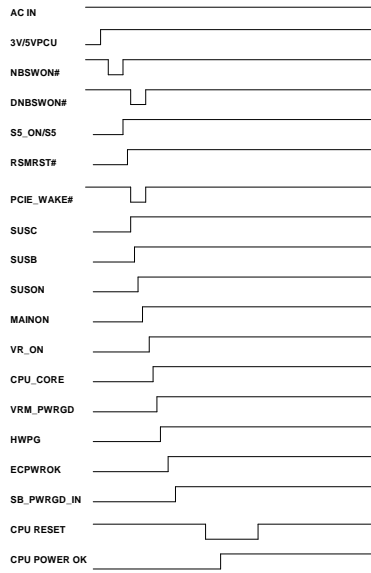


[illegible]

Power Sequence

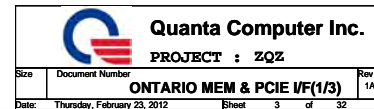


Hudson M1 SM BUS

SB820 SMBUS	Pin NO.	SMBUS Function Define
PCLK_SMB PDAT_SMB (+3V)	AD22 AE22	DDR / RFID
SB_SMBCLK1 SB_SMBDATA1 (+3V_S5)	F5 F4	not used
SB_SCLK2 SB_SDATA2 (+3V_S5)	D25 F23	not used
SB_SCLK3 SB_SDATA3 (+3V_S5)	B26 E26	not used
SB_SCLK3 SB_SDATA3 (+3V_S5)	B26 E26	not used

KBC(EC) SM BUS

KBC SMBUS	Pin NO.	SMBUS Function Define
MBCLK MBDATA (+3VPCU)	110 111	Battery
MBCLK_THRM MBDATA_THRM (+3VPCU)	115 116	Thermal

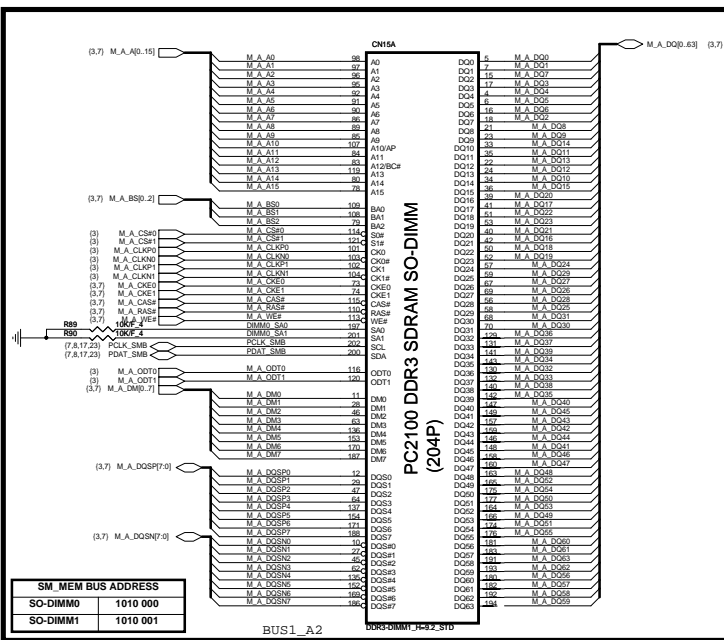


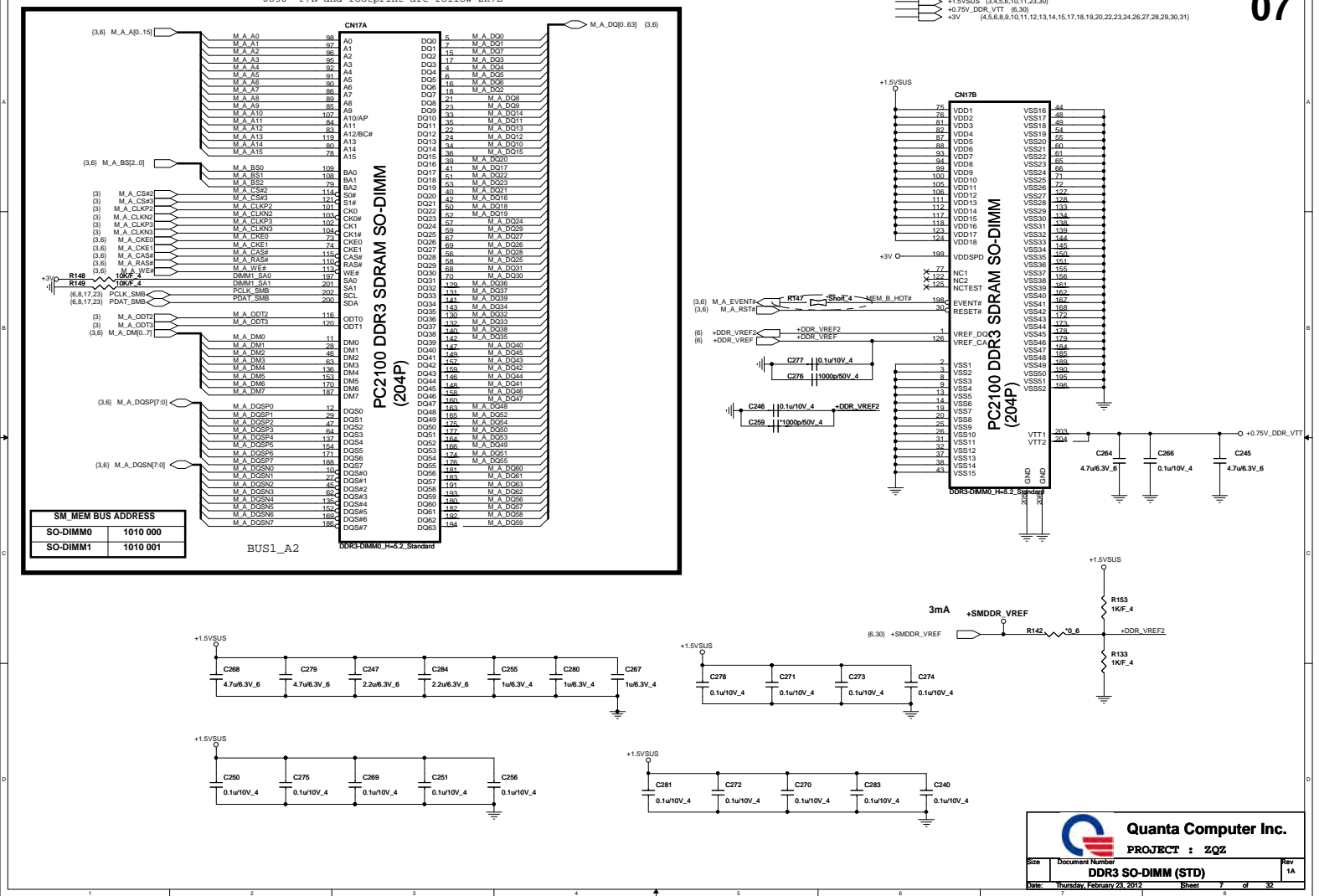


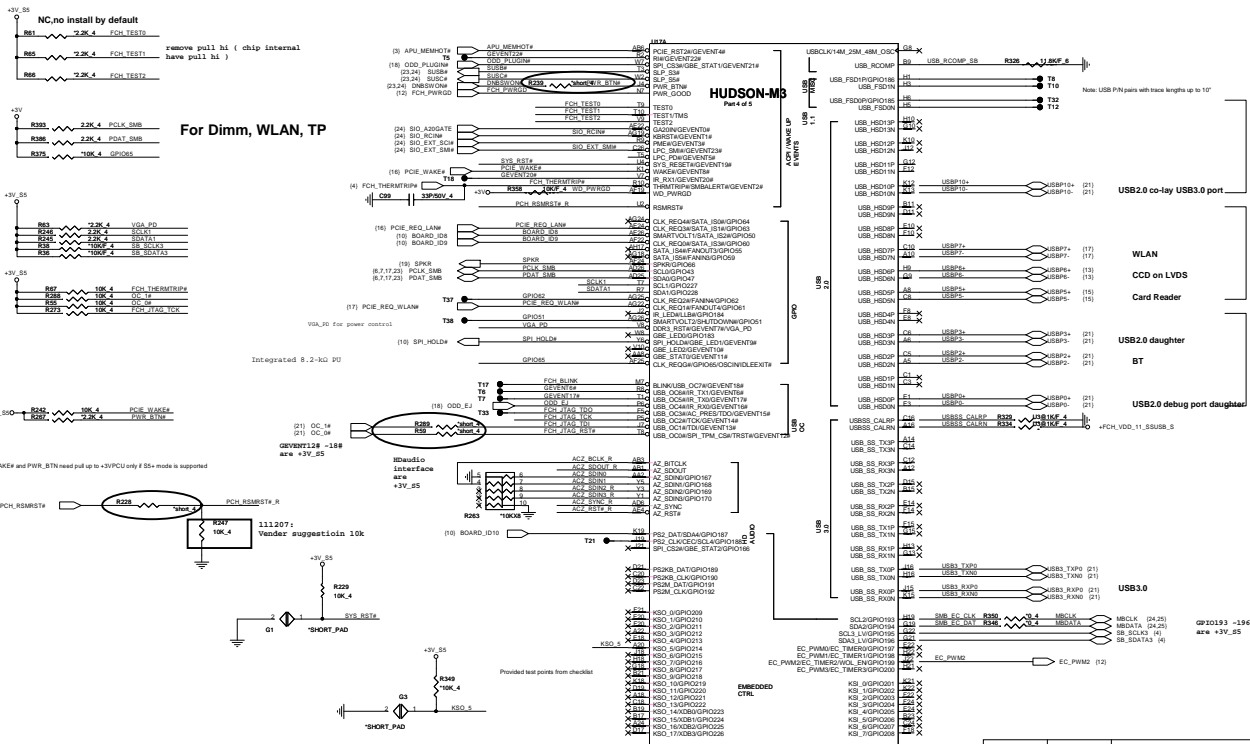


0830--P/N and footprint are follow ZR7B

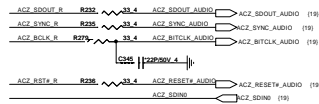
+1.5VSUS (3,4,5,7,10,11,23,30)
 +0.75V_DDR_VTT (7,30)
 +3V (4,5,7,8,10,11,12,13,14,15,17,18,19,20,22,23,24,26,27,28,29,30,31)



