CURE DIS

MV

2011.01.25

Hon Hai Precision Industry Co. Ltd.
Foxconn eMS Inc.
HNBD R&D
phone: +886-2-2799-6111

Title

Size	Document Number	Rev
C	CURE DIS	0.1

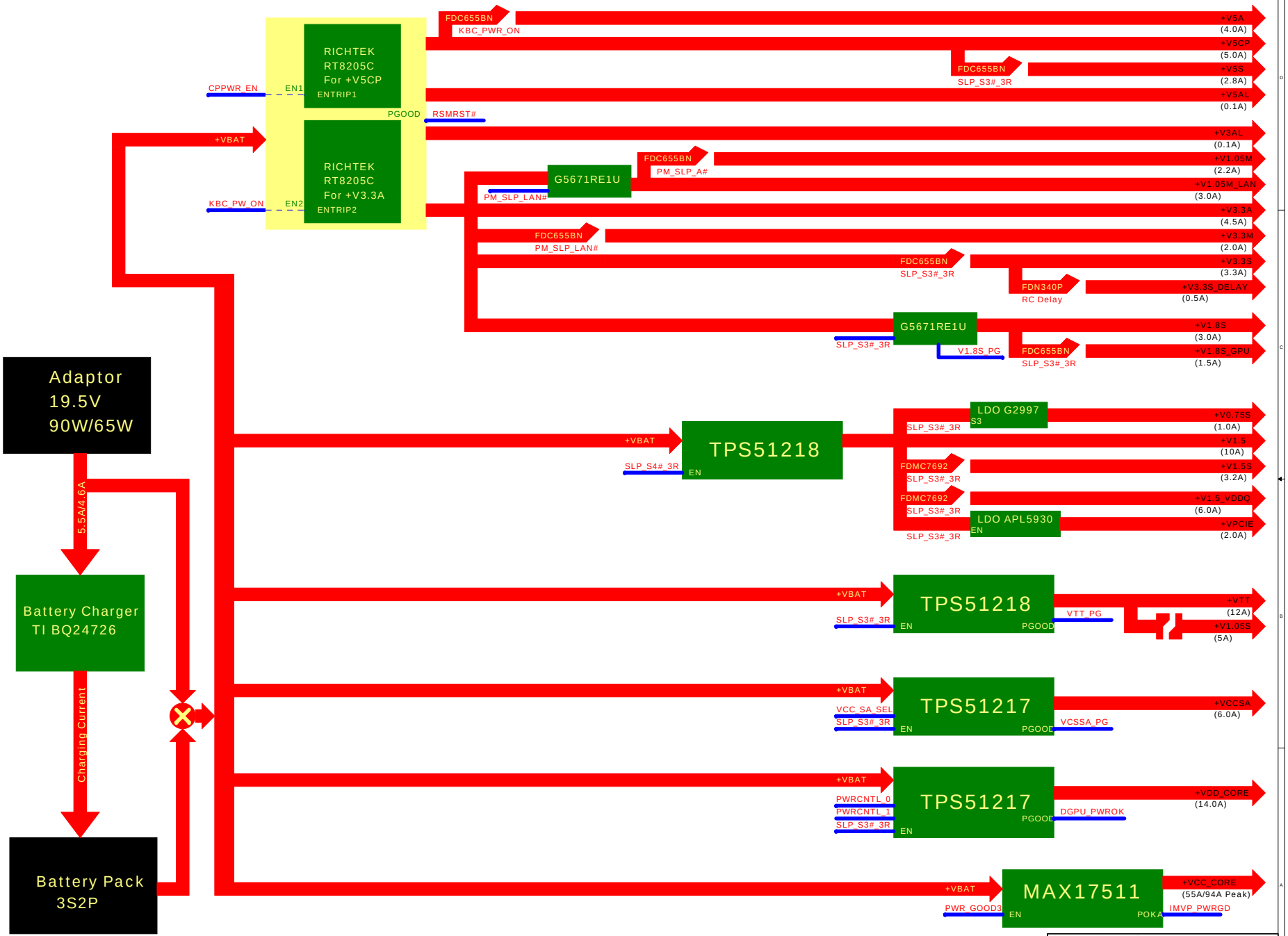
FOXCONN
Hon Hai Precision Industry Co. Ltd.
Foxconn eMS Inc.
HNBD R&D
phone: +886-2-2799-6111

Title: **Index Page**

Size	Document Number	Rev
C	CURE DIS	0.1

Page Modified: Thursday, January 20, 2011 11:09:40 (UTC/GMT) | Sheet 2 of 52

POWER MAP

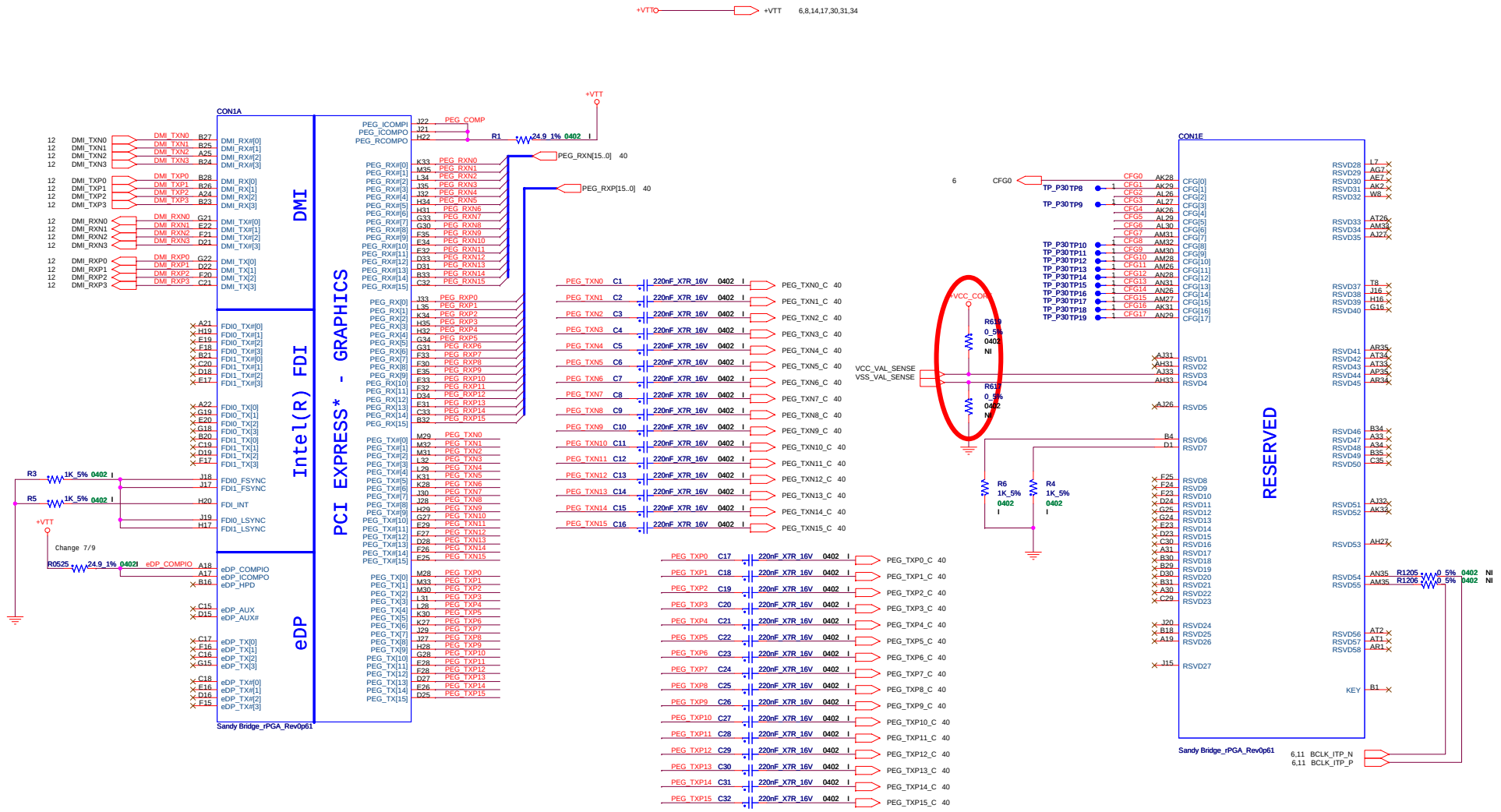


Foxconn
Foxconn eMS Inc.
HNBD R&D
Hon Hai Precision Industry Co. Ltd.
phone: +886-2-2799-6111

Title: POWER MAP

Size: Custom | Document Number: CURE DIS | Rev: 0.1

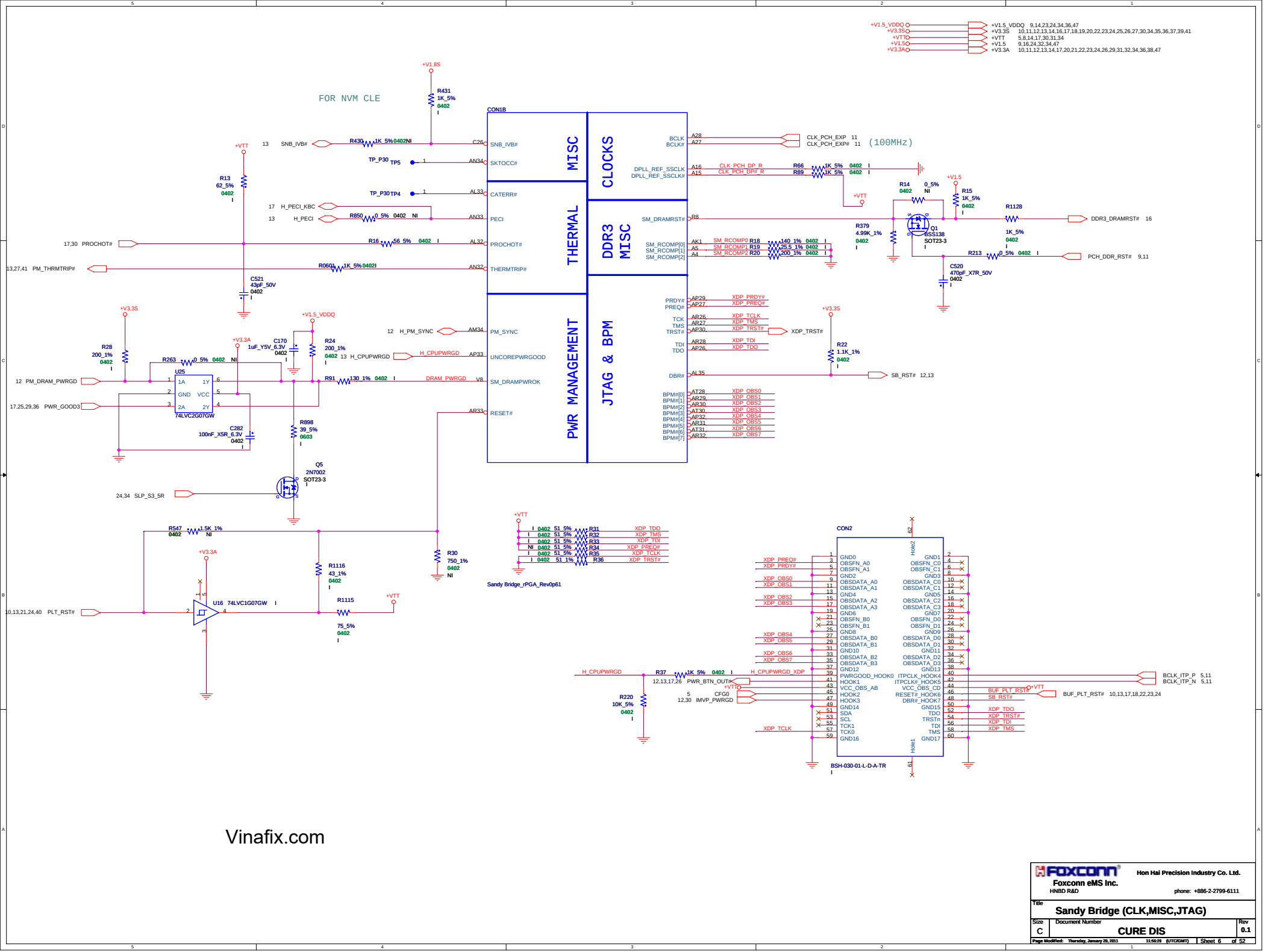
Page Modified: Thursday, January 20, 2011 11:09:38 (UTC/GMT) | Sheet 4 of 52



Note for Layout : Embedded DisplayPort Compensation Signal Routing Guideline

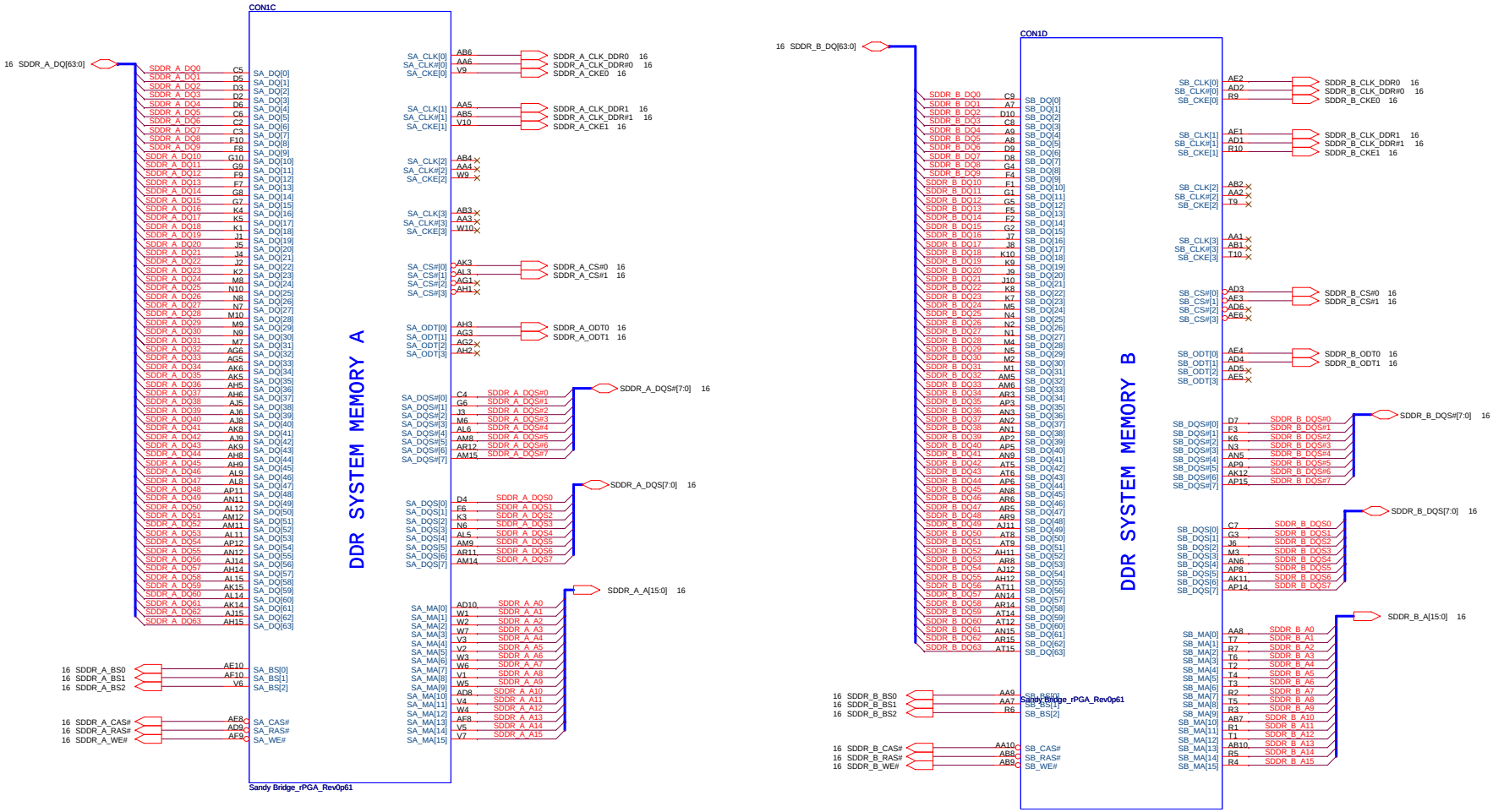
Signal	Trace Width	Trace Spacing to other Signals	Routing Length	Resistance
DP_ICOMPO	12 milss(0.305mm)	15 milss(0.381mm)	500 milss(12.7mm)	
DP_COMPIO	4 milss(0.102mm)	15 milss(0.381mm)	500 milss(12.7mm)	
R3				24.9 +/- 1%

Hon Hai Precision Industry Co. Ltd.	Foxconn eMS Inc. HNBD R&D
phone: +886-2-2799-6111	
Title	Sandy bridge (DMI,PEG,FDI)
Size	C
Document Number	CURE DIS
Rev	0.1
Page Modified: Thursday, January 20, 2011 15:32:17 (UTC/GMT)	Sheet 5 of 52



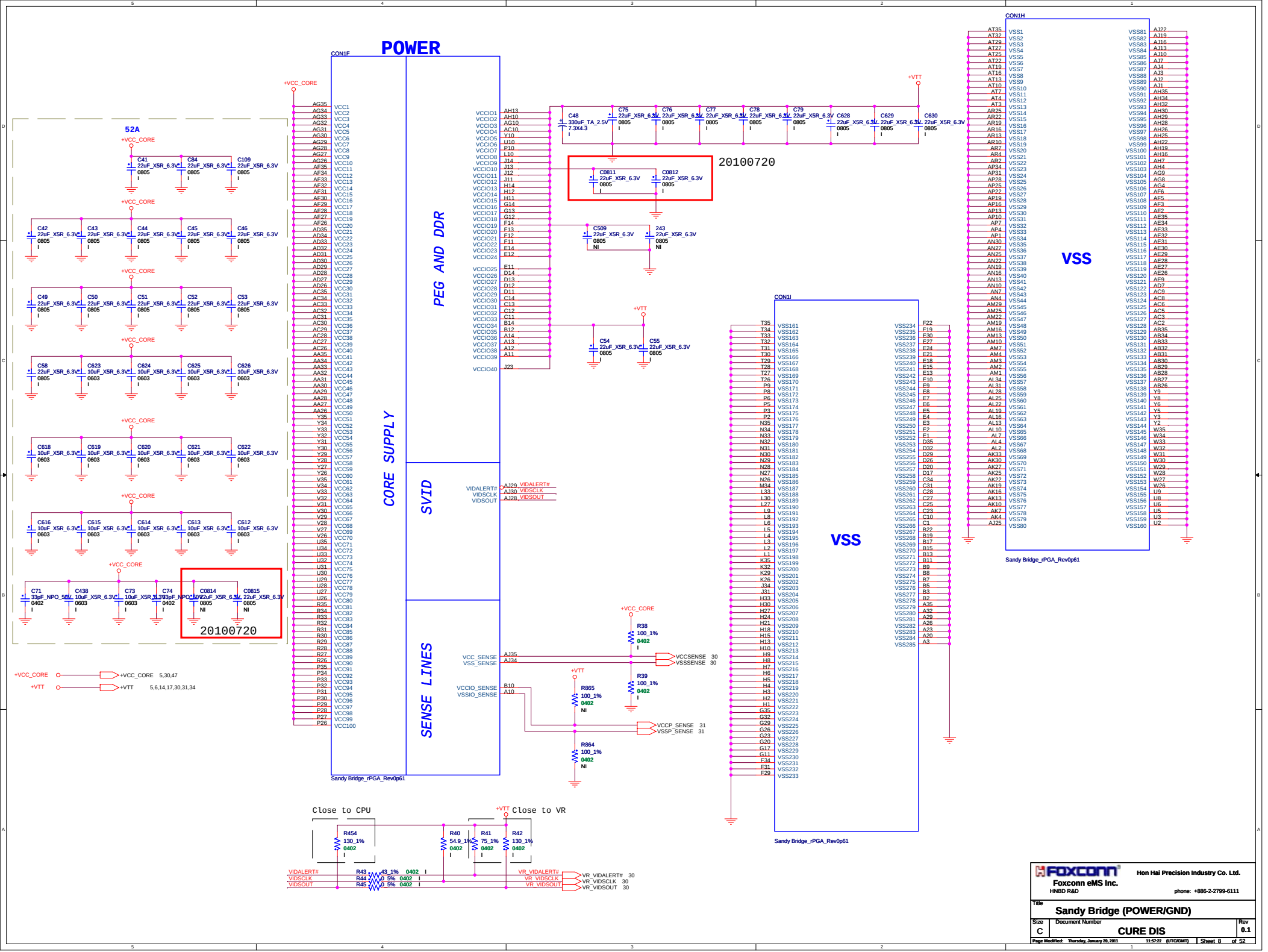
Vinafix.com

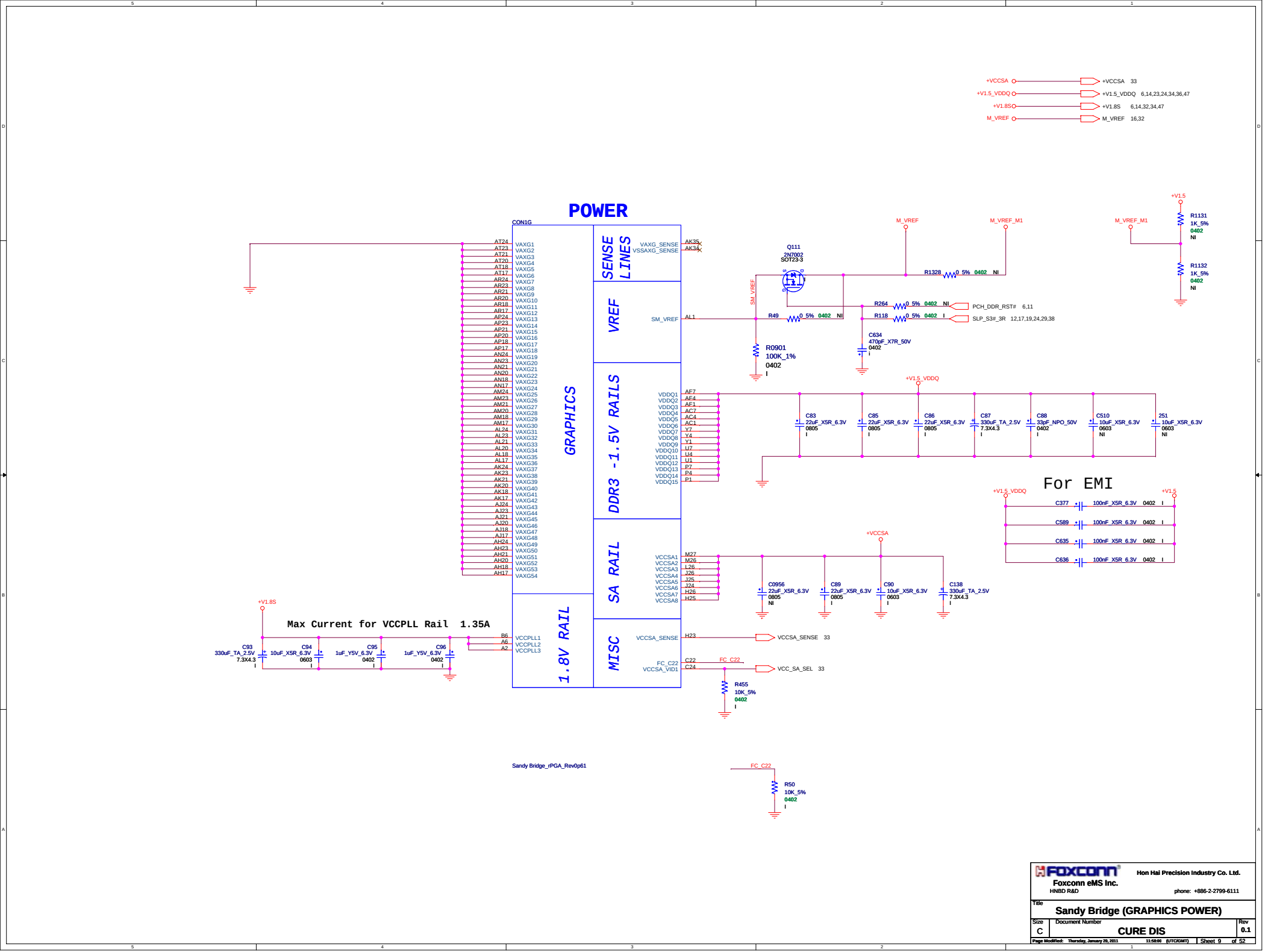
Foxconn	Hon Hai Precision Industry Co. Ltd.	
Foxconn eMS Inc.		
HNBD R&D	phone: +886-2-2799-6111	
Title	Sandy Bridge (CLK,MISC,JTAG)	
Size: C	Document Number: CURE DIS	Rev: 0.1
Page Modified: Thursday, January 20, 2011 11:56:28 (UTC/GMT)	Sheet 6 of 52	



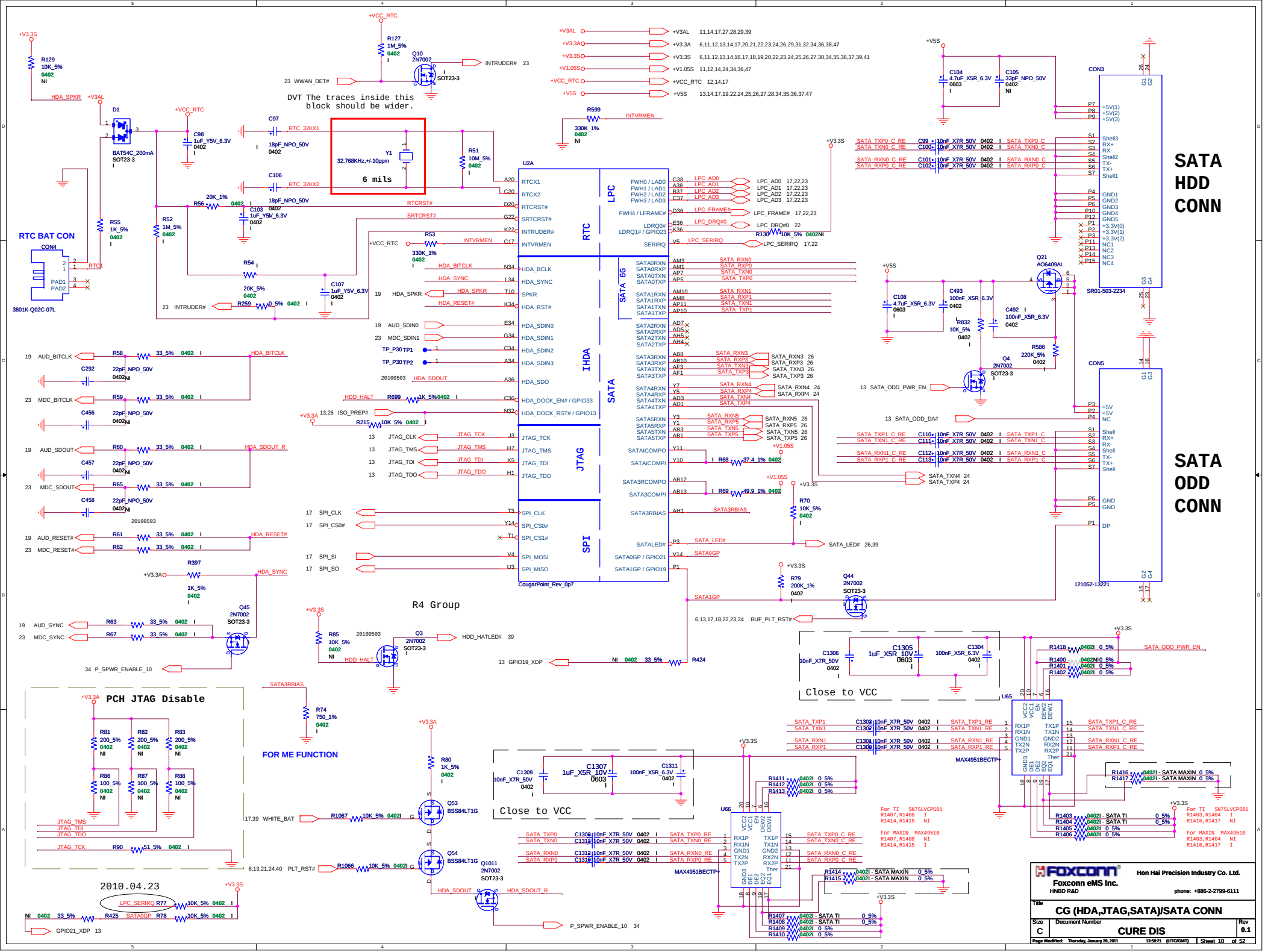
Foxconn eMS Inc. HNBD R&D	Hon Hai Precision Industry Co. Ltd. phone: +886-2-2799-6111	
Title: Sandy bridge (DDR3)		
Size: C	Document Number: CURE DIS	Rev: 0.1
Page Modified: Thursday, January 20, 2011 11:17:56 (UTC/GMT)	Sheet 7 of 52	

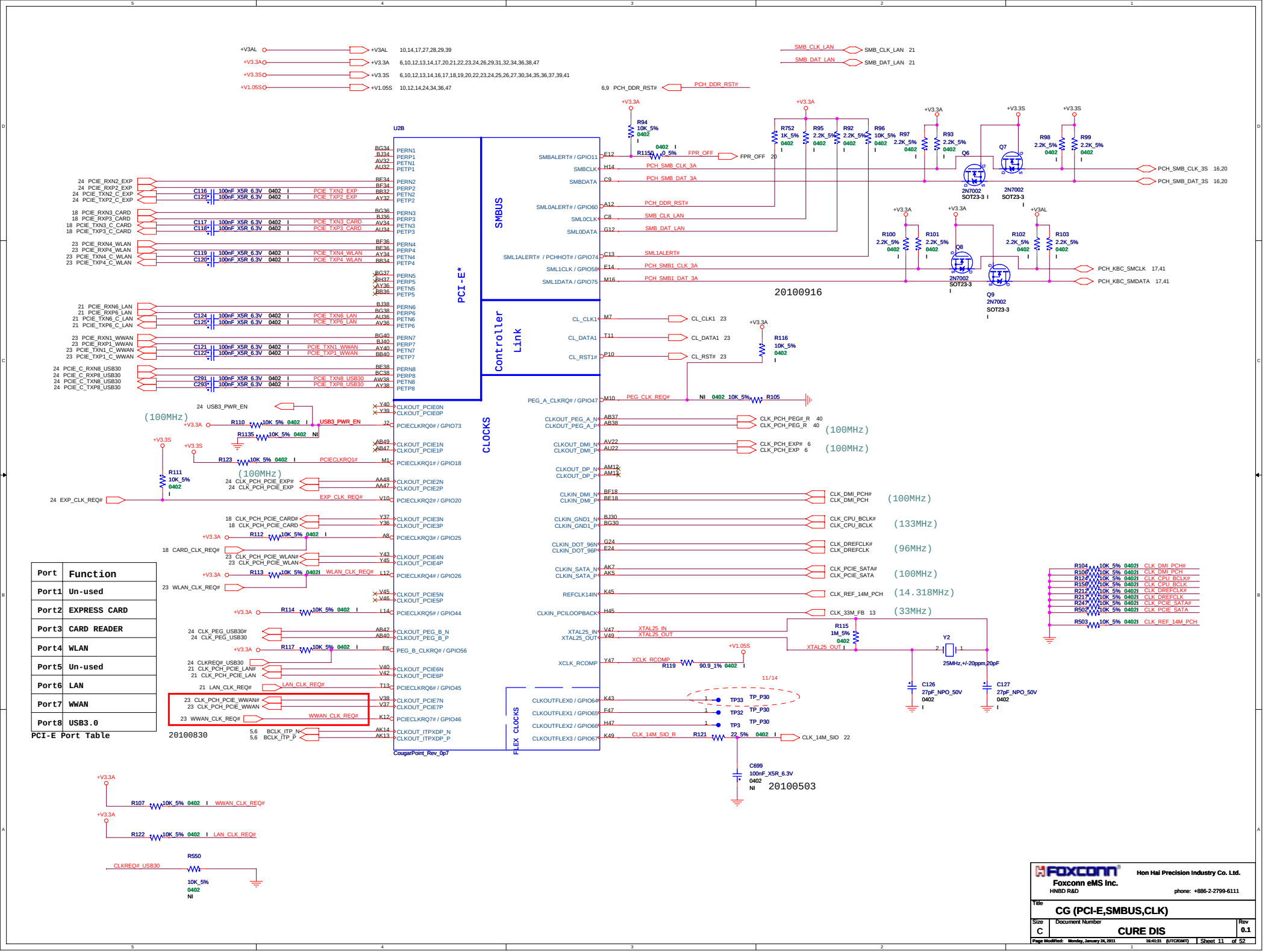
POWER

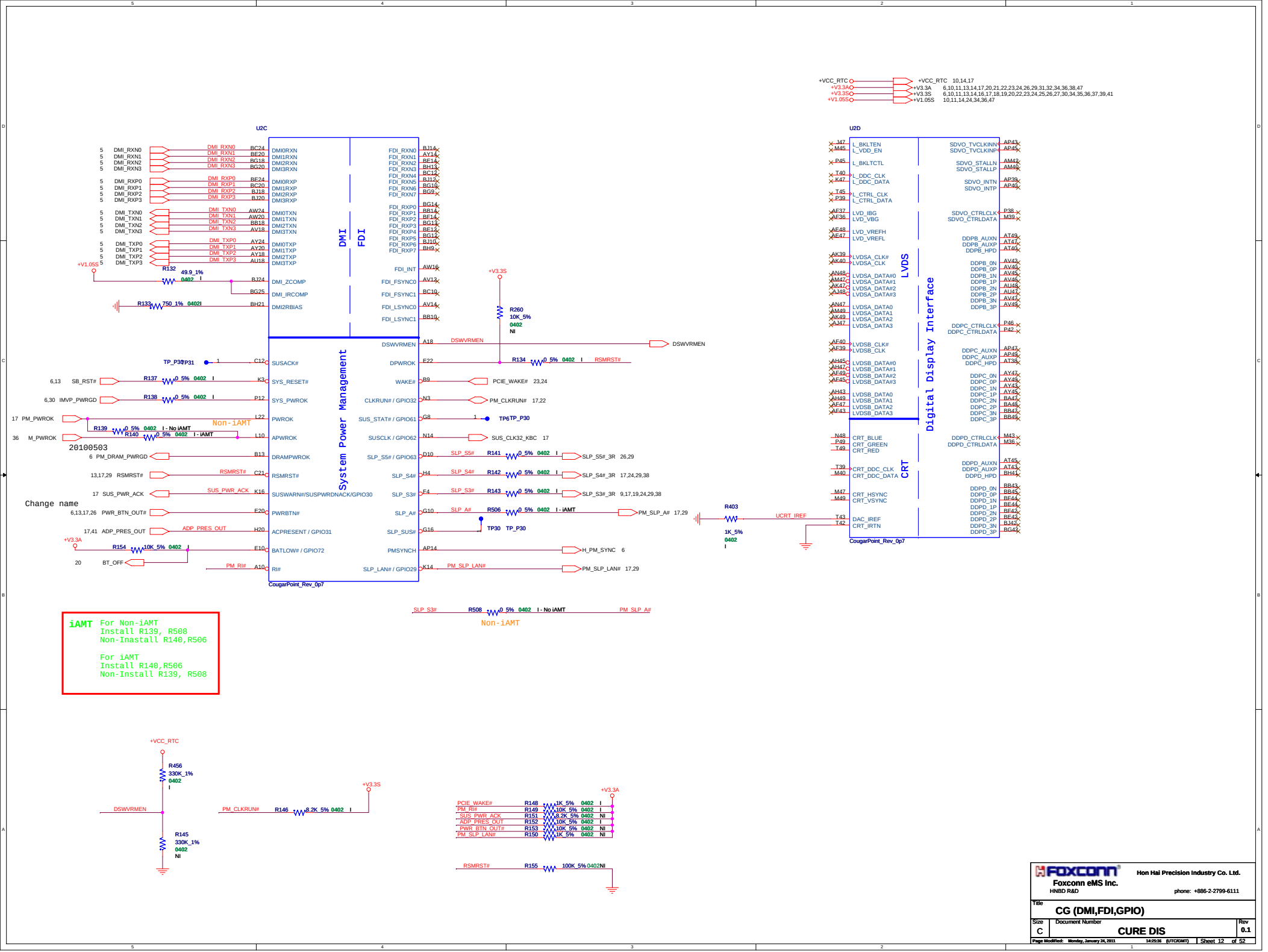

CON1F
CORE SUPPLY
PEG AND DDR
SVID
SENSE LINES
Sandy Bridge_rPGA_Rev0p61
52A
20100720
CON1H
VSS
CON1I
VSS
Sandy Bridge_rPGA_Rev0p61
Close to CPU
Close to VR
Foxconn eMS Inc.
Hon Hai Precision Industry Co. Ltd.
HNBD R&D
phone: +886-2-2799-6111
Sandy Bridge (POWER/GND)
CURE DIS
Rev 0.1
Sheet 8 of 52



