

# BIB75-MHA ( Fm Z77A-MHT V5.0)

Ver:1.0

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36	RESUME RESET LOGIC
37	ACPI POWER CONTROL
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## CPU:

Intel Ivy Bridge processors in LGA1155 Package 95W

## System Chipset:

*Intel B75 colay with Q77-RAID 0/1/5/10 & iAMT( Active Management Technology 8.0)*

## Main Memory:

Dual Channel/DDR-III\*4(Max 16GB) 1333/1600  
DDR3-1066 /1333/1600

## Onboard Device:

Super I/O:Fintek F81866AD-COM x6 +F81216-COMx4  
LAN:Intel 82579 PHY-iAMT & PCIe-Realtek8111E - 20120222 Change  
HD Codec::ALC892 -3 jacks

## Power solution:

**CPU Voltage Regulators:3phase by ISL6363**  
**AXG voltage Regulators:1phase by ISL6363**  
**VCCIO voltage Regulators:1phase by ISL6363**  
DDR voltage Regulators:1Phase by FP6326

## Expansion Slots:

PCI EXPRESS 16X SLOTx1  
PCI EXPRESS 4X SLOTx1  
PCI SLOT\*2

## REAR IO:

PS/2 +2 layer USB2.0 Port  
*HDMI Port ( DP--> PS161 ) -( Co\_LAY /w-COM2 ) + COM Port*  
*DVI ( DP--> PS161 ) +VGA Port*  
2 layer USB2.0/3.0 + Gb RJ-45 Ports  
2 layer USB3.0 + Gb RJ-45 Ports  
Audio Jack x3

## Front I/O:

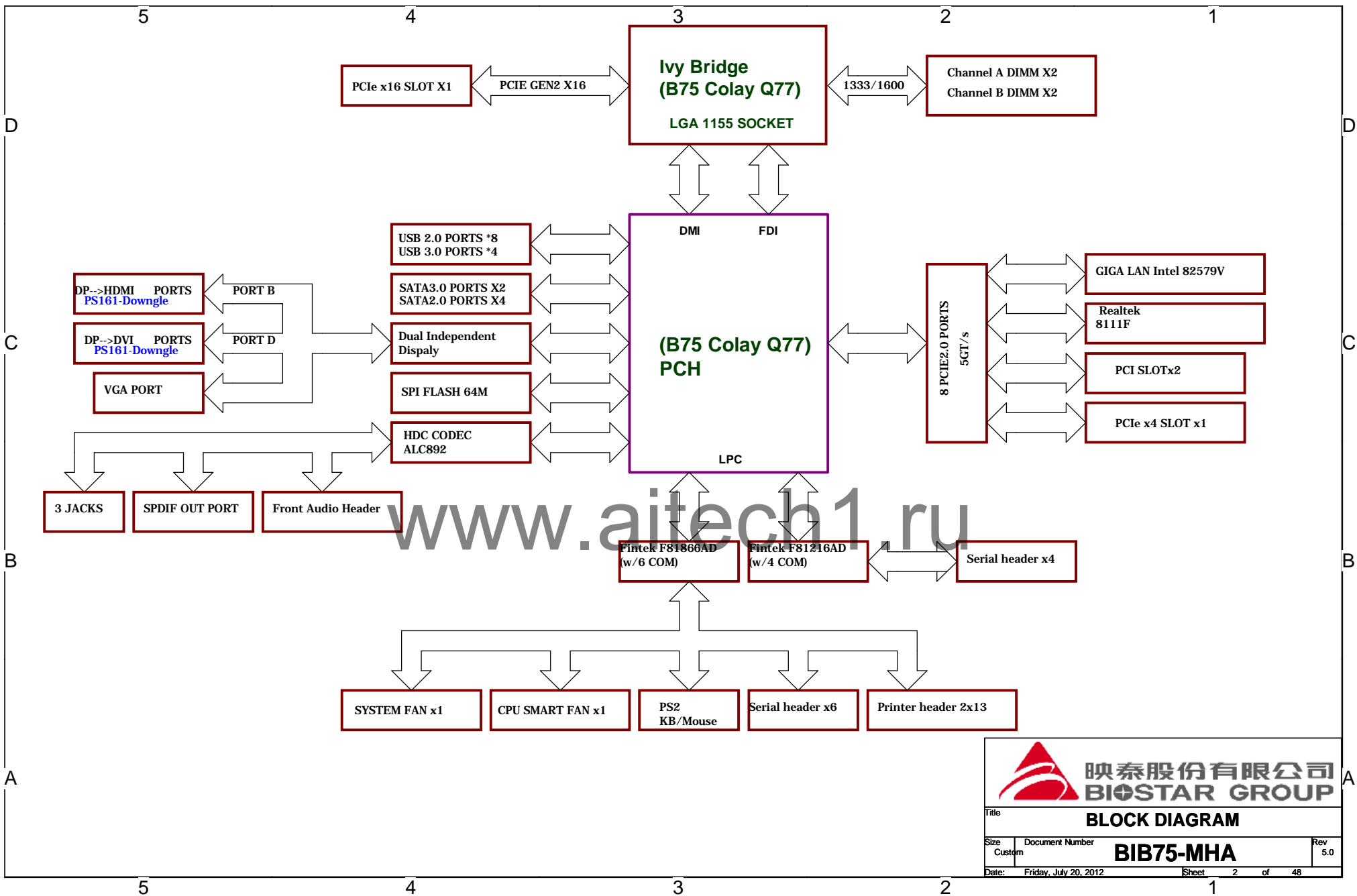
5SATA2(Black)+ 1SATA3(white)  
USB2.0 BOX Header \* 2  
USB3.0 BOX Header \* 1  
CPU /System FAN  
Serial header BOX Header 2x5  
Front Audio Header & SPDIF Out 1


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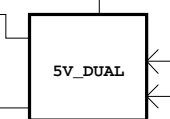
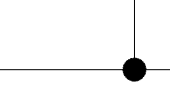
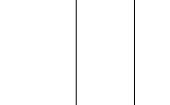
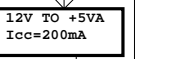
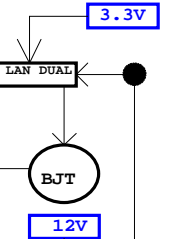
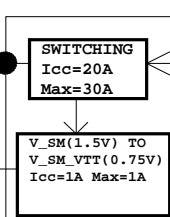
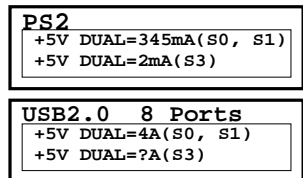
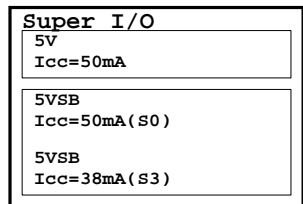
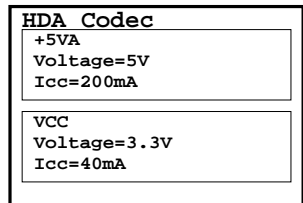
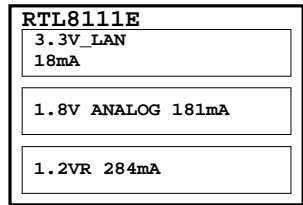
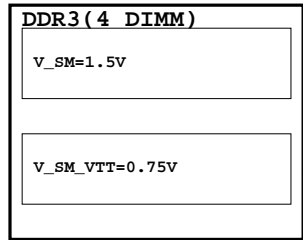




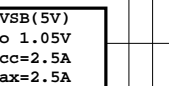
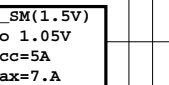
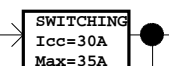
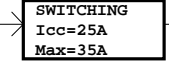
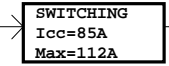
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<b>Size</b> Custom	<b>Document Number</b> <b>BIB75-MHA</b>		<b>Rev</b> 5.0
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# POWER DELIVERY MAP

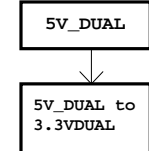
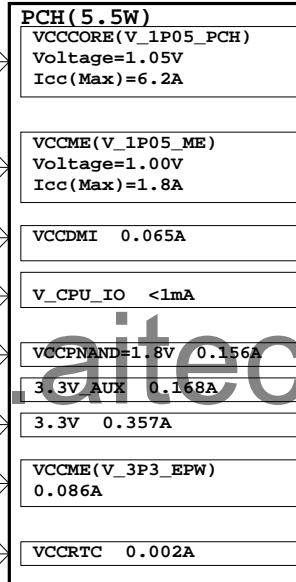
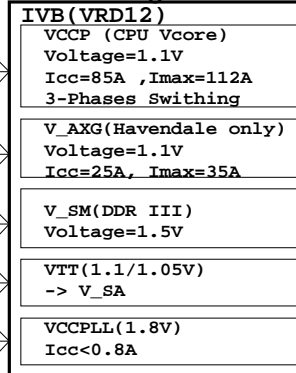
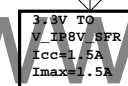


12V(4PIN)

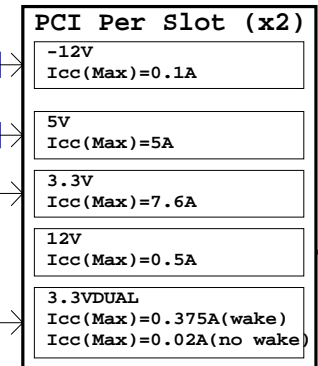
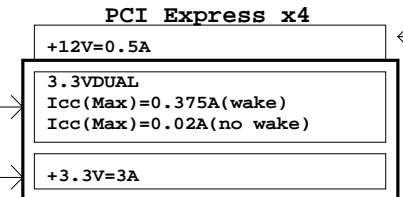
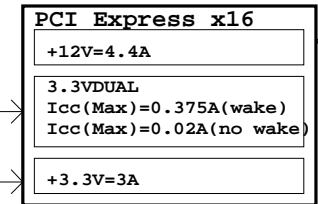


5VSB

3.3V



3.3V



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# BIB75-MHA REV 0.9 TO 0.95 CHANGELIST

0. R115-N.I. For ATX mode - -20120329
1. COM1 Fail : SU1-Pin26 Change to --- > SU14-Pin2 -20120329 -Next PCB Ver modify..
2. F USB1 Fail : USB12-/+ & USB13-/+ BIB75-Librady error..20120329-Next PCB Ver modify..
3. Add B75-ME Power Add U7-UP0105 P-SOP8(Page46 & Page15 ) -20120409
4. SU1-Pin101 - Change = FAN\_CTL2 -20120411
5. Add PS2 Mouse into PS2 KB-CON.-20120410
6. Change SDRAM trace to Solderside -20120411
7. Add PS161x2 - For DP -- > DVI/HDMI IC For 3 Display(View )-20120413
8. Change PCIe x4 slot layout(Lane5~8)-20120413
9. Realtek Lan Chip 8111E/F DSN is same -Update Driver is ok. 20120412
10. Del - AC Plug-In Auto Power ON Issue :
11. Change RTL8111E--> 8111F -20120424
12. Change F6326 --> UP1514 -20120424
13. Change F6137-->UP0109F -20120424

## Ver: 0.95 Issue:

1. 82579 Lan LED 右邊不亮 -20120425
2. VGA Card不易拔除，Slot 的卡棒會被散熱片擋到 -20120425
3. Printer Port Cable D0~D7 need swap -20120425

## Ver: 1.0 Note:

1. BOM -PCIe x16 slot must use - 10-455-164411R39-D/SLOT PCI-E X16/164P/黑色/ (EE082C0S-YW3Z)-無鉛...KORTAK ...20120521
2. 3-Display- DisPlay port -- > DVI also set to HDMI mode( GR100=N.I.,But, AOC & LG can't disply ---> set to DVI Mode is OK ) . 20120521
3. 3-Display Must use Ivy Bridge CPU - by B75- Spec )
4. 2-Display : IDR2 & IRD4 = 0 / 3-Display : IDR1=1 & IRD4=0..20120521
5. 3 Display & 2 display BOM is different : .20120523
6. PS161-Set=DVI mode can fix AOC & LG DVI input.- ..20120530

## Ver: 1.0 pcb Modify Note:

0. PE - 關於BIB75-MHA-MosFET-TOP & Bottom 共通 via hole 請修改為塞孔設計 ...20120521

1. Printer D0~D7 need swap.-V1.0..20120522
2. FR3---Change to Pull-High-->3V3\_Dual For S3 -Blinking-V1.0 ...20120522
3. LU1-Pin26 & Pin27 Swap & LED +/- need swap for follow BIB75-AHA...20120521
4. 2-DisplayID=0 : IDR2 & IRD4 = 0 / 3-DisplayID=1 : IDR1=1 & IRD4=0..20120521
5. 8111F -Lan LED resister(R18,19,21~23) modify -->100 ohm ..20120524
6. EMI modify PCB list..20120531

- a. AC30左上方靠近AUD\_LINK\_BCLK\_VIA孔加一顆VCC5對GND的104p電容(EC55) ..20120531
- b. ECT2右上方加一顆VCC3\_3對GND的104p電容(EC56)...20120531
- c. LFB1, LFB2 =0R ...20120531
- d. CT9左上方CK PE\_100M\_MCP\_DN 訊號線VIA孔旁加兩顆GND VIA 孔 ..20120531
- e. 將GND\_BOT層重新切割 HDMI如下..20120531
- f. DVI紅點打GND VIA..20120531
- g. BYC2上方USB3\_RXN1 訊號線與右方CK\_PE\_100M\_MCP\_DN 拉開25MIL..20120531
- h. LC46上方USB3\_TXP1與CK\_PE\_100M\_MCP\_DN 拉開25MIL..20120531
- i. USB3\_RXP2與GBE\_TXP 拉開拉開25MIL...20120531

7. BOM For Sale request : 2 Display(DVI+VGA)+10 COM (DB-9Pin x2 + 2x20Pin x2) ..20120710
- 8.Change D CONN 9PIN SLIM---> Foxcon-Pin-out ..20120720

1. 2 Disply only or 3 Disply-/w-PS161 x2 - Config ID-Resister setting
2. 2 Disply only BOM ???
3. 3 Disply-/w-PS161 x2 - BOM setting
4. 6 -COM or 10 COM BOM setting...

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5

4

3

2

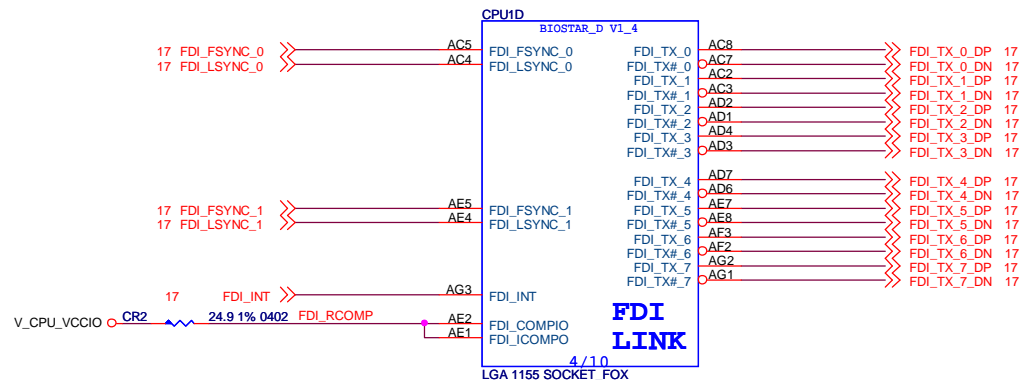
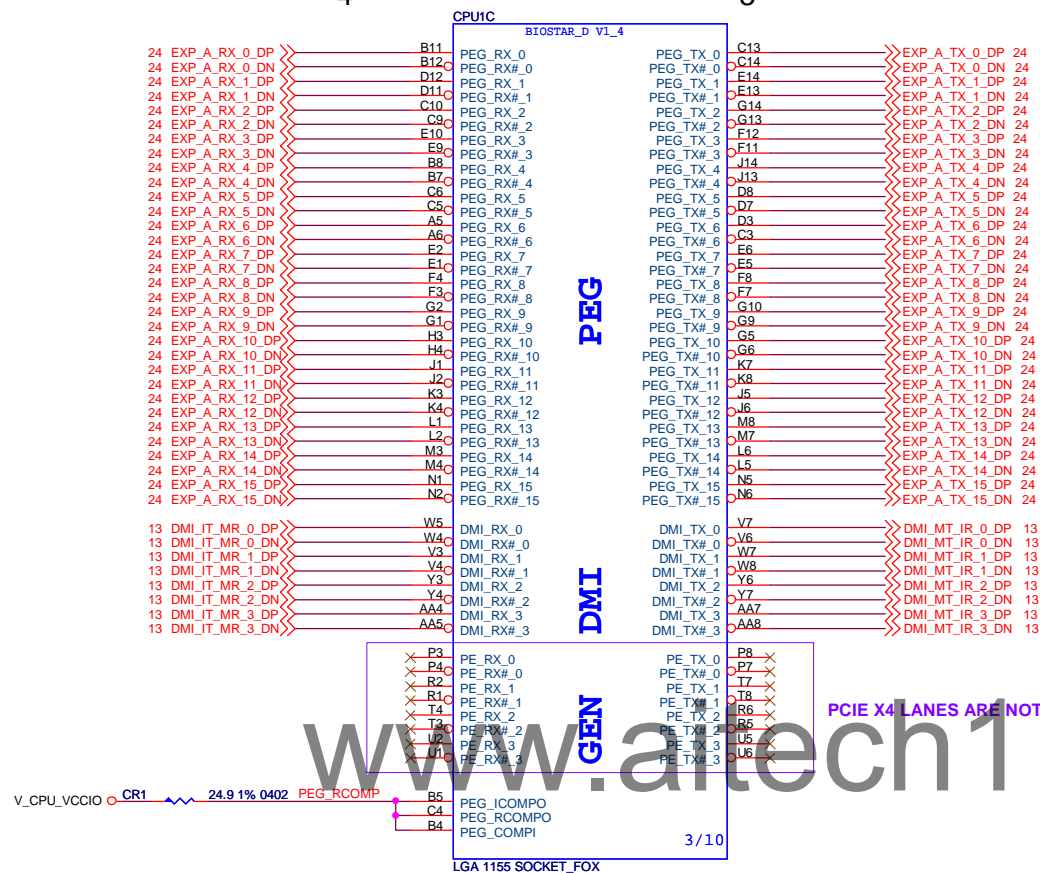
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D

