

**Table 1-1. Skylake Processor Lines**

Processor Line	Package	Base TDP	Processor IA Cores	Maximum Graphics Configuration	On Package Cache	Platform Type
Y-processor line	BGA1515	4W	2	GT2	N/A	1-Chip
U-processor line	BGA1356	15W	2	GT2	N/A	1-Chip
		15,28W		GT3	64 MB	
H-processor line	BGA1440	35,45W	4	GT2	N/A	2-Chip
		45W	4	GT4	128 MB	
S-processor line	LGA1151	35,65W	2	GT2	N/A	2-Chip
		35,65,95W	4	GT2	N/A	
		35,65W	4	GT4	64 MB	

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**BLOCK DIAGRAM**

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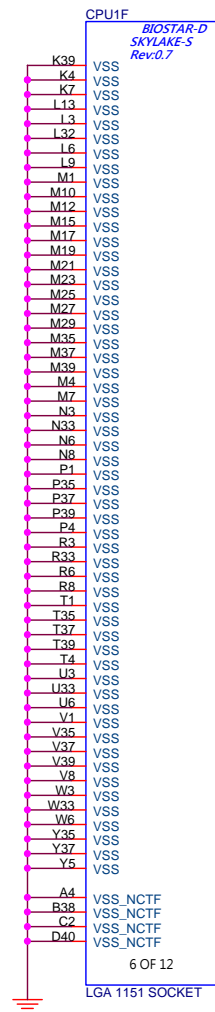
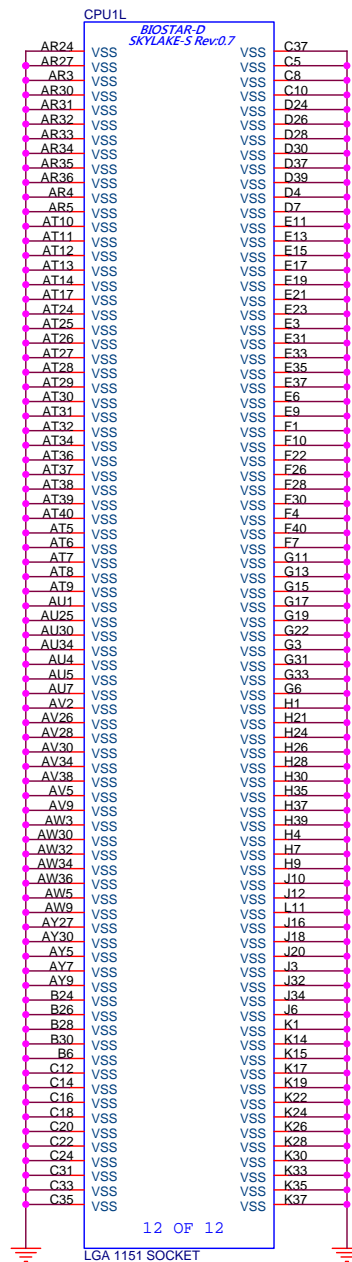
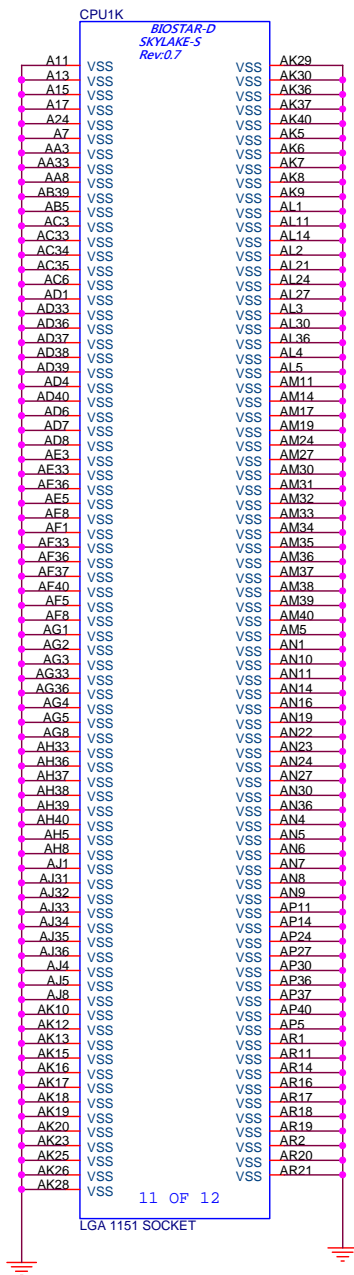













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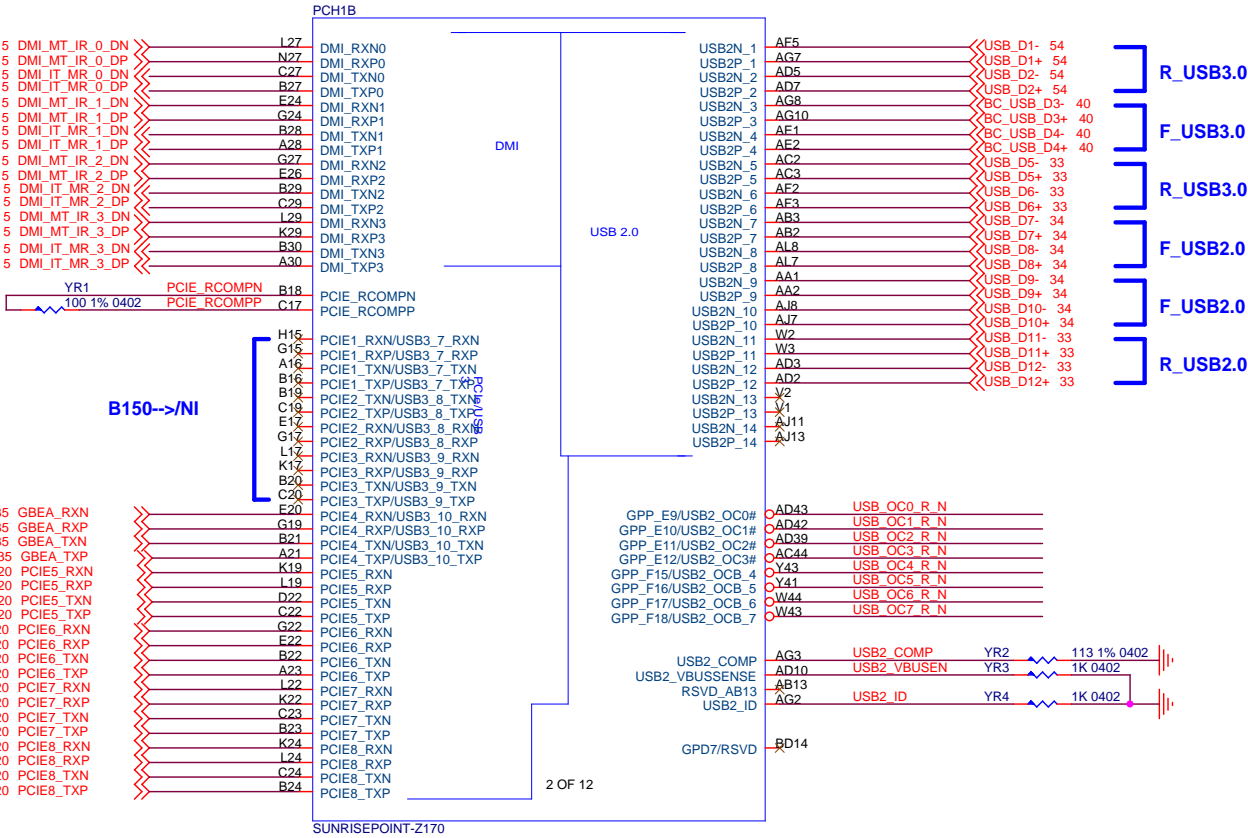




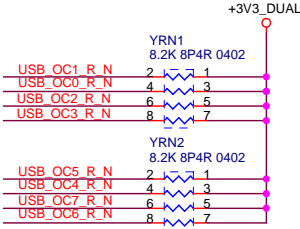
PCH PART: Y+Reference

PCIE\_RCOMP  
W/S=4/12 mils  
Max Lenght NA

GBE I219  
PEX4-1  
PEX1-1  
PEX1-2



PCIE #20					
PCIE #19					
PCIE #18	SATA #5	X4	X2		
PCIE #17	SATA #4				
PCIE #16	SATA #3	X4	X2		
PCIE #15	SATA #2				
PCIE #14	SATA #1	X4	X2		
PCIE #13	SATA #0				
PCIE #12					
PCIE #11					
PCIE #10	SATA #1	X4	X2		
PCIE #9	SATA #0				
PCIE #8					
PCIE #7					
PCIE #6					
PCIE #5					
USB3 #10	PCIE #4				
USB3 #9	PCIE #3				
USB3 #8	PCIE #2				
USB3 #7	PCIE #1				
USB3 #6					
USB3 #5					
USB3 #4					
USB3 #3	SSIC #2				
USB3 #2	SSIC #1				
USB3 #1 (Capable of OTG)					



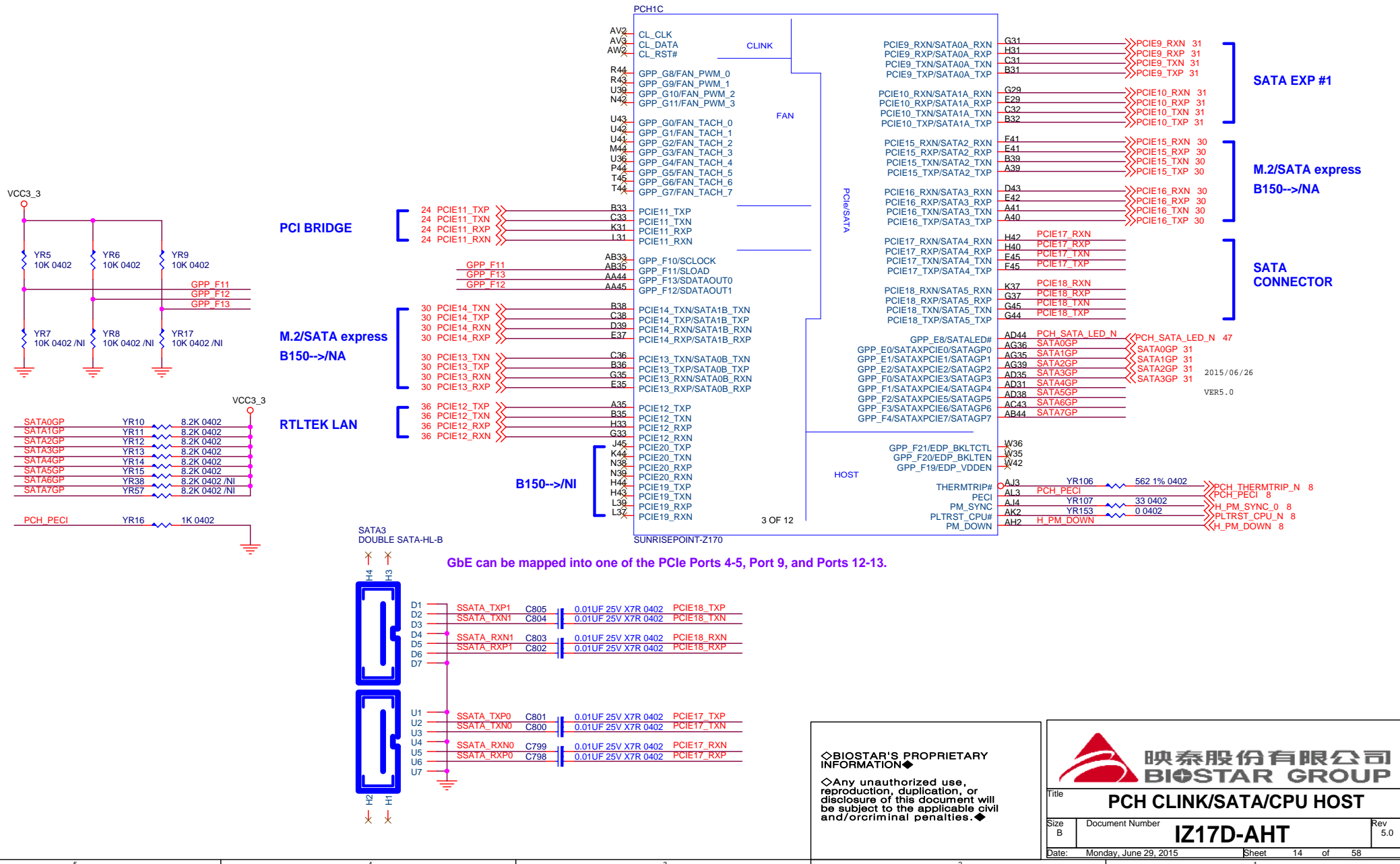
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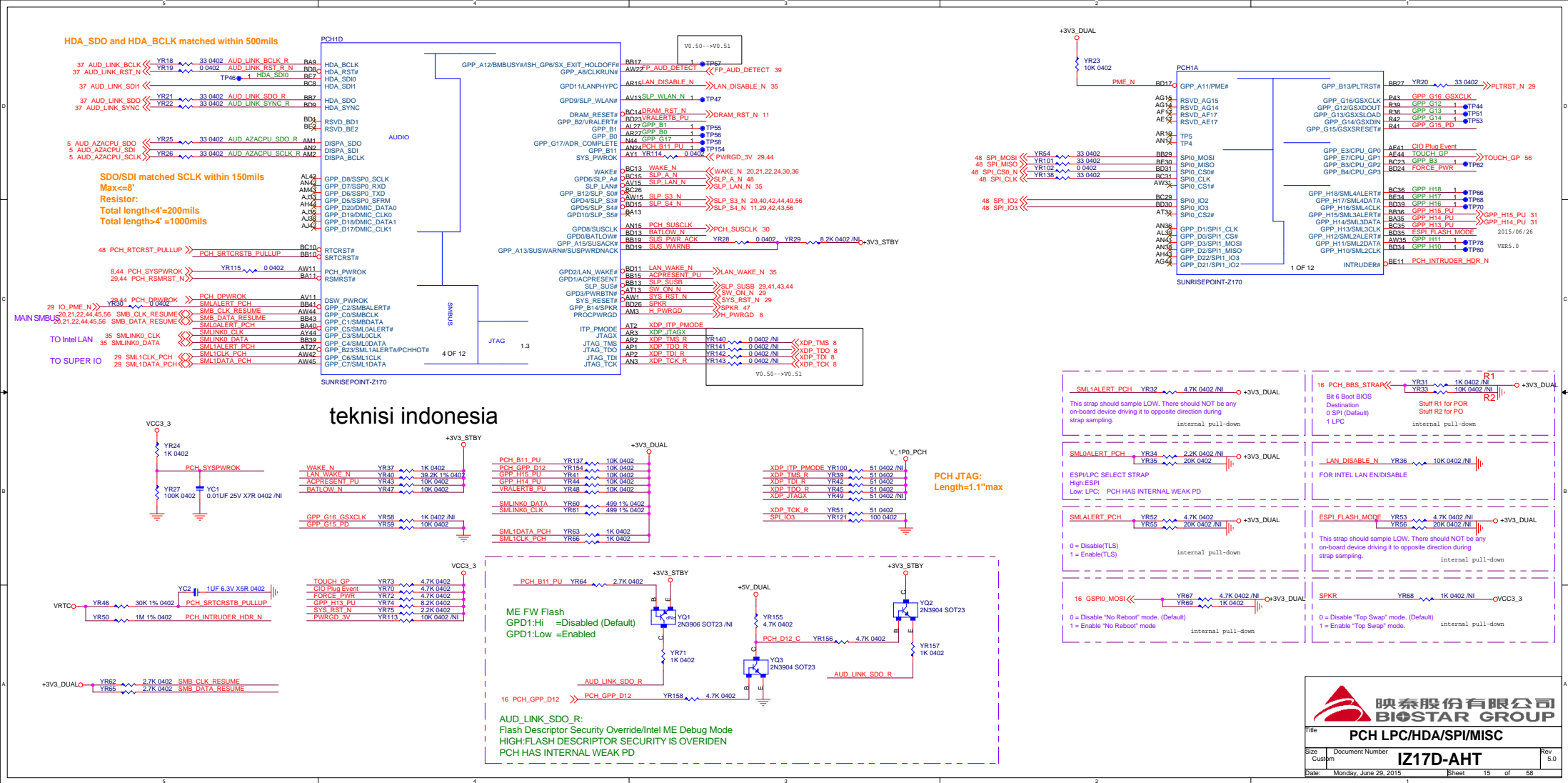
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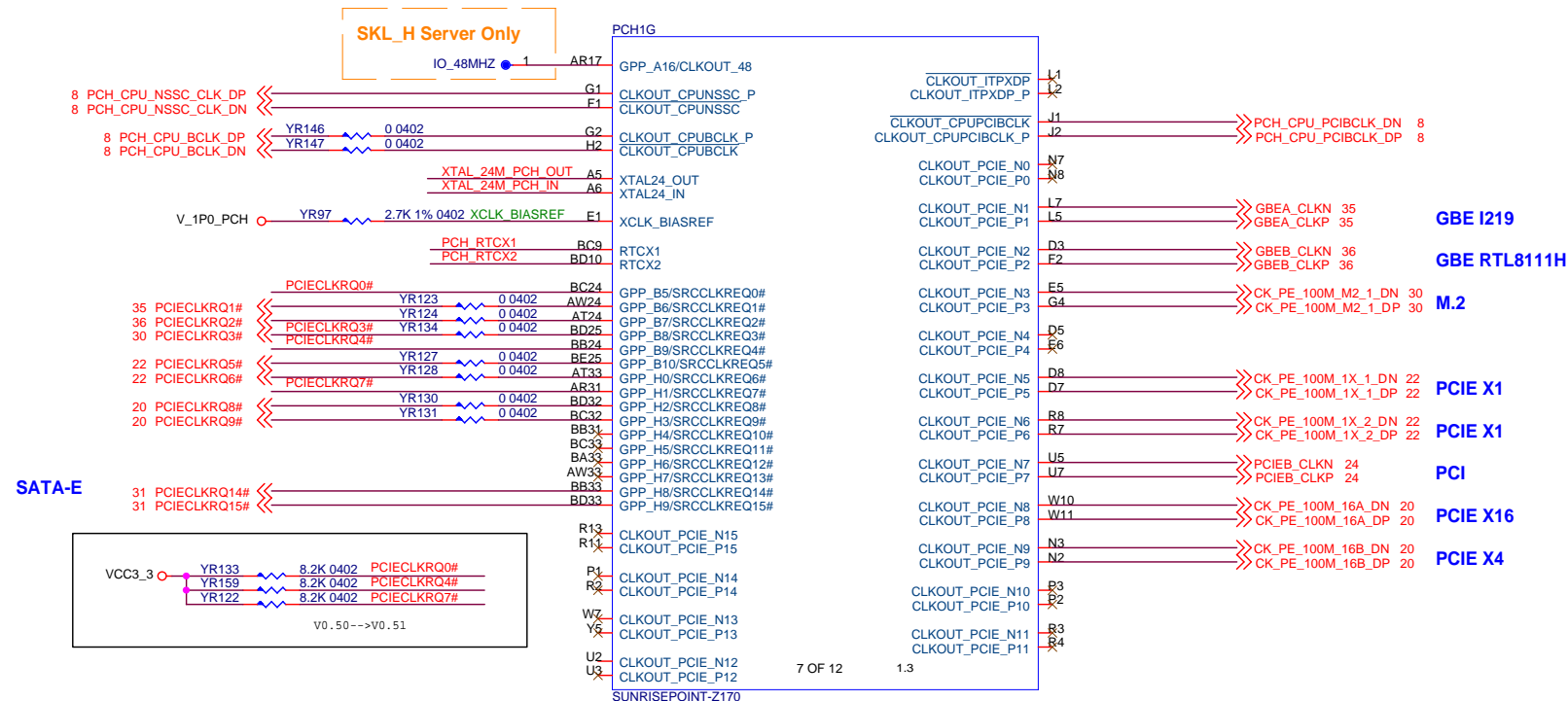
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# PCH PART: Y+Reference