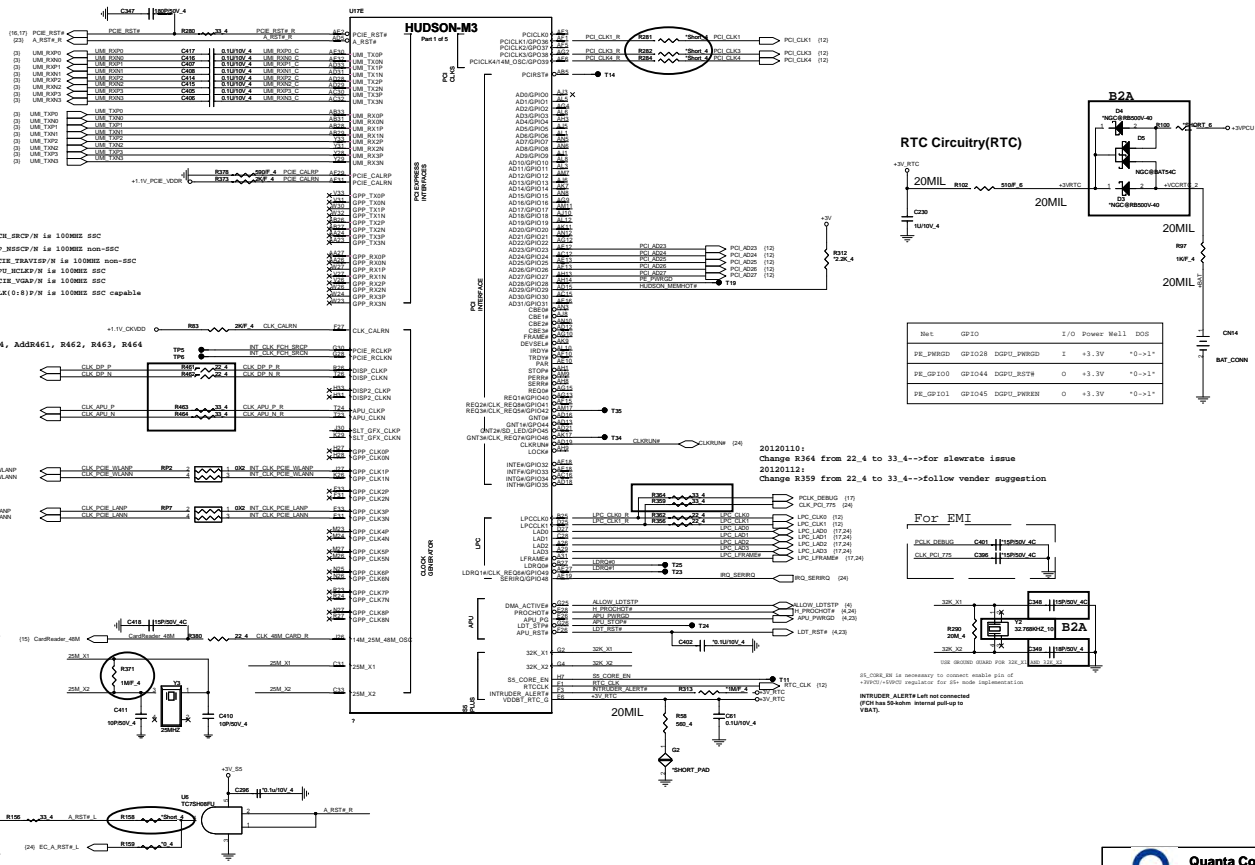


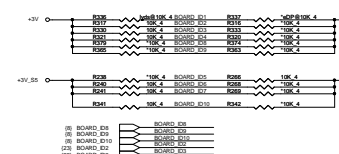
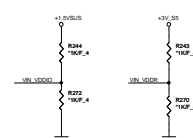
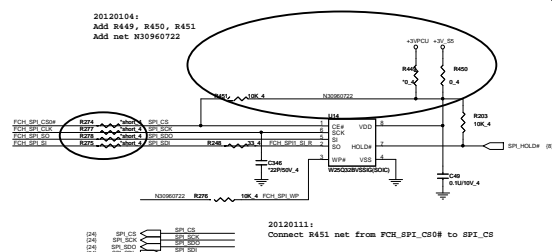
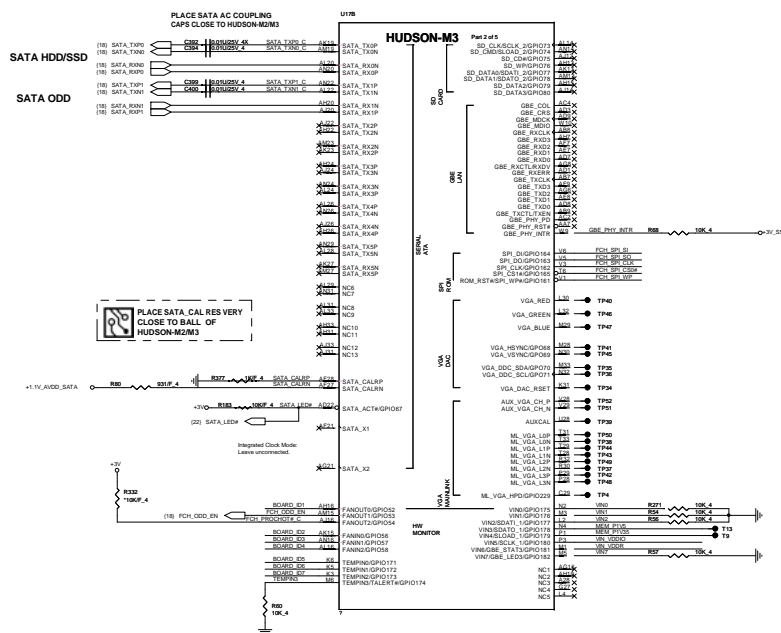


To Azalia



EC	FCH	Device	I2C_Device(s)
I2Ce_1(M)	I2CF_2(M)	Charger	Battery
I2Ce_2(M)		EEPROM	APU
I2Ce_3(M)		VGA Thermal	
	I2CF_3(M)		APU
	I2CF_1(M)	Lan	WLAN
	I2CF_0(M)	Dimm	Clk Gen

