


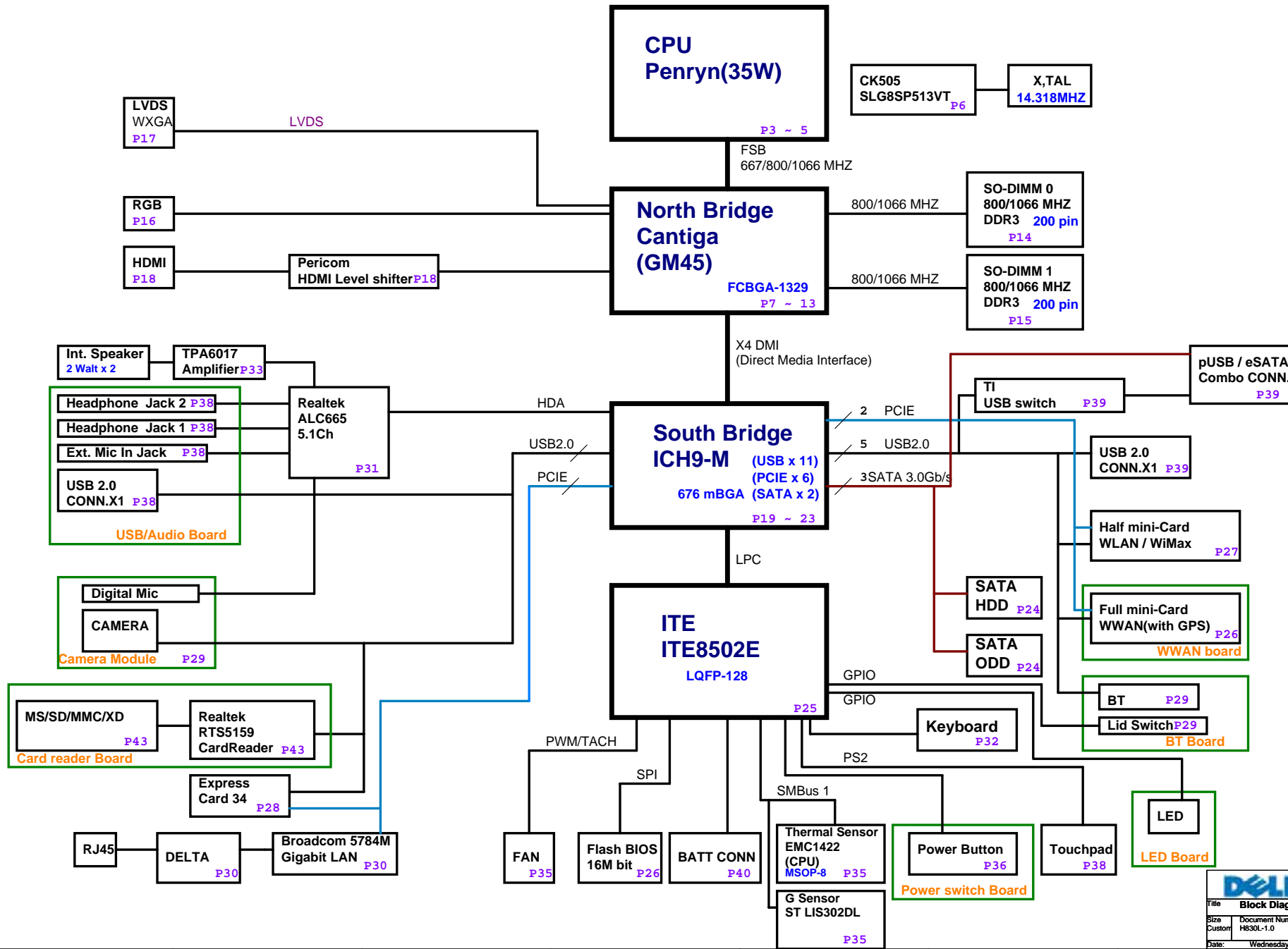
Schematic Page Index (Title / Revision / Change Log)							
Page	Title of Schematics Page	Rev.	Date	Page	Title of Schematics Page	Rev.	Date
01	Schematics Page Index	1.0	09'0410	36	USB2.0 & e-SATA	1.0	09'0410
02	Block Diagram	1.0	09'0410	37	DB board connector(MB)	1.0	09'0410
03	Penryn(HOST BUS) 1/3	1.0	09'0410	38	PWR BTN & BT & LED DB	1.0	09'0410
04	Penryn(HOST BUS) 2/3	1.0	09'0410	39	Power Design Diagram	1.0	09'0410
05	Penryn (Power/Gnd) 3/3	1.0	09'0410	40	DCIN & Battery	1.0	09'0410
06	CLOCK GEN	1.0	09'0410	41	MAX8731A_Smart_Charger	1.0	09'0410
07	Cantiga (HOST) 1/7	1.0	09'0410	42	MAX17020 (+3_3V/+5V)	1.0	09'0410
08	Cantiga (DMI) 2/7	1.0	09'0410	43	SYS Power(+1_5V/+1_05V)	1.0	09'0410
09	Cantiga (GRAPHIC) 3/7	1.0	09'0410	44	DDR3 Power(+1_5V/+0_75V)	1.0	09'0410
10	Cantiga (DDRII) 4/7	1.0	09'0410	45	CPU_Vcore---ISL6266A	1.0	09'0410
11	Cantiga (POWER,VCC) 5/7	1.0	09'0410	46	Others power plane	1.0	09'0410
12	Cantiga (VCC CORE) 6/7	1.0	09'0410	47	HOLE	1.0	09'0410
13	Cantiga (VSS) 7/7	1.0	09'0410	48	History (1)	1.0	09'0410
14	DDR3(SO-DIMM_0) 1/2	1.0	09'0410	49	History (2)	1.0	09'0410
15	DDR3(SO-DIMM_1) 2/2	1.0	09'0410	50	History (3)	1.0	09'0410
16	CRT	1.0	09'0410	51			
17	LVDS	1.0	09'0410	52			
18	HDMI	1.0	09'0410	53			
19	ICH9-M(PCI/USB) 1/5	1.0	09'0410	54			
20	ICH9-M(LPC,IDE,SATA)2/5	1.0	09'0410	55			
21	ICH9-M(GPIO) 3/5	1.0	09'0410	56			
22	ICH9-M(POWER) 4/5	1.0	09'0410	57			
23	ICH9-M(GND) 5/5	1.0	09'0410	58			
24	SATA HDD/ODD	1.0	09'0410	59			
25	EC+KBC(IT8502E)	1.0	09'0410	60			
26	Flash ROM/SPI	1.0	09'0410	61			
27	WLAN/WiMAX Mini-PCIECard	1.0	09'0410	62			
28	EXPRESS CARD	1.0	09'0410	63			
29	BT & CAMERA/Dig MIC CON	1.0	09'0410	64			
30	Broadcom LAN(BCM5784M)	1.0	09'0410	65			
31	Audio (CODEC & POWER)	1.0	09'0410	66			
32	Audio (HP,EXT MIC)	1.0	09'0410	67			
33	Audio (SPKR)	1.0	09'0410	68			
34	Audio (MUTE)	1.0	09'0410	69			
35	FAN/Thermal Sensor / G Sensor	1.0	09'0410	70			

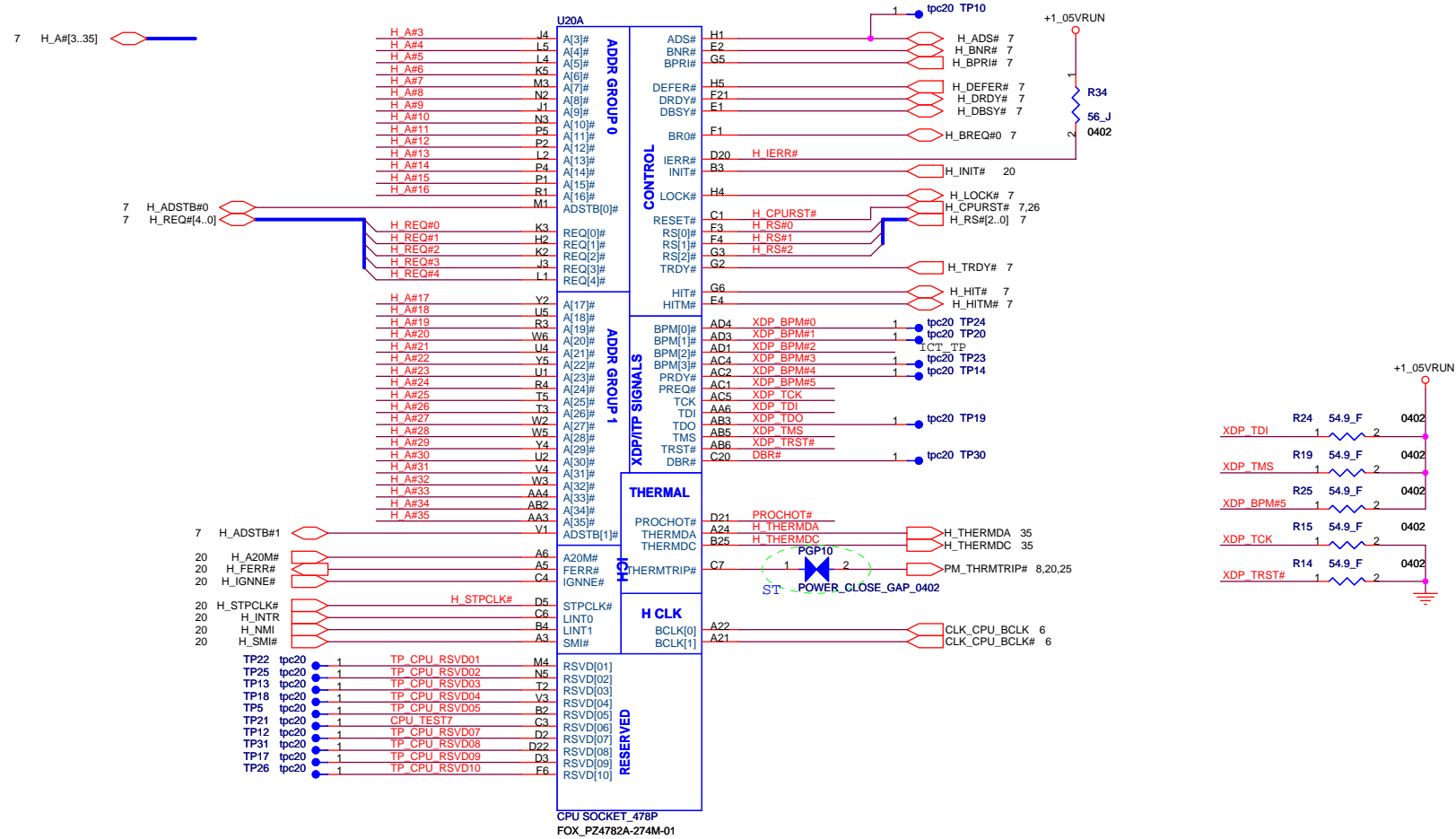
Project Code & Schematics Subject: H830-L Main Board_6L

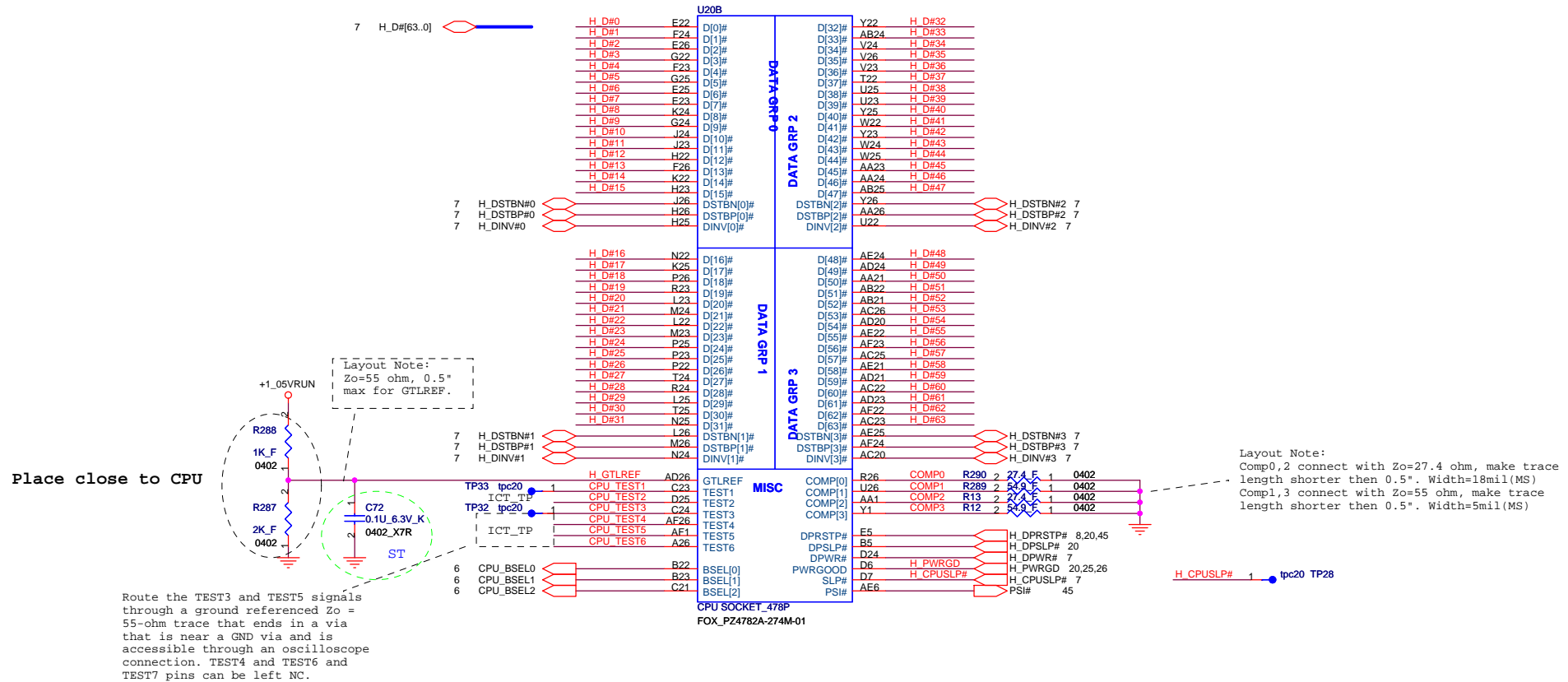
PCB P/N:	1P-0093200-6010 (NANYA)
	1P-0093J00-6010 (IRIS)
	1P-0093500-6010 (HANNSTAR)
BT DB P/N:	1P-1093200-6010 (NANYA)
	1P-1093J03-6010 (IRIS)
	1P-1093503-6010 (HANNSTAR)
LED DB P/N:	1P-1093201-6010 (NANYA)
	1P-1093J01-6010 (IRIS)
	1P-1093502-6010 (HANNSTAR)
P/B DB P/N:	1P-1093202-6010 (NANYA)
	1P-1093J00-6010 (IRIS)
	1P-1093501-6010 (HANNSTAR)

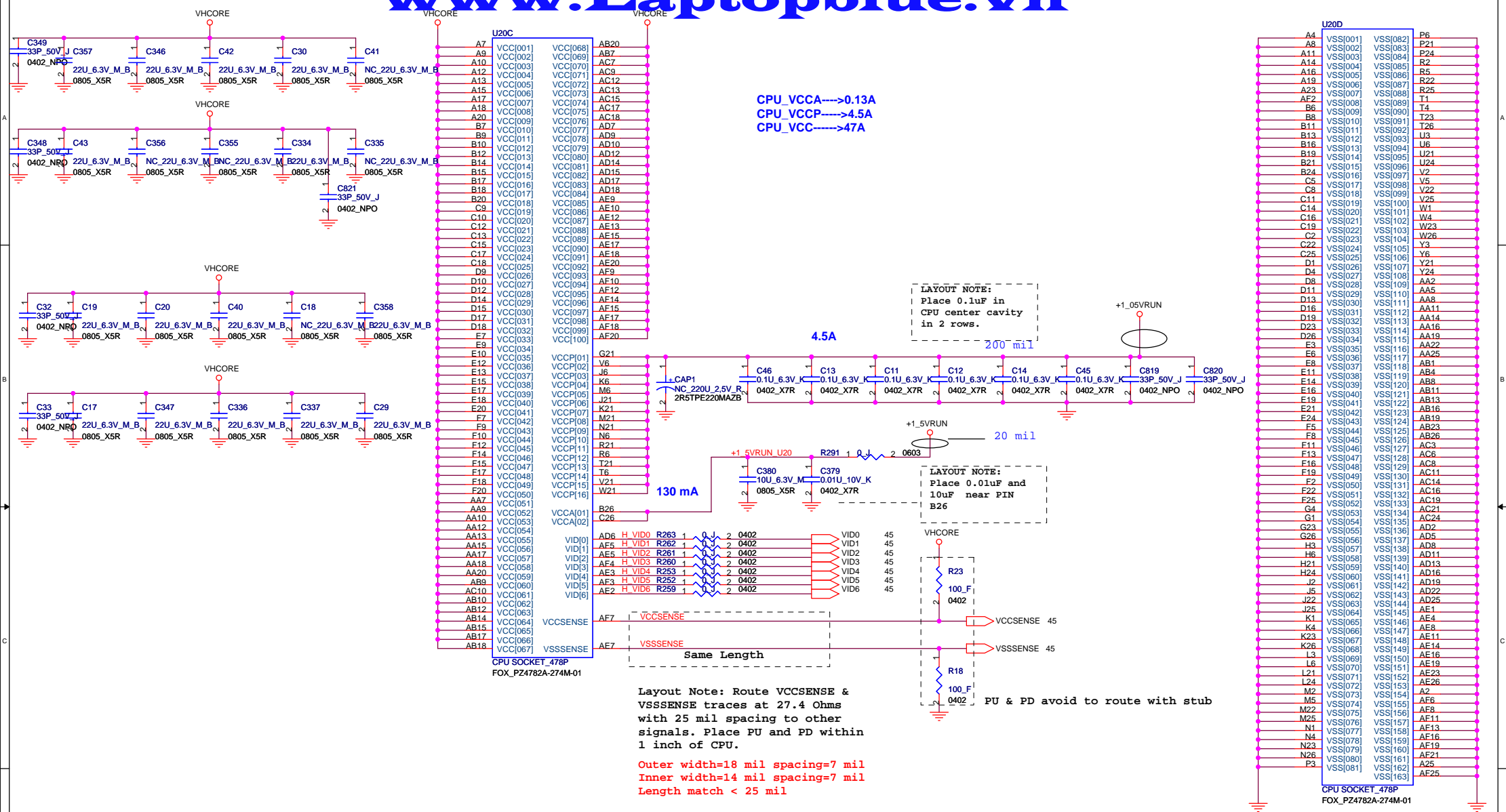
P. Leader	Check by	Design by
 www.dell.com ALL RIGHTS RESERVED		
Title Index Page		
Size A3	Document Number H830L-1.0	Rev 1.0
Date: Wednesday, April 08, 2009	Sheet 1	of 50

H830(Montevina UMA)

