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CPU:

Intel Sandy/Ivy Bridge processors in LGA1155 Package 95W

System Chipset:

Sugar Point    H61

Main Memory:

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

DDR3-1333 /1066 /800

Onboard Device:

Super I/O:IT8728

LAN:Realtek 8111E

HD Codec:ALC662 3 jacks

PCI BRIDGE:IT8893E CX

USB3.0 CONTROLLER:ASM1042

Power solution:

CPU Voltage Regulators:3phase by uP6235

AXG voltage Regulators:1phase by uP6235

VTT voltage Regulators:1Phase by UP6109V by UP6262

DDR voltage Regulators:1Phase by FP6109V by UP6262

Expansion Slots:

PCI EXPRESS 16X SLOT\*1

PCI EXPRESS 1X SLOT\*1

PCI SLOT\*2

REAR IO:

PS/2 +2 layer USB2.0 Port

HDMI Port

DVI Port

VGA Port

2 layer USB3.0 + Gb RJ-45 Ports

Audio Jackets

Front I/O:

4SATA2 FOR H61

USB Header \* 2

CPU /System1

Serial header

Parallel Header

CIR Header

Front Audio Header & SPDIF Out 1

HW Engineer		Date	
HW Leader1		Date	
HW Leader2		Date	

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File

INDEX

Doc Number

IH61C-MHS

Rev

0.6

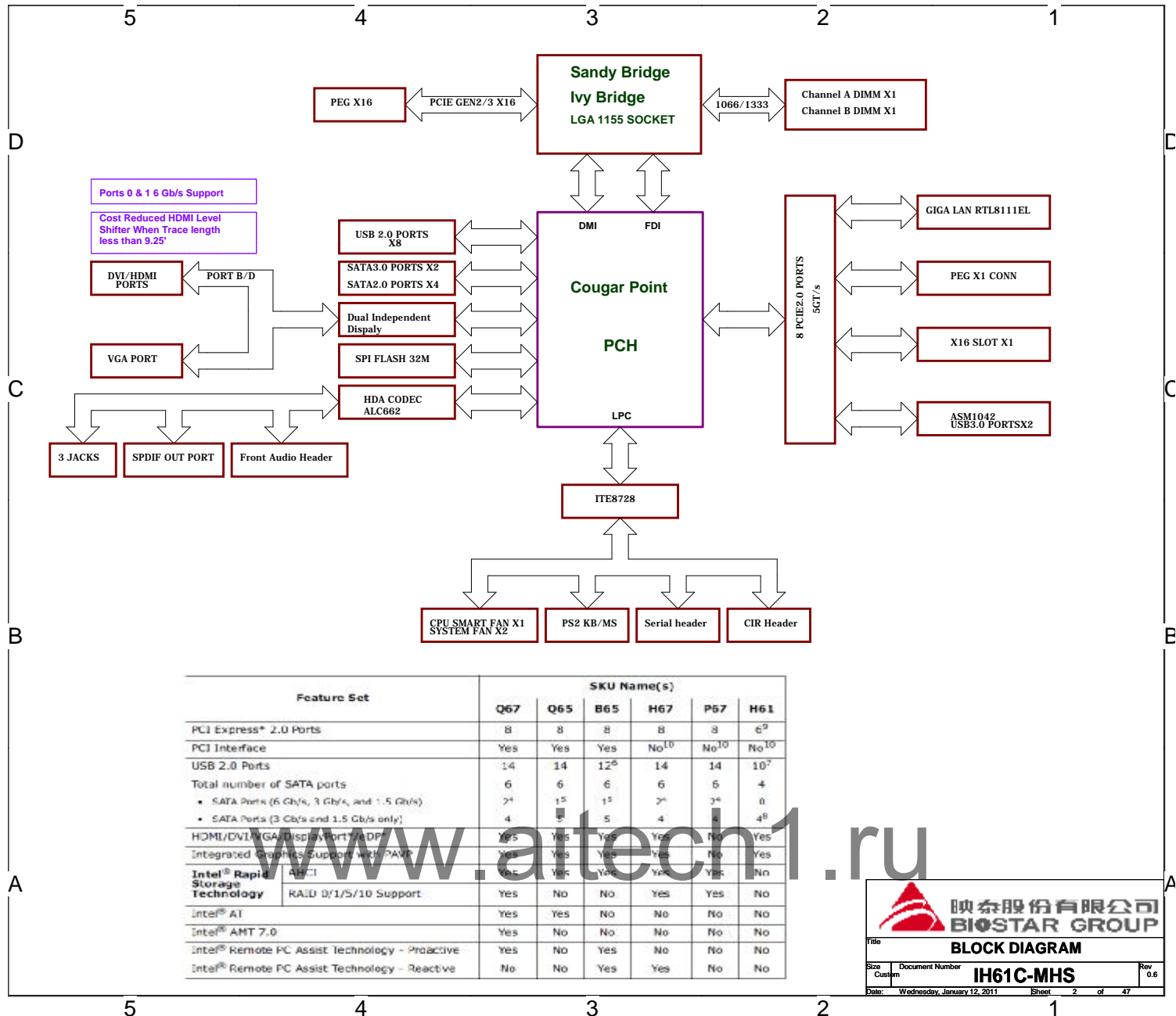
Date

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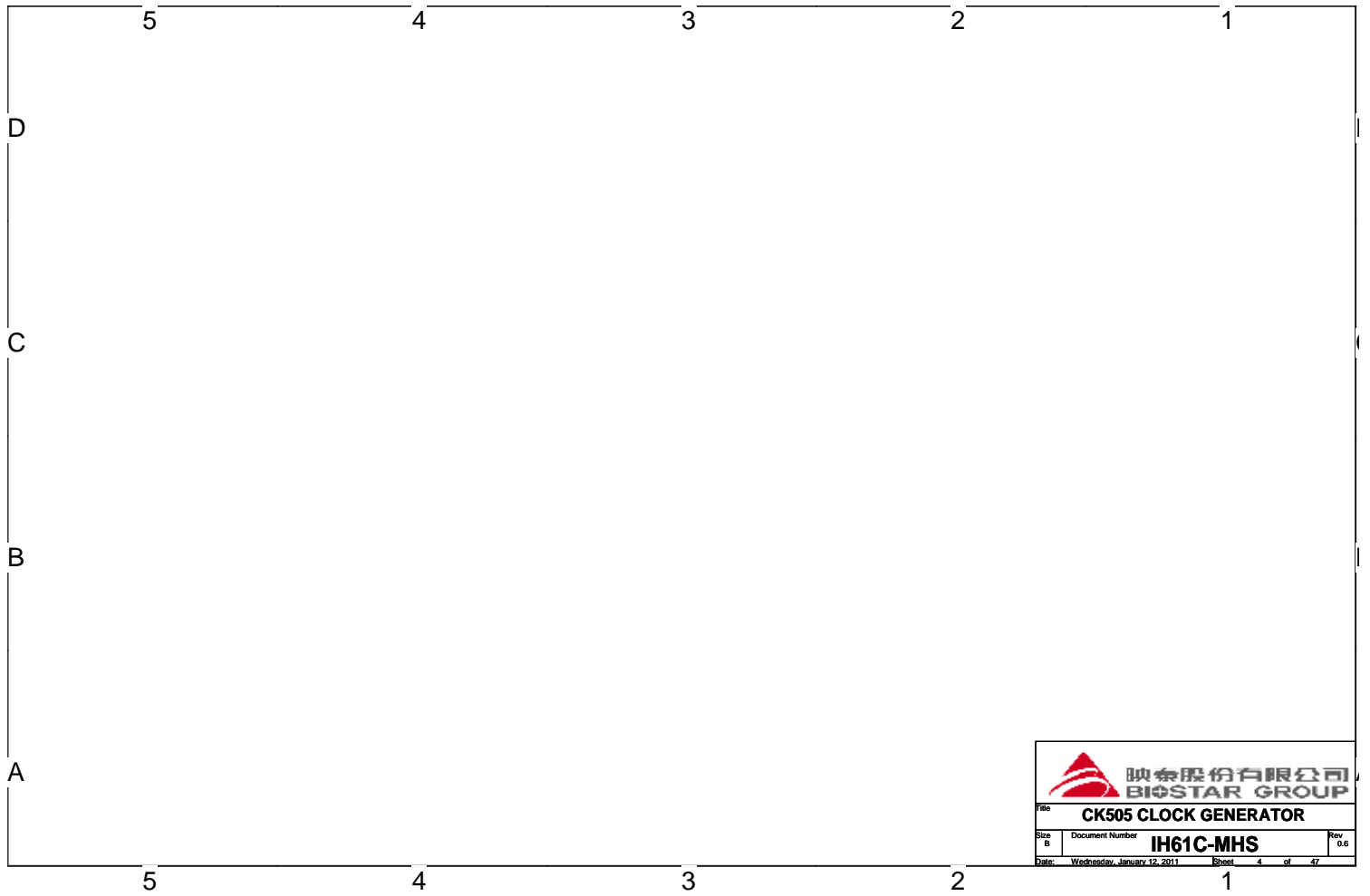
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		5	4	3	2	1
		V0.6 to 0.61				
D		1. CR28 change to 110ohm 2. Remove SATA3 and SATA4 3. PC12.A26 net name change to PC12_IDSEL 4. PWRGD_50 CONTROL PONRST# 5. TR10 reserved (42.2K) 6. All MOSFET value modified 7. UU3.3 connected to V_1P8_SFR 8. RN2 and RN3 dummy				
C		9. PWM modified TBD Vcore PR34 --> 510R PR12, 14, 16 --> 36KR PC11 --> 68pF PR38 --> 39KR BCC27, BCC26, BCC11, BCC12, BCC13, BCC14, BCC24, BCC23 --> NC PCT11 --> NC VGT PR47 --> 3.6KR PC64 --> 33pF PR57 --> 8.2KR				
B		10. ATXPWR3 value modified to ATXPWR2 11. CODEC change to ALC662 12. NI PCT11 13. UU3 change to 6137E				
A						
		5	4	3	2	1

