Schematics Page Index (Title / Revision / Change Date)

Project Code & Schematics Subject:	**M850 Main Board_8L**

PCB P/N:	**1P-0094J00-8011(IRIS)** **1P-0094500-8011(HANNSTAR)**
A+U/B P/N:	**1P-1094J01-8011(IRIS)** **1P-1094501-8011(HANNSTAR)**
P/B P/N:	**1P-1094J00-8011(IRIS)** **1P-1094500-8011(HANNSTAR)**

P. Leader	Check by	Design by

FOXCONN — HON HAI Precision Ind. Co., Ltd.
CCPBG - R&D Division

Title: **Index Page**		
Size: Custom	Document Number: M850-1-01	Rev: 1.0
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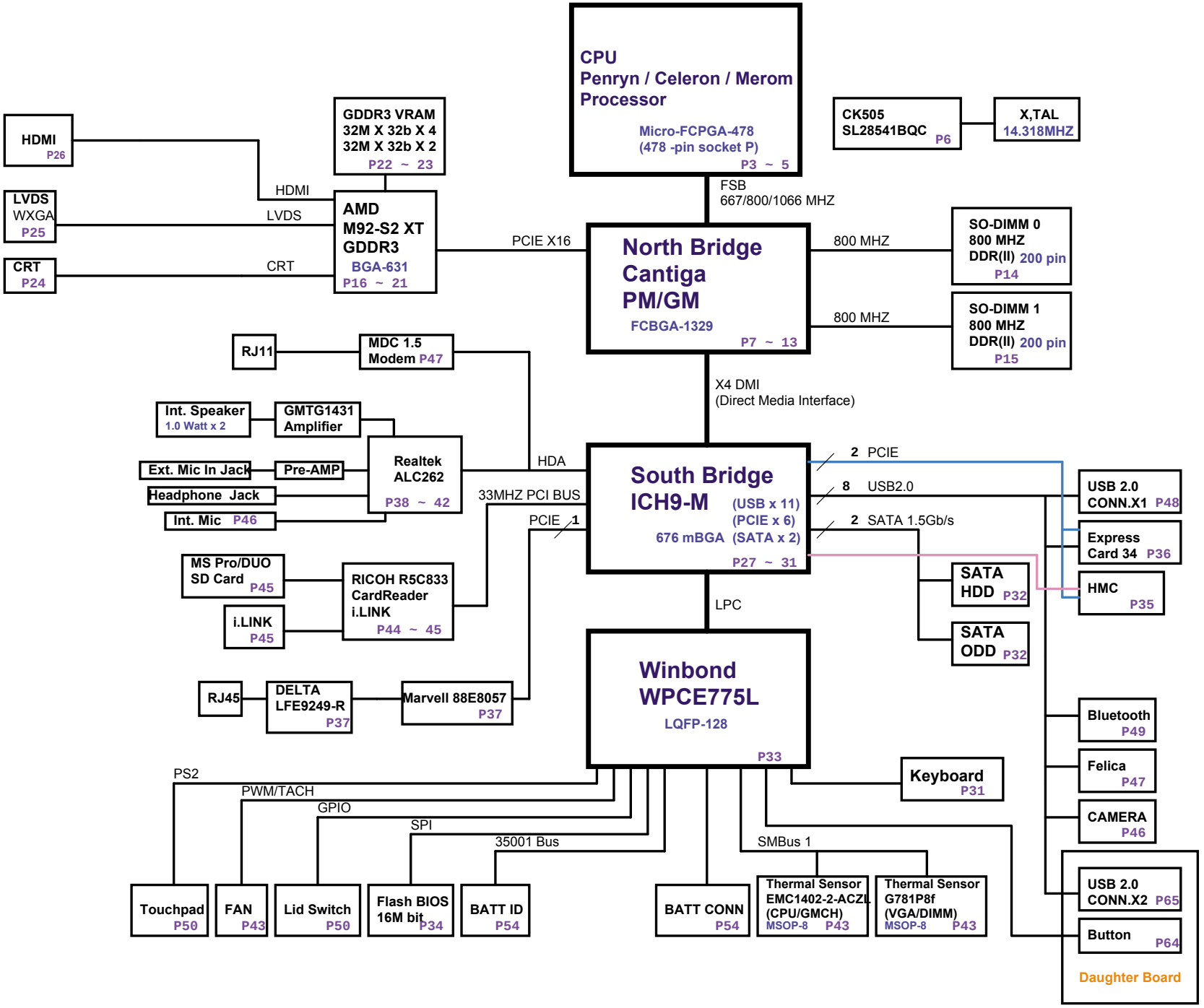
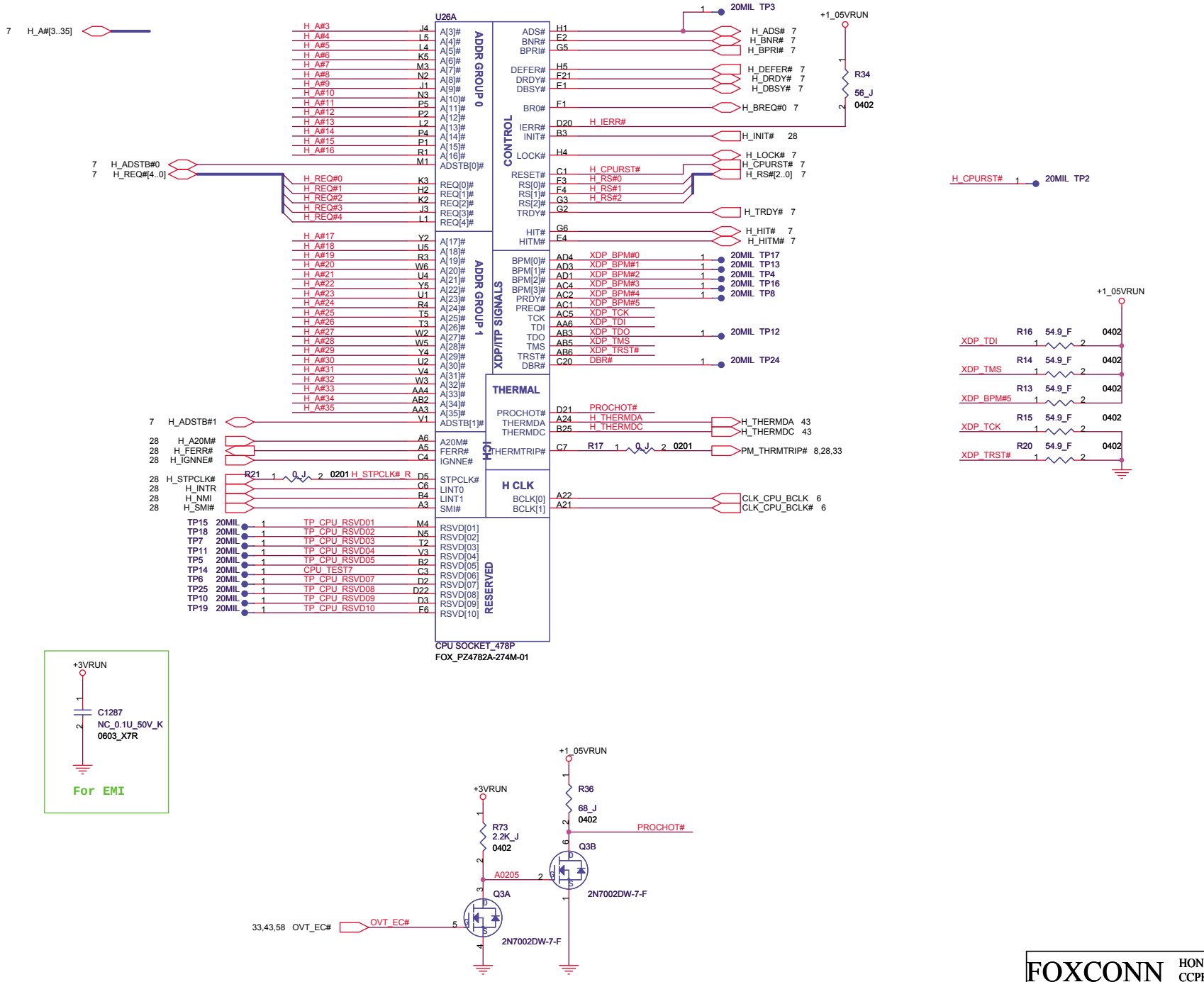
M851(Montevina + M92-S2 XT)

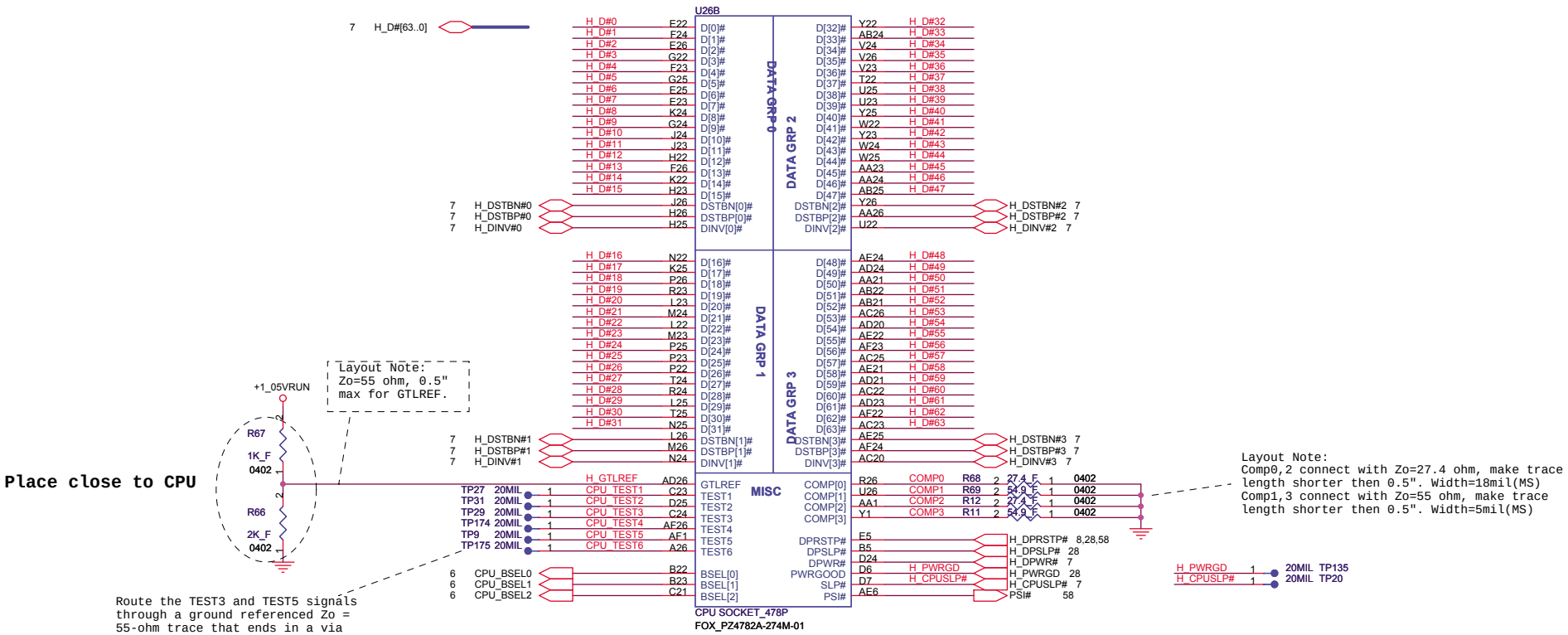


FOXCONN HON HAI Precision Ind. Co., Ltd.
CCPBG - R&D Division

Title: Block Diagram		
Size: Custom	Document Number: M850-1-01	Rev: 1.0
Date: Wednesday, June 17, 2009	Sheet 2 of 69	



FOXCONN	HON HAI Precision Ind. Co., Ltd. CCPBG - R&D Division		
Title	Penryn (HOST BUS) 1/3		
Size A3	Document Number M850-1-01		Rev 1.0
Date: Thursday, July 09, 2009	Sheet 3	of	69



FOXCONN	HON HAI Precision Ind. Co., Ltd. CCPBG - R&D Division	
Title	Penryn (HOST BUS) 2/3	
Size A3	Document Number M850-1-01	Rev 1.0
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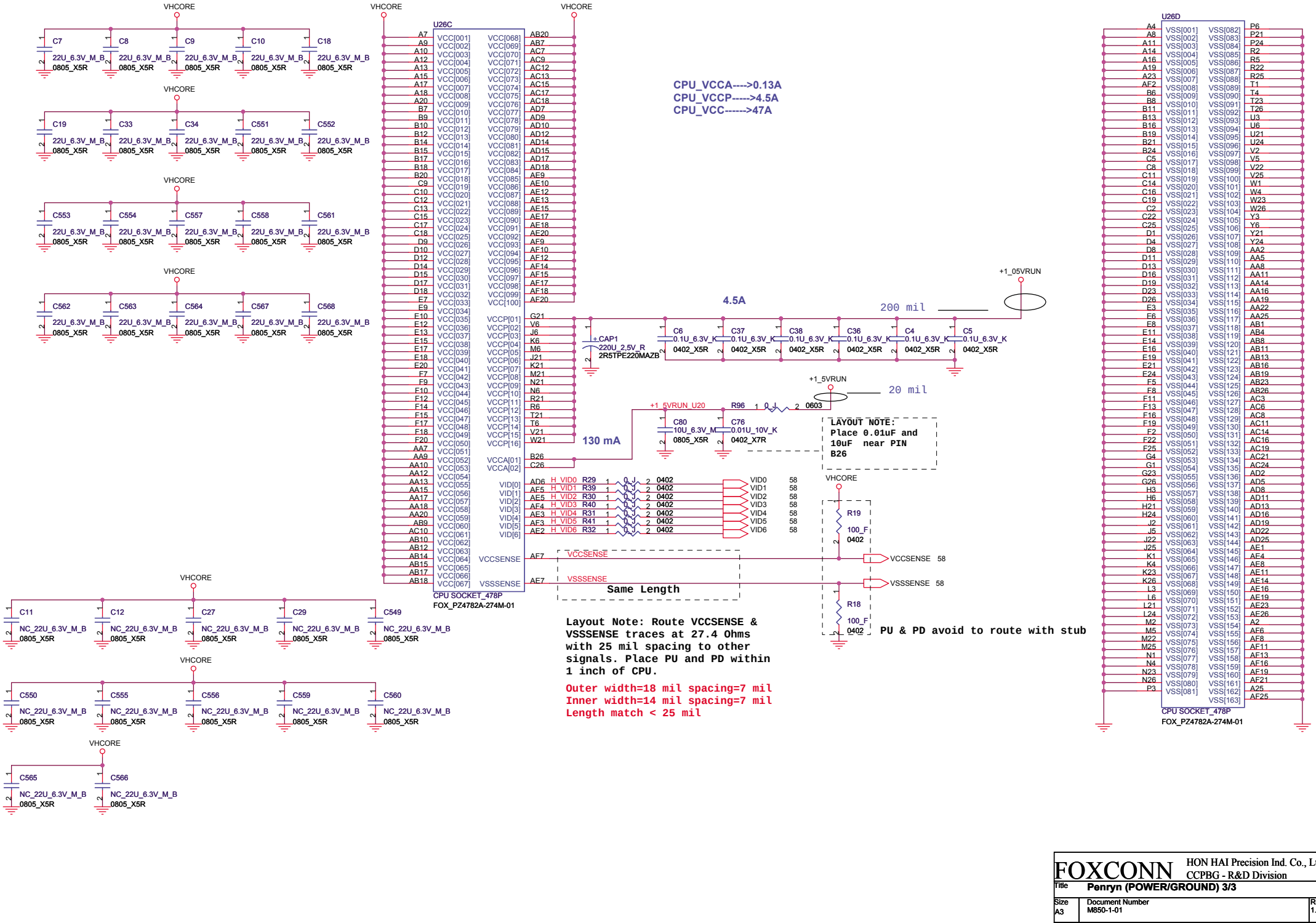

FOXCONN	HON HAI Precision Ind. Co., Ltd. CCPBG - R&D Division	
Title	Penryn (POWER/GROUND) 3/3	
Size A3	Document Number M850-1-01	Rev 1.0
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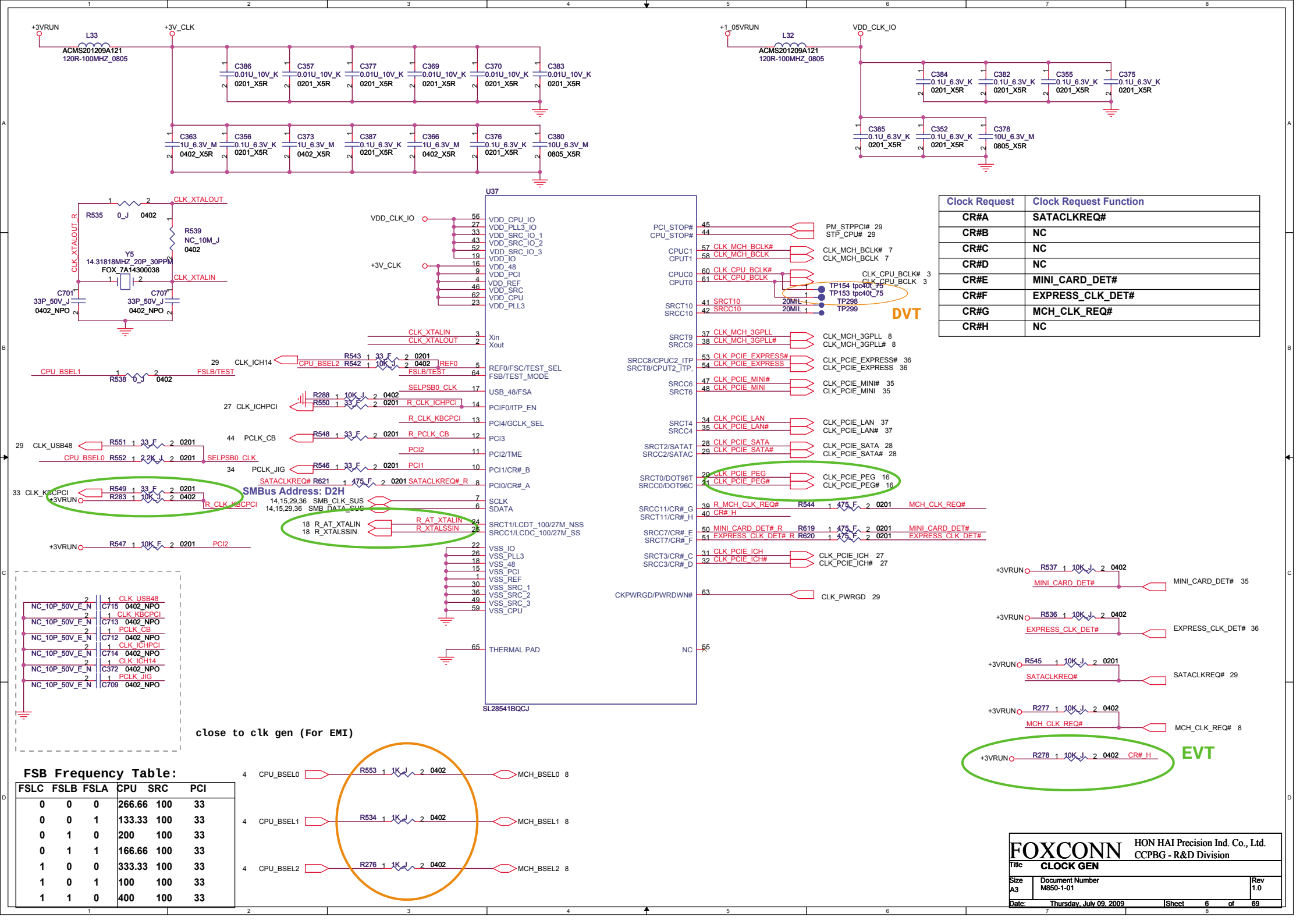

Clock Request	Clock Request Function
CR#A	SATACLKREQ#
CR#B	NC
CR#C	NC
CR#D	NC
CR#E	MINI_CARD_DET#
CR#F	EXPRESS_CLK_DET#
CR#G	MCH_CLK_REQ#
CR#H	NC

FSB Frequency Table:

FSLC	FSLB	FSLA	CPU	SRC	PCI
0	0	0	266.66	100	33
0	0	1	133.33	100	33
0	1	0	200	100	33
0	1	1	166.66	100	33
1	0	0	333.33	100	33
1	0	1	100	100	33
1	1	0	400	100	33

FOXCONN
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Title	CLOCK GEN	
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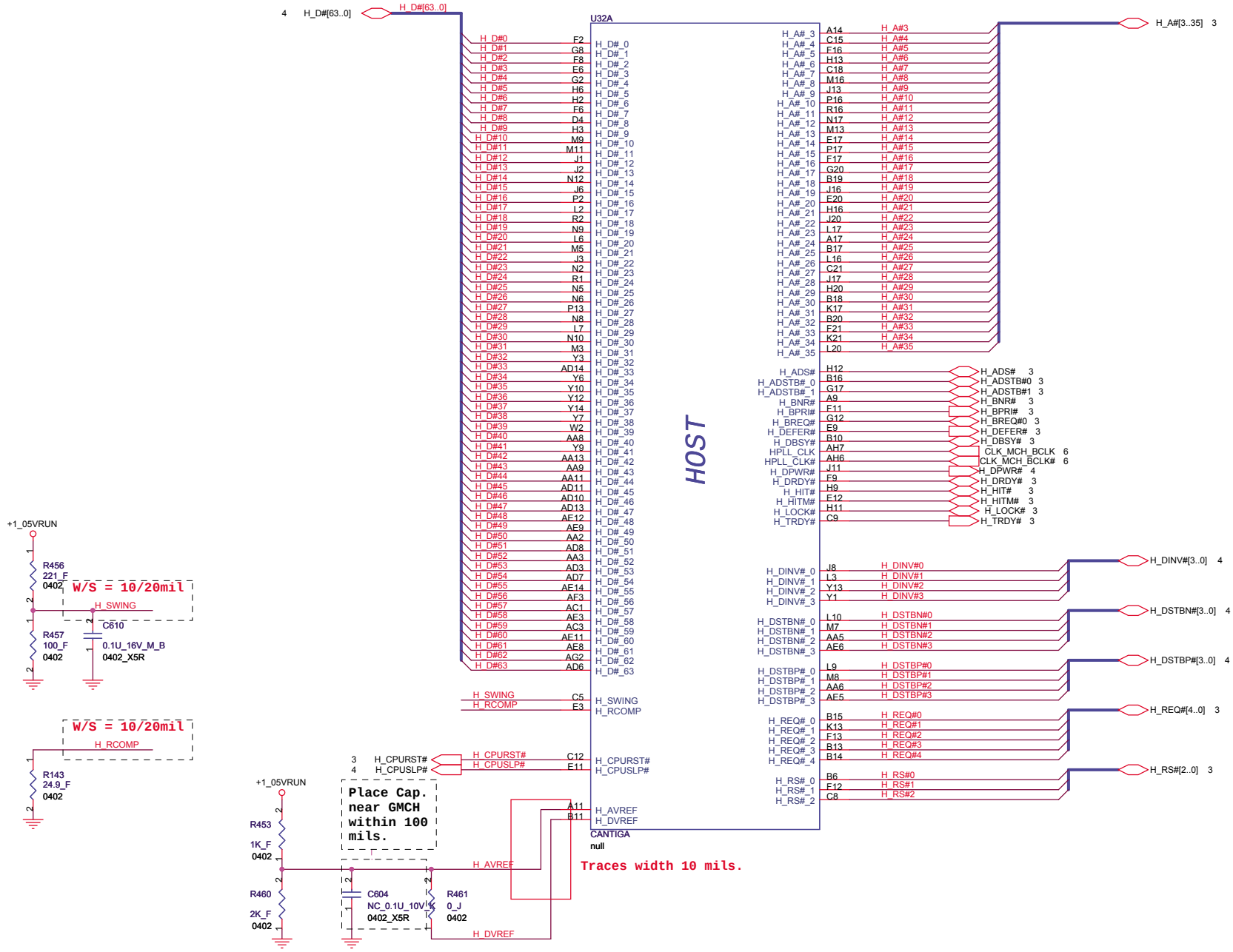

FOXCONN
HON HAI Precision Ind. Co., Ltd.
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Title: Cantiga (HOST) 1/7		
Size: A3	Document Number: M850-1-01	Rev: 1.0
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MCH_CFG_0-2 FSB Frequency	000 = FSB1066 ; 010 = FSB800; 011 = FSB667 ; Others = Reserved
MCH_CFG_3-4	Reserved
MCH_CFG_5 DMI X2 Select	Low = DMI X2 High = DMI X4 (Default)
MCH_CFG_6 ITPM Host Interface	Low =The ITPM Host Interface is enabled2 High = The ITPM Host Interface is disabled (default)
MCH_CFG_7 Intel Management Engine Crypto Strap	Low = Intel Management Engine Crypto Transport Layer Security (TLS) cipher suite with no confidentiality High = Intel Management Engine Crypto TLS cipher suite with confidentiality (default)
MCH_CFG_8	Reserved
MCH_CFG_9 PCIE Graphics Lane	Low = Reverse Lane High = Normal operation (default)
MCH_CFG_10 PCIE Loopback enable	Low = Enabled3 High = Disabled (default)
MCH_CFG_11	Reserved
MCH_CFG_12 ALLZ	Low = ALLZ mode enabled3 High = Disabled (default)
MCH_CFG_13 XOR	Low = XOR mode enabled3 High = Disabled (default)
MCH_CFG_14~15	Reserved
MCH_CFG_16 FSB Dynamic ODT	Low = Dynamic ODT disabled High = Dynamic ODT enabled (default)
MCH_CFG_17~18	Reserved
MCH_CFG_19 DMI Lane Reversal	Low = Normal operation (Default): Lane Numbered in Order High = Reverse Lanes DMI x4 mode [(G)MCH->ICH]: (3->0, 2-> 1, 1->2 and 0->3) DMI x2 mode [(G)MCH ->ICH]: (3->0, 2->1)
MCH_CFG_20 Digital Display Port (SDVO/ DP/iHDMI) Concurrent with PCIe	Low = Only digital display port (SDVO/DP/iHDMI) or PCIe is operational (default) High = Digital display port (SDVO/DP/iHDMI) and PCIe are operating simultaneously via the PEG port

U32B

RSVD

DDR CLK/ CONTROL/COMPENSATION

CLK

DMI

GRAPHICS VID

GRAPHICS VR

MISC

NC

HDA

CANTIGA

CFG[17:3] internal pull-up
CFG[20:18] internal pull-down

Width =12mil

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Title	Cantiga (DMI) 2/7	
Size: Custom	Document Number: M850-1-01	Rev: 1.0
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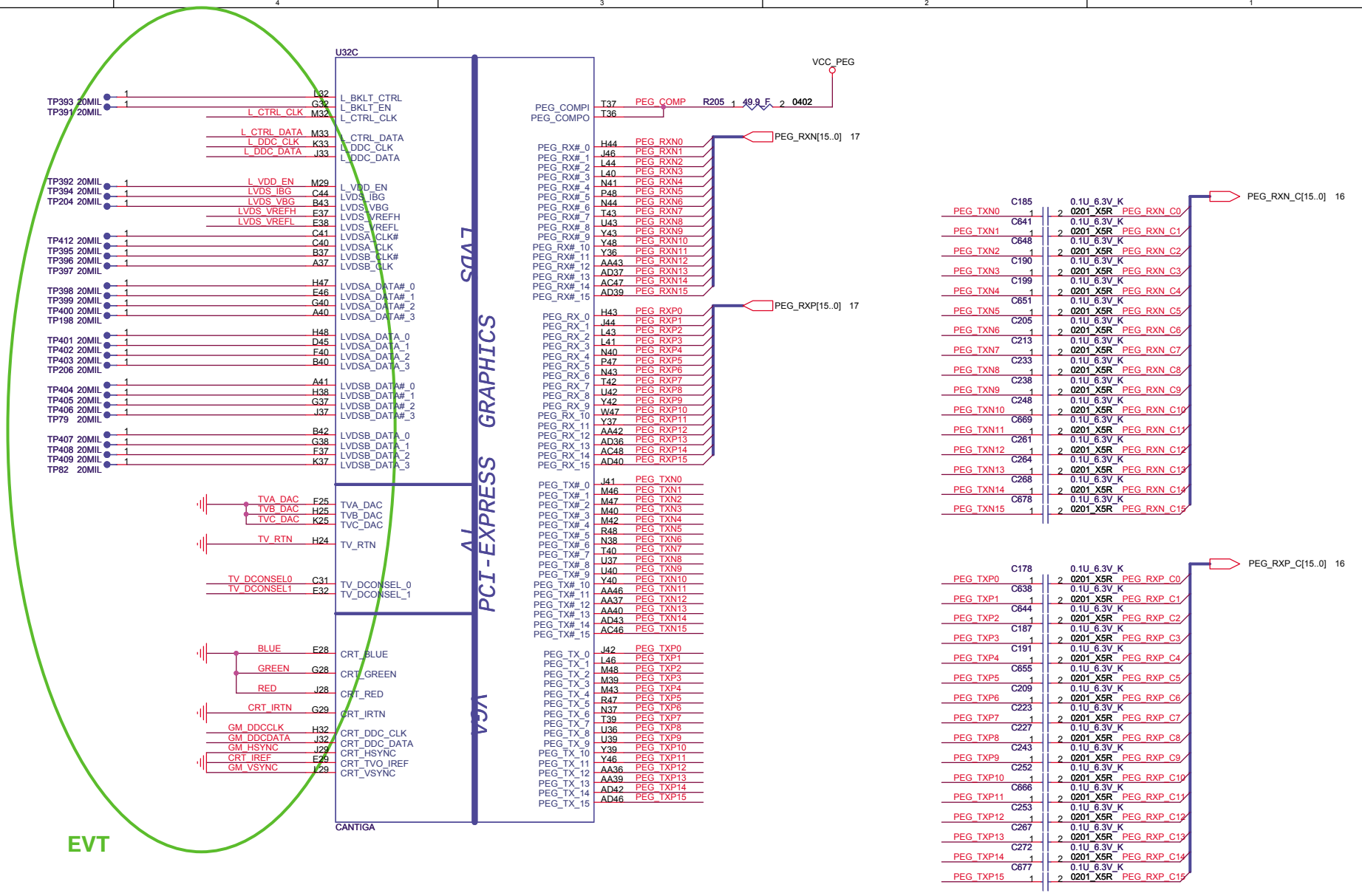

FOXCONN	HON HAI Precision Ind. Co., Ltd. CCPBG - R&D Division
Title	Cantiga (GRAPHIC) 3/7
Size: A3	Document Number: M850-1-01
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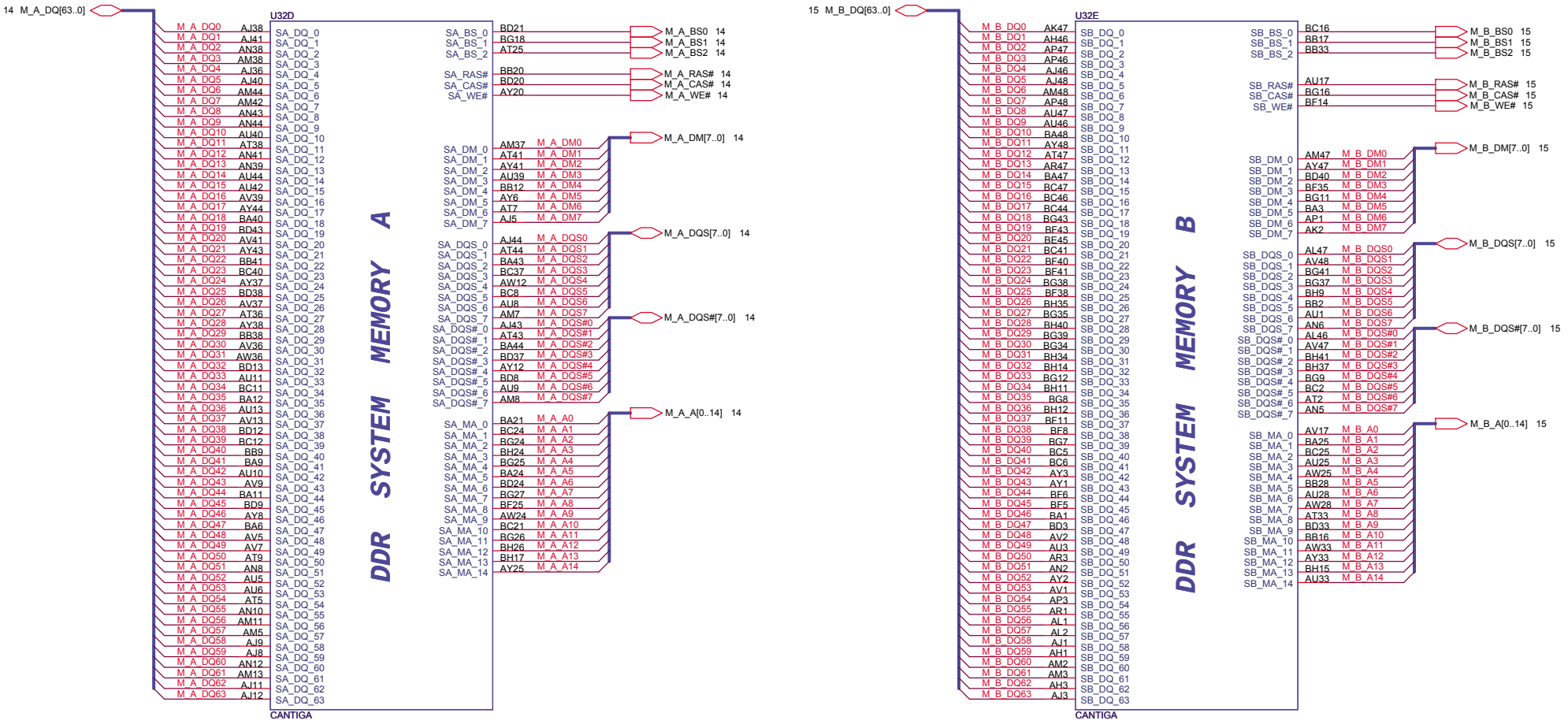
Date: Wednesday, April 01, 2009	Sheet 9 of 69