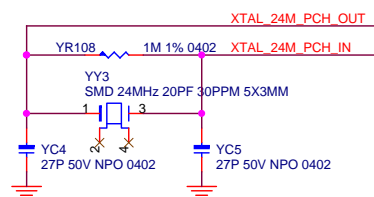




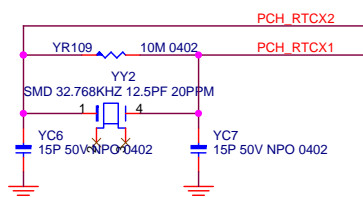



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24MHZ CRYSTAL

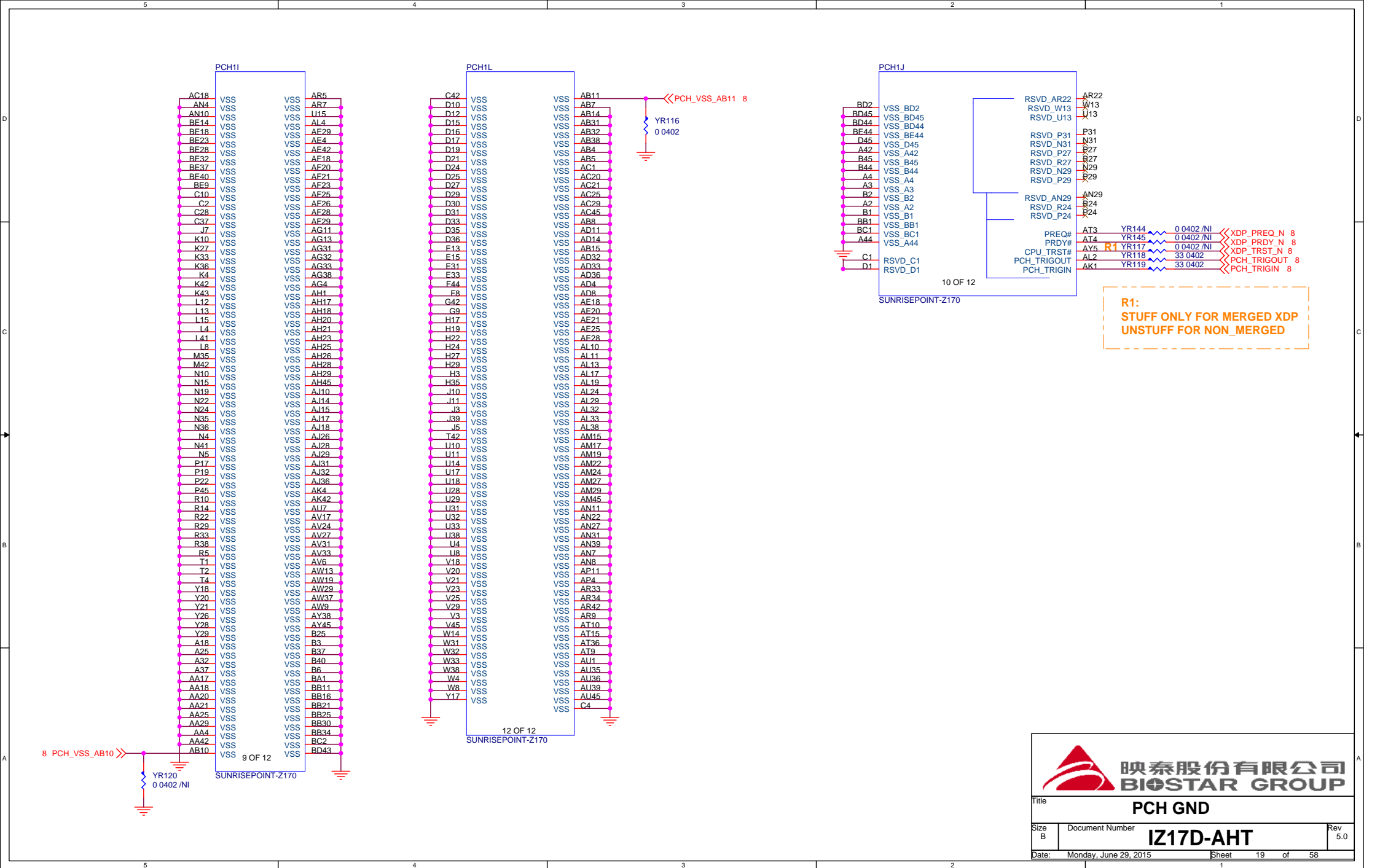


RTC CRYSTAL



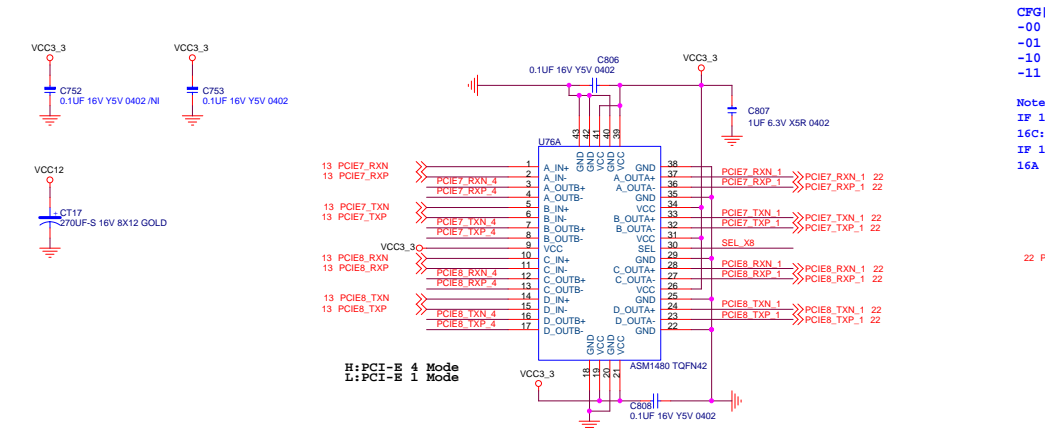
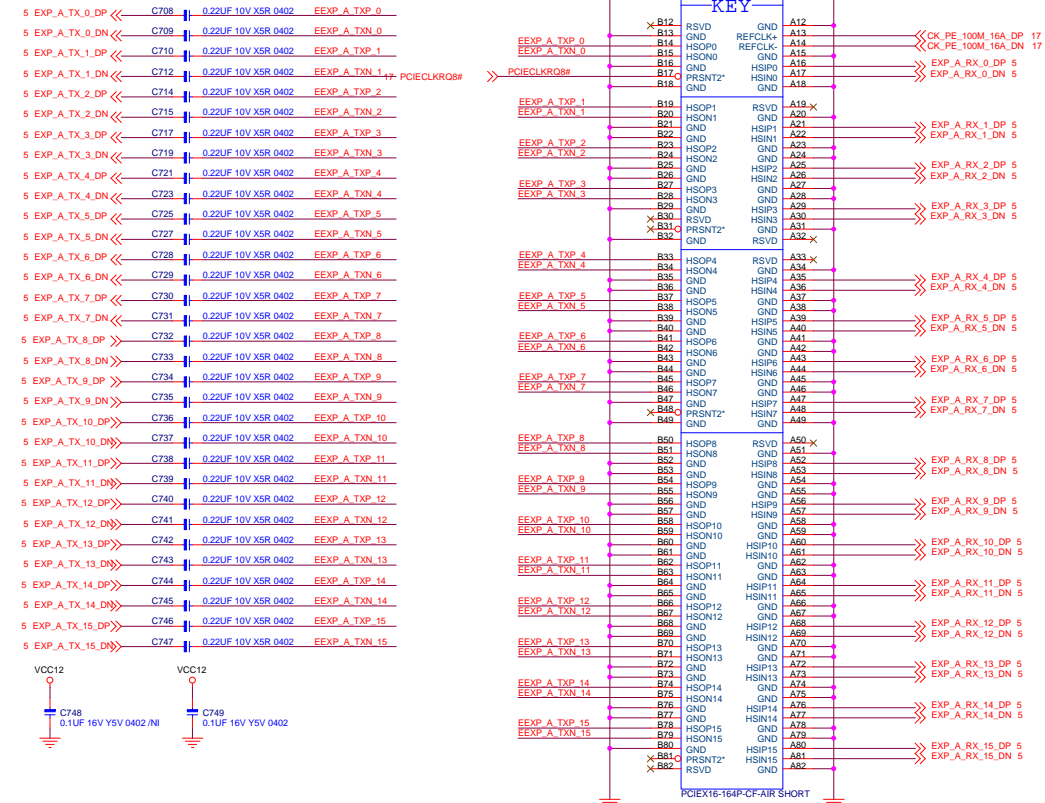
		
Title PCH CLOCK BUFFER		
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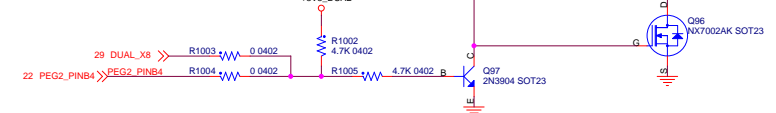
SLOT PART: E+Reference

Value:180 nF - 265 nF  
450 mils max to connector pin



CFG[6:5] PEX bifurcation  
-00 1\*8+2\*4;  
-01 RSVD;  
-10 2\*8;  
-11 1\*16

Notes:  
IF 16C exist,  
16C:4X,16B:4X,16A:8X,  
IF 16B exist,  
16A exist, 2\*8



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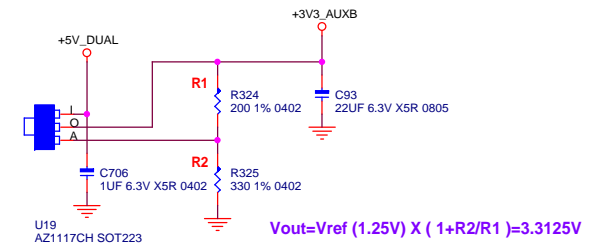
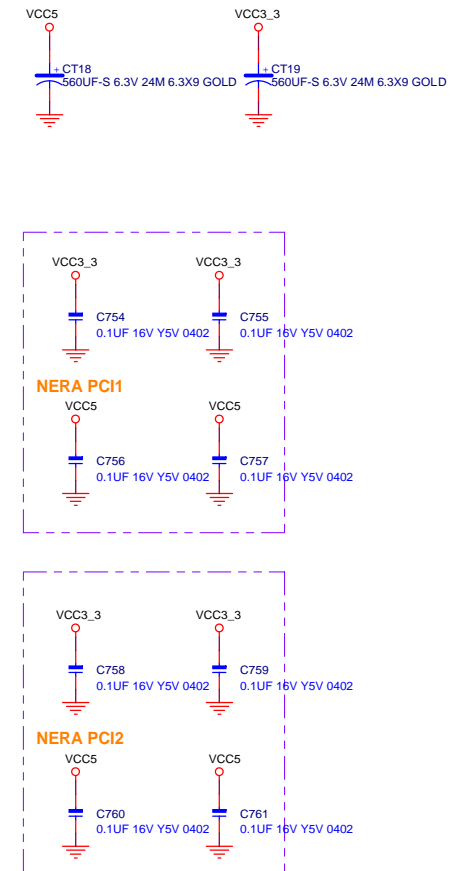
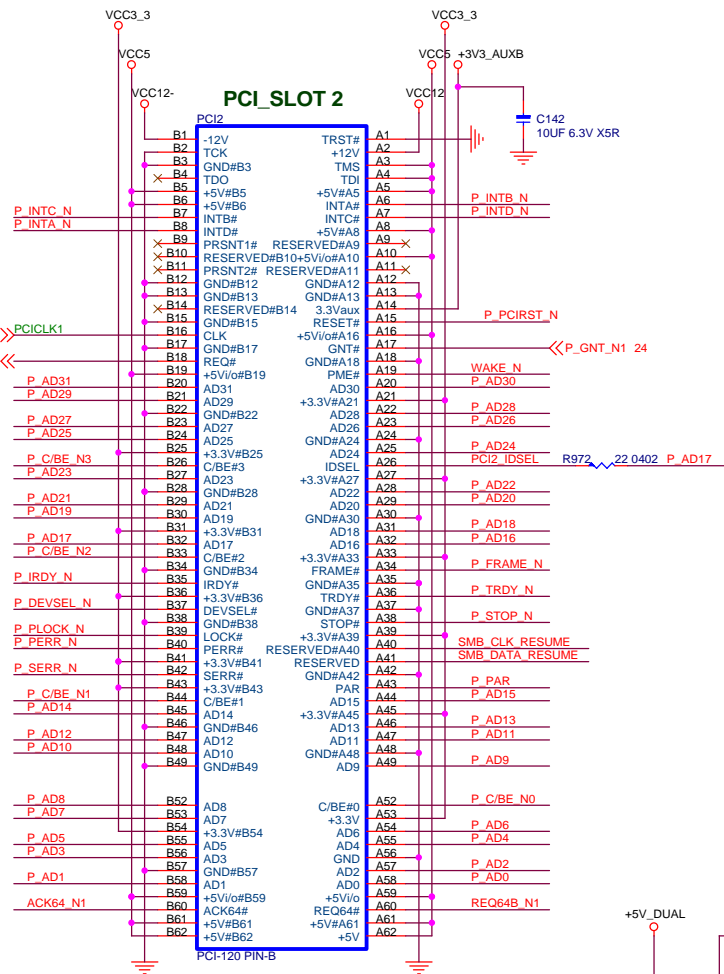
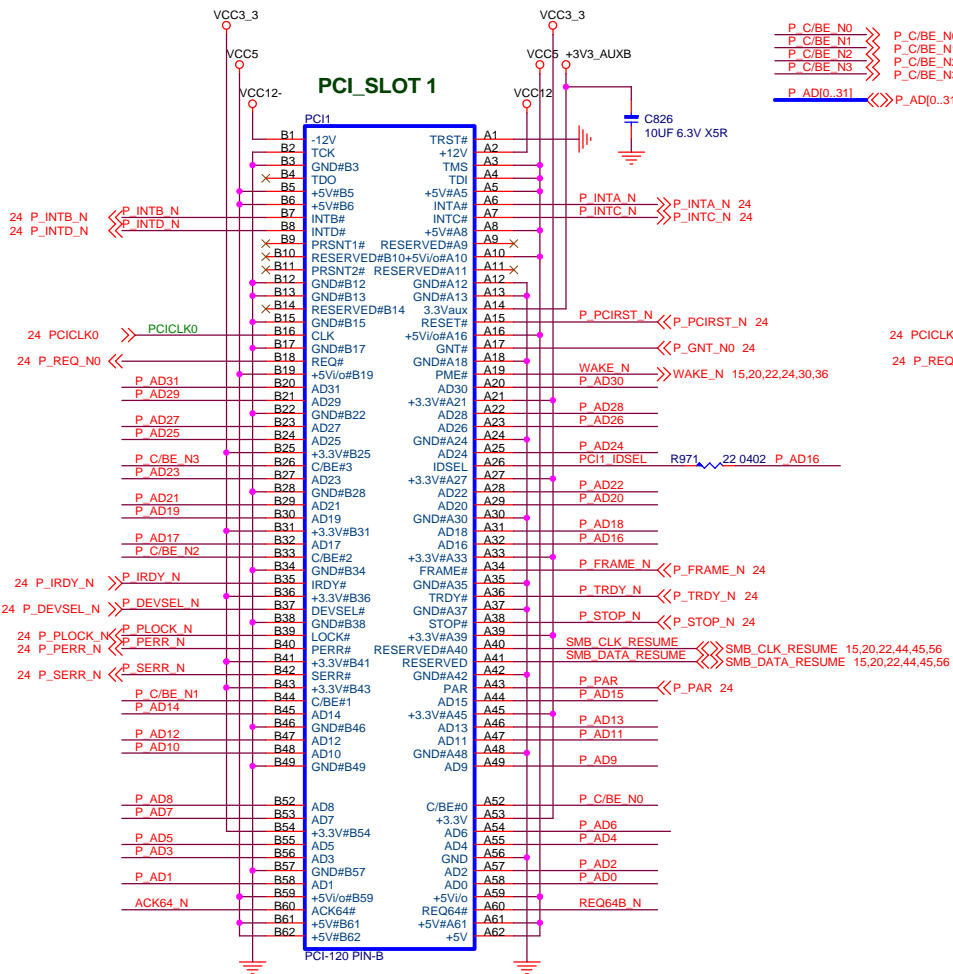
PCIEX16 SLOT 1 & 2

