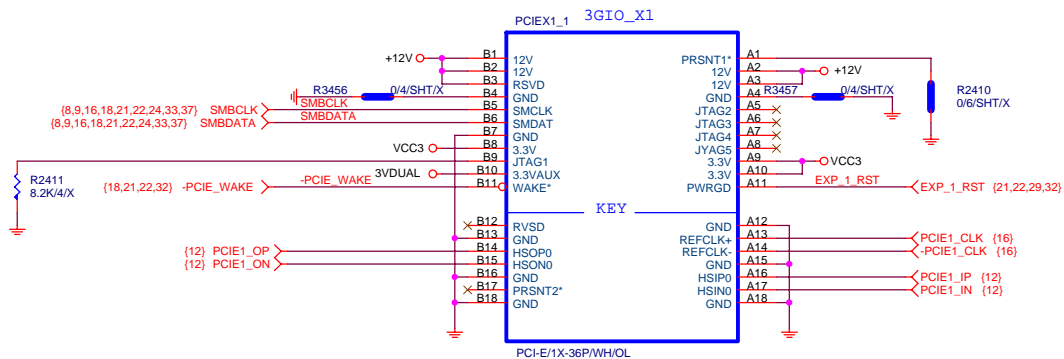


PDD[0..15] ↔ PDD[0..15] (25)



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ATI SB600-SATA,PDD,IDE,HWM			
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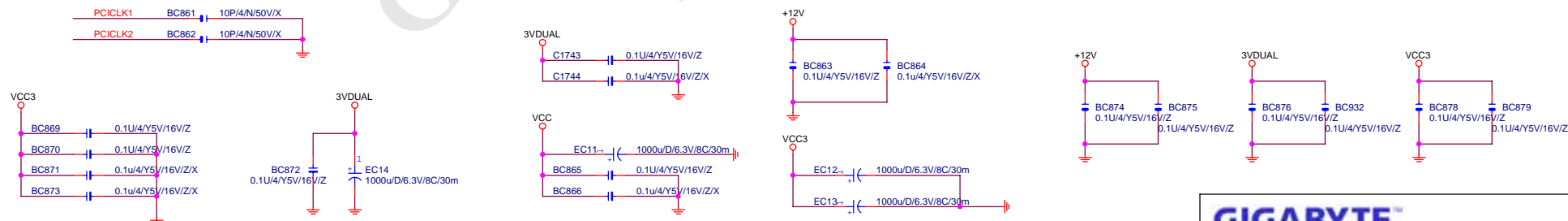
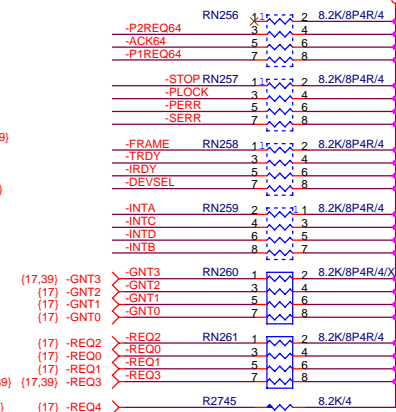
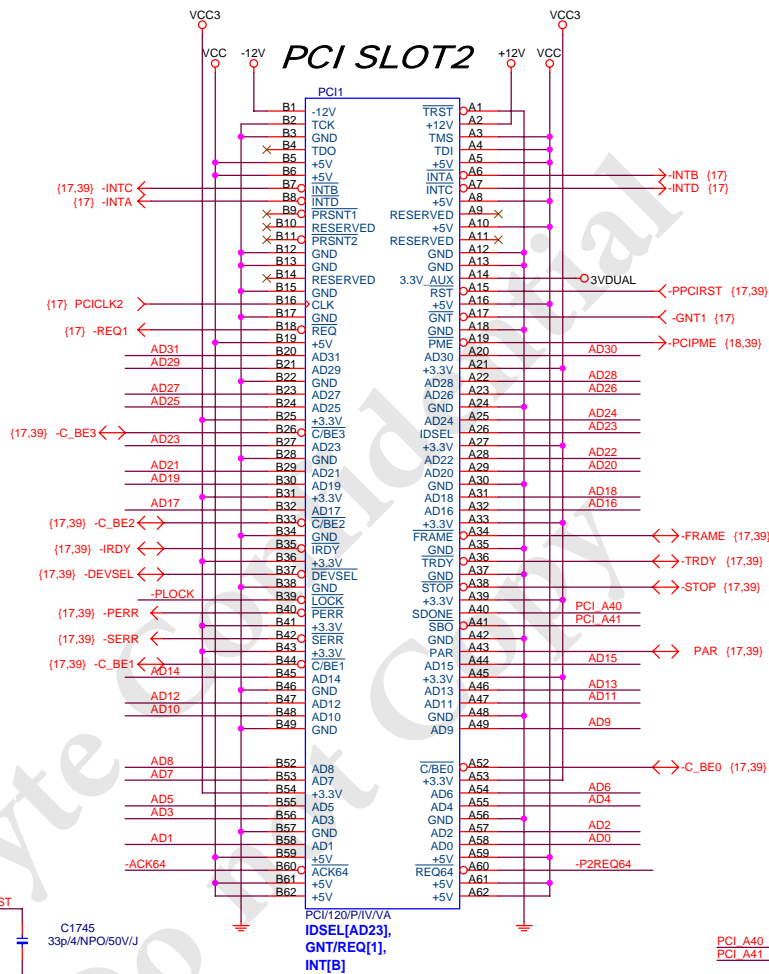
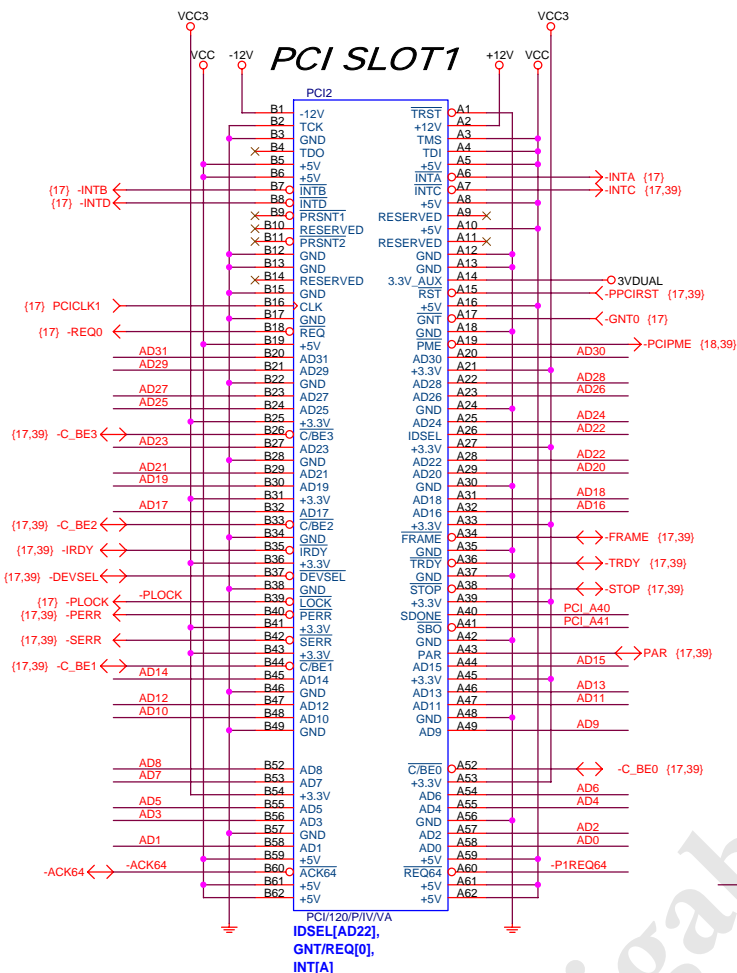


