1	Cover Sheet
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4	CPU-CLK/Control/MISC/PEG
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10	PCH-PCIE/DMI/USB/CLK
11	PCH-SATA/HOST/GPIO/DDI/VGA
12	PCH-SMB/LPC/AUDIO/RTC
13	PCH-Power
14	PCH-GND
15	SIO-NCT5533D
16	PCIE x16 and x1 Slots
17	Mini PCIE/Mini SATA
18	Audio Codec-ALC892
19	Gigabit Intel Clarkville-V I217
20	Front / Rear USB Connectors
21	SATA / FAN /eSATA
22	TPM & Asset ID
23	PCH & ME Core Power
24	DDR Power
25	VCC3 & VCC5
26	VRD12.5-ISL95816HRZ 4 Phase
27	VCCP
28	ATX/F_Panel/EMI/LED
29	CPU/PCH XDP&USB PW-Discharge
30	HDMI/DP
31	VGA
32	Manual & Option Parts
33	Reset/Pwrok/PON
34	Power Map
35	GPIO Table
36	History

MS-7829 Version : 0A

CPU :

Intel Haswell Processor

System Chipset :

Intel Lynx Point Chipset

On Board Chipset :

VRM 12.5 --ISL95816HRZ 4 Phase
Gigabit Intel Clarkville-V I217
HDA Codec -- Realtek ALC662-VD
Super I/O -- NCT5533D
SPI Flash 32Mb

Main Memory :

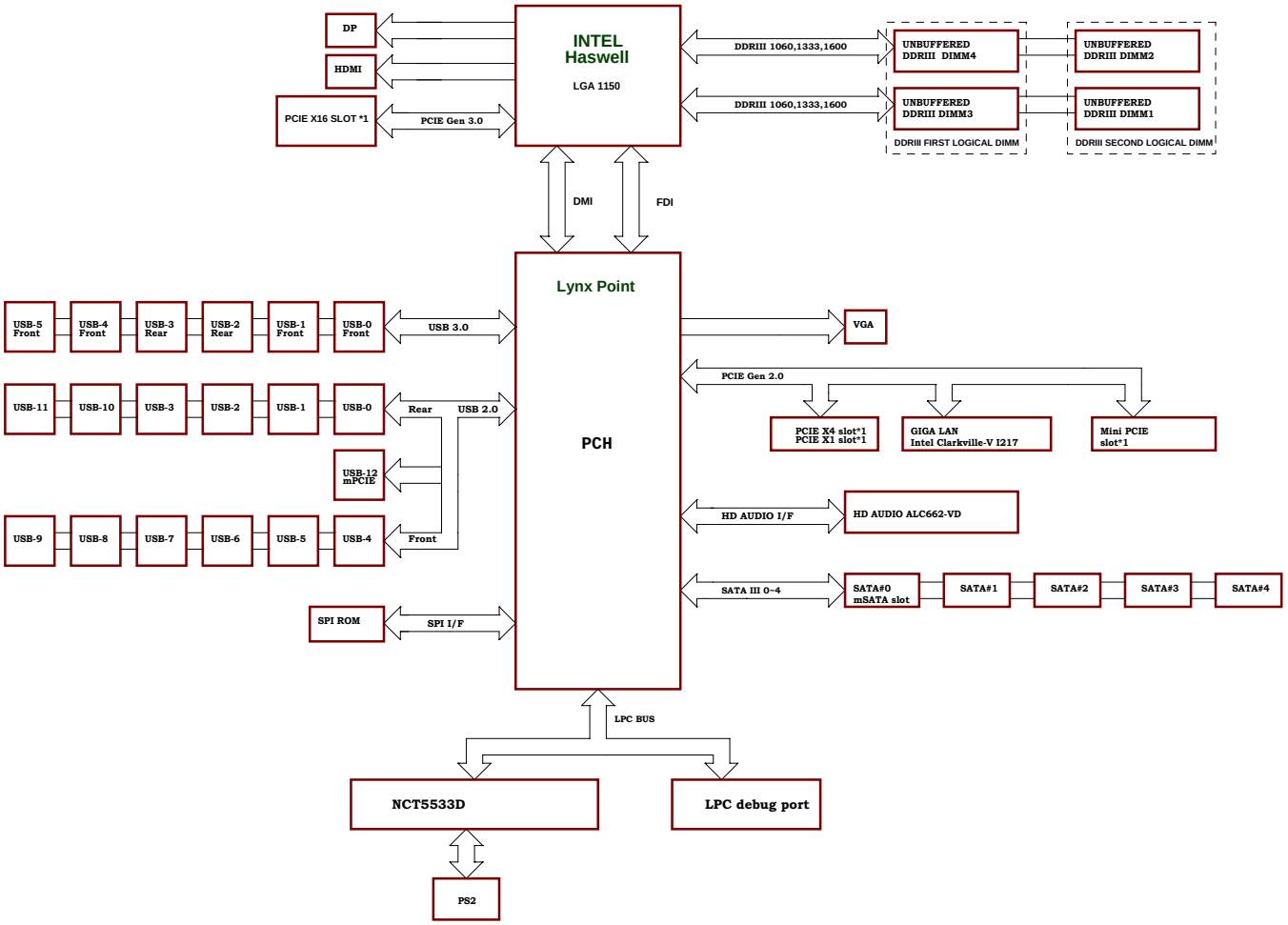
2 Channel DDR III * 4 (Max 32GB)

Expansion Slot :

PCI Express x16 Slot * 1
Mini PCIE/Mini SATA Slot * 1

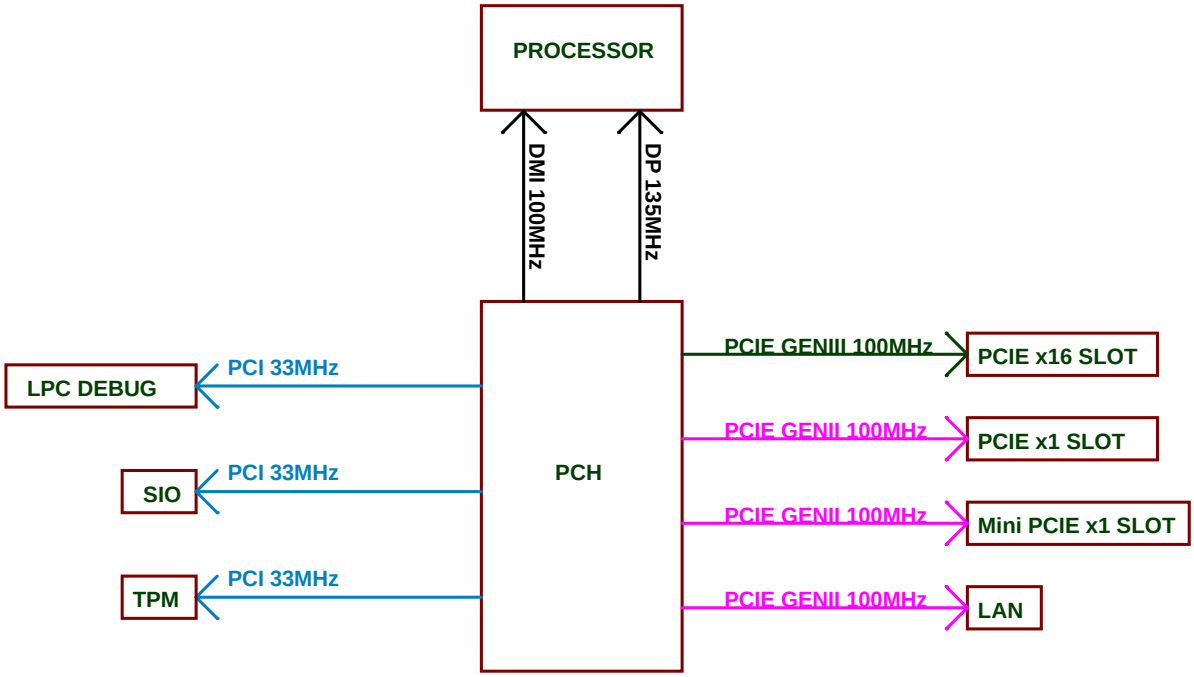
MSI Link for the Future MICRO-START INT'L CO.,LTD.

Title	Cover Sheet	
Size	Document Number: Acer SharkBay	Rev: 0A
Date: Friday, July 06, 2012	Sheet 1 of 35	



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

Title	Block Diagram	
Size	Document Number: Acer SharkBay	Rev: 0A
Date: Friday, July 06, 2012	Sheet 2 of 35	

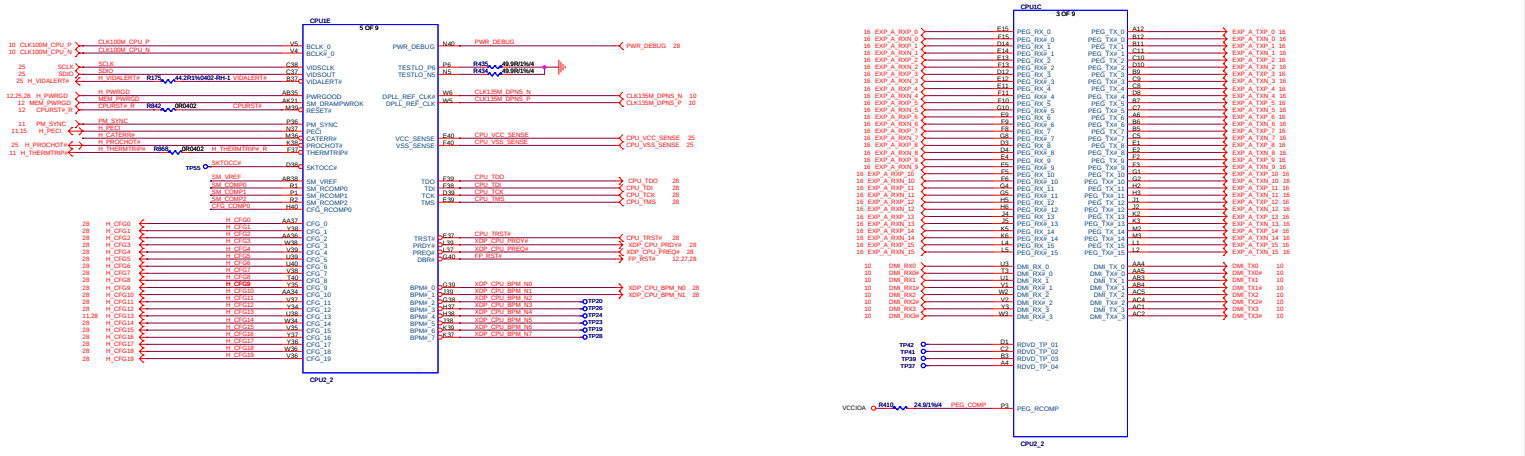


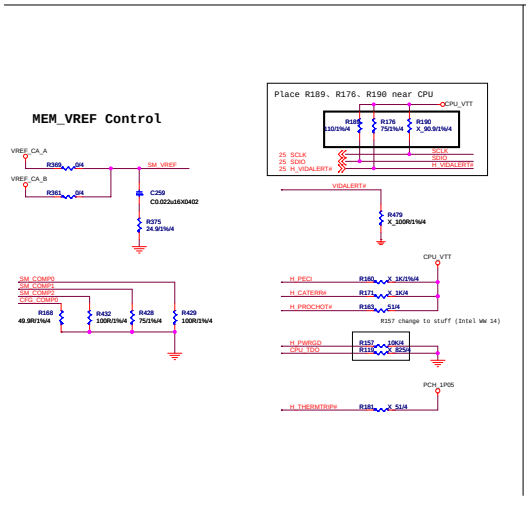
MICRO-START INTL CO.,LTD.

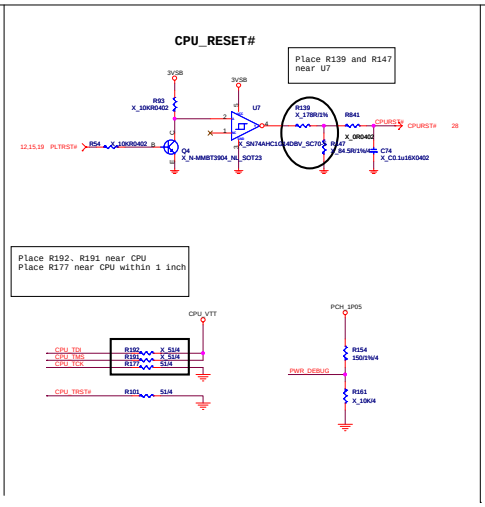
Title: Clock Distribution

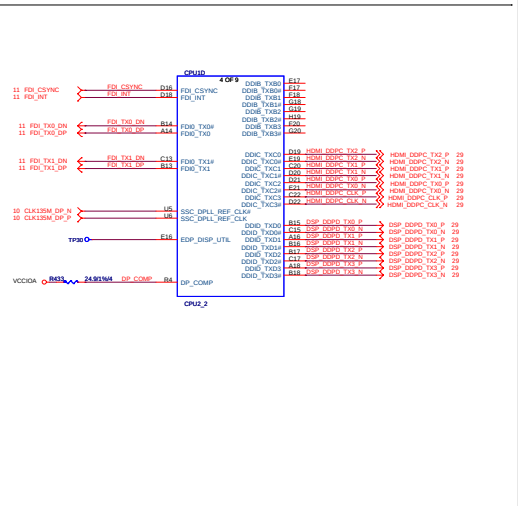
Size	Document Number	Rev
	Acer SharkBay	0A

Date: Friday, July 06, 2012 Sheet 3 of 35

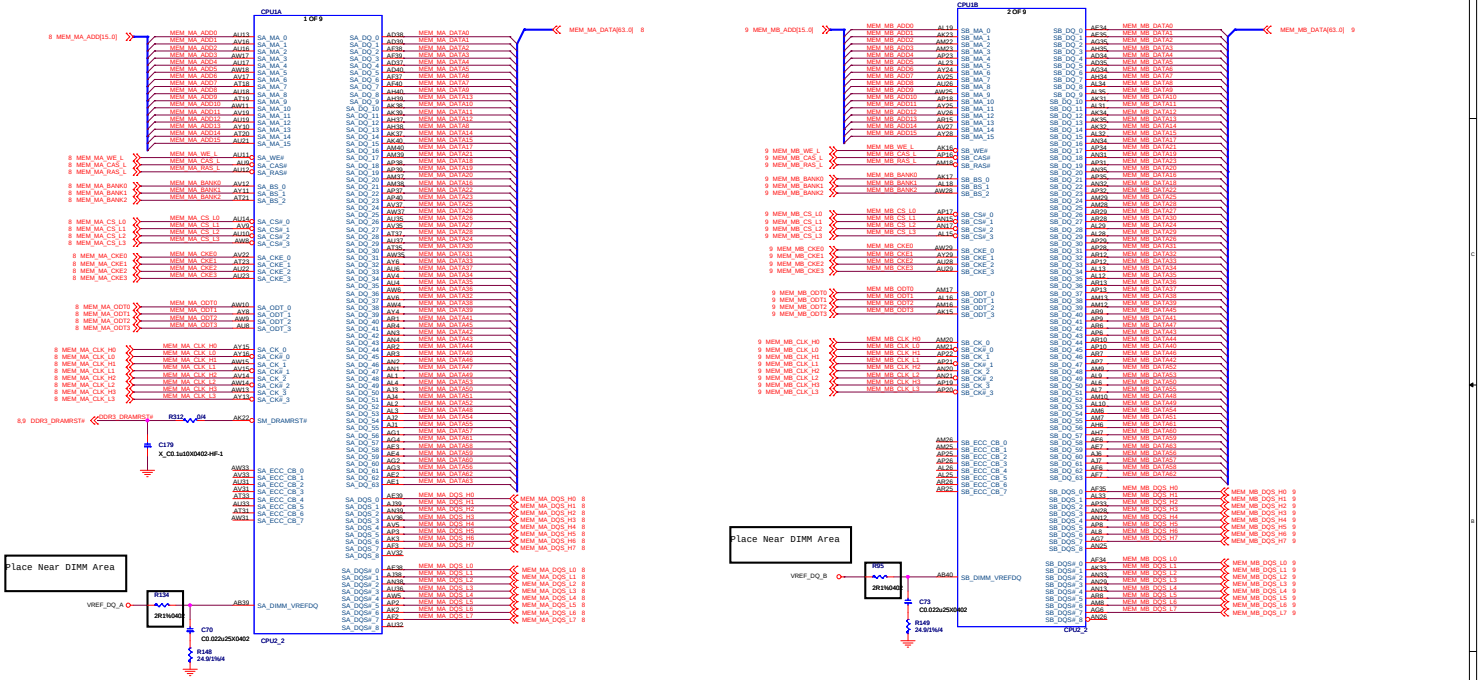




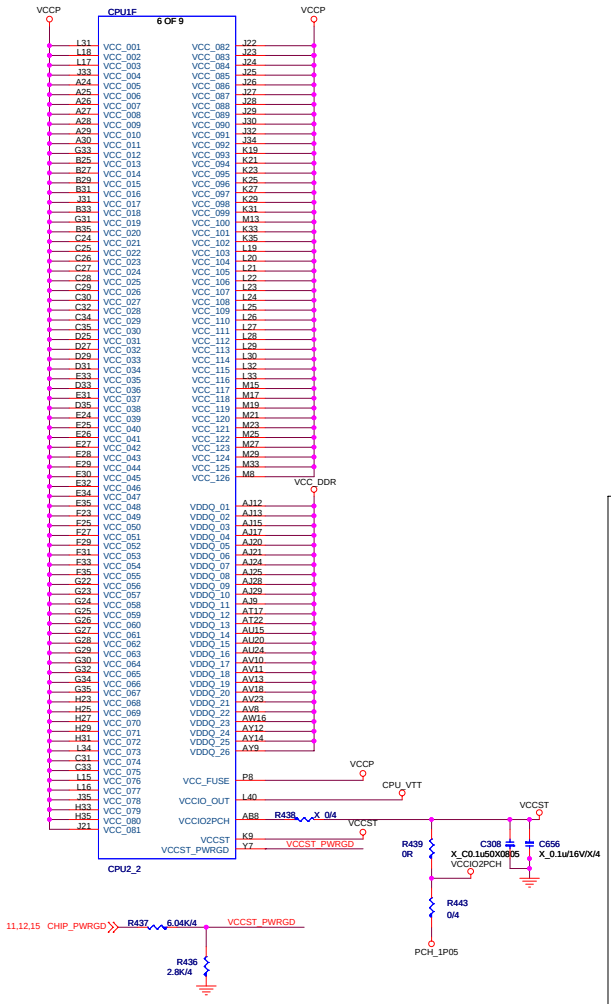


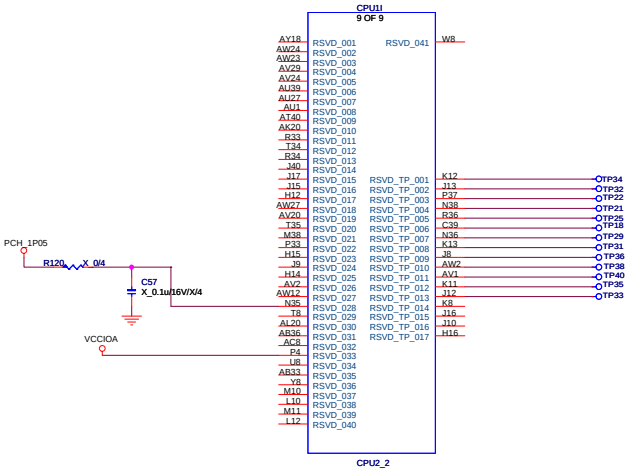


MSI	MICRO-START INT'L CO.,LTD.		
Title	CPU-CLK/Control/MISC/PEG		
Size	Document Number		Rev
	Acer SharkBay		0A
Date:	Monday, July 16, 2012	Sheet 4 of 35	