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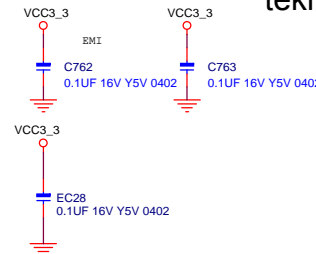
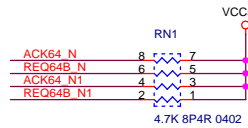
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IDSEL:AD16, INT:ABCD, REQ0 & GNT0, PCICLK0

IDSEL:AD17, INT:BCDA, REQ1 & GNT1, PCICLK0



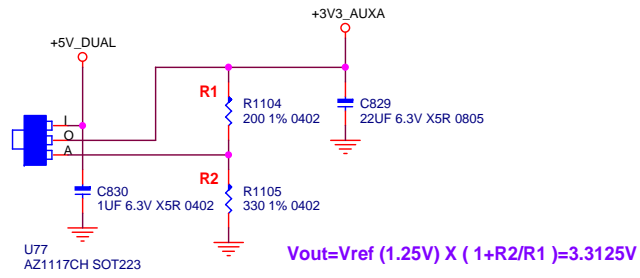
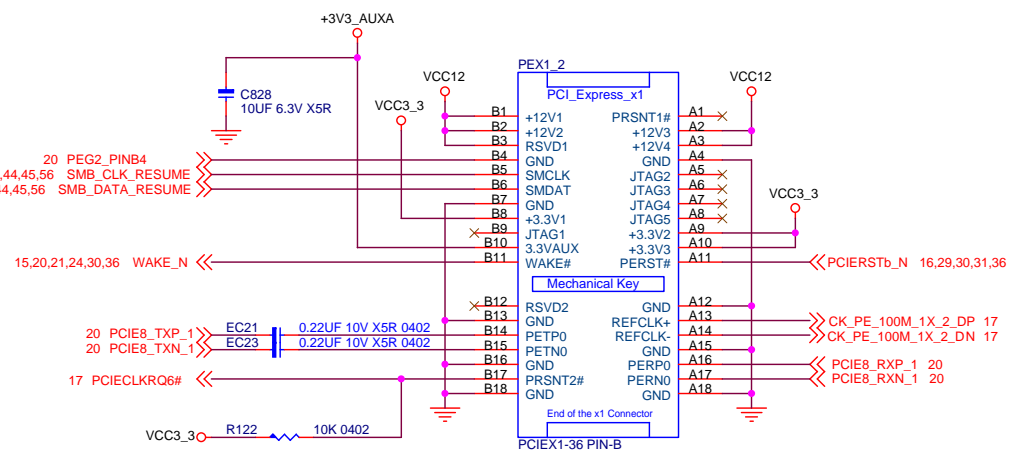
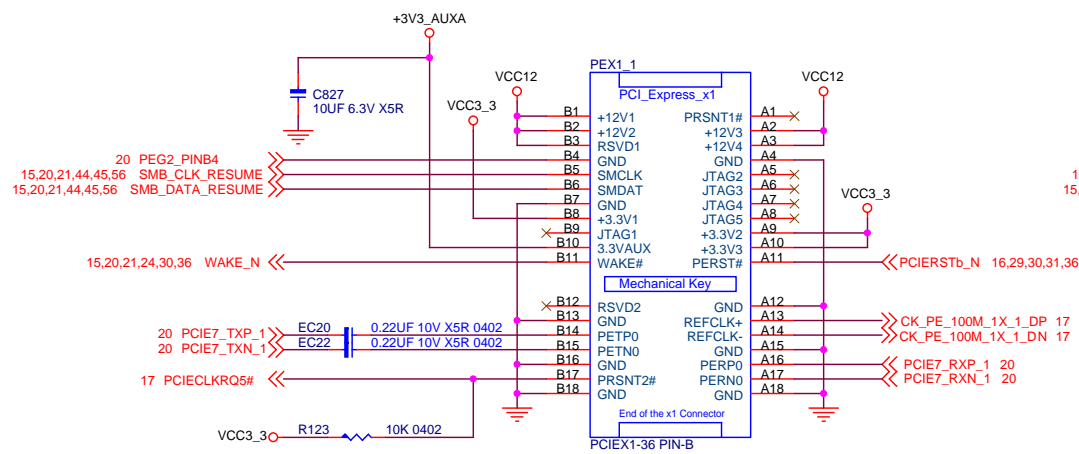
Power Rail	Expansion Boards (Short and Long)
5 V ±5%	5 A max. (system dependent)
3.3 V ±0.3 V	7.6 A max. (system dependent)
12 V ±5%	500 mA
-12 V ±10%	100 mA




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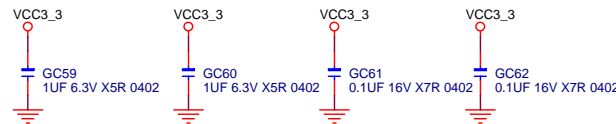
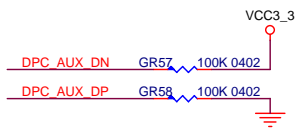
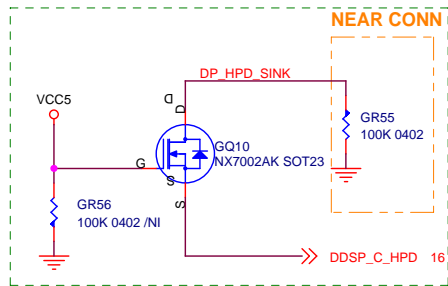


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Title <b>PCIE1 &amp; 2 &amp; 3 &amp; mPCIE</b>		
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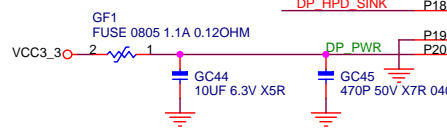




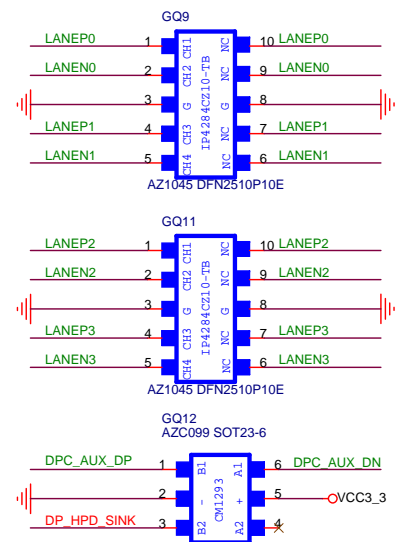
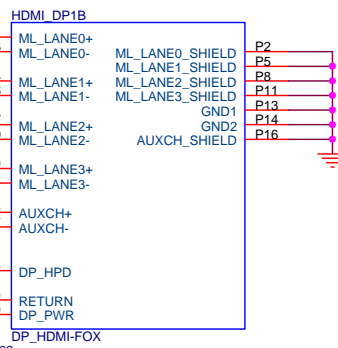
5 DDI2\_TX\_0\_DP  
5 DDI2\_TX\_0\_DN  
5 DDI2\_TX\_1\_DP  
5 DDI2\_TX\_1\_DN  
5 DDI2\_TX\_2\_DP  
5 DDI2\_TX\_2\_DN  
5 DDI2\_TX\_3\_DP  
5 DDI2\_TX\_3\_DN  
5 DDI2\_AUX\_DP  
5 DDI2\_AUX\_DN

GC34 0.1UF 16V X7R 0402  
GC37 0.1UF 16V X7R 0402  
GC35 0.1UF 16V X7R 0402  
GC36 0.1UF 16V X7R 0402  
GC38 0.1UF 16V X7R 0402  
GC39 0.1UF 16V X7R 0402  
GC40 0.1UF 16V X7R 0402  
GC41 0.1UF 16V X7R 0402  
GC42 0.1UF 16V X7R 0402  
GC43 0.1UF 16V X7R 0402

LANEP0 P1  
LANEN0 P3  
LANEP1 P4  
LANEN1 P6  
LANEP2 P7  
LANEN2 P9  
LANEP3 P10  
LANEN3 P12  
DPC\_AUX\_DP P15  
DPC\_AUX\_DN P17



## DP CONNECTOR



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Title  
**DP CONNECTOR**

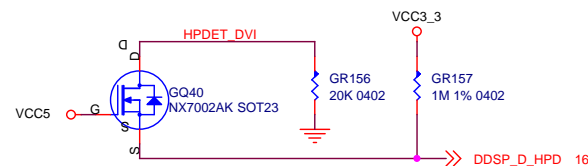
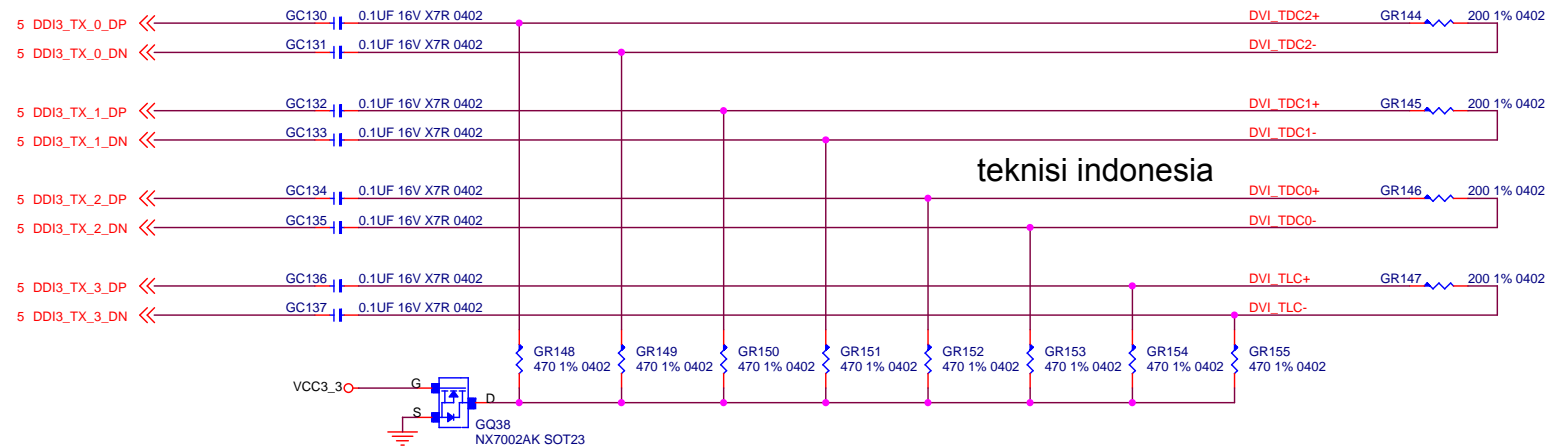
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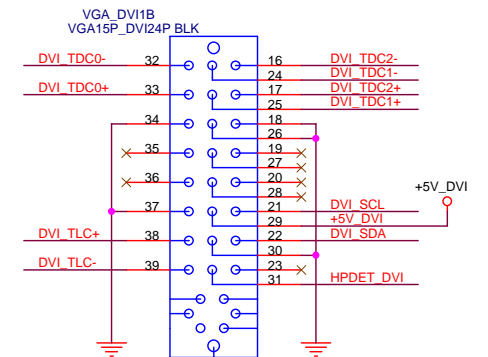
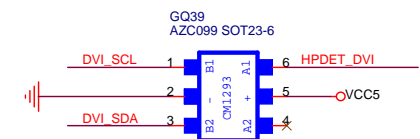
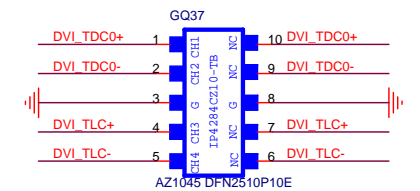
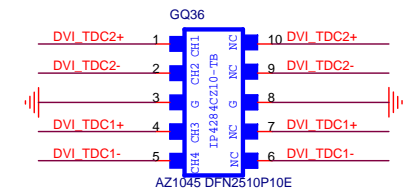
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### LEVEL SHIFTER HPD +5V SWITCH TO +3.3V



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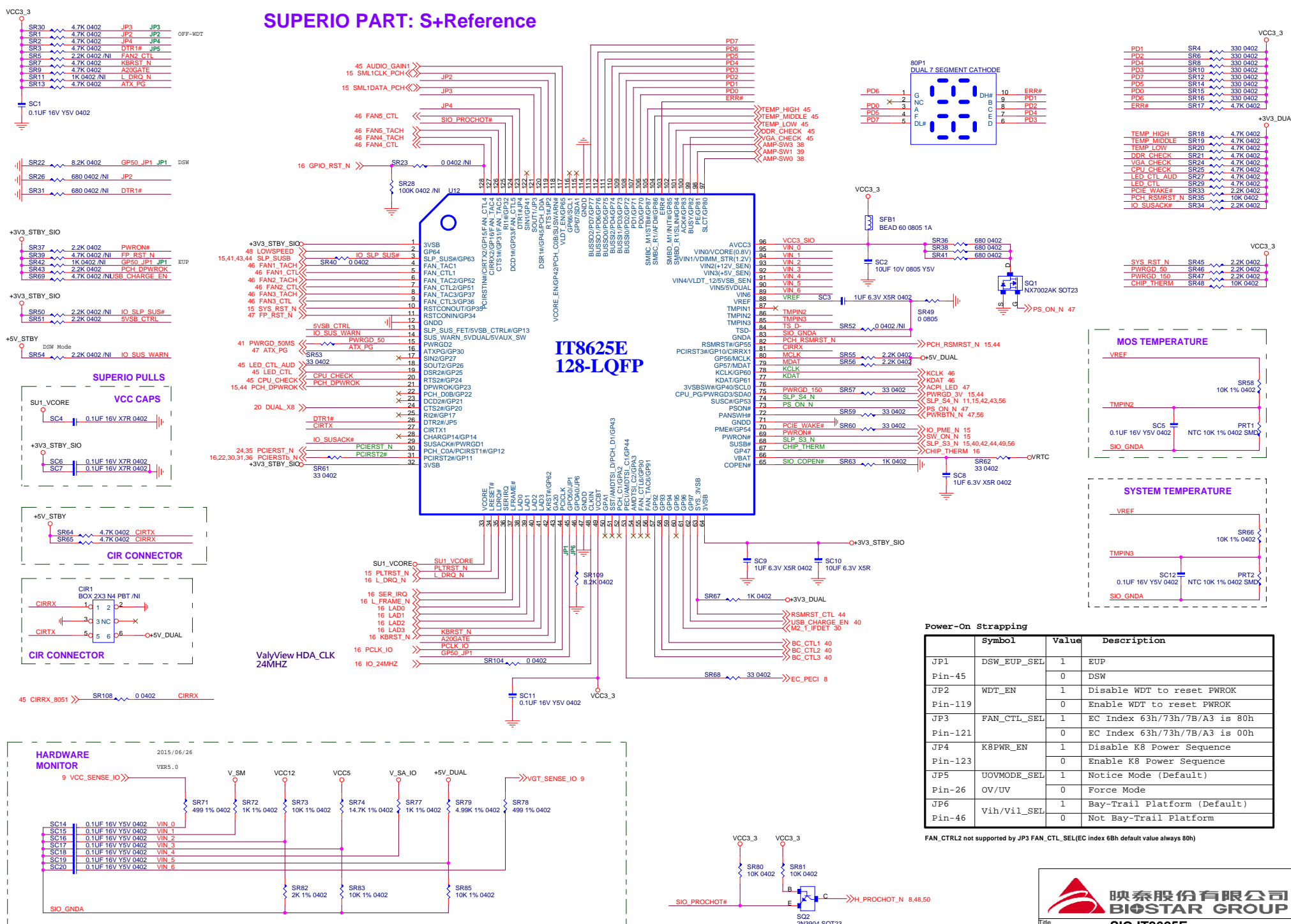
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# SUPERIO PART: S+Reference



