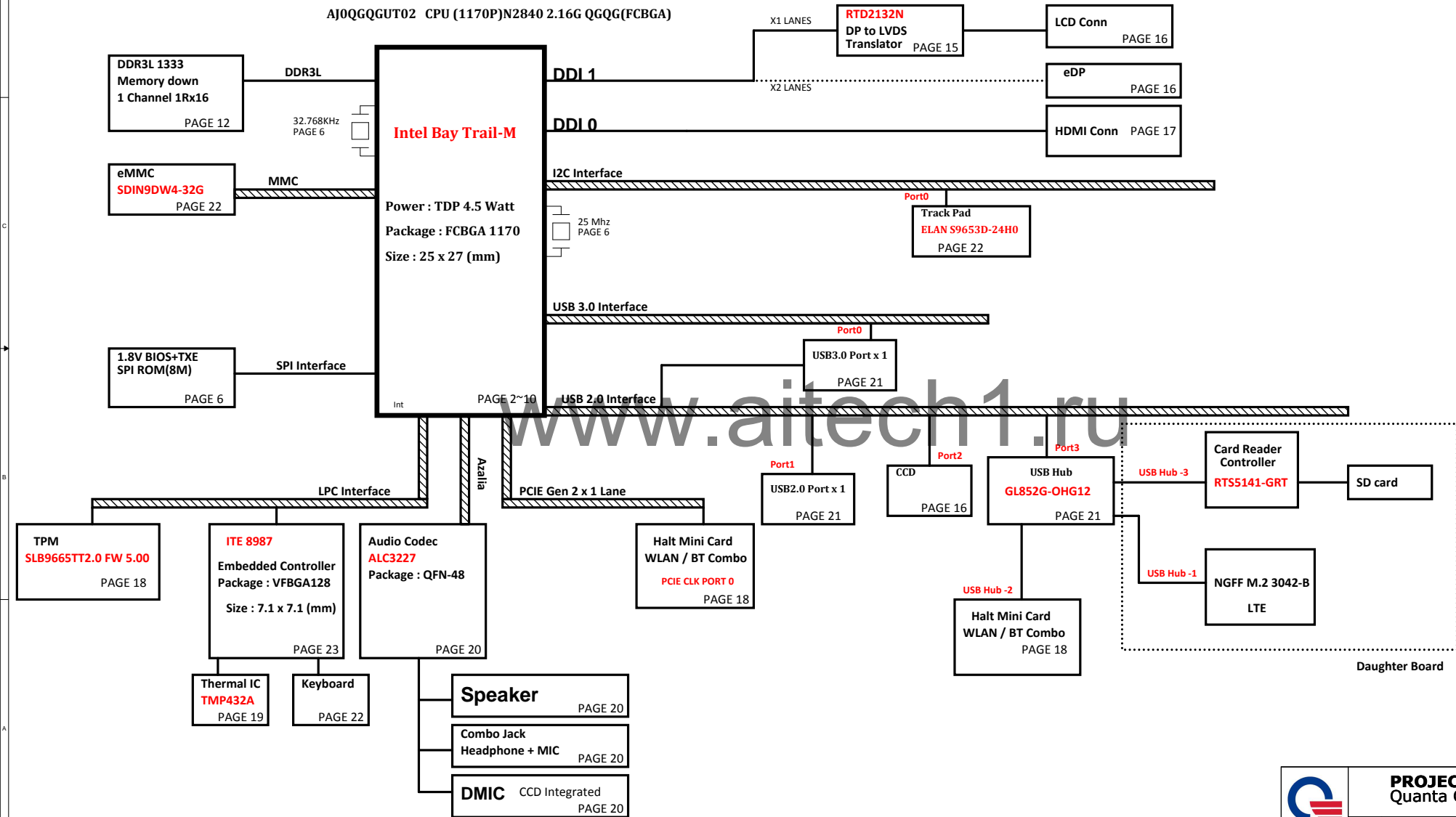
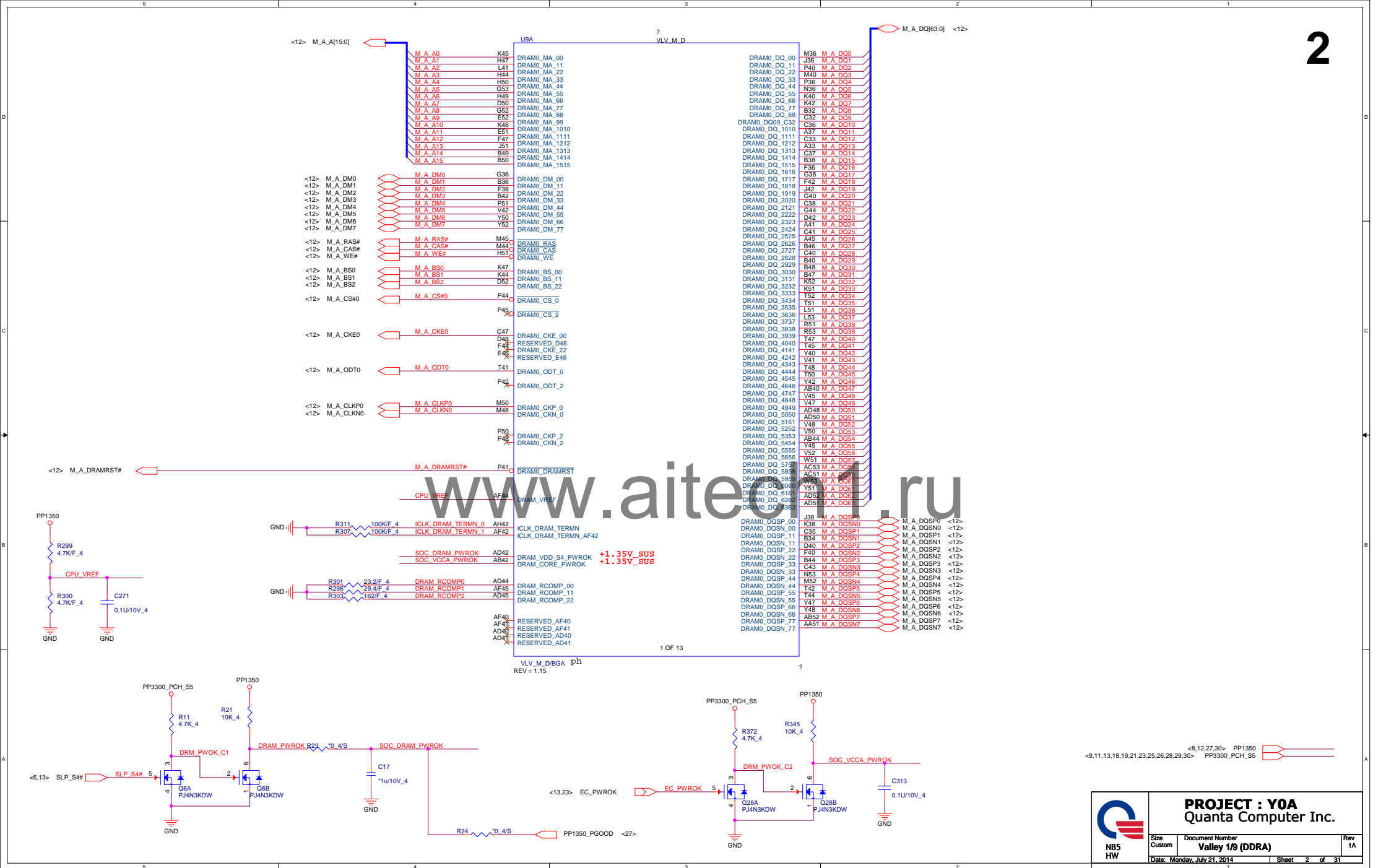


Y0A Intel Bay Trail-M Platform Block Diagram

AJ0QGQLUT02 CPU(1170P)N2940 1.83G QGQL(FCBGA)

AJ0QGQGUT02 CPU (1170P)N2840 2.16G QGQG(FCBGA)





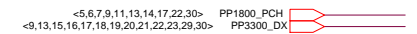
USB		VLV-M-D	
AY45	DRAM1_MA_00	DRAM1_DQ_00	BG38
BB47	DRAM1_MA_11	DRAM1_DQ_11	BC40
AW47	DRAM1_MA_22	DRAM1_DQ_22	BA42
BB43	DRAM1_MA_33	DRAM1_DQ_33	BD42
BB39	DRAM1_MA_44	DRAM1_DQ_44	BC38
BC45	DRAM1_MA_55	DRAM1_DQ_55	BD36
BB43	DRAM1_MA_66	DRAM1_DQ_66	BF42
BF40	DRAM1_MA_77	DRAM1_DQ_77	BC44
BC52	DRAM1_MA_88	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	BJ33
BA47	DRAM1_MA_1313	DRAM1_DQ_1313	BG37
BH43	DRAM1_MA_1414	DRAM1_DQ_1414	BH38
BH50	DRAM1_MA_1515	DRAM1_DQ_1515	BJ36
		DRAM1_DQ_1616	AT36
BD38	DRAM1_DM_00	DRAM1_DQ_1717	AV40
BH36	DRAM1_DM_11	DRAM1_DQ_1818	AT40
BC36	DRAM1_DM_22	DRAM1_DQ_1919	BA36
BH42	DRAM1_DM_33	DRAM1_DQ_2020	AV36
AT37	DRAM1_DM_44	DRAM1_DQ_2121	AV42
AM42	DRAM1_DM_55	DRAM1_DQ_2222	AV40
AK39	DRAM1_DM_66	DRAM1_DQ_2323	BJ41
AK52	DRAM1_DM_77	DRAM1_DQ_2424	BG41
AV48	DRAM1_RAS	DRAM1_DQ_2525	BJ45
AV48	DRAM1_CAS	DRAM1_DQ_2626	BA46
BB43	DRAM1_WE	DRAM1_DQ_2727	BG40
		DRAM1_DQ_2828	BH40
AY47	DRAM1_BS_00	DRAM1_DQ_2929	BH48
BF52	DRAM1_BS_11	DRAM1_DQ_3030	BH47
BF52	DRAM1_BS_22	DRAM1_DQ_3131	AY52
		DRAM1_DQ_3232	AY51
AT44	DRAM1_CS_0	DRAM1_DQ_3333	AY52
		DRAM1_DQ_3434	AP51
AT45	DRAM1_CS_2	DRAM1_DQ_3535	AW51
		DRAM1_DQ_3636	AW53
		DRAM1_DQ_3737	AP51
BG47	DRAM1_CKE_00	DRAM1_DQ_3838	AR53
BE46	RESERVED_BE46	DRAM1_DQ_3939	AP47
BD46	DRAM1_CKE_22	DRAM1_DQ_4040	AP45
BF48	RESERVED_BF48	DRAM1_DQ_4141	AP40
		DRAM1_DQ_4242	AM41
AP41	DRAM1_ODT_0	DRAM1_DQ_4343	AP48
AT42	DRAM1_ODT_2	DRAM1_DQ_4444	AP50
		DRAM1_DQ_4545	AK42
AV50		DRAM1_DQ_4646	AP40
AV48	DRAM1_CKP_0	DRAM1_DQ_4747	AM45
	DRAM1_CKN_0	DRAM1_DQ_4848	AM47
		DRAM1_DQ_4949	AF48
		DRAM1_DQ_5050	AF50
		DRAM1_DQ_5151	AM48
		DRAM1_DQ_5252	AM50
AT50	DRAM1_CKP_2	DRAM1_DQ_5353	AM44
AT48	DRAM1_CKN_2	DRAM1_DQ_5454	AK45
		DRAM1_DQ_5555	AK52
		DRAM1_DQ_5656	AL51
AT48	DRAM1_DRAMRST	DRAM1_DQ_5757	AG33
		DRAM1_DQ_5858	AG31
		DRAM1_DQ_5959	AG33
		DRAM1_DQ_6060	AG51
		DRAM1_DQ_6161	AF52
		DRAM1_DQ_6262	AF51
		DRAM1_DQ_6363	
		DRAM1_DQSP_00	BF40
		DRAM1_DQSN_00	BD40
		DRAM1_DQSP_11	BG35
		DRAM1_DQSN_11	BH34
		DRAM1_DQSP_22	BA38
		DRAM1_DQSN_22	AY38
		DRAM1_DQSP_33	BA44
		DRAM1_DQSN_33	BG43
		DRAM1_DQSP_44	AG53
		DRAM1_DQSN_44	AY52
		DRAM1_DQSP_55	AP42
		DRAM1_DQSN_55	AP44
		DRAM1_DQSP_66	AK47
		DRAM1_DQSN_66	AK48
		DRAM1_DQSP_77	AK52
		DRAM1_DQSN_77	AK51
		DRAM1_DQSN_77	

