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# IP67C-AHT

ATX (305mm X 210mm)

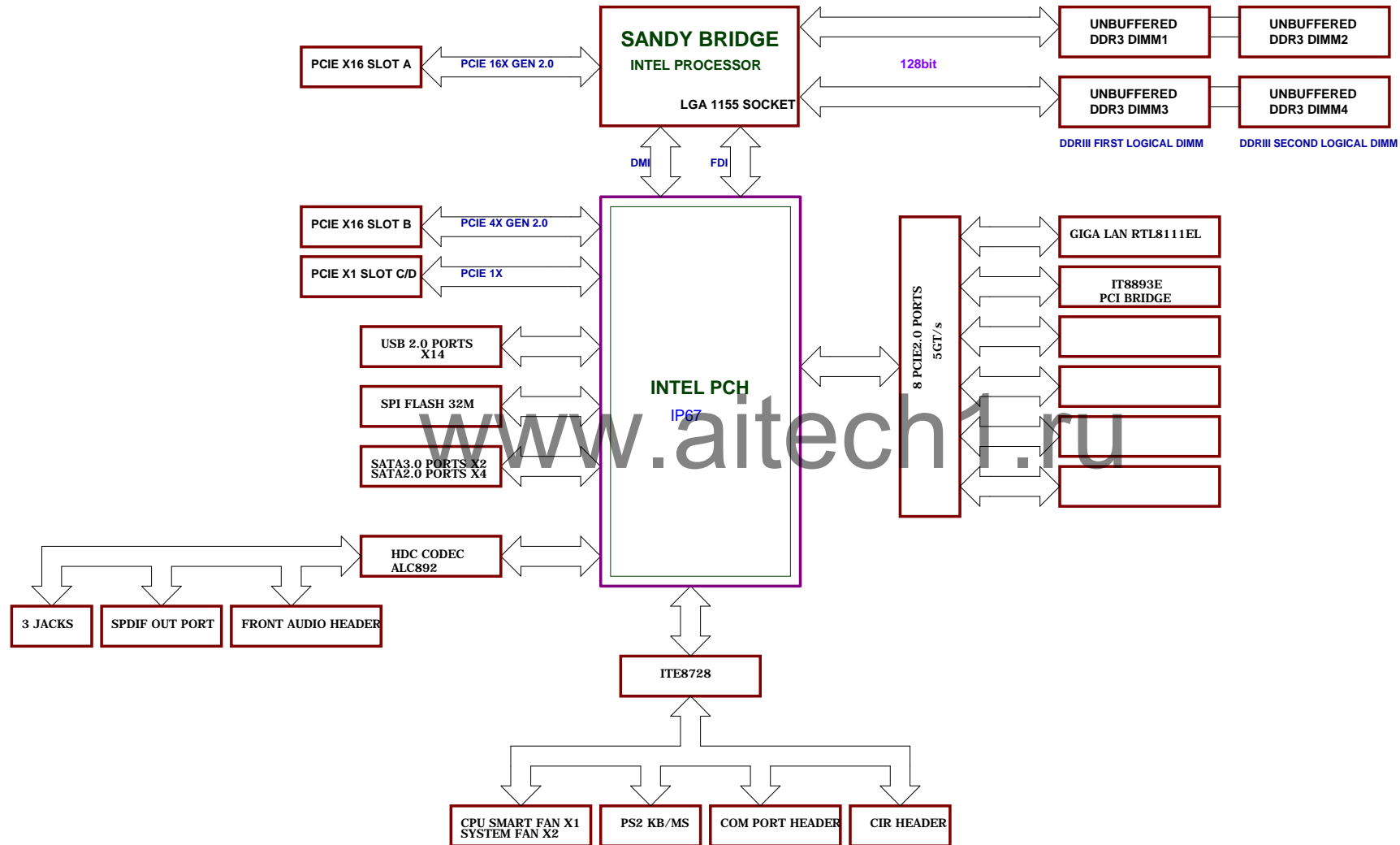
VER:0.6

INTEL SANDY BRIDGE (1155) PROCESSOR  
 INTEL P67 PCH  
 DDR3-2000(OC)/1600(OC)/1333 /1066 /800 X4  
 PCIE X16 SLOT X2  
 PCIE X1 SLOT X1  
 PCI SLOT X2  
 IT8728 SUPERIO  
 ALC 892 CODEC  
 RTL8111E LAN SUPPORTS 10/100/1000  
 AMS 1042 SUPPORTS USB3.0 INTERFACE


TARZAN

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# IP67C-AHT-V0.6 BLOCK DIAGRAM



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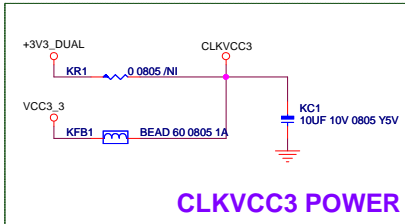
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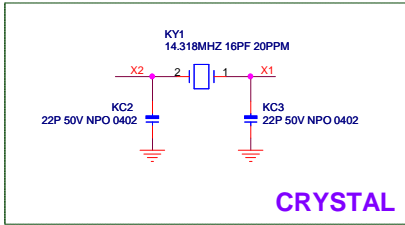
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Title		CHANGE LIST	
Size	Document Number	Rev	
Custom	IP67C-AHT	0.6	
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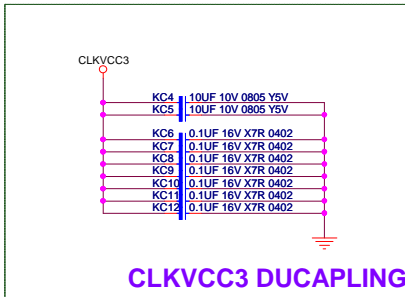
## CLOCK GEN PART: K+Reference



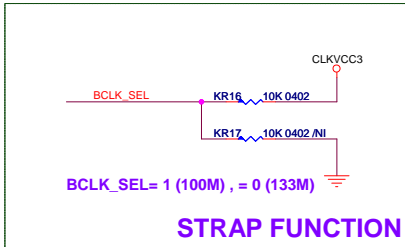
CLKVCC3 POWER



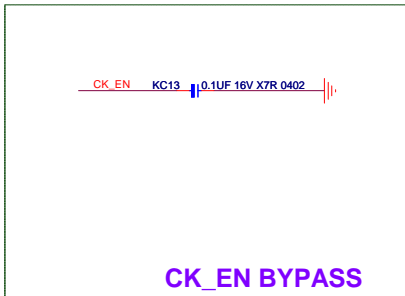
CRYSTAL



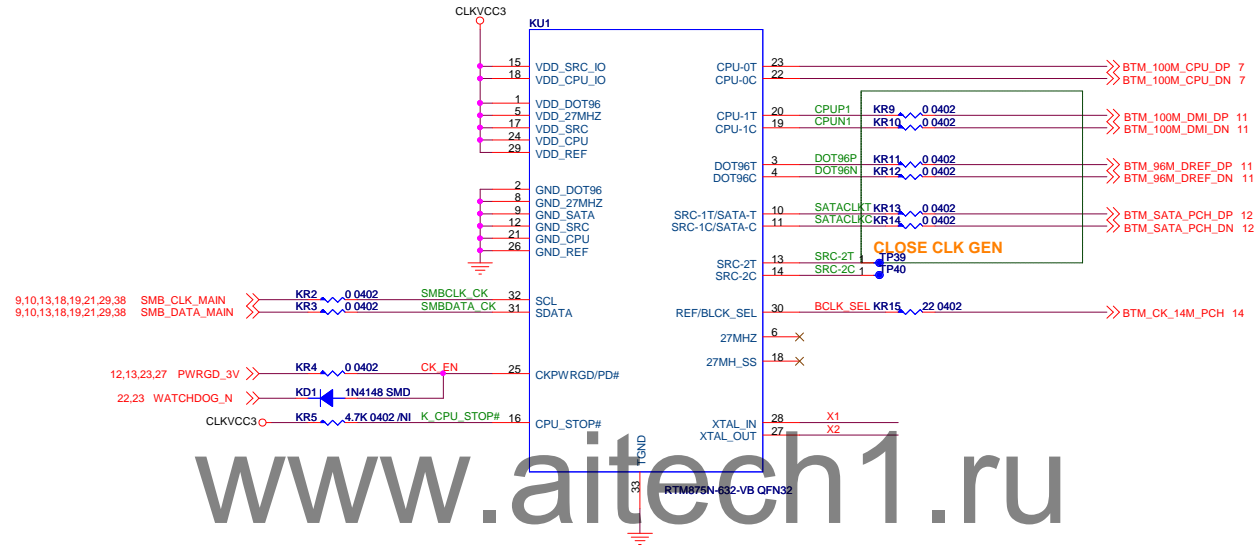
CLKVCC3 DUCAPLING



STRAP FUNCTION



CK\_EN BYPASS

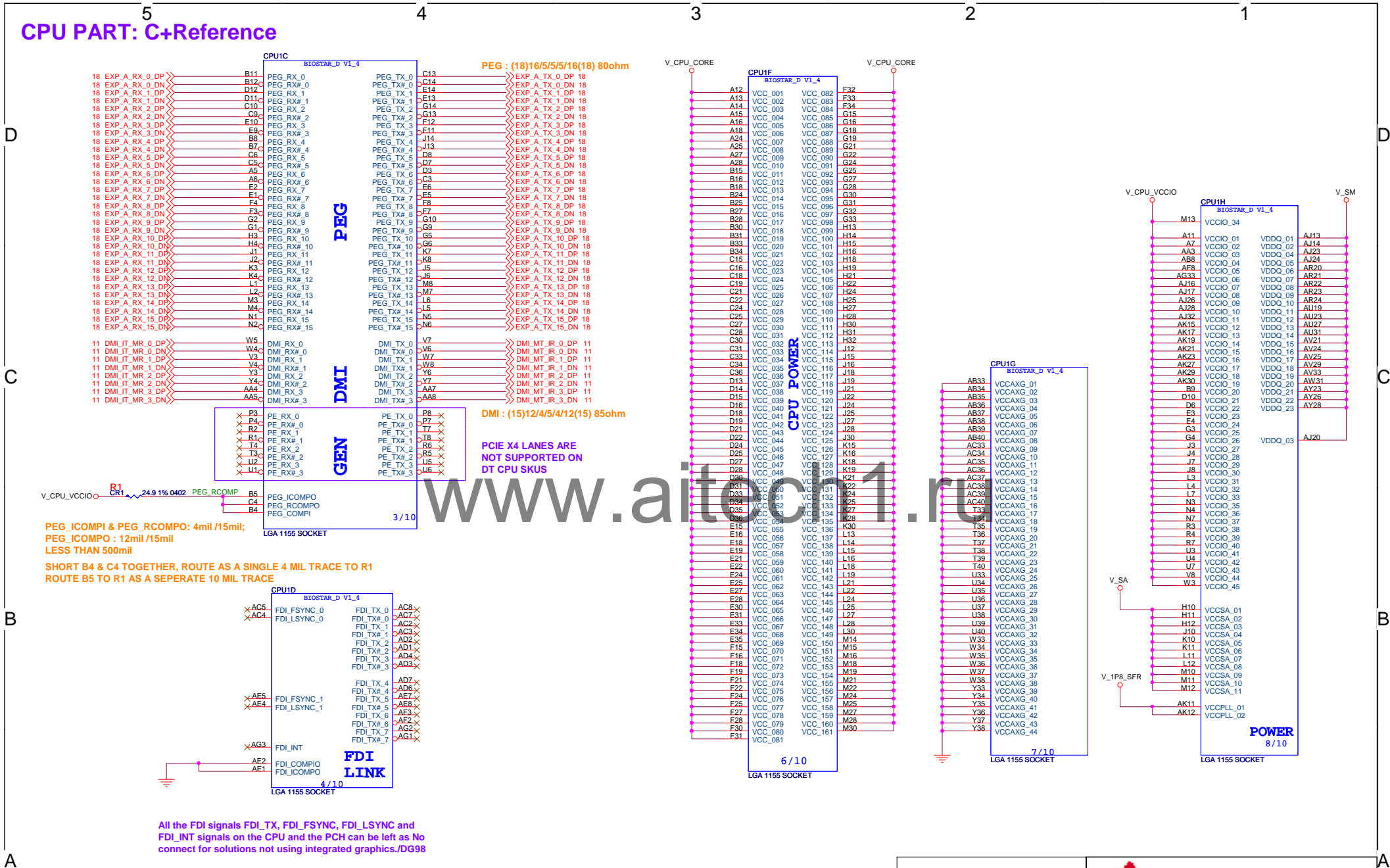


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Title <b>CK505 CLOCK GENERATOR</b>	
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# CPU PART: C+Reference



All the FDI signals FDI\_TX, FDI\_FSYNC, FDI\_LSYNC and FDI\_INT signals on the CPU and the PCH can be left as No connect for solutions not using integrated graphics/DG98

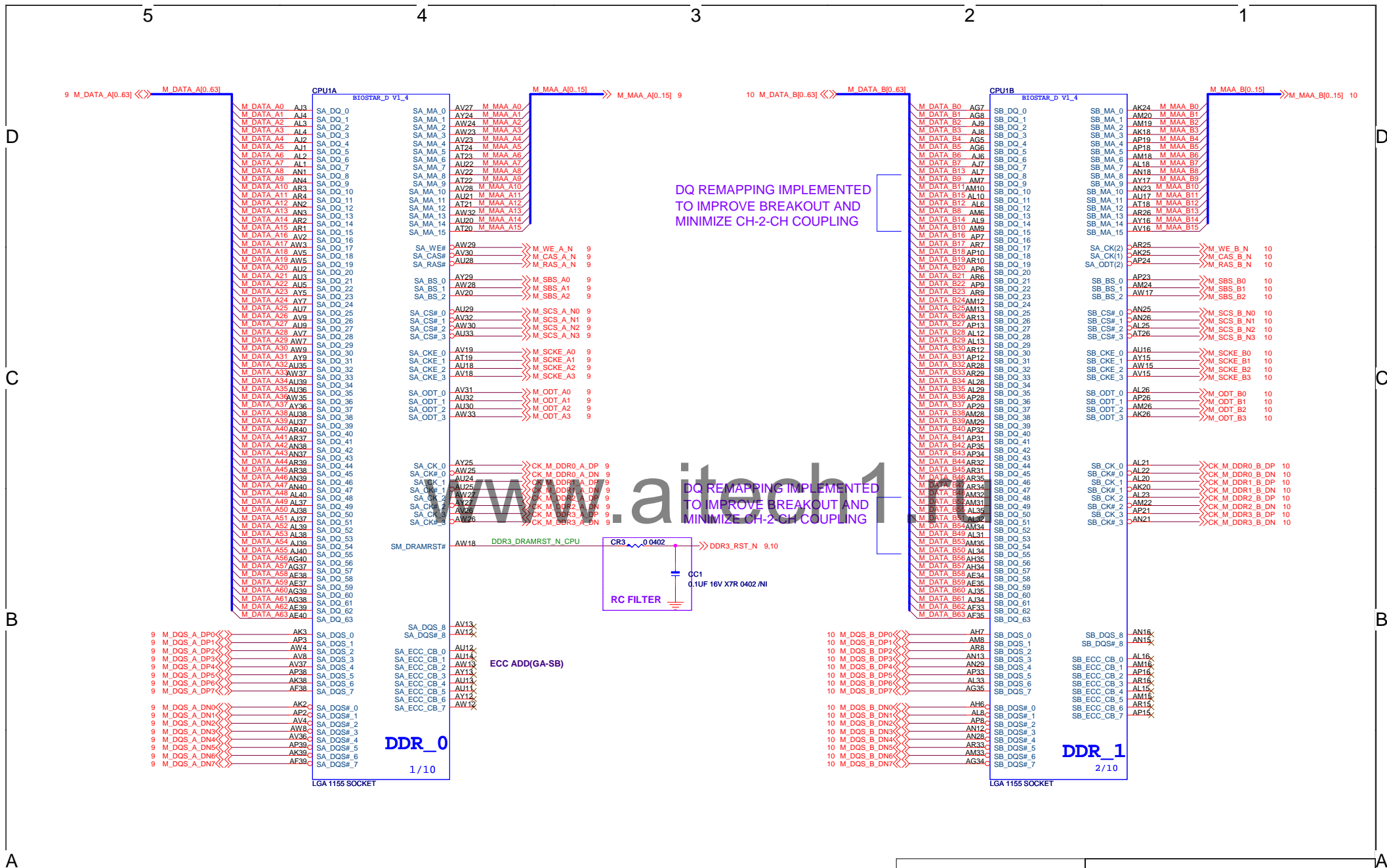
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Title <b>Intel 1155 CPU1:PE/MISC</b>			Rev <b>0.6</b>
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Title	
Intel 1156 CPU2:MEMORY	
Size	Document Number
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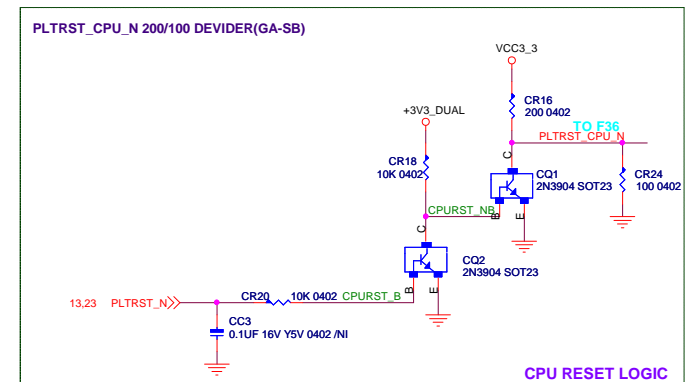
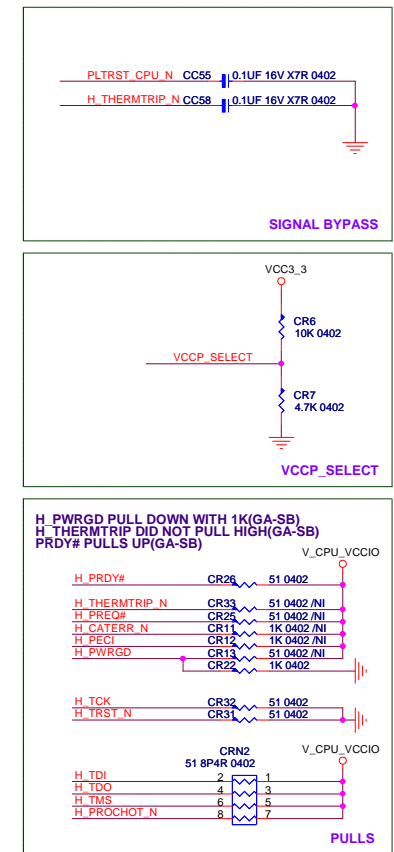
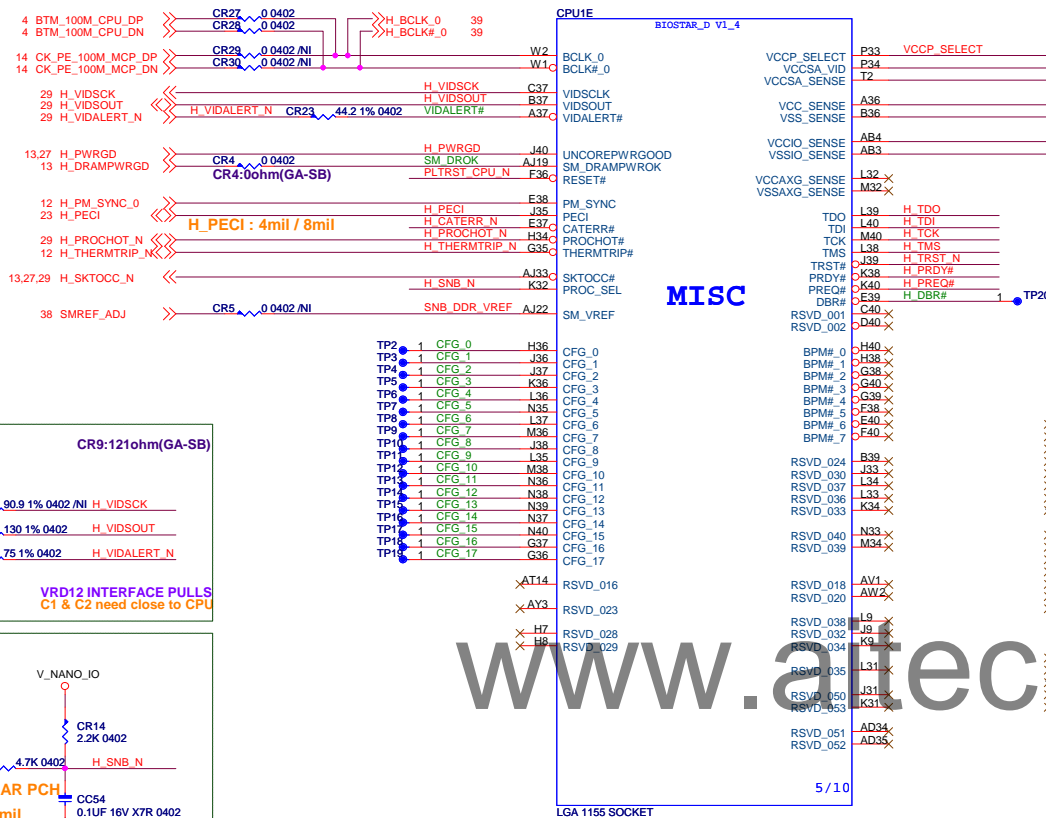
5

