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10	CLOCK GEN	A00	09'12'25	45	USB2.0 & e-SATA	A00	09'12'25
11	PCH (HDA,JTAG,SAT)	A00	09'12'25	46	DB board connector (MB)	A00	09'12'25
12	PCH (PCI-E,SMBUS,CLK)	A00	09'12'25	47	PWR BTN & BT & LED DB	A00	09'12'25
13	PCH (DMI,FDI,GPIO)	A00	09'12'25	48	SATA HDD/ODD	A00	09'12'25
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15	PCH (PCI,USB,NVRAM)	A00	09'12'25	50	DCIN & Battery	A00	09'12'25
16	PCH (GPIO,VSS NCTF,RSVD)	A00	09'12'25	51	MAX8731A Smart Charger	A00	09'12'25
17	PCH (POWER) 1/2	A00	09'12'25	52	MAX17020 (+3.3V/+5V)	A00	09'12'25
18	PCH (POWER) 2/2	A00	09'12'25	53	SYS Power+1.1VTT/+1.05V	A00	09'12'25
19	PCH (VSS)	A00	09'12'25	54	DDR3 Power(+1.5V/+0.75V)	A00	09'12'25
20	DDR3(SO-DIMM 0) 1/2	A00	09'12'25	55	CPU Power VHCORE	A00	09'12'25
21	DDR3(SO-DIMM 1) 2/2	A00	09'12'25	56	CPU Power DRV-PHASE3	A00	09'12'25
22	VGA (PCI-E) 1/6	A00	09'12'25	57	VGA Power(ATI VDD)	A00	09'12'25
23	VGA (STRAP) 2/6	A00	09'12'25	58	SYS Power +1.8V	A00	09'12'25
24	VGA (IO) 3/6	A00	09'12'25	59	Others power plane	A00	09'12'25
25	VGA (DDR3) 4/6	A00	09'12'25	60	HOLE	A00	09'12'25
26	VGA (DP) 5/6	A00	09'12'25	61	History (1)	A00	09'12'25
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35	Flash ROM/SPI	A00	09'12'25	70			

Project Code & Schematics Subject: H902 Main Board 8L

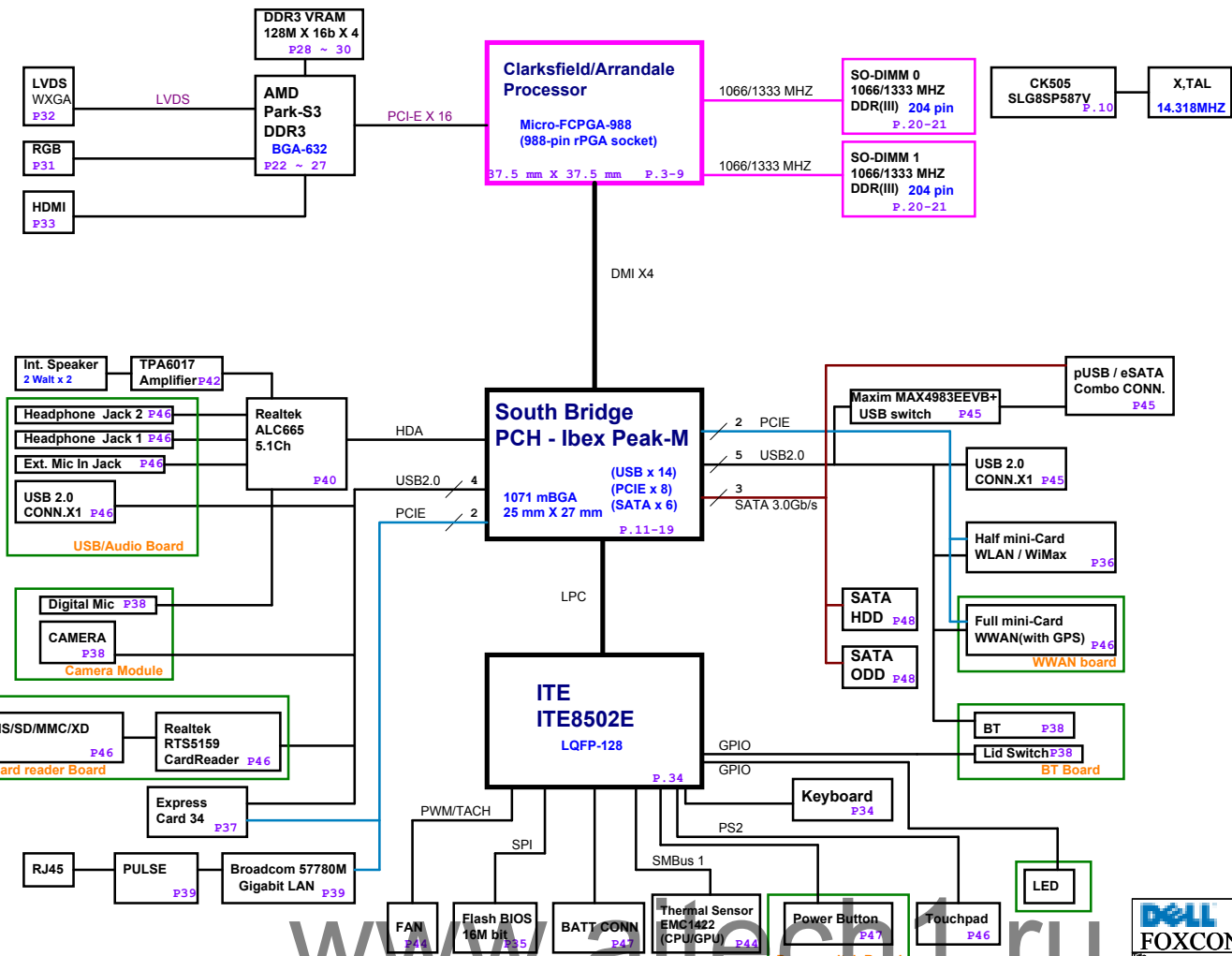
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	1P-009C500-8000 (HANNSTAR)
	1P-009C200-8000 (NANYA)
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	1P-1098201-8000 (NANYA)
LED DB P/N:	1P-1098J00-8000 (IRIS)
	1P-1098500-8000 (HANNSTAR)
	1P-1098200-8000 (NANYA)
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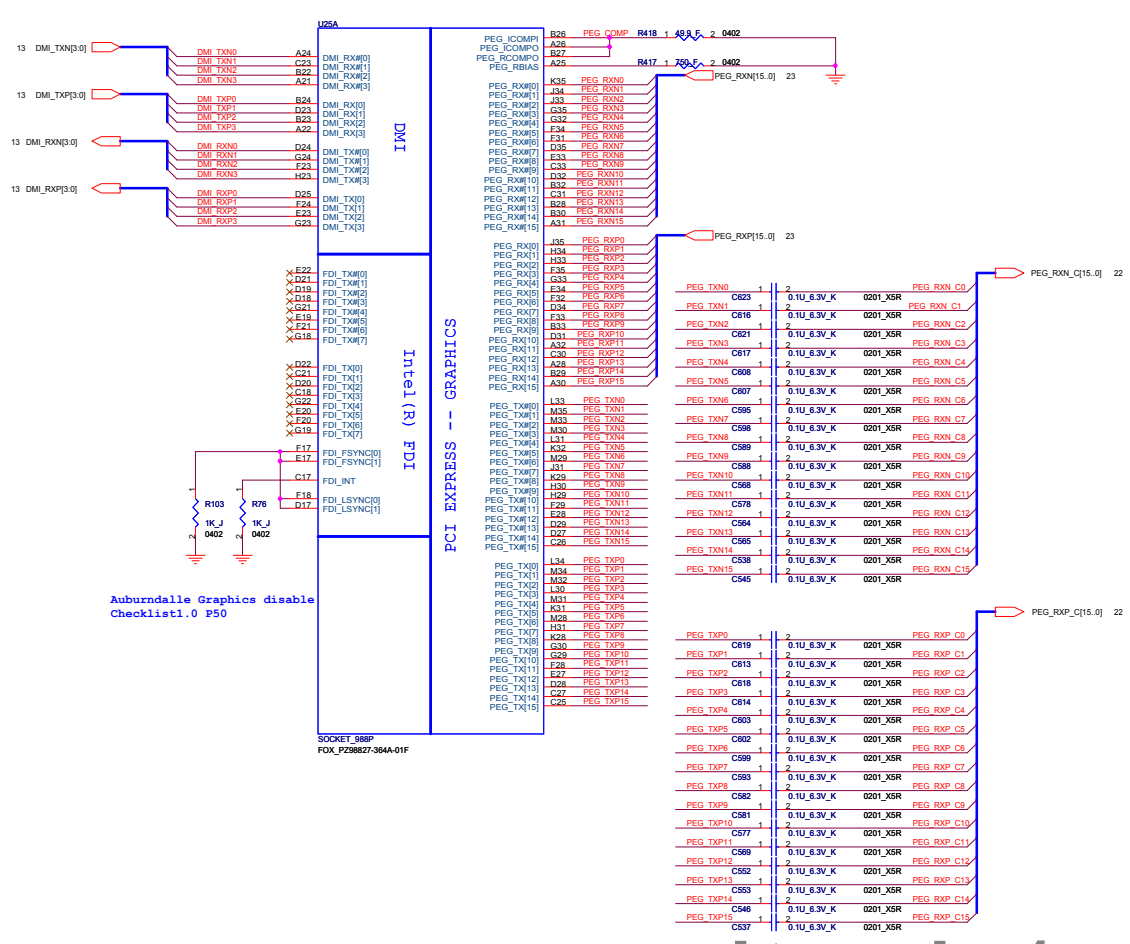
P. Leader	Check by	Design by


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H902 Calpella + Discrete VGA







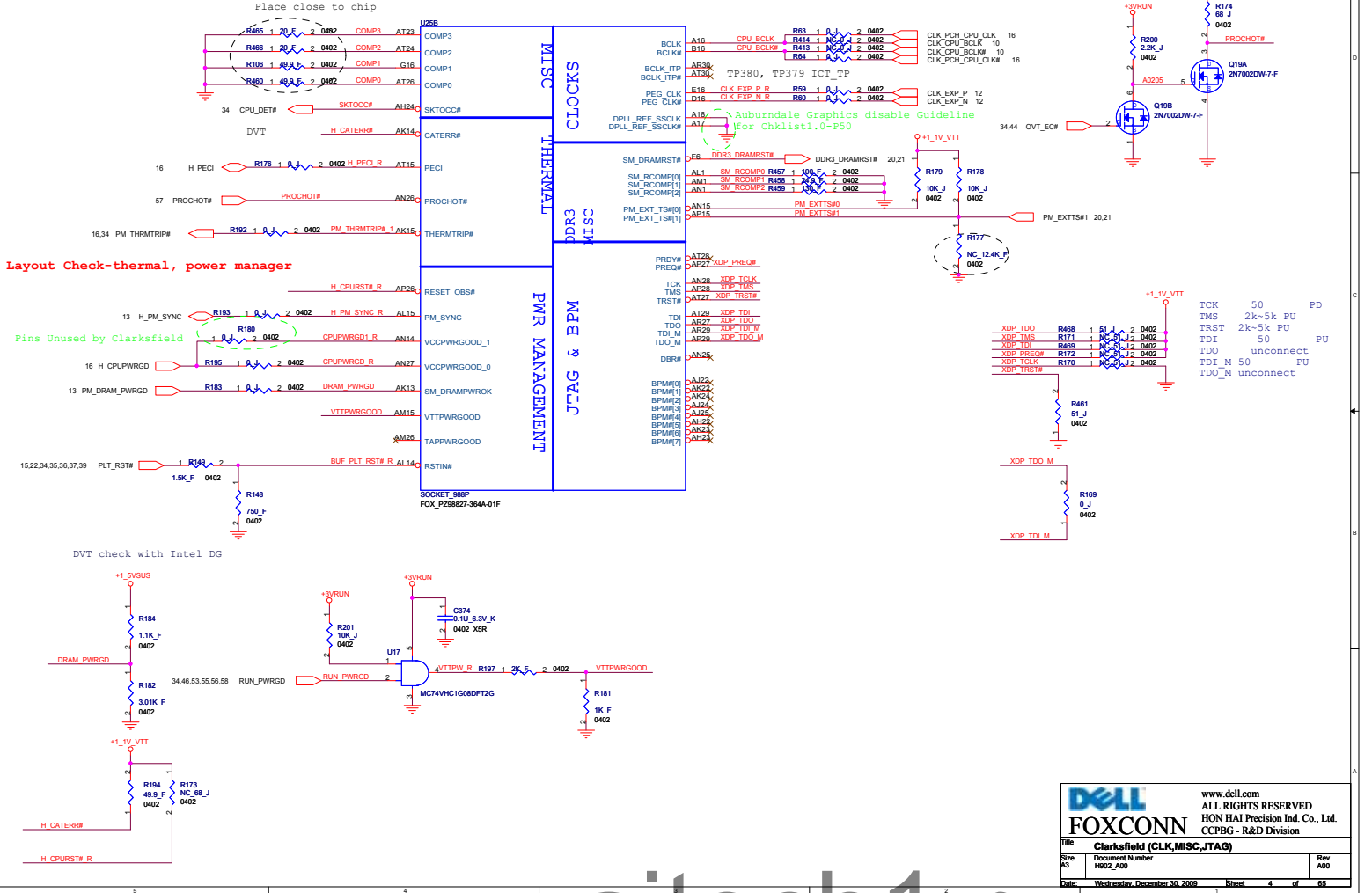
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TitleClarkfield (DMI,PEG,FDI)



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Layout Note:
Comp0,2 connect with Zo=27.4 ohm, make trace
length shorter then 0.5". Width=20mil (MS)
Comp1,3 connect with Zo=55 ohm, make trace
length shorter then 0.5". Width=5mil (MS)



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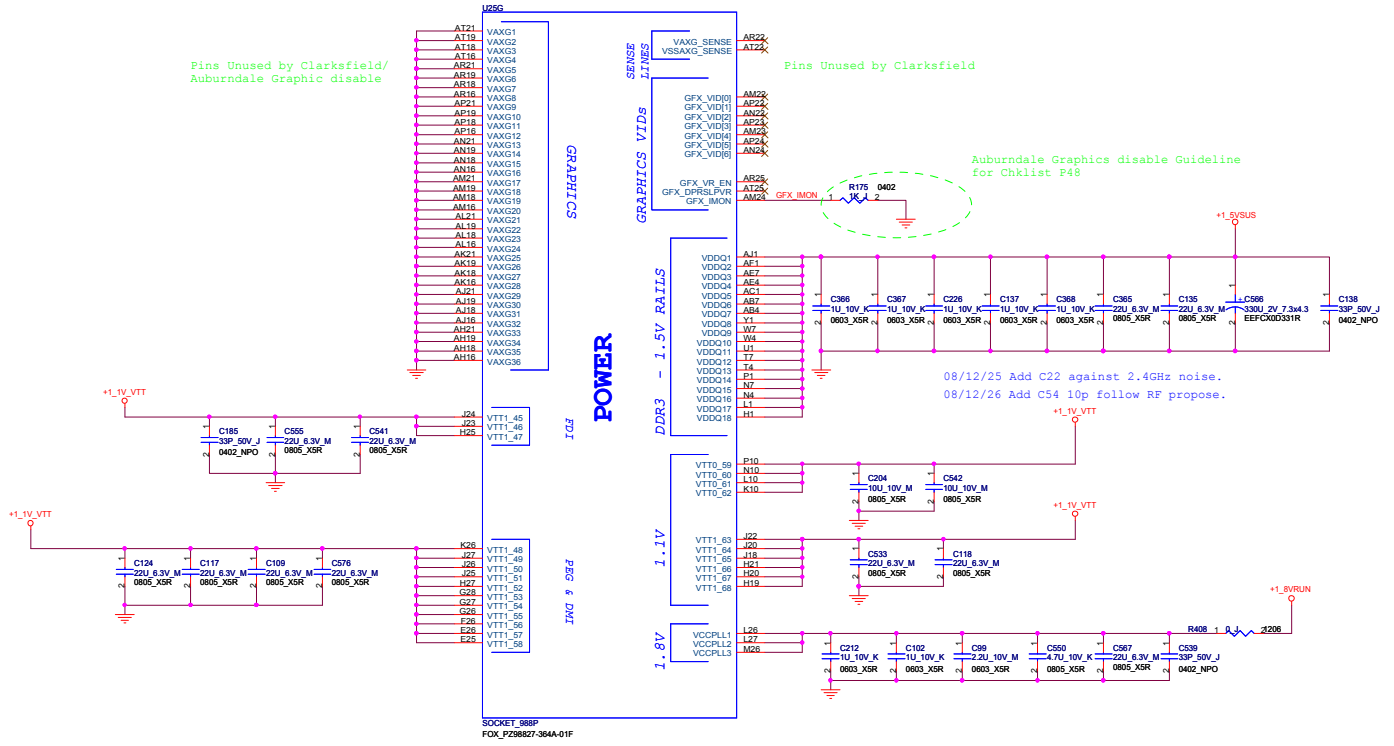
Title: Clarksfield (CLK,MISC,JTAG)		
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Pins Unused by Clarksfield/
Auburndale Graphic disable

