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IZ87D-AHT REV 5.3

CPU:

Intel Ivy HASWELL processors in LGA1150Package 95W

System Chipset: Z87

Main Memory:

Dual Channel/DDR-III*4(Max 16GB) 1066/1333/1600

Onboard Device:

Super I/O:IT8728

LAN:Realtek 8111E

HD Codec:ALC898 6 jacks

Power solution:

CPU Voltage Regulators:12phase by ISL6367 High 1 Low 1 OV BY ISL6367

DDR Voltage Regulators:1Phase by FP6326 high 1 Low 2 OV BY UP1811

Expansion Slots:

PCI EXPRESS 16X SLOT*2 PCI EXPRESS 4X SLOT*1

PCI EXPRESS 1X SLOT*3

REAR I/O:

PS/2 +2 layer USB2.0 Port

HDMI Port

DVI+VGA Port

USB3.0 PORT*2

Gb RJ-45 +2 layer USB3.0 Ports

Audio Jackets

Front I/O:

4SATA2(Red)+ 2SATA3(white)

USB 2.0 Header * 4

USB 3.0 Header * 2

CPU /System1/System2 FAN

Serial header

CIR Header

Front Audio Header & SPDIF Out 1

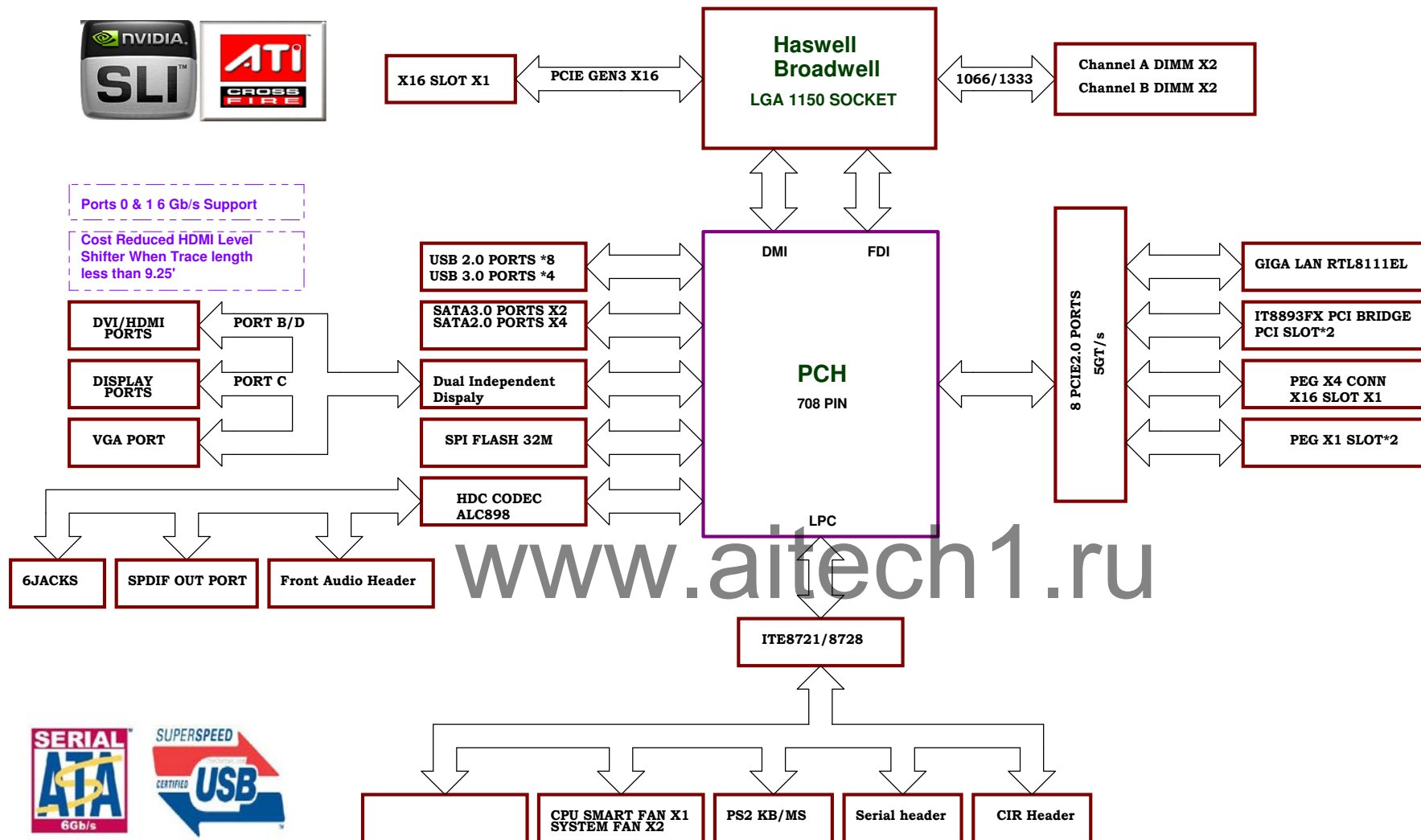
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Title BLOCK DIAGRAM		
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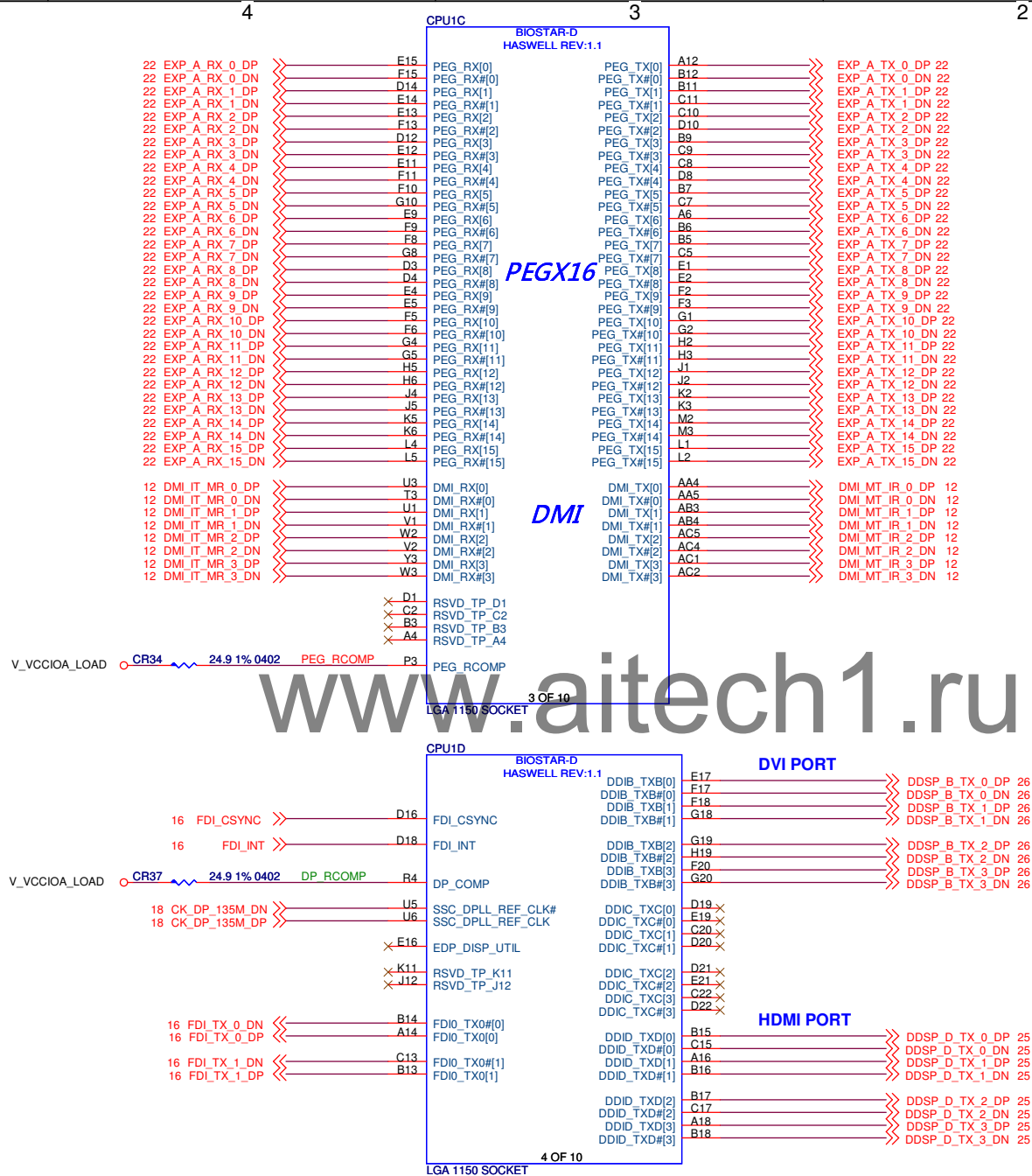
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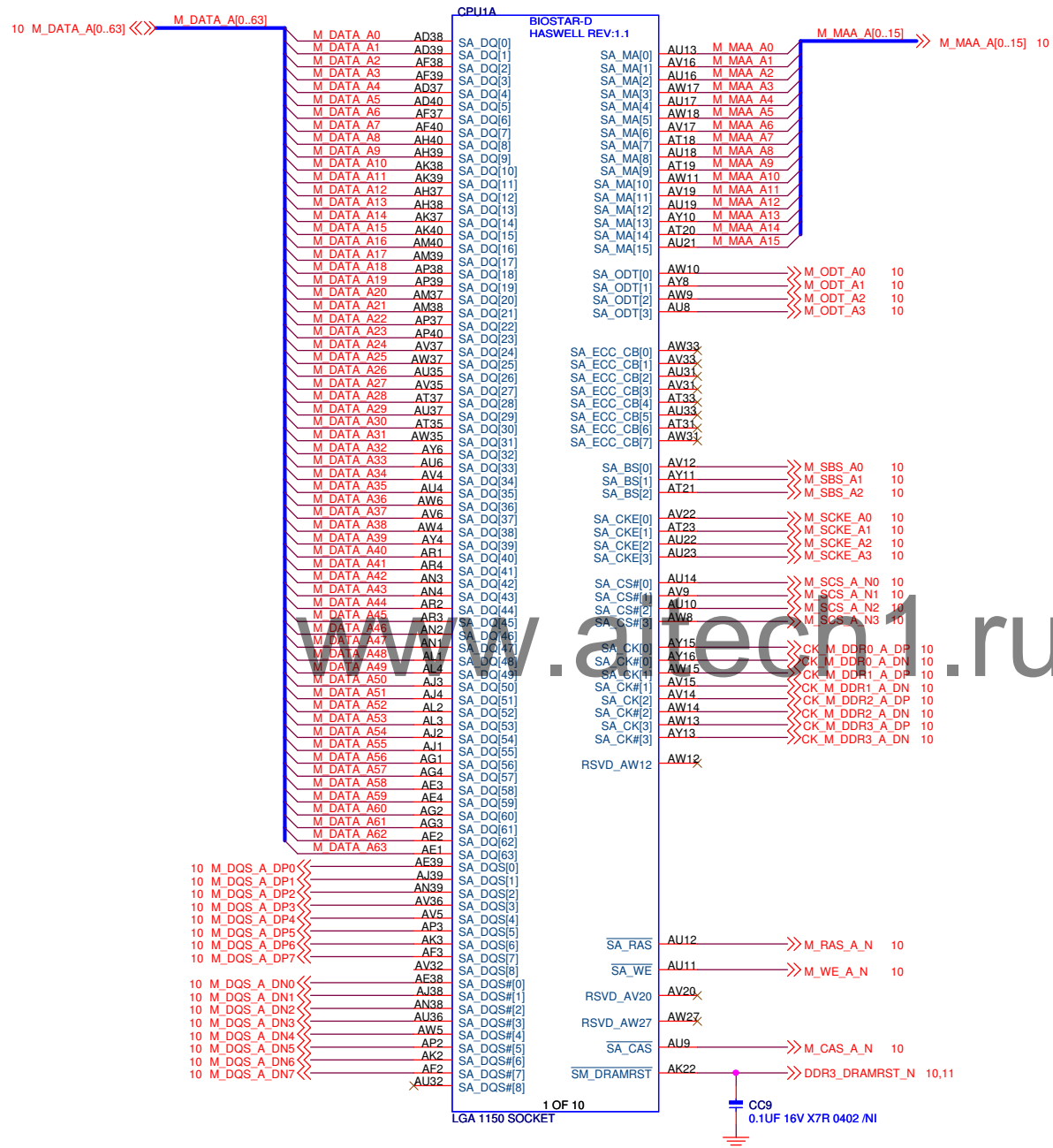
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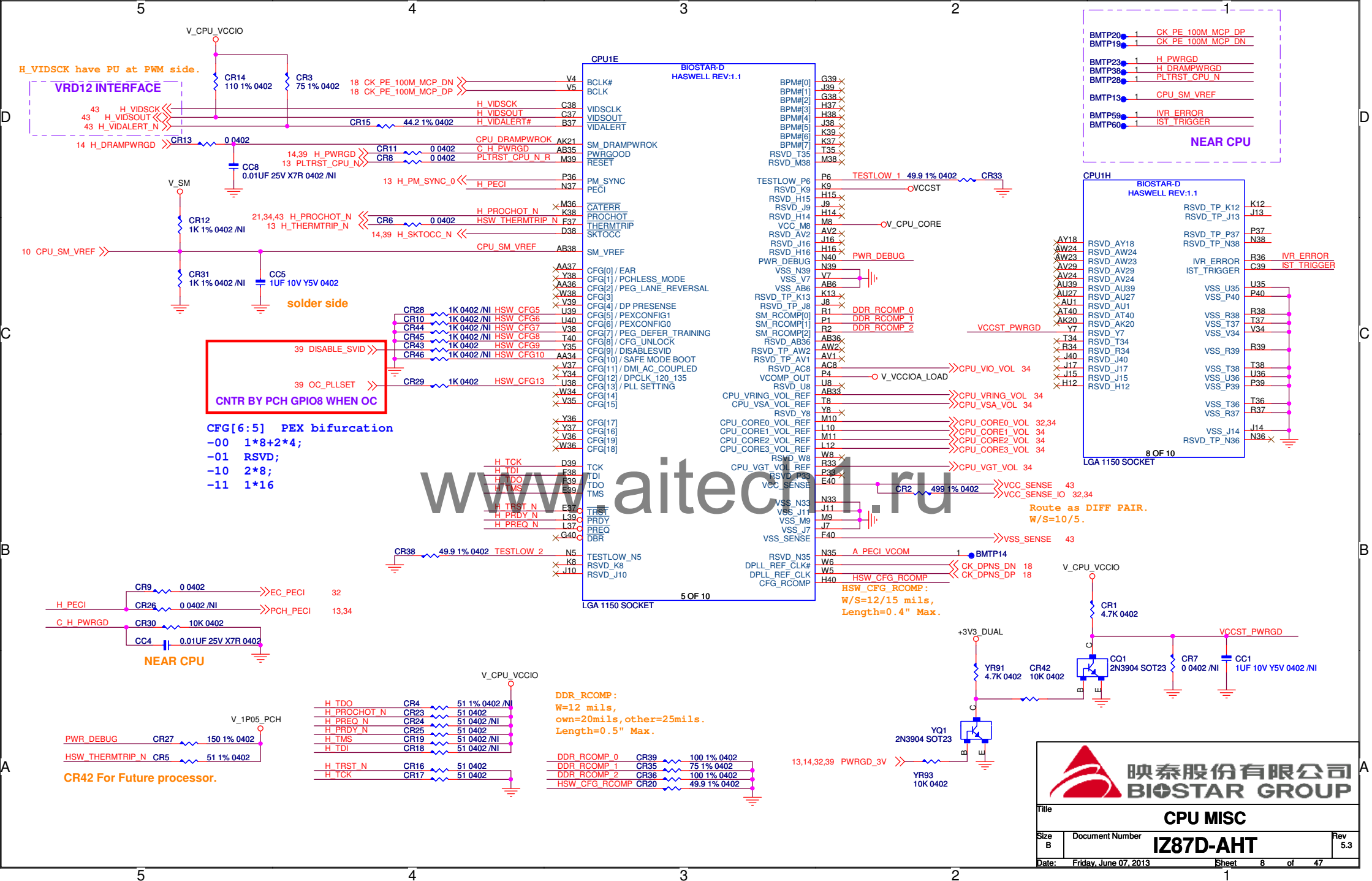


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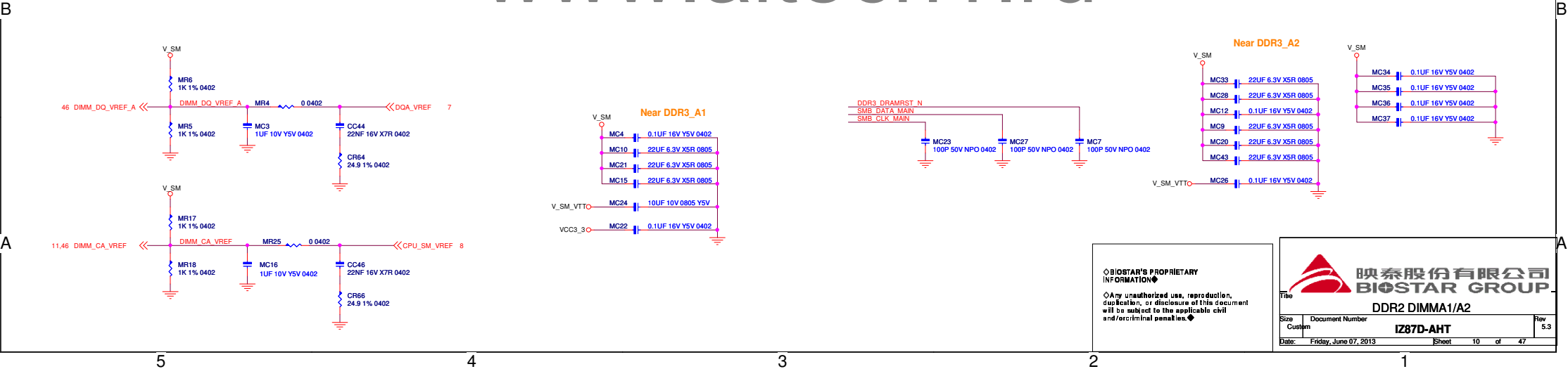
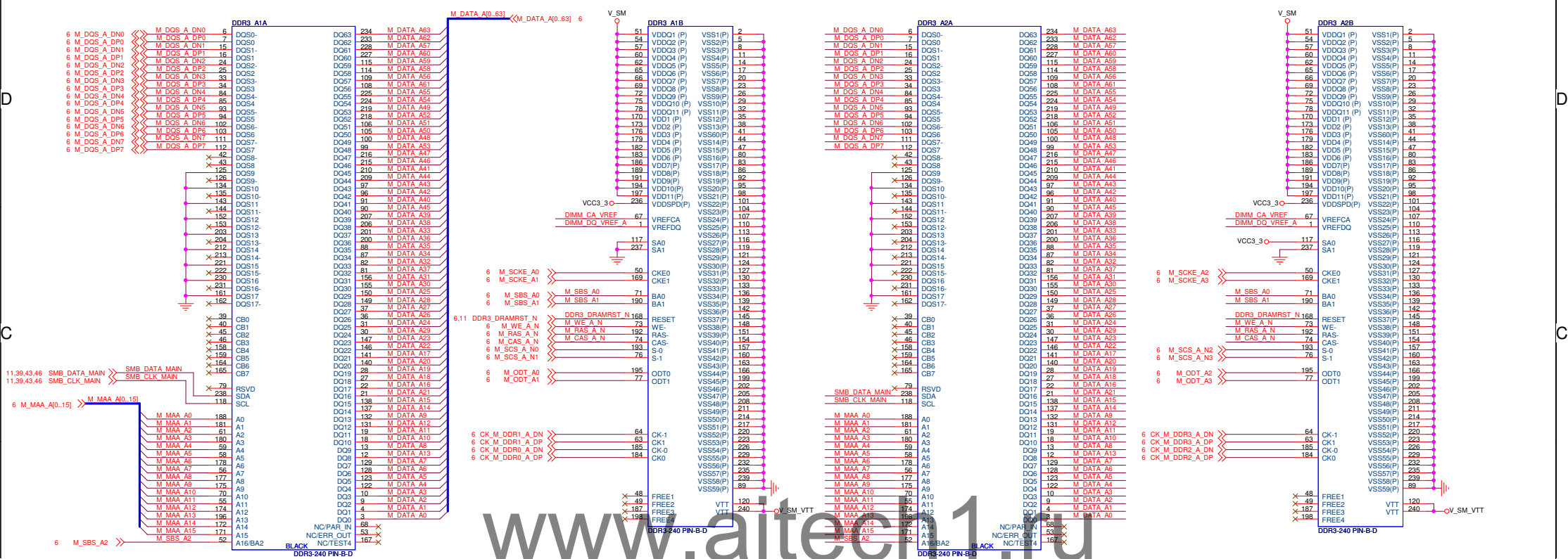
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MEMORY PART: M+Reference