Foxconn eMS Inc.	Hon Hai Precision Industry Co. Ltd.
HNBD R&D	phone: +886-2-2799-6111
Title	Sandy Bridge (GRAPHICS POWER)
Size C	Document Number CURE DIS
Rev	0.1
Page Modified: Thursday, January 20, 2011 11:58:00 (UTC/GMT)	Sheet 9 of 52


SATA HDD CONN
SATA ODD CONN
RTC BAT CON
PCH JTAG Disable
FOR ME FUNCTION
R4 Group
Close to VCC
Close to VCC
DVT The traces inside this block should be wider.
6 mils
2010.04.23
CougarPoint_Rev_0p7
Foxconn eMS Inc.
HNBD R&D
Hon Hai Precision Industry Co. Ltd.
phone: +886-2-2799-6111
CG (HDA,JTAG,SATA)/SATA CONN
CURE DIS
Sheet 10 of 52


+V3AL
+V3.3A
+V3.3S
+V1.05SS
SMB_CLK_LAN
SMB_DAT_LAN
PCH_DDR_RST#
U2B
PCI-E*
SMBUS
Controller Link
CLOCKS
FLEX CLOCKS
SMBALERT# / GPIO11
SMBCLK
SMBDATA
SML0ALERT# / GPIO60
SML0CLK
SML0DATA
SML1ALERT# / PCHHOT# / GPIO74
SML1CLK / GPIO58
SML1DATA / GPIO75
CL_CLK1
CL_DATA1
CL_RST1#
PEG_A_CLKRQ# / GPIO47
PCIECLKRQ0# / GPIO73
PCIECLKRQ1# / GPIO18
PCIECLKRQ2# / GPIO20
PCIECLKRQ3# / GPIO25
PCIECLKRQ4# / GPIO26
PCIECLKRQ5# / GPIO44
PEG_B_CLKRQ# / GPIO56
PCIECLKRQ6# / GPIO45
PCIECLKRQ7# / GPIO46
CLKOUTFLEX0 / GPIO64
CLKOUTFLEX1 / GPIO65
CLKOUTFLEX2 / GPIO66
CLKOUTFLEX3 / GPIO67
XTAL25_IN
XTAL25_OUT
XCLK_RCOMP
CougarPoint_Rev_0p7
20100916
20100830
20100503
PCH_SMB_CLK_3S
PCH_SMB_DAT_3S
PCH_KBC_SMCLK
PCH_KBC_SMDATA
CLK_DMI_PCH#
CLK_DMI_PCH
CLK_CPU_BCLK#
CLK_CPU_BCLK
CLK_DREFCLK#
CLK_DREFCLK
CLK_PCIE_SATA#
CLK_PCIE_SATA
CLK_REF_14M_PCH
CLK_33M_FB
CLK_14M_SIO
(100MHz)
(133MHz)
(96MHz)
(14.318MHz)
(33MHz)
25MHz,+/-20ppm,20pF
Port | Function
Port1 | Un-used
Port2 | EXPRESS CARD
Port3 | CARD READER
Port4 | WLAN
Port5 | Un-used
Port6 | LAN
Port7 | WWAN
Port8 | USB3.0
PCI-E Port Table
Hon Hai Precision Industry Co. Ltd.
Foxconn eMS Inc.
HNBD R&D
phone: +886-2-2799-6111
CG (PCI-E,SMBUS,CLK)
Size C
Document Number CURE DIS
Rev 0.1
Page Modified: Monday, January 24, 2011 16:41:31 (UTC/GMT)
Sheet 11 of 52


U2C
DMI
FDI
System Power Management
CougarPoint_Rev_0p7
U2D
LVDS
CRT
Digital Display Interface
CougarPoint_Rev_0p7
+VCC_RTC 10,14,17
+V3.3A 6,10,11,13,14,17,20,21,22,23,24,26,29,31,32,34,36,38,47
+V3.3S 6,10,11,13,14,16,17,18,19,20,22,23,24,25,26,27,30,34,35,36,37,39,41
+V1.05S 10,11,14,24,34,36,47
DMI_RXN0 DMI_RXN1 DMI_RXN2 DMI_RXN3
DMI_RXP0 DMI_RXP1 DMI_RXP2 DMI_RXP3
DMI_TXN0 DMI_TXN1 DMI_TXN2 DMI_TXN3
DMI_TXP0 DMI_TXP1 DMI_TXP2 DMI_TXP3
DMI_ZCOMP
DMI_IRCOMP
DMI2RBIAS
R132 49.9_1% 0402 I
R133 750_1% 0402I
FDI_RXN0 FDI_RXN1 FDI_RXN2 FDI_RXN3 FDI_RXN4 FDI_RXN5 FDI_RXN6 FDI_RXN7
FDI_RXP0 FDI_RXP1 FDI_RXP2 FDI_RXP3 FDI_RXP4 FDI_RXP5 FDI_RXP6 FDI_RXP7
FDI_INT
FDI_FSYNC0
FDI_FSYNC1
FDI_LSYNC0
FDI_LSYNC1
R260 10K_5% 0402 NI
DSWVRMEN
SUSACK#
SYS_RESET#
PWROK
APWROK
DRAMPWROK
RSMRST#
SUSWARN#/SUSPWRDNACK/GPIO30
PWRBTN#
ACPRESENT / GPIO31
BATLOW# / GPIO72
RI#
DPWROK
WAKE#
CLKRUN# / GPIO32
SUS_STAT# / GPIO61
SUSCLK / GPIO62
SLP_S5# / GPIO63
SLP_S4#
SLP_S3#
SLP_A#
SLP_SUS#
PMSYNCH
SLP_LAN# / GPIO29
R134 0_5% 0402 I RSMRST#
R137 0_5% 0402 I
R138 0_5% 0402 I
R139 0_5% 0402 I - No iAMT
R140 0_5% 0402 I - iAMT
Non-iAMT
20100503
R141 0_5% 0402 I
R142 0_5% 0402 I
R143 0_5% 0402 I
R506 0_5% 0402 I - iAMT
TP30 TP_P30
R154 10K_5% 0402 I
Change name
R508 0_5% 0402 I - No iAMT
Non-iAMT
iAMT For Non-iAMT
Install R139, R508
Non-Inastall R140,R506
For iAMT
Install R140,R506
Non-Install R139, R508
R403 1K_5% 0402 I
UCRT_IREF
L_BKLTEN L_VDD_EN L_BKLTCTL L_DDC_CLK L_DDC_DATA L_CTRL_CLK L_CTRL_DATA
LVD_IBG LVD_VBG LVD_VREFH LVD_VREFL
LVDSA_CLK# LVDSA_CLK LVDSA_DATA#0 LVDSA_DATA#1 LVDSA_DATA#2 LVDSA_DATA#3 LVDSA_DATA0 LVDSA_DATA1 LVDSA_DATA2 LVDSA_DATA3
LVDSB_CLK# LVDSB_CLK LVDSB_DATA#0 LVDSB_DATA#1 LVDSB_DATA#2 LVDSB_DATA#3 LVDSB_DATA0 LVDSB_DATA1 LVDSB_DATA2 LVDSB_DATA3
CRT_BLUE CRT_GREEN CRT_RED CRT_DDC_CLK CRT_DDC_DATA CRT_HSYNC CRT_VSYNC DAC_IREF CRT_IRTN
SDVO_TVCLKINN SDVO_TVCLKINP SDVO_STALLN SDVO_STALLP SDVO_INTN SDVO_INTP SDVO_CTRLCLK SDVO_CTRLDATA
DDPB_AUXN DDPB_AUXP DDPB_HPD DDPB_0N DDPB_0P DDPB_1N DDPB_1P DDPB_2N DDPB_2P DDPB_3N DDPB_3P
DDPC_CTRLCLK DDPC_CTRLDATA DDPC_AUXN DDPC_AUXP DDPC_HPD DDPC_0N DDPC_0P DDPC_1N DDPC_1P DDPC_2N DDPC_2P DDPC_3N DDPC_3P
DDPD_CTRLCLK DDPD_CTRLDATA DDPD_AUXN DDPD_AUXP DDPD_HPD DDPD_0N DDPD_0P DDPD_1N DDPD_1P DDPD_2N DDPD_2P DDPD_3N DDPD_3P
+VCC_RTC
R456 330K_1% 0402 I
R145 330K_1% 0402 NI
DSWVRMEN
PM_CLKRUN#
R146 8.2K_5% 0402 I
+V3.3S
PCIE_WAKE# R148 1K_5% 0402 I
PM_RI# R149 10K_5% 0402 I
SUS_PWR_ACK R151 8.2K_5% 0402 NI
ADP_PRES_OUT R152 10K_5% 0402 I
PWR_BTN_OUT# R153 10K_5% 0402 NI
PM_SLP_LAN# R150 1K_5% 0402 NI
RSMRST# R155 100K_5% 0402NI
+V3.3A
Foxconn
Foxconn eMS Inc.
HNBD R&D
Hon Hai Precision Industry Co. Ltd.
phone: +886-2-2799-6111
Title
CG (DMI,FDI,GPIO)
Size C
Document Number
CURE DIS
Rev 0.1
Page Modified: Monday, January 24, 2011 14:25:36 (UTC/GMT)
Sheet 12 of 52

the new 0 ohm to be placed close to R427 to minimize stub when the signal is used for XDP

20100907

U2E

RSVD

NVRAM

PCI

USB

U2F

GPIO

CPU/MISC

NCTF

USB Charging

USB ESATA

CAMERA
EXPRESS CARD
WLAN
BLUETOOTH
SMART CARD
FINGER PRINT
WWAN
USB2 (DB)
DOCK
USB2 (DB)
DOCK

CougarPoint_Rev_0p7

Note : The 0 ohm resistors(R1306 & R1305) need to be placed to minimize stub length for XDP signals

OCP

Place R108 within 1"(25.4mm) of the PCH

PCH_XDP_CONN

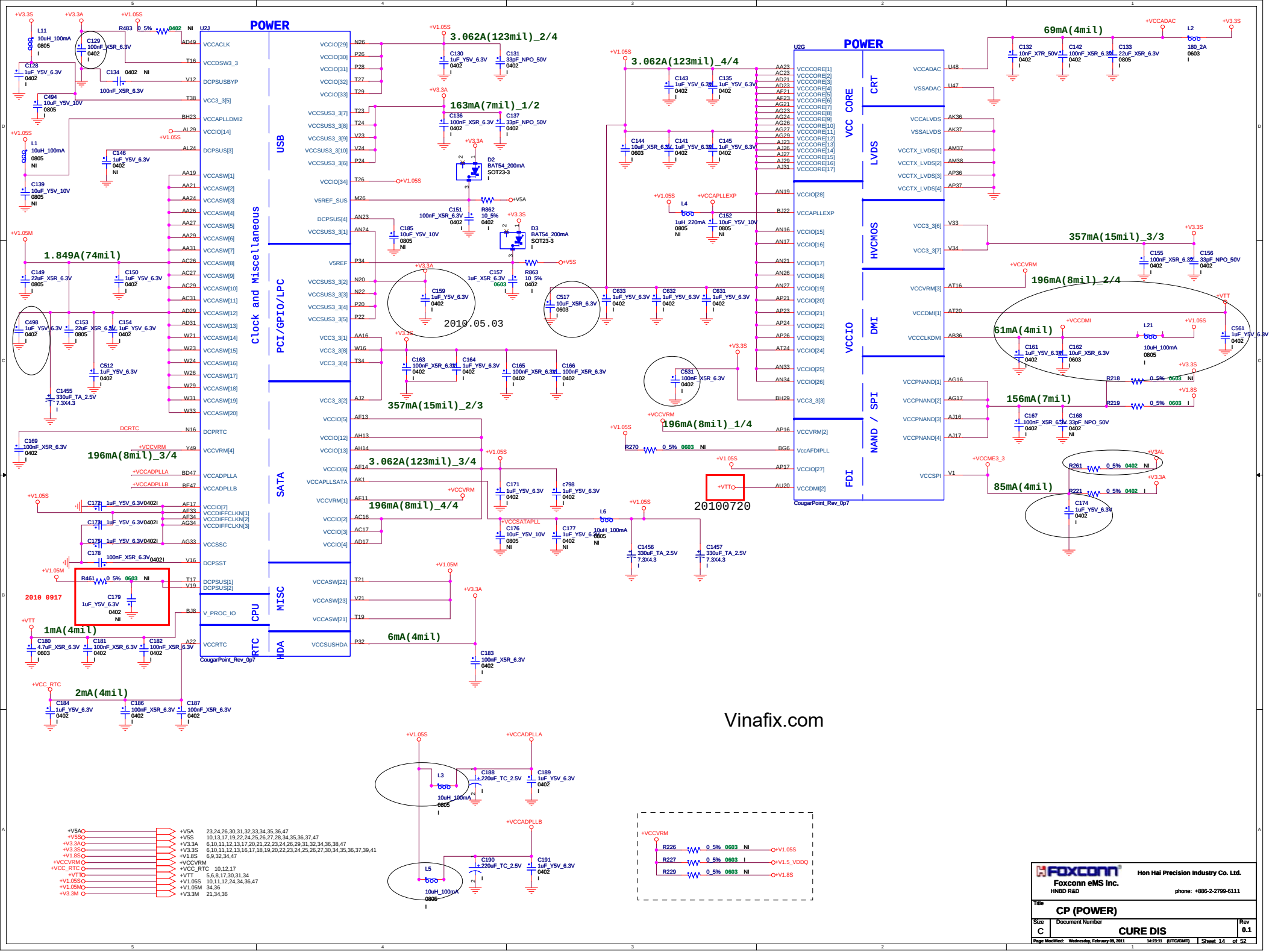
Note if the new diode cannot be placed close to R410 to minimize stub then we will need to add another 0ohm to place it close to R410

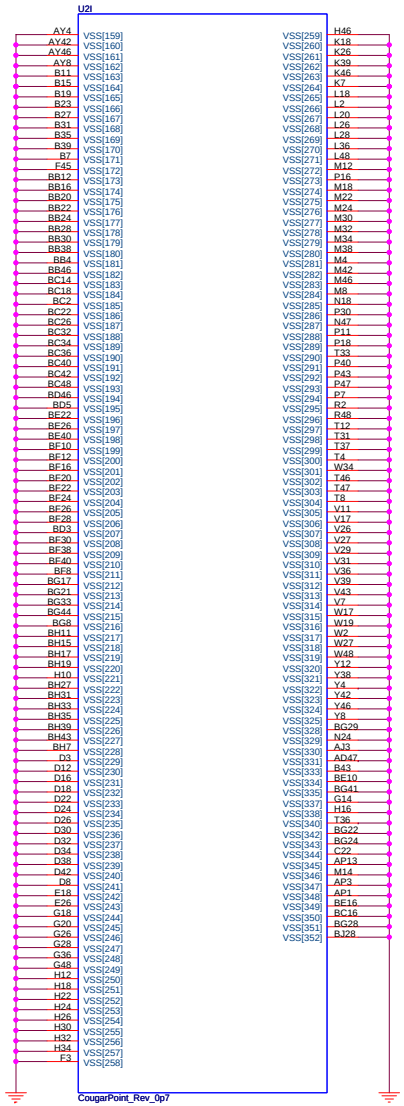
Foxconn
Foxconn eMS Inc.
HNBD R&D
Hon Hai Precision Industry Co. Ltd.
phone: +886-2-2799-6111

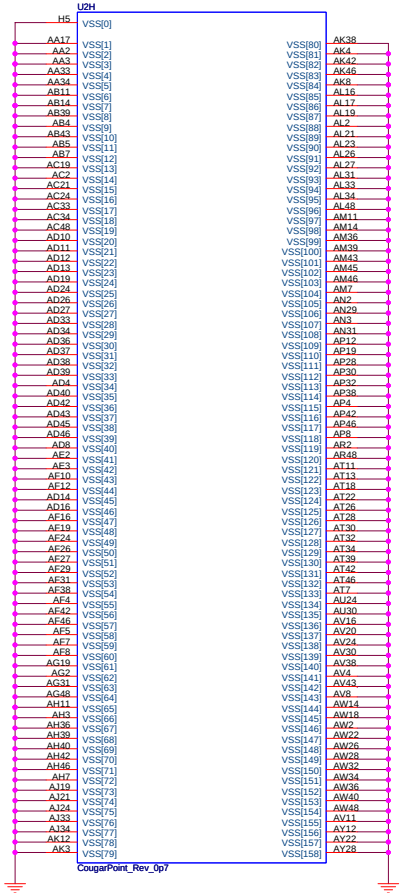
Title: CG (PCI,USB,NVRAM,GPIO)

Size: C | Document Number: CURE DIS | Rev: 0.1

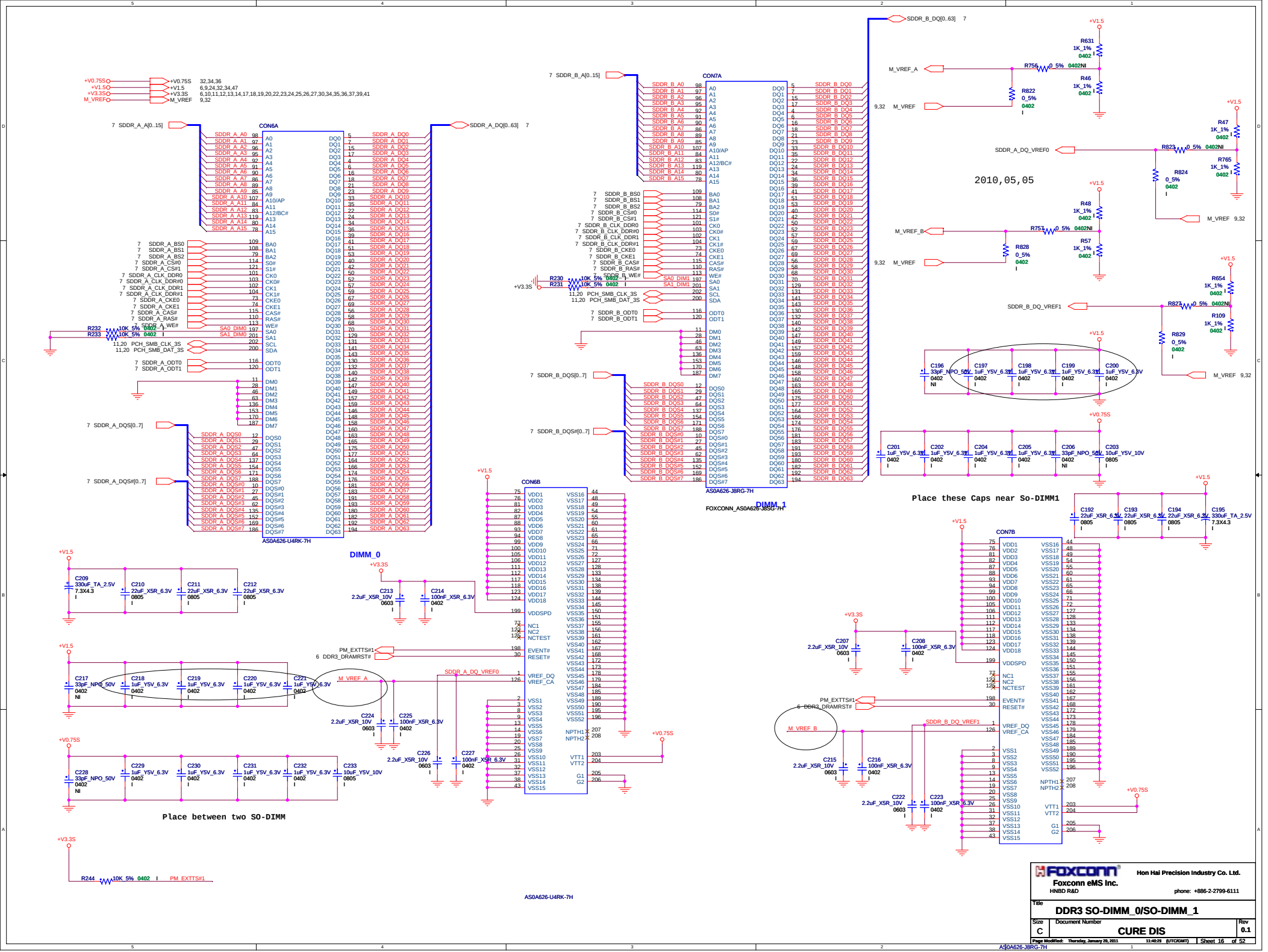
Page Modified: Thursday, January 20, 2011 13:32:03 (UTC/GMT) | Sheet 13 of 52

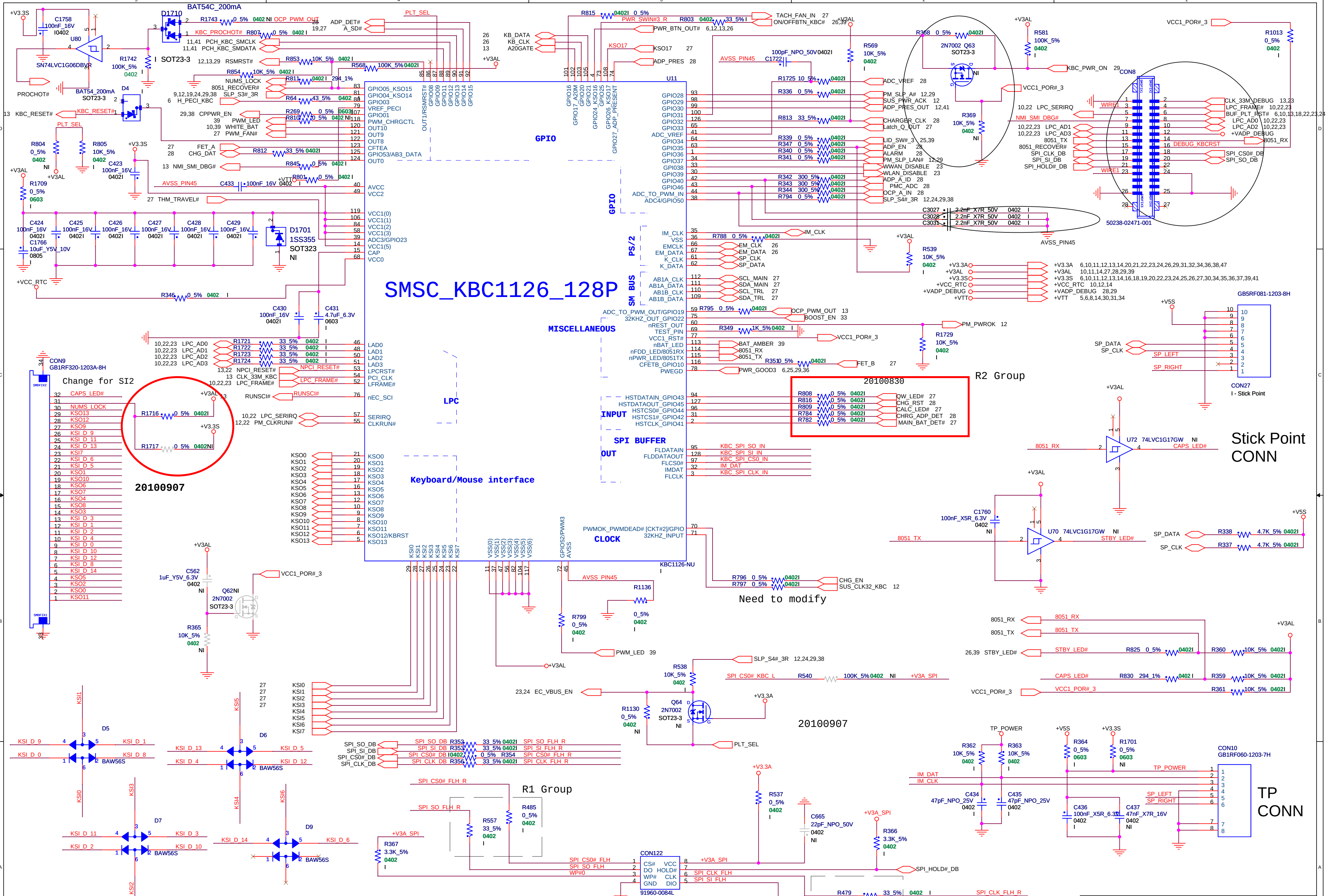

POWER
U2J
Clock and Miscellaneous
USB
PCI/GPIO/LPC
SATA
MISC
CPU
RTC
HDA
CougarPoint_Rev_0p7
POWER
U2G
VCC CORE
CRT
LVDS
HVCMOS
DMI
VCCIO
NAND / SPI
FDI
CougarPoint_Rev_0p7
3.062A(123mil)_2/4
163mA(7mil)_1/2
3.062A(123mil)_4/4
1.849A(74mil)
357mA(15mil)_2/3
196mA(8mil)_3/4
3.062A(123mil)_3/4
196mA(8mil)_4/4
196mA(8mil)_1/4
6mA(4mil)
1mA(4mil)
2mA(4mil)
69mA(4mil)
357mA(15mil)_3/3
196mA(8mil)_2/4
61mA(4mil)
156mA(7mil)
85mA(4mil)
2010.05.03
20100720
2010 0917
Vinafix.com
Foxconn eMS Inc.
Hon Hai Precision Industry Co. Ltd.
HNBD R&D
phone: +886-2-2799-6111
CP (POWER)
CURE DIS
0.1
Sheet 14 of 52





FOXCONN	Hon Hai Precision Industry Co. Ltd.	
Foxconn eMS Inc.		
HNBD R&D	phone: +886-2-2799-6111	
Title: CG (GND)		
Size: C	Document Number: CURE DIS	Rev: 0.1
Page Modified: Thursday, January 20, 2011 11:09:38 (UTC/GMT)	Sheet 15 of 52	


CON6A
CON6B
CON7A
CON7B
DIMM_0
DIMM_1
AS0A626-U4RK-7H
AS0A626-J8RG-7H
FOXCONN_AS0A626-J8SG-7H
2010,05,05
Place these Caps near So-DIMM1
Place between two SO-DIMM
Foxconn eMS Inc.
Hon Hai Precision Industry Co. Ltd.
HNBD R&D
phone: +886-2-2799-6111
DDR3 SO-DIMM_0/SO-DIMM_1
CURE DIS
Size C
Rev 0.1
Sheet 16 of 52



Foxconn eMS Inc.

HNBD R&D

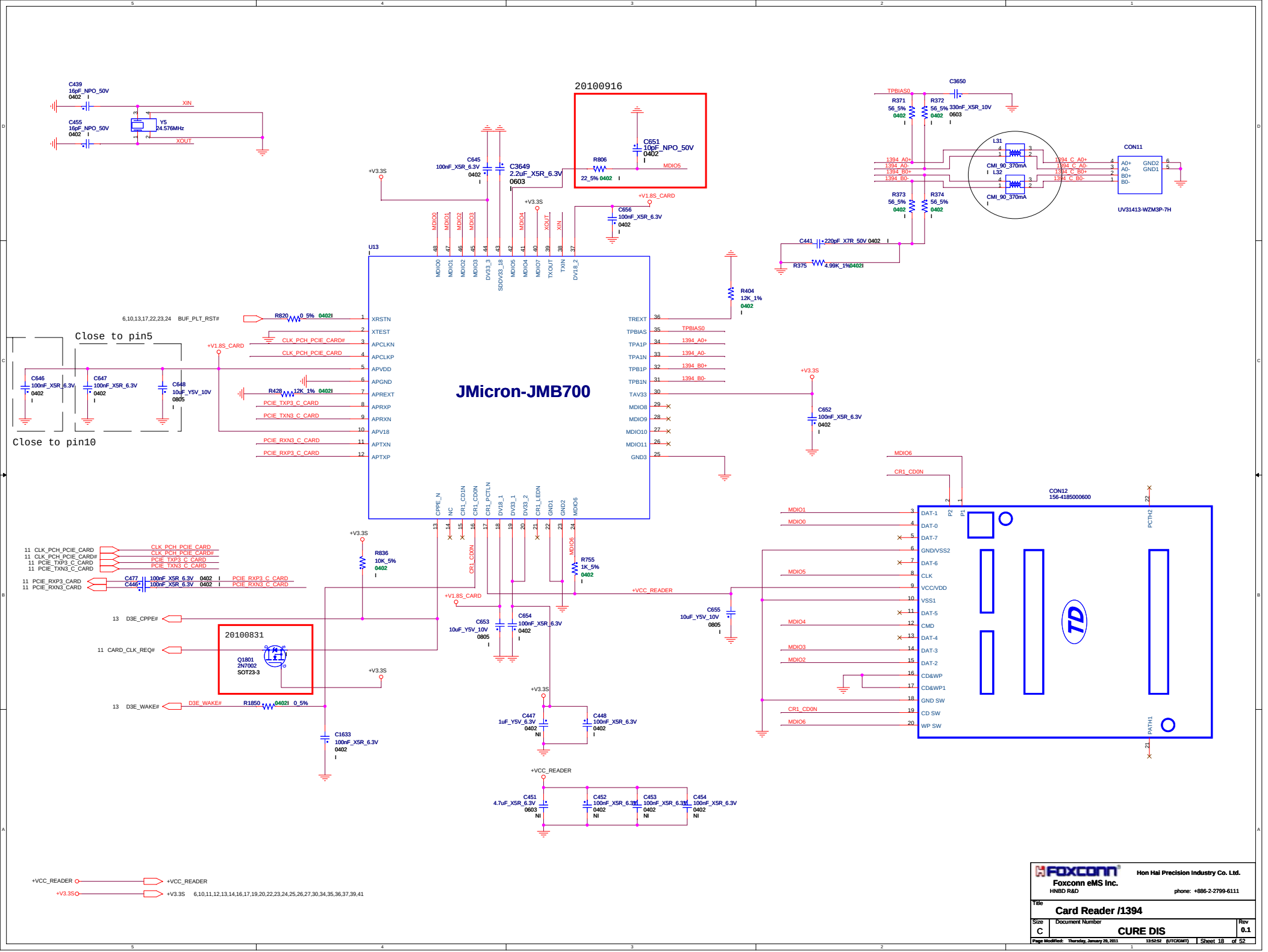
Hon Hai Precision Industry Co. Ltd.