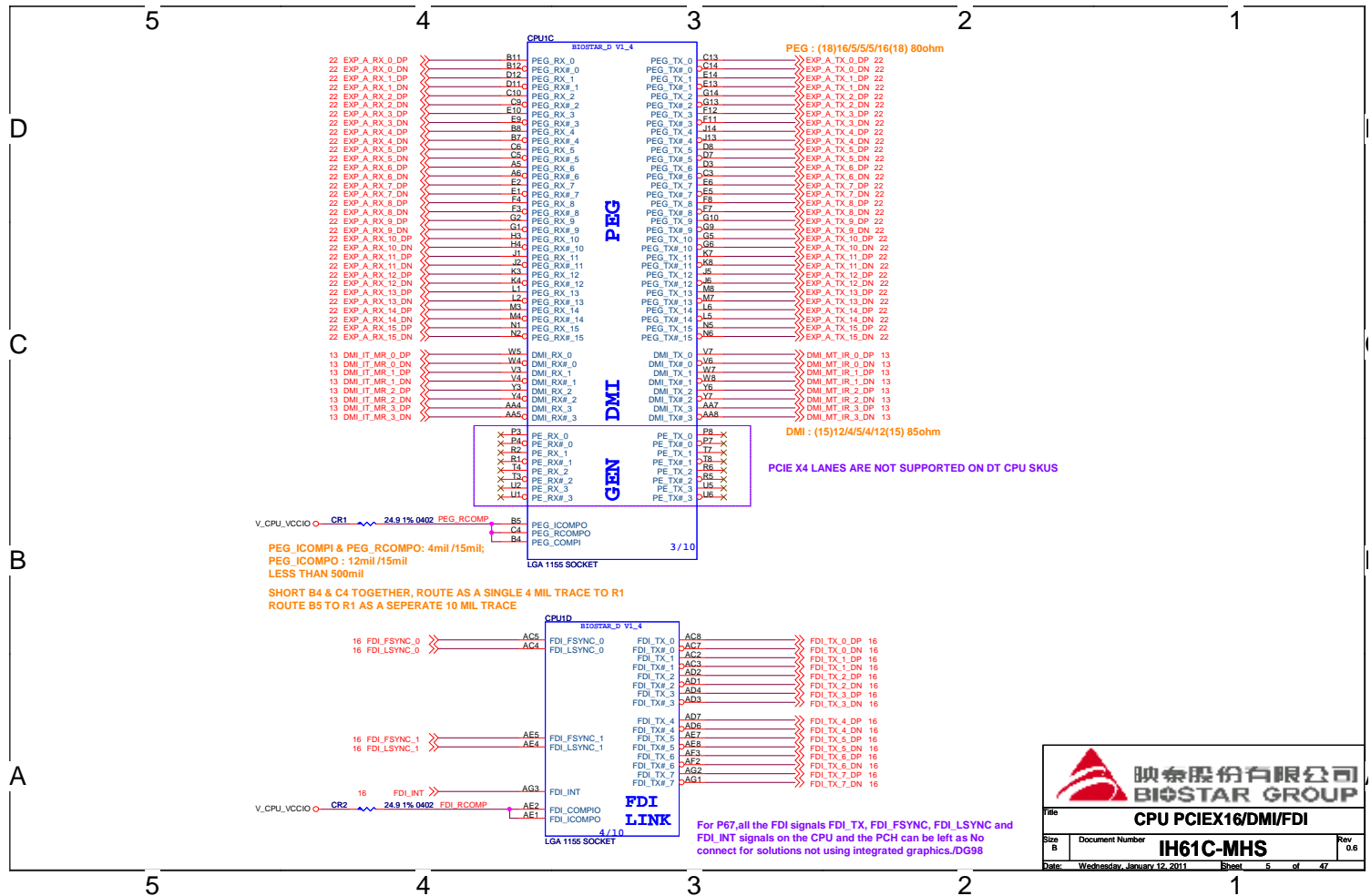
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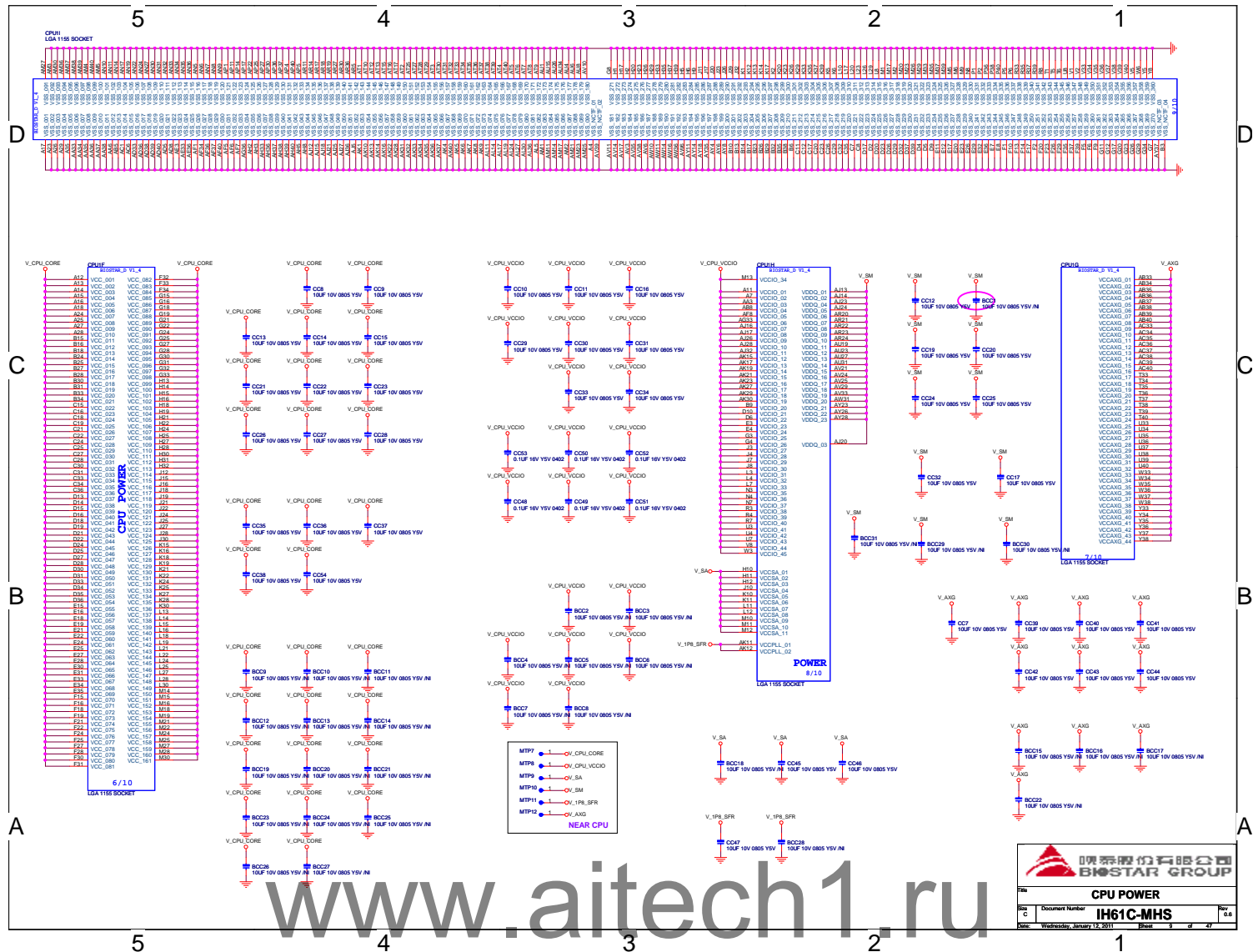
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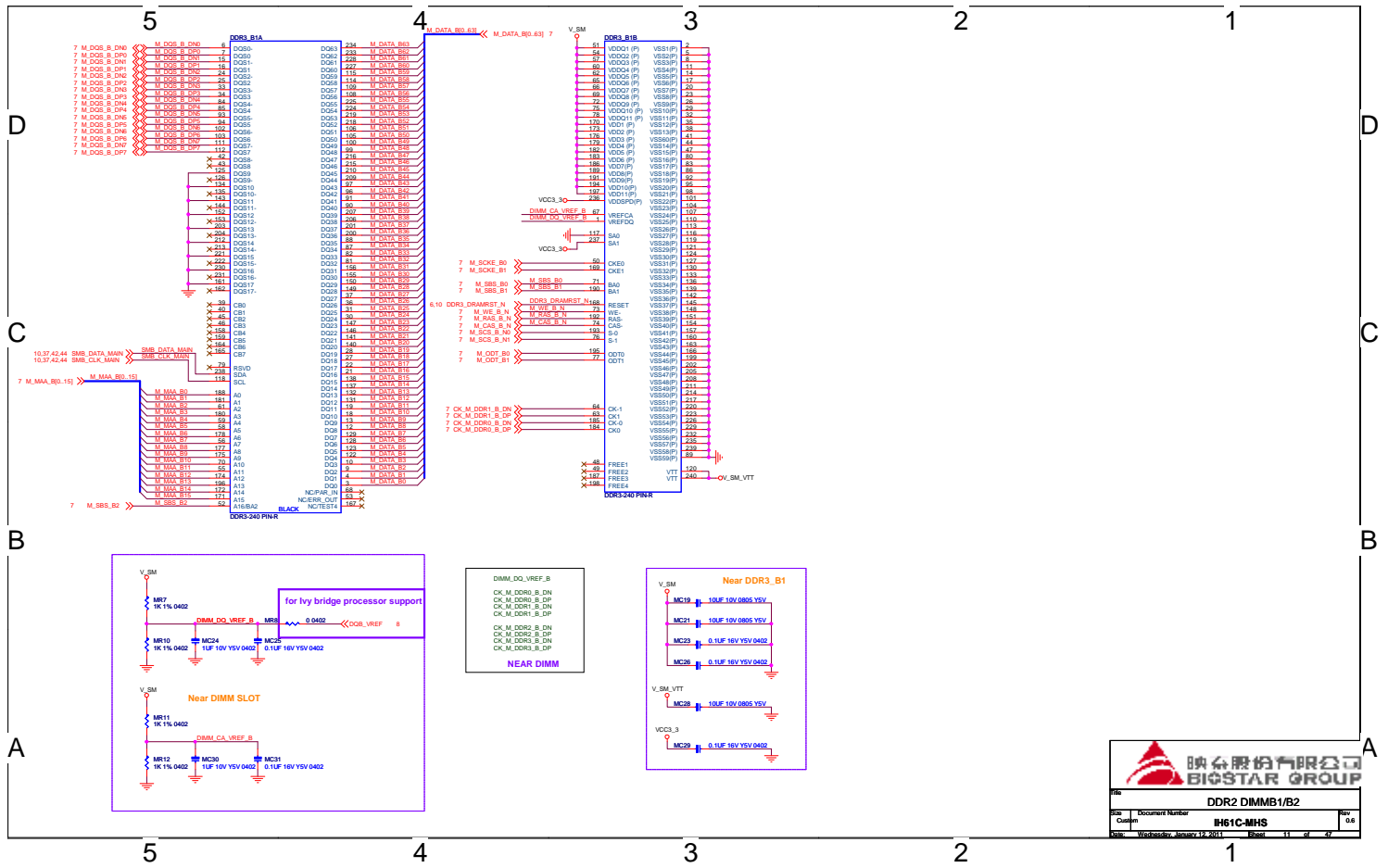




