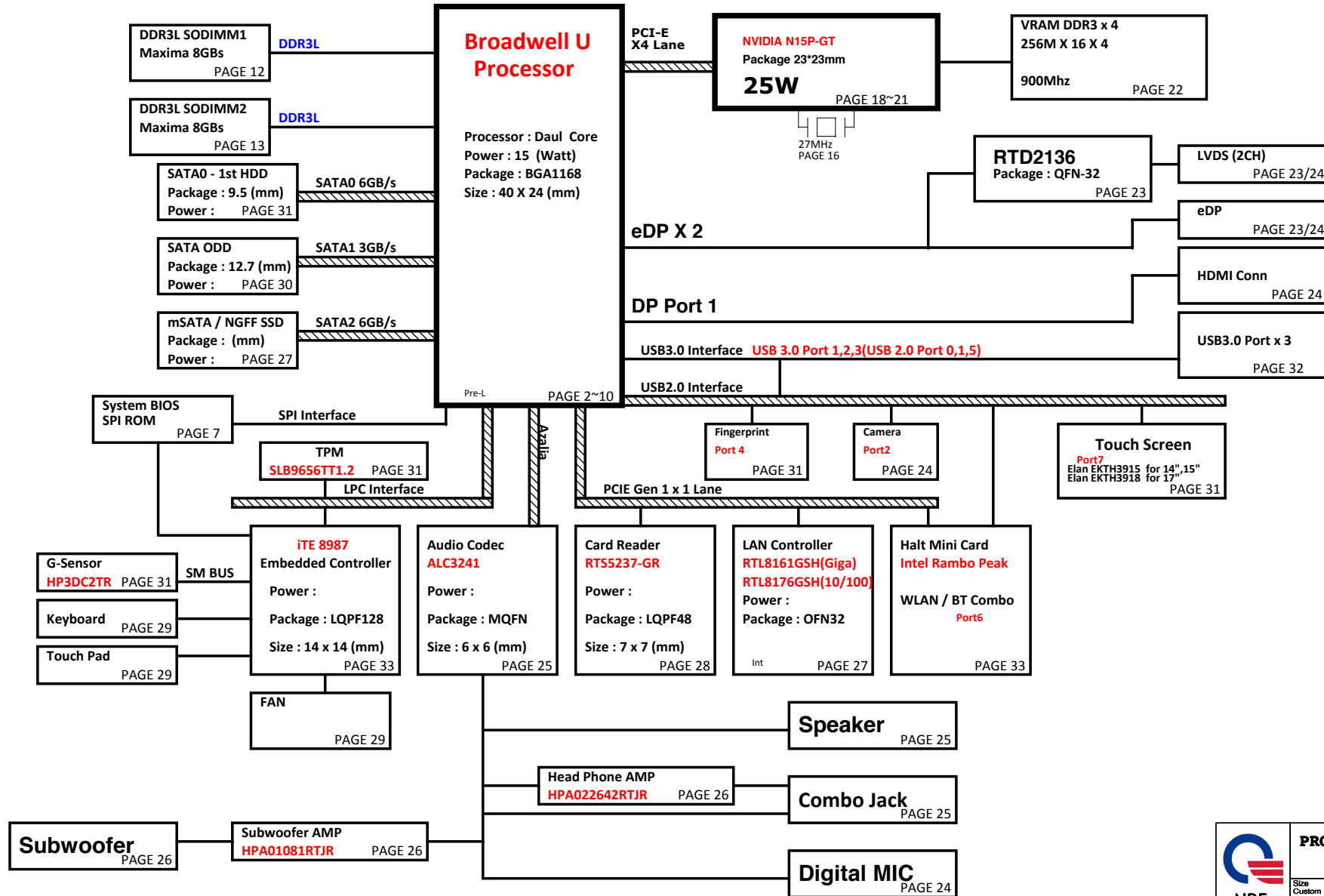


DIS (14" / 15" / 17") S-Vine^{MT} Intel Crescent Bay ULT Platform Block Diagram

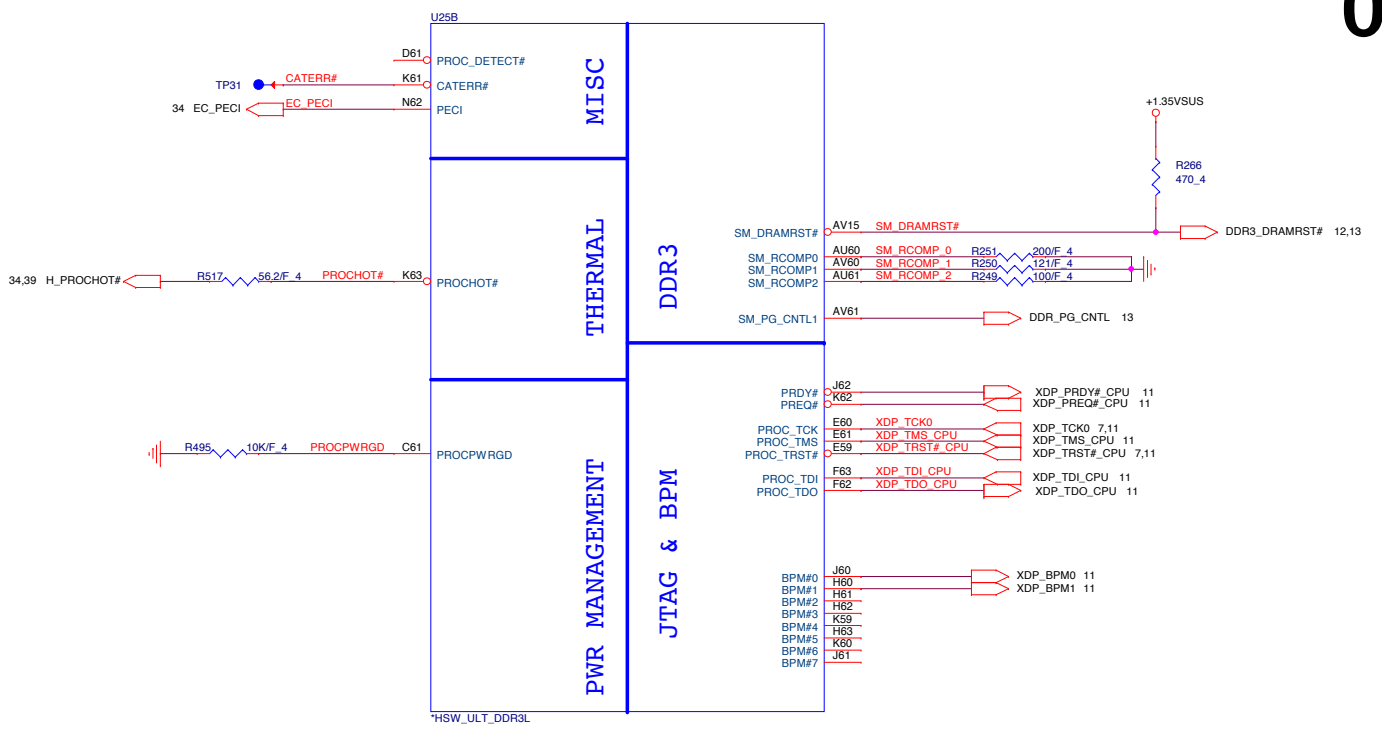
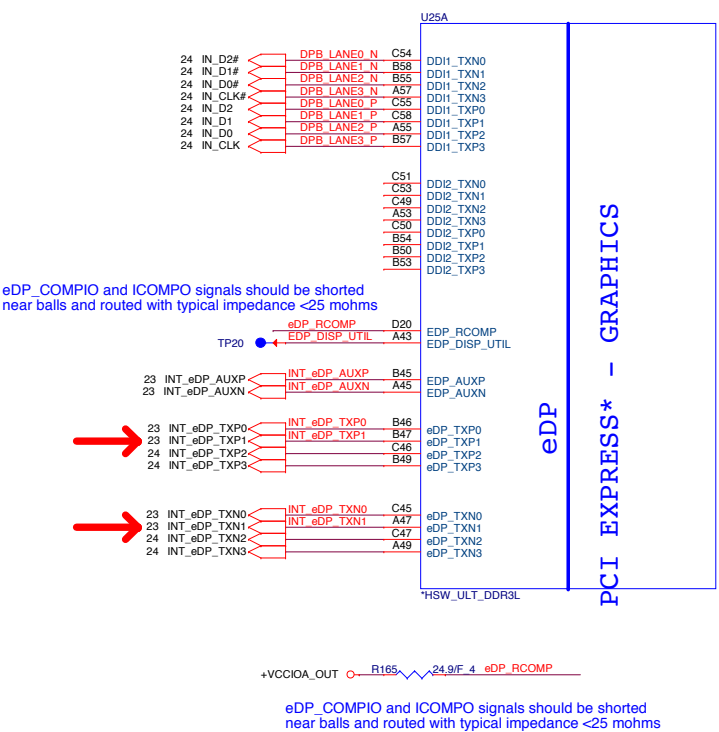
01

PCB 6L STACK UP

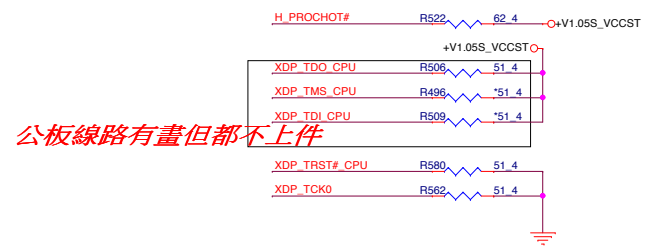
LAYER 1 : TOP
 LAYER 2 : SGND
 LAYER 3 : IN1(High)
 LAYER 4 : IN2(Low)
 LAYER 5 : SVCC
 LAYER 6 : BOT



	PROJECT : Y11C	
	Quanta Computer Inc.	
	Size Custom	Document Number Block Diagram
Date: Tuesday, April 08, 2014		Sheet 1 of 44



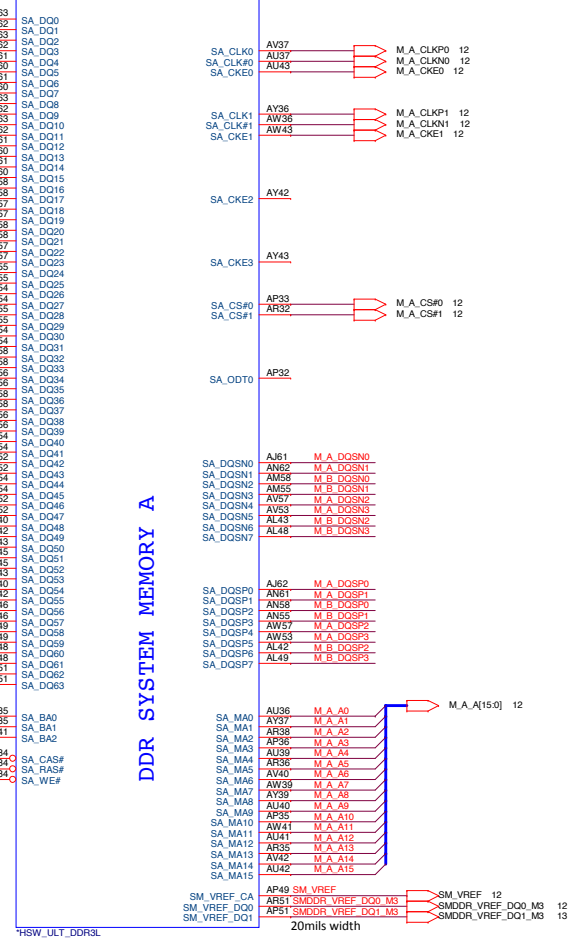
Processor pull-up (CPU)



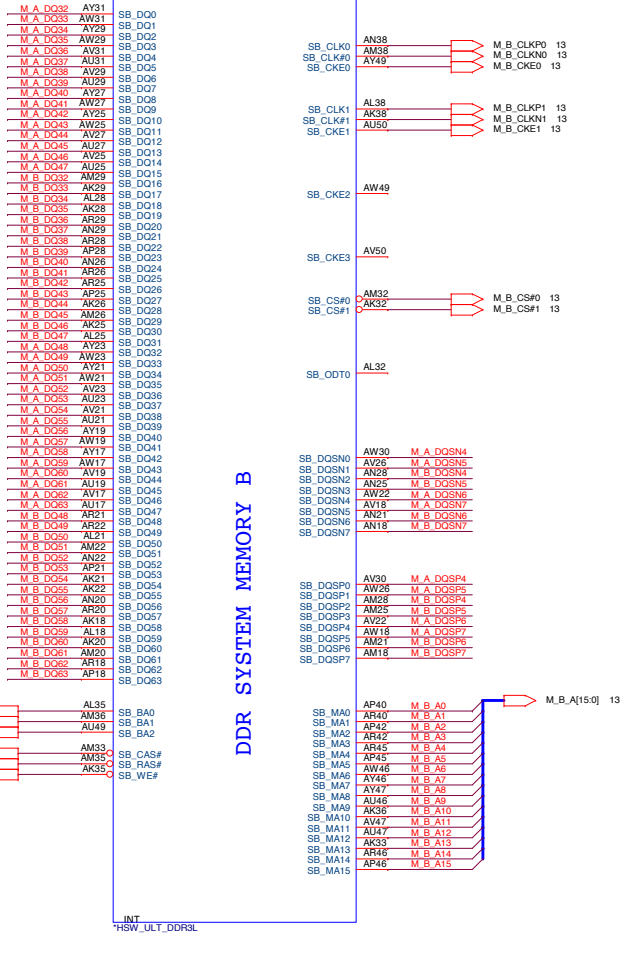
Haswell ULT Processor (DDR3L)

- 12 M.A_DQ[63:0]
- 13 M.B_DQ[63:0]
- 12 M.A_DQS[7:0]
- 12 M.A_DQSP[7:0]
- 13 M.B_DQS[7:0]
- 13 M.B_DQSP[7:0]

U25C



U25D

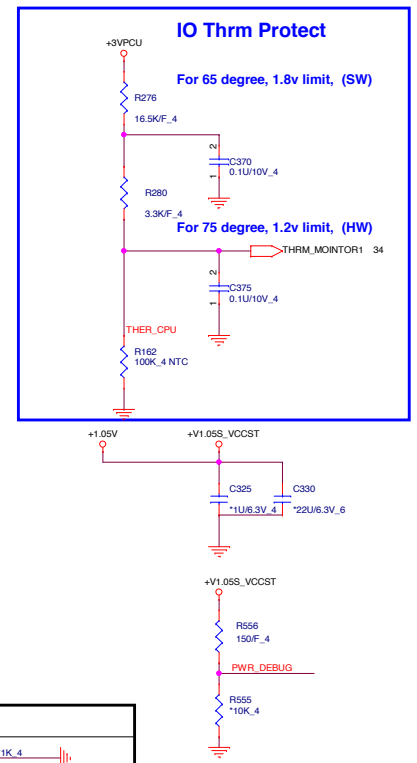
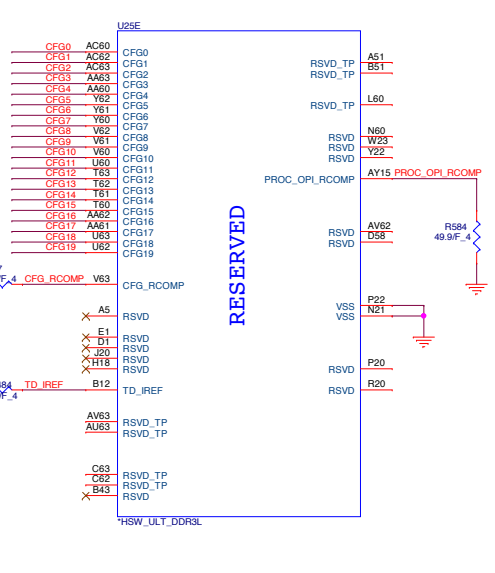
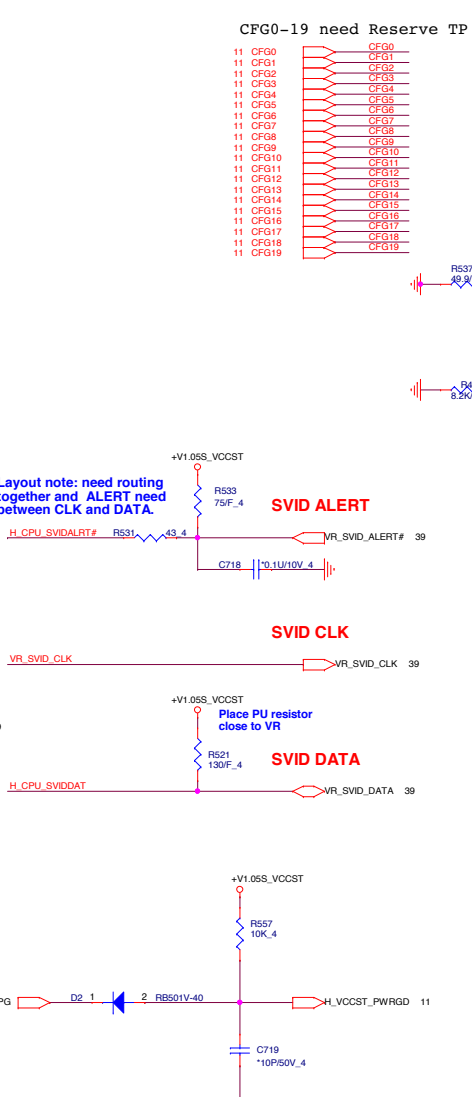
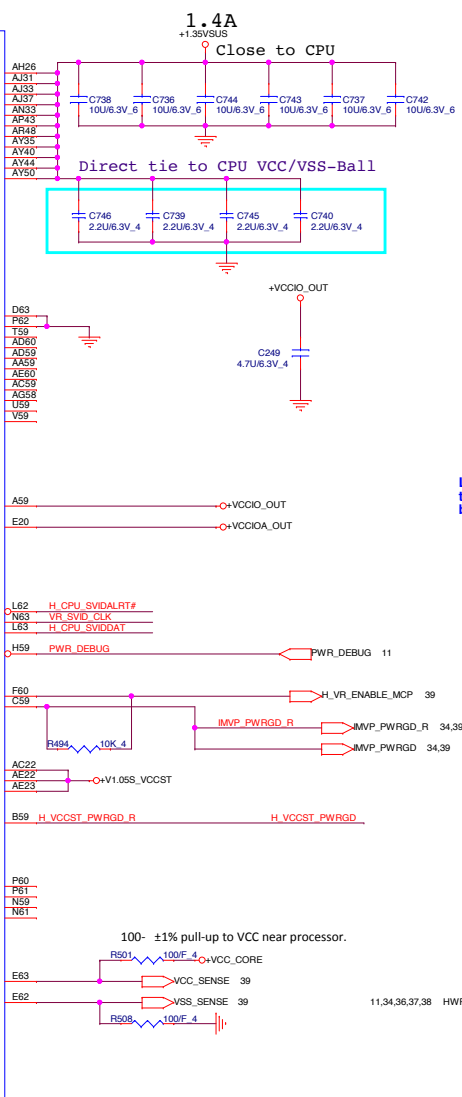
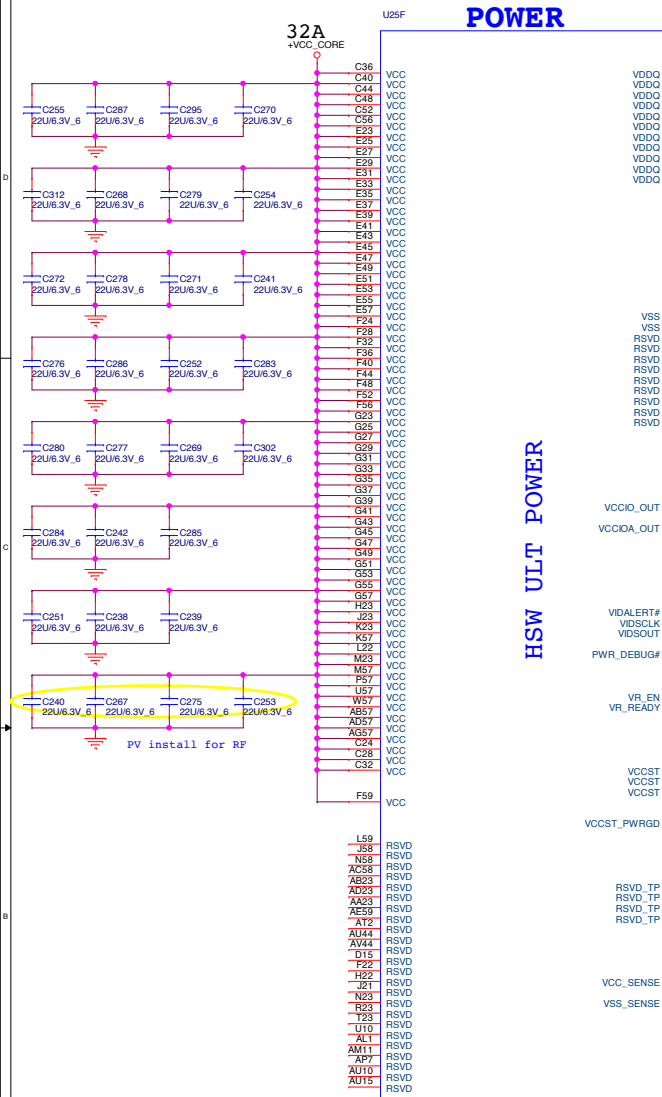


*HSW_ULT_DDR3L

20mils width

PROJECT : Y11C
Quanta Computer Inc.

Size: Custom Document Number: ULT 2/9 (DDR3 I/F) Rev: 1A
Date: Wednesday, April 02, 2014 Sheet: 3 of 44



Processor Strapping

The CFG signals have a default value of '1' if not terminated on the board.

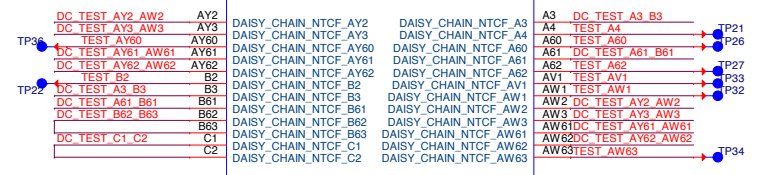
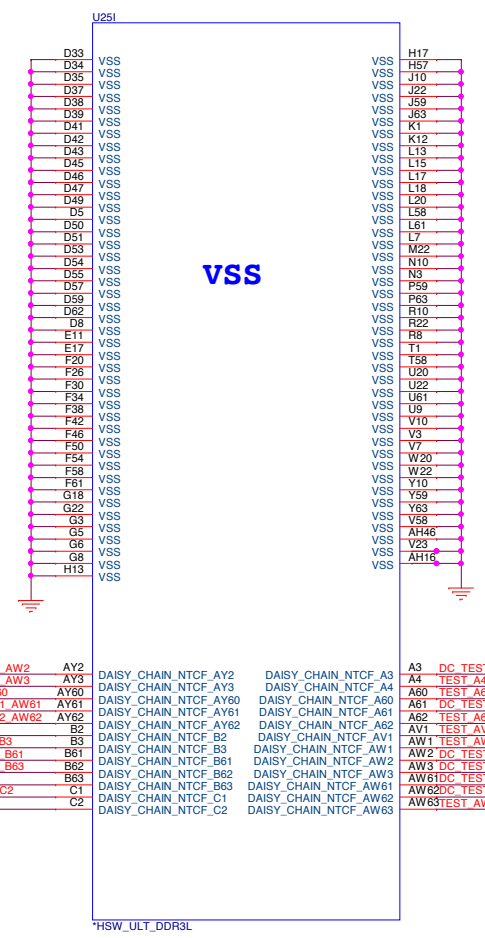
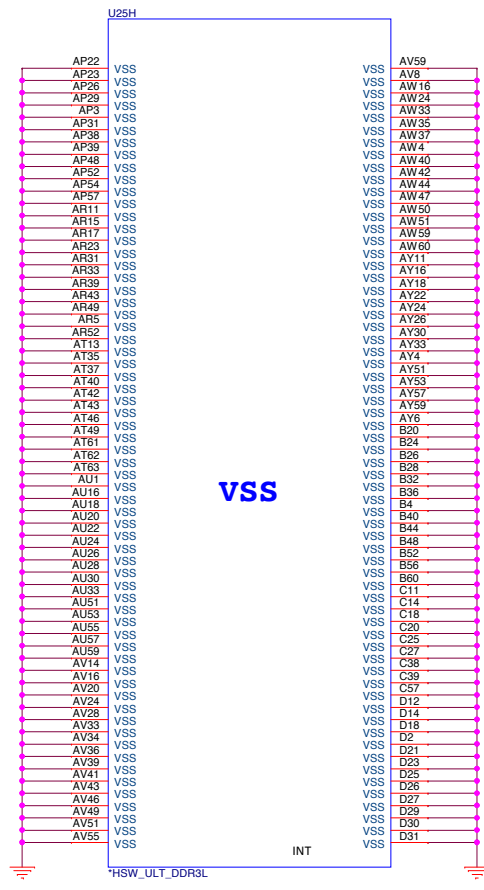
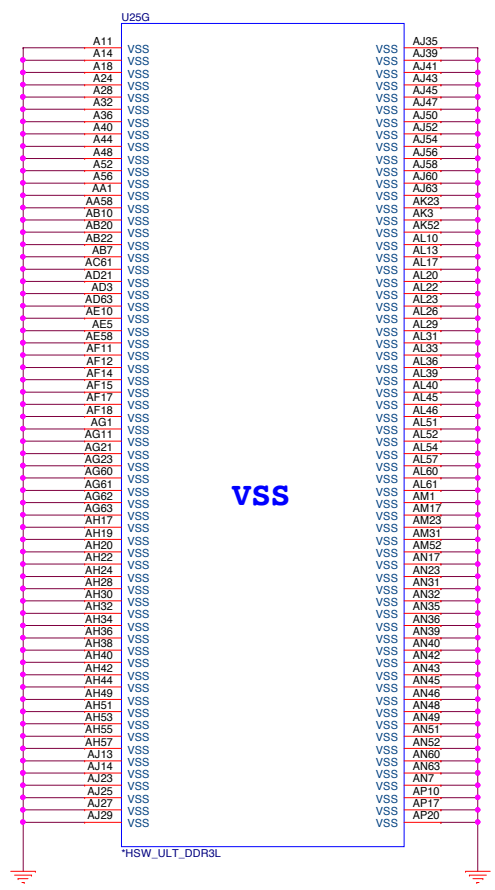
	1	0	Circuit
CFG3 (Physical Debug Enable) DFX_Privacy	Disable:	Enable: Set DFX Enable in DFX interface MSR	
CFG4 (DP Presence Strap)	Disable; No physical DP attached to eDP	Enable; An ext DP device is connected to eDP	

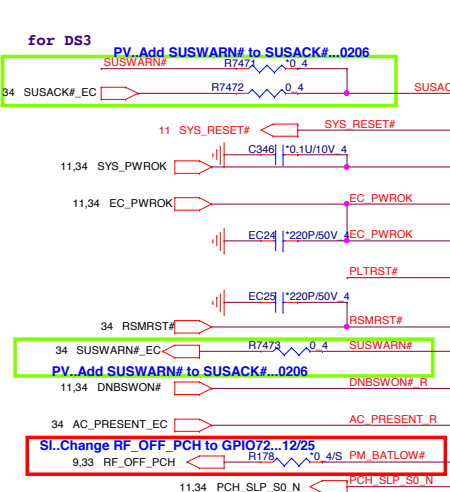
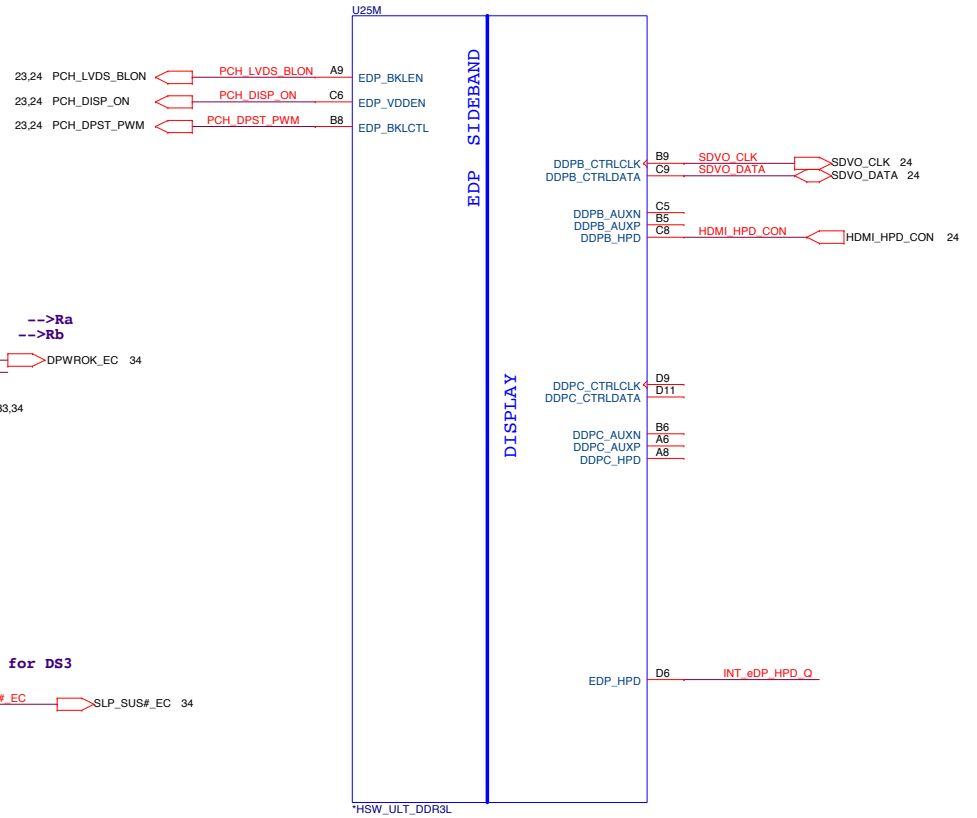
- +VCCIO_OUT 2
- +VCCIO_OUT 6
- +1.35VSUS 2,12,13,29,37
- +1.05V 2,7,9,10,11,31,34,38,39,40,43
- +VCC_CORE 39

PROJECT : Y11C
Quanta Computer Inc.