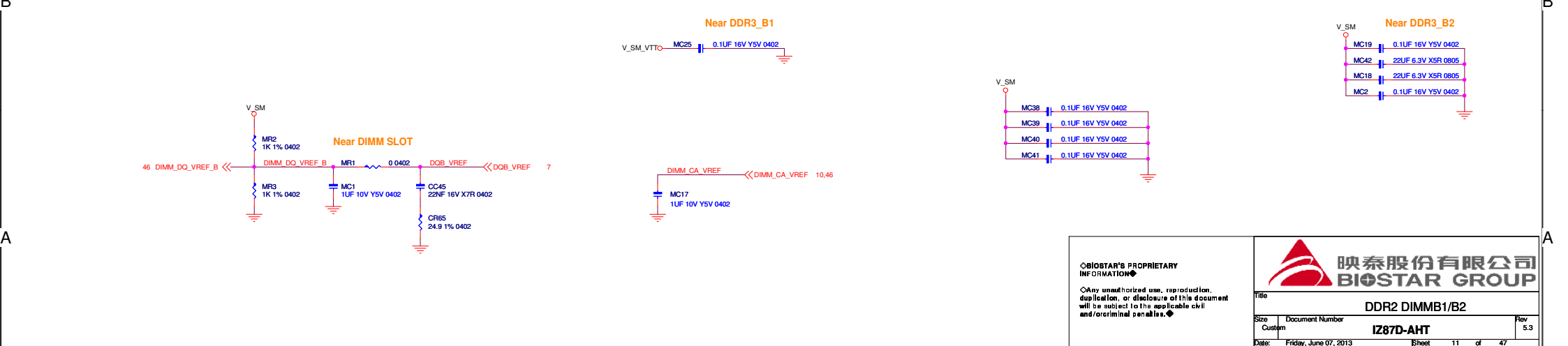
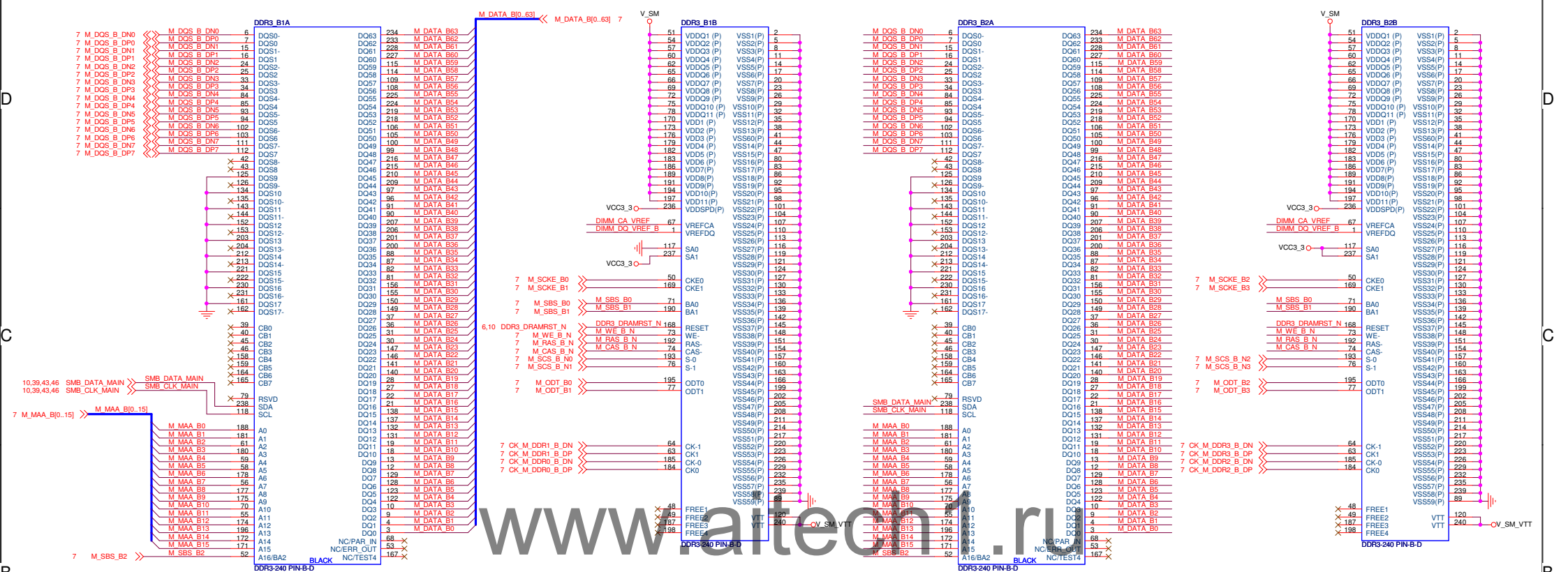
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DDR2 DIMMA1/A2	
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5 4 3 2 1

MEMORY PART: M+Reference

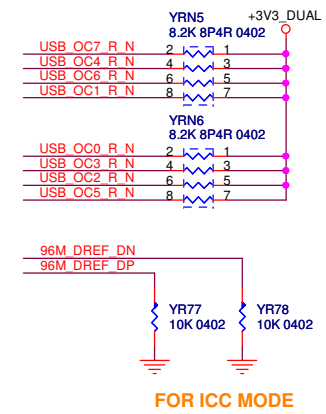
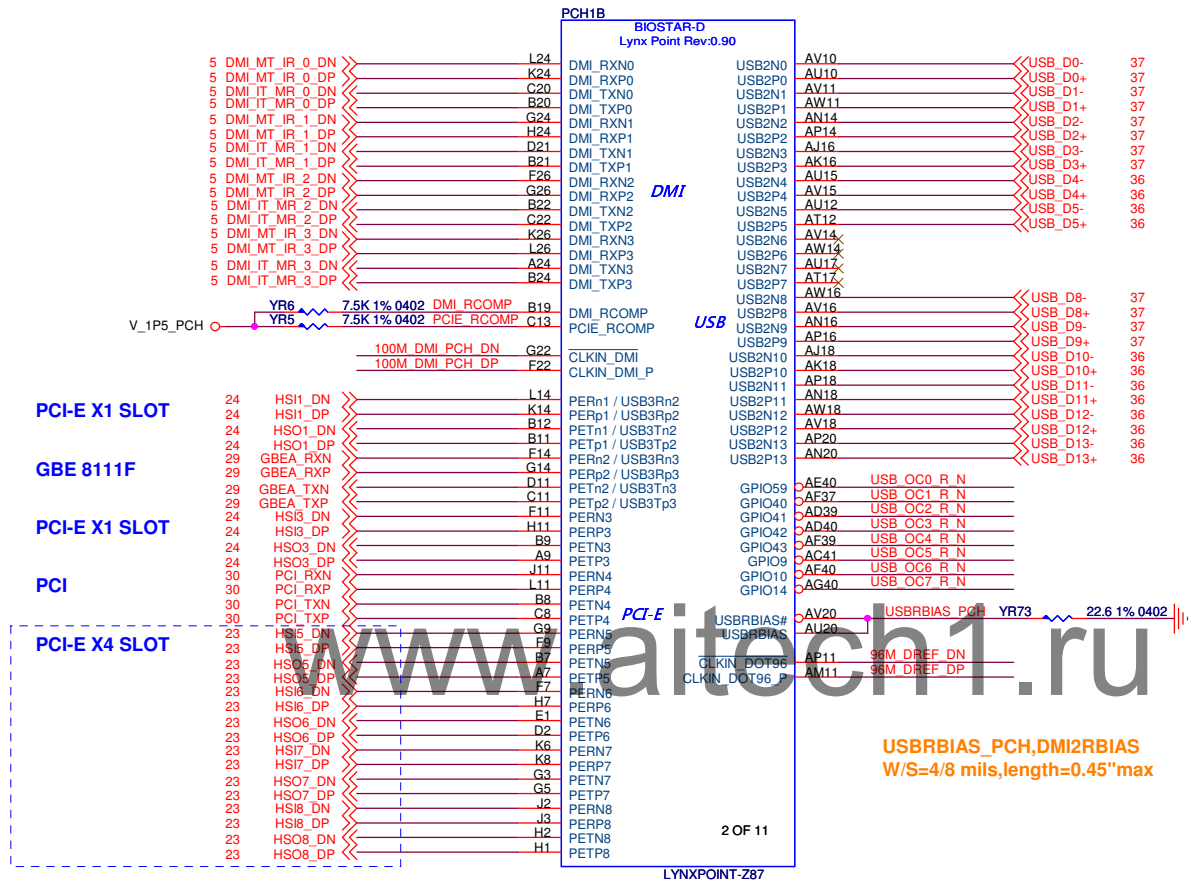
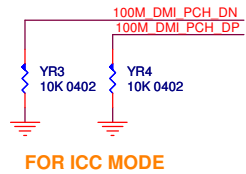


D

C

B

A



USBRBIAS_PCH,DMI2RBIAS
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Title
PCH DMI/PCIE/USB

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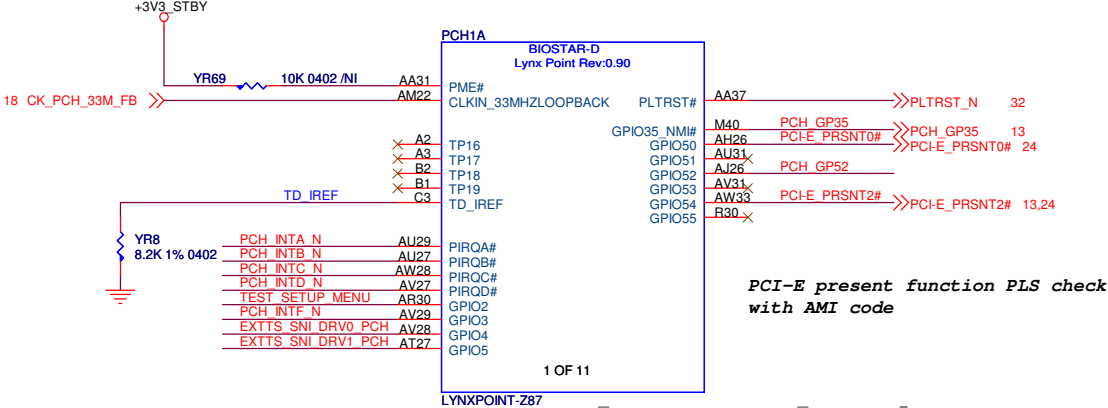
D

C

B

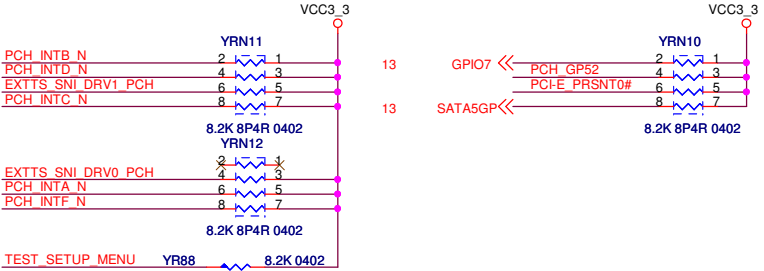
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PCH PART: Y+Reference



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TEST SETUP MENU TABLE
GP2 Board Style
1:Disable(Default)
0:Test setup menu ENable.



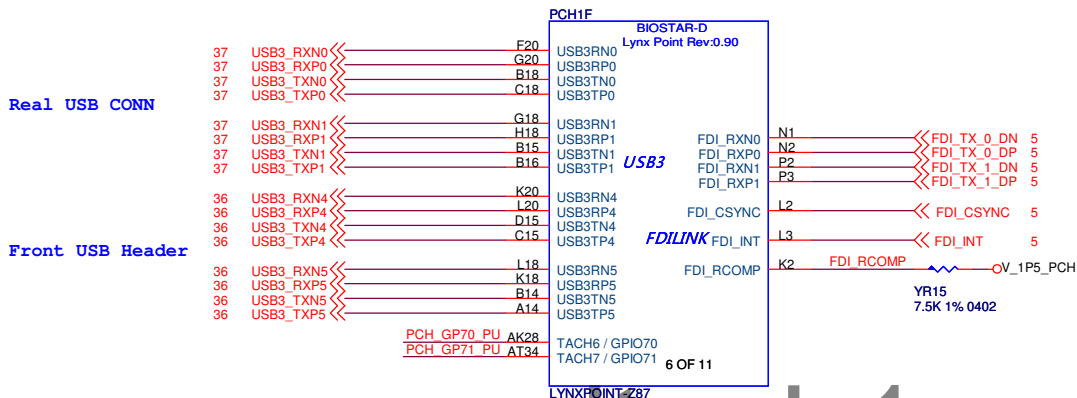
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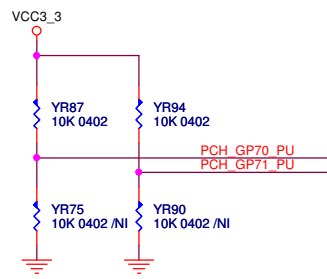
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FOR LPT:
GP70 STRAP---USB3 PORT4,
GP71 STRAP---USB3 PORT5.
SOFT STRAP TO DETERMINE NATIVE FUNCTION.

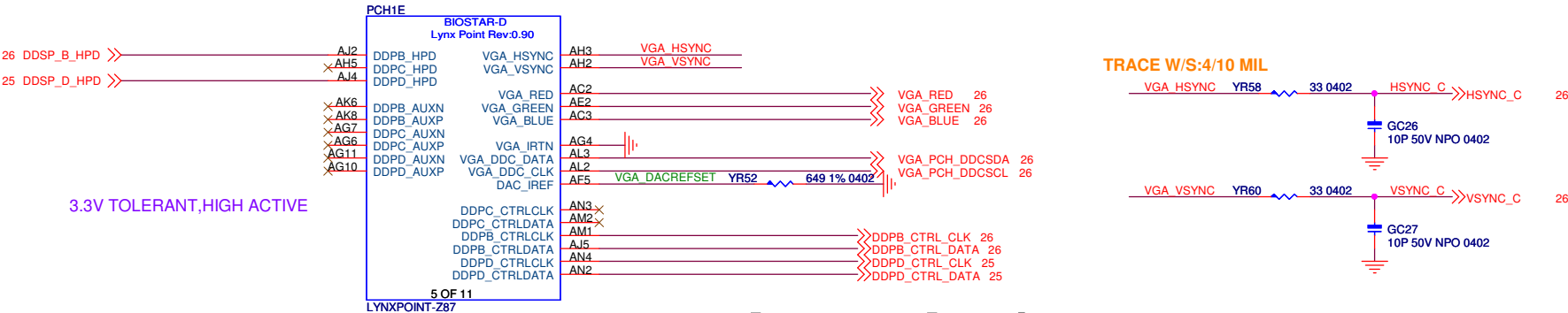
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Title PCH USB3/FDI LINK		
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PCH PART: Y+Reference



