

COMPAL CONFIDENTIAL

MODEL NAME : QAL70/QAL71
PCB NO : LA-7741P(DAB00000810)
BOM P/N : 4619EO31LXX
GPIO MAP: Rev1.1

Dalmore 13 UMA

Ivy Bridge + Panther POINT

2012-03-21
REV : 1.0 (A00)
@ : Nopop Component
CONN@ : Connector Component


MB Type	BOM P/N	
TPM		1@
DTP		2@
SPI ON BOARD		@SPI
TAA		@TAA

CPU	CPU R1 P/N	CPU R3 P/N
SNB 2.3G (@SNB)	SA00004QX4L	SA00004QX5L
IVB 2.3G (@IVB)		
IVB 2.6G (@IVB)	SA00005JL1L	SA00005JK2L
IVB 2.8G (@IVB)	SA00005JK1L	SA00005JK2L
IVB 2.9G (@IVB)	SA00005JJ2L	SA00005JJ3L

For SNB CPU: @SNB
For IVB CPU: @IVB

MB PCB	
Part Number	Description
DAB00000810	PCB OLK LA-7741P REV1 M/B

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Title: Cover Sheet

Size	Document Number	Rev
	LA-7741	0.1
Date: Friday, March 30, 2012	Sheet 1 of 56	

On IO board



Title	UMA Block Diagram
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UMA Block Diagram

LA-7741

Size: Document Number: **LA-774**
Date: Wednesday, March 28, 2012

Sheet 2 of 5

Rev	0.1
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POWER STATES

Signal State	SLP S3#	SLP S4#	SLP S5#	SLP A#	ALWAYS PLANE	M PLANE	SUS PLANE	RUN PLANE	CLOCKS
S0 (Full ON) / M0	HIGH	HIGH	HIGH	HIGH	ON	ON	ON	ON	ON
S3 (Suspend to RAM) / M3	LOW	HIGH	HIGH	HIGH	ON	ON	ON	OFF	OFF
S4 (Suspend to DISK) / M3	LOW	LOW	HIGH	HIGH	ON	ON	OFF	OFF	OFF
S5 (SOFT OFF) / M3	LOW	LOW	LOW	HIGH	ON	ON	OFF	OFF	OFF
S3 (Suspend to RAM) / M-OFF	LOW	HIGH	HIGH	LOW	ON	OFF	ON	OFF	OFF
S4 (Suspend to DISK) / M-OFF	LOW	LOW	HIGH	LOW	ON	OFF	OFF	OFF	OFF
S5 (SOFT OFF) / M-OFF	LOW	LOW	LOW	LOW	ON	OFF	OFF	OFF	OFF

PM TABLE

power plane State	+15V_ALW +5V_ALW +3.3V_ALW_PCH +3.3V_RTC_LDO	+3.3V_SUS +1.5V_MEM	+5V_RUN +3.3V_RUN +1.8V_RUN +1.5V_RUN +0.75V_DDR_VTT +VCC_CORE +1.05V_RUN_VTT +1.05V_RUN	+3.3V_M +1.05V_M	+3.3V_M +1.05V_M (M-OFF)
S0	ON	ON	ON	ON	ON
S3	ON	ON	OFF	ON	OFF
S5 S4/AC	ON	OFF	OFF	ON	OFF
S5 S4/AC don't exist	OFF	OFF	OFF	OFF	OFF

need to update Power Status and PM Table

SATA	DESTINATION
SATA 0	HDD
SATA 1	ODD/ E3 Module Bay
SATA 2	NA
SATA 3	NA
SATA 4	ESATA
SATA 5	Dock

UMA DP/HDMI Port	Connetion
Port B	MB HDMI Conn
Port C	Dock DP port 2
Port D	Dock DP port 1

PCH	USB PORT#	DESTINATION
	0	JUSB1 (Right side)
	1	JUSB2 (Rear Left side)
	2	NA
	3	MLK DOCK
	4	WLAN
	5	WWAN
	6	DOCKING
	7	USH->BIO
	8	JMINI3(PP)
	9	JESATA1 (right side)
	10	Express card
	11	Bluetooth
	12	Camera
	13	NA

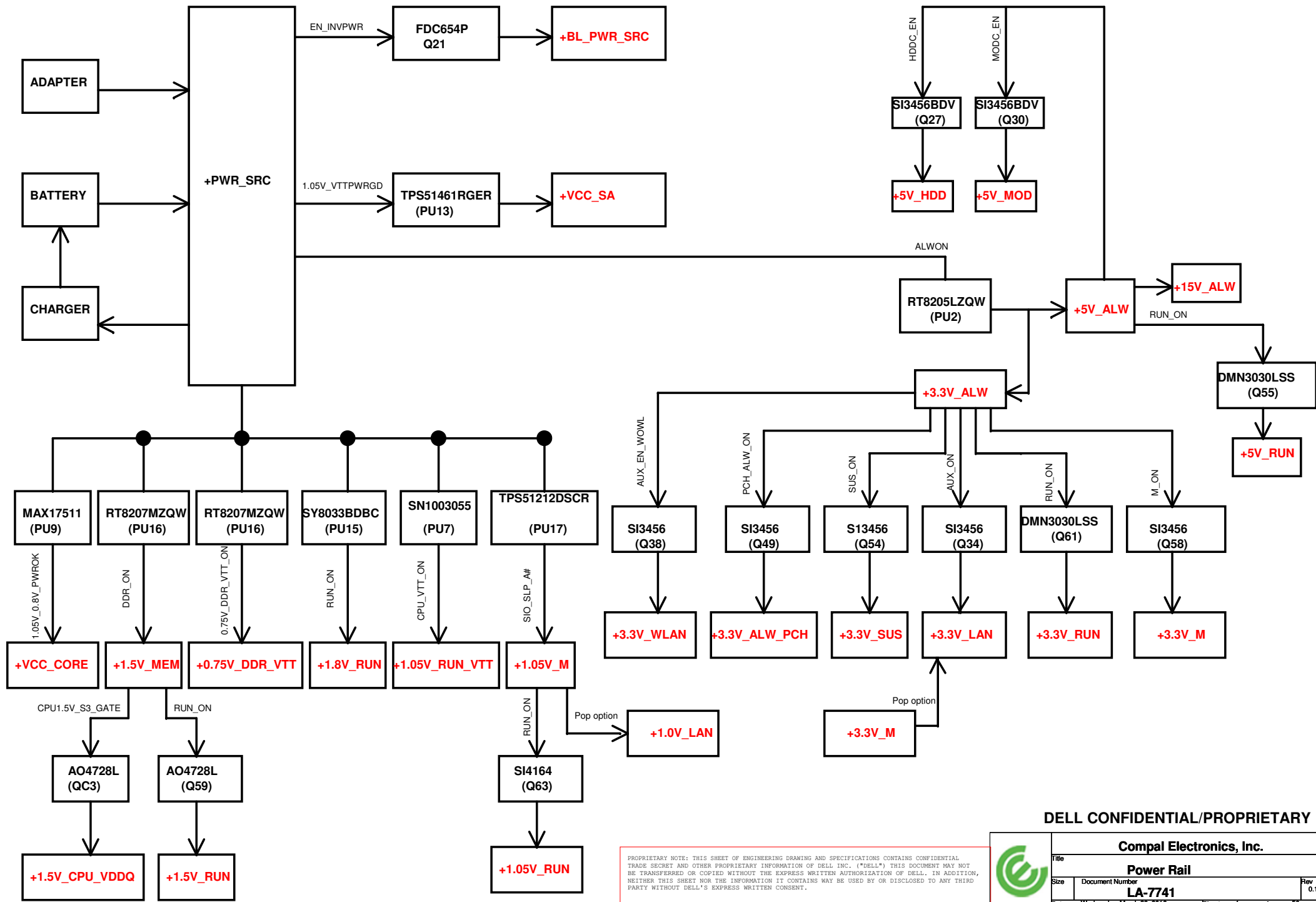
USH	0	BIO
	1	NA

PCI EXPRESS	DESTINATION
Lane 1	MINI CARD-1 WWAN
Lane 2	MINI CARD-2 WLAN
Lane 3	Express card
Lane 4	E3 Module Bay (USB3)
Lane 5	1/2vMINI CARD-3 PCIE
Lane 6	MMI
Lane 7	10/100/1G LOM
Lane 8	None

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Compal Electronics, Inc.			
Index and Config.			
Title	LA-7741		
Size	Document Number	Rev 0.1	
Date:	Wednesday, March 28, 2012	Sheet 3	of 56

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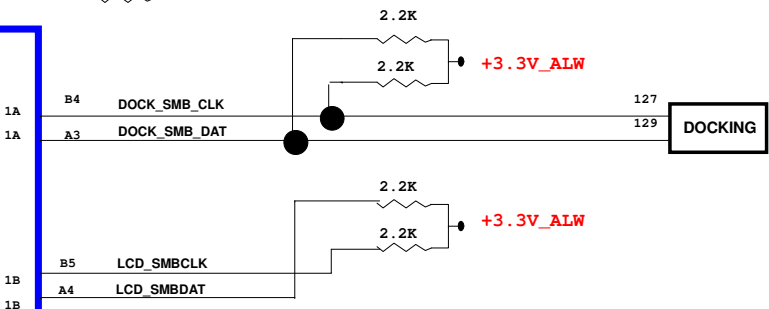
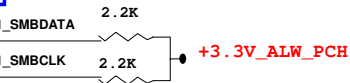
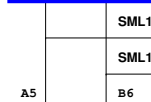
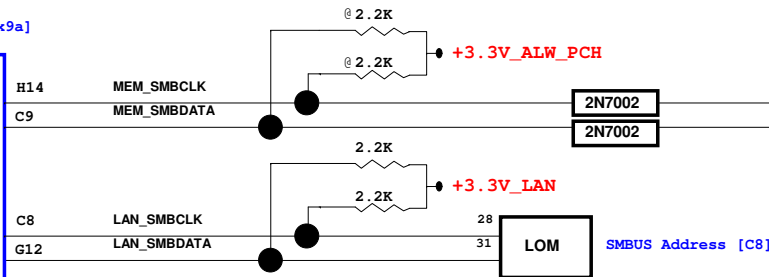
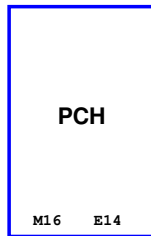
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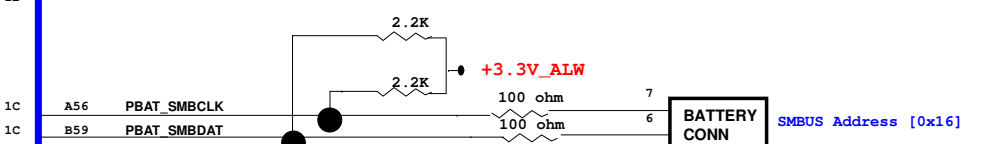
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Title		Power Rail	
Size	Document Number	Rev	
	LA-7741	0.1	
Date:	Wednesday, March 28, 2012	Sheet	4 of 56

SMBUS Address [0x9a]

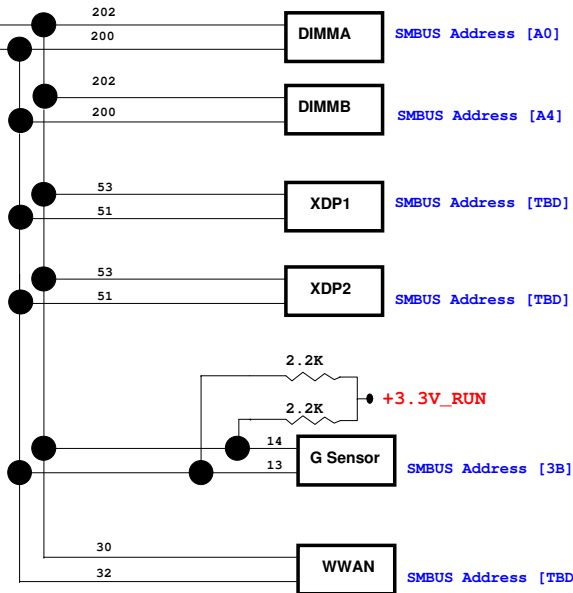
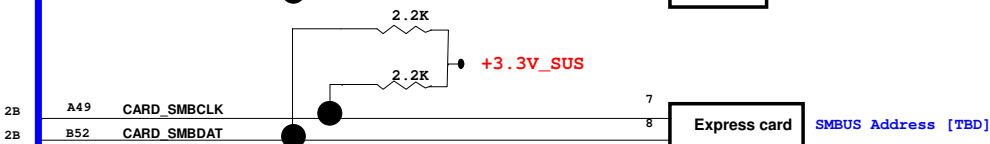
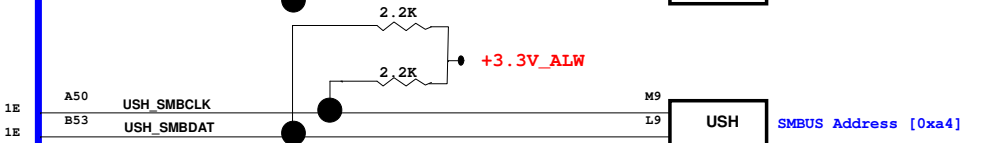


SMBUS Address
APR_EC: 0x48
SPR_EC: 0x70
MSLICE_EC: 0x72
USB: 0x59
AUDIO: 0x34
SLICE_BATTERY: 0x17
SLICE_CHARGER: 0x13

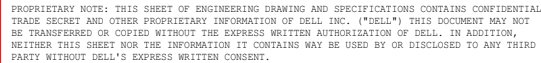
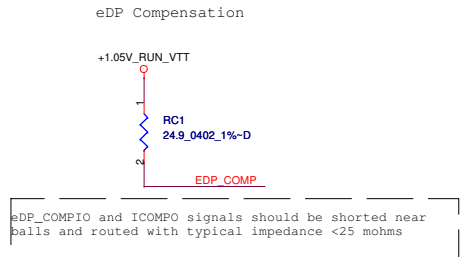
KBC



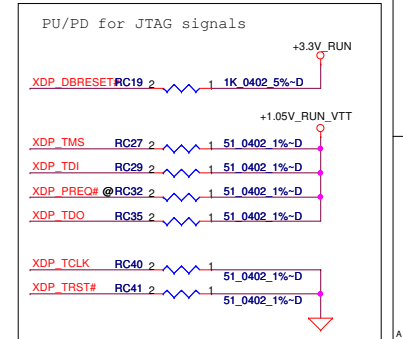
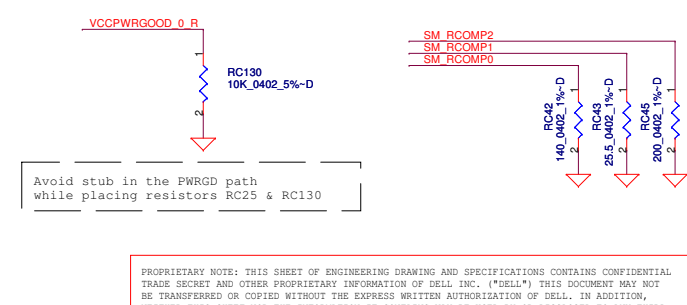
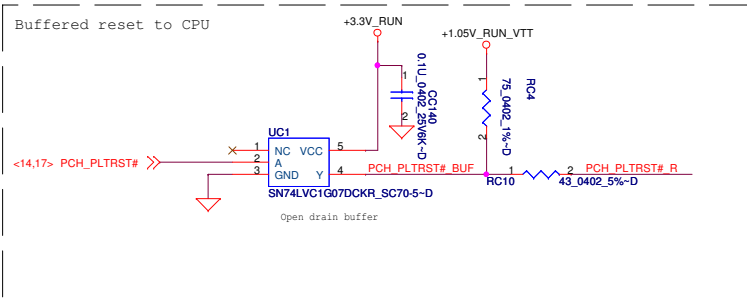
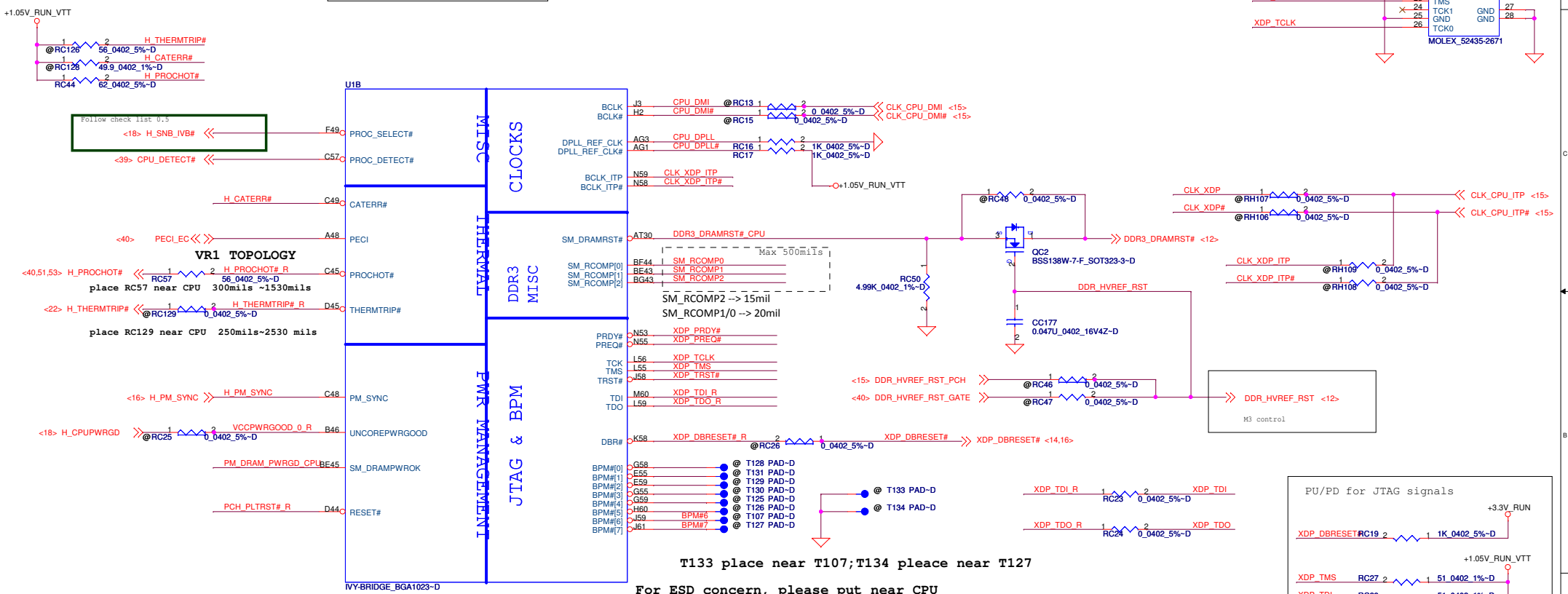
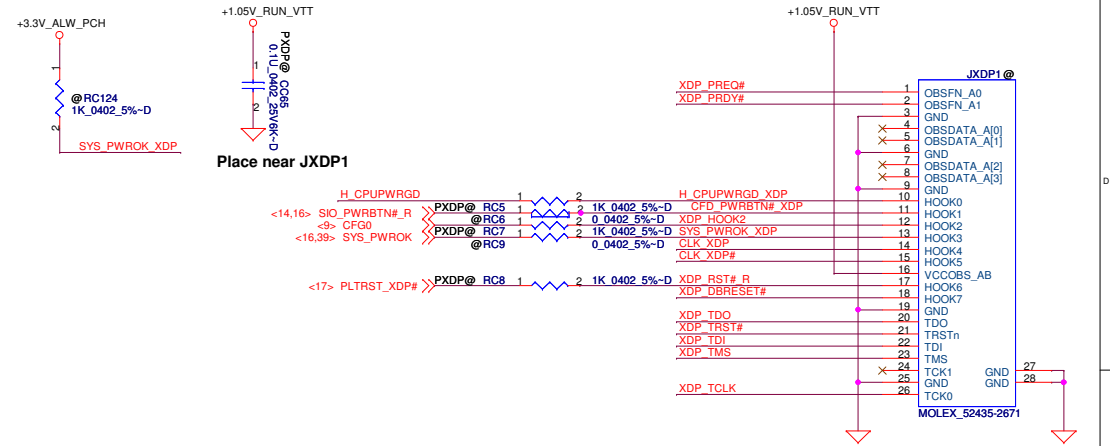
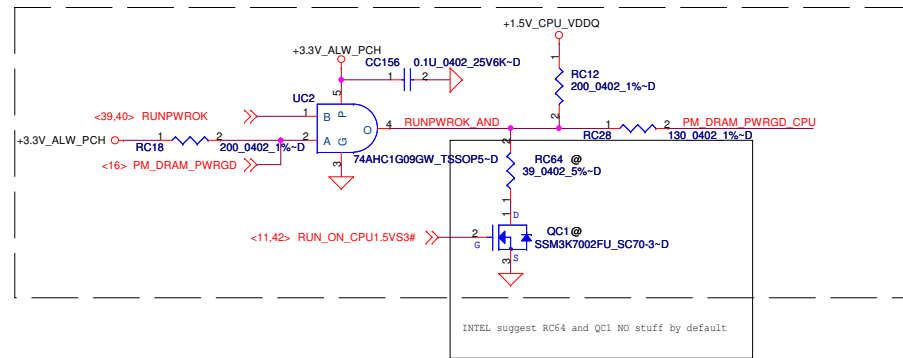
MEC 5065



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Date: Wednesday, March 28, 2012 Sheet 6 of 56



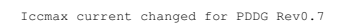
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Sandy Bridge (2/6)			
Title Size Date: Wednesday, March 28, 2012	Document Number LA-7741	Rev 0.1	Sheet 7 of 56

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Date: Wednesday, March 28, 2012 Sheet 9 of 56



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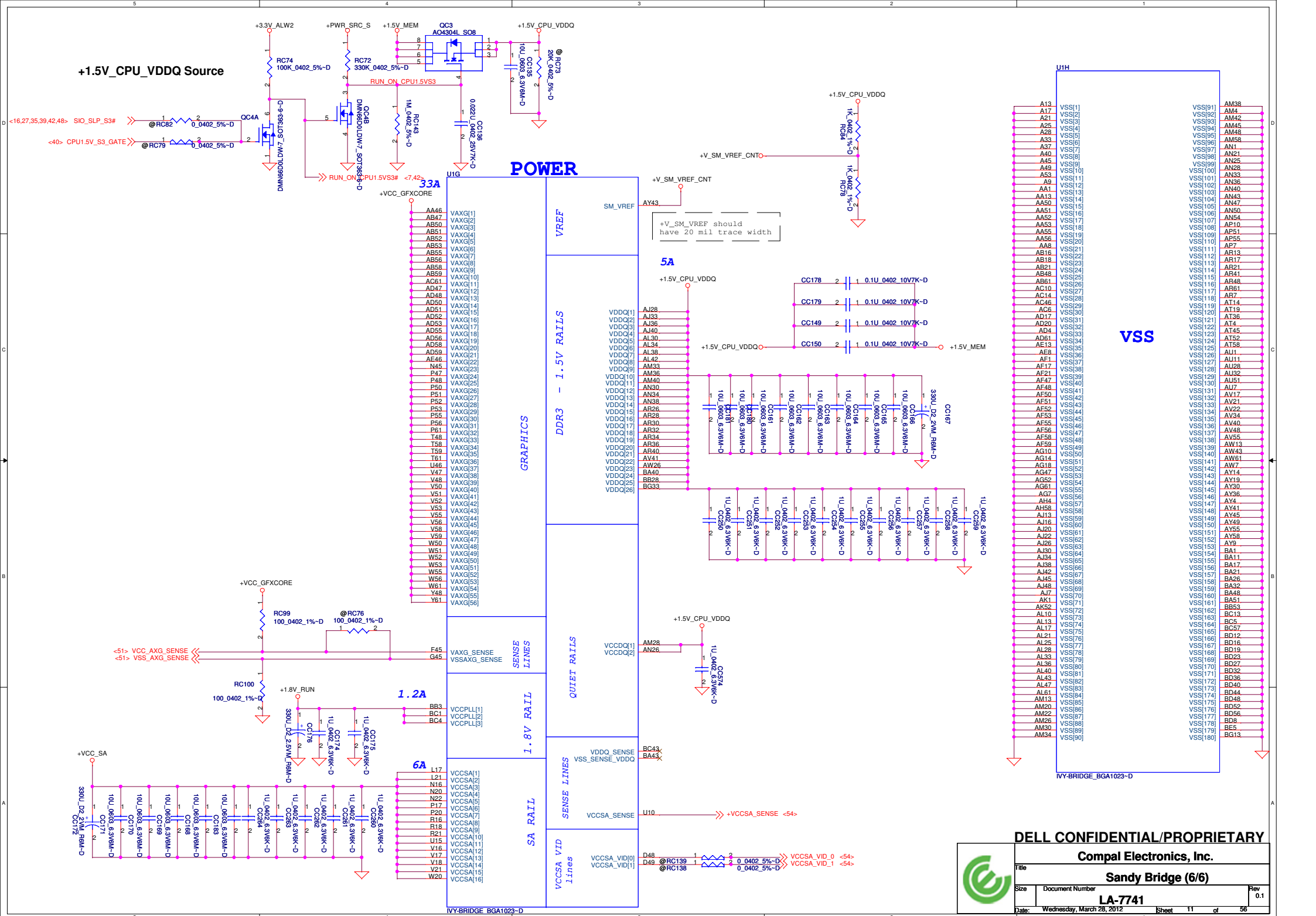
Sandy Bridge (5/6)

