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IH55E-MHT REV 6.1

CPU:

Intel Lynnfield/Havendale processors in LGA1156 Package

System Chipset:

PCH(Ibex Peak)

Main Memory:

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

Onboard Device:

Clock Generator:RTM885N-926

Super I/O:ITE8721

LAN:Realtek 8111DL

HD Codec:ALC662S

IDE Host controller:JMB368

Expansion Slots:

PCI EXPRESS 16X SLOT*1

PCI EXPRESS 4X SLOT*1


PCI SLOT*2

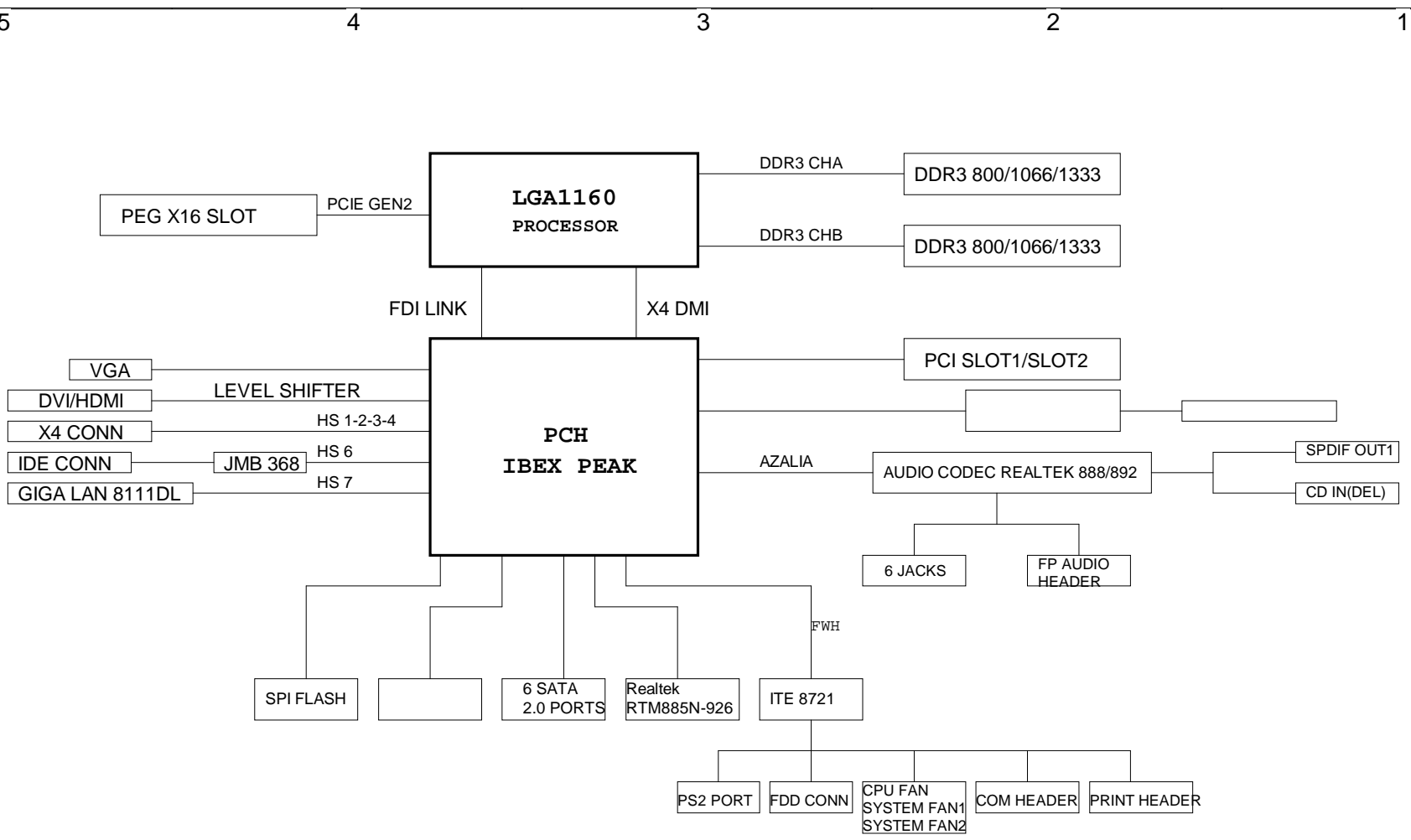
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		映泰股份有限公司 BIOSTAR GROUP	
Title		COVER	
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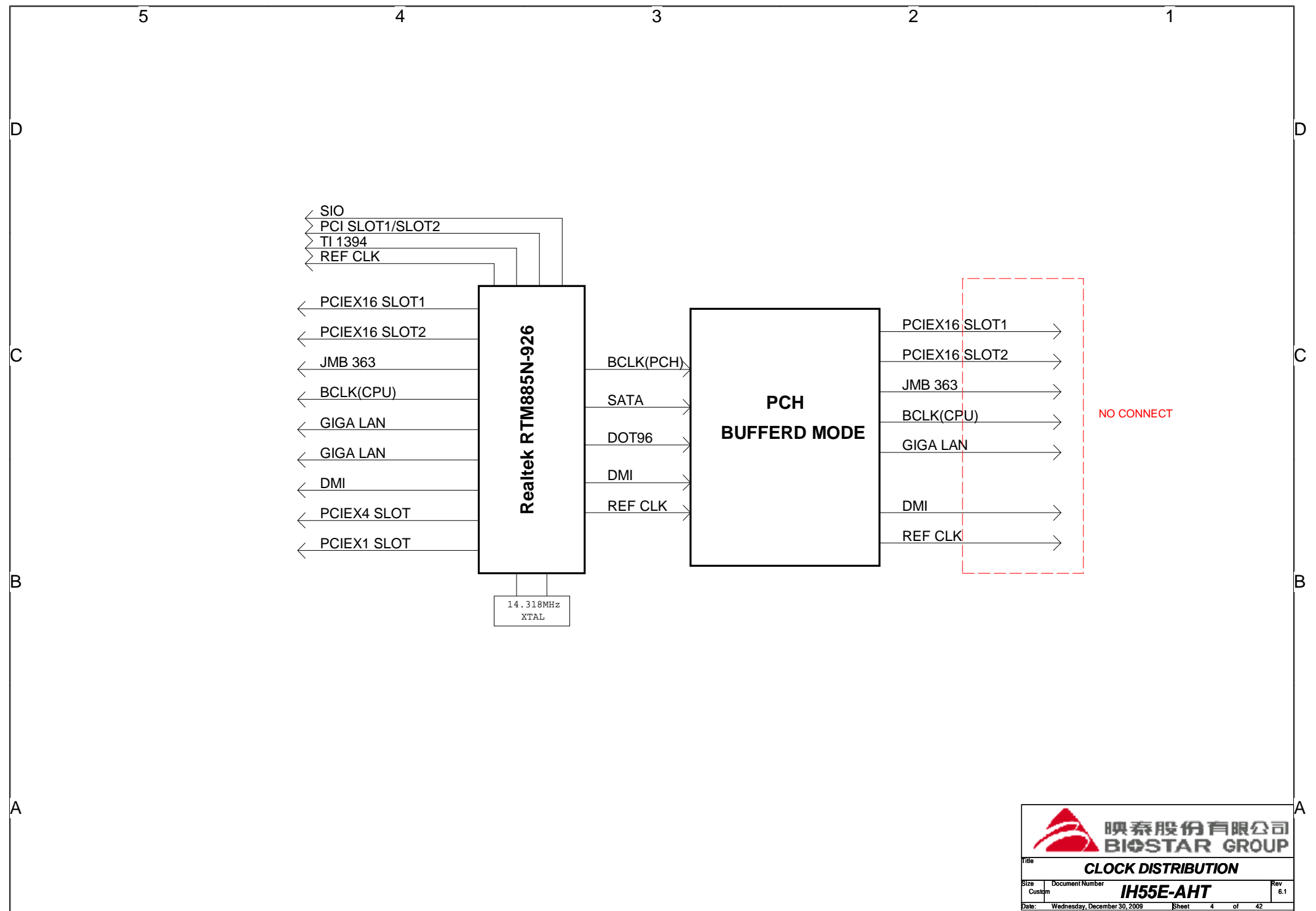