4

3

2

1



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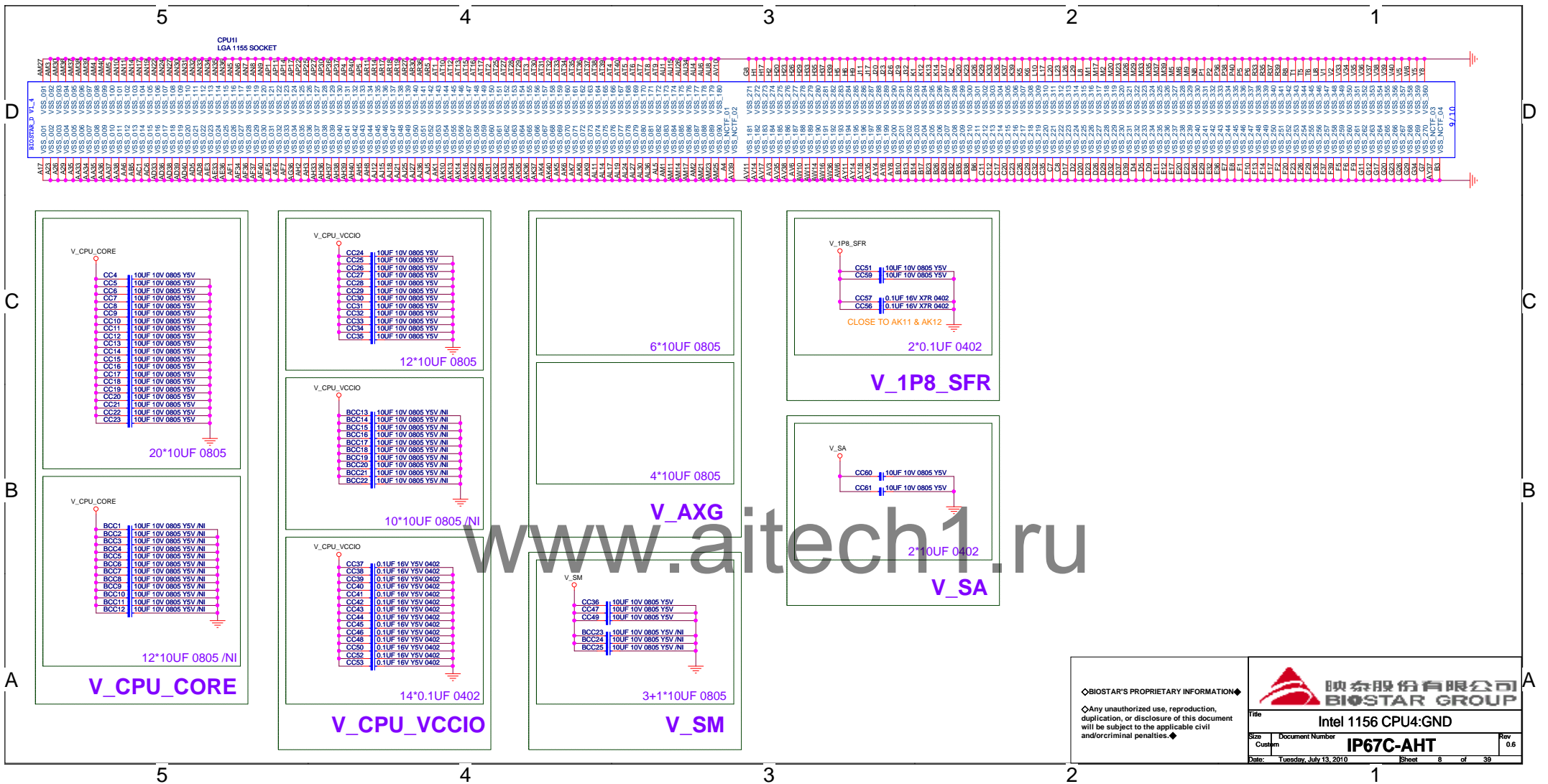
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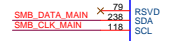
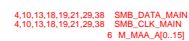
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Title: **Intel 1156 CPU3:POWER**

Size: Custom Document Number: **IP67C-AHT** Rev: 0.6

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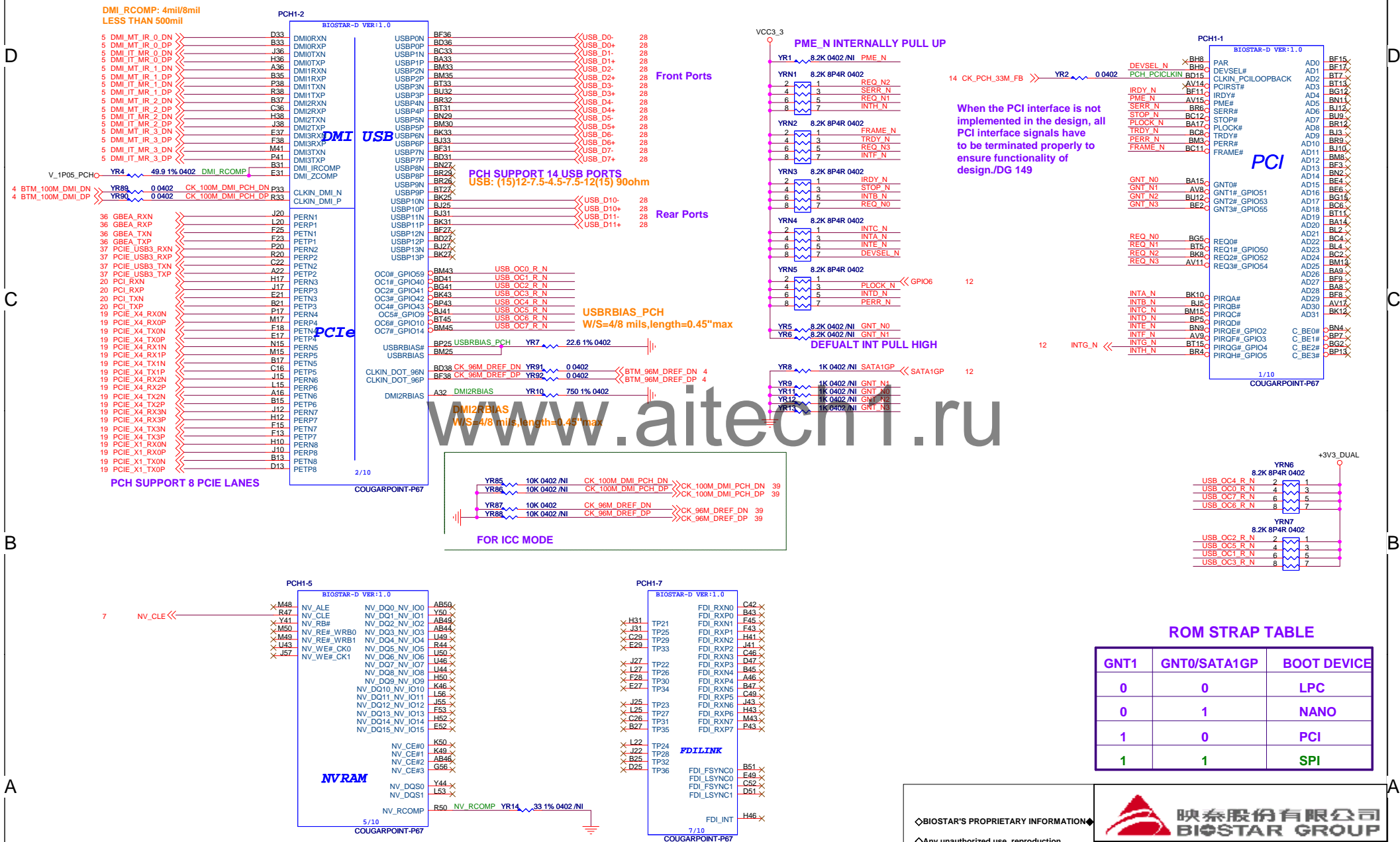


Title			
DDR2 DIMMA1/A2			
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# SOUTHBRIDGE PART: Y+Reference



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Title: **PCH DMI/PCIE/USB/PCI/FDI**

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5

4

3

2

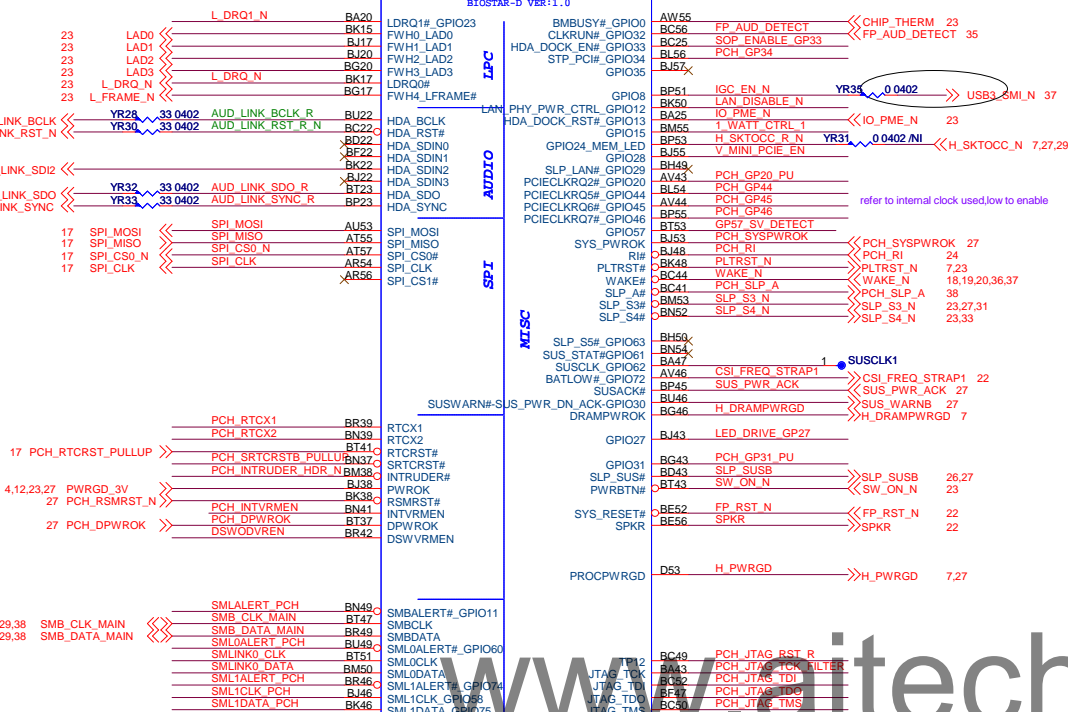
1

## L\_DRQ\_N PULLS UP(GA-SB)

PCH1-4

BIOSTAR-D VER:1.0

## EXTERNAL THERMAL EVENT



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4/10  
COUGARPOINT-P67

## RTC CRYSTAL

## PULLS

## JTAG PULLS

## INTERNAL CLOCK REQUEST

## PULLS

## PULLS

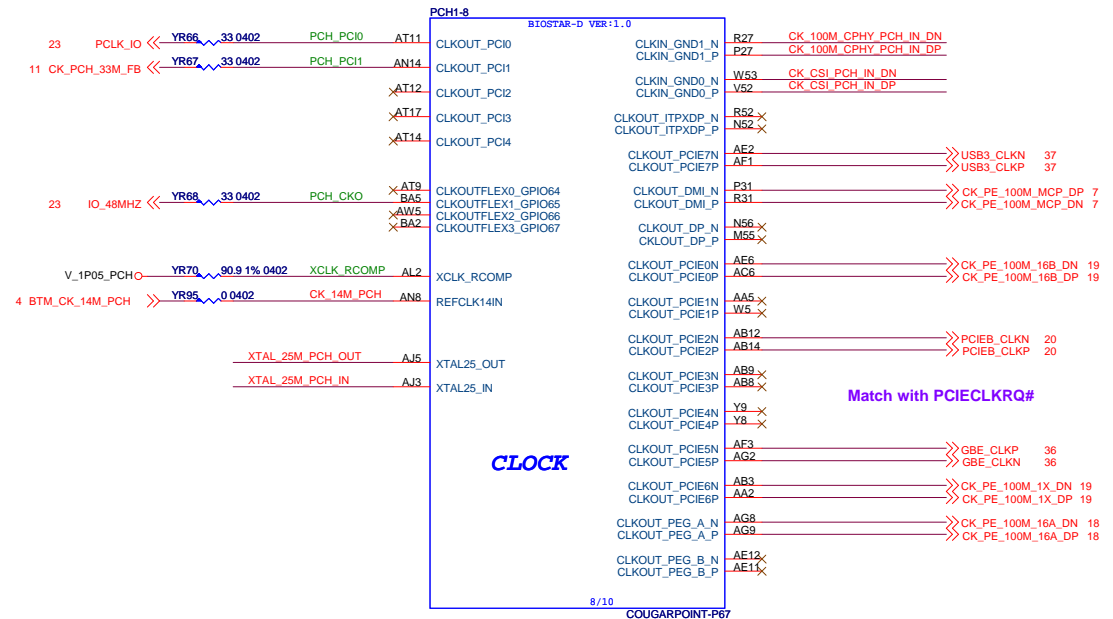
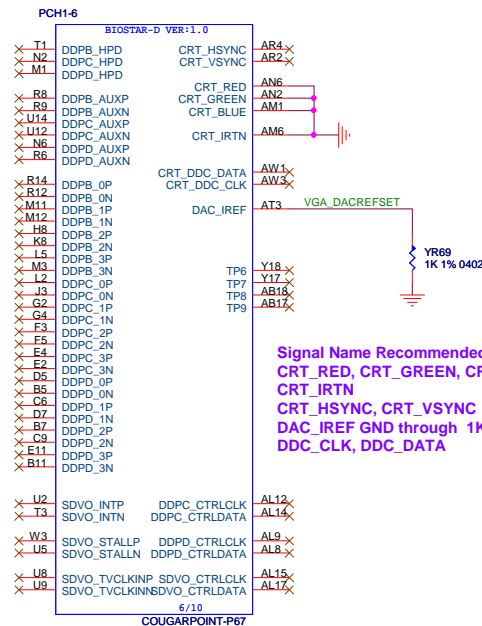
## PULLS

## BEEP OUT

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Title <b>PCH LPC/HDA/SPI/MISC</b>	
Size	Document Number <b>IP67C-AHT</b>
Date	Rev <b>0.6</b>
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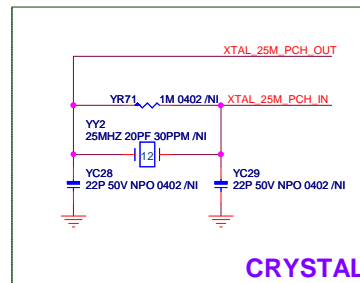
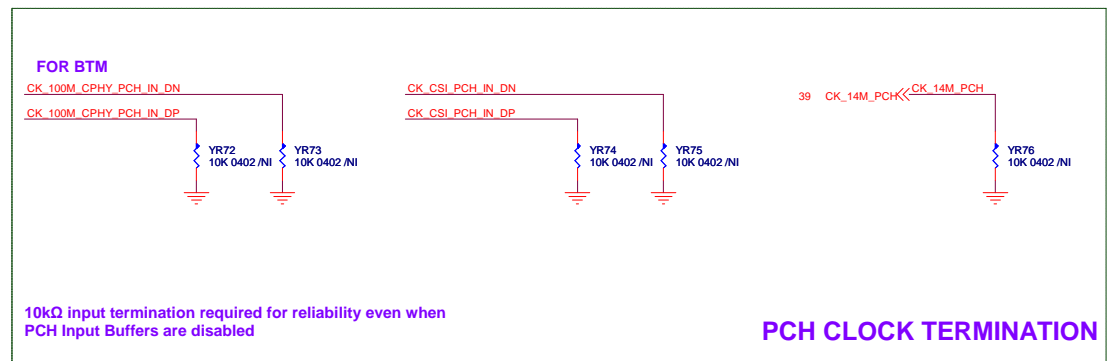
## PORT TABLE

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

REMOVE LEVEL SHIFTER WHEN TRACE LENGTH LESS THAN 9.25 INCHES

If DisplayPort interface is not implemented, the Main Link, aux channel differential signals and HPD signals can be left as No Connects./DG108

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Title: **PCH VGA/DISPLAY PORT**