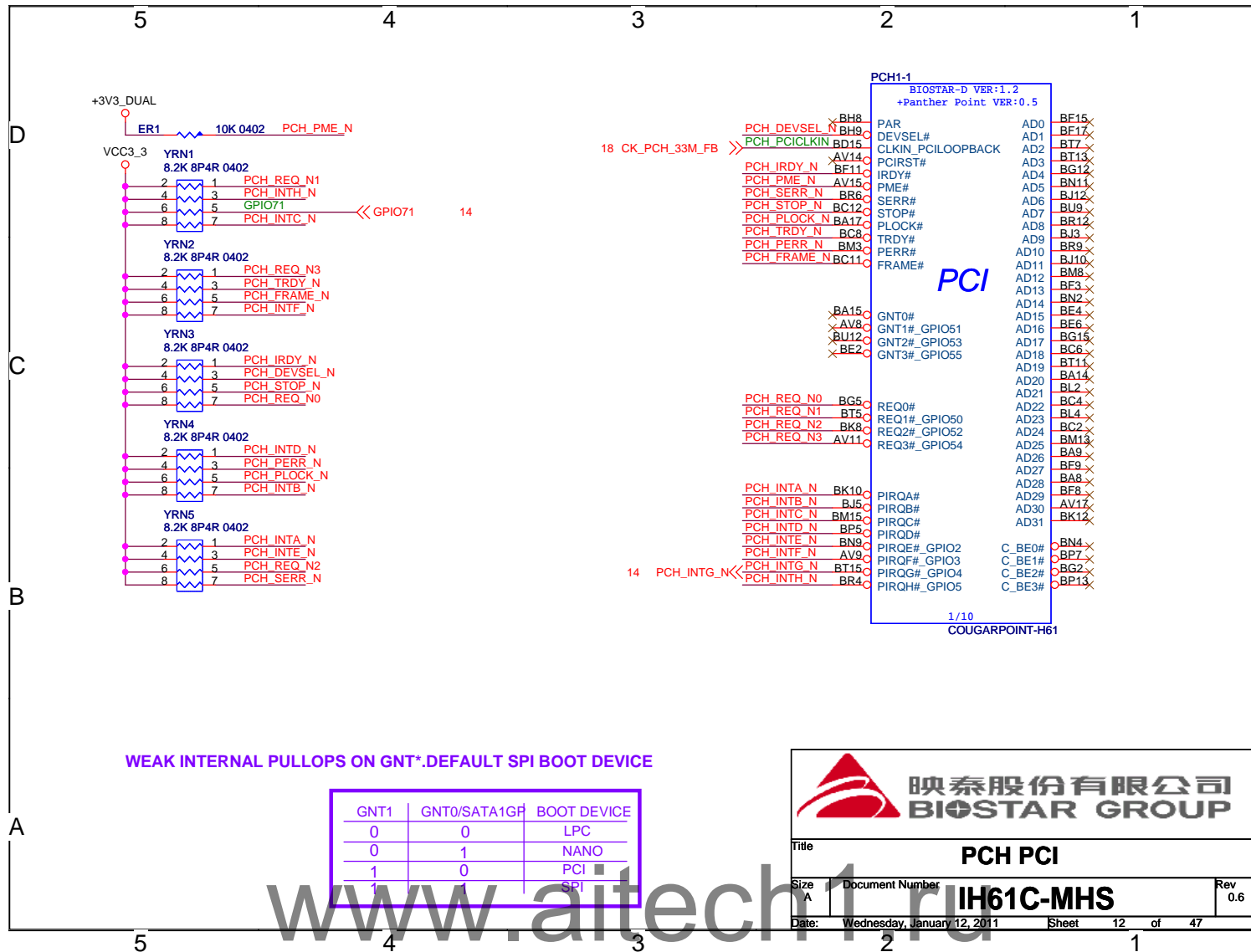






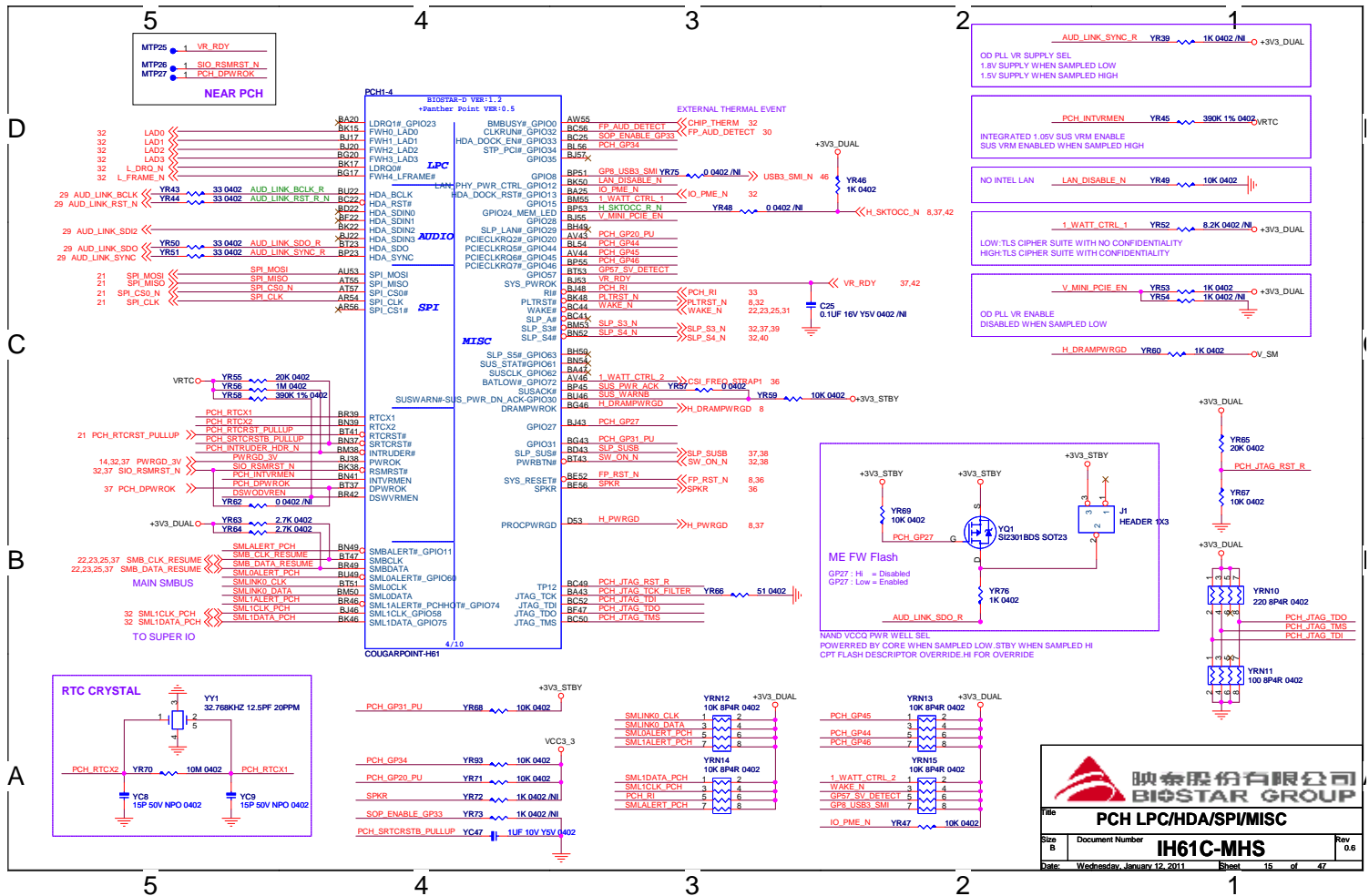


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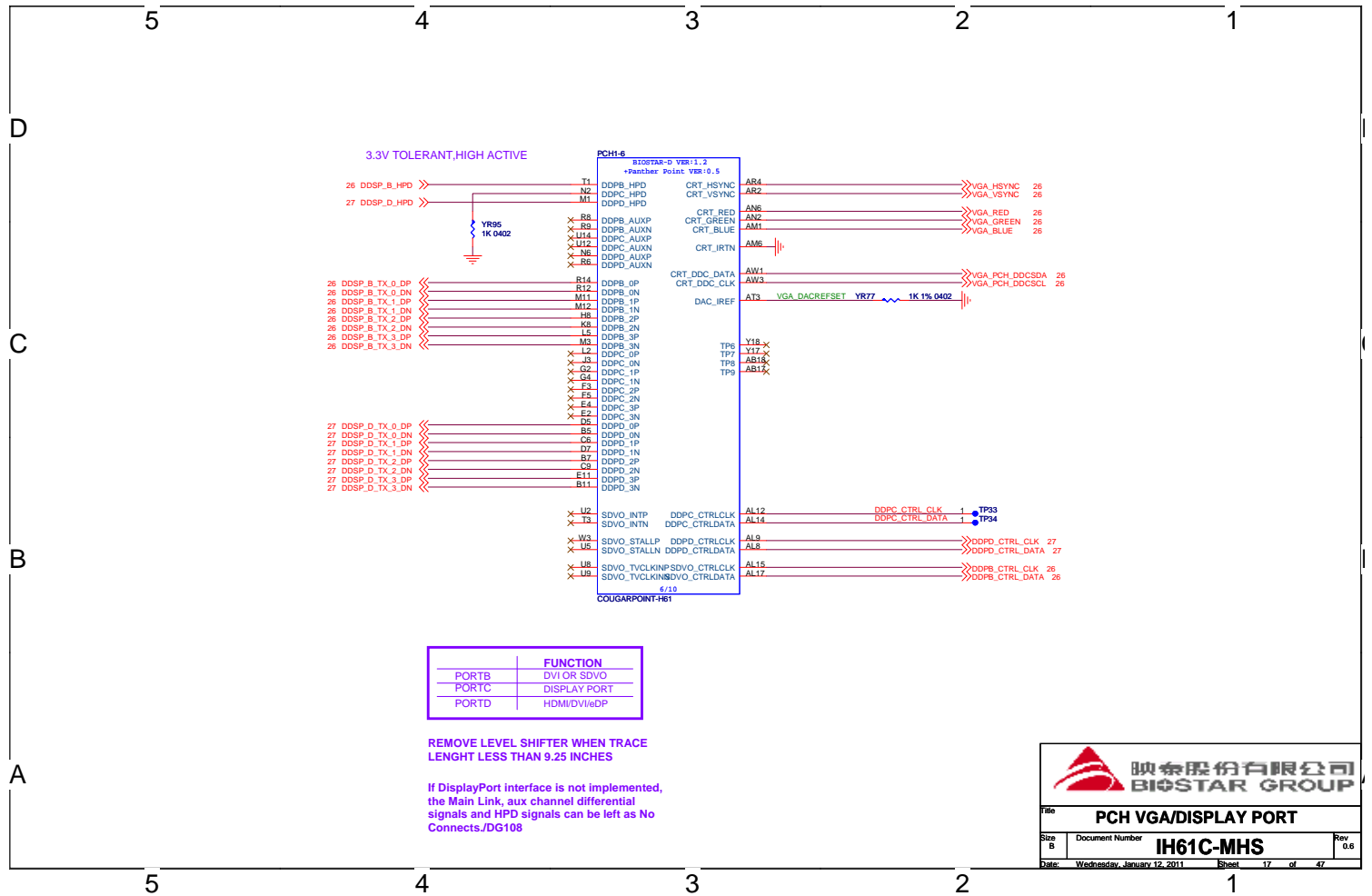




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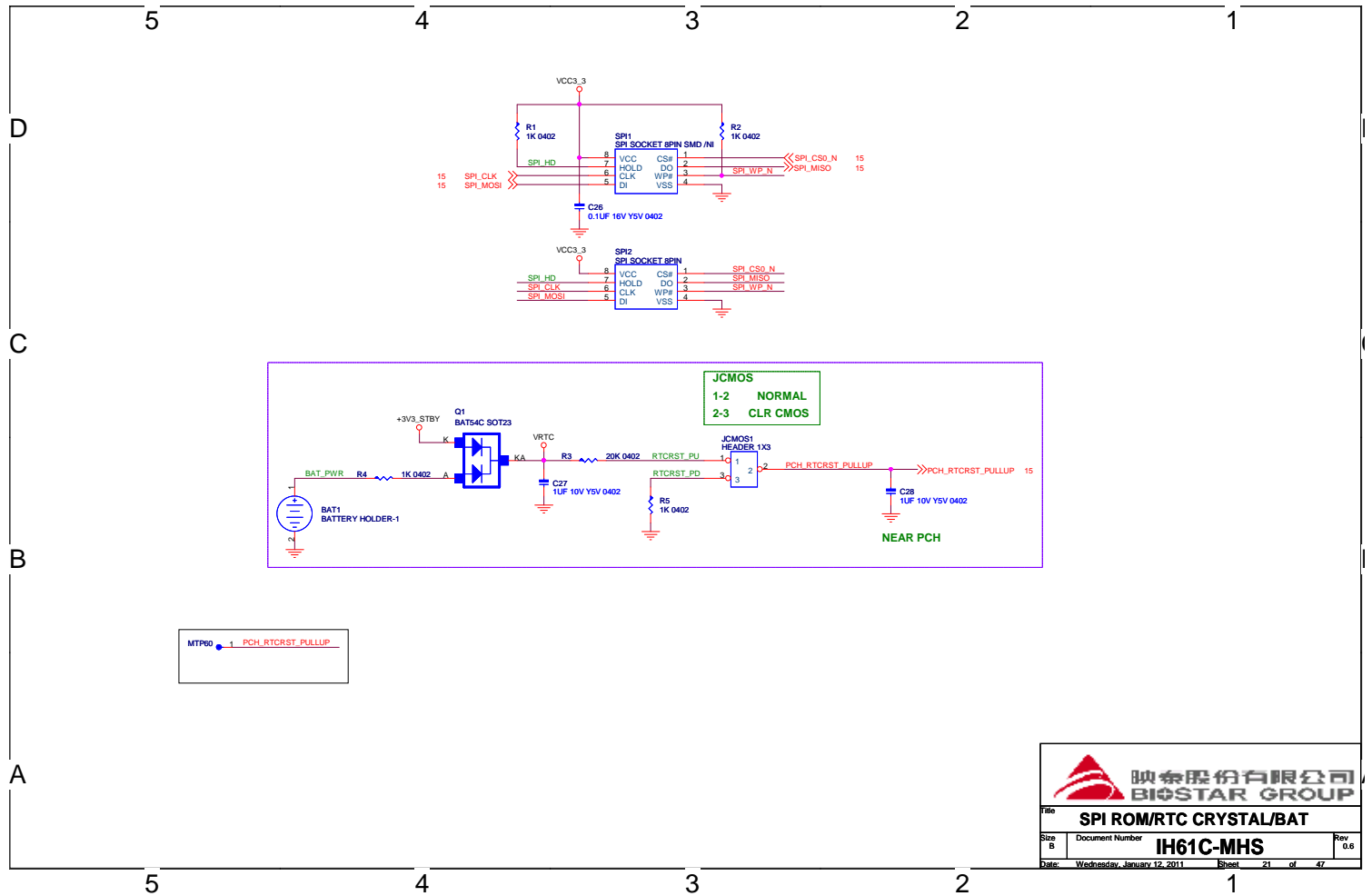
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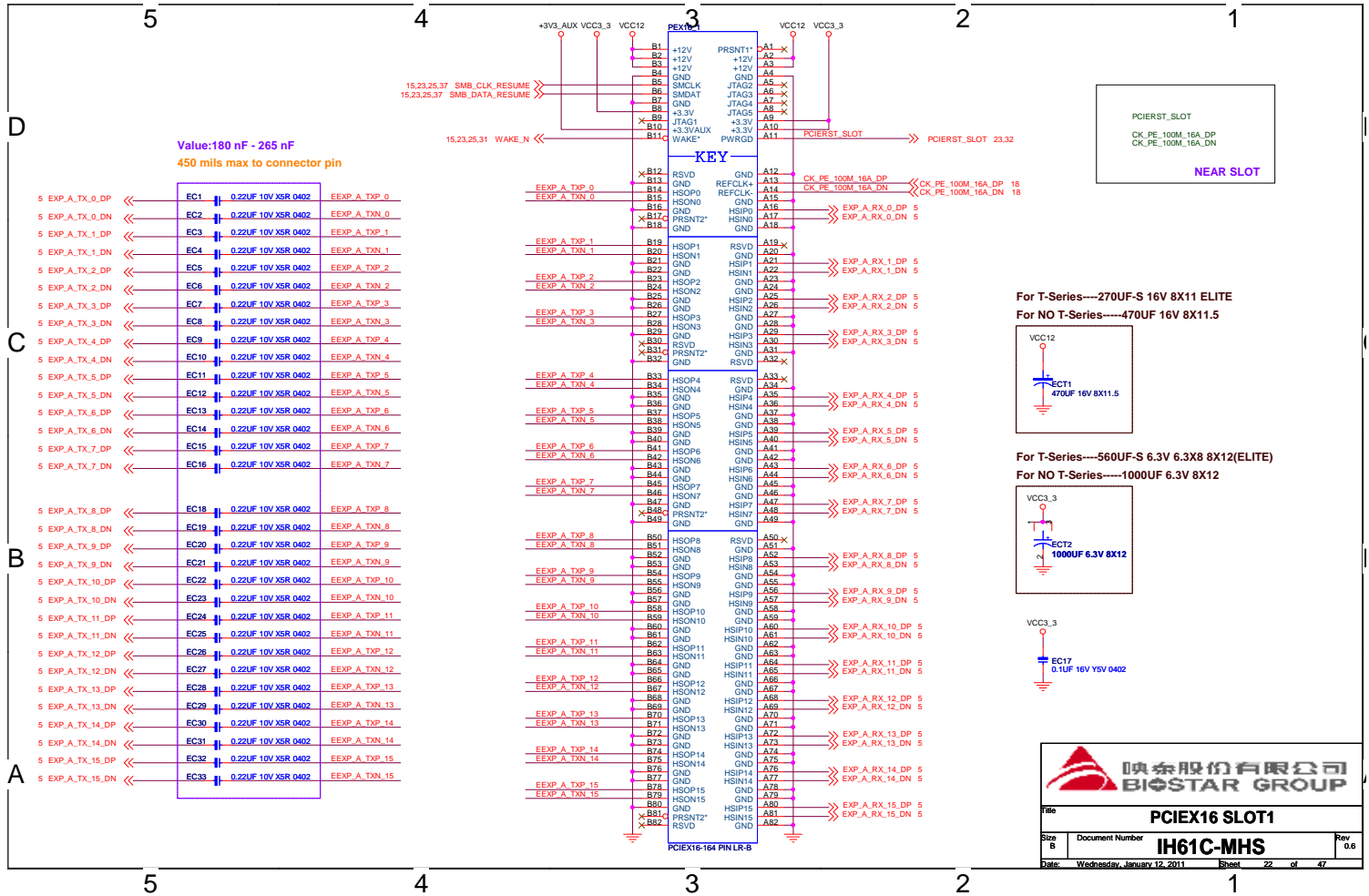