## Power-On Strapping

	Symbol	Value	Description
JP1	DSW_EUP_SEL	1	EUP
Pin-45		0	DSW
JP2	WDT_EN	1	Disable WDT to reset PWROK
Pin-119		0	Enable WDT to reset PWROK
JP3	FAN_CTL_SEL	1	EC Index 63h/73h/7B/A3 is 80h
Pin-121		0	EC Index 63h/73h/7B/A3 is 00h
JP4	K8PWR_EN	1	Disable K8 Power Sequence
Pin-123		0	Enable K8 Power Sequence
JP5	UOVMODE_SEL	1	Notice Mode (Default)
Pin-26	OV/UV	0	Force Mode
JP6	Vih/Vil_SEL	1	Bay-Trail Platform (Default)
Pin-46		0	Not Bay-Trail Platform

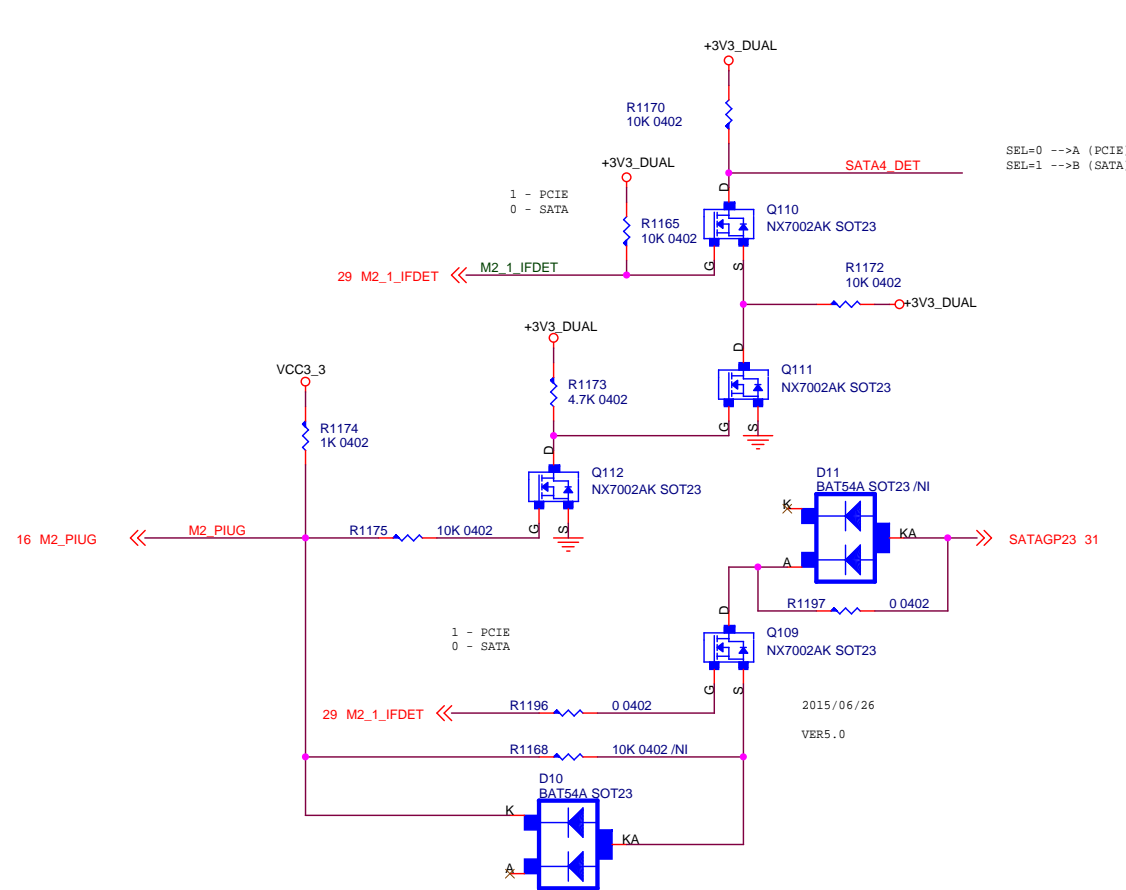
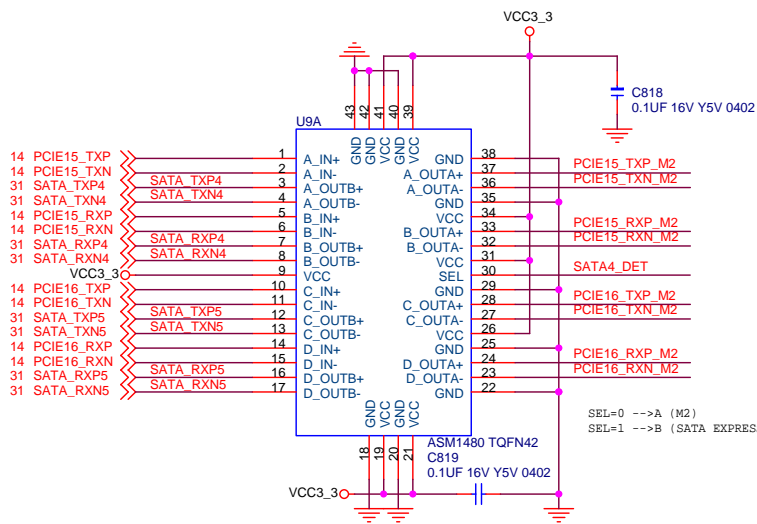
FAN\_CTRL2 not supported by JP3 FAN\_CTL\_SEL (EC index 6Bh default value always 80h)

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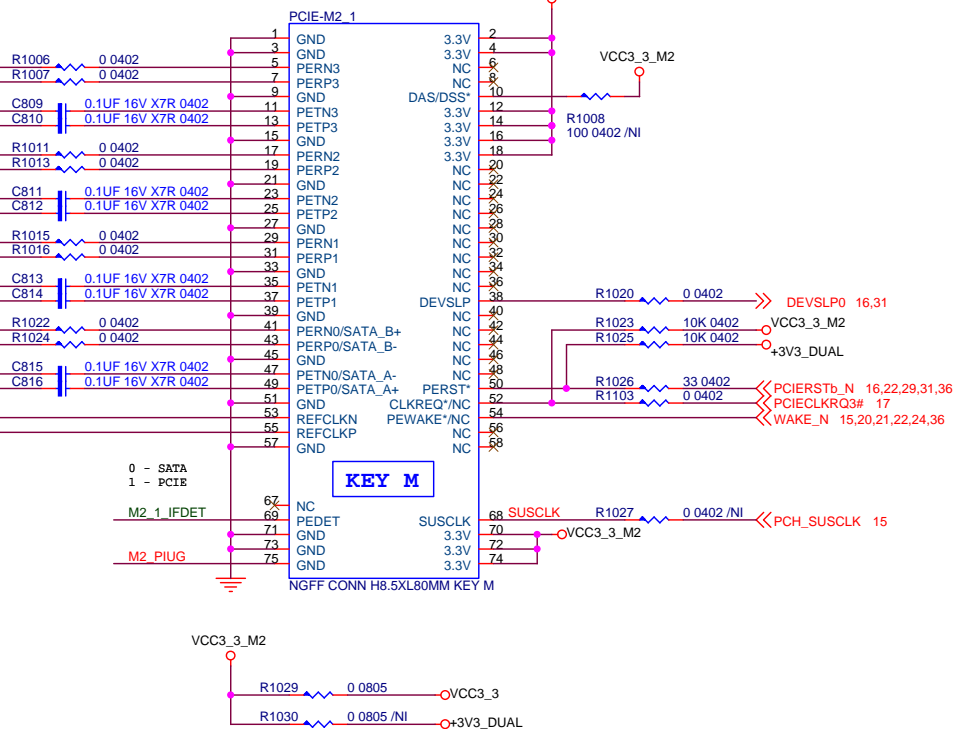
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	M2_1_IFDET 1 (DEFALUT)	M2_1_IFDET 0
M2_PIUG 1 (DEFALUT)	SATA SATA-EXPRESS	
M2_PIUG 0		