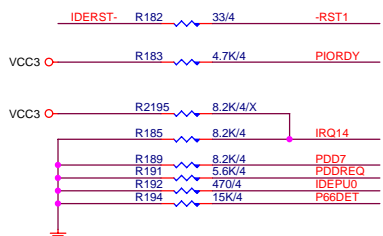
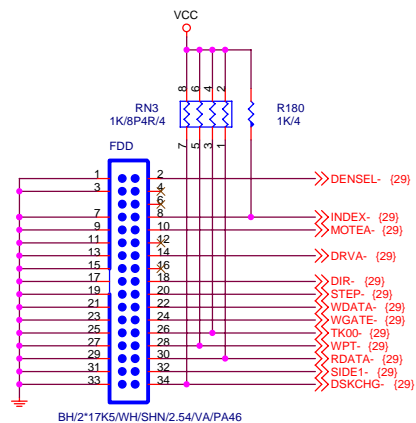


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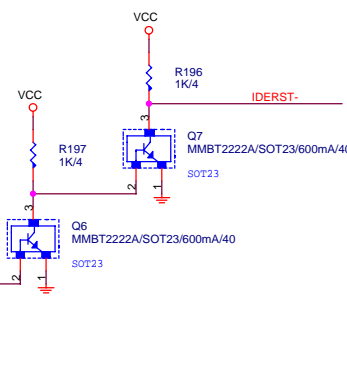
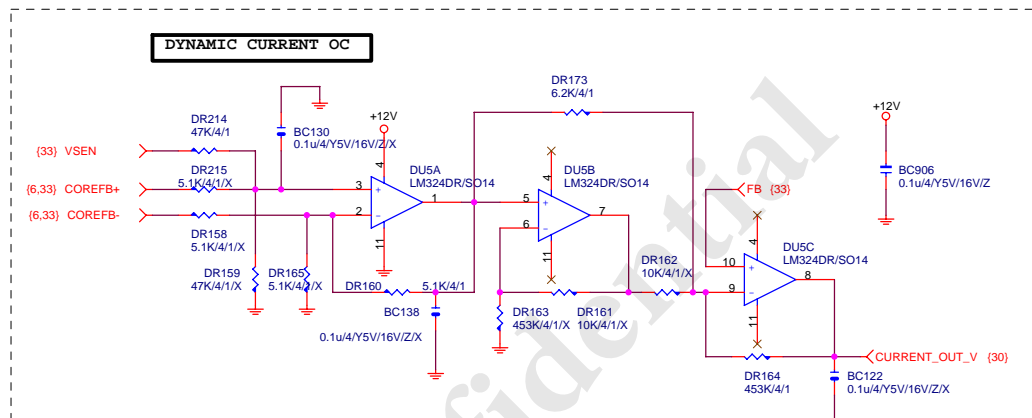
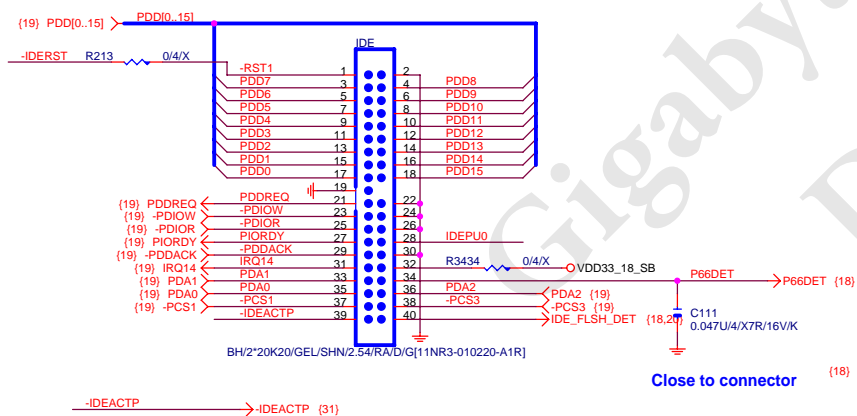
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PCI SLOT 1,2