FOXCONN	HON HAI Precision Ind. Co., Ltd. CCPBG - R&D Division	
Title	Cantiga (DDRII) 4/7	
Size A3	Document Number M850-1-01	Rev 1.0
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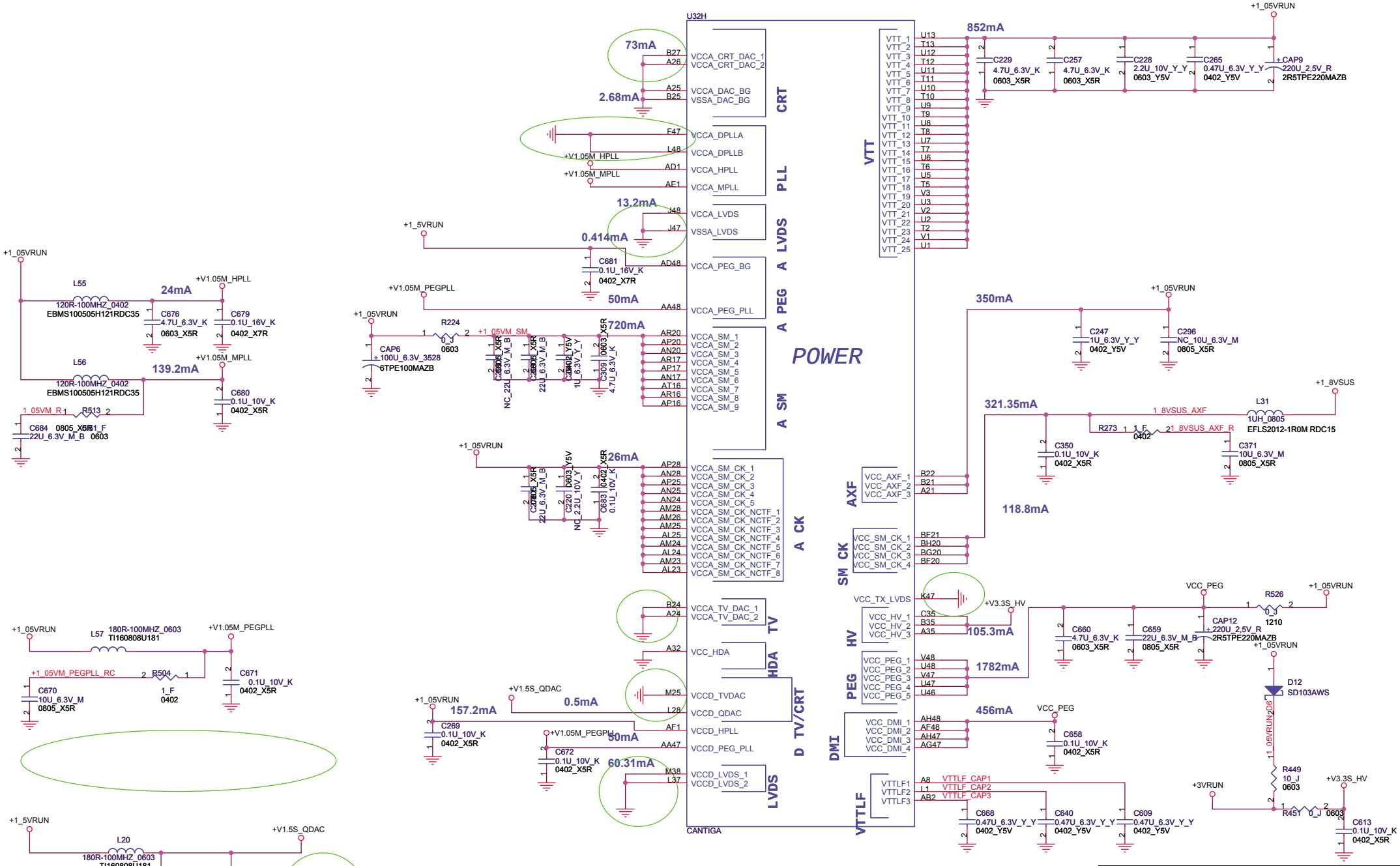
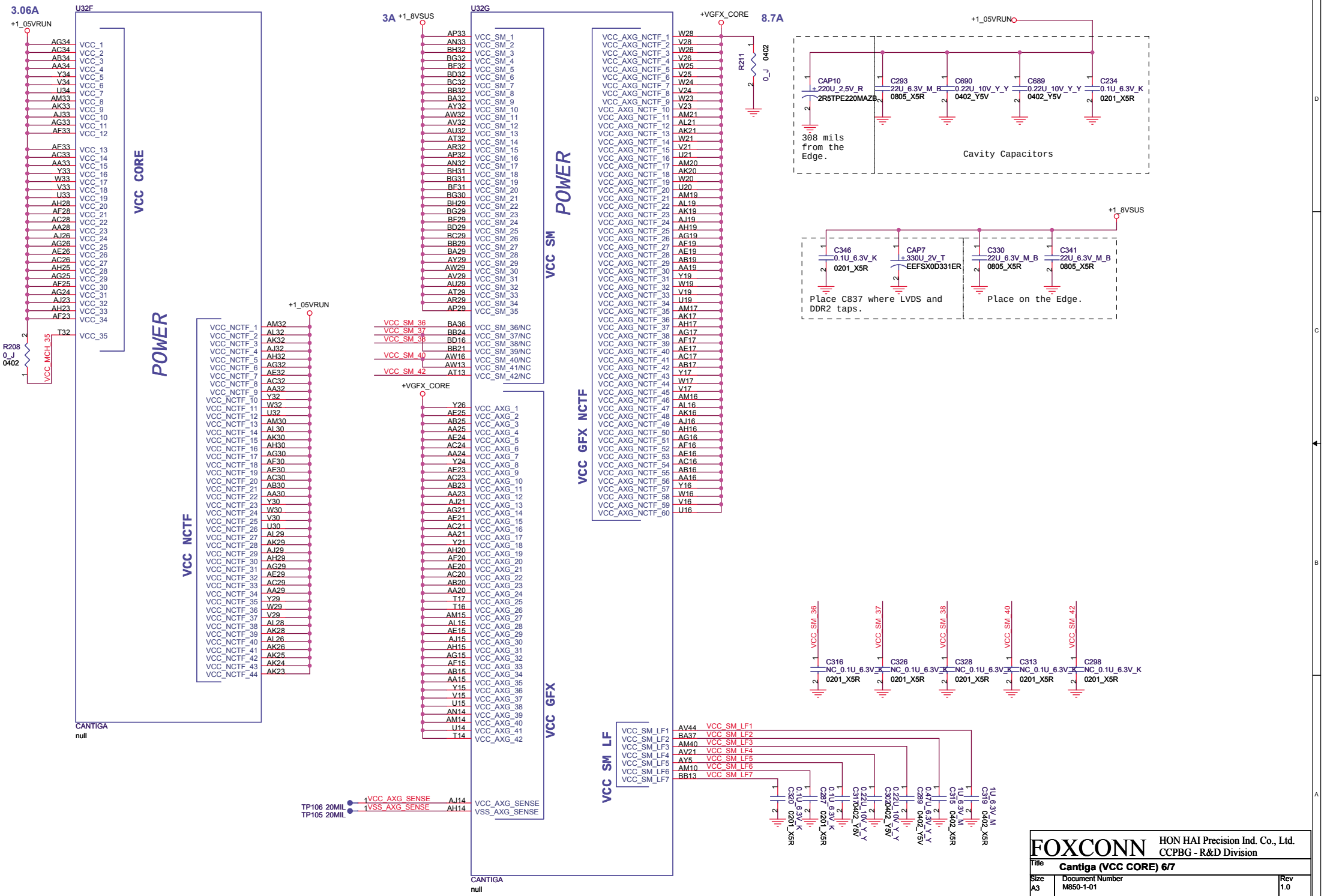
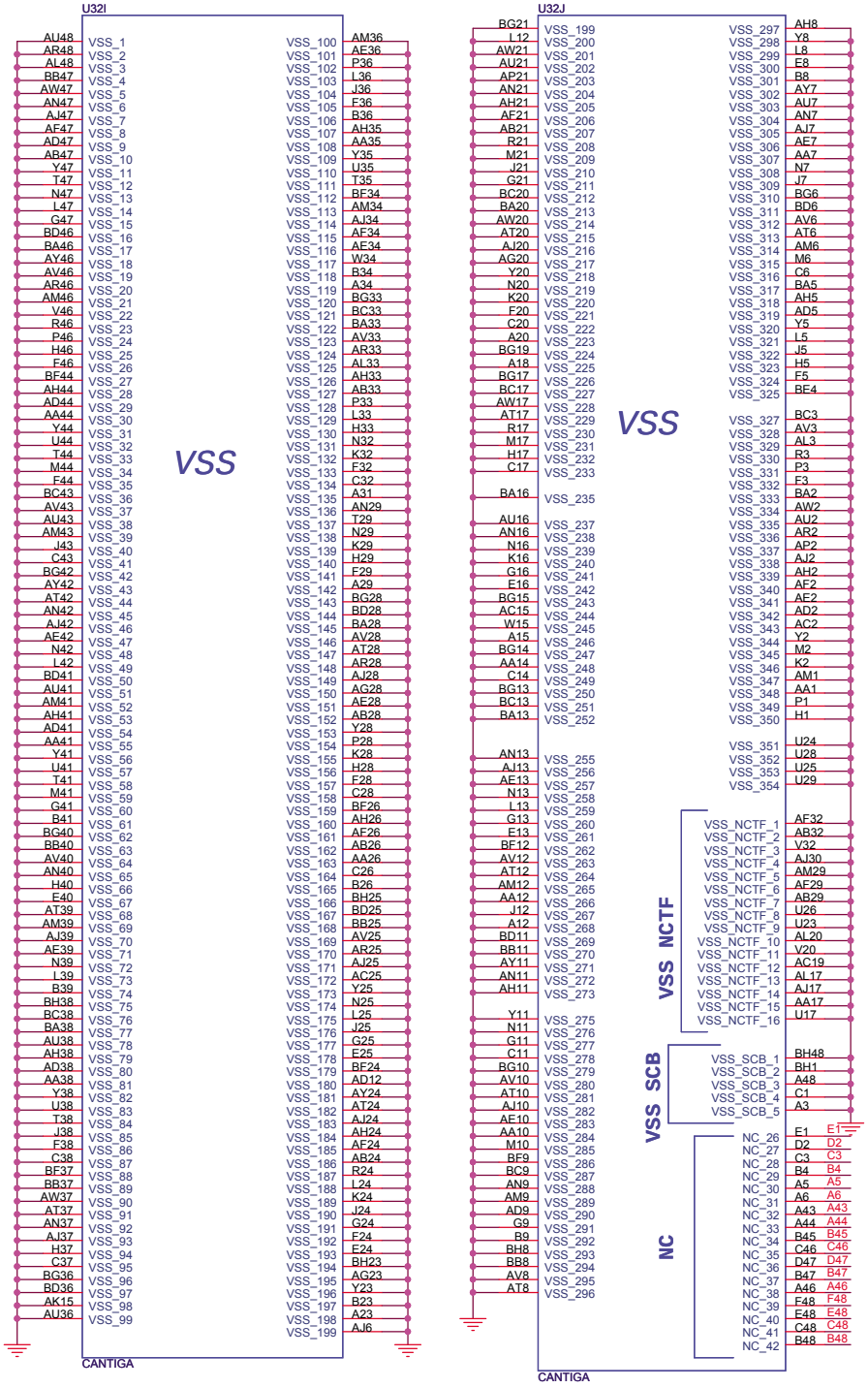


FOXCONN
HON HAI Precision Ind. Co., Ltd.
CCPBG - R&D Division

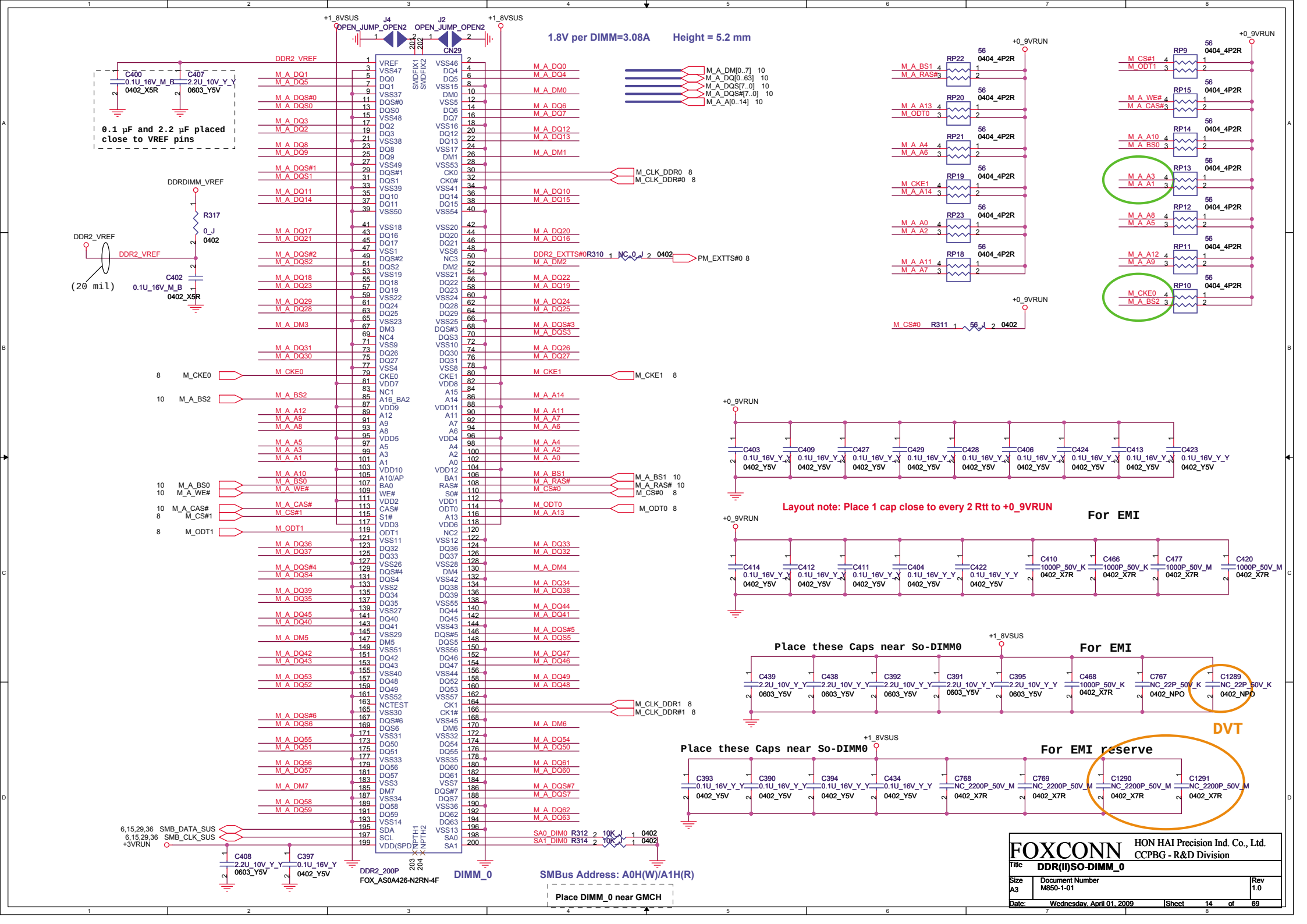
Title	Cantiga (POWER,VCC) 5/7	
Size A3	Document Number M850-1-01	Rev 1.0
Date: Thursday, February 26, 2009	Sheet 11 of 69	



FOXCONN	HON HAI Precision Ind. Co., Ltd. CCPBG - R&D Division	
Title	Cantiga (VCC CORE) 6/7	
Size A3	Document Number M850-1-01	Rev 1.0
Date: Thursday, July 09, 2009	Sheet 12 of 69	



FOXCONN	HON HAI Precision Ind. Co., Ltd. CCPBG - R&D Division		
Title	Cantiga (VSS) 7/7		
Size A3	Document Number M850-1-01		Rev 1.0
Date: Thursday, February 26, 2009		Sheet 13 of 69	


1.8V per DIMM=3.08A
Height = 5.2 mm
0.1 µF and 2.2 µF placed close to VREF pins
DDR2_200P
FOX_AS0A426-N2RN-4F
DIMM_0
SMBus Address: A0H(W)/A1H(R)
Place DIMM_0 near GMCH
Layout note: Place 1 cap close to every 2 Rtt to +0_9VRUN
For EMI
Place these Caps near So-DIMM0
DVT
For EMI reserve
FOXCONN
HON HAI Precision Ind. Co., Ltd.
CCPBG - R&D Division
DDR(II)SO-DIMM_0
Document Number M850-1-01
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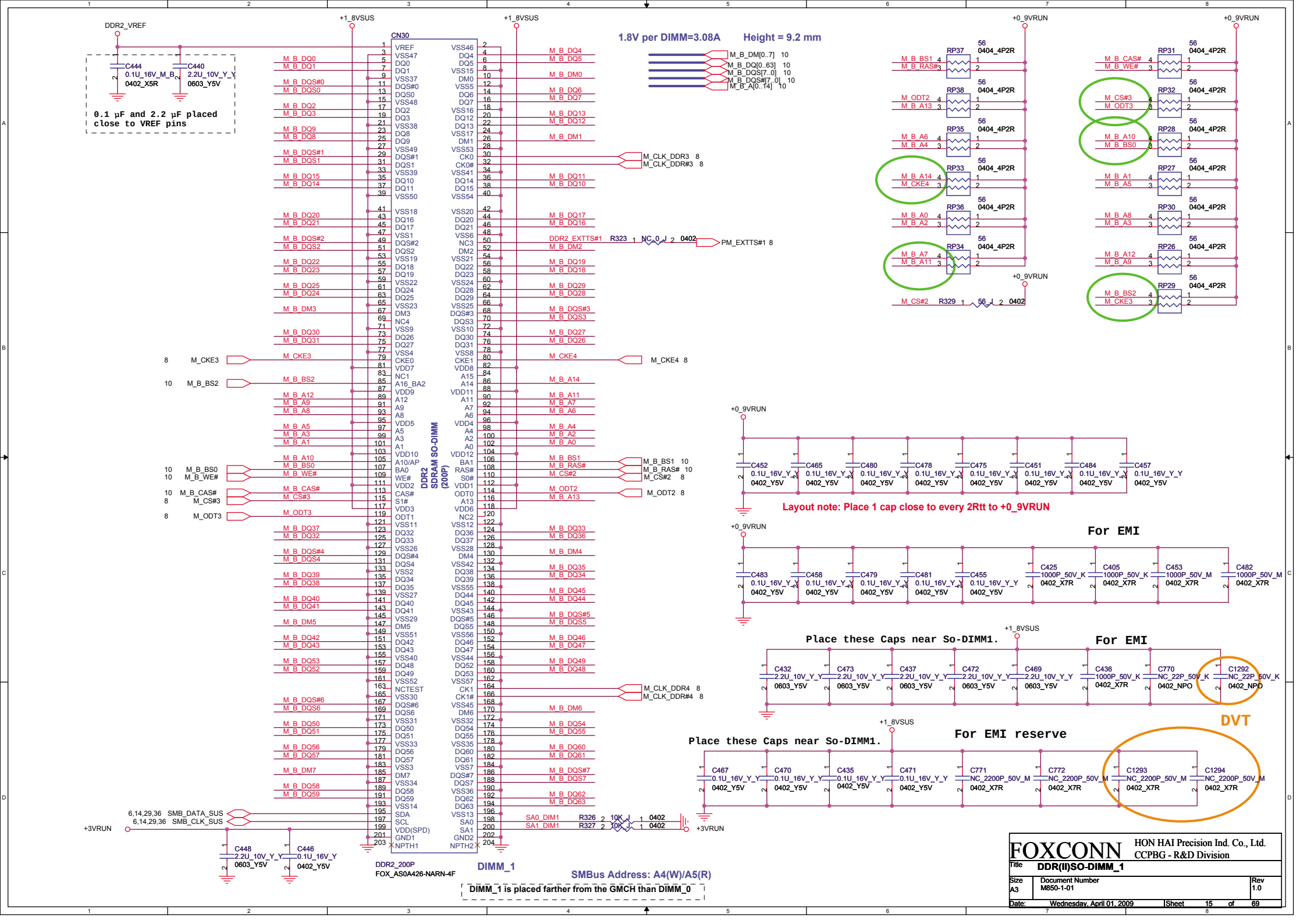
DDR2_VREF
C444 0.1U_16V_M_B 0402_X5R
C440 2.2U_10V_Y_Y 0603_Y5V
0.1 µF and 2.2 µF placed close to VREF pins
+1_8VSUS
CN30
1.8V per DIMM=3.08A
Height = 9.2 mm
M_B_DM[0..7] 10
M_B_DQ[0..63] 10
M_B_DQS[7..0] 10
M_B_DQS#[7..0] 10
M_B_A[0..14] 10
DDR2 SDRAM SO-DIMM (200P)
DDR2_EXTTS#1 R323 NC_0_J 0402
PM_EXTTS#1 8
M_CKE3 8
M_CKE4 8
M_B_BS2 10
M_B_BS0 10
M_B_WE# 10
M_B_CAS# 10
M_CS#3 8
M_ODT3 8
M_CS#2 R329 56_J 0402
M_ODT2 8
M_B_BS1 10
M_B_RAS# 10
M_CS#2 8
M_CLK_DDR3 8
M_CLK_DDR#3 8
M_CLK_DDR4 8
M_CLK_DDR#4 8
SA0_DIM1 R326 10K_J 0402
SA1_DIM1 R327 10K_J 0402
6,14,29,36 SMB_DATA_SUS
6,14,29,36 SMB_CLK_SUS
+3VRUN
C448 2.2U_10V_Y_Y 0603_Y5V
C446 0.1U_16V_Y 0402_Y5V
DDR2_200P
FOX_AS0A426-NARN-4F
DIMM_1
SMBus Address: A4(W)/A5(R)
DIMM_1 is placed farther from the GMCH than DIMM_0
+0_9VRUN
RP37 RP31 RP38 RP32 RP35 RP28 RP33 RP27 RP36 RP30 RP34 RP26 RP29
56 0404_4P2R
C452 C465 C480 C478 C475 C451 C484 C457
0.1U_16V_Y_Y 0402_Y5V
Layout note: Place 1 cap close to every 2Rtt to +0_9VRUN
For EMI
C483 C458 C479 C481 C455 C425 C405 C453 C482
0.1U_16V_Y_Y 0402_Y5V
1000P_50V_K 0402_X7R
1000P_50V_M 0402_X7R
Place these Caps near So-DIMM1.
C432 C473 C437 C472 C469 C436 C770 C1292
2.2U_10V_Y_Y 0603_Y5V
1000P_50V_K 0402_X7R
NC_22P_50V_K 0402_NPO
DVT
For EMI reserve
C467 C470 C435 C471 C771 C772 C1293 C1294
0.1U_16V_Y_Y 0402_Y5V
NC_2200P_50V_M 0402_X7R
FOXCONN
HON HAI Precision Ind. Co., Ltd.
CCPBG - R&D Division
Title DDR(II)SO-DIMM_1
Size A3
Document Number M850-1-01
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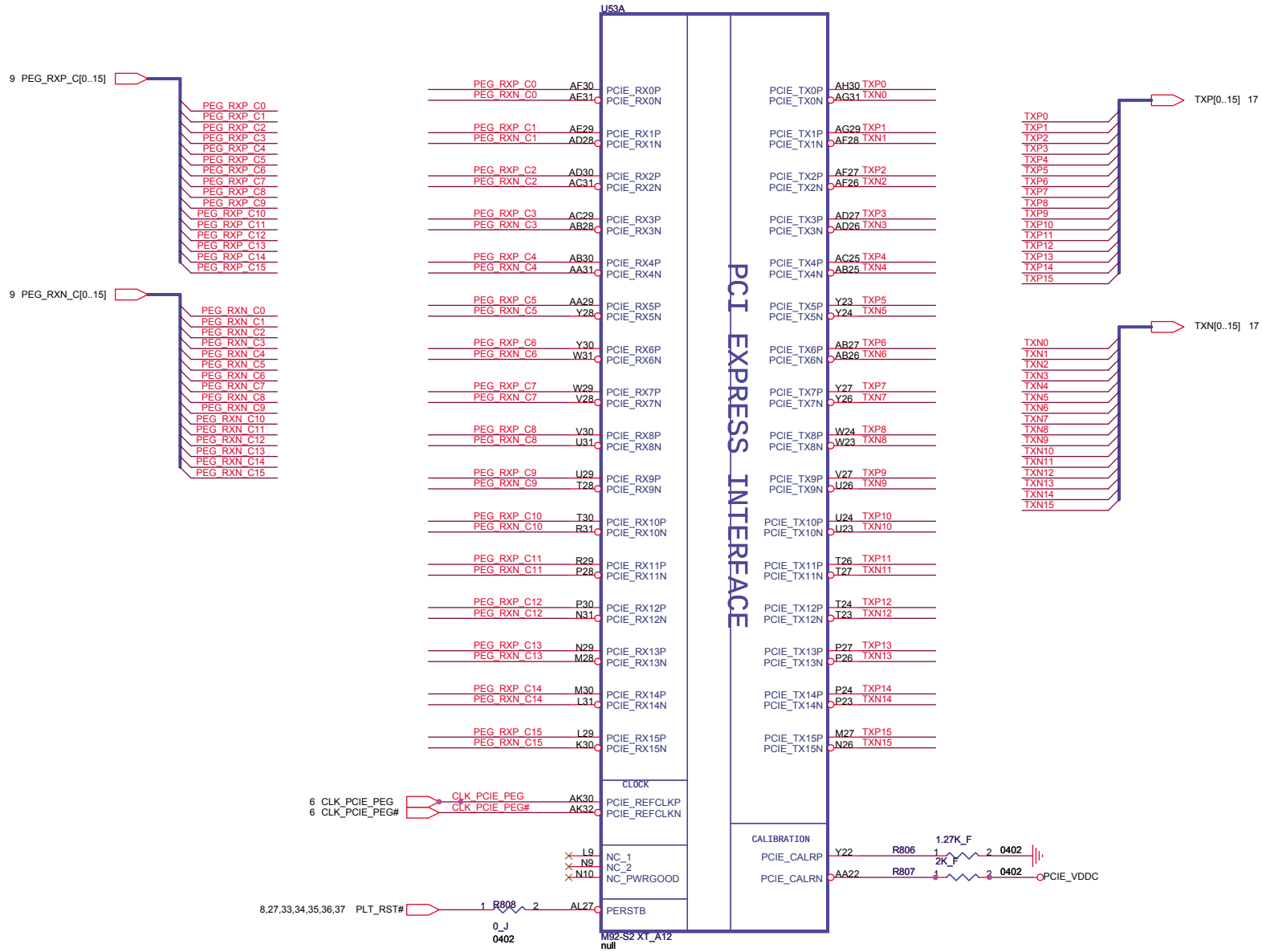

FOXCONN	HON HAI Precision Ind. Co., Ltd. CCPBG - R&D Division	
Title	VGA (PCI-E) 1/5	
Size A3	Document Number M850-1-01	Rev 1.0
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	Mount	NC
Hynix-256MB H5RS1H23MFR-11C	R812,R809	R910,R911, R811,R810
Hynix-512MB H5RS1H23MFR-11C	R910 R812,R809	R911 R811,R810

	Mount	NC
Samsung-256MB K4J10324QD-HC12	R812,R810	R910,R911, R811,R809
Qimonda-256MB HYB18H1G321A2F-10	R811,R810	R910,R911, R812,R809

	Mount	NC
Samsung-512MB K4J10324QD-HC12	R910 R812,R810	R911 R811,R809
Qimonda-512MB HYB18H1G321A2F-10	R910 R811,R810	R911 R812,R809

DVT

9 PEG_RXP[0..15]

9 PEG_RXN[0..15]

TXP[0..15] 16

TXN[0..15] 16

0.1U_6.3V_K

PEG_RXP0	C1078	0201_X5R	TXP0	PEG_RXN0 C1079 0201_X5R TXN0
PEG_RXP1	C1080	0201_X5R	TXP1	PEG_RXN1 C1081 0201_X5R TXN1
PEG_RXP2	C1082	0201_X5R	TXP2	PEG_RXN2 C1083 0201_X5R TXN2
PEG_RXP3	C1084	0201_X5R	TXP3	PEG_RXN3 C1085 0201_X5R TXN3
PEG_RXP4	C1086	0201_X5R	TXP4	PEG_RXN4 C1087 0201_X5R TXN4
PEG_RXP5	C1088	0201_X5R	TXP5	PEG_RXN5 C1089 0201_X5R TXN5
PEG_RXP6	C1090	0201_X5R	TXP6	PEG_RXN6 C1091 0201_X5R TXN6
PEG_RXP7	C1092	0201_X5R	TXP7	PEG_RXN7 C1093 0201_X5R TXN7
PEG_RXP8	C1094	0201_X5R	TXP8	PEG_RXN8 C1095 0201_X5R TXN8
PEG_RXP9	C1096	0201_X5R	TXP9	PEG_RXN9 C1097 0201_X5R TXN9
PEG_RXP10	C1098	0201_X5R	TXP10	PEG_RXN10 C1099 0201_X5R TXN10
PEG_RXP11	C1100	0201_X5R	TXP11	PEG_RXN11 C1101 0201_X5R TXN11
PEG_RXP12	C1102	0201_X5R	TXP12	PEG_RXN12 C1103 0201_X5R TXN12
PEG_RXP13	C1104	0201_X5R	TXP13	PEG_RXN13 C1105 0201_X5R TXN13
PEG_RXP14	C1106	0201_X5R	TXP14	PEG_RXN14 C1107 0201_X5R TXN14
PEG_RXP15	C1108	0201_X5R	TXP15	PEG_RXN15 C1109 0201_X5R TXN15

DVT

Strap for GDDR3-136ball
ATI_DVPDATA[1:0:21:20]

0001 32Mx32 Qimonda-256MB
0010 32Mx32 Hynix-256MB
0011 32Mx32 Samsung-256MB
0101 32Mx32 Qimonda-512MB
0110 32Mx32 Hynix-512MB
0111 32Mx32 Samsung-512MB

+1_8VRUN

MEM_ID0	R809	NC_10K_J	0402	AT_MEM_ID0	R810	10K_J 0201
MEM_ID1	R811	NC_10K_J	0201	AT_MEM_ID1	R812	10K_J 0201
MEM_ID2	R813	NC_10K_J	0201	AT_MEM_ID2	R814	NC_10K_J 0201
MEM_ID3	R815	NC_10K_J	0201	AT_MEM_ID3	R816	NC_10K_J 0201
				AT_MEM_ID2_1	R910	10K_J 0201
				AT_MEM_ID3_1	R911	NC_10K_J 0201

+3V_DELAY

MEM_SIZE2	R819	10K_J	0201	AT_GPIO13	R820	NC_10K_J 0201
MEM_SIZE1	R821	10K_J	0201	AT_GPIO12	R822	NC_10K_J 0201
MEM_SIZE0	R823	NC_10K_J	0201	AT_GPIO11	R824	10K_J 0201

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

64MB	010
128MB	000
256MB	001
512MB	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

18,24 AT_DACA_HSYNC — R825 10K_J 0402
18,24 AT_DACA_VSYNC — R826 10K_J 0402

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

18 AT_GPIO2 — R882 NC_10K_J 0402
18 AT_GPIO1 — R883 NC_10K_J 0402
18 AT_GPIO0 — R884 NC_10K_J 0402

18 AT_MEM_ID0 → AT_MEM_ID0
18 AT_MEM_ID1 → AT_MEM_ID1
18 AT_MEM_ID2 → AT_MEM_ID2
18 AT_MEM_ID3 → AT_MEM_ID3
18 AT_MEM_ID2_1 → AT_MEM_ID2_1
18 AT_MEM_ID3_1 → AT_MEM_ID3_1

For AMD verification

18 AT_GPIO11 → AT_GPIO11
18 AT_GPIO12 → AT_GPIO12
18 AT_GPIO13 → AT_GPIO13

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CCPBG - R&D Division

Title: VGA (Strap) 2/5

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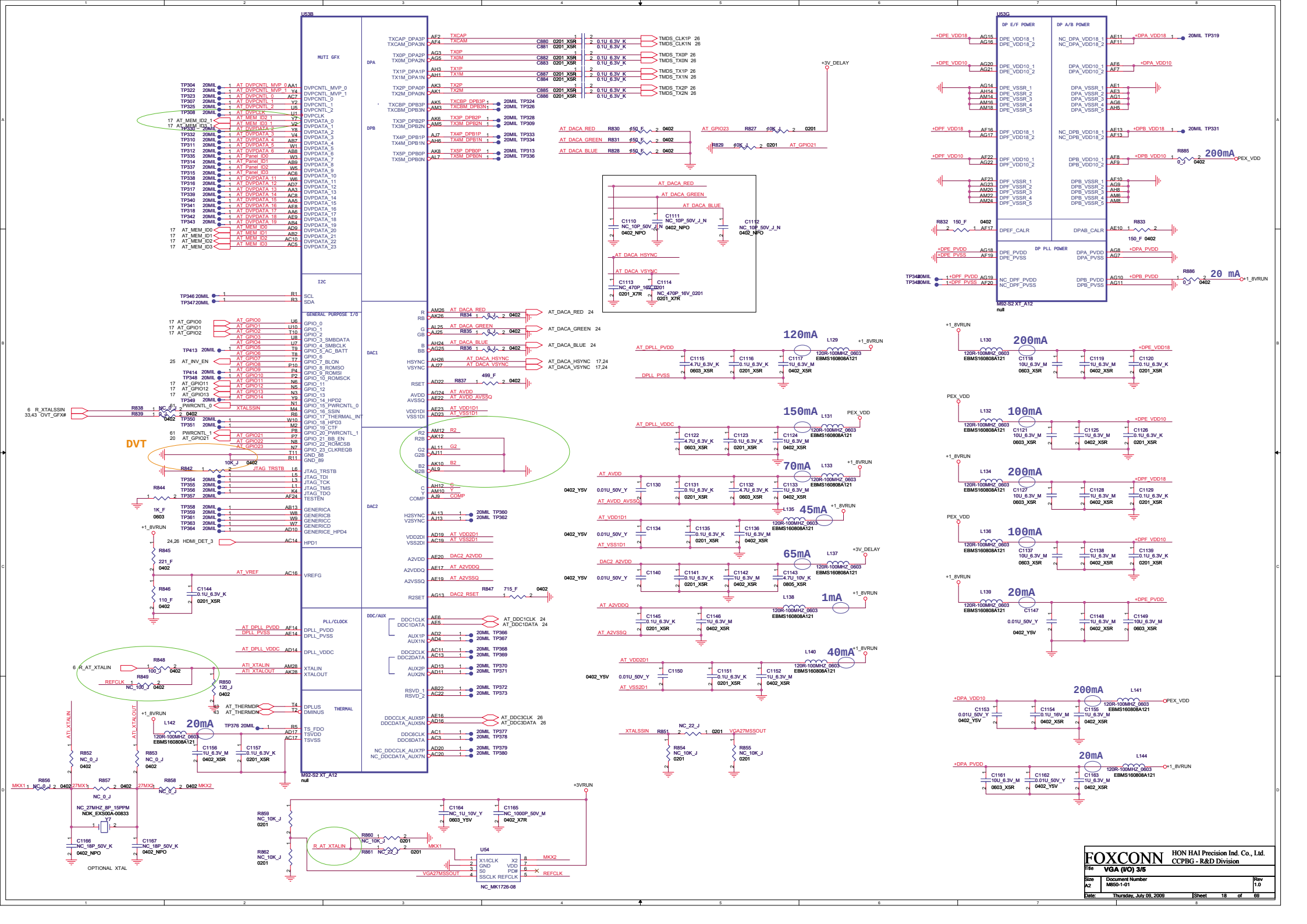
U53B
MUTI GFX
DPA
DPB
I2C
GENERAL PURPOSE I/O
DAC1
DAC2
PLL/CLOCK
DDC/AUX
THERMAL
VREFG
HPD1
M92-S2 XT_A12
null
DVT
OPTIONAL XTAL
U53G
DP E/F POWER
DP A/B POWER
DP PLL POWER
M92-S2 XT_A12
null
U54
NC_MK1726-08
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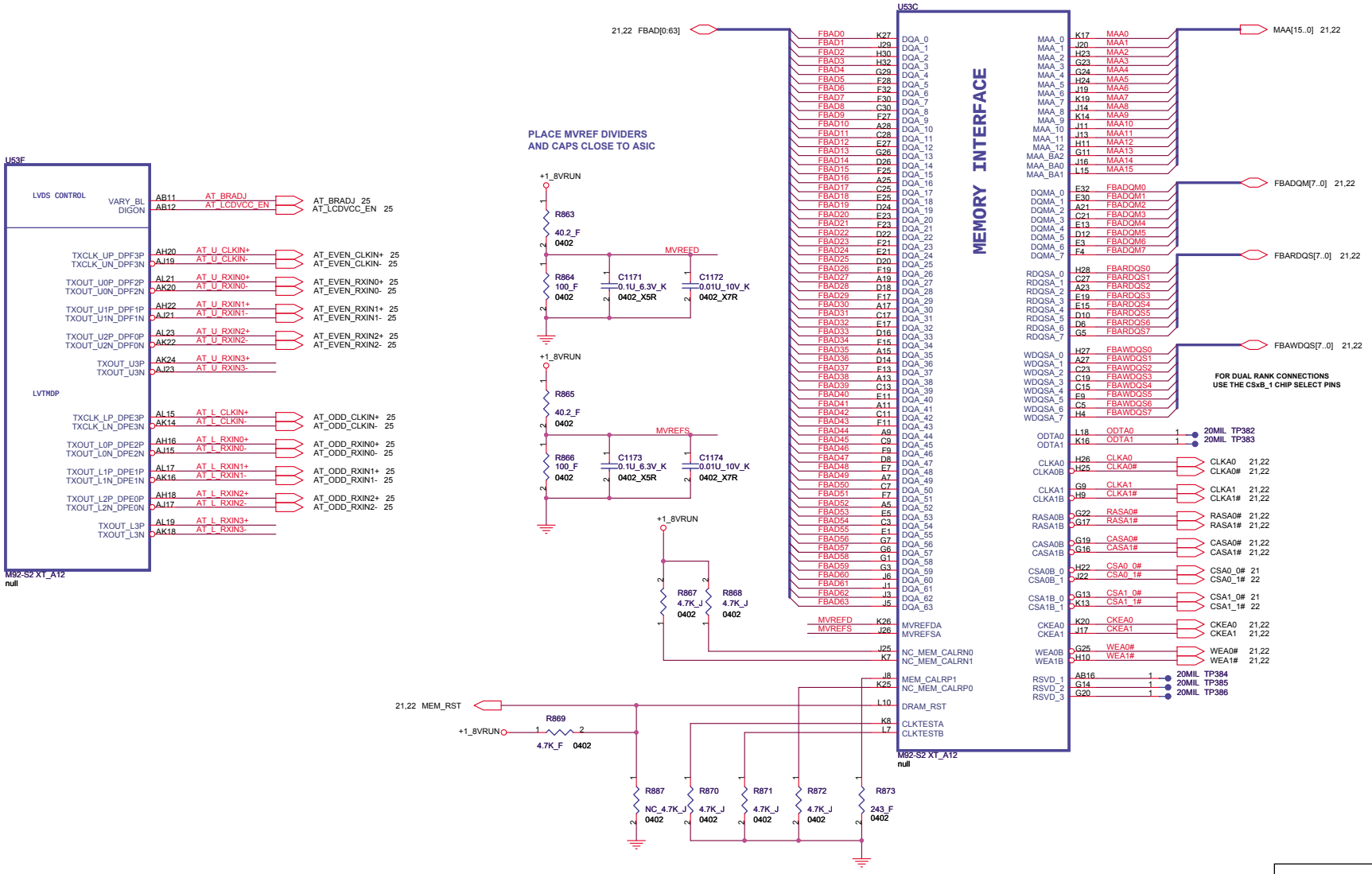
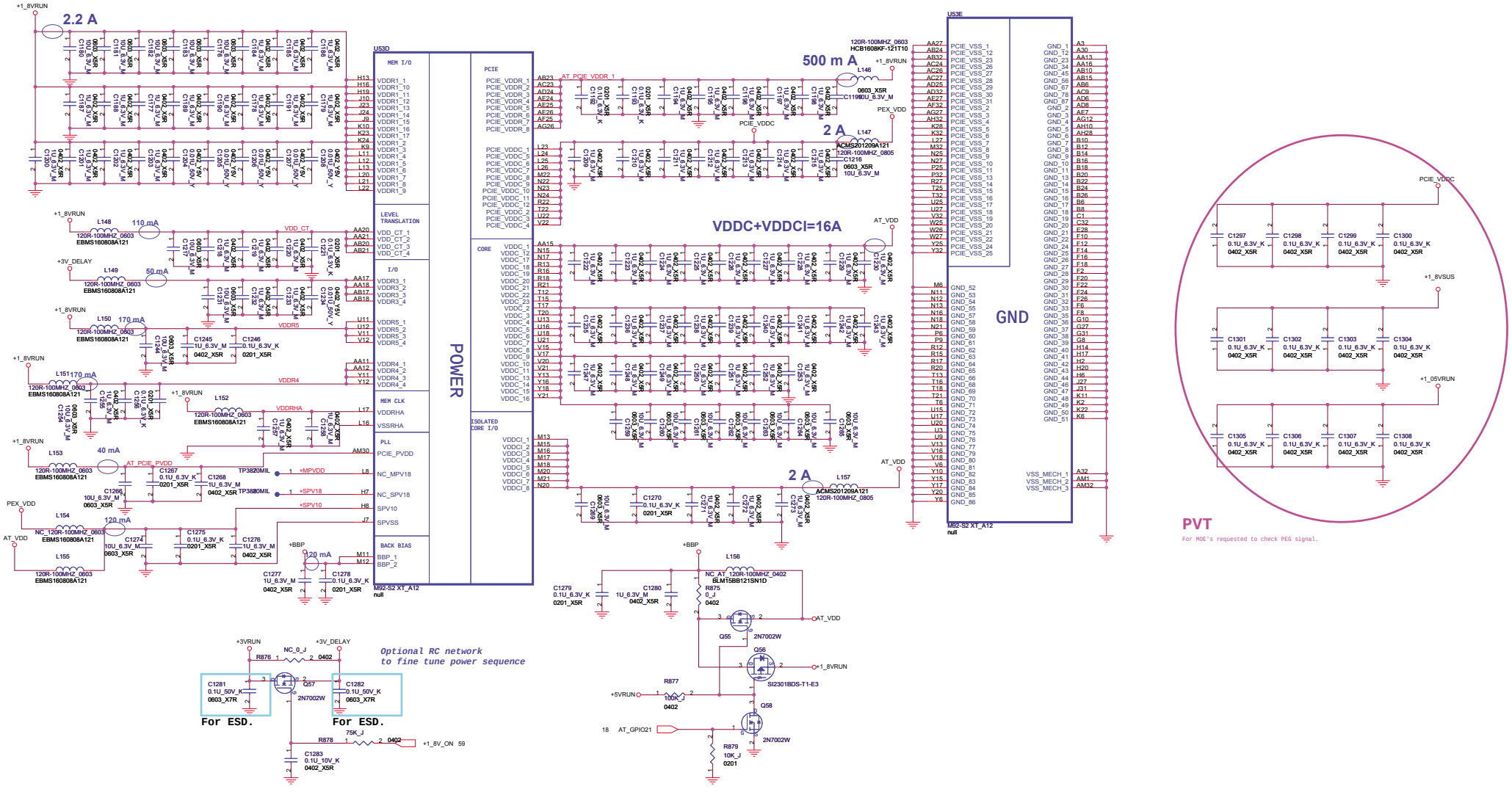
45mA
65mA
1mA
40mA
20mA
20 mA