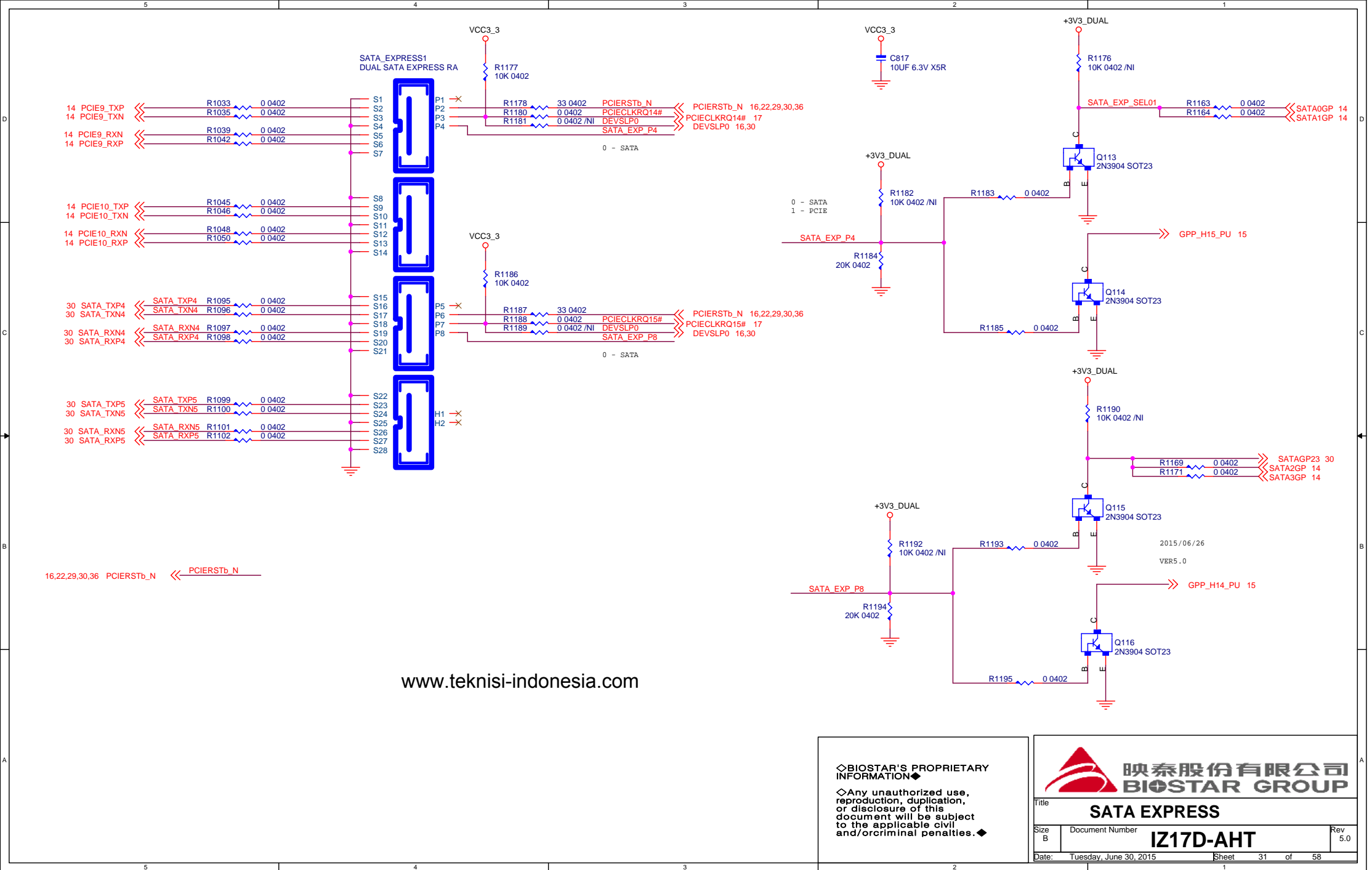
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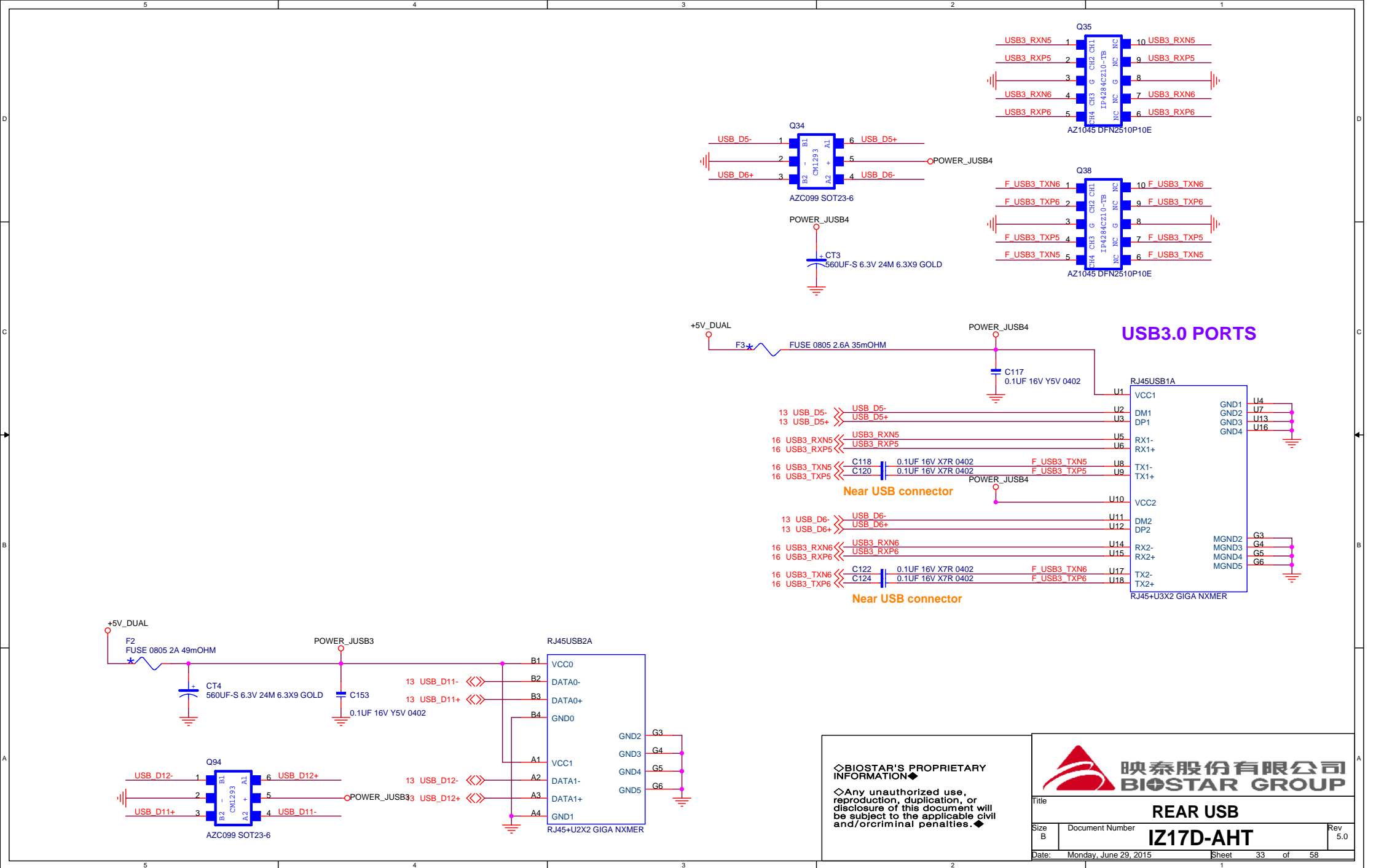
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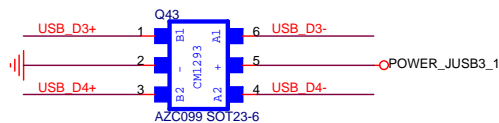
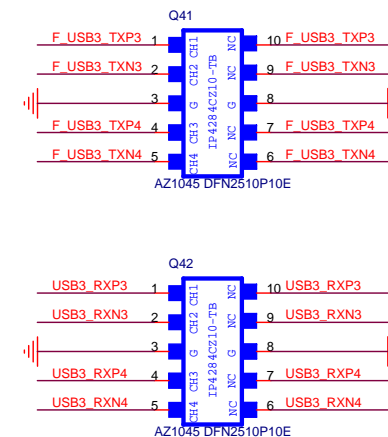
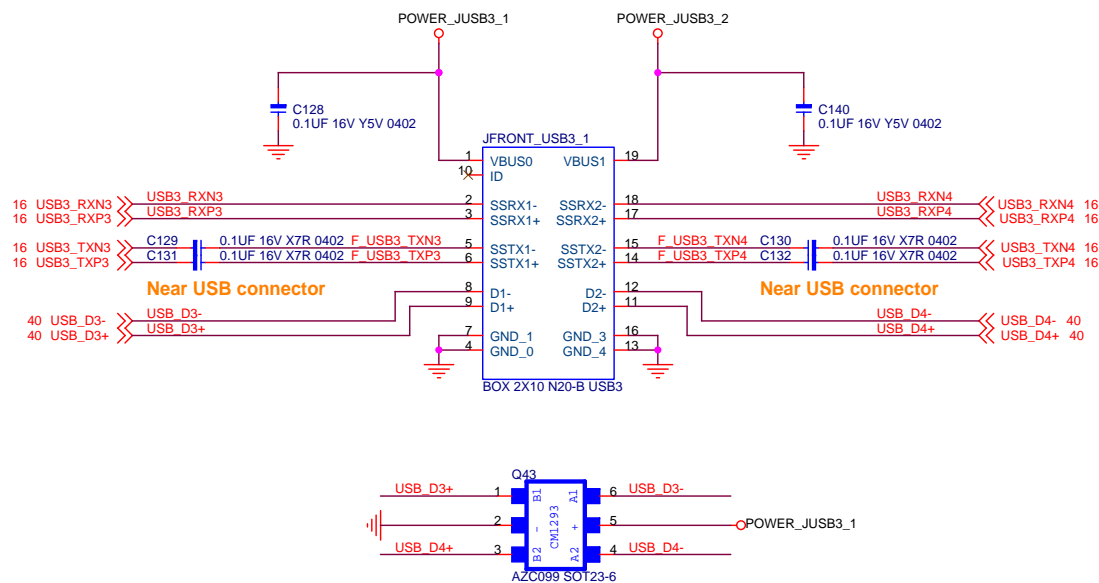
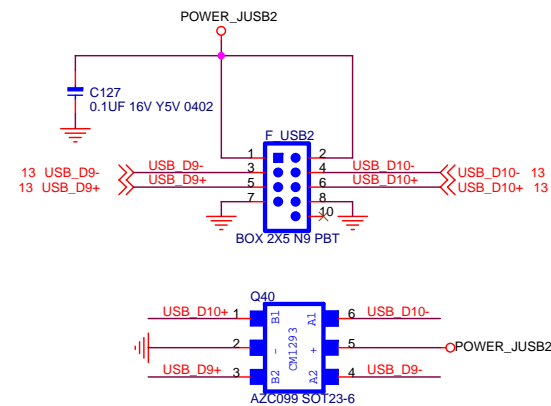
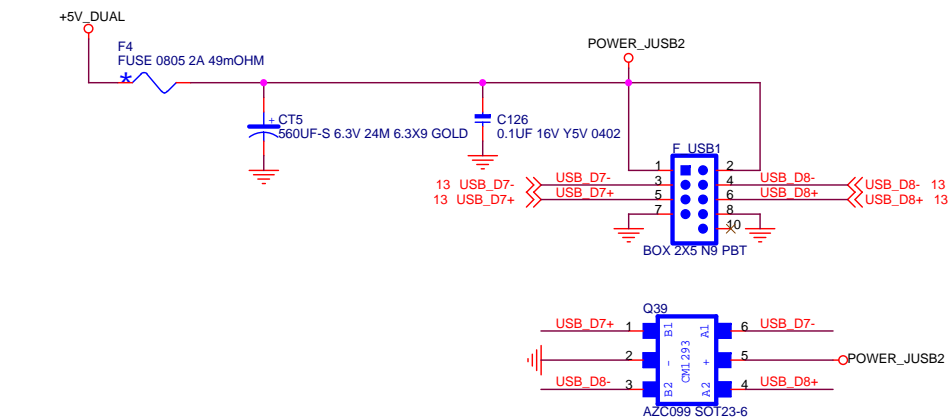
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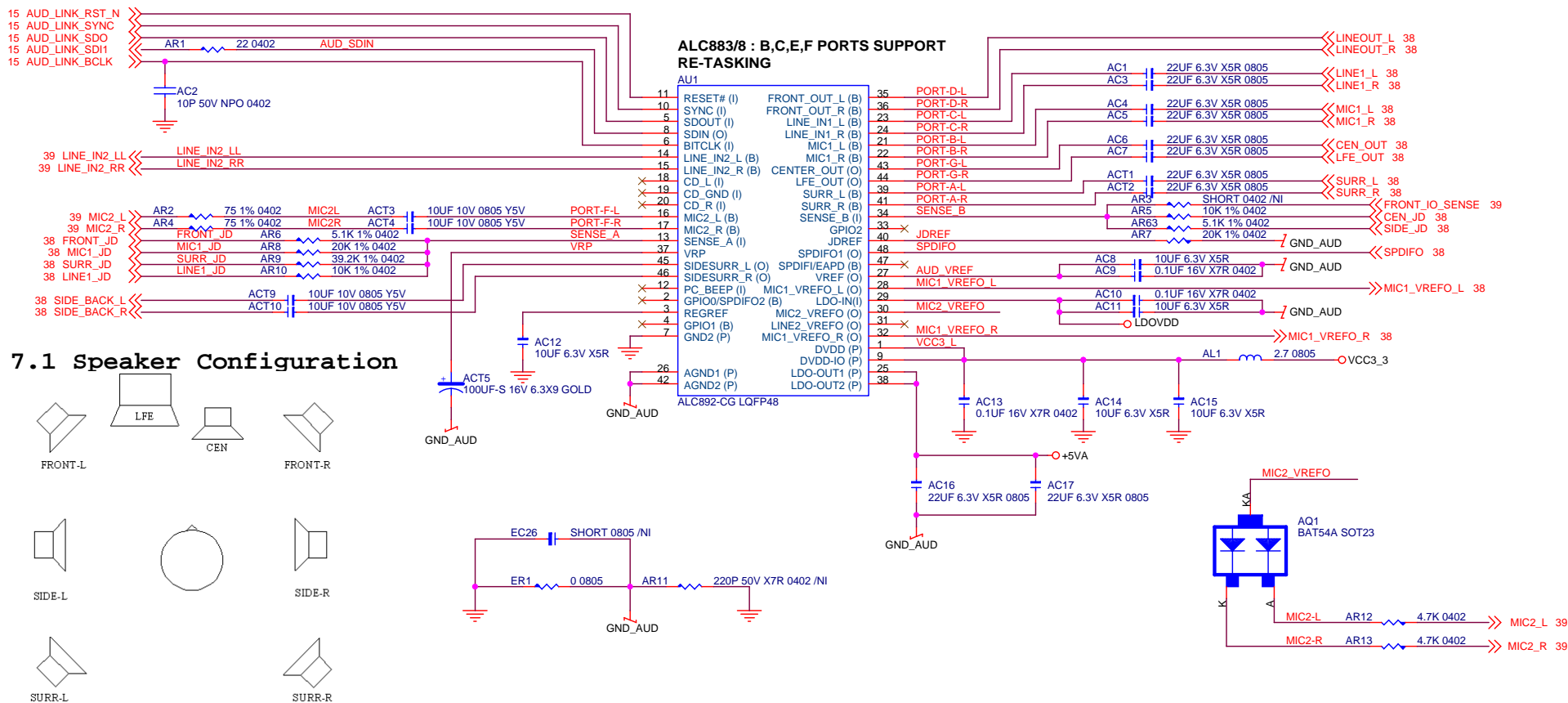
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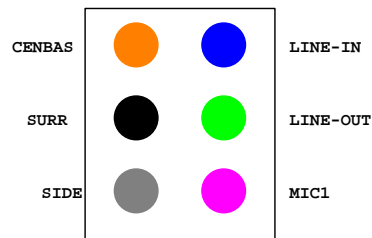
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AUDIO\_COVER1  
Hi-Fi Cover  
BRACKET-AUDIO HIFI /NI  
6/15 add Audio cover



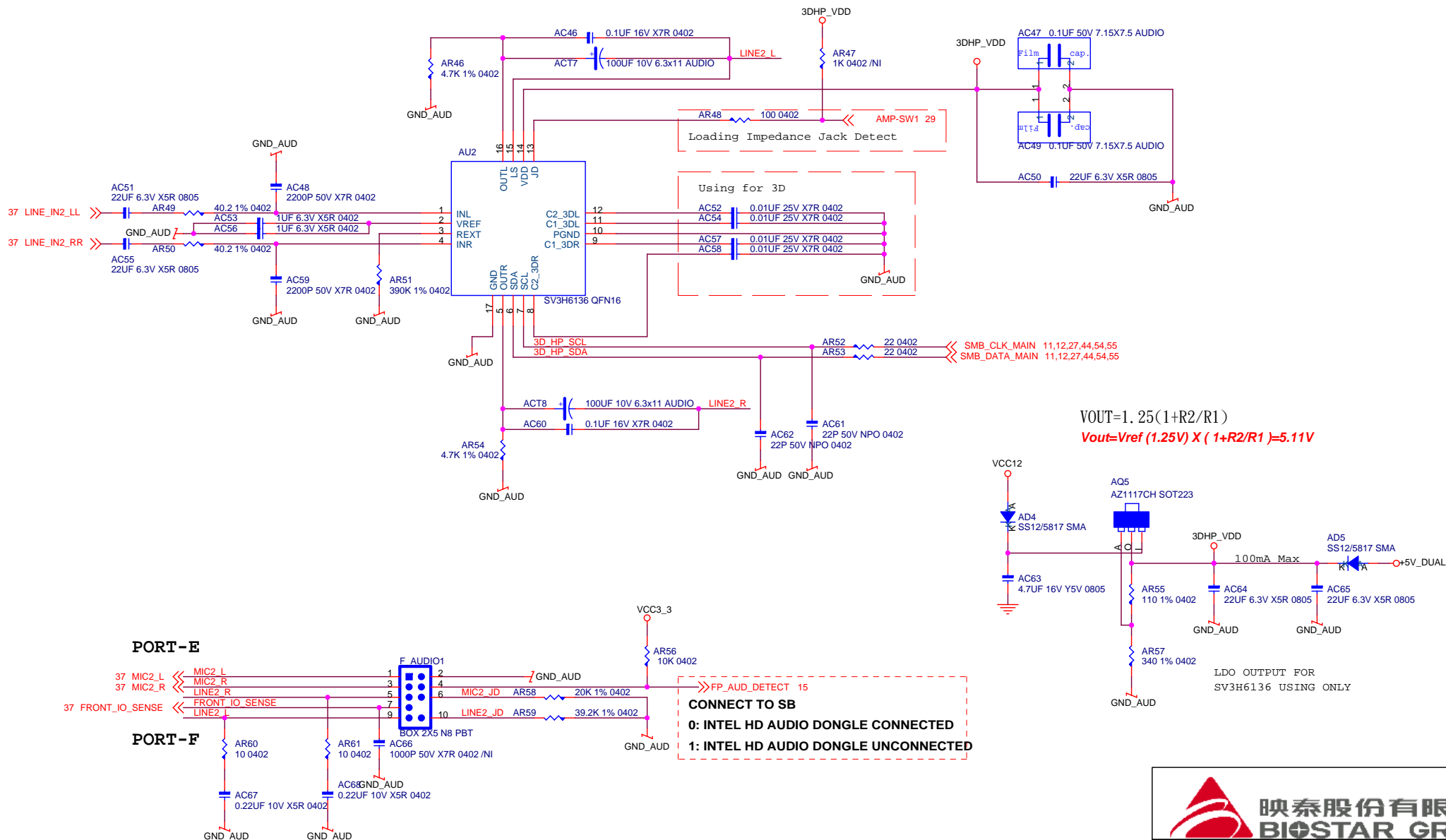
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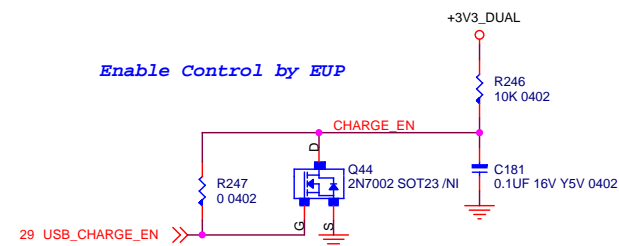
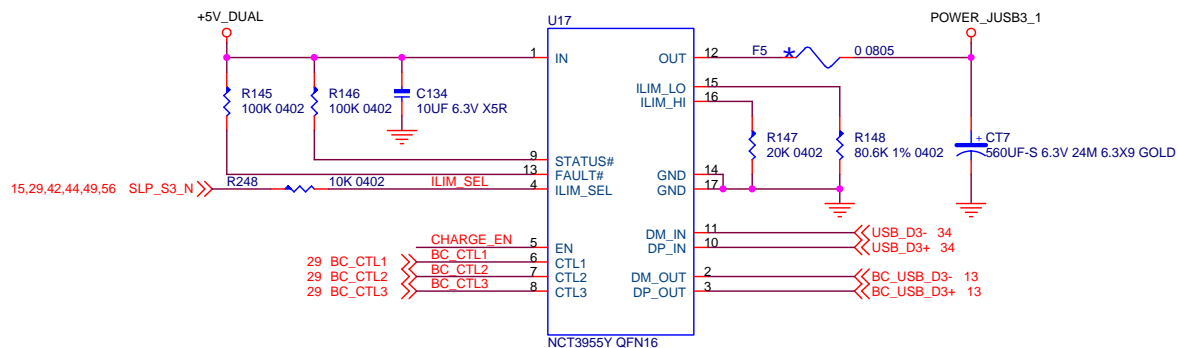
Title: **CODEC ALC892**

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CTL1	CTL2	CTL3	ILIM_SEL	Mode	Current Limit Setting	STATUS# Output (Active Low)	Comment
1	1	1	0 (S3/S5)	SDP	ILM_LO	OFF	
1	1	1	1 (S0)	CDP	ILM_HI	CDP load present	Data Lines Connected and Power Mgt. Function Active