Size Custom Document Number
04 - ULT 3/9 (POWER-1)

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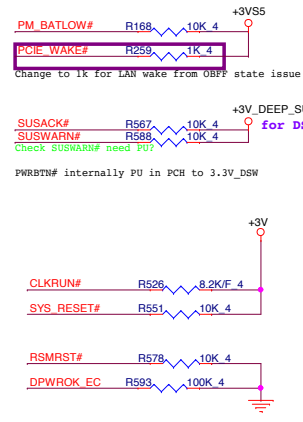
System Power Management

EDP SIDEBAND

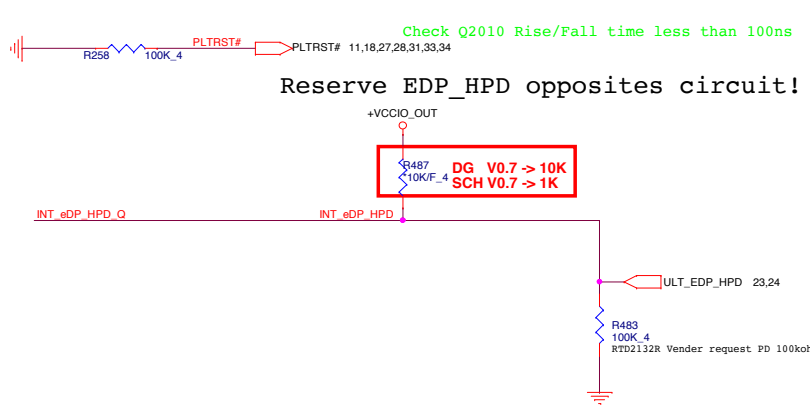
DISPLAY

INT. HDMI

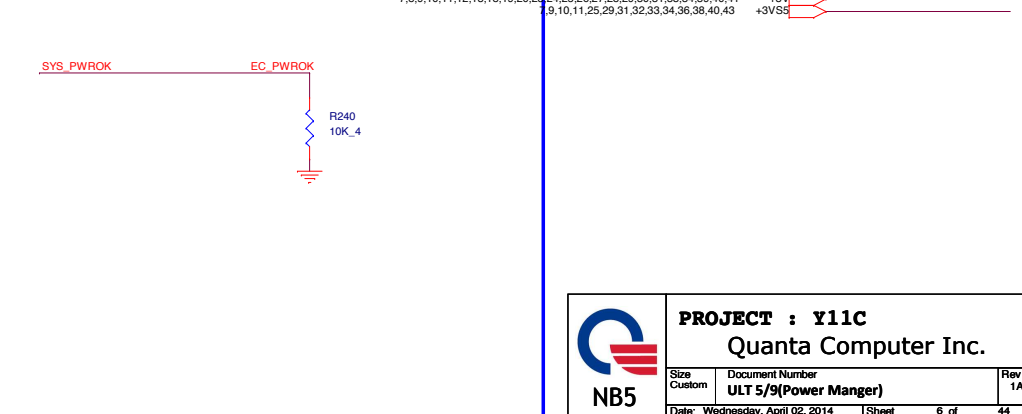
PCH Pull-high/low(CLG)



PLTRST#(CLG)

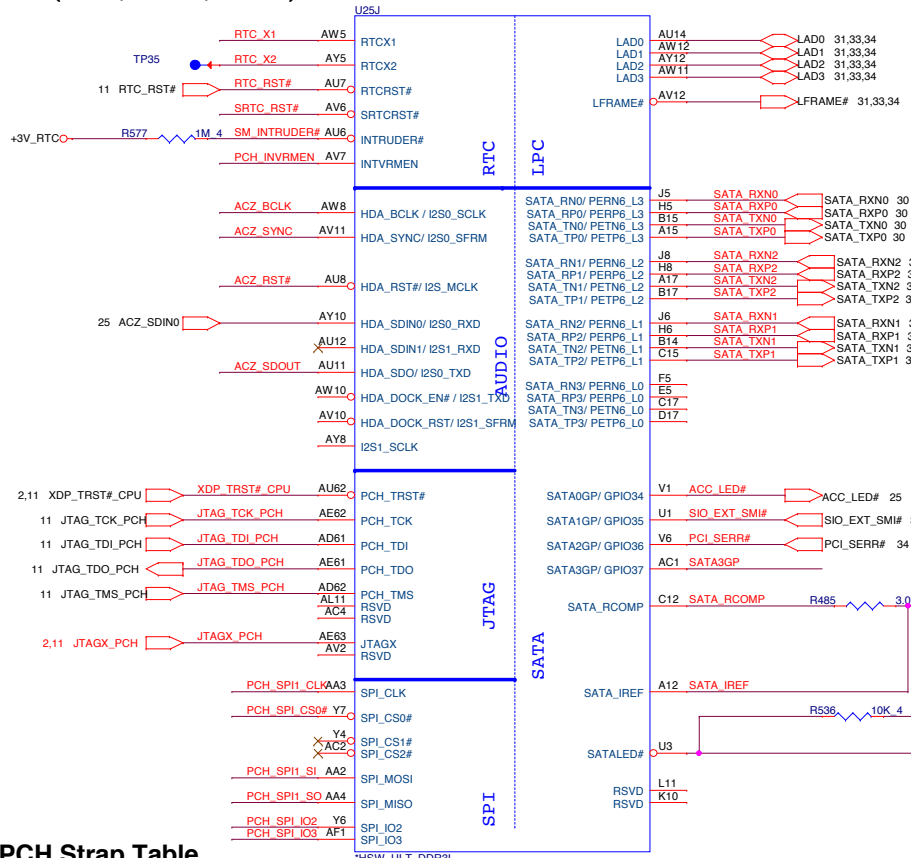


System PWR_OK(CLG)



	PROJECT : Y11C Quanta Computer Inc.		Rev 1A
	Size Custom	Document Number	Rev 1A
	Date: Wednesday, April 02, 2014		Sheet 6 of 44

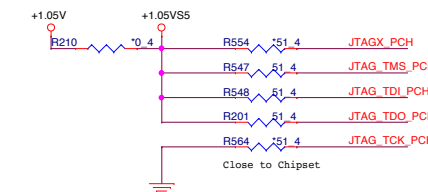
Lynx Point-LP Platform Controller Hub (HDA, JTAG, SATA)



PCH Strap Table

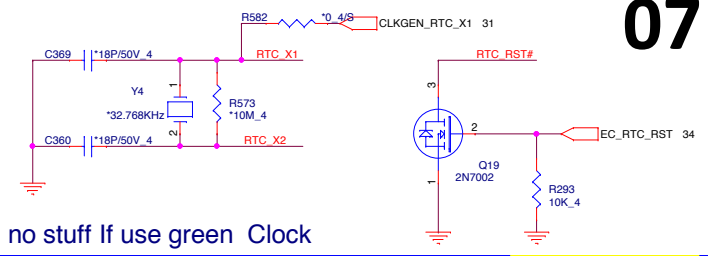
Pin Name	Strap description	Sampled	Configuration	Circuit								
SPKR	No reboot mode setting	PWROK	0 = Default (weak pull-down 20K) 1 = Setting to No-Reboot mode									
SDIO_D0 / GPIO66	Top-Block Swap	PWROK	0 = "top-block swap" mode 1 = Default (weak pull-up 20K)									
INTVRMEN	Integrated 1.05V VRM enable	ALWAYS	Should be always pull-up	+3V_RTC - R575 330K 4 PCH_INVRMEN								
HDA_SDO /I2S0_TXD	Flash Descriptor Security Only for Interposer	PWROK	0 = Default (weak pull-down 20K) 1 = Can be Overriden	34 GPIO3_EC - R581 1K 4 ACZ_SDO								
GSPI0_MOSI / GPIO86	Boot BIOS Selection	PWROK	<table border="1"> <tr> <th>GNT0#</th> <th>Boot Location</th> </tr> <tr> <td>1</td> <td>LPC</td> </tr> <tr> <td>0</td> <td>SPI(Default)</td> </tr> </table>	GNT0#	Boot Location	1	LPC	0	SPI(Default)			
GNT0#	Boot Location											
1	LPC											
0	SPI(Default)											
GPIO15	TLS Confidentiality	PWROK	0 = ME Crypto Transport Layer Security cipher suite with no confidentiality(Default) 1 = Intel ME Crypto TLS cipher suite with confidentiality									
DSWVRMEN	Deep Sx Well On-Die Voltage Regulator Enable	ALWAYS	Should be always pull-up	+3V_RTC - R576 330K 4 DSWVRMEN 6								
<table border="0"> <tr> <td>34 PCH_SPL_CS0# R</td> <td>PCH_SPL_CS0# R</td> </tr> <tr> <td>34 PCH_SPL_CLK R</td> <td>PCH_SPL_CLK R</td> </tr> <tr> <td>34 PCH_SPL_SI R</td> <td>PCH_SPL_SI R</td> </tr> <tr> <td>34 PCH_SPL_SO R</td> <td>PCH_SPL_SO R</td> </tr> </table>					34 PCH_SPL_CS0# R	PCH_SPL_CS0# R	34 PCH_SPL_CLK R	PCH_SPL_CLK R	34 PCH_SPL_SI R	PCH_SPL_SI R	34 PCH_SPL_SO R	PCH_SPL_SO R
34 PCH_SPL_CS0# R	PCH_SPL_CS0# R											
34 PCH_SPL_CLK R	PCH_SPL_CLK R											
34 PCH_SPL_SI R	PCH_SPL_SI R											
34 PCH_SPL_SO R	PCH_SPL_SO R											

HDD (SATA3 6.0Gb/s)
 ODD (SATA2 3.0Gb/s)
 mSATA / NGFF (SATA4 6Gb/s)



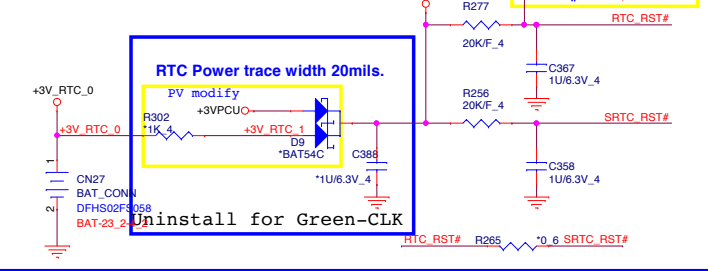
DG recommended that SATA AC coupling capacitors should be close to the connector (<100 mils) for optimal signal quality.

RTC Clock 32.768KHz

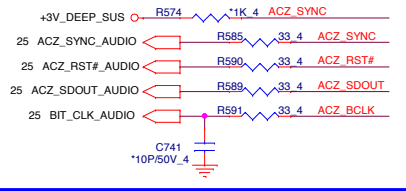


no stuff if use green Clock

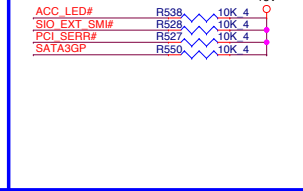
RTC Circuitry(RTC)



HDA Bus(CLG)

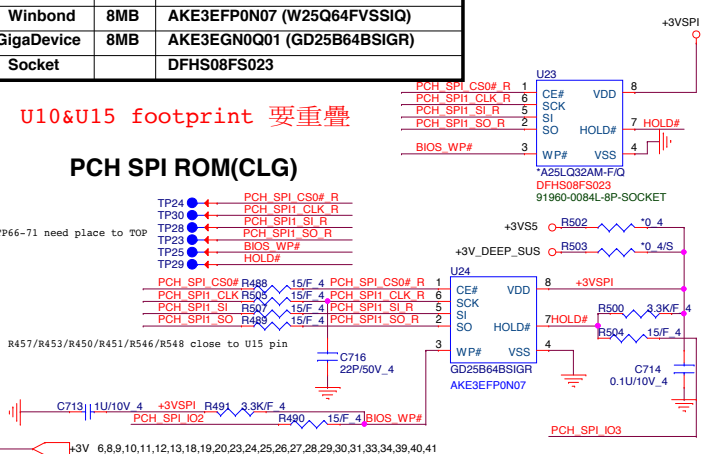


GPIO Pull UP

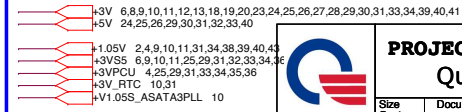
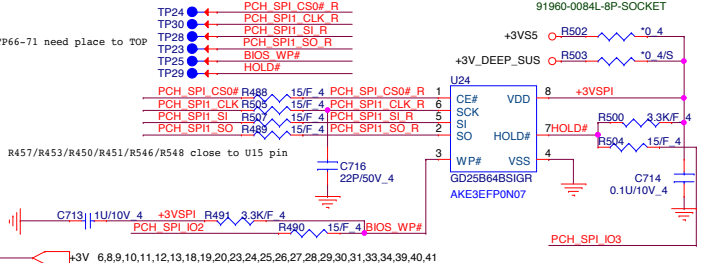


Vender	Size	P/N
MXIC	8MB	AKE3EZN0Z00 (MX25L6473EM2I-10G)
Winbond	8MB	AKE3EFP0N07 (W25Q64FVSSIQ)
GigaDevice	8MB	AKE3EGN0Q01 (GD25B64BSIGR)
Socket		DFHS08FS023

4M SPI ROM Socket



PCH SPI ROM(CLG)

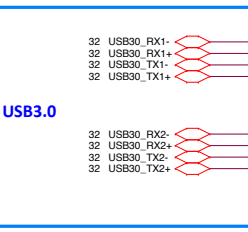
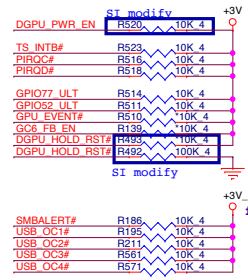


PROJECT : Y11C
 Quanta Computer Inc.

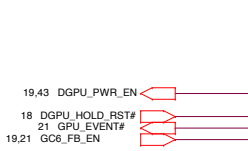
Size Custom	Document Number ULT 6/9(SATA/HDA)	Rev 1A
Date: Wednesday, April 02, 2014	Sheet 7 of	44

Lynx Point-LP Platform Controller Hub (HDA, JTAG, SATA)

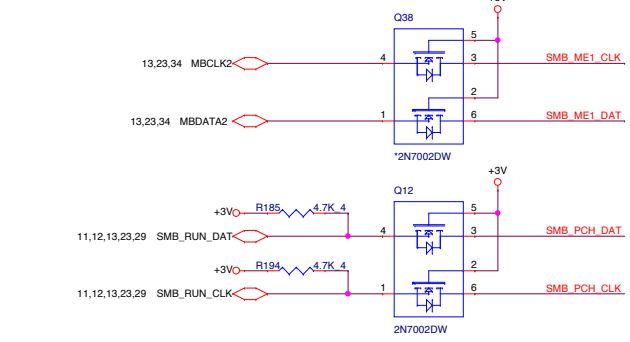
PCI/USBOC# Pull-up(CLG)



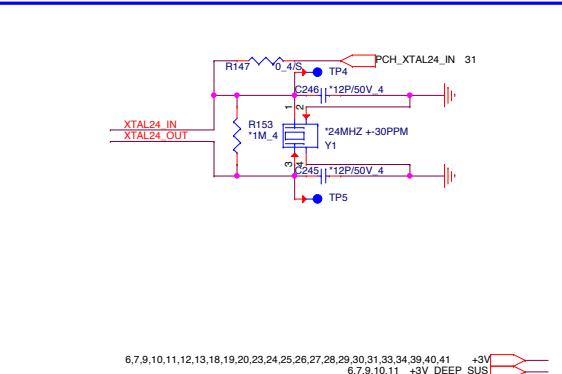
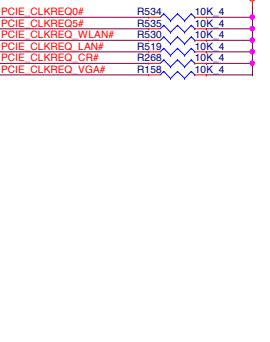
20111130 Modify USB3.0 for HM70



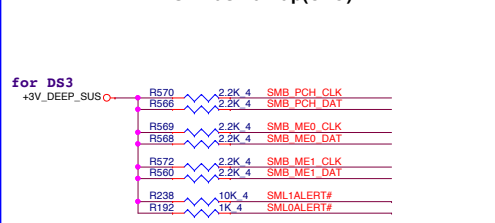
SMBus/Pull-up(CLG)



CLK_REQ/Strap Pin(CLG)



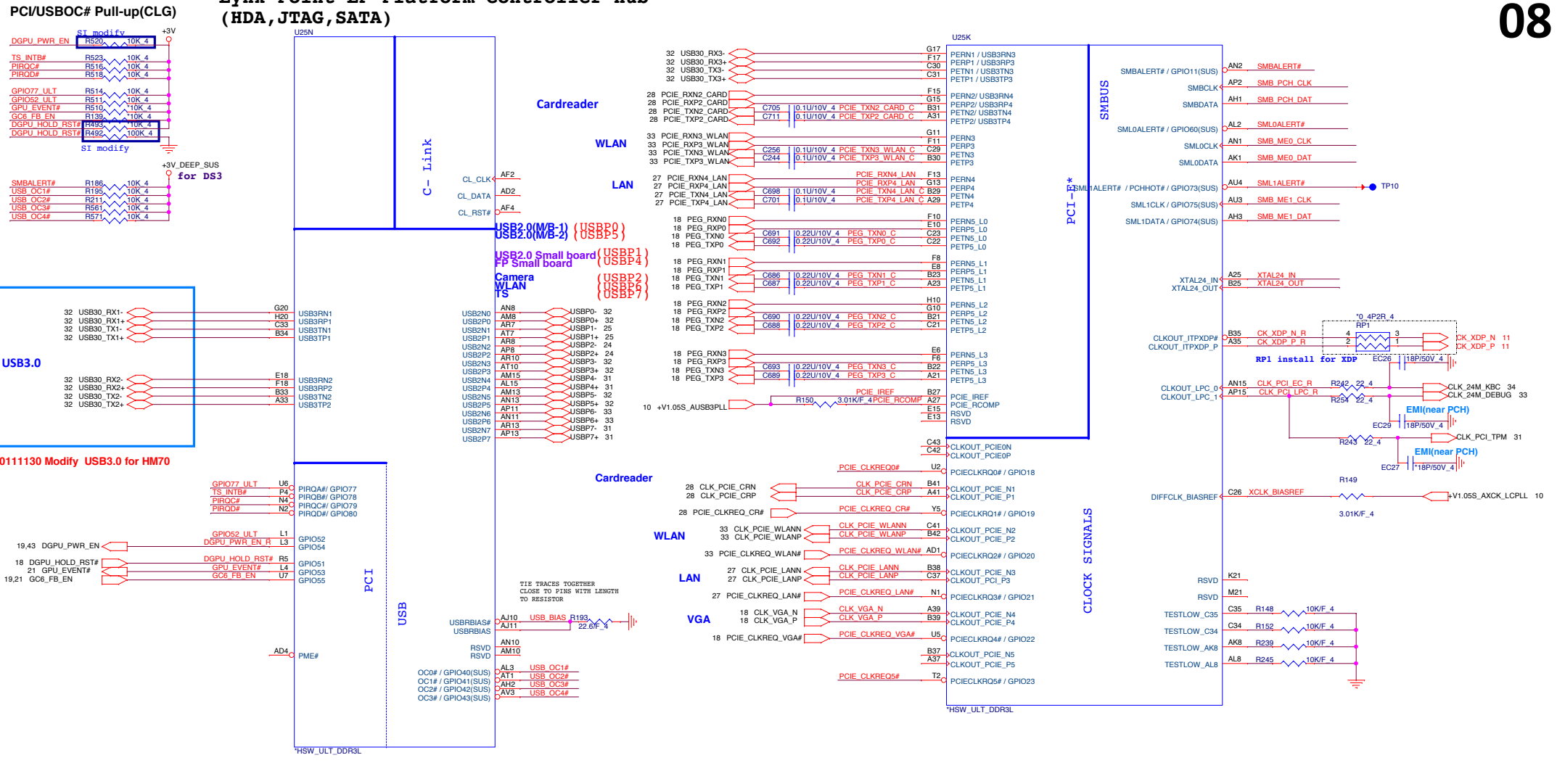
SMBus/Pull-up(CLG)



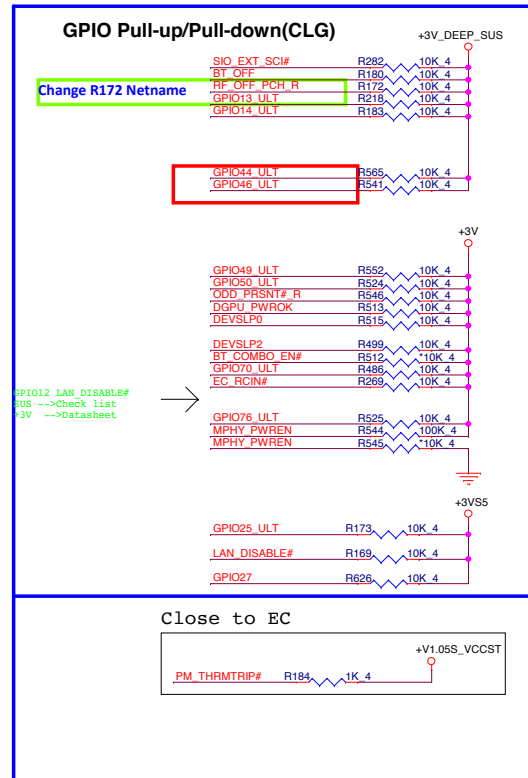
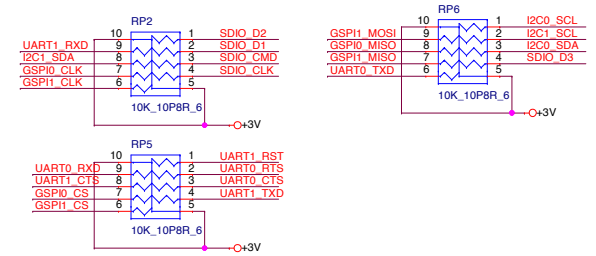
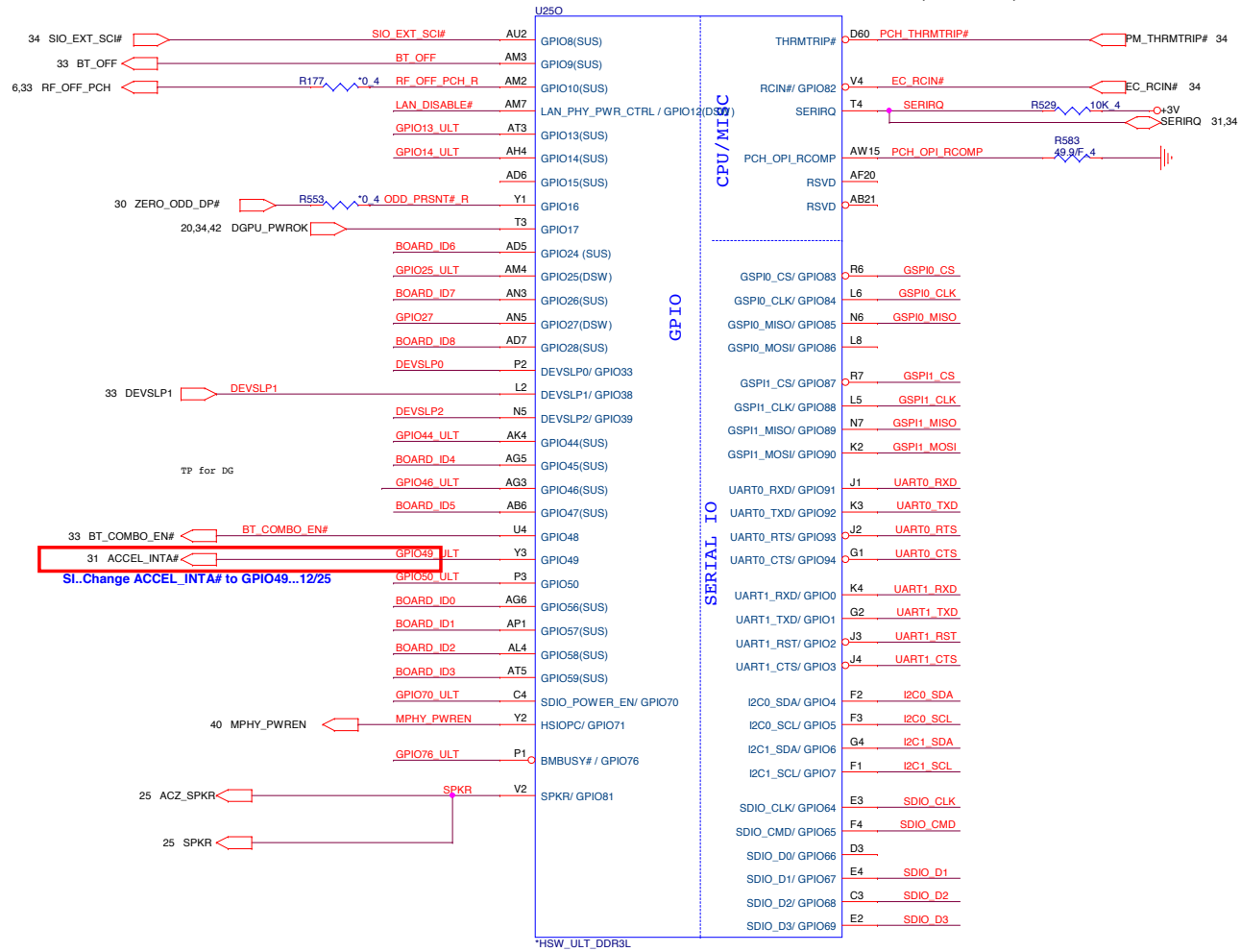
PROJECT : Y11C
Quanta Computer Inc.

Size Custom Document Number **ULT 7/9 (PCIE/USB/CLK)** Rev 1A

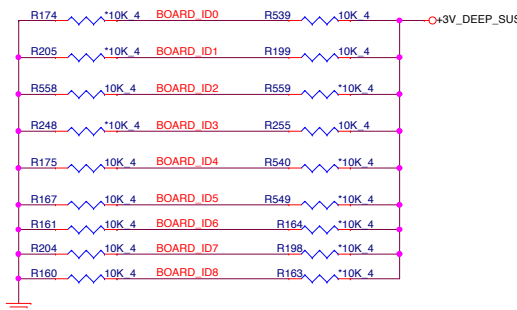
Date: Wednesday, April 02, 2014 Sheet 8 of 44



Lynx Point-LP Platform Controller Hub (HDA,JTAG,SATA) Haswell (GPIO)



Model	BOARD_ID[6:5] Reserve	BOARD_ID4 Reserve	BOARD_ID3 Pavillian	BOARD_ID[2:1] 00 14" 01 15" 10 17"	BOARD_ID0 0 : UMA 1 : DIS



	DIS	UMA
Stuff	Ra	Rb
NC	Rb	Ra

6,7,8,10,11,12,13,18,19,20,23,24,25,26,27,28,29,30,31,33,34,39,40,41
6,7,10,11,25,29,31,32,33,34,36,38,40,43

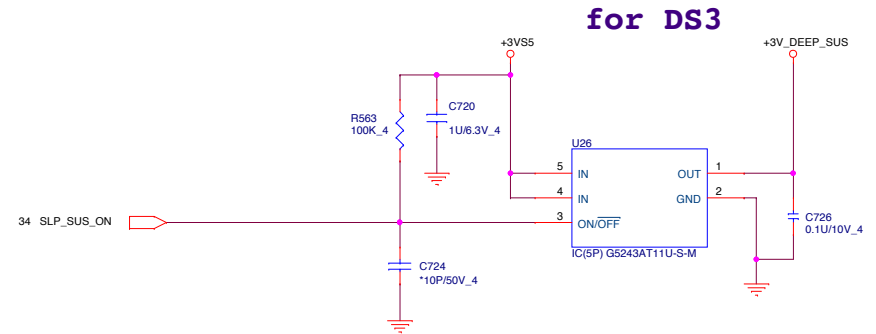
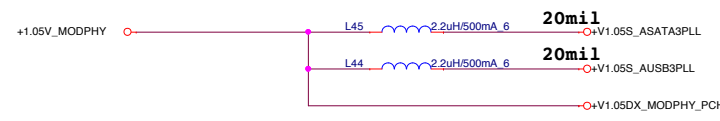
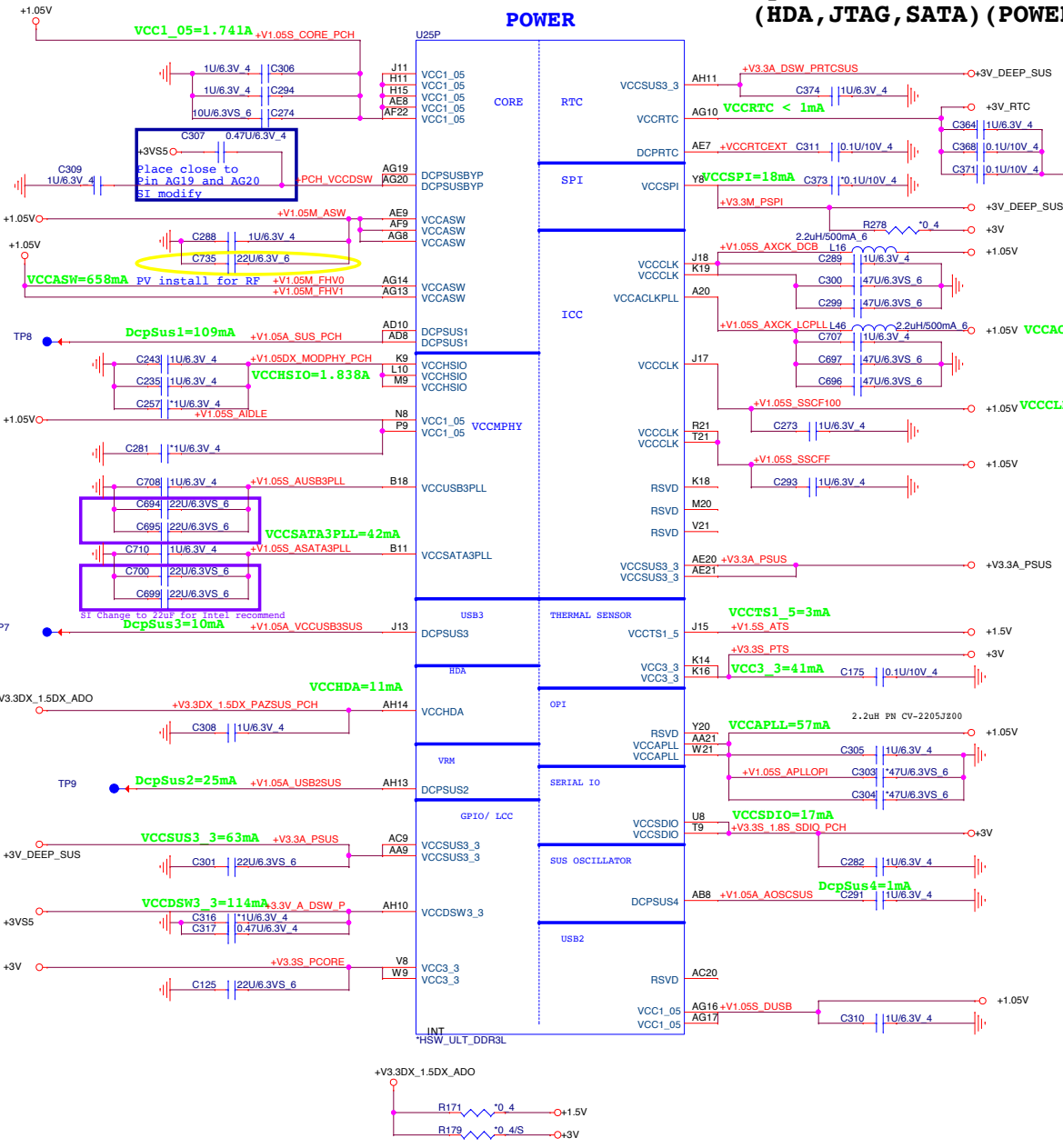
PROJECT : Y11C
Quanta Computer Inc.

