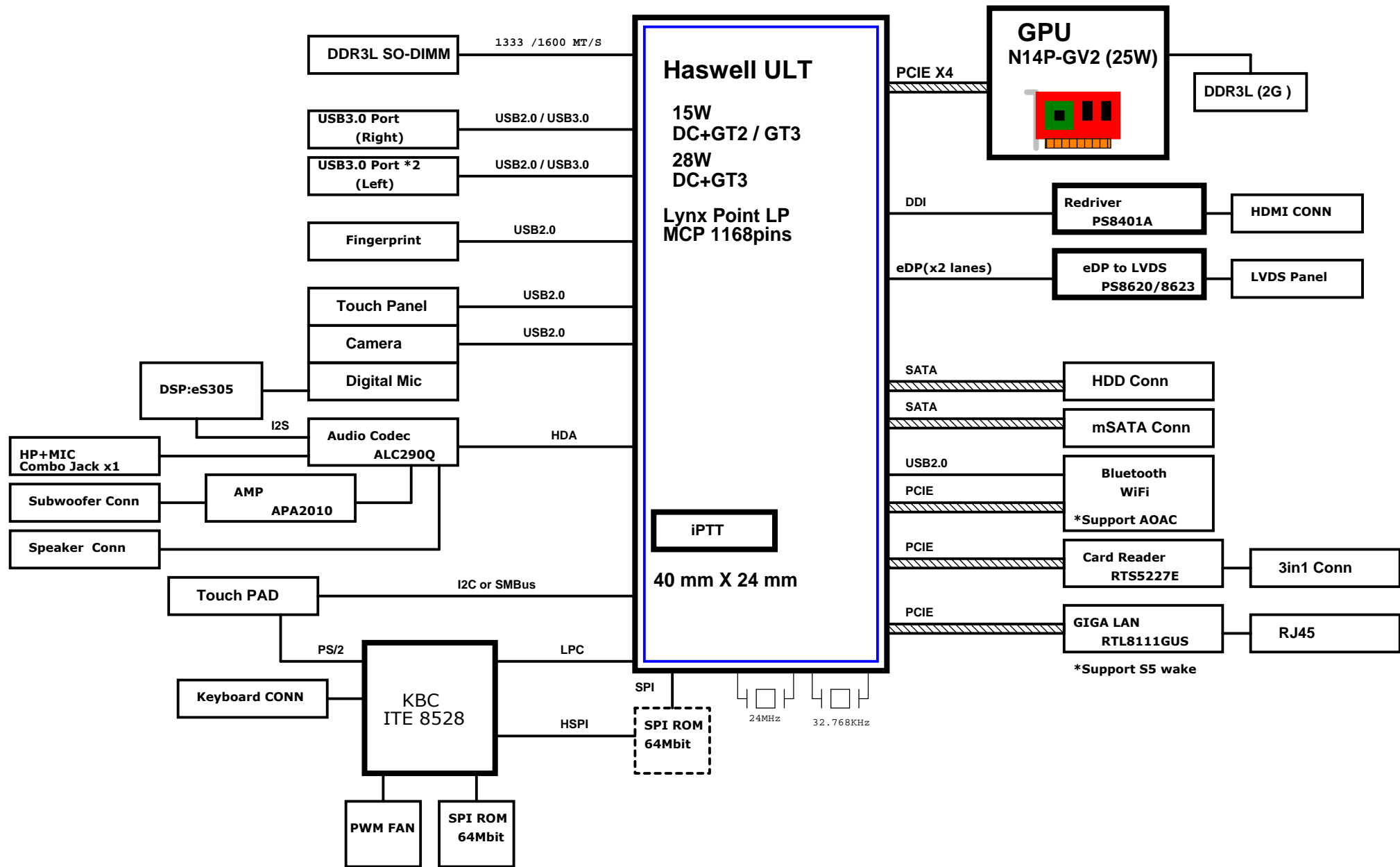


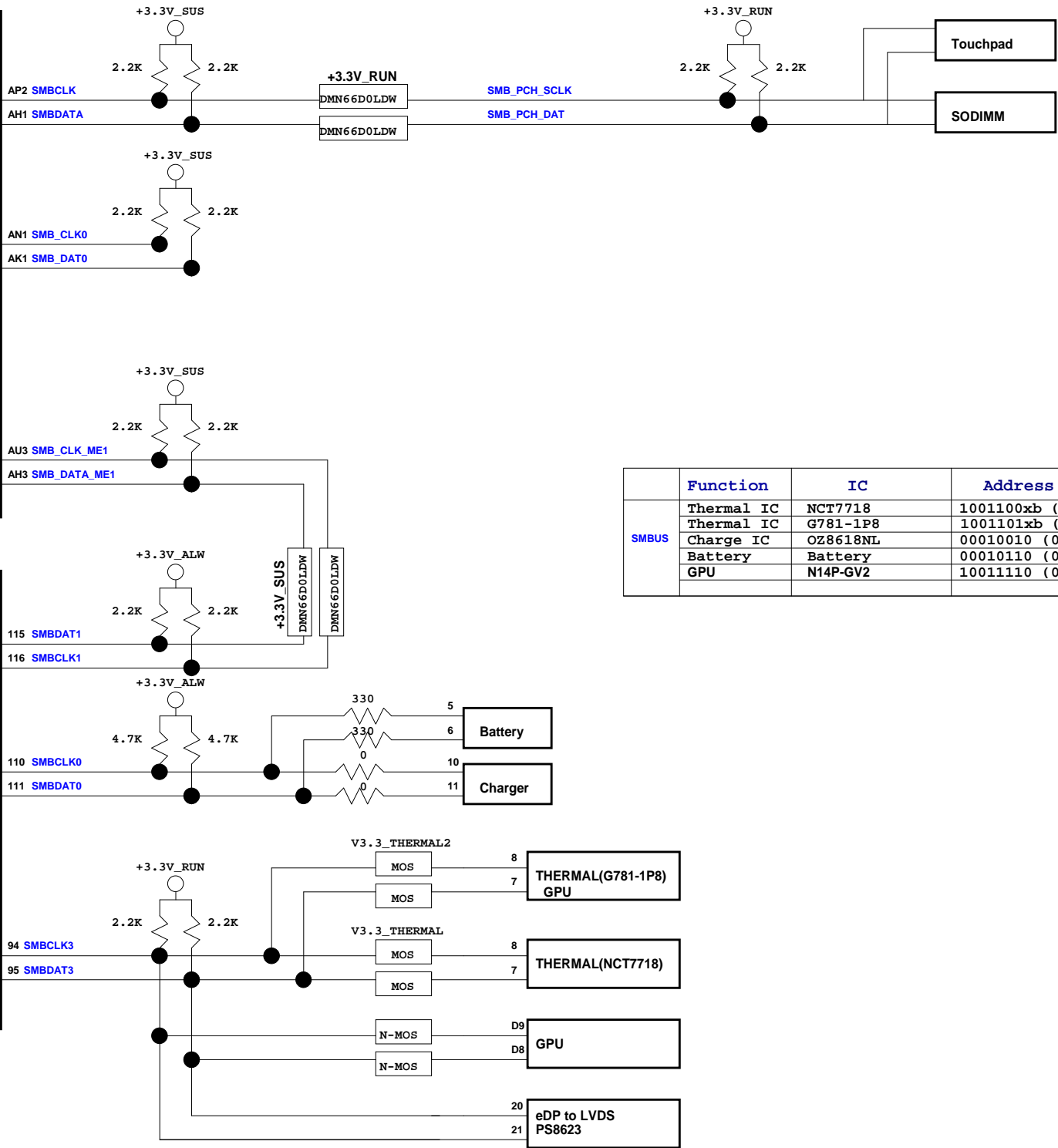
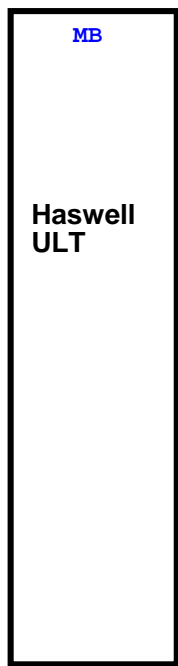
JW8B/C BLOCK DIAGRAM



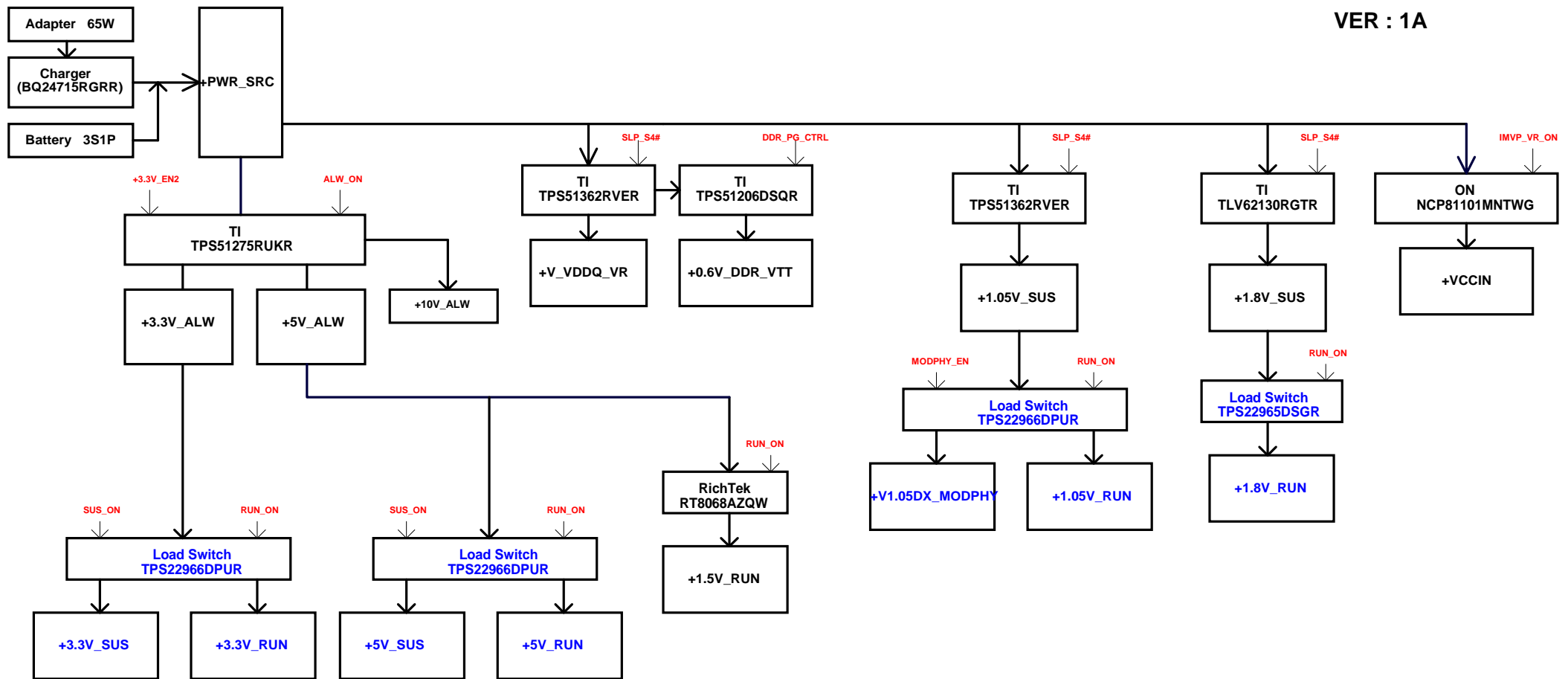
HSIO Port	USB3.0	PCIE	SATA
1	USB3.0_1 CN6		
2	USB3.0_2 CN4		
3	USB3.0_3 CN5	PCIE1 X	
4	USB3.0_4 X	PCIE2 Card Reader	
5		PCIE3 GIGA LAN	
6		PCIE4 WIFI	
7		PCIE5 GPU 4X	
8		PCIE5 GPU 4X	
9		PCIE5 GPU 4X	
10		PCIE5 GPU 4X	
11		PCIE6 X	SATA3 X
12		PCIE6 X	SATA2 mSATA
13		PCIE6 X	SATA1 HDD
14		PCIE6 X	SATA0 X

PCIE CLK
CLK0 X
CLK1 Card Reader
CLK2 GIGA LAN
CLK3 WIFI
CLK4 GPU 4X
CLK5 X

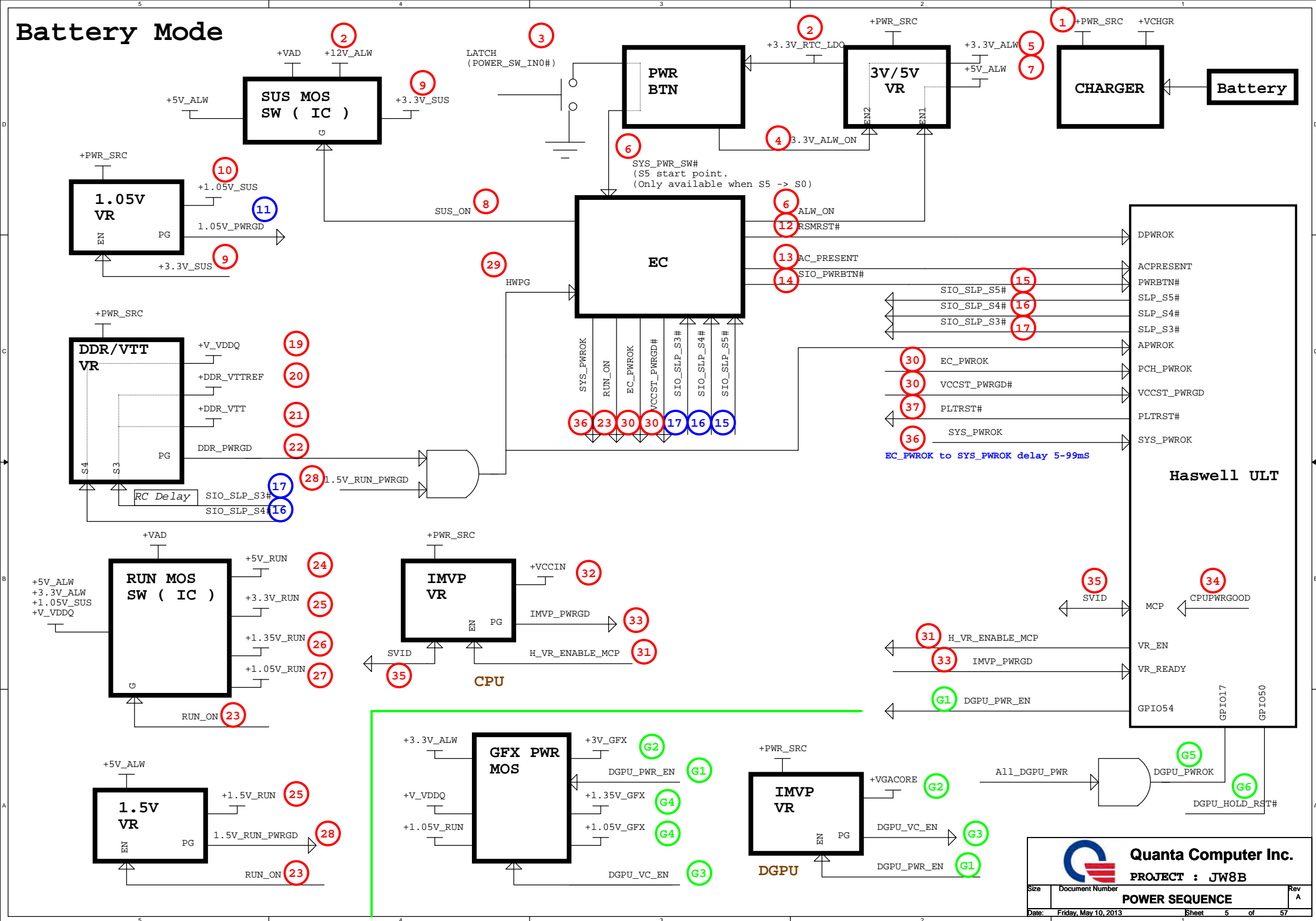
USB2.0
USB2.0_0 CN4
USB2.0_1 CN6
USB2.0_2 CN5
USB2.0_3 Finger Print
USB2.0_4 Camera
USB2.0_5 eTP
USB2.0_6 Blue Tooth
USB2.0_7 Touch Screen



	Function	IC	Address
SMBUS	Thermal IC	NCT7718	1001100xb (98h)
	Thermal IC	G781-1P8	1001101xb (9Ah)
	Charge IC	OZ8618NL	00010010 (0x12h)
	Battery	Battery	00010110 (0X16h)
	GPU	N14P-GV2	10011110 (0X9Eh)

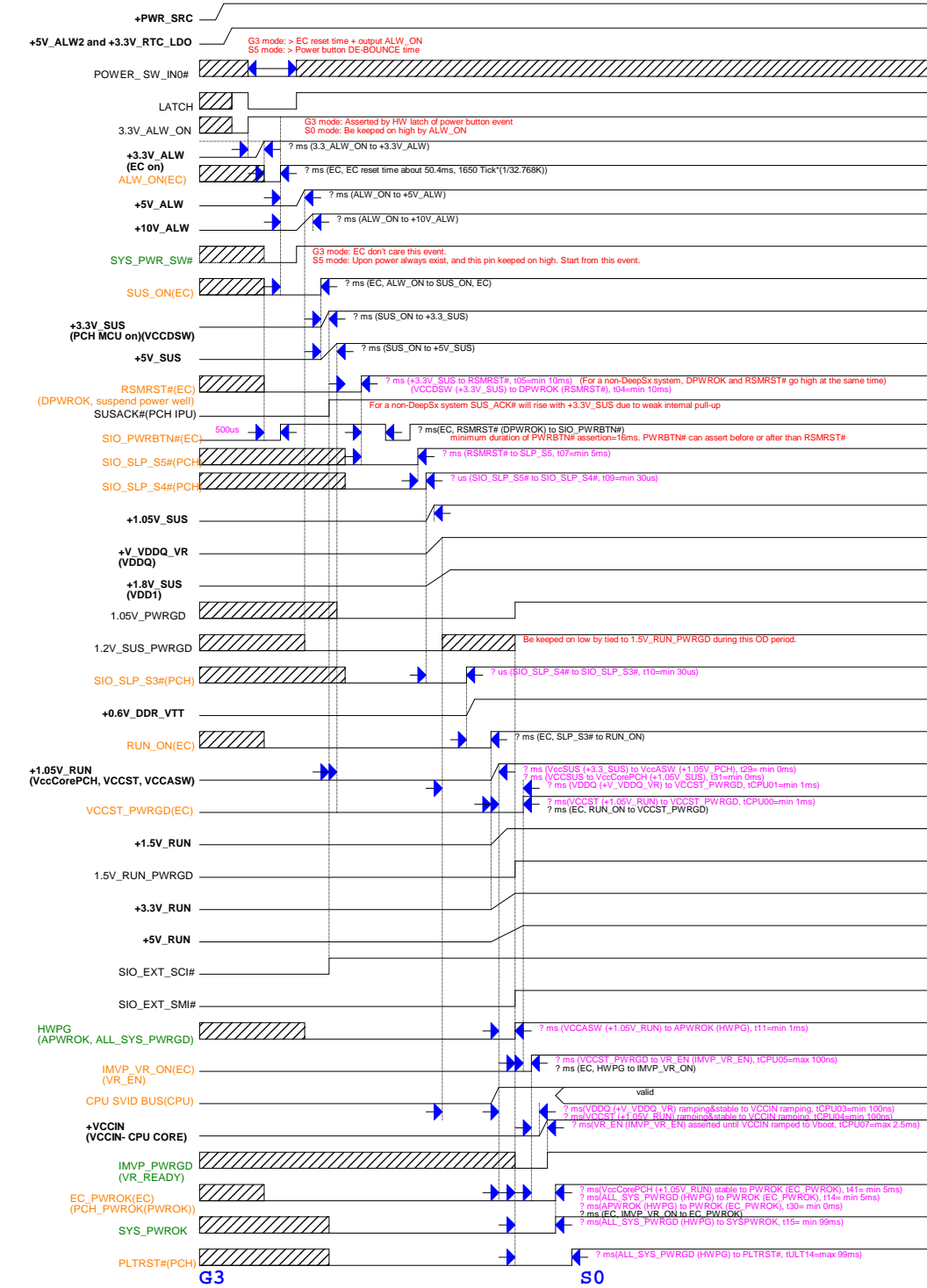


Battery Mode

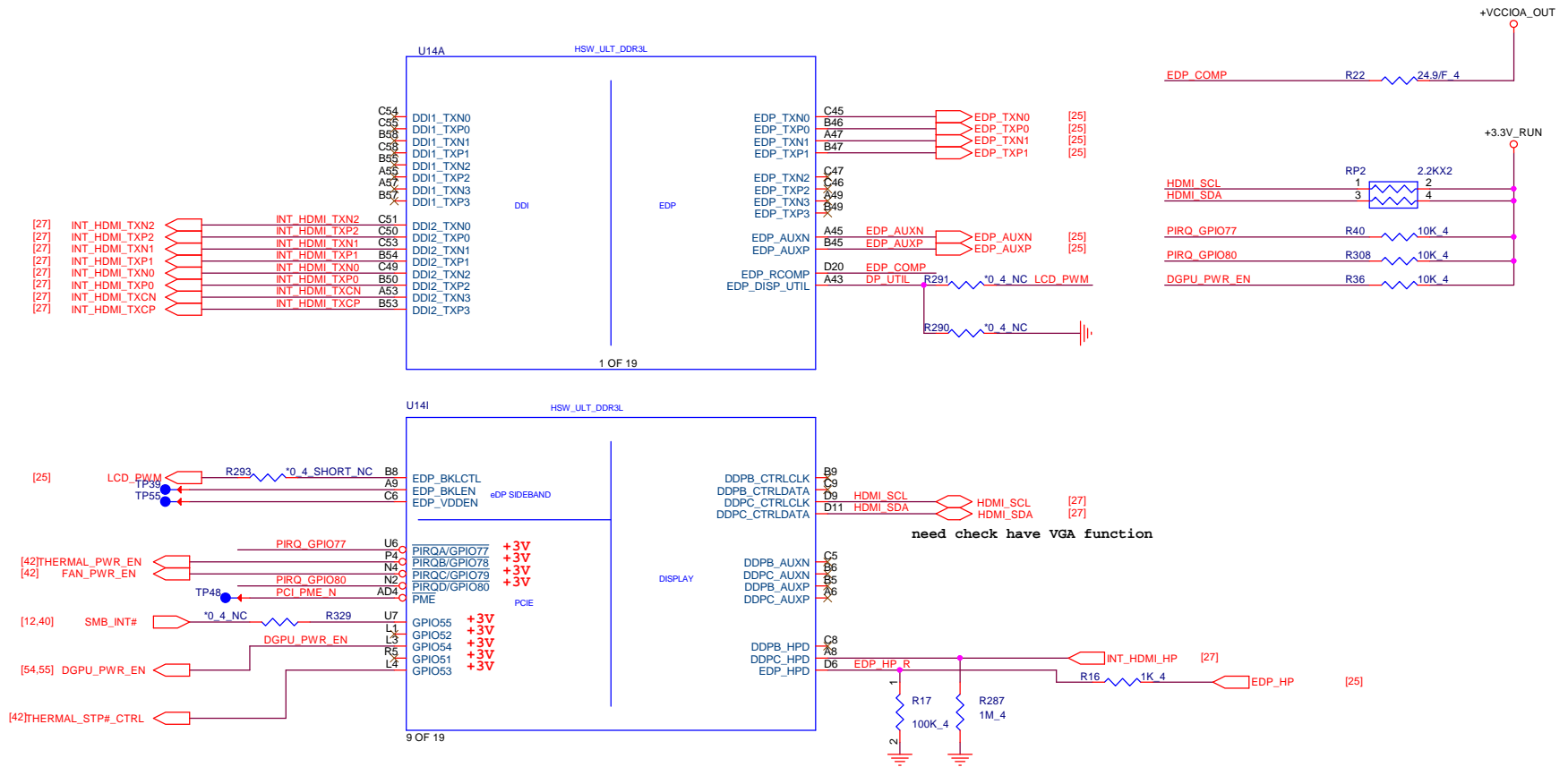


Power Sequence
(G3 to S0)