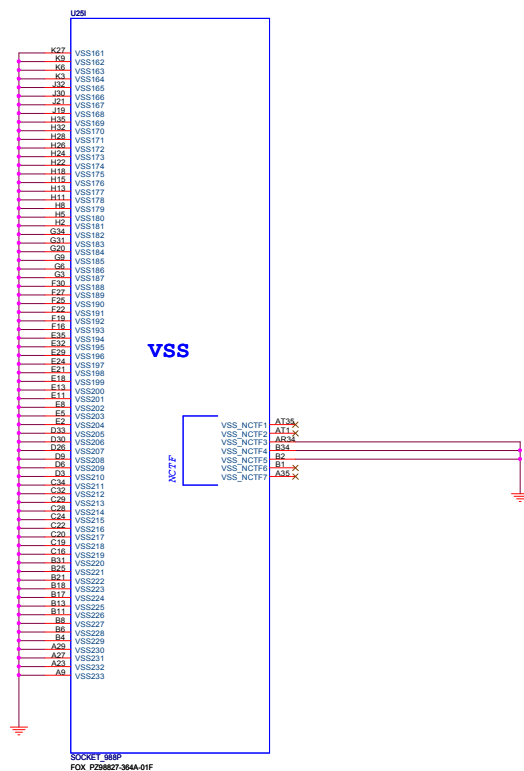
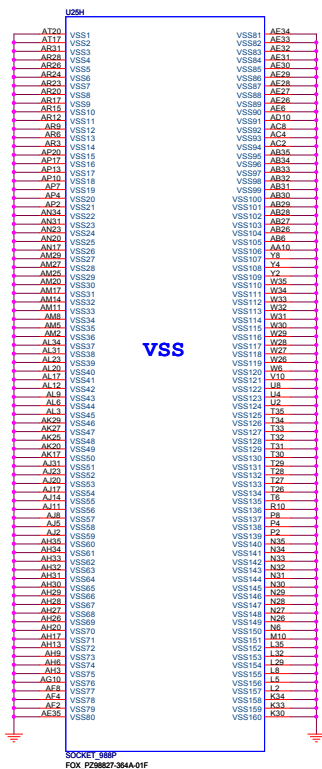
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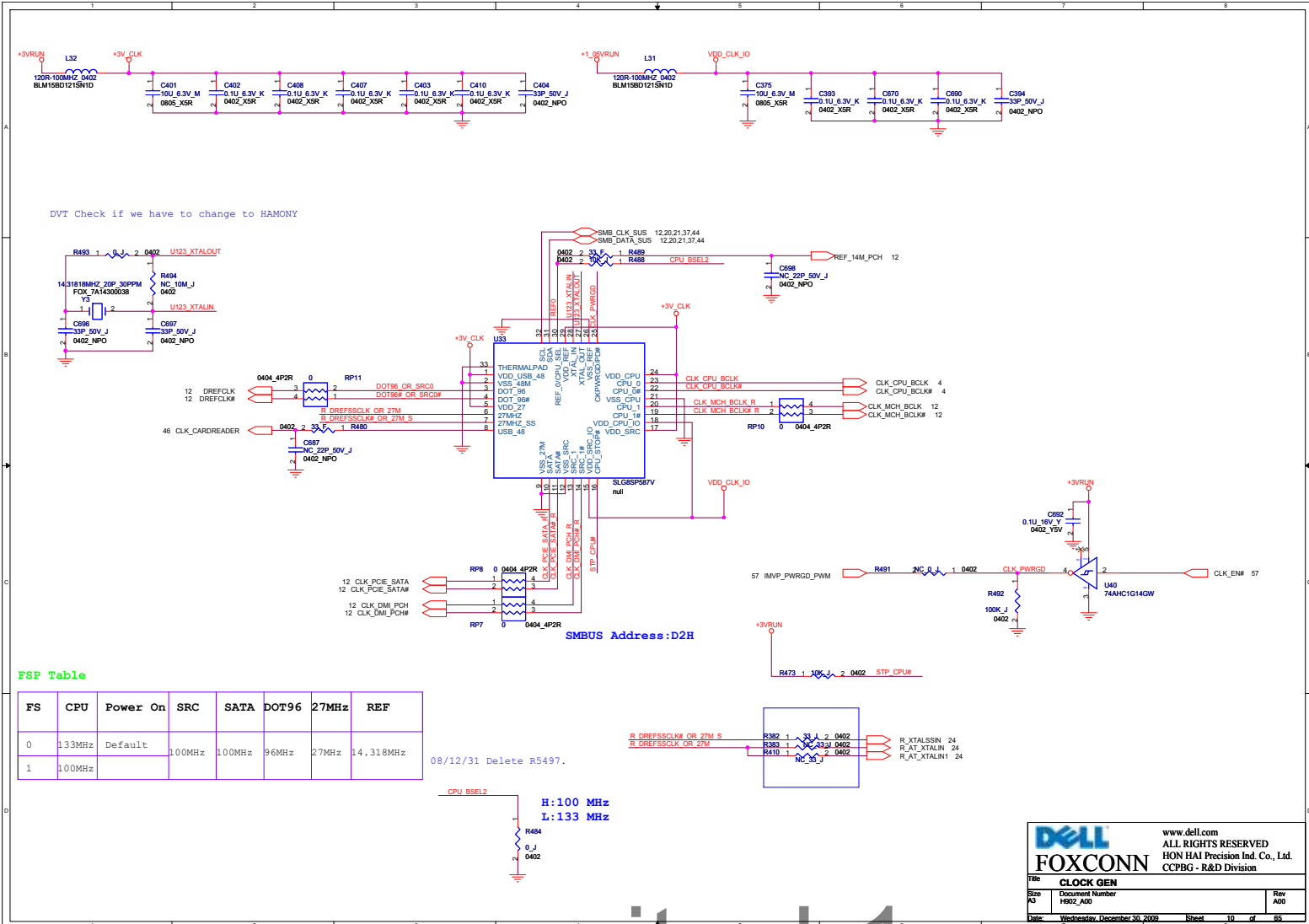
Auburndale Graphics disable Guideline
for Chklist P48



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Title	Clarksfield (GRAPHIC POWER)		
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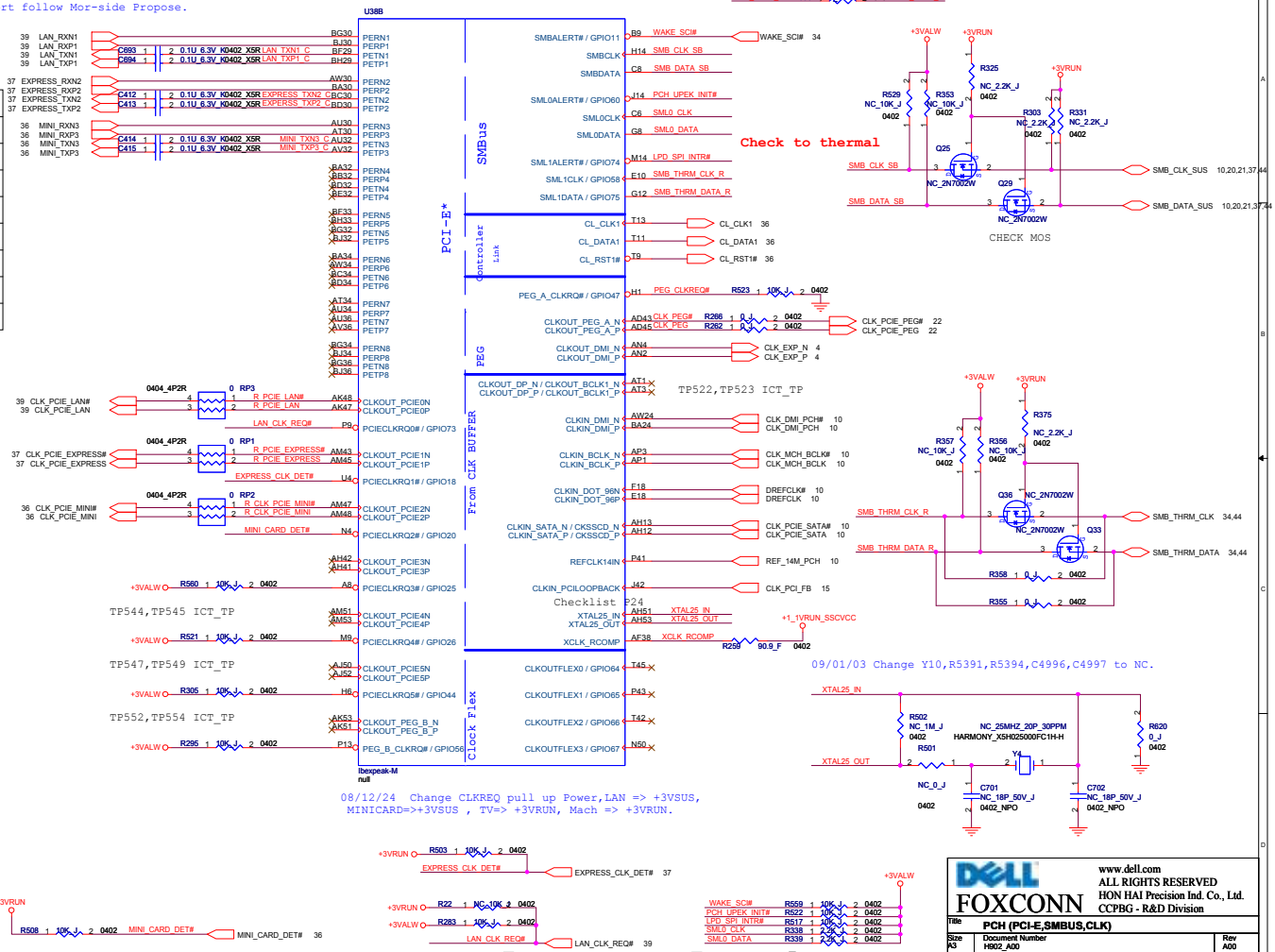




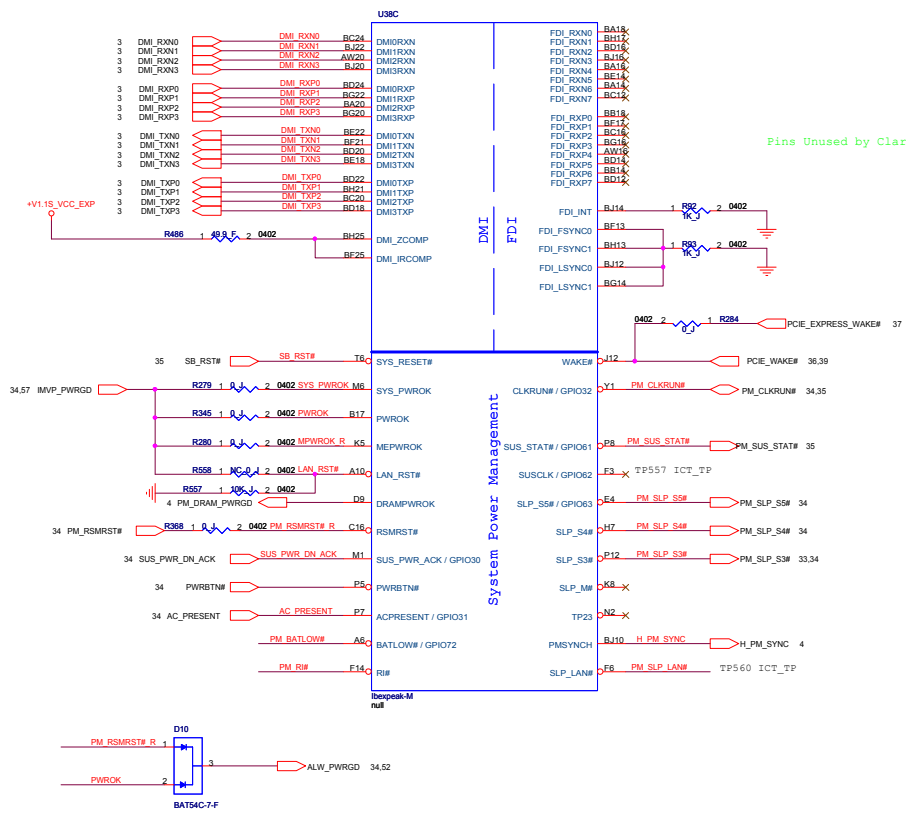


SMB CLK SB R527 1 0 J 2 0402 SMB CLK SUS
SMB DATA SB R336 1 0 J 2 0402 SMB DATA SUS

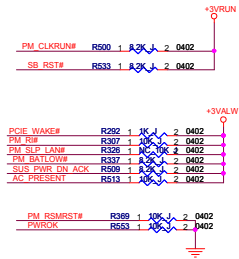
Port	Function
Port1	LAN
Port2	Express Card
Port3	WLAN
Port4	Un-used
Port5	Un-used
Port6	Un-used
Port7	Un-used
Port8	Un-used



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Pins Unused by Clarksfield



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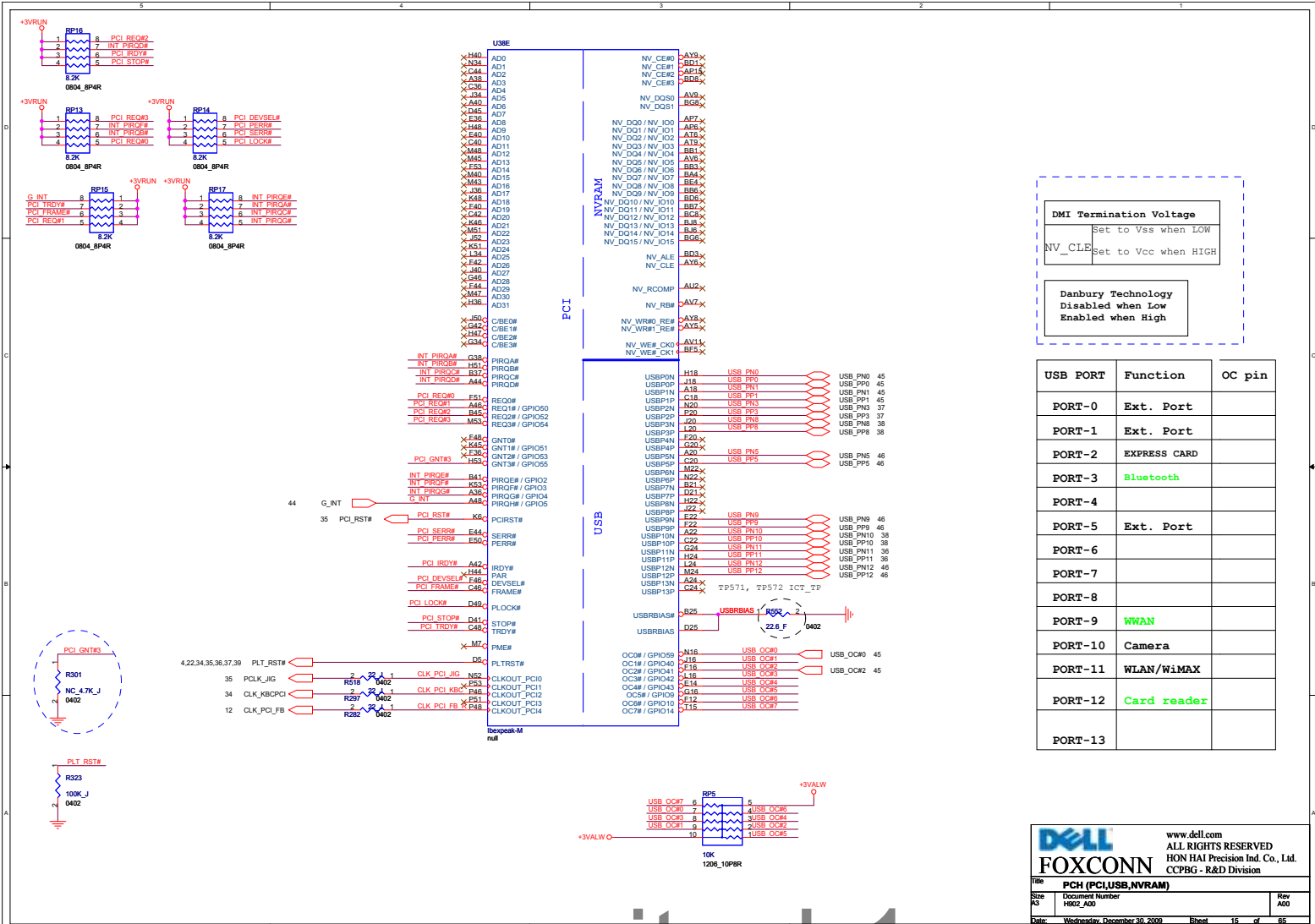
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Size: A3	Document Number: H802_A00	Rev: A00	
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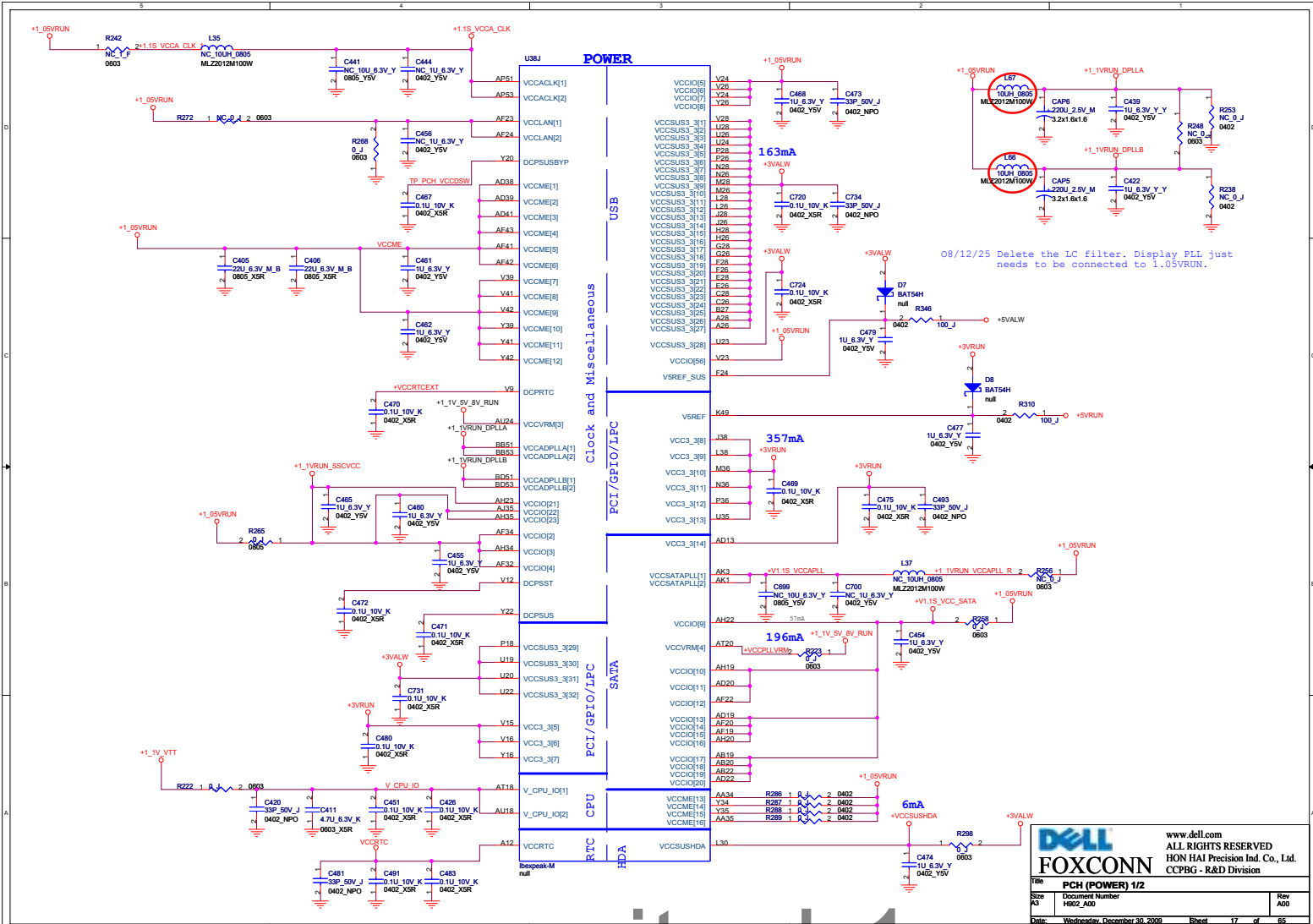
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Place resistor close to PCH