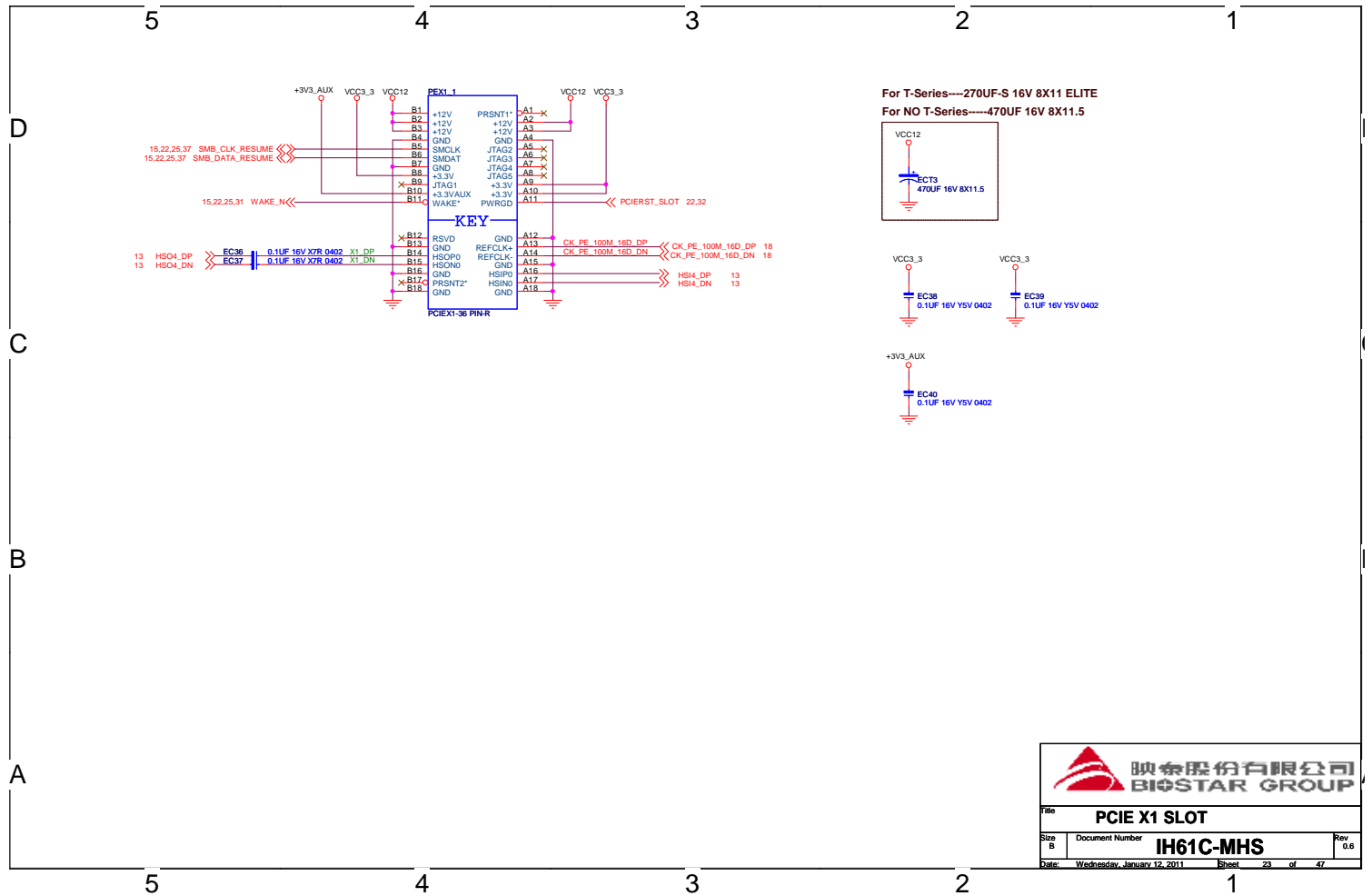


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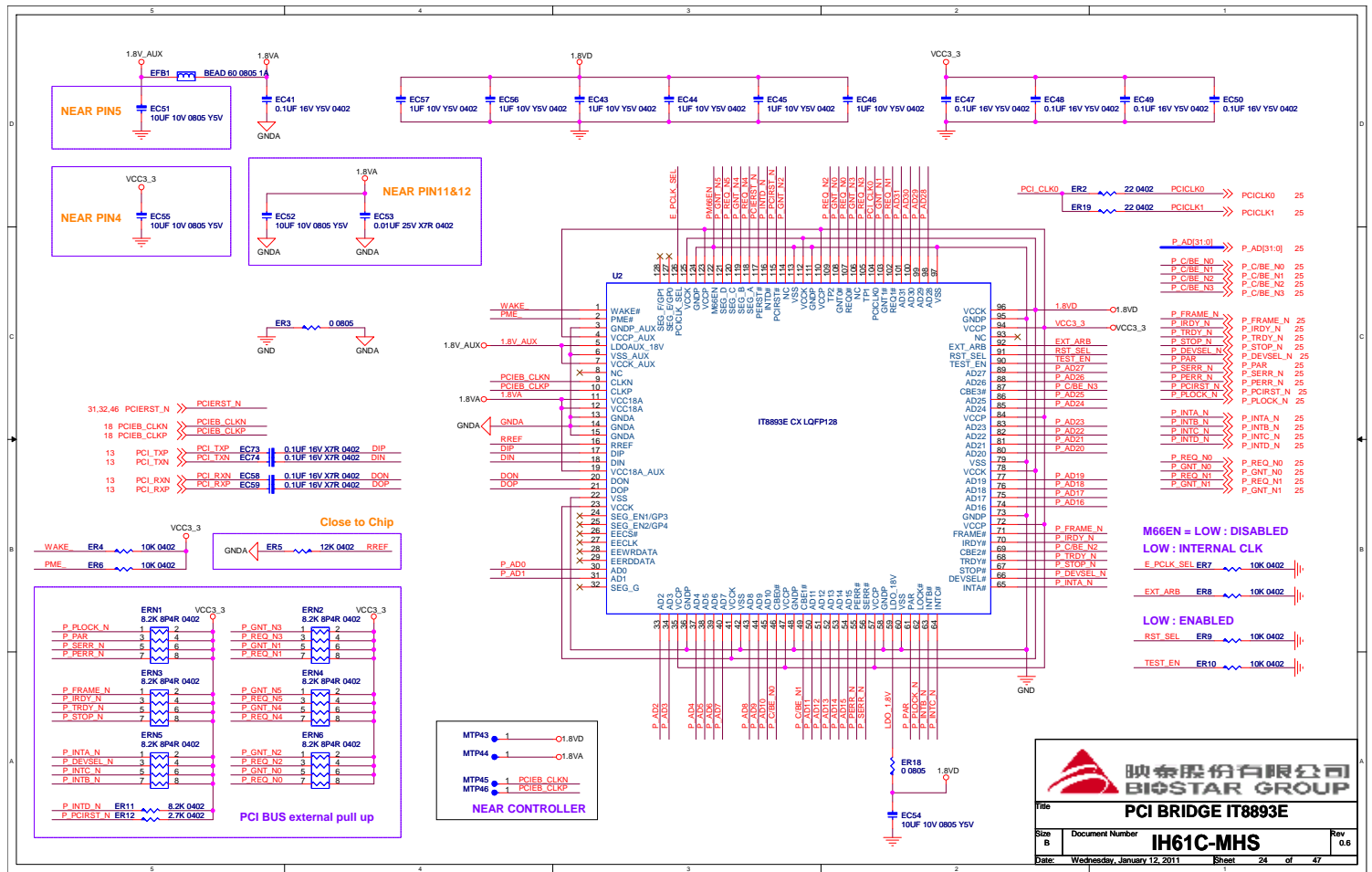
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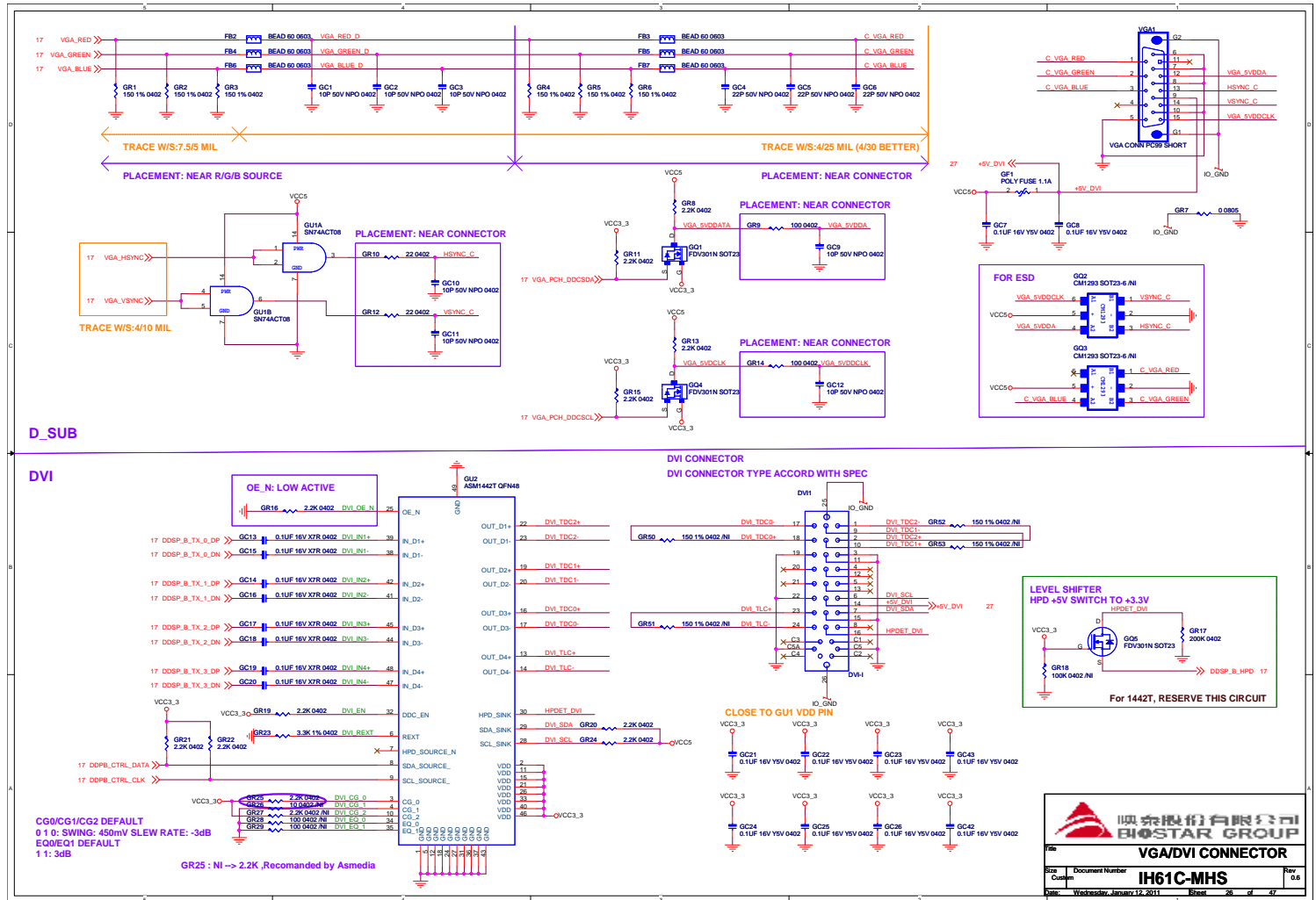
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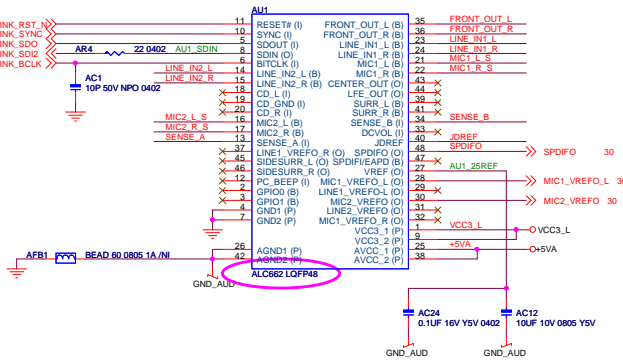
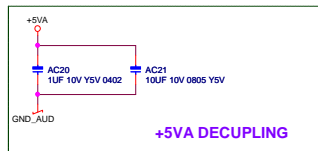
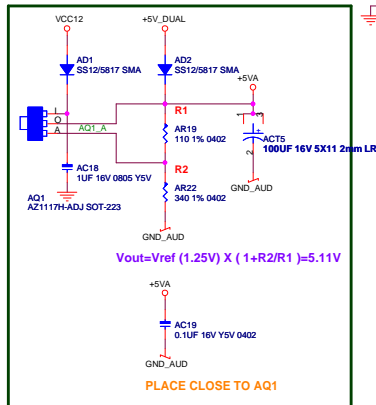
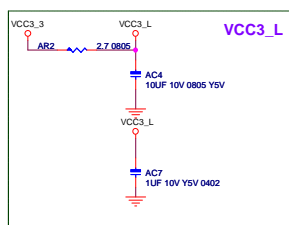
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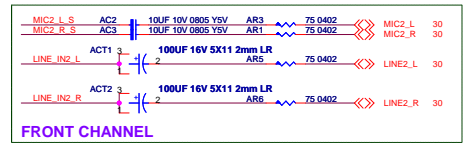
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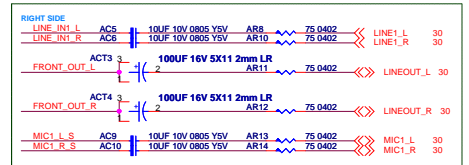
## AUDIO PART: A+Reference