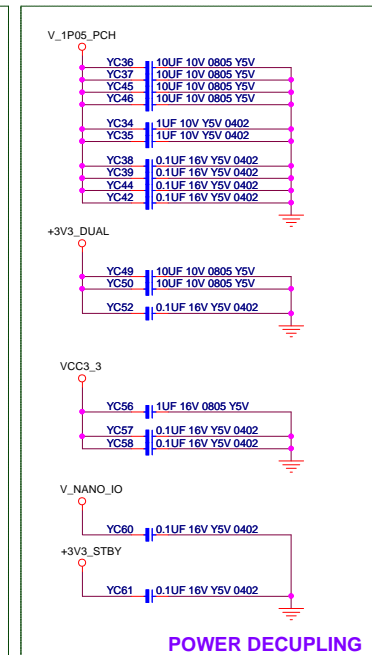
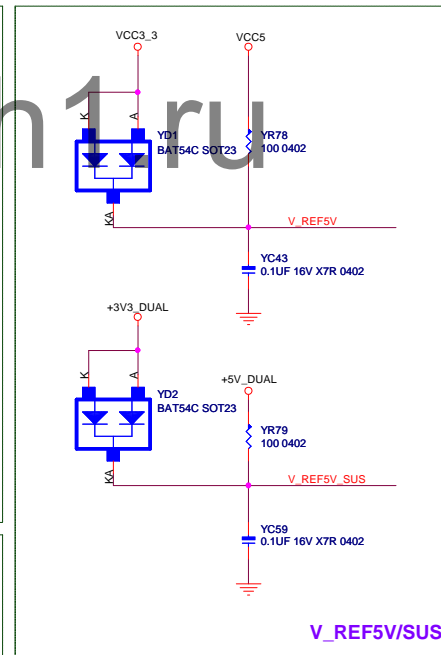
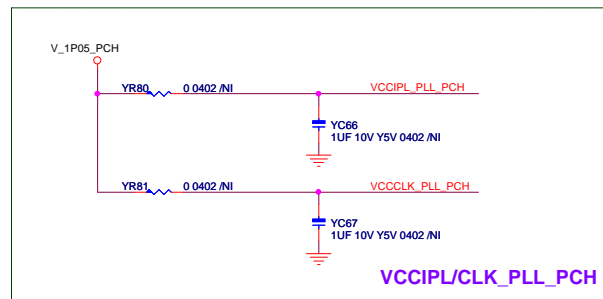
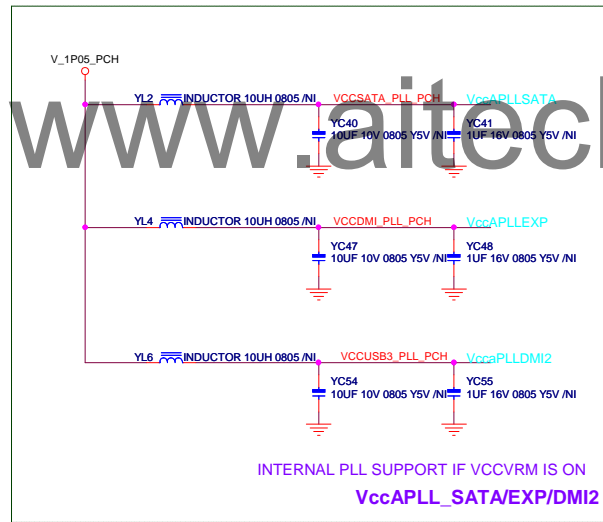
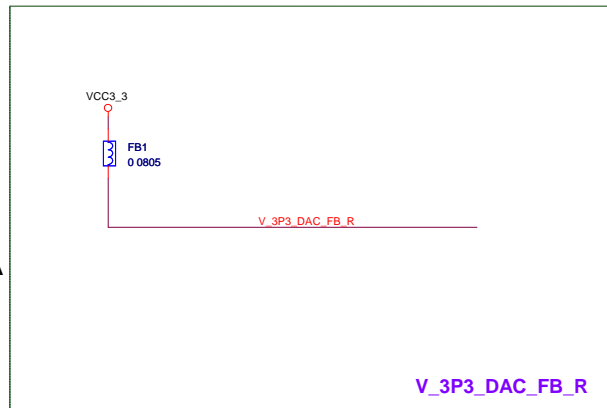
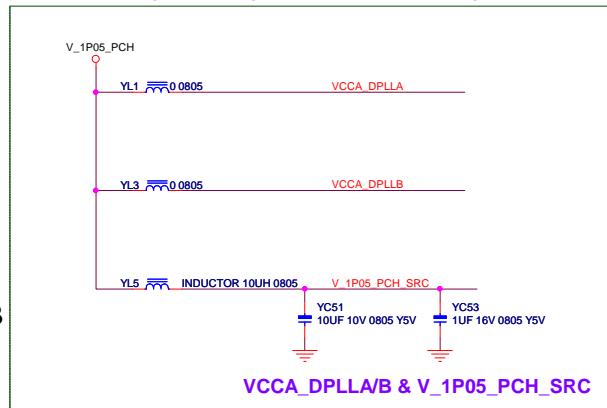
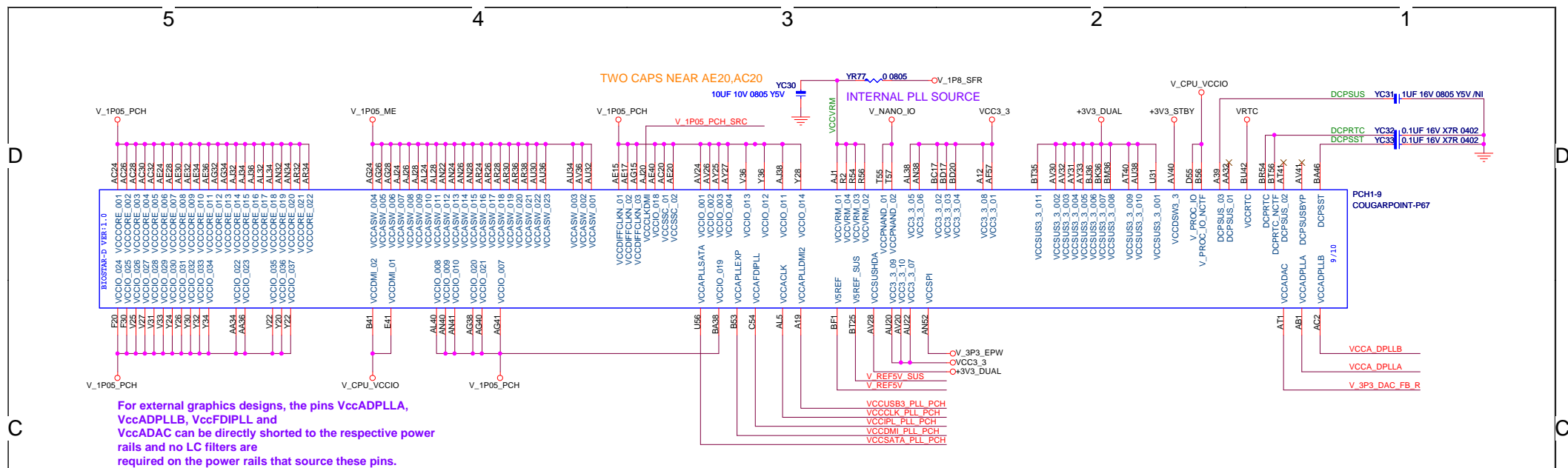
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Document Number: **IP67C-AHT**

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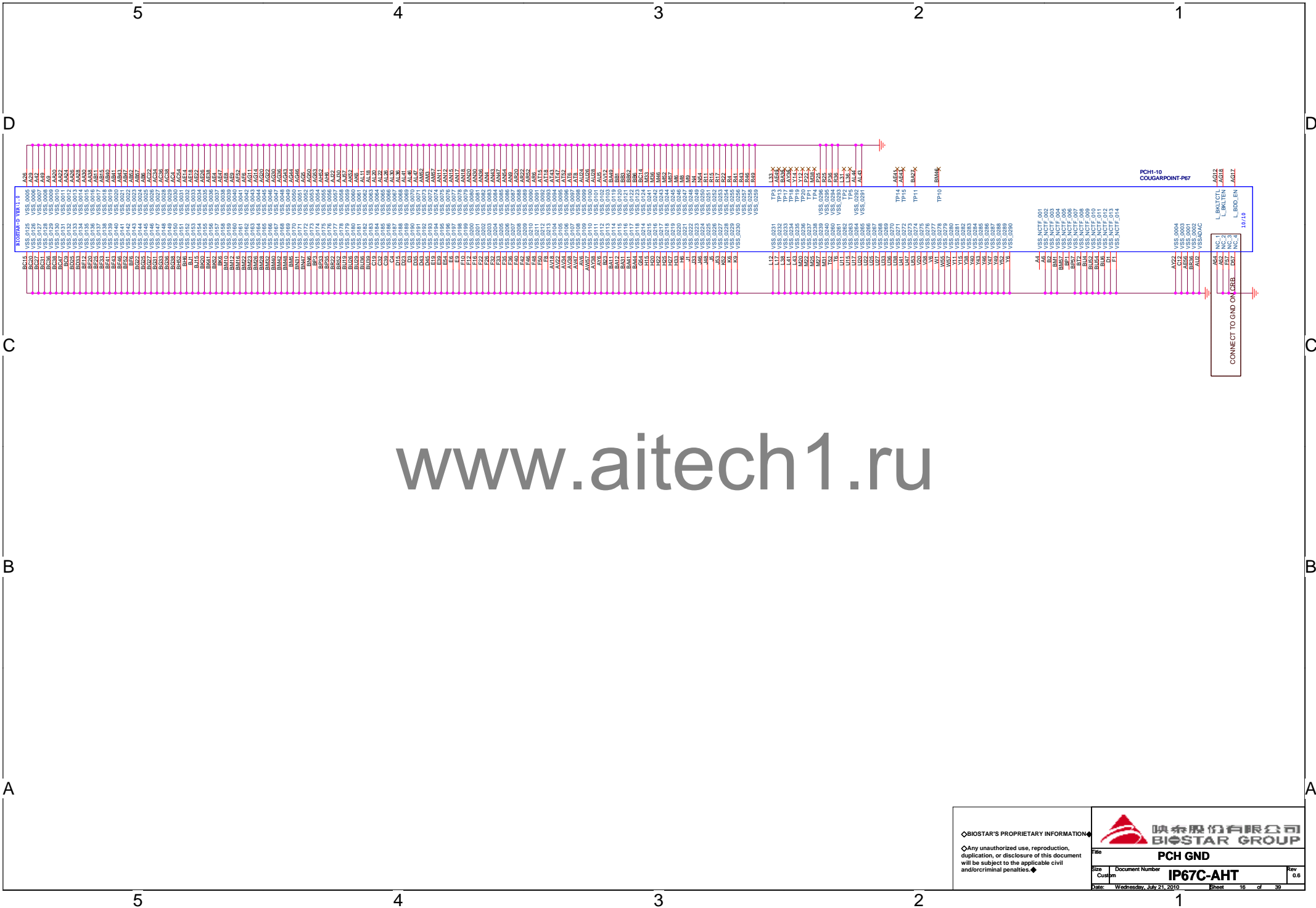
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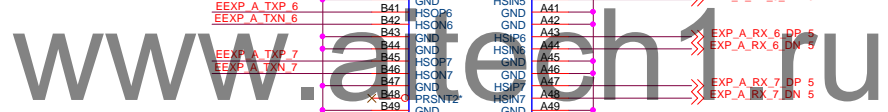


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Title	PCH GND		
Size	Document Number	Rev	
Custm	IP67C-AHT	0.6	
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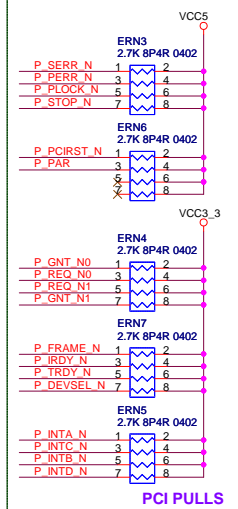
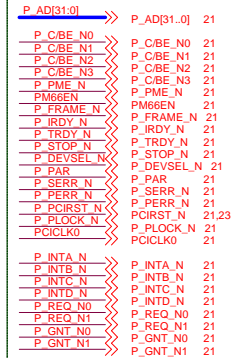
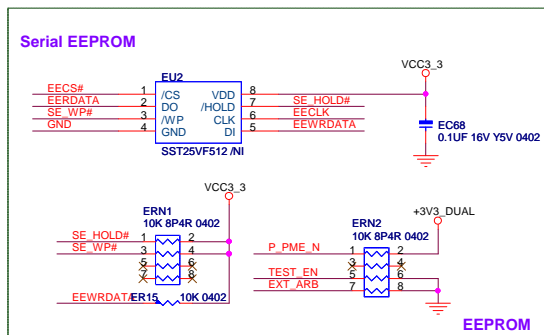
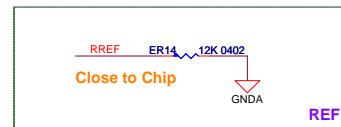
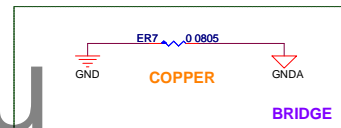
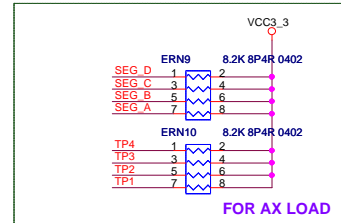
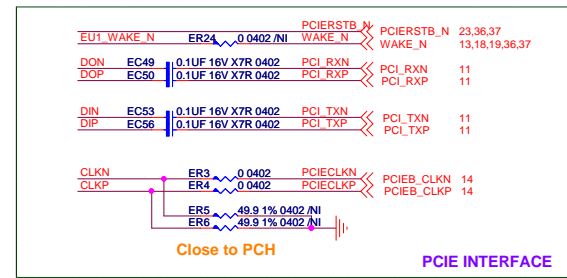
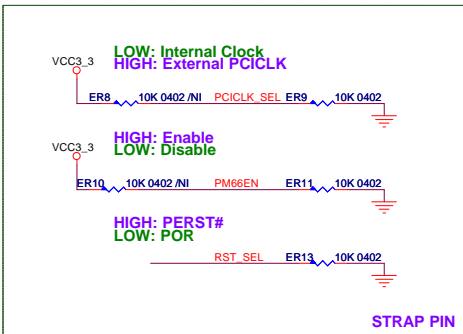
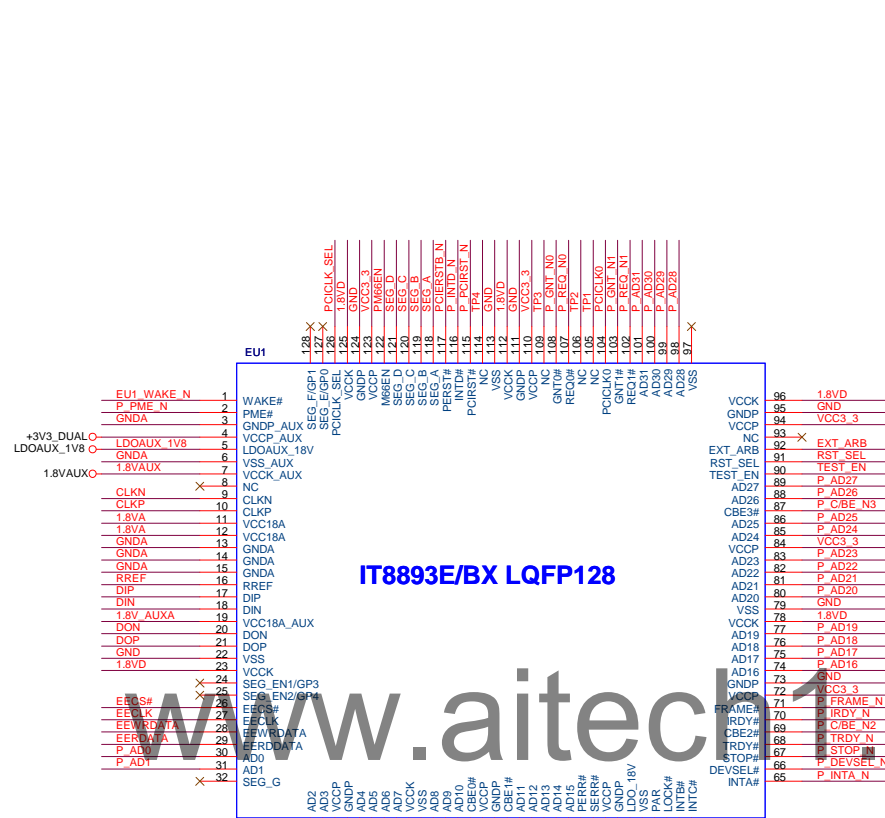
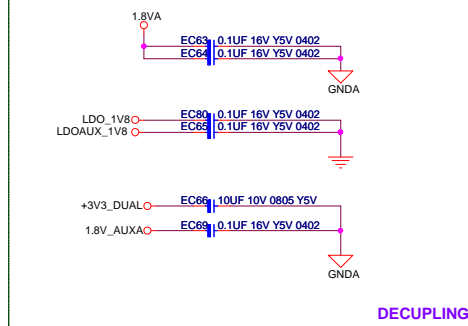
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 <b>映泰股份有限公司</b> <b>BIOSTAR GROUP</b>	
Title <b>PCIEX16 SLOT1</b>	
Size Custom	Document Number <b>IP67C-AHT</b>
Date: <b>Thursday, July 22, 2010</b>	Sheet <b>18</b> of <b>39</b>
Rev <b>0.6</b>	