MSI	MICRO-START INT'L CO.,LTD.		
Title	CPU-Memory		
Size	Document Number		Rev
	Acer SharkBay		0A
Date:	Thursday, July 12, 2012	Sheet 5 of 35	



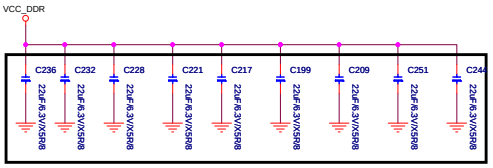


VCCP-Decoupling

PLACE THESE CAPS INSIDE CPU SOCKET CAVITY

PLACE THESE CAPS NEAR CPU SOCKET EDGE

VCC_DDR-Decoupling

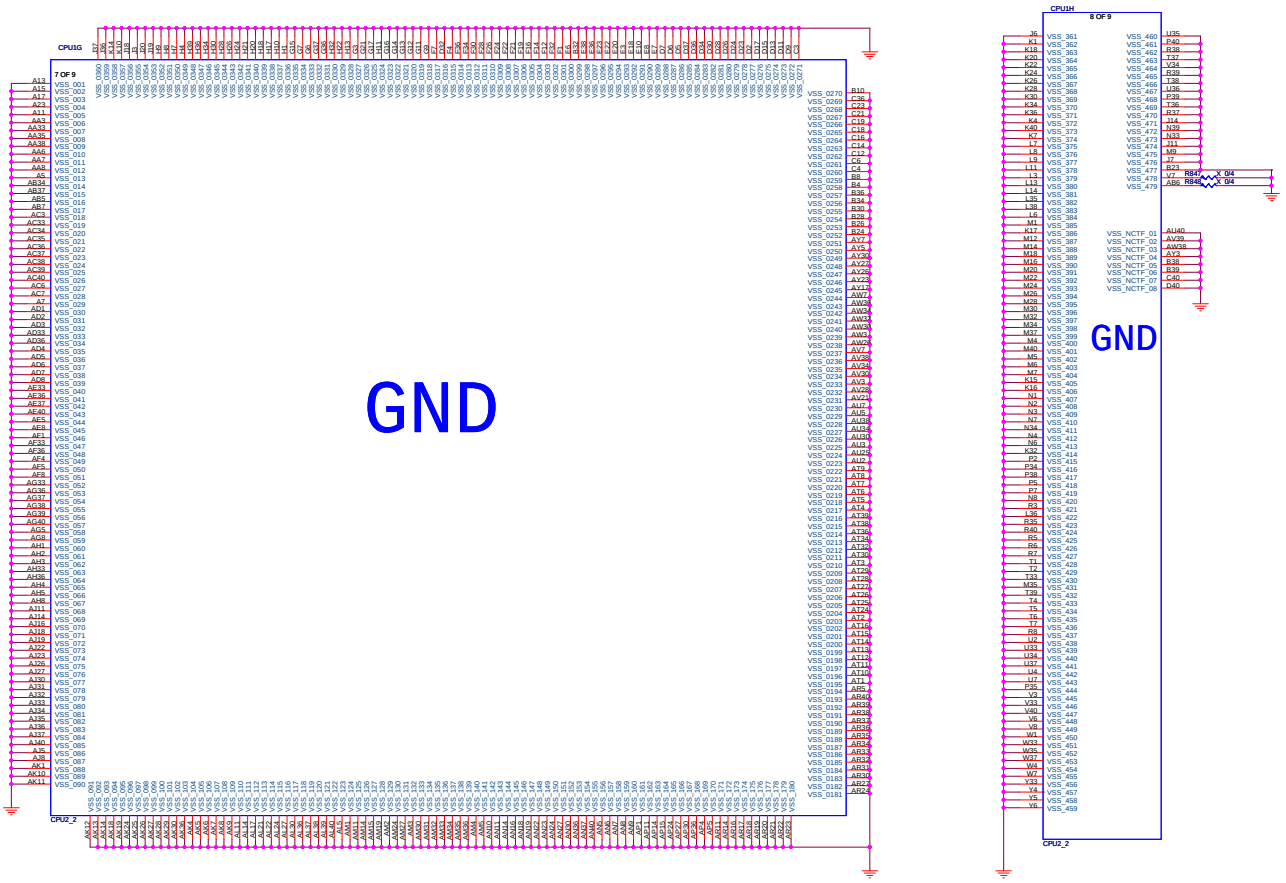


MSI MICRO-START INTL CO.,LTD.

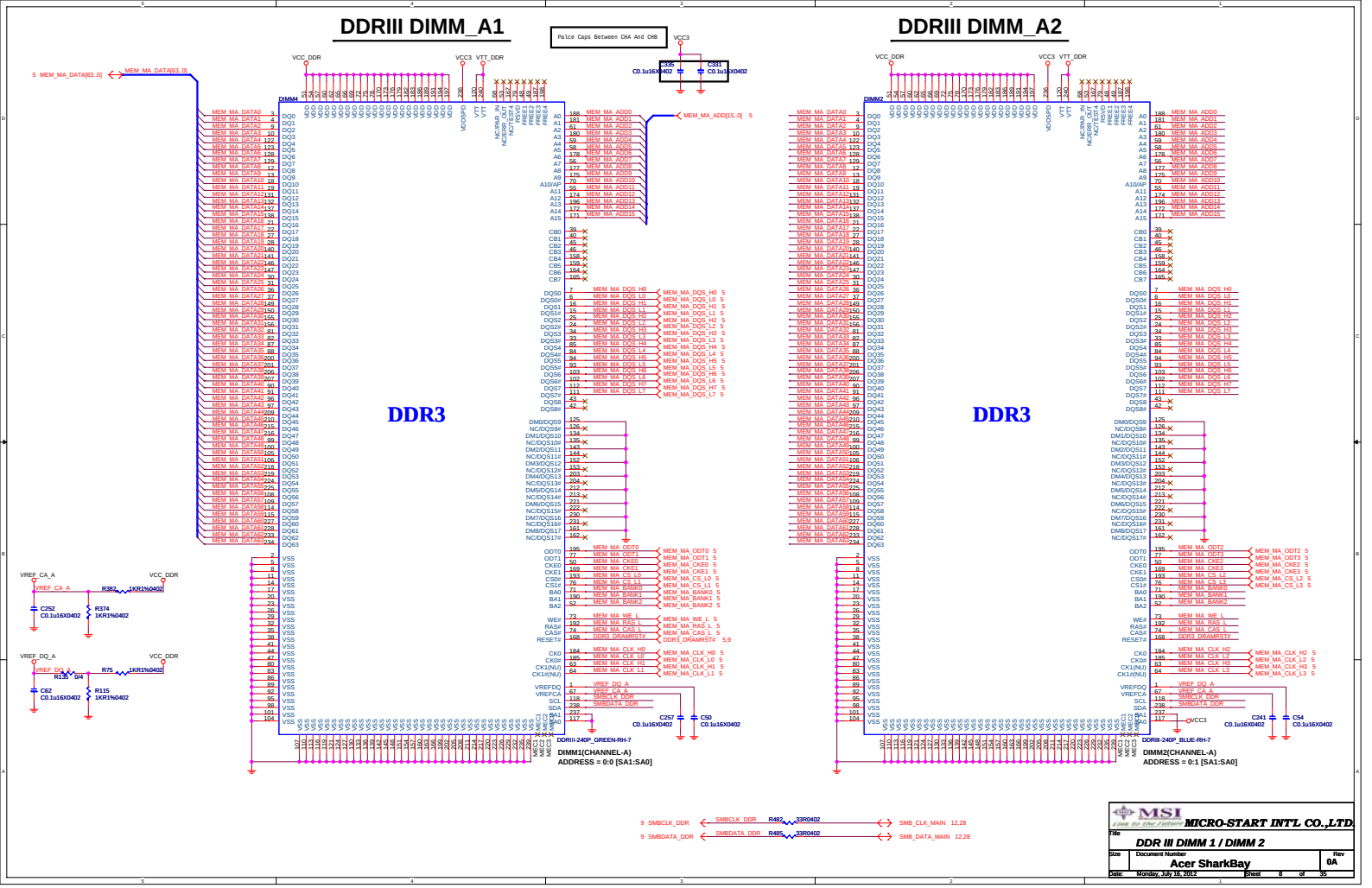
Title: CPU-Power

Size	Document Number	Rev
	Acer SharkBay	0A

Date: Monday, July 16, 2012 Sheet 6 of 35

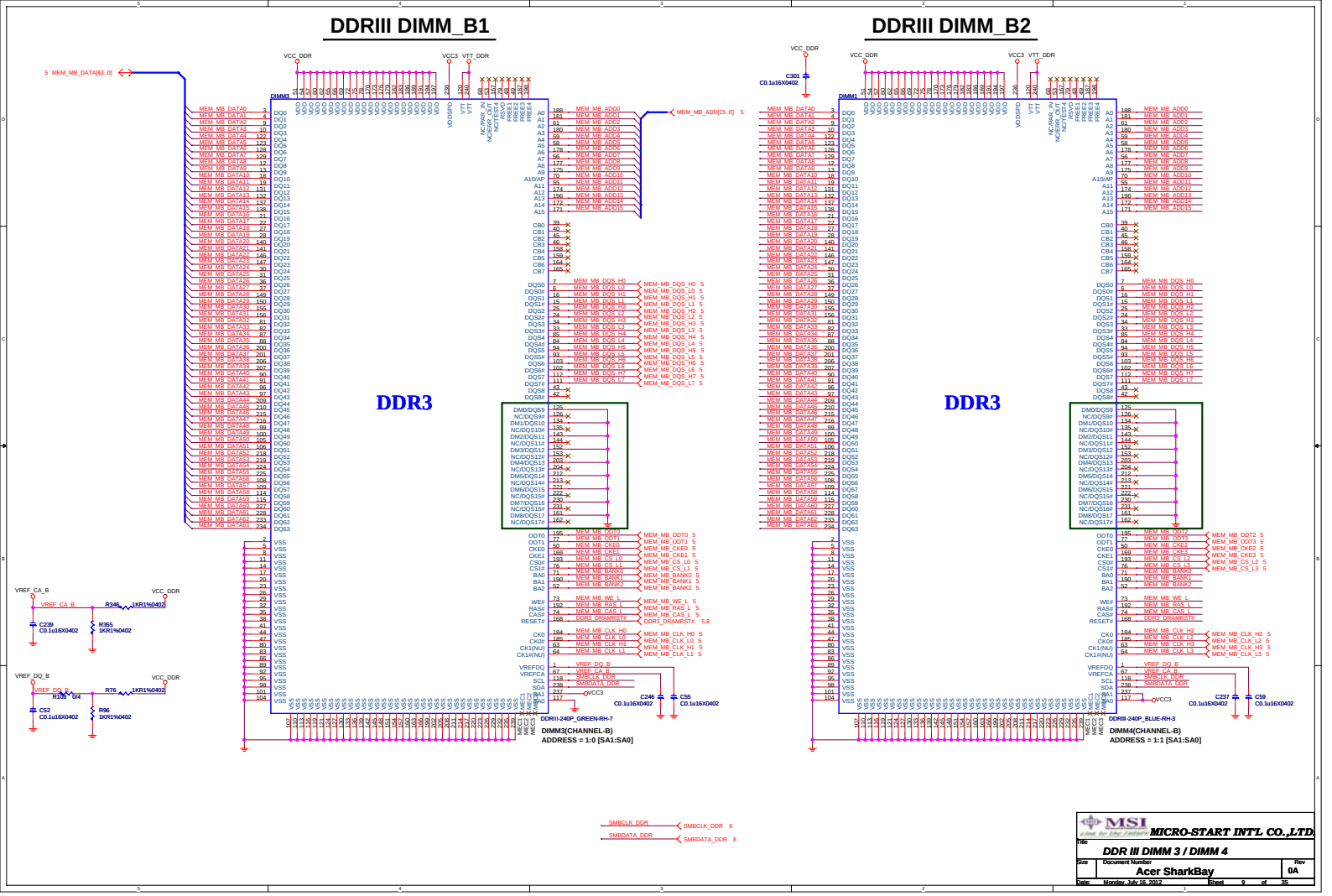


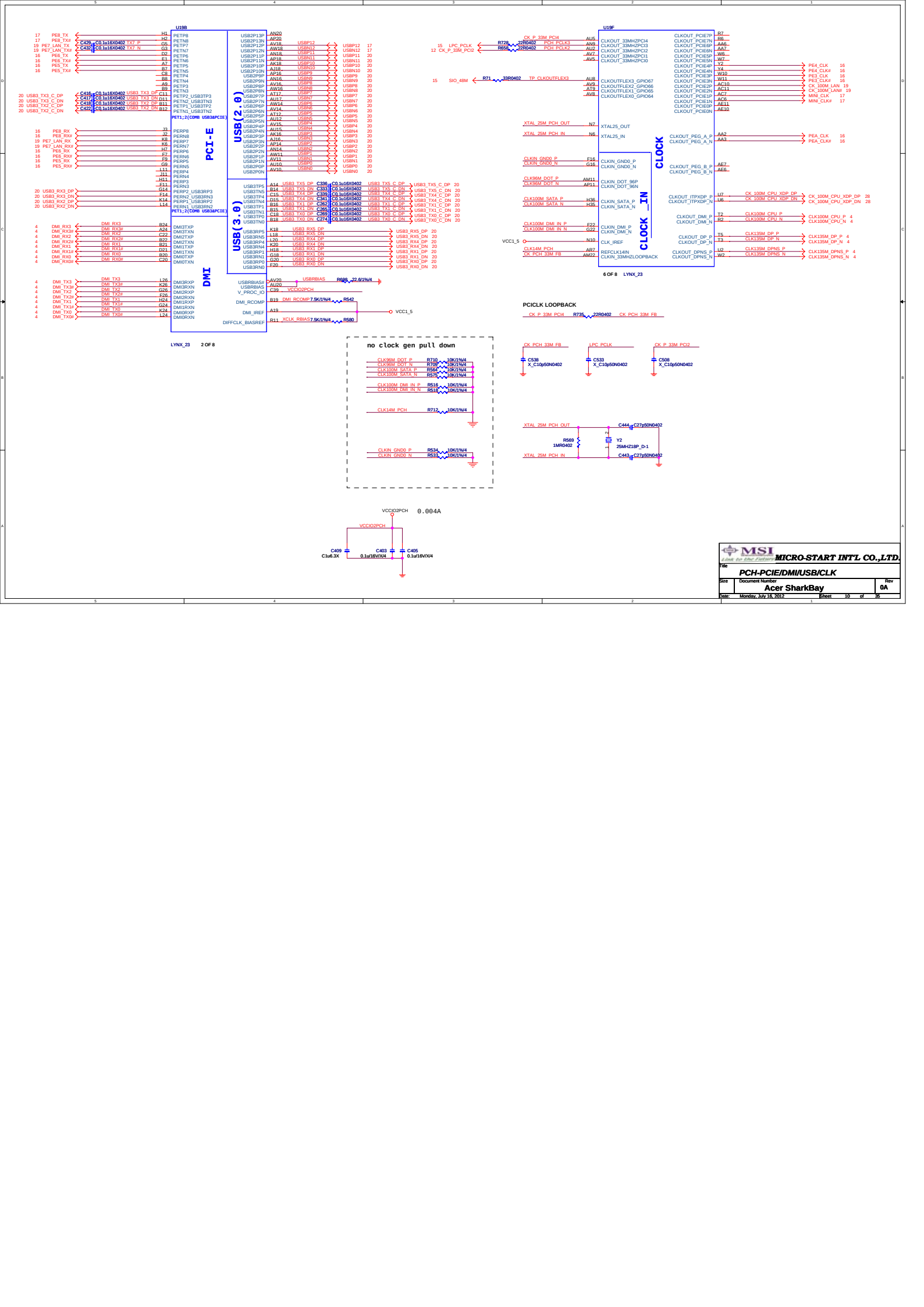
MSI Link to the Future	MICRO-START INTL CO.,LTD		
Title	CPU-GND		
Size	Document Number		Rev
	Acer SharkBay		0A
Date:	Monday, July 09, 2012	Sheet 7 of 35	

