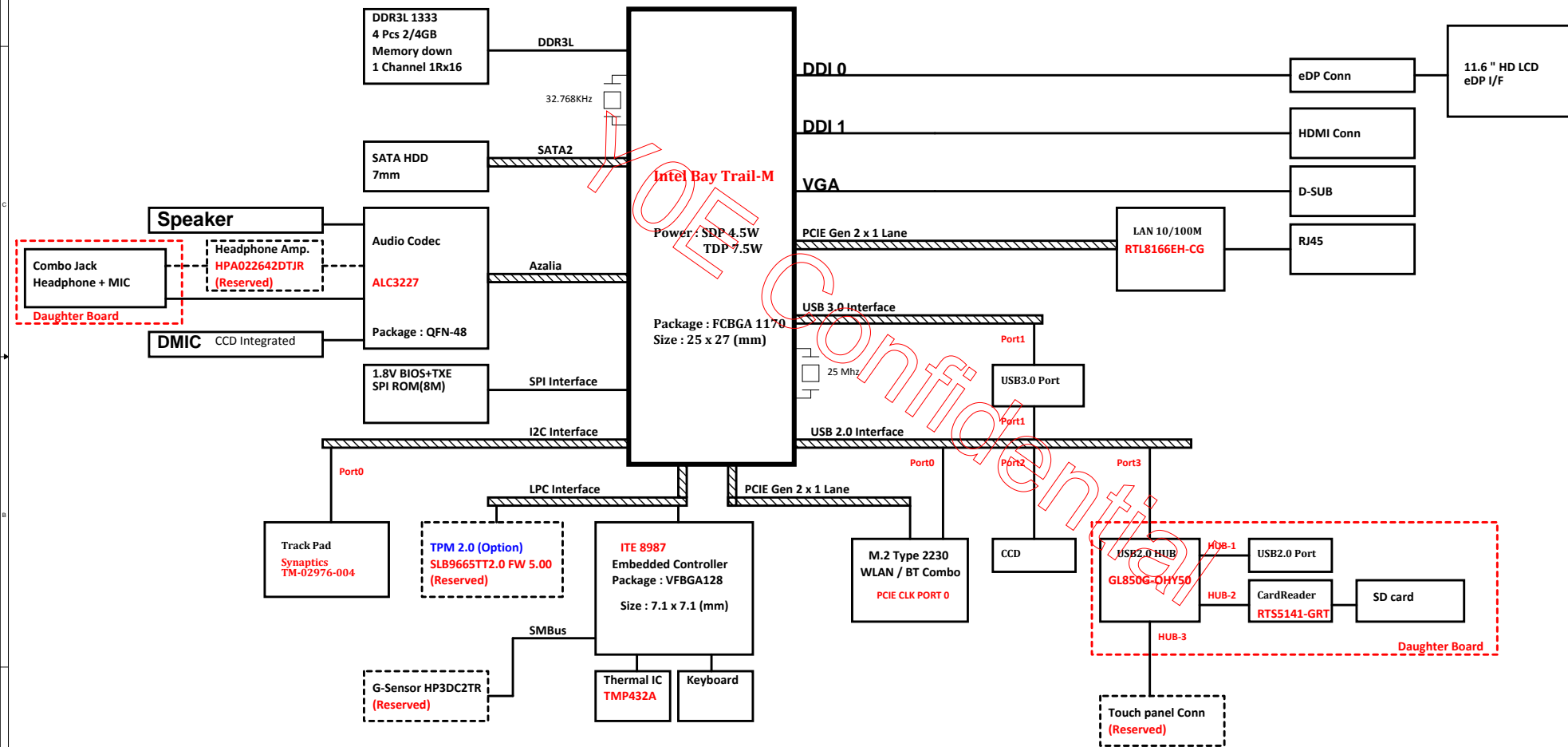
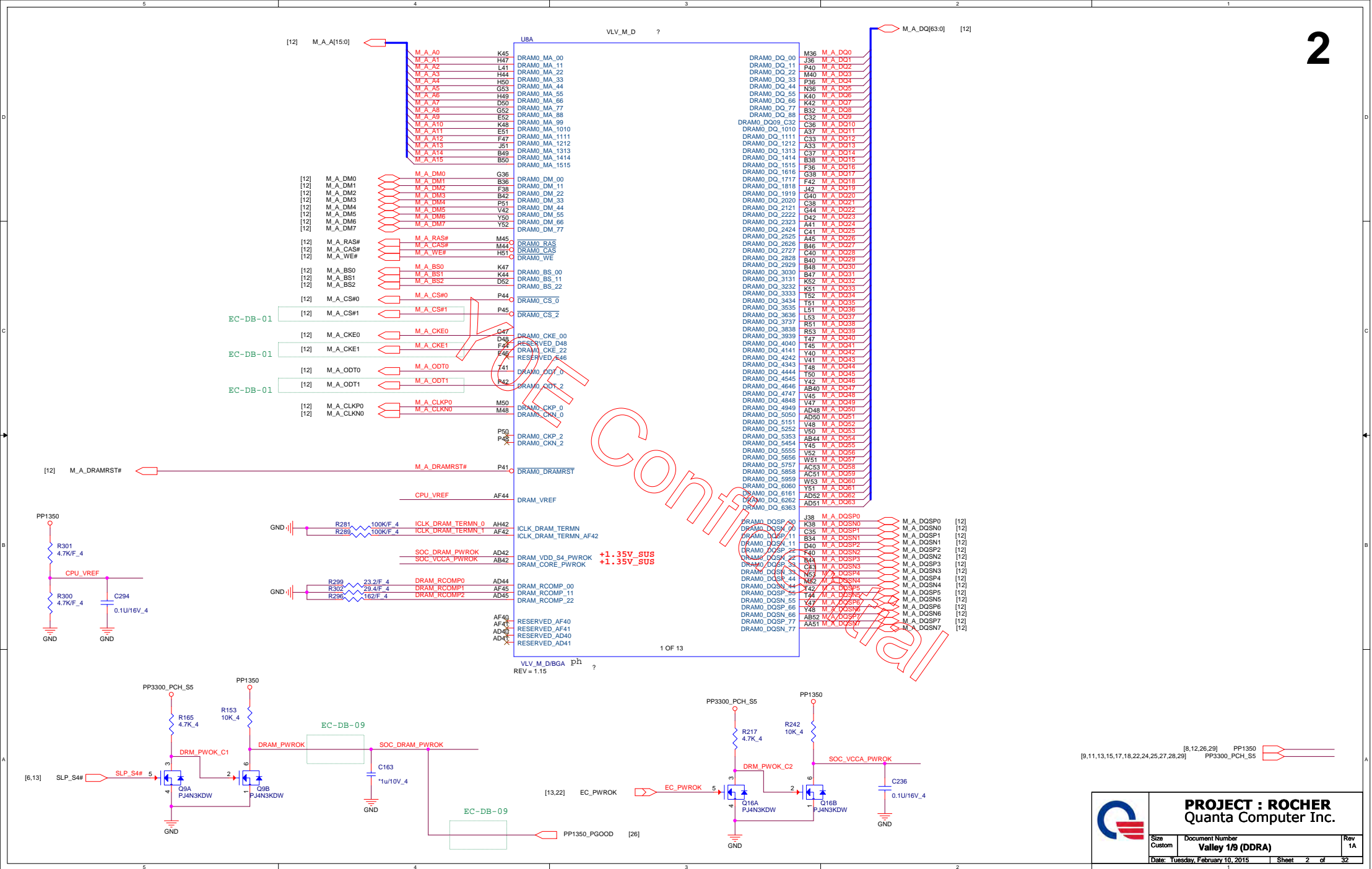


# HP Rocher 1.0 RFQ

## Intel Bay Trail-M Platform Block Diagram





UBB		VLV_M_D ?	
AY45	DRAM1_MA_00	DRAM1_DQ_00	BG38
BB47	DRAM1_MA_11	DRAM1_DQ_11	BC40
AW47	DRAM1_MA_22	DRAM1_DQ_22	BA42
BB43	DRAM1_MA_33	DRAM1_DQ_33	BD42
BB39	DRAM1_MA_44	DRAM1_DQ_44	BC38
BC45	DRAM1_MA_55	DRAM1_DQ_55	BD36
BB43	DRAM1_MA_66	DRAM1_DQ_66	BF42
BF40	DRAM1_MA_77	DRAM1_DQ_77	BC44
BC52	DRAM1_MA_88	DRAM1_DQ_88	BF32
BE52	DRAM1_MA_99	DRAM1_DQ_99	BE32
AY48	DRAM1_MA_1010	DRAM1_DQ_1010	BG36
BE37	DRAM1_MA_1111	DRAM1_DQ_1111	BJ37
BD47	DRAM1_MA_1212	DRAM1_DQ_1212	BG33
BA47	DRAM1_MA_1313	DRAM1_DQ_1313	BJ33
BH43	DRAM1_MA_1414	DRAM1_DQ_1414	BG37
BH50	DRAM1_MA_1515	DRAM1_DQ_1515	BH38
		DRAM1_DQ_1616	BJ36
BD38	DRAM1_DM_00	DRAM1_DQ_1717	AT36
BH38	DRAM1_DM_11	DRAM1_DQ_1818	AV40
BC36	DRAM1_DM_22	DRAM1_DQ_1919	AT40
BH42	DRAM1_DM_33	DRAM1_DQ_2020	AK36
AT37	DRAM1_DM_44	DRAM1_DQ_2121	AV36
AM42	DRAM1_DM_55	DRAM1_DQ_2222	AV42
AK39	DRAM1_DM_66	DRAM1_DQ_2323	AV40
AK52	DRAM1_DM_77	DRAM1_DQ_2424	BJ41
AV48	DRAM1_RAS	DRAM1_DQ_2525	BG41
AV48	DRAM1_CAS	DRAM1_DQ_2626	BJ45
BB47	DRAM1_WE	DRAM1_DQ_2727	BH46
AY47		DRAM1_DQ_2828	BG40
AY44	DRAM1_BS_00	DRAM1_DQ_2929	BH40
BF52	DRAM1_BS_11	DRAM1_DQ_3030	BH47
AT44	DRAM1_BS_22	DRAM1_DQ_3131	AY52
		DRAM1_DQ_3232	AY51
AT40	DRAM1_CS_0	DRAM1_DQ_3333	AY52
AT45	DRAM1_CS_2	DRAM1_DQ_3434	AP51
		DRAM1_DQ_3535	AW51
BG47	DRAM1_CKE_00	DRAM1_DQ_3636	AW53
BE48	RESERVED_BE48	DRAM1_DQ_3737	AP51
BD46	DRAM1_CKE_22	DRAM1_DQ_3838	AP53
BE48	RESERVED_BE48	DRAM1_DQ_3939	AP47
		DRAM1_DQ_4040	AP45
AP41	DRAM1_ODT_0	DRAM1_DQ_4141	AP40
AT42	DRAM1_ODT_2	DRAM1_DQ_4242	AM41
		DRAM1_DQ_4343	AP48
AV50	DRAM1_CKP_0	DRAM1_DQ_4444	AP50
AV48	DRAM1_CKN_0	DRAM1_DQ_4545	AK42
		DRAM1_DQ_4646	AP40
		DRAM1_DQ_4747	AM45
		DRAM1_DQ_4848	AM47
		DRAM1_DQ_4949	AP48
		DRAM1_DQ_5050	AP50
		DRAM1_DQ_5151	AM48
		DRAM1_DQ_5252	AM50
AT50	DRAM1_CKP_2	DRAM1_DQ_5353	AK44
AT48	DRAM1_CKN_2	DRAM1_DQ_5454	AK45
		DRAM1_DQ_5555	AM52
		DRAM1_DQ_5656	AL51
		DRAM1_DQ_5757	AG53
AT41	DRAM1_DRAMRST	DRAM1_DQ_5858	AG51
		DRAM1_DQ_5959	AL53
		DRAM1_DQ_6060	AK51
		DRAM1_DQ_6161	AP52
		DRAM1_DQ_6262	AP51
		DRAM1_DQ_6363	
		DRAM1_DQSP_00	BF40
		DRAM1_DQSN_00	BD40
		DRAM1_DQSP_11	BC35
		DRAM1_DQSN_11	BH34
		DRAM1_DQSP_22	BA36
		DRAM1_DQSN_22	BY36
		DRAM1_DQSP_33	BH44
		DRAM1_DQSN_33	BG43
		DRAM1_DQSP_44	BU53
		DRAM1_DQSN_44	AV52
		DRAM1_DQSP_55	AP42
		DRAM1_DQSN_55	AP44
		DRAM1_DQSP_66	AK47
		DRAM1_DQSN_66	AK48
		DRAM1_DQSP_77	AK52
		DRAM1_DQSN_77	AL51