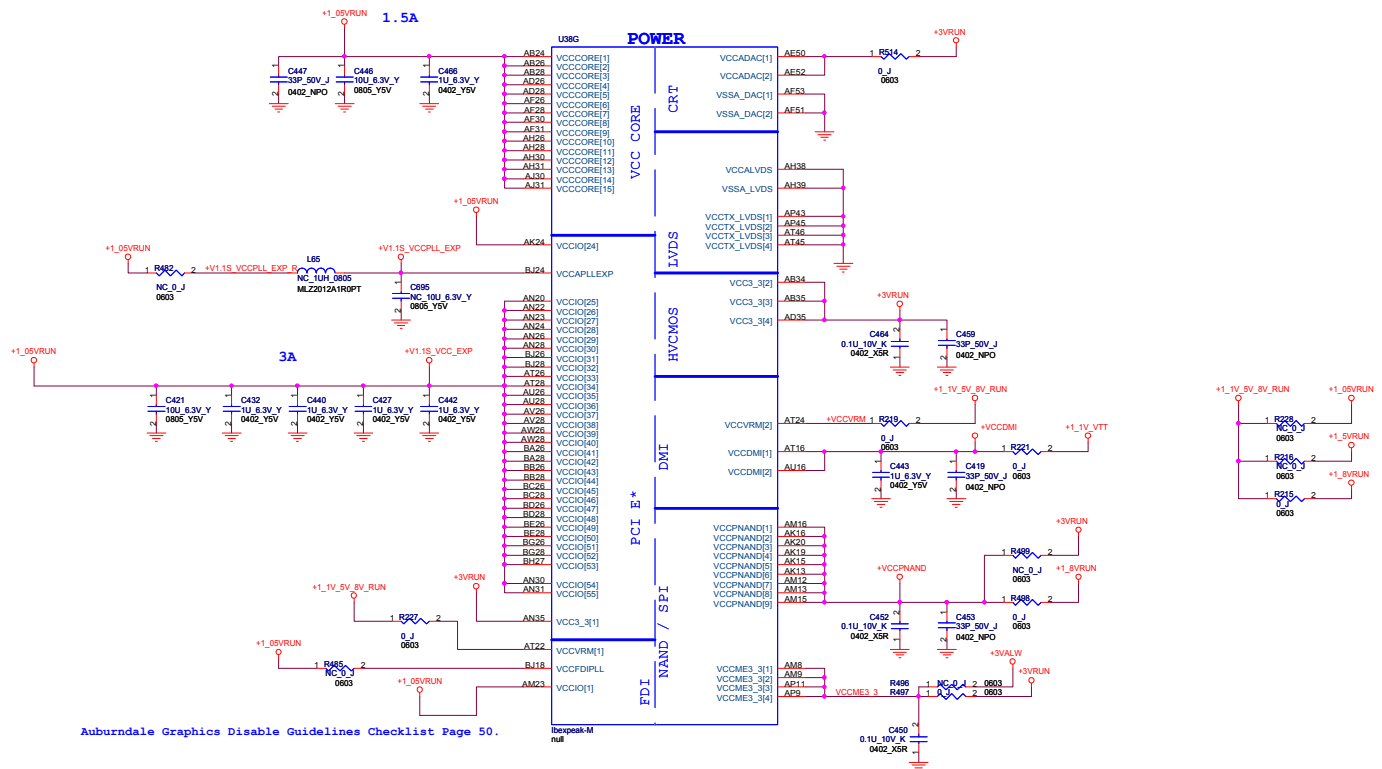
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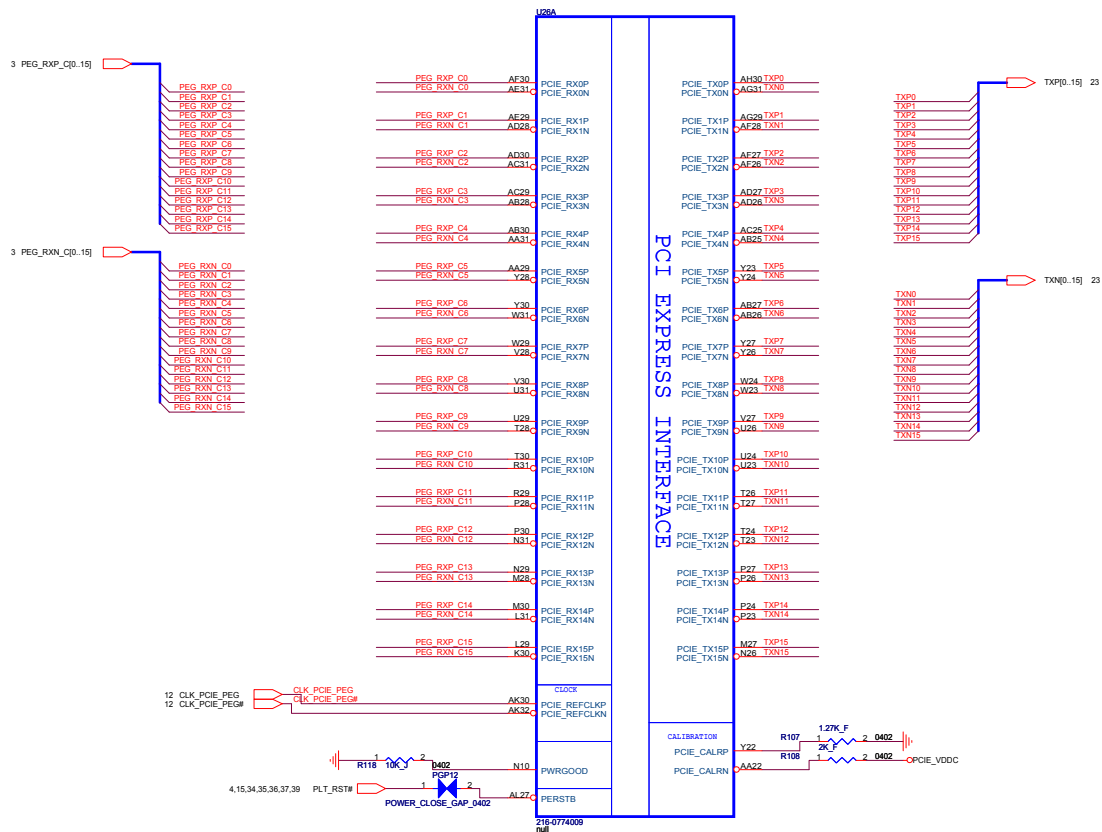
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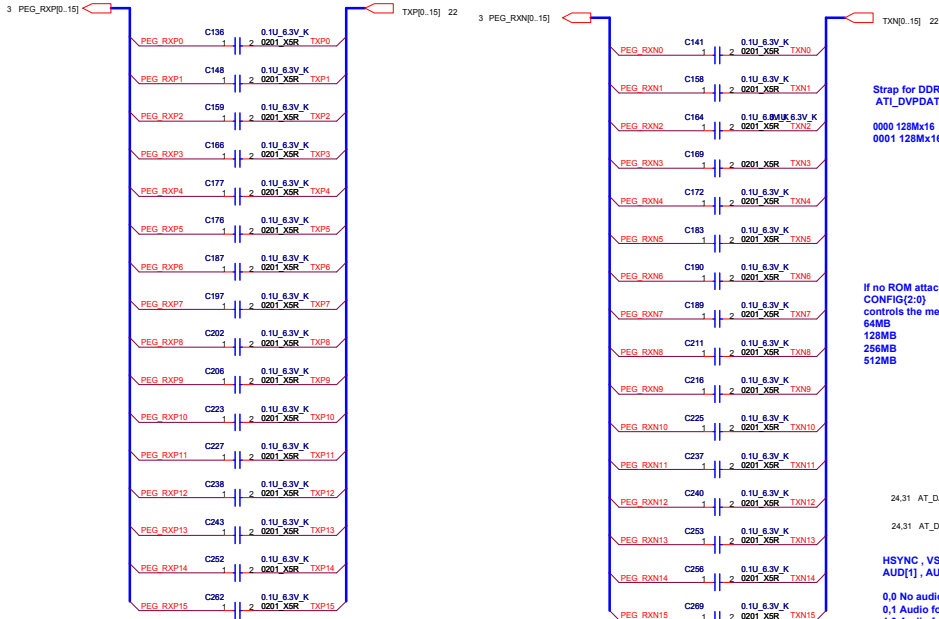
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U38		
AV7	VSS1599	H49
B11	VSS1600	H5
B15	VSS1601	J24
B19	VSS1602	K11
B23	VSS1603	K43
B27	VSS1604	K47
B31	VSS1605	K7
B35	VSS1606	L14
B39	VSS1607	L18
B43	VSS1608	L2
B47	VSS1609	L22
B51	VSS1610	L32
B55	VSS1611	L36
B59	VSS1612	L40
B63	VSS1613	L44
B67	VSS1614	M12
B71	VSS1615	M16
B75	VSS1616	M20
B79	VSS1617	M24
B83	VSS1618	M28
B87	VSS1619	M32
B91	VSS1620	M36
B95	VSS1621	M40
B99	VSS1622	M44
C03	VSS1623	M48
C07	VSS1624	M52
C11	VSS1625	M56
C15	VSS1626	M60
C19	VSS1627	M64
C23	VSS1628	M68
C27	VSS1629	M72
C31	VSS1630	M76
C35	VSS1631	M80
C39	VSS1632	M84
C43	VSS1633	M88
C47	VSS1634	M92
C51	VSS1635	M96
C55	VSS1636	M100
C59	VSS1637	M104
C63	VSS1638	M108
C67	VSS1639	M112
C71	VSS1640	M116
C75	VSS1641	M120
C79	VSS1642	M124
C83	VSS1643	M128
C87	VSS1644	M132
C91	VSS1645	M136
C95	VSS1646	M140
C99	VSS1647	M144
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D07	VSS1649	M152
D11	VSS1650	M156
D15	VSS1651	M160
D19	VSS1652	M164
D23	VSS1653	M168
D27	VSS1654	M172
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D35	VSS1656	M180
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G87	VSS1744	M532
G91	VSS1745	M536
G95	VSS1746	M540
G99	VSS1747	M544
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H07	VSS1749	M552
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P83	VSS1968	M1428
P87	VSS1969	M1432
P91	VSS1970	M1436
P95	VSS1971	M1440
P99	VSS1972	M1444
Q03	VSS1973	M1448
Q07	VSS1974	M1452
Q11	VSS1975	M1456
Q15	VSS1976	M1460
Q19	VSS1977	M1464
Q23	VSS1978	M1468
Q27	VSS1979	M1472
Q31	VSS1980	M1476
Q35	VSS1981	M1480
Q39	VSS1982	M1484
Q43	VSS1983	M1488
Q47	VSS1984	M1492
Q51	VSS1985	M1496
Q55	VSS1986	M1500
Q59	VSS1987	M1504
Q63	VSS1988	M1508
Q67	VSS1989	M1512
Q71	VSS1990	M1516
Q75	VSS1991	M1520
Q79	VSS1992	M1524
Q83	VSS1993	M1528
Q87	VSS1994	M1532
Q91	VSS1995	M1536
Q95	VSS1996	M1540
Q99	VSS1997	M1544
R03	VSS1998	M1548
R07	VSS1999	M1552
R11	VSS2000	M1556
R15	VSS2001	M1560
R19	VSS2002	M1564
R23	VSS2003	M1568
R27	VSS2004	M1572
R31</		



	Mount	NC
Samsung 1GB K4W2G1646B-HC12 P/N: 13-K4W2G16-3000	R432 (0), R105 (0) R433 (0), R94 (1)	R430 (1), R104 (1) R431 (1), R95 (0)
Hynix 1GB H5TQ2G63BFR-12C P/N: 13-H5T02G6-3000	R432 (0), R105 (0) R433 (0), R95 (0)	R430 (1), R104 (1) R431 (1), R94 (1)



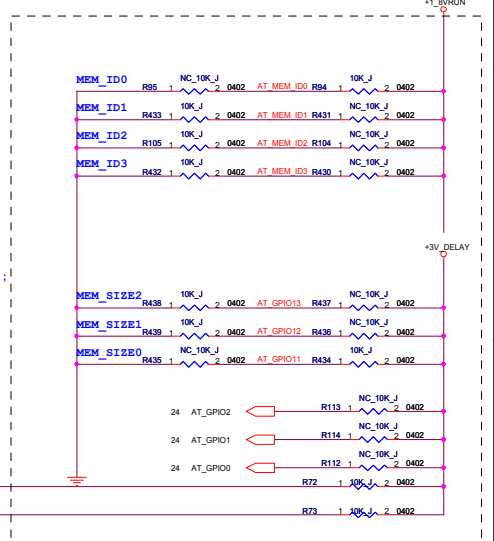
Strap for DDR3
ATI_DVDPDATA[1:0 :21:20]
0000 128Mx16 Hynix 1GB
0001 128Mx16 Samsung 1GB

If no ROM attached, GPIO[13:12:11] ;
CONFIG(2:0)
controls the memory aperture size.
64MB 010
128MB 000
256MB 001
512MB 001


HSYNC, VSYNC
AUD[1], AUD[0]
0,0 No audio function
0,1 Audio for DisplayPort and HDMI if dongle is detected
1,0 Audio for DisplayPort only
1,1 Audio for both DisplayPort and HDMI

24 AT_MEM_ID0
24 AT_MEM_ID1
24 AT_MEM_ID2
24 AT_MEM_ID3

24 AT_GPIO11
24 AT_GPIO12
24 AT_GPIO13



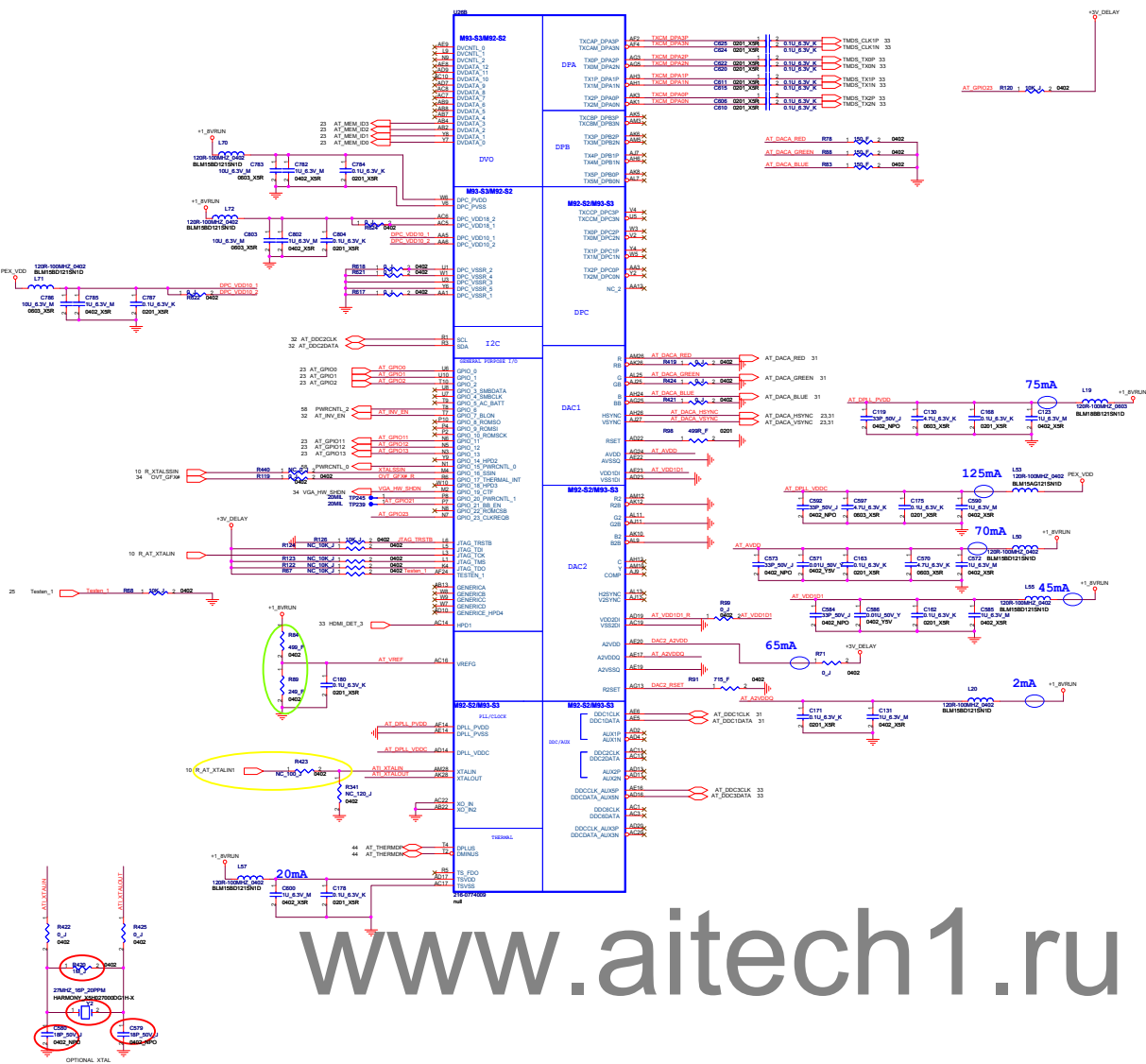
GPIO 0 : PCIE FULL TX OUTPUT SWING
GPIO 1 : PCIE TRANSMITTER DE-EMPHASIS ENABLED
GPIO 2 : PCIE GEN2 ENABLED