Shark Bay ULT PSS, 490828, Rev1.1



Haswell ULT (DISPLAY)



Quanta Computer Inc.
PROJECT : JW8B

Haswell ULT (DDR3L)

U14C

HSW_ULT_DDR3L

AH63	SA_DQ0	AU37
AH62	SA_DQ1	AW37
AK63	SA_CLK0	AW36
AK62	SA_CLK#1	AY36
AH61	SA_CLK1	
AH60	SA_DQ4	AU43
SA_DQ5	SA_CKE0	AW43
AK61	SA_CKE1	AY42
AK60	SA_DQ7	AY43
AM63	SA_DQ8	
AM62	SA_CKE2	AP33
AP63	SA_CKE3	AR32
AP62	SA_CS#0	
AM61	SA_CS#1	AP32
AM60	SA_ODT0	AY34
AP61		AW34
AP60	SA_RAS	AY34
AP59	SA_WE	AW34
AP58	SA_CAS	AY34
AR58		
SA_DQ17	SA_BA0	AU35
SA_DQ18	SA_BA1	AV35
AK57	SA_BA2	AY41
AL58		
AK58	SA_MA0	AU36
AR57	SA_MA1	AY37
AN57	SA_MA2	AR38
AP58	SA_MA3	AP36
AR56	SA_MA4	AU39
AM54	SA_MA5	AR36
AK54	SA_MA6	AV40
AL55	SA_MA7	AW39
AK55	SA_MA8	AY39
AR54	SA_MA9	AU40
AN54	SA_MA10	AP35
AY58	SA_MA11	AW41
AY56	SA_MA12	AU41
AW58	SA_MA13	AR35
AW56	SA_MA14	AY42
AV58	SA_MA15	AU42
AU58		
SA_DQ38		
AU56	SA_DQ39	AJ61
AY54	SA_DQ40	AN62
AW54	SA_DQ41	AM68
AY52	SA_DQ42	AM55
AW52	SA_DQ43	AV57
AV54	SA_DQ44	AV53
AU54	SA_DQ45	AL43
AV52	SA_DQ46	AL48
AU52	SA_DQ47	
AK49	SA_DQ48	
AK42	SA_DQ49	AJ62
AM43	SA_DQ50	AN61
AM45	SA_DQ51	AN58
AK45	SA_DQ52	AN55
AK43	SA_DQ53	AW57
AM40	SA_DQ54	AW53
AM42	SA_DQ55	AL42
AM46	SA_DQ56	AL49
AK46	SA_DQ57	
AM49	SA_DQ58	
AK49	SA_DQ59	
AM48	SA_DQ60	
AK48	SA_DQ61	
AM51	SA_DQ62	
AK51	SA_DQ63	

DDR CHANNEL A

3 OF 19

[19] M_B_DQ[63..0]

U14D

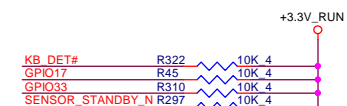
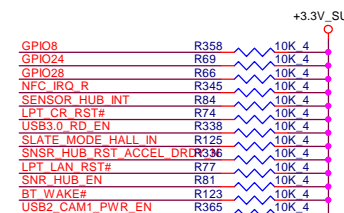
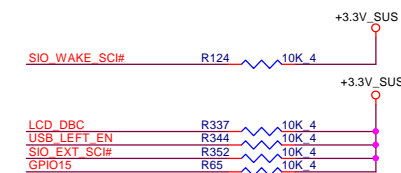
HSW_ULT_DDR3L

M_B_DQ0	AY31
M_B_DQ1	AW31
M_B_DQ2	AY29
M_B_DQ3	AW29
M_B_DQ4	AV31
M_B_DQ5	AU31
M_B_DQ6	AV29
M_B_DQ7	AU29
M_B_DQ8	AY27
M_B_DQ9	AW27
M_B_DQ10	AY25
M_B_DQ11	AW25
M_B_DQ12	AV27
M_B_DQ13	AU27
M_B_DQ14	AV25
M_B_DQ15	AU25
M_B_DQ16	AM29
M_B_DQ17	AK29
M_B_DQ18	AL28
M_B_DQ19	AK28
M_B_DQ20	AR29
M_B_DQ21	AN29
M_B_DQ22	AR28
M_B_DQ23	AP28
M_B_DQ24	AN26
M_B_DQ25	AR26
M_B_DQ26	AR25
M_B_DQ27	AP25
M_B_DQ28	AK26
M_B_DQ29	AM26
M_B_DQ30	AK25
M_B_DQ31	AL25
M_B_DQ32	AY23
M_B_DQ33	AW23
M_B_DQ34	AY21
M_B_DQ35	AW21
M_B_DQ36	AV23
M_B_DQ37	AU23
M_B_DQ38	AV21
M_B_DQ39	AU21
M_B_DQ40	AY19
M_B_DQ41	AW19
M_B_DQ42	AY17
M_B_DQ43	AW17
M_B_DQ44	AV19
M_B_DQ45	AU19
M_B_DQ46	AV17
M_B_DQ47	AU17
M_B_DQ48	AR21
M_B_DQ49	AR22
M_B_DQ50	AL21
M_B_DQ51	AM22
M_B_DQ52	AN22
M_B_DQ53	AP21
M_B_DQ54	AK21
M_B_DQ55	AK22
M_B_DQ56	AN20
M_B_DQ57	AR20
M_B_DQ58	AK18
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M_B_DQ61	AM20
M_B_DQ62	AR18
M_B_DQ63	AP18

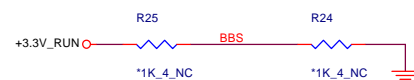
DDR CHANNEL B

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GPIO Pull-up/Pull-down(CLG)



GPIO86:Boot BIOS Strap Bit	
PU	LPC
PD	SPI (Default IPD)



GPIO66 : Top-Block Swap	
R1547	ENABLE
R1547_NC	DISABLE(Default)

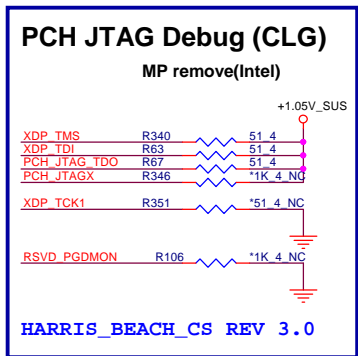
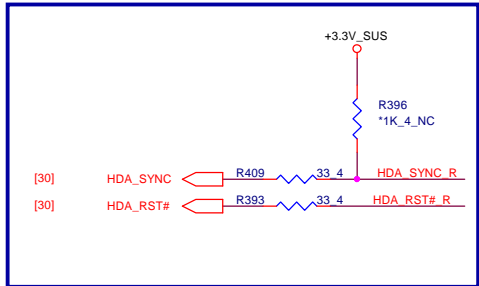
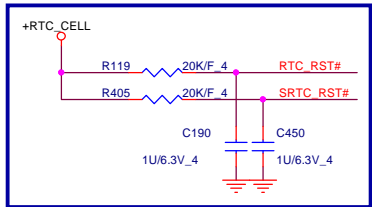
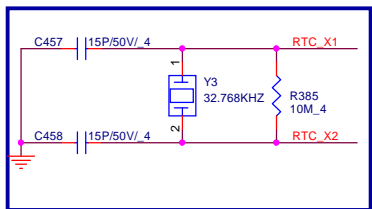


H14K		HSW_ULT_D0R3L	
PERN5_L0			
PERP5_L0		DSW	USB2N0 USB2P0
PETN5_L0			
PETP5_L0		DSW	USB2N1 USB2P1
PERN5_L1			
PERP5_L1		DSW	USB2N2 USB2P2
PETN5_L1			
PETP5_L1		DSW	USB2N3 USB2P3
PERN5_L2			
PERP5_L2		DSW	USB2N4 USB2P4
PETN5_L2			
PETP5_L2		DSW	USB2N5 USB2P5
PERN5_L3			
PERP5_L3		DSW	USB2N6 USB2P6
PETN5_L3			
PETP5_L3		DSW	USB2N7 USB2P7
PERN3			
PERP3			USB3RN1 USB3RP1
PETN3	PCE		
PETP3		USB	USB3TN1 USB3TP1
PERN4			
PERP4			USB3RN2 USB3RP2
PETN4			
PETP4			USB3TN2 USB3TP2
PERN1/USB3RN3			
PERP1/USB3RP3			
PETN1/USB3TN3			
PETP1/USB3TP3			USBRBIAS USBRBIAS
PERN2/USB3RN4			RSDV RSDV
PERP2/USB3RP4			
PETN2/USB3TN4			
PETP2/USB3TP4			
RSDV		+3V_S5	OC0/GPIO40
RSDV		+3V_S5	OC1/GPIO41
PCIE_RCOMP		+3V_S5	OC2/GPIO42
PCIE_IREF		+3V_S5	OC3/GPIO43



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	Haswell ULT 4/12	A
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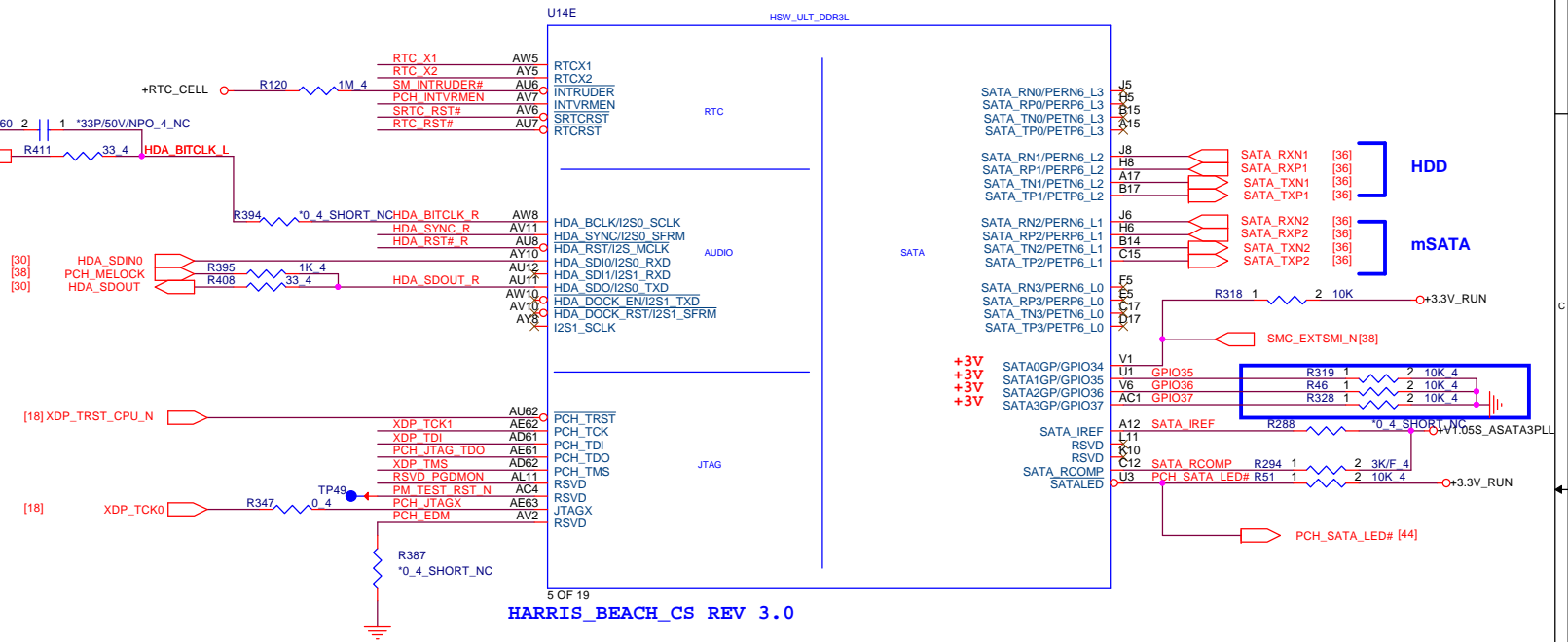


DFXTESTMODE
HIGH - DFXTESTMODE DISABLED(DEFAULT)
LOW - DFXTESTMODE ENABLED

PCH Strap Table

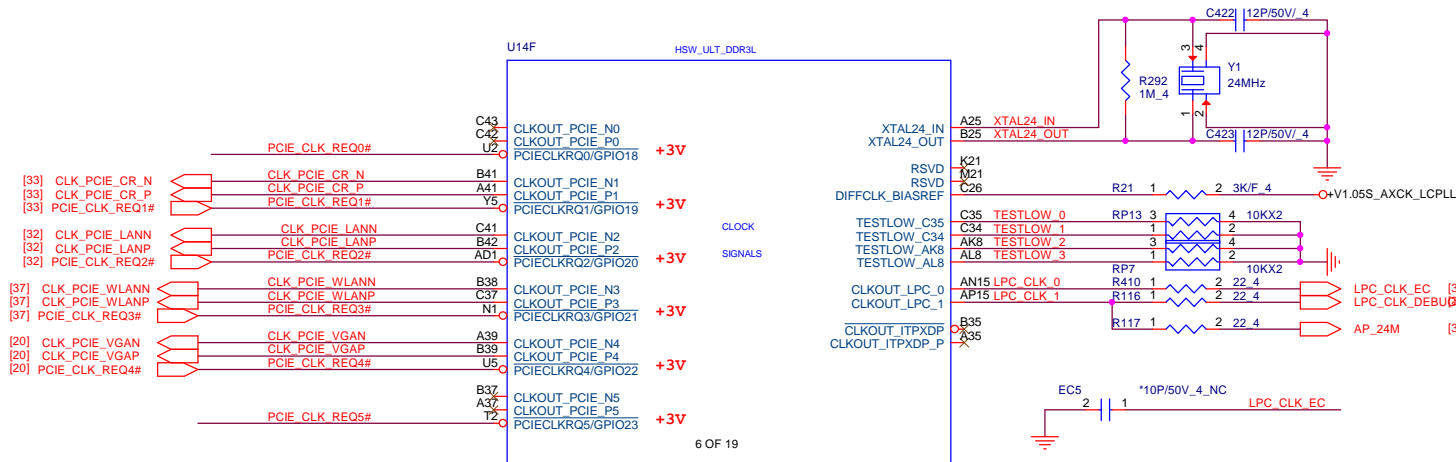
Pin Name	Strap description	Sampled	Configuration	note
SPKR	No reboot mode setting	PWROK	0 = Default (weak pull-down 20K) 1 = Setting to No-Reboot mode	
HDA_SDO	Flash Descriptor Security Override / Intel ME Debug Mode	PWROK	0 = Security Effect (Int PD) 1 = Can be Override	
INTVRMEN	Integrated 1.05V VRM enable	ALWAYS	Should be always pull-up	+RTC_CELL R407 *330K 4 NC PCH_INTVRMEN R392 330K 4

Haswell ULT (RTC, HDA, JTAG, SATA)

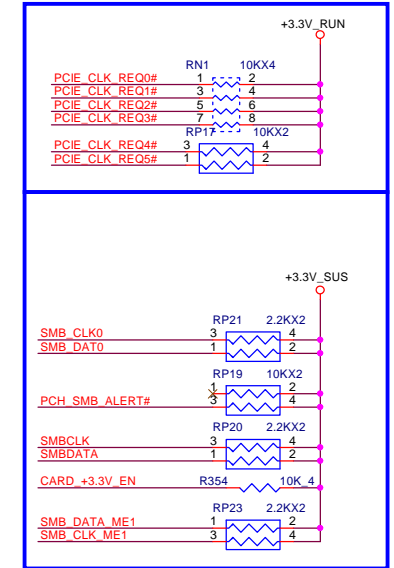
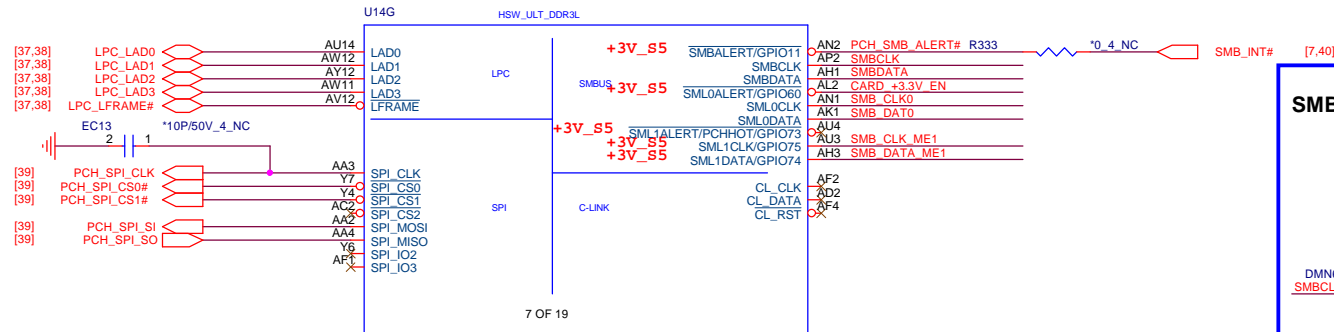


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PROJECT : JW8B

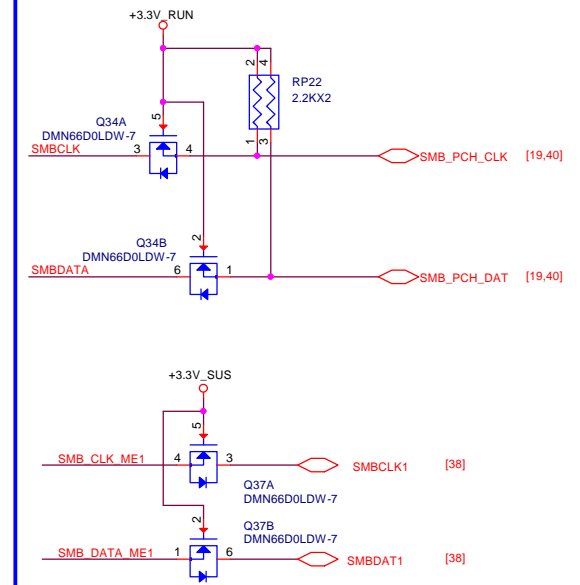
Haswell ULT (CLK)