LA-7741

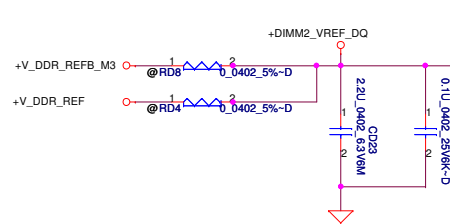
Date: Wednesday, March 28, 2012 Sheet 10 of 56

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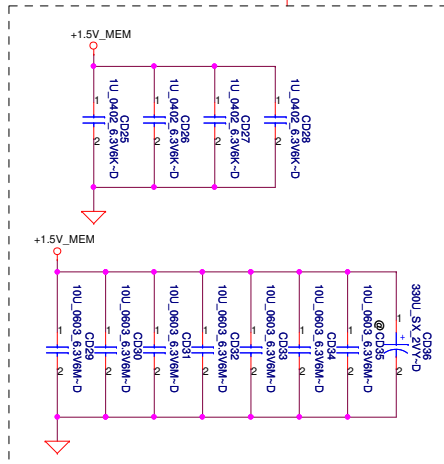
Note:
Check voltage tolerance of
VREF_DQ at the DIMM socket

Populate RD4, De-Populate RD8 for Intel DDR3
VREFDQ multiple methods M1
Populate RD8, De-Populate RD4 for Intel DDR3
VREFDQ multiple methods M3

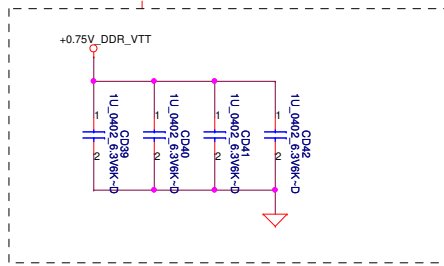
<8> DDR_B_DQS[0..7] <<>
<8> DDR_B_DQ[0..63] <<>
<8> DDR_B_DQS[0..7] <<>
<8> DDR_B_MA[0..15] <<>

All VREF traces should
have 10 mil trace width

Layout Note:
Place near JDIMM2



Layout Note:
Place near JDIMM2.203,204



<8> DDR_CKE2_DIMMB <<>

<8> DDR_BS2 <<>

<8> M_CLK_DDR2 <<>

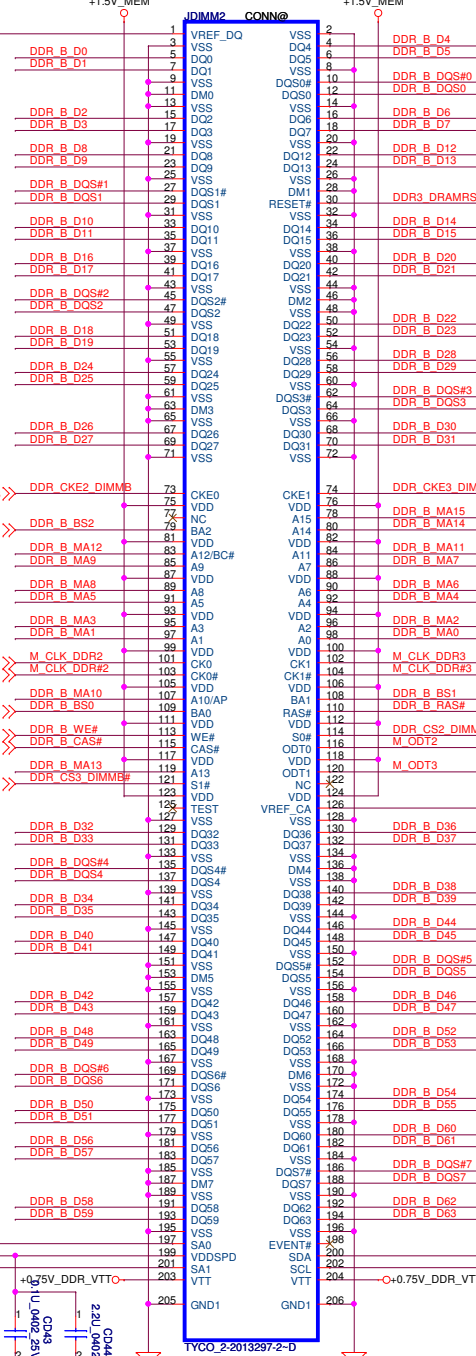
<8> M_CLK_DDR#2 <<>

<8> DDR_BS0 <<>

<8> DDR_WE# <<>

<8> DDR_CAS# <<>

<8> DDR_CS3_DIMMB# <<>



JDIMMB H=8

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DDRIII-SODIMM SLOT2

LA-7741

Rev 0.1

Date: Wednesday, March 28, 2012 Sheet 13 of 56

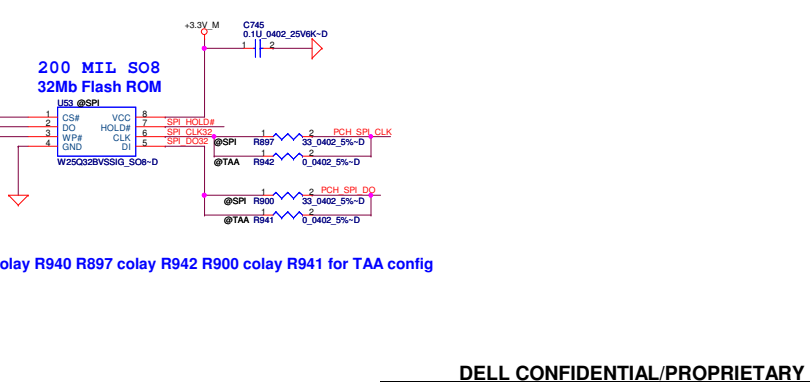
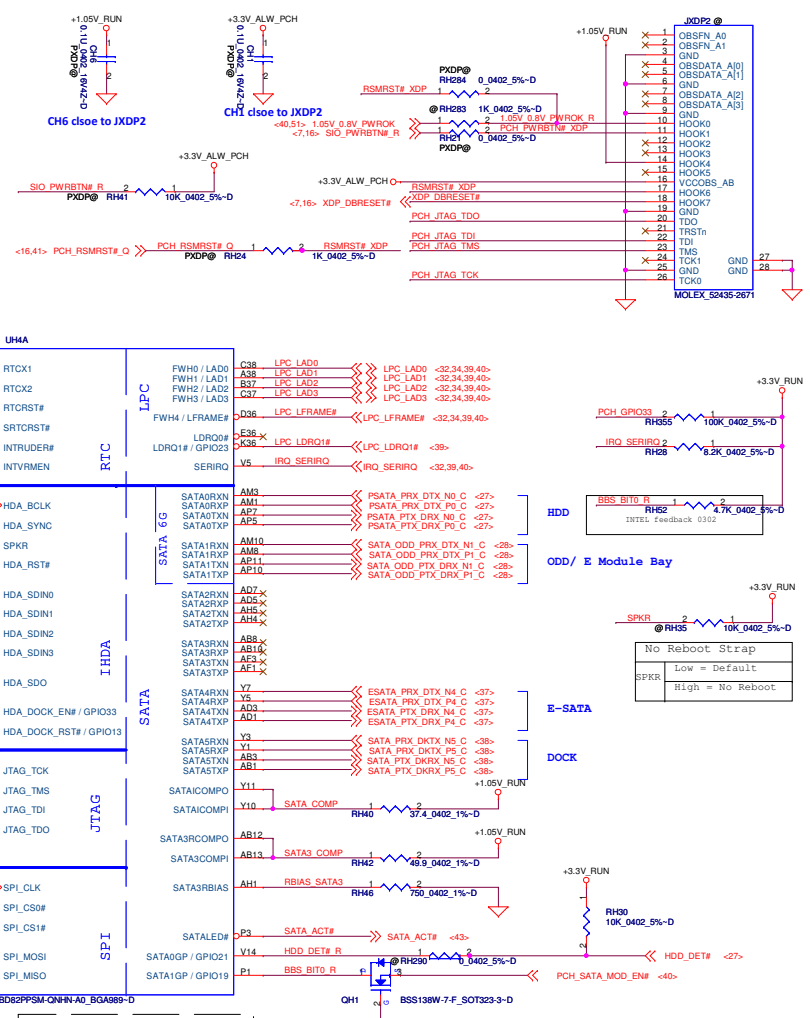
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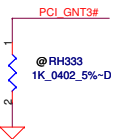
PCH_AZ_SYNC is sampled
at the rising edge of RSMRST# pin.
So signal should be PU to the ALWAYS rail.

```

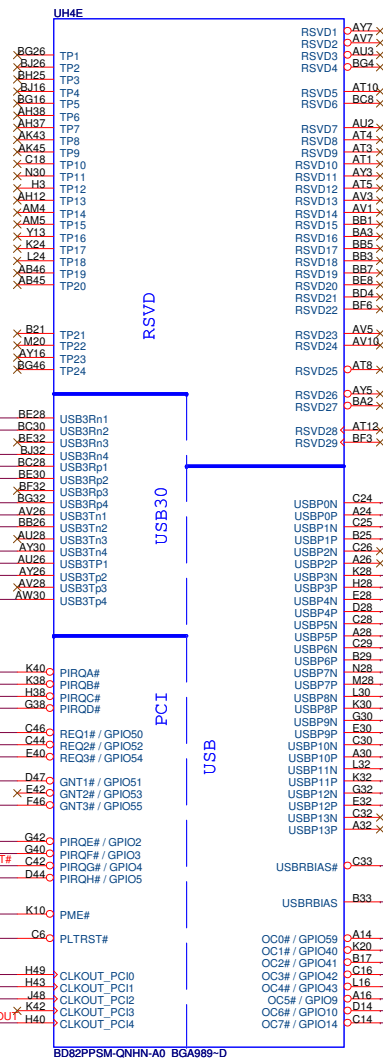
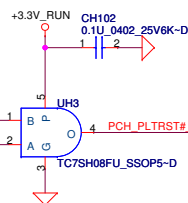
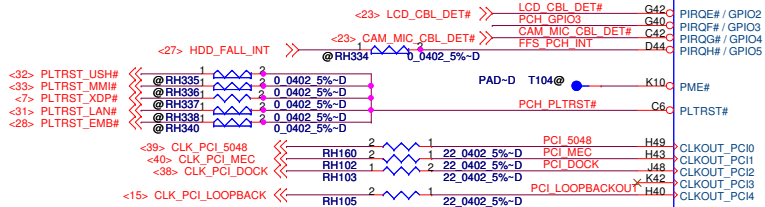
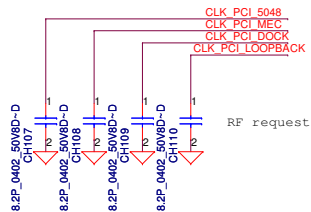
INTVRMEN- Integrated SUS
1.1V VRM Enable
High - Enable Internal VRs
Low - Enable External VRs



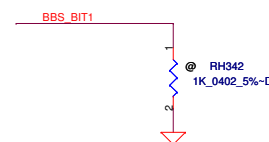
Title		PCH (1/8)	
Size	Document Number	Rev	
	LA-7741	0.1	
Date:	Wednesday, March 28, 2012	Sheet	14 of 56



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



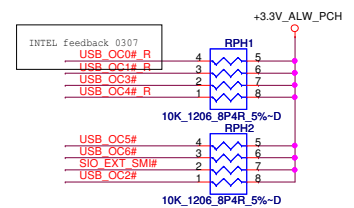
Boot BIOS Strap		
BBS_BIT1	SATA_SLDP (BBS_BIT0)	Boot BIOS Location
0	0	LPC
0	1	Reserved (NAND)
1	0	PCI
1	1	SPI



```

----->Right Side
----->Rear Left side
----->MLK DOCK
----->WLAN/WIMAX
----->WWAN/UWB
----->DOCK
----->USH
----->PP
----->Right side E-SATA
----->Express Card
----->Blue Tooth
----->Camera

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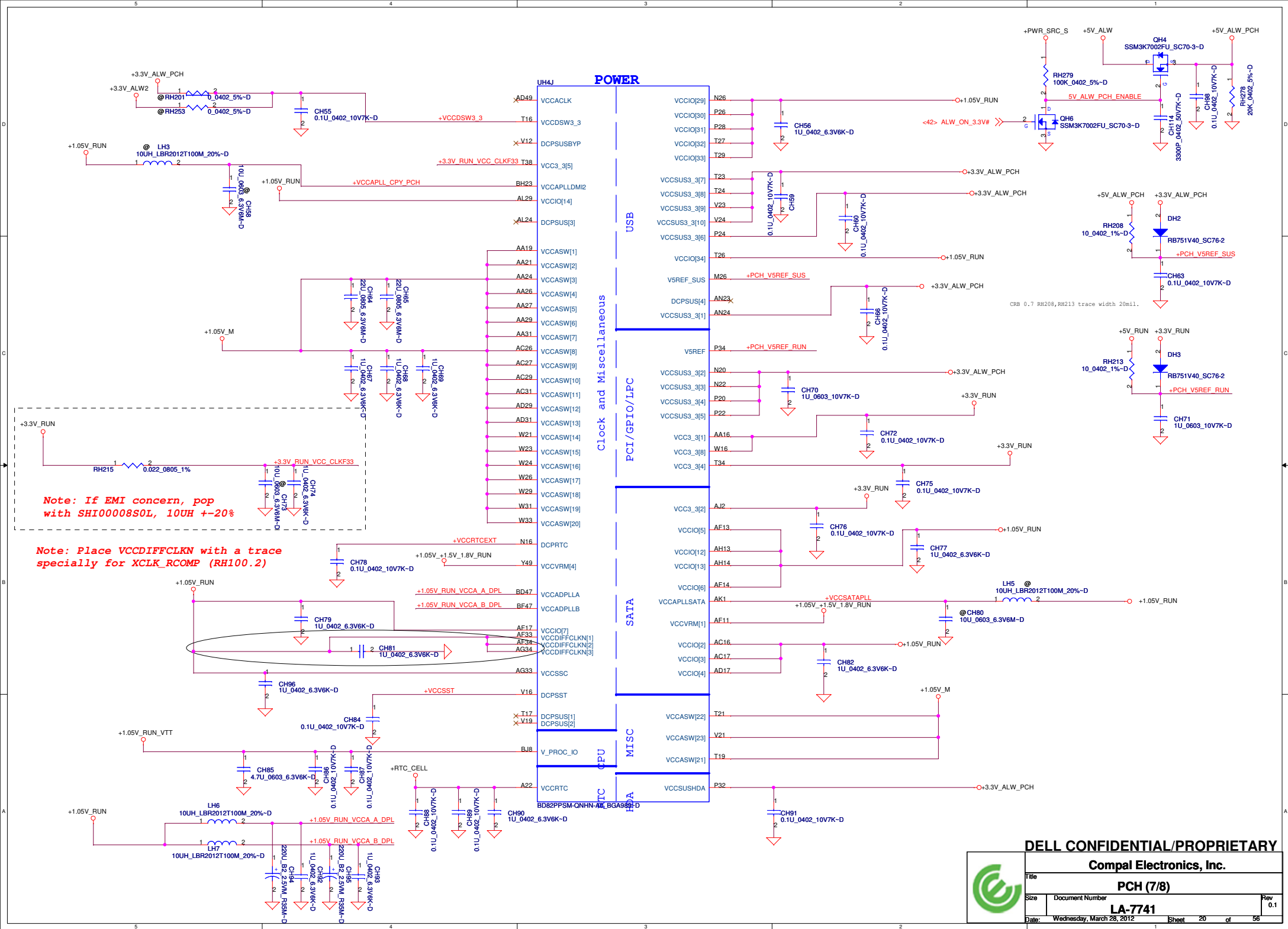
PCH (4/8)

LA-7741

Size	Document Number	Rev
	LA-7741	0
Date:	Wednesday, March 28, 2012	Sheet 17 of 56

Rev	0.1
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UH4H		
H5	VSS[0]	
AA17	VSS[1]	VSS[80] AK38
AA2	VSS[2]	VSS[81] AK4
AA3	VSS[3]	VSS[82] AK46
AA33	VSS[4]	VSS[83] AK5
AA34	VSS[5]	VSS[84] AK8
AB11	VSS[6]	VSS[85] AL16
AB14	VSS[7]	VSS[86] AL17
AB39	VSS[8]	VSS[87] AL19
AB4	VSS[9]	VSS[88] AL2
AB43	VSS[10]	VSS[89] AL21
AB5	VSS[11]	VSS[90] AL23
AB7	VSS[12]	VSS[91] AL26
AC19	VSS[13]	VSS[92] AL27
AC2	VSS[14]	VSS[93] AL31
AC21	VSS[15]	VSS[94] AL34
AC24	VSS[16]	VSS[95] AL48
AC33	VSS[17]	VSS[96] AM11
AC34	VSS[18]	VSS[97] AM14
AC48	VSS[19]	VSS[98] AM36
AD10	VSS[20]	VSS[99] AM39
AD11	VSS[21]	VSS[100] AM43
AD12	VSS[22]	VSS[101] AM45
AD13	VSS[23]	VSS[102] AM46
AD19	VSS[24]	VSS[103] AM7
AD24	VSS[25]	VSS[104] AN2
AD26	VSS[26]	VSS[105] AN29
AD27	VSS[27]	VSS[106] AN3
AD33	VSS[28]	VSS[107] AN31
AD34	VSS[29]	VSS[108] AP12
AD36	VSS[30]	VSS[109] AP19
AD37	VSS[31]	VSS[110] AP28
AD38	VSS[32]	VSS[111] AP32
AD39	VSS[33]	VSS[112] AP38
AD4	VSS[34]	VSS[113] AP4
AD40	VSS[35]	VSS[114] AP42
AD42	VSS[36]	VSS[115] AP46
AD43	VSS[37]	VSS[116] AP8
AD45	VSS[38]	VSS[117] AR2
AD46	VSS[39]	VSS[118] AR48
AD8	VSS[40]	VSS[119] AT11
AE2	VSS[41]	VSS[120] AT13
AE3	VSS[42]	VSS[121] AT18
AF10	VSS[43]	VSS[122] AT22
AF12	VSS[44]	VSS[123] AT26
AD14	VSS[45]	VSS[124] AT28
AD16	VSS[46]	VSS[125] AT30
AF16	VSS[47]	VSS[126] AT32
AF19	VSS[48]	VSS[127] AT34
AF24	VSS[49]	VSS[128] AT39
AF26	VSS[50]	VSS[129] AT42
AF27	VSS[51]	VSS[130] AT46
AF29	VSS[52]	VSS[131] AU24
AF31	VSS[53]	VSS[132] AU30
AF38	VSS[54]	VSS[133] AV16
AF4	VSS[55]	VSS[134] AV20
AF42	VSS[56]	VSS[135] AV24
AF46	VSS[57]	VSS[136] AV30
AF5	VSS[58]	VSS[137] AV38
AF7	VSS[59]	VSS[138] AV4
AF8	VSS[60]	VSS[139] AV8
AG19	VSS[61]	VSS[140] AW14
AG2	VSS[62]	VSS[141] AW18
AG31	VSS[63]	VSS[142] AW2
AG48	VSS[64]	VSS[143] AW22
AH11	VSS[65]	VSS[144] AW26
AH3	VSS[66]	VSS[145] AW28
AH36	VSS[67]	VSS[146] AW32
AH39	VSS[68]	VSS[147] AW36
AH40	VSS[69]	VSS[148] AW40
AH42	VSS[70]	VSS[149] AW48
AH46	VSS[71]	VSS[150] AY11
AH7	VSS[72]	VSS[151] AY12
AJ19	VSS[73]	VSS[152] AY22
AJ21	VSS[74]	VSS[153] AY28
AJ24	VSS[75]	VSS[154]
AJ33	VSS[76]	VSS[155]
AJ34	VSS[77]	VSS[156]
AK12	VSS[78]	VSS[157]
AK3	VSS[79]	VSS[158]

BD82PPSM-QNHN-A0_BGA989-D

UH4I		
AY4	VSS[159]	VSS[259] H46
AY42	VSS[160]	VSS[260] K18
AY46	VSS[161]	VSS[261] K26
AY8	VSS[162]	VSS[262] K39
B11	VSS[163]	VSS[263] K46
B15	VSS[164]	VSS[264] K7
B19	VSS[165]	VSS[265] L18
B23	VSS[166]	VSS[266] L2
B27	VSS[167]	VSS[267] L20
B31	VSS[168]	VSS[268] L26
B39	VSS[169]	VSS[269] L38
B7	VSS[170]	VSS[270] L48
F45	VSS[171]	VSS[271] M12
B12	VSS[172]	VSS[272] M18
BB16	VSS[173]	VSS[273] M22
BB20	VSS[174]	VSS[274] M24
BB22	VSS[175]	VSS[275] M30
BB24	VSS[176]	VSS[276] M32
BB28	VSS[177]	VSS[277] M34
BB30	VSS[178]	VSS[278] M38
BB38	VSS[179]	VSS[279] M4
BB4	VSS[180]	VSS[280] M42
BB46	VSS[181]	VSS[281] M46
BC14	VSS[182]	VSS[282] M8
BC18	VSS[183]	VSS[283] M18
BC18	VSS[184]	VSS[284] M24
BC2	VSS[185]	VSS[285] M30
BC22	VSS[186]	VSS[286] M32
BC26	VSS[187]	VSS[287] M34
BC32	VSS[188]	VSS[288] M38
BC34	VSS[189]	VSS[289] M4
BC36	VSS[190]	VSS[290] M42
BC40	VSS[191]	VSS[291] M46
BC42	VSS[192]	VSS[292] M48
BC48	VSS[193]	VSS[293] M54
BD46	VSS[194]	VSS[294] M58
BD5	VSS[195]	VSS[295] M6
BE22	VSS[196]	VSS[296] M12
BE26	VSS[197]	VSS[297] M18
BE40	VSS[198]	VSS[298] M24
BF10	VSS[199]	VSS[299] M30
BF12	VSS[200]	VSS[300] M32
BF16	VSS[201]	VSS[301] M34
BF20	VSS[202]	VSS[302] M38
BF22	VSS[203]	VSS[303] M4
BF24	VSS[204]	VSS[304] M42
BF26	VSS[205]	VSS[305] M46
BF28	VSS[206]	VSS[306] M48
BF30	VSS[207]	VSS[307] M54
BF38	VSS[208]	VSS[308] M58
BF40	VSS[209]	VSS[309] M6
BF48	VSS[210]	VSS[310] M12
BG17	VSS[211]	VSS[311] M18
BG21	VSS[212]	VSS[312] M24
BG24	VSS[213]	VSS[313] M30
BG33	VSS[214]	VSS[314] M32
BG44	VSS[215]	VSS[315] M34
BG48	VSS[216]	VSS[316] M38
BH11	VSS[217]	VSS[317] M4
BH15	VSS[218]	VSS[318] M12
BH17	VSS[219]	VSS[319] M18
BH19	VSS[220]	VSS[320] M24
H10	VSS[221]	VSS[321] M30
BH27	VSS[222]	VSS[322] M32
BH31	VSS[223]	VSS[323] M34
BH33	VSS[224]	VSS[324] M38
BH35	VSS[225]	VSS[325] M4
BH39	VSS[226]	VSS[326] M12
BH43	VSS[227]	VSS[327] M18
BH7	VSS[228]	VSS[328] M24
D1	VSS[229]	VSS[329] M30
D12	VSS[230]	VSS[330] M32
D16	VSS[231]	VSS[331] M34
D18	VSS[232]	VSS[332] M38
D22	VSS[233]	VSS[333] M4
D24	VSS[234]	VSS[334] M12
D26	VSS[235]	VSS[335] M18
D30	VSS[236]	VSS[336] M24
D32	VSS[237]	VSS[337] M30
D34	VSS[238]	VSS[338] M32
D38	VSS[239]	VSS[339] M34
D42	VSS[240]	VSS[340] M38
D8	VSS[241]	VSS[341] M4
E18	VSS[242]	VSS[342] M12
F26	VSS[243]	VSS[343] M18
G18	VSS[244]	VSS[344] M24
G20	VSS[245]	VSS[345] M30
G26	VSS[246]	VSS[346] M32
G28	VSS[247]	VSS[347] M34
G36	VSS[248]	VSS[348] M38
G48	VSS[249]	VSS[349] M4
H12	VSS[250]	VSS[350] M12
H18	VSS[251]	VSS[351] M18
H22	VSS[252]	VSS[352] M24
H24	VSS[253]	VSS[353] M30
H26	VSS[254]	VSS[354] M32
H30	VSS[255]	VSS[355] M34
H32	VSS[256]	VSS[356] M38
H34	VSS[257]	VSS[357] M4
F3	VSS[258]	VSS[358] M12