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REMOVE LEVEL SHIFTER WHEN TRACE LENGHT LESS THAN 9.25 INCHES

	FUNCTION
PORTB	DVI OR SDVO
PORTC	DISPLAY PORT
PORTD	HDMI/DVI/eDP

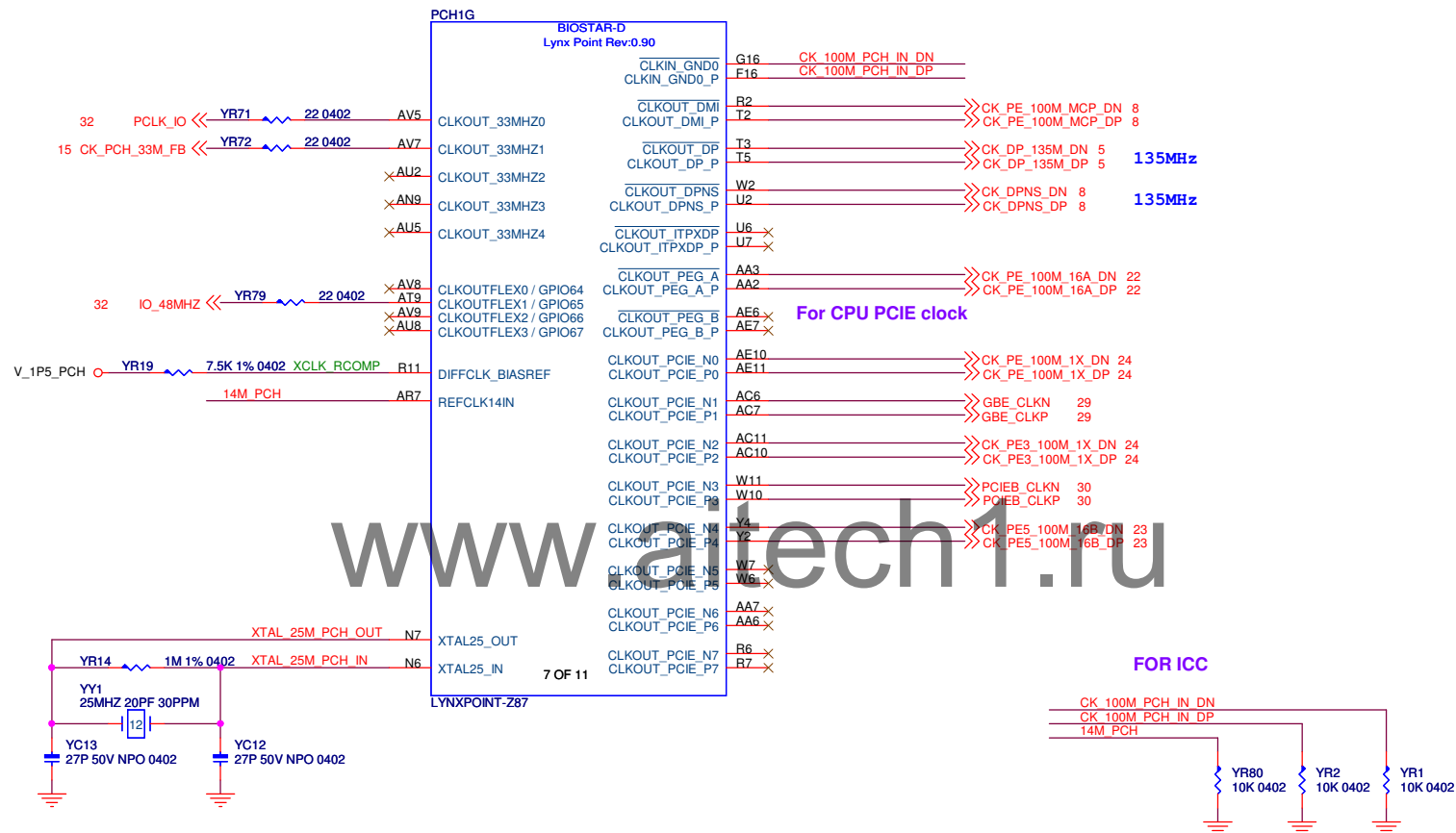
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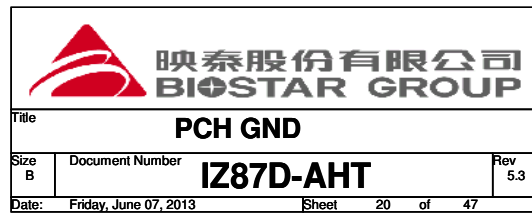
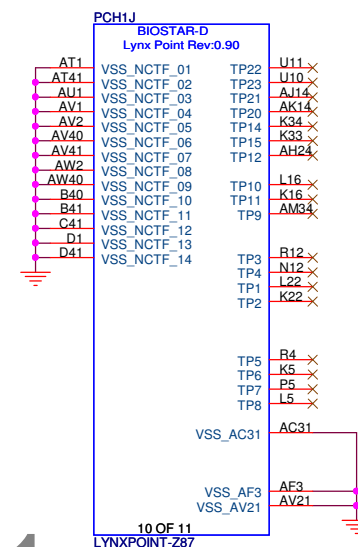
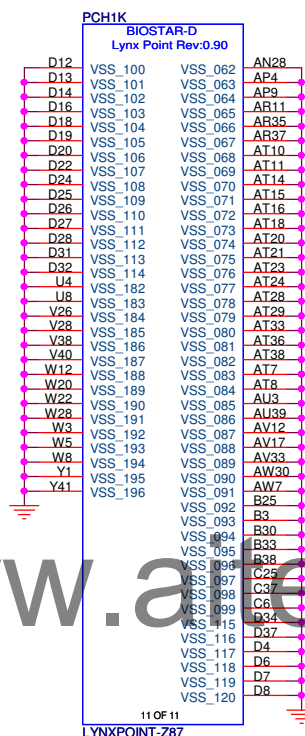
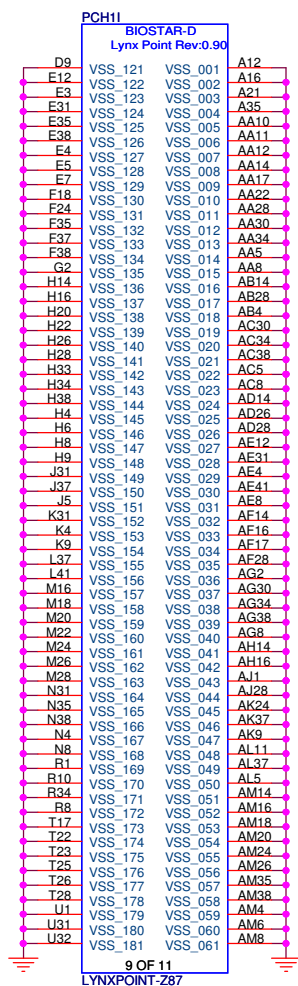
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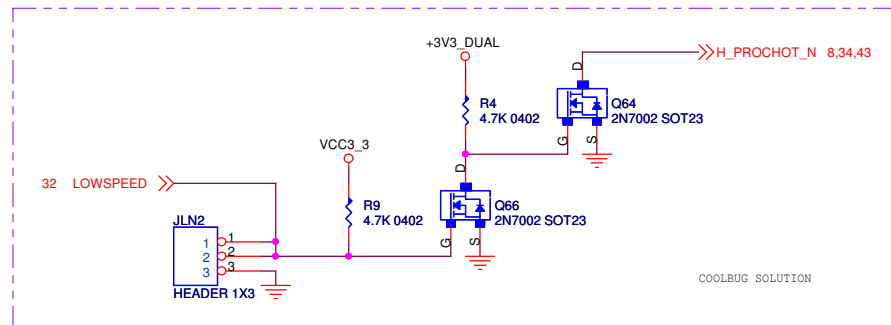
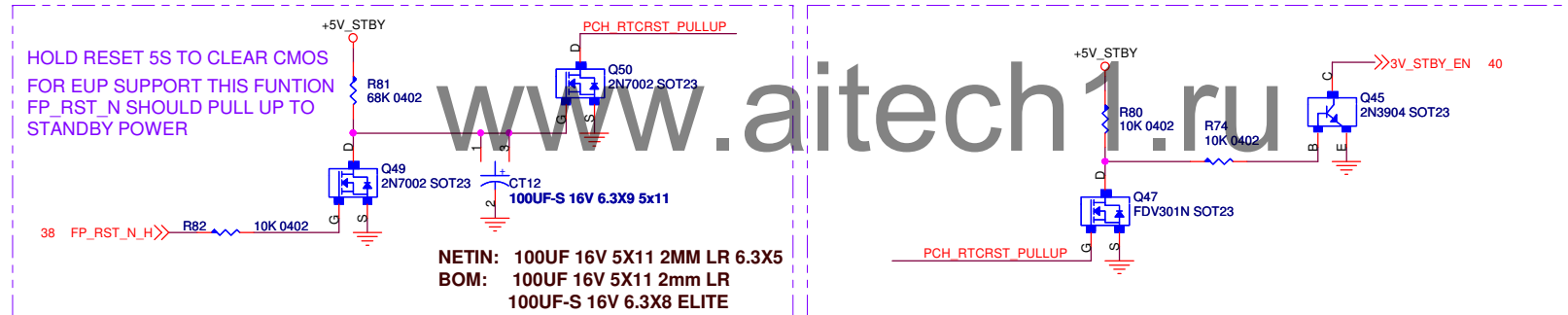
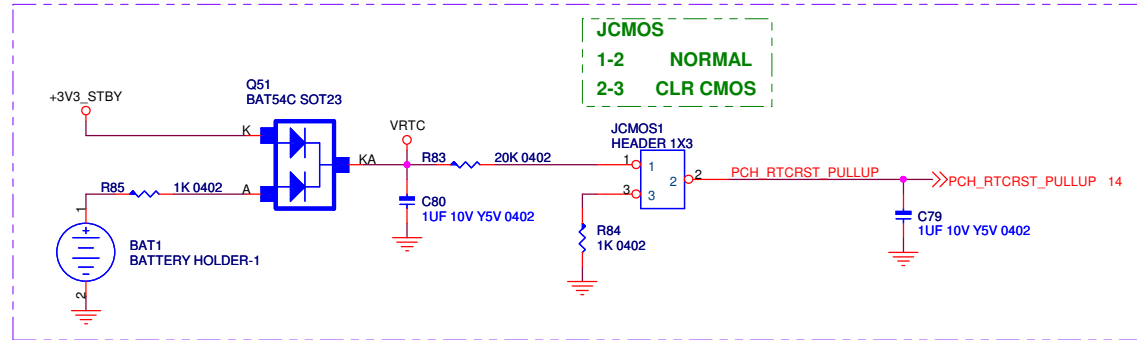
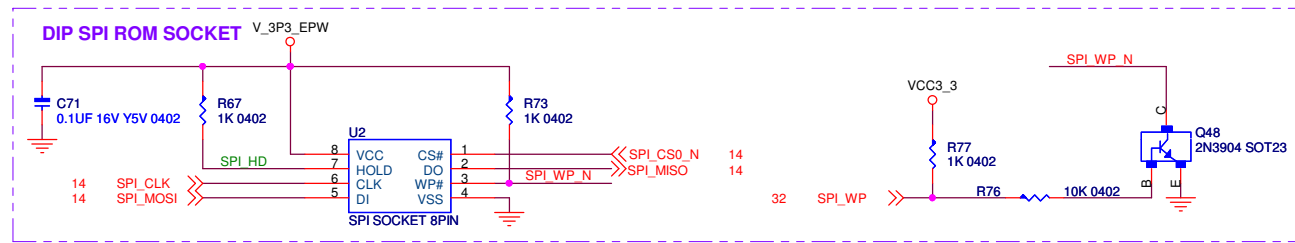
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Title PCH VGA/DISPLAY PORT		
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PCH PART: Y+Reference







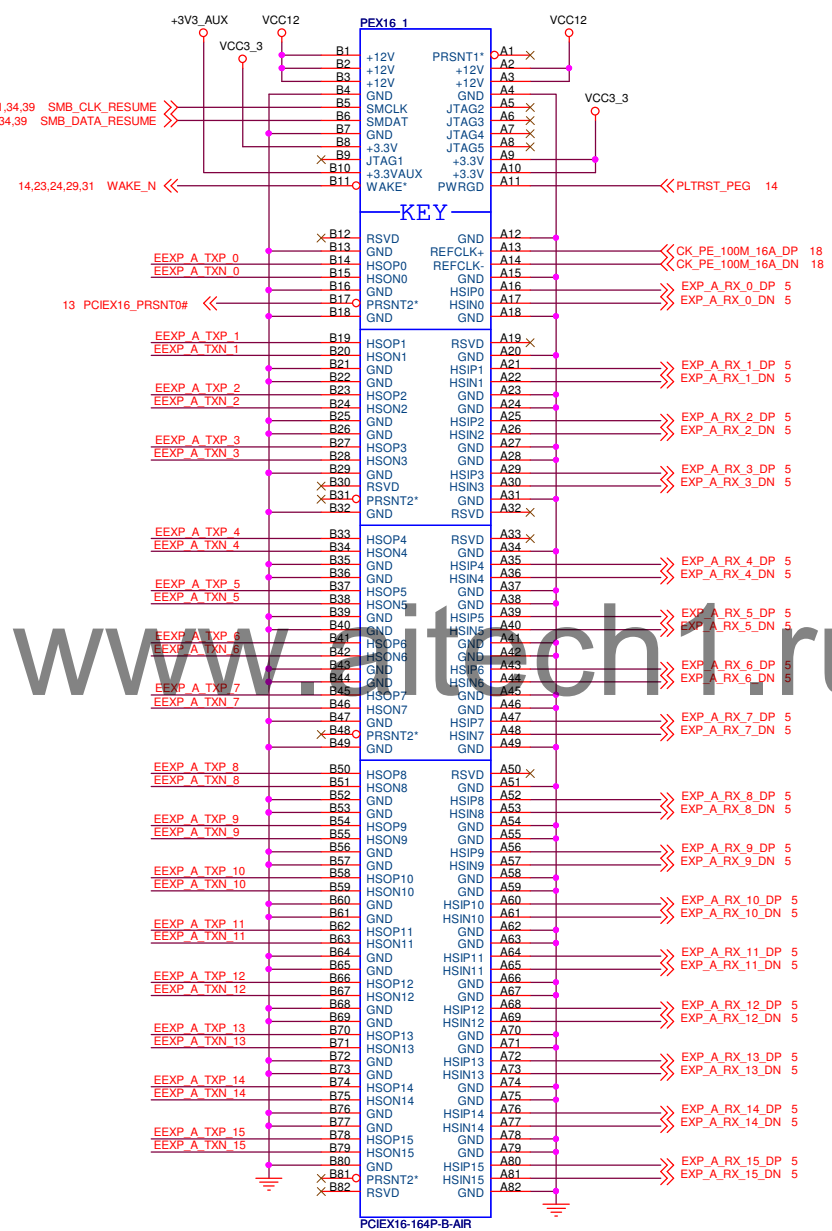
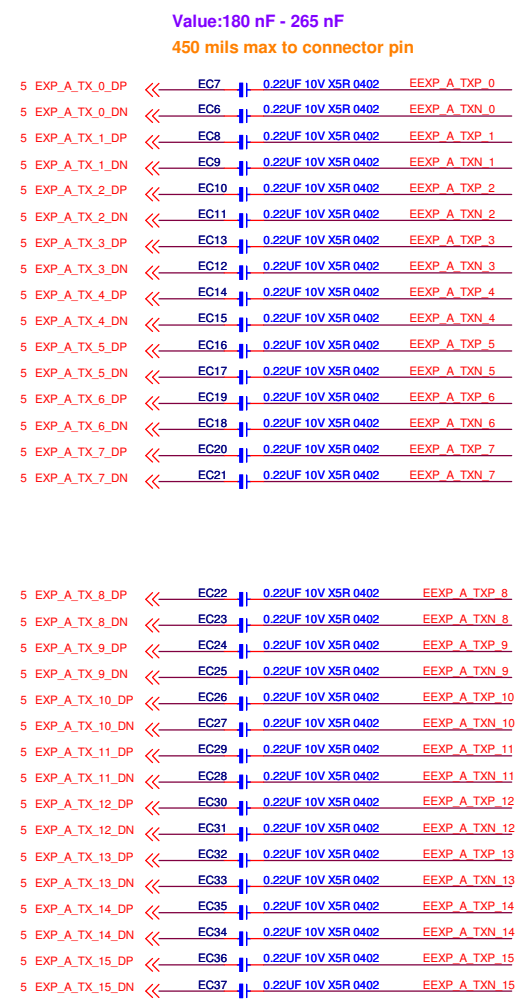
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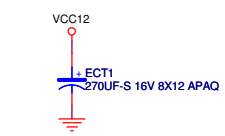


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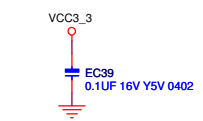
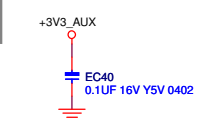
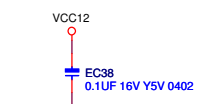
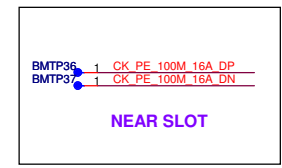
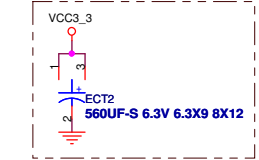
IZ87D-AHT