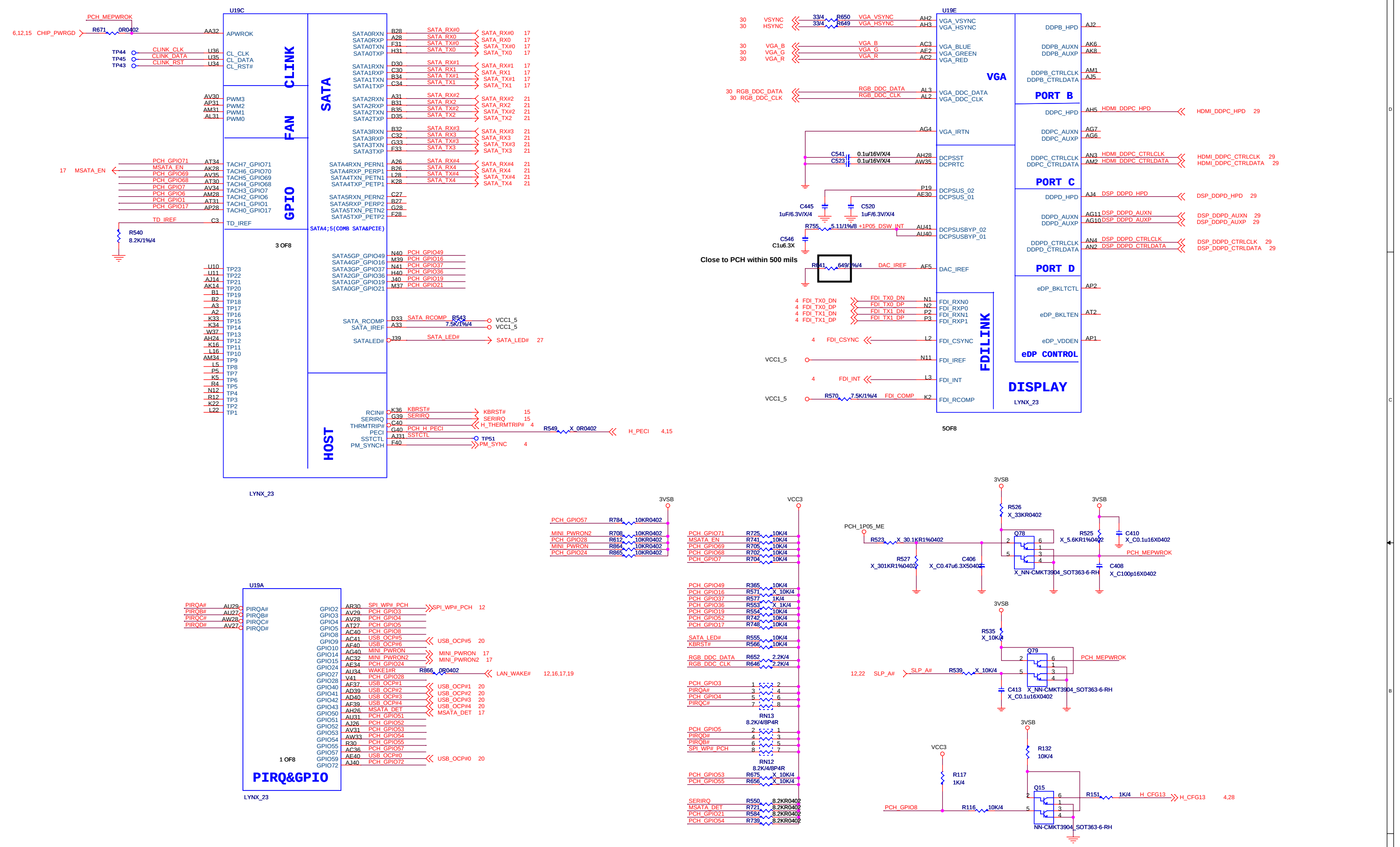


MSI — Link to the Future — MICRO-START INTL CO.,LTD

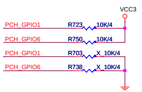
File	DDR III DIMM 1 / DIMM 2		
Size	Document Number		Rev
	Acer SharkBay		0A
Date:	Monday, July 16, 2012	Sheet 8 of 35	


DDRIII DIMM_B1
DDRIII DIMM_B2
DDR3
DDR3
DIMM3
DIMM1
DIMM3(CHANNEL-B)
ADDRESS = 1:0 [SA1:SA0]
DIMM4(CHANNEL-B)
ADDRESS = 1:1 [SA1:SA0]
DDRIII-240P_GREEN-RH-7
DDRIII-240P_BLUE-RH-3
VCC_DDR
VCC3
VTT_DDR
VREF_CA_B
VREF_DQ_B
SMBCLK_DDR
SMBDATA_DDR
MICRO-START INT'L CO.,LTD
DDR III DIMM 3 / DIMM 4
Acer SharkBay
0A
Monday, July 16, 2012
9
35


U19B
PCI-E
USB(2.0)
USB(3.0)
DMI
PETP8
PETN8
PETP7
PETN7
PETP6
PETN6
PETP5
PETN5
PETP4
PETN4
PETP3
PETN3
PETP2_USB3TP3
PETN2_USB3TN3
PETP1_USB3TP2
PETN1_USB3TN2
PERP8
PERN8
PERP7
PERN7
PERP6
PERN6
PERP5
PERN5
PERP4
PERN4
PERP3
PERN3
PERP2_USB3RP3
PERN2_USB3RN3
PERP1_USB3RP2
PERN1_USB3RN2
DMI3TXP
DMI3TXN
DMI2TXP
DMI2TXN
DMI1TXP
DMI1TXN
DMI0TXP
DMI0TXN
DMI3RXP
DMI3RXN
DMI2RXP
DMI2RXN
DMI1RXP
DMI1RXN
DMI0RXP
DMI0RXN
USB2P13P
USB2P13N
USB2P12P
USB2P12N
USB2P11P
USB2P11N
USB2P10P
USB2P10N
USB2P9P
USB2P9N
USB2P8P
USB2P8N
USB2P7P
USB2P7N
USB2P6P
USB2P6N
USB2P5P
USB2P5N
USB2P4P
USB2P4N
USB2P3P
USB2P3N
USB2P2P
USB2P2N
USB2P1P
USB2P1N
USB2P0P
USB2P0N
USB3TP5
USB3TN5
USB3TP4
USB3TN4
USB3TP1
USB3TN1
USB3TP0
USB3TN0
USB3RP5
USB3RN5
USB3RP4
USB3RN4
USB3RP1
USB3RN1
USB3RP0
USB3RN0
USBRBIAS
USBRBIAS#
V_PROC_IO
DMI_RCOMP
DMI_IREF
DIFFCLK_BIASREF
LYNX_23 2 OF 8
U19F
CLOCK
CLOCK_IN
CK_P_33M_PCI4
CLKOUT_33MHZPCI4
CLKOUT_33MHZPCI3
CLKOUT_33MHZPCI2
CLKOUT_33MHZPCI1
CLKOUT_33MHZPCI0
CLKOUTFLEX3_GPIO67
CLKOUTFLEX2_GPIO66
CLKOUTFLEX1_GPIO65
CLKOUTFLEX0_GPIO64
XTAL25_OUT
XTAL25_IN
CLKIN_GND0_P
CLKIN_GND0_N
CLKIN_DOT_96P
CLKIN_DOT_96N
CLKIN_SATA_P
CLKIN_SATA_N
CLKIN_DMI_P
CLKIN_DMI_N
CLK_IREF
REFCLK14IN
CLKIN_33MHZLOOPBACK
CLKOUT_PCIE7P
CLKOUT_PCIE7N
CLKOUT_PCIE6P
CLKOUT_PCIE6N
CLKOUT_PCIE5P
CLKOUT_PCIE5N
CLKOUT_PCIE4P
CLKOUT_PCIE4N
CLKOUT_PCIE3P
CLKOUT_PCIE3N
CLKOUT_PCIE2P
CLKOUT_PCIE2N
CLKOUT_PCIE1P
CLKOUT_PCIE1N
CLKOUT_PCIE0P
CLKOUT_PCIE0N
CLKOUT_PEG_A_P
CLKOUT_PEG_A_N
CLKOUT_PEG_B_P
CLKOUT_PEG_B_N
CLKOUT_ITPXDP_P
CLKOUT_ITPXDP_N
CLKOUT_DMI_P
CLKOUT_DMI_N
CLKOUT_DP_P
CLKOUT_DP_N
CLKOUT_DPNS_P
CLKOUT_DPNS_N
6 OF 8 LYNX_23
PCICLK LOOPBACK
no clock gen pull down
CLK96M_DOT_P
CLK96M_DOT_N
CLK100M_SATA_P
CLK100M_SATA_N
CLK100M_DMI_IN_P
CLK100M_DMI_IN_N
CLK14M_PCH
CLKIN_GND0_P
CLKIN_GND0_N
XTAL_25M_PCH_OUT
XTAL_25M_PCH_IN
Y2
25MHZ18P_D-1
VCCIO2PCH
0.004A
C409
C1u6.3X
C403
0.1u/16V/X/4
C405
0.1u/16V/X/4
MSI
MICRO-START INT'L CO.,LTD.
PCH-PCIE/DMI/USB/CLK
Acer SharkBay
0A
Monday, July 16, 2012
Sheet 10 of 35

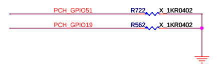


BIOS STARAPS

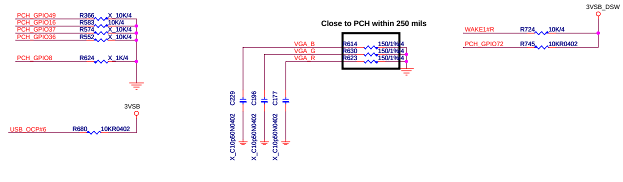


BIOS STARAPS	GPIO1	GPIO6
0A	1	1
NA	0	0

BIOS Device Select

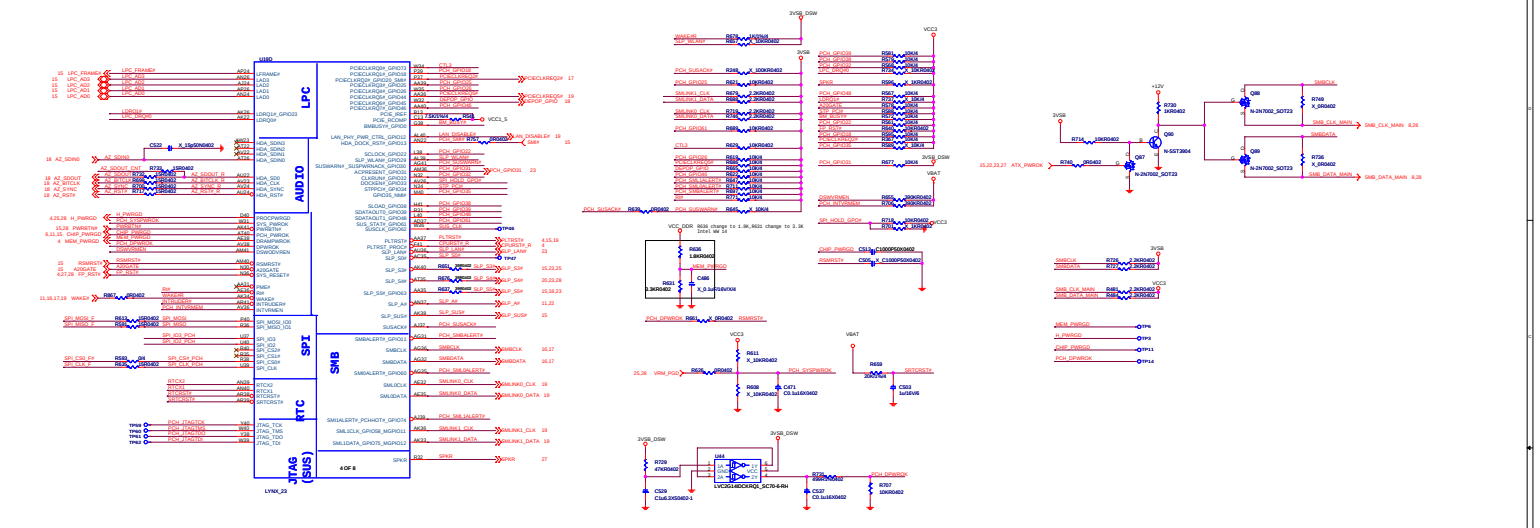


BOOT DEVICE	GPIO51	GPIO19
LPC	0	0
SPI	1	1

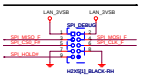


MICRO-START INT'L CO.,LTD.

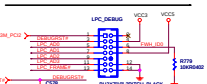
Title		
PCH-SATA/HOST/GPIO/DDI/VGA		
Size	Document Number: Acer SharkBay	Rev: 0A
Date: Monday, July 16, 2012	Sheet 11 of 35	



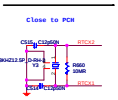
SPI DEBUG PROT
Close to SPI ROM



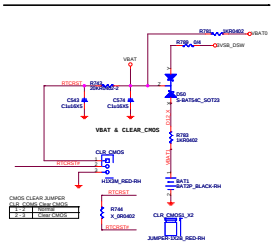
LPC Debug Port



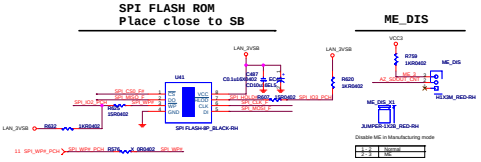
RTC Block
Close to PCH



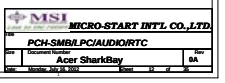
VBAT



SPI FLASH ROM
Place close to SB

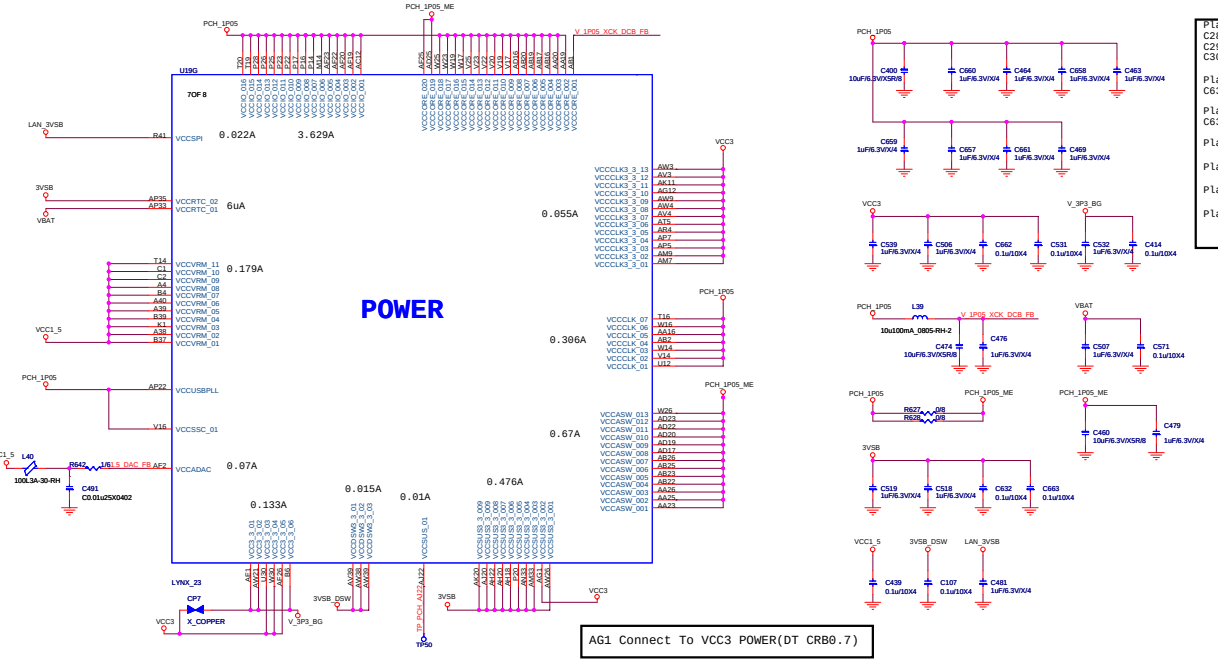


ME_DIS



MSI	MICRO-STAR INT'L CO.,LTD	
Title	PCH-SMB/LPC/AUDIO/RTC	
Size	Document Number: Acer SharkBay	Rev: 0A
Date: Monday, July 18, 2022	Sheet 13 of 36	