Size Custom Document Number **ULT 8/9 (GPIO/MISC)** Rev 1A

Date: Wednesday, April 02, 2014 Sheet 9 of 44

NB5

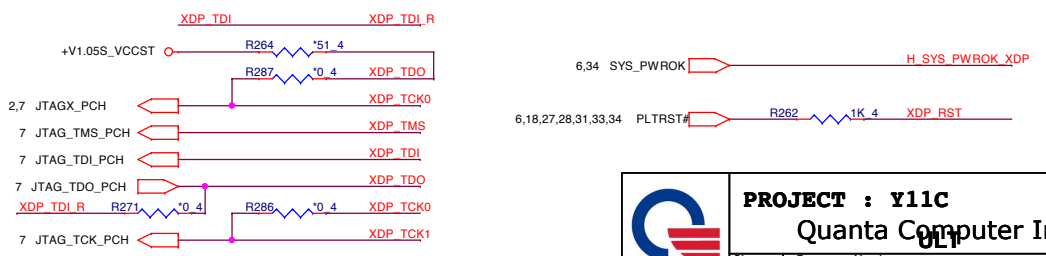
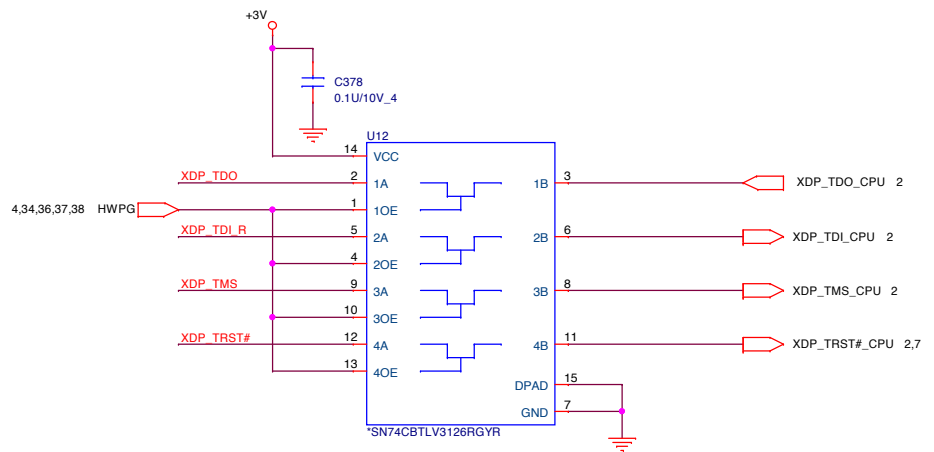
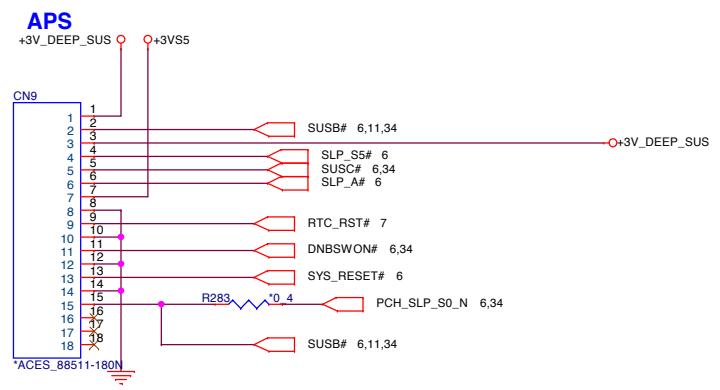
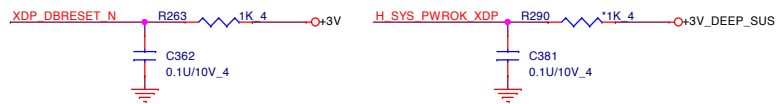
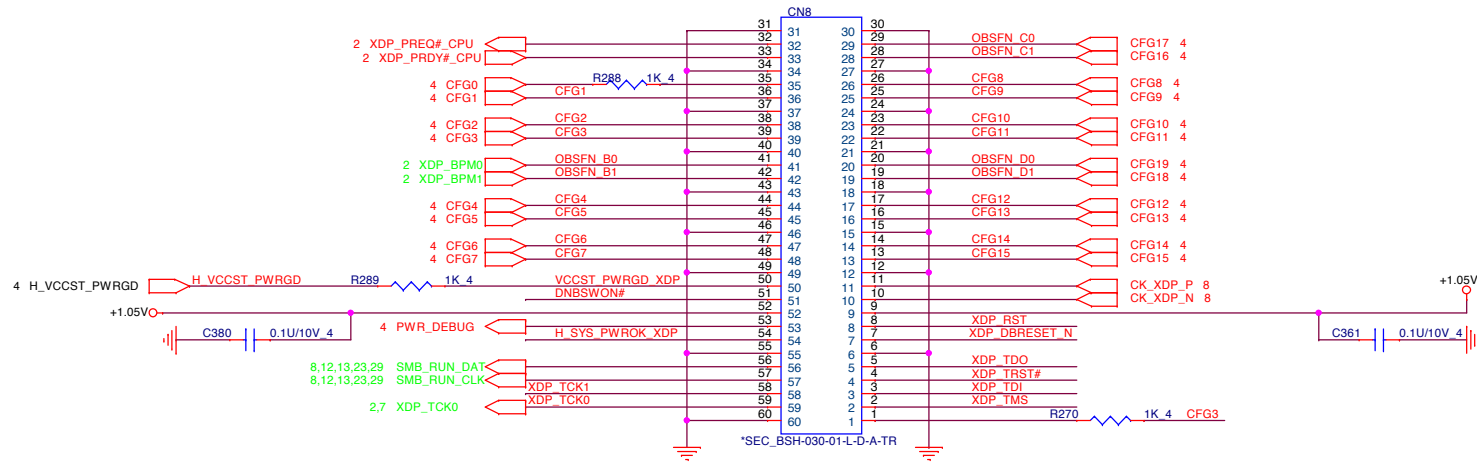
Lynx Point-LP Platform Controller Hub (HDA, JTAG, SATA) (POWER)



6,7,8,9,11,12,13,18,19,20,23,24,25,26,27,28,29,30,31,33,34,39,40,41	+3V	8	+V1.05S_AUSB3PLL
24,25,26,29,30,31,32,33,40	+5V	7	+V1.05S_ASATA3PLL
2,4,7,9,11,31,34,38,39,40,43	+1.05V	8	+V1.05S_AXCK_LCPLL
6,7,9,11,25,29,31,32,33,34,36,38,40,43	+3VS5	7,31	+3V_RTC
13,25,29,32,36,37,38,39,40,41,42,43	+5VS5	2,4,12,13,29,37	+1.35VSUS

PROJECT : Y11C
Quanta Computer Inc.

Size Custom	Document Number	Rev 1A
	ULT 9/9(Power-2)	
Date: Tuesday, April 08, 2014	Sheet 10 of	44



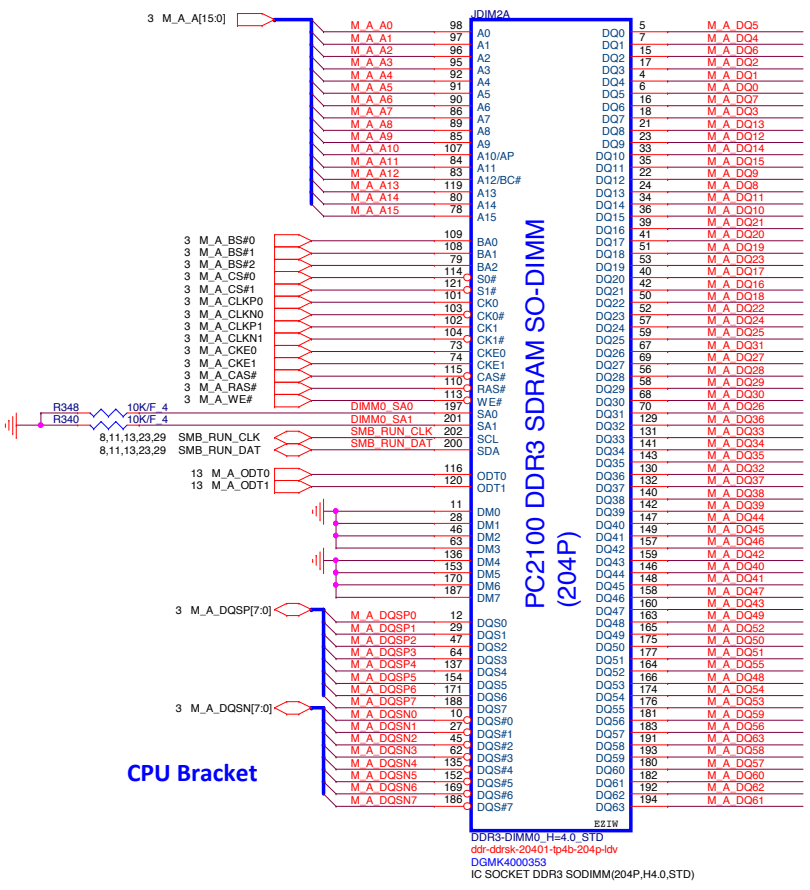
PROJECT : Y11C
Quanta Computer Inc.

Size Document Number
HSW XDP & APS

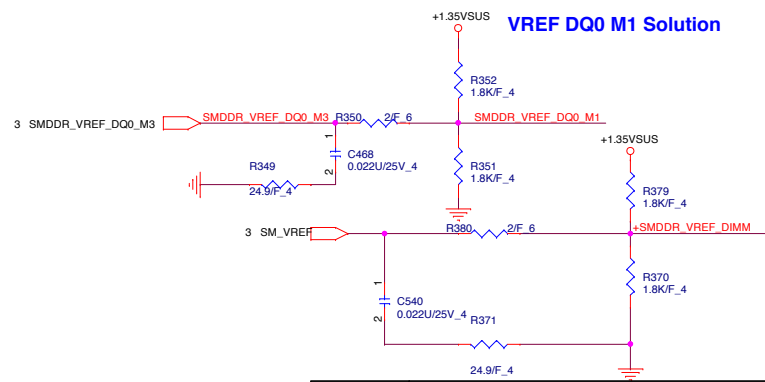
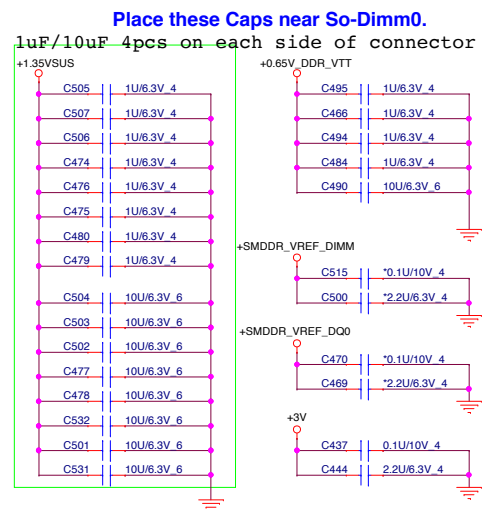
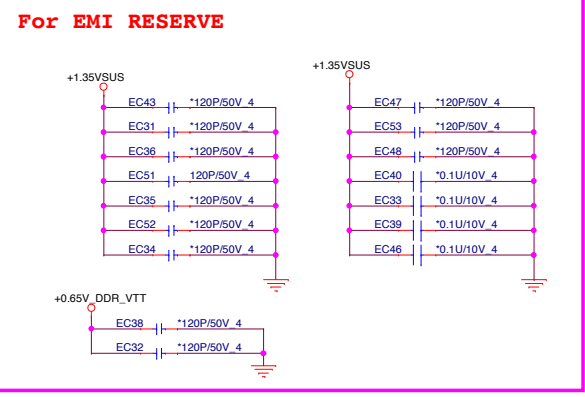
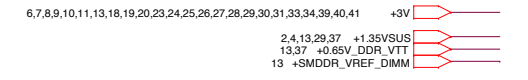
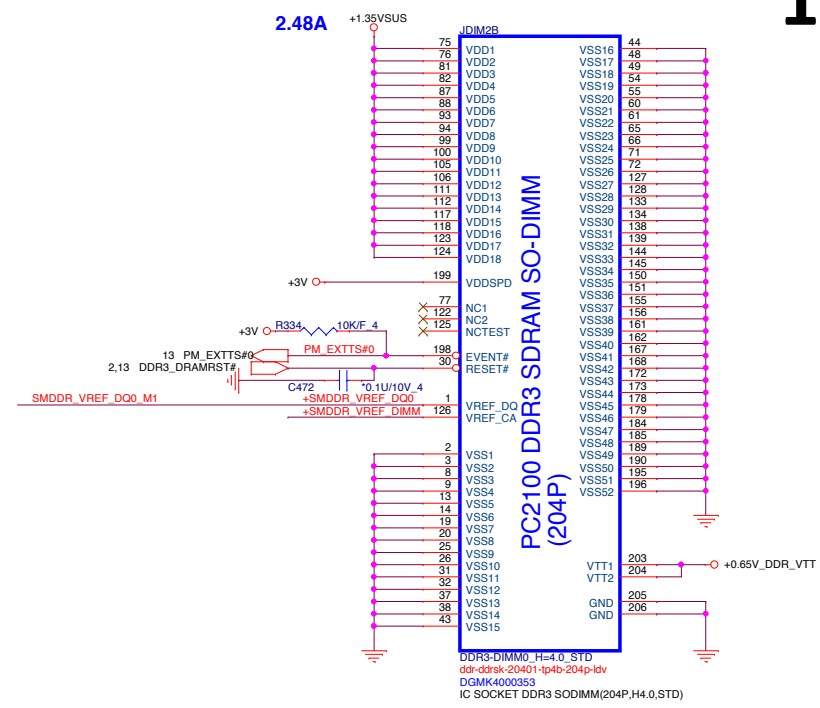
Date: Wednesday, April 02, 2014 | Sheet 11 of 44

NB5 Rev 1A

DIMM & Footprint 同Joshua提供



M.A_DQ[63:0] 3



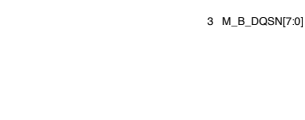
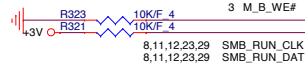
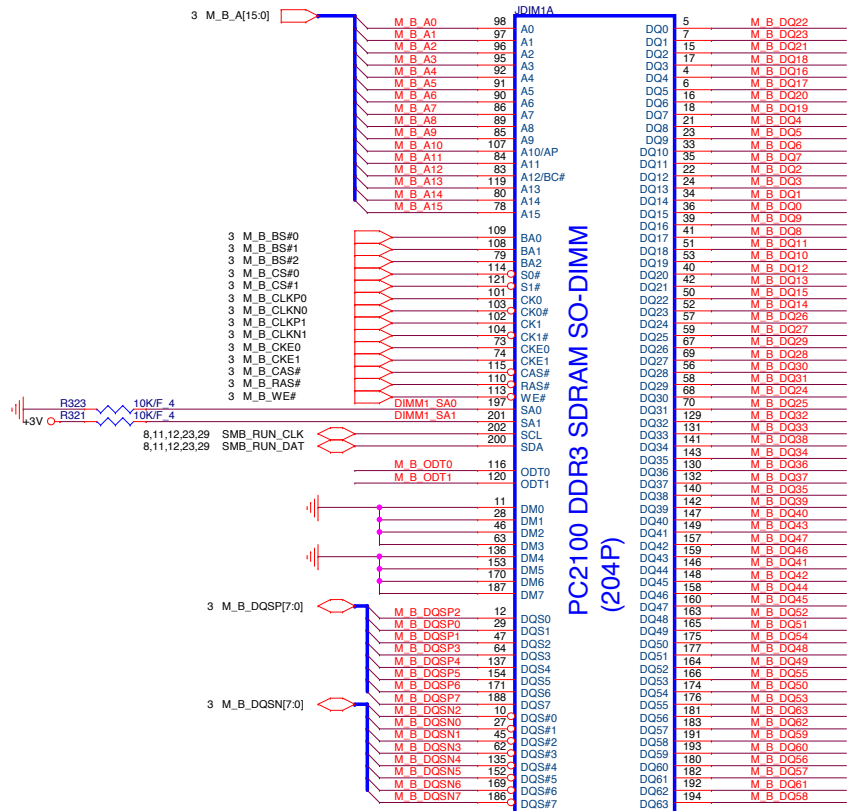
PROJECT : Y11C

Quanta Computer Inc.

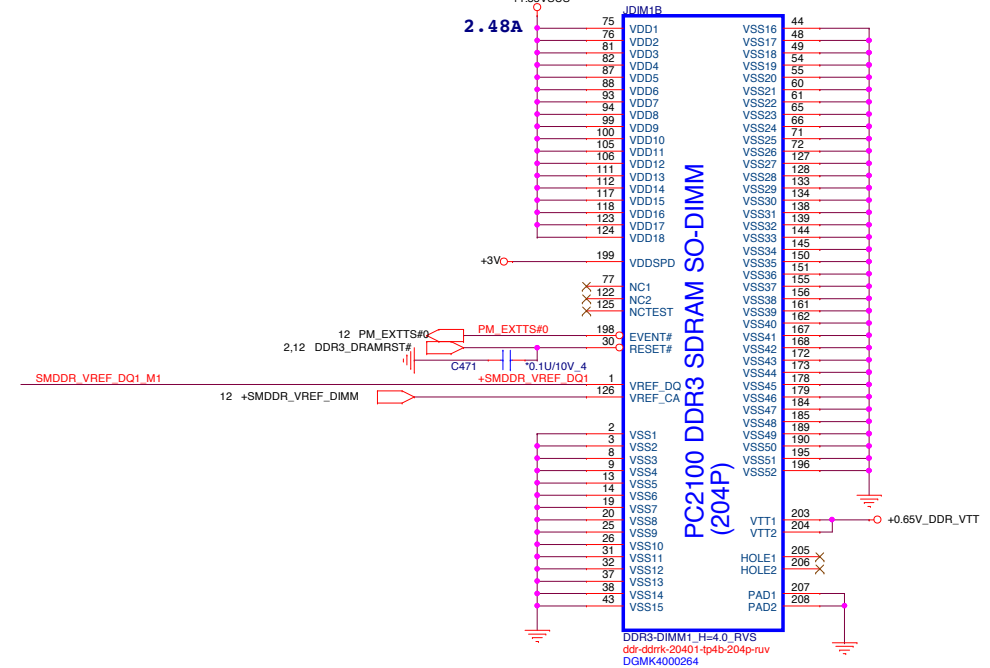
Size Custom	Document Number	Rev
Date: Wednesday, April 02, 2014	DDR3 DIMM0-STD(4.0H)	1A
Sheet	12of	44

DIMM & Footprint 同Joshua提供

M_B_DQ[63:0] 3



DDR3-DIMM1_H=4.0_RVS
ddr-ddr1k-20401-tp4b-204p-ruv
DGMK4000264



SMDDR_VREF_DQ1_M1

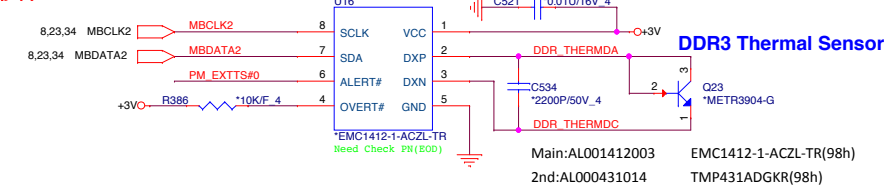
2.48A

PC2100 DDR3 SDRAM SO-DIMM (204P)

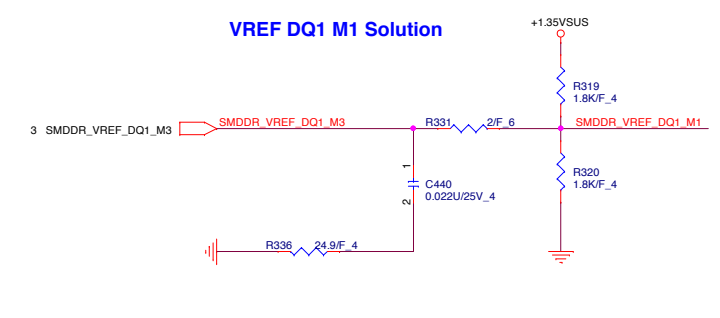
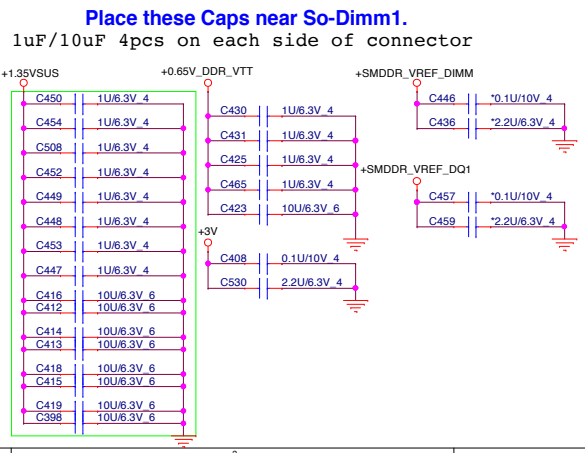
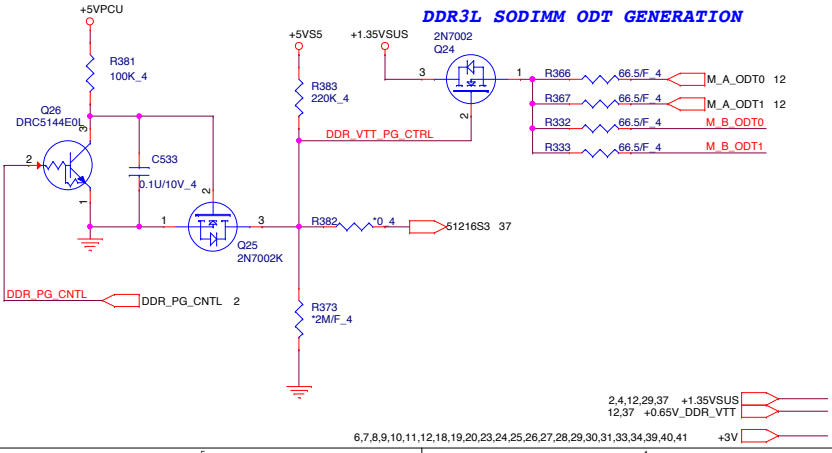
DDR3-DIMM1_H=4.0_RVS
ddr-ddr1k-20401-tp4b-204p-ruv
DGMK4000264

Local Thermal Sensor

mv可移除




Main:AL001412003 EMC1412-1-ACZL-TR(98h)
2nd:AL000431014 TMP431ADGKR(98h)





PROJECT : Y11C
Quanta Computer Inc.

NB5

Size Custom	Document Number	Rev 1A
	DDR3 DIMM1-RV5(4.0H)	
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	Quanta Computer Inc.	
	Size Custom	Document Number N15S-GT (PCIE VF) /NVDD
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	Quanta Computer Inc.	
	Size Custom	Document Number N15S-GT (MEMORY/GND)
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	PROJECT :Y05 Quanta Computer Inc.		
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1 2 3 4 5 6 7 8

A

A

B

B


C

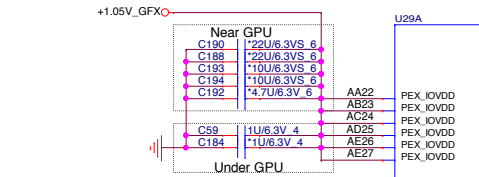
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D

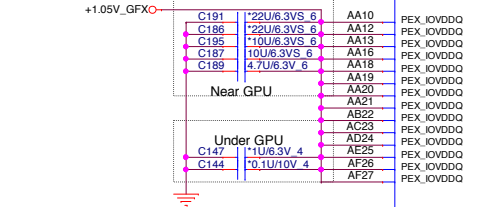
D

1 2 3 4 5 6 7 8

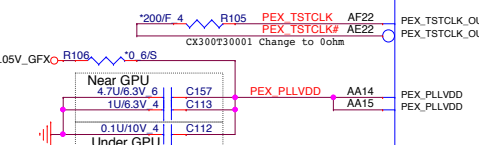
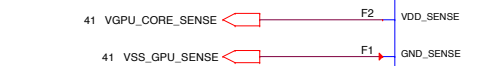
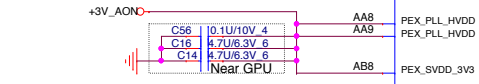
	PROJECT :Y05	
	Quanta Computer Inc.	
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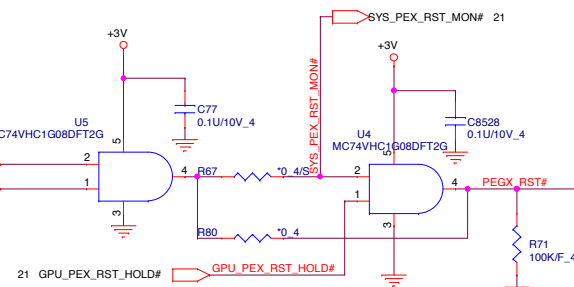
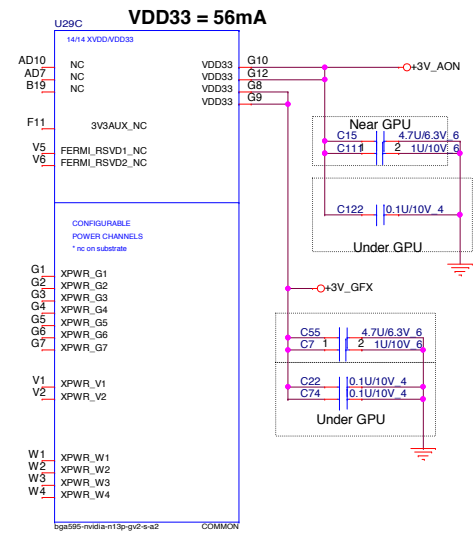
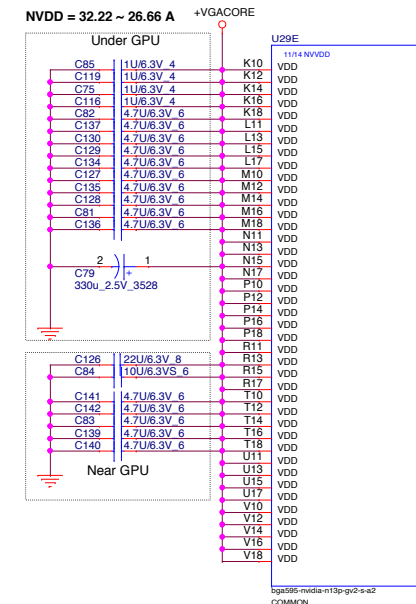
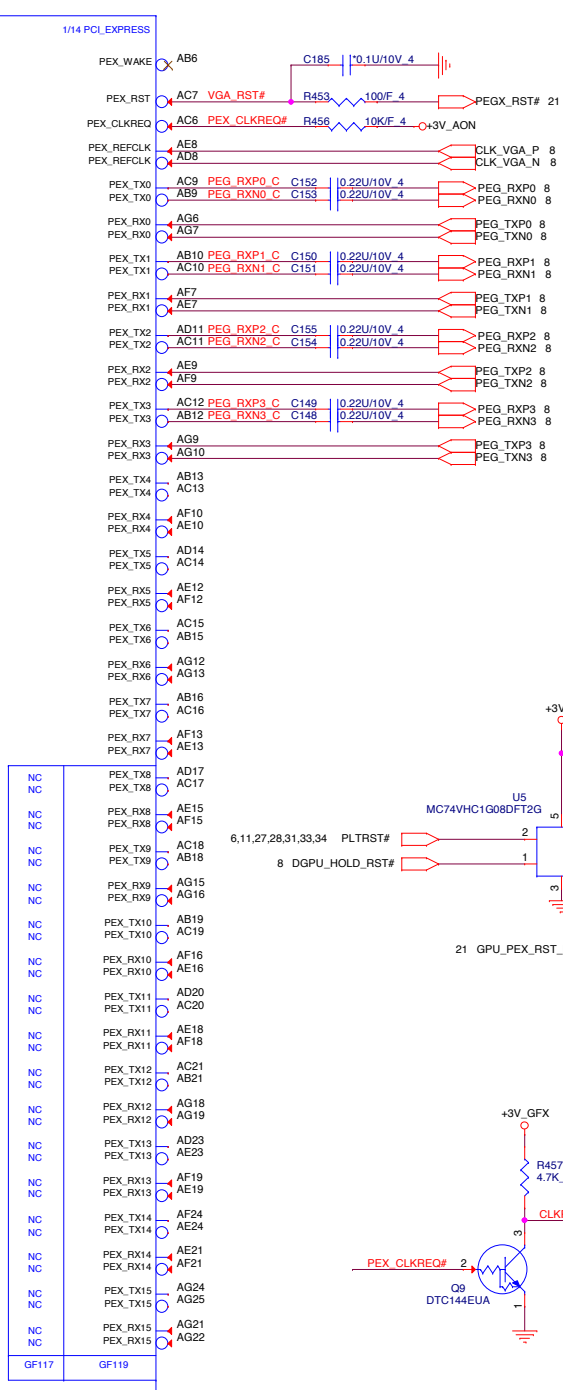
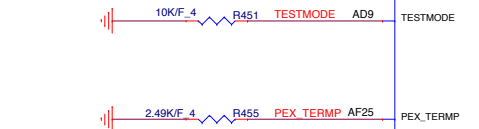
PEX_IOVDD + PEX_IOVDDQ = 1.042A



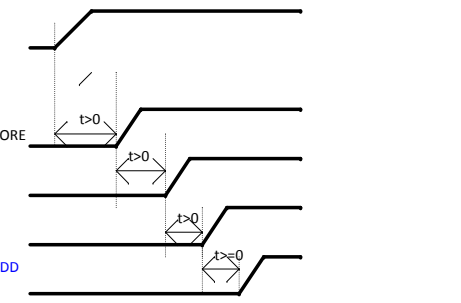
PEX_PLL_HVDD + PEX_SVDD_3V3 = 143mA



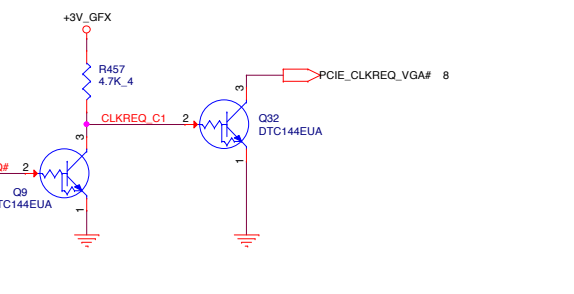
PEX_PLLVDD = 130mA



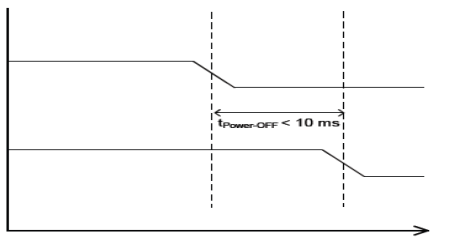
Power up sequence



Power down sequence

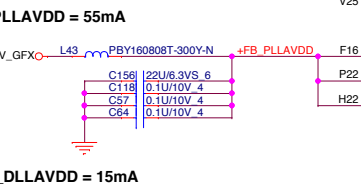
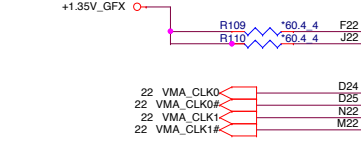
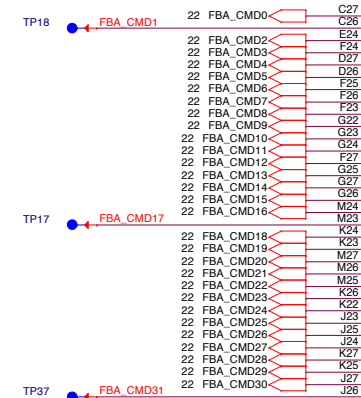
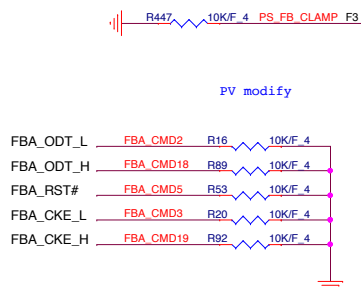


First Rail to Power Down



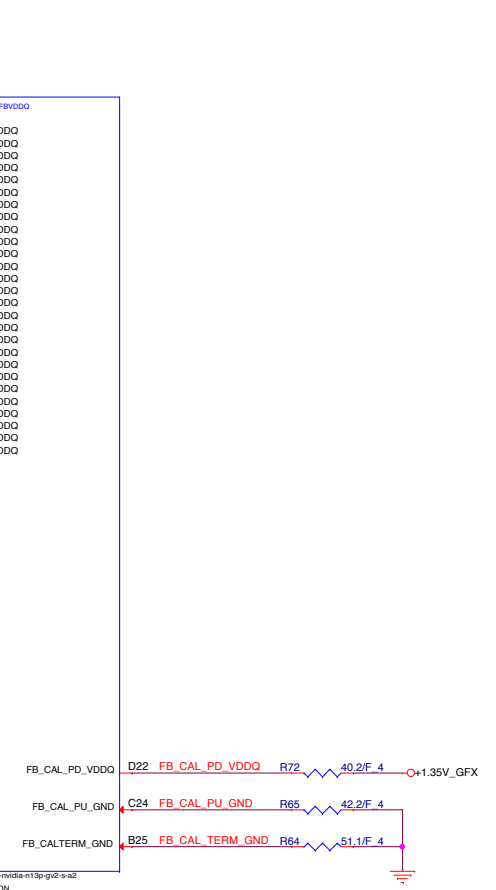
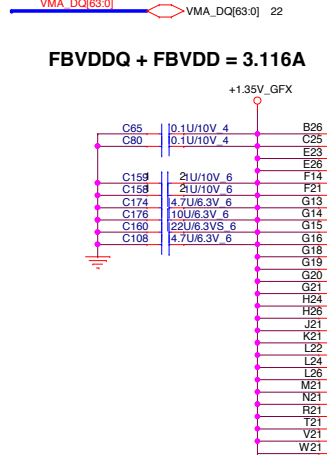
PROJECT :U82
Quanta Computer Inc.