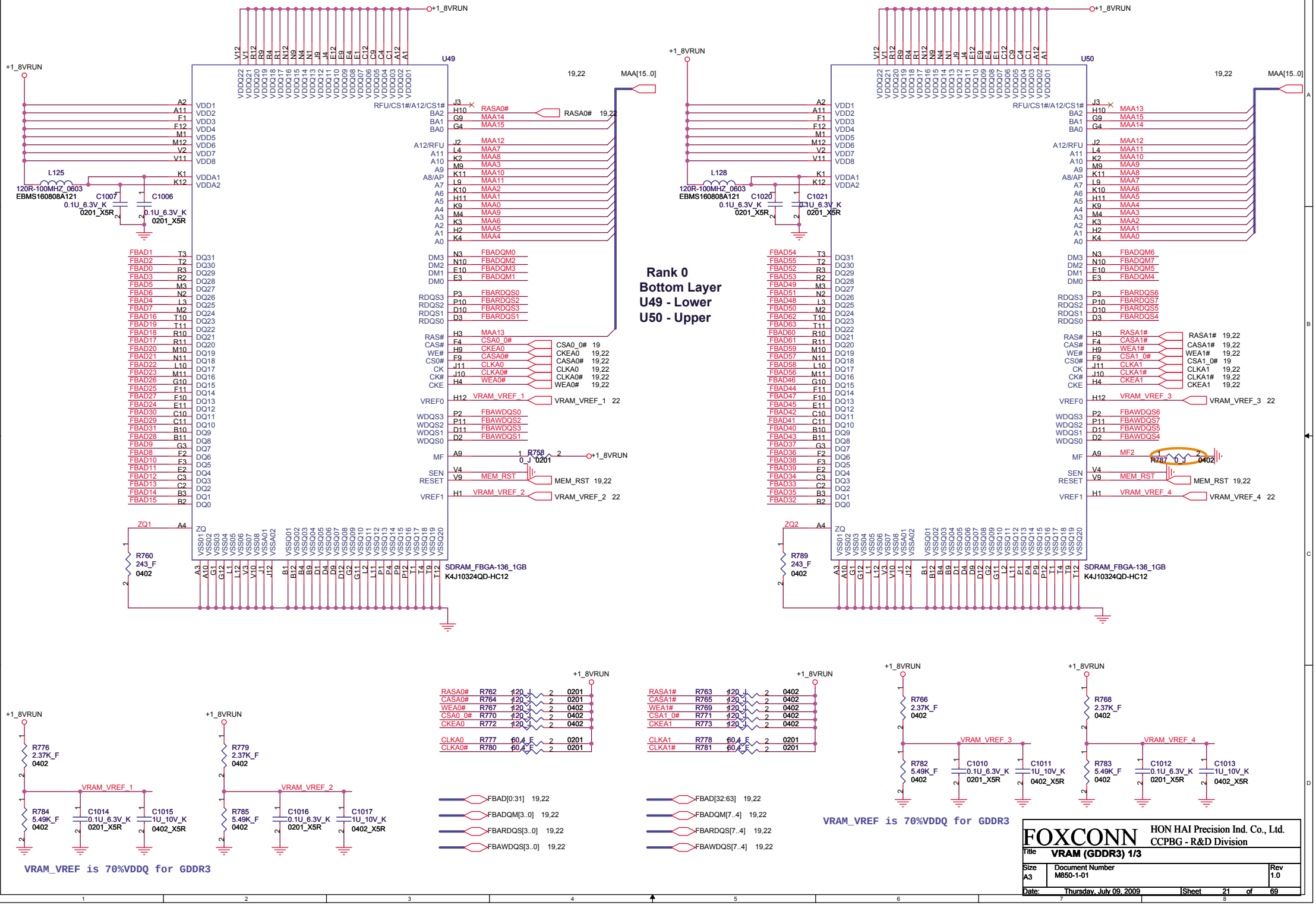


FOXCONN HON HAI Precision Ind. Co., Ltd.
CCPBG - R&D Division

Title	VGA (Memory BUS) 4/5	
Size: Custom	Document Number: M850-1-01	Rev: 1.0
Date: Wednesday, April 01, 2009	Sheet 19 of 69	

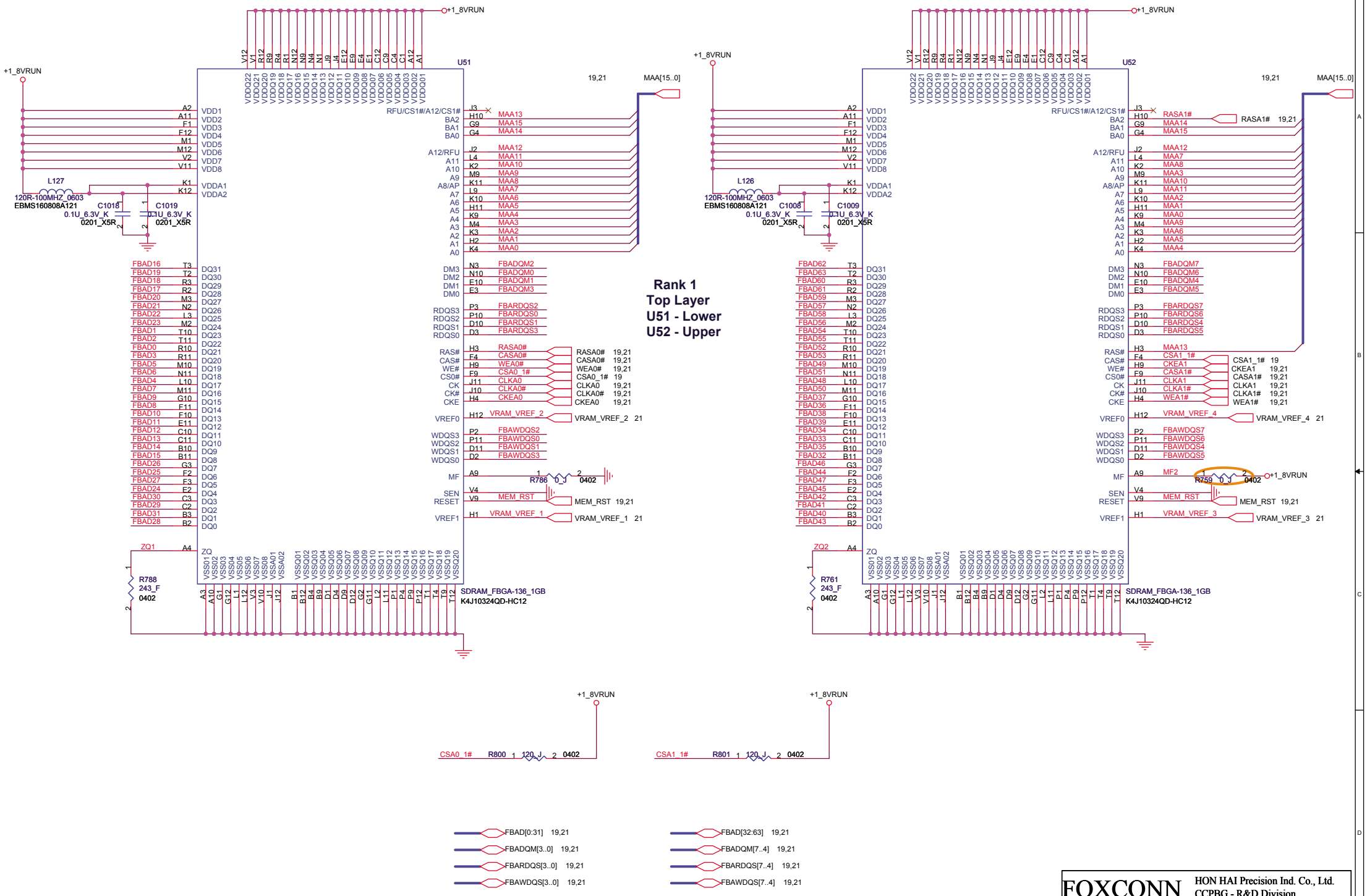


FOXCONN	HON HAI Precision Ind. Co., Ltd. CCPBG - R&D Division		
Title	VGA (Power) 5/5		
Size A2	Document Number M850-1-01		Rev 1.0
Date:	Wednesday, April 01, 2009	Sheet 20 of 69	



FOXCONN
HON HAI Precision Ind. Co., Ltd.
CCPBG - R&D Division

Title	VRAM (GDDR3) 1/3	
Size A3	Document Number M850-1-01	Rev 1.0
Date: Thursday, July 09, 2009	Sheet 21 of 69	



FOXCONN	HON HAI Precision Ind. Co., Ltd. CCPBG - R&D Division	
Title	VRAM (GDDR3) 2/3	
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+1_8VRUN

Place around the VRAM U49 **1.2A**

C1022 10U_6.3V_M 0805_X5R	C1023 0.1U_6.3V_K 0201_X5R	C1024 0.1U_6.3V_K 0201_X5R	C1025 0.1U_6.3V_K 0201_X5R	C1026 0.1U_6.3V_K 0201_X5R	C1027 0.1U_6.3V_K 0201_X5R	C1028 0.1U_6.3V_K 0201_X5R	C1029 1000P_16V_K 0201_X7R	C1030 1000P_16V_K 0201_X7R	C1031 0.1U_6.3V_K 0201_X5R	C1032 0.1U_6.3V_K 0201_X5R	C1033 0.1U_6.3V_K 0201_X5R	C1034 0.1U_6.3V_K 0201_X5R	C1035 1000P_16V_K 0201_X7R

+1_8VRUN

Place around the VRAM U50 **1.2A**

C1036 10U_6.3V_M 0805_X5R	C1037 0.1U_6.3V_K 0201_X5R	C1038 0.1U_6.3V_K 0201_X5R	C1039 0.1U_6.3V_K 0201_X5R	C1040 0.1U_6.3V_K 0201_X5R	C1041 0.1U_6.3V_K 0201_X5R	C1042 0.1U_6.3V_K 0201_X5R	C1043 1000P_16V_K 0201_X7R	C1044 1000P_16V_K 0201_X7R	C1045 0.1U_6.3V_K 0201_X5R	C1046 0.1U_6.3V_K 0201_X5R	C1047 0.1U_6.3V_K 0201_X5R	C1048 0.1U_6.3V_K 0201_X5R	C1049 1000P_16V_K 0201_X7R

+1_8VRUN

Place around the VRAM U51 **1.2A**

C1050 10U_6.3V_M 0805_X5R	C1051 0.1U_6.3V_K 0201_X5R	C1052 0.1U_6.3V_K 0201_X5R	C1053 0.1U_6.3V_K 0201_X5R	C1054 0.1U_6.3V_K 0201_X5R	C1055 0.1U_6.3V_K 0201_X5R	C1056 0.1U_6.3V_K 0201_X5R	C1057 1000P_16V_K 0201_X7R	C1058 1000P_16V_K 0201_X7R	C1059 0.1U_6.3V_K 0201_X5R	C1060 0.1U_6.3V_K 0201_X5R	C1061 0.1U_6.3V_K 0201_X5R	C1062 0.1U_6.3V_K 0201_X5R	C1063 1000P_16V_K 0201_X7R

+1_8VRUN

Place around the VRAM U52 **1.2A**

C1064 10U_6.3V_M 0805_X5R	C1065 0.1U_6.3V_K 0201_X5R	C1066 0.1U_6.3V_K 0201_X5R	C1067 0.1U_6.3V_K 0201_X5R	C1068 0.1U_6.3V_K 0201_X5R	C1069 0.1U_6.3V_K 0201_X5R	C1070 0.1U_6.3V_K 0201_X5R	C1071 1000P_16V_K 0201_X7R	C1072 1000P_16V_K 0201_X7R	C1073 0.1U_6.3V_K 0201_X5R	C1074 0.1U_6.3V_K 0201_X5R	C1075 0.1U_6.3V_K 0201_X5R	C1076 0.1U_6.3V_K 0201_X5R	C1077 1000P_16V_K 0201_X7R

FOXCONN HON HAI Precision Ind. Co., Ltd.
CCPBG - R&D Division

Title: **VRAM (BYPASS) 3/3**

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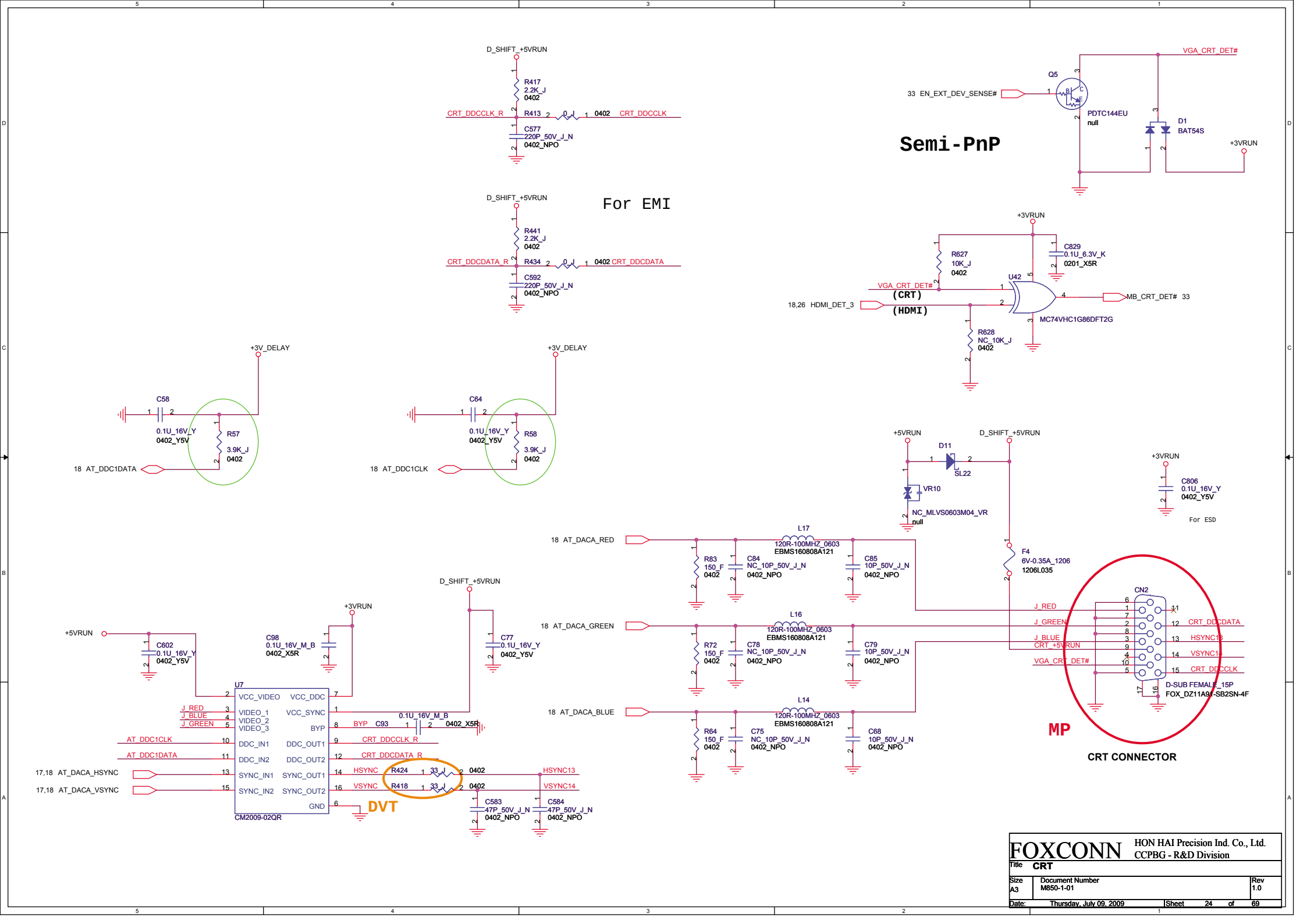
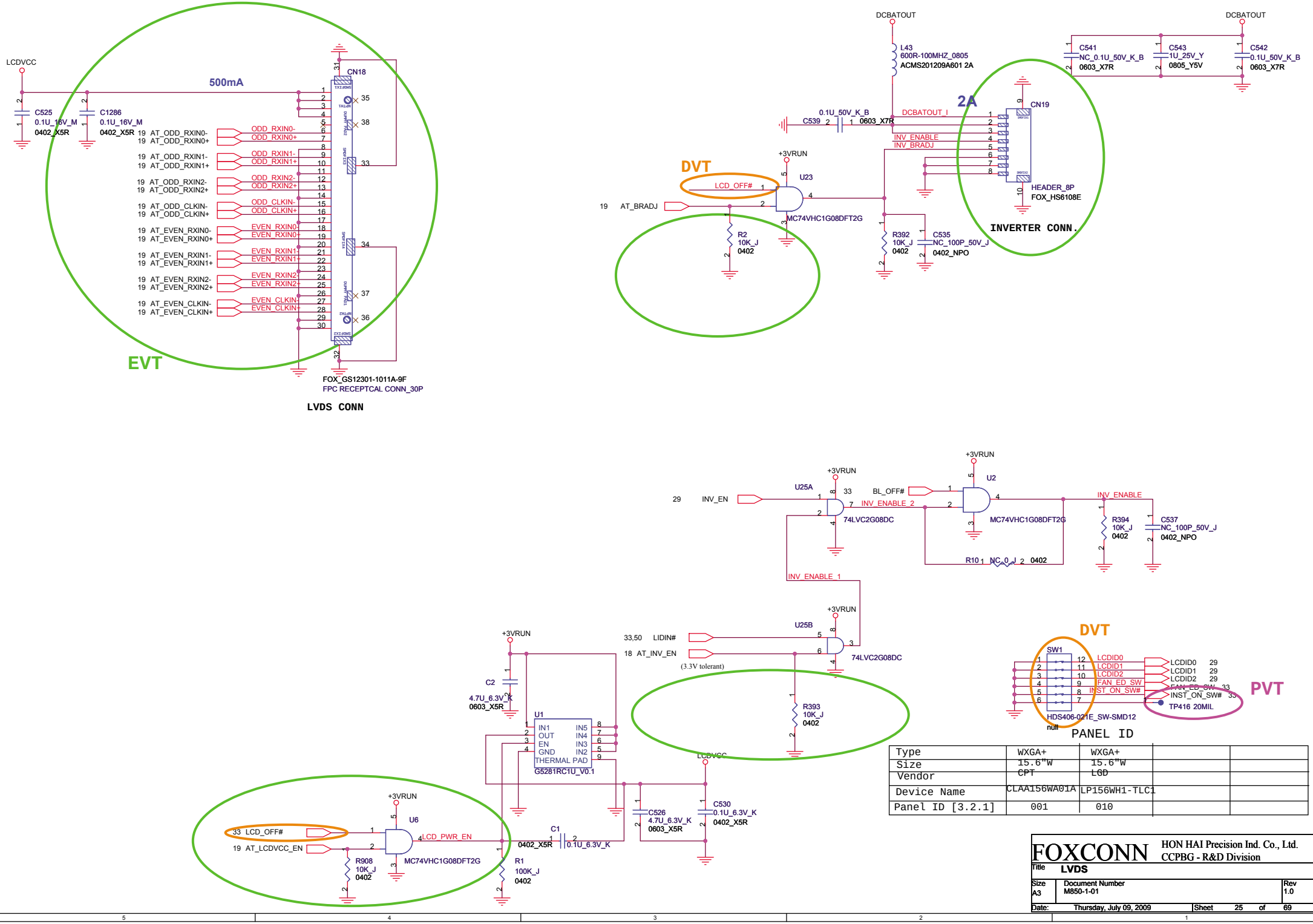


FOXCONN	HON HAI Precision Ind. Co., Ltd. CCPBG - R&D Division	
Title: CRT		
Size: A3	Document Number: M850-1-01	Rev: 1.0
Date: Thursday, July 09, 2009	Sheet 24 of 69	


LCDVCC
500mA
C525
0.1U_16V_M
0402_X5R
C1286
0.1U_16V_M
0402_X5R
CN18
19 AT_ODD_RXIN0-
19 AT_ODD_RXIN0+
19 AT_ODD_RXIN1-
19 AT_ODD_RXIN1+
19 AT_ODD_RXIN2-
19 AT_ODD_RXIN2+
19 AT_ODD_CLKIN-
19 AT_ODD_CLKIN+
19 AT_EVEN_RXIN0-
19 AT_EVEN_RXIN0+
19 AT_EVEN_RXIN1-
19 AT_EVEN_RXIN1+
19 AT_EVEN_RXIN2-
19 AT_EVEN_RXIN2+
19 AT_EVEN_CLKIN-
19 AT_EVEN_CLKIN+
ODD_RXIN0-
ODD_RXIN0+
ODD_RXIN1-
ODD_RXIN1+
ODD_RXIN2-
ODD_RXIN2+
ODD_CLKIN-
ODD_CLKIN+
EVEN_RXIN0-
EVEN_RXIN0+
EVEN_RXIN1-
EVEN_RXIN1+
EVEN_RXIN2-
EVEN_RXIN2+
EVEN_CLKIN-
EVEN_CLKIN+
EVT
FOX_GS12301-1011A-9F
FPC RECEPTCAL CONN_30P
LVDS CONN
DCBATOUT
L43
600R-100MHZ_0805
ACMS201209A601 2A
C539
0.1U_50V_K_B
0603_X7R
DCBATOUT_I
INV_ENABLE
INV_BRADJ
2A
CN19
HEADER_8P
FOX_HS6108E
INVERTER CONN.
C541
NC_0.1U_50V_K_B
0603_X7R
C543
1U_25V_Y
0805_Y5V
C542
0.1U_50V_K_B
0603_X7R
DVT
+3VRUN
U23
LCD_OFF#
19 AT_BRADJ
MC74VHC1G08DFT2G
R2
10K_J
0402
R392
10K_J
0402
C535
NC_100P_50V_J
0402_NPO
29 INV_EN
U25A
74LVC2G08DC
BL_OFF#
INV_ENABLE_2
U2
MC74VHC1G08DFT2G
R394
10K_J
0402
C537
NC_100P_50V_J
0402_NPO
R10
NC_0_J
0402
INV_ENABLE_1
U25B
33,50 LIDIN#
18 AT_INV_EN
(3.3V tolerant)
74LVC2G08DC
R393
10K_J
0402
C2
4.7U_6.3V_K
0603_X5R
U1
IN1
OUT
EN
GND
IN5
IN4
IN3
IN2
THERMAL PAD
G5281RC1U_V0.1
LCDVCC
C526
4.7U_6.3V_K
0603_X5R
C530
0.1U_6.3V_K
0402_X5R
C1
0402_X5R
0.1U_6.3V_K
U6
33 LCD_OFF#
19 AT_LCDVCC_EN
LCD_PWR_EN
MC74VHC1G08DFT2G
R908
10K_J
0402
R1
100K_J
0402
DVT
SW1
LCDID0
LCDID1
LCDID2
FAN_ED_SW
INST_ON_SW#
HDS406-021E_SW-SMD12
null
PVT
TP416 20MIL
PANEL ID
Type WXGA+ WXGA+
Size 15.6"W 15.6"W
Vendor CPT LGD
Device Name CLAA156WA01A LP156WH1-TLC1
Panel ID [3.2.1] 001 010
FOXCONN
HON HAI Precision Ind. Co., Ltd.
CCPBG - R&D Division
Title LVDS
Size A3
Document Number M850-1-01
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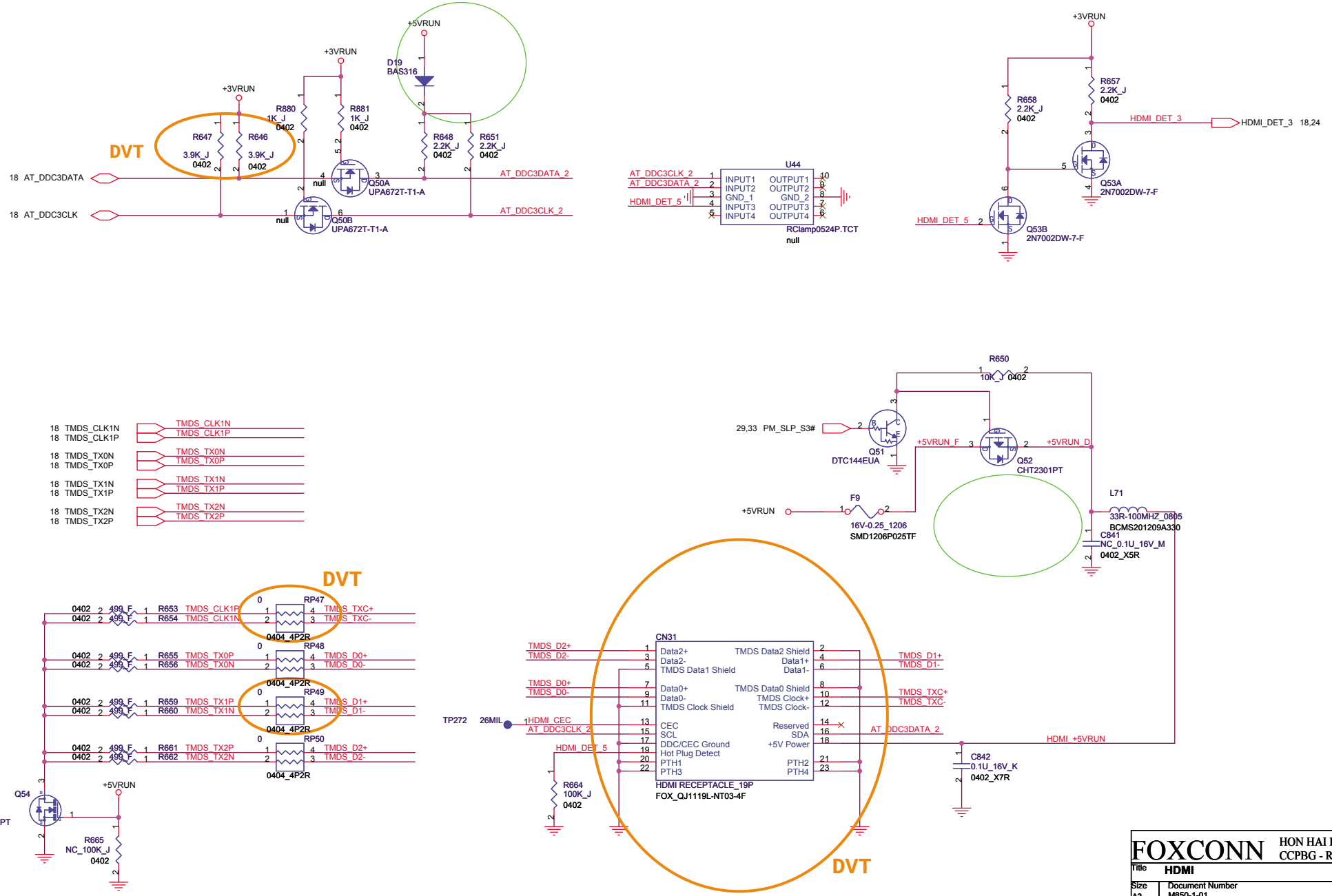
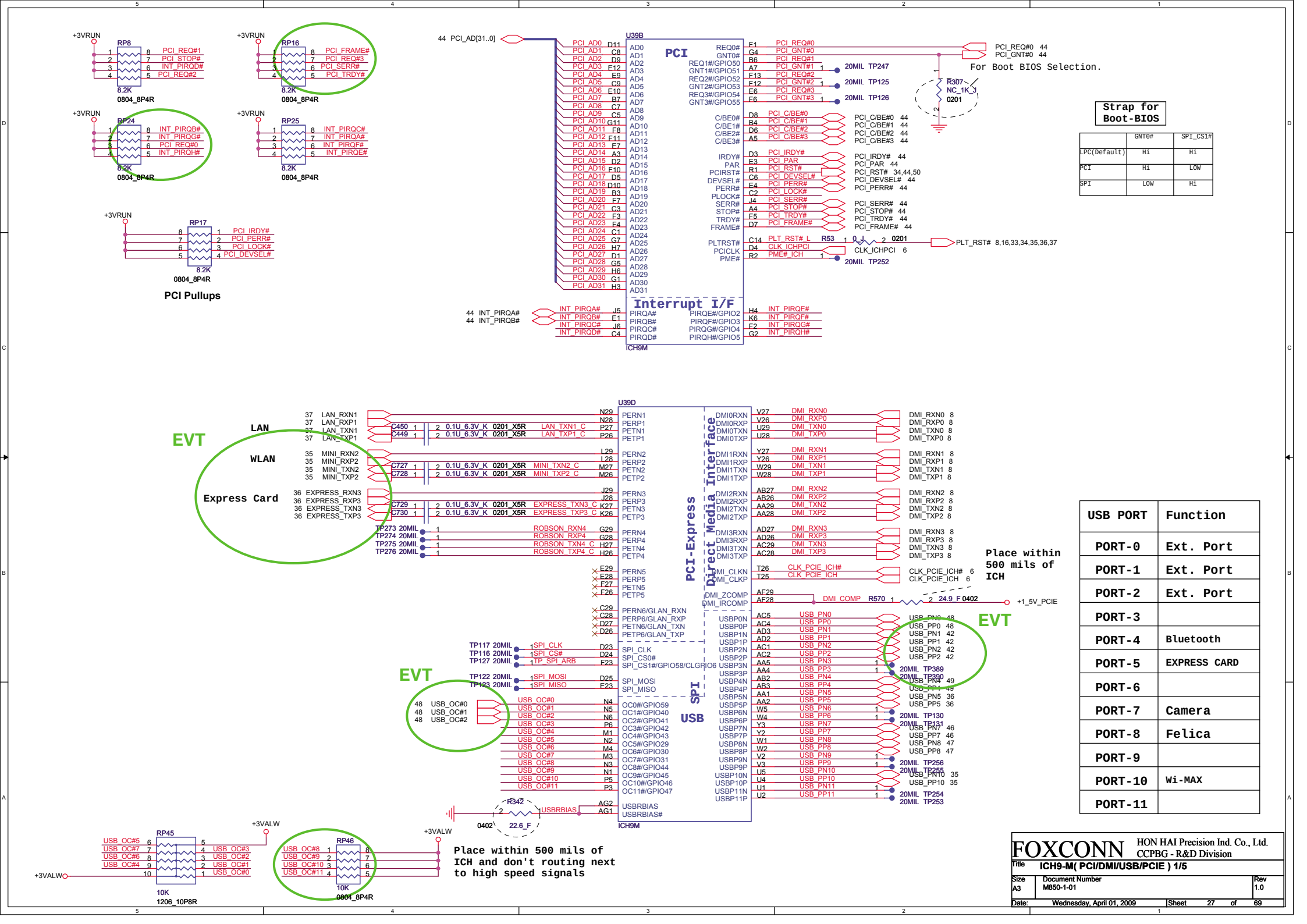
Date: Thursday, July 09, 2009
Sheet 25 of 69



FOXCONN	HON HAI Precision Ind. Co., Ltd. CCPBG - R&D Division	
Title	HDMI	
Size A3	Document Number M850-1-01	Rev 1.0
Date: Wednesday, April 01, 2009	Sheet 26 of 69	