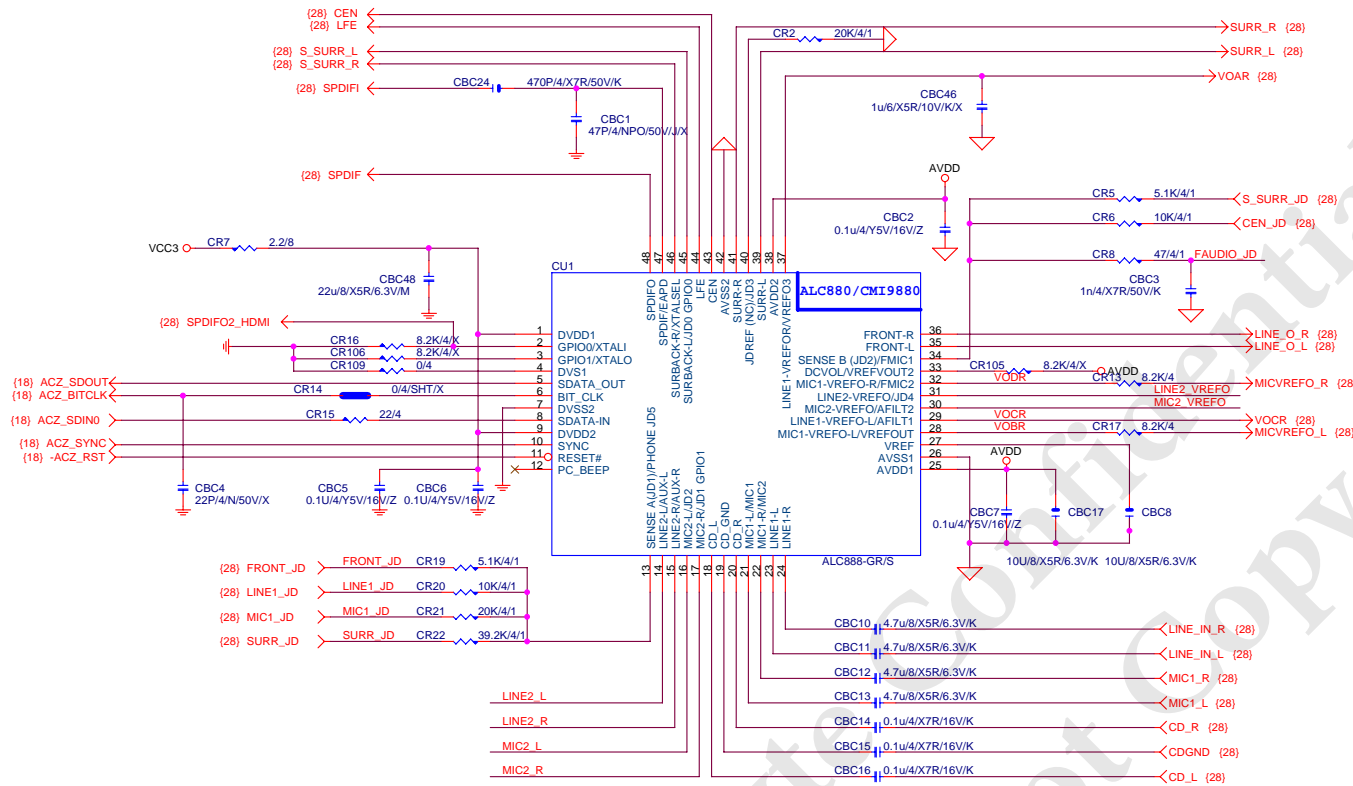
PRIMARY IDE CONNECTOR



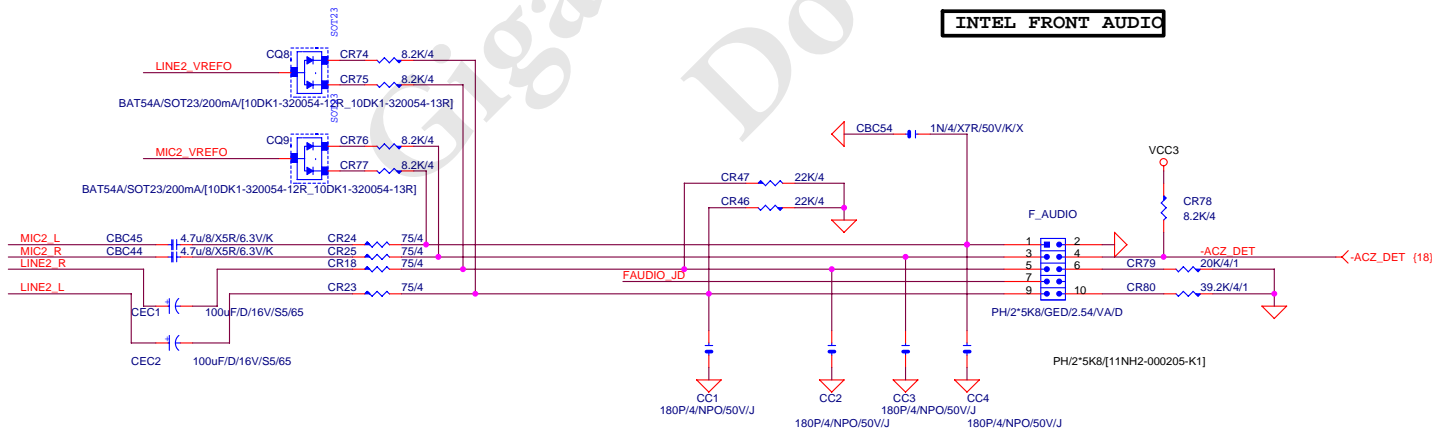
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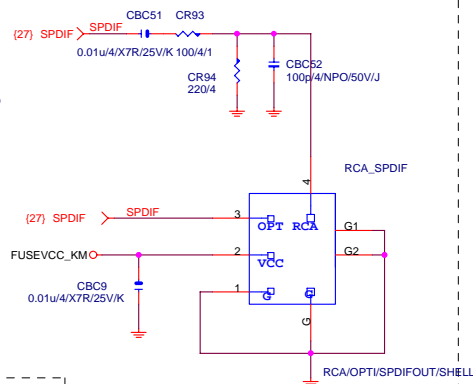
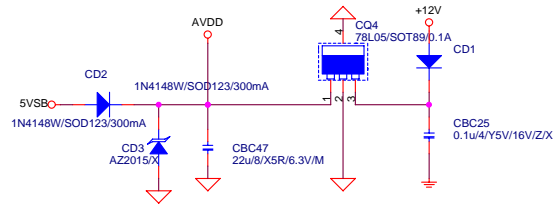
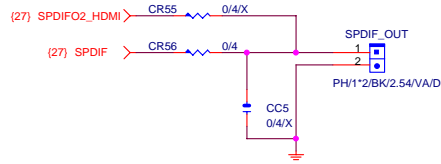
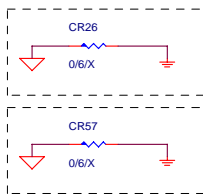


INTEL FRONT AUDIO

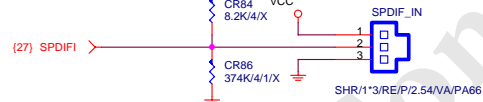
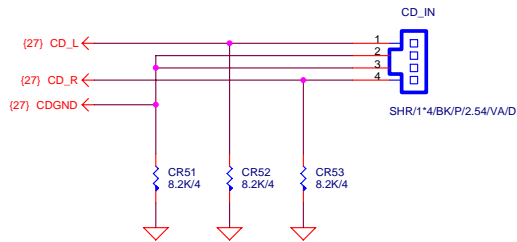


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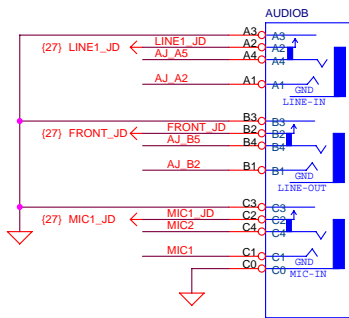
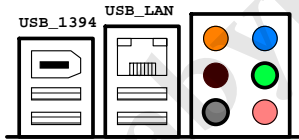