Size Custom	Document Number N14M-GS (PCIE VF) /NVDD	Rev 2A
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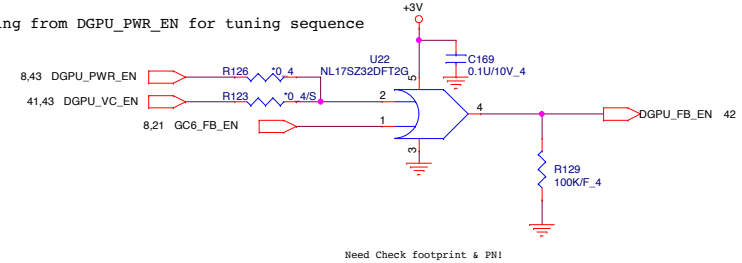


U29B	2/14 FBA	U29D	U29F
NC	FBA_D0	F18 VMA_DQ0	A2
FB_CLAMP	FBA_D1	F18 VMA_DQ1	AB17
	FBA_D2	E16 VMA_DQ2	GND
	FBA_D3	F17 VMA_DQ3	AB20
	FBA_D4	D20 VMA_DQ4	AB24
	FBA_D5	D21 VMA_DQ5	GND
	FBA_D6	F21 VMA_DQ6	AC2
	FBA_D7	E21 VMA_DQ7	AC22
	FBA_D8	E15 VMA_DQ8	AC25
	FBA_D9	D15 VMA_DQ9	AC8
	FBA_D10	F15 VMA_DQ10	AD13
	FBA_D11	F13 VMA_DQ11	AD15
	FBA_D12	C13 VMA_DQ12	AD18
	FBA_D13	B13 VMA_DQ13	A26
	FBA_D14	E13 VMA_DQ14	AD19
	FBA_D15	C14 VMA_DQ15	AD21
	FBA_D16	B15 VMA_DQ16	AD22
	FBA_D17	C16 VMA_DQ17	AE14
	FBA_D18	A13 VMA_DQ18	AE17
	FBA_D19	A15 VMA_DQ19	AE20
	FBA_D20	B18 VMA_DQ20	AF1
	FBA_D21	A18 VMA_DQ21	AF11
	FBA_D22	A19 VMA_DQ22	AF14
	FBA_D23	C19 VMA_DQ23	AF17
	FBA_D24	B24 VMA_DQ24	AF3
	FBA_D25	C23 VMA_DQ25	AF23
	FBA_D26	A25 VMA_DQ26	AF5
	FBA_D27	A24 VMA_DQ27	AFB
	FBA_D28	A21 VMA_DQ28	AG3
	FBA_D29	B21 VMA_DQ29	AG26
	FBA_D30	C20 VMA_DQ30	AB14
	FBA_D31	C21 VMA_DQ31	B1
	FBA_D32	R22 VMA_DQ32	B11
	FBA_D33	R24 VMA_DQ33	B14
	FBA_D34	T22 VMA_DQ34	B17
	FBA_D35	R23 VMA_DQ35	B20
	FBA_D36	N25 VMA_DQ36	B23
	FBA_D37	N26 VMA_DQ37	B25
	FBA_D38	N23 VMA_DQ38	B5
	FBA_D39	N24 VMA_DQ39	B8
	FBA_D40	V23 VMA_DQ40	E11
	FBA_D41	V22 VMA_DQ41	E14
	FBA_D42	T23 VMA_DQ42	E17
	FBA_D43	U22 VMA_DQ43	E2
	FBA_D44	Y24 VMA_DQ44	E20
	FBA_D45	AA24 VMA_DQ45	E22
	FBA_D46	Y22 VMA_DQ46	E25
	FBA_D47	AA23 VMA_DQ47	E5
	FBA_D48	AD27 VMA_DQ48	E8
	FBA_D49	AB25 VMA_DQ49	H2
	FBA_D50	AD26 VMA_DQ50	H22
	FBA_D51	AC25 VMA_DQ51	H25
	FBA_D52	AA27 VMA_DQ52	H5
	FBA_D53	AA26 VMA_DQ53	K11
	FBA_D54	W26 VMA_DQ54	K13
	FBA_D55	Y25 VMA_DQ55	K15
	FBA_D56	R28 VMA_DQ56	K17
	FBA_D57	T25 VMA_DQ57	L10
	FBA_D58	N27 VMA_DQ58	L12
	FBA_D59	R27 VMA_DQ59	L15
	FBA_D60	V26 VMA_DQ60	L18
	FBA_D61	V27 VMA_DQ61	L2
	FBA_D62	W27 VMA_DQ62	L23
	FBA_D63	W25 VMA_DQ63	LS
			M11
			AA7
			M13
			M15
			M17
			N10
			N12
			N14
			N16
			N18
			P11
			P13
			P15
			P17
			P2
			P23
			P26
			P5
			R10
			R12
			R14
			R16
			R18
			T11
			T13
			T15
			T17
			U10
			U12
			U14
			U16
			U18
			U2
			U23
			U26
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			V11
			V13
			V15
			V17
			Y2
			Y23
			Y26
			Y5

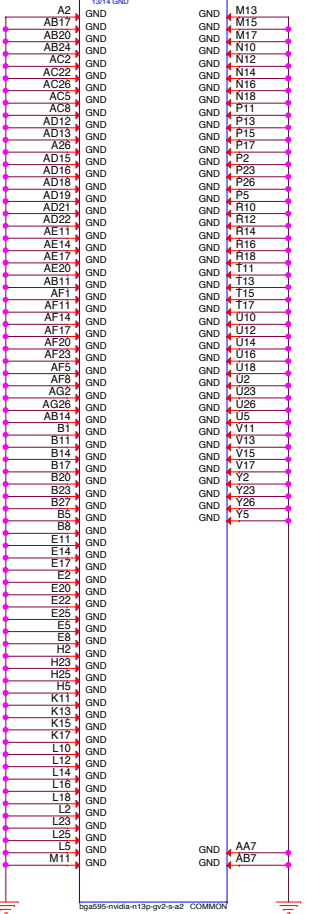
FBA_DQM0-DQM7	FBA_DQS0-DQS7	FBA_DQS_RN0-DQS_RN7	FBA_DQS_WP0-DQS_WP7
D19 VMA_DM0	E19 VMA_WDQS0	F19 VMA_RDQS0	F19 VMA_WDQS0
D14 VMA_DM1	C15 VMA_WDQS1	C14 VMA_RDQS1	C14 VMA_WDQS1
D22 VMA_DM2	B16 VMA_WDQS2	A16 VMA_RDQS2	A16 VMA_WDQS2
D22 VMA_DM3	B22 VMA_WDQS3	A22 VMA_RDQS3	A22 VMA_WDQS3
P24 VMA_DM4	R25 VMA_WDQS4	P25 VMA_RDQS4	P25 VMA_WDQS4
W24 VMA_DM5	W23 VMA_WDQS5	W23 VMA_RDQS5	W23 VMA_WDQS5
AA25 VMA_DM6	AB28 VMA_WDQS6	AB27 VMA_RDQS6	AB27 VMA_WDQS6
U25 VMA_DM7	T26 VMA_WDQS7	T27 VMA_RDQS7	T27 VMA_WDQS7



For support GC6

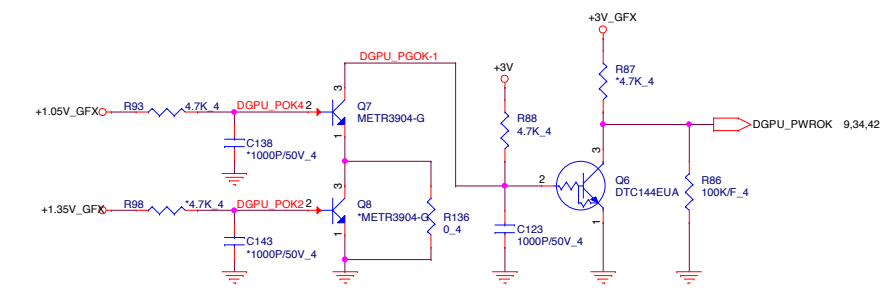
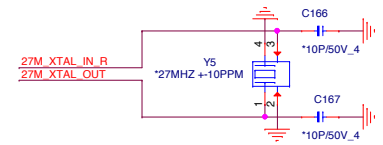
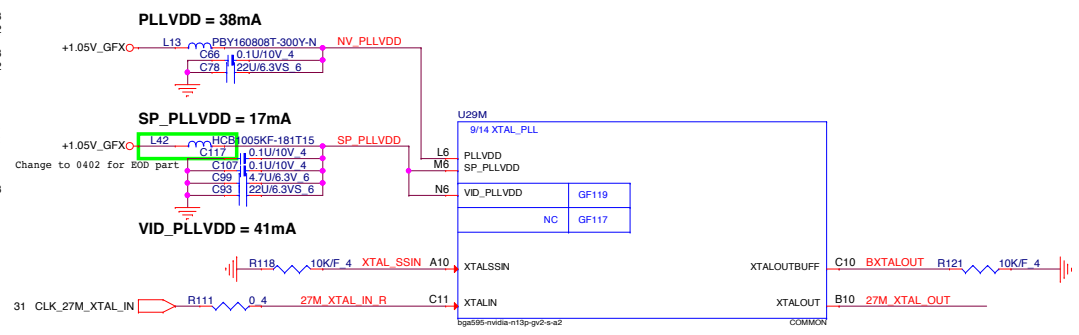
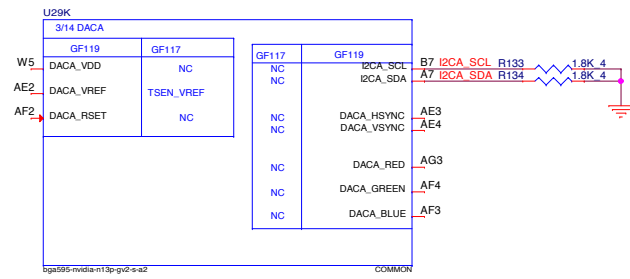
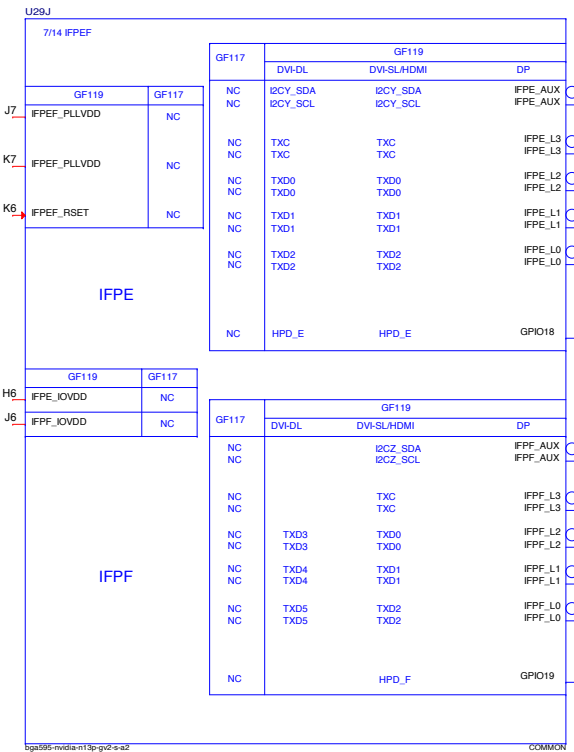
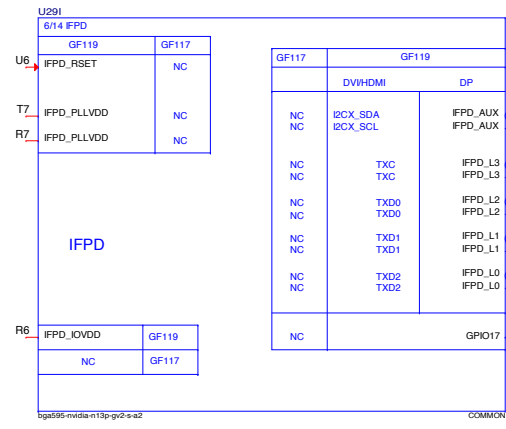
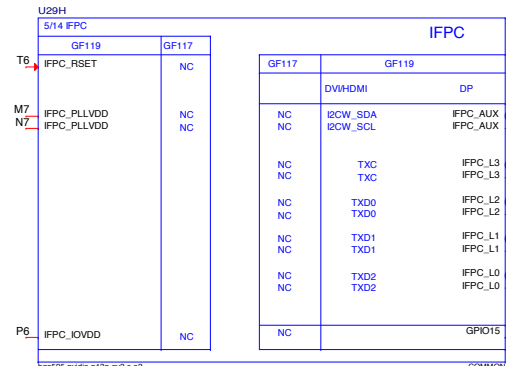
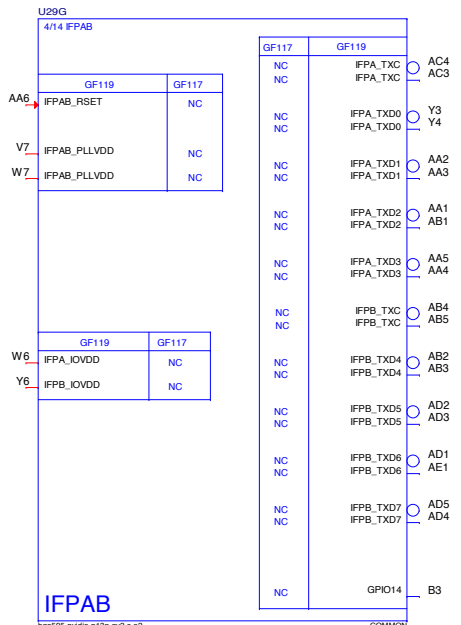


Need Check footprint & PIN!



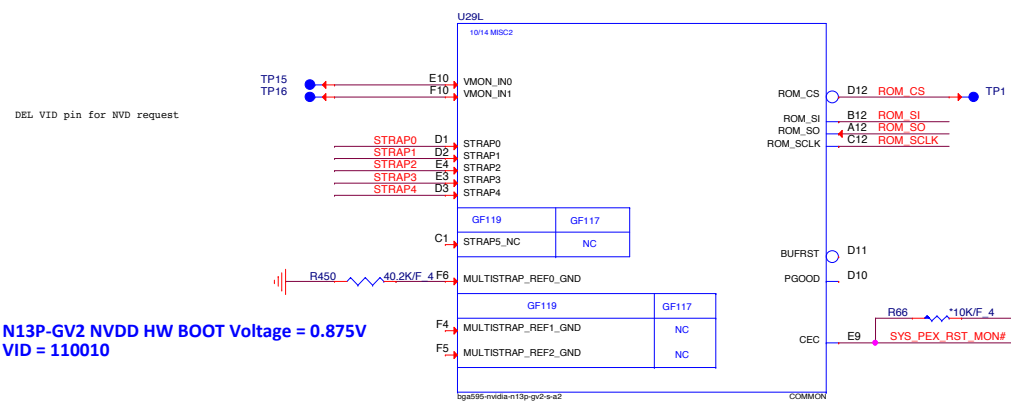
PROJECT :U82
Quanta Computer Inc.

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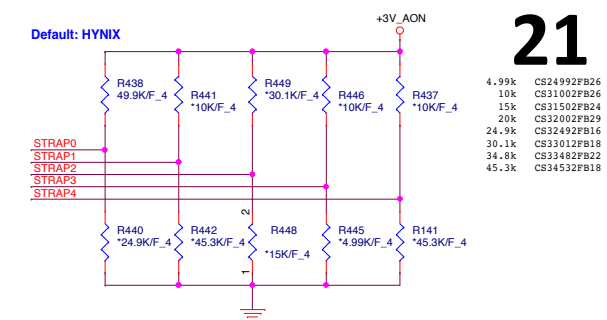
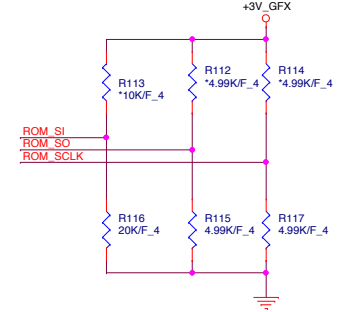


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Quanta Computer Inc.

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N13P-GV2 NVDD HW BOOT Voltage = 0.875V
VID = 110010

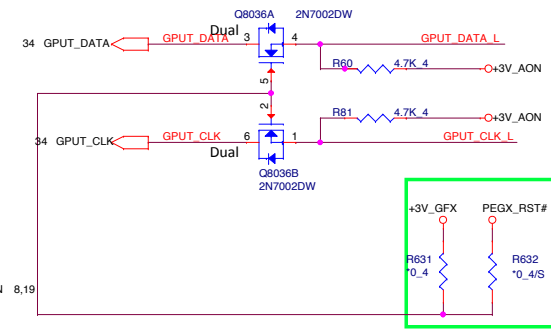
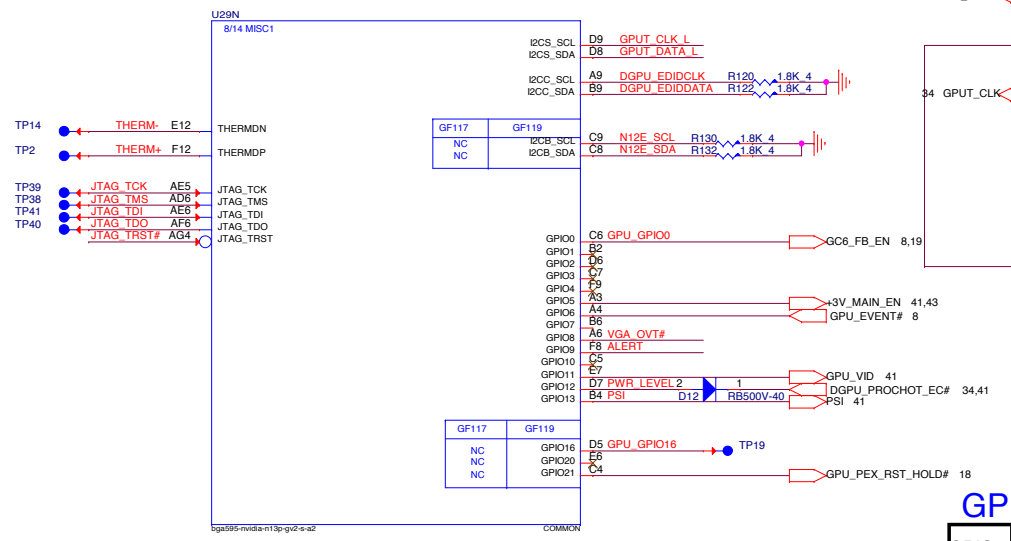


4.99k	CS24992FB26
10k	CS31002FB26
15k	CS31502FB24
20k	CS32002FB29
24.9k	CS32492FB16
30.1k	CS33012FB18
34.8k	CS33482FB22
45.3k	CS34532FB18

Table 15-2. Resistance Mapping to Hex Values

Resistor Values	Pull-Up to 3V3_MAIN	Pull-Down to GND
4.99 kΩ	1000	0000
10.0 kΩ	1001	0001
15.0 kΩ	1010	0010
20.0 kΩ	1011	0011
24.9 kΩ	1100	0100
30.1 kΩ	1101	0101
34.8 kΩ	1110	0110
45.3 kΩ	1111	0111

Hynix should be 0x3, R440 20K 1%
Micro Should be 0x4, R440 24.9K 1%
Samsung Should be 0x5, R440 30.1K 1%

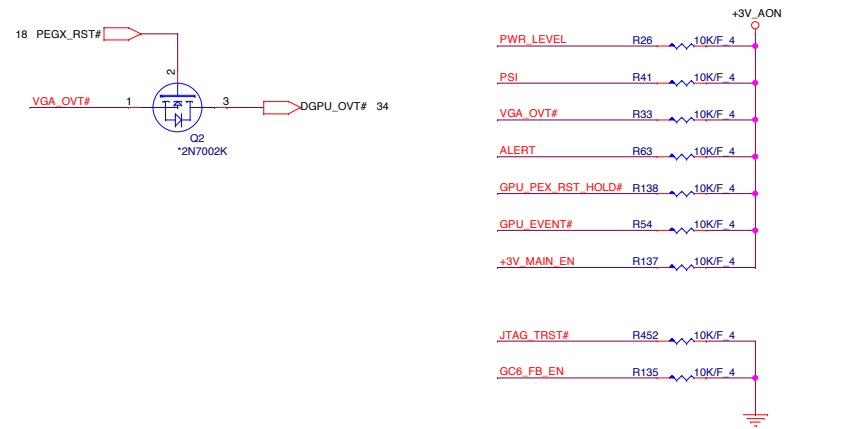


VRAM Configuration Table

RAMCFG [3:0]	DESCRIPTION	Vendor	Vendor P/N	QCI P/N	QBC	TOP B/S
0000						
0100	DDR3 256Mx16, 64bit, 4Gb,900MHz	Micron	MT41J256M16HA-093G:E	S-M	AKD5PZSTL01	AKD5PZSTL00
0011	DDR3 256Mx16, 64bit, 4Gb,900MHz	HYNIX	H5TC4G63AFR-11C		AKD5PGWT08	AKD5PGWT07
0101	DD3L 256Mx16, 64bit, 4Gb,900MHz	SAMSUNG	4W4G1646D-BC1A	AKD5PGWT500		

GPIO ASSIGNMENTS

GPIO	I/O	PIN	USAGE
0	IN	FB_CLAMP_MON	FB Clamp monitor
1	OUT	MEM_VDD_CTL	Memory VDD VID
2	OUT	LCD_BL_PWM	Panel Backlight PWM
3	OUT	LCD_VCC	PANEL POWER ENABLE
4	OUT	LCD_BLEN	PANEL BACKLIGHT ENABLE
5	OUT	Reserved	--
6	OUT	FB_CLAMP_TGL_REQ	Active low FB Clamp toggle request
7	OUT	3D VISION	3D VISION LEFT/RIGHT signal
8	I/O	OVERT	ACTIVE LOW THERMAL OVERT
9	I/O	ALERT	ACTIVE LOW THERMAL ALERT
10	OUT	MEM_VREF_CTL	MEMMORY VREF CONTROL
11	OUT	PWR_VID	GPU CORE_VDD PWM Control signal
12	IN	PWR_LEVEL	AC Power detect or power supply overdraw input
13	OUT	PSI	Phase Shedding



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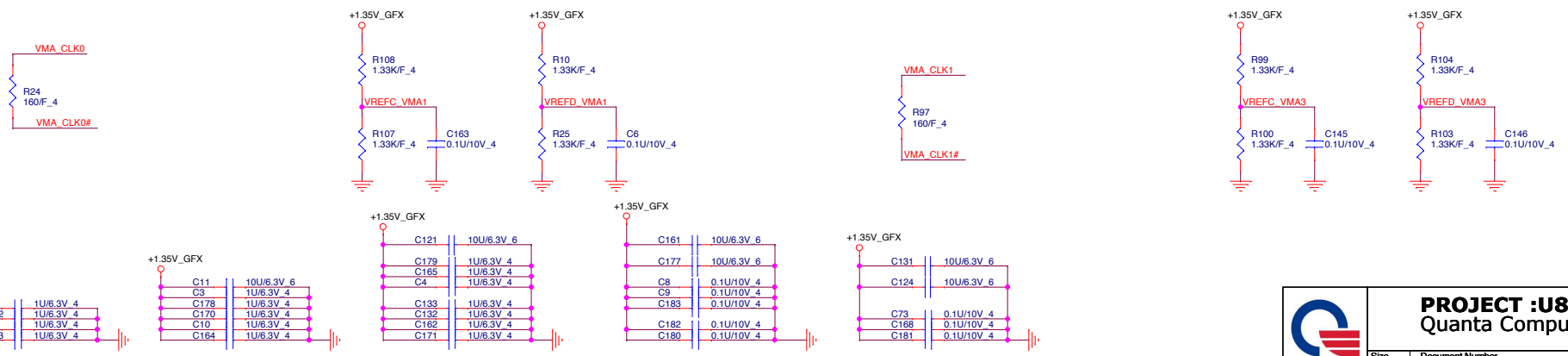
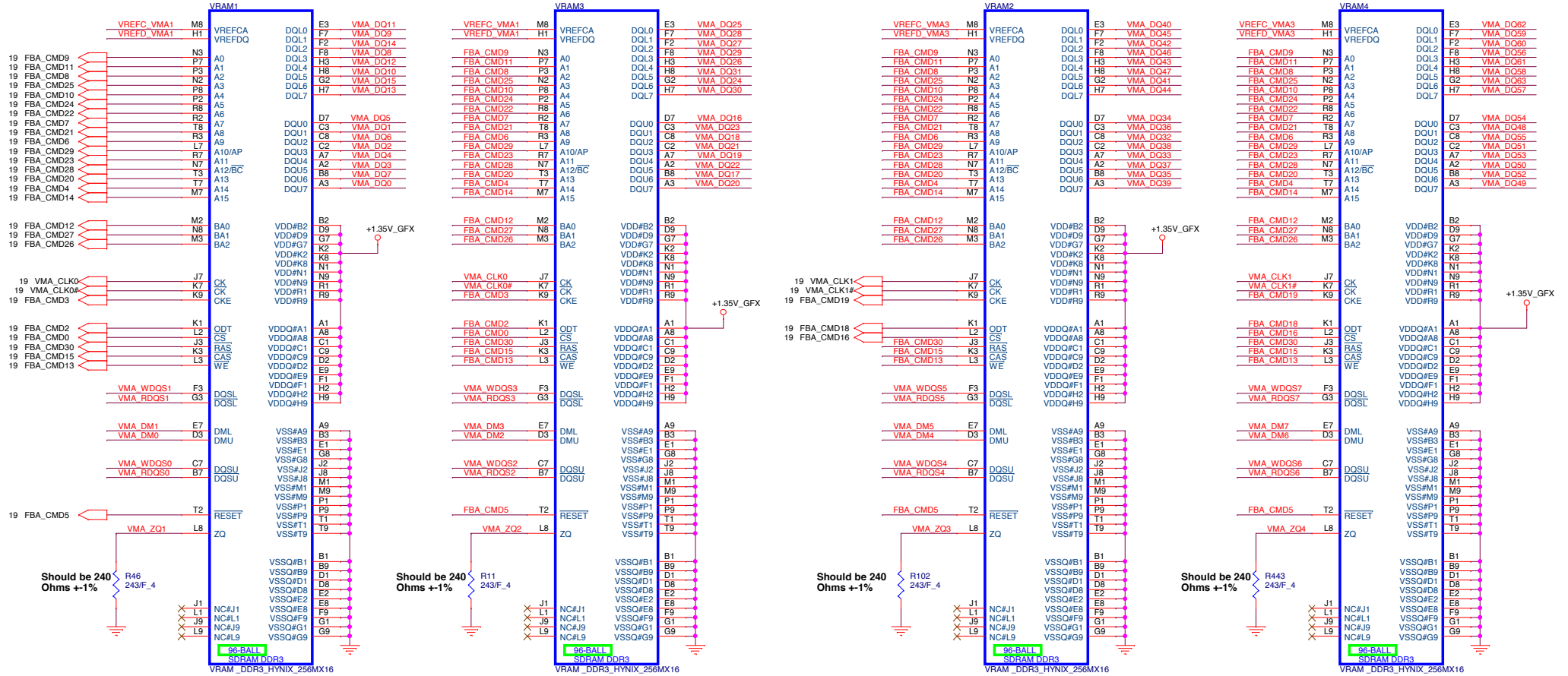
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CHANNEL A: 256MB/512MB DDR3

HYU 256Mx16, PN : AKD5PGWTW08---AKD5PGWTW07
HYU 128Mx16, PN : AKD5MZDWTW03---AKD5MZDWTW02

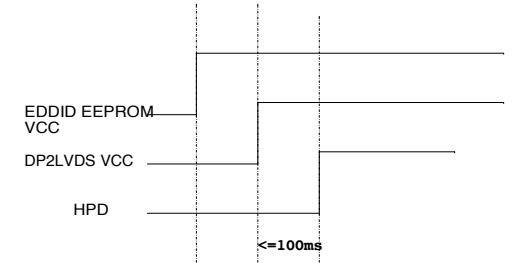
QBC **TOP B/S**
SAM 256Mx16, PN : AKD5PZDT501---AKD5PZDT500
SAM 128Mx16, PN : AKD5MGGT535---AKD5MGGT534