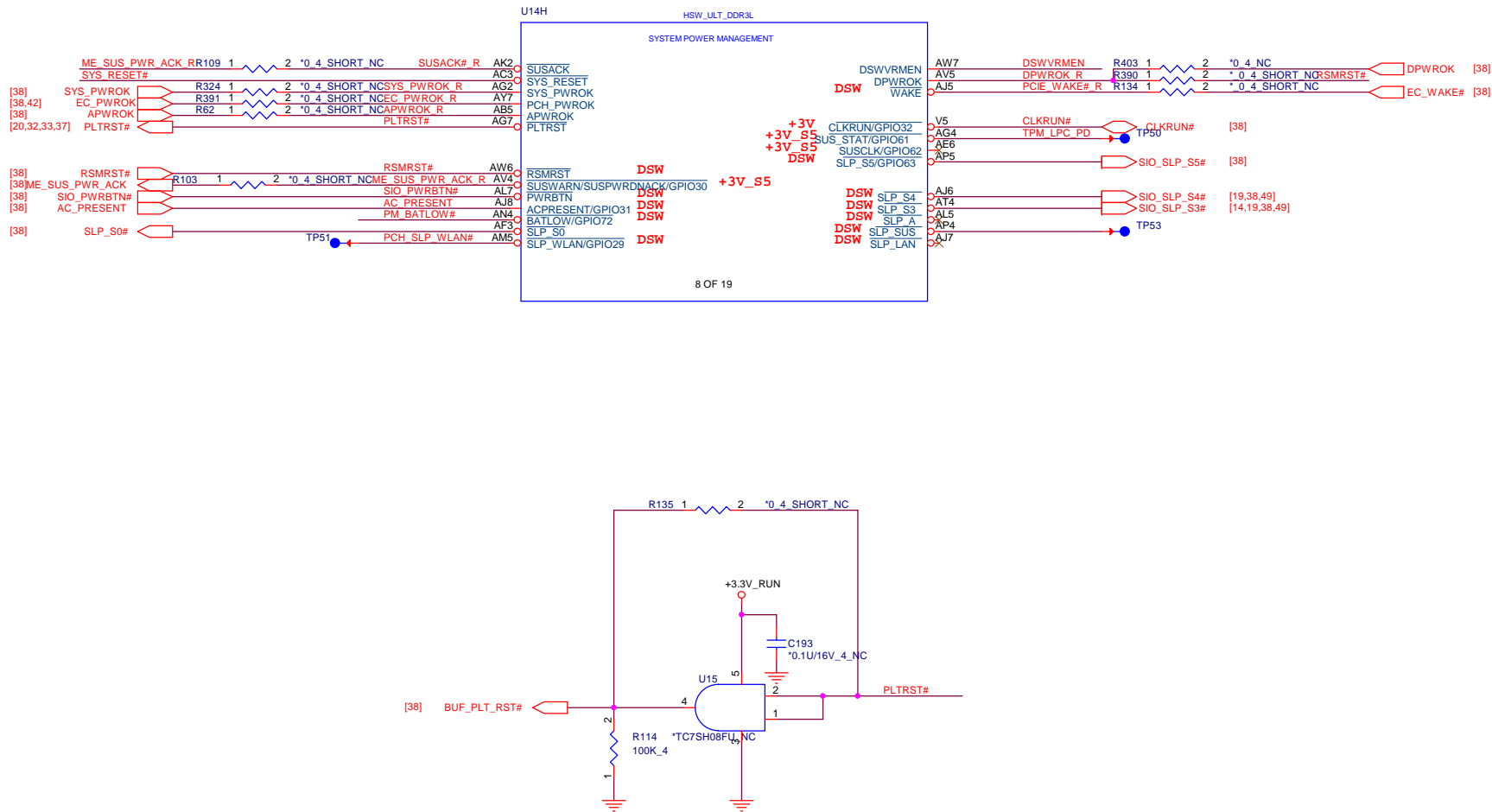
Haswell ULT (LPC/SPI/SMB/CLINK)



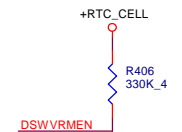
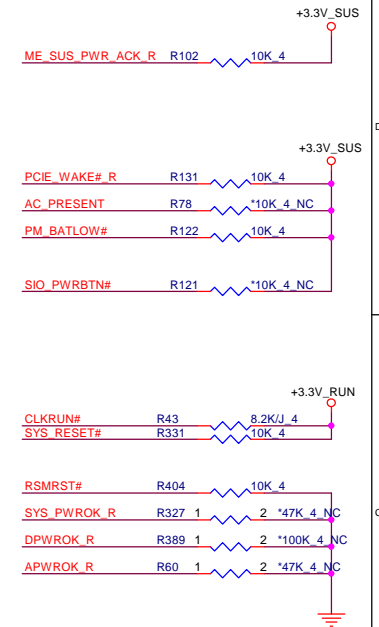
SMBus/Pull-up(CLG)



Haswell ULT (SYSTEM POWER MANAGEMENT)



PCH Pull-high/low(CLG)



On Die DSW VR Enable
High = Enable (Default)
Low = Disable

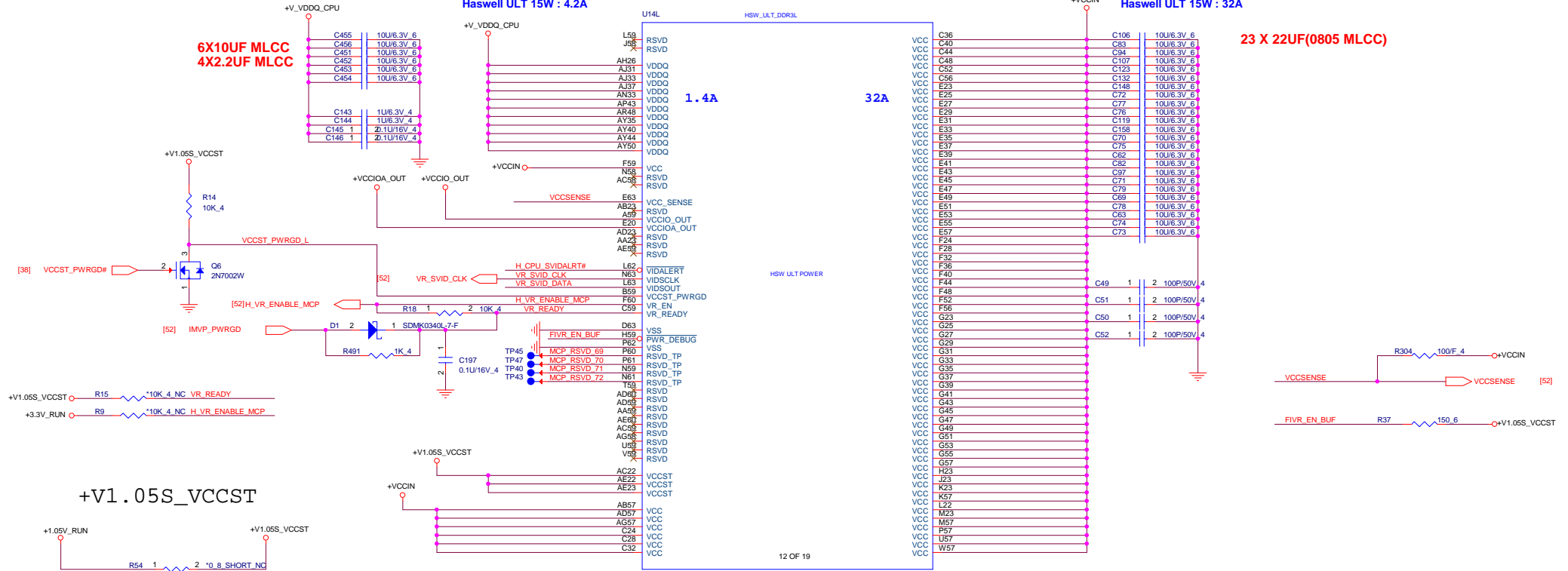
Haswell ULT MCP(POWER)

CPU VDDQ
Haswell ULT 15W : 4.2A

CPU VCC 1/21: 220uX23 --> 100uX23
Haswell ULT 15W : 32A

6X10UF MLCC
4X2.2UF MLCC

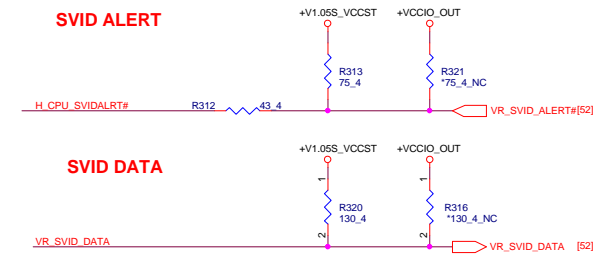
23 X 22UF(0805 MLCC)



S3 Power reduce

SVID ALERT

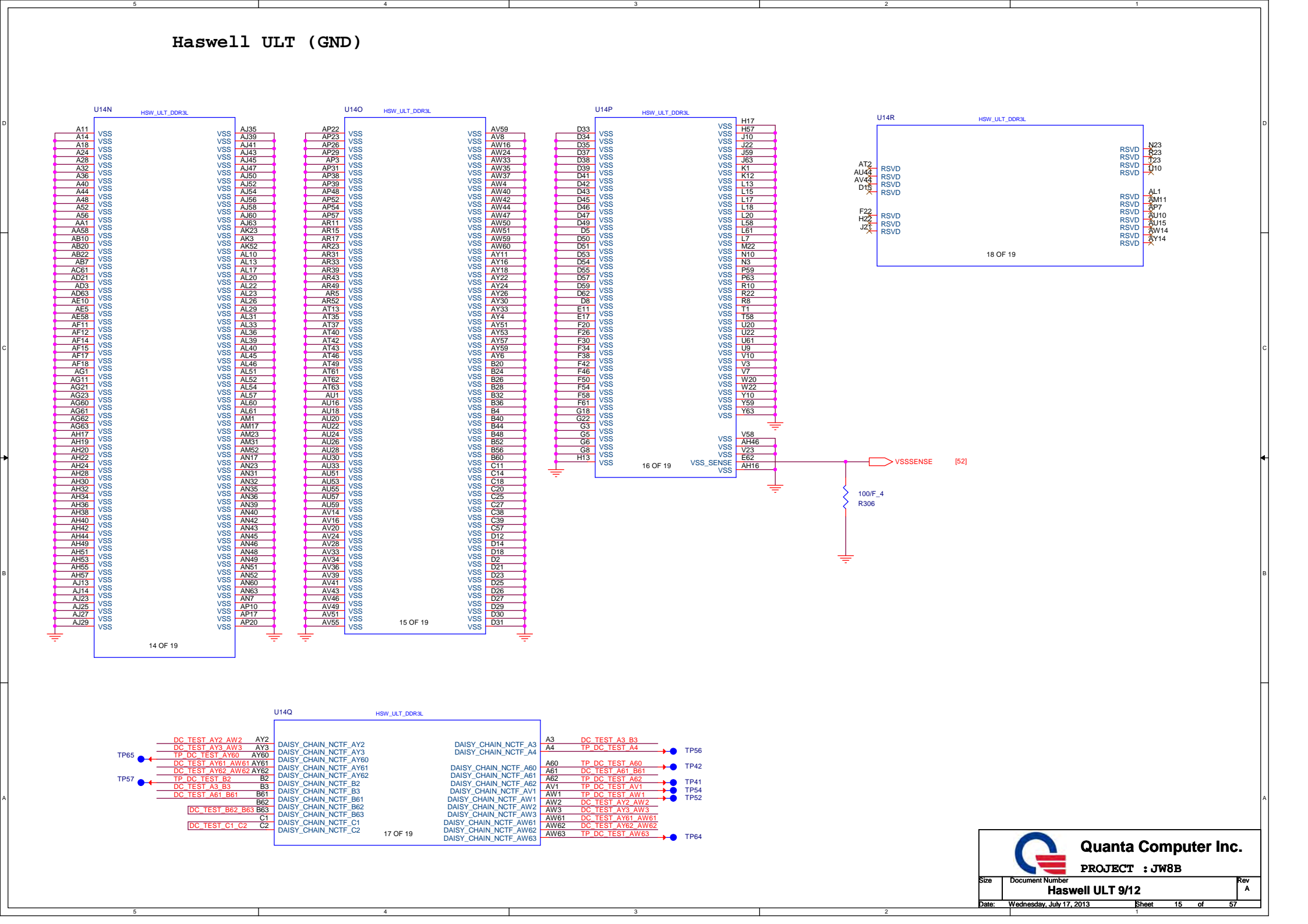
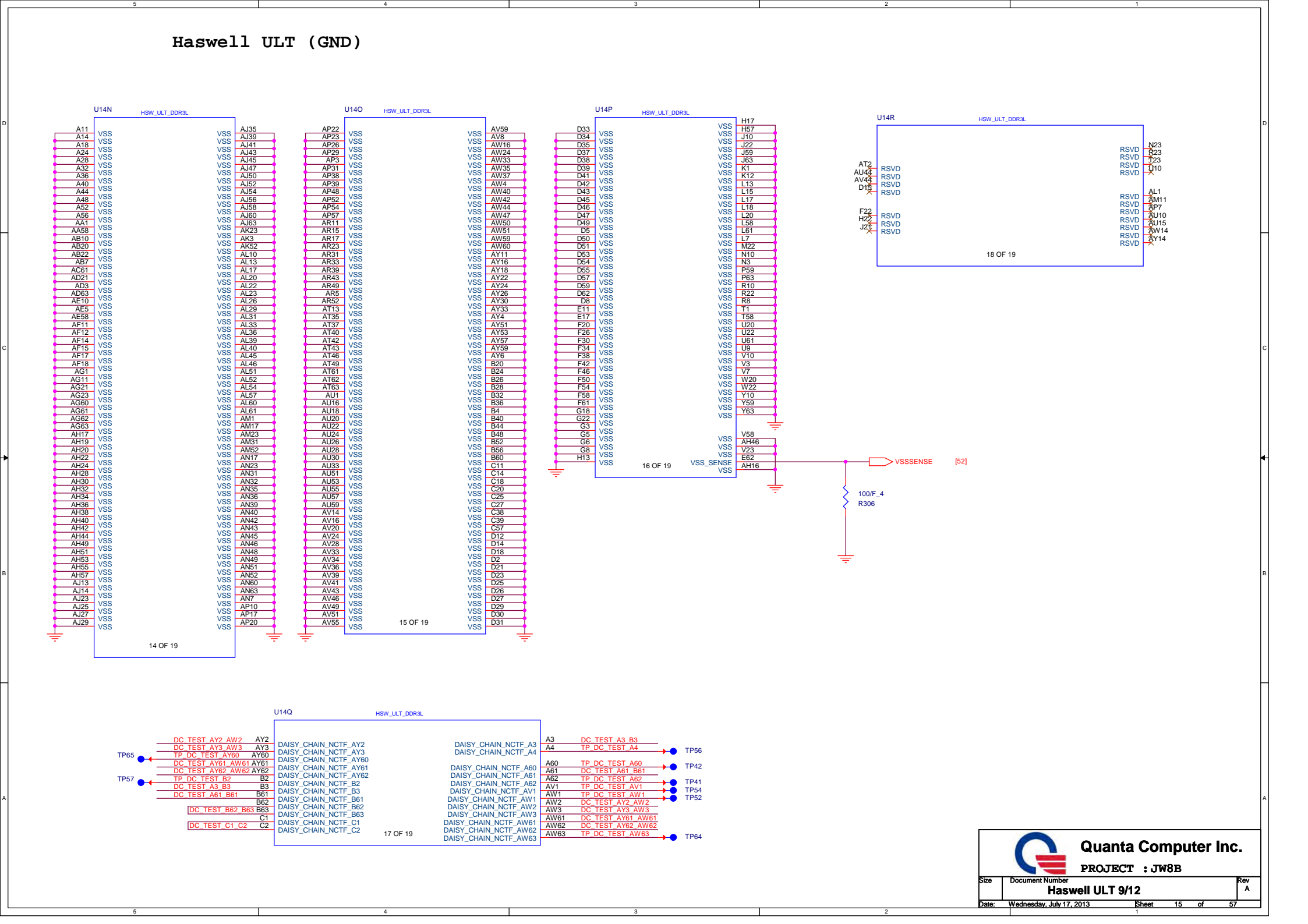
SVID DATA

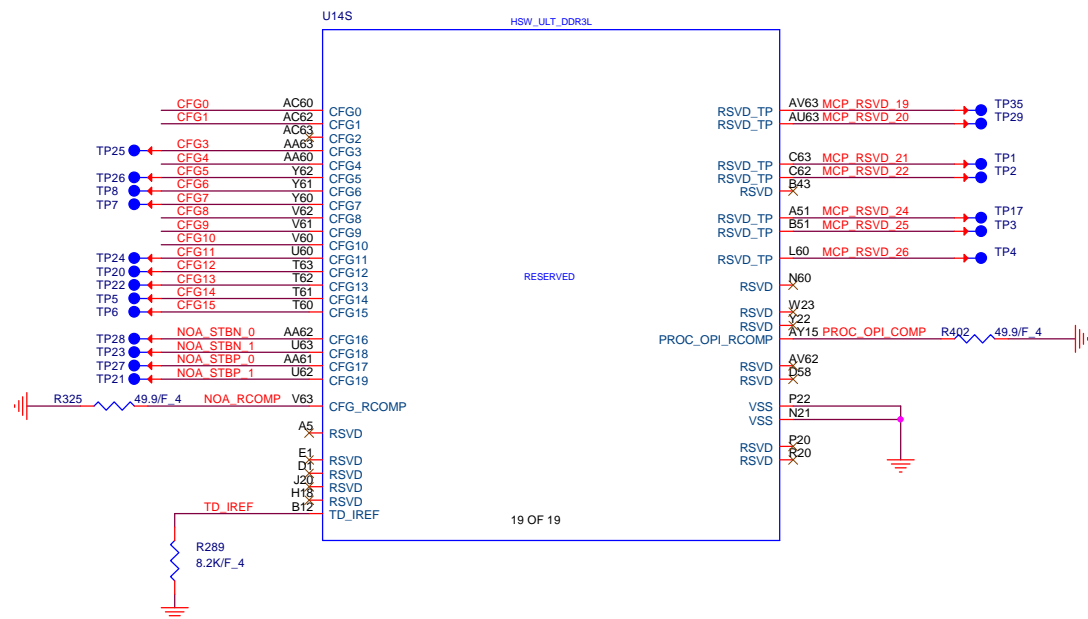


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Haswell ULT 8/12

[illegible]



Processor Strapping

	1	0	
CFG0 EAR-STALL/NOT STALL RESET SEQUENCE AFTER PCU PLL IS LOCKED	(DEFAULT) NORMAL OPERATION; NO STALL	STALL	CFG0 R339 *1K 4 NC
CFG1 PCH/ PCH LESS MODE SELECTION	(DEFAULT) NORMAL OPERATION	PCH-LESS MODE	CFG1 R334 *1K 4 NC
CFG3 PHYSICAL_DEBUG_ENABLED (DFX PRIVACY)	DISABLED NO PHYSICAL DISPLAY PORT ATTACHED TO EMBEDDED DISPLAY PORT	ENABLED AN EXTERNAL DISPLAY PORT DEVICE IS CONNECTED TO THE EMBEDDED DISPLAY PORT	CFG3 R330 *1K 4 NC
CFG4 DISPLAY PORT PRESENCE STRAP	DISABLED NO PHYSICAL DISPLAY PORT ATTACHED TO EMBEDDED DISPLAY PORT	ENABLED AN EXTERNAL DISPLAY PORT DEVICE IS CONNECTED TO THE EMBEDDED DISPLAY PORT	CFG4 R61 *1K 4
CFG 8 ALLOW THE USE OF NOA ON LOCKED UNITS	DISABLED(DEFAULT); IN THIS CASE, NOA WILL BE DISABLED IN LOCKED UNITS AND ENABLED IN UN-LOCKED UNITS	ENABLED; NOA WILL BE AVAILABLE REGARDLESS OF THE LOCKING OF THE UNIT	CFG8 R326 *1K 4 NC
CFG9 NO SVID PROTOCOL CAPABLE VR CONNECTED	VRS SUPPORTING SVID PROTOCOL ARE PRESENT	NO VR SUPPORTING SVID IS PRESENT. THE CHIP WILL NOT GENERATE (OR RESPOND TO) SVID ACTIVITY	CFG9 R58 *1K 4 NC
CFG10 SAFE MODE BOOT	POWER FEATURES ACTIVATED DURING RESET	POWER FEATURES (ESPECIALLY CLOCK GATINE ARE NOT ACTIVATED	CFG10 R57 *1K 4 NC