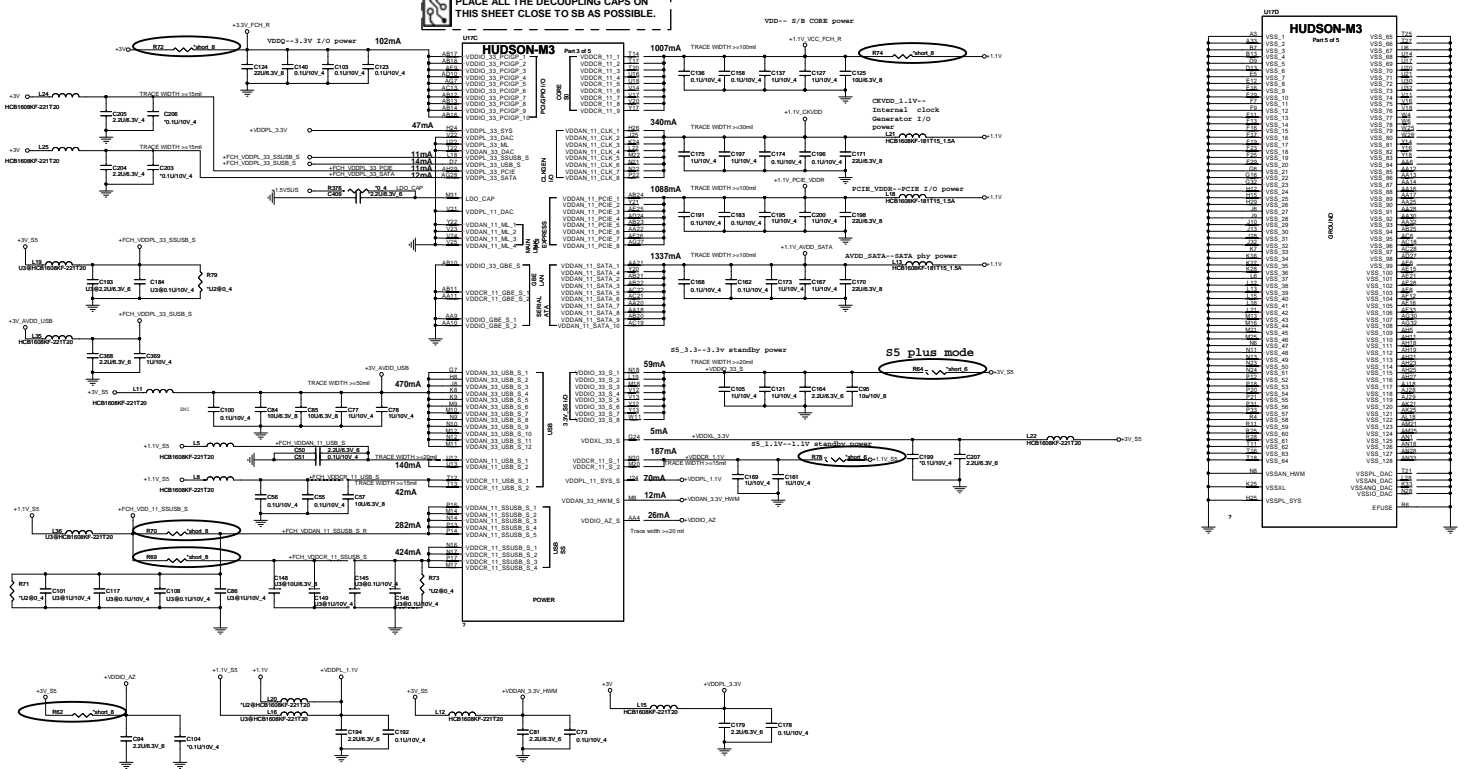




BOARD ID SETTING

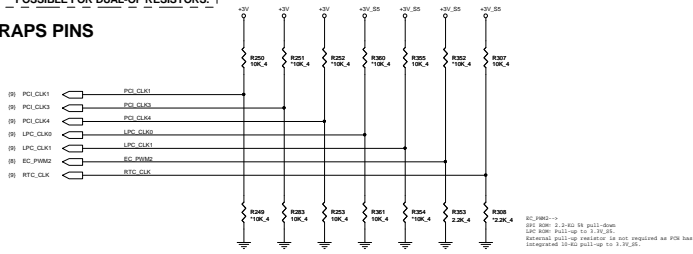
BOARD_ID1	LCD	BOARD_ID2	BOARD_ID3	For TP
0	eDP	0	1	ALPS
1	LVDS	1	0	ELAN
		1	1	Synaptics

PLACE ALL THE DECOUPLING CAPS ON THIS SHEET CLOSE TO SB AS POSSIBLE.



OVERLAP COMMON PADS WHERE POSSIBLE FOR DUAL-OP RESISTORS.

STRAPS PINS



```

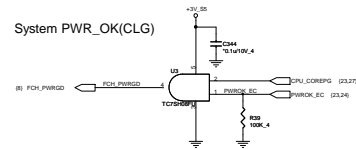
MC_PMC2-->
SPI ROM: 2.3-KB 54 pull-down
LPC ROM: Pull-up to 3.3V_56.
External pull-up resistor is not required as PCR has
integrated 10-KB pull-up to 3.3V_56.

```

Remove PCI_CLK2 function

REQUIRED STRAPS

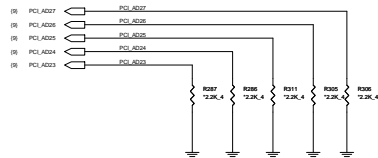
	PC1_CLK1	PC1_CLK2	PC1_CLK3	PC1_CLK4	LPC_CLK0	LPC_CLK1	EC_PWM2	RTC_CLK
PULL HIGH	ALLOW PCE Gen0 DEFAULT	USE DEBUG STRAP	non_Fusion CLOCK MODE DEFAULT	EC ENABLED	CLKGEN DISABLED	CLK ROM	SS PLUS MODE DISABLED	
PULL LOW	FORCE PCE Gen0	IGNORE DEBUG STRAP DEFAULT	FUSION CLOCK MODE DEFAULT	EC DISABLED	CLKGEN DISABLED	SPI ROM	SS PLUS MODE ENABLED	



FCH PWRGD CKT

DEBUG STRAPS

FCH HAS 15K INTERNAL PU FOR PCI_AD[27:23]



	PCI_AD27	PCI_AD26	PCI_AD25	PCI_AD24	PCI_AD23
PULL HIGH	USE PCI PLL DEFAULT	DISABLE ILA AUTORUN DEFAULT	USE FC PLL DEFAULT	USE DEFAULT PCI STRAPS DEFAULT	DISABLE PCI MEM BOOT DEFAULT
PULL LOW	BYPASS PCI PLL	ENABLE ILA AUTORUN	BYPASS FC PLL	USE EEPROM PCI STRAPS	ENABLE PCI MEM BOOT

**Quanta Computer Inc.**

PROJECT : ZQZ

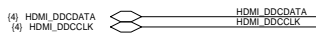
Size	Document Number	Rev
	FCH 5/5(STRAP & PWRGD)	1A
Date:	Thursday, February 23, 2012	Sheet 12 of 32

20120110:
Change C398 from .1u_10V_4 to 1000p/50V_4

[illegible]

EM-6781-T3: AL006781000
 APX9132H AI-TRG: AL009132001
 AH9249NTR-G1: AL009249000

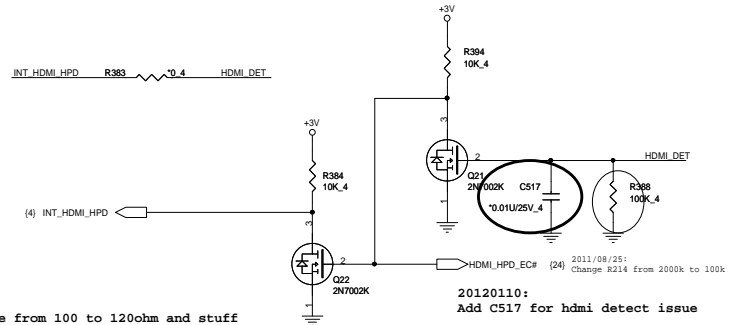
HDMI SDVO I2C Control



HDMI HPD SENSE (HDM)

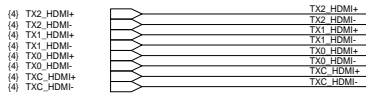
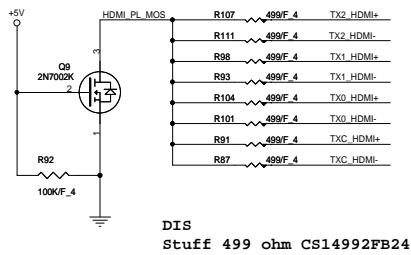
UMA use +3V for the detect pin
Dis use +3V_DELAY for the detect pin

14



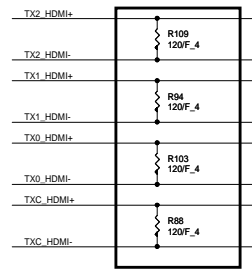
HDMI (HDM)

Close to HDMI Connector

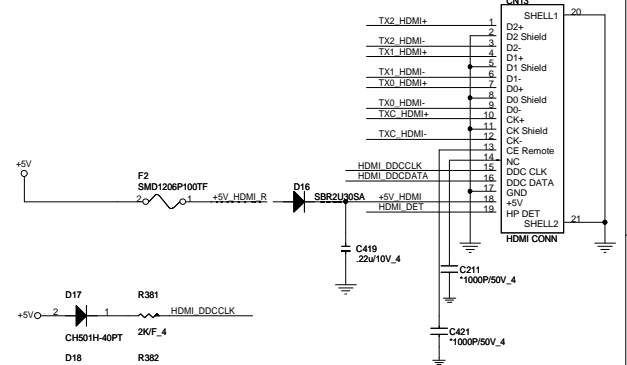


EMI reserve for HDMI(EMC)

Close connector

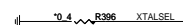
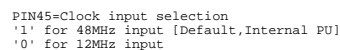
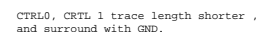


HDMI PORT (HDM)

