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42	BOM

IH11M-MHS H110MD PRO D4 VER 6.0

CPU:

Intel Skylake S 42 in LGA1151 Package 95W

System Chipset:

SPT-H PCH

Main Memory:

Dual Channel/DDR-4*2(Max 16GB)1867/2133

Onboard Device:

Super I/O:IT8613E
LAN:Realtek 8111H
HD Codec:ALC887

Power solution:

CPU Voltage Regulators:3phase by RT3606 high 1 Low 1 OV by RT3606
DDR Voltage Regulators:1Phase by UP1514 high 1 Low 1 OV by IT8613E

Expansion Slots:

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

REAR IO:

PS/2 PORT
DVI Port
VGA Port
USB3.0 PORT *2
Gb RJ-45 +2 layer USB3.0 Ports
Audio Jackets (3 PORT)

Front I/O:

SATA3 *6
USB 2.0 Header * 2 Serial header
USB 3.0 Header * 1 Front Audio Header
CPU FAN *1
System FAN *1

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Title: INDEX		
Size: B	Document Number: IH11M-MHS	Rev: 6.0
Date: Friday, January 08, 2016	Sheet 1 of 42	

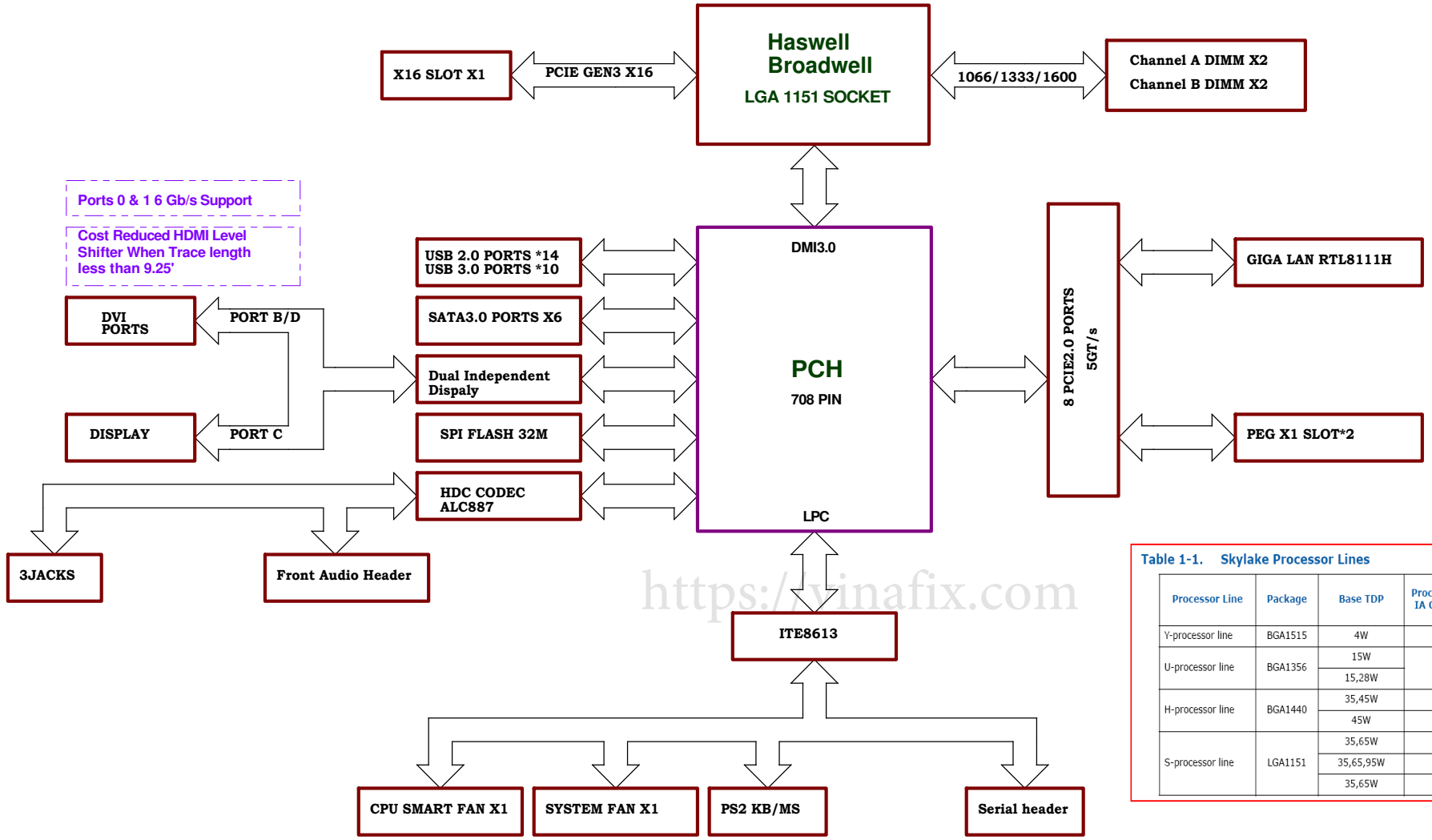

Table 1-1. Skylake Processor Lines

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		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		
		35,65W	4	GT4	64 MB	

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Title: BLOCK DIAGRAM

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Title: POWER DELIVERY

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1.VER0.60:COLAY S3 FUNCTION(PAGE15/23/25/26/28/30/31/32/33)

2.VER0.60:COLAY REMOVE VGT_PH2(PAGE39)

3.VER0.60:DDR3 CHANGE DDR4(PAGE6/7/11/12)

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Title: CPU PCIEX16/DMI/FDI

Size: B | Document Number: IH11M-MHS | Rev: 6.0

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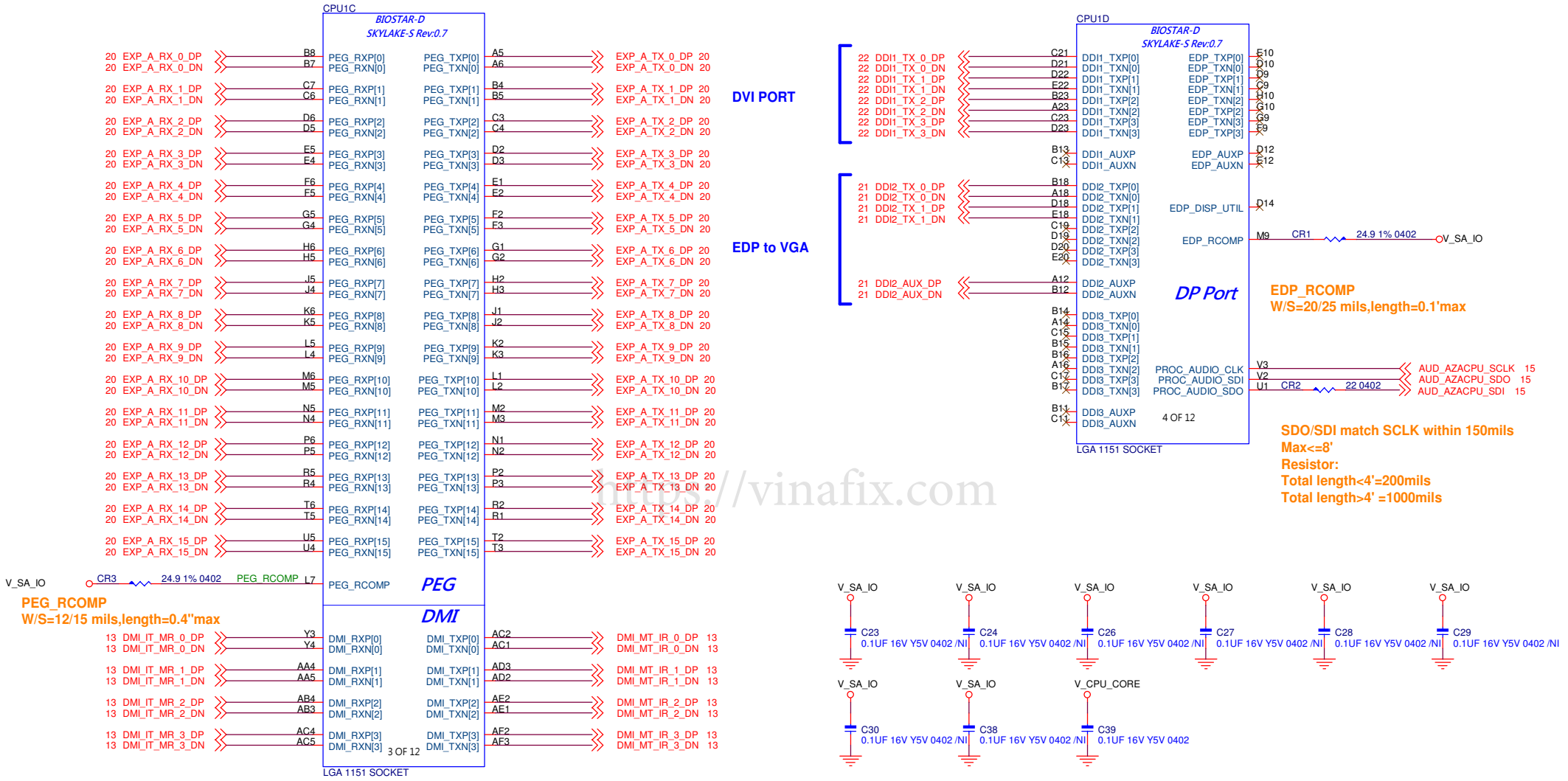

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Title	CPU PCIEX16/DMI/FDI	
Size B	Document Number IH11M-MHS	Rev 6.0
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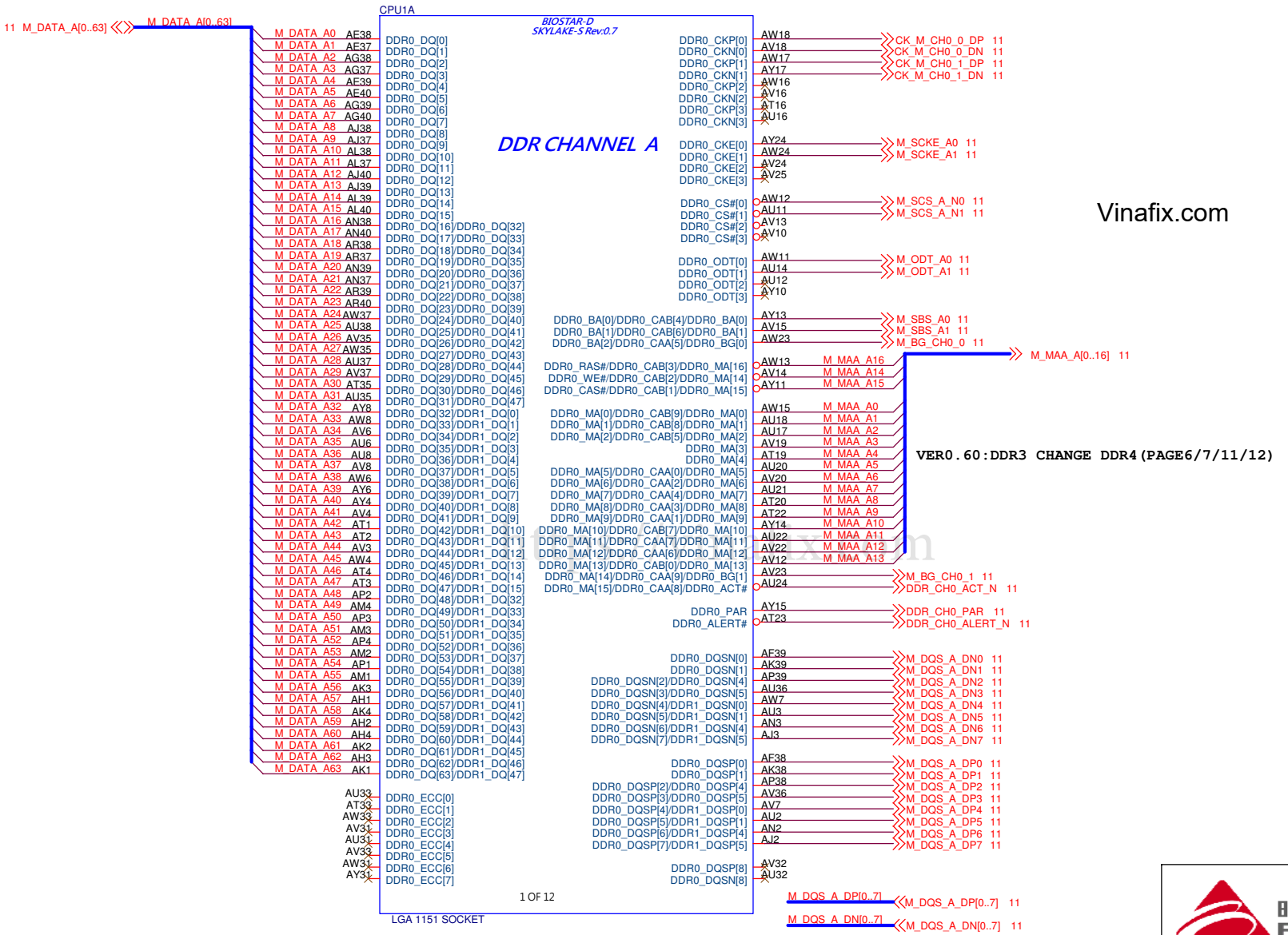

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Title	CPU DDR3 CHANNEL A	
Size B	Document Number IH11M-MHS	Rev 6.0
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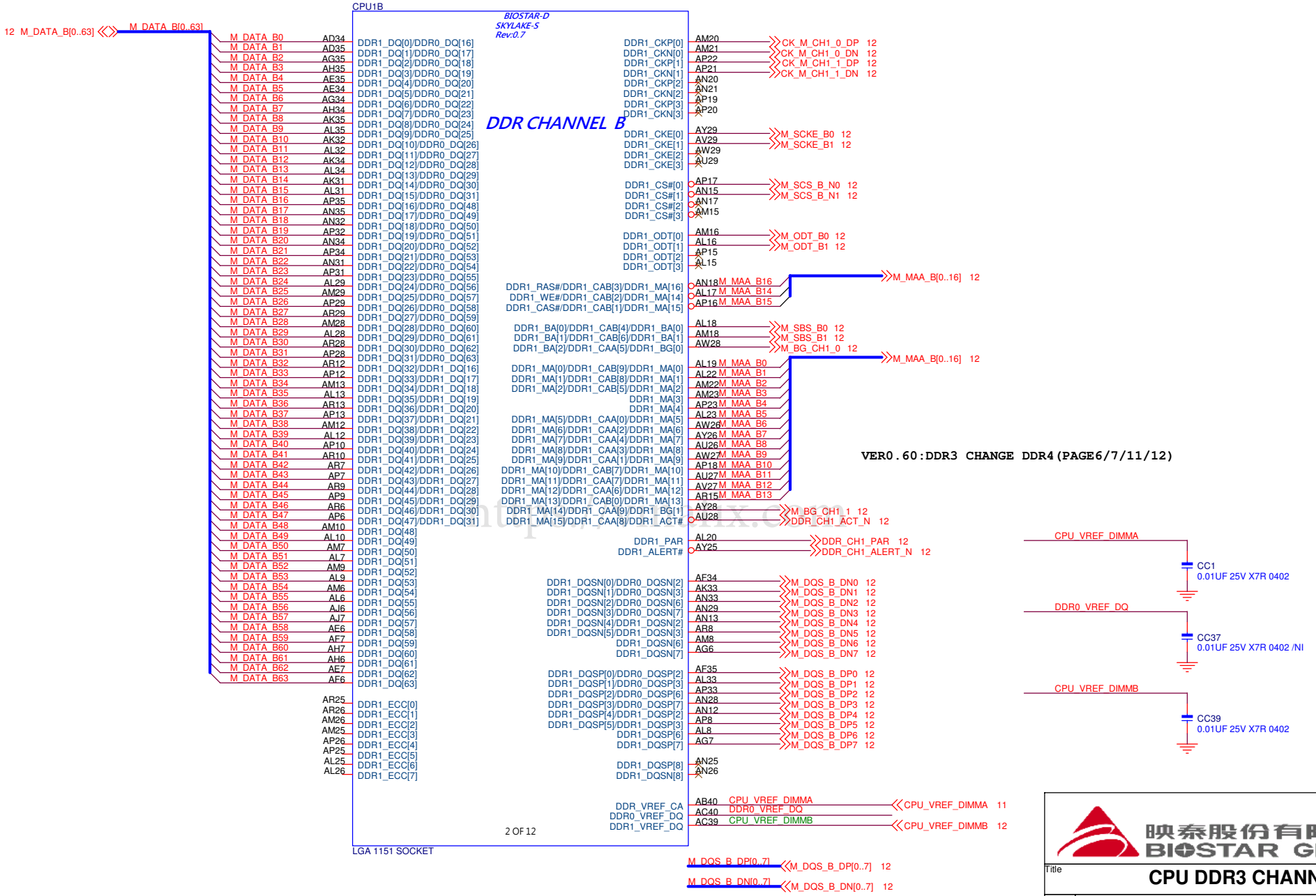
CPU1B
BIOSTAR-D
SKYLAKE-S
Rev:0.7
DDR CHANNEL B
12 M_DATA_B[0..63]
M_DATA_B[0..63]
DDR1_DQ[0]/DDR0_DQ[16]
DDR1_DQ[1]/DDR0_DQ[17]
DDR1_DQ[2]/DDR0_DQ[18]
DDR1_DQ[3]/DDR0_DQ[19]
DDR1_DQ[4]/DDR0_DQ[20]
DDR1_DQ[5]/DDR0_DQ[21]
DDR1_DQ[6]/DDR0_DQ[22]
DDR1_DQ[7]/DDR0_DQ[23]
DDR1_DQ[8]/DDR0_DQ[24]
DDR1_DQ[9]/DDR0_DQ[25]
DDR1_DQ[10]/DDR0_DQ[26]
DDR1_DQ[11]/DDR0_DQ[27]
DDR1_DQ[12]/DDR0_DQ[28]
DDR1_DQ[13]/DDR0_DQ[29]
DDR1_DQ[14]/DDR0_DQ[30]
DDR1_DQ[15]/DDR0_DQ[31]
DDR1_DQ[16]/DDR0_DQ[48]
DDR1_DQ[17]/DDR0_DQ[49]
DDR1_DQ[18]/DDR0_DQ[50]
DDR1_DQ[19]/DDR0_DQ[51]
DDR1_DQ[20]/DDR0_DQ[52]
DDR1_DQ[21]/DDR0_DQ[53]
DDR1_DQ[22]/DDR0_DQ[54]
DDR1_DQ[23]/DDR0_DQ[55]
DDR1_DQ[24]/DDR0_DQ[56]
DDR1_DQ[25]/DDR0_DQ[57]
DDR1_DQ[26]/DDR0_DQ[58]
DDR1_DQ[27]/DDR0_DQ[59]
DDR1_DQ[28]/DDR0_DQ[60]
DDR1_DQ[29]/DDR0_DQ[61]
DDR1_DQ[30]/DDR0_DQ[62]
DDR1_DQ[31]/DDR0_DQ[63]
DDR1_DQ[32]/DDR1_DQ[16]
DDR1_DQ[33]/DDR1_DQ[17]
DDR1_DQ[34]/DDR1_DQ[18]
DDR1_DQ[35]/DDR1_DQ[19]
DDR1_DQ[36]/DDR1_DQ[20]
DDR1_DQ[37]/DDR1_DQ[21]
DDR1_DQ[38]/DDR1_DQ[22]
DDR1_DQ[39]/DDR1_DQ[23]
DDR1_DQ[40]/DDR1_DQ[24]
DDR1_DQ[41]/DDR1_DQ[25]
DDR1_DQ[42]/DDR1_DQ[26]
DDR1_DQ[43]/DDR1_DQ[27]
DDR1_DQ[44]/DDR1_DQ[28]
DDR1_DQ[45]/DDR1_DQ[29]
DDR1_DQ[46]/DDR1_DQ[30]
DDR1_DQ[47]/DDR1_DQ[31]
DDR1_DQ[48]
DDR1_DQ[49]
DDR1_DQ[50]
DDR1_DQ[51]
DDR1_DQ[52]
DDR1_DQ[53]
DDR1_DQ[54]
DDR1_DQ[55]
DDR1_DQ[56]
DDR1_DQ[57]
DDR1_DQ[58]
DDR1_DQ[59]
DDR1_DQ[60]
DDR1_DQ[61]
DDR1_DQ[62]
DDR1_DQ[63]
DDR1_ECC[0]
DDR1_ECC[1]
DDR1_ECC[2]
DDR1_ECC[3]
DDR1_ECC[4]
DDR1_ECC[5]
DDR1_ECC[6]
DDR1_ECC[7]
2 OF 12
LGA 1151 SOCKET
DDR1_CKP[0]
DDR1_CKN[0]
DDR1_CKP[1]
DDR1_CKN[1]
DDR1_CKP[2]
DDR1_CKN[2]
DDR1_CKP[3]
DDR1_CKN[3]
CK_M_CH1_0_DP 12
CK_M_CH1_0_DN 12
CK_M_CH1_1_DP 12
CK_M_CH1_1_DN 12
DDR1_CKE[0]
DDR1_CKE[1]
DDR1_CKE[2]
DDR1_CKE[3]
M_SCKE_B0 12
M_SCKE_B1 12
DDR1_CS#[0]
DDR1_CS#[1]
DDR1_CS#[2]
DDR1_CS#[3]
M_SCS_B_N0 12
M_SCS_B_N1 12
DDR1_ODT[0]
DDR1_ODT[1]
DDR1_ODT[2]
DDR1_ODT[3]
M_ODT_B0 12
M_ODT_B1 12
DDR1_RAS#/DDR1_CAB[3]/DDR1_MA[16]
DDR1_WE#/DDR1_CAB[2]/DDR1_MA[14]
DDR1_CAS#/DDR1_CAB[1]/DDR1_MA[15]
M_MAA_B16
M_MAA_B14
M_MAA_B15
M_MAA_B[0..16] 12
DDR1_BA[0]/DDR1_CAB[4]/DDR1_BA[0]
DDR1_BA[1]/DDR1_CAB[6]/DDR1_BA[1]
DDR1_BA[2]/DDR1_CAA[5]/DDR1_BG[0]
M_SBS_B0 12
M_SBS_B1 12
M_BG_CH1_0 12
DDR1_MA[0]/DDR1_CAB[9]/DDR1_MA[0]
DDR1_MA[1]/DDR1_CAB[8]/DDR1_MA[1]
DDR1_MA[2]/DDR1_CAB[5]/DDR1_MA[2]
DDR1_MA[3]
DDR1_MA[4]
DDR1_MA[5]/DDR1_CAA[0]/DDR1_MA[5]
DDR1_MA[6]/DDR1_CAA[2]/DDR1_MA[6]
DDR1_MA[7]/DDR1_CAA[4]/DDR1_MA[7]
DDR1_MA[8]/DDR1_CAA[3]/DDR1_MA[8]
DDR1_MA[9]/DDR1_CAA[1]/DDR1_MA[9]
DDR1_MA[10]/DDR1_CAB[7]/DDR1_MA[10]
DDR1_MA[11]/DDR1_CAA[7]/DDR1_MA[11]
DDR1_MA[12]/DDR1_CAA[6]/DDR1_MA[12]
DDR1_MA[13]/DDR1_CAB[0]/DDR1_MA[13]
DDR1_MA[14]/DDR1_CAA[9]/DDR1_BG[1]
DDR1_MA[15]/DDR1_CAA[8]/DDR1_ACT#
M_MAA_B0
M_MAA_B1
M_MAA_B2
M_MAA_B3
M_MAA_B4
M_MAA_B5
M_MAA_B6
M_MAA_B7
M_MAA_B8
M_MAA_B9
M_MAA_B10
M_MAA_B11
M_MAA_B12
M_MAA_B13
M_MAA_B[0..16] 12
M_BG_CH1_1 12
DDR_CH1_ACT_N 12
DDR1_PAR
DDR1_ALERT#
DDR_CH1_PAR 12
DDR_CH1_ALERT_N 12
VER0.60:DDR3 CHANGE DDR4(PAGE6/7/11/12)
DDR1_DQSN[0]/DDR0_DQSN[2]
DDR1_DQSN[1]/DDR0_DQSN[3]
DDR1_DQSN[2]/DDR0_DQSN[6]
DDR1_DQSN[3]/DDR0_DQSN[7]
DDR1_DQSN[4]/DDR1_DQSN[2]
DDR1_DQSN[5]/DDR1_DQSN[3]
DDR1_DQSN[6]
DDR1_DQSN[7]
M_DQS_B_DN0 12
M_DQS_B_DN1 12
M_DQS_B_DN2 12
M_DQS_B_DN3 12
M_DQS_B_DN4 12
M_DQS_B_DN5 12
M_DQS_B_DN6 12
M_DQS_B_DN7 12
DDR1_DQSP[0]/DDR0_DQSP[2]
DDR1_DQSP[1]/DDR0_DQSP[3]
DDR1_DQSP[2]/DDR0_DQSP[6]
DDR1_DQSP[3]/DDR0_DQSP[7]
DDR1_DQSP[4]/DDR1_DQSP[2]
DDR1_DQSP[5]/DDR1_DQSP[3]
DDR1_DQSP[6]
DDR1_DQSP[7]
M_DQS_B_DP0 12
M_DQS_B_DP1 12
M_DQS_B_DP2 12
M_DQS_B_DP3 12
M_DQS_B_DP4 12
M_DQS_B_DP5 12
M_DQS_B_DP6 12
M_DQS_B_DP7 12
DDR1_DQSP[8]
DDR1_DQSN[8]
DDR_VREF_CA
DDR0_VREF_DQ
DDR1_VREF_DQ
CPU_VREF_DIMMA
DDR0_VREF_DQ
CPU_VREF_DIMMB
CPU_VREF_DIMMA 11
CPU_VREF_DIMMB 12
M_DQS_B_DP[0..7]
M_DQS_B_DN[0..7]
M_DQS_B_DP[0..7] 12
M_DQS_B_DN[0..7] 12
CPU_VREF_DIMMA
CC1
0.01UF 25V X7R 0402
DDR0_VREF_DQ
CC37
0.01UF 25V X7R 0402 /NI
CPU_VREF_DIMMB
CC39
0.01UF 25V X7R 0402
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Title
CPU DDR3 CHANNEL B
Size B
Document Number
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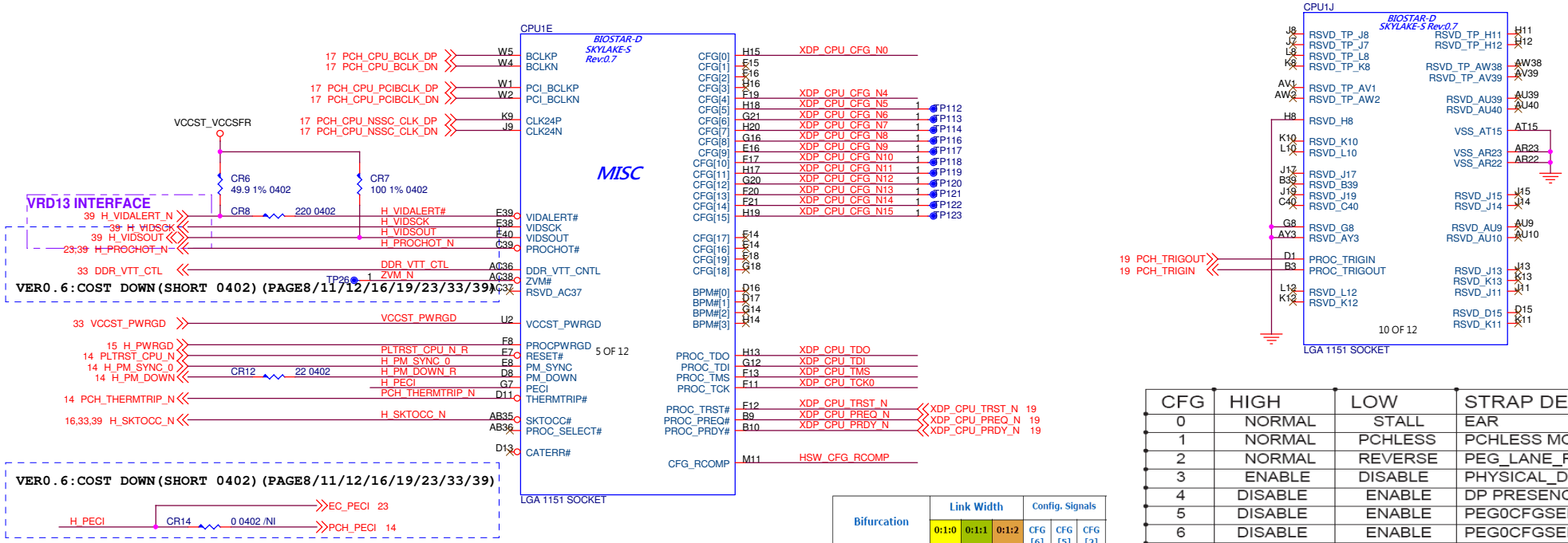