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3.3 SUS: 205mA
1.05 SUS: 2066mA
1.05 RUN: 2578mA
3.3 RUN: 58mA
```

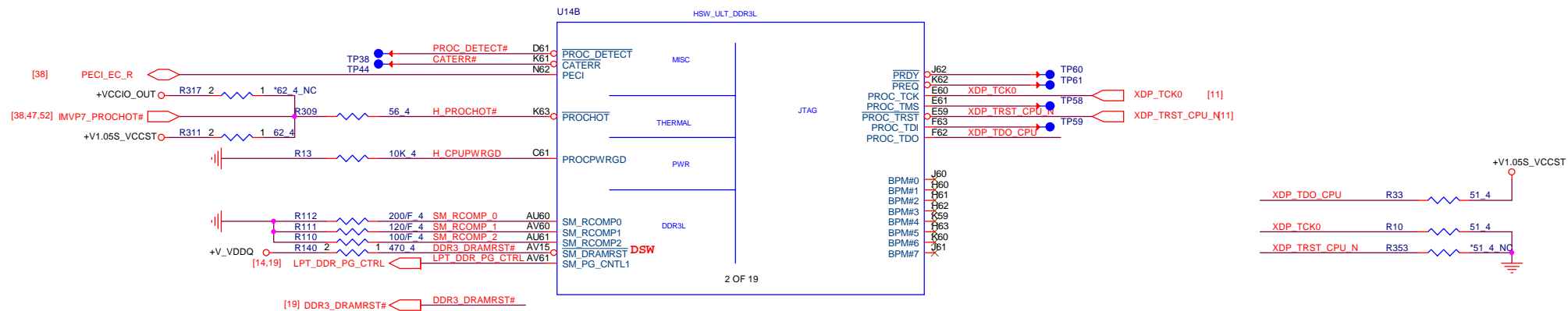


VCCSUS3
129mA

VCC1_05
2.6A

VCCASW
473mA

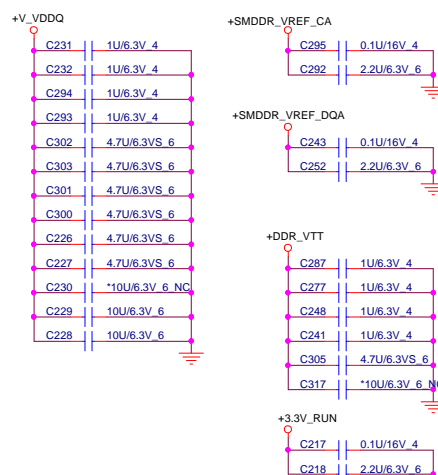
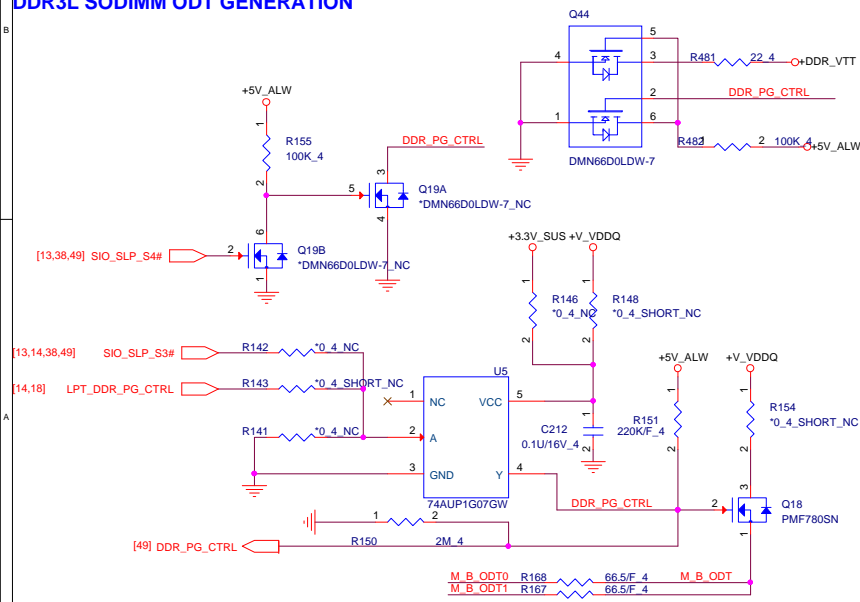
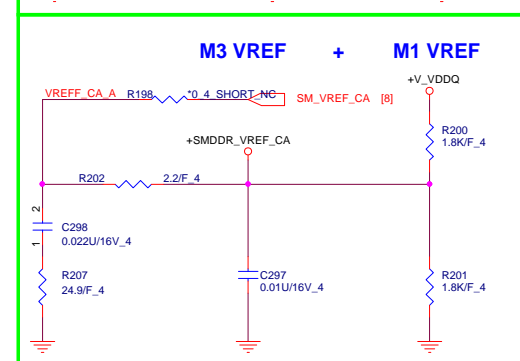
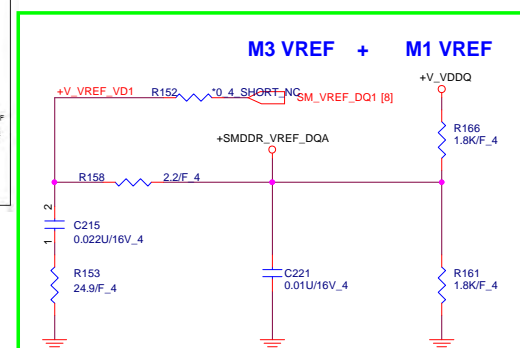
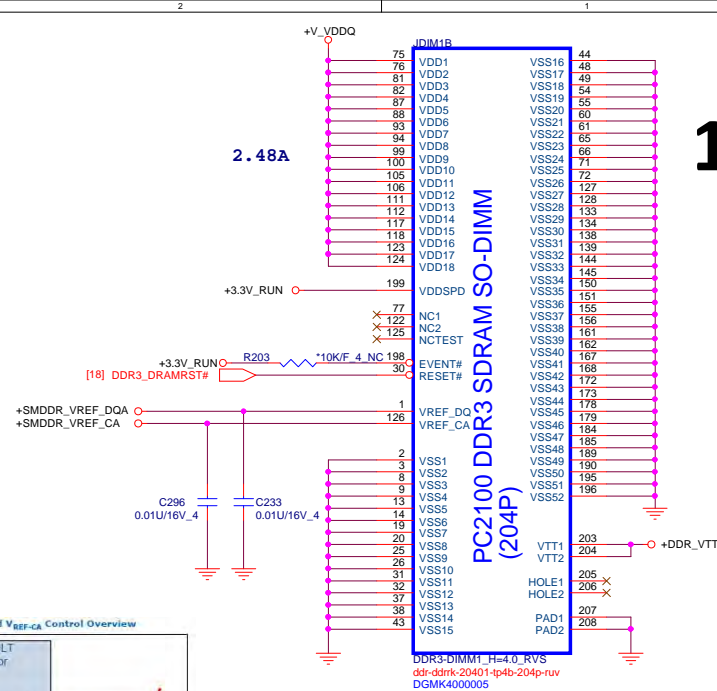
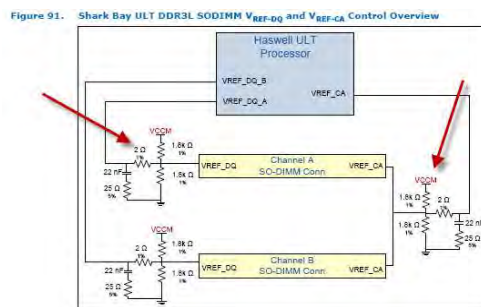
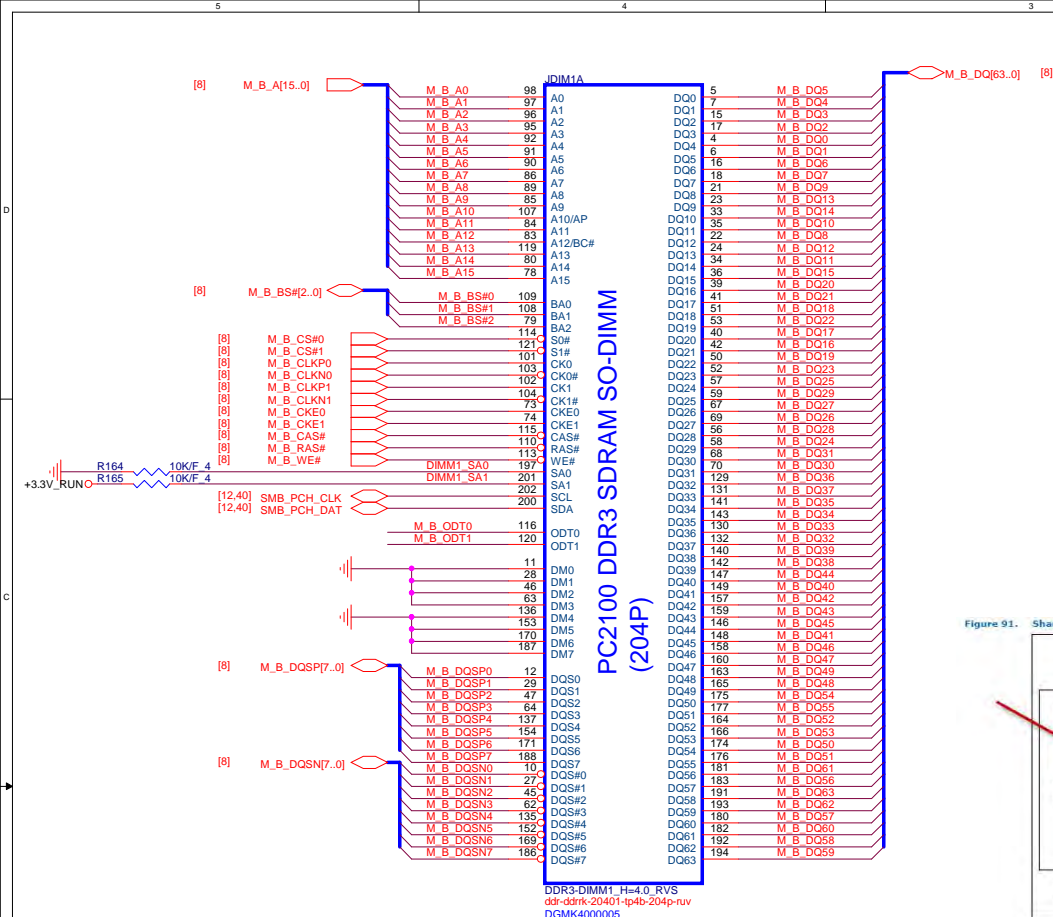


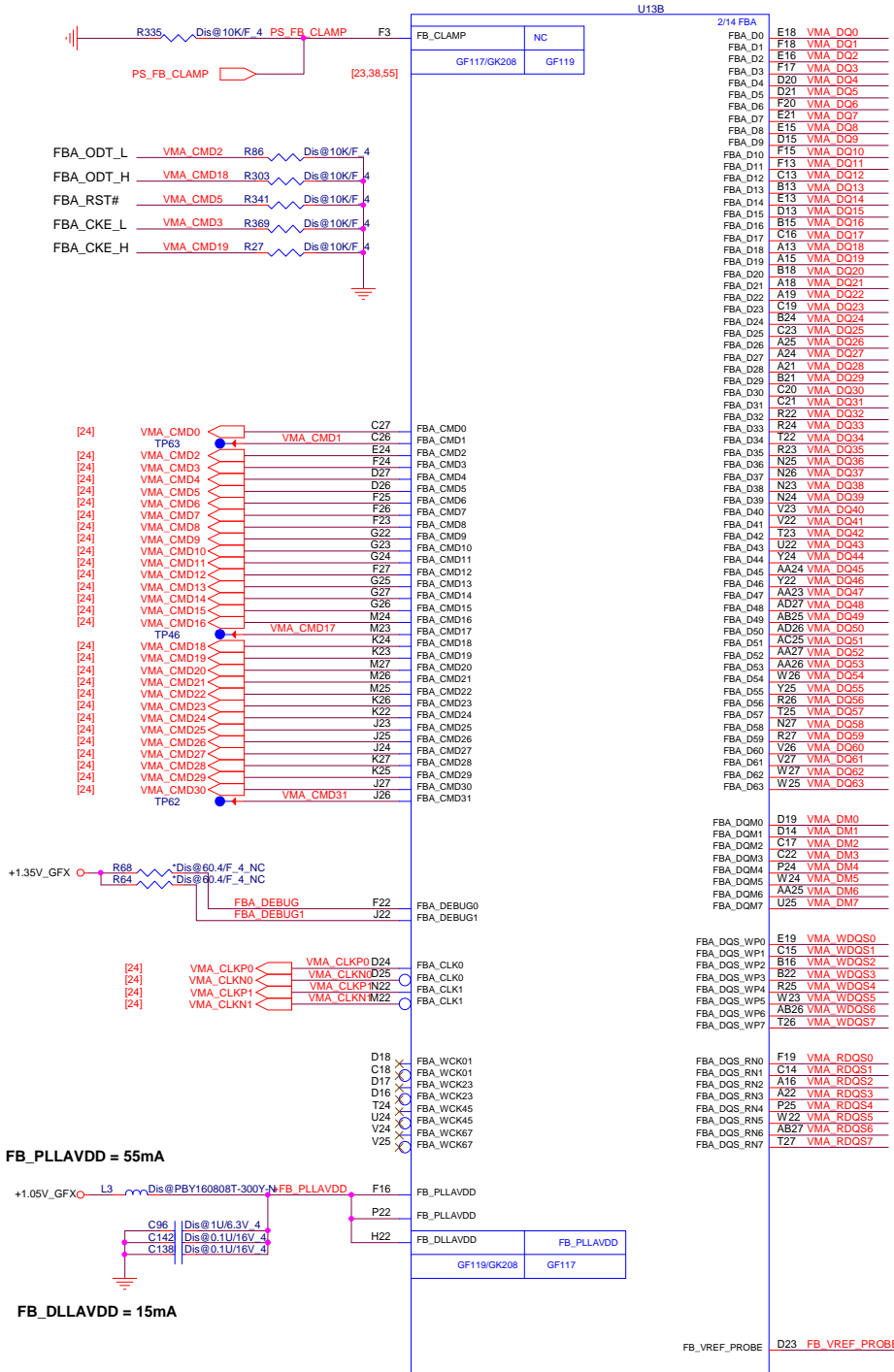


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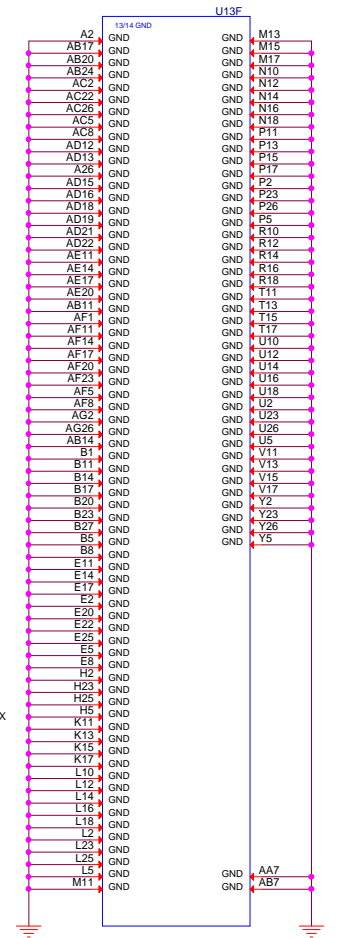
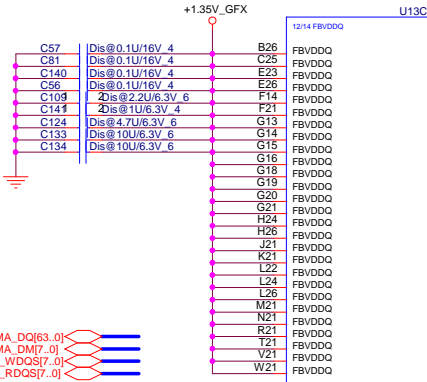
PROJECT : JW8B

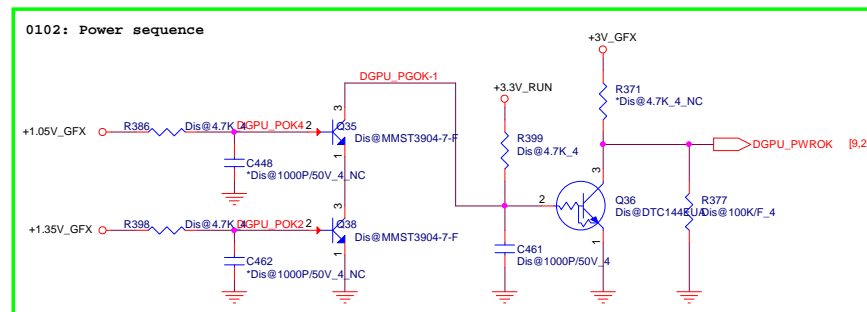
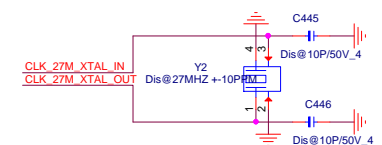
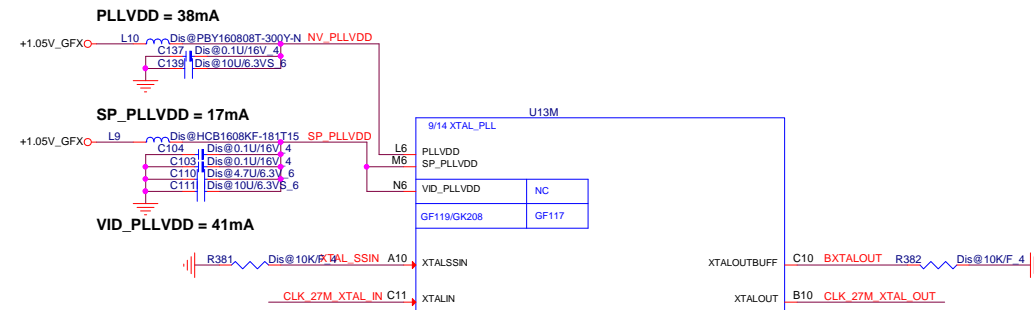
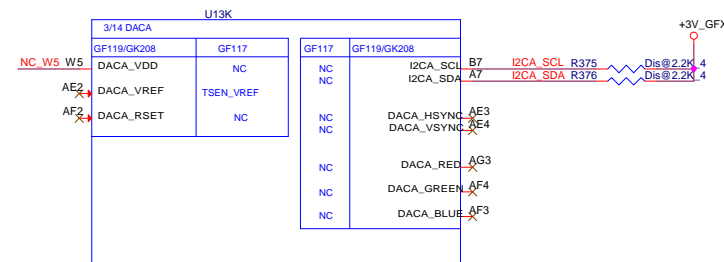
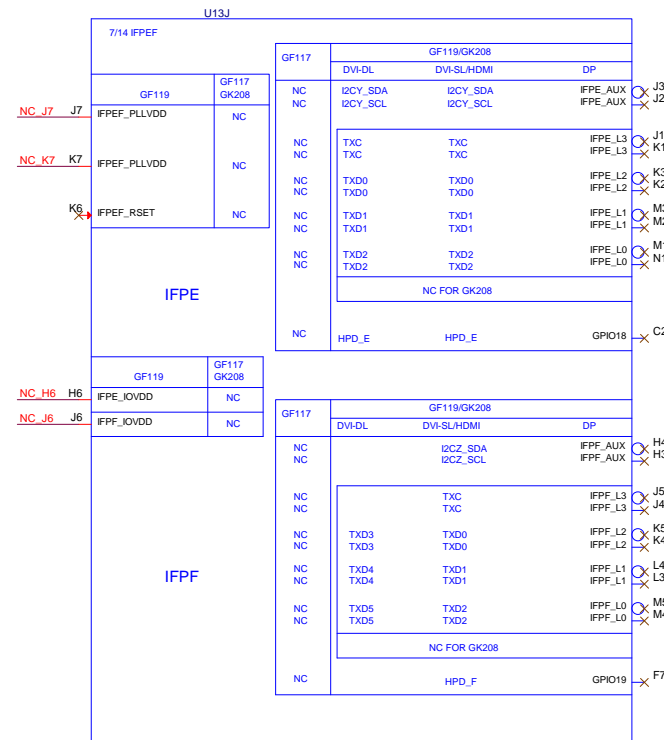
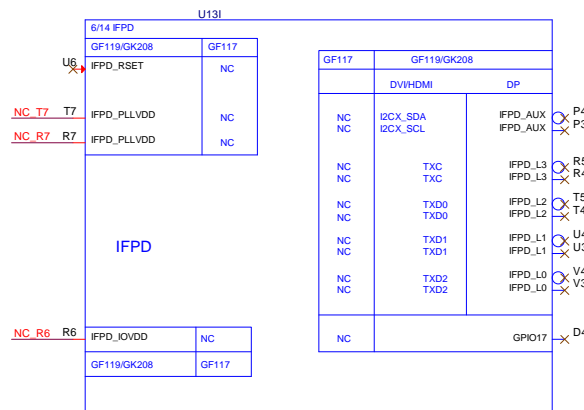
Size	Document Number	Rev
	Haswell ULT 12/12	A
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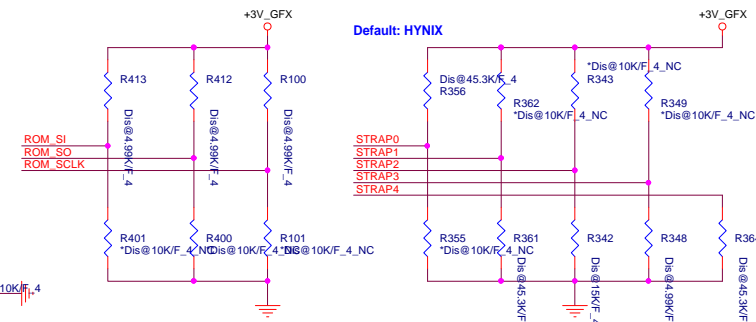
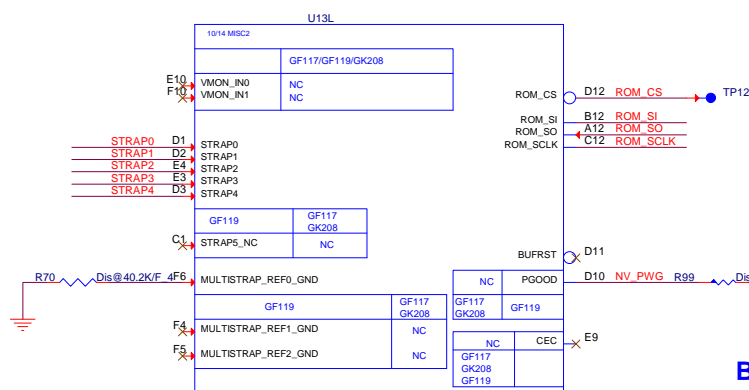




FBVDDQ + FBVDD = 3.116A







4.99K: CS24992FB00 RES CHIP 4.99K 1/16W +1% (0402)
 45K: CS34502FB00 RES CHIP 45K 1/16W +1% (0402)
 15K: CS31502FB24 RES CHIP 15K 1/16W +1% (0402)
 30.1K: CS33012FB18 RES CHIP 30.1K 1/16W +1% (0402)
 34.8K: CS33482FB22 RES CHIP 34.8K 1/16W +1% (0402)

Binary Strap Mode Mapping

Strap Pin name	Strap Mapping	Resistance	Note
ROM_SCLK	PCI_DEVID[4] SUB_VEN00R PCI_DEVID[5] PEX_PLL_EN	5Kohm , H	1000 , SUB: no Video BIOS
ROM_SI	RAM_CFG[2] RAM_CFG[1] RAM_CFG[0]	5Kohm , H	4.99K 1000 --> Micron MT41K128M16JT-107G:K (Default) 30.1K 1101 --> Micron MT41K256M16HA-107G:E 34.8K 1110 --> Hynix H5TC4G63AFR-11C
ROM_SO	FB[1] FB[0] SMB_ALT_ADDR VGA_DEVICE	5Kohm , H	1000 , FB: 256 MB (Default) SMB:0x9E
STRAP0	User strap [3:0]	45Kohm , H	1111 , EDID is used
STRAP1	3GIO_CFG[3:0]	45Kohm , D	1111 , USER defined
STRAP2	PCI_DEVID[3:0]	15Kohm , D	010010 , N14P-GV2
STRAP3	SOR[3:0]_EXPOSED	5Kohm , D	0000 , IFPx port not use
STRAP4	RESERVED PCIE_SPEED_GEN3 PCIE_MAX_SPEED DP_PLL_VDD33V	45Kohm , D	0111 , PCIE GEN3 setting