C

B

A



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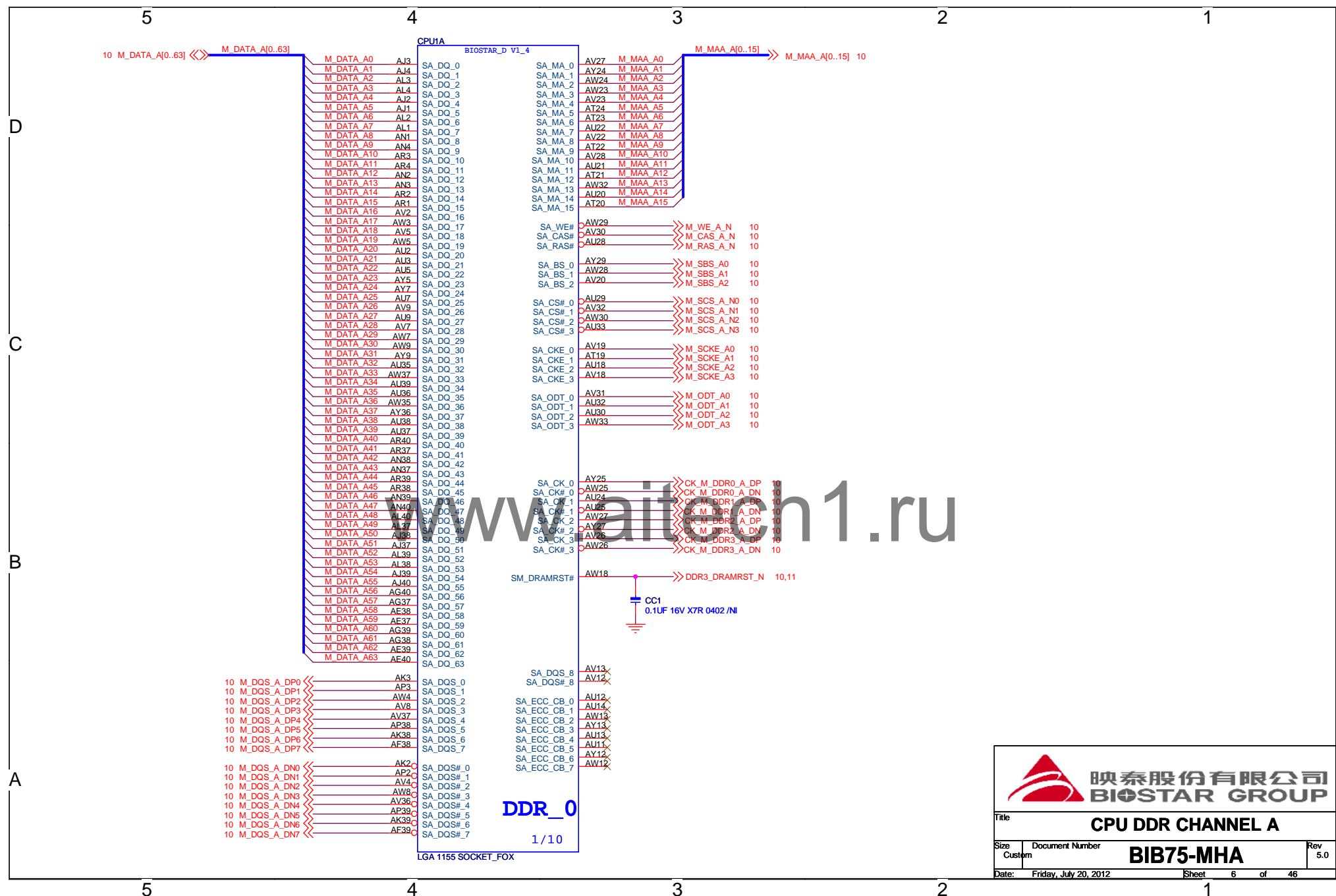
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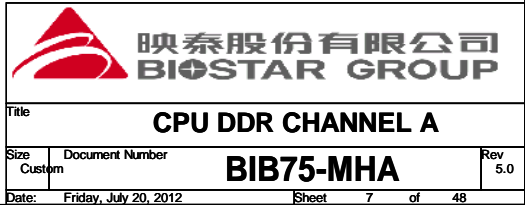
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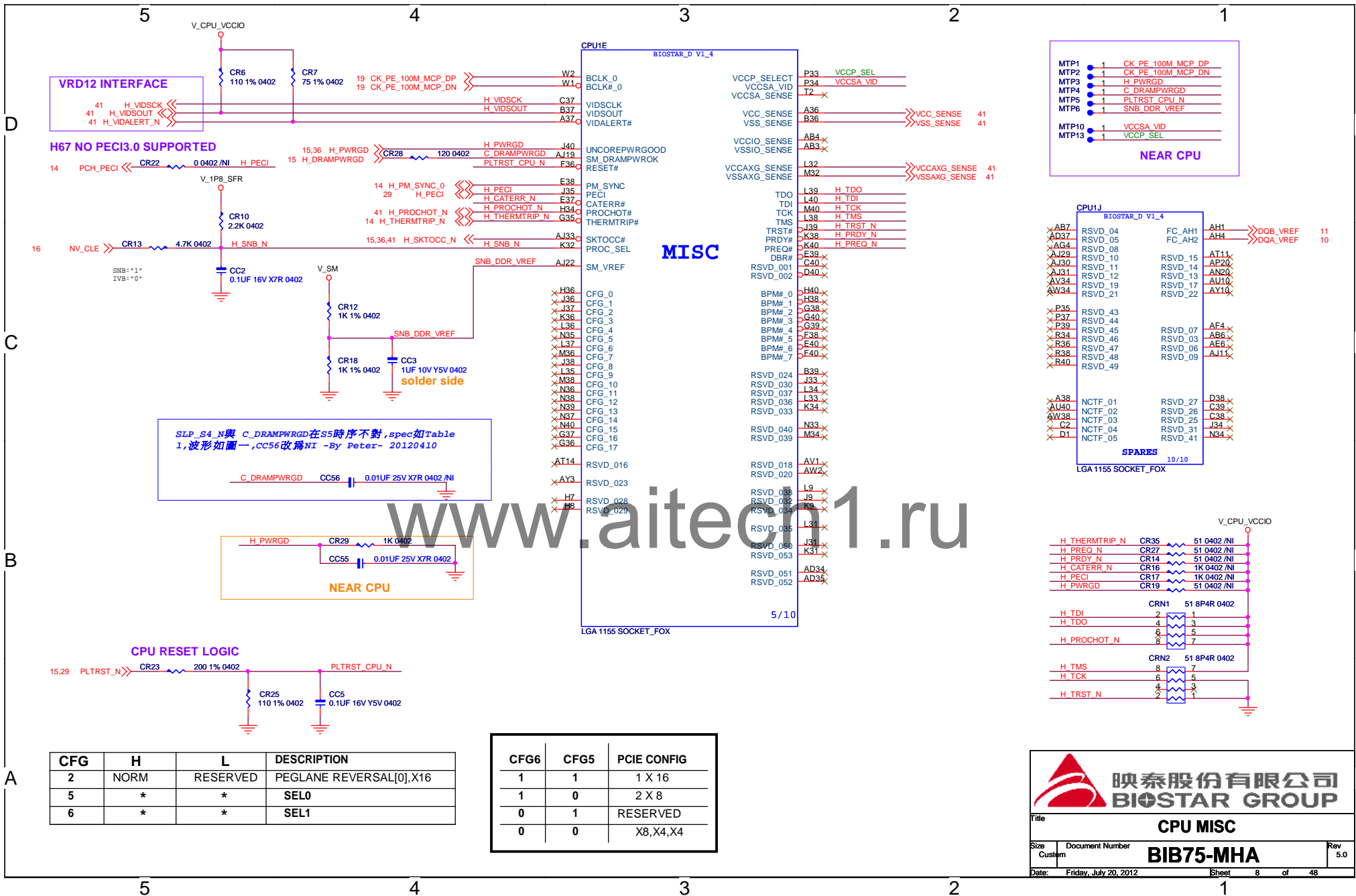






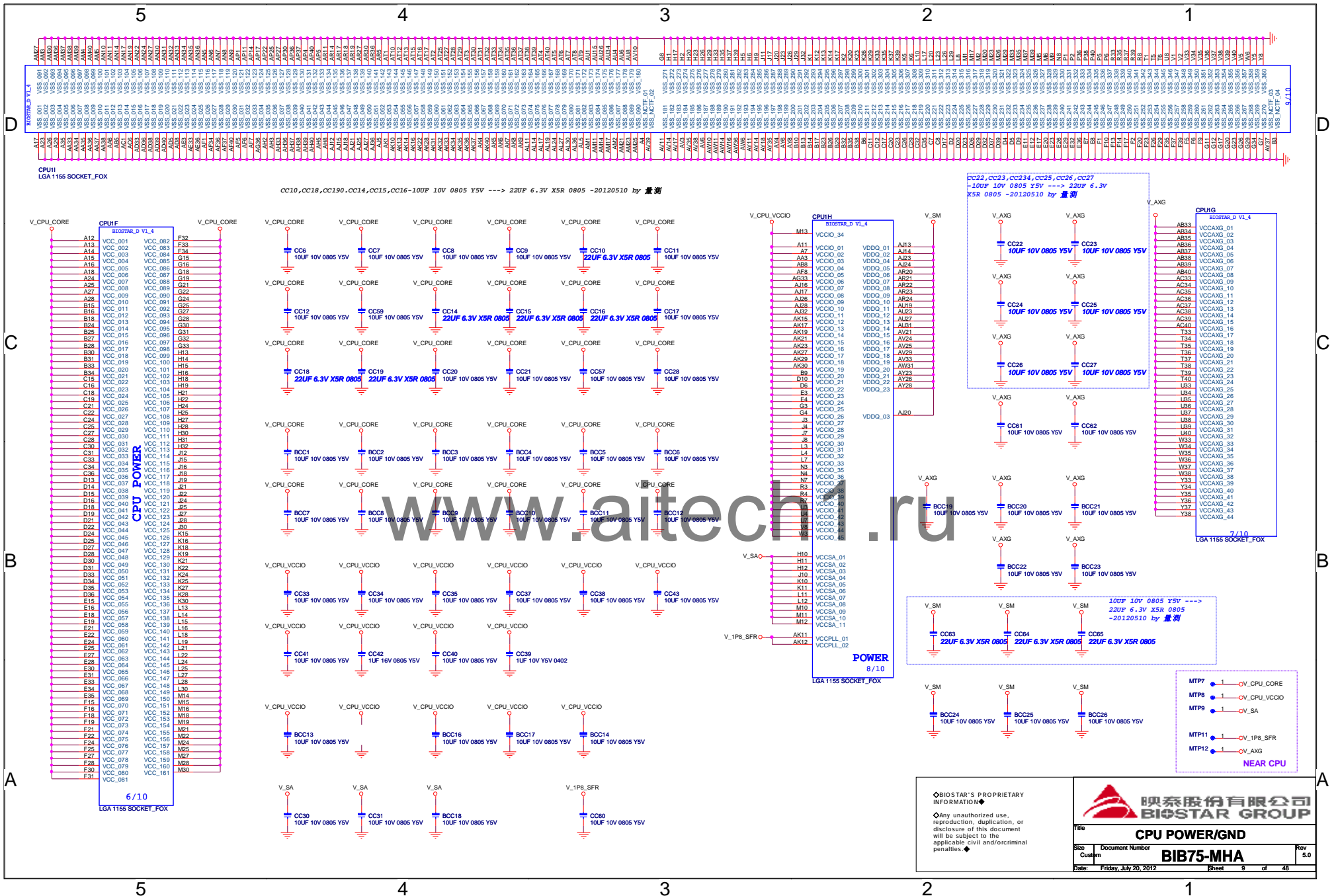






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## D



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DDR2 DIMMA1/A2			
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[illegible]



# PCH PART: Y+Reference

+3V3\_DUAL  
YR1 8.2K 0402 /NI PME\_N  
VCC3\_3  
YR5 4.7K 0402 PCIRST#  
YR6 8.2K 0402 REQ\_N2  
YR29 8.2K 0402 SERR\_N  
YR43 8.2K 0402 REQ\_N1  
YR47 8.2K 0402 << INTG\_N 44  
YRN2 8.2K 8P4R 0402  
2 1 TRDY\_N  
4 3 FRAME\_N  
6 5 REQ\_N3  
8 7 INTF\_N  
YR7 8.2K 0402 REQ\_N0  
YR8 8.2K 0402 PLOCK\_N  
YR12 8.2K 0402 IRDY\_N  
YR13 8.2K 0402 STOP\_N  
YR23 8.2K 0402 INTC\_N  
YR24 8.2K 0402 INTA\_N  
YR25 8.2K 0402 INTE\_N  
YR27 8.2K 0402 DEVSEL\_N  
YRN6 8.2K 8P4R 0402  
2 1 INTN\_N  
4 3 INTD\_N  
6 5 PERR\_N  
8 7 INTB\_N

44 PAR BH8  
44 DEVSSEL\_N BH9  
PCCLK\_PCH 19 PCLCK\_PCH 29 PCIRST# AV14  
44 IRDY\_N BF11  
44 PME\_N AV15  
44 SERR\_N BR6  
44 STOP\_N BC12  
44 PLOCK\_N BA17  
44 TRDY\_N BC8  
44 PERR\_N BM3  
44 FRAME\_N BC11  
44 GNT\_N0 << GNT\_N0 BA15  
44 GNT\_N1 << GNT\_N1 BV8  
BU12 BE2  
44 REQ\_N0 << REQ\_N0 BG5  
44 REQ\_N1 << REQ\_N1 BT5  
REQ\_N2 BK8  
REQ\_N3 AV11  
PIRQJA INTA\_N BK10  
PIRQJB INTB\_N BJ5  
PIRQJC INTC\_N BM15  
PIRQJD INTD\_N BP5  
PIRQJE INTE\_N BN9  
PIRQJF INTE\_N BV9  
PIRQG INTG\_N BT15  
PIRHU INTH\_N BR4

REV 1.0  
AD0 BF15 AD0  
AD1 BF17 AD1  
AD2 BT7 AD2  
AD3 BT13 AD3  
AD4 BG12 AD4  
AD5 BN11 AD5  
AD6 BJ12 AD6  
AD7 BU9 AD7  
AD8 BR12 AD8  
AD9 BJ3 AD9  
AD10 BR9 AD10  
AD11 BJ10 AD11  
AD12 BM8 AD12  
AD13 BF3 AD13  
AD14 BN2 AD14  
AD15 BE4 AD15  
AD16 BE6 AD16  
AD17 BG15 AD17  
AD18 BC6 AD18  
AD19 BT11 AD19  
AD20 BA14 AD20  
AD21 BL2 AD21  
AD22 BC4 AD22  
AD23 BL4 AD23  
AD24 BC2 AD24  
AD25 BM13 AD25  
AD26 BA9 AD26  
AD27 BF9 AD27  
AD28 BA8 AD28  
AD29 BF8 AD29  
AD30 AV17 AD30  
AD31 BK12 AD31  
C\_BE0# BN4 C\_BE\_N0 << C\_BE\_N0 44  
C\_BE1# BP7 C\_BE\_N1 << C\_BE\_N1 44  
C\_BE2# BG2 C\_BE\_N2 << C\_BE\_N2 44  
C\_BE3# BP13 C\_BE\_N3 << C\_BE\_N3 44

PCI  
1 OF 10  
PANTHERPOINT-B75

## WEAK INTERNAL PULLUPS ON GNT\*.DEFAULT SPI BOOT DEVICE

GNT1	GNT0/SATA1GP	BOOT DEVICE
0	0	LPC
0	1	NANO
1	0	PCI
1	1	SPI

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GNT1	GNT0/SATA1GP	BOOT DEVICE
0	0	LPC
0	1	NANO
1	0	PCI
1	1	SPI

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# PCH PART: Y+Reference

DML\_RCOMP  
W/S=4/8 mils,  
length=0.45"max

FOR ICC MODE

PCIe x4

PCH SUPPORT 8 PCIE LANES  
All AC couple cap near device

PCH1B

PPT\_CRB

REV 1.0

DM

USB

PCI-E

2 OF 10

PANTHERPOINT-B75

USBP0N  
USBP0P  
USBP1N  
USBP1P  
USBP2N  
USBP2P  
USBP3N  
USBP3P  
USBP4N  
USBP4P  
USBP5N  
USBP5P  
USBP6N  
USBP6P  
USBP7N  
USBP7P  
USBP8N  
USBP8P  
USBP9N  
USBP9P  
USBP10N  
USBP10P  
USBP11N  
USBP11P  
USBP12N  
USBP12P  
USBP13N  
USBP13P

OC0#\_GPIO59  
OC1#\_GPIO40  
OC2#\_GPIO41  
OC3#\_GPIO42  
OC4#\_GPIO43  
OC5#\_GPIO44  
OC6#\_GPIO45  
OC7#\_GPIO46

USBRBIAS#  
USBRBIAS  
CLKIN\_DOT\_96N  
CLKIN\_DOT\_96P  
DMI2RBIAS

BE36  
BD36  
BC33  
BA33  
BM33  
BM35  
BT33  
BU32  
BR32  
BT31  
BN29  
BN27  
BK33  
BJ33  
BF31  
BD31  
BN27  
BR29  
BT27  
BK25  
BJ25  
BK31  
BD27  
BF27  
BK27  
BJ27

BM43  
BD41  
BG41  
BK43  
BP43  
BJ41  
BT45  
BM45  
BE25  
BM25  
BD38  
BF38  
A32

USB\_OC0\_R\_N  
USB\_OC1\_R\_N  
USB\_OC2\_R\_N  
USB\_OC3\_R\_N  
USB\_OC4\_R\_N  
USB\_OC5\_R\_N  
USB\_OC6\_R\_N  
USB\_OC7\_R\_N  
USBRBIAS\_PCH  
96M\_DREF\_DN  
96M\_DREF\_DP  
DMI2RBIAS

USB\_D0-  
USB\_D0+  
USB\_D1-  
USB\_D1+  
USB\_D2-  
USB\_D2+  
USB\_D3-  
USB\_D3+  
USB\_D4-  
USB\_D4+  
USB\_D5-  
USB\_D5+  
USB\_D8-  
USB\_D8+  
USB\_D9-  
USB\_D9+  
USB\_D10-  
USB\_D10+  
USB\_D11-  
USB\_D11+  
USB\_D12-  
USB\_D12+  
USB\_D13-  
USB\_D13+