For ALL SOLID-----270UF-S 16V 8X11 ELITE
For NO SOLID-----470UF 16V 8X11.5



NETIN:560UF-S 6.3V 6.3X8 8X8
BOM: 1000UF 6.3V 8X12
560UF-S 6.3V 6.3X8 ELITE



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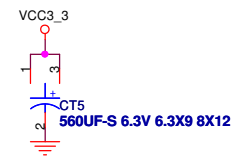
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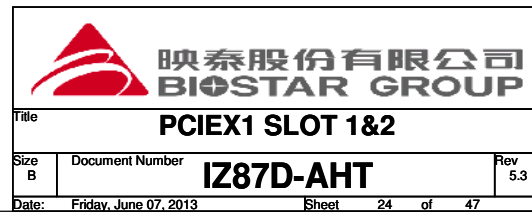
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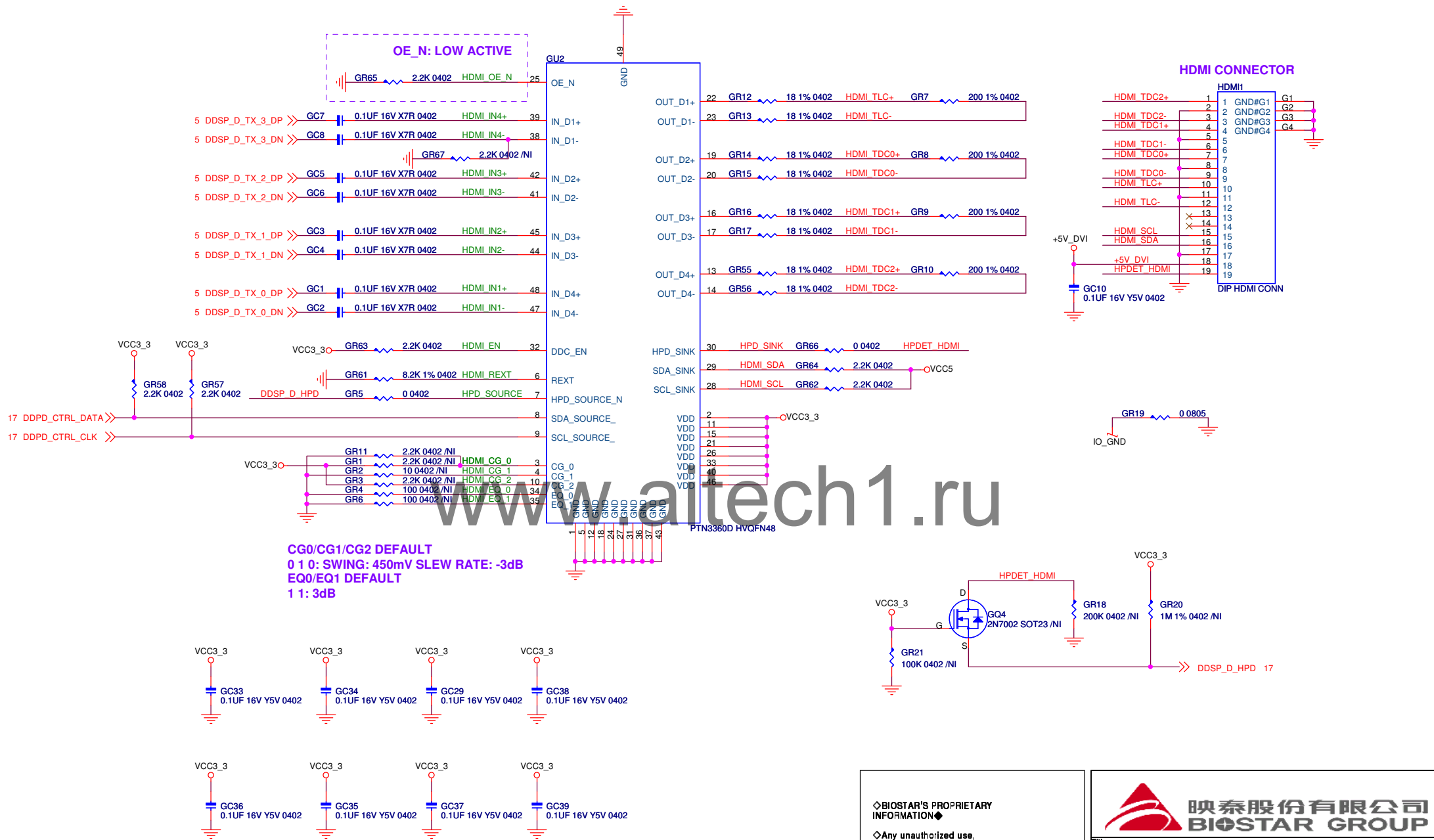
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Title				PCIEX16 SLOT2 (X4)			
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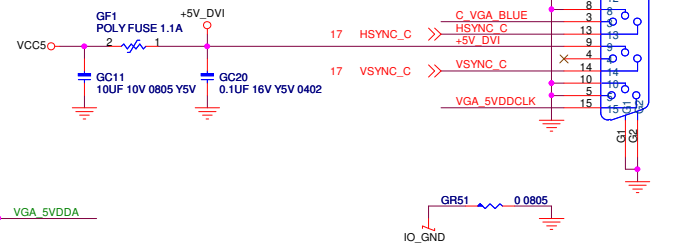
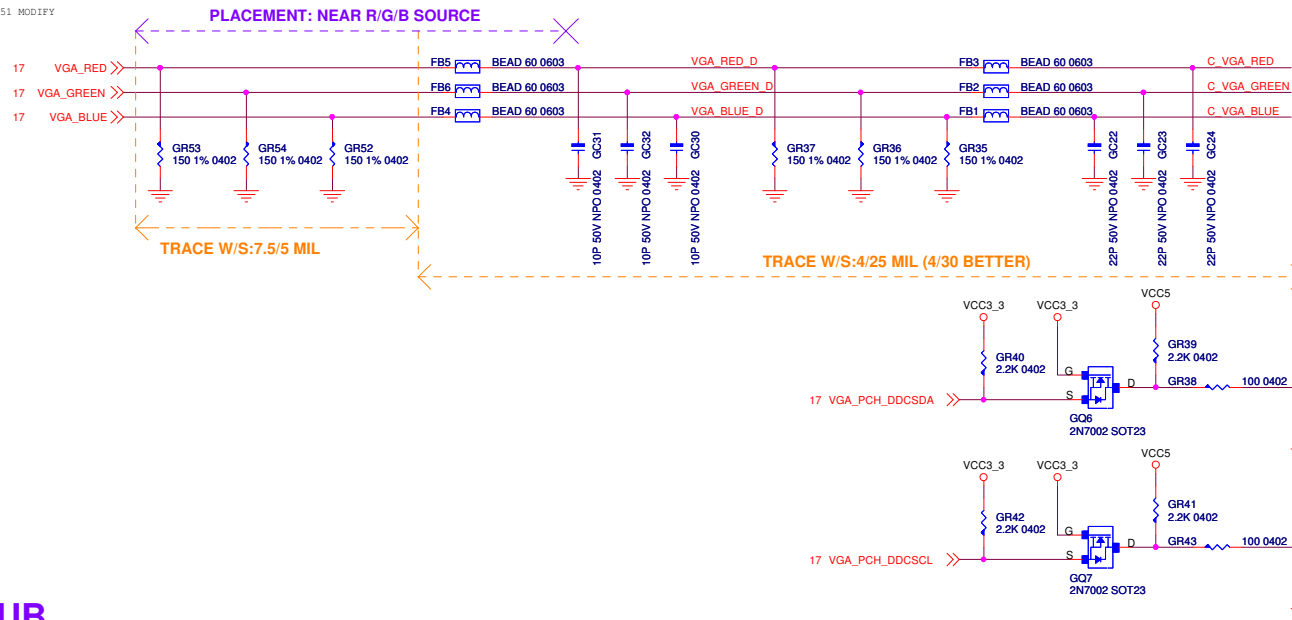
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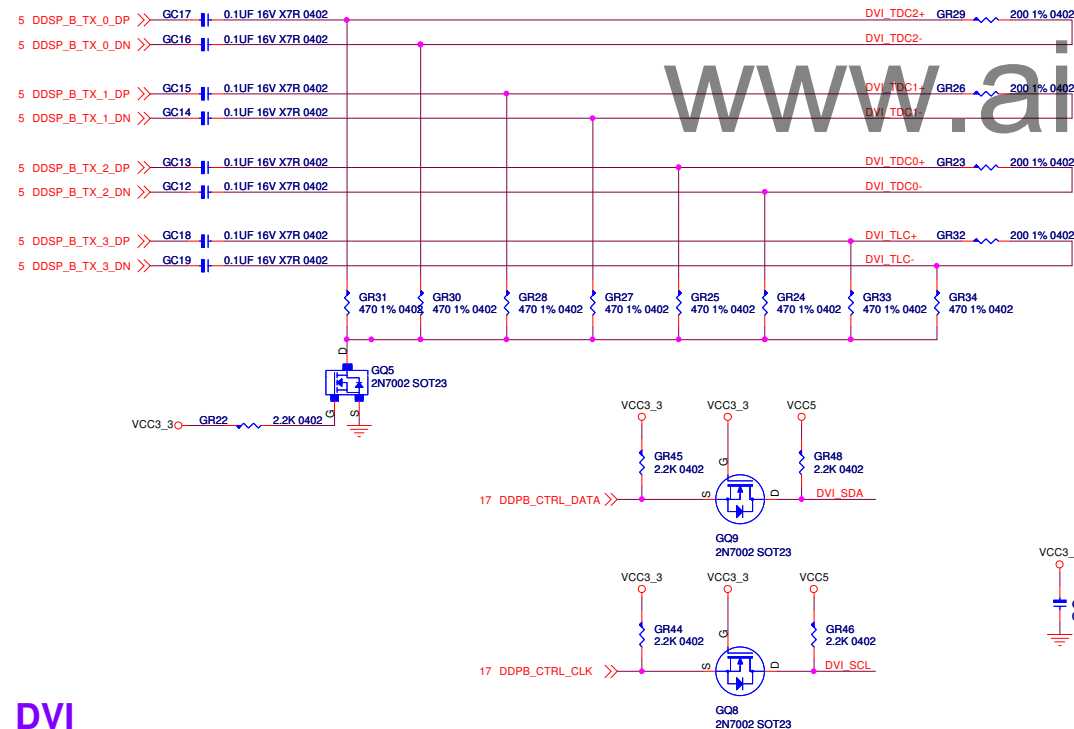
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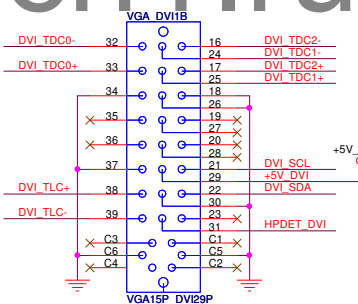
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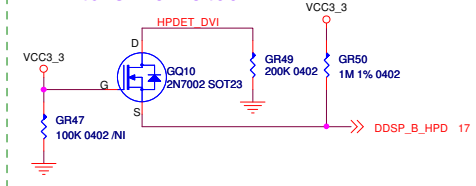
D_SUB



DVI CONNECTOR
DVI CONNECTOR TYPE ACCORD WITH SPEC



LEVEL SHIFTER
HPD +5V SWITCH TO +3.3V



DVI

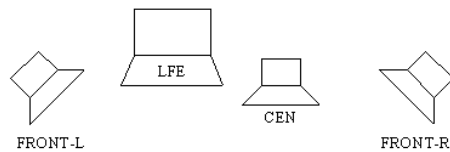
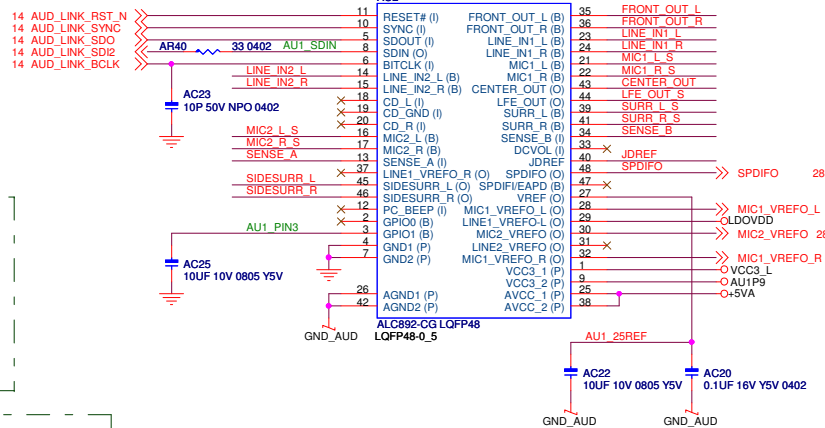
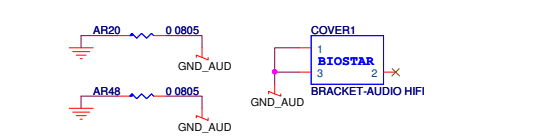
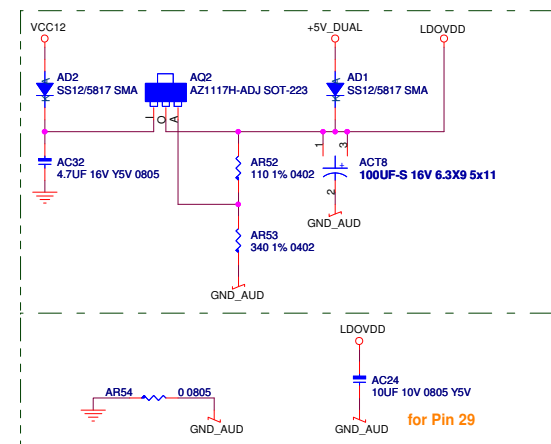
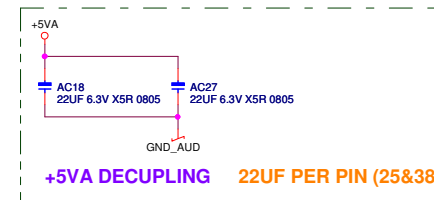
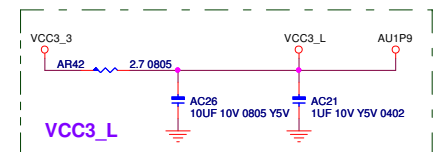
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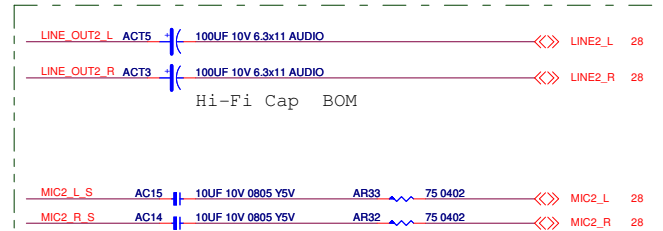
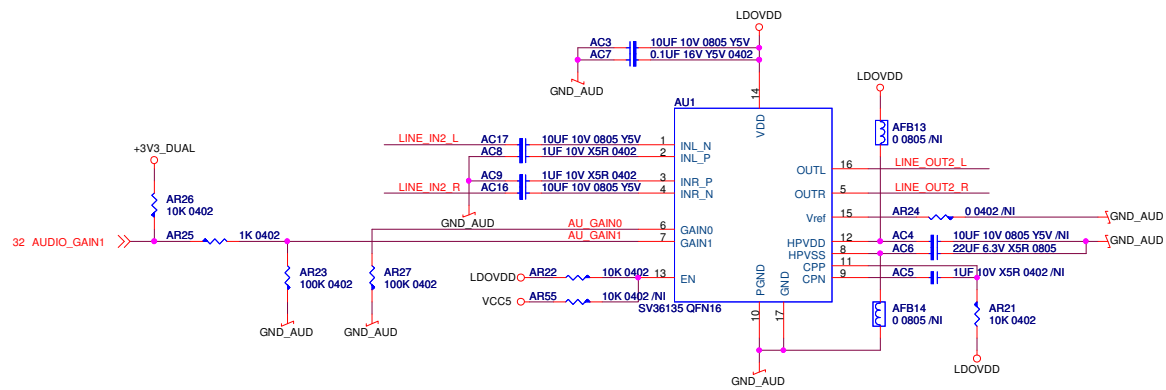


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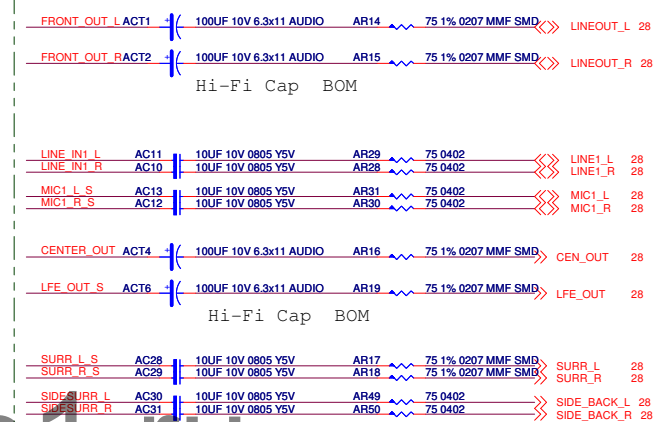
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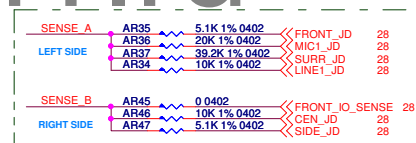
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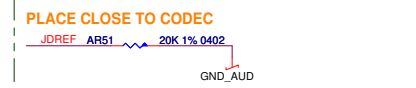
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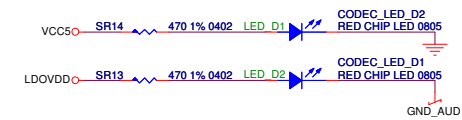
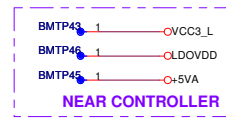
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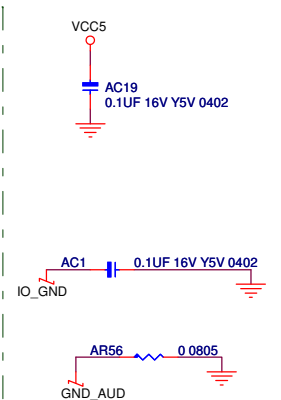
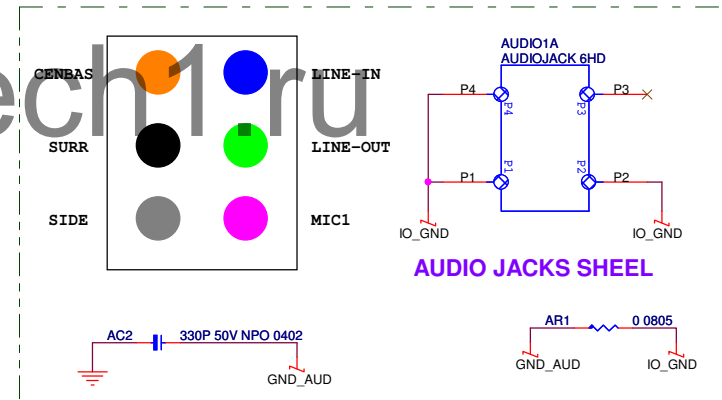
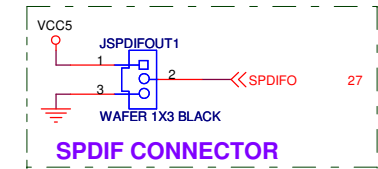
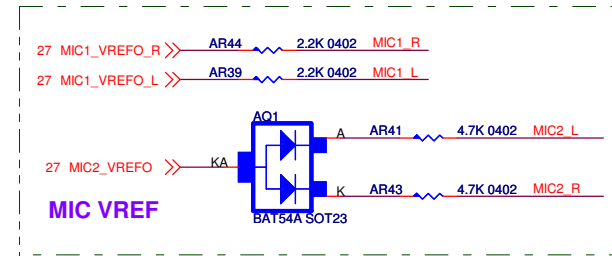
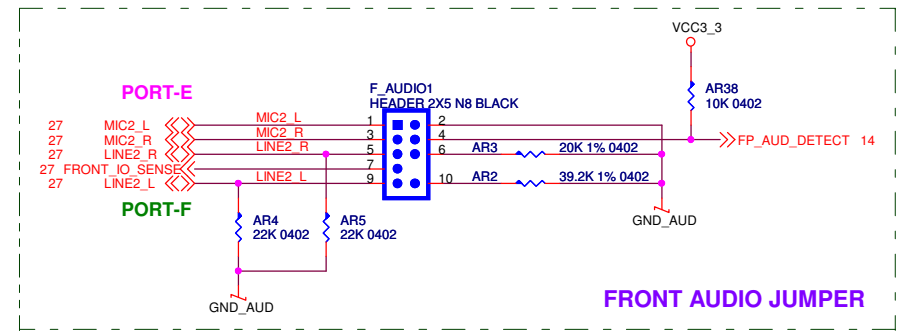
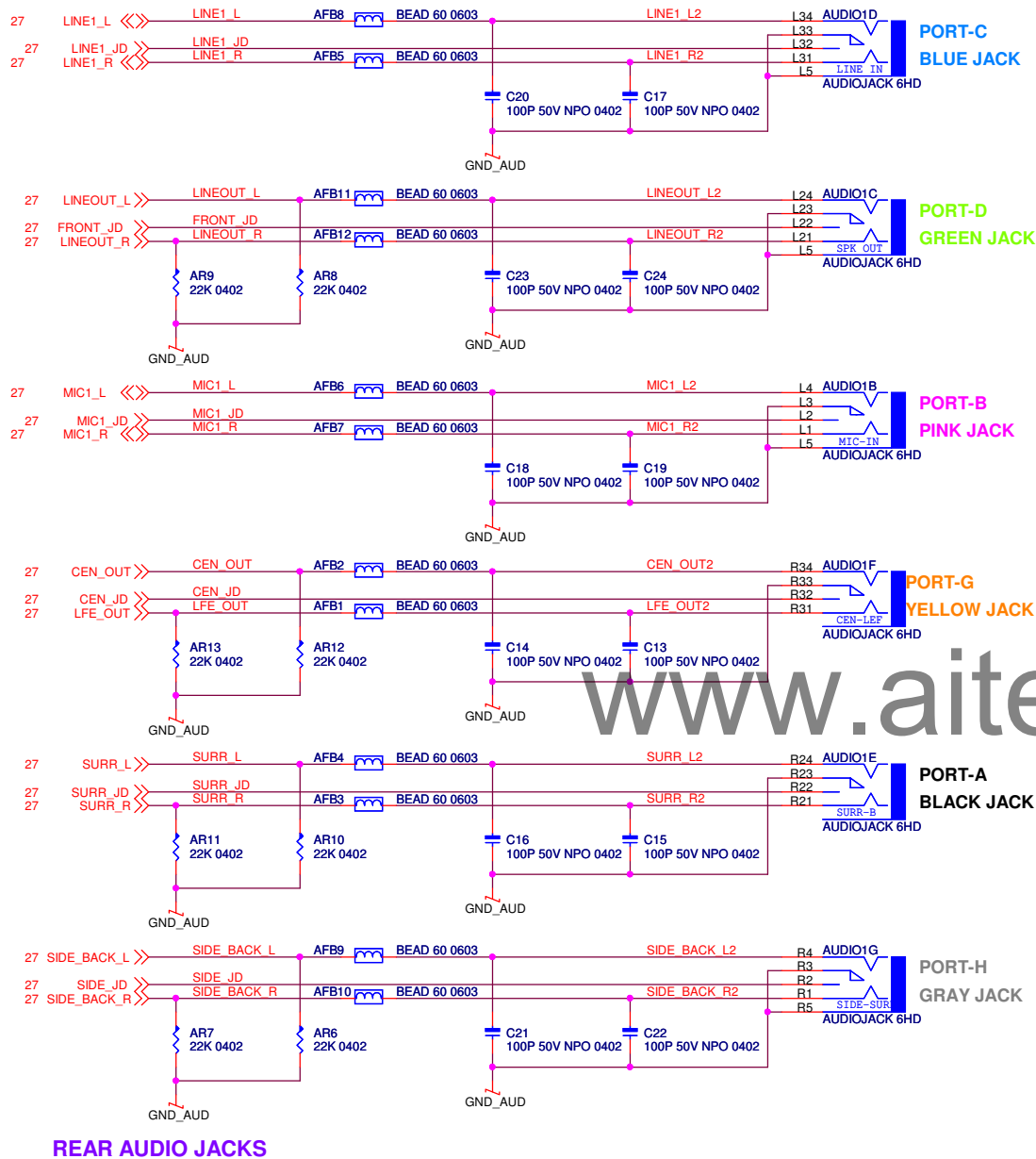