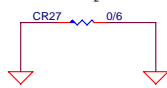
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CD IN



For Audio precision test



BLUE
LINE-IN

GREEN
LINE-OUT

PINK
MIC-IN

Orange
CEN/LFE
ALC880 - SURROUND
CMI9880 - Back SURR

Black
Back side
Speaker
Azalia Port G

Gray
Left & Right Side
Speaker

Gray
CMI9880 - Side SURR

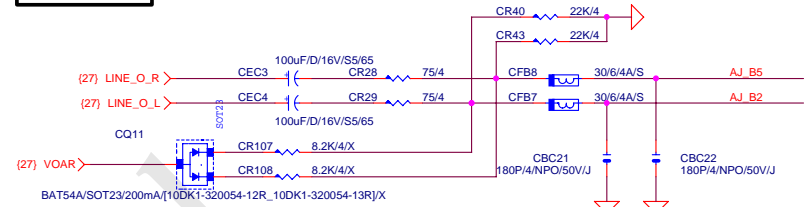
2X3RP/26P/OR,BK,GY,BU,GE,PK/RA

2X3RP/26P/OR,BK,GY,BU,GE,PK/RA

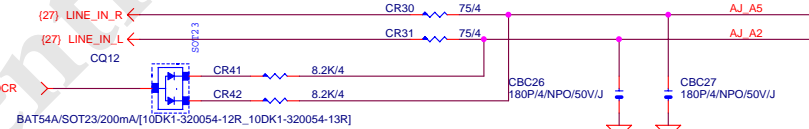
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3RJ+15P/[11NR6-403004-11]