USBRBIAS\_PCH,DMI2RBIAS  
W/S=4/8 mils,length=0.45"max

Colay /w USB3.0 Connector + 82579 Lan PHY

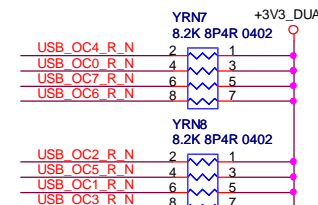
Colay /w USB3.0 Jumper

Colay /w PS2-KB Connector

B75 -USB x12 only

Colay /w RTL8111E Lan

USB 2.0x2 Jumper x2



FOR ICC MODE

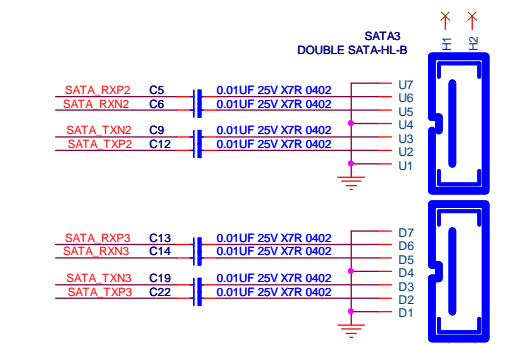
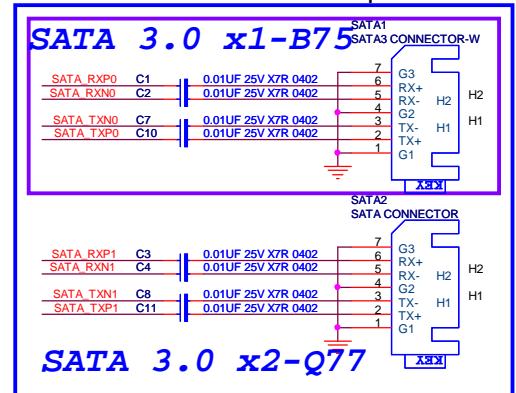
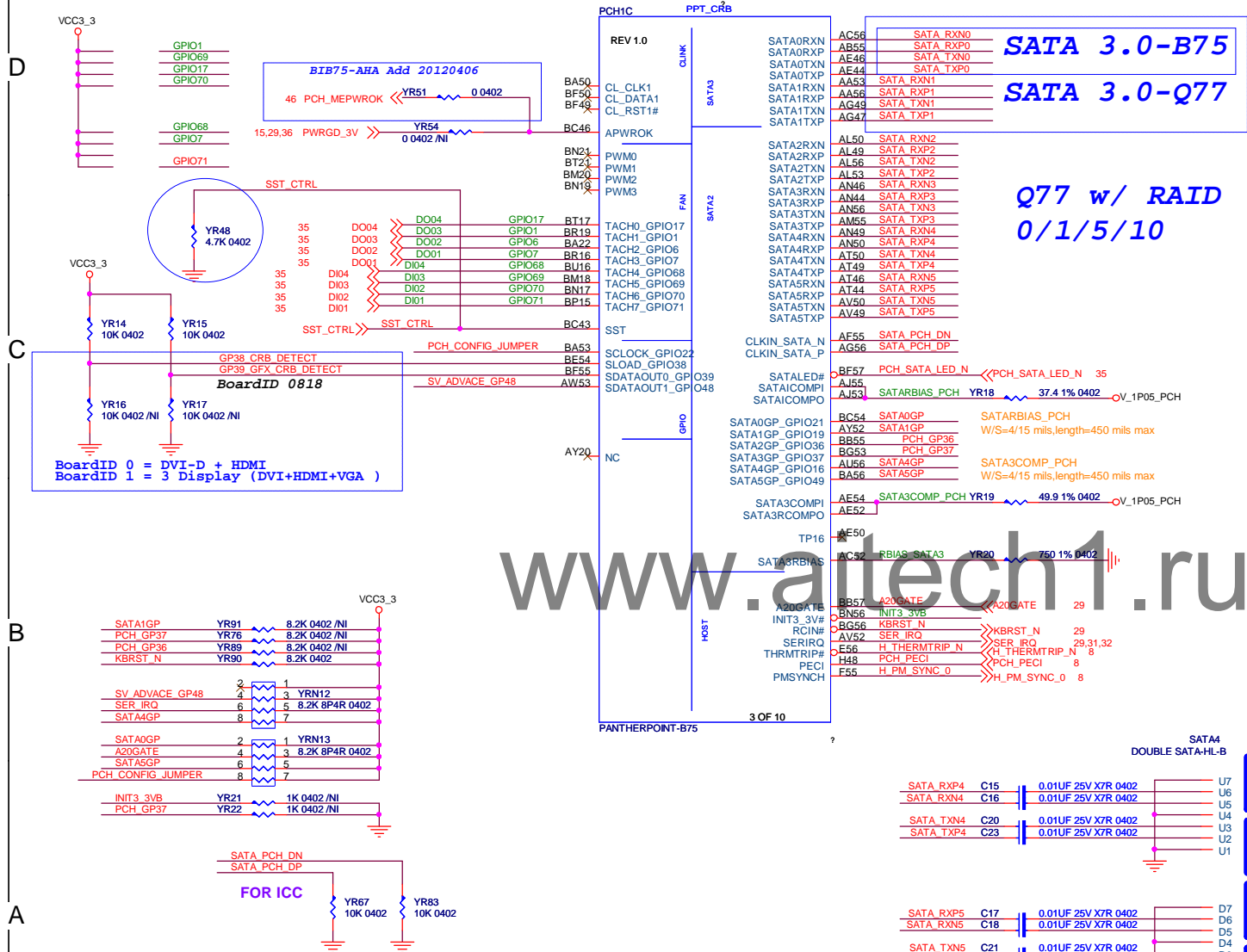
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Title			
PCH DMI/PCIE/USB			
Size	Document Number	Rev	
Custom	BIB75-MHA	5.0	
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# PCH PART: Y+Reference

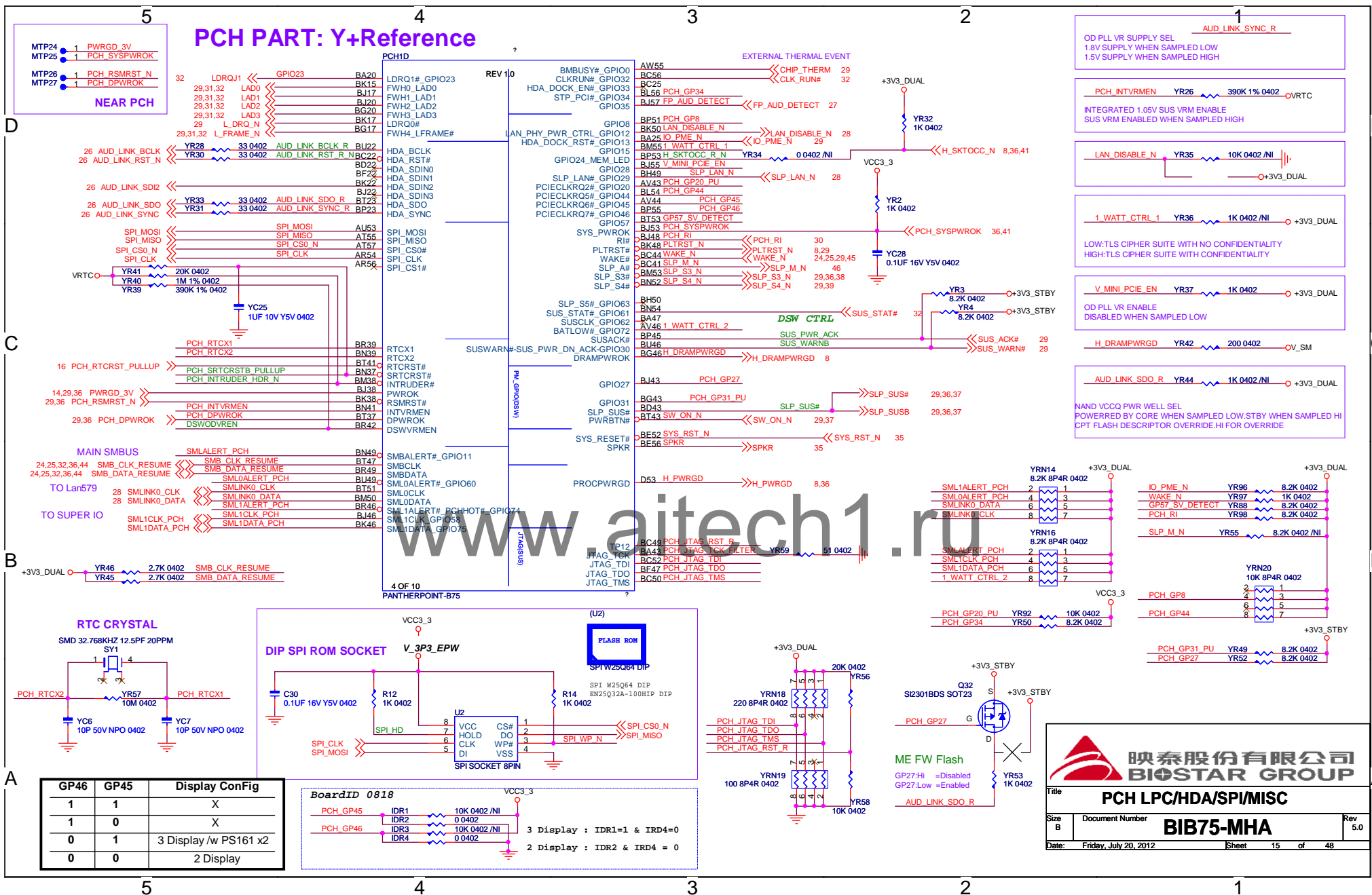


**PCH CLINK/SATA/CPU HOST**

Size: Document Number **BIB75-MHA** Rev: 5.0

Date: Friday, July 20, 2012 Sheet: 14 of 48

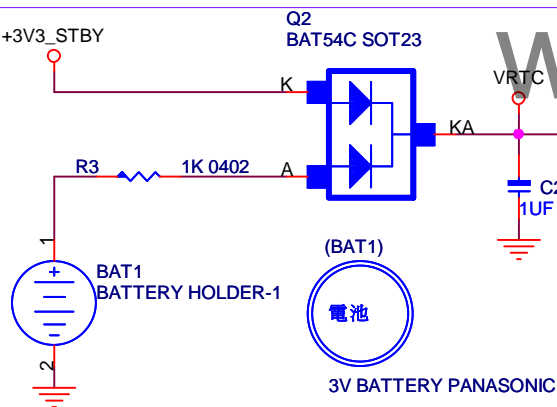
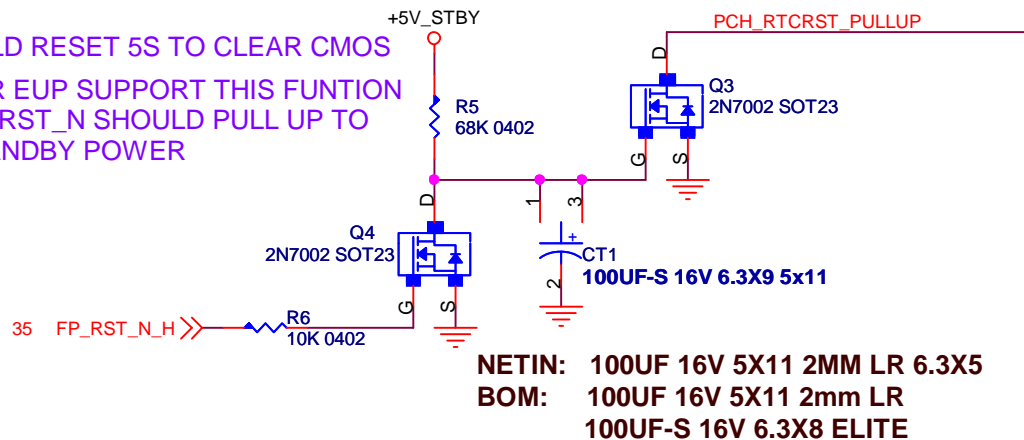




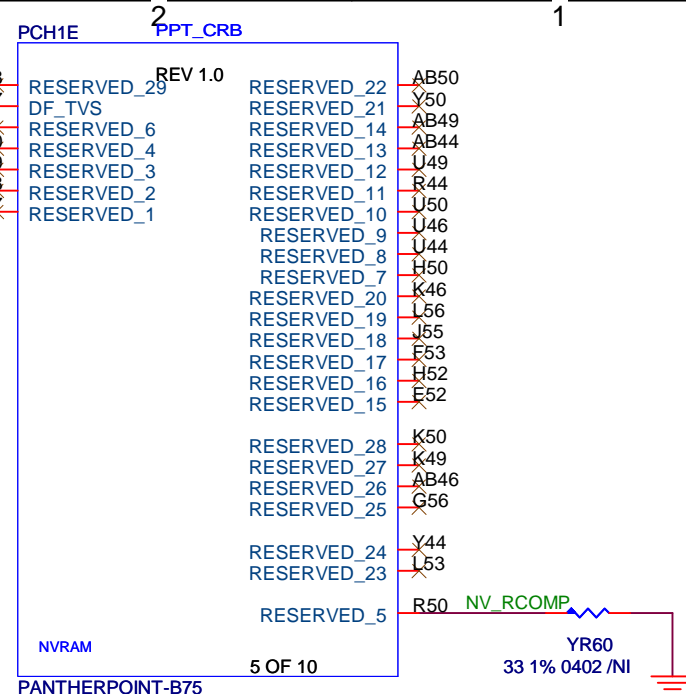


# PCH PART: Y+Reference

HOLD RESET 5S TO CLEAR CMOS  
FOR EUP SUPPORT THIS FUNTION  
FP\_RST\_N SHOULD PULL UP TO  
STANDBY POWER



JCMOS  
1-2 NORMAL  
2-3 CLR CMOS

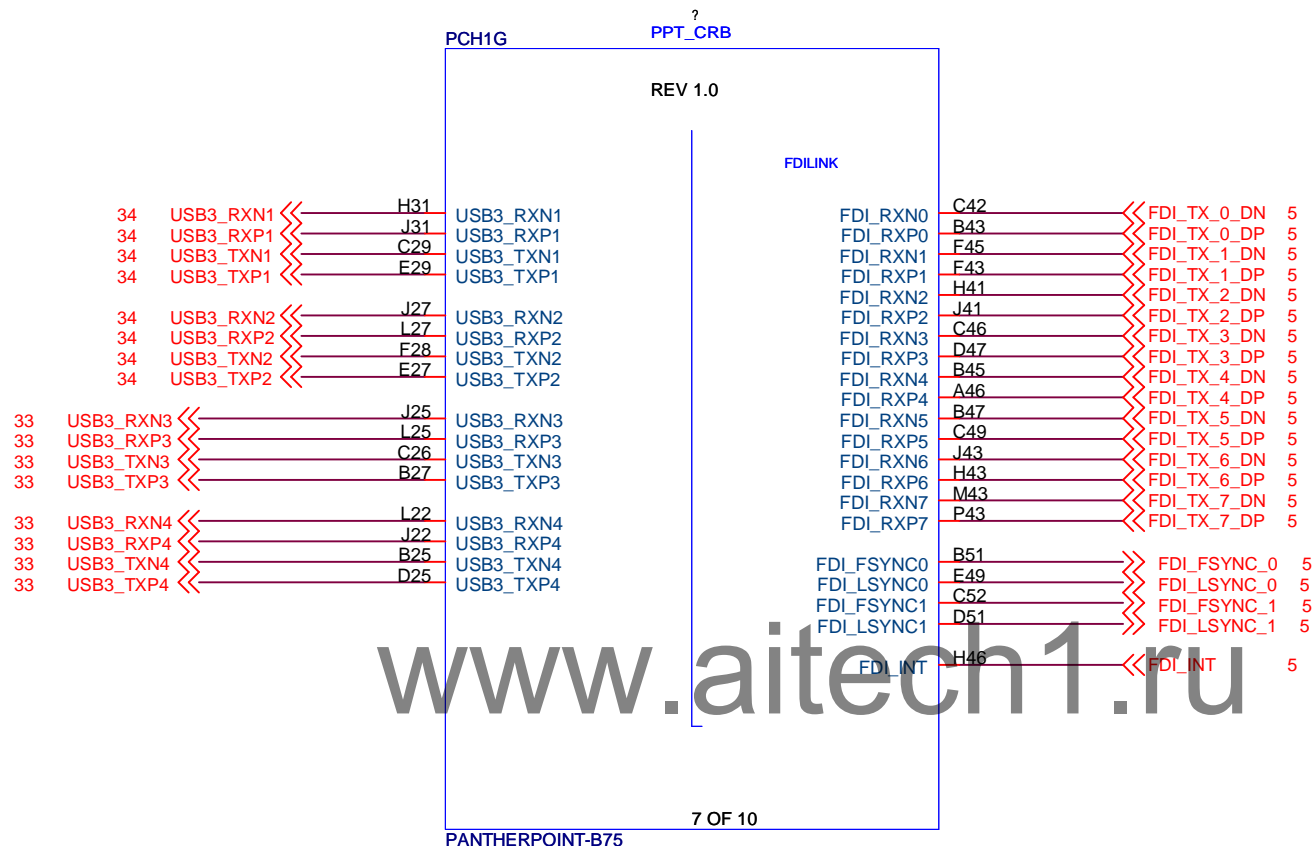


Title			PCH NVRAM
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# PCH PART: Y+Reference



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# PCH PART: Y+Reference

For DP--> DVI-D / HDMI use

3.3V TOLERANT, HIGH ACTIVE

DP-B / DVI

DP-D / HDMI

REMOVE LEVEL SHIFTER WHEN TRACE LENGTH LESS THAN 9.25 INCHES

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

PCH1F

PPT\_CRB

REV 1.0

T1 DDPB\_HPD  
N2 DDPC\_HPD  
M1 DDPD\_HPD  
R8 DDPB\_AUXP  
R9 DDPB\_AUXN  
U14 DDPC\_AUXP  
U12 DDPC\_AUXN  
N6 DDPD\_AUXP  
R6 DDPD\_AUXN

22 DDSP\_B\_TX\_0\_DP  
22 DDSP\_B\_TX\_0\_DN  
22 DDSP\_B\_TX\_1\_DP  
22 DDSP\_B\_TX\_1\_DN  
22 DDSP\_B\_TX\_2\_DP  
22 DDSP\_B\_TX\_2\_DN  
22 DDSP\_B\_TX\_3\_DP  
22 DDSP\_B\_TX\_3\_DN

R14 DDPB\_0P  
R12 DDPB\_0N  
M11 DDPB\_1P  
M12 DDPB\_1N  
H8 DDPB\_2P  
K8 DDPB\_2N  
L5 DDPB\_3P  
M3 DDPB\_3N  
L2 DDPC\_0P  
J3 DDPC\_0N  
G2 DDPC\_1P  
G4 DDPC\_1N  
F3 DDPC\_2P  
F6 DDPC\_2N  
E4 DDPC\_3P  
E2 DDPC\_3N  
D5 DDPD\_0P  
B5 DDPD\_0N  
C6 DDPD\_1P  
D7 DDPD\_1N  
B7 DDPD\_2P  
C9 DDPD\_2N  
E11 DDPD\_3P  
B11 DDPD\_3N

U2 SDVO\_INTP  
T3 SDVO\_INTN  
W3 SDVO\_STALLP  
U5 SDVO\_STALLN  
U8 SDVO\_TVCLKINP  
U9 SDVO\_TVCLKINN

CRT\_HSYNC AR4 >>> VGA\_HSYNC 22  
CRT\_VSYNC AR2 >>> VGA\_VSYNC 22  
CRT\_RED AN6 >>> VGA\_RED 22  
CRT\_GREEN AN2 >>> VGA\_GREEN 22  
CRT\_BLUE AM1 >>> VGA\_BLUE 22  
CRT\_IRTN AM6