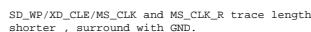


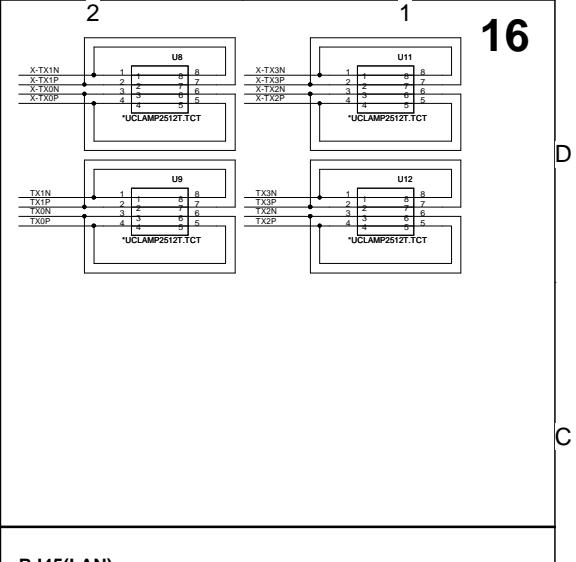
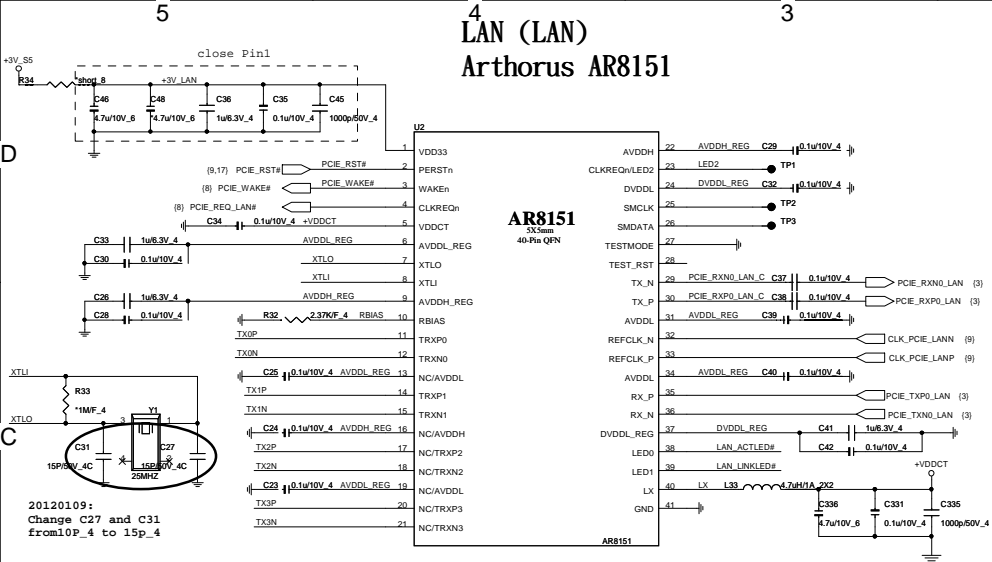
Quanta Computer Inc.
PROJECT : ZQZ

Size	Document Number	HDMI	Rev
Date: Thursday, February 23, 2012	Sheet	14 of 32	1A

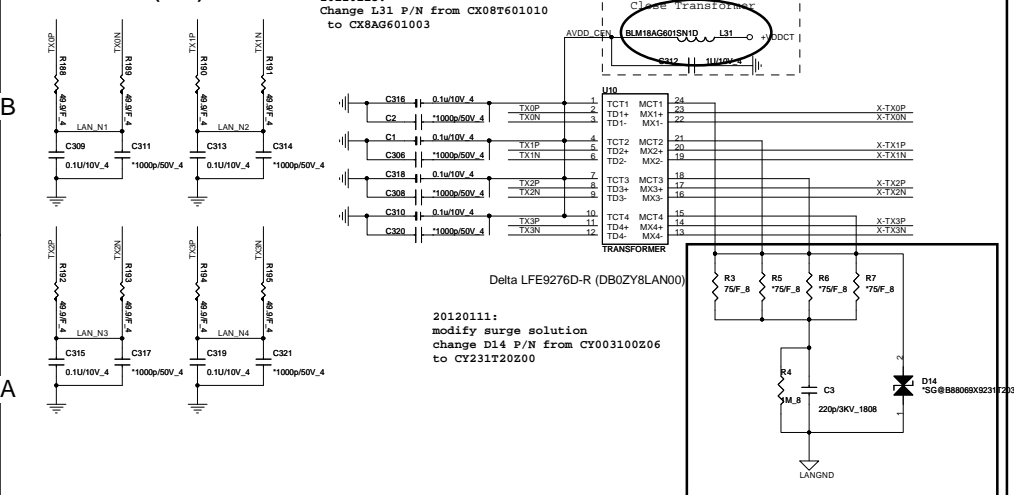


SD_CLK/XD_ALE/MS_BS and SD_CLK_R trace length shorter, surround with GND.

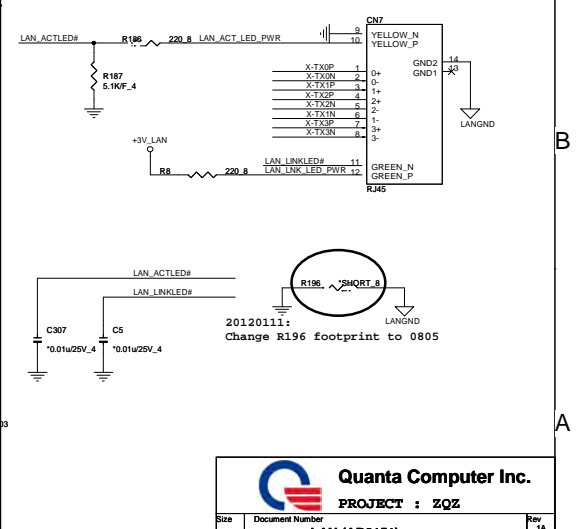




TRANSFORMER(LAN)



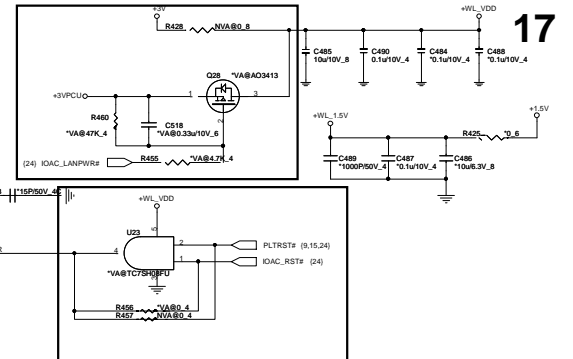
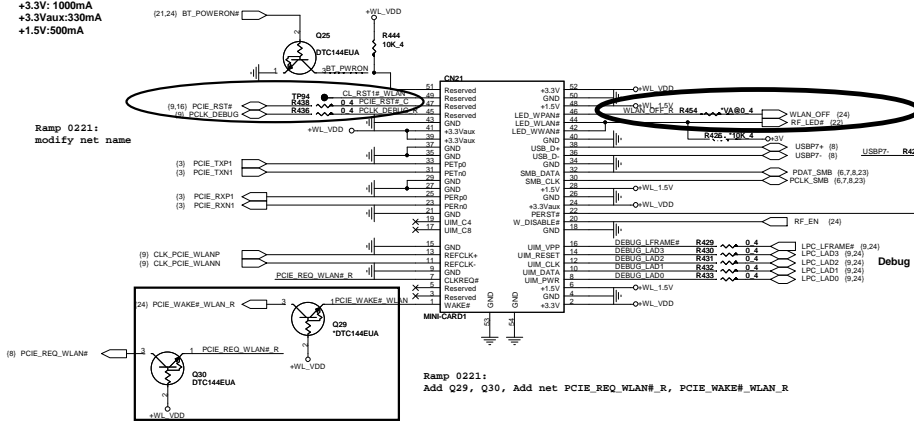
RJ45(LAN)



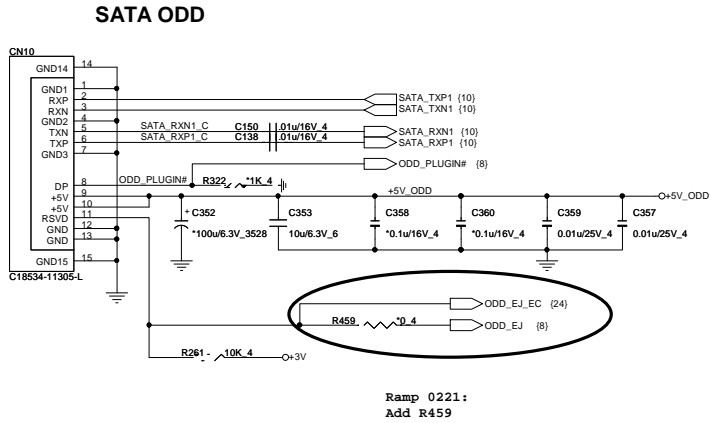
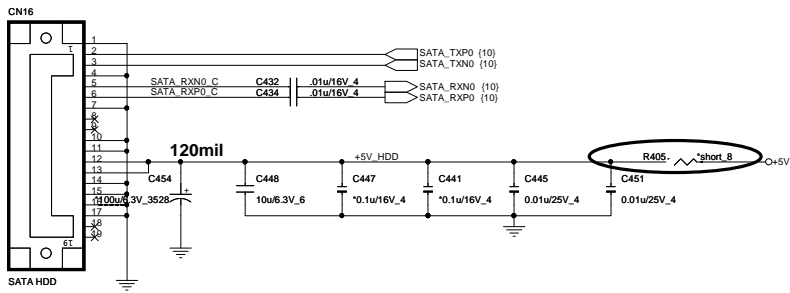
MINI-CARD WLAN(MPC)