VLV\_M\_D/BGA

REV = 1.15

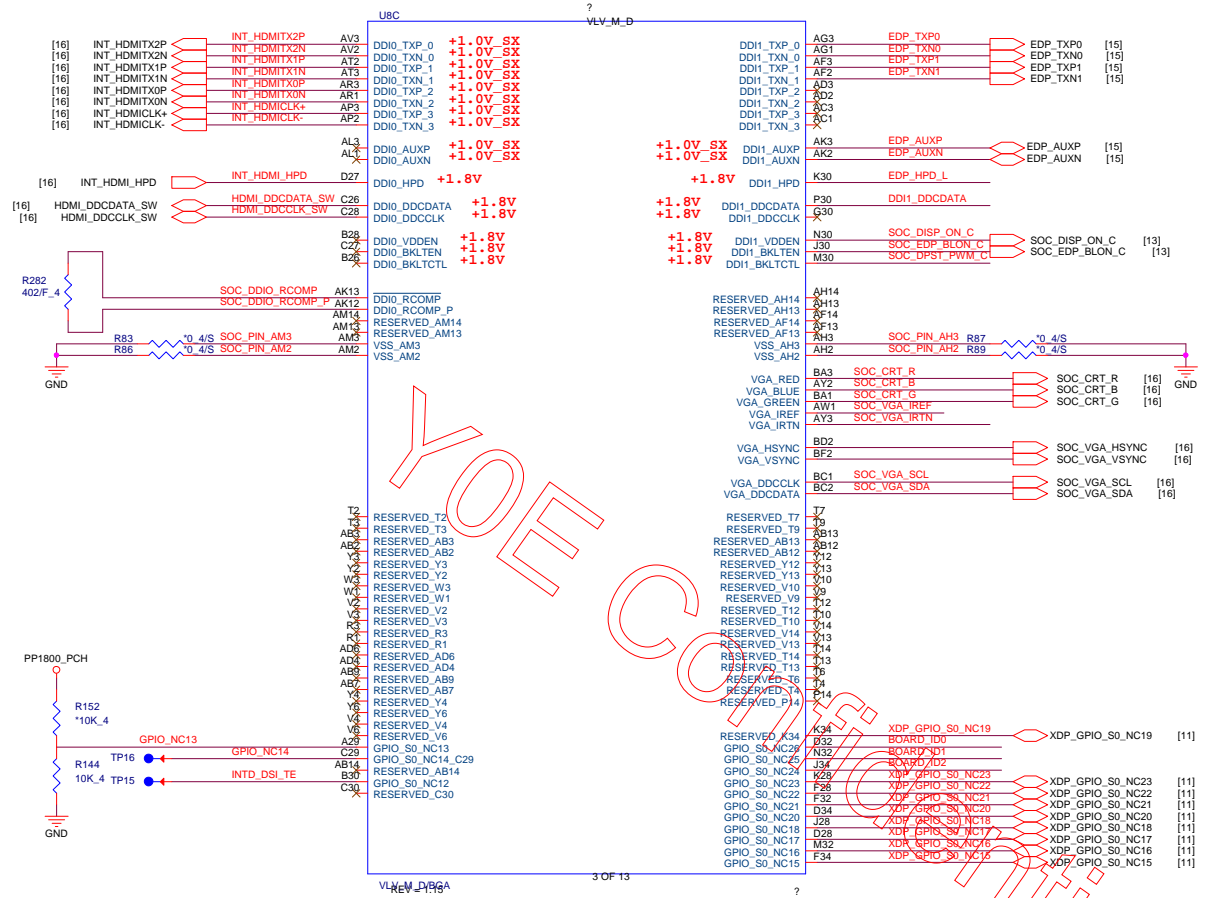
2 OF 13

?

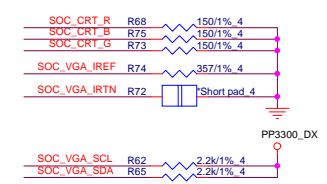
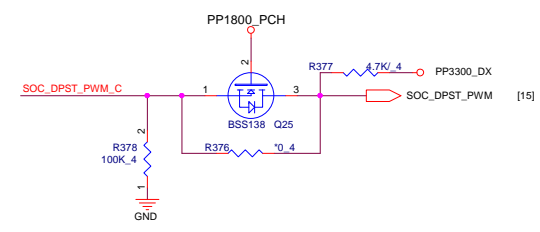
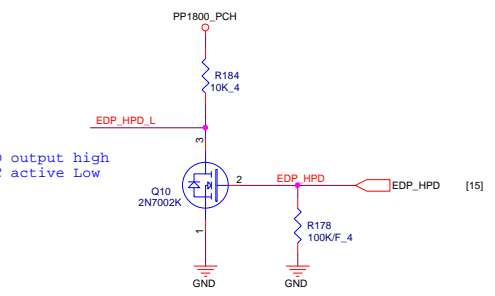


**PROJECT : ROCHER**  
Quanta Computer Inc.

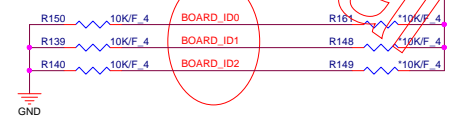
Size	Document Number	Rev
Custom	Valley 2/9 (DDR8)	1A
Date: Tuesday, February 10, 2015	Sheet 3 of 32	



HPD output high  
SOC active Low



Need to discuss with BIOS

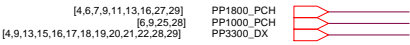


BOARD_ID0	BOARD_ID1	BOARD_ID2	
0	0	0	NO TPM
1	0	0	TPM
0	1	0	

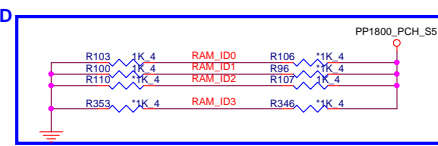
[5,6,7,9,11,13,16,27,29]  
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**PROJECT : ROCHER**  
Quanta Computer Inc.

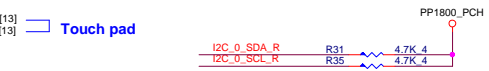
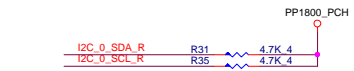
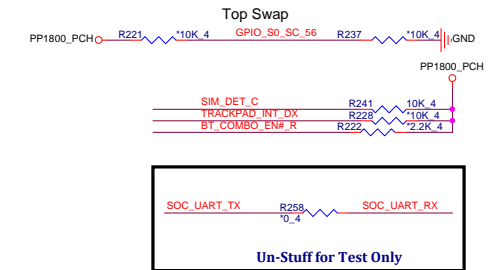
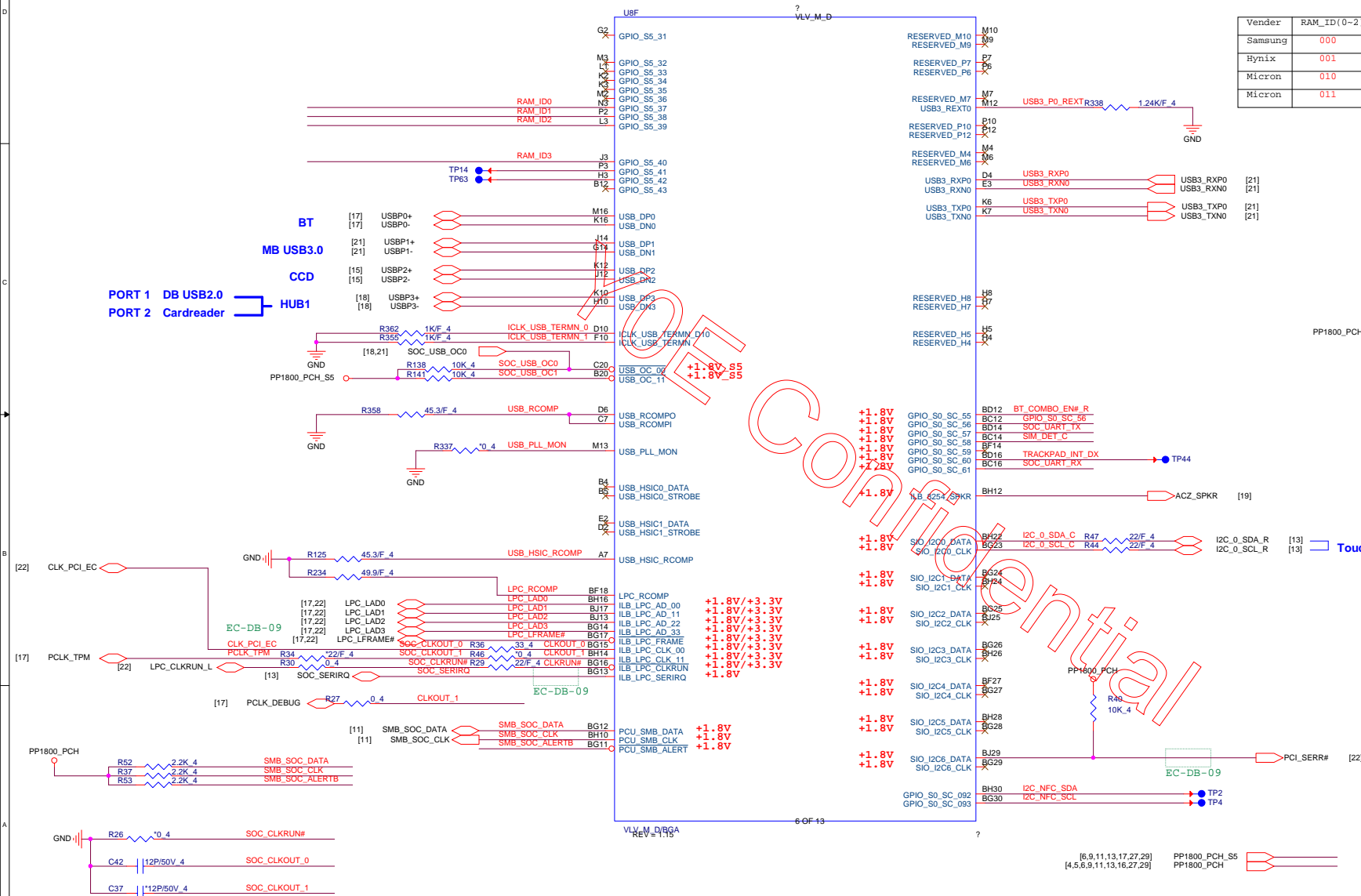
Size Custom	Document Number <b>Valley 3/9 (Display)</b>	Rev 1A
Date: Tuesday, February 10, 2015	Sheet 4 of 32	







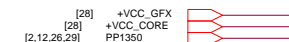
Vender	RAM_ID(0-2)	TOP B/S PN	Mfr. PN	Channel	Size
Samsung	000	AKD5PGST508	K4B4G1646Q-HYK0	1CH	2GB
Hynix	001	AKD5PGSTW14	H5TC4G63CFB-PBA	1CH	2GB
Micron	010	AKD5PGSTL06	MT41K256M16HA-125:E	1CH	2GB
Micron	011	AKD5PGSTL18	MT41K256M16LY-107:N	1CH	2GB