RP8
PCI_REQ#1
PCI_STOP#
INT_PIRQD#
PCI_REQ#2
RP16
PCI_FRAME#
PCI_REQ#3
PCI_SERR#
PCI_TRDY#
RP24
INT_PIRQB#
INT_PIRQG#
PCI_REQ#0
INT_PIRQH#
RP25
INT_PIRQC#
INT_PIRQA#
INT_PIRQF#
INT_PIRQE#
RP17
PCI_IRDY#
PCI_PERR#
PCI_LOCK#
PCI_DEVSEL#
8.2K
0804_8P4R
+3VRUN
PCI Pullups
U39B
PCI
Interrupt I/F
ICH9M
44 PCI_AD[31..0]
For Boot BIOS Selection.
Strap for Boot-BIOS
LPC(Default)
PCI
SPI
GNT0#
SPI_CS1#
U39D
PCI-Express
Direct Media Interface
SPI
USB
EVT
LAN
WLAN
Express Card
Place within 500 mils of ICH
Place within 500 mils of ICH and don't routing next to high speed signals
RP45
RP46
10K
1206_10P8R
+3VALW
USB PORT
Function
PORT-0
Ext. Port
PORT-1
Ext. Port
PORT-2
Ext. Port
PORT-3
PORT-4
Bluetooth
PORT-5
EXPRESS CARD
PORT-6
PORT-7
Camera
PORT-8
Felica
PORT-9
PORT-10
Wi-MAX
PORT-11
FOXCONN
HON HAI Precision Ind. Co., Ltd.
CCPBG - R&D Division
Title
ICH9-M(PCI/DMI/USB/PCIE) 1/5
Size
A3
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1.0
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Wednesday, April 01, 2009
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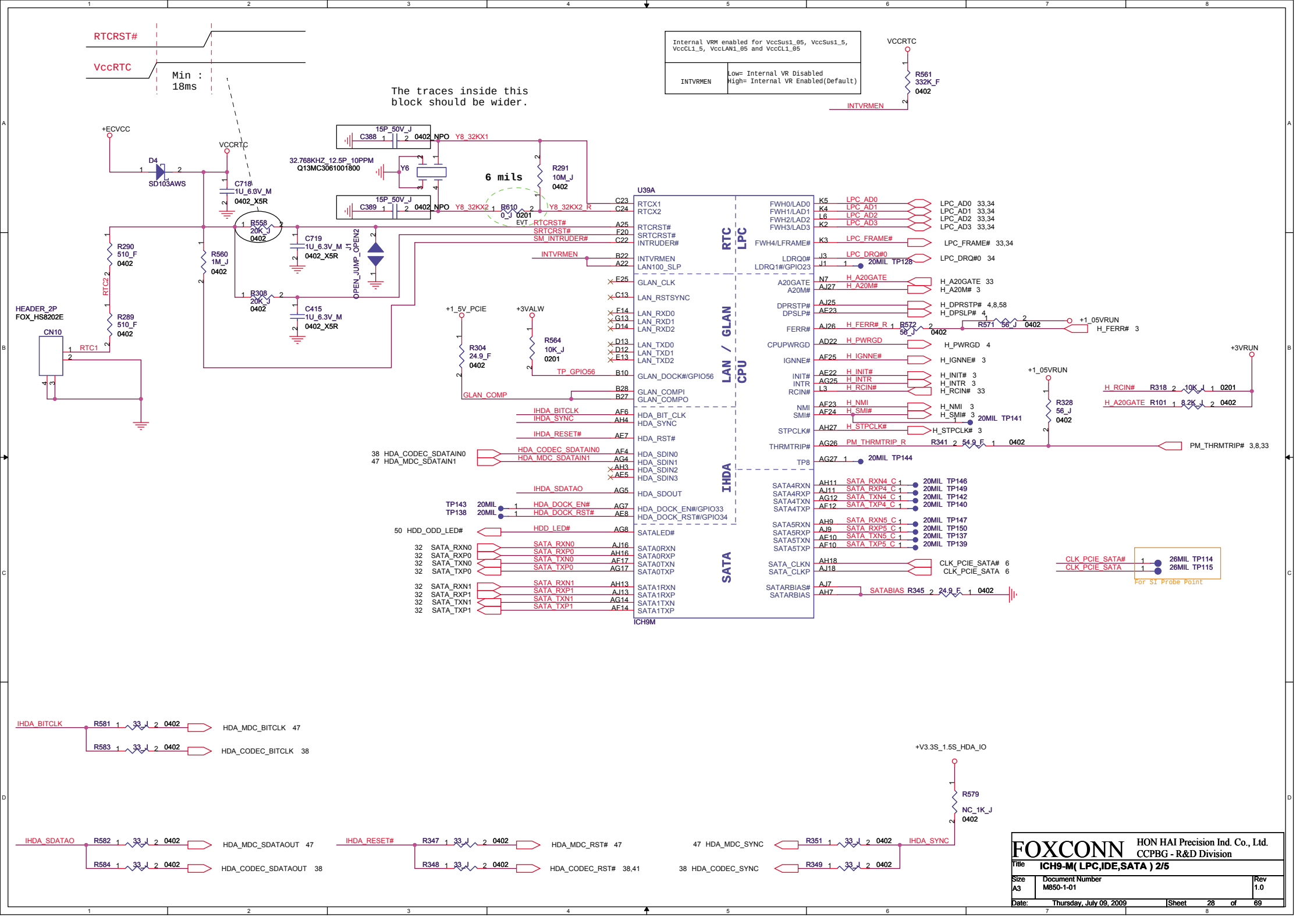

FOXCONN	HON HAI Precision Ind. Co., Ltd. CCPBG - R&D Division
Title	ICH9-M(LPC,IDE,SATA) 2/5
Size A3	Document Number M850-1-01
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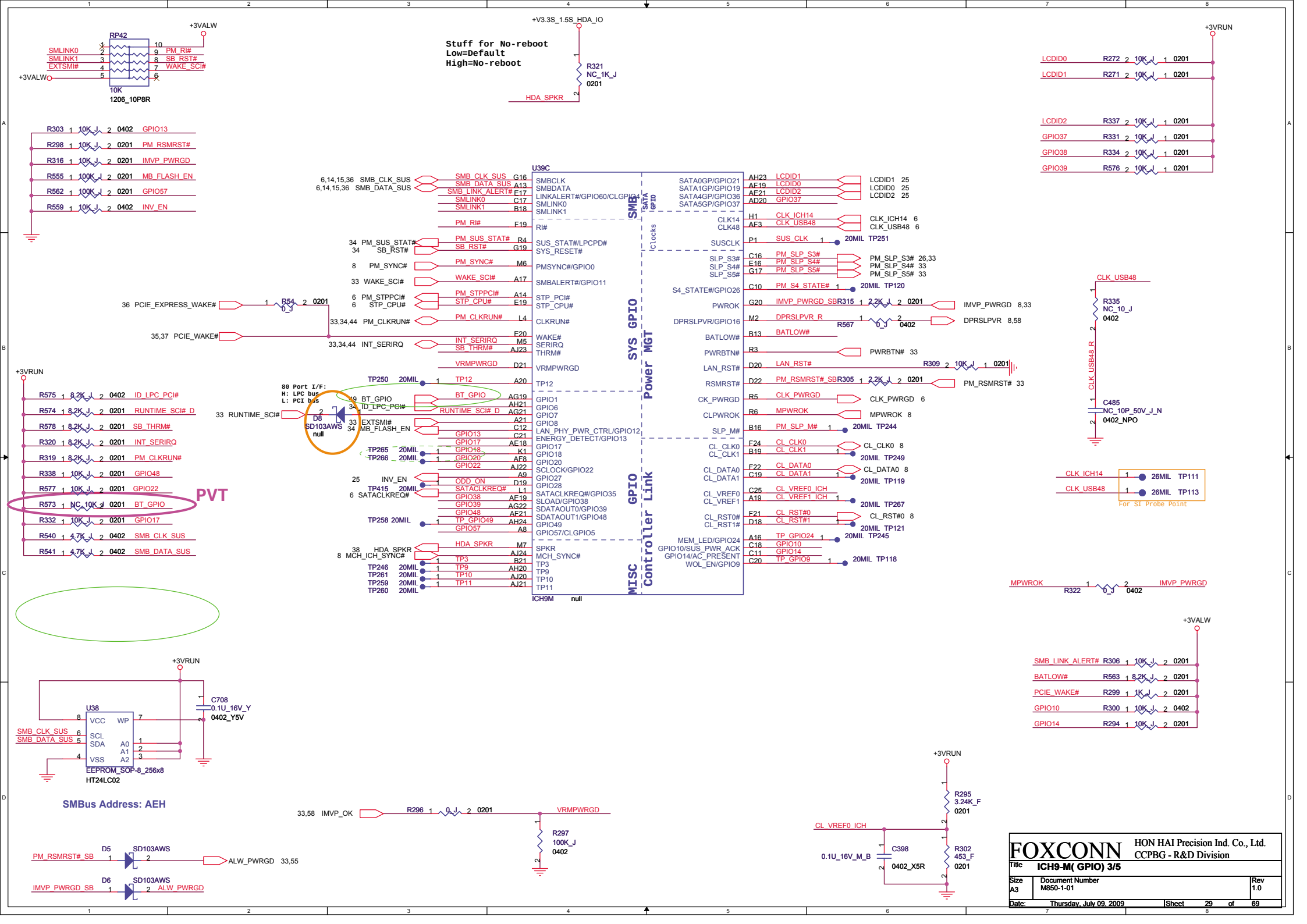
RP42
SMLINK0
SMLINK1
EXTSMI#
PM_RI#
SB_RST#
WAKE_SCI#
10K
1206_10P8R
+3VALW
+V3.3S_1.5S_HDA_IO
Stuff for No-reboot
Low=Default
High=No-reboot
R321
NC_1K_J
0201
HDA_SPKR
+3VRUN
LCDID0
LCDID1
LCDID2
GPIO37
GPIO38
GPIO39
R303 10K_J 0402 GPIO13
R298 10K_J 0201 PM_RSMRST#
R316 10K_J 0201 IMVP_PWRGD
R555 100K_J 0201 MB_FLASH_EN
R562 100K_J 0201 GPIO57
R559 10K_J 0402 INV_EN
U39C
SMBCLK
SMBDATA
LINKALERT#/GPIO60/CLGPIO4
SMLINK0
SMLINK1
RI#
SUS_STAT#/LPCPD#
SYS_RESET#
PMSYNC#/GPIO0
SMBALERT#/GPIO11
STP_PCI#
STP_CPU#
CLKRUN#
WAKE#
SERIRQ
THRM#
VRMPWRGD
TP12
GPIO1
GPIO6
GPIO7
GPIO8
LAN_PHY_PWR_CTRL/GPIO12
ENERGY_DETECT/GPIO13
GPIO17
GPIO18
GPIO20
SCLOCK/GPIO22
GPIO27
GPIO28
SATACLKREQ#/GPIO35
SLOAD/GPIO38
SDATAOUT0/GPIO39
SDATAOUT1/GPIO48
GPIO49
GPIO57/CLGPIO5
SPKR
MCH_SYNC#
TP3
TP9
TP10
TP11
SMB
SATA GPIO
CLocks
SYS GPIO
Power MGT
GPIO
Controller Link
MISC
ICH9M
null
SATA0GP/GPIO21
SATA1GP/GPIO19
SATA4GP/GPIO36
SATA5GP/GPIO37
CLK14
CLK48
SUSCLK
SLP_S3#
SLP_S4#
SLP_S5#
S4_STATE#/GPIO26
PWROK
DPRSLPVR/GPIO16
BATLOW#
PWRBTN#
LAN_RST#
RSMRST#
CK_PWRGD
CLPWROK
SLP_M#
CL_CLK0
CL_CLK1
CL_DATA0
CL_DATA1
CL_VREF0
CL_VREF1
CL_RST0#
CL_RST1#
MEM_LED/GPIO24
GPIO10/SUS_PWR_ACK
GPIO14/AC_PRESENT
WOL_EN/GPIO9
6,14,15,36 SMB_CLK_SUS
6,14,15,36 SMB_DATA_SUS
SMB_LINK_ALERT#
34 PM_SUS_STAT#
34 SB_RST#
8 PM_SYNC#
33 WAKE_SCI#
6 PM_STPPCI#
6 STP_CPU#
33,34,44 PM_CLKRUN#
33,34,44 INT_SERIRQ
SB_THRM#
36 PCIE_EXPRESS_WAKE#
R54 0_J 0201
35,37 PCIE_WAKE#
TP250 20MIL
TP12
BT_GPIO
ID_LPC_PCI#
RUNTIME_SCI#_D
33 RUNTIME_SCI#
80 Port I/F:
H: LPC bus
L: PCI bus
D8
SD103AWS
null
33 EXTSMI#
34 MB_FLASH_EN
TP265 20MIL
TP266 20MIL
GPIO13
GPIO17
GPIO18
GPIO20
GPIO22
25 INV_EN
ODD_ON
TP415 20MIL
6 SATACLKREQ#
GPIO38
GPIO39
GPIO48
TP258 20MIL
TP_GPIO49
GPIO57
38 HDA_SPKR
8 MCH_ICH_SYNC#
TP3
TP9
TP10
TP11
TP246 20MIL
TP261 20MIL
TP259 20MIL
TP260 20MIL
AH23 LCDID1
AF19 LCDID0
AE21 LCDID2
AD20 GPIO37
LCDID1 25
LCDID0 25
LCDID2 25
H1 CLK_ICH14
AF3 CLK_USB48
CLK_ICH14 6
CLK_USB48 6
P1 SUS_CLK
20MIL TP251
C16 PM_SLP_S3#
E16 PM_SLP_S4#
G17 PM_SLP_S5#
PM_SLP_S3# 26,33
PM_SLP_S4# 33
PM_SLP_S5# 33
C10 PM_S4_STATE#
20MIL TP120
G20 IMVP_PWRGD_SB
R315 2.2K_J 0201
IMVP_PWRGD 8,33
M2 DPRSLPVR_R
R567 0_J 0402
DPRSLPVR 8,58
B13 BATLOW#
R3
PWRBTN# 33
D20 LAN_RST#
R309 10K_J 0201
D22 PM_RSMRST#_SB
R305 2.2K_J 0201
PM_RSMRST# 33
R5 CLK_PWRGD
CLK_PWRGD 6
R6 MPWROK
MPWROK 8
B16 PM_SLP_M#
20MIL TP244
F24 CL_CLK0
B19 CL_CLK1
CL_CLK0 8
20MIL TP249
F22 CL_DATA0
C19 CL_DATA1
CL_DATA0 8
20MIL TP119
C25 CL_VREF0_ICH
A19 CL_VREF1_ICH
20MIL TP267
F21 CL_RST0#
D18 CL_RST1#
CL_RST#0 8
20MIL TP121
A16 TP_GPIO24
20MIL TP245
C18 GPIO10
C11 GPIO14
C20 TP_GPIO9
20MIL TP118
CLK_USB48
R335 NC_10_J 0402
CLK_USB48_R
C485 NC_10P_50V_J_N 0402_NPO
CLK_ICH14
CLK_USB48
26MIL TP111
26MIL TP113
For SI Probe Point
MPWROK
R322 0_J 0402
IMVP_PWRGD
R575 8.2K_J 0402 ID_LPC_PCI#
R574 8.2K_J 0201 RUNTIME_SCI#_D
R578 8.2K_J 0201 SB_THRM#
R320 8.2K_J 0201 INT_SERIRQ
R319 8.2K_J 0201 PM_CLKRUN#
R338 10K_J 0201 GPIO48
R577 10K_J 0201 GPIO22
R573 NC_10K_J 0201 BT_GPIO
R332 10K_J 0201 GPIO17
R540 4.7K_J 0402 SMB_CLK_SUS
R541 4.7K_J 0402 SMB_DATA_SUS
PVT
+3VRUN
U38
VCC
WP
SCL
SDA
A0
A1
A2
VSS
EEPROM_SOP-8_256x8
HT24LC02
C708
0.1U_16V_Y
0402_Y5V
SMB_CLK_SUS
SMB_DATA_SUS
SMBus Address: AEH
SMB_LINK_ALERT# R306 10K_J 0201
BATLOW# R563 8.2K_J 0201
PCIE_WAKE# R299 10K_J 0201
GPIO10 R300 10K_J 0402
GPIO14 R294 10K_J 0201
33,58 IMVP_OK
R296 0_J 0201
VRMPWRGD
R297 100K_J 0402
D5
SD103AWS
PM_RSMRST#_SB
ALW_PWRGD 33,55
D6
SD103AWS
IMVP_PWRGD_SB
ALW_PWRGD
CL_VREF0_ICH
C398 0.1U_16V_M_B 0402_X5R
R295 3.24K_F 0201
R302 453_F 0201
FOXCONN
HON HAI Precision Ind. Co., Ltd.
CCPBG - R&D Division
Title
ICH9-M(GPIO) 3/5
Size A3
Document Number M850-1-01
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Date: Thursday, July 09, 2009
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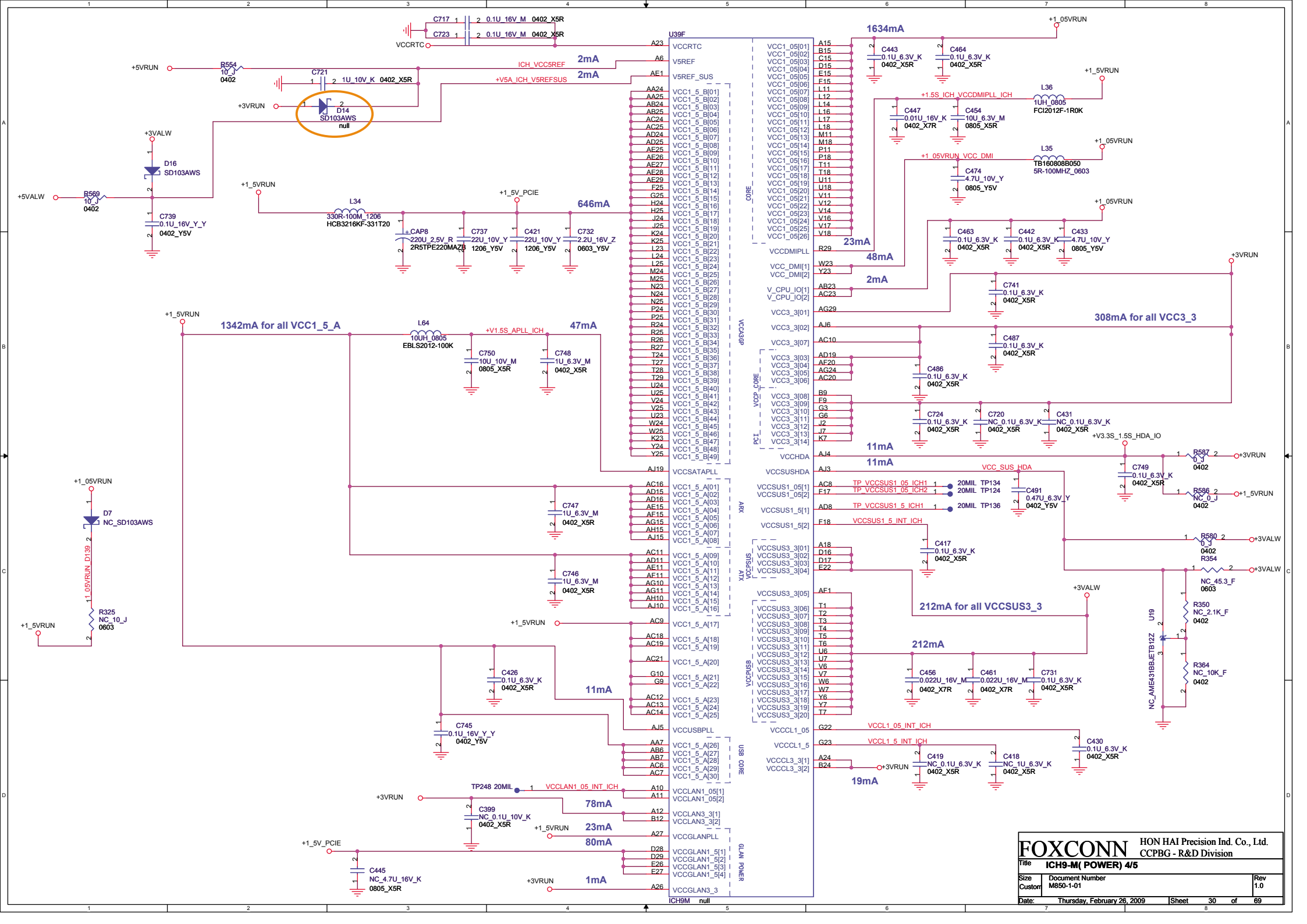
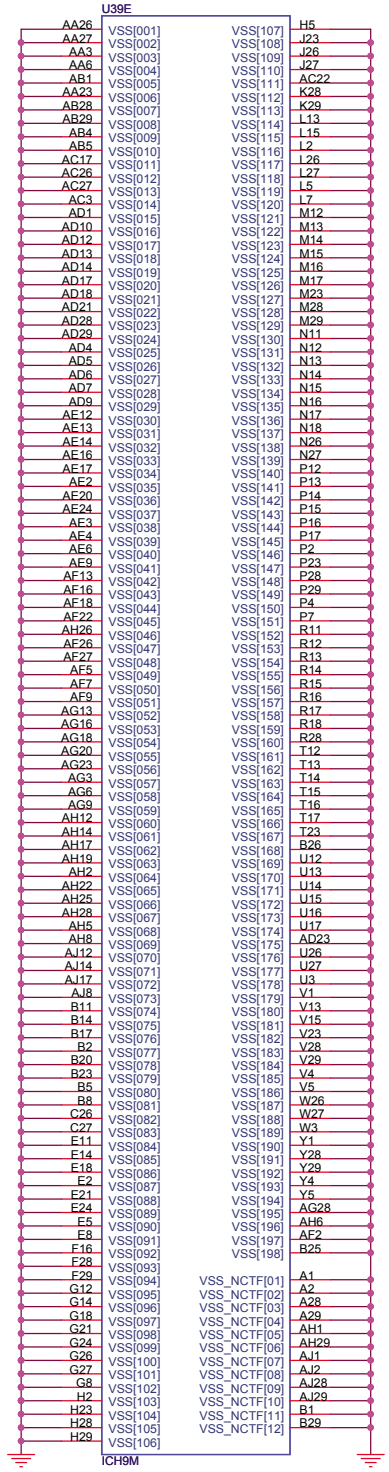

U39F
VCCRTC
V5REF
V5REF_SUS
CORE
VCCDMIPLL
VCCSATAPLL
VCCUSBPLL
VCCGLANPLL
VCCHDA
VCCSUSHDA
VCCSUS1_05[1]
VCCSUS1_05[2]
VCCSUS1_5[1]
VCCSUS1_5[2]
VCCSUS3_3[01]
VCCSUS3_3[02]
VCCSUS3_3[03]
VCCSUS3_3[04]
VCCSUS3_3[05]
VCCSUS3_3[06]
VCCSUS3_3[07]
VCCSUS3_3[08]
VCCSUS3_3[09]
VCCSUS3_3[10]
VCCSUS3_3[11]
VCCSUS3_3[12]
VCCSUS3_3[13]
VCCSUS3_3[14]
VCCSUS3_3[15]
VCCSUS3_3[16]
VCCSUS3_3[17]
VCCSUS3_3[18]
VCCSUS3_3[19]
VCCSUS3_3[20]
VCCCL1_05
VCCCL1_5
VCCCL3_3[1]
VCCCL3_3[2]
VCCLAN1_05[1]
VCCLAN1_05[2]
VCCLAN3_3[1]
VCCLAN3_3[2]
VCCGLAN1_5[1]
VCCGLAN1_5[2]
VCCGLAN1_5[3]
VCCGLAN1_5[4]
VCCGLAN3_3
ICH9M null
2mA
2mA
1634mA
646mA
1342mA for all VCC1_5_A
47mA
11mA
11mA
212mA for all VCCSUS3_3
212mA
23mA
48mA
2mA
308mA for all VCC3_3
78mA
23mA
80mA
1mA
19mA
ICH_VCC5REF
+V5A_ICH_V5REFSUS
+1.5S_ICH_VCCDMIPLL_ICH
+1_05VRUN_VCC_DMI
+V1.5S_APLL_ICH
VCC_SUS_HDA
+V3.3S_1.5S_HDA_IO
VCCL1_05_INT_ICH
VCCL1_5_INT_ICH
VCCLAN1_05_INT_ICH
TP_VCCSUS1_05_ICH1
TP_VCCSUS1_05_ICH2
TP_VCCSUS1_5_ICH1
VCCSUS1_5_INT_ICH
+5VRUN
+3VRUN
+3VALW
+1_05VRUN
+1_5VRUN
+5VALW
+1_5V_PCIE
R554 10_J 0402
C721 1U_10V_K 0402_X5R
D14 SD103AWS null
D16 SD103AWS
R569 10_J 0402
C739 0.1U_16V_Y_Y 0402_Y5V
L34 330R-100M_1206 HCB3216KF-331T20
+CAP8 220U_2.5V_R 2R5TPE220MAZ8
C737 22U_10V_Y 1206_Y5V
C421 22U_10V_Y 1206_Y5V
C732 2.2U_16V_Z 0603_Y5V
L64 10UH_0805 EBLS2012-100K
C750 10U_10V_M 0805_X5R
C748 1U_6.3V_M 0402_X5R
C747 1U_6.3V_M 0402_X5R
C746 1U_6.3V_M 0402_X5R
D7 NC_SD103AWS
R325 NC_10_J 0603
C426 0.1U_6.3V_K 0402_X5R
C745 0.1U_16V_Y_Y 0402_Y5V
C399 NC_0.1U_10V_K 0402_X5R
C445 NC_4.7U_16V_K 0805_X5R
C443 0.1U_6.3V_K 0402_X5R
C464 0.1U_6.3V_K 0402_X5R
C447 0.01U_16V_K 0402_X7R
C454 10U_6.3V_M 0805_X5R
L36 1UH_0805 FCI2012F-1R0K
C474 4.7U_10V_Y 0805_Y5V
L35 TB160808B050 5R-100MHZ_0603
C463 0.1U_6.3V_K 0402_X5R
C442 0.1U_6.3V_K 0402_X5R
C433 4.7U_10V_Y 0805_Y5V
C741 0.1U_6.3V_K 0402_X5R
C487 0.1U_6.3V_K 0402_X5R
C486 0.1U_6.3V_K 0402_X5R
C724 0.1U_6.3V_K 0402_X5R
C720 NC_0.1U_6.3V_K 0402_X5R
C431 NC_0.1U_6.3V_K 0402_X5R
C749 0.1U_6.3V_K 0402_X5R
R587 0_J 0402
R586 NC_0_J 0402
C491 0.47U_6.3V_Y 0402_Y5V
C417 0.1U_6.3V_K 0402_X5R
R580 0_J 0402
R354 NC_45.3_F 0603
R350 NC_2.1K_F 0402
R364 NC_10K_F 0402
U19 NC_AME431BBJETB12Z
C456 0.022U_16V_M 0402_X7R
C461 0.022U_16V_M 0402_X7R
C731 0.1U_6.3V_K 0402_X5R
C430 0.1U_6.3V_K 0402_X5R
C419 NC_0.1U_6.3V_K 0402_X5R
C418 NC_1U_6.3V_K 0402_X5R
20MIL TP134
20MIL TP124
20MIL TP136
FOXCONN
HON HAI Precision Ind. Co., Ltd.
CCPBG - R&D Division
Title ICH9-M(POWER) 4/5
Size Custom
Document Number M850-1-01
Rev 1.0
Date: Thursday, February 26, 2009
Sheet 30 of 69



FOXCONN	HON HAI Precision Ind. Co., Ltd. CCPBG - R&D Division	
Title	ICH9-M(GND) 5/5	
Size A3	Document Number M850-1-01	Rev 1.0
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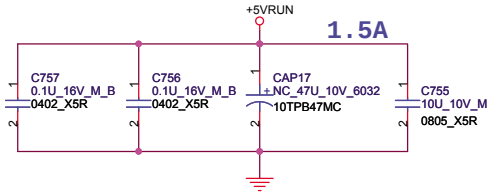
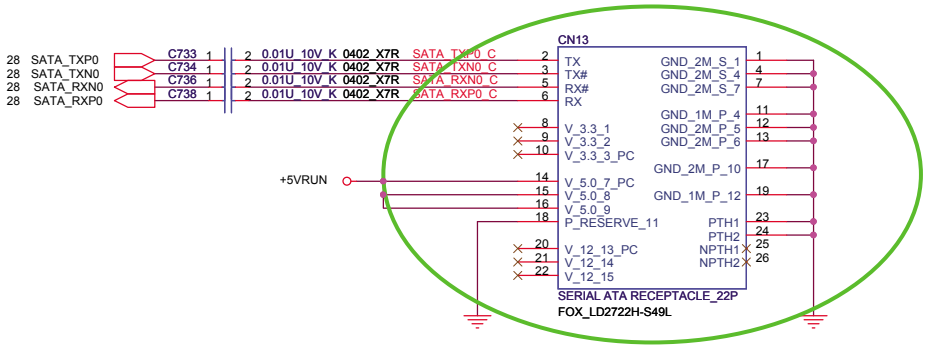
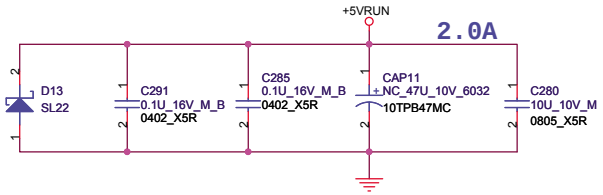
SATA HDD CONN

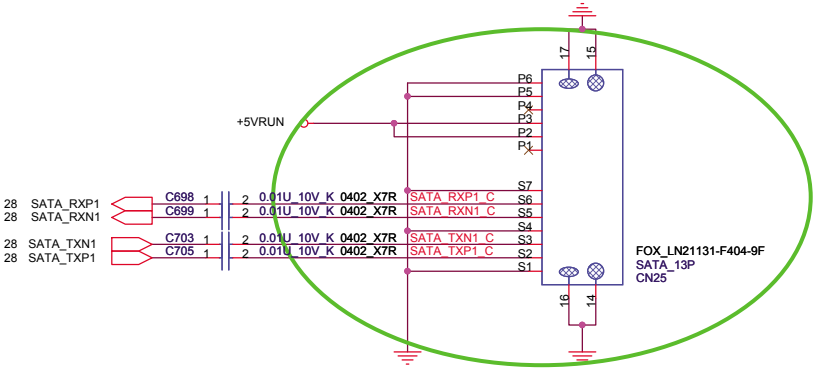


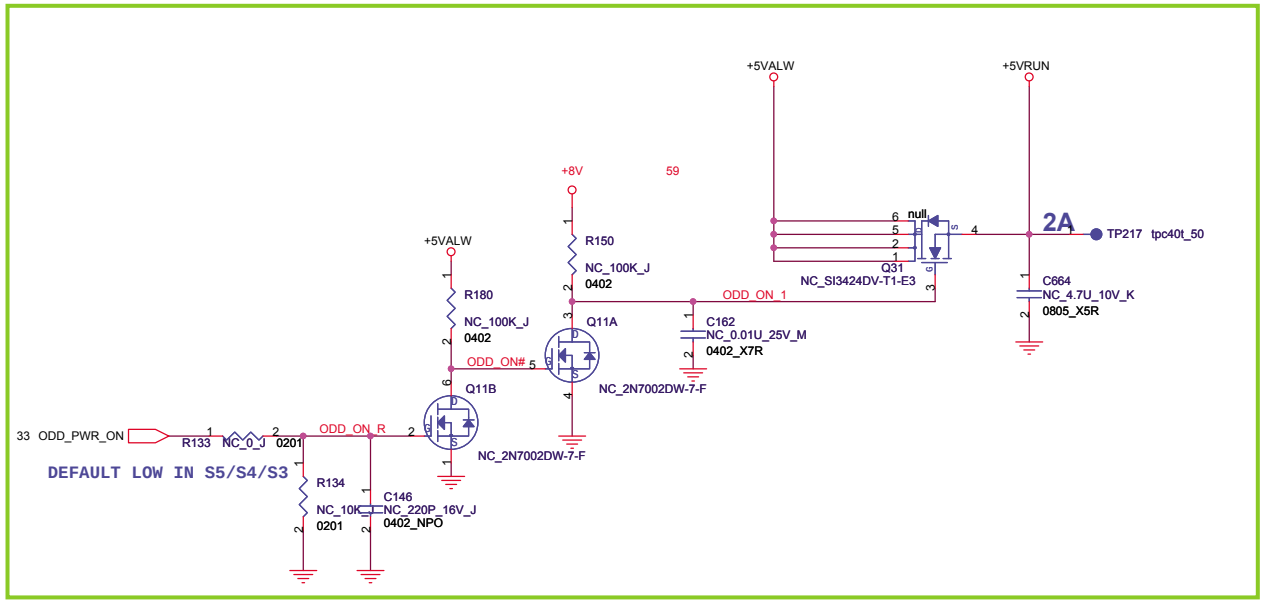


EVT

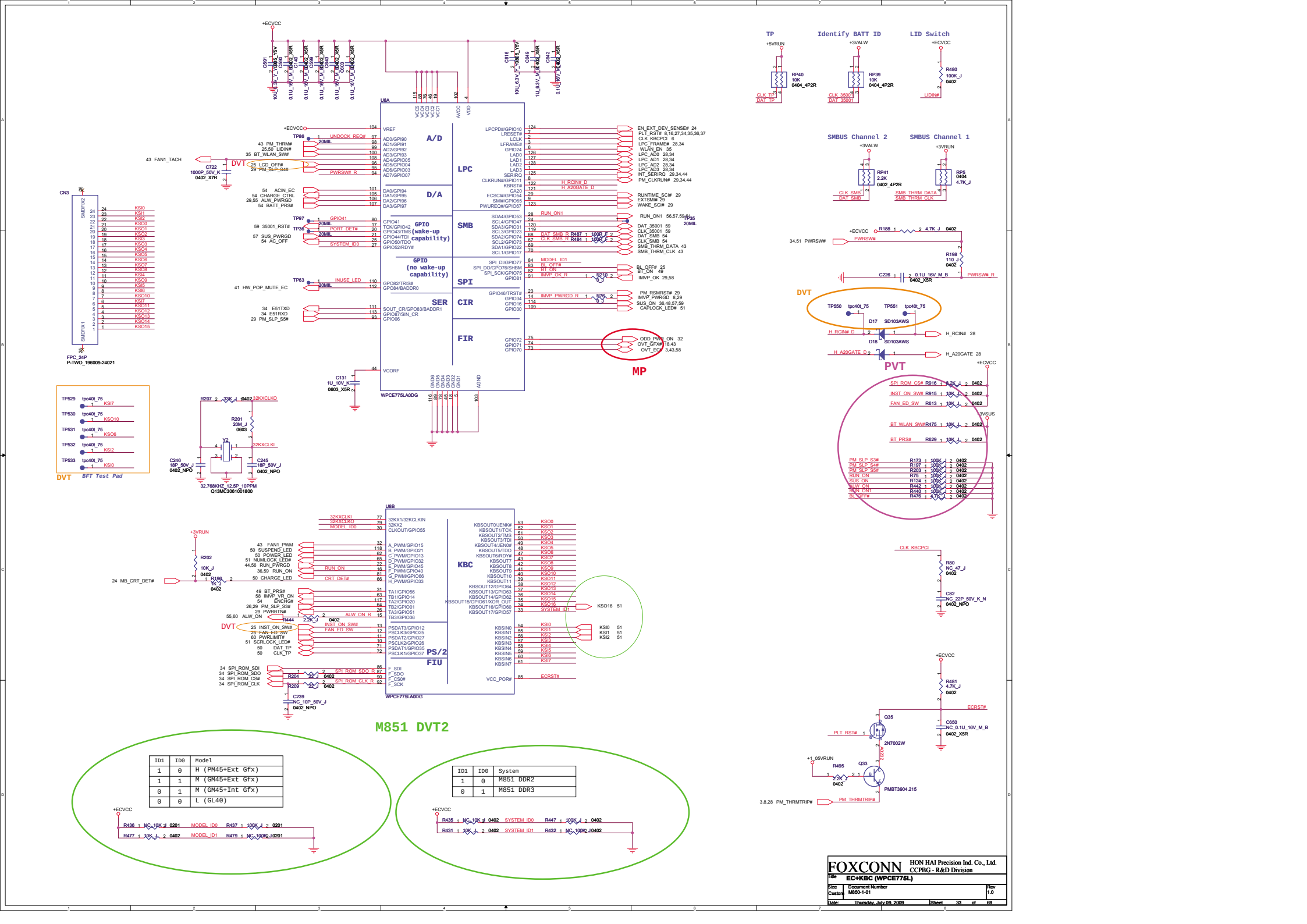
SATA ODD CONN







FOXCONN	HON HAI Precision Ind. Co., Ltd. CCPBG - R&D Division	
Title: SATA HDD/ODD		
Size: A3	Document Number: M850-1-01	Rev: 1.0
Date: Thursday, July 09, 2009	Sheet 32 of 69	


TP
Identify BATT ID
LID Switch
SMBUS Channel 2
SMBUS Channel 1
DVT
PVT
MP
M851 DVT2
U8A
WPCE775LA0DG
U8B
WPCE775LA0DG
FOXCONN
HON HAI Precision Ind. Co., Ltd.
CCPBG - R&D Division
EC+KBC (WPCE775L)
Thursday, July 09, 2009
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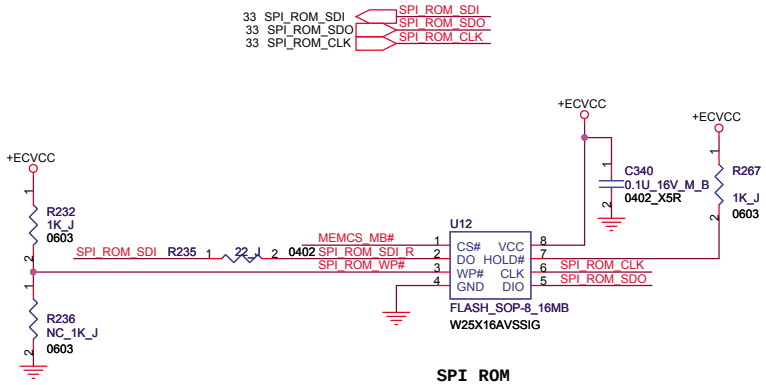
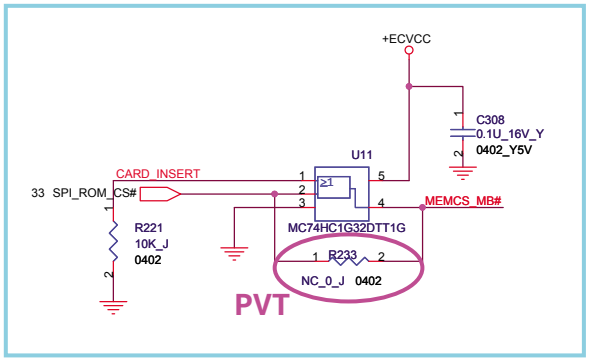
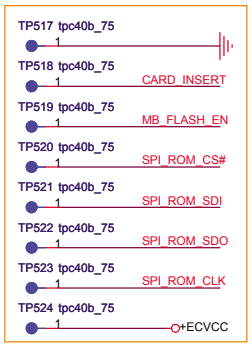


SPI ROM

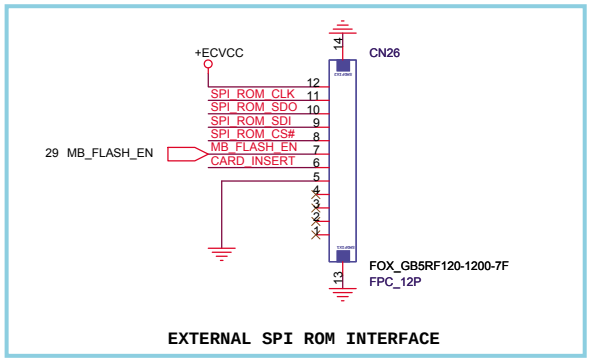
LABLE1

NC_AMI-APTIO

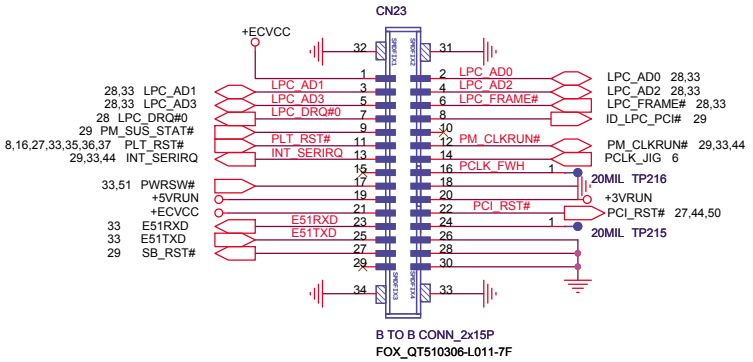




DVT *BFT Test Pad*



EXTERNAL SPI ROM INTERFACE



JIG-120

FOXCONN	HON HAI Precision Ind. Co., Ltd. CCPBG - R&D Division	
Title	**Flash ROM/SPI**	
Size A3	Document Number M850-1-01	Rev 1.0
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BOSS2
BOSS_4x5.2

BOSS1
BOSS_4x5.2

Half Mini Card

+1_5V=>0.5A Peak/0.375A Normal
+3_3VAux=>2.75A Peak/1.1A Normal

WLAN ON/OFF Switch

BT_WLAN_SW# → BT_WLAN_SW# 33

1BS007-12110-002-7F_SW_SMD7
SW4

CN21

29,37 PCIE_WAKE#	WAKE#	1	2	+3.3Vaux_1	MINI_PCIE_+3_3V
WIRELESS_DATA	BT_DATA	3	4	GND_1	MINI_PCIE_+1_5V
WIRELESS_CHCLK	BT_CHCLK	5	6	NC_1	
MINI_CARD_DET#	CLKREQ#	7	8	NC_2	
	GND_2	9	10	NC_3	
6 CLK_PCIE_MINI#	REFCLK-	11	12	NC_4	
6 CLK_PCIE_MINI	REFCLK+	13	14	NC_5	
	GND_3	15	16	NC_6	
	NC_7	17	18	GND_4	
	NC_8	19	20	W_DISABLE#	
	GND_5	21	22	PERST#	PLT_RST# 8,16,27,33,34,36,37
27 MINI_RXN2	PETn0	23	24	+3.3Vaux_2	MINI_PCIE_+3_3V
27 MINI_RXP2	PETp0	25	26	GND_6	MINI_PCIE_+1_5V
	GND_7	27	28	NC_9	
	GND_8	29	30	NC_10	
27 MINI_TXN2	PERn0	31	32	NC_11	
27 MINI_TXP2	PERp0	33	34	GND_9	
	GND_10	35	36	NC_12	USB_PN10_L
	GND_11	37	38	NC_13	USB_PP10_L
MINI_PCIE_+3_3V	+3.3Vaux_3	39	40	NC_14	
	+3.3Vaux_4	41	42	NC_15	
	GND_12	43	44	LED_WLAN#	MINI_CARD_LED#
	C-Link_CLK	45	46	NC_16	A4311 1 20MIL TP159
	C-Link_DAT	47	48	NC_17	MINI_PCIE_+1_5V
	C-Link_RST	49	50	GND_13	
	NC_18	51	52	+3.3Vaux_5	MINI_PCIE_+3_3V

SMDFIX1 NPTH1 SMDFIX2 NPTH2

MINI PCI CONN_2x26P
FOX_AS0B226_S68N_7F

Half Mini Card
WLAN

for RF team test VEDS, MP will delete

R914 1 2 WLAN_EN 33
0_J
0402

+3VSUS

Q21 SRK7002 — D22 BAS316PT — Q20 DTA114YUA

WLAN_EN

TP180 tpc40t_75

R386 120_J 0402

TP184 tpc40t_75

49 BT_LED

R630 NC_100K_J 0402

Q49 DTC144EUA

LED3 HT-110UYG null

M851 PVT

WIRELESS LED

TURN WIRELSS LED ON WHEN EITHER WLAN OR BT IS ENABLED.

