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20	VGA (CRT)5/9	1.0	09'07'27	57	DDR2 Power(+1_8V/+0_9V)	1.0	09'07'27
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27	VRAM (BYPASS) 1/2	1.0	09'07'27	64	Audio (SPKR)	1.0	09'07'27
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Project Code & Schematics Subject: M870 Main Board_8L

PCB P/N: (IRIS) :1P-0097J00-8010
(HANNSTAR) :1P-0097500-8010

A/B P/N: (IRIS) :1P-1097J02-8010
(HANNSTAR) :1P-1097500-8010

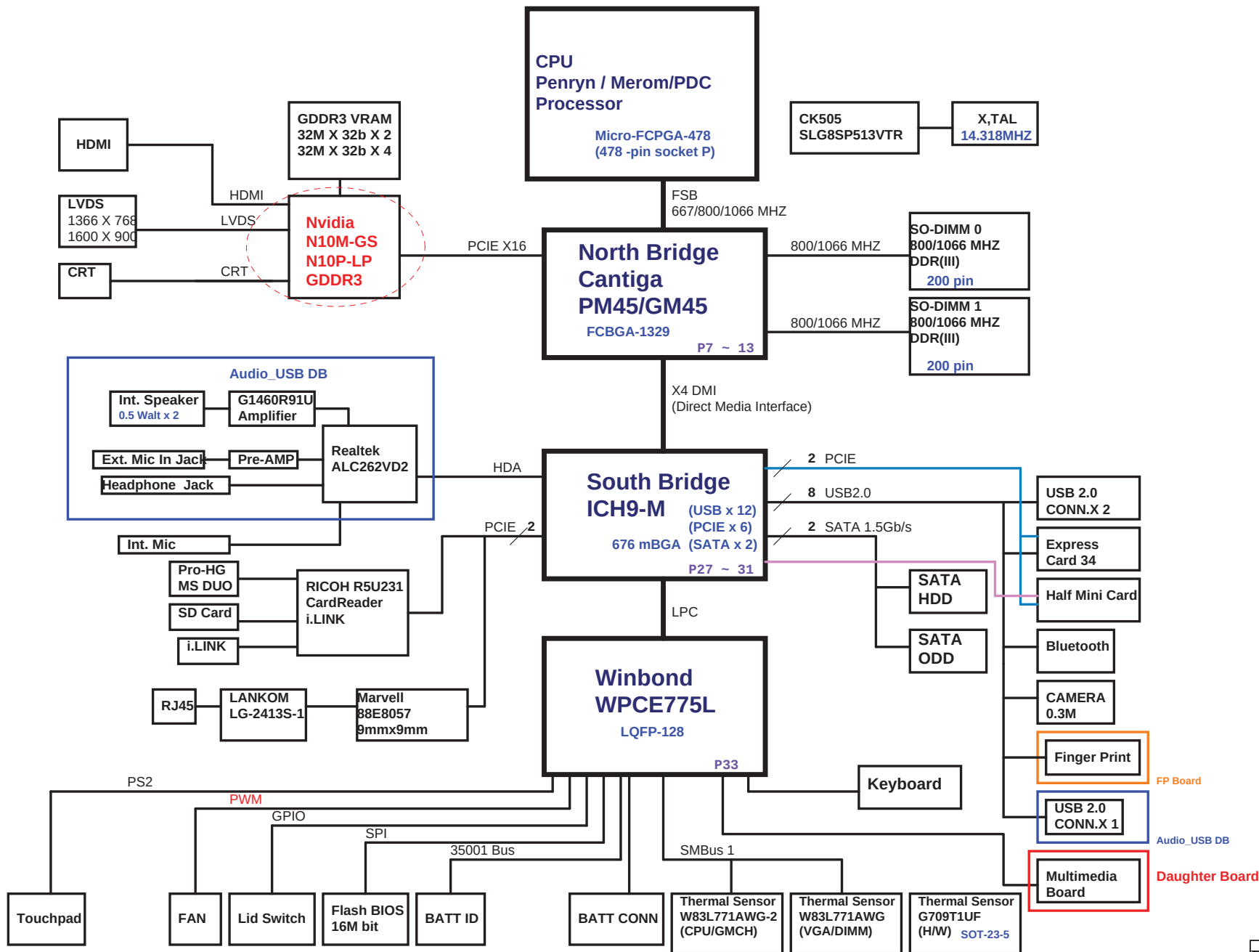
FU/B P/N: (IRIS) :1P-1097J00-8010
(HANNSTAR) :1P-1097503-8010

Ch/B P/N: (IRIS) :1P-1097J01-8010
(HANNSTAR) :1P-1097501-8010

FP/B P/N: (IRIS) :1P-1097J03-8010
(HANNSTAR) :1P-1097502-8010

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M870(Montevina + N10M/N10P-LP)



TI CHARGER BQ24753 P.54	
OUTPUTS	
DC_IN	BT+ DCBATOUT

SYSTEM DC/DC MAX17020ETJ+ P.55	
INPUTS	OUTPUTS
DCBATOUT	+5VALW +5VALW_LDO +3VALW +ECVCC +12V

SYSTEM DC/DC SC412 P.56	
INPUTS	OUTPUTS
DCBATOUT	+1_5VRUN +1_05VRUN

SYSTEM DC/DC SC412+G2998 P.57	
INPUTS	OUTPUTS
DCBATOUT	+1_8VSUS +0_9VRUN

CPU DC/DC ISL6266A P.58	
INPUTS	OUTPUTS
DCBATOUT	VHORE

SYSTEM DC/DC SC411+APL5913 P.61	
INPUTS	OUTPUTS
DCBATOUT	NV_VDD +1_5VRUN PEX_VDD

7 H_A#[3..35]

7 H_ADSTB#0
7 H_REQ#[4..0]

7 H_ADSTB#1
33 H_A20M#
33 H_FERR#
33 H_IGNNE#
33 H_STPCLK#
33 H_INTR#
33 H_NMI#
33 H_SMI#

TP15 20MIL 1 TP CPU RSVD01 M4
TP18 20MIL 1 TP CPU RSVD02 N5
TP7 20MIL 1 TP CPU RSVD03 T2
TP11 20MIL 1 TP CPU RSVD04 V3
TP5 20MIL 1 TP CPU RSVD05 B2
TP14 20MIL 1 CPU TEST7 C3
TP6 20MIL 1 TP CPU RSVD07 D2
TP25 20MIL 1 TP CPU RSVD08 D22
TP10 20MIL 1 TP CPU RSVD09 D3
TP19 20MIL 1 TP CPU RSVD10 F6

H A#3 J4
H A#4 L5
H A#5 L4
H A#6 K5
H A#7 M3
H A#8 N2
H A#9 J1
H A#10 N3
H A#11 P2
H A#12 P5
H A#13 L2
H A#14 P4
H A#15 P1
H A#16 R1
H A#17 Y2
H A#18 U5
H A#19 R3
H A#20 W6
H A#21 U4
H A#22 Y5
H A#23 U1
H A#24 R4
H A#25 T5
H A#26 T3
H A#27 W2
H A#28 W5
H A#29 Y4
H A#30 U2
H A#31 V4
H A#32 W3
H A#33 AA4
H A#34 AB2
H A#35 AA3

H REQ#0 K3
H REQ#1 H2
H REQ#2 K2
H REQ#3 J3
H REQ#4 L1

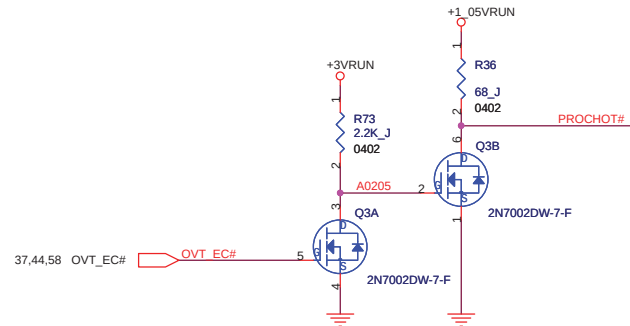
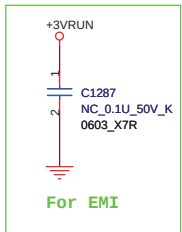
A[3]# J4
A[4]# L5
A[5]# L4
A[6]# K5
A[7]# M3
A[8]# N2
A[9]# J1
A[10]# N3
A[11]# P2
A[12]# P5
A[13]# L2
A[14]# P4
A[15]# P1
A[16]# R1
A[17]# Y2
A[18]# U5
A[19]# R3
A[20]# W6
A[21]# U4
A[22]# Y5
A[23]# U1
A[24]# R4
A[25]# T5
A[26]# T3
A[27]# W2
A[28]# W5
A[29]# Y4
A[30]# U2
A[31]# V4
A[32]# W3
A[33]# AA4
A[34]# AB2
A[35]# AA3

A20M# A6
FERR# A5
IGNNE# C4

STPCLK# D5
LINT0 C6
LINT1 B4
SMI# A3

RSVD[01] M4
RSVD[02] N5
RSVD[03] T2
RSVD[04] V3
RSVD[05] B2
RSVD[06] C3
RSVD[07] D2
RSVD[08] D22
RSVD[09] D3
RSVD[10] F6

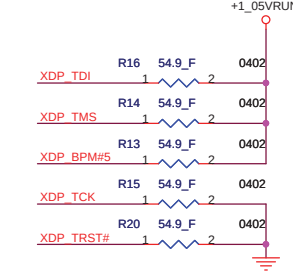
CPU SOCKET_478P
FOX_P24782A-274M-01



ADS# H1
BNR# E2
BPR# G5
DEFER# H5
DRDY# F21
DBSY# E1
BR0# F1
IERR# D20
INIT# B3
LOCK# H4
RESET# C1
RS[0]# E3
RS[1]# E4
RS[2]# G3
TRDY# G2
HIT# G6
HITM# E4
BPM[0]# AD4
BPM[1]# AD3
BPM[2]# AD1
BPM[3]# AC4
PRDY# AC2
PREQ# AC1
TCK# AC5
TDI# AA6
TDO# AB3
TMS# AB5
TRST# AB6
DBR# C20
PROCHOT# D21
THERMDA A24
THERMDC B25
PM_THRMTRIP# C7
CLK_CPU_BCLK 6
CLK_CPU_BCLK# 6

RSVD[01] M4
RSVD[02] N5
RSVD[03] T2
RSVD[04] V3
RSVD[05] B2
RSVD[06] C3
RSVD[07] D2
RSVD[08] D22
RSVD[09] D3
RSVD[10] F6

H_CPURST# 1 20MIL TP2

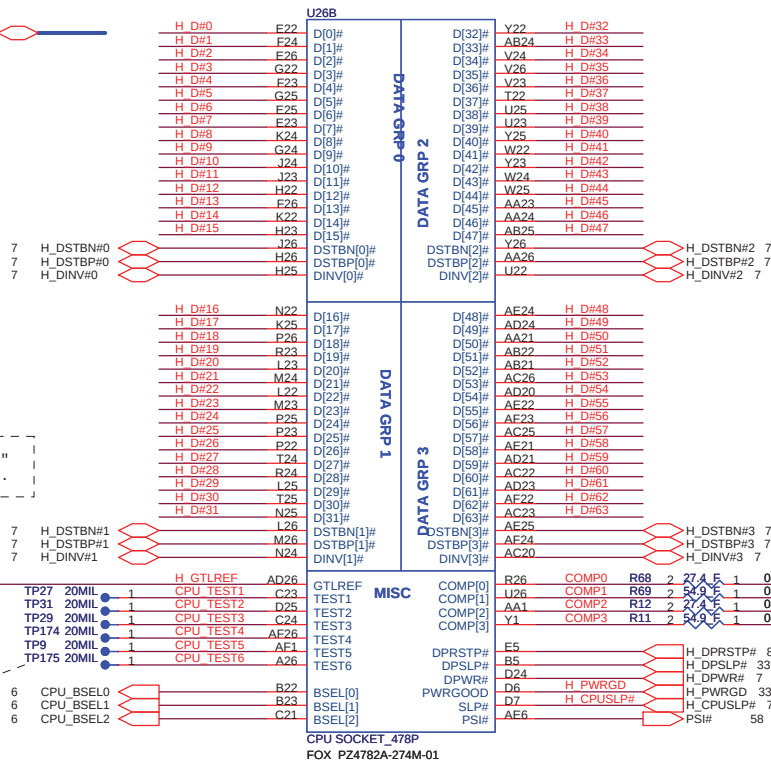


Place c close to CPU

Route the TEST3 and TEST5 signals through a ground referenced Zo = 55-ohm trace that ends in a via that is near a GND via and is accessible through an oscilloscope connection. TEST4 and TEST6 and TEST7 pins can be left NC.

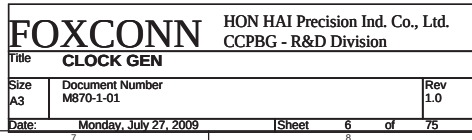
Layout Note:
Zo=55 ohm, 0.5"
max for GTLREF.

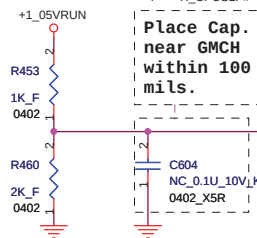
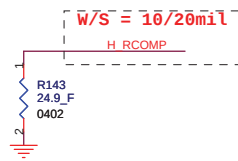
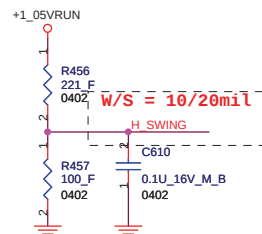
7 H_D#[63..0]



Layout Note:
Comp0,2 connect with Zo=27.4 ohm, make trace length shorter then 0.5". Width=18mil(MS)
Comp1,3 connect with Zo=55 ohm, make trace length shorter then 0.5". Width=5mil(MS)

H_PWRGD 1 20MIL TP135
H_CPUSLP# 1 20MIL TP20





H_D#0	F2	H_D#_0
H_D#1	G8	H_D#_1
H_D#2	F8	H_D#_2
H_D#3	E5	H_D#_3
H_D#4	G2	H_D#_4
H_D#5	H6	H_D#_5
H_D#6	H2	H_D#_6
H_D#7	F6	H_D#_7
H_D#8	D4	H_D#_8
H_D#9	H3	H_D#_9
H_D#10	M3	H_D#_10
H_D#11	M11	H_D#_11
H_D#12	J1	H_D#_12
H_D#13	J2	H_D#_13
H_D#14	N12	H_D#_14
H_D#15	J6	H_D#_15
H_D#16	P2	H_D#_16
H_D#17	L2	H_D#_17
H_D#18	R2	H_D#_18
H_D#19	N9	H_D#_19
H_D#20	L6	H_D#_20
H_D#21	M5	H_D#_21
H_D#22	J3	H_D#_22
H_D#23	N2	H_D#_23
H_D#24	R1	H_D#_24
H_D#25	N5	H_D#_25
H_D#26	N6	H_D#_26
H_D#27	P13	H_D#_27
H_D#28	N8	H_D#_28
H_D#29	L7	H_D#_29
H_D#30	N10	H_D#_30
H_D#31	M3	H_D#_31
H_D#32	Y3	H_D#_32
H_D#33	AD14	H_D#_33
H_D#34	Y6	H_D#_34
H_D#35	Y10	H_D#_35
H_D#36	Y12	H_D#_36
H_D#37	Y14	H_D#_37
H_D#38	Y7	H_D#_38
H_D#39	W2	H_D#_39
H_D#40	AA8	H_D#_40
H_D#41	Y9	H_D#_41
H_D#42	AA13	H_D#_42
H_D#43	AA9	H_D#_43
H_D#44	AA11	H_D#_44
H_D#45	AD11	H_D#_45
H_D#46	AD10	H_D#_46
H_D#47	AD13	H_D#_47
H_D#48	AE12	H_D#_48
H_D#49	AE9	H_D#_49
H_D#50	AA2	H_D#_50
H_D#51	AD8	H_D#_51
H_D#52	AA3	H_D#_52
H_D#53	AD3	H_D#_53
H_D#54	AD7	H_D#_54
H_D#55	AE14	H_D#_55
H_D#56	AE3	H_D#_56
H_D#57	AC1	H_D#_57
H_D#58	AE3	H_D#_58
H_D#59	AC3	H_D#_59
H_D#60	AE11	H_D#_60
H_D#61	AE8	H_D#_61
H_D#62	AG2	H_D#_62
H_D#63	AD6	H_D#_63

H_SWING C5
H_RCOMP E3

H_CPUREST# C12
H_CPURESTP# E11

H_AVREF A11
H_DVREF B11

Traces width 10 mils.

HOST

H_A#_3	A14	H_A#3
H_A#_4	C15	H_A#4
H_A#_5	F16	H_A#5
H_A#_6	H13	H_A#6
H_A#_7	C18	H_A#7
H_A#_8	M16	H_A#8
H_A#_9	J13	H_A#9
H_A#_10	P16	H_A#10
H_A#_11	R16	H_A#11
H_A#_12	N17	H_A#12
H_A#_13	M13	H_A#13
H_A#_14	E17	H_A#14
H_A#_15	P17	H_A#15
H_A#_16	E17	H_A#16
H_A#_17	G20	H_A#17
H_A#_18	B19	H_A#18
H_A#_19	J16	H_A#19
H_A#_20	E20	H_A#20
H_A#_21	H16	H_A#21
H_A#_22	J20	H_A#22
H_A#_23	L17	H_A#23
H_A#_24	A17	H_A#24
H_A#_25	B17	H_A#25
H_A#_26	L16	H_A#26
H_A#_27	C21	H_A#27
H_A#_28	J17	H_A#28
H_A#_29	H20	H_A#29
H_A#_30	B18	H_A#30
H_A#_31	K17	H_A#31
H_A#_32	B20	H_A#32
H_A#_33	E21	H_A#33
H_A#_34	K21	H_A#34
H_A#_35	L20	H_A#35

H_ADS#	H12	H_ADS#_3
H_ADSTB#_0	B16	H_ADSTB#0_3
H_ADSTB#_1	G17	H_ADSTB#1_3
H_BNR#	A9	H_BNR#_3
H_BPRI#	E11	H_BPRI#_3
H_BREQ#	G12	H_BREQ#0_3
H_DEFER#	E9	H_DEFER#_3
H_DBSY#	B10	H_DBSY#_3
HPLL_CLK	AH7	CLK_MCH_BCLK_6
HPLL_CLK#	AH6	CLK_MCH_BCLK#_6
H_DPWR#	E9	H_DPWR#_4
H_DRDY#	H9	H_DRDY#_3
H_HIT#	E12	H_HIT#_3
H_HITV#	H11	H_HITV#_3
H_LOCK#	C9	H_LOCK#_3
H_TRDY#		H_TRDY#_3

H_DINV#_0	J8	H_DINV#0_4
H_DINV#_1	L3	H_DINV#1_4
H_DINV#_2	Y13	H_DINV#2_4
H_DINV#_3	Y1	H_DINV#3_4

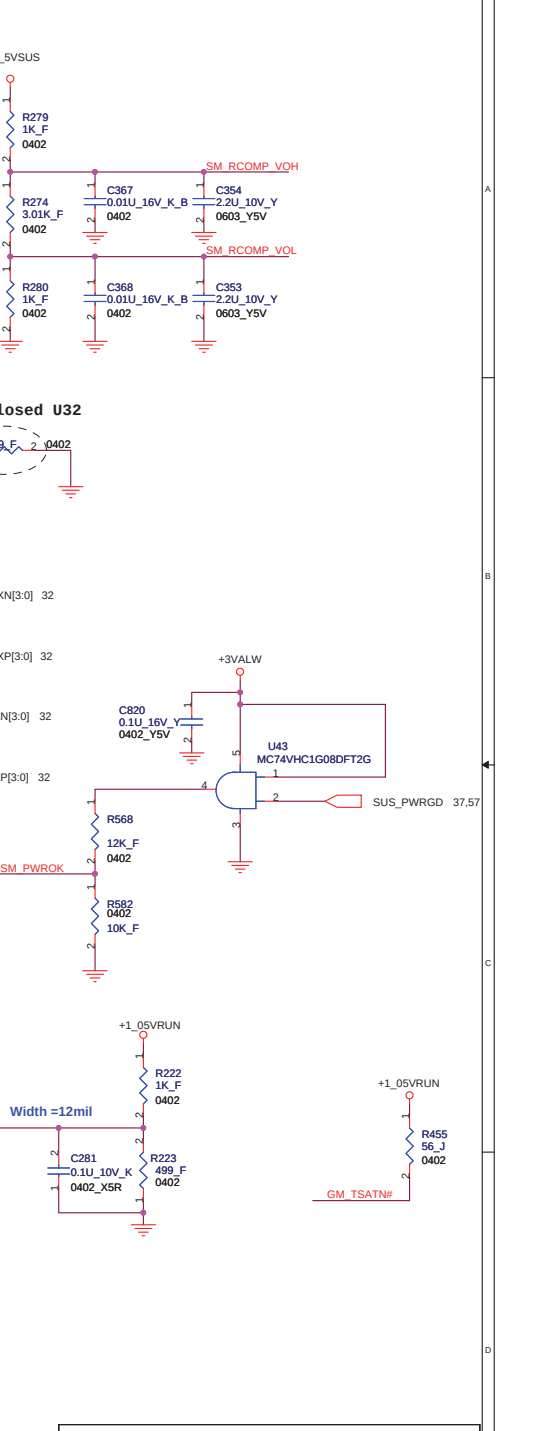
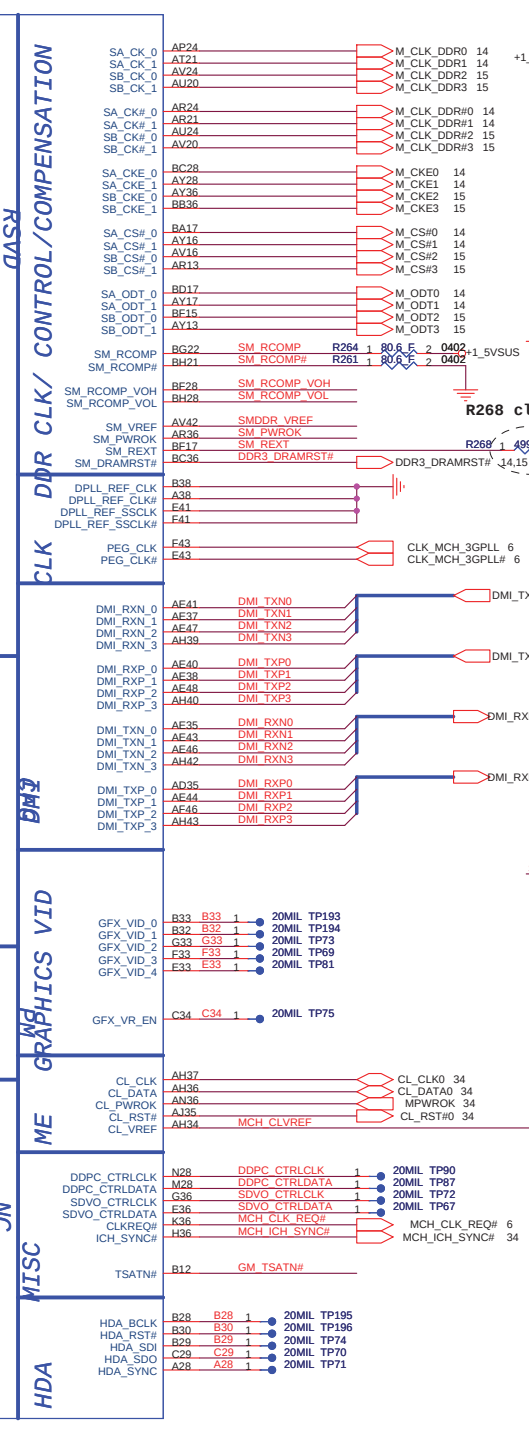
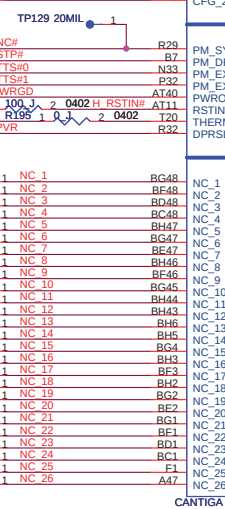
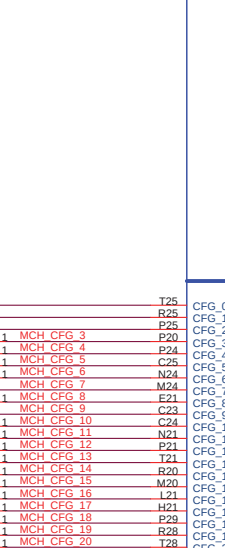
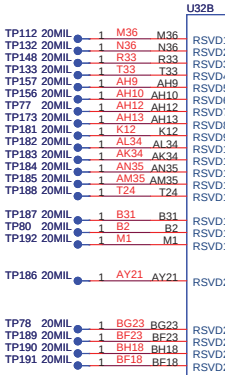
H_DSTBN#_0	L10	H_DSTBN#0_4
H_DSTBN#_1	M7	H_DSTBN#1_4
H_DSTBN#_2	AA5	H_DSTBN#2_4
H_DSTBN#_3	AE6	H_DSTBN#3_4