**PROJECT : ROHER**  
Quanta Computer Inc.

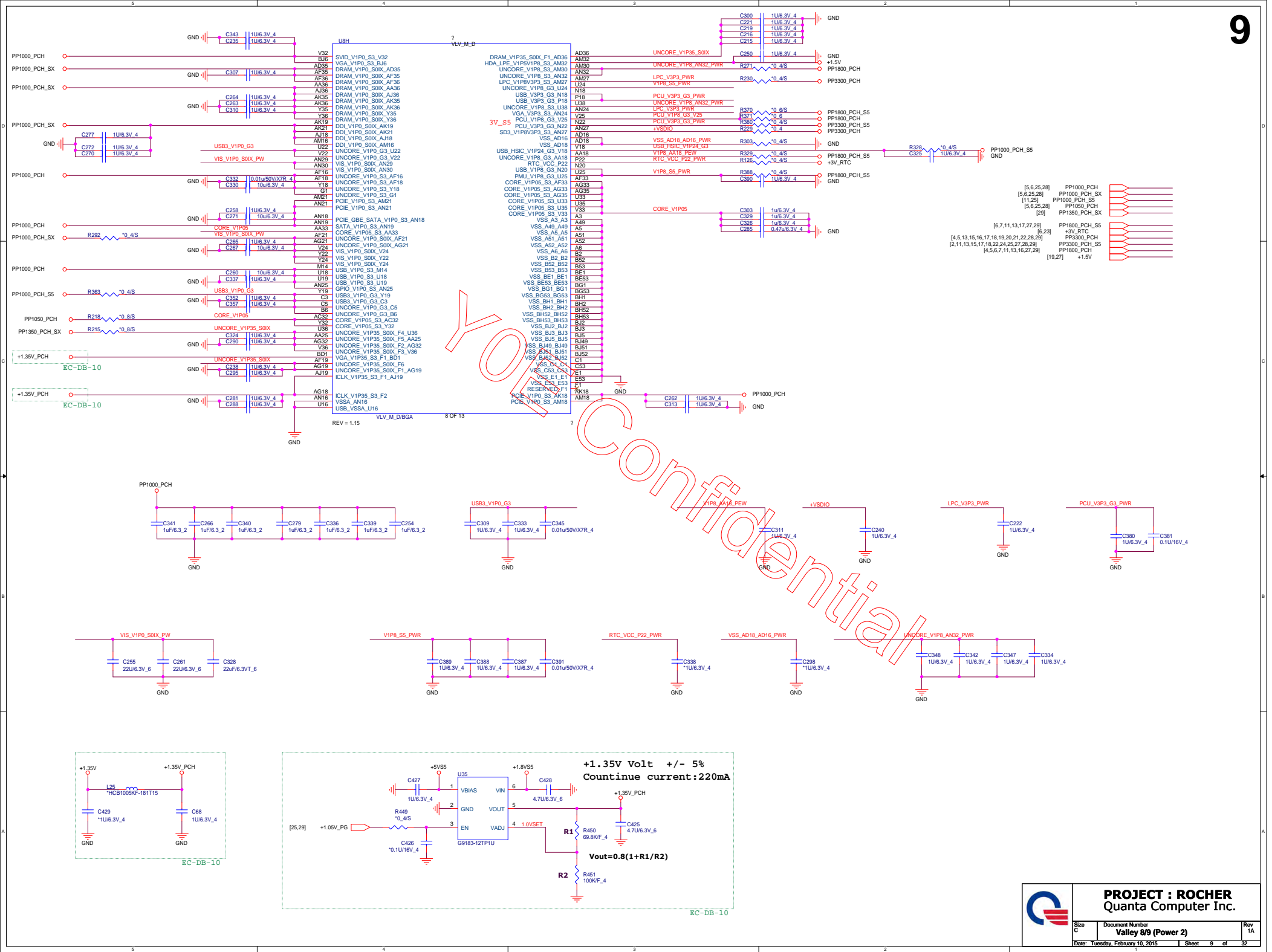
Size	Document Number	Rev
Custom	Valley 6/9 (USB/LPC/I2C)	1A
Date: Tuesday, February 10, 2015	Sheet 7 of 32	

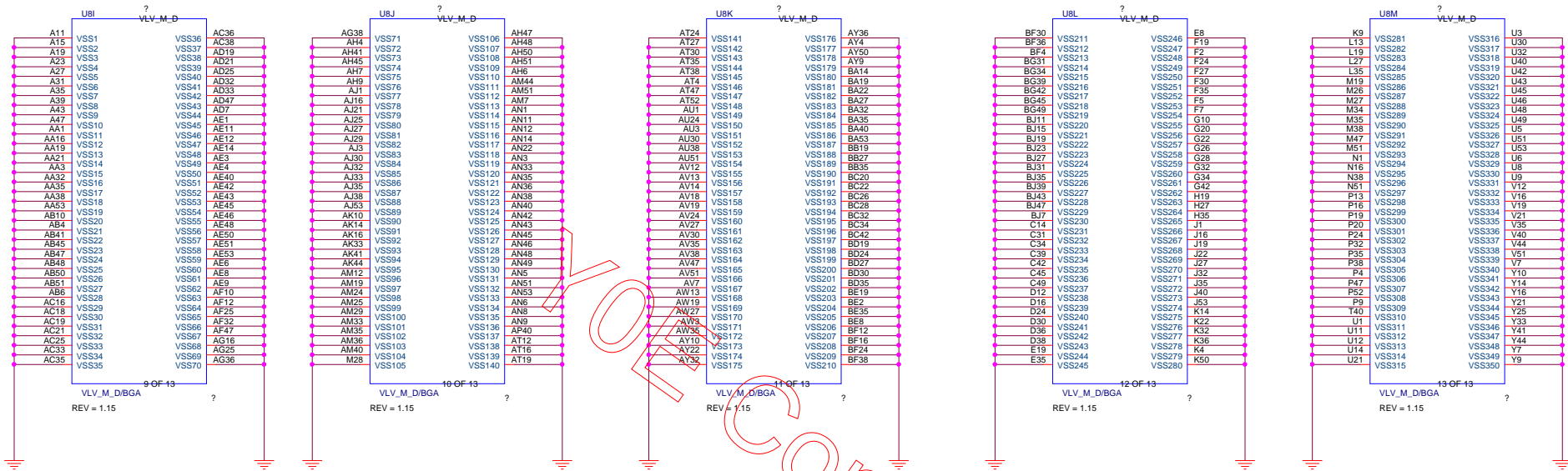




Size Custom	Document Number <b>Valley 7/9 (Power 1)</b>	Rev 1.
Date: Tuesday, February 10, 2015		Sheet 8 of 32







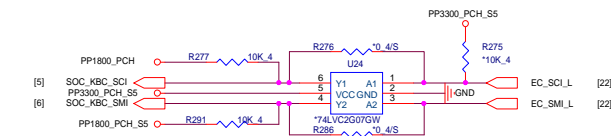
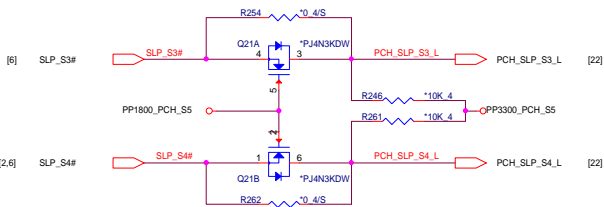
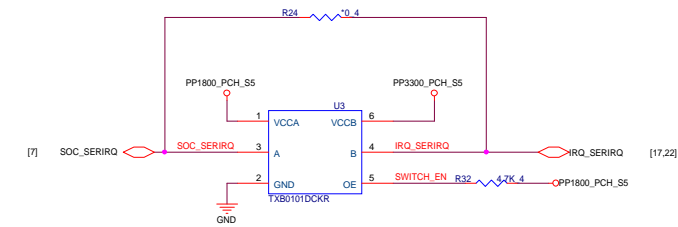
**PROJECT : ROCHER**  
Quanta Computer Inc.

Size	Document Number	Rev
Custom	Valley 9/9 (GND)	1A
Date: Tuesday, February 10, 2015	Sheet 10 of 32	

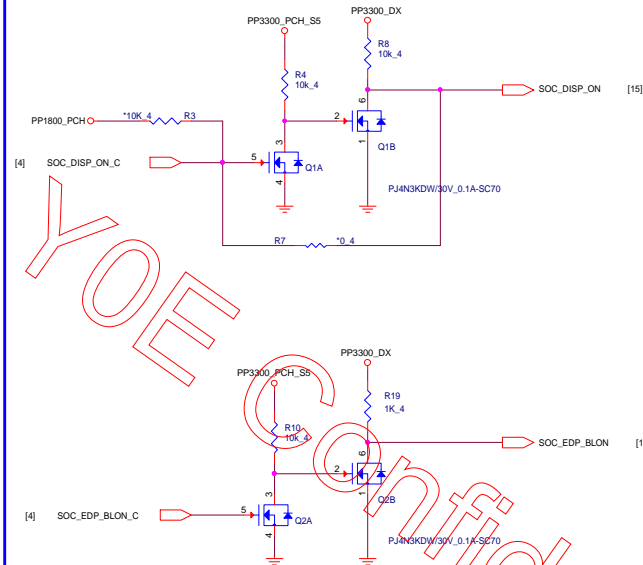




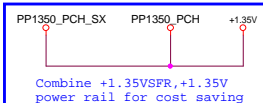
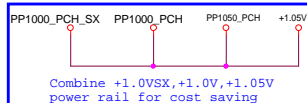
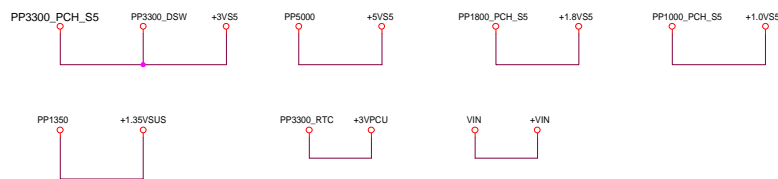
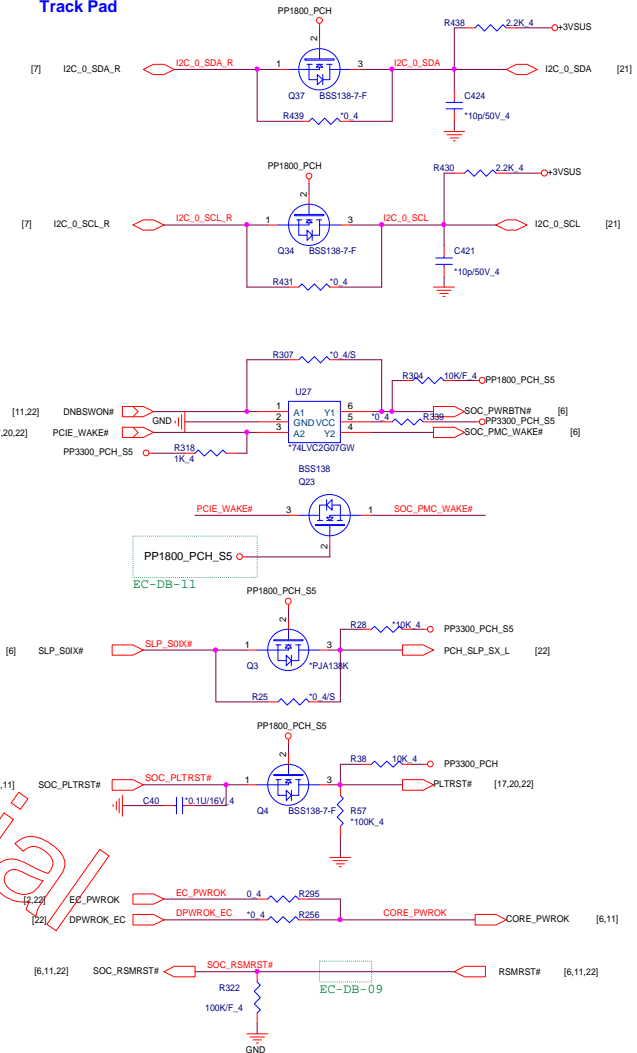
[2,9,11,15,17,18,22,24,25,27,28,29] PP1800\_PCH\_S5  
 [4,5,6,7,9,11,16,27,29] PP3300\_PCH\_S5  
 [4,5,9,15,16,17,18,19,20,21,22,28,29] PP1800\_PCH  
 [4,5,9,15,16,17,18,19,20,21,22,28,29] PP3300\_PCH  
 [4,5,9,15,16,17,18,19,20,21,22,28,29] PP3300\_DX  
 [2,8,12,26,29] +3VSUS  
 PP1350