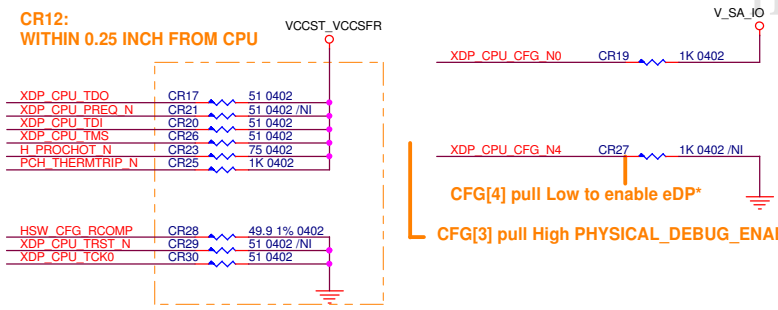

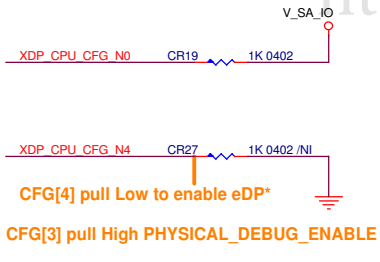

Bifurcation	Link Width			Config. Signals		
	0:1:0	0:1:1	0:1:2	CFG [6]	CFG [5]	CFG [2]
1x16	x16	N/A	N/A	1	1	1
1x16 **Reversed**	x16	N/A	N/A	1	1	0
2x8	x8	x8	N/A	1	0	1
2x8 **Reversed**	x8	x8	N/A	1	0	0
1x8+2x4	x8	x4	x4	0	0	1
1x8+2x4 **Reversed**	x8	x4	x4	0	0	0

CFG[19:0]

Configuration Signals: The CFG signals have a default value of '1' if not terminated on the board. Refer to the appropriate platform design guide for pull-down recommendations when a logic low is desired.
Intel recommends placing test points on the board for CFG pins.

- **CFG[0]:** Stall reset sequence after PCU PLL lock until de-asserted;
  - 1 = (Default) Normal Operation; No stall.
  - 0 = Stall.
- **CFG[1]:** Reserved configuration lane.
- **CFG[2]:** PCI Express* Static x16 Lane Numbering Reversal.
  - 1 = Normal operation
  - 0 = Lane numbers reversed.
- **CFG[3]:** Reserved configuration lane.
- **CFG[4]:** eDP enable:
  - 1 = Disabled.
  - 0 = Enabled.
- **CFG[6:5]:** PCI Express* Bifurcation
  - 00 = 1 x8, 2 x4 PCI Express*
  - 01 = reserved
  - 10 = 2 x8 PCI Express*
  - 11 = 1 x16 PCI Express*
- **CFG[7]:** PEG Training:
  - 1 = (default) PEG Train immediately following RESET# de assertion.
  - 0 = PEG Wait for BIOS for training.
- **CFG[19:8]:** Reserved configuration lanes.

CFG	HIGH	LOW	STRAP DESCRIPTION
0	NORMAL	STALL	EAR
1	NORMAL	PCHLESS	PCHLESS MODE
2	NORMAL	REVERSE	PEG_LANE_REVERSAL
3	ENABLE	DISABLE	PHYSICAL_DEBUG_ENABLE
4	DISABLE	ENABLE	DP PRESENCE
5	DISABLE	ENABLE	PEG0CFGSEL[0]
6	DISABLE	ENABLE	PEG0CFGSEL[1]
7	RESET_N	BIOS REQ	PEG_DEFER_TRAINING
8	DISABLE	ENABLE	CFG UNLOCK
9	PRESENT	NOT PRESENT	SVID NOT PRESENT
10	ACTIVATE	DEACTIVATE	SAFE MODE BOOT
11	DC COUPLED	AC COUPLED	DMI_AC_COUPLED
12	PMSYNC 2.0	LEGACY	PMSYNC LEGACY
13	SYNC	ASYNC	PMSYNC ASYNC MODE
14	RESERVED		
15	RESERVED		
ALL PINS HAVE INTERNAL PULL-UPS			

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Title	CPU MISC	
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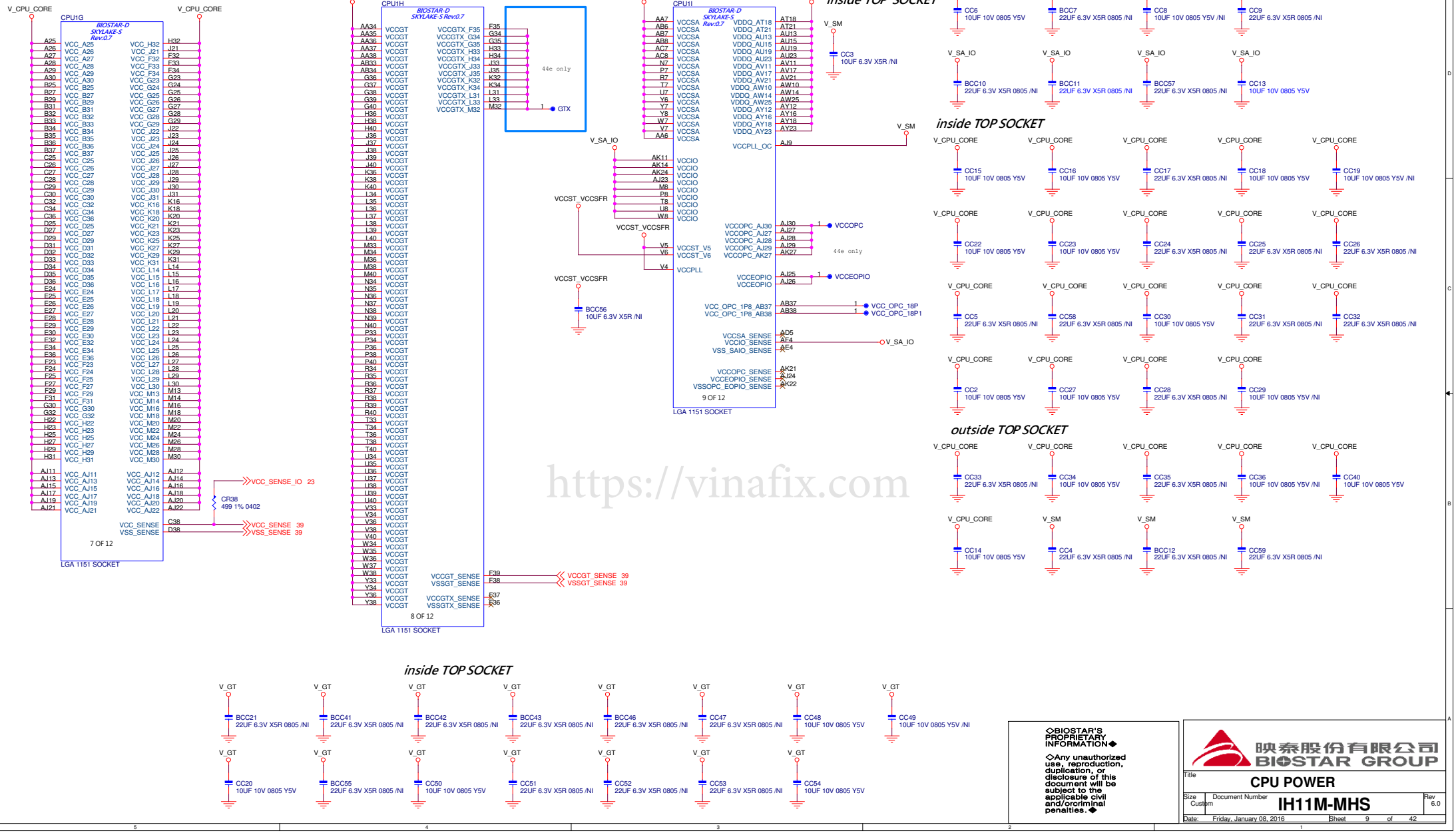

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Title: CPU POWER

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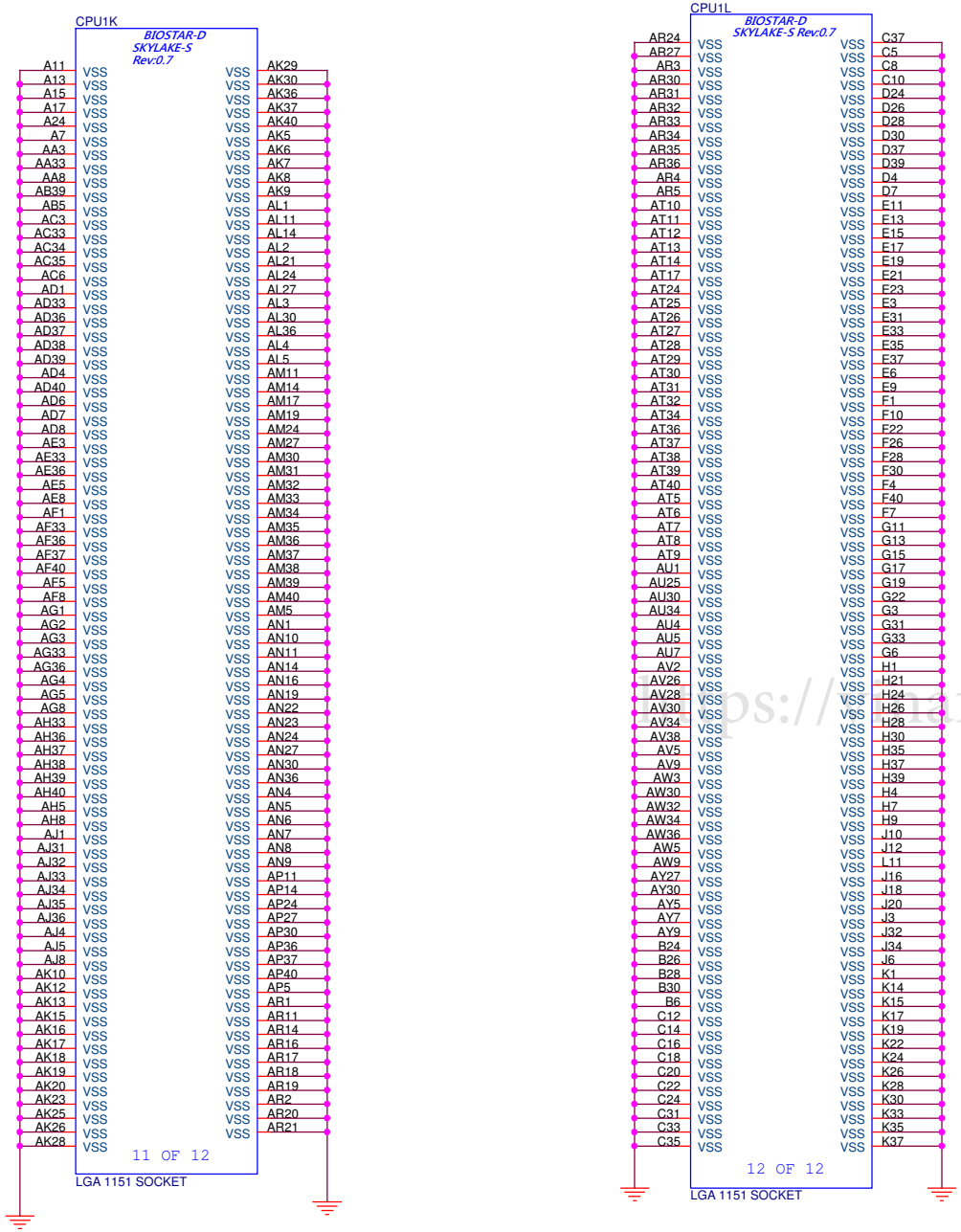

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Title: CPU GND

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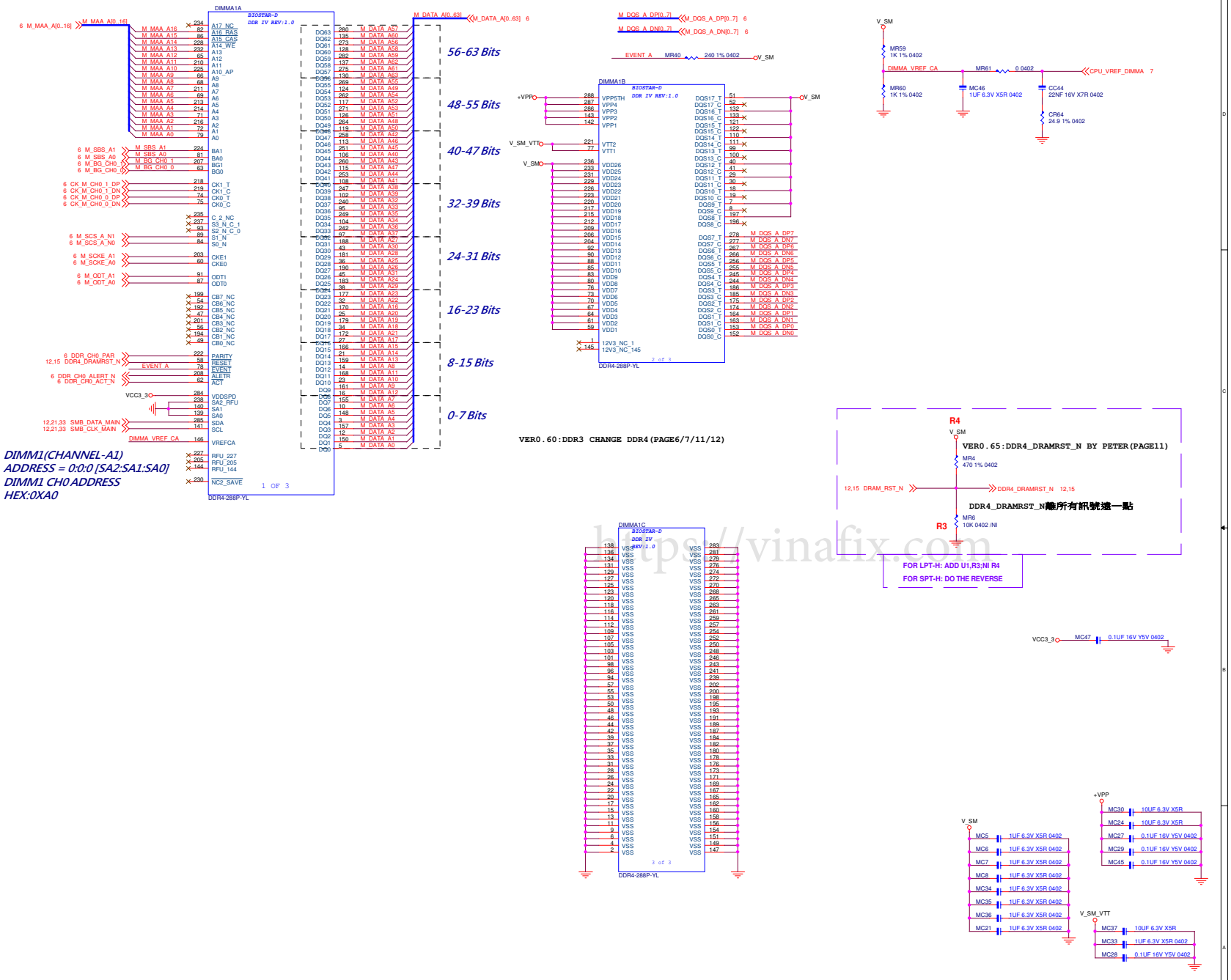

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Title	DDR3L DIMMA1		
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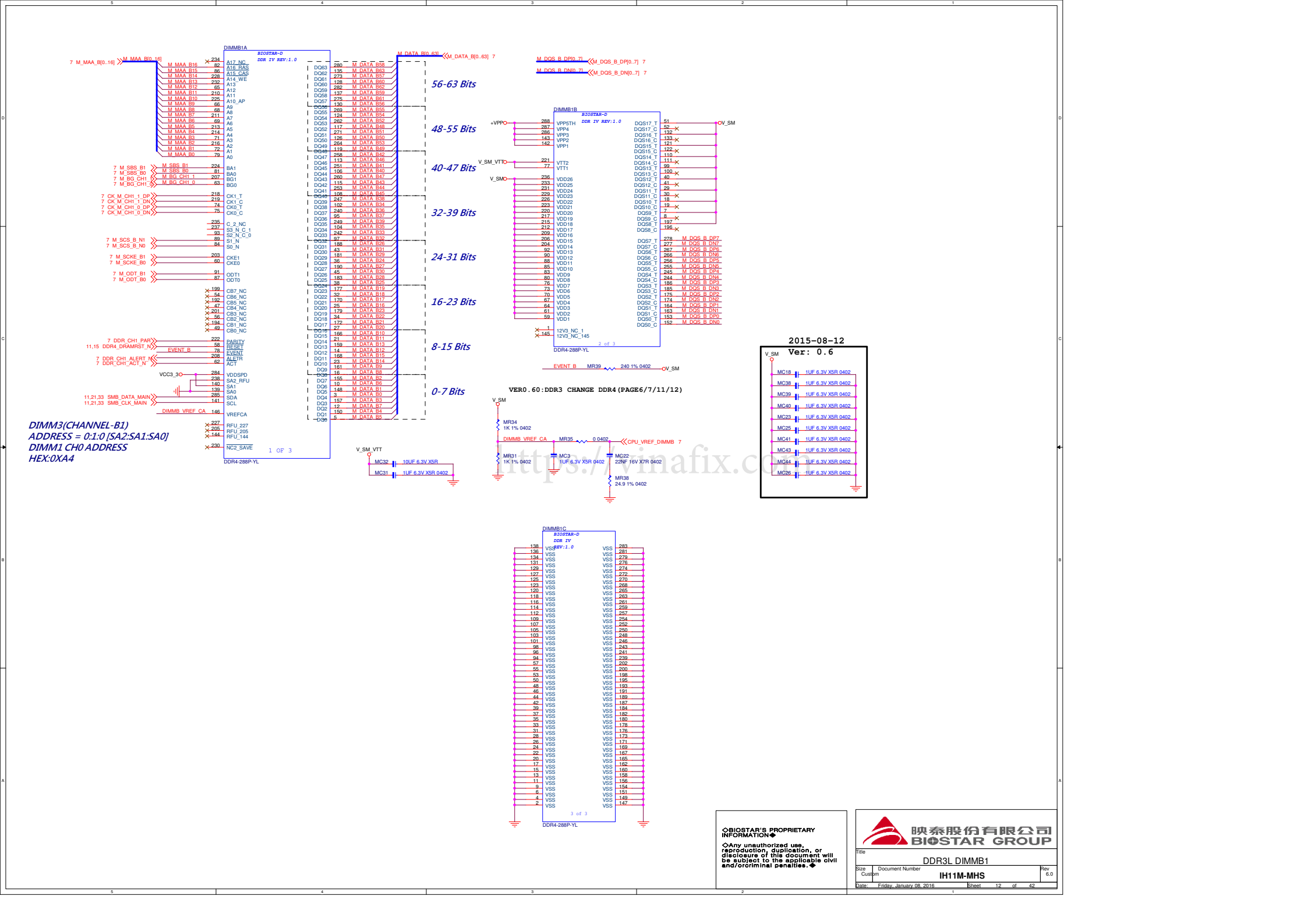