AF25、AD25 Connect To ASW POWER(DT CRB0.7)



Place C283、C237 near P14, P16, P17,P26, P28
C285 near M14 C288 near U12 C289 near W14
C291 near AB2 C295 near V16 C297 near AA16, W16
C300 near AP22, AF19

Place C303 near AV4, AR4, AT5, AP5
C634 near AG1 C633 near W30 C304 near AF26

Place C630 near AN33 C301 near AK20
C631 near AW26 C302 near AP35

Place C635 near T14

Place C636 near AW39

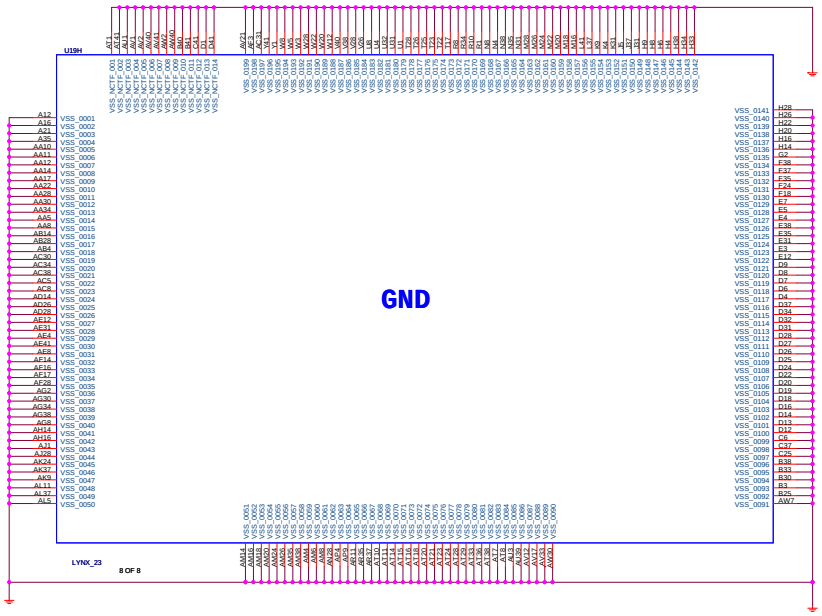
Place C312、C311 near AD17, AD19

Place C306 near AW21 C632 near B6

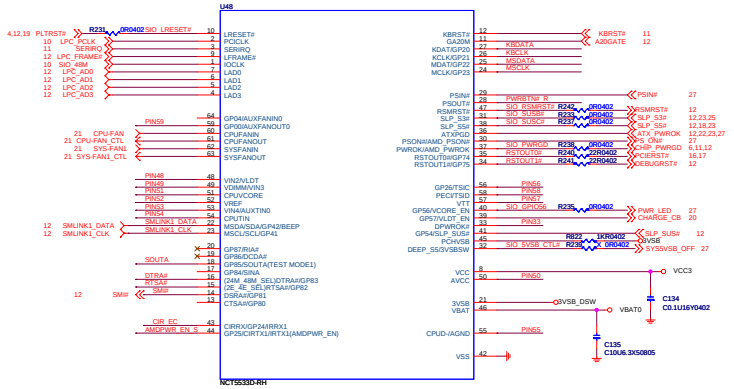
AG1 Connect To VCC3 POWER(DT CRB0.7)

MSI MICRO-START INTL CO.,LTD.

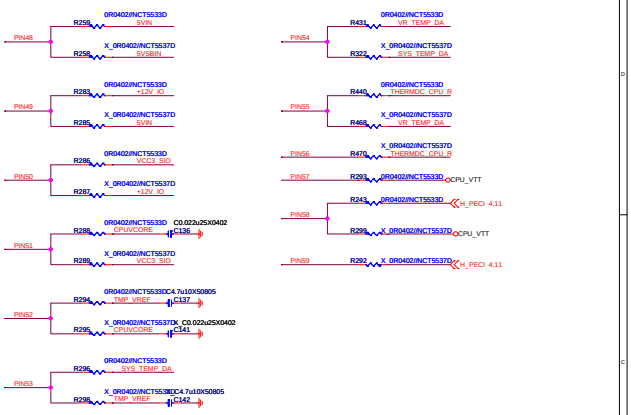
Title	PCH-Power	
Size	Document Number: Acer SharkBay	Rev: 0A
Date: Monday, July 16, 2012	Sheet 13 of 35	



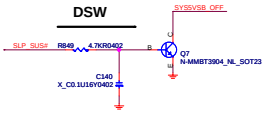
MICRO-START INTL CO.,LTD			
Title: PCH-GND			
Size	Document Number: Acer SharkBay		Rev: 0A
Date: Monday, July 16, 2012	Sheet 14 of 35		



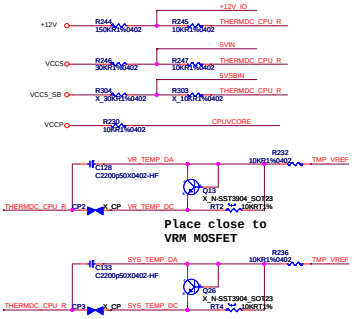
Co-lay NCT5533D/NCT5537D

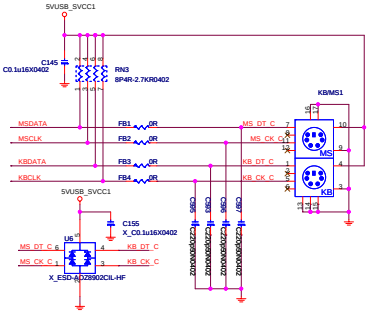


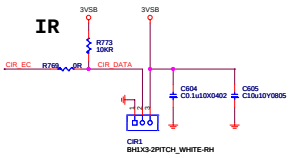
DSW



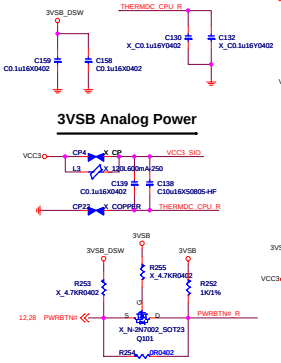
Voltage And Temp Sensing

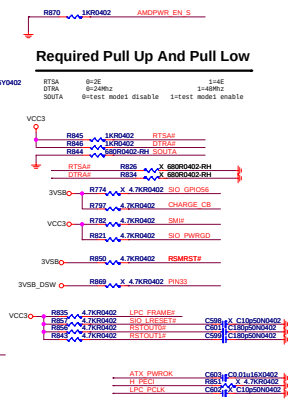


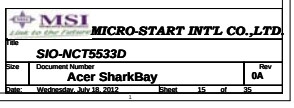




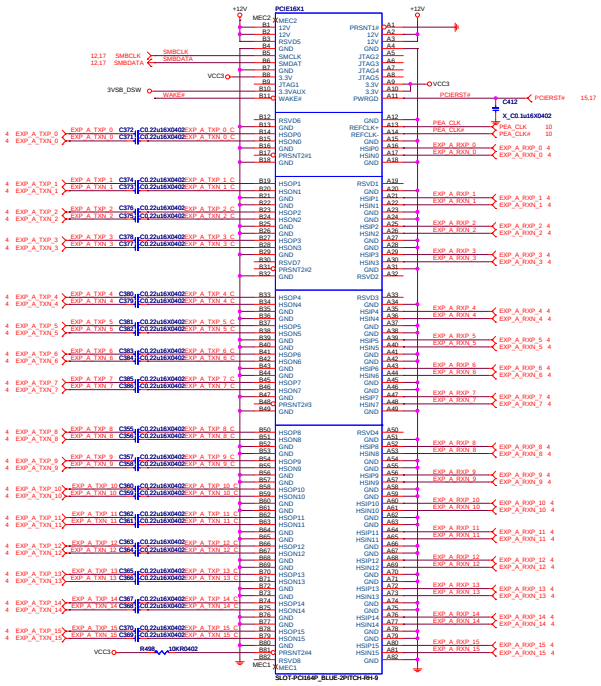
3VSB Analog Power

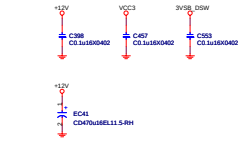




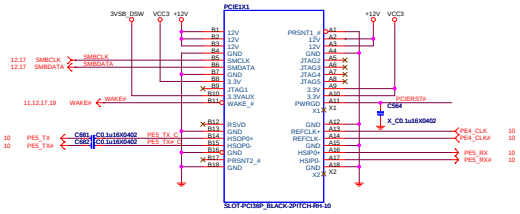


PCI_EXPRESS X16 SLOT

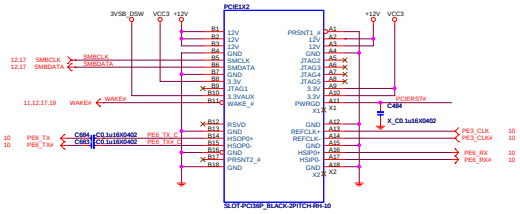




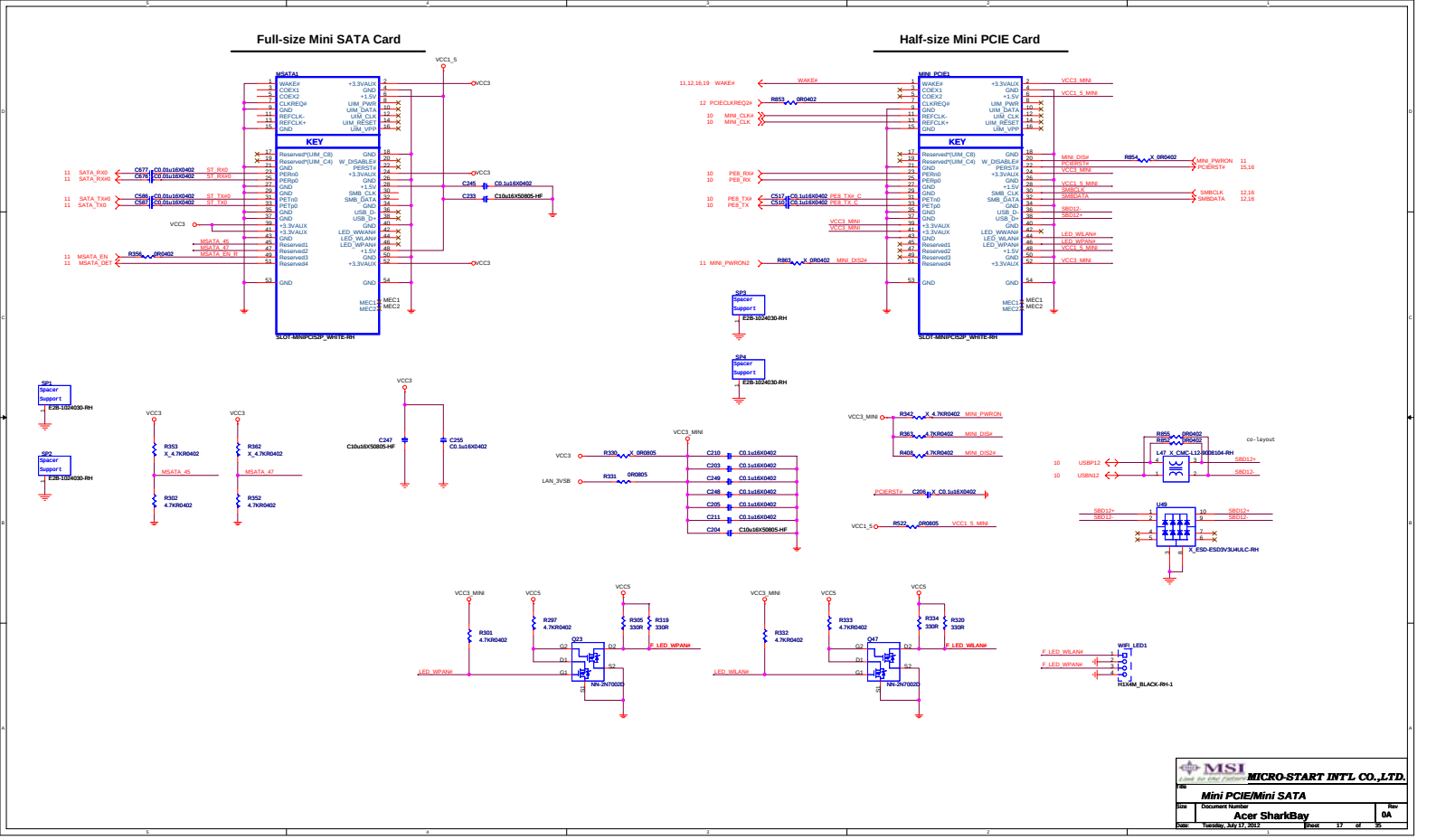
PCI_EXPRESS x1 SLOT



PCI_EXPRESS x1 SLOT



MSI	MICRO-START INT'L CO.,LTD.		
Title	PCIE x16 and x1 Slots		
Size	Document Number	Acer SharkBay	Rev 0A
Date: Monday, July 16, 2012	Sheet 19 of 35		


Full-size Mini SATA Card
Half-size Mini PCIE Card
MSATA1
MINI_PCIE1
KEY
SLOT-MINIPCIS3P_WHITE-RH
SLOT-MINIPCIS3P_WHITE-RH
SP1
SP2
SP3
SP4
E2B-1024030-RH
L47 X_CMC-L12-900R104-RH
U49
X_ESD-ESD3V3U4ULC-RH
WIFI_LED1
H1X6M_BLACK-RH-1
NN-2N7002D
MICRO-START INT'L CO.,LTD.
Mini PCIE/Mini SATA
Acer SharkBay
0A
Tuesday, July 17, 2012
17
35

Azalia Codec -ALC662

Layout Follow Route

Reference Resistor For Jack Detection(Close To The Codec)

Split by DGND

Analog Area

Digital Area

AUDIO CODE REGULATORS

Trace Width 30mils.

Audio DE-POP Circuit

EMC Request

Front Audio Jack

3 Jack Colay 6 Jack

AUDIO PANEL

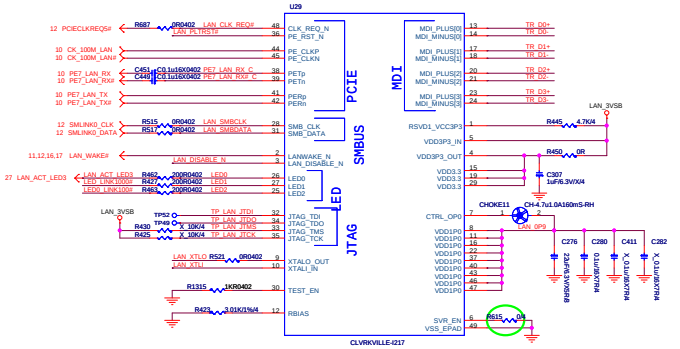
LINE IN(A) — LINE_OUT (front channel)

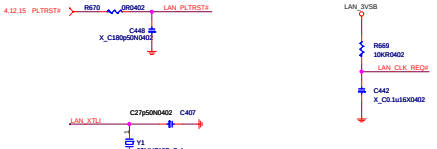
LINE OUT(B) — SURROUND or LINE_IN

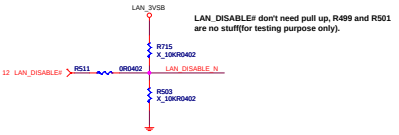
MIC IN(C) — CENTER-LEF or MIC INPUT

USE ALC662 CO-LAYOUT

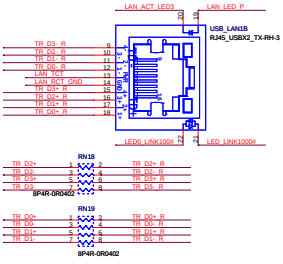
MICRO-START INTL CO.,LTD		
File: Audio Codec-ALC892 Co-lay ALC662-VD		
Size: Custom	Document Number: Acer SharkBay	Rev: 0A
Date: Monday, July 16, 2012	Sheet 18 of 35	



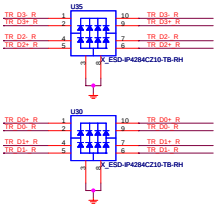




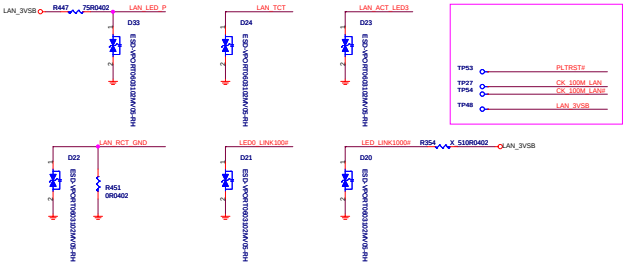
LAN Connector



ESD

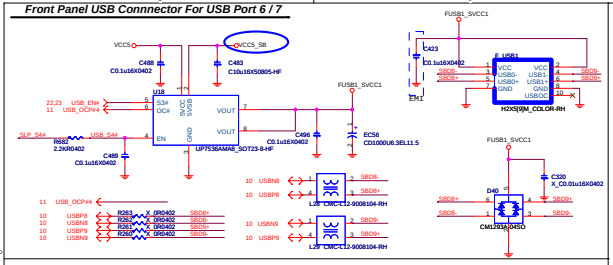


ESD

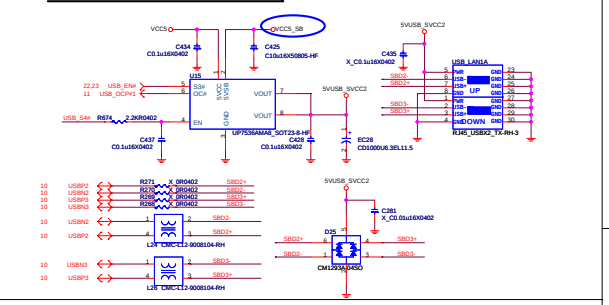


MSI MICRO-START INT'L CO.,LTD		
Title: Gigabit LAN-RTL8111F-VB Co-lay RTL8111GN		
Size	Document Number: Acer SharkBay	Rev: 0A
Date: Monday, July 16, 2012	Sheet 19 of 35	