## eDP control pin (For eDP)



## Track Pad




**PROJECT : ROCHER**  
**Quanta Computer Inc.**

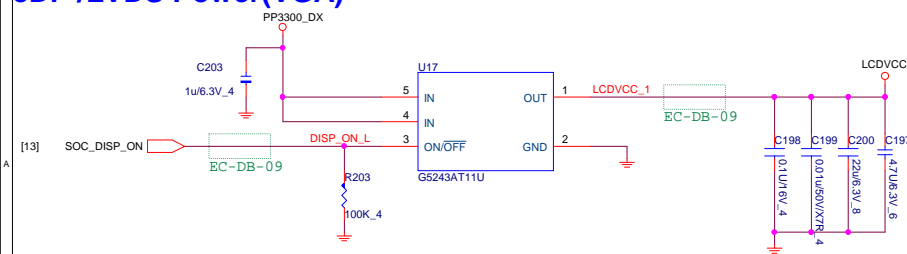
Size C Document Number  
**Level Shifter (SOC\_EC)**  
 Date: Tuesday, February 10, 2015 Sheet 13 of 32

2014/11/11 remove eDP to LVDS converter

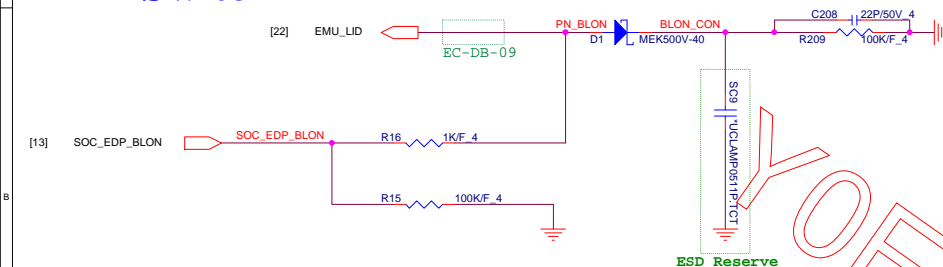
YOE Confidential

			<b>PROJECT : ROCHER</b> Quanta Computer Inc.		
Size Custom	Document Number <b>LVDS converter RTD2132N</b>			Rev 1A	
Date: Tuesday, February 10, 2015		Sheet	14	of	32

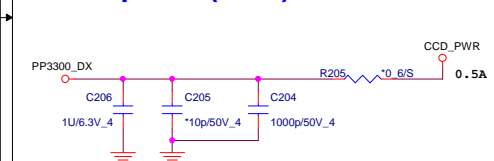
## eDP /LVDS Power(VGA)



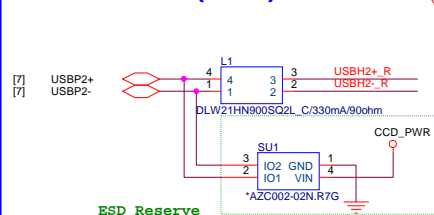
## LID Switch



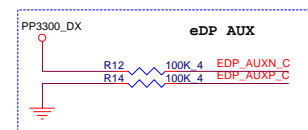
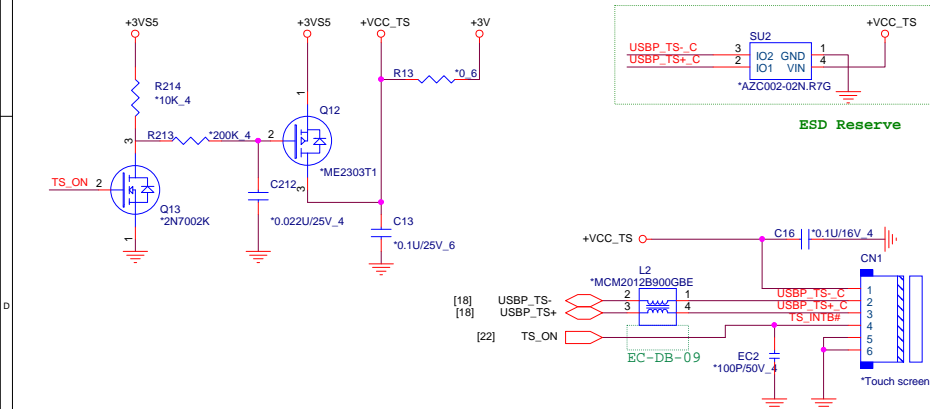
## CCD power(CCD)



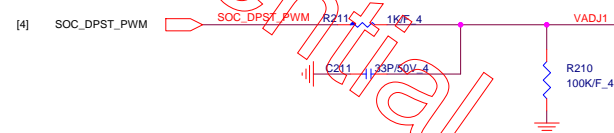
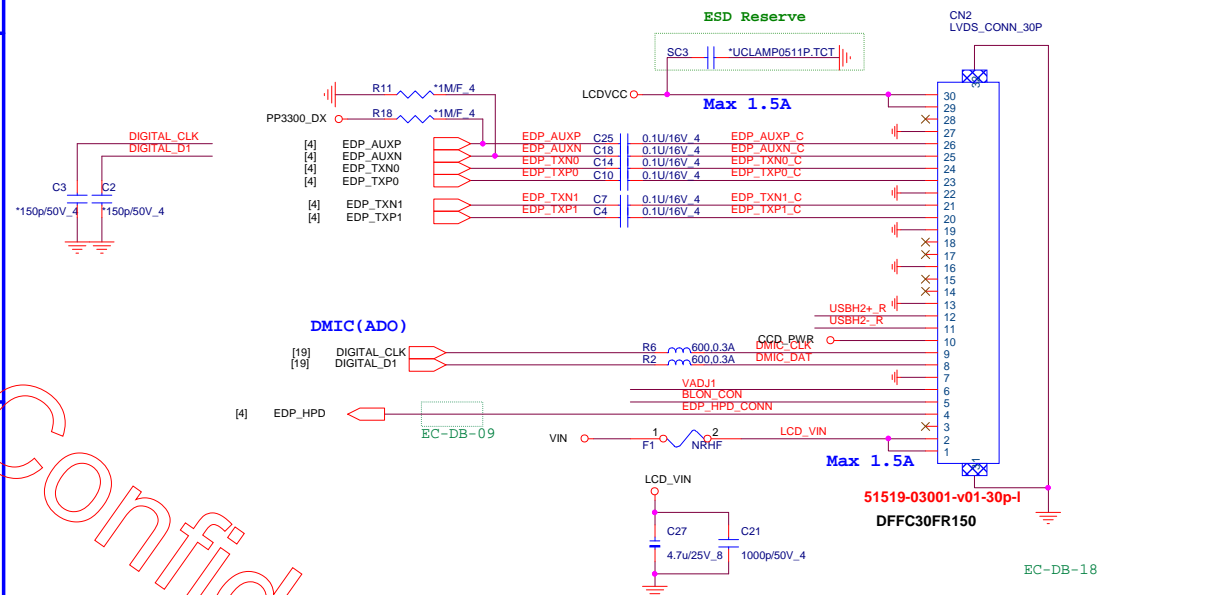
## CCD USB(CCD)




## Touch screen



## eDP/LVDS Need New LCD Cable



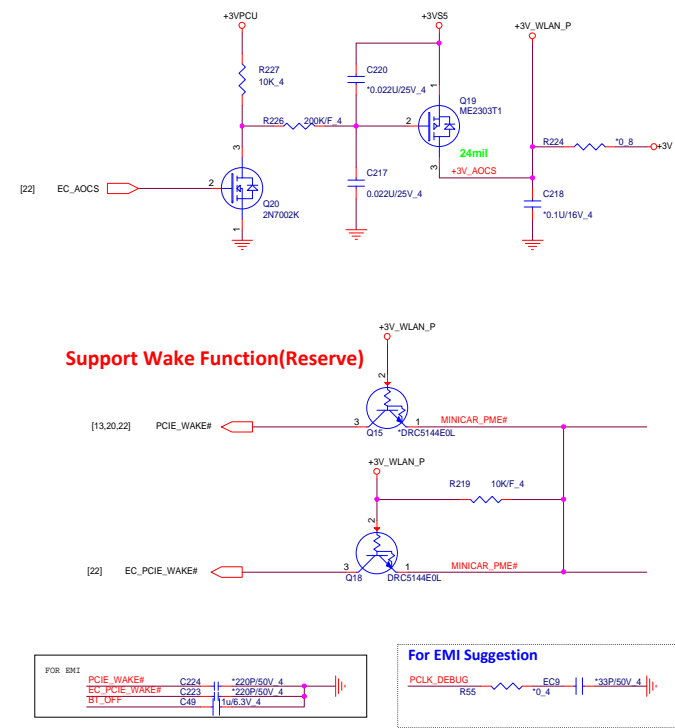
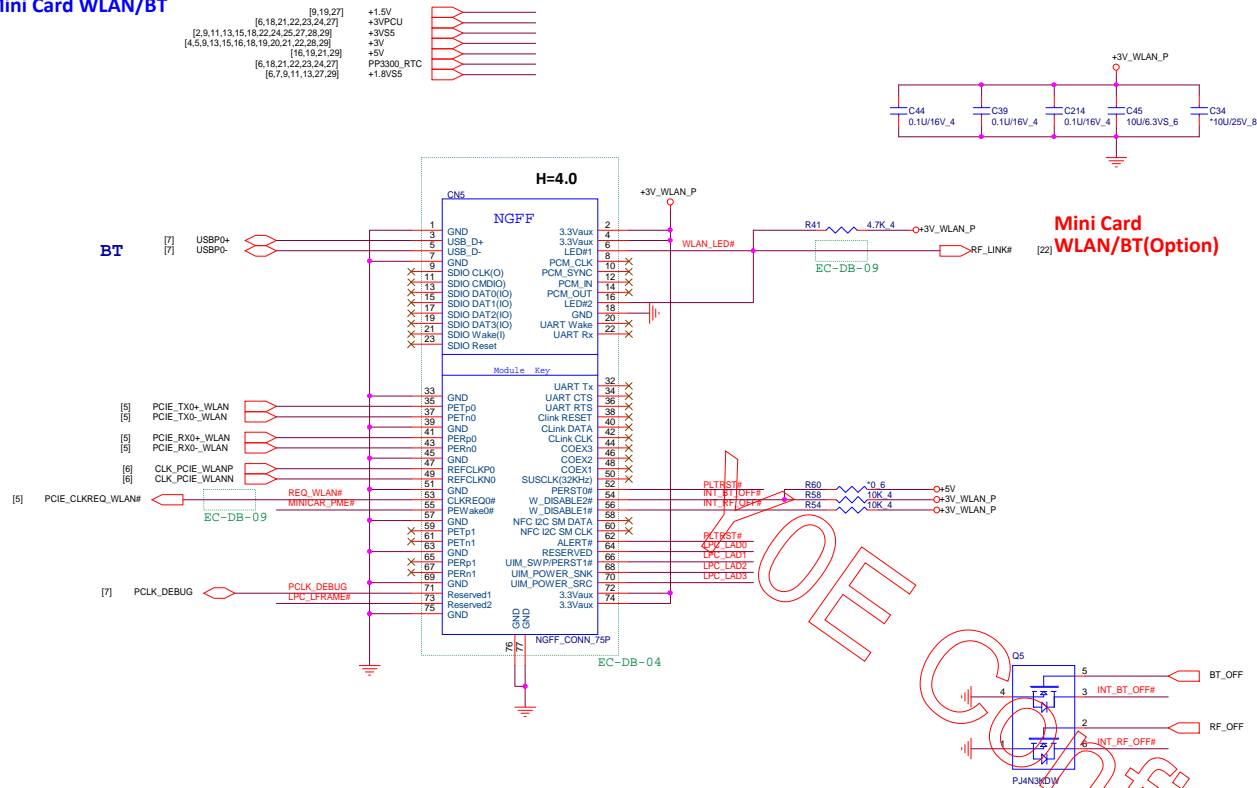
[4,5,9,13,16,17,18,19,20,21,22,28,29]	PP3300_DX
[18,23,24,25,26,28,29,30]	VIN
[4,5,9,13,16,17,18,19,20,21,22,28,29]	+3V
[2,9,11,13,17,18,22,24,25,27,28,29]	+3VS5

 <b>PROJECT : ROCHER</b> <b>Quanta Computer Inc.</b>		
Size Custom	Document Number <b>LVDS/eDP/CCD/DMIC</b>	Rev 1A
Date: Tuesday, February 10, 2015	Sheet 15 of 32	