BD82PPSM-QNHN-A0_BGA989-D

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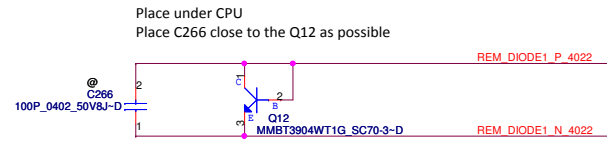
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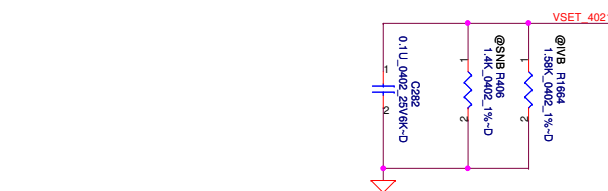
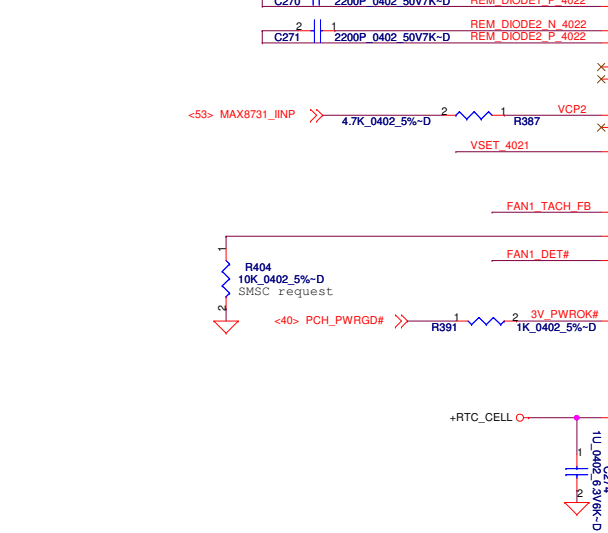
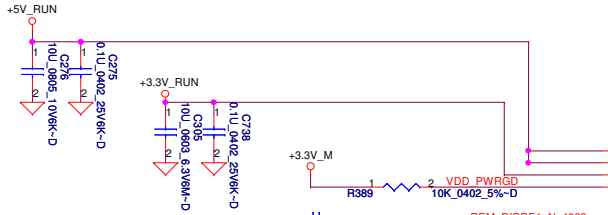
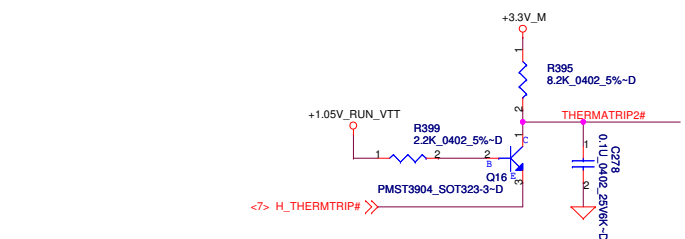
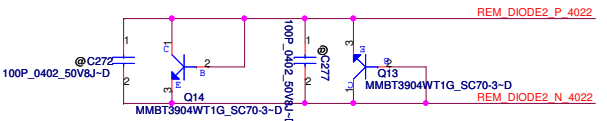
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Size: Document Number LA-7741 Rev 0.1

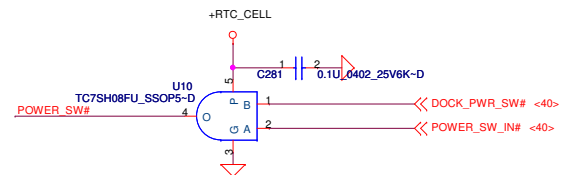
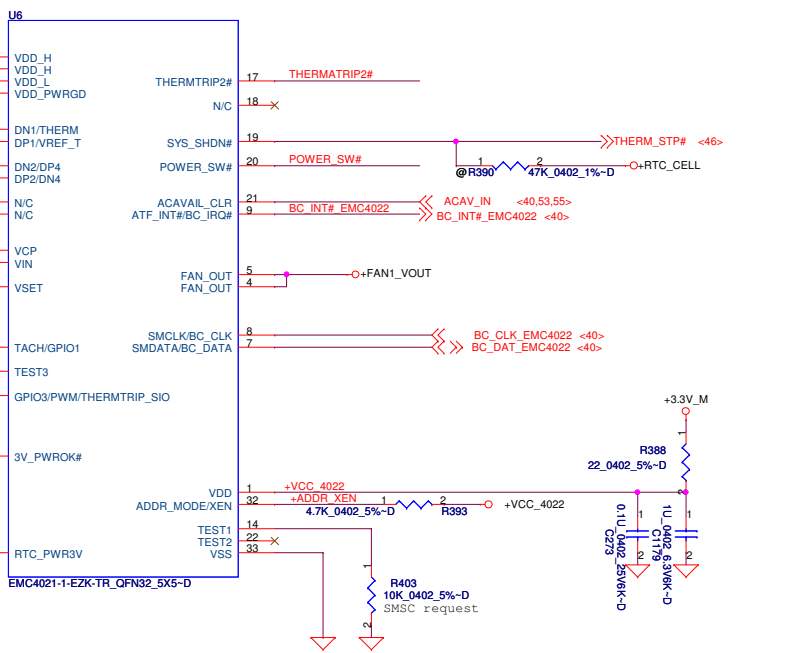
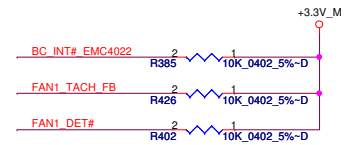
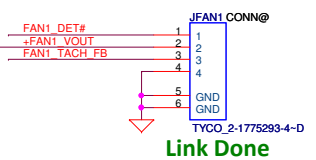
Date: Wednesday, March 28, 2012 Sheet 21 of 56



- (1) DP3/DN3 for SODIMM on Q14, place Q14 close to SODIMM and C272 close to Q14
(2) DP5/DN5 for Skin on Q13, place Q13 close to Vcore VR choke.



Rest=1400 Tp=94degree For SNB
Rest=1580 Tp=96degree For IVB

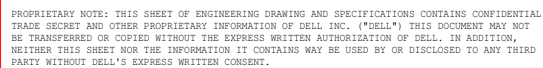


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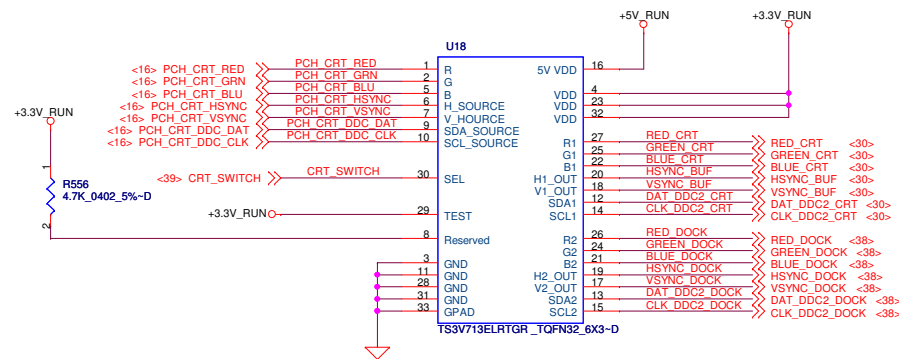


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Title			
FAN & Thermal Sensor			
Size	Document Number	Rev	
	LA-7741	0.1	
Date:	Wednesday, March 28, 2012	Sheet	22 of 56

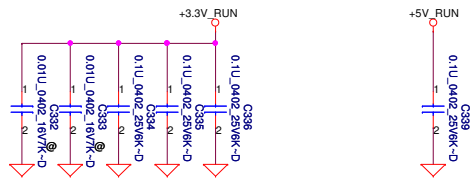
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SW for MB/DOCK

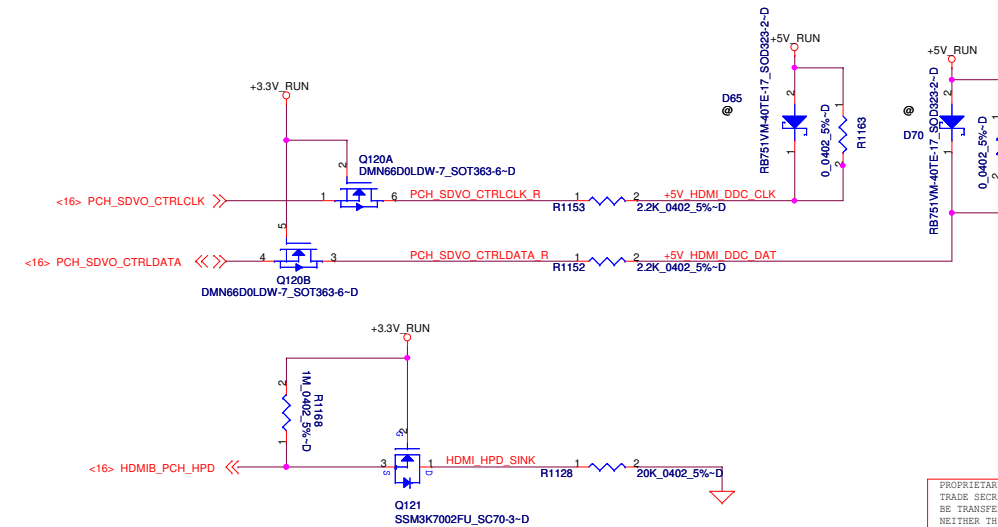
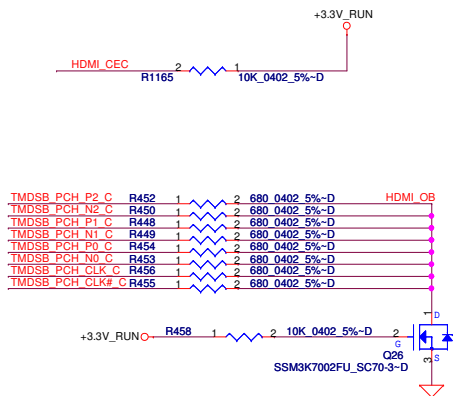


SEL1/SEL2	Chanel	Source
0	A=B1	MB
1	A=B2	APR/SPR

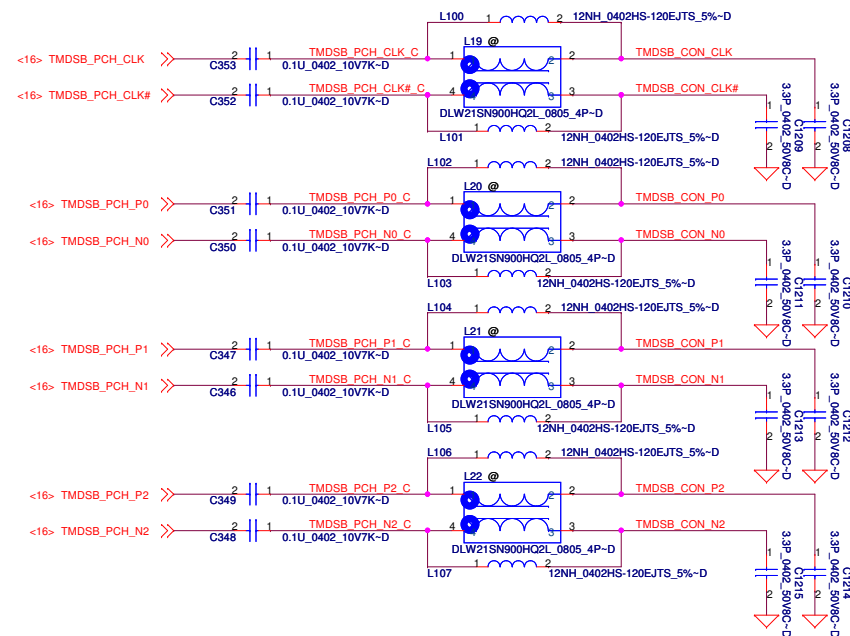
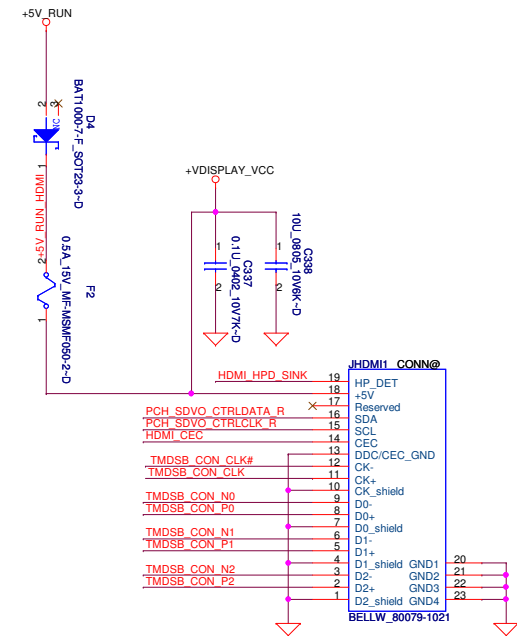


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	Title CRT/Video switch		
	Size	Document Number LA-7741	Rev 0.1
	Date: Wednesday, March 28, 2012	Sheet 24	of 56



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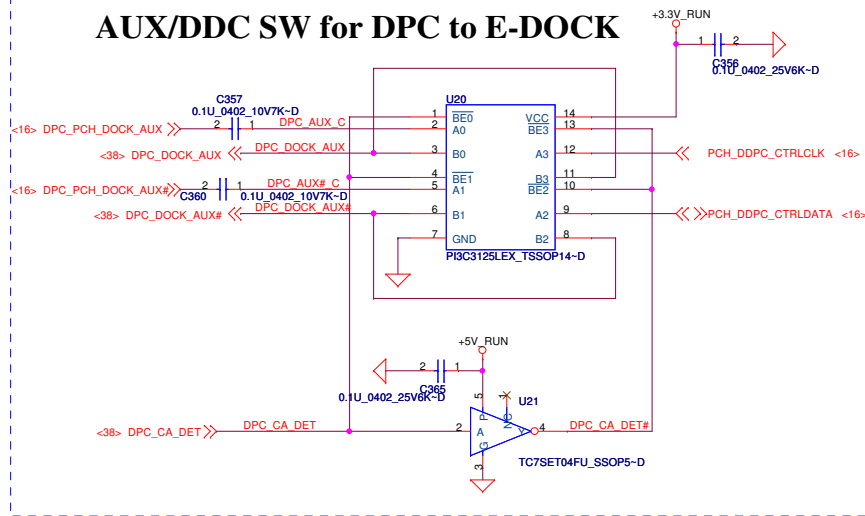
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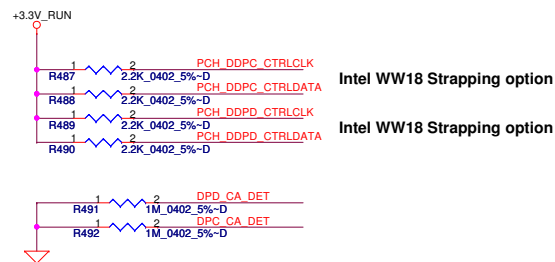
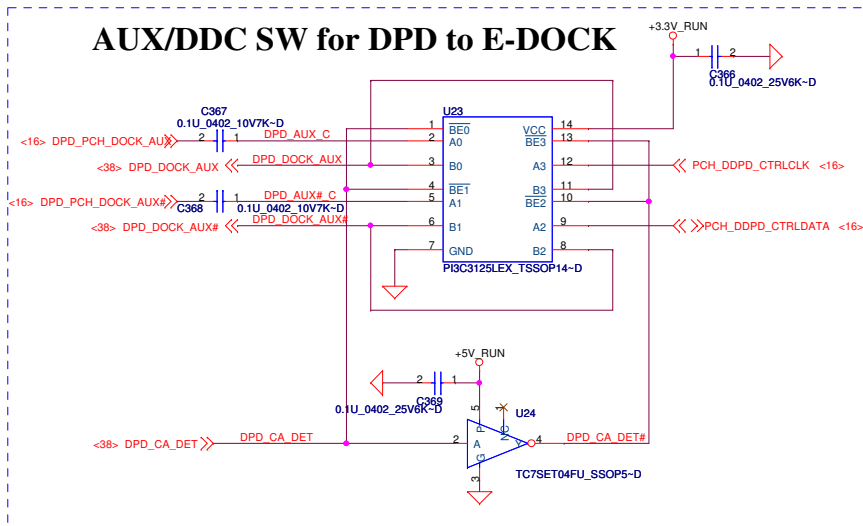
HDMI port		
Size	Document Number	Rev
	LA-7741	0.1
Date:	Wednesday, March 28, 2012	Sheet 25 of 56

AUX/DDC SW for DPC to E-DOCK



There is a new die for PI3C3125. Sample available on May.

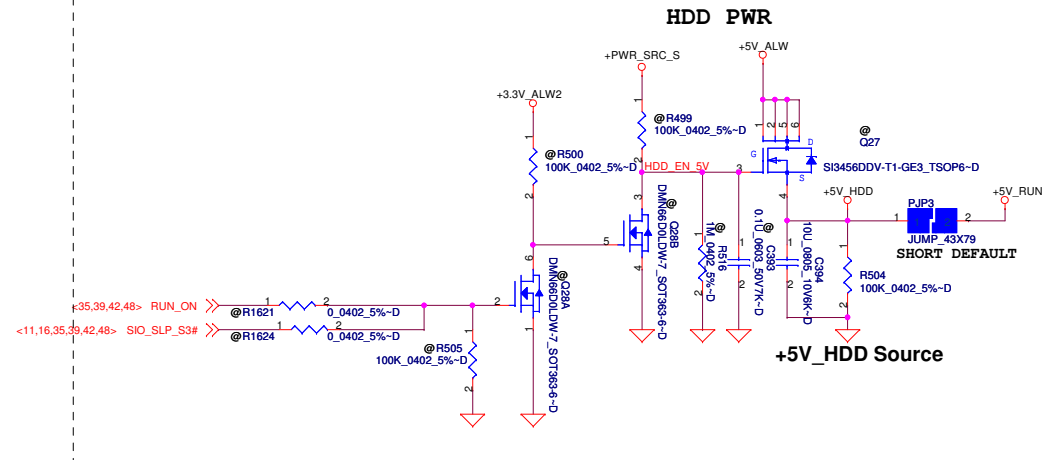
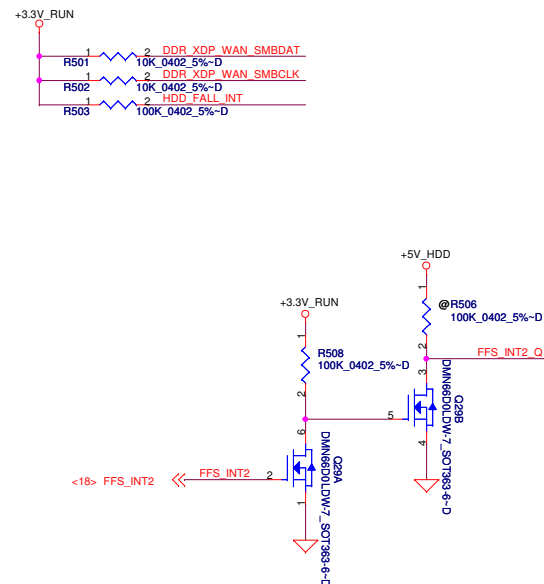
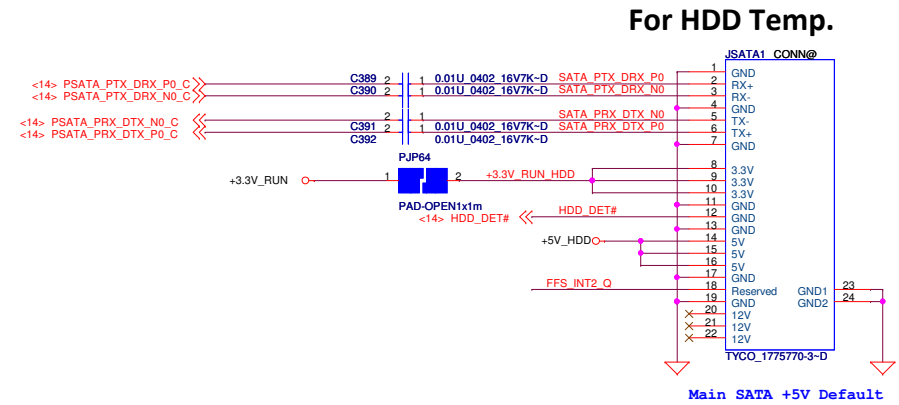
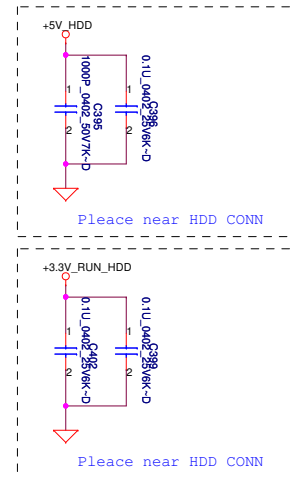
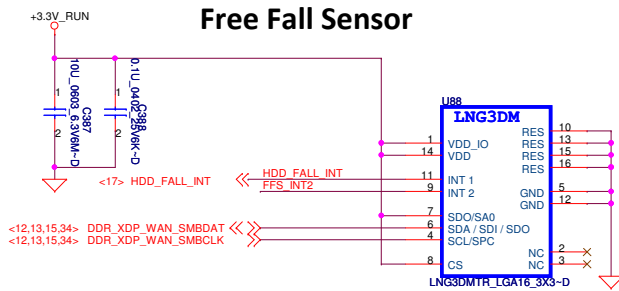
AUX/DDC SW for DPD to E-DOCK



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Title	DP125		
Size	Document Number	LA-7741	
Date:	Wednesday, March 28, 2012	Sheet	26 of 56
Rev	0.1		



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HDD CONNECTOR

LA-7741

Date: Wednesday, March 28, 2012 Sheet 27 of 56

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For ODD

	PIN6	PIN16	PIN9	PIN8	PIN17	PIN19	PIN20	PIN18
Parade PS8520B(Internal PD)	PH	PH	PD	PD	PD	PD	PD	PD
MAXIM MAX4951C(Internal PD)	PH	PH	PD	PD	PD	PD	VCC	PD
Pericom PI3EQX6741ST (Tri-level)	NC	NC	PD	PD	PD	PD	VCC	PH
TI SN75LVCP601 (Internally tied to Vcc(2))	PD	PD	PD	PD	PD	PD	VCC	PD

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ODD CONNECTOR

LA-7741

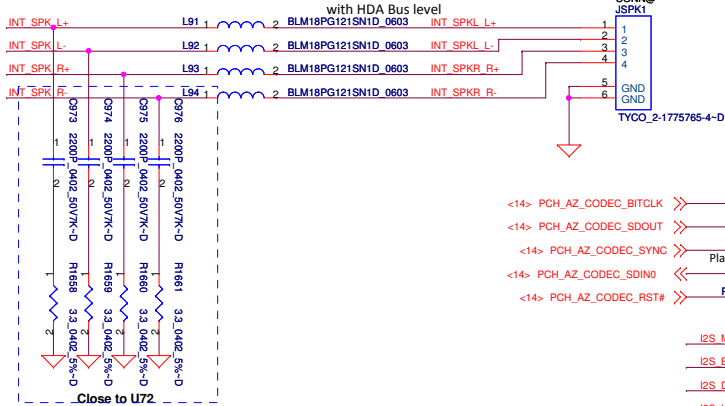
	LA-7741	0.1
Date:	Wednesday, March 28, 2012	Sheet 28 of 56

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Internal Speakers Header

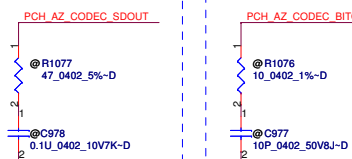
15 mils trace

DVDD_IO should match with HDA Bus level

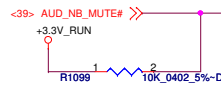


Close to U72 pin5

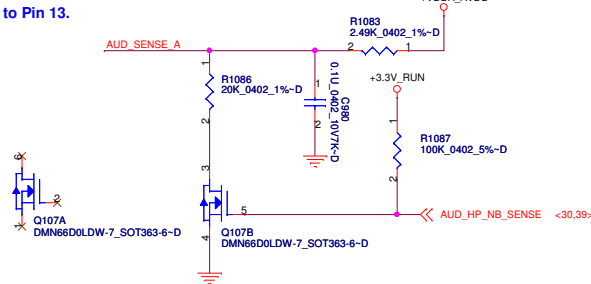
Close to U72 pin6



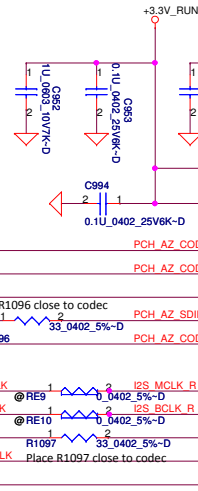
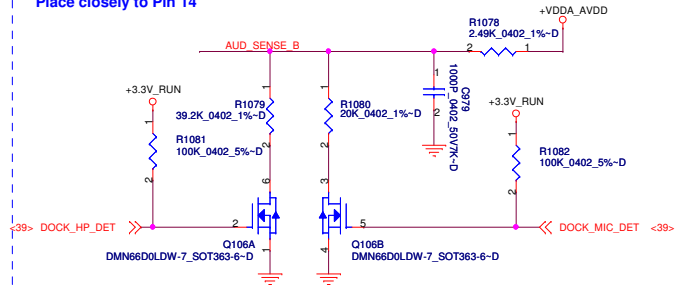
BCLK: Audio serial data bus bit clock input/output
LRCLK: Audio serial data bus word clock input/output



Place closely to Pin 13.

