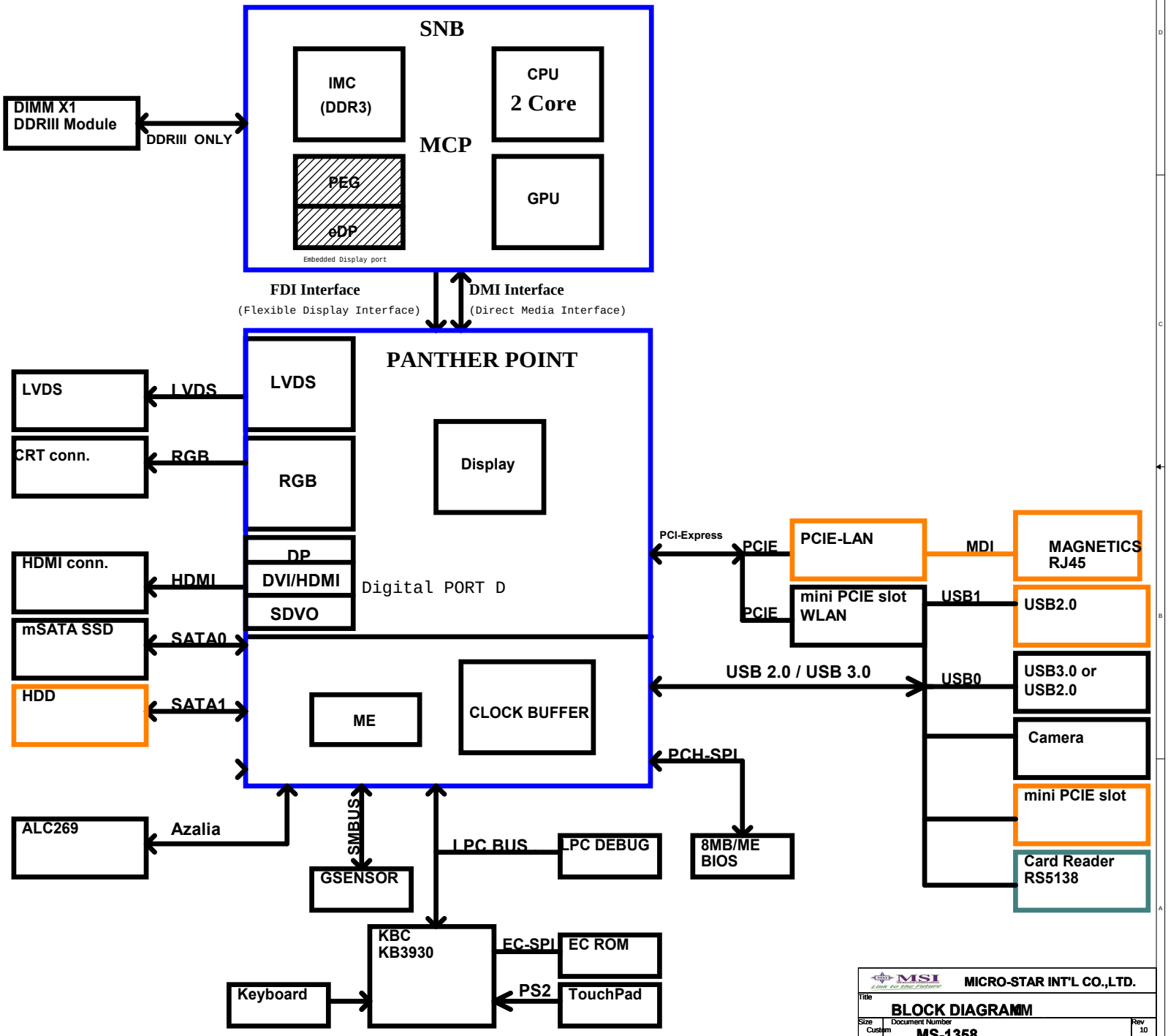
1358 VER :10



MICRO-STAR INT'L CO.,LTD.

Title: BLOCK DIAGRAM

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MICRO-STAR INT'L CO.,LTD.	
Title	PLATFORM
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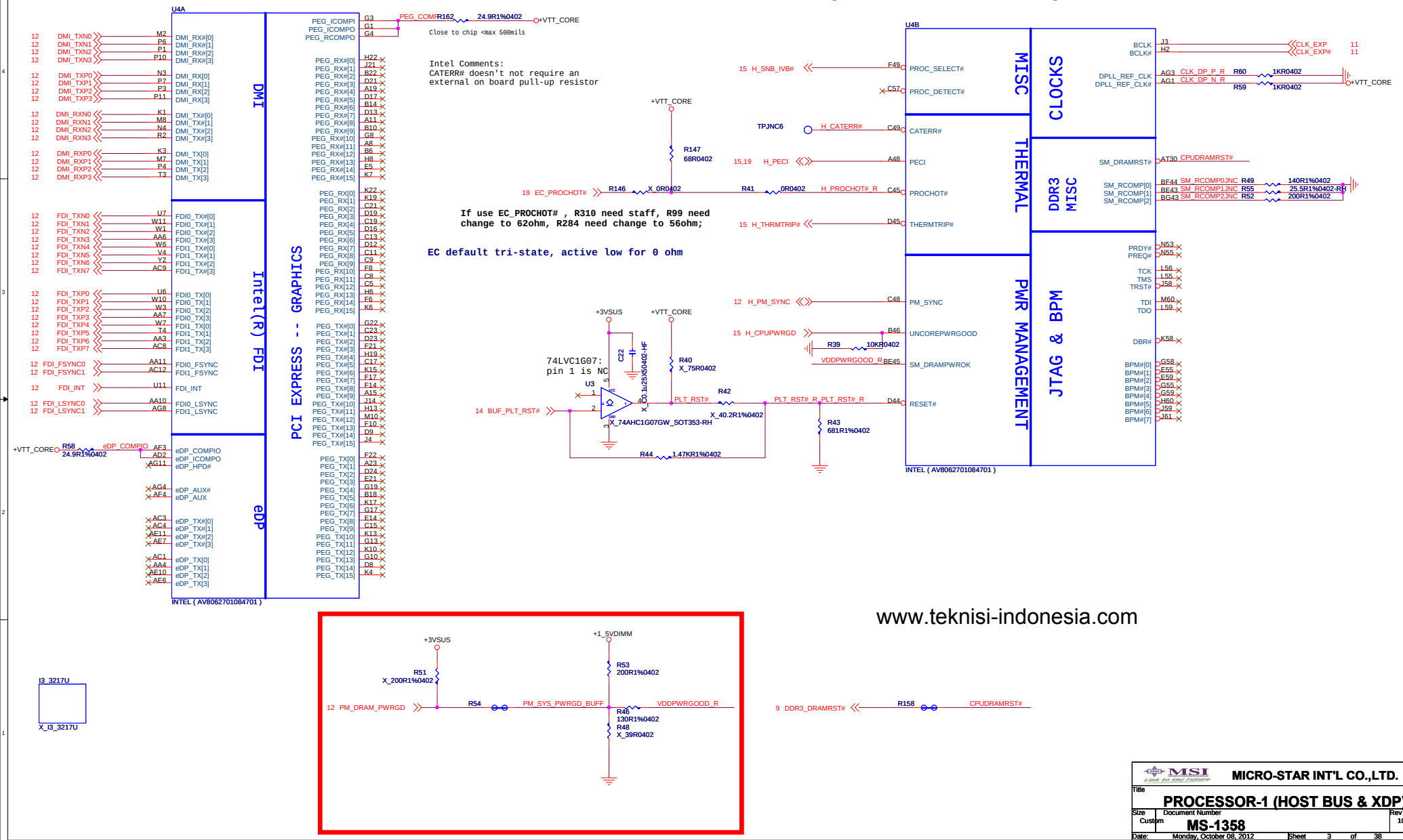
IVY BRIDGE 2C BGA PROCESSOR (DMI,DP,PEG,FDI)



MICRO-STAR INT'L CO.,LTD.			
Title: PROCESSOR-1 (HOST BUS & XDP)			
Size: Custom	Document Number: MS-1358		Rev: 10
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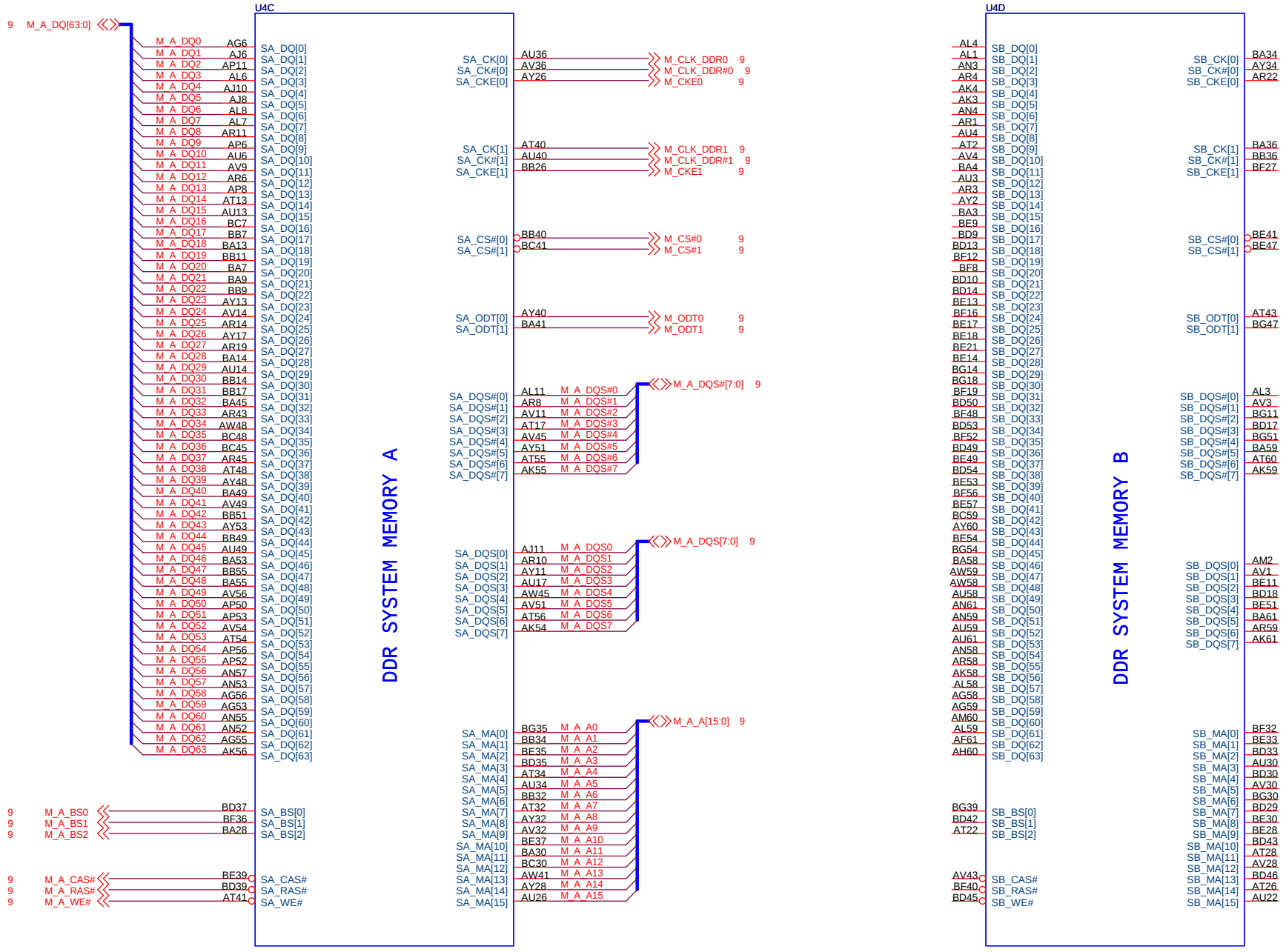
IVY BRIDGE 2C BGA PROCESSOR (DDR3)



MICRO-STAR INT'L CO.,LTD.

Title: PROCESSOR-2 (DDR3)

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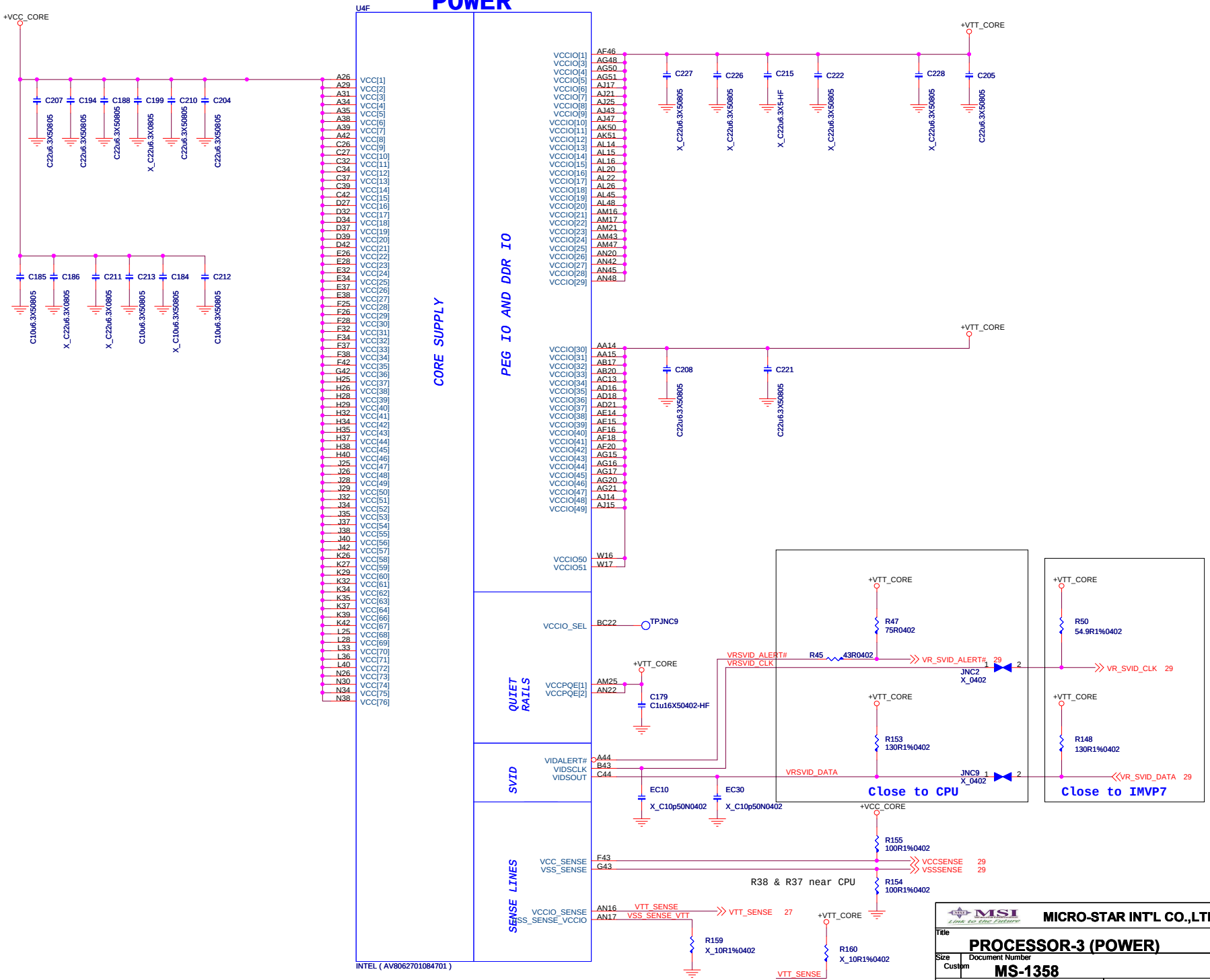
25A

IVY BRIDGE 2C BGA PROCESSOR (POWER)

For SV CPU

POWER



Title	PROCESSOR-3 (POWER)
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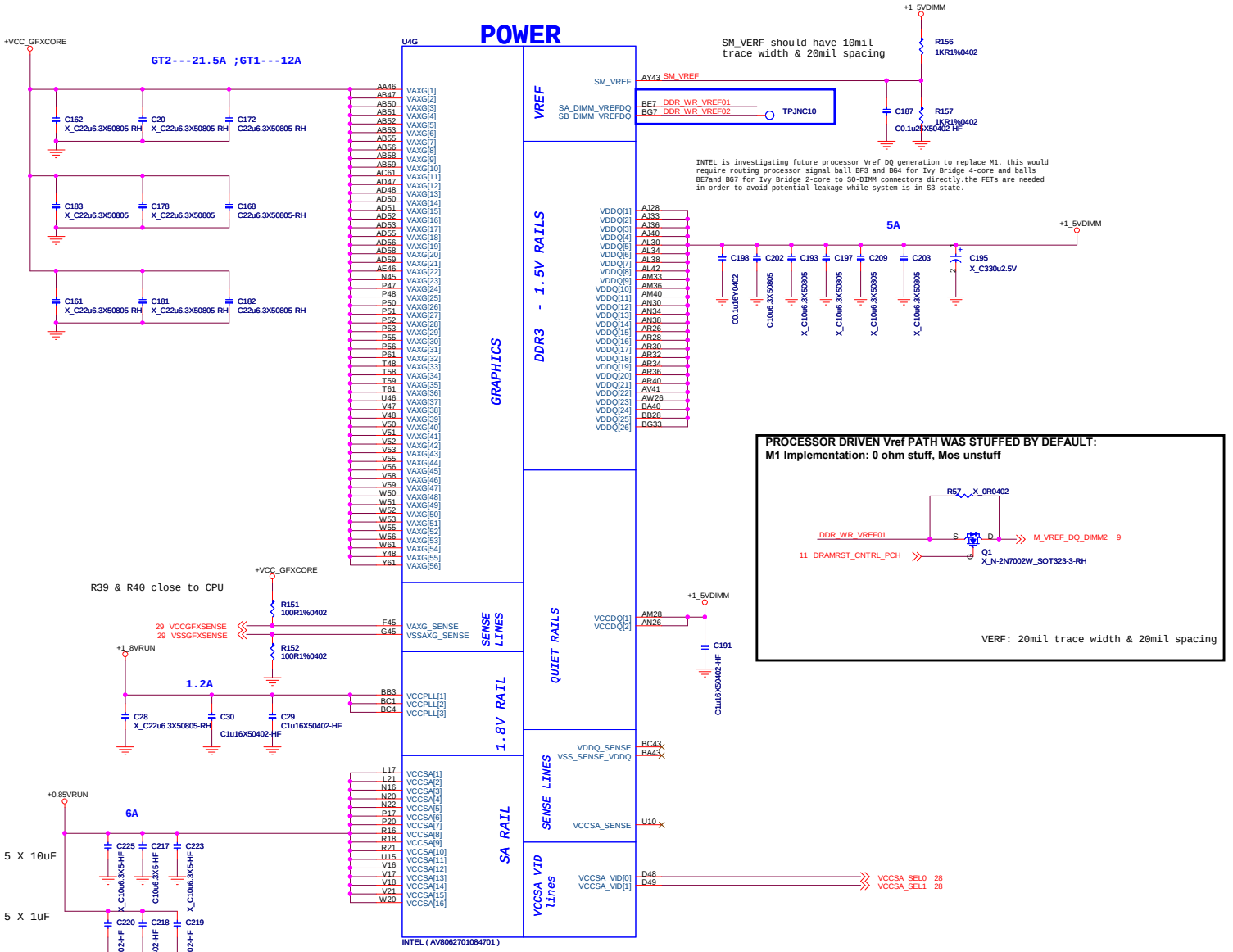
MICRO-STAR INT'L CO.,LTD.