H_DSTBP#_0	L9	H_DSTBP#0_4
H_DSTBP#_1	M8	H_DSTBP#1_4
H_DSTBP#_2	AA6	H_DSTBP#2_4
H_DSTBP#_3	AE5	H_DSTBP#3_4

H_REQ#_0	B15	H_REQ#0_3
H_REQ#_1	K13	H_REQ#1_3
H_REQ#_2	E13	H_REQ#2_3
H_REQ#_3	B13	H_REQ#3_3
H_REQ#_4	B14	H_REQ#4_3

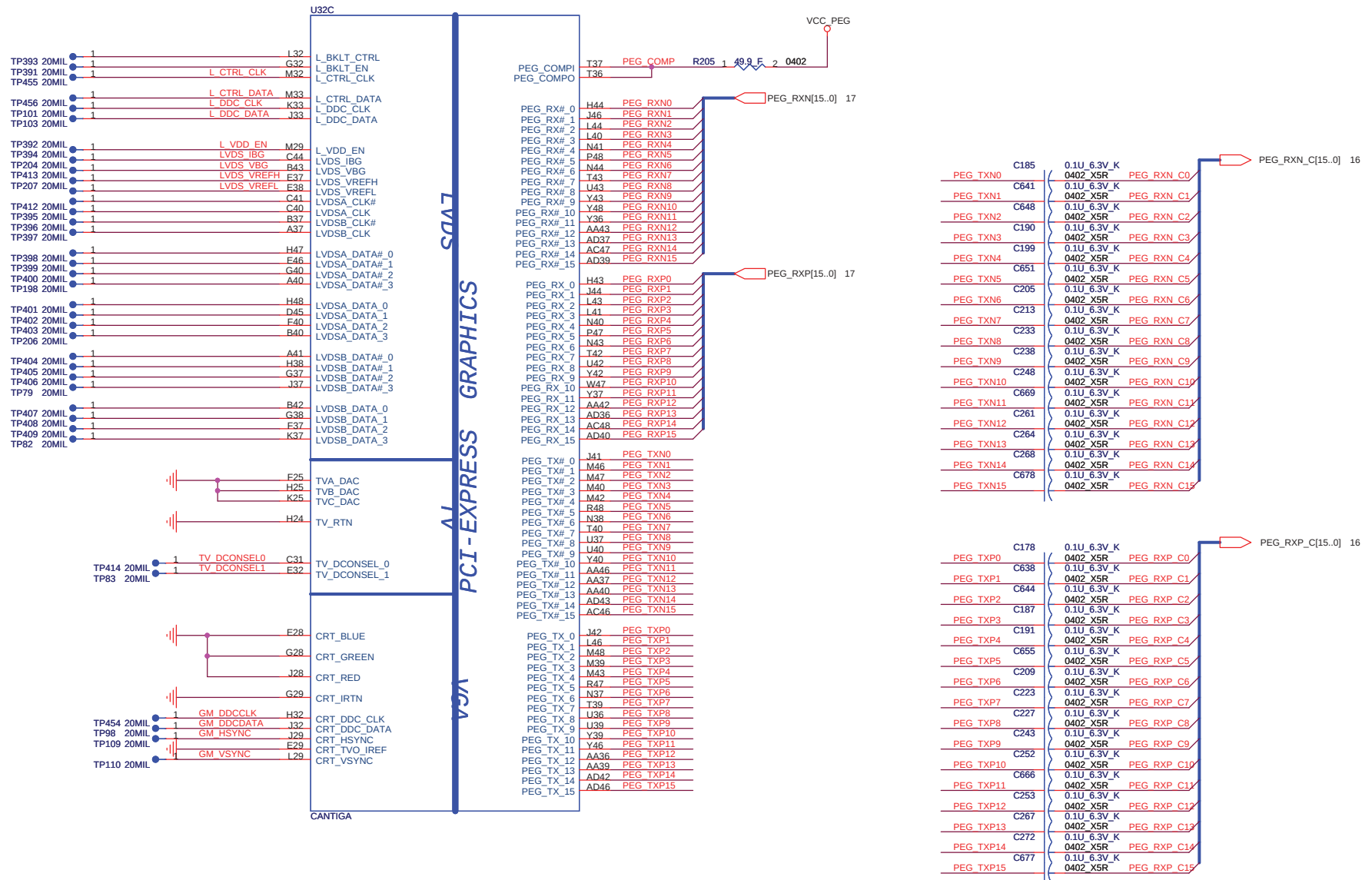
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H_RS#_1	E12	H_RS#1_3
H_RS#_2	C8	H_RS#2_3

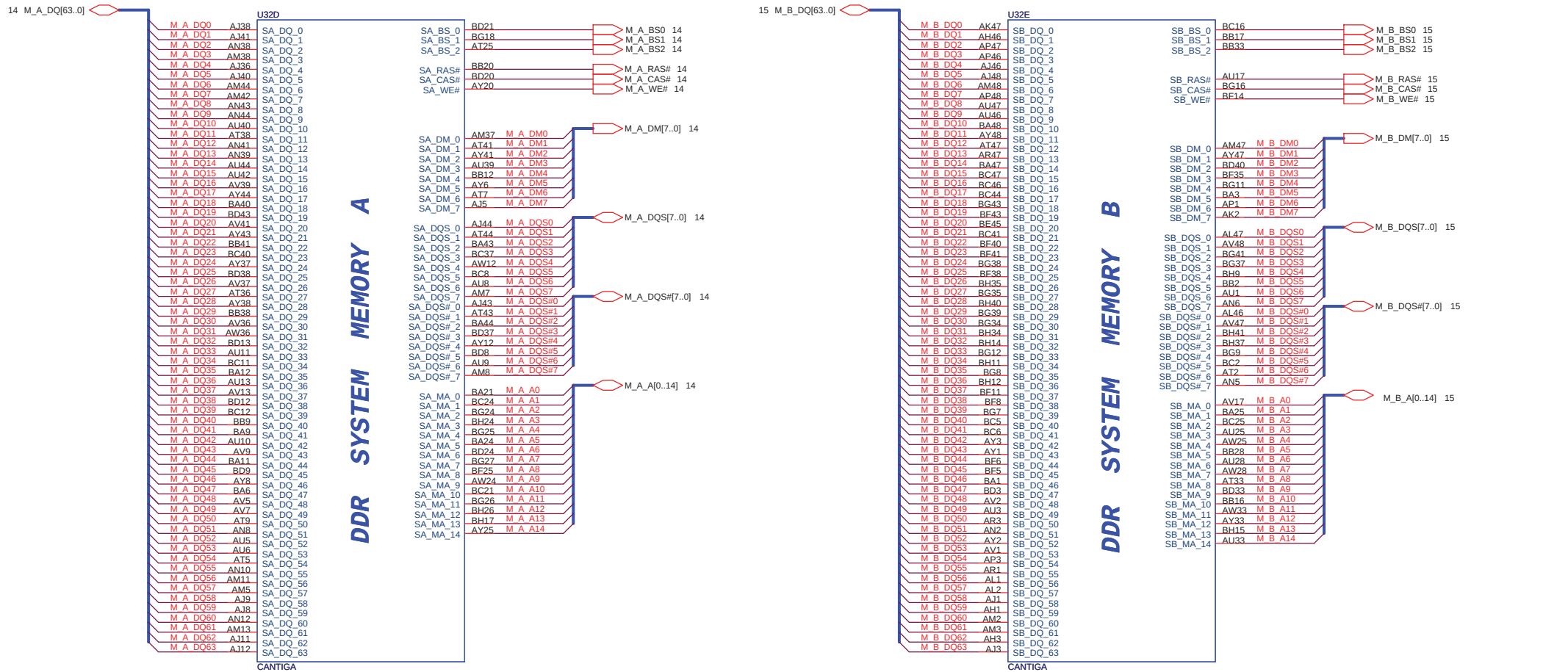
MCH_CFG_0-2 FSB Frequency	000 = FSB1066 ; 010 = FSB800; 011 = FSB667 ; Others = Reserved
MCH_CFG_3-4	Reserved
MCH_CFG_5 DMI X2 Select	Low = DMI X2 High = DMI X4 (Default)
MCH_CFG_6 ITPM Host Interface	Low = The ITPM Host Interface is enabled2 High = The ITPM Host Interface is disabled (default)
MCH_CFG_7 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



FOXCONN		HON HAI Precision Ind. Co., Ltd.	
Cantiga (DMI) 217		CCPBG - R&D Division	
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Date	Monday, July 27, 2009	Sheet	8 of 75

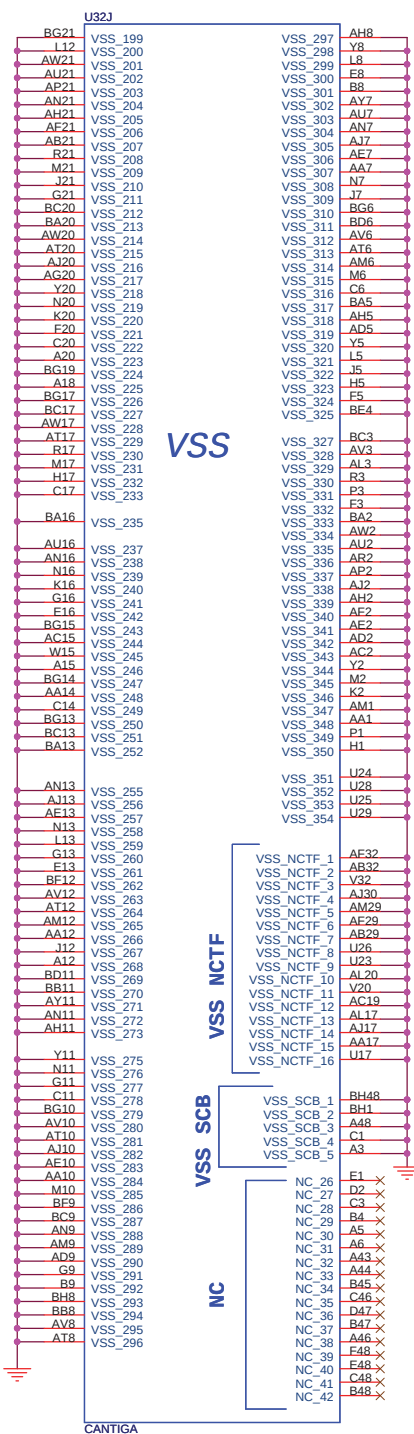
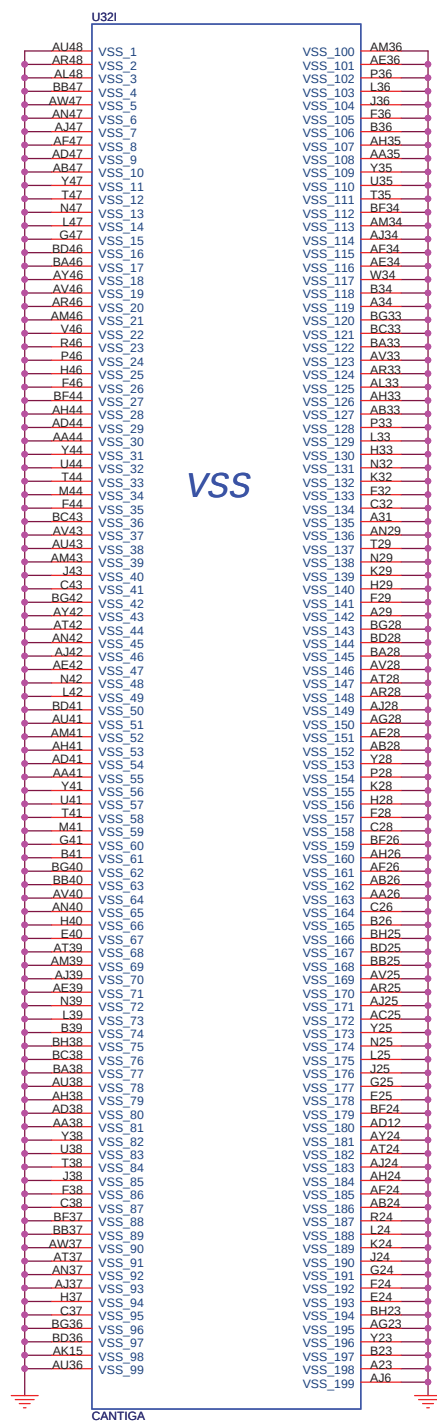
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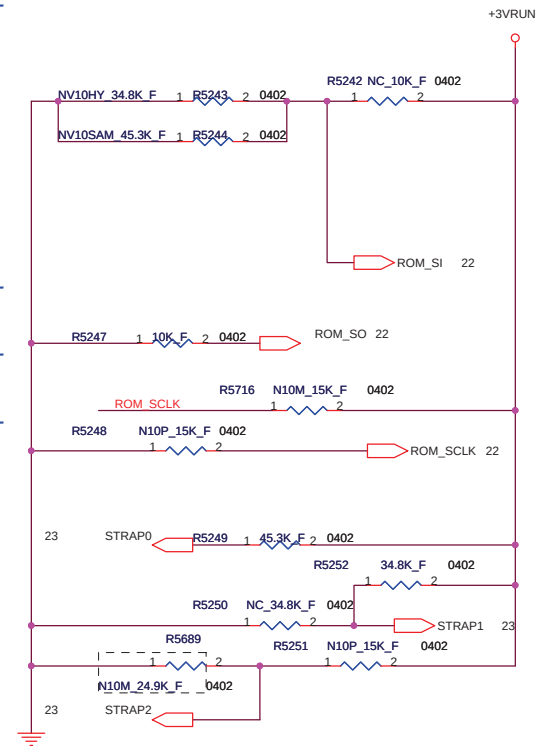
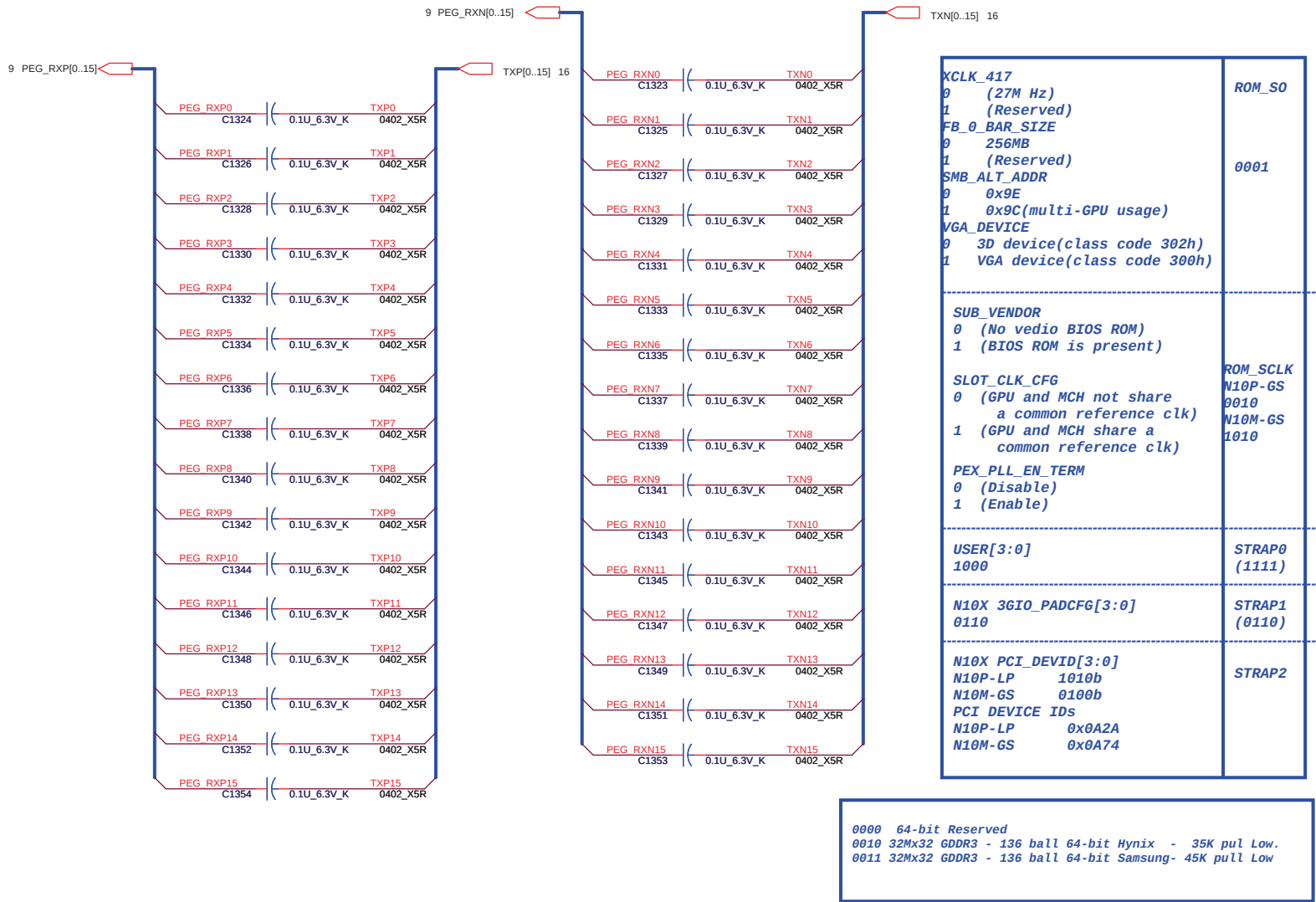












Logical Strap bit Mapping

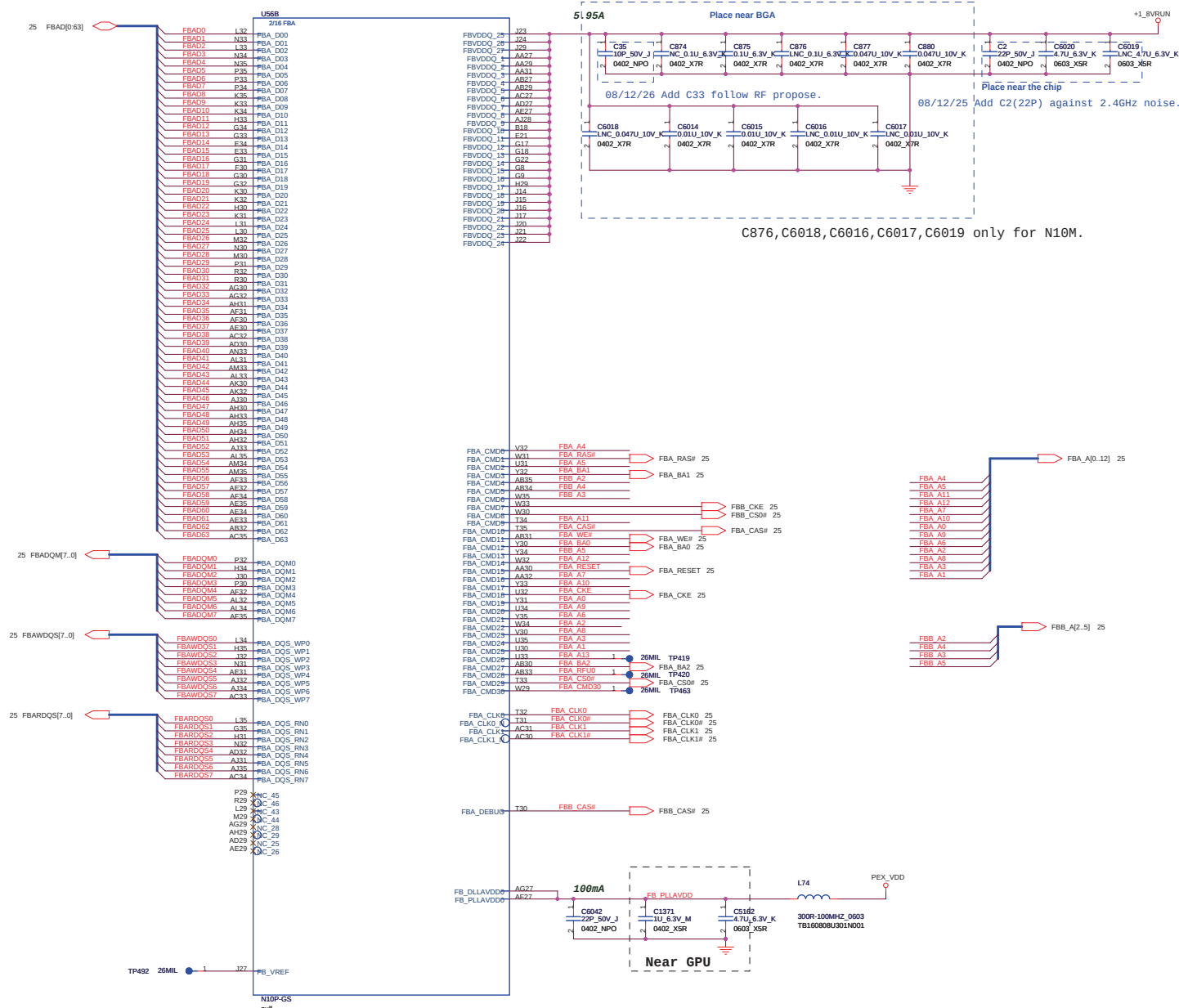
Resistor values	Pull-up to VDD	Pull-down to GND
5KΩ	1000	0000
10KΩ	1001	0001
15KΩ	1010	0010
20KΩ	1011	0011
25KΩ	1100	0100
30KΩ	1101	0101
35KΩ	1110	0110
45KΩ	1111	0111

Strap Options

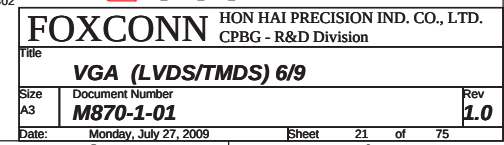
Physical Strapping pin	Power Rail	Logical Strapping pin3	Logical Strapping pin2	Logical Strapping pin1	Logical Strapping pin0
ROM_SI	+3VRUN	RAMCFG[3]	RAMCFG[2]	RAMCFG[1]	RAMCFG[0]
ROM_SO	+3VRUN	XCLK_417	FB_0_BAR_SIZE	SMB_ALT_ADDR	VGA_DEVICE
ROM_SCLK	+3VRUN	PCI_DEVID[4]	SUB_VENDOR	SLOT_CLK_CFG	PEX_PLL_EN_TERM
STRAP0	+3VRUN	USER[3]	USER[2]	USER[1]	USER[0]
STRAP1	+3VRUN	3GIO_PADCFG[3]	3GIO_PADCFG[2]	3GIO_PADCFG[1]	3GIO_PADCFG[0]
STRAP2	+3VRUN	PCI_DEVID[3]	PCI_DEVID[2]	PCI_DEVID[1]	PCI_DEVID[0]

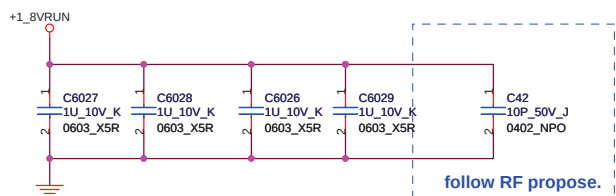
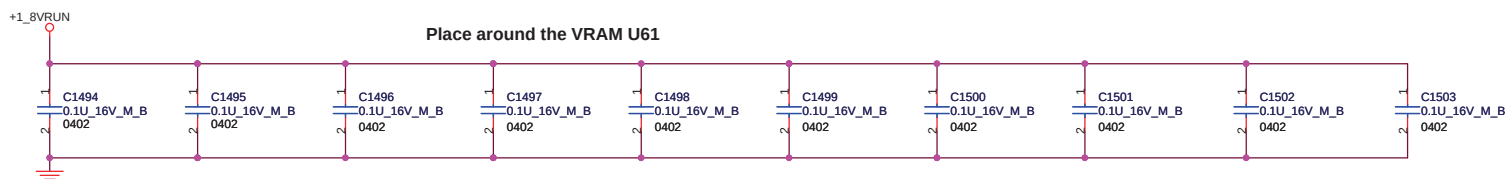
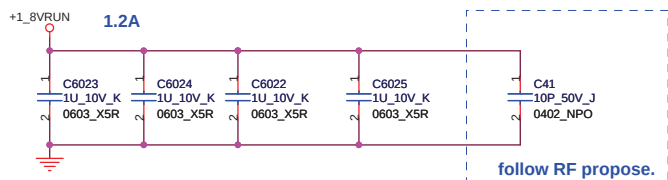
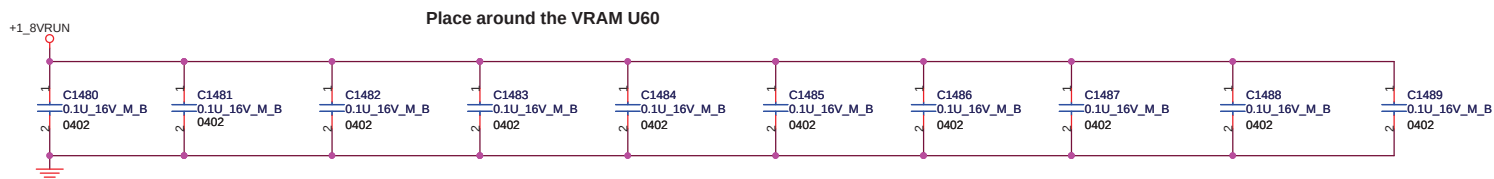
Refer to <GB1 Family Design Guide DG-03276-001 v01 secured>