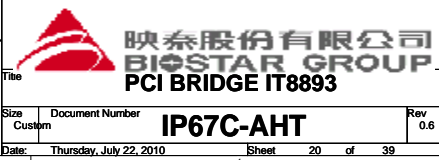




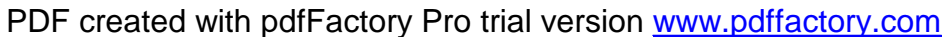


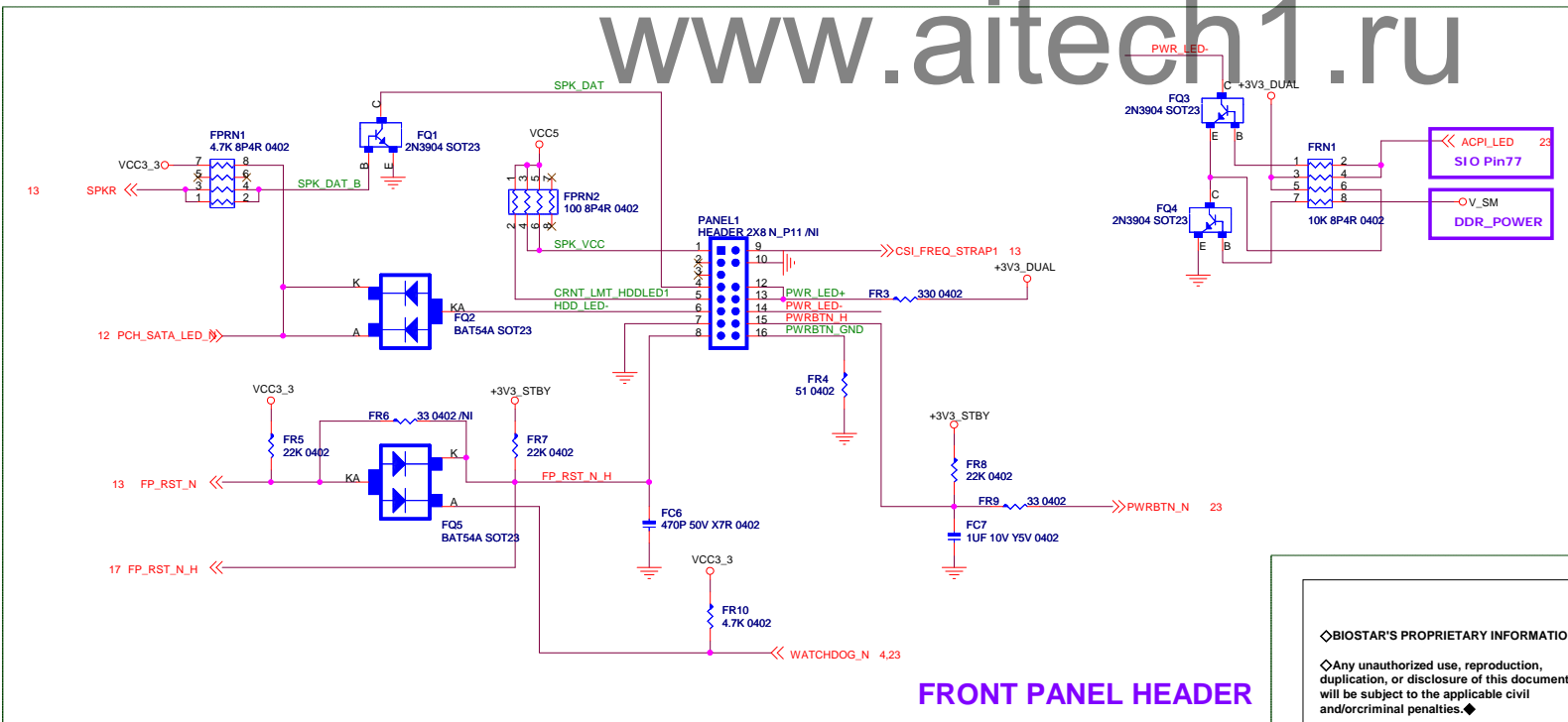
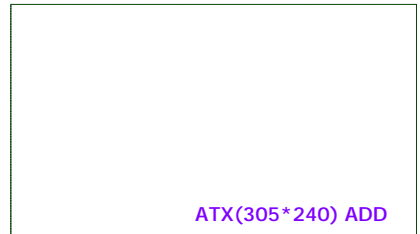
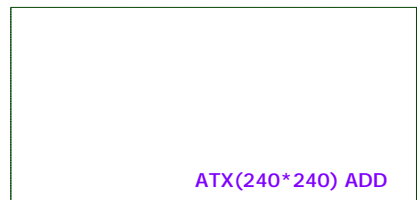
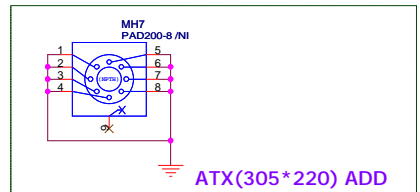
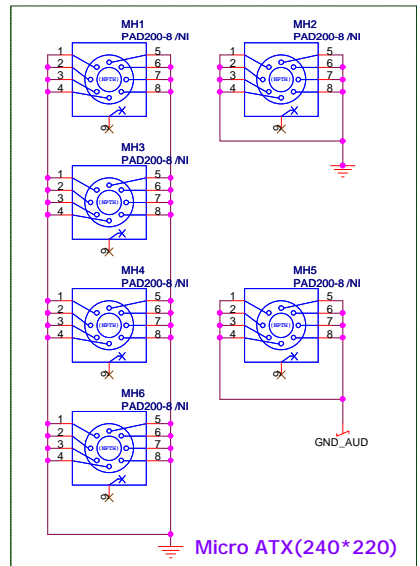
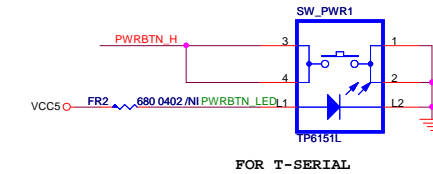
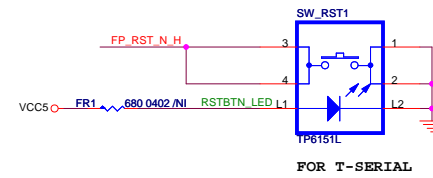
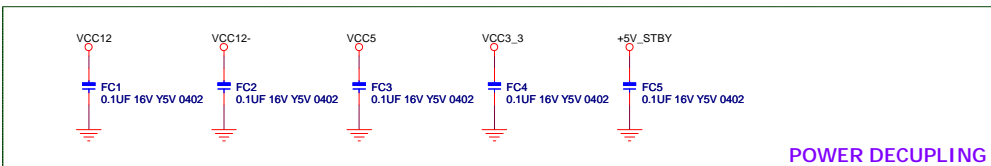
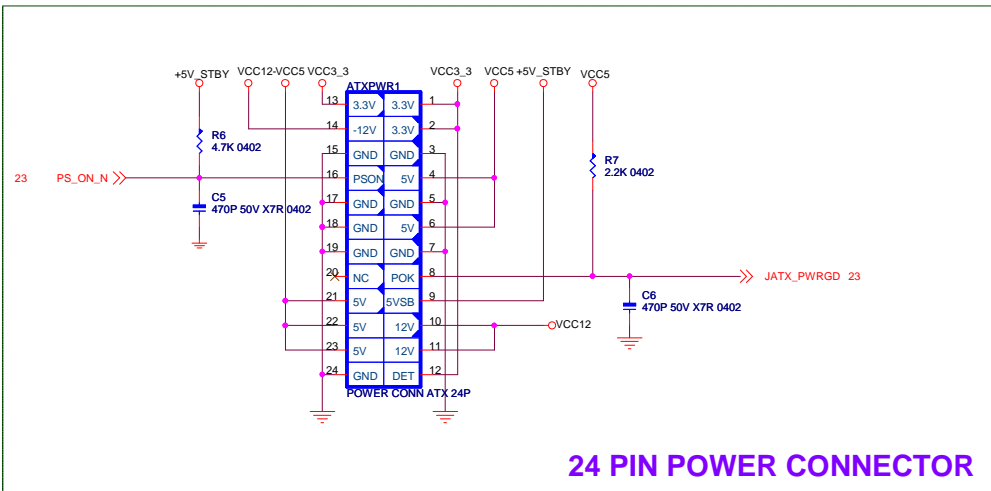
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Title: 24PIN POWER CONN&FP

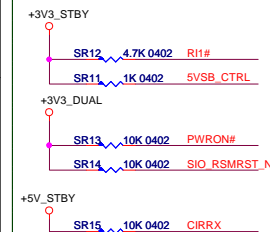
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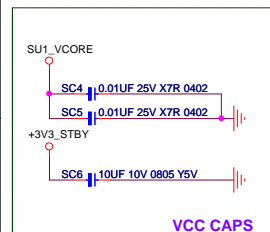
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VCC3\_3

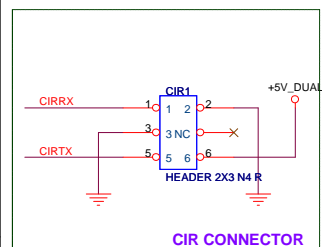
Pin	Signal
1	SRN1
2	4.7K 8P4R 0402
3	DTR1# JP4
4	SOUT1 JP3
5	RTS1# JP2
6	PCIRSTIN# PCIRST1# PCIRST12#
7	PCIRST12#
8	SR3
9	SR4
10	SR5
11	SR20
12	SR8
13	SR9
14	SIO PWRGD 30
15	SIO PWRGD 150
16	FRAME N



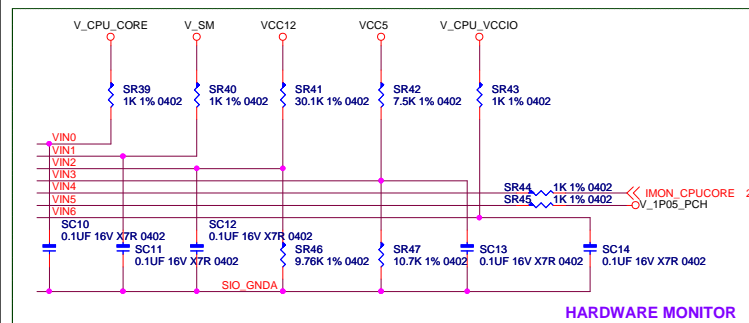
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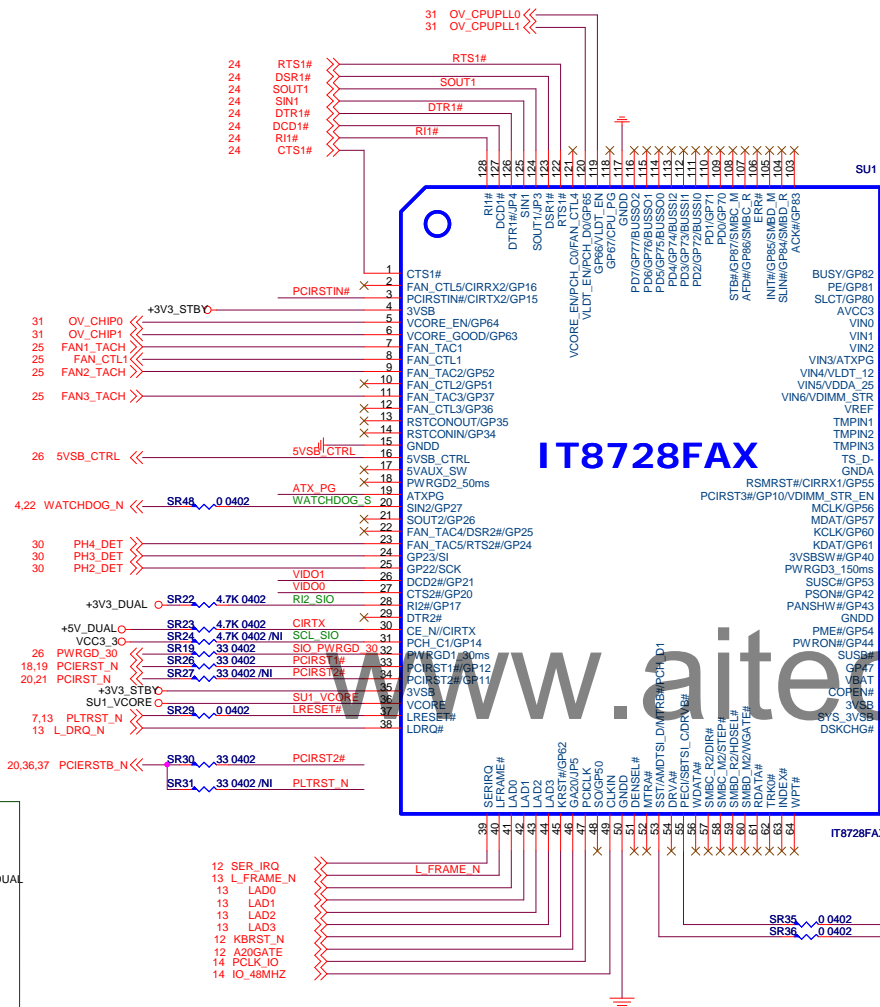
VCC CAPS



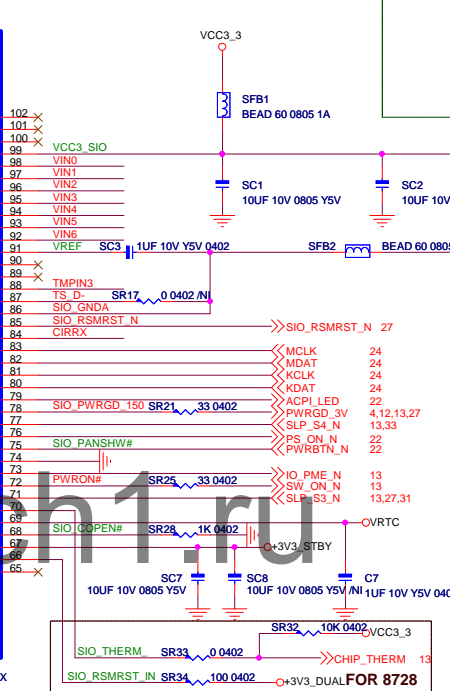
## CIR CONNECTOR



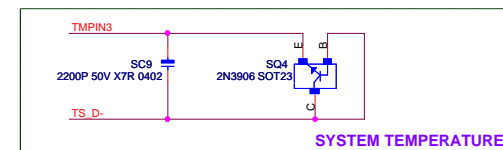
## HARDWARE MONITOR



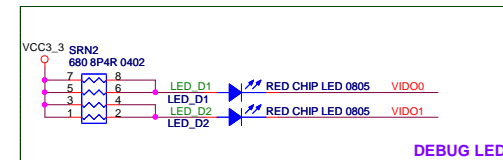
**IT8728FAX**



LED_D2	LED_D1	MESSAGE
OFF	OFF	ABNORMAL
OFF	ON	MEMORY ERROR
ON	OFF	VGA ERROR
ON	ON	NORMAL



SYSTEM TEMPERATURE



DEBUG LED

ITE8721		ITE8728
PIN121	FAN_CTL4/VID_TURBO	VCORE_EN/PCH+C0
PIN120	VDDA_EN	VLDT_EN/PCH+D0
PIN19	GP30	ATXPG
PIN31	GP14	PCH_C1
PIN53	SST/AMDSI_D/PECI_AVA/MTRB#/PCH_D	SST/AMDSI_D/MTRB#/PCH_C
PIN55	PECI/AMDSI_C/DRVB#/PCH_C	PECI/AMDSI_C/DRVB#
PIN66	GP47	SYS_3VSB
PIN70	SYS_3VSB	GP47
PIN95	VIN3/ATXPG	VIN2(VCC5)
PIN96	VIN2	VIN1(VCC12)
PIN97	VIN1(VCC5)	VIN1/VDIMM_STR(1.5V)
PIN98	VIN0(VCC12)	VIN0/VCORE(1.1V)

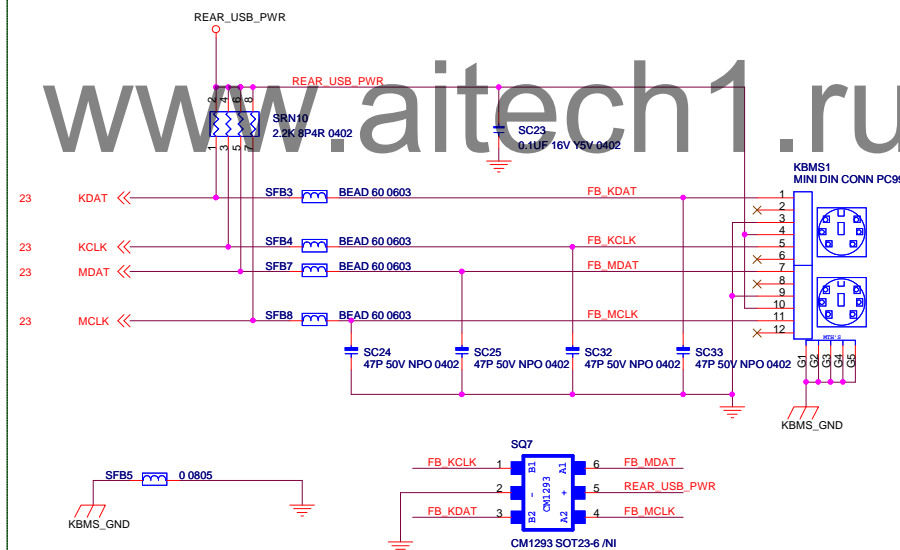
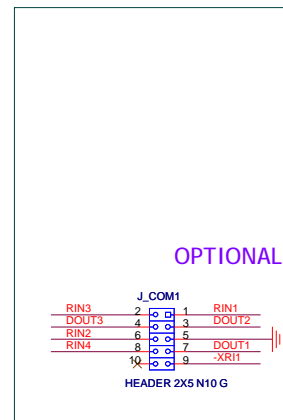
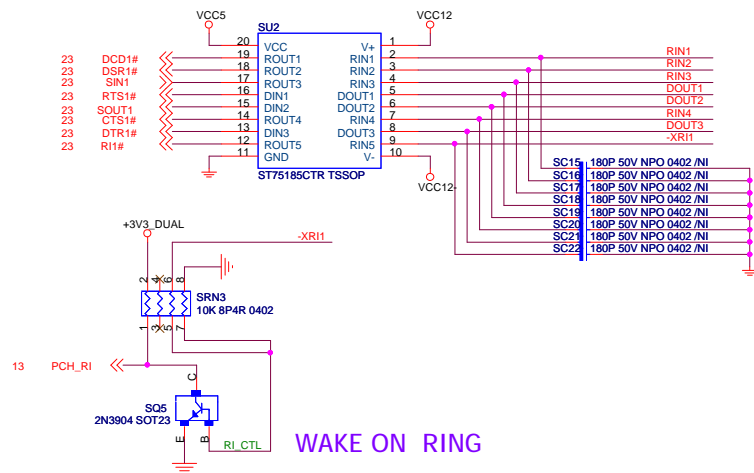
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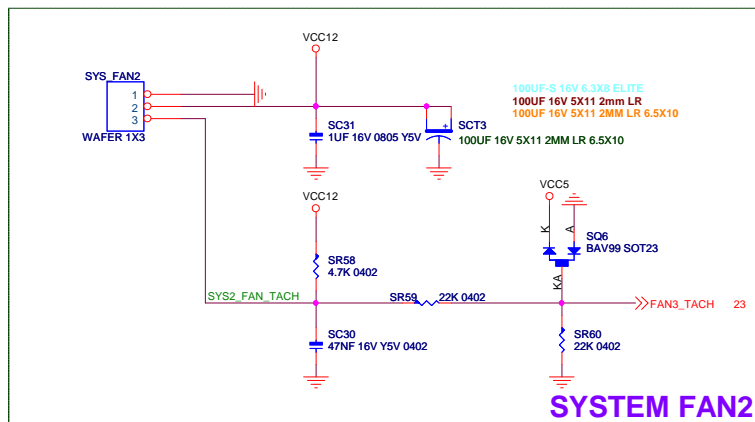
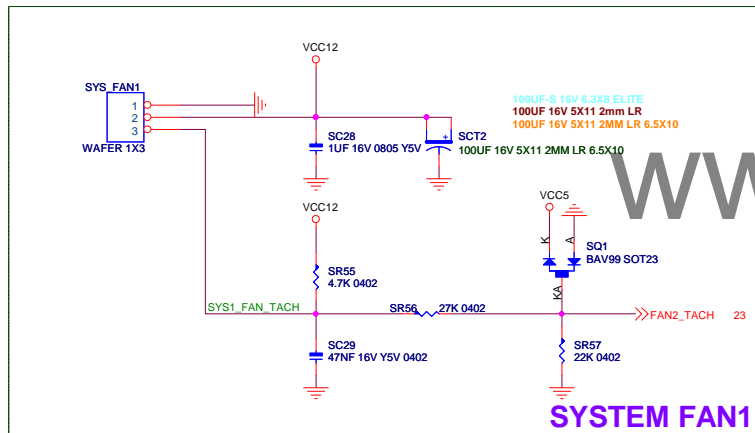
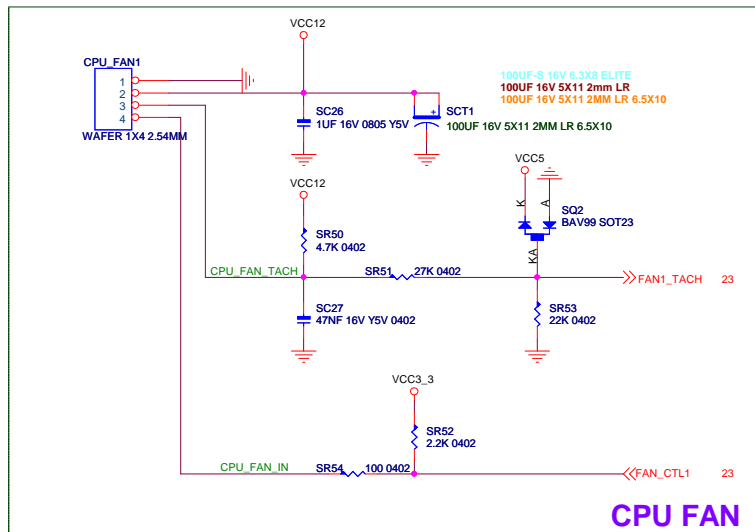