U24 NC_SN74CB3Q3305PW

MINI_PCIE_+3_3V	1OE	VCC	8	MINI_PCIE_+3_3V
27 USB_PN10	1A	2OE	7	MINI_PCIE_+3_3V
USB_PN10_L	1B	2B	6	USB_PP10_L
	GND	2A	5	USB_PP10 27

C534 NC_0.1U_16V_Y 0402_Y5V

+3VSUS
R387 0_J 0805
MINI_PCIE_+3_3V
C538 NC_22U_6.3V_M 0805_X5R
C531 0.1U_16V_Y 0402_Y5V
C546 0.1U_16V_Y 0402_Y5V
C529 10U_10V_M 0805_X5R
C548 10U_10V_M 0805_X5R

+1_5VRUN
R396 0_J 0603
MINI_PCIE_+1_5V
C545 0.1U_10V_K 0402_X5R
C544 NC_10U_10V_M 0805_X5R
C536 NC_10U_10V_M 0805_X5R

FOXCONN	HON HAI Precision Ind. Co., Ltd. CCPBG - R&D Division	
Title: Half Mini Card		
Size: A3	Document Number: M850-1-01	Rev: 1.0
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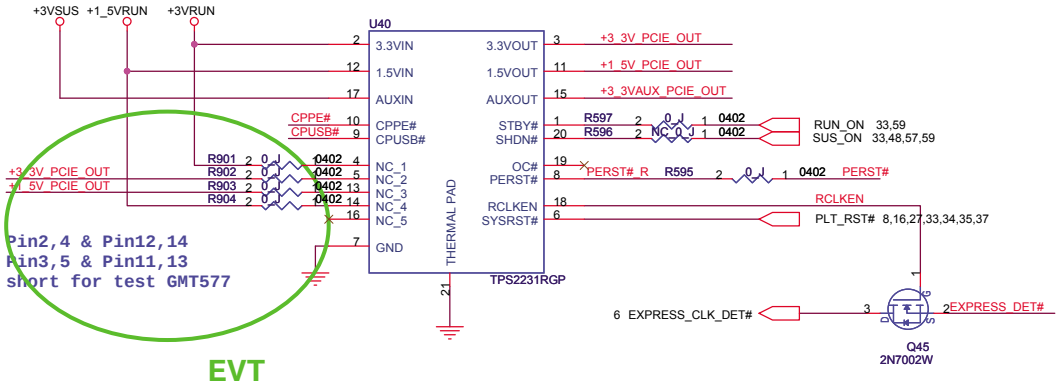
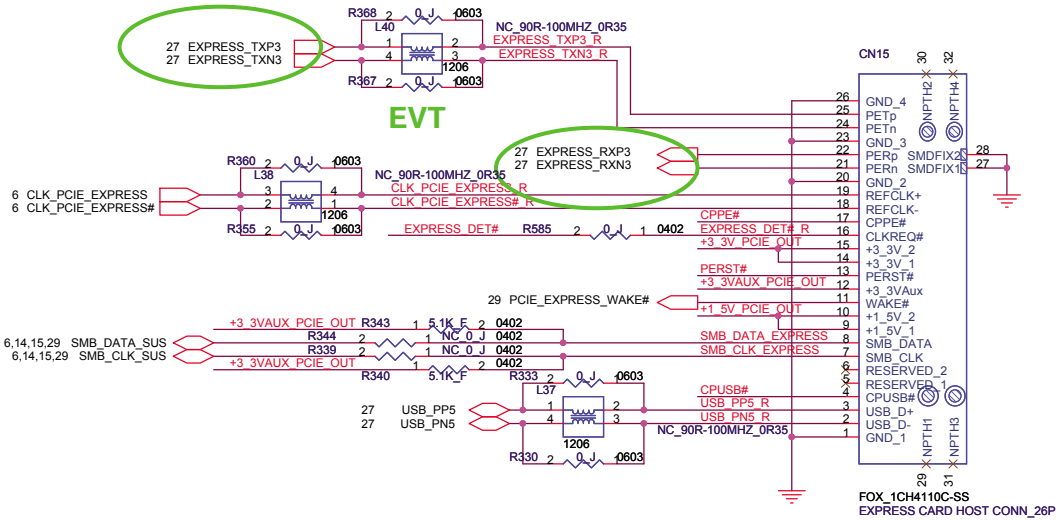
+1_5V=>1.3A
+3_3VAux=>0.6A
+3_3V=>2.5A

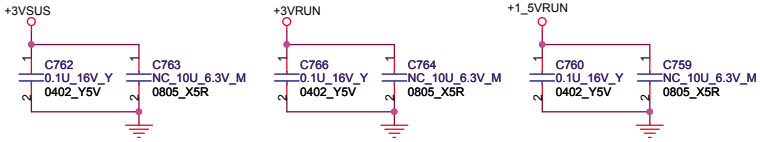
Express Card Power Switch

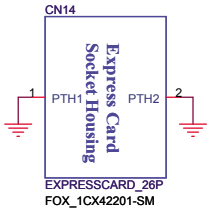


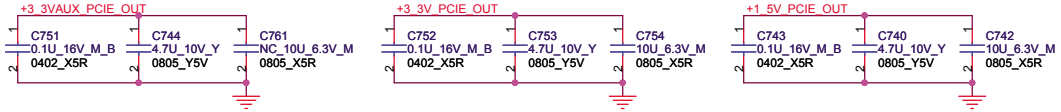
EVT



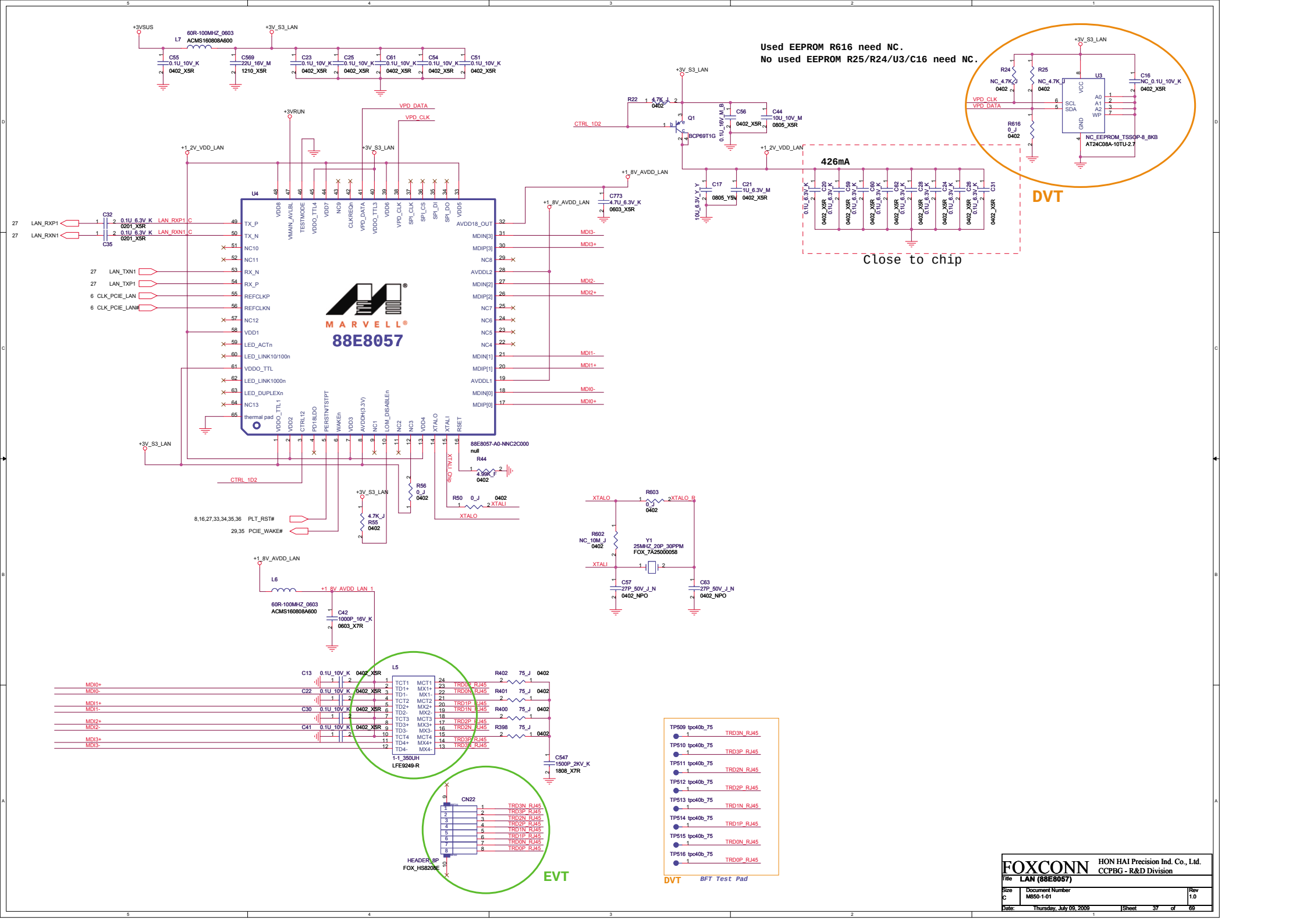
Express Card Slot.

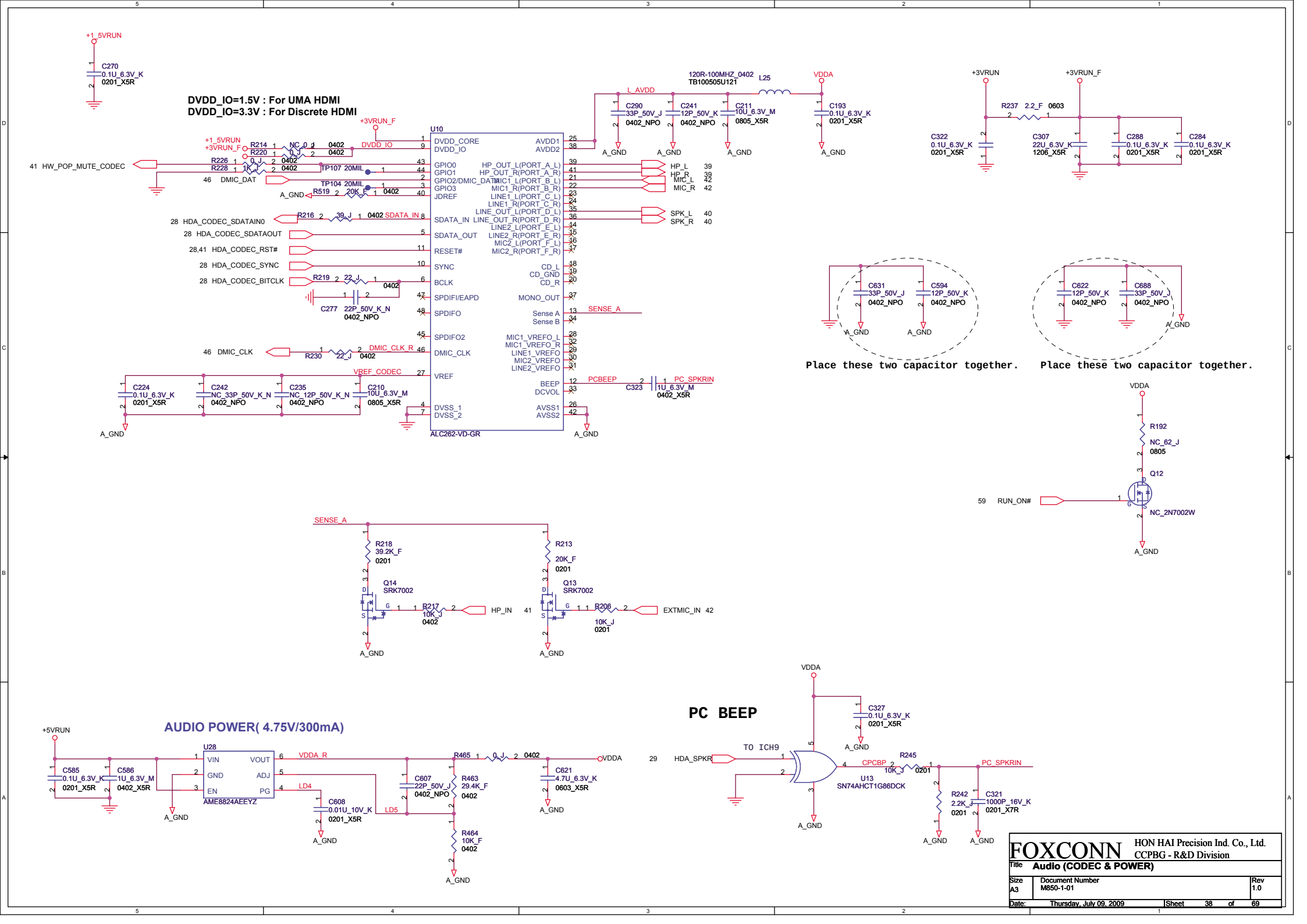


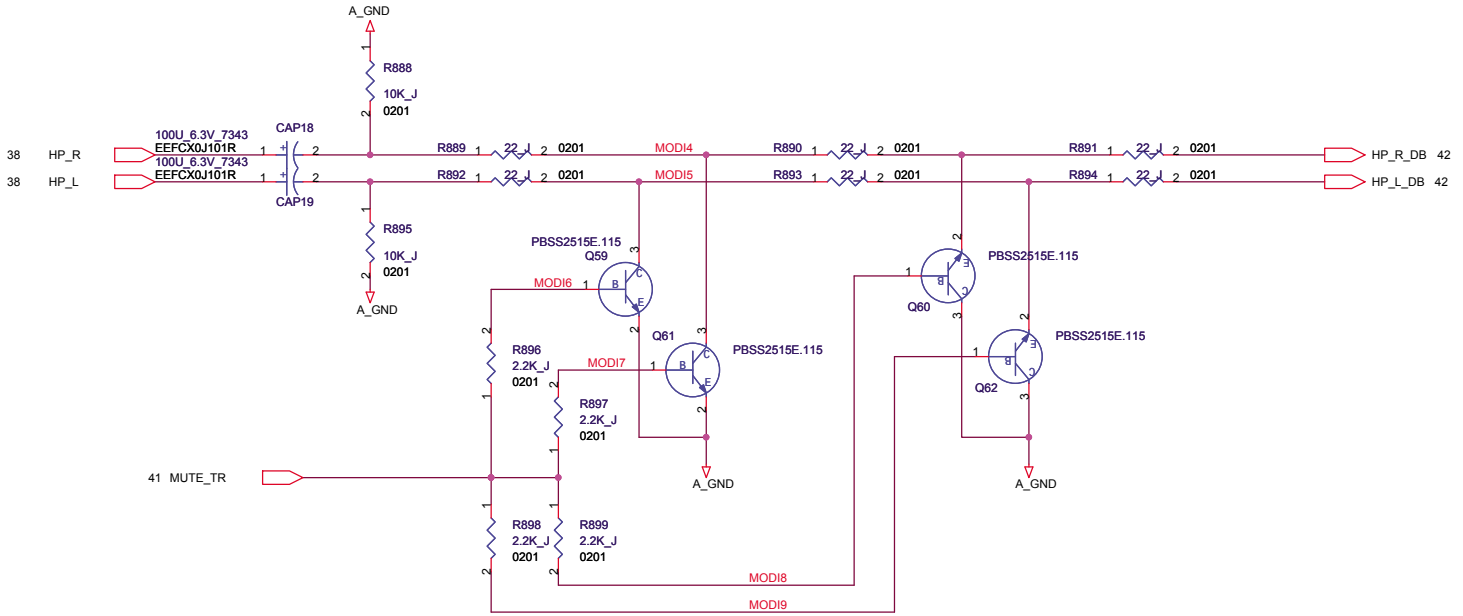




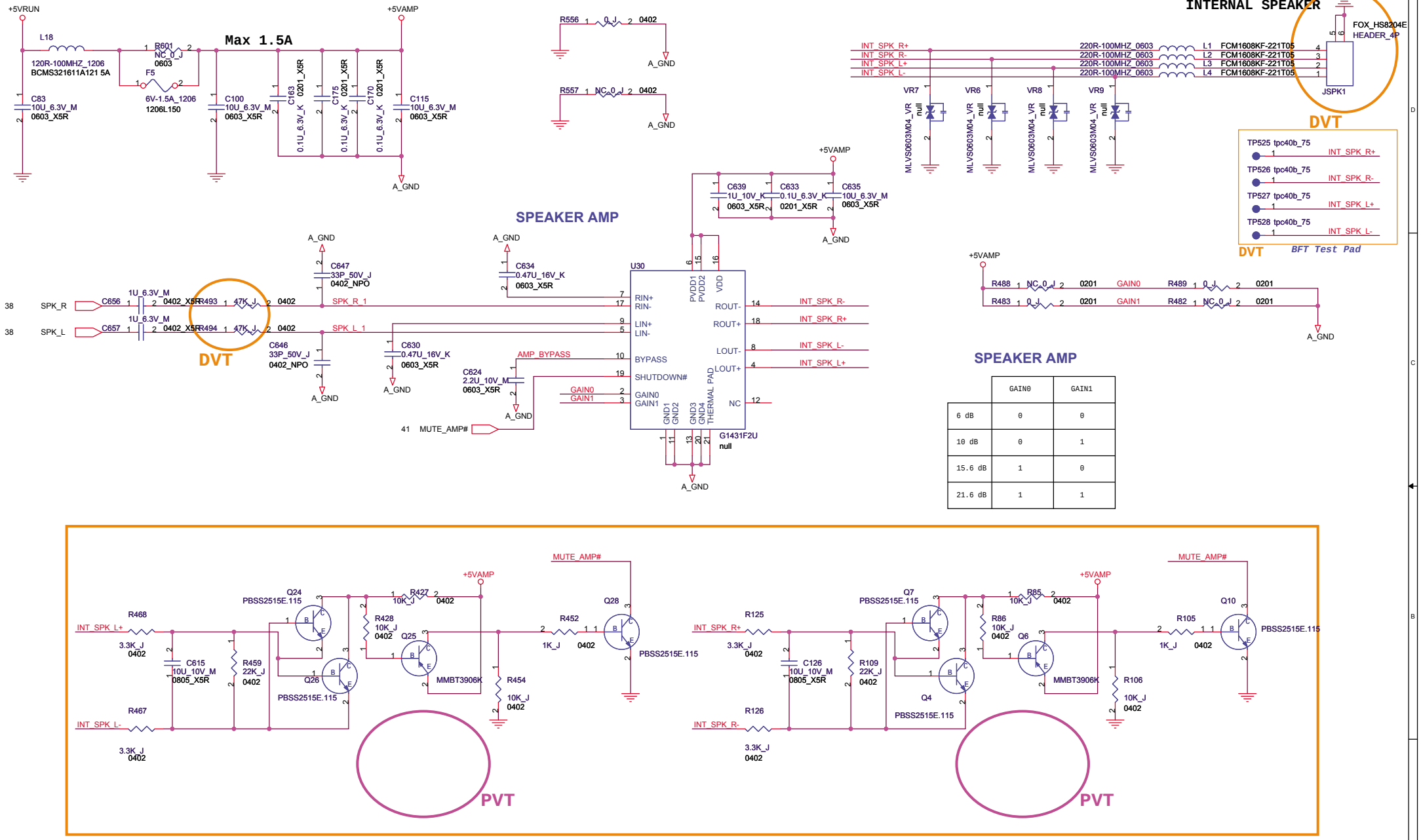
FOXCONN	HON HAI Precision Ind. Co., Ltd. CCPBG - R&D Division	
Title: EXPRESS CARD		
Size: A3	Document Number: M850-1-01	Rev: 1.0
Date: Wednesday, April 01, 2009	Sheet 36 of 69	


Used EEPROM R616 need NC.
No used EEPROM R25/R24/U3/C16 need NC.
426mA
Close to chip
DVT
EVT
88E8057
MARVELL
U4
+3VSUS
+3V_S3_LAN
+3VRUN
+1_2V_VDD_LAN
+1_8V_AVDD_LAN
VPD_DATA
VPD_CLK
CTRL_1D2
LAN_RXP1
LAN_RXN1
LAN_TXN1
LAN_TXP1
CLK_PCIE_LAN
CLK_PCIE_LAN#
PLT_RST#
PCIE_WAKE#
MDI3-
MDI3+
MDI2-
MDI2+
MDI1-
MDI1+
MDI0-
MDI0+
XTALO
XTALI
TRD3N_RJ45
TRD3P_RJ45
TRD2N_RJ45
TRD2P_RJ45
TRD1N_RJ45
TRD1P_RJ45
TRD0N_RJ45
TRD0P_RJ45
BFT Test Pad
FOXCONN
HON HAI Precision Ind. Co., Ltd.
CCPBG - R&D Division
Title LAN (88E8057)
Size C
Document Number M850-1-01
Rev 1.0
Date: Thursday, July 09, 2009
Sheet 37 of 69


DVDD_IO=1.5V : For UMA HDMI
DVDD_IO=3.3V : For Discrete HDMI
U10
ALC262-VD-GR
Place these two capacitor together.
Place these two capacitor together.
PC BEEP
AUDIO POWER(4.75V/300mA)
U28
AME8824AEEYZ
U13
SN74AHCT1G86DCK
TO ICH9
FOXCONN
HON HAI Precision Ind. Co., Ltd.
CCPBG - R&D Division
Title Audio (CODEC & POWER)
Size A3
Document Number M850-1-01
Rev 1.0
Date: Thursday, July 09, 2009
Sheet 38 of 69

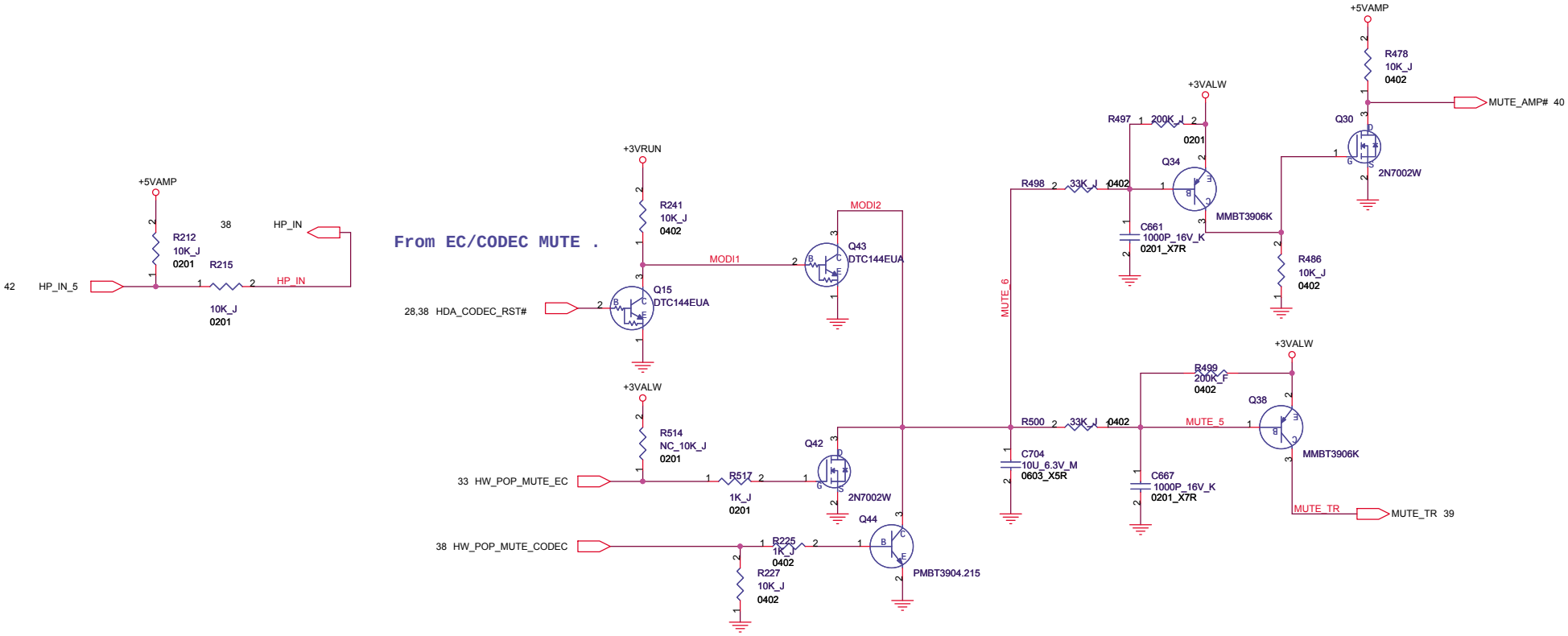


FOXCONN	HON HAI Precision Ind. Co., Ltd. CCPBG - R&D Division	
Title	Audio (HP)	
Size A3	Document Number M850-1-01	Rev 1.0
Date: Monday, July 13, 2009	Sheet 39 of 69	

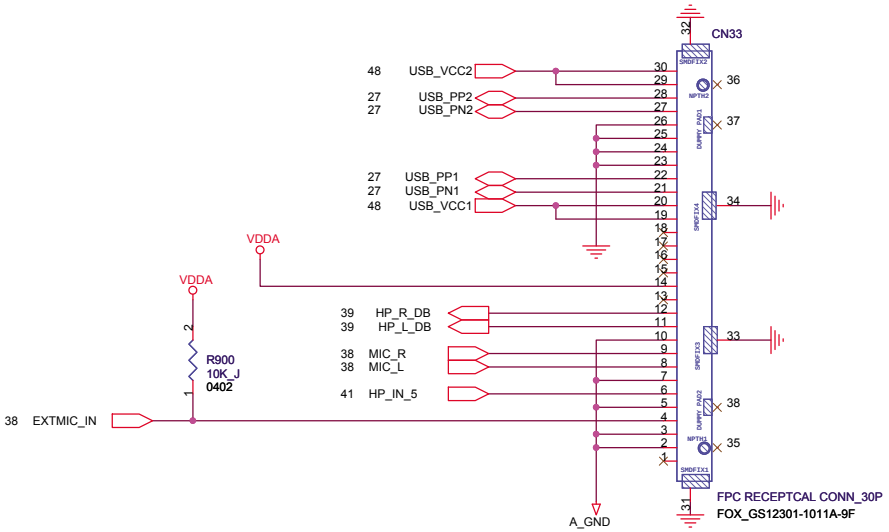


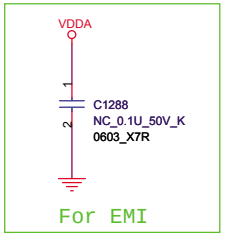
For Mor request,add the speaker cable short protection circuit

FOXCONN	HON HAI Precision Ind. Co., Ltd. CCPBG - R&D Division	
Title	Audio (SPKR)	
Size A3	Document Number M850-1-01	Rev 1.0
Date: Wednesday, April 01, 2009	Sheet 40 of 69	

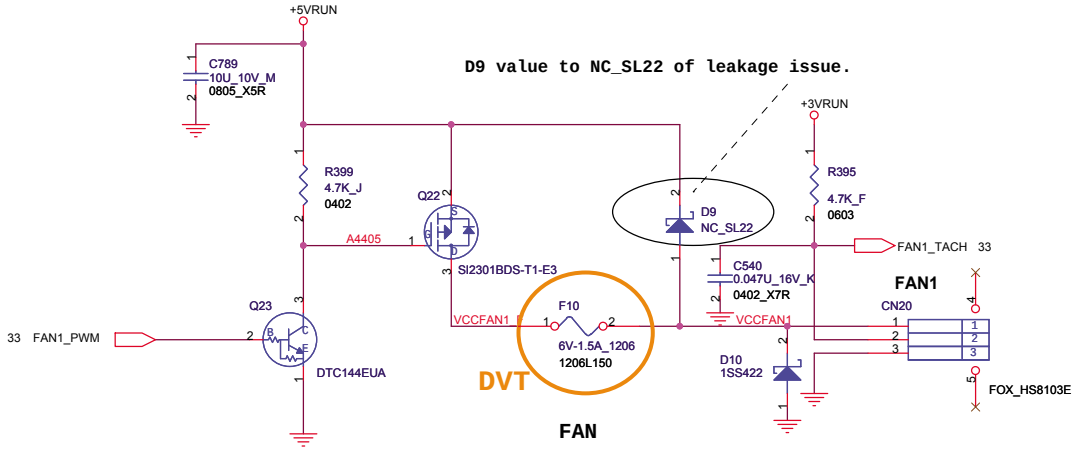


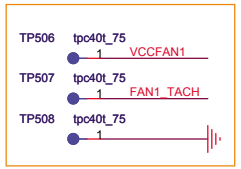
FOXCONN	HON HAI Precision Ind. Co., Ltd. CCPBG - R&D Division	
Title	Audio (MUTE)	
Size A3	Document Number M850-1-01	Rev 1.0
Date: Thursday, July 09, 2009	Sheet 41 of 69	

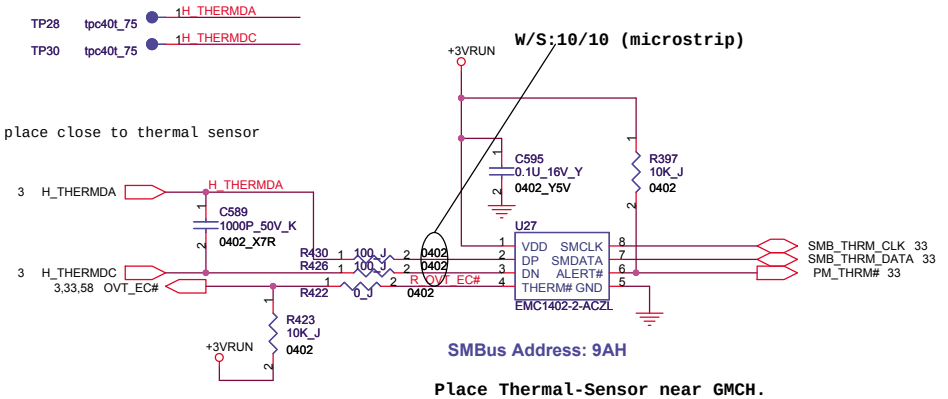


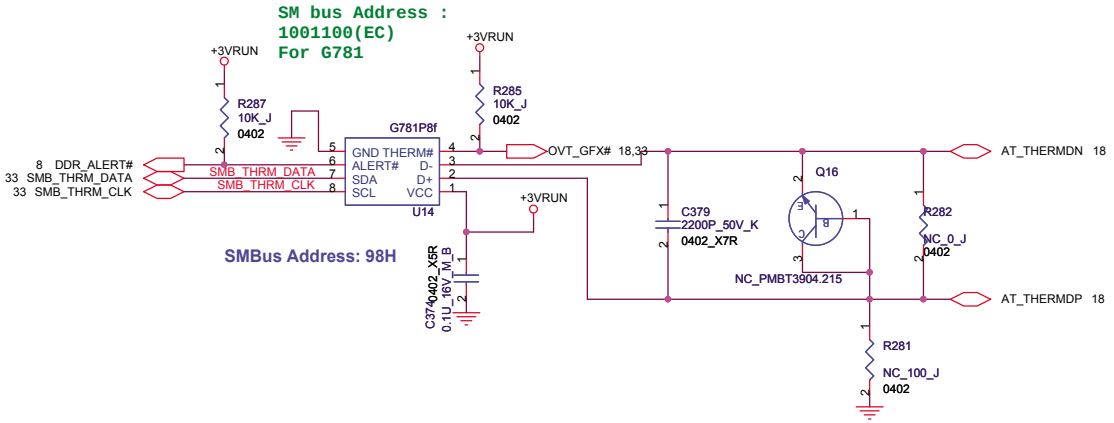


FOXCONN	HON HAI PRECISION IND. CO., LTD. CPBG - R&D Division	
Title: **Audio+USB MB CONN**		
Size: A3	Document Number: **M850-1-01**	Rev: **1.0**
Date: Wednesday, April 01, 2009	Sheet 42 of 69	