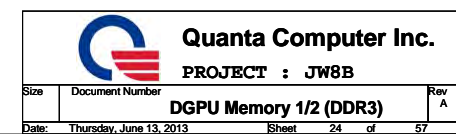
GPIO ASSIGNMENTS (GB2-64)

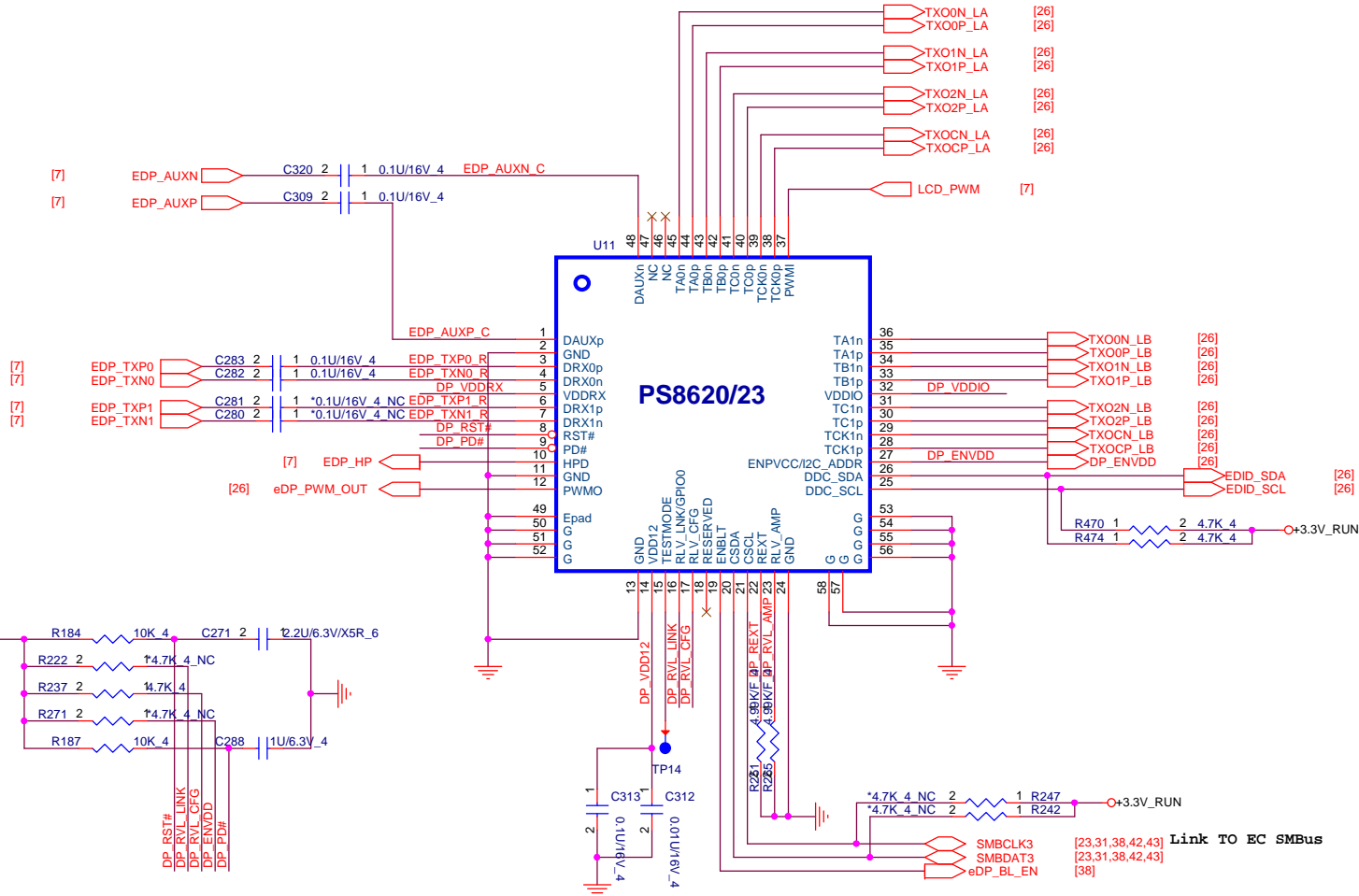
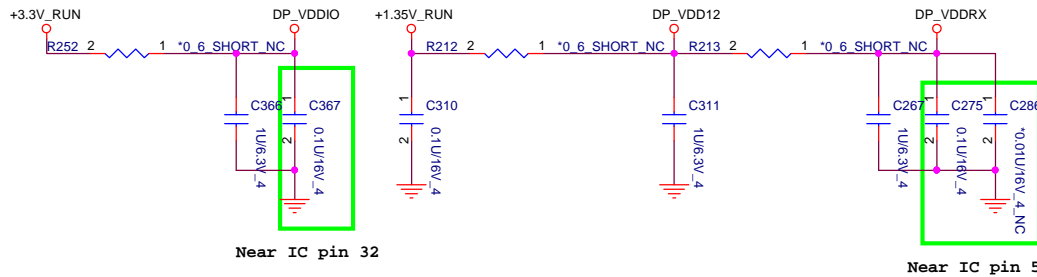
GPIO	I/O	PIN	USAGE
0	IN	FB_CLAMP_MON	FB Clamp monitor
1	OUT	MEM_VDD_CTL	MEMORY VDD ID
2	OUT	LCD_BL_PWM	LCD BACKLIGHT PWM
3	OUT	LCD_VCC	PANEL POWER ENABLE
4	OUT	LCD_BLEN	PANEL BACKLIGHT ENABLE
5		RESERVE	
6	OUT	FB_CLAMP_TGL_REQ#	# --> FB Clamp toggle request
7	OUT	3DVision	3D VISION LEFT/RIGHT VISION
8	I/O	OVERT	ACTIVE LOW THERMAL OVER TEMP
9	I/O	ALERT	ACTIVE LOW THERMAL ALERT
10	OUT	MEM_VREF_CTL	MEMORY VREF CONTROL
11	OUT	PWM_VID	GPU Core VDD PWM control
12	IN	PWR_LEVEL	Power Detect ,HIGH=AC, LOW=DC
13	OUT	PSI	Phase Shedding
14	IN	HPD_A	HOT PLUG DETECT FOR IFPAB
15	IN	HPD_C	HOT PLUG DETECT FOR IFPC
16	OUT	FRM_LCK	MEMMORY VDD CONTROL
17	IN	HPD_D	HOT PLUG DETECT FOR IFPD
18	IN	HPD_E	HOT PLUG DETECT FOR IFPE
19	IN	HPD_F or HPD_B	HOT PLUG DETECT FOR IFPF
20/21		RESERVE	

VRAM Configuration Table

RAMCFG [3:0]	DESCRIPTION	Vendor	DELL P/N	QC1 P/N
0000				
1000 0x8	MT41K128M16JT-107G:K (FCBGA)(96P)	Micron	NA	AKD5DGSTL00
1101 0xD	MT41K256M16HA-107G:E	Micron	NA	AKD5PGSTL00
1110 0xE	H5TC4G63AFR-11C	Hynix	NA	AKD5PGWTW05

for meet Power down sequence for +3V_GFX





DP_ENVDD: I2C Slave address selection, internal pull-down ~80K
L: 0x10h~0x1Fh
H: 0x90h~0x9Fh

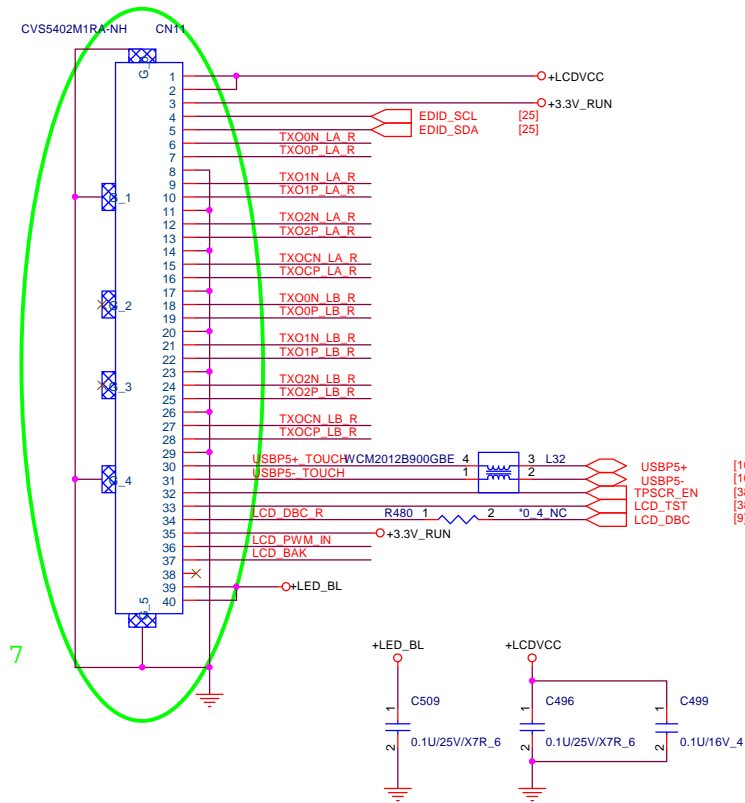
DP_RVL_LINK: LVDS single link or dual link selection, internal pull-down ~80K
L: Single link LVDS
H: Dual link LVDS



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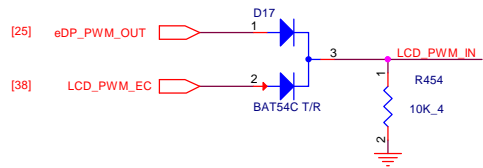
PROJECT : JW8B

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	eDP to LVDS (PS8620/23)	
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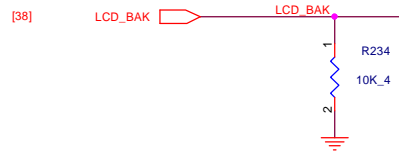


TOUCH SCREEN

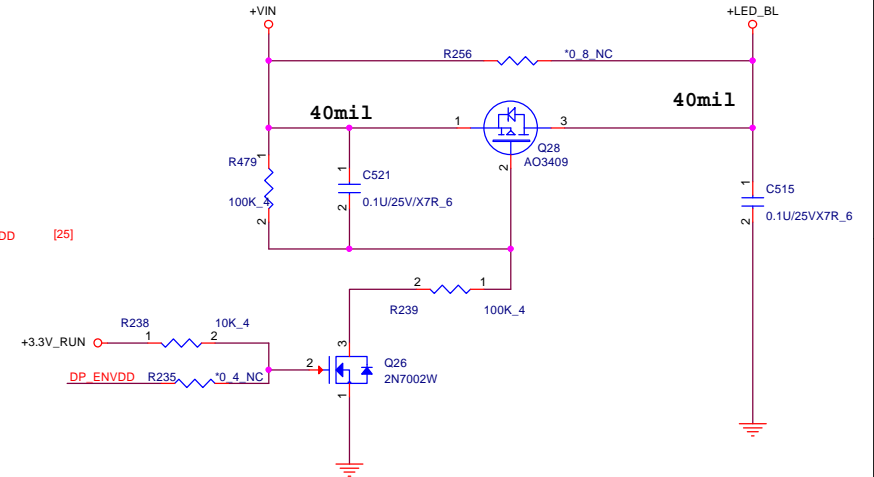
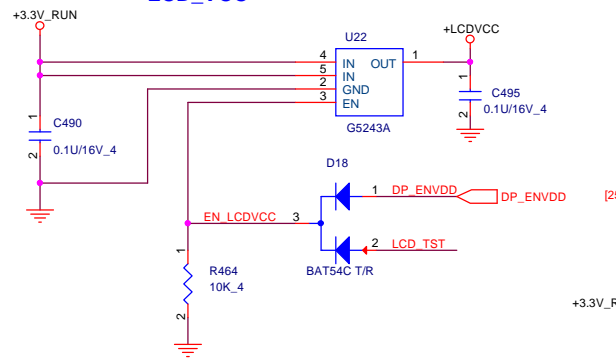
Brightness Control



BAK_EN

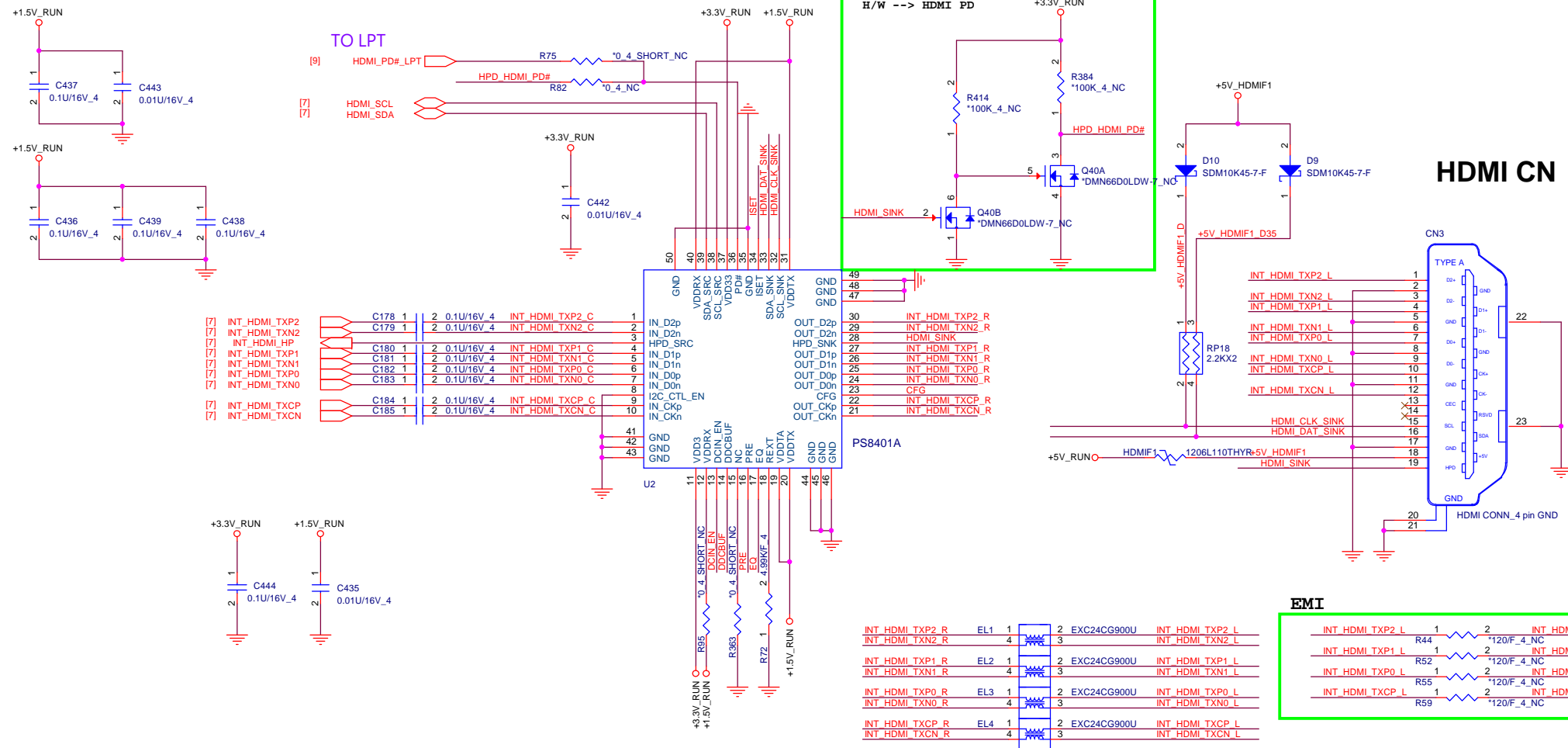


LCD_VCC



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	LVDS CONN	A
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3 Level Input:
 L:LOW,internal pull down
 H:HIGH, external pull up