NETIN: 100UF 16V 5X11 2MM LR 6.3X5  
BOM: 100UF 16V 5X11 2mm LR  
100UF-S 16V 6.3X8 ELITE

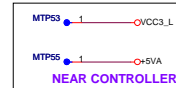
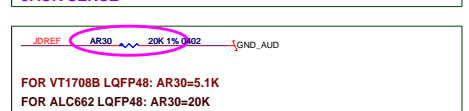
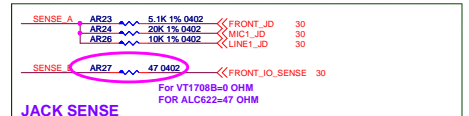


### FRONT CHANNEL



### REAR CHANNEL

### CD IN CONNECTOR



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**CODEC ALC662**  
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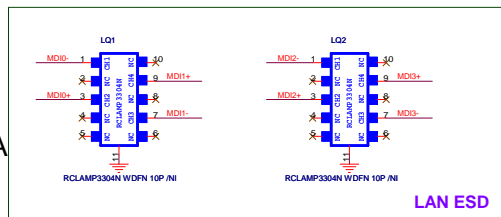
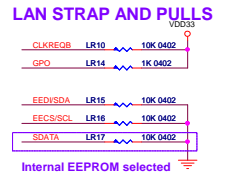
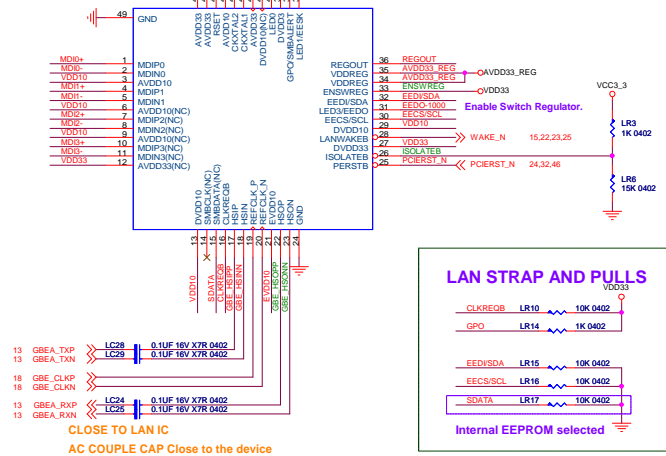
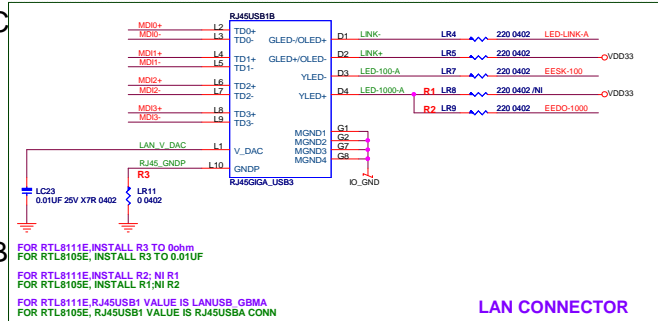
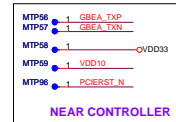
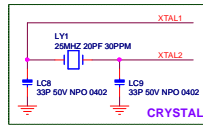
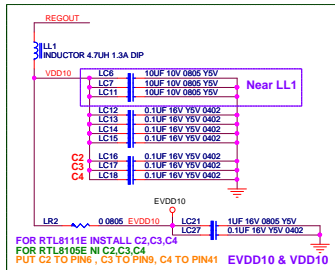
The image contains two circuit diagrams illustrating the correct placement of decoupling capacitors for the RTL111E and RTL105E ICs.

**Top Diagram (Correct Placement):**

- IC:** RTL111E
- Power Pins:** +V3V3\_AUX, VDD33, GND.
- Capacitors:**
  - C1:** 0.1UF 16V Y5V 0402, connected between VDD33 and GND.
  - C2:** 0.1UF 16V Y5V 0402, connected between +V3V3\_AUX and GND.
- Text:**
  - FOR RTL111E INSTALL C1
  - FOR RTL105E NI C1
  - PUT C1 TO PIN 12

**Bottom Diagram (Incorrect Placement):**

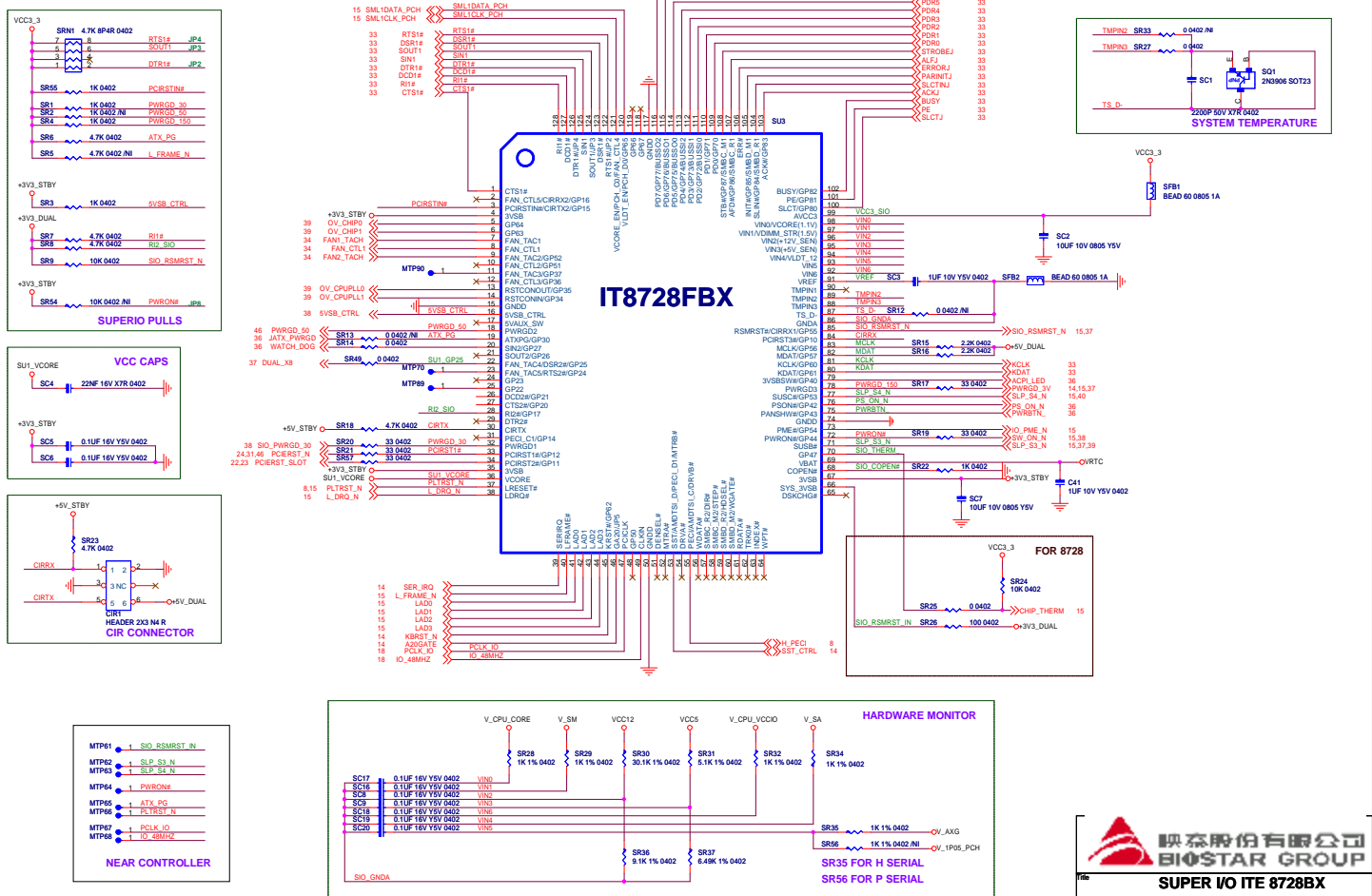
- IC:** RTL105E
- Power Pins:** +V3V3\_AUX, A/VDD33\_REG, GND.
- Capacitors:**
  - LC22:** 10UF 10V 0805 Y5V, connected between +V3V3\_AUX and GND.
  - LC21:** 10UF 10V 0805 Y5V, connected between A/VDD33\_REG and GND.
- Text:**
  - AVDD33\_REG
  - AVD33 REG