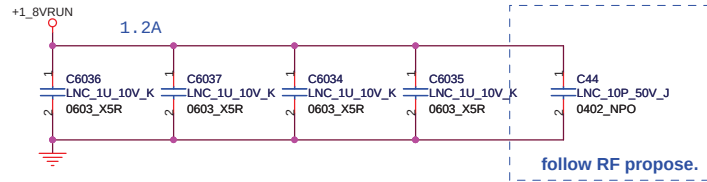
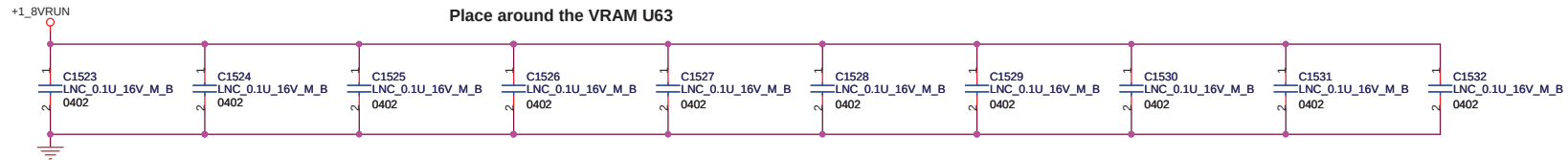
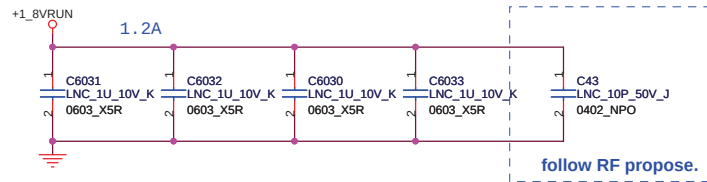
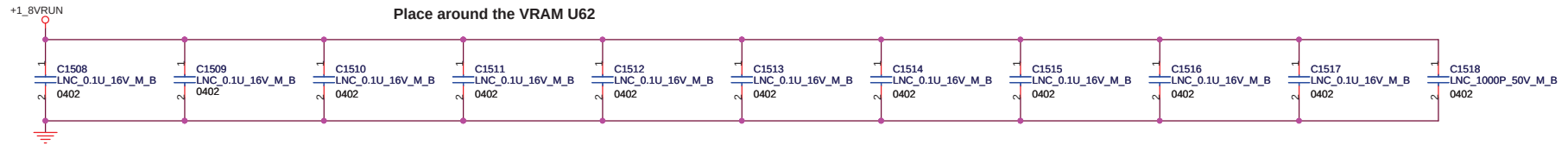
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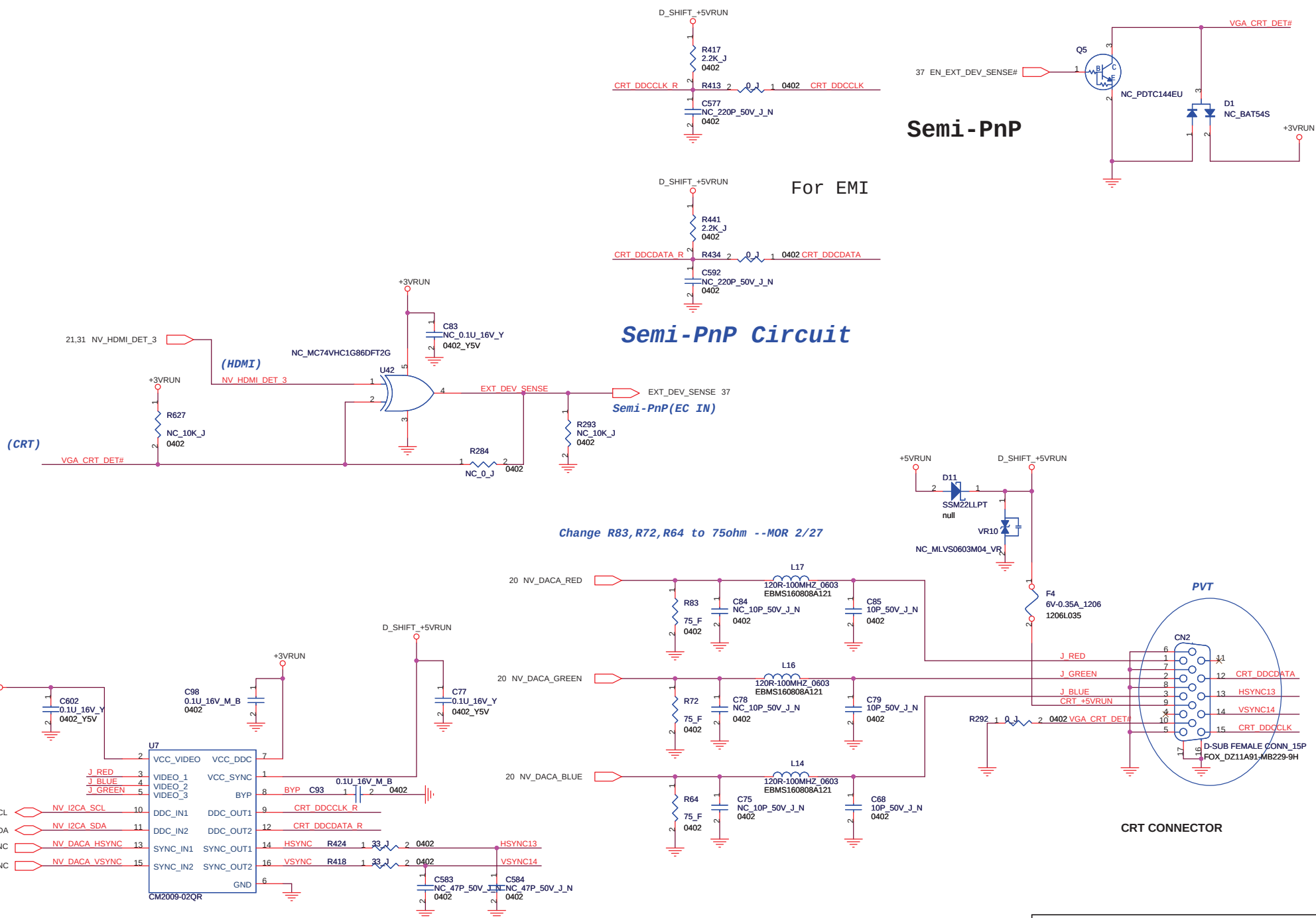


09/02/05 Reserve +3VRUN for IOVDD from MOR.

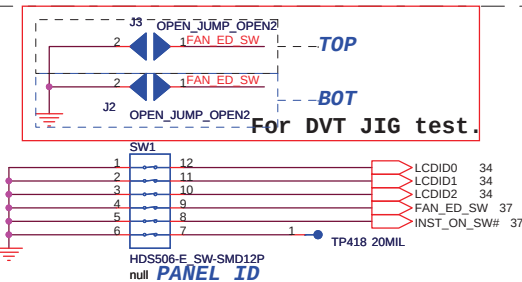
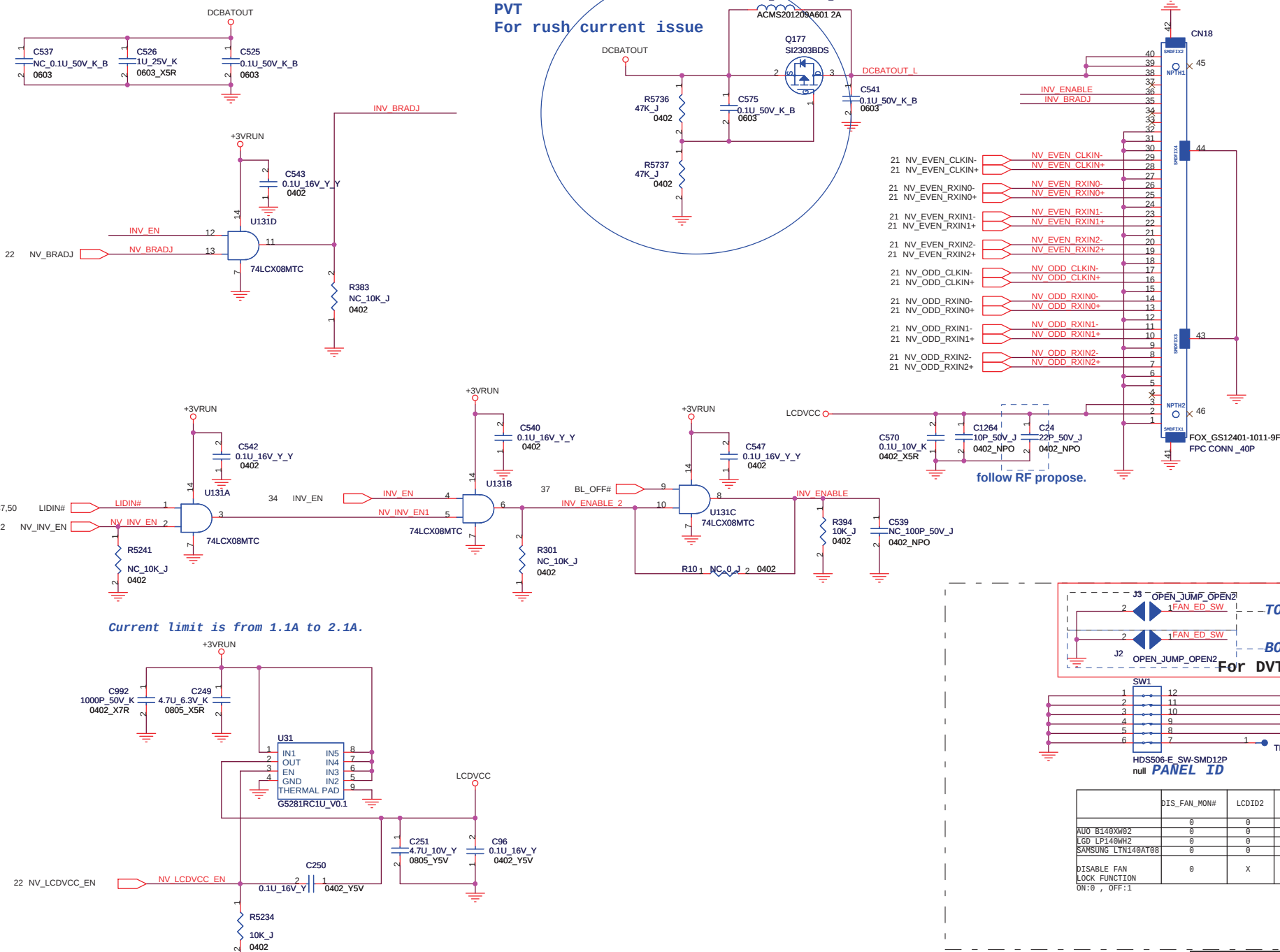




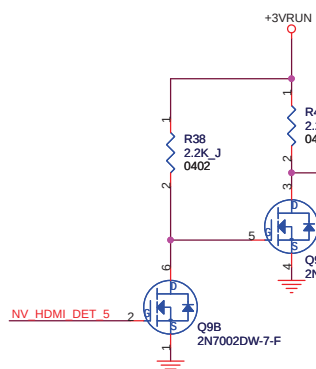
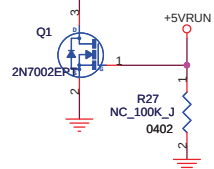
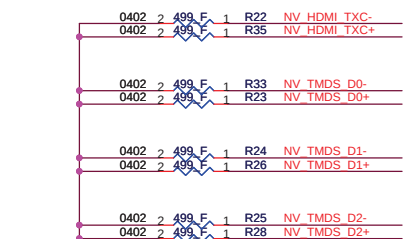
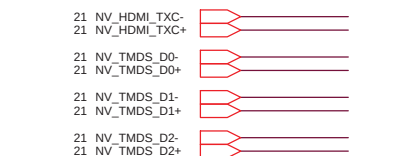




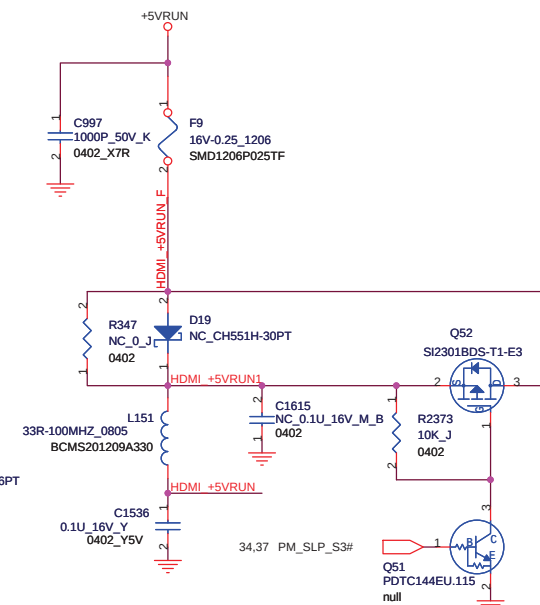
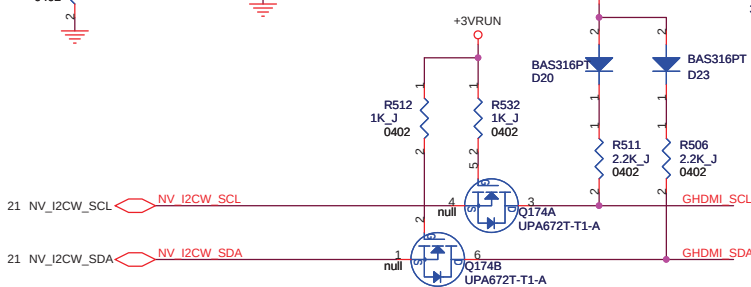
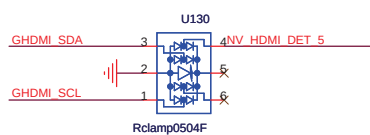
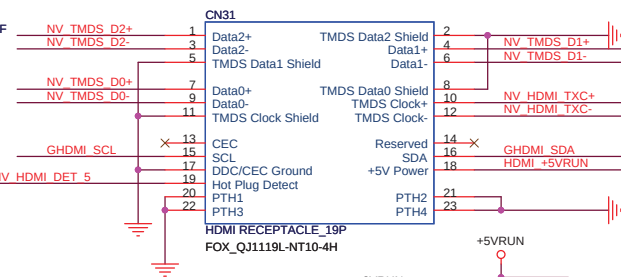
LVDS CONNECTOR



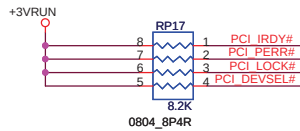
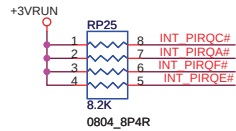
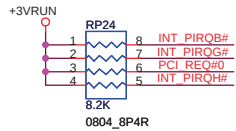
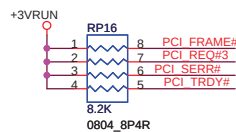
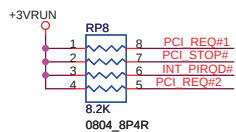
	DIS_FAN_MON#	LCDID2	LCDID1	LCDID0
AUD B148WB02	0	0	0	0
LGD LP148WH2	0	0	0	1
SAMSUNG LTN148AT88	0	0	1	1
DISABLE FAN LOCK FUNCTION	0	X	X	X
ON:0 , OFF:1				



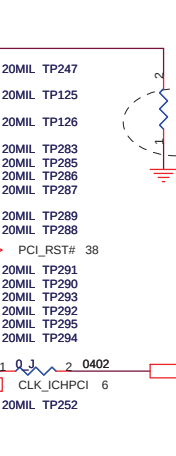
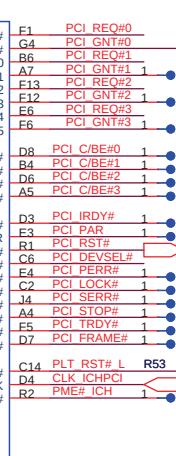
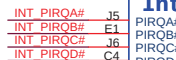
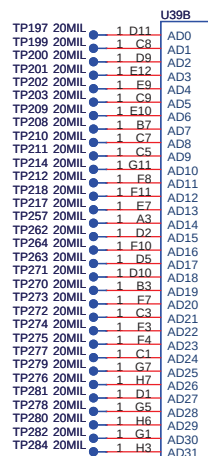
HDMI CONNECTOR



FOXCONN		HON HAI Precision Ind. Co., Ltd. CCPBG - R&D Division	
Title		HDMI	
Size	Document Number	Rev	
A3	M870-1-01	1.0	
Date:	Monday, July 27, 2009	Sheet	31 of 75



PCI Pullups

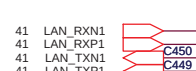


For Boot BIOS Selection.

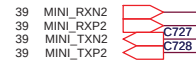
Strap for Boot-BIOS

	GNT0#	SPI_CS1#
LPC(Default)	H1	H1
PCI	H1	LOW
SPI	LOW	H1

LAN



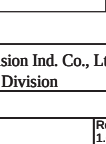
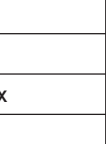
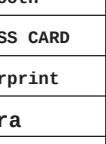
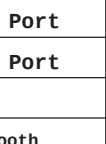
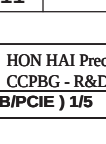
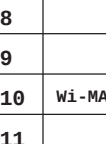
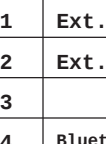
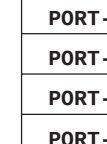
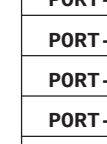
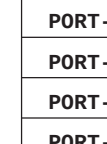
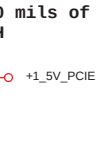
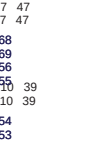
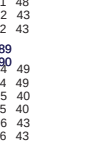
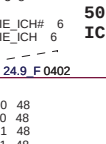
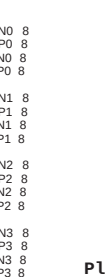
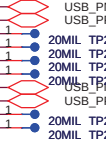
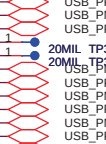
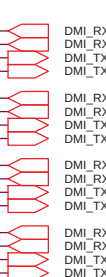
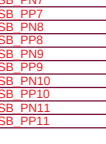
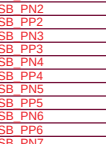
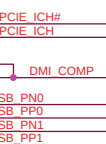
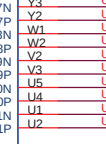
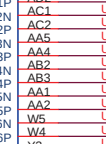
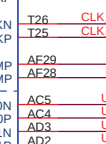
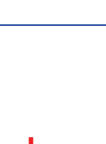
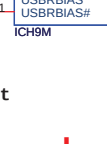
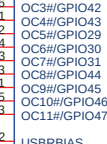
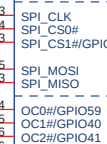
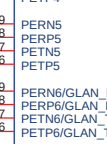
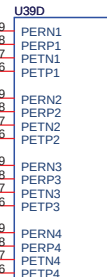
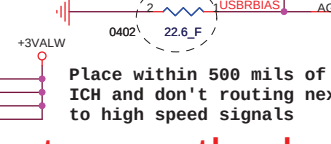
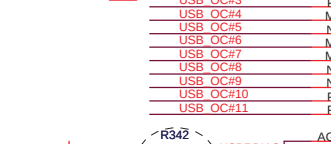
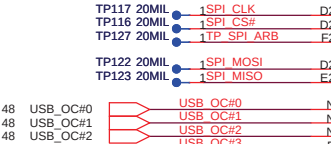
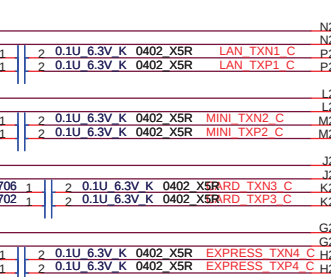
WLAN



Cardreader



Express Card



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	Fingerprint
PORT-7	Camera
PORT-8	
PORT-9	
PORT-10	Wi-MAX
PORT-11	

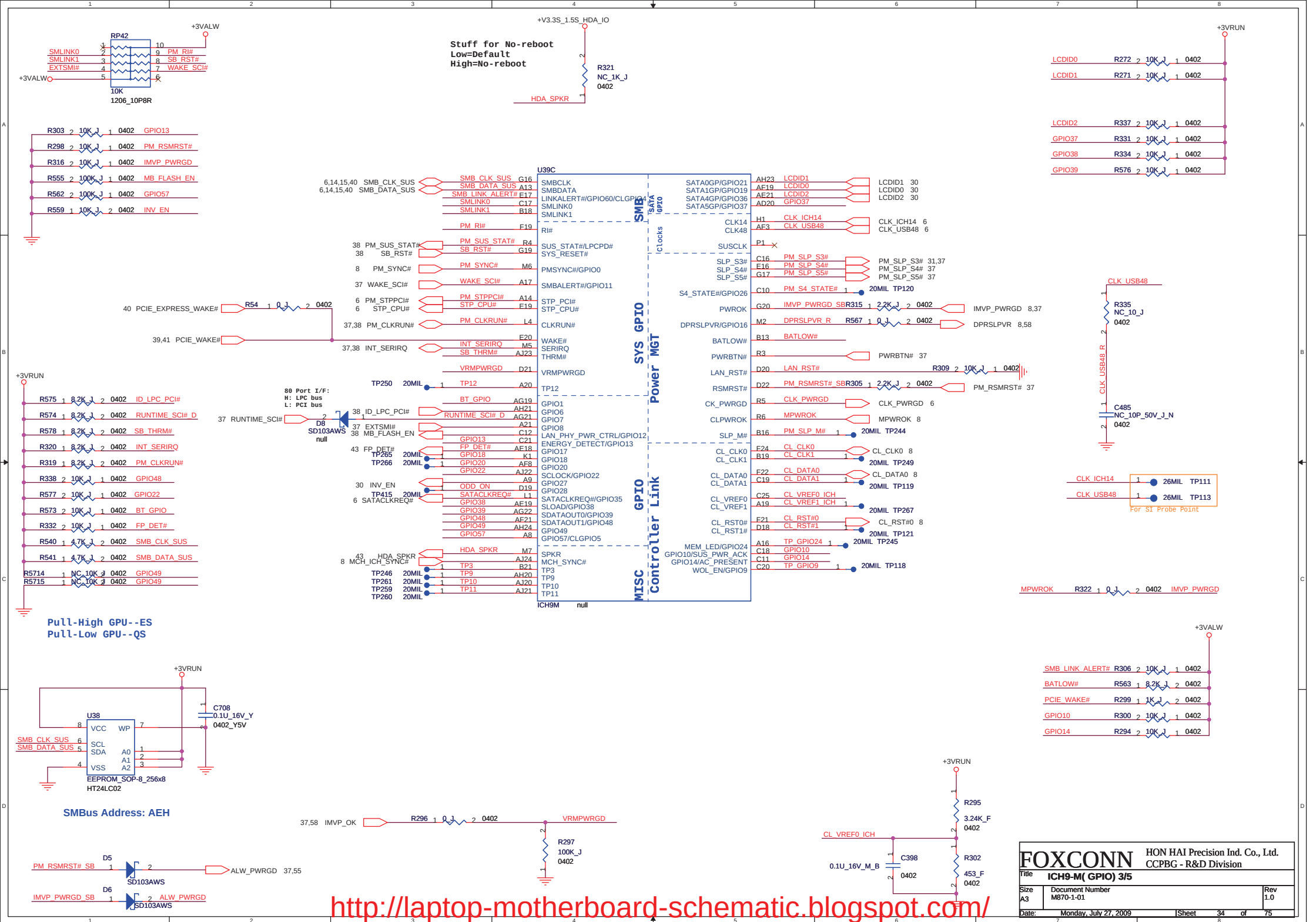
FOXCONN HON HAI Precision Ind. Co., Ltd.
CCPBG - R&D Division

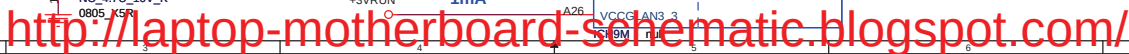
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Size: A3 Document Number: M870-1-01 Rev: 1.0

Date: Monday, July 27, 2009 Sheet: 32 of 75

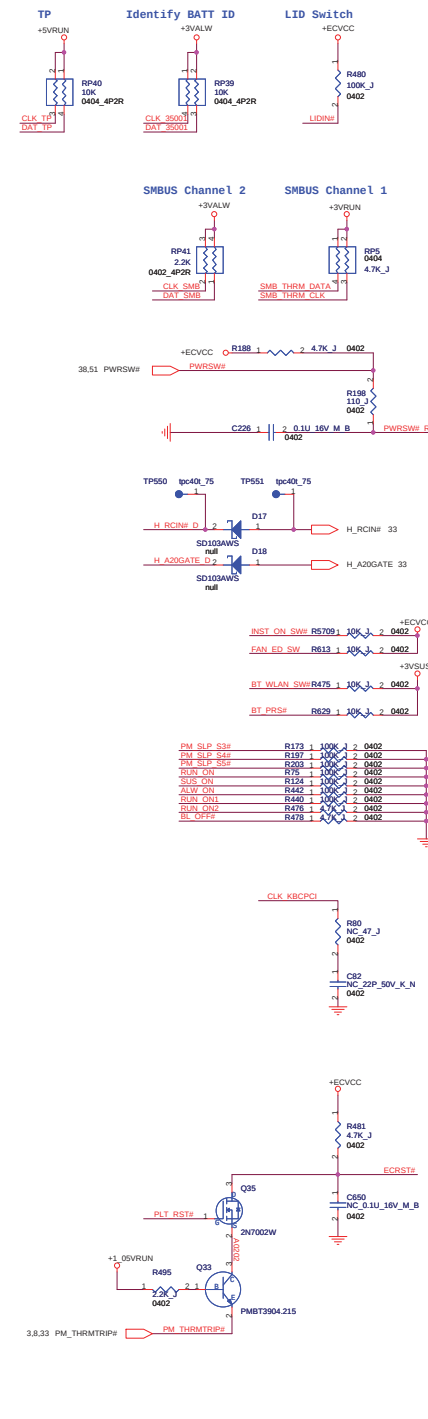


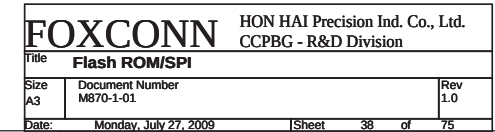
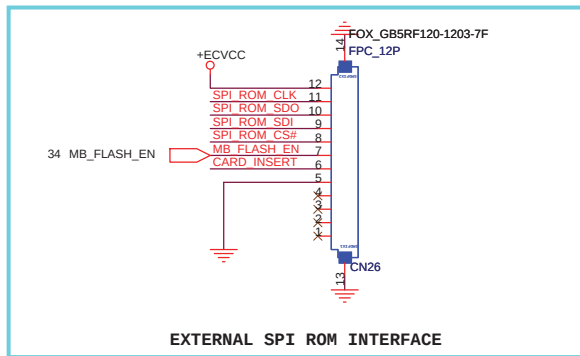
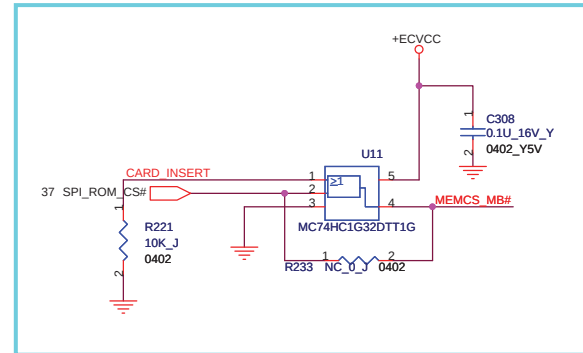