19 VMA_DQ[63..0]
19 VMA_DM[7..0]
19 VMA_WDQS[7..0]
19 VMA_RDQS[7..0]

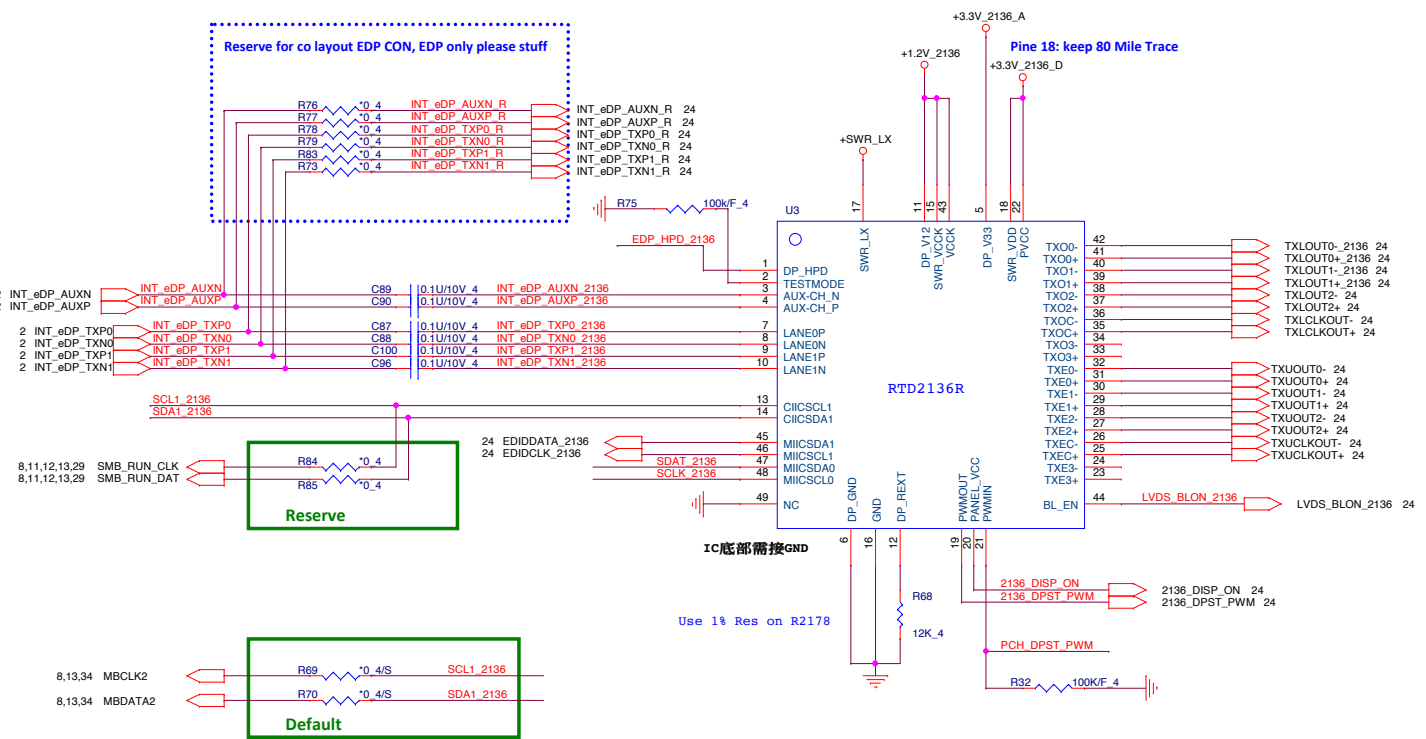


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RTD2136S Power Up Sequence

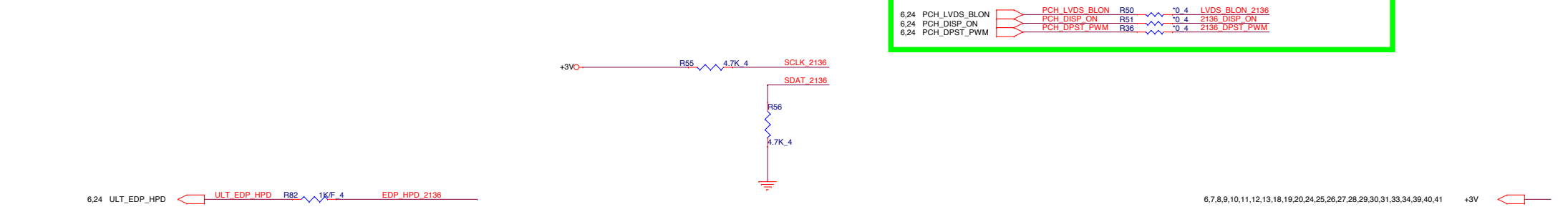
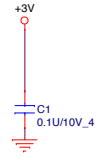


RTD2136 Dual Channel only



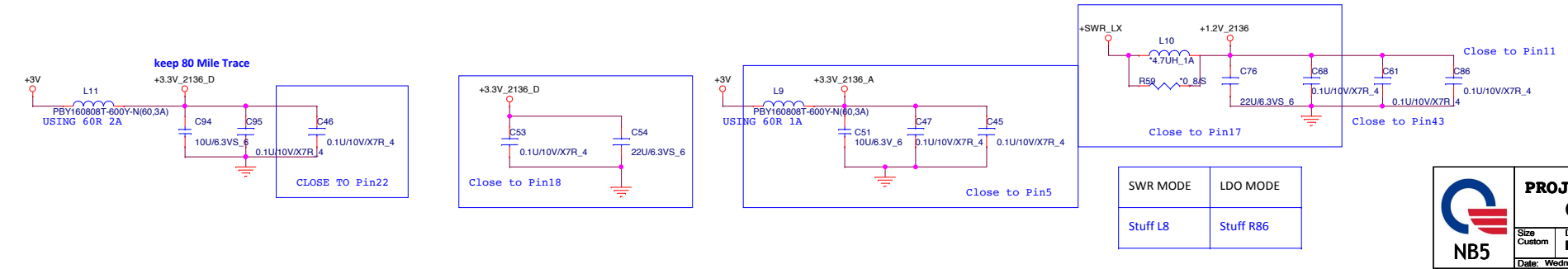
For eDP, close to U8016

6,24 PCH_LVDS_BLON	PCH_LVDS_BLON	R50	0.4	LVDS_BLON_2136
6,24 PCH_DISP_ON	PCH_DISP_ON	R51	0.4	2136_DISP_ON
6,24 PCH_DPST_PWM	PCH_DPST_PWM	R36	0.4	2136_DPST_PWM



6,7,8,9,10,11,12,13,18,19,20,24,25,26,27,28,29,30,31,33,34,39,40,41 +3V

L8: need use CV-4709MN00 for Vendor suggestion

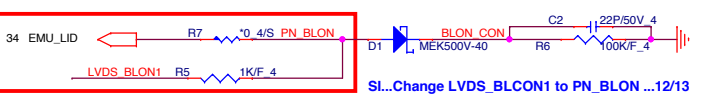


SWR MODE	LDO MODE
Stuff L8	Stuff R86

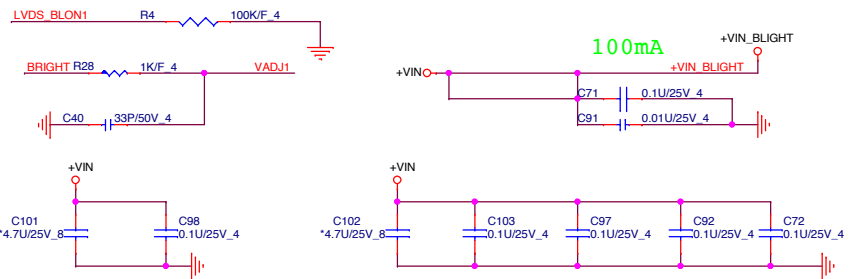
PROJECT : Y11C
Quanta Computer Inc.

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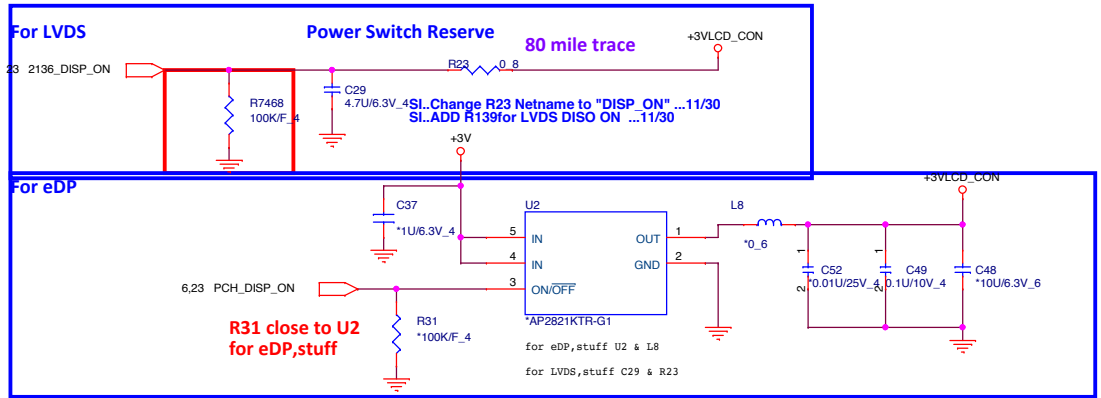
LID Switch



SI..Change LVDS_BLCON1 to PN_BLON ...12/13

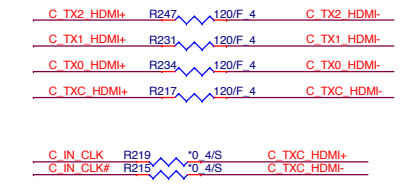


100mA

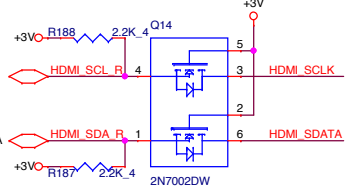


R31 close to U2 for eDP,stuff

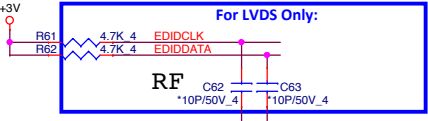
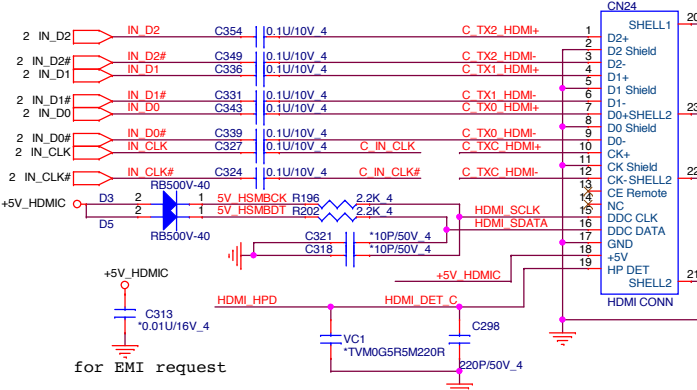
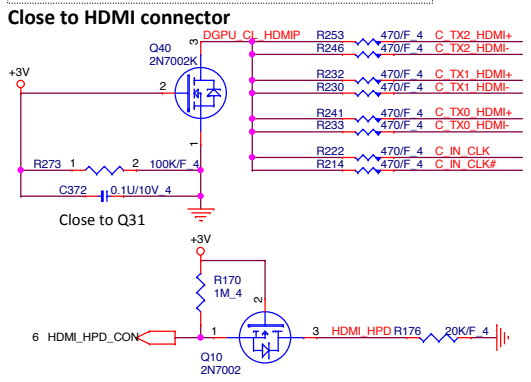
EMI Solution



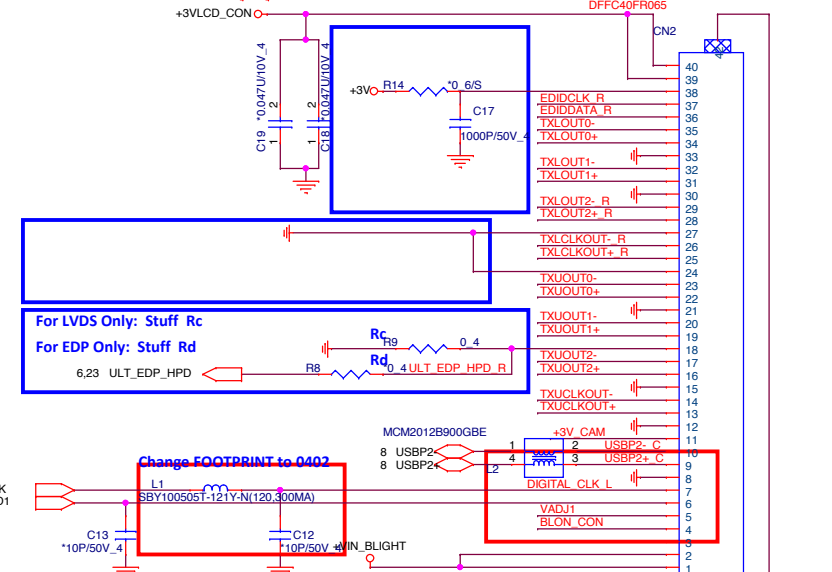
HDMI SMBus Isolation



For eDP Only: stuff Cap
For LVDS only stuff Resistor



LVDS Conn.

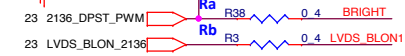


For LVDS Only: Stuff Rc
For EDP Only: Stuff Rd

Change FOOTPRINT to 0402

SI...for Swap CN2 to pin6/pin8 ...12/11

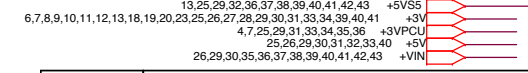
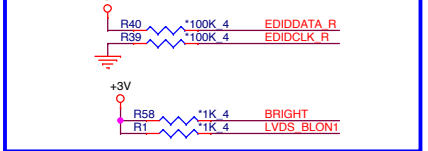
For LVDS Only: stuff Ra,Rb,Rc



For EDP Only: stuff Rd,Re,Rf



For EDP Only: stuff

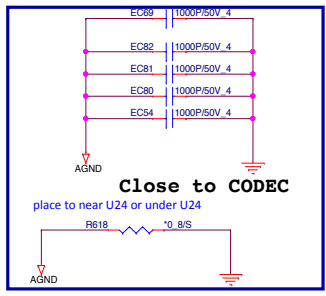
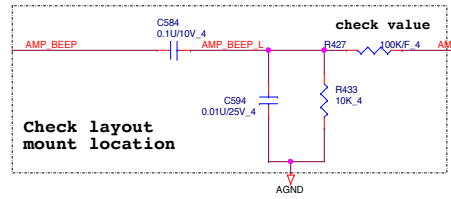
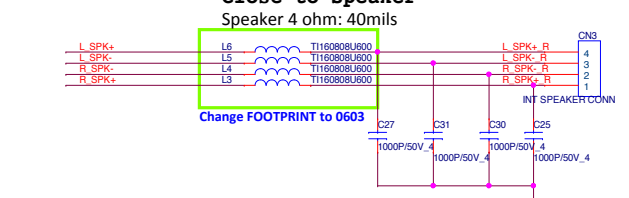
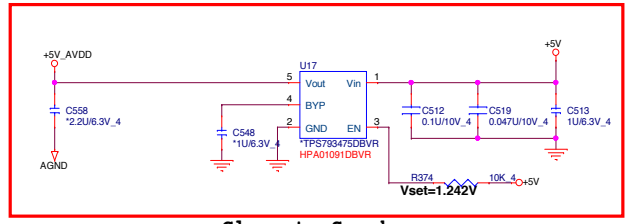
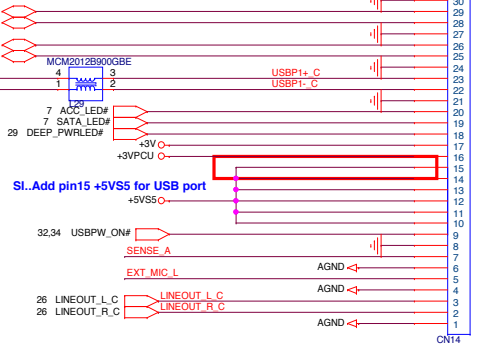
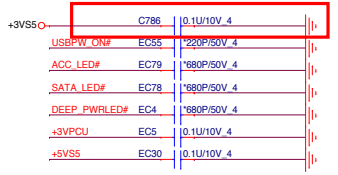
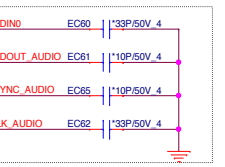
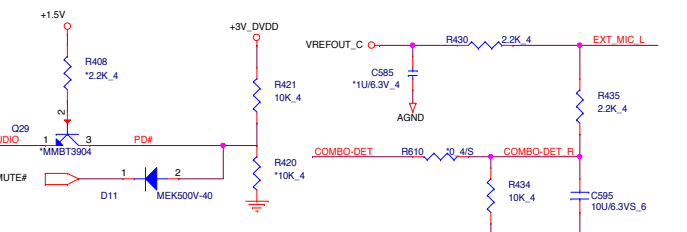
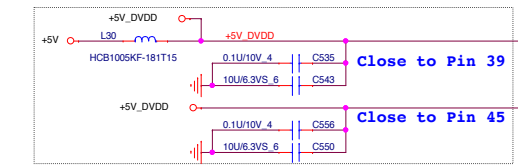
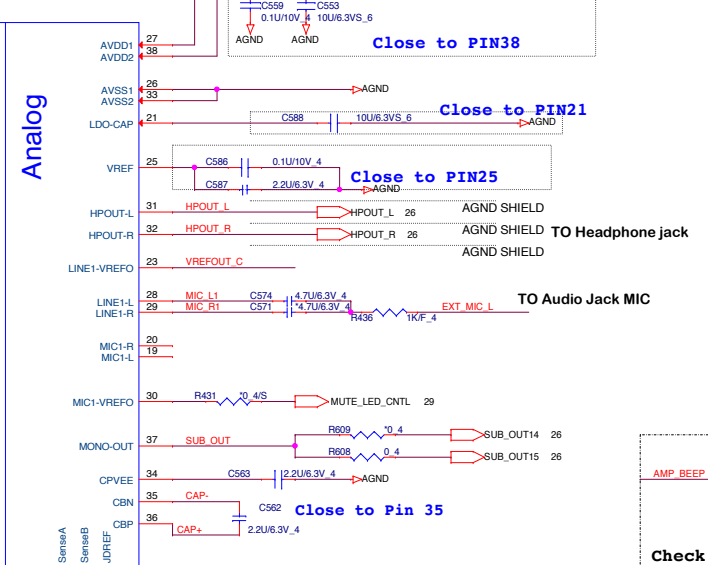
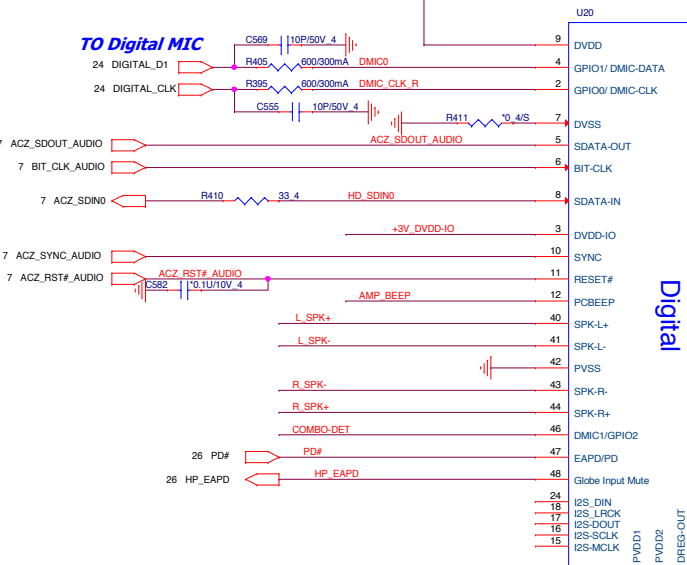
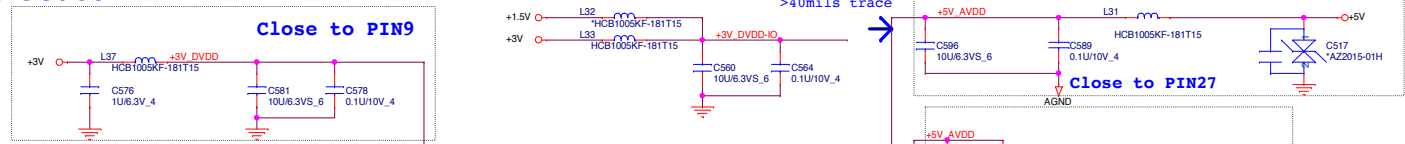


PROJECT : Y11C
Quanta Computer Inc.

Size Custom Document Number LCD CON/LID/CAM/D-MIC Rev 1A

Date: Monday, April 07, 2014 Sheet 24 of 44

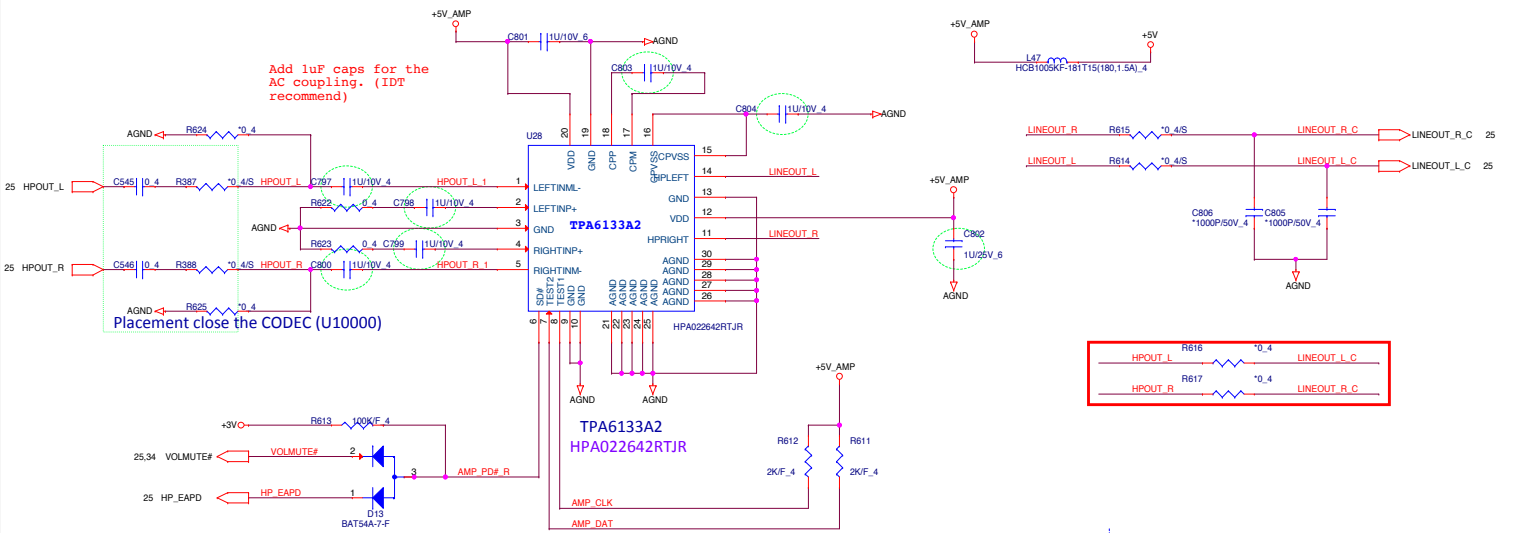
Audio Codec



PROJECT : Y11C
Quanta Computer Inc.

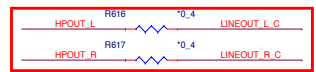
Size Custom Document Number Audio Codec Rev 1A
 Date: Wednesday, April 02, 2014 | Sheet 25 of 44

Head Phone out

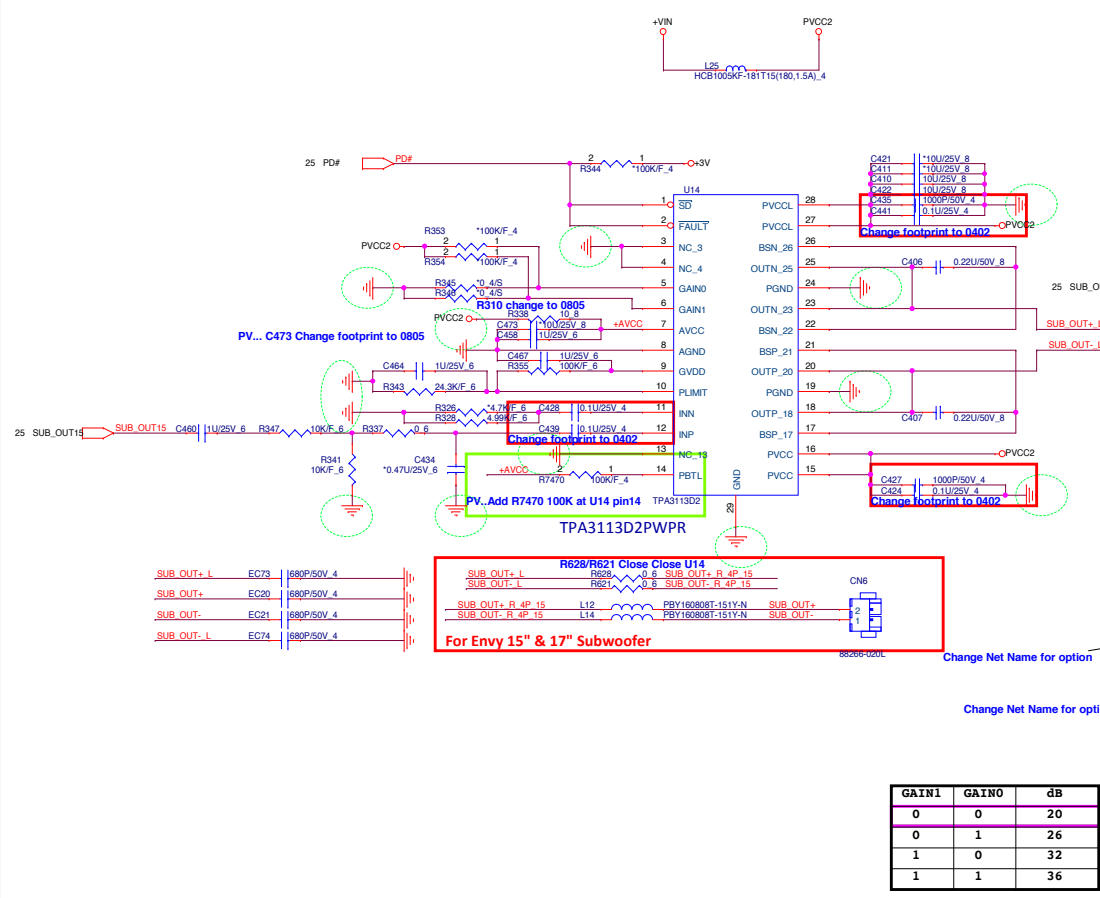


Add 1uF caps for the AC coupling. (IDT recommend)

Placement close the CODEC (U10000)

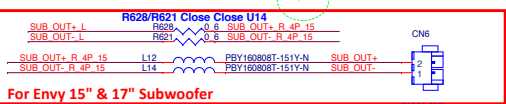


For Envy 15" & 17" Subwoofer



PV... C473 Change footprint to 0805

Change footprint to 0402

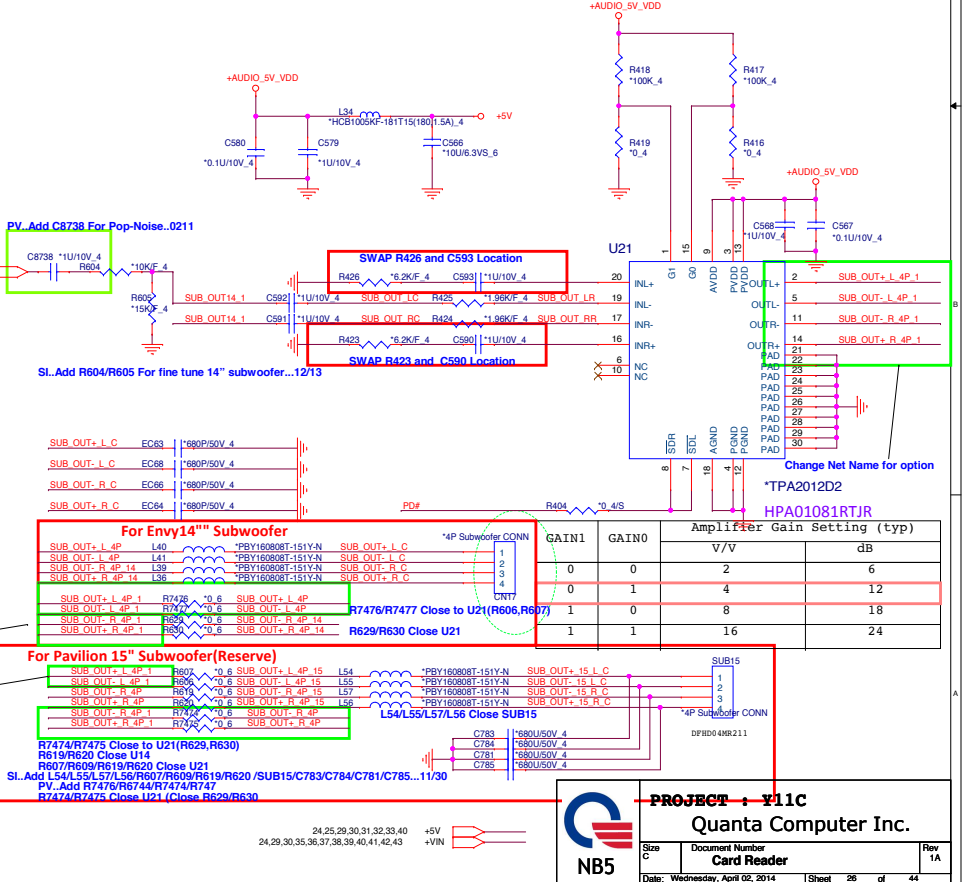


For Envy 15" & 17" Subwoofer

Change Net Name for option

GAIN1	GAIN0	dB
0	0	20
0	1	26
1	0	32
1	1	36

For Pavilion 15" Subwoofer(Reserve) For Envy14" Subwoofer



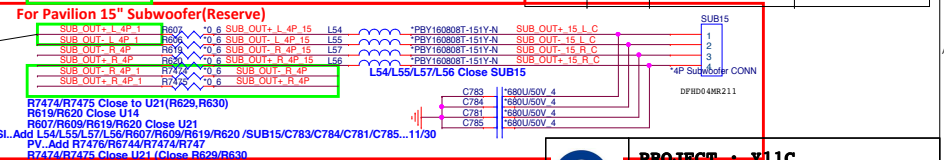
PV... Add C8738 For Pop-Noise...0211

SWAP R426 and C593 Location

SWAP R423 and C590 Location

SI... Add R604/R605 For fine tune 14" subwoofer...12/13

For Envy14" Subwoofer				*4P Subwoofer CONN			Amplifier Gain Setting (typ)		
SUB_OUT+_L_C	SUB_OUT+_L_C	SUB_OUT+_R_C	SUB_OUT+_R_C	GAIN1	GAIN0	V/V	Gain	dB	
EC63	EC68	EC66	EC64	0	0	2	6		
EC63	EC68	EC66	EC64	0	1	4	12		
EC63	EC68	EC66	EC64	1	0	8	18		
EC63	EC68	EC66	EC64	1	1	16	24		



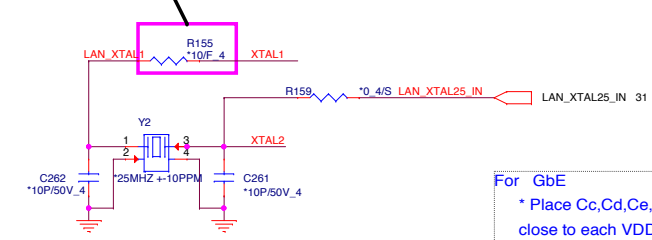
Change Net Name for option

PROJECT - Y11C
Quanta Computer Inc.