2 OF 13

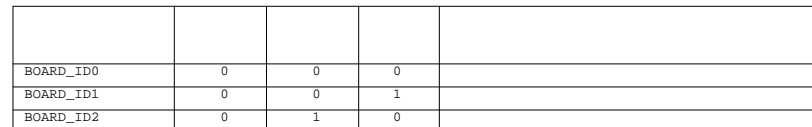
VLV-M-D/BGA
REV = 1.15

PROJECT : Y0A
Quanta Computer Inc.

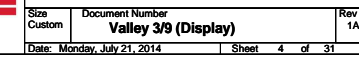
Size Custom	Document Number Valley 2/9 (DDR8)	Rev 1A
Date: Monday, July 21, 2014	Sheet 3 of 31	



PP1800_PCH



BOARD_ID0	0	0	0	
BOARD_ID1	0	0	1	
BOARD_ID2	0	1	0	



6

RTC Circuitry(RTC)

30mils

RTC Power trace width 20mils.

RTC Clock 32.768KHz

Check BIOS Socket

Co-layout with U22

SPI NOR FLASH

Need place to TOP side

Vender	Size	P/N
Winbond	8MB	AKE5EZ2N0N00 (W25Q64FWSSIG)
Socket (208mil)		DFHS08FS023 (Firstly Stuff)

PROJECT : YOA
Quanta Computer Inc.

Size Custom
Document Number
Valley 5/9 (SPI/GPIO/CLK)
Date: Monday, July 21, 2014
Sheet 6 of 31

6

RTC Circuitry(RTC)

30mils

RTC Power trace width 20mils.

RTC Clock 32.768KHz

Check BIOS Socket

Co-layout with U22

SPI NOR FLASH

Need place to TOP side

Vender	Size	P/N
Winbond	8MB	AKE5EZ2N0N00 (W25Q64FWSSIG)
Socket (208mil)		DFHS08FS023 (Firstly Stuff)

PROJECT : YOA
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Size Custom
Document Number
Valley 5/9 (SPI/GPIO/CLK)
Date: Monday, July 21, 2014
Sheet 6 of 31

[illegible]

6

RTC Circuitry(RTC)

RTC Clock 32.768KHz

Check BIOS Socket

Need place to TOP side

Co-layout with U22

SPI NOR FLASH

PROJECT : YOA
Quanta Computer Inc.

Size Custom Document Number Valley 5/9 (SPI/GPIO/CLK) Rev 1A

Date: Monday, July 21, 2014 Sheet 6 of 31

6

RTC Circuitry(RTC)

RTC Clock 32.768KHz

Check BIOS Socket

Need place to TOP side

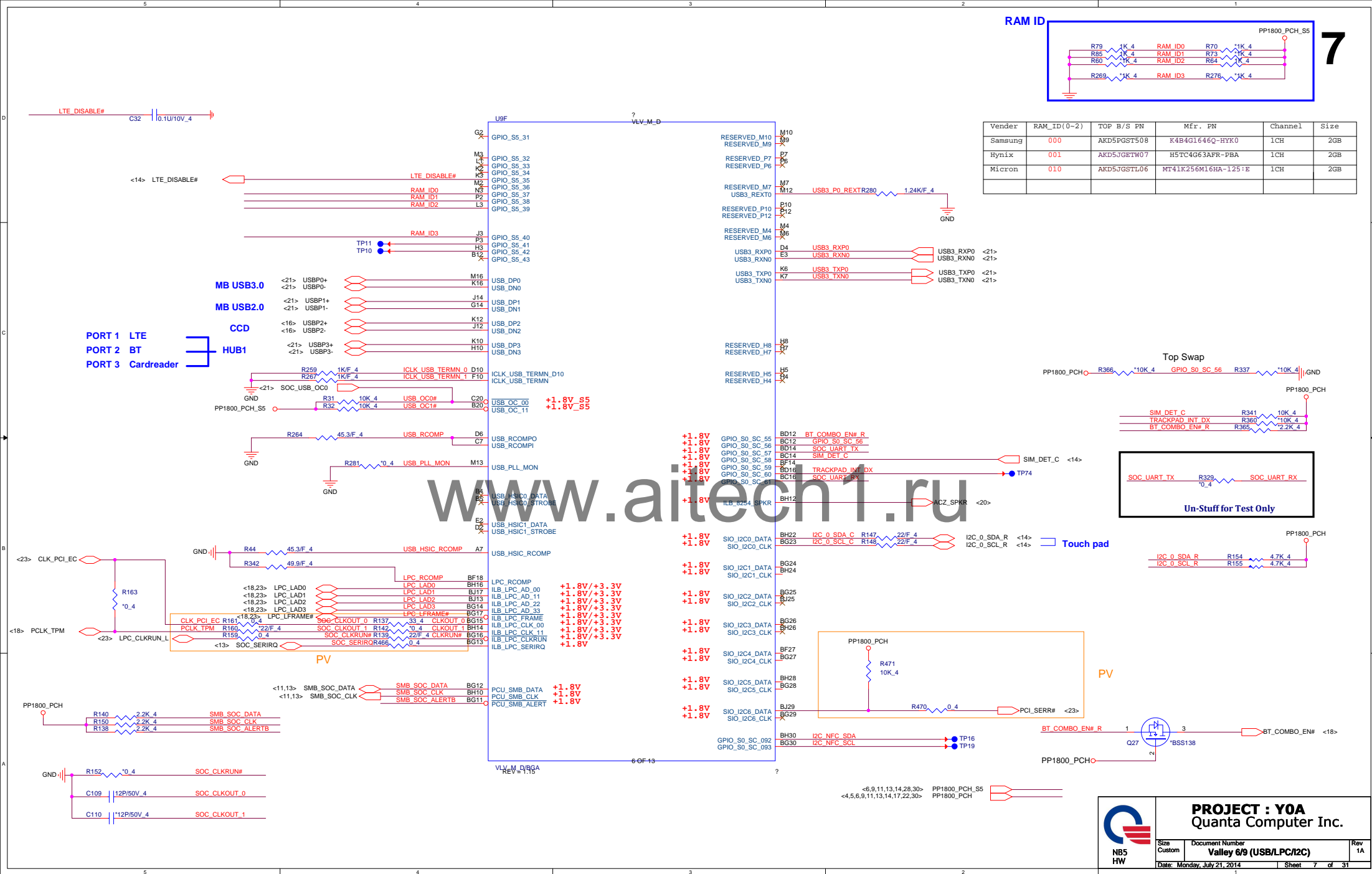
Co-layout with U22

SPI NOR FLASH

PROJECT : YOA
Quanta Computer Inc.

Size Custom Document Number Valley 5/9 (SPI/GPIO/CLK) Rev 1A

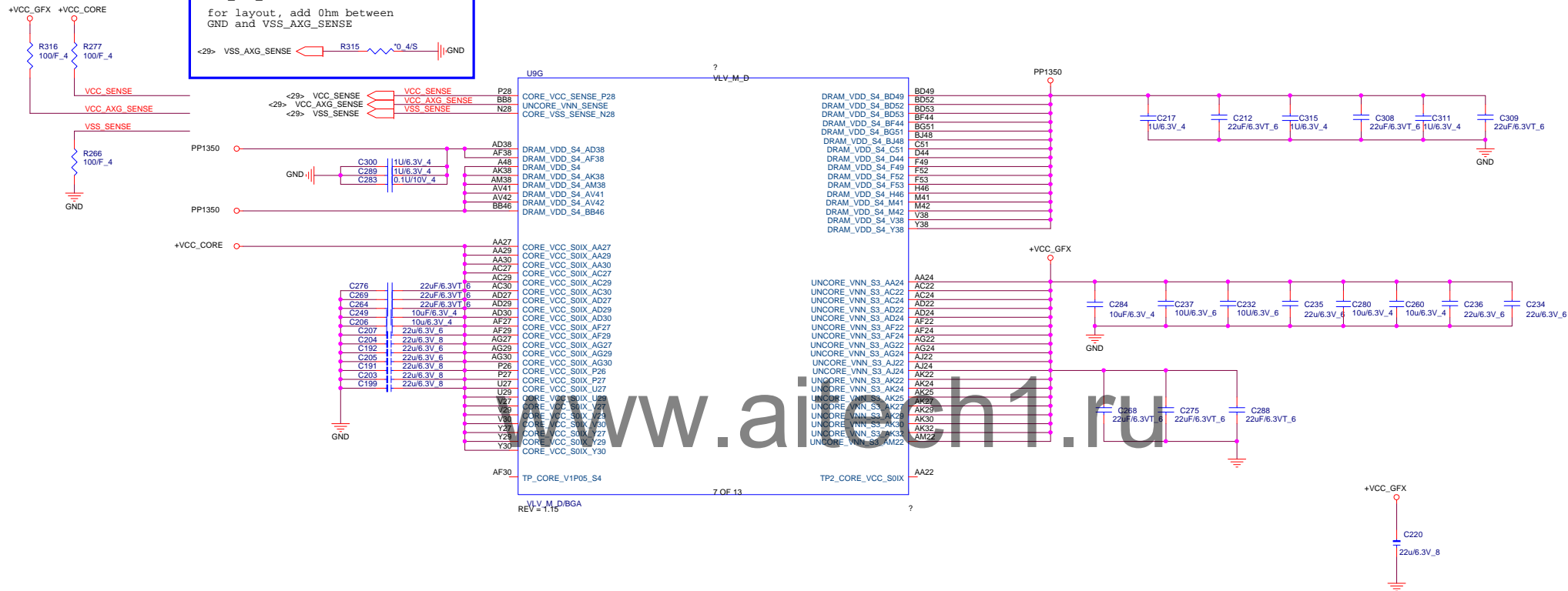
Date: Monday, July 21, 2014 Sheet 6 of 31



layout suggestion by intel,
VSS_AXG_SENSE didn't
connect to VSS_SENSE, will
connect the GND via near
VCC_AXG_SENSE