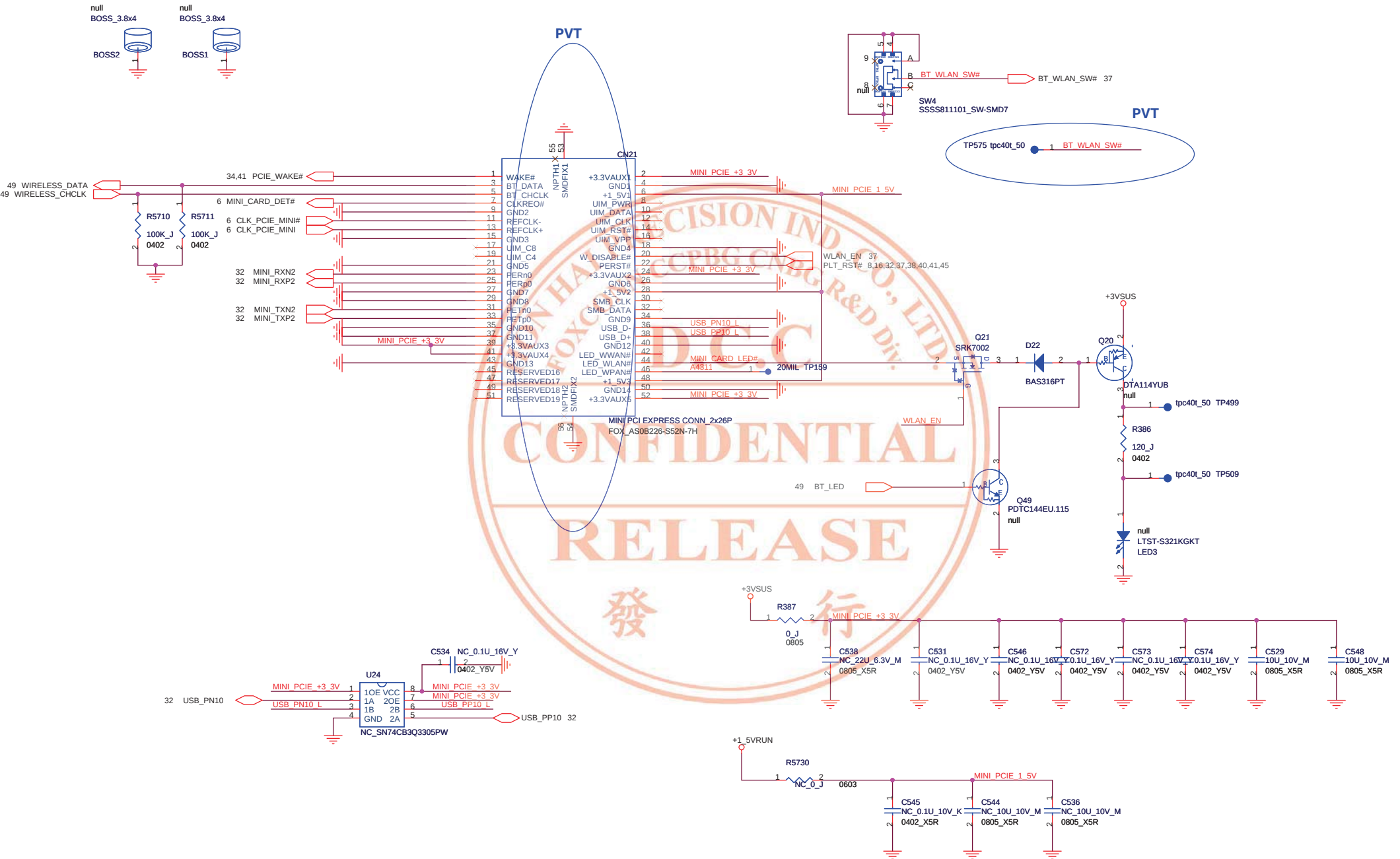


<http://laptop-motherboard-schematic.blogspot.com/>





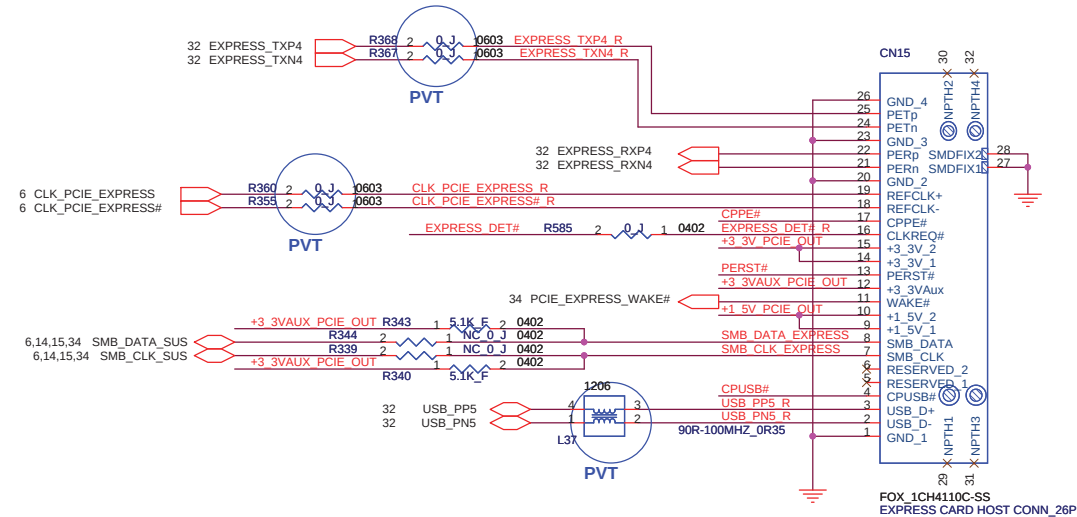
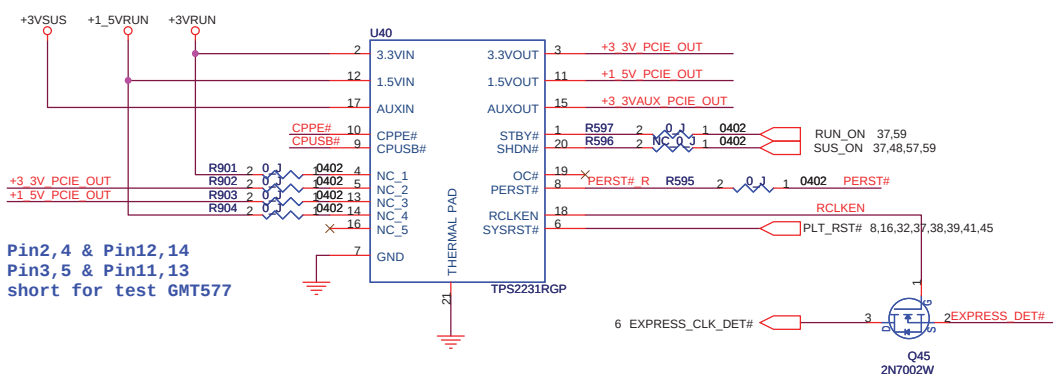
SW4.C pin delete and SW4.A connect to GND.



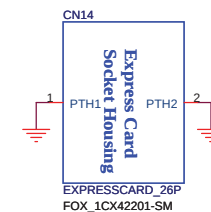
<http://laptop-motherboard-schematic.blogspot.com/>

+1_5V=>1.3A
+3_3VAux=>0.6A
+3_3V=>2.5A

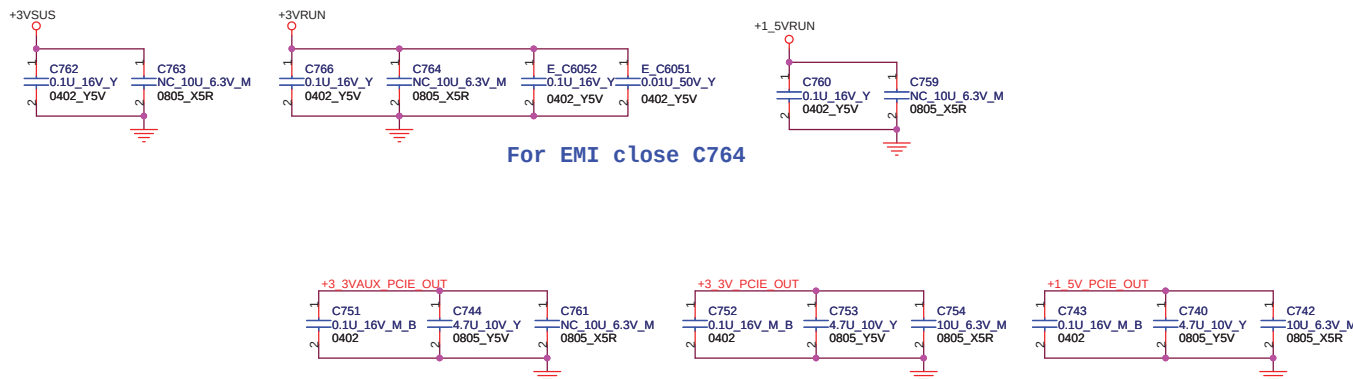
Express Card Power Switch



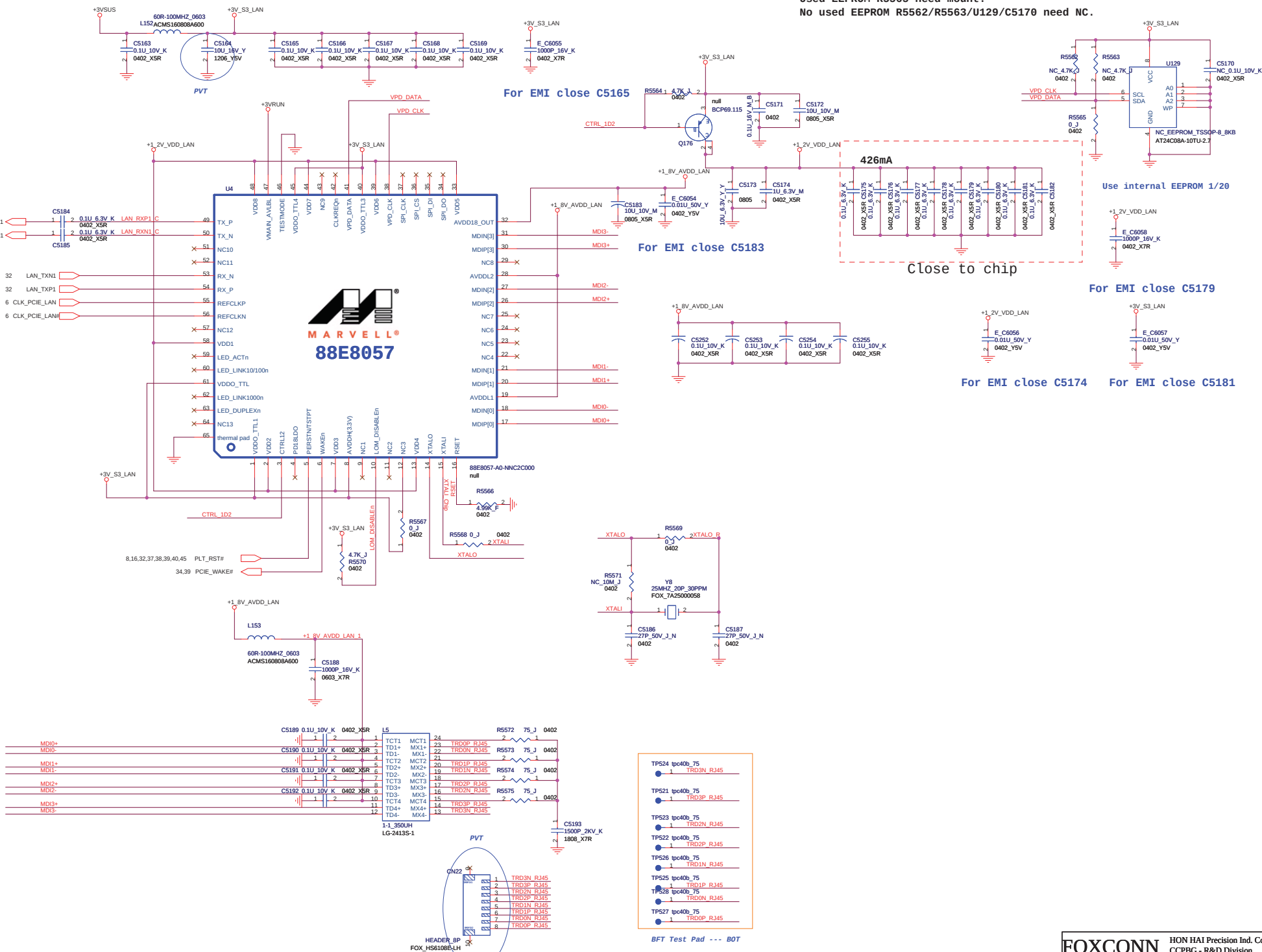
Express Card Slot.



For EMI close C764

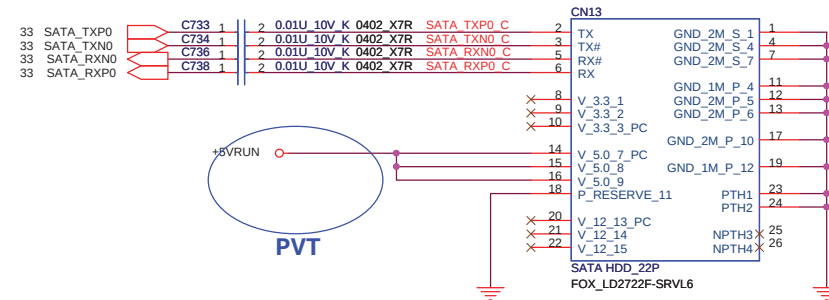
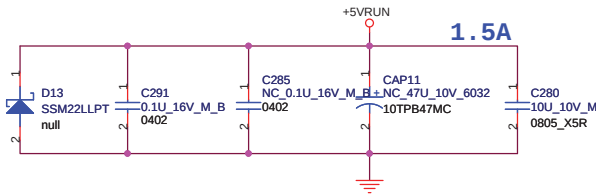


Used EEPROM R5565 need mount.
No used EEPROM R5562/R5563/U129/C5170 need NC.

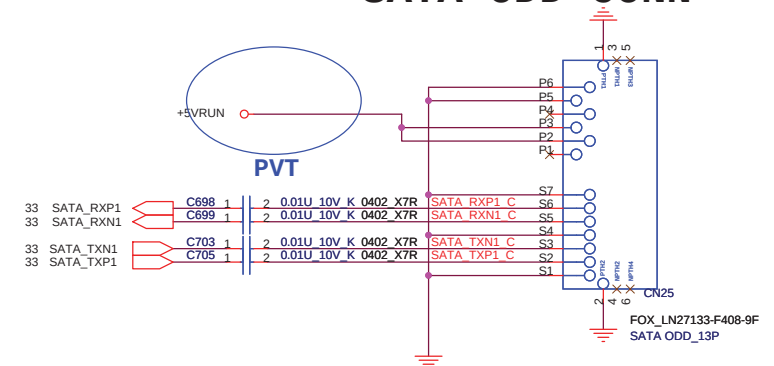
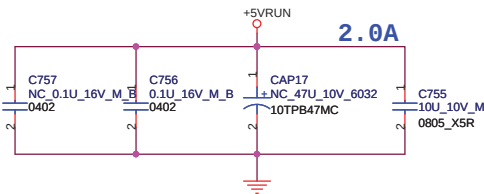


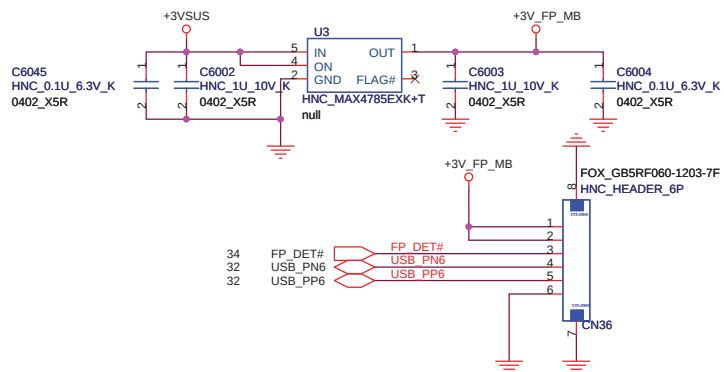
<http://laptop-motherboard-schematic.blogspot.com/>

SATA HDD CONN

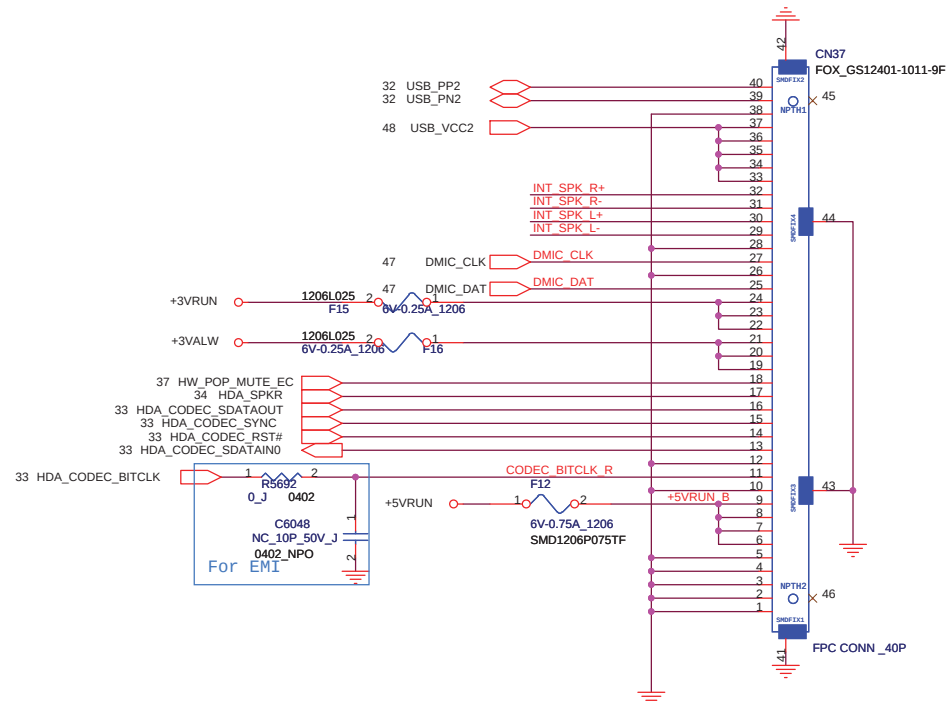


SATA ODD CONN

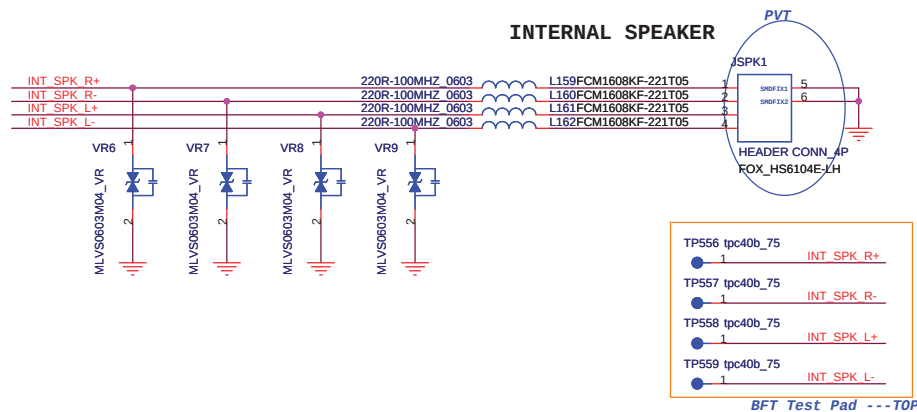




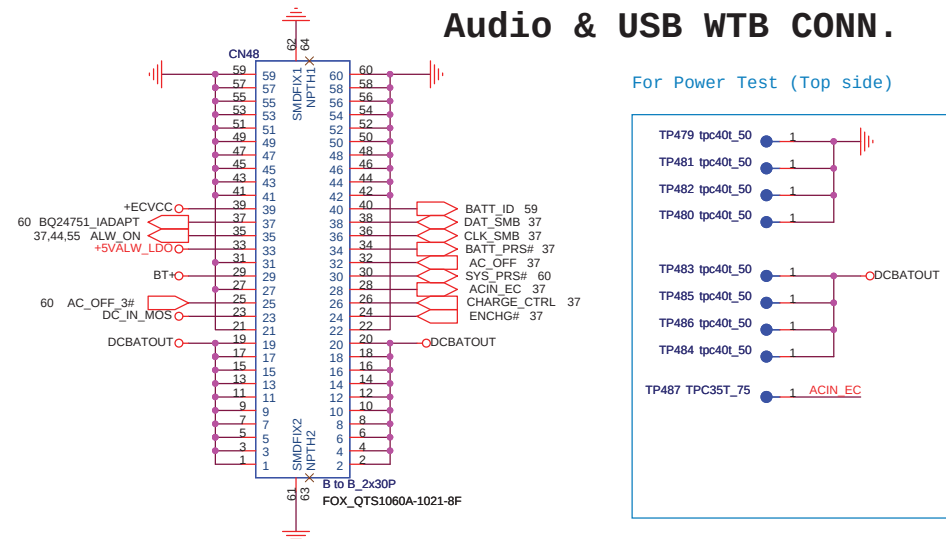
Fingerprint FTB CONN.



Audio & USB WTB CONN.

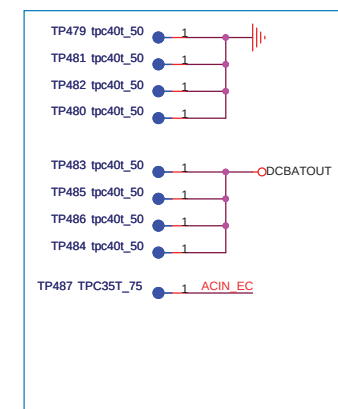


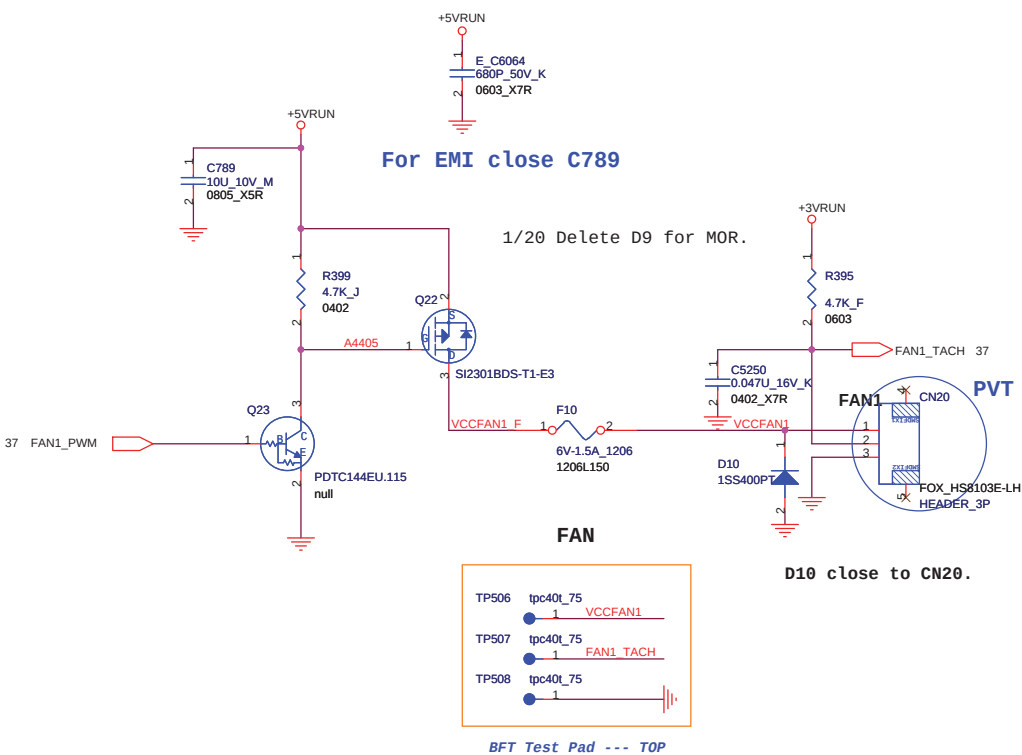
BFT Test Pad ---TOP



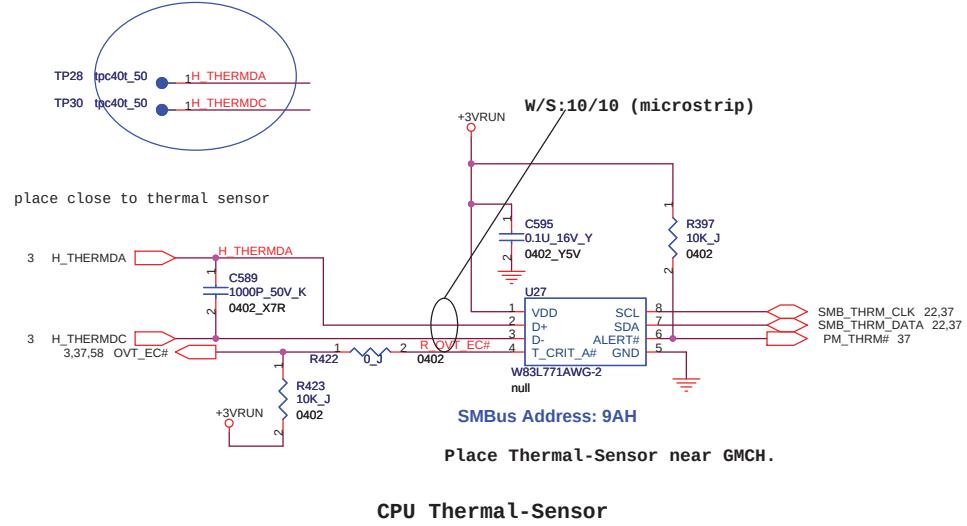
Charger Board CONN.