Document Number: **Card Reader**

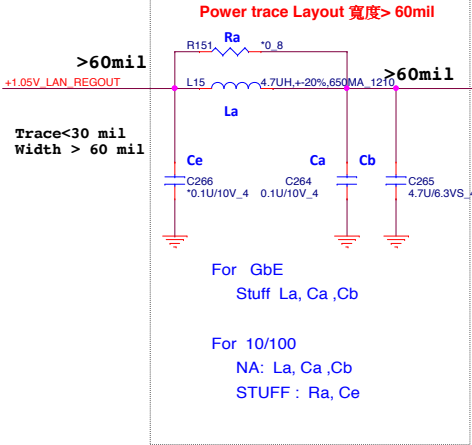
Date: Wednesday, April 02, 2014 | Sheet 26 of 44

For EMI 0 - 22 ohm



For GbE
 * Place Cc,Cd,Ce,Cf,C232
 close to each VDD10 pin-- 3, 22, 8, 30

For 10/100 NA Ce,Cf
 * Place Ce , Cf ,C250
 close to each VDD10 pin-- 8, 30 only,



For GbE
 Stuff La, Ca ,Cb

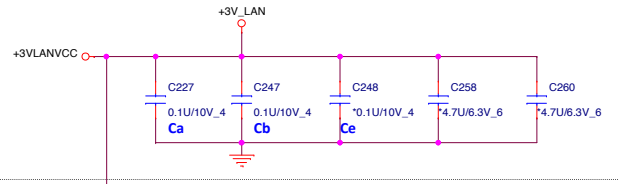
For 10/100
 NA: La, Ca ,Cb
 STUFF : Ra, Ce

For GbE
 * Place Cf close to each VDD10 pin-- 22 (reserve)

For 10/100
 * Place Cg close to each VDD10 pin-- 30 (reserve)

For 10/100
 * Stuff Cb and Ce only, close to each VDD33 pin-- 23, 32

For GIGA
 * Stuff Ca and Cb only, close to each VDD33 pin-- 11, 32

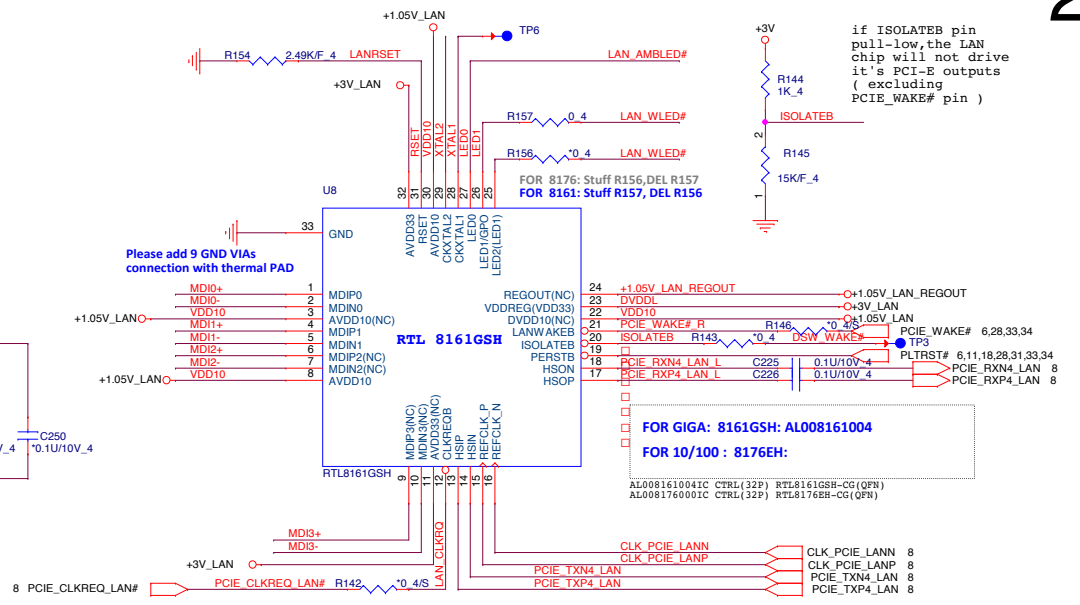


* Place Cc and Cd close to each VDD33 pin-- 23

For GIGA
 Stuff Cc ,Cd

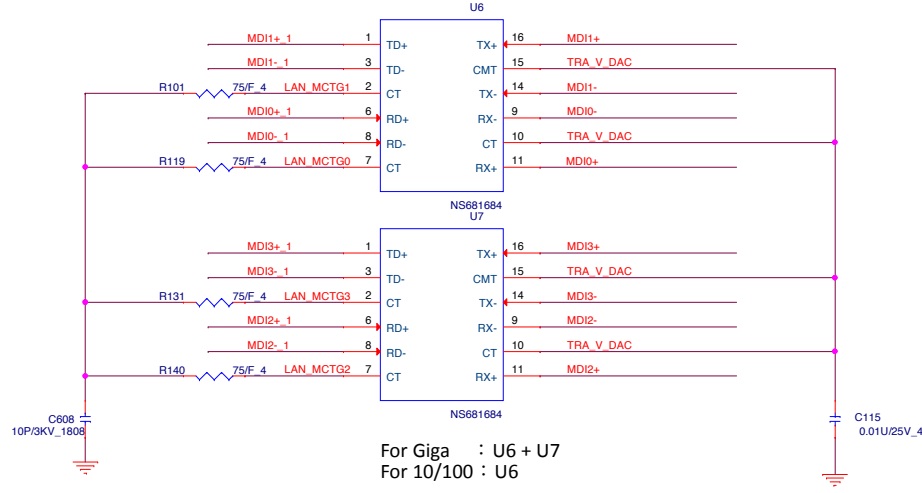
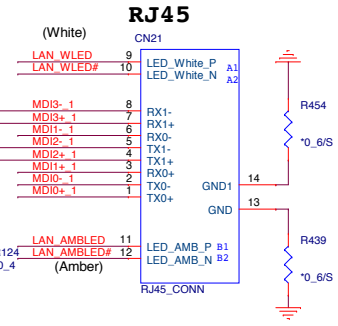
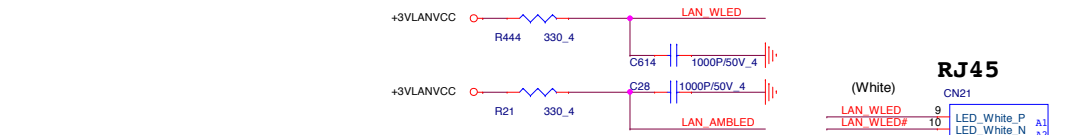
For 10/100
 NA: Cc, Cd

Remove For Not Using SWR mode



if ISOLATEB pin pull-low, the LAN chip will not drive it's PCI-E outputs (excluding PCIE_WAKE# pin)

FOR GIGA: 8161GSH: AL008161004
 FOR 10/100: 8176EH:

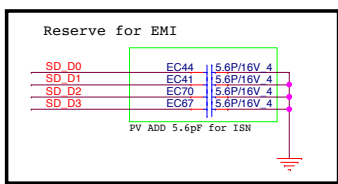
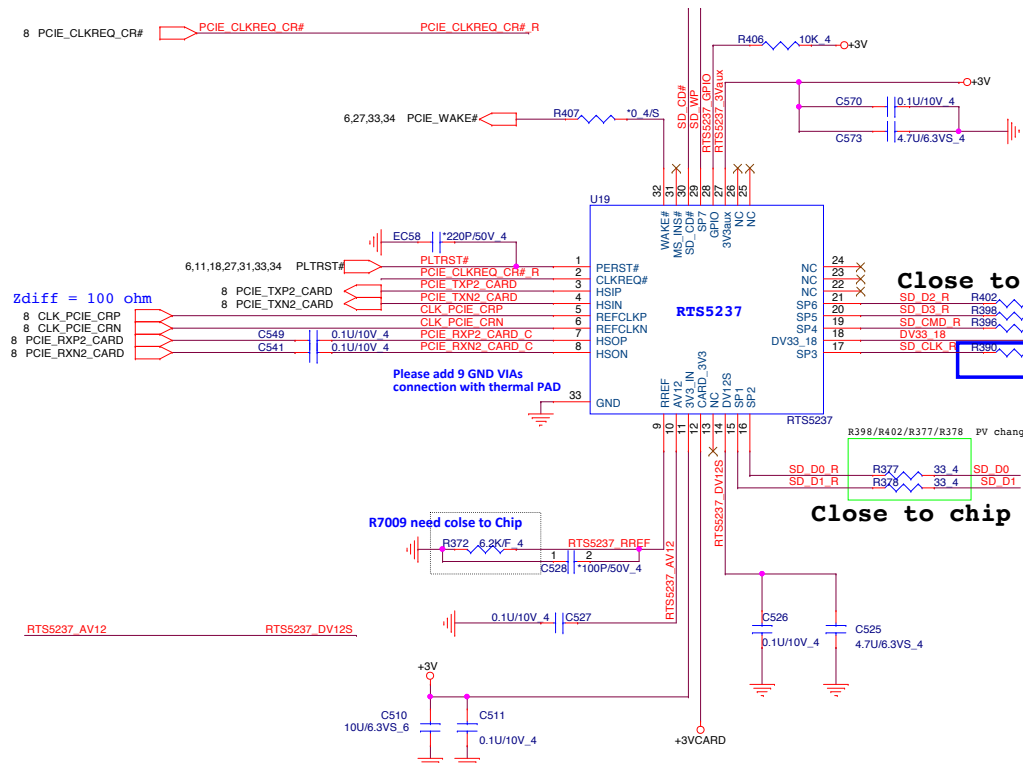


For Giga : U6 + U7
 For 10/100 : U6

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Quanta Computer Inc.

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SP1	SD D1	MS D1
SP2	SD D0	MS D0
SP3	SD CLK	MS D0
SP4	SD CMD	MS D2
SP5	SD D3	MS D3
SP6	SD D2	MS CLK
SP7	SD WP	MS BS

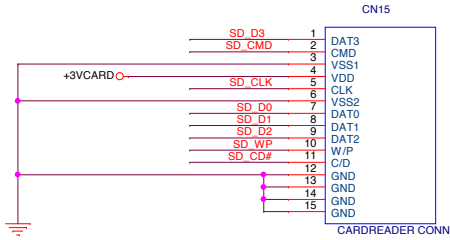
Share Pin
SD / MMC

Close to chip pin

Close to chip pin

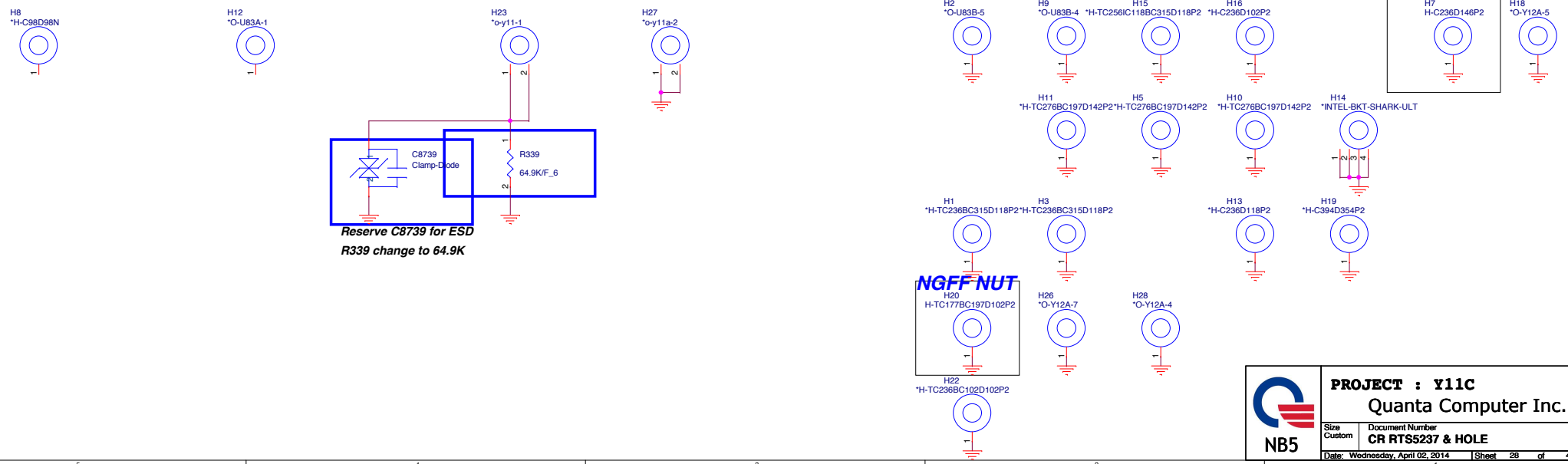
CLOSE CONN

CARD READER



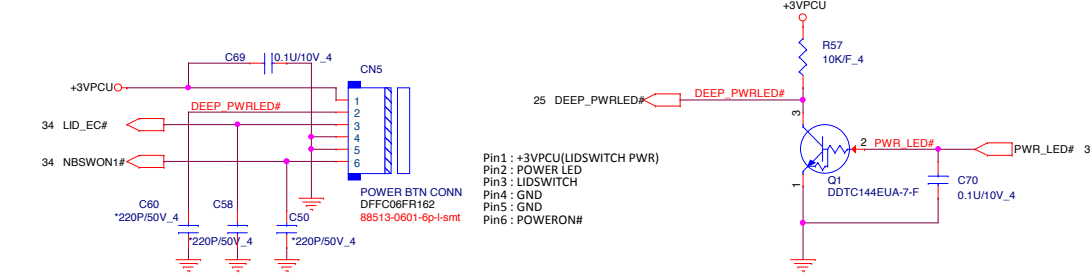
R6x Type

Thermal Nut

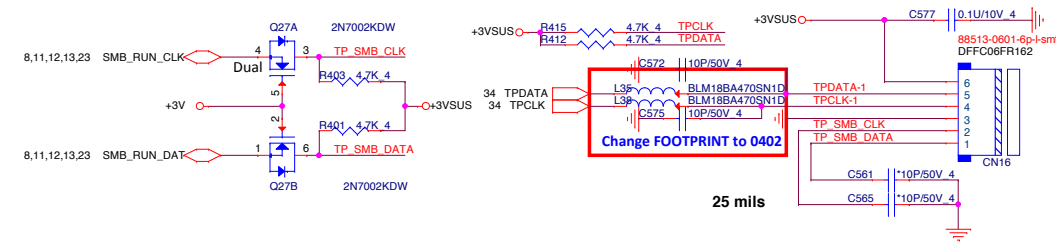


	PROJECT : Y11C		Rev 1A
	Quanta Computer Inc.		
	Size Custom	Document Number CR RTS5237 & HOLE	
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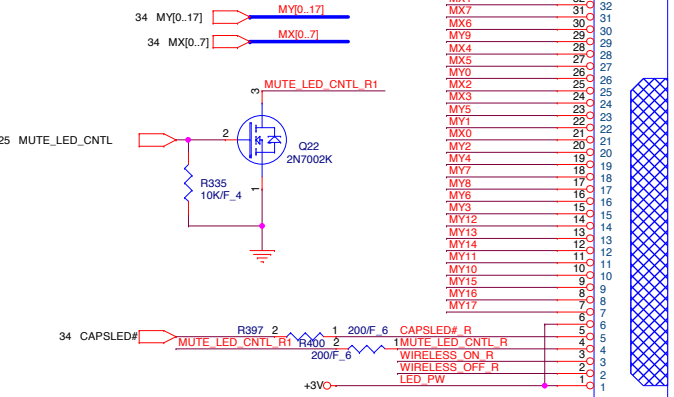
Power Button Connector



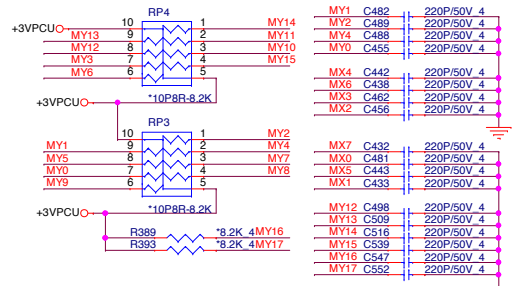
Touch Pad Connector



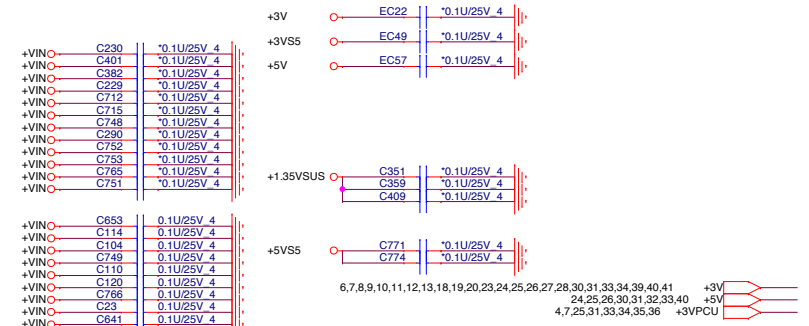
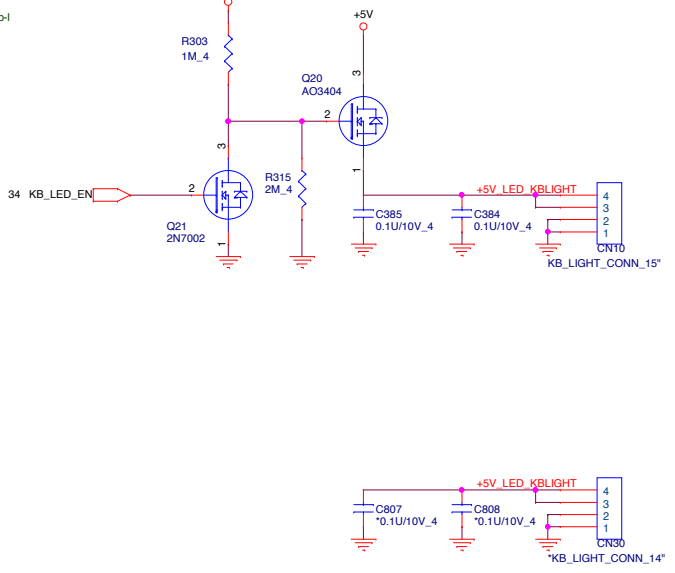
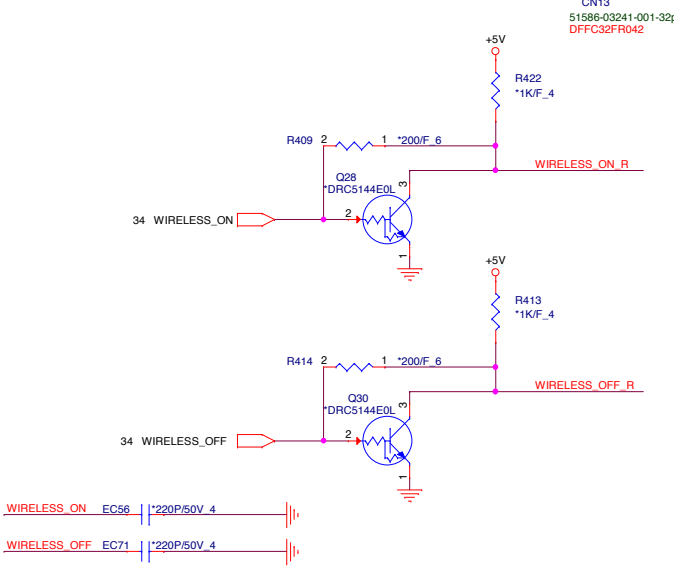
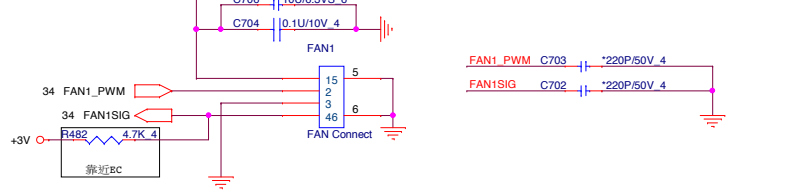
KEYBOARD Con.



KEYBOARD PULL-UP



FAN

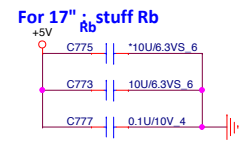
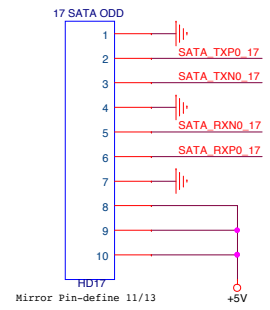
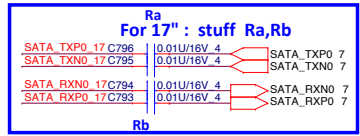


PROJECT : Y11C
Quanta Computer Inc.

Size Custom Document Number PB/TP/KB/FAN/EMI Cap Rev 1A
 NB5 Date: Wednesday, April 02, 2014 Sheet 29 of 44

HDD

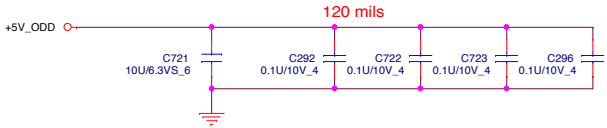
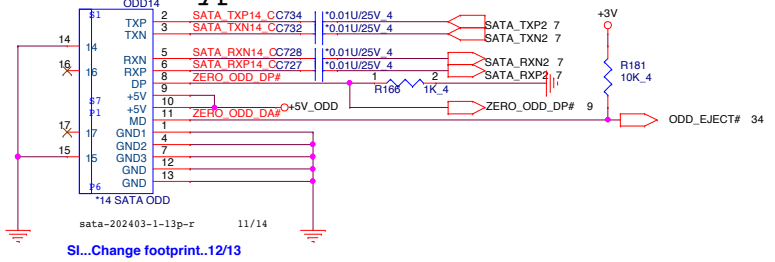
SATA HDD Connector(Cable type) 15.6"



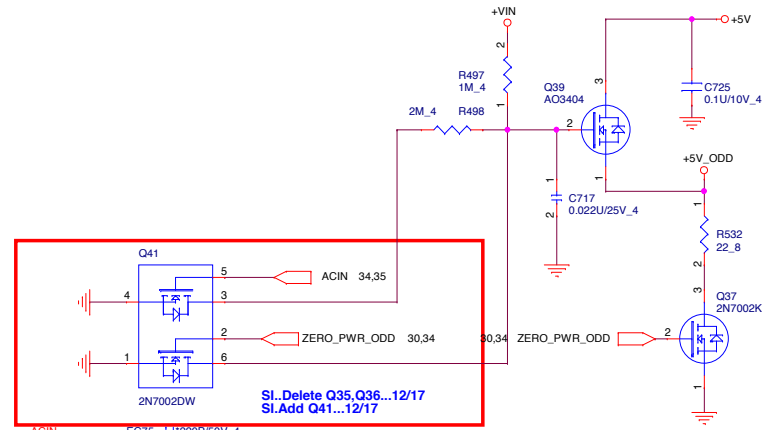
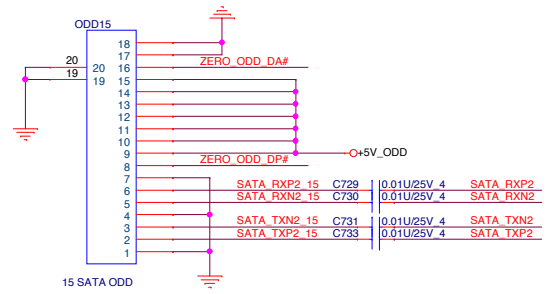
SATA ODD CONNECTOR

14" SATA ODD

Bypass CAP close conn



15" SATA ODD



High : ODD power down
Low : ODD power on

PROJECT : Y11C
Quanta Computer Inc.

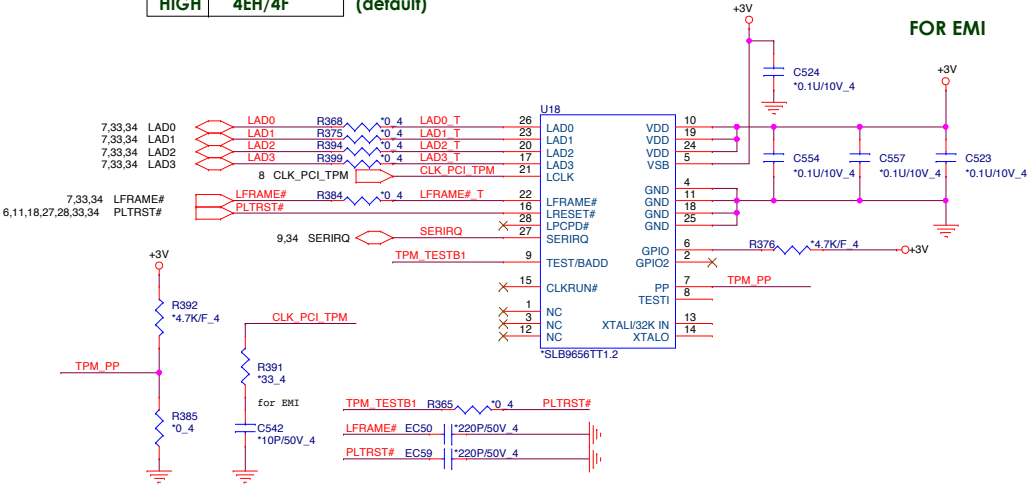
Size Custom	Document Number	Rev 1A
HDMI		
Date: Wednesday, April 02, 2014	Sheet 30 of	44

TPM (1.2)

Address

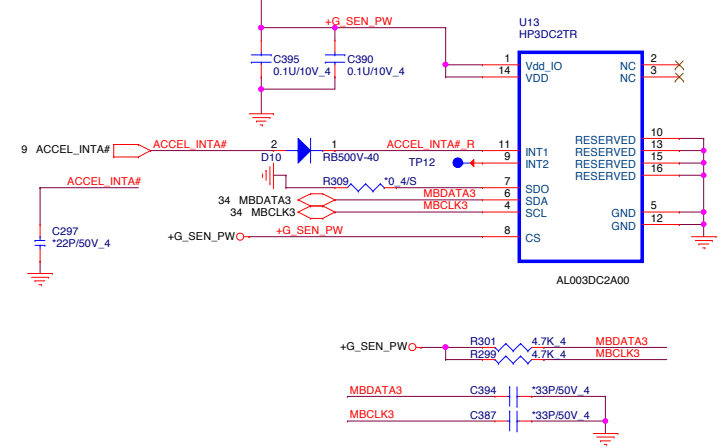
	BADD
HIGH	4EH/4F (default)

FOR EMI

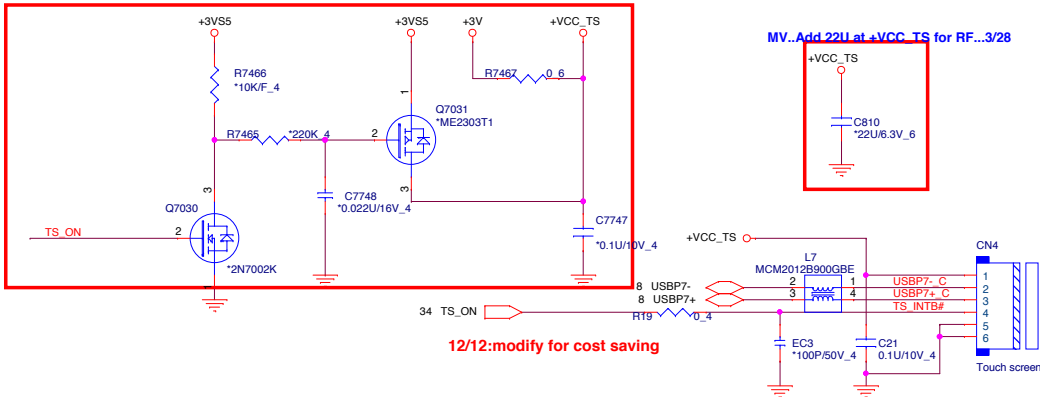


Accelerometer Sensor

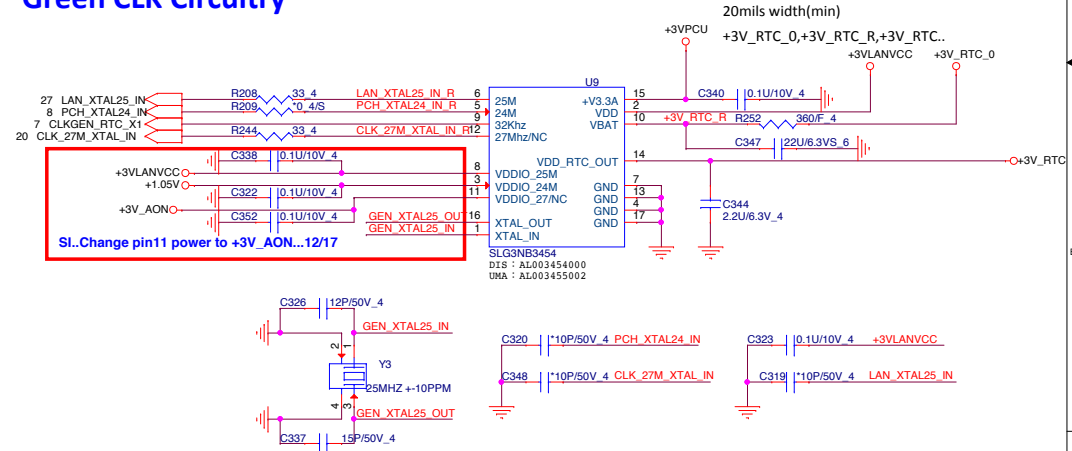
沿用u82



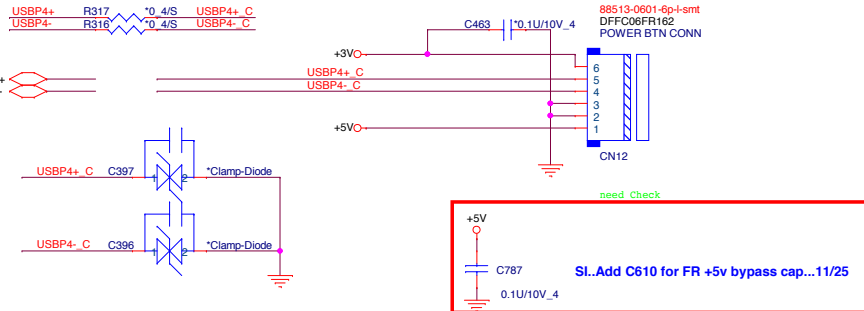
Touch screen



Green CLK Circuitry

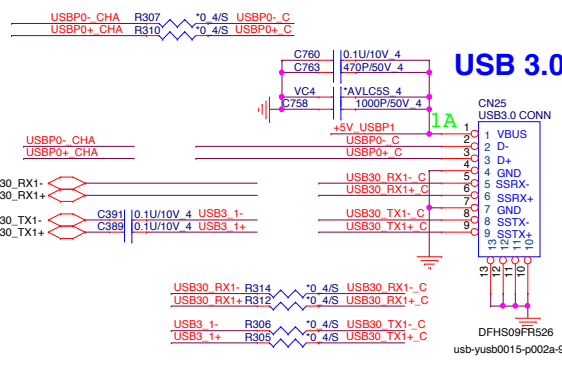
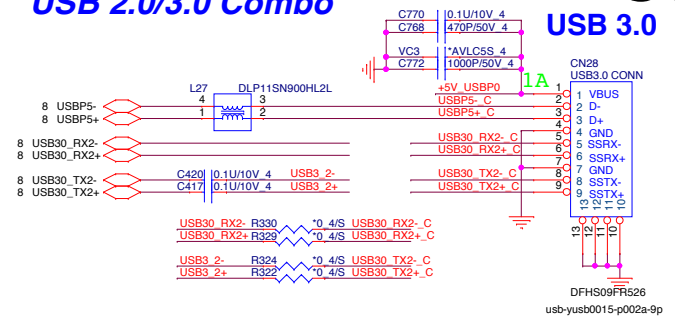