IVY BRIDGE 2C BGA PROCESSOR (GRAPHICS POWER)



VCCSA_SEL Voltage Selection Table

VID[0] Pin C22	VID[1] Pin C24	VCCSA Vout	Required for 2011 processor	Required for 2012 processor
0	0	0.90 V	Yes	Yes
0	1	0.80 V	Yes	Yes
1	0	0.725 V	No	Yes
1	1	0.675 V	No	Yes

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Title: PROCESSOR-4 (GRAPHICS POWER)

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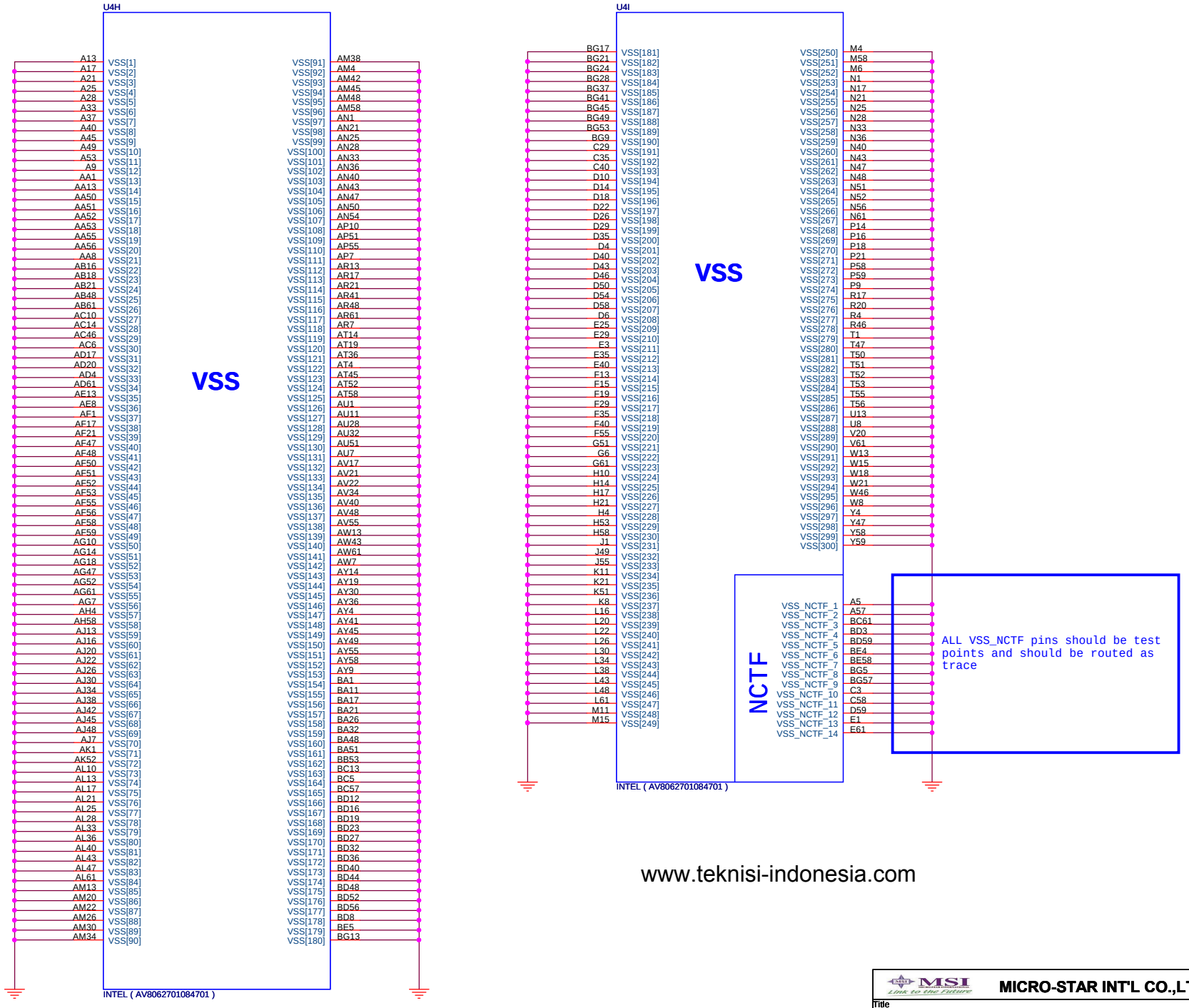
IVY BRIDGE 2C BGA PROCESSOR (GND)



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Title: PROCESSOR-5 (GND)		
Size: Custom	Document Number: MS-1358	Rev: 10
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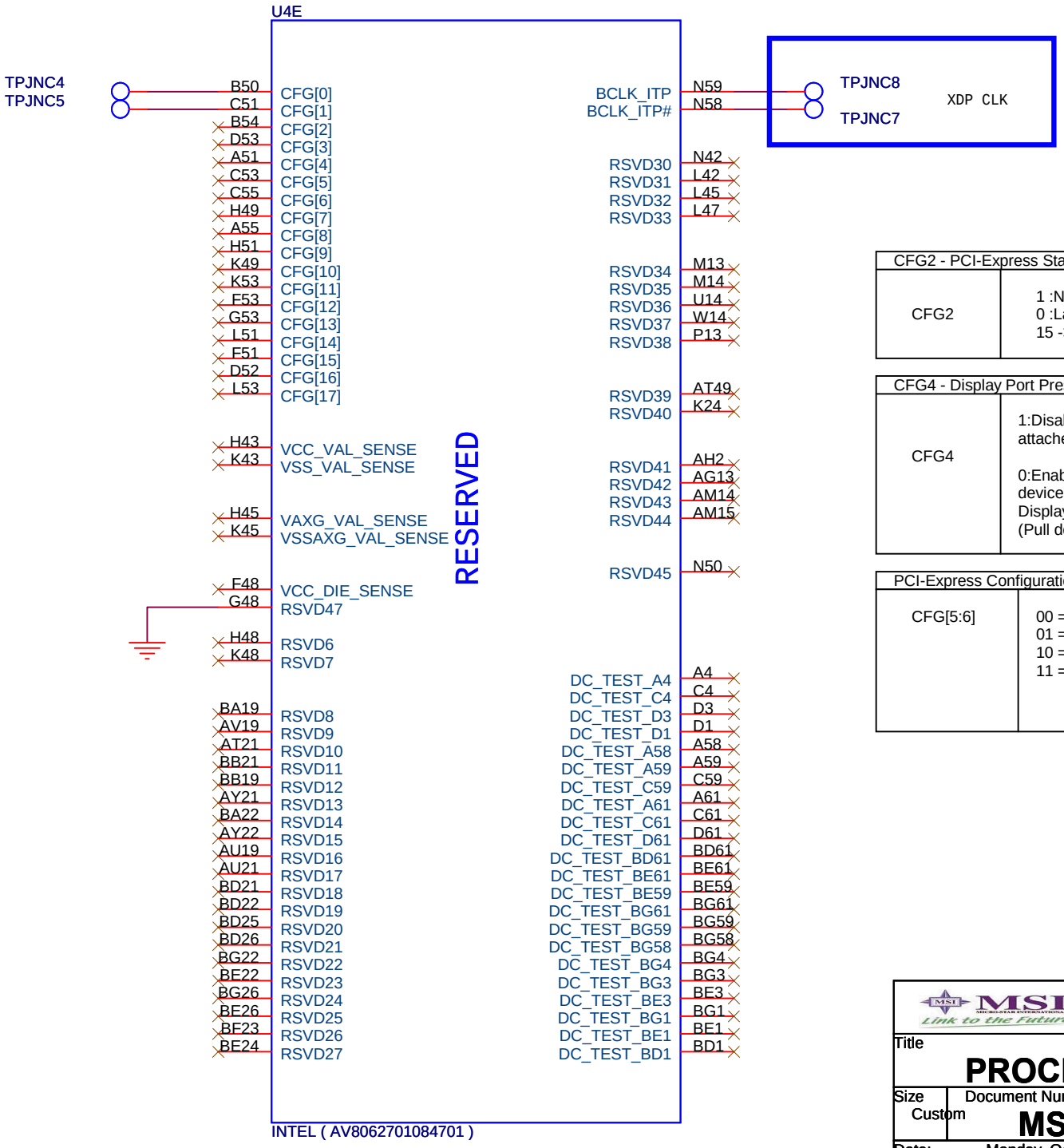
IVY BRIDGE 2C BGA PROCESSOR (RESERVED)



CFG2 - PCI-Express Static Lane Reversal	
CFG2	1 :Normal Operation 0 :Lane Numbers Reversed 15 -> 0, 14 -> 1, ...

CFG4 - Display Port Presence	
CFG4	1:Disabled; No Physical Display Port attached to Embedded Display Port (NC in DG) 0:Enabled; An external Display Port device is connected to the Embedded Display Port (Pull down to GND through a 1K ± 5% resistor)

PCI-Express Configuration Select	
CFG[5:6]	00 = 1 x 8, 2 x 4 PCI Express 01 = reserved 10 = 2 x 8 PCI Express 11 = 1 x 16 PCI Express (Default)

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Title: PROCESSOR-6 (RESERVE)

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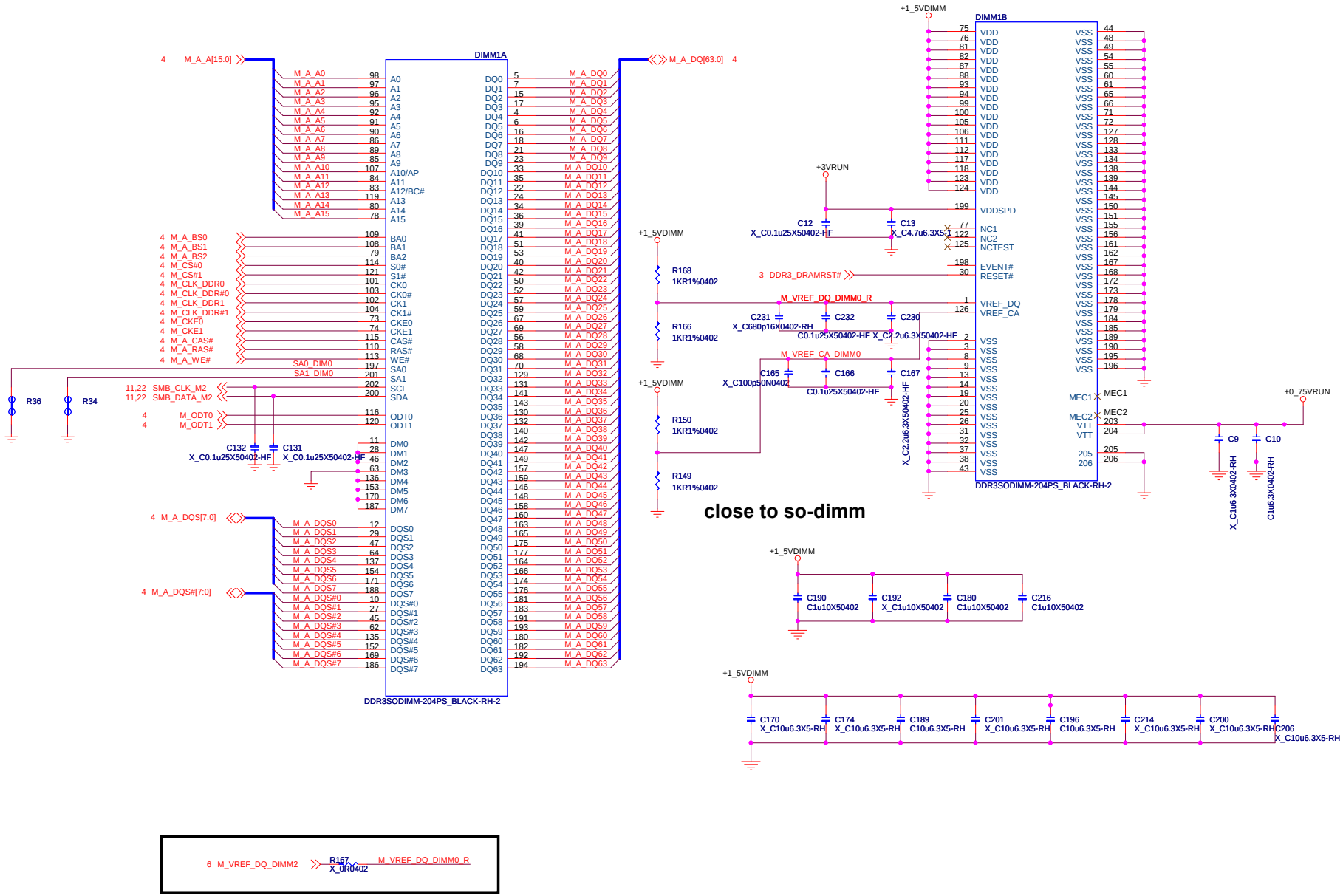
SODIMM#A



MICRO-STAR INT'L CO.,LTD.	
Title	DDR3 SODIMM0
Size	A3
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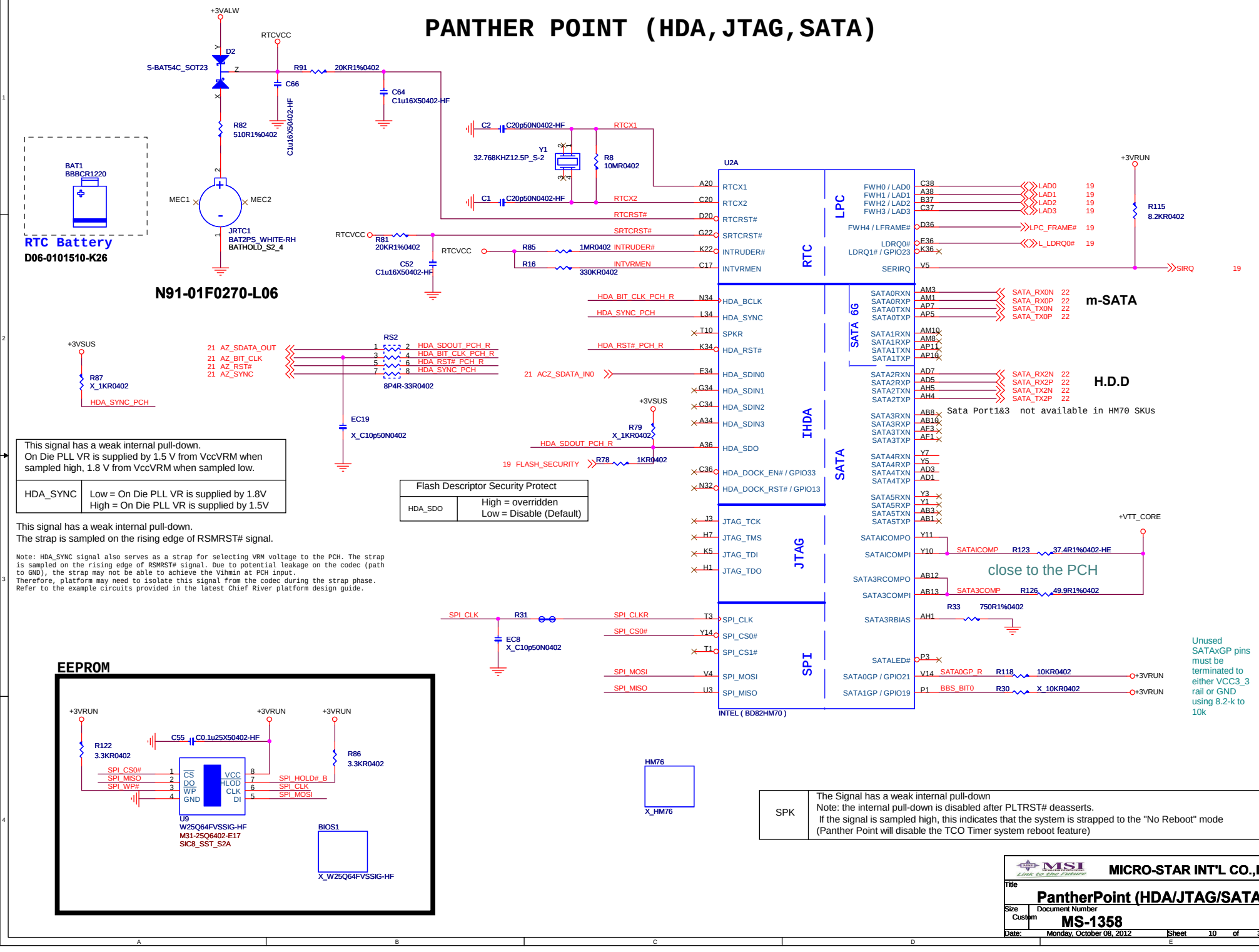
PANTHER POINT (HDA,JTAG,SATA)



This signal has a weak internal pull-down. On Die PLL VR is supplied by 1.5 V from VccVRM when sampled high, 1.8 V from VccVRM when sampled low.	
HDA_SYNC	Low = On Die PLL VR is supplied by 1.8V High = On Die PLL VR is supplied by 1.5V

This signal has a weak internal pull-down.
The strap is sampled on the rising edge of RSMRST# signal.

Note: HDA_SYNC signal also serves as a strap for selecting VRM voltage to the PCH. The strap is sampled on the rising edge of RSMRST# signal. Due to potential leakage on the codec (path to GND), the strap may not be able to achieve the Vihmin at PCH input.
Therefore, platform may need to isolate this signal from the codec during the strap phase.
Refer to the example circuits provided in the latest Chief River platform design guide.

Flash Descriptor Security Protect	
HDA_SDO	High = overridden Low = Disable (Default)

SPK	The Signal has a weak internal pull-down Note: the internal pull-down is disabled after PLTRST# deasserts. If the signal is sampled high, this indicates that the system is strapped to the "No Reboot" mode (Panther Point will disable the TCO Timer system reboot feature)

Unused SATAxGP pins must be terminated to either VCC3_3 rail or GND using 8.2-k to 10k

MICRO-STAR INT'L CO.,LTD.