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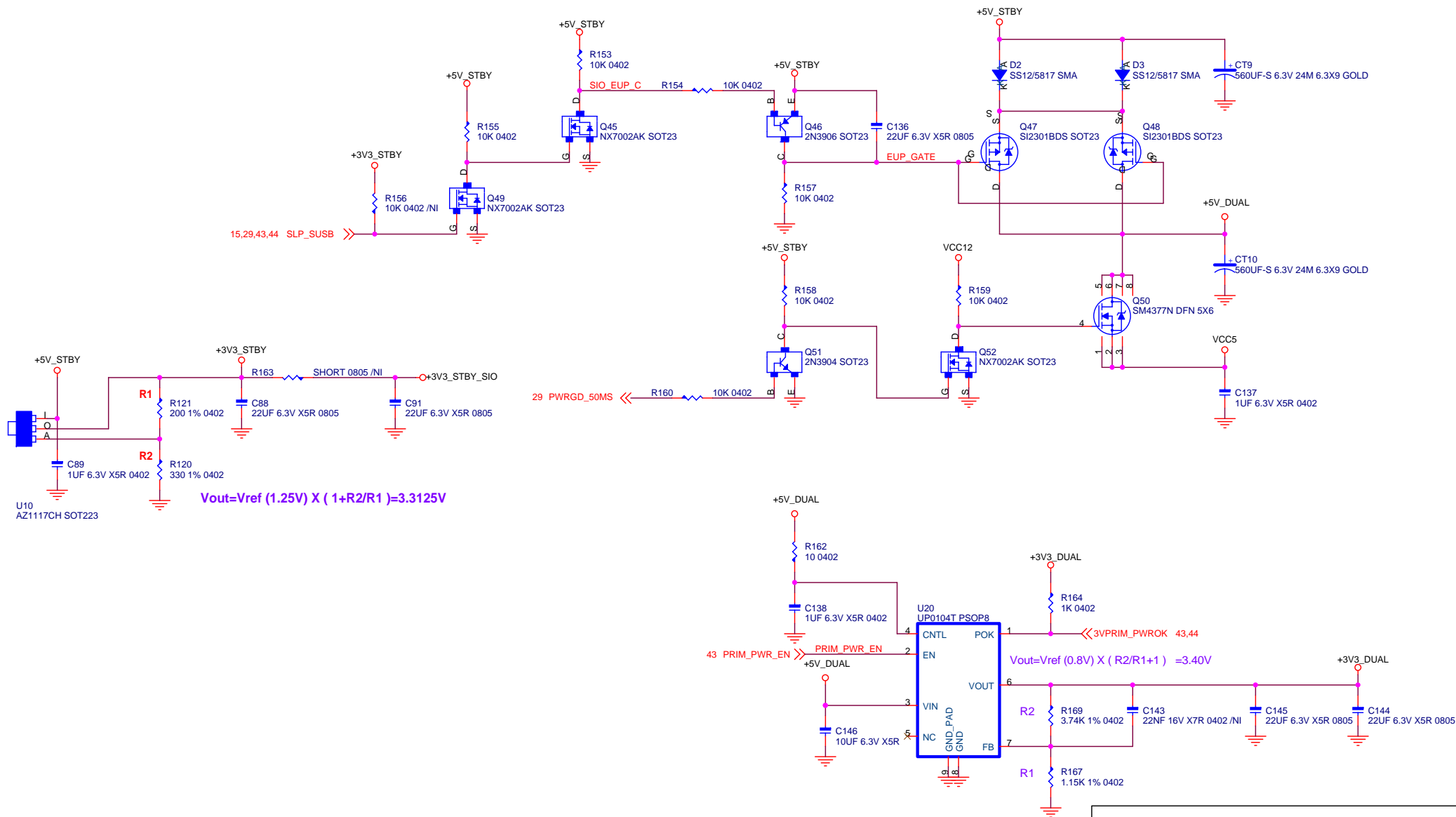
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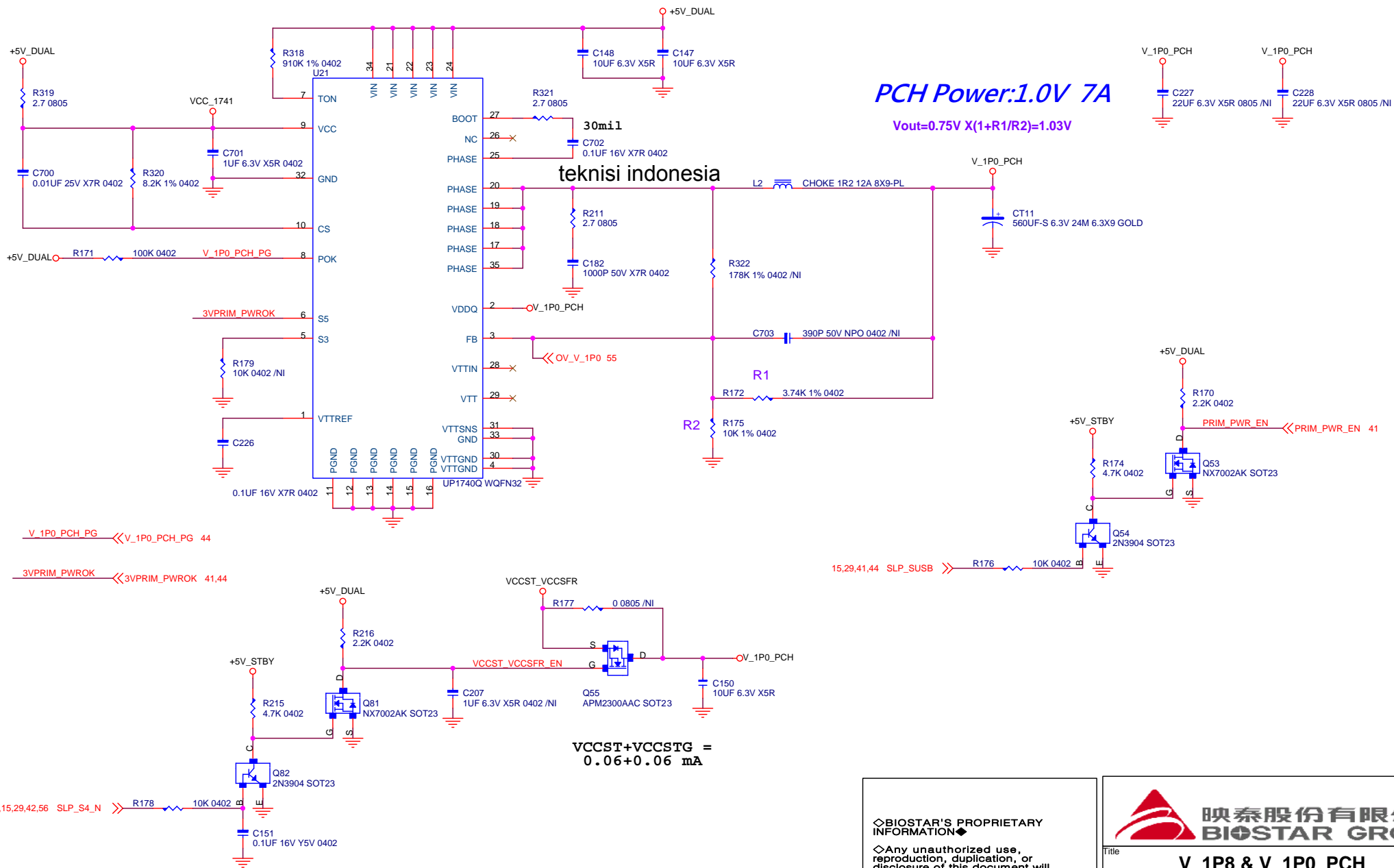
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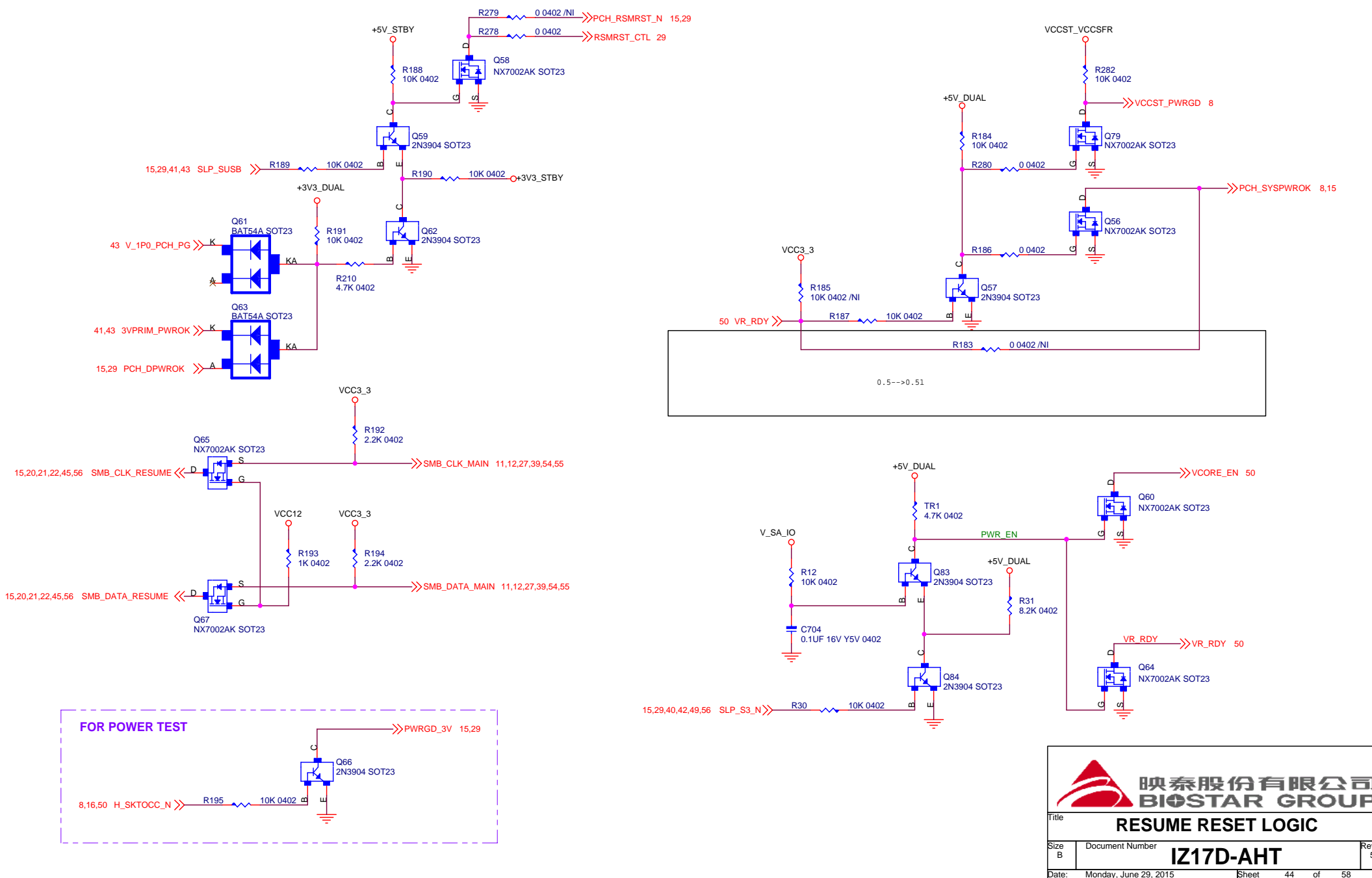
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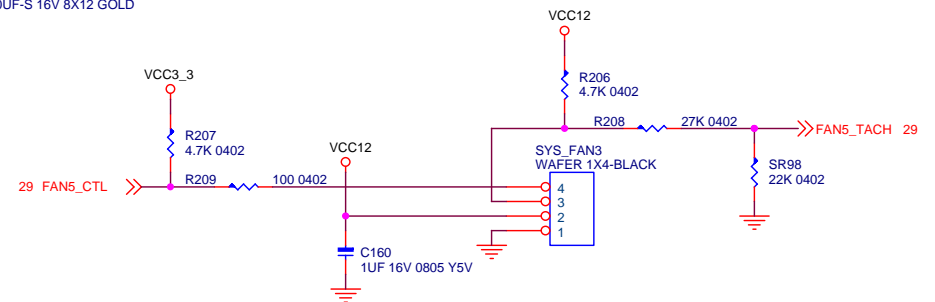
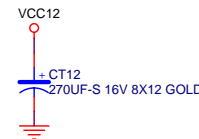
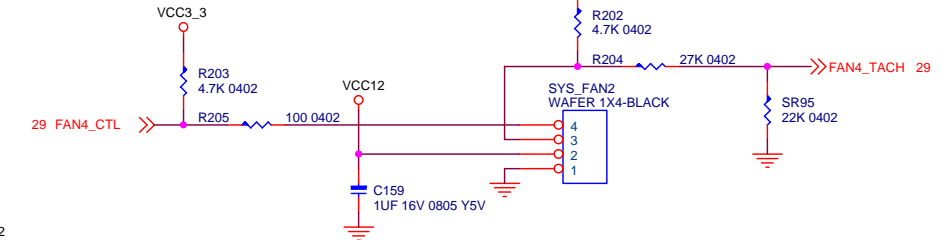
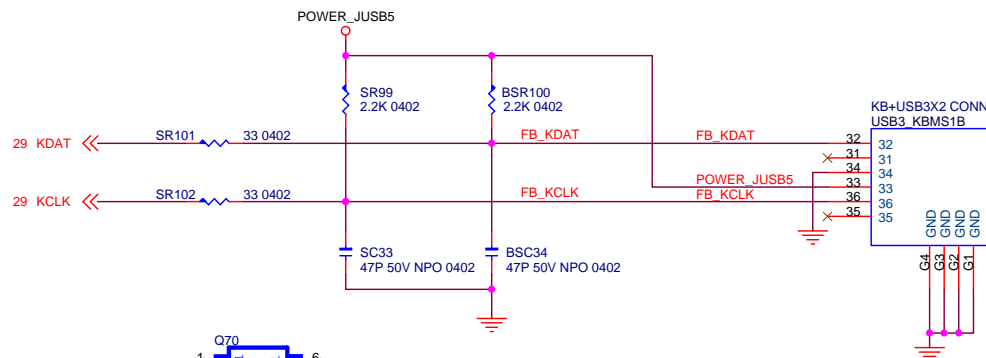
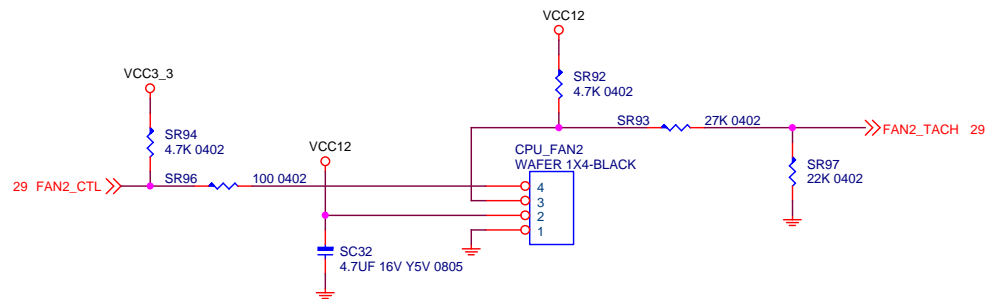
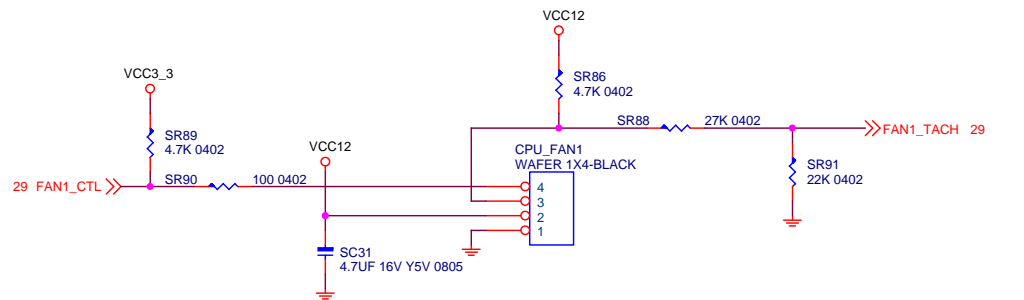


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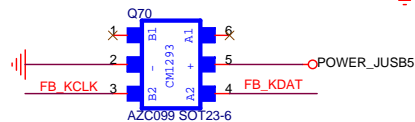
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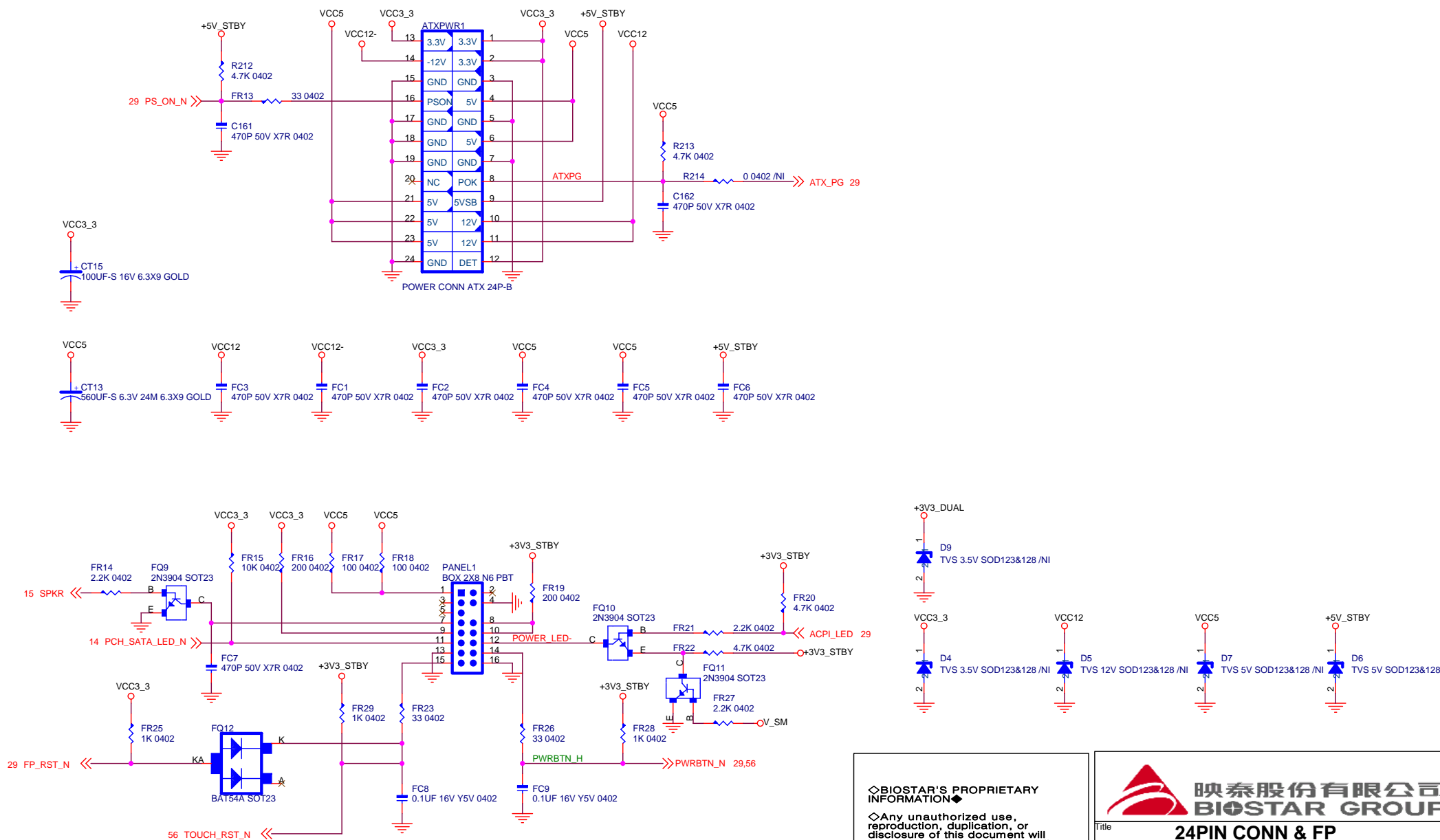