Fingerprint Conn



	PROJECT : Y11C	
	Quanta Computer Inc.	
	Size Custom	Document Number
	TPM/G-Sensor/G-CLK/TS/FP	
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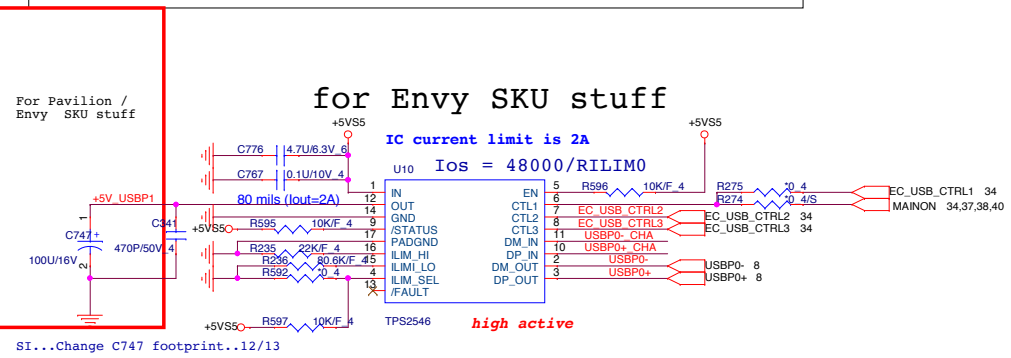
USB 2.0/3.0 Combo



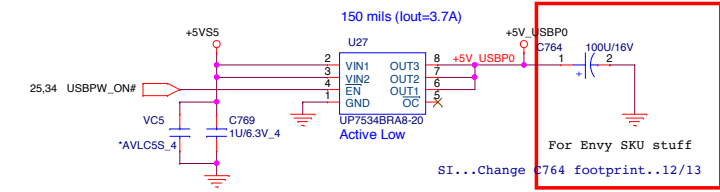
if Envy SKU, non-staff



For Pavilion / Envy SKU stuff



SI...Change C747 footprint..12/13



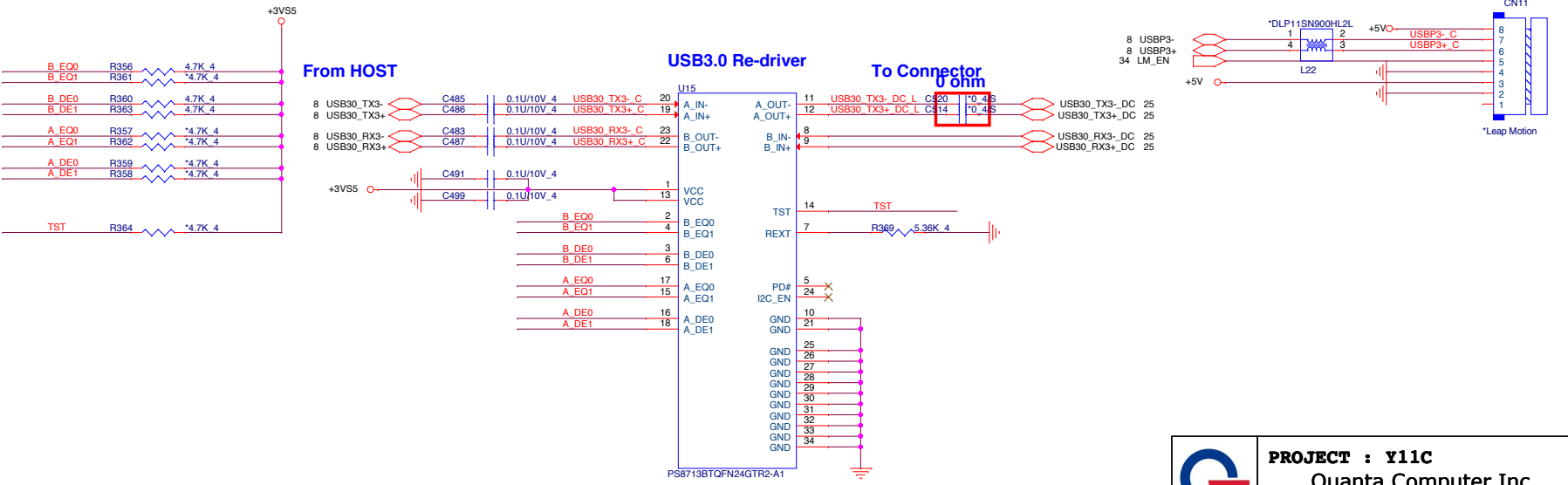
SI...Change C764 footprint..12/13

Right-Side USB3.0 Re-Driver

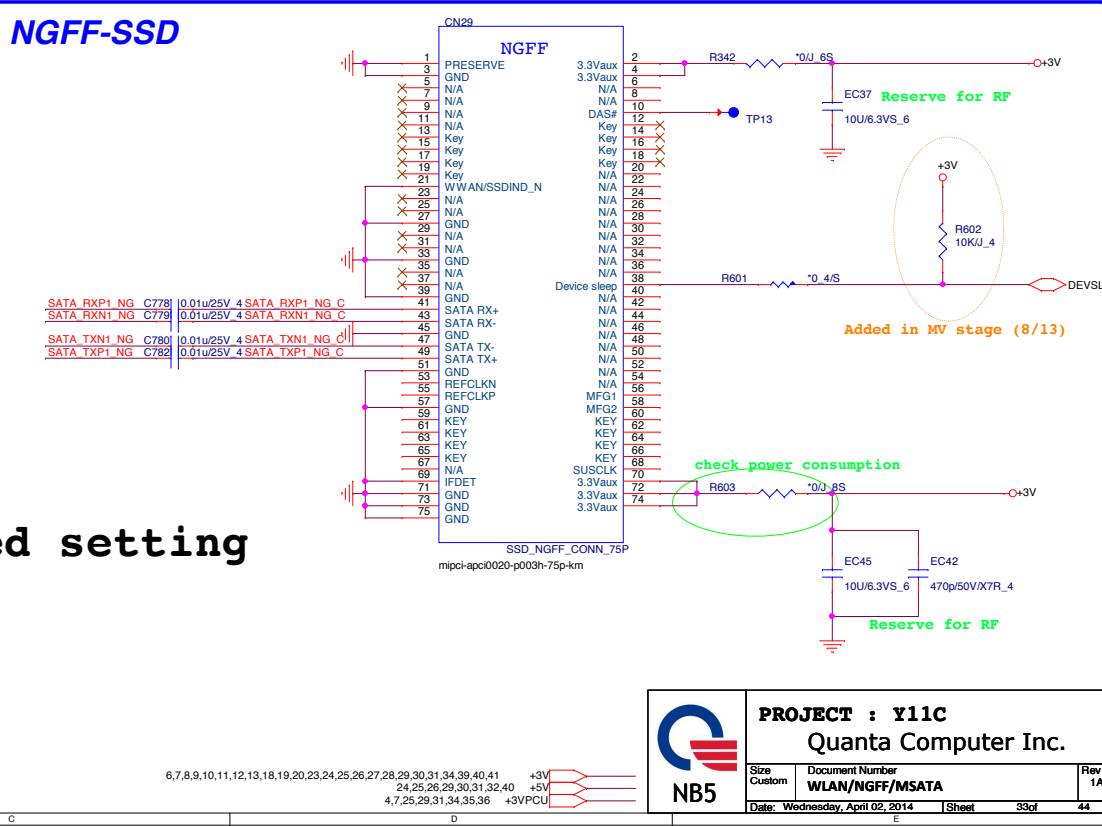
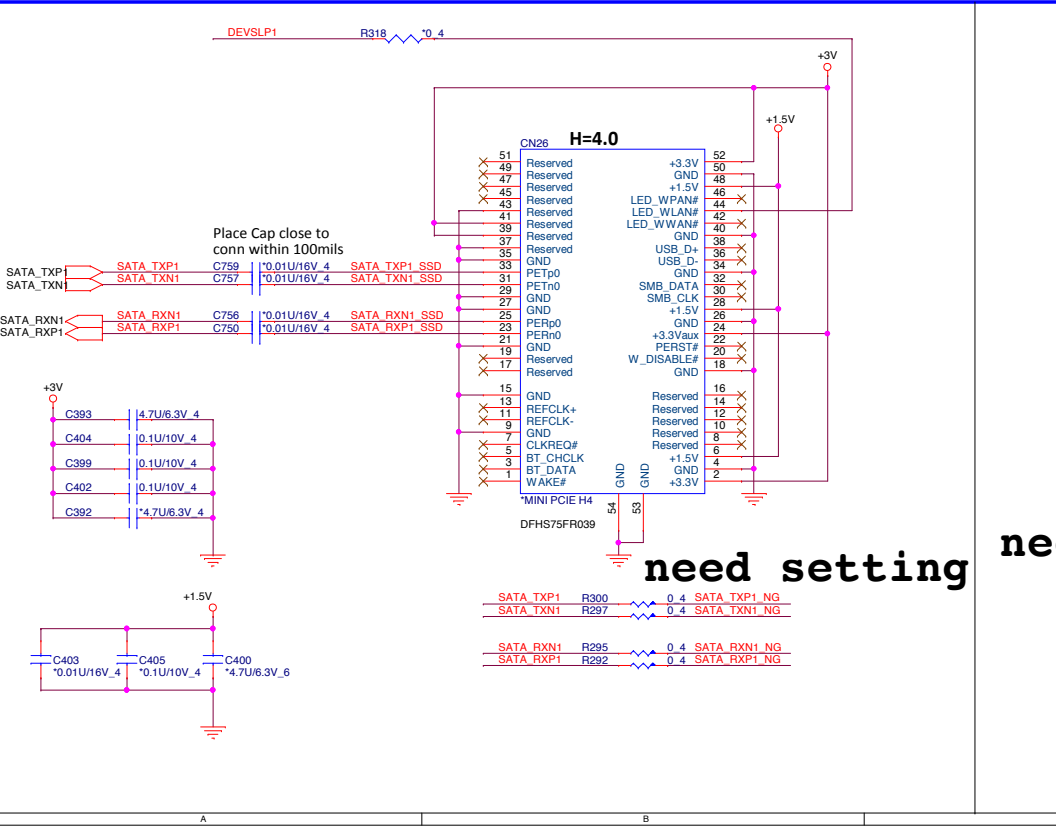
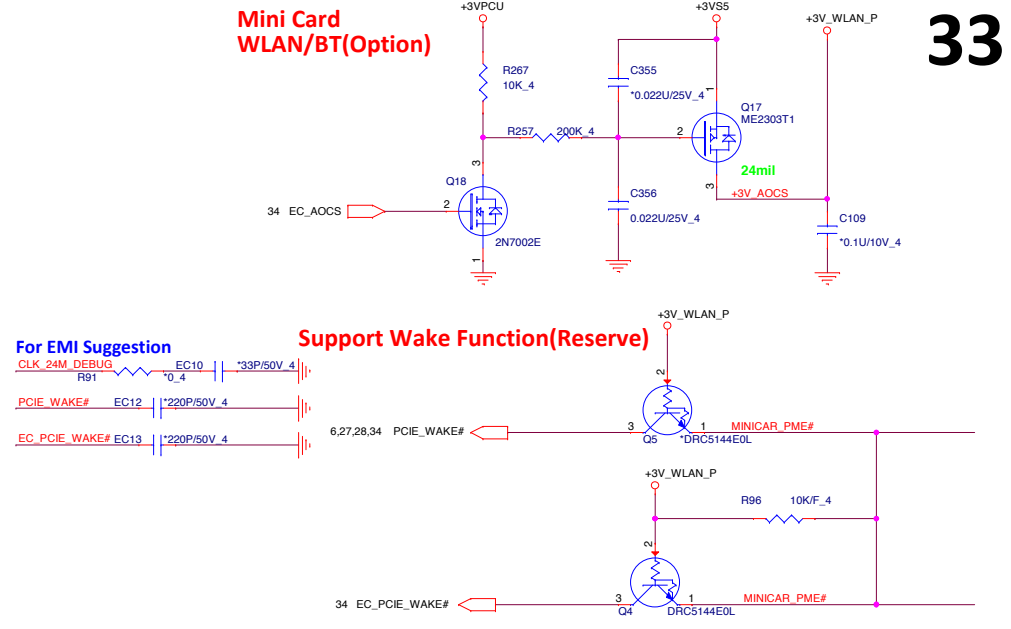
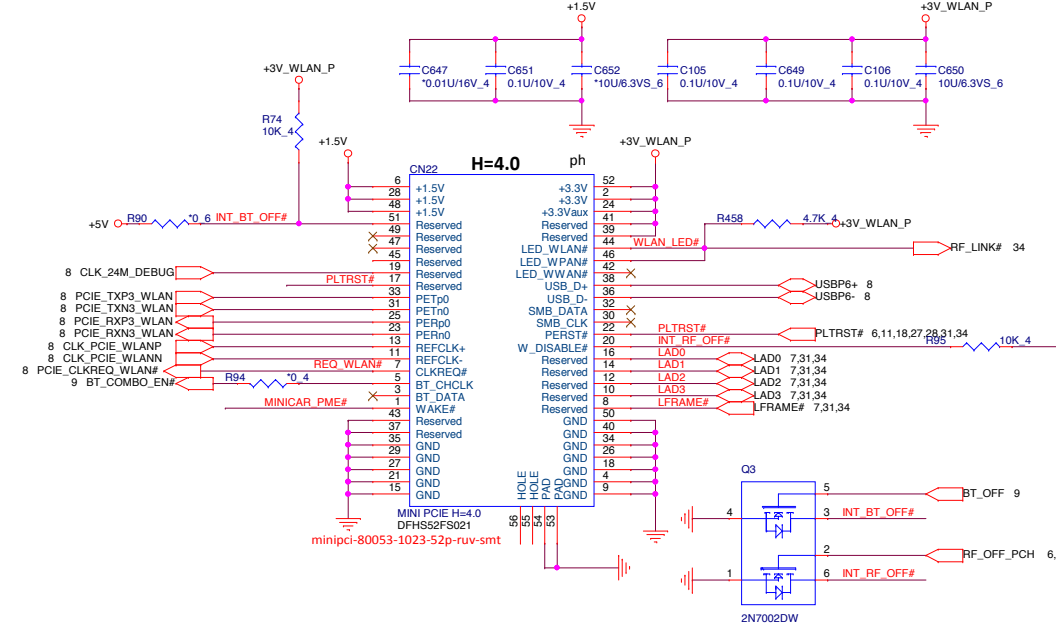
AEQ 9.5db / ADE 3.5db
BEQ 13db / BDE 5db / REXT 5.36K

A_EQ1	A_EQ0	A_DE1	A_DE0	B_EQ1	B_EQ0	B_DE1	B_DE0
0	0	9.5db	0	0	0	3.5db	
0	1	13db	0	1	0	no de-emphasis	
1	0	4.5db	1	0	0	2.7db	
1	1	7.5db	1	1	1	5db	

TST : Low = Normal LFPS swing / High =Turn down LFPS swing

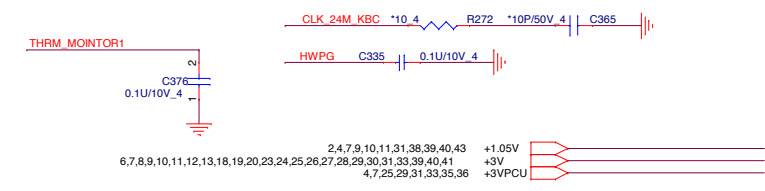
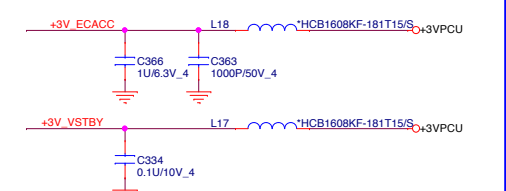
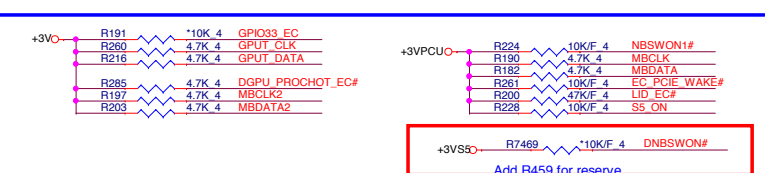
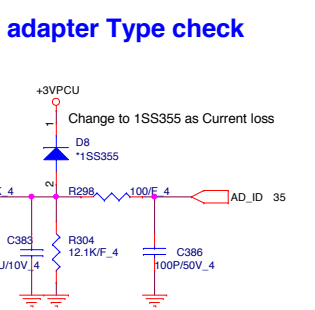
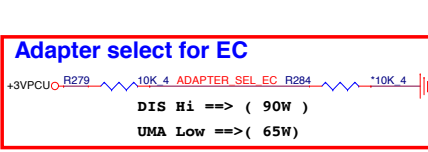
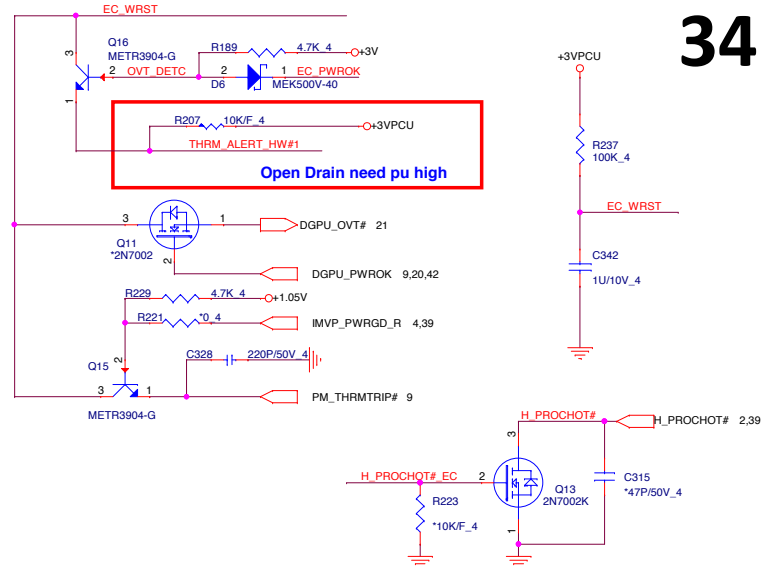
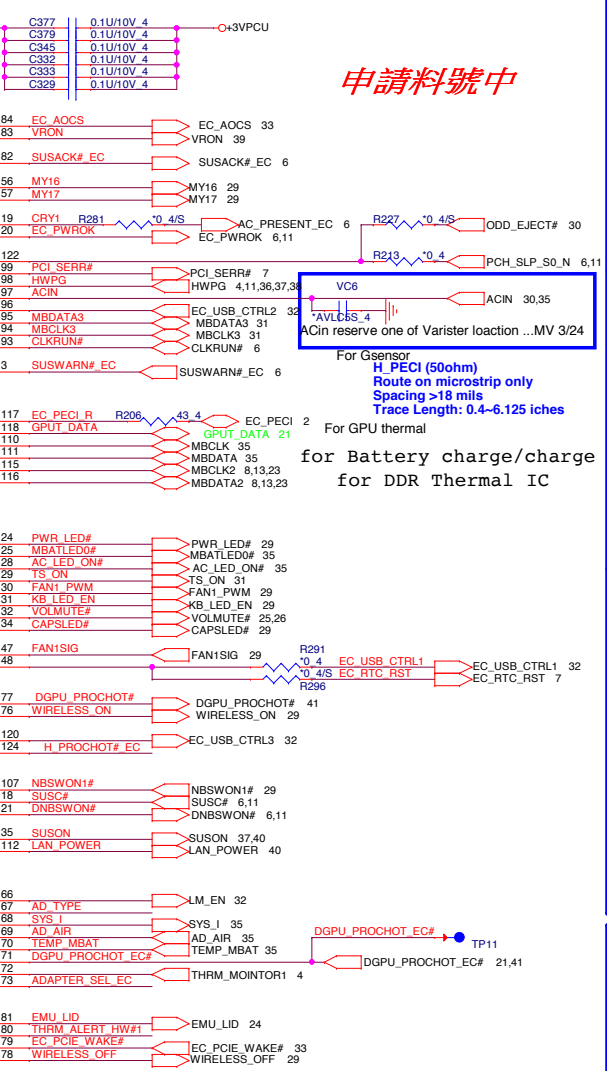
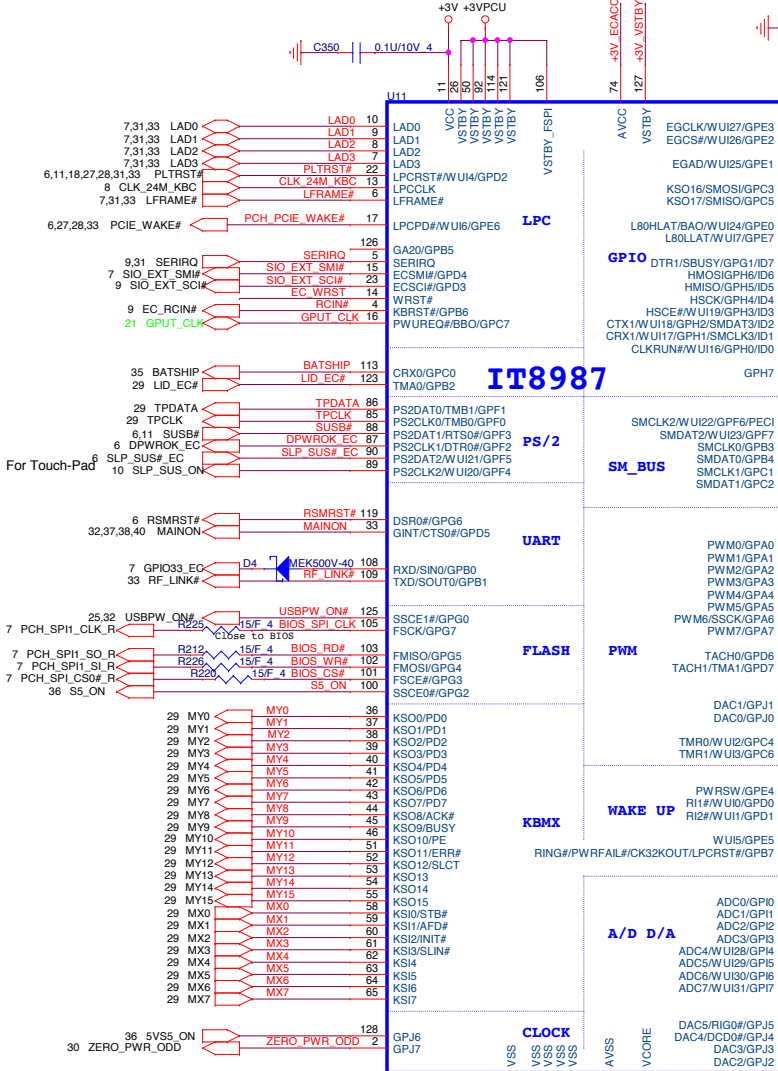


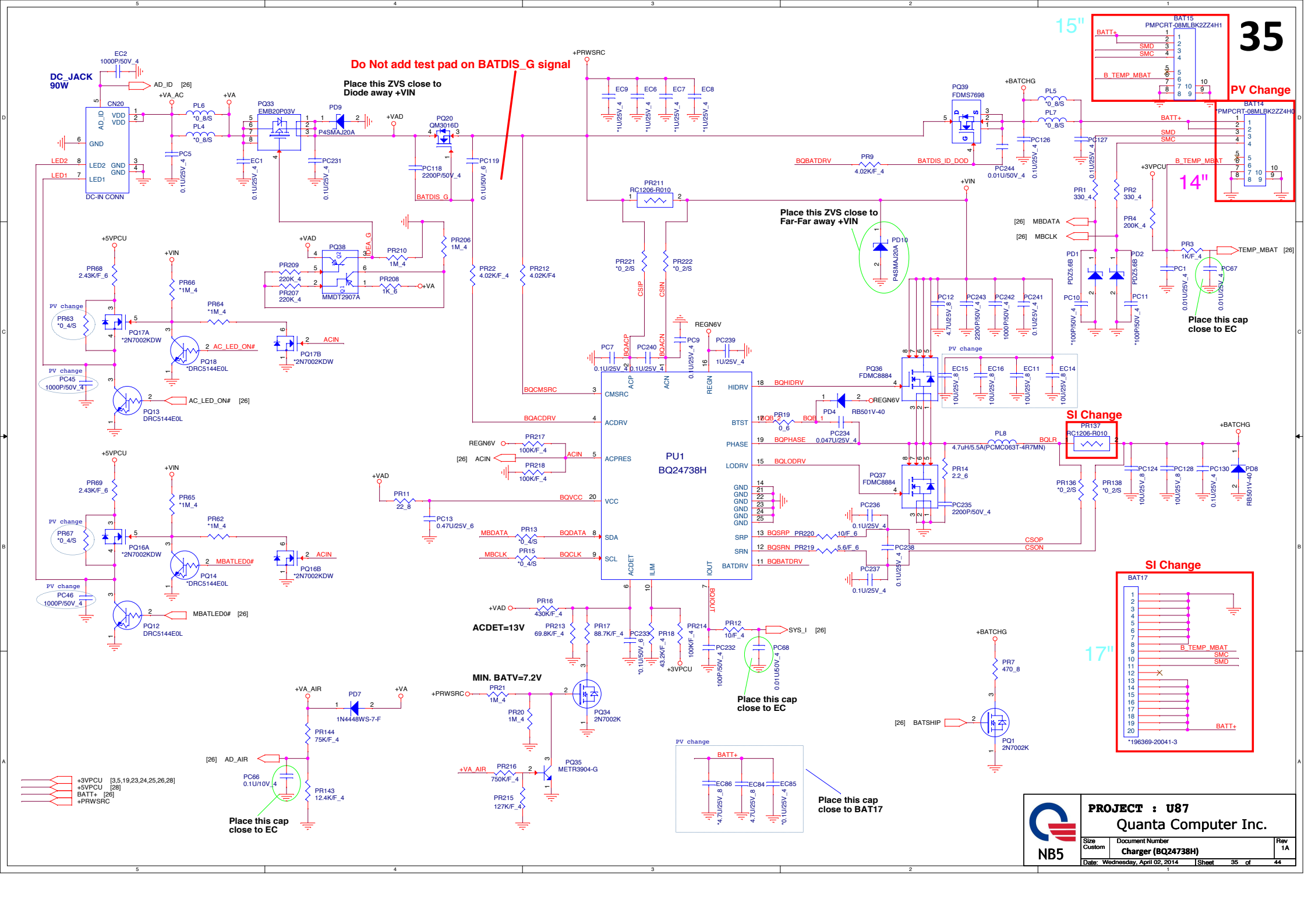
	PROJECT : Y11C	
	Quanta Computer Inc.	
Size Custom	Document Number	Rev 1A
USB 3.0		
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	PROJECT : Y11C		Rev 1A
	Quanta Computer Inc.		
Size Custom	Document Number	WLAN/NGFF/MSATA	
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申請料號中





Do Not add test pad on BATDIS_G signal

Place this ZVS close to Diode away +VIN

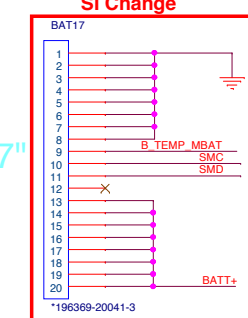
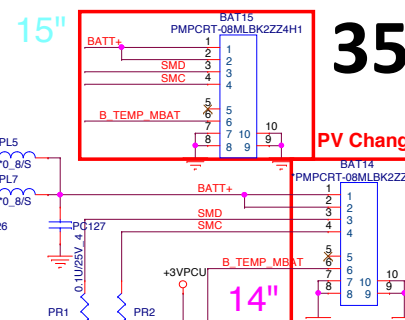
Place this ZVS close to Far-Far away +VIN

Place this cap close to EC

Place this cap close to EC

Place this cap close to EC

Place this cap close to BAT17

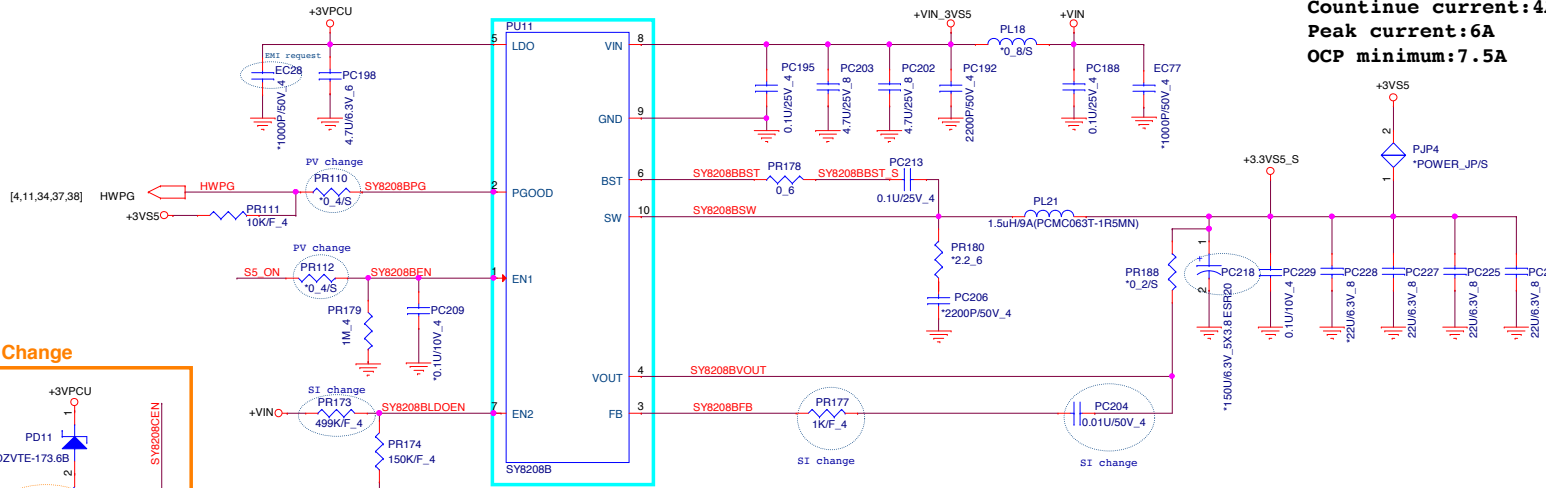


PROJECT : U87
Quanta Computer Inc.
Size Custom Document Number Changer (BQ24738H) 1A
NB5 Date: Wednesday, April 02, 2014 Sheet 35 of 44