Title: PantherPoint (HDA/JTAG/SATA)

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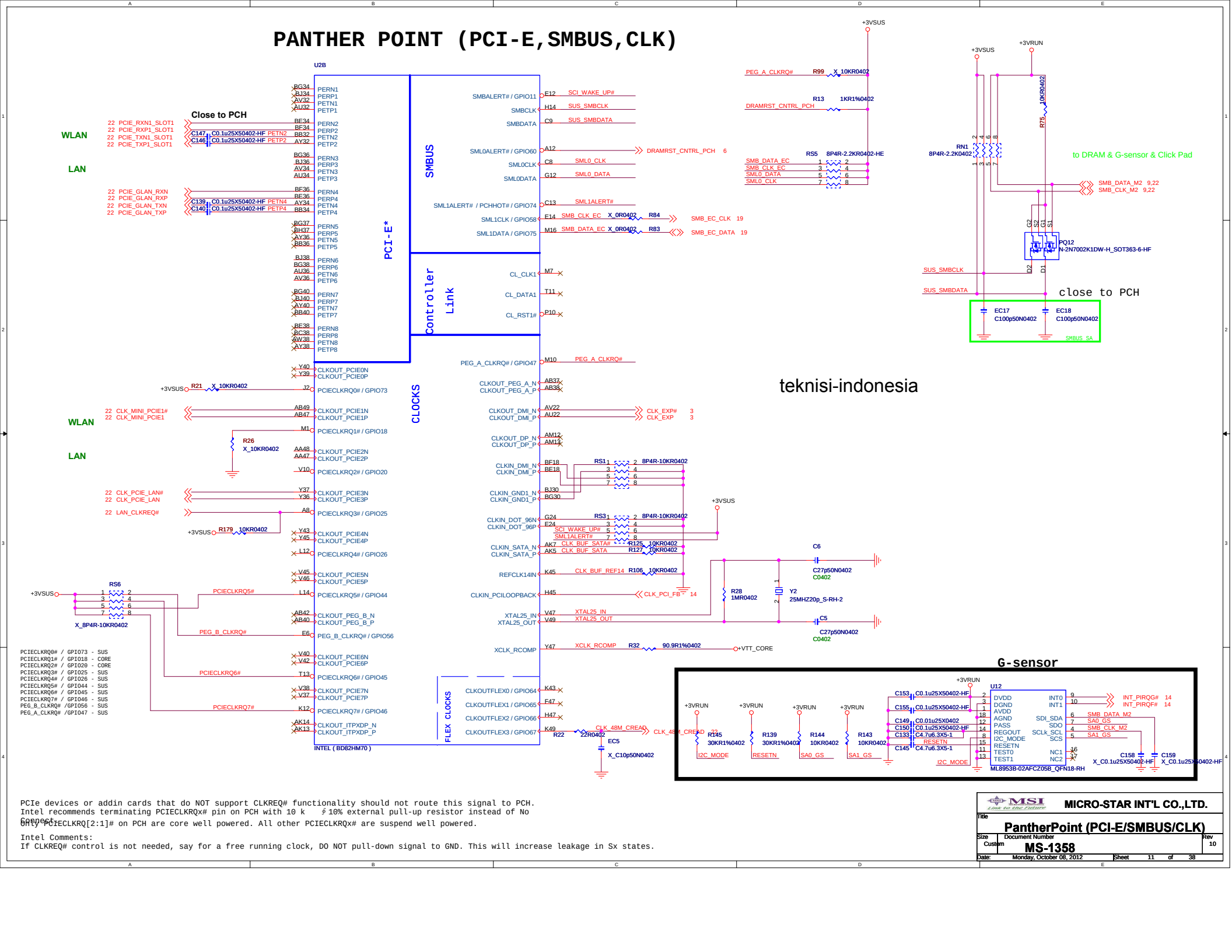
PANTHER POINT (PCI-E,SMBUS,CLK)



PCIe devices or addin cards that do NOT support CLKREQ# functionality should not route this signal to PCH.
Intel recommends terminating PCIECLKRQx# pin on PCH with 10 k ± 10% external pull-up resistor instead of No Connect.
Only PCIECLKRQ[2:1]# on PCH are core well powered. All other PCIECLKRQx# are suspend well powered.

Intel Comments:
If CLKREQ# control is not needed, say for a free running clock, DO NOT pull-down signal to GND. This will increase leakage in Sx states.

MICRO-STAR INT'L CO.,LTD.

Title: PantherPoint (PCI-E/SMBUS/CLK)

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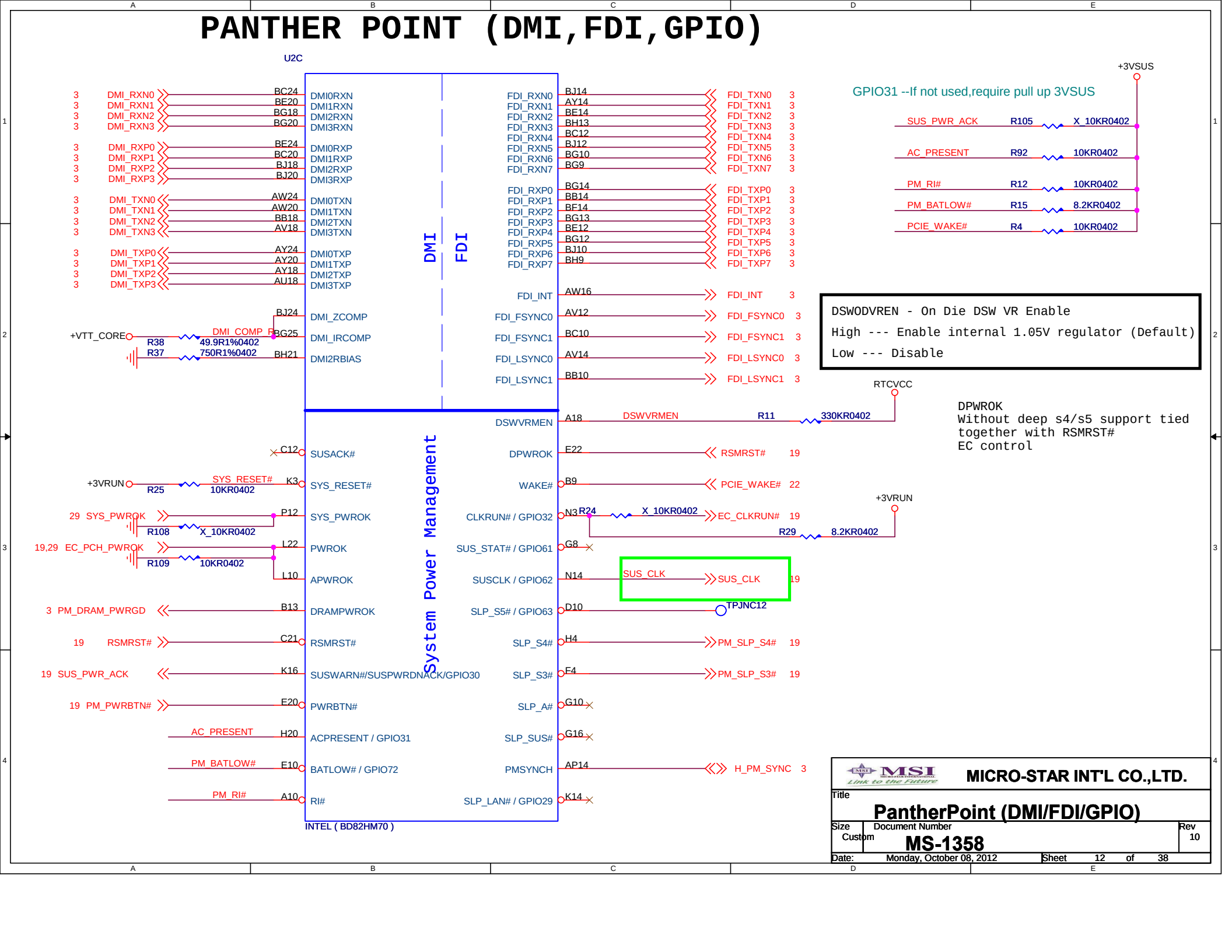
PANTHER POINT (DMI,FDI,GPIO)



Title	PantherPoint (DMI/FDI/GPIO)
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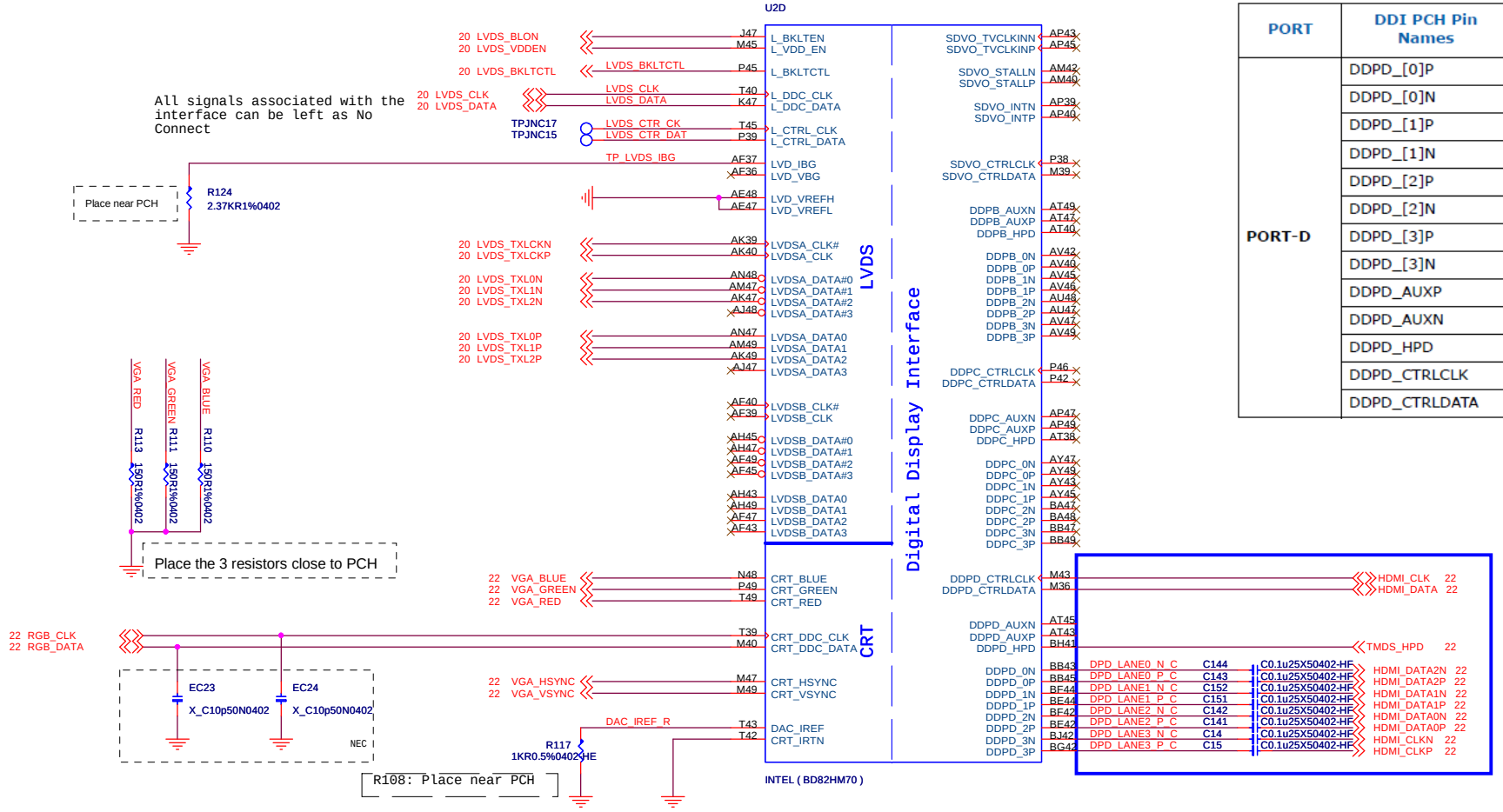
MICRO-STAR INT'L CO.,LTD.

PANTHER POINT (LVDS,DDI)



PORT	DDI PCH Pin Names	HDMI/DVI Mapping
PORT-D	DDPD_[0]P	TMDSD_DATA2
	DDPD_[0]N	TMDSD_DATA2#
	DDPD_[1]P	TMDSD_DATA1
	DDPD_[1]N	TMDSD_DATA1#
	DDPD_[2]P	TMDSD_DATA0
	DDPD_[2]N	TMDSD_DATA0#
	DDPD_[3]P	TMDSD_CLK
	DDPD_[3]N	TMDSD_CLK#
	DDPD_AUXP	NA
	DDPD_AUXN	NA
	DDPD_HPD	HDMID_HPD
	DDPD_CTRLCLK	HDMID_CTRLCLK
	DDPD_CTRLDATA	HDMID_CTRLDATA

MICRO-STAR INT'L CO.,LTD.

Title: PantherPoint (LVDS/DDI)

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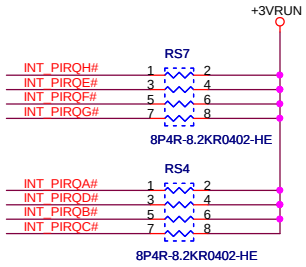
PANTHER POINT (PCI,USB,NVRAM)

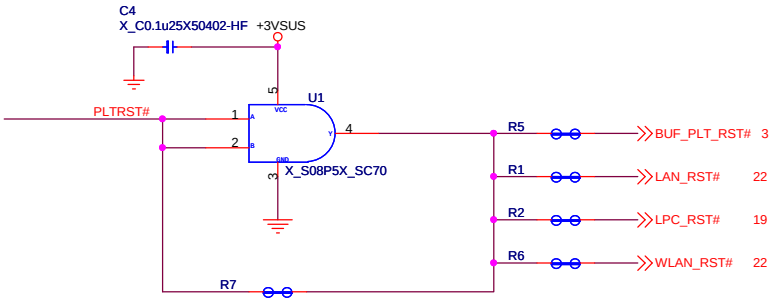


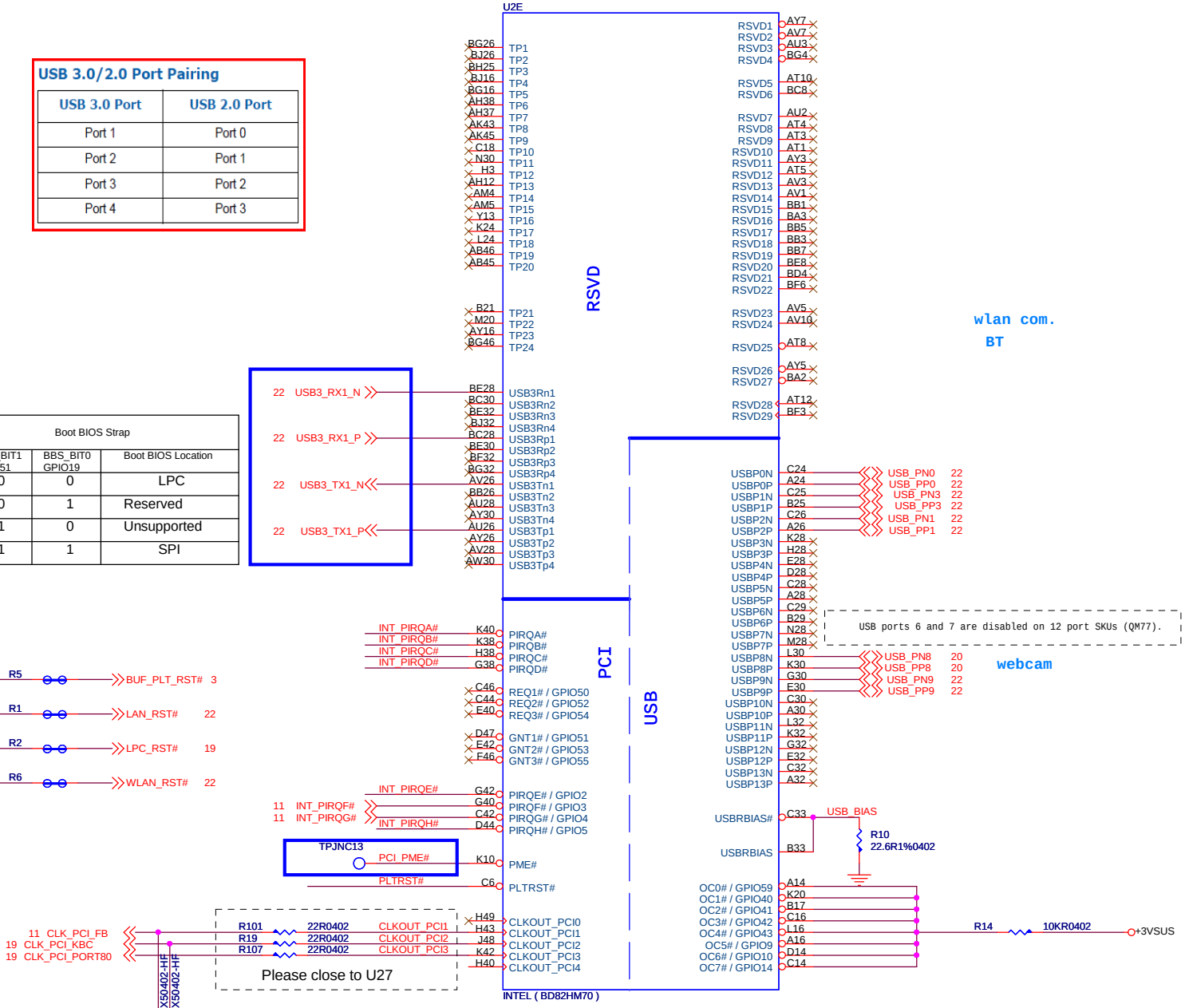
USB 3.0/2.0 Port Pairing

USB 3.0 Port	USB 2.0 Port
Port 1	Port 0
Port 2	Port 1
Port 3	Port 2
Port 4	Port 3

A16 swap override Strap/Top-Block Swap Override jumper	
GNT#3	Low = A16 swap override/Top-Block Swap Override enabled High = Default

Boot BIOS Strap		
BBS_BIT1 GPIO51	BBS_BIT0 GPIO19	Boot BIOS Location
0	0	LPC
0	1	Reserved
1	0	Unsupported
1	1	SPI





MICRO-STAR INT'L CO.,LTD.			
Title: PantherPoint (PCI/USB/NVRAM)			
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PANTHER POINT (GPIO,VSS_NCTF,RSVD)

GPIO0 & 6 & 16 & 17 & 22 & 34 & 38 & 48 --If not used,require pull up 3VRUN

GPIO57 --If not used,require pull up 3VSUS

GPIO15--Not support AMT,Transport Layer Security Disable(High is support TLS,internal pull-down)

GPIO27 is deep S4 & S5 weak up event,internal pull high.

GPIO35 --Define to EDID Select (If not used,require pull down)

GPIO15:

This signal must be pulled up to support Intel RPAT and Intel AMT with TLS. Intel ME configuration parameters also need to be set correctly to enable TLS.

Since Pin has strap functionality that requires internal pull-down to be sampled at rising PWROK, following guidelines are required to be followed:
"When Used as SATA2GP/SATA3GP for Mechanical Presence detect - Use a weak external pull-up (150K-200 kOhms) to Vcc3_3 OR use 10K external pull-up that is enabled only after PLTRST# de-assertion.
"When Used as GP Input (Pin HW default) - Ensure GPI is not driven high during strap sampling window
"When Unused as GPIO or SATA*GP - Use 8.2K-10K pull-down to ground.

For Ivy Bridge processor only implementation:
Connect DF_TVS signal of the PCH to PROC_SELECT# of the processor through a 1K ∮ 5% series resistor.
PROC_SELECT# also needs a 2.2K ∮ 5% pull up resistor to PCH VccDFTERM rail.

Intel Comments:
Reserve 0 ohm option in these pins
pins AH8, AK11, AH10 & AK10) to GND.