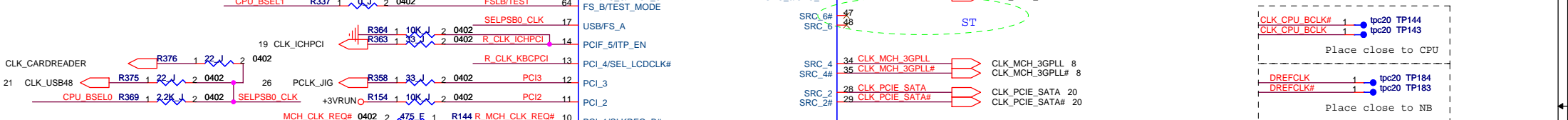





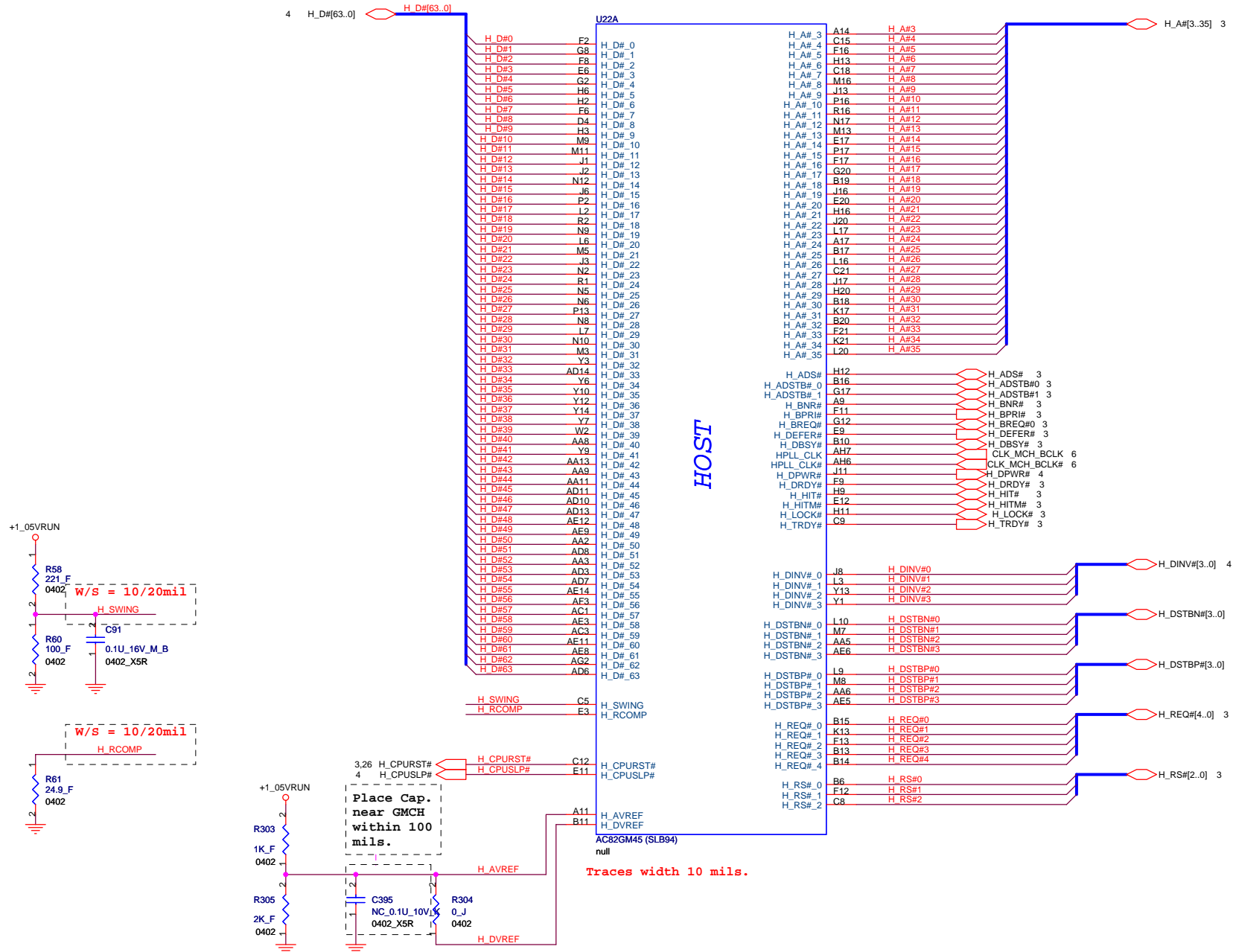




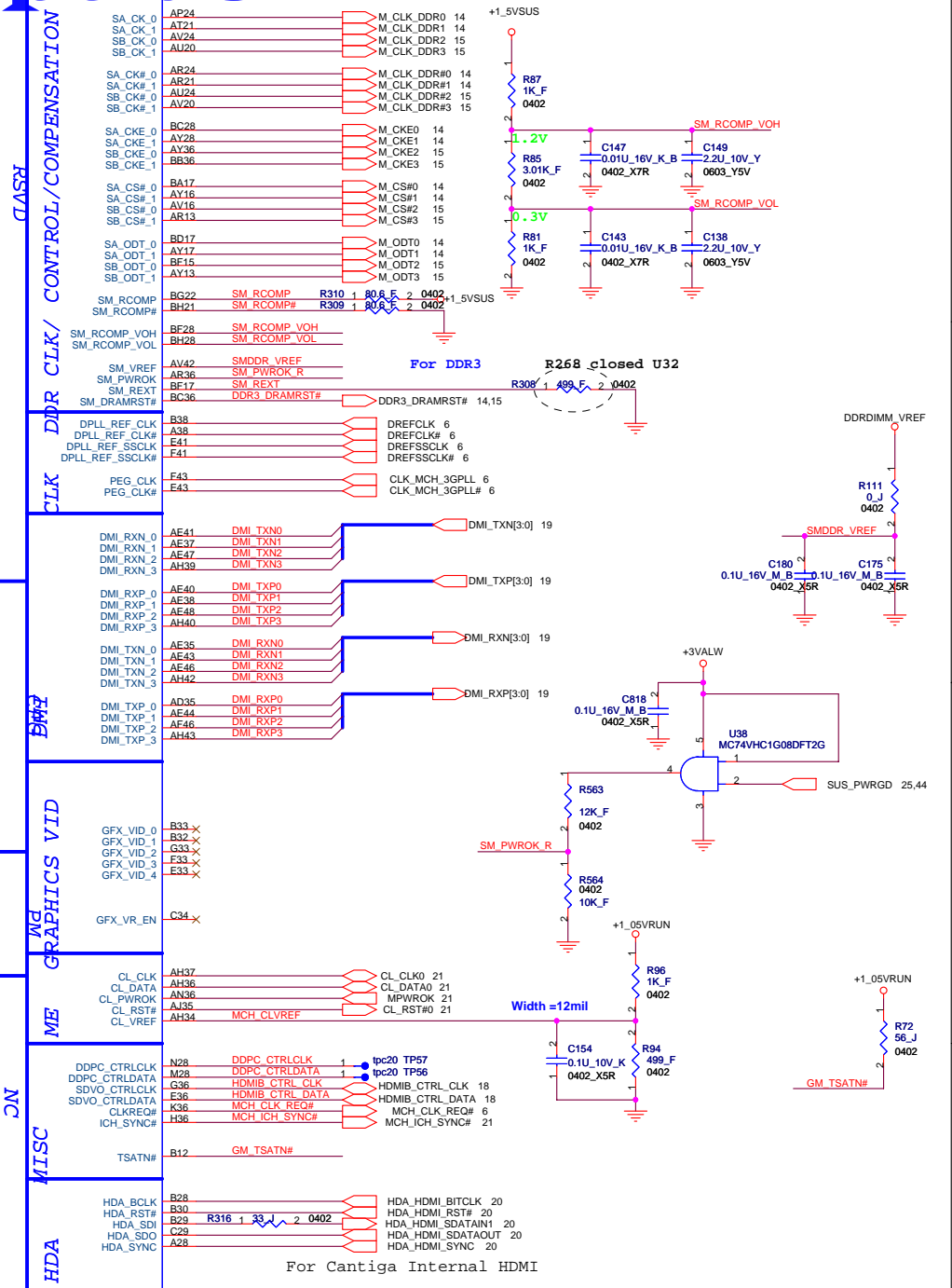
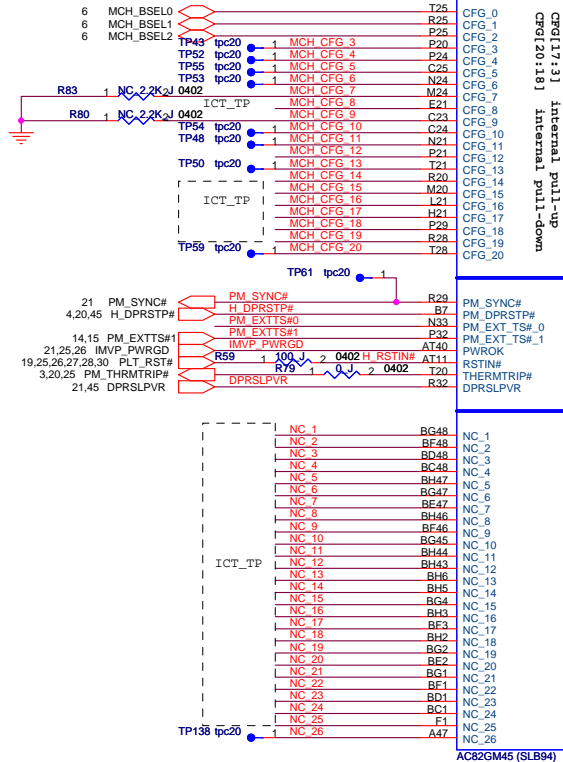
Clock Request	Clock Request Function
CR#A	SATACLKREQ#
CR#B	MCH_CLK_REQ#
CR#C	NC
CR#D	NC
CR#E	NC
CR#F	EXPRESS_CLK_DET#
CR#G	LAN_CLK_REQ#
CR#H	MINI_CARD_DET#

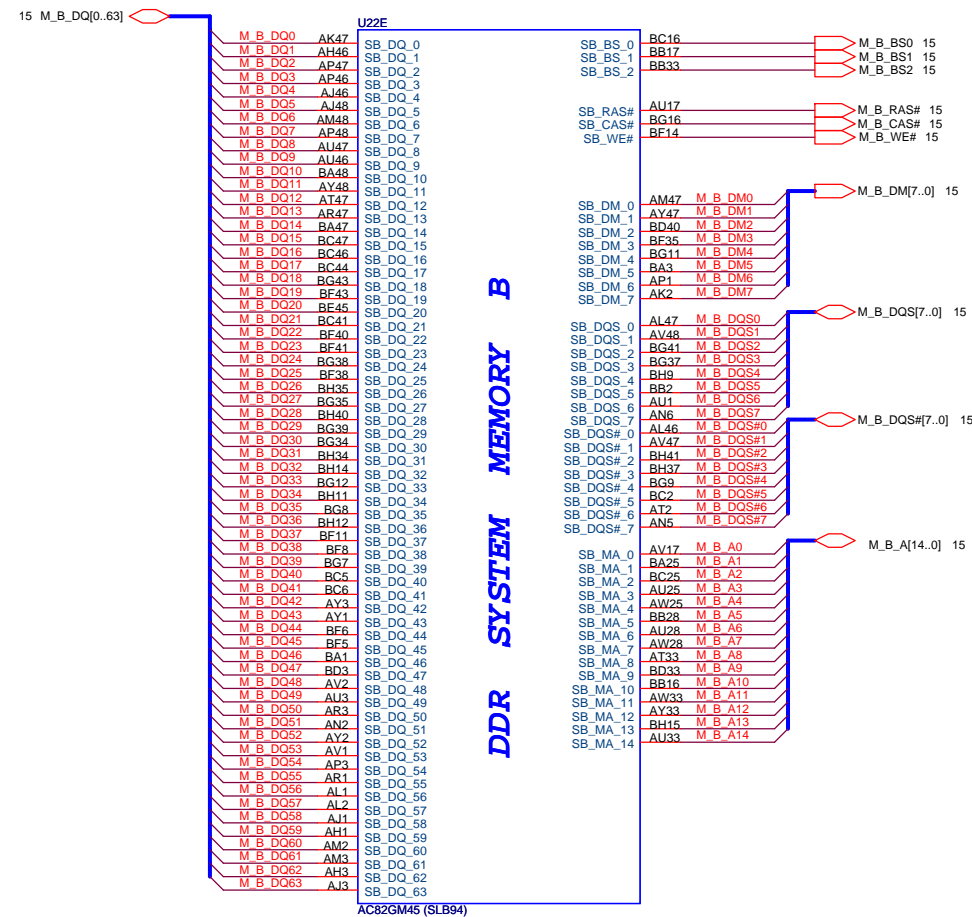


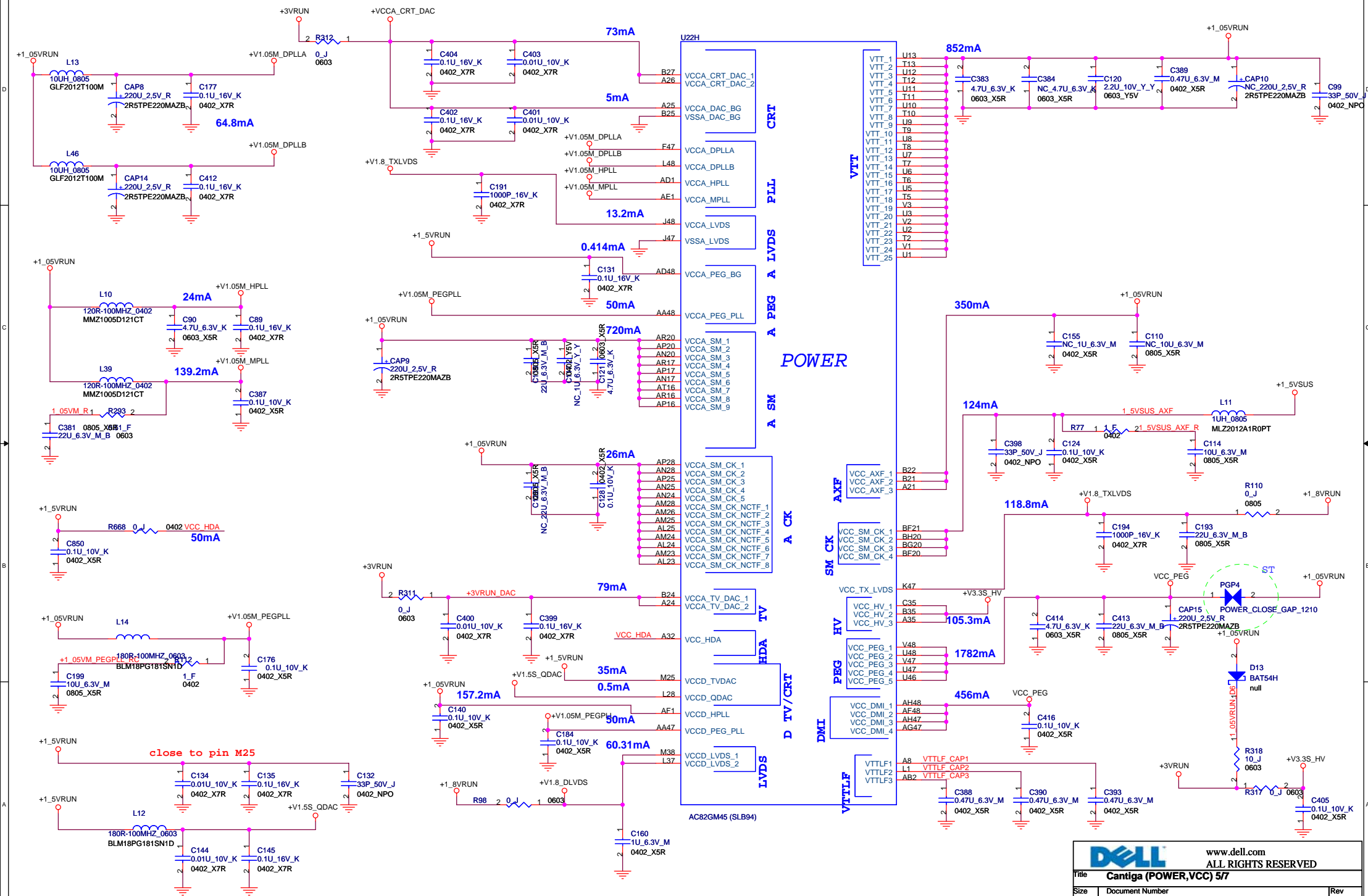
		www.dell.com ALL RIGHTS RESERVED	
Title CLOCK GEN			
Size A3	Document Number H830L-1.0		Rev 1.0
Date: Wednesday, April 08, 2009		Sheet 6	of 50

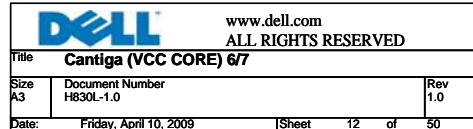


MCH_CFG_0-2 FSB Frequency	000 = FSB1066 ; 010 = FSB800; 011 = FSB667 ; Others = Reserved
MCH_CFG_3-4	Reserved
MCH_CFG_5 DMI X2 Select	Low = DMI X2 High = DMI X4 (Default)
MCH_CFG_6 ITPM Host Interface	Low =The ITPM Host Interface is enabled2 High = The ITPM Host Interface is disabled (default)
MCH_CFG_7 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/1HDMI) Concurrent with PCIe	Low = Only digital display port (SDVO/DP/1HDMI) or PCIe is operational (default) High = Digital display port (SDVO/DP/1HDMI) and PCIe are operating simultaneously via the PEG port