+3.3V: 1000mA
+3.3Vaux:330mA
+1.5V:500mA

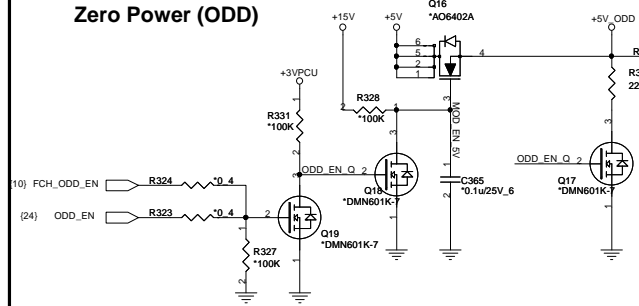
Check LED signal. (active high or low)




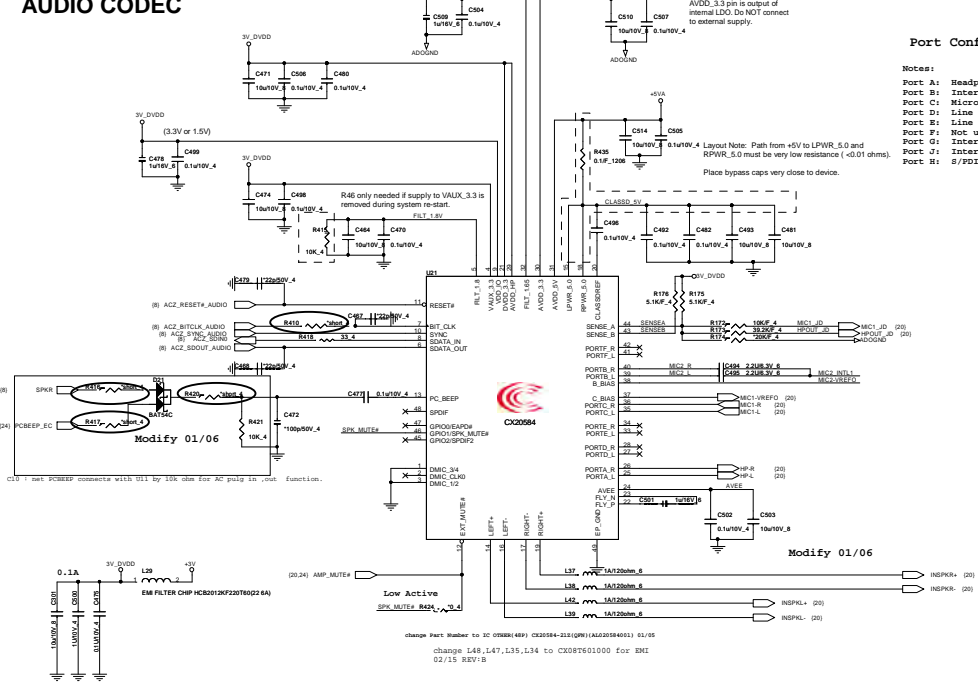
mSATA



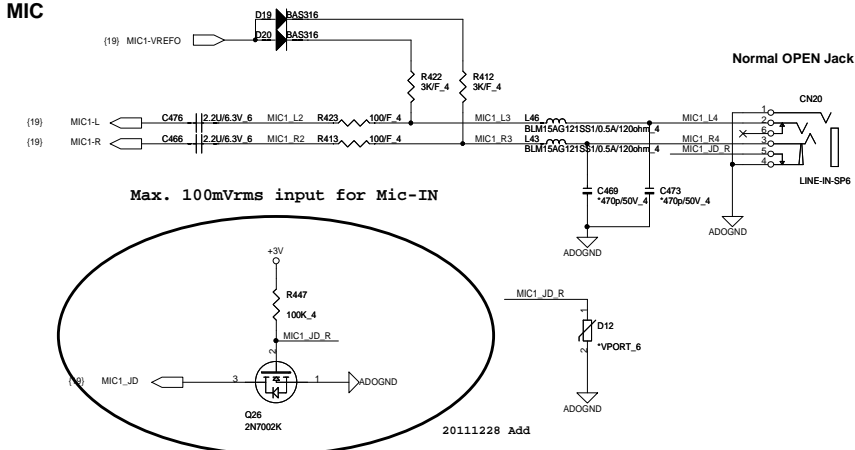
```
Ramp 0221:
Add R459
```



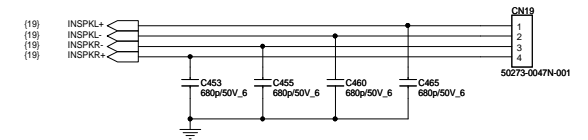
 Quanta Computer Inc. PROJECT : ZQZ	
Size	Document Number SATA-HDD/ODD/HOLE
Date: Thursday, February 23, 2012	Sheet 18 of 32 Rev 1A



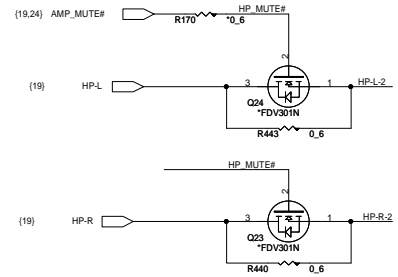
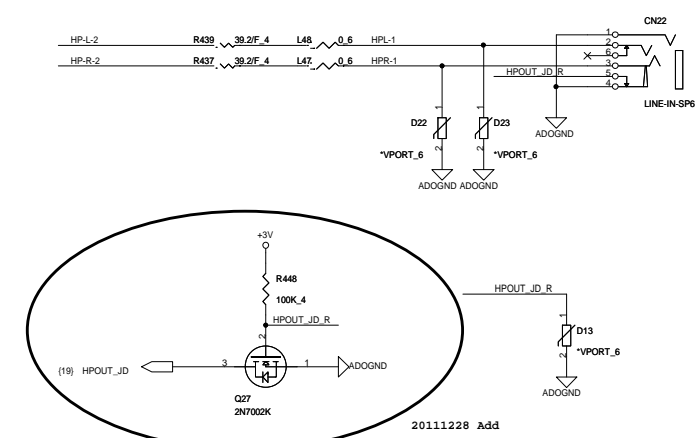
MIC




Internal Speaker

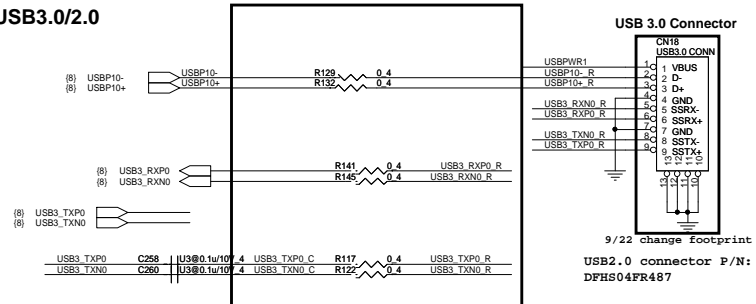


HP

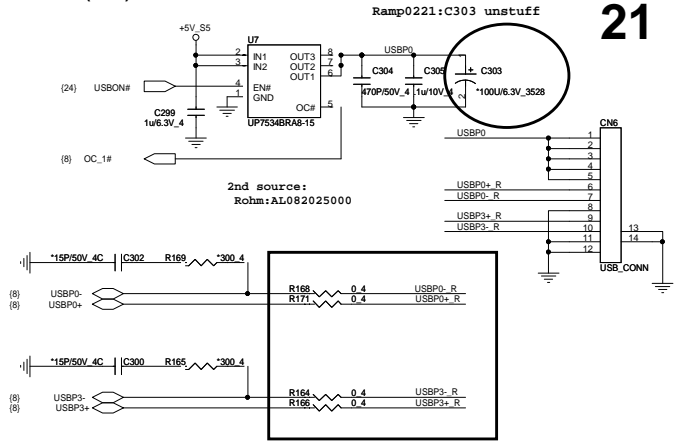


 Quanta Computer Inc.	
PROJECT : ZQZ	
Size	Document Number
AUDIO JACK CONN	
Date: Thursday, February 23, 2012	Sheet 20 of 32

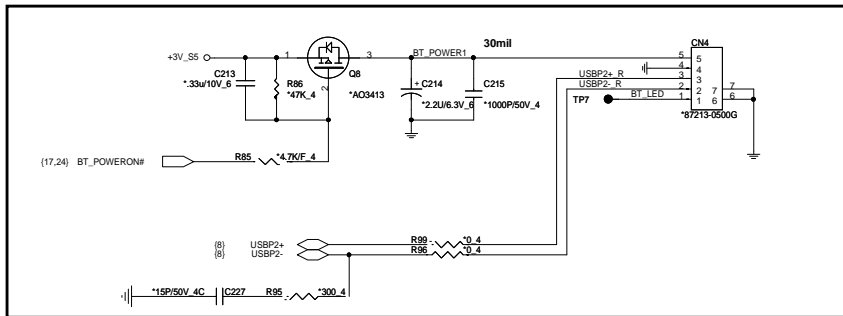
USB3.0/2.0



EXT. USB(USB)