for layout, add 0hm between
GND and VSS_AXG_SENSE

<29> VSS_AXG_SENSE

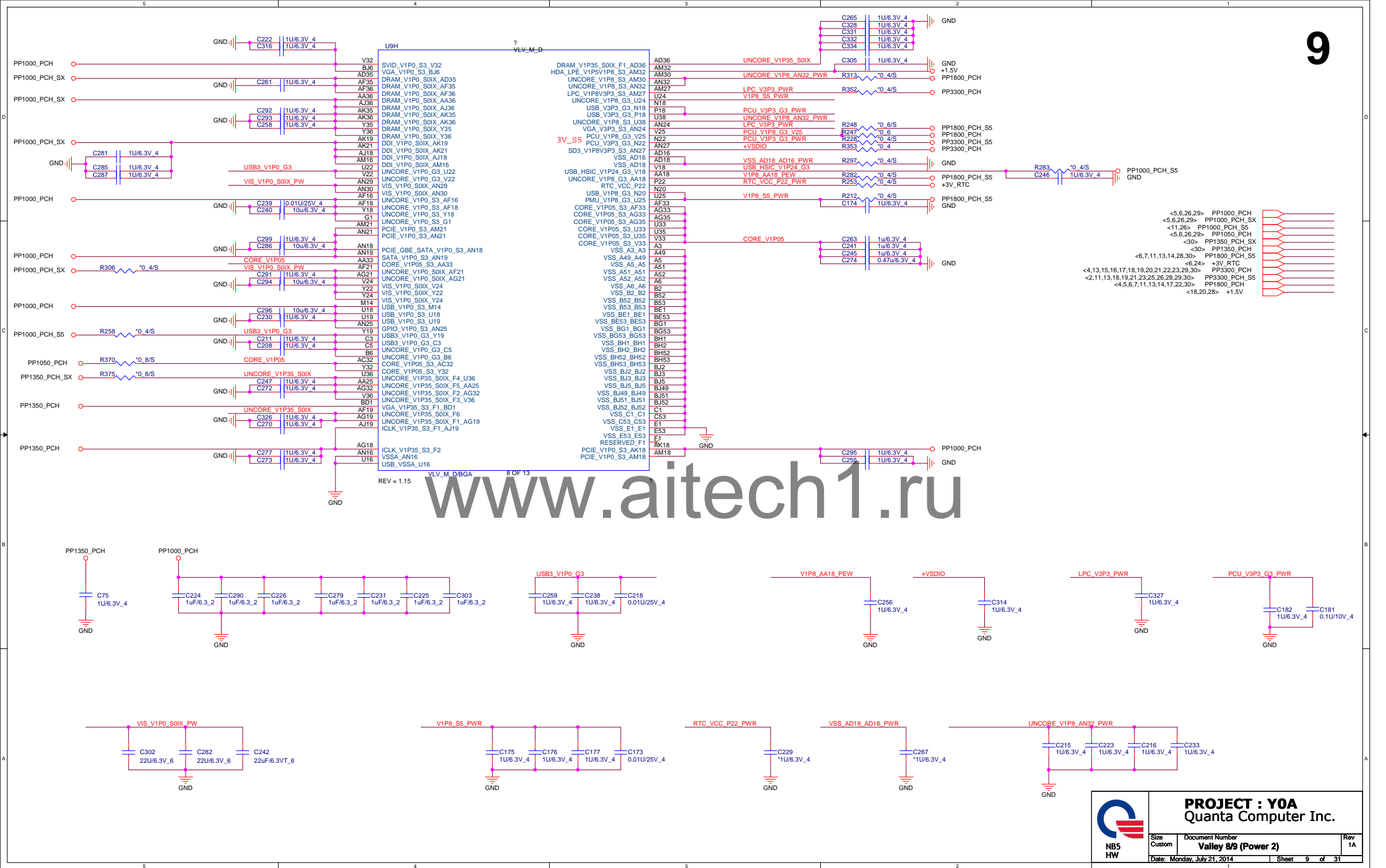


<29> +VCC_GFX
<29> +VCC_CORE
<2,12,27,30> PP1350

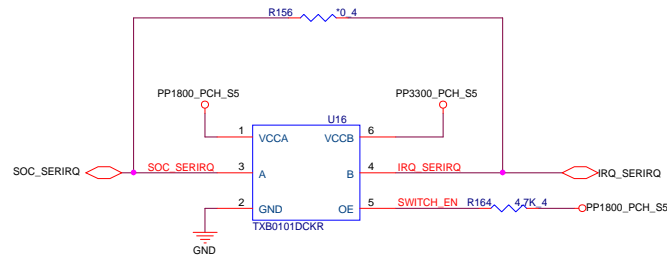


PROJECT : Y0A
Quanta Computer Inc.

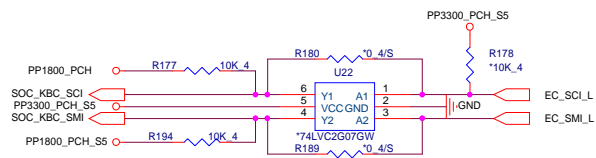
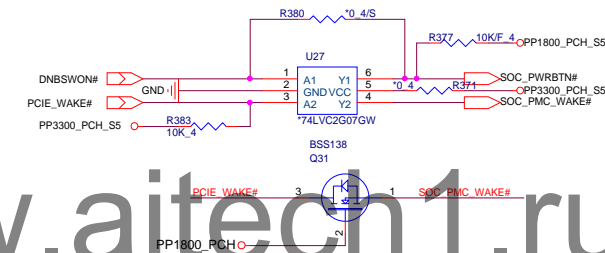
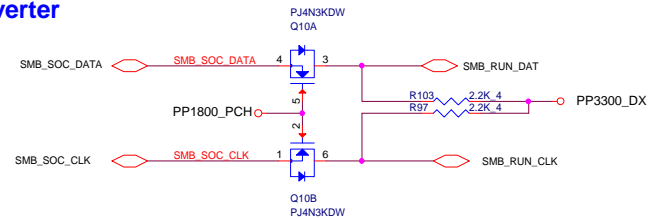
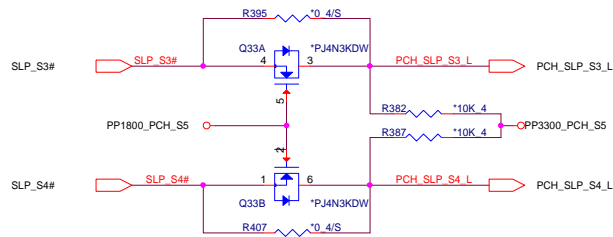
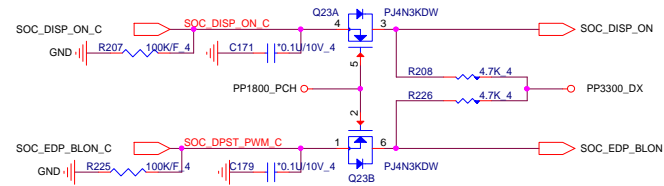
Size Custom	Document Number Valley 7/9 (Power 1)	Rev 1A
Date: Monday, July 21, 2014	Sheet 8 of 31	

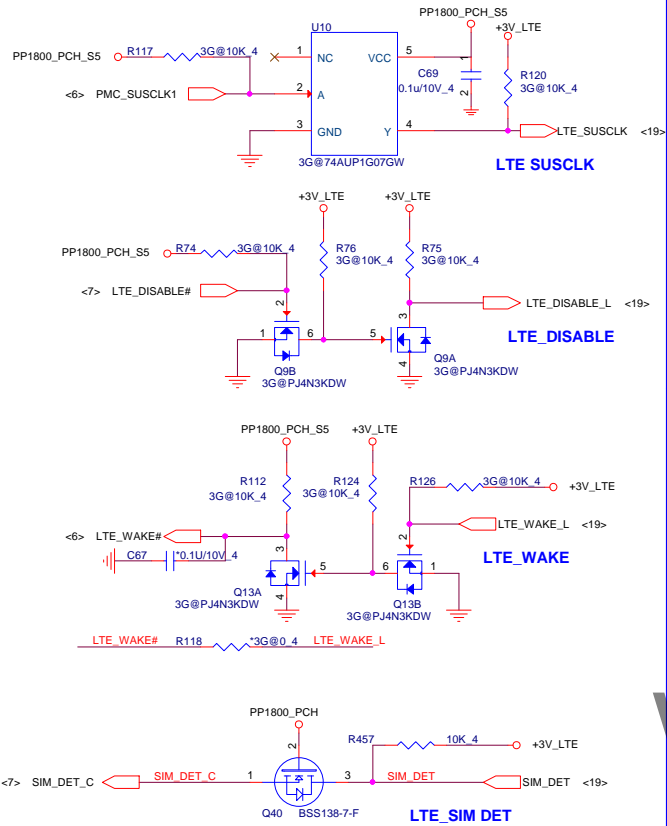


eDP control pin (For eDP)