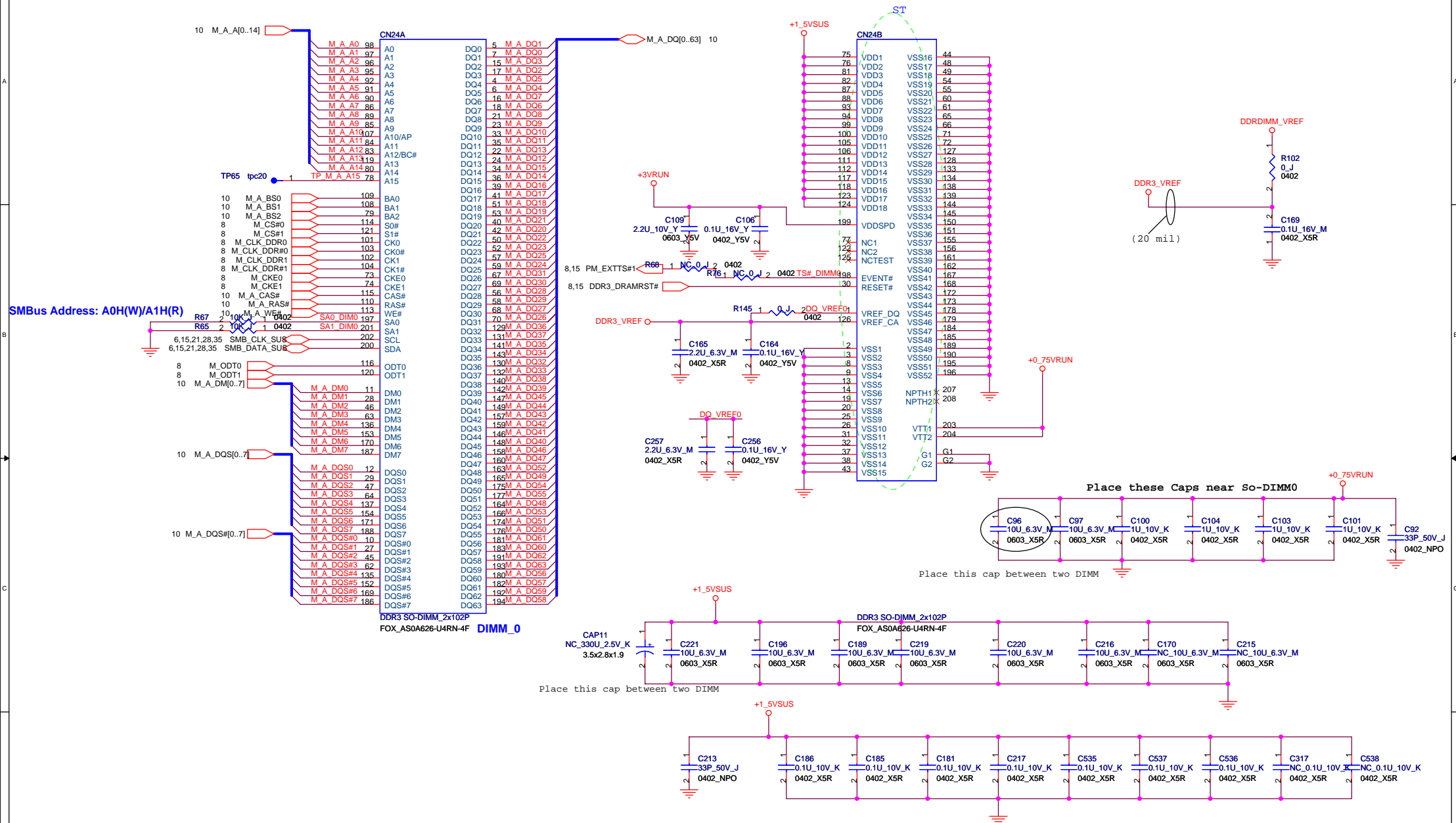


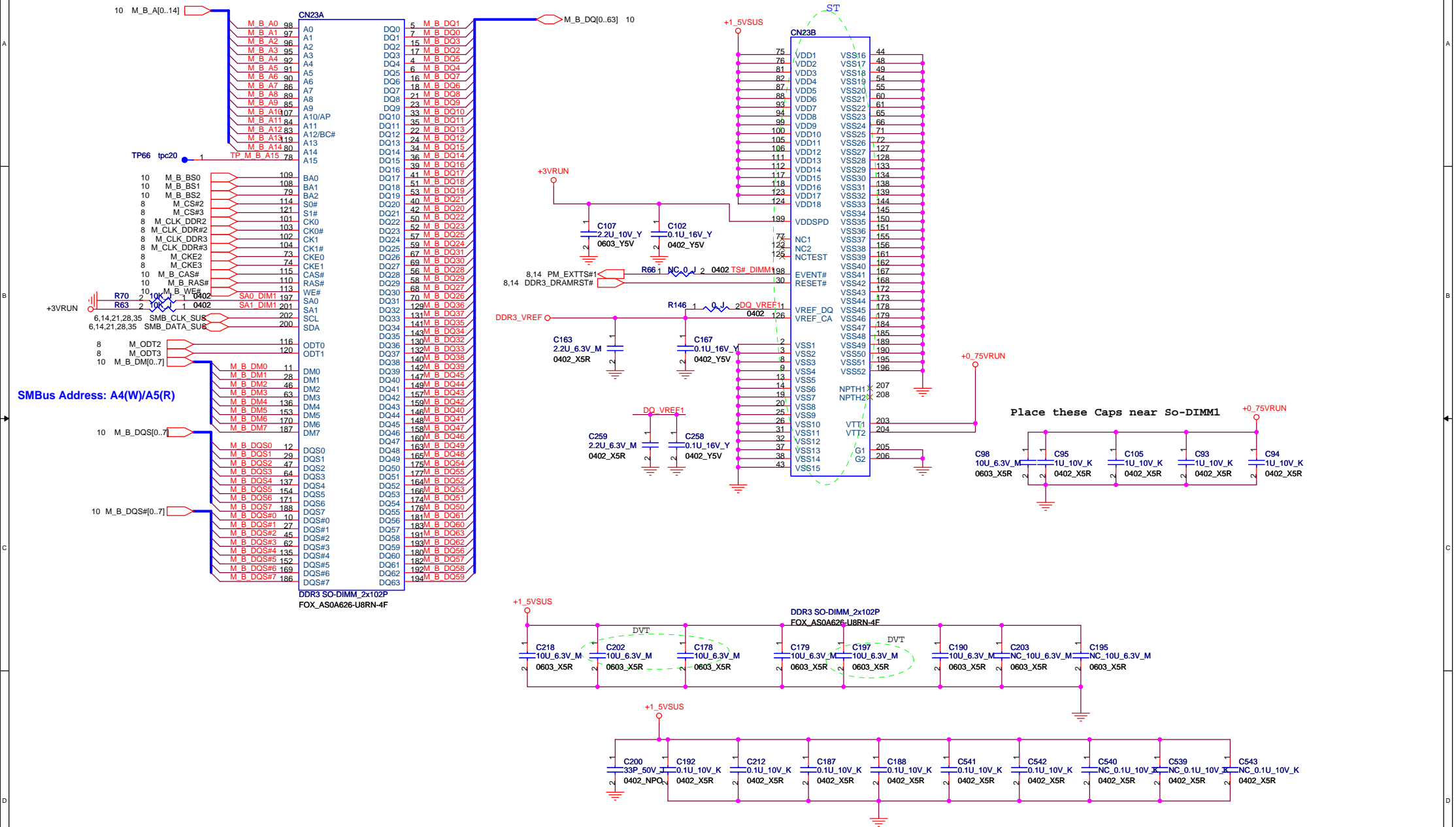


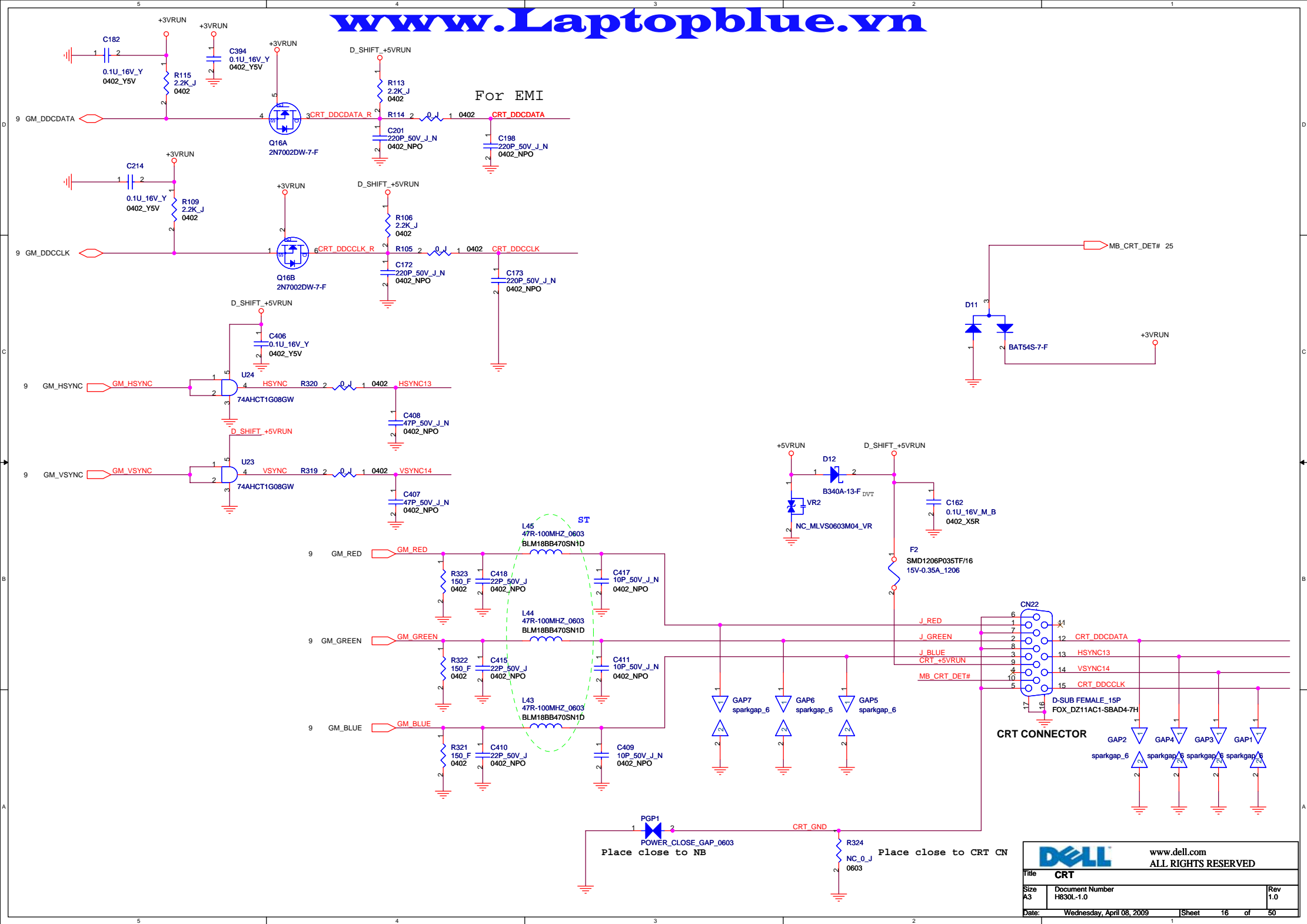
AU48	VSS_1	VSS_100	AM36	BG21	VSS_199	VSS_297	AH8
AR48	VSS_2	VSS_101	AE36	L12	VSS_200	VSS_298	Y8
AL48	VSS_3	VSS_102	P36	AW21	VSS_201	VSS_299	L8
BB47	VSS_4	VSS_103	L36	AU21	VSS_202	VSS_300	E8
AW47	VSS_5	VSS_104	J36	AP21	VSS_203	VSS_301	B8
AN47	VSS_6	VSS_105	B36	AN21	VSS_204	VSS_302	AY7
AF47	VSS_7	VSS_106	AF21	AJ21	VSS_205	VSS_303	AU7
AD47	VSS_8	VSS_107	AH35	AB21	VSS_206	VSS_304	AJ7
AB47	VSS_9	VSS_108	AA35	R21	VSS_207	VSS_305	AE7
Y47	VSS_10	VSS_109	Y35	M21	VSS_208	VSS_306	AA7
T47	VSS_11	VSS_110	J21	J21	VSS_209	VSS_307	N7
N47	VSS_12	VSS_111	T35	G21	VSS_210	VSS_308	J7
L47	VSS_13	VSS_112	BC20	BC20	VSS_211	VSS_309	BG6
G47	VSS_14	VSS_113	BA20	BA20	VSS_212	VSS_310	BD6
BD46	VSS_15	VSS_114	AJ34	AW20	VSS_213	VSS_311	AV6
BA46	VSS_16	VSS_115	AF34	AT20	VSS_214	VSS_312	AT6
AY46	VSS_17	VSS_116	AE34	AJ20	VSS_215	VSS_313	AM6
AV46	VSS_18	VSS_117	W34	AG20	VSS_216	VSS_314	M6
AR46	VSS_19	VSS_118	B34	Y20	VSS_217	VSS_315	C6
AM46	VSS_20	VSS_119	A34	N20	VSS_218	VSS_316	BA5
V46	VSS_21	VSS_120	BG33	K20	VSS_219	VSS_317	AH5
R46	VSS_22	VSS_121	BC33	F20	VSS_220	VSS_318	AD5
P46	VSS_23	VSS_122	BA33	C20	VSS_221	VSS_319	Y5
H46	VSS_24	VSS_123	AV33	A20	VSS_222	VSS_320	L5
F46	VSS_25	VSS_124	AR33	BG19	VSS_223	VSS_321	J5
BF44	VSS_26	VSS_125	AL33	A18	VSS_224	VSS_322	H5
AH44	VSS_27	VSS_126	AH33	BG17	VSS_225	VSS_323	F5
AD44	VSS_28	VSS_127	AB33	BC17	VSS_226	VSS_324	BE4
AA44	VSS_29	VSS_128	P33	AW17	VSS_227	VSS_325	
Y44	VSS_30	VSS_129	L33	AT17	VSS_228		BC3
U44	VSS_31	VSS_130	H33	R17	VSS_229	VSS_327	AV3
T44	VSS_32	VSS_131	N32	M17	VSS_230	VSS_328	AL3
M44	VSS_33	VSS_132	K32	C17	VSS_231	VSS_329	R3
F44	VSS_34	VSS_133	F32		VSS_232	VSS_330	P3
BC43	VSS_35	VSS_134	C32		VSS_233	VSS_331	F3
AV43	VSS_36	VSS_135	A31	BA16	VSS_234	VSS_332	BA2
AU43	VSS_37	VSS_136	AN29		VSS_235	VSS_333	AW2
AM43	VSS_38	VSS_137	T29	AU16		VSS_334	AU2
J43	VSS_39	VSS_138	N29	AN16	VSS_237	VSS_335	AB2
C43	VSS_40	VSS_139	K29	N16	VSS_238	VSS_336	AP2
BG42	VSS_41	VSS_140	H29	K16	VSS_239	VSS_337	AJ2
AY42	VSS_42	VSS_141	F29	G16	VSS_240	VSS_338	AH2
AT42	VSS_43	VSS_142	A29	E16	VSS_241	VSS_339	AF2
AN42	VSS_44	VSS_143	BG28	BG15	VSS_242	VSS_340	AE2
AJ42	VSS_45	VSS_144	BD28	AC15	VSS_243	VSS_341	AD2
AE42	VSS_46	VSS_145	BA28	W15	VSS_244	VSS_342	AC2
N42	VSS_47	VSS_146	AV28	A15	VSS_245	VSS_343	Y2
L42	VSS_48	VSS_147	AT28	BG14	VSS_246	VSS_344	M2
BD41	VSS_49	VSS_148	AR28	AA14	VSS_247	VSS_345	K2
AU41	VSS_50	VSS_149	AJ28	C14	VSS_248	VSS_346	AM1
AM41	VSS_51	VSS_150	AG28	BG13	VSS_249	VSS_347	AA1
AH41	VSS_52	VSS_151	AE28	BC13	VSS_250	VSS_348	P1
AD41	VSS_53	VSS_152	AB28	BA13	VSS_251	VSS_349	H1
AA41	VSS_54	VSS_153	Y28		VSS_252	VSS_350	
Y41	VSS_55	VSS_154	P28			VSS_351	U24
U41	VSS_56	VSS_155	K28	AN13		VSS_352	U28
T41	VSS_57	VSS_156	H28	AJ13		VSS_353	U25
M41	VSS_58	VSS_157	F28	AE13		VSS_354	U29
G41	VSS_59	VSS_158	C28	N13			
B41	VSS_60	VSS_159	BF26	L13			
BG40	VSS_61	VSS_160	AH26	G13			
BB40	VSS_62	VSS_161	AF26	E13			
AV40	VSS_63	VSS_162	AB26	BF12			
AN40	VSS_64	VSS_163	AA26	AV12			
H40	VSS_65	VSS_164	C26	AT12			
E40	VSS_66	VSS_165	B26	AM12			
AT39	VSS_67	VSS_166	BH25	AA12			
AM39	VSS_68	VSS_167	BD25	J12			
AJ39	VSS_69	VSS_168	BB25	A12			
AE39	VSS_70	VSS_169	AV25	BD11			
N39	VSS_71	VSS_170	AR25	BB11			
L39	VSS_72	VSS_171	AJ25	AY11			
B39	VSS_73	VSS_172	AC25	AN11			
BH38	VSS_74	VSS_173	Y25	AH11			
BC38	VSS_75	VSS_174	N25				
BA38	VSS_76	VSS_175	L25	Y11			
AU38	VSS_77	VSS_176	J25	N11			
AH38	VSS_78	VSS_177	G25	G11			
AD38	VSS_79	VSS_178	E25	C11			
AA38	VSS_80	VSS_179	BF24	BG10			
Y38	VSS_81	VSS_180	AD12	AV10			
U38	VSS_82	VSS_181	AY24	AT10			
T38	VSS_83	VSS_182	AT24	AJ10			
I38	VSS_84	VSS_183	AJ24	AE10			
F38	VSS_85	VSS_184	AH24	AA10			
C38	VSS_86	VSS_185	AF24	M10			
BF37	VSS_87	VSS_186	AB24	BE9			
BB37	VSS_88	VSS_187	R24	BC9			
AW37	VSS_89	VSS_188	L24	AN9			
AT37	VSS_90	VSS_189	K24	AM9			
AN37	VSS_91	VSS_190	J24	AD9			
AJ37	VSS_92	VSS_191	G24	G9			
H37	VSS_93	VSS_192	F24	B9			
C37	VSS_94	VSS_193	E24	BH8			
BG36	VSS_95	VSS_194	BH23	BB8			
BD36	VSS_96	VSS_195	AG23	AV8			
AK15	VSS_97	VSS_196	Y23				
AU36	VSS_98	VSS_197	B23				
	VSS_99	VSS_198	A23				
		VSS_199	AJ6				

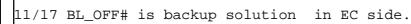
AC82GM45 (SLB94)

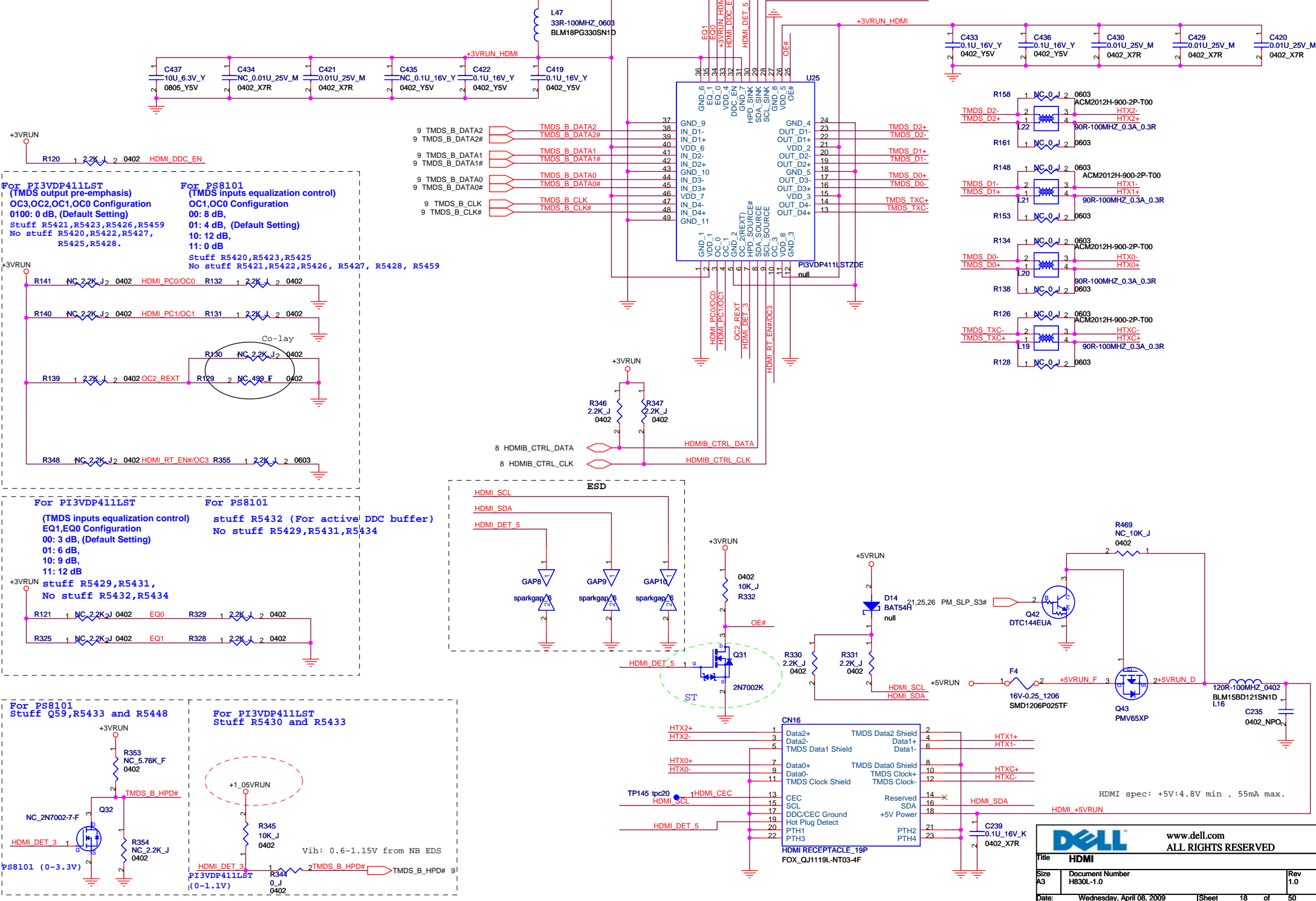
AC82GM45 (SLB94)

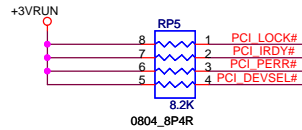
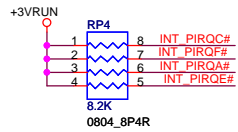
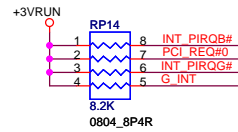
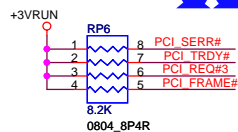
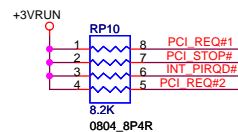












PCI Pullups

INT PIROA# J5
INT PIROB# E1
INT PIROC# J6
INT PIROD# C4

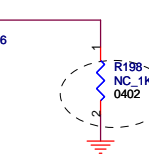
Interrupt I/F
PIROA# J5
PIROB# E1
PIROC# J6
PIROD# C4

CH9M

null

PCI
REQ0# GNT0#
REQ1#/GPIO50 GNT1#/GPIO51
REQ2#/GPIO52 GNT2#/GPIO53
REQ3#/GPIO54 GNT3#/GPIO55
C/BE0#
C/BE1#
C/BE2#
C/BE3#
IRDY#
PAR
PCIRST#
DEVSEL#
PERR#
PLOCK#
SERP#
STOP#
TRDY#
FRAME#
PLTRST#
PCICLK
PME#

F1 PCI REQ#0
G4 PCI GNT#0
B6 PCI REQ#1
A7 PCI GNT#1
F13 PCI REQ#2
E6 PCI GNT#2
F6 PCI REQ#3
E6 PCI GNT#3
D8
B4
D6
A5
D3 PCI IRDY#
E3
R1 PCI RST#
C6 PCI DEVSEL#
E4 PCI PERR#
C2 PCI LOCK#
J4 PCI SERR#
A4 PCI STOP#
F5 PCI TRDY#
D7 PCI FRAME#
C14 PLT RST# L
D4 CLK ICHPCI
R2 PME# ICH



For Boot BIOS Selection.

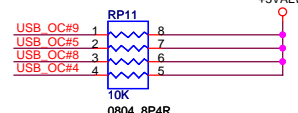
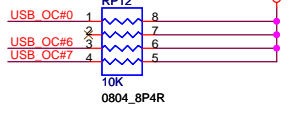
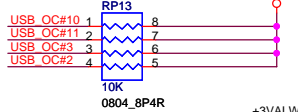
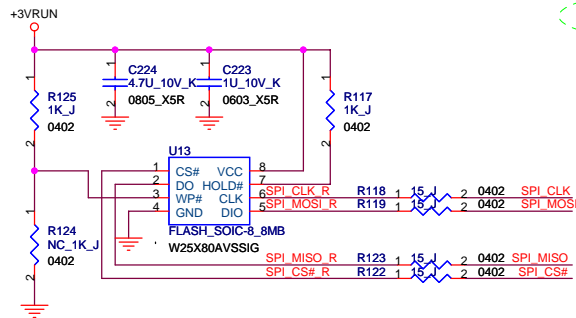
Strap for Boot-BIOS

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

LAN

Express Card

WLAN



Place within 500 mils of ICH and don't routing next to high speed signals

LAN RXN1
LAN RXP1
LAN TXN1
LAN TXP1

C241 1 2 0.1U 6.3V K 0402 X7R
C240 1 2 0.1U 6.3V K 0402 X7R

LAN TXN1 C
LAN TXP1 C

EXPRESS RXN2
EXPRESS RXP2
EXPRESS TXN2
EXPRESS TXP2

C243 1 2 0.1U 6.3V K 0402 X7R
C242 1 2 0.1U 6.3V K 0402 X7R

EXPRESS TXN2 C
EXPRESS TXP2 C

MINI RXN3
MINI RXP3
MINI TXN3
MINI TXP3

C245 1 2 0.1U 6.3V K 0402 X7R
C244 1 2 0.1U 6.3V K 0402 X7R

MINI TXN3 C
MINI TXP3 C

PERN1
PERP1
PETN1
PETP1

N29
N28
P27
P26

PERN2
PERP2
PETN2
PETP2

PERN3
PERP3
PETN3
PETP3

J29
J28
K27
K26

PERN4
PERP4
PETN4
PETP4

PERN5
PERP5
PETN5
PETP5

C29
C28
D27
D26

PERN6/GLAN_RXN
PERP6/GLAN_RXP
PETN6/GLAN_TXN
PETP6/GLAN_TXP

SPI_CLK
SPI_CS#
SPI_MOSI
SPI_MISO

D23
D24
E23
E23

SPI_CLK
SPI_CS#
SPI_MOSI
SPI_MISO

USB_OC#0
USB_OC#2
USB_OC#3
USB_OC#4
USB_OC#5
USB_OC#6
USB_OC#7
USB_OC#8
USB_OC#9
USB_OC#10
USB_OC#11

N4
N5
N6
P6
M1
M2
M4
M3
N3
N1
P5
P3

OC0#/GPIO59
OC1#/GPIO40
OC2#/GPIO41
OC3#/GPIO42
OC4#/GPIO43
OC5#/GPIO29
OC6#/GPIO30
OC7#/GPIO31
OC8#/GPIO44
OC9#/GPIO45
OC10#/GPIO46
OC11#/GPIO47

USB_RBIAS
USB_RBIAS#

AG2
AG1

USB_RBIAS
USB_RBIAS#

PERN1
PERP1
PETN1
PETP1

N29
N28
P27
P26

PERN2
PERP2
PETN2
PETP2

PERN3
PERP3
PETN3
PETP3

J29
J28
K27
K26

PERN4
PERP4
PETN4
PETP4

PERN5
PERP5
PETN5
PETP5

C29
C28
D27
D26

PERN6/GLAN_RXN
PERP6/GLAN_RXP
PETN6/GLAN_TXN
PETP6/GLAN_TXP

SPI_CLK
SPI_CS#
SPI_MOSI
SPI_MISO

D23
D24
E23
E23

SPI_CLK
SPI_CS#
SPI_MOSI
SPI_MISO

USB_OC#0
USB_OC#2
USB_OC#3
USB_OC#4
USB_OC#5
USB_OC#6
USB_OC#7
USB_OC#8
USB_OC#9
USB_OC#10
USB_OC#11

N4
N5
N6
P6
M1
M2
M4
M3
N3
N1
P5
P3

OC0#/GPIO59
OC1#/GPIO40
OC2#/GPIO41
OC3#/GPIO42
OC4#/GPIO43
OC5#/GPIO29
OC6#/GPIO30
OC7#/GPIO31
OC8#/GPIO44
OC9#/GPIO45
OC10#/GPIO46
OC11#/GPIO47

USB_RBIAS
USB_RBIAS#

AG2
AG1

USB_RBIAS
USB_RBIAS#

PERN1
PERP1
PETN1
PETP1

N29
N28
P27
P26

PERN2
PERP2
PETN2
PETP2

PERN3
PERP3
PETN3
PETP3

PERN4
PERP4
PETN4
PETP4

PERN5
PERP5
PETN5
PETP5

PERN6/GLAN_RXN
PERP6/GLAN_RXP
PETN6/GLAN_TXN
PETP6/GLAN_TXP

SPI_CLK
SPI_CS#
SPI_MOSI
SPI_MISO

D23
D24
E23
E23

SPI_CLK
SPI_CS#
SPI_MOSI
SPI_MISO

USB_OC#0
USB_OC#2
USB_OC#3
USB_OC#4
USB_OC#5
USB_OC#6
USB_OC#7
USB_OC#8
USB_OC#9
USB_OC#10
USB_OC#11

N4
N5
N6
P6
M1
M2
M4
M3
N3
N1
P5
P3

OC0#/GPIO59
OC1#/GPIO40
OC2#/GPIO41
OC3#/GPIO42
OC4#/GPIO43
OC5#/GPIO29
OC6#/GPIO30
OC7#/GPIO31
OC8#/GPIO44
OC9#/GPIO45
OC10#/GPIO46
OC11#/GPIO47