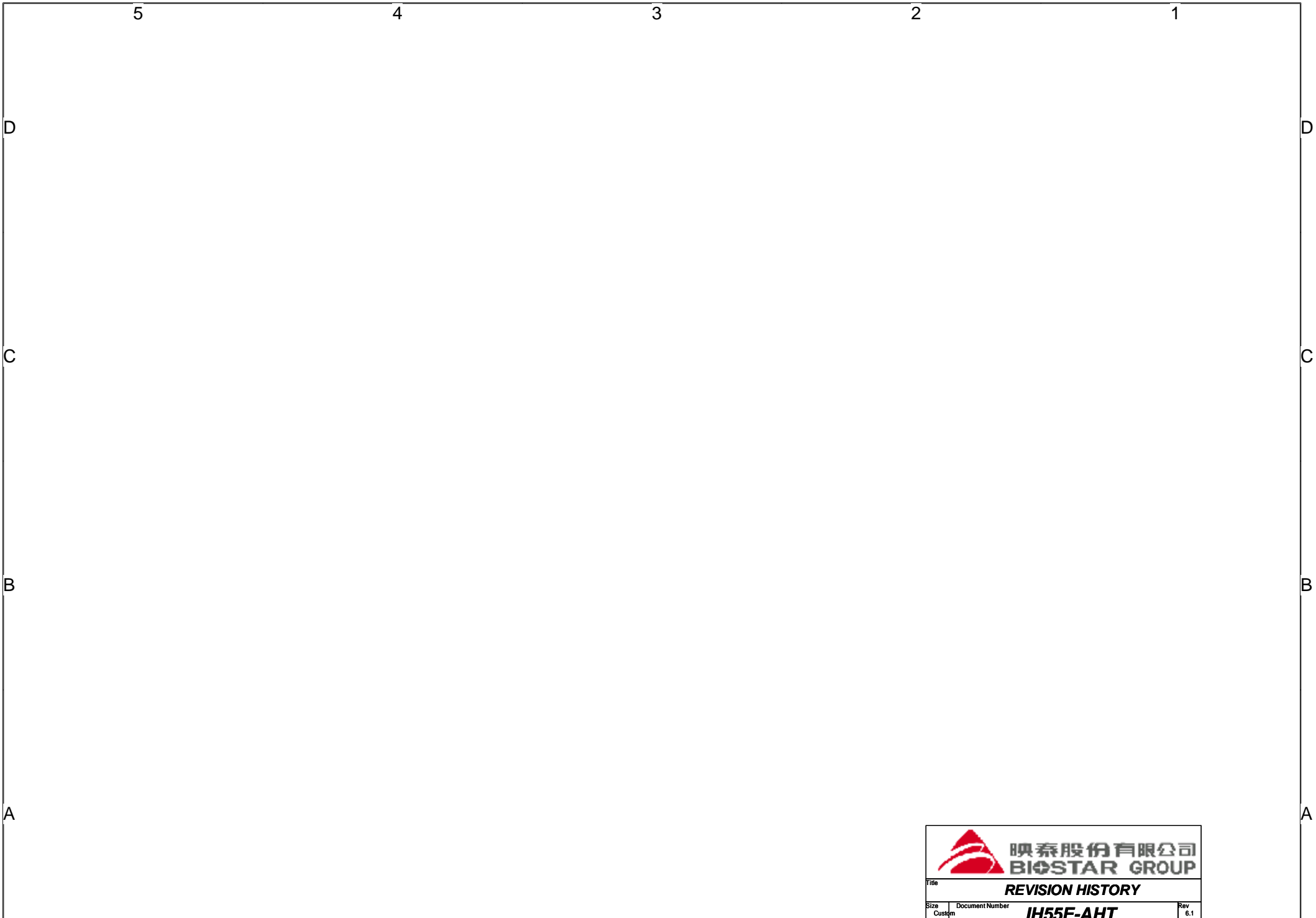


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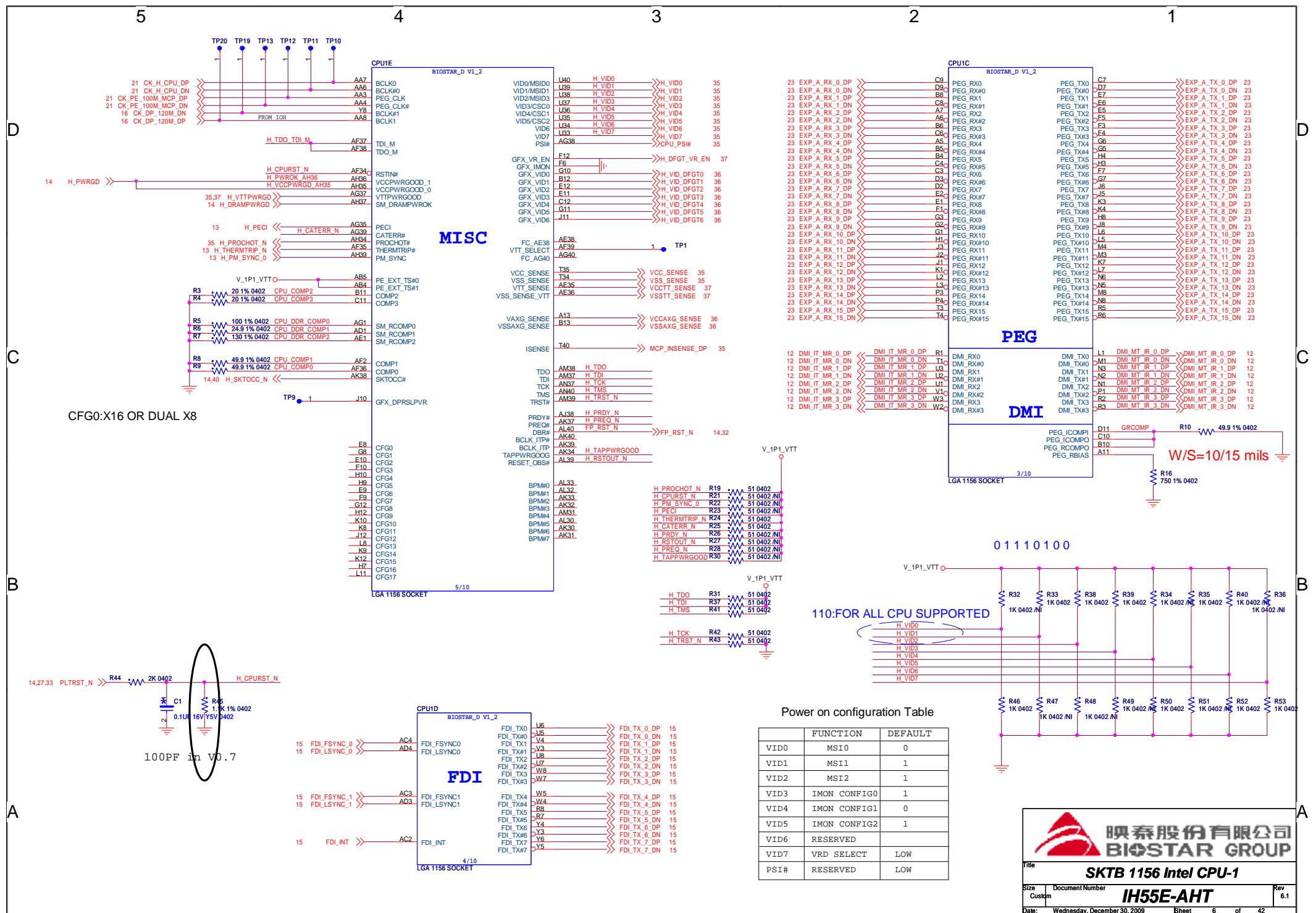
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Title			BLOCK DIAGRAM		
Size	Document Number		Rev		
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		映泰股份有限公司 BIOSTAR GROUP	
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	FUNCTION	DEFAULT
VID0	MSI0	0
VID1	MSI1	1
VID2	MSI2	1
VID3	IMON CONFIG0	1
VID4	IMON CONFIG1	0
VID5	IMON CONFIG2	1
VID6	RESERVED	
VID7	VRD SELECT	LOW
PSI#	RESERVED	LOW



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Title

SKTB 1156 Intel CPU-1

Size

Document Number

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IH55E-AHT

Date

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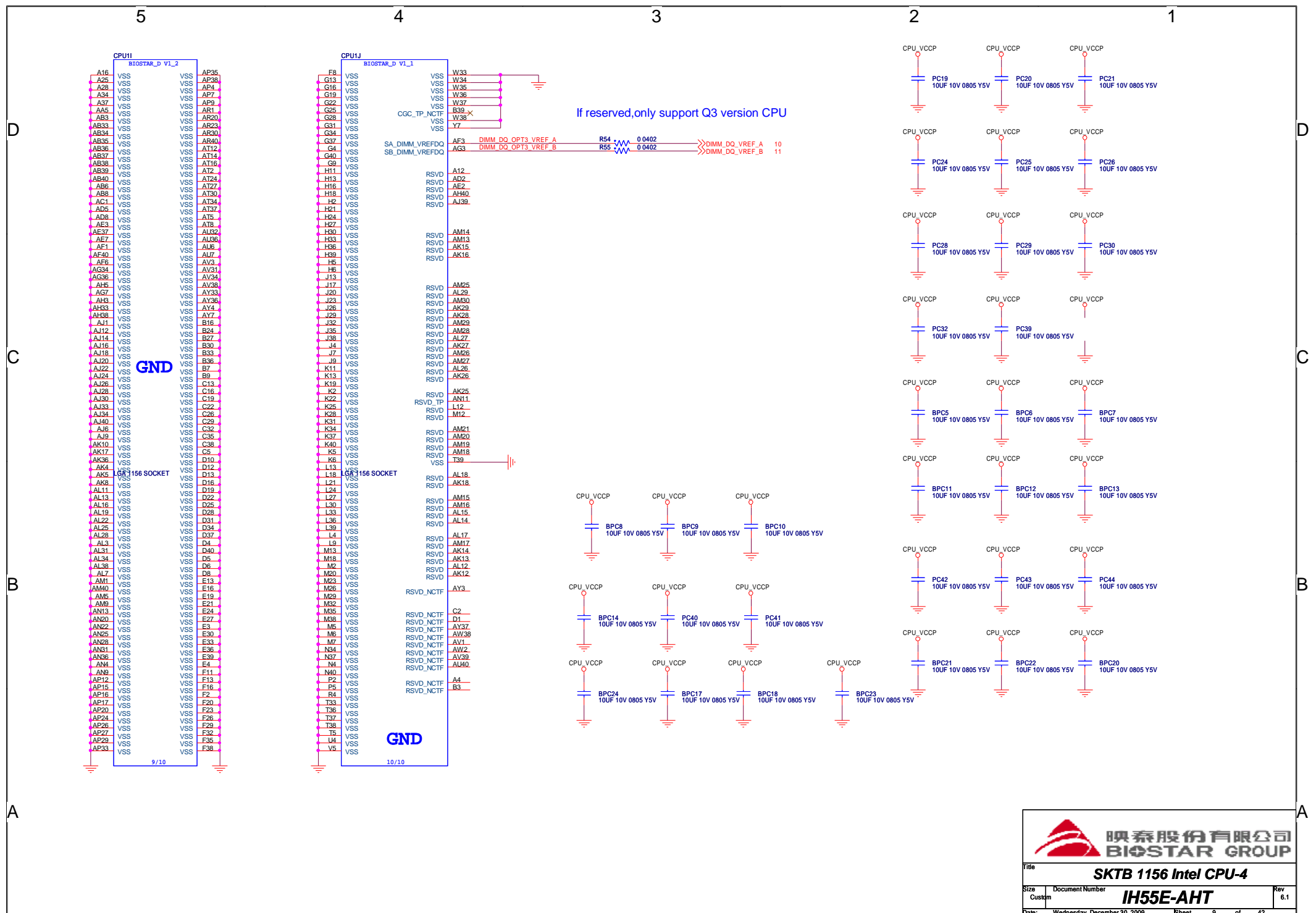
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Rev