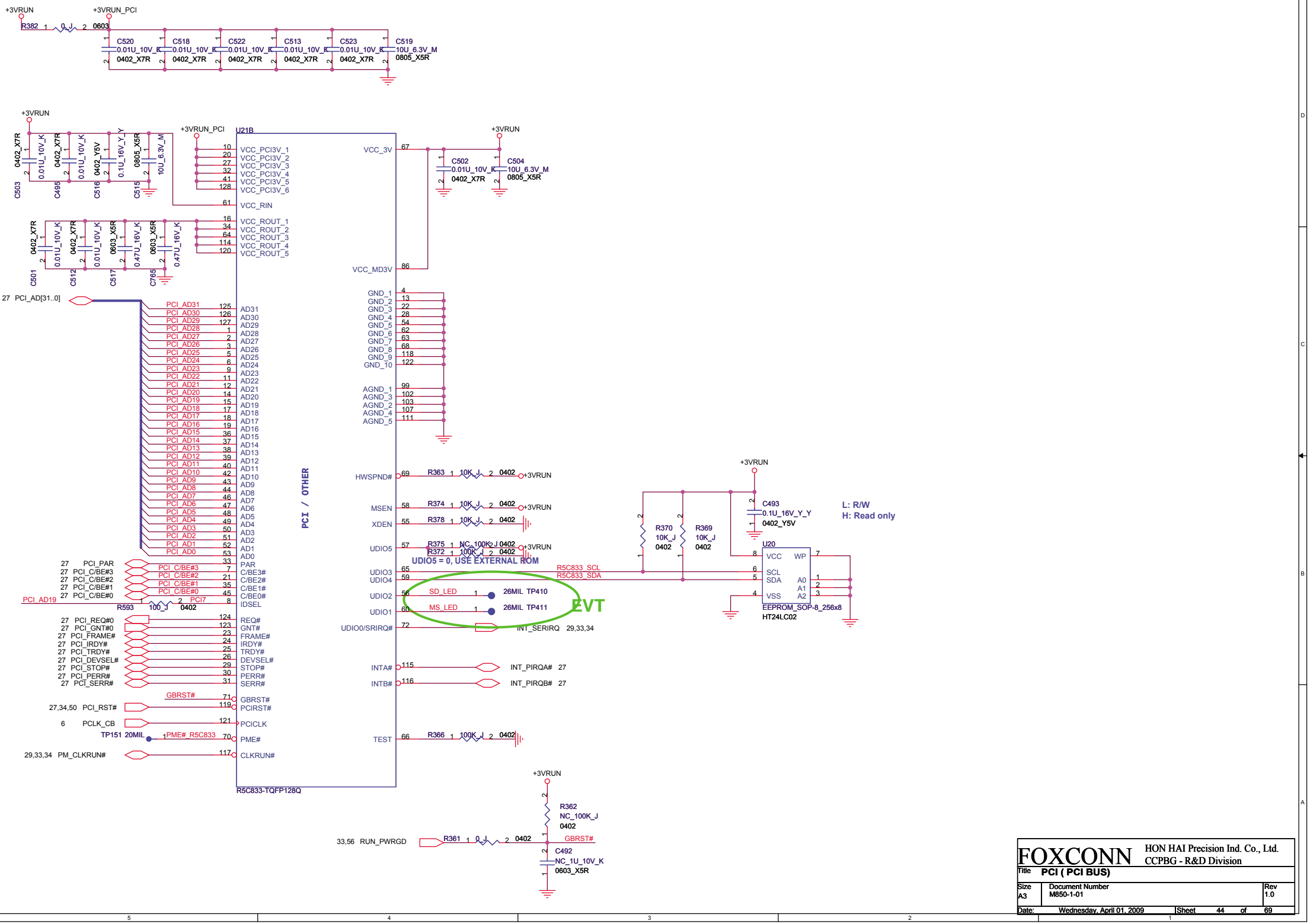




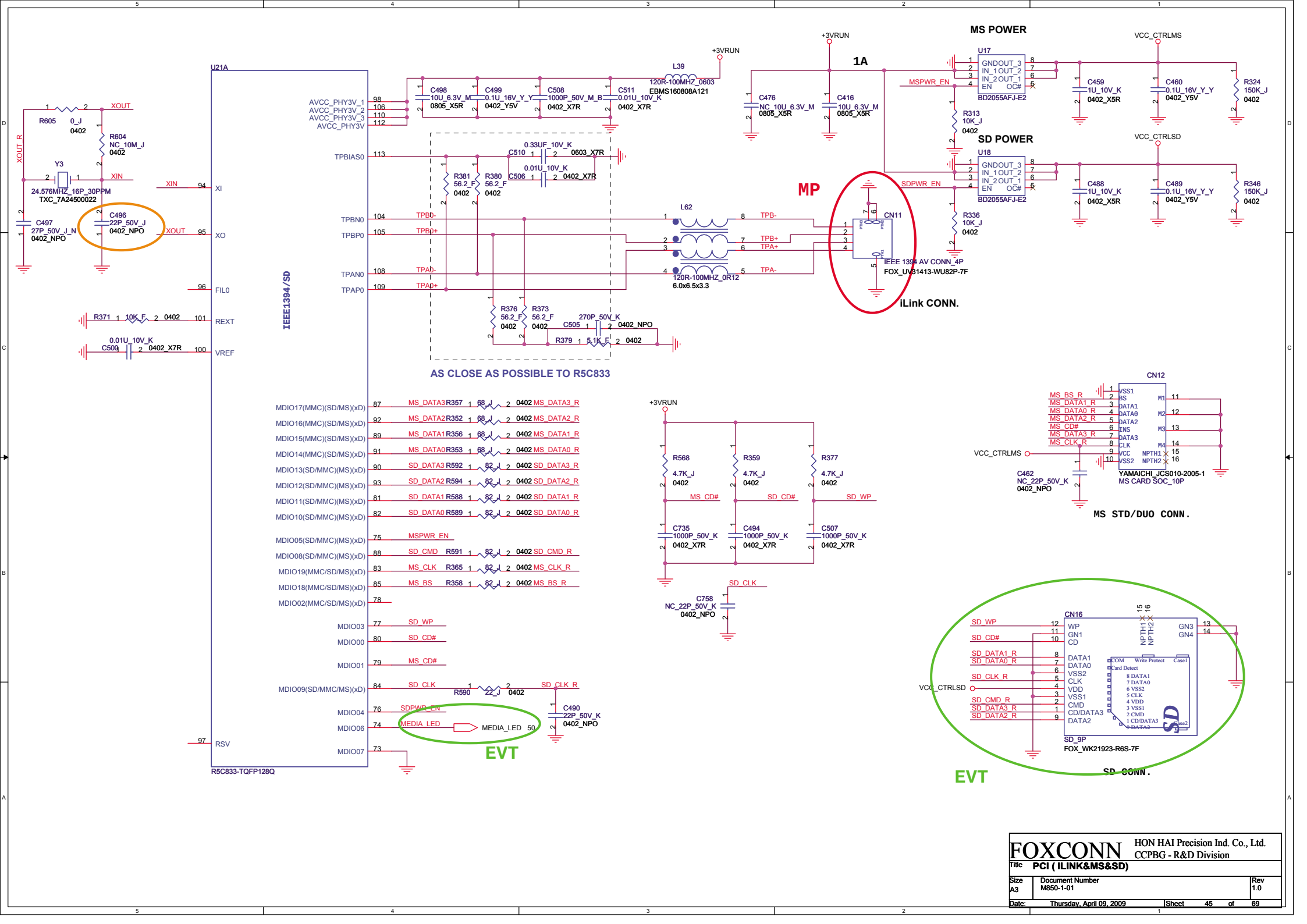




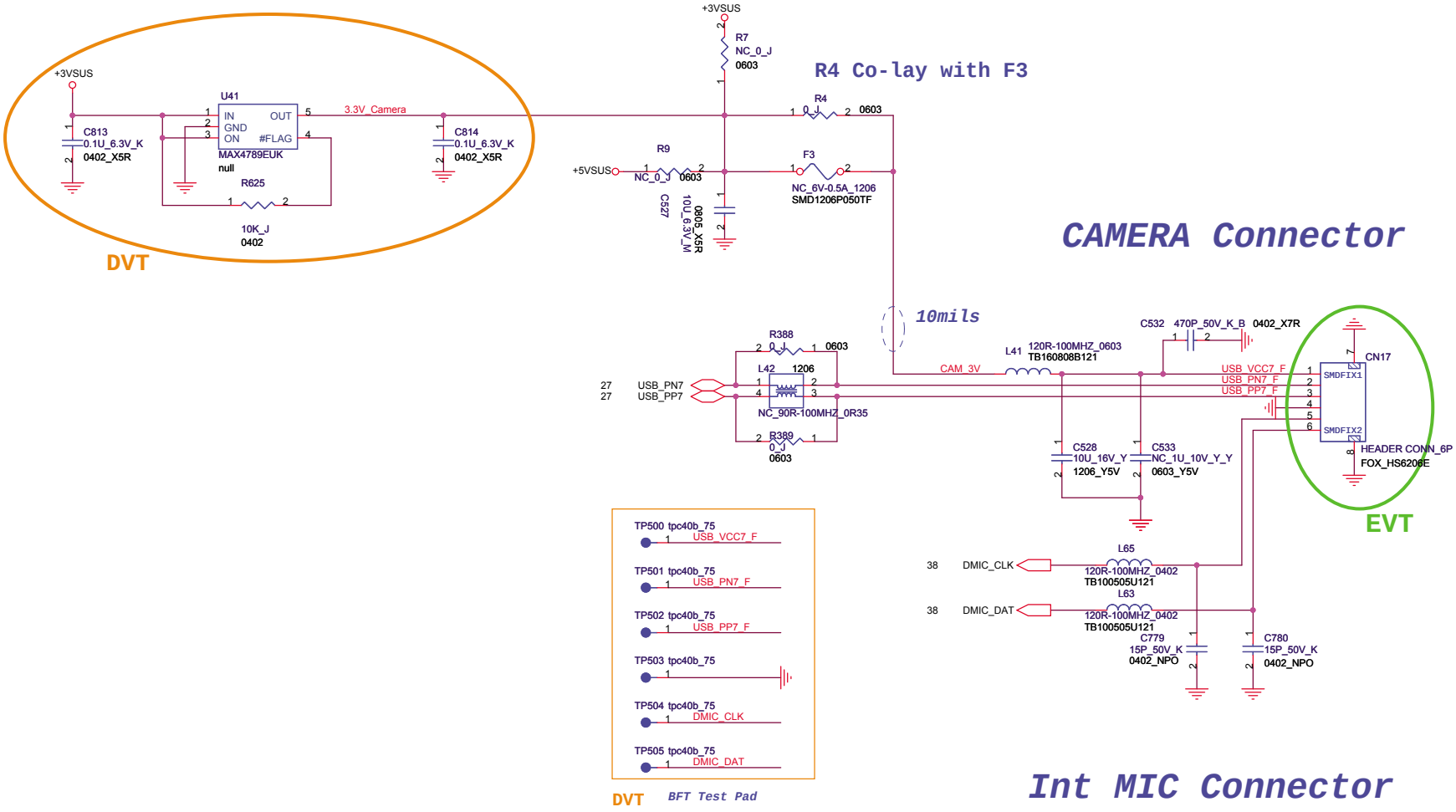
FOXCONN	HON HAI Precision Ind. Co., Ltd. CCPBG - R&D Division	
Title	FAN/Thermal	
Size A3	Document Number M850-1-01	Rev 1.0
Date: Wednesday, April 01, 2009	Sheet 43 of 69	



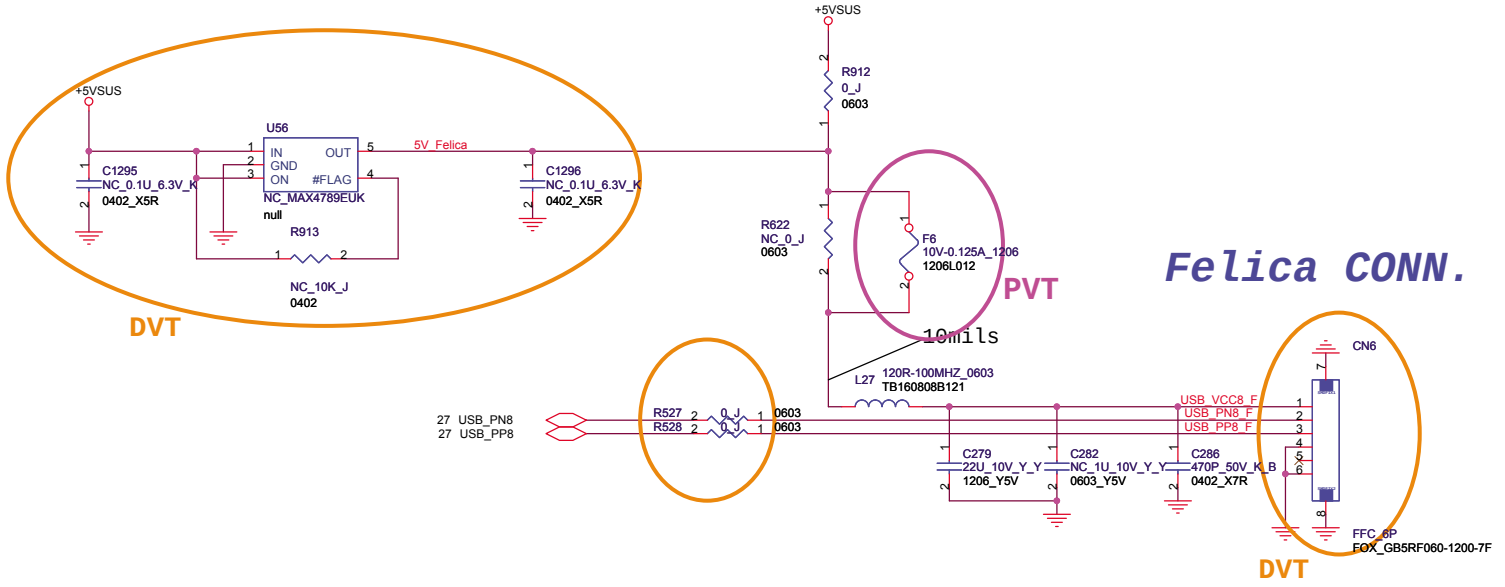
FOXCONN	HON HAI Precision Ind. Co., Ltd. CCPBG - R&D Division	
Title	PCI (PCI BUS)	
Size A3	Document Number M850-1-01	Rev 1.0
Date: Wednesday, April 01, 2009	Sheet 44 of 69	

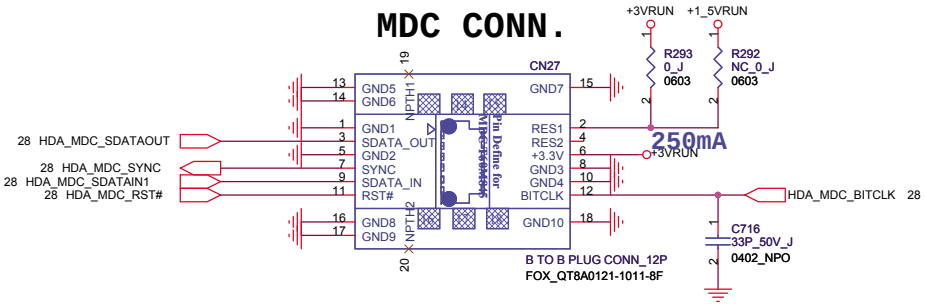


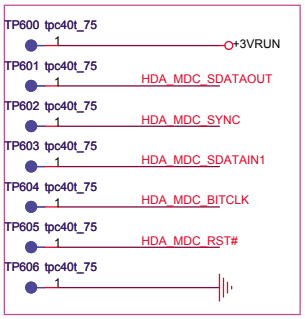
FOXCONN	HON HAI Precision Ind. Co., Ltd.
	CCPBG - R&D Division
Title	PCI (ILINK&MS&SD)
Size A3	Document Number M850-1-01
Rev	1.0
Date: Thursday, April 09, 2009	Sheet 45 of 69

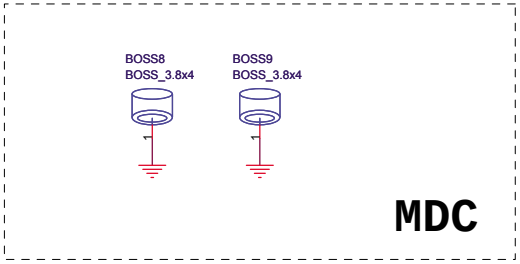


FOXCONN	HON HAI Precision Ind. Co., Ltd. CCPBG - R&D Division	
Title	CAMERA/Int MIC.	
Size A3	Document Number M850-1-01	Rev 1.0
Date: Wednesday, April 01, 2009	Sheet 46 of 69	

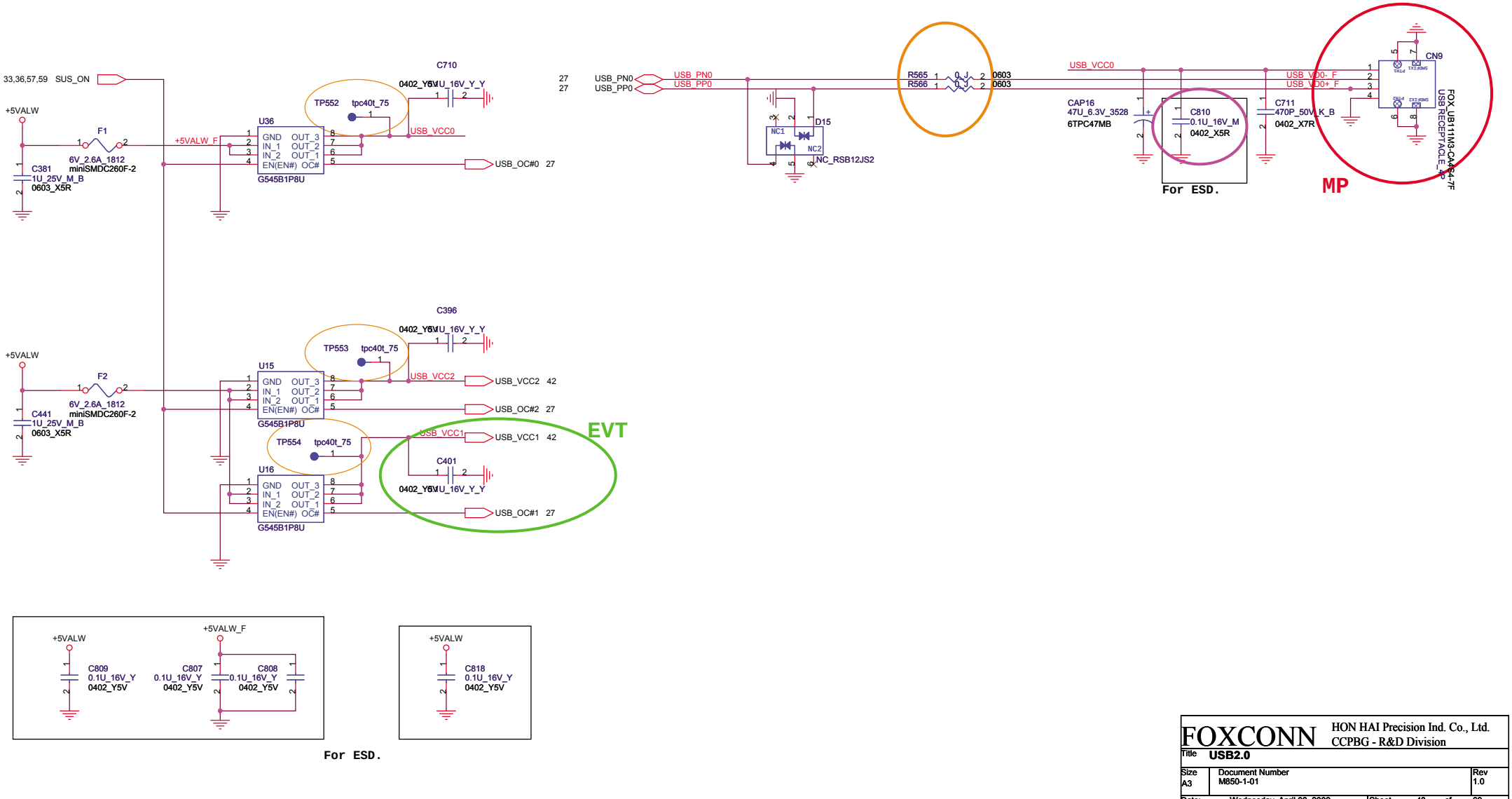






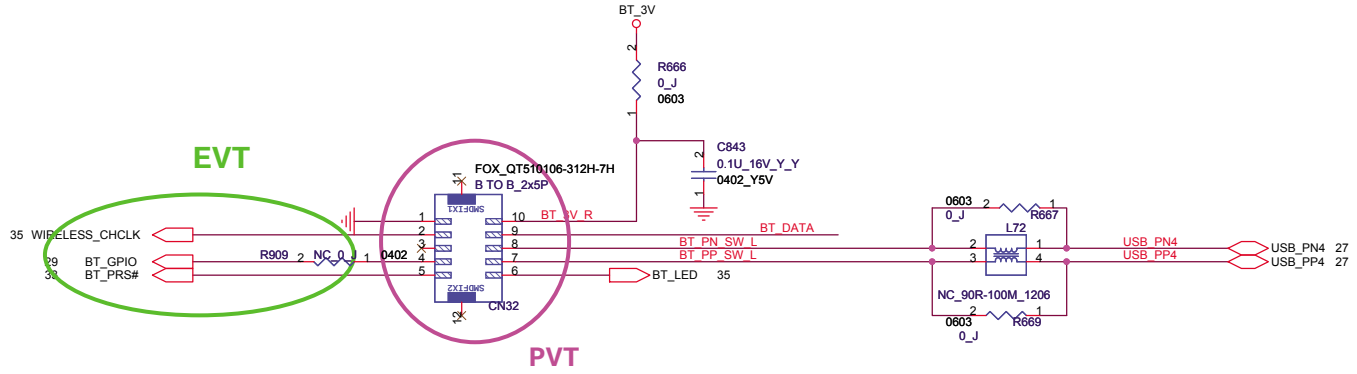


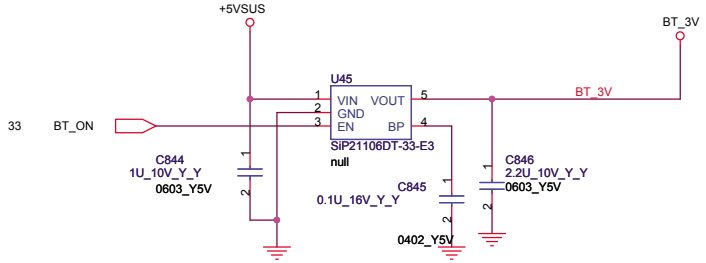
FOXCONN	HON HAI Precision Ind. Co., Ltd. CCPBG - R&D Division	
Title	Felica & Modem	
Size A3	Document Number M850-1-01	Rev 1.0
Date: Wednesday, April 01, 2009	Sheet 47 of 69	

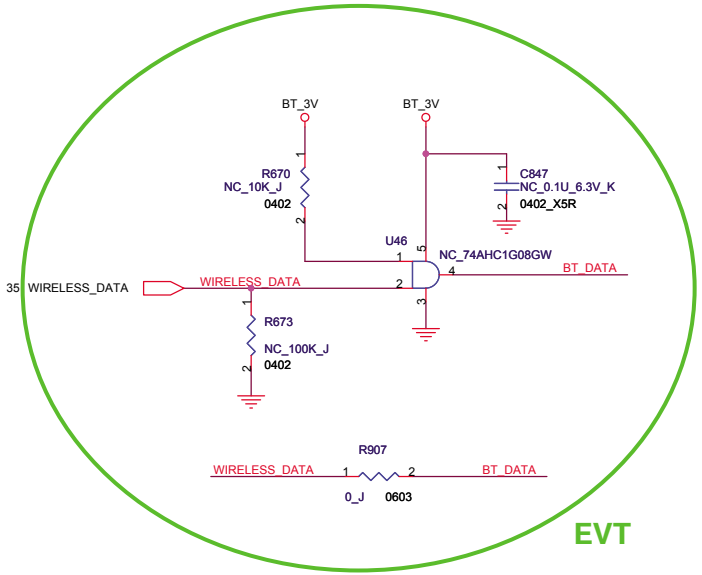


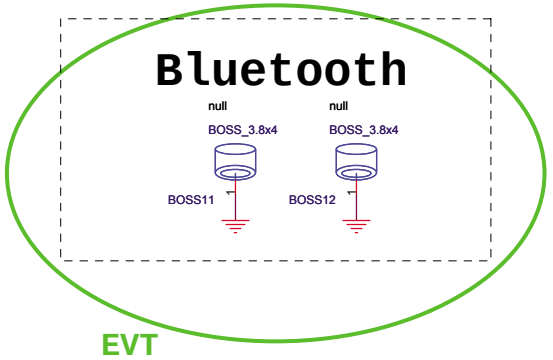
FOXCONN	HON HAI Precision Ind. Co., Ltd. CCPBG - R&D Division	
Title	USB2.0	
Size A3	Document Number M850-1-01	Rev 1.0
Date: Wednesday, April 08, 2009	Sheet 48 of 69	

Bluetooth connector

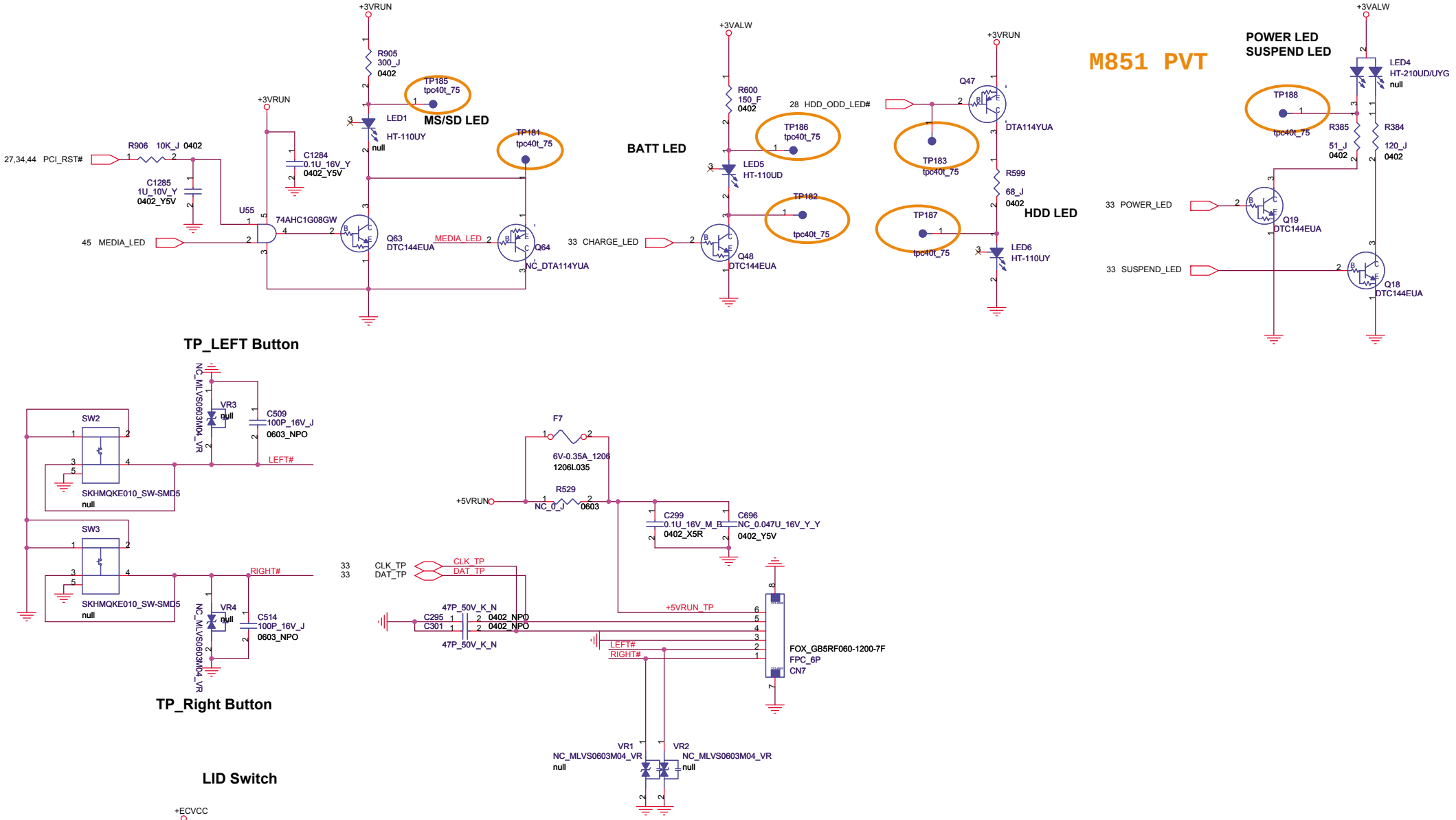




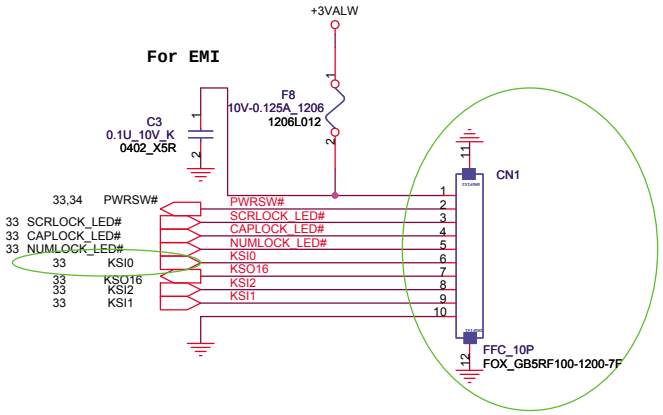


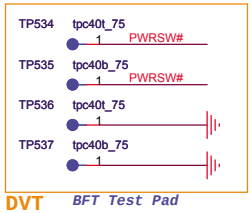


FOXCONN	HON HAI PRECISION IND. CO., LTD. CPBG - R&D Division	
Title	Bluetooth	
Size A3	Document Number M850-1-01	Rev 1.0
Date: Wednesday, April 01, 2009	Sheet 49 of 69	



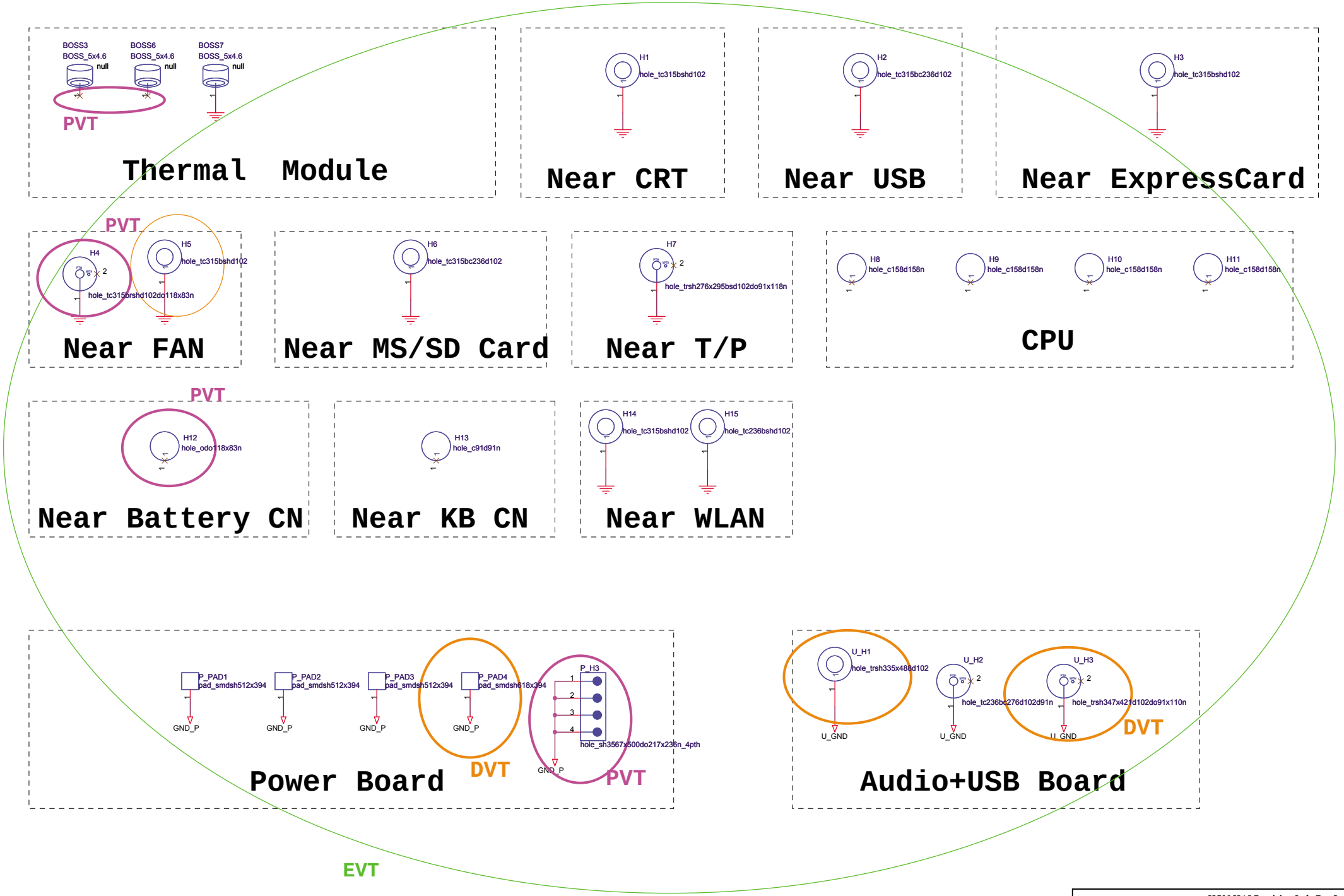
FOXCONN	HON HAI Precision Ind. Co., Ltd. CCPBG - R&D Division	
Title	LED & T/P & LID	
Size A3	Document Number M850-1-01	Rev 1.0
Date: Thursday, July 09, 2009	Sheet 50 of 69	