CRT\_DDC\_DATA AW1 >>> VGA\_PCH\_DDCSDA 22  
CRT\_DDC\_CLK AW3 >>> VGA\_PCH\_DDCSCL 22

DAC\_IREF AT3 >>> VGA\_DACREFSET YR63 1K 1% 0402

TP6 Y18  
TP7 X17  
TP8 AB18  
TP9 AB17

DDPC\_CTRLCLK AL12  
DDPC\_CTRLDATA AL14  
DDPD\_CTRLCLK AL9  
DDPD\_CTRLDATA AL8  
SDVO\_CTRLCLK AL15  
SDVO\_CTRLDATA AL17

B75 - HDMI

>>> DDPD\_CTRL\_CLK 23  
>>> DDPD\_CTRL\_DATA 23

B75 - DVI-D

>>> DDPB\_CTRL\_CLK 22  
>>> DDPB\_CTRL\_DATA 22

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PANTHERPOINT-B75



Title PCH VGA/DISPLAY PORT

Size Custom Document Number

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## D

C

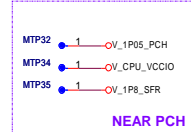
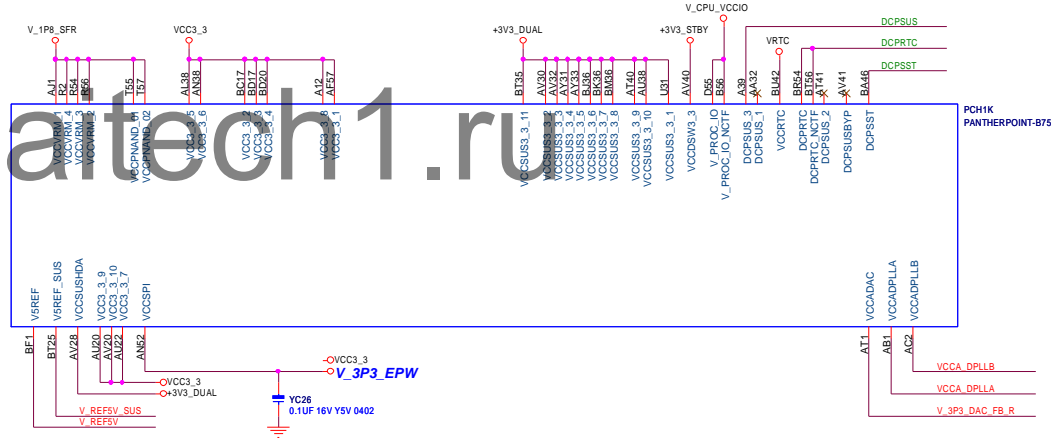
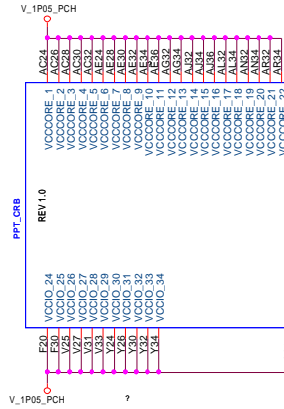
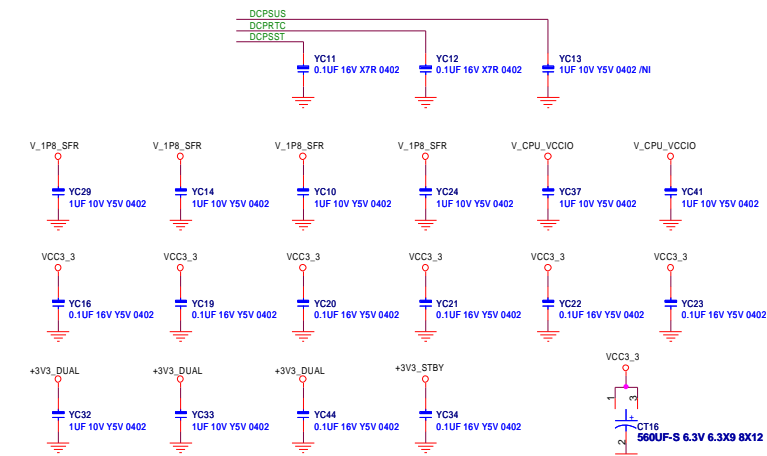
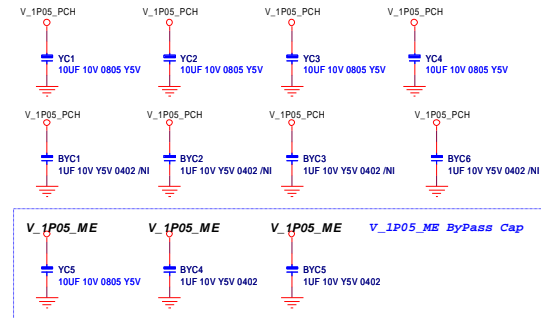
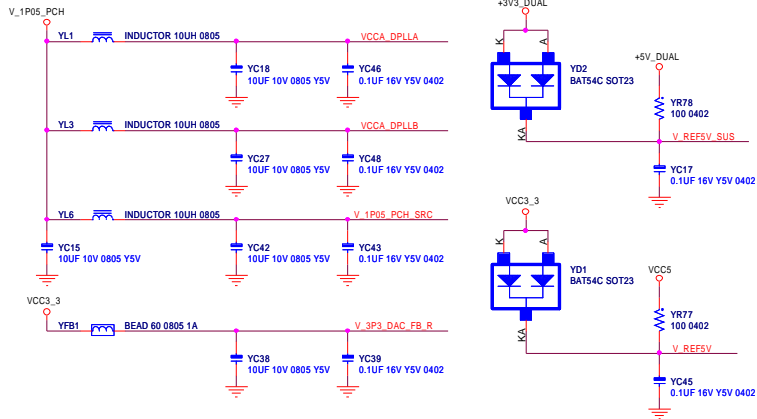
B

A





# PCH PART: Y+Reference



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**PCH POWER**

**BIB75-MHA**

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# PCH PART: Y+Reference

PPT\_CRB

BC15	VSS_125	VSS_5	A26
BC20	VSS_126	VSS_6	A29
BC27	VSS_127	VSS_7	A42
BC31	VSS_128	VSS_8	A49
BC36	VSS_129	VSS_9	AA20
BC38	VSS_130	VSS_10	AA22
BC47	VSS_131	VSS_11	AA24
BC9	VSS_132	VSS_12	AA26
BD25	VSS_133	VSS_13	AA28
BD33	VSS_134	VSS_14	AA30
BD35	VSS_135	VSS_15	AA38
BD38	VSS_136	VSS_16	AA38
BD41	VSS_137	VSS_17	AB11
BD43	VSS_138	VSS_18	AB10
BD44	VSS_139	VSS_19	AB10
BD46	VSS_140	VSS_20	AB41
BF22	VSS_141	VSS_21	AB47
BF23	VSS_142	VSS_22	AB52
BF24	VSS_143	VSS_23	AB57
BF25	VSS_144	VSS_24	AB57
BF26	VSS_145	VSS_25	AB6
BF27	VSS_146	VSS_26	AC22
BF31	VSS_147	VSS_27	AC34
BF33	VSS_148	VSS_28	AC34
BF36	VSS_149	VSS_29	AC38
BF38	VSS_150	VSS_30	AC4
BF42	VSS_151	VSS_31	AC54
BH6	VSS_152	VSS_32	AE14
BH15	VSS_153	VSS_33	AE18
BK10	VSS_154	VSS_34	AE22
BK20	VSS_155	VSS_35	AE26
BK41	VSS_156	VSS_36	AE38
BK52	VSS_157	VSS_37	AE4
BM10	VSS_158	VSS_38	AE7
BM12	VSS_159	VSS_39	AE9
BM22	VSS_160	VSS_40	AE92
BM23	VSS_161	VSS_41	AF6
BM26	VSS_162	VSS_42	AG11
BM28	VSS_163	VSS_43	AG11
BM32	VSS_164	VSS_44	AG14
BM40	VSS_165	VSS_45	AG20
BM46	VSS_166	VSS_46	AG22
BM5	VSS_167	VSS_47	AG30
BN1	VSS_168	VSS_48	AG30
BN47	VSS_169	VSS_49	AG34
BN6	VSS_170	VSS_50	AG46
BN7	VSS_171	VSS_51	AG5
BN8	VSS_172	VSS_52	AG50
BP3	VSS_173	VSS_53	AG53
BP33	VSS_174	VSS_54	AG53
BP35	VSS_175	VSS_55	AH52
BR22	VSS_176	VSS_56	AH6
BR23	VSS_177	VSS_57	AJ22
BR24	VSS_178	VSS_58	AJ22
BR26	VSS_179	VSS_59	AK57
BU19	VSS_180	VSS_60	AK6
BU29	VSS_181	VSS_61	AL11
BU39	VSS_182	VSS_62	AL18
C19	VSS_183	VSS_63	AL20
C32	VSS_184	VSS_64	AL22
C38	VSS_185	VSS_65	AL22
C4	VSS_186	VSS_66	AL28
D3	VSS_187	VSS_67	AL30
D33	VSS_188	VSS_68	AL38
D35	VSS_189	VSS_69	AL46
D43	VSS_190	VSS_70	AL47
D45	VSS_191	VSS_71	AM52
E19	VSS_192	VSS_72	AM3
E39	VSS_193	VSS_73	AM57
E44	VSS_194	VSS_74	AN11
E6	VSS_195	VSS_75	AN11
F6	VSS_196	VSS_76	AN12
F8	VSS_197	VSS_77	AN15
F10	VSS_198	VSS_78	AN18
F12	VSS_199	VSS_79	AN20
F16	VSS_200	VSS_80	AN30
F22	VSS_201	VSS_81	AN36
F26	VSS_202	VSS_82	AN4
F32	VSS_203	VSS_83	AN43
F33	VSS_204	VSS_84	AN47
F35	VSS_205	VSS_85	AN47
F36	VSS_206	VSS_86	AN54
F40	VSS_207	VSS_87	AN9
F42	VSS_208	VSS_88	AR22
F46	VSS_209	VSS_89	AR22
F50	VSS_210	VSS_90	AR6
FR	VSS_211	VSS_91	AT15
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FR	VSS_221	VSS_101	AU5
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FR	VSS_350	VSS_230	BB3

PCH1J  
PANTHERPOINT-B75

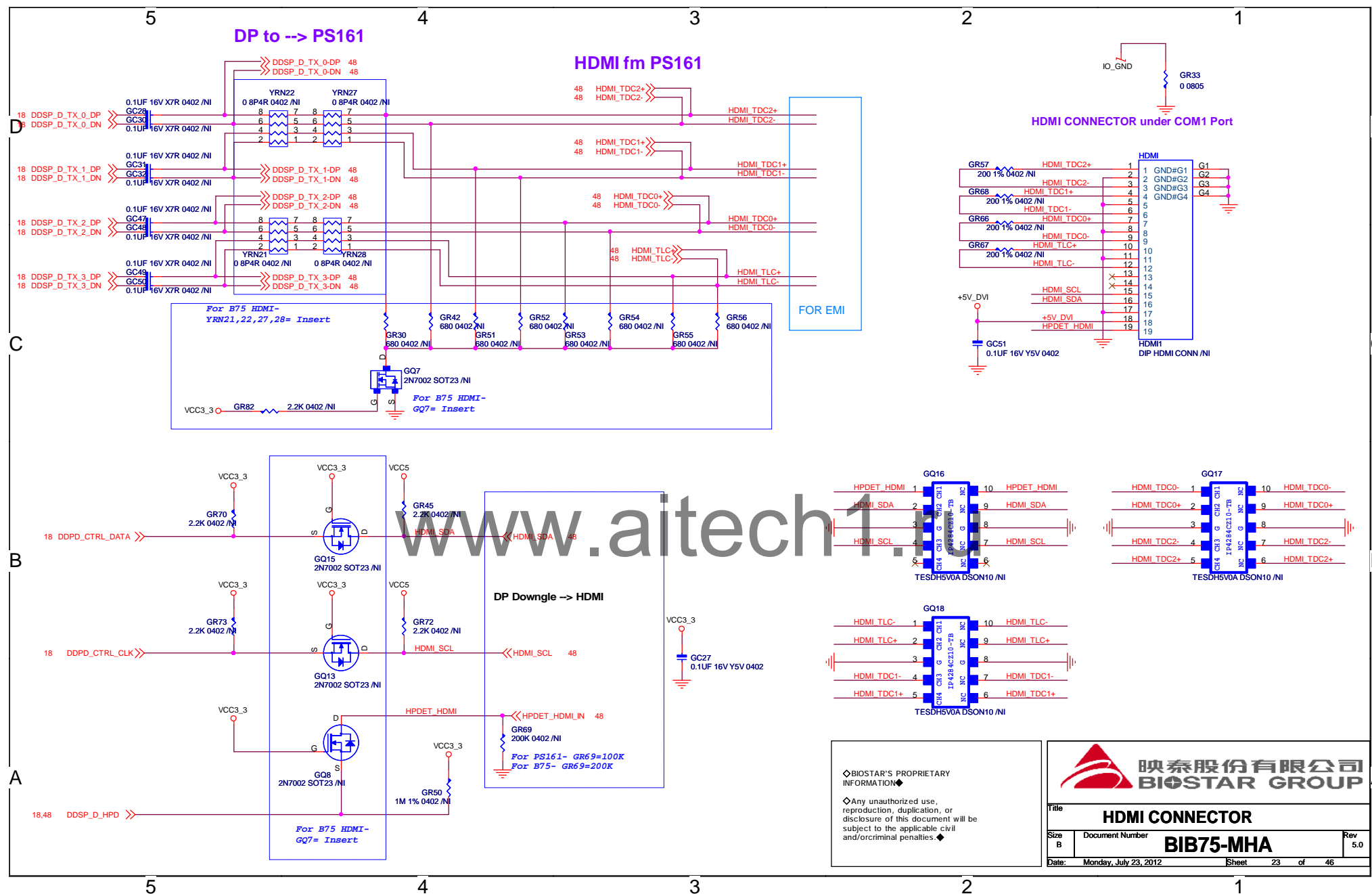
10 OF 10

L12	VSS_231	TP3	L33
L17	VSS_232	TP13	AE49
L31	VSS_233	TP17	AE36
L41	VSS_234	TP18	AE36
L43	VSS_235	TP19	AE36
M20	VSS_236	TP20	AE36
M22	VSS_237	TP21	AE36
M25	VSS_238	TP22	AE36
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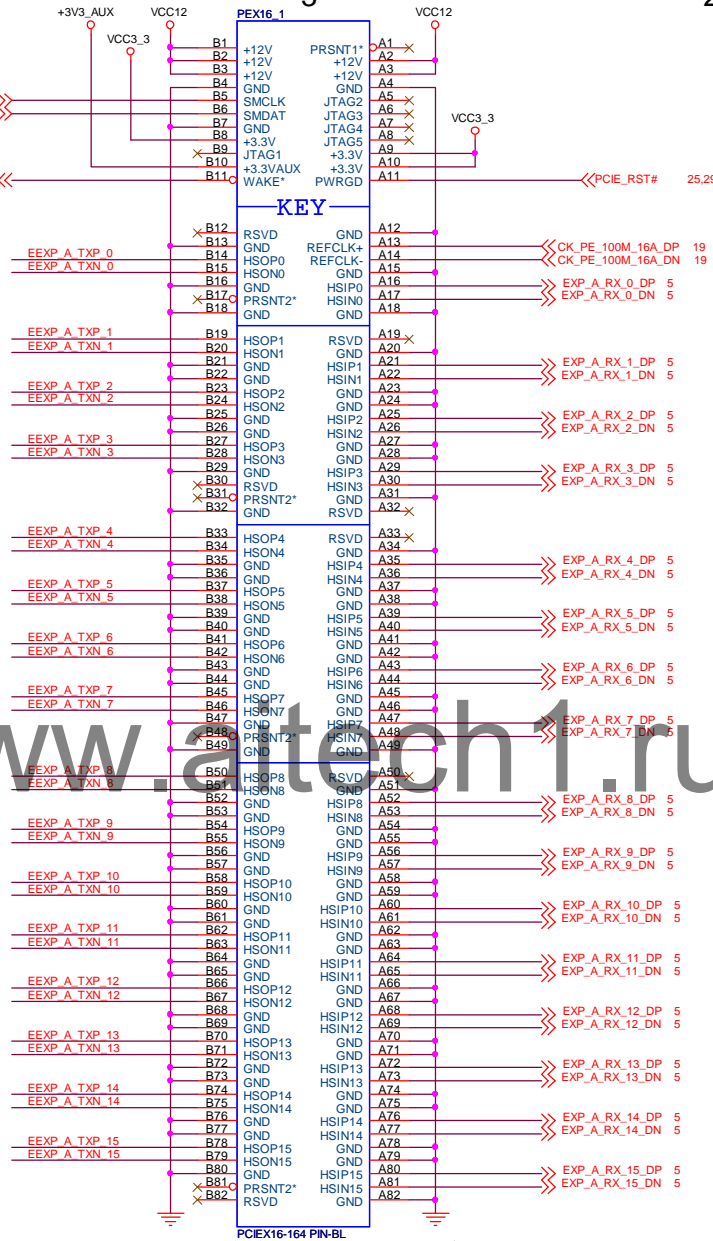
# SLOT PART: E+Reference

Value:180 nF - 265 nF

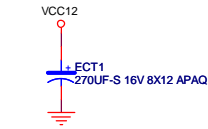
450 mils max to connector pin

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	EC17	0.22UF 10V X5R 0402	EEXP_A_TXP_7
5 EXP_A_TX_7_DN	EC18	0.22UF 10V X5R 0402	EEXP_A_TXN_7
5 EXP_A_TX_8_DP	EC19	0.22UF 10V X5R 0402	EEXP_A_TXP_8
5 EXP_A_TX_8_DN	EC20	0.22UF 10V X5R 0402	EEXP_A_TXN_8
5 EXP_A_TX_9_DP	EC21	0.22UF 10V X5R 0402	EEXP_A_TXP_9
5 EXP_A_TX_9_DN	EC23	0.22UF 10V X5R 0402	EEXP_A_TXN_9
5 EXP_A_TX_10_DP	EC24	0.22UF 10V X5R 0402	EEXP_A_TXP_10
5 EXP_A_TX_10_DN	EC25	0.22UF 10V X5R 0402	EEXP_A_TXN_10
5 EXP_A_TX_11_DP	EC26	0.22UF 10V X5R 0402	EEXP_A_TXP_11
5 EXP_A_TX_11_DN	EC27	0.22UF 10V X5R 0402	EEXP_A_TXN_11
5 EXP_A_TX_12_DP	EC28	0.22UF 10V X5R 0402	EEXP_A_TXP_12
5 EXP_A_TX_12_DN	EC29	0.22UF 10V X5R 0402	EEXP_A_TXN_12
5 EXP_A_TX_13_DP	EC30	0.22UF 10V X5R 0402	EEXP_A_TXP_13
5 EXP_A_TX_13_DN	EC31	0.22UF 10V X5R 0402	EEXP_A_TXN_13
5 EXP_A_TX_14_DP	EC32	0.22UF 10V X5R 0402	EEXP_A_TXP_14
5 EXP_A_TX_14_DN	EC33	0.22UF 10V X5R 0402	EEXP_A_TXN_14
5 EXP_A_TX_15_DP	EC34	0.22UF 10V X5R 0402	EEXP_A_TXP_15
5 EXP_A_TX_15_DN	EC35	0.22UF 10V X5R 0402	EEXP_A_TXN_15