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Title			SKTB 1156 Intel CPU-4		
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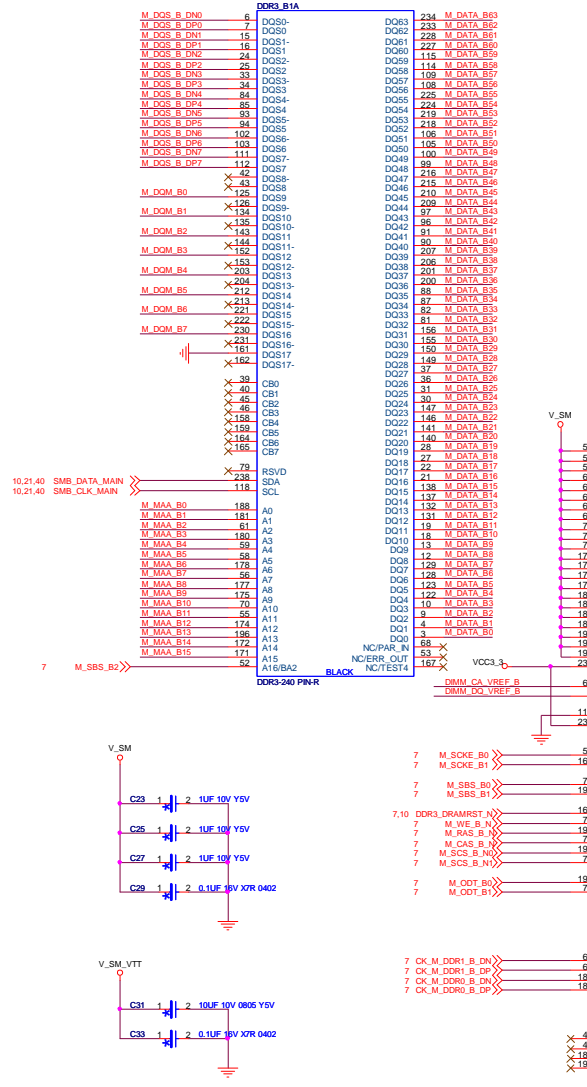
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3

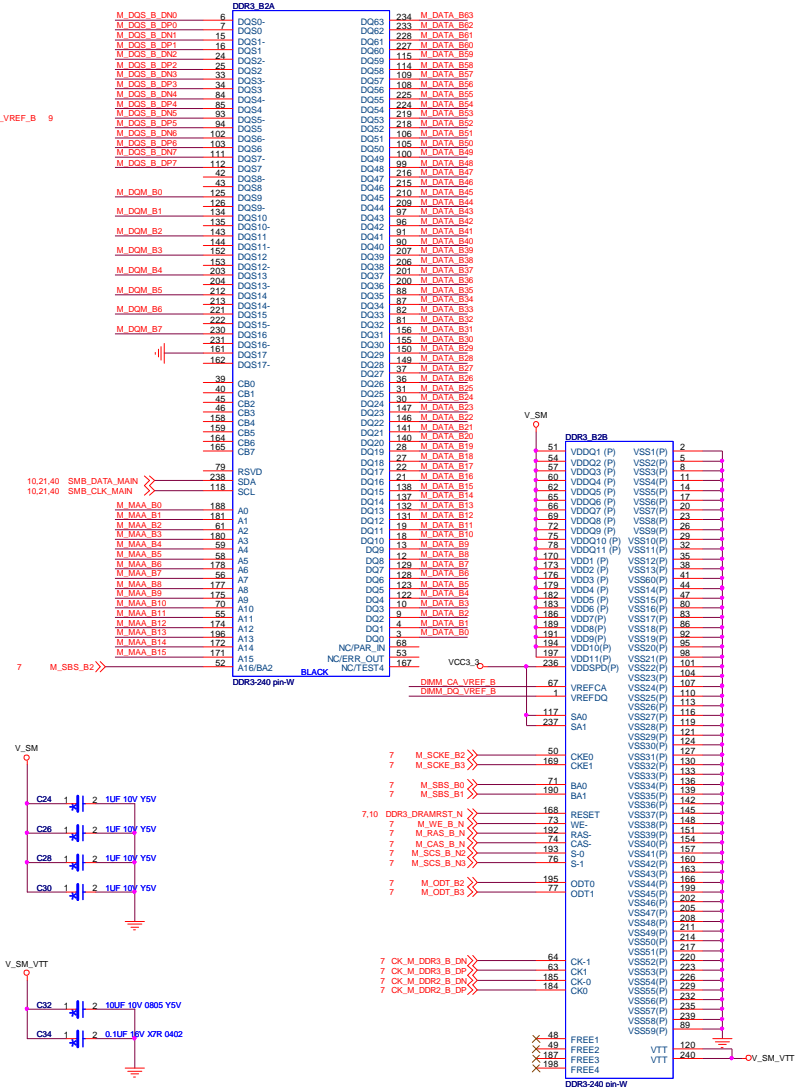
2

1

7 M_DATA_B[0..63] M_DATA_B[0..63]
7 M_MAA_B[0..19] M_MAA_B[0..19]
7 M_ODT_B[0..7] M_ODT_B[0..7]
7 M_DQS_B_DN[0..7] M_DQS_B_DN[0..7]
7 M_DQS_B_DP[0..7] M_DQS_B_DP[0..7]
7 M_DQS_B_DN[0..7] M_DQS_B_DN[0..7]
7 M_DQS_B_DP[0..7] M_DQS_B_DP[0..7]



Reserve in 6.0



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4

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1



FOR SOP ENABLE AND FLASH
STUFF FOR RECOVERY USAGE ONLY

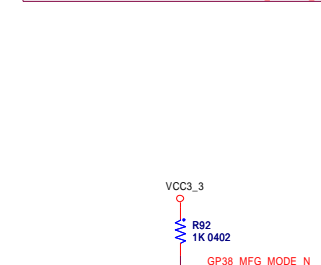
CONFIG / RECOVERY JUMPER

RECOVER/CONFIGURE HEADER	MODE
JUMPER ON 1-2	NORMAL (DEFAULT)
JUMPER ON 2-3	CONFIGURE
JUMPER REMOVED	RECOVERY

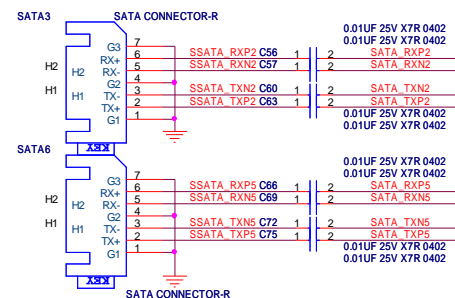
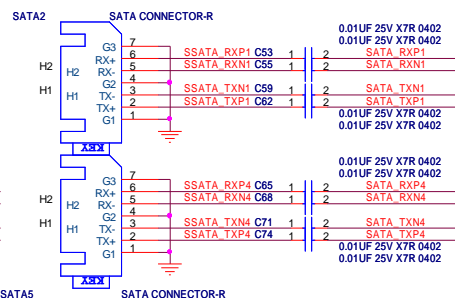
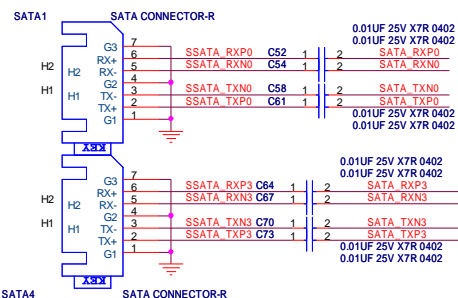
CONFIGURE = SAFE MODE

if use PCH PWM controller,
SST should connect to sensor(dual sensor)