For Power Test (Top side)

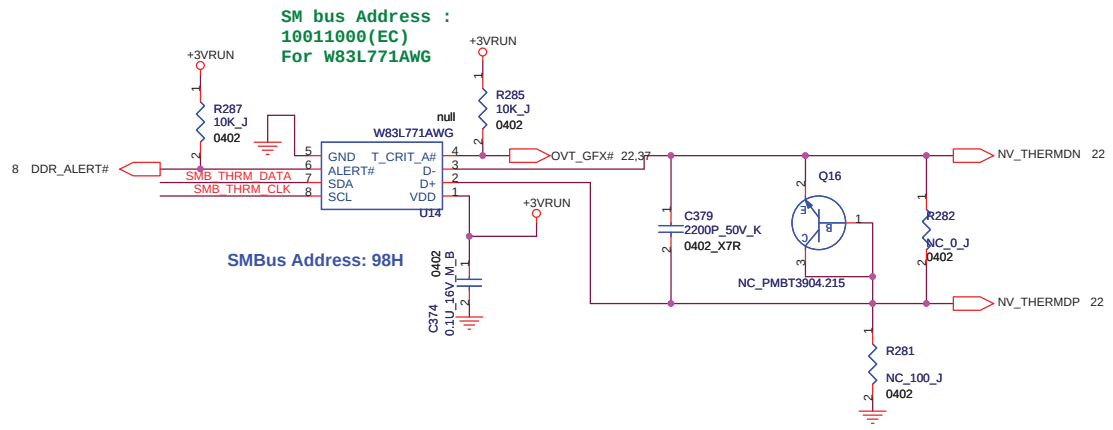
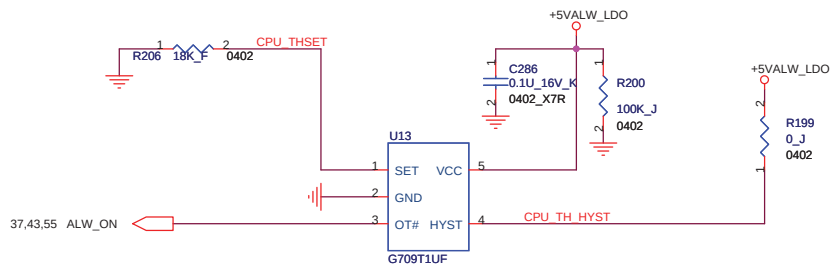


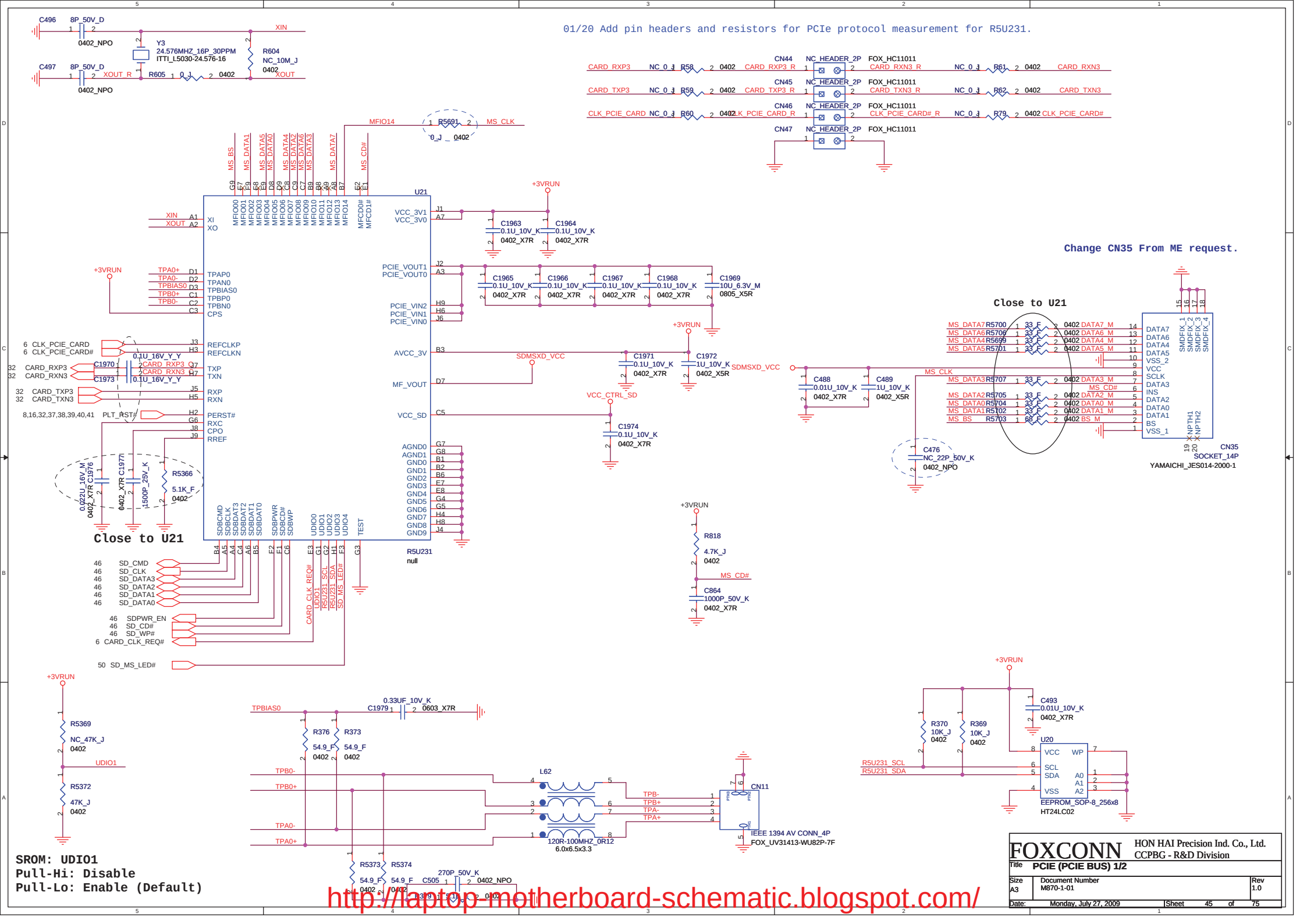


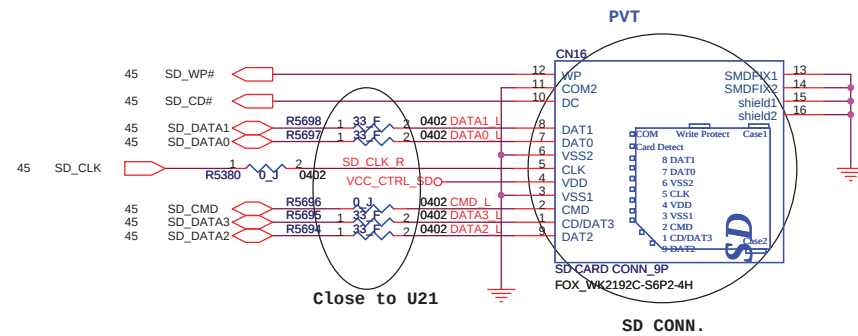
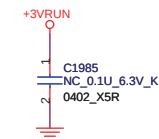
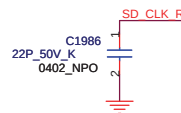
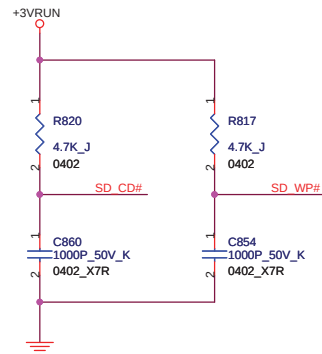
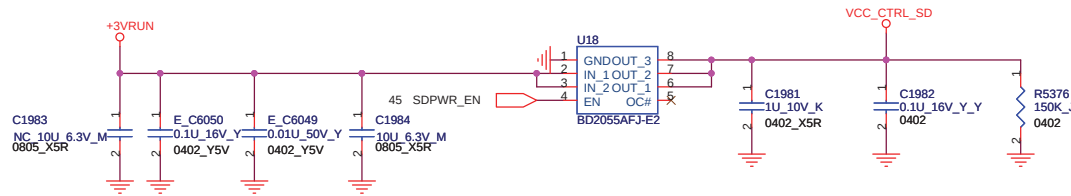
將這2個點位置拉大至少100mil，DVT時距離太進影響測



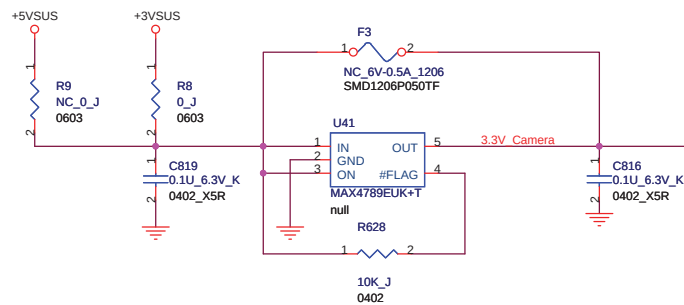
HW THERMAL PROTECTION



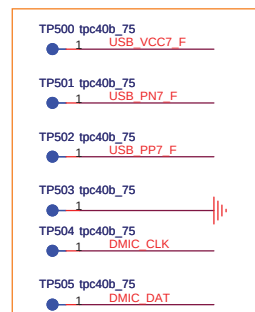
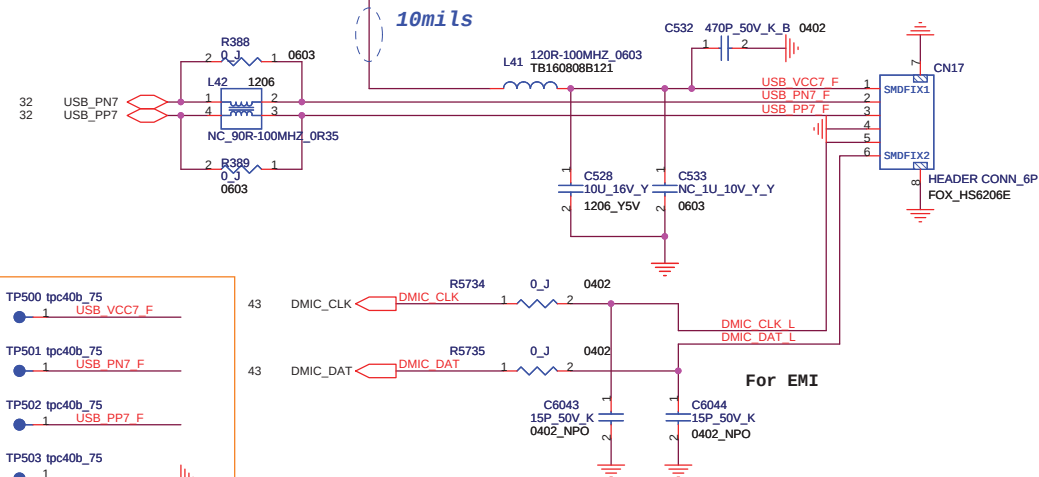




For EMI



CAMERA Connector



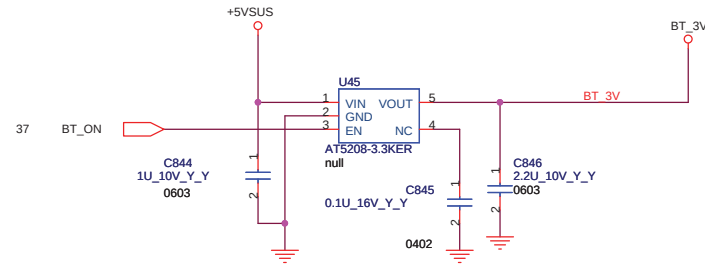
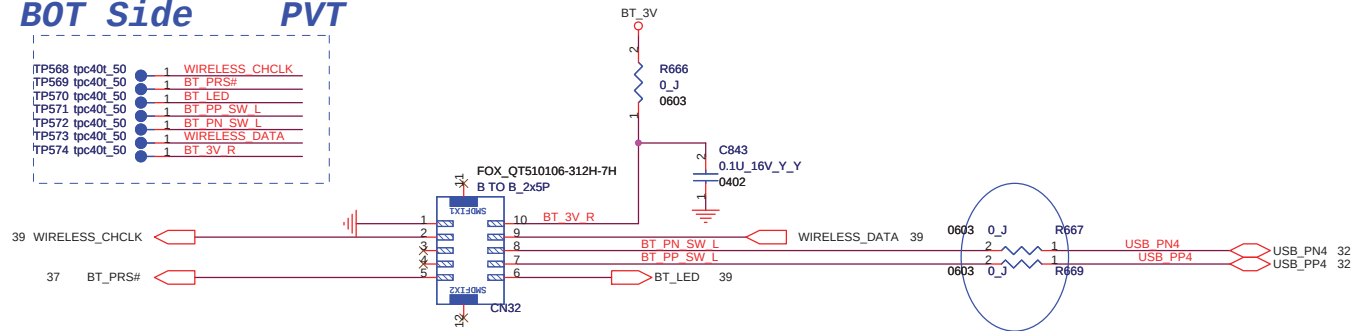
BFT Test Pad --- TOP

Int MIC Connector

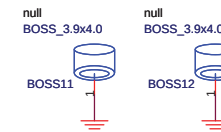
Bluetooth connector

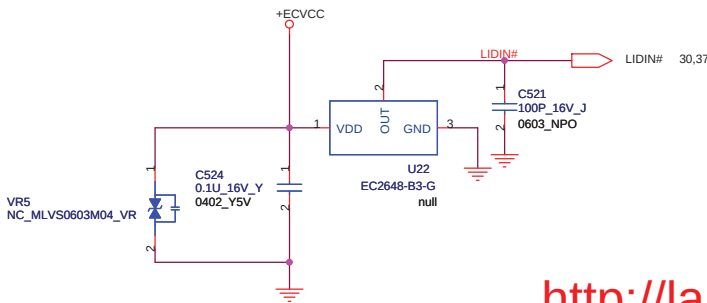
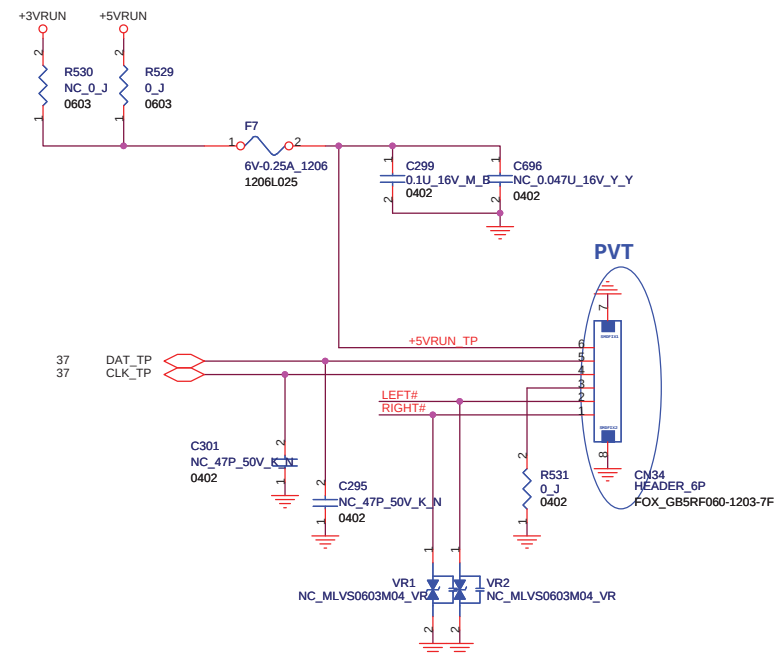
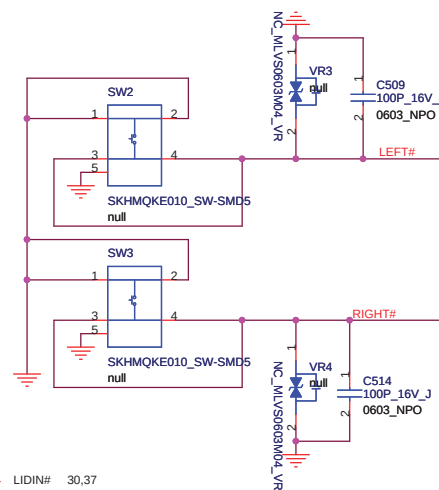
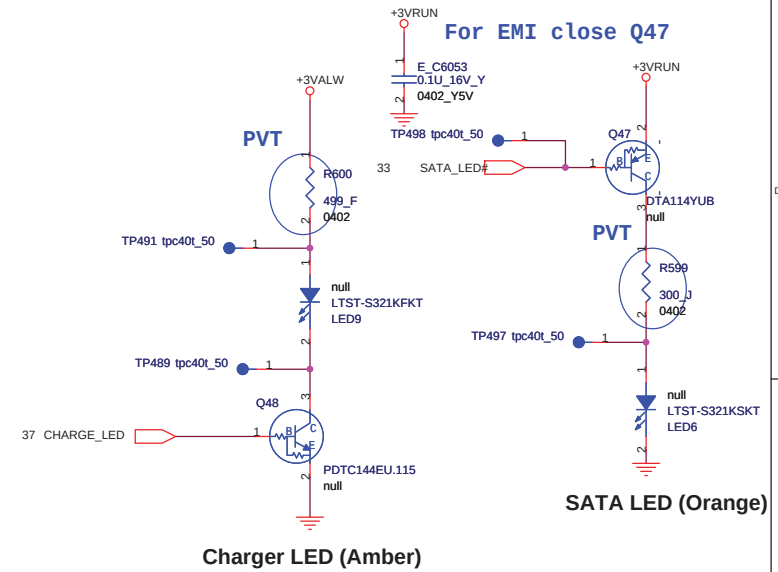
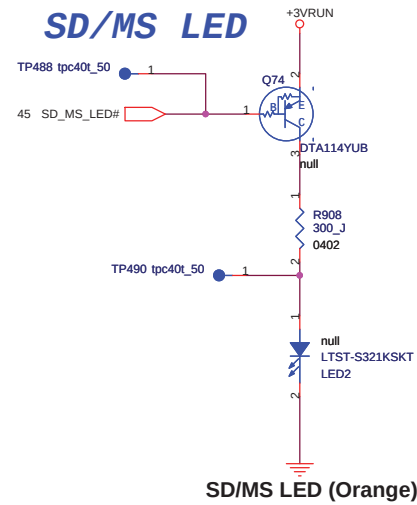
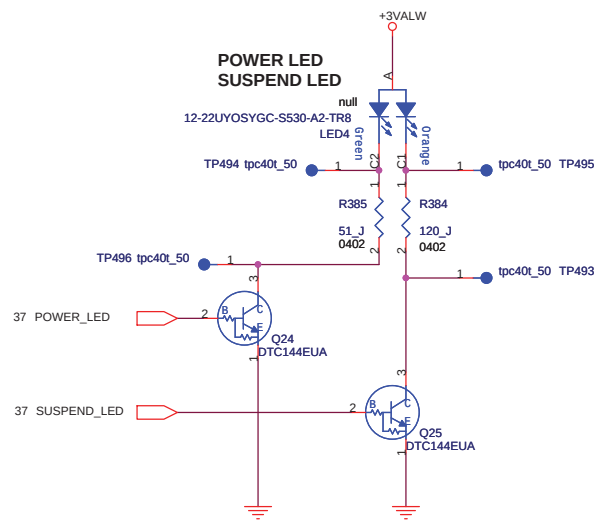
BOT Side **PVT**

TP568 tpc40t_50	1	WIRELESS_CHCLK
TP569 tpc40t_50	1	BT_PRS#
TP570 tpc40t_50	1	BT_LED
TP571 tpc40t_50	1	BT_PP_SW_L
TP572 tpc40t_50	1	BT_PN_SW_L
TP573 tpc40t_50	1	WIRELESS_DATA
TP574 tpc40t_50	1	BT_3V_R

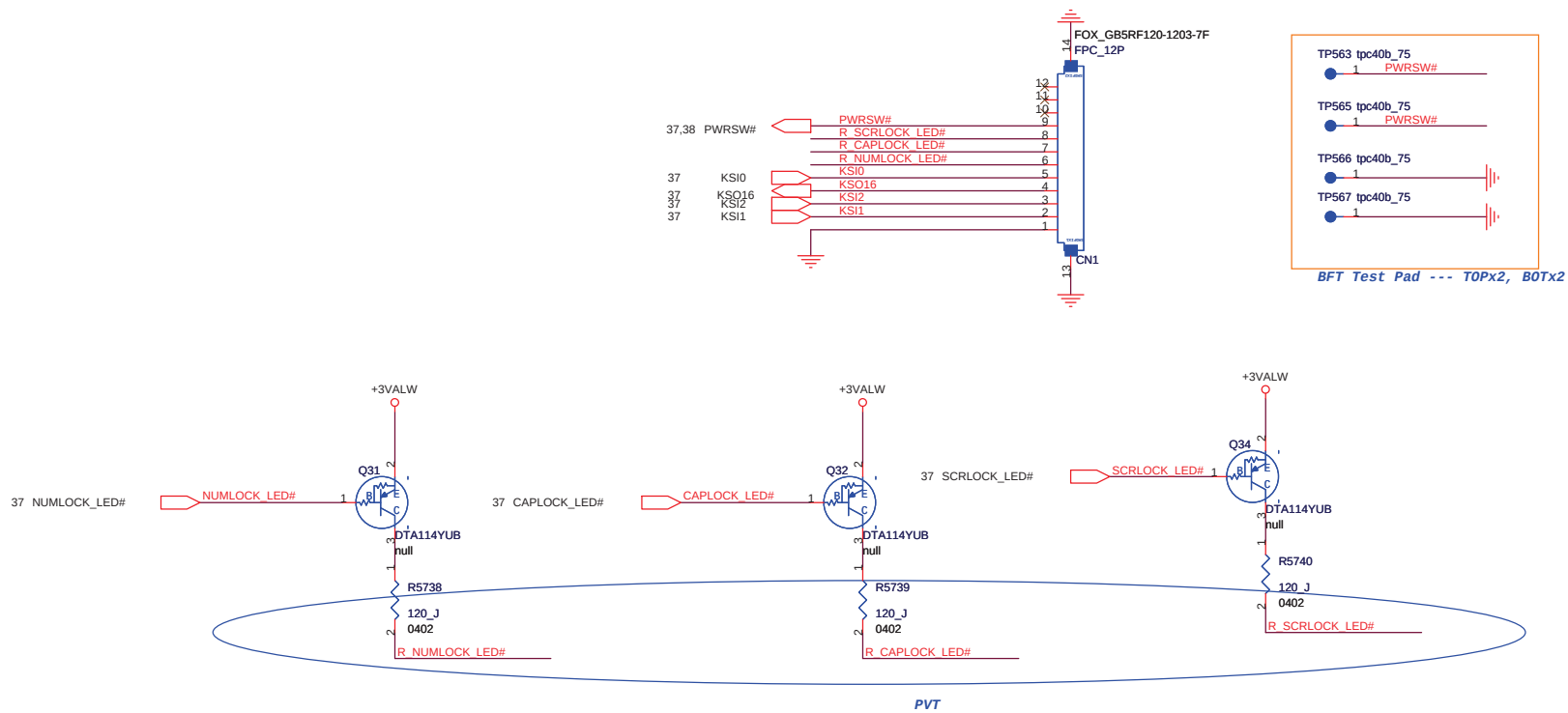


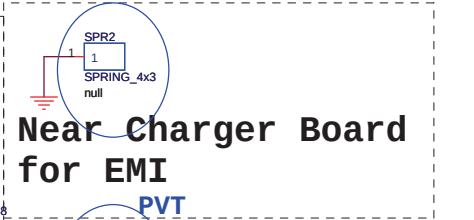
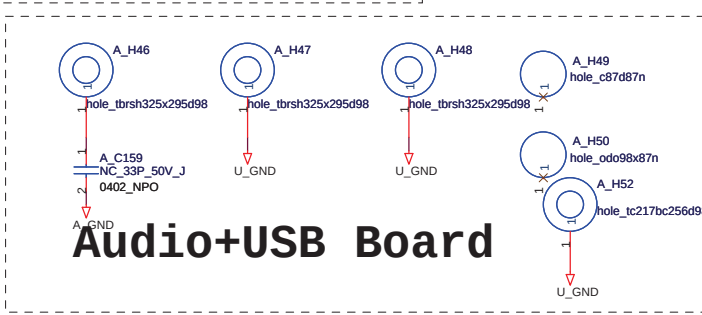
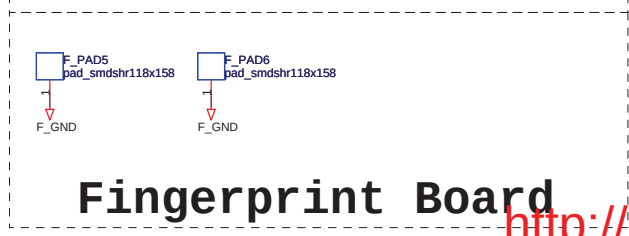
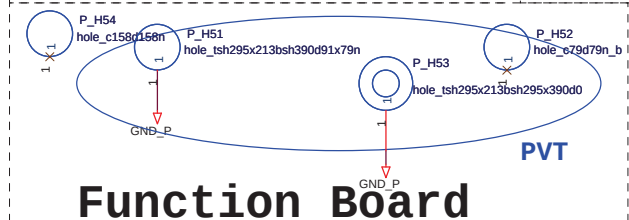
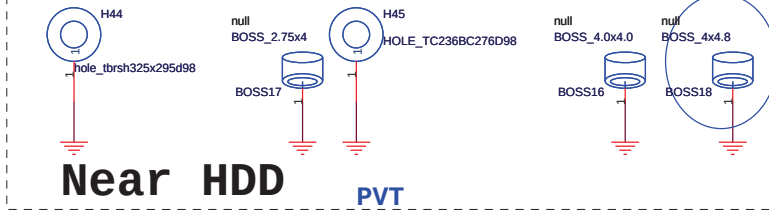
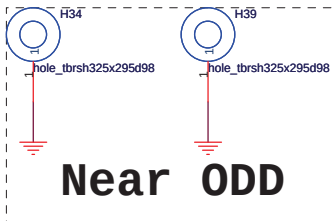
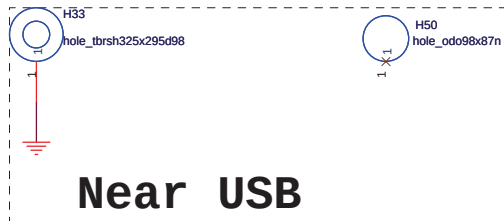
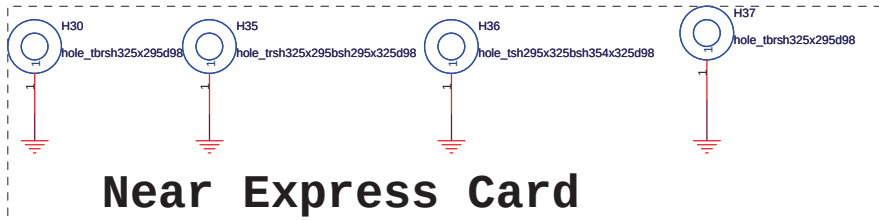
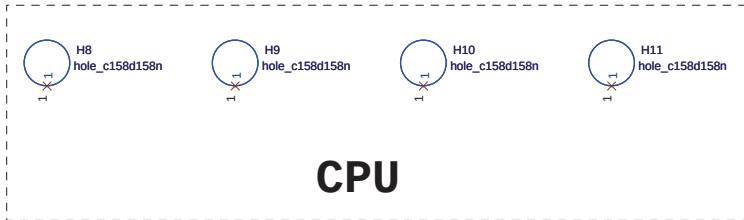
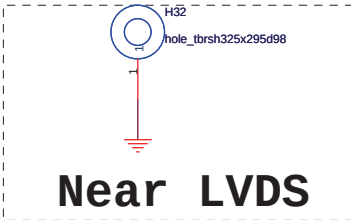
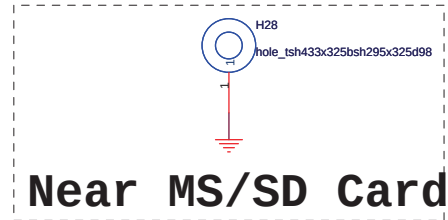
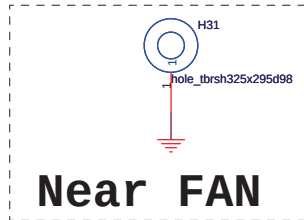
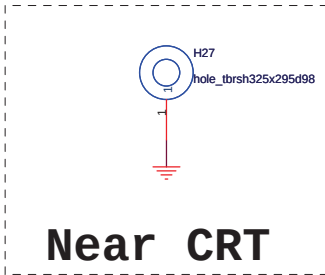
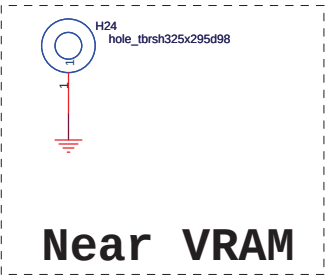
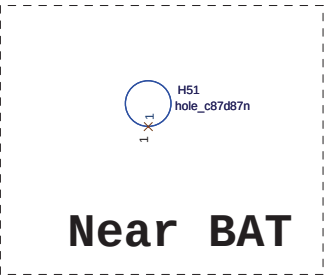
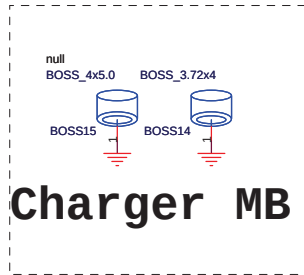
Bluetooth