DMI & FDI Termination Voltage	
NV_CLE	Set to VSS when LOW
	Set to VCC when High

U2F

GPIO

CPU/MISC

NCTF

INTEL (BD82HM70)

Title	
	PantherPoint (GPIO/NCTF/RSVD)
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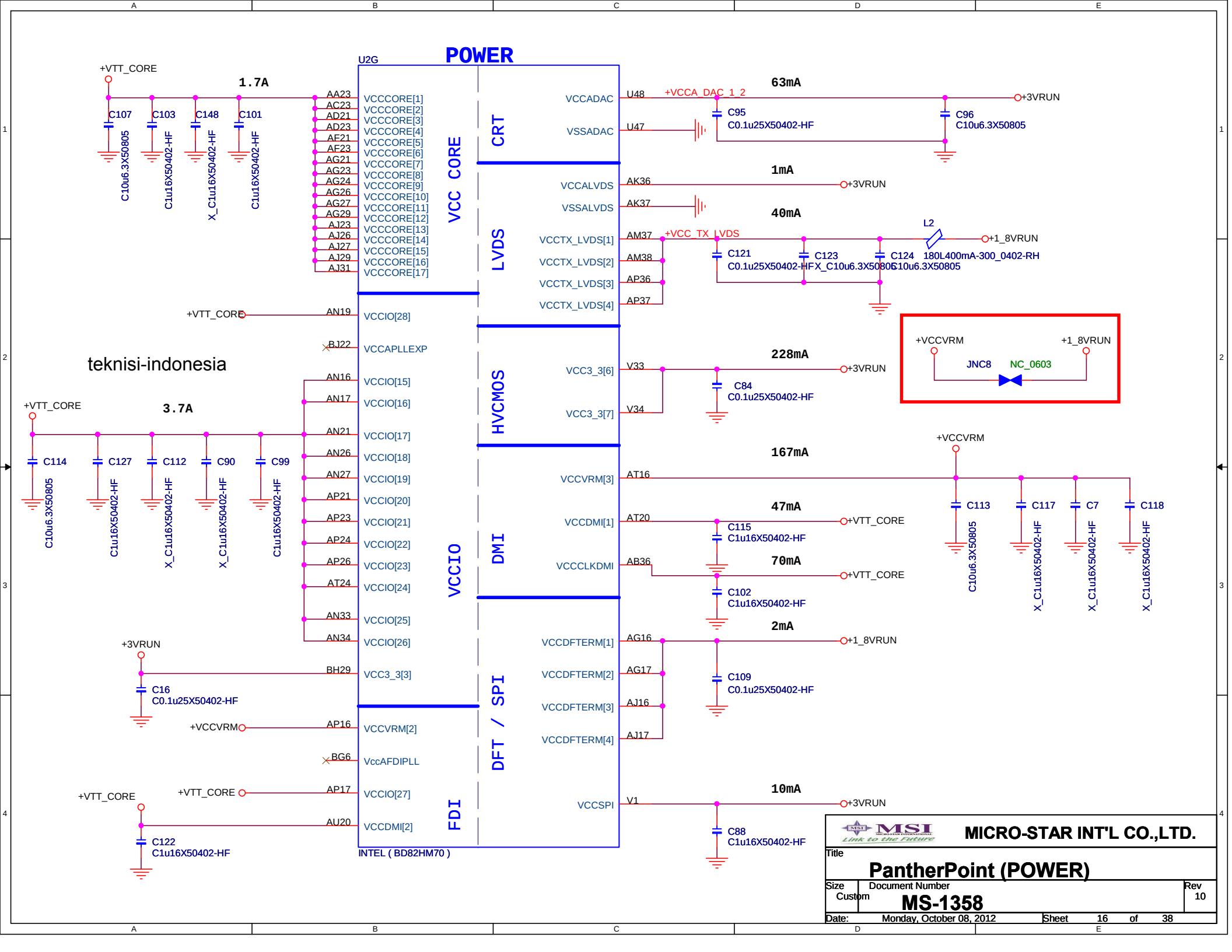
POWER
U2G
VCC CORE
LVDS
HVCMOS
VCCIO
DMI
DFT / SPI
FDI
CRT
INTEL (BD82HM70)
+VTT_CORE
1.7A
3.7A
+3VRUN
+1_8VRUN
+VCCVRM
+VCC_TX_LVDS
+VCCA_DAC_1_2
63mA
1mA
40mA
228mA
167mA
47mA
70mA
2mA
10mA
L2
180L400mA-300_0402-RH
JNC8
NC_0603
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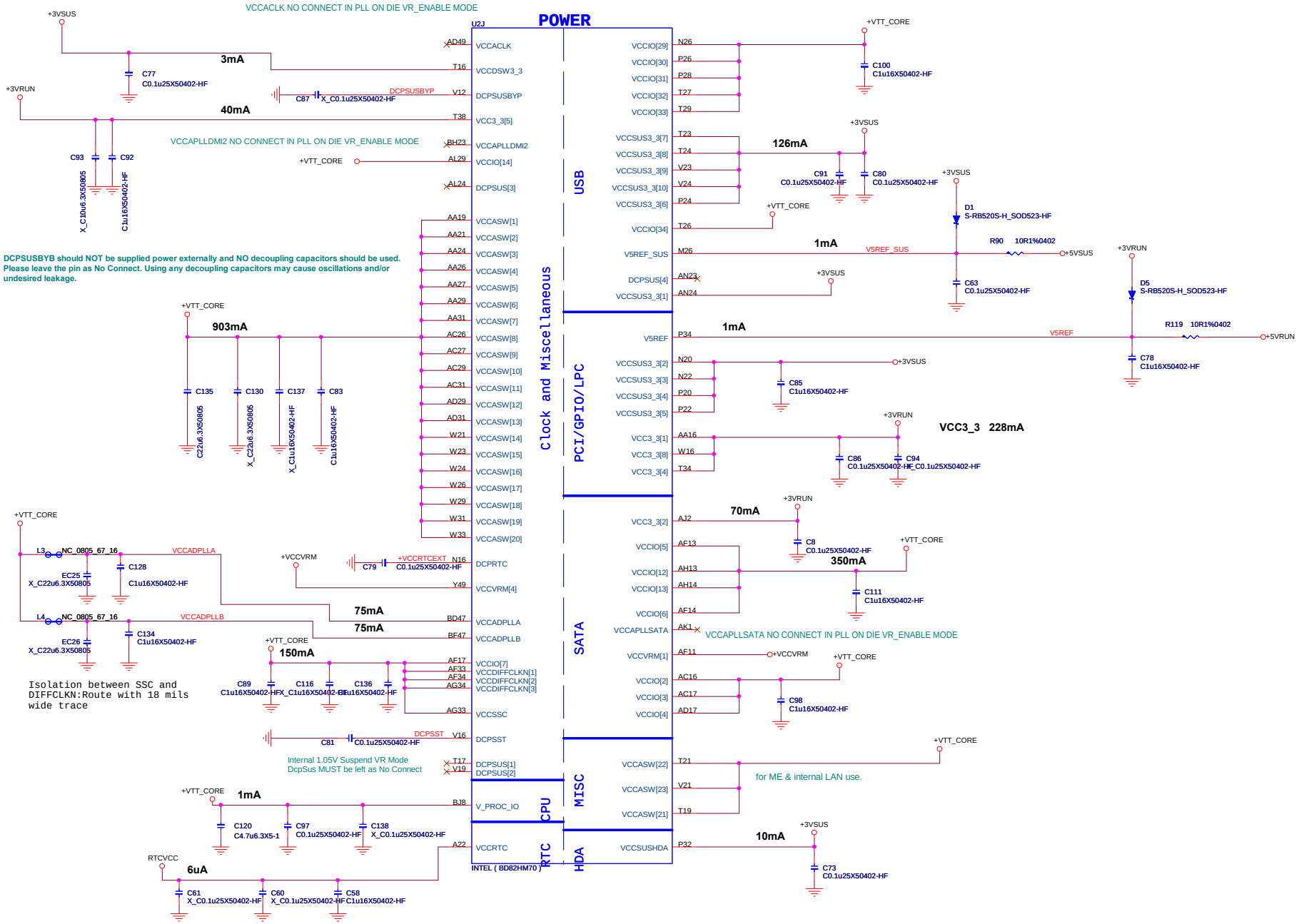
Document Number

PANTHER POINT (POWER)



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Title: PantherPoint (POWER)			
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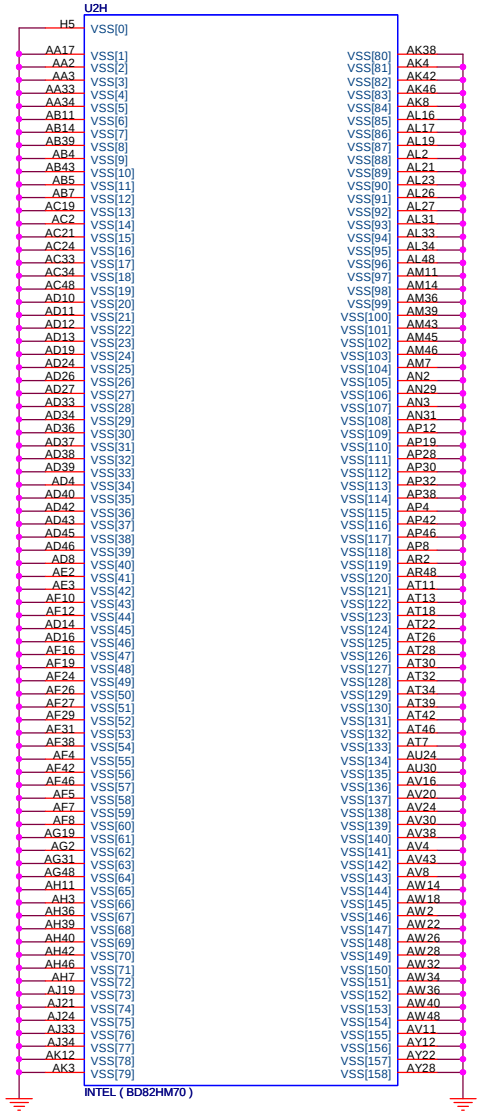
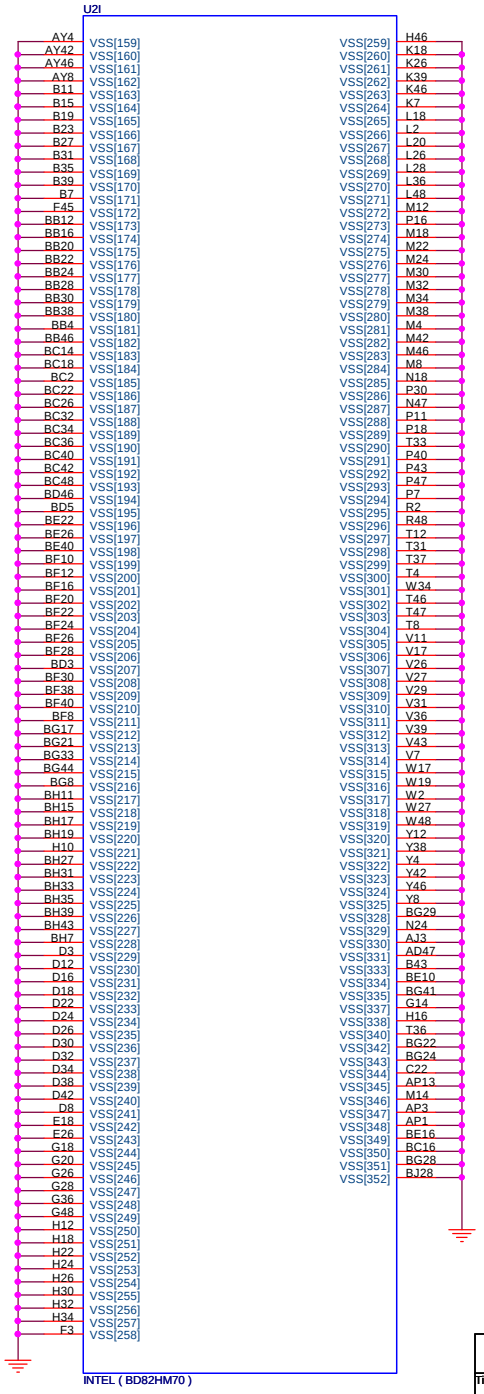
PANTHER POINT (GND)





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Title: PantherPoint (GND)

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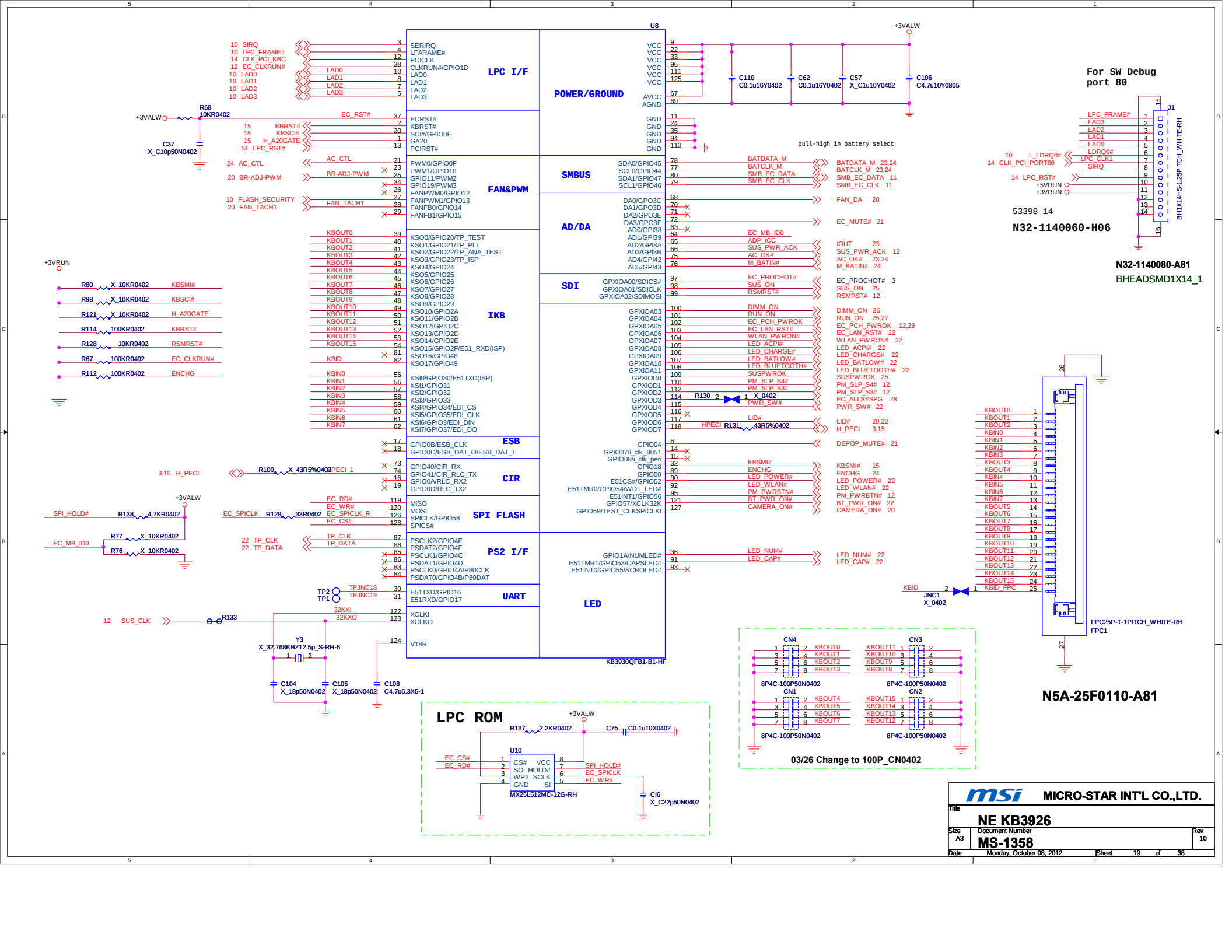

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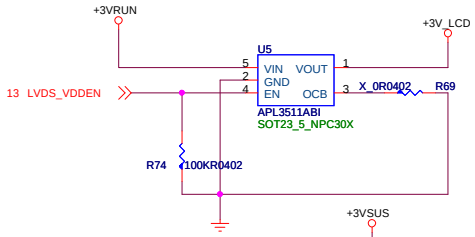
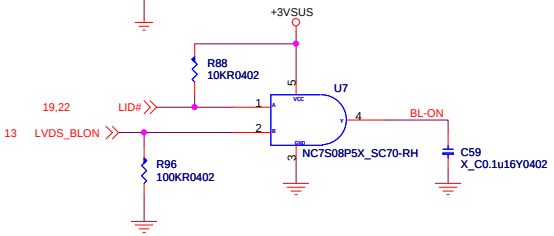
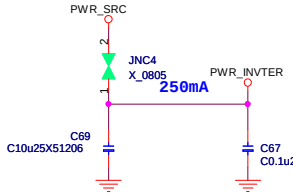
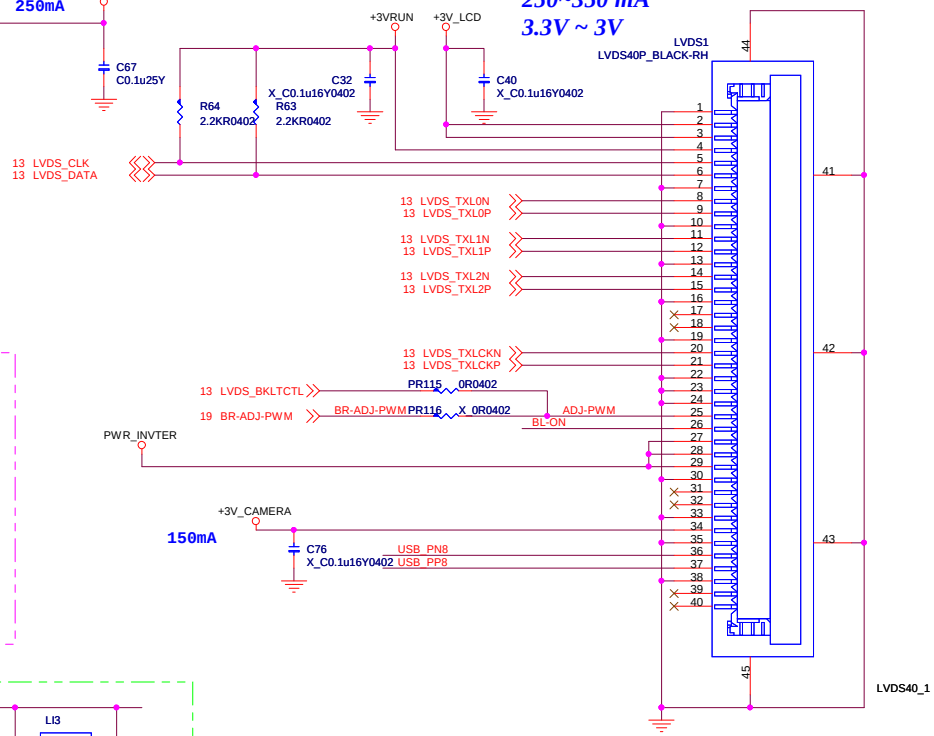
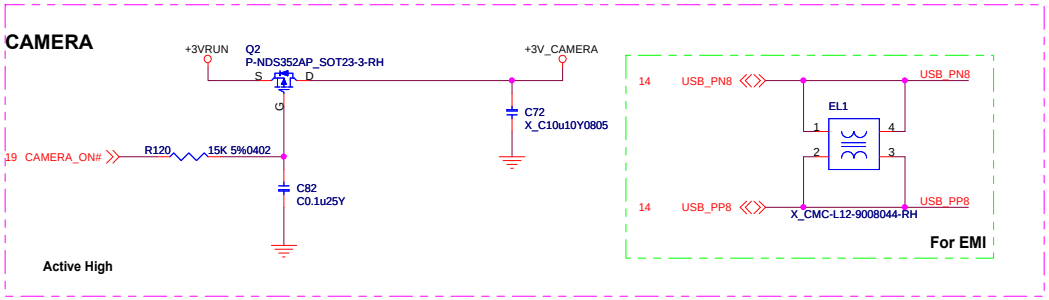
LVDS POWER

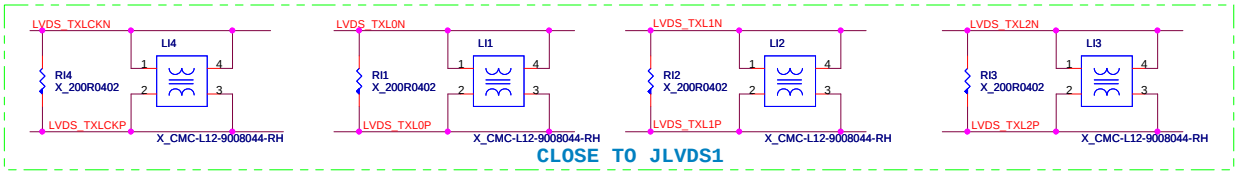


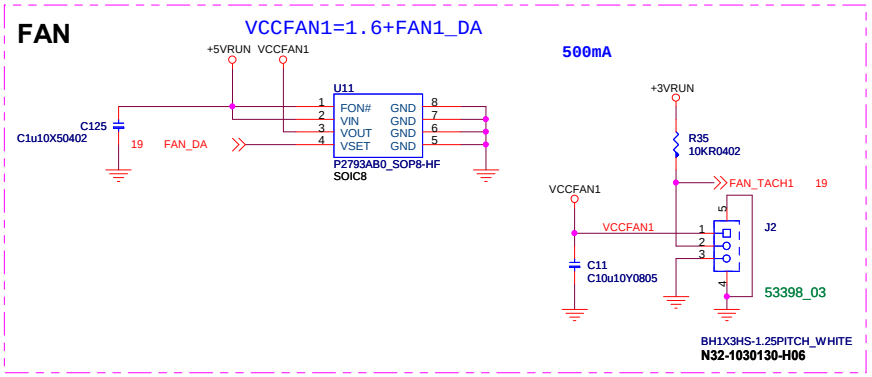












MICRO-STAR INT'L CO.,LTD.