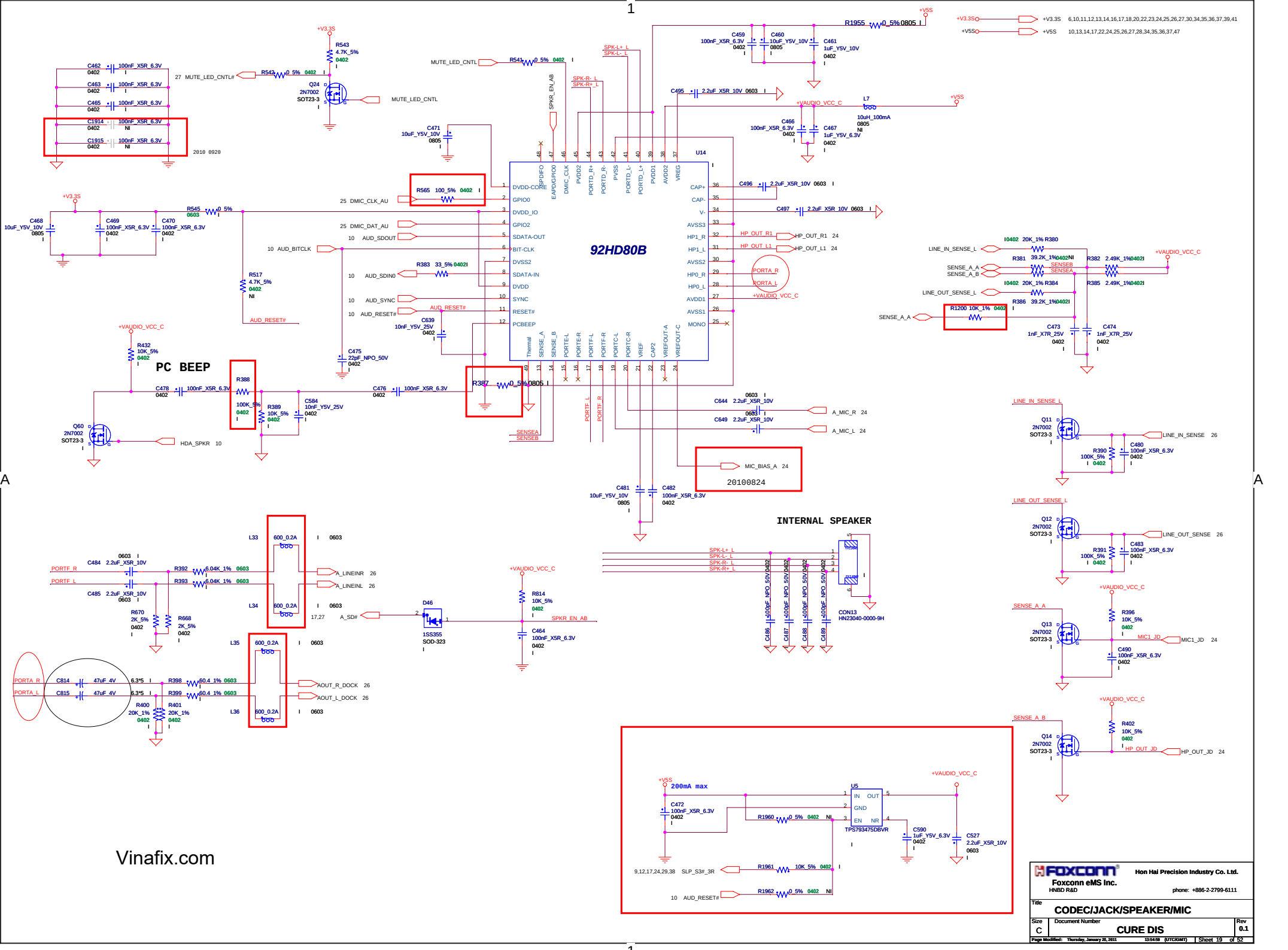
phone: +886-2-2799-6111

Title: EC+KBC(SMSC1126)

Size	Document Number	Rev
C	CURE DIS	0.1

Page Modified: Thursday, January 20, 2011 15:07:25 (UTC/GMT) Sheet 17 of 52

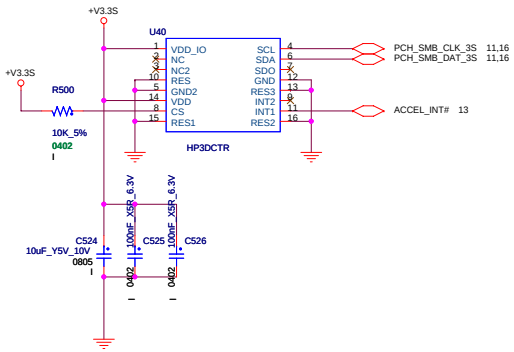

20100916
JMicron-JMB700
U13
Close to pin5
Close to pin10
20100831
C439 16pF_NPO_50V 0402
C455 16pF_NPO_50V 0402
Y5 24.576MHz
XIN
XOUT
C645 100nF_X5R_6.3V 0402
C3649 2.2uF_X5R_6.3V 0603
R806 22_5% 0402
C651 10pF_NPO_50V 0402
MDIO5
+V3.3S
+V1.8S_CARD
C656 100nF_X5R_6.3V 0402
C3650
TPBIAS0
R371 56_5% 0402
R372 56_5% 330nF_X5R_10V 0402 0603
L31
L32
CMI_90_370mA
CMI_90_370mA
1394_A0+
1394_A0-
1394_B0+
1394_B0-
1394_C_A0+
1394_C_A0-
1394_C_B0+
1394_C_B0-
CON11
UV31413-WZM3P-7H
R373 56_5% 0402
R374 56_5% 0402
C441 220pF_X7R_50V 0402
R375 4.99K_1% 0402
R404 12K_1% 0402
6,10,13,17,22,23,24 BUF_PLT_RST#
R820 0_5% 0402
CLK_PCH_PCIE_CARD#
CLK_PCH_PCIE_CARD
R428 12K_1% 0402
PCIE_TXP3_C_CARD
PCIE_TXN3_C_CARD
PCIE_RXN3_C_CARD
PCIE_RXP3_C_CARD
C646 100nF_X5R_6.3V 0402
C647 100nF_X5R_6.3V 0402
C648 10uF_Y5V_10V 0805
C652 100nF_X5R_6.3V 0402
XRSTN
XTEST
APCLKN
APCLKP
APVDD
APGND
APREXT
APRXP
APRXN
APV18
APTXN
APTXP
TREXT
TPBIAS
TPA1P
TPA1N
TPB1P
TPB1N
TAV33
MDIO8
MDIO9
MDIO10
MDIO11
GND3
CPPE_N
NC
CR1_CD1N
CR1_CD0N
CR1_PCTLN
DV18_1
DV33_1
DV33_2
CR1_LEDN
GND1
GND2
MDIO6
R836 10K_5% 0402
R755 1K_5% 0402
+VCC_READER
C653 10uF_Y5V_10V 0805
C654 100nF_X5R_6.3V 0402
C655 10uF_Y5V_10V 0805
C447 1uF_Y5V_6.3V 0402 NI
C448 100nF_X5R_6.3V 0402
C1633 100nF_X5R_6.3V 0402
C451 4.7uF_X5R_6.3V 0603 NI
C452 100nF_X5R_6.3V 0402 NI
C453 100nF_X5R_6.3V 0402 NI
C454 100nF_X5R_6.3V 0402 NI
Q1801 2N7002 SOT23-3
D3E_CPPE#
CARD_CLK_REQ#
D3E_WAKE#
R1850 0_5% 0402
C477 100nF_X5R_6.3V 0402
C446 100nF_X5R_6.3V 0402
CON12 156-4185000600
DAT-1
DAT-0
DAT-7
GND/VSS2
DAT-6
CLK
VCC/VDD
VSS1
DAT-5
CMD
DAT-4
DAT-3
DAT-2
CD&WP
CD&WP1
GND SW
CD SW
WP SW
PCTH2
PATH1
+VCC_READER
+V3.3S
+V3.3S 6,10,11,12,13,14,16,17,19,20,22,23,24,25,26,27,30,34,35,36,37,39,41
Foxconn
Hon Hai Precision Industry Co. Ltd.
Foxconn eMS Inc.
HNBD R&D
phone: +886-2-2799-6111
Title
Card Reader /1394
Size C
Document Number CURE DIS
Rev 0.1
Page Modified: Thursday, January 20, 2011 13:52:52 (UTC/GMT)
Sheet 18 of 52


92HD80B
U14
PC BEEP
INTERNAL SPEAKER
20100824
Vinafix.com
Foxconn eMS Inc.
HNBD R&D
Hon Hai Precision Industry Co. Ltd.
phone: +886-2-2799-6111
CODEC/JACK/SPEAKER/MIC
CURE DIS
Size C
Rev 0.1
Sheet 19 of 52

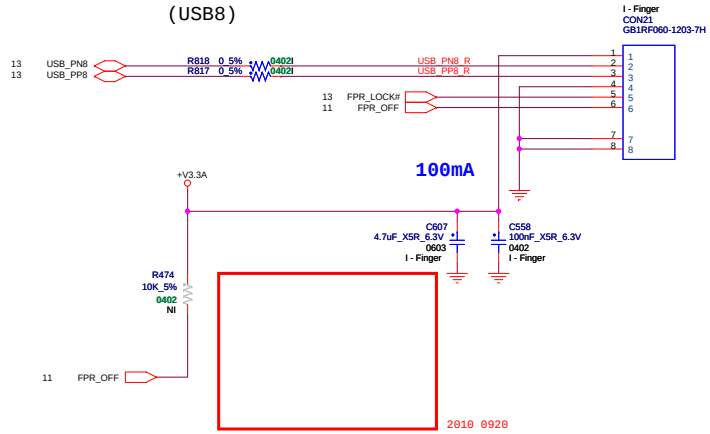
FINGER PRINT CONN.

+V3.3S → +V3.3S 6,10,11,12,13,14,16,17,18,19,22,23,24,25,26,27,30,34,35,36,37,39,41
+V3.3A → +V3.3A 6,10,11,12,13,14,17,21,22,23,24,26,29,31,32,34,36,38,47
+VCC_BT → +VCC_BT

ACCELEMENTOR



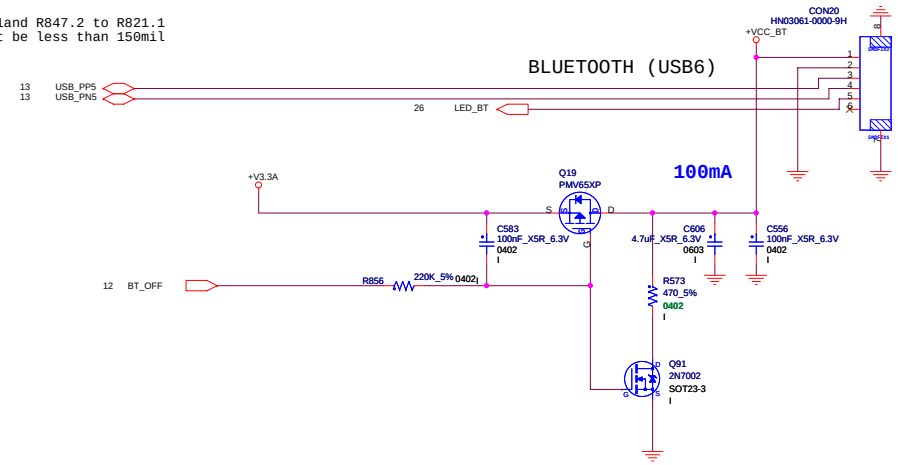
(USB8)



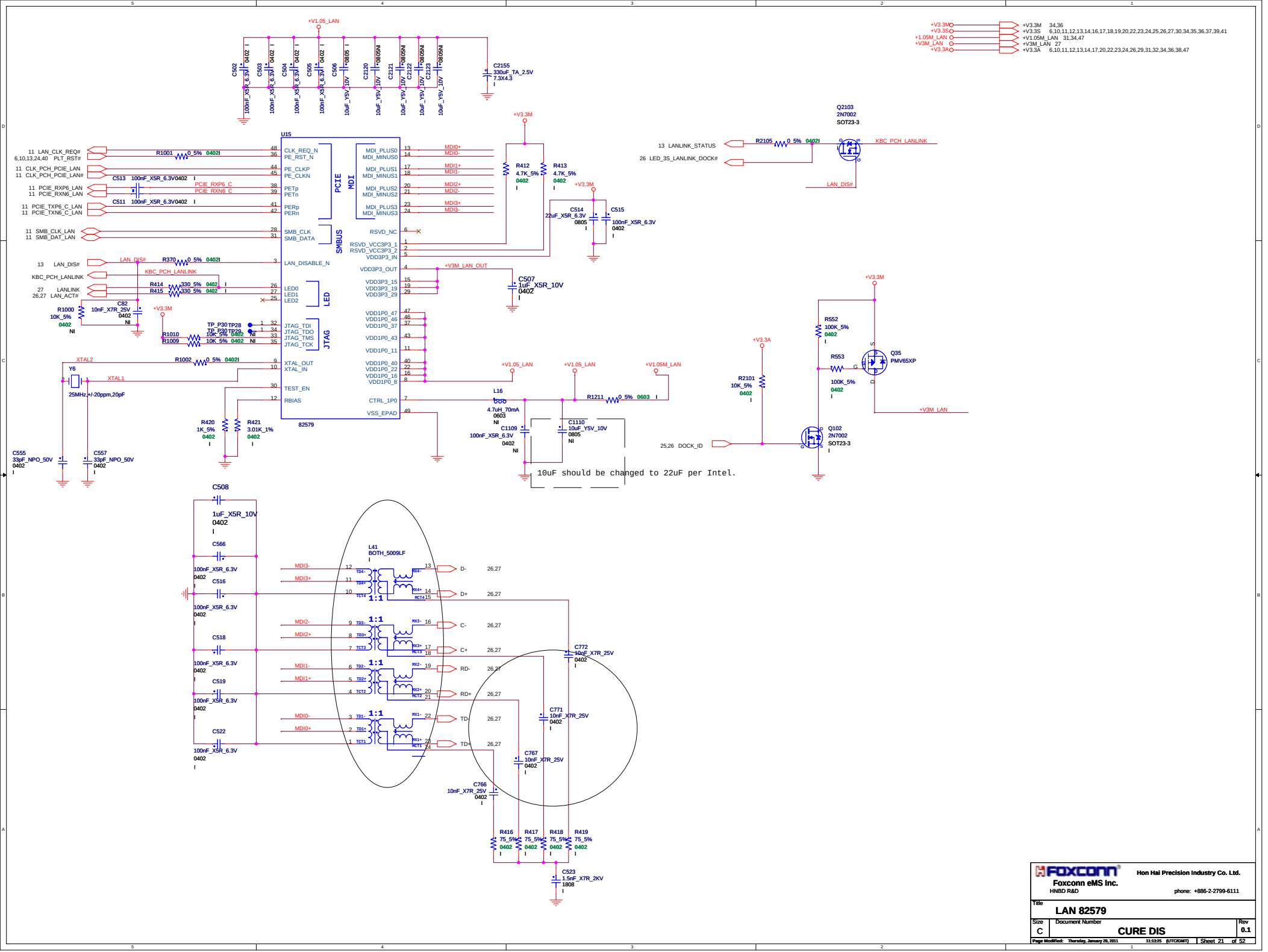
Bluetooth CONN.

20100907

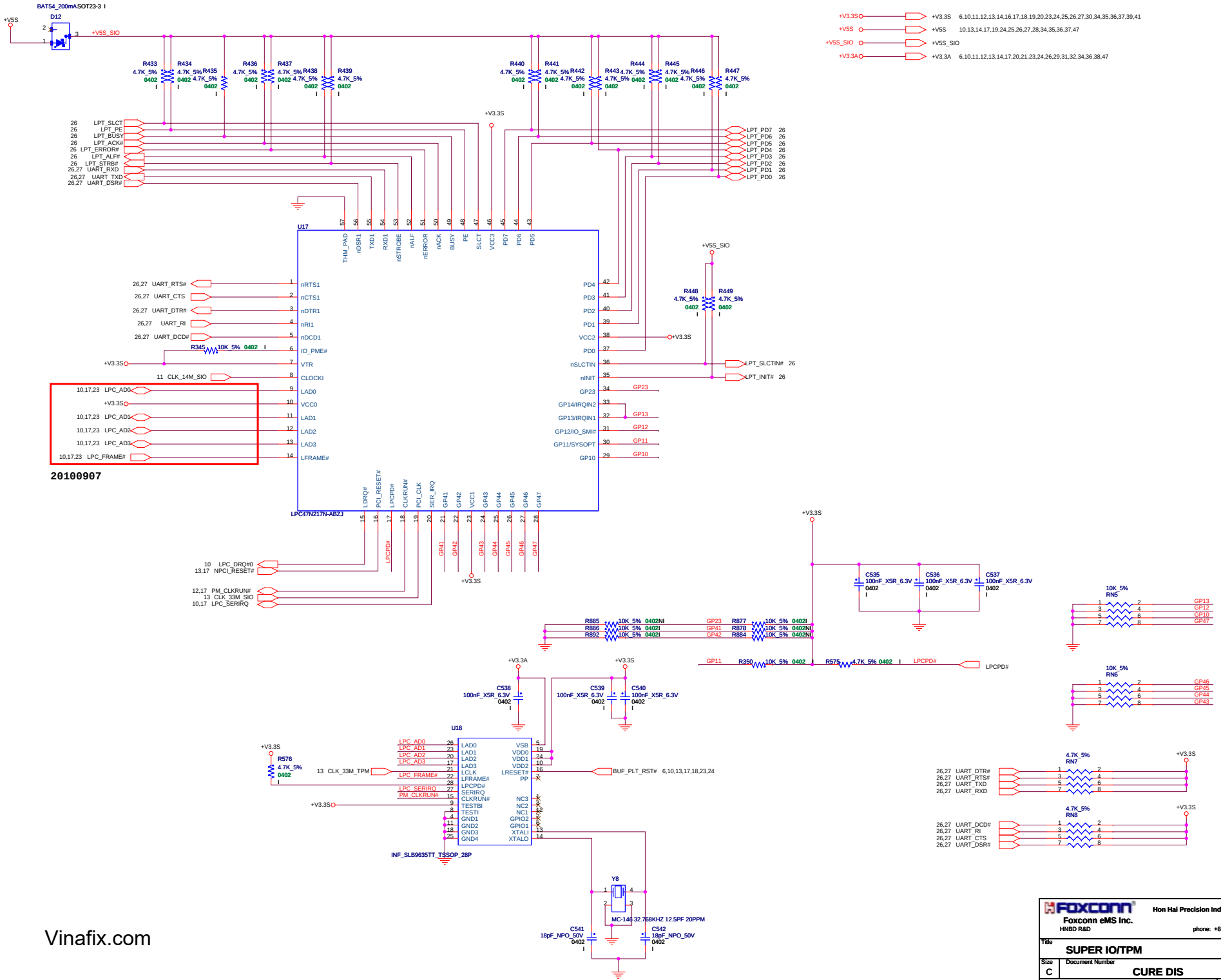
R848.2 to R819.1and R847.2 to R821.1
stub length must be less than 150mil



FOXCONN / Foxconn eMS Inc. HNBD R&D	Hon Hai Precision Industry Co. Ltd. phone: +886-2-2799-6111	
Title: ACEL/BT/FPR		
Size: C	Document Number: CURE DIS	Rev: 0.1
Page Modified: Thursday, January 20, 2011 13:58:52 (UTC/GMT)		Sheet 20 of 52

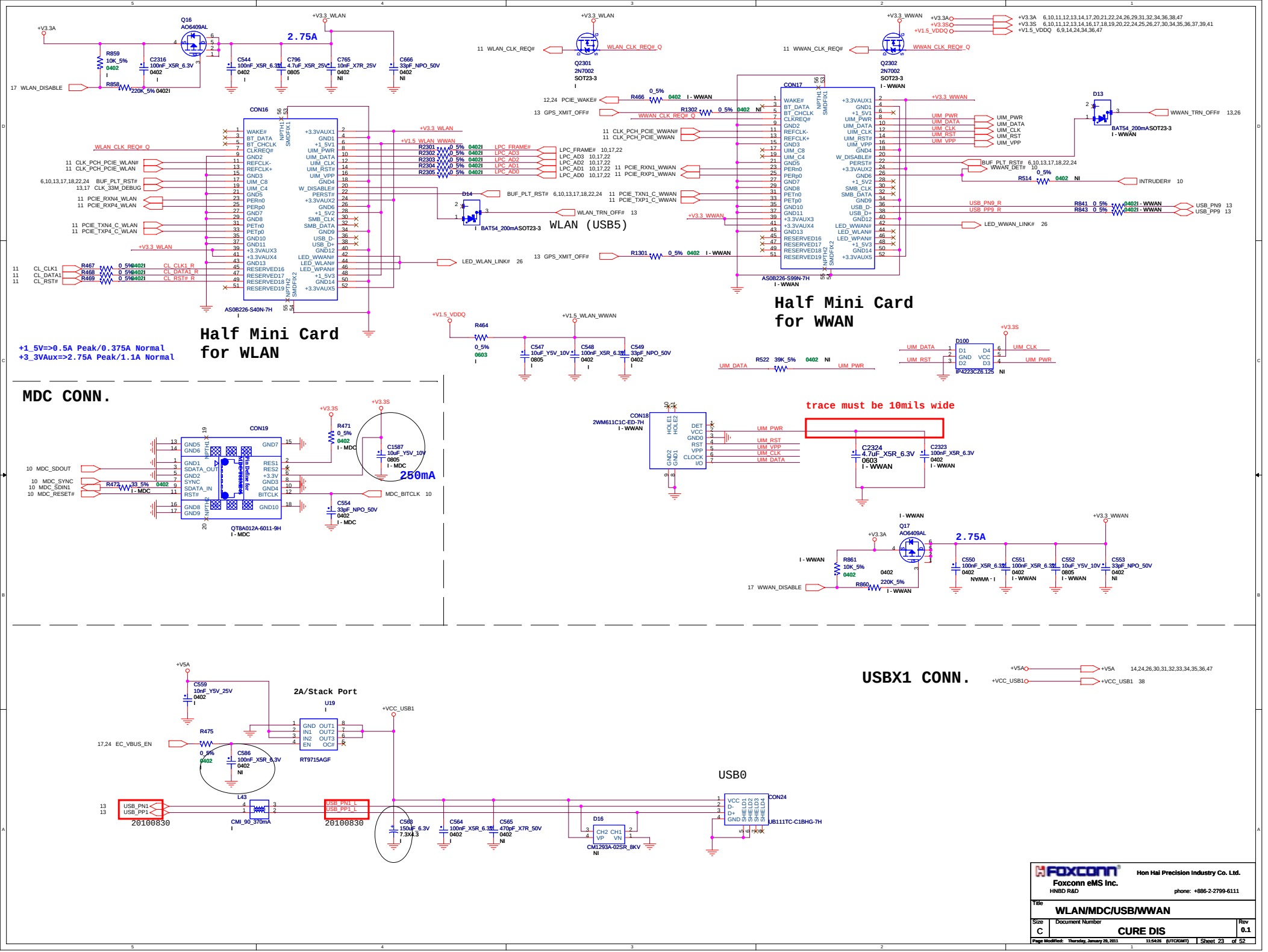


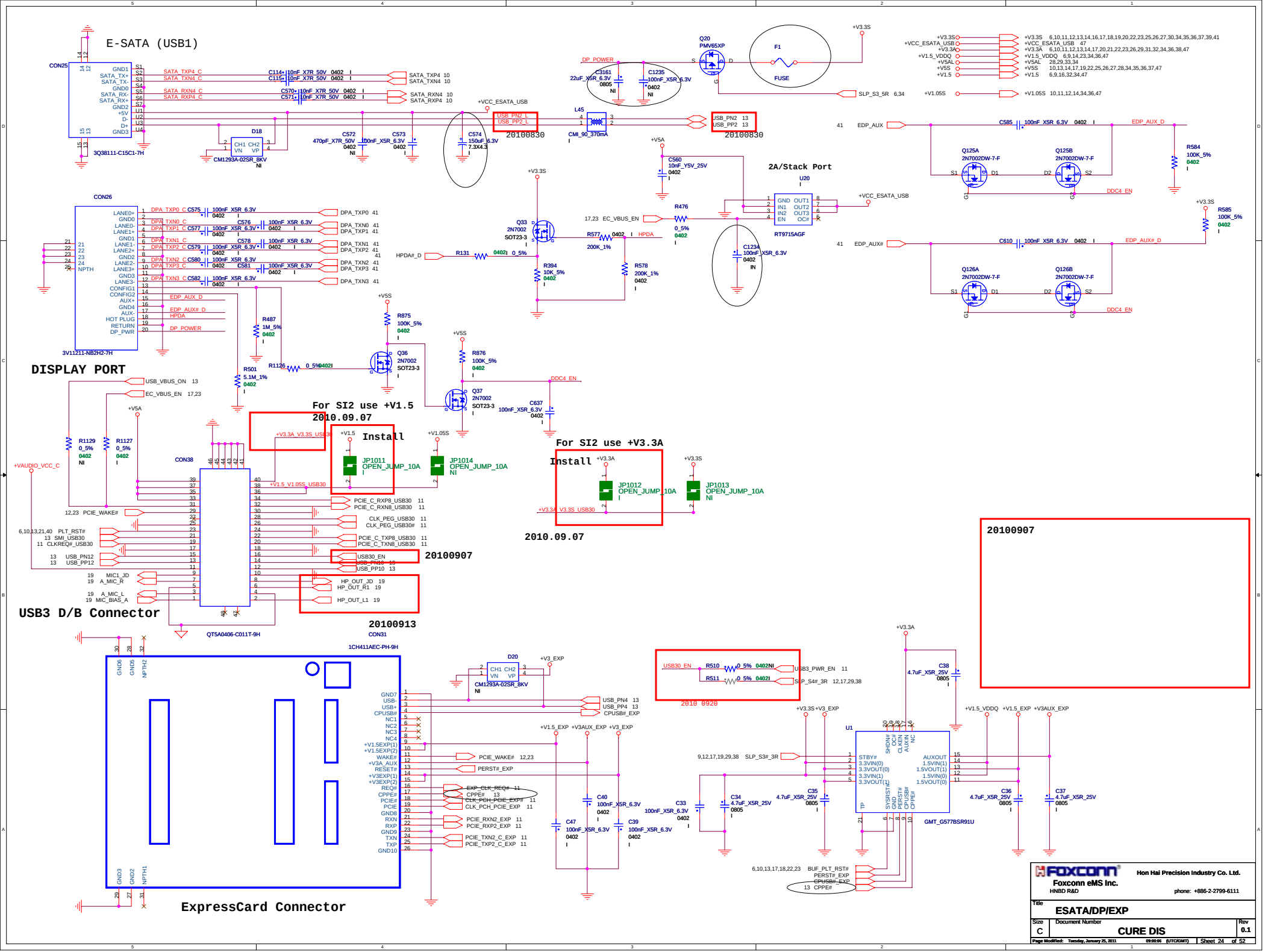
Foxconn eMS Inc. HNBD R&D	Hon Hai Precision Industry Co. Ltd. phone: +886-2-2799-6111	
Title: LAN 82579		
Size: C	Document Number: CURE DIS	Rev: 0.1
Page Modified: Thursday, January 20, 2011 11:13:25 (UTC/GMT)		Sheet 21 of 52

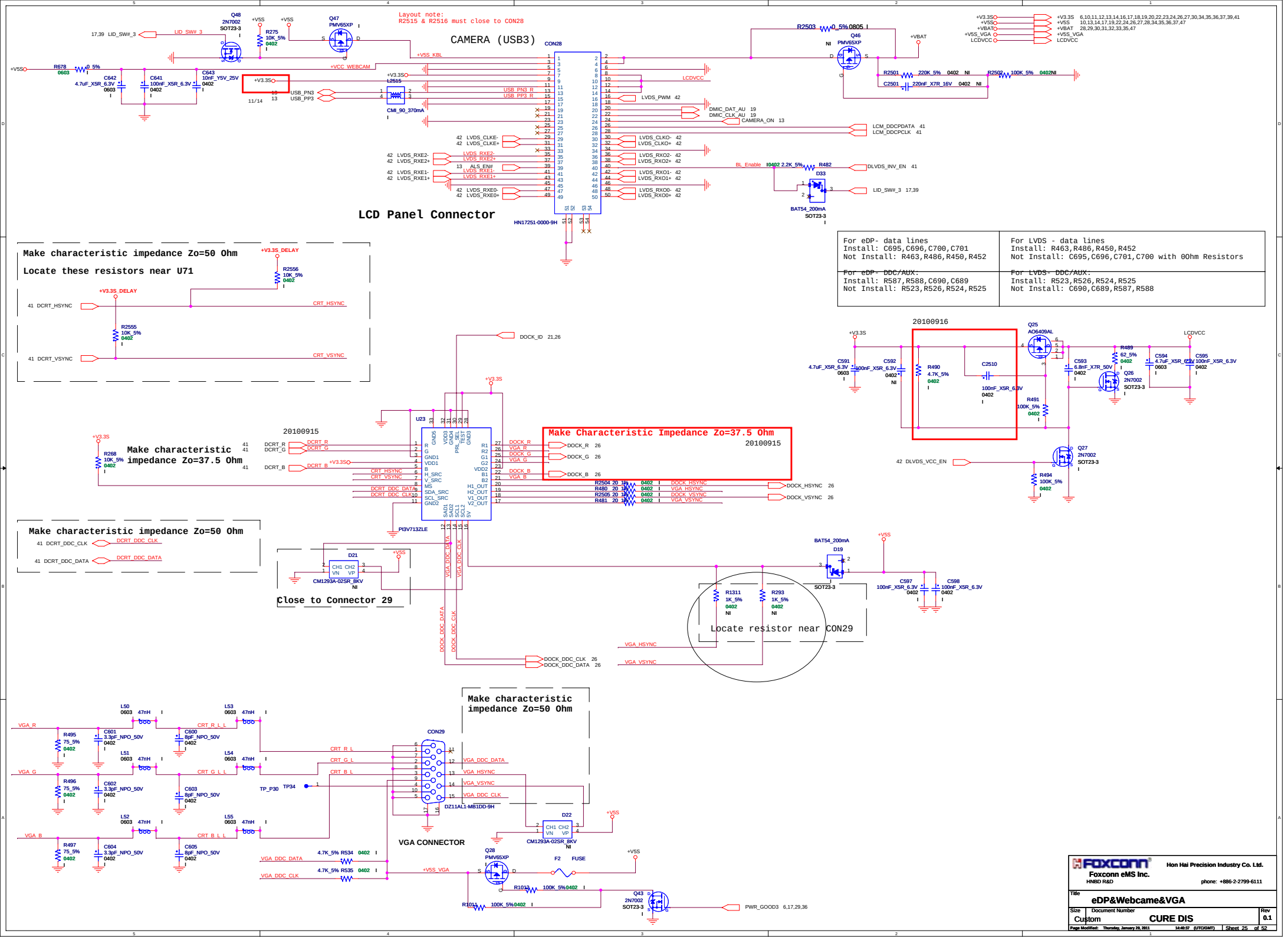


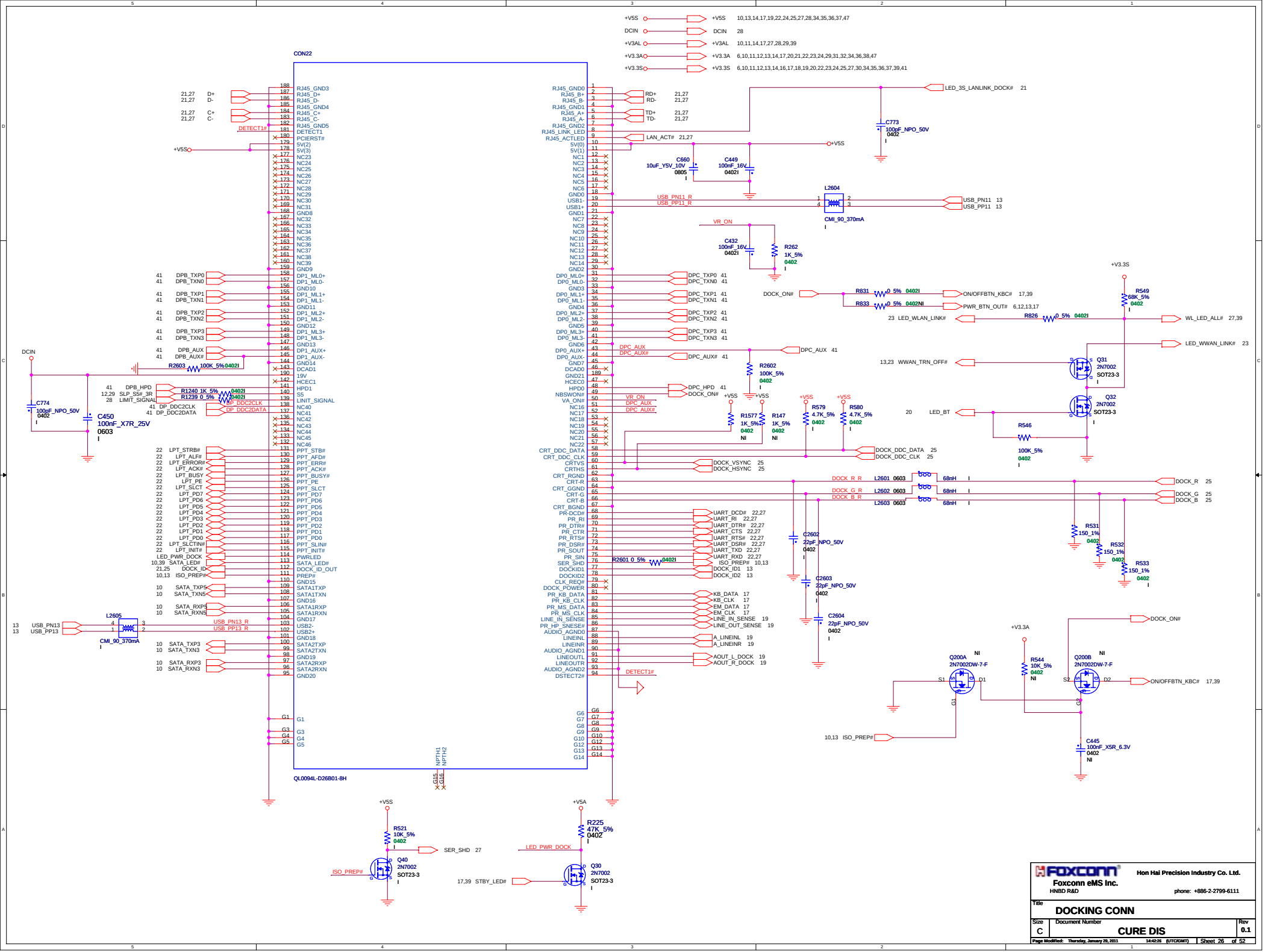
Vinafix.com

FOXCONN / Foxconn eMS Inc. HNBD R&D	Hon Hai Precision Industry Co. Ltd. phone: +886-2-2799-6111	
Title: SUPER IO/TPM		
Size: C	Document Number: CURE DIS	Rev: 0.1
Page Modified: Monday, January 24, 2011 16:20:44 (UTC/GMT)		Sheet 22 of 52

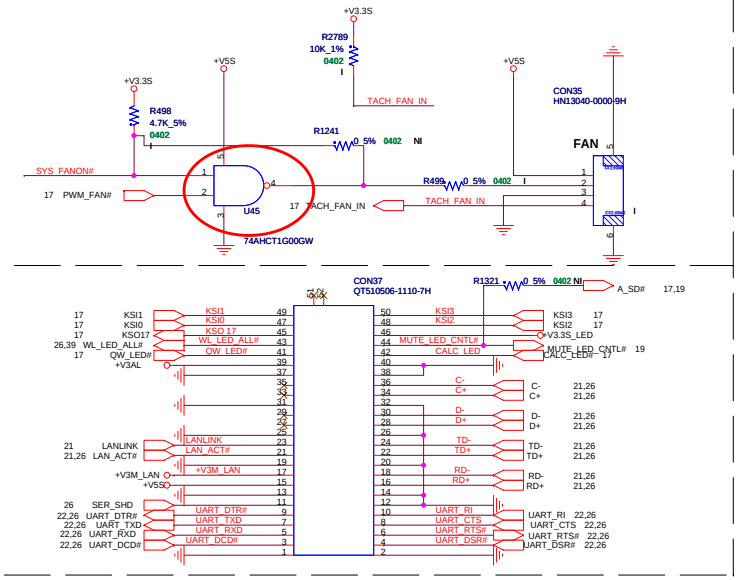

Half Mini Card for WLAN
Half Mini Card for WWAN
WLAN (USB5)
MDC CONN.
USBX1 CONN.
USB0
+1_5V=>0.5A Peak/0.375A Normal
+3_3VAux=>2.75A Peak/1.1A Normal
2.75A
250mA
2A/Stack Port
trace must be 10mils wide
Foxconn eMS Inc.
Hon Hai Precision Industry Co. Ltd.
WLAN/MDC/USB/WWAN
CURE DIS