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3RJ+15P/[11NR6-403004-31]

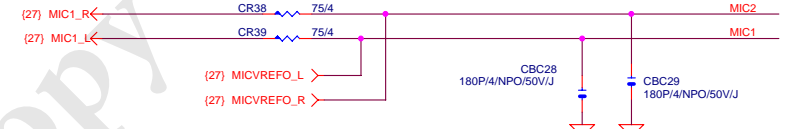
LINE OUT FRONT OUT



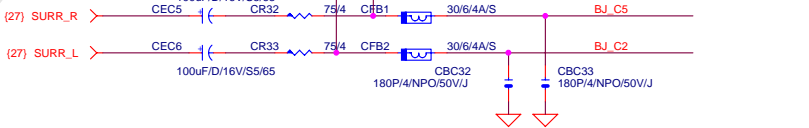
LINE-IN



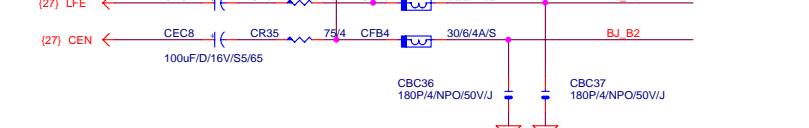
MIC



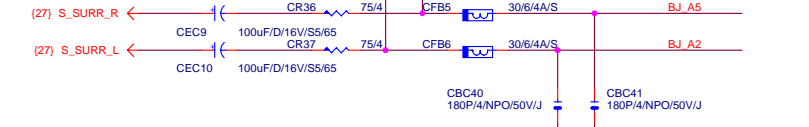
SURROUND



CEN/LFE

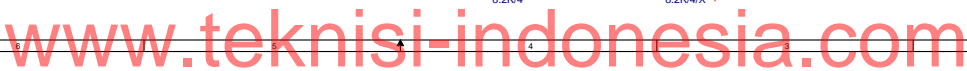


SURR BACK

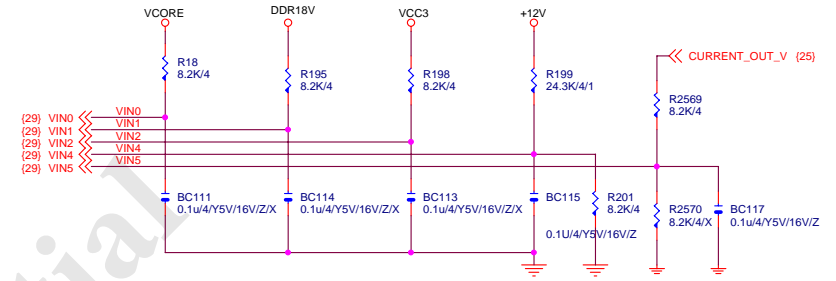
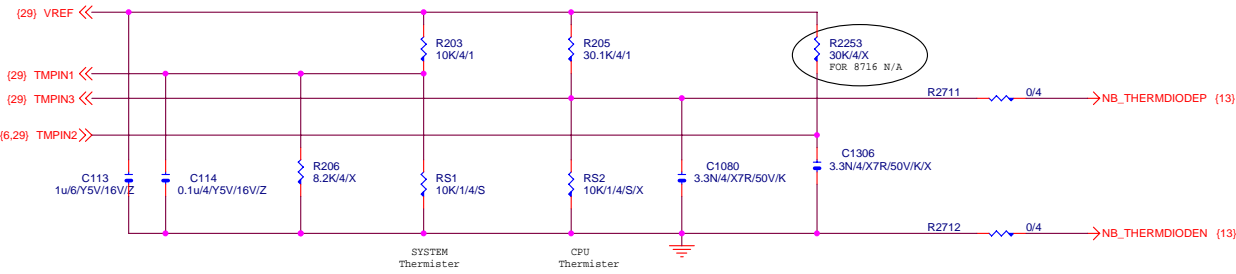


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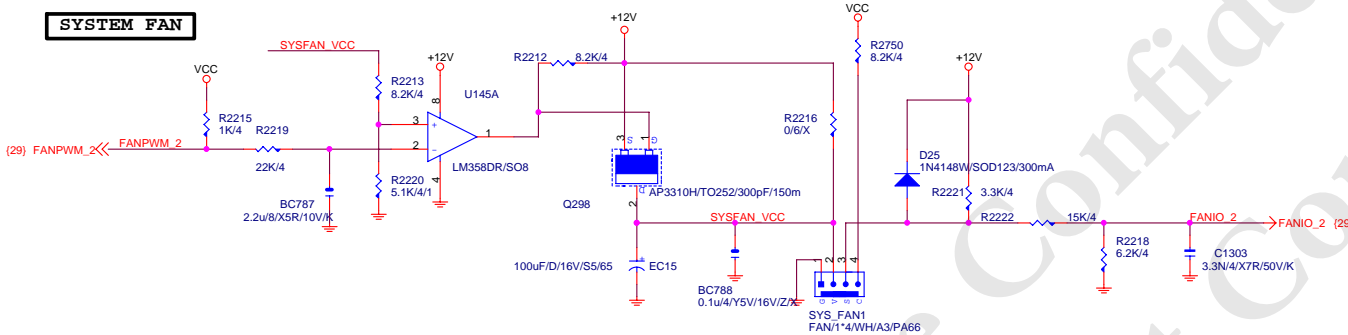
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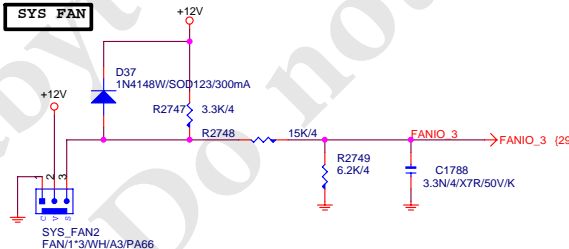
Hardware Monitor circuits