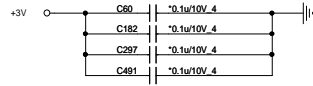
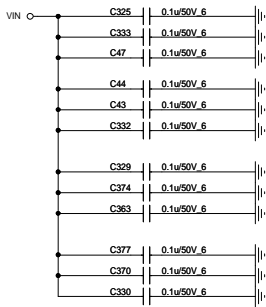


BLUETOOTH V3.0 CONN(BTM)

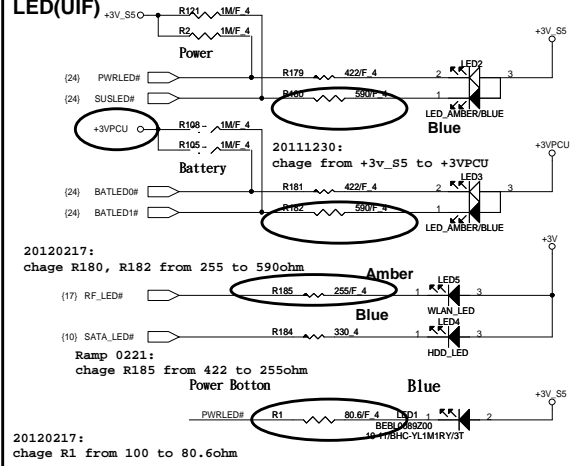


Ramp 0221:
L27, RP5, RP6, L26, L30, L28

EE RETURN-PATH CAPACITORS(EMC)

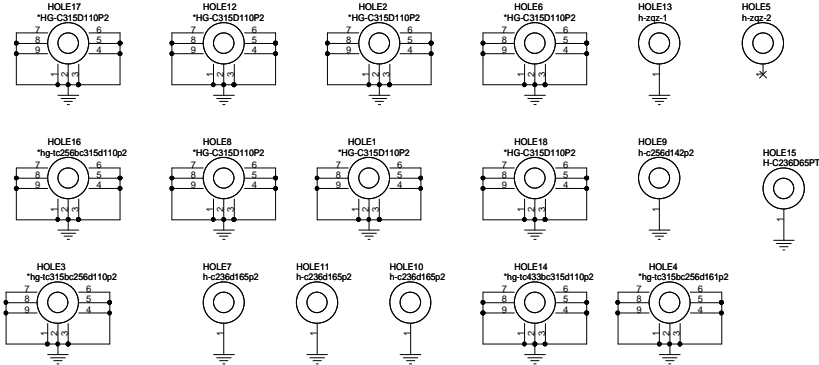


LED(UIF)



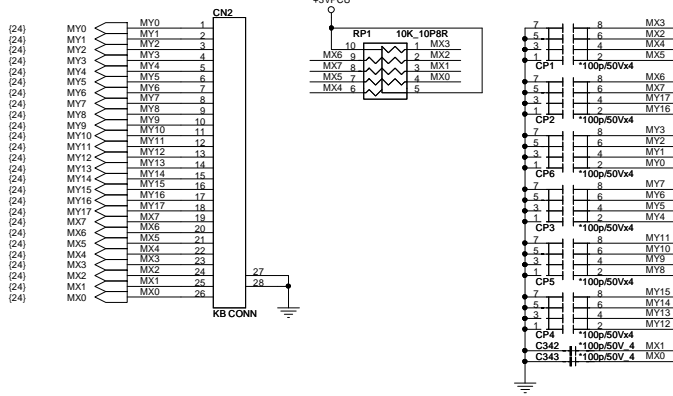
22

HOLE(OTH)

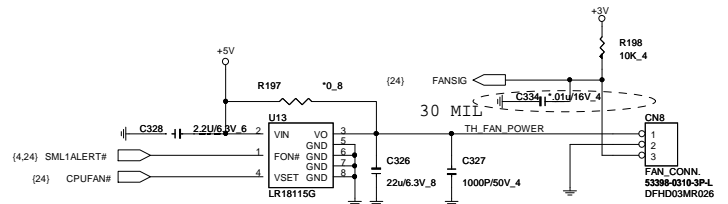


Quanta Computer Inc.
PROJECT : ZQZ
29 - LED/ EM/ Screw Hole& Nut
Date: Thursday, February 23, 2012 Sheet 22 of 32

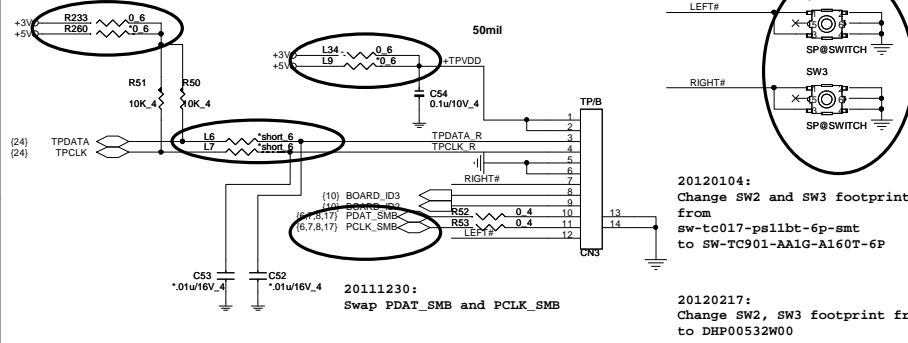
K/B(KBC)



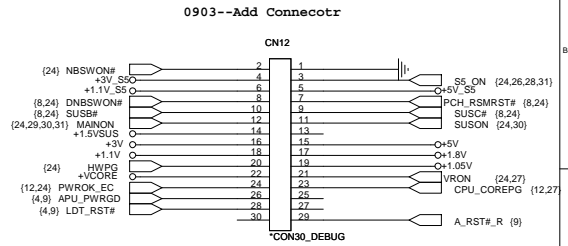
CPU FAN(THM)



TOUCHPAD BOARD CONN(TPD)

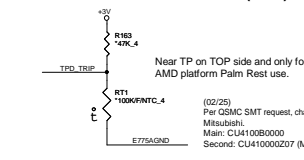


Power Sequence

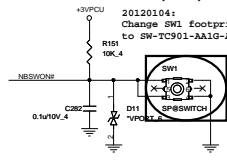


Quanta Computer Inc.
PROJECT : ZQZ
30 - KB/TP/FAN
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PALM REST THERMAL SENSOR (THM)

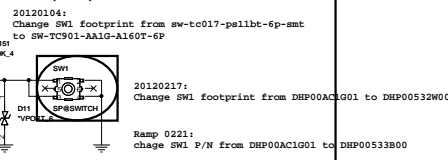


POWER-ON SWITCH (KBC)

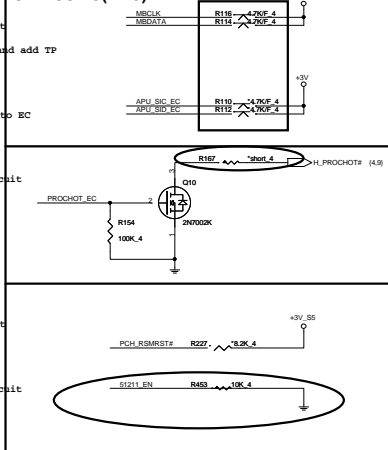


SM BUS ARRANGEMENT TABLE

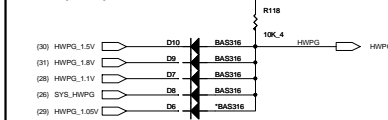
SM Bus 1	Battery
SM Bus 2	APU
SM Bus 3	
SM Bus 4	