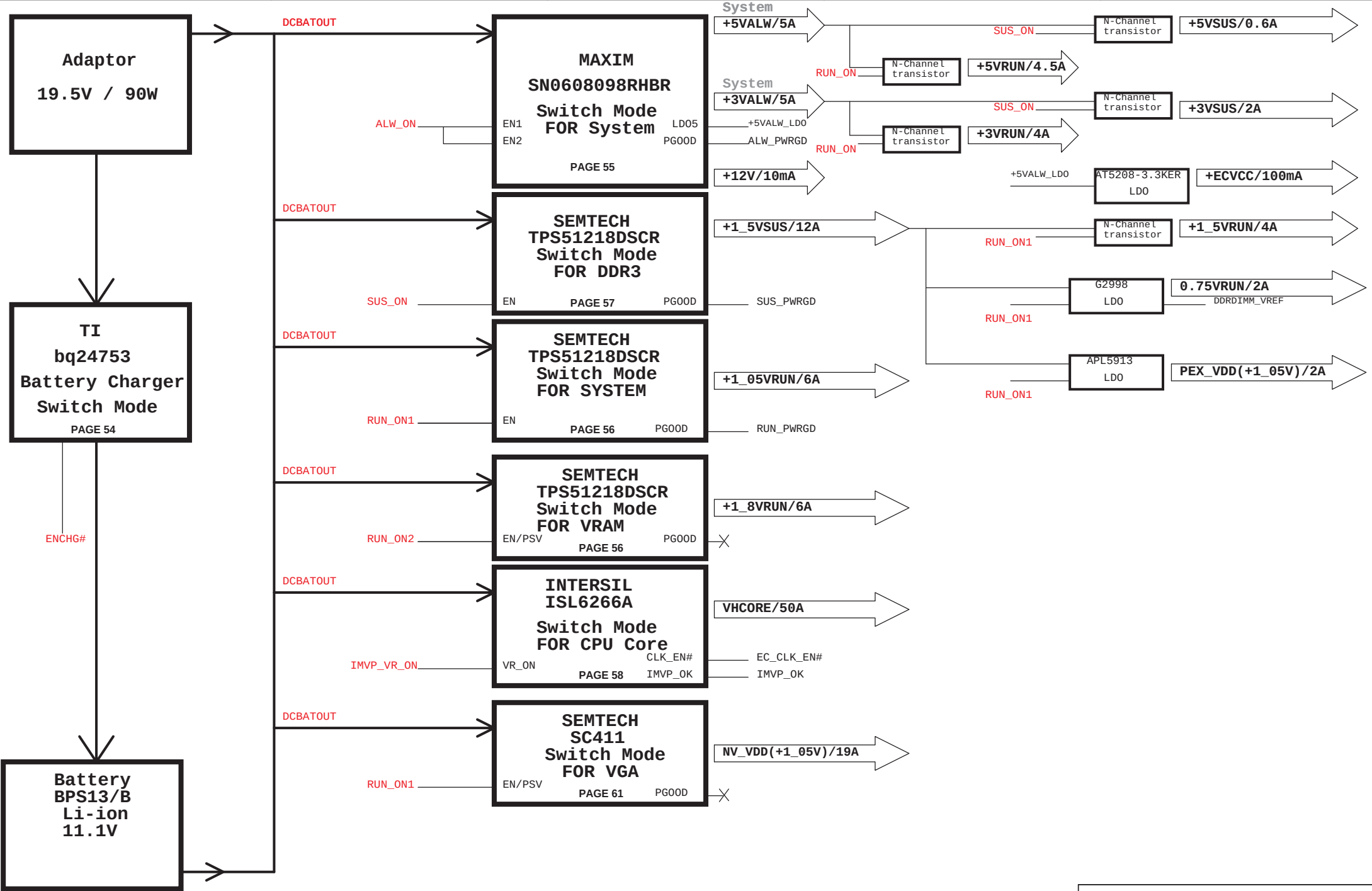


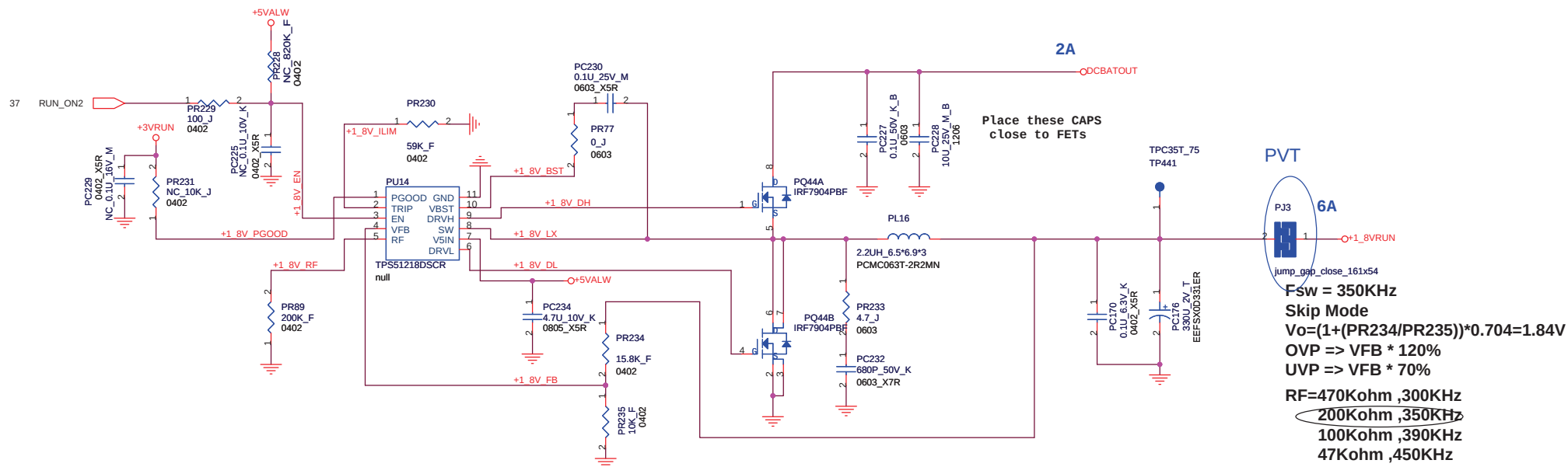


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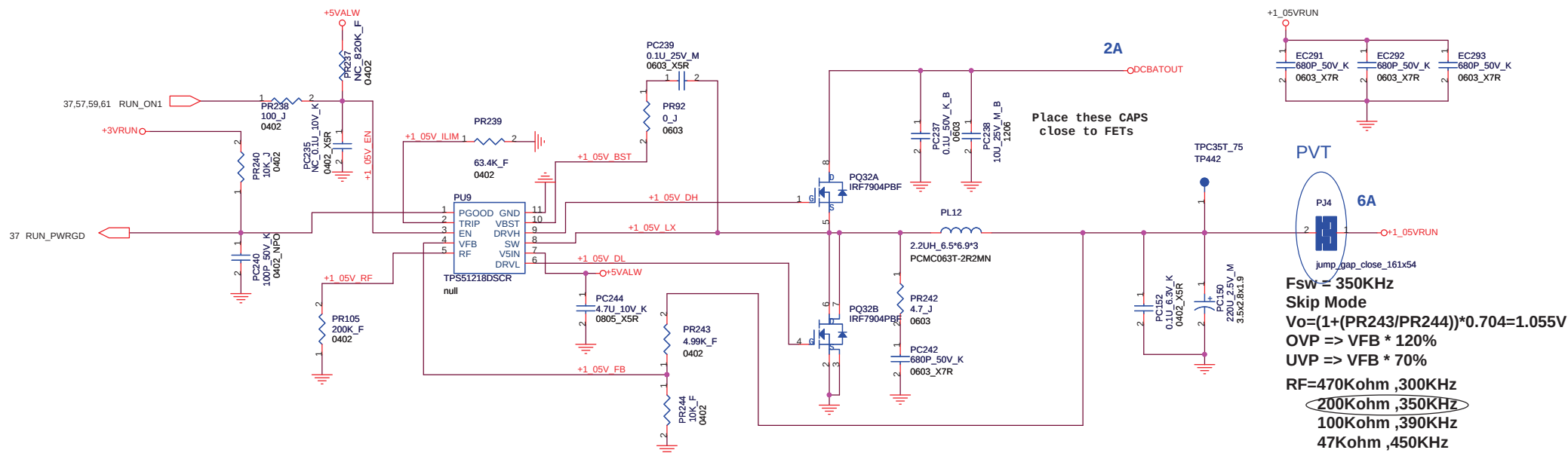


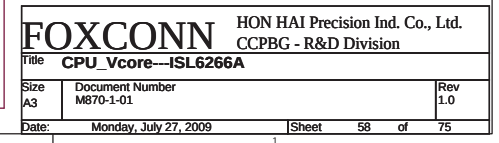


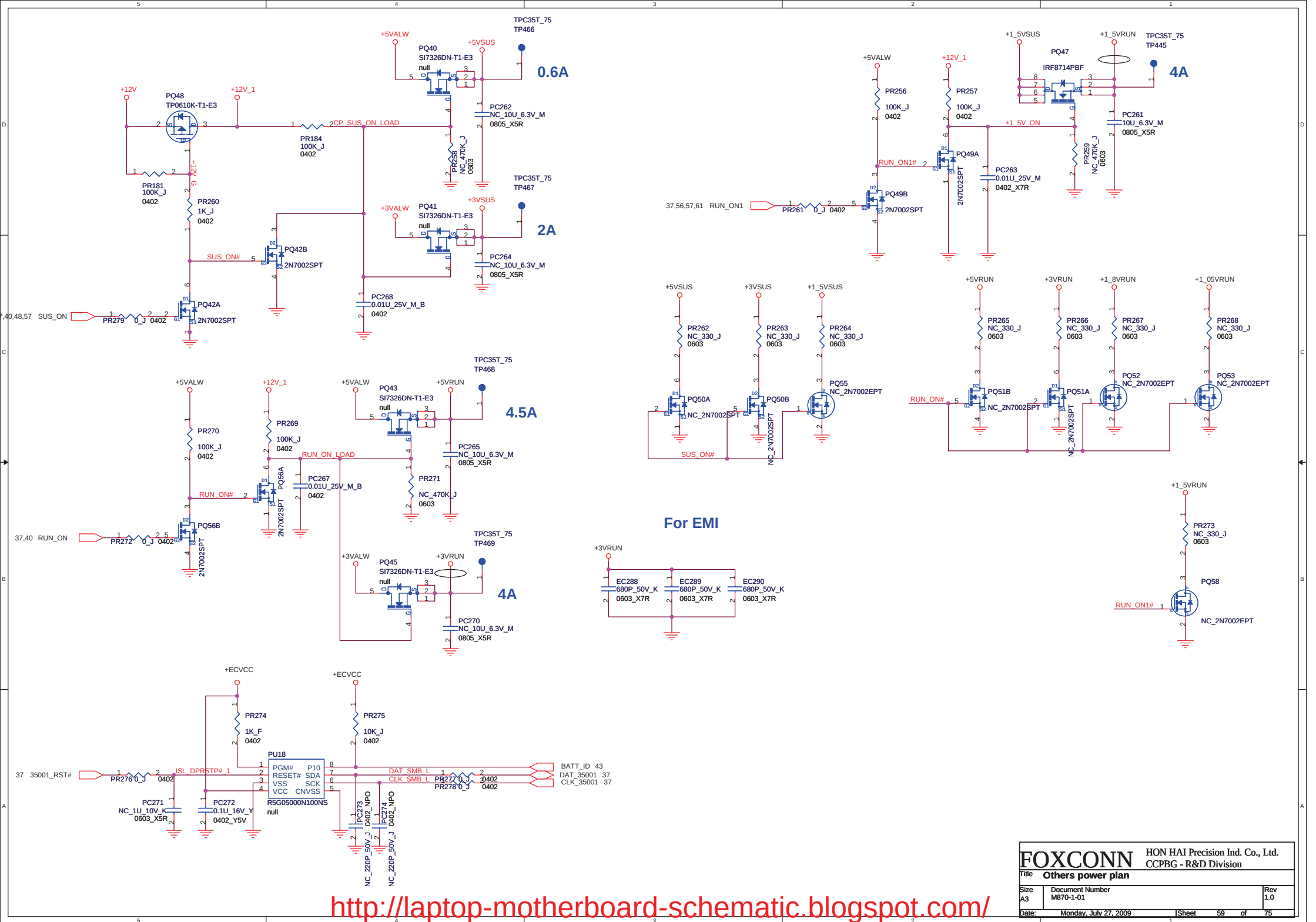


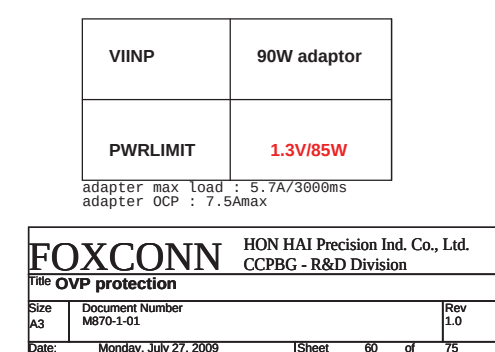


For EMI



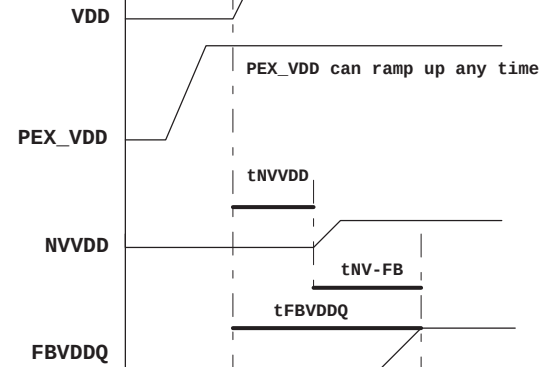




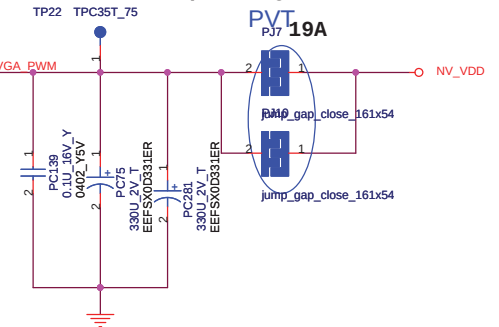


The ramp time for any rail must be more than 40 us
 $NVVDD \leq VDD(3.3V + 0.5V)$
 $FBVDDQ \leq VDD(3.3V + 0.5V)$

For EMI close PC140



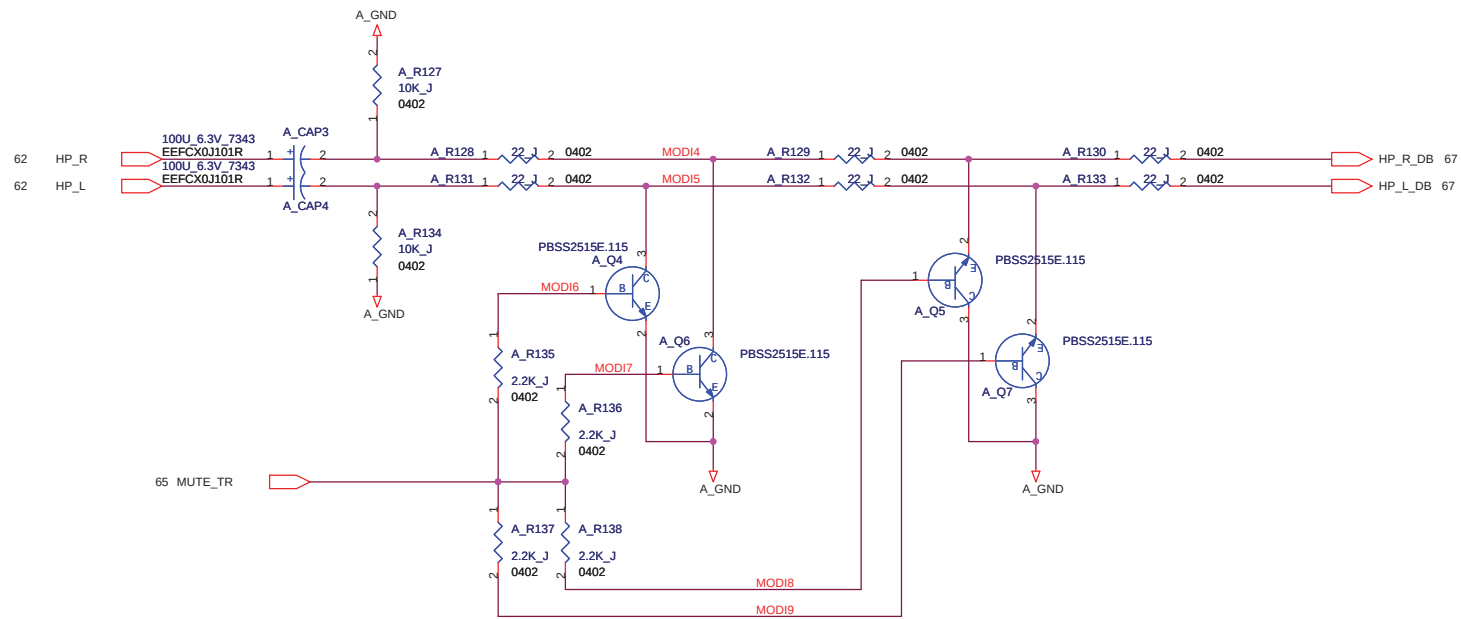
Recommended Power sequencing order

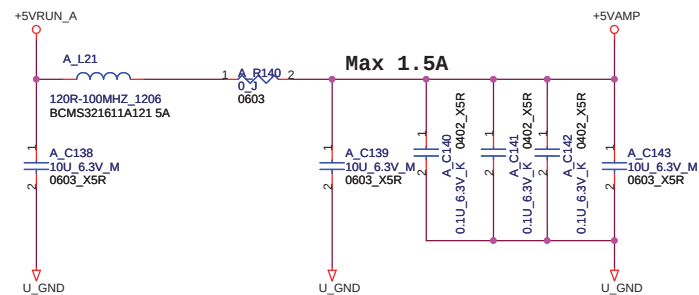


$V_o = (1 + (PR181/PR184)) * 0.5$
 $I_{oc} = (I_{trip} * R_{trip}) / R_{ds(on)} \Rightarrow (10\mu A * PR180) / R_{ds(on)}$
 Operating Frequency : 300KHz
 $OVP \Rightarrow V_{FB} * 116\%$
 $UVP \Rightarrow V_{FB} * 70\%$

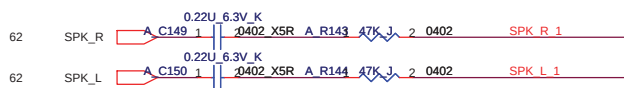
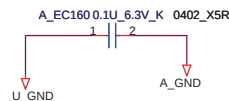
N10P-LP	I/O	Inter pull low	GPIO TABLE
PWRCNTL_0	0	Yes	GPU Voltage fix 0.85V

N10M-GS	I/O	Inter pull low	GPIO TABLE
PWRCNTL_0	0	Yes	GPU Voltage H:=1.00V GPU Voltage L:=0.85V