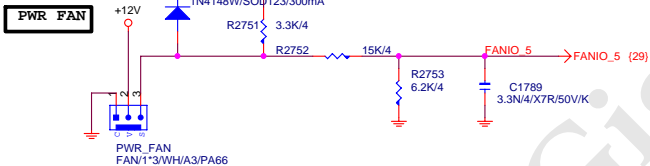
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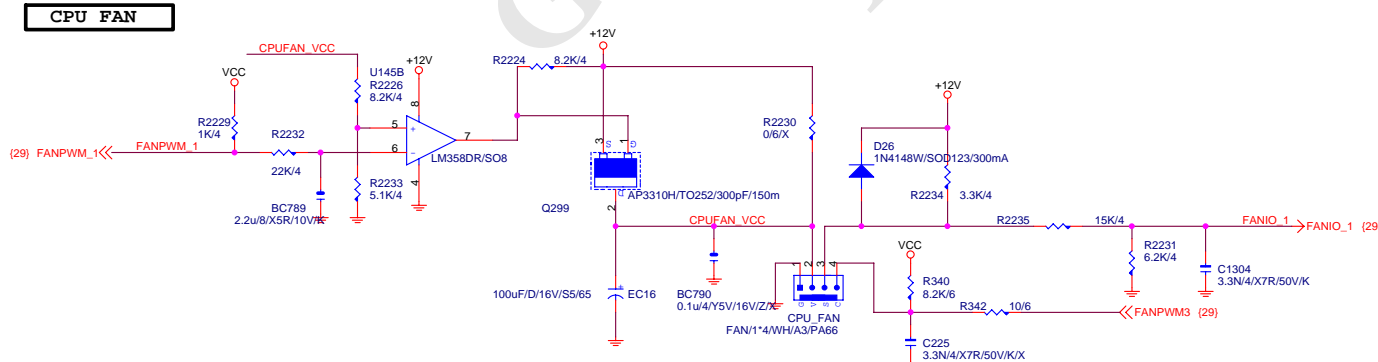
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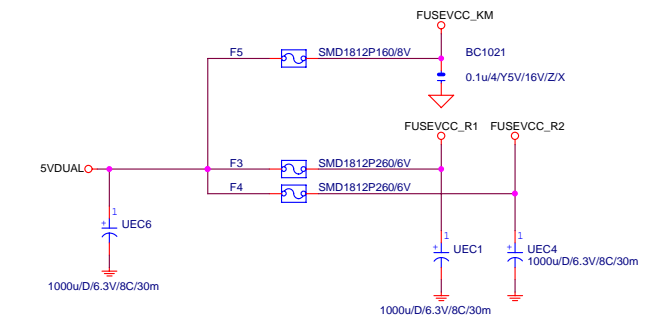
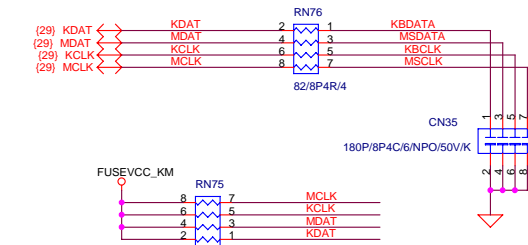
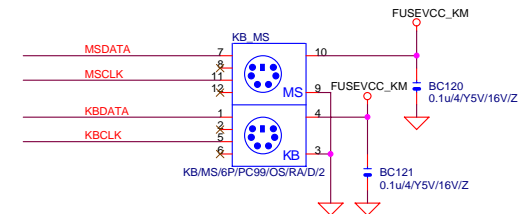
PWR FAN