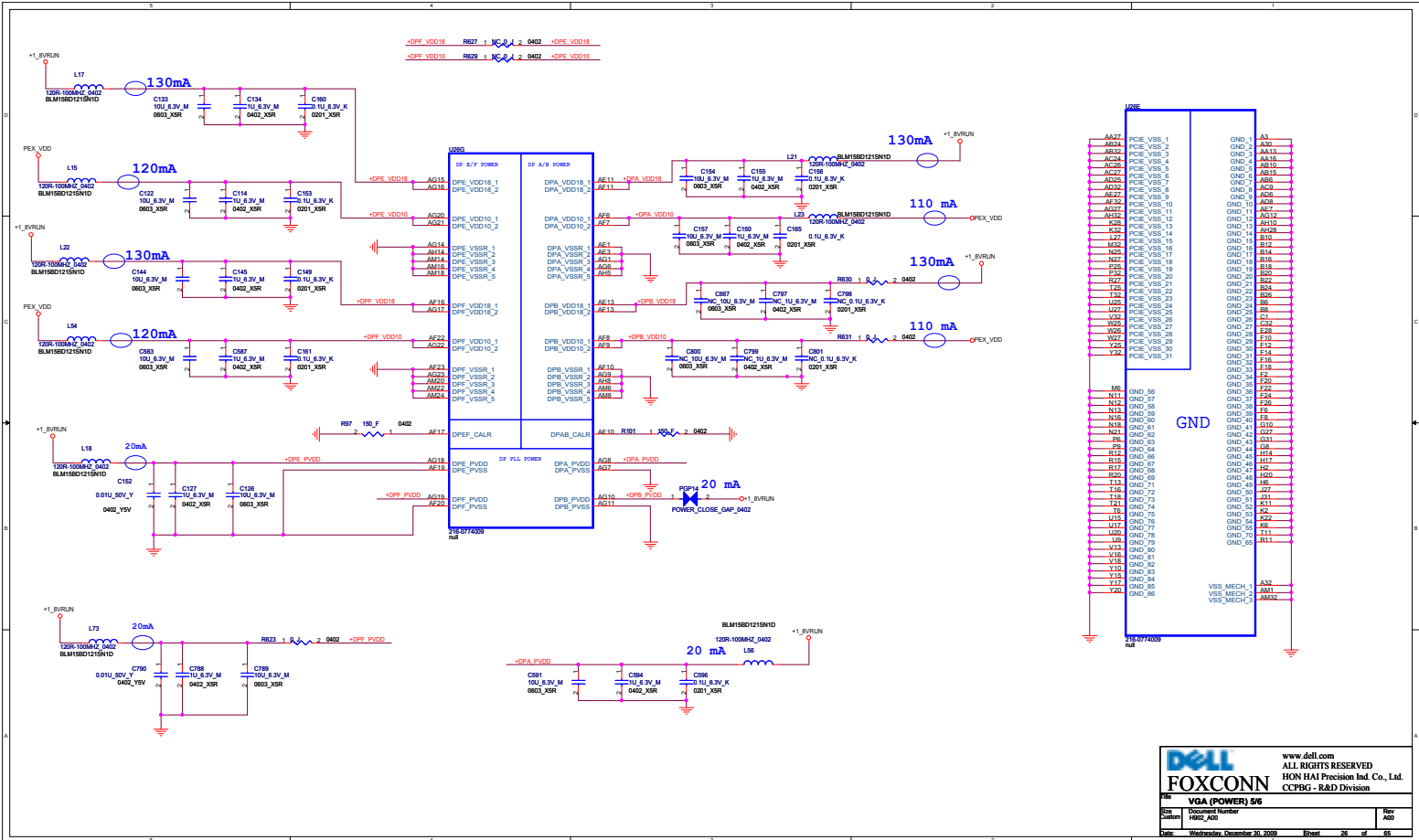


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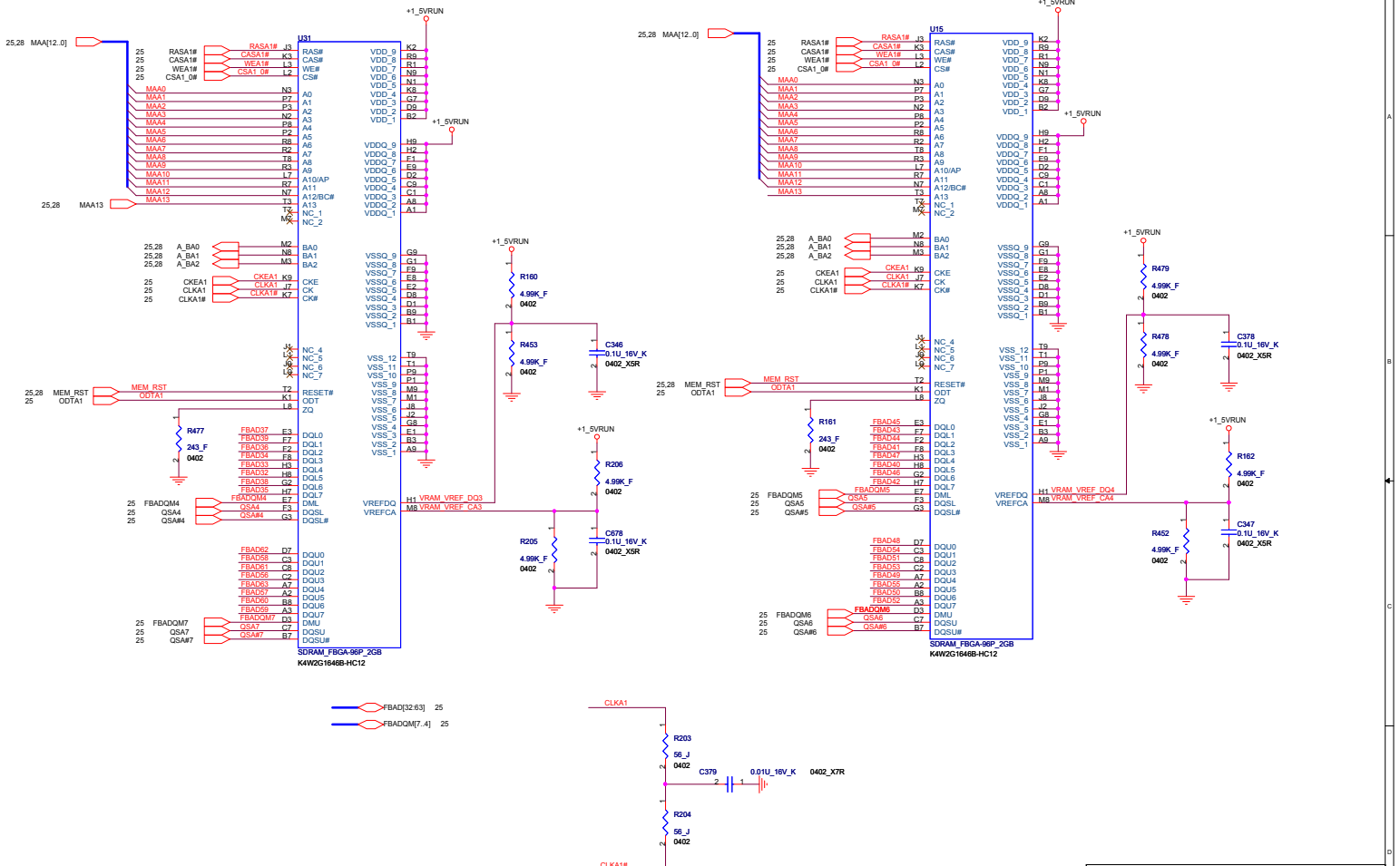
FOXCONN

16
Size A3
Document Number H802_A00
Date: Wednesday, December 30, 2009
Sheet 23 of 95







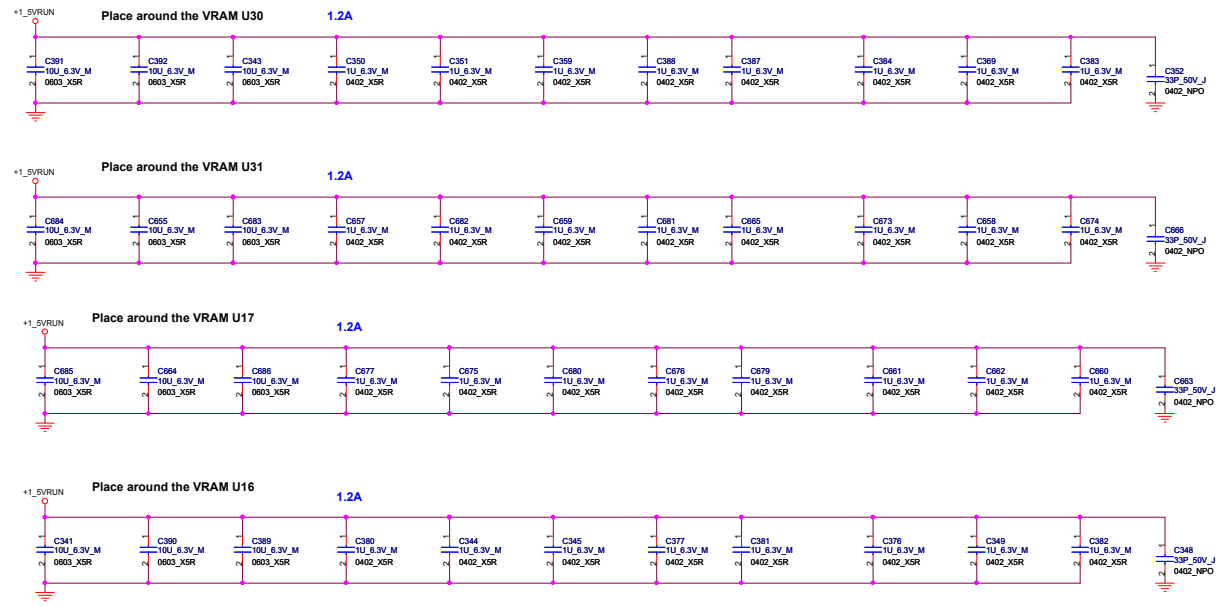


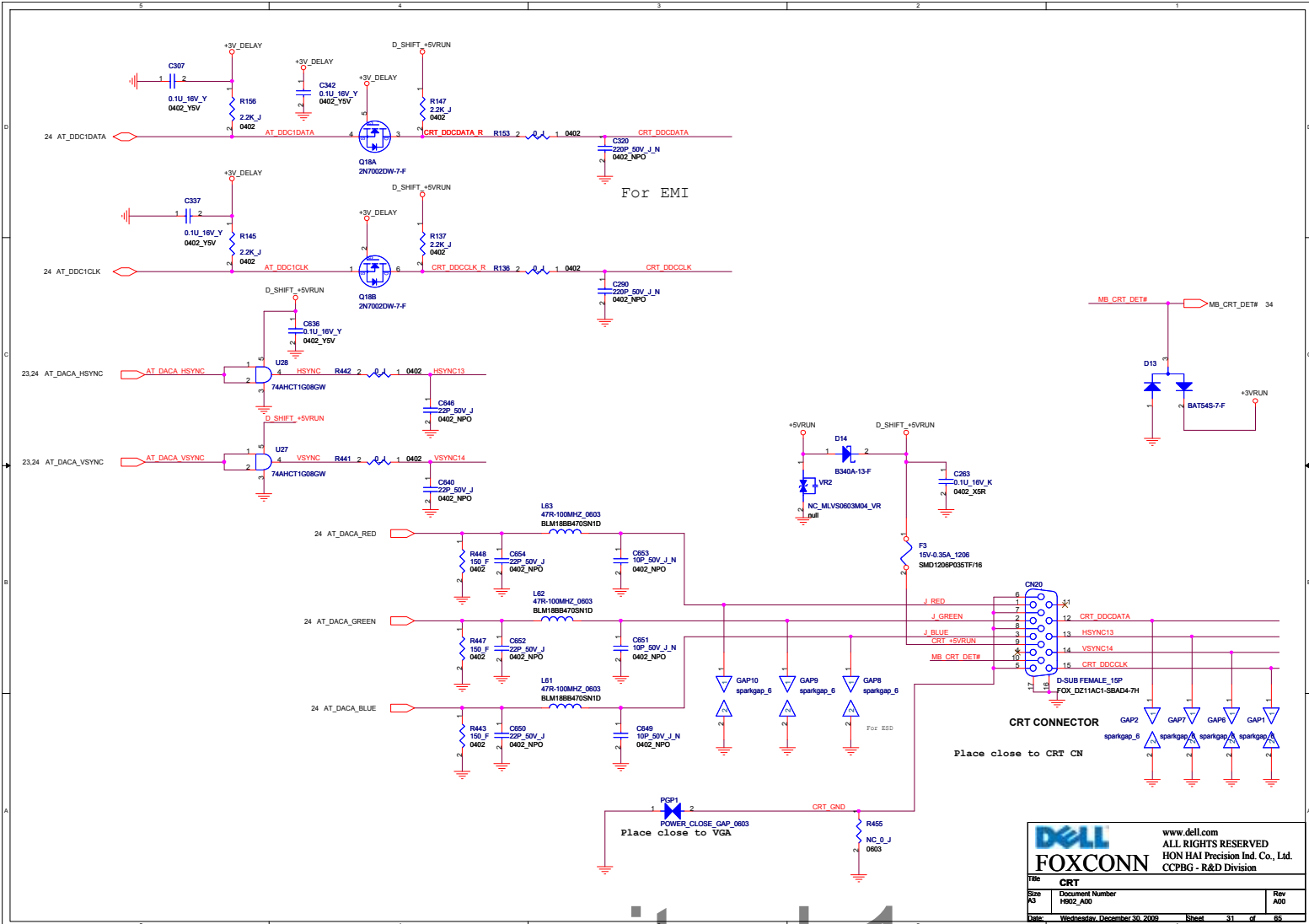
FOXCONN


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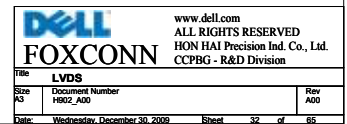
Title: VRAM (DDR3) 2/3		
Size: A3	Document Number: H802_A00	Rev: A00
Date: Wednesday, December 30, 2009	Sheet: 28	of 85

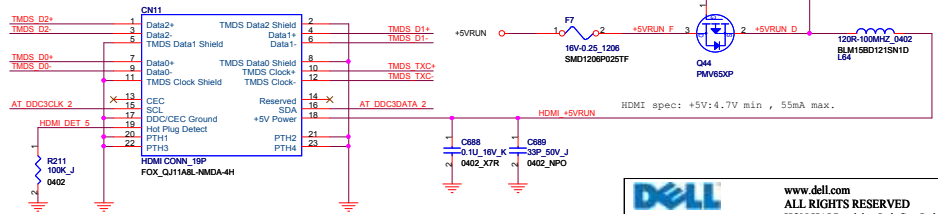
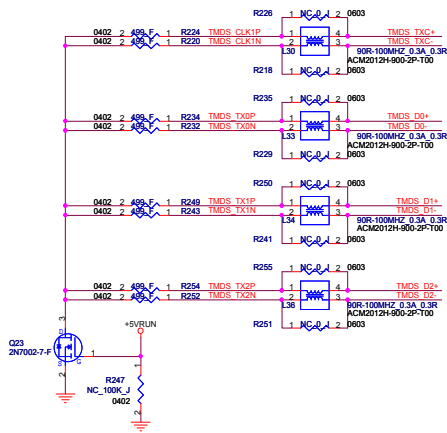
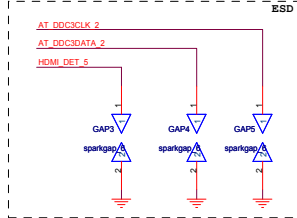
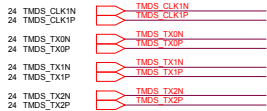
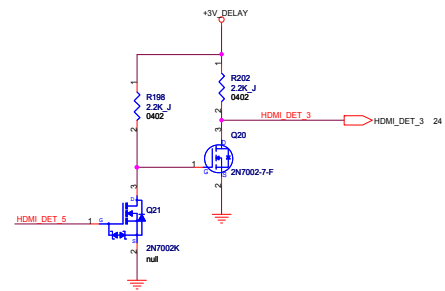
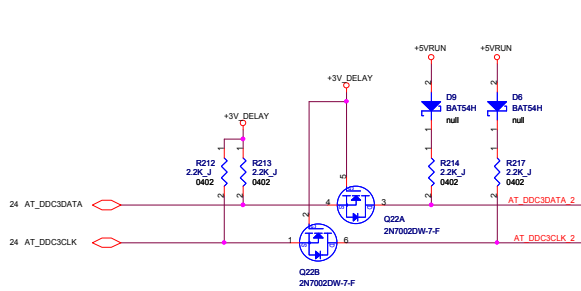
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Title CRT			
Size A3	Document Number H802_A00		Rev A00
Date: Wednesday, December 30, 2009	Sheet 31	of 85	

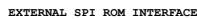
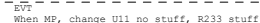