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# FP PART: F+Reference

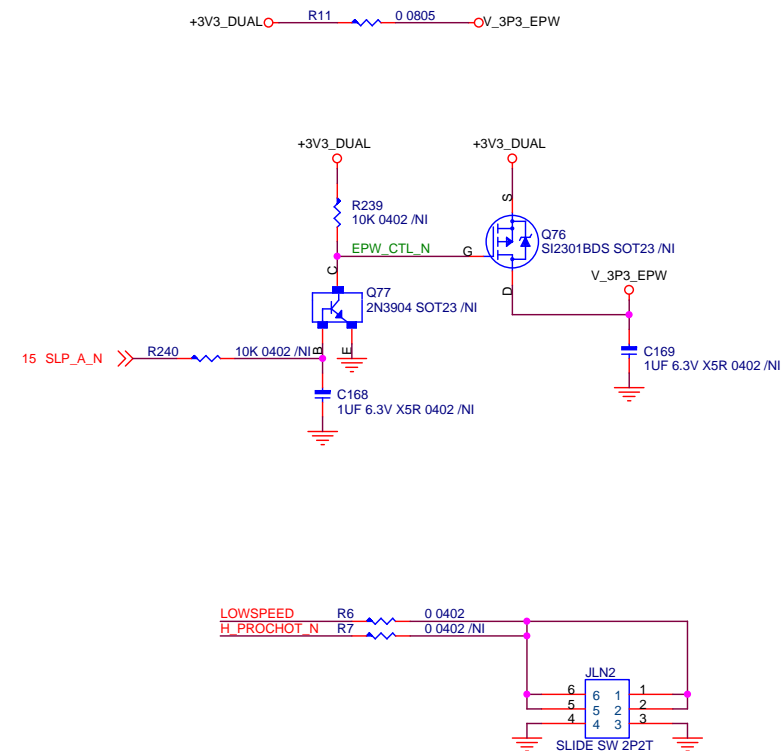
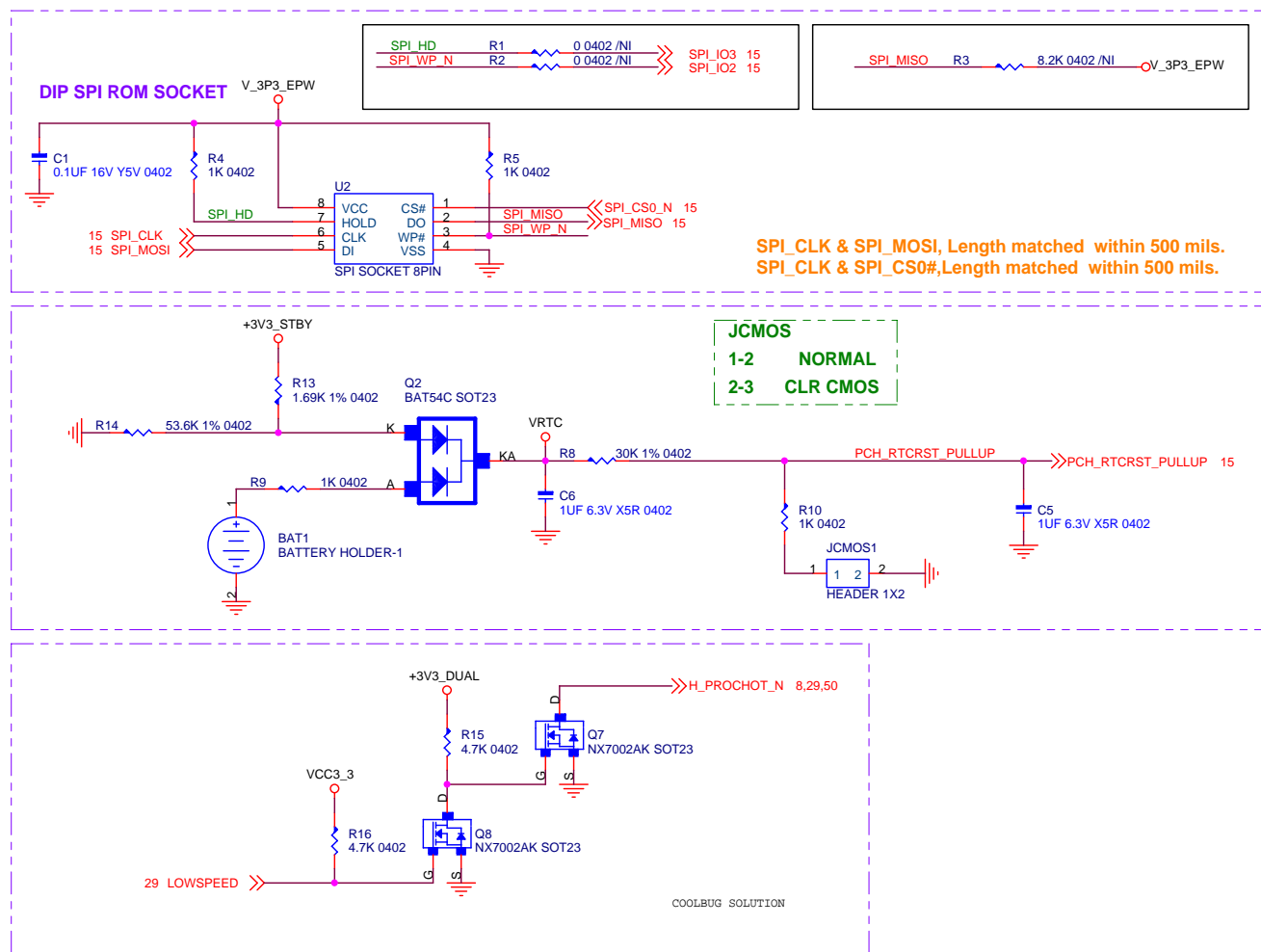


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Title <b>24PIN CONN &amp; FP</b>		
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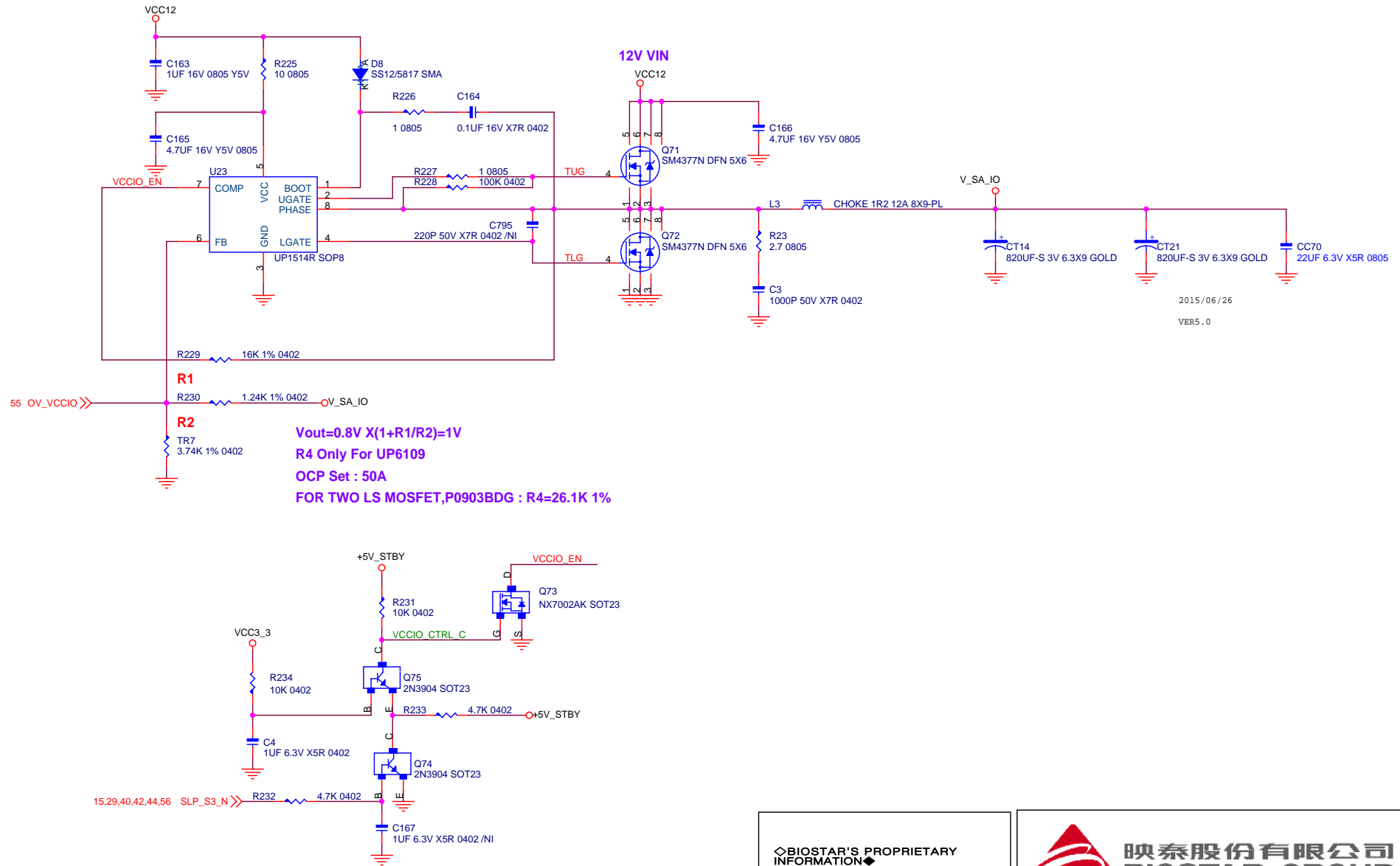


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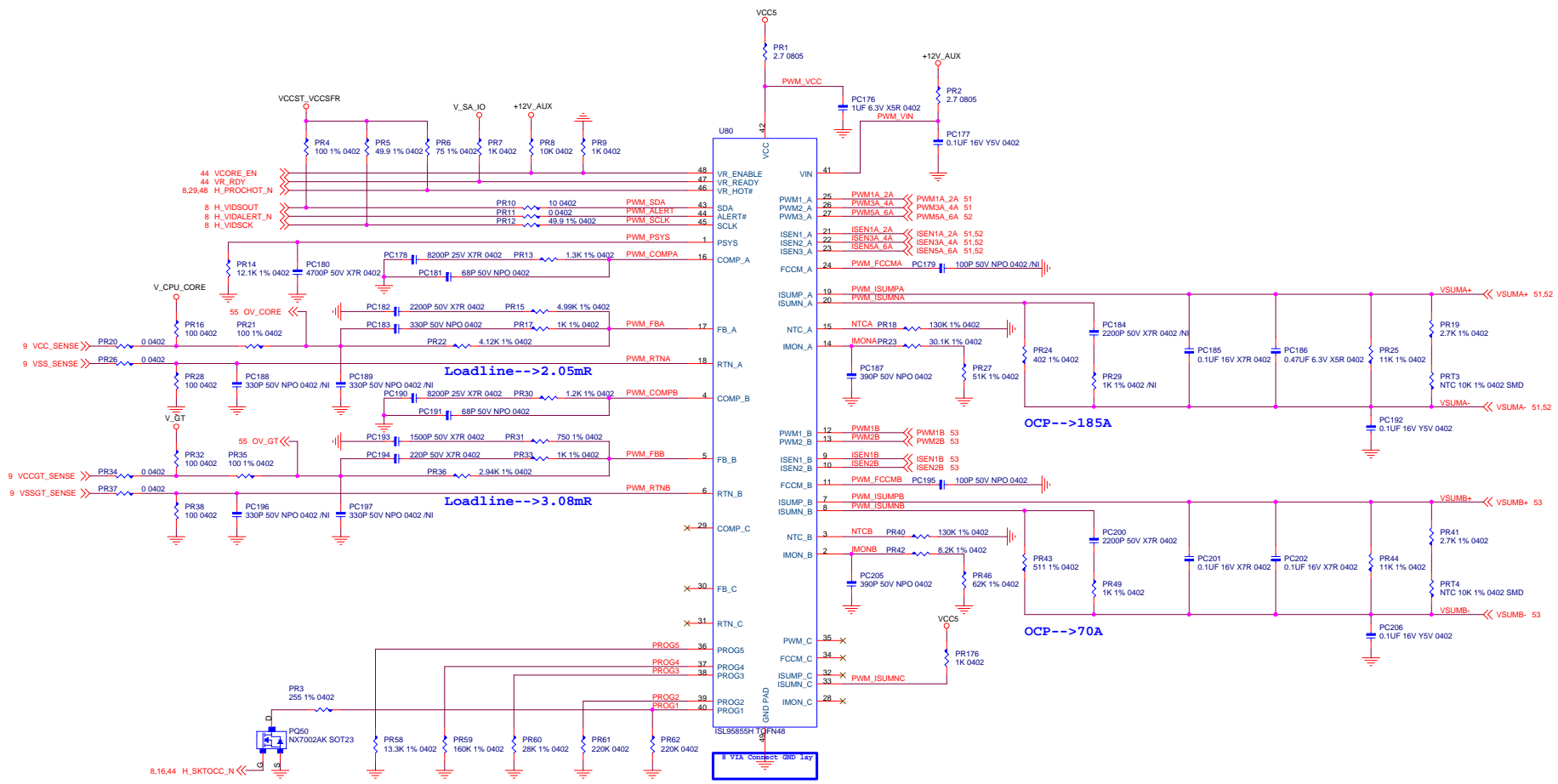


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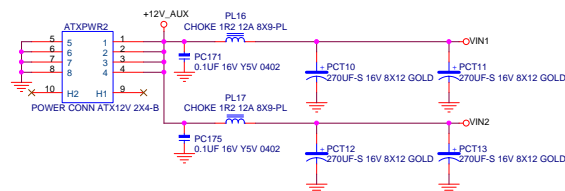