CPU FAN

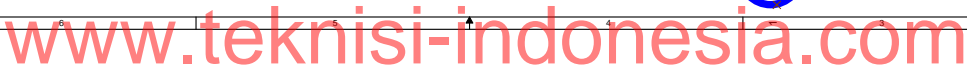


KB & MS

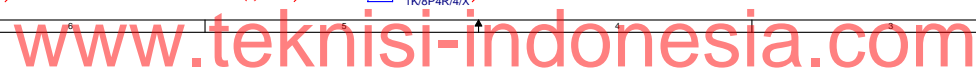


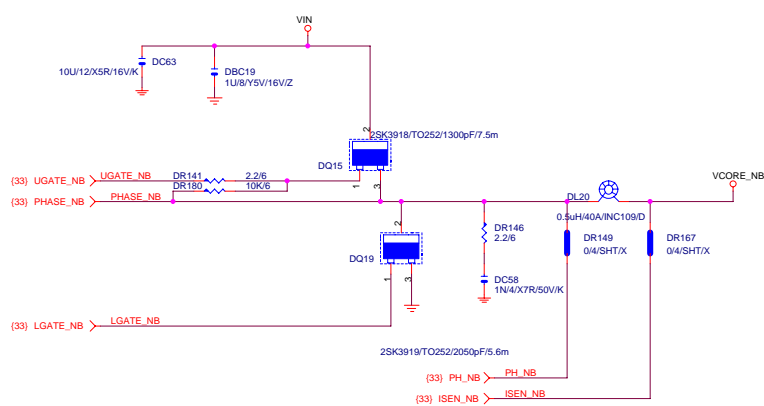
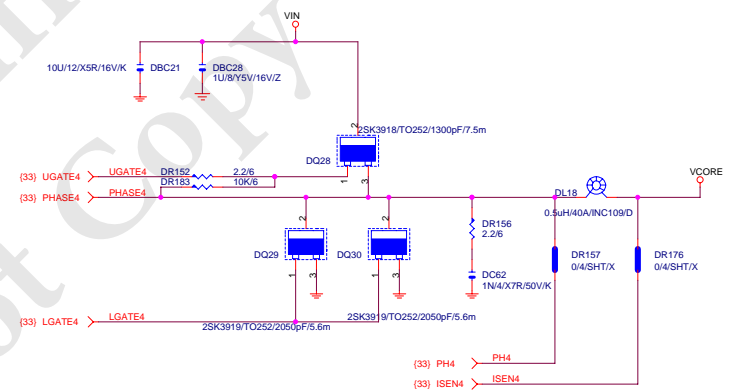
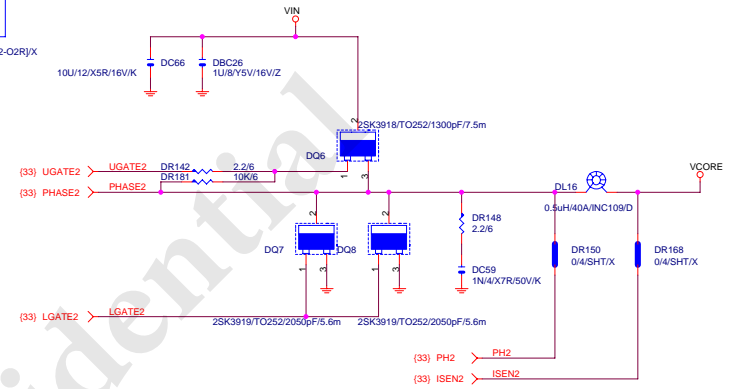