USB_RBIAS
USB_RBIAS#

AG2
AG1

USB_RBIAS
USB_RBIAS#

PERN1
PERP1
PETN1
PETP1

N29
N28
P27
P26

PERN2
PERP2
PETN2
PETP2

PERN3
PERP3
PETN3
PETP3

PERN4
PERP4
PETN4
PETP4

PERN5
PERP5
PETN5
PETP5

PERN6/GLAN_RXN
PERP6/GLAN_RXP
PETN6/GLAN_TXN
PETP6/GLAN_TXP

SPI_CLK
SPI_CS#
SPI_MOSI
SPI_MISO

D23
D24
E23
E23

SPI_CLK
SPI_CS#
SPI_MOSI
SPI_MISO

USB_OC#0
USB_OC#2
USB_OC#3
USB_OC#4
USB_OC#5
USB_OC#6
USB_OC#7
USB_OC#8
USB_OC#9
USB_OC#10
USB_OC#11

N4
N5
N6
P6
M1
M2
M4
M3
N3
N1
P5
P3

OC0#/GPIO59
OC1#/GPIO40
OC2#/GPIO41
OC3#/GPIO42
OC4#/GPIO43
OC5#/GPIO29
OC6#/GPIO30
OC7#/GPIO31
OC8#/GPIO44
OC9#/GPIO45
OC10#/GPIO46
OC11#/GPIO47

USB_RBIAS
USB_RBIAS#

AG2
AG1

USB_RBIAS
USB_RBIAS#

PERN1
PERP1
PETN1
PETP1

N29
N28
P27
P26

PERN2
PERP2
PETN2
PETP2

PERN3
PERP3
PETN3
PETP3

PERN4
PERP4
PETN4
PETP4

PERN5
PERP5
PETN5
PETP5

PERN6/GLAN_RXN
PERP6/GLAN_RXP
PETN6/GLAN_TXN
PETP6/GLAN_TXP

SPI_CLK
SPI_CS#
SPI_MOSI
SPI_MISO

D23
D24
E23
E23

SPI_CLK
SPI_CS#
SPI_MOSI
SPI_MISO

USB_OC#0
USB_OC#2
USB_OC#3
USB_OC#4
USB_OC#5
USB_OC#6
USB_OC#7
USB_OC#8
USB_OC#9
USB_OC#10
USB_OC#11

N4
N5
N6
P6
M1
M2
M4
M3
N3
N1
P5
P3

OC0#/GPIO59
OC1#/GPIO40
OC2#/GPIO41
OC3#/GPIO42
OC4#/GPIO43
OC5#/GPIO29
OC6#/GPIO30
OC7#/GPIO31
OC8#/GPIO44
OC9#/GPIO45
OC10#/GPIO46
OC11#/GPIO47

USB_RBIAS
USB_RBIAS#

AG2
AG1

USB_RBIAS
USB_RBIAS#

PERN1
PERP1
PETN1
PETP1

N29
N28
P27
P26

PERN2
PERP2
PETN2
PETP2

PERN3
PERP3
PETN3
PETP3

PERN4
PERP4
PETN4
PETP4

PERN5
PERP5
PETN5
PETP5

PERN6/GLAN_RXN
PERP6/GLAN_RXP
PETN6/GLAN_TXN
PETP6/GLAN_TXP

SPI_CLK
SPI_CS#
SPI_MOSI
SPI_MISO

D23
D24
E23
E23

SPI_CLK
SPI_CS#
SPI_MOSI
SPI_MISO

USB_OC#0
USB_OC#2
USB_OC#3
USB_OC#4
USB_OC#5
USB_OC#6
USB_OC#7
USB_OC#8
USB_OC#9
USB_OC#10
USB_OC#11

N4
N5
N6
P6
M1
M2
M4
M3
N3
N1
P5
P3

OC0#/GPIO59
OC1#/GPIO40
OC2#/GPIO41
OC3#/GPIO42
OC4#/GPIO43
OC5#/GPIO29
OC6#/GPIO30
OC7#/GPIO31
OC8#/GPIO44
OC9#/GPIO45
OC10#/GPIO46
OC11#/GPIO47

USB_RBIAS
USB_RBIAS#

AG2
AG1

USB_RBIAS
USB_RBIAS#

PERN1
PERP1
PETN1
PETP1

N29
N28
P27
P26

PERN2
PERP2
PETN2
PETP2

PERN3
PERP3
PETN3
PETP3

PERN4
PERP4
PETN4
PETP4

PERN5
PERP5
PETN5
PETP5

PERN6/GLAN_RXN
PERP6/GLAN_RXP
PETN6/GLAN_TXN
PETP6/GLAN_TXP

SPI_CLK
SPI_CS#
SPI_MOSI
SPI_MISO

D23
D24
E23
E23

SPI_CLK
SPI_CS#
SPI_MOSI
SPI_MISO

USB_OC#0
USB_OC#2
USB_OC#3
USB_OC#4
USB_OC#5
USB_OC#6
USB_OC#7
USB_OC#8
USB_OC#9
USB_OC#10
USB_OC#11

N4
N5
N6
P6
M1
M2
M4
M3
N3
N1
P5
P3

OC0#/GPIO59
OC1#/GPIO40
OC2#/GPIO41
OC3#/GPIO42
OC4#/GPIO43
OC5#/GPIO29
OC6#/GPIO30
OC7#/GPIO31
OC8#/GPIO44
OC9#/GPIO45
OC10#/GPIO46
OC11#/GPIO47

USB_RBIAS
USB_RBIAS#

AG2
AG1

USB_RBIAS
USB_RBIAS#

PERN1
PERP1
PETN1
PETP1

N29
N28
P27
P26

PERN2
PERP2
PETN2
PETP2

PERN3
PERP3
PETN3
PETP3

PERN4
PERP4
PETN4
PETP4

PERN5
PERP5
PETN5
PETP5

PERN6/GLAN_RXN
PERP6/GLAN_RXP
PETN6/GLAN_TXN
PETP6/GLAN_TXP

SPI_CLK
SPI_CS#
SPI_MOSI
SPI_MISO

D23
D24
E23
E23

SPI_CLK
SPI_CS#
SPI_MOSI
SPI_MISO

USB_OC#0
USB_OC#2
USB_OC#3
USB_OC#4
USB_OC#5
USB_OC#6
USB_OC#7
USB_OC#8
USB_OC#9
USB_OC#10
USB_OC#11

N4
N5
N6
P6
M1
M2
M4
M3
N3
N1
P5
P3

OC0#/GPIO59
OC1#/GPIO40
OC2#/GPIO41
OC3#/GPIO42
OC4#/GPIO43
OC5#/GPIO29
OC6#/GPIO30
OC7#/GPIO31
OC8#/GPIO44
OC9#/GPIO45
OC10#/GPIO46
OC11#/GPIO47

USB_RBIAS
USB_RBIAS#

AG2
AG1

USB_RBIAS
USB_RBIAS#

PERN1
PERP1
PETN1
PETP1

N29
N28
P27
P26

PERN2
PERP2
PETN2
PETP2

PERN3
PERP3
PETN3
PETP3

PERN4
PERP4
PETN4
PETP4

PERN5
PERP5
PETN5
PETP5

PERN6/GLAN_RXN
PERP6/GLAN_RXP
PETN6/GLAN_TXN
PETP6/GLAN_TXP

SPI_CLK
SPI_CS#
SPI_MOSI
SPI_MISO

D23
D24
E23
E23

SPI_CLK
SPI_CS#
SPI_MOSI
SPI_MISO

USB_OC#0
USB_OC#2
USB_OC#3
USB_OC#4
USB_OC#5
USB_OC#6
USB_OC#7
USB_OC#8
USB_OC#9
USB_OC#10
USB_OC#11

N4
N5
N6
P6
M1
M2
M4
M3
N3
N1
P5
P3

OC0#/GPIO59
OC1#/GPIO40
OC2#/GPIO41
OC3#/GPIO42
OC4#/GPIO43
OC5#/GPIO29
OC6#/GPIO30
OC7#/GPIO31
OC8#/GPIO44
OC9#/GPIO45
OC10#/GPIO46
OC11#/GPIO47

Internal VRM enabled for VccSua1_05, VccSua1_5, VccC1_5, VccLAN1_05 and VccC1_05

INTVRMEN

Low= Internal VR Disabled
High= Internal VR Enabled(Default)

VCCRTC

R368
332K_F
0402

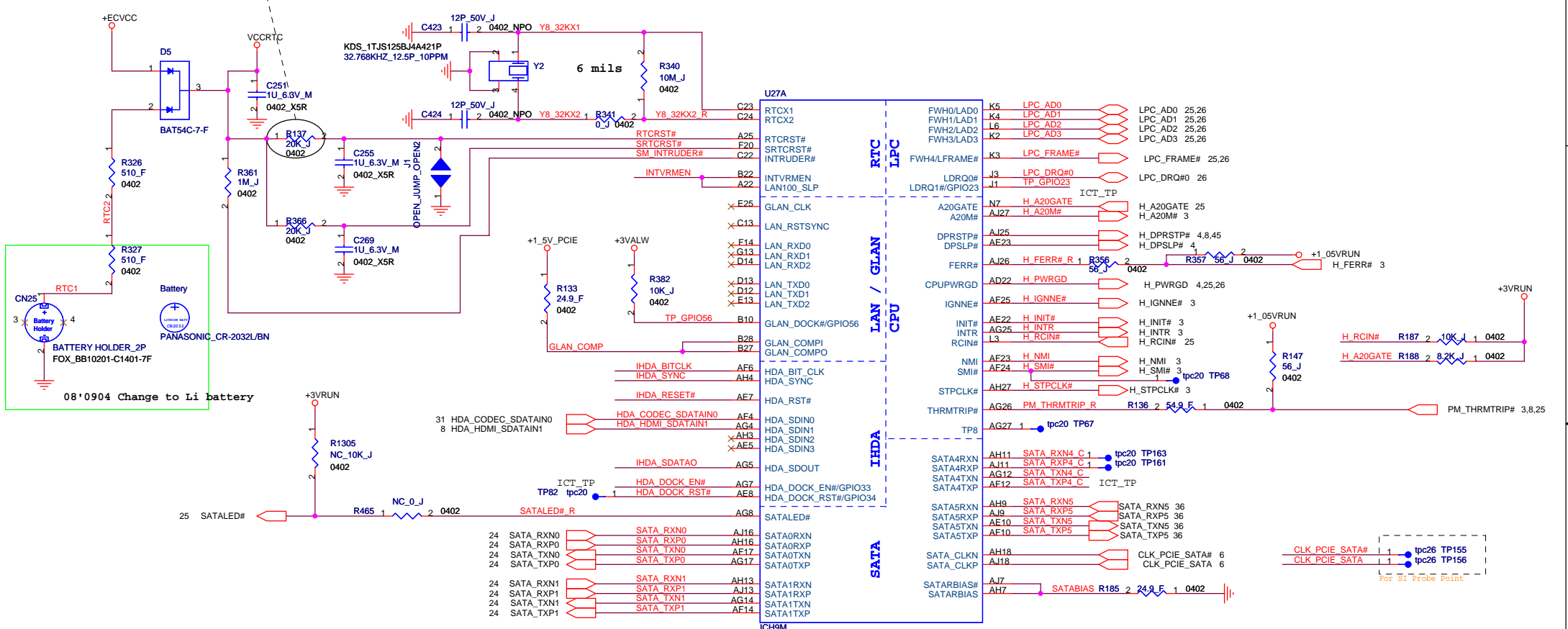
INTVRMEN

RTCST#

VccRTC

Min : 18ms

The traces inside this block should be wider.



IHDA_BITCLK

R184 1 33 2 0402

HDA_HDMI_BITCLK 8

R180 1 33 2 0402

HDA_CODEC_BITCLK 31

IHDA_SDATAO

R190 1 33 2 0402

HDA_HDMI_SDATAOUT 8

R192 1 33 2 0402

HDA_CODEC_SDATAOUT 31

IHDA_RESET#

R178 1 33 2 0402

HDA_HDMI_RST# 8

R174 1 33 2 0402

HDA_CODEC_RST# 31,34

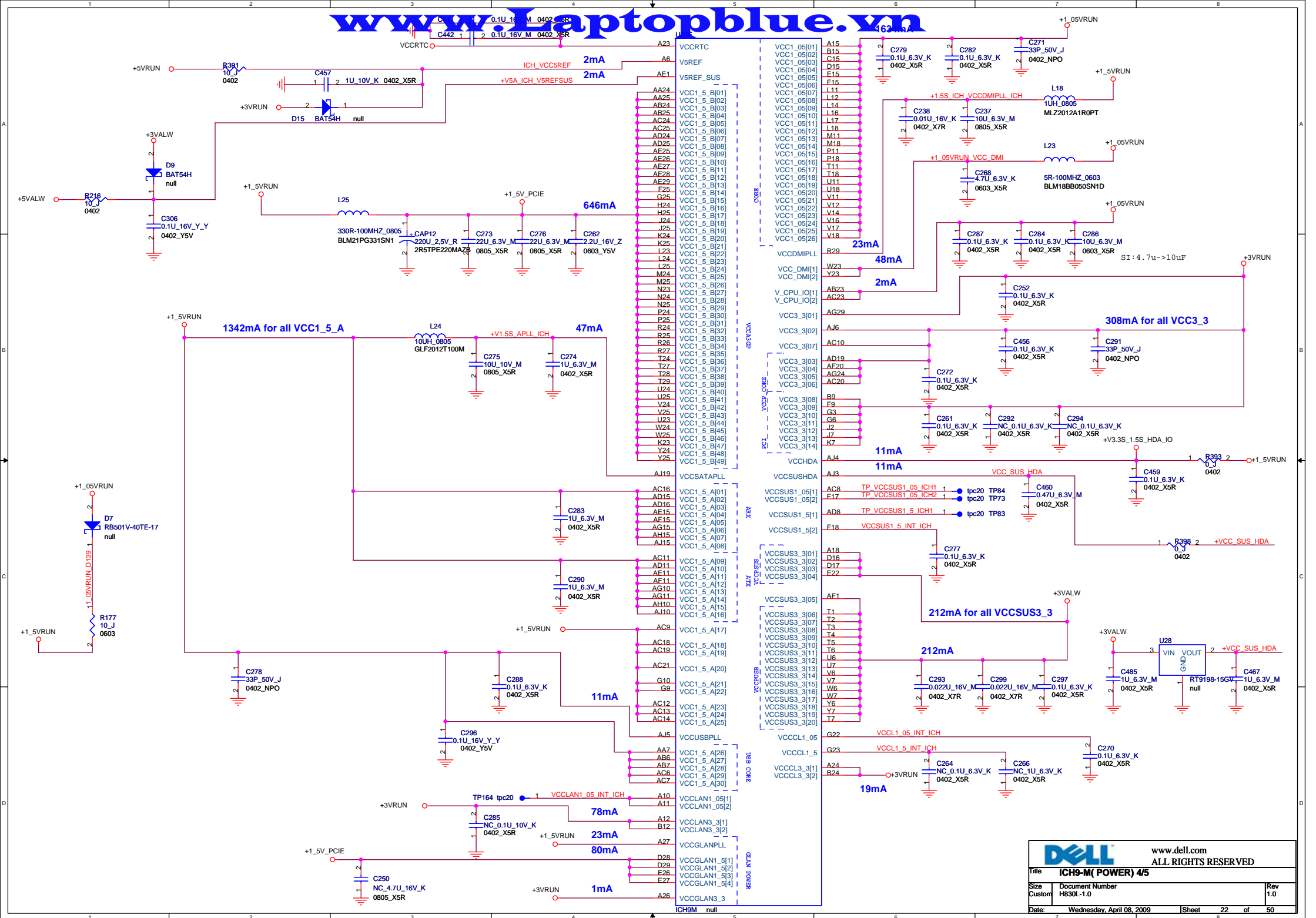
8 HDA_HDMI_SYNC

R201 1 33 2 0402

IHDA_SYNC

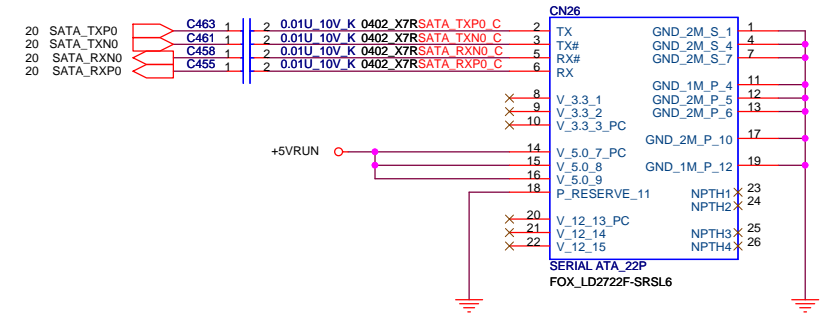
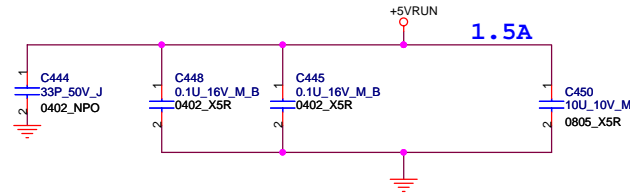
R204 1 33 2 0402

31 HDA_CODEC_SYNC

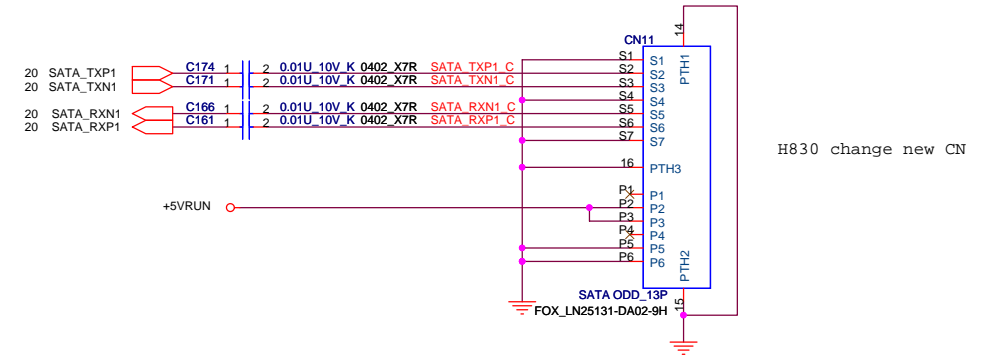


AA26	VSS[001]	VSS[107]	J23
AA27	VSS[002]	VSS[108]	J26
AA3	VSS[003]	VSS[109]	J27
AA6	VSS[004]	VSS[110]	AC22
AB1	VSS[005]	VSS[111]	K28
AA23	VSS[006]	VSS[112]	K29
AB28	VSS[007]	VSS[113]	L13
AB29	VSS[008]	VSS[114]	L15
AB4	VSS[009]	VSS[115]	L2
AB5	VSS[010]	VSS[116]	L26
AC17	VSS[011]	VSS[117]	L27
AC26	VSS[012]	VSS[118]	L5
AC27	VSS[013]	VSS[119]	L7
AC3	VSS[014]	VSS[120]	M12
AD1	VSS[015]	VSS[121]	M13
AD10	VSS[016]	VSS[122]	M14
AD12	VSS[017]	VSS[123]	M15
AD13	VSS[018]	VSS[124]	M16
AD14	VSS[019]	VSS[125]	M17
AD17	VSS[020]	VSS[126]	M23
AD18	VSS[021]	VSS[127]	M28
AD21	VSS[022]	VSS[128]	M29
AD28	VSS[023]	VSS[129]	N11
AD29	VSS[024]	VSS[130]	N12
AD4	VSS[025]	VSS[131]	N13
AD5	VSS[026]	VSS[132]	N14
AD6	VSS[027]	VSS[133]	N15
AD7	VSS[028]	VSS[134]	N16
AD9	VSS[029]	VSS[135]	N17
AE12	VSS[030]	VSS[136]	N18
AE13	VSS[031]	VSS[137]	N26
AE14	VSS[032]	VSS[138]	N27
AE16	VSS[033]	VSS[139]	P12
AE17	VSS[034]	VSS[140]	P13
AE2	VSS[035]	VSS[141]	P14
AE20	VSS[036]	VSS[142]	P15
AE24	VSS[037]	VSS[143]	P16
AE3	VSS[038]	VSS[144]	P17
AE4	VSS[039]	VSS[145]	P2
AE6	VSS[040]	VSS[146]	P23
AE9	VSS[041]	VSS[147]	P28
AE13	VSS[042]	VSS[148]	P29
AE16	VSS[043]	VSS[149]	P4
AE18	VSS[044]	VSS[150]	P7
AE22	VSS[045]	VSS[151]	R11
AH26	VSS[046]	VSS[152]	R12
AE26	VSS[047]	VSS[153]	R13
AE27	VSS[048]	VSS[154]	R14
AF5	VSS[049]	VSS[155]	R15
AF7	VSS[050]	VSS[156]	R16
AF9	VSS[051]	VSS[157]	R17
AG13	VSS[052]	VSS[158]	R18
AG18	VSS[053]	VSS[159]	R28
AG18	VSS[054]	VSS[160]	T12
AG20	VSS[055]	VSS[161]	T13
AG23	VSS[056]	VSS[162]	T14
AG3	VSS[057]	VSS[163]	T15
AG6	VSS[058]	VSS[164]	T16
AG9	VSS[059]	VSS[165]	T17
AH12	VSS[060]	VSS[166]	T23
AH14	VSS[061]	VSS[167]	B26
AH17	VSS[062]	VSS[168]	U12
AH19	VSS[063]	VSS[169]	U13
AH2	VSS[064]	VSS[170]	U14
AH22	VSS[065]	VSS[171]	U15
AH25	VSS[066]	VSS[172]	U16
AH28	VSS[067]	VSS[173]	U17
AH5	VSS[068]	VSS[174]	AD23
AH8	VSS[069]	VSS[175]	U26
AJ12	VSS[070]	VSS[176]	U27
AJ14	VSS[071]	VSS[177]	U3
AJ17	VSS[072]	VSS[178]	V1
AJ8	VSS[073]	VSS[179]	V13
B11	VSS[074]	VSS[180]	V15
B14	VSS[075]	VSS[181]	V23
B17	VSS[076]	VSS[182]	V28
B2	VSS[077]	VSS[183]	V29
B20	VSS[078]	VSS[184]	V4
B23	VSS[079]	VSS[185]	V5
B5	VSS[080]	VSS[186]	W26
B8	VSS[081]	VSS[187]	W27
C26	VSS[082]	VSS[188]	W3
C27	VSS[083]	VSS[189]	Y1
E11	VSS[084]	VSS[190]	Y28
E14	VSS[085]	VSS[191]	Y29
E18	VSS[086]	VSS[192]	Y4
E2	VSS[087]	VSS[193]	Y5
E21	VSS[088]	VSS[194]	AG28
E24	VSS[089]	VSS[195]	AH6
E5	VSS[090]	VSS[196]	AF2
E8	VSS[091]	VSS[197]	B25
F18	VSS[092]	VSS[198]	
F28	VSS[093]		A1
F29	VSS[094]	VSS_NCTF[01]	A2
G12	VSS[095]	VSS_NCTF[02]	A28
G14	VSS[096]	VSS_NCTF[03]	A29
G18	VSS[097]	VSS_NCTF[04]	AH1
G21	VSS[098]	VSS_NCTF[05]	AH29
G24	VSS[099]	VSS_NCTF[06]	AJ1
G26	VSS[100]	VSS_NCTF[07]	AJ2
G27	VSS[101]	VSS_NCTF[08]	AJ28
G8	VSS[102]	VSS_NCTF[09]	AJ29
H2	VSS[103]	VSS_NCTF[10]	B1
H23	VSS[104]	VSS_NCTF[11]	B29
H28	VSS[105]	VSS_NCTF[12]	
H29	VSS[106]		