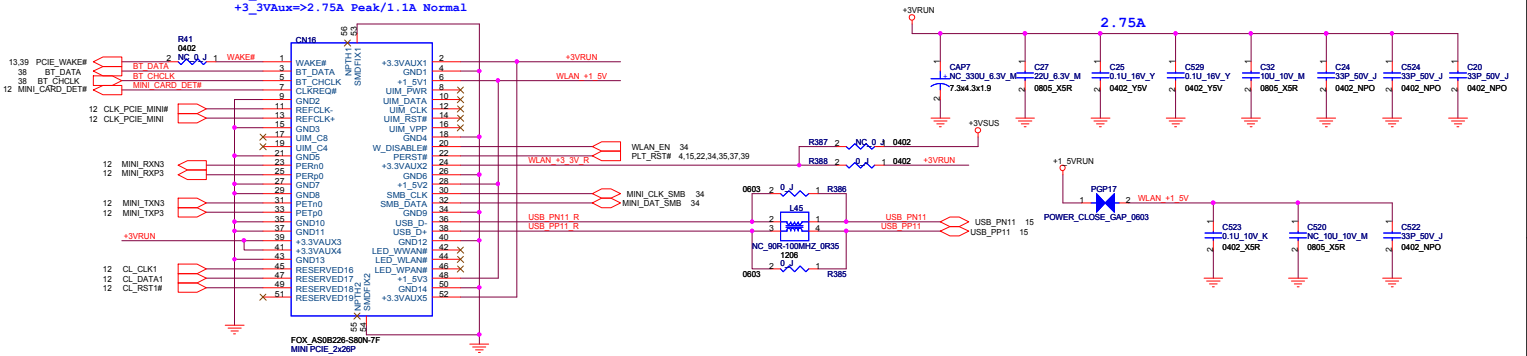
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Title: HDMI	
Size: A3	Document Number: H802_A00
Date: Wednesday, December 30, 2009	Rev: A00
Sheet: 33	of: 95

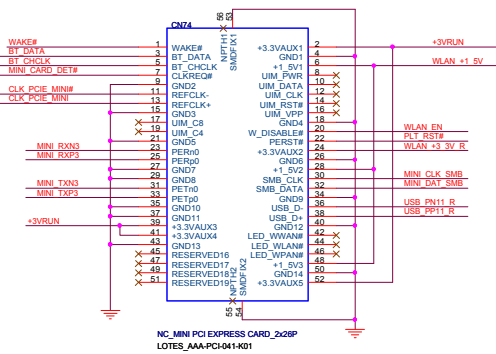
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+1.5V=>0.5A Peak/0.375A Normal
+3.3Vaux=>2.75A Peak/1.1A Normal



Half Mini Card for WLAN or WiMAX



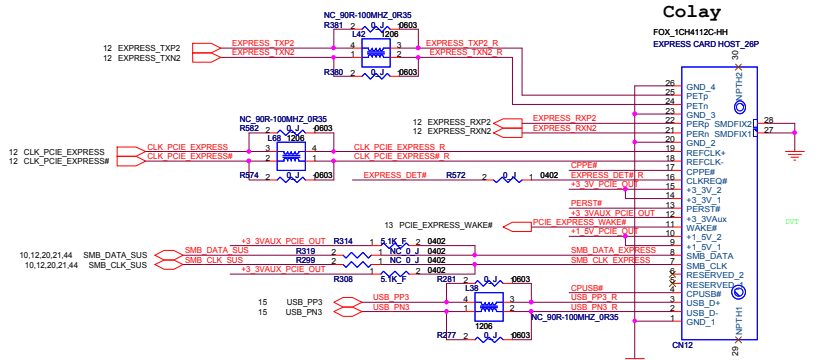
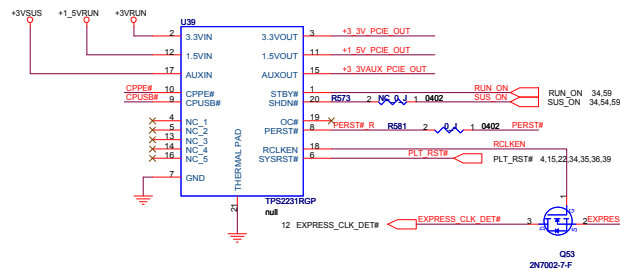
NC_MINI PCI EXPRESS CARD_2x26P
OTES_AAA-PC041-K01

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Title WLAN/Wimax Mini-PCIE Card			
Size A3	Document Number H802_A00	Rev A00	
Date: Wednesday, December 30, 2009	Sheet 36	of 85	

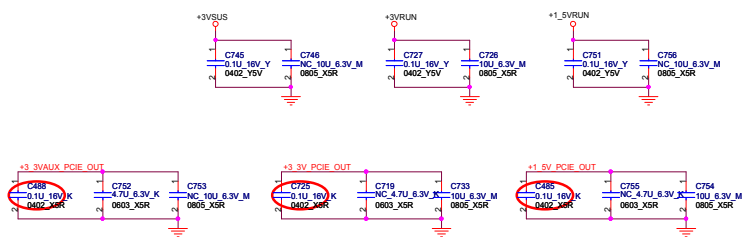
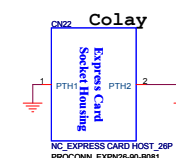
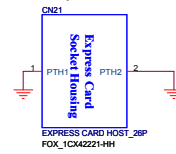
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+1_5V=>650mA
+3_3VAux=>275mA
+3_3V=>1.3A

Express Card Power Switch



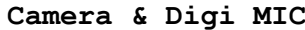
Express Card Slot.




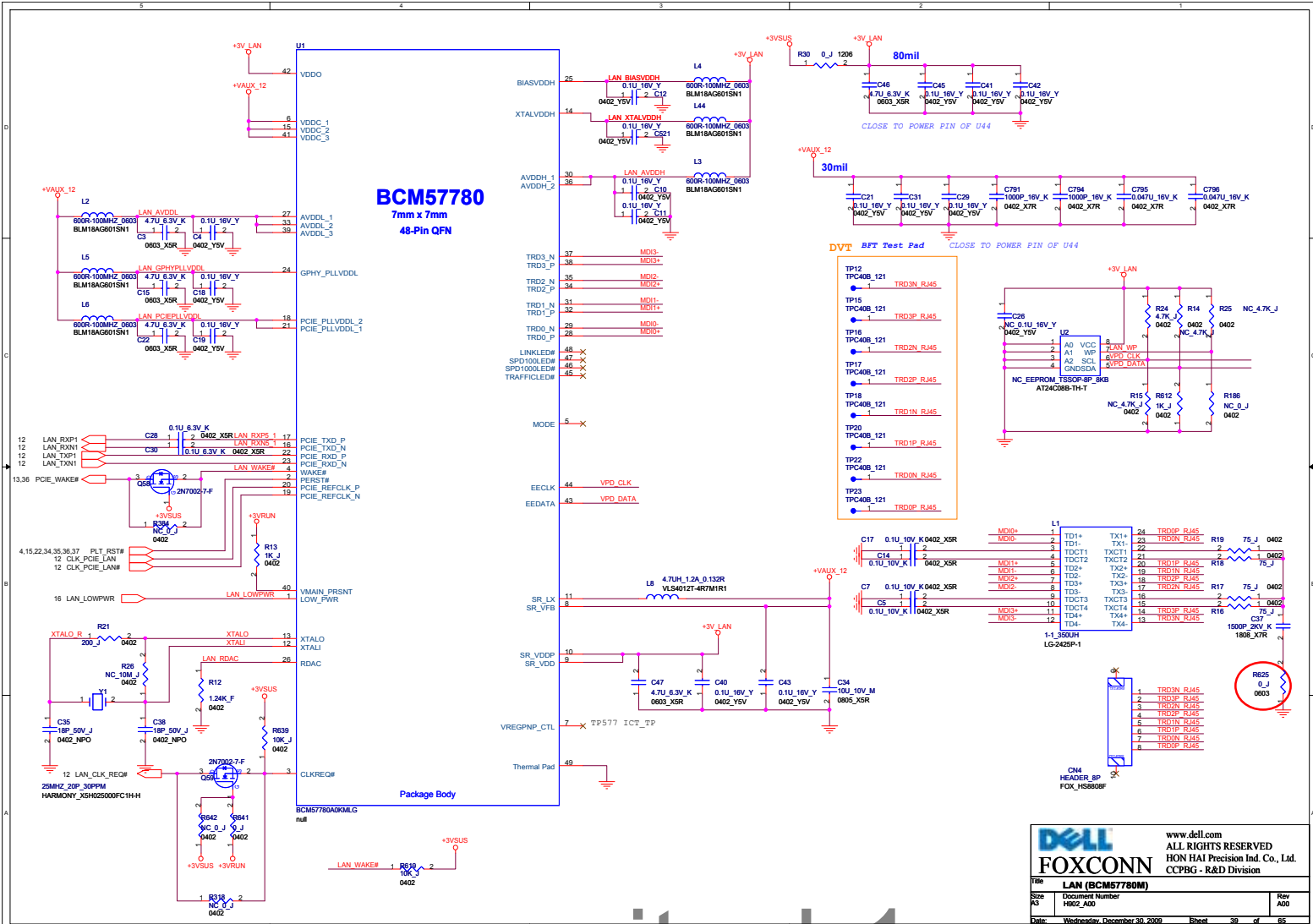
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Express card		
Size	Document Number	Rev
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Date	Wednesday, December 30, 2009	Sheet 37 of 85

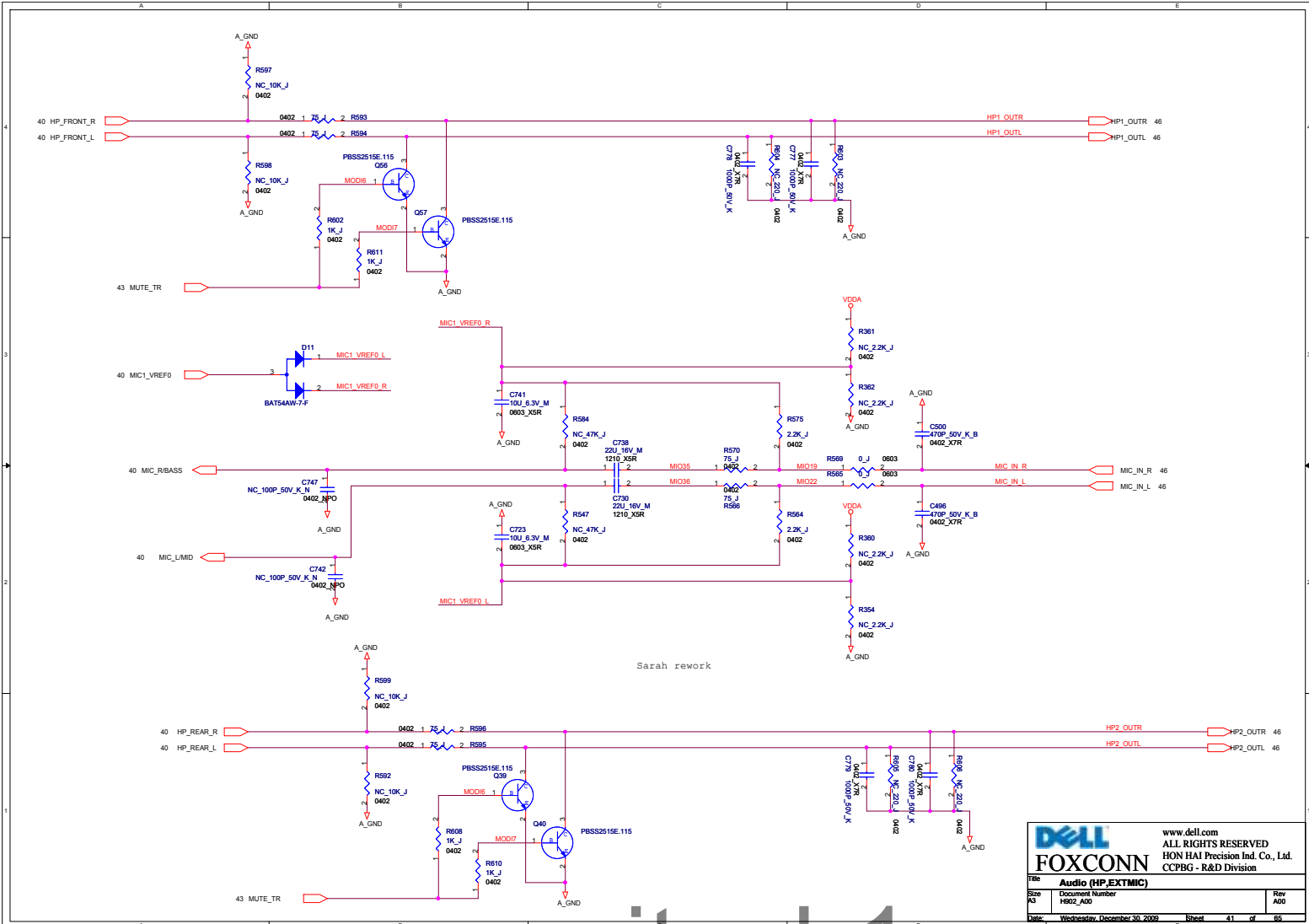
www.aitech1.ru



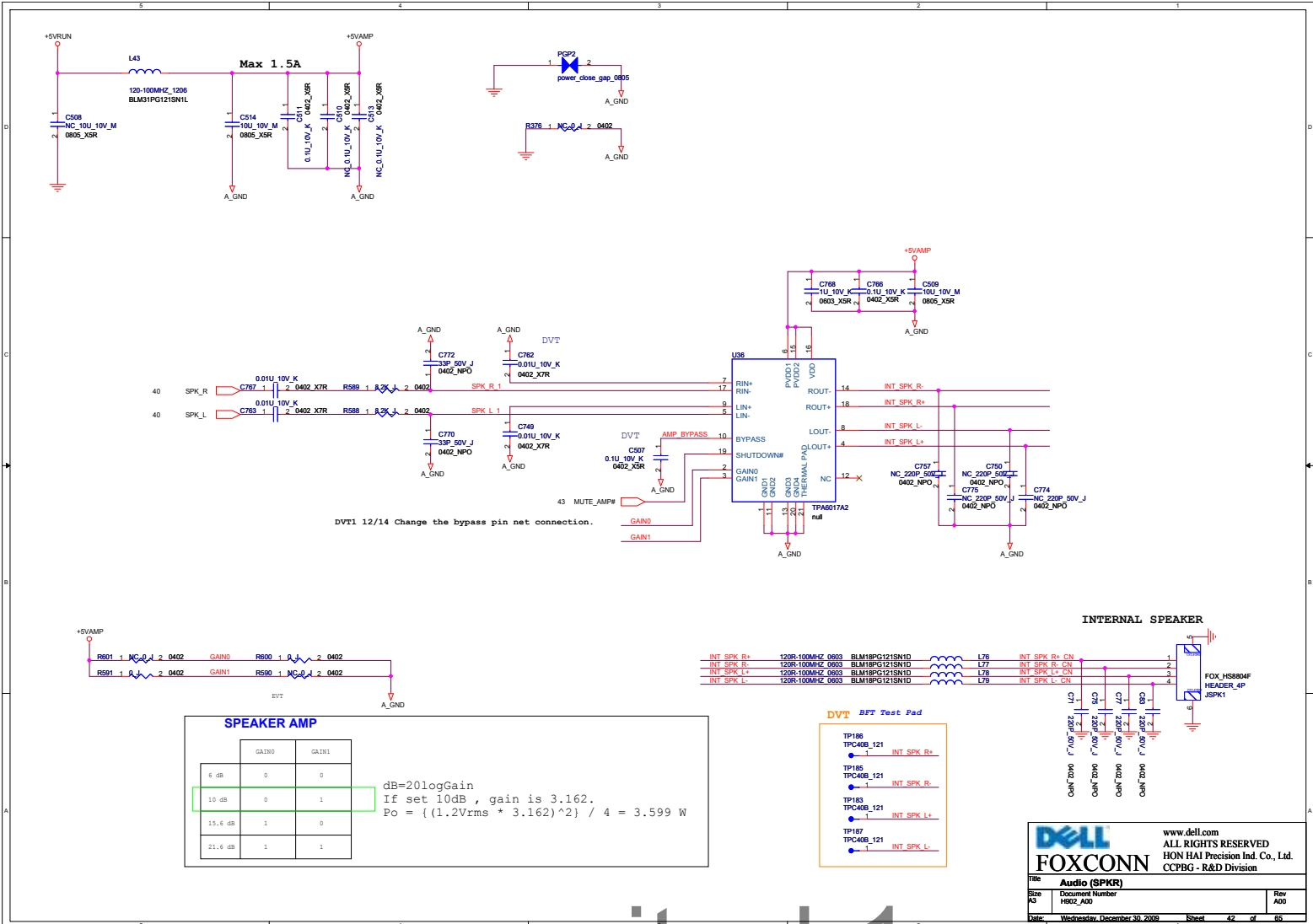
		www.dell.com ALL RIGHTS RESERVED HON HAI Precision Ind. Co., Ltd. CCPBG - R & D Division	
FOXCONN			
Title BT & CAMERA/Dig MIC CON			
Size A3	Document Number H802_A00	Rev A00	
Date: Wednesday, December 30, 2009	Sheet 38	of 55	