Title: LVDS, Camera, BT, FAN

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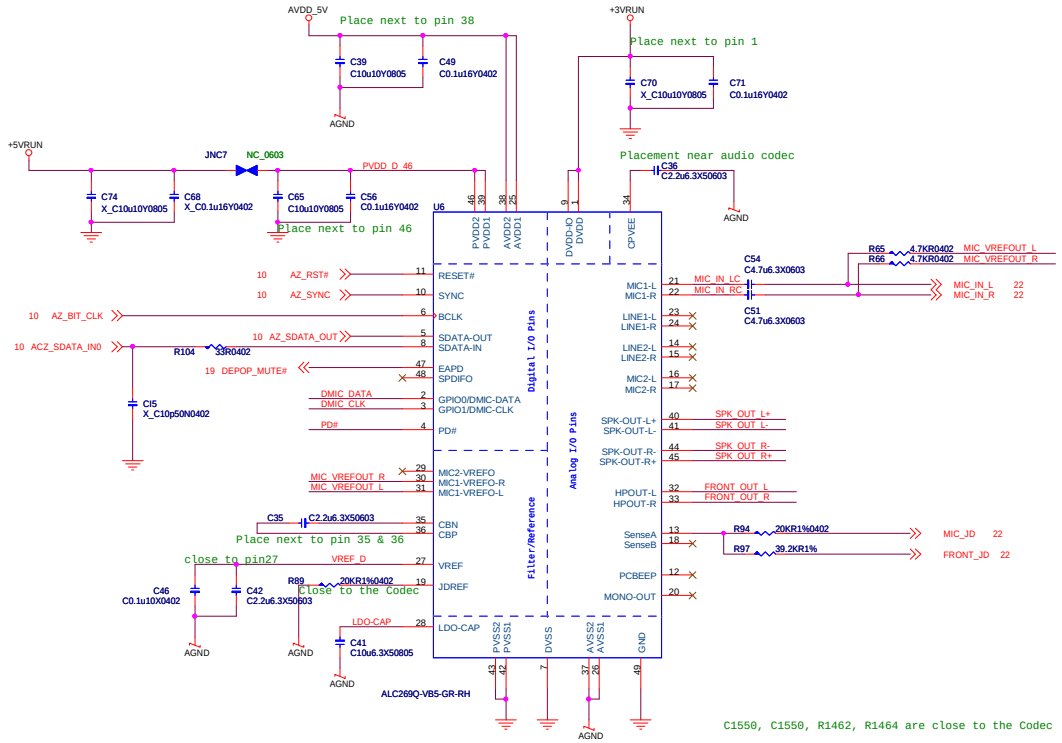
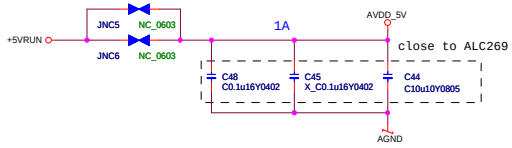
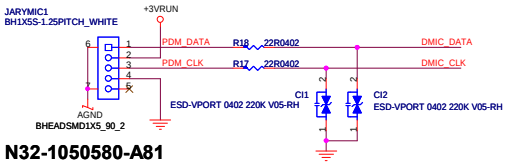


POWER ISOLATION (CODEC 5V)

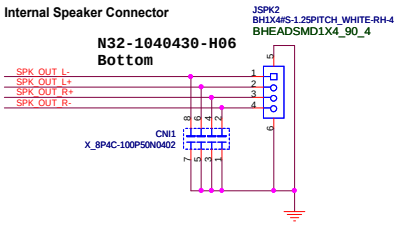


ARRAY MIC CONN



N32-1050580-A81

Internal Speaker Connector



N32-1040AV0-H06

4ohm loading---------40 mil trace width
8ohm loading---------20 mil trace width

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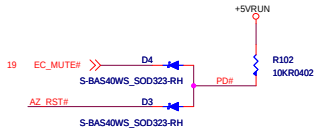
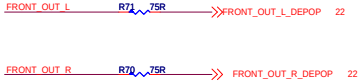
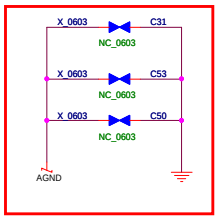
simple MUTE







msi MICRO-STAR INT'L CO.,LTD.		
Title: AZALIA CODEC(ALC269)		
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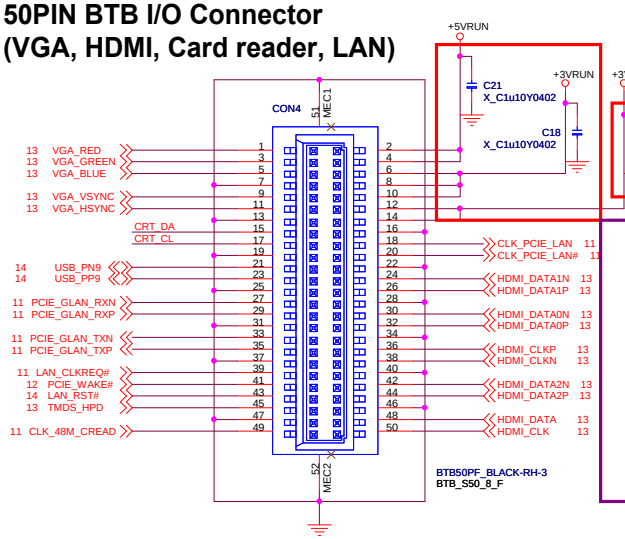
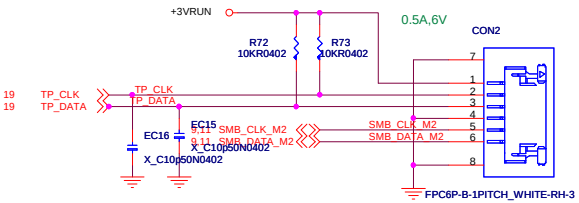
50PIN BTB I/O Connector (VGA, HDMI, Card reader, LAN)



N5C-50F0160-A81

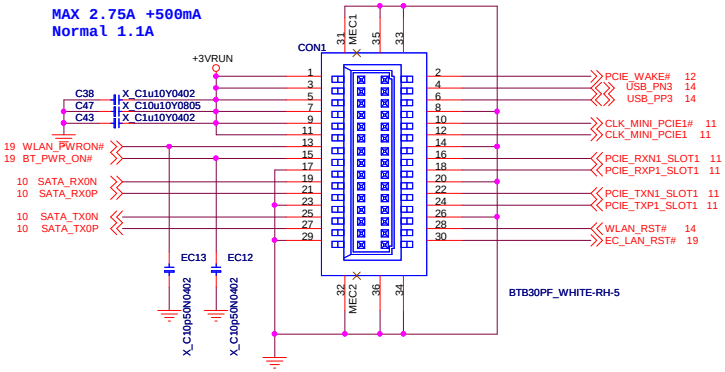
Launch Board Connector

TP: Click PAD



MINI PCIE Connector

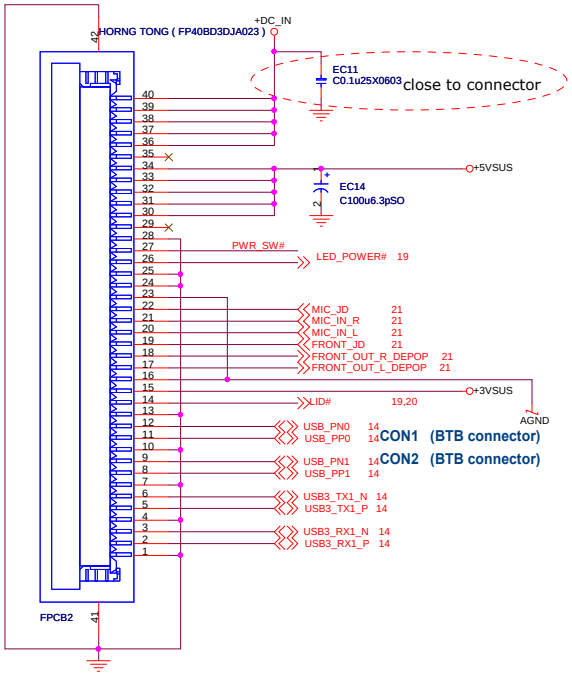
MAX 2.75A +500mA
Normal 1.1A



N5C-30F0220-A81

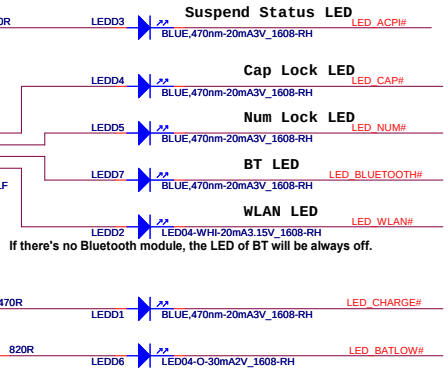
19 LED_ACPI#
19 LED_CAP#
19 LED_NUM#
19 LED_BLUETOOTH#
19 LED_WLAN#
19 LED_CHARGE#
19 LED_BATLOW#

40PIN COAXIAL I/O Connector (USB Port x 2, MIC, Earphone)



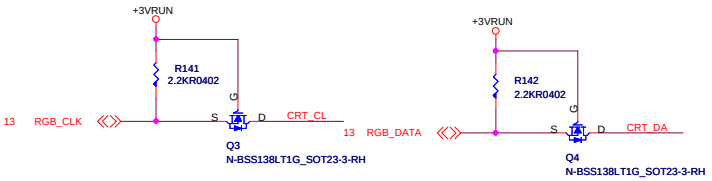
Co-lay LED

Power on: ON
S3 state: Blinking
S4/S5 state: OFF

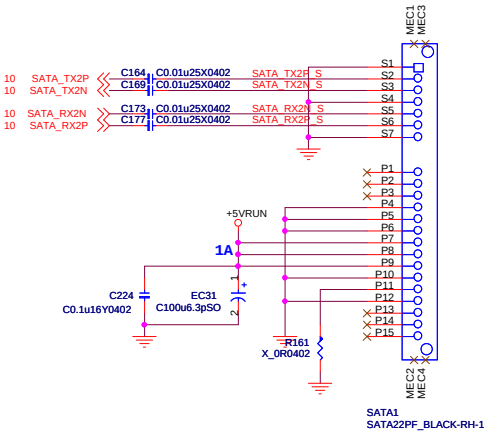


Battery Low (5%): yellow
Error: yellow Blinking
Charging: blue
Battery Full/ Discharge: OFF

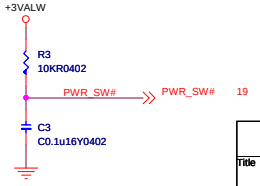
CRT DDC BUFFER



SATA HDD Connector

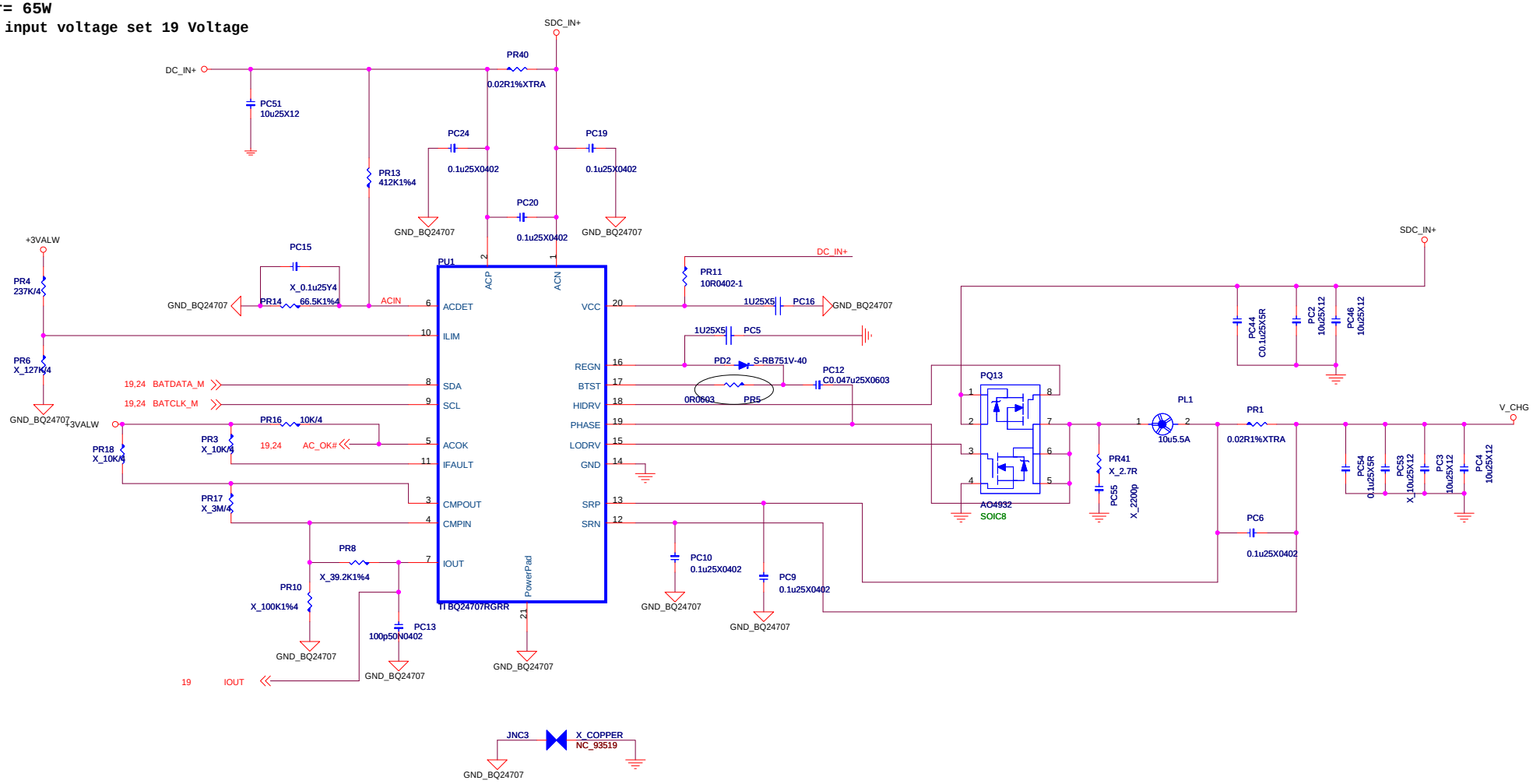


N5N-22F0140-AF2

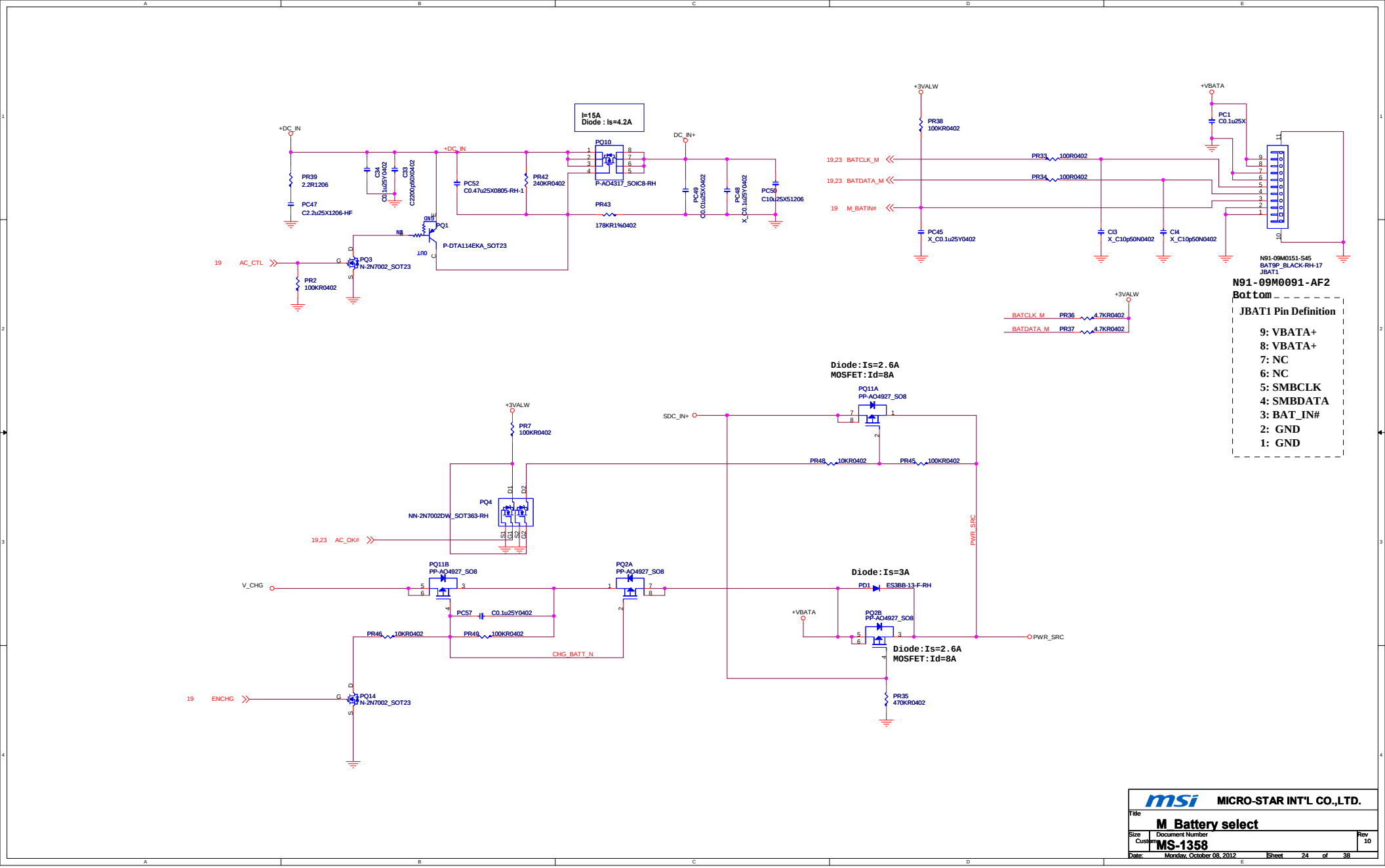


MSI	MICRO-STAR INT'L CO.,LTD.	
Title	HDD, BTB CON	
Size: Custom	Document Number: MS-1358	Rev: 10
Date: Monday, October 08, 2012	Sheet 22 of 38	