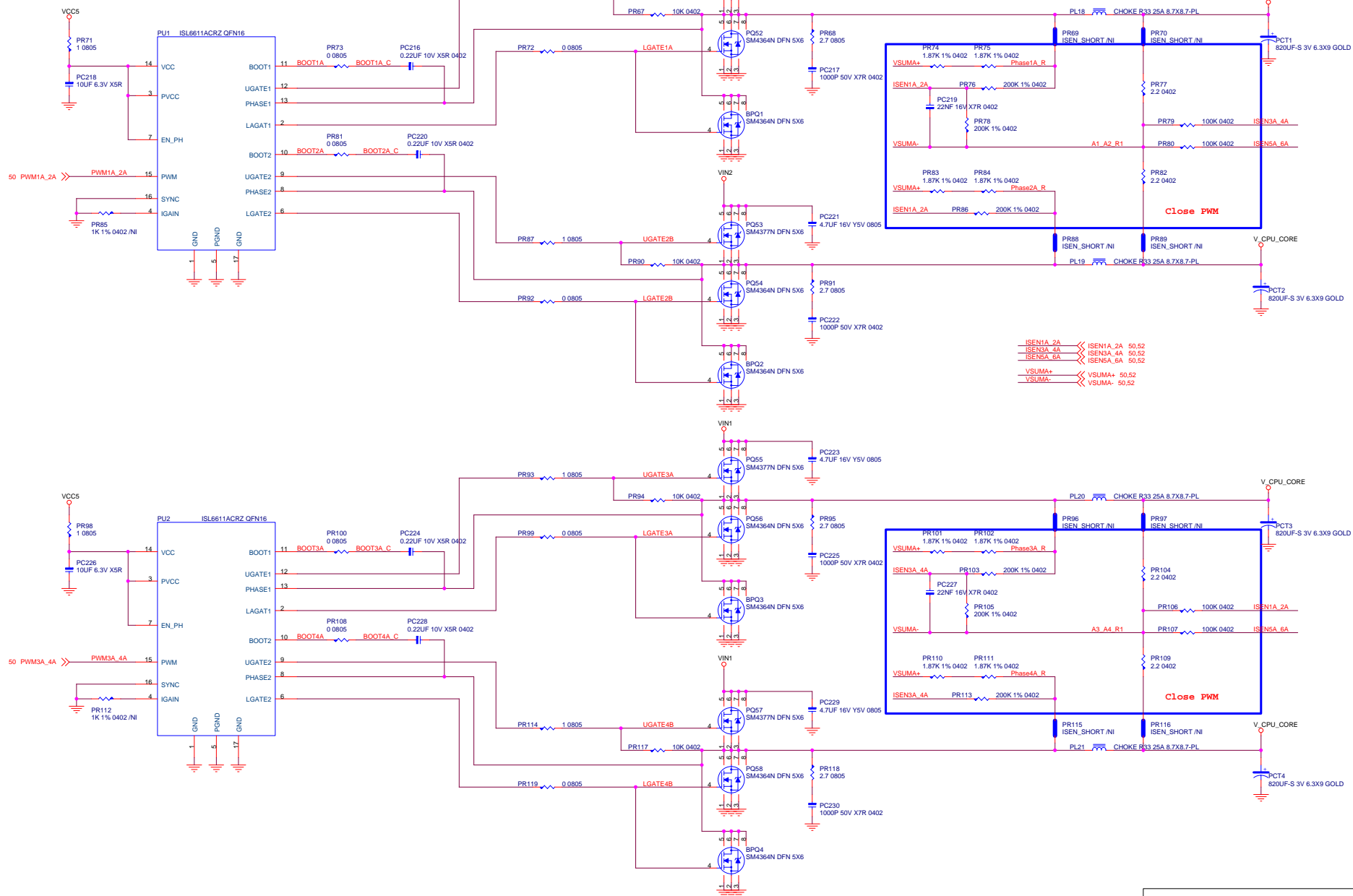
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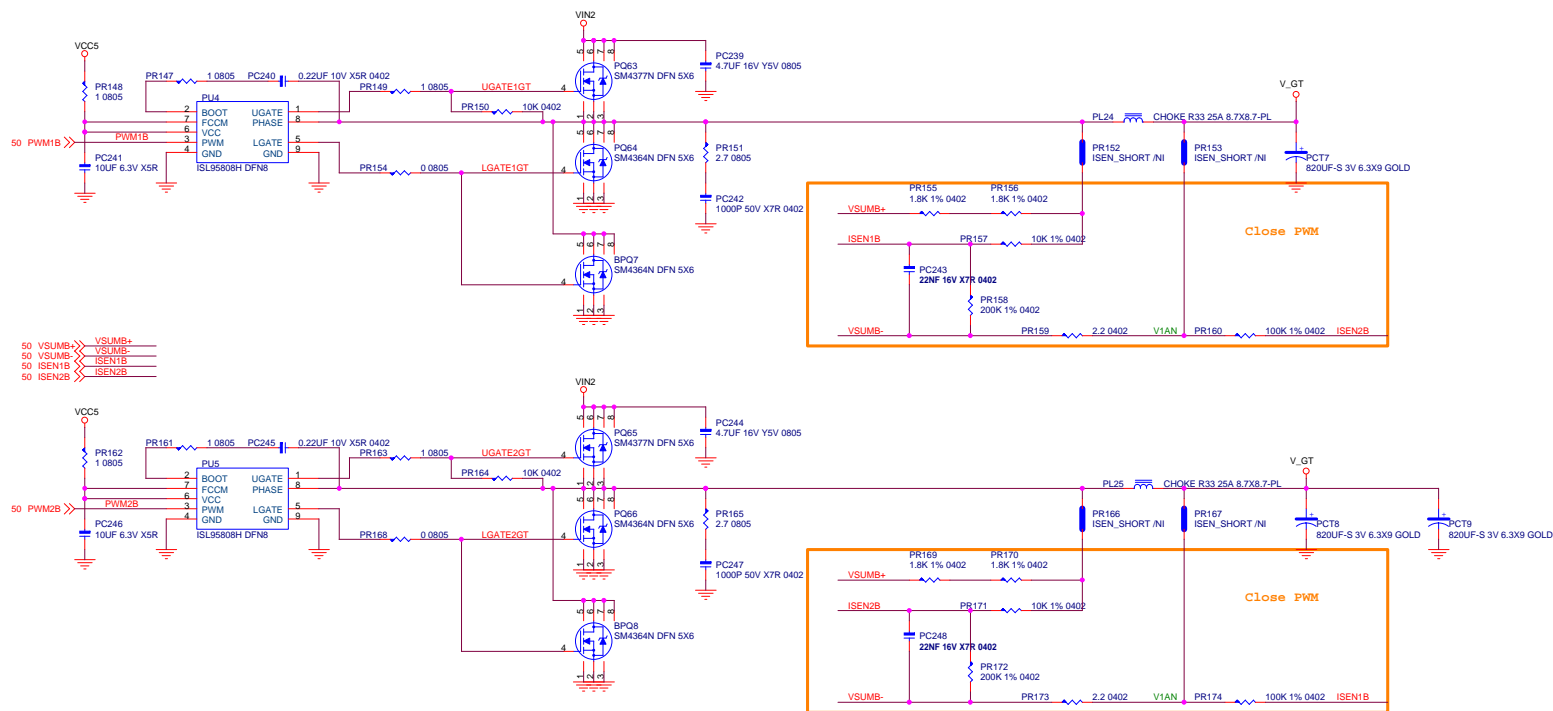


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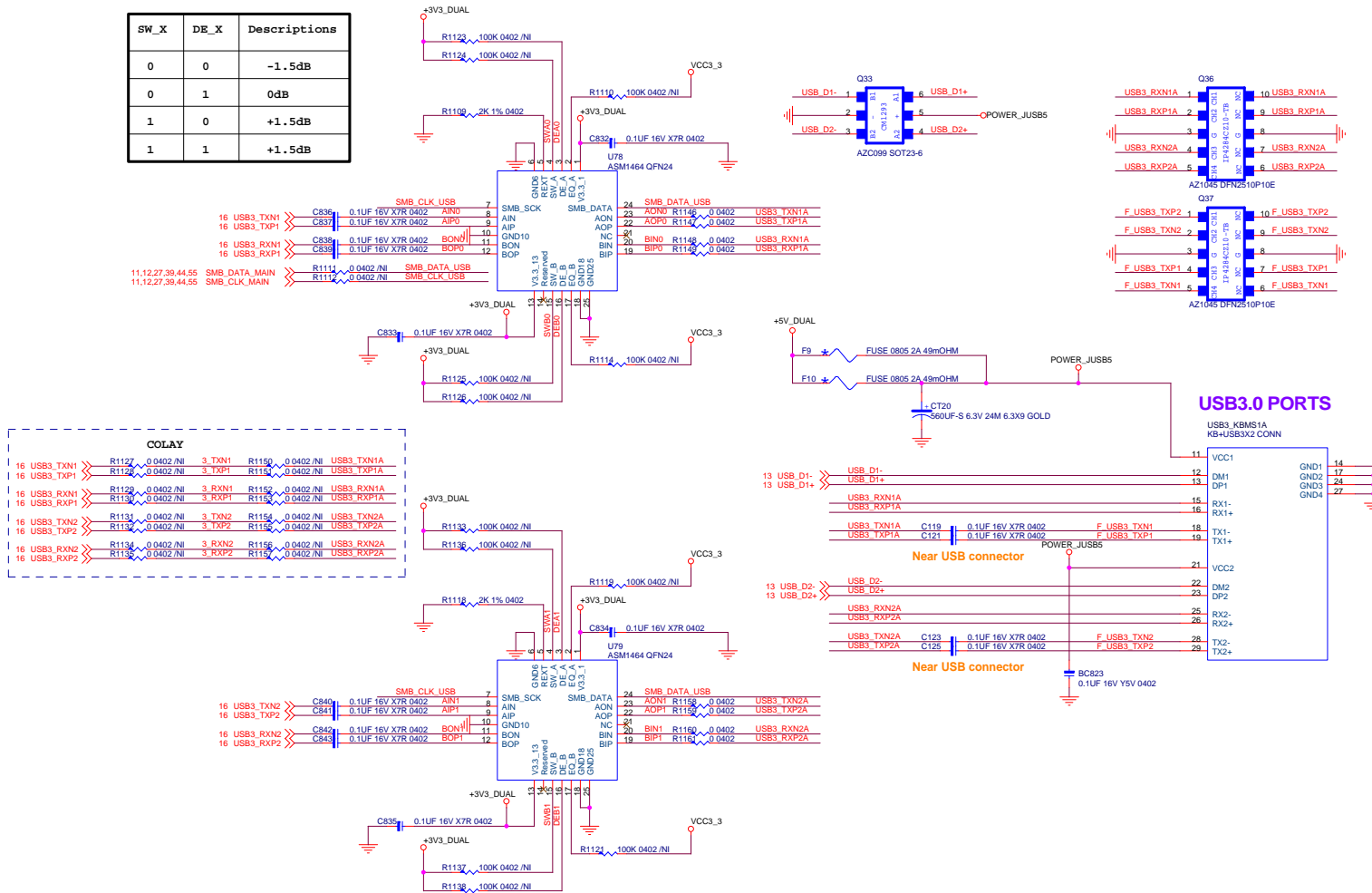








SW_X	DE_X	Descriptions
0	0	-1.5dB
0	1	0dB
1	0	+1.5dB
1	1	+1.5dB



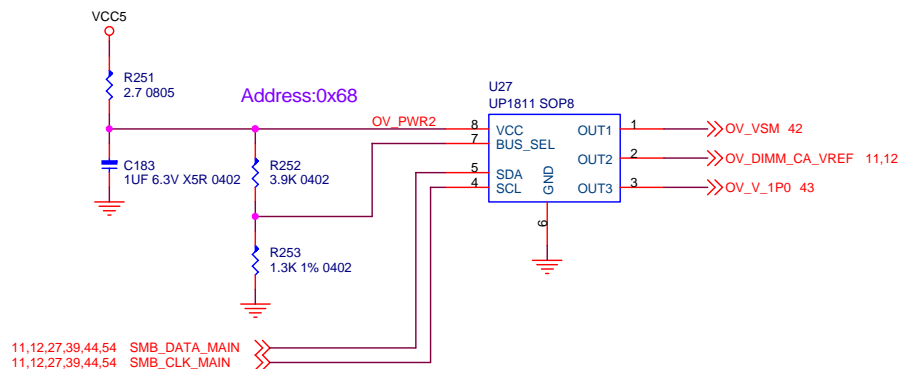
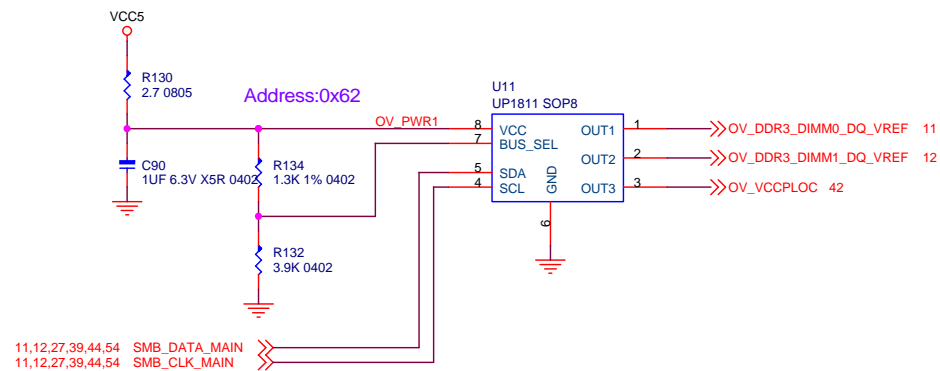
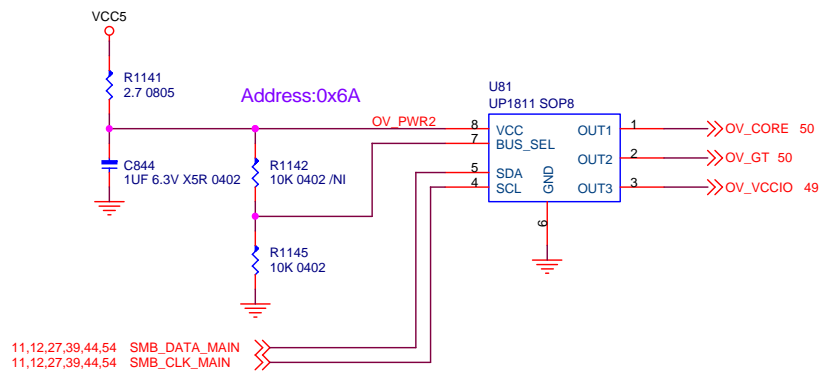
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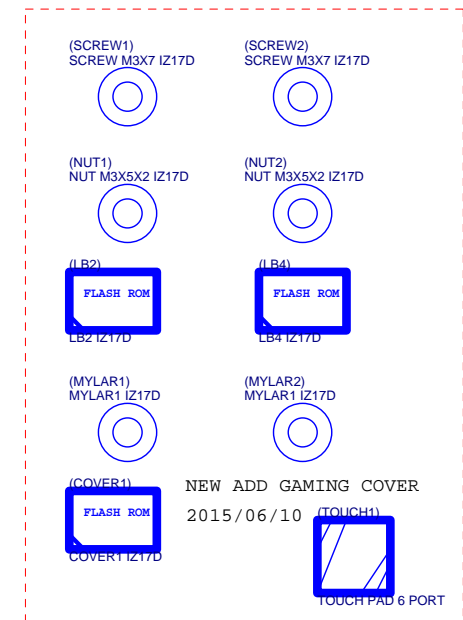
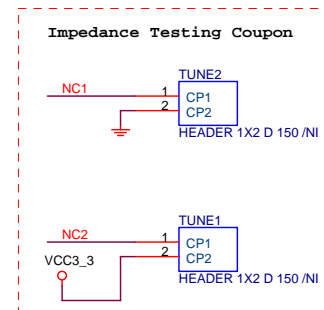
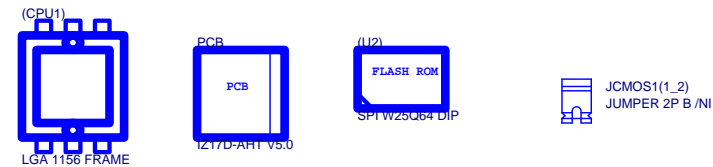
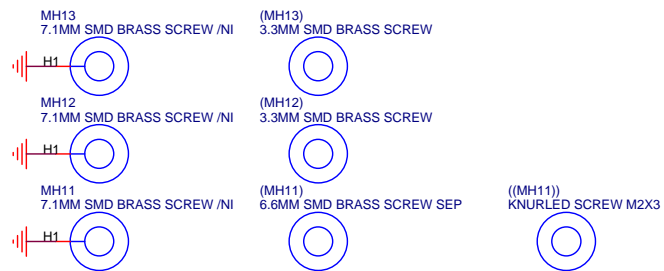
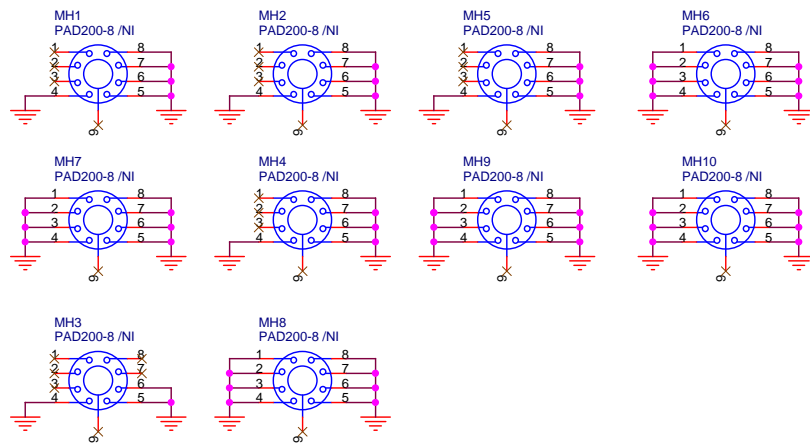
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