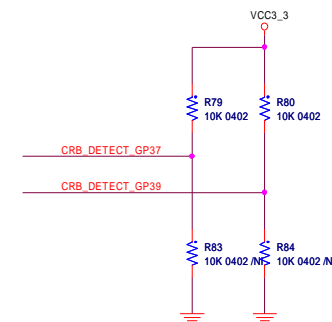
PCH_CONFIG_JUMPER



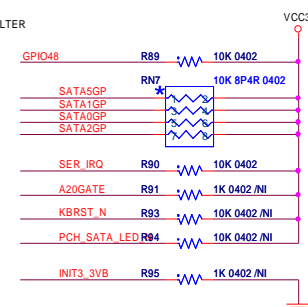
CONFIGURE = SAFE MODE



BOARDID TABLE: CRB STYLE

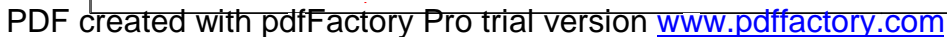


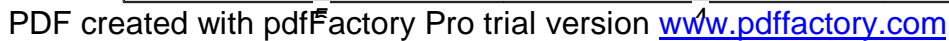
WS=4/8 mils, length=0.5'' max

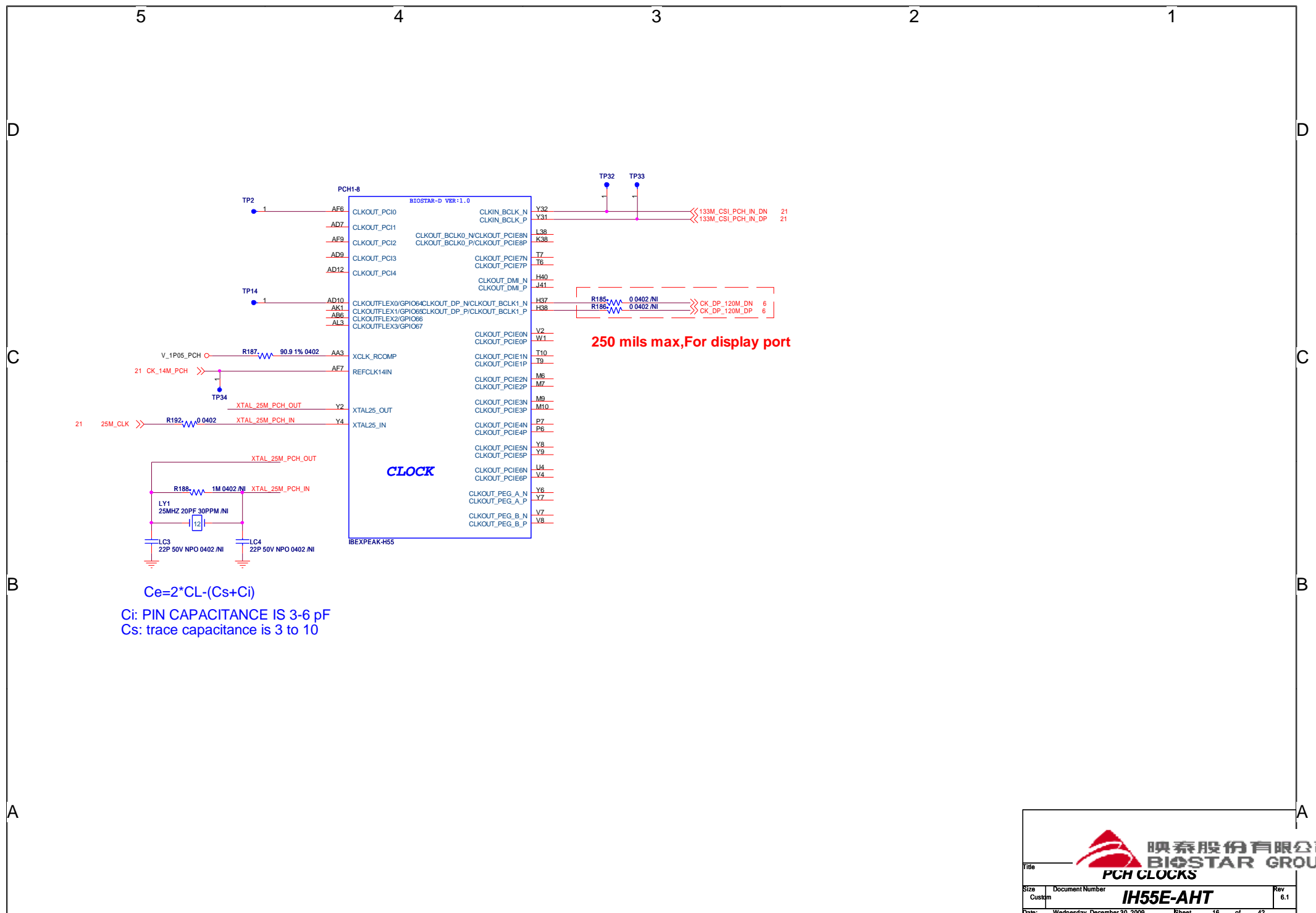


CONFIGURABLE CPU OUTPUT STRONGER IF LOW

File PCH SATA/CPU HOST		
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$$C_e = 2 * C_L - (C_s + C_i)$$

Ci: PIN CAPACITANCE IS 3-6 pF
Cs: trace capacitance is 3 to 10



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Title

Size Custom

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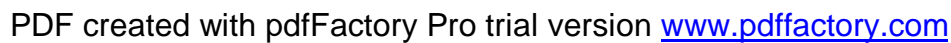
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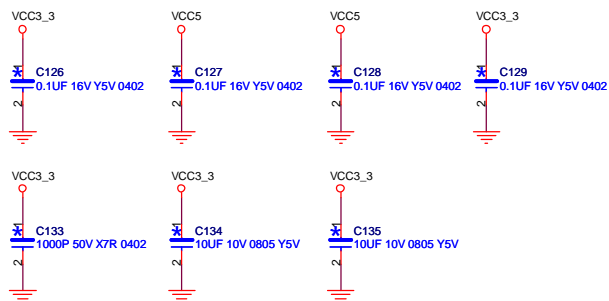
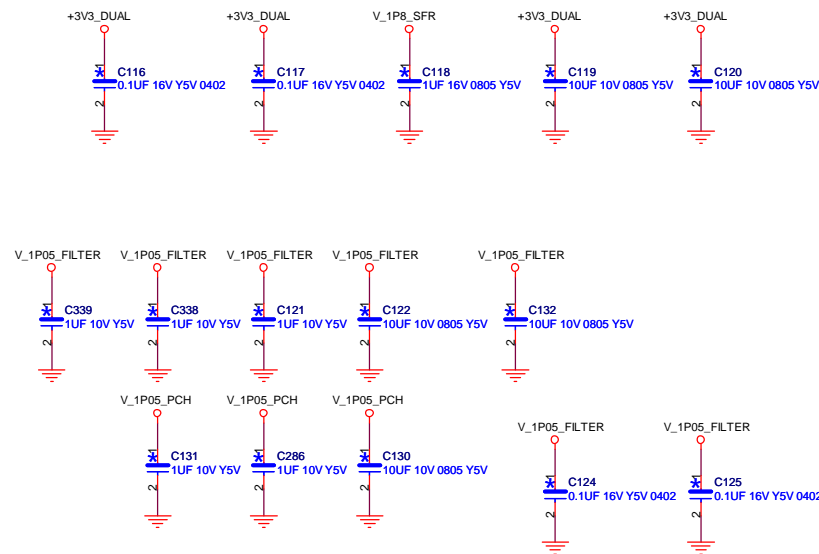
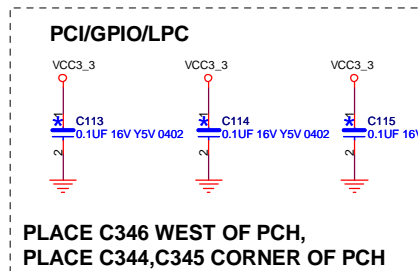
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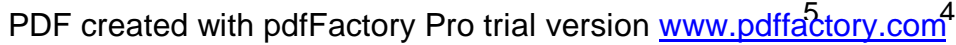
PCH CLOCKS

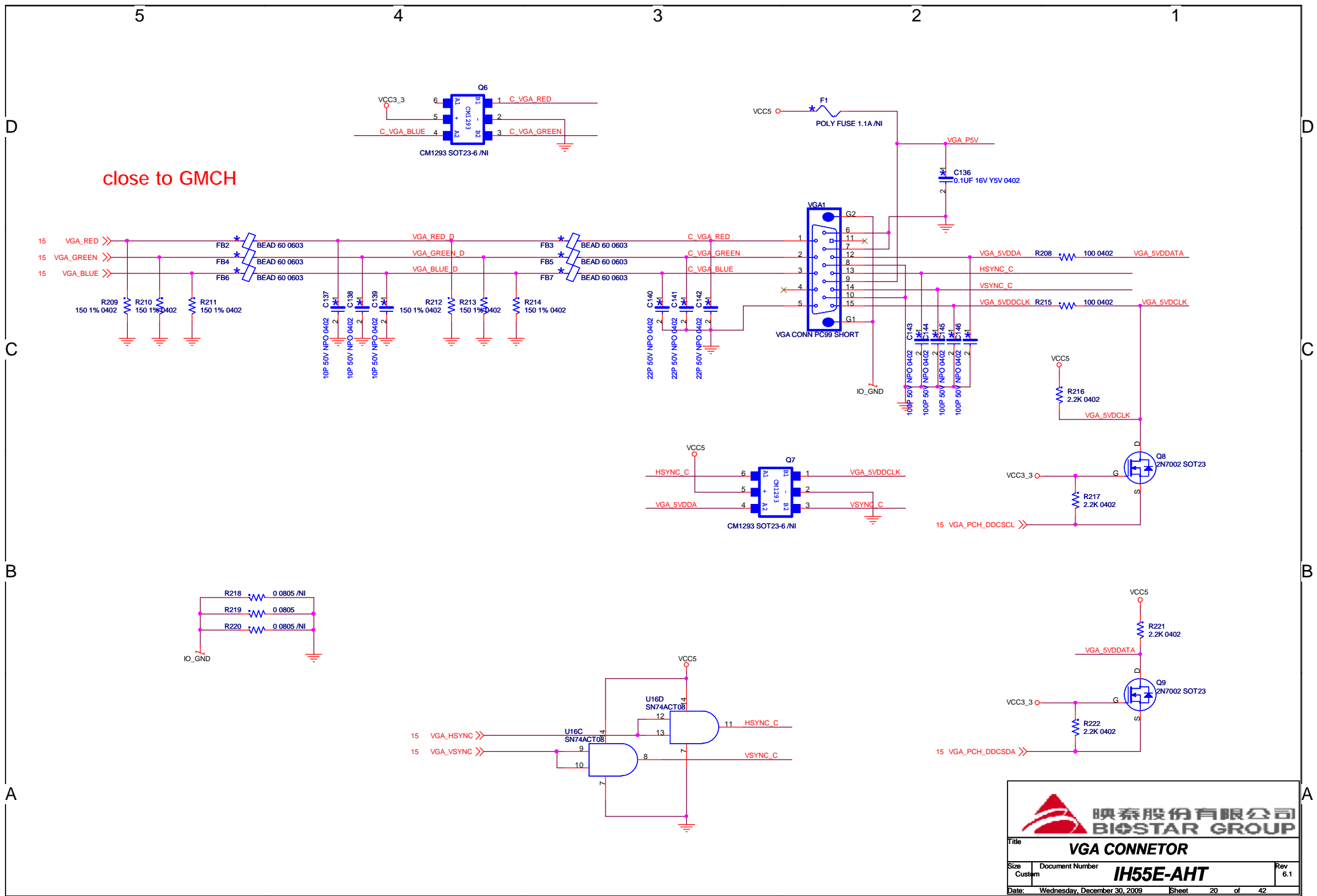
IH55E-AHT





Title PCH DECOUPLING CAPS			
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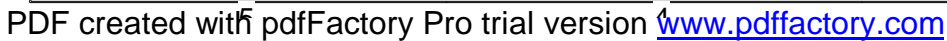