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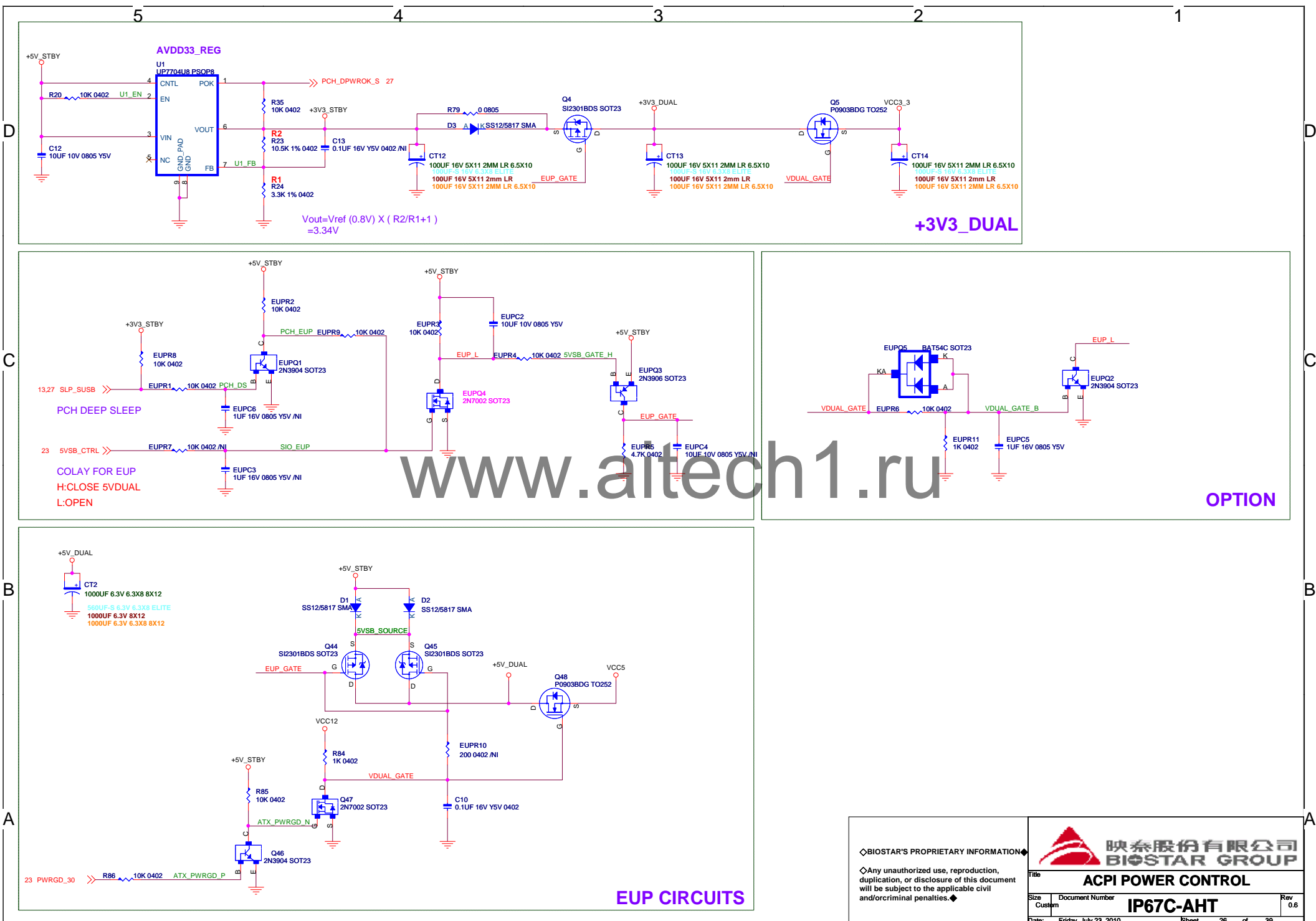


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Title		HW MONITOR/FAN CONTROL	
Size	Document Number	IP67C-AHT	
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Date: Thursday, July 22, 2010		Sheet 25 of 39	



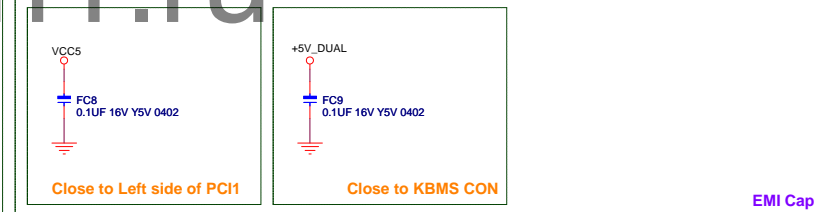
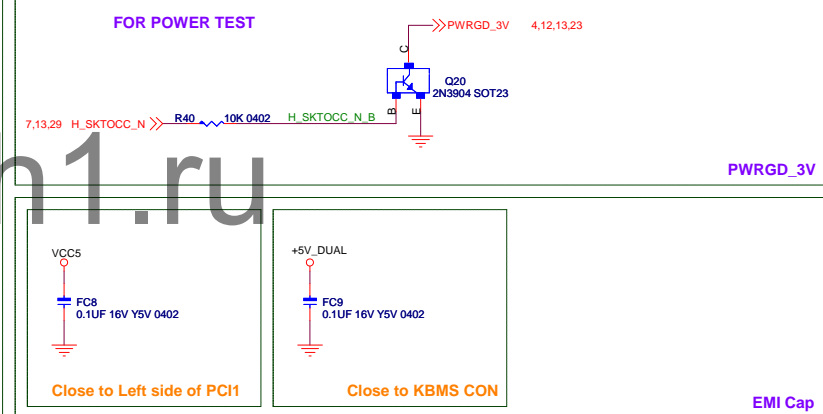
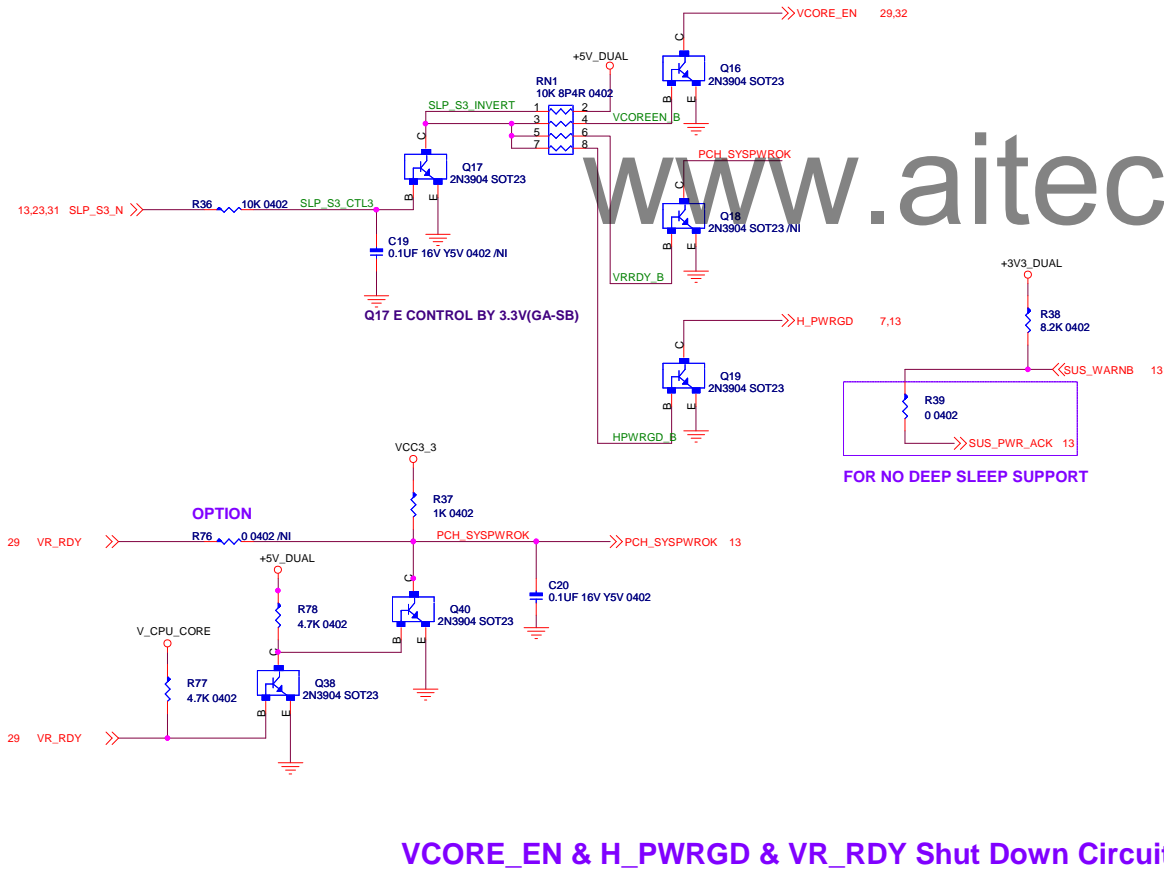
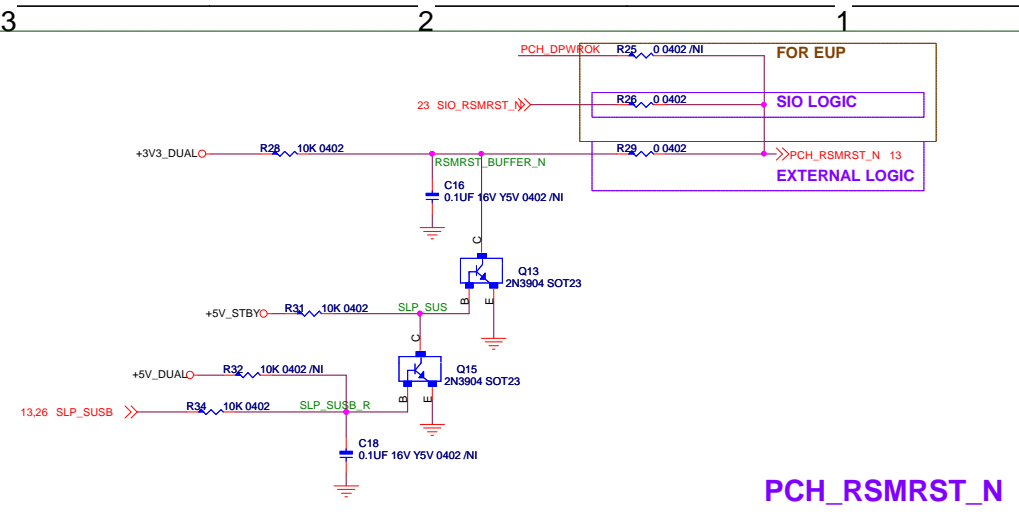
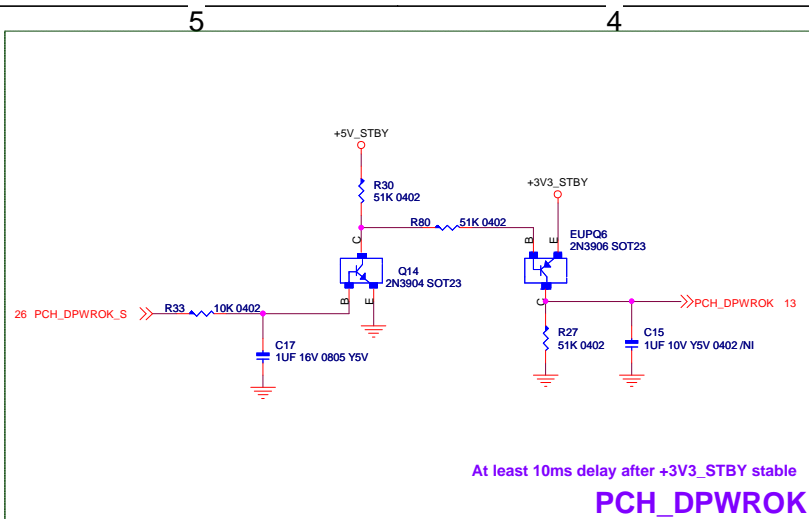
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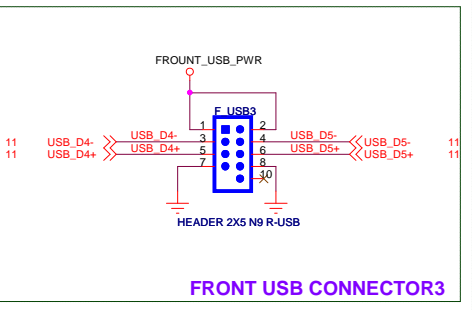
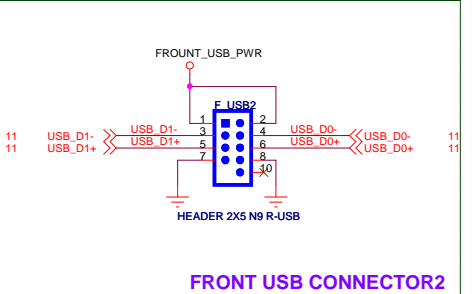
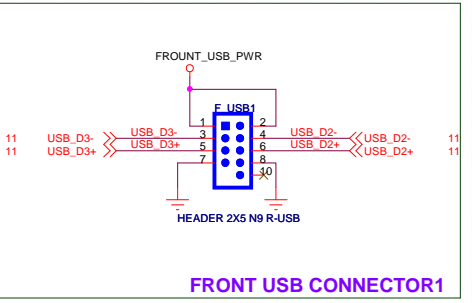
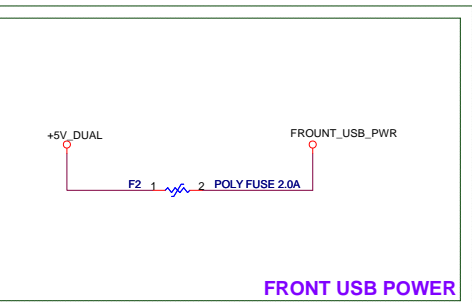
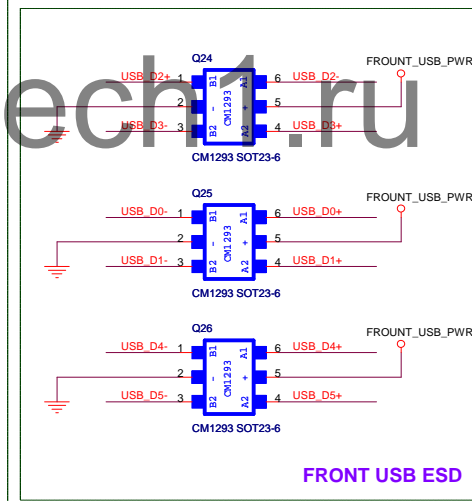
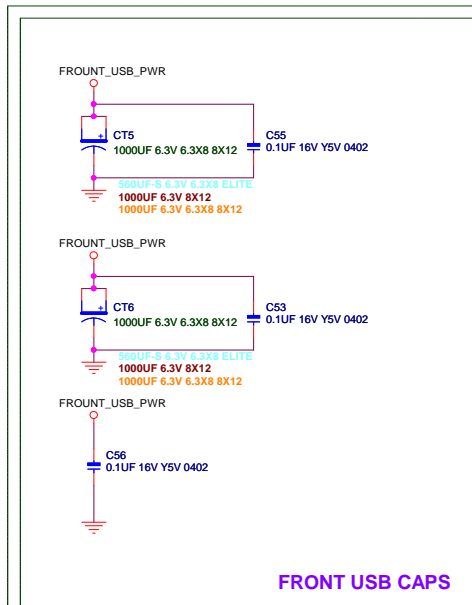
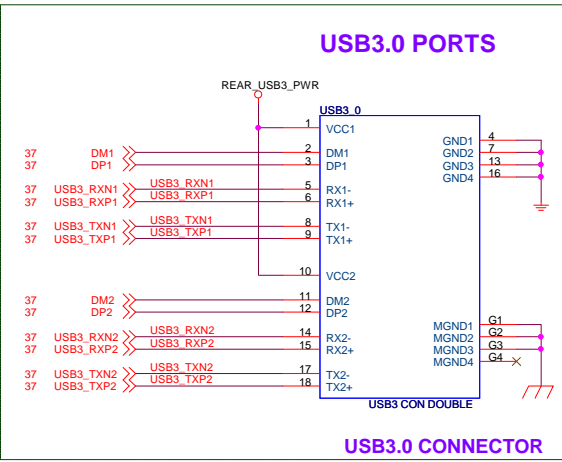
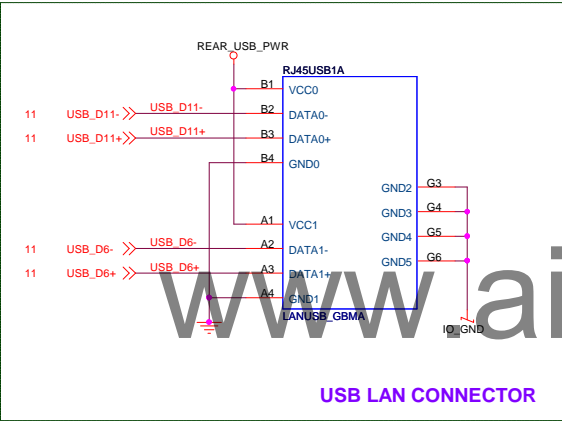
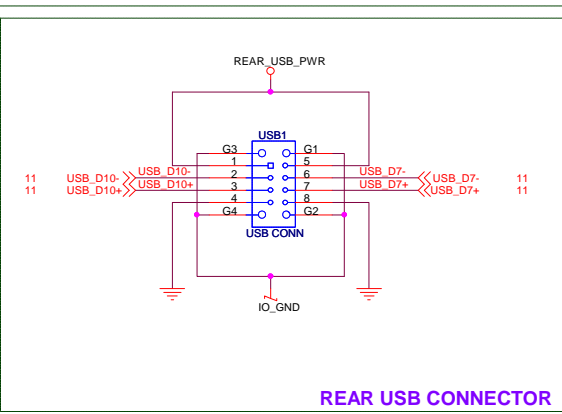
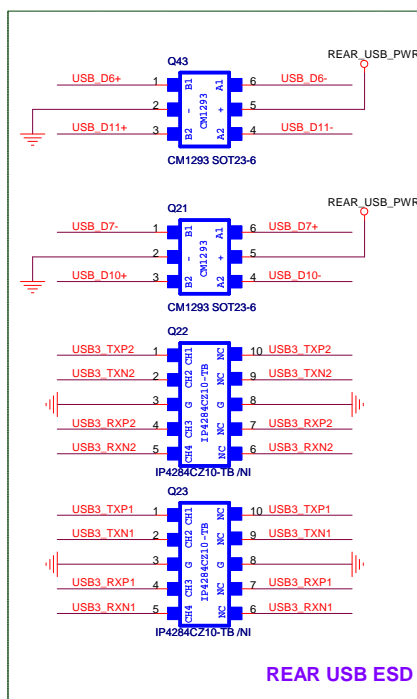
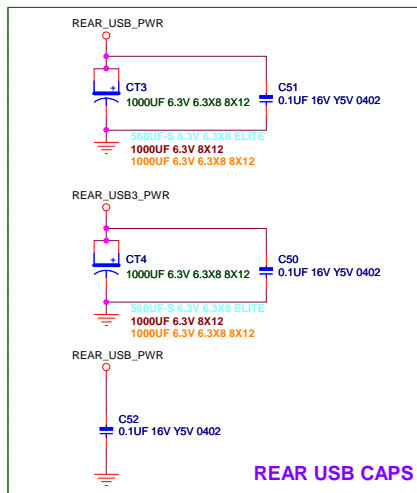
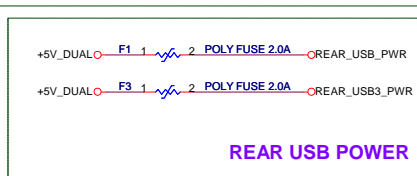