E-SATA (USB1)
CON25
3Q38111-C15C1-7H
D18
CM1293A-02SR_8KV
SATA_TXP4_C
SATA_TXN4_C
SATA_RXN4_C
SATA_RXP4_C
SATA_TXP4 10
SATA_TXN4 10
SATA_RXN4 10
SATA_RXP4 10
+VCC_ESATA_USB
USB_PN2_L
USB_PP2_L
USB_PN2 13
USB_PP2 13
20100830
CMI_90_370mA
L45
C574 150uF_6.3V 7.3X4.3
C572 470pF_X7R_50V 0402 NI
C573 100nF_X5R_6.3V 0402
C570 10nF_X7R_50V 0402
C571 10nF_X7R_50V 0402
C114 10nF_X7R_50V 0402
C115 10nF_X7R_50V 0402
DP_POWER
C3161 22uF_X5R_6.3V 0805 NI
C123S 100nF_X5R_6.3V 0402 NI
Q20 PMV65XP
F1 FUSE
SLP_S3_5R 6,34
+V3.3S
+V1.05S
+V3.3S 6,10,11,12,13,14,16,17,18,19,20,22,23,25,26,27,30,34,35,36,37,39,41
+VCC_ESATA_USB 47
+V3.3A 6,10,11,12,13,14,17,20,21,22,23,26,29,31,32,34,36,38,47
+V1.5_VDDQ 6,9,14,23,34,36,47
+V5AL 28,29,33,34
+V5S 10,13,14,17,19,22,25,26,27,28,34,35,36,37,47
+V1.5 6,9,16,32,34,47
+V1.05S 10,11,12,14,34,36,47
2A/Stack Port
U20
RT9715AGF
R476 0_5% 0402
C560 10nF_Y5V_25V 0402
C1234 100nF_X5R_6.3V 0402 IN
17,23 EC_VBUS_EN
Q33 2N7002 SOT23-3
R577 200K_1% 0402 HPDA
R578 200K_1% 0402
R394 10K_5% 0402
R131 0402I 0_5%
HPDA#_D
41 EDP_AUX
41 EDP_AUX#
C585 100nF_X5R_6.3V 0402
C610 100nF_X5R_6.3V 0402
EDP_AUX_D
EDP_AUX#_D
Q125A 2N7002DW-7-F
Q125B 2N7002DW-7-F
Q126A 2N7002DW-7-F
Q126B 2N7002DW-7-F
DDC4_EN
R584 100K_5% 0402
R585 100K_5% 0402
CON26
3V11211-NB2H2-7H
DPA_TXP0_C C575 100nF_X5R_6.3V 0402
DPA_TXN0_C C576 100nF_X5R_6.3V 0402
DPA_TXP1_C C577 100nF_X5R_6.3V 0402
DPA_TXN1_C C578 100nF_X5R_6.3V 0402
DPA_TXP2_C C579 100nF_X5R_6.3V 0402
DPA_TXN2_C C580 100nF_X5R_6.3V 0402
DPA_TXP3_C C581 100nF_X5R_6.3V 0402
DPA_TXN3_C C582 100nF_X5R_6.3V 0402
DPA_TXP0 41
DPA_TXN0 41
DPA_TXP1 41
DPA_TXN1 41
DPA_TXP2 41
DPA_TXN2 41
DPA_TXP3 41
DPA_TXN3 41
EDP_AUX_D
EDP_AUX# D
HPDA
DP_POWER
R487 1M_5% 0402
R501 5.1M_1% 0402
R1126 0_5% 0402I
R875 100K_5% 0402
R876 100K_5% 0402
Q36 2N7002 SOT23-3
Q37 2N7002 SOT23-3
C637 100nF_X5R_6.3V 0402
DISPLAY PORT
For SI2 use +V1.5
2010.09.07
Install
JP1011 OPEN_JUMP_10A I
JP1014 OPEN_JUMP_10A NI
For SI2 use +V3.3A
Install
JP1012 OPEN_JUMP_10A I
JP1013 OPEN_JUMP_10A NI
2010.09.07
20100907
USB_VBUS_ON 13
EC_VBUS_EN 17,23
+VAUDIO_VCC_C
+V5A
R1129 0_5% 0402 NI
R1127 0_5% 0402
CON38
12,23 PCIE_WAKE#
6,10,13,21,40 PLT_RST#
13 SMI_USB30
11 CLKREQ#_USB30
13 USB_PN12
13 USB_PP12
19 MIC1_JD
19 A_MIC_R
19 A_MIC_L
19 MIC_BIAS_A
PCIE_C_RXP8_USB30 11
PCIE_C_RXN8_USB30 11
CLK_PEG_USB30 11
CLK_PEG_USB30# 11
PCIE_C_TXP8_USB30 11
PCIE_C_TXN8_USB30 11
USB30_EN
USB_PN10 13
USB_PP10 13
HP_OUT_JD 19
HP_OUT_R1 19
HP_OUT_L1 19
USB3 D/B Connector
QT5A0406-C011T-9H
20100913
CON31
1CH411AEC-PH-9H
ExpressCard Connector
D20
CM1293A-02SR_8KV
USB_PN4 13
USB_PP4 13
CPUSB#_EXP
PCIE_WAKE# 12,23
PERST#_EXP
EXP_CLK_REQ# 11
CPPE# 13
CLK_PCH_PCIE_EXP# 11
CLK_PCH_PCIE_EXP 11
PCIE_RXN2_EXP 11
PCIE_RXP2_EXP 11
PCIE_TXN2_C_EXP 11
PCIE_TXP2_C_EXP 11
+V3_EXP
+V1.5_EXP
+V3AUX_EXP
C40 100nF_X5R_6.3V 0402
C47 100nF_X5R_6.3V 0402
C39 100nF_X5R_6.3V 0402
C33 100nF_X5R_6.3V 0402
USB30_EN
R510 0_5% 0402NI
R511 0_5% 0402I
USB3_PWR_EN 11
SLP_S4#_3R 12,17,29,38
2010 0920
9,12,17,19,29,38 SLP_S3#_3R
C34 4.7uF_X5R_25V
C35 4.7uF_X5R_25V 0805
C38 4.7uF_X5R_25V 0805
C36 4.7uF_X5R_25V 0805
C37 4.7uF_X5R_25V 0805
U1
GMT_G577BSR91U
6,10,13,17,18,22,23 BUF_PLT_RST#
PERST#_EXP
CPUSB#_EXP
13 CPPE#
20100907
Hon Hai Precision Industry Co. Ltd.
Foxconn eMS Inc.
HNBD R&D
phone: +886-2-2799-6111
Title
ESATA/DP/EXP
Size C
Document Number
CURE DIS
Rev 0.1
Page Modified: Tuesday, January 25, 2011 09:00:06 (UTC/GMT)
Sheet 24 of 52

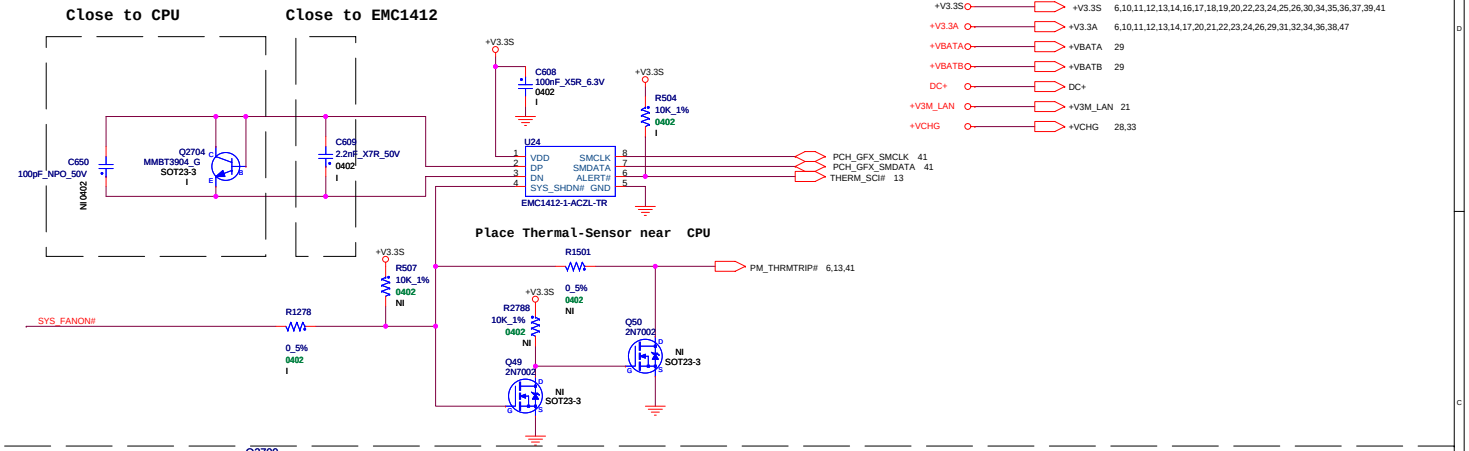

Layout note:
R2515 & R2516 must close to CON28
CAMERA (USB3)
CON28
LCD Panel Connector
HN17251-0000-9H
Make characteristic impedance Zo=50 Ohm
Locate these resistors near U71
+V3.3S_DELAY
R2556 10K_5% 0402
R2555 10K_5% 0402
41 DCRT_HSYNC
CRT_HSYNC
41 DCRT_VSYNC
CRT_VSYNC
For eDP- data lines
Install: C695,C696,C700,C701
Not Install: R463,R486,R450,R452
For LVDS - data lines
Install: R463,R486,R450,R452
Not Install: C695,C696,C701,C700 with 0Ohm Resistors
For eDP- DDC/AUX:
Install: R587,R588,C690,C689
Not Install: R523,R526,R524,R525
For LVDS- DDC/AUX:
Install: R523,R526,R524,R525
Not Install: C690,C689,R587,R588
20100916
20100915
Make characteristic impedance Zo=37.5 Ohm
Make Characteristic Impedance Zo=37.5 Ohm
U23
PI3V713ZLE
Make characteristic impedance Zo=50 Ohm
Close to Connector 29
Locate resistor near CON29
VGA CONNECTOR
CON29
DZ11AL1-MB1DD-9H
Make characteristic impedance Zo=50 Ohm
Foxconn eMS Inc.
HNBD R&D
Hon Hai Precision Industry Co. Ltd.
phone: +886-2-2799-6111
eDP&Webcame&VGA
Custom
CURE DIS
0.1
Sheet 25 of 52


+V5S +V5S 10,13,14,17,19,22,24,25,27,28,34,35,36,37,47
DCIN DCIN 28
+V3AL +V3AL 10,11,14,17,27,28,29,39
+V3.3A +V3.3A 6,10,11,12,13,14,17,20,21,22,23,24,29,31,32,34,36,38,47
+V3.3S +V3.3S 6,10,11,12,13,14,16,17,18,19,20,22,23,24,25,27,30,34,35,36,37,39,41
CON22
QL0094L-D26B01-8H
RJ45_GND3
RJ45_D+
RJ45_D-
RJ45_GND4
RJ45_C+
RJ45_C-
RJ45_GND5
DETECT1
PCIERST#
5V(2)
5V(3)
NC23
NC24
NC25
NC26
NC27
NC28
NC29
NC30
NC31
GND8
NC32
NC33
NC34
NC35
NC36
NC37
NC38
NC39
GND9
DP1_ML0+
DP1_ML0-
GND10
DP1_ML1+
DP1_ML1-
GND11
DP1_ML2+
DP1_ML2-
GND12
DP1_ML3+
DP1_ML3-
GND13
DP1_AUX+
DP1_AUX-
GND14
DCAD1
19V
HCEC1
HPD1
S5
LINIT_SIGNAL
NC40
NC41
NC42
NC43
NC44
NC45
NC46
PPT_STB#
PPT_AFD#
PPT_ERR#
PPT_ACK#
PPT_BUSY#
PPT_PE
PPT_SLCT
PPT_PD7
PPT_PD6
PPT_PD5
PPT_PD4
PPT_PD3
PPT_PD2
PPT_PD1
PPT_PD0
PPT_SLCTIN#
PPT_INIT#
PWRLED
SATA_LED#
DOCK_ID_OUT
PREP#
GND15
SATA1TXP
SATA1TXN
GND16
SATA1RXP
SATA1RXN
GND17
USB2-
USB2+
GND18
SATA2TXP
SATA2TXN
GND19
SATA2RXP
SATA2RXN
GND20
G1
G3
G4
G5
NPTH1
NPTH2
G15
G16
RJ45_GND0
RJ45_B+
RJ45_B-
RJ45_GND1
RJ45_A+
RJ45_A-
RJ45_GND2
RJ45_LINK_LED
RJ45_ACTLED
5V(0)
5V(1)
NC1
NC2
NC3
NC4
NC5
NC6
GND0
USB1-
USB1+
GND1
NC7
NC8
NC9
NC10
NC11
NC12
NC13
NC14
GND2
DP0_ML0+
DP0_ML0-
GND3
DP0_ML1+
DP0_ML1-
GND4
DP0_ML2+
DP0_ML2-
GND5
DP0_ML3+
DP0_ML3-
GND6
DP0_AUX+
DP0_AUX-
GND7
DCAD2
GND21
HCEC0
HPD0
NBSWON#
VA_ON#
NC16
NC17
NC18
NC19
NC20
NC21
NC22
CRT_DDC_DATA
CRT_DDC_CLK
CRTVS
CRTHS
CRT_RGND
CRT-R
CRT_GGND
CRT-G
CRT-B
CRT_BGND
PR-DCD#
PR_RI
PR_DTR#
PR_CTR
PR_RTS#
PR_DSR#
PR_SOUT
PR_SIN
SER_SHD
DOCKID1
DOCKID2
CLK_REQ#
DOCK_POWER
PR_KB_DATA
PR_KB_CLK
PR_MS_DATA
PR_MS_CLK
LINE_IN_SENSE
PR_HP_SNESE#
AUDIO_AGND0
LINEINL
LINEINR
AUDIO_AGND1
LINEOUTL
LINEOUTR
AUDIO_AGND2
DSTECT2#
G6
G7
G8
G9
G10
G12
G13
G14
DPB_TXP0
DPB_TXN0
DPB_TXP1
DPB_TXN1
DPB_TXP2
DPB_TXN2
DPB_TXP3
DPB_TXN3
DPB_AUX
DPB_AUX#
DPB_HPD
SLP_S5#_3R
LIMIT_SIGNAL
DP_DDC2CLK
DP_DDC2DATA
LPT_STRB#
LPT_ALF#
LPT_ERROR#
LPT_ACK#
LPT_BUSY
LPT_PE
LPT_SLCT
LPT_PD7
LPT_PD6
LPT_PD5
LPT_PD4
LPT_PD3
LPT_PD2
LPT_PD1
LPT_PD0
LPT_SLCTIN#
LPT_INIT#
LED_PWR_DOCK
SATA_LED#
DOCK_ID
ISO_PREP#
SATA_TXP5
SATA_TXN5
SATA_RXP5
SATA_RXN5
SATA_TXP3
SATA_TXN3
SATA_RXP3
SATA_RXN3
USB_PN13
USB_PP13
USB_PN13_R
USB_PP13_R
L2605
CMI_90_370mA
DCIN
C774 100pF_NPO_50V 0402 I
C450 100nF_X7R_25V 0603 I
R2603 100K_5% 0402I
R1240 1K_5% 0402I
R1239 0_5% 0402I
DP_DDC2CLK
DP_DDC2DATA
LAN_ACT# 21,27
C660 10uF_Y5V_10V 0805 I
C449 100nF_16V 0402I
C773 100pF_NPO_50V 0402 I
LED_3S_LANLINK_DOCK# 21
L2604
CMI_90_370mA I
USB_PN11_R
USB_PP11_R
USB_PN11 13
USB_PP11 13
VR_ON
C432 100nF_16V 0402I
R262 1K_5% 0402 I
DPC_TXP0 41
DPC_TXN0 41
DPC_TXP1 41
DPC_TXN1 41
DPC_TXP2 41
DPC_TXN2 41
DPC_TXP3 41
DPC_TXN3 41
DPC_AUX
DPC_AUX#
DPC_AUX 41
DPC_AUX# 41
DPC_HPD 41
DOCK_ON#
R2602 100K_5% 0402 I
R1577 1K_5% 0402 NI
R147 1K_5% 0402 NI
R579 4.7K_5% 0402 I
R580 4.7K_5% 0402 I
DOCK_DDC_DATA 25
DOCK_DDC_CLK 25
DOCK_VSYNC 25
DOCK_HSYNC 25
DOCK_R_R
DOCK_G_R
DOCK_B_R
L2601 0603 68nH I
L2602 0603 68nH I
L2603 0603 68nH I
DOCK_R 25
DOCK_G 25
DOCK_B 25
C2602 22pF_NPO_50V 0402 I
C2603 22pF_NPO_50V 0402 I
C2604 22pF_NPO_50V 0402 I
R531 150_1% 0402
R532 150_1% 0402
R533 150_1% 0402 I
UART_DCD# 22,27
UART_RI 22,27
UART_DTR# 22,27
UART_CTS 22,27
UART_RTS# 22,27
UART_DSR# 22,27
UART_TXD 22,27
UART_RXD 22,27
ISO_PREP# 10,13
DOCK_ID1 13
DOCK_ID2 13
R2601 0_5% 0402I
KB_DATA 17
KB_CLK 17
EM_DATA 17
EM_CLK 17
LINE_IN_SENSE 19
LINE_OUT_SENSE 19
A_LINEINL 19
A_LINEINR 19
AOUT_L_DOCK 19
AOUT_R_DOCK 19
DETECT1#
R831 0_5% 0402I
R833 0_5% 0402NI
ON/OFFBTN_KBC# 17,39
PWR_BTN_OUT# 6,12,13,17
R826 0_5% 0402I
23 LED_WLAN_LINK#
WL_LED_ALL# 27,39
LED_WWAN_LINK# 23
R549 68K_5% 0402 I
13,23 WWAN_TRN_OFF#
Q31 2N7002 SOT23-3 I
Q32 2N7002 SOT23-3 I
20 LED_BT
R546 100K_5% 0402 I
Q200A 2N7002DW-7-F NI
Q200B 2N7002DW-7-F NI
R544 10K_5% 0402 NI
ON/OFFBTN_KBC# 17,39
10,13 ISO_PREP#
C445 100nF_X5R_6.3V 0402 NI
R521 10K_5% 0402 I
SER_SHD 27
Q40 2N7002 SOT23-3 I
R225 47K_5% 0402 I
LED_PWR_DOCK
Q30 2N7002 SOT23-3 I
17,39 STBY_LED#
Hon Hai Precision Industry Co. Ltd.
Foxconn eMS Inc.
HNBD R&D
phone: +886-2-2799-6111
Title
DOCKING CONN
Size C
Document Number CURE DIS
Rev 0.1
Page Modified: Thursday, January 20, 2011 14:42:26 (UTC/GMT)
Sheet 26 of 52

FAN CONNECTOR

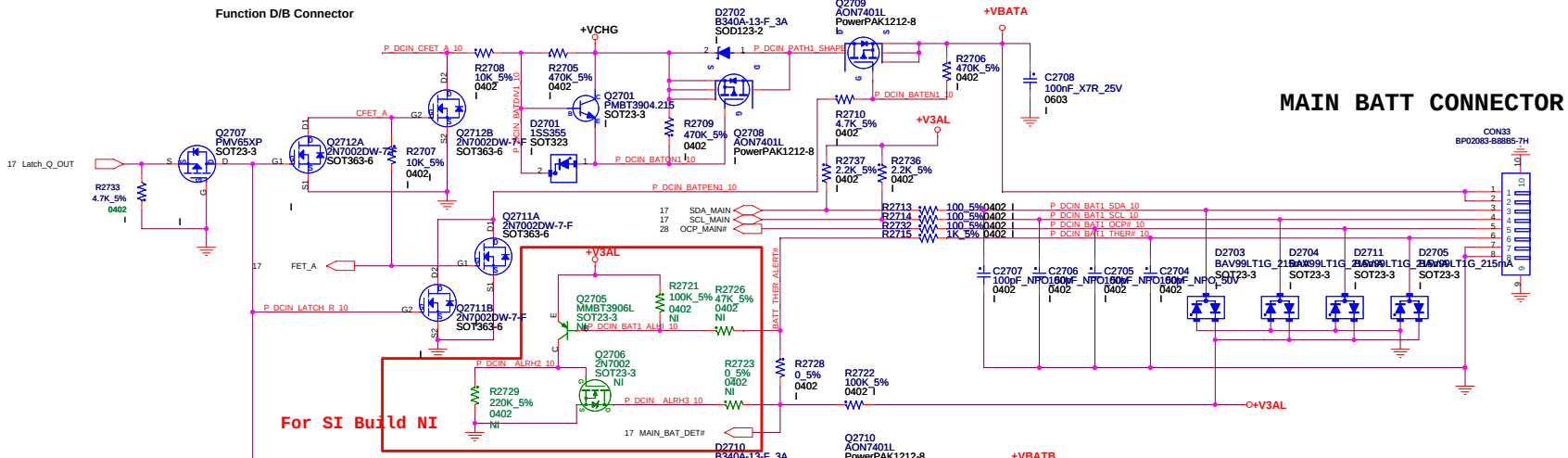


THERMAL SENSOR

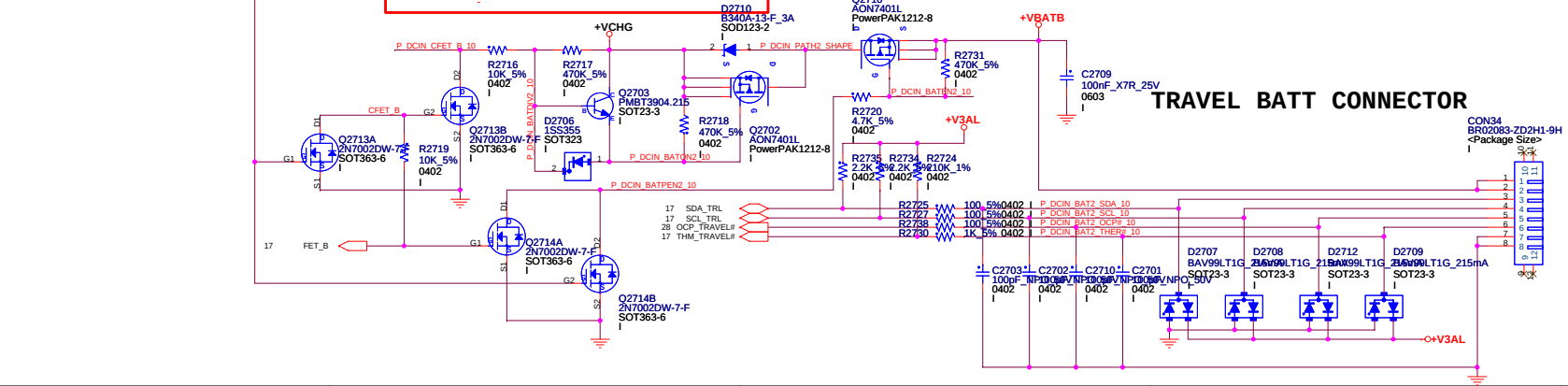


Function D/B Connector

MAIN BATT CONNECTOR



TRAVEL BATT CONNECTOR



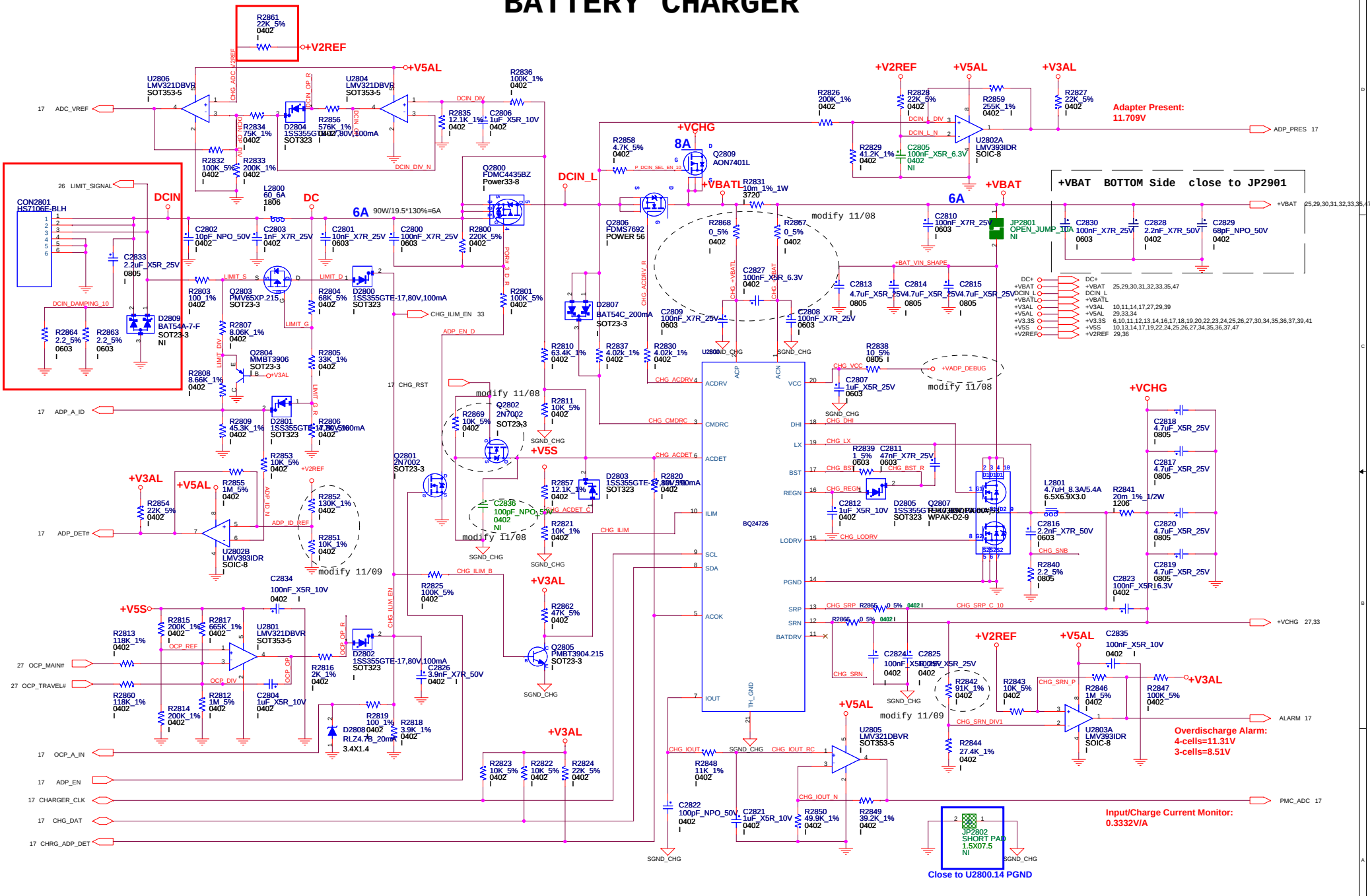
FOXCONN
Hon Hai Precision Industry Co. Ltd.
Foxconn eMS Inc.
HNBD R&D
phone: +886-2-2799-6111

Title: DCIN/Battery/OCP/FAN

Size: Custom | Document Number: CURE DIS | Rev: 0.1

Page Modified: Thursday, January 20, 2011 14:47:57 (UTC/GMT) | Sheet 27 of 52

BATTERY CHARGER



Foxconn eMS Inc. HNBD R&D	Hon Hai Precision Industry Co. Ltd. phone: +886-2-2799-6111
Title	PWR_Charger
Size C	Document Number CURE UMA Rev 0.1
Page Modified: Thursday, January 20, 2011 11:17:50 (UTC/GMT)	Sheet 28 of 52

+V5CP / +V3.3A POWER SUPPLY

+V5A:

1. I/P Current:
   Iin=Vo*Io/(0.75*Vin)=4.15A
2. Ripple Current:
   Irip=5.63A
3. Ripple Voltage:
   ESR/1=15mohm
   Vrip=84.45mV
4. Inductor Spec:
   Isat=14A
   Idc=8A
   DCR=20mohm
5. MOSFET Spec:
   H-side MOSFET: RJK0389DPA
   Rds(ON)=11.8mohm (Vgs=4.5 V)
   I cont = 15A (T =25)
   I peak = 60A (Pause =10 us)
6. Frequency:
   F=300KHz
7. OCP:
   Set = R2904 to 71.5K
   Vtrip= (R2904*10uA/9)-24mV=0.0554mV
   Iocp=Vtrip/Rdson + Iripple/2 = 8.1A

+V3.3A:

1. I/P Current:
   Iin=Vo*Io/(0.75*Vin)=2.35A
2. Ripple Current:
   Irip=2.21A
3. Ripple Voltage:
   ESR/1=15mohm
   Vrip=33.15mV
4. Inductor Spec:
   Isat=13.5A
   Idc=6A
   DCR=30mohm
5. MOSFET Spec:
   L-side MOSFET: RJK0389DPA
   Rds(ON)=10.5mohm (Vgs=4.5 V)
   I cont = 20A (T =25)
   I peak = 80A (Pause =10 us)
6. Frequency:
   F=375KHz
7. OCP:
   Set = R2903 to 80.6K
   Vtrip= (R2903*10uA/9)-24mV=0.0655mV
   Iocp=Vtrip/Rdson + Iripple/2 = 7.4A

Thermistor must be placed away from heat source

Imax=4.5A
OCP=7.4A

Imax=5A
OCP=8.1A

Vref=2.0V

U2901 RT8205CGQW QFN-24

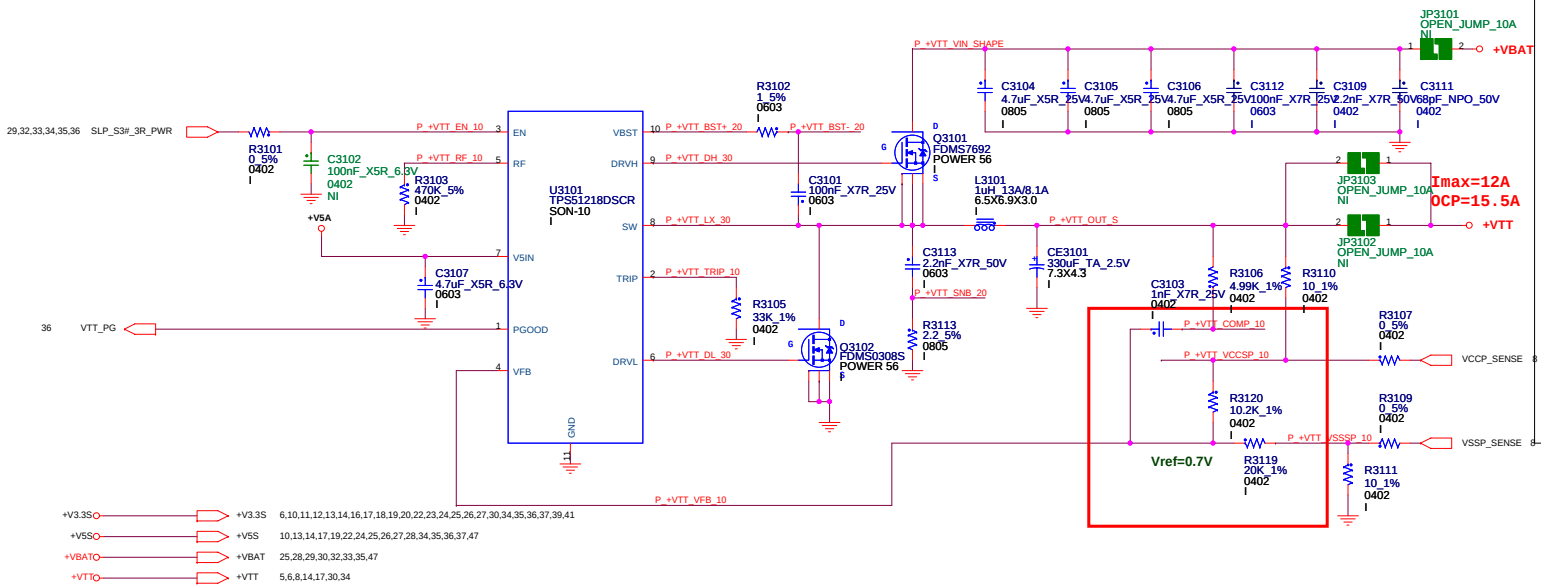
Q2902 RJK0389DPA-00#J53 WPAK-D2-9

Q2901 RJK0389DPA-00#J53 WPAK-D2-9

modify 11/11

Foxconn eMS Inc. HNBD R&D	Hon Hai Precision Industry Co. Ltd. phone: +886-2-2799-6111
Title: 5V/3.3V	
Size: C	Document Number: CURE DIS
Rev: 0.1	
Page Modified: Thursday, February 17, 2011 14:47:39 (UTC/GMT)	Sheet 29 of 52

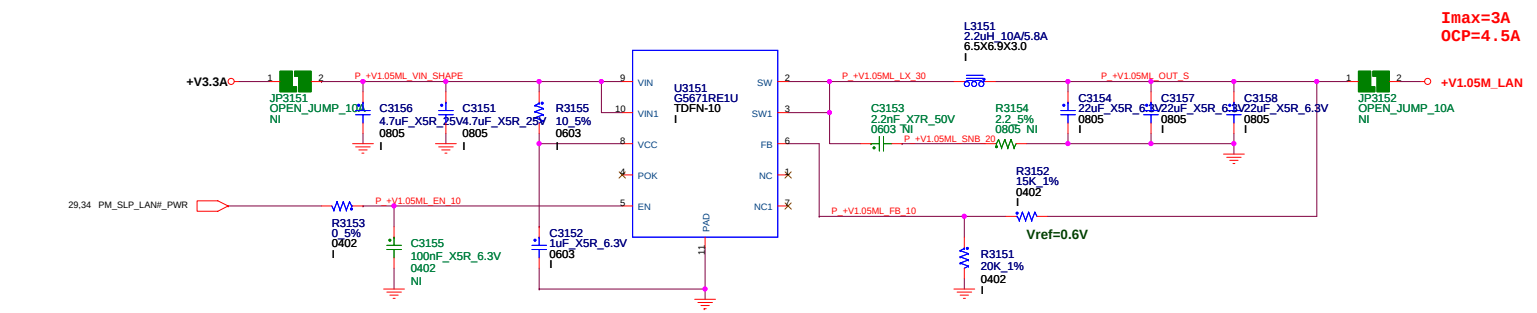
+VTT POWER SUPPLY



+V1.05M_LAN:

1. I/P Current:
   - Iin=Vo*Io/(0.75*Vin)=1.87A Irms=2.75A
2. Ripple Current:
   - Irip=3.43A
3. Ripple Voltage:
   - ESR/1=9mohm
   - Vrip=30.87mV
4. Inductor Spec:
   - Isat=36A
   - Idc=18A
   - DCR=3.3mohm
5. MOSFET Spec:
   - H-side MOSFET: FDMS7692 L-side MOSFET: FDMS0308S
   - Rds(ON)=9.5mohm (Vgs=4.5 V) Rds(ON)=3.0mohm (Vgs=4.5 V)
   - I cont = 13A (T =25) I cont = 22A (T =25)
   - I peak = 50A (Pause =10 us) I peak = 150A (Pause =10 us)
6. Frequency:
   - F=290KHz (R3103=470K)
7. OCP:
   - Set = R3105 to 33K
   - Vtrip= R3105*10uA=0.33V
   - Iocp=(Vtrip/8*Rdson) + Iripple/2 = 15.5A

+V1.05M_LAN POWER SUPPLY



+V1..05M_LAN:

1. I/P Current:
   - Iin=Vo*Io/(0.75*Vin)=0.84A
2. Ripple Current:
   - Irip=0.38A
3. Ripple Voltage:
   - ESR/3=3.3mohm
   - Vrip=1.25mV
4. Inductor Spec:
   - Isat=14A
   - Idc=8A
   - DCR=20mohm
5. MOSFET Spec:
   - H-side P-MOSFET: L-side N-MOSFET:
   - Rds(ON)=110mohm (Vgs=4.5 V) Rds(ON)=75mohm (Vgs=4.5 V)
6. Frequency:
   - F=1MHz (min=800KHz, max=1.2MHz)
7. OCP:
   - Iocp=4A(min)/4.5A(typ)/5A(max)

+VBAT	+VBAT	25,28,29,30,32,33,35,47
+V3.3S	+V3.3S	6,10,11,12,13,14,16,17,18,19,20,22,23,24,25,26,27,30,34,35,36,37,39,41
+V1.05M_LAN	+V1.05M_LAN	21,34,47
+V5A	+V5A	14,23,24,26,30,32,33,34,35,36,47

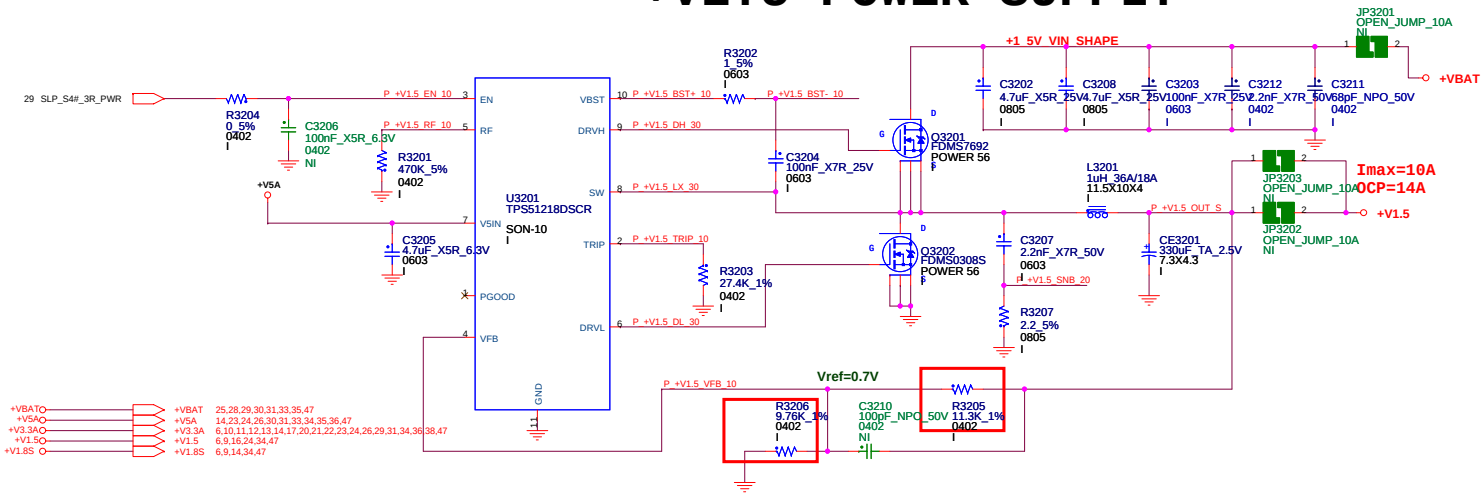
Foxconn eMS Inc.
HNBD R&D
Hon Hai Precision Industry Co. Ltd.
phone: +886-2-2799-6111