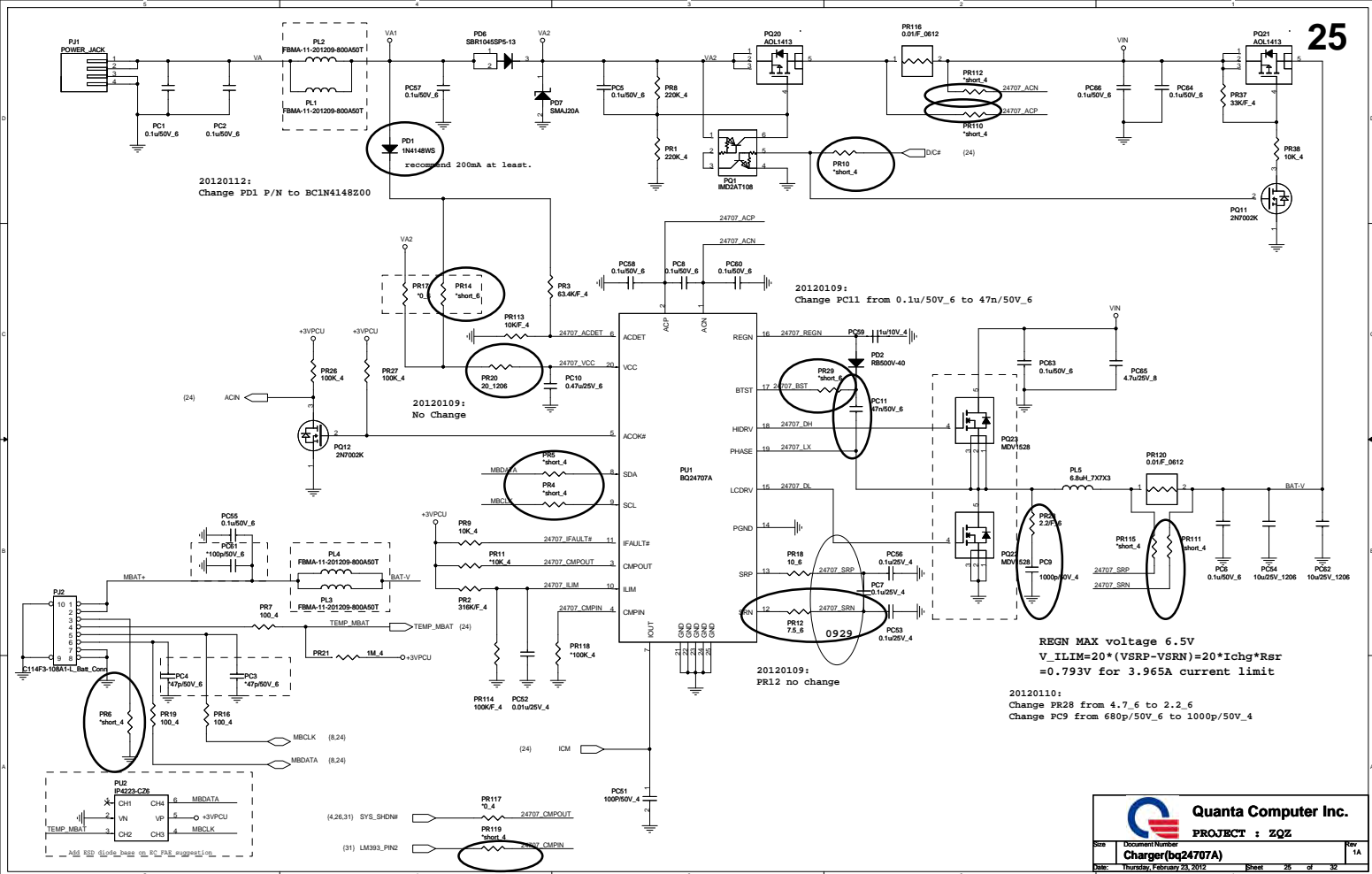


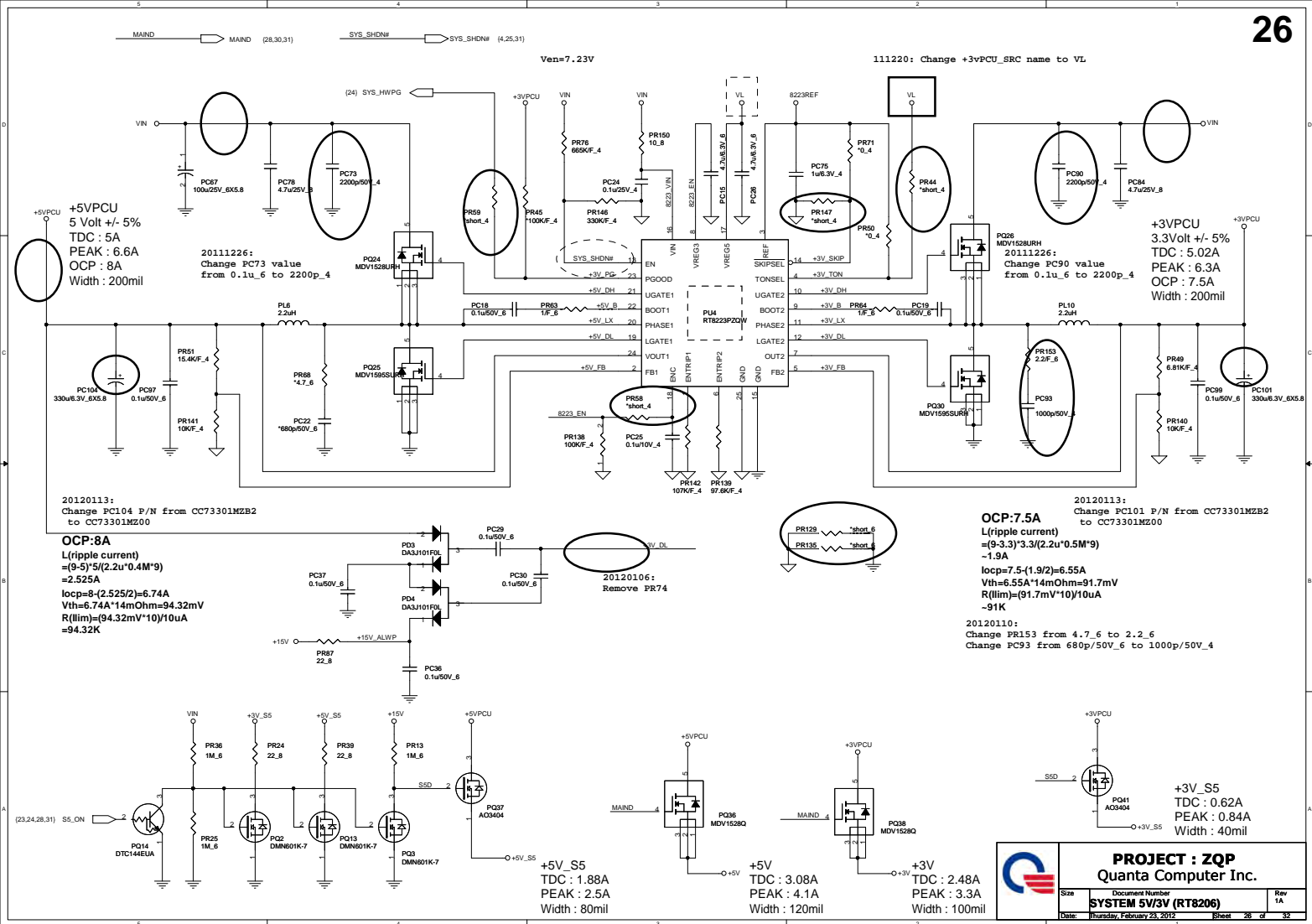
SM BUS PU(KBC)

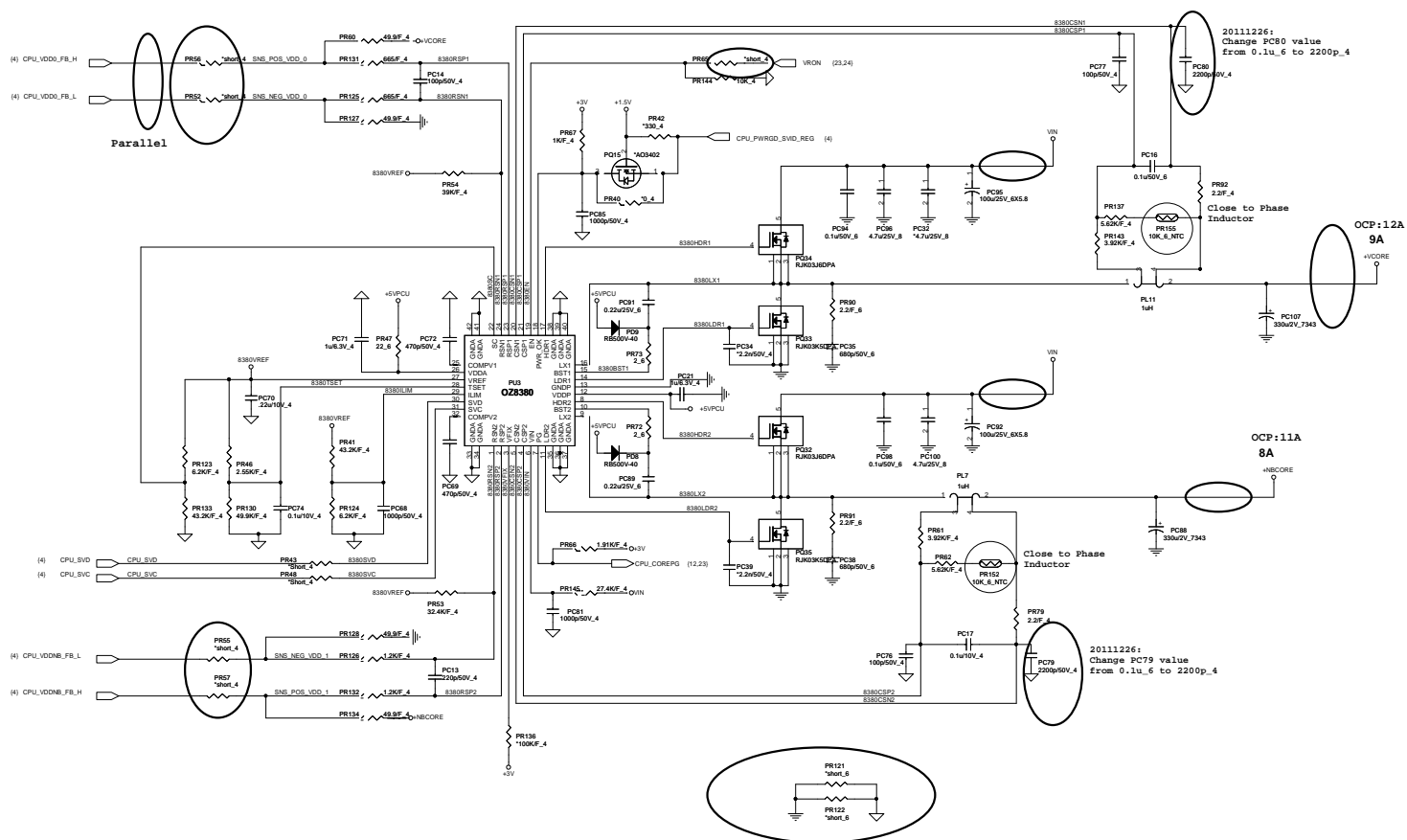


HWPG(KBC)