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Title: DDR3L DIMMB1

Size: Custom | Document Number: IH11M-MHS | Rev: 6.0

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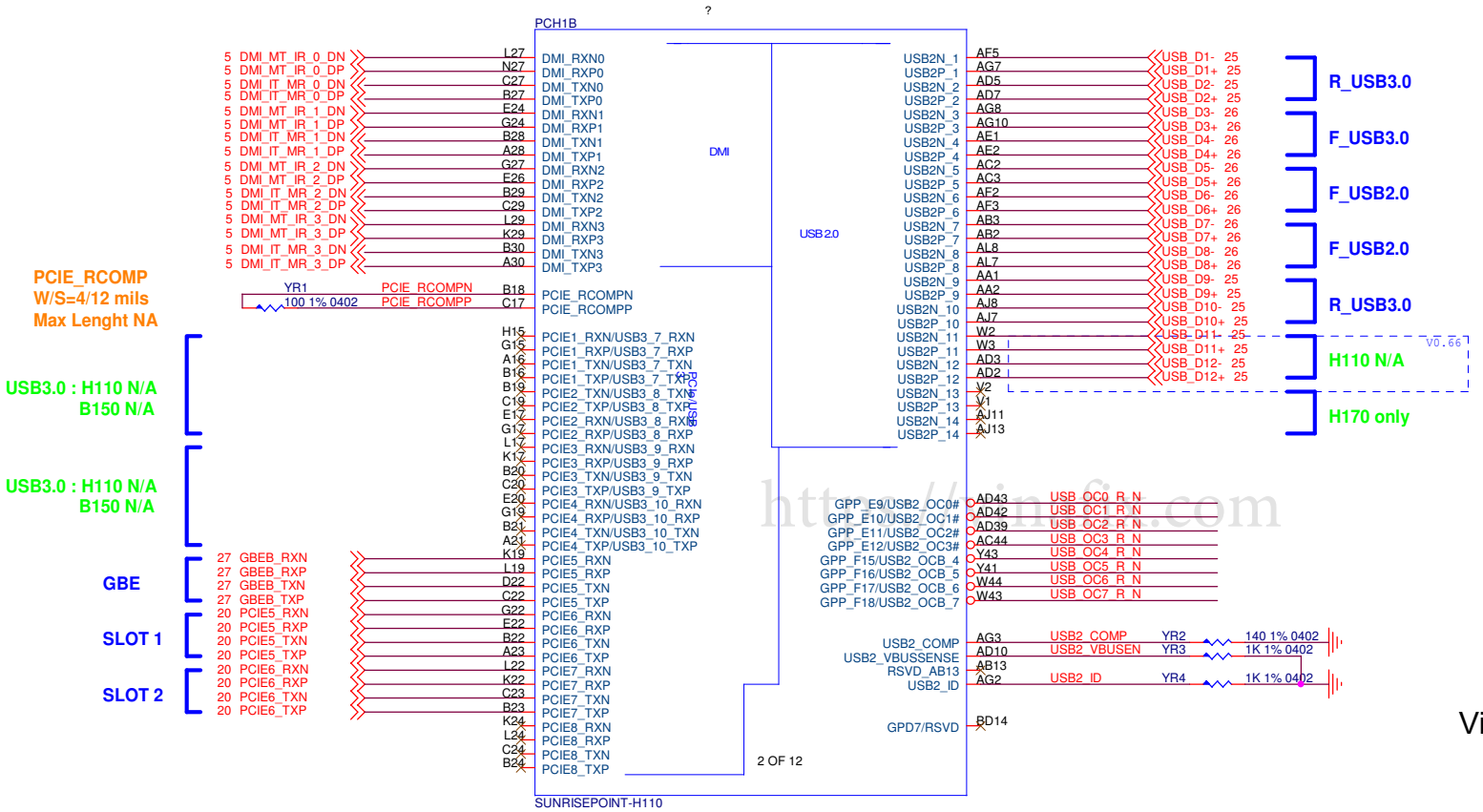
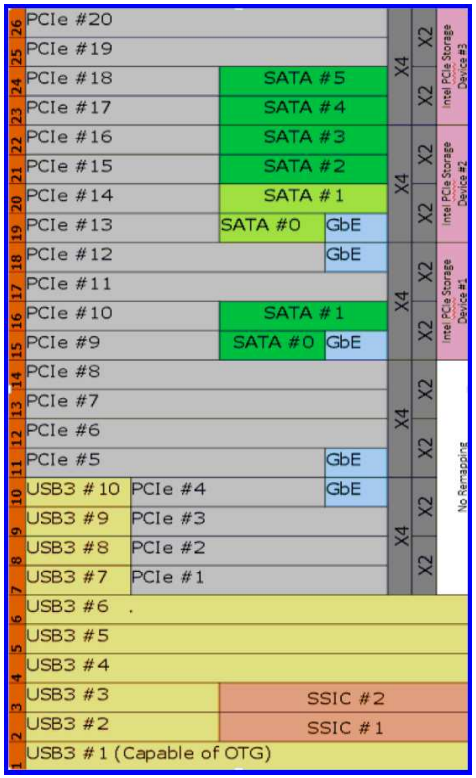
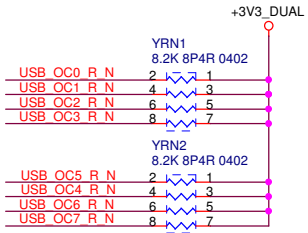
PCH PART: Y+Reference







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Title	PCH DMI/PCIE/USB	
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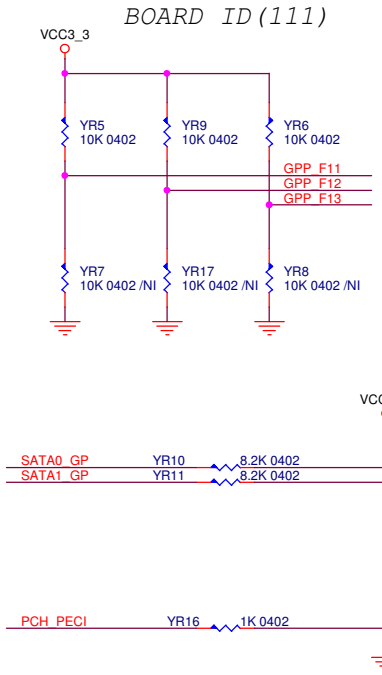
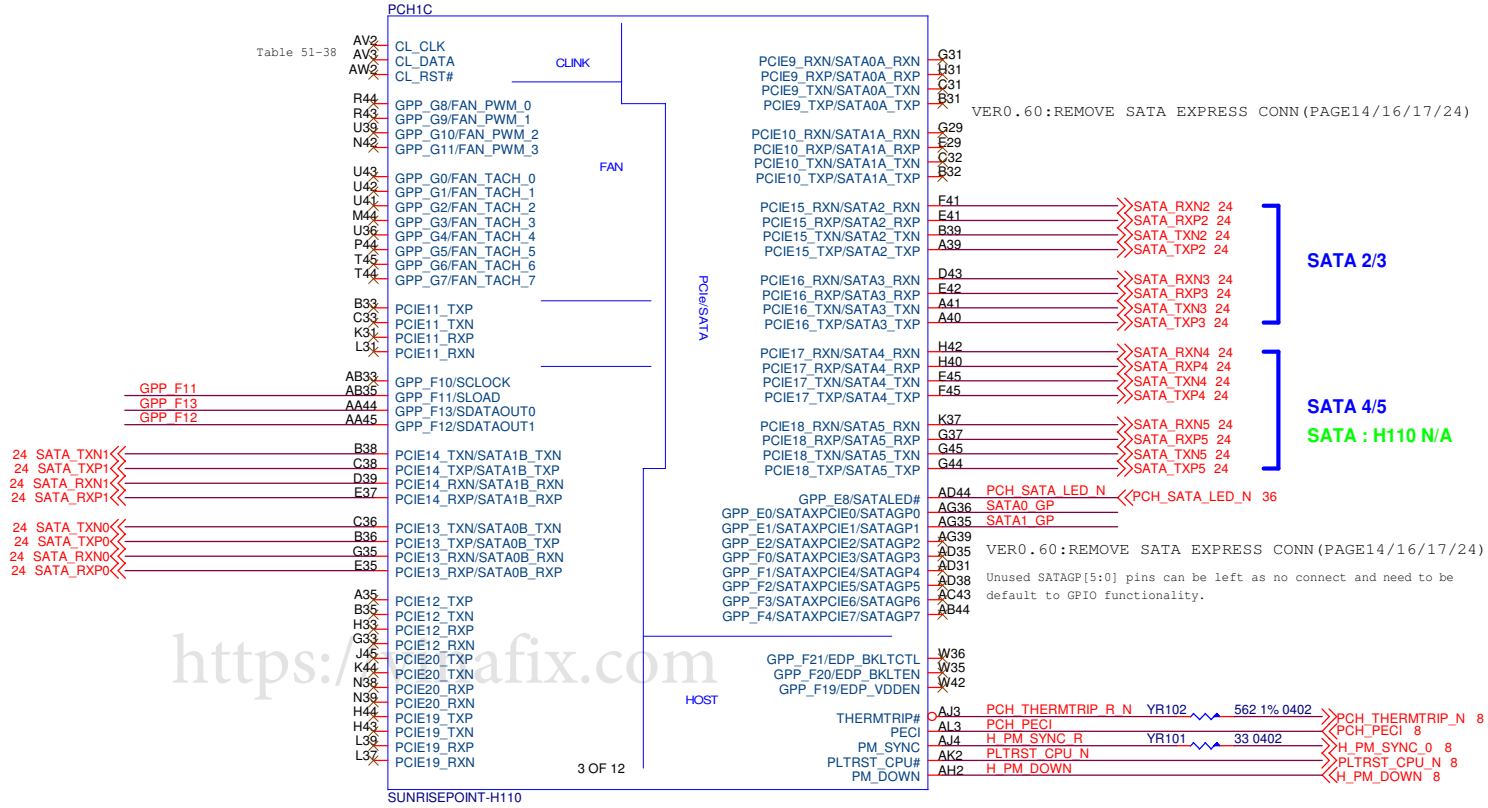
PCH PART: Y+Reference





GbE can be mapped into one of the PCIe Ports 4-5, Port 9, and Ports 12-13.

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Title	PCH CLINK/SATA/CPU HOST	
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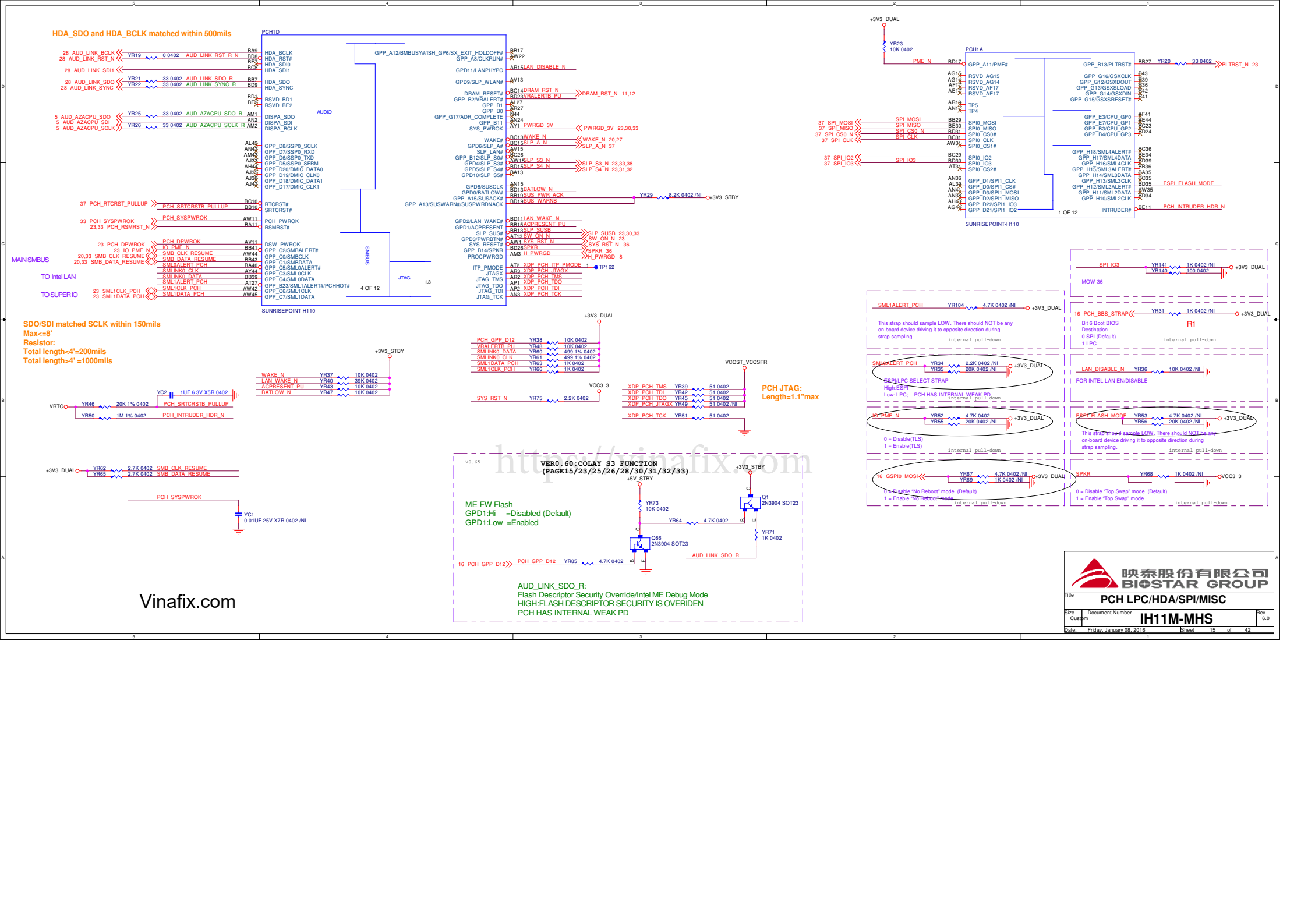
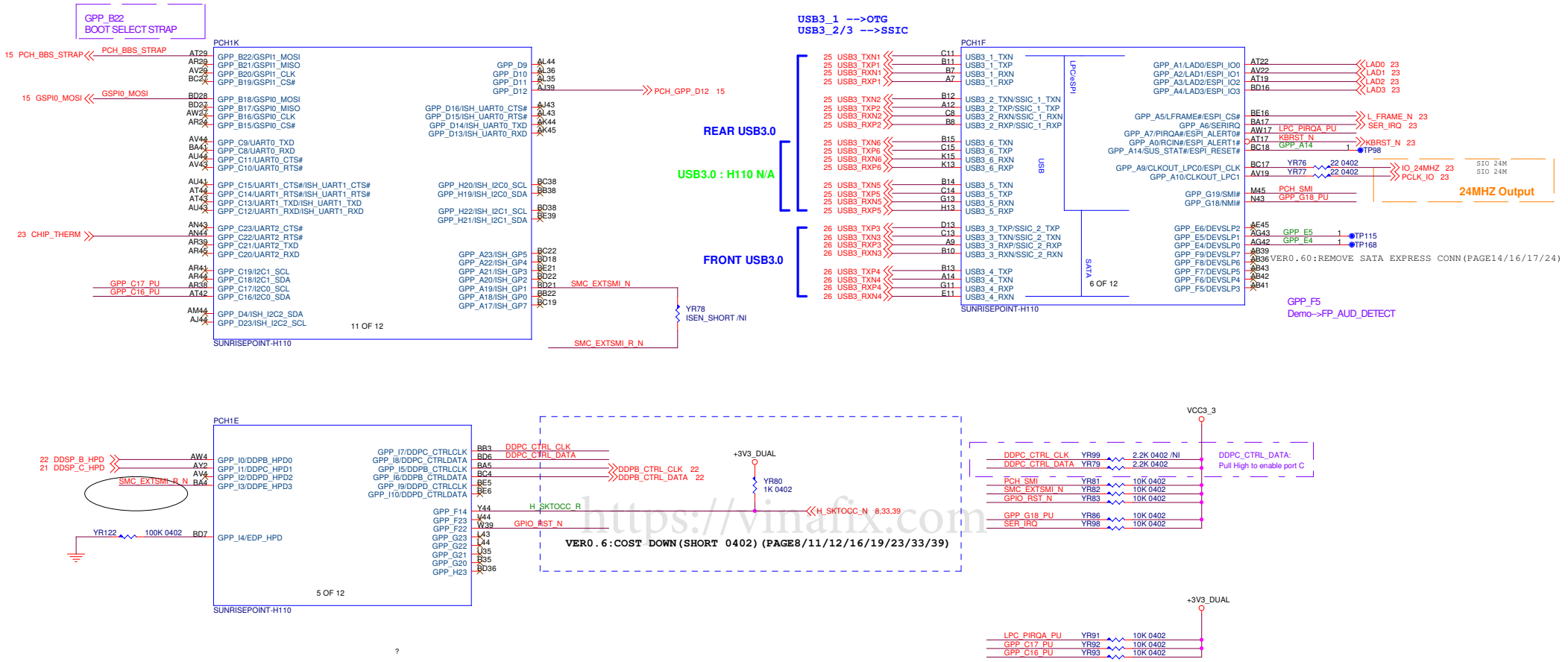

HDA_SDO and HDA_BCLK matched within 500mils
PCH1D
SUNRISEPOINT-H110
AUDIO
SMBUS
JTAG
4 OF 12
MAIN SMBUS
TO Intel LAN
TO SUPERIO
SDO/SDI matched SCLK within 150mils
Max<=8'
Resistor:
Total length<4'=200mils
Total length>4' =1000mils
PCH JTAG:
Length=1.1"max
VER0.60:COLAY S3 FUNCTION
(PAGE15/23/25/26/28/30/31/32/33)
ME FW Flash
GPD1:Hi =Disabled (Default)
GPD1:Low =Enabled
AUD_LINK_SDO_R:
Flash Descriptor Security Override/Intel ME Debug Mode
HIGH:FLASH DESCRIPTOR SECURITY IS OVERIDEN
PCH HAS INTERNAL WEAK PD
PCH1A
SUNRISEPOINT-H110
1 OF 12
SPI_MOSI
SPI_MISO
SPI_CS0_N
SPI_CLK
SPI_IO2
SPI_IO3
ESPI_FLASH_MODE
PCH_INTRUDER_HDR_N
PLTRST_N
SML1ALERT_PCH
16 PCH_BBS_STRAP
Bit 6 Boot BIOS Destination
0 SPI (Default)
1 LPC
R1
MOW 36
LAN_DISABLE_N
FOR INTEL LAN EN/DISABLE
ESPI/LPC SELECT STRAP
High:ESPI
Low: LPC; PCH HAS INTERNAL WEAK PD
IO_PME_N
0 = Disable(TLS)
1 = Enable(TLS)
16 GSPI0_MOSI
0 = Disable "No Reboot" mode. (Default)
1 = Enable "No Reboot" mode.
SPKR
0 = Disable "Top Swap" mode. (Default)
1 = Enable "Top Swap" mode.
internal pull-down
Vinafix.com
http://vinafix.com
映泰股份有限公司
BIOSTAR GROUP
Title
PCH LPC/HDA/SPI/MISC
Size
Custom
Document Number
IH11M-MHS
Rev
6.0
Date: Friday, January 08, 2016
Sheet 15 of 42

PCH PART: Y+Reference



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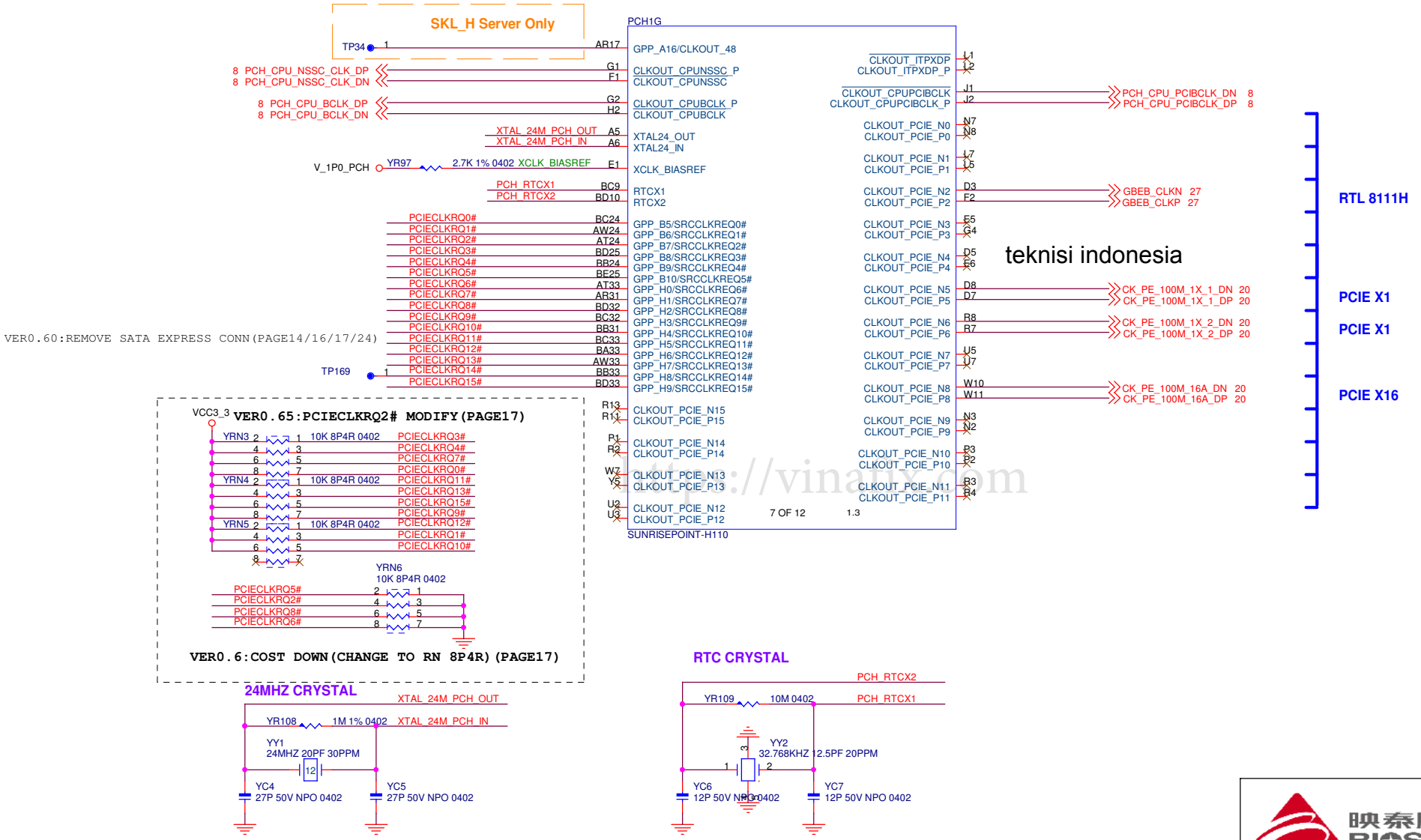
Title	PCH LPC/DP/USB3/UART	
Size: Custom	Document Number: IH11M-MHS	Rev: 6.0
Date: Friday, January 08, 2016	Sheet 16 of 42	



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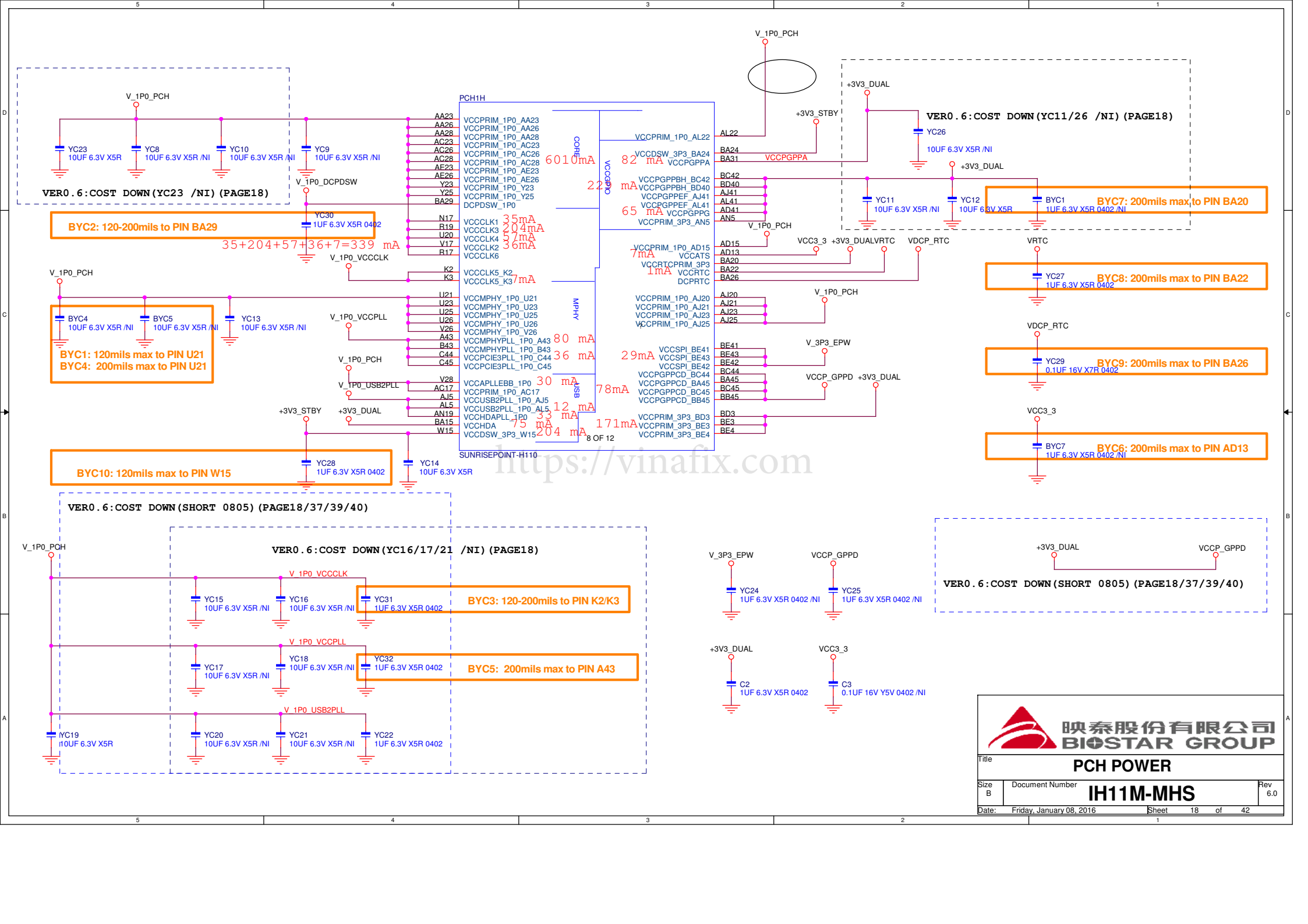
Title	PCH CLOCK BUFFER	
Size B	Document Number IH11M-MHS	Rev 6.0
Date: Friday, January 08, 2016	Sheet 17 of 42	