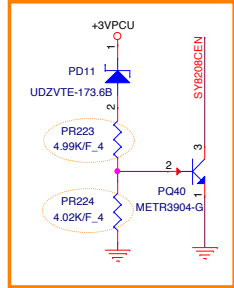
DC/DC +3VS5/+5VS5

+3.3 Volt +/- 5%
Countinue current:4A
Peak current:6A
OCP minimum:7.5A

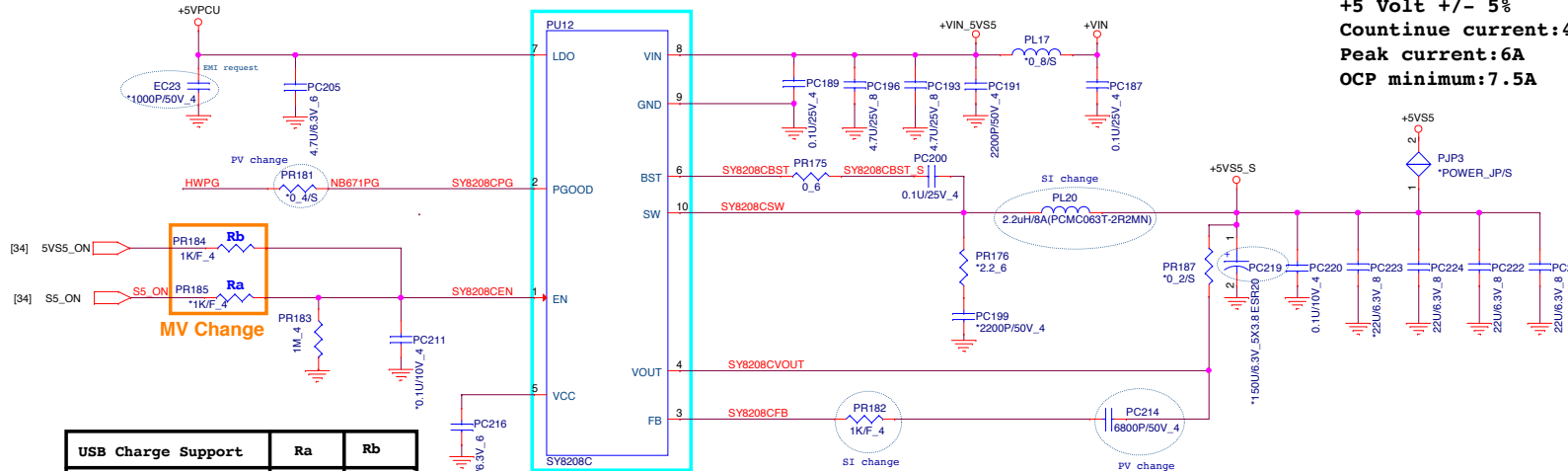
+3VSS [6,7,9,10,11,25,29,32,33,38,40,43]
 +5VSS [13,25,29,32,37,38,39,40,41,42,43]



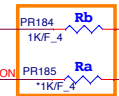
MV Change



+5 Volt +/- 5%
Countinue current:4A
Peak current:6A
OCP minimum:7.5A

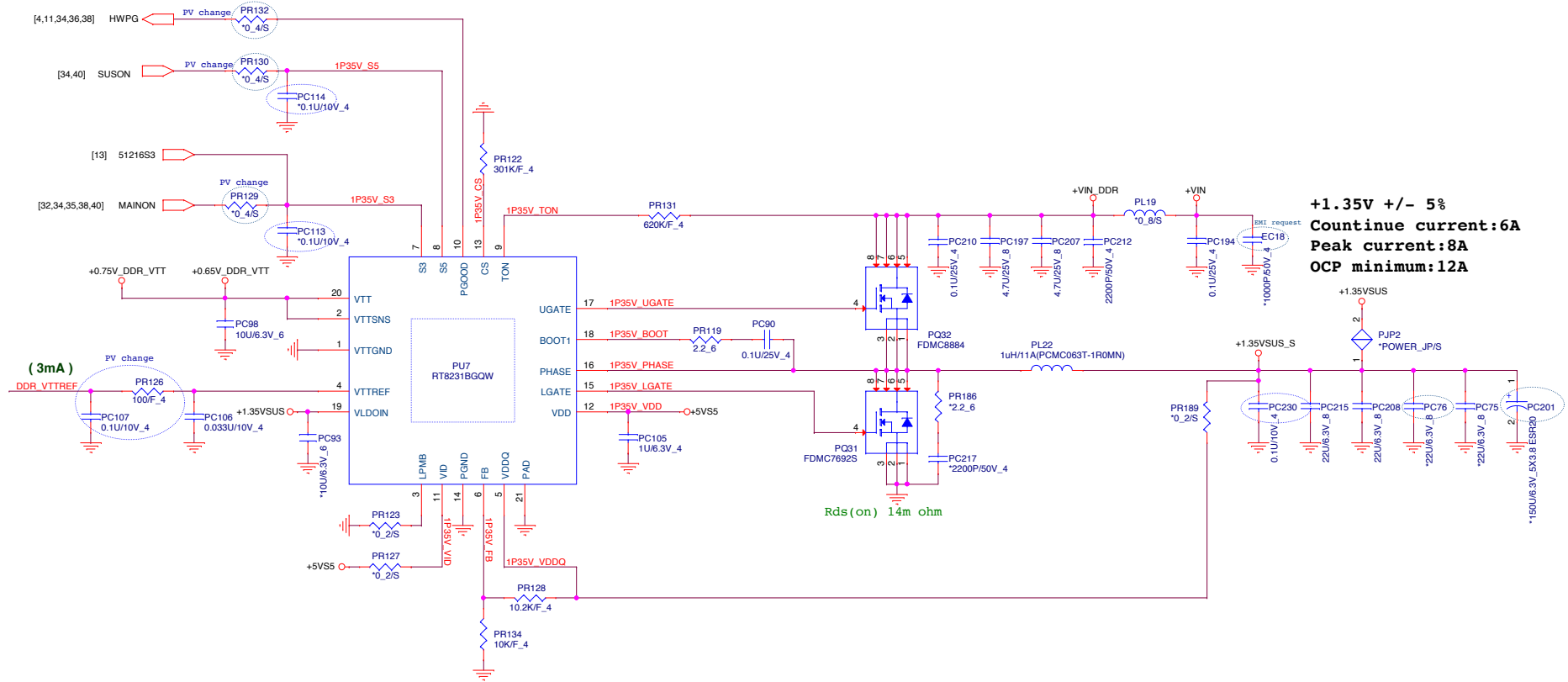


MV Change



USB Charge Support	Ra	Rb
VINE (No support)	Stuff	NA
ENVY (Support)	NA	Stuff

	PROJECT : R63		Rev 1A
	Quanta Computer Inc.		
	Size Custom Document Number 3/5VPCU(RT8243A)	Date: Wednesday, April 02, 2014	
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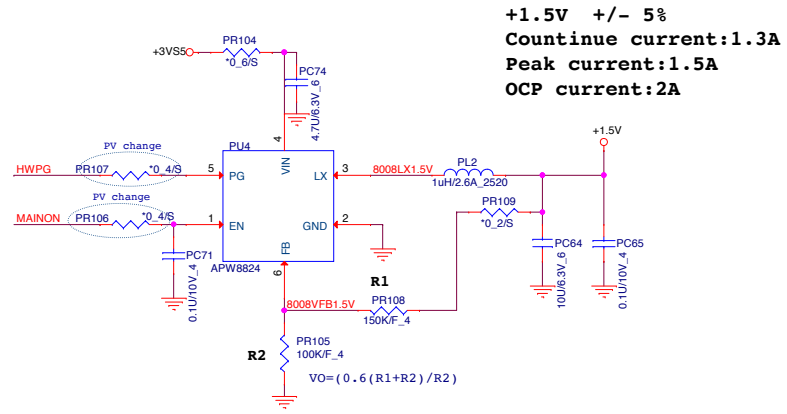
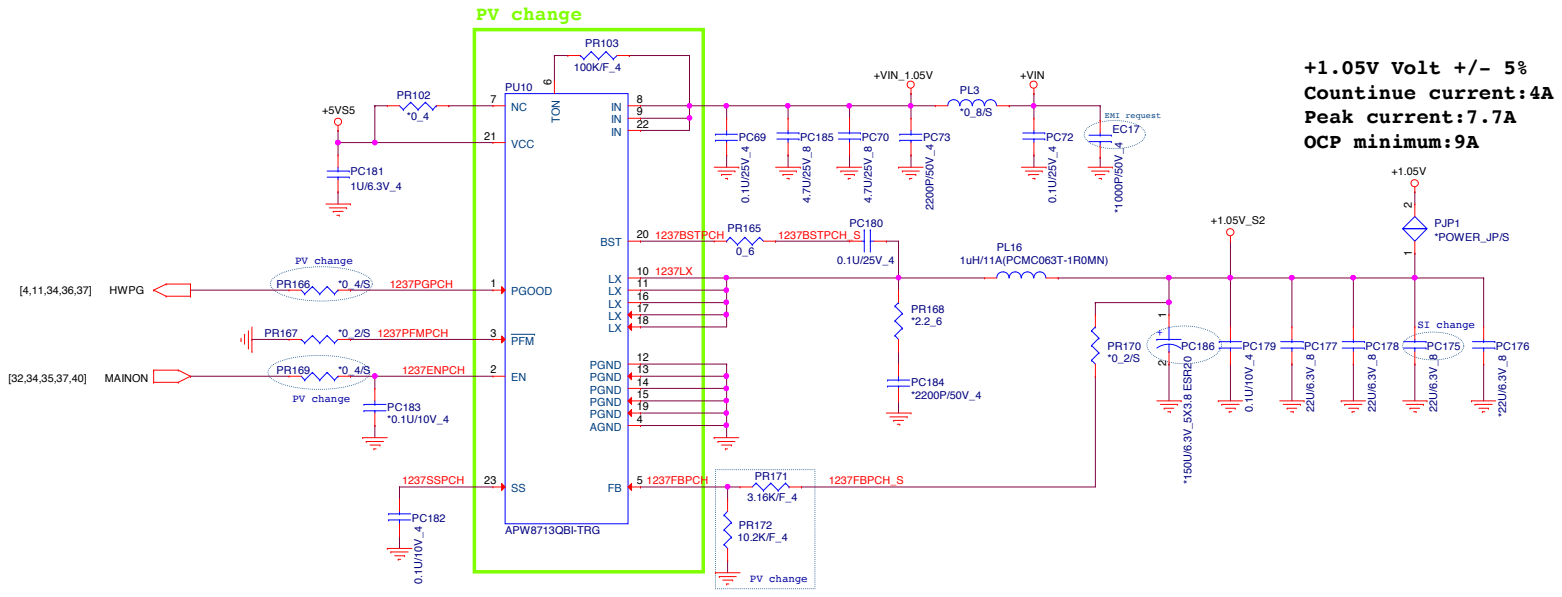


+1.35V +/- 5%
Countinue current:6A
Peak current:8A
OCP minimum:12A

Rds(on) 14m ohm

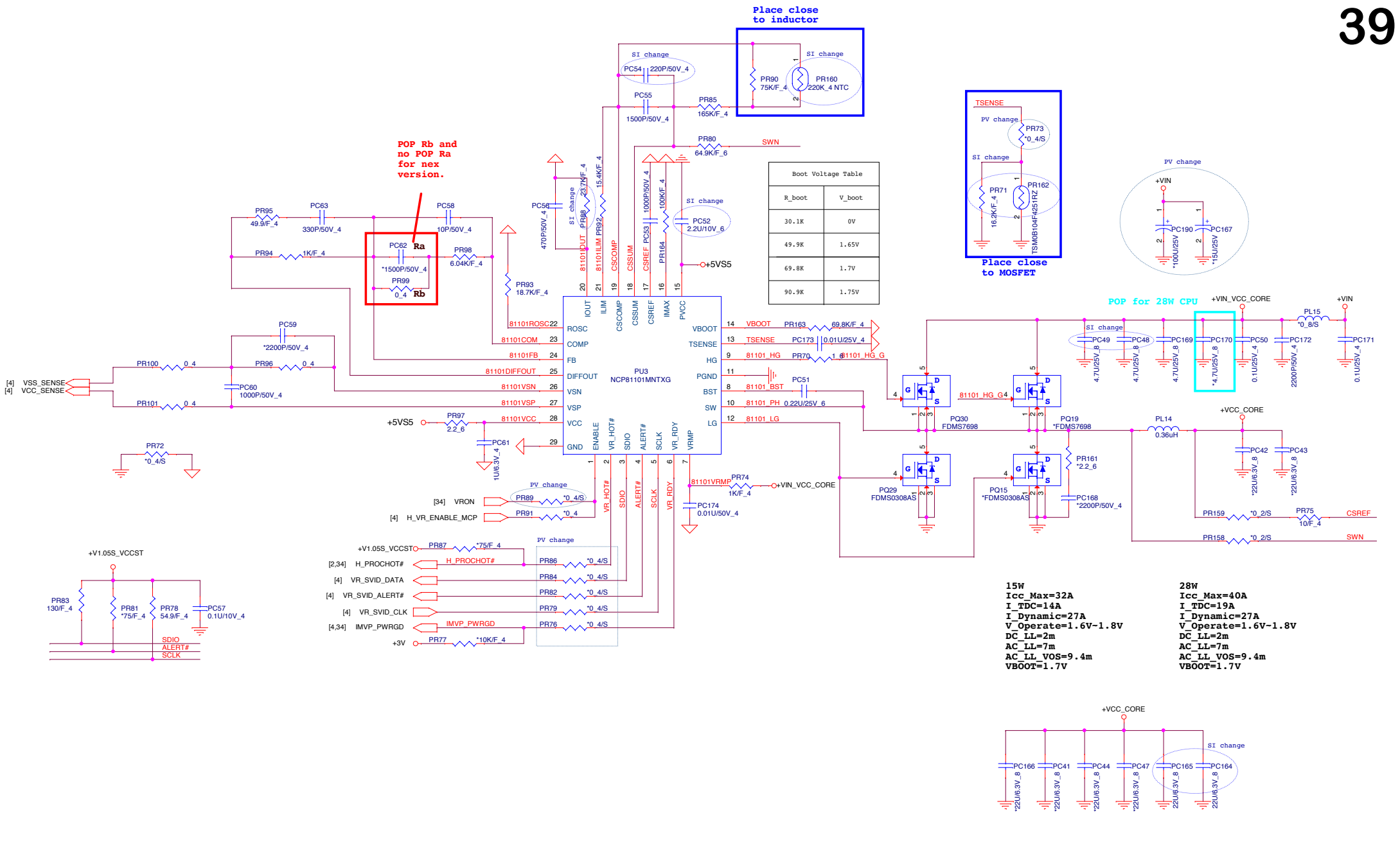
+1.35VSUS [2,4,12,13,29]

	PROJECT : Y02			Rev 1A
	Quanta Computer Inc.			
	Size Custom	Document Number DDR3 (RT8231A)/1.8V55		
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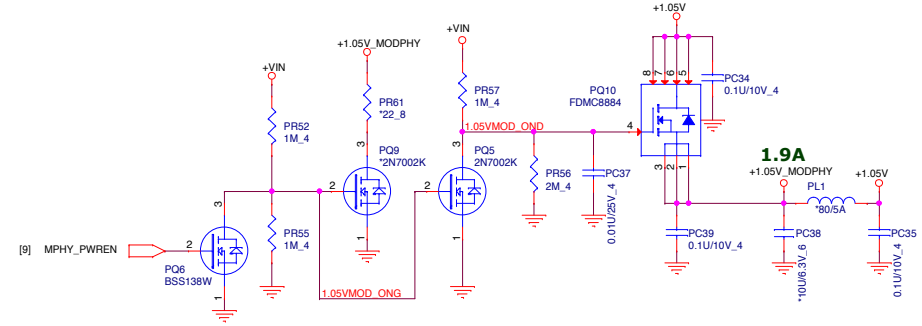
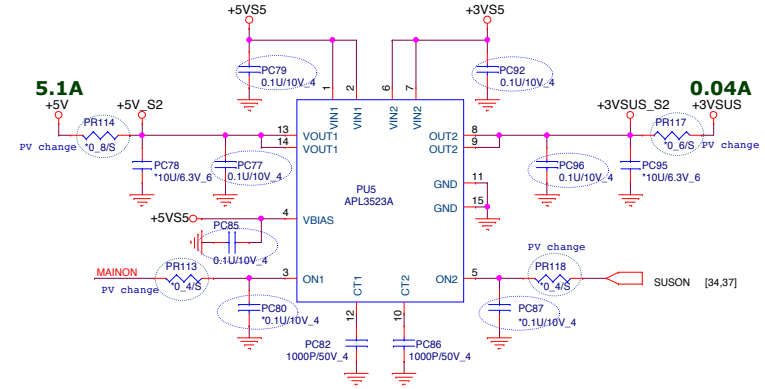
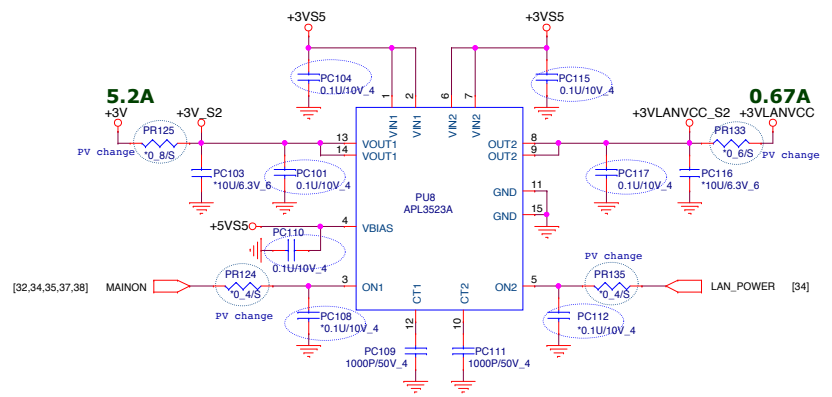
- +VIN [24,26,29,30,35,36,37,39,40,41,42,43]
- +3VSS [6,7,9,10,11,25,29,32,33,36,40,43]
- +5VSS [13,25,29,32,36,37,39,40,41,42,43]

<p>NB5/RD3</p>	<p>PROJECT : U63 Quanta Computer Inc.</p>		
	<p>Size Custom</p>	<p>Document Number +1.1VS5 (RT8228)/2.5V</p>	<p>Rev 1A</p>
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Quanta Computer Inc.

Size Custom	Document Number CPU Core (NCP81101)ULT	Rev 1A
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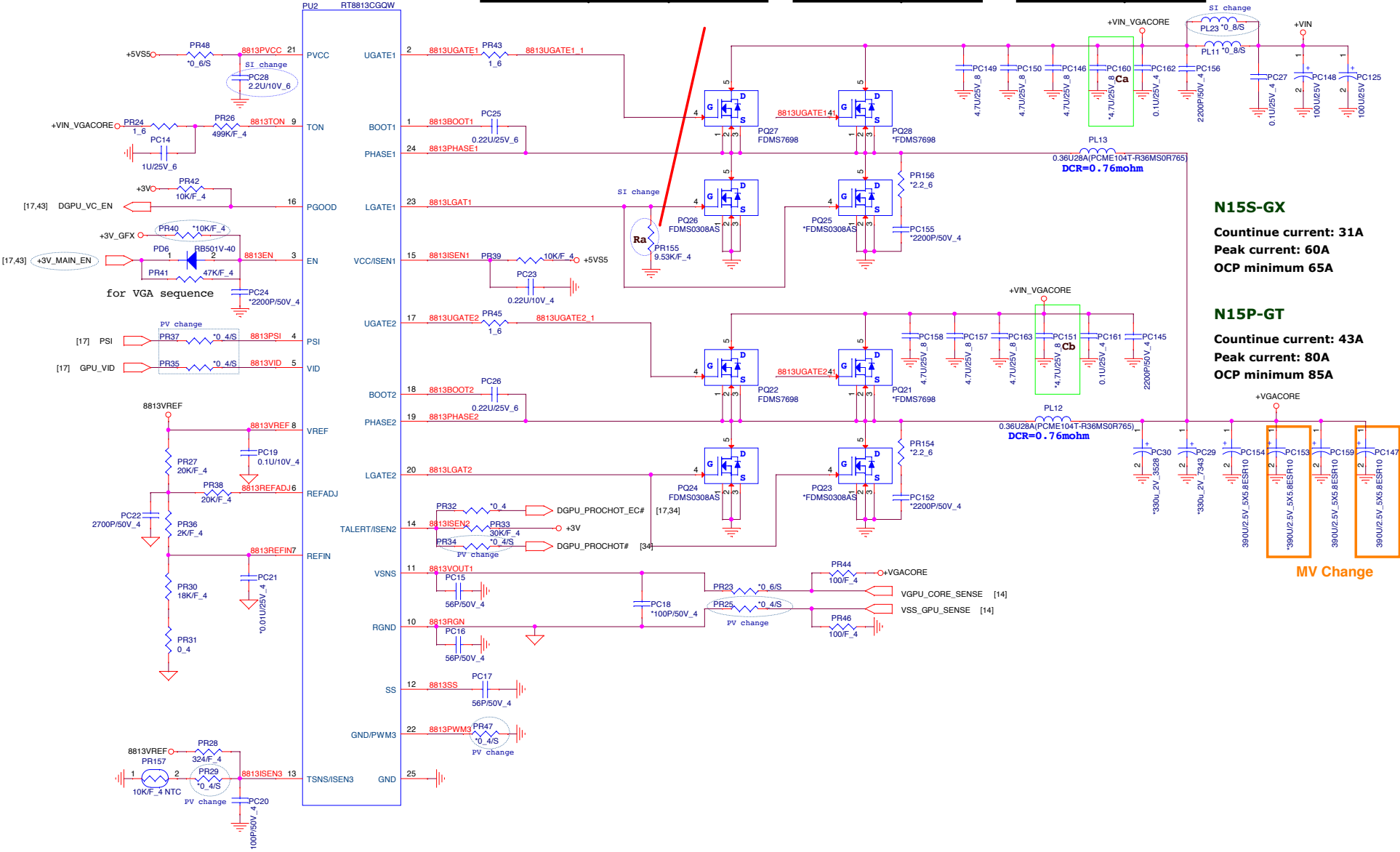
- [6,7,8,9,10,11,12,13,14,17,18,23,24,25,26,27,28,29,30,31,33,34,39,41] +3V
- [24,25,26,29,30,31,32,33] +5V
- [24,26,29,30,35,36,37,38,39,41,42,43] +VIN
- [6,7,9,10,11,25,29,32,33,36,38,43] +3VS5
- [19,25,29,32,36,37,38,39,41,42,43] +3VSUS
- [27,31] +3VLANVCC

VGA Core

VGA TYPE	Ra Value	P/N
N15S-GX (25W)	9.53K	CS29532FB10
N15P-GT (35W)	12.4K	CS31242FB13

VGA TYPE	MOSFET
N15S-GX (25W)	1H1L
N15P-GT (35W)	2H2L


VGA TYPE	Ca, Cb
N15S-GX (25W)	No stuff
N15P-GT (35W)	Stuff

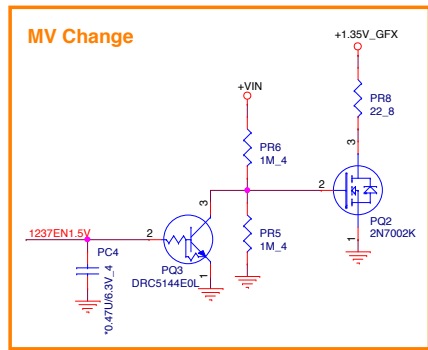
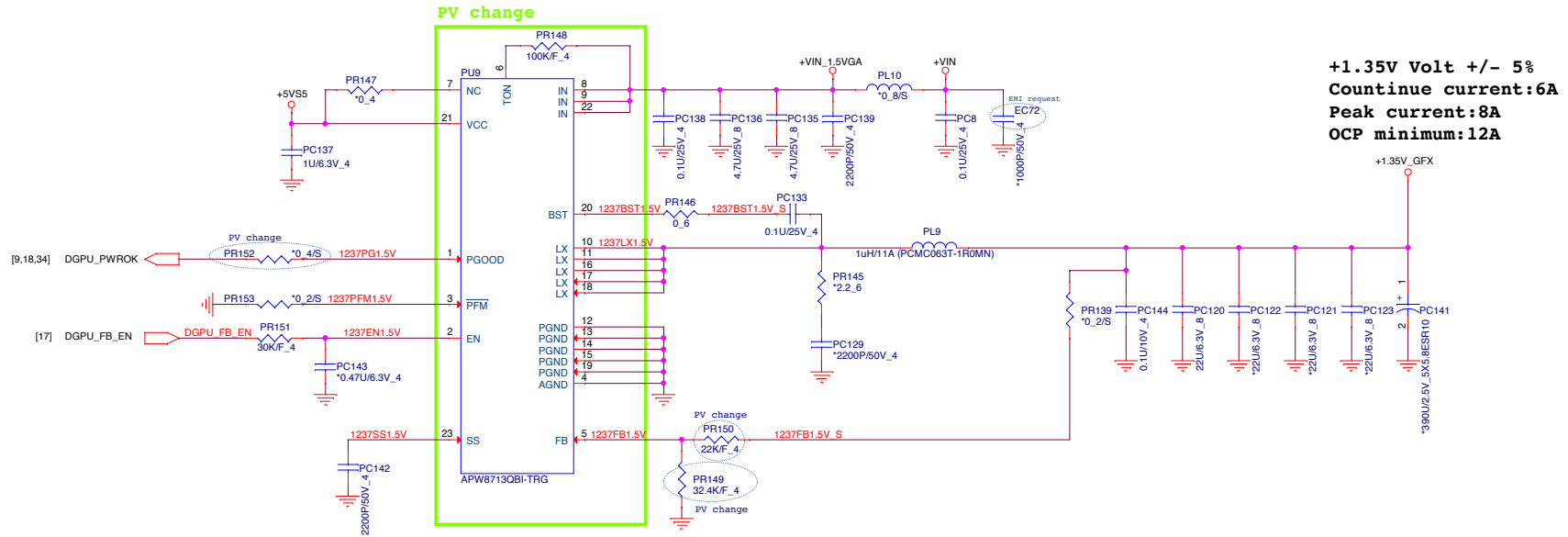


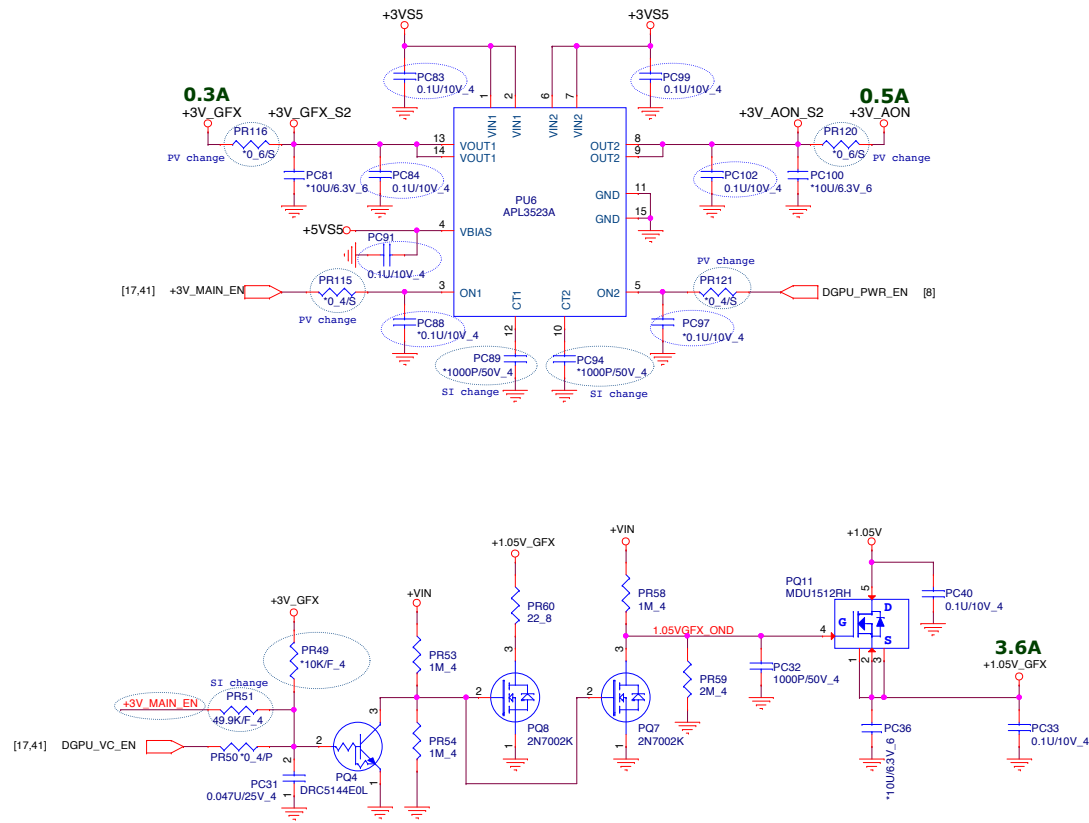
N15S-GX
 Countinue current: 31A
 Peak current: 60A
 OCP minimum 65A

N15P-GT
 Countinue current: 43A
 Peak current: 80A
 OCP minimum 85A

MV Change

		
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Custom	+VGACORE (RT8813A)	1A
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Battery Connector	Pavillion	ENVY
14"	DFAD08MR063	DFAD08MR064
15"	DFAD08MR065	DFAD08MR066
17"	DFFC20FR081	DFFC20FR081

USB Charge Support	PR185	PR184
Pavillion	Stuff	NA
ENVY (USB charge)	NA	Stuff

UMA	Disable Page 41 、 42 、 43 ,but keep below location
Page 41	PC161 、 PC162
Page 42	PC138 、 PC144 、 PC4 、 PC148
Page 43	PC84 、 PC102 、 PC88 、 PC97 、 PC40 、 PC33

Discrete	Location	Part Number
N15S (25W)	PR155	CS29532FB10
	PC151 、 PC160	NA
	PQ21 、 PQ23 、 PQ25 、 PQ28	NA
N15P (35W)	PR155	CS31242FB13
	PC151 、 PC160	Stuff
	PQ21 、 PQ23 、 PQ25 、 PQ28	Stuff

Title		
<Title>		
Size	Document Number	Rev
A	<Doc>	<RevCode>
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