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Title		ACPI POWER CONTROL	
Size	Document Number	IP67C-AHT	
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Date: Thursday, July 22, 2010		Document Number <b>IP67C-AHT</b>	
Sheet 27		Rev 0.6	



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**USB CONN**

**IP67C-AHT**

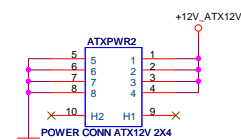
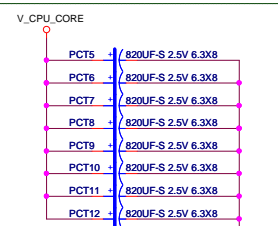
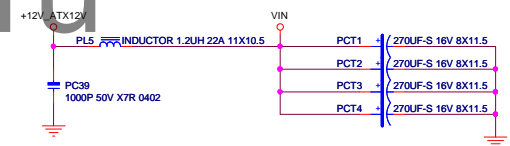
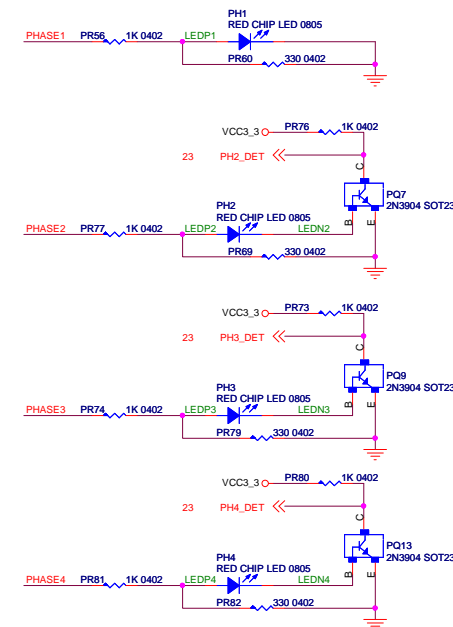
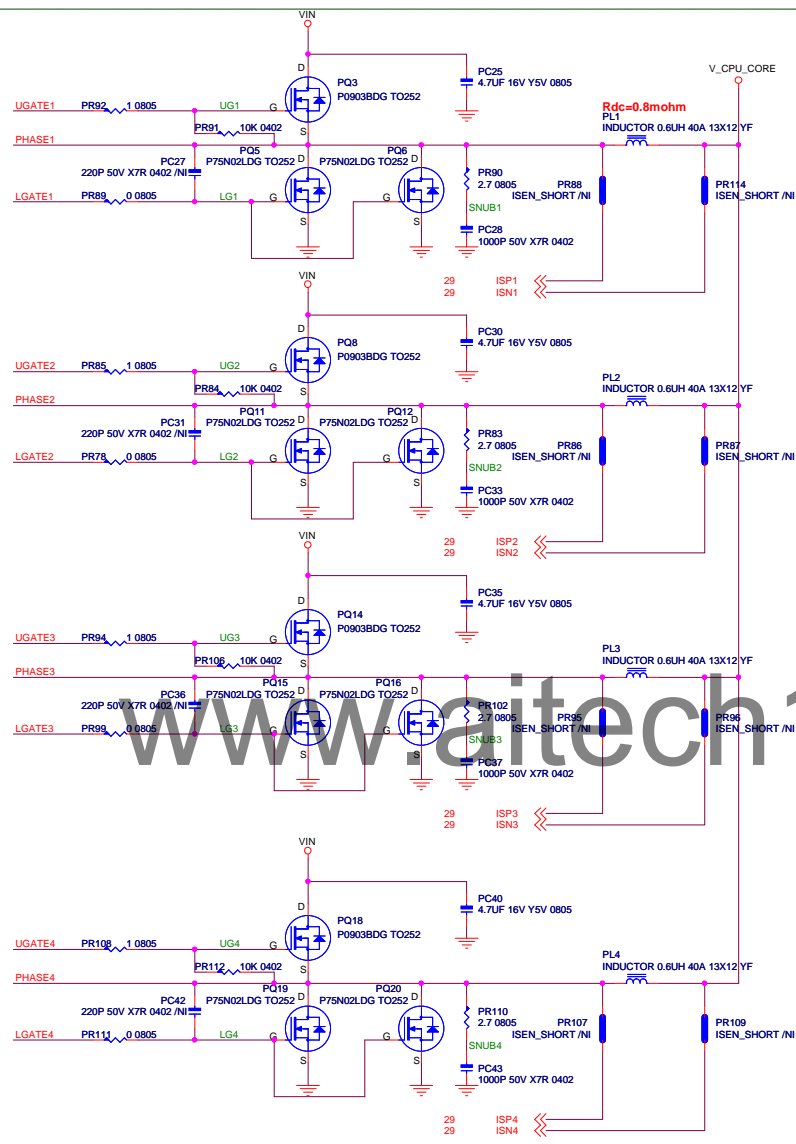
Rev 0.6

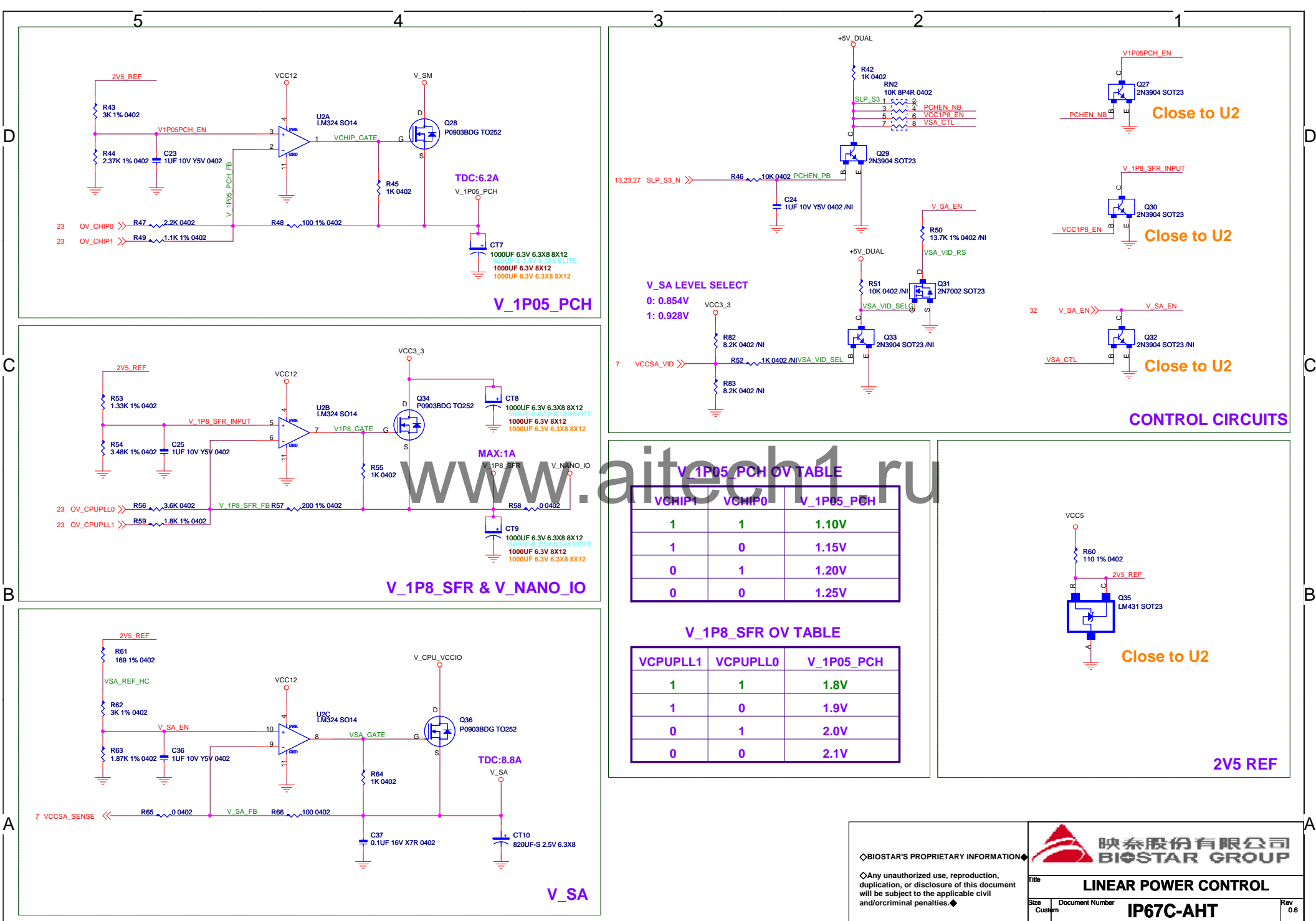
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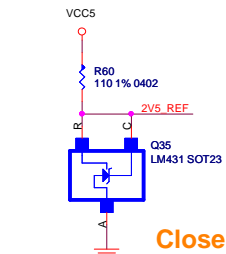






VCHIP1	VCHIP0	V_1P05_PCH
1	1	1.10V
1	0	1.15V
0	1	1.20V
0	0	1.25V

VCPULL1	VCPULL0	V_1P05_PCH
1	1	1.8V
1	0	1.9V
0	1	2.0V
0	0	2.1V





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Title

LINEAR POWER CONTROL

Size

Document Number

IP67C-AHT

Rev

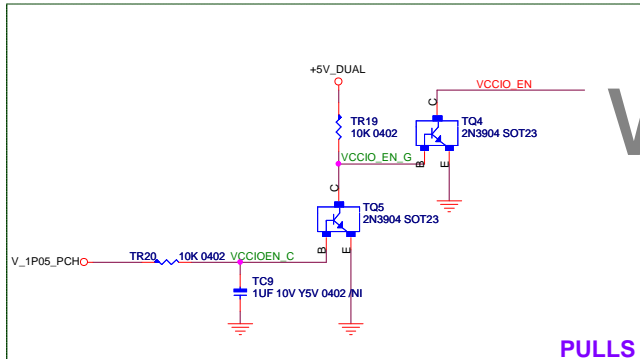
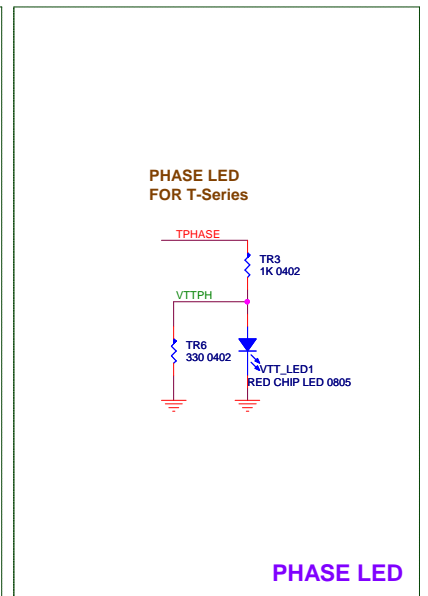
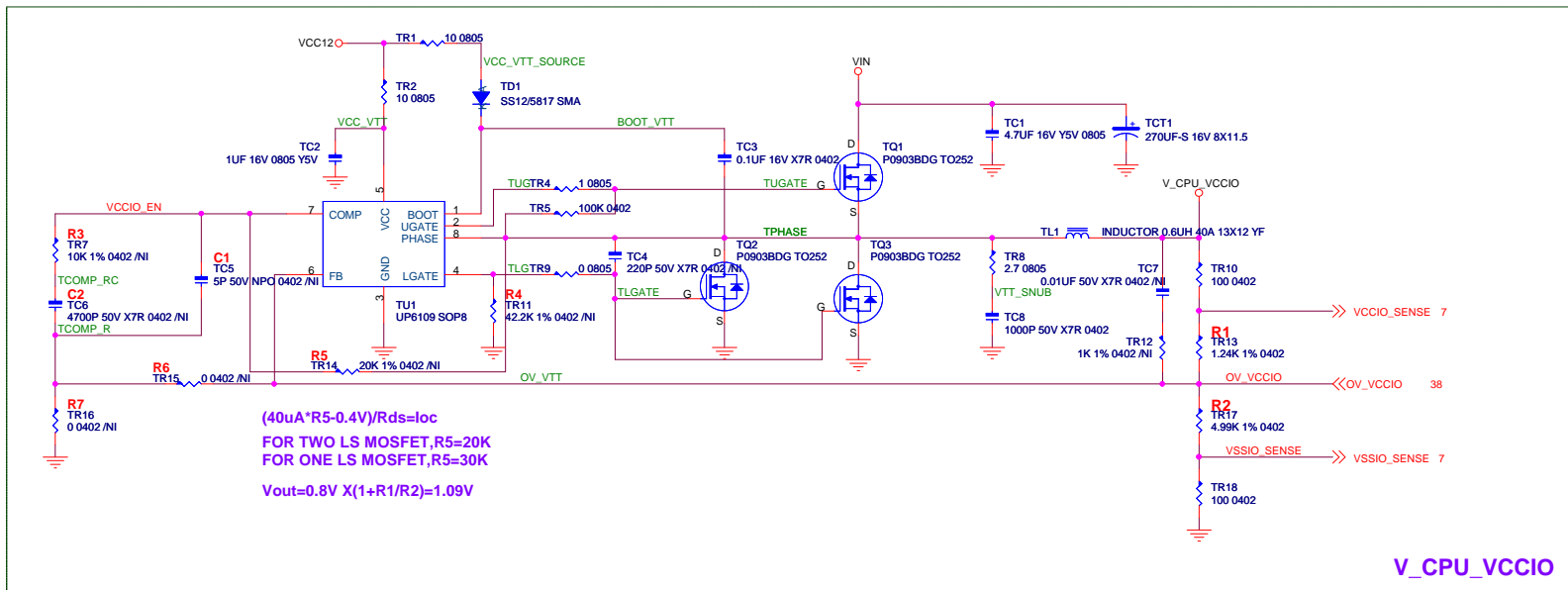
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Date

Thursday, July 22, 2010

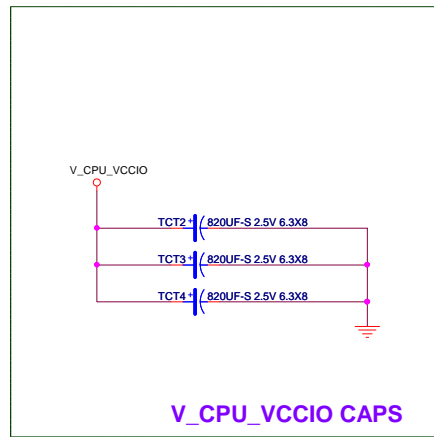
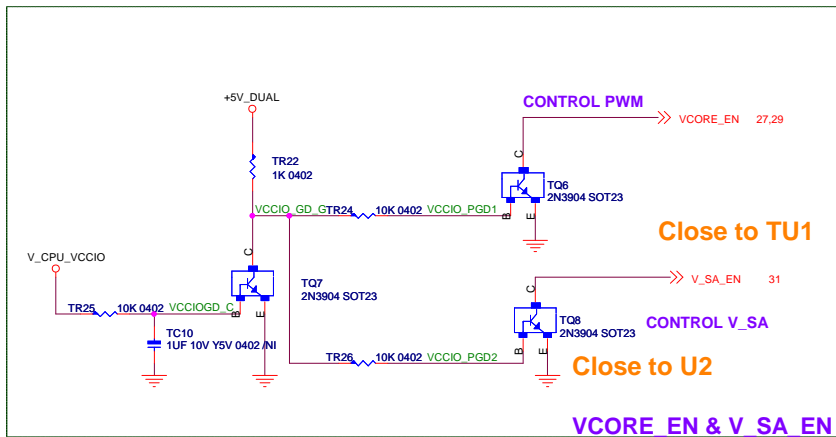
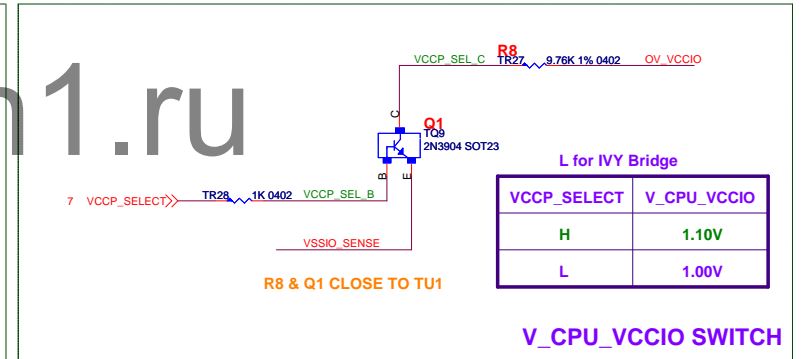
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R3	NI	13.7K 1% 0402	NI
R4	NI	26.1K 1% 0402	NI
R5	20K 0402	NI	NI
R6	NI	0 0402	NI
R7	NI	NI	NI
C1	NI	5P 50V NPO 0402	NI
C2	NI	4700P 50V X7R 0402	NI