Title: VTT/+V1.05M

Size: C | Document Number: CURE DIS | Rev: 0.1

Page Modified: Thursday, January 20, 2011 11:17:56 (UTC/GMT) | Sheet 31 of 52

+V1.5 POWER SUPPLY



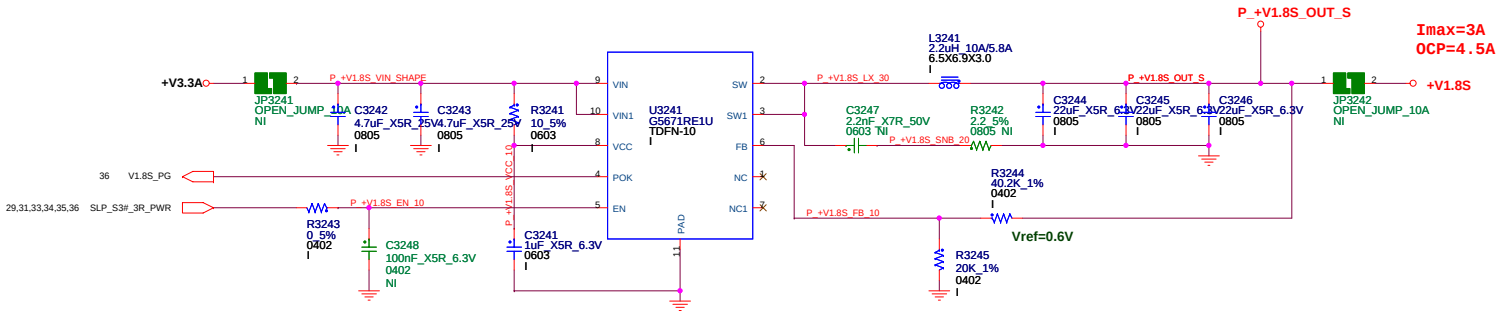
+V1.5:

1. I/P Current:
   Iin=Vo*Io/(0.75*Vin)=2.22A
2. Ripple Current:
   Irip=4.77A
3. Ripple Voltage:
   ESR/1=9mohm
   Vrip=42.93mV
4. Inductor Spec:
   Isat=36A
   Idc=18A
   DCR=3.3mohm
5. MOSFET Spec:

H-side MOSFET: FDMS7692	L-side MOSFET: FDMS0308S
Rds(ON)=9.5mohm (Vgs=4.5 V)	Rds(ON)=3.0mohm (Vgs=4.5 V)
I cont = 13A (T =25)	I cont = 22A (T =25)
I peak = 50A (Pause =10 us)	I peak = 150A (Pause =10 us)

6. Frequency:
   F=290KHz (R3201=470K)
7. OCP:
   Set = R3203 to 27.4K
   Vtrip= R3203*10uA=0.274V
   Iocp=(Vtrip/8*Rdson) + Iripple/2 = 14A

+V1.8S POWER SUPPLY



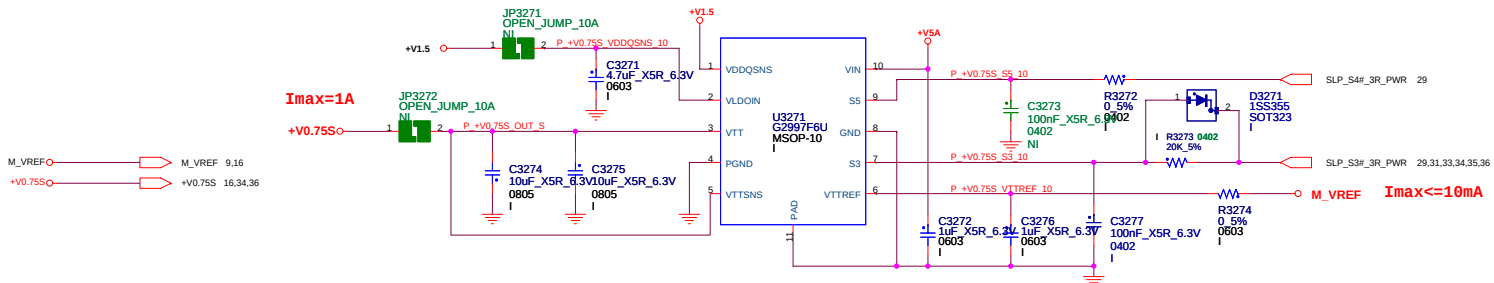
+V1.8S:

1. I/P Current:
   Iin=Vo*Io/(0.75*Vin)=1.44A
2. Ripple Current:
   Irip=0.53A
3. Ripple Voltage:
   ESR/3=3.3mohm
   Vrip=1.75mV
4. Inductor Spec:
   Isat=14A
   Idc=8A
   DCR=20mohm
5. MOSFET Spec:

H-side P-MOSFET:	L-side N-MOSFET:
Rds(ON)=110mohm (Vgs=4.5 V)	Rds(ON)=75mohm (Vgs=4.5 V)

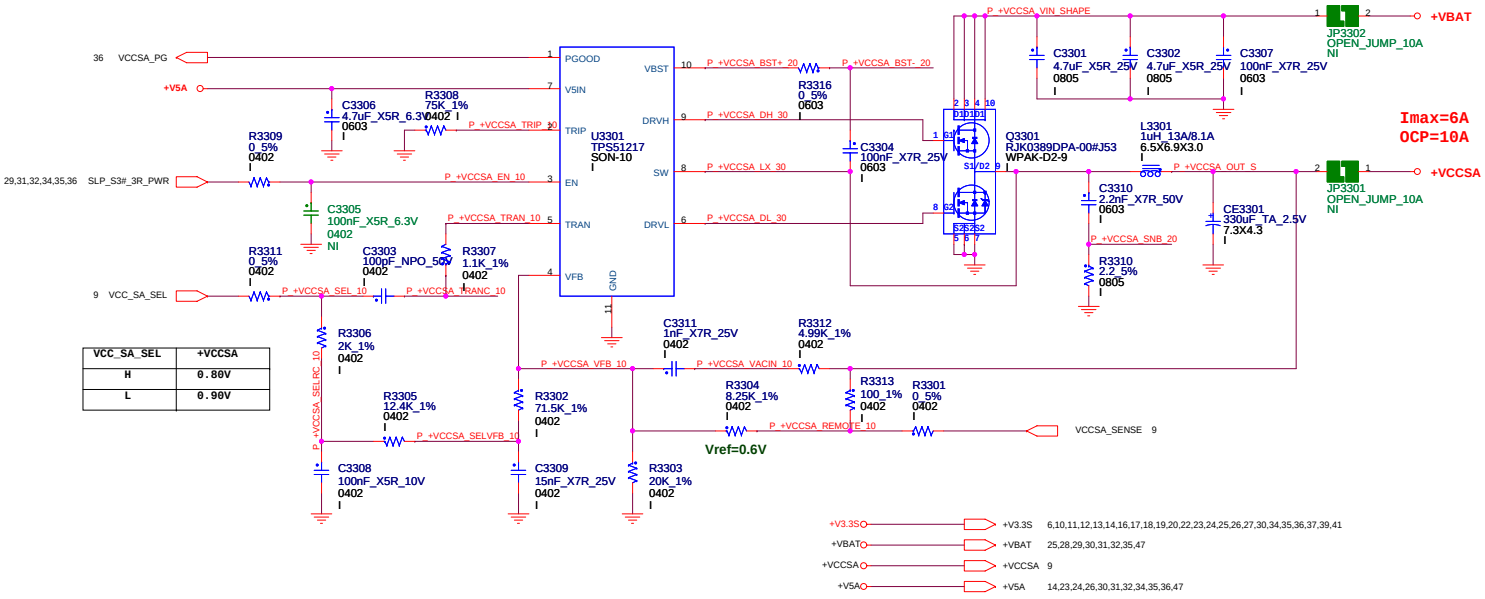
6. Frequency:
   F=1MHz (min=800KHz, max=1.2MHz)
7. OCP:
   Iocp=4A(min)/4.5A(typ)/5A(max)

+V0.75S POWER SUPPLY



Foxconn	Hon Hai Precision Industry Co. Ltd.
Foxconn eMS Inc.	
HNBD R&D	phone: +886-2-2799-6111
Title	1.5VDDR3/0.75V/V1.8S
Size: C	Document Number: CURE DIS
Rev: 0.1	
Page Modified: Thursday, January 20, 2011 11:17:56 (UTC/GMT)	Sheet 32 of 52

+VCCSA POWER SUPPLY



VCC_SA_SEL	+VCCSA
H	0.80V
L	0.90V

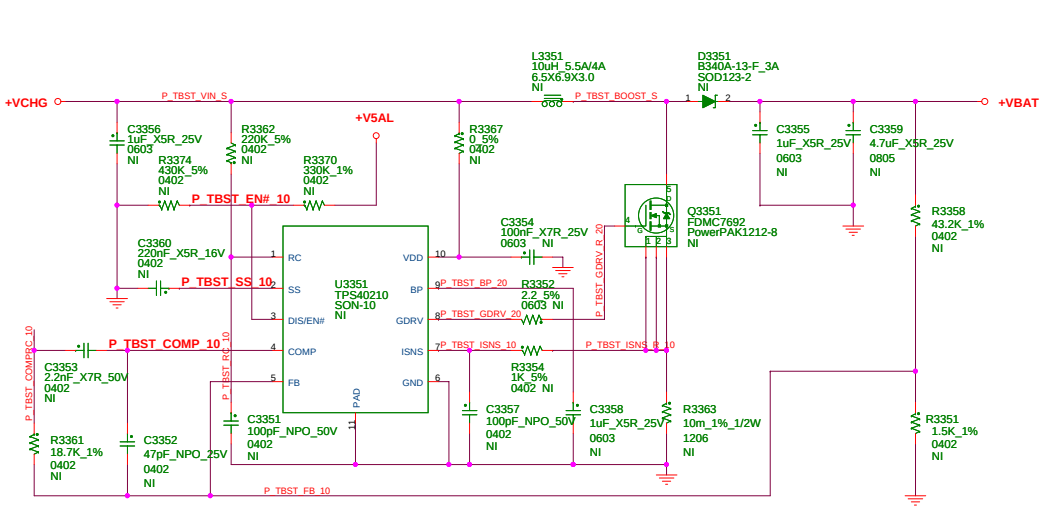
+VCCSA:

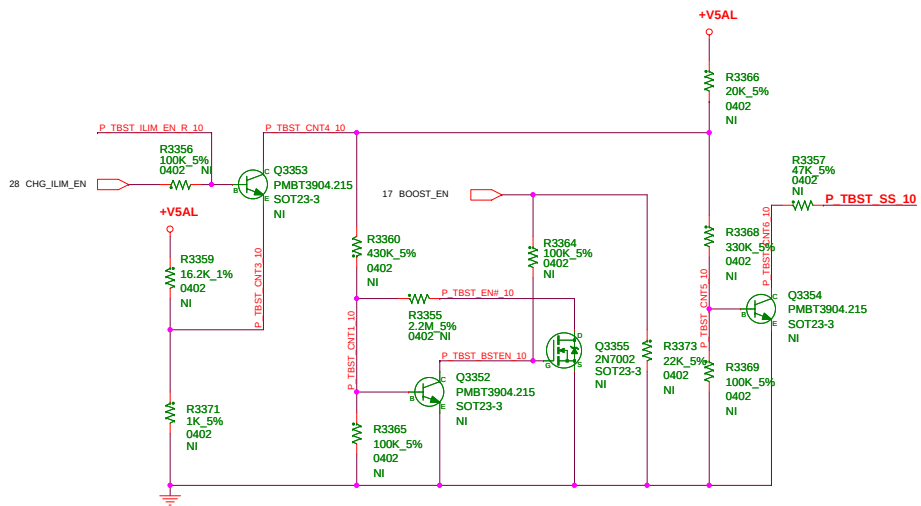
1. I/P Current:
   Iin=Vo*Io/(0.75*Vin)=0.76A
2. Ripple Current:
   Irip=2.39A
3. Ripple Voltage:
   ESR/1=9mohm
   Vrip=21.51mV
4. Inductor Spec:
   Isat=36A
   Idc=18A
   DCR=3.3mohm
5. MOSFET Spec:

H-side MOSFET: RJK0389DPA	L-side MOSFET: RJK0389DPA
Rds(ON)=11.8mohm (Vgs=4.5 V)	Rds(ON)=10.5mohm (Vgs=4.5 V)
I cont = 15A (T =25)	I cont = 20A (T =25)
I peak = 60A (Pause =10 us)	I peak = 80A (Pause =10 us)

6. Frequency:
   F=340KHz
7. OCP:
   Set = R3308 to 75K
   Vtrip= R3308*10uA=0.75V
   Iocp=(Vtrip/8*Rdson) + Iripple/2 = 10A

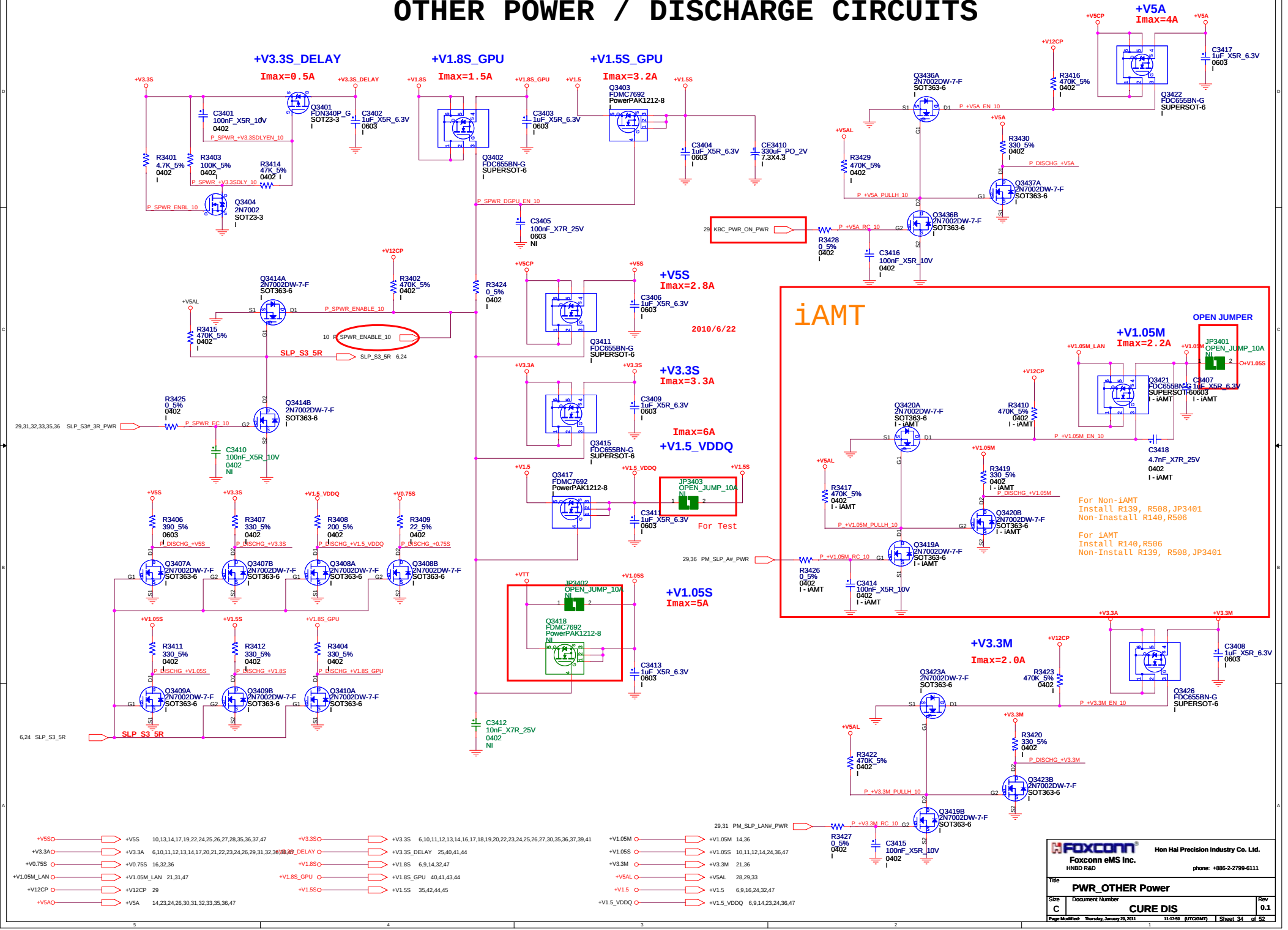
BOOST CIRCUIT





Foxconn eMS Inc. HNBD R&D	Hon Hai Precision Industry Co. Ltd. phone: +886-2-2799-6111		
Title: VCCSA			
Size: C	Document Number: CURE UMA		Rev: 0.1
Page Modified: Thursday, January 20, 2011 11:17:56 (UTC/GMT)			Sheet 33 of 52

OTHER POWER / DISCHARGE CIRCUITS



+V5S	+V5S 10,13,14,17,19,22,24,25,26,27,28,35,36,37,47	+V3.3S	+V3.3S 6,10,11,12,13,14,16,17,18,19,20,22,23,24,25,26,27,30,35,36,37,39,41
+V3.3A	+V3.3A 6,10,11,12,13,14,17,20,21,22,23,24,26,29,31,32,33,34,37	+V3.3S_DELAY	+V3.3S_DELAY 25,40,41,44
+V0.75S	+V0.75S 16,32,36	+V1.8S	+V1.8S 6,9,14,32,47
+V1.05M_LAN	+V1.05M_LAN 21,31,47	+V1.8S_GPU	+V1.8S_GPU 40,41,43,44
+V12CP	+V12CP 29	+V1.5S	+V1.5S 35,42,44,45
+V5A	+V5A 14,23,24,26,30,31,32,33,35,36,47		

+V1.05M	+V1.05M 14,36
+V1.05S	+V1.05S 10,11,12,14,24,36,47
+V3.3M	+V3.3M 21,36
+V5AL	+V5AL 28,29,33
+V1.5	+V1.5 6,9,16,24,32,47
+V1.5_VDDQ	+V1.5_VDDQ 6,9,14,23,24,36,47

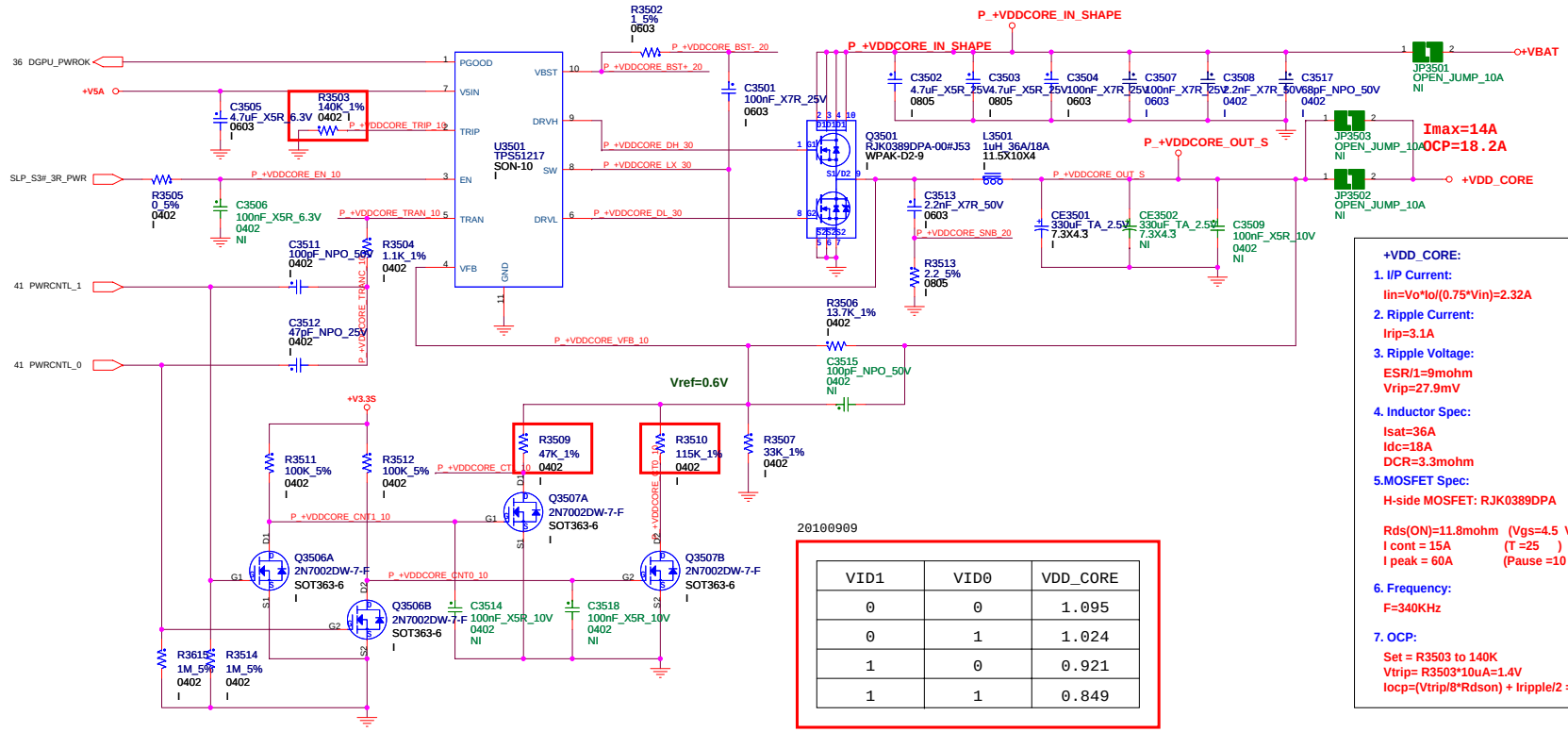
Foxconn
Foxconn eMS Inc.
HNBD R&D
Hon Hai Precision Industry Co. Ltd.
phone: +886-2-2799-6111

Title: PWR_OTHER Power

Size: C | Document Number: CURE DIS | Rev: 0.1

Page Modified: Thursday, January 20, 2011 11:17:56 (UTC/GMT) | Sheet 34 of 52

+VDD_CORE POWER SUPPLY



20100909

VID1	VID0	VDD_CORE
0	0	1.095
0	1	1.024
1	0	0.921
1	1	0.849

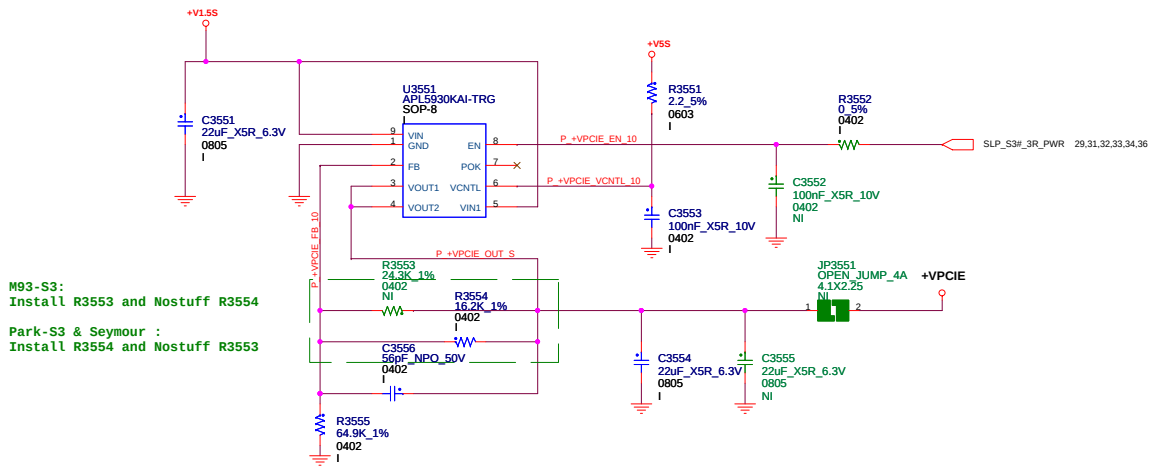
+VDD_CORE:

1. I/P Current:
   Iin=Vo*Io/(0.75*Vin)=2.32A
2. Ripple Current:
   Irip=3.1A
3. Ripple Voltage:
   ESR/1=9mohm
   Vrip=27.9mV
4. Inductor Spec:
   Isat=36A
   Idc=18A
   DCR=3.3mohm
5. MOSFET Spec:

H-side MOSFET: RJK0389DPA	L-side MOSFET: RJK0389DPA
Rds(ON)=11.8mohm (Vgs=4.5 V)	Rds(ON)=10.5mohm (Vgs=4.5 V)
I cont = 15A (T =25)	I cont = 20A (T =25)
I peak = 60A (Pause =10 us)	I peak = 80A (Pause =10 us)

6. Frequency:
   F=340KHz
7. OCP:
   Set = R3503 to 140K
   Vtrip= R3503*10uA=1.4V
   Iocp=(Vtrip/8*Rdson) + Iripple/2 = 18.2A

+VPCIE POWER SUPPLY



M93-S3:
Install R3553 and Nostuff R3554

Park-S3 & Seymour :
Install R3554 and Nostuff R3553

+VBAT	+VBAT	25,28,29,30,31,32,33,47
+V5A	+V5A	14,23,24,26,30,31,32,33,34,36,47
+V5S	+V5S	10,13,14,17,19,22,24,25,26,27,28,34,36,37,47
+V3.3S	+V3.3S	6,10,11,12,13,14,16,17,18,19,20,22,23,24,25,26,27,30,34,36,37,39,41
+V1.5S	+V1.5S	34,42,44,45
+VDD_CORE	+VDD_CORE	44
+VPCIE	+VPCIE	40,41,43,44

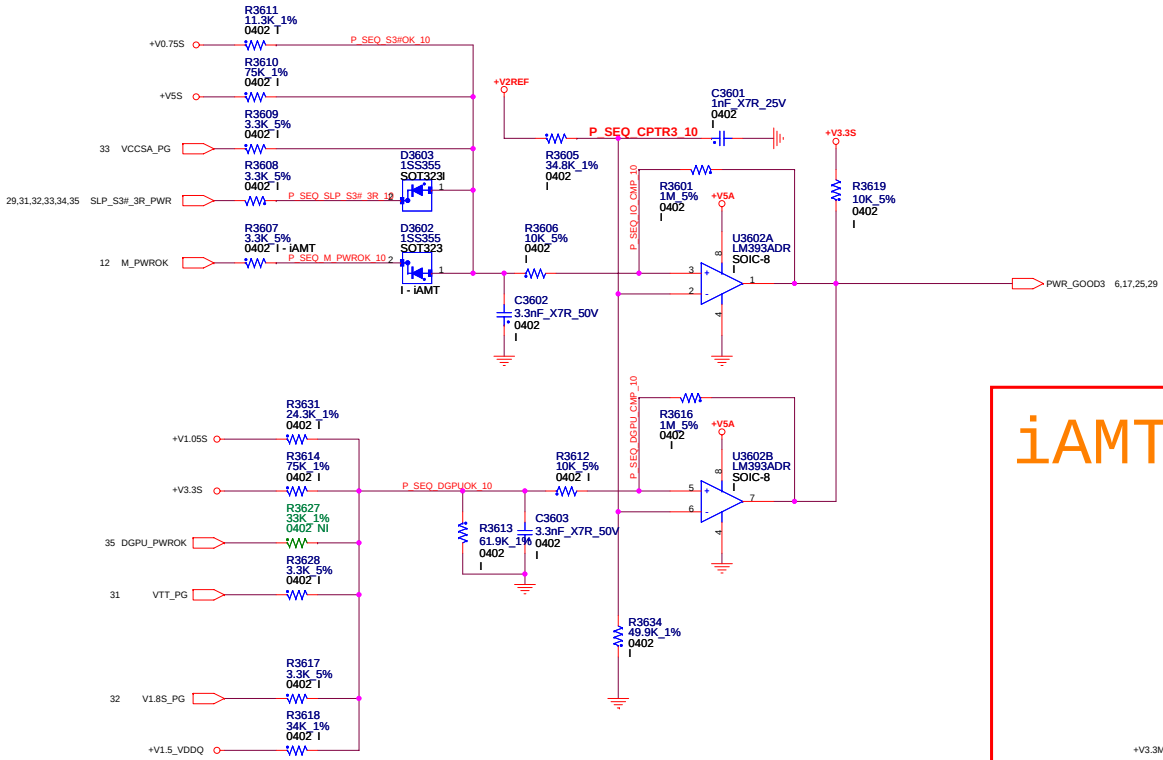
Foxconn
Foxconn eMS Inc.
HNBD R&D
Hon Hai Precision Industry Co. Ltd.
phone: +886-2-2799-6111

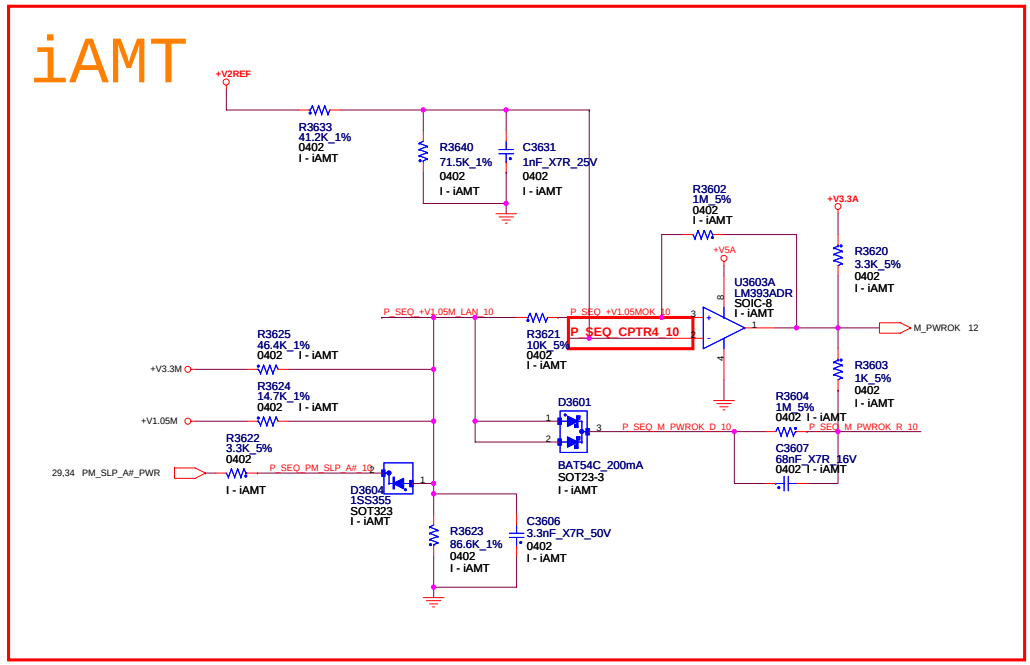
Title: ATVDD/+VPCIE

Size: C | Document Number: CURE DIS | Rev: 0.1

Page Modified: Thursday, January 20, 2011 11:17:56 (UTC/GMT) | Sheet 35 of 52

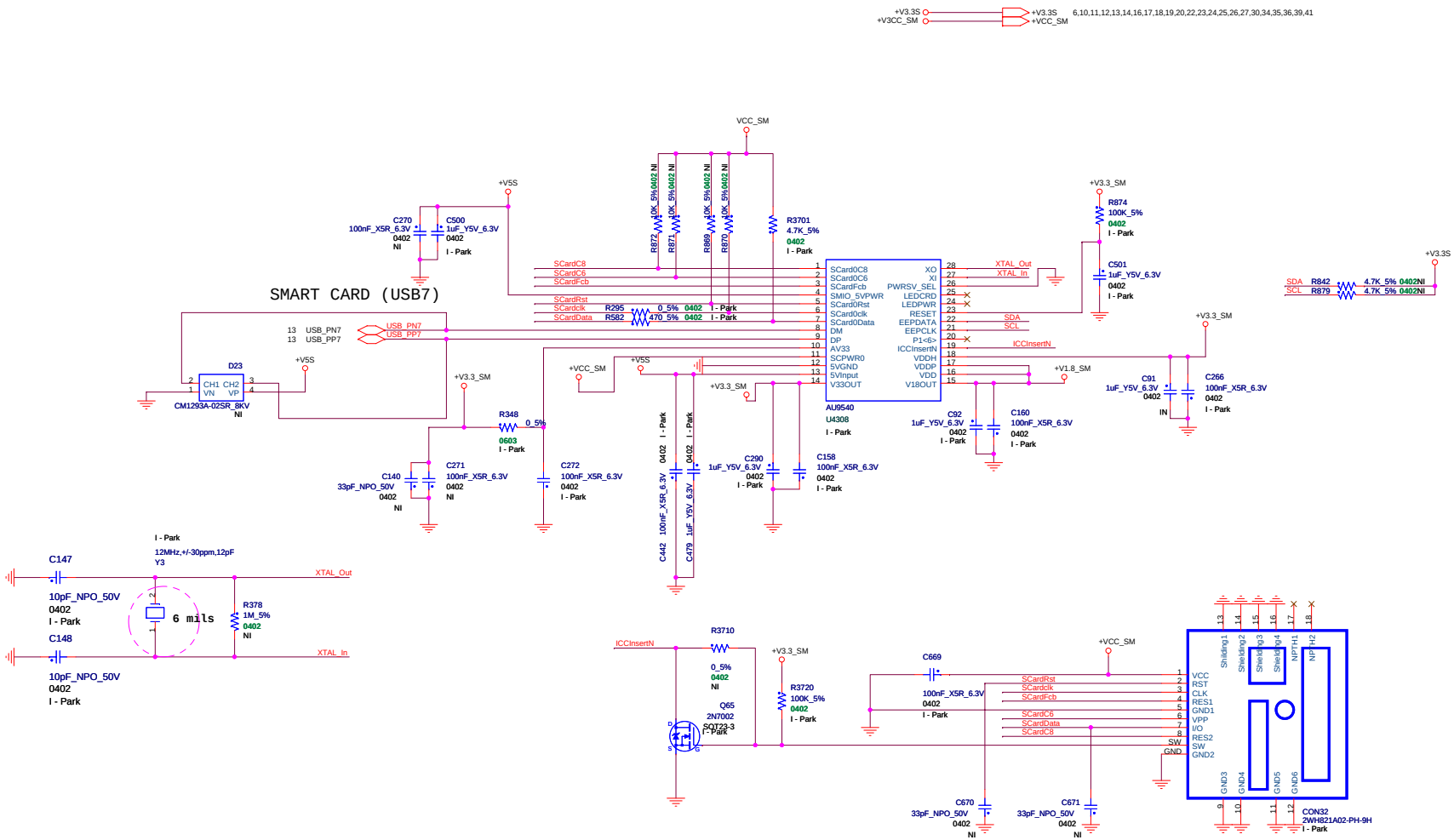
POWER SEQUENCE



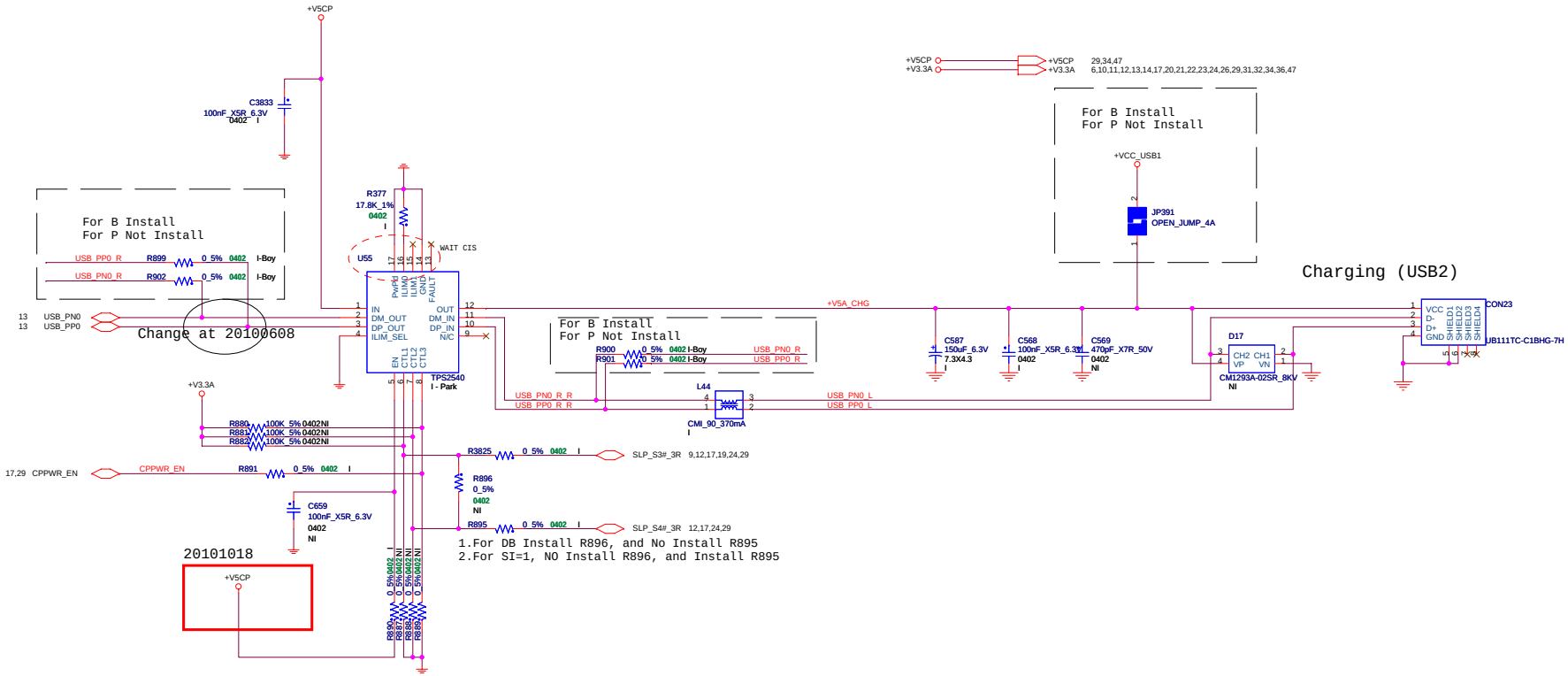


+V2REF	+V2REF	28,29
+V5A	+V5A	14,23,24,26,30,31,32,33,34,35,47
+V5S	+V5S	10,13,14,17,19,22,24,25,26,27,28,34,35,37,47
+V3.3S	+V3.3S	6,10,11,12,13,14,16,17,18,19,20,22,23,24,25,26,27,30,34,35,37,39,41
+V1.5_VDDQ	+V1.5_VDDQ	6,9,14,23,24,34,47
+V0.75S	+V0.75S	16,32,34
+V1.05S	+V1.05S	10,11,12,14,24,34,47
+V1.8S	+V1.8S	6,9,14,32,34,47
+V3AL	+V3AL	10,11,14,17,27,28,29,39
+V5AL	+V5AL	28,29,33,34
+V3.3A	+V3.3A	6,10,11,12,13,14,17,20,21,22,23,24,26,29,31,32,34,38,47
+V1.05M	+V1.05M	14,34
+V3.3M	+V3.3M	21,34