V_1P0_PCH
YC23 10UF 6.3V X5R
YC8 10UF 6.3V X5R /NI
YC10 10UF 6.3V X5R /NI
YC9 10UF 6.3V X5R /NI
VER0.6:COST DOWN(YC23 /NI)(PAGE18)
V_1P0_DCPDSW
YC30 1UF 6.3V X5R 0402
BYC2: 120-200mils to PIN BA29
35+204+57+36+7=339 mA
V_1P0_VCCCLK
PCH1H
AA23 VCCPRIM_1P0_AA23
AA26 VCCPRIM_1P0_AA26
AA28 VCCPRIM_1P0_AA28
AC23 VCCPRIM_1P0_AC23
AC26 VCCPRIM_1P0_AC26
AC28 VCCPRIM_1P0_AC28
AE23 VCCPRIM_1P0_AE23
AE26 VCCPRIM_1P0_AE26
Y23 VCCPRIM_1P0_Y23
Y25 VCCPRIM_1P0_Y25
BA29 DCPDSW_1P0
CORE
6010mA
VCCGPPO
N17 VCCCLK1 35mA
R19 VCCCLK3 204mA
U20 VCCCLK4 57mA
V17 VCCCLK2 36mA
R17 VCCCLK6
K2 VCCCLK5_K2
K3 VCCCLK5_K3 7mA
V_1P0_PCH
BYC4 10UF 6.3V X5R /NI
BYC5 10UF 6.3V X5R /NI
YC13 10UF 6.3V X5R /NI
BYC1: 120mils max to PIN U21
BYC4: 200mils max to PIN U21
V_1P0_VCCPLL
U21 VCCMPHY_1P0_U21
U23 VCCMPHY_1P0_U23
U25 VCCMPHY_1P0_U25
U26 VCCMPHY_1P0_U26
V26 VCCMPHY_1P0_V26
MPHY
A43 VCCMPHYPLL_1P0_A43 80 mA
B43 VCCMPHYPLL_1P0_B43
C44 VCCPCIE3PLL_1P0_C44 36 mA
C45 VCCPCIE3PLL_1P0_C45
V_1P0_PCH
V_1P0_USB2PLL
V28 VCCAPLLEBB_1P0 30 mA
AC17 VCCPRIM_1P0_AC17
AJ5 VCCUSB2PLL_1P0_AJ5
AL5 VCCUSB2PLL_1P0_AL5 12 mA
AN19 VCCHDAPLL_1P0 33 mA
BA15 VCCHDA 75 mA
W15 VCCDSW_3P3_W15 204 mA
USB
78mA
8 OF 12
+3V3_STBY
+3V3_DUAL
YC28 1UF 6.3V X5R 0402
YC14 10UF 6.3V X5R
BYC10: 120mils max to PIN W15
SUNRISEPOINT-H110
V_1P0_PCH
AL22 VCCPRIM_1P0_AL22
BA24 VCCDSW_3P3_BA24
BA31 VCCPGPPA
82 mA VCCPGPPA
+3V3_STBY
VCCPGPPA
BC42 VCCPGPPBH_BC42
BD40 VCCPGPPBH_BD40
AJ41 VCCPGPPEF_AJ41
AL41 VCCPGPPEF_AL41
AD41 VCCPGPPG
AN5 VCCPRIM_3P3_AN5
22 mA
65 mA
V_1P0_PCH
AD15 VCCPRIM_1P0_AD15
AD13 VCCATS
BA20 VCCRTCPRIM_3P3
BA22 VCCRTC
BA26 DCPRTC
7mA
1mA
VCC3_3
+3V3_DUALVRTC
VDCP_RTC
AJ20 VCCPRIM_1P0_AJ20
AJ21 VCCPRIM_1P0_AJ21
AJ23 VCCPRIM_1P0_AJ23
AJ25 VCCPRIM_1P0_AJ25
V_1P0_PCH
BE41 VCCSPI_BE41
BE43 VCCSPI_BE43
BE42 VCCSPI_BE42
BC44 VCCPGPPCD_BC44
BA45 VCCPGPPCD_BA45
BC45 VCCPGPPCD_BC45
BB45 VCCPGPPCD_BB45
29mA
V_3P3_EPW
VCCP_GPPD
+3V3_DUAL
BD3 VCCPRIM_3P3_BD3
BE3 VCCPRIM_3P3_BE3
BE4 VCCPRIM_3P3_BE4
171mA
+3V3_DUAL
YC26 10UF 6.3V X5R /NI
VER0.6:COST DOWN(YC11/26 /NI)(PAGE18)
YC11 10UF 6.3V X5R /NI
YC12 10UF 6.3V X5R
BYC1 1UF 6.3V X5R 0402 /NI
BYC7: 200mils max to PIN BA20
VRTC
YC27 1UF 6.3V X5R 0402
BYC8: 200mils max to PIN BA22
VDCP_RTC
YC29 0.1UF 16V X7R 0402
BYC9: 200mils max to PIN BA26
VCC3_3
BYC7 1UF 6.3V X5R 0402 /NI
BYC6: 200mils max to PIN AD13
VER0.6:COST DOWN(SHORT 0805)(PAGE18/37/39/40)
V_1P0_PCH
VER0.6:COST DOWN(YC16/17/21 /NI)(PAGE18)
V_1P0_VCCCLK
YC15 10UF 6.3V X5R /NI
YC16 10UF 6.3V X5R /NI
YC31 1UF 6.3V X5R 0402
BYC3: 120-200mils to PIN K2/K3
V_1P0_VCCPLL
YC17 10UF 6.3V X5R /NI
YC18 10UF 6.3V X5R /NI
YC32 1UF 6.3V X5R 0402
BYC5: 200mils max to PIN A43
V_1P0_USB2PLL
YC19 10UF 6.3V X5R
YC20 10UF 6.3V X5R /NI
YC21 10UF 6.3V X5R /NI
YC22 1UF 6.3V X5R 0402
V_3P3_EPW
YC24 1UF 6.3V X5R 0402 /NI
VCCP_GPPD
YC25 1UF 6.3V X5R 0402 /NI
+3V3_DUAL
C2 1UF 6.3V X5R 0402
VCC3_3
C3 0.1UF 16V Y5V 0402 /NI
+3V3_DUAL
VCCP_GPPD
VER0.6:COST DOWN(SHORT 0805)(PAGE18/37/39/40)
https://vinafix.com
映泰股份有限公司
BIOSTAR GROUP
Title
PCH POWER
Size B
Document Number
IH11M-MHS
Rev 6.0
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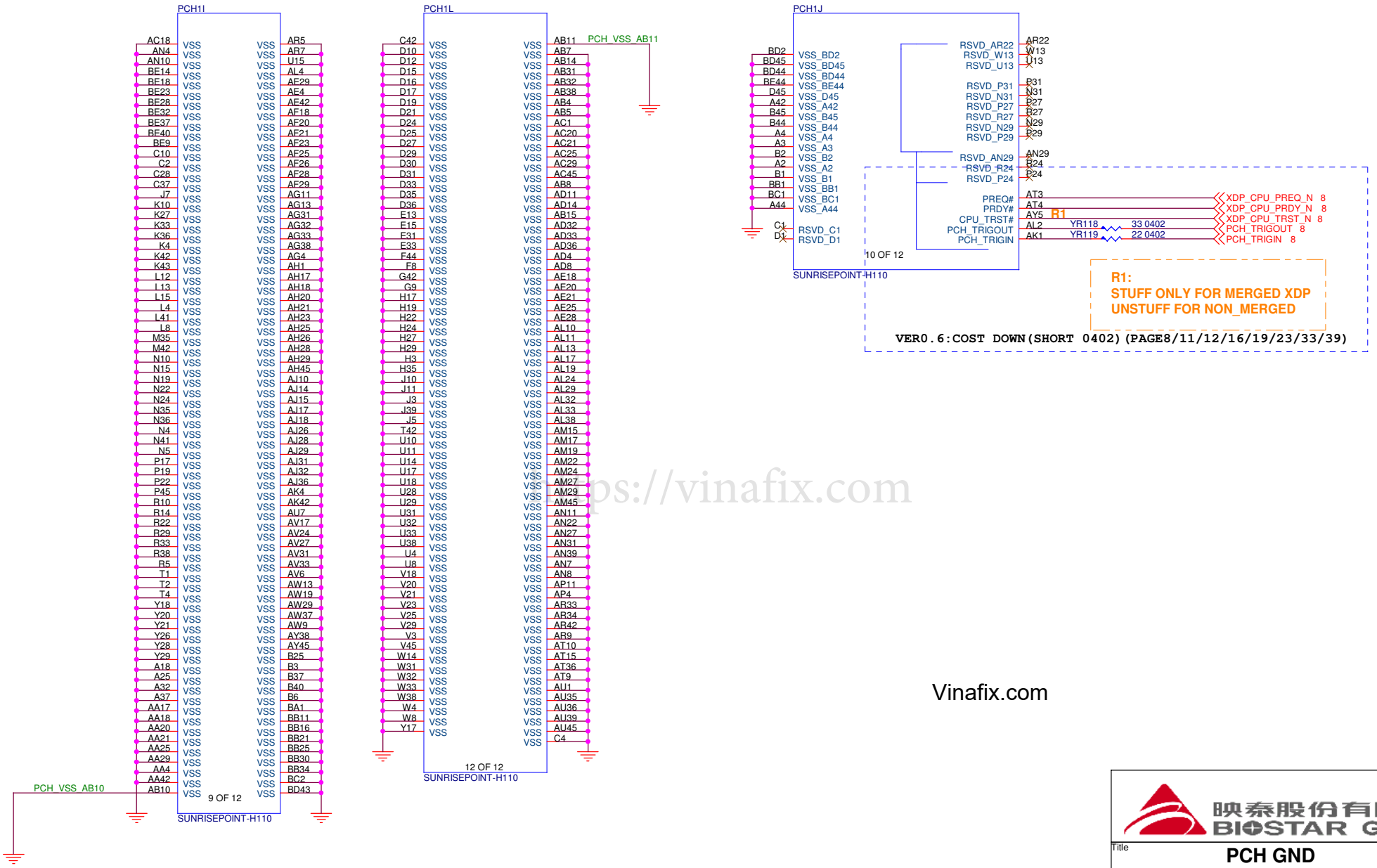

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Title	PCH GND	
Size B	Document Number IH11M-MHS	Rev 6.0
Date: Friday, January 08, 2016	Sheet 19 of 42	

SLOT PART: E+Reference

Value:180 nF - 265 nF

450 mils max to connector pin

5 EXP_A_TX_0_DP	EC1	0.22UF 10V X5R 0402	EEXP_A_TXP_0	
5 EXP_A_TX_0_DN	EC2	0.22UF 10V X5R 0402	EEXP_A_TXN_0	
5 EXP_A_TX_1_DP	EC3	0.22UF 10V X5R 0402	EEXP_A_TXP_1	
5 EXP_A_TX_1_DN	EC4	0.22UF 10V X5R 0402	EEXP_A_TXN_1	
5 EXP_A_TX_2_DP	EC5	0.22UF 10V X5R 0402	EEXP_A_TXP_2	
5 EXP_A_TX_2_DN	EC6	0.22UF 10V X5R 0402	EEXP_A_TXN_2	
5 EXP_A_TX_3_DP	EC7	0.22UF 10V X5R 0402	EEXP_A_TXP_3	
5 EXP_A_TX_3_DN	EC8	0.22UF 10V X5R 0402	EEXP_A_TXN_3	
5 EXP_A_TX_4_DP	EC9	0.22UF 10V X5R 0402	EEXP_A_TXP_4	
5 EXP_A_TX_4_DN	EC10	0.22UF 10V X5R 0402	EEXP_A_TXN_4	
5 EXP_A_TX_5_DP	EC11	0.22UF 10V X5R 0402	EEXP_A_TXP_5	
5 EXP_A_TX_5_DN	EC12	0.22UF 10V X5R 0402	EEXP_A_TXN_5	
5 EXP_A_TX_6_DP	EC13	0.22UF 10V X5R 0402	EEXP_A_TXP_6	
5 EXP_A_TX_6_DN	EC14	0.22UF 10V X5R 0402	EEXP_A_TXN_6	
5 EXP_A_TX_7_DP	EC19	0.22UF 10V X5R 0402	EEXP_A_TXP_7	
5 EXP_A_TX_7_DN	EC28	0.22UF 10V X5R 0402	EEXP_A_TXN_7	
5 EXP_A_TX_8_DP	EC49	0.22UF 10V X5R 0402	EEXP_A_TXP_8	
5 EXP_A_TX_8_DN	EC50	0.22UF 10V X5R 0402	EEXP_A_TXN_8	
5 EXP_A_TX_9_DP	EC30	0.22UF 10V X5R 0402	EEXP_A_TXP_9	
5 EXP_A_TX_9_DN	EC29	0.22UF 10V X5R 0402	EEXP_A_TXN_9	
5 EXP_A_TX_10_DP	EC33	0.22UF 10V X5R 0402	EEXP_A_TXP_10	
5 EXP_A_TX_10_DN	EC35	0.22UF 10V X5R 0402	EEXP_A_TXN_10	
5 EXP_A_TX_11_DP	EC32	0.22UF 10V X5R 0402	EEXP_A_TXP_11	
5 EXP_A_TX_11_DN	EC31	0.22UF 10V X5R 0402	EEXP_A_TXN_11	
5 EXP_A_TX_12_DP	EC37	0.22UF 10V X5R 0402	EEXP_A_TXP_12	
5 EXP_A_TX_12_DN	EC38	0.22UF 10V X5R 0402	EEXP_A_TXN_12	
5 EXP_A_TX_13_DP	EC36	0.22UF 10V X5R 0402	EEXP_A_TXP_13	
5 EXP_A_TX_13_DN	EC34	0.22UF 10V X5R 0402	EEXP_A_TXN_13	
5 EXP_A_TX_14_DP	EC39	0.22UF 10V X5R 0402	EEXP_A_TXP_14	
5 EXP_A_TX_14_DN	EC48	0.22UF 10V X5R 0402	EEXP_A_TXN_14	
5 EXP_A_TX_15_DP	EC40	0.22UF 10V X5R 0402	EEXP_A_TXP_15	
5 EXP_A_TX_15_DN	EC41	0.22UF 10V X5R 0402	EEXP_A_TXN_15	

PEX16_1

15,33 SMB_CLK_RESUME
15,33 SMB_DATA_RESUME
15,27 WAKE_N

KEY

EEXP_A_TXP_0 / EEXP_A_TXN_0
EEXP_A_TXP_1 / EEXP_A_TXN_1
EEXP_A_TXP_2 / EEXP_A_TXN_2
EEXP_A_TXP_3 / EEXP_A_TXN_3
EEXP_A_TXP_4 / EEXP_A_TXN_4
EEXP_A_TXP_5 / EEXP_A_TXN_5
EEXP_A_TXP_6 / EEXP_A_TXN_6
EEXP_A_TXP_7 / EEXP_A_TXN_7
EEXP_A_TXP_8 / EEXP_A_TXN_8
EEXP_A_TXP_9 / EEXP_A_TXN_9
EEXP_A_TXP_10 / EEXP_A_TXN_10
EEXP_A_TXP_11 / EEXP_A_TXN_11
EEXP_A_TXP_12 / EEXP_A_TXN_12
EEXP_A_TXP_13 / EEXP_A_TXN_13
EEXP_A_TXP_14 / EEXP_A_TXN_14
EEXP_A_TXP_15 / EEXP_A_TXN_15

CK_PE_100M_16A_DP 17
CK_PE_100M_16A_DN 17
EXP_A_RX_0_DP 5 / EXP_A_RX_0_DN 5
EXP_A_RX_1_DP 5 / EXP_A_RX_1_DN 5
EXP_A_RX_2_DP 5 / EXP_A_RX_2_DN 5
EXP_A_RX_3_DP 5 / EXP_A_RX_3_DN 5
EXP_A_RX_4_DP 5 / EXP_A_RX_4_DN 5
EXP_A_RX_5_DP 5 / EXP_A_RX_5_DN 5
EXP_A_RX_6_DP 5 / EXP_A_RX_6_DN 5
EXP_A_RX_7_DP 5 / EXP_A_RX_7_DN 5
EXP_A_RX_8_DP 5 / EXP_A_RX_8_DN 5
EXP_A_RX_9_DP 5 / EXP_A_RX_9_DN 5
EXP_A_RX_10_DP 5 / EXP_A_RX_10_DN 5
EXP_A_RX_11_DP 5 / EXP_A_RX_11_DN 5
EXP_A_RX_12_DP 5 / EXP_A_RX_12_DN 5
EXP_A_RX_13_DP 5 / EXP_A_RX_13_DN 5
EXP_A_RX_14_DP 5 / EXP_A_RX_14_DN 5
EXP_A_RX_15_DP 5 / EXP_A_RX_15_DN 5

PCIEX16-164P-YL-AIR SHORT

PEX1_2 — PCI_Express_x1 — Mechanical Key — End of the x1 Connector — PCIEX1-36 PIN-B

15,33 SMB_CLK_RESUME
15,33 SMB_DATA_RESUME
15,27 WAKE_N
13 PCIE5_TXP / 13 PCIE5_TXN — EC20 / EC22 0.1UF 16V X7R 0402
CK_PE_100M_1X_1_DP 17
CK_PE_100M_1X_1_DN 17
PCIE5_RXP 13
PCIE5_RXN 13
PCIERSTb_N 23

PEX1_1 — PCI_Express_x1 — Mechanical Key — End of the x1 Connector — PCIEX1-36 PIN-B

15,33 SMB_CLK_RESUME
15,33 SMB_DATA_RESUME
15,27 WAKE_N
13 PCIE6_TXP / 13 PCIE6_TXN — EC21 / EC23 0.1UF 16V X7R 0402
CK_PE_100M_1X_2_DP 17
CK_PE_100M_1X_2_DN 17
PCIE6_RXP 13
PCIE6_RXN 13
PCIERSTb_N 23

EC17 0.1UF 16V Y5V 0402 /NI
EC15 0.1UF 16V Y5V 0402
EC43 0.1UF 16V Y5V 0402 /NI
EC42 0.1UF 16V Y5V 0402
EC18 0.1UF 16V Y5V 0402 /NI
EC16 0.1UF 16V Y5V 0402
ECT1 270UF-S 16V 8X12 BLK
ECT2 560UF-S 6.3V 24M 6.3X9 8X12

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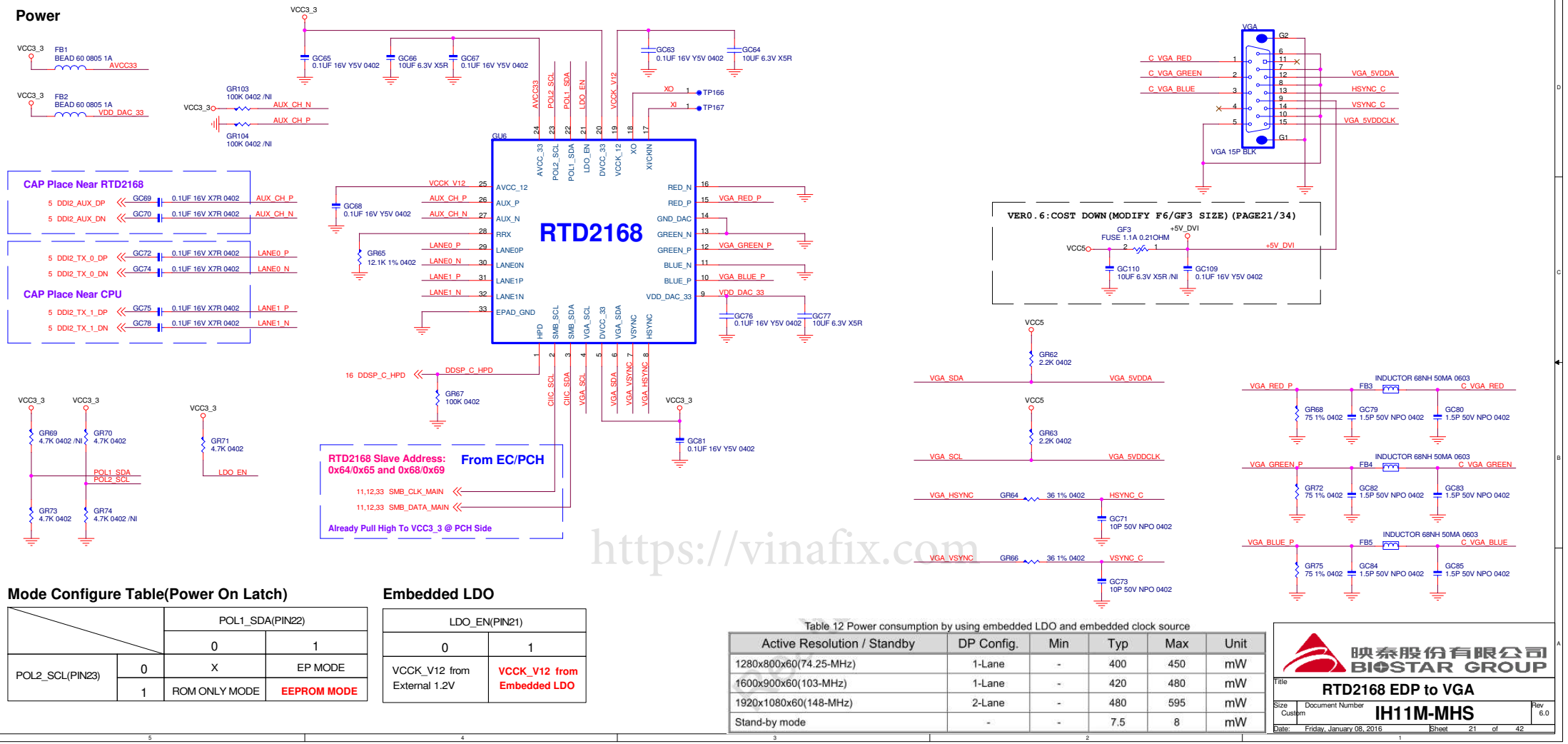
Title: PCIEX16 SLOT 1 & 2

Size: C | Document Number: IH11M-MHS | Rev: 6.0

Date: Tuesday, March 01, 2016 | Sheet 20 of 42



Mode Configure Table(Power On Latch)

		POL1_SDA(PIN22)	
		0	1
POL2_SCL(PIN23)	0	X	EP MODE
	1	ROM ONLY MODE	**EEPROM MODE**

Embedded LDO

LDO_EN(PIN21)	
0	1
VCCK_V12 from External 1.2V	**VCCK_V12 from Embedded LDO**

Table 12 Power consumption by using embedded LDO and embedded clock source

Active Resolution / Standby	DP Config.	Min	Typ	Max	Unit
1280x800x60(74.25-MHz)	1-Lane	-	400	450	mW
1600x900x60(103-MHz)	1-Lane	-	420	480	mW
1920x1080x60(148-MHz)	2-Lane	-	480	595	mW
Stand-by mode	-	-	7.5	8	mW