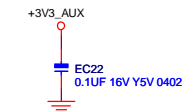
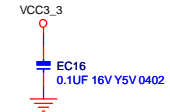
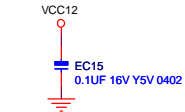
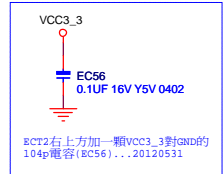
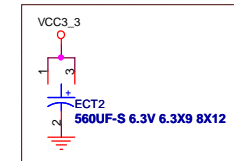
PCIe x16 slot must use - 10-455-164411R39-D/SLOT PCI-E X16/164P/黑色/(EE082C0S-YW3Z).無鉛...KORTAK ...20120521



For ALL SOLID-----270UF-S 16V 8X11 ELITE  
For NO SOLID-----470UF 16V 8X11.5



NETIN:560UF-S 6.3V 6.3X8 8X8  
BOM: 1000UF 6.3V 8X12  
560UF-S 6.3V 6.3X8 ELITE



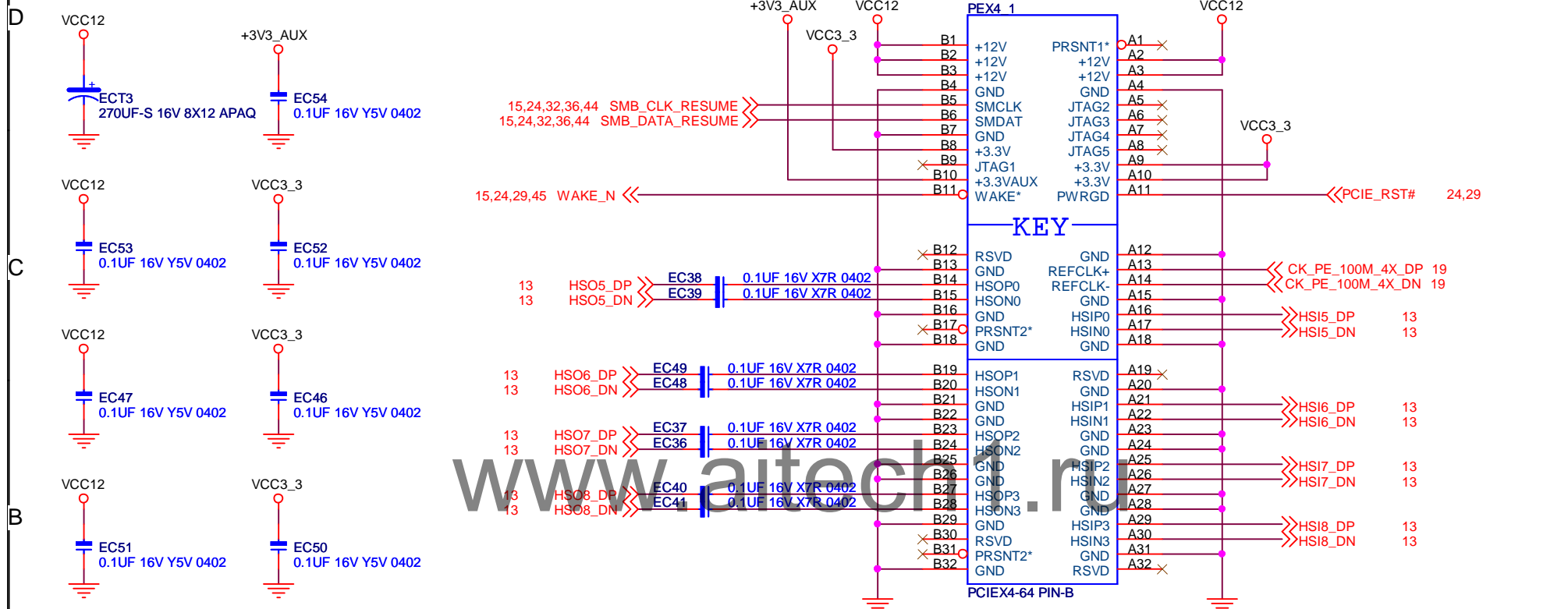
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Title		PCIEX16 SLOT1	
Size	Document Number	BIB75-MHA	
Custom			
Date:	Friday, July 20, 2012	Sheet	24 of 48
		Rev 5.0	



# SLOT PART: E+Reference



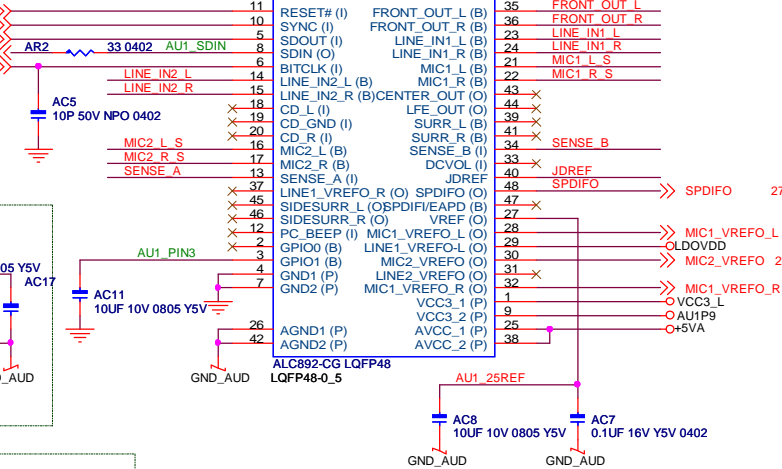
映泰股份有限公司  
BIOSTAR GROUP

Title			PCIEX16 SLOT2
Size	Document Number	Rev	
Custom	BIB75-MHA	5.0	
Date:	Friday, July 20, 2012	Sheet	25 of 48

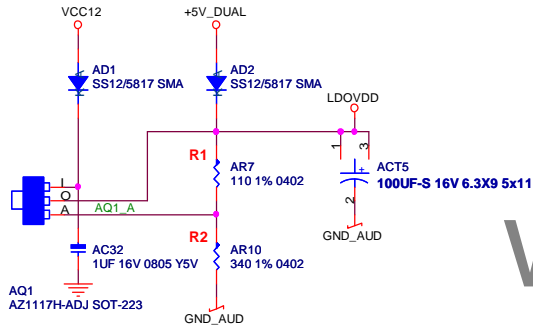


# AUDIO PART: A+Reference

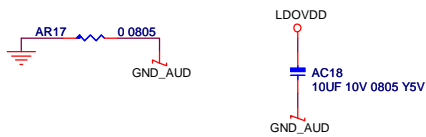
15 AUD\_LINK\_RST\_N  
15 AUD\_LINK\_SYNC  
15 AUD\_LINK\_SDO  
15 AUD\_LINK\_SDI2  
15 AUD\_LINK\_BCLK



**10UF+0.1UF PER PIN (25&38)**  
**+5VA DECUPLING**



$V_{out} = V_{ref} (1.25V) \times (1 + R2/R1) = 5V$

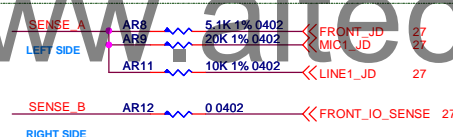


MTP53 1 VCC3\_L  
MTP54 1 LDOVDD  
MTP55 1 +5VA  
**NEAR CONTROLLER**

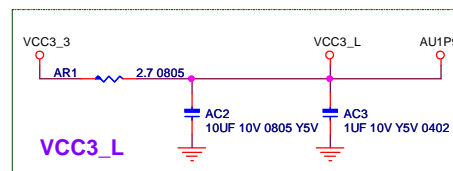
**PLACE CLOSE TO CODEC**

JREF AR15 20K 1% 0402  
**EXT\_VOL\_CTRL & JREF**

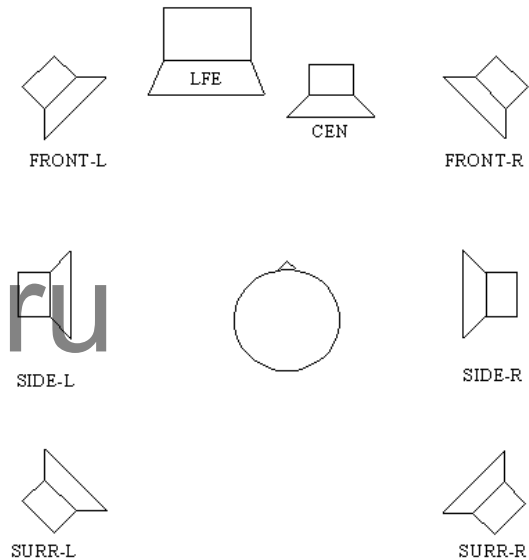
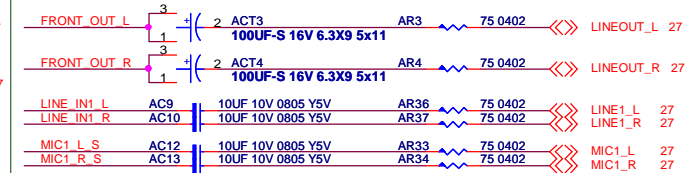
**REAR CHANNEL**



**JACK SENSE**



**FRONT CHANNEL**



**7.1 SPEAKER CONFIGURATION**

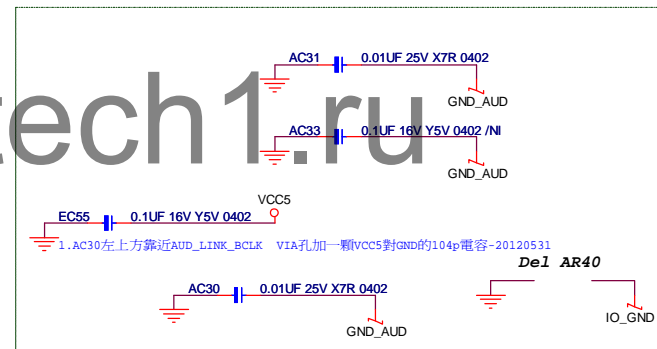
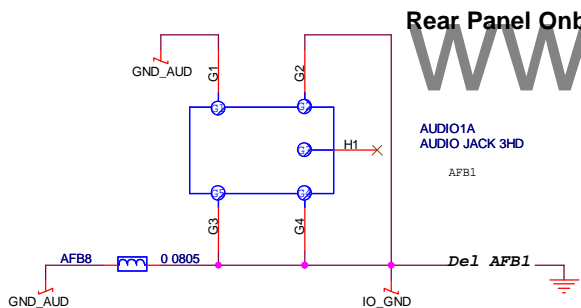
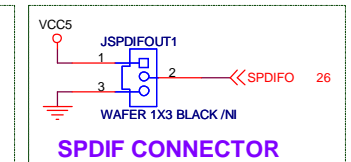
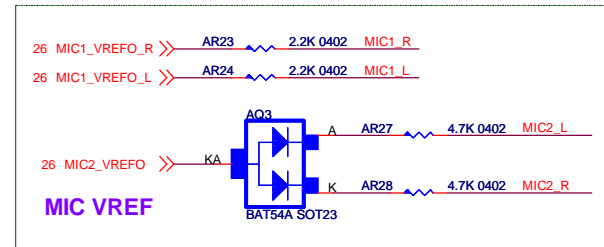
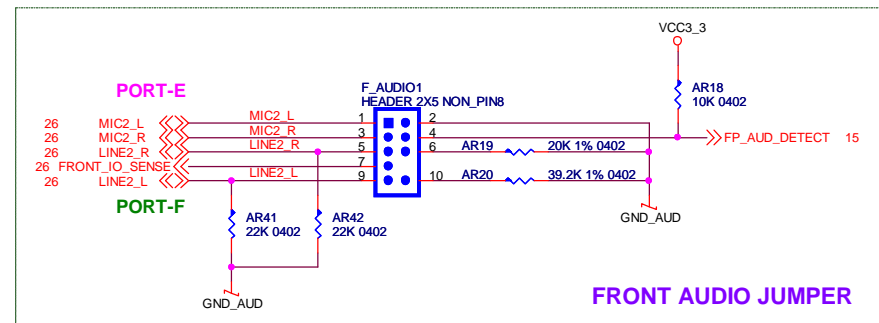
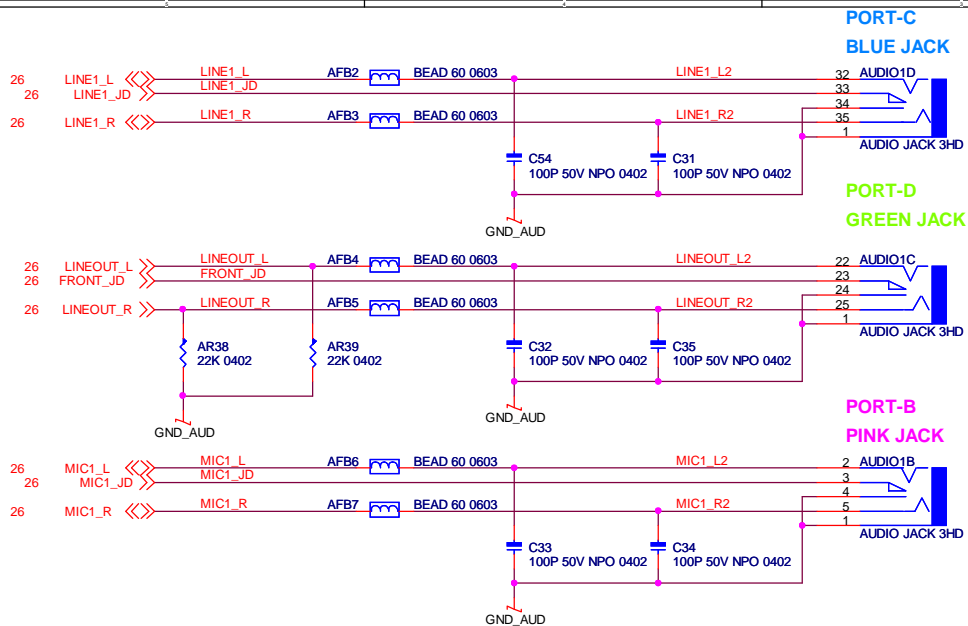
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Title: **CODEC ALC 892**

Size: Custom Document Number: **BIB75-MHA** Rev: 5.0

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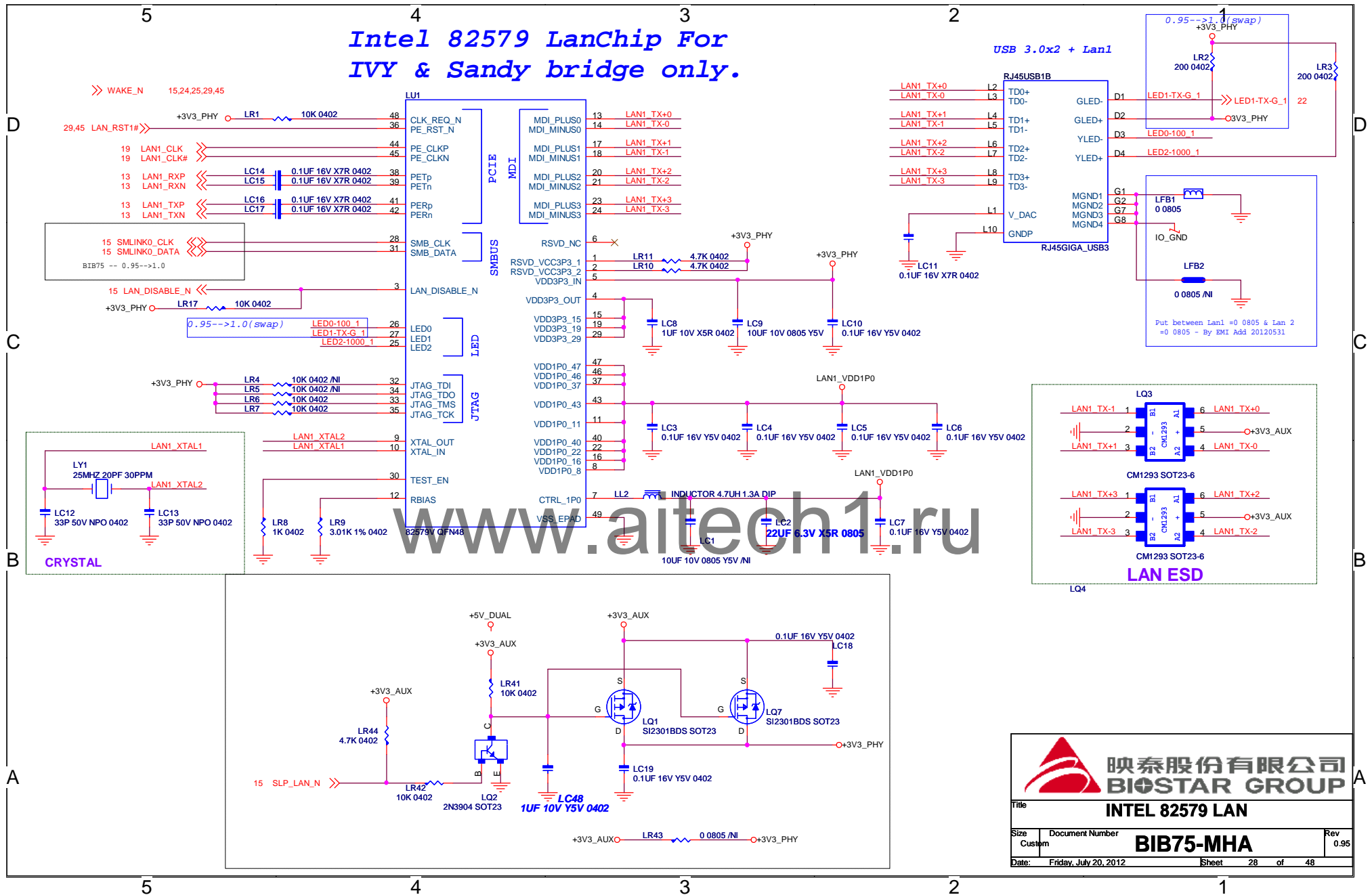