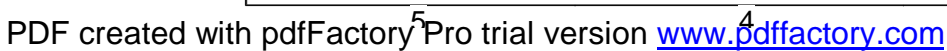
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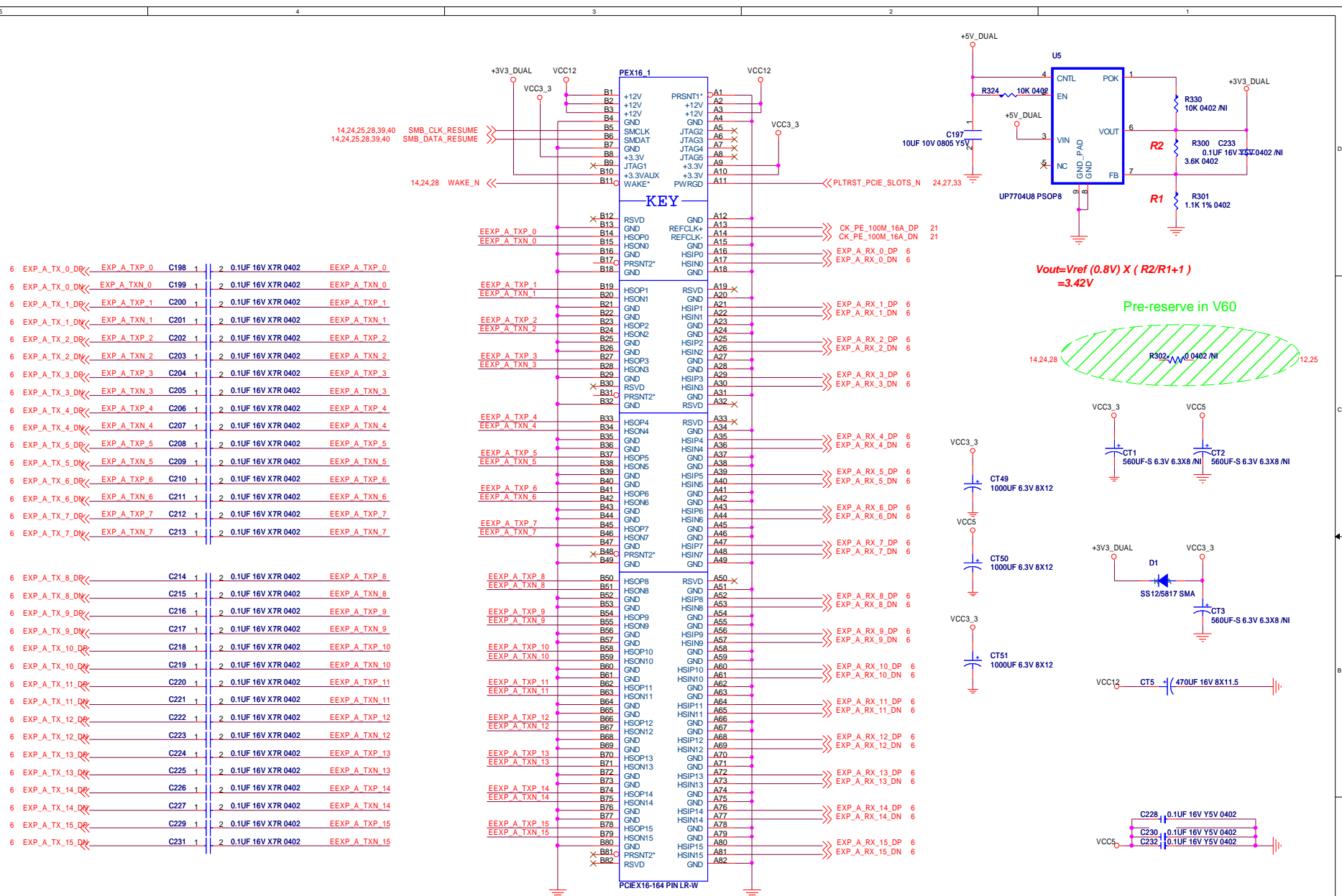
Title: **VGA CONNETOR**


Size: Custom Document Number: **IH55E-AHT** Rev: 6.1

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Title

PCI-E 16 SLOT

Size

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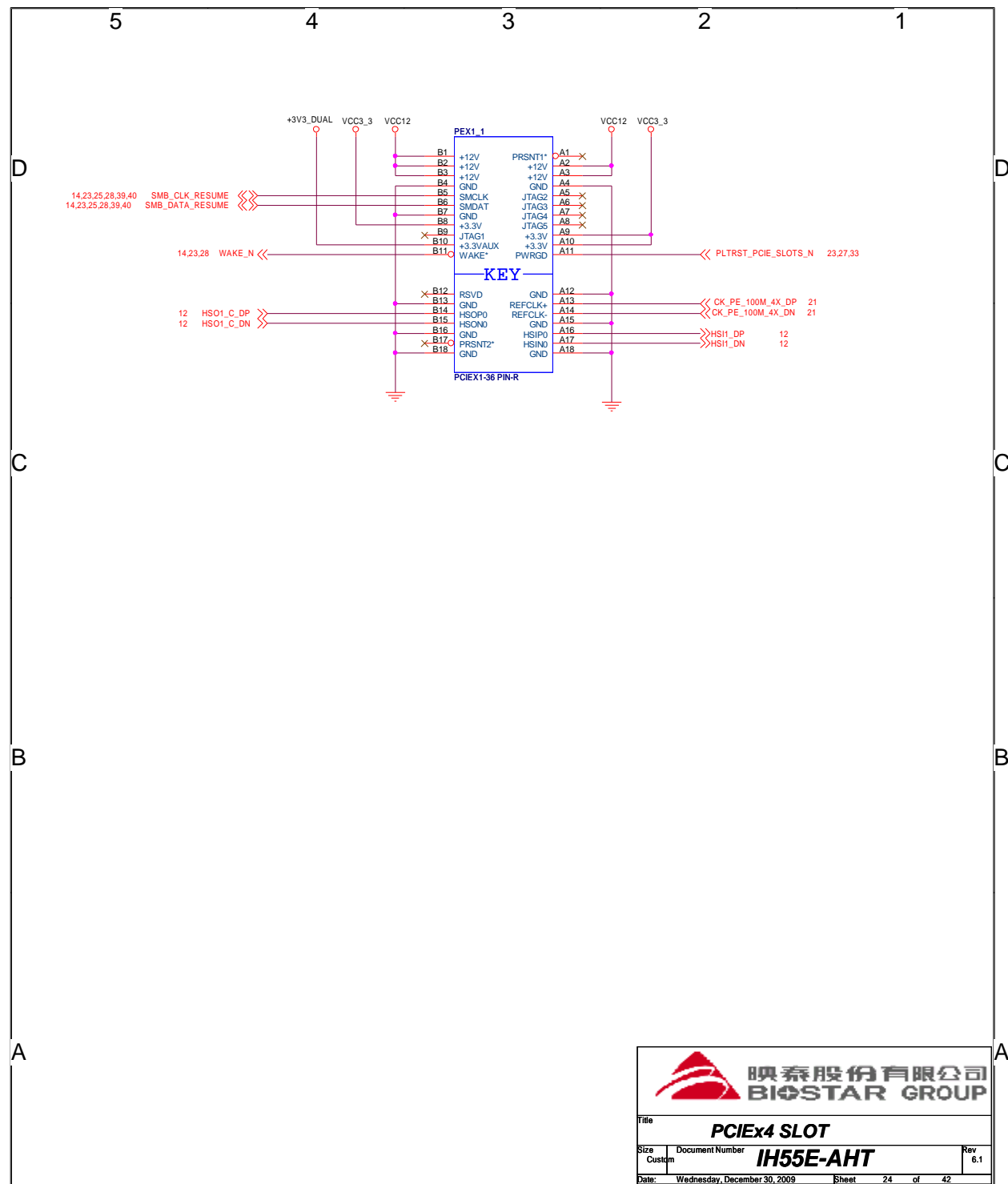
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Title: **PCIEx4 SLOT**


Size: Custom Document Number: **IH55E-AHT** Rev: 6.1

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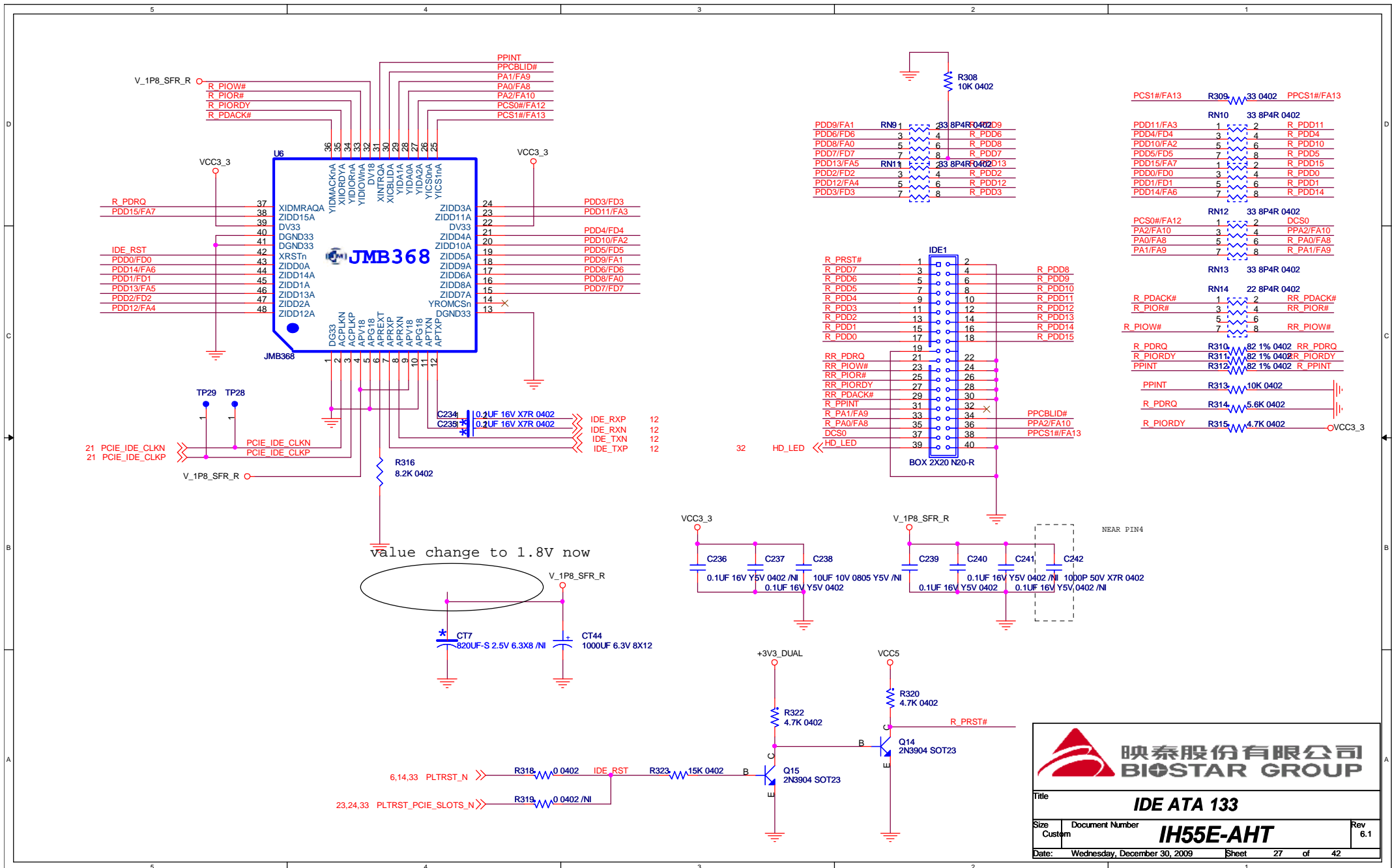
5 4 3 2 1