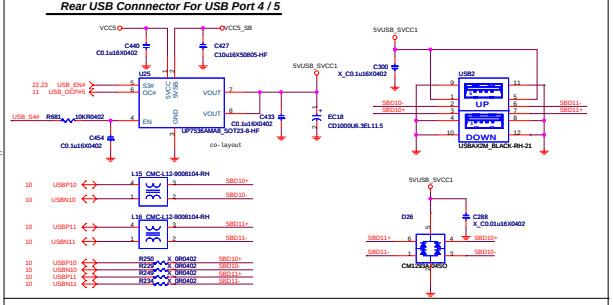
Front Panel USB Connnector For USB Port 6 / 7



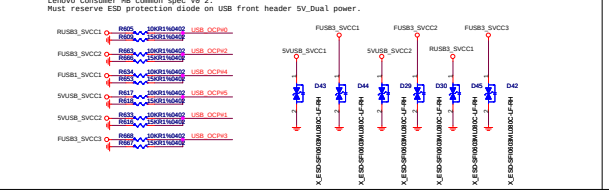
Rear USB Connnector For USB Port 8 / 9



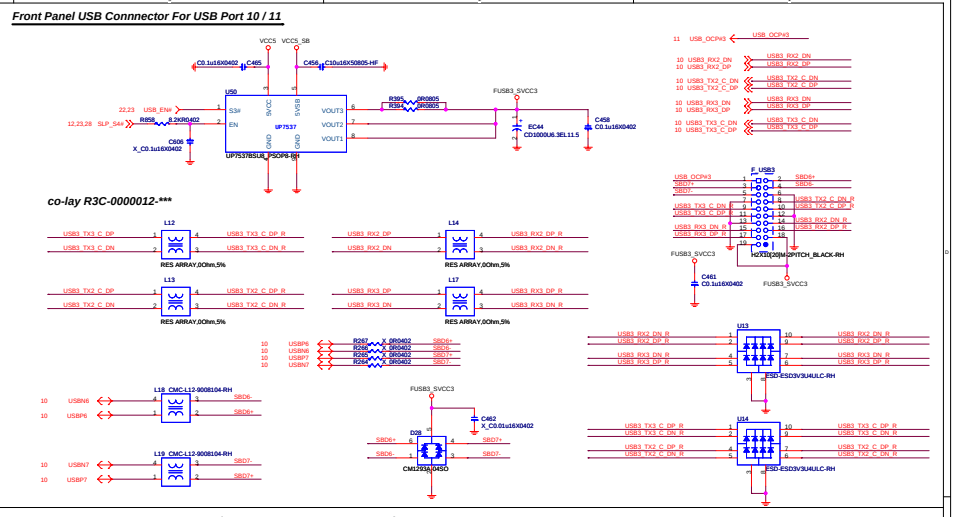
Rear USB Connnector For USB Port 4 / 5



Lenovo Consumer MB common spec V0 2:
Must reserve ESD protection diode on USB front header 5V_Dual power.



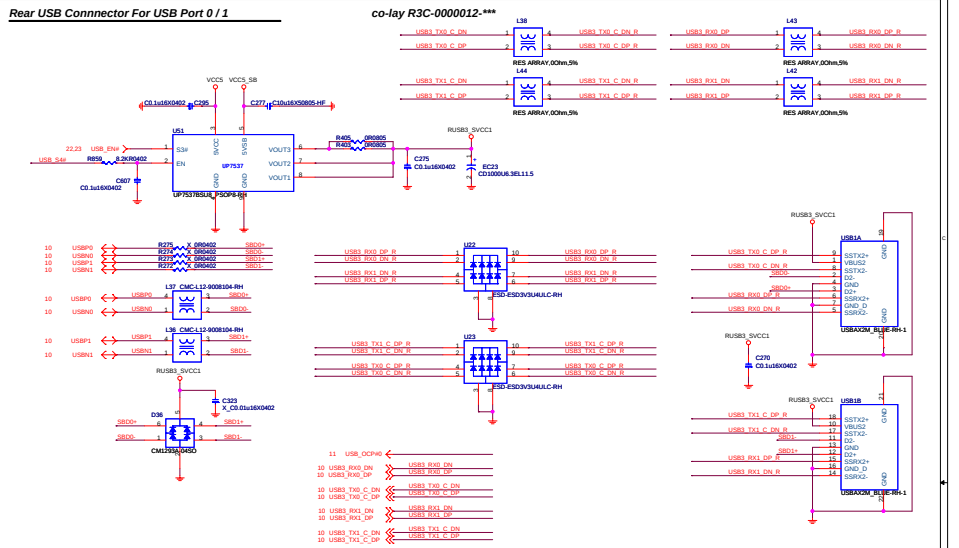
Front Panel USB Connnector For USB Port 10 / 11



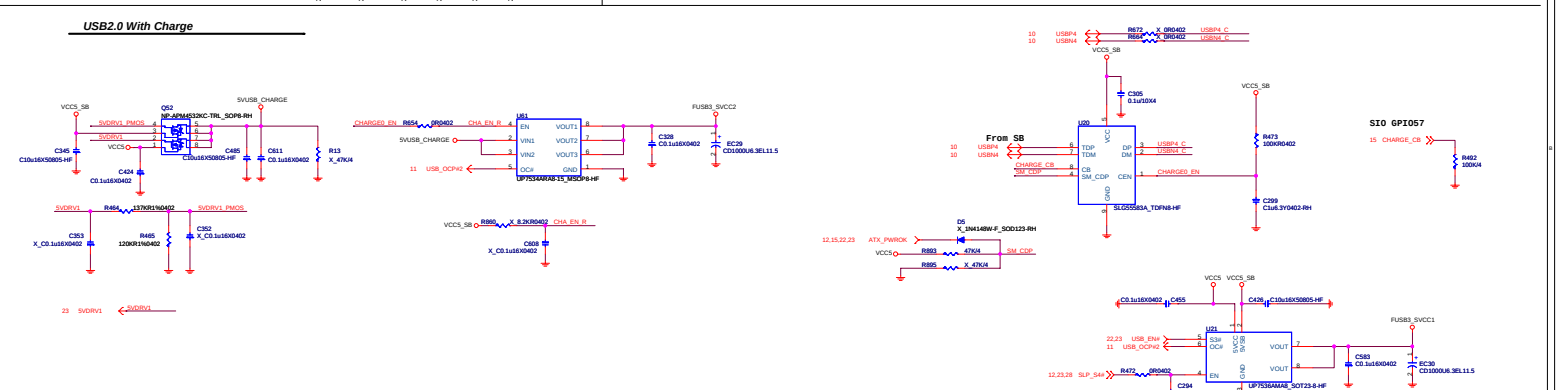
co-lay R3C-0000012-***

Rear USB Connnector For USB Port 0 / 1

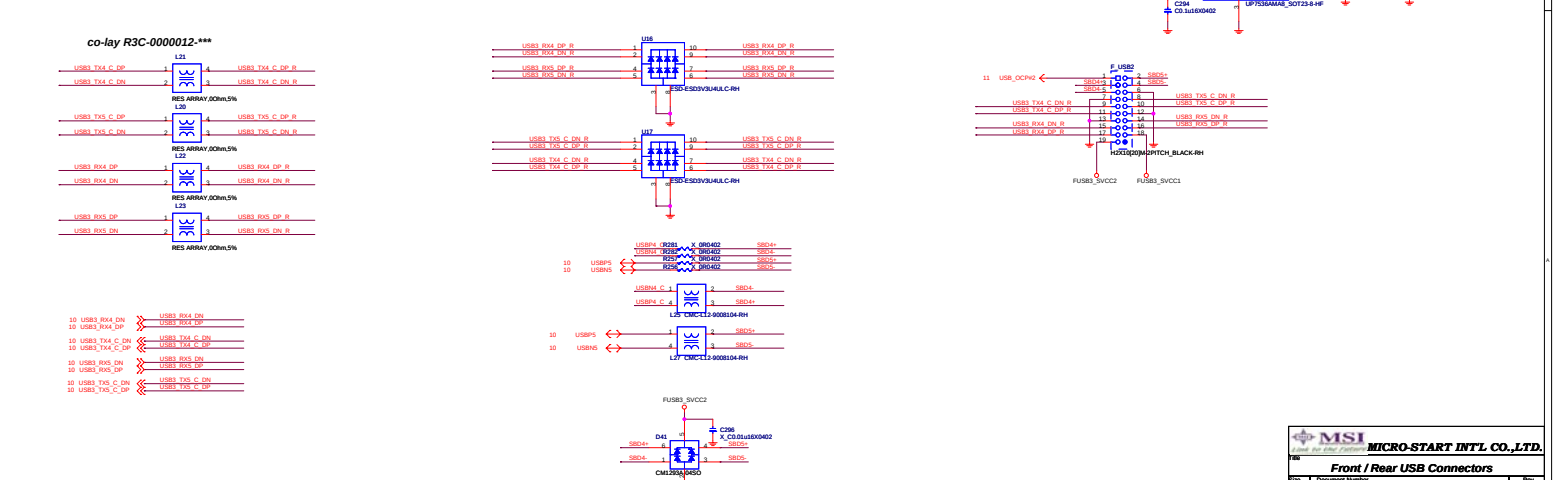
co-lay R3C-0000012-***



USB2.0 With Charge

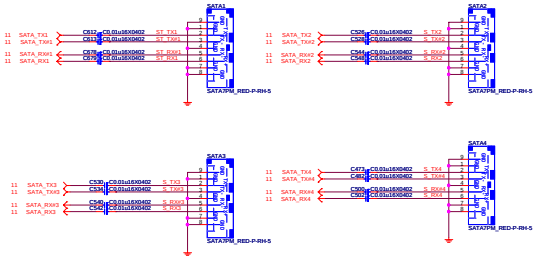


co-lay R3C-0000012-***

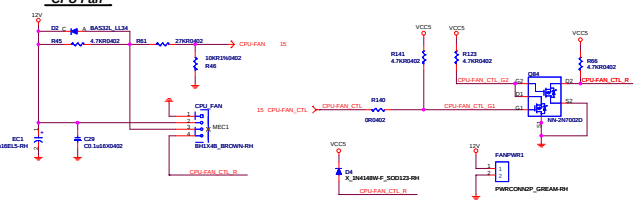


MSI MICRO-START INT'L CO.,LTD.		
Title: Front / Rear USB Connectors		
Size:	Document Number: Acer SharkBay	Rev: 0A
Date: Monday, July 16, 2012	Sheet 20 of 35	

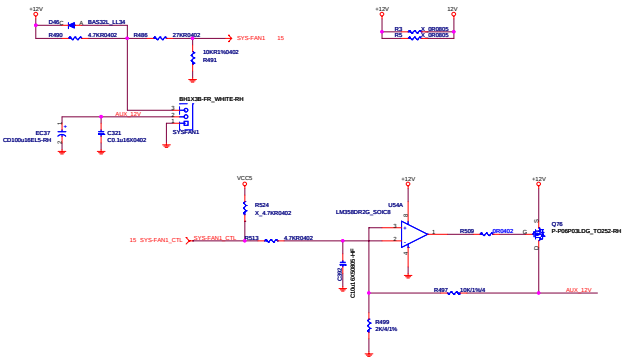
SATA Connector



CPU Fan

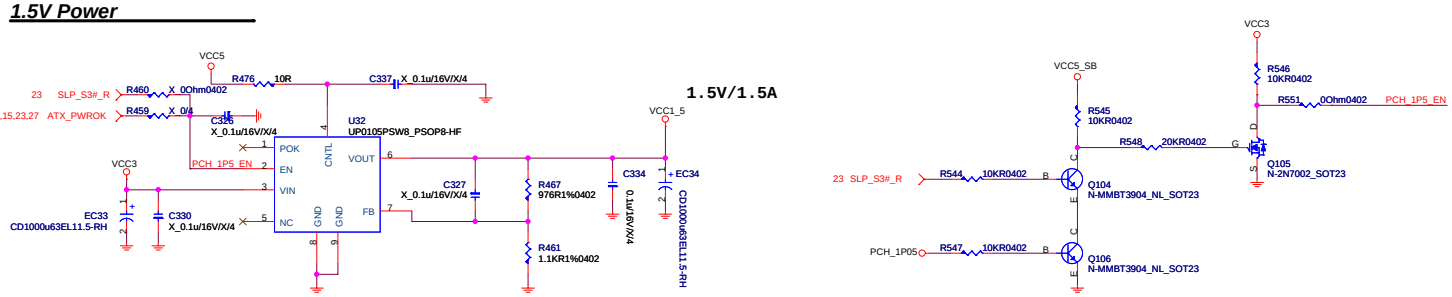


System Fan



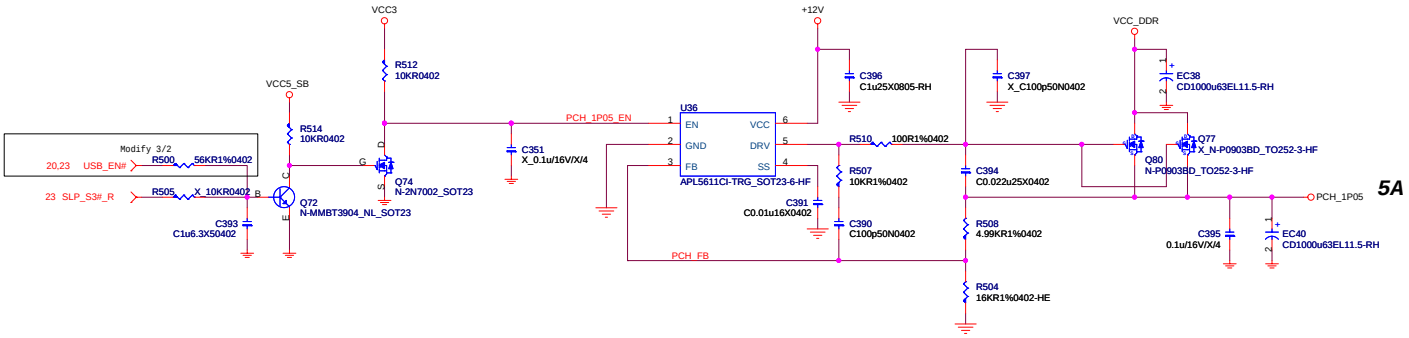
MSI	MICRO-START INT'L CO.,LTD.		
Title	SATA / FAN /eSATA		
Size	Document Number		Rev
	Acer SharkBay		0A
Date:	Tuesday, July 17, 2012	Sheet	21 of 39

1.5V Power

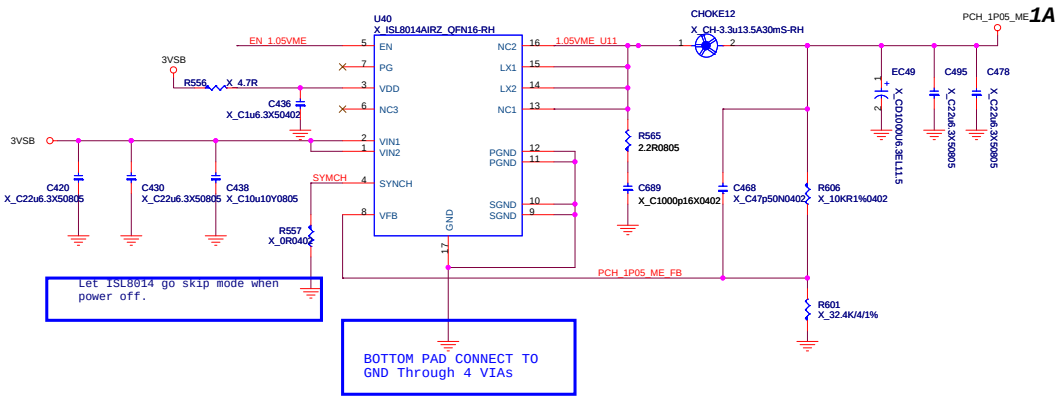


PCH Core Power Control

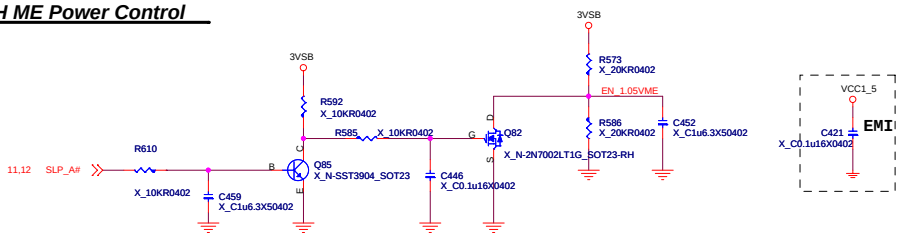
PCH Core Power



PCH ME Power



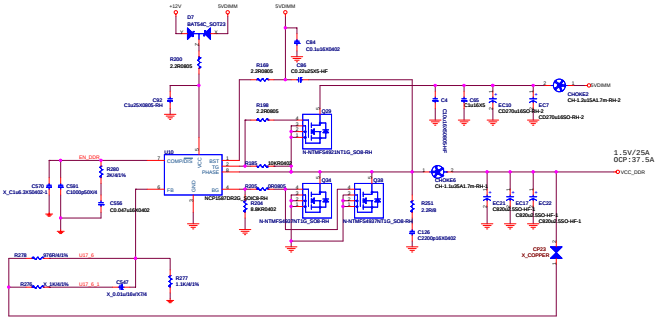
PCH ME Power Control

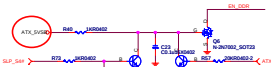


MSI link to the future	MICRO-START INT'L CO.,LTD.	
Title	PCH & ME Core Power	
Size	Document Number: Acer SharkBay	Rev: 0A
Date: Monday, July 16, 2012	Sheet 22 of 35	

DDRIII DIMM Power

Vout = 0.8[(R254+R246)/R254]



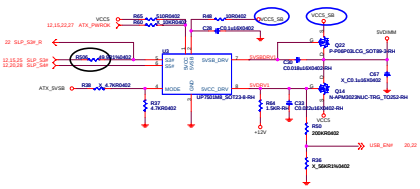


Place R311 near PCH
near the bifurcation point of signal

DDRIII Regulator Power Source

Place R86 near PCH,
near the bifurcation point of signal

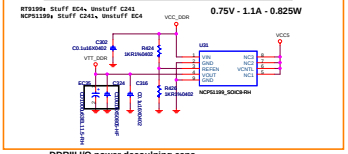
5V - 5.8A - 29W



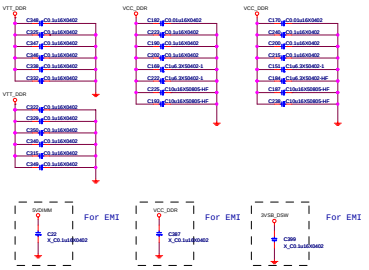
DDRIII Termination Power

RT9199x Stuff EC4, Unstuff C241
NCP51199x Stuff C241, Unstuff EC4

0.75V - 1.1A - 0.825W

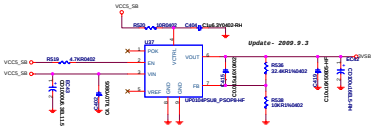


DDRIII I/O power decoulping caps.