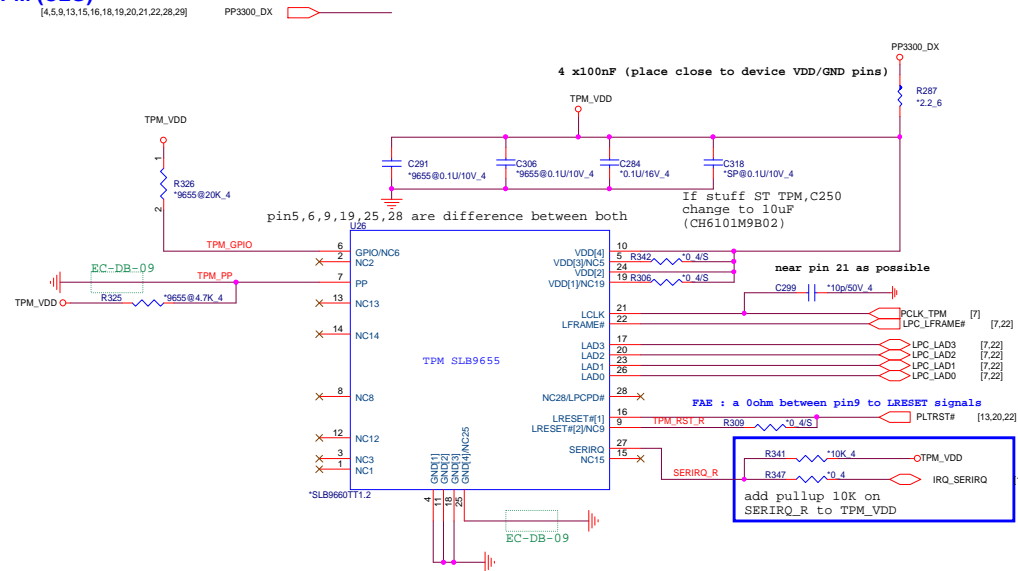




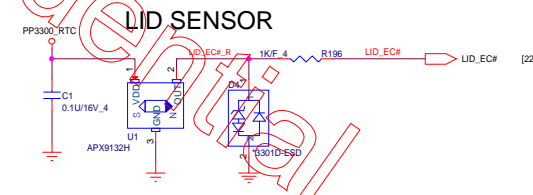
## Mini Card WLAN/BT



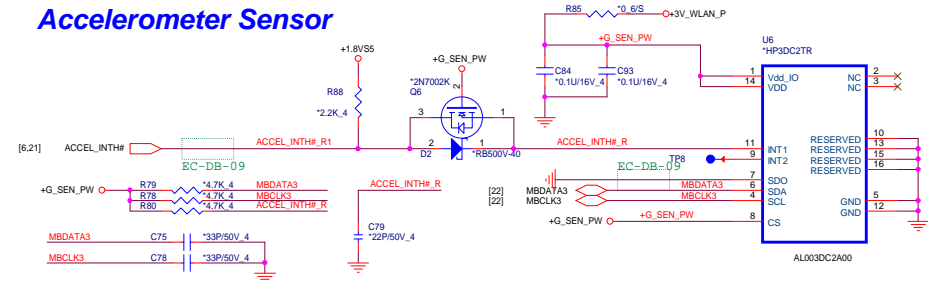
## TPM (CLG)



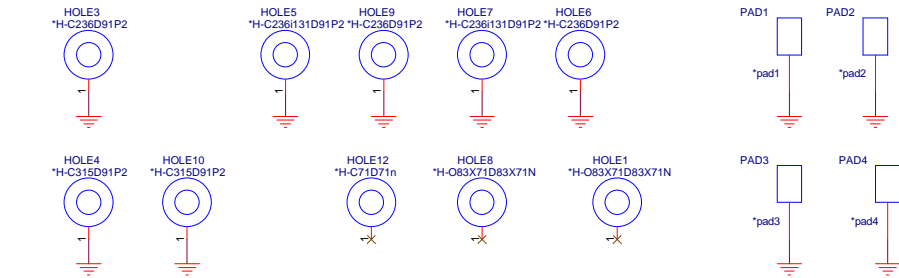
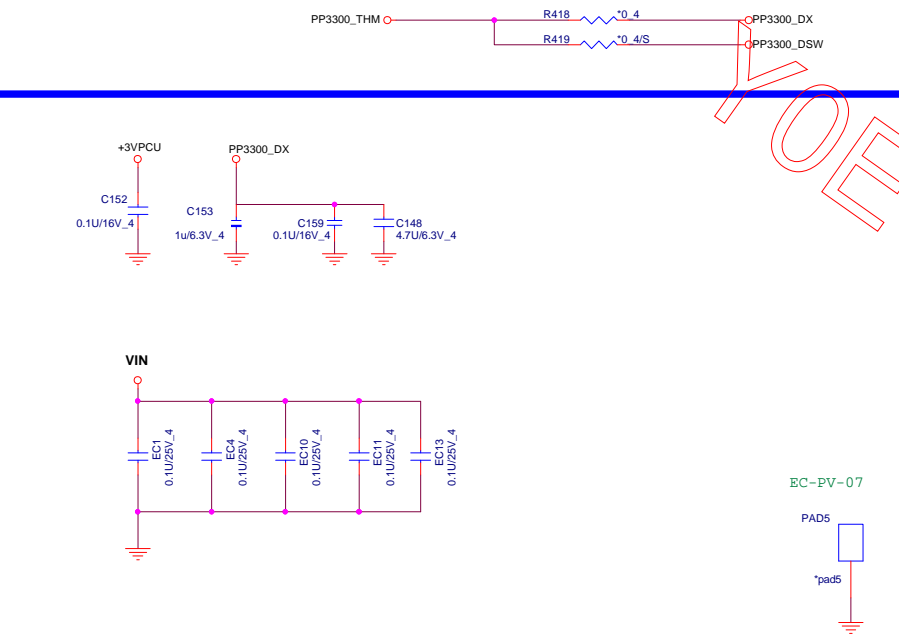
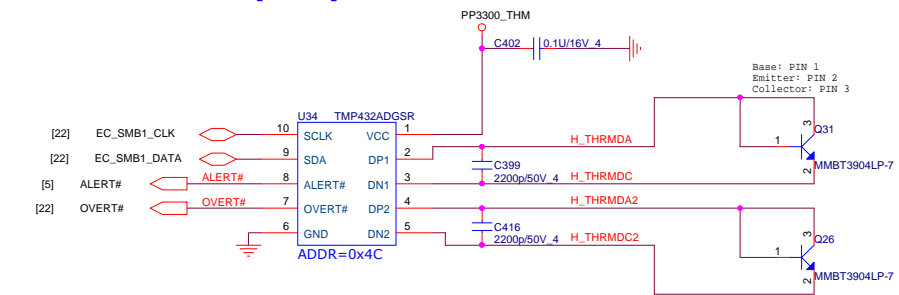
**LID**



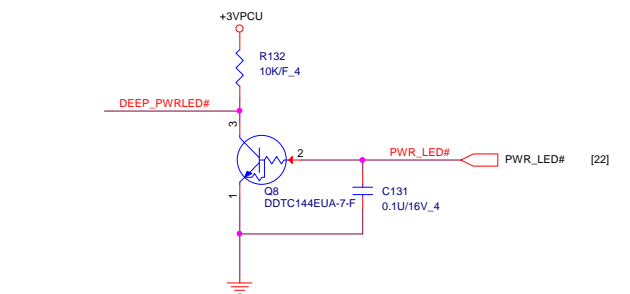
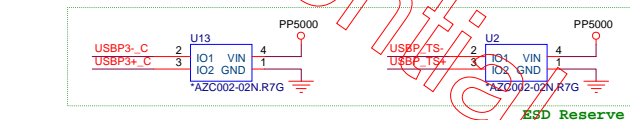
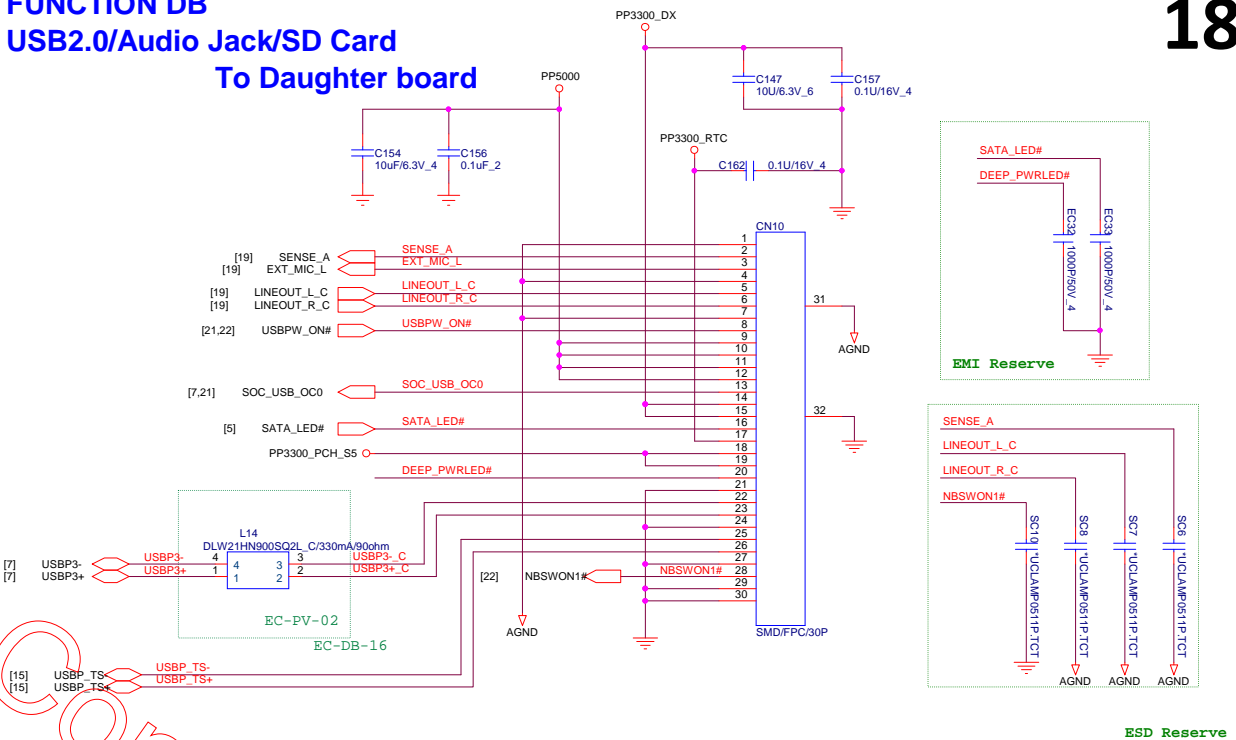
## Accelerometer Sensor