ICH9M

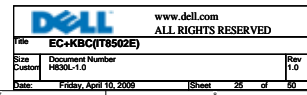


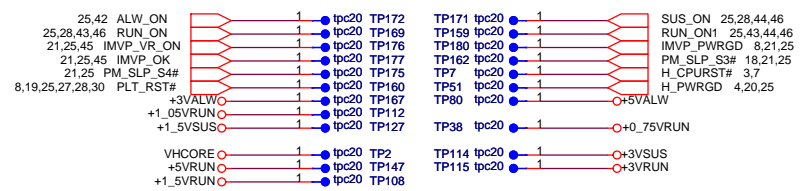
SATA ODD CONN

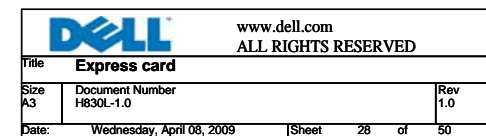
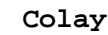
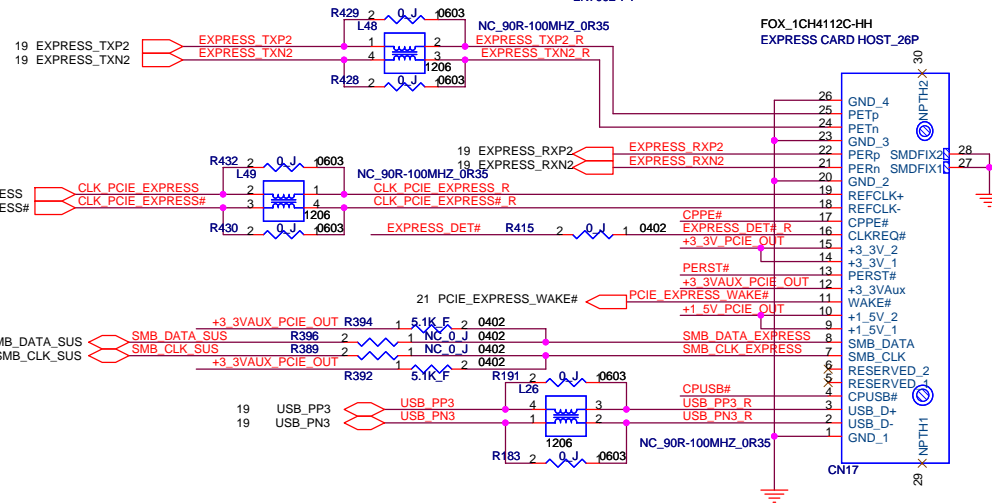


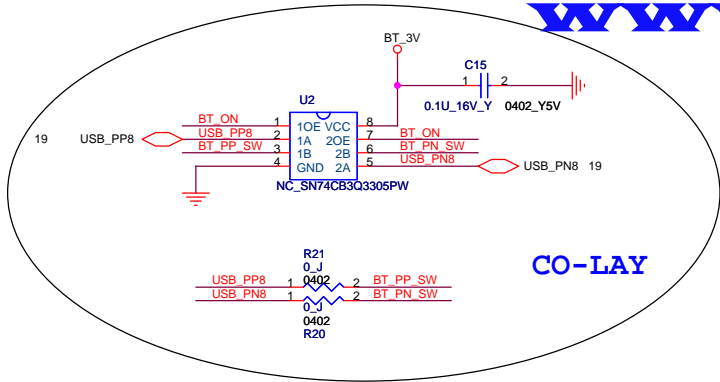
ODD CON ADAPTER

Add CN68 need 2N-0013009-FKG0 in BOM

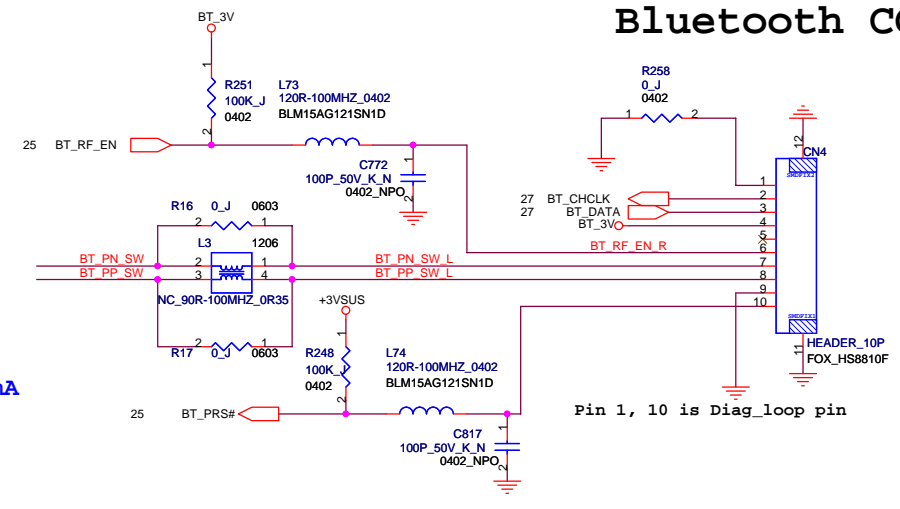




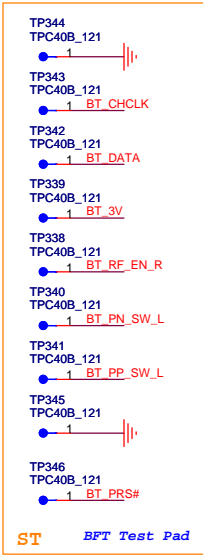




CO-LAY

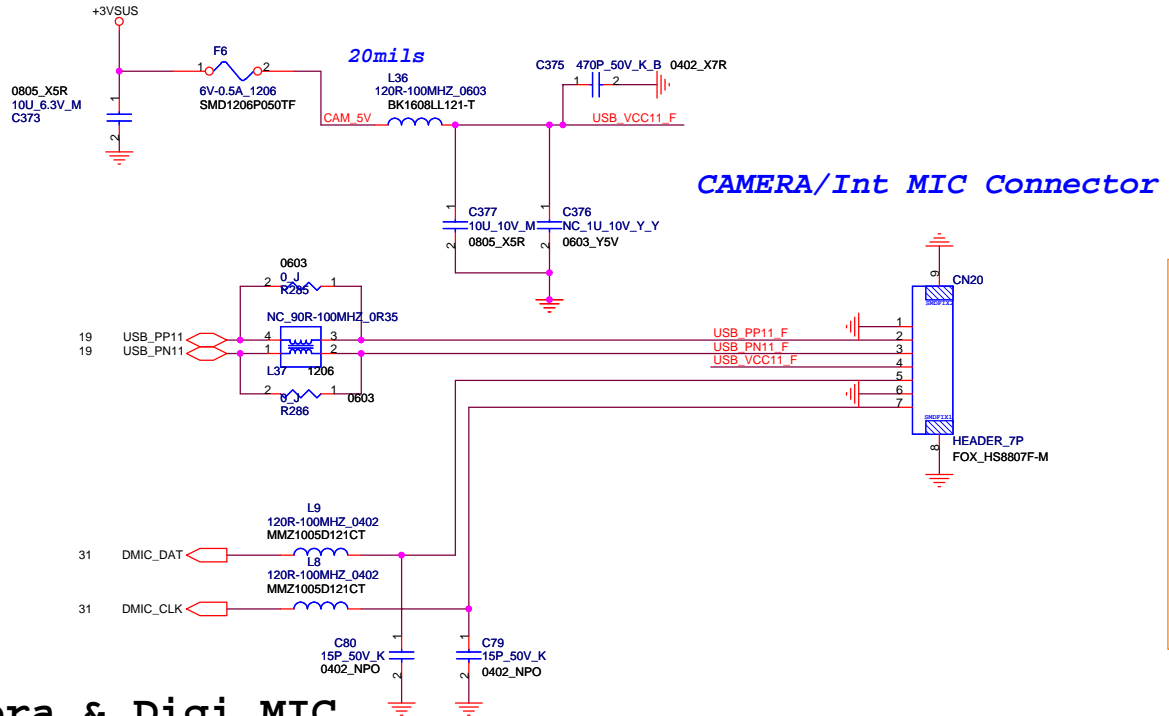


Bluetooth CONN.

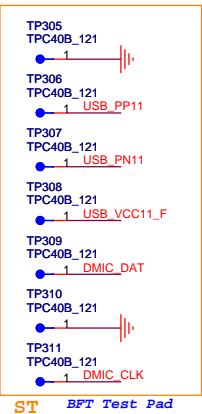


Pin 1, 10 is Diag_loop pin

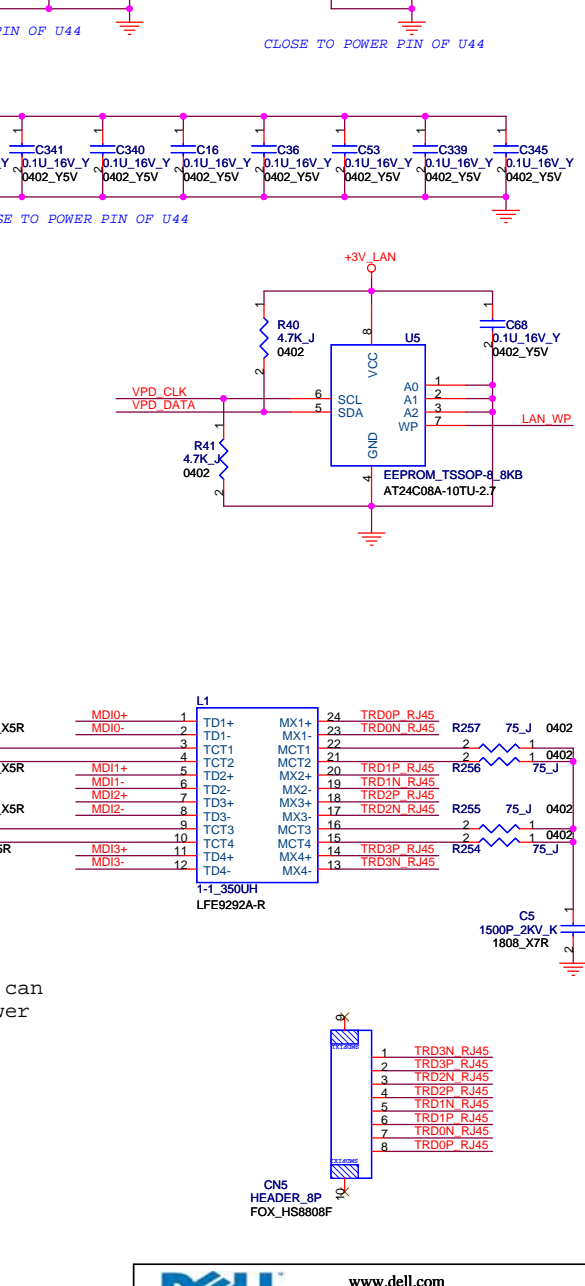
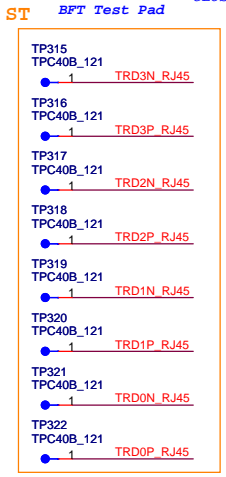
Bluetooth



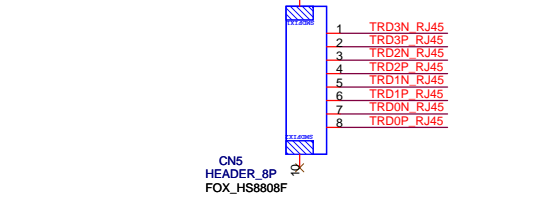
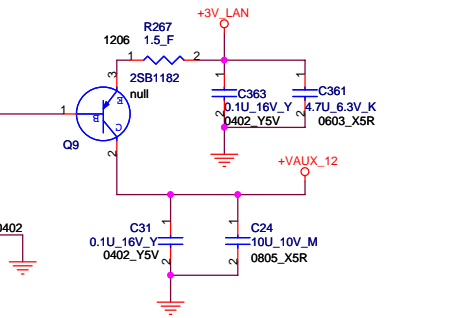
CAMERA/Int MIC Connector

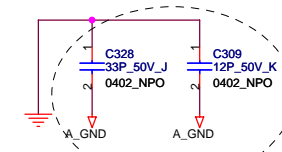
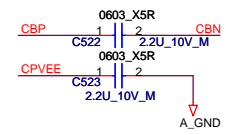
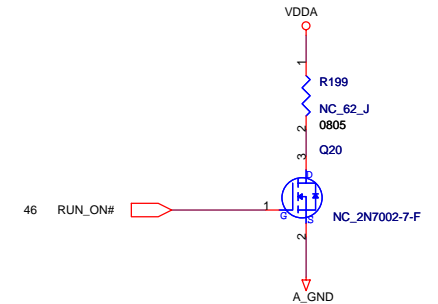
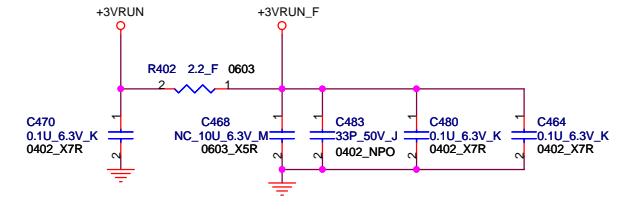
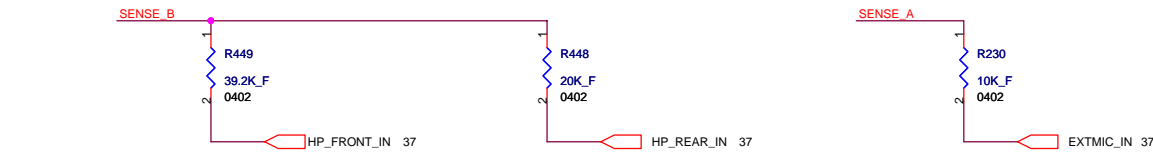


Camera & Digi MIC

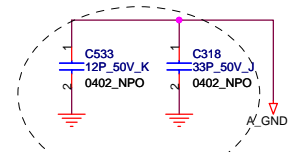


R5449 is required only if Q62 can not dissipate the required power

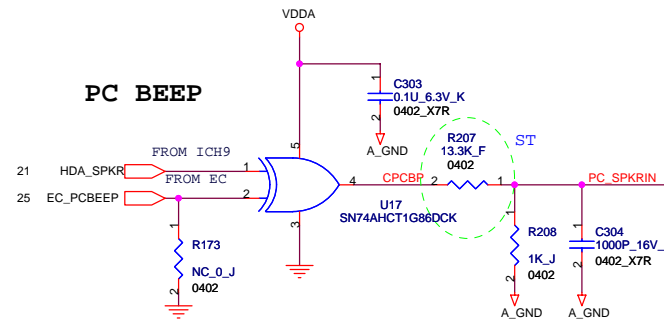
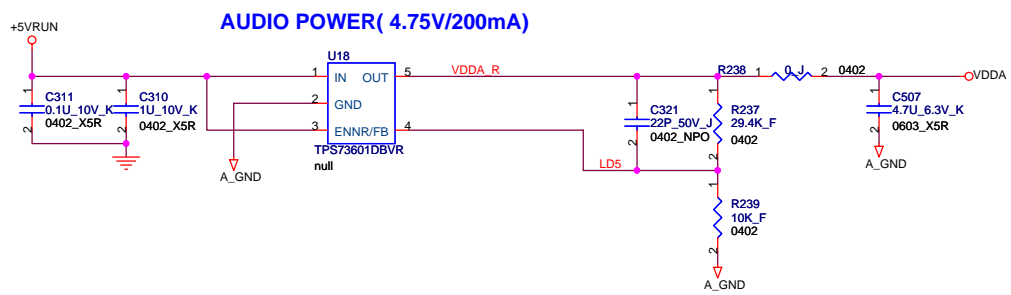


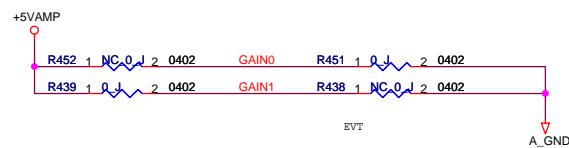
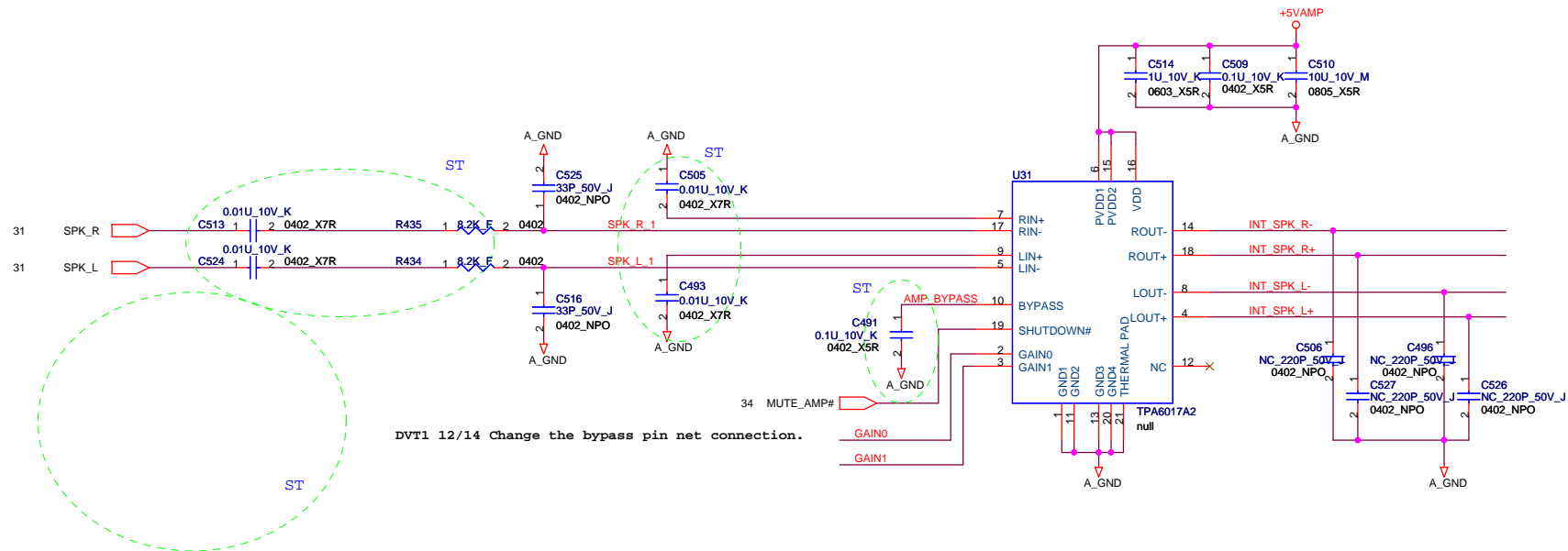
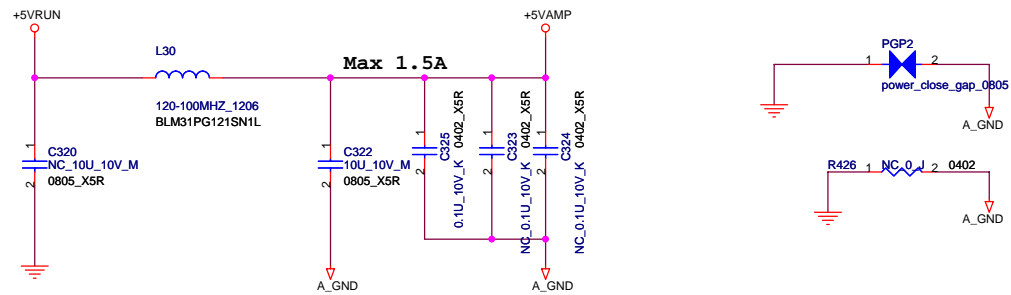


Place these two capacitor together.



Place these two capacitor together.