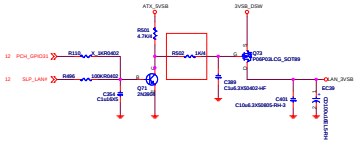


EMI CAPs

3V Standby Power

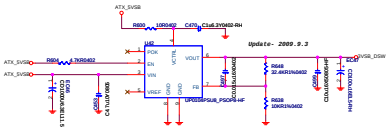


LAN Power



Deep Sx Power For Wake On Lan

Vout=0.8*(R461+R449)/R461=3.392 V



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

DDR Power

Acer SharkBay

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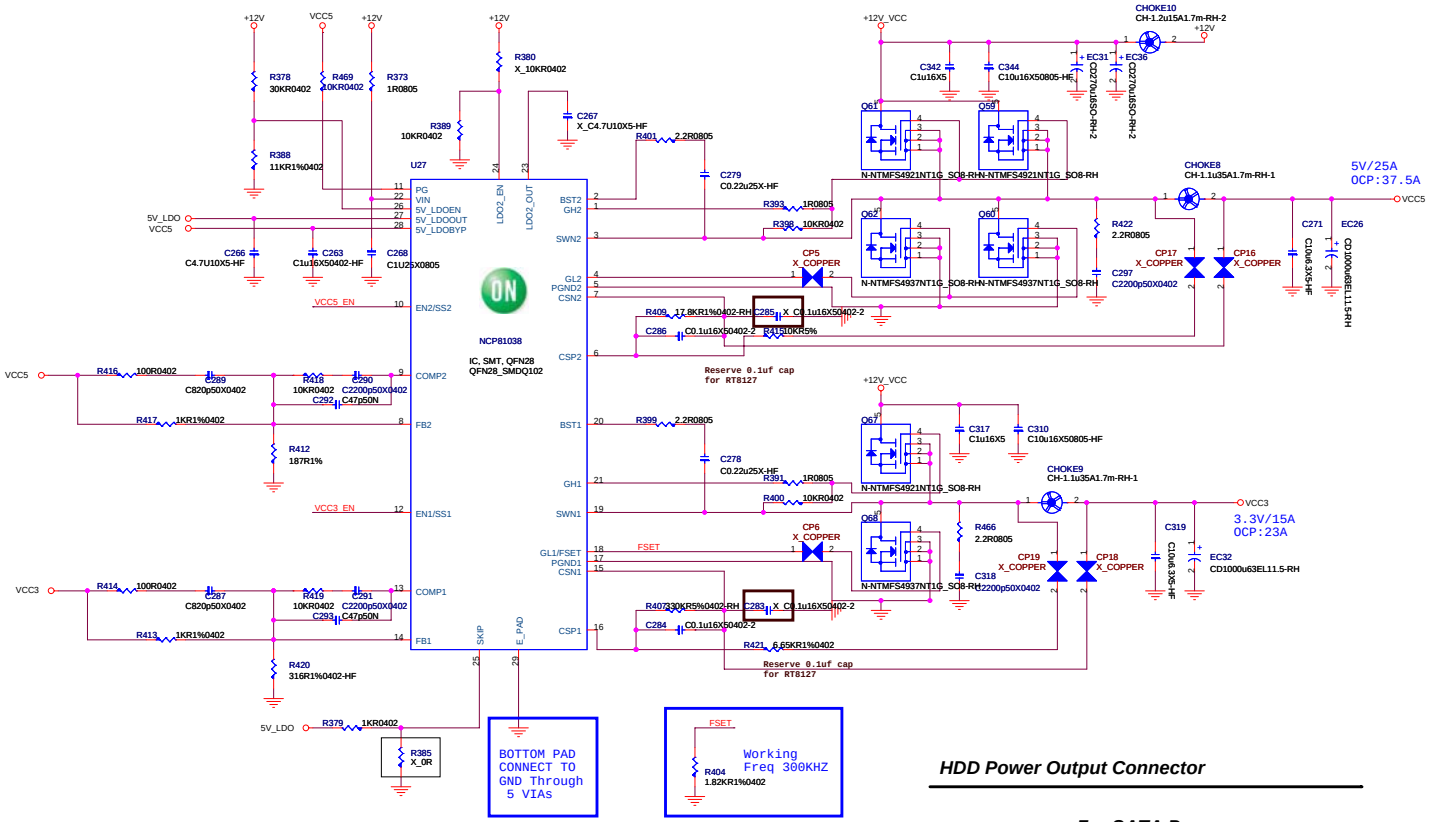
Rev: 0A

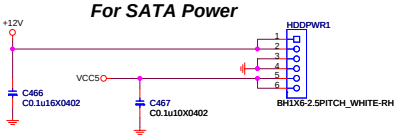
VCC3&VCC5 Power



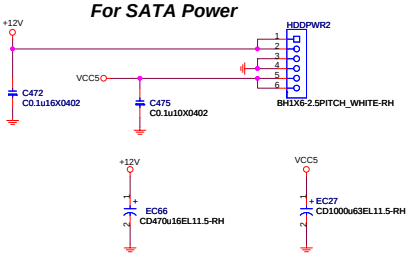
SKIP	DCM programming pin: • Ground this pin to setup automatic CCM-DCM transfer without minimum switching frequency limitation; • Connect this pin to VCC to force CCM operation; • Leave this pin open to give automatic CCM-DCM transfer, but with minimum switching frequency of 33KHz.

HDD Power Output Connector

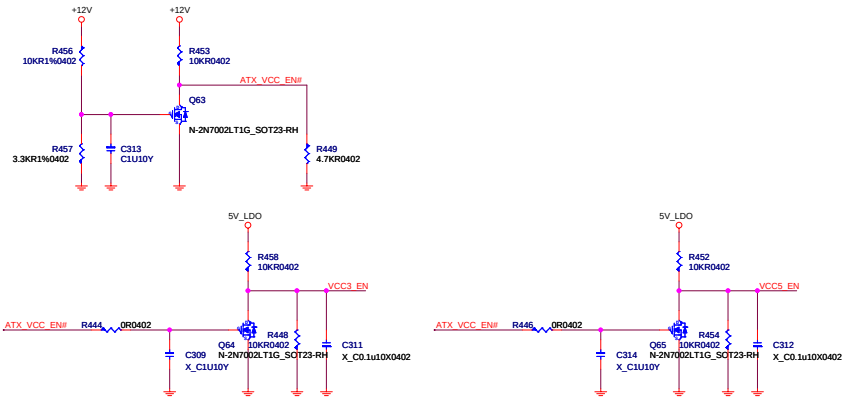
For SATA Power



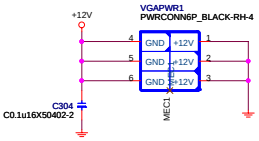
For SATA Power



VCC3&VCC5 Power Enable



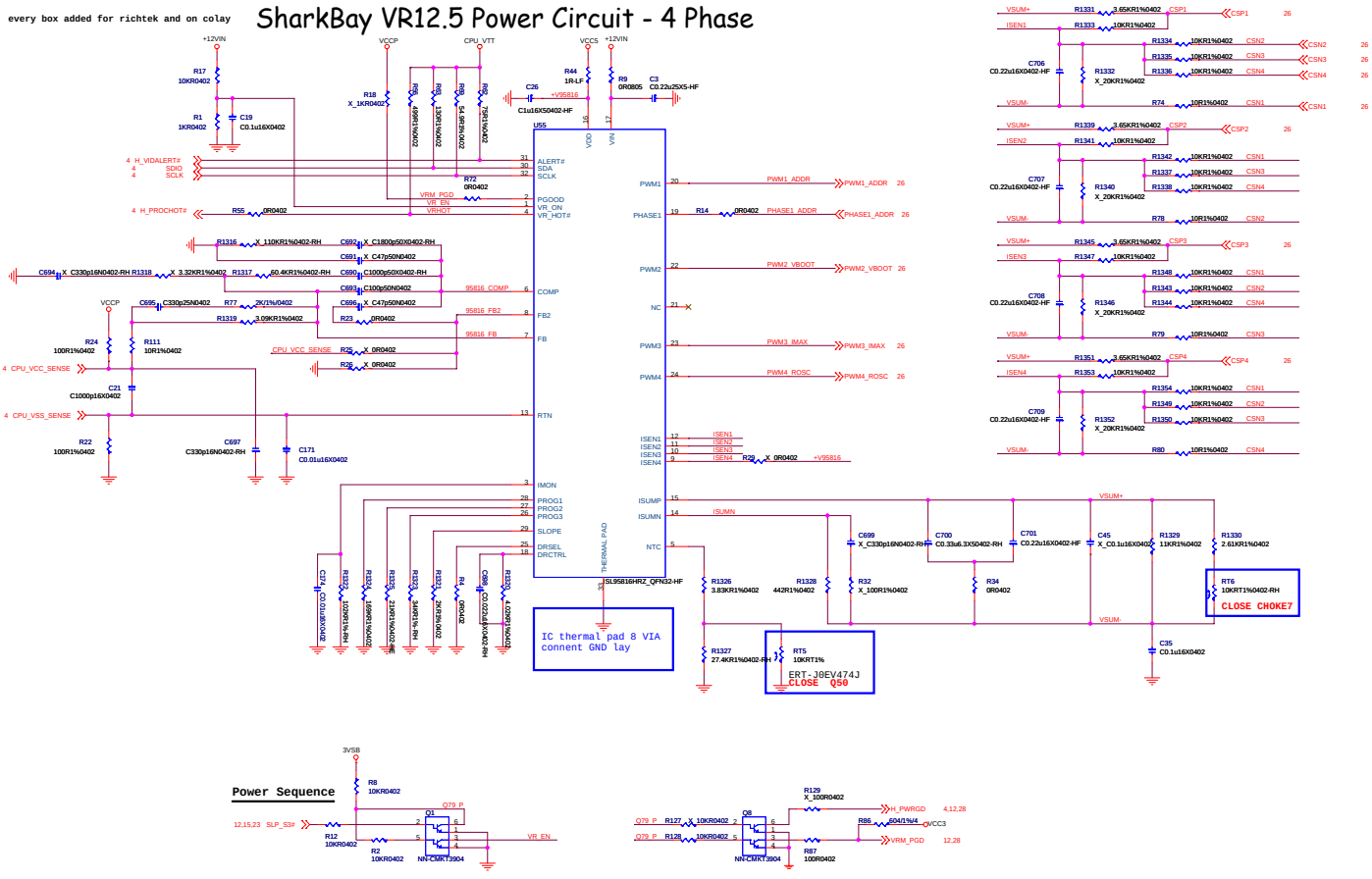
VGA Power Output Connector



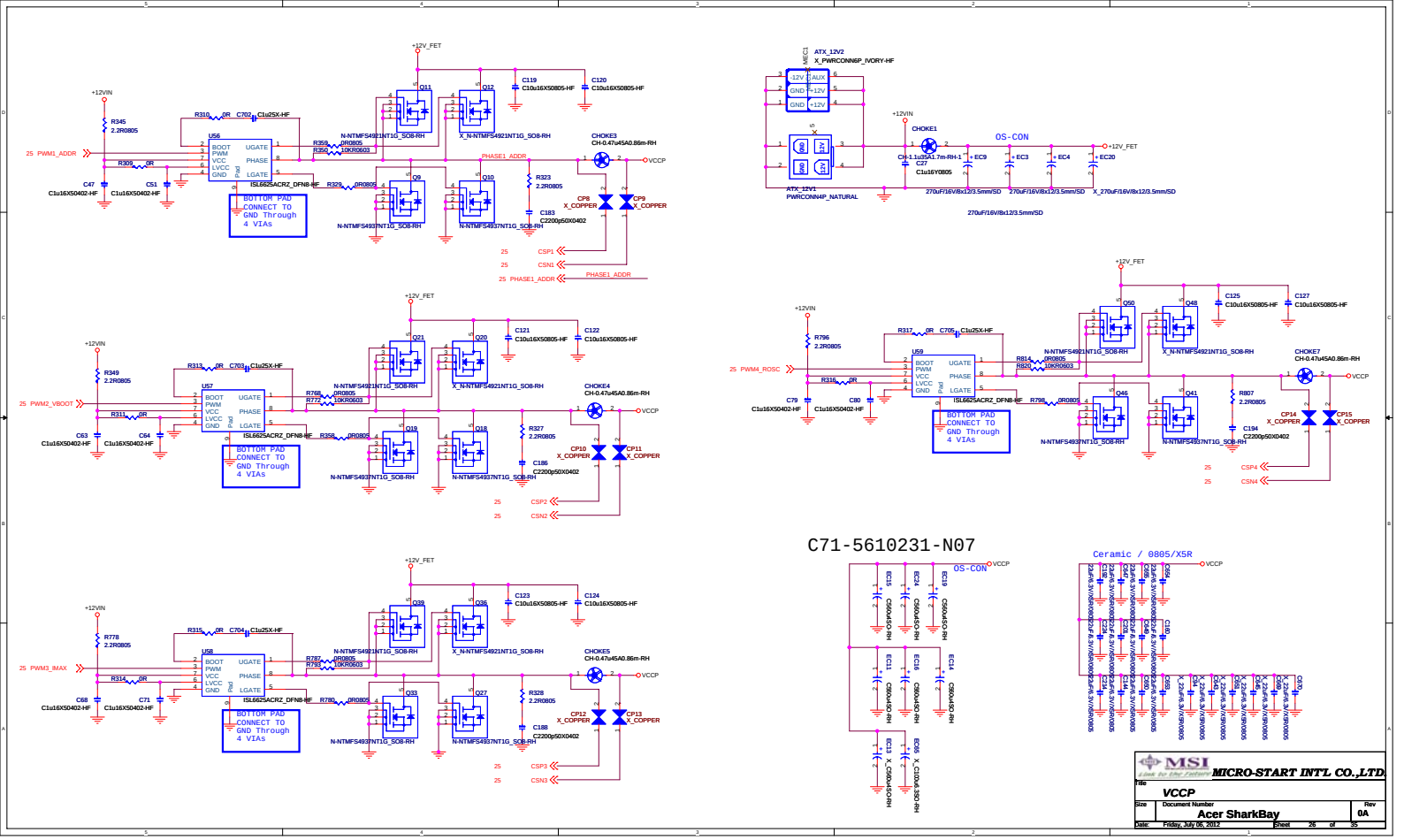
MSI MICRO-START INT'L CO.,LTD.			
Title: VCC3 & VCC5			
Size	Document Number: Acer SharkBay		Rev: 0A
Date: Tuesday, July 17, 2012		Sheet 24 of 35	

every box added for richtek and on colay

SharkBay VR12.5 Power Circuit - 4 Phase



MSI Link to the Future	MICRO-START INTL CO.,LTD	
Title: VRD12-NCP81102 4 Phase		
Size	Document Number: Acer SharkBay	Rev: 0A
Date: Monday, July 16, 2012	Sheet 25 of 35	



MSI MICRO-START INTL CO.,LTD

File: VCCP

Size	Document Number	Rev
	Acer SharkBay	0A

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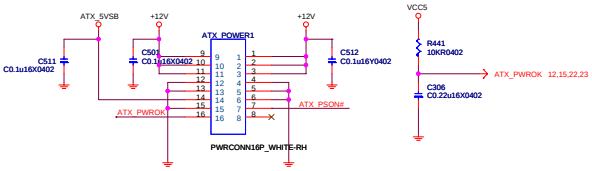
ATX Power Connector / Front Panel / LED/DSW