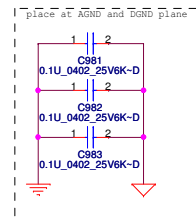


Place closely to Pin 14



Notes:

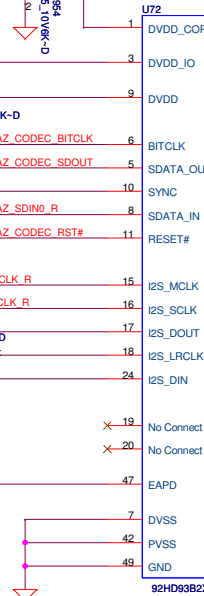
Keep PVDD supply and speaker traces routed on the DGND plane.
Keep away from AGND and other analog signals



Resistor	SENSE_A	SENSE_B
39.2K	PORT A	PORT E
20K	PORT B	PORT F
10K	NA	DMIC0
5.11K	SPDIFOUT0	SPDIFOUT1 (DMIC1)
2.49K	Pull-up to AVDD	

PORT A	External MIC
PORT B	HeadPhone Out
PORT C	Dock Audio
PORT D	Internal SPK

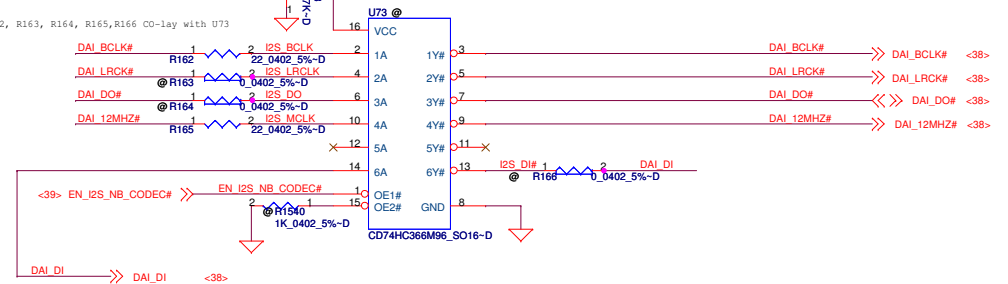
Place C994, C952~C957 close to Codec



place at Codec bottom side



R162, R163, R164, R165, R166 CO-LAY WITH U73



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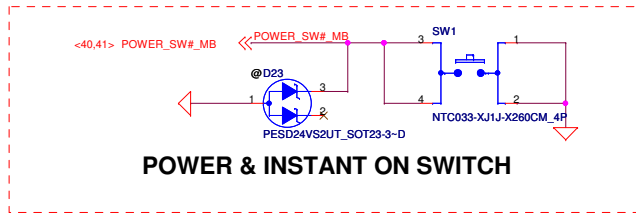
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Azalia (HD) Codec

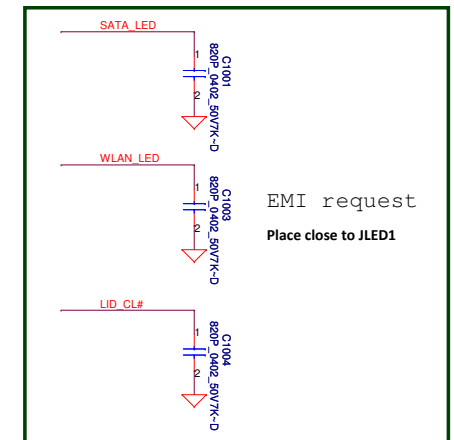
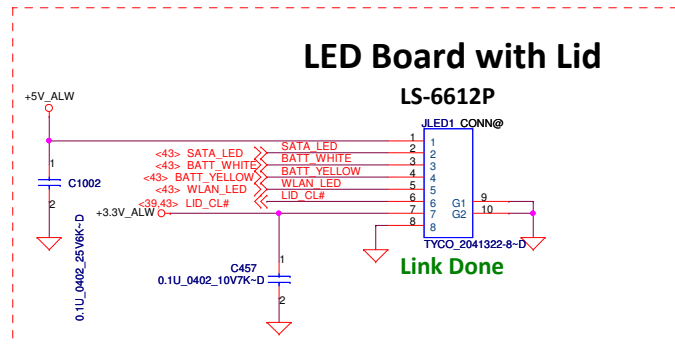
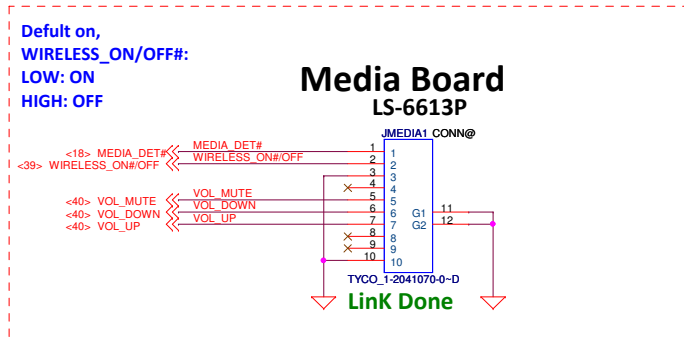
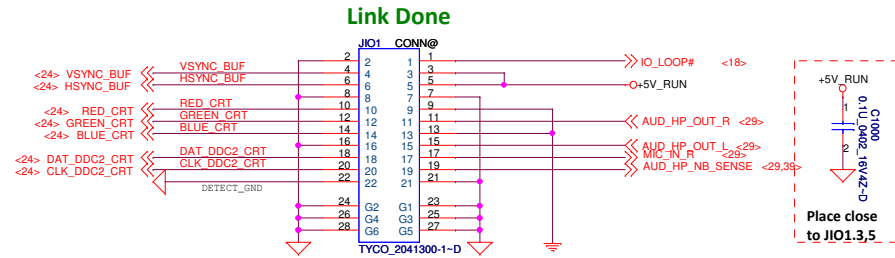
Title	Document Number	Rev
	LA-7741	0.1

Date: Wednesday, March 28, 2012 Sheet 29 of 56

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I/O board CONN.



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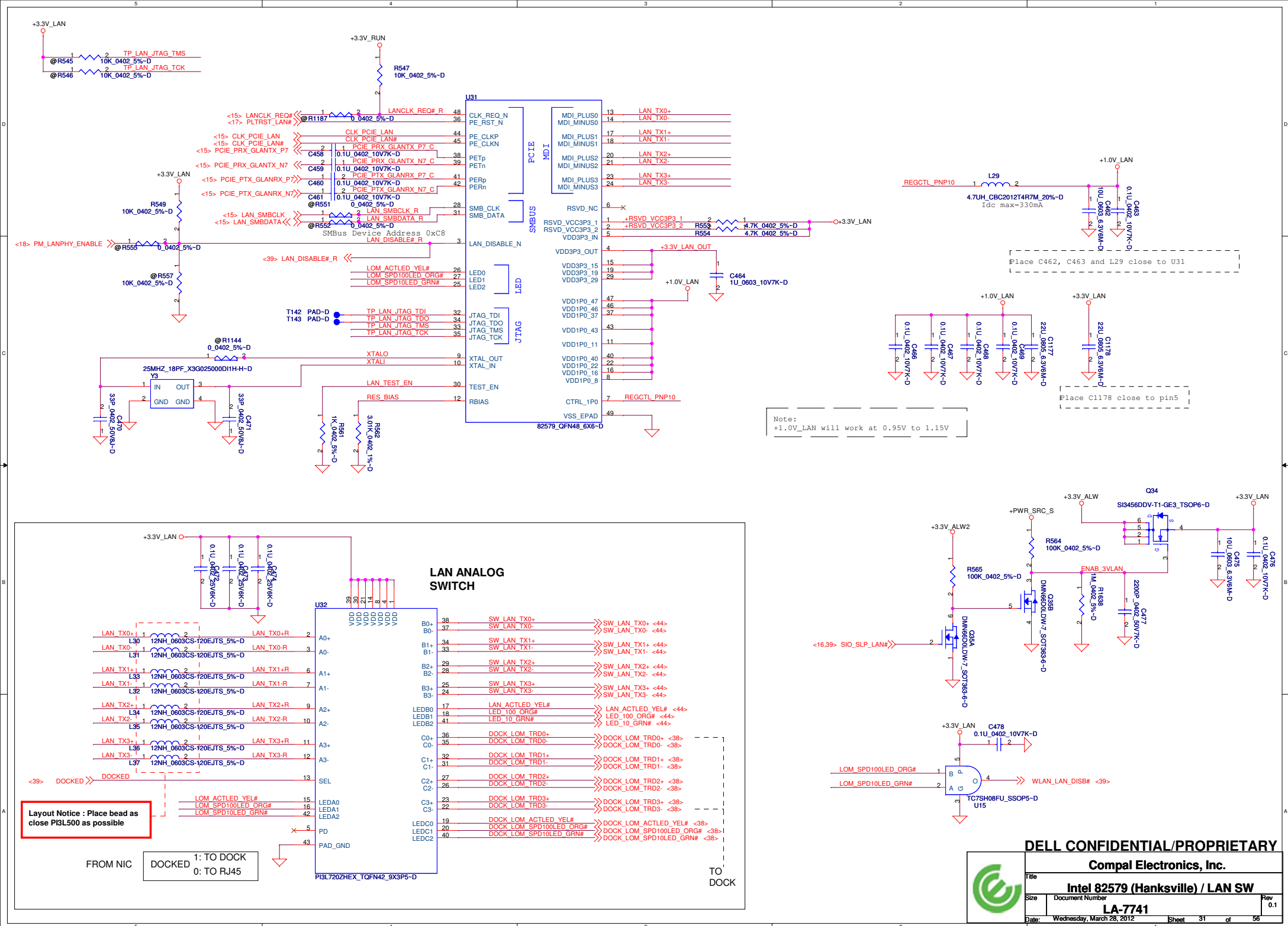
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Size: **LA-7741**

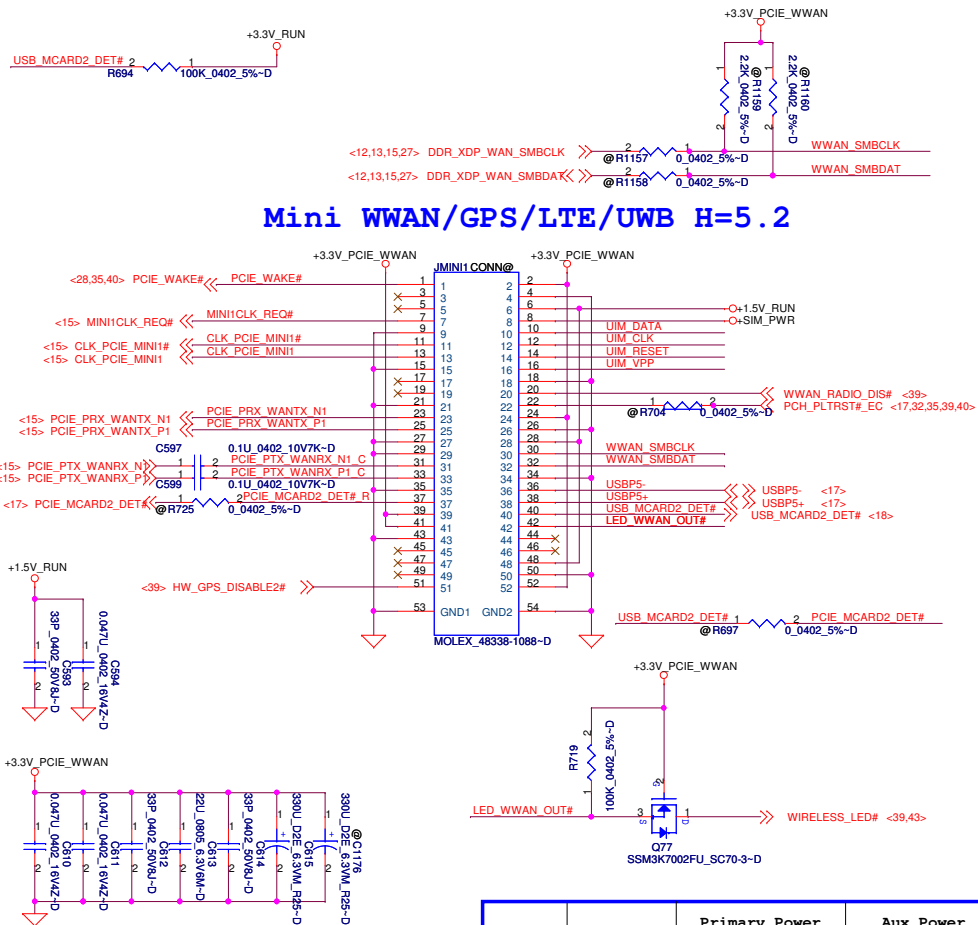
Date: **Wednesday, March 28, 2012**

Rev: **0.1**

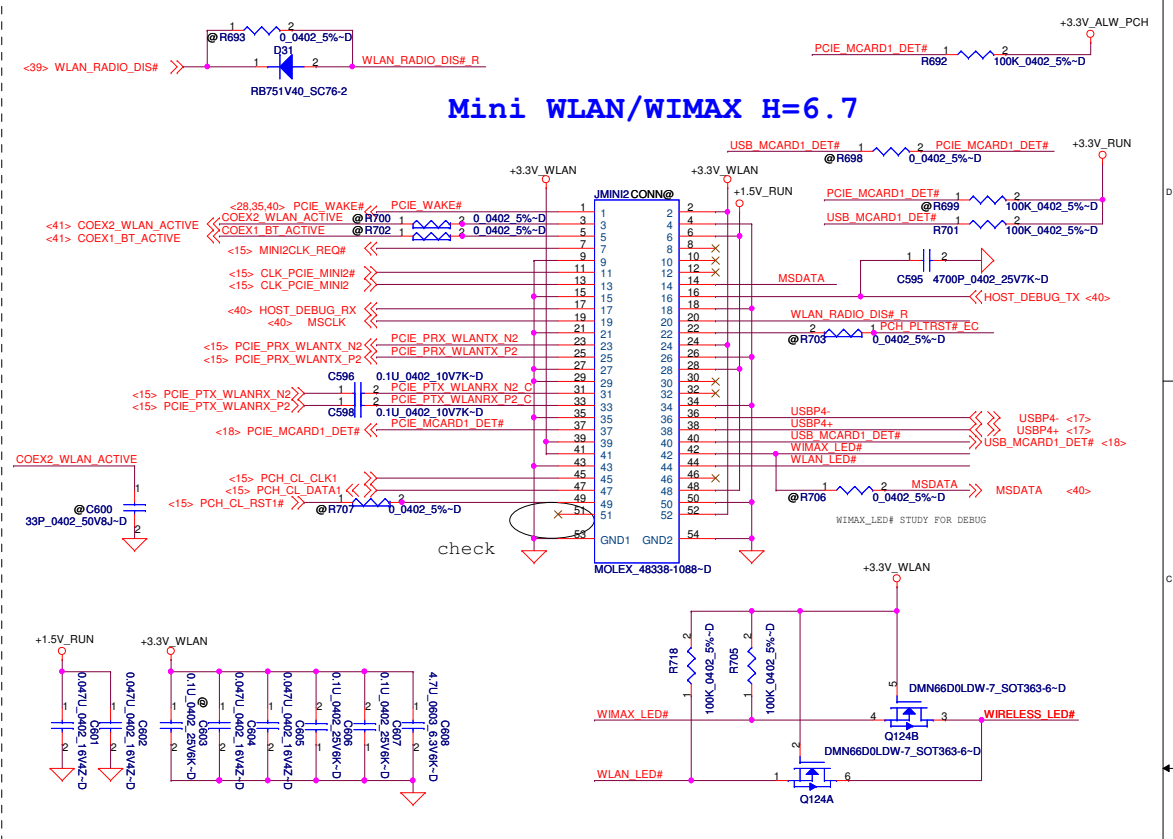
Sheet: **30** of **56**



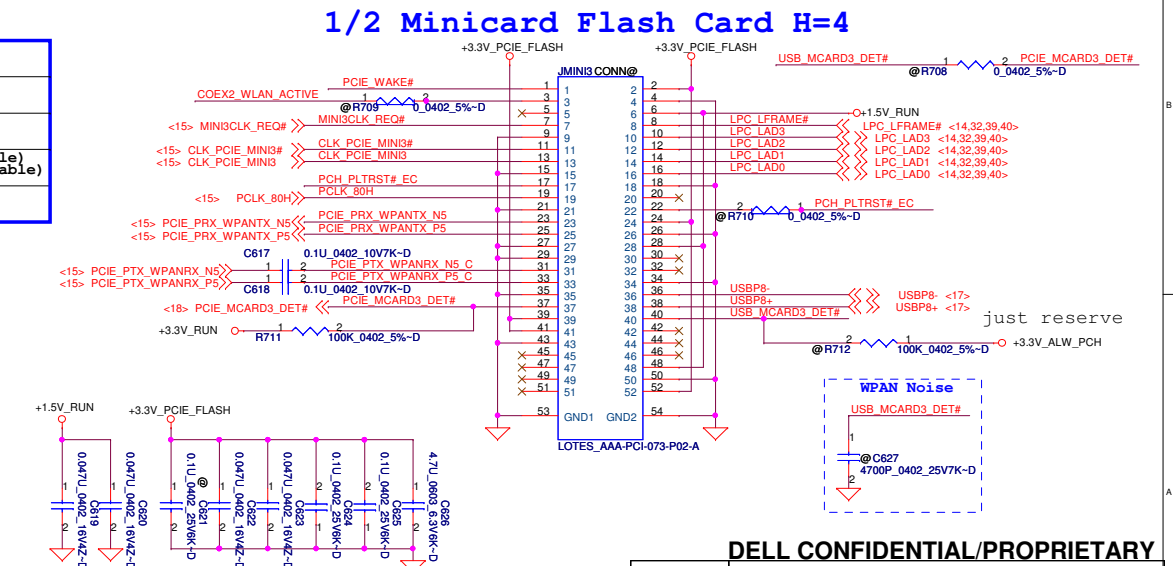




Mini WWAN/GPS/LTE/UWB H=5.2

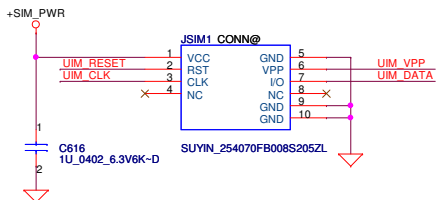


Mini WLAN/WIMAX H=6.7



1/2 Minicard Flash Card H=4

SIM Card Push-Push



PWR Rail	Voltage Tolerance	Primary Power		Aux Power
		Peak	Normal	Normal
+3.3V	+~9%	1000	750	
+3.3Vaux	+~9%	330	250	250 (Wake enable) 5 (Not wake enable)
+1.5V	+~5%	500	375	NA

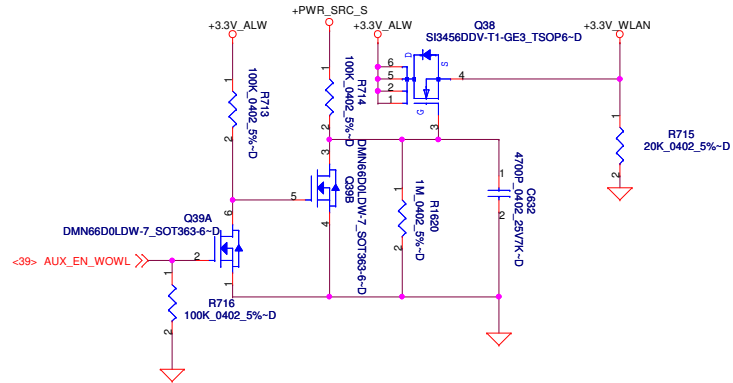
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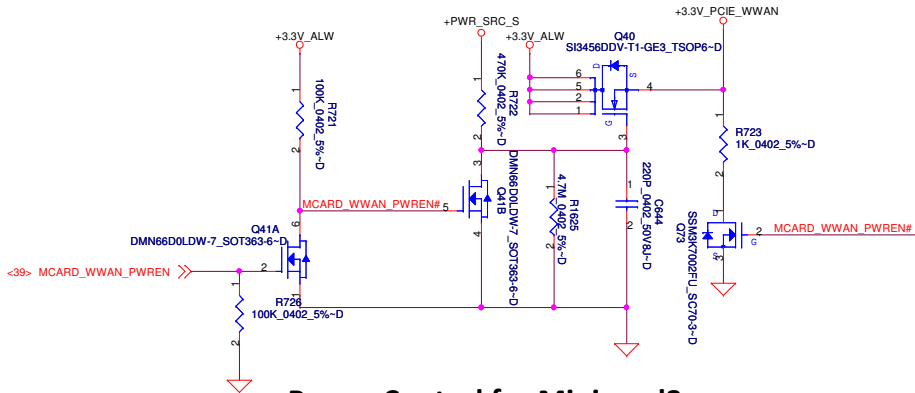


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Mini Card			
LA-7741			
Date: Wednesday, March 28, 2012	Sheet	34	of 56