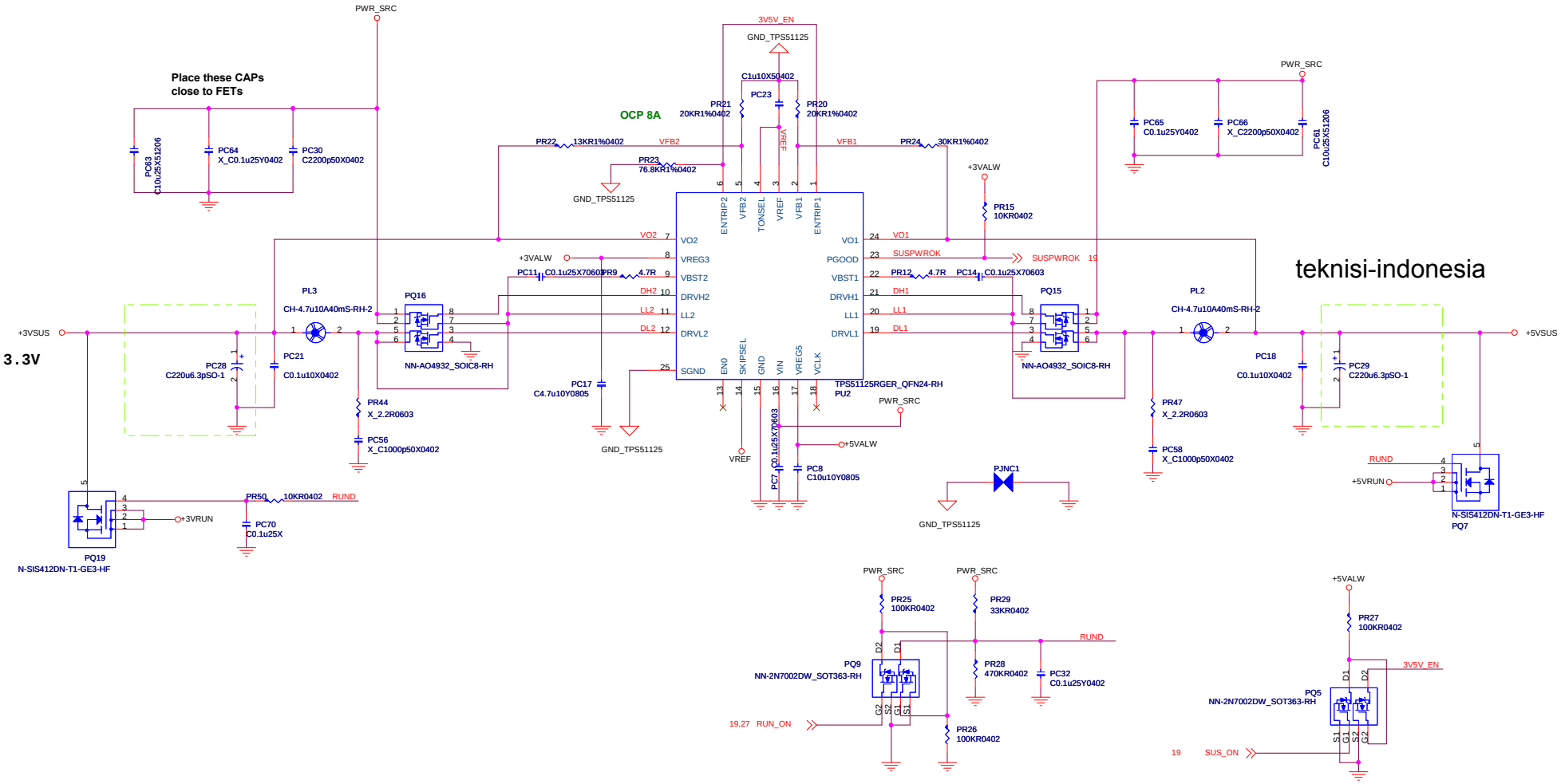
Adapter= 65W
Adapter input voltage set 19 Voltage



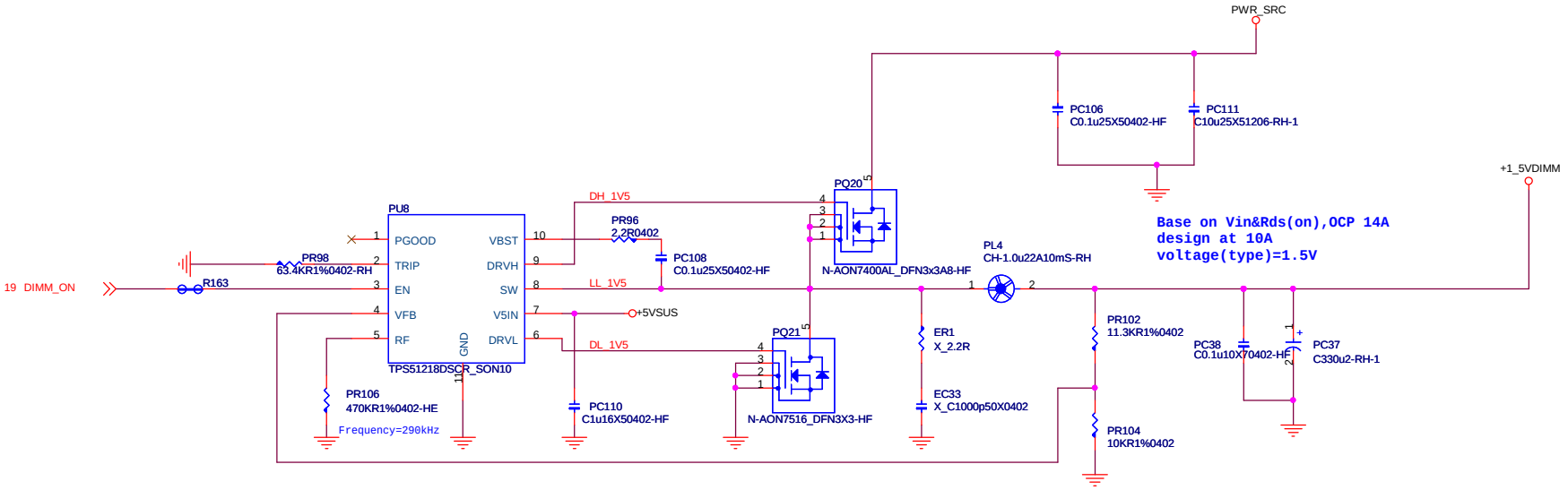
msi MICRO-STAR INT'L CO.,LTD.			
Title: M_Battery Charger			
Size: A3	Document Number: MS-1358		Rev: 10
Date: Monday, October 08, 2012		Sheet 23 of 38	

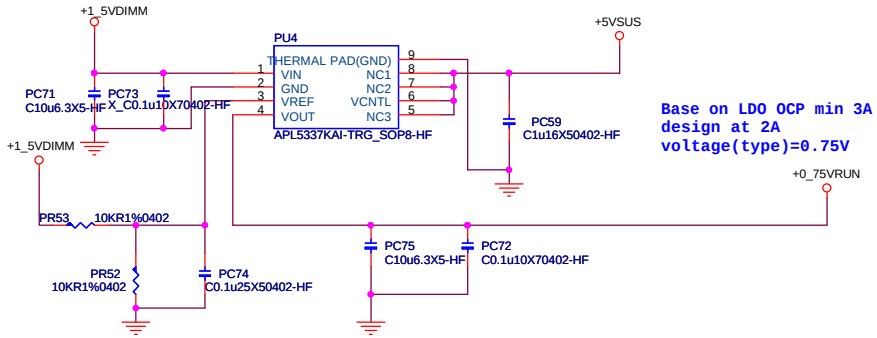


msi	MICRO-STAR INT'L CO.,LTD.		
Title	M_Battery select		
Size: Custom	Document Number: MS-1358		Rev: 10
Date: Monday, October 08, 2012		Sheet 24 of 38	



MSI	MICRO-STAR INT'L CO.,LTD.		
Title	M_System Power		
Size	Document Number		Rev
Custom	MS-1358		10
Date:	Monday, October 08, 2012	Sheet 25 of 38	





MICRO-STAR INT'L CO.,LTD.

Title: DIMM & SMDDR_VTERM

Size	Document Number	Rev
B	MS-1358	10

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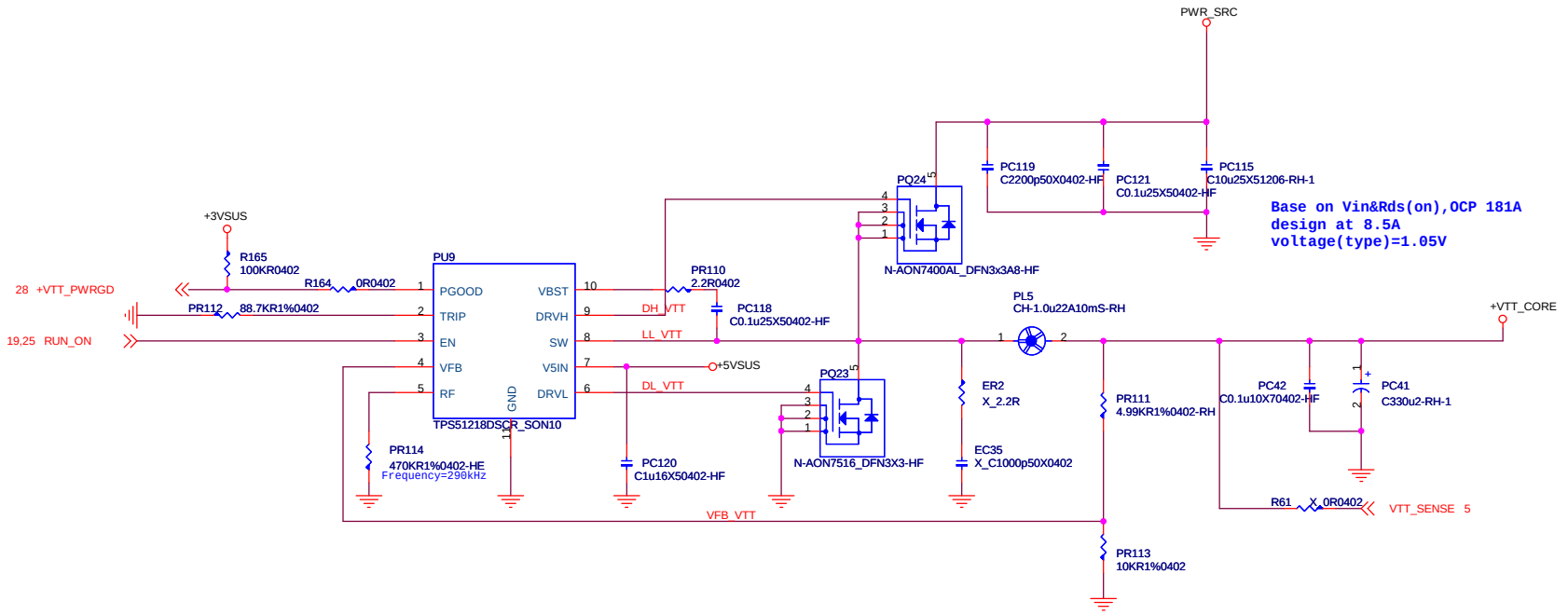

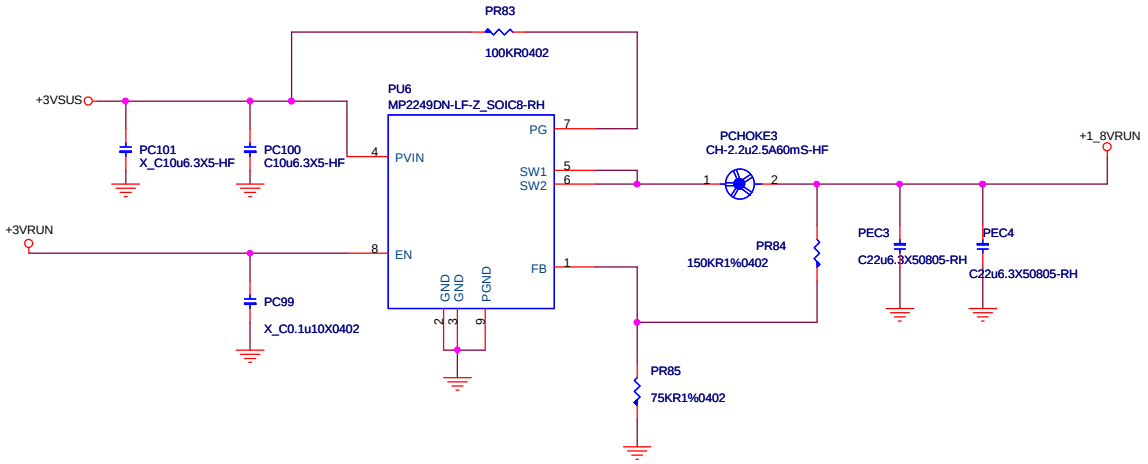

MSI Link to the Future	MICRO-STAR INT'L CO.,LTD.	
Title: +VTT & +1.05VLAN		
Size: B	Document Number: MS-1358	Rev: 10
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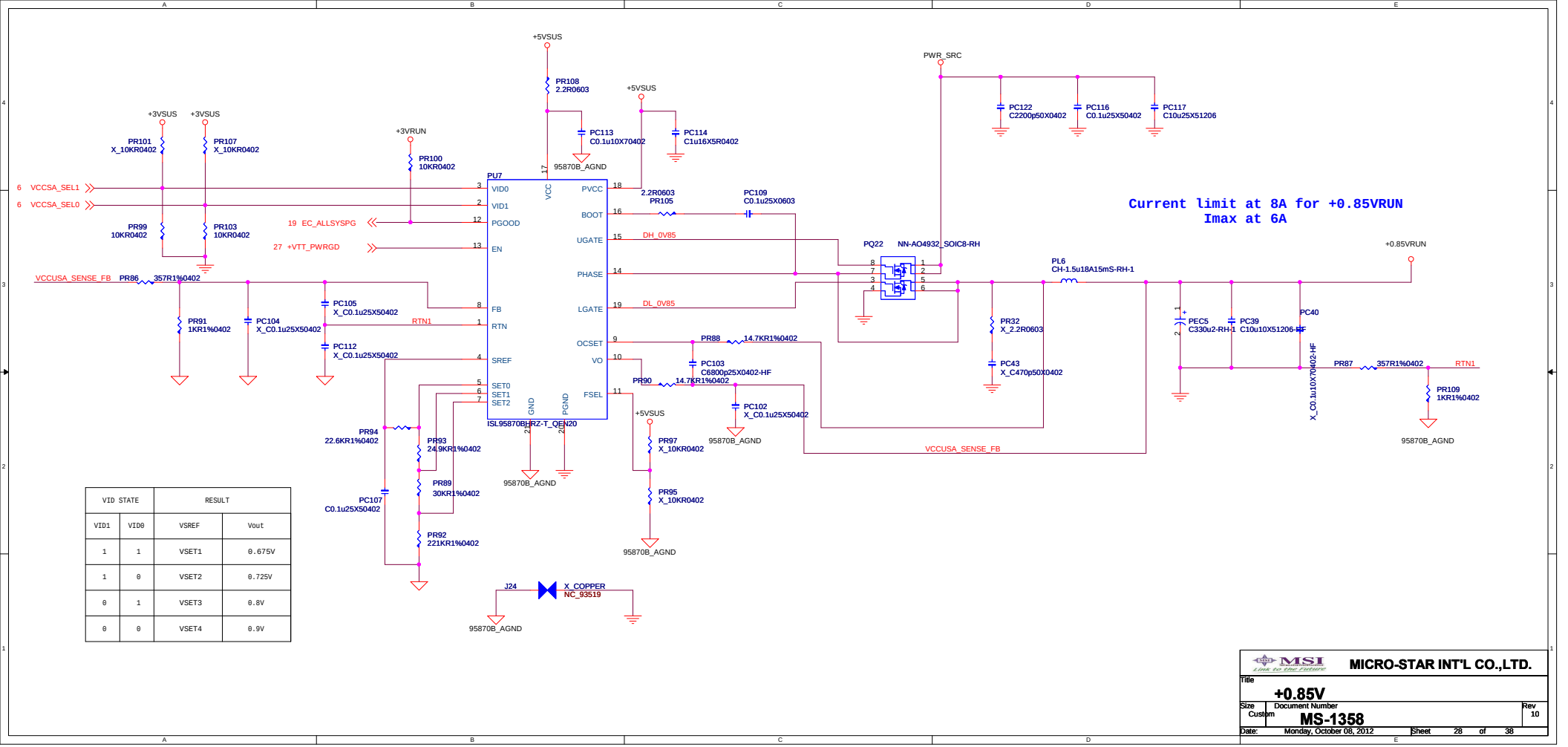

VID STATE		RESULT	
VID1	VID0	VSREF	Vout
1	1	VSET1	0.675V
1	0	VSET2	0.725V
0	1	VSET3	0.8V
0	0	VSET4	0.9V

MICRO-STAR INT'L CO.,LTD.