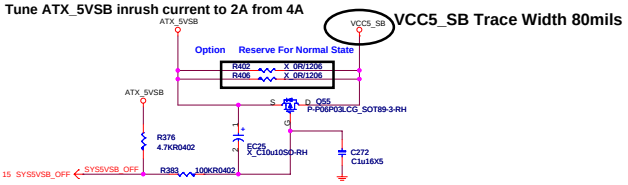
16 Pin ATX Power Connector



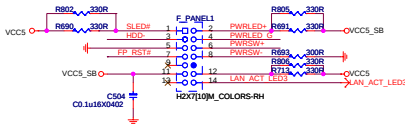
5VSB Power Switch

Tune ATX_5VSB inrush current to 2A from 4A

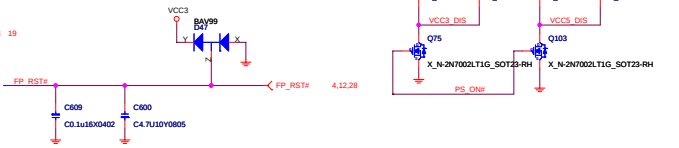
VCC5_SB Trace Width 80mils



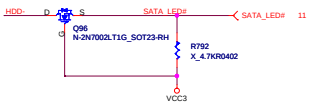
Acer Front Panel Connector



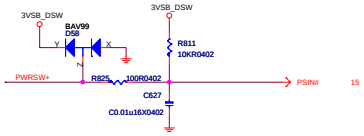
VCC3、VCC5 Discharge Schematic



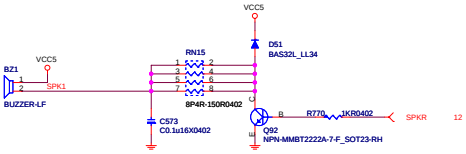
HDD LED



Power Button

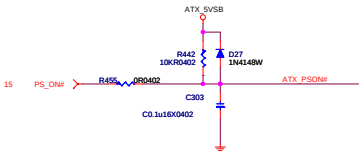


Buzzer Circuit



Cap For EMI

ATX Power On



Power LED

MSI	MICRO-START INT'L CO.,LTD.	
Title	ATX/F_Panel/EMI/LED	
Size	Document Number: Acer SharkBay	Rev: 0A
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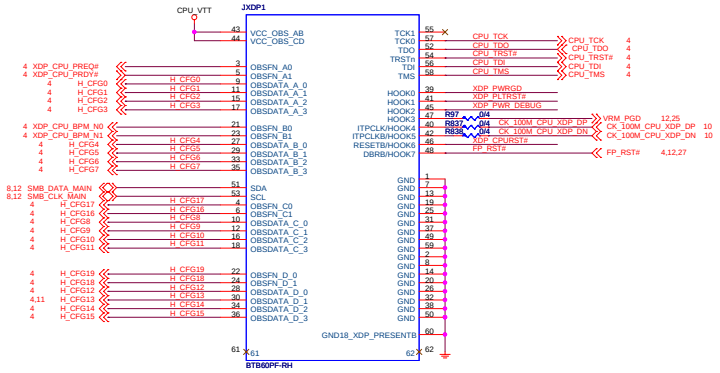
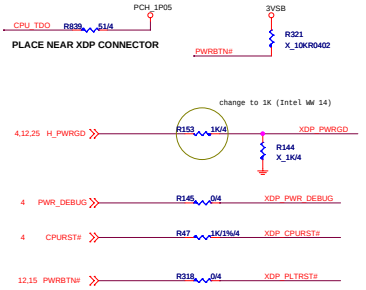
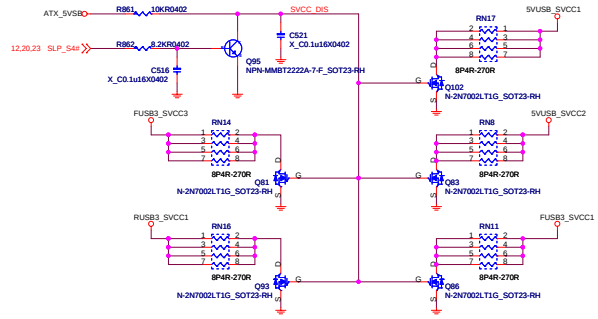
Reserve debug port 5020





USB power discharge circuit



MICRO-START INT'L CO.,LTD.

Title: CPU/PCH XDP&USB PW-Discharge

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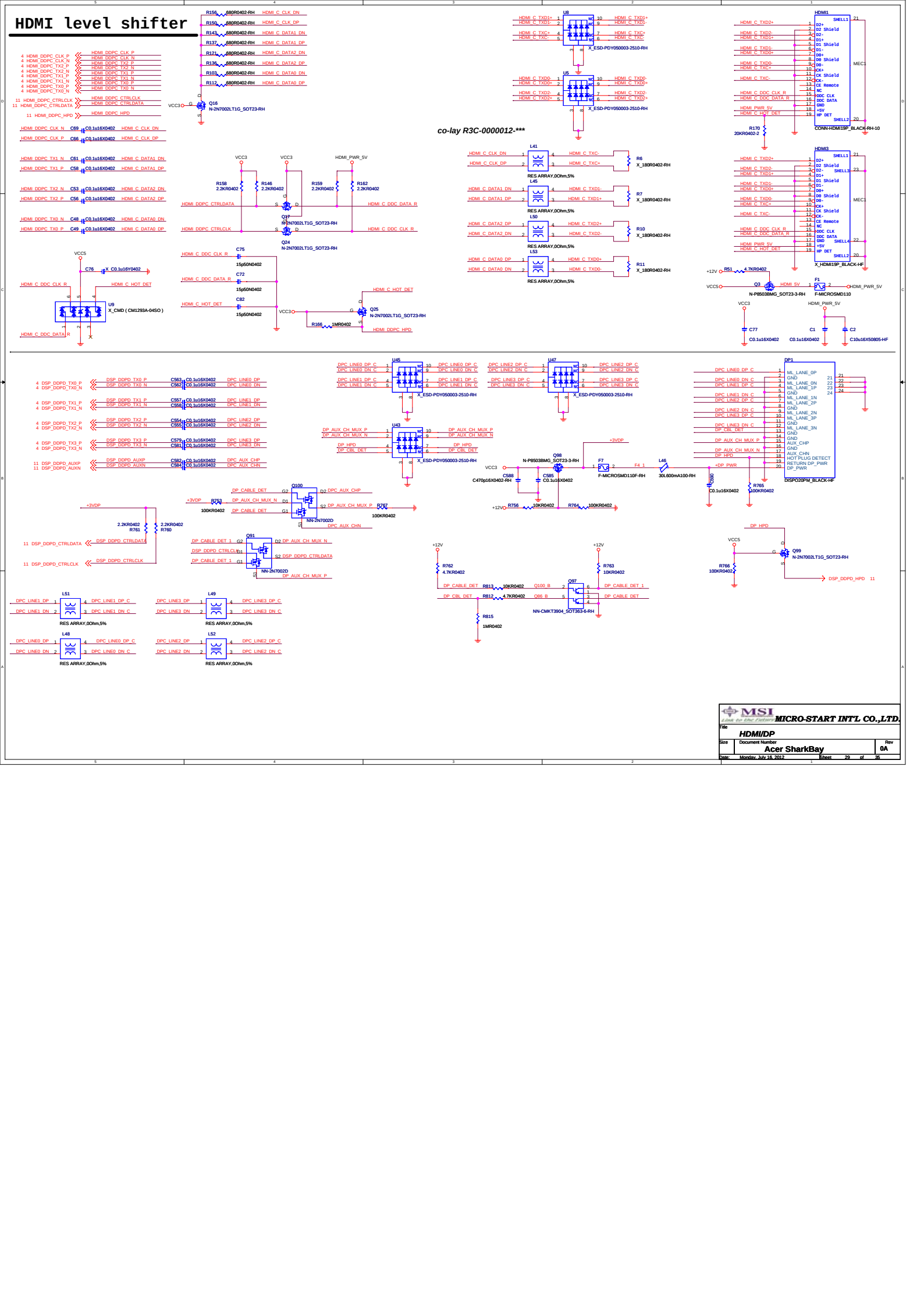
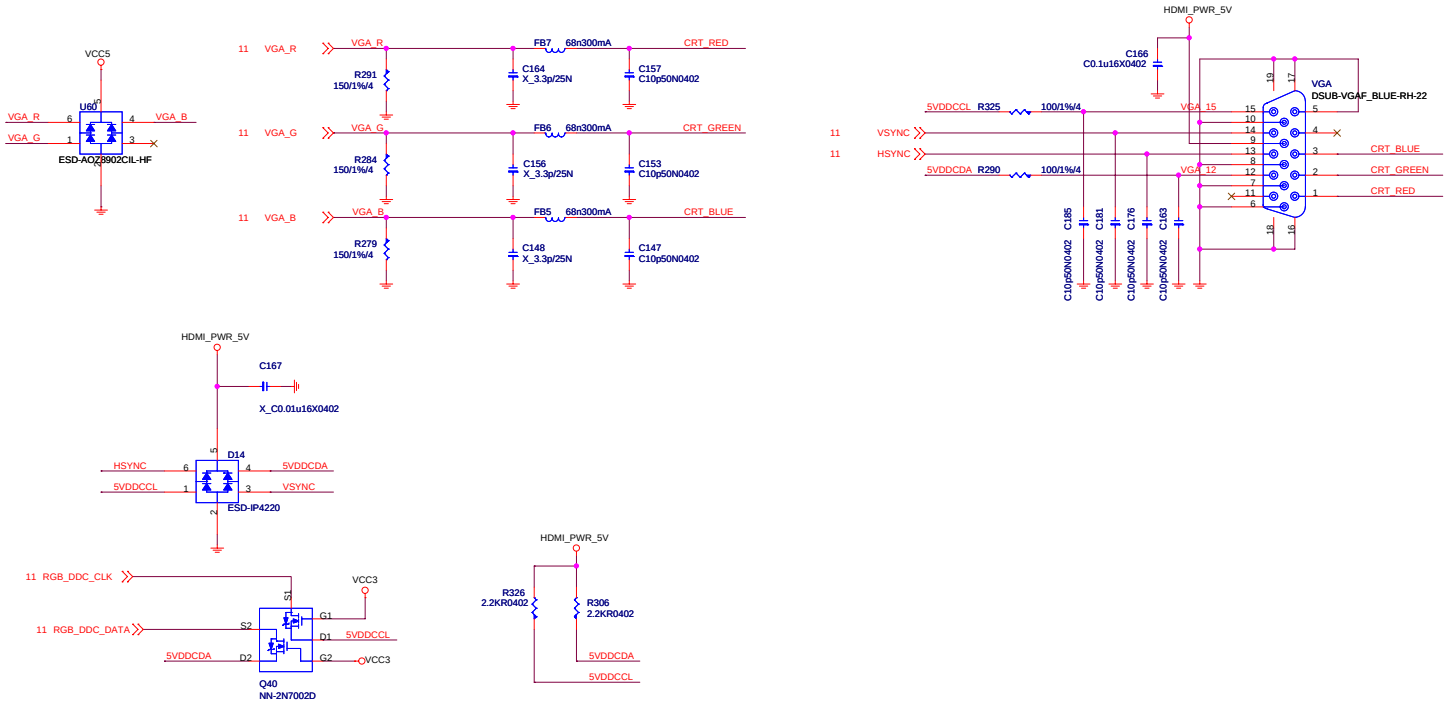
HDMI level shifter





MICRO-START INTL CO.,LTD.

Title: VGA

Size	Document Number	Rev
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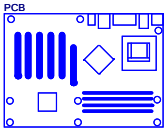
Manual Parts

PCB

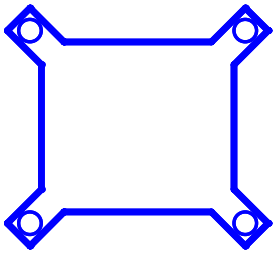


PCB

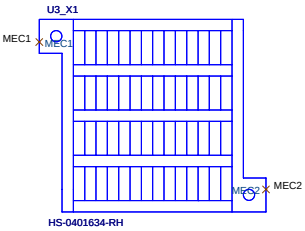
P80-078050A-G37

XU1_X2

X_CPU RETENTION BACKPLATE



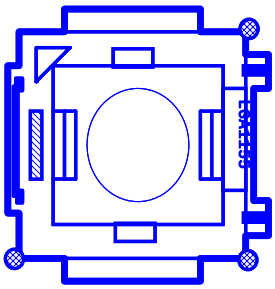
U3_X1



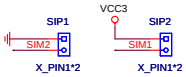
HS-0401634-RH

XU1_X1

CPU SOCKET



Simulation



X_PIN1*2 X_PIN1*2

VBAT-S1

BAT-BCR2032P-RH

BIOS_ROM

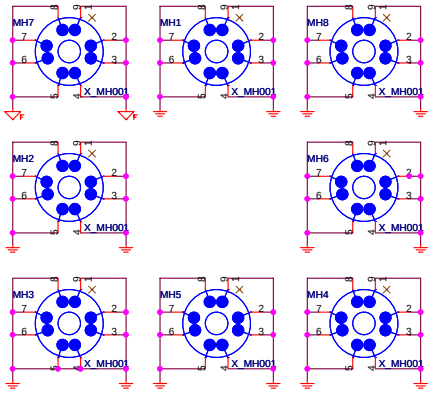
OPT

NCT5537D

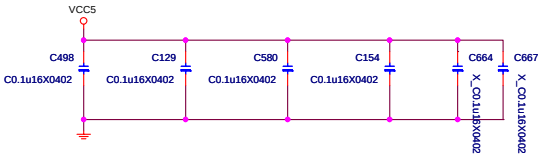
SIO/NCT5537D CHIP

X_NCT5537D

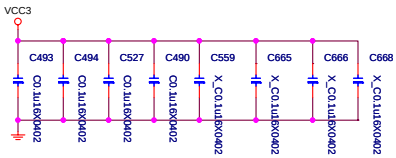
Mounting Holes



For EMI



For Moat CAP



Optics Orientation Holes

Optical Fiducial Marks-120

MSI Link to the Future MICRO-START INTL CO.,LTD.

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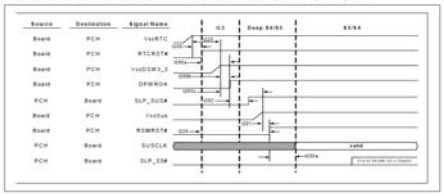
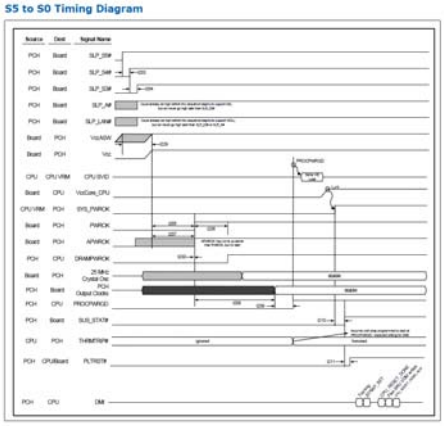
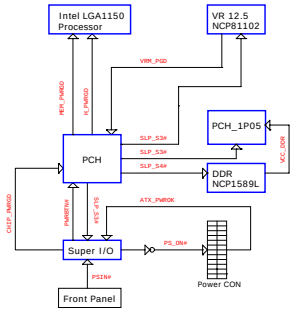
G3 w/RTC Loss to S4/S5 (With Deep Sx Support) Timing Diagram



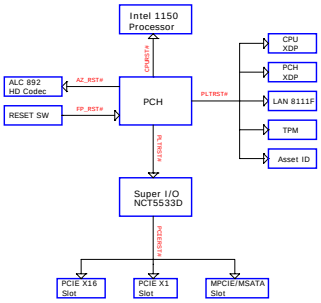
S5 to S0 Timing Diagram



PWROK MAP



RESET MAP



G3-S5

- 3VSB_DSW
- PCH_DPWROK
- SLP_SUS#
- /SYS5VSB_OFF
- 5VSB
- 3VSB
- RSMRST#

S5-S0

- 12V
- 5V
- 3.3V
- 5VDRV1
- VCC1_5REF
- DDR_EN
- VCC1_5
- VCC_DDR
- PCH_1P05
- CHIP_PWRGD
- MEM_PWRGD
- H_PWRGD
- VCCCP
- PCH_SYSPWROK
- SUS_STAT#
- PLTRST#

MICRO-START INT'L CO.,LTD.