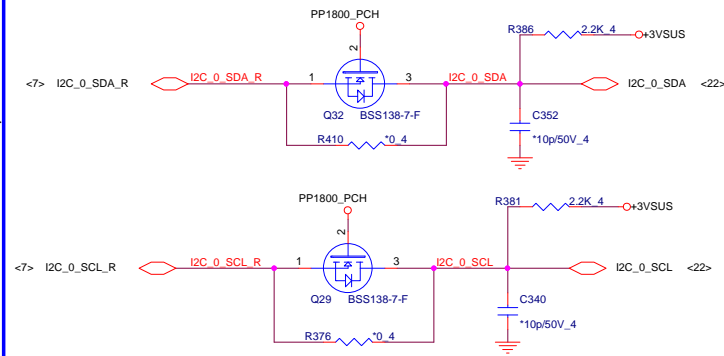


LVDS converter

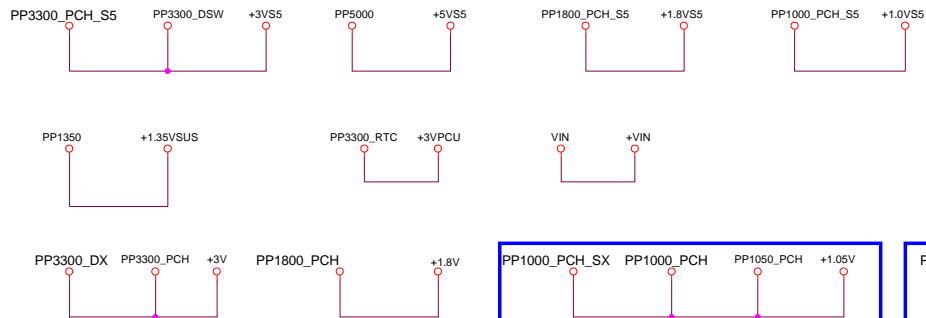




Track Pad

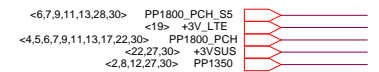


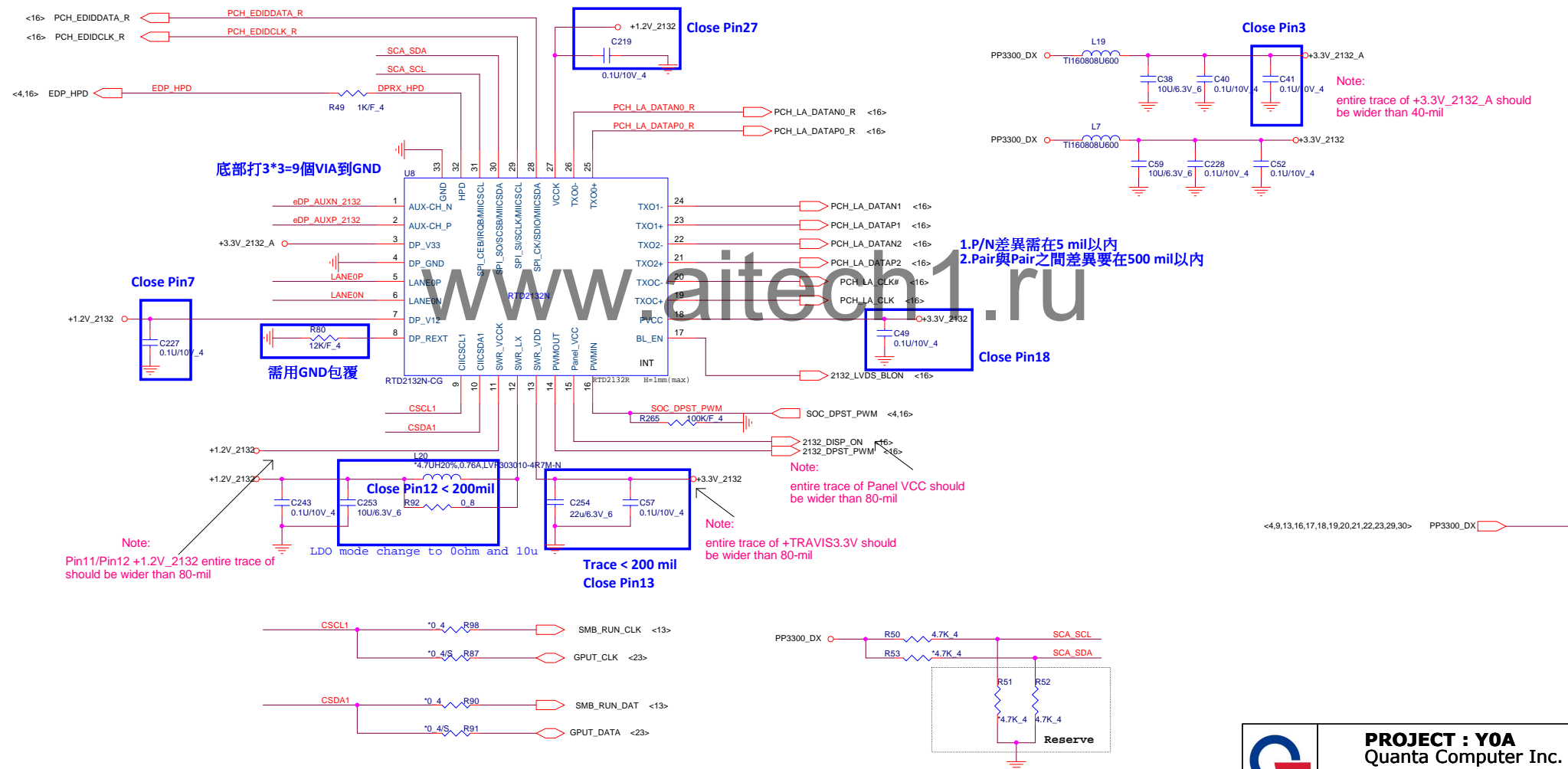
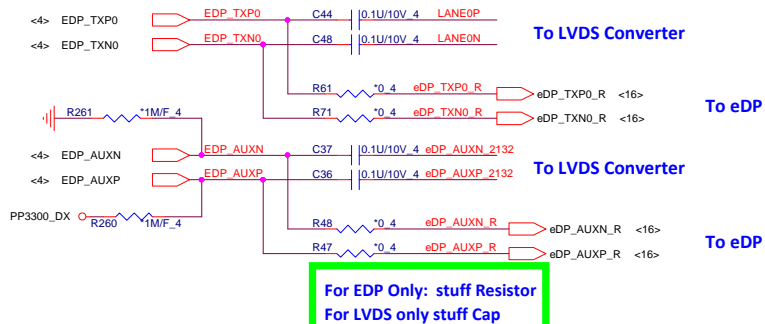
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Combine +1.0VSX,+1.0V,+1.05V
power rail for cost saving

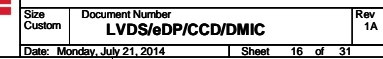
Combine +1.35VSFR,+1.35V
power rail for cost saving



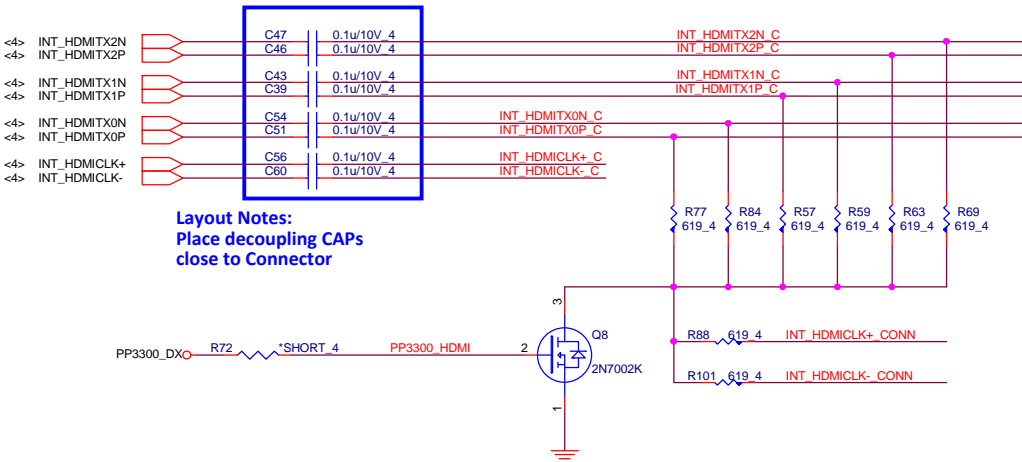




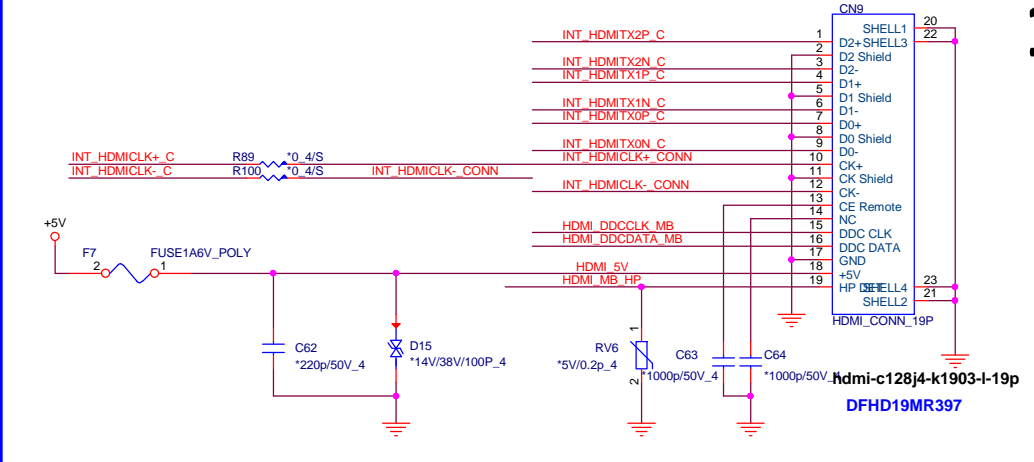
For LVDS Only: Stuff Rb



HDMI Cost Reduced level shift (HDM)

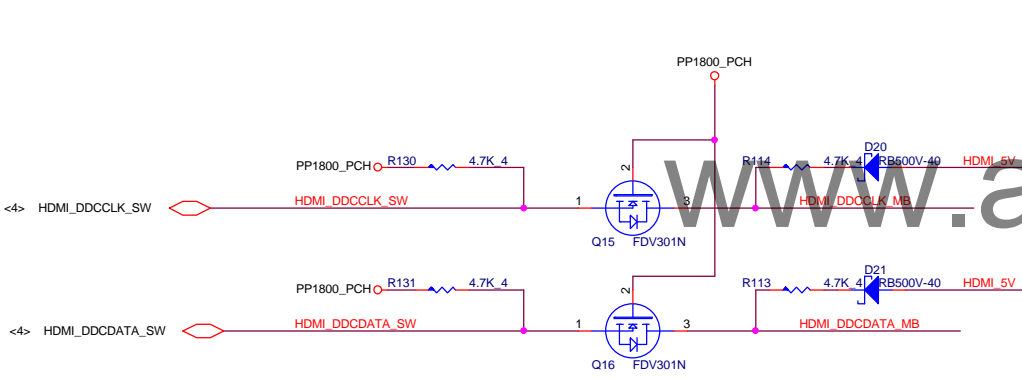


HDMI connector (HDM)

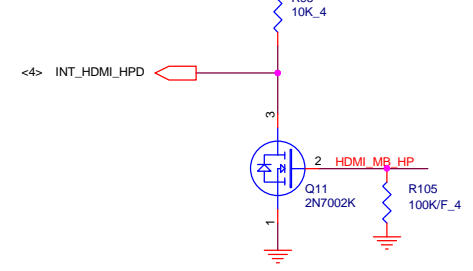


17

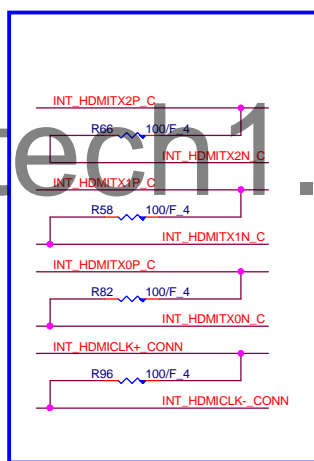
HDMI DDC (HDM)



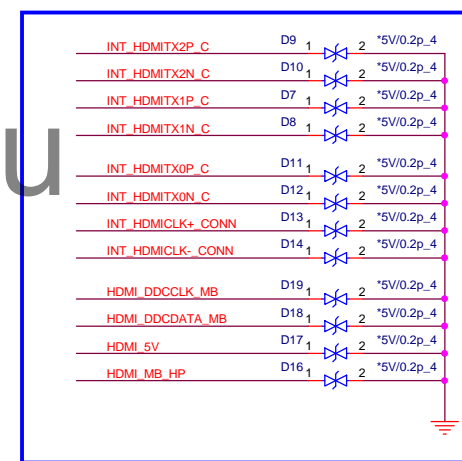
HDMI-detect (HDM)



EMI



ESD 靠近HDMI CONNECTOR(CN16)