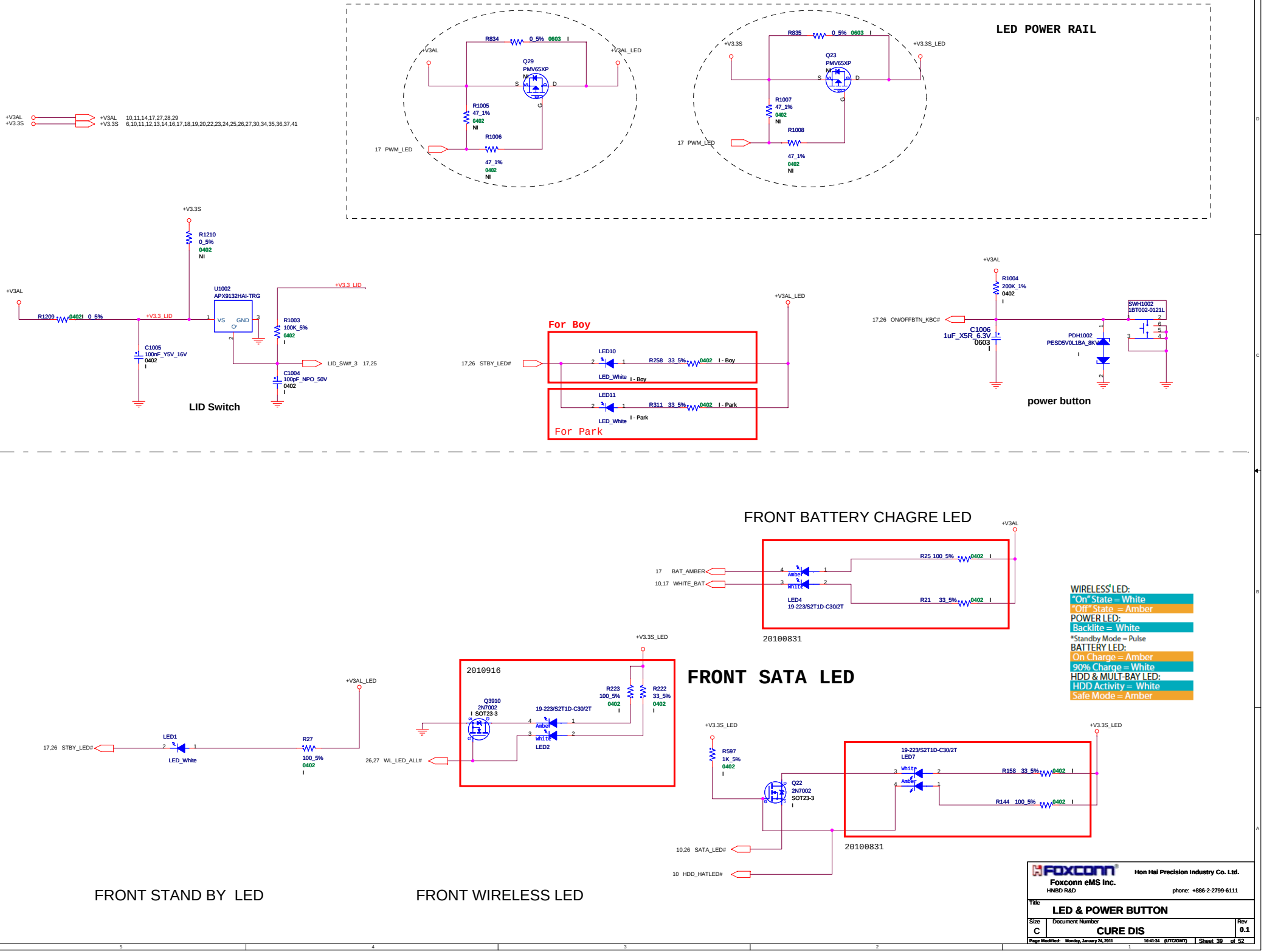
FOXCONN	Hon Hai Precision Industry Co. Ltd.		
Foxconn eMS Inc.			
HNBD R&D	phone: +886-2-2799-6111		
Title	SEQUENCE		
Size	Document Number		Rev
C	CURE DIS		0.1
Page Modified: Thursday, January 20, 2011	11:17:56 (UTC/GMT)	Sheet 36 of 52	

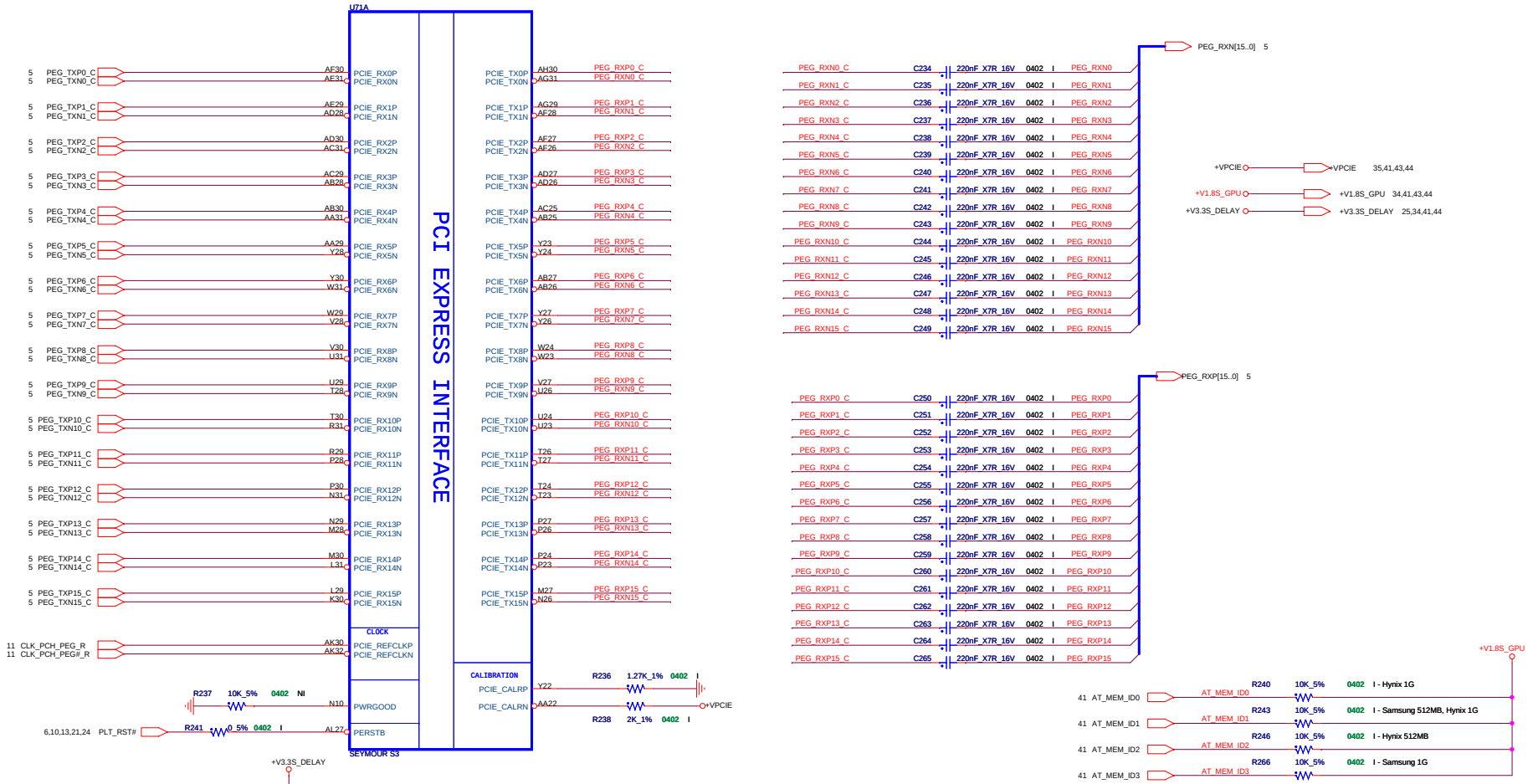


FOXCONN	Hon Hai Precision Industry Co. Ltd.		
Foxconn eMS Inc.			
HNBD R&D	phone: +886-2-2799-6111		
Title	SMART CARD		
Size	Document Number		Rev
C	CURE DIS		0.1
Page Modified: Monday, January 24, 2011 16:26:37 (UTC/GMT)		Sheet 37 of 52	



FOXCONN	Hon Hai Precision Industry Co. Ltd.	
Foxconn eMS Inc.		
HNBD R&D	phone: +886-2-2799-6111	
Title	USB CHARGER	
Size: C	Document Number: CURE DIS	Rev: 0.1
Page Modified: Thursday, January 20, 2011 11:21:44 (UTC/GMT)	Sheet 38 of 52	


LED POWER RAIL
+V3AL
+V3.3S
+V3AL 10,11,14,17,27,28,29
+V3.3S 6,10,11,12,13,14,16,17,18,19,20,22,23,24,25,26,27,30,34,35,36,37,41
R834 0_5% 0603
Q29 PMV65XP
R1005 47_1% 0402 NI
R1006 47_1% 0402 NI
17 PWM_LED
+V3AL_LED
R835 0_5% 0603
Q23 PMV65XP
R1007 47_1% 0402 NI
R1008 47_1% 0402 NI
+V3.3S_LED
R1210 0_5% 0402 NI
R1209 0402I 0_5%
U1002 APX9132HAI-TRG
VS GND
R1003 100K_5% 0402
C1005 100nF_Y5V_16V 0402
C1004 100pF_NPO_50V 0402
+V3.3_LID
LID_SW#_3 17,25
LID Switch
For Boy
LED10
R258 33_5% 0402 I - Boy
LED_White
I - Boy
LED11
R311 33_5% 0402 I - Park
I - Park
For Park
17,26 STBY_LED#
R1004 200K_1% 0402
C1006 1uF_X5R_6.3V 0603
17,26 ON/OFFBTN_KBC#
PDH1002 PESD5V0L1BA_8KV
SWH1002 1BT002-0121L
power button
FRONT BATTERY CHAGRE LED
17 BAT_AMBER
10,17 WHITE_BAT
LED4 19-223/S2T1D-C30/2T
R25 100_5% 0402
R21 33_5% 0402
20100831
WIRELESS LED:
"On" State = White
"Off" State = Amber
POWER LED:
Backlite = White
*Standby Mode = Pulse
BATTERY LED:
On Charge = Amber
90% Charge = White
HDD & MULT-BAY LED:
HDD Activity = White
Safe Mode = Amber
FRONT SATA LED
2010916
Q3910 2N7002 SOT23-3
19-223/S2T1D-C30/2T
R223 100_5% 0402
R222 33_5% 0402
LED2
26,27 WL_LED_ALL#
LED1
R27 100_5% 0402
LED_White
R597 1K_5% 0402
Q22 2N7002 SOT23-3
LED7
R158 33_5% 0402
R144 100_5% 0402
10,26 SATA_LED#
10 HDD_HATLED#
FRONT STAND BY LED
FRONT WIRELESS LED
Hon Hai Precision Industry Co. Ltd.
Foxconn eMS Inc.
HNBD R&D
phone: +886-2-2799-6111
Title
LED & POWER BUTTON
Size C
Document Number CURE DIS
Rev 0.1
Page Modified: Monday, January 24, 2011 16:41:34 (UTC/GMT)
Sheet 39 of 52



Strap for DDR3

MEM_ID3	MEM_ID2	MEM_ID1	MEM_ID0	2011 HP PLAN
0	0	0	0	Samsung (E-die, 64Mx16) K4W1G1646E-HC12
0	0	0	1	Hynix (Orion-die, 64Mx16) H5TQ1G63BFR-12C
0	0	1	0	Samsung (F 36nm die, 64Mx16, 512MB) - K4W1G1646G-BC11
0	1	0	0	Hynix (Vega 44nm die, 64Mx16, 512MB) - H5TQ1G63DFR-11C
1	0	0	0	Samsung (C die, 128Mx16, 1Gb) K4W2G1646C-HC11
0	0	1	1	Hynix (Vega die, 128Mx16, 1GB) H5TQ2G63BFR-11C

Brand	Install	Non - Install
Hynix 512MB	R246	R243, R240, R266
Hynix 1G	R240, R243	R246, R266
Samsung 512MB	R243	R246, R240, R266
Samsung 1G	R266	R243, R246, R240

If no ROM attached, GPIO[13:12:11] ;
CONFIG{2:0}
controls the memory aperture size.

Reserved 011
256MB 001

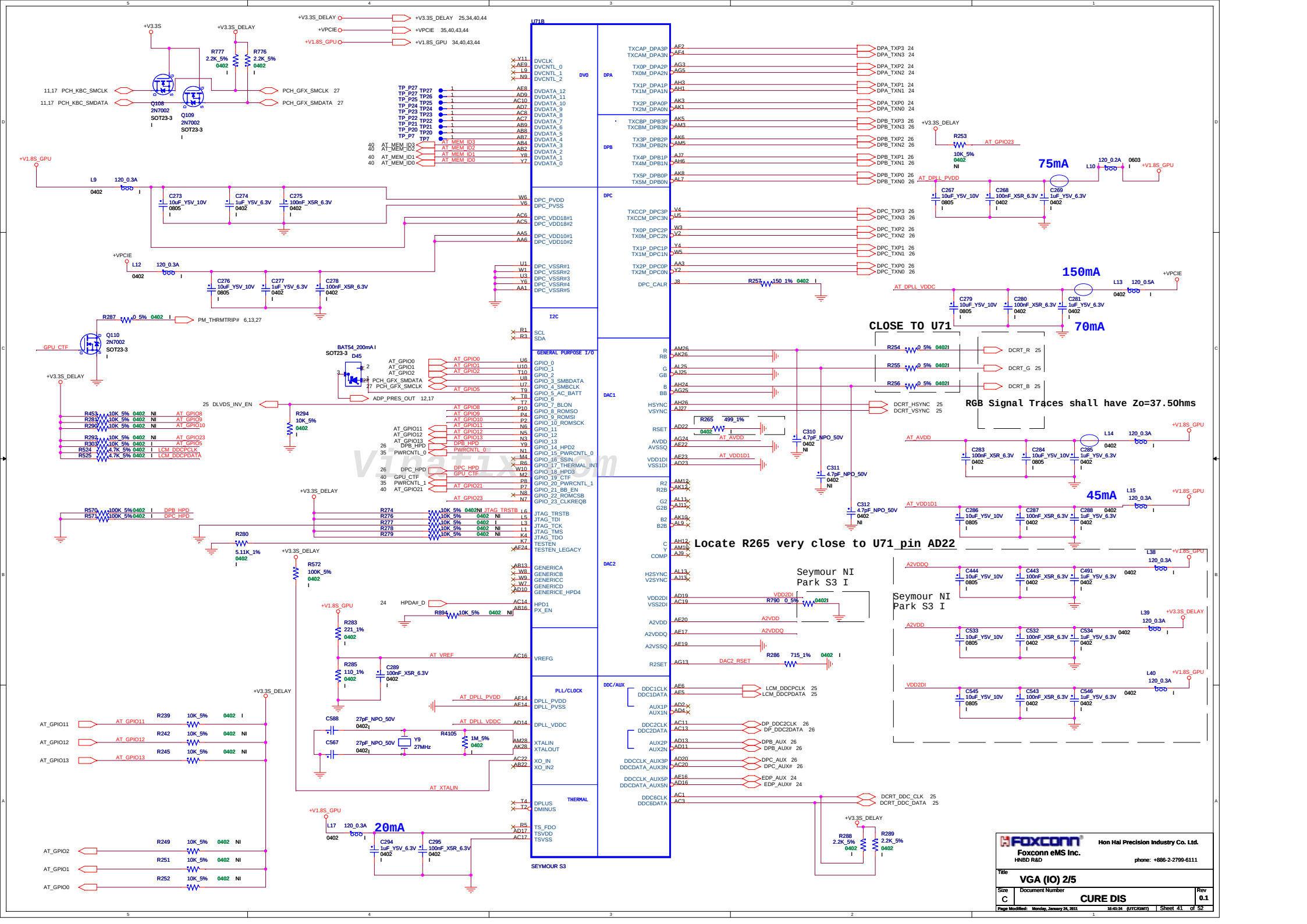
HSYNC , VSYNC
AUD[1] , AUD[0]

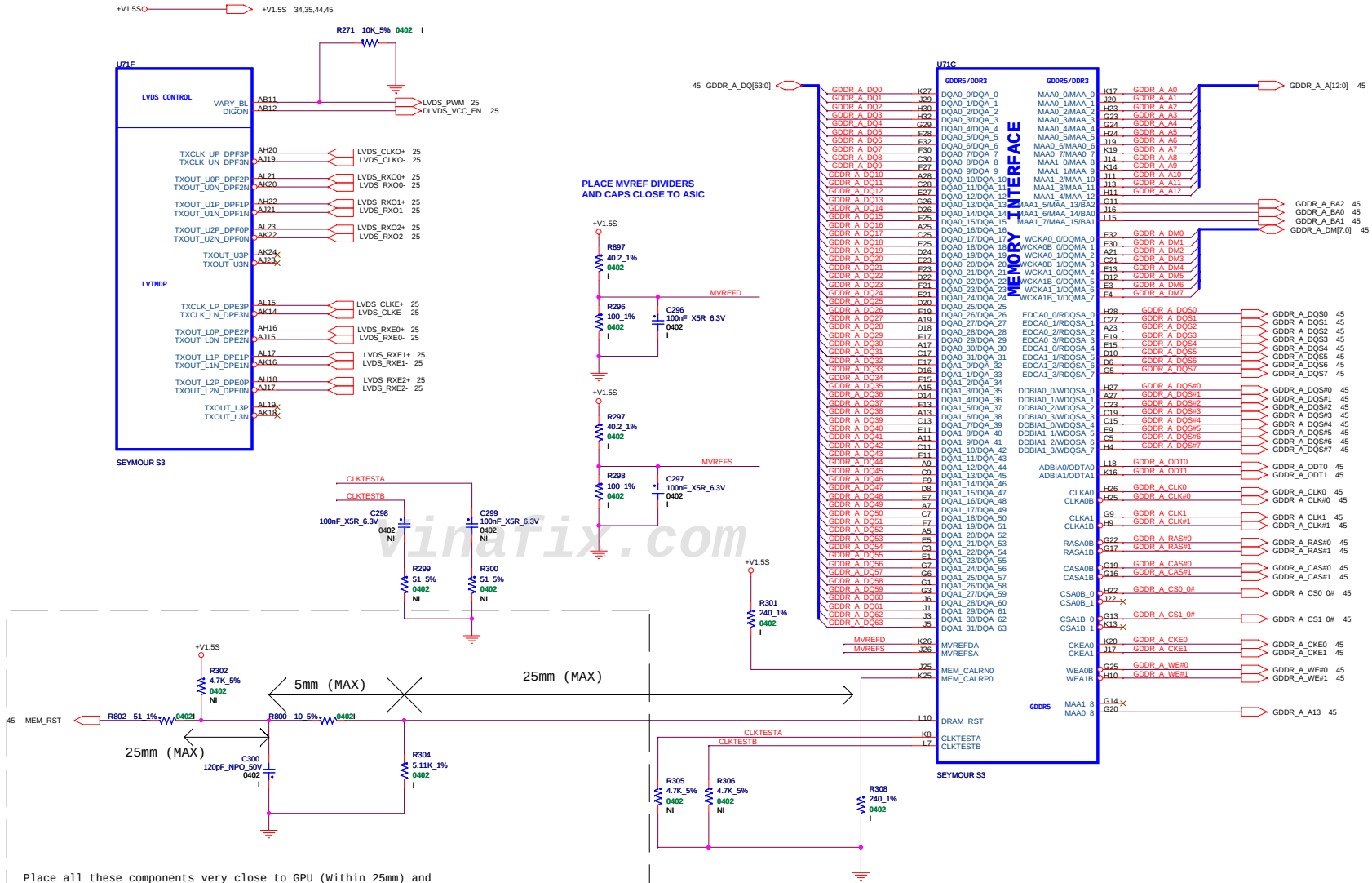
0,0 No audio function
0,1 Audio for DisplayPort and HDMI if dongle is detected
1,0 Audio for DisplayPort only
1,1 Audio for both DisplayPort and HDMI

GPIO 0 : PCIE FULL TX OUTPUT SWING
GPIO 1 : PCIE TRANSMITTER DE-EMPHASIS ENABLED
GPIO 2: PCIE GEN2 ENABLED

Foxconn eMS Inc.
HNBD R&D
Hon Hai Precision Industry Co. Ltd.
phone: +886-2-2799-6111

Title: VGA (PCI-E/STRAP) 1/5
Size: C
Document Number: CURE DIS
Rev: 0.1
Page Modified: Thursday, January 20, 2011 11:17:56 (UTC/GMT)
Sheet 40 of 52

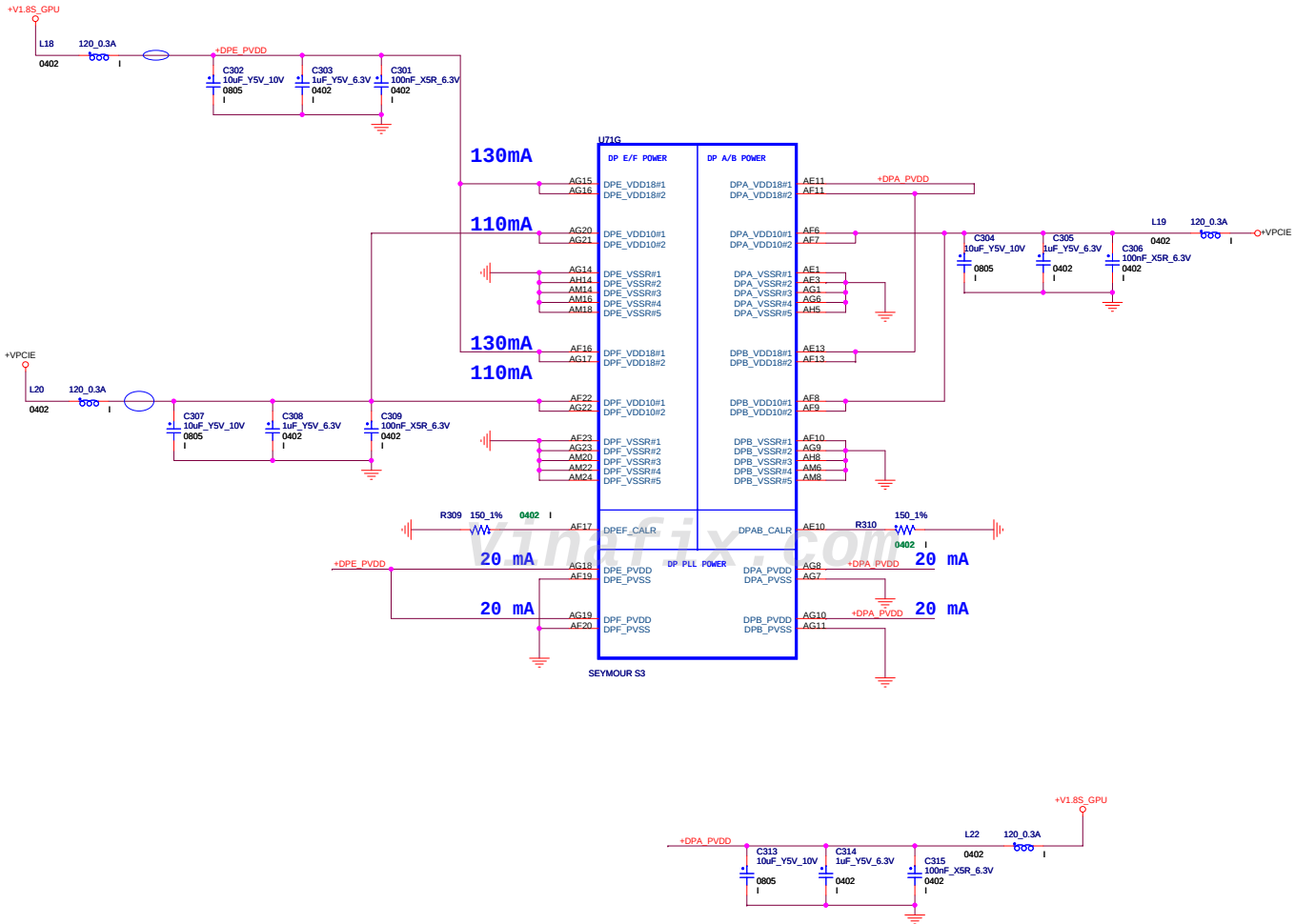

+V3.3S_DELAY +V3.3S_DELAY 25,34,40,44
+VPCIE +VPCIE 35,40,43,44
+V1.8S_GPU +V1.8S_GPU 34,40,43,44
U71B
SEYMOUR S3
DVO
DPA
DPB
DPC
DAC1
DAC2
DDC/AUX
I2C
GENERAL PURPOSE I/O
PLL/CLOCK
THERMAL
75mA
150mA
70mA
45mA
20mA
CLOSE TO U71
RGB Signal Traces shall have Zo=37.50hms
Locate R265 very close to U71 pin AD22
Seymour NI
Park S3 I
Seymour NI
Park S3 I
FOXCONN
Hon Hai Precision Industry Co. Ltd.
Foxconn eMS Inc.
HNBD R&D
phone: +886-2-2799-6111
Title
VGA (IO) 2/5
Size C
Document Number
CURE DIS
Rev 0.1
Page Modified: Monday, January 24, 2011 16:41:34 (UTC/GMT)
Sheet 41 of 52

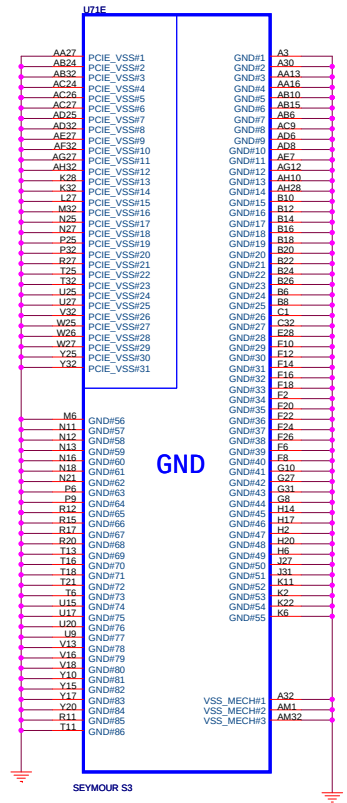


Foxconn eMS Inc. HNBD R&D	Hon Hai Precision Industry Co. Ltd. phone: +886-2-2799-6111
Title	VGA (DDR3) 3/5
Size C	Document Number CURE DIS Rev 0.1
Page Modified: Thursday, January 20, 2011 11:17:56 (UTC/GMT)	Sheet 42 of 52

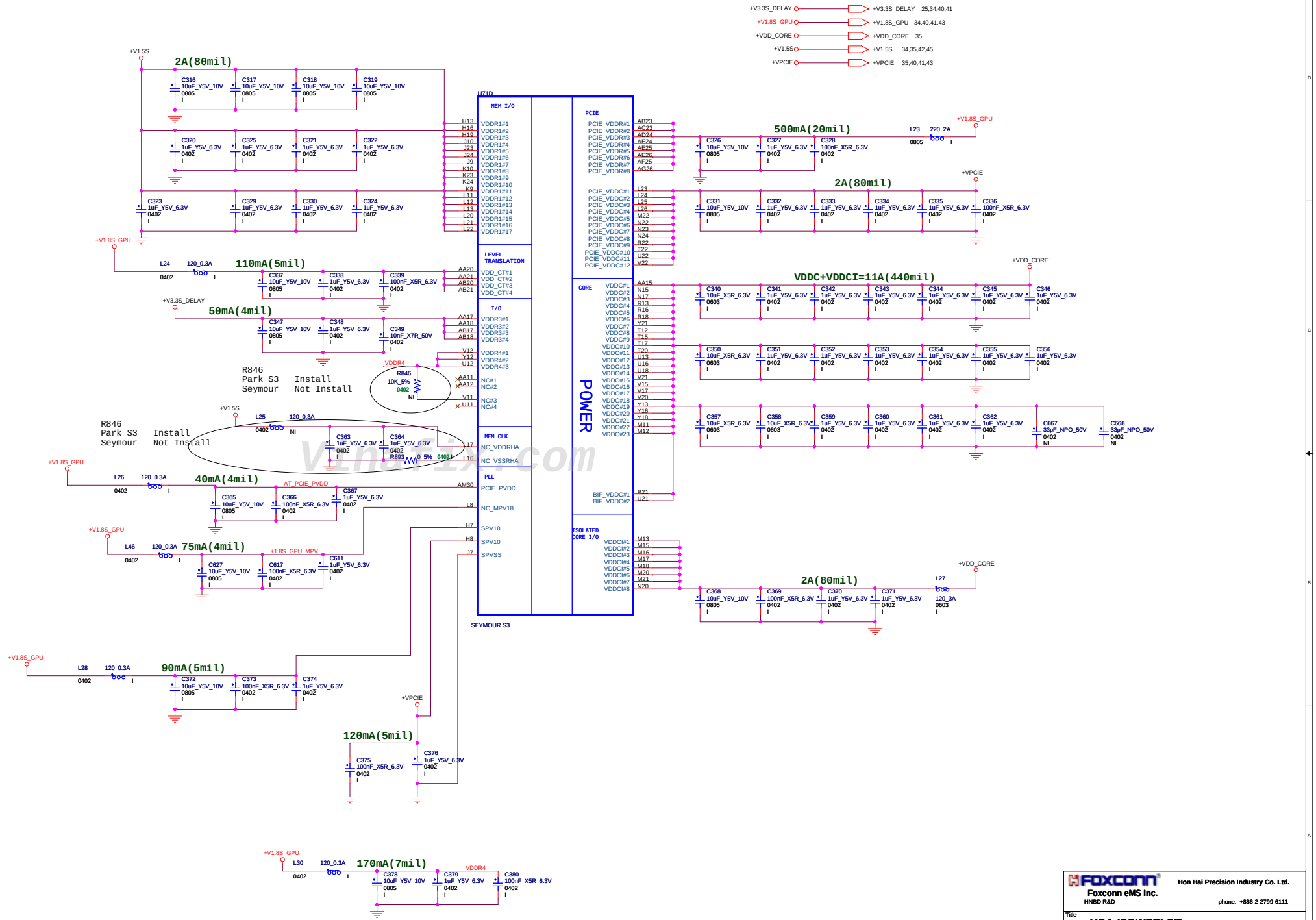
+VPCIE → +VPCIE 35,40,41,44

+V1.8S_GPU → +V1.8S_GPU 34,40,41,44

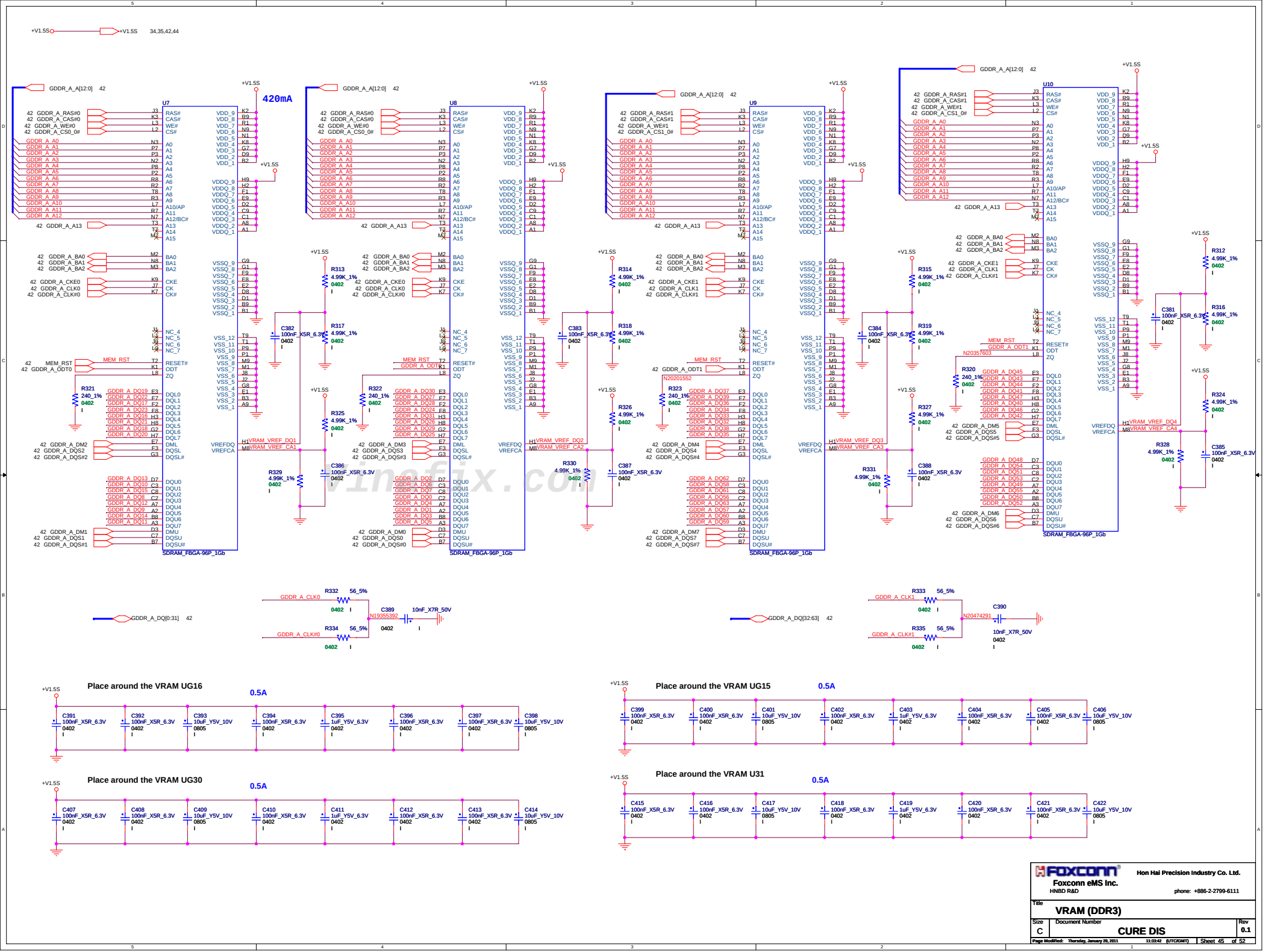




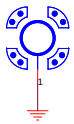
Foxconn eMS Inc. HNBD R&D	Hon Hai Precision Industry Co. Ltd. phone: +886-2-2799-6111
Title	VGA (POWER) 4/5
Size C	Document Number CURE DIS Rev 0.1
Page Modified: Thursday, January 20, 2011 11:17:56 (UTC/GMT)	Sheet 43 of 52