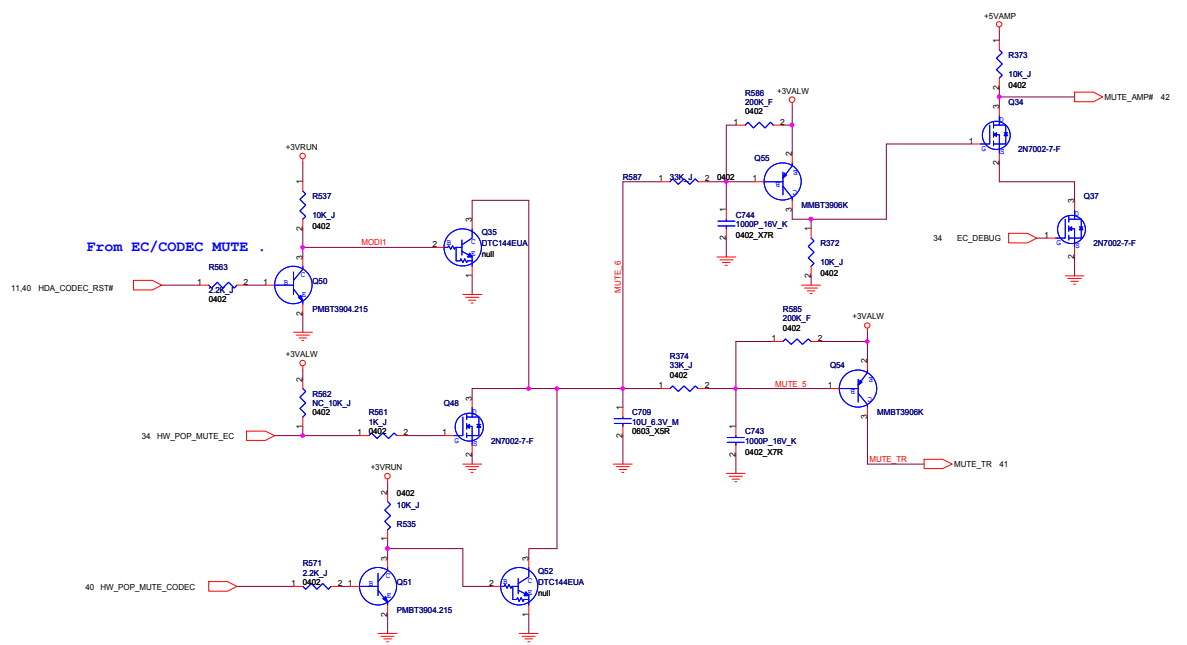
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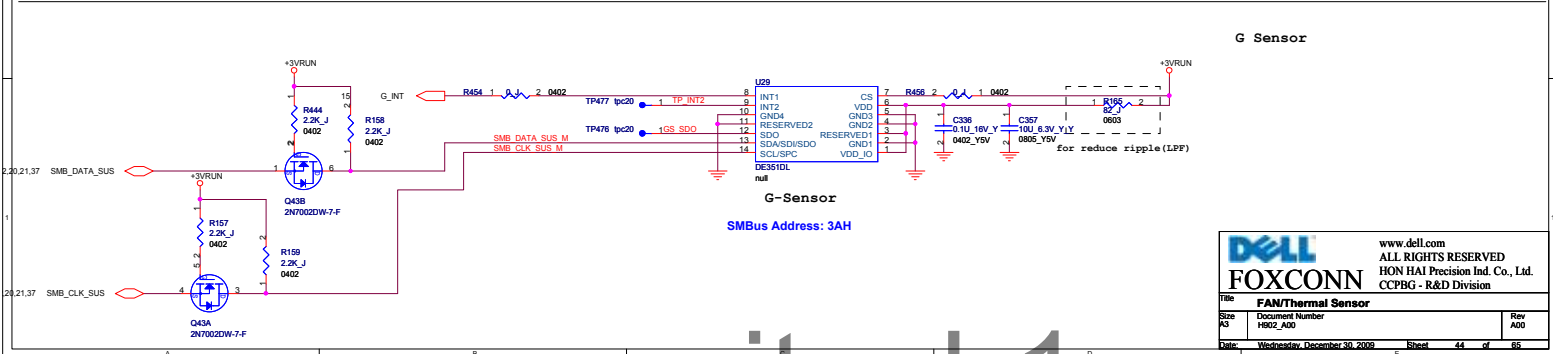
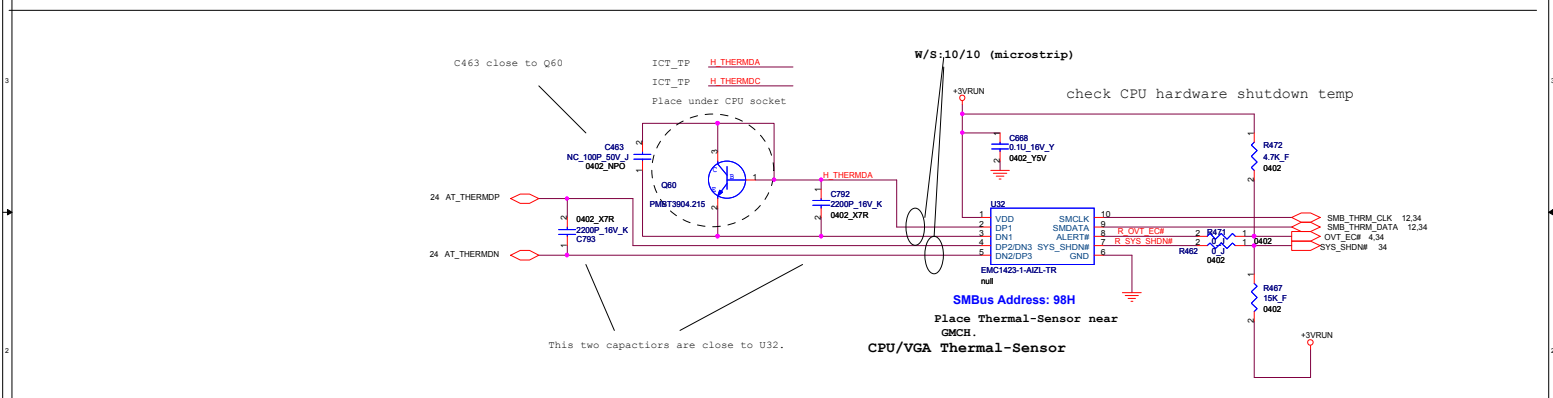
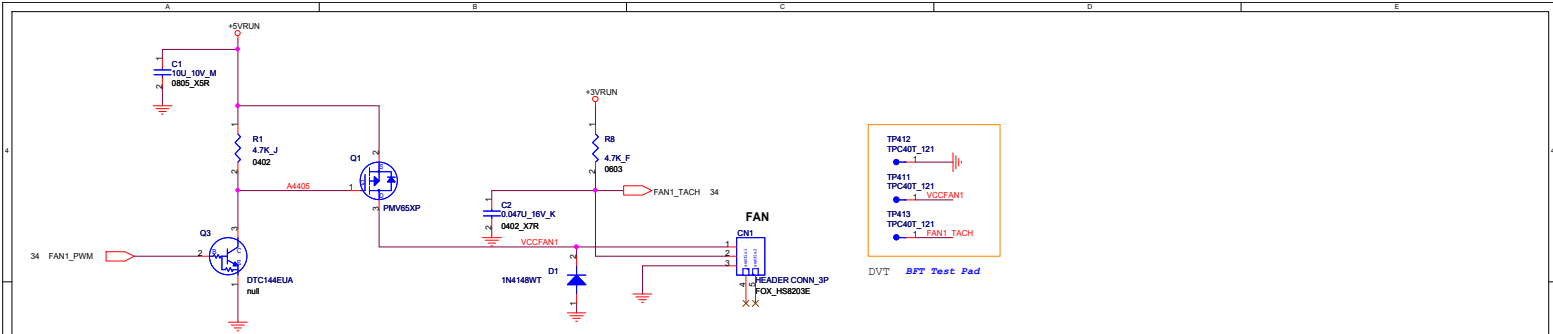



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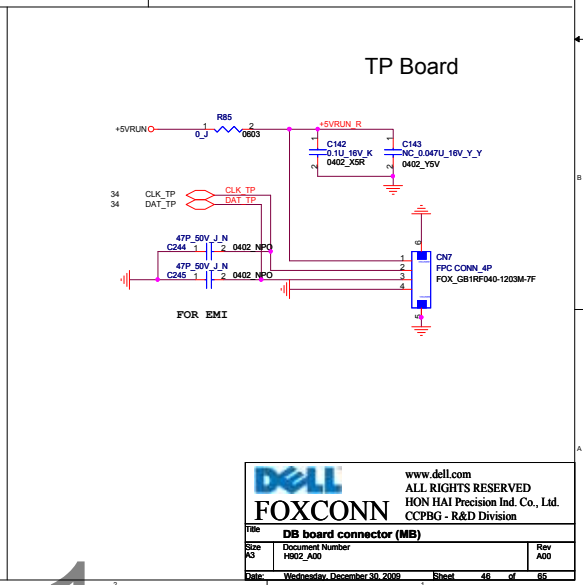
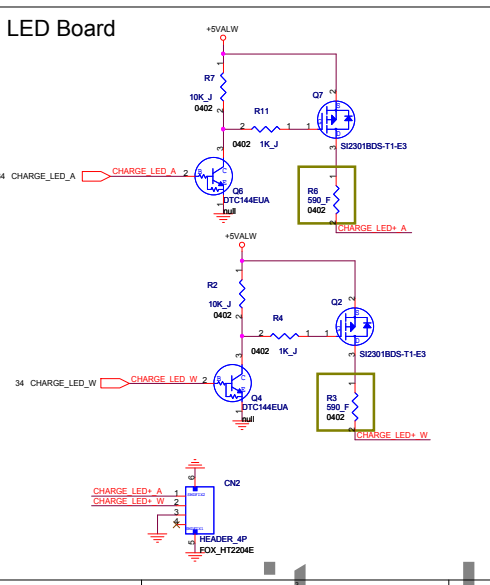
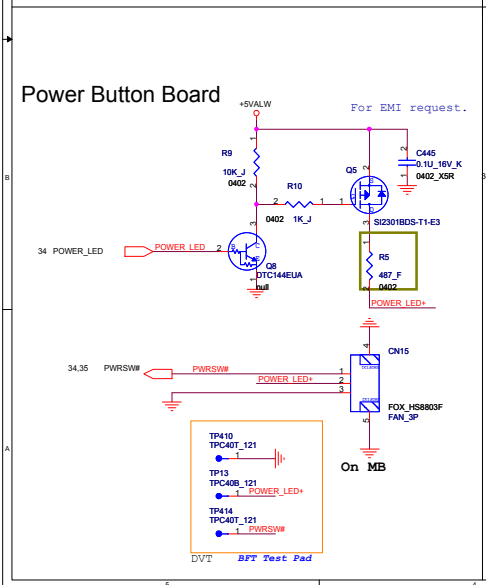
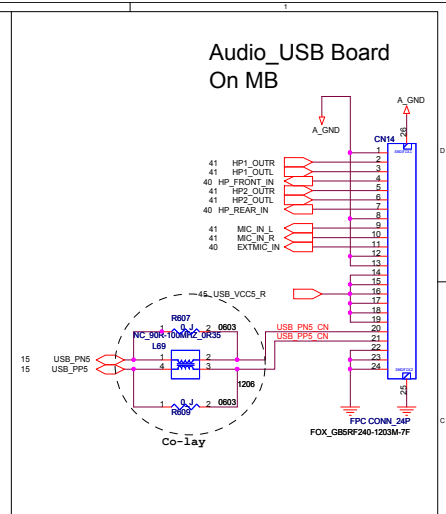
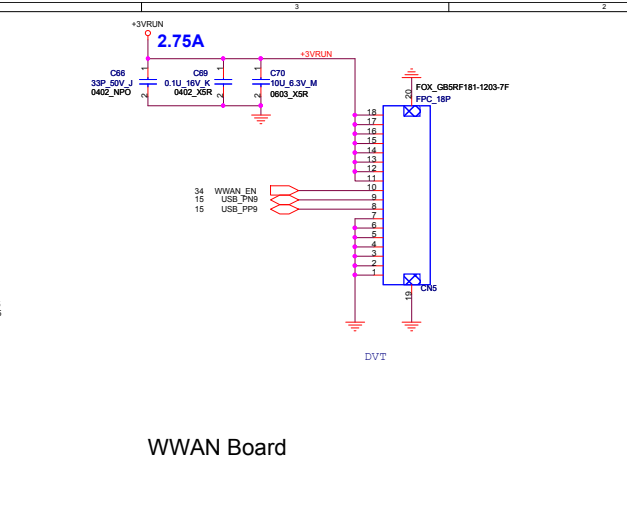
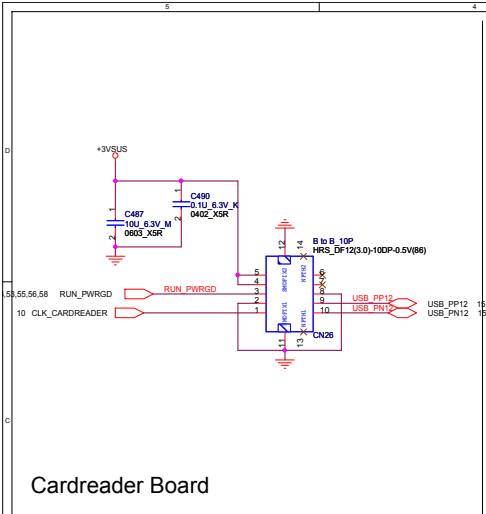
		www.dell.com ALL RIGHTS RESERVED HON HAI Precision Ind. Co., Ltd. CCPBG - R&D Division	
Title: Audio (MUTE)			
Size: A3	Document Number: H802_A00	Rev: A00	
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Title	FAN/Thermal Sensor		
Size	Document Number	Rev	
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Date	Wednesday, December 30, 2009	Sheet	44 of 65

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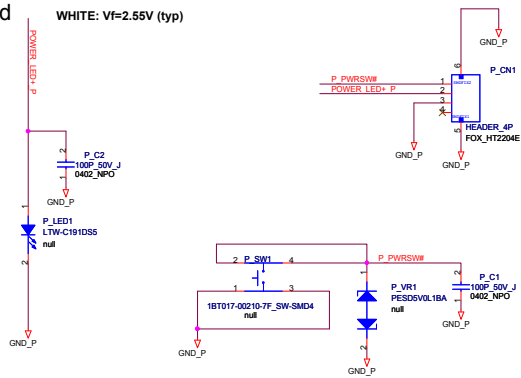


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Title DB board connector (MB)			
Size	Document Number	Rev	
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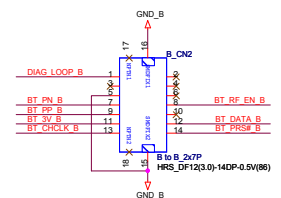
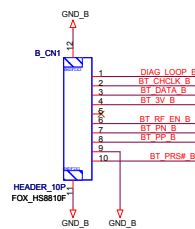
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Power Button Board

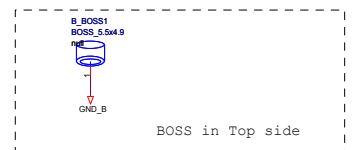
WHITE: Vf=2.55V (typ)



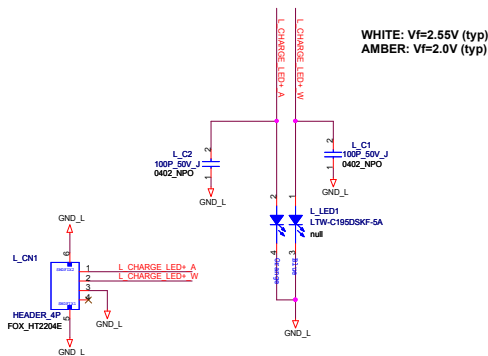
Bluetooth Board




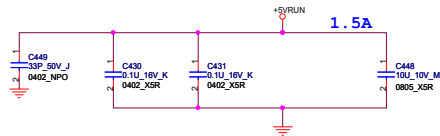
Bluetooth CONN.



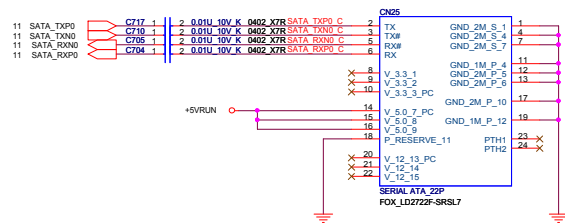
LED Board



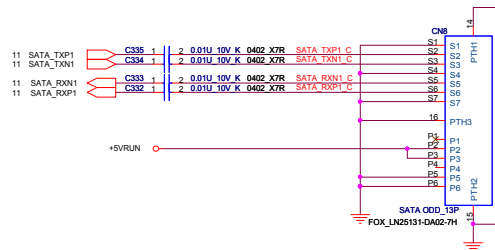
		www.dell.com ALL RIGHTS RESERVED HON HAI Precision Ind. Co., Ltd. CCPBG - R&D Division	
FOXCONN			
Title PWR BTN&LED&BT DB			
Size A3	Document Number H902_A00	Rev A00	
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SATA HDD CONN