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 映泰股份有限公司 BIOSTAR GROUP			
Title RESERVED FOR 1394			
Size Custom	Document Number IH55E-AHT		Rev 6.1
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5 4 3 2 1

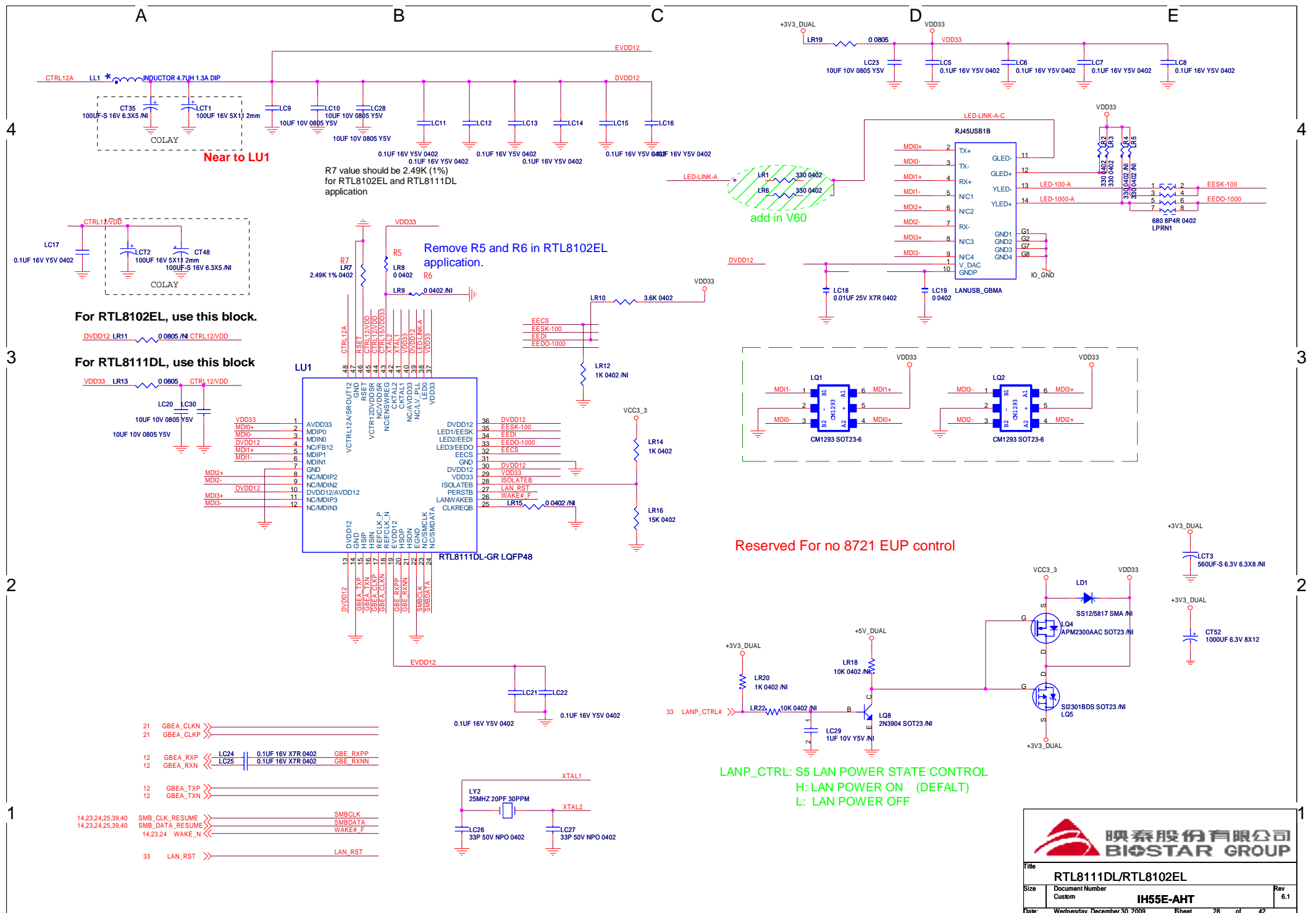


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Title: **IDE ATA 133**

Size: Custom Document Number: **IH55E-AHT** Rev: 6.1

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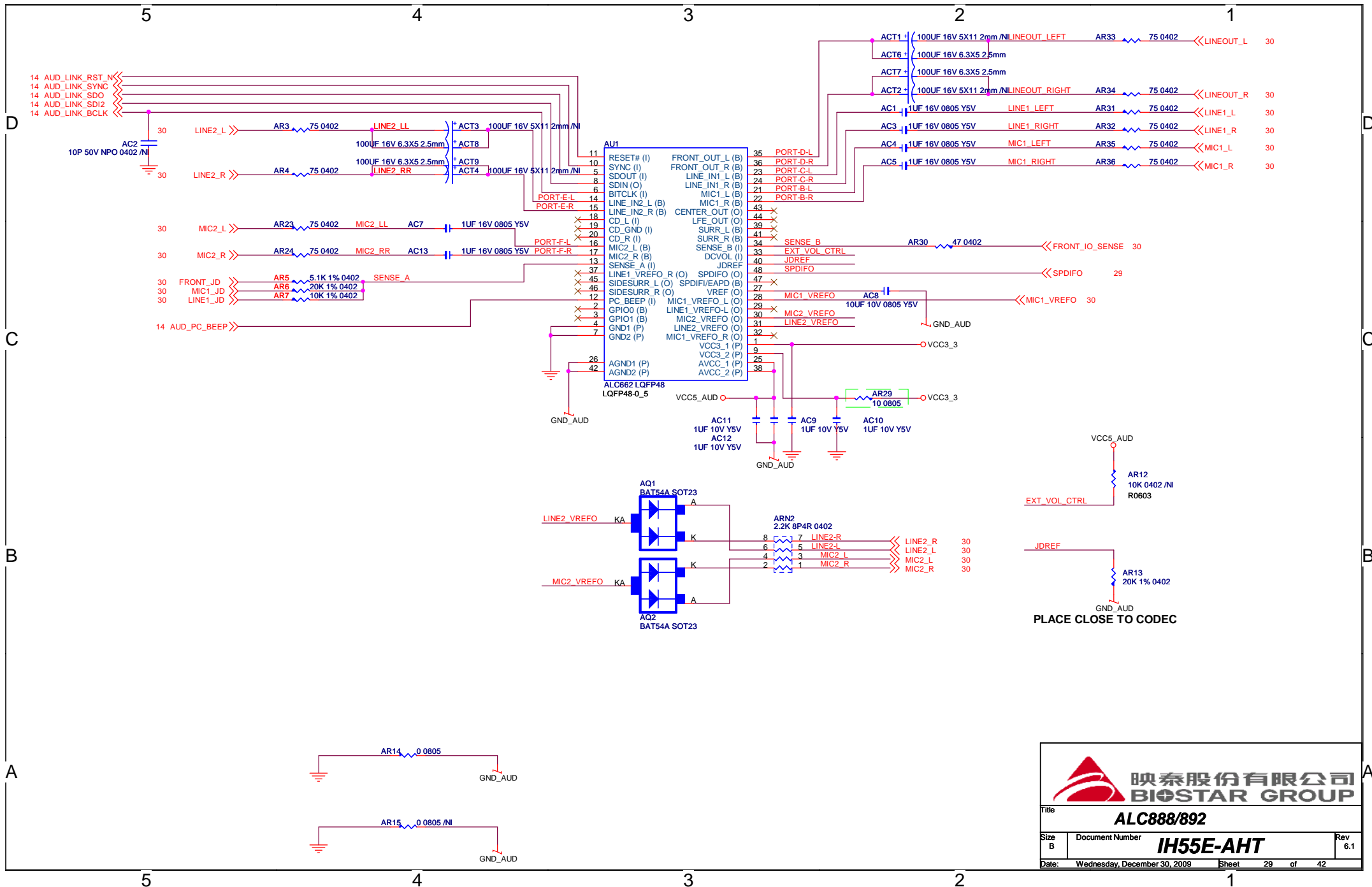