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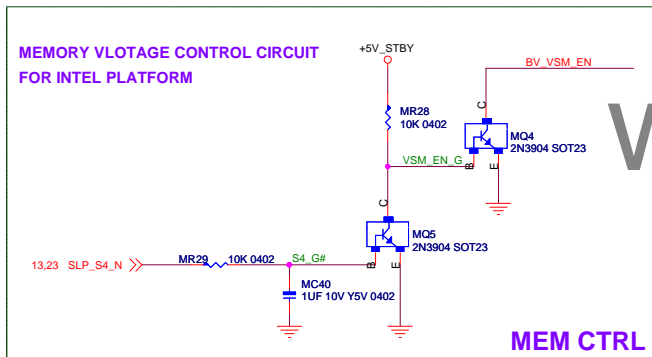
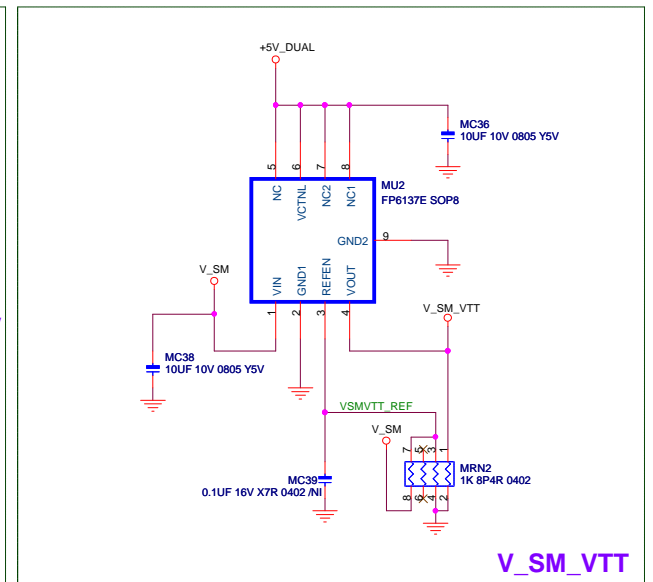
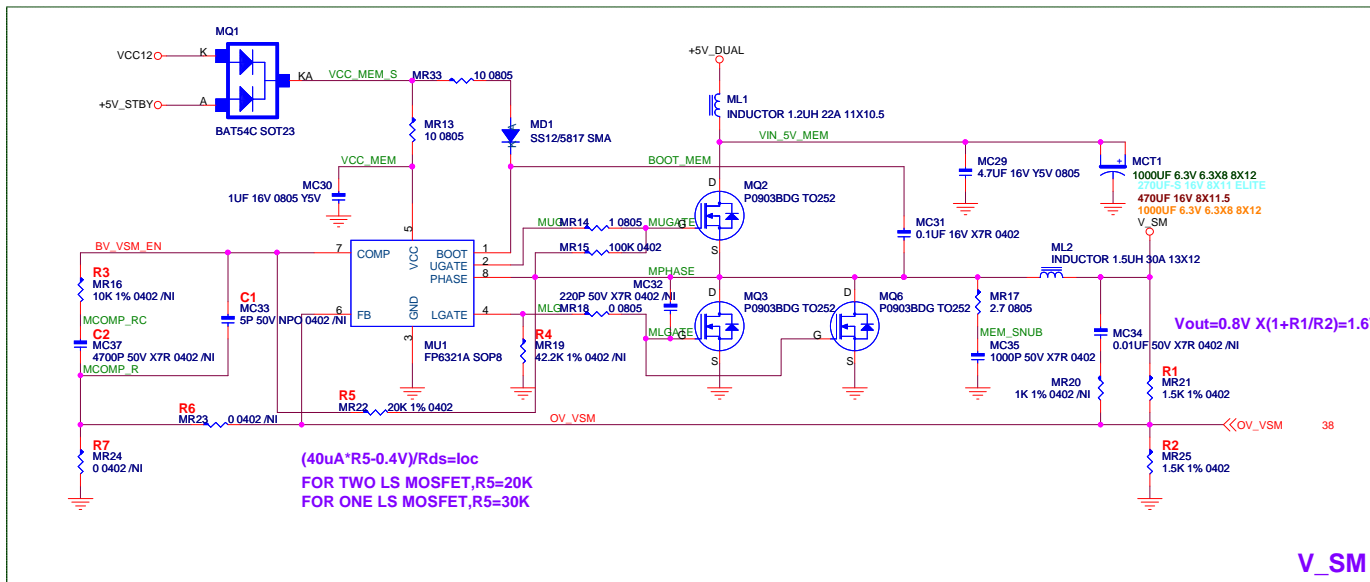
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BIOSTAR GROUP

Title: VTT DC-DC Converter  
IP67C-AHT

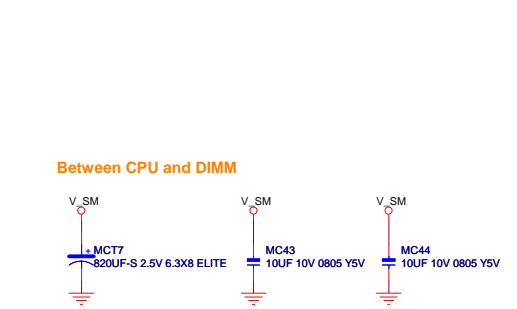
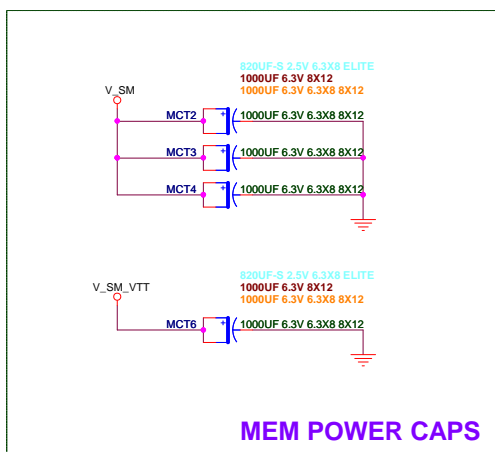
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R4	NI	26.1K 1% 0402	NI
R5	20K 0402	NI	NI
R6	NI	0 0402	NI
R7	NI	NI	NI
C1	NI	5P 50V NPO 0402	NI
C2	NI	4700P 50V X7R 0402	NI



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Size: Custom

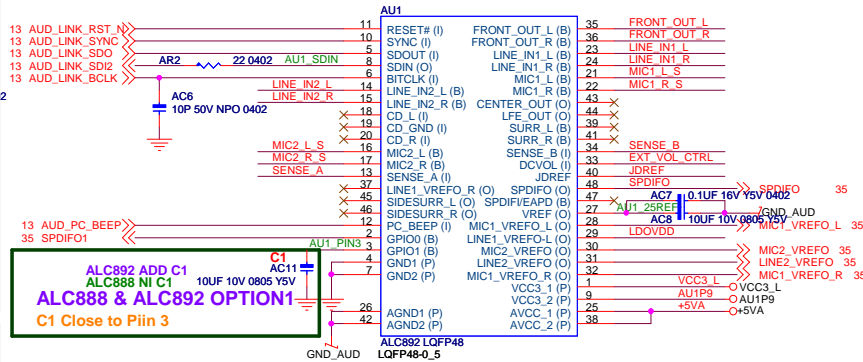
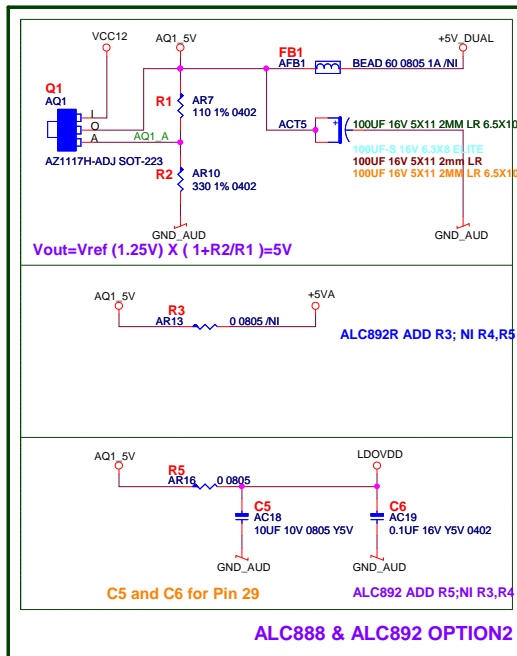
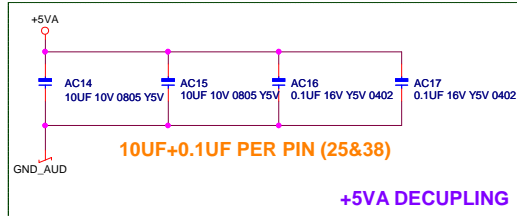
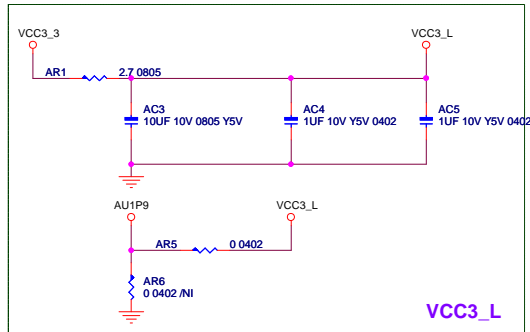
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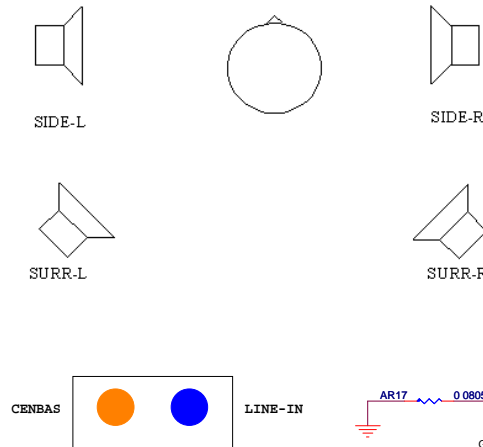
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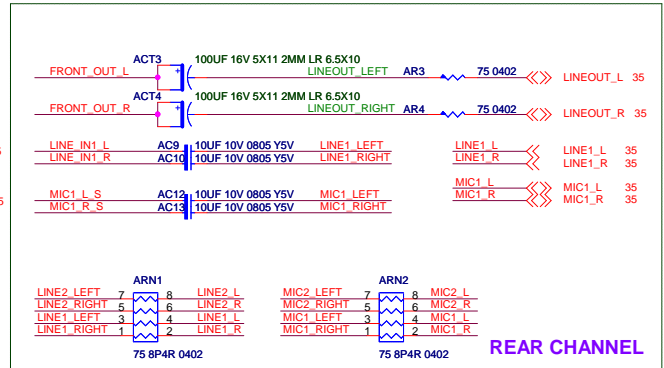
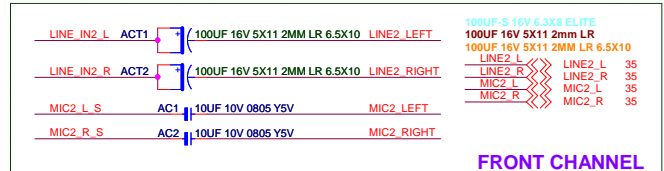
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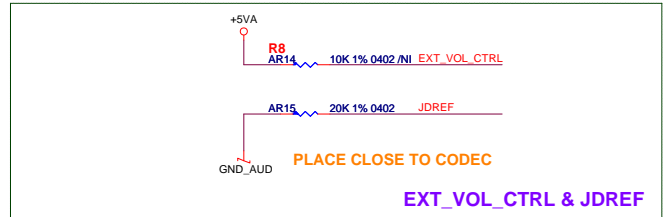
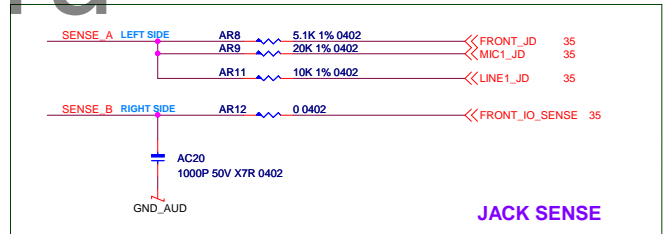
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BIOSTAR STANDARD  
NO:2010\_AUDIO\_ALC892\_01



## CD IN CONNECTOR



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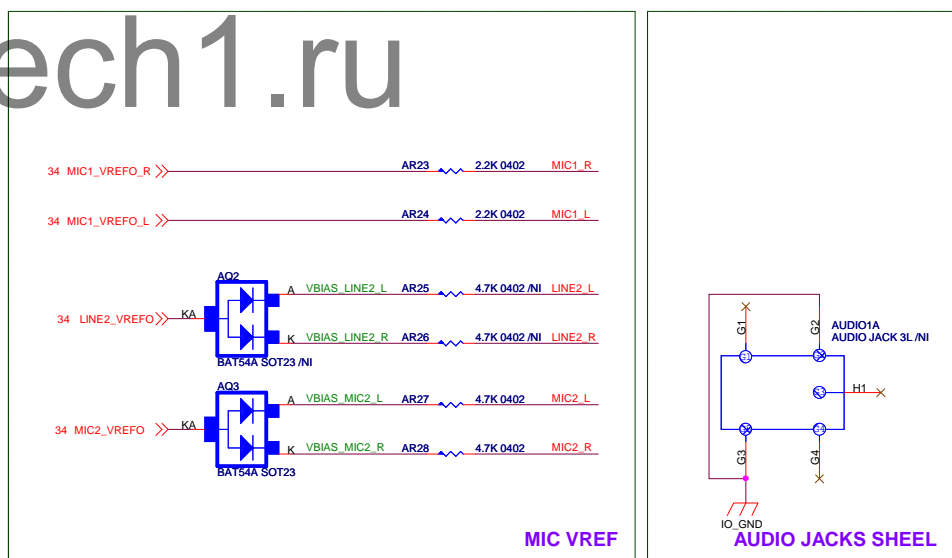
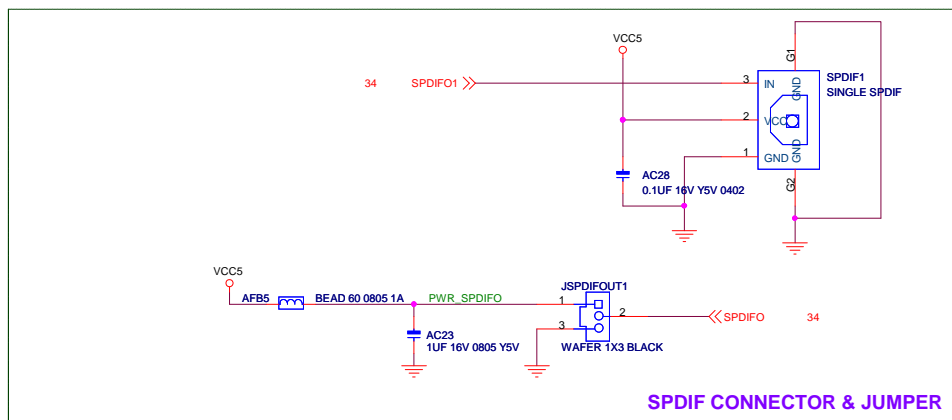
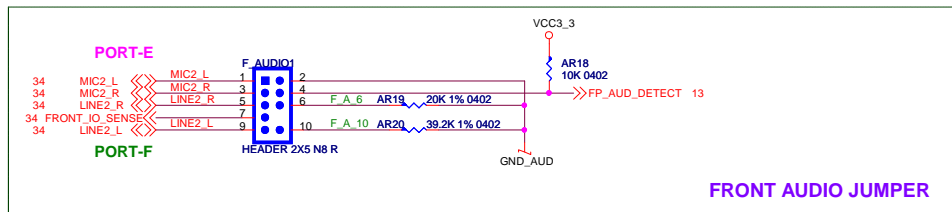
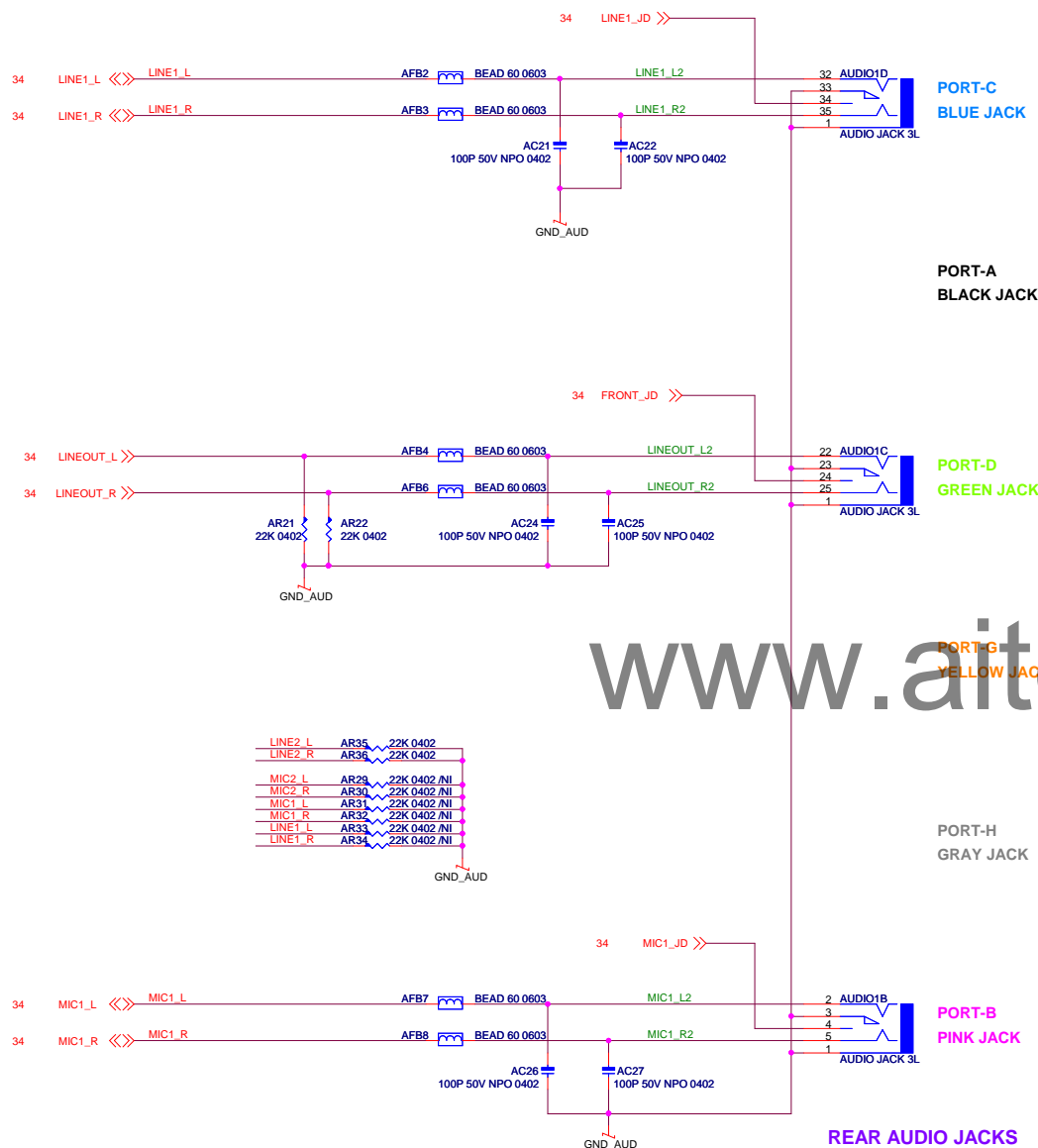
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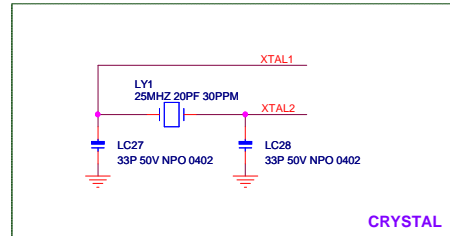
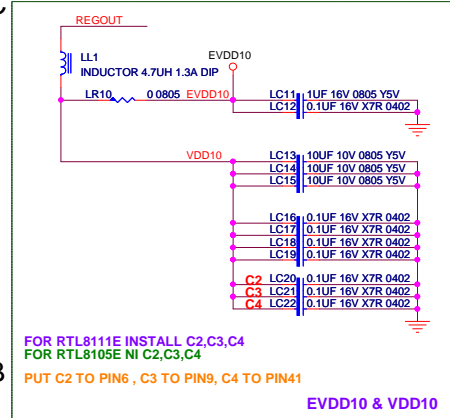
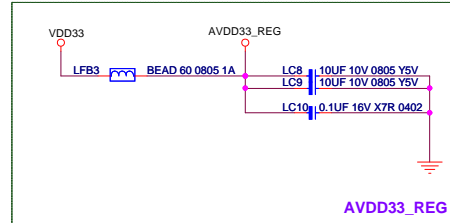
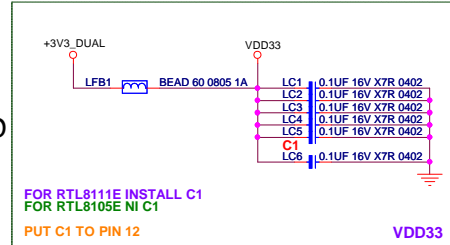
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**IP67C-AHT**