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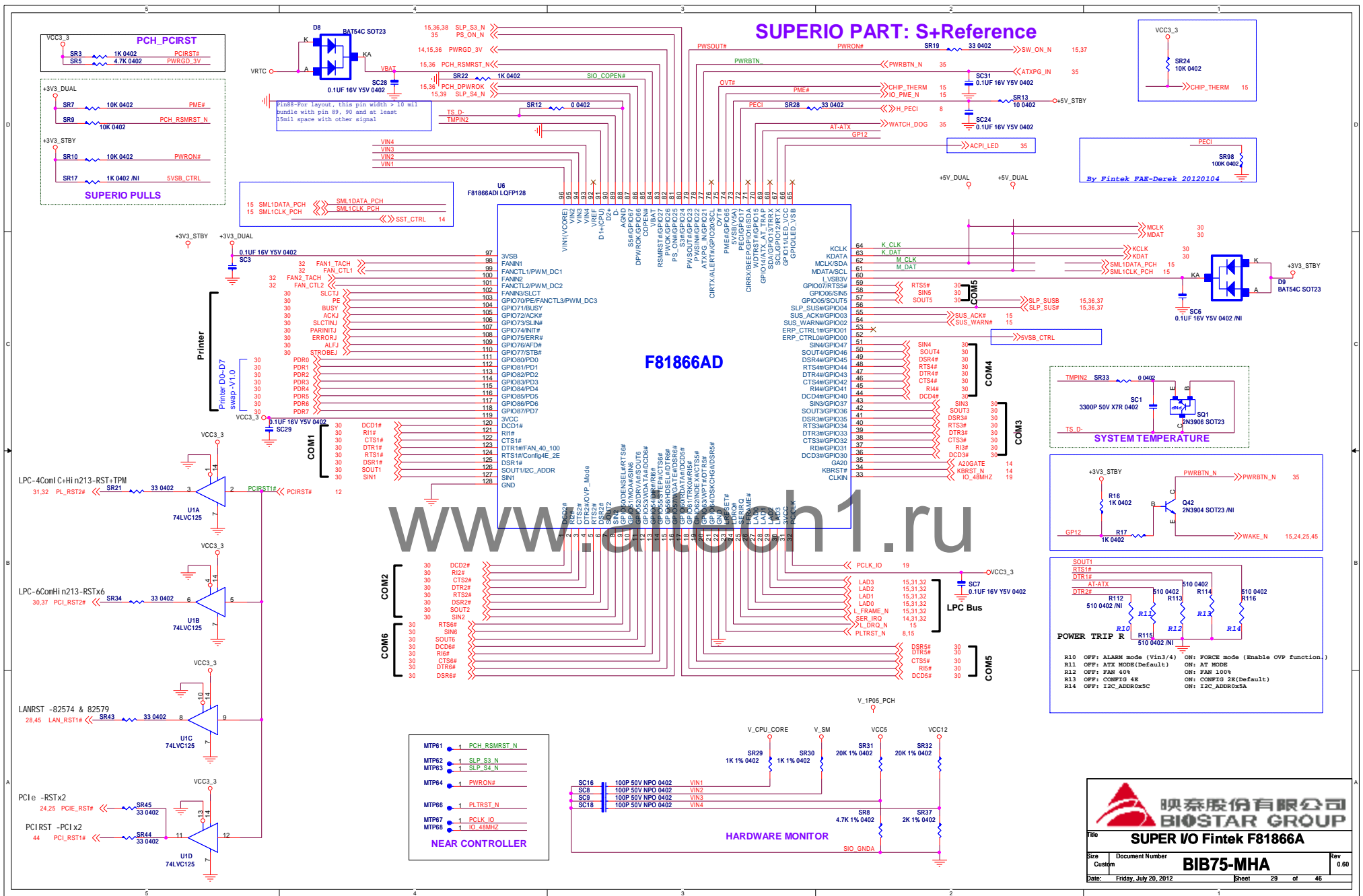
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# Intel 82579 LanChip For IVY & Sandy bridge only.



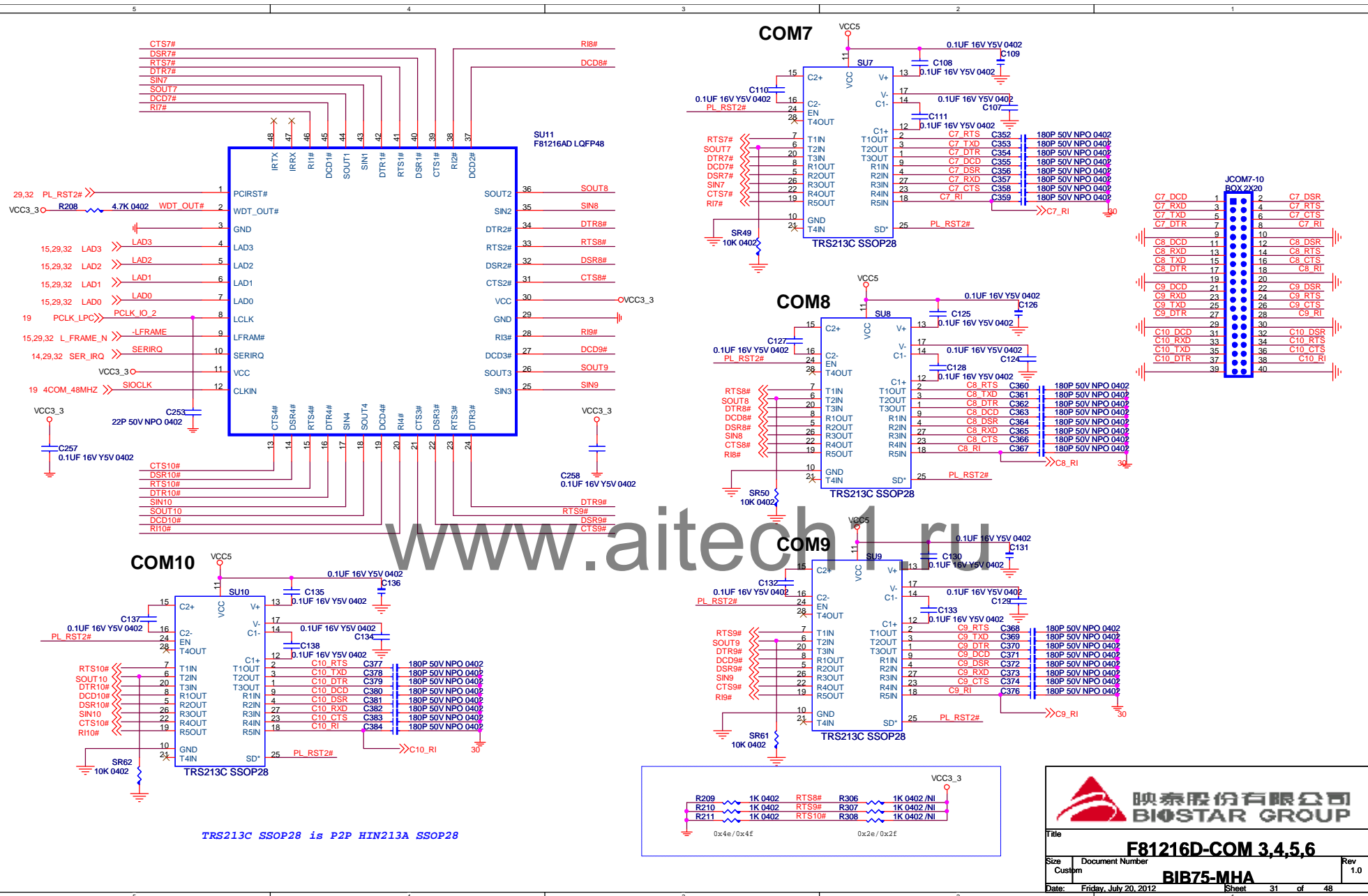






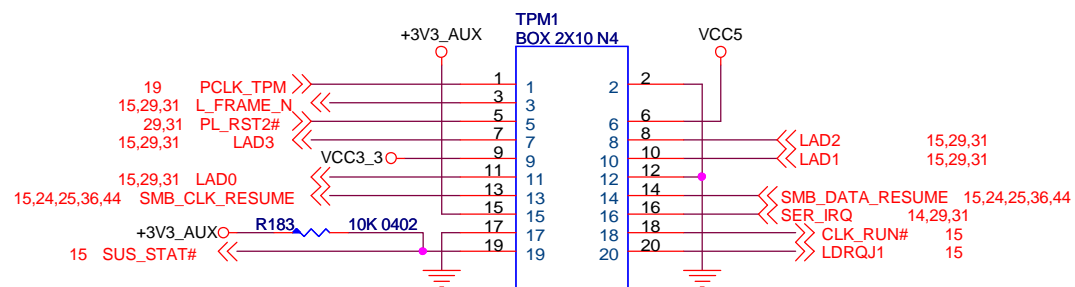
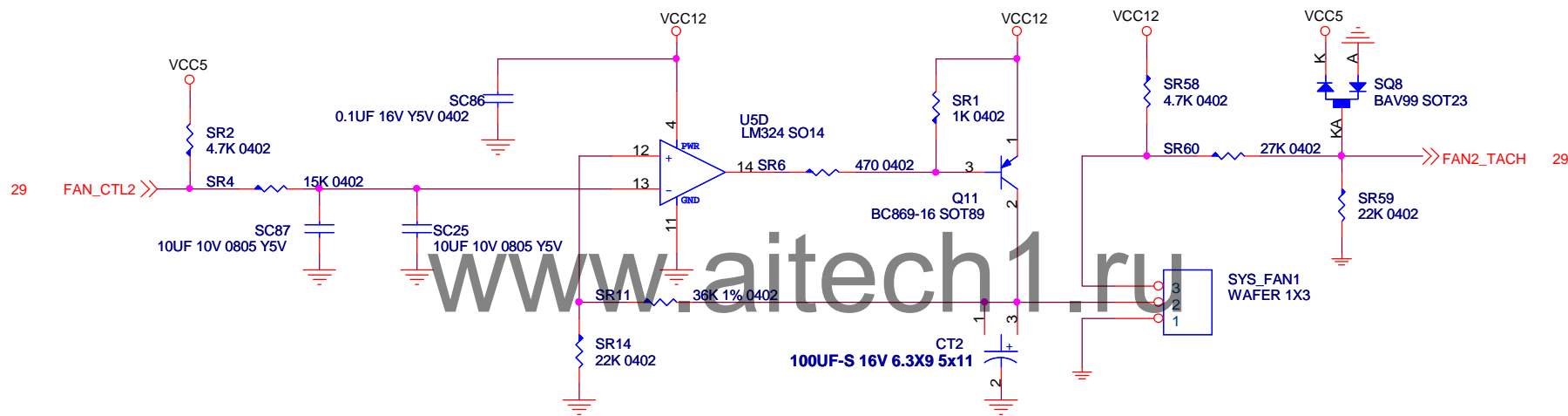
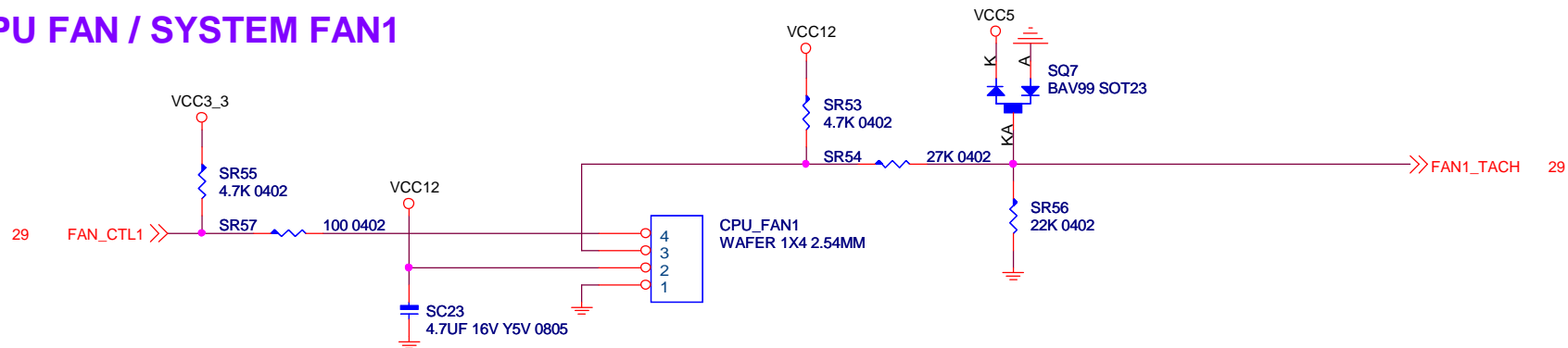









# CPU FAN / SYSTEM FAN1

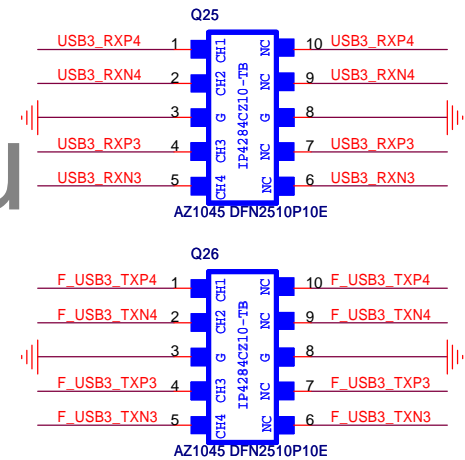
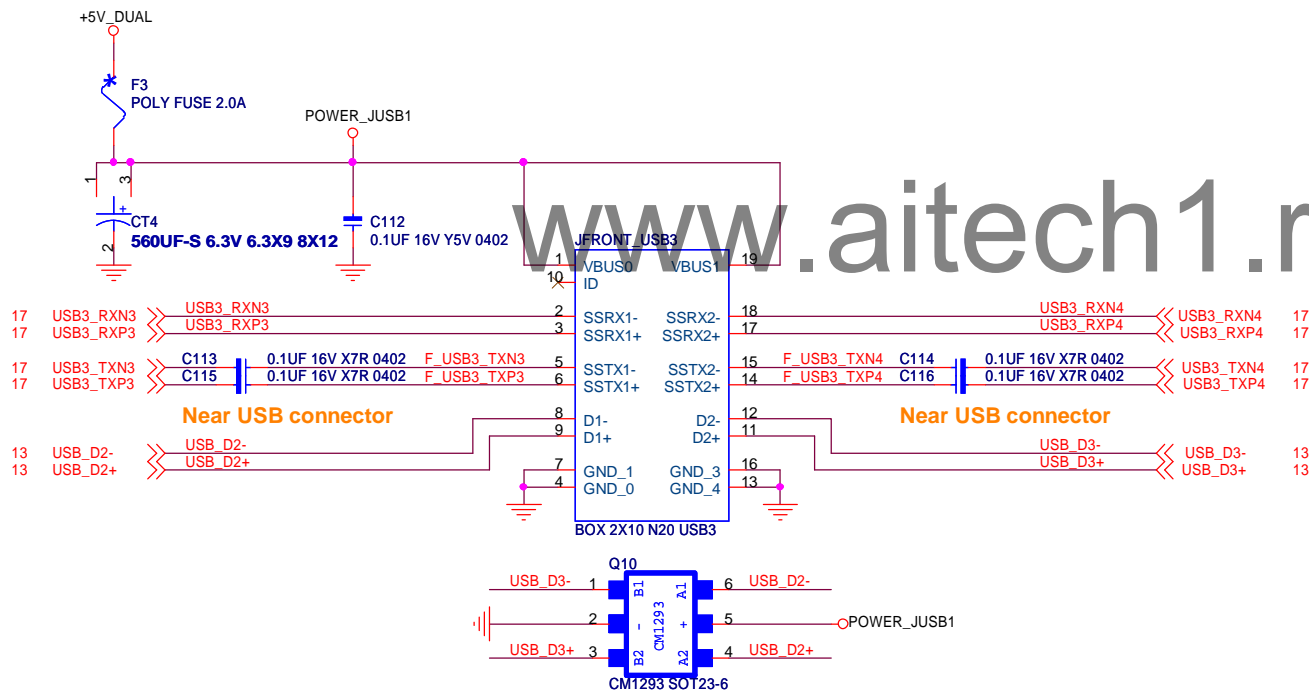
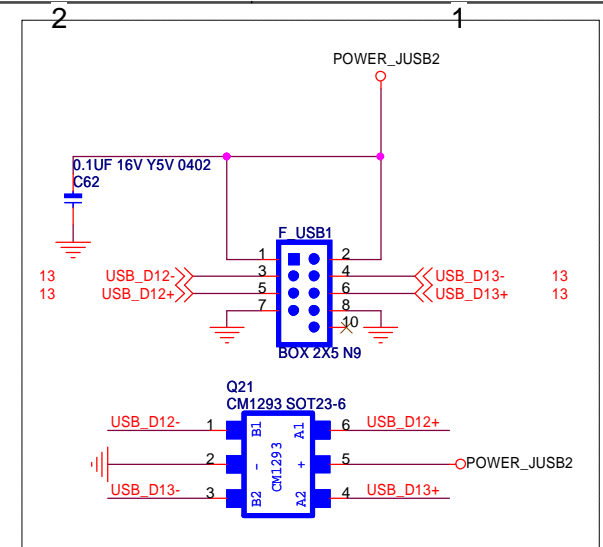
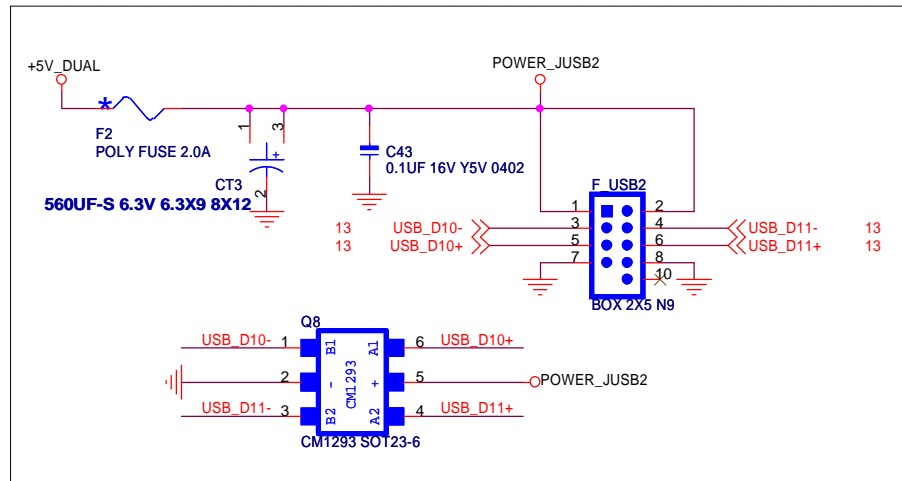