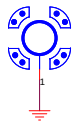
Foxconn eMS Inc. HNBD R&D	Hon Hai Precision Industry Co. Ltd. phone: +886-2-2799-6111
Title	VGA (POWER) 5/5
Size C	Document Number CURE DIS
Rev	0.1
Page Modified: Thursday, January 20, 2011 11:17:56 (UTC/GMT)	Sheet 44 of 52


+V1.5S
+V1.5S 34,35,42,44
420mA
U7
U8
U9
U10
GDDR_A_A[12:0] 42
GDDR_A_BA0
GDDR_A_BA1
GDDR_A_BA2
GDDR_A_CKE0
GDDR_A_CLK0
GDDR_A_CLK#0
GDDR_A_CKE1
GDDR_A_CLK1
GDDR_A_CLK#1
GDDR_A_CS0_0#
GDDR_A_CS1_0#
GDDR_A_WE#0
GDDR_A_WE#1
GDDR_A_RAS#0
GDDR_A_CAS#0
GDDR_A_RAS#1
GDDR_A_CAS#1
GDDR_A_A13
GDDR_A_ODT0
GDDR_A_ODT1
MEM_RST
GDDR_A_CS1_0#
GDDR_A_DQ[0:31] 42
GDDR_A_DQ[32:63] 42
SDRAM_FBGA-96P_1Gb
R313 4.99K_1% 0402
R314 4.99K_1% 0402
R315 4.99K_1% 0402
R312 4.99K_1% 0402
R316 4.99K_1% 0402
R317 4.99K_1% 0402
R318 4.99K_1% 0402
R319 4.99K_1% 0402
R324 4.99K_1% 0402
R325 4.99K_1% 0402
R326 4.99K_1% 0402
R327 4.99K_1% 0402
R328 4.99K_1% 0402
R329 4.99K_1% 0402
R330 4.99K_1% 0402
R331 4.99K_1% 0402
R321 240_1% 0402
R322 240_1% 0402
R323 240_1% 0402
R320 240_1% 0402
C382 100nF_X5R_6.3V 0402
C383 100nF_X5R_6.3V 0402
C384 100nF_X5R_6.3V 0402
C381 100nF_X5R_6.3V 0402
C385 100nF_X5R_6.3V 0402
C386 100nF_X5R_6.3V 0402
C387 100nF_X5R_6.3V 0402
C388 100nF_X5R_6.3V 0402
R332 56_5% 0402
R333 56_5% 0402
R334 56_5% 0402
R335 56_5% 0402
C389 10nF_X7R_50V 0402
C390 10nF_X7R_50V 0402
N19355392
N20474291
N20201552
N20357603
Place around the VRAM UG16 0.5A
C391 100nF_X5R_6.3V 0402
C392 100nF_X5R_6.3V 0402
C393 10uF_Y5V_10V 0805
C394 100nF_X5R_6.3V 0402
C395 1uF_Y5V_6.3V 0402
C396 100nF_X5R_6.3V 0402
C397 100nF_X5R_6.3V 0402
C398 10uF_Y5V_10V 0805
Place around the VRAM UG30 0.5A
C407 100nF_X5R_6.3V 0402
C408 100nF_X5R_6.3V 0402
C409 10uF_Y5V_10V 0805
C410 100nF_X5R_6.3V 0402
C411 1uF_Y5V_6.3V 0402
C412 100nF_X5R_6.3V 0402
C413 100nF_X5R_6.3V 0402
C414 10uF_Y5V_10V 0805
Place around the VRAM UG15 0.5A
C399 100nF_X5R_6.3V 0402
C400 100nF_X5R_6.3V 0402
C401 10uF_Y5V_10V 0805
C402 100nF_X5R_6.3V 0402
C403 1uF_Y5V_6.3V 0402
C404 100nF_X5R_6.3V 0402
C405 100nF_X5R_6.3V 0402
C406 10uF_Y5V_10V 0805
Place around the VRAM U31 0.5A
C415 100nF_X5R_6.3V 0402
C416 100nF_X5R_6.3V 0402
C417 10uF_Y5V_10V 0805
C418 100nF_X5R_6.3V 0402
C419 1uF_Y5V_6.3V 0402
C420 100nF_X5R_6.3V 0402
C421 100nF_X5R_6.3V 0402
C422 10uF_Y5V_10V 0805
Foxconn
Foxconn eMS Inc.
HNBD R&D
Hon Hai Precision Industry Co. Ltd.
phone: +886-2-2799-6111
Title
VRAM (DDR3)
Size C
Document Number CURE DIS
Rev 0.1
Page Modified: Thursday, January 20, 2011 11:33:42 (UTC/GMT)
Sheet 45 of 52

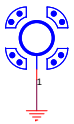
NI
<Package Size>
MOUNTING_HOLE
HOLE11



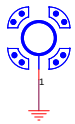
NI
<Package Size>
MOUNTING_HOLE
HOLE12



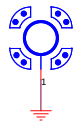
NI
<Package Size>
MOUNTING_HOLE
HOLE13



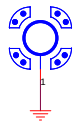
NI
<Package Size>
MOUNTING_HOLE
HOLE14



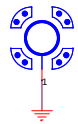
NI
<Package Size>
MOUNTING_HOLE
HOLE16



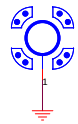
NI
<Package Size>
MOUNTING_HOLE
HOLE17



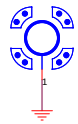
NI
<Package Size>
MOUNTING_HOLE
HOLE18



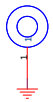
NI
<Package Size>
MOUNTING_HOLE
HOLE19



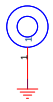
NI
<Package Size>
MOUNTING_HOLE
HOLE20



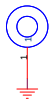
HOLE3
MOUNTING_HOLE
<Package Size>
NI



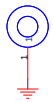
HOLE4
MOUNTING_HOLE
<Package Size>
NI



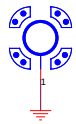
HOLE5
MOUNTING_HOLE
<Package Size>
NI



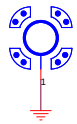
HOLE6
MOUNTING_HOLE
<Package Size>
NI



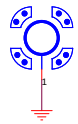
NI
<Package Size>
MOUNTING_HOLE
HOLE30



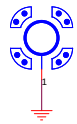
NI
<Package Size>
MOUNTING_HOLE
HOLE31



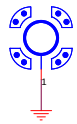
NI
<Package Size>
MOUNTING_HOLE
HOLE32



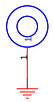
NI
<Package Size>
MOUNTING_HOLE
HOLE33



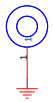
NI
<Package Size>
MOUNTING_HOLE
HOLE34



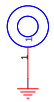
HOLE7
MOUNTING_HOLE
<Package Size>
NI



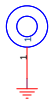
HOLE8
MOUNTING_HOLE
<Package Size>
NI



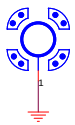
HOLE9
MOUNTING_HOLE
<Package Size>
NI



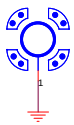
HOLE10
MOUNTING_HOLE
<Package Size>
NI



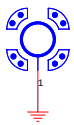
NI
<Package Size>
MOUNTING_HOLE
HOLE29



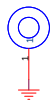
NI
<Package Size>
MOUNTING_HOLE
HOLE27



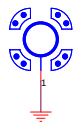
NI
<Package Size>
MOUNTING_HOLE
HOLE28



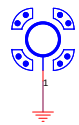
HOLE21
MOUNTING_HOLE
<Package Size>
NI



NI
<Package Size>
MOUNTING_HOLE
HOLE35



NI
<Package Size>
MOUNTING_HOLE
HOLE36



Fiducail1
MOUNTING_HOLE
<Package Size>
NI

Fiducail2
MOUNTING_HOLE
<Package Size>
NI

Fiducail3
MOUNTING_HOLE
<Package Size>
NI

Fiducail4
MOUNTING_HOLE
<Package Size>
NI

Fiducail5
MOUNTING_HOLE
<Package Size>
NI

Fiducail6
MOUNTING_HOLE
<Package Size>
NI

Fiducail7
MOUNTING_HOLE
<Package Size>
NI

Fiducail8
MOUNTING_HOLE
<Package Size>
NI

FOXCONN
Hon Hai Precision Industry Co. Ltd.
Foxconn eMS Inc.
HNBD R&D
phone: +886-2-2799-6111

Title
Mounting Hole

Size	Document Number	Rev
C	CURE DIS	0.1

Page Modified: Thursday, January 20, 2011 11:09:38 (UTC/GMT)

09/17 Add

+V3.3A

C1125 1nF_X7R_50V 0402
C1126 68pF_NPO_50V 0402

P_+VDDCORE_OUT_S

C1127 1nF_X7R_50V 0402
C1129 68pF_NPO_50V 0402

P_+V1.8S_OUT_S

C1128 68pF_NPO_50V 0402

P_+VCORE_VIN_SHAPE12

C1121 1nF_X7R_50V 0402
C1122 68pF_NPO_50V 0402

P_+V3.3A_OUT_S

C1123 1nF_X7R_50V 0402
C1124 68pF_NPO_50V 0402

+VBAT

C1119 1nF_X7R_50V 0402
C1120 68pF_NPO_50V 0402

+VBAT

C1113 100nF_X7R_25V 0603
C1111 2.2nF_X7R_50V 0402
C1112 68pF_NPO_50V 0402

+VBAT

C1116 100nF_X7R_25V 0603
C1114 2.2nF_X7R_50V 0402
C1115 68pF_NPO_50V 0402

+VBAT

C1117 1nF_X7R_50V 0402
C1118 68pF_NPO_50V 0402

+VBAT BOTTOM Side U3201

+VBAT

C1106 100nF_X7R_25V 0603
C1107 2.2nF_X7R_50V 0402
C1108 68pF_NPO_50V 0402

+VBAT BOTTOM Side close JP3151

+VBAT

C1103 100nF_X7R_25V 0603
C1104 2.2nF_X7R_50V 0402
C1105 68pF_NPO_50V 0402

+VBAT TOP Side close R2831 & Q2806

+VBAT

C1100 100nF_X7R_25V 0603
C1101 2.2nF_X7R_50V 0402
C1102 68pF_NPO_50V 0402

11/10 Add

P_+VDDCORE_IN_SHAPE

C1131 68pF_NPO_50V 0402
C1132 1nF_X7R_50V 0402
C1130 100nF_X7R_25V 0603

P_+VDDCORE_IN_SHAPE

C1134 68pF_NPO_50V 0402
C1135 1nF_X7R_50V 0402

+V1.05S

C1136 68pF_NPO_50V 0402
C1137 1nF_X7R_50V 0402

+V1.8S

C1138 68pF_NPO_50V 0402
C1139 1nF_X7R_50V 0402

+V1.8S

C1140 68pF_NPO_50V 0402
C1141 1nF_X7R_50V 0402

+V1.5

C1142 68pF_NPO_50V 0402
C1143 1nF_X7R_50V 0402

+V1.5_VDDQ

C1145 68pF_NPO_50V 0402
C1146 1nF_X7R_50V 0402
C1144 100nF_X7R_25V 0603

+V5S

C1147 68pF_NPO_50V 0402
C1148 1nF_X7R_50V 0402

+V5S

C1149 68pF_NPO_50V 0402
C1150 1nF_X7R_50V 0402

+V5CP

C1151 68pF_NPO_50V 0402
C1152 1nF_X7R_50V 0402

+VCC_ESATA_USB

C1153 68pF_NPO_50V 0402
C1154 1nF_X7R_50V 0402

+V5A

C1157 68pF_NPO_50V 0402

+VCC_CORE

C1158 68pF_NPO_50V 0402
C1159 1nF_X7R_50V 0402

P_+VCORE_VIN_SHAPE12

C1160 68pF_NPO_50V 0402
C1161 1nF_X7R_50V 0402

+V1.05M_LAN

C1162 68pF_NPO_50V 0402
C1163 1nF_X7R_50V 0402

+V3.3A

C1164 68pF_NPO_50V 0402
C1165 1nF_X7R_50V 0402

Foxconn
Hon Hai Precision Industry Co. Ltd.
Foxconn eMS Inc.
HNBD R&D
phone: +886-2-2799-6111

Title: VBAT RF

Size: C | Document Number: CURE DIS | Rev: 0.1

Page Modified: Thursday, January 20, 2011 11:09:38 (UTC/GMT) | Sheet 47 of 52

2010/6/7

Del:
R1278,R3106,R1407,R1408,R1403,R1404 --- 0Ohm,+/-5%
Add:
R1501,R1414,R1415,R1416,R1417 --- 0Ohm,+/-5%
R3106 --- 4.99KOhm,+/-1%

2010/6/10

Del:
R547 --- 1.5KOhm,+/-1%
R38 --- 750Ohm,+/-1%
Add:
U16 --- 74LVC1G07SW,1.65V~5.5V,7ns
R1116 --- 430hm,+/-1%
R1115 --- 750hm,+/-1%

2010/6/12

Del:
R3630
C3604

Change:
R2826 to 610101500-011-G
CE3001,CE3002,CE3003,CE3005 to 622106M00-020-G

2010/6/18

Change:
C3817,C3830,C3841 to 620111200-011-G
CE3001,CE3002,CE3003,CE3005 to 621200L00-024-G
U66,U68 to 210889R00-173-G
R3205 to 610117Y00-011-G
R3206 to 610116200-011-G
R3509 to 610108500-011-G
R3512 to 610110N00-011-G
R3507 to 610101L00-011-G
R3508 to 610113300-011-G
CON9 to 341400V000-0VQ-G

Del:
R1210,R542,C689,C690,C695,C696,C700,C701,U2806,
Q2804,R3121,R3108,R3117,R3115,R3116,R3118

Add:
C105,C209 --- 622106M00-028-G
R3603 --- 610108T00-011-G
R3604 --- 610108A00-011-G
C3360 --- 620104T00-011-G
R2955 --- 610108K00-011-G
R523,R526 --- 610107A00-011-G
R3119 --- 610114400-011-G
R3120 --- 610114300-011-G

2010/6/21

Change:
R297,R897 to 610102800-011-G
R3505 to 610107A00-011-G
R2938 to 610116600-011-G
R2947 to 610112H00-011-G
R3429,R2932 to 610108K00-011-G
R2939 to 610115L00-011-G
R3424,R3425,R3426,R3427,R3428 to 610107A00-011-G

Del:
U3701,U3703,L25,R846,R305,R306,R587, R588

Add:
C3506 --- 620111200-011-G
R2937 --- 610114R00-011-G
R524, R525 --- 610107B00-011-G
HOLE7,HOLE8 --- 洩架脫脫,,C3604,M2X8.7,1.2,SN,G,00
HOLE33,HOLE34 --- 洩架脫脫,,C3604,M2X8.2,1.2,SN,G,00
HOLE9,HOLE10 --- 洩架脫脫,,C3604,M2X2.8,1.2,SN,G,00

2010/7/1

Del:
R878,R884 --- 10KOhm,+/-5%
Add:
R886,R892 --- 10KOhm,+/-5%

2010/7/7

Page 40: Change +V3.3AL_LED to +V3AL_LED
Page 10: Change R76 to NI

2010/7/8

Page 21: Add R2101 pull to +V3.3A

2010/7/9

Page 38: Change R874.1 to +V3.3_SM
Page 38: Del R1229
Page 38: Del ICCInsertN pull +V3.3_SM

2010/7/12

Page 16 -- Change R76 to an isolation FET (2N7002) with source connected to SATA1GP,
drain connected to CON5.P1 and gate connected to BUF_PLT_RST#.Move R79 to the drain of the isolation FET.

Page10 -- Add an isolation FET (2N7002) with drain

Page27 -- At U45, NC7SZ logic family is not guaranteed to work with 5V Vcc and 3.3V input signal, please use TTL
compatible logic family (TC7SET or equivalent) add 3A schottky diode across Q2702, with anode connected to Q2702-D,
and cathode to Q2702-S connect Q2711A-S1 to GND, and connect Q2711B-D2 to Q2711A-D1; connect Q2714A-S1 to GND, and connect
Q2714B-D2 to Q2714A-D1. ?If the voltage at +VCHG is too low, ALARM goes high, and the LATCH signal is latched
high. This should turn off Q2708 and Q2702, and turn onQ2709 and Q2710 - this is diode-OR mode, where either battery can power
the notebook, but one battery cannot backfeed the other.

Page26 -- Change R480 and R481 to 20ohm to match commendation from Intel for Rs in docking topology (IDG 3.2.17)

Page25 -- Pin5 of CON28 should change to other power rail, because camera module won't need 1.8V anymore (instead of using 3.3V for the digital mics).

Page22 -- Connect C541/C542 pin2 to system ground (not analog ground), or TPM will malfunction and cause system hang up.

Page22 -- Change GPIO41 and GPIO42 to low by uninstalling R878 and R884; and installing R886 and R892.
Let platform ID (SSID)=001b to support common BIOS architecture.

Page27 -- Change net name THM_MAIN# to MAIN_BAT_DET#,KBC_PW_ON to KBC_PWR_ON

Page17 -- Correct KBC 1126 symbol ,Pin names and pin umbers

Page27 -- CON37 pin05 should change to KSO17 (from SI3)

Page17 -- Add +V3S option for CON10 pin1 (TP connector power)

Page17 -- To scrap A0 and use A1 revision silicon KBC1126, install R7070 to use SUS_CLK32_KBC and not install 1234, Y4.

Page14 -- R216 change to 10uH for VCCCLKDMI rail filter

Page13 -- Add D1301 & R410(NI)

Page13 -- R196 and R198 (GPIO37/36 pull up +V3.3S) change to 200kohm

Page13 -- Add a R1312 0ohm resistor on KBC_RESET# (between R205 pin1 and U2(PCH) pin P5)

Page9 -- Add a 0910 100Kohm pull down resistor on SM_VREF

Page37 -- Remove M2 DDR3 VREF circuitry

Page25 -- The connection to pin1 should be a power rail--name it +V5S_KBL. It should be switched with a FET controlled by LID_SW#_3

2010/7/14

Page 28: Change C2831,C2824,C2825 to Y5V
Page 21: Add Q2103, R2105 to modify LAN LED

2010/07/15

Page 10 -- Cnage Q21 from PMV65XP (3pin) to AM3423P (6Pin)

Page 10 -- Change SATA port2 to port3, (SATA_RXN2 chage name to SATA_RXN3 and connect to SATA3RXN) etd ...

Page 10 -- Change Q45.G from BUF_PLT_RST# to P_SPWR_ENABLE_10 (the 12v signal of SLP_S3#_3R_PWR)

Page 19 -- Change U14 pin 24 from MIC_BIAS_A to no connect and pin23 forom no connect to MIC_BIAS_A

Page 25 -- Cnage R2503 from size of 0603 to 0805

Page 27 -- Change U45 from 74AHC to 74AHCT

Page 17 -- Add net name TP_POWER at Con10 pin 1

Page 17 -- Change Y4 to install, R1234 to install, R796 to Install, R797 to non install

Page 17 -- Change R151 to NI, R581 to 100Kohm and R569 to 10Kohm. (base on?KBC1126 specification correction)

Page 26 -- Add R2601 0ohm from CON30 pin 76 to CON37 pin 11 SER_SHD

2010/07/19

Page 24 -- Add JP1014

Page 5 -- Add R0525

Page 17 -- Please move TRAVEL_BAT_DET# signal to this new location. (previously using GPIO 1)
This will become the new pin for our CPPWR_EN (O) signal which controls battery charging port mode.

Page 13 -- Add R1305 (Note this should be connected to CR1_CD0N via a NO INSTALLED 0 ohm resistor and R282 PU
should be on PCH side of 0 ohm)

Page 23 -- C563 must be changed from 100UF to 150UF to pass peak current load test.

Page 24 -- C574 must be changed from 100UF to 150UF to pass peak current load test

Page 38 -- C587 must be changed from 100UF to 150UF to pass peak current load test.

Page 17 -- Add D1701,R1709

2010/07/20

Page 08 -- Add C0814,C0815,C0811,C0812

Page 24 --Del U54,C527,R470,C464,R683,C768,C528,R866,
C770,C530,R867,C769,R786,C472,R477,C529,R1201,
R1202

Page 24 -- Change CON38.1 to +VAUDIO_VCC_C, CON38.3 to A_MIC_L, CON38
to A_MIC_R

Page 24 -- Add R2431,R2432,C2411

Page 19 -- Change L8 to R1955

Page 14 -- Change U2 pin AU20 to +VTT

Page 17 -- CON27 pin8 add net name SP_LEFT,pin8 add netname SP_RIGHT

Page 17 -- CON10 pin5 add net name SP_LEFT, pin6 add net name SP_RIGHT

Page 30 -- Add R3056

Page 19 -- Add R1956,R1957

2010/07/21

Page 08 -- Change R896 NI, R895 Install
Page 09 -- Add C0955, C0956
Page 14 -- Add C1455, C1456, C1457, C2155

2010/7/22

Page 25 -- Change C590,C596,C599 from 8.2pF_NPO_50V
to 33pF_NPO_50V

Page 25 -- Change L49,L51,L53 from 470hm@100MHz to
260hm@100MHz

Page 25 -- Change R488,R492,R493 from 0ohm to L - 260hm@100MHz
(We will change name R488 R492 R493 to L488 L492 L92 on next build)

Page 17: Add U70, U72, C1760

2010/7/23

Page 27: Add R2789
Page 19: Add R1955 to 0805 size
Page 21: Change U15pin 47, 46, 37, 43, 11, 40, 22, 16, 8 from +V1.05M_LAN to +V1.05_LAN
Page 17: Change U11-7% to BOOST_EN.
Page 21: Change R1211 to 0603 size

2010/7/28

Page 17: Add C1766

2010/7/29

Page 37: Add R3701 ※a⋯⋯ 刊 Alcor 刊 Pull up 5刊
Page 42: GPU(U71) PIN: G20 Connect to VRAM PIN: T3
Page 34: Add CE3410

2010/8/02

Page 6: Change R430 to 1k and I

2010/8/04

Pgae 32: change R3273 form 0 to 20K
Pgae 34: Add CE3410 330uF_PO_2V for +V1.5S ;
Add JP3803 for +V1.05S

Sharepoint SI1 change list

Page 10 Change R76 to an isolation FET (2N7002) with source connected to SATA1GP, drain connected to CON5.P1 and gate connected to BUF_PLT_RST#. Move R79 to the drain of the isolation FET.
Page 10 Add an isolation FET (2N7002) with drain connected to U2.L34 (HDA_SYNC of PCH), source connected to R63.2 and R67.2 and gate connected to BUF_PLT_RST#. Move R397 to the drain of isolation FET.
page 19 Change R542 to INSTALL.
page 27 Change R1321 to NO INSTALL
page 25 Reserve a MOSFET to connect +VBAT to CON28.26 and CON28.27. See attached.
page 22 D01 issue. Change C541.2 and C542.2 to digital GND.
page 22 Add RS232 transceiver in between SIO LPC47N217N and Serial Port connector.
page 27 At U45, NC7SZ logic family is not guaranteed to work with 5V Vcc and 3.3V input signal, please use TTL compatible logic family (TC7SET or equivalent) add 3A schottky diode across Q2702, with anode connected to Q2702-D, and cathode to Q2702-S
connect Q2711A-S1 to GND, and connect Q2711B-D2 to Q2711A-D1; connect Q2714A-S1 to GND, and connect Q2714B-D2 to Q2714A-D1.
page 25 Pin5 of CON28 should change to other power rail, because camera module won't need 1.8V anymore (instead of using 3.3V for the digital mics).
page 22 Connect C541/C542 pin2 to system ground (not analog ground), or TPM will malfunction and cause system hang up.
page 22 Change GPIO41 and GPIO42 to low by uninstalling R878 and R884; and installing R886 and R892. Let platform ID (SSID)=001b to support common BIOS archtecture.
page 21 Need to reserve if MDI traces cannot achieve 1:3 ratio for MDI to system RJ45 and MDI to docking connector length ratio.
page 17 Please make sure all net names to KBC GPIOs match the GPIOs list. For example: THM_MAIN# should be MAIN_BAT_DET#, KBC_PW_ON should be KBC_PWR_ON
page 17 Correct KBC 1126 symbol ! Pin names and pin numbers do not match for 1126. They are for 1098. See GPIOs list
page 17 CON37 pin05 should change to KSO17 (from KSO13), that will be used for detecting Mute(KSI0) / Wireless(KSI1) / Calculator(KSI2) / QuickX button action(KSI3) in new definition.
page 17 Add +V3S option for CON10 pin1 (TP connector power), preference is to support 3.3V as the power is lower.
page 17 To scrap A0 and use A1 revision silicon KBC1126, install R7070 to use SUS_CLK32_KBC and not install R1234, Y4.
page 14 R216 should change to 10uH for VCCCLKDMI rail filter
page 13 Value of R196 and R198 (GPIO37/36 pull up +V3.3S) should be change to 200kohm (to meet strap function requirement).
page 13 For A20GATE, add 0ohm between PCH and KBC (propose to remove it after SI1). ODM should update their test tools to support associated reset pin on KBC side (Intel confirmed that A20 is no longer supported even though it now can still work with SandyBridge C0).
page 13 Add a 0ohm resistor on KBC_RESET# (between R205 pin1 and U2(PCH) pin P5), propose to NI it once all DOS manufacturing tools are updated.
page 10 SATA port0 to HDD may also need SATA3 re-driver as the total length exceeded 6" PDG requirement. The current length is around 6.9". We will test SATA3 signal integrity to determine whether we have to add the re-driver for SI1.
page 9 SM_VREF should add a 100Kohm pull down resistor, as IDG 2.5.10.1 mentioned.
page 6 Need to use OD buffer to provide independent reset signal to CPU, install U16 and R1116, not install R547 as UMA done. (IDG 2.6.9)
page 37 Remove M2 DDR3 VREF circuitry. Delete the page on both Discrete and UMA schematics.
page 25 Delete KB_LIGHT_ON net name and R275. The connection to pin1 should be a power rail--name it +V5S_KBL. It should be switched with a FET controlled by LID_SW#_3. See attached for reference.
page 17 Add a small RC filter on the ADC_VREF: add 10ohm resistor between the OP-amp output (U2806 pin4) and the SMSC1126 pin 41, and add a 100pF cap from SMSC1126 pin 41 to pin 45.
page 27 Add the attached circuit for PM_THRMTRIP# connected to SYS_SHDN on thermal sensor and also a 1K series on the signal from CPU.
page 17 Change R151 to NI, R581 to 100Kohm and R569 to 10Kohm. (base on KBC1126 specification correction)
page 24 For TI USB3 controller we also need to provide +V1.5 supply for the +V1.05S_USB30 power as an option because of an erratum of the part. On SI1 m/b we will install the +V1.5 jumper for TI USB3 d/b
page 5 "eDP_COMPIO and eDP_ICOMPO can not be left floating
even if Internal Graphic is disabled since they are shared
with other interfaces. Refer to Section 2.2.2 of Intel PDG for routing guidelines. Note UMA is correct but layout note on trace width, spacing and length should be added for both schematics."
page 17 " GPIO 23: Please move TRAVEL_BAT_DET# signal to this new location. (previously using GPIO 1)
GPIO 1: This will become the new pin for our CPPWR_EN (O) signal which controls battery charging port mode."
page 13 "GPIO60:? ?Please add D3E_WAKE# signal for JMicron control signal to keep controller active in AC (possible concerns with DTM test). (Note this should be connected to CR1_CD0N via a NO INSTALLED 0 ohm resistor and R282 PU should be on PCH side of 0 ohm)"
page 23 U19 USB power switch must be changed to a different part that can pass SVTP 2.19 port load and short test. C563 must be changed from 100UF to 150UF to pass peak current load test.
page 24 U20 USB power switch must be changed to a different part that can pass SVTP 2.19 port load and short test. C574 must be changed from 100UF to 150UF to pass peak current load test.
page 38 C567 (U) C587 (D) must be changed from 100UF to 150UF to pass peak current load test.
page 17 Please reserve a TVS diode (NI) on for KBC VCC1 (+V3AL)near the VCC1 power pins as shown in attached snippet from previous schematic.
page 10 Change SATA2 to the docking connector to SATA3.
page 27 Please change R2733 from 100K to 4.7K.
page 31 Change +V5A to +V5CP at JP3151-1.
page 32 Change +V5A to +V5CP at JP3241-1.
page 14 VCCDMI[2] at U2.AU20 should be connected to VTT. Note +VCCDMI at L21.1 should be changed to a different name (maybe +V1.05S_DMI)
page 8 "Per Intel PPDG1.21
VCC_CORE-->reserve 2 more 22uF caps (NI)
VTT-->change C509 and C243 to INSTALL"
page 9 "Per Intel PPDG1.21
+VCCSA-->add 1 more 22uF"
page 14 "Per Intel PPDG1.21
+V1.05M-->requires 1x330uF
+V1.05S-->requires 2x330uF
+V1.05M_LAN requires 1x330uF"
page 29 Add a RC delay for V3.3A power sequence, as shown in the picture.
page 17 Add STBY_LED# and CAPS_LED# buffers as shown on attached drawing.
page 39 Please change power rail at R25.2 and R21.2 from +V3AL_LED back to +V3AL for battery charging LEDs. No change to other LED power rails.
page 33 Please modify the boost circuit to the attached drawing.
page 27 Please add a 10K to +V3S on TACH_FAN_IN
page 29 Can +V3.3A regulator handle the increase current for +V1.05M_LAN and +V1.05 which will be about 7A? The L2902 is only rated at 6A. Also JP2902 is only rated at 4A.
The inductor needs to be changed and it should use 2 jumper pads and the bulk capacitance should be increased (suggest changing CE2902 to 330U)
page 29 Is 5A Imax for +V5CP sufficient for 5 USB ports? L2901 can handle 8A which is good but JP2903 can only handle 4A. Should we add another jumper pad for +V5CP
page 19 Please change R1955 to 0805 size
page 33 Replace boost circuit with new circuit in attached file.

page 17 Change U11-7% to BOOST_EN
page 21 U15 (82579) VDD1P0 power pins are not connected correctly. Those pins, U15.47, U15.46, U15.37, U15.43, U15.11, U15.40, U15.22, U15.16 and U15.8 should be connected to +V1.05_LAN. This will allow the power to be supplied from either internal regulator or +V1.05M_LAN.
R1211 should be changed to a 0603 size and INSTALLED. Also all caps that are on +V1.05M_LAN should be changed to on +V1.05_LAN. (See Clash schematic for reference).
page 38 Please add a 0.1uF cap to GND at U55.1 (IN pin)
page 35 "Modify +VDD_CORE power to meet the following output levels:
VID[1:0]?11b -->0.90V
VID[1:0]?10b -->0.95V (Note 0.90V should be fine)
VID[1:0]?01b -->1.05V
VID[1:0]?00b -->1.12V
Please make sure +VDD_CORE can deliver 12.7A peak"
page 17 Please change R352, R353 and R356 to 33 ohm.
page 10 Please add an isolation FET (2n7002) on HDA_SDOUT just like the implementation for HDA_SYNC.
page 5 DIS & UMA: Chnage R8 for CFG4 to NI to disable eDP.
page 42 Seymour pin G20 should be MAA_13 and it should be connected to GDDR_A_A13 of all VRAM devices on page 45. This must be connected to support 128x16 device for 1GB VRAM SKU.
page 17 Change connection at R799.1 from TP_LED# to PWM_LED. This is to provide the option to use either PWM output to control the LED.
page 27 Please change CON37.39 to +V3AL (we will not pulse QW LED).
page 17 Please add a 4.7U or 10U 0603 caps (INSTALL) for +V3AL and place it close to KBC. This was discussed on the con call.
page 13 We need to swap USB port1 and port2 because port1 is the debug port and BIOS may need it for debugging eSATA issues so it cannot be used for the eSATA combo connector. However this is not critical so we will defer it to SI2. This is added here as a reminder.
page 12 BOM change: change R150 to NI for both DIS and UMA.
page 34 This is just a question for now. Why C3405 is needed and it's a 0603 size? I don't see this on UMA. The cap is taken too much space at Q3803 in layout
page 32 BOM change: change C3277 to INSTALL and change R3273 to 20K INSTALL; and change D3271 to INSTALL. This change is needed to meet Intel S3 resume power sequence timings Tt31 and Tt32.
page 45 Reserve a 330UF (NI) for +V1.5S near the VRAM devices. The cap should be placed on the left side of VRAM device in the middle on layout.
page 6 BOM change: Change R430 to 1K_5% and INSTALL for SI1
page 33 "These BOM changes are needed for the SI build. Please change
R3303 from 0.05 Ohm to 0.01 Ohm
R3305 from 2.2K to 470 Ohm
R3355 from 1K to 220 Ohm
R3350 from 51K to 10K
R3371 from 100K to 22K
R3356 from 220K to 100K
R3366 from 100K to 20K
R3368 from 100K to 330K