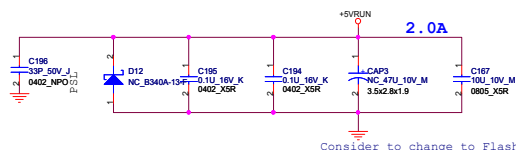


SATA ODD CONN



ODD CON ADAPTER

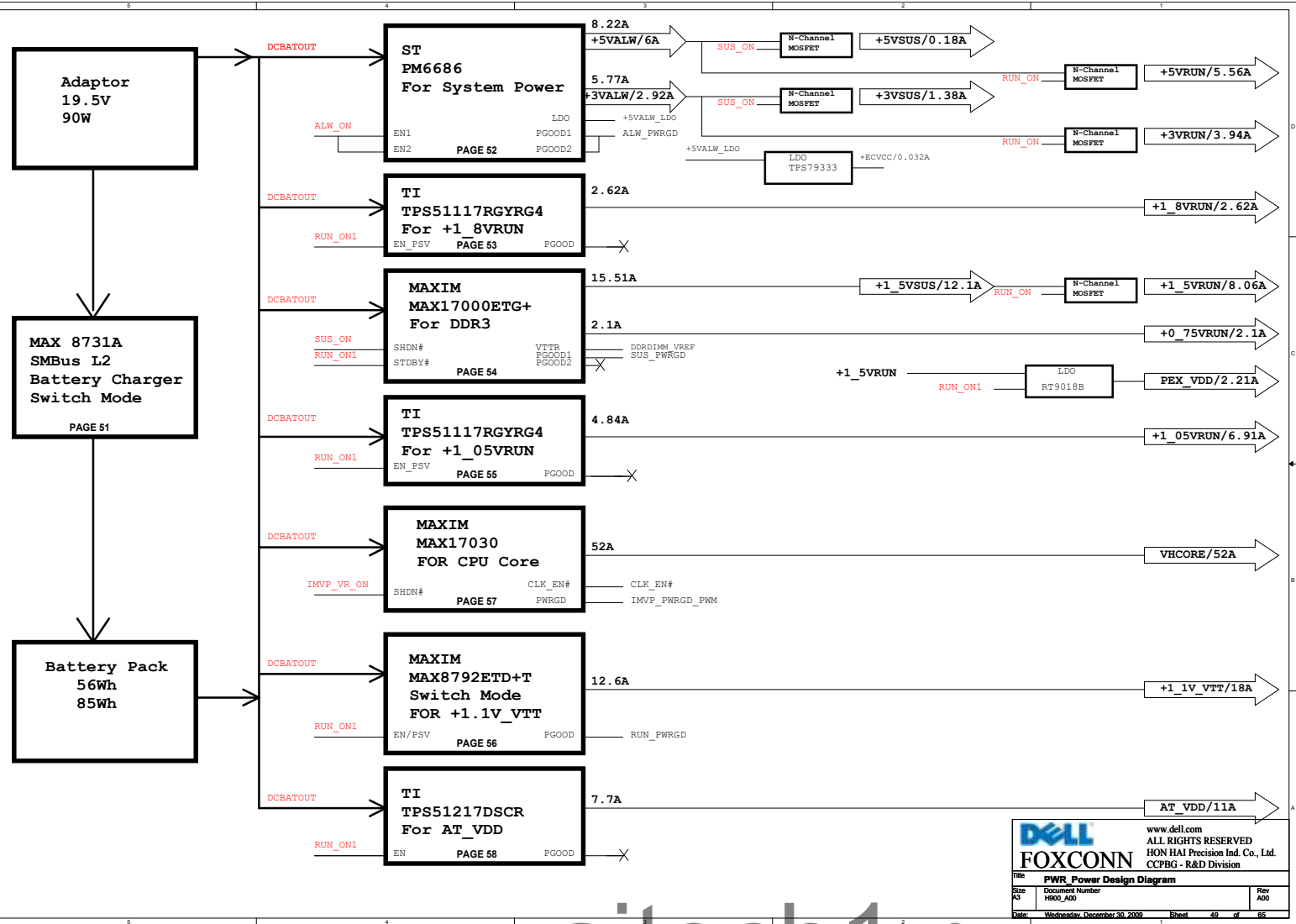
Add CN68 need 2N-0013009-FKG0 in BOM



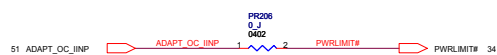
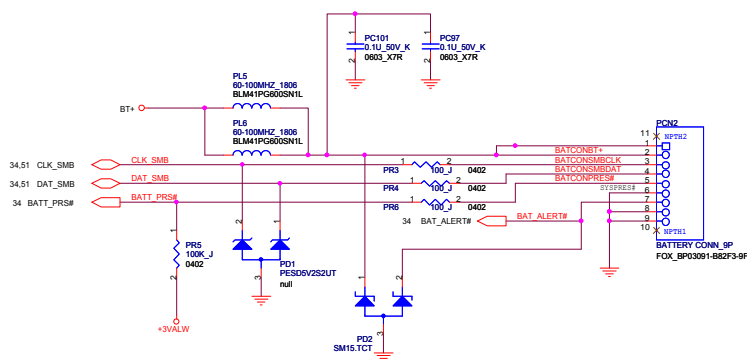
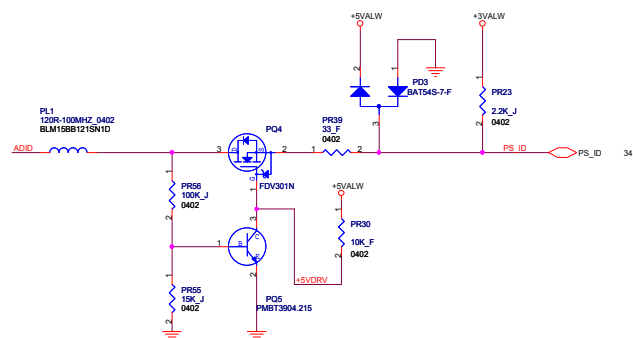
Consider to change to Flash board connector.


FOXCONN			
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SATA HDD/ODD			
Size	Document Number	Rev	
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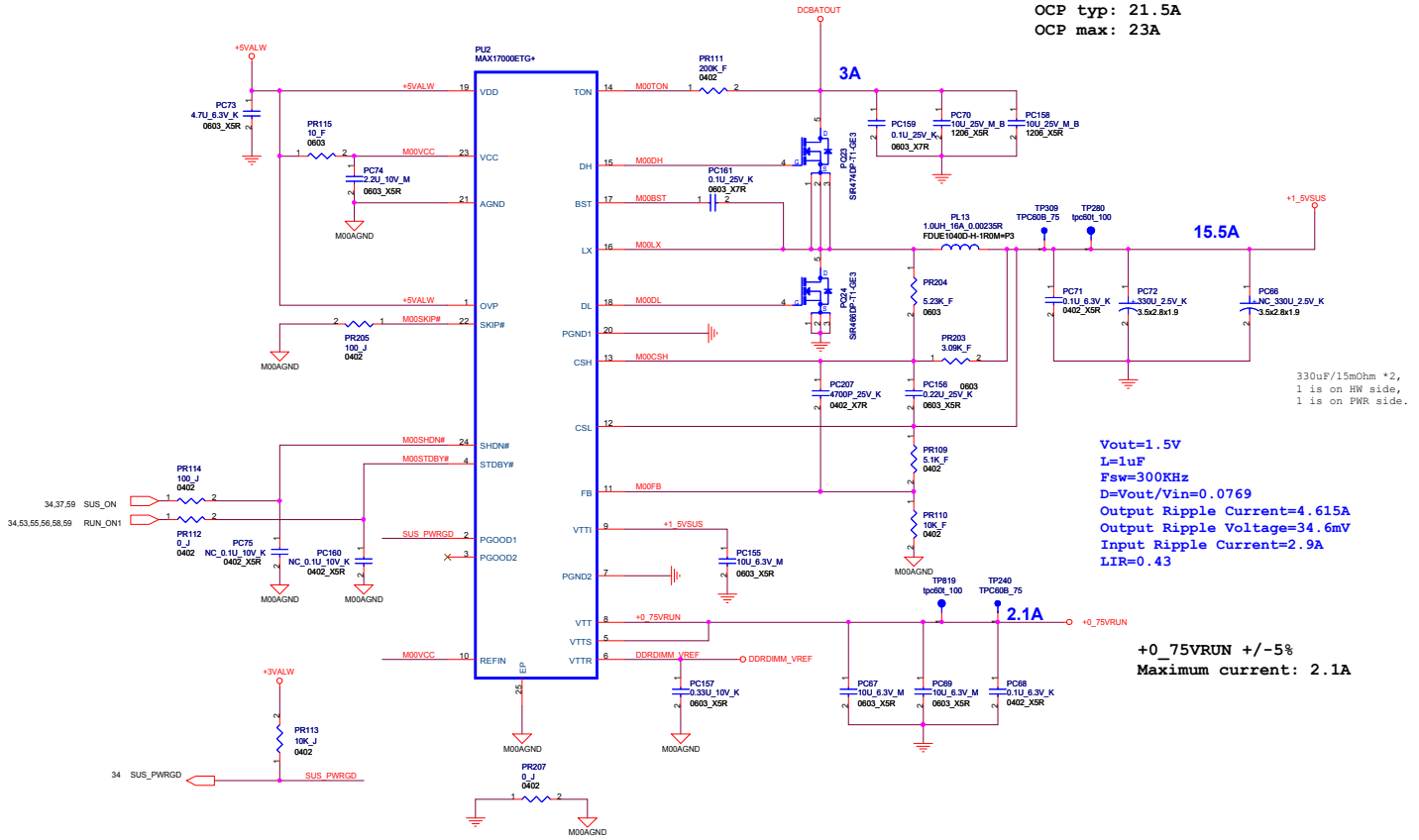



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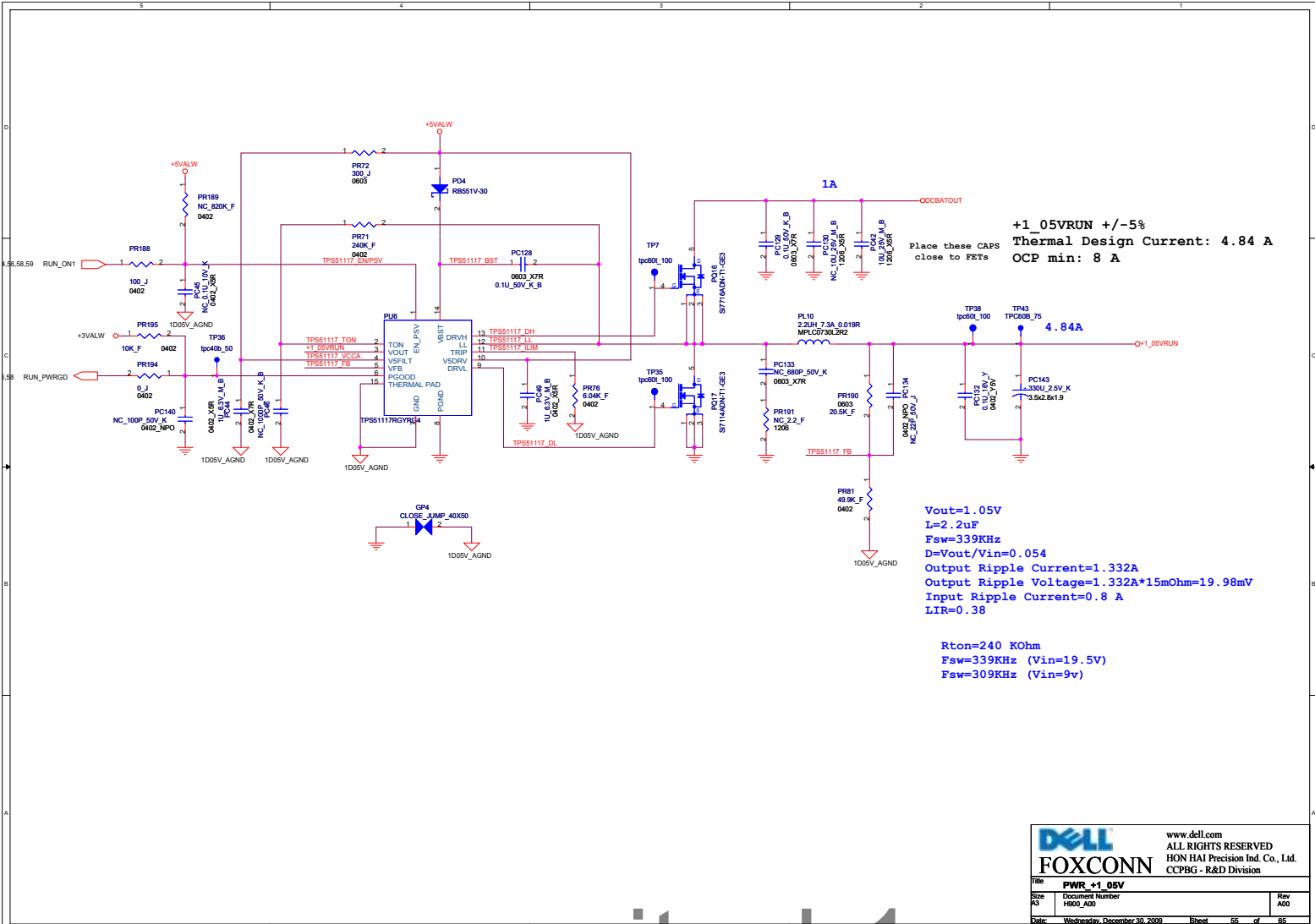
Title PWR_DCIN & Battery			
Size	Document Number	Rev	
A00	H900_A00	A00	
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+1_5VSUS +/-5%
 Thermal Design Current: 15.5A
 OCP min: 20.3A
 OCP typ: 21.5A
 OCP max: 23A



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Title PWR +1.5V/+0.75V			
Size A3	Document Number H900_A00	Rev A00	
Date:	Wednesday, December 30, 2009	Sheet	54 of 65

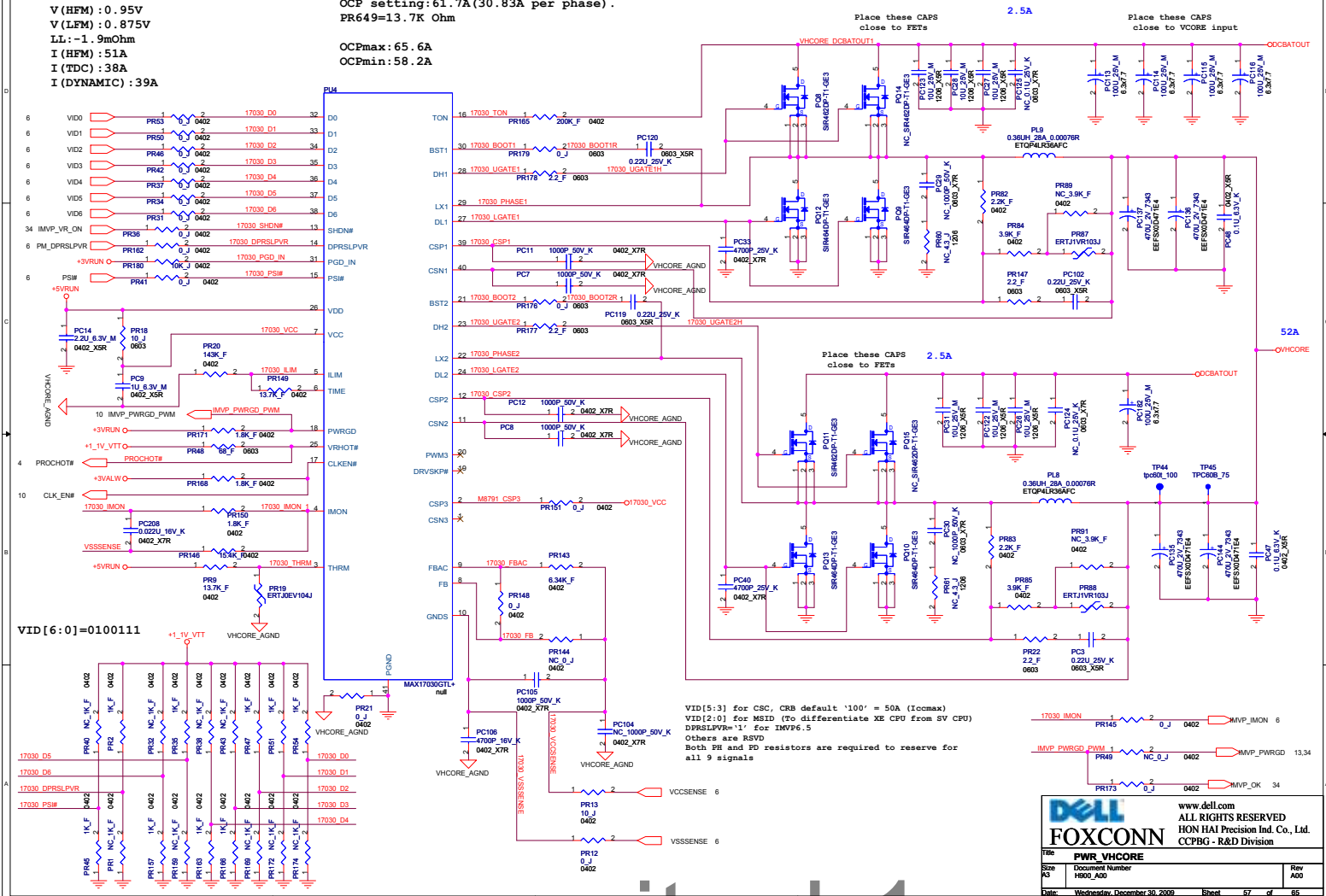
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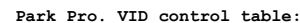
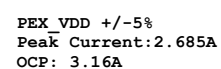
Clarksfield SV 45W CPU
V(HFM): 0.95V
V(LFM): 0.875V
LL:-1.9mOhm
I(HFM): 51A
I(TDC): 38A
I(DYNAMIC): 39A

OCP setting: 61.7A (30.83A per phase).
PR649=13.7K Ohm
OCPmax: 65.6A
OCPmin: 58.2A




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Rev	A0	Docu	Rev
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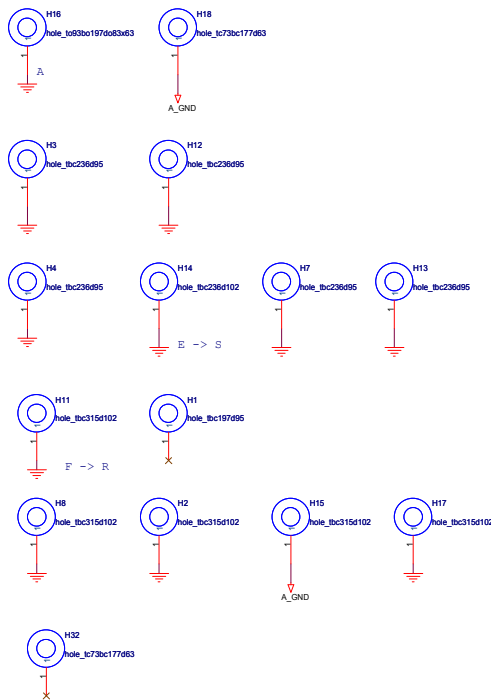
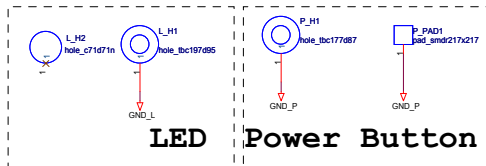
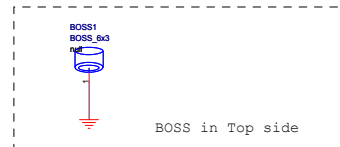
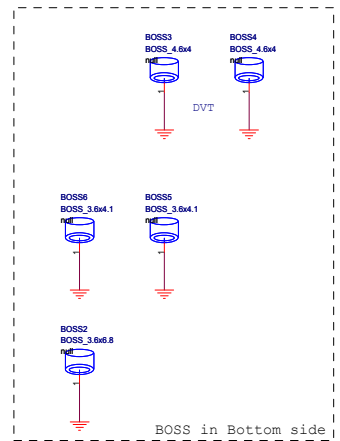
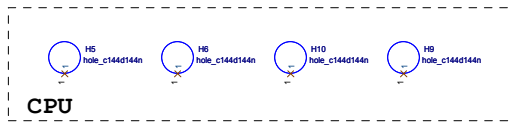
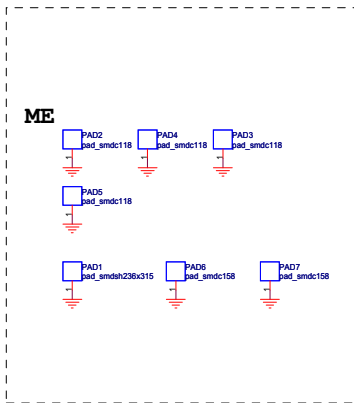
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PWRCNTL_2	PWRCNTL_0	GPU Voltage	R top	R bot
0	0	1.05V	10Kohm	20K//120K//60.4K= 13.3Kohm
0	1	0.95V	10Kohm	20K//120K= 17.1Kohm
1	1	0.9V	10Kohm	20Kohm

Power Control	GPIO
PWRCNTL_0	GPIO15
PWRCNTL_2	GPIO6

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FOXCONN			
Title PWR_AT_VDD/PEX_VDD			
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Title: HOLE			
Size: A3	Document Number: H802_A00	Rev: A00	
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H902 DVT

(2009/09/25)

P.25 Change R139 & R143 from 100 ohm to 40.2 ohm for AMD recommend.
P.24 Change AT_MEM ID0~3 connect to DVDDATA 0~3.
P.26 Reserve R627 & R629 for reduce DPE/F_PLL.
P.26 Add R630 & R631 to replace Bead L74, L75 and NC C667, C797, C798, C800, C799, C801 for AMD recommend.
P.25 NC C273, C280, R127, R134 for AMD recommend.