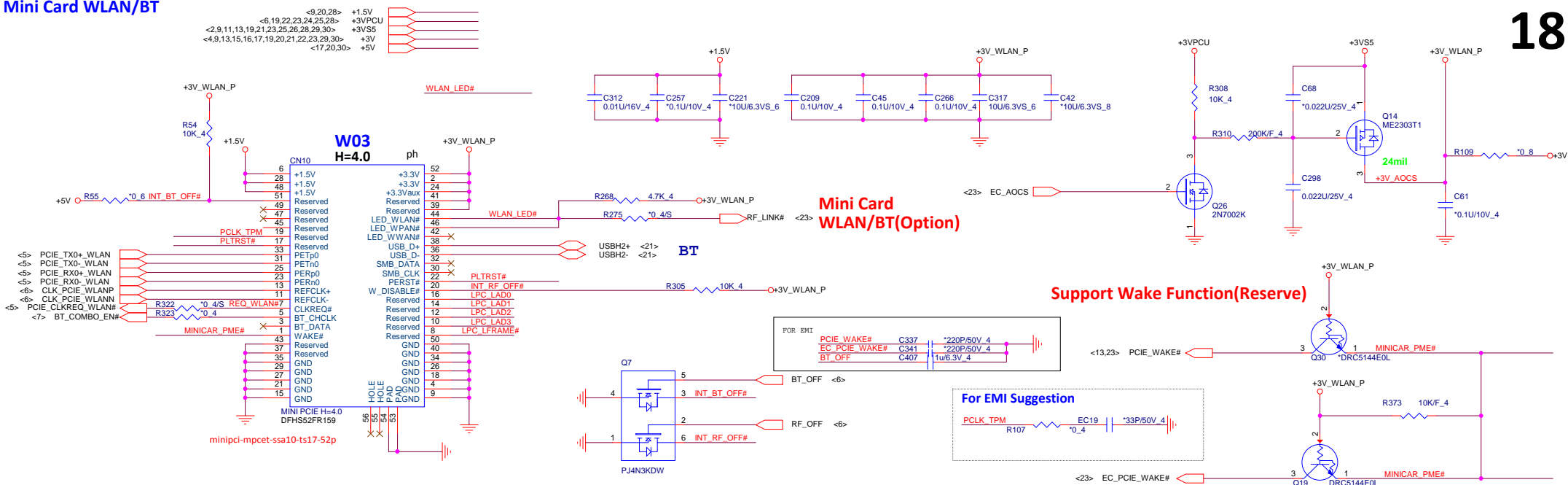


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<4,5,6,7,9,11,13,14,22,30> PP1800_PCH
<18,20,30> +5V

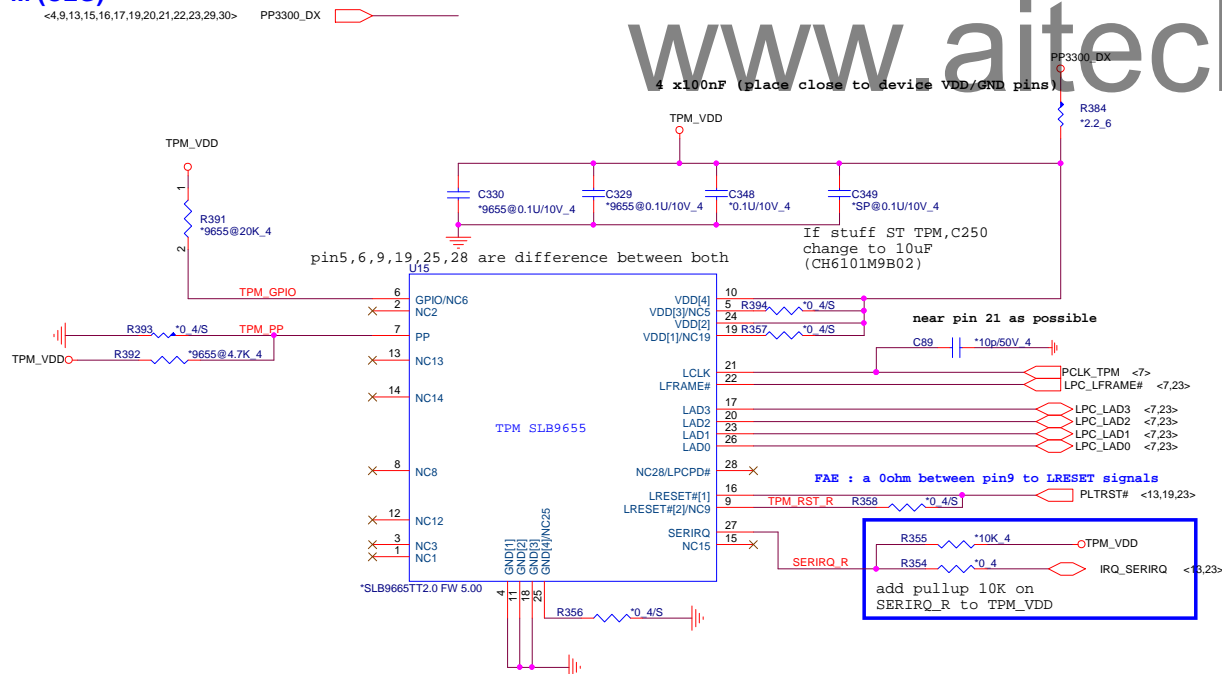
PROJECT : Y0A
Quanta Computer Inc.

Size Custom	Document Number HDMI	Rev 1A
Date: Monday, July 21, 2014		Sheet 17 of 31

Mini Card WLAN/BT

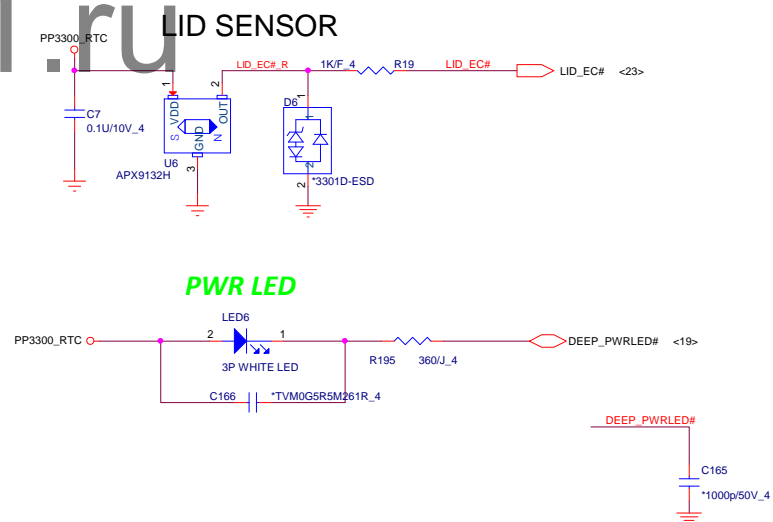



TPM (CLG)



AL009665K01 IC OTHER(28P)SLB9665TT2.0 FW 5.00(TSSOP)

LID

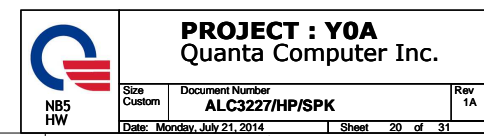


<6,19,22,23,24,25,28> PP3300_RTC 

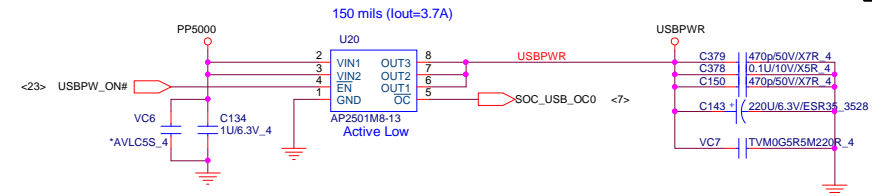


PROJECT : Y0A
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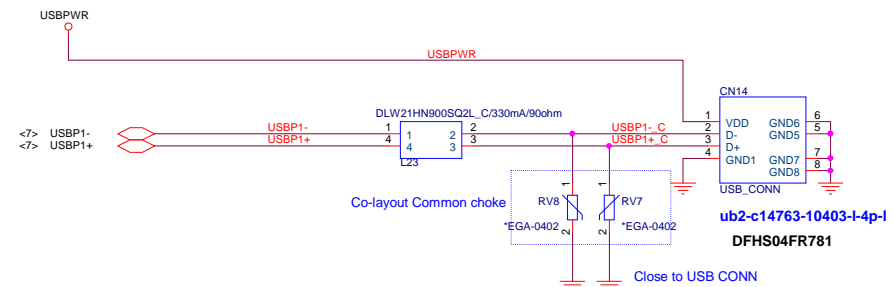
Size Custom	Document Number WLAN/TPM/LED/LID/SW	Rev 1A
Date: Monday, July 21, 2014		Sheet 18 of 31