Hon Hai Precision Industry Co., Ltd.
Foxconn eMS Inc.
HNBD R&D
phone: +886-2-27664111

Title: Change List
Size: Custom
Document Number: CURE DIS
Rev: 0.1

2010/7/9
page 27
Nostuff Q2705,Q2706,R2721,R2723,R2726,R2729
Stuff R2728

page 28
Add R2861 22K Ohm +/-5% (For VDC_VREF)

page 30
Nostuff R3051,R3037,R3038,R3039,R3040
Stuff R3050
Del R3021,R3024
Add R3021 121K Ohm +/-1% (For IMAXA limit)
Add R3024 147K Ohm +/-1% (For IMAXA limit)

page31
Del R3108,R3121,R3118,R3117,R3115,R3116,U3103,C3108
Stuff R3120,R3119
Del +V1.05M_LAN solution with NB634
Add +V1.05M_LAN solution with G5671

page 32
Del R3205,R3206
Add R3205 11.3K Ohm +/-1% (For 1.5V feedback)
Add R3206 9.76K Ohm +/-1% (For 1.5V feedback)
Del +V1.8S solution with NB634
Add +V1.8S solution with G5671

page 34
Change R3428.1 connection to KBC_PWR_ON_PWR
Change Q3418.1 connection to +VTT
Add JP3402
Nostuff Q3418

page 35
Del R3510,R3509,R3512,R3507,R3508,C3514,C3516
Add R3514,R3515 1M Ohm +/-5%
Add Q3506,RQ3507 2N7002DW
Add C3514,C3515 100nF_X5R_10 and Nostuff
Add R3509 30.1K Ohm +/-1%
Add R3510 59K Ohm +/-1%
Add R3507 20K Ohm +/-1%

2010/7/22

Page 29: Add D2908, R2953, C2960

2010/9/15

Page 35
Change R3506 to 13.7k, 610113T00-011-G
Change R3507 to 33k, 61011J600-011-G
Change R3509 to 47k, 610101S00-011-G
Change R3510 to 115k, 61011FU00-011-G

Page 33
Change R3356 to 100k, 610103300-011-G
Change R3365 to 470, 61010KS00-011-G
Change R3355 to 220, 61010JY00-011-G
Change R3359 to 10k, 61010G500-011-G
Change R3371 to 22k, 61010FK00-011-G
Change R3366 to 20k, 61010FG00-011-G
Change R3368 to 330k, 610112S00-011-G
Change R3363 to 10m, 611000500-034-G
Change C3358 to 1uF, 620108M00-011-G
Change R3370 to 1.5m, 610119J00-011-G
Change C3360 to 220nF, 62011C400-023-G
Add D3353
Add R3373, 10k, 61010G500-011-G
Add control signal "PMC_ADC"

2010/9/16

Page 29
Change R2907 to 10.2k, 610114300-011-G

Page 30
Change R3055 to 3.92k, 610119Q00-011-G

Hon Hai Precision Industry Co. Ltd.
Foxconn eMS Inc.
HNBD R&D
phone: +886-2-2799-6111

Title: Change list forPower

Size: C | Document Number: CURE DIS | Rev: 0.1

Page Modified: Thursday, January 20, 2011 11:09:38 (UTC/GMT) | Sheet 49 of 52

2010/8/15

Change R120 to Install for USB30 (Only for NEC)
Audio part should be modifed, still wait for solution,

2010/8/19

Page 24 Delete R2431, R2432, C2411
Page 24 Change CON38 pin17 to MIC_BIAS_A

2010/8/26

Page 26 change C450 to 100V
Page 18 CON12 pin16,pin17 connect to GND

2010/8/30

Page 17 Change CON9.31 (keyboard connector) from +V3.3S to +V3AL.
Page 11 Delete R107 and change PCIECLKRQ7# net name to WWAN_CLK_REQ# at both R123.2 and PCIECLKRQ7# pin of PCH
Page11 Add R1150 for FPR_OFF
Page 13 Change R273.2 to GPIO51
Page 13 Change R189.2 to FPR_LOCK#
Page 13 Change U2F.V13 to FPR_LOCK#
Page 13 Change U2E.D47 to GPIO51
Page 10 Delete R116, R125, R75 and R126
Page 24 Change E-SATA to USB port2
Page 23 Change USB to USB port1

2010/8/31

Page 17 Add R1721,R1722,R1723,R1724 61010AJ00-011-G
Page 18 Delete R1137, and add Q1801
Page 24 Delete C56, U6, R84, C60, R17,C57, R23, C59,JP1010, JP1011, JP1014 for move 1.5 to 1.05 IC to USB30 Board.
Page 13 Change R273 to 61010A000-011-G
Page 38 Delete LED4, LED5, LED7, LED8, LED2, LED3
Page 38 Add LED2, LED7, LED4 HHPN: 52111J400-326-G
Page 38 Change R158, R21, R222 from 100Ohm to 33Ohm 61010AJ00-011-G
Page 38 Change R144, R223, R25 from 100Ohm to 200Ohm 61011DB00-044-G

2010/9/02

Page 37 Add Q65 51030BJ00-031-G for Smart Card issue
Page 37 Add R3720 610103300-011-G for Smart Card issue

2010/9/03

Page 27 Change U45 to 31010JQ00-688-G 74AHCT1G08GW PHILIPS

2010/9/07

Page 27 Change R377 to 610115W00-011-G
Page 13 Change R189 pin1 to Ground
Page 24 Change CON38.16 from SLP_S4#_3R to USB30_EN
Page 24 Rename CON38.36 and CON38.38 +V1.5_V1.05S_USB30
Page 24 Add JP1011 and JP1014 back to switch either +V1.5 or +V1.05S for +V1.5_V1.05S_USB30
Page 17 Add R1720 PD (610107C00-044-G)
Page 13 Add R1320 connect to D3E_CPPE# (610107A00-011-G)
Page 18 Change R836 to Pull-up to +V3.3S
Page 38 Add R3825 (610107A00-011-G)
Page 23 Add R2301, R2302, R2303, R2304, R2305 (610107A00-011-G)
Page 17 Add R1716 connector to +V3AL (610107A00-011-G)
Page 17 Add R1717 connector to +V3.3S (610107A00-011-G)
Page 17 Delete R358 (NI already)
Page 24 Delete Q38, Q39, R515, R516 and C640,JP1012,JP1013
Page 24 Change CON38 pin40 to +V3.3A
Page 11 Change R123 pin1 to +V3.3S and pin2 to WWAN_CLK_REQ#
Page 11 Delete R128
Page 11 Add R107 (610107C00-044-G)
Page 11 Change c699 to C699

2010/9/08

Page 23 Change D13,D14 to 52010BV00-030-G
Page 38 Change R377 to 610110H00-011-G
Page 18 Change R836 to 610107C00-044-G

2010/9/09

Page 35 Change R3507 to 610114A00-011-G
Page 35 Change R3509 to 610118500-011-G
Page 35 Change R3510 to 61010FJ00-011-G
Page 23 Change D13,D14 to 52030LD00-031-G
Page 37 Add R3710 (NI)

2010/9/13

Page 24 CON38.8-->HP_OUT_JD
CON38.6-->HP_OUT_R1
CON38.4-->AGND
CON38.2-->HP_OUT_L1
Change 35 Change R3506 to 610113T00-011-G
Change 35 Change R3507 to 61011J600-011-G
Change 35 Change R3509 to 61011B000-011-G
Change 35 Change R3510 to 61011FU00-011-G

2010/9/14

Page 10 Change Y1 to 710119600-162-G

2010/9/15

Page 25 Delete R488, R492 R493, C590, C596, C599, L49, L51 and L53.
Page 25 Delete R234, R235, R267.
Page 25 Add L50, L51, L52, L53, L54, L55 (630115000-129-G)
Page 22 Delete Y7
Page 22 Change Y8 to 710105G00-162-G

2010/9/16

Page 23 Add Q2301, Q2302
Page 25 Add C2510
Page 25 Change R490 to 610107800-011-G
Page 25 Change R491 to 610103300-011-G
Page 11 Add R1121, R1122 (610107A00-011-G)
Page 39 Add Q3910

2010/9/17

Page 46 Add Hole35, Hole36 for SATA HDD
Page 19 Delete L56

2010/10/02

Page 10 Change R1400 to NI
Page 10 Change R1418 to Install

SI2B

2010/10/26

Pgae 25: Add R2555 and R2556 for VSYNC and HVSYNC pull high to +V3.3S_Delay
Page 13: correct RCIN# net name and install R1312
Page 41 Del R291 because double pull high
Page 38: ConnectU55.5 to +VSCP

2010/10/31

Page 38 : Add 2 resistor(R900&901) to avoide USB branch.

2010/11/08

Page 25: Delete C695, C696, C700, C701, R450, R452, R463 and R486
Page 25: Delete R523, R526, R587 and R588
Page 41:Delete DPA_AUX and DPA_AUX# connections on U71.AE6 and U71.AE5. Leave the pins NC
Page 22: Connect U18.10 to +V3.3S from C539.1. From Clash schematic pin10 is also a VDD pin for the TPM device.

2010/11/09

Page 17: Delete Y4 and R1234
Page 17: Change R816 to OCP_MAIN#
Page 25: Delete HPDE at R844.2, HPDE#_D, R214, R844, and Q34.
Page 25: Delete HPDE connection to CON28.33
Page 42: Add R271
Page 42: Delete R429

Sharepoint SI2 change list

page 17 Change CON9.31 (keyboard connector) from +V3.3S to +V3AL.

page 10 Remove pass-through topology for SPI flash ROM-->Delete R4 group resistors (R116, R125, R75 and R126) and traces connected to KBC (SPI_CLK_KBC, SPI_CS0#_KBC, SPI_SI_KBC and SPI_SO_KBC)

page 13 Swap USB Port1 and Port2 connections.USB Port1 should be connected to the rear left side walk-up port and USB Port2 should be connected to eSATA combo port.

page 11 "Move CLK_PCH_PCIE_WWAN(#) clock pair from CLKOUT_PCIE0P(N) to CLKOUT_PCIE7P(N)
Note also update the PCIE Port Table to show WWAN on Port 7."

page 11 Move WWAN_CLK_REQ# from PCIECLKRQ1# to PCIECLKRQ7# by delete WWAN_CLK_REQ# connection to pull-up R107 and change PCIECLKRQ7# net name to WWAN_CLK_REQ# at both R123.2 and PCIECLKRQ7# pin of PCH.

page 13 Change FPR_LOCK# from GPIO51 to GPIO68 to match the attached design drawing.

page 24 " Change CON38.16 from SLP_S4#_3R to USB30_EN
Rename CON38.36 and CON38.38 +V1.5_V1.05S_USB30
Add JP1011 and JP1014 back to switch either +V1.5 or +V1.05S for +V1.5_V1.05S_USB30 (for SI2 use +V1.5)
Rename CON38.40, JP1012.2 and JP1013.2 from +V3.3A_USB30 to +V3.3A_V3.3S_USB30
Move Q38, Q39, R515, R516 and C640 on both TI and NEC USB3 daughter board. (Note Q38 on d/b must have a jumper to bypass as an option)
"

page 2 " Rename CON2000.40 to +V3.3A_V3.3S_USB3
Rename CON2000.38 and CON2000.36 to +V1.5_V1.05S_USB30
Rename CON2000.16 to USB30_EN
Add Q38, Q39, R515, R516 and C640 from m/b. And add a jumper (NI) across Q38 to bypass it if we were to use +V1.05S from m/b.
Change R2001.1 to USB30_EN
Add LDO (U6) from m/b to generate +V1.05_USB30 through a jumper (I). The LDO should be controlled by USB30_EN signal from CON2000.16.
Add a jumper (NI) from +V1.5_V1.05S_USB30 to +V1.05_USB30. This is the option for if we were to use +V1.05S from m/b.
"

page 17 Add a 10K pull-down on PM_PWROK

page 18 Please add an isolation FET to the CLKREQ signal to the JMicron card reader controller. This connects to pin 13 of the controller and will prevent leakage from the pull-up when system is off.

page 13 Add a 0 ohm (NI) to connect to GPIO0 and name the signal D3E_CPPE#. This signal should be connected to pin 13 of JMicron Cardread (U13). Make a layout note for the new 0 ohm to be placed close to R427 to minimize stub when the signal is used for XDP.

page 18 Change R836 to a pull-up to +V3.3S (INSTALL) and change CPPE netname to D3E_CPPE# and connect it directly to pin13 of U13.

page 38 "On pin ILIM0 (pin 16) of the TI TPS2540 controller, please change the current limit strapping resistor value from 20K to 17.8K. This will increase the current limit to support 2.5A continously.
(Note please also correct page title from ""USB CGARGER"" to ""USB CHARGER"")"

page 38 "TI confirmed they will be shipping TPS2540 PG1.1 silicon for all upcoming builds. Please make sure when using PG1.1 silicon we will connect the following control signals as below:
CTL1 (pin6) connects to SLP_S3#
CTL2 (pin7) connects to SLP_S4#
CTL3 (pin8) connects to CPPWR_EN
Note this is correct on current 0903 schematics but please add a 0 ohm (INSTALL) at R806.1 to SLP_S3#_3R. This is needed if we use the PU and PD resistors to set the charging mode for testing."

page 23 Add 0 ohm resistors (INSTALL) for LPC_FRAME# and LPC_AD[3:0] signals at WLAN Minicard connector CON16 pins 6. 8, 10, 12, 14 and 16

page 20 Move R847 and R848 from page 23 to this page and place the resistors close to R819 and R821. In the layout note, change "less than 250mil" to "less than 150mil" Current layout is wrong and must be fixed for SI2.

page 27 Change U45 part to a NAND gate. This is one of the problems for fan not working properly in SI1 unit. The second problem was caused by the wires for PWM and TACH are swapped on the fan module connector. Note 0903 schematics already made the change. This is added for reference.

page 35 "Power team to change ?VDD_CORE output to support the following voltage levels for each of those VID values.
VID[1:0]=11b -> 0.85V
VID[1:0]=10b -> 0.90V
VID[1:0]=01b -> 1.00V
VID[1:0]=00b -> 1.10V
Note update the table on page 35 to show the correct voltages for the VID values also."

page 37 Cause our Smart card connector is normal close, so we add Q65 N-MOS to reverse it, and also add R3720 to pull up to +3.3_SM

page 37 Reserve a 0 ohm (NI) from Q65.D to Q65.G. This is to allow the signal to bypass Q65 if the normal open connector is used later.

page 24 "Change CON38 pin-out to the following:
CON38.8-->HP_OUT_JD
CON38.6-->HP_OUT_R1
CON38.4-->AGND
CON38.2-->HP_OUT_L1"

page 25 "Discrete RGB Filters Change:
Delete R488, R492 R493, C590, C596, C599, L49, L51 and L53. Connect DCRT_[R, G, B] directly to U23 pins 1, 2 and 5.
Move R495, R498 and R497 to before (left of) C601, C602 and C604
Change the filter to match the attached requirements from AMD design guide. The filter should consist of C-L-C-L. See attached for the components values.
Change layout notes for characteristic impedance to ""Make characteristic impedance Zo=37.5 ohm"" for DOCK_[R, G, B] traces from U23 to docking connector. (Note not including DOCK_HSYNC and DOCK_VSYNC)
"

page 34 Change C3405 to NI. This is to resolve Tx31 timing issue in SVTP 3.1 Power Sequence on Discrete

page 10 32.768 KHz crystall should be changed to a 10 ppm part to meet SVTP 2.6 RTC Accuracy Test requirement of +8s / -10s per 7 days.

page 33 "Changes are based on Clash discrete schematic. Same changes apply for Cure
install R5590; no install R5469, R5586, Q601, R5588, Q600, R5589 these will not be needed, they are only needed for the previous generation battery
no install C5341 high impedance signal
remove (short) power pads PAD539 and PAD540
change R9425 to 10K, and connect R9425-1 to PMC boost will be enabled by PMC signal
add 220K resistor from C9421-1 (BP pin) to R9425-2/Q9304-1 node this puts hysteresis in the EN# signal
add 0.5A schottky diode from L30522-1 (cathode) to GND (anode) in case battery is removed during boost see attached file boost4.jpg
Note second attachment shows the design and component changes for cure. This is the same attachment as the one in item 40 from Tom
"

page 33 Add 0.5A diode, 220K resistor, and make resistor value changes, to the boost circuit as shown in the attached file Cure_b_091510.jpg

page 25 "Add C2510 100nF between Q35 S to G Change R490 to 4.7K & R491 to 100K"

page 23 Add Q2301 on CON16 Pin7 and add Q2302 on CON17 Pin7

page 39 Add Q3910 and change front wireless LED circuit.

page 11 Add R1121 pull high to +V3.3S and add R1122(NI) pull high to +V3.3_WWAN

page 24 Change R1129 to NI and R1127 to I. EC_VBUS_EN is configured for SLP_S4#_3R and that's what we will use to control the USB power switches on USB3 d/b for SI2

page 27 Change CON37 pins 14, 20, 26, 32 and 38 to GND.

page 30 "Per Morris we need to change R3055 to 3.92K to raise the PROCHOT# trigger temperature to 120C.

page 47 For RF solution :Add C1121,C1122 to P_+VCORE_VIN_SHAPE12; Add C1123,C1124 to P_+3.3A_OUT_S ; Add C1119,C1120,C1113,C1111,C1112,C1114,C1115,C1116,C1117,C1118 to +VBAT

page 20 "This was missed from the FPR_OFF changes.
Delete R474, R557, R574, Q18 and Q84
Change CON21.1 to +V3.3A
See drawing attached in item #7"

page 59 BOM change: Change R510 to 'I' and R511 to "NI" We will use USB3_PWR_EN to control the USB3 controller power from BIOS for SI2

page 10 Reserve a 0 ohm (NI) from SATA_ODD_PWR_EN to U65.7 (or ths can be connected to R1400.1)

page 30 Change CE3010 to INSTALL

page 25 For EMI solution: add R2515 & R2516 0 Ohm to connect CON28 pin13,pin15 (USB_PN3/USB_PP3)

page 13 BOM change: change R1320 to install

page 10 BOM change: change R81, R82, R83, R86, R87 and R88 to no-install

page 38 Connect U55.5 to +VSCP (EN pin of USB charging controller)

page 10 BOM change: Change R1418 to INSTALL.

page 13 BOM change: Change R1312 to INSTALL to connect KBC_RESET# signal to RCIN# of PCH

page 41 Delete R291. AT_GPIO11 is double pulled up (R291 and R239). For correct memory aperture setting AT_GPIO[13:11] should be set to 001b so ?R242 needs to be changed to NI

Sharepoint PV change list

page 13 BOM change: Change R1312 to INSTALL to connect KBC_RESET# signal to RCIN# of PCH

page 13 KBC_RESET# is shorted across R1312 in layout because the net name on both sides of R1312 are the same.

page 38 Connect U55.5 to +V5CP (EN pin of USB charging controller)

page 41 Blu-Ray Issue: Delete R291. AT_GPIO11 is double pulled up (R291 and R239). For correct memory aperture setting AT_GPIO[13:11] should be set to 001b so ?R242 needs to be changed to NI

page 41 HDMI Issue. Add 10K pull-ups to +V3.3S_DELAY on DCRT_HSYNC and DCRT_VSYNC. Note this can placed near the current reworked locations at R480 and R572.

page 33 Make the attached changes from Tom for boost circuit

page 17 Change 8051_RX and 8051_TX pull-ups connection as attached.

page 30 Change R3007 from 2.2ohm to 1ohm

page 11 "CLKREQ#_USB30 need to pull-up instead of pull-down.

page 6 "Match Clash : Change R430 to NI "

page 41 "Match Clash Discrete : Change R804 to NI "

page 27 "Match Clash:
Change R1581 to NI
Change R1278 to I
Change R507 to 10K_5% NI"

page 42 "Match Clash : Delete R271"

page 20 "Match Clash : Change C583 to I"

page 20 "Match Clash : Delete R477, connect the trace directly
Delete R574, R857 and Q84"

page 6 "Match Clash:
Change R36 to 51_1% resistor"

page 28 "Change D2806.1 back to +V5S, same as SI2. This was changed on SI2B

page 28 C2831 is not needed so can be deleted but if it's reserved it should not be Y5V type, change it to X7R

page 28 Change R2857.1 to +V5S to match Clash

page 28 Add a 0.1UF decoupling cap at pin6 (VCC) of U2801 to match Clash

page 28 "Delete C2832 at pin3 of CON2801 to match Clash
Add a dual ESD diode at pin1 (DCIN) and pin3 (LIMIT_SIGNAL) of CON2801 to match Clash"

page 28 "Change R2801 to 100K to match Clash
No change for C2801"

page 28 Change R2852 to 130K_1% to match Clash

page 28 Add a Transient Voltage Surpression (TVS) diode on OCP_A_IN at R2810.1 to match Clash

page 28 "Change R2844 to 27.4K_1%
Delete R2845 and connect R2844.2 directly to GND
Add a 0.1uF decoupling cap on pin8 of U2803 to match Clash"

page 28 Connect D2806.2 from the L2800.2 side for less noise power for the charger IC. This will match Clash.

page 22 Connect U18.10 to +V3.3S from C530.1. From Clash schematic pin10 is also a VDD pin for the TPM device.

page 25 "Remove eDP:
Delete EDP[1:0]N/P connections
Delete LVDS_RXB[1:2]+/- at R863.1, R886.1, R450.1 and R452.1
Delete C695, C696, C700, C701, R450, R452, R463 and R880"

page 42 "Remove eDP:
Change U71.AL17 pin from EDP1P to LVDS_RXE1+
Change U71.AK16 pin from EDP1N to LVDS_RXE1-
Change U71.AH18 pin from EDP0P to LVDS_RXE2+
Change U71.AJ17 pin from EDP0N to LVDS_RXE2-"

page 25 "Remove eDP:
Delete DPA_AUX# and DPA_AUX connections
Delete R523, R526, R587 and R588
Connect LCM_DDCPDATA and LCM_DDCPCLK to CON28.26 and CON28.28 directly"

page 41 "Remove eDP:
Delete DPA_AUX and DPA_AUX# connections on U71.AE6 and U71.AE5. Leave the pins NC."

page 28 "From Tom Sawyers:
1) Add a 100pF cap (no install) from U2800-6 to SGND_CHG (ACDET to charger signal GND)
2) Remove D2806, and connect D2905-3 /D2907-2 node (+VADP_DEBUG) to R2838-2 (CHG_VCC_1). [Use the existing diode-or of adapter power and battery power to also power the charger Vcc pin.]
3) Add a 7002 type FET, gate to KBC GPIO to be determined, drain to U2800-6 (ACDET), source to SGND_CHG.Add a 10K resistor from FET gate to GND.Need to decide with KBC GPIO to use.? GPIO should be low, except when resetting BQ24726 charge latch.
4) Add a 7002 type FET (no install), gate to OCP_PWM_OUT, drain to PROCHOT#, source to GND. [allows throttle signal from KBC to throttle CPU using PROCHOT#]"

page 17 "Delete Y4 and R1234
Delete R816. SLP_ME_CSW_DEV# doesn't need to be connected to KBC. We will use this GPIO to control Q2802.G."

page 11 Please reserve a 10K pull-down to signal USB3_PWR_EN. Do not populate this resistor.

page 24 Please No Install R510 (0-ohm for USB3_PWR_EN) and Install R511 (0-ohm for SLP_S0#_3R)

page 20 "Delete R819 and R821 and connect USB_PPS and USB_PNS directly to CON20.3 and CON20.4.
Delete R848 and R847 and USB_PPS_R_WLAN and USB_PNS_R_WLAN
Delete BT_OFF# at Q81"

page 23 "Delete USB_PPS_R_WLAN and USB_PNS_R_WLAN to CON16.36 and CON16.38
Delete BT_OFF#, R518 and R520"

page 5 Delete R272 and make the eDP_HPD as NC same as UMA

page 6 Change R431 from 2.2K_5% to 1K_5% to match Clash

page 10 Delete SPI_CS1# on U2.T1 pin

page 17 "Delete SPI_CS1# at CON8.22, R357.1 and R355.2
Delete KBC_SPI_CS1_IN net name at and change it to IM_DAT
Delete R357, R355 and R7870"

page 11 Add a 10K PU on PEG_CLK_REQ# (U2.M10) to +V3.3A and change R105 to NI.

page 12 Delete SUS_ACK net, SUS_PWR_ACK net to R135, and R135 to SUSACK# (U2.C12 pin). Add a TP to the SUSACK# pin only to match Clash.

page 12 Delete SLP_SUS#_1126 net but keep the TP to SLP_SUS# U2.G16

page 29 Delete SLP_SUS#_1126 and R2951

page 13 Connect NC_1, NC_2, NC_3, and NC_4 to GND through a single 0 ohm resistor (just in case if they need to be disconnected). CRB has these pins connected to GND via individule 0 ohm resistors.

page 17 "Delete BGA_CRACK net
Change R349 to 1K_5%
Change CON8.7 from +V3.3S to connect to NMI_SMI_DBG#"

page 41 "Change R280 to 5.11K_1%
Change R277 to INSTALL
(Note R274 is already shown as NI)"

page 13 Change R200 to NI. ALS_EN# (GPIO17) has a 20K internal PU.

page 13 Change D1301, R1305 and R196 to NI

page 10 "Change Q53 and Q54 from PMV65XP to BSS84 p-FET (same as what Clash used) for HDA_SDOOUT. The original p-FET causes a glitch on PLT_RST# when ME override activates.
Also add a small 10 ohm series resistor between PLT_RST# and Q54.G. (Note I'm still testing this solution so may change)."

page 23 Add C2316 100nF cap between Q16 S. and Q16 G. for DBS 6878A8 Transient States test

page 47 "Add 68pF(C1131, C1134) and 1nF(C1132, C1135), 100nF(C1130, C1133) from VDDCORE_IN_SHAPE to GND
Add 68pF(C1136), 1nF(C1137) from +V1.05S to GND
Add 68pF(C1138, C1140), and 1pF(C1139, C1141) from +V1.8S toGND
Add 68pF(C1142) and 1nF(C1143) from +V1.5 to GND
Add 68pF(C1145, C1167) and 1nF(C1146, C1168) and 100nF(C1144) from +V1.5_VDDQ to GND
Add 68pF(C1147, C1149, C1166) and 1nF(C1148, C1150) from +V5S to GND
Add 68pF(C1151) and 1nF(C1152) from +V5CP to GND
Add 68pF(C1153) and 1nF(C1154) from +VCC_ESATA_USB to GND
Add 68pF(C1155, C1171, C1174, C1173, C1176) and 1nF(C1156, C1172, C1175) from +V1.5S
Add 68pF(C1158) and 1nF(C1159) from +VCC_CORE to GND
Add 68pF(C1160) and 1nF(C1161) from P_+VCORE_VIN_SHAPE12 to GND
Add 68pF(C1162) and 1nF(C1163) from +V1.05M_LAN to GND
Add 68pF(C1164) and 1nF(C1165) from +V3.3A to GND
Add 68pF(C1169) and 1nF(C1170) from +V3.3S to GND
Add 68pF(C1157) from +V5A to GND"

page 10 Change net PLT_RST# to BUF_PLT_RST# at Q54 G.

page 28 To correct, change ACDET_RST to CHG_RST at Q2802-G.

page 11 "Delete CLK_27M, CLK_27M_R and R505.
Add a TP to CLKOUTFLEX2 (U2.47) pin"

page 41 Delete CLK_27M, R282 and R284

page 17 "Delete Q66 for OCP_PWM_OUT to control PROHOT# and...
Add a dual diode (BAT54) with cathode connect to Q61.G and anodes connect to OCP_PWM_OUT through a NI 0 ohm resistor and KBC_PROHOT#. See attached drawing."

page 19 Reserve a 0 ohm (NI) to connect SLP_S3#_3R to U5.3 (EN) also. This is case we need to match Clash.

page 23 Delete JP3303 and JP3304 pads that are reserved for using +V3.3S. They are not needed any longer.

page 23 Delete PCH_SMB_CLK_3S_WWAN and PCH_SMB_DAT_3S_WWAN on CON17.30 and CON17.32.

page 11 "Delete R1121, R1122, R136, R988, R989, R987, Q42 and Q33
Delete PCH_SMB_CLK_3S_WWAN and PCH_SMB_DAT_3S_WWAN nets"

page 10 "Add a 10K ohm series to connect WHITE_BAT to Q53.G
Add a 0 ohm series to connect BUF_PLT_RST# to Q54.G
See attached drawing."

page 28 Per Tom's email: set R2865 and R2866 to Zero Ohms

page 23 Delete CON16.42 net LED_WWAN_LINK#, and connect Con 16.42 44 46 togerther to LED_WLAN_LINK#. Just like Clash circuit.

page 28 "Change R2865 from 10 Ohm to 0 Ohm,
Chnge R2866 from 7.5 Ohm to 0 Ohm"

page 23 Delete Con 16 pin 51 net BT_OFF#, and R519

page 26 RGB LC filters are incorrect. Change the 0 ohms to 68NH inductors (this must be at least 0603 size) and move the caps to between the inductors and 150 ohm terminations. See attached.

page 11 Delete CLK_48M_USB30 and R120

page 24 Delete CLK_48M_USB30 to CON38.19

page 29 Delete R2952 that connects to SUS_PWR_ACK. This is for layout which will free up more space for USB. R2952 was only reserved for ME debugging purpose.

page 17 "Reduce capacitance on PROCHOT# to meet risetime spec.? Replace Q61, R1742, and D1710 with new circuit as shown in attached file.

page 25 "Delete R2504 and R2505
Connect CON28.9 to +V3.3S directly."

page 33 BOM change: Please change all components of boost circuit to NO INSTALL.

page 29 Change C2982? 4.7uF from 10uF due to RT9205 with 700A_max for +V3AL.

page 25 Change R490? 10k.

Hon Hai Precision Industry Co. Ltd.
Foxconn eMS Inc.
HWBD R&D
phone: +886-2-27996111

Title: PV change list

Size	Document Number	Rev
Custom	CURE DIS	0.1

2011/01/11

Page 26 Change VGA filter L and C place
Page 17 Change R387 pin1 to +V3A_SPI
Page22 Add C2323 and C2324 at line UIM_PWR to GND

2011/01/13

Page 17 Delete R836
Page 25 Change R480, R481 place
Page 25 Add R2502, R2503
Page 20 Delete R818, R817
Page 20 Add L2021
Page 23 Delete R841, R843
Page 26 Add R2602, R2603
Page 23 Add L2321

2011/01/14

Page 25 Change C657, C658 place
Page 25 Add C2504, C2505

2011/01/15

Page 23, mount R1301 to match Clash

2011/01/17

Page 24 Install R510 and uninstall R511
Page 25 Delete C657, C658

Sharepoint MV change list

page 25 "Move HSYNC and VSYNC series resistors to MUX outputs:
1. Delete R480 and R481
2. Add 20 ohm 5% series resistors for VGA_HSYNC and VGA_VSYNC
3. Add 20 ohm 5% series resistors for DOCK_HSYNC and DOCK_VSYNC"

page 26 "Dock RGB filter topology change from CL to LC:
1. Connect C2602.2 to L2601.1
2. Connect C2603.2 to L2602.1
3. Connect C2604.2 to L2603.1"

page 17 "Remove KBC debug signal buffers
1. Change U72 and U70 to NO INSTALL
2. Change R825 to 0 ohm INSTALL"

page 17 "Reduce Caps and Num Lock LEDs Brightness:
1. Change R811 from 0 ohm to 294 ohm 1% INSTALL
2. Change R830 from 0 ohm NI to 294 ohm 1% INSTALL"

page 34 "Reduce +V1.05M_LAN ramp up current
1. Add a 4.7nF from Q3421.3 to Q3421.4"

page 19 "Reduce +VAUDIO_VCC_C ramp up current
1. Change C590 from 10nF to 1uF"

page 18 "Enable JMicron D3E_WAKE for AC:
1. Change R1850 to INSTALL
2. Change C1833 to INSTALL"

page 23 "Increase SIM power decoupling per Comm. team:
1. Add a 0.1uF and 4.7uF on UIM_PWR at CON18.2 (Note trace must be 10mils wide)"

page 30 "Per Maxim feedback for LL and FDOM to pass
DIS modification items as below
1.C3039a220nF
2.C3056a68nF
3.R3034a7.5kohm
UMA modification items as below
1.R3029a100kohm
2.C3056a22nF
3.R3034a8.87kohm
4.C3032a10nF
5.C3008?C3009a10nF
6.R3015a5.36kohm

page 26 "EMI changes:
1. Change R849 and R855 to 90ohm Common Mode Choke for USB port 11 to dock.
2. Change R868 and R873 to 90 ohm Common Mode Choke for USB port 13 to dock"

page 25 "EMI changes:
1. Change R2515 and R2516 to 90 ohm Common Mode Choke for USB port3 to Camera."

page 20 "EMI changes:
1. Change R818 and R817 to 90 ohm Common Mode Choke for USB port8 to FPR
2. May need to add CM choke for USB port6 to BT as well."

page 23 "EMI changes:
1. Change R841 and R843 to 90 ohm Common Mode Choke for USB port9 to WWAN"

page 17 "Fix SMBus to charger undershoot
1. Change R812 and R813 to from 0 ohm to 33 ohm"

page 17 "Fix to meet SS battery life requirement
1. Change R367.1 from +V3AL to +V3A_SPI.
Note we could also remove the +V3AL option and connect SPI ROM directly to +V3.3A if it could simpify layout."

page 28 "Fix to meet SS battery life
1. Change U2802, U2803 from LM393ADR to LMV393IDR"

page 29 "Fix to meet SS battery life
1. Change U2902 from LM393ADR to LMV393IDR"

page 26 "Reduce S3 power consumption
1. Change R225 from 10K to 47K"

page 26 EMI requests us, change D2703 D2704 D2705 & D2711 to R2713 R2714,R2715,R2732 pin1.Please refer to the attached file for details.

page 30 "For acoustics test:
Change CE3010 and CE3011 from 47uF to 68uF"

page 29 "For acoustics test:
Change C2903, C2904 and C2907 to NI
Change C2908, C2910 and C2905 from 4.7uF to 10uF"

page 30 "For acoustics test:
Change C3005, C3022, C3023, C3033 and C3034 to NI
Change C3020, C3006, C3004 and C3035 from 4.7uF to 10uF"

page 23 Change R1301 to INSTALL to match Clash.

page 24 "Change R510 to INSTALL and change R511 to NO INSTALL
For PVR will use USB3_PWR_EN from GPIO to control the USB30_EN on USB3 daughter board"

page 19 Change R1961 to INSTALL and change R1962 to NI

Hon Hai Precision Industry Co. Ltd.
Foxconn eMS Inc.
Title: MV change list
Size: Custom | Document Number: CURE DIS | Rev: 0.1