 M:VDD3/2, both external pill-up and pull-down

Int pull-down 150k , 3.3V IO
 L:default,AC coupling input
 H:DC coupling input

L:default,passive DDC pass-through
 H:active DDC buffer with default threshold
 M:passive DDC pass-through with internal -10Kohm pull up

L:programmable EQ for channel loss up to 6.5dB @3Gbps
 H:programmable EQ for channel loss up to 9.5dB @3Gbps
 M:programmable EQ for channel loss up to 3dB @3Gbps

INT_HDMI_TXP2_R EL1 1 2 EXC24CG900U INT_HDMI_TXP2_L
 INT_HDMI_TXN2_R 4 3 INT_HDMI_TXN2_L
 INT_HDMI_TXP1_R EL2 1 2 EXC24CG900U INT_HDMI_TXP1_L
 INT_HDMI_TXN1_R 4 3 INT_HDMI_TXN1_L
 INT_HDMI_TXP0_R EL3 1 2 EXC24CG900U INT_HDMI_TXP0_L
 INT_HDMI_TXN0_R 4 3 INT_HDMI_TXN0_L
 INT_HDMI_TXCP_R EL4 1 2 EXC24CG900U INT_HDMI_TXCP_L
 INT_HDMI_TXCN_R 4 3 INT_HDMI_TXCN_L

Int pull-down 150k , 3.3V IO
 L:HDMI ID disable
 H:HDMI ID enable

L:no pre-emphasis
 H:1.6dB pre-emphasis
 M:3.0dB pre-emphasis

L:default
 H:increase +13%
 M:increase -13%

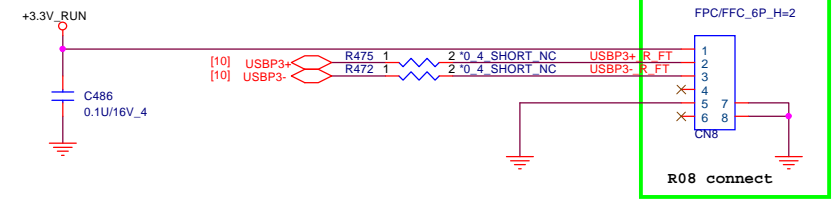
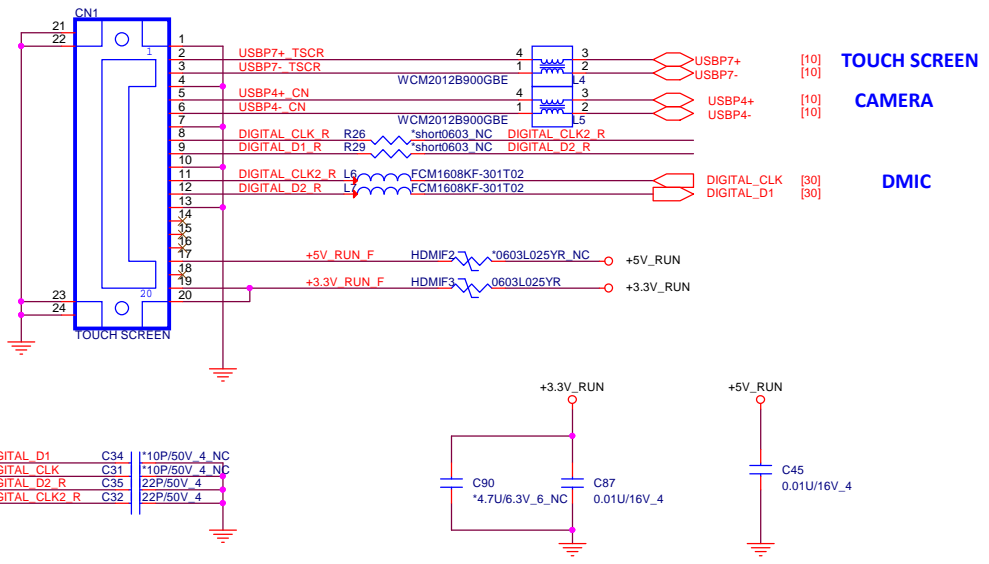
EMI

INT_HDMI_TXP2_L	1	2	INT_HDMI_TXN2_L
INT_HDMI_TXP1_L	1	2	INT_HDMI_TXN1_L
INT_HDMI_TXP0_L	1	2	INT_HDMI_TXN0_L
INT_HDMI_TXCP_L	1	2	INT_HDMI_TXCN_L

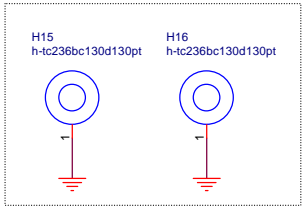
CAMERA / DMIC

Fingerprint

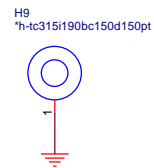
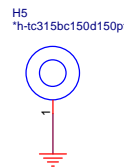
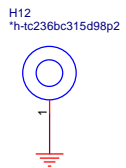
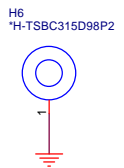
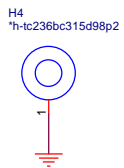
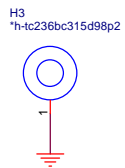
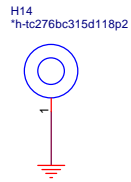
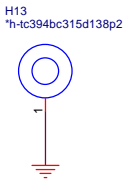
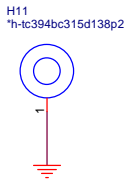
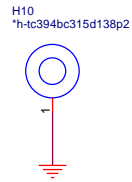
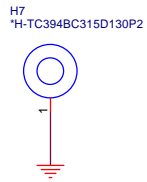
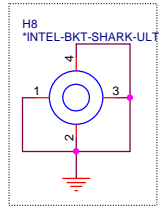
Conn P/N, Footprint OK. Luke 12/18



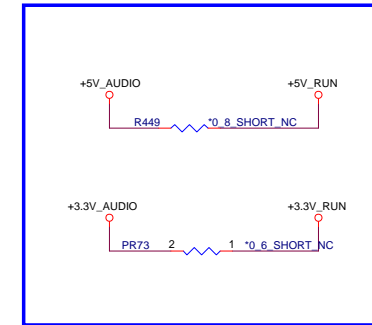
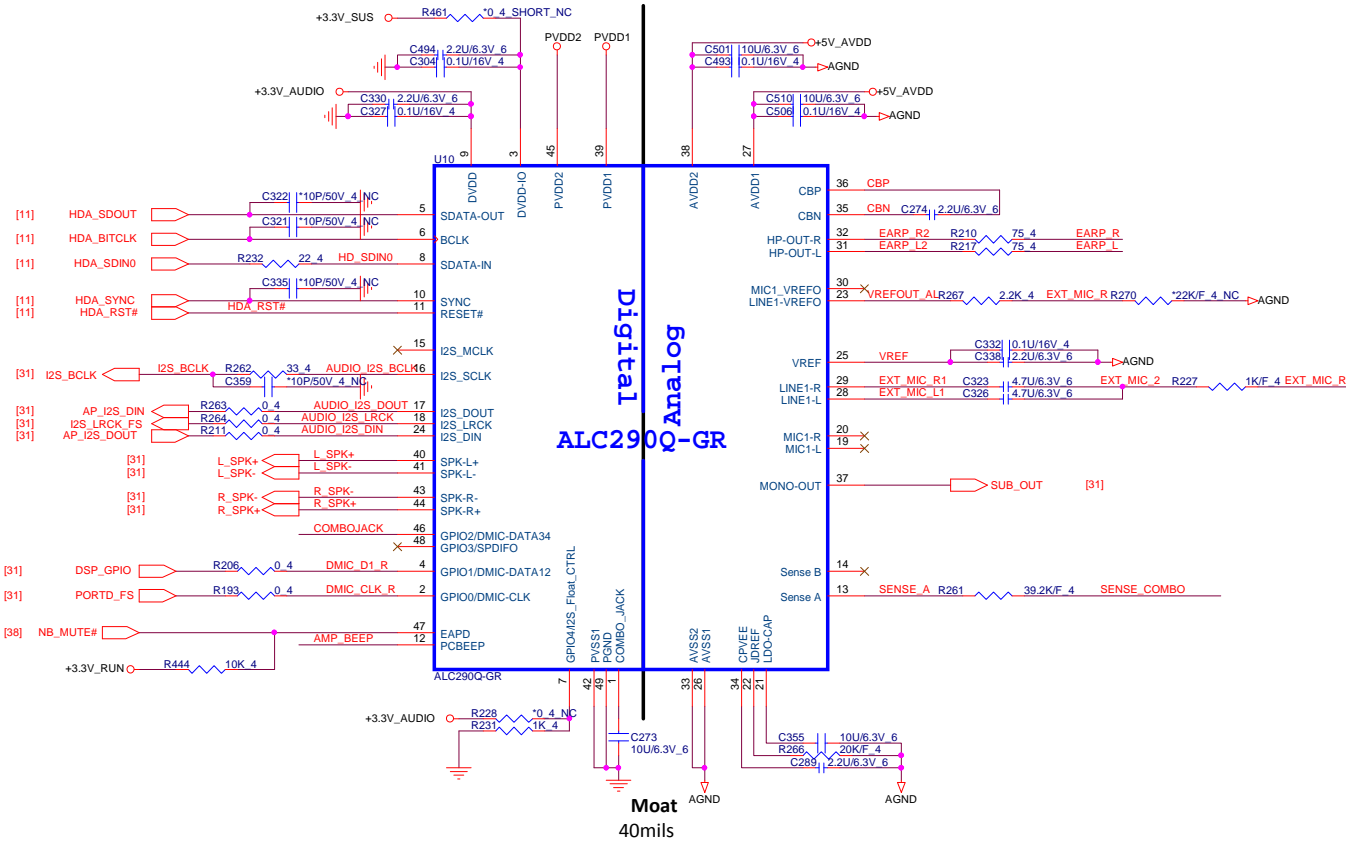
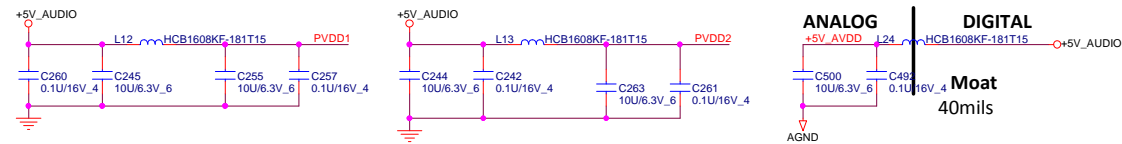
Mini-PCIE



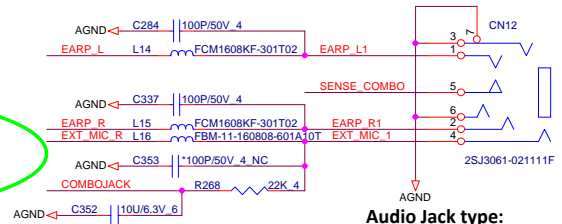
CPU BKT



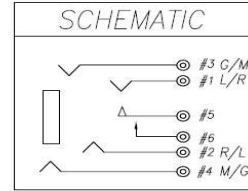
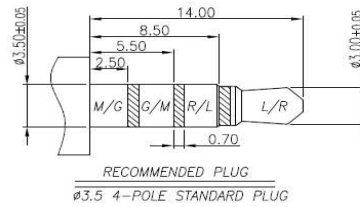
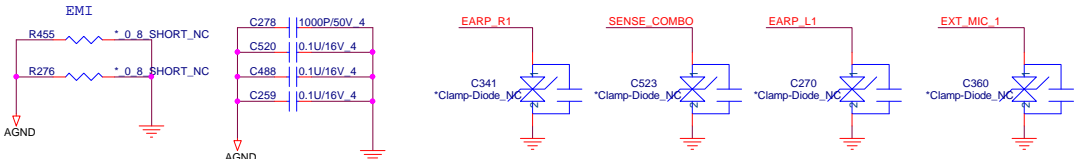
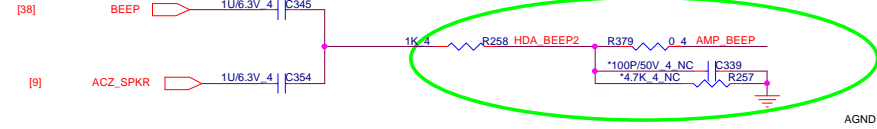