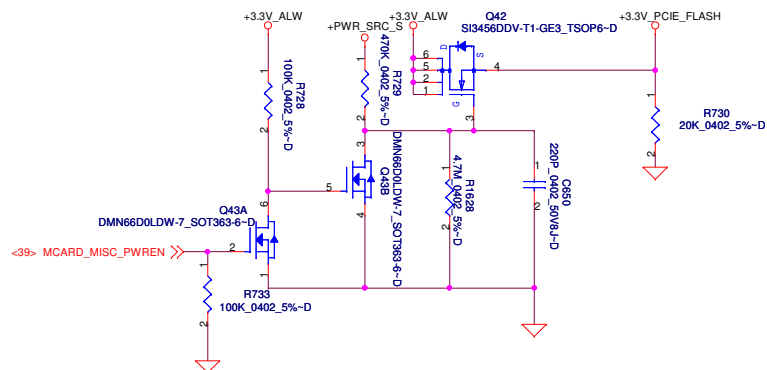
Power Control for Mini card2

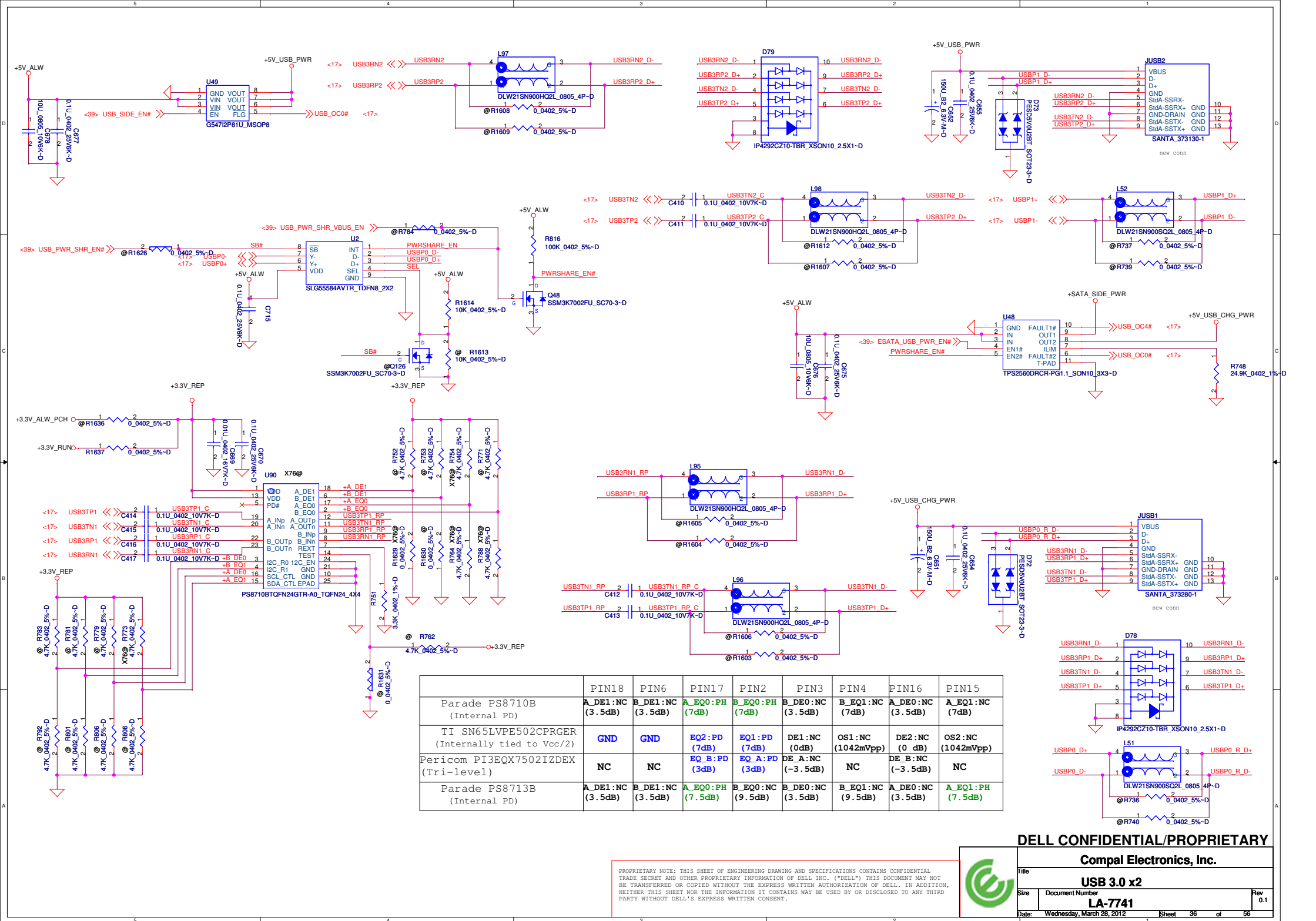


Power Control for Mini card1

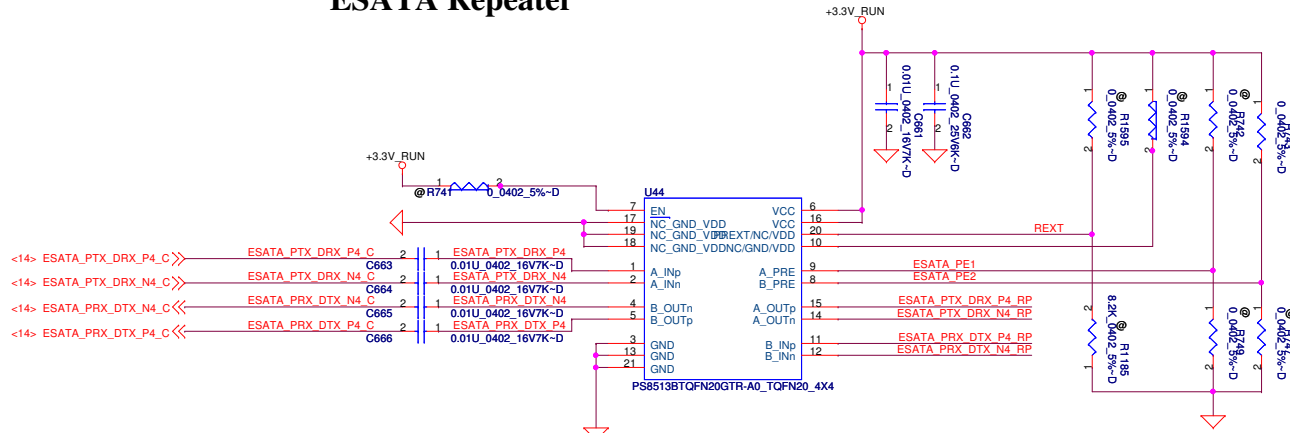


Power Control for Mini card3

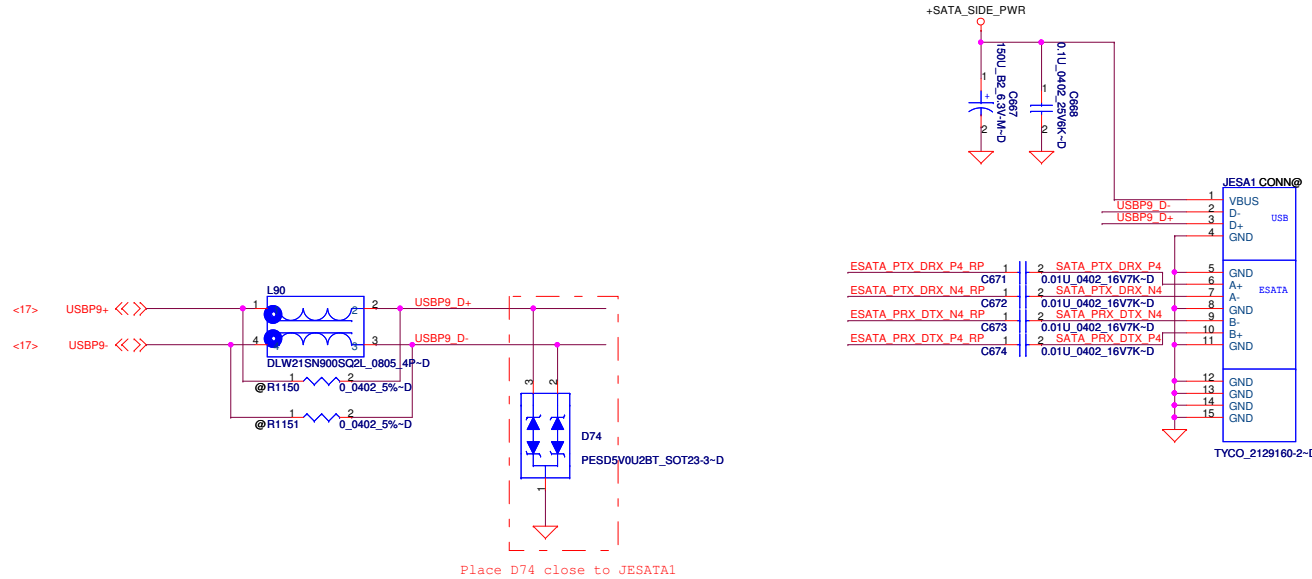





ESATA Repeater



	PIN8	PIN9	PIN20
Parade PS8513B (Internal PD)	B_PRE:PH (3.5dB)	A_PRE:NC (0dB)	NC (de-pop R1595)
MAXIM MAX4951C (Internal PD)	B_PRE:PH (3.0dB)	A_PRE:NC (0dB)	NC (de-pop R1595)
TI SN75LVCP412A (Internal PD)	B_PRE:PH (2.5dB)	A_PRE:NC (0dB)	NC (de-pop R1595)



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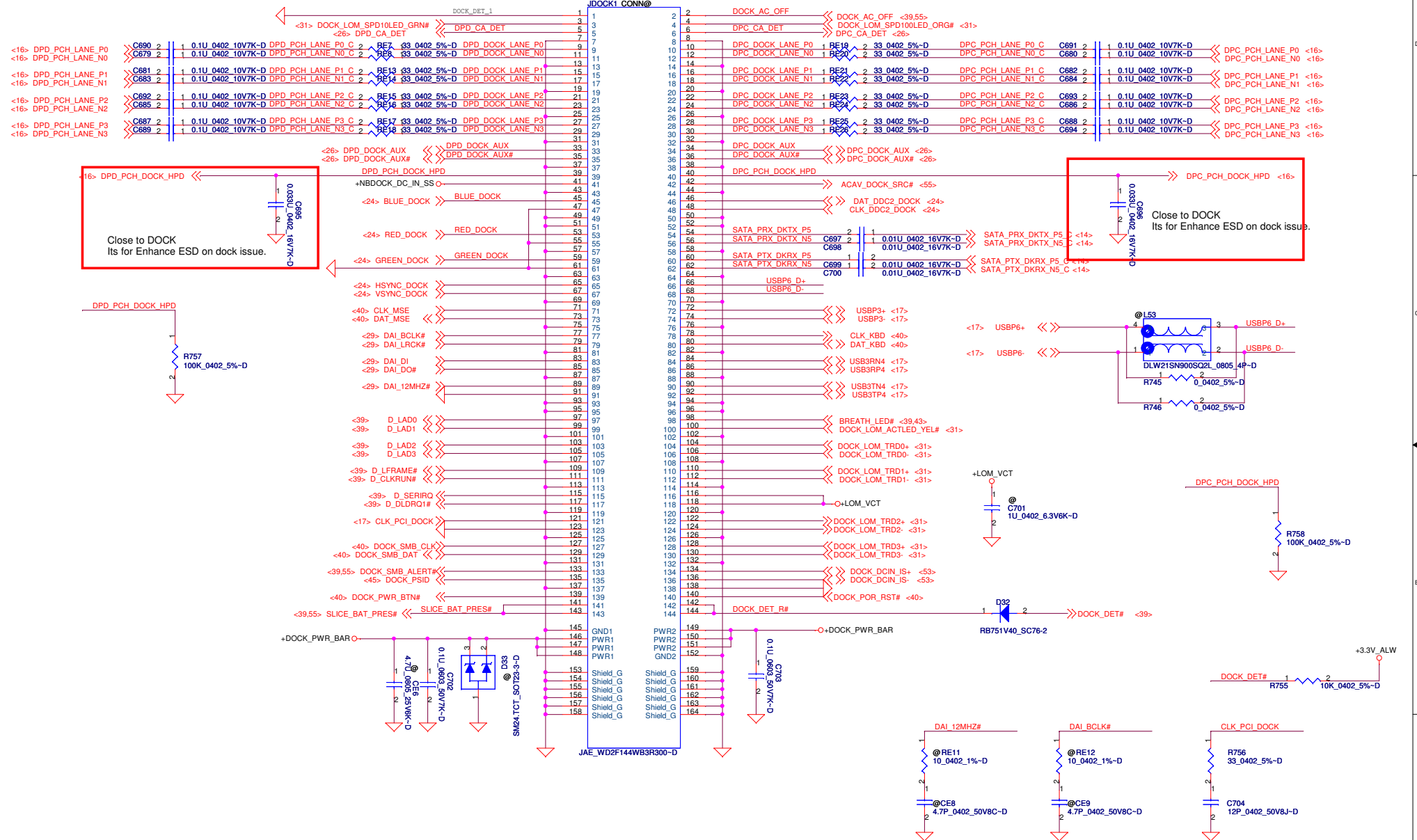
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USB/ESATA/IO/MDC

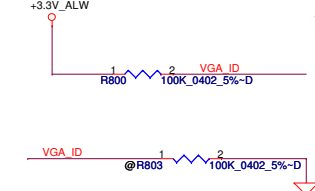
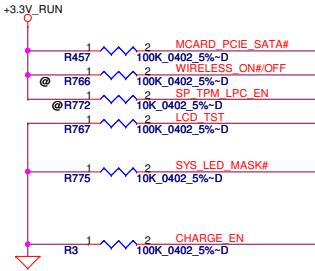
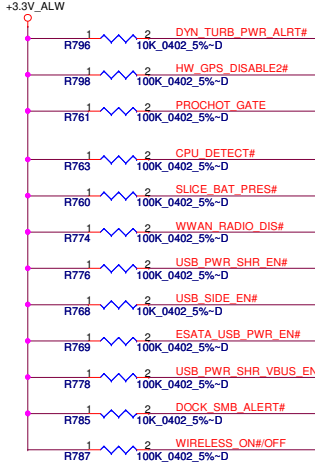
LA-7741

Date: Wednesday, March 28, 2012 Sheet 37 of 56

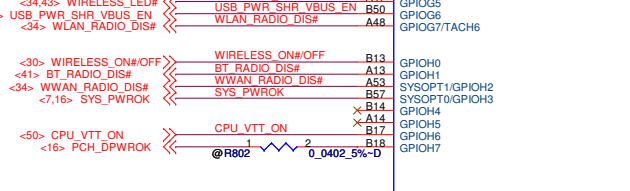
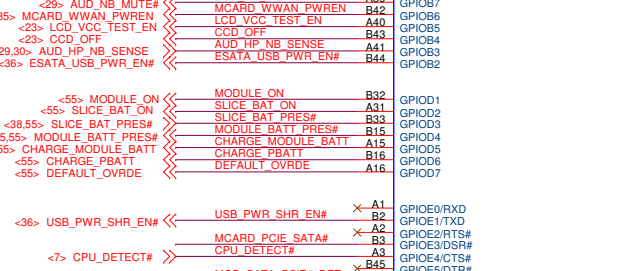
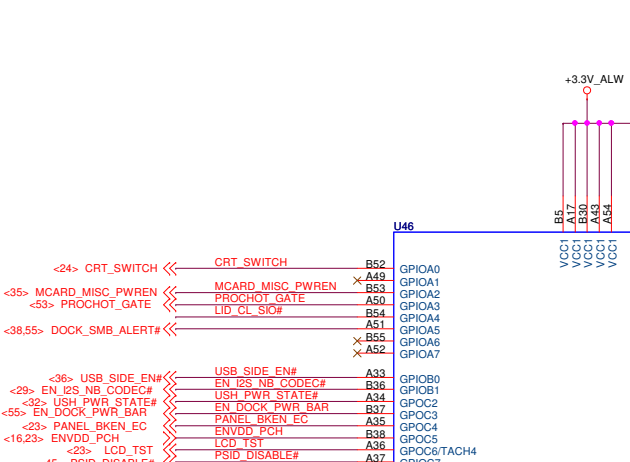
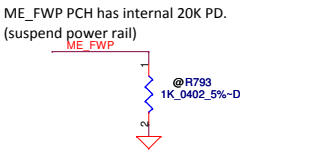


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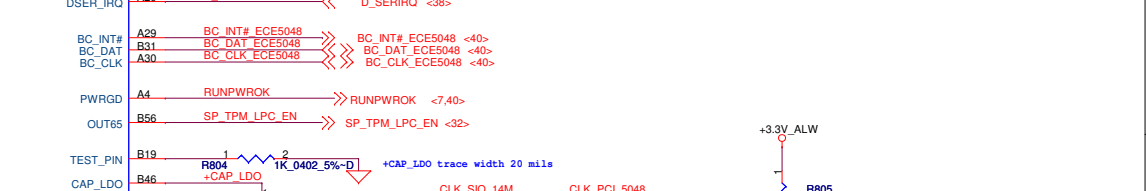
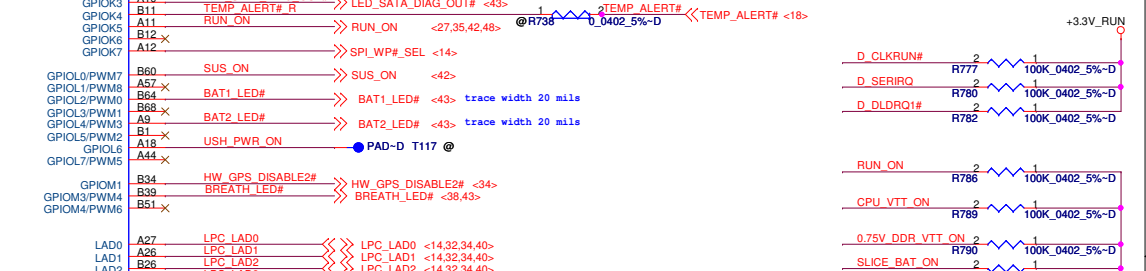
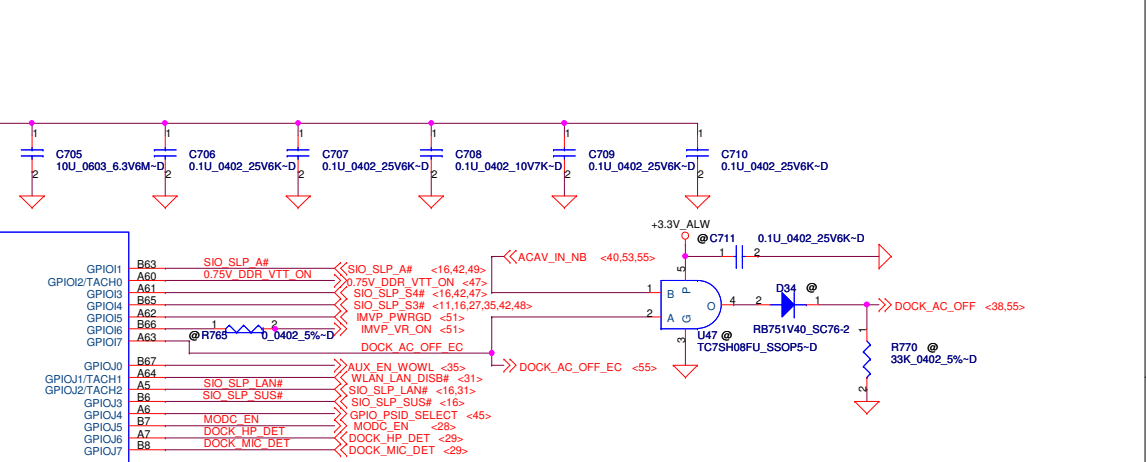
			
Compal Electronics, Inc.			
DOCKING CONN			
Title Size Date: Wednesday, March 28, 2012	Document Number LA-7741	Rev 0.1	Sheet 38 of 56



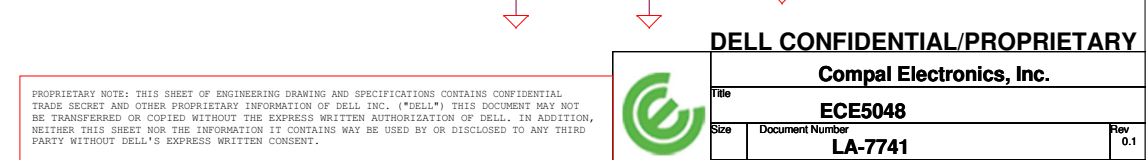
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Discrete	0
UMA	1



	VGA_ID0
Discrete	0
UMA	1



	VGA_ID0
Discrete	0
UMA	1



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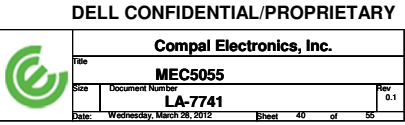
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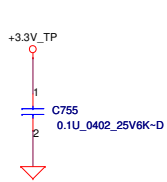
LA-7741

Rev 0.1

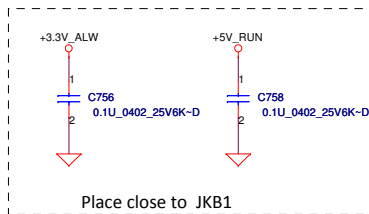
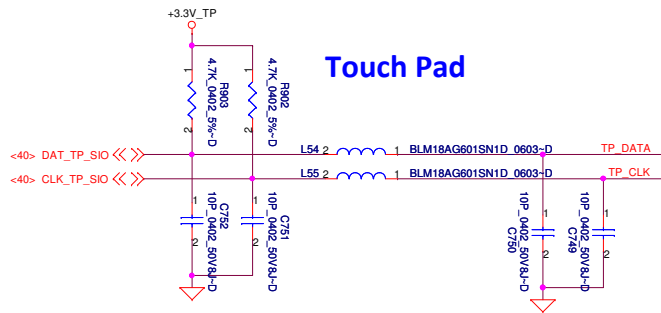
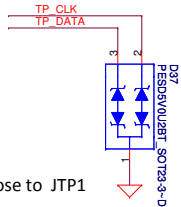
Wednesday, March 28, 2012

Sheet 39 of 56

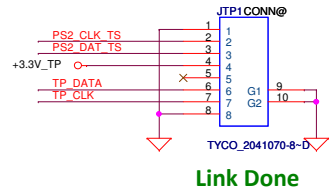
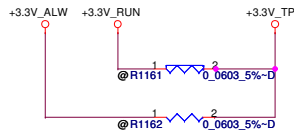




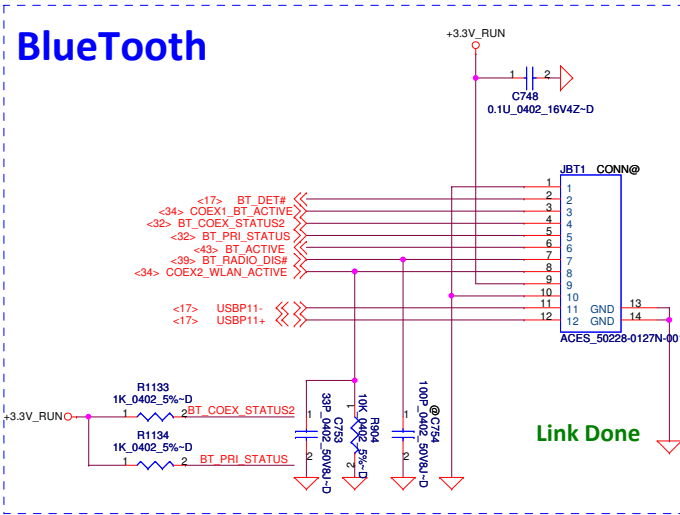
Place close to JTP1



Place close to JKB1

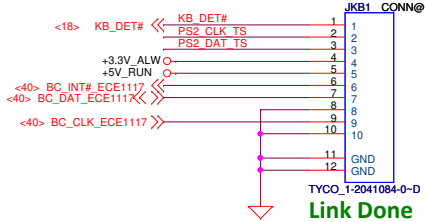


Link Done

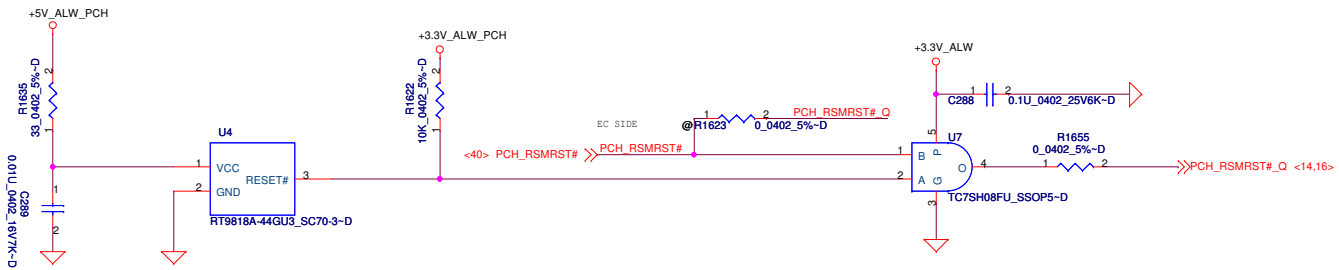
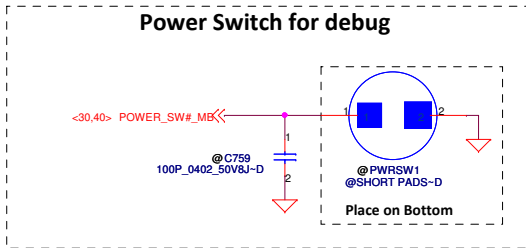


Link Done

KB Conn. Pitch=1.0mm



Link Done



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Touch PAD/Int KB/BT

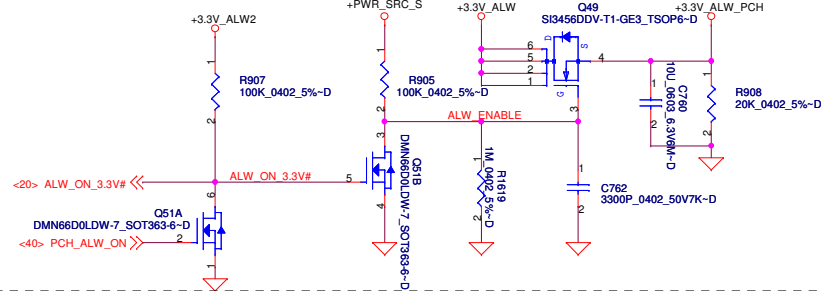
LA-7741

Rev 0.1

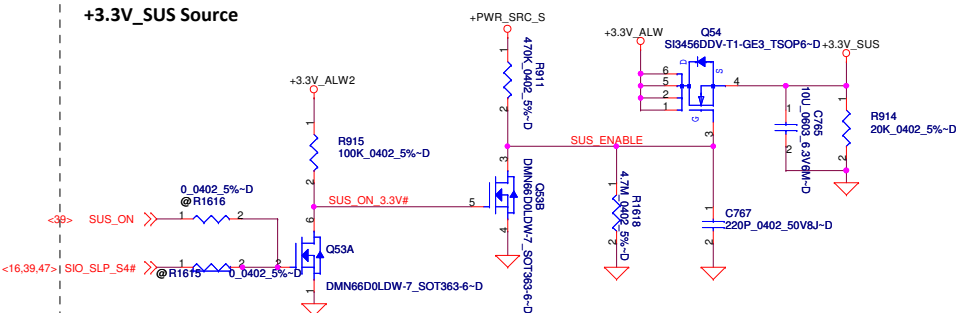
Date: Wednesday, March 28, 2012 Sheet 41 of 56