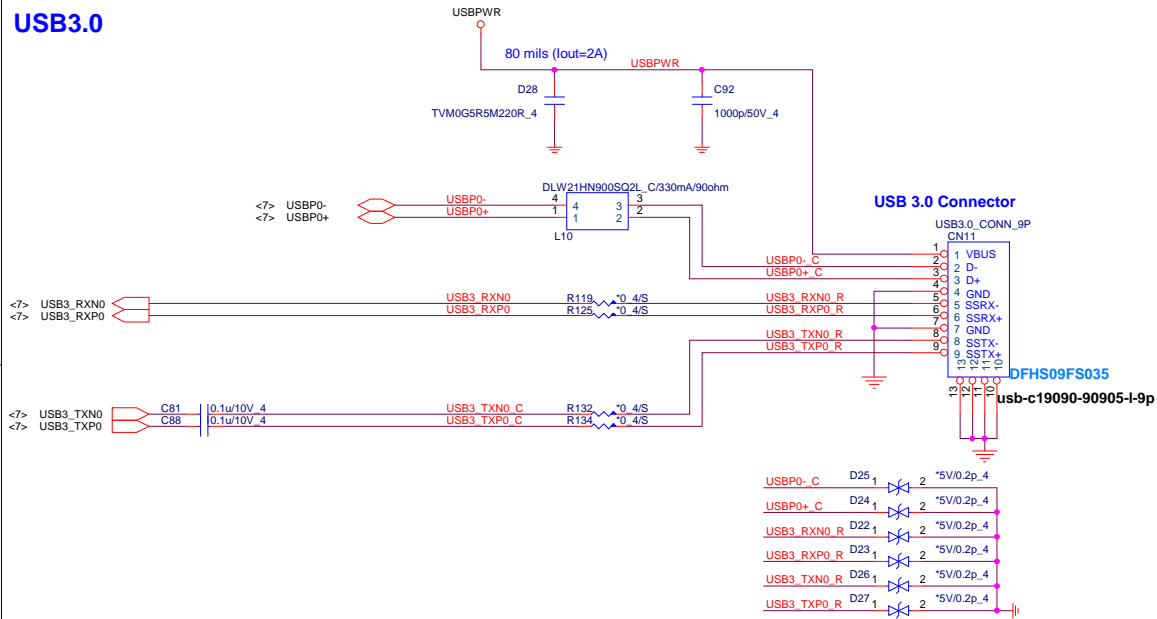
USB POWER SWITCH



USB 2.0

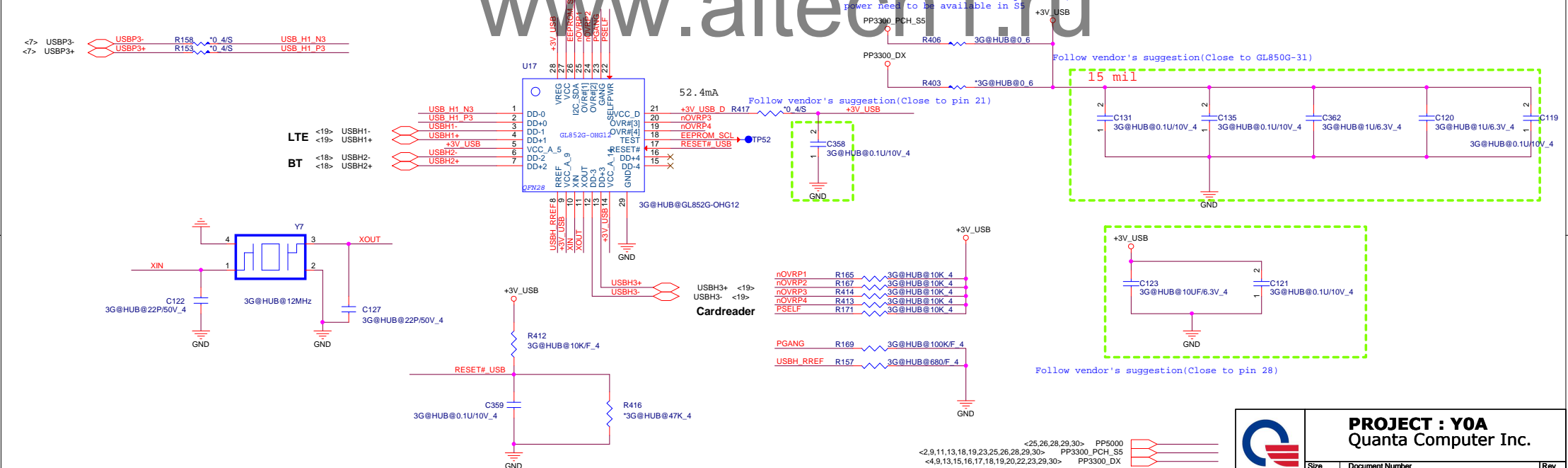


USB3.0

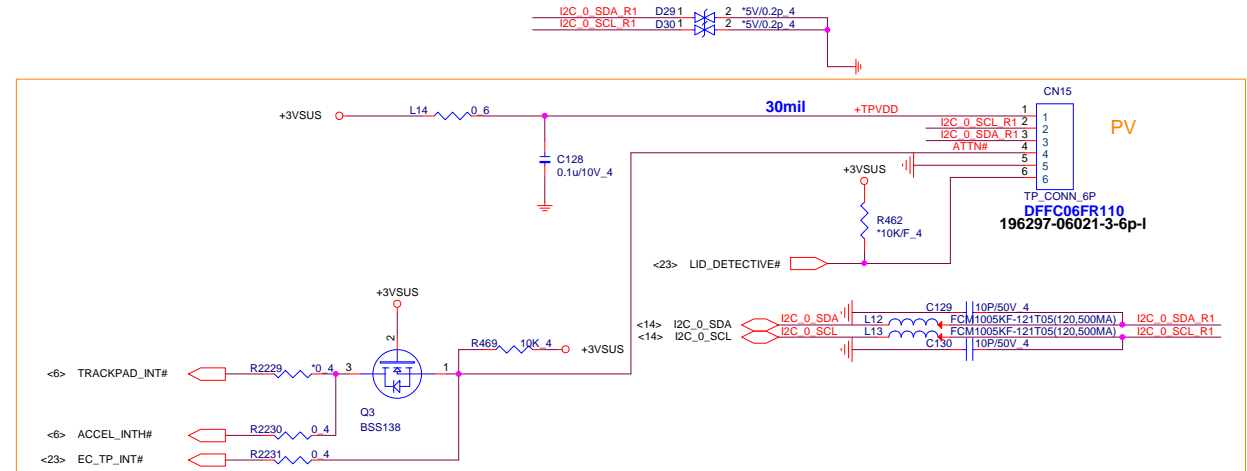
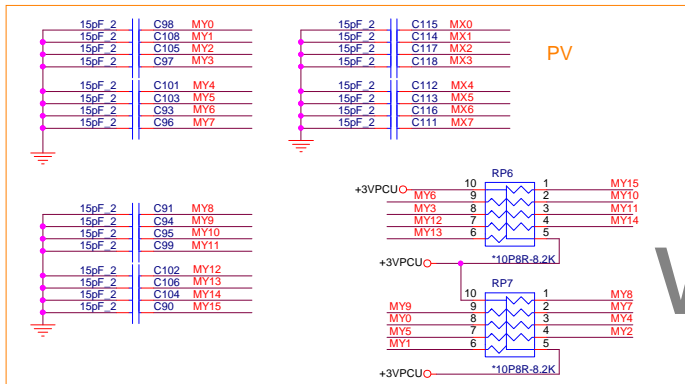
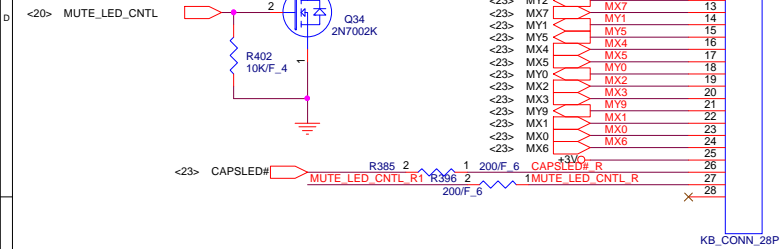


USB 2.0 HUB

3G@HUB@ means HUB will be stuffed if 3G/LTE exists

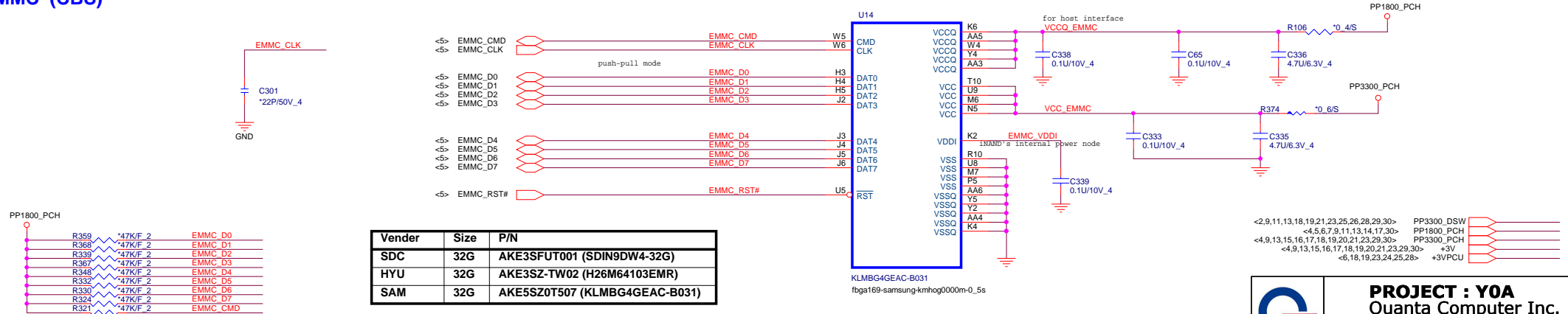


Track PAD BOARD CONN (TPD)



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EMMC (CBS)

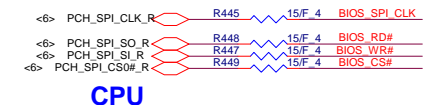
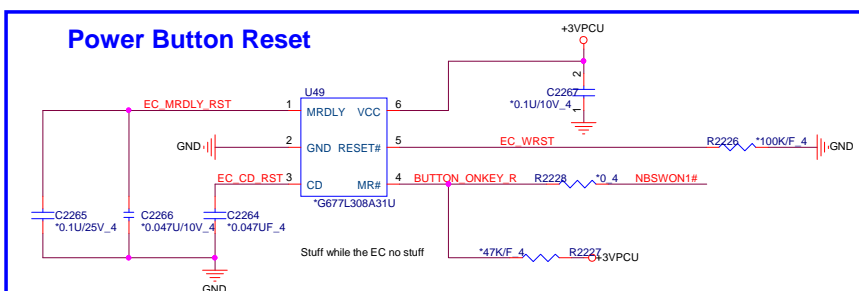
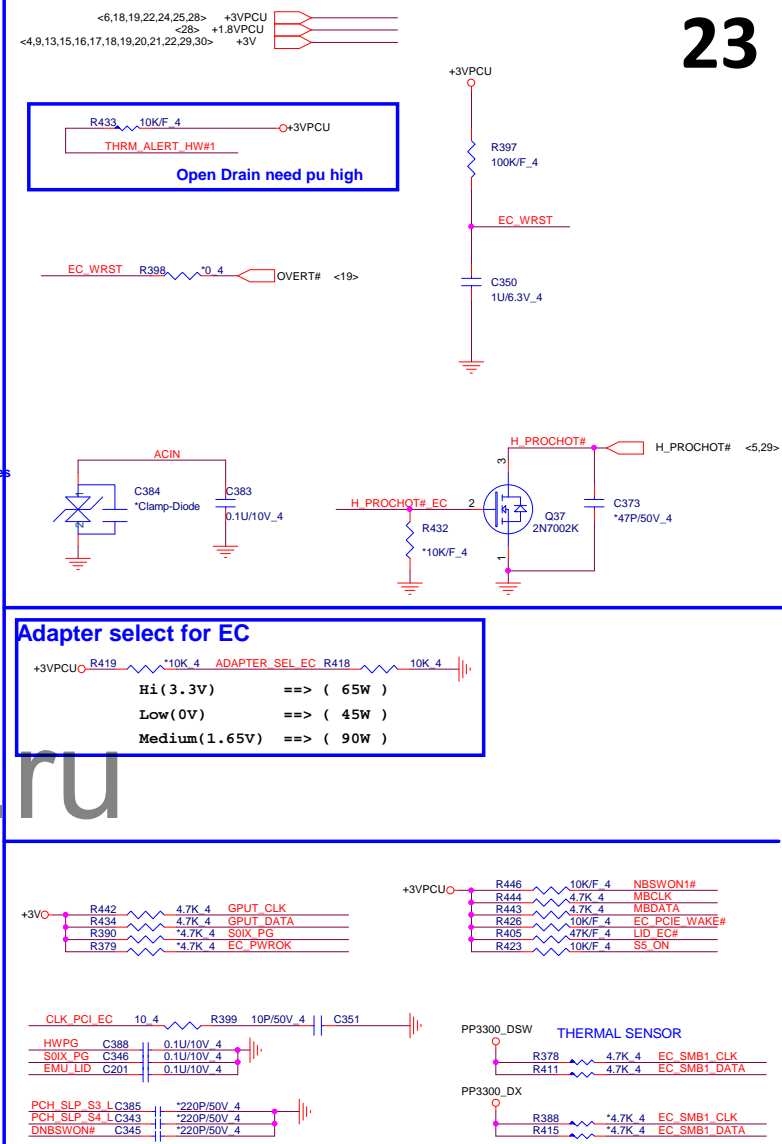


Vender	Size	P/N
SDC	32G	AKE3SFUT001 (SDIN9DW4-32G)
HYU	32G	AKE3SZ-TW02 (H26M64103EMR)
SAM	32G	AKE5SZ0T507 (KLMBG4GEAC-B031)