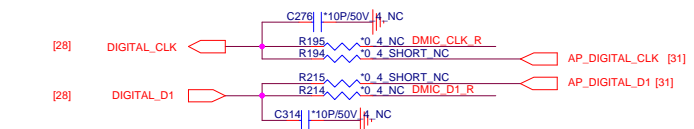
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Size	Document Number		
Custom	<Doc>		
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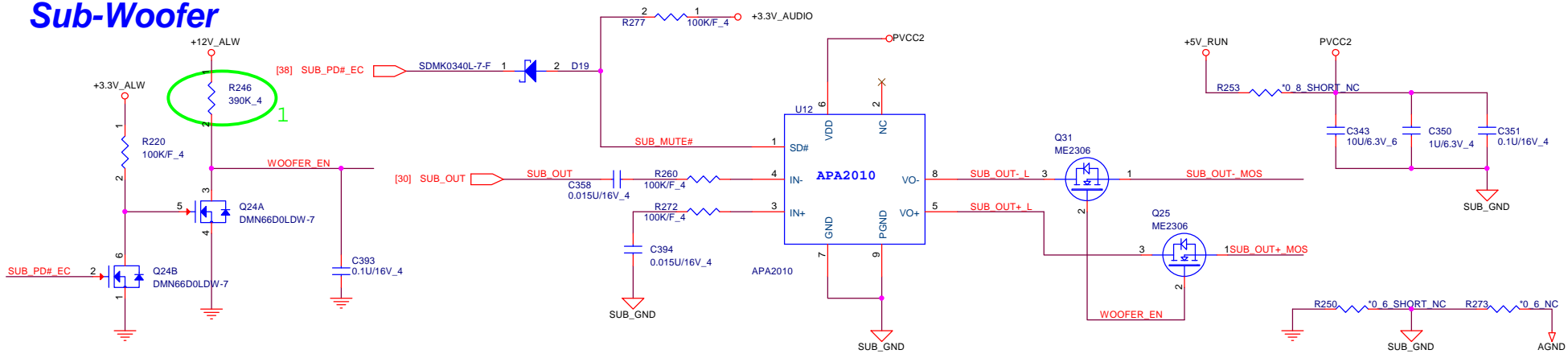
Audio Combo Jack



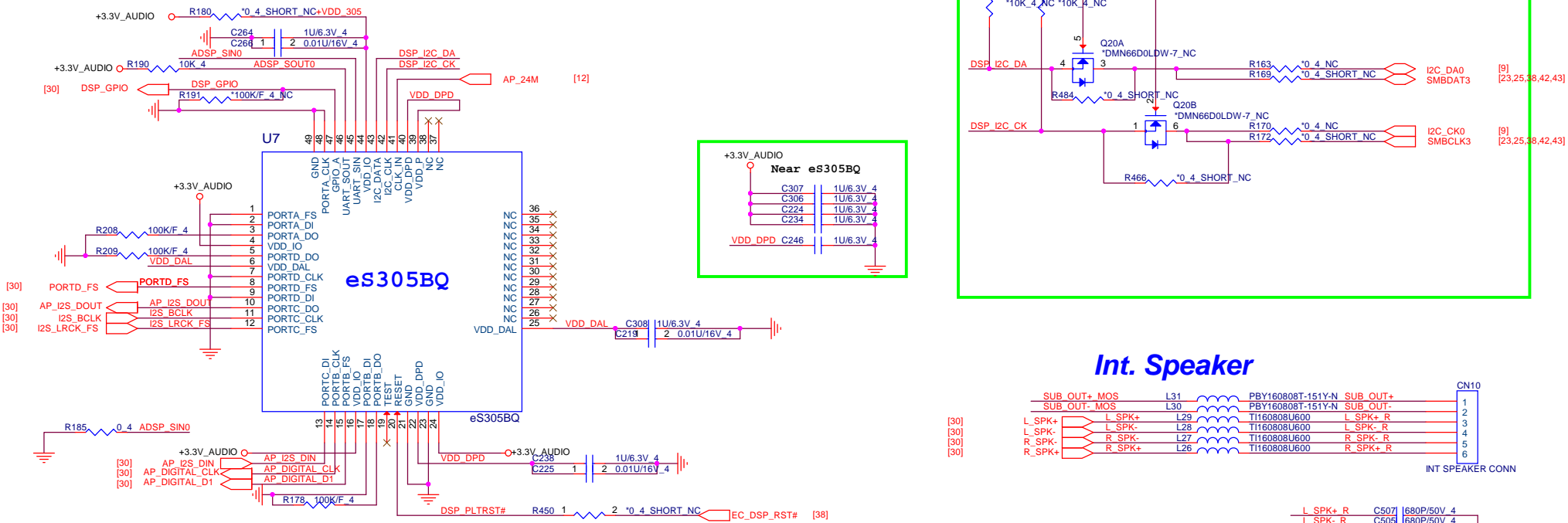
Audio Jack type:
Normal Open
Combo Jack(IPHONE)



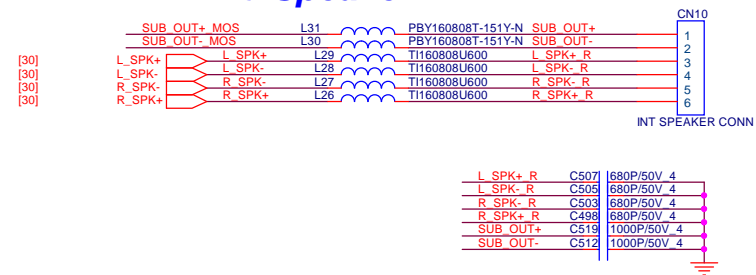
Sub-Woofer



Audio Processor



Int. Speaker



VDD10

C483 0.1U/16V 4

C480 0.1U/16V 4

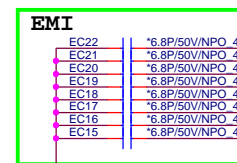
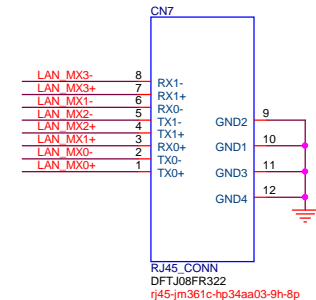
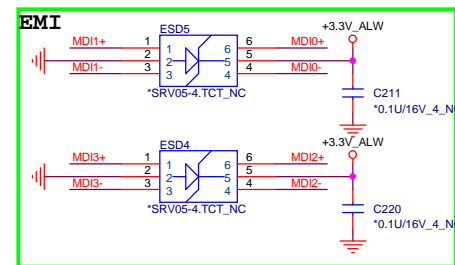
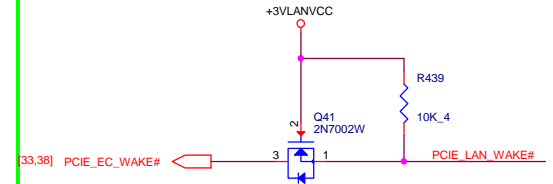
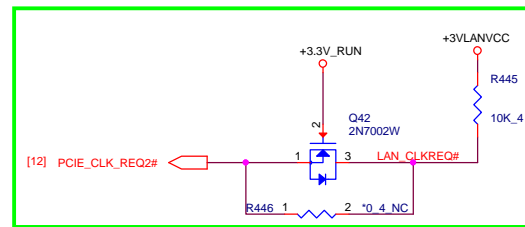
C479 0.1U/16V 4

C482 0.1U/16V 4

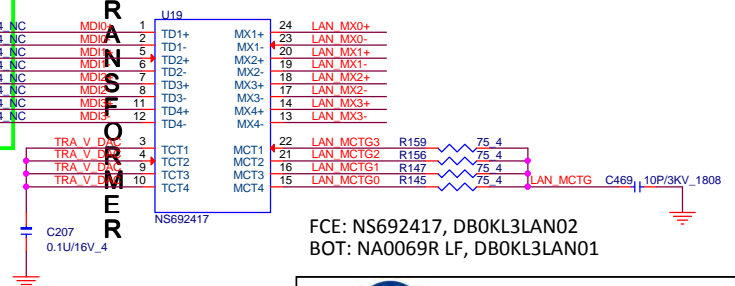
[10]	PCIE_RXP3		C214	0.1U/16V_4	PCIE_RXP3_C
[10]	PCIE_RXN3		C216	0.1U/16V_4	PCIE_RXN3_C
					LAN_RST#

+3VLANVCC R431 *10K 4 NC

The diagram shows a circuit for the LAN ISOLAT# pin. A +3.3V_RUN supply is connected to the top of resistor R435 (1K 4). The bottom of R435 is connected to the LAN ISOLAT# pin. A second resistor, R436 (*15K 4 NC), is connected between the LAN ISOLAT# pin and ground.

[illegible]

MD10+
MD10-
MD11+
MD11-
MD12+
MD12-
MD13+
MD13-
V DA
V DA
V DA
V DA



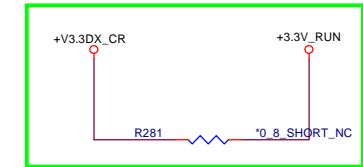
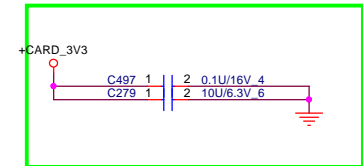
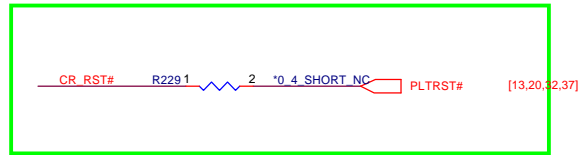
FCE: NS692417, DB0KL3LAN02
BOT: NA0069R LF, DB0KL3LAN01



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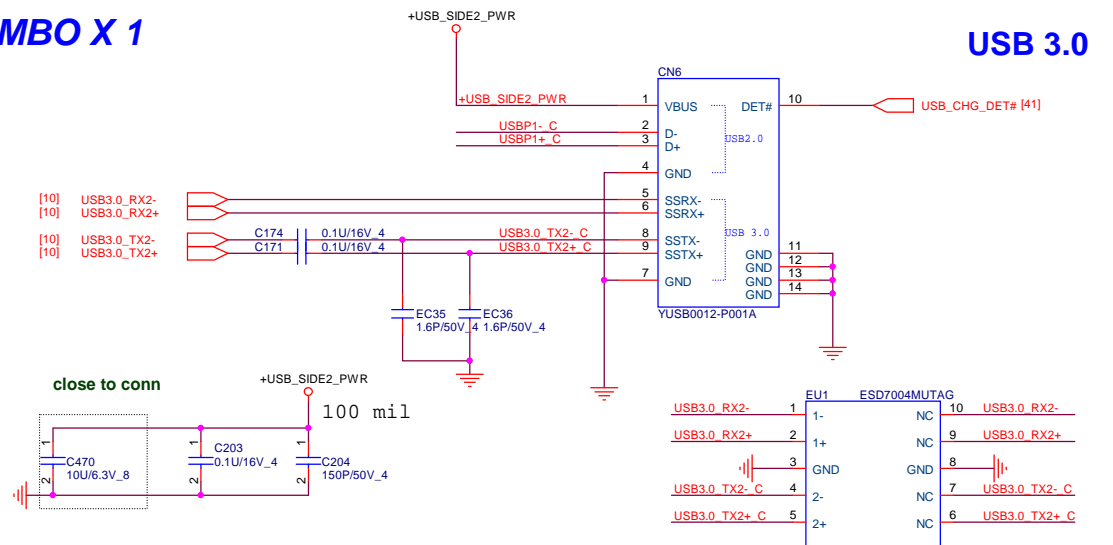
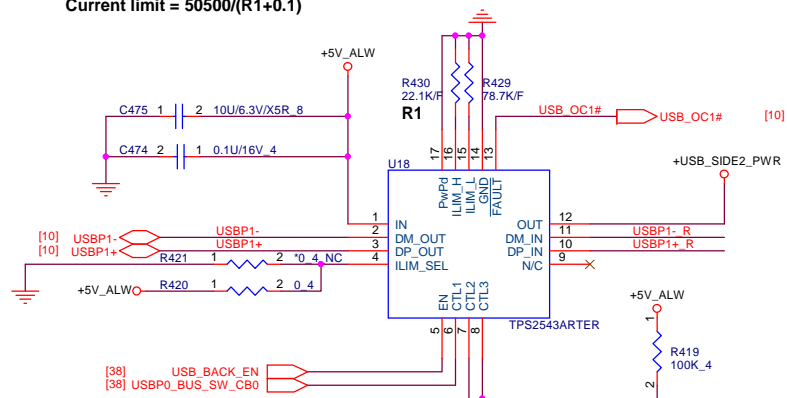
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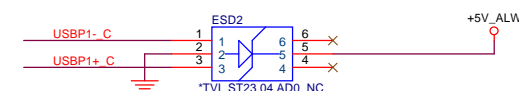
USB 3.0

Current limit = 50500/(R1+0.1)

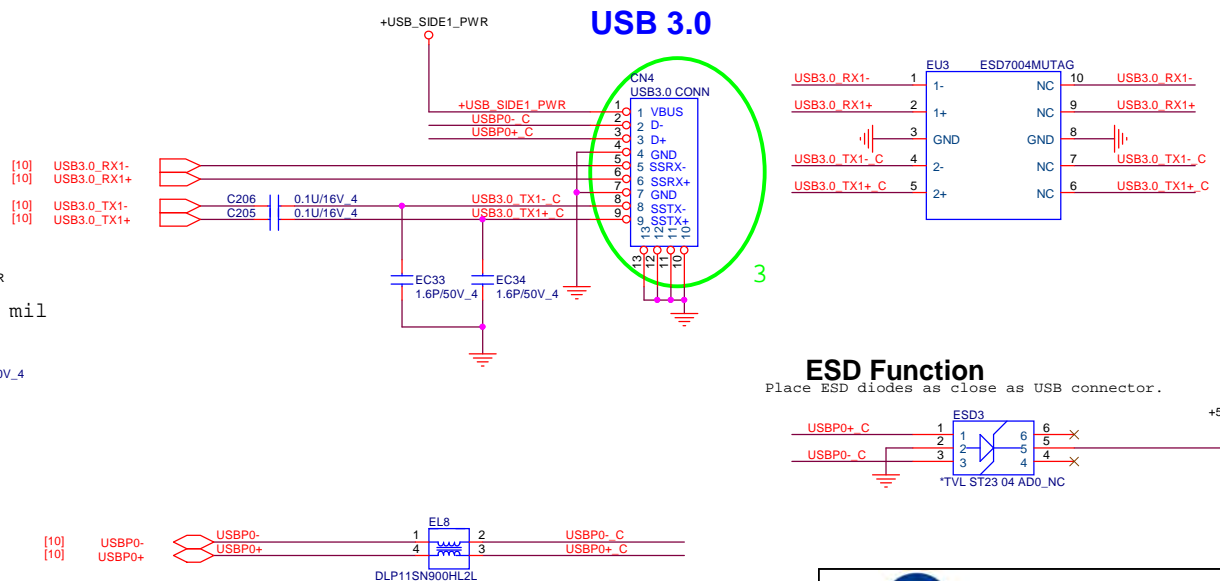
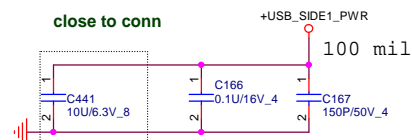
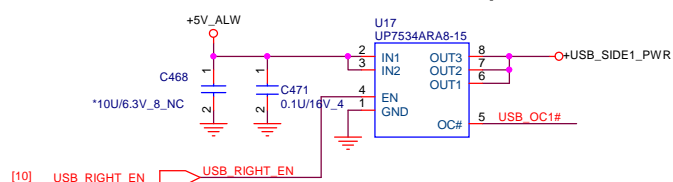


ESD Function

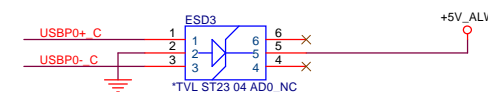
Place ESD diodes as close as USB connector.

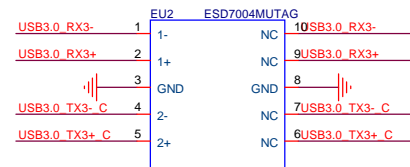
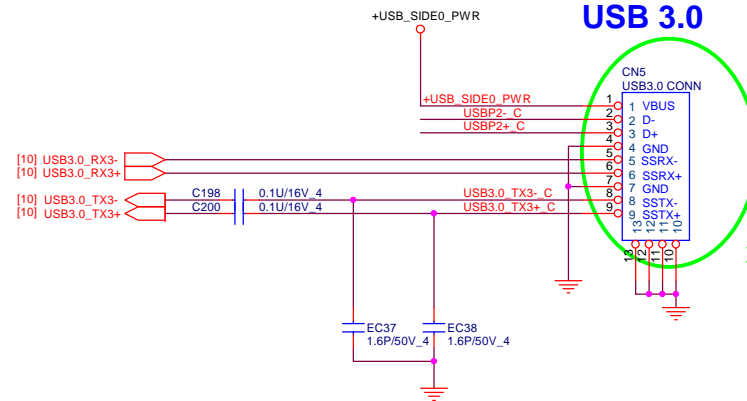
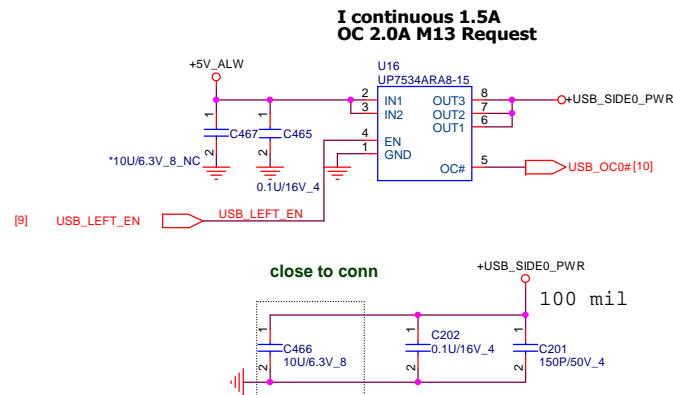


**I continuous 1.5A
OC 2.0A M13 Request**

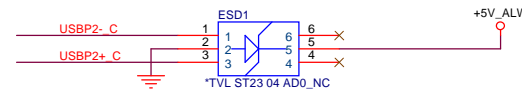


Place ESD diodes as close as USB connector.