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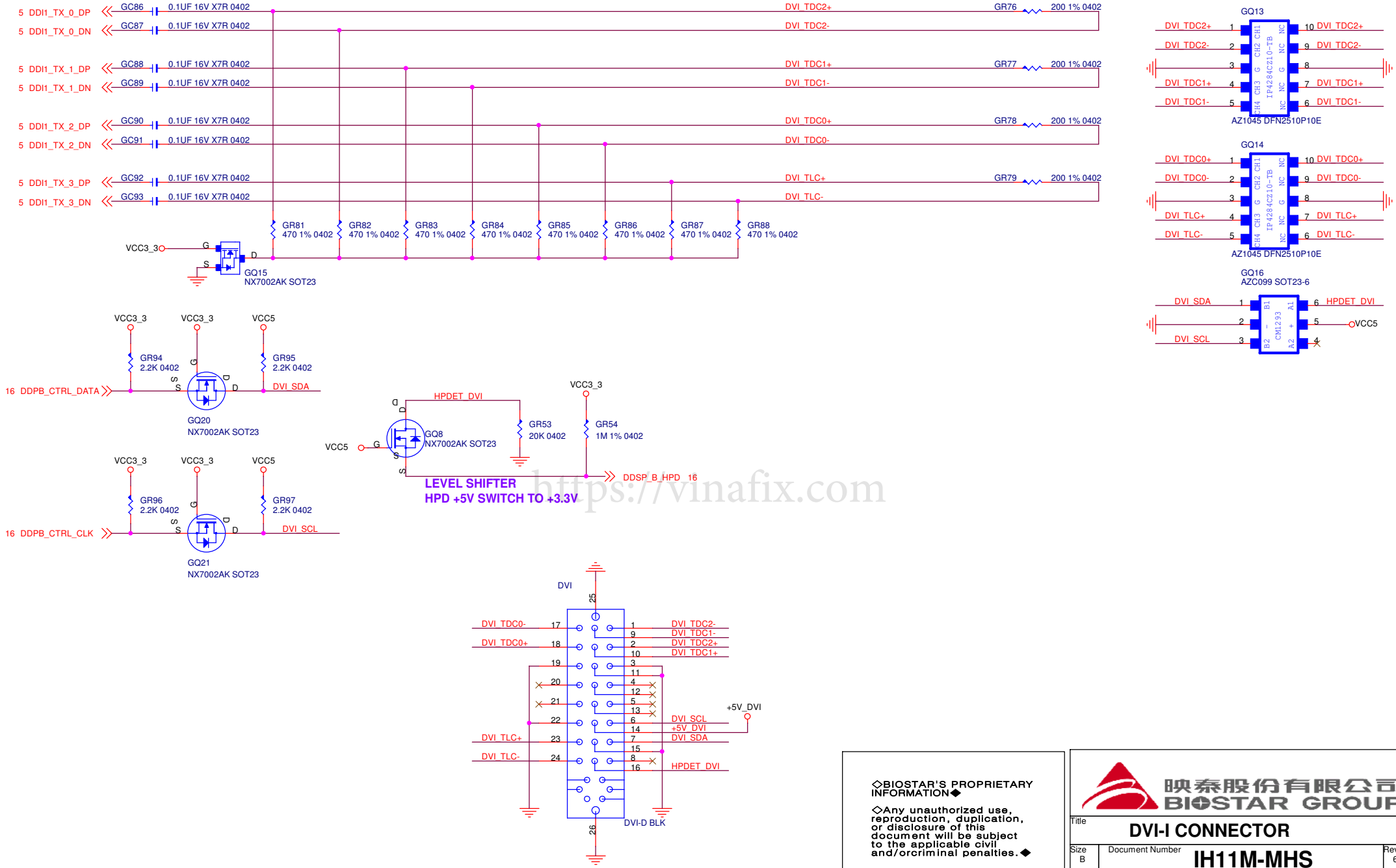
Title: RTD2168 EDP to VGA

Size: Custom | Document Number: IH11M-MHS | Rev: 6.0

Date: Friday, January 08, 2016 | Sheet 21 of 42



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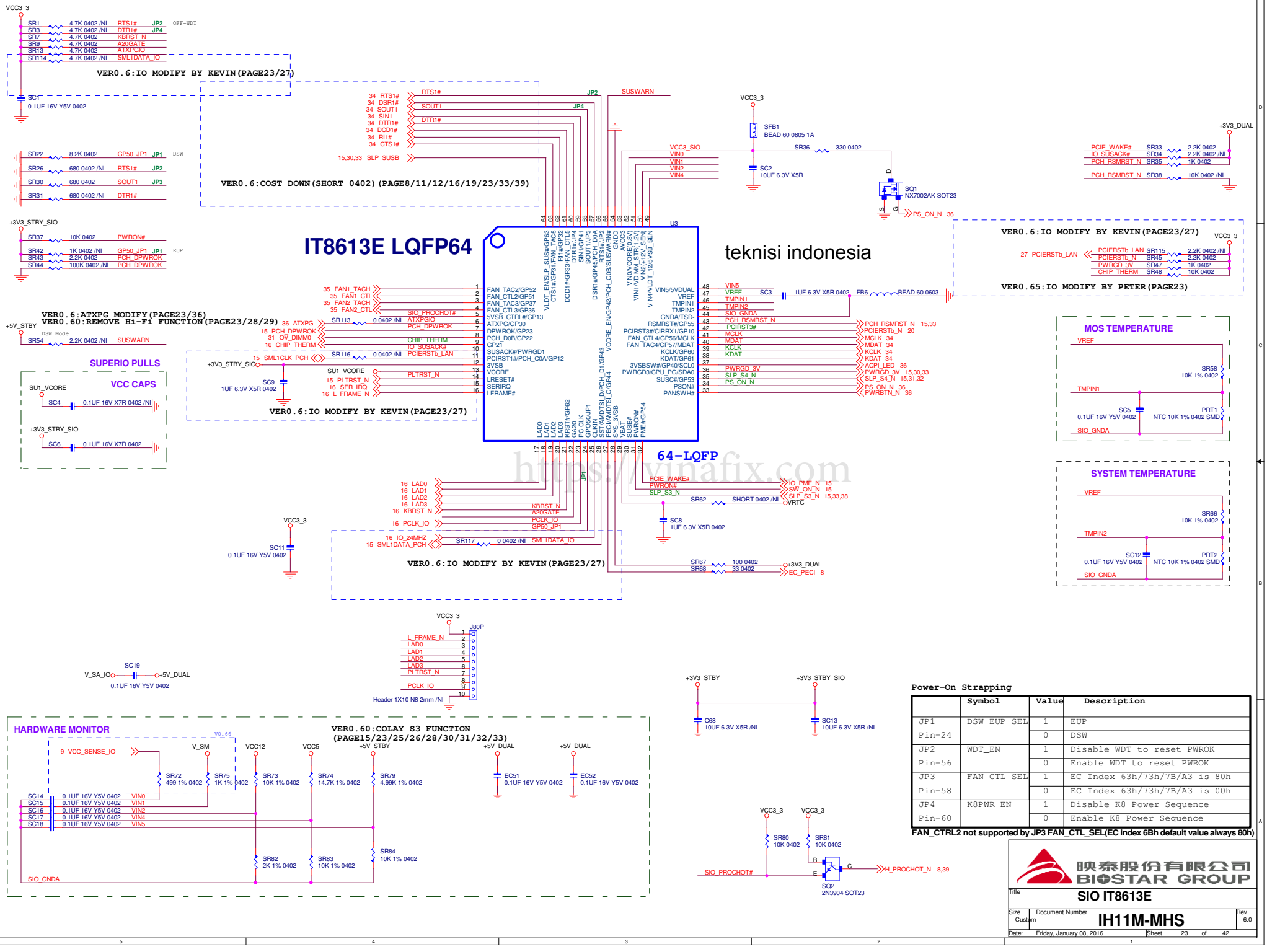
Title: DVI-I CONNECTOR

Size: B | Document Number: IH11M-MHS | Rev: 6.0

Date: Friday, January 08, 2016 | Sheet 22 of 42



	Symbol	Value	Description
JP1	DSW_EUP_SEL	1	EUP
Pin-24		0	DSW
JP2	WDT_EN	1	Disable WDT to reset PWROK
Pin-56		0	Enable WDT to reset PWROK
JP3	FAN_CTL_SEL	1	EC Index 63h/73h/7B/A3 is 80h
Pin-58		0	EC Index 63h/73h/7B/A3 is 00h
JP4	K8PWR_EN	1	Disable K8 Power Sequence
Pin-60		0	Enable K8 Power Sequence

Title	SIO IT8613E		
Size: Custom	Document Number: IH11M-MHS		Rev: 6.0
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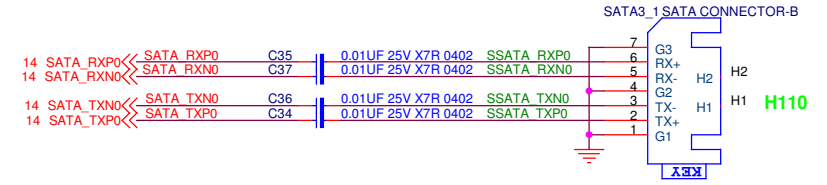

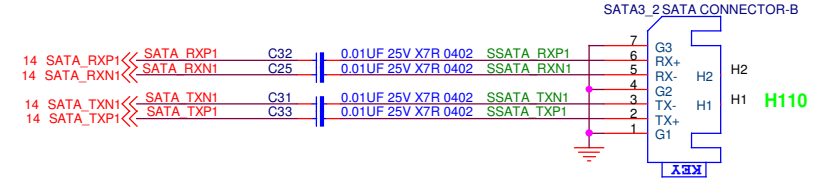

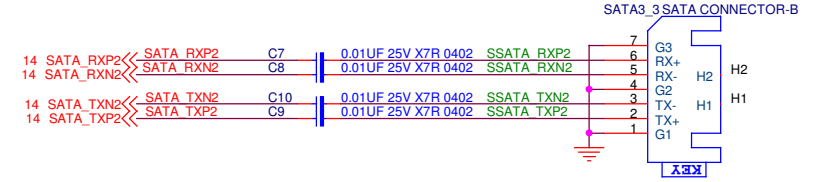

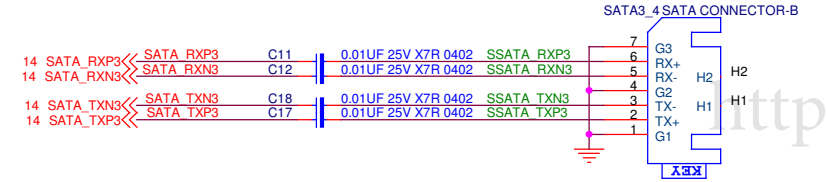

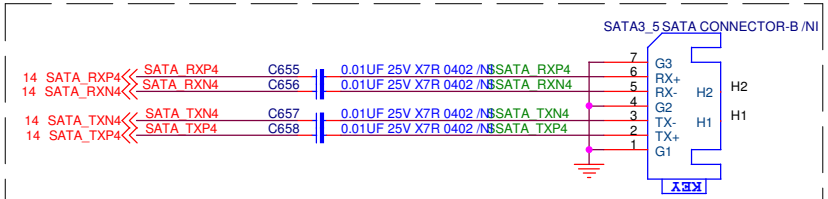

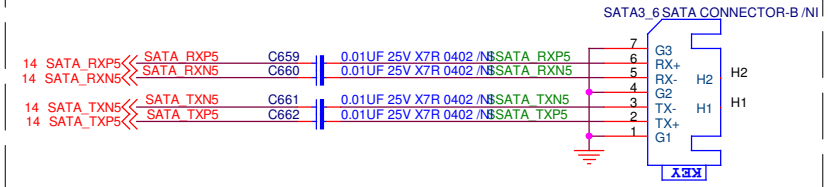

VER0.65:NEW ADD SATA CONN(PAGE14/24)

VER0.60:REMOVE SATA EXPRESS CONN(PAGE14/16/17/24)

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Title	SATA EXPRESS	
Size B	Document Number IH11M-MHS	Rev 6.0
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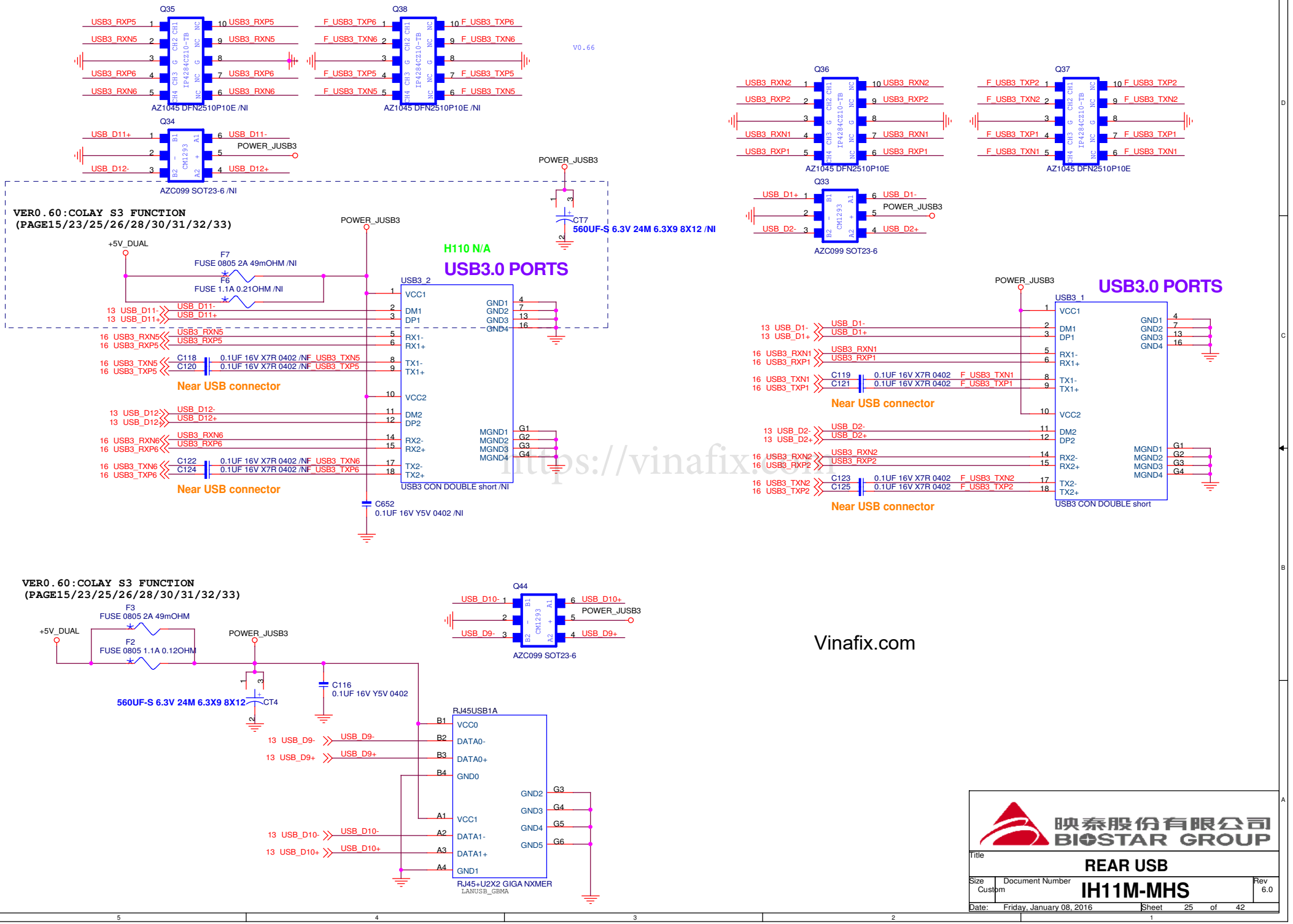
Q35
USB3_RXP5
USB3_RXN5
USB3_RXP6
USB3_RXN6
AZ1045 DFN2510P10E /NI
Q38
F_USB3_TXP6
F_USB3_TXN6
F_USB3_TXP5
F_USB3_TXN5
AZ1045 DFN2510P10E /NI
V0.66
Q34
USB_D11+
USB_D11-
POWER_JUSB3
USB_D12-
USB_D12+
AZC099 SOT23-6 /NI
Q36
USB3_RXN2
USB3_RXP2
USB3_RXN1
USB3_RXP1
AZ1045 DFN2510P10E
Q37
F_USB3_TXP2
F_USB3_TXN2
F_USB3_TXP1
F_USB3_TXN1
AZ1045 DFN2510P10E
Q33
USB_D1+
USB_D1-
POWER_JUSB3
USB_D2-
USB_D2+
AZC099 SOT23-6
VER0.60:COLAY S3 FUNCTION
(PAGE15/23/25/26/28/30/31/32/33)
POWER_JUSB3
CT7
560UF-S 6.3V 24M 6.3X9 8X12 /NI
+5V_DUAL
F7
FUSE 0805 2A 49mOHM /NI
F6
FUSE 1.1A 0.21OHM /NI
H110 N/A
USB3.0 PORTS
USB3_2
VCC1
DM1
DP1
RX1-
RX1+
VCC2
DM2
DP2
RX2-
RX2+
TX1-
TX1+
TX2-
TX2+
GND1
GND2
GND3
GND4
MGND1
MGND2
MGND3
MGND4
C118
C120
0.1UF 16V X7R 0402 /NF_USB3_TXN5
0.1UF 16V X7R 0402 /NF_USB3_TXP5
C122
C124
0.1UF 16V X7R 0402 /NF_USB3_TXN6
0.1UF 16V X7R 0402 /NF_USB3_TXP6
Near USB connector
Near USB connector
USB3 CON DOUBLE short /NI
C652
0.1UF 16V Y5V 0402 /NI
POWER_JUSB3
USB3.0 PORTS
USB3_1
C119
C121
0.1UF 16V X7R 0402
F_USB3_TXN1
F_USB3_TXP1
C123
C125
0.1UF 16V X7R 0402
F_USB3_TXN2
F_USB3_TXP2
Near USB connector
Near USB connector
USB3 CON DOUBLE short
VER0.60:COLAY S3 FUNCTION
(PAGE15/23/25/26/28/30/31/32/33)
F3
FUSE 0805 2A 49mOHM
+5V_DUAL
F2
FUSE 0805 1.1A 0.12OHM
POWER_JUSB3
560UF-S 6.3V 24M 6.3X9 8X12
CT4
C116
0.1UF 16V Y5V 0402
Q44
USB_D10-
USB_D10+
POWER_JUSB3
USB_D9-
USB_D9+
AZC099 SOT23-6
RJ45USB1A
VCC0
DATA0-
DATA0+
GND0
VCC1
DATA1-
DATA1+
GND1
GND2
GND3
GND4
GND5
RJ45+U2X2 GIGA NXMER
LANUSB_GBMA
Vinafix.com
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REAR USB
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Custom
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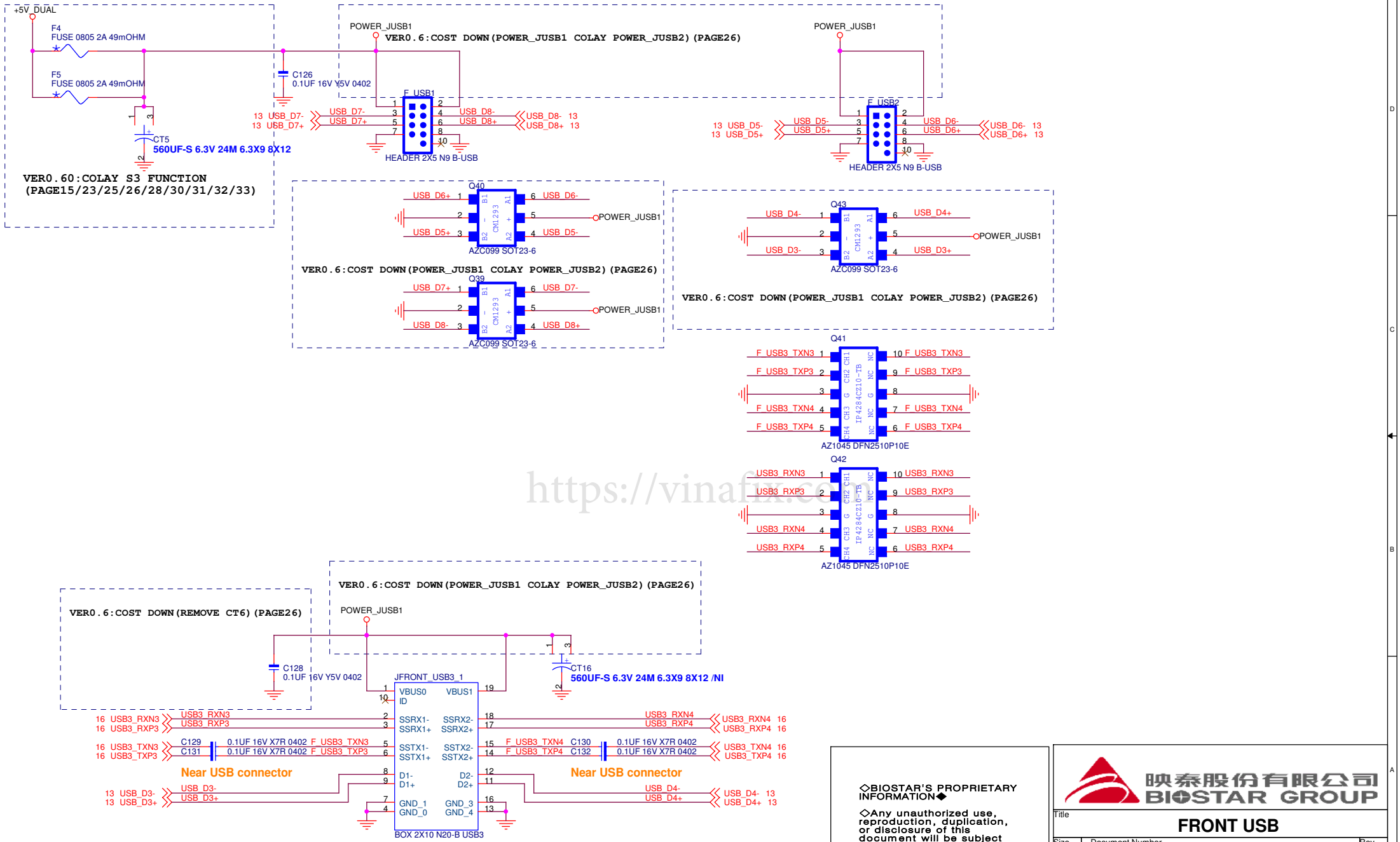
+5V_DUAL
F4
FUSE 0805 2A 49mOHM
F5
FUSE 0805 2A 49mOHM
CT5
560UF-S 6.3V 24M 6.3X9 8X12
VER0.60:COLAY S3 FUNCTION
(PAGE15/23/25/26/28/30/31/32/33)
C126
0.1UF 16V Y5V 0402
POWER_JUSB1
VER0.6:COST DOWN(POWER_JUSB1 COLAY POWER_JUSB2)(PAGE26)
F_USB1
13 USB_D7-
13 USB_D7+
USB_D7-
USB_D7+
USB_D8-
USB_D8+
USB_D8- 13
USB_D8+ 13
HEADER 2X5 N9 B-USB
F_USB2
13 USB_D5-
13 USB_D5+
USB_D5-
USB_D5+
USB_D6-
USB_D6+
USB_D6- 13
USB_D6+ 13
HEADER 2X5 N9 B-USB
Q40
USB_D6+
USB_D5+
USB_D6-
USB_D5-
POWER_JUSB1
CM1293
AZC099 SOT23-6
VER0.6:COST DOWN(POWER_JUSB1 COLAY POWER_JUSB2)(PAGE26)
Q39
USB_D7+
USB_D8-
USB_D7-
USB_D8+
POWER_JUSB1
CM1293
AZC099 SOT23-6
Q43
USB_D4-
USB_D3-
USB_D4+
USB_D3+
POWER_JUSB1
CM1293
AZC099 SOT23-6
VER0.6:COST DOWN(POWER_JUSB1 COLAY POWER_JUSB2)(PAGE26)
Q41
F_USB3_TXN3
F_USB3_TXP3
F_USB3_TXN4
F_USB3_TXP4
IP4284CZ10-TB
AZ1045 DFN2510P10E
Q42
USB3_RXN3
USB3_RXP3
USB3_RXN4
USB3_RXP4
IP4284CZ10-TB
AZ1045 DFN2510P10E
VER0.6:COST DOWN(REMOVE CT6)(PAGE26)
VER0.6:COST DOWN(POWER_JUSB1 COLAY POWER_JUSB2)(PAGE26)
POWER_JUSB1
C128
0.1UF 16V Y5V 0402
CT16
560UF-S 6.3V 24M 6.3X9 8X12 /NI
JFRONT_USB3_1
VBUS0
VBUS1
ID
SSRX1-
SSRX1+
SSRX2-
SSRX2+
SSTX1-
SSTX1+
SSTX2-
SSTX2+
D1-
D1+
D2-
D2+
GND_1
GND_0
GND_3
GND_4
16 USB3_RXN3
16 USB3_RXP3
16 USB3_TXN3
16 USB3_TXP3
C129
C131
0.1UF 16V X7R 0402
F_USB3_TXN3
F_USB3_TXP3
Near USB connector
13 USB_D3-
13 USB_D3+
USB_D3-
USB_D3+
C130
C132
F_USB3_TXN4
F_USB3_TXP4
USB3_RXN4 16
USB3_RXP4 16
USB3_TXN4 16
USB3_TXP4 16
Near USB connector
USB_D4- 13
USB_D4+ 13
BOX 2X10 N20-B USB3
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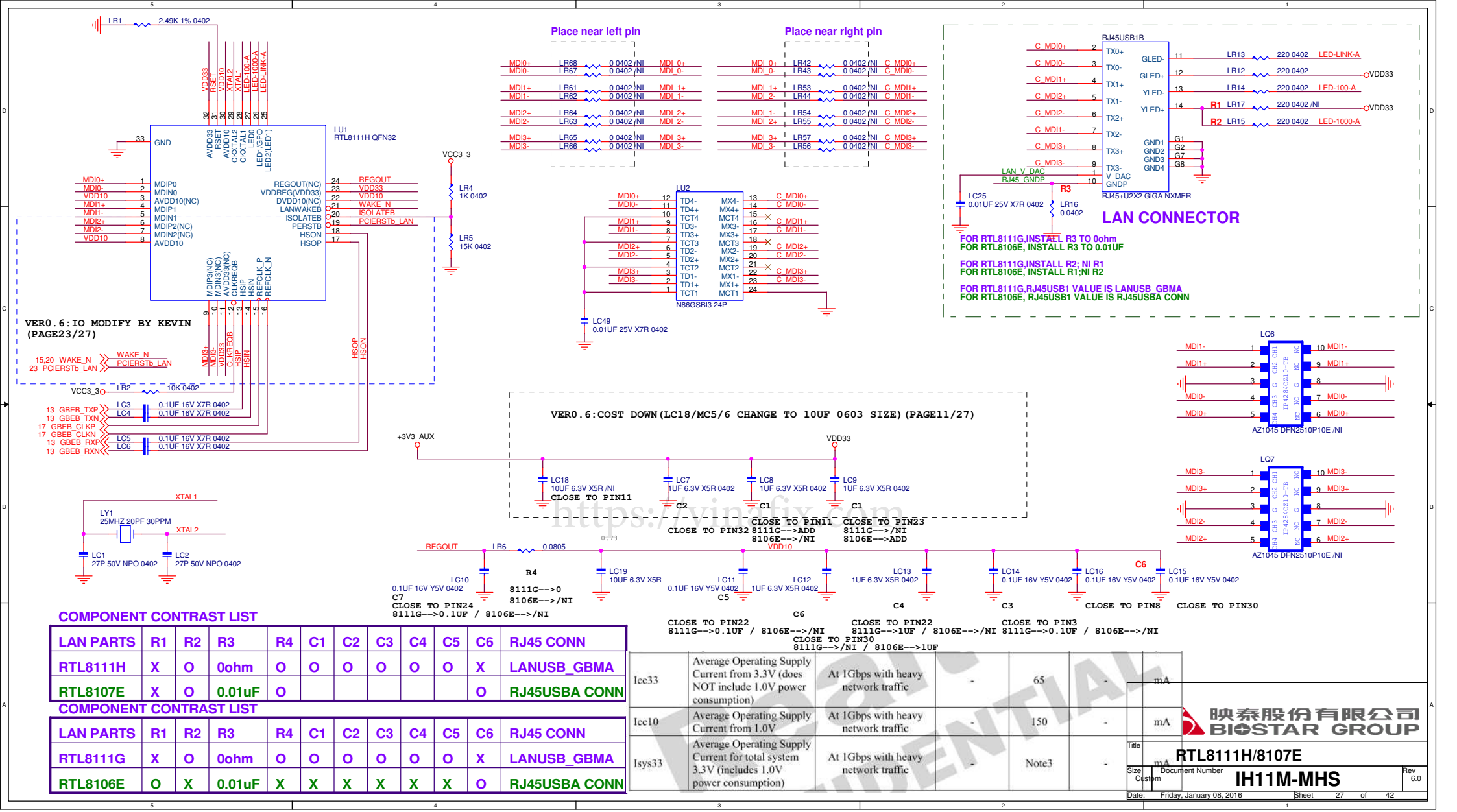