## HOLE(OTH)

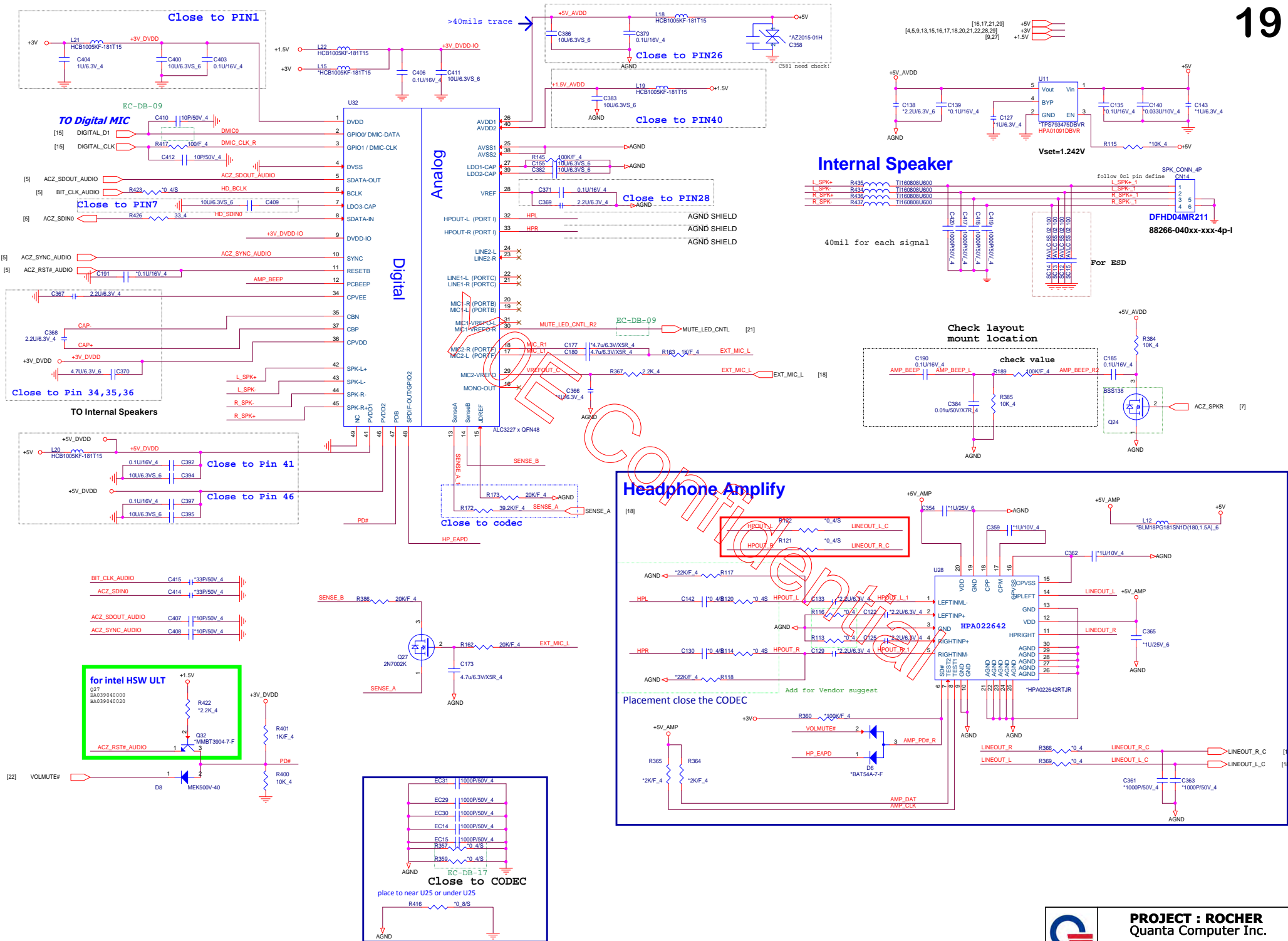


**FUNCTION DB**  
**USB2.0/Audio Jack/SD Card**  
**To Daughter board**

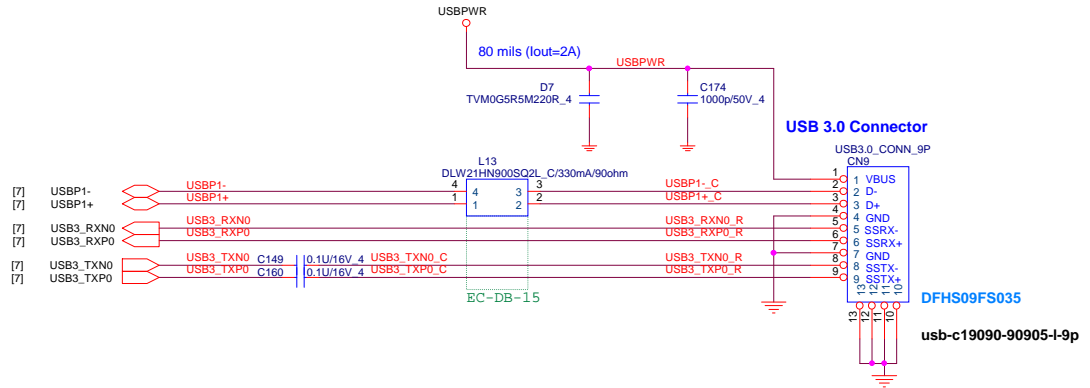
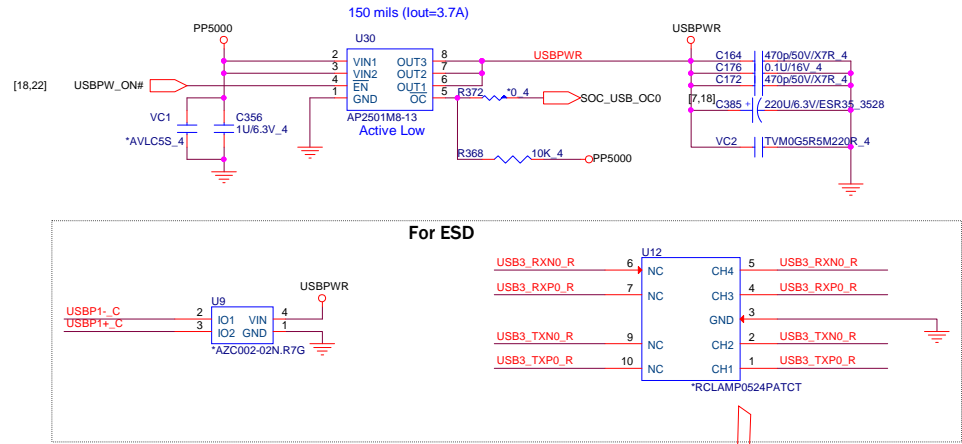


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[2,9,11,13,15,17,22,24,25,27,28,29]	PP3300_DSW	
[6,17,21,22,23,24,27]	+3VPCU	
[15,23,24,25,26,28,29,30]	VIN	
[9,21,24,25,27,28,29]	PP5000	
[6,17,21,22,23,24,27]	PP3300_RTC	

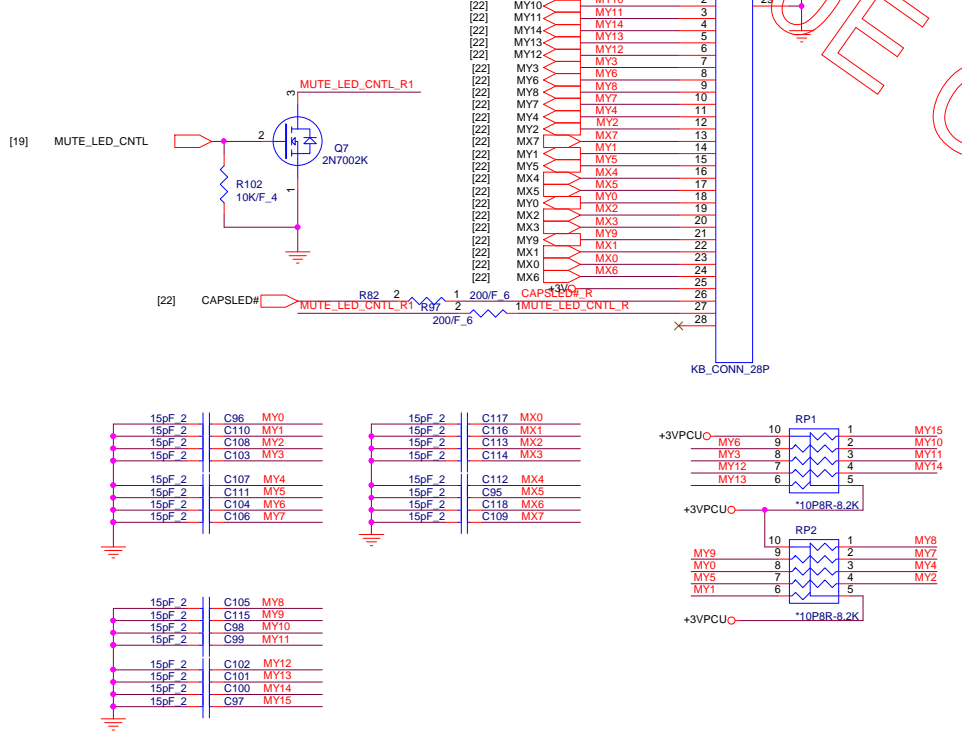
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	Size Custom	Document Number <b>DB CN /Thermal sensor/Hole</b>	Rev <b>1A</b>
	Date: <b>Tuesday, February 10, 2015</b>	Sheet <b>18</b> of <b>32</b>	



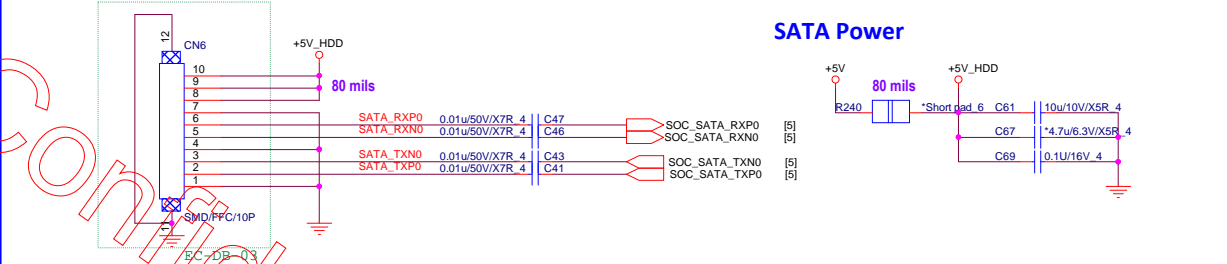




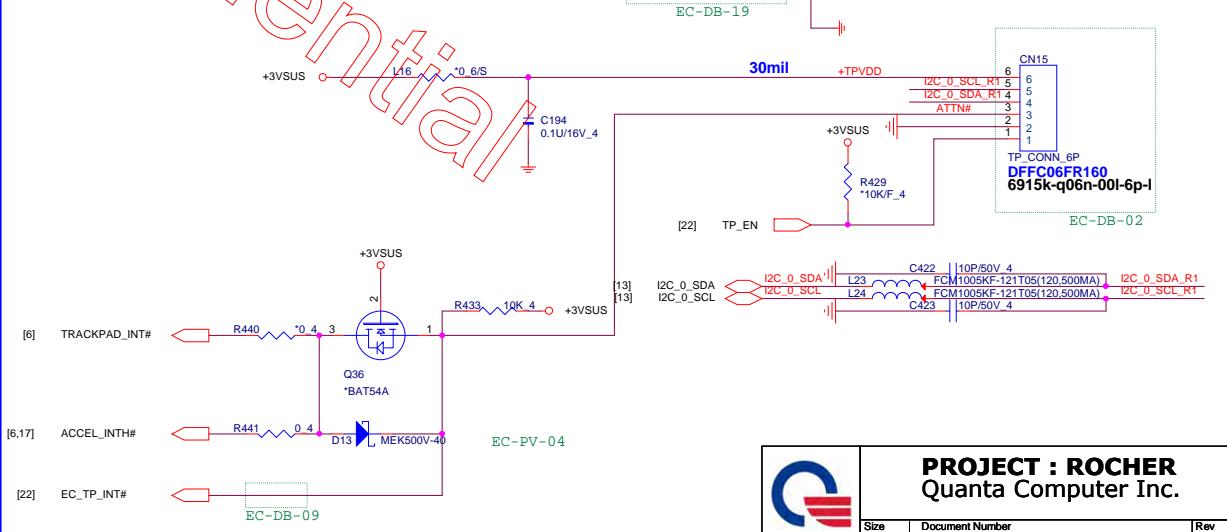
K/B (KBC)