Rev 0.6

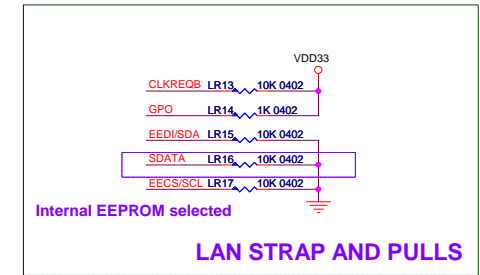
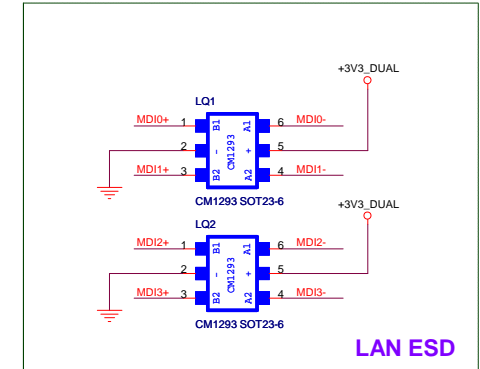
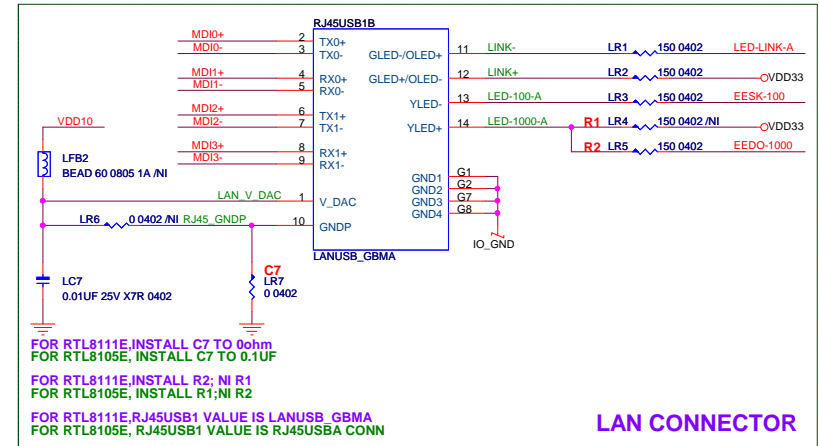
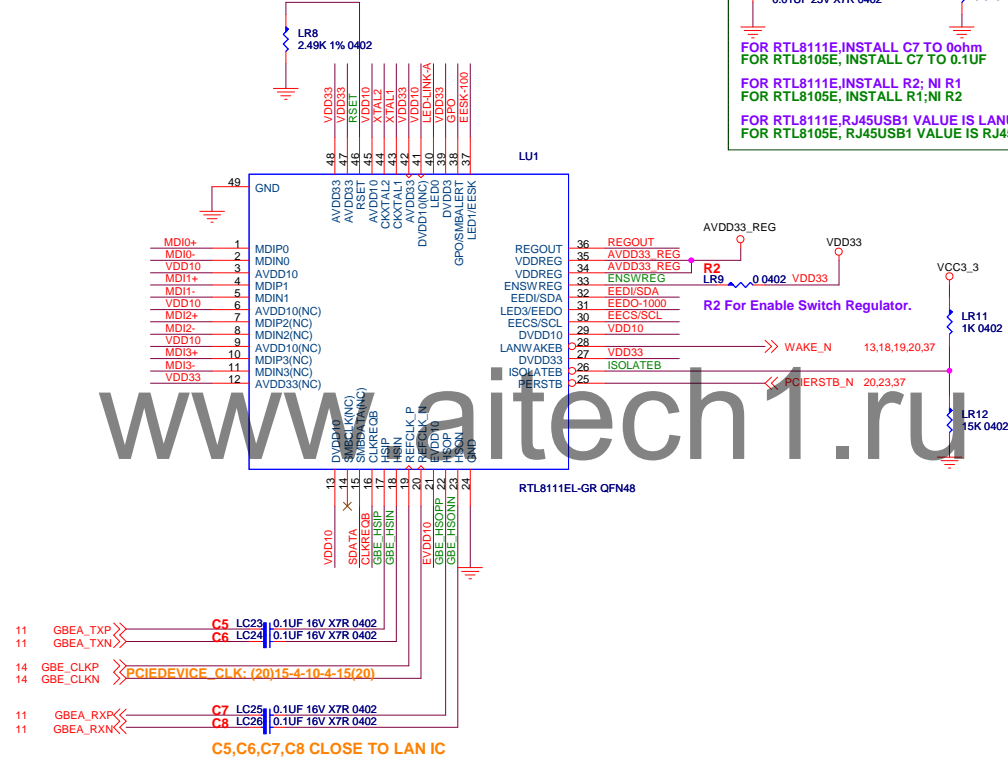
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## LAN PART: L+Reference



### COMPONENT CONTRAST LIST

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RTL8111E	O	O	O	O	0ohm	X	X	O	O	LANUSB_GBMA
RTL8105E	X	X	X	X	0.1uF	O	O	X	X	RJ45USBA CONN



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Size: Custom

Document Number: IP67C-AHT

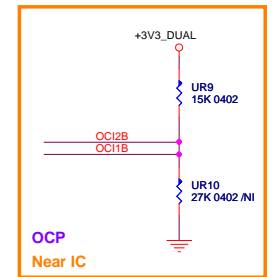
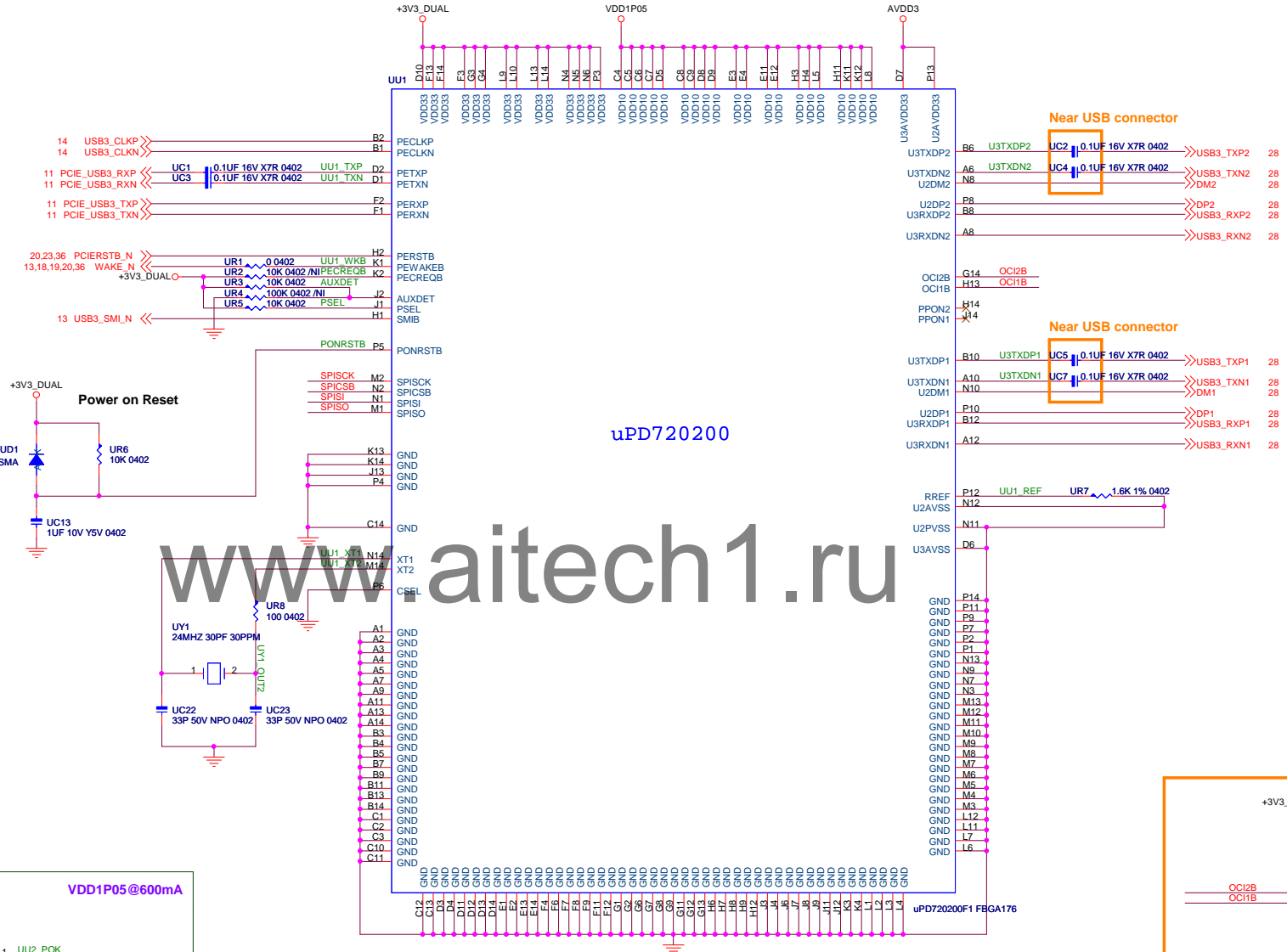
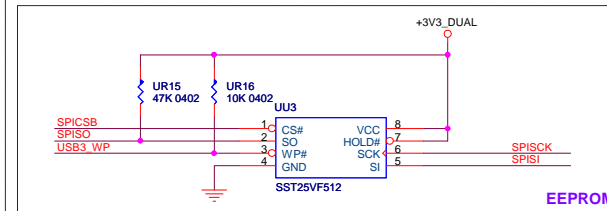
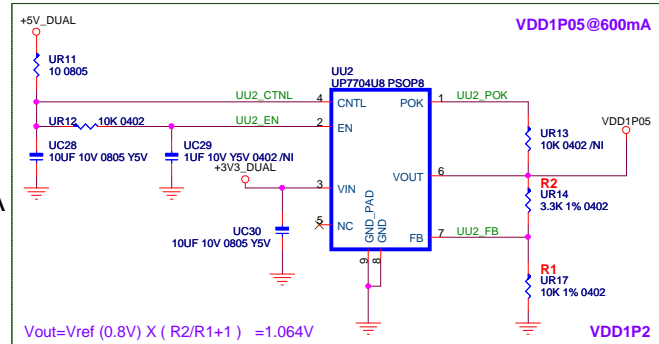
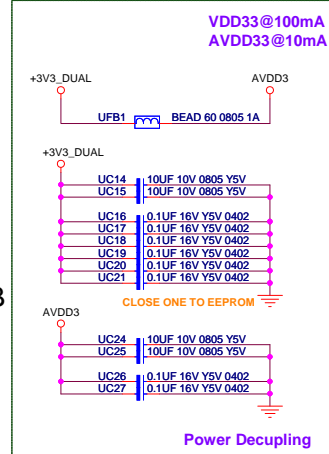
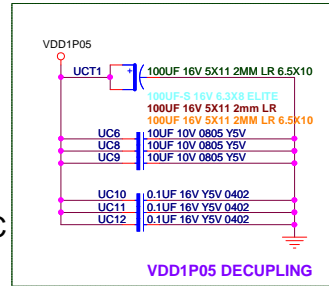
Date: Thursday, July 22, 2010

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# EX-USB PART: U+Reference



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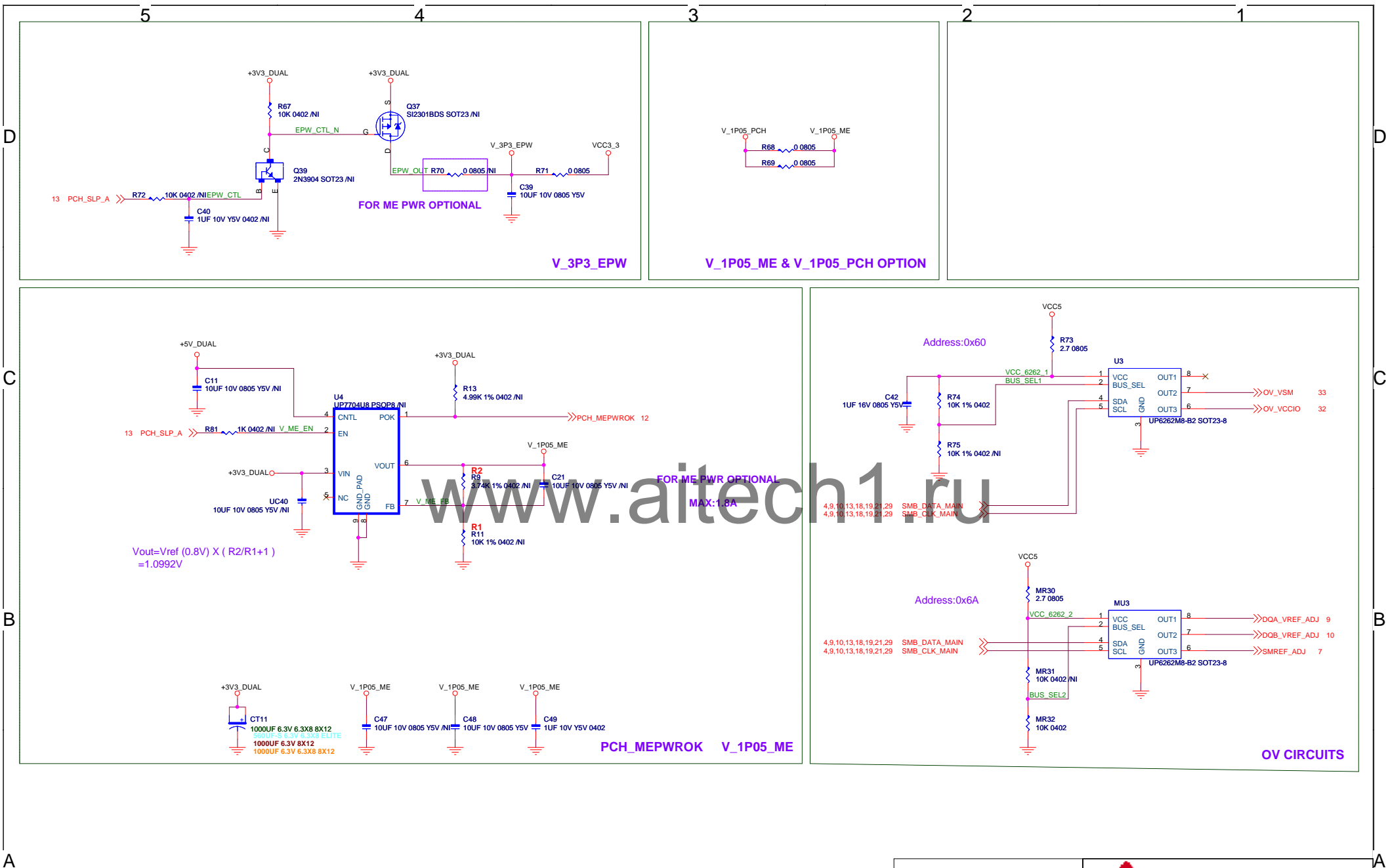
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Size: Custom Document Number: **IP67C-AHT** Rev: 0.6

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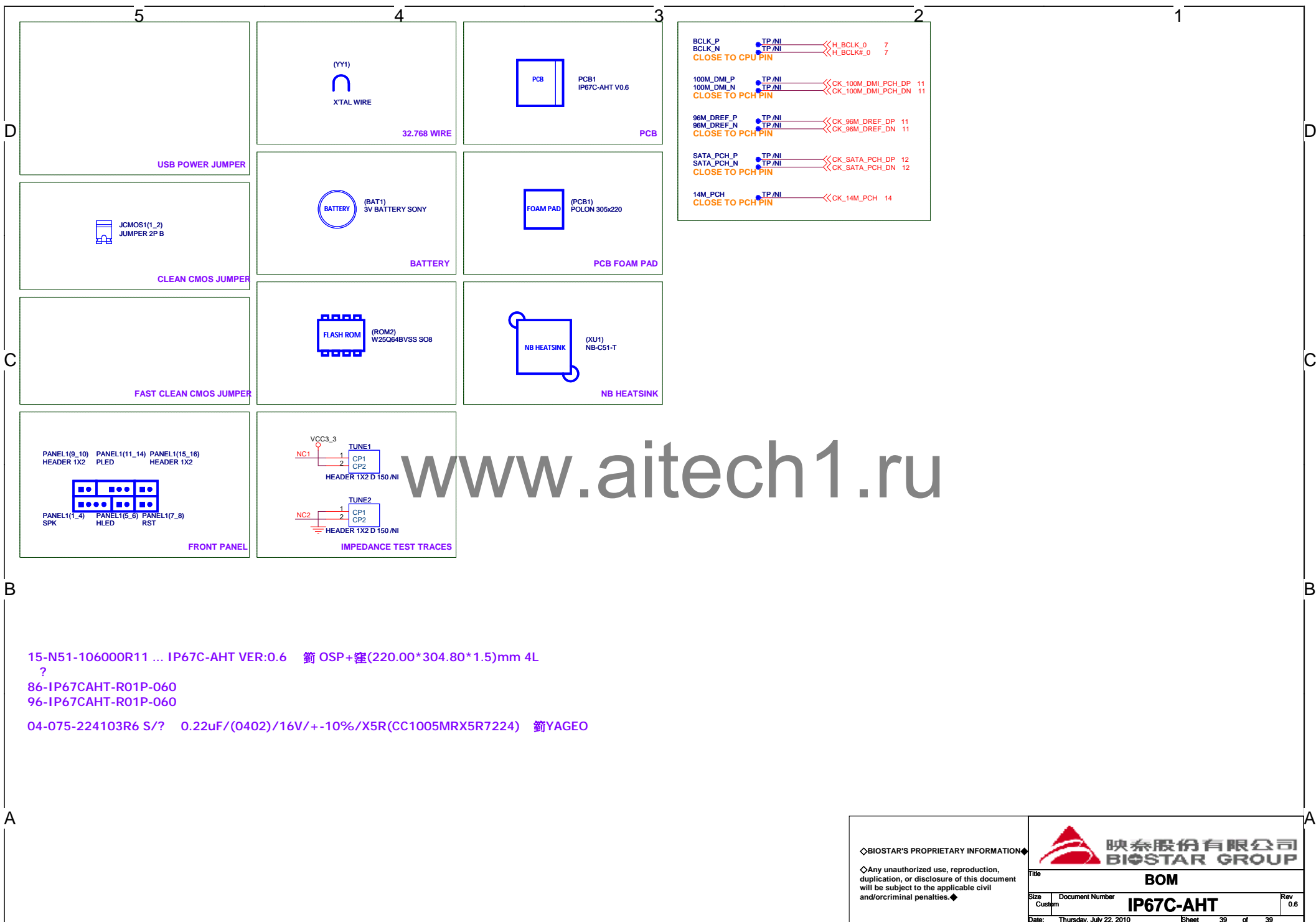
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Size: Custom  
Date: Thursday, July 22, 2010

Document Number: **IP67C-AHT**

Rev: 0.6

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Size	Document Number	Rev	
Custom	IP67C-AHT	0.6	
Date:	Thursday, July 22, 2010	Sheet	39 of 39