COMPONENT CONTRAST LIST

LAN PARTS	R1	R2	R3	R4	C1	C2	C3	C4	C5	C6	RJ45 CONN
RTL8111H	X	O	0ohm	O	O	O	O	O	O	X	LANUSB_GBMA
RTL8107E	X	O	0.01uF	O						O	RJ45USBA CONN

COMPONENT CONTRAST LIST

LAN PARTS	R1	R2	R3	R4	C1	C2	C3	C4	C5	C6	RJ45 CONN
RTL8111G	X	O	0ohm	O	O	O	O	O	O	X	LANUSB_GBMA
RTL8106E	O	X	0.01uF	X	X	X	X	X	X	O	RJ45USBA CONN

Icc33	Average Operating Supply Current from 3.3V (does NOT include 1.0V power consumption)	At 1Gbps with heavy network traffic	-	65	- mA
Icc10	Average Operating Supply Current from 1.0V	At 1Gbps with heavy network traffic	-	150	- mA
Isys33	Average Operating Supply Current for total system 3.3V (includes 1.0V power consumption)	At 1Gbps with heavy network traffic	-	Note3	- mA

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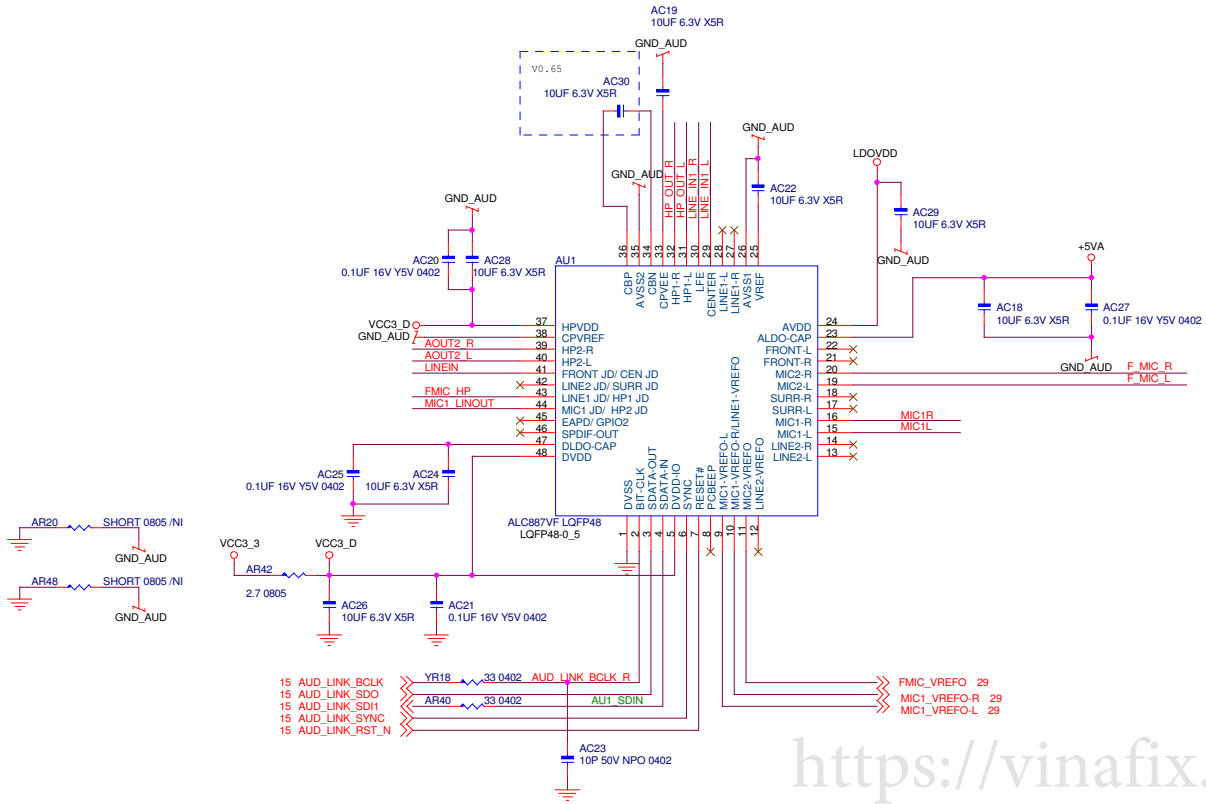

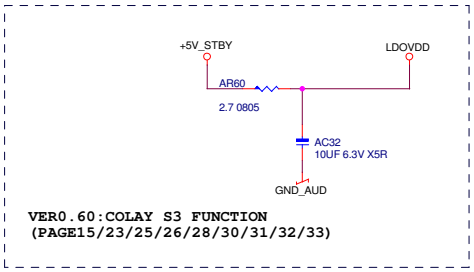

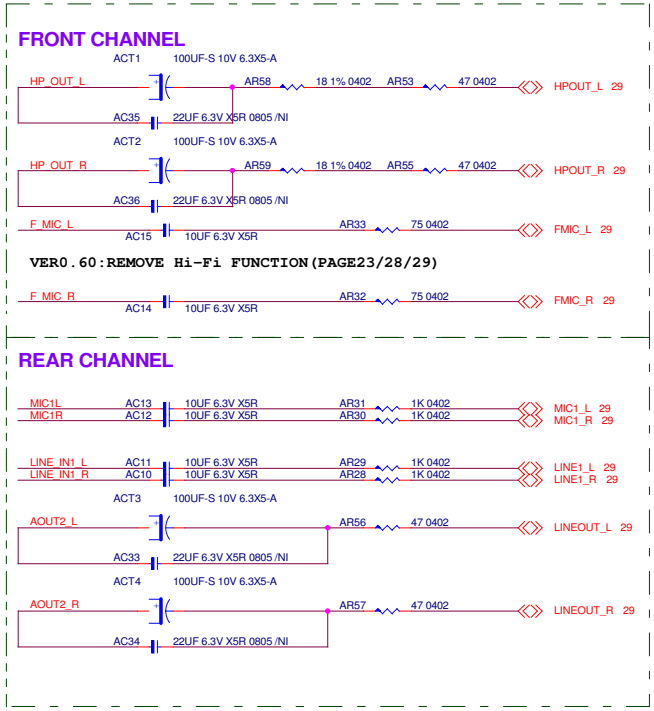

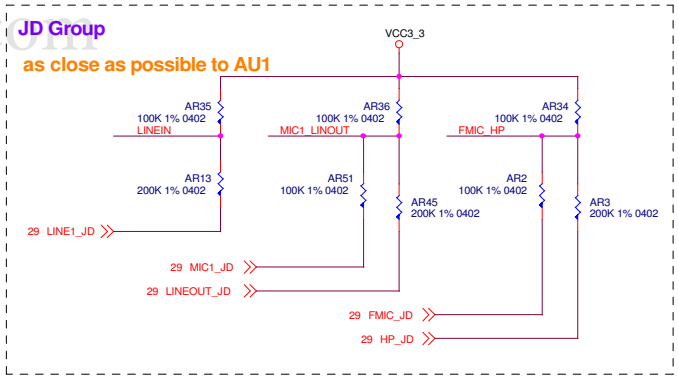

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Title: AUDIO CODEC ALC887

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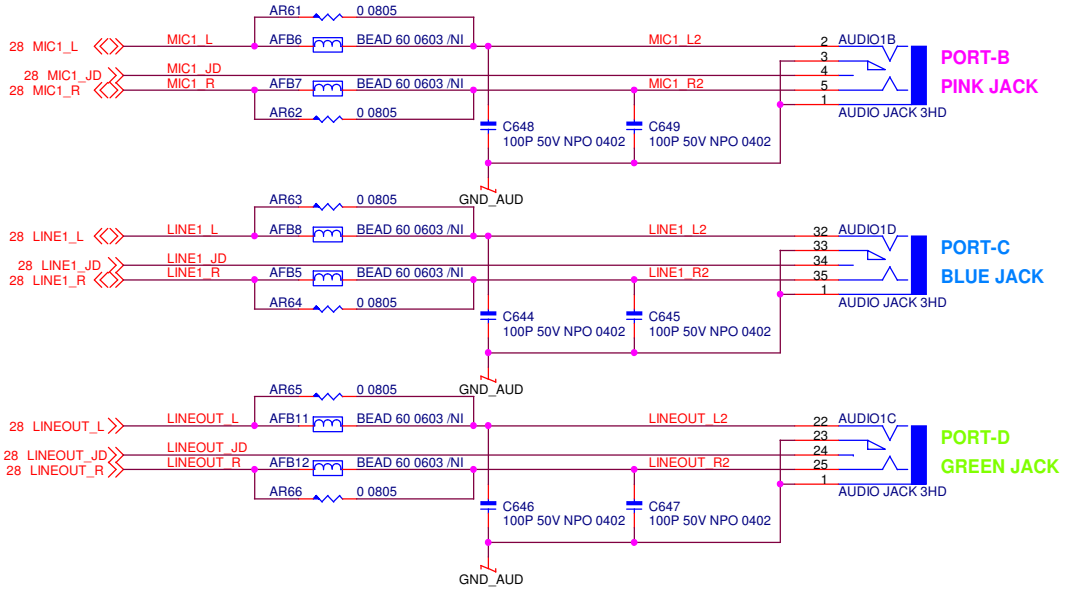

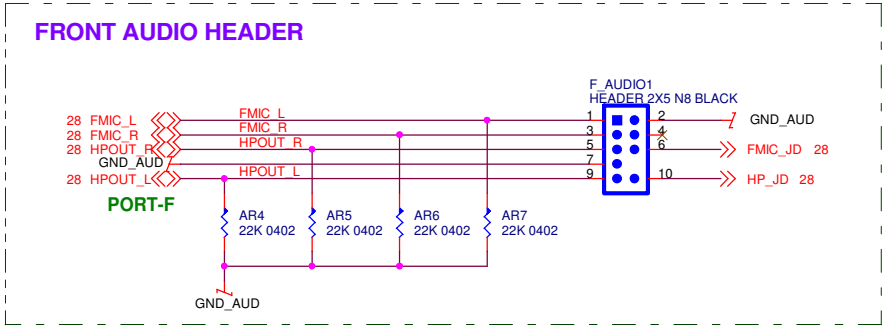

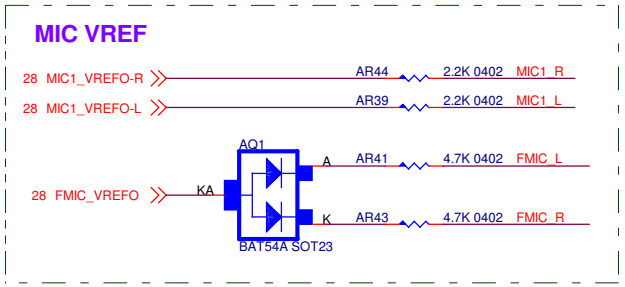

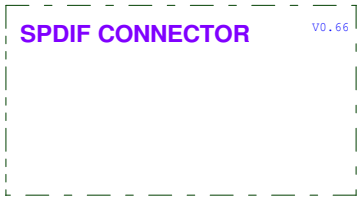

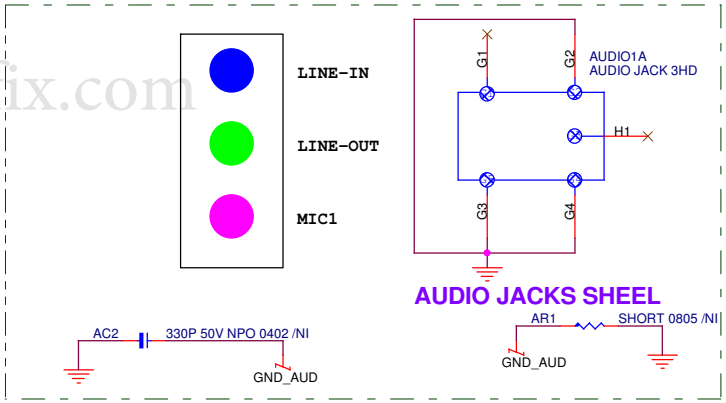

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Title: AUDIO CONNECTOR

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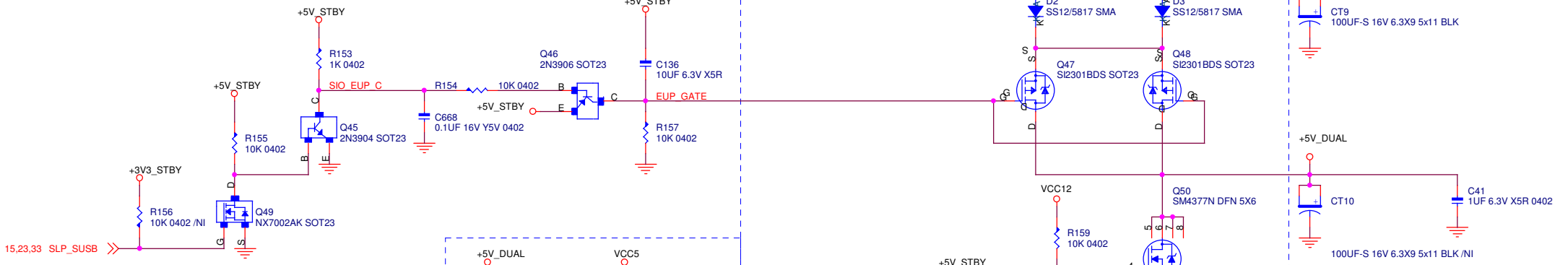
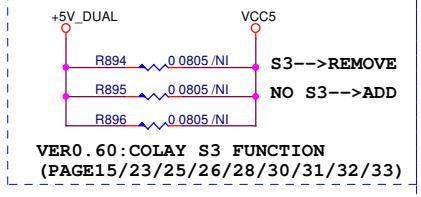


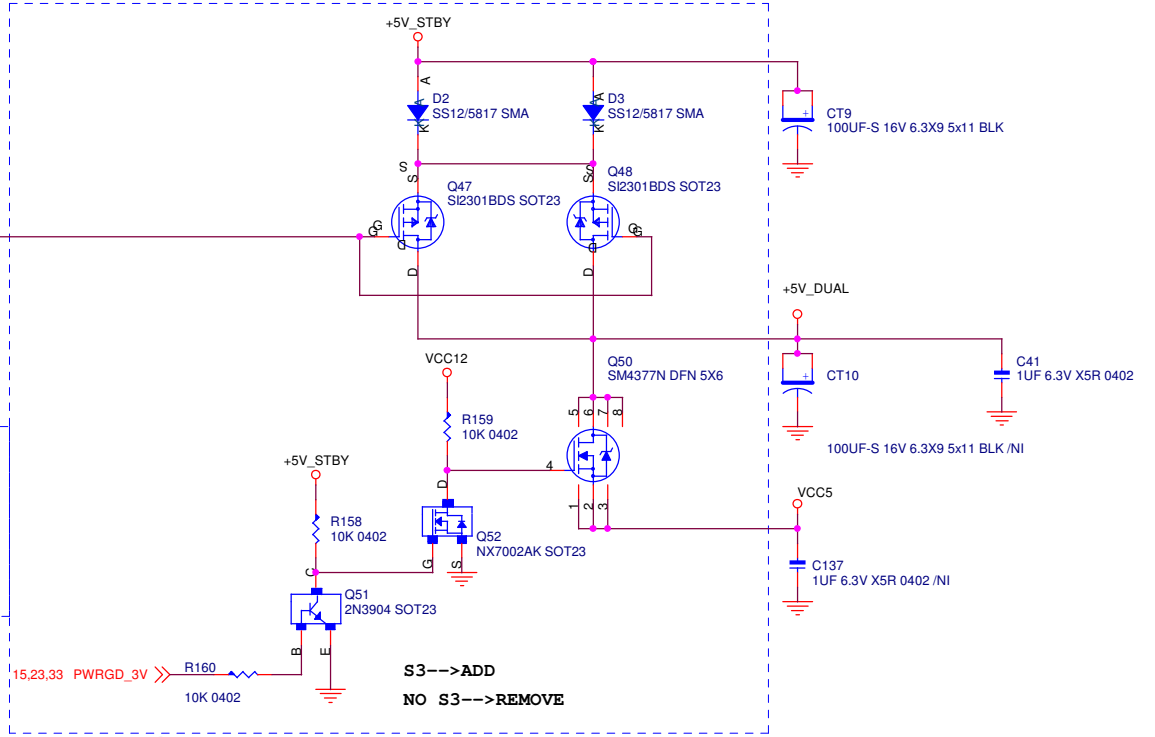
Energy-Using Product(EUP)