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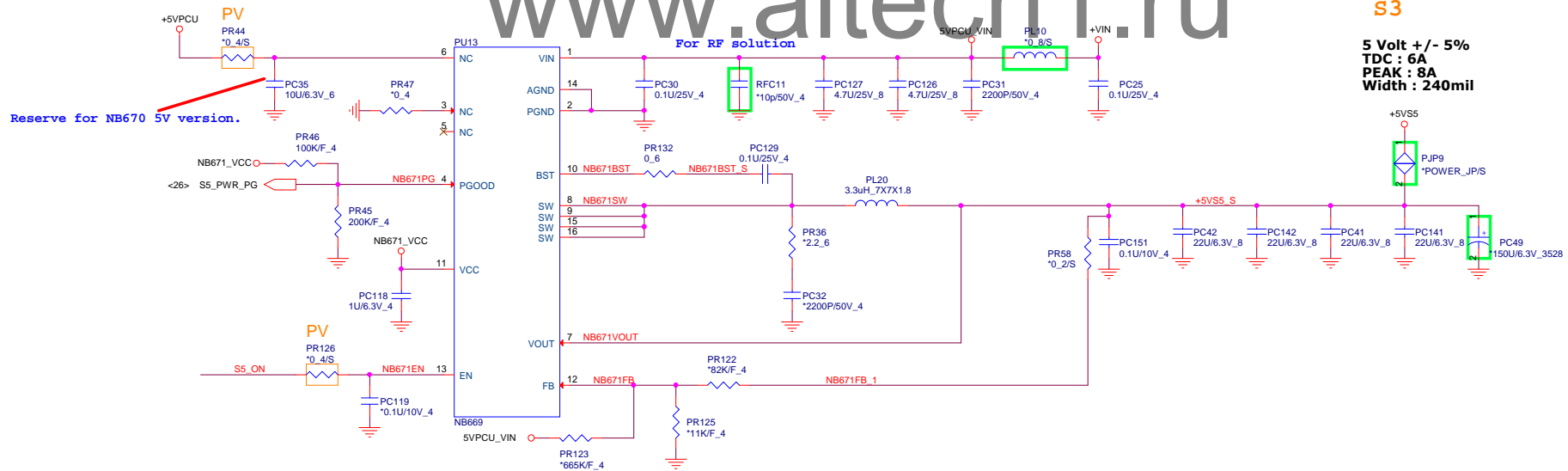
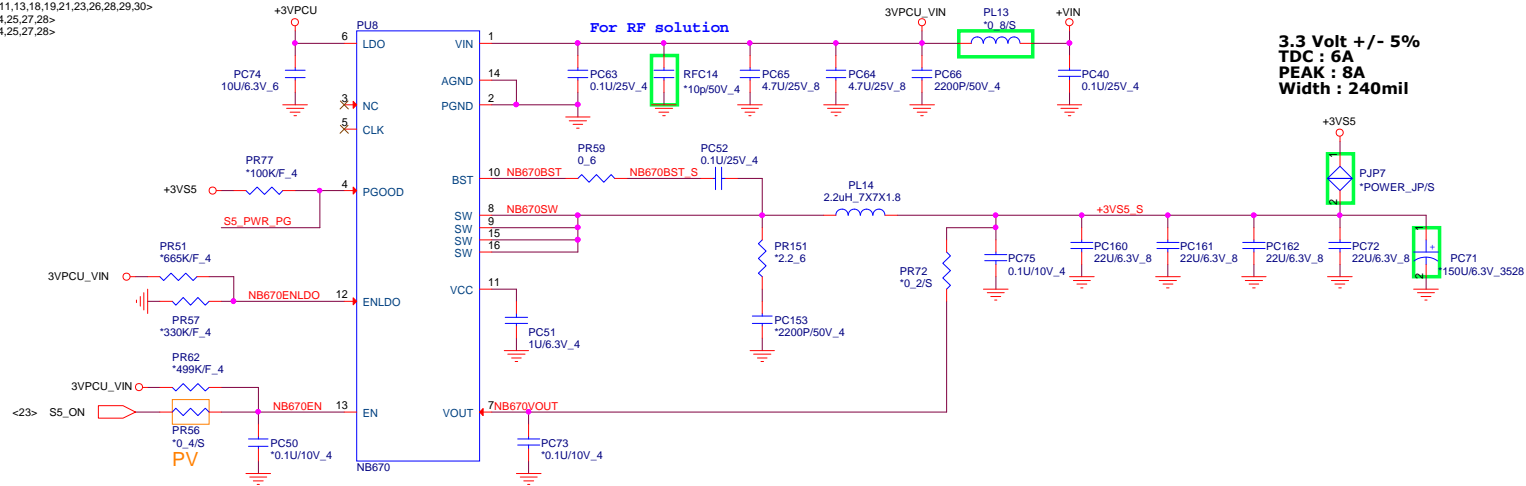
Size Custom	Document Number KB/TP/EMMC	Rev 1A
Date: Monday, July 21, 2014		Sheet 22 of 31

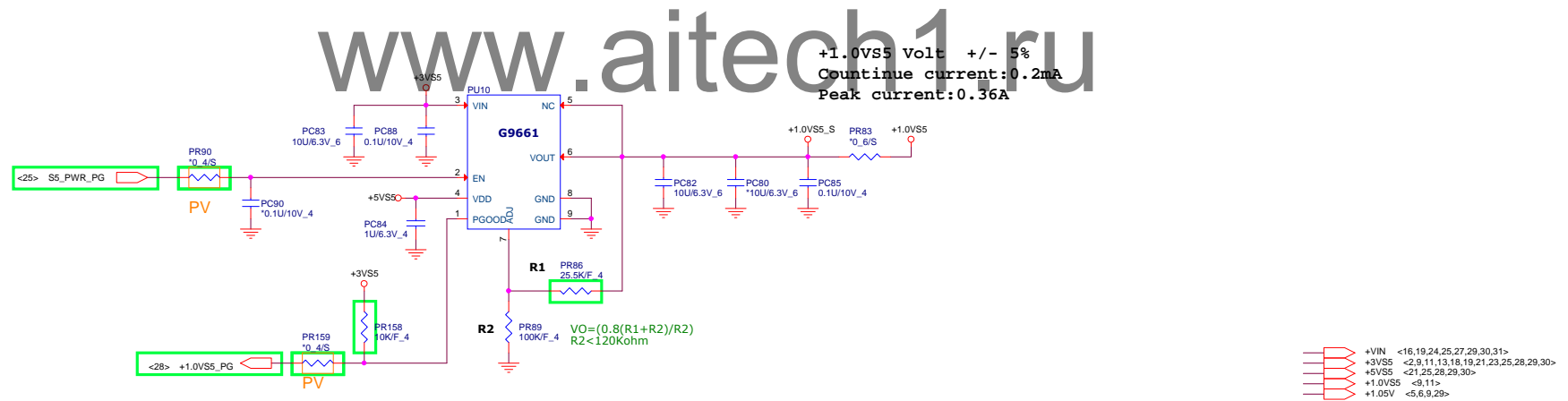
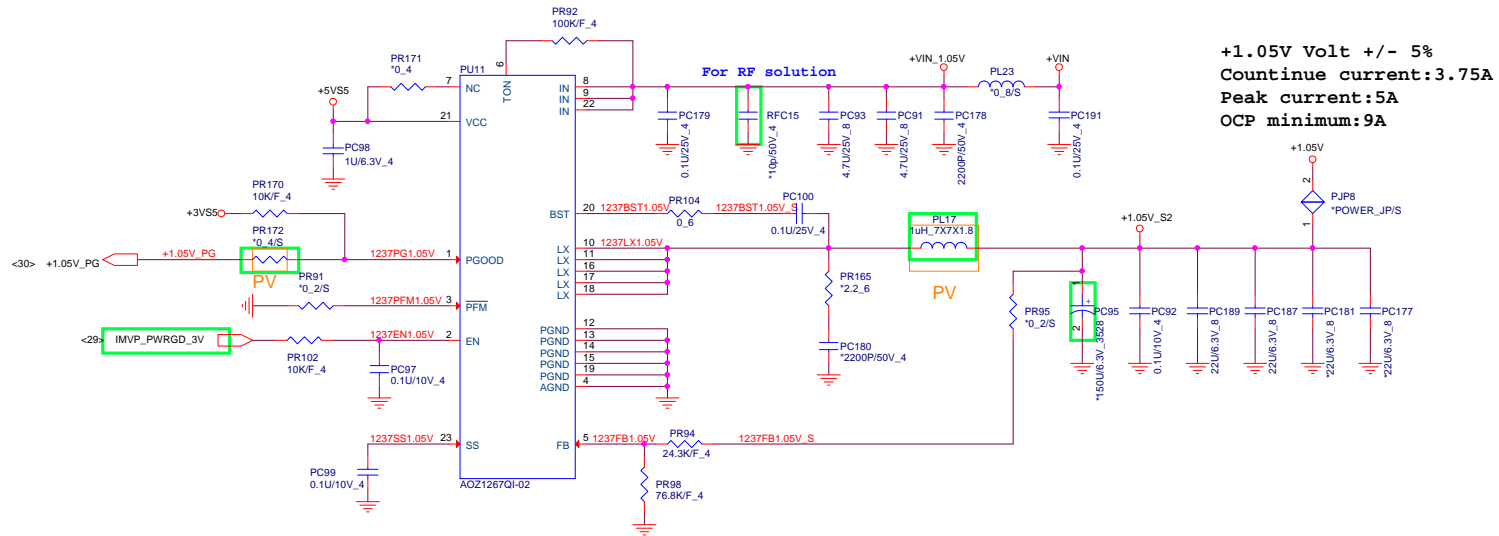


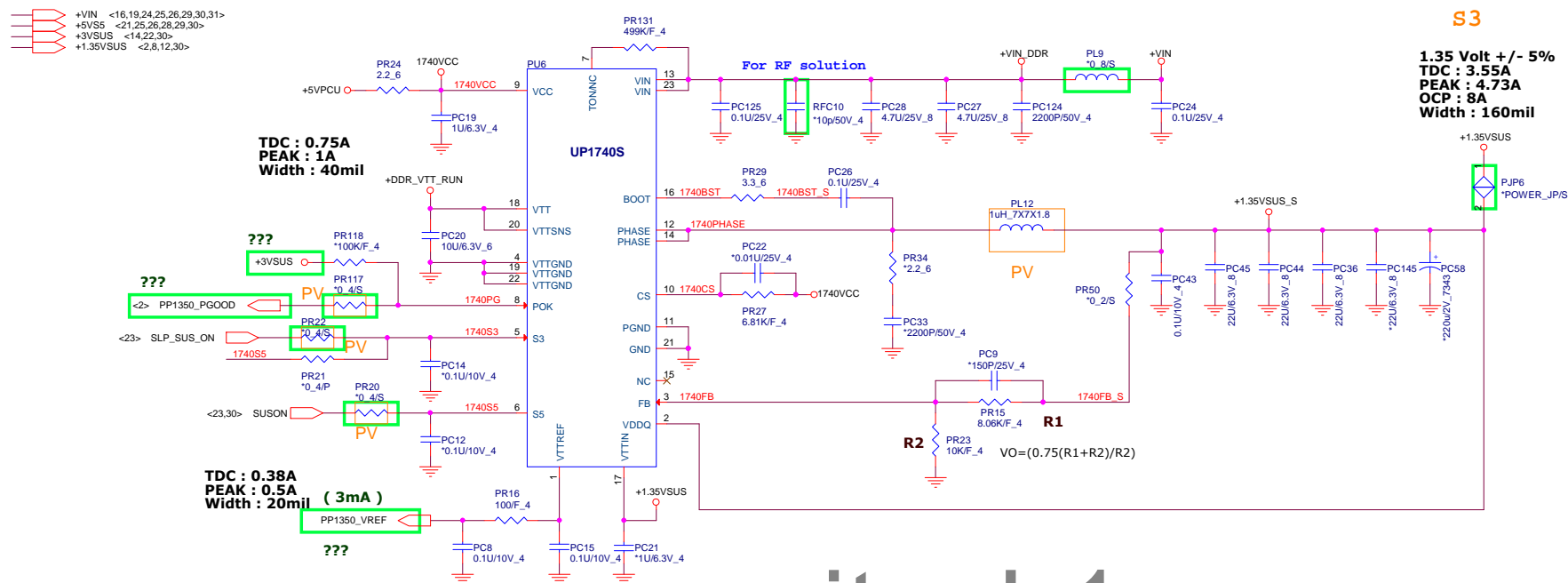
Size Custom	Document Number KBC ITE 8987	Rev 1A
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45/65W DC_JACK