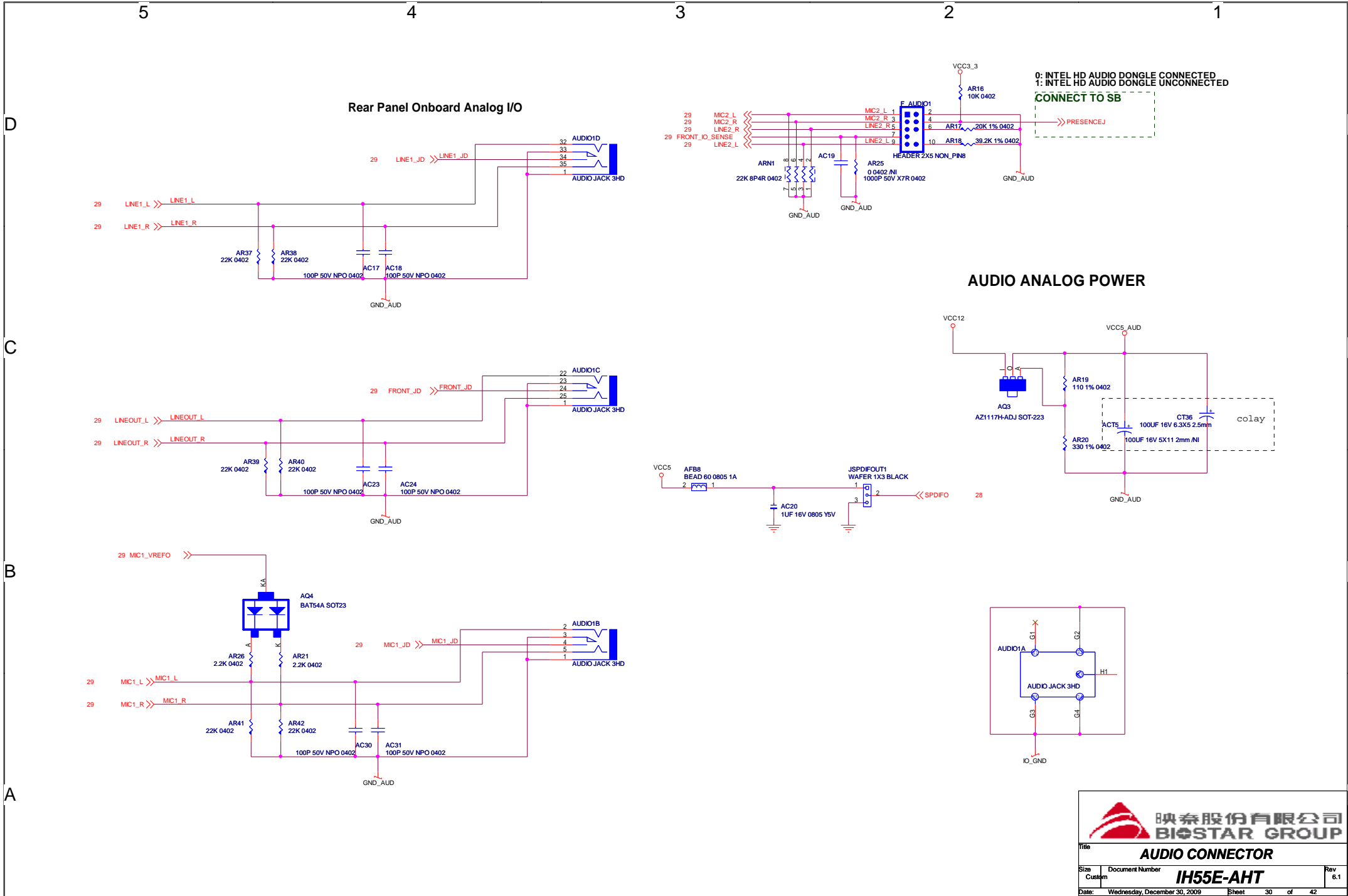


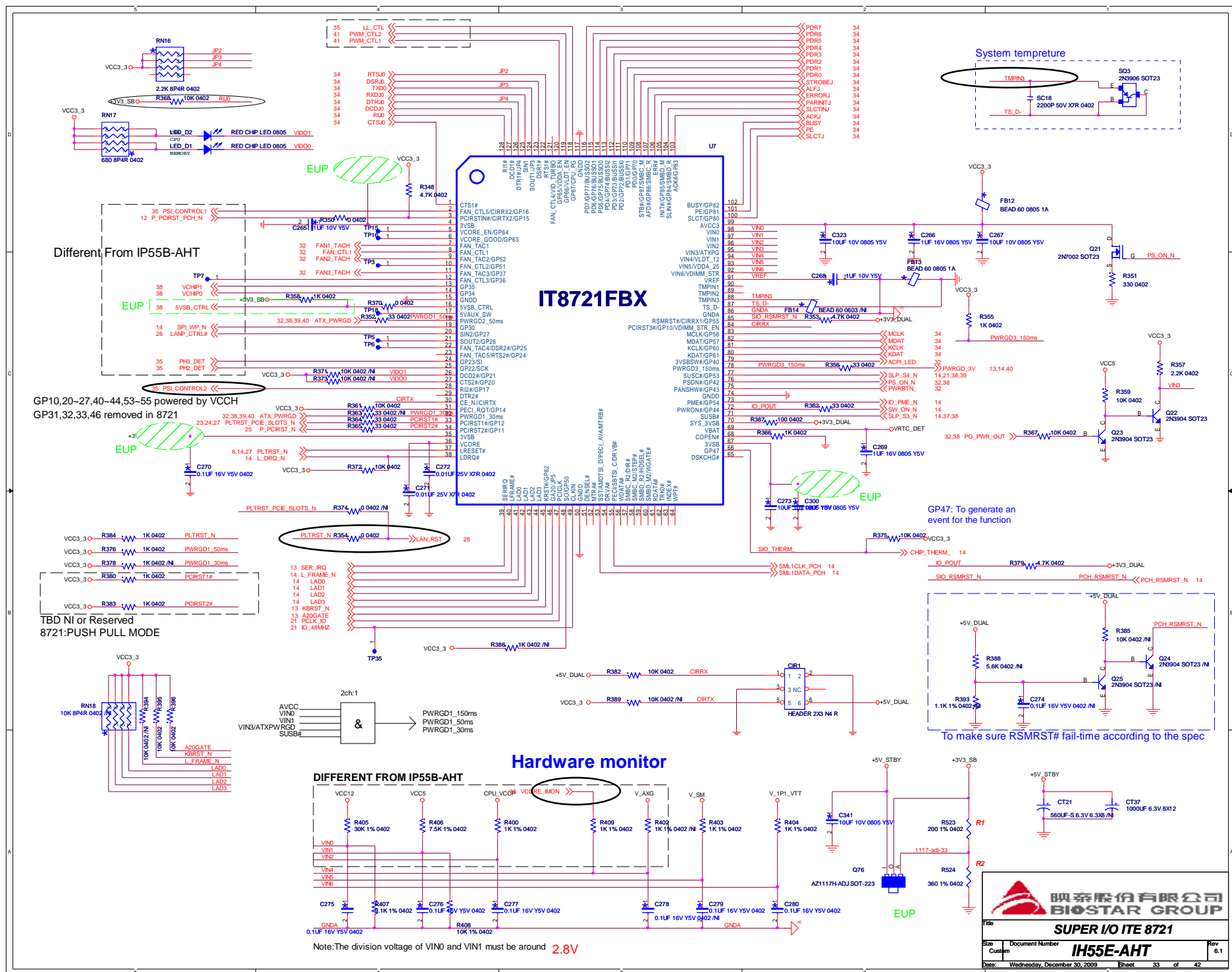
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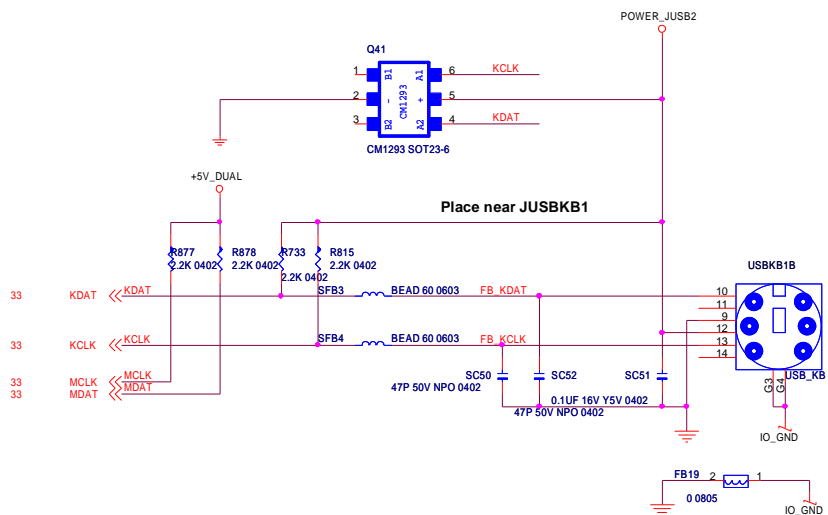
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Title			RTL8111DL/RTL8102EL		
Size	Document Number		Custom		Rev
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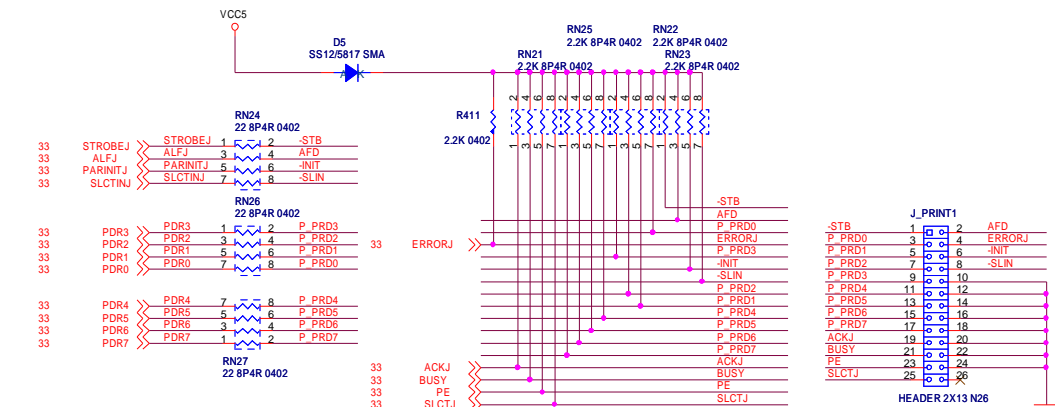
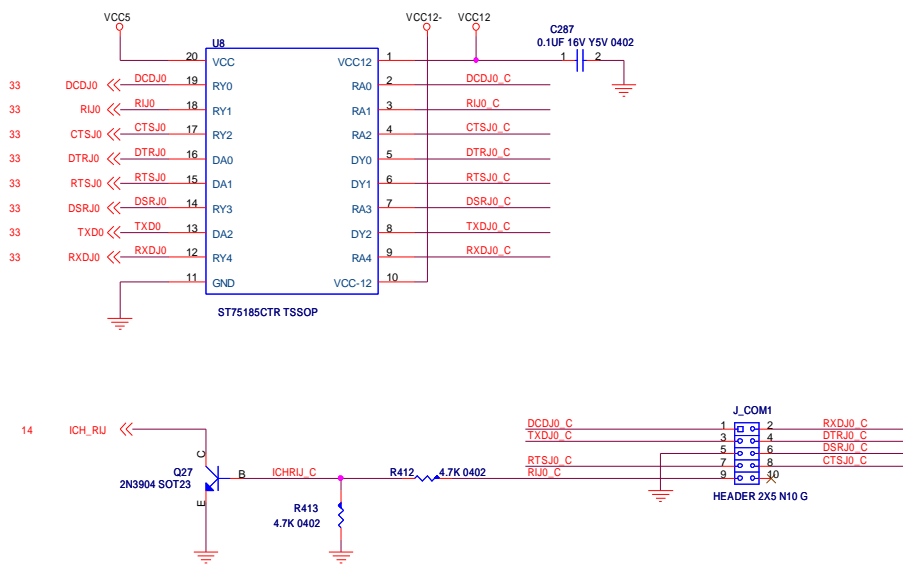