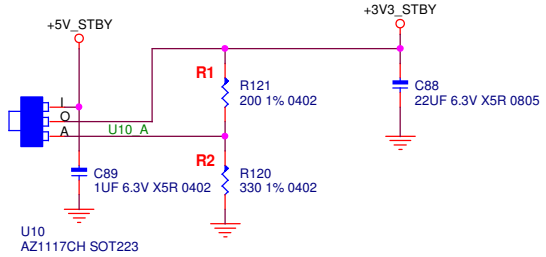
SLP_SUSB Hight :EUP OFF

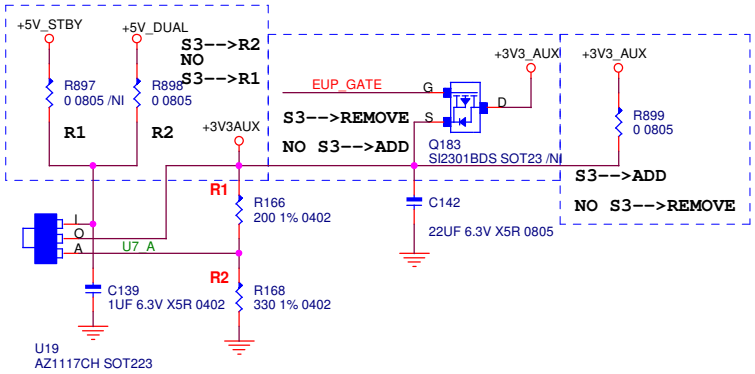
SLP_SUSB Low :EUP ON

Vout=Vref (1.25V) X (1+R2/R1)=3.3125V

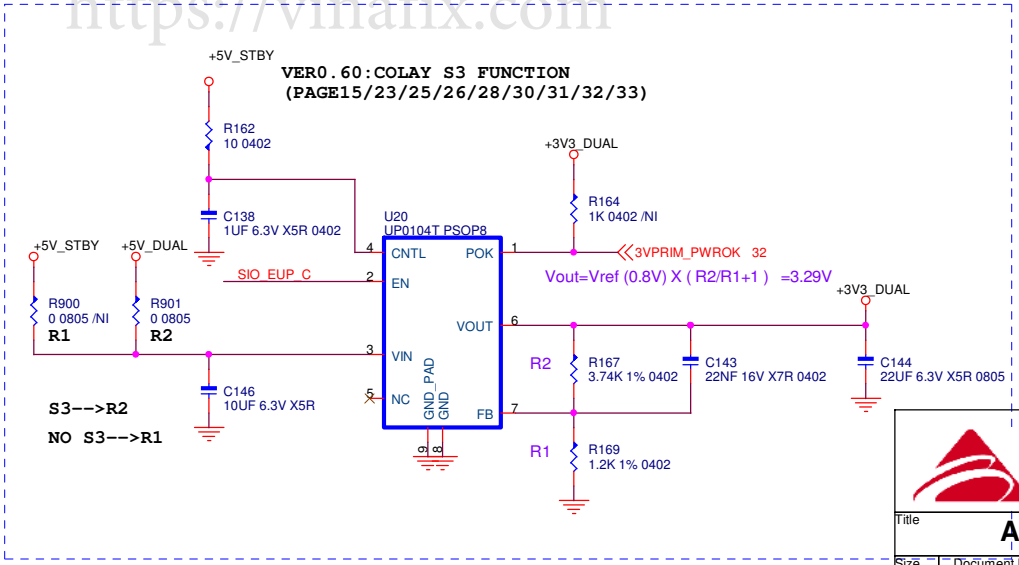








Vout=Vref (1.25V) X (1+R2/R1)=3.3125V



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Title	ACPI POWER	
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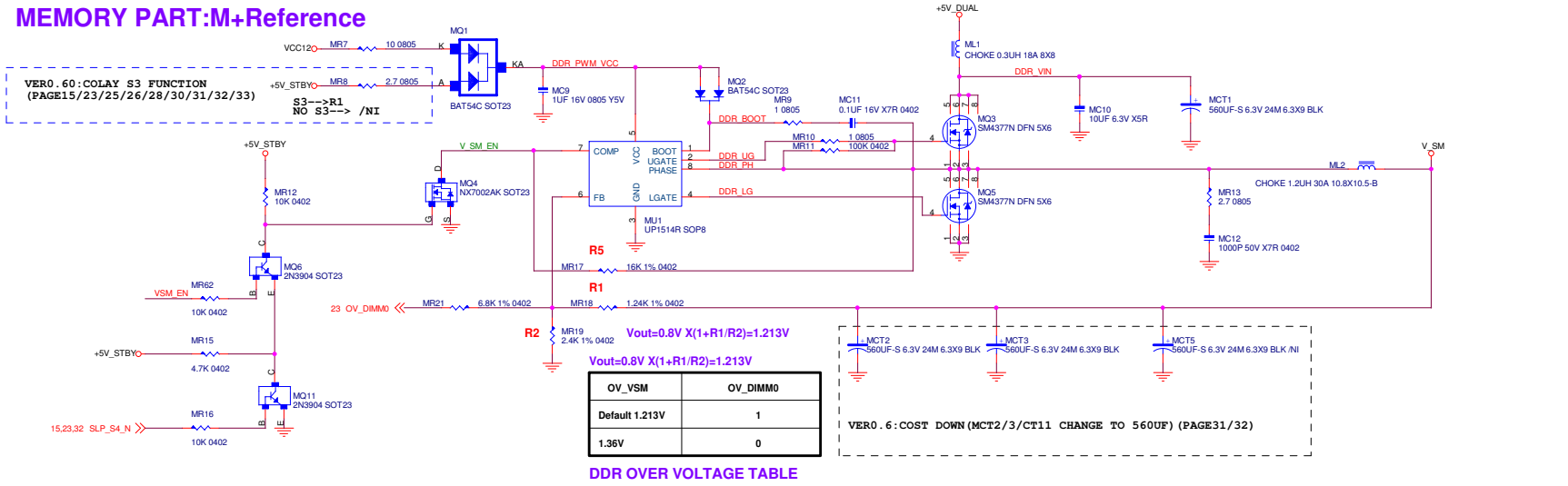
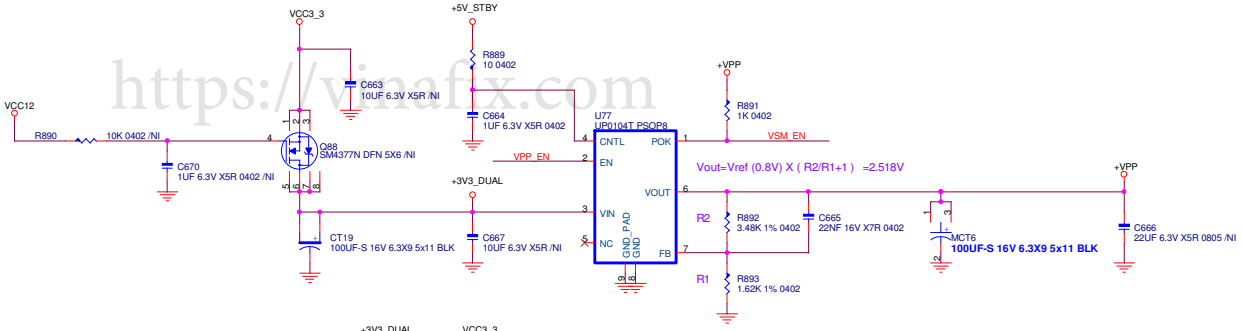
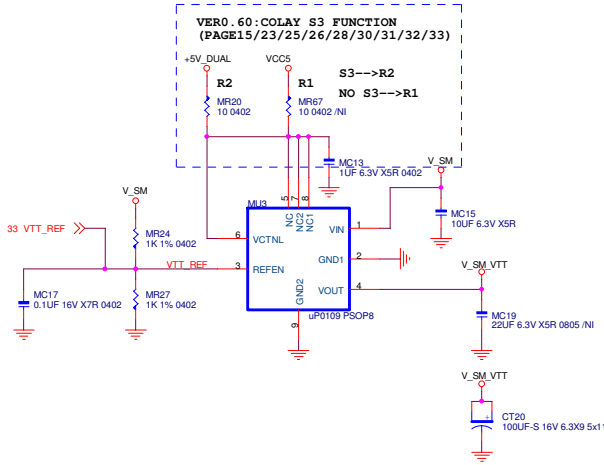
MEMORY PART:M+Reference

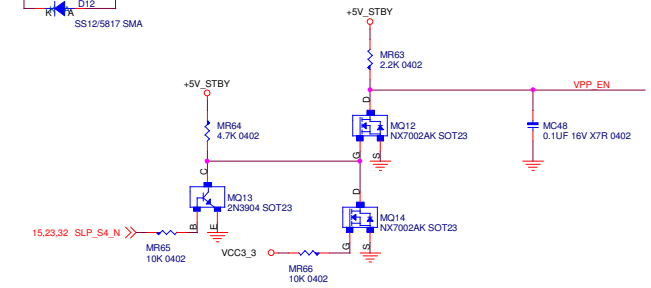


OV_VSM	OV_DIMM0
Default 1.213V	1
1.36V	0

DDR OVER VOLTAGE TABLE







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Title: MEMORY DC-DC

Size: C | Document Number: IH11M-MHS | Rev: 6.0

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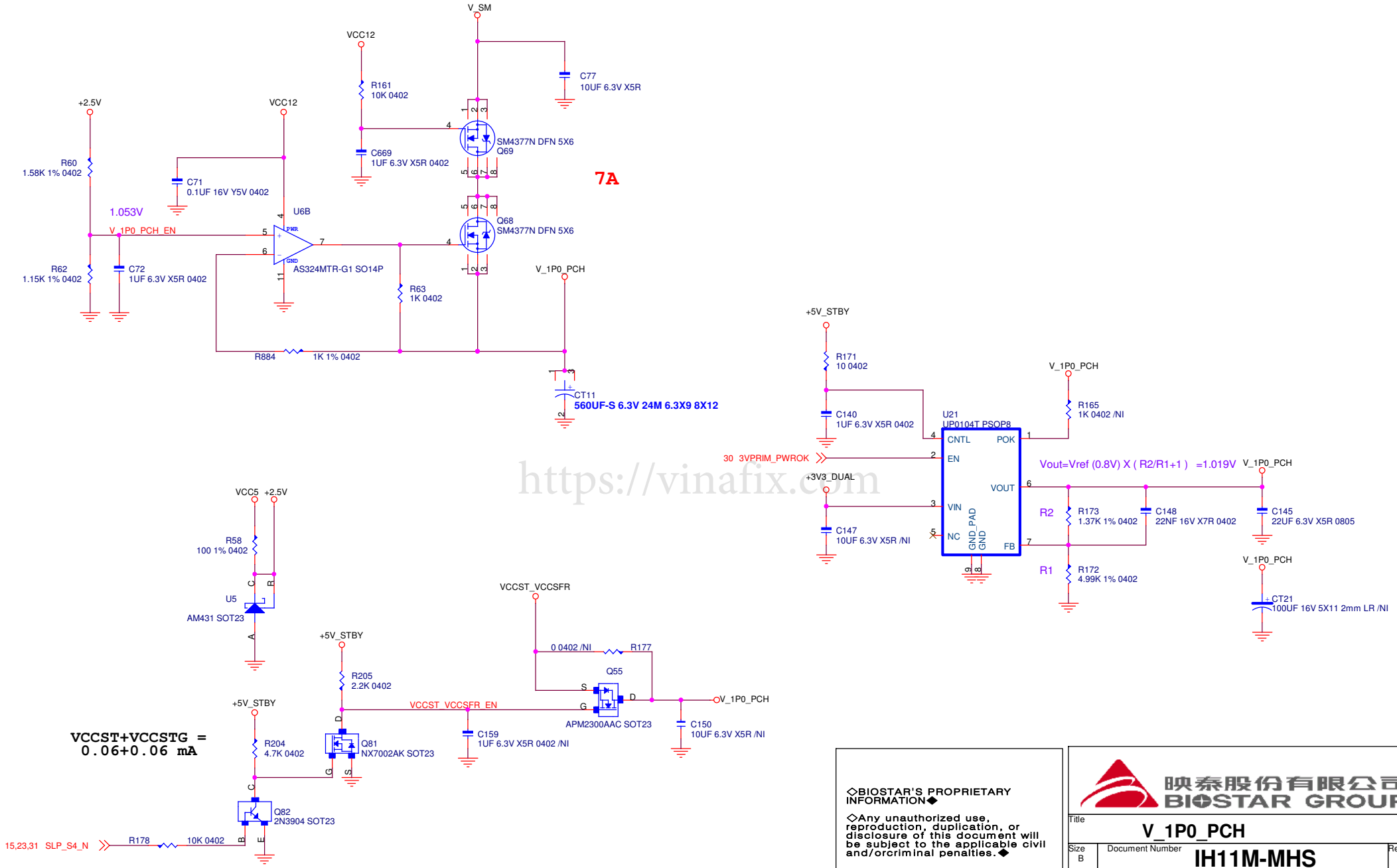

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Title	V_1P0_PCH	
Size B	Document Number IH11M-MHS	Rev 6.0
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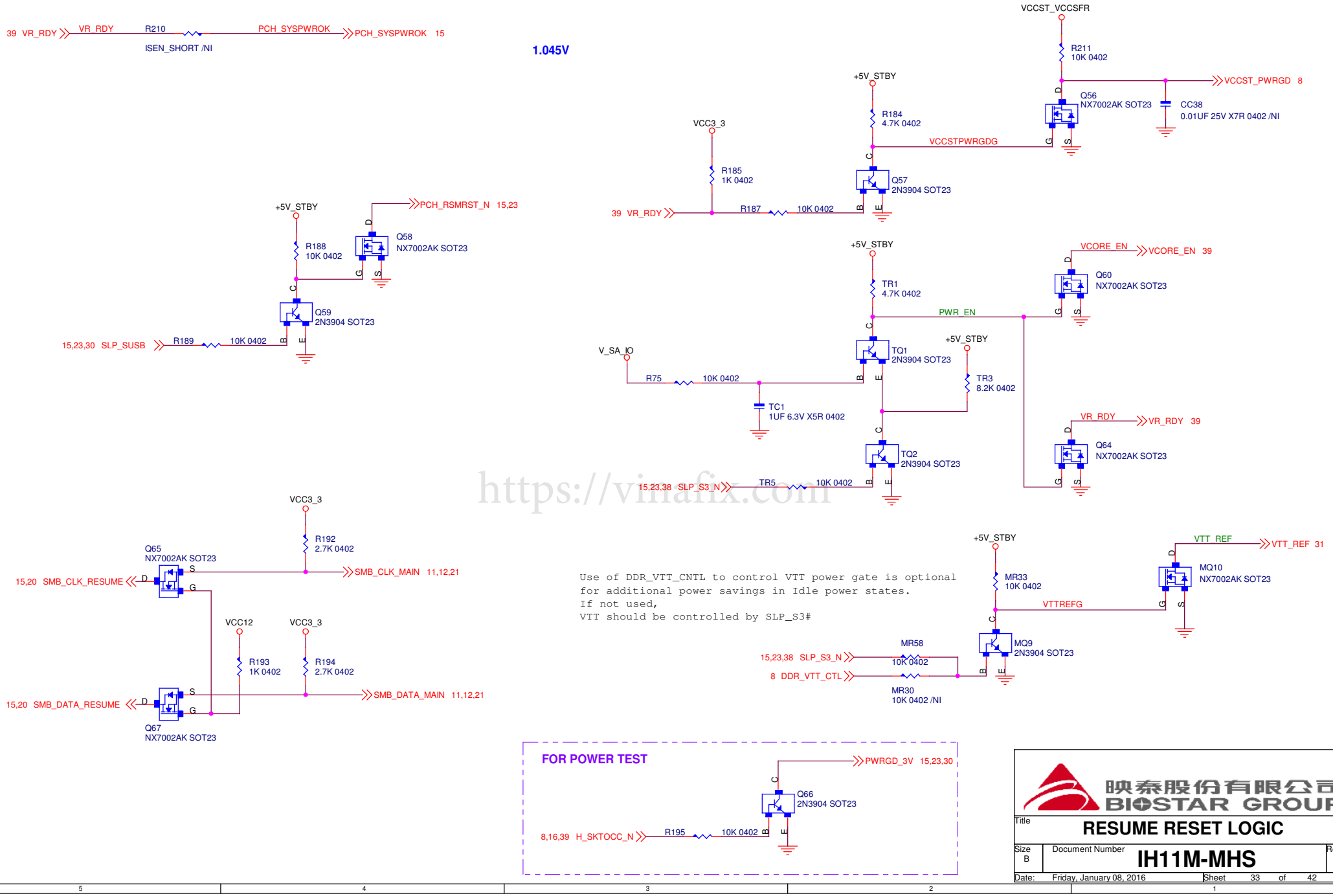

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Title	RESUME RESET LOGIC	
Size B	Document Number IH11M-MHS	Rev 6.0
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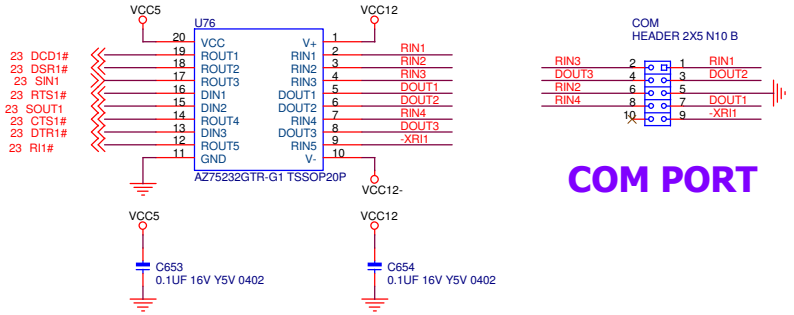
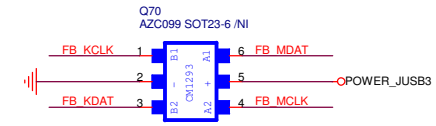


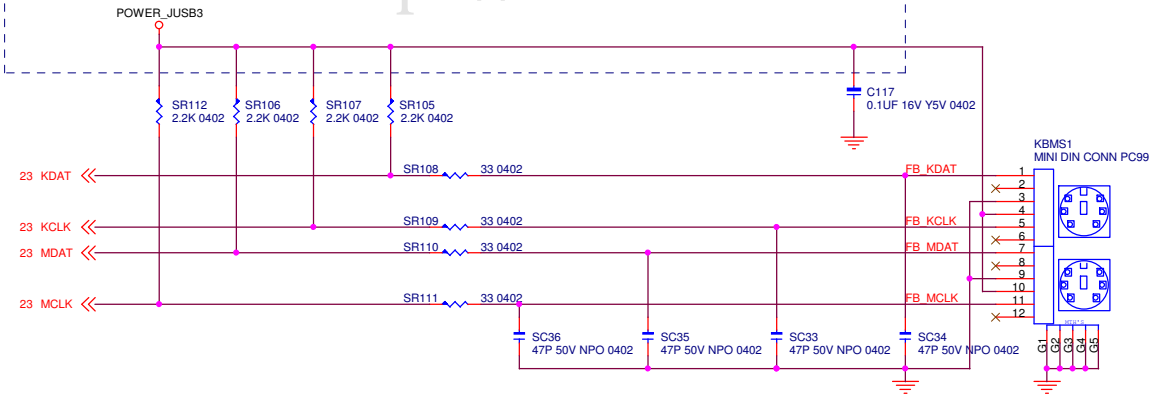
COM PORT

WAKE ON RING

KEYBOARD & MOUSE



VER0.6:COST DOWN(POWER_JUSB4/POWER_JUSB5 COLAY)(PAGE25/34)



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Title: COM1 / PS2 CONN

Size: Custom | Document Number: IH11M-MHS | Rev: 6.0

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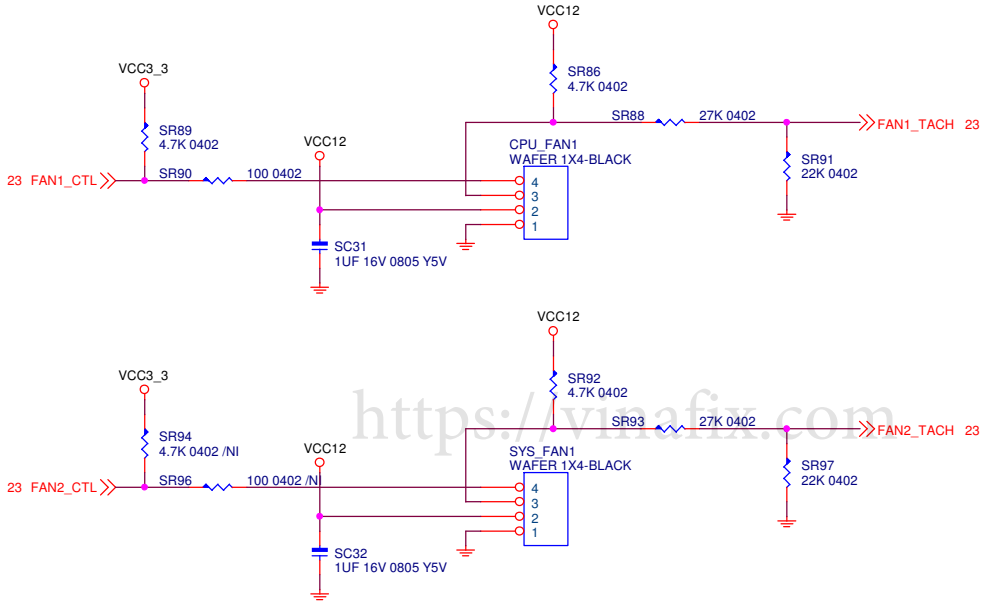

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Title: FAN & PS2

Size: B | Document Number: IH11M-MHS | Rev: 6.0

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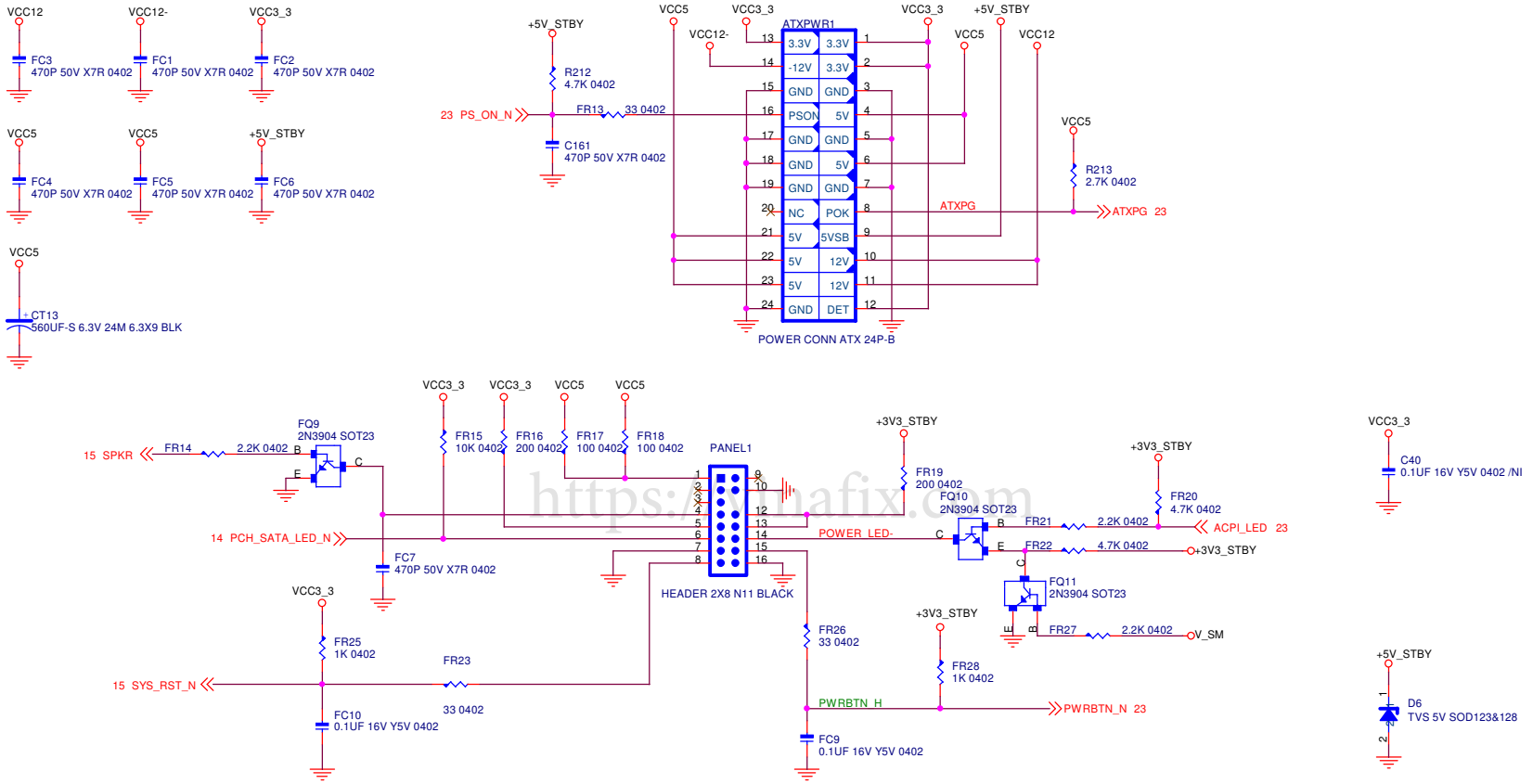
FP PART: F+Reference



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Title: 24PIN CONN & FP

Size: Custom | Document Number: IH11M-MHS | Rev: 6.0

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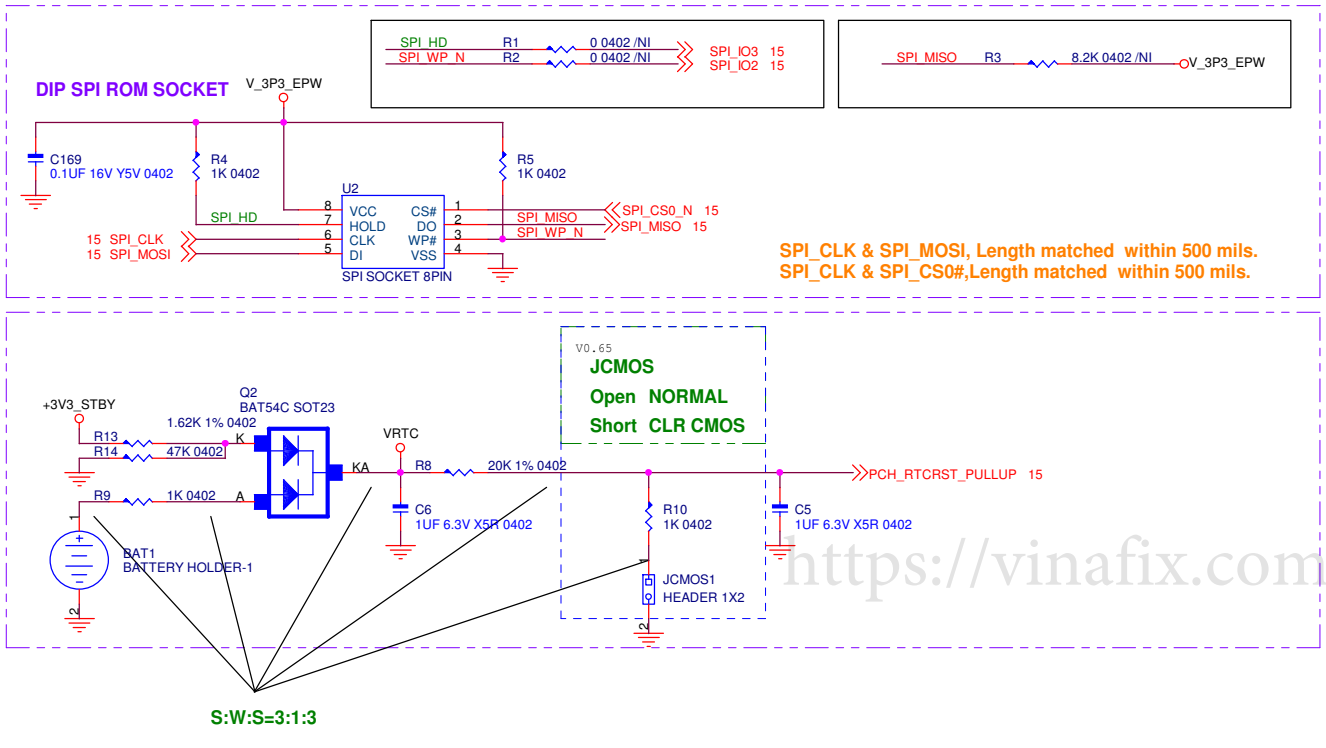