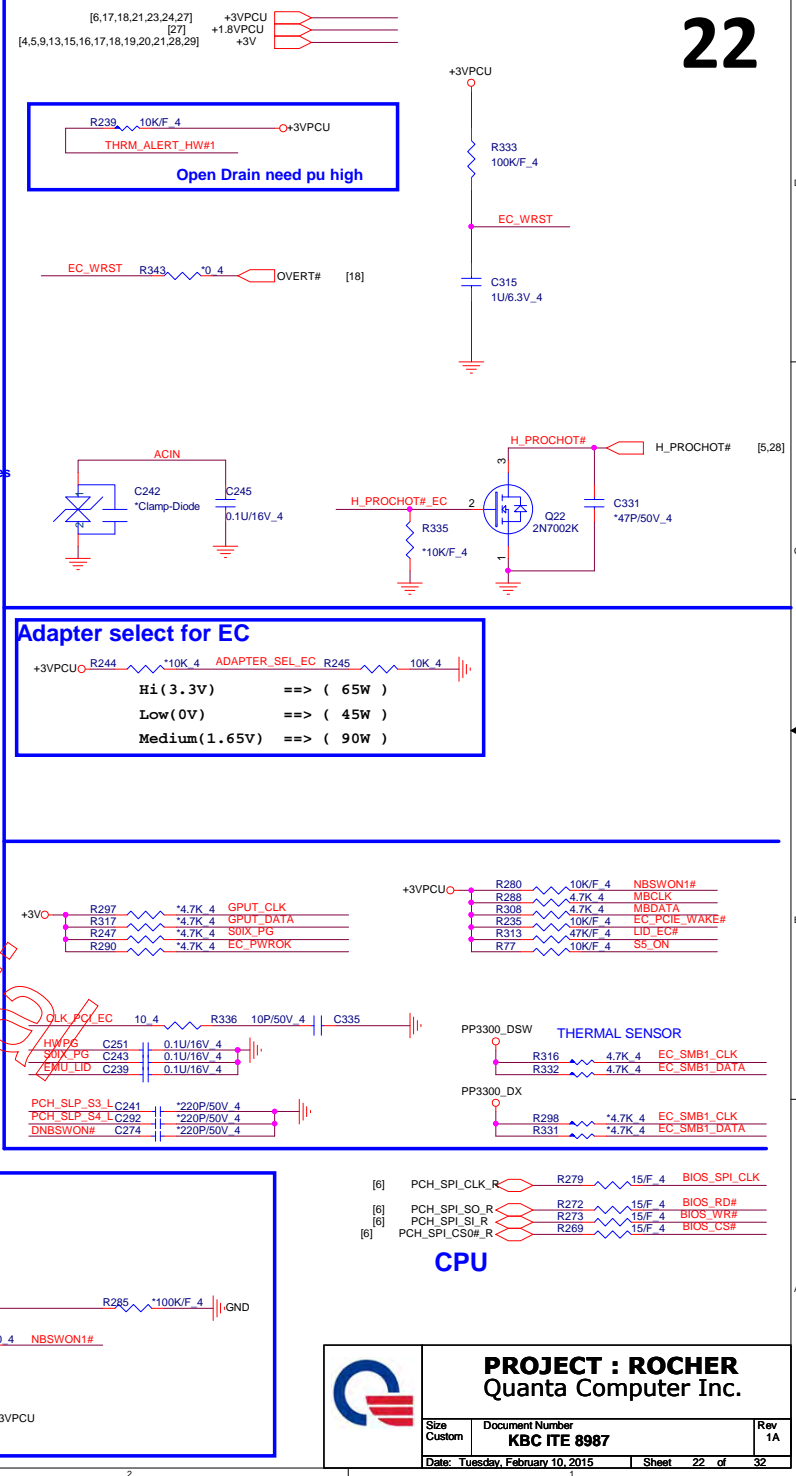
SATA HDD Connector



Track PAD BOARD CONN (TPD)

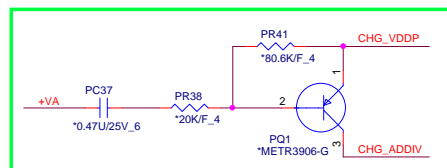
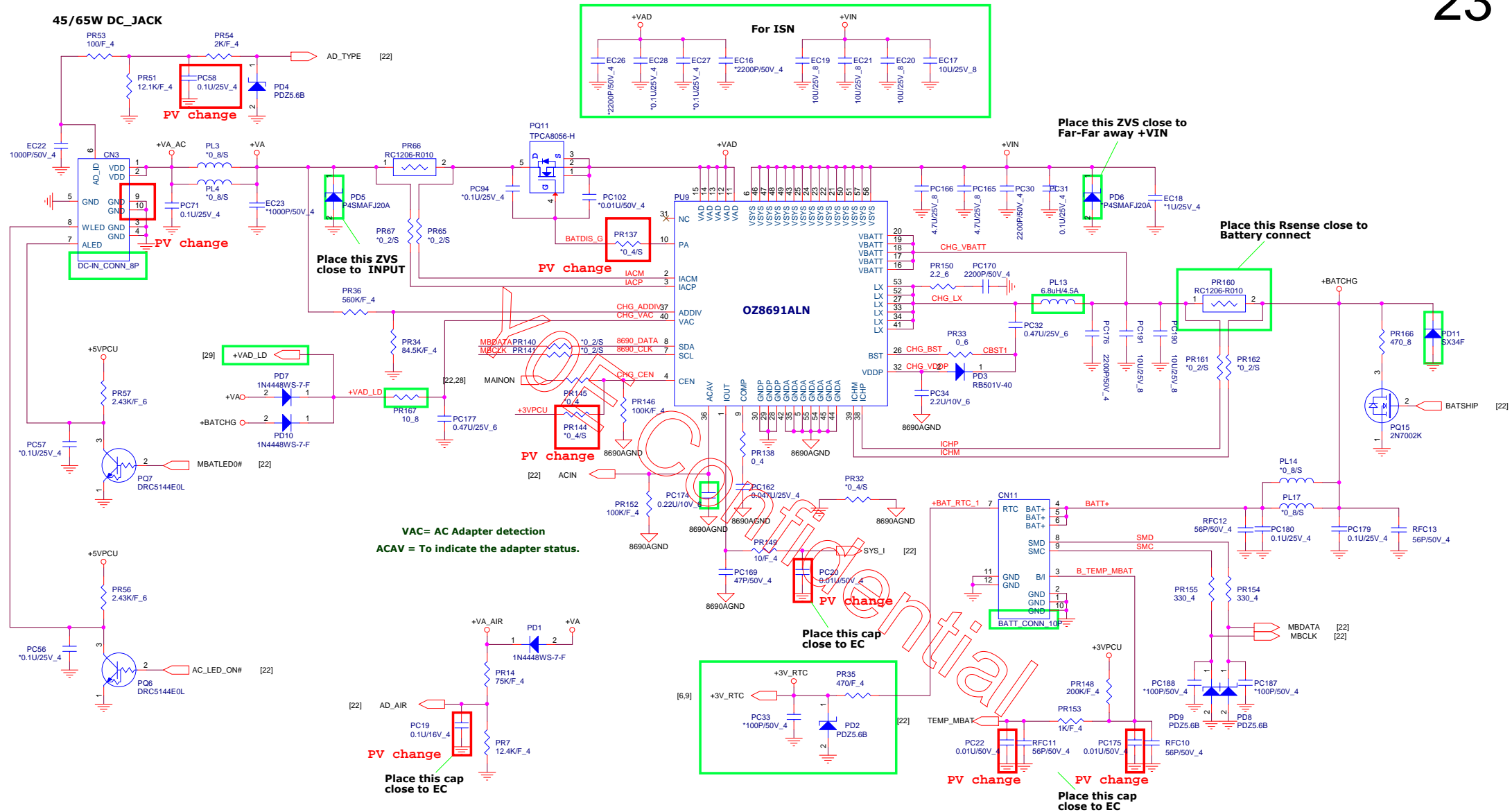




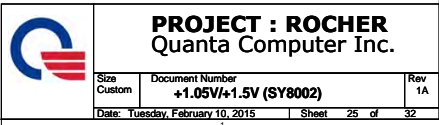
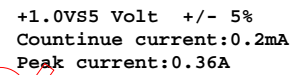
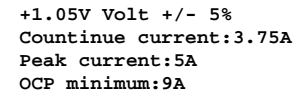