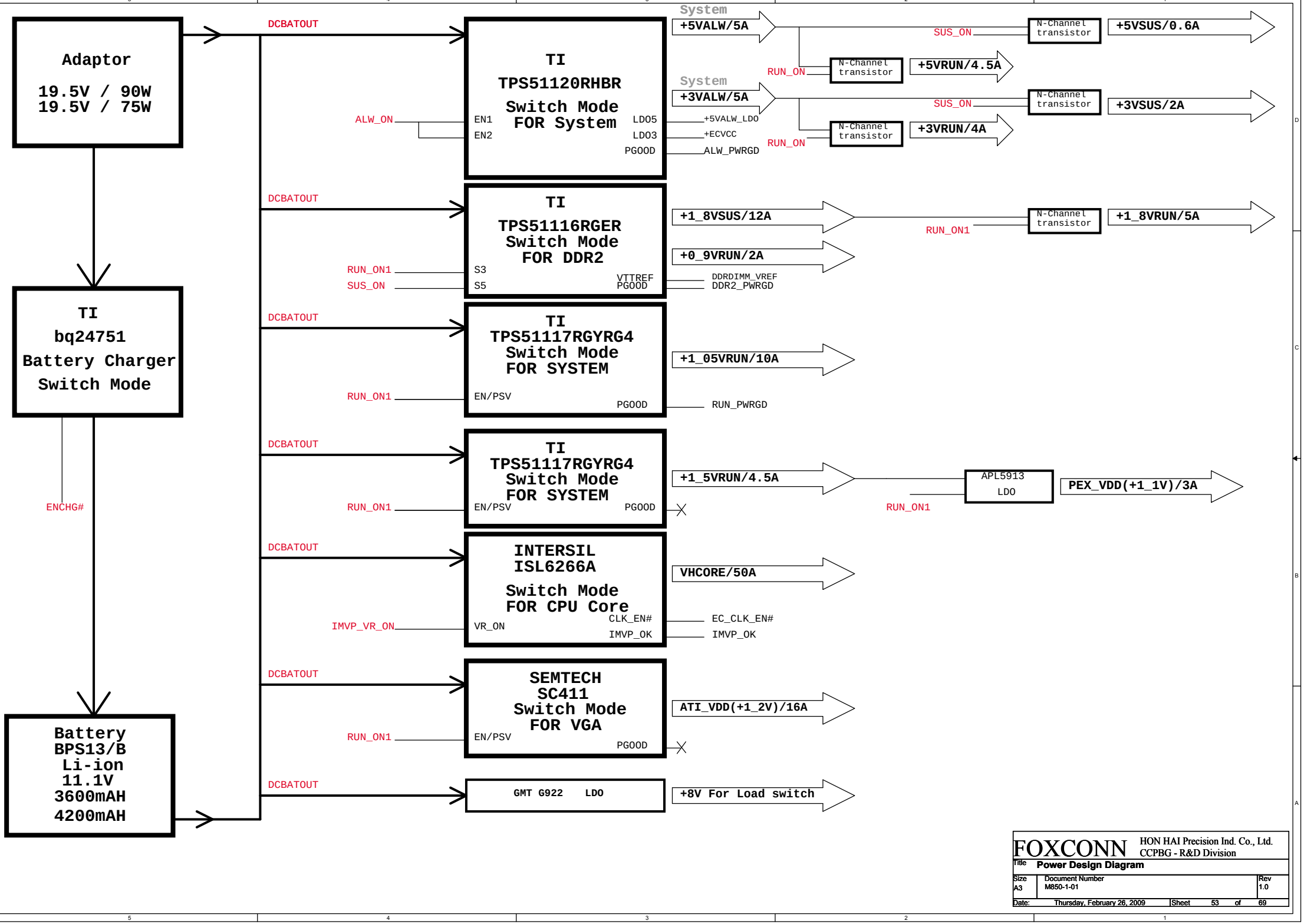


DVT *BFT Test Pad*

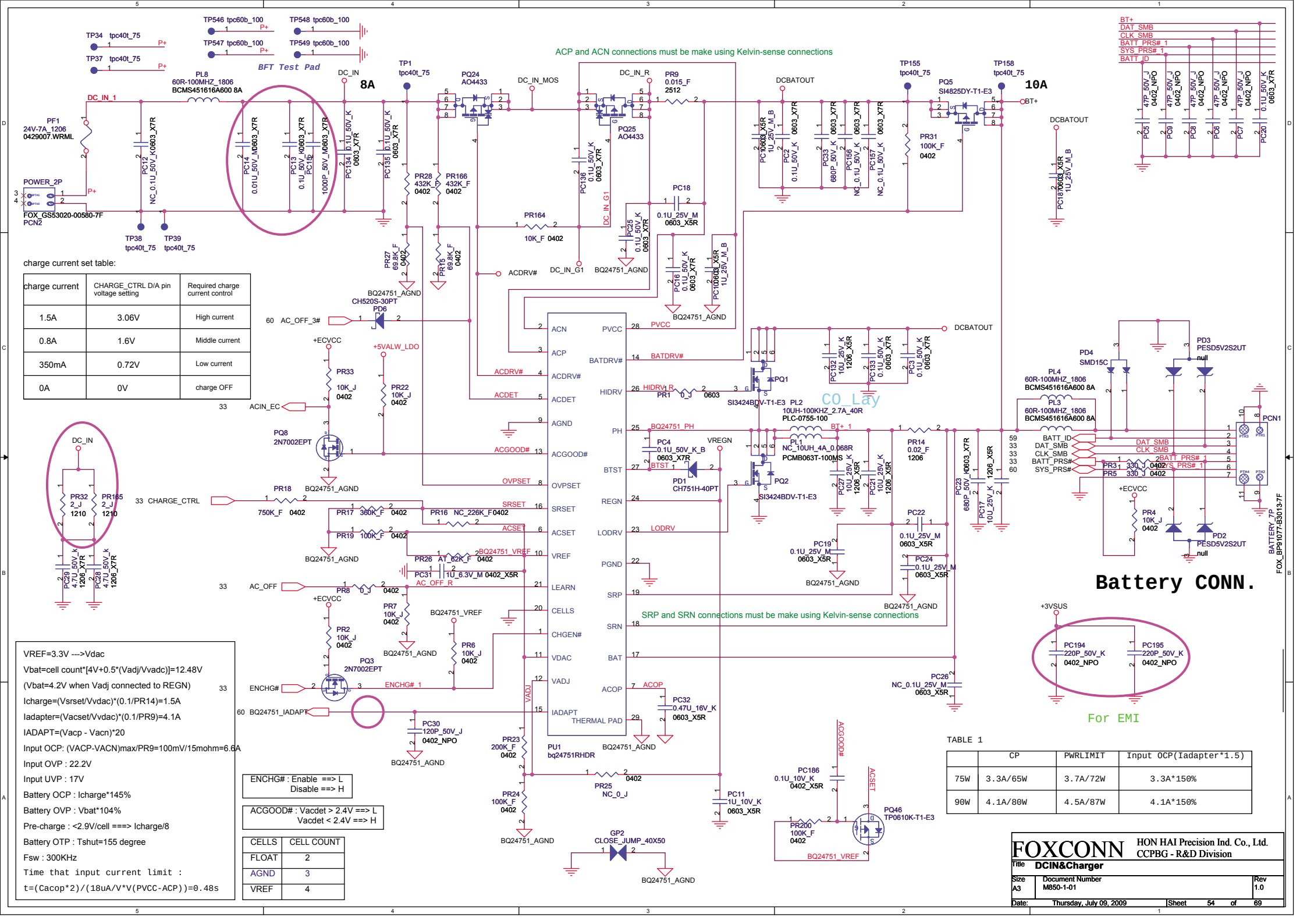
FOXCONN	HON HAI Precision Ind. Co., Ltd. CCPBG - R&D Division	
Title	**Power Board MB CONN**	
Size A3	Document Number M850-1-01	Rev 1.0
Date: Wednesday, April 01, 2009	Sheet 51 of 69	

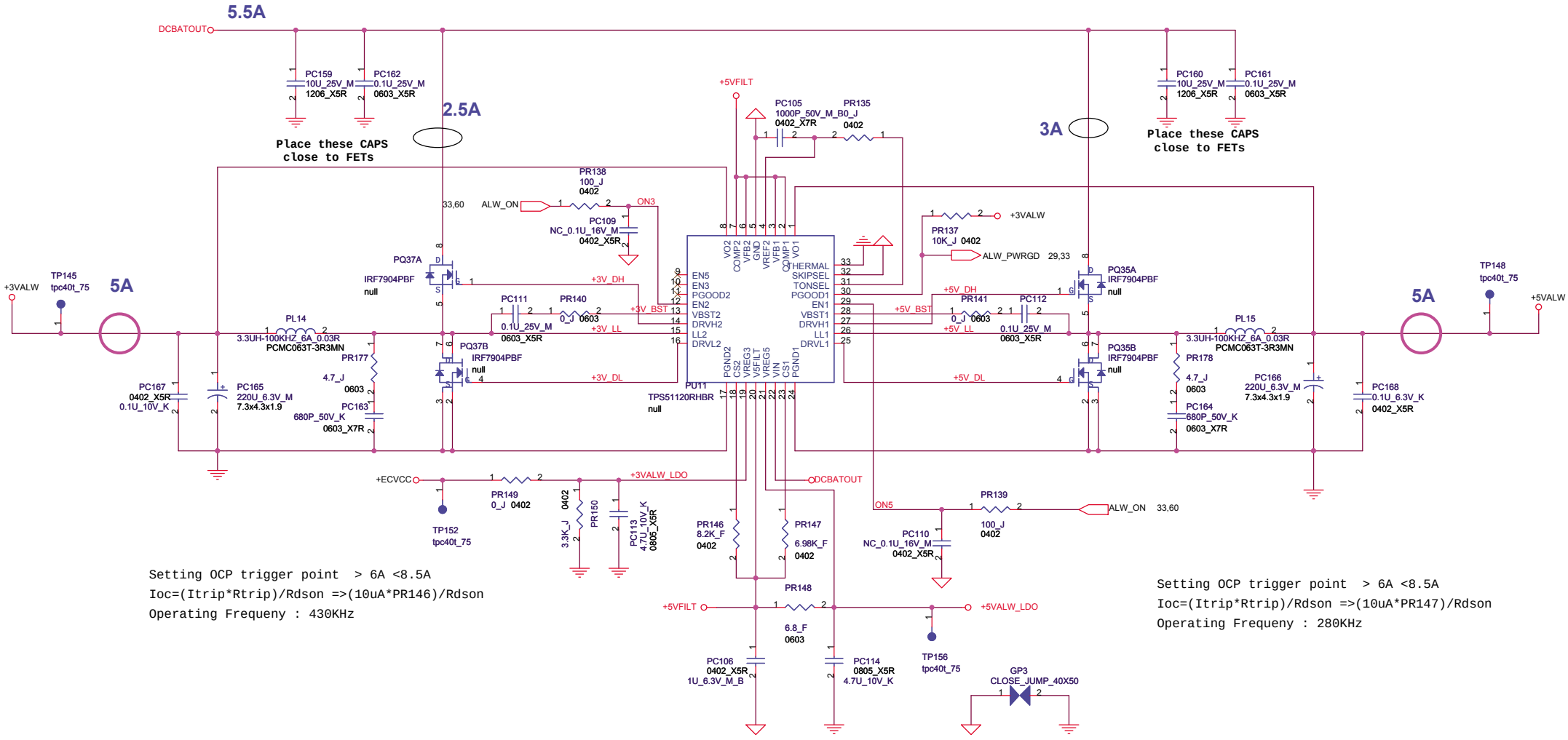


FOXCONN	HON HAI Precision Ind. Co., Ltd. CCPBG - R&D Division	
Title	HOLE	
Size A3	Document Number M850-1-01	Rev 1.0
Date: Thursday, February 26, 2009	Sheet 52 of 69	



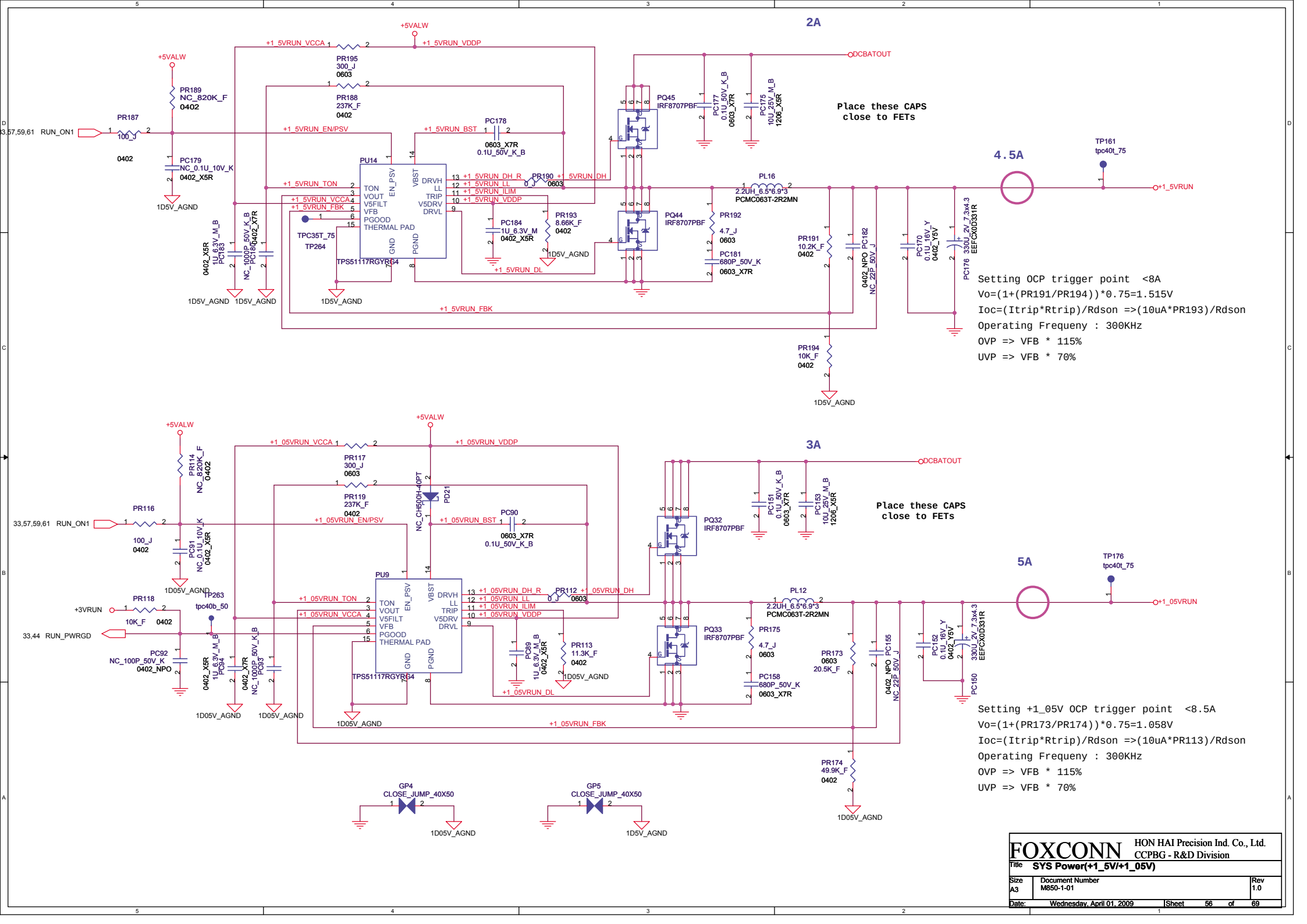
FOXCONN	HON HAI Precision Ind. Co., Ltd. CCPBG - R&D Division	
Title	Power Design Diagram	
Size A3	Document Number M850-1-01	Rev 1.0
Date: Thursday, February 26, 2009	Sheet 53 of 69	


ACP and ACN connections must be make using Kelvin-sense connections
BFT Test Pad
8A
10A
Battery CONN.
CO_Lay
SRP and SRN connections must be make using Kelvin-sense connections
For EMI
charge current set table:
charge current | CHARGE_CTRL D/A pin voltage setting | Required charge current control
1.5A | 3.06V | High current
0.8A | 1.6V | Middle current
350mA | 0.72V | Low current
0A | 0V | charge OFF
VREF=3.3V --->Vdac
Vbat=cell count*[4V+0.5*(Vadj/Vvadc)]=12.48V
(Vbat=4.2V when Vadj connected to REGN)
Icharge=(Vsrset/Vvdac)*(0.1/PR14)=1.5A
Iadapter=(Vacset/Vvdac)*(0.1/PR9)=4.1A
IADAPT=(Vacp - Vacn)*20
Input OCP: (VACP-VACN)max/PR9=100mV/15mohm=6.6A
Input OVP : 22.2V
Input UVP : 17V
Battery OCP : Icharge*145%
Battery OVP : Vbat*104%
Pre-charge : <2.9V/cell ===> Icharge/8
Battery OTP : Tshut=155 degree
Fsw : 300KHz
Time that input current limit :
t=(Cacop*2)/(18uA/V*V(PVCC-ACP))=0.48s
ENCHG# : Enable ==> L
Disable ==> H
ACGOOD# : Vacdet > 2.4V ==> L
Vacdet < 2.4V ==> H
CELLS | CELL COUNT
FLOAT | 2
AGND | 3
VREF | 4
TABLE 1
 | CP | PWRLIMIT | Input OCP(Iadapter*1.5)
75W | 3.3A/65W | 3.7A/72W | 3.3A*150%
90W | 4.1A/80W | 4.5A/87W | 4.1A*150%
FOXCONN
HON HAI Precision Ind. Co., Ltd.
CCPBG - R&D Division
Title DCIN&Charger
Size A3
Document Number M850-1-01
Rev 1.0
Date: Thursday, July 09, 2009
Sheet 54 of 69

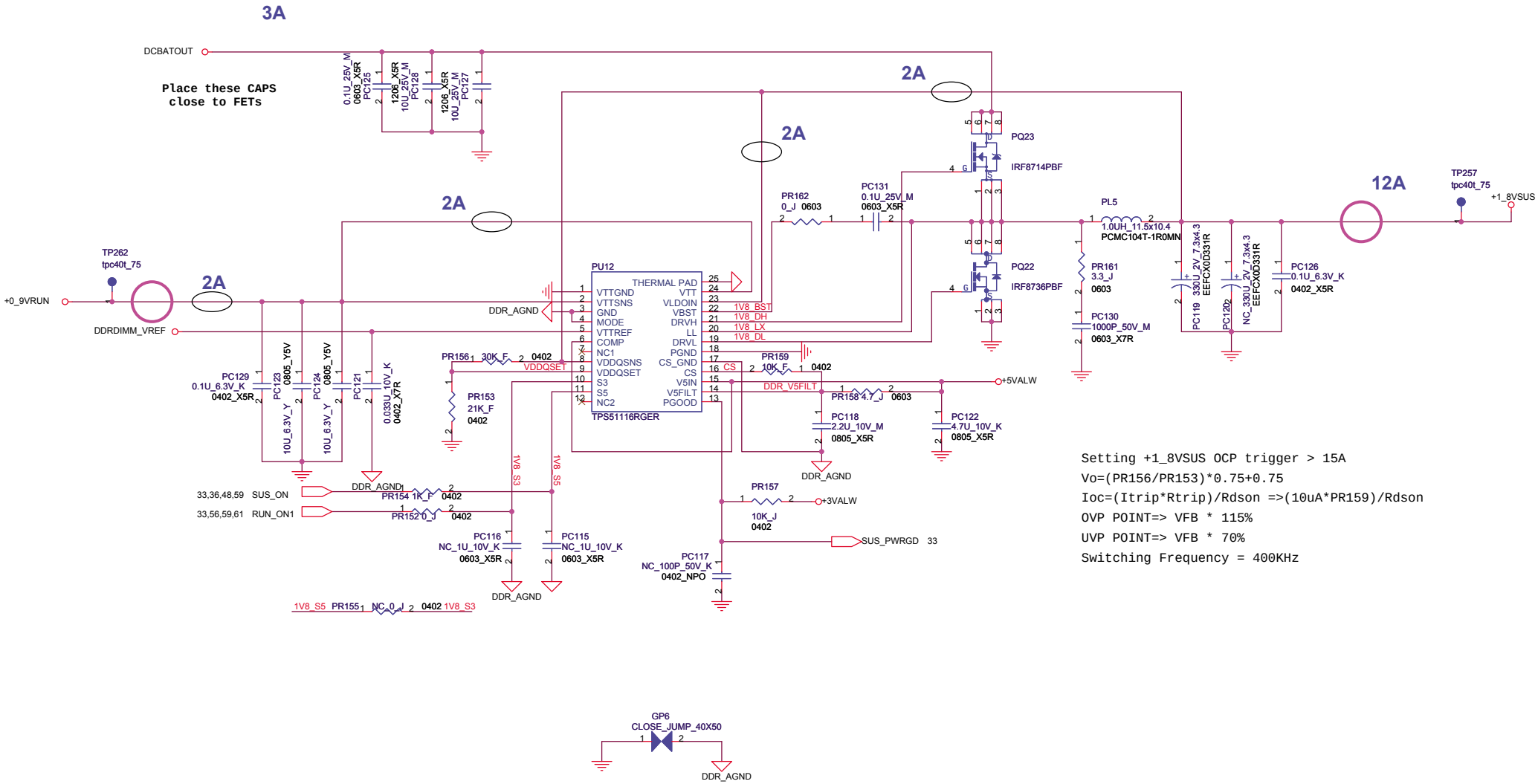


FOXCONN HON HAI Precision Ind. Co., Ltd.
CCPBG - R&D Division

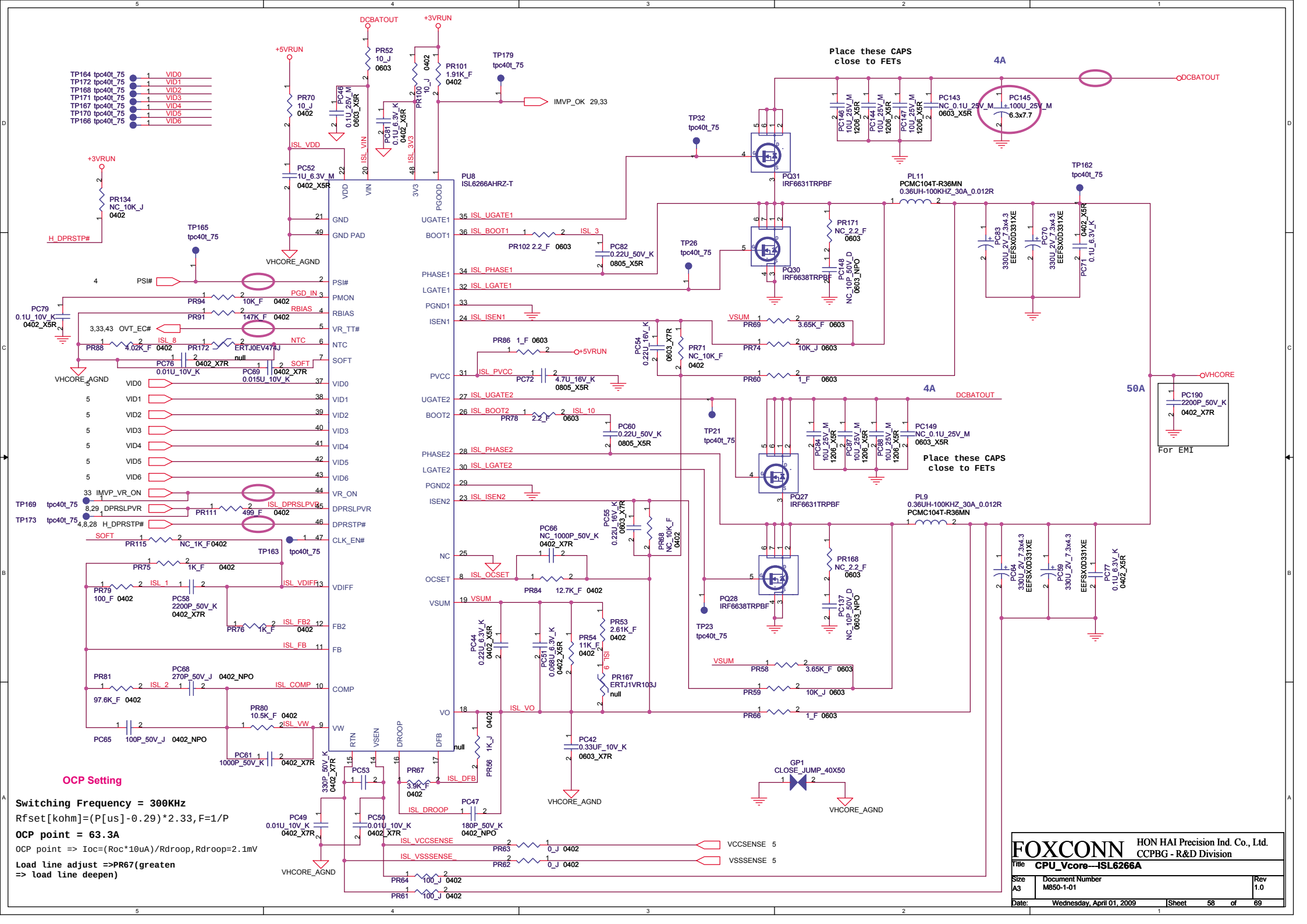
Title	SYS Power (+3_3V/+5V)	
Size A3	Document Number M850-1-01	Rev 1.0
Date: Wednesday, April 01, 2009	Sheet 55 of 69	

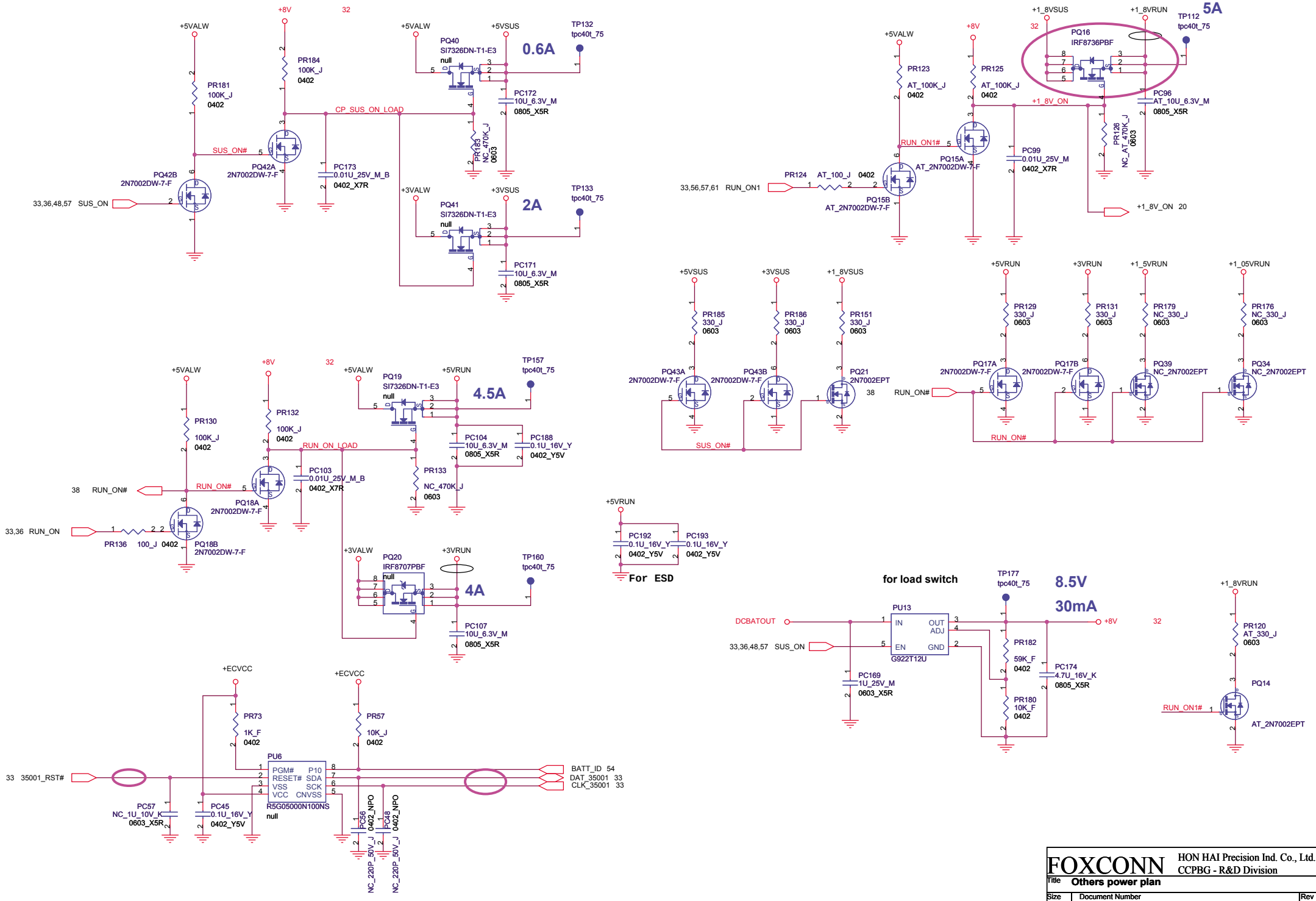


FOXCONN	HON HAI Precision Ind. Co., Ltd. CCPBG - R&D Division	
Title	SYS Power(+1_5V/+1_05V)	
Size A3	Document Number M850-1-01	Rev 1.0
Date: Wednesday, April 01, 2009	Sheet 56 of 69	

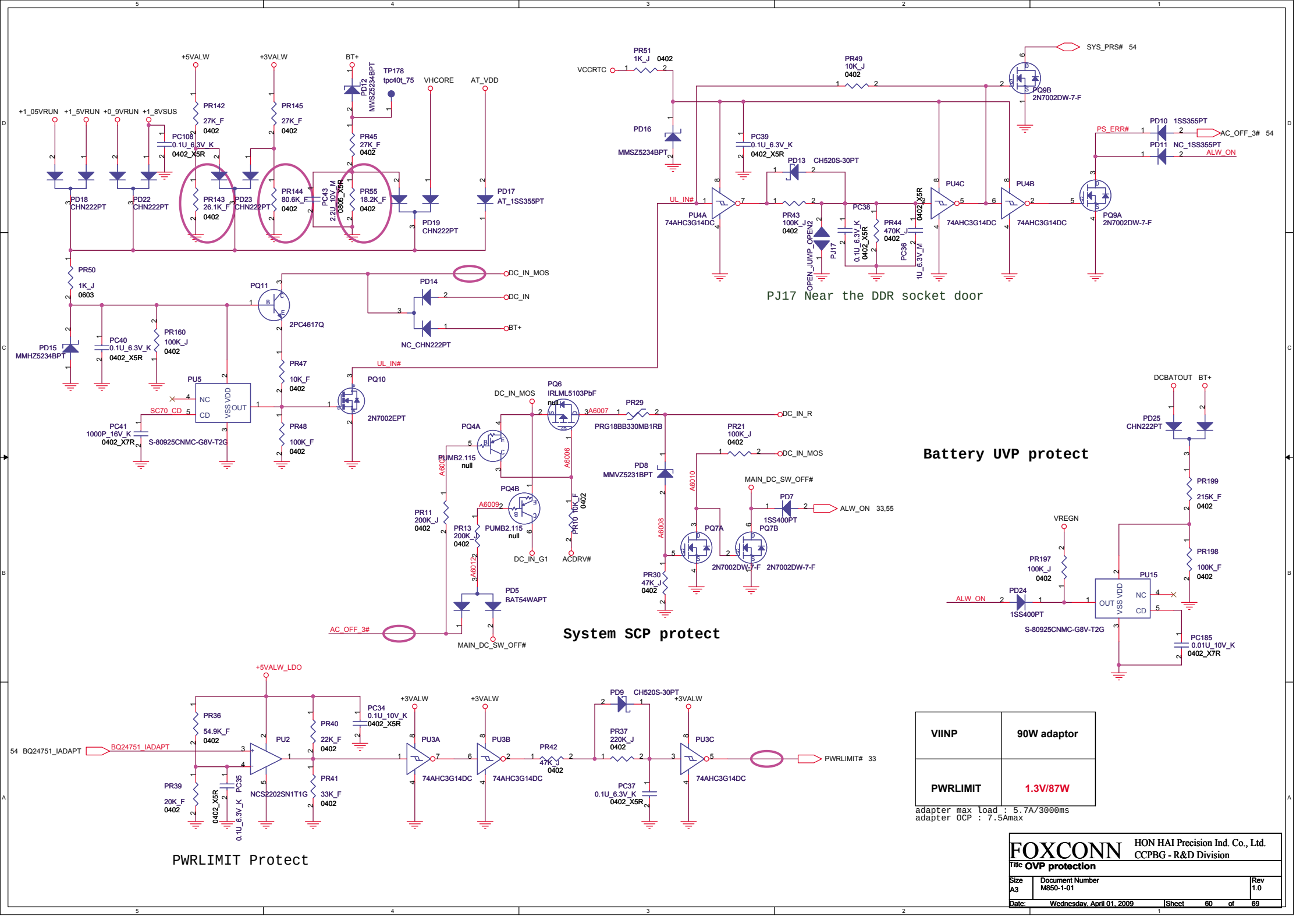


FOXCONN	HON HAI Precision Ind. Co., Ltd. CCPBG - R&D Division	
Title	DDR2 Power(+1_8V/+0_9V)	
Size A3	Document Number M850-1-01	Rev 1.0
Date: Wednesday, April 01, 2009	Sheet 57 of 69	


Place these CAPS close to FETs
4A
DCBATOUT
50A
VHCORE
For EMI
PU8 ISL6266AHRZ-T
PQ31 IRF6631TRPBF
PQ30 IRF6638TRPBF
PQ27 IRF6631TRPBF
PQ28 IRF6638TRPBF
PL11 PCMC104T-R36MN 0.36UH-100KHZ_30A_0.012R
PL9 0.36UH-100KHZ_30A_0.012R PCMC104T-R36MN
OCP Setting
Switching Frequency = 300KHz
Rfset[kohm]=(P[us]-0.29)*2.33,F=1/P
OCP point = 63.3A
OCP point => Ioc=(Roc*10uA)/Rdroop,Rdroop=2.1mV
Load line adjust =>PR67(greaten => load line deepen)
FOXCONN
HON HAI Precision Ind. Co., Ltd.
CCPBG - R&D Division
Title CPU_Vcore---ISL6266A
Size A3
Document Number M850-1-01
Rev 1.0
Date: Wednesday, April 01, 2009
Sheet 58 of 69



FOXCONN	HON HAI Precision Ind. Co., Ltd. CCPBG - R&D Division	
Title: Others power plan		
Size: A3	Document Number: M850-1-01	Rev: 1.0
Date: Wednesday, April 01, 2009	Sheet 59 of 69	



VIINP	90W adaptor
PWRLIMIT	1.3V/87W

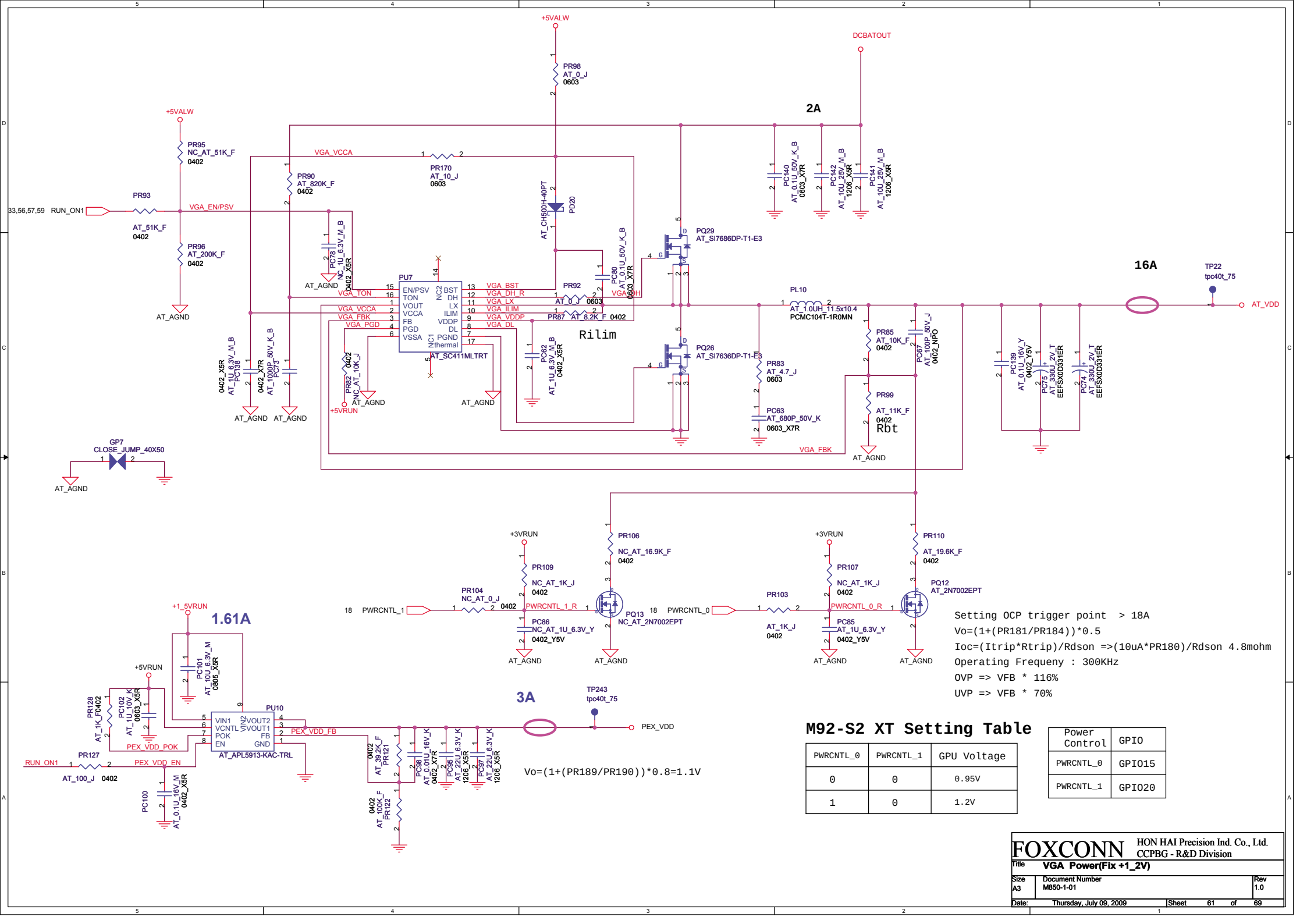
adapter max load : 5.7A/3000ms
adapter OCP : 7.5Amax