JACK SENSE



EXT_VOL_CTRL & JDREF





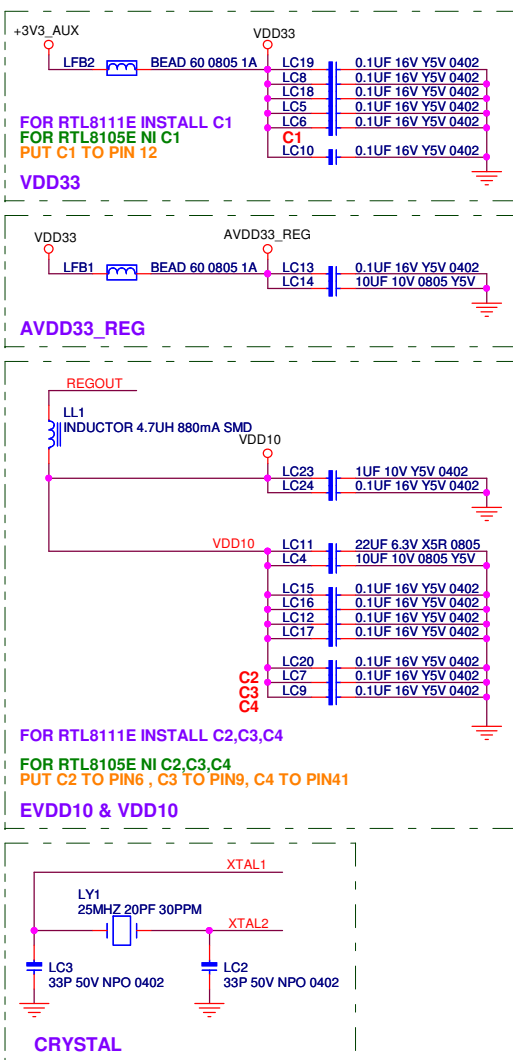
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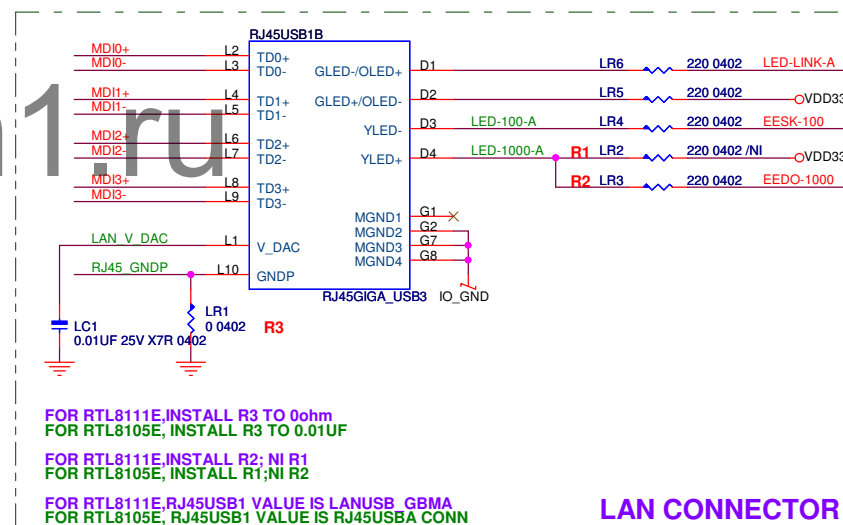
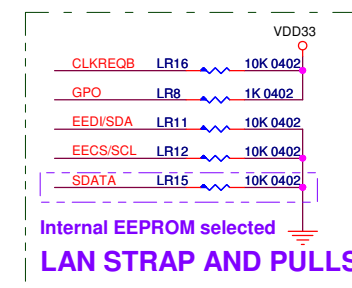
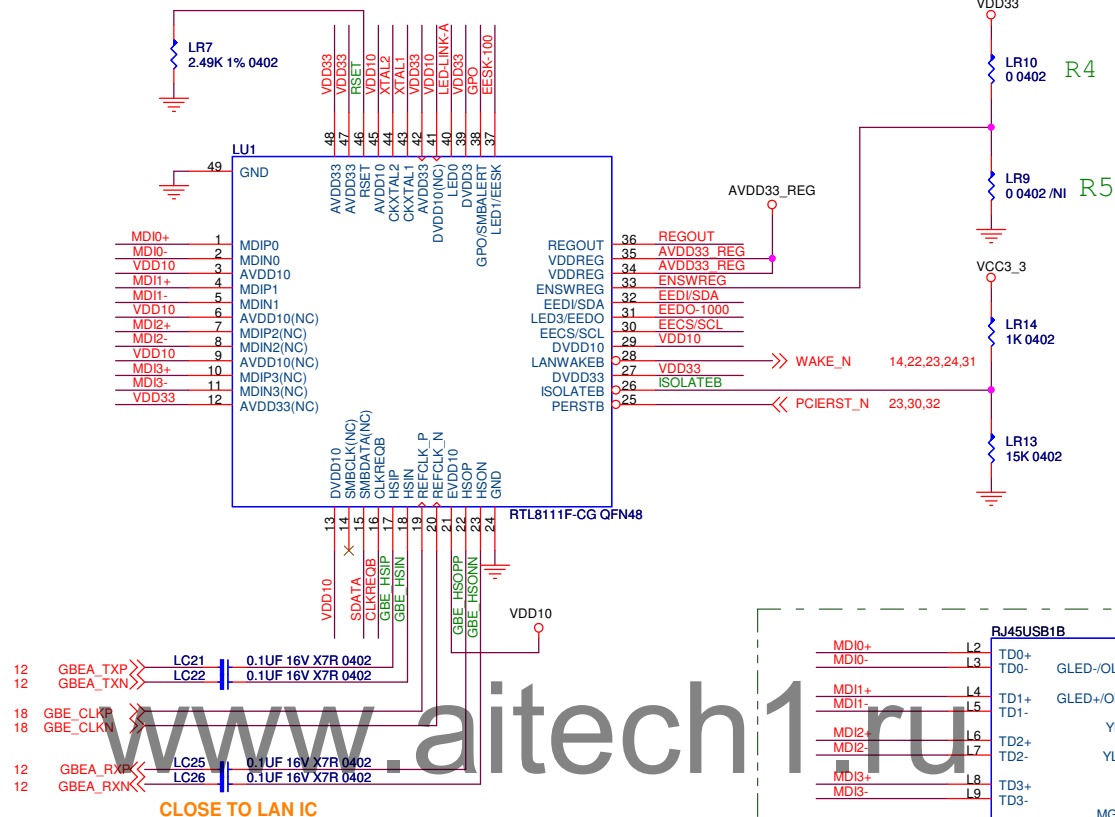
AUDIO CONNECTOR		
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LAN PART: L+Reference



COMPONENT CONTRAST LIST

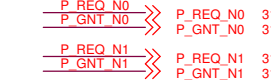
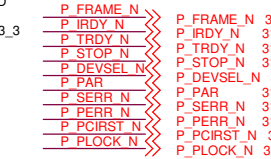
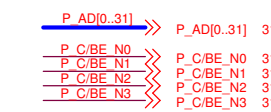
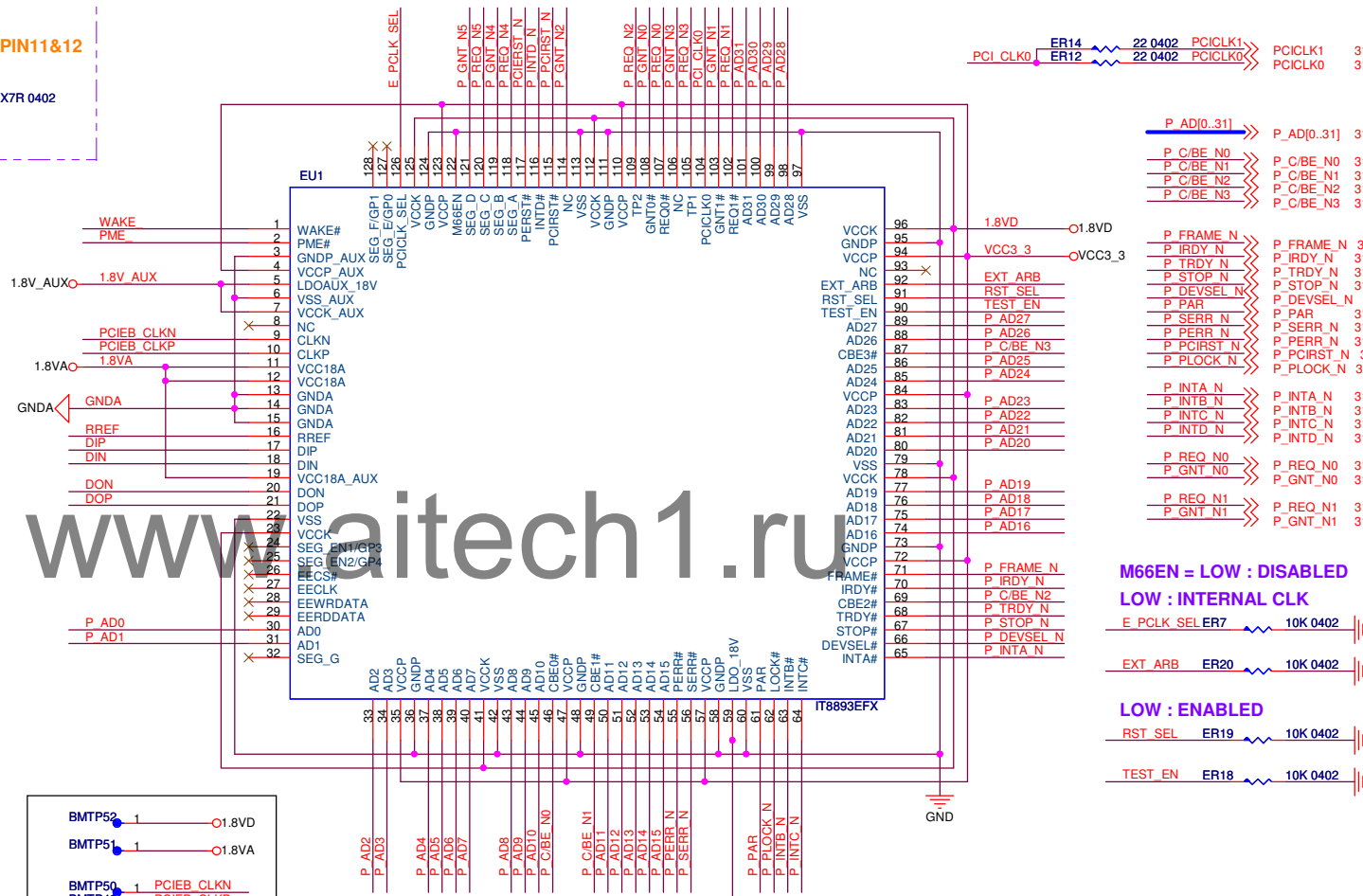
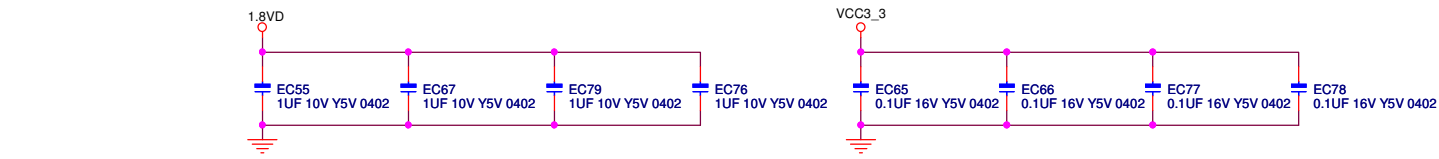
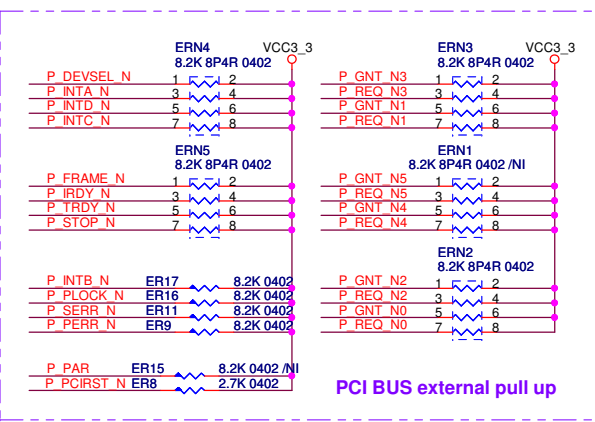
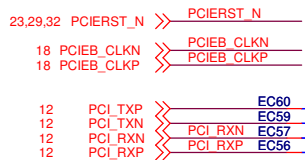
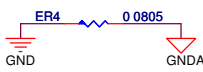
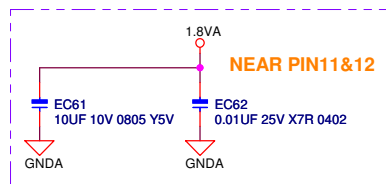
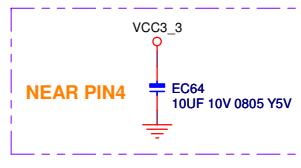
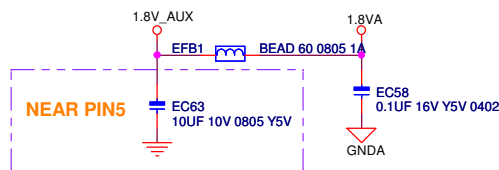
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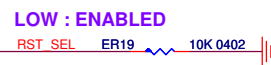
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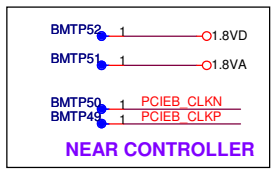