LAN PARTS	C1	C2	C3	C4		R1	R2	R3	RJ45 CONN
RTL8111E	O	O	O	O		X	O	0ohm	LANUSB_GBMA
RTL8105E	X	X	X	X		O	X	0.01uF	RJ45USBA CONN

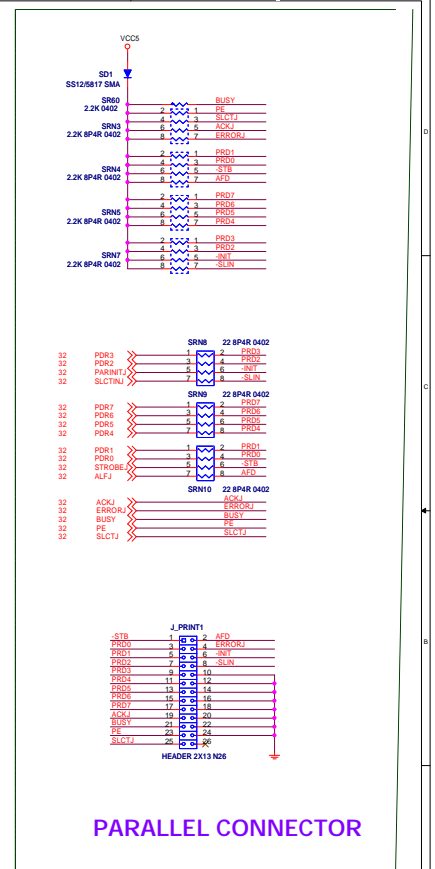
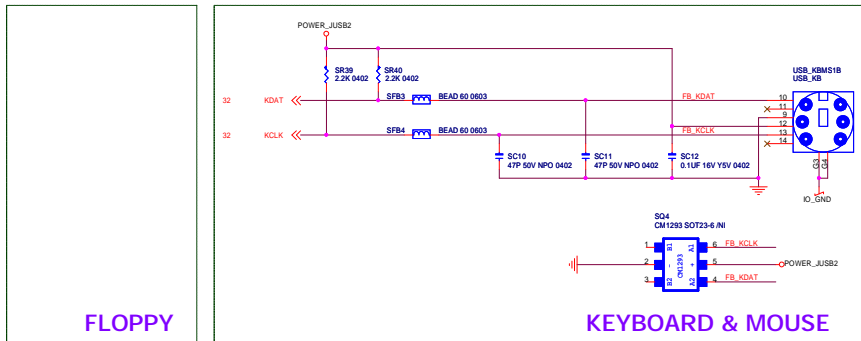
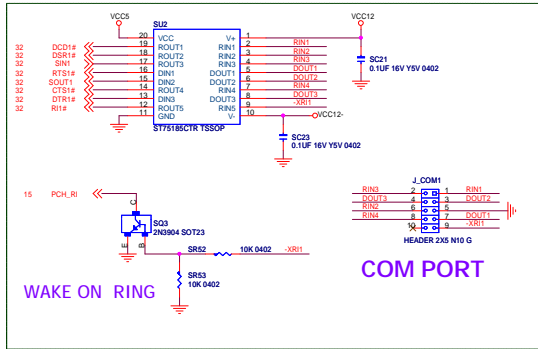


# SUPERIO PART: S+Reference



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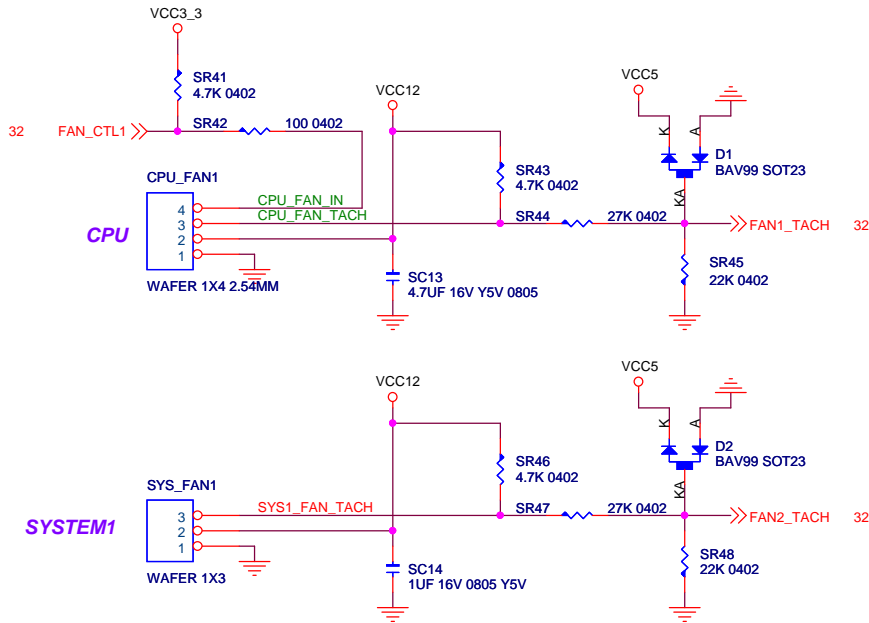
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COM / PS2 CONN  
IH61C-MHS

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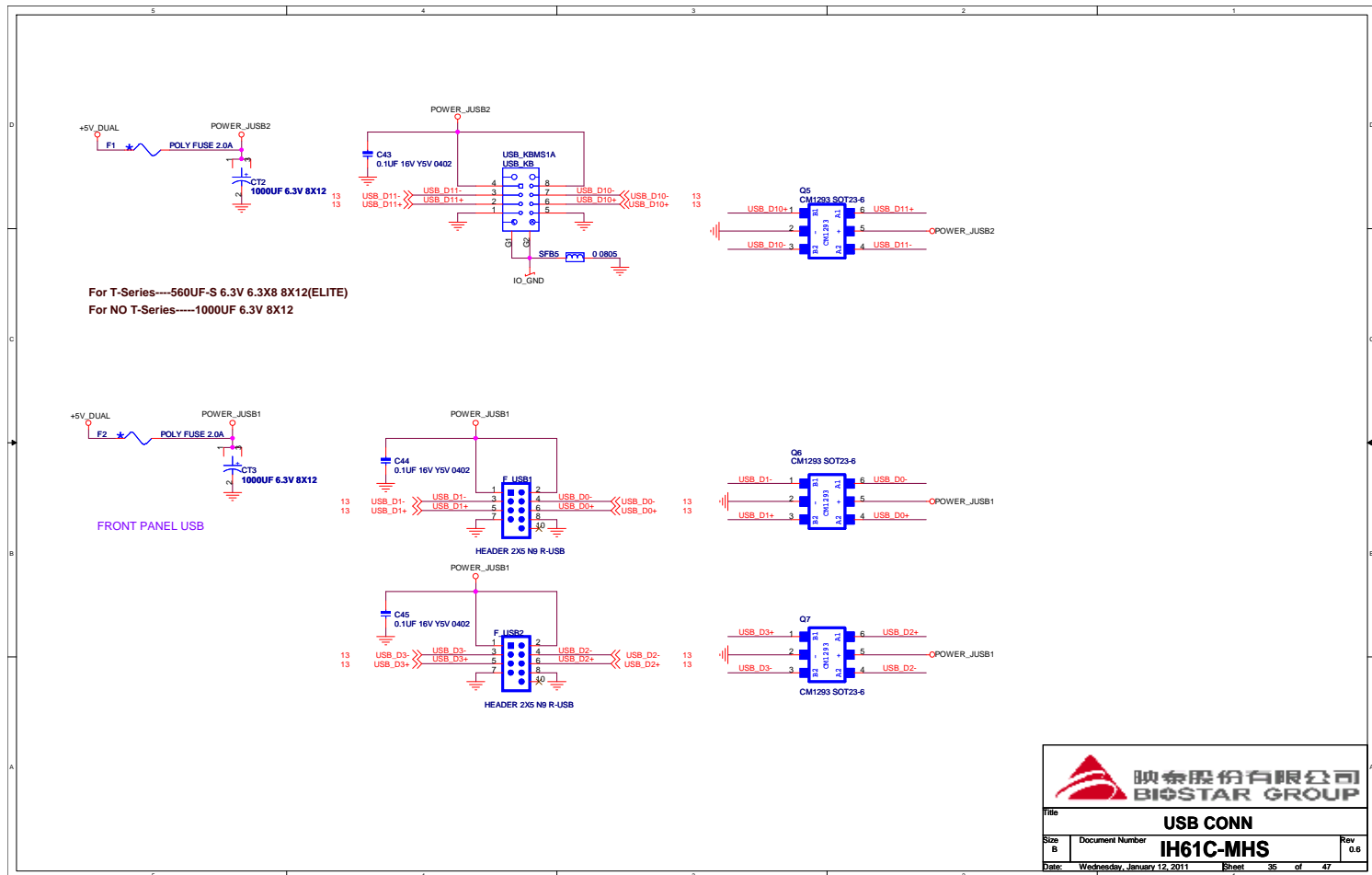
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# CPU FAN/SYSTEM FAN1/SYSTEM FAN2

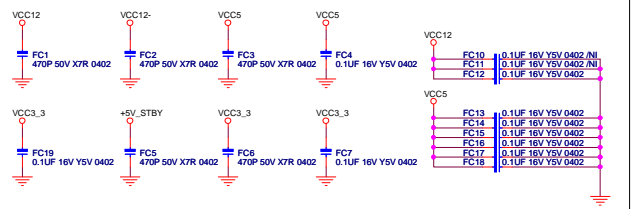
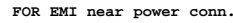