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**BI+STAR GROUP**

<b>Title</b>		
<b>HW MONITOR/FAN CONTROL</b>		
<b>Size</b>	<b>Document Number</b>	<b>Rev</b>
Custom	<b>BIB75-MHA</b>	5.0
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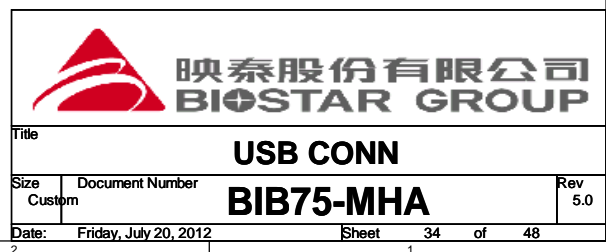
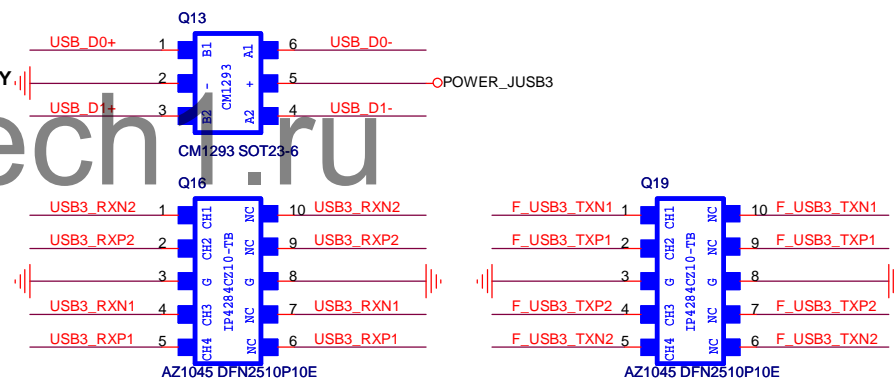
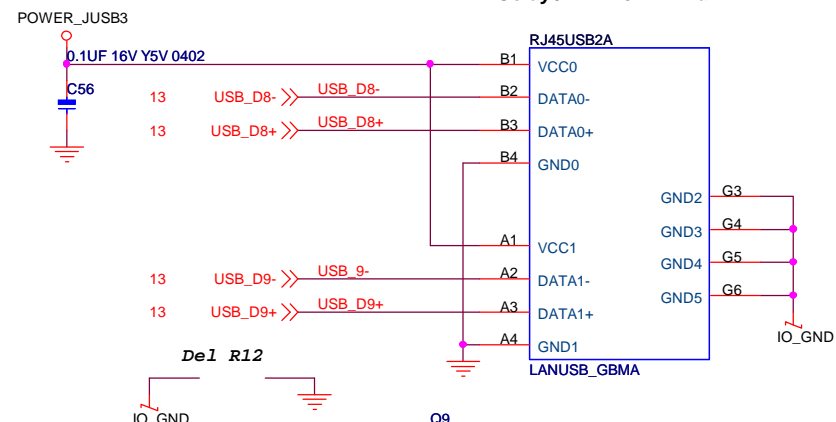
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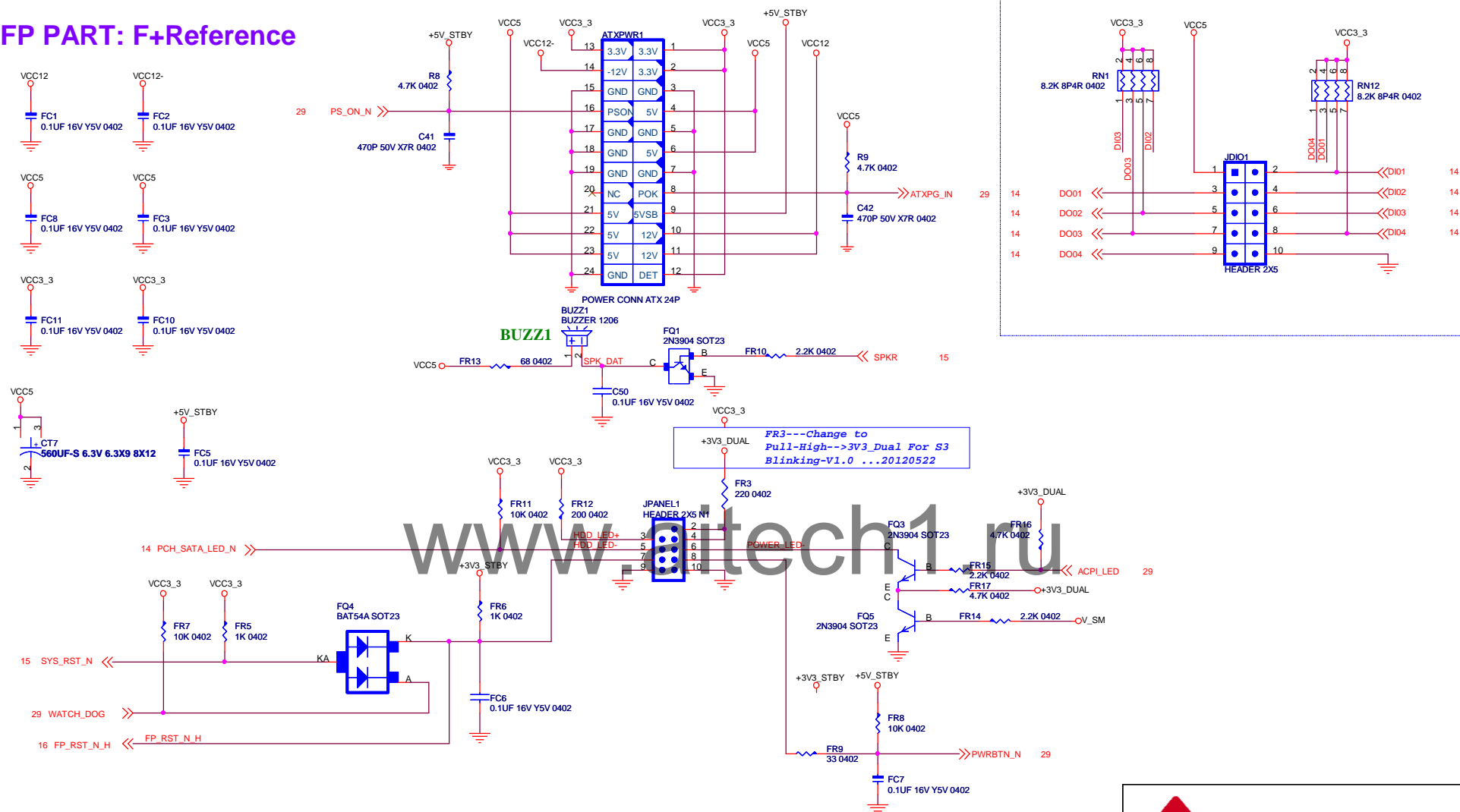
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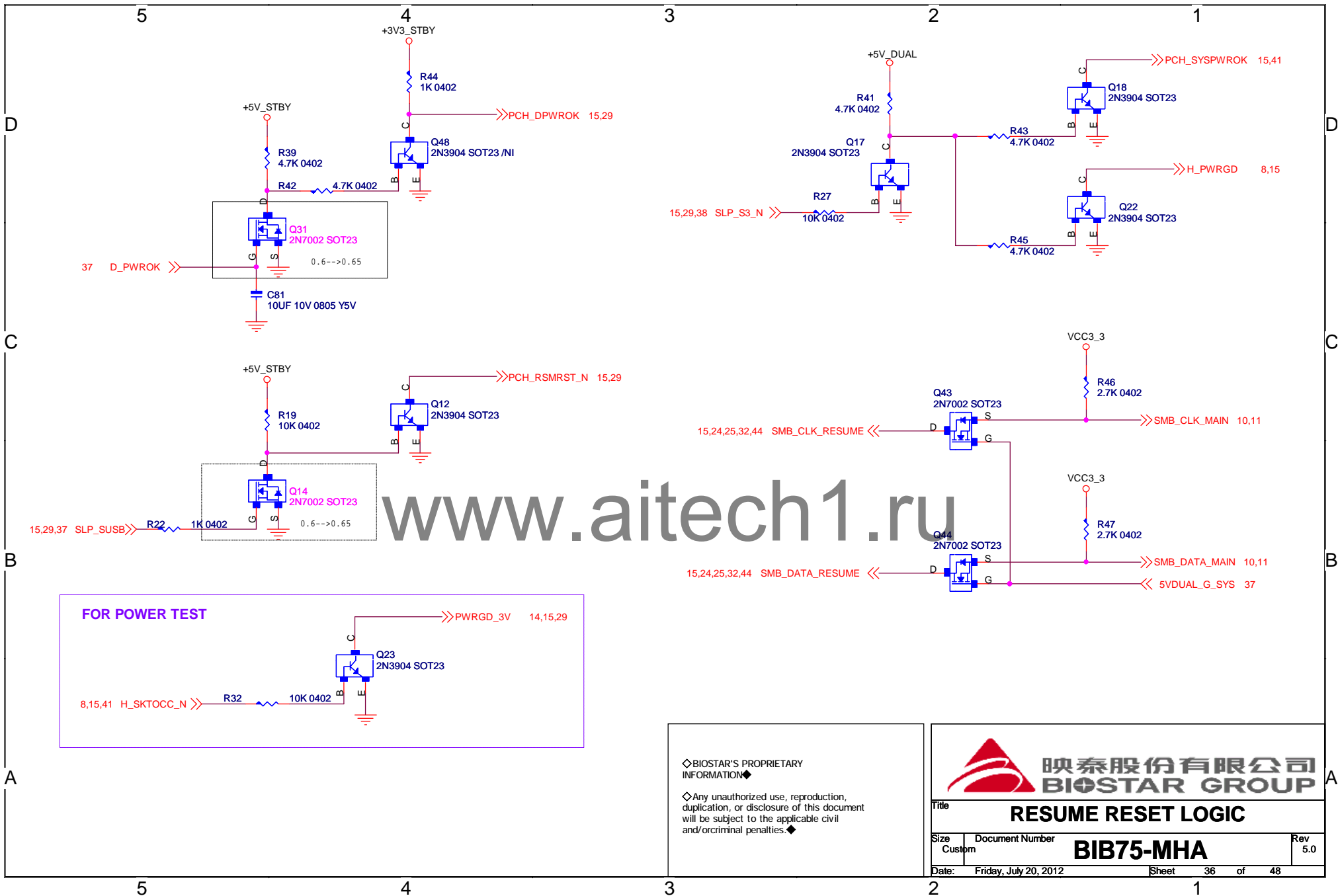




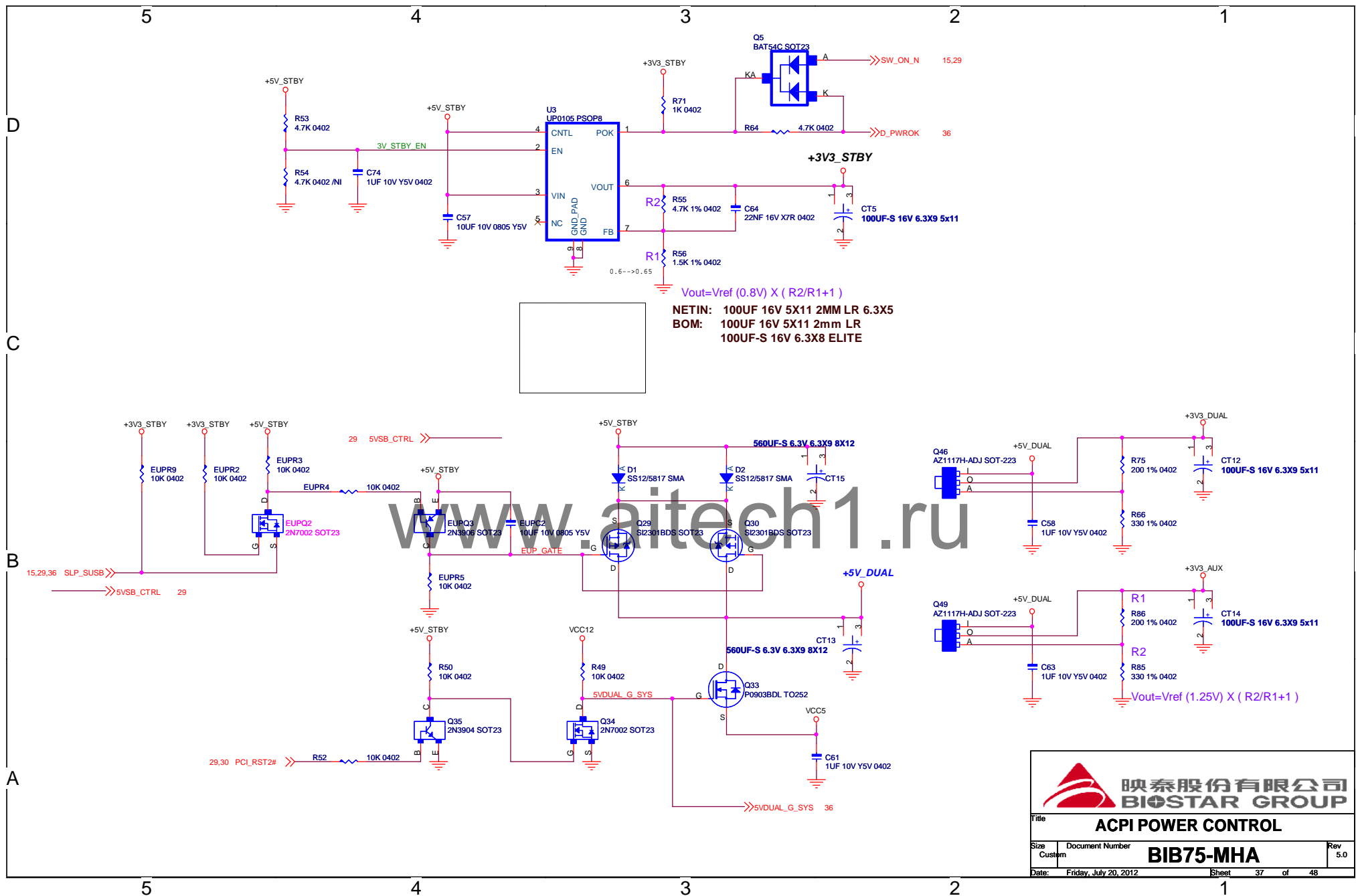
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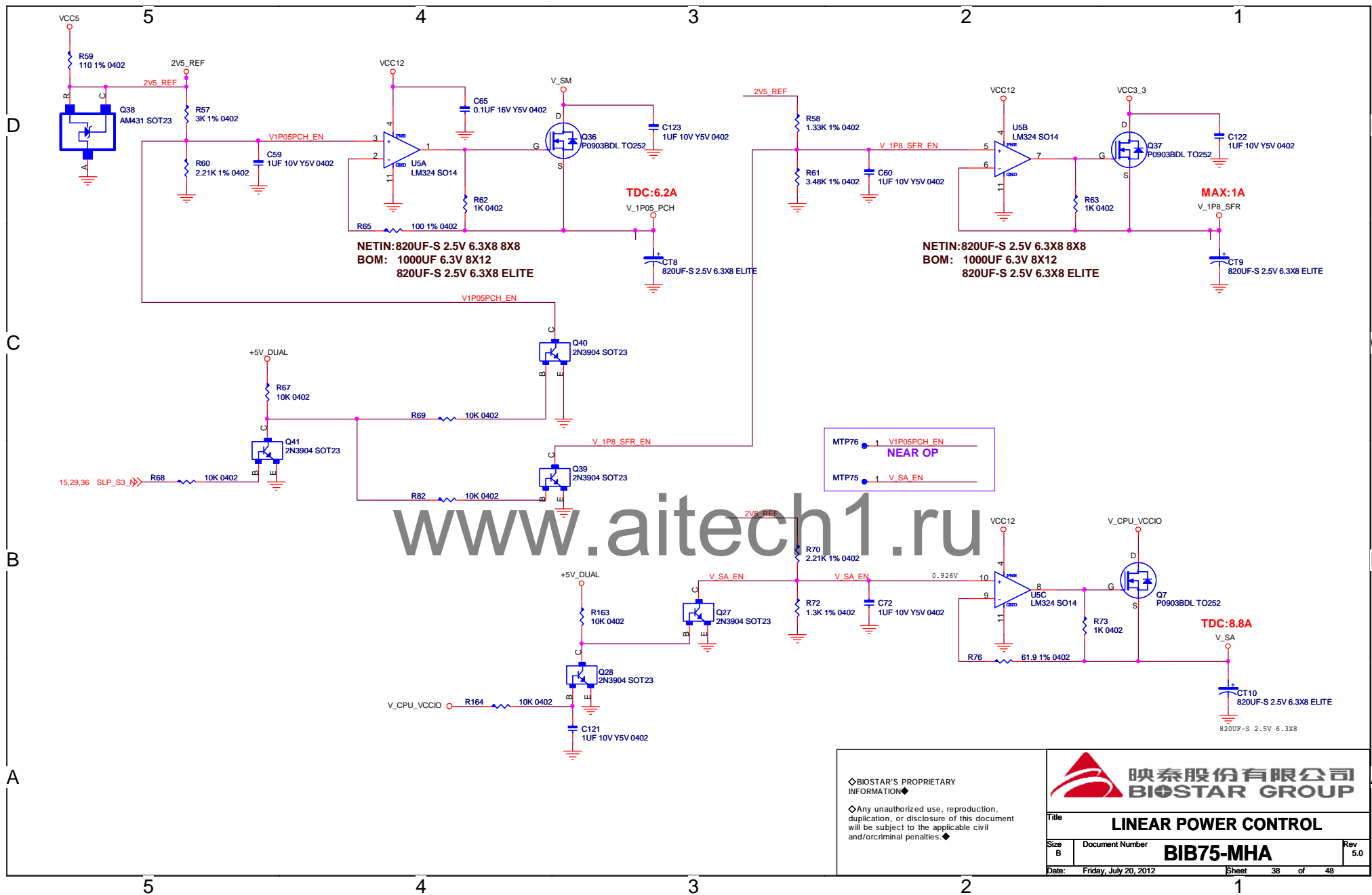