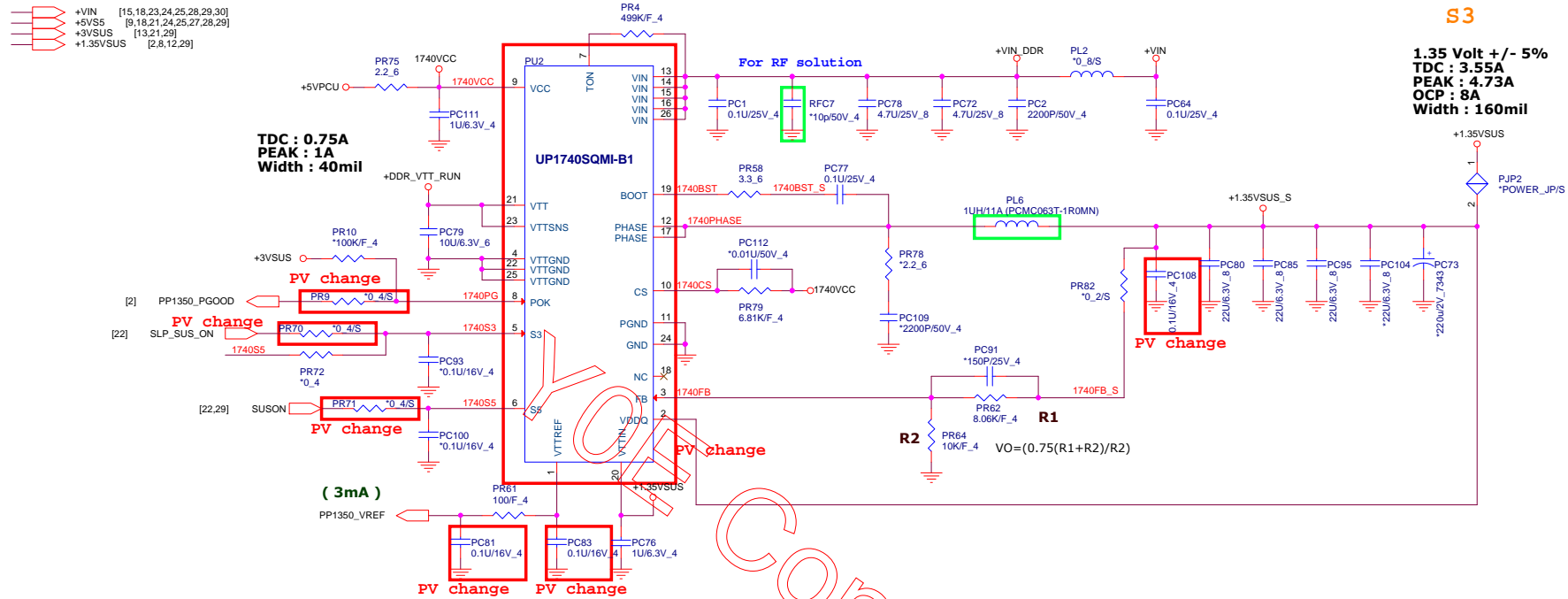


**45/65W DC\_JACK**







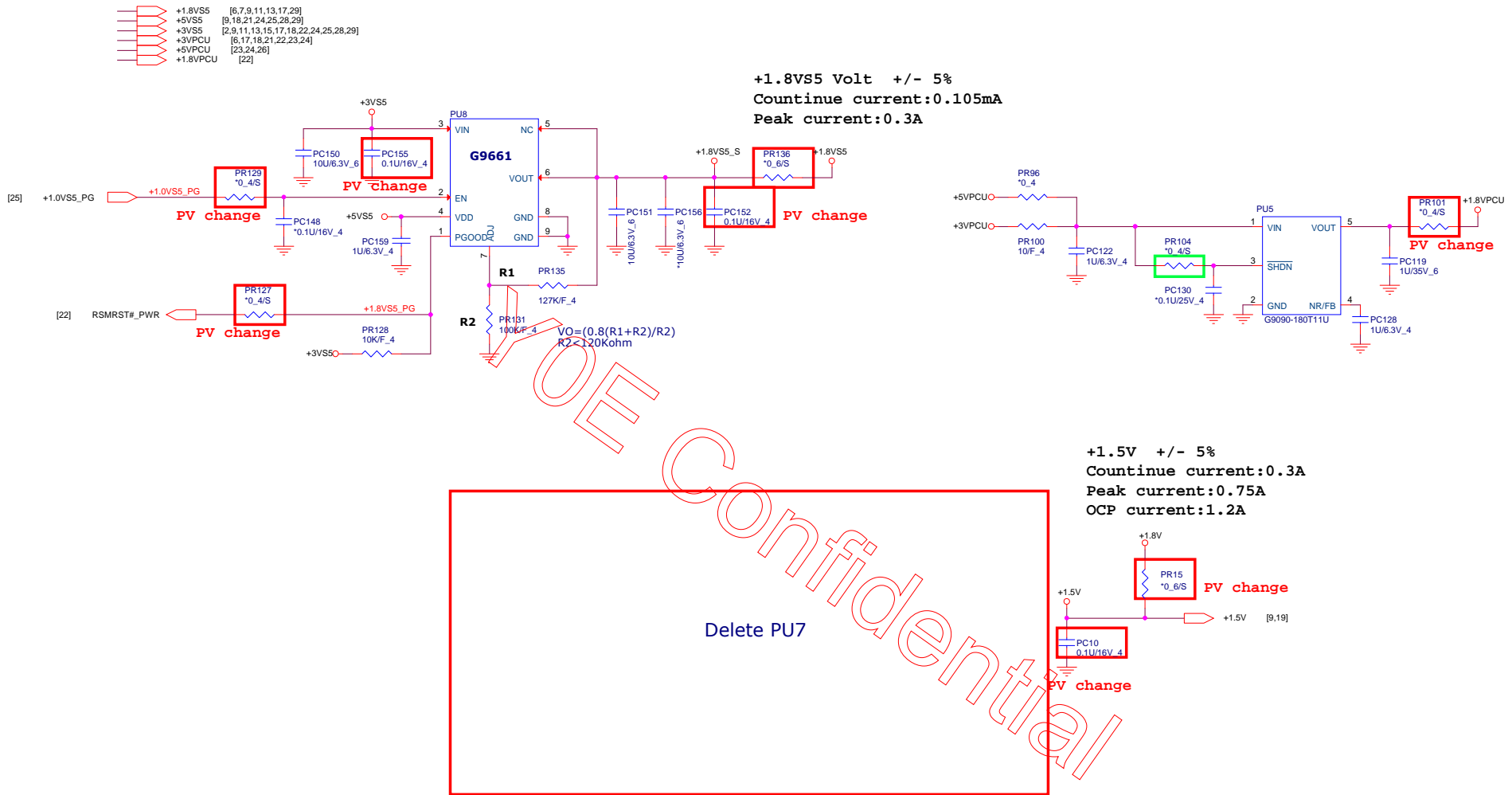


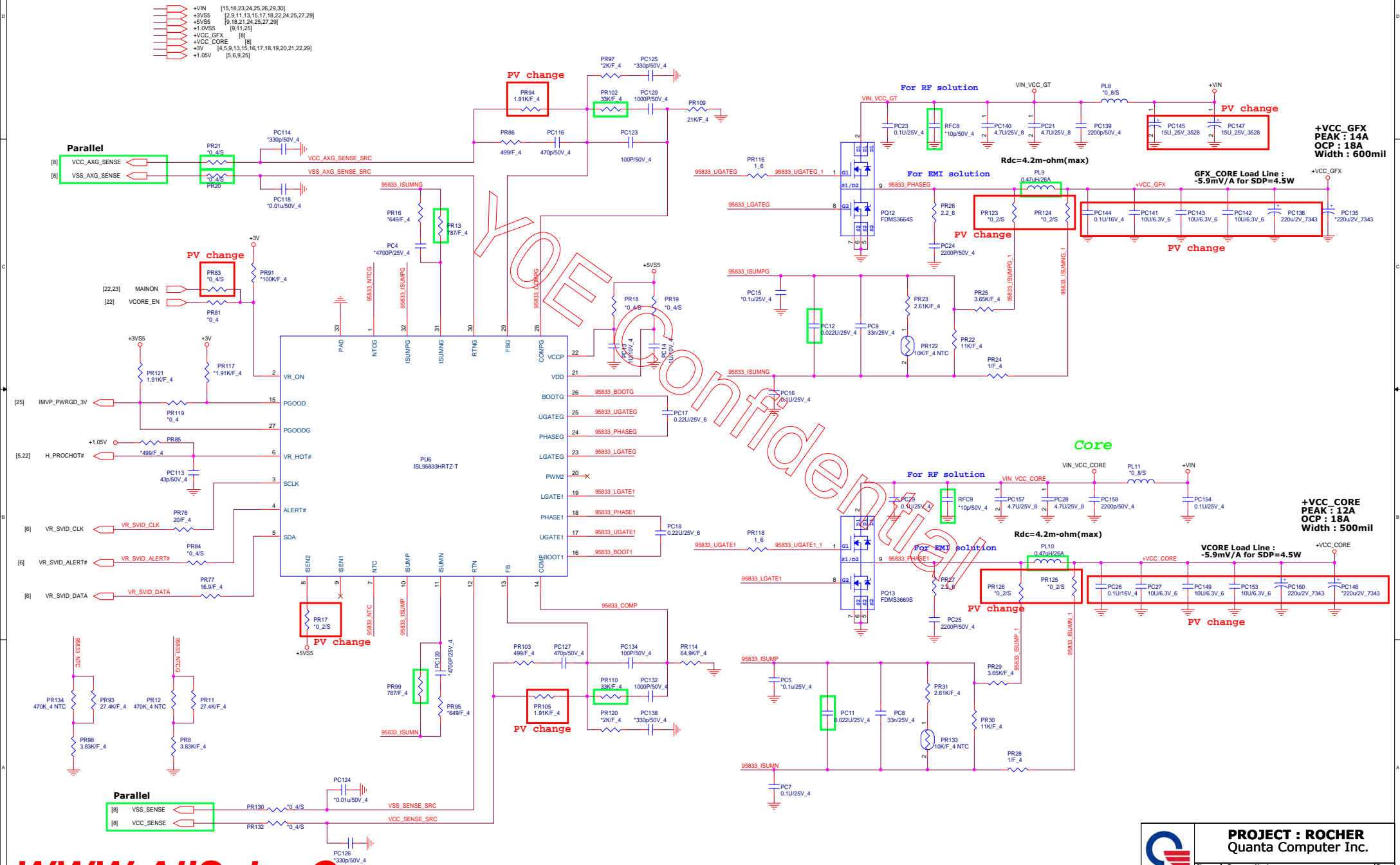
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S0	1	1	ON	ON	ON
S3 (main on off)	0	1	ON	ON	OFF
S4/S5	0	0	OFF	OFF	OFF



**PROJECT : ROCHER**  
Quanta Computer Inc.

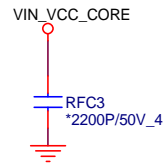
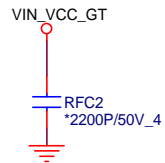
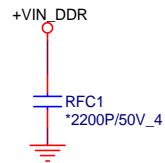
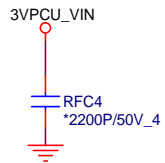
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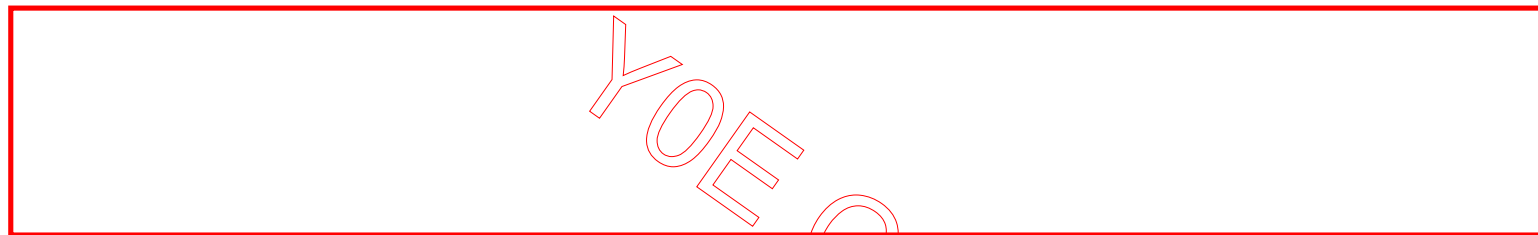




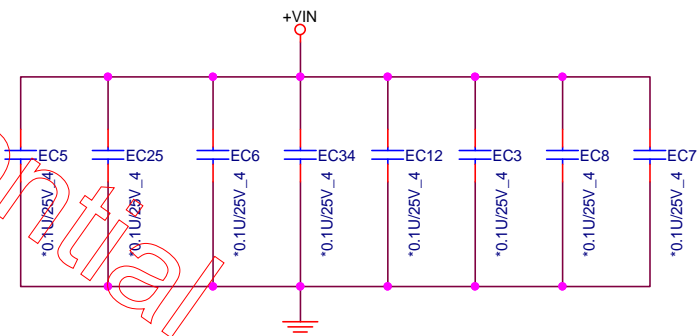
VIN\_VCC\_CORE VIN\_VCC\_CORE [28]

VIN\_VCC\_GT VIN\_VCC\_GT [28]

TOP



BOTTOM



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# Y0E Schematic EC Tracking Record A to C version(DB/PV Planar)

EC #	Page	Description	Part Affected
EC-DB-01	2,12	Reserve M_A_ODT1/M_A_CS#1/M_A_CKE1 signals and R442~R448 for DDP memory.	R442~R448
EC-DB-02	21	Change footprint and material of CN15 for SMT issue.	CN15
EC-DB-03	21	Change footprint and material of CN6 for ME change.	CN6
EC-DB-04	17	Change footprint and material of CN5 for ME change.	CN5
EC-DB-05	23~29	Change PR137,PR144,PR37,PR143,PR157,PR158,PR2,PR5,PR69,PR112,PR9,PR70,PR71,PR101,PR127,PR129,PR136,PR83, and PR68 from 0 ohm to short pad for power update.	PR137,PR144,PR37,PR143,PR157,PR158,PR2,PR5,PR69,PR112,PR9,PR70,PR71,PR101,PR127,PR129,PR136,PR83, and PR68
EC-DB-06	26	Change pin defined and footprint of PU2 for power update.	PU2
EC-DB-07	23~29	Change footprint of PR17,PR123,PR124,PR125, and PR126 for power update.	PR17,PR123,PR124,PR125, and PR126
EC-DB-08	28	Un-staff PC146 and staff PC160 for power update.	PC146 and PC160
EC-DB-09	2,5,6,7,11,13,15~22	Remove R143,R146,R223,R64,R151,R156,R158,R166,R129,R171,R375,R39,R394,R182,R185,R180,R412,R410,R312,R21,R90,R66,R315,R421,R373,R204,R432,R334,R243,R45,R33,R202,R197,R17,R20,R42,R56,R198,R1,R330, and R23 for test point coverage.	R143,R146,R223,R64,R151,R156,R158,R166,R129,R171,R375,R39,R394,R182,R185,R180,R412,R410,R312,R21,R90,R66,R315,R421,R373,R204,R432,R334,R243,R45,R33,R202,R197,R17,R20,R42,R56,R198,R1, and R23
EC-DB-10	9	Add +1.35V LDO (U35) and reserve L25 and C429 for CRT ripple issue.	U35,C427,R449,C426,C428,C425,R450,R451,C68,L25, and C429
EC-DB-11	13	Change connection of Q23.2 from PP1800_PCH to PP1800_PCH_S5 for WOL issue.	Q23
EC-DB-12	23	Pin9 and Pin10 of CN3 connect to GND for ESD suggestion.	CN3
EC-DB-13	27	Remove PU7, PR111, PR113, PC137, PR87, PC117, PR108, PR115, PL7, PR92, and PC6 for layout space.	PU7, PR111, PR113, PC137, PR87, PC117, PR108, PR115, PL7, PR92, and PC6
EC-DB-14	28	Staff PC145, PC147, PC135, PC27, PC149, and PC153 for power issue.	PC145, PC147, PC135, PC27, PC149, and PC153
EC-DB-15	6,21	Remove R293, R294, R119, R123, R133, and R142 for test point coverage.	R293, R294, R119, R123, R133, and R142
EC-DB-16	18	Un-staff R176 and R177, and staff L14 for EMI suggestion.	R176, R177, and L14
EC-DB-17	19	Change R357 and R359 from 0 ohm to short pad for cost saving.	R357 and R359
EC-DB-18	15	Change footprint and material of CN2 for ME change.	CN2
EC-DB-19	21	Staff D11 and D12 for ESD suggestion.	D11 and D12
EC-DB-20	20	Change footprint and material of CN4 for ME change.	CN4
EC-DB-21	28	Staff PC141,PC142,PC143,PC27,PC149, and PC153 for fixing overshoot issue.	PC141,PC142,PC143,PC27,PC149, and PC153
EC-DB-22	28	Change PR94 and PR105 from 1.78k ohm to 1.91k ohm for Vcore load line fine-tune.	PR94 and PR105

### ***Y0E Schematic EC Tracking Record C to MP version(PV/MV Planar)***

[illegible]

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