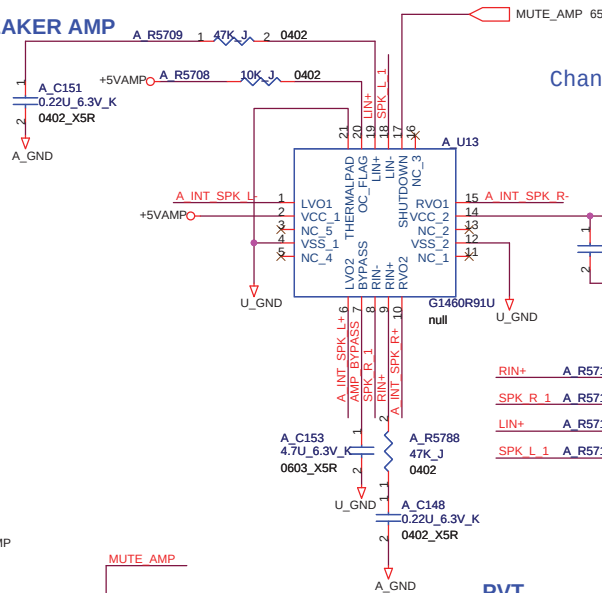




For EMI

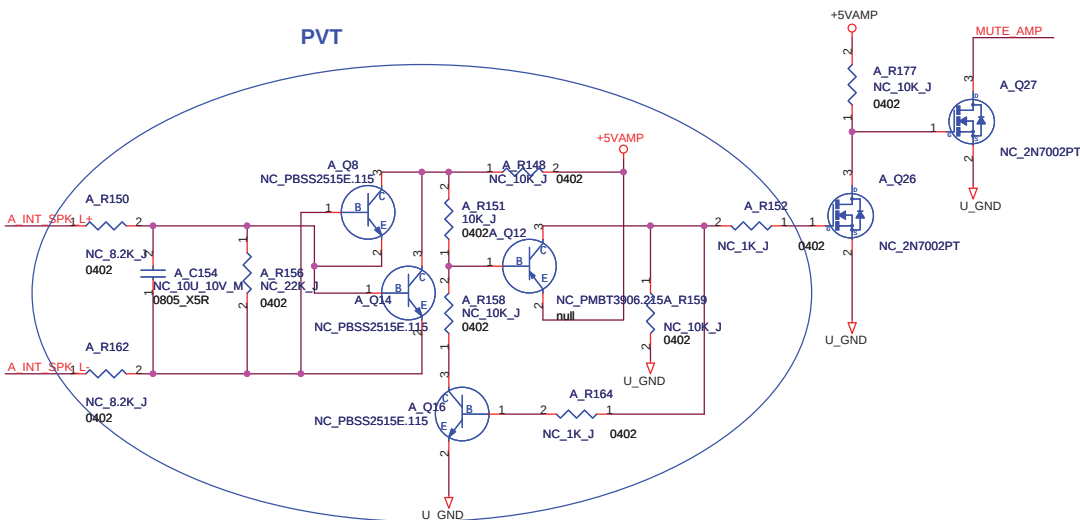


SPEAKER AMP

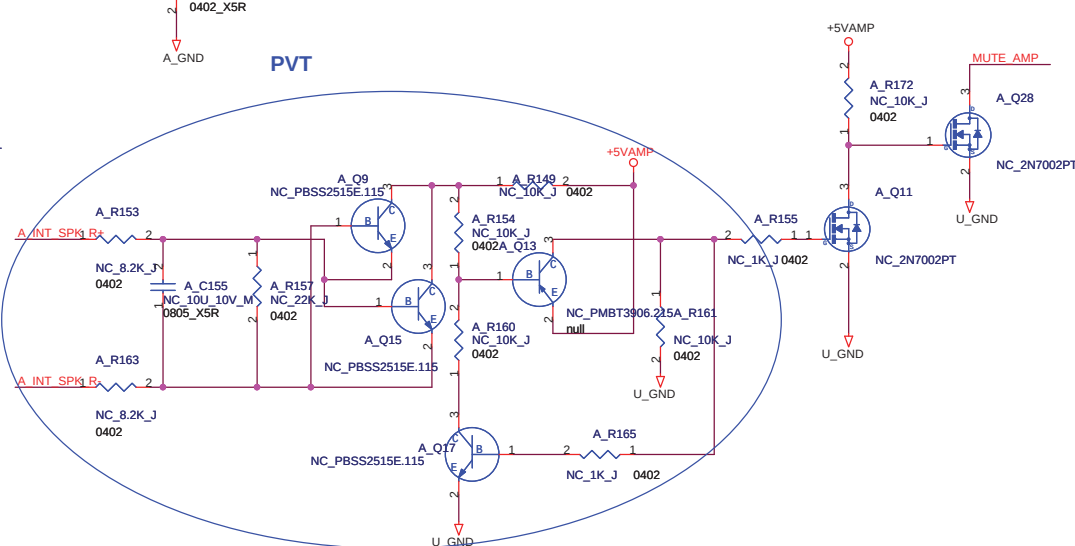


Change A_GND to U_GND from MOR 1/19

PVT



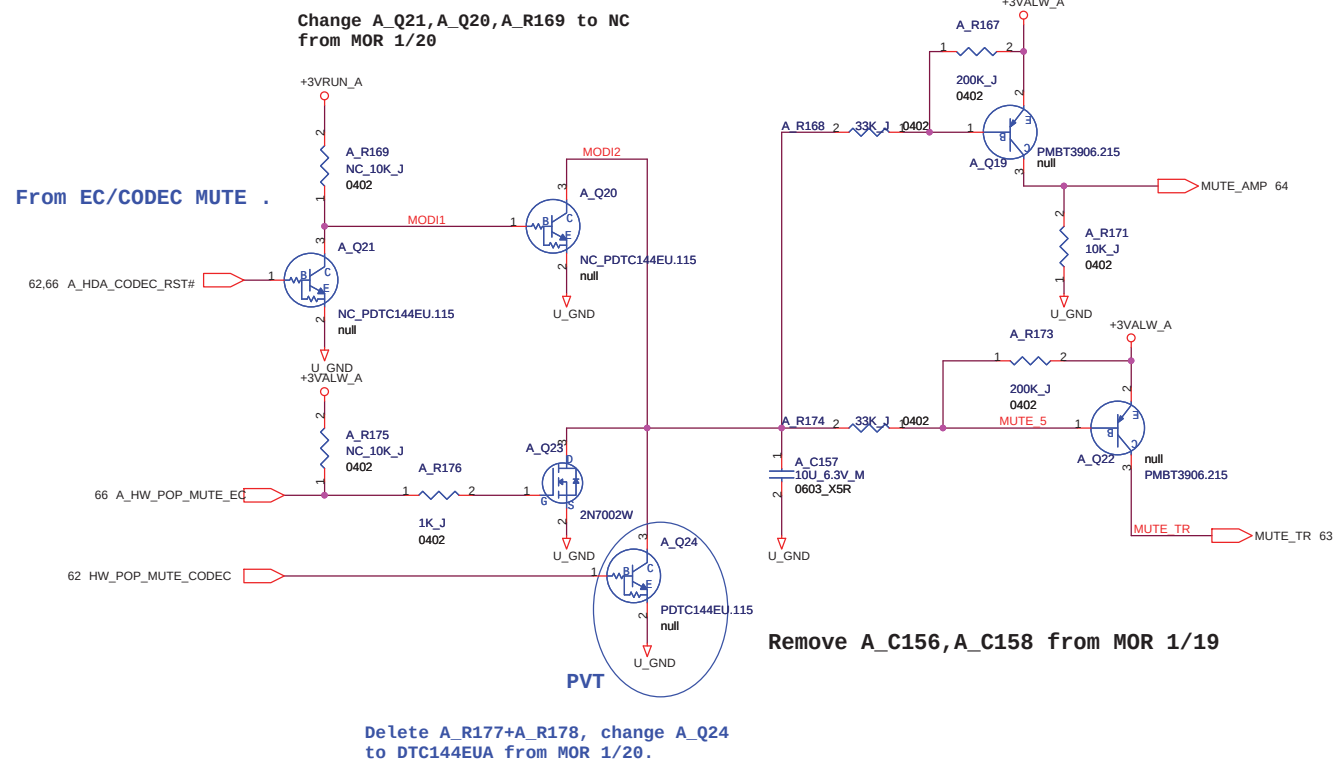
PVT

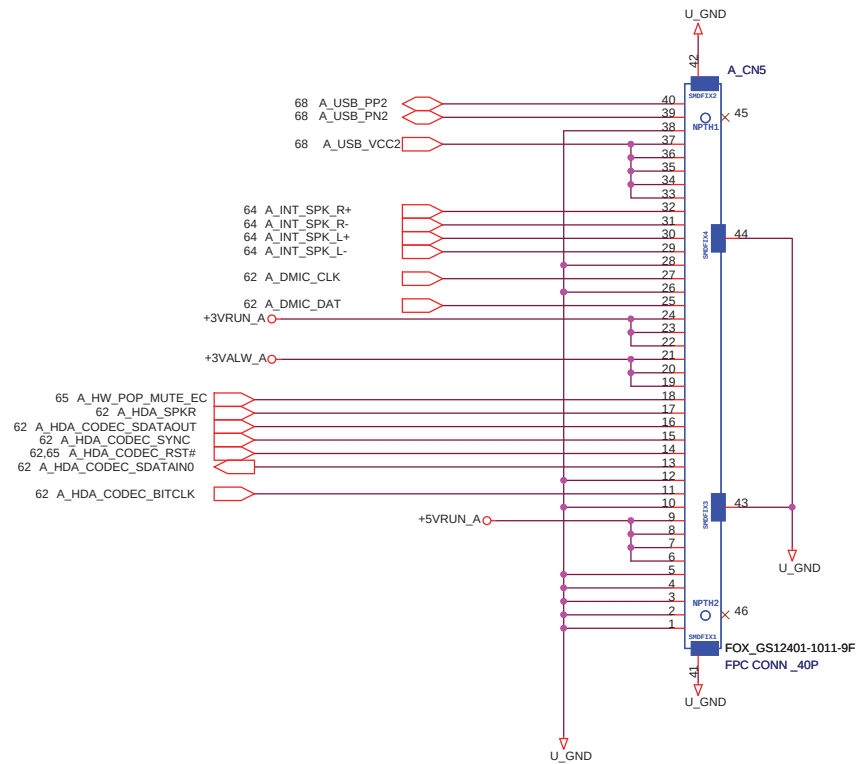


For Mor request, add the speaker cable short protection circuit

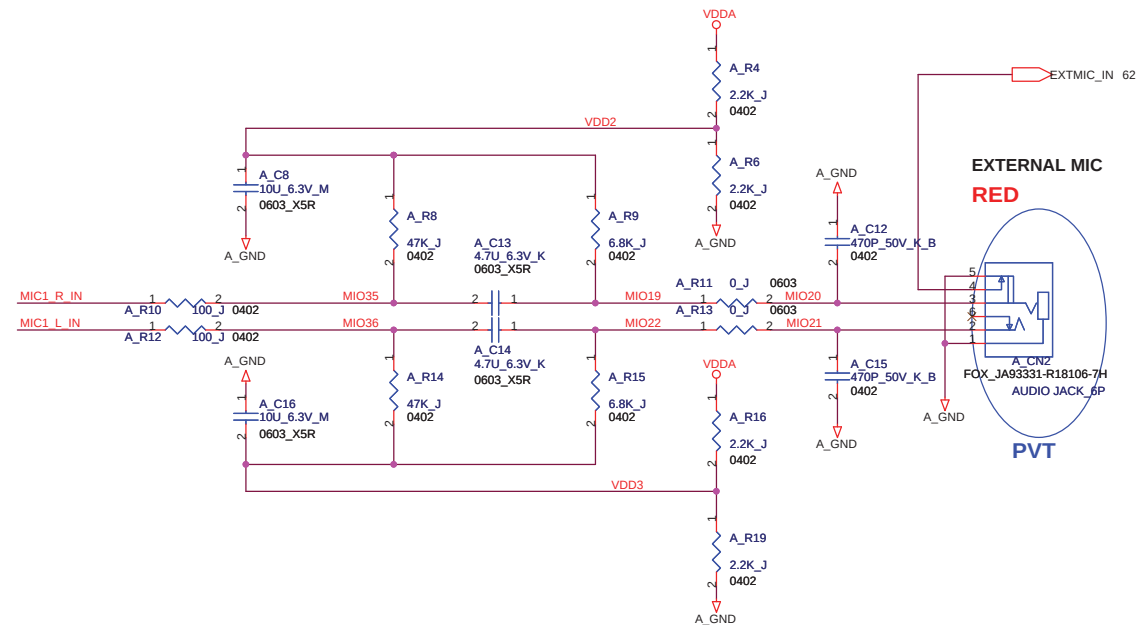
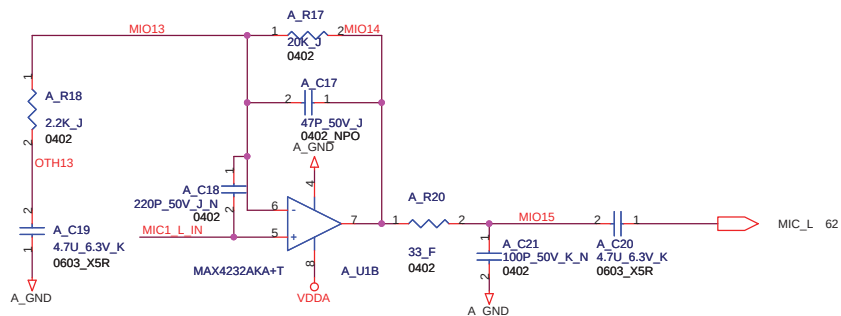
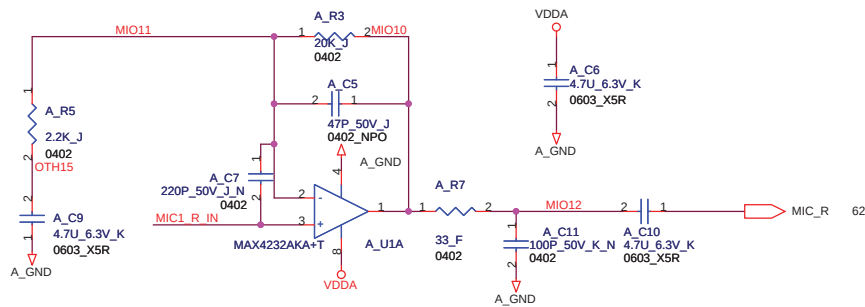
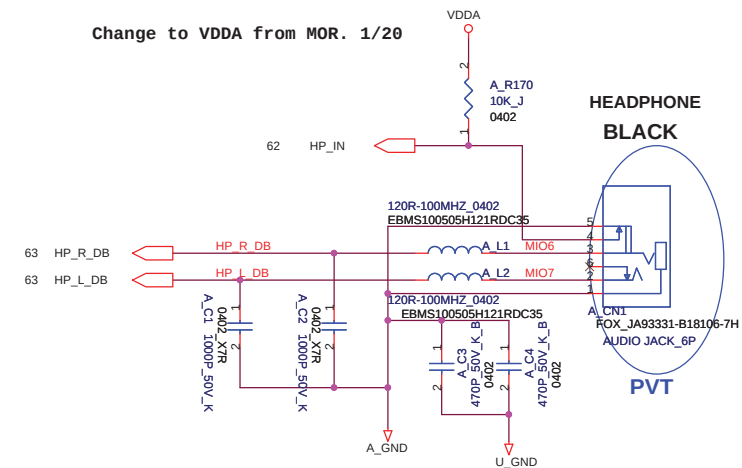
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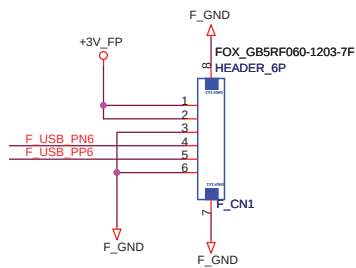
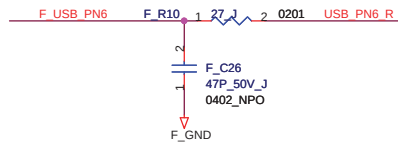
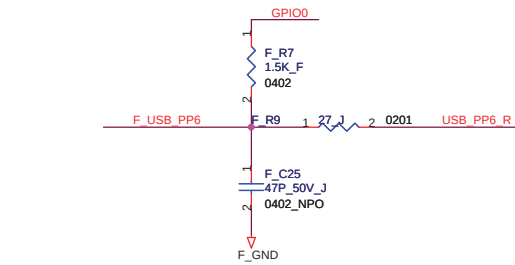
FOXCONN			HON HAI Precision Ind. Co., Ltd.
Title			CCPBG - R&D Division
Size	Document Number	Rev	
A3	M870-1-01	1.0	
Date:	Monday, July 27, 2009	Sheet	64 of 75



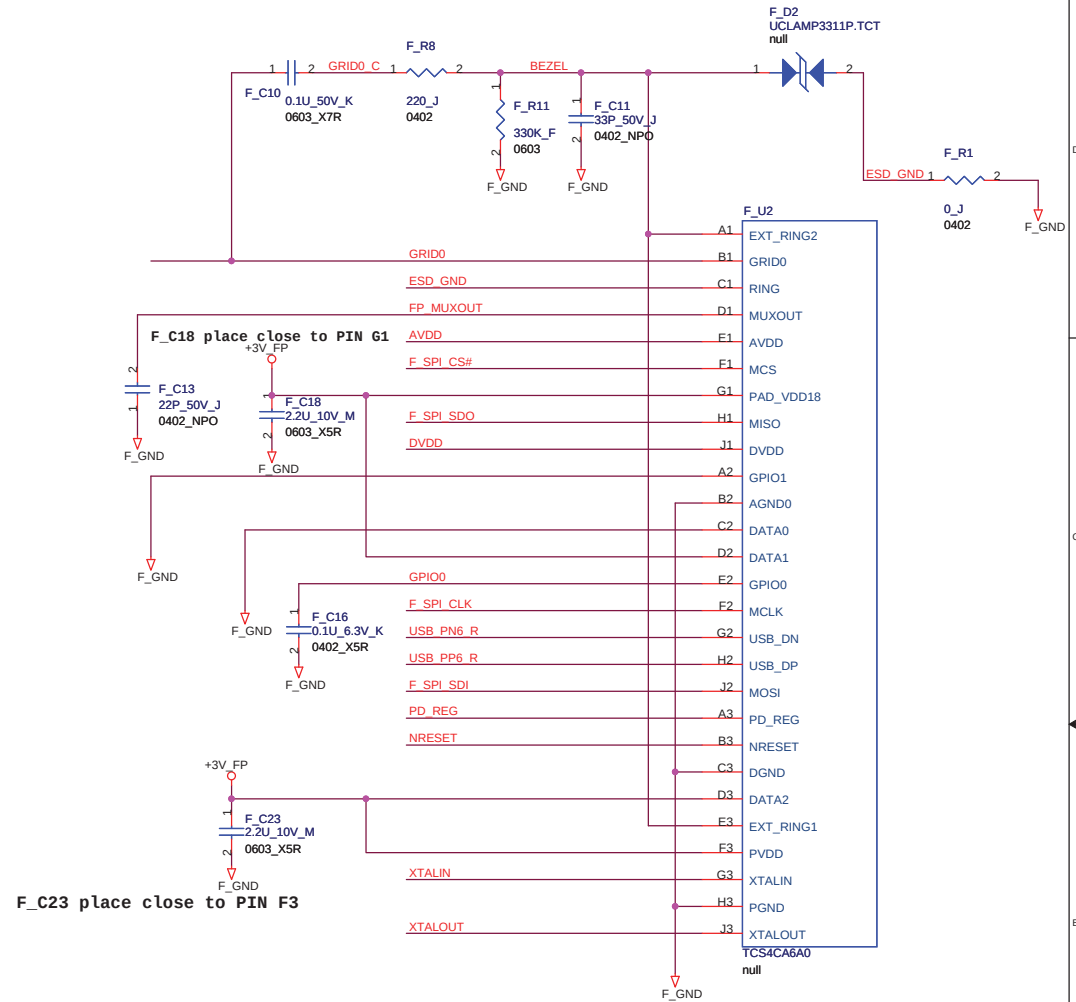
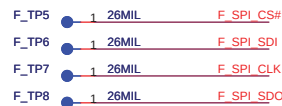
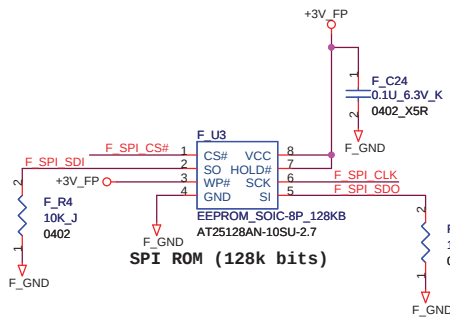
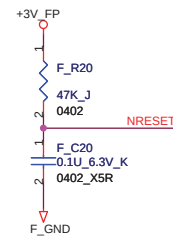
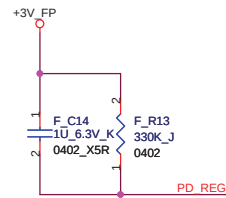
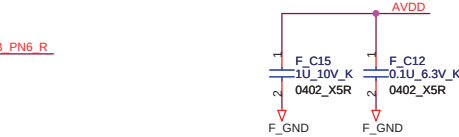


Change to VDDA from MOR. 1/20

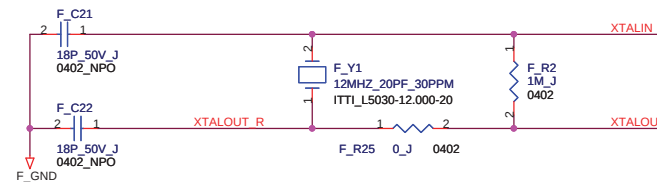


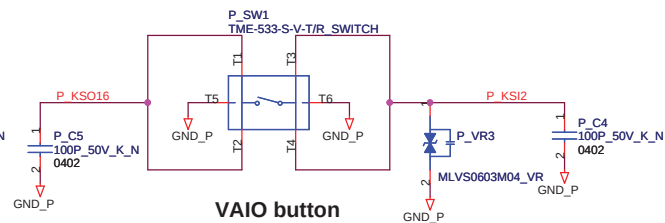
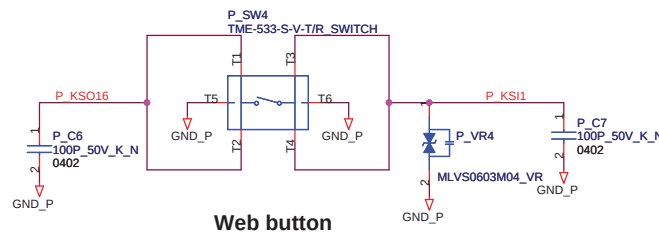
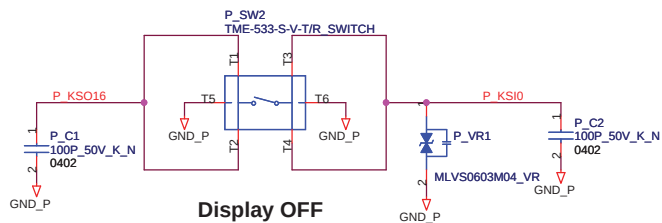
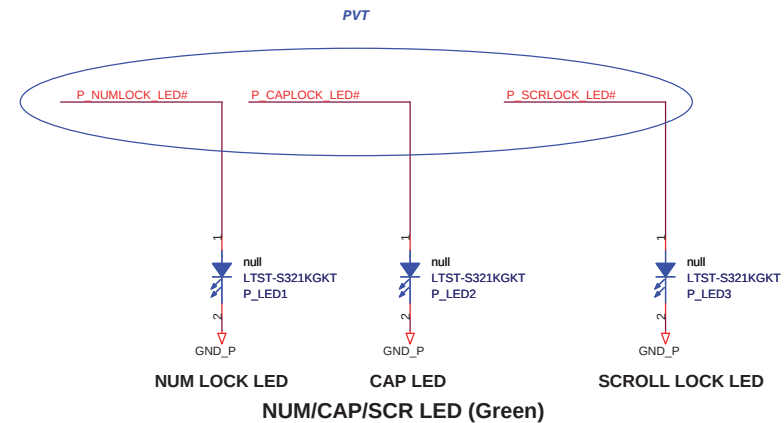
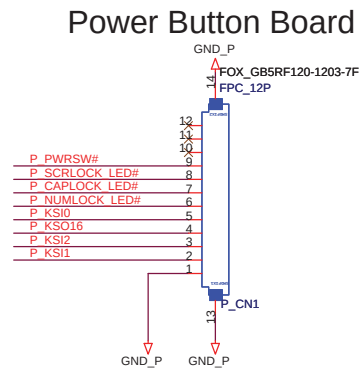
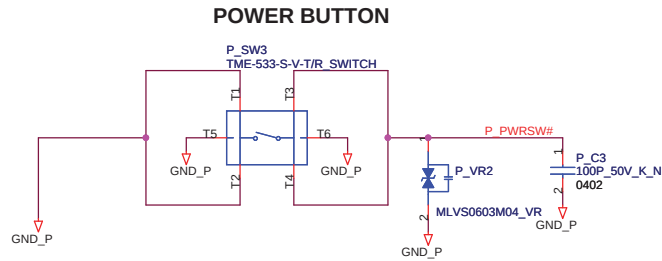


Fingerprint FTB CONN.



F_C23 place close to PIN F3





(2009/01/08)
P.37 RP41 pin swap for layout request.
P.31 RP1-RP4 pin swap for layout request.
P.30 Reserve R5693 for SW test od del SW1.
P.41 Change C5183 4.7u to 10u for FAE suggestion.
P.33 Change D4 footprint for SMT request.
P.34 Change D5,D6,D8 footprint for SMT request.
P.35 Change D7,D14,D16 footprint for SMT request.
P.37 Change D17,D18 footprint for SMT request.
(2009/01/09)
P.44 Change R200 from 150 ohm to 100K.C286 change to 0402.
P.50 Modify MS/SD LED circuit of active low schematic.
P.06 Del R547,R556 for FAE suggestion.
P.09,17 Change PCIE cap to 0402 size.
P.46 Add 0 ohm resistor for SD Data.
P.45 Add 0 ohm resistor for MS Data.
P.64 Change SPK AMP circuit.
P.41 Add C5252,C5253,C5254,C5255 for FAE suggestion.
(2009/01/10)
P.03 Add Test point for CPU side (TP34,TP38)
P.69 Change F_U3 to AT25128AN-10SU-2.7.
(2009/01/12)
P.37,43 Add LED control signal for MOR request.
P.64 Add A_R5708,A_R5709,A_R5710,A_R5711,A_R5712,A_R5713 for FAE request.
(2009/01/13)
P.18 Add C878 change L74 for demo circuit.
P.23 Remove R4813,R4802,R4803,R4804,C5127 from FAE.
P.20 Change C1390 to 1u.
P.16 Remove C1322
P.20 Change R5265 to 10K ohm from Design guide.
P.58 Add PC145 for power suggestion.
P.41 Change C5184,C5185 cap size to 0402.
P.69 Change F_C12,F_C16,F_C20,F_C24 size to 0402.
P.46 Change C1985 size to 0402.
P.70 Change P_LED1,P_LED2,P_LED3 to HT-170UYG for PE suggestion.
P.50 Change LED9 to HT-170UD,LED2,LED8,LED6 to HT-170UY for PE suggestion.
P.32 Change PCIE port, port3 for cardreader,port4 for Express from MOR suggestion.
P.50 Add Q59,Q60 for power and suspend LED control.
P.24 Add C5195,C5199 for DG.
P.15 RP36,RP34,RP33,RP38 pin3,4 swap for layout.
P.20 Change C5240 for PUR request.
P.24 Change C5243,C5246 for PUR suggestion.
P.30 Change C1264 for PUR suggestion.
P.69 Change F_C10 for PUR suggestion.
P.69 Change F_C28 size to 0402.
(2009/01/14)
P.37 Add R5708 for power request.
P.62 Add A_R117 and reserve A_C22,A_C23,A_CN3,change A_R116 for EMI suggestion.
P.50 Modify power and suspend LED schematic.
P.42 Change CN13 to LD2722F-S08L6 for ME request.
P.54 Change PCN1 to BP91071-B71E3-7F for ME request.
(2009/01/15)
P.62 Delete A_C112,A_R109.
P.43,66 Modify DB conector pin define.
P.21 Change R5269 value to stuff from MOR suggestion.

(2009/01/15)
P.31 {HDMI}Delete R515,R538 because double pull-high.
P.18/19 {VGA}Remove R5576,R5579,R5577,R5580
P.62 {Audio}Change A_R112 to 10K and add A_R142 from MOR request.
P.64 {Audio}Remove A_R150,A_R162,A_R153,A_R163.
P.65 {Audio}Remove A_R172 because have double resistor.
P.16 {VGA}Remove C5124.Add C1303 for DG.
P.22 {VGA}Remove R5300 from FAE suggestion.
P.17 {VGA}Add R5251 for N10P-Lp deivce ID 0x0A2A.
P.43 {LED}Move LED circuit to MB.
(2009/01/19)
P.55 {3V/5V}Add PR236,PR245,PC266,PC269 for EMI request.
P.62 {Audio}A_CN3 For EMI Request.
P.12 {Cantiga}Remove R211 from MOR request
P.30 {LVDS} Change L43 to 600R-100MHZ_0805 from MOR request.
P.37 {EC} Add 10K pull-high resistor for INST_ON_SW.
P.30 Change SW1 to HDS406-021E_SW-SMD12 for INST_ON_SW function.
P.45 {Cardreader} Add R818,C864 MOR request (For noise reduction).
P.45 {Cardreader} Change C489 to 1u MOR request.
P.46 {Cardreader} Change C1981 to X5R MOR request.
P.46 {Cardreader} Remove R5377 for MOR request.
P.65 {Audio}Remove A_C156,A_C158 from MOR request.
P.62 {Audio} Change A_R123 to 200K from MOR request.
P.64 {Audio} Change A_5709,A_5788 to 47K,A_C148,A_C151 to 1U from MOR request.
P.26 {VRAM} Add C23,C25,C26,C28 For 2.4GHz noise.
P.25 {VRAM} Add C30,C31,C32,C45 For 2.4GHz noise.
P.16 {VGA} Add C46,C47,C48,C49,C50 For 2.4GHz noise.
P.11 {Cantiga} Add C21,C53,C54 For 2.4GHz noise.
P.14/15 {DDR3} Modify to DDR3 circuit from MOR request.
(2009/01/20)
P.60 {OVP} Remove PD10 from MOR request.
P.08 {Cantiga} Add U43, C820, R568,R582 to solve SUS_PWRGD level drop issue.
P.37 {EC} EXT_DEV_SENSE change to GPIO33 from EC request.
(2009/01/23)
P.45,46 {Cardreader} Change CN35,CN16 connector from ME request.
P.34 {ICH9} Add R5714 for GPU ES sample.
P.17 {VGA} Change R5251 to 15K,Add R5716 15K for FAE request.
P.38 {EC} Add 1K pull-high from Vendor suggestion.
P.43 {LED} Change LED power plan from 3V to 5V from MOR suggestion.
P.17 {VGA} Change R5249 to 45.3K.
(2009/02/05)
P.38 {SPI} Change U12 to MX25L1605DM2I-12G.
P.21 {VGA} R5269 to no stuff from MOR request.
P.22 {VGA} Reserve R5717 from MOR request.
P.30 {LVDS} Change U29.1 to INV_EN from MOR request.(LCD timing)
P.21 {VGA} Reserve R5718(+3VRUN) for IOVDD backup from MOR.
(2009/02/16)
P.42 {SATA} Change CN13 HDD CONN from ME request.
P.21 {VGA} Add C5138 for design guide v03.
P.31 {HDMI} Delete LEVEL SHIFTER circuit from MOR.
P.56 {+1_8V/+1_05V} Change PL12 to PCMB053T-1R5MS for Power request.
P.45 {Cardreader} Change PCIE Head connector.
P.43,69 {Fingerprint} Change Fingerprint CONN to 6pin for layout sapce.