Reset/Pwrok/PON

Acer SharkBay

0A

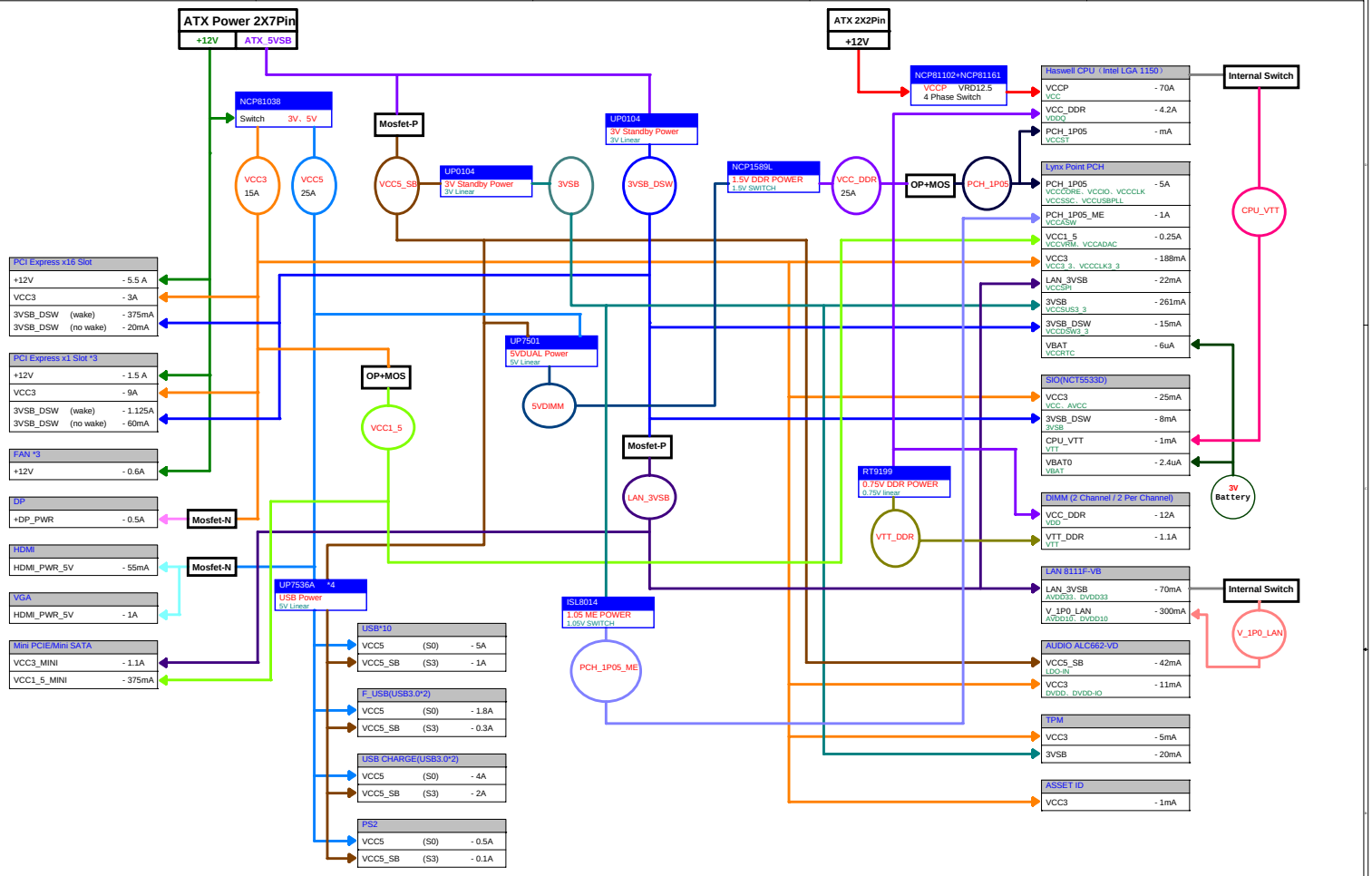
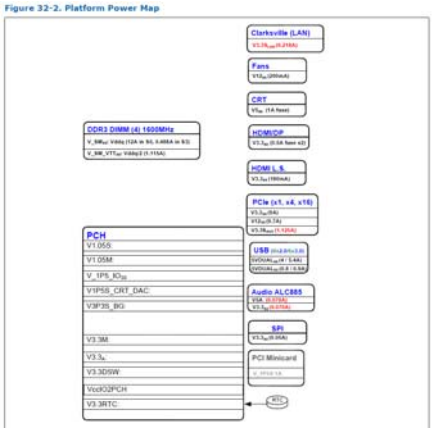


Figure 32-2. Platform Power Map



PCH

GPIO	Alt Function	I/O/NC	Power	Tol	Default	Signal Name
GPIO[0]	BMBUSY#	I/O	Main	3.3V	GPI	Pull-Hi
GPIO[1]	Unmuxed	I/O	Main	3.3V	GPI	Pull-Hi
GPIO[2]	PIRQE#	I/O	Main	5V	GPI	SPI_WP#_PCH
GPIO[3]	PIRQF#	I/O	Main	5V	GPI	Pull-Hi
GPIO[4]	PIRQG#	I/O	Main	5V	GPI	Pull-Hi
GPIO[5]	PIRQH#	I/O	Main	5V	GPI	Pull-Hi
GPIO[6]	Unmuxed	I/O	Main	3.3V	GPI	Pull-Hi
GPIO[7]	Unmuxed	I/O	Main	3.3V	GPI	Pull-Hi
GPIO[8]	Unmuxed	I/O	Resume	3.3V	GPO	Pull-Hi
GPIO[9]	OC5#	I/O	Resume	3.3V	Native	USB_OCP#5
GPIO[10]	OC6#	I/O	Resume	3.3V	Native	USB_OCP#6
GPIO[11]	SMBALERT#	I/O	Resume	3.3V	Native	Pull-Hi
GPIO[12]	LAN_PHY_PWR_CTRL	I/O	Resume	3.3V	Native	LAN_DISABLE#
GPIO[13]	Unmuxed	I/O	Resume	3.3V	GPI	PCH_SMI#
GPIO[14]	OC7#	I/O	Resume	3.3V	Native	SIO_PME#
GPIO[15]	Unmuxed	I/O	Resume	3.3V	GPO	Pull-Hi
GPIO[16]	SATA4GP	I/O	Main	3.3V	GPI	Pull-Low
GPIO[17]	Unmuxed	I/O	Main	3.3V	GPI	CLR_CMOS
GPIO[18]	PCIECLKRQ1#	I/O	Main	3.3V	Native	Pull-Hi
GPIO[19]	SATA1GP	I/O	Main	3.3V	GPI	Pull-Hi
GPIO[20]	PCIECLKRQ2#	I/O	Main	3.3V	Native	PCIECLKREQ2#
GPIO[21]	SATA0GP	I/O	Main	3.3V	GPI	Pull-Hi
GPIO[22]	SCLOCK	I/O	Main	3.3V	GPI	LPT_DET#
GPIO[23]	LDRQ1#	I/O	Main	3.3V	Native	NC
GPIO[24]	Unmuxed	I/O	Resume	3.3V	GPO	MINI_PWRON
GPIO[25]	Unmuxed	I/O	Resume	3.3V	Native	Pull-Hi
GPIO[26]	Unmuxed	I/O	Resume	3.3V	Native	Pull-Hi
GPIO[27]	Unmuxed	I/O	DSW	3.3V	GPI	Pull-Hi
GPIO[28]	Unmuxed	I/O	Resume	3.3V	GPO	Pull-Hi
GPIO[29]	SLP_WLAN#	I/O	Resume	3.3V	Native	NC
GPIO[30]	SUS_PWRDN_ACK/SUS_WARN#	I/O	Resume	3.3V	GPI	PCH_SUSWARN#
GPIO[31]	Unmuxed	I/O	DSW	3.3V	GPI	Pull-Hi
GPIO[32]	Unmuxed	I/O	Main	3.3V	GPO	CLKRUN#
GPIO[33]	HDA_DOCK_EN#	I/O	Main	3.3V	GPO	Pull-Hi
GPIO[34]	STP_PCI	I/O	Main	3.3V	GPI	Pull-Hi
GPIO[35]	Unmuxed	I/O	Main	3.3V	GPO	Pull-Hi
GPIO[36]	SATA2GP	I/O	Main	3.3V	GPI	NC

PCH

GPIO	Alt Function	I/O/NC	Power	Tol	Default	Signal Name
GPIO[37]	SATA3GP	I/O	Main	3.3V	GPI	Pull-Hi
GPIO[38]	SLOAD	I/O	Main	3.3V	GPI	CHASSIS_ID1
GPIO[39]	SDATAOUT0	I/O	Main	3.3V	GPI	CHASSIS_ID2
GPIO[40]	OC1#	I/O	Resume	3.3V	Native	USB_OCP#1
GPIO[41]	OC2#	I/O	Resume	3.3V	Native	USB_OCP#2
GPIO[42]	OC3#	I/O	Resume	3.3V	Native	USB_OCP#3
GPIO[43]	OC4#	I/O	Resume	3.3V	Native	USB_OCP#4
GPIO[44]	PCIECLKRQ5#	I/O	Resume	3.3V	Native	PCIECLKREQ5#
GPIO[45]	PCIECLKRQ6#	I/O	Resume	3.3V	Native	Pull-Hi
GPIO[46]	PCIECLKRQ7#	I/O	Resume	3.3V	Native	ILIM_SEL
GPIO[48]	SDATAOUT1	I/O	Main	3.3V	GPI	COM_GPIO1
GPIO[49]	SATA5GP	I/O	Main	3.3V	GPI	MSATA_MPCIE_DET
GPIO[50]	Unmuxed	I/O	Main	3.3V	GPI	FUSB_G1
GPIO[51]	Unmuxed	I/O	Main	3.3V	GPO	NC
GPIO[52]	Unmuxed	I/O	Main	3.3V	GPI	FUSB_G2
GPIO[53]	Unmuxed	I/O	Main	3.3V	GPO	NC
GPIO[54]	Unmuxed	I/O	Main	3.3V	GPI	Pull-Hi
GPIO[55]	Unmuxed	I/O	Main	3.3V	GPO	NC
GPIO[57]	Unmuxed	I/O	Resume	3.3V	GPI	Pull-Hi
GPIO[58]	SML1CLK#	I/O	Resume	3.3V	Native	CTL1
GPIO[59]	OC8#	I/O	Resume	3.3V	Native	USB_OCP#0
GPIO[60]	SML0ALERT#	I/O	Resume	3.3V	Native	Pull-Hi
GPIO[61]	SUS_STAT#	I/O	Resume	3.3V	Native	SUS_STAT#
GPIO[62]	SUSCLK	I/O	Resume	3.3V	Native	NC
GPIO[63]	SLP_S5#	I/O	Resume	3.3V	Native	SLP_S5#
GPIO[64]	CLKOUTFLEX0	I/O	CORE	3.3V	Native	NC
GPIO[65]	CLKOUTFLEX1	I/O	CORE	3.3V	Native	NC
GPIO[66]	CLKOUTFLEX2	I/O	CORE	3.3V	Native	NC
GPIO[67]	CLKOUTFLEX3	I/O	CORE	3.3V	Native	CLKOUTFLEX3_48M
GPIO[68]	Unmuxed	I/O	CORE	3.3V	GPI	Pull-Hi
GPIO[69]	Unmuxed	I/O	CORE	3.3V	GPI	Pull-Hi
GPIO[70]	Unmuxed	I/O	CORE	3.3V	GPI	MSATA_EN
GPIO[71]	Unmuxed	I/O	CORE	3.3V	GPI	Pull-Hi
GPIO[72]	Unmuxed	I/O	DSW	3.3V	Native	Pull-Hi
GPIO[73]	PCIECLKRQ0#	I/O	Resume	3.3V	Native	CTL3
GPIO[74]	SML1ALERT#	I/O	Resume	3.3V	Native	Pull-Hi
GPIO[75]	SML1DATA	I/O	Resume	3.3V	Native	CTL2

SIO(NCT5533D)

PIN NAME	USAGE	Input/Output	NOTES
GPIO0	AUX-FAN1_CTL	Output	Fan speed control
GPIO4	AUX-FAN1	Input	Fan speed sense
GPIO20	KBDATA	Input	Keyboard data in
GPIO21	KBCLK	Output	keyboard clcok out
GPIO22	MSDATA	Input	Mouse data in
GPIO23	MSCLK	Output	Mouse clcok out
GPIO24	SIO_WAKE#_R	Output	Wake up signal from LAN
GPIO25	AMDPWR_EN	Input	Pin strap which disabled AMD power sequence
GPIO26	SIO_GP26	Output	Reserved GPIO for future use
GPIO41	SMI#	Output	SIO SMI# generation
GPIO42	SDA_SIO	Output	Reserved GPIO for future use
GPIO54	SLP_SUS#	Input	DSW signal which received from PCH
GPIO56	PS2_DET#	Input	PS2 device detect signal
GPIO57	PWR_LED_R	Output	LED drive signal which shows the system state

SIO(NCT5533D)

PIN NAME	USAGE	Input/Output	NOTES
GPIO80	CTSA#	Input	LPT signal
GPIO81	DSRA#	Input	LPT signal
GPIO82	RTSA#	Output	LPT signal
GPIO83	DTRA#	Output	LPT signal
GPIO84	SINA	Input	LPT signal
GPIO85	SOUTA	Output	LPT signal
GPIO86	DCDA#	Input	LPT signal
GPIO87	RIA#	Input	LPT signal

DDR-III DIMM Config

DEVICE	ADDRESS(SA1:SA0)	CLOCK	
DIMM 1	01	MEM_MA_CLK_H2/L2	MEM_MA_CLK_H3/L3
DIMM 2	00	MEM_MA_CLK_H0/L0	MEM_MA_CLK_H1/L1
DIMM 3	11	MEM_MB_CLK_H2/L2	MEM_MB_CLK_H3/L3
DIMM 4	10	MEM_MB_CLK_H0/L0	MEM_MB_CLK_H1/L1

SIO(NCT6779D)

PIN NAME	USAGE	Input/Output	NOTES
GPIO0	AUX-FAN1_CTL	Output	Fan speed control
GPIO1	NA	NA	NA
GPIO2	NA	NA	NA
GPIO3	NA	NA	NA
GPIO4	AUX-FAN1	Input	Fan speed sense
GPIO5	AUXFANIN2	Input	Pull low
GPIO6	AUXFANIN3	Input	Pull low
GPIO7	NA	NA	NA
GPIO10	RIB#	Input	Com port signal
GPIO11	DCDB#	Iutput	Com port signal
GPIO12	SOUTB	Output	Com port signal
GPIO13	SINB	Iutput	Com port signal
GPIO14	DTRB#	Output	Com port signal
GPIO15	RTSB#	Output	Com port signal
GPIO16	DSRB#	Intput	Com port signal
GPIO17	CTSB#	Intput	Com port signal
GPIO20	KBDATA	Input	Keyboard data in
GPIO21	KBCLK	Output	keyboard clcok out
GPIO22	MSDATA	Input	Mouse data in
GPIO23	MSCLK	Output	Mouse clcok out

SIO(NCT6779D)

PIN NAME	USAGE	Input/Output	NOTES
GPIO24	SIO_WAKE#_R	Output	Wake up signal from LAN
GPIO25	AMDPWR_EN	Input	Pin strap which disabled AMD power sequence
GPIO26	NA	NA	NA
GPIO27	MLED	Output	Pull high
GPIO30	RESETCONI#	Input	Pull high
GPIO31	SDA_SIO	Output	Reserved GPIO for future use
GPIO32	SCI_SIO	Output	Reserved GPIO for future use
GPIO33	NA	NA	NA
GPIO34	PRSTB#	Output	LPT signal
GPIO35	PRAFD#	Output	LPT signal
GPIO36	PRERR#	Input	LPT signal
GPIO40	TEST_MODE_EN	Input	Pin strap which disabled test mode
GPIO41	PRINIT#	Output	LPT signal
GPIO42	LPT_SLIN#	Output	LPT signal
GPIO43	PRACK#	Input	LPT signal
GPIO44	PRBUSY	Input	LPT signal
GPIO45	PRPE	Input	LPT signal
GPIO46	PRSLCT	Input	LPT signal
GPIO47	RESETCONO#	Input	Pull high
GPIO50	SUSWARN#	Output	DSW signal

SIO(NCT6779D)

PIN NAME	USAGE	Input/Output	NOTES
GPIO51	SIO_5VDUAL	Input	DSW signal
GPIO52	SUSACK#	Output	DSW signal
GPIO53	NA	NA	NA
GPIO54	SLP_SUS#	Input	DSW signal
GPIO55	SYS5VSB_OFF_R	Output	DSW signal
GPIO56	PS2_DET#	Input	PS2 detect signal
GPIO57	PWR_LED_R	Output	Power led
GPIO60	RND0	I/O	LPT signal
GPIO61	RND1	I/O	LPT signal
GPIO62	RND2	I/O	LPT signal
GPIO63	RND3	I/O	LPT signal
GPIO64	RND4	I/O	LPT signal
GPIO65	RND5	I/O	LPT signal
GPIO66	RND6	I/O	LPT signal
GPIO67	RND7	I/O	LPT signal
GPIO70	DSW_EN	Input	Pin strap which enable DSW
GPIO71	SIO_GP71	Output	Reserved GPIO for future use
GPIO72	SIO_GP72	Output	Reserved GPIO for future use
GPIO73	SIO_GP73	Output	Reserved GPIO for future use
GPIO74	RSTOUT0#	Output	PCIE reset signal

SIO(NCT5533D)

PIN NAME	USAGE	Input/Output	NOTES
GPIO75	RSTOUT1#	Output	LPC_Debug card reset signal
GPIO76	RSTOUT2#	Output	TPM reset signal
GPIO80	CTSA#	Input	COM port signal
GPIO81	DSRA#	Input	COM port signal
GPIO82	RTSA#	Output	COM port signal
GPIO83	DTRA#	Output	COM port signal
GPIO84	SINA	Input	COM port signal
GPIO85	SOUTA	Output	COM port signal
GPIO86	DCDA#	Input	COM port signal
GPIO87	RIA#	Input	COM port signal

MICRO-STAR INT'L CO.,LTD.

GPIO Table

Acer SharkBay

History

MICRO-START INTL CO.,LTD.

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