M66EN = LOW : DISABLED

LOW : INTERNAL CLK



LOW : ENABLED



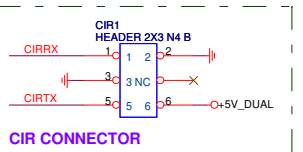
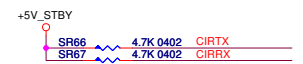
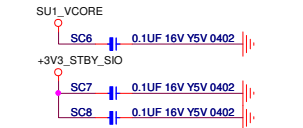
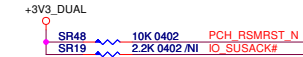
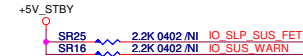
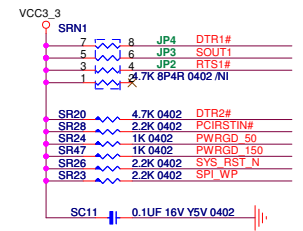
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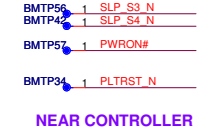
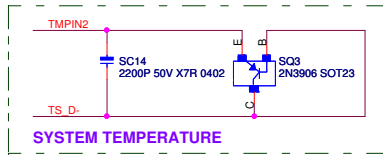
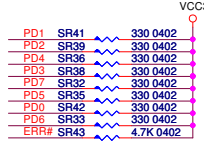
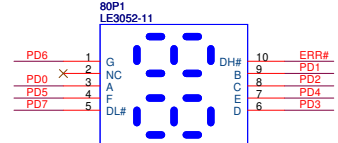
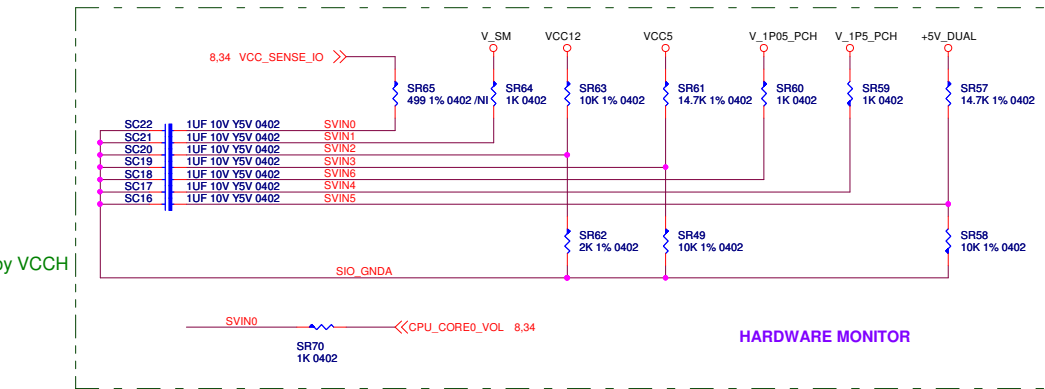
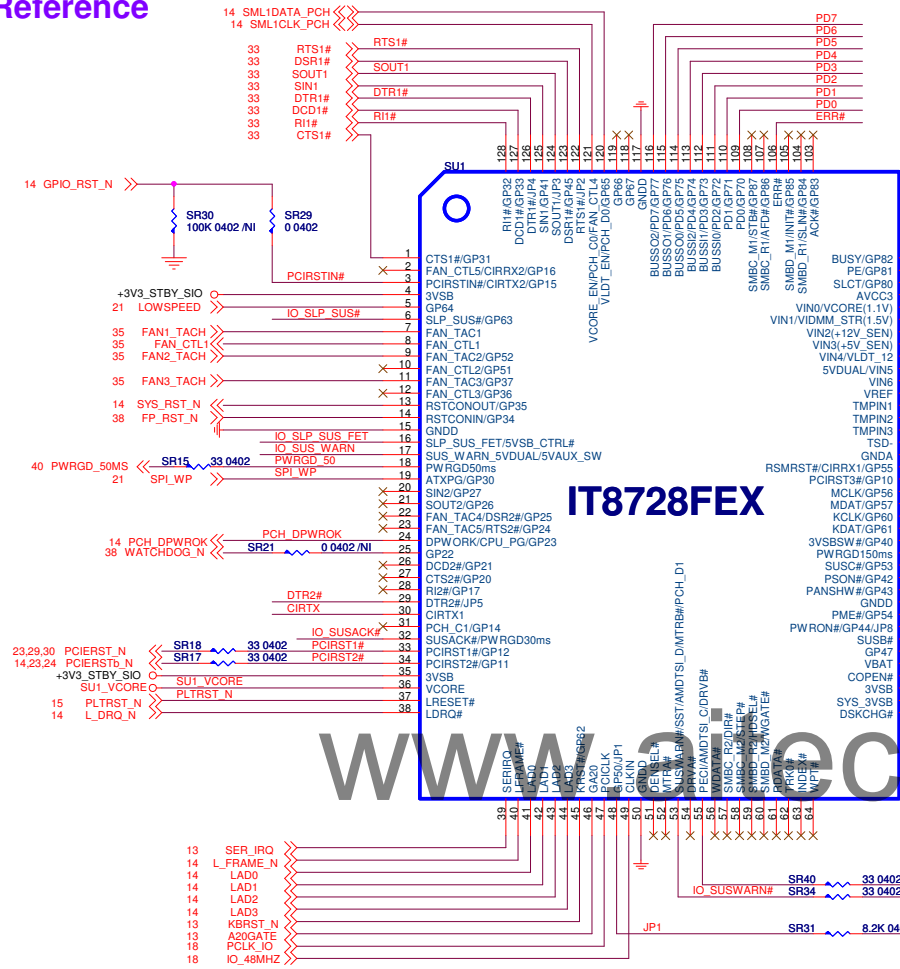
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SUPERIO PART: S+Reference



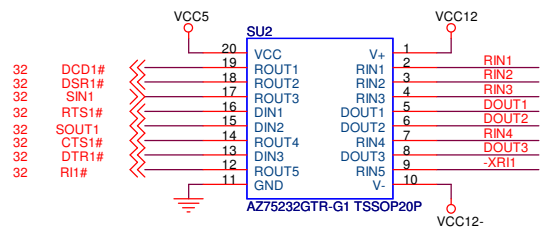
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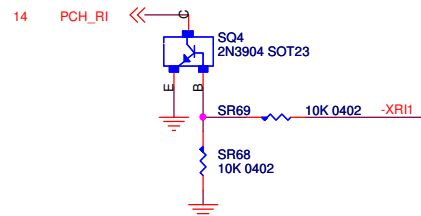
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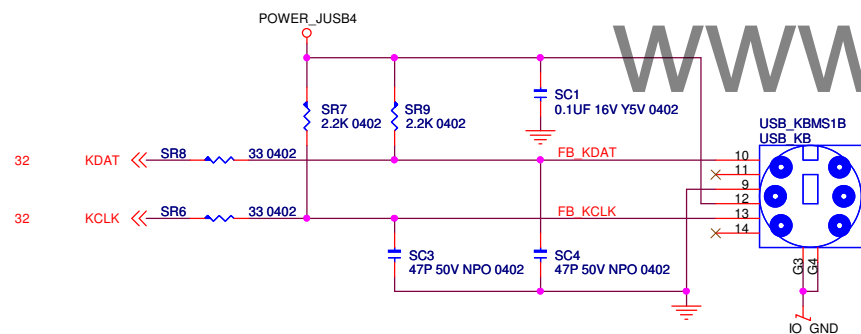


COM PORT



WAKE ON RING

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KEYBOARD & MOUSE

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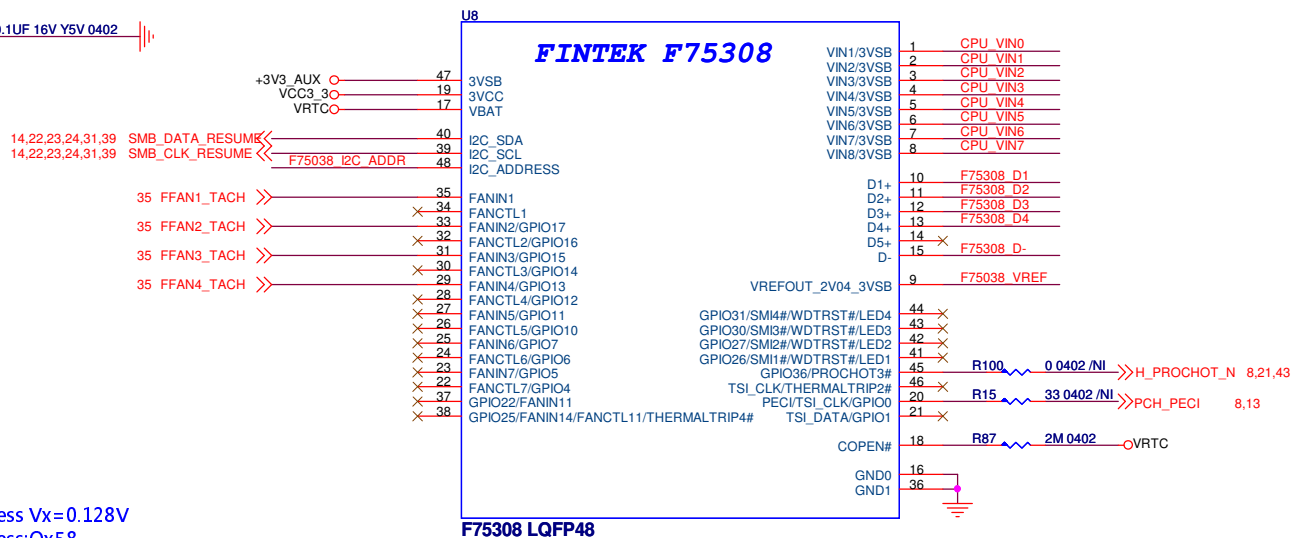
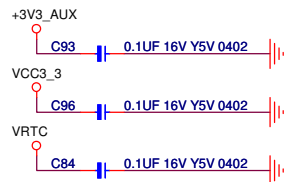


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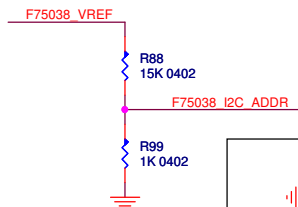
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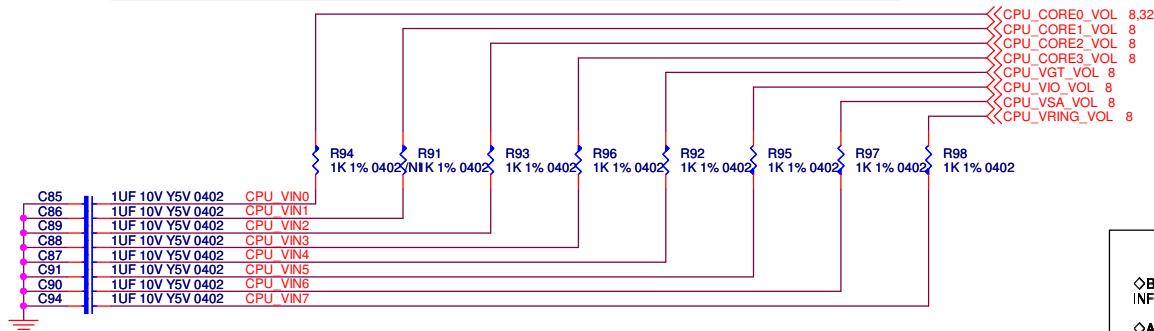
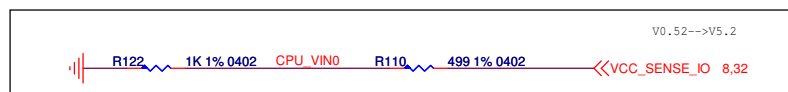
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Address Vx=0.128V
Address:0x58



CPU INTERNAL VOLTAGE HARDWARE MONITOR



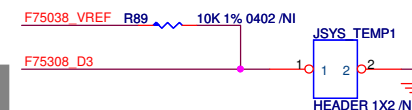
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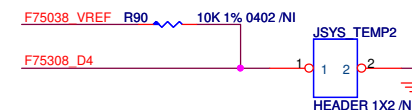
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Near PEX16_1&PCH



Near PEX16_2&PCH

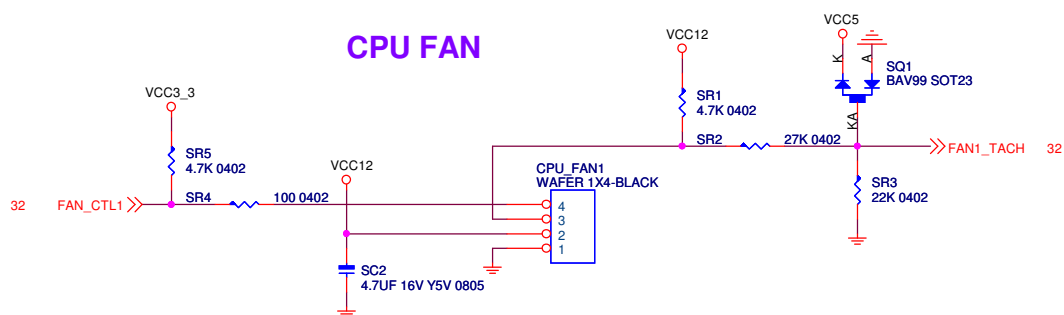
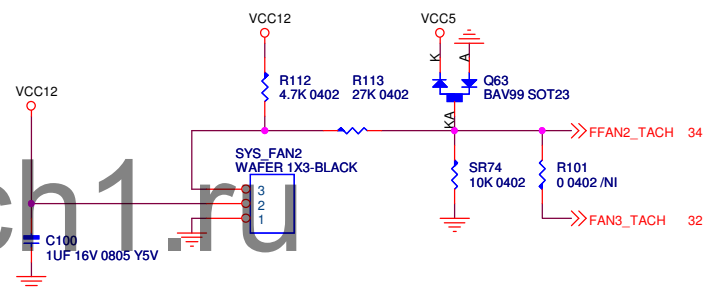
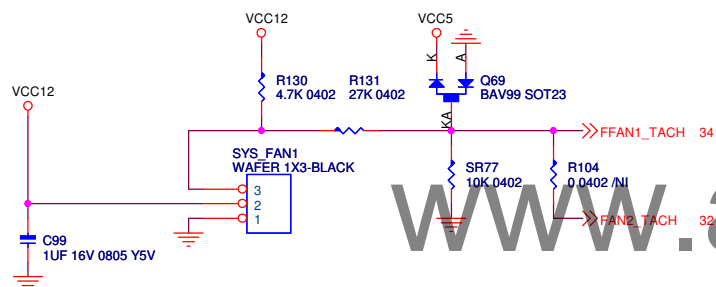
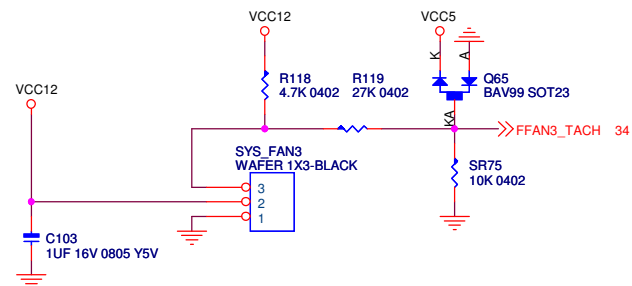
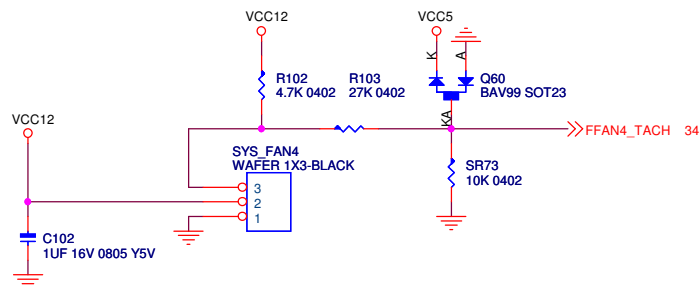


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FAN CONTROL		
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D

D

C

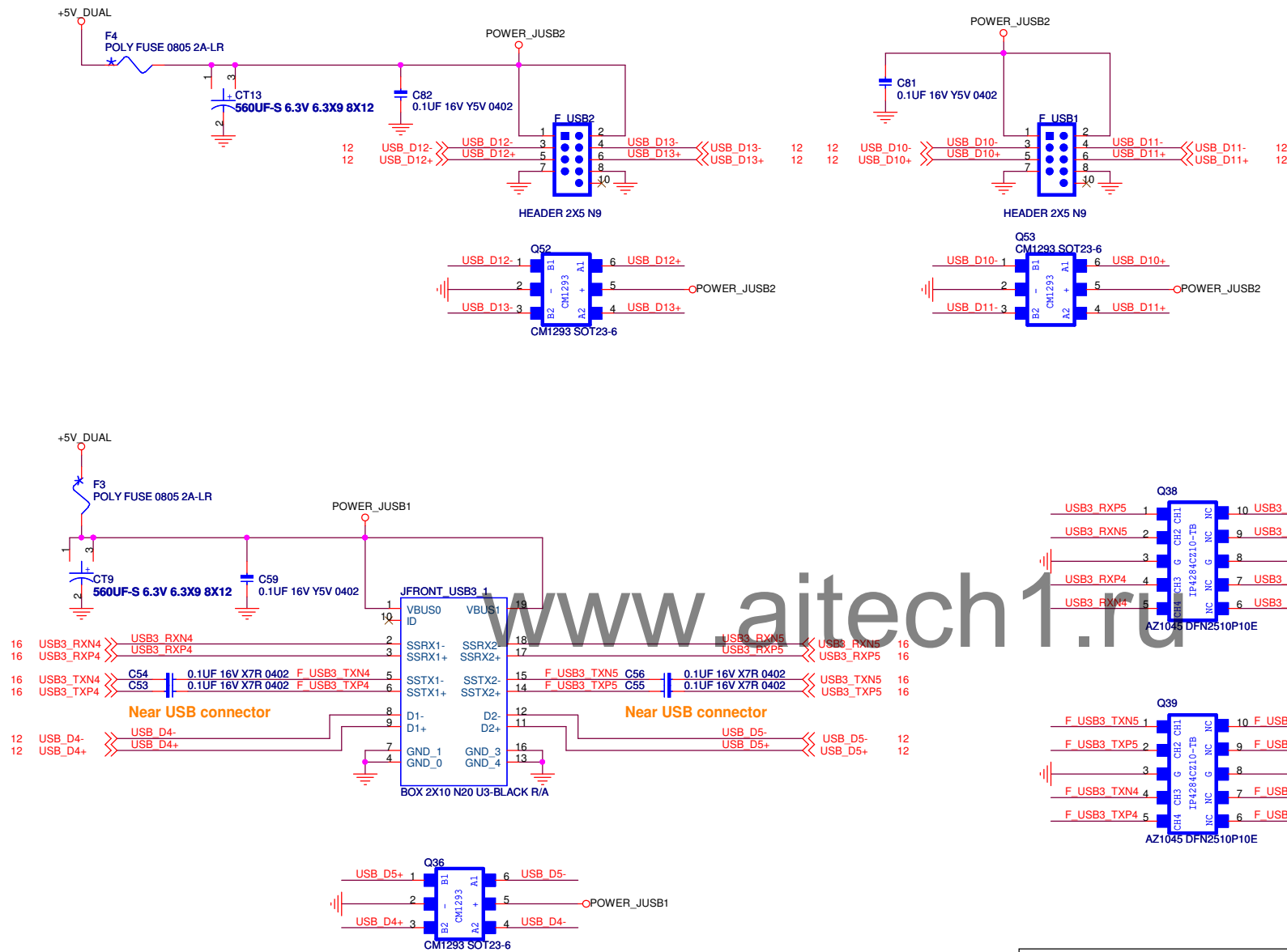
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B