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<b>HW MONITOR/FAN CONTROL</b>	
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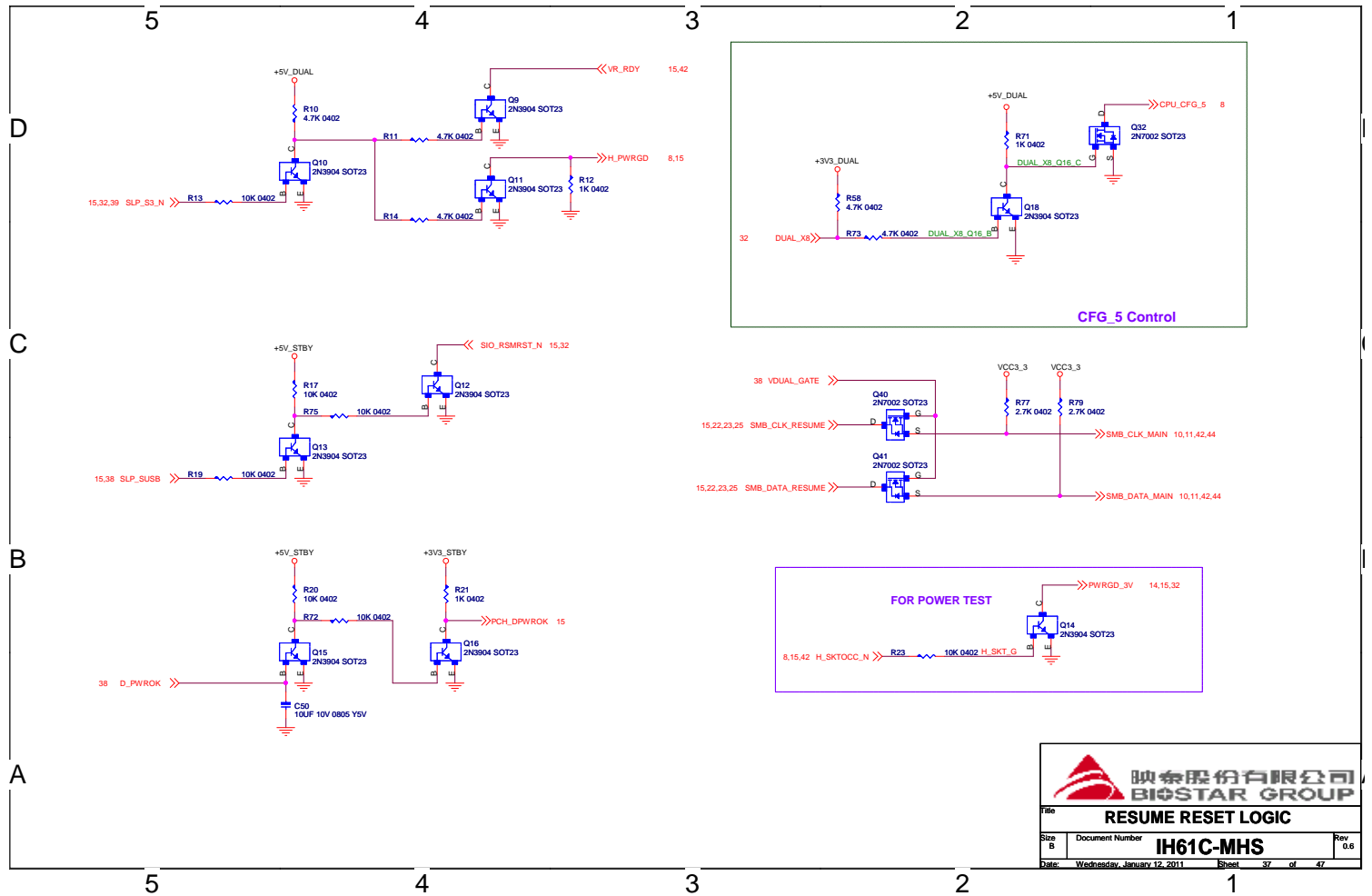
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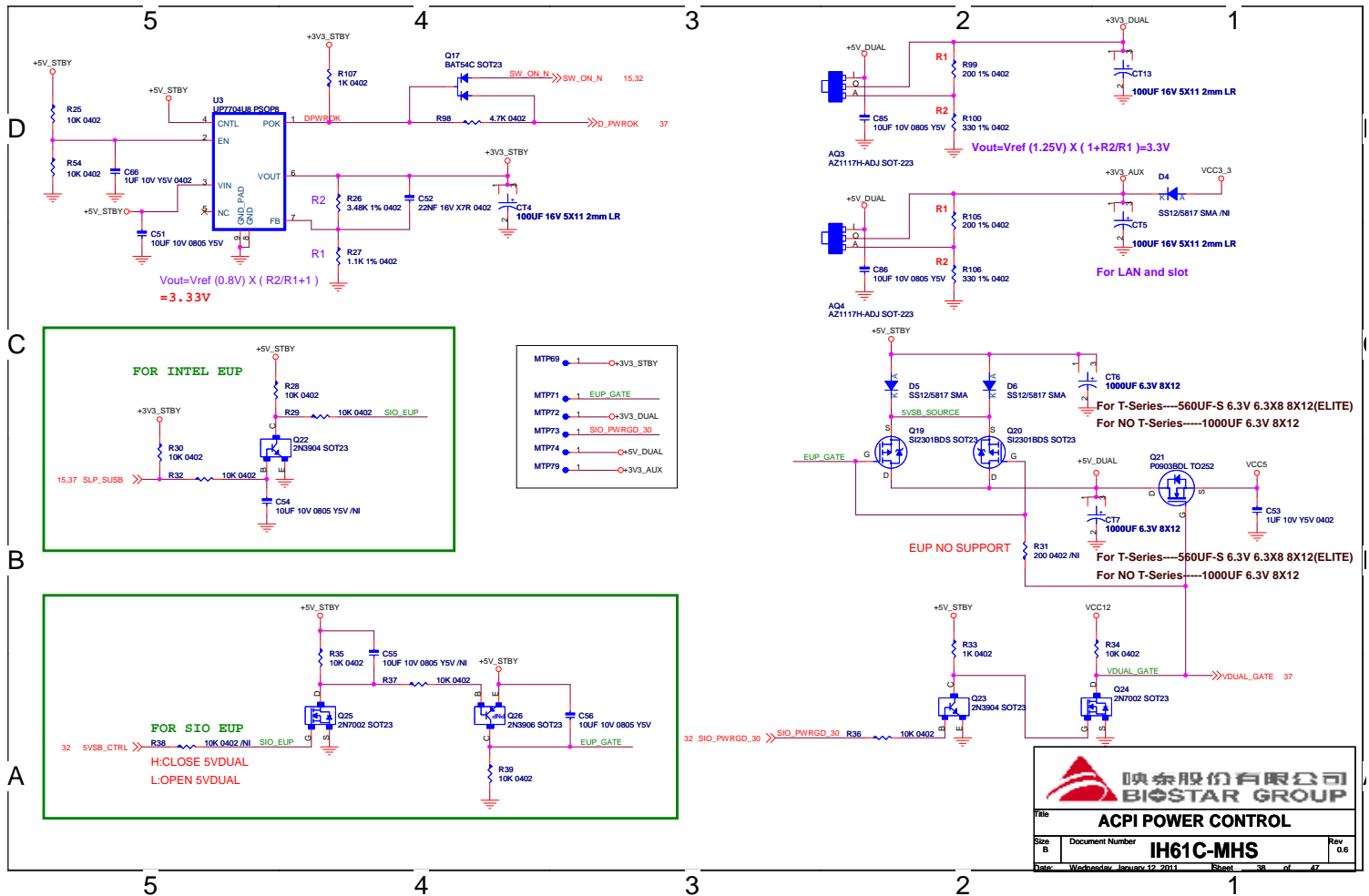
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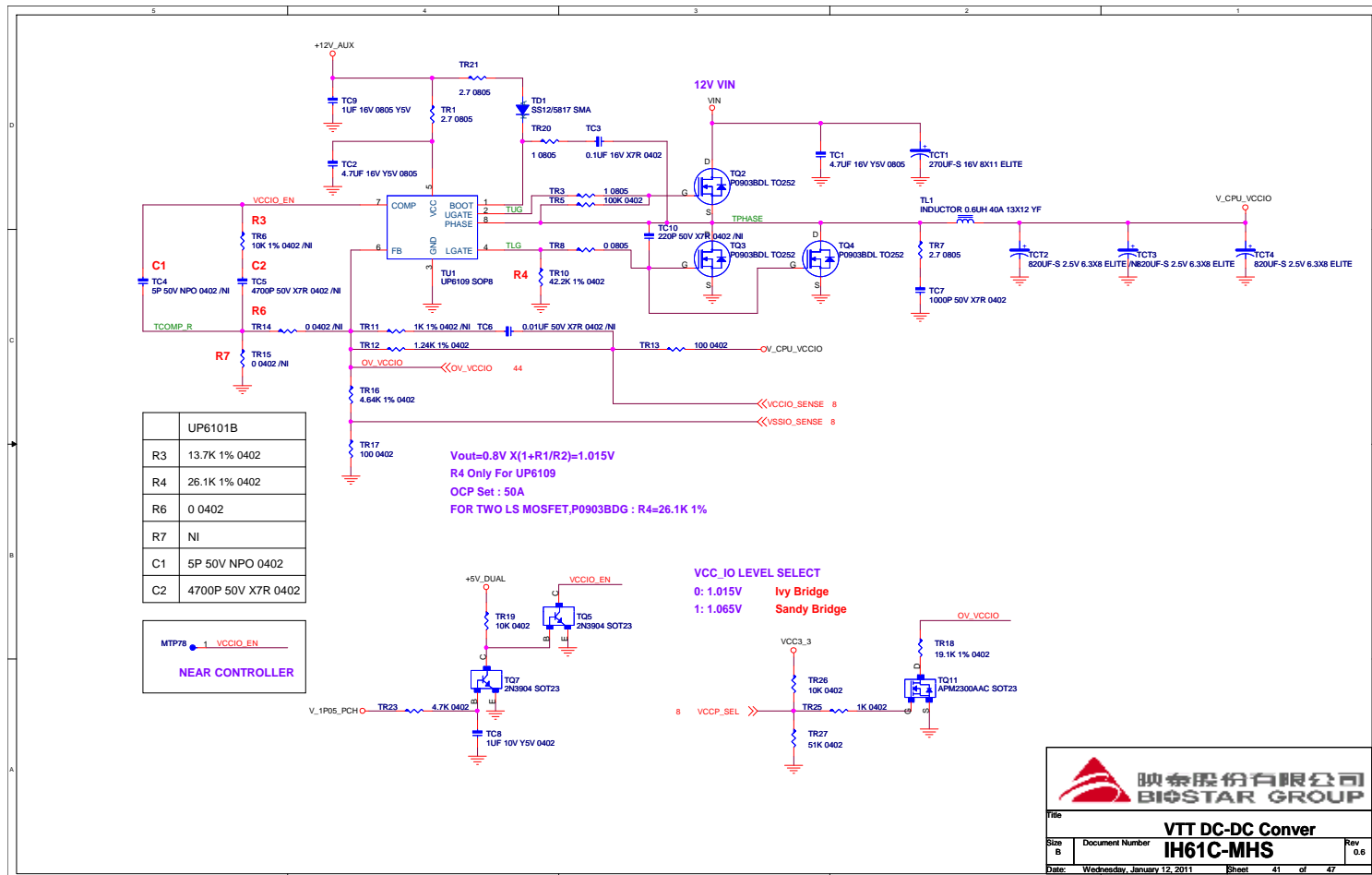


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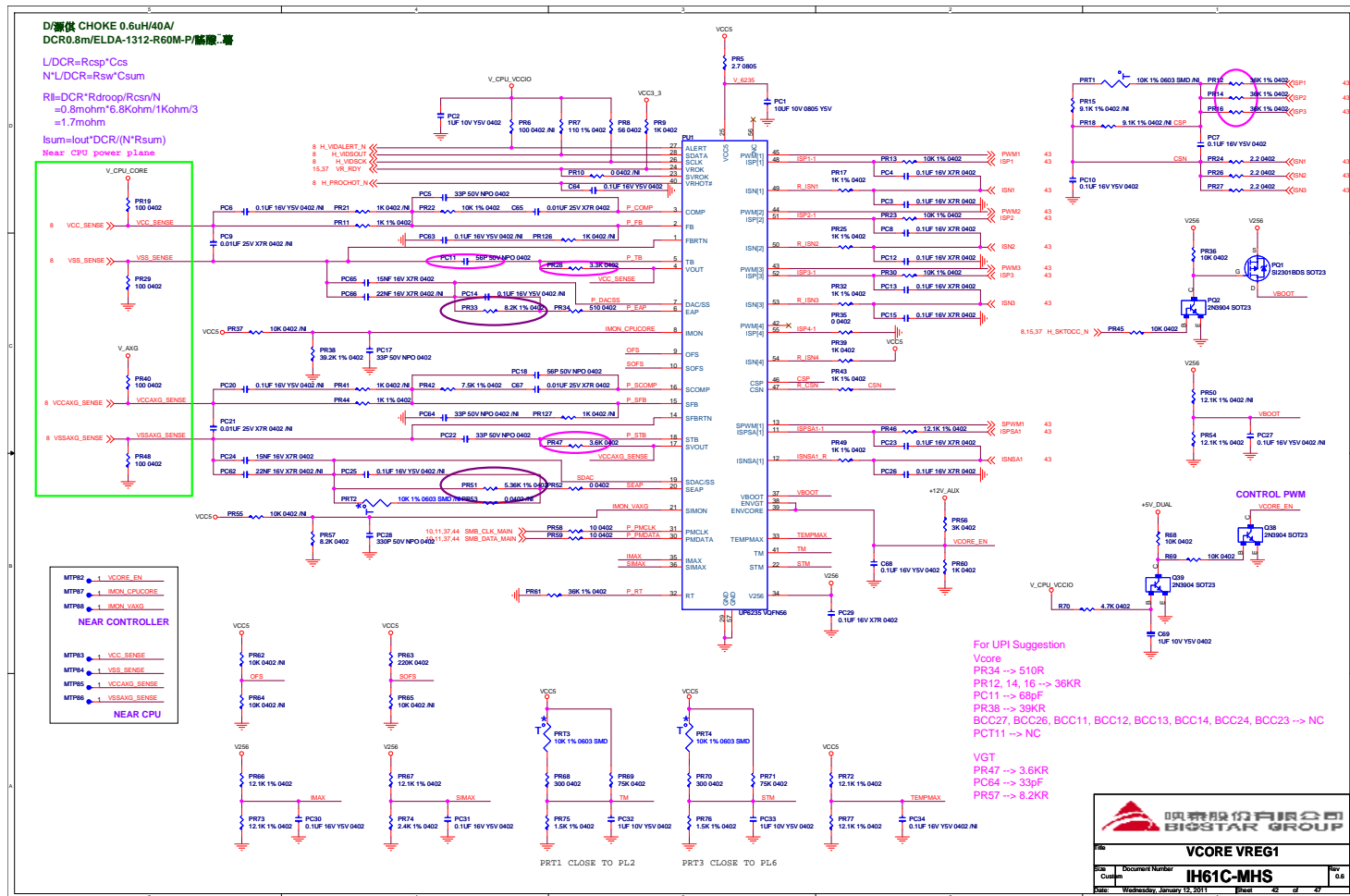