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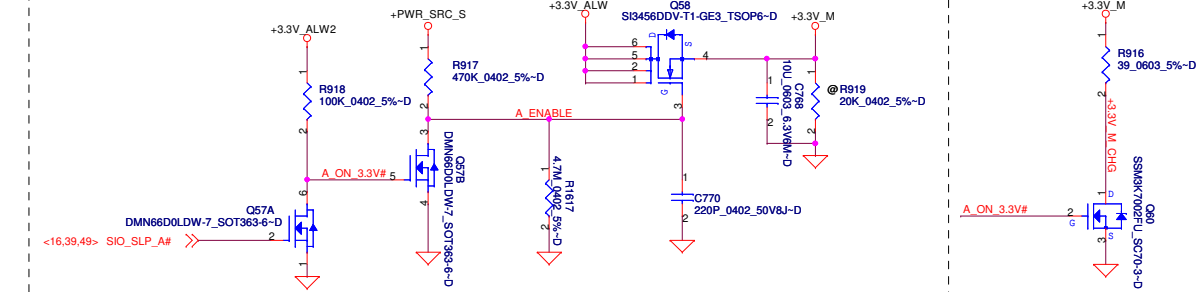
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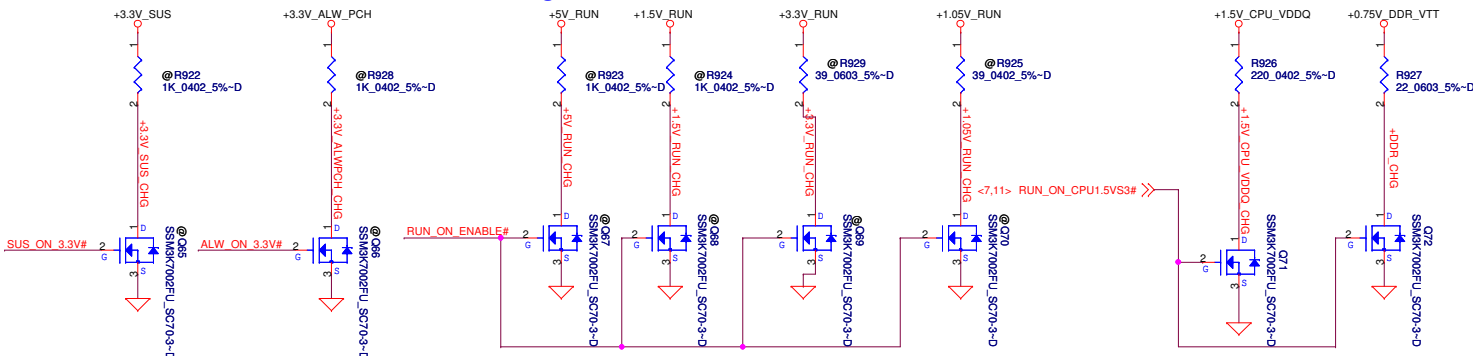
+3.3V_SUS Source



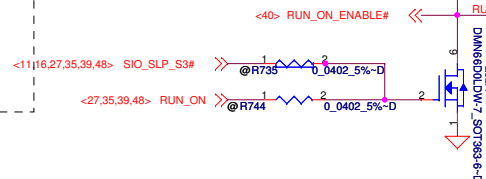
+3.3V_M Source



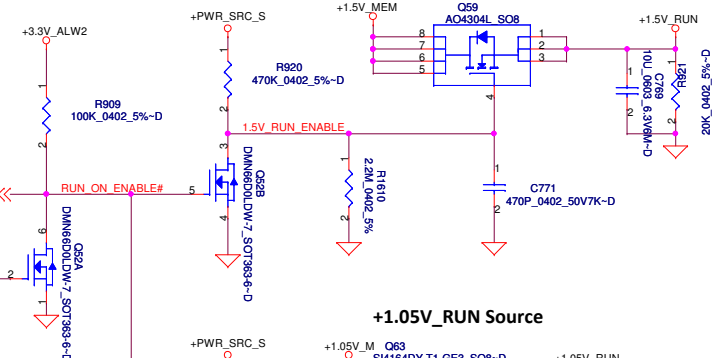
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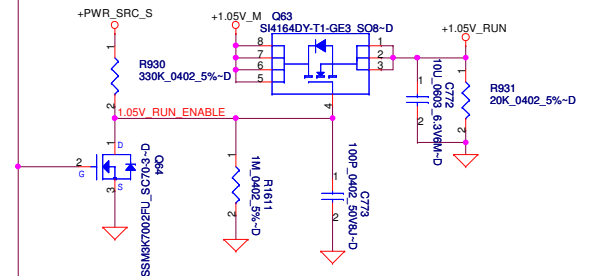
DC/DC Interface



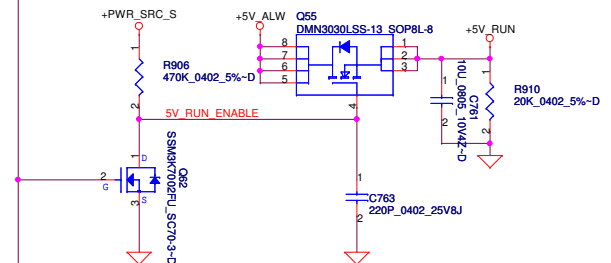
+1.5V_RUN Source



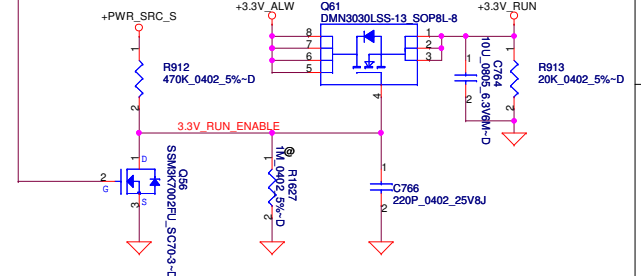
+1.05V_RUN Source



+5V_RUN Source



+3.3V_RUN Source



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POWER CONTROL

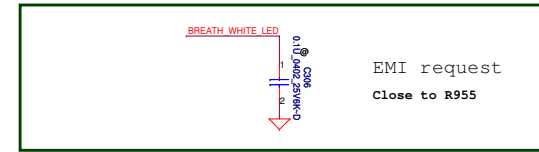
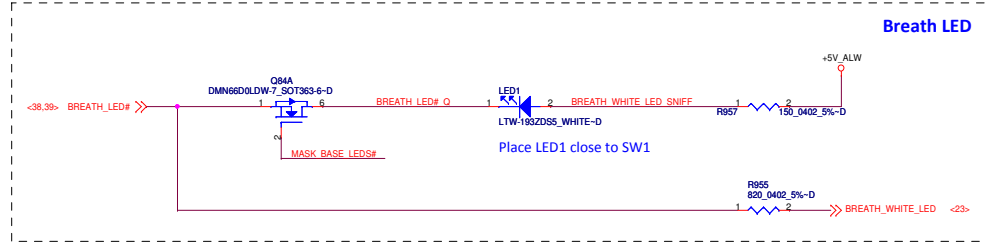
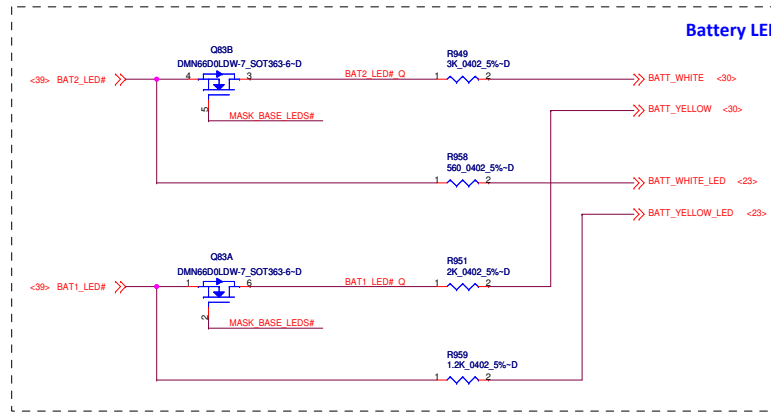
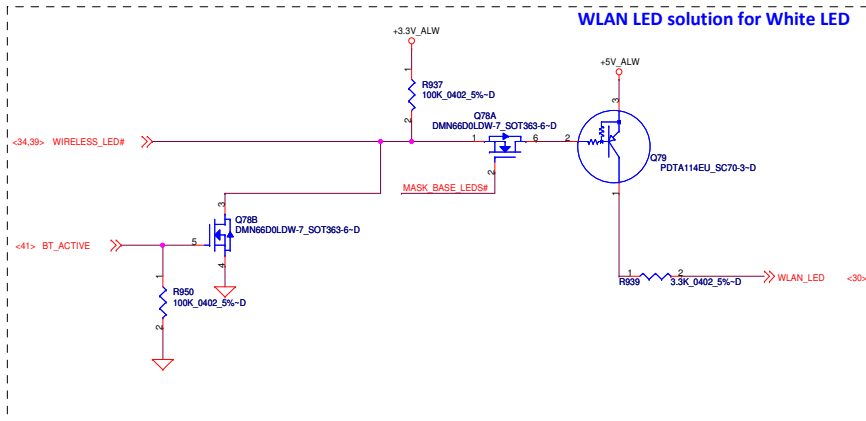
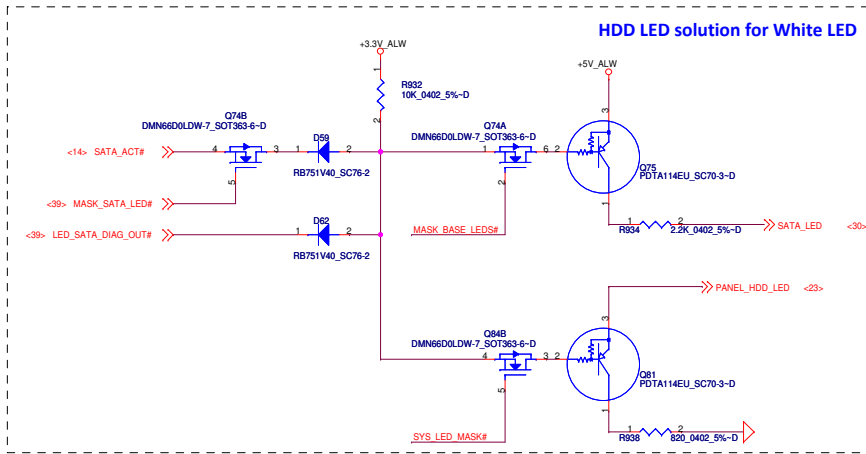
LA-7741

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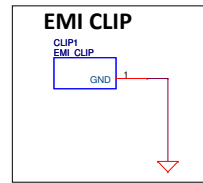
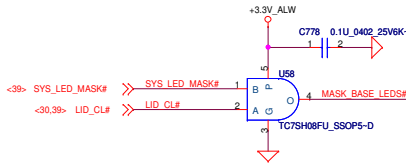
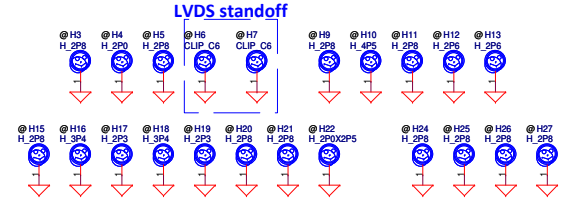
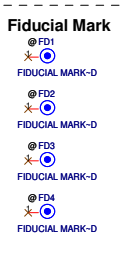
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Sheet 42 of 56

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LED Circuit Control Table		
	SYS_LED_MASK#	LID_CL#
Mask All LEDs (Sniffer Function)	0	X
Mask Base MB LEDs (Lid Closed)	1	0
Do not Mask LEDs (Lid Opened)	1	1



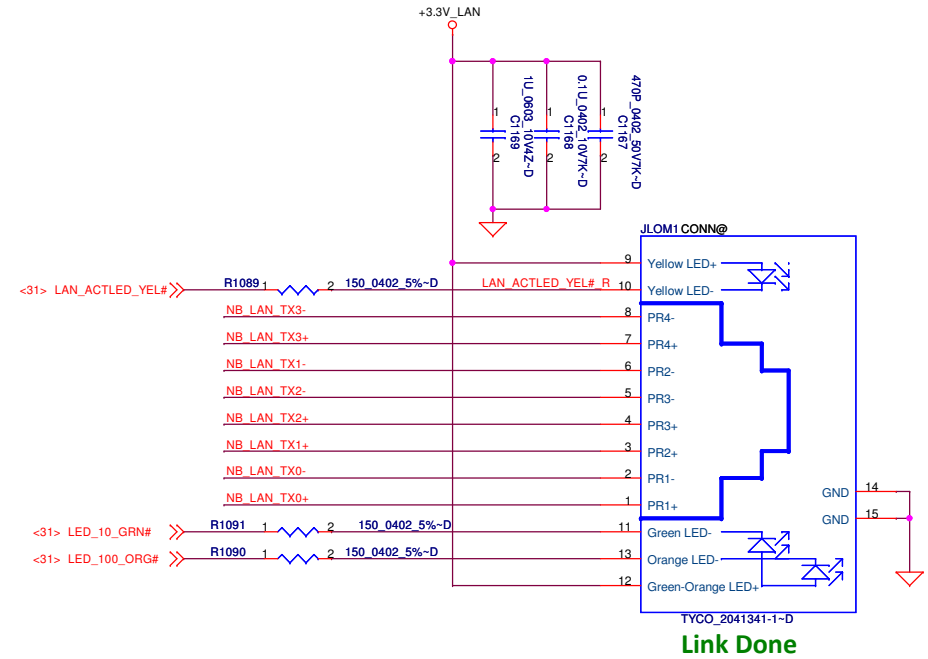
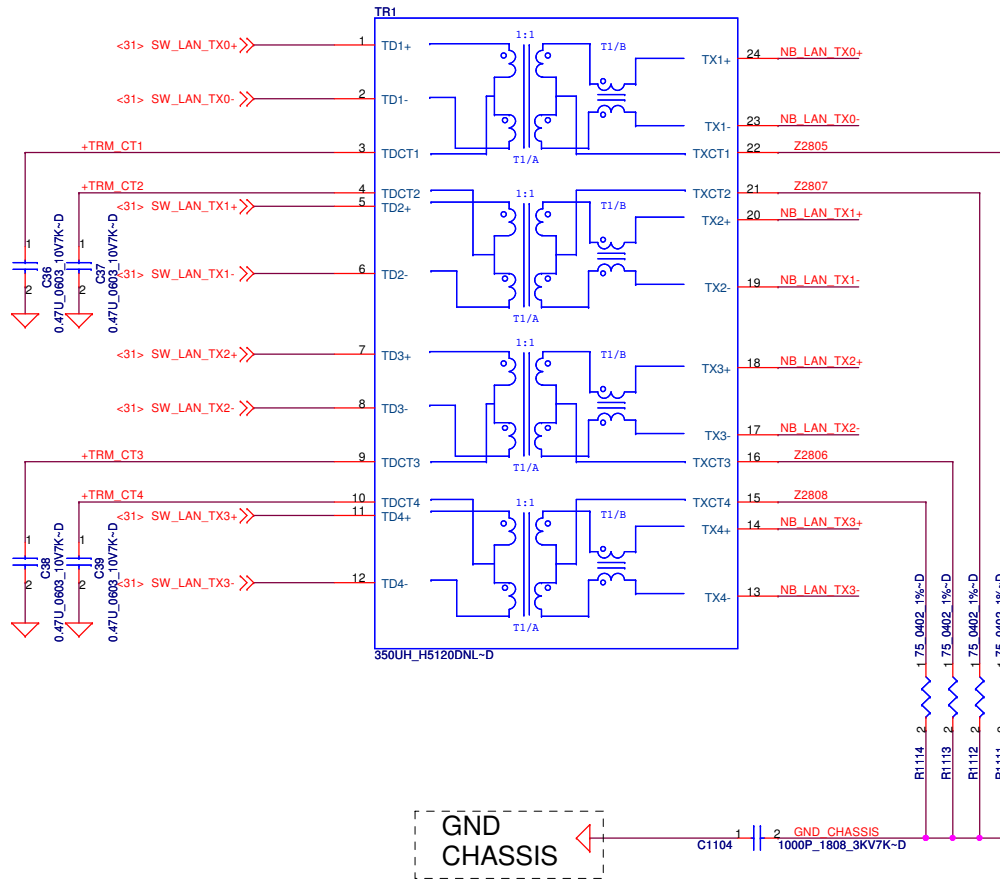
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PAD and Standoff

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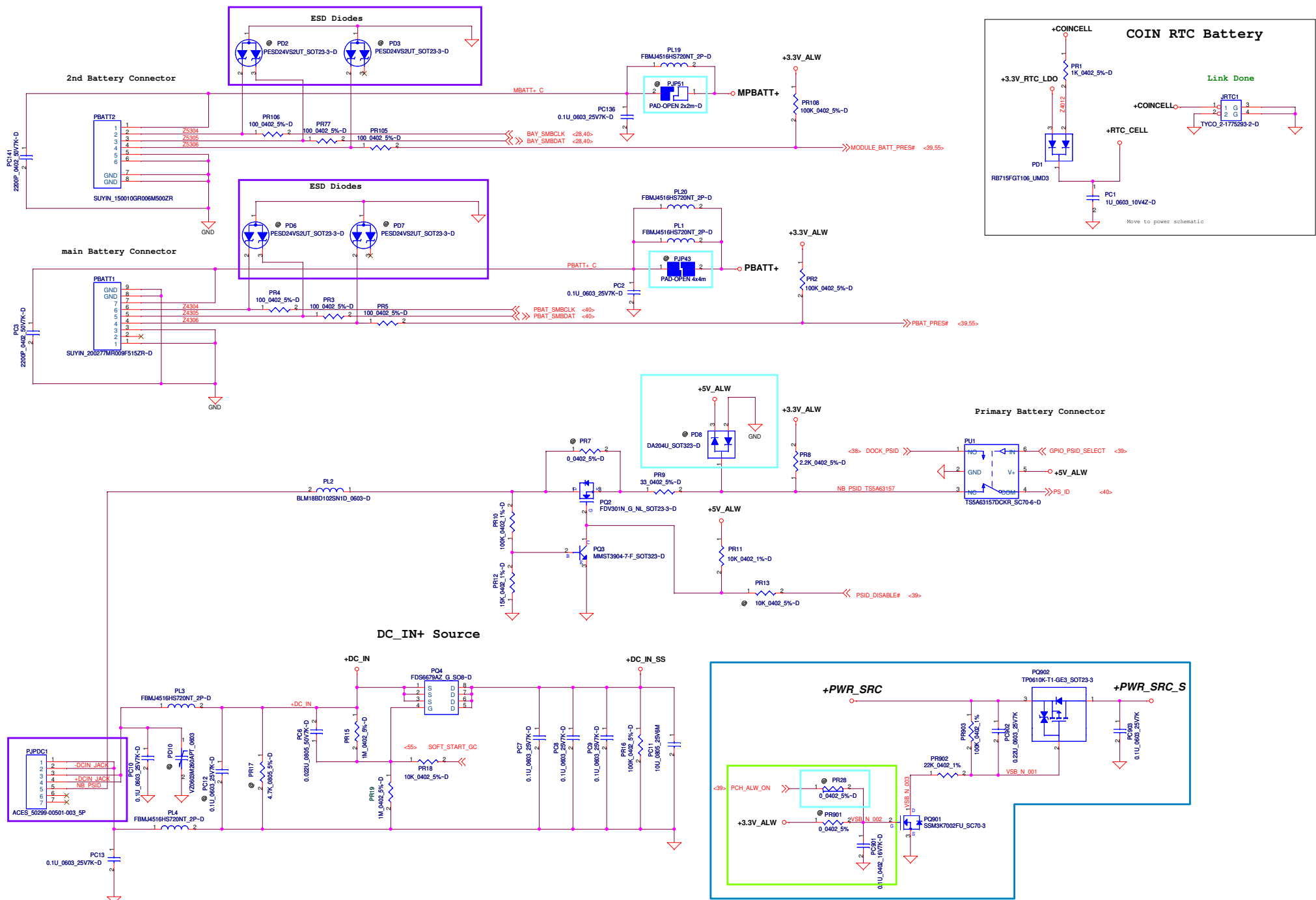


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Title		RJ45
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Date	Wednesday, March 28, 2012	Sheet 44 of 56
Rev		0.3

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		+DCIN	
Size	Document Number	LA-7741	
Date:	Wednesday, March 28, 2012	Sheet	45 of 56

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3.3VALWP +/- 5%
TDC=5.45A
Peak Current=7.786A
OCP min=10.122A
L/S RDS(on) 14.2m ohm(typ), 17.5m ohm(max)
FSW=375KHz
Delta_Iin=1.246A
Delta_Io=3.3231A

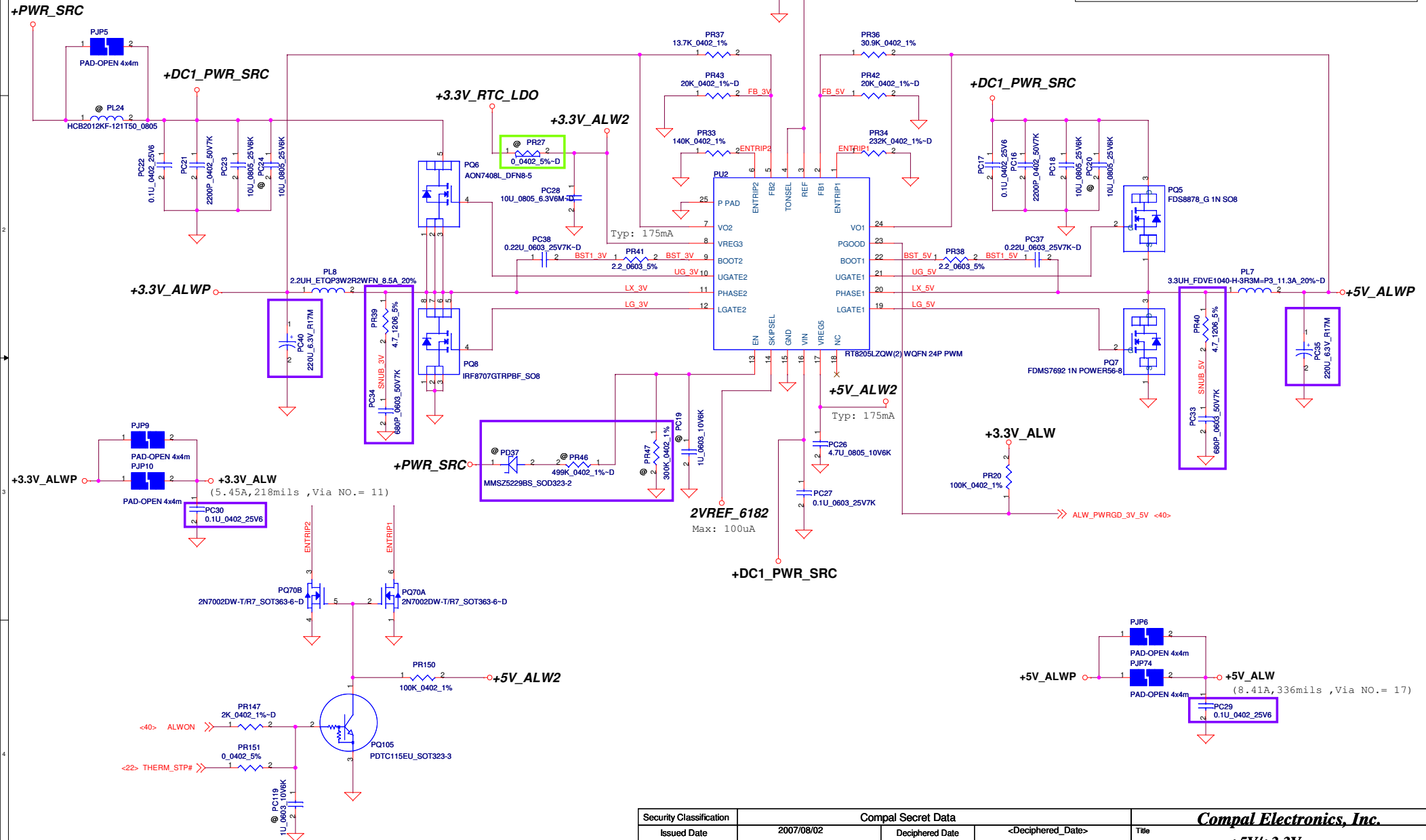
+5V_ALWP/ +3.3V_ALWP

Charlie_note :

SKIPSEL Connect to REF : DEM Mode
@DEM VFBx=2.0V

TONSEL
Frequency Selectable Input for VOUT1(+5v)/VOUT2(+3.3v)
respectively.
300kHz/375kHz : Connect to REF

5VALWP +/- 5%
TDC=8.41A
Peak Current=12.012A
OCP min=15.62A
L/S RDS(on) 9.7m ohm(typ), 14.5m ohm(max)
FSW=300KHz
Delta_Iin=1.64A
Delta_Io=3.756A