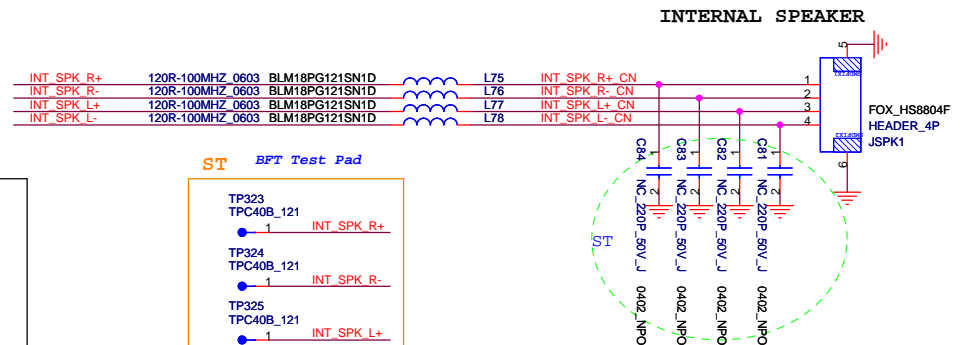




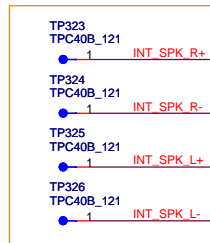
SPEAKER AMP

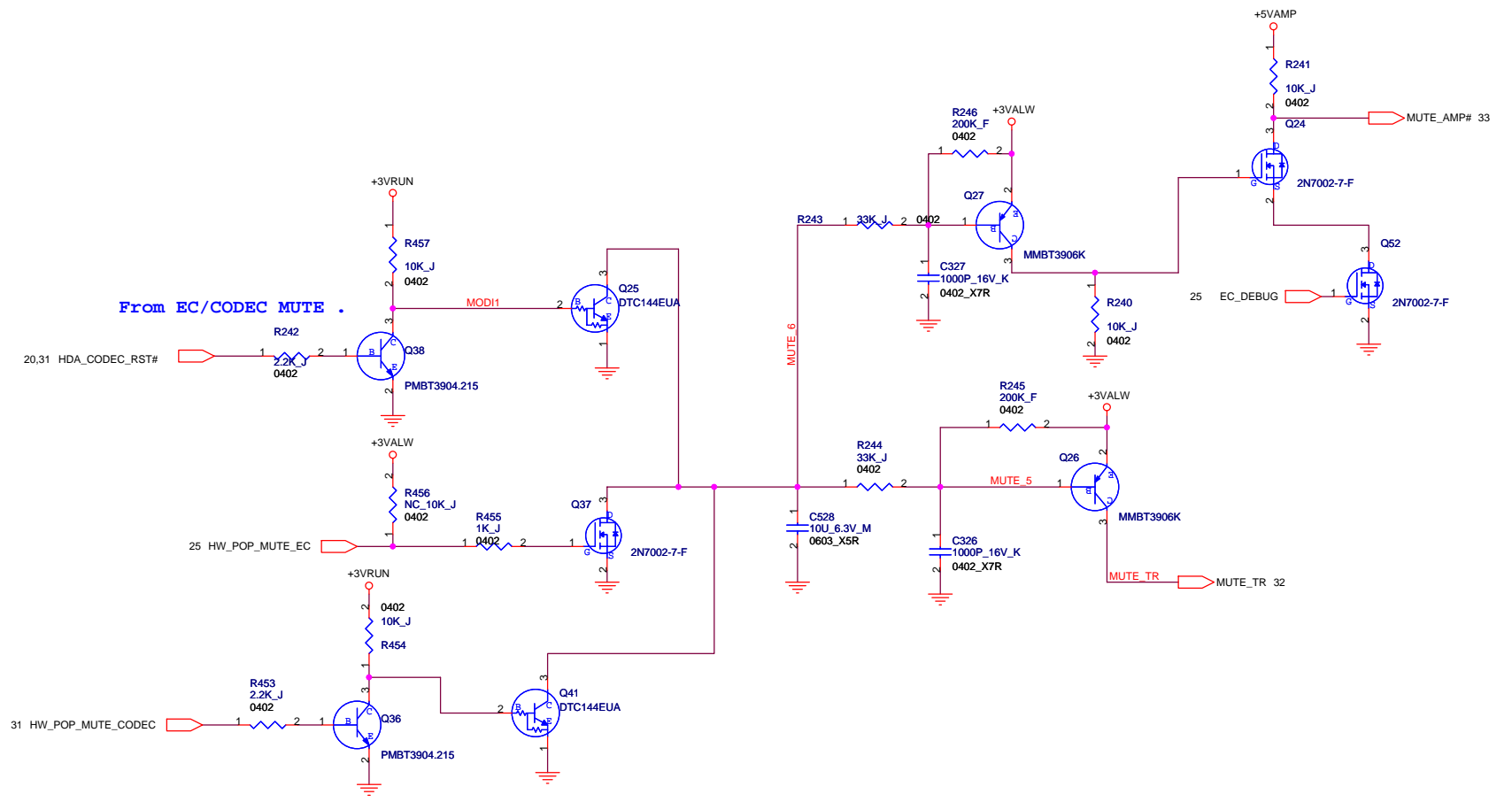
	GAIN0	GAIN1
6 dB	0	0
10 dB	0	1
15.6 dB	1	0
21.6 dB	1	1

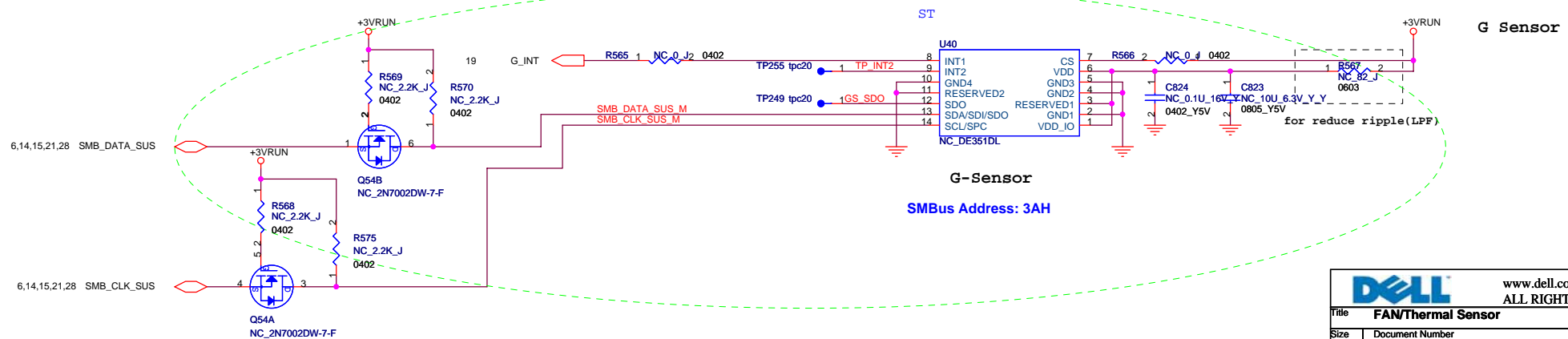
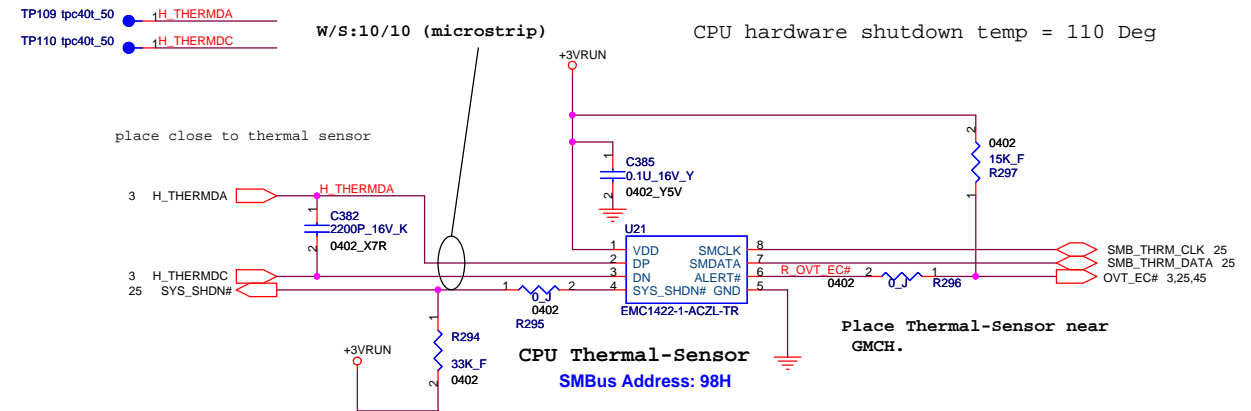
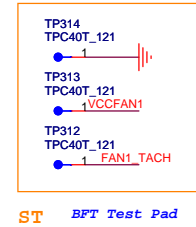
$\text{dB} = 20 \log \text{Gain}$
 If set 10dB, gain is 3.162.
 $P_o = \{(1.2V_{rms} * 3.162)^2\} / 4 = 3.599 \text{ W}$

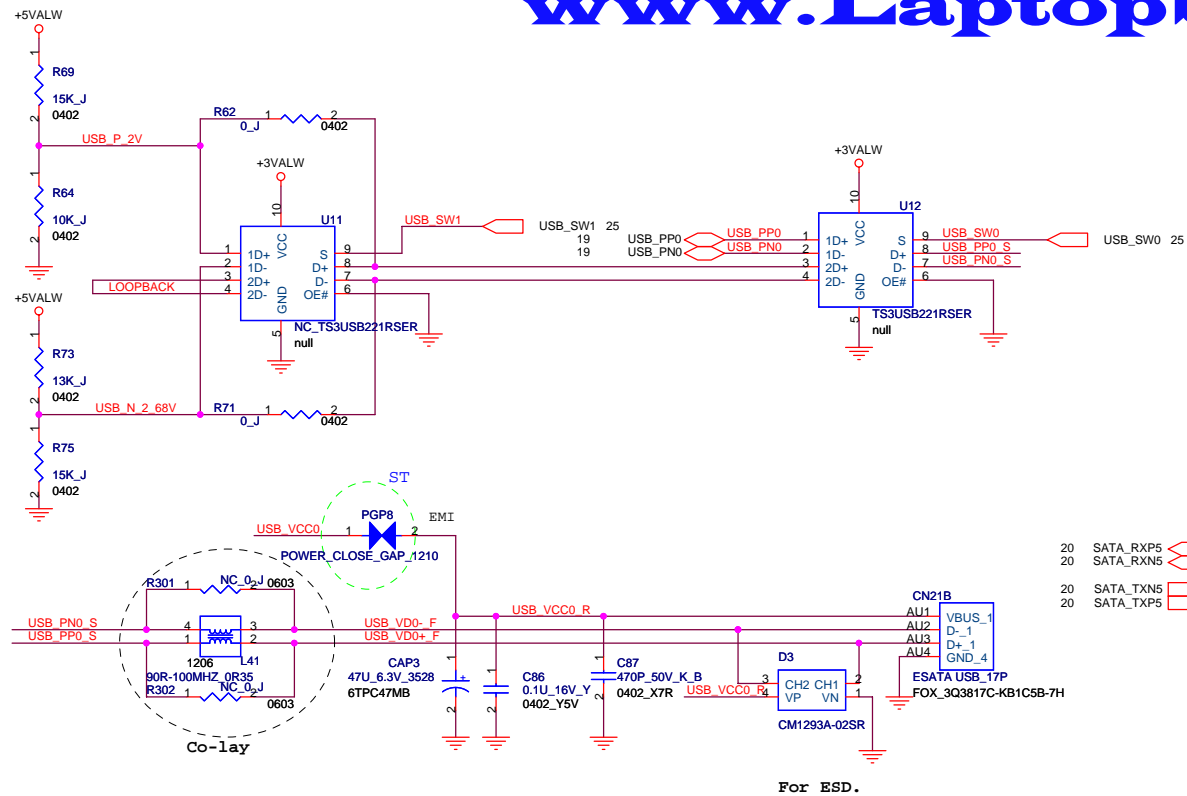


ST BFT Test Pad

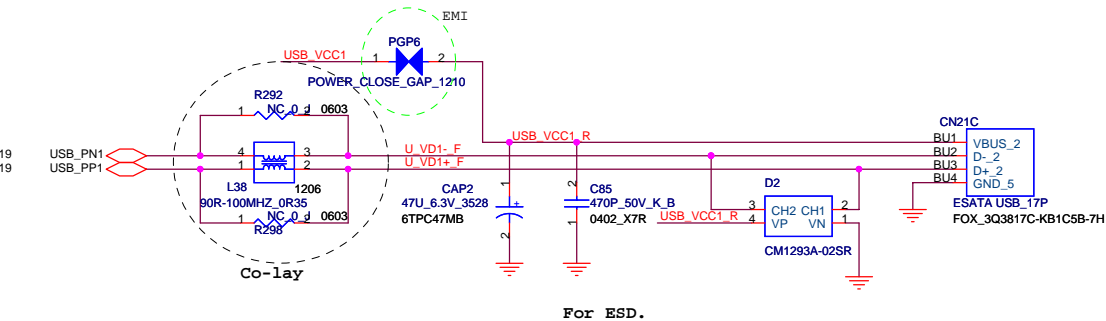




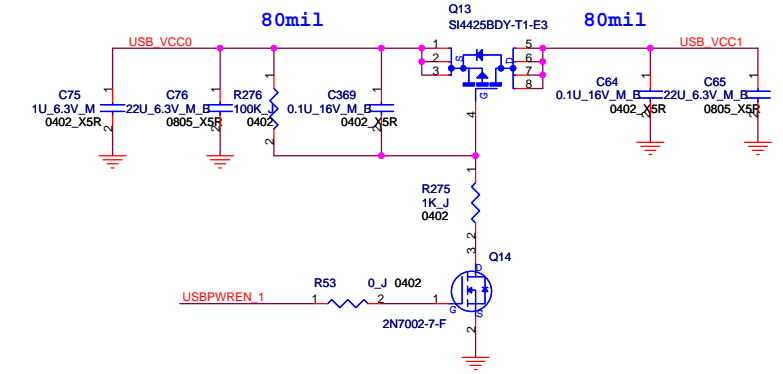
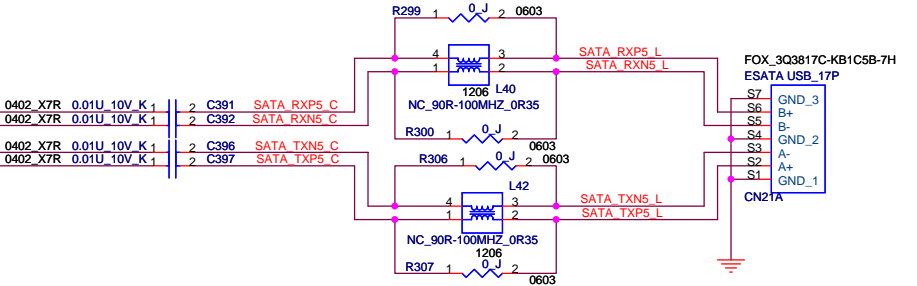
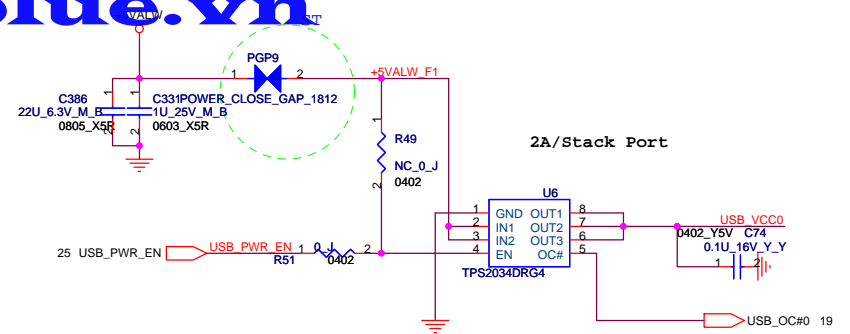




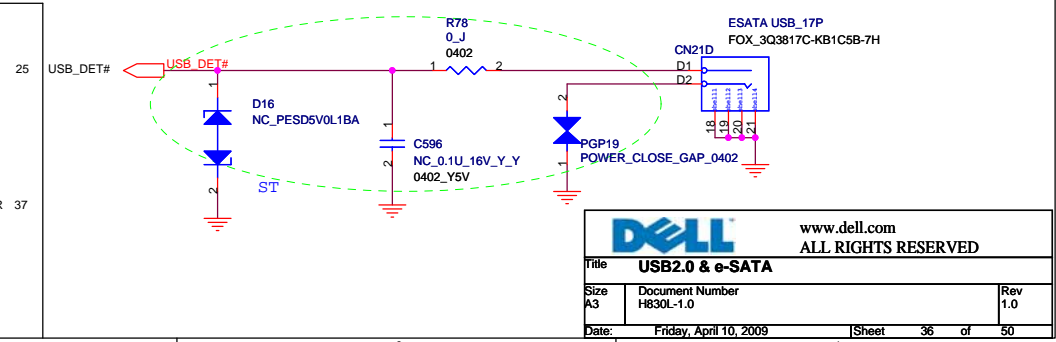
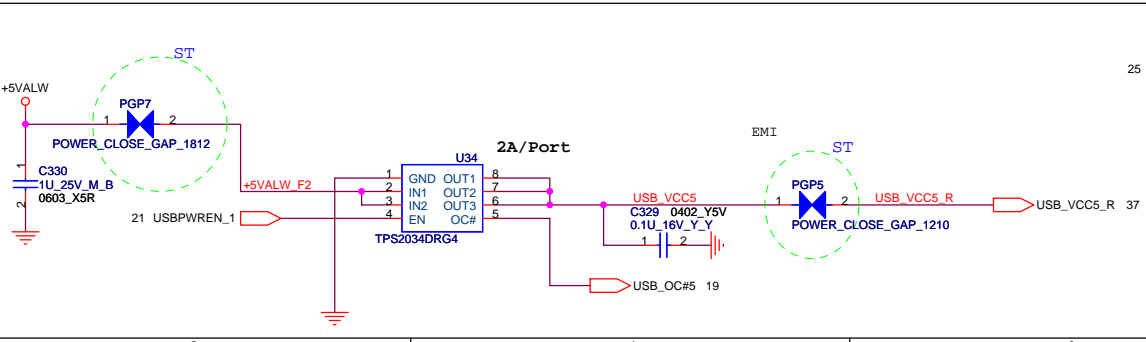
For ESD.



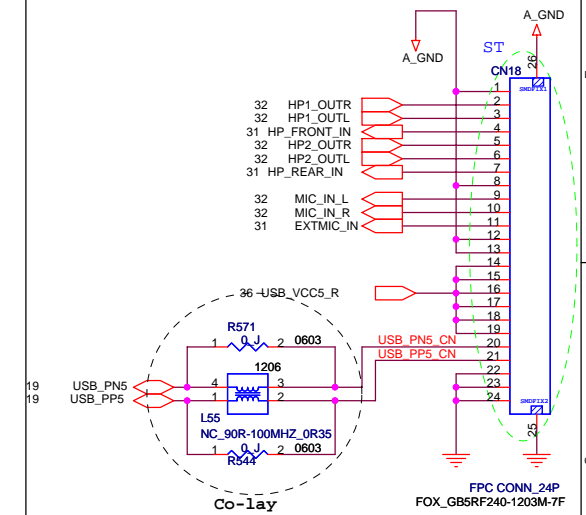
For ESD.



USB + e-SATA on MB



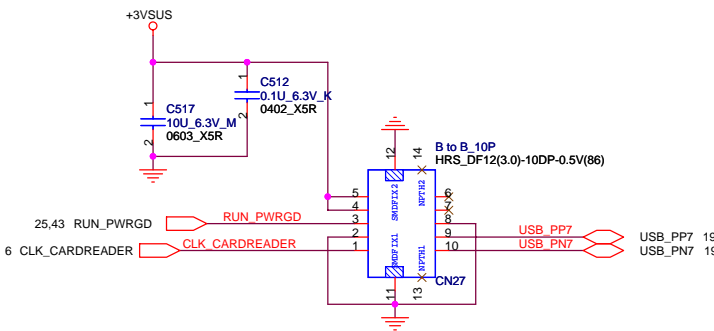
Audio_USB Board On MB



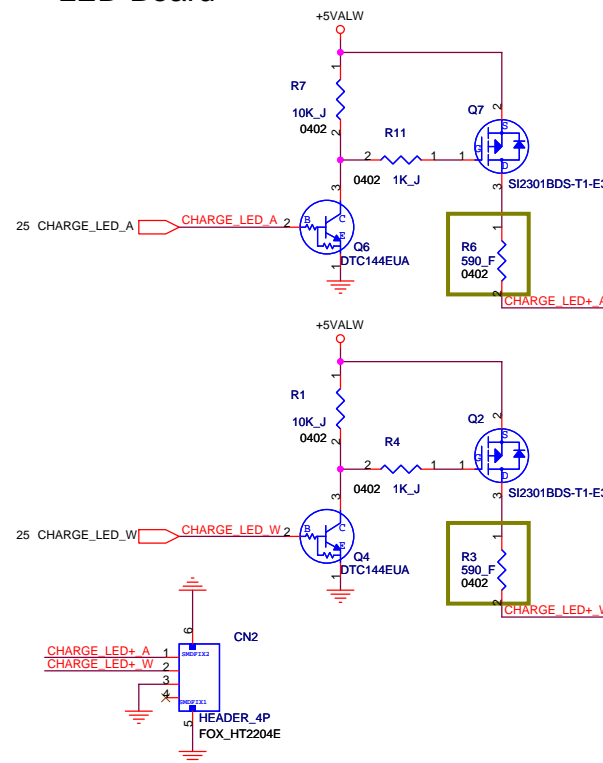
WWAN Board

ST

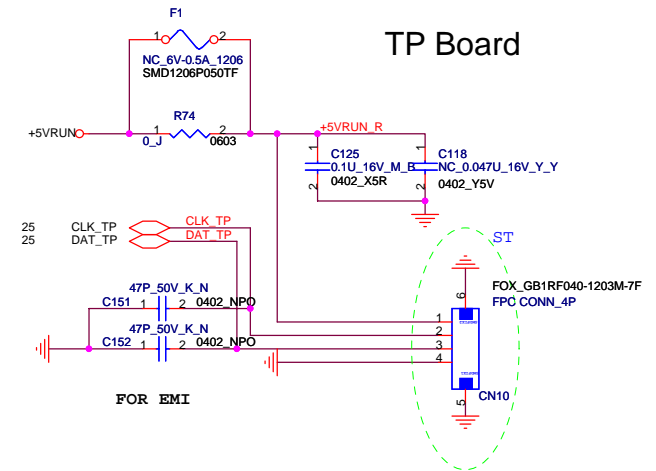
Cardreader Board



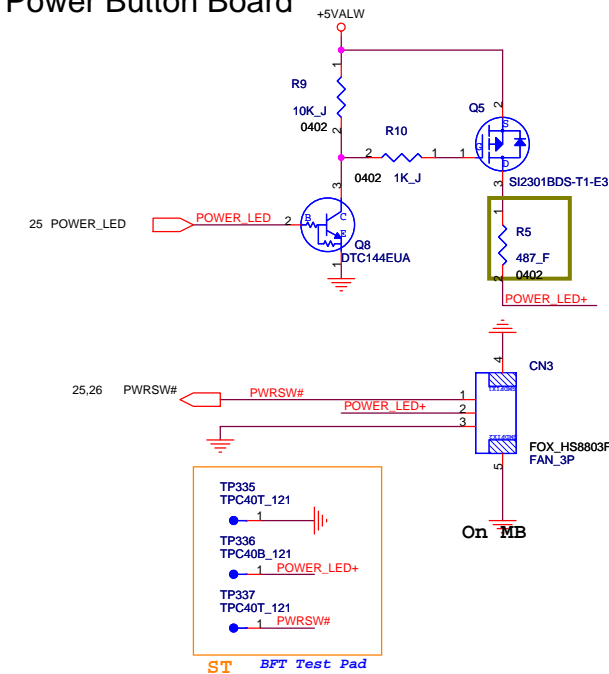
LED Board



TP Board

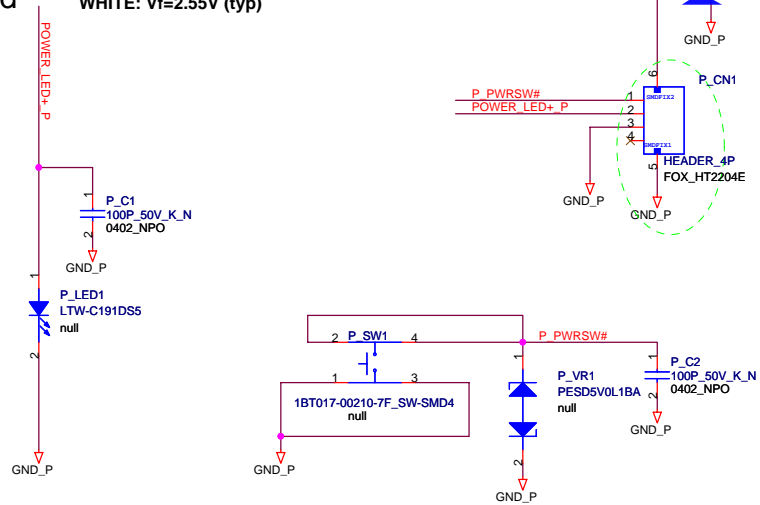


Power Button Board

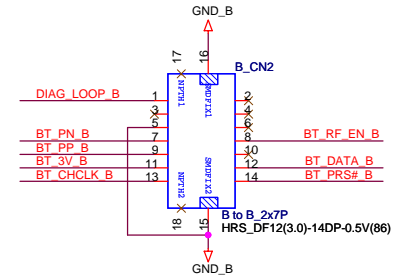
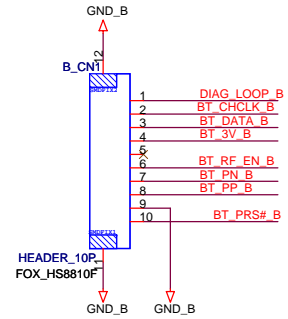