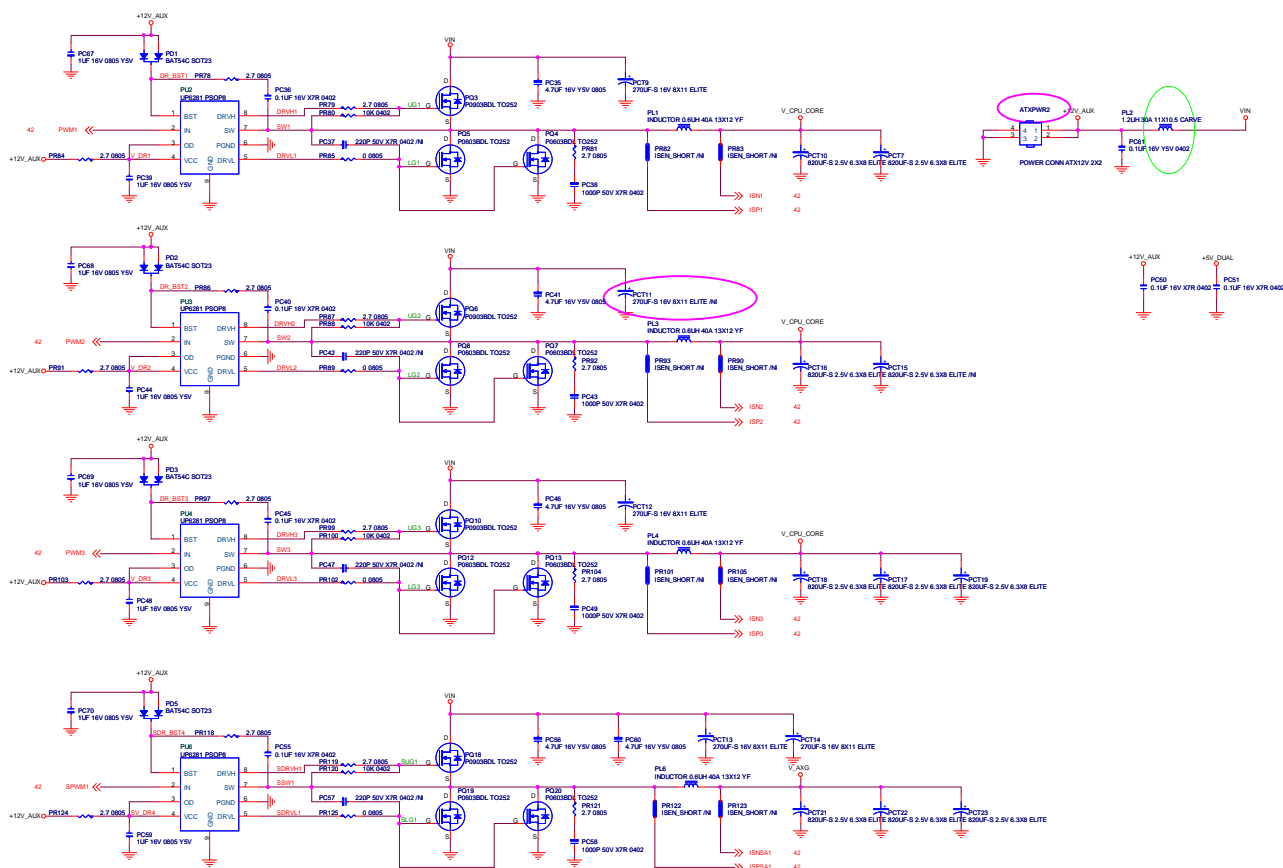
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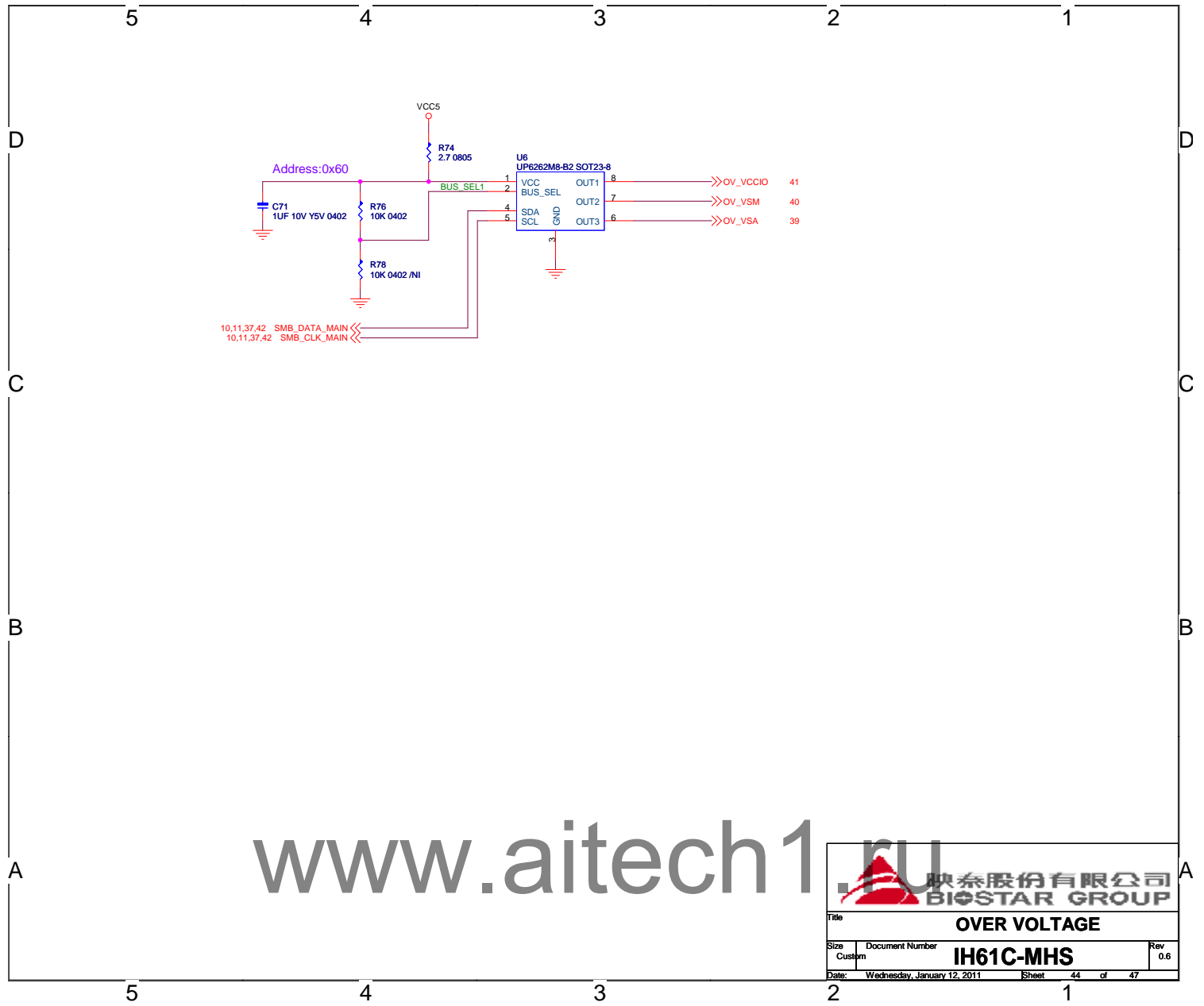


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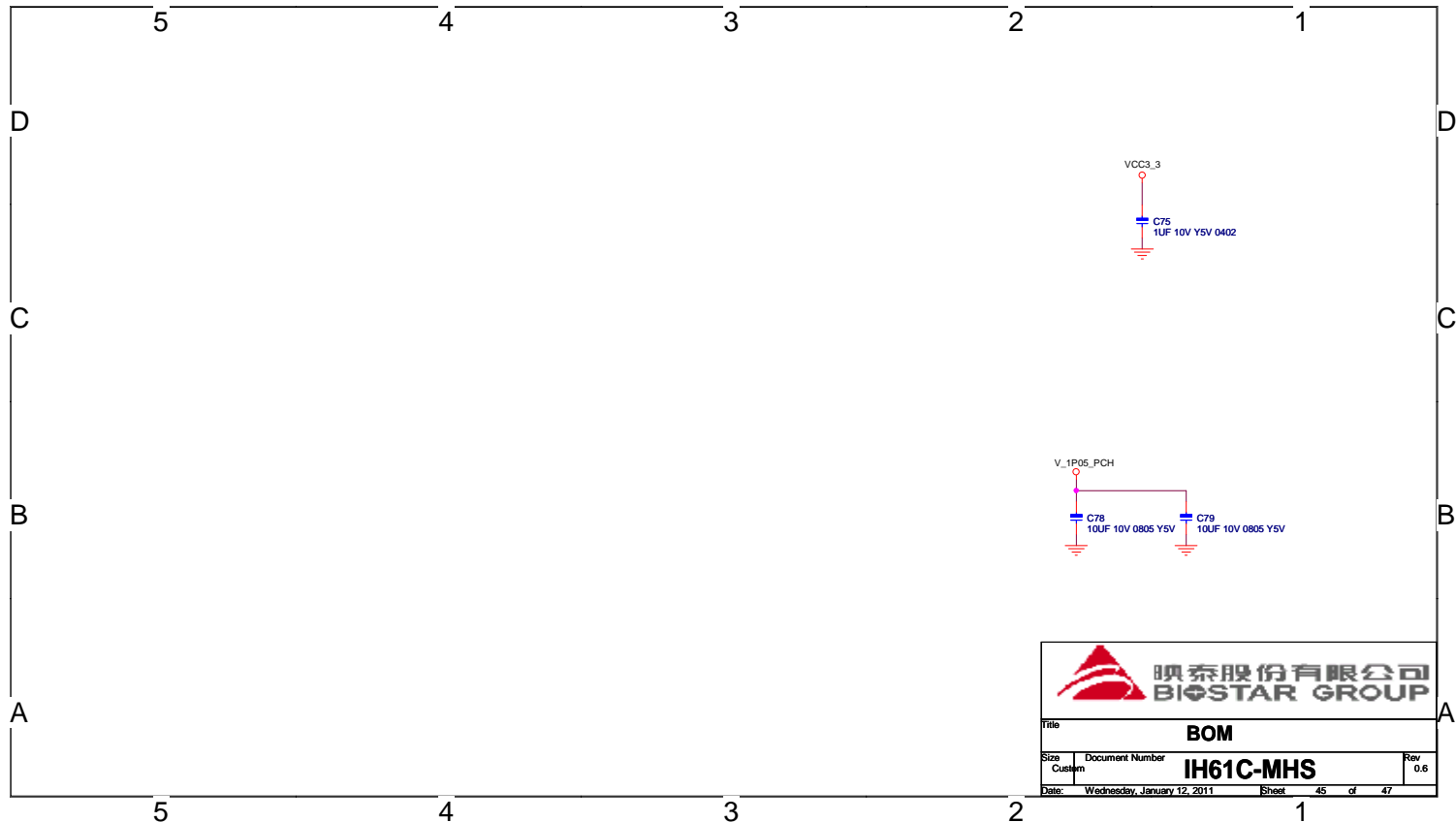
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<b>OVER VOLTAGE</b>			
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