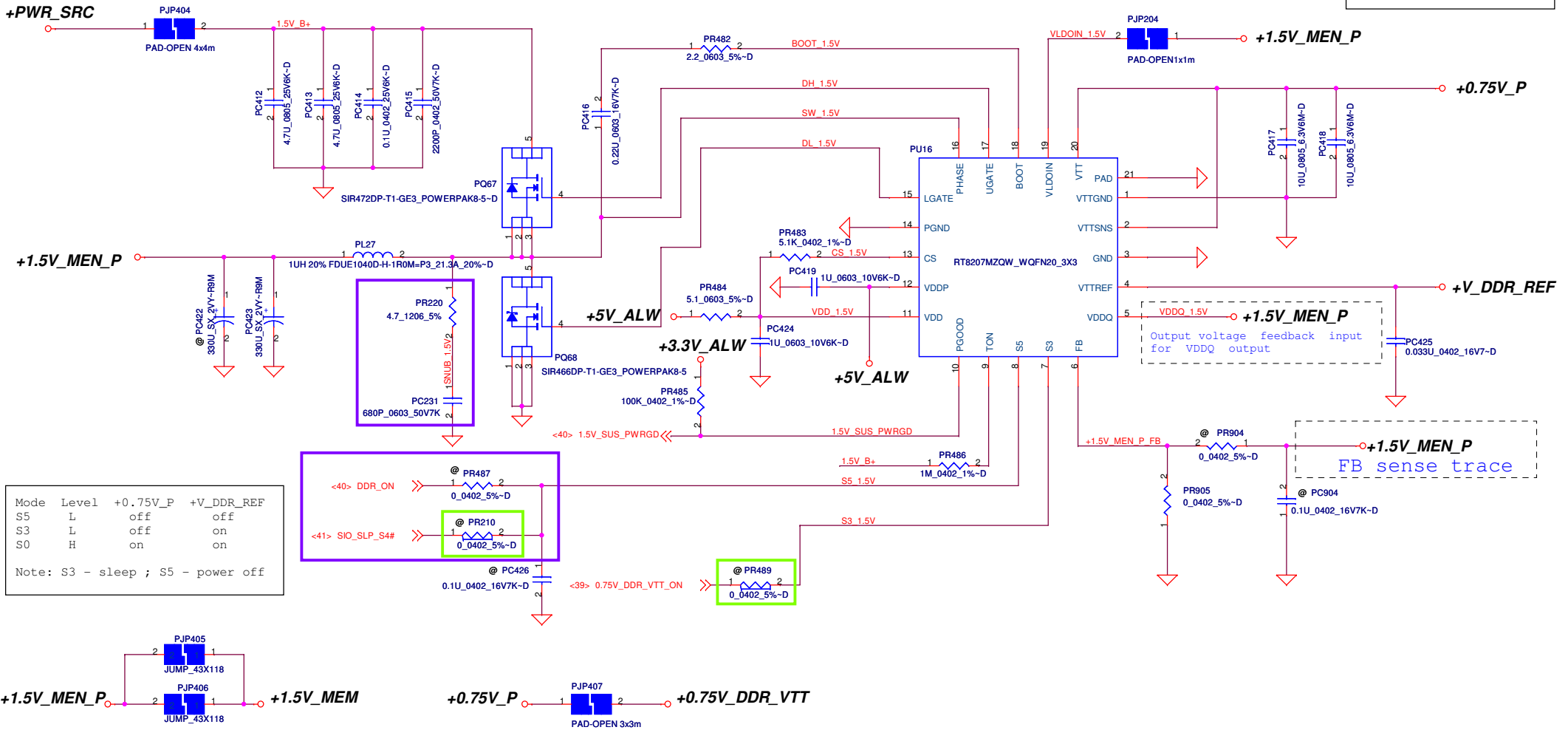


Security Classification		Compal Secret Data		Title	
Issued Date	2007/08/02	Deciphered Date	<Deciphered_Date>	Compal Electronics, Inc. +5V/+3.3V	
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				Date:	Wednesday, March 28, 2012
				Sheet	46 of 56
				Rev	0.1

1.5Volt +/- 5%
TDC=7.18A
Peak Current=10.25A
OCP min=13.33A
L/S RDS(on) 4.2m ohm(typ), 5.1m ohm(max)
FSW=253KHz for RTON=1M ohm, spec. On-Time =303.947ns
Delta_Iin=1.458A
Delta_Io=5.4728A

+1.5V_MEN_P/ +0.75V_P

0.75Volt +/- 5%
TDC=0.525A
Peak Current=0.75A
OCP min=0.975A



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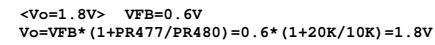
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+1.5V MEN/+0.75V DDR VTT

Title	LA-7741		
Size	Document Number	Rev	0.1
Date	Wednesday, March 28, 2012	Sheet	47 of 56

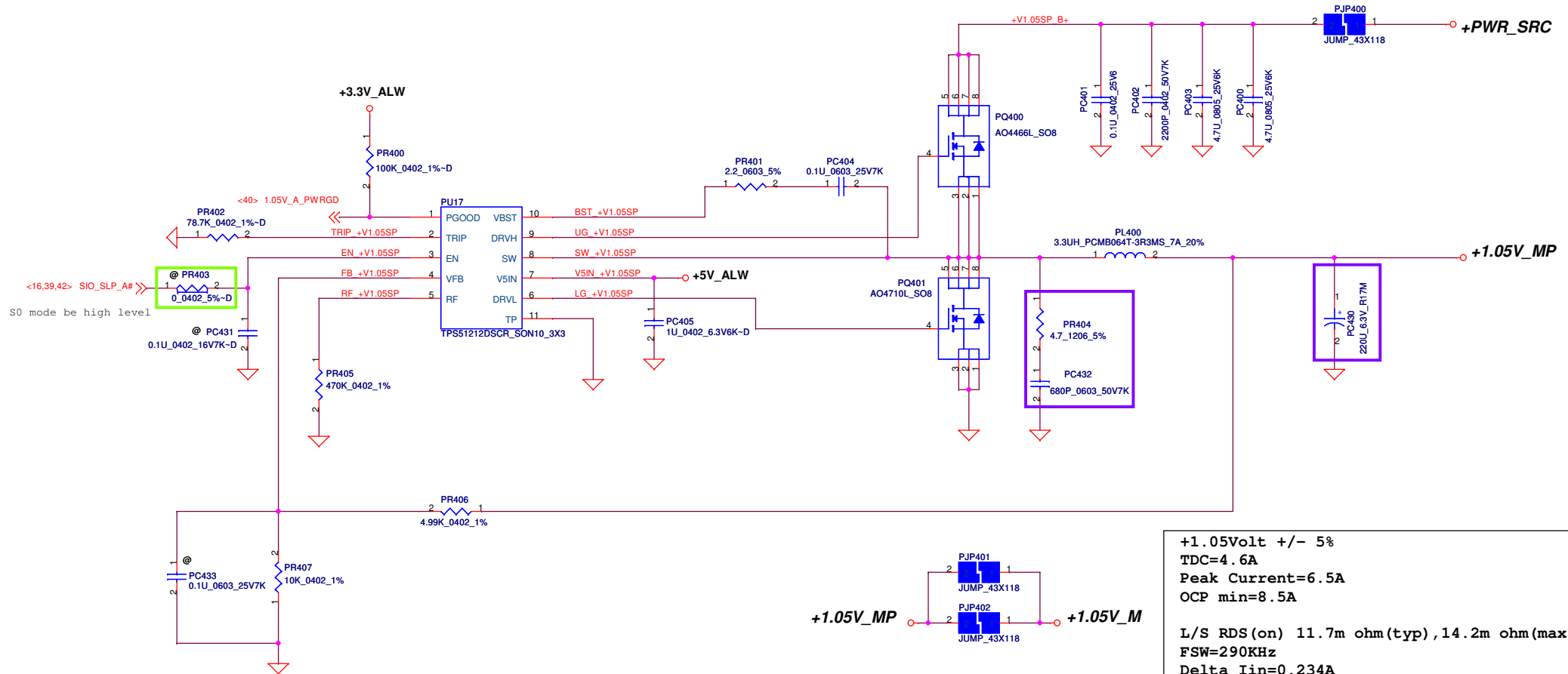
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```
FSW=1MHz
Delta_Iin=0.407A
Delta_Io=0.8182A
```



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+1.05V_MP



+1.05Volt +/- 5%
 TDC=4.6A
 Peak Current=6.5A
 OCP min=8.5A
 L/S RDS(on) 11.7m ohm(typ), 14.2m ohm(max)
 FSW=290KHz
 Delta_Iin=0.234A
 Delta_Io=1.038A

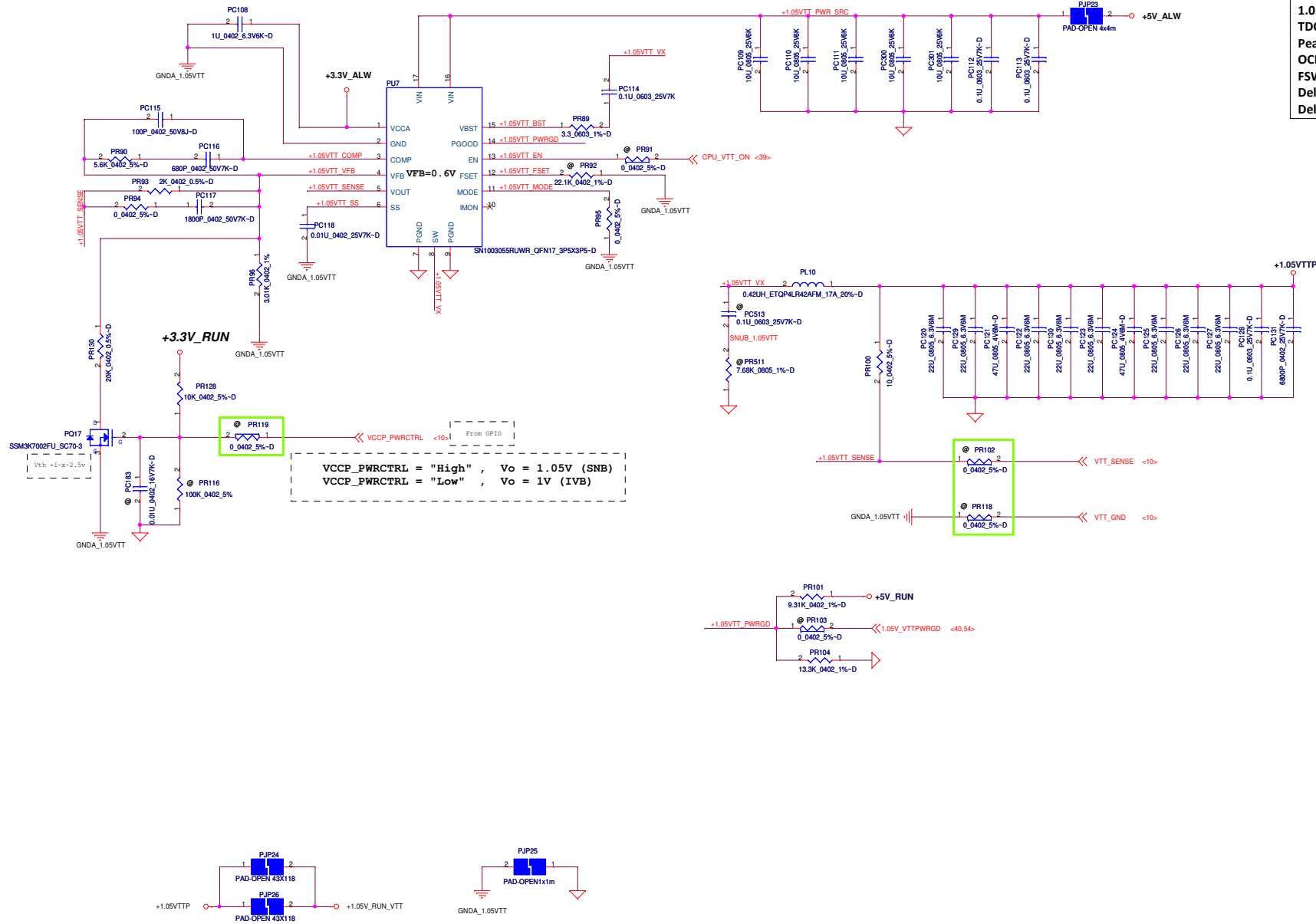
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Title			+1.05V_M	
Size	Document Number			Rev
	LA-7741			0.1
Date:	Wednesday, March 28, 2012			Sheet 49 of 56

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$+1.05V_{TTP}$ 

1.05VOLT +/-5%
TDC=4.49A
Peak Current=6.411A
OCP min=8.334A
FSW=1MHz
Delta_lin=0.804A
Delta_lo=1.975A

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ISL95870A +1.05V RUN VTT

Size	Document Number
	LA-7741

Rev	0.1
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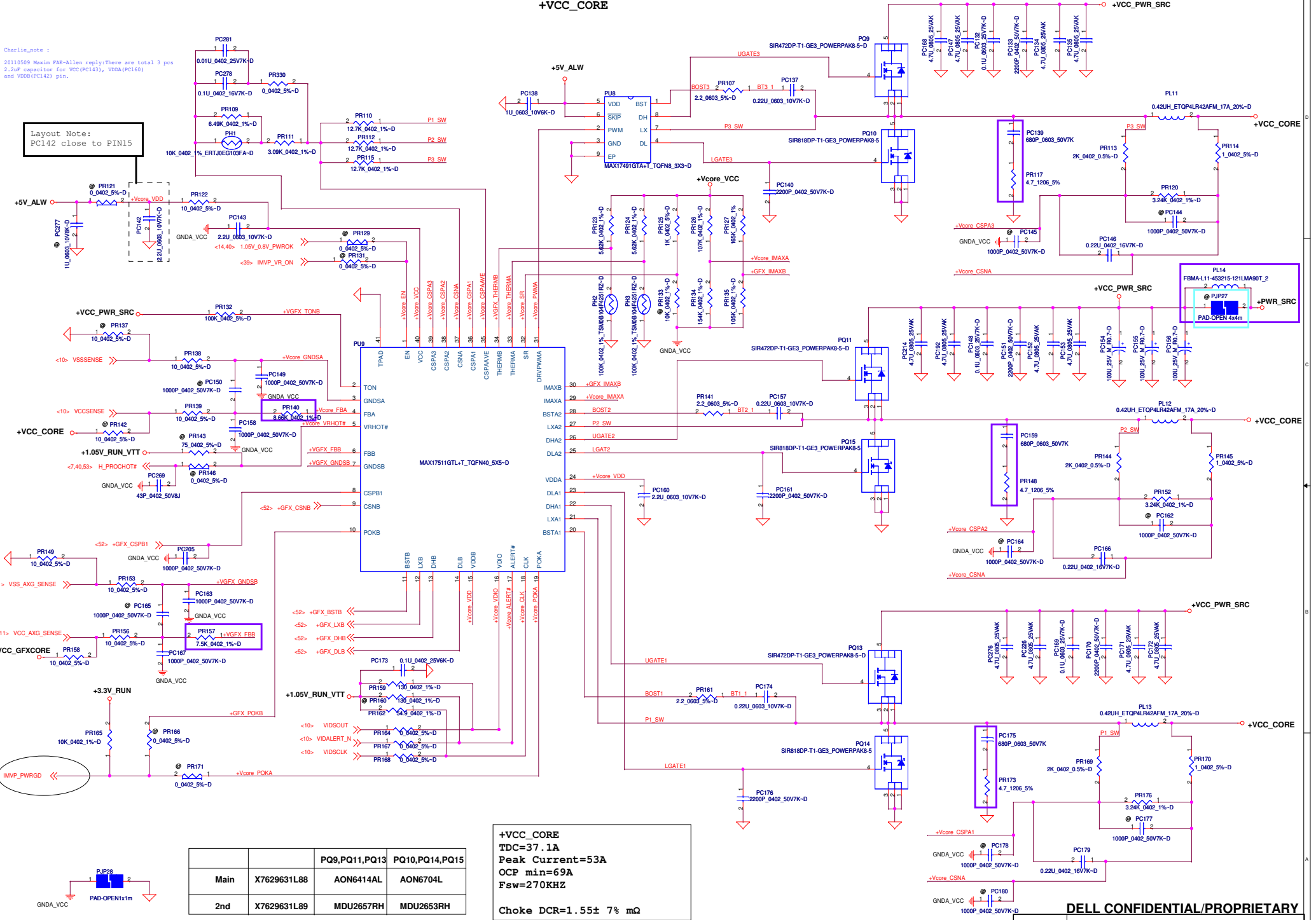
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+VCC_CORE

Charlie_note :

20110509 Maxin FAB-Allen reply:There are total 3 pcs 2.2uF capacitor for VCC (PC143), VDDA (PC160) and VDDB (PC142) pin.

Layout Note:
PC142 close to PIN15



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Title		
Vcore		
Size	Document Number	Rev
	LA-7741	0.1
Date	Wednesday, March 28, 2012	Sheet 51 of 56

		PQ21,PQ24	PQ25,PQ26
Main	X7629631L88	AON6414AL	AON6704L
2nd	X7629631L89	MDU2657RH	MDU2653RH