+VIN <16,19,24,26,27,29,30,31>
 +3VPCU <6,18,19,22,23,24,28>
 +3VS5 <2,9,11,13,18,19,21,23,26,28,29,30>
 +5VPCU <24,25,27,28>
 +5VS5 <24,25,27,28>







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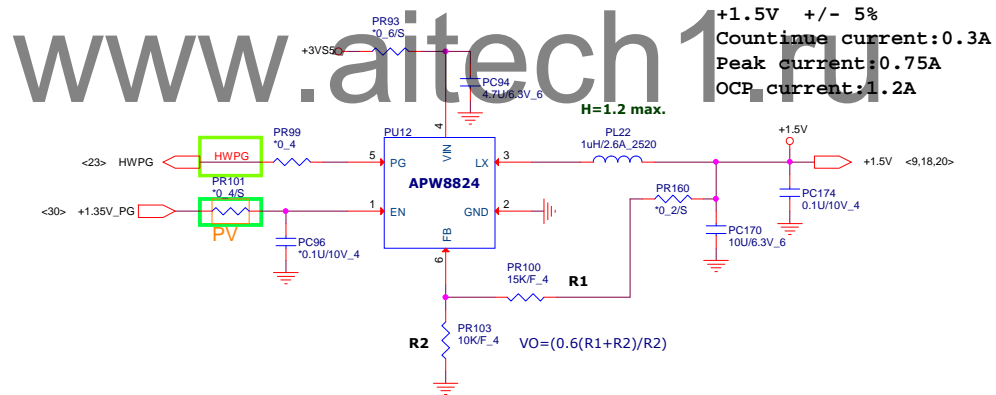
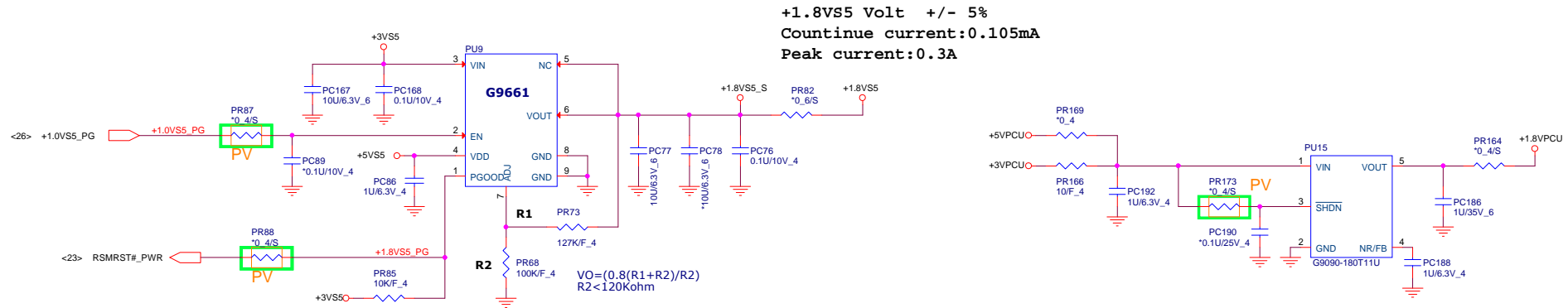
	S3	S5	+1.35VSUS	REF	VTT
S0	1	1	ON	ON	ON
S3 (main on off)	0	1	ON	ON	OFF
S4/S5	0	0	OFF	OFF	OFF

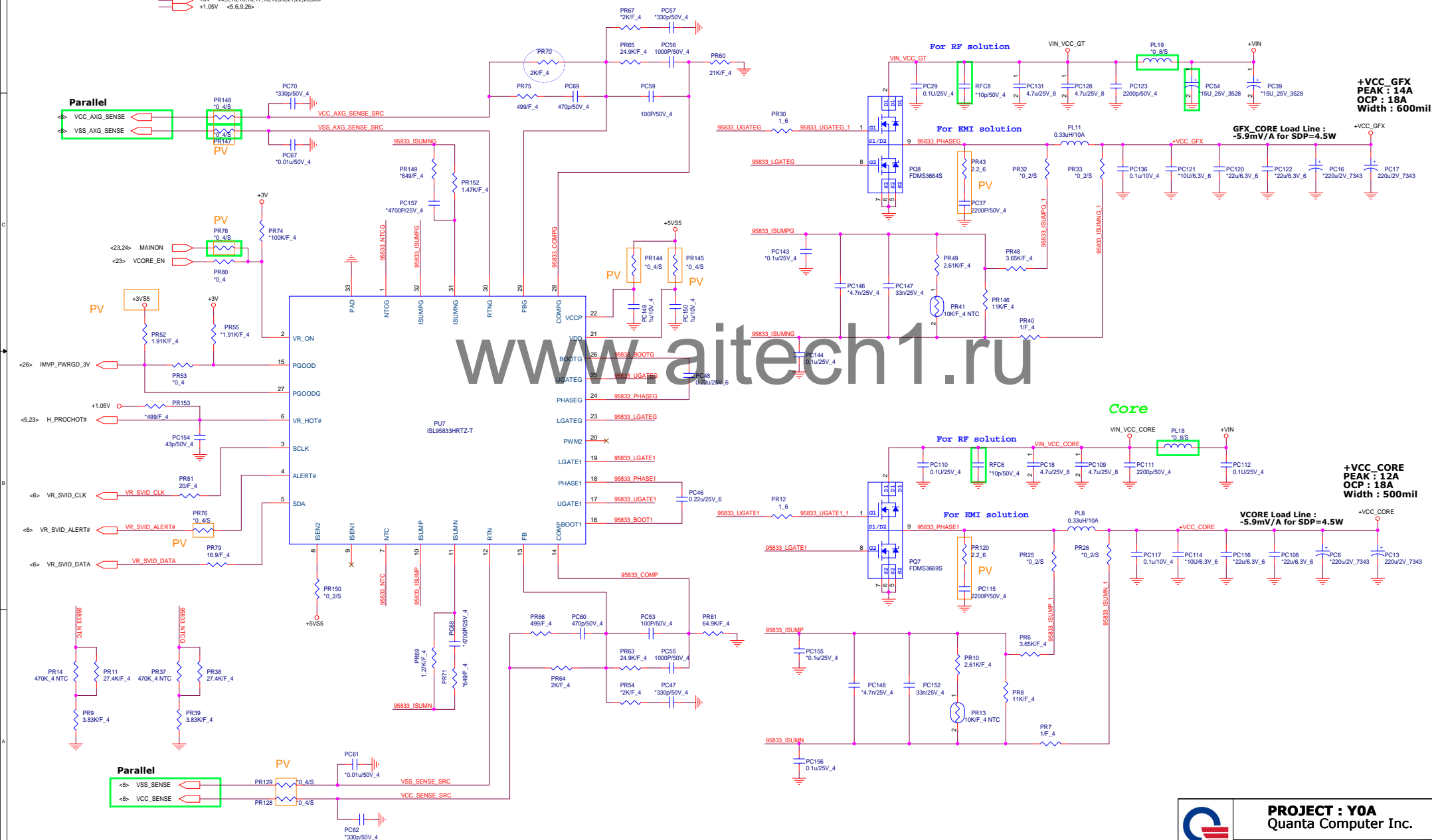


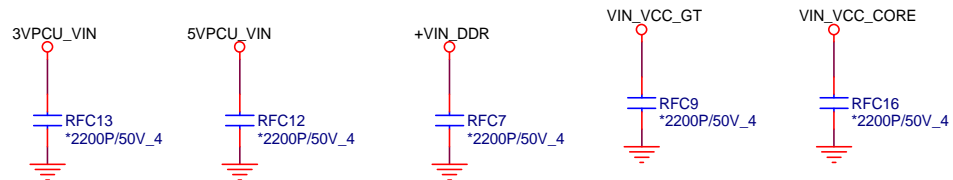
PROJECT : Y0A
Quanta Computer Inc.

Size Custom Document Number **DDR 1.35V(UP1740S)** Rev 1A
Date: Monday, July 21, 2014 Sheet 27 of 31

+1.8VS5 <6,7,9,11,13,14,30>
 +5VS5 <21,25,26,29,30>
 +3VS5 <2,9,11,13,18,19,21,23,25,26,29,30>
 +3VPCU <6,18,19,22,23,24,25>
 +5VPCU <24,25,27>
 +1.8VPCU <23>



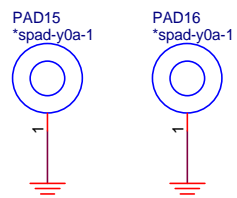
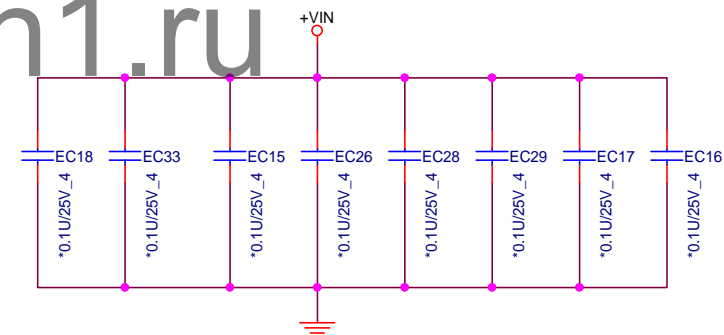
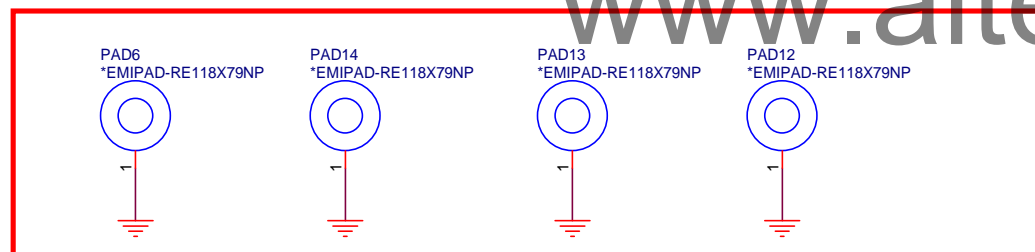




TOP



BOTTOM



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Quanta Computer Inc.

Size Custom	Document Number EM/RF	Rev 1A
Date: Monday, July 21, 2014	Sheet 31 of 31	