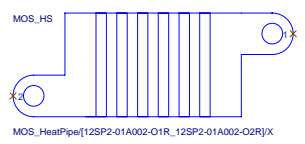
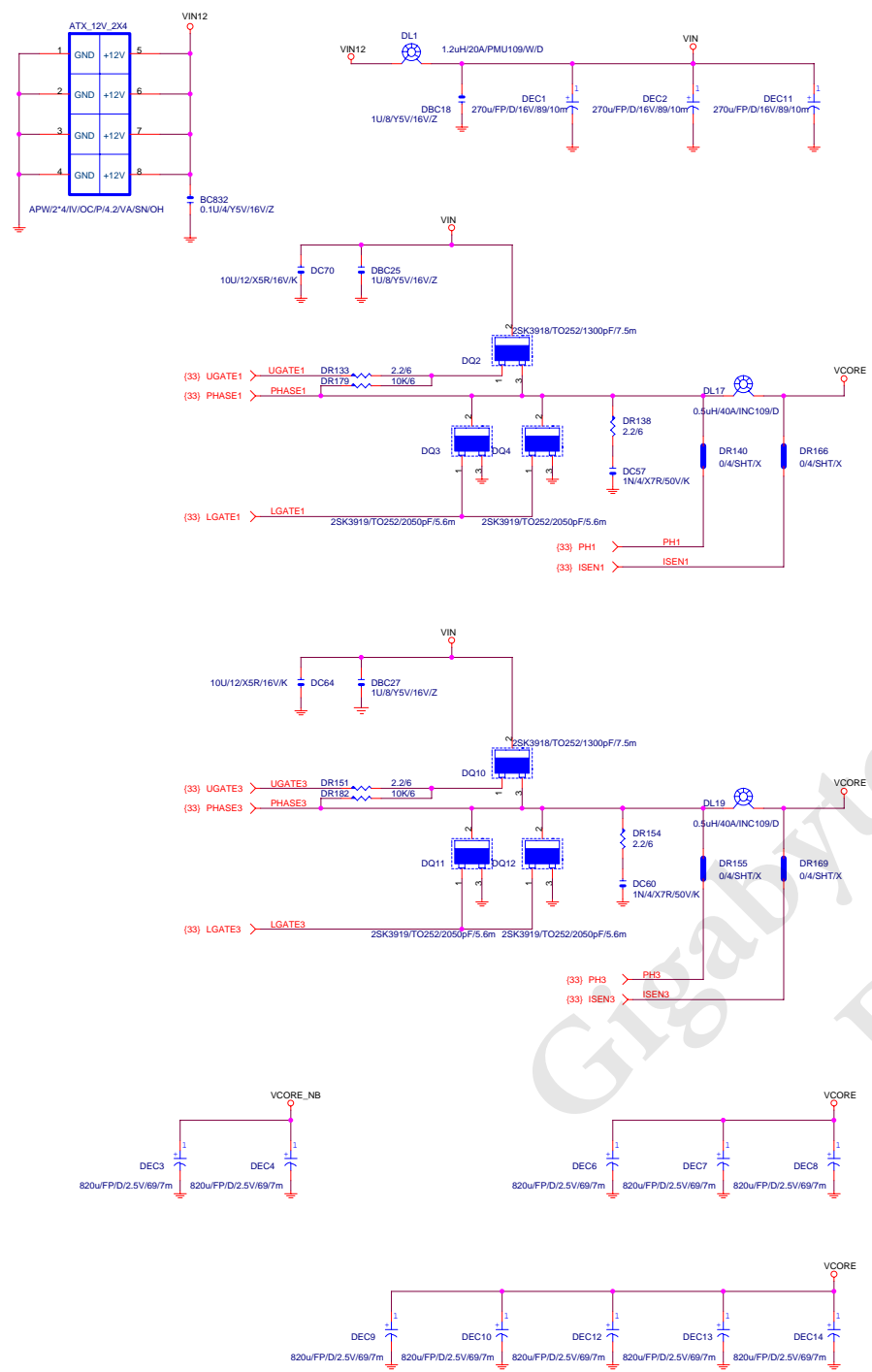
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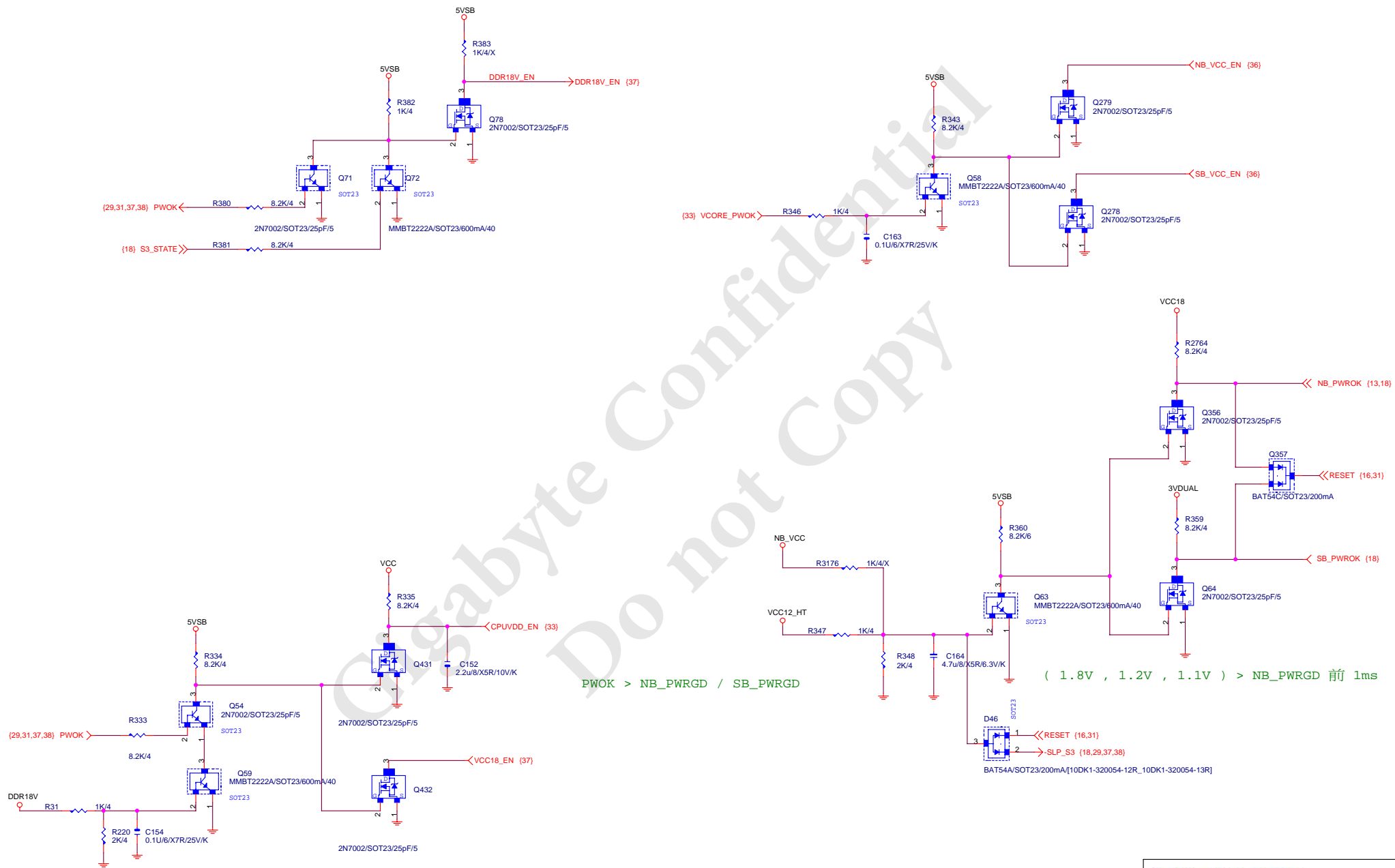






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