```
+VCC_GFXCORE
TDC=23.1A
Peak Current=33A
OCP min=43A
Fsw=330KHZ

Choke DCR=0.82± 5% mΩ
```

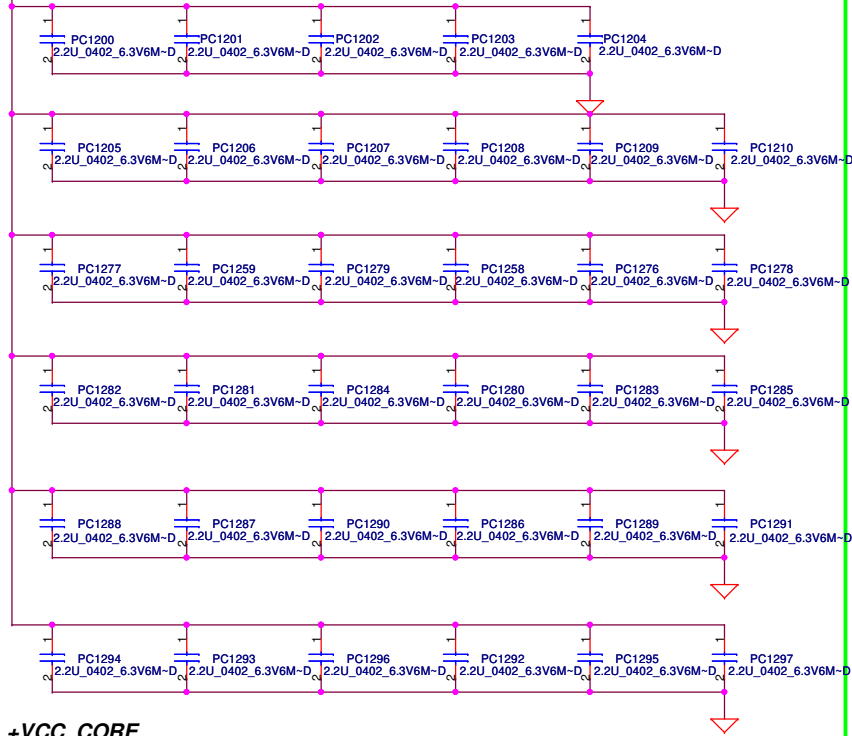


Title		
ISL95870A +1.05V RUN VTT		
Size	Document Number	Rev
	LA-7741	0.1

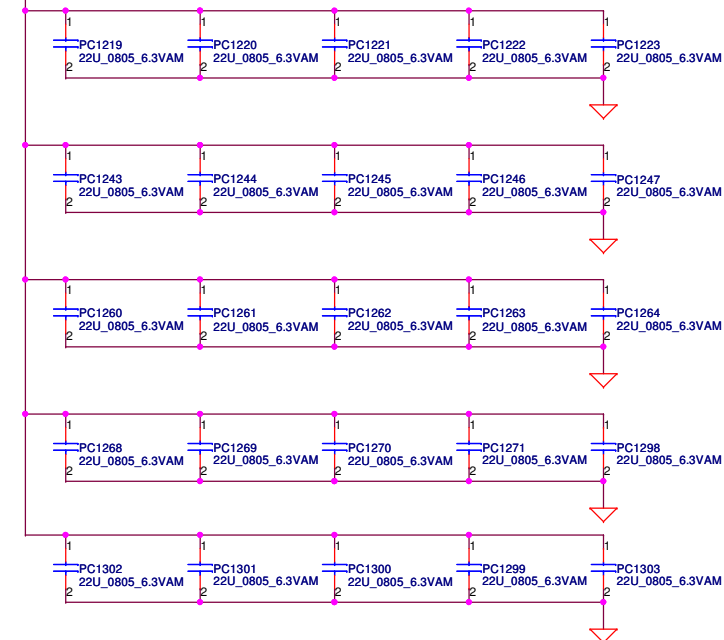
+VCC_CORE

Charlie note: Vcore_Cout1
1.22uF*35 (SE00000888L)
2.22uF*25 (SE00000888L)
Vcore_Cout2
1.470uF 4.5m *4 (SGA00004X80)

+VCC_CORE



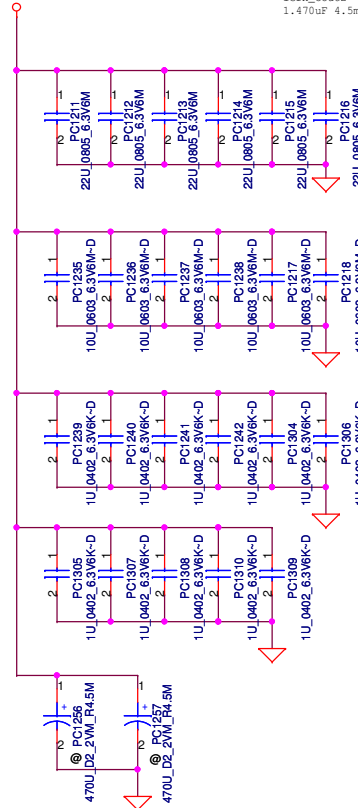
+VCC_CORE



+VCC_GFXCORE

Charlie note:
iGfx_Cout1
1.22uF*6 (SE000000110)
2.10uF*6 (SE00000578L)
3.11uF*11 (SE000000K8L)
iGfx_Cout2
1.470uF 4.5m *2 (SGA00004200)

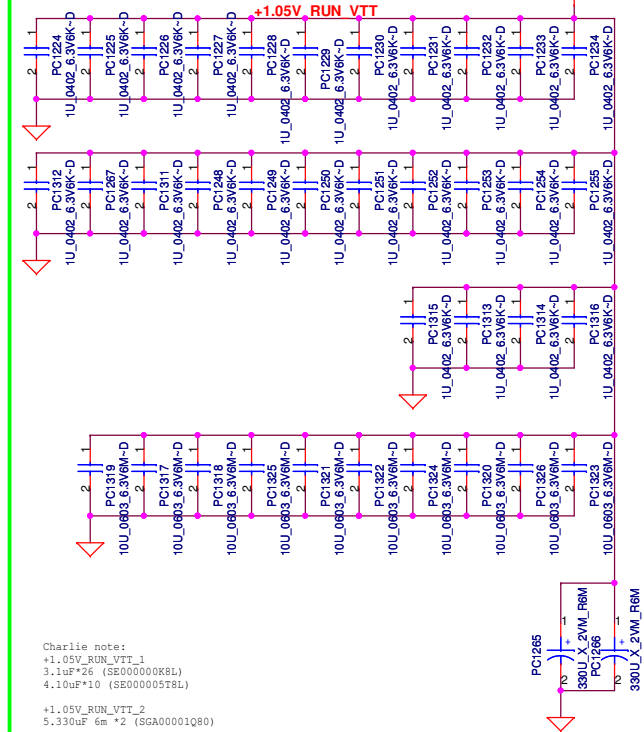
+VCC_GFXCORE



Below is 458544_CRV_PDDG_0.5 Table 5-8.

Socket Bottom	5 x 22 μ F (0805) 5 x (0805) no-stuff sites
Socket Top	7 x 22 μ F (0805) 2 x (0805) no-stuff sites

+1.05V_RUN_VTT

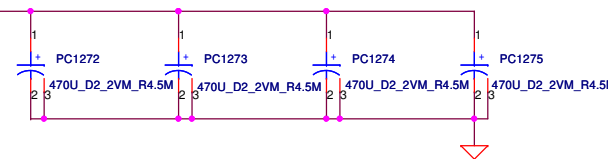


Charlie note:
+1.05V_RUN_VTT_1
3.10uF*26 (SE000000K8L)
4.10uF*10 (SE00000578L)

+1.05V_RUN_VTT_2
5.330uF 6m *2 (SGA00001Q80)

+VCC_CORE

+VCC_CORE



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Title	LA-7741	Rev	0.1
Size	Document Number		
Date	Wednesday, March 28, 2012	Sheet	56 of 56

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Version Change List (P. I. R. List)

Page 1

Item	Page#	Title	Date	Request Owner	Issue Description	Solution Description	Rev.
1	51	VCORE_MAX17511	2011/08/02	Maxim	CPU Load line modify	PR140 change from 9.76K_ohm(P/N :SD03497618L) to 8.66K_ohm (P/N : SD03486618L)	X01
2	51	+VCC_GFXCORE	2011/08/02	Maxim	GFX Load line modify	PR157 change from 8.45K_ohm(P/N :SD00000068L) to 7.5K_ohm (P/N : SD03475018L)	X01
3	45	DCIN	2011/08/04	DELL	ME design change	PJPDC1 change from 7pin(P/N :SP02000NQ0L) (MOLEX_87438-0743_7P) to 5pin(P/N :SP02000YD00) (ACES_50299-00501-003_5P)	X01
4	46 49	+5V_ALWP/ +3.3V_ALWP +1.05V_MP	2011/08/04	Compal	COS concern, change from D2 Polymer cap to OScon cap	+5V_ALWP/ +3.3V_ALWP portion : PC35,PC40 change from 220u_6.3V_ESR25 polymer cap(P/N: SGA00002M00) to 220u_6.3V_ESR17 OScon cap(P/N: SF000002Y00) (H=4.2) +1.05V_MP portion : PC430 change from 220u_4V_ESR15 polymer cap(P/N: SGA00000Y0L) to 220u_6.3V_ESR17 OScon cap(P/N: SF000002Y00) (H=4.2)	X01
5	47	+1.5V_MEN_P	2011/08/04	DELL	Follow VC , enable use SIO_SLP_S4#.	1. Un-pop PR487, 2. Add PR210 for net "SIO_SLP_S4#"	X01
6	46	+5V_ALWP/ +3.3V_ALWP	2011/08/05	DELL	Main and 2nd IC common setting	Un-pop PD37,PR46,PR47	X01
7	48	+1.8V_RUN	2011/08/05	Compal	follow E4-12"14"15" schematic	Add PC307 0.1U_0603_25V (P/N: SE042104K8L)	X01
8	51 53	VCORE_MAX17511 Charger	2011/08/09	Compal	EMI request	Add PL14(P/N: SM01000DJ00) (S SUPPRE_ FBMA-L11-453215-121LMA90T 1812) and un-pop PJP27 Pop PL800(P/N: SH00000NW00) (S COIL 1UH +-20% PCMB053T-1R0MS 7A)and un-pop PJP27	X01
9	45	DCIN	2011/08/17	Compal - Kuo.Richard	ESD solution	1. Pop PD2 and PD3 (P/N: SCA00000R0L) for PBATT2 2. Pop PD6 and PD7 (P/N: SCA00000R0L) for PBATT1	X01
10	46	+5V_ALWP/ +3.3V_ALWP	2011/08/17	Compal - Ling. Carol	RF solution	1. Add PC29, PC30(P/N: SE00000G88L) (S CER CAP 0.1U 25V K X5R 0402) bypass cap. at +5V_ALWP output jumper- PJP74 and +3.3V_ALWP output jumper- PJP10 2. for +5V_ALWP : Pop PR40 (P/N: SD001470B80) (S RES 1/4W 4.7 +-5% 1206), PC33 (P/N: SE025681K80) (S CER CAP 680P 50V K X7R 0603) 3. for +3.3V_ALWP : Pop PR39 (P/N: SD001470B80) (S RES 1/4W 4.7 +-5% 1206), PC34 (P/N: SE025681K80) (S CER CAP 680P 50V K X7R 0603)	X01

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Compal Electronics, Inc.			
Title		PWR_PIR 1	
Size	Document Number		Rev
	LA-7741		0.1
Date:	Wednesday, March 28, 2012	Sheet	57 of 58

Version Change List (P. I. R. List)

Page 2

Item	Page #	Title	Date	Request Owner	Issue Description	Solution Description	Rev.
11	47	+1.5V_MEN_P	2011/08/17	Compal - Ling. Carol	RF solution	for 1.5V_MEN_P: Pop PR220 (P/N: SD001470B80) (S RES 1/4W 4.7 +-5% 1206), PC231 (P/N: SE025681K80) (S CER CAP 680P 50V K X7R 0603)	X01
	49	+1.05V_MP				for +1.05V_MP: Pop PR404 (P/N: SD001470B80) (S RES 1/4W 4.7 +-5% 1206), PC432 (P/N: SE025681K80) (S CER CAP 680P 50V K X7R 0603)	
	51	+VCC_CORE				for +VCC_CORE: Pop PR117 (P/N: SD001470B80) (S RES 1/4W 4.7 +-5% 1206), PC139 (P/N: SE025681K80) (S CER CAP 680P 50V K X7R 0603)	
						Pop PR148 (P/N: SD001470B80) (S RES 1/4W 4.7 +-5% 1206), PC159 (P/N: SE025681K80) (S CER CAP 680P 50V K X7R 0603)	
						Pop PR173 (P/N: SD001470B80) (S RES 1/4W 4.7 +-5% 1206), PC175 (P/N: SE025681K80) (S CER CAP 680P 50V K X7R 0603)	
	52	+VCC_GFXCORE				for +VCC_GFXCORE: Pop PR193 (P/N: SD001470B80) (S RES 1/4W 4.7 +-5% 1206), PC198 (P/N: SE025681K80) (S CER CAP 680P 50V K X7R 0603)	
	54	+VCCSA_P				for +VCCSA_P: Pop PR248 (P/N: SD001470B80) (S RES 1/4W 4.7 +-5% 1206), PC254 (P/N: SE025681K80) (S CER CAP 680P 50V K X7R 0603)	
12	45	DCIN	2011/10/17	Compal	Reduce power consumption in S5.	Add net "PCH_ALW_ON" with PR28 (0 ohm) for +PWR_SRC_S enable signal. then un-pop PR901	X02
13	55	Selector	2011/11/07	Compal	Thailand flood impacted materials - Vendoe (ROHM)	Change PD18,PD19,PD21,PD22,PD23,PD24,PD25,PD26,PD27,PD28,PD29 from SCS00005T0L(S SCH DIO RB751VM-40TE-17 SOD-323) to SCS0340L01L (S SCH DIO SDMK0340L-7-F SOD-323)	X02
14	53	Charger	2011/12/06	Compal	Vendor inform material will EOL	Change PQ803A and PQ803B from SB00000CL0L (S TR NTGD4161PT1G 2P TSOP6) to SB00000E100 (S TR SI3993CDV-T1-GE3 2P TSOP6)	X02
15	53 55	Charger Selector	2011/12/06	Compal	Without ESD protected	Change PQ38,PQ808,PQ909,PQ910,PQ911 from SB57002040L (S TR 2N7002W-7-F 1N SOT323 DII) to SB00000U000 (S TR DMN65D8LW-7 1N SOT323-3)	X02
16	45	DCIN	2011/12/06	Compal - Kuo.Richard	ESD test currently is pass	Del PD2, PD3, PD6 and PD7 (P/N: SCA00000R0L)	X02
17	48	+1.8V_RUN	2011/12/22	Compal	follow E4-12"14"15" schematic	Change PL26 from SH00000MN00 (S COIL 1UH +-20% PH041H-1R0MS 3.8A) CYNTEC to SH00000MW00 (S COIL 1UH +-30% NRS4018T1RONDGJ 3.2A) Taiyo	X02

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Compal Electronics, Inc.			
Title		PWR_PIR 2	
Size	Document Number		Rev
	LA-7741		0.1
Date: Wednesday, March 28, 2012		Sheet	58 of 58

Item	Page#	Title	Date	Request Owner	Issue Description	Solution Description	Rev.
18	45	DCIN	2012/02/22	Compal - YuHeng_Hsieh	ESD solution	Add @ PD8	X03

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Compal Electronics, Inc.		
Title PWR_PIR 2		
Size	Document Number LA-7741	Rev 0.1
Date: Wednesday, March 28, 2012 Sheet 58 of 58		

Version Change List (P. I. R. List)

Item	Page#	Title	Date	Request Owner	Issue Description	Solution Description	Rev.
1	42	HW	08/16/2011	COMPAL	E4 uses SIO_SLP_S4# for power control	DDR_ON and SUS_ON are replaced by SIO_SLP_S4#	X01
2	14, 39	HW	08/16/2011	COMPAL	SMSC request to delete LPC_LDRQ0#	Leave LDRQ0# no connection on both of 5048 and PCH side	X01
3	22	HW	08/16/2011	COMPAL	UMA uses EMC4021 for cost concern	Change thermal sensor to EMC4021 for UMA	X01
4	42	HW	08/16/2011	COMPAL	Load SW sources output rising time mismatch and COS. cost concern	Change back to E3 +3.3V/5V_RUN discrete solution	X01
5	29	HW	08/16/2011	COMPAL	Codec is change to 92HD93	Pop R162~R166 and de-pop U73	X01
6	20, 42	HW	08/16/2011	COMPAL	Vgs less than cut-in voltage in battery mode	Add control circuit for +5V_ALW_PCH	X01
7	27, 28, 42	HW	08/16/2011	COMPAL	Vgs of 5V MOS maybe large than max rating	Add R516, R517. Change Q55 from SB00000KQ0L to SB00000GV00	X01
8	11	HW	08/16/2011	COMPAL	Follow INTEL PDDG 0.8	De-pop RC140	X01
9	32	HW	08/16/2011	COMPAL	RESET_OUT# power sequence issue	Add R1640, 1M ohms pull down for USH_PWR_STATE# at M/B side	X01
10	40	HW	08/16/2011	COMPAL	Change board ID to X01	Change R875 to 130Kohms	X01
11	34	HW	08/16/2011	COMPAL	PCH GPIO52 need 8.2~10K pull up +3.3VS	Change R695 from 100K to 10Kohms	X01
12	23	HW	08/16/2011	COMPAL	CRT SW 2nd source TI, TS3V713 pin29 is VDD	Connect pin29 to +3.3V_RUN	X01
13	15	HW	08/16/2011	COMPAL	Follow crystal measurement report	Change C741 and C741to 39pF CH18 CH19 to 8.2pF CH2 to 18pF	X01
14	16	HW	08/16/2011	COMPAL	+1.05V_M turn off before APWROK de-assert	Add UH5 circuit for HW solution	X01
15	29	HW	08/16/2011	COMPAL	Co-lay 92HD93 with ALC290	Pop option for 92HD93/ALC290=>R1646/C1164; R1644/R1643; C965/R1642 Reserve for ALC290 only: C1204, C1205, R171, R1647, C1165, R1648 Reserve for 92HD93 only: R1645, C963	X01
16	41	HW	08/16/2011	COMPAL	Reset IC threshold voltage issue	Change U4 to RT9801A (threshold adjustable)	X01
17	26	HW	08/16/2011	COMPAL	DPX_CA_DET voltage too low through dongle	Change U21 and U24 to SA000055G0L	X01
18	17	HW	08/16/2011	COMPAL	Request from INTEL review feedback	Pop RH332 for PCH_GPIO3	X01
19	42, 43	HW	08/16/2011	COMPAL	For cost saving	Change Q61 to SB00000GV00; HDD and breath LED control share Q84; Power team request Q59 change to SB00000L80L	X01
20	41	HW	08/16/2011	COMPAL	For RSMRST# debug	Reserve R1655 and pop R1623	X01
21	43	HW	08/16/2011	COMPAL	White light LED brightness is abnormal	Change R934, R938, R939, R949, R958, R957 and R955 to 2.2 Kohms	X01
22	18	HW	08/16/2011	COMPAL	Follow GPIO MAP	Add RH264 pull high for EXPRCRD_DET#	X01

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Title: EE P.I.R (1/5)

Size: Document Number LA-7741P Rev: 0.1

Date: Wednesday, March 28, 2012 Sheet 59 of 71

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Version Change List (P. I. R. List)

Item	Page#	Title	Date	Request Owner	Issue Description	Solution Description	Rev.
23	11	HW	08/16/2011	COMPAL	DF488976:S3 can't resume issue	Control 1.5V_VDDQ by EC. Pop RC79 and de-pop RC82	X01
24	18	HW	08/16/2011	COMPAL	Delete TCM and Non-TPM configuration	De-pop RH270 and RH271. Always pop RH267 and RH268	X01
25	23,33	HW	08/16/2011	COMPAL	EMI request to add solution	Reserve C1207 for DMIC_CLK;CE758 for SD/MMCCLK Change R676 to 22ohm	X01
26	29	HW	08/16/2011	COMPAL	EMI request to add solution	pop C981~C983 0.1uF	X01
27	36	HW	08/22/2011	COMPAL	DF499184 Right side USB3 port performance poor	Change C410~C417 from 0.01uF to 0.1uF	X01
28	15,17	HW	08/22/2011	COMPAL	RF request to add RF noise solution	Pop CH107~CH110,CH112,CH113 8.2pF	X01
29	25	HW	08/23/2011	COMPAL	DF494588:HDMI EMI fail	add C1208~C1215 3.3pF	X01
30	19	HW	08/24/2011	COMPAL	CRT ripple iissue	Change LH1 to SHI00007W0L	X01
31	40	HW	08/26/2011	COMPAL	SMSC review feedback	Reserve R933 R896	X01
32	43	HW	08/29/2011	COMPAL	Follow LED spec	Change R949, R958, R957, R955, R939, R938, R934 to 1.2K	X01
33	42	HW	08/29/2011	COMPAL	Follow 14 15	depop R1627	X01
34	25	HW	08/30/2011	COMPAL	DF494588 HDMI EMI issue	depop L19~L22 pop R451,R459 R462 R466 R468~R471 SHI0000EE0L	X01
35	25	HW	10/25/2011	COMPAL	DF494588 HDMI EMI issue	change R451,R459 R462 R466 R468~R471 to L100~L107 SHI0000ES0L 12nH	0.3(X01)
36	14	HW	10/25/2011	COMPAL	Follow crystal measurement report	change CH2 to 15pF	0.3(X01)
37	22	HW	10/25/2011	COMPAL	Thermal team request change OTP to 96 deg	change R406 to 1.58k	0.3(X01)
38		HW	11/21/2011	COMPAL	Change RC value at Gate of MOS Load SW to modify power rail soft start timing	RC72 from 100K to 330K; RC143 form 330K to 1M; CC136 form 0.1u to 0.022u R412 from 100K to 470K; R1632 form 1M to 4.7M; C293 form 0.1u to 0.022u R507 from 100K to 470K; R517 form 1M to 4.7M; C400 form 0.1u to 0.022u R722 from 100K to 470K; R1625 form 1M to 4.7M; C644 form 4700p to 220p R729 from 100K to 470K; R1628 form 1M to 4.7M; C650 form 4700p to 220p R917 from 100K to 470K; R1617 form 1M to 4.7M; C770 form 4700p to 220p R920 from 100K to 470K; R1610 form 470K to 2.2M; C771 form 4700p to 470p R930 from 100K to 330K; R1611 form 470K to 1M; C773 form 2200p to 100p R906 from 100K to 470K; C763 form 2200p to 220p R912 from 100K to 470K; C766 form 470p to 220p	0.3(X01)
39	40	HW	11/21/2011	COMPAL	SMSC review feedback	Add R933 and R896 100Kohms to GND for I2S disabled	0.3(X01)
40	29	HW	11/21/2011	COMPAL	Remove ALC290 co-lay circuit	Remove R1648, R1647, R1646, R1645, C1165, C1164, R1643, R1644, R1642, R171, C1204, C1205	0.3(X01)
41	29	HW	11/21/2011	COMPAL	15" UMA speaker no sound issue	Add snubber on speaker trace with C973~C976: 2200pF(SE074222K8L.) and R1658~R1661: 3.3ohms(0402). Change bead rated current from 200mA to 2A.	0.3(X01)

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Title		EE P.I.R (2/5)	
Size	Document Number	Rev	
	LA-7741P	0.1	
Date:	Wednesday, March 28, 2012	Sheet	60 of 71

Version Change List (P. I. R. List)

Item	Page#	Title	Date	Request Owner	Issue Description	Solution Description	Rev.
42	33	HW	11/21/2011	COMPAL	EMI request to change SD CLK series R	R676 is changed from 33ohms to 10ohms	0.3 (X01)
43	42	HW	11/21/2011	COMPAL	1V leakage on +3.3V_RUN during system boot	Pop Q69 and R929 discharge circuit	0.3 (X01)
44	40	HW	11/21/2011	COMPAL	EC has internal pull up for volume signals	De-pop R1169, R1197 and R1118	0.3 (X01)
45	41	HW	11/21/2011	COMPAL	Chane reset IC to RT9818A-44GU3	Update U4 symbol and add R1629 for backup of inrush prevention. Change RSMRST# pull up with 100Koms. Pop R1655 and de-pop R1623.	0.3 (X01)
46	39	HW	11/21/2011	COMPAL	When suspend/resume cycles, wireless SW GPIO IRQs keeps giving	Add R787 pulling up to +3.3V_ALW for WIRELESS_ON#/OFF and de-pop R766	0.3 (X01)
47	19	HW	11/21/2011	COMPAL	CRT ripple garbage display issue	Change CH36 from 10uF to 22uF	0.3 (X01)
48	7~42	HW	11/21/2011	COMPAL	For cost saving	Change 0 ohm resistor to short pad	0.3 (X01)
49	42	HW	11/21/2011	COMPAL	+3.3V_SUS sequence timing probelm	Change C767 to 470pF	0.3 (X01)
50	32	HW	11/21/2011	COMPAL	TPM is changed to AT97SC3204-X2A18-AB	U39 (TPM) is changed to SA00004WQ10 (AT97SC3204-X2A18-AB) for WIN8 support	0.3 (X01)
51	34	HW	11/21/2011	COMPAL	PCH GPIO52 changed to be free	De-pop R725, remove R695 and add RH359	0.3 (X01)
52	11, 42	HW	11/21/2011	COMPAL	AO4728L leakage issue	Change QC3 and Q59 to AO4304L (SB00000RV00)	0.3 (X01)
53	32	HW	11/21/2011	COMPAL	+3.3V_RUN Giltch when AC plugin	Add D87, R1662 and R1663 (pull high to +3.3V_RUN) for HW solution backup	0.3 (X01)
54	11	HW	11/21/2011	COMPAL	Change 1Kohms tolerance for cost saving	Change 1Kohms +-1% to +-5% except RC78, RC84	0.3 (X01)
55	38	HW	11/21/2011	COMPAL	EMI request to add 33ohms for DP port	Add RE7, RE8, RE13~RE26 for DP portD and portC	0.3 (X01)
56	22	HW	11/25/2011	COMPAL	Thermal team request change OTP to 94 deg for SNB, 96 deg for IVB	R406 =1.4K for SNB, add R1664=1.58K for IVB	0.3 (X01)
57	38	HW	11/25/2011	COMPAL	EMI request to add common choke for docking USB port8	Add L53(@), R745, R746	0.3 (X01)
58	34 , 38	HW	12/01/2011	COMPAL	For Dock USB Port8 EMI issue	Swap USB port6 & port8	0.3 (X01)
59	23	HW	12/01/2011	COMPAL	For solve Camera USB EMI issue	Pop L10 (180ohm) , depop R427, R428	0.3 (X01)
60	7	HW	12/02/2011	COMPAL	For ESD request	Remove 0 ohm short pad at location RC129, RC25, RC23, RC24, RC26, RH106, RH107	0.3 (X01)
61	35	HW	12/02/2011	COMPAL	For ESD request	Reserve CE10, CE11 and CE12 for EXP PWR SW signals, CPUSB#, EXPRCRD_CPPE# and CARD_RESET#	0.3 (X01)
62	36	HW	12/02/2011	COMPAL	For cost down plan	Change USB PWR SW (U49) from TI2560 to GMT517	0.3 (X01)
63	31	HW	12/02/2011	COMPAL	Change RC value at Gate of MOS Load SW to modify power rail soft start timing	R1638 from 470K to 1M	

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Title EE P.I.R (3/5)			
Size	Document Number	Rev 0.1	
Date: Wednesday, March 28, 2012		Sheet	61 of 71

Version Change List (P. I. R. List)

Item	Page#	Title	Date	Request Owner	Issue Description	Solution Description	Rev.
64	36	HW	12/21/2011	COMPAL	For ESD request	D78,D79 change from SC30000250L to SC300002F0L , and pin8 connect to GND	X02
65	14~21	HW	12/21/2011	COMPAL	PCH use QS sample at ST	UH4 change to SA00005BU1L	X02
66	40	HW	12/21/2011	COMPAL	Change board ID to X02	Change R875 to 62Kohms	X02
67	43	HW	12/21/2011	COMPAL	Change current limit resistors of LED	Change R957 to 150ohms , R934 to 2.2kohm, R949 to 1.8kohm,R951 to 2Kohm,R939 to 3.3kohm,R955 to 820 ohm,R938 to 820 ohm,R958 to 560 ohm, R959 to 1.2kohm	X02
68	42	HW	12/21/2011	COMPAL	follow 14" schematic	Q55,Q61 change to SB00000GV00	X02
69	41	HW	12/28/2011	COMPAL	To prevent inrush current at reset IC input	Add R1635(33ohm) for backup of inrush prevention	X02
70	42	HW	12/28/2011	COMPAL	+3.3V_SUS sequence timing	R911 from 100K to 470K; R1618 from 1M to 4.7M; C767 from 470p to 220p	X02
71	23 ,30	HW	01/03/2012	COMPAL	For EMI request	Add C303,C304,C1001,C1003,C1004 820pF	X02
72	43	HW	01/03/2012	COMPAL	For EMI request	Add and reserve C306(@)	X02
73	43	HW	01/06/2012	COMPAL	Change current limit resistors of LED	R949 from 1.8k ohm to 3k ohm	X02
74	36	HW	02/20/2012	COMPAL	Add pop option resistor for USB3.0 repeater	Add R764,R788,R792,R801,R806,R808 location and change main source to SA000056E0L(Pericom)	A00
75	28	HW	02/20/2012	COMPAL	Parade PS8520 pin can't connect to 3.3V for avoid the leakage voltage issue.	Add R1182 for SATA repeater pop option	A00
76	40	HW	02/20/2012	COMPAL	Change board ID to A00	Change R875 to 33Kohms	A00
77	40	HW	02/20/2012	COMPAL	Change MEC5055 P/N for MP	Change U51 P/N to SA00003TZ2L	A00
78	14~21, 31	HW	02/20/2012	COMPAL	Chnage PCH, LAN chip P/N for X-build	UH4 is changed to SA00005BU3L U31 is changed to SA00003SI5L	A00
79	38	HW	02/20/2012	COMPAL	System hangs after hot dock (DF531758)	Change R755 from 100Kohms to 10Kohms	A00
80	32	HW	02/20/2012	COMPAL	Add BOM config for Non-TPM	Add 1@ for TPM and 2@ for Non-TPM config	A00
81	14	HW	02/20/2012	COMPAL	De-pop resistor on PCH JTAG for power saving	De-pop RH288, RH47, RH48 and RH49	A00
82	36	HW	02/20/2012	COMPAL	Samsung cell phone can't support CDP	Change U2 to Seligo SA00004VH00, Change charging mode to SDP only in S0 ,reserve Q126(@)	A00
83	34	HW	02/20/2012	COMPAL	E4 no support WWAN SMBUS function .	Not stuff R1157 and R1158.	A00
84		HW	02/20/2012	COMPAL	For cost saving	Change 0 ohm resistor to short pad,except R1174,R1176,R1177,R1181,R1633,R495,R496,R743, R1595,R745,R746,R935,R940,R941,R942,R1163,R1164	A00
85	28	HW	03/03/2012	COMPAL	For Parade ODD repeater detect issue	Add R1814(8.2K) to PD for Parade , and reserve R1182 to PH for other repeater	A00

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Title EE P.I.R (4/5)			
Size	Document Number		Rev 0.1
LA-7741P			
Date: Wednesday, March 28, 2012	Sheet 62	of 71	


Version Change List (P. I. R. List)

Item Page# Title Date Request Owner Issue Description Solution Description Rev.

86	37	HW	03/03/2012	COMPAL	Add pop option resistor for eSATA repeater	Add R1185,R749,R747	A00
87	36	HW	03/05/2012	COMPAL	System will reconnect USB 3.0 after resume from S3 issue.[BITS:DF537410].	Reserve R1636 to +3.3V_ALW_PCH, and add R1637 to +3.3V_RUN	A00
88	33	HW	03/09/2012	COMPAL	Due to ESD has an SD card lost issue	add CE13 47nF capacitor for PLTRST_MMI# on U38 side	A00
89	35	HW	03/13/2012	COMPAL	For ESD request	Pop CE10 ,CE11 ,CE12(0.1uF) ,& add CE14 (100pF)	A00

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Title

EE P.I.R (5/5)

Size

Document Number

LA-7741P

Rev

1.0

Date: Wednesday, March 28, 2012

Sheet 63 of 71