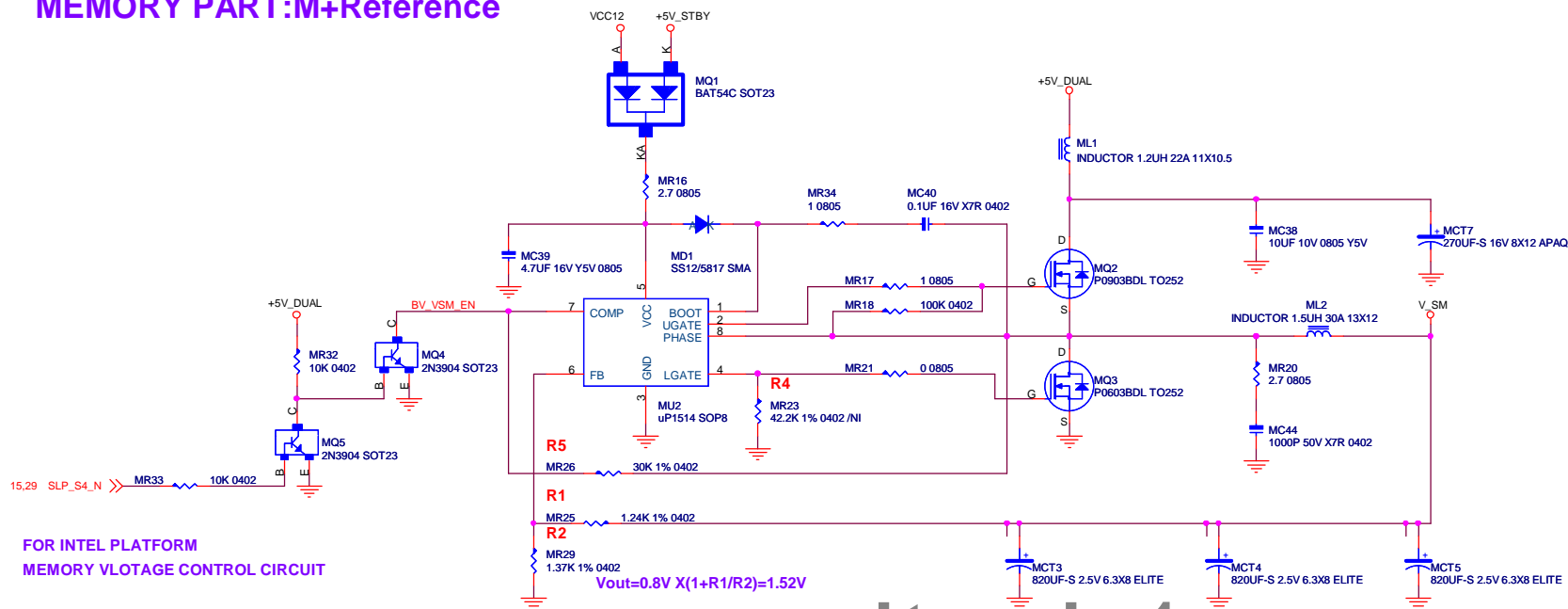




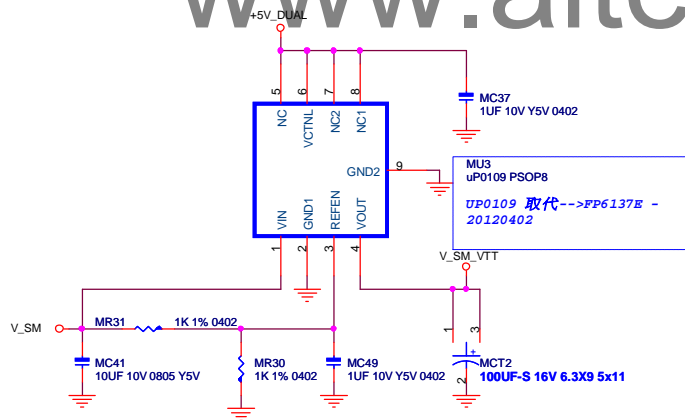




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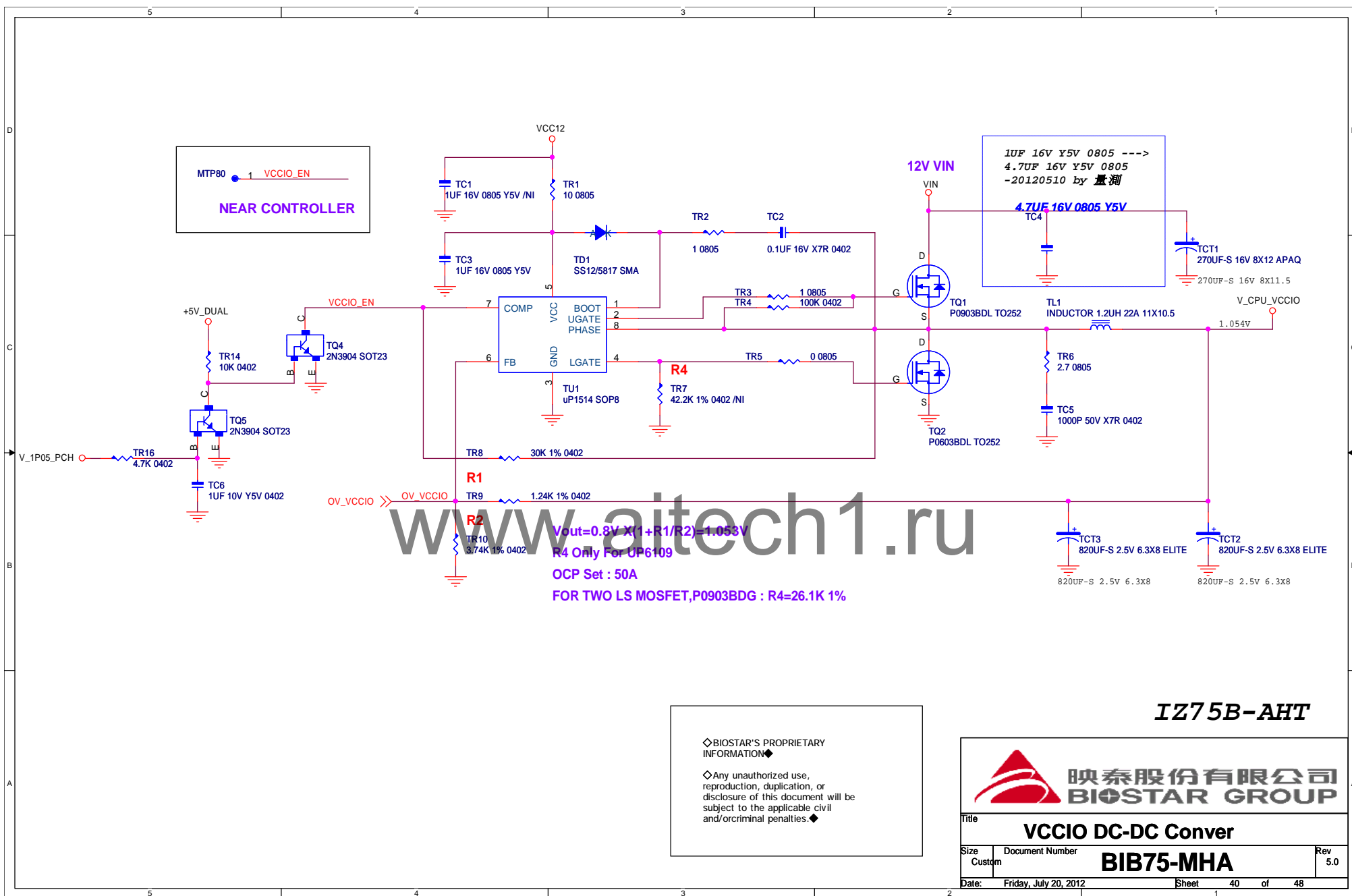
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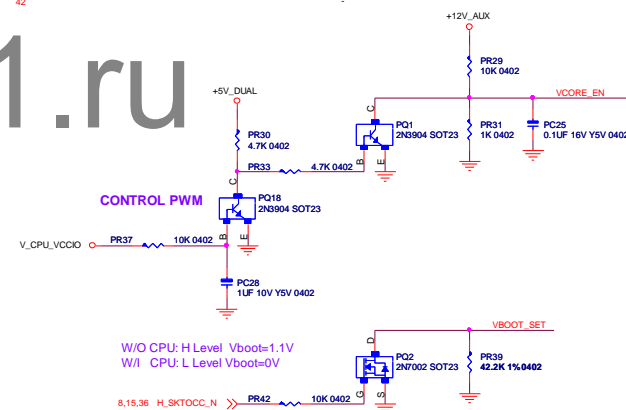
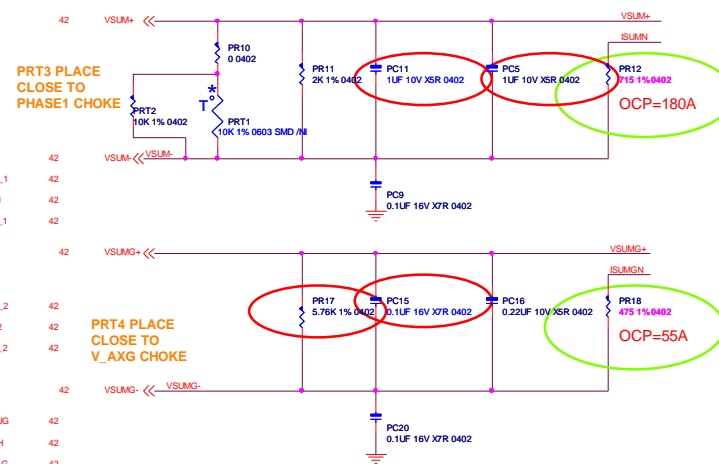
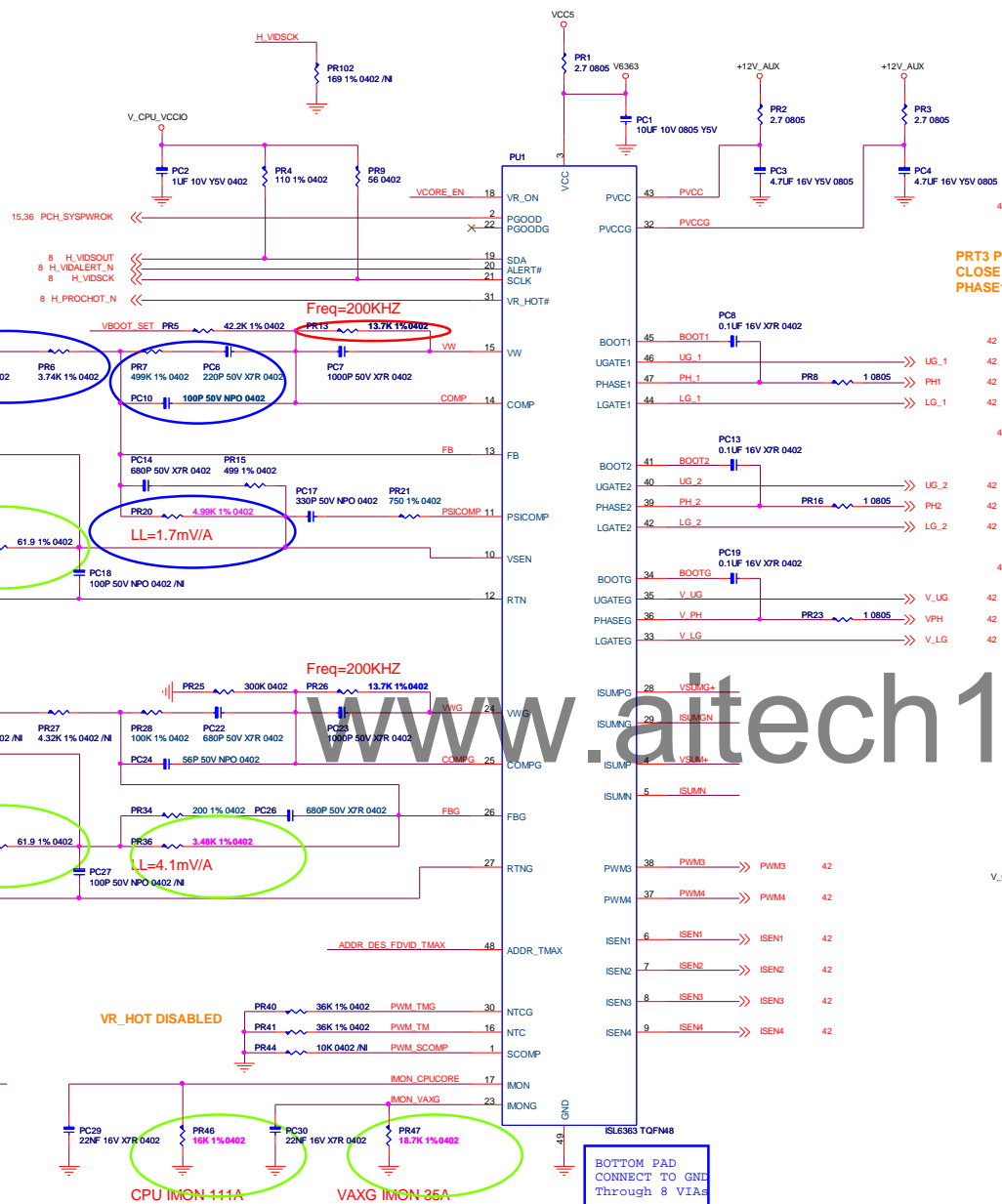


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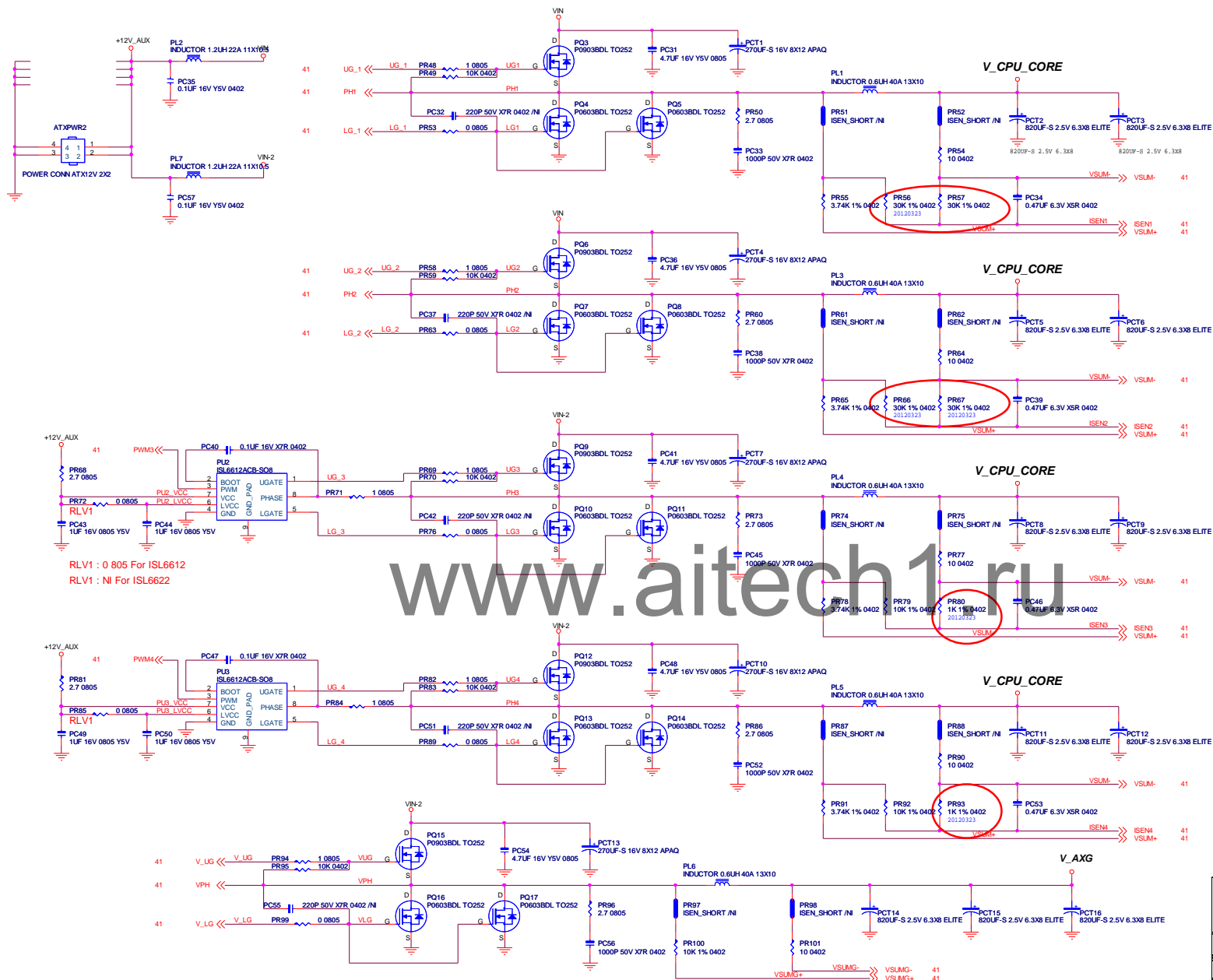
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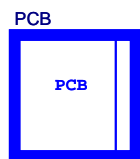
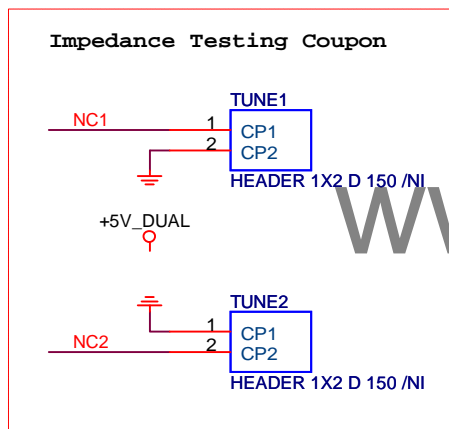
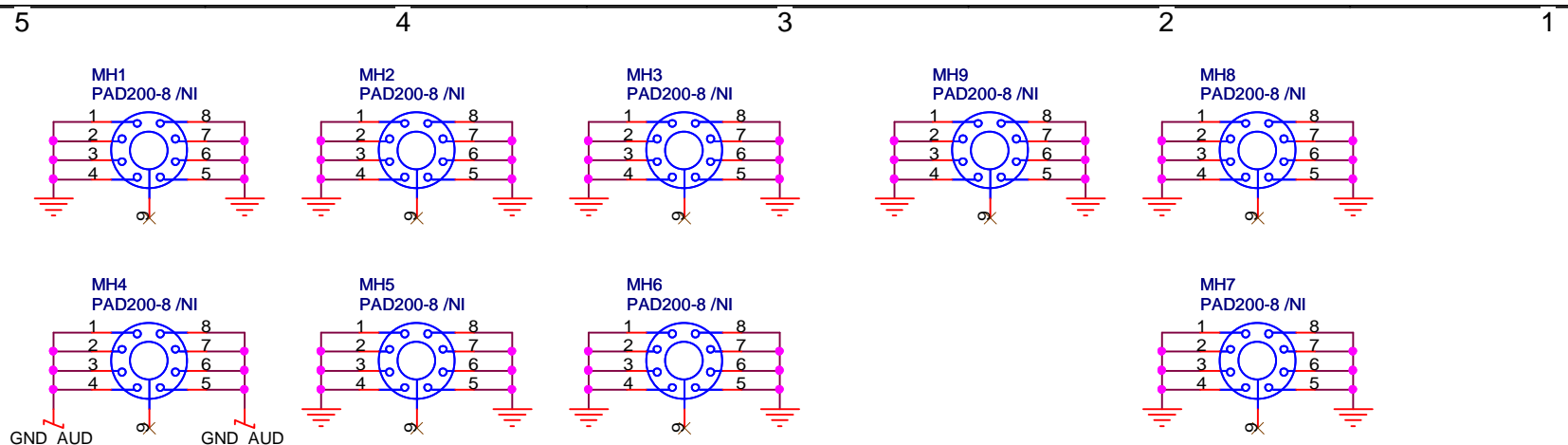
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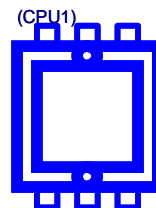


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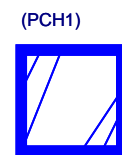




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