Title: +0.85V

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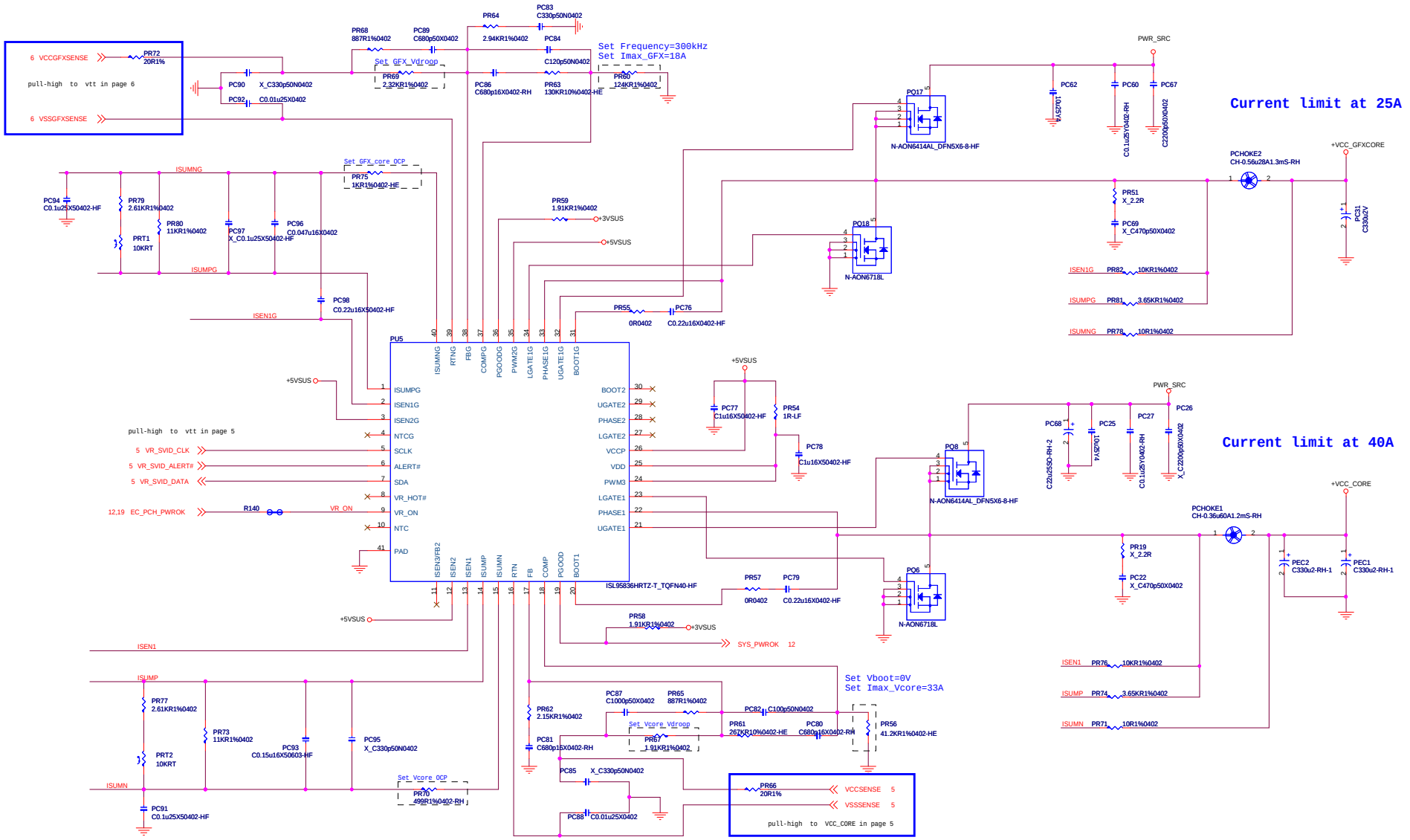

MICRO-STAR INT'L CO.,LTD.			
Title: CPU_GFX-CORE			
Size: C	Document Number: MS-1358		Rev: 10
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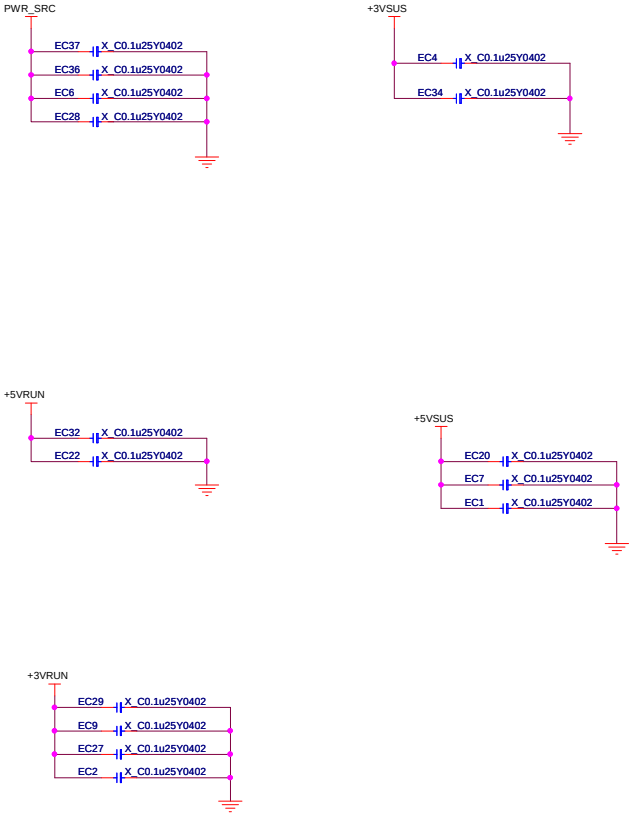
EMI SOLUTION



MICRO-STAR INT'L CO.,LTD.

Title: EMI-1		
Size: Custom	Document Number: MS-1358	Rev: 10
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PCB1
PCB
PCB
P30-1358110-H73
P30-1358110-T53,

UME8
BIOS LABEL
X_BIOS_LABEL

MYLAR6
FAN
X_E2P-3515911-Y42

MYLAR5
CMOS
E2P-3514211-Y42

RUBBER1
KB CON
E2Y-3511311-Y40

RUBBER2
KB CON
E2Y-3511311-Y40

MYLAR2
LVDS
LVDS_E2P-3512411-Y42

RUBBER3
LVDS
E2Y-5220111-Y40

MYLAR1
PCB
X_DDR_E2P-0112911-Y42

UME1
HDMI LABEL
X_HDMI_LABEL

ADHESIVE1
PCB
X_E2Y-0114812-Y42

RUBBER4
Click Pad
E2Y-5220111-Y40

FM13 FM10 FM9 FM8
FM6 FM3 FM2 FM17
FM11 FM14 FM7 FM15
FM12 FM4 FM16 FM5 FM1
F_PAD_X

50 OHM
J15 L1_4mil_50_Ohm X_H1X2M_BLACK-RH GND2
J16 L3_5.5mil_50_Ohm X_H1X2M_BLACK-RH GND2
J7 L4_5.5mil_50_Ohm X_H1X2M_BLACK-RH GND5
J6 L6_4mil_50_Ohm X_H1X2M_BLACK-RH GND5

37 OHM
J13 L1_8mil_37_Ohm X_H1X2M_BLACK-RH GND2
J14 L3_9.5mil_37_Ohm X_H1X2M_BLACK-RH GND2

40 OHM
J23 L1_7mil_40_Ohm X_H1X2M_BLACK-RH GND2
J12 L3_8.5mil_40_Ohm X_H1X2M_BLACK-RH GND2

DIFF_72 OHM
J17 L1_DIFF_7/5/7_72_Ohm+ L1_DIFF_7/5/7_72_Ohm- X_H1X4_black-RH GND2
J19 L3_DIFF_7/5/7_72_Ohm+ L3_DIFF_7/5/7_72_Ohm- X_H1X4_black-RH GND2

DIFF_85 OHM
J20 L1_DIFF_4/4/4_85_Ohm+ L1_DIFF_4/4/4_85_Ohm- X_H1X4_black-RH GND2
J22 L3_DIFF_4/4/4_85_Ohm+ L3_DIFF_4/4/4_85_Ohm- X_H1X4_black-RH GND2
J4 L4_DIFF_4/4/4_85_Ohm+ L4_DIFF_4/4/4_85_Ohm- X_H1X4_black-RH GND5
J8 L6_DIFF_4/4/4_85_Ohm+ L6_DIFF_4/4/4_85_Ohm- X_H1X4_black-RH GND5

DIFF_90 OHM
J3 L1_DIFF_4/6/4_90_Ohm+ L1_DIFF_4/6/4_90_Ohm- X_H1X4_black-RH GND2
J11 L3_DIFF_4.5/6/4.5_90_Ohm+ L3_DIFF_4.5/6/4.5_90_Ohm- X_H1X4_black-RH GND2
J5 L4_DIFF_4.5/6/4.5_90_Ohm+ L4_DIFF_4.5/6/4.5_90_Ohm- X_H1X4_black-RH GND5
J9 L6_DIFF_4/6/4_90_Ohm+ L6_DIFF_4/6/4_90_Ohm- X_H1X4_black-RH GND5

DIFF_100 OHM
J18 L1_DIFF_4/8/4_100_Ohm+ L1_DIFF_4/8/4_100_Ohm- X_H1X4_black-RH GND2
J21 L3_DIFF_4/8/4_100_Ohm+ L3_DIFF_4/8/4_100_Ohm- X_H1X4_black-RH GND2
J10 L4_DIFF_4/8/4_100_Ohm+ L4_DIFF_4/8/4_100_Ohm- X_H1X4_black-RH GND5

holes_S295d110_P MH2 X_S7.5D2.8
H_S295D110_P_V5 MH3 X_VIA5
holes_S295d110_P MH4 X_S7.5D2.8
HOLES_R158D110 MH8 X_HOLES_R158D110
SP1 Spacer Support X_H_R295D165_T193

H_NR177D91 MH9 HOLES_HDD1
H_NR177D91 MH10 HOLES_HDD1

SCREW1 E43-1205003-H29
SCREW2 E43-1205003-H29

holes_S295d110_P MH1 X_S7.5D2.8
holes_S295d110_P MH5 X_S7.5D2.8
holes_S295d110_P MH6 X_S7.5D2.8
holes_S295d110_P MH7 X_S7.5D2.8

BOSS

SP2 Spacer Support X_E2B-171A020-RH

MICRO-STAR INT'L CO.,LTD.

Title: Non_Footprint for BOM
Size: Custom
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Hall Switch

PU ON MB

LID#_A

CA10 X_C1000p50X0402

+3VSUS_A

UA1 VDD GND VOUT

CA11 C0.1u16Y0402

.APX9131AI-TRL_SOT23-3-RH

PWR_SW_KEY#_A R62 X_0402

SWA1

SW-TACTB1S-RH-7

CA3 X_C0.1u16Y0402

N71-0101650-D02 SWTA_S4_4_4X4_75

I36-0913109-A30

Location HOLES

MHA1 X_R6.2D2.7 holes_r244d106

MHA2 X_R4.0D2.8 HOLES_R158D110

MHA3 X_R6.2D2.7 holes_r244d106

X_NPTH63 HA1

X_NPTH63 HA2

PCBA1 PCB

MYLARA1 E2P-3516411-Y42 E2P-3516411-Y42

MYLARA2 X_E2P-3512411-Y42 E2P-3512411-Y42

MYLARA3 X_E2P-3512711-Y42 E2P-3512711-Y42

MYLARA4 X_E2P-3516211-Y42 E2P-3516211-Y42

FM

FMA8 FMA7 FMA2 FMA1 FMA4 FMA9 FMA6 FMA5 FMA3

N92-03M0351-AF2

PWRA1 PWRJACK3P-RH-7

N92-03M0351-S56 DCJACK_5

LA7 80L6A-30_0805-RH

+DC_IN_A

CA23 X_C0.1u25Y0402

CA22 X_2200p50X4

CA1 X_C0.1u25Y0402

CA2 X_2200p50X4

+5VSUS_A

RA3 470R LEDA5 BLUE,470nm-20mA3V_1608-RH LED_POWER#1_A

RA2 470R LEDA3 BLUE,470nm-20mA3V_1608-RH

RA7 470R LEDA7 BLUE,470nm-20mA3V_1608-RH

+DC_IN_A

EMCA4 X_C10p50N0402

EMCA3 X_C10p50N0402

EMCA1 X_C10p50N0402

LED_POWER#1_A EMCA2 X_C10p50N0402

For EMI

40PIN COAXIAL I/O Connector

+DC_IN_A

+5VSUS_A

PWR_SW_KEY#_A

LED_POWER#1_A

MIC_JD_A

MIC_IN_R_A

MIC_IN_L_A

FRONT_JD_A

FRONT_OUT_R_DEPOP_A

FRONT_OUT_L_DEPOP_A

+3VSUS_A

LID#_A

USB_PN0_A

USB_PP0_A

USB_PN1_A

USB_PP1_A

USB3_TX1_N_A

USB3_TX1_P_A

USB3_RX1_N_A

USB3_RX1_P_A

HORNG TONG (FP40BD3DJA023)

AGND_A FPCB1

R11-0750033-W08 IMPLEMENT ??

MIC_IN_R_A LA6 300L300mA-350

MIC_IN_L_A LA5 300L300mA-350

CA21 X_C10p50N0402

MIC_JD_A

MEC2

(BLACK) MIC Jack

MICA1 JACK-AUDIOF_BL-SP-RH-1

AUDIO_JACK_6P_OB

N54-06F0821-H06

CA19 X_680p50X4

CA16 X_680p50X4

DA4 X_ESD

DA3 X_ESD

CA20 X_C1000p50X0402

CA17 X_C1000p50X0402

C154 C0.1u25Y0402

C171 X_C0.1u25Y0402

AGND_A

R11-0750033-W08 IMPLEMENT ??

1.0 to Bead

CA18 X_C10p50N0402

FRONT_JD_A

FRONT_OUT_R_DEPOP_A

FRONT_OUT_L_DEPOP_A

LA4 300L300mA-350

LA3 300L300mA-350

(BLACK) LineOut Jack

LOUTA1 JACK-AUDIOF_BL-SP-RH-1

AUDIO_JACK_6P_OB

N54-06F0821-H06

1.0 Unmount

RA9 X_20K1%4

RA8 X_20K1%4

CA14 X_680p50X4

CA12 X_680p50X4

DA2 X_ESD

DA1 X_ESD

CA15 X_100p50X4

CA13 X_100p50X4

USB1

USB5V_A

USBA2

LA2 X_CMC-L12-9008044-RH

USB_PN0_A

USB_PP0_A

VBUS D- D+ GND SSTX+ SSTX- GND SSRX+ SSRX- RSV

SSTX2P_C C156 C0.1u10X0402 USB3_TX1_P_A

SSTX2N_C C157 C0.1u10X0402 USB3_TX1_N_A

USB3_RX1_P_A

USB3_RX1_N_A

USB30_CON

C163 X_C10p25N0402

C160 X_C10p25N0402

USB2

USB5V_A

+5VSUS_A

F1 F-SMD1812P110TF-RH MINISMD050

ECA1 C220u6.3pSO-1

CA9 X_C0.1u16Y0402

CA8 X_C1000p50X0402

EMCA5 X_C10p50N0402

EMCA6 X_C10p50N0402

For EMI

teknisi-indonesia

USB5V_A

USBA1 USBAM_BLACK-RH-3

N53-04M0411-H06 USB_CONN_0517

CA5 C0.1u16Y0402

CA4 X_C1000p50X0402

LA1 X_CMC-L12-9008044-RH

USB_PN1_A

USB_PP1_A

CA6 X_C10p25N0402

CA7 X_C10p25N0402

N53-04M0411-H06

H=288mil

MSI MICRO-STAR INT'L CO.,LTD.

Title: DCIN/AUDIO JACK/USB/CONN

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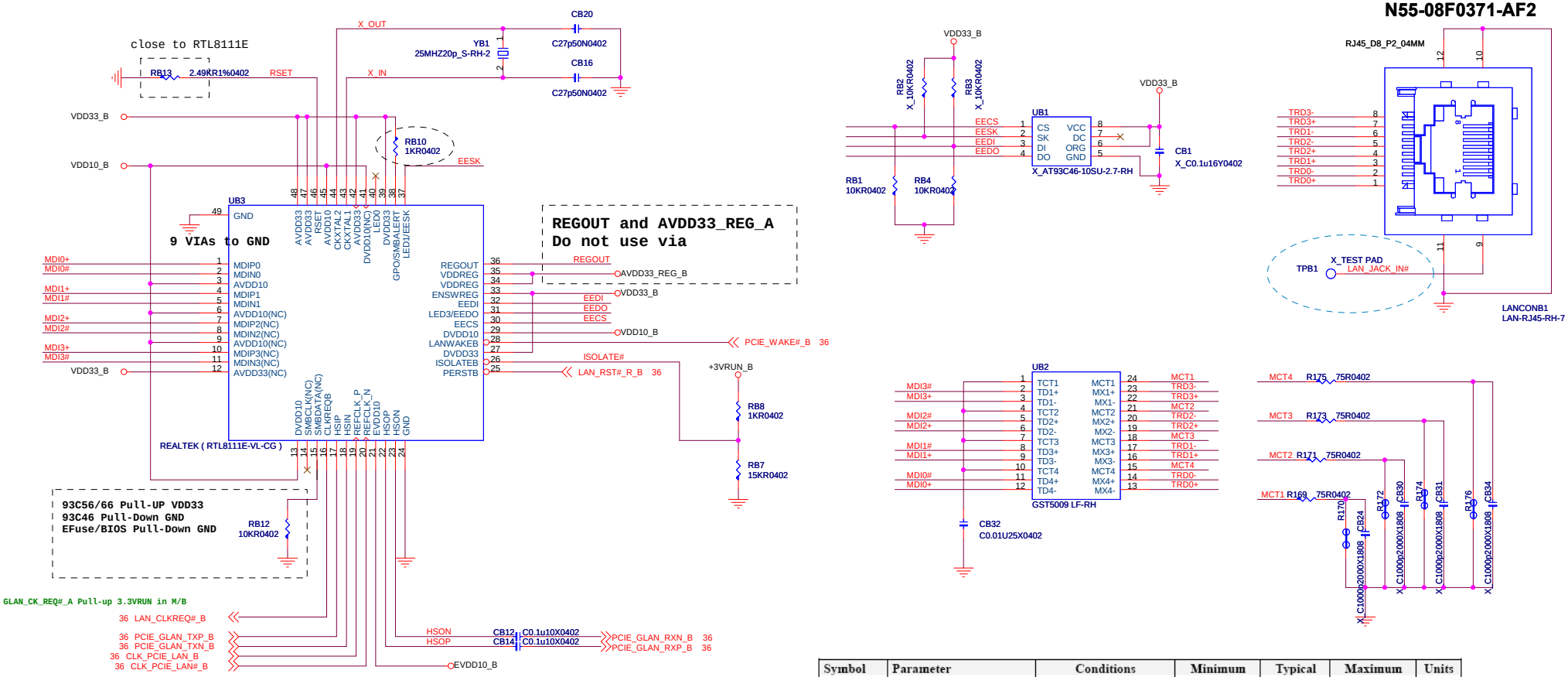
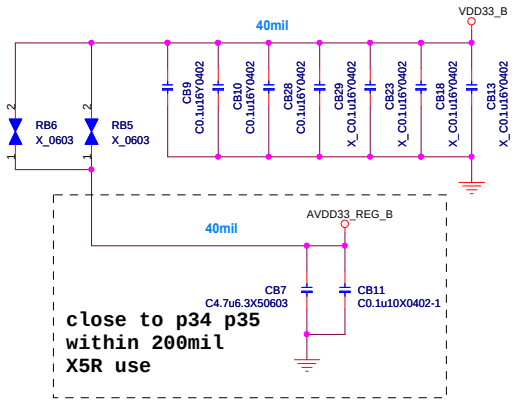
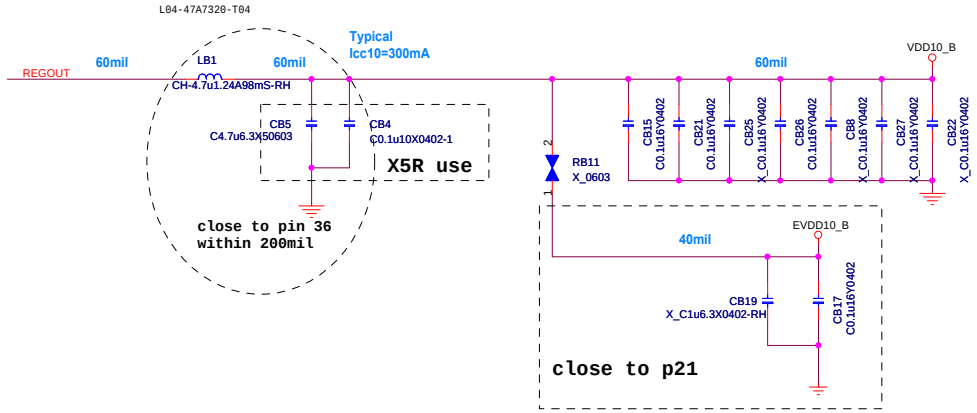
N55-08F0371-AF2