FOXCONN
HON HAI Precision Ind. Co., Ltd.
CCPBG - R&D Division

Title: OVP protection

Size	Document Number	Rev
A3	M850-1-01	1.0

Date: Wednesday, April 01, 2009 Sheet 60 of 69



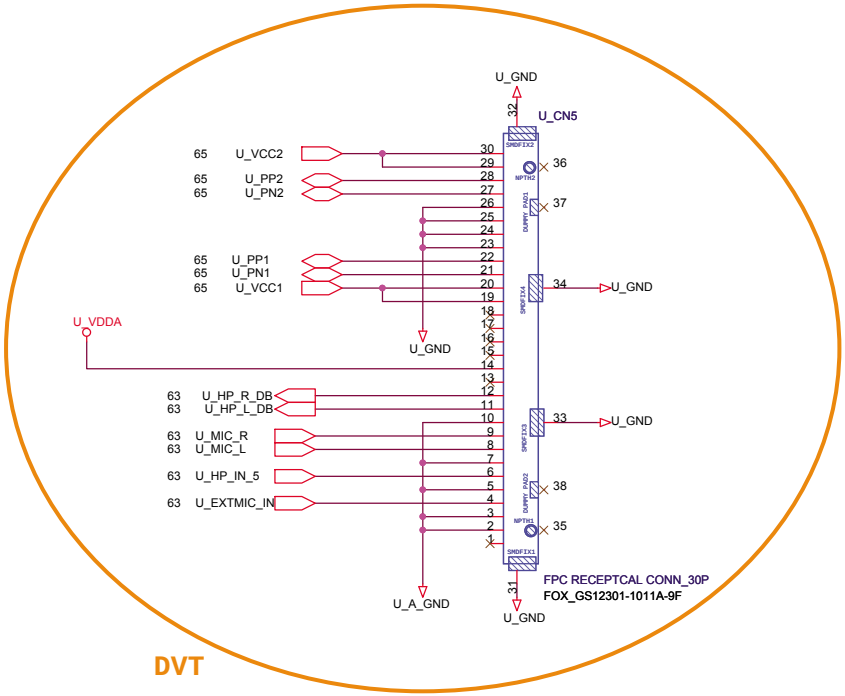
M92-S2 XT Setting Table

PWRCNTL_0	PWRCNTL_1	GPU Voltage
0	0	0.95V
1	0	1.2V

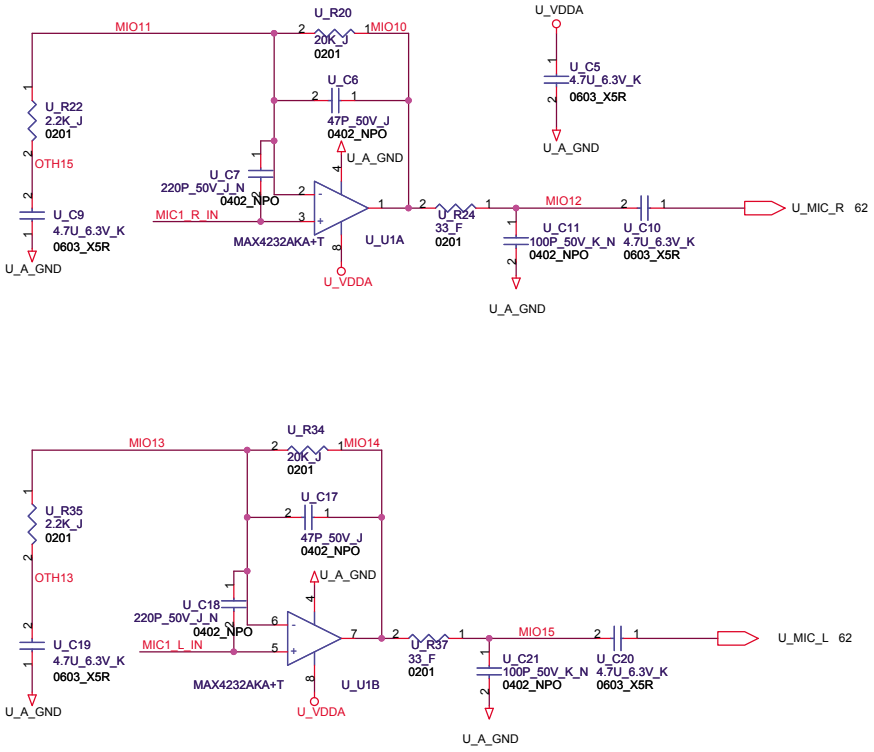
Power Control	GPIO
PWRCNTL_0	GPIO15
PWRCNTL_1	GPIO20

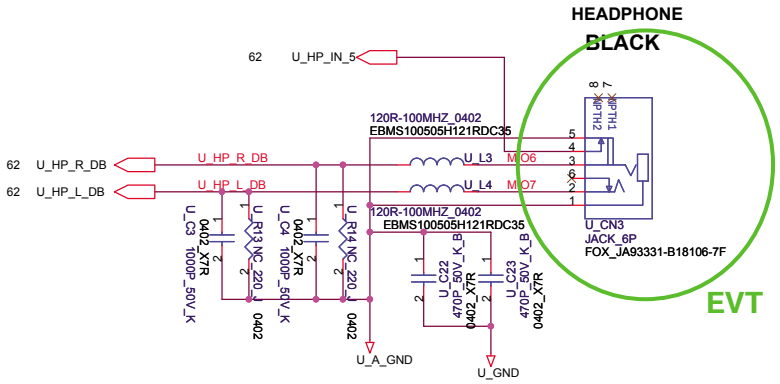
FOXCONN HON HAI Precision Ind. Co., Ltd.
CCPBG - R&D Division

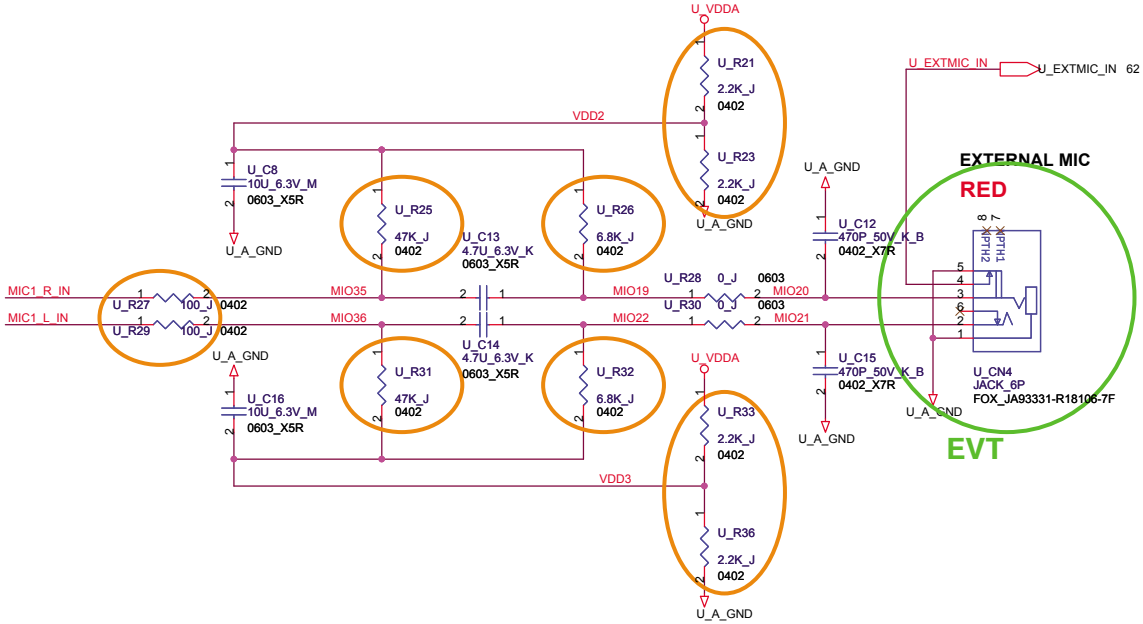
Title	VGA Power(Fix +1_2V)	
Size A3	Document Number M850-1-01	Rev 1.0
Date: Thursday, July 09, 2009	Sheet 61 of 69	



FOXCONN	HON HAI PRECISION IND. CO., LTD. CPBG - R&D Division	
Title	***Audio+USB DB CONN***	
Size A3	Document Number ***M850-1-01***	Rev ***1.0***
Date: Wednesday, April 01, 2009	Sheet 62 of 69	



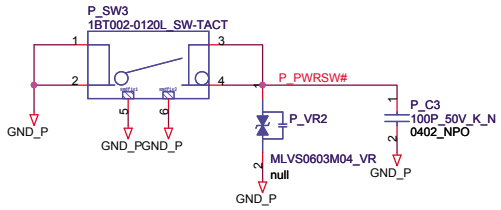


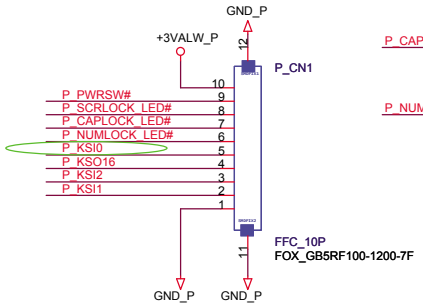


FOXCONN	HON HAI Precision Ind. Co., Ltd. CCPBG - R&D Division	
Title	Audio (HP, MIC Jack)	
Size A3	Document Number M850-1-01	Rev 1.0
Date: Wednesday, April 01, 2009	Sheet 63 of 69	

Power Button Board

POWER BUTTON

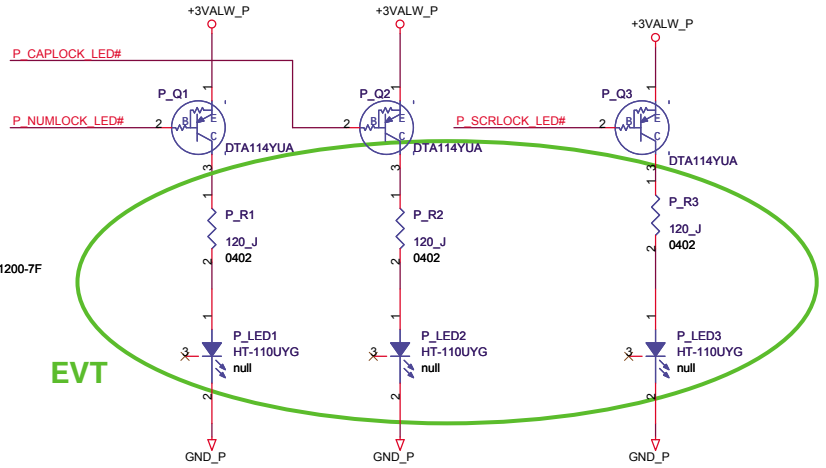




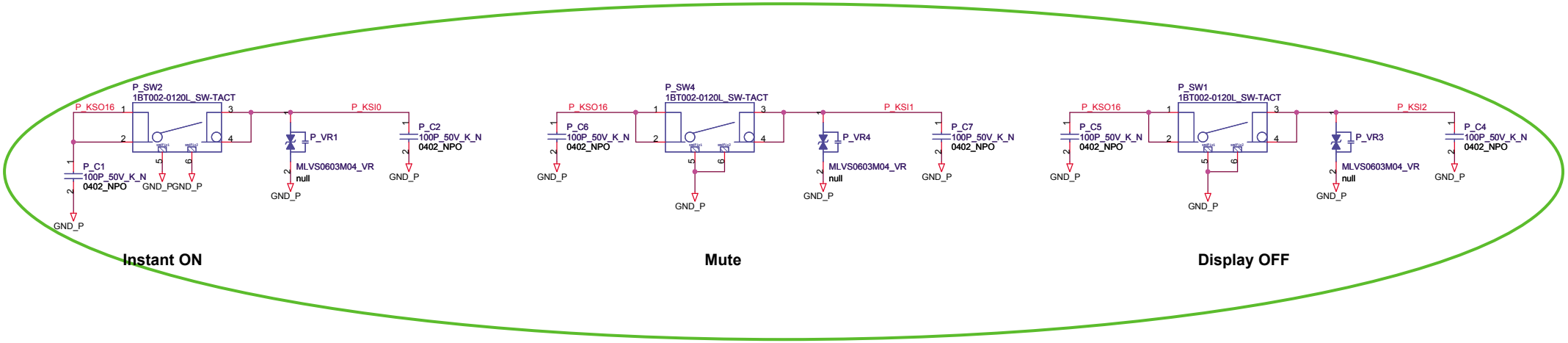
NUM LOCK LED

CAP LED

SCROLL LOCK LED



EVT



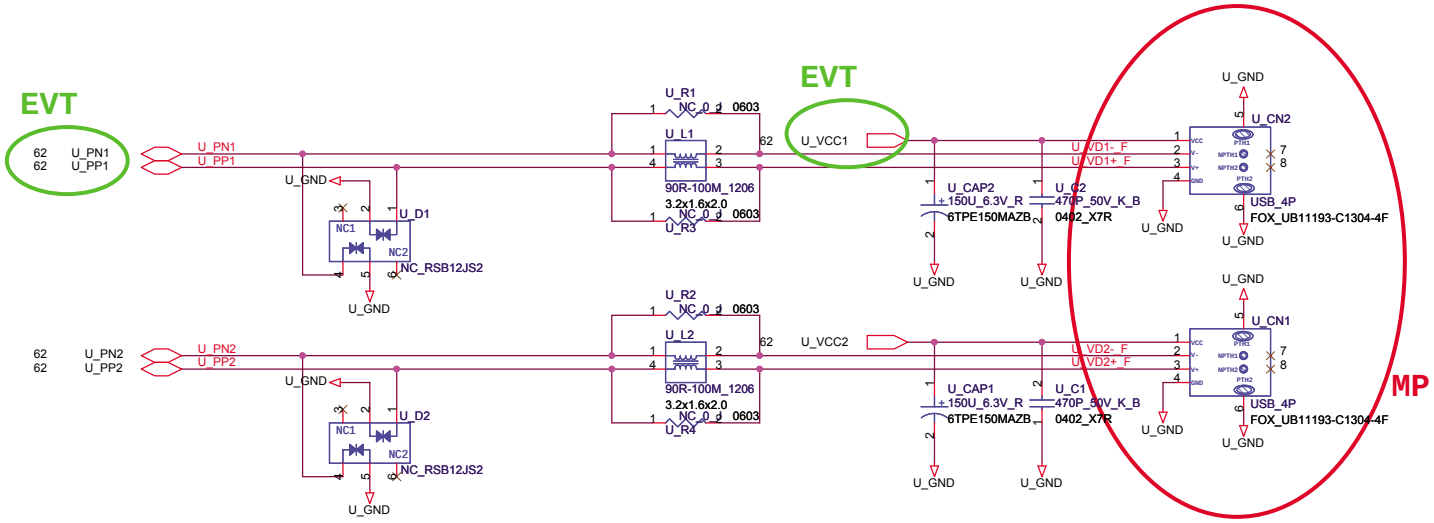
Instant ON

Mute

Display OFF

EVT

FOXCONN	HON HAI Precision Ind. Co., Ltd. CCPBG - R&D Division	
Title	Power Board DB & CONN	
Size A3	Document Number M850-1-01	Rev 1.0
Date: Thursday, February 26, 2009	Sheet 64 of 69	



FOXCONN	HON HAI Precision Ind. Co., Ltd. CCPBG - R&D Division	
Title	USB DB	
Size A3	Document Number M850-1-01	Rev 1.0
Date: Wednesday, April 08, 2009	Sheet 65 of 69	

M850 EVT

(2008/08/29)

P.45 Change CN16 from WK21923-S6P-7F to WK21923-R6S-7F for ME request.
P.32 Change CN25 from LN27131-A403-4F to LN21131-F404-9F for ME request.
P.32 Change CN13 from LD2722F-SR6L to LD2722H-S49L for ME request.
P.25 Change CN18 from HT1310F to GS12201-1011-9F for ME request.
P.46 Change CN17 from HS6106E to HS6206E for ME request.
P.37 Change CN22 from HS6108E to HS8208E for ME request.
P.33 Change CN3 from GB21240-0002-7F to 196009-24021 for ME request.
P.49 Change CN32 from QT510106-111H-7F to QT510106-311H-7F for ME request.
P.35 Change SW4 from 1BS007-12120-002-7F to 1BS007-12110-002-7F for ME request.
P.39 Change U_CN4 from JA9333L-R5S7-7F to JA93331-R18106-7F for ME request.
P.39 Change U_CN3 from JA9333L-B5S7-7F to JA93331-B18106-7F for ME request.
P.51 Change U_CN1 and U_CN2 from UB11193-C1314-4F to UB11193-C1308-4F for ME request.
P.52 Add BOSS11 and BOSS12 for ME request.

(2008/08/29)

P.45 Change CN11 form UV31413-GR56P-7F to UV31413-WZ03P-7F for ME request.
P.24 Change CN2 from DZ11A91-MA2SY-4F to DZ11A91-SB281-4F for ME request.
P.26 Change CN31 from QJ5119L-NT03-4F to QJ5119L-NK03-4F for ME request.
P.48 Change CN9 from UB11193-C1314-4F to UB1112C-CA501-7F for ME request.

(2008/09/01)

P.55 Change PR146 from 6.98K_F to 8.2K_F for OCP setting.
P.55 Change PR147 from 6.19K_F to 6.98K_F for OCP setting.
P.56 Change PR193 from 5.49K_F to 8.66K_F for OCP setting.
P.56 Change PR113 from 8.66K_F to 11.3K_F for OCP setting.
P.61 Change PR87 from 6.8K_F to 8.2K_F for OCP setting.
P.61 Change PR99 from 8.2K_F to 6.98K_F for AT_VDD voltage setting to 1.2V.

(2008/09/02)

P.25 Change CN18 from GS12201-1011-9F to GS12301-1011A-9F for support Dual-LVDS.
P.25 Add RP51,RP52,RP53 and RP54 for support Dual-LVDS.

(2008/09/19)

P.35 Delete R611&R612 for MOR's requested
P.35 Add D22 for MOR's requested
P.27,42,48,51 Change external USB port from USBP3N/USBP3P to USBP1N/USBP1P for MOR's requested
P.27,35,36 Change PCIE port from Express Card #2, WLAN #3 to WLAN #2, Express Card #3 for MOR's requested
P.54 Change PCN1 from BP91077-B2013-7F to BP91077-B3013-7F for ME's requested
P.37 Change U4 from 88E8055 to 88E8057 for MOR's requested
P.49 Delete R668,674,672,671 for MOR's requested
P.35 Change C538,C544,C536 to NC for MOR's requested

(2008/09/22)

P.45 Change CN11 from UV31413-WZ03P-7F to UV31413-RU81P-7F for ME's requested

(2008/09/24)

P.48 Change CN9 from UB1112C-CA501-7F to UB1112C-CA207-7F for ME's requested

(2008/09/26)

P.65 [Power board DB button] Add P_SW4,P_C6,P_C7,P_VR4 for add mute button
P.25 [Inverter CONN] Change CN19 from HS6106E to HS6108E for support LED backlight function
P.25 [Panel ID Switch] Change SW1 from HDS404-E to FHDS-04-T-V-T/R for shortage issue

(2008/10/02)

P.36 [ExpressCard] Add R901,R902,R903,R904 for test GMT577 ExpressCard power switch
P.37 [GLAN]Change L5 from NS682403P to LFE9249-R for PUR's suggestion
P.26 [HDMI] Change CN31 from QJ5119L-NK03-4F to QJ5119L-NT03-4F for ME's ID concern
P.52 [Thermal Module Nut] Change BOSS3,BOSS6,BOSS7 form F50M20-501130BS to EMI_F50M20_351130BS for ME's concern
P.21,22 [VRAM] Change U49,U50,U51,U52 from K4J10324QD-HC14 to K4J10324QD-HC12 for support 800MHz
P.50 [TouchPad] Change CN7 from GB5RF120-1200-7F to GB5RF060-1200-7F for change to 6-pin solution
P.60 [OVP protection]Delete PR35 CA_69.8K_F for 8L version unnecessary resister.
P.50 [MS/SD LED] Combine MS/SD LED for MOR's requested
P.65 [Caps/Num/Scroll lock LED] Change from HT-150YG to HT-110UYG for ME's ID concern
P.14 [DDR2] Swap RP13,RP10 pin assignment for layout convenient
P.15 [DDR2] Swap RP33,RP34,RP32,RP28,RP29 pin assignment for layout convenient
P.25 [LVDS] Change L98 from EBMS160808A121(400mA) to HCB1608KF-121T10(1A) for Panel max current is 500mA

(2008/10/06)

P.27 [ICH9] Swap RP46,RP24,RP16 pin assignment for layout convenient
P.50 [TP] Reserved 12pin TP solution in EVT

(2008/10/07)

P.49 [BT]NC U46,R673,R670,C847 and add R907 for BT module has internal protection schematics for BT_DATA pin.
P.35 [WLAN]Change Q49 from FET to transistor for a little cost down.
P.54 [DCIN&Charger]Delete PR34 for 8L version unnecessary resister.
P.52 [HOLE]Update HOLE for ME's requested.
P.11 [Cantiga] Delete R121,R151 for 8L version unnecessary resister.

(2008/10/08)

P.11 [Cantiga]Delete C202,C225 for VCCD_TVDAC can be connected to GND form Intel DG mention.
P.18 [VGA]REFCLK jumper R849.2pin should be connected to R848.1pin side not R848.2pin side. In case if you use REFCLK, It's voltage should be deviced also.
P.18 [VGA]Delete R840,R841,R843 and connect R2B,G2B,B2B to GND directly.
P.24 [CRT]Change DDC 3V pull-up R57,R58 from 2.2k to 3.9k to meet E-DDC spec.
P.25 [LVDS]Add R908 for AT_LCDVCC_EN need 10k pull-down as AMD Check list 8-1 mention.
P.26 [HDMI]Delete R649 for HDMI DDC need back drive protection so cannot use R649.
P.26 [HDMI]Delete D21 and R652 for if using diode, HDMI_+5VRUN voltage cannot meet spec. And HDMI_+5VRUN need back drive protection.
P.25 [LVDS]Change R393 from 10k to 100k to meet desing guide.

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(2008/10/09)

P.21 [VRAM]Change R770,R771 from 82.5ohm to 120ohm for AMD suggestion
P.33,51,64 [Button]Delte KSO15 and add KSI0 control signal for SW request
P.49 [BT]Add R909(NC) for new BT module reserved
P.11 [Cantiga]Delete R116 for useless
P.33 [EC]Change R477,R437 to mount and R479,R436 to NC for H model ID change to "10"
P.25 [LVDS]Change back R393 from 100k to 10k to meet AMD check list 8-8.

(2008/10/10)

P.62 [Audio+USB CONN]Swap pin assignment for cable routing smooth.
P.03 [Penryn]Add C1287(NC) for EMI verification.
P.33 [EC]Add R910~R933 for EMI verification.
P.51 [Power Board CONN]Add C1288~C1295(NC) for EMI verification.
P.17 [VGA]Delete R817,R818 for GPIO9 is VGA_DIS strap.

(2008/10/11)

P.52 [HOLE]Update all holes for ME's requested

(2008/10/13)

P.33 [EC]Delete R910~R933 for layout space not enough
P.51 [Power Board CONN]Delete C1288~C1295 for layout space not enough.
P.48 [USB]Change CN9 from UB1112C-CA207-7F to UB11123-CA301-7F
for ME's concerned.
P.54 [DCIN&Charger]Add PC194,PC195(NC) for EMI verification

(2008/10/14)

P.52 [HOLE]Delete H16,H17,H18 for ME's requested.
P.17 [VGA]Add R910,R911 for AMD confirm pin DVPDATA_22 and DVPDATA_23 function
P.29 [ICH9]Delete R301 for needless
P.48 [USB]Change CN9 from UB11123-CA301-7F to UB111M3-CA4S4-7F for ME's requested

(2008/10/15)

P.16 [VGA]Change R849 from 0ohm to 100ohm and Net for R861.1&R860.1
changed to R_AT_XTALIN for MOR's comment
P.42 [Audio]Add C1288(NC) for EMI verification

(2008/10/16)

P.50 [T/P]Reverse CONN for ME's requested

M850 DVT

(2008/11/13)

P.40 [Audio]Reverse JSPK1 pin definiens for ME's cable routing concern
P.62 [Audio+USB DB]Reverse U_CN5 pin definiens for ME's cable routing concern
P.47 [Felica]Reverse CN6 pin definiens for ME's cable routing concern
P.50 [T/P]Reverse CN7 pin definiens for ME's cable routing concern
P.18 [VGA]Connect U53.T11&R11 to GND for ATI updated
P.17 [VGA]Change R815,R814 to NC and R910 to mount for
ATI DVPDATA[23,22] failure issue

(2008/11/15)

P.50 [T/P]Delete CN34,R530,R531 for cancel 12pin T/P solution

(2008/11/17)

P.26 [HDMI]Change CN31 from QJ5119L-NT03-4F to QJ1119L-NT03-4F(Dip type)
for CONN issue

(2008/11/19)

P.26 [HDMI]Swap RP47 and RP49 for layout convenient
P.52 [HOLE]Change U_H3 size for ME's requested
P.52 [HOLE]Delete P_PAD5 and add P_H3 for ME's requested
P.52 [HOLE]Change P_PAD4 size for ME's requested
P.52 [HOLE]Delete P_H1 and P_H2 for ME's requested

(2008/11/24)

P.55 [SYS Power (+3_3V/+5V)] Add test point TP152, TP156
P.56 [SYS Power(+1_5V/+1_05V))] Add test point TP161, TP176
P.58 [CPU_Vcore---ISL6266A] Add test point TP179
P.59 [Others power plane] Add test point TP132, TP133, TP157, TP160, TP177
P.60 [OVP protection] Add test point TP178

(2008/12/01)

P.54 [DCIN&Charger] Add test point TP34, TP37, TP38, TP39
P.54 [DCIN&Charger] Change PQ5 from AO4433 to SI4825DY-T1-E3 for EMI Issue
P.58 [CPU_Vcore---ISL6266A] Add PJ11 for power test

(2008/12/02)

P.62 Change U_CN5 pin33 and Pin34 to connect U_GND
P.06 [Clock Gen] Change test point type of TP153,TP154 for L6 requested
P.63 [Audio]Change U_R21,U_R23,U_R33,U_R36,U_R27,U_R29,U_R25,U_R26,U_R31
and U_R32 from 0201 to 0402 for L6 requested
P.33 [EC,LVDS] Add LED_OFF#(GPIO04) signal to U6.1 and U23.1 for Display Off issue.
P.25 [LVDS] Change SW1 from 8pin to 12pin for add Instant ON function

(2008/12/04)

P.50 [T/P Buttom] Change SW2 and SW3 from 1BT001-1420L-001(160g) to
1BT001-1410L-001(100g) for ME's requested
P.26 [HDMI] Swap RP47 and RP49 for layout convenience

(2008/12/05)

P.52 [HOLE] Change U_H3 from 1X-HOLE000-0935 to 1X-HOLE000-0959 for ME's requested
P.52 [HOLE] Change U_H1 from 1X-HOLE000-0905 to 1X-HOLE000-0958 for ME's requested
P.52 [HOLE] Change P_H3 from 1X-HOLE000-0936 to 1X-HOLE000-0960 for ME's requested

(2008/12/10)

P.33,34,37,40,43,46,51,54 [Test Pad] Add TP500~TP549 for BFT test pad
P.54 [DCIN] Delete PL6 for safety concern
P.37 [GLAN]NC R24,R25,U3,C16 and mount R616 for using M8057 internal EEPROM.
P.17 [VGA]Update VRAM strp for add Hynix VRAM
P.33 [EC]Add TP550,TP551 for detect D17 reverse from L6's suggestion
P.48 [USB]Add TP552~TP554 for detect USB power switch leakage from L6's suggestion

(2008/12/12)

P.59 [Other power plane]Change PQ40,PQ41 from SI2316DS-T1-E3 to SI7326DN-T1-E3
for overload test issue.
P.26 [HDMI]Change R647 and R646 to 3.9k ohm for meet E-DDC spec.
P.49 [BT]Change CN32 from QT510106-311H-7F to QT510106-312H-7F for ME's requested.

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(2008/12/15)

P.54 [DCIN&Charger] Change PC194, PC195 from NC_0.1U_50V_K 0603 to 220P_50V_K 0603 for EMI request

P.61 [VGA Power] Change PR99 from 6.98K_F 0402 to 11K_F 0402 for AMD M92 Power-Play function

P.61 [VGA Power] Change PR110 from NC_49.9K_F 0402 to 19.6K_F 0402 for AMD M92 Power-Play function

P.61 [VGA Power] Change PQ12 from NC to mount for AMD M92 Power-Play function

P.61 [VGA Power] Change PC85 from NC to mount for AMD M92 Power-Play function

P.61 [VGA Power] Change PR103 from 0_J 0402 to 1K_J 0402 for AMD M92 Power-Play function

(2008/12/18)

P.54 [DCIN&Charger] Change PC28, PC29 from 4.7U_25V_K 0805 to 4.7U_50V_K 1206 for reducing DC_IN inrush voltage.

P.54 [DCIN&Charger] Parallel PR32 and PR165 for reducing DC_IN inrush voltage.

P.54 [DCIN&Charger] Change PL1 from SPD8D43PT100M to PCMB063T-100MS for 2nd source implement.

P.50 [LED] Change R385 from 33ohm to 51ohm for LED brightness issue

(2008/12/19)

P.60 [OVP Protection] Add PR160 100K_J 0402 for MOR request.

P.46 [CAM]Change U41 to MAX4789EUK and delete C815,C816,R626 for VEDS current limit requested.

P.43 [FAN]Add F10 for prevent FAN sorot issue of MOR requested

P.24 [CRT]Change R418 and R424 from 22ohm to 33ohm for improve VEDS AGRB issue.

P.24 [CRT]Change CN2 from DZ11A91-SB281-4F to DZ11A91-SB2SN-4F for ME's requested.

(2008/12/20)

P14,15 [DDR2]Add C1289,C1290,C1291,C1292,C1293,C1294 (NC) for EMI concern and MOR requested

P.50 [TP]Change F7 from 0.5A to 0.35A for MOR's requested

P.47 [Felica]Change F6 from 0.5A to 0.35A for MOR's requested

P.47 [Felica]Add U56,C1295,C1296,R913 (NC) and R912 for reserve power switch for MOR's requested

P.40 [Audio]Change R493,R494 from 1k to 47k for Pi-Pi noise issue

(2008/12/22)

P.35 [Half Mini Card]Add R914 for RF team test VEDS,MP will delete it.

P.54 [DCIN&Charger]Change TP546~TP549 from 40mil to 60mil for BFT side requested.

P.23,33 [EC]Change signal name "LED_OFF#" to "LCD_OFF#" for MOR's suggestion.

P.60 [OVP]Change PC41 from 0.01uF to 1nF for Power_Abnormal_Conditions issue.

P.47 [Felica]Delete L60 for needless and SMT requested

P.48 [USB]Delete L61 for needless and SMT requested

(2008/12/23)

P.37 [Marvell GLAN]Delete TP538~TP545 for layout space concern

P.45 [PCI]Change C496 from 27p to 22p for improve crytal accuracy

P.29 [ICH9]Change footprint of D8 for SMT requested

P.30 [ICH9]Change footprint of D14 for SMT requested

(2008/12/24)

P.52 [HOLE]Change H5 from 1X-HOLE000-0925 to 1X-HOLE000-0913 for ME's requested

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(2008/12/26)

P.33 [EC] Add R915 for updating Instand On function.

(2009/02/09)

P.50 [T/P]Update the connection of SW2 and SW3 to correct T/P function

P.35 [WLAN]Update the connection of WLAN Switch to meet ME's requested

(2009/02/10)

P.54 [DCIN&Charger] Change PR32, PR165 from 1_J 1210 to 2_J 1210 for reducing DC_IN inrush voltage.

P.54 [DCIN&Charger] Change PC194, PC195 from 220P_50V_K 0603_NPO to 220P_50V_K 0402_NPO for PUR convenient.

P.54 [DCIN&Charger] Delete PR12 for unnecessary.

P.55 [SYS Power(+3_3V/+5V)] Delete PJ1, PJ2 for unnecessary.

P.56 [SYS Power(+1_5V/+1_05V)] Delete PJ3, PJ4 for unnecessary.

P.57 [DDR2 Power(+1_8V/+0_9V)] Delete PJ5, PJ8 for unnecessary.

P.58 [CPU_Vcore---ISL6266A] Delete PR20, PR38, PR46, PR65, PJ11 for unnecessary.

P.58 [CPU_Vcore---ISL6266A] Change PC145 from MATSUSHITA, EEEFK1E101XP to CHEMI-CON, EMVE250ADA101MF80G for MOR request.

P.59 [Others power plane] Delete PR72, PR77, PR89 for unnecessary.

P.60 [OVP protection] Delete PR97, PR105, PR108 for unnecessary.

P.61 [VGA Power(ATI VDD)] Delete PJ7, PJ9, PJ10 for unnecessary.

(2009/02/13)

P.29 [ICH9]Change R573 from mount to NC because BT_GPIO is not used for M850.

P.25 [LVDS]Change signal name "INST_ON_SW" to "INST_ON_SW#" because it's low active.

P.33 [EC]Change signal name "INST_ON_SW" to "INST_ON_SW#" because it's low active.

(2009/02/19)

P.50 [LED]Change R600 from 120ohm to 150ohm to satisfy brightness requested.

P.47 [Felica]Change F6 from 0.35A to 0.25A for felica module heated concern.

P.33 [EC]Add R916 for SPI ROM datasheet updated.

P.52 [HOLE]Change H4 from 1X-HOLE000-0926 to 1X-HOLE000-1052 for ME's requested.

P.52 [HOLE]Change H12 from 1X-HOLE000-0915 to 1X-HOLE000-1051 for ME's requested.

P.65 [USB]Change U_CN1 and U_CN2 form UB11193-C1308-4F to UB111S3-C1GS6-4H for ME's requested.

(2009/02/20)

P.59 [Others power plane] Change PQ16 from IRF8714PBF to IRF8736PBF for +1_8VRUN voltage drop issue.

P.60 [OVP protection] Change PR55 from 14.7K_F 0402 to 18.2K_F 0402 for BT+ OVP setting.

P.60 [OVP protection] Change PR143 from 20K_F 0402 to 26.1K_F 0402 for +5VALW OVP setting.

P.60 [OVP protection] Change PR144 from 47K_F 0402 to 80.6K_F 0402 for +3VALW OVP setting.

P.24 [CRT] Change CN2 from DZ11A91-SB2SN-4F to DZ11A91-SA2SN-4H for ME's requested.

P.47 [Felica]Change F6 from 0.25A to 0.125A for felica module heated concern.

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(2009/02/23)

P.50 [TP]Change SW2 and SW3 from 19-1BT0011-1003 to 19-SKHM0KE-1000 for ME's requested.

P.54 [DCIN]Move PC13,PC14,PC15 to the another side of PL8 for improving EMC.

P.52 [HOLE]Change BOSS3,BOSS6 from connect to GND to NC for improving EMC.

P.49 [BT]Change CN32 from QT510106-312H-7F to QT510106-312H-7H for ME's requested.

P.45 [ILINK]Change CN11 from UV31413-RU81P-7F to UV31413-RU82P-7H for ME's requested.

P.20 [VGA]Add C1297~C1308 for MOR's requested to check PEG signal.

(2009/02/24)

P.48 [USB]Change CN9 from UB111M3-CA4S4-7F to UB111M3-CAGS4-7H for MOR's requested.

(2009/02/25)

P.52 [HOLE]Change P_H3 from 1X-HOLE000-0960 to 1X-HOLE000-1054 for EMC's requested.

P.33 [EC]Change R915,R613,R475,R629,R435,R431(10K) from 0201 to 0402 for SMT's requested.

P.33 [EC]Change R173,R197,R203,R75,R124,R442,R440,R447,R432(100K) from 0201 to 0402 for SMT's requested.

P.33 [EC]Change R476(4.7K) from 0201 to 0402 for SMT's requested.

P.34 [Flash ROM]Change R233(0) from 0201 to 0402 for SMT's requested.

(2009/02/25b)

P.47 [Modem]Add TP600~TP606 for BFT test requested.

(2009/02/26)

P.48 [USB]Change C810 from Y5V to X5R for MOR VEDS requested.

P.40 [Audio]Delete Q27,R450,R614,Q8,R98,R615 for unnecessary to improve BFT test point.

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(2009/04/01)

P.33 [EC]Signal symbol "OVT_GFX#" change to two-way type for avoiding confusion from SW's suggestion.

(2009/04/08)

P.24 [CRT]Change CN2 from FOX_DZ11A91-SA2SN-4H to FOX_DZ11A91-SB2SN-4F (same as DVT used) for CONN discoloration issue.

P.48 [USB2.0]Change CN9 from FOX_UB111M3-CAGS4-7H to FOX_UB111M3-CA4S4-7F (same as DVT used) for CONN discoloration issue.

P.65 [USB DB]Change U_CN1 and U_CN2 from FOX_UB111S3-C1GS6-4H to FOX_UB11193-C1304-4F for CONN discoloration issue.

(2009/04/09)

P.45 [ILINK]Change CN11 from UV31413-RU82P-7H to UV31413-WU82P-7F for CONN discoloration issue.

M851 PVT

(2009/07/08)

P.35 [Half Mini Card]Add TP180,TP184 for LED test in L6.

P.50 [LED&T/P&LID]Add TP181,TP182,TP183 TP185,TP186,TP187,TP188 for LED test in L6.

(2009/07/09)

P.06 [Half Mini Card]Change R542,R276,R283,R288,R553,R277,R278,R536,R537,R538, R534 from 0201 to 0402 for SMT's request.

P.08 [Cantiga (DMI)]Change R286,R231,R193,R195 from 0201 to 0402 for SMT's request.

P.12 [Cantiga (VCC CORE)]Change R208 from 0201 to 0402 for SMT's request.

P.17 [VGA (Strap)]Change R809,R825,R826 from 0201 to 0402 for SMT's request.

P.18 [VGA (I/O)]Change R830,R831,R828 from 0201 to 0402 for SMT's request.

P.21 [VRAM (GDDR3)]Change R787,R763,R769,R765,R773,R771,RR772,R767,R770 from 0201 to 0402 for SMT's request.

P.22 [VRAM (GDDR3)]Change R801,R786,R800 from 0201 to 0402 for SMT's request.

P.28 [ICH9-M (LPC,IDE,SATA)]Change R101 from 0201 to 0402 for SMT's request.

P.29 [ICH9-M (GPIO)]Change R541,R540,R567, R322,R575,R300,R297,R303 from 0201 to 0402 for SMT's request.

P.33 [EC+KBC (WPCE775L)]Change R444,R477 from 0201 to 0402 for SMT's request.

P.38 [Audio (CODEC & POWER)]Change R230,R217 from 0201 to 0402 for SMT's request.

P.39 [Audio (HP)]Change R893,R894 from 0201 to 0402 for SMT's request.

P.41 [Audio (MUTE)]Change R241,R499,R227,R225,R486,R498,R500,R478 from 0201 to 0402 for SMT's request.

(2009/07/13)

P.39 [Audio (HP)]Change R893,R894 to 0201 again for avoiding side effect.

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