H902 PVT

(2009/11/03)

P.22-27 Change U26 HHPN to 12-2160774-0002.
P.17 Change L35, L37, L66, L67 to 1L-DML2201-2M00 for PUR recommend.
P.20 Change C364 to 1C-2B20104-K301 for PUR recommend.
P.31 Change C263 to 1C-2B20104-K301 for PUR recommend.
P.34 Change C457, C732, C502, C489, C703, C476, C486, C503, C718 & C739 to 1C-2B20104-K301 for PUR recommend.
P.35 Change C319 to 1C-2B20104-K301 for PUR recommend.
P.37 Change C485 & C488 & C725 to 1C-2B20104-K301 for PUR recommend.
P.45 Change C68 & C532 to 1C-2B20104-K301 for PUR recommend.
P.46 Change C69 & C142 to 1C-2B20104-K301 for PUR recommend.
P.46 Change C194, C195, C430 & C431 to 1C-2B20104-K301 for PUR recommend.

(2009/11/18)

P.46 Add C445 0.1uF for EMI recommend.
P.33 Change CN11 for ME recommend.



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H900 EVT -> DVT

(2009/03/26)

- P.47 Add BT2(CSR) BC_BOSS1 NC for reserve.
- P.32 Change LVDS connector pin define switch Pin4 and Pin10. (Pin4 NC, Pin10 +3VRUN)
- P.47 Add BT2(CSR) BC_BOSS1 NC for reserve.

(2009/03/27)

- P.46 Modify WWAN CN5 pin define.
- P.32 LVDS CN, change +3VRUN to pin 4, pin3 to NC prevent DCBATOUT short to +3VRUN.

(2009/03/31)

- P.42 Change R588,R589 to 8.2K ohm for 1.5W speaker.

(2009/04/01)

- P.40 Change R332 to 13.3K for Realtek recommend.
- P.24 Reserve R382, R383, R617 and R293 0 ohm for Park.
- P.24 Reserve L71, C785 1uF, C786 10uF, C787 0.1uF, L70, C782 1uF, C783 10uF, C784 0.1uF for Park.
- P.24 Reserve R619, R620 0 ohm for Park.
- P.27 Add R622 0 ohm for saperate Park schematics.
- P.27 Reserve R618 and R621 0ohm, C512 1uF, C515 10uF, and L72 for Park.

(2009/04/02)

- P.26 Reserve L73, C788 1uF, C789 10uF, C790 0.1uF and R623 0ohm for Park.

(2009/04/03)

- P.27 Reserve R624 150 ohm, R627 0 ohm for Park.
- P.27 Add R625,R626 0 ohm for Park.

(2009/04/06)

- P.11 Stuff R495 for Flash SPI.

(2009/04/10)

- P.11 Change PCH SPI_CS# to SPI_ROM_CS#.
- P.34 Change H_PWRGD to H_CPUPWRGD.

(2009/04/13)

- P.40 Reserve R628 0 ohm for PC beep.
- P.42 Change R45,R47,R49,R50 to bead L76,L77,L78,L79 for EMI request.
- P.24 Change L19 to BLM18BB121SN1D to solve AT_DPLL_PVDD Vpp over spec issue.
- P.32 Change F8 to 467002 (32V-2A_0603) for LVDS VCC protection.
- P.47 Del BC_CN4,BC_CN3,BC_BOSS1,BC_TP1,BC_TP2 for BT2 board is not necessary.
- P.42 Change C767,C763,C762,C749 to 0.01uF; C507 to 0.1uF for speaker pop noise.
- P.32 Del R29 0ohm for no necessary.
- P.36 Del R27 0ohm for no necessary.
- P.45 Change R384, R34, R52 to close gap PGP4,PGP5,PGP6.
- P.45 Change F5,F1 to close gap PGP7,PGP8 for un-necessary.
- P.22 Change R410 0ohm to close gap PGP12.
- P.26 Change R92,R93 0ohm to close gap PGP13,PGP14.
- P.36 Change R391 0ohm to close gap PGP17.

(2009/04/15)

- P.39 Add D15, D16 for solving leakage issue.

(2009/04/23)

- P.4 Del R196 0ohm for no necessary.

(2009/04/24)

- P.4 Add CPU DET# for Dell PC Beep.

(2009/04/27)

- P.4 Change R184 to 1.1K ohm R182 to 3.01K ohm for Intel recommand.

(2009/04/28)

- P.36 Add R27 0 ohm for DVT.
- P.41 Change R602, R611, R608, R610 to 1k ohm for Audio headphone noise.
- P.45 Add F1 and F5 for protection and del PGP7 and PGP8.

(2009/04/30)

- P.6 Del R401, R115 for Vcore power plane.
- P.38 Change TP29, TP46, TP42, TP40, TP39, TP428, TP430 to TPC40B_121.
- P.50 Change TP8, TP11, TP14, TP10, TP9 to TPC60B_121.
- P.44 Change TP412, TP411, TP413 to TPC40T_121.
- P.39 Change TP12, TP15, TP16, TP17, TP18, TP20, TP22, TP23 to TPC40B_121.
- P.42 Change TP186, TP185, TP183, TP187 to TPC40B_121.
- P.34 Change TP480, TP485, TP329, TP479, TP483, TP182, TP333, TP128 to TPC40T_121.
- P.46 Change TP414, TP410 to TPC40T_121 and TP13 to TPC40B_121.
- P.38 Change TP47, TP422, TP417, TP37, TP30, TP33, TP32, TP31, TP28 to TPC40B_121.
- P.11 Change C736 to 15pF for cystal vendor recommand.
- P.30 Change C35 and C38 to 18pF for cystal vendor recommand.
- P.34 Del Q28 and R318 2.2k ohm for CPU PC Beep solution .

(2009/05/5)

- P.32 Change C65 to 6800pF for LVDS sequence.
- P.39 Reserve R318 and R384 0 ohm for leakage solution.
- P.45 Change F1 and F5 to 1M-F08V05A-0000.

(2009/05/8)


- P.16 Reserve R391 1K ohm for following the CRB.
- P.7 Del R55 0 ohm for leakage.
- P.35 Change U13 to W25X80A.
- P.31 Change L61, L62, L63 to 33R100MHz for CRT SI issue.

(2009/05/11)

- P.17 Change C479 to 1uF for Intel recommend.
- P.24 Reserve R410 and R629 0 ohm for Park.
- P.24 Reserve R634, R631, R632, and R633 0 ohm for Park.
- P.24 Del R619 and R620 0 ohm for Park NC.
- P.25 Change C781 to 1nF for AMD recommend.
- P.25 Reserve R630 680 ohm and R115 10K PD for Park.
- P.27 Reserve R635 0 ohm for Park.
- P.25 Add TP172, TP173, TP174, TP175, TP176 and TP177 for Layout request.
- P.60 Change BOSS3 and BOSS4 for ME request.
- P.17 Del C445 and C463 33pF for unused.
- P.36 Del R27 0 hom for unused.
- P.45 Del F1, F5, and R31 0 ohm for unused.
- P.46 Del F2 for unused.

(2009/05/12)

- P.46 Reserve R637 and R638 0 ohm for WWAN change.
- P.46 Add R636 0 ohm for WWAN change.
- P.13 Add R92 and R93 1k ohm for Intel recommend.



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(2009/06/06)

(2009/06/16)

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(2009/07/01)

(2009/07/14)

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(2009/07/22)

(2009/07/24)

(2009/07/28)

(2009/08/03)


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Number	Date	Page	Title	Issue	Description	Version
1	2009/04/10	P.55	+1_05VRUN	1.05V Vripple over spec.	Change PC143 from 220uF 2.5V 35m Ohm(1C-31R0227-MX00) to 330uF 2.5V 15m Ohm(1C-33U0337-KX00).	X01
2	2009/04/13	P.51	Charger	Change PR152 for ADAPT OC function.	Change PR152 from 8.45K 0402 1%(1R-0008451-F200) to 10K 0402 1%(1R-0000103-F200)	X01
3	2009/05/06	P.57	VCORE	Fine tune VCORE setting for loadline, transition and mosfet ring issue.	Add PC7 :470pF 50V X7R 0402(1C-2B20471-K000) Add PC106 :4700pF 16V X7R 0402(1C-2B20472-K002) Add PC29 and PC30 :1000pF 50V X7R(1C-2B3012-MX00) Add PR60 and PR61 :4.3 Ohm 1206 5%(1R-000043X-J600) Del PQ14 and PQ15 SiR462DP-T1-GE3 (17-SiR462D-PT00) Change PR12 from 10 Ohm 0402 5%(1R-0000100-J200) to 0 Ohm 0402 5%(1R-0000000-J200) Change PR143 from 7.15K Ohm 0402 1%(1R-0007151-F200) to 6.34K Ohm 0402 1%(1R-0006341-F200) Change PR82 and PR83 from 2.7K Ohm 0402 1%(1R-0000272-F200) to 2.2K Ohm 0402 1%(1R-0000222-F200) Change PR84 and PR85 from 4.02K Ohm 0402 1%(1R-0004021-F200) to 1.69K Ohm 0402 1%(1R-0001691-F200)	X01
4	2009/05/06	P.58	AT_VDD	Changing H-S,L-S Mosfets and boost resistor for solving ring issue.	Change PQ40 from Si7716ADN(17-Si7716A-DN00) to AON7402L(17-AON7402-L000) Change PQ41 from Si7714ADN(17-Si7714A-DN00) to AON7700(17-AON7700-0000) Change PR222 from 0 Ohm 0603 1%(1R-0000000-J300) to 1 Ohm 0603 1%(1R-000010X-F300)	X01
5	2009/05/07	P.54	+1_5VSUS	Modifying OCP setting for +1_5VSUS.	Change PR204 from 4.87K 0603 1%(1R-0004871-F300) to 5.23K 0603 1%(1R-0005231-F300) Change PR203 from 3.24K 0603 1%(1R-0003241-F300) to 3.09K 0603 1%(1R-0003091-F300)	X01
6	2009/05/11	P.56	+1_1V_VTT	Change remote sense detection from CPU to output Cap.	Add PR184 10 Ohm 0402 1%(1R-0000100-F200) Delete PR183 0 Ohm 0402 5%(1R-0000000-J200)	X01
7	2009/05/12	P.50	PSID	Change PQ4 to high ESD protection (6000KV).	Change PQ4 from 2N7002K(17-2N7002K-0001) to FDV301N(17-FDV301N-0000).	X01
8	2009/05/12	P.55 P.56	+1_05VRUN +1_1V_VTT	Change RUN_PWRGD singal from +1_1V_VTT rail to +i_05VRUN rail.	Delete PR70 100 Ohm 0402 1%(1R-000010I-F200) Add PR195 10 Kohm 0402 1%(1R-0000103-F200) Add PR194 0 Ohm 0402 5%(1R-0000000-J200)	X01
9	2009/05/13	P.57	VCORE	PROCHOT# signal pull-up resistor is 56 ohm in IMVP side.	Change PR48 from 56 Ohm 0603 1%(1R-0000560-J300) to 68 Ohm 0603 1%(1R-0000680-F300)	X01
10	2009/05/20	P.58	PEX_VDD	Modify feedback capacitor for improving loop response.	Change PC57 from 0.01uF 0402 25V X7R(1C-2B20103-M000) to 470pF 0402 50V X7R(1C-2B20471-K000)	X01
11	2009/05/20	P.51	DC_IN	Modify resistor and capacitor for reducing adapeter's inrush current.	Change PR28 from 47KOhm 0402 5%(1R-0000473-J200) to 100KOhm 0402 5%(1R-0000104-J200) Change PC6 from 0.1uF 0603 50V(1C-2B30104-K000) to 0.22uF 0603 25V X5R(1C-2B30224-K400)	X01
12	2009/05/26	P.54	+1_5VSUS	Add a capacitor between CSH and FB for improving jitter issue.	Add PC207 4700pF 25V 0402 X7R 10%(1C-2B20472-K001)	X01




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13	2009/06/18	P.57	V_CORE	Change GND design for C-state issue	Change PR21.1 to PGND. Change PR21.2 to AGND. Change PC14.2 to PGND.	X02
14	2009/07/02	P.57	V_CORE	Change boost resistor to reduce ring of Mosfet. Add feedback capacitor to reduce ground noise.	Change PR178 from 0 Ohm 0603 5%(1R-0000000-J300) to 2.2 Ohm 0603 1%(1R-000022X-F300), Change PR177 from 0 Ohm 0603 5%(1R-0000000-J300) to 2.2 Ohm 0603 1%(1R-000022X-F300), Add PC7: 1000pF 16V X7R (1C-2B20102-K001) . Add PC8: 1000pF 16V X7R (1C-2B20102-K001) . Add PC11: 1000pF 16V X7R (1C-2B20102-K001) . Add PC12: 1000pF 16V X7R (1C-2B20102-K001) .	X02
15	2009/07/06	P.51	Charger	Change rating voltage from 25V to 50V and size from 0603 to 0805 for Capacitor(PC6) .	Change PC6 from 0.22uF 25V X5R 0603 10%(1C-2B30224-K400) to 0.22uF 50V X5R 0805 10%(1C-2B70224-K600)	
16	2009/07/10	P.57	V_CORE	Modify DCR feedback and IMON setting.	Change PR84 and PR85 from 1.69K 0402 1%(1R-000169I-F200) to 3.9K 0402 1%(1R-0003901-F200) Change PR150 from 10K 0402 1%(1R-0000103-F200) to 1.8K 0402 1%(1R-0000182-F200) Change PC208 from 0.1uF 6.3V 0402 (1C-2B20104-K101) to 0.022uF 16V 0402 X7R (1C-2B20223-K000) Change PR146 from 12K 0402 1%(1R-0000123-F200) to 15.4K 0402 1%(1R-0001542-F200)	X02
17	2009/07/20	P.59	Other power plane	Add discharge path for 1_5VRUN and 1_05VRUN	Add PR104:330 Ohm 0603 5%(1R-0000331-J300) Add PR95:330 Ohm 0603 5%(1R-0000331-J300) Add PQ21:2N7002-7-F SOT-23 (17-2N70027-F000) Add PQ18:2N7002-7-F SOT-23 (17-2N70027-F000)	X02
18	2009/07/24	P.57	V_CORE	Add AL capacitor to reduce acoustic noise.	Add PC113:EEEFK1E101XP,100uF,25V,20%, 6.3*7.7,0.34ohm (1C-1XX0107-M400) Add PC182:EEEFK1E101XP,100uF,25V,20%, 6.3*7.7,0.34ohm (1C-1XX0107-M400)	X02
19	2009/09/25	P.58	VGA_CORE	Add more GPIO pin for VAG 4 level controller	Add NC_PC187,NC_PC188,NC_PC189 PR230,PR231,PR232, 0ohm Remove PR79, PR80	X02
20	2009/09/25	P.58	VGA_CORE	Change AOS MOS to ON MOS for reducing risk of induce voltage	Change PQ40 PQ41 and PQ54 to ON MOS 4823 and 4821.	
21	2009/11/19	P.58	VGA_CORE	EMI request add one cap	Add PC185 1000pF	
22	2009/11/19	P.58	VGA_CORE	Reduce inductor current when VID change	change PR230, PR232, from 0 to 47K. change PC188, PC189, from 0.047uF to 0.015uF. PC56 from 22pF to 560pF NC_PC131, PC141, PC142, from 330uF 15mohm to 330uF 9mohm. Add NC_PC190,NC_PC191 change PR86, to 46.4K for OCP 15A	
23	2009/11/19	P.58	VGA_CORE	TI suggest reducing short through risk	change PR222, from 1 ohm to 2.2 ohm	
24	2009/11/19	P.58	VGA_CORE	Remove unused GPIO pin	Remove PQ57,PD10,PR228,PR229	
24	2009/11/27	P.58	VGA_CORE	R C delay as Dell request	NC_PC188, PC_PC189 and add PC190, PC191 0.1uF	

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