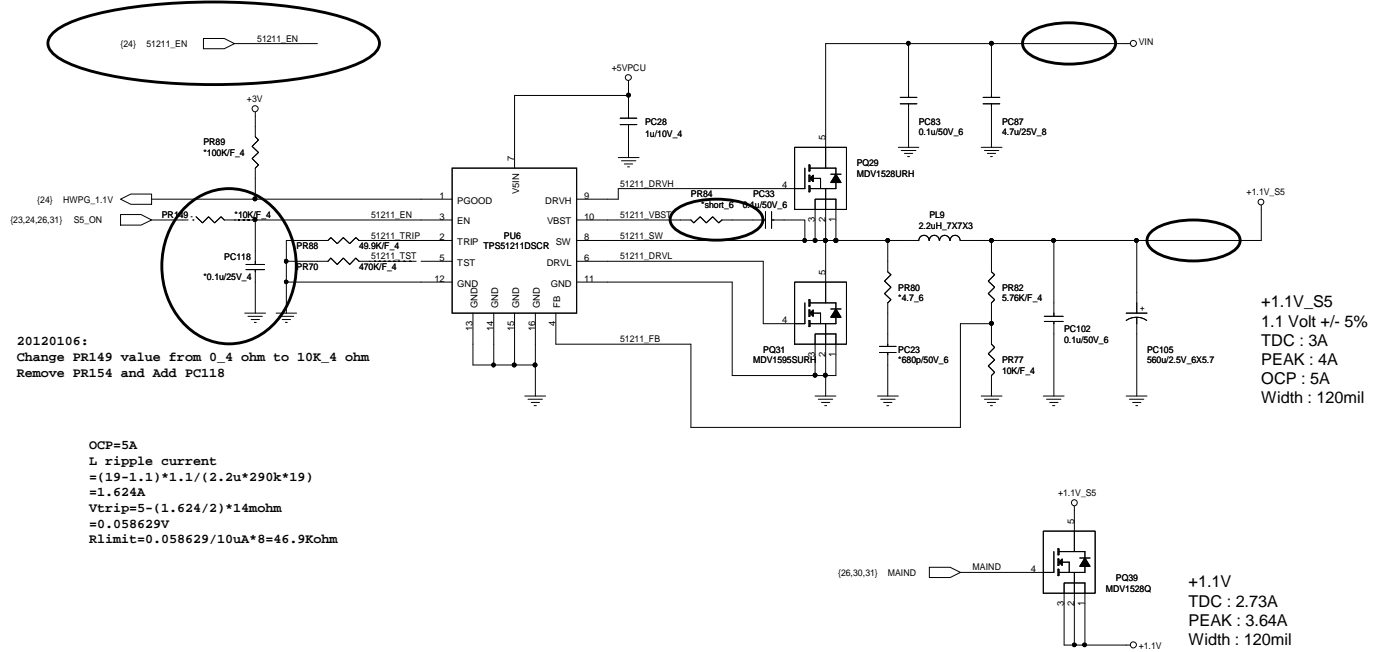





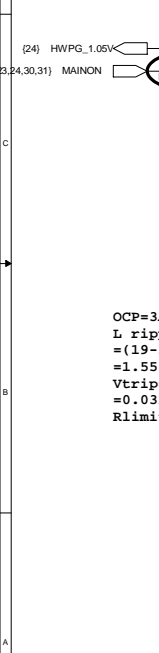





20120106:
Add net +1.1V_S5_EN to EC and add R452

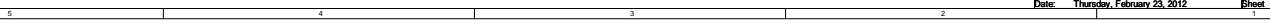


 Quanta Computer Inc. PROJECT : ZQZ			
Size	Document Number	VCCP 1.1V(TPS51211)	Rev 1A
Date	Thursday, February 23, 2012	Sheet	28 of 32




```
OCP=3A
L ripple current
=(19-1.05)*1.05/(2.2u*290k*19)
=1.555A
Vtrip=3-(1.555/2)*14mohm
=0.03111V
Rlimit=0.03111/10uA*8=24.89Kohm
```

 Quanta Computer Inc. PROJECT : ZQZ		Rev 1A
Size	Document Number +1.05V(TPS51211)	
Date:	Thursday, February 23, 2012	Sheet 29 of 32



MODEL		REV	CHANGE LIST		Model ZQE/G M/B BOARD		
				Page	From	To	
ZQZ M/B	A	First Release					
	B	111220: page26--Change PR44 net from +3VPCU_SRC name to VL 111220: Change all TP footprint to TP2650 111226: page25--Change PR20 value from 20_1206ohm to 22_8ohm Change PR12 value from 7.5ohm to 10ohm page26&27--Change PC73, PC79, PC80, PC90 value from 0.1u_6 to 2200p_4 111228: page20--Add R447, R448, Q26, Q27 111230: page23--Swap PDAT_SMB and PCLK_SMB 120103: page24--Change TP26 from U4.105 to U4.22 Change net CPUFAN# from U4.22 to U4.105 120104: Change PQ22,PQ23,PQ24,PQ25,PQ26,PQ27,PQ28,PQ29,PQ30,PQ31,PQ36,PQ38,,PQ39, PQ40,PQ43,PQ44 footprint to wdfn5-3_05x3_05-65 120104: page13--Swap INT_EDIDCLK from CN1.32 to CN1.33 Swap INT_EDIDDATA from CN1.33 to CN1.32 Change SW1, SW2, SW3 footprint from sw-tc017-ps11bt-6p-smt to SW-TC901-AA1G-A160T-6P R30, R28, Q2, Q3 unstuff, R21 stuff page10--Add R449, R450, R451 Add net N30960722 120106: page26--Remove PR74 page24--Remove net POWERSMAR_SW and add TP97 page24--Remove net POWERSMARTLED and add TP95 page24--Remove net +0.75V_ON and add TP96 page28--Change PR149 value from 0_4 ohm to 422K_4 ohm page28--Remove PR154 and Add PC118 page28--Add net +1.1V_S5_EN to EC and add R452 page24--Connect net SML1ALERT# to EC and add R453 120109: page26--Change C27 and C31 from10P_4 to 15p_4 120109: page25--PR20 No change 120109: page25--Change PC11 from 0.1u/50V_6 to 47n/50V_6 120109: page25--PR12 no Change 120109:Remove JP9, JP3, JP12, JP3, JP10, JP11, JP13, JP14, JP7, JP1, JP2, JP4, JP5, JP6 120110:page25--Change PR28 from 4.7_6 to 2.2_6, Change PC9 from 680p/50V_6 to 1000p/50V_4 120110:page26--Change PR153 from 4.7_6 to 2.2_6, Change PC93 from 680p/50V_6 to 1000p/50V_4 120110:page30--Change PR159 from 4.7_6 to 2.2_6, Change PC115 from 680p/50V_6 to 1000p/50V_4 120110:page13--Change L14, L17, L23 from BLM18BA470SN1_6 to BLM18BB750SN1D 120110:page13--Change C398 from .1u_10V_4 to 1000p/50V_4 120110:page9--Change R364 from 22_4 to 33_4 -->for slewrate issue 120111:page16--modify surge solution and change D14 P/N from CY003100Z06 to CY231T20Z00 120111:page10--Connect R451 net from FCH_SPI_CS0# to SPI_CS 120111:page14--Add C517 for hdmi detect issue 120111:page16--Change R196 footprint to 0805 120112:page09--Change R359 from 22_4 to 33_4-->follow vender suggestion 120112:page24--Change R110, R112, R116, R114 from 10k to 4.7k-->follow vender suggestion 120112:Change PQ24, PQ26, PQ28, PQ29, PQ44 P/N from BAM74100001 to BAM15280000 120112:Change PQ25, PQ27, PQ30, PQ31, PQ43 P/N from BAM77020000 to BAM15950000 120112:Change PQ32, PQ34 P/N from BAM14480000 to BAM03J60000 120112:Change PQ33, PQ35 P/N from BAM17180000 to BAM03K50000 120113:page25--Change PD1 P/N to BC1N4148Z00 120113:page16--Change Change L31 P/N from CX08T601010 to CX8AG601003 120113:page26--Change PC101, PC104 P/N from CC73301MZB2 to CC73301MZ00 120217:page22--Change R180, R182 from 255 to 590ohm 120217:page22--Change R1 from 100 to 80.6ohm 120217:page23,24--Change SW1, SW2, SW3 from DHP00AC1G01 to DHP00532W00	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54	1A 			



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