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A

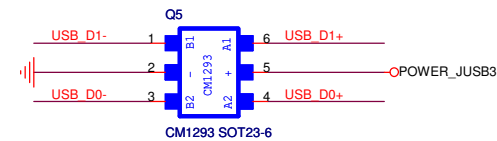
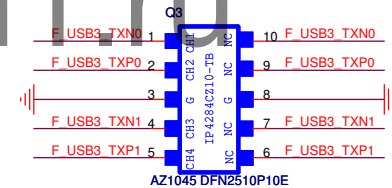
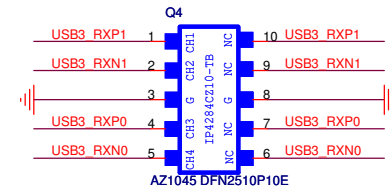
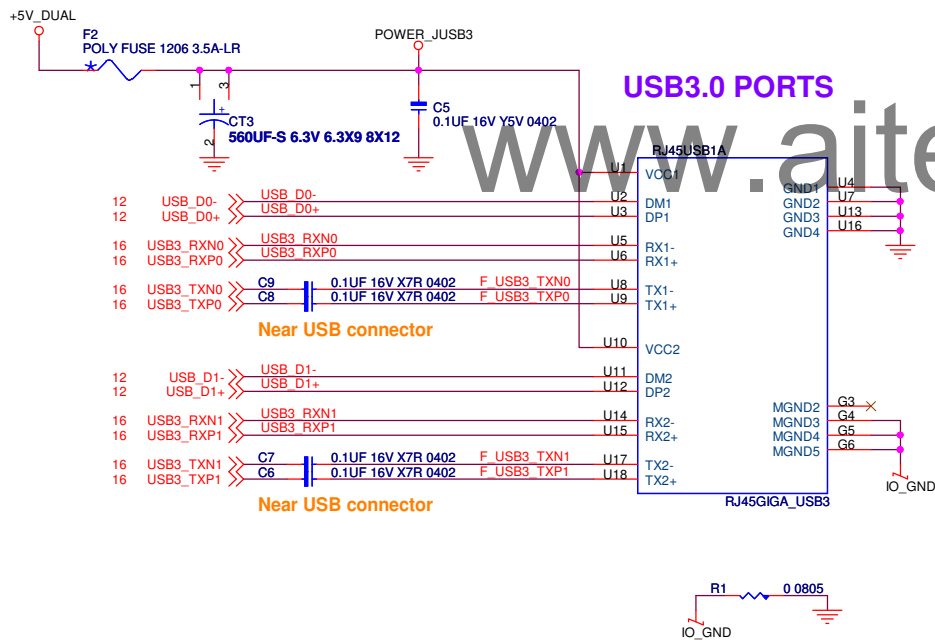
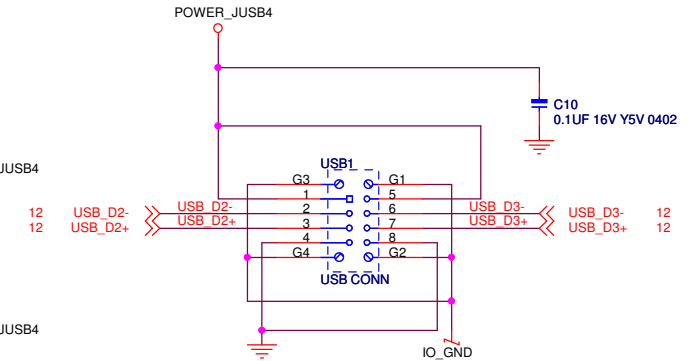
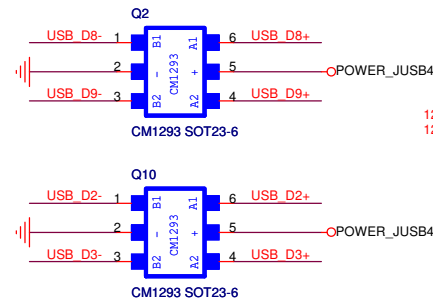
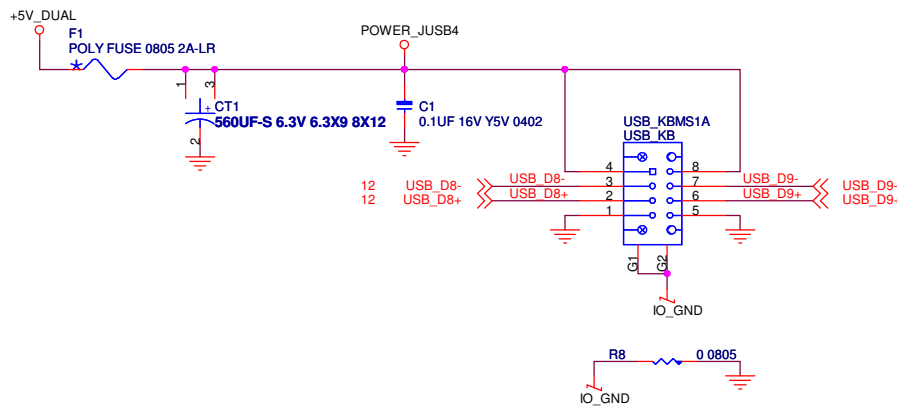
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USB3.0 PORTS

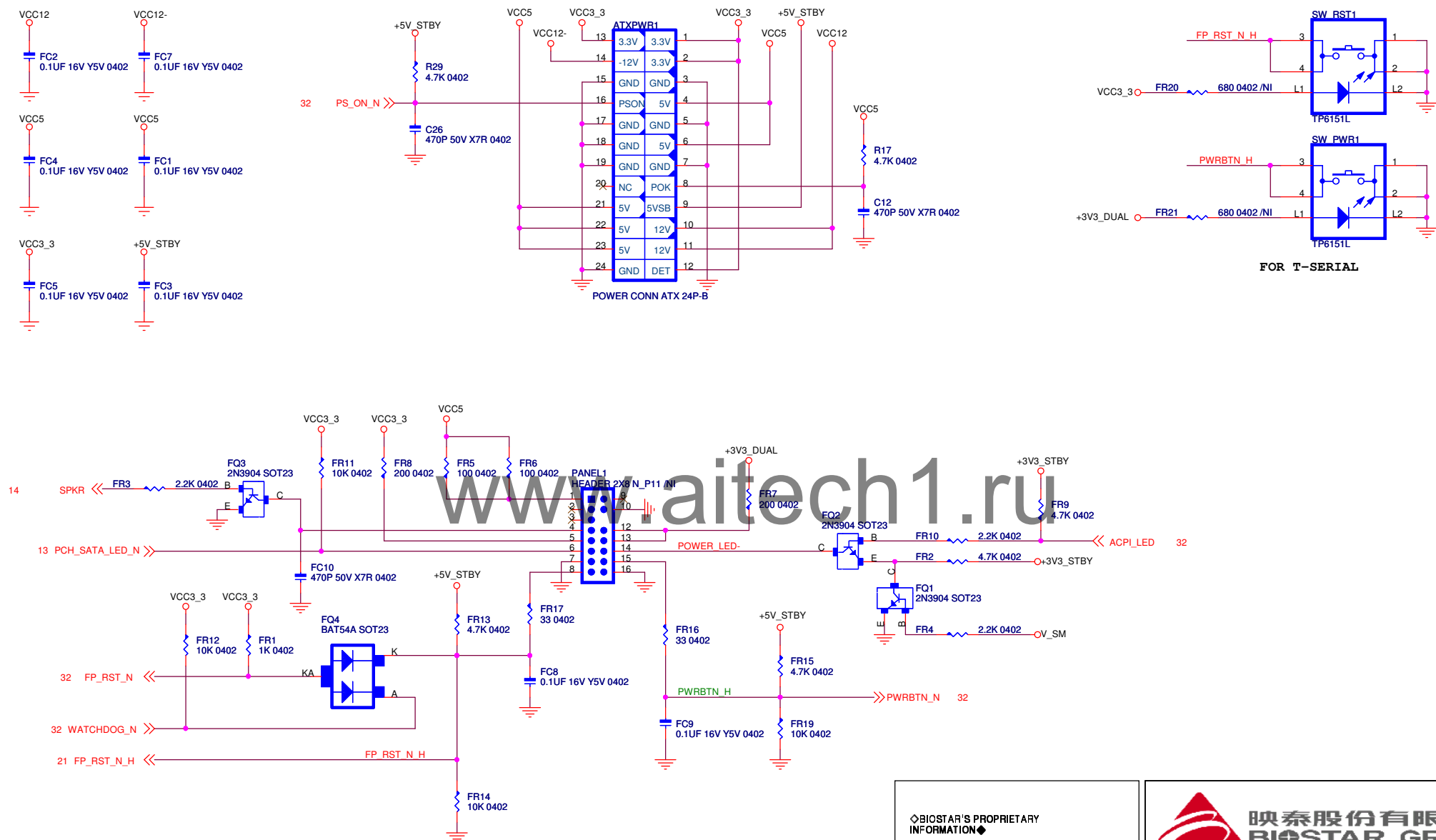
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FP PART: F+Reference

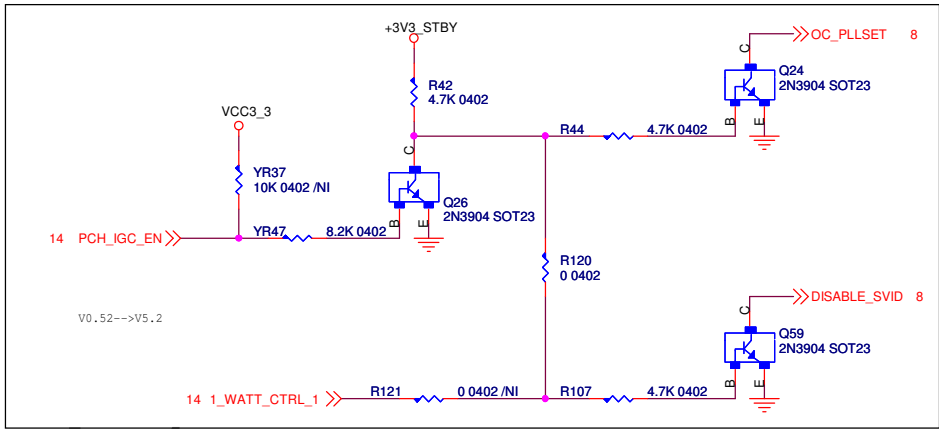


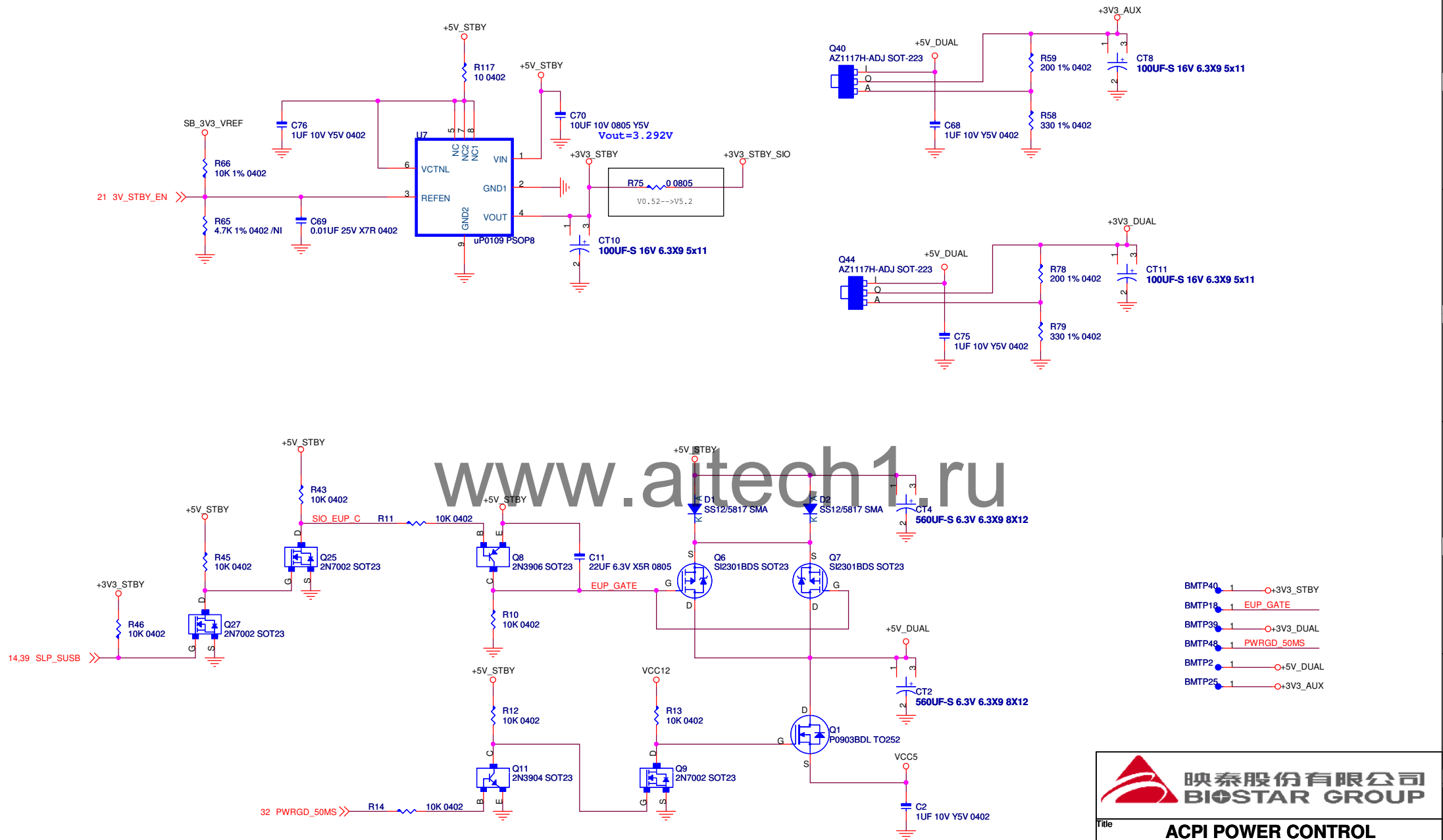
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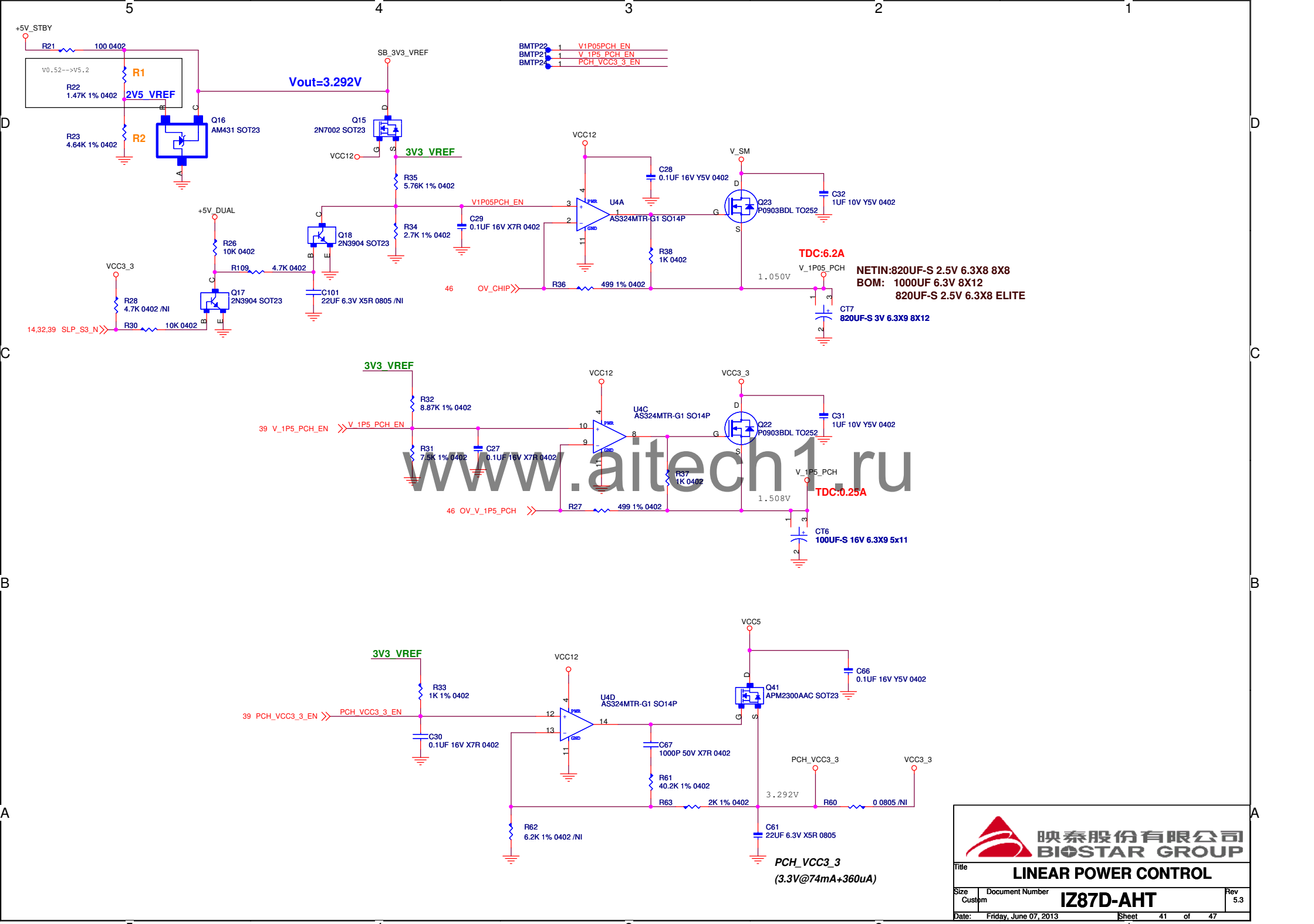
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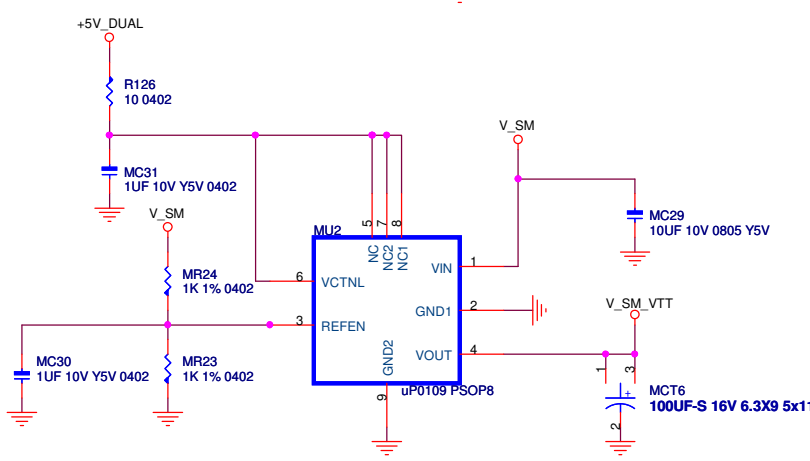
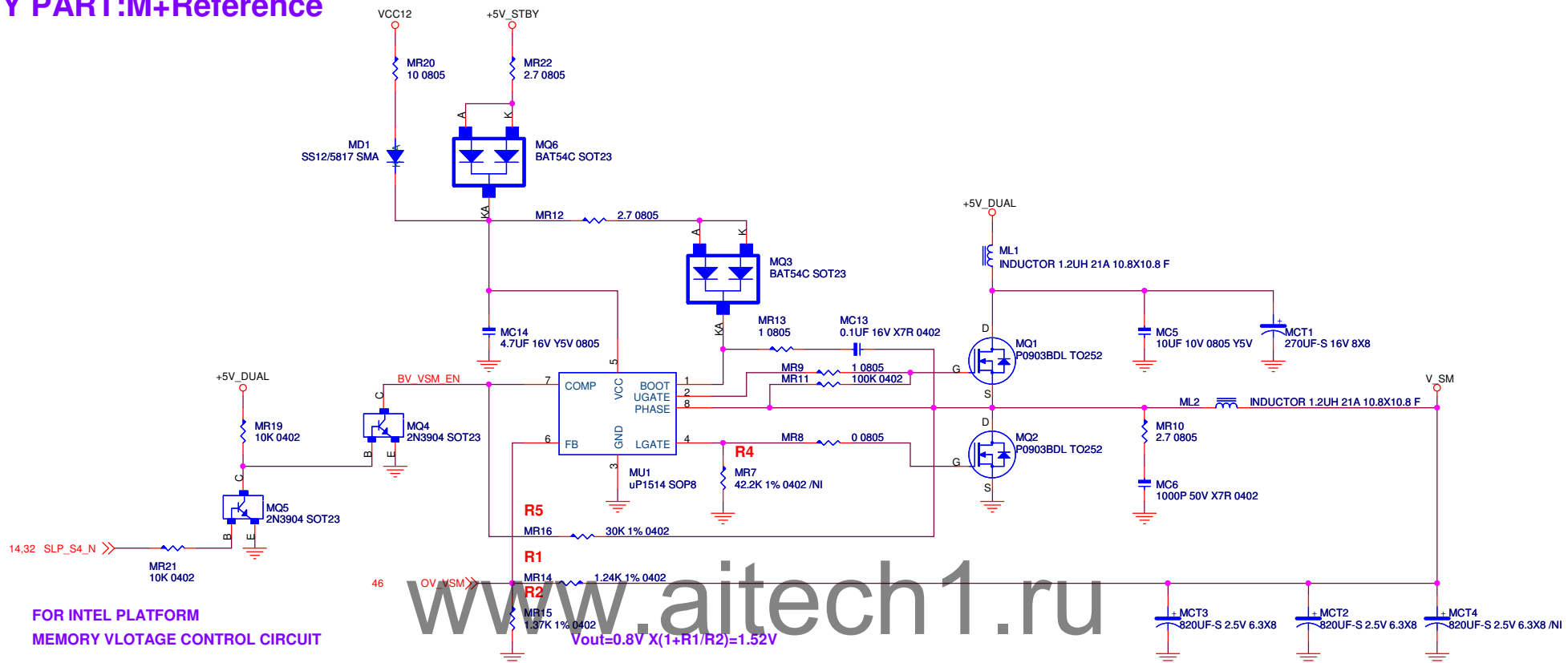
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MEMORY PART:M+Reference