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(2009/02/19)

P.24 {VGA Power} Delete C5246,C5207,C5210
Add C6038,C6039,C5201,C6040,C6041 from DG v04.
P.25 {VRAM} Delete R5336,R5720,R5344,R5721 Add R5724,R5725
from DG v04.
P.26 {VRAM} Delete R5350,R5723,R5351,R5722 Add R5726,R5727
from DG v04.
P.18 {VGA} Delete C876,C6018,C6016,C6017,C6019 for M and L board.
for N10M.
P.18 {VGA} Delete C879,C6012,C6006,C6010,C6011 for M and L board.
for N10M.
P.21 {VGA} Change L70,L77 to 180R from DG v04.
P.21 {VGA} Change L75 to 220R from DG v04.
P.21 {VGA} Change C5132 to 1U from DG v04.
P.20 {VGA} Change C5200 to 1U and add C5202 from DG v04.
P.20 {VGA} Change L155 to 220R from DG v04.
P.20 {VGA} Add C1395,C1397,C1396 from DG v04.
P.14 {DDR} Change CAP13,C222,C219,C196,C221 to stuff.
P.15 {DDR} Change C202,C179,C197 to stuff.
P.54 {Charger} Reserve PQ14,PD9 and PR34.
P.41 {LAN} Change L5 to LFE9249-R for PUR request.
P.70 {Power Board} Change P_SW1-P_SW4 to TME-533-S-V-T/R_SWITCH
from PUR request.
P.38 {SPI} Change R269 to 8.2K from FAE.

(2009/02/23)

P.50 {LED} Change LED2,LED6,LED9 for ME request.
P.49 {BT} Change BOSS11,BOSS12 to A40M20-31BS for ME request.
P.52 {HOLE} Change BOSS14 to A40M20-40BS for ME request.
P.39 {WLAN} Change BOSS1,BOSS2 to A40M20-30BS for ME request.
P.39 {WLAN} Change SW4 to 1BS007-12120-002-7F fro ME request.
P.39 {WLAN} Change CN21 to AS0B226-S52N-7F fro ME request.
P.68 {USB/DB} Change A_CN7 to UB11123_R1201_7F for ME request.
P.16 {VGA} Change L73 to 100NH from DG v04.
P.18 {VGA} Change L74 to 300R from DG v04.
P.50 {TP} Change F7 to 6V-0.25A_1206 from MOR request.
P.21 {VGA} Change L71 to 300R from DG v04.
P.20 {VGA} Change L76 to 300R from DG v04.
P.20 {VGA} Change L81,L83 to 100NH from DG v04.
P.42 {HDD} Change CN13 to LD2522H-S02 from ME request.
P.42 {ODD} Change CN25 to LN27133-F408-9F from ME request.

(2009/02/24)

P.69 Change F_D2 to UCLAMP3311P.TCT.
P.22 {VGA} Delete R5297,R5296.
P.47 {CAM} Change U41 to MAX4789EUK+T.
P.31 {HDMI} Delete RP1,RP2,RP3,RP4 from FAE suggestion.
P.24 {VGA} Change C6040,C6041 to 0.22U_6.3V_K from PUR suggestion.

(2009/02/25)

P.18 {VGA} Remove U56.J27 reserve circuit from FAE suggestion.
P.30 {LVDS} Change CN18 to GS12401-1011-9F from ME request.
P.54 {Charger} Change PF1 to 24V-7A_1206 from power request.
P.52 {HOLE} Delete BOSS3,BOSS13, add BOSS15 from ME request.
P.69 {FP} Delete F_BOSS1 from ME request.
P.64 {Audio} Change A_R5710,A_R5711,A_R5712,A_R5713 to 105K
from FAE suggestion.
P.22 {VGA} Add R5728,R5729 from FAE sguusetion.
Because use external thermal sensor.

(2009/02/26)

P.45 {Cardreader} Change CN11 to UV31413-RU82P-7H from ME request.
P.49 {BT} Change CN32 to QT510106-312H-7H from ME request.
P.29 {CRT} Change CN2 to DZ11A91-MB229-9F from ME request.
P.48 {USB} Change CN9,CN12 to UB111M3-CAGS4-7H from ME request.
P.42 {HDD} Change CN13 to LD2722F-SRYL6 from ME request.
P.41 {LAN} Chnage L5 to LG-2413S-1 from PUR suggestion.
P.47 {CAM} Change CN17 to HS6204E. Because move MIC to Audio board from MI request.
P.62 {Audio} Change A_CN3 to HS6202E from ME request.
P.47 {CAM} Delete L65,L63,C779,C780 from EMI request.
P.62 {Audio} Add A_L27,A_L28,A_C159,A_C160 from EMI request.
P.17 {VGA} Change R5251 to 15K from FAE request.

(2009/02/27)

P.20 {VGA} Change L154 to 33ohm from DG v04.
P.47 {CAM} Remove R7,R4. Add R8 from MOR suggestion.
P.11 {Cantiga} Change C21 value to NC from MOR request.
P.15 {DDR3} Add C59 from MOR request.
P.16,23 {VGA} Change L73,L81,L83 to TL160808-R10K.
P.18 {VGA} Add C6042 from MOR request.
P.27 {VRAM} Remove C14,C15 from MOR request.
P.28 {VRAM} Remove C16,C17 from MOR request.
P.39 {WLAN} Reserve R5370 from MOR request.
P.29 {CRT} Change R83,R72,R64 to 75ohm from MOR suggestion.
P.20 {VGA} Remove R5262,R5263,R5264 from MOR suggestion.

(2009/03/02)

P.39 {WLAN} Change BOSS1,BOSS2 footptint.
P.14 {DDR} Change C92 to 22P for RE suggestion.
P.14,15 {DDR} Remove C214,C200, because had same solution.
P.52 {HOLE} Modify F_PAD5,F_PAD6 PAD size from EMI request.
P.42 {HDD} Remove R5712, add open jump.
P.42 {ODD} Remove R5713, add open jump.
P.54 {Charger} Change PCN2 to GS73041-10272-7F from ME request.
P.21 {VGA} Change C5132,C5236 size to 0402 from DG v04.
P.54 {Charger} Change PCN1 to BP91071-B71E3-7H from ME request.

(2009/03/03)

P.62 {Audio} Change A_CN3 to HS8202E from ME request.
P.52 {HOLE} Add P_R4,P_C8(reserve) for EMI request.
P.50 {LED} Change LED2,6 to L-C170KRCT-FX for SPEC.
P.50 {LED} Change LED9 to HT-191UD for SPEC.
P.70 {Function} Change P_LED1,P_LED2,P_LED3,P_LED11 to L-C170KGCT-FX for SPEC.
P.39 {WLAN} Change LED3 to L-C170KGCT-FX for SPEC.
P.50 {TP} Chnage CN34 to GB5RF060-1203-7F for ME request.
P.39 {WLAN} Change SW4 to SSSS811101_SW-SMD7 from ME request.

(2009/03/04)

P.50 {TP} Add R5733-R5740 for co-lay 2 TP vendor.
P.14 {DDR} Change CN29 to AS0A626-U2SN-7F from ME request.
P.48 {USB} Add L156 for EMI suggestion.
P.61 {VGA} Change PR87 to 7.15K for power request.
P.52 {HOLE} Add BOSS16 for ME request.

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(2009/03/09)

P.48,43 {USB} Change F1,F11,F12 to 6V_2.6A_1812.

P.62 {Audio} Change A_R118,A_R119,A_R120,A_R121,A_C116,A_C117,A_C119,A_C120,A_C127,A_C133,A_C131,A_C136 to 0402 size.

P.62,67 {Audio} Change A_C137,A_R119,A_R125,A_R5,A_R18 to 0402 size.

P.63 {HP} Change A_R127,A_R134,A_R128,A_R129,A_R130,A_R131,A_R132,A_R133,A_R135,A_R136,A_R137,A_R138 to 0402 size.

P.37 {EC} Change R476,R487,R484,R76,R210,R437,R479,R447,R432,R173,R197,R203,R124,R75,R442,R440,R477,R436,R431,R435,R613,R475,R629,R444 to 0402 size.

P.34 {ICH9} Change R302,R295,R563,R575,R574,R578,R320,R319,R271,R272,R337,R331,R334,R576,R309,R294,R300,R306,R298,R303,R316,R338,R577,R573,R332,R555,R562,R297,R322,R296,R567,R54,R540,R541,R299,R321,R305,R315 to 0402 size.

P.06 {CLK} Change R288,R283,R542,R537,R536,R545,R277,R553,R534,R276,R552,C357,C377,C369,C370,C383,C386 to 0402 size.

P.64 {SPK} Change A_C145,A_C140,A_C141,A_C142 to 0402 size.

P.54 {Charger} SWAP PD2 Pin1.2 for layout.

P.12 {Cantiga} Change R208,C234,C346,C320,C287,C316,C326,C328,C313,C298 to 0402 size.

P.06 {CLK} Change R544,R619,R620,R621,R543,R550,R546,R551,R549,C384,C382,C355,C375,C385,C352,C376,C387,C356 to 0402 size.

P.32 {ICH9} Change R53,R307,C449,C450,C727,C728,C706,C702,C729,C730 to 0402 size.

P.69 {FP} Change F_R9,F_R10,F_R20,F_R1,F_R25,F_R3,F_R26,F_R4,F_C12,F_C20,F_C24,F_C16 to 0402 size.

P.65 {Audio} Change A_R166,A_R171,A_R169,A_R175,A_R176 to 0402 size.

P.67 {HP} Change A_R7,A_R20,A_R170 to 0402 size.

P.08 {Cantiga} Change R268,R195,R286,R181,R130,R193 to 0402 size.

P.33 {ICH9} Change R101,R610,R318,R564 to 0402 size.

P.67 {MIC} Change A_R17,A_R3 to 0402 size.

P.65 {MUTE} Change A_R174,A_R168,A_R167,A_R173 to 0402 size.

P.38 {FLASH} Change R233 to 0402 size.

(2009/03/10)

P.55 {3V/5V} Change PU11 to SN0608098RHBR for power request.

P.55 {3V/5V} Change PC216 to 1U for power request.

P.54 {Charger} Add 2 test point for BFT.

P.43 {Audio} Move D-MIC and SPK circuit to MB for ME request.

P.43.66 {Audio} Change CN37 to 40 pin for ME request.

P.49 {BT} Delete R909 from MOR suggestion.Because Vespa is used only UGPZ9.

(2009/03/11)

P.46 {SD} Change U18 to BD2055AFJ-E2 for VEDS spec.

P.50 {TP} Change R529 value to stuff.

P.43,66 {Audio} Modify Audio connector pin define for layout.

(2009/03/12)

P.52 {HOLE} Add A_C159 for EMI request.

P.31 {HDMI} Delete U128, add U130 for low cost solution.

(2009/03/13)

P.29 {CRT} Change Q5,D1,R627,R284 value to no stuff from MOR request.

P.29 {CRT} Add R292 from MOR request.

P.37 {EC} Change C616 value to no stuff from power request.

(2009/03/16)

P.43,66 {Audio} Change Audio BTB connector pin define for EMI suggestion.

P.52 {HOLE} Change H45 for ME request.

P.42 {HDD} Change CN13 to LD2722F-SRVL6 from ME request.

(2009/03/17)

P.64 {SPK} Change cable short circuit from A_GND to U_GND.

P.50 {TP} Delete R5733-R5740 for remove co-lay 2 TP vendor.

P.64 {SPK} Change A_R5710,A_R5711,A_R5712,A_R5713 to 75K from FAE suggestion.

(2009/03/18)

P.50,70 {LED} Move Power & suspend LED to MB for ID modify.

P.54 {Charger} Change PCN1 to BP91071-B31E3-7H from ME request.

P.52 {HOLE} Add A_H49,A_H50 for ME request.

P.70 {LED} Change P_LED1,P_LED2,P_LED3 to L-S110KGCT-FX from ME request.

P.50 {TP} Change SW2,SW3 SKHMQKE010_SW-SMD5 from ME suggestion.

P.52 {HOLE} Delete P_PAD1,P_PAD2,P_PAD3,P_PAD4 for EMI request.

(2009/03/19)

P.52 {HOLE} Change BOSS14,BOSS15 from ME request.

P.49 {BT} Change U45 to AT5208-3.3KER.

P.50 {TP} Change R530 to stuff,R529 to no stuff from MOR request.

P.64 {SPK} Change A_Q10,A_Q11 to 2N7002PT and add A_Q27,A_Q28,A_R172,A_R177.

P.65 {MUTE} Delete A_Q18,A_R166 for MUTE_AMP high active of AMP.

(2009/03/20)

P.52 {HOLE} Delete A_C159 from EMI suggestion.

P.52 {HOLE} Change BOSS15 to BOSS_3.72x4 from ME request.

P.31 {HDMI} Change CN31 to QJ1119L-NT10-4H from ME request.

P.04 {CPU} Reserve C6047 for H_DPRSTP#.

(2009/03/23)

P.22 {VGA} Delete R5728,R5729 because double pull-high.

P.38 {EC} Move R269 to SPI_ROM_CS# signal of EC side.

P.16 {VGA} Change C571,C569 value to no stuff. because control IC have 22uF.

P.14 {DDR3} Change CAP13 to no stuff.

P.54 {Charger} SWAP PD2 pin1,2 for layout request.

P.30 {LVDS} Add CN18.32 to GND.

P.17 {GPU} Change R5689 to 24.9K from DG v04.

P.52 {HOLE} Reserve A_C159 to A_GND from EMI suggestion.

P.69 {FP} Change F_R9,F_R10 to 0201 size for layout space issue.

(2009/03/24)

P.52 {HOLE} Delete SPR1 for EMI request.

(2009/03/25)

P.19 {VGA} Change R5256,R5257 to 56.2 and 27 ohm from N10M PUN modify.

(2009/03/27)

P.50 {TP} Change R529 to stuff,R530 to no stuff for new TP power.

P.08 {Cantiga} Change C820 to Y5V.

P.57 {1.5V_0.75V} Change PC250 to no stuff.

P.59 {Others} Change PC262,PC264,PC265,PC270,PR262,PR263,PR264,PQ50,PQ55,PR265,PR266,PQ51 to no stuff.

P.29 {CRT} C577,C592,C583,C584 to no stuff.

P.30 {LVDS} Delete L43,Add R5731 and change R394 to no stuff.

P.41 {LAN} Delete L152,Add R5733.C5164 change to 10U.

P.42 {SATA} Change C285,C757 to no stuff.

P.48 {USB} Delete L156, Add R5372, Change CAP16,CAP18 to 47UF.

P.50 {LED} Change C6045,C6046,C295,C301 value to no stuff.

(2009/04/03)

P.34 {ICH9} Change R5714 value to no stuff.

P.17 {VGA} Change R5250 to 34.8K from PUN update.

P.39 {WLAN} Change C531,C546,C573 value to no stuff.

P.16 {VGA} Change C1290,C1300,C1312 to no stuff.

P.18 {VGA} Change C874 value to no stuff.

P.20 {VGA} Change C1395,C1397,C5196,C5197 value to no stuff.

P.11 {Canita} Change CAP6 to NC.

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(2009/04/10)

- P.21 {VGA} HDMI I2C data and CLK signal swap.
- P.19 {VGA} Change R5256 to 56.2_F, R5257 to 40.2_F for PUN V07.
- P.37 {EC} Add R478 pull-down resistor for BL_OFF#.
- P.50 {TP} Modify SW2, SW3 pin define.

(2009/04/18)

- P.39 {WLAN} SW4.C pin delete and SW4.A connect to GND for ME ID design.
- P.61 {VGA POWER} Change PR99 to 13.7K, PR110 to 33K, PC85 value to stuff for N10M GPU power.
- P.61 {VGA POWER} Change PR99 to 13.7K, Change PR110 to NC_* for N10P GPU power.
- P.44 {Thermal} Delete R426, R430 for vendor suggestion.
- P.30 {LVDS} Delete U25, U29, U2, U23 and Add U131 (4 channel) for can reducing parts.

(2009/04/21)

- P.58 {CPU_CODE} Change PR67 to 3.3K from Power request.

(2009/04/22)

- P.43, 54 {Charger} Modify charger board BTB connector from ME request.
- P.55 {3V/5V} Change PC216 to 1U_6.3V from power request.

(2009/04/28)

- P.50 {LED} Change LED2, LED6 to HT-110UY for ME request.
- P.50 {LED} Change LED9 to HT-110UD for ME request.
- P.43 {SPK} Change JSPK1 to HS6104E for ME request.
- P.47 {CAM} Change CN17 to HS6106E for ME request.
- P.52 {HOLE} Add BOSS17 for ME request.

(2009/04/30)

- P.54 {Charger} Change charger board location to C_*.
- P.29 {CRT} Change D11 to SSM22LLPT for leakage issue.
- P.30 {LVDS} Change R5241 to no stuff, because had double PL.

(2009/05/04)

- P.43 {Audio} Change F12 from 2.6A to 0.75A, because +5VRUN power budget only 0.55A.
- P.50 {LED} Change power/suspend LED circuit, same M850.
- P.37 {KB} Add 10 test point for BFT.

(2009/05/05)

- P.39 {WLAN} Chnage LED3 to HT-110UYG for ME request.
- P.70 {Function} Change P_LED1~PLED3 to HT-110UYG for ME request.
- P.30 {LVDS} Add J3 for BFT test.

(2009/05/07)

- P.39 {WLAN} Add TP499, TP509 for Power test.
- P.50 {LED} Add TP494, TP496, TP495, TP493, TP488, TP490, TP491, TP489, TP498, TP497 for power test.
- P.57 {DDR Power} Change PU17 pin6 change from +3VSUS to +3VALW for Power request.
- P.58 {CPU Power} Add TP176 for Power test.
- P.54 {Charger} C_PU1 change to BQ24753ARHDR and schematic_part select bq24753ARHDR_T821_PWR for power request.
- P.60 {OVP} PU2 change to G1336BTB1U for power request.
- P.60 {OVP} Del PR40, PR41 and pin6 link to +5VALW_LD0 directly.
- P.30, 43, 66 {LVDS, BTB, Audio} Change CN18, CN37, A_CN5 to GS12407-11151-9F from ME request.

(2009/05/11)

- P.58 {CPU} Add 0.1ux5pcs (EC283~EC287) and PC143, PC149 stuff for EMI suggestion.
- P.25 {VRAM} Add EC6048 for EMI suggestion.
- P.59 {Others} Add EC288, EC289, EC290 for EMI suggestion.
- P.64 {Audio} Delete A_R141, Add A_EC160 for EMI suggestion.
- P.14 {DDR} Change CN29 to AS0A626-N2SN-7H from ME request.
- P.15 {DDR} Change CN30 to AS0A626-JASG-7H from ME request.
- P.40 {Express} Delete R330, R333, Add L37 for express card SI test fail issue.

(2009/05/13)

- P.46 {SD} Change R5694, R5695, R5697, R5698 to 33ohm for SI test solution.
- P.45 {MS} Change R5704, R5705, R5707, R5701 to 33ohm R5703 to 68ohm for SI test solution.
- P.43 {Audio} Chnage A_C110 to C6048 for layout suggestion.
- P.43 {Audio} Chnage A_F16, A_F17 to F15, F16 for layout suggestion.
- P.33 {ICH9} Change CN10 to HS8102E from ME request.
- P.45 {MS} Change CN35 to JES014-2000-1 from ME request.
- P.30, 43, 66 {LVDS, BTB, Audio} Change CN18, CN37, A_CN5 to GS12401_1011 for ME request.
- P.52 {HOLE} Change function board and Audio board serew.
- P.69 {FP} Change F_CN1 pin define from ME request.
- P.70 {Function} Change P_CN1 pin define from ME request.

(2009/05/18)

- P.56 {+1_05V} Add 3pcs 680p CAP of EMI suggestion.
- P.54 {Charger} Add C_PR136 of EMI request.
- P.47 {DMI} Delete L157, L158, add R5734, R5735 for EMI request.
- P.43, 54 {Charger} Modify charger board CONN pin define for EMI suggestion.

(2009/05/19)

- P.62 {Audio} Change A_C23, A_C22 to 15p, And delete A_R117, A_R116 Add A_L158, A_159 for EMI request.

(2009/05/20)

- P.56 {1.8/1.05V} Change power solution to TPS51218DSCR for power request.
- P.57 {1.05/0.75V} Change power solution to TPS51218DSCR for power request.

(2009/05/21)

- P.41 {LAN} Change R5733 to Bead (L152), Add E_C6054, E_C6055, E_C6056 for EMI request.
- P.46 {SD} Add E_C6049, E_C6050 for EMI request.
- P.40 {Express} Add E_C6051, E_C6052 for EMI request.
- P.50 {LED} Add E_C6053 for EMI request.

(2009/05/22)

- P.56 {1.8V_1.05V} Change PR235 to 9.76K, PC176 to 330U for power request.
- P.52 {HOLE} Add SPR1, SPR2 for EMI request.
- P.41 {LAN} Add E_C6054~E_C6057 for EMI request.
- P.70 {Function LED} Change P_LED1, P_LED2, P_LED3 for factory request.
- P.39 {WLAN LED} Change LED3 for factory request.
- P.50 {LED} Change LED2, LED6 for factory request.

(2009/05/23)

- P.55 {SYSPower} Add E_C6059, E_C6060, E_C6061, E_C6062 for EMI request.
- P.41 {LAN} Add E_C6058 for EMI request.
- P.44 {LAN} Add E_C6064 for EMI request.
- P.61 {VGA Power} Add E_C6063, E_C6065 for EMI request.
- P.54 {Charger} Reserve E_C6066 for EMI request.
- P.55 {SYSPower} Reserve E_C6067, E_C6068, E_C6069, E_C6070 for EMI request.

(2009/05/25)

- P.11 {Cantiga} Delete C21 from MOR request.
- P.45 {MS} Change R376, R373, R5373, R5374 to 54.9 ohm for i.LINK test issue.
- P.20 {VGA} Change R1228, R1231 to NC_* from MOR suggestion.
- P.47 {CAM} Change CN17 to HS6206E for ME request.
- P.64 {SPK} Delete A_C147, A_C152, Change A_C149, A_C148, A_C150, A_C151 to 0.22u for POP noise issue.
- P.64 {SPK} Change A_R5710~A_R5713 resistor to 82K for SPK low voice issue.
- P.43 {FP} Change U3 to Max4785 for FP current limit issue.
- P.46 {SD} Change CN16 to WK21923-S6P1-7F from ME request.
- P.30 {LVDS} Add Swith circuit for push current issue.

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(2009/06/03)
P.30 {LVDS} Change SW1 to DHNF-06F-T-V-T-R_SW-SMD12 because original part well EOL.
P.17 {VGA} Add R5252 for nVIDIA suggestion.

PVT
(2009/07/01)
P.30 {LVDS} Modify rush current circuit.
P.29 {CRT} Change CN2 to DZ11A91-MB229-9H for ME request.
P.44 {FAN} Change CN20 to HS8103E-LH for ME request.
P.37 {EC} Change CN3 to 196009-24021-3 for ME request.
P.41 {LAN} Change CN22 to HS6108E-LH fot ME request.
P.50/43/69 {TP} Change CN34/CN36/F_CN1 to GB5RF060-1203-7H for ME request.
P.39 {WLAN} Change CN21 to AS0B226-S52N-7H for ME request.
P.43 {BTB} Change JSPK1 to HS6104E-LH for ME request.
P.67 {HP} Change A_CN1 to JA93331-B18106-7H for ME request.
P.52 {HOLE} Change BOSS16 and Add BOSS18 for ME request.
P.45 {Cardreader} Change CN11 to UV31413-WU82P-7H for ME request.
P.38 {Flash} Change CN23 to QT510306-L011-7H for ME request.

(2009/07/03)
P.65 {MUTE} Change A_Q24 to stuff from MOR request.
P.42 {HDD/ODD} Remove PJ12,PJ13,F13,F14 for PVT not need.
P.64 {AMP} Modify cable circuit to no stuff.

(2009/07/06)
P.49 {BT} Add TP568~TP574 test point of BT.
P.49 {BT} Remove L72. DVT no mount becasue have 2 0ohm res.
P.40 {Express} Delete R333,R330,L38,L40. becasue have colay parts.
P.48 {USB} Delete L66,L61 becasue have colay res.

(2009/07/07)
P.67 {Audio} Change A_CN2 to JA93331-R18106-7H from ME request.
P.33 {ICH9} Change CN10 to HS8202E-LH from ME request.
P.70 {Function} Move P_R1,P_R2,P_R3 TO PAGE. 50 from MOR side suggestion.
P.55,56,57,61 {Power JP} Modify power Jump for power request.
P.30 {LVDS} L43 no stuff and Q177,C575,R5736,R5737 stuff for LVDS dcbatout inruch current issue.

(2009/07/10)
P.57 {DDR3} Add PJ6 for Power request.
P.45 {MS} Change R5700,R5706,R5699,R5702 to 33ohm for overshoot issue.
P.68 {USB} Change A_CN7 to UB11123-R1201-7H for ME request.
P.39 {WLAN} Add TP575 for WLAN test point.

(2009/07/15)
P.05 {CPU VID} Delete R29,R30,R31,R32,R39,R40,R41 for power suggestion.
P.54 {Charger} Change C_EC6066,C_PC156 to 1u for EMI request.
P.48 {USB} Add USB test point of BFT.
P.58 {CPU} Reserve EC294,EC295,EC296 on DCBATOUT for EMI request.

(2009/07/16)
P.52 {HOLE} Change SPR1,SPR2 for EMI request.
P.46 {SD} Change CN16 to WK2192C-S6P2-4H for ME request.
P.54 {Charger} Change C_PCN1 to BP91071-B31E3-7H for ME request.
P.46 {SD} Change CN16 to WK2192C-S6P2-4H from ME request.

(2009/07/17)
P.23 {VGA} Add R5741,R5742 0 ohm for MOR suggestion.
P.52 {HOLE} Change P_H51,P_H53 for ME request.

(2009/07/18)
P.52 {HOLE} Add function board hole for ME request.
P.50 {LED} Change R599,R600 to 499,300 ohm for brightness issue.

(2009/07/24)
P.60 {OVP} Change PR55 to 18.2K,PR143 to 26.1K,PR144 to 80.6K and mount PR73 from MOR request.

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