Power Button Board

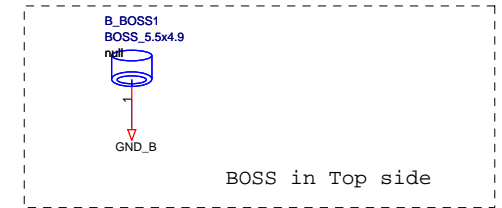
WHITE: Vf=2.55V (typ)



POWER BUTTON



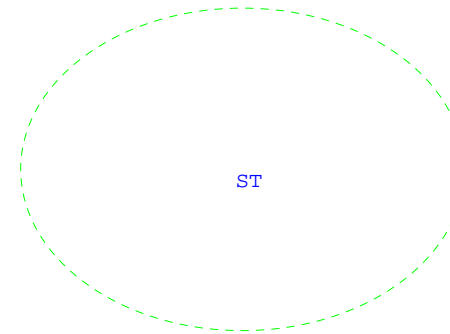
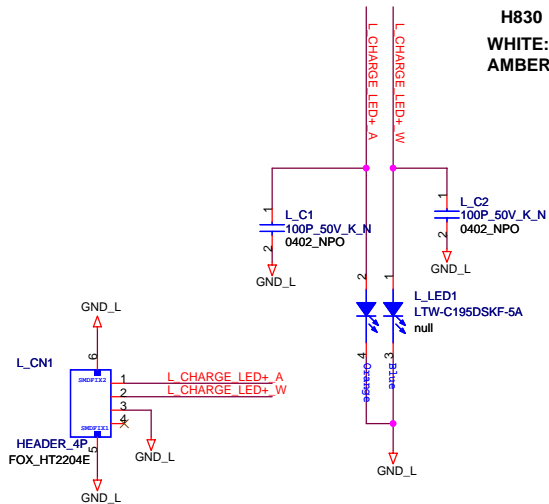
Bluetooth CONN.

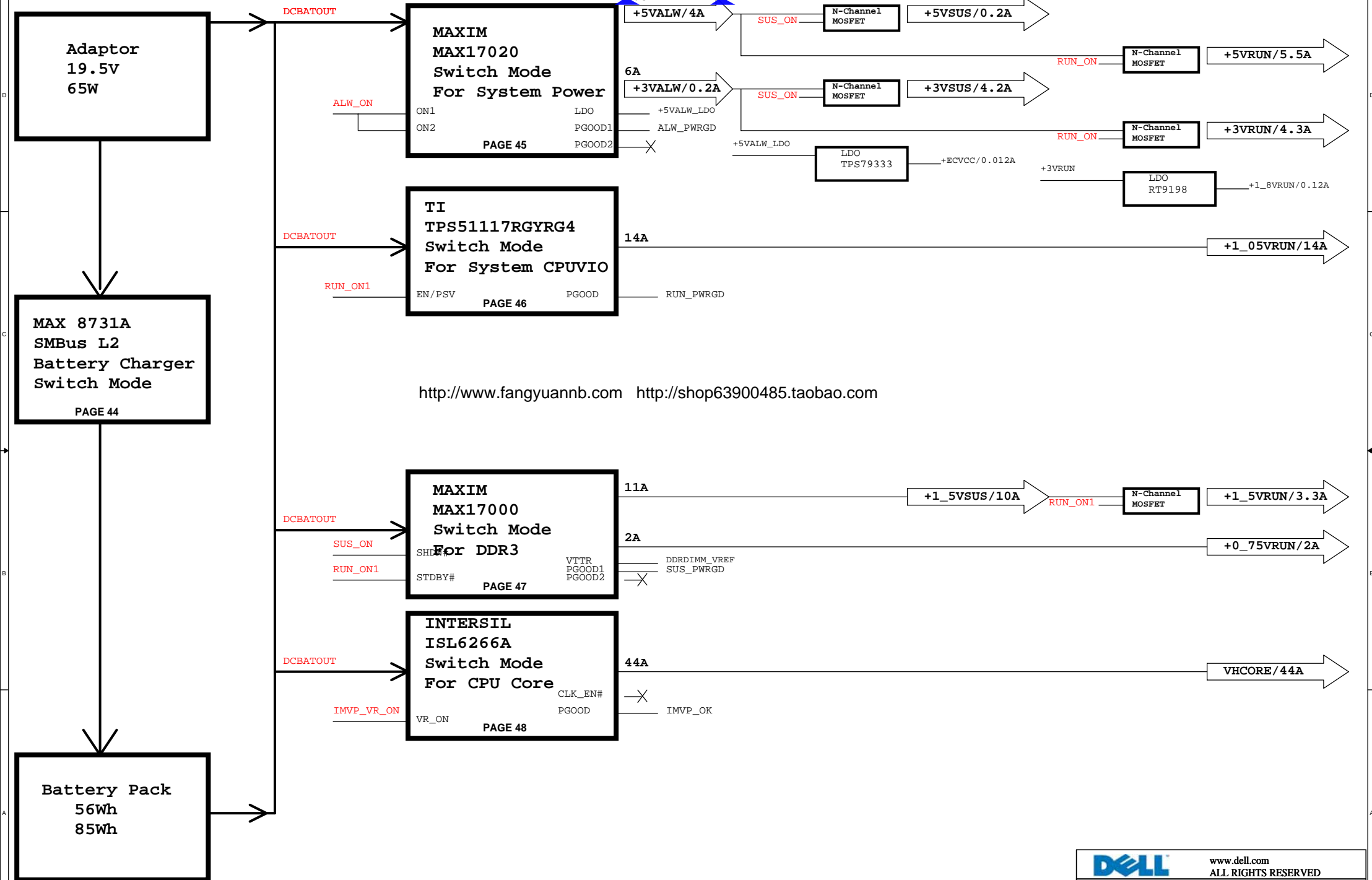


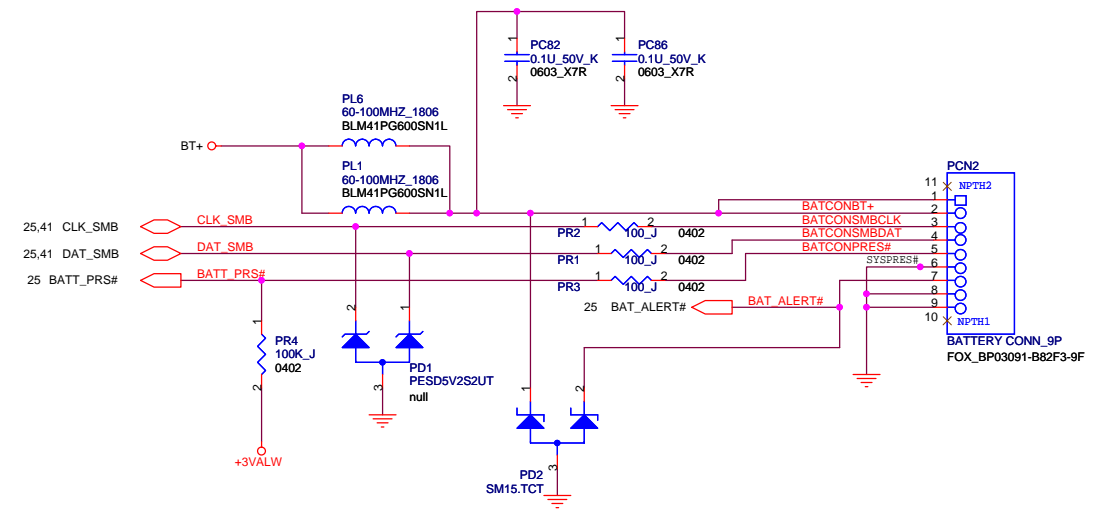
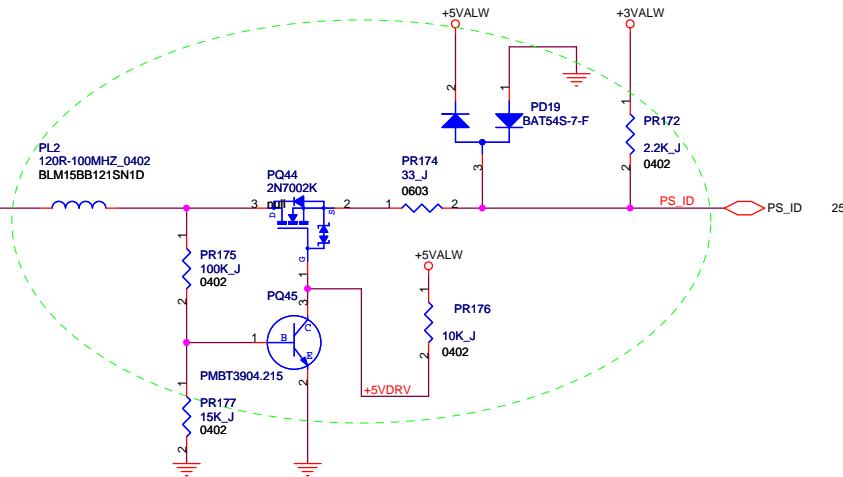
Bluetooth Board

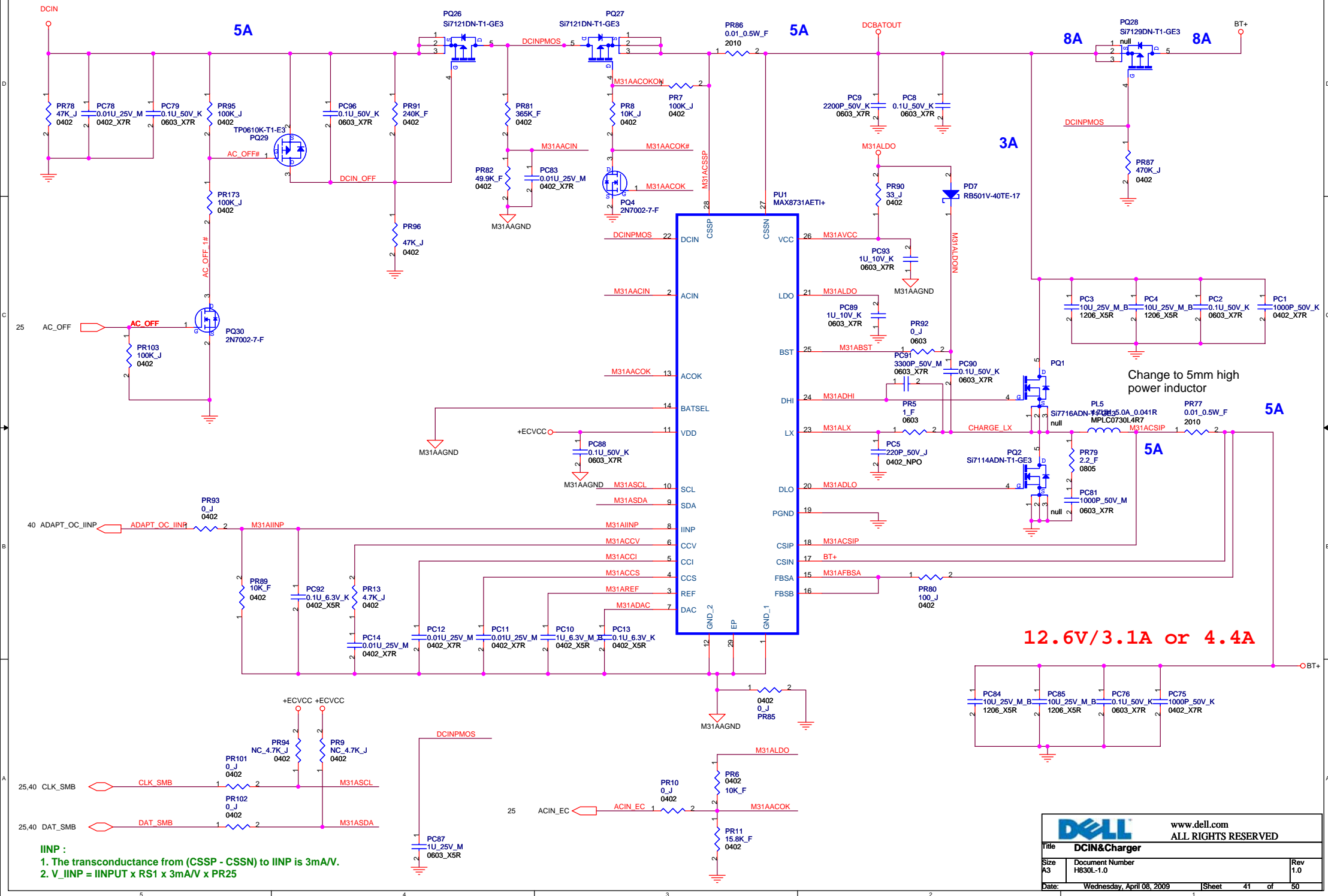
LED Board

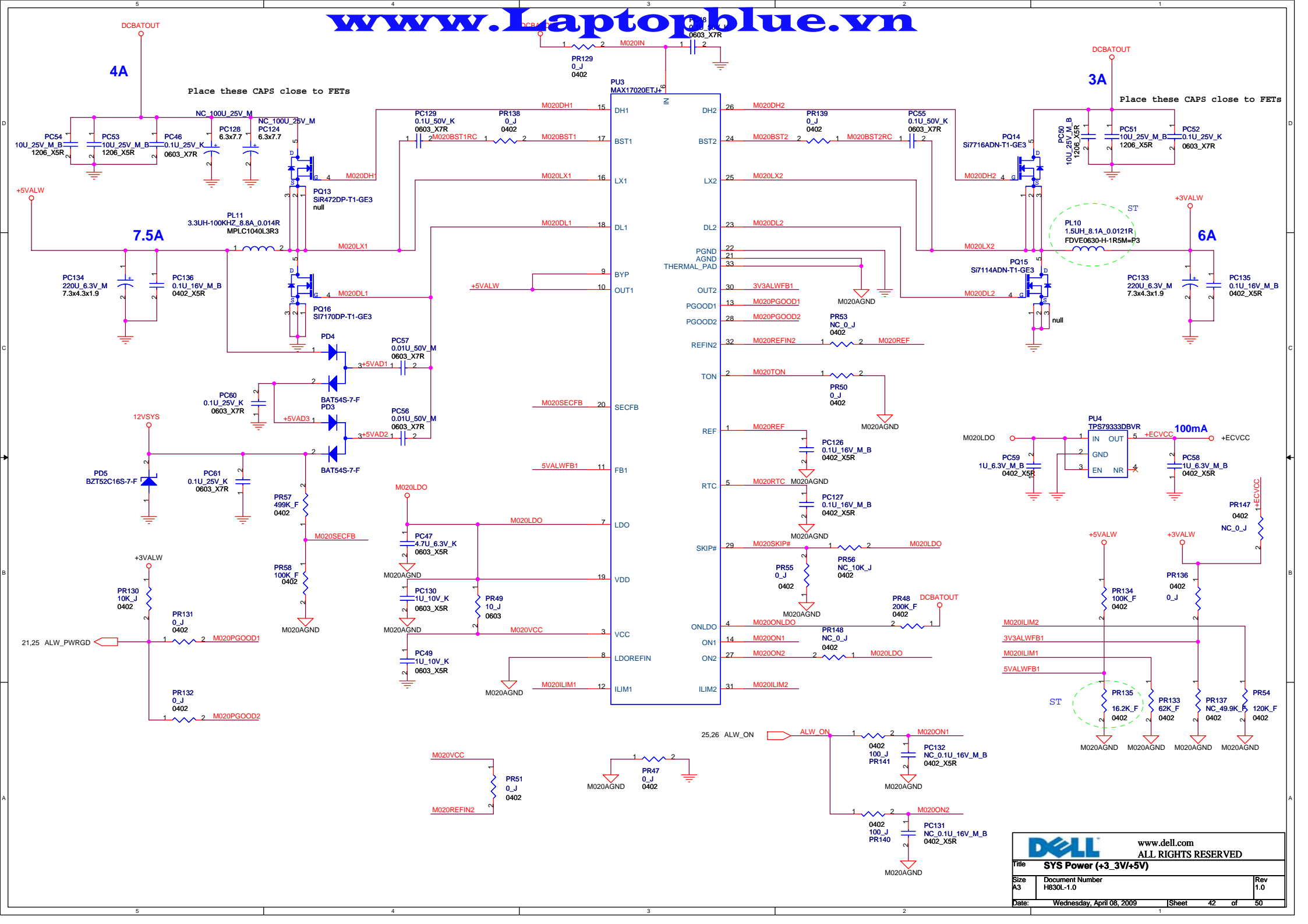
H830
WHITE: Vf=2.55V (typ)
AMBER: Vf=2.0V (typ)