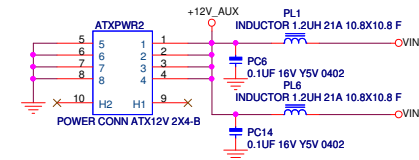
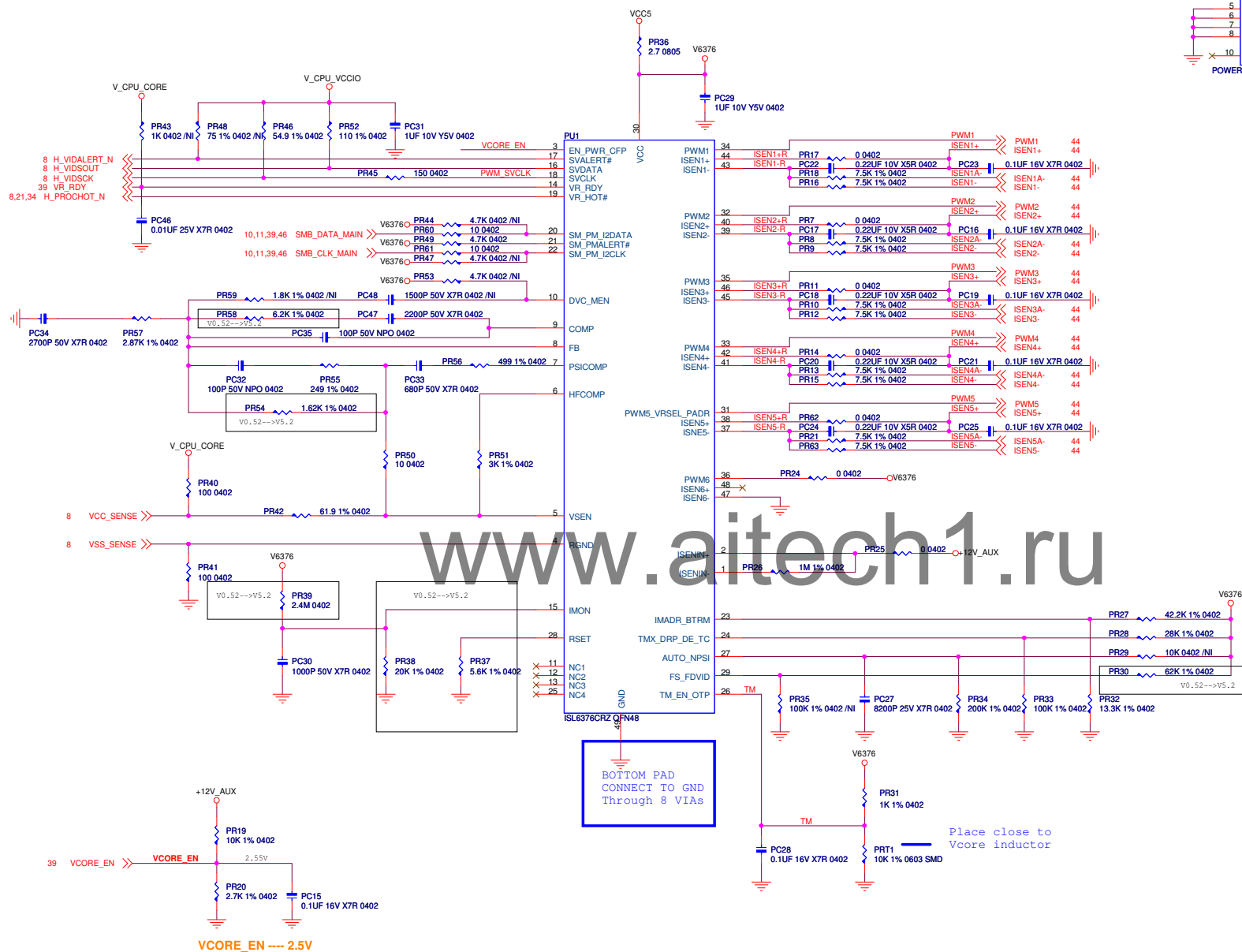


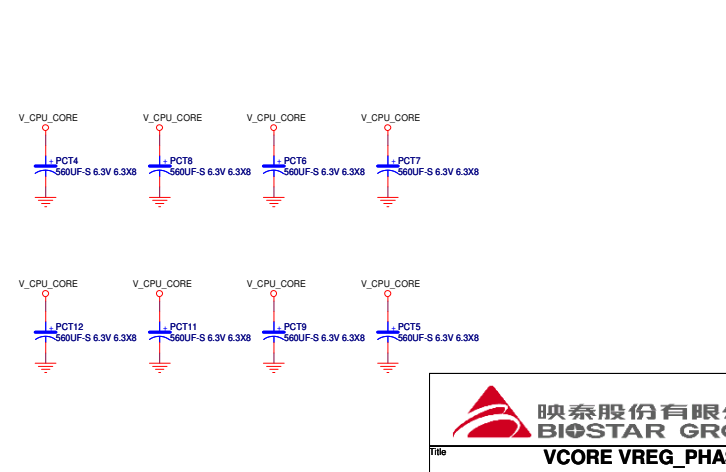
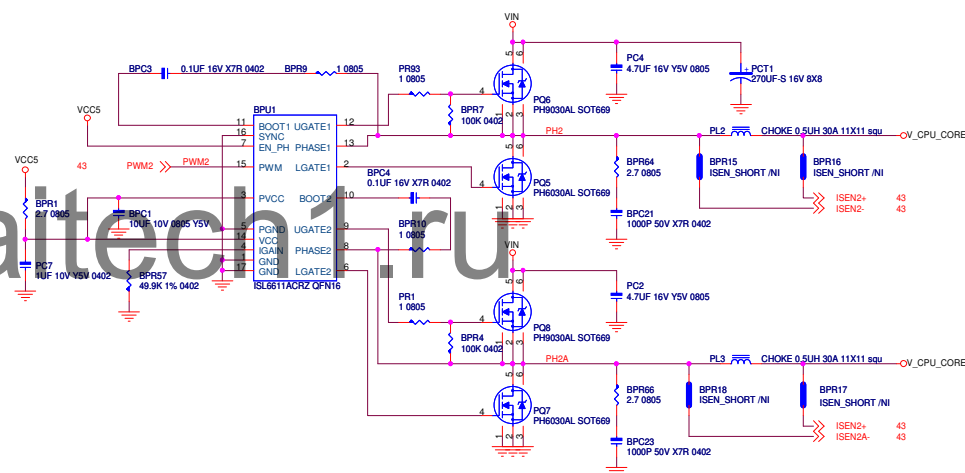
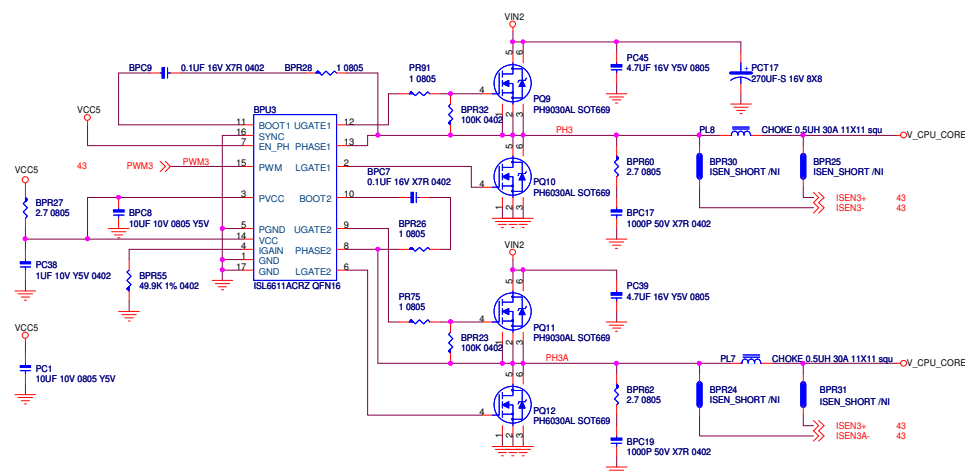
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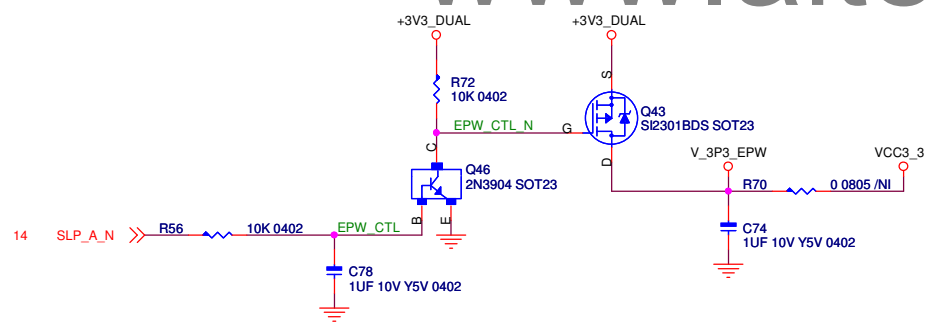
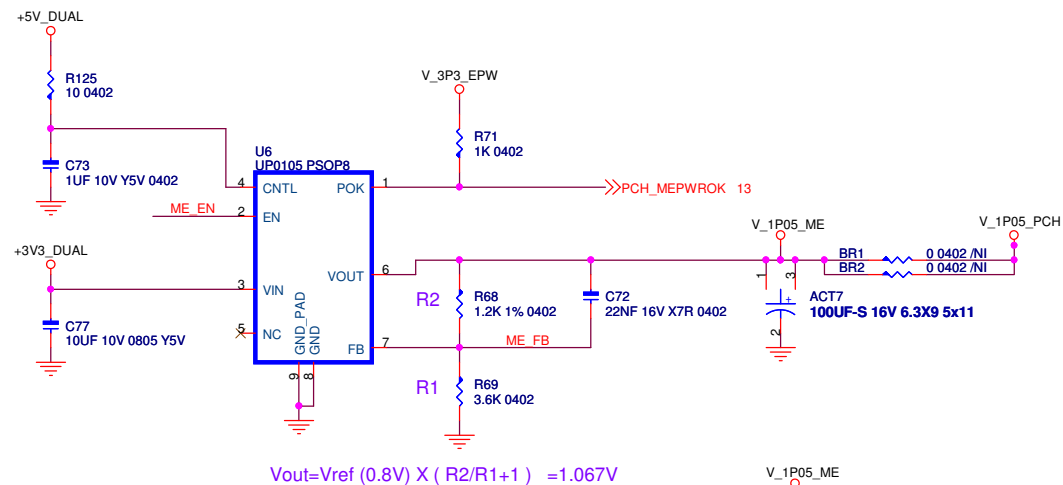
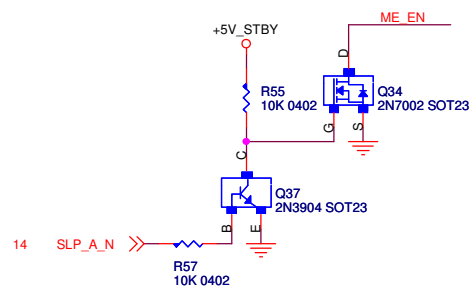
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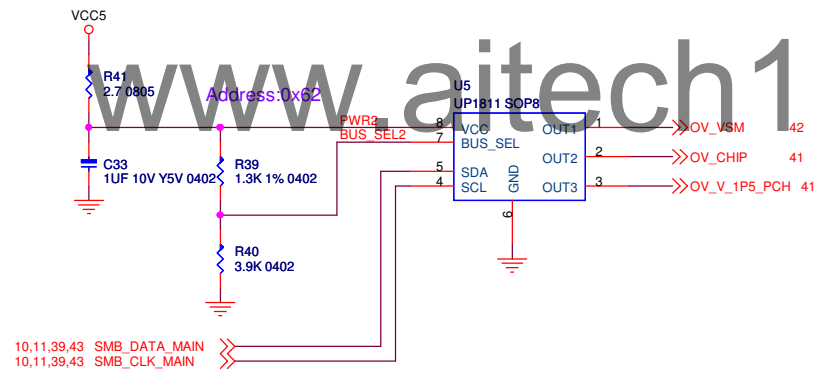
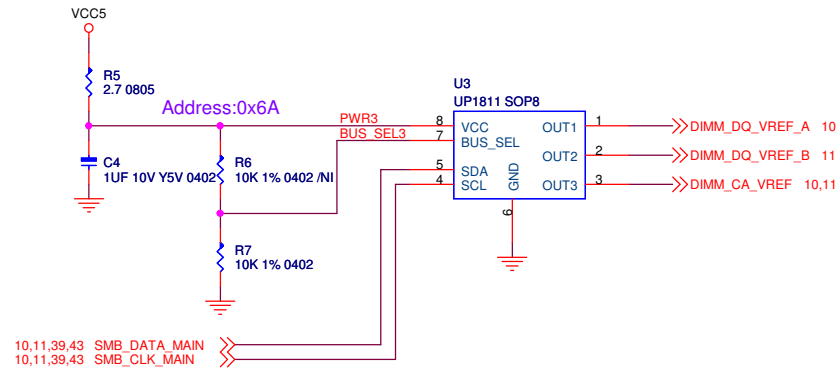
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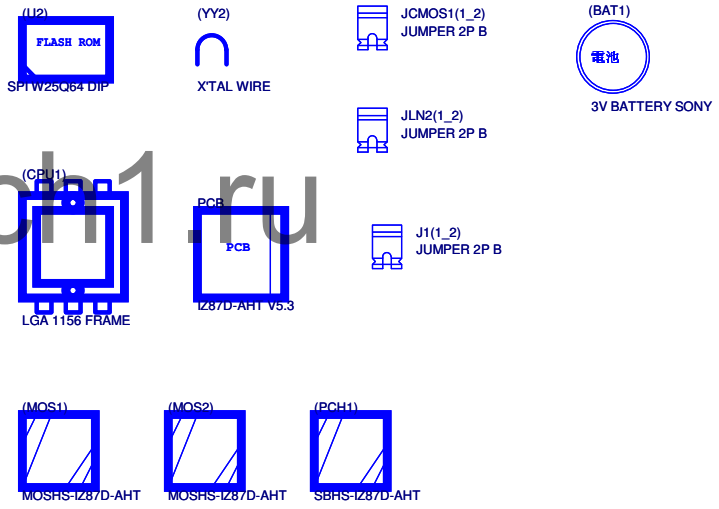
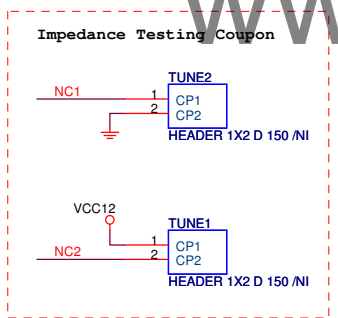
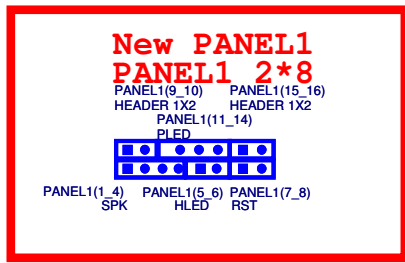
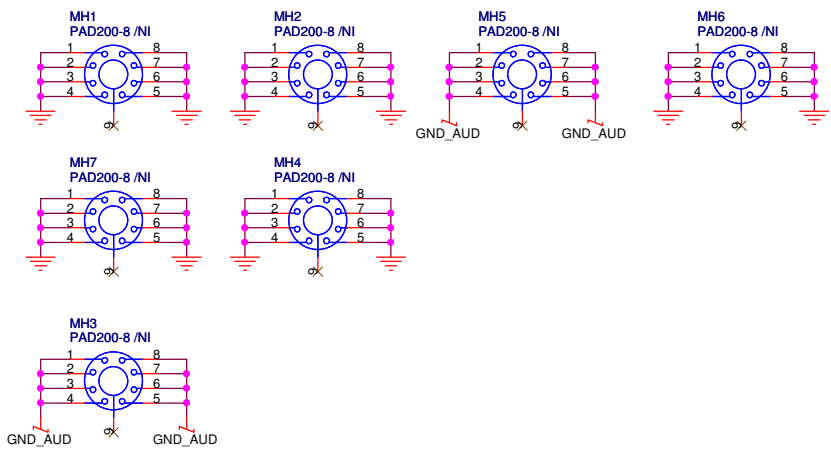


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