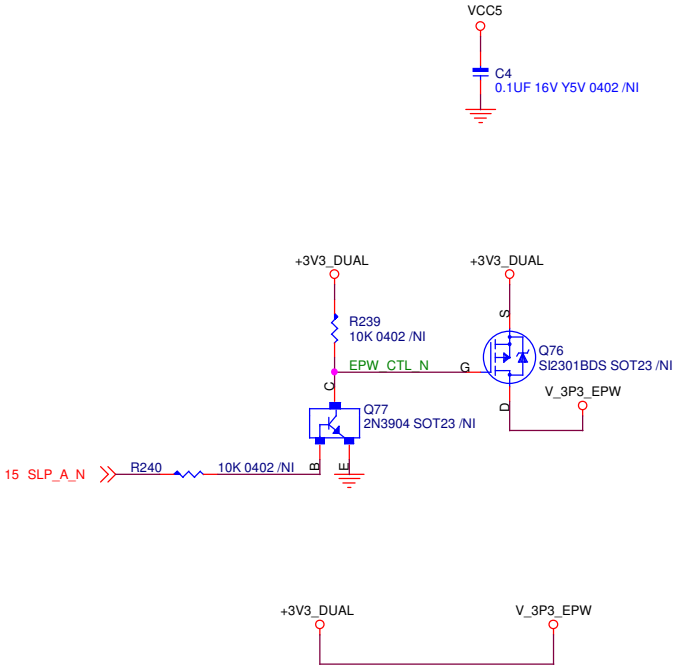

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Title	SPI ROM/RTC CRYSTAL/BAT	
Size B	Document Number IH11M-MHS	Rev 6.0
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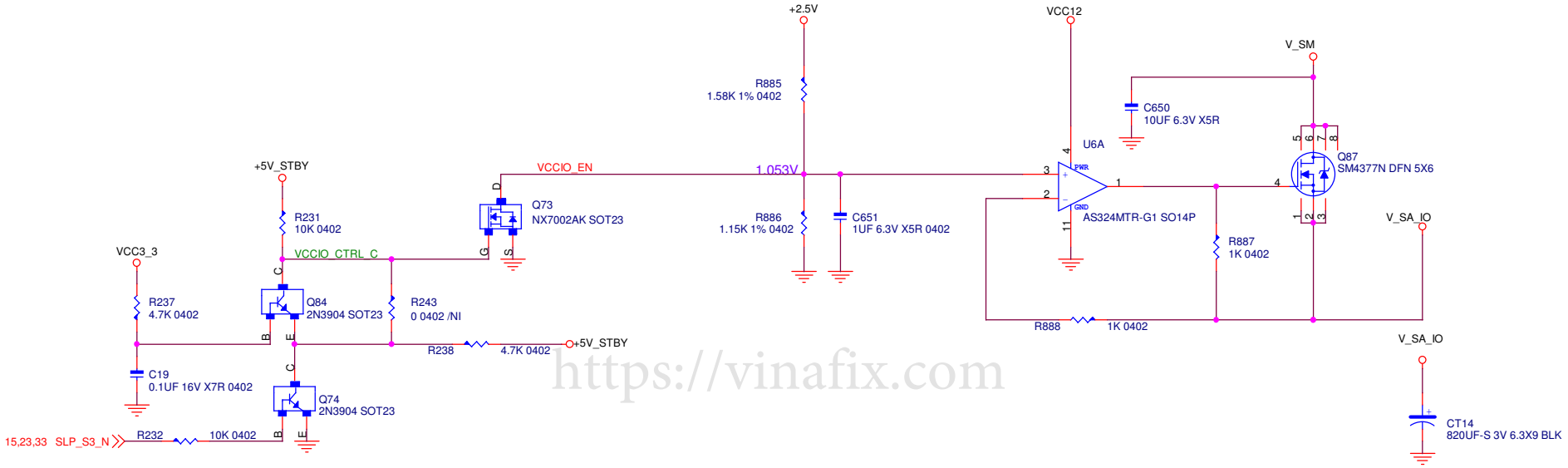

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BIOSTAR GROUP

Title	VCCIO/VCCSA DC-DC	
Size B	Document Number IH11M-MHS	Rev 6.0
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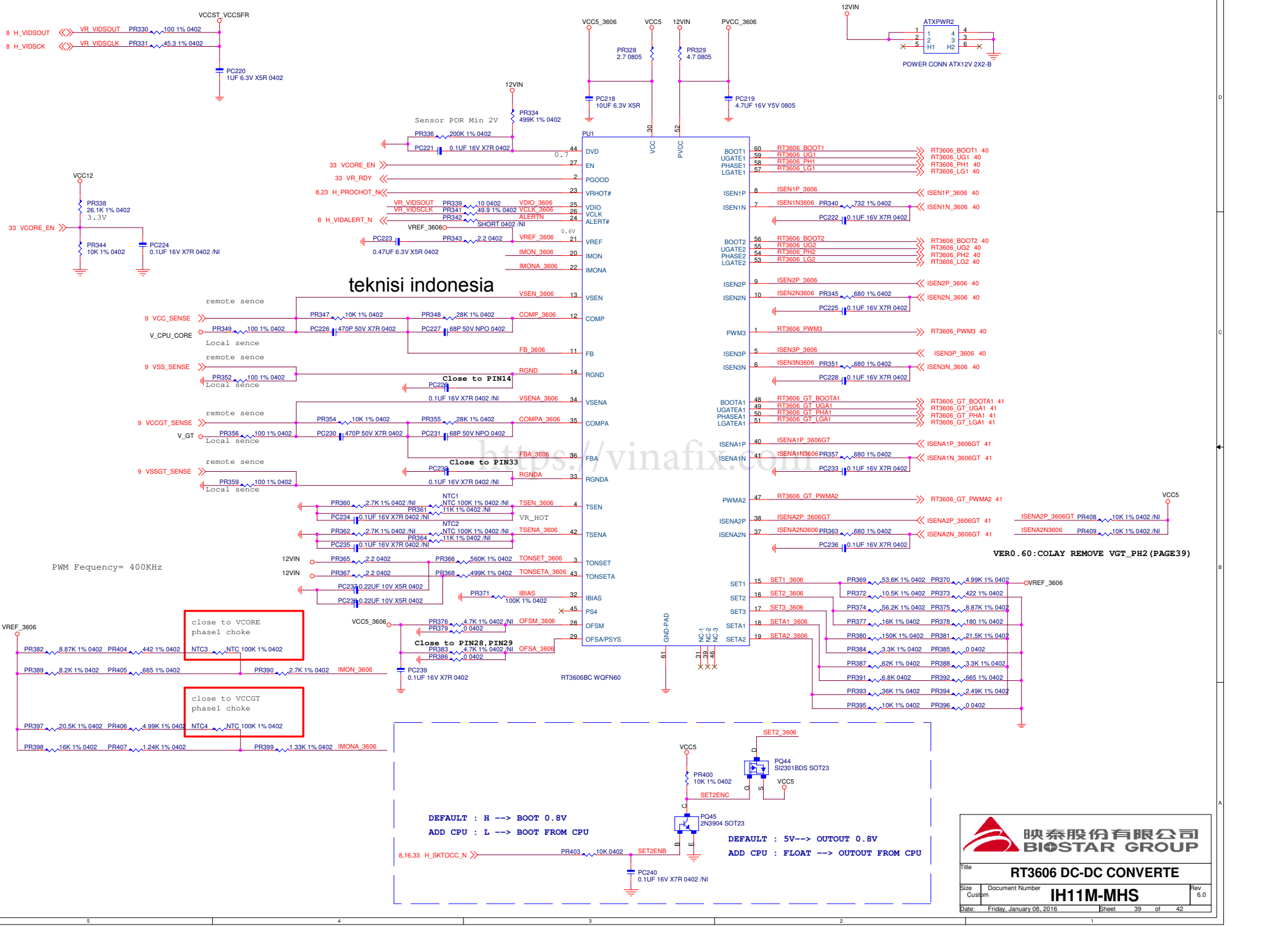
VCCST_VCCSFR
8 H_VIDSOUT
8 H_VIDSCK
VR_VIDSOUT PR330 100 1% 0402
VR_VIDSCLK PR331 45.3 1% 0402
PC220 1UF 6.3V X5R 0402
VCC12
PR338 26.1K 1% 0402
3.3V
33 VCORE_EN
PR344 10K 1% 0402
PC224 0.1UF 16V X7R 0402 /NI
12VIN
PR334 499K 1% 0402
Sensor POR Min 2V
PR336 200K 1% 0402
PC221 0.1UF 16V X7R 0402
VCC5_3606
VCC5
PR328 2.7 0805
PR329 4.7 0805
PVCC_3606
PC218 10UF 6.3V X5R
PC219 4.7UF 16V Y5V 0805
ATXPWR2
POWER CONN ATX12V 2X2-B
PU1
33 VCORE_EN
33 VR_RDY
8,23 H_PROCHOT_N
8 H_VIDALERT_N
VR_VIDSOUT PR339 10 0402 VDIO_3606
VR_VIDSCLK PR341 49.9 1% 0402 VCLK_3606
PR342 SHORT 0402 /NI ALERTN
VREF_3606
PR343 2.2 0402
PC223 0.47UF 6.3V X5R 0402
VREF_3606
IMON_3606
IMONA_3606
DVD
EN
PGOOD
VRHOT#
VDIO
VCLK
ALERT#
VREF
IMON
IMONA
VCC
PVCC
BOOT1 RT3606_BOOT1
UGATE1 RT3606_UG1
PHASE1 RT3606_PH1
LGATE1 RT3606_LG1
ISEN1P ISEN1P_3606
ISEN1N ISEN1N3606 PR340 732 1% 0402
PC222 0.1UF 16V X7R 0402
BOOT2 RT3606_BOOT2
UGATE2 RT3606_UG2
PHASE2 RT3606_PH2
LGATE2 RT3606_LG2
ISEN2P ISEN2P_3606
ISEN2N ISEN2N3606 PR345 680 1% 0402
PC225 0.1UF 16V X7R 0402
PWM3 RT3606_PWM3
ISEN3P ISEN3P_3606
ISEN3N ISEN3N3606 PR351 680 1% 0402
PC228 0.1UF 16V X7R 0402
BOOTA1 RT3606_GT_BOOTA1
UGATEA1 RT3606_GT_UGA1
PHASEA1 RT3606_GT_PHA1
LGATEA1 RT3606_GT_LGA1
ISENA1P ISENA1P_3606GT
ISENA1N ISENA1N3606 PR357 680 1% 0402
PC233 0.1UF 16V X7R 0402
PWMA2 RT3606_GT_PWMA2
ISENA2P ISENA2P_3606GT
ISENA2N ISENA2N3606 PR363 680 1% 0402
PC236 0.1UF 16V X7R 0402
ISENA2P_3606GT PR408 10K 1% 0402 /NI
ISENA2N3606 PR409 10K 1% 0402 /NI
VER0.60:COLAY REMOVE VGT_PH2(PAGE39)
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https://vinafix.com
remote sence
9 VCC_SENSE
V_CPU_CORE
PR347 10K 1% 0402
PR348 28K 1% 0402
PR349 100 1% 0402
PC226 470P 50V X7R 0402
PC227 68P 50V NPO 0402
Local sence
VSEN_3606
COMP_3606
FB_3606
9 VSS_SENSE
PR352 100 1% 0402
Close to PIN14
PC229 0.1UF 16V X7R 0402 /NI
RGND
VSENA_3606
9 VCCGT_SENSE
V_GT
PR354 10K 1% 0402
PR355 28K 1% 0402
PR356 100 1% 0402
PC230 470P 50V X7R 0402
PC231 68P 50V NPO 0402
COMPA_3606
FBA_3606
9 VSSGT_SENSE
Close to PIN33
PC232 0.1UF 16V X7R 0402 /NI
PR359 100 1% 0402
RGNDA
PWM Fequency= 400KHz
NTC1
PR360 2.7K 1% 0402 /NI
NTC 100K 1% 0402 /NI
PR361 11K 1% 0402 /NI
PC234 0.1UF 16V X7R 0402 /NI
TSEN_3606
VR_HOT
NTC2
PR362 2.7K 1% 0402 /NI
NTC 100K 1% 0402 /NI
PR364 11K 1% 0402 /NI
PC235 0.1UF 16V X7R 0402 /NI
TSENA_3606
12VIN
PR365 2.2 0402
PR366 560K 1% 0402
TONSET_3606
PR367 2.2 0402
PR368 499K 1% 0402
TONSETA_3606
PC237 0.22UF 10V X5R 0402
PC238 0.22UF 10V X5R 0402
PR371 100K 1% 0402
IBIAS
PS4
OFSM_3606
OFSA_3606
VCC5_3606
PR376 4.7K 1% 0402 /NI
PR379 0 0402
Close to PIN28,PIN29
PR383 4.7K 1% 0402 /NI
PR386 0 0402
PC239 0.1UF 16V X7R 0402
RT3606BC WQFN60
GND-PAD
NC-1
NC-2
NC-3
SET1 SET1_3606
SET2 SET2_3606
SET3 SET3_3606
SETA1 SETA1_3606
SETA2 SETA2_3606
PR369 53.6K 1% 0402
PR370 4.99K 1% 0402
PR372 10.5K 1% 0402
PR373 422 1% 0402
PR374 56.2K 1% 0402
PR375 8.87K 1% 0402
PR377 16K 1% 0402
PR378 180 1% 0402
PR380 150K 1% 0402
PR381 21.5K 1% 0402
PR384 3.3K 1% 0402
PR385 0 0402
PR387 62K 1% 0402
PR388 3.3K 1% 0402
PR391 6.8K 0402
PR392 665 1% 0402
PR393 36K 1% 0402
PR394 2.49K 1% 0402
PR395 10K 1% 0402
PR396 0 0402
VREF_3606
close to VCORE
phase1 choke
NTC3
NTC 100K 1% 0402
PR382 8.87K 1% 0402
PR404 442 1% 0402
PR389 8.2K 1% 0402
PR405 665 1% 0402
PR390 2.7K 1% 0402
IMON_3606
close to VCCGT
phase1 choke
NTC4
NTC 100K 1% 0402
PR397 20.5K 1% 0402
PR406 4.99K 1% 0402
PR398 16K 1% 0402
PR407 1.24K 1% 0402
PR399 1.33K 1% 0402
IMONA_3606
SET2_3606
PQ44 SI2301BDS SOT23
PR400 10K 1% 0402
SET2ENC
PQ45 2N3904 SOT23
DEFAULT : H --> BOOT 0.8V
ADD CPU : L --> BOOT FROM CPU
DEFAULT : 5V--> OUTOUT 0.8V
ADD CPU : FLOAT --> OUTOUT FROM CPU
8,16,33 H_SKTOCC_N
PR403 10K 0402
SET2ENB
PC240 0.1UF 16V X7R 0402 /NI
映泰股份有限公司
BIOSTAR GROUP
Title
RT3606 DC-DC CONVERTE
Size Custom
Document Number IH11M-MHS
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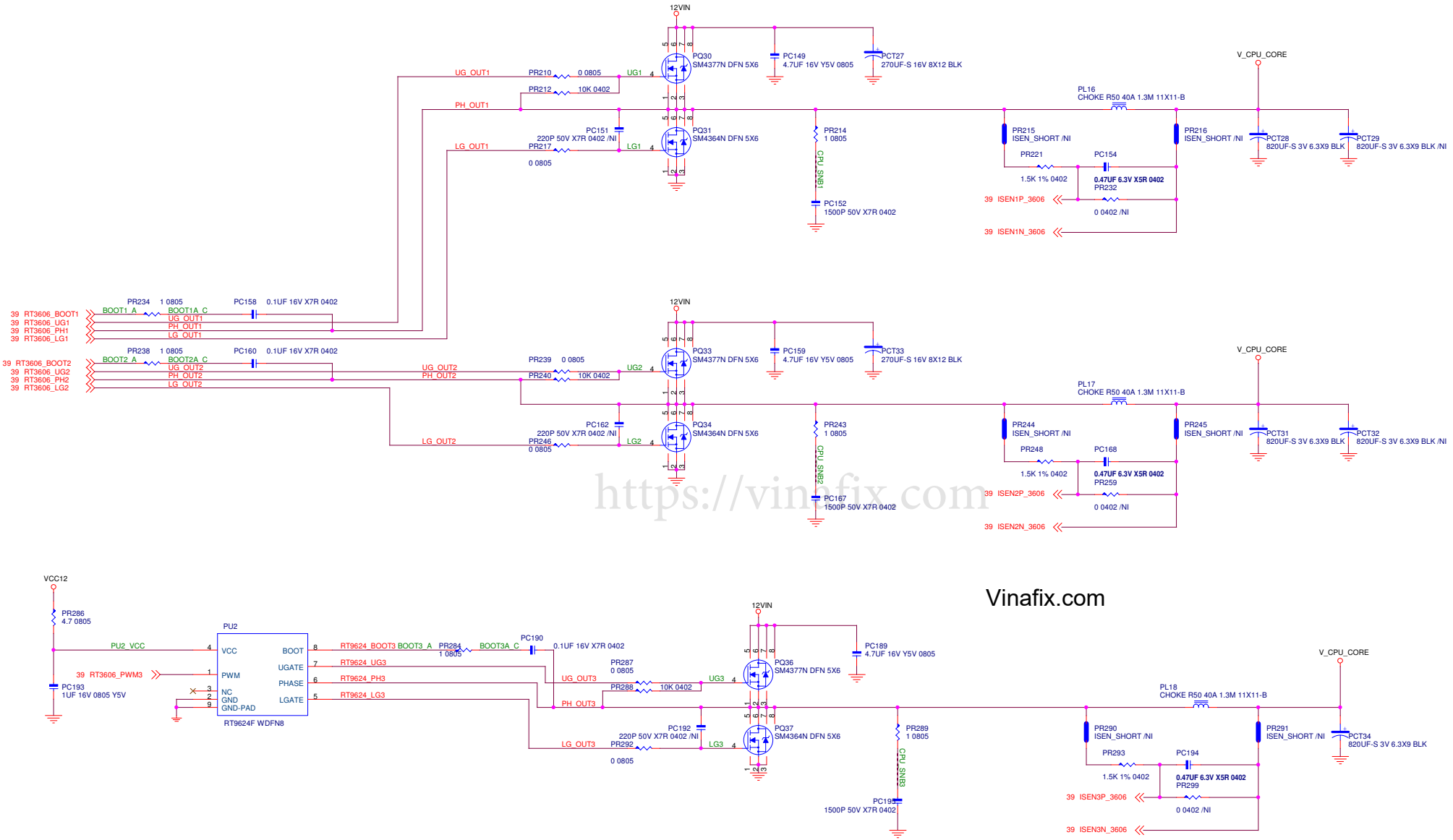

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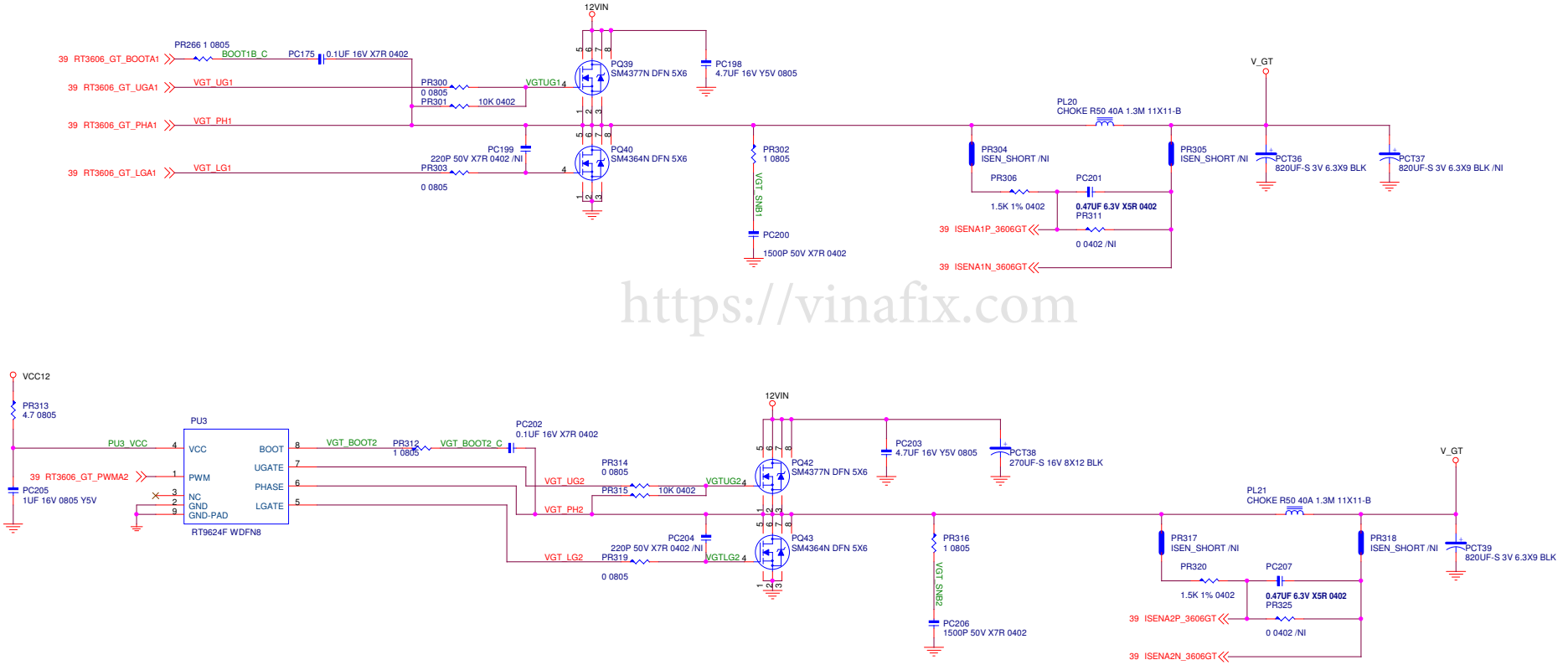
Skylake S-line 42 95W RT3606_VGT



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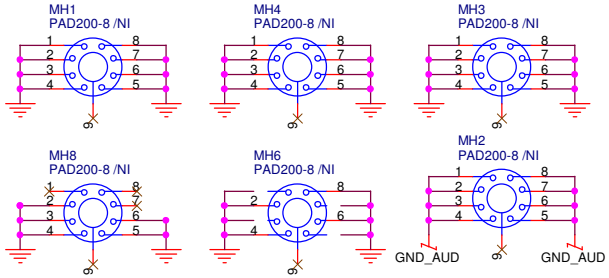

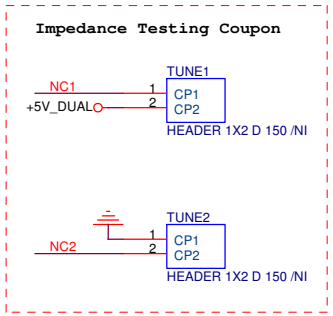

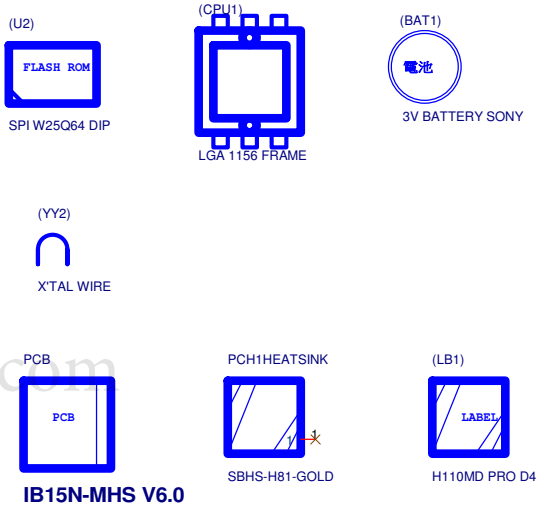

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Title	BOM	
Size B	Document Number IH11M-MHS	Rev 6.0
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