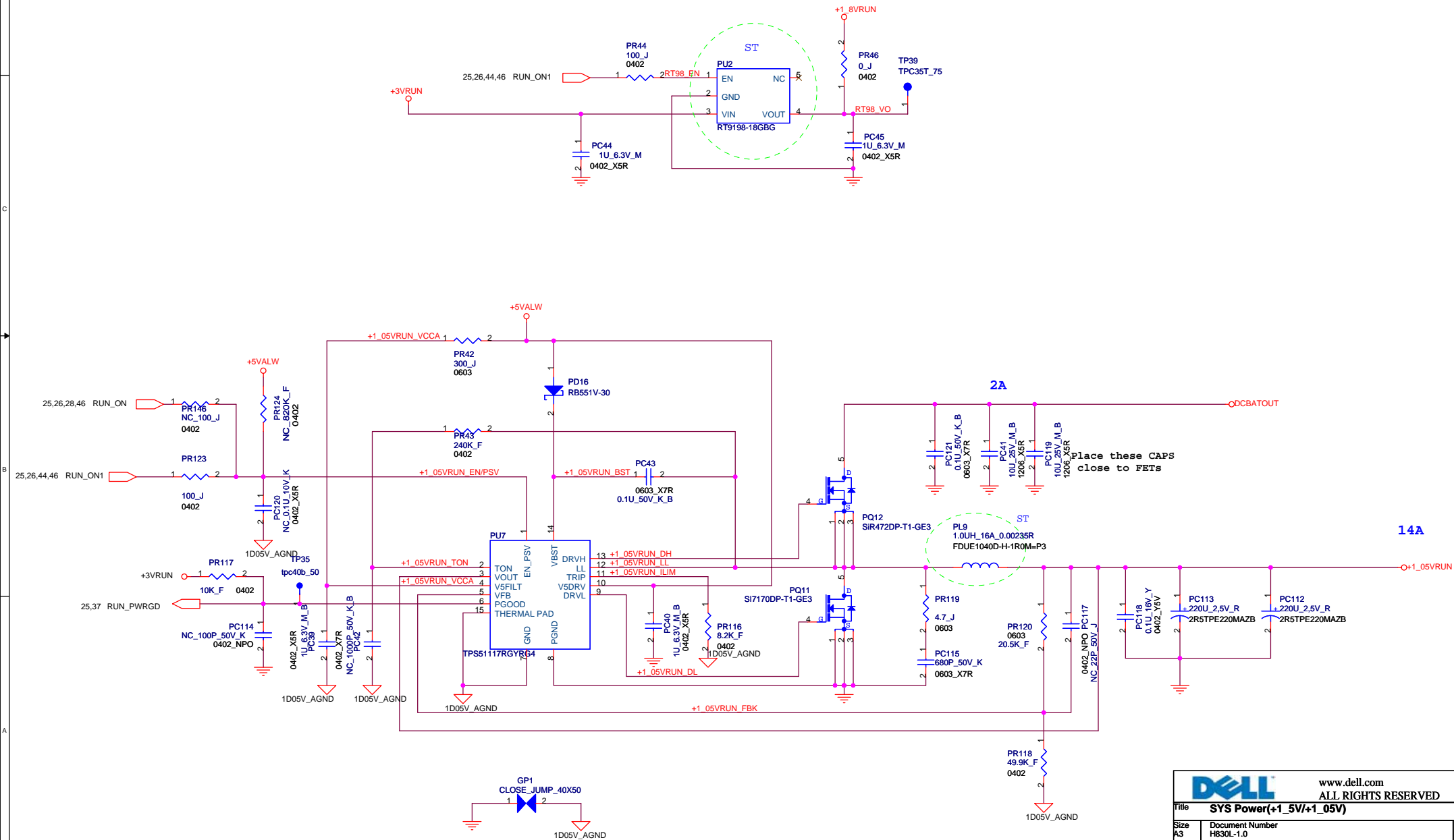


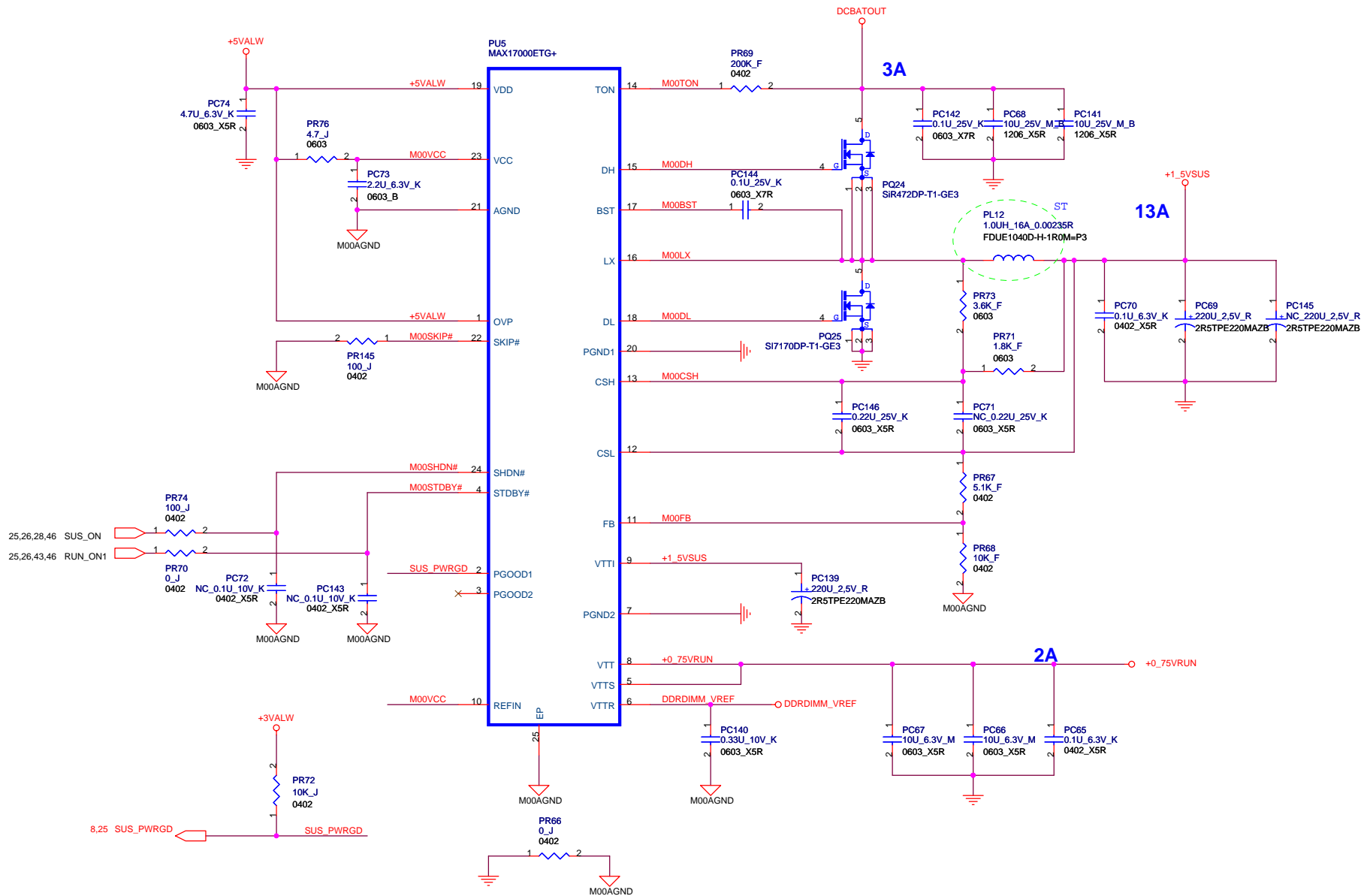


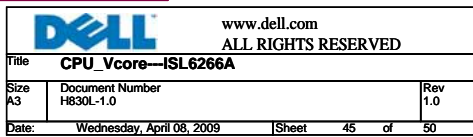


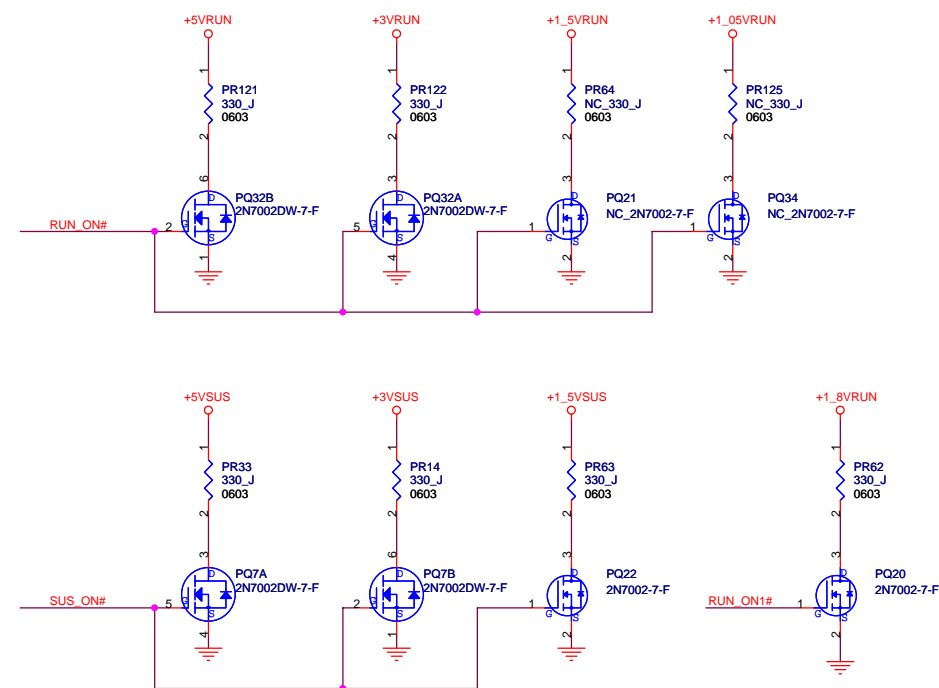












H830-L EVT -> DVT

(2008/12/29)

- P.25 Change KB CN: CN13 to Stuff; CN12 to NC for ME requirement.
- P.28 Change Express Card CN: CN14, CN17 to Foxconn for ME requirement.
- P.37 Change WWAN CN: CN8 to Stuff; CN7 to NC for ME requirement.
- P.41 Change PR87 to 470K from 100K to fix part number error.
- P.41 Change PR6 to 10K from 100K to fix part number error.
- P.41 Change PR89 to 10K from 8.45K to fix part number error.
- P.41 Change PR77, PR86 to CYTEC from WALSIN for purchase requirement.
- P.42 Change PR136 to 27K from 33K for fine tune voltage.
- P.42 Change PR56 to NC ; PR55 to stuff to fix 3V/5V over-spec issue.
- P.43 Change PQ11 to SI7170DP-T1-GE3 from Sir466DP-T1-GE3.
- P.45 Change PR108, PR36, PR35 to 1ohm from 100K to fix part number error.
- P.45 Change PR20 to NC for ISL6266A improved by internal circuit.

(2008/12/31)

- P.25/29/30/33/35/37/40 Add test point TP300~TP337 for DVT BFT test.

(2009/01/06)

- P.18 Change L47 vender to PSL vender Murata.
- P.29 Add TP338~TP to solve PC_BEEP issue.
- P.33 Add Q50, R468,R560,C816,C792 to solve PC_BEEP issue.
- P.34 Add Q41 to solve speaker mute issue.
- P.37 Change CN3 to 4pin CN from 3pin to avoid confusing with LED Brd CN.
- P.38 Reverse L_SMD1 to follow cable pin definition.

(2009/01/08)

- P.20 Change RTC battery part number to CR-2032L/BN from CR-2032L/BE for PUR.
- P.40 Add PU PR172 for PS_ID.
- P.24 Change CN26 (HDD CN) footprint for ME request.
- P.24 Change CN26 (HDD CN) footprint for ME request.
- P.19 Change R124 to NC for no necessary.

(2009/01/09)

- P.14/15 Change C221,C196,C219,C220,C202,C178,C197 to stuff to follow H830H.
- P.38 Change R299,R300,R306,R307 to Stuff; L40,L42 to NC to solve e-sata issue.
- P.20 Change C423, C424 to 12pF from 15pF for crystal Y2 precision.
- P.30 Change C48 to 15pF, C47 to 18pF for crystal Y1 precision.
- P.25 Change C481 to 15pF, C475 to 15pF for crystal Y4 precision.
- P.06 Change C425 to 27pF for crystal Y3 precision.
- P.21 Change USBPWREN_1 to SB GPIO28; GPIO22 connect +3VRUN to solve USB S3 auto resume issue.
- P.40 Change TP300, TP301,TP302,TP303,TP304 to TPC60B_75 for TE request.
- P.41/42 Change PQ2, PQ15 to Si7114ADN-T1-GE3 for power request.
- P.43 Change PQ11 to SI7170DP-T1-GE3 for power request.
- P.34 Add Q52 and connect EC_DEBUG to EC to solve PC_BBEP issue.

(2009/01/09-2)

- P.30 Change Y1 to X5H025000FC1H-H for vender suggest.
- P.20 Change RTC Battery CN25 to BB10201-C1401-7F for ME request.

(2009/01/12)

- P.36 Change U6,U34 to HF part RT9703GS for vender suggest.

(2009/01/14)

- P.38 Change L_SMD1 to L_CN1 for ME request.
- P.48 Del H1,H10 & H23 for ME request.
- P.43 Change PU2 to RT9198-18PBG from RT9198-18GBG for PUR request.
- P.36 Change U6,U34 back to LF part RT9703PS for vender lead time issue.

- P.36 Del eSATA Choke L40 and L42 for improve SI.
- P.18 Change HMDI CN CN16 to DIP type for factory EE request.
- P.37 Change PWR BTN CN CN3 to 3pin and LED Brd CN CN2 to 4pin for ME request.

(2009/01/19)

- P.41 Add PR173 for solve PQ29 derating issue.
- P.42 Move PC124 to DCIN5VALW for power request.
- P.06 Change C425 to 33pF for crystal Y3 precision.

(2009/01/20)

- P.43 Add PD16 for power request.
- P.08 Add U38, C818, R563,R564 to solve SUS_PWRGD level drop issue.
- P.05 Add C819, C820, C821 for RF request.
- P.27 Del D4 and add R469, Q42 and Q43 to solve HDMI CN VCC issue.
- P.42 Del PR52 and change PR51 to 0ohm;change PR53 to NC for power request.
- P.47 Add PAD2~PAD12 for ME request.

(2009/01/21)

- P.17 Change R269 to 62ohm and stuff R360 and Q12; add C534 to solve panel power sequence issue.
- P.36 Change USB power switch U34, U6 to TPS2034DRG4 (low Rds on).
- P.38 Add BC_CN4 and BC_CN3 for BT second source.
- P.52 Add PR146 NC for resevering power sequence test.

(2009/02/02)

- P.31 Change C518 to 2.2uF from 10uF to solve S3 pop noise issue.
- P.47 Connect H30 to AGND from GND.
- P.37 Increase USB_VCC5_R to 6pin from 4pin and decrease AGND, GND pin to improve voltage drop.

(2009/02/02)

- P.37 Del colay connector CN6 for ME request.

(2009/02/05)


- P.47 Del BOSS6 for ME request.
- P.38 Add BC_TP1, BC_TP2.
- P.25 Change Q21B(3904) to Q53 (2N7002) to prevent current leakage.
- P. Change test point to ICT test point: TP111,TP113,TP116,TP117,TP118,TP119,TP120,TP121,TP122,TP123,TP124,TP125,TP126,TP130,TP131,TP132,TP133,TP135,TP136,TP137,TP139,TP140,TP141,TP142,TP153,TP157,TP158,TP178,TP179,TP34,TP36,TP37,TP40,TP41,TP42,TP44,TP45,TP46,TP47,TP49,TP58,TP60,TP62,TP63,TP64,TP69,TP70,TP72,TP75,TP77,TP78,TP79,TP8,TP85,TP86,TP87,TP88,TP89,TP9,TP90,TP92,TP93,TP94,TP95,
- P.35 Add U39,U40,R565,R568,R569,R570,R566,R567,C823 for G sensor function.

(2009/02/06)

- P.47 Del BOSS6 for ME request.
- P.31 Change LDO U18 to TPS73601DBVR for current limit up to 400mA.
- P.31 Change R478 to 0ohm from 22ohm for SI.
- P.37 Add L55, R544, R571 for EMI.
- P.20 Add R465,R1305 and SATALED# for HDD LED.
- P.35 Add Q54, R575, TP255, TP249 for G sensor function.
- P.28 Add CN72, CN73 for expresscard CN second source.

(2009/02/07)

- P.36 Change D2,D3 to PSL vender.
- P.51 Change PR136 to 0 ohm and PR137 to NC to solve +3VALW level too high issue. .

		www.dell.com	
		ALL RIGHTS RESERVED	
Title History (1)			
Size A3	Document Number H830L-1.0		Rev 1.0
Date:	Wednesday, April 08, 2009	Sheet 48 of	50

H830-L DVT

(2009/02/10)

- P.16 Change C418,C415 & C410 to 22pF for EMI requirement.
- P.29 Add L73, L74,C772 & C817 for EMI requirement.
- P.16 Change L45,L44,L43 to BLM18BB750SN1D for RGB Tr, Tf issue.
- P.33 Del R54,R55,R56,R57 and add L75,L76,L77,L78 for EMI issue.

(2009/02/11)

- P.40 Add C822 1000pF on PCN1 pin 3 for EMI requirement.
- P.42 Change PR54 to 120k for 3.3V OCP Change.
- P.43 Change PR43 to 240k for 1.05V Frequency Change.
- P.44 Change PR43 to 1.8k for 1.5V OCP Change
- P.41 Change PQ28 to Si7129DN-T1-GE3 for Id Derating Fail
- P.44 Change PC69,PC139 to 220uF, for Power IC issue,Maxim FAE instance
- P.43 Change PC112,PC113 to 220uF, for Power IC issue,TI FAE instance.
- P.44 Change PC145(NC) to 220uF, for Power IC issue,Maxim FAE instance
- P.45 Change PC143 to 0.1uF for For Vhcore loadline and transient.
- P.45 Change PR111 to 499ohm for Vhcore loadline and transient
- P.45 Change PR112 to 4.12Kohm for Vhcore loadline and transient
- P.42 Add PR147(NC) 0ohm for +3D3VALWVO from +ECVCC,for PT energy star test.
- P.42 Add PR148(NC) 0ohm for M020ON2 from M020LDO,for PT energy star test.

(2009/02/12)

- P.30 Change R26 to 1.1K from 1.24k for LAN SI issue.

(2009/02/13)

- P.38 Add BC_BOSS1 for BT2 Brd nut.
- P.14/15 Add C535,C537,C538,C317,C538,C541,C542,C540,C539,C543 for DDR EMI issue.
- P.42 Add PC146 and NC PC71 for DDR power.
- P.30 Change R26 to 1.24K from 1.1k for LAN SI issue.
- P.40 Add PCN2 toBP03091-B82F3-9F for ME request.
- P.16 Change F2 to SMD1206P035TF/16 for fuse derating issue.
- P.36 Change F5,F7 to SMD1812P260TF for fuse derating issue.

(2009/02/17)

- P.20 Change R1035,R465 to NC to reserve for SATA LED.

H830-L PT -> ST

(2009/03/08)

- P.33 Change Q50,R468,C816,C792 to NC because new version Codec solved PC-Beep issue (PT implement. E-ECN)
- P.21 Change RTC battery part number to CR-2032L/BN from CR-2032L/BE for PUR request.
- P.35 Change U40 G-sensor part number to DE351DL for request.
- P.41~45 Remove Power open gap PJ1,PJ2,PJ3,PJ4,PJ5,PJ6,PJ7,PJ8,PJ9,PJ10,PJ11,PJ12,PJ13,PJ14,PJ15,PJ16,PJ17 for power request.
- P.42 Change PR135 to 16.2K ohm to solve +5VALW voltage too high issue.

(2009/03/15)

- P.42 Change PR135 to 16.2K ohm to solve +5VALW voltage too high issue.
- P.17 Change R38 to 51K and C534 to 0.015uF tol solve LCD power sequence issue.
- P.25/26/37 Change CN13,CN29,CN18,CN10 material to met tin for ME request.
- P.40 Add PR175, PR177, PQ45,PQ44,PR176, PD19,PR174, and del PD5; change C822 to NC_100pF for AD_ID(PS_ID) protection.
- P.18 Change Q31 to 2N7002K for HDMI detection pin ESD protection.
- P.36 Reserve D16 PESD5V0L1BA NC for USB port detection pin ESD.

(2009/03/16)

- P.38 Change P_SMD1 to P_CN1for ME request.

(2009/02/16)

- P.17 Add fuse F8 for LVDS power protection.

(2009/03/17)

- P.17 Add fuse F8 for LVDS power protection.
- P.37 Change CN8 to 18pin and del C368,C498,C73,C72 for del PCIe interface of WWAN DB.

(2009/03/26)

- P.17 LVDS CN, change +3VRUN to pin 10 from pin4 to prevent DCBATOUT short to +3VRUN.
- P.47 Del H20 and modify H4,H18,H26,H9,H16,H28 for ME request.
- P.20 Del C246,C247 for del PCIe interface of WWAN DB.
- P.04 Add C72 to solve H_GTLREF Vpp over-spec issue.
- P.47 Modify P_H1 and P_PAD1 for ME request.
- P.37 Change WWAN DB CN +3VALW to 8pin from 7pin.
- P.27 Add CN74 WLAN CN second source colay with CN17 for ME request.

(2009/03/27)

- P.17 LVDS CN, change +3VRUN to pin 10 from pin4 to prevent DCBATOUT short to +3VRUN.

(2009/03/27-2)

- P.37 Modify WWAN CN8 pin define.
- P.26 LVDS CN, change +3VRUN to pin 4, pin3 to NC prevent DCBATOUT short to +3VRUN.

(2009/03/27-3)

- P.31 Change R207 to 13.3K for Realtek recomment.

(2009/03/31)

- P.18 Change R386 to NC for 27MHz XTAL.
- P.33 Change R435,R434 to 8.2K for 6ohm SPK.
- P.14/15 Change DDR CN package: CN24 to AS0A626-U4RN-4F, CN23 to AS0A626-U8RN-4F for SMT.
- P.43 Change PU2 to RT9198-18GBG (HF part)for PUR request.

(2009/04/02)

- P.33 Change C81,C82,C83 and C84 to NC for EMI request.
- P.33 Del Q50,R468,R560,C816,C792 to del reservation for PCBeep.

(2009/04/03)

- P.16 Change L43,L44,L45 to BLM18BB470SN1D to solve VGA SI issue.
- P.19/25/38 Del CN8,C78,C225,C77 add TP34,TP36,TP37 for WWAN CN PCIe interface cancelled.

(2009/04/05)

- P.40 Change BFT Testpoint TP300, TP301,TP302, TP303,TP304 to TPC60B_121 for TE request.
- P.25/35/37 Change BFT Testpoint TP327,TP328,TP329,TP330,TP333,TP334,TP312, TP313,TP314,TP335,TP337 to tpc40t_121 for TE request.
- P.29/30/33/37 Change BFT Testpoint TP305,TP306,TP307,TP308,TP310,TP338,TP339, TP340,TP341,TP342,TP343,TP344,TP345,TP346,TP309,TP311 TP315,TP316,TP317, TP318,TP319,TP320,TP321,TP322 ,TP323,TP324,TP325,TP326,TP336 to tpc40B_121 for TE request.

(2009/04/08)

- P.42 Change PL_10 to FDVE0630-H-1R5M=P3 (HF part) for power request.
- P.43 Change PL_9 to FDUE1040D-H-1R0M=P3 (HF part) for power request.
- P.44 Change PL_12 to FDUE1040D-H-1R0M=P3 (HF part) for power request.

 www.dell.com ALL RIGHTS RESERVED		
Title History (1)		
Size A3	Document Number H830L-1.0	Rev 1.0
Date:	Wednesday, April 08, 2009	Sheet 49 of 50

(2009/04/08)

- P.17 Change F8 to 467002 (32V-2A_0603) forLVDS VCC protection.
- P.38 Del BC_CN4,BC_CN3,BC_BOSS1,BC_TP1,BC_TP2 for BT2 board is not necessary.

(2009/04/09)

- P.35 Change R568,R575, Q54,R569,R570,R565,U40,C824,R566,C823,R567 to NC for cancelling support G-sensor.
- P.33 Change C513,C524,C505,C493 to 0.01uF;C491 to 0.1uF for speaker pop noise.
- P.17 Del R270 0ohm for no necessary.
- P.27 Del R39 0ohm and change R278 to close gap PGP17.
- P.11 Change R116 0ohm to close gap PGP4.
- P.36 Change R247,R47,R52 0ohm to close gap PGP5,PGP6,PGP8.
- P.36 Change F5,F7 to close gap PGP7,PGP9.

(2009/04/10)

- P.30 Change R48 0ohm to close gap PGP18.
- P.45 Add C596 NC and PGP19 for USB detection softstart.
- P.32 Change R463,R446,R464,R467 to 1K ohm to solve pop noise..