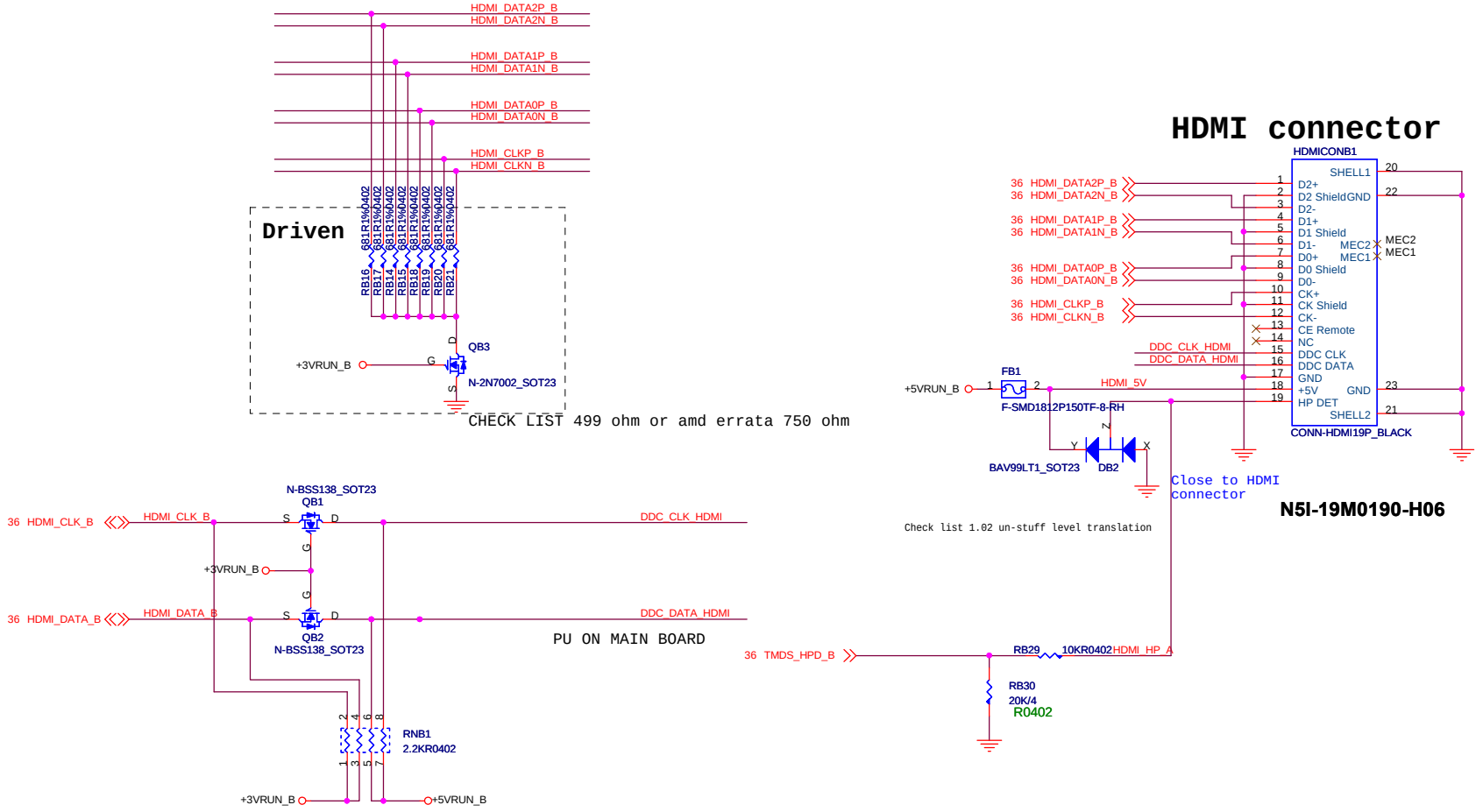


Symbol	Parameter	Conditions	Minimum	Typical	Maximum	Units
Icc33	Average Operating Supply Current from 3.3V	At 1Gbps with heavy network traffic	-	70	-	mA
Icc10	Average Operating Supply Current from 1.05V	At 1Gbps with heavy network traffic	-	300	-	mA



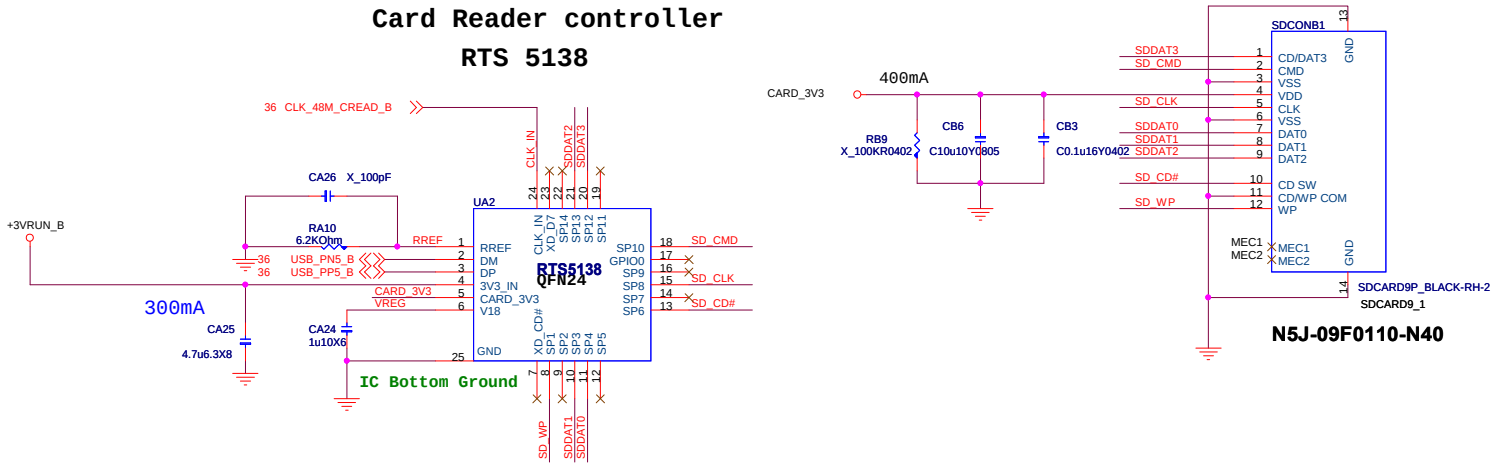


msi	MICRO-STAR INT'L CO.,LTD.
Title	PCIE GIGA LAN (RTL 8111E)
Size	A3
Document Number	MS-1358
Rev	10
Date:	Monday, October 08, 2012
Sheet	33 of 38



MICRO-STAR INT'L CO.,LTD.		
Title: HDMI Connecter		
Size: B	Document Number: MS-1358	Rev: 10
Date: Monday, October 08, 2012	Sheet 34 of 38	

Card Reader controller
RTS 5138



Clock	MODE1	MODE0
48MHz	×	×
24MHz	×	○
12MHz (Crystal)	○	○

MICRO-STAR INT'L CO.,LTD.

Title: CARD READER (RTL5139)

Size: A3 | Document Number: MS-1358 | Rev: 10

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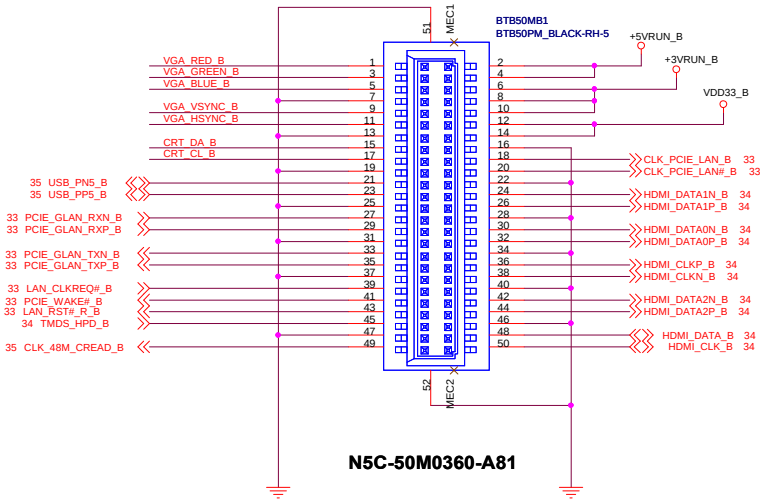
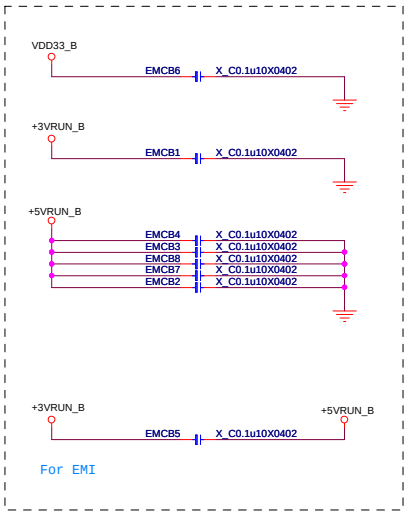
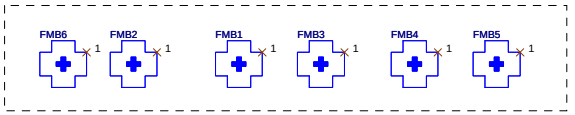
50PIN BTB I/O Connector 设计

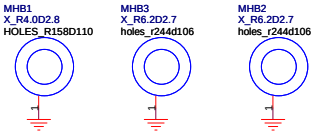


N5C-50M0360-A81

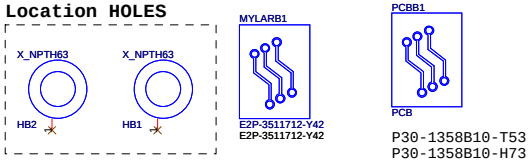


FM

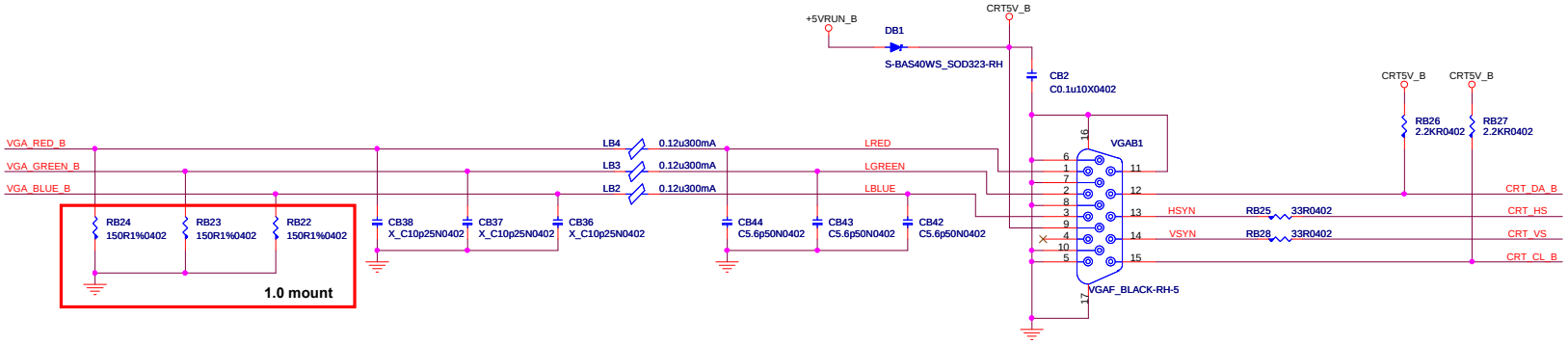




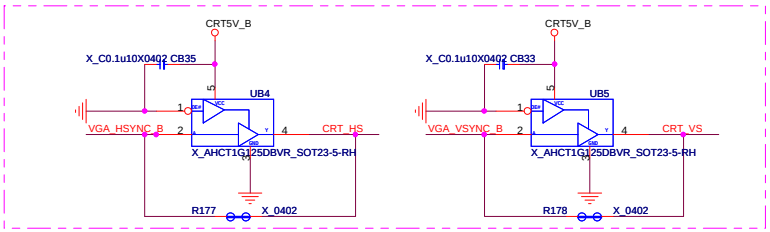
Location HOLES

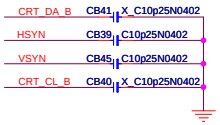


P30-1358B10-T53
P30-1358B10-H73



N59-15F0621-AF2





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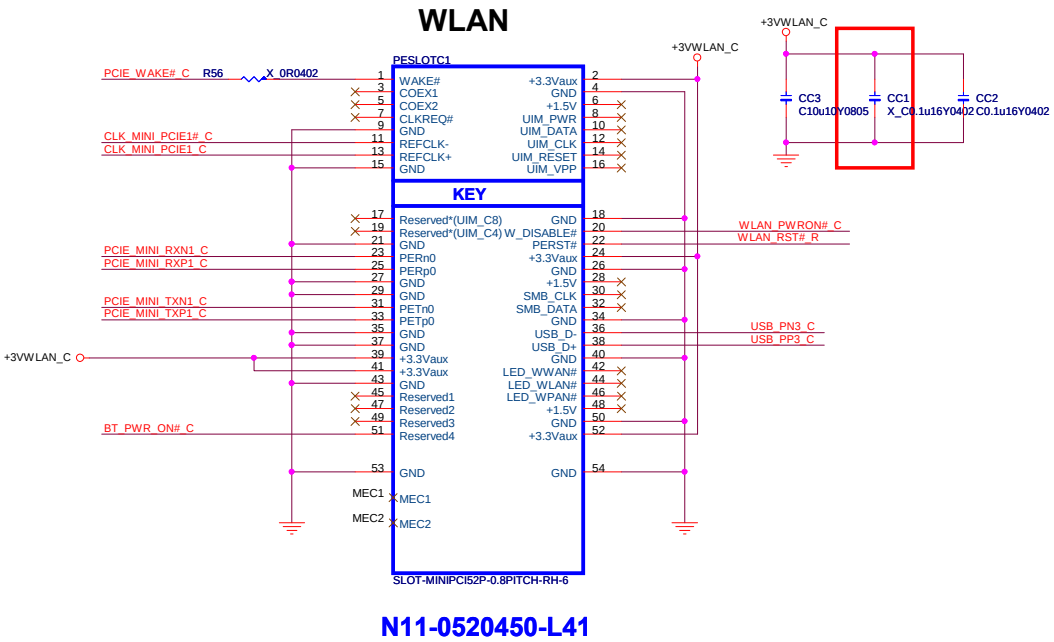

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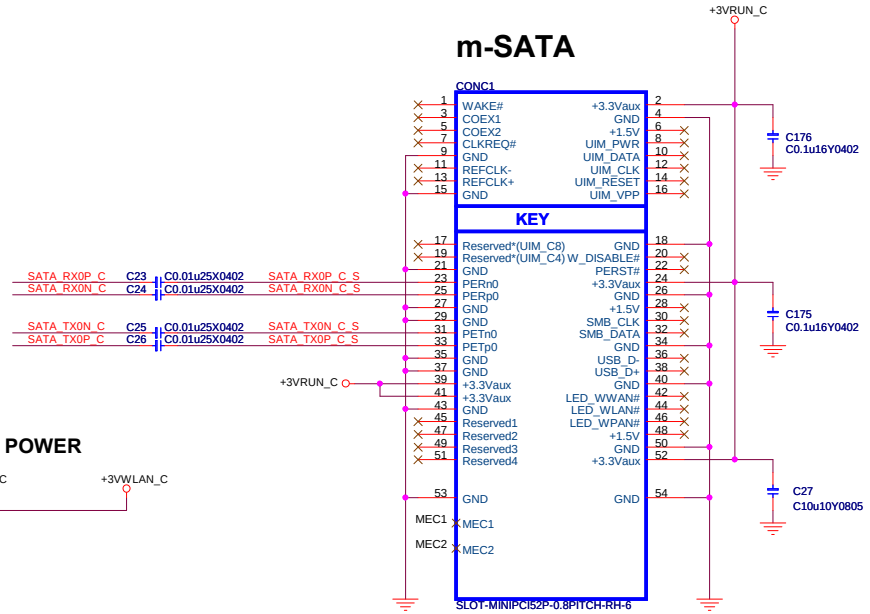


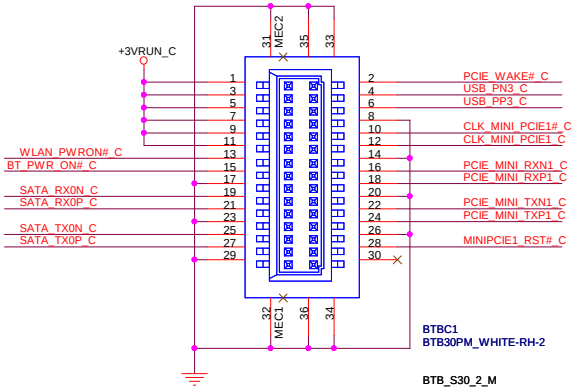
N11-0520210-K06

MINICARD POWER

AW-NE785H Pin-out Definitions

Pin No.	Definition	Basic Description	Type
1	NC	No connect. Should be left open.	
2	3.3v	3.3V power supply	VCC
3	NC	No connect. Should be left open	
4	GND	Ground	GND
5	NC	No connect. Should be left open	
6	NC	No connect. Should be left open.	
7	CLKREQ_L	Reference clock request.	
8	NC	No connect. Should be left open.	
9	GND	Ground	GND
10	NC	No connect. Should be left open.	
11	REFCLK-	Differential reference clock	
12	NC	No connect. Should be left open.	
13	REFCLK+	Differential reference clock	
14	NC	No connect. Should be left open.	
15	GND	Ground	GND
16	NC	No connect. Should be left open.	
17	NC	No connect. Should be left open.	
18	GND	Ground	GND
19	NC	No connect. Should be left open.	
20	W_DISABLE_L	WLAN disable control.	Input
21	GND	Ground	GND
22	PERST_L	PCI express fundamental reset	Input
23	PERn0	Differential transmit	Output
24	NC	No connect. Should be left open.	
25	PERp0	Differential transmit	Output
26	GND	Ground	GND
27	GND	Ground	GND
28	NC	No connect. Should be left open.	
29	GND	Ground	GND
30	NC	No connect. Should be left open.	
31	PETn0	Differential receive	Input
32	NC	No connect. Should be left open.	
33	PETp0	Differential receive	Input
34	GND	Ground	GND
35	GND	Ground	GND
36	NC	No connect. Should be left open.	
37	GND	Ground	GND
38	NC	No connect. Should be left open.	
39	NC	No connect. Should be left open.	
40	GND	Ground	GND
41	NC	No connect. Should be left open.	
42	NC	No connect. Should be left open.	
43	NC	No connect. Should be left open.	
44	LED_WLAN_L	Active low signal. The signal is used to provide status indicators via LED.	Output
45	NC	No connect. Should be left open.	
46	NC	No connect. Should be left open.	
47	NC	No connect. Should be left open.	
48	NC	No connect. Should be left open.	
49	NC	No connect. Should be left open.	
50	GND	Ground	GND
51	NC	No connect. Should be left open.	
52	3.3v	3.3V power supply	VCC

WLAN_RST# R — MINIPCIE1_RST# C



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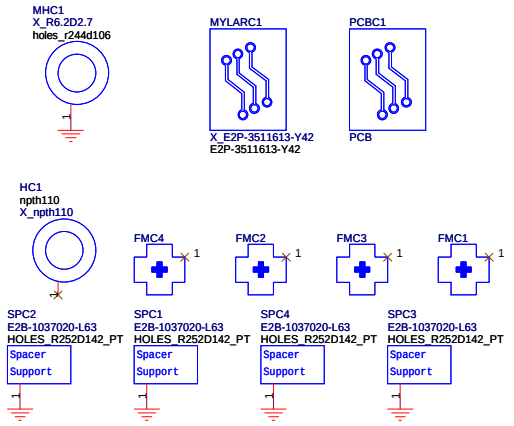

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