PS2 PORT

FLOPPY CONNECTOR

COM HEADER

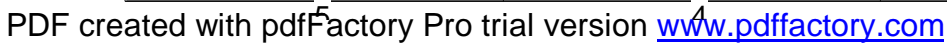
PRINT HEADER

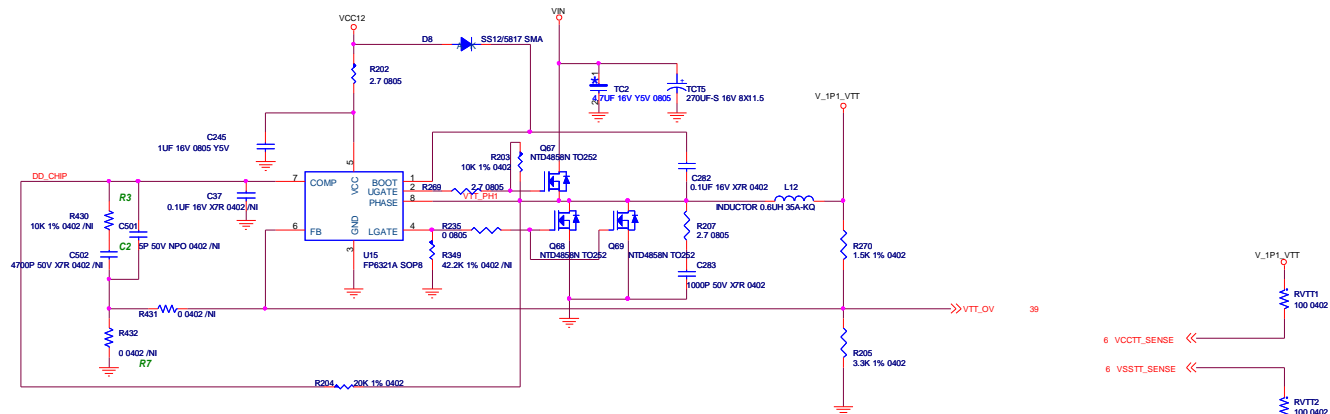




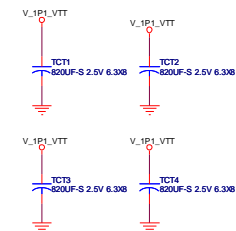
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FDD / PS2 CONN		
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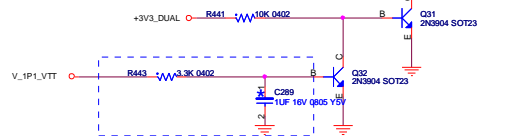




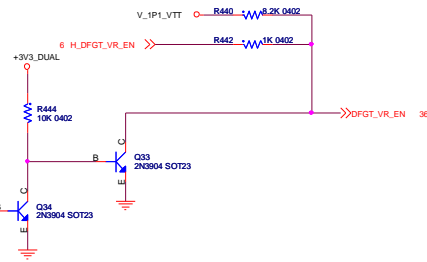
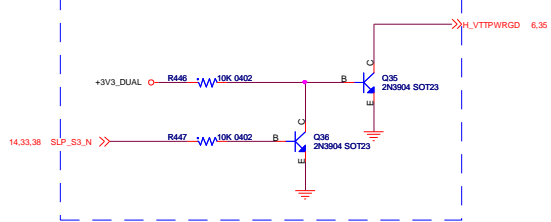
1.1V/48A



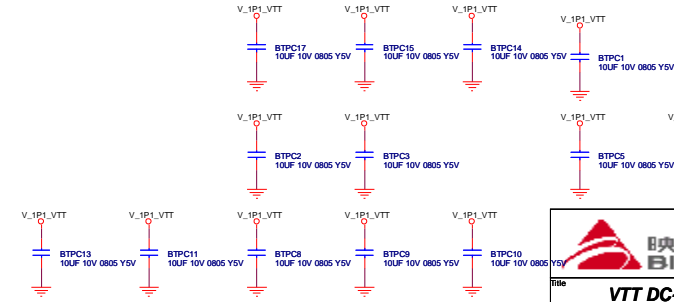
For delay 100ns min,50ms max



For H_VTTPWRGD fall down fasterly than VTT when power off



TBD

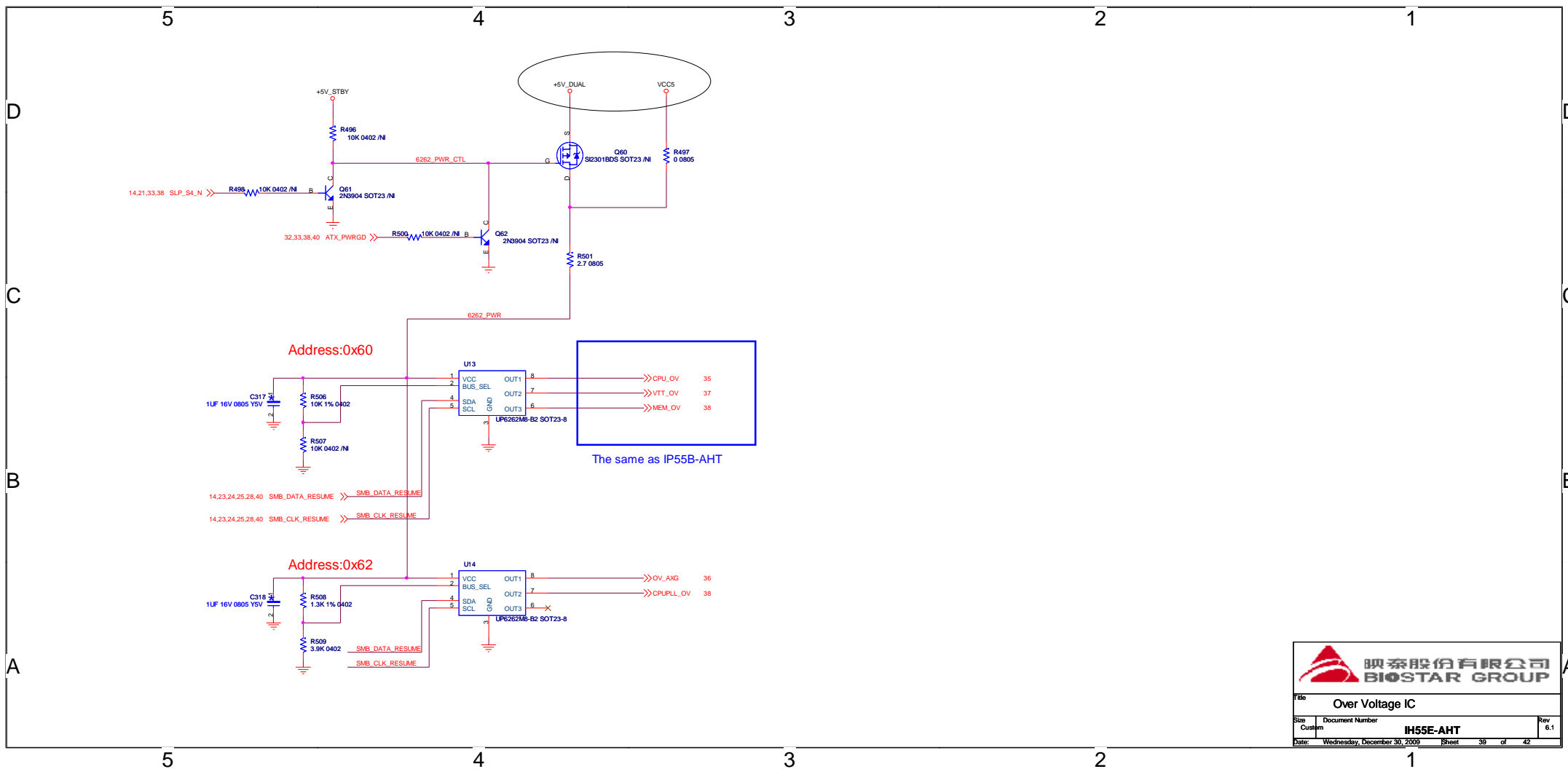




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VTT DC-DC Conver	
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+3V3_DUAL

R510 1K 0402

R511 1K 0402

SMB_CLK_RESUME 14,23,24,25,28,39

SMB_DATA_RESUME 14,23,24,25,28,39

SMB_CLK_RESUME 14,23,24,25,28,39

SMB_CLK_MAIN 10,11,21

SMB_DATA_RESUME 14,23,24,25,28,39

SMB_DATA_MAIN 10,11,21

6,14 H_SKT0CC_N

R514 10K 0402

Q66 2N3904 SOT23

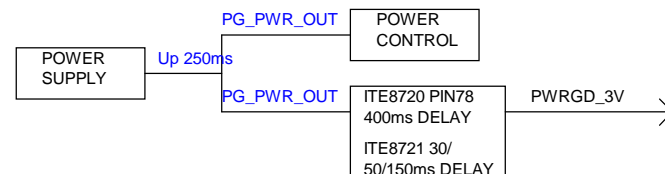
PWRGD_3V 13,14,33

POWER ON SEQUENCE FOR 8720/8721 COLAY MAP

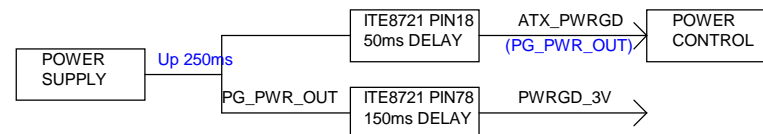
SOLUTION1



SOLUTION2



SOLUTION3
DEFAULT



FALL TIME:40mv/us

C325 100P 50V NPO 0402

PWRGD_3V 13,14,33

R520

32,33,38,39 ATX_PWRGD

PWRGD_3V 13,14,33

0 0402 /NI

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Title **RESET BUFFER AND SEQUENCE**

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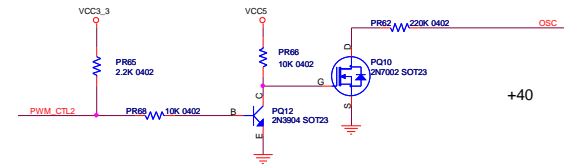
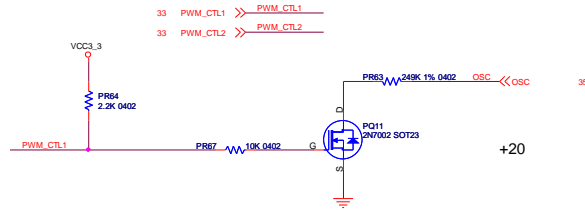
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PWM Frequency Control

6206:Fsw=1000/Rosc(Kohm)
=200kHz
6219:Fsw=300*(24K/Rosc)^{0.92}
=200kHz

PWM_CTL1	PWM_CTL2	FREQUENCY
0	0	220K
0	1	180K
1	0	240K
1	1	200K

default



Turbo Control