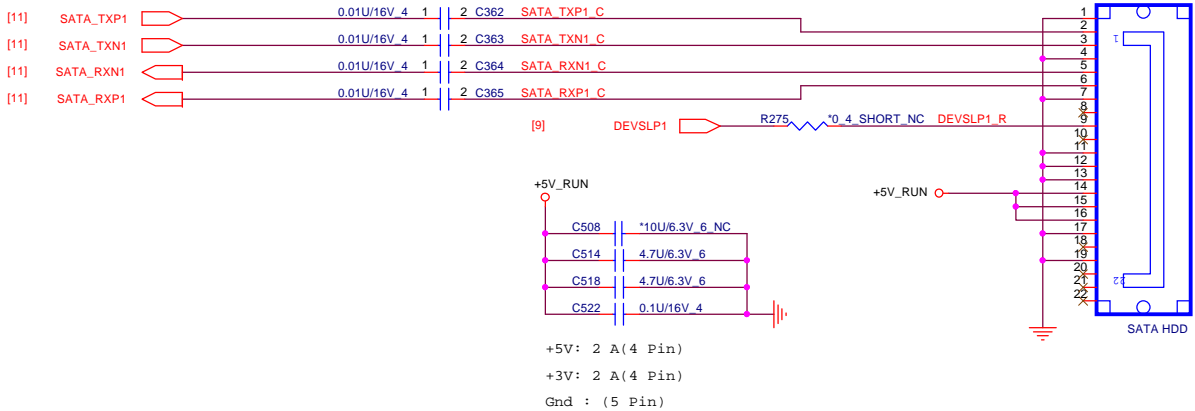


ESD Function
Place ESD diodes as close as USB connector.

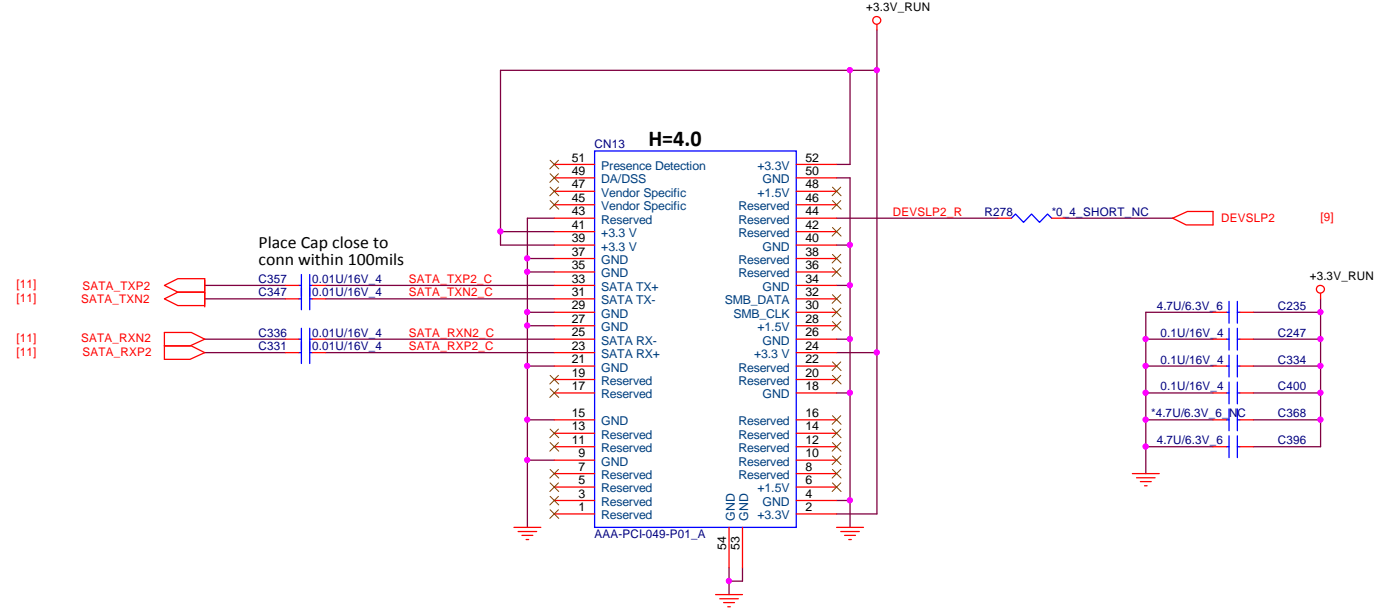


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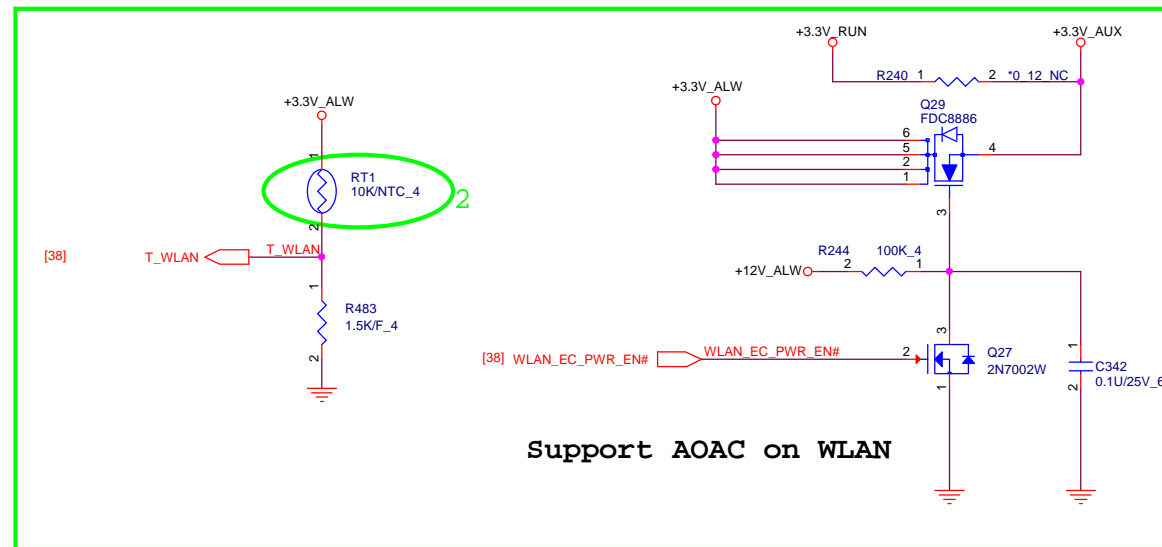
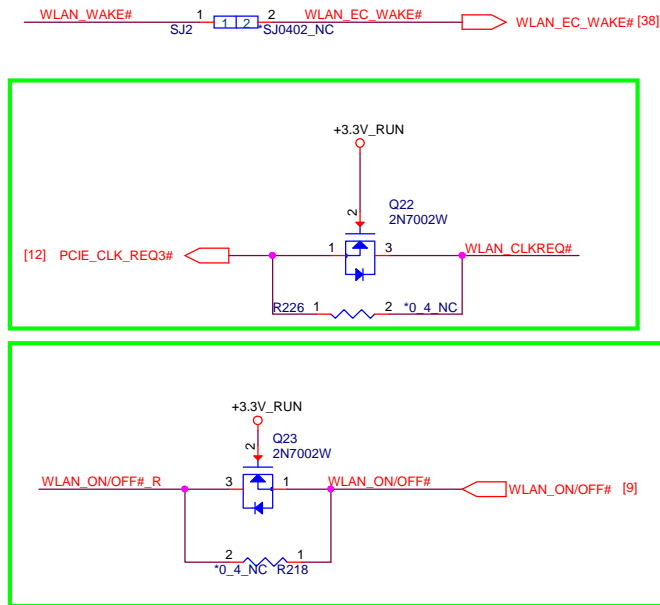
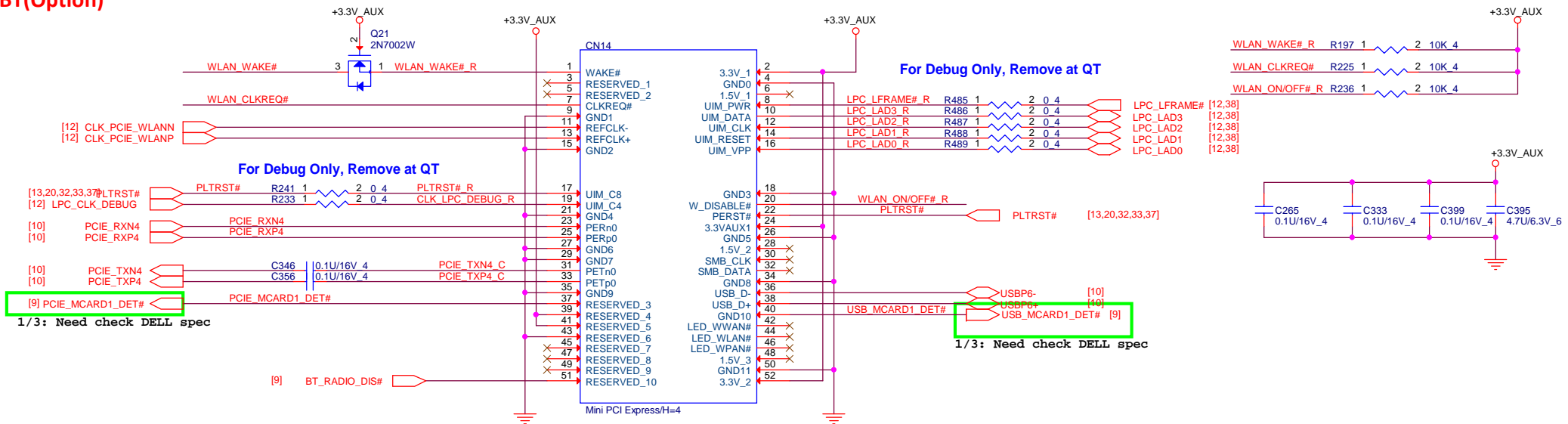
SATA HDD Connector

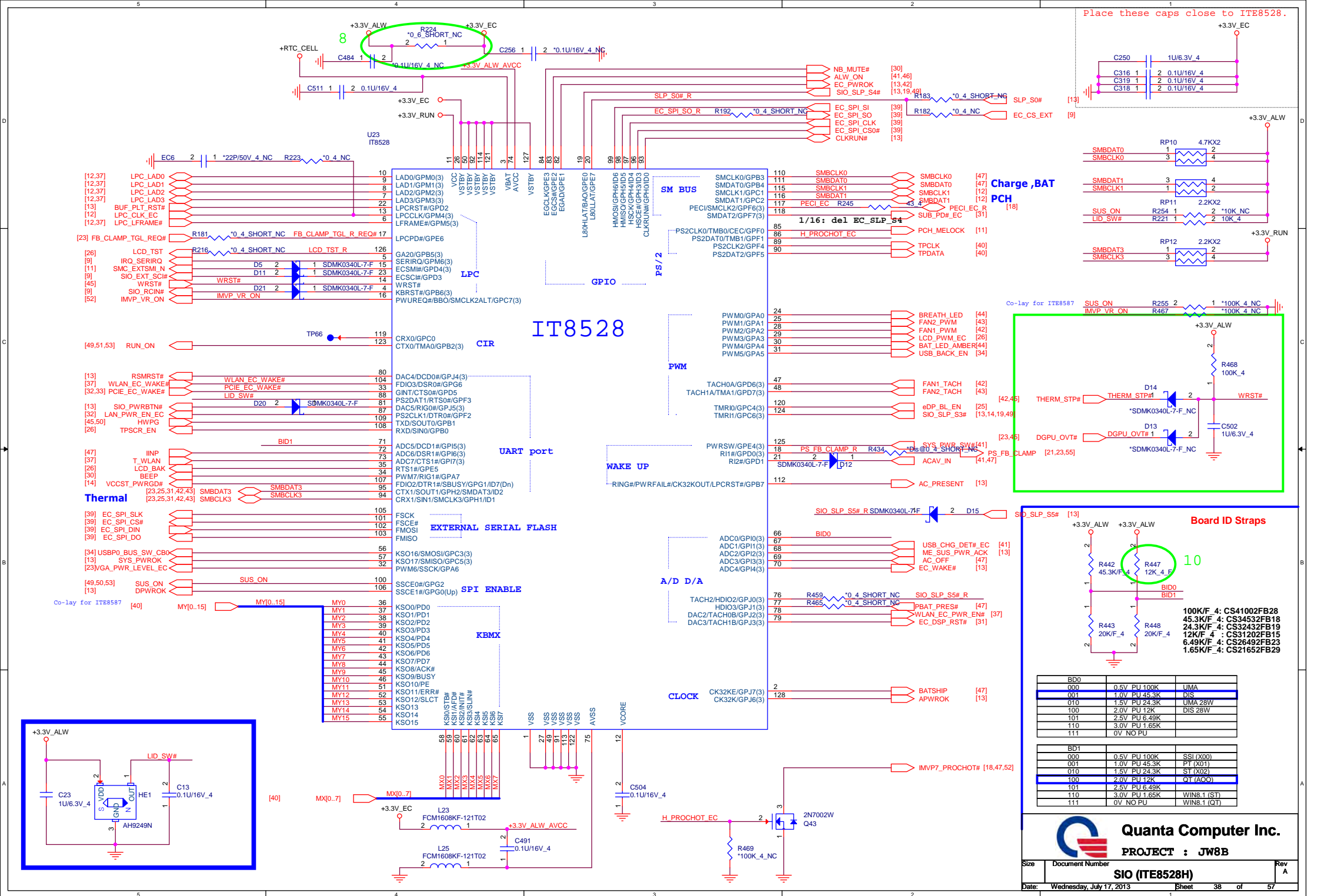


mSATA

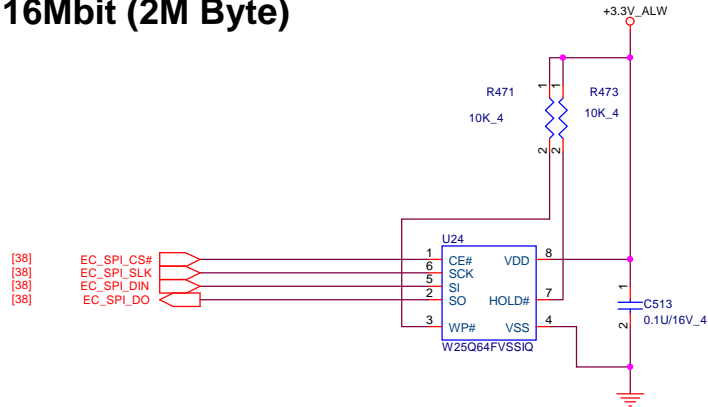


Mini Card WLAN/BT(Optional)

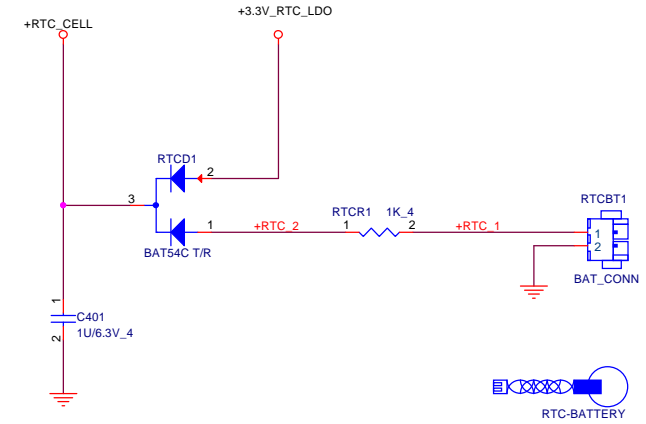




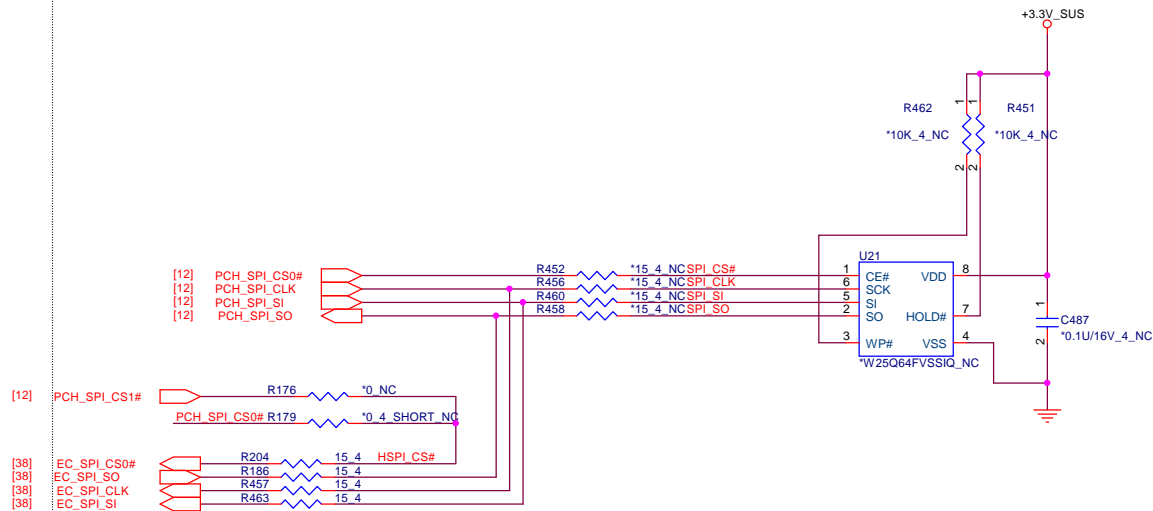
For EC 16Mbit (2M Byte)



RTC BATTERY



For PCH 64Mbit (8M Byte)

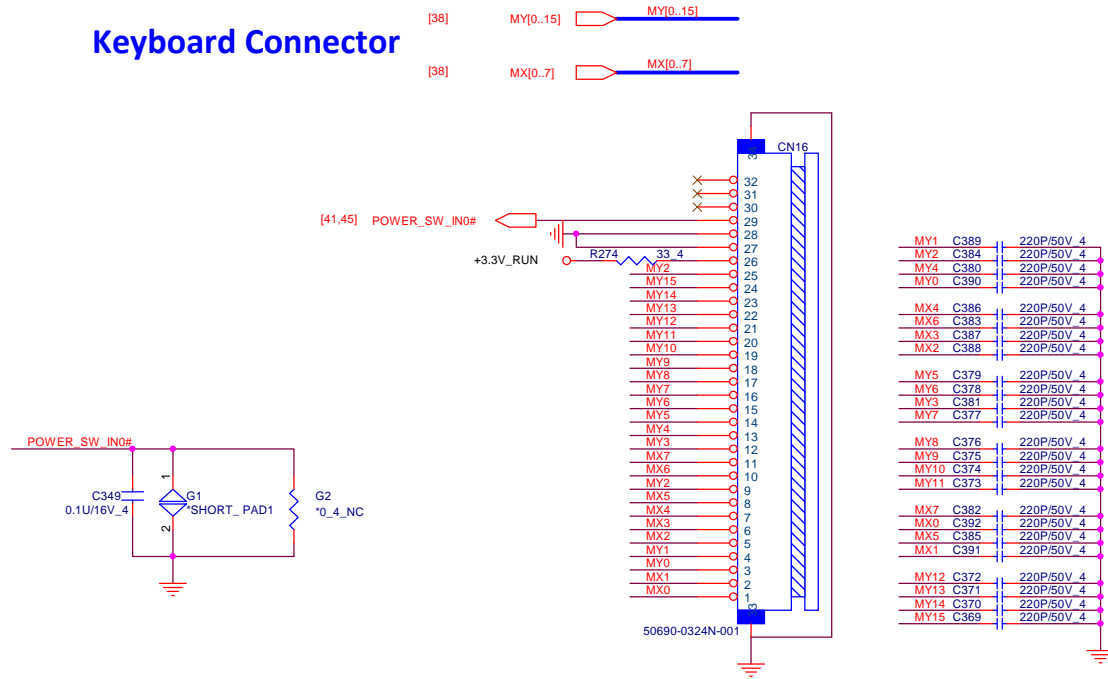


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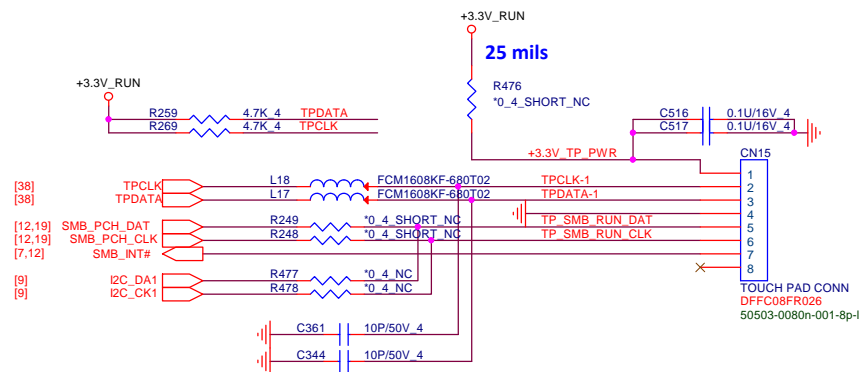
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FLASH / RTC		
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Keyboard Connector



Touch Pad Connector

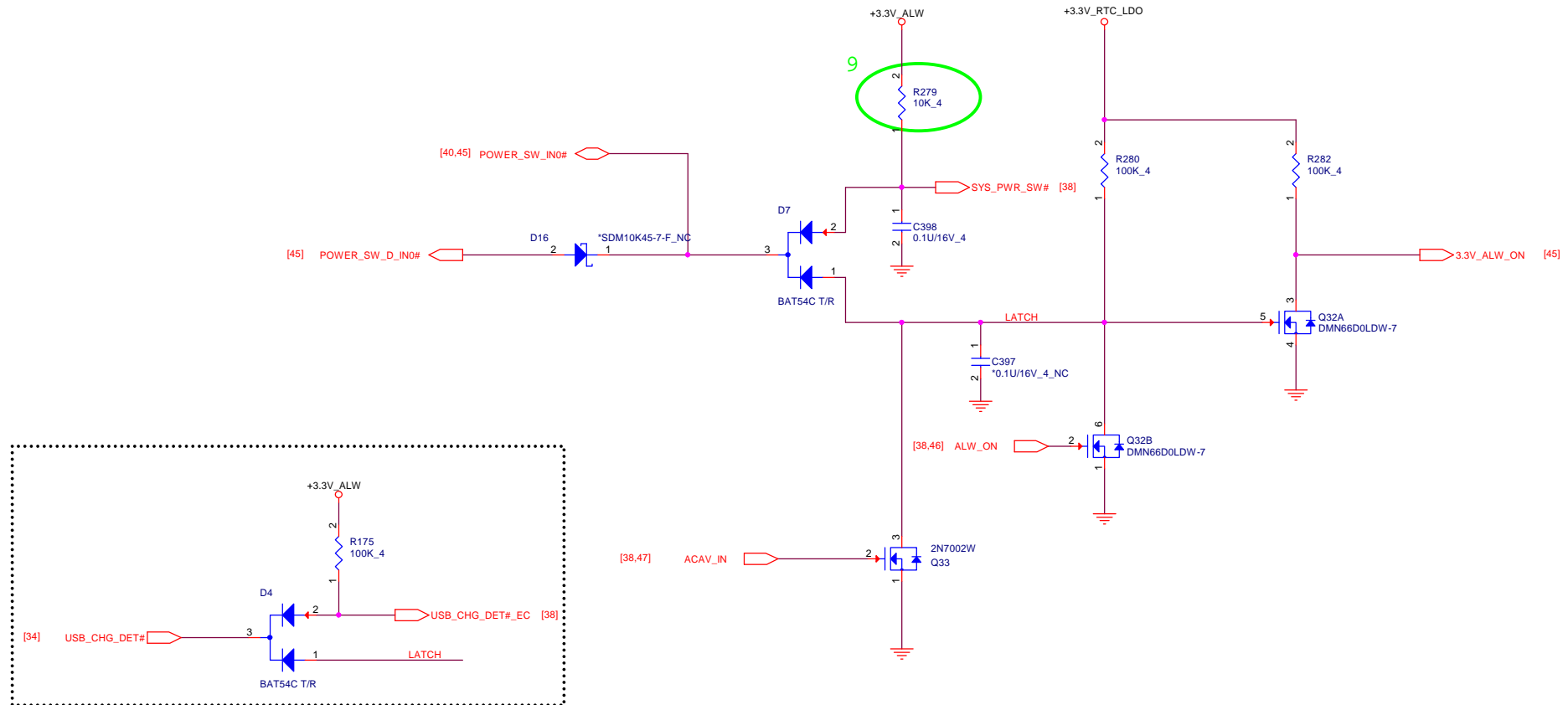


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	KB/CLK Gen/FAN/TP	A
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3VALW ON POWER LOGIC



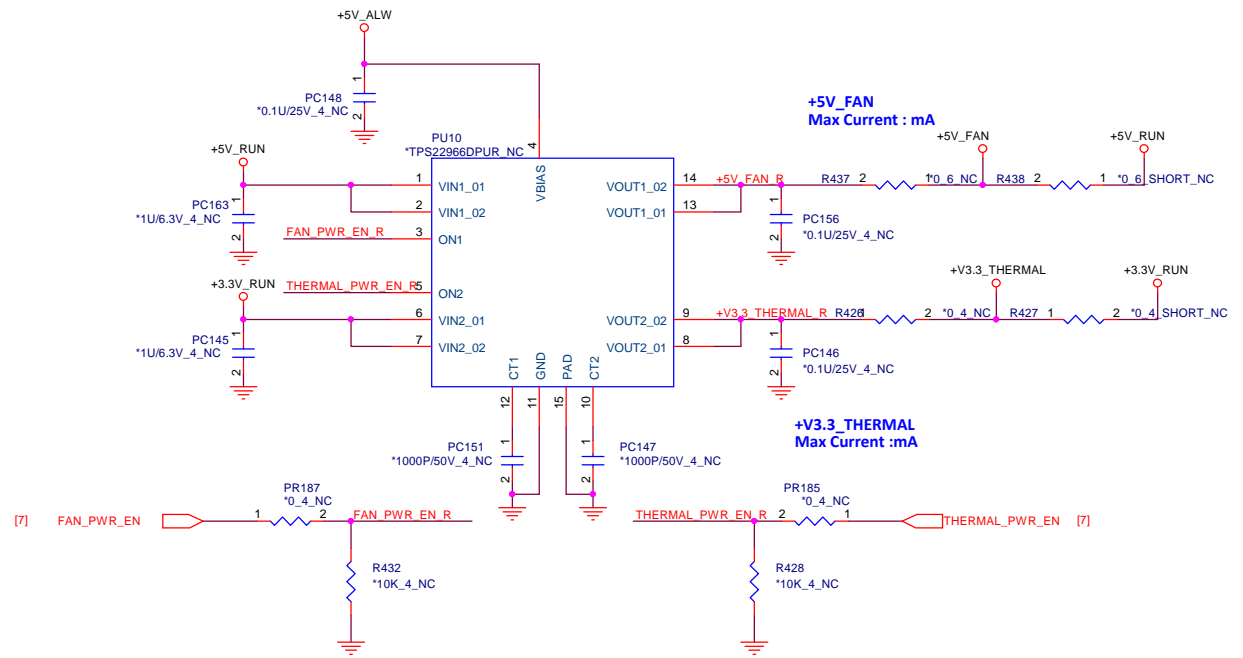
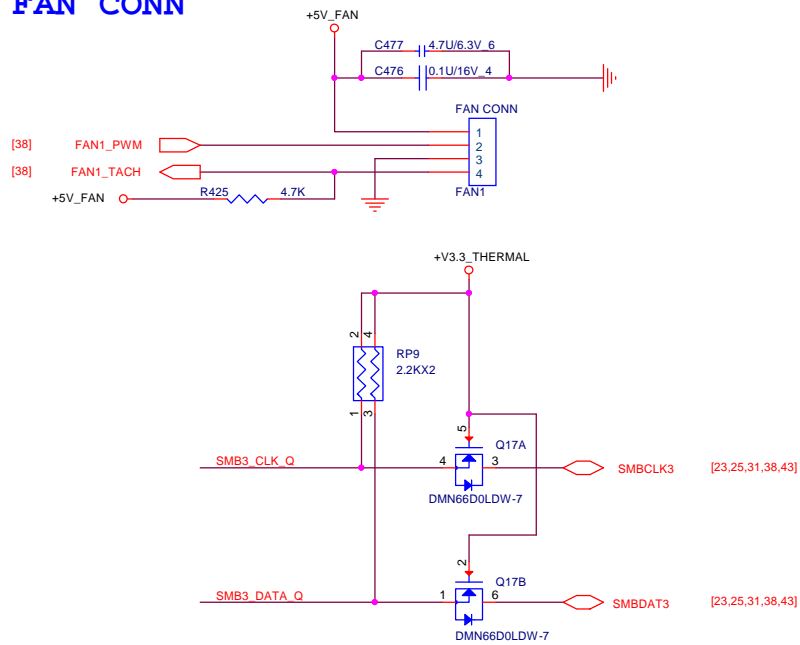
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PROJECT : JW8B

3VALW ON POWER LOGIC

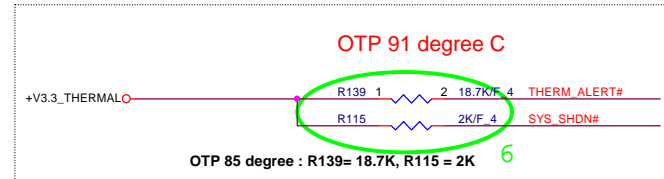
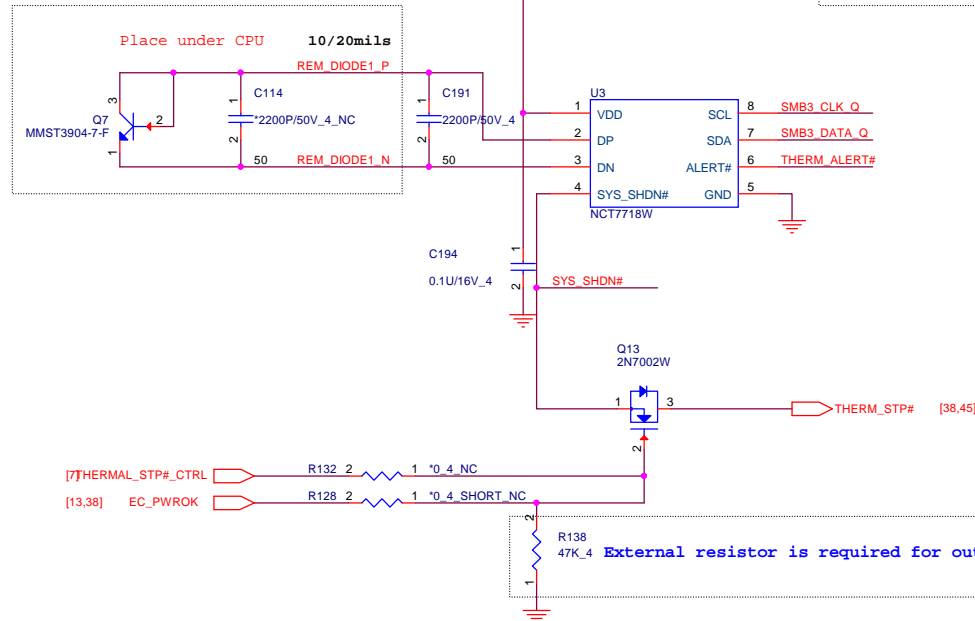
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FAN CONN



THERMAL IC

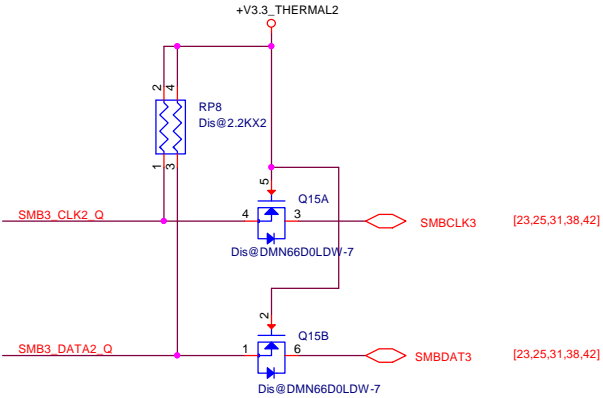
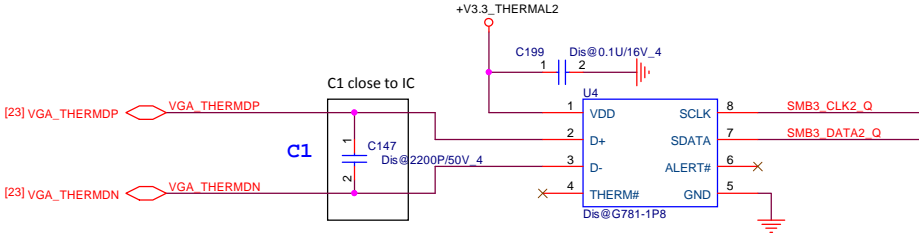
Need closed to CPU



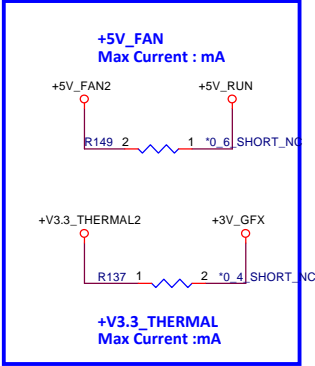
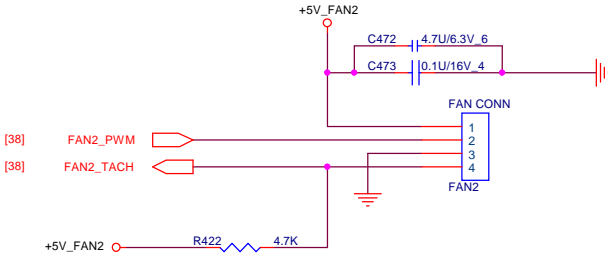
SYS_SHDN#	2K	7.5K	10.5K	14K	18.7K
ALERT#					
2K	77 °C	87 °C	97 °C	107 °C	117 °C
7.5K	79 °C	89 °C	99 °C	109 °C	119 °C
10.5K	81 °C	91 °C	101 °C	111 °C	121 °C
14K	83 °C	93 °C	103 °C	113 °C	123 °C
18.7K	85 °C	95 °C	105 °C	115 °C	125 °C

For GPU use

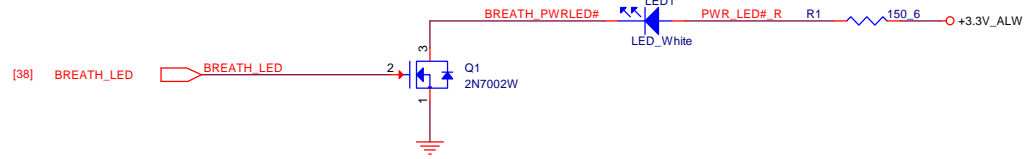
G781-1P8
SMBus address is 1001101xb (9Ah) (x is R/W bit).



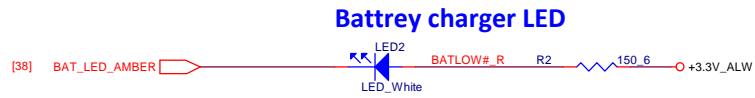
FAN CONN



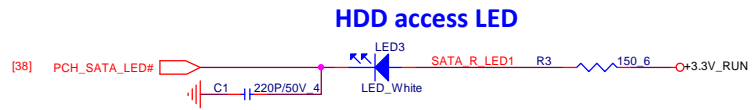
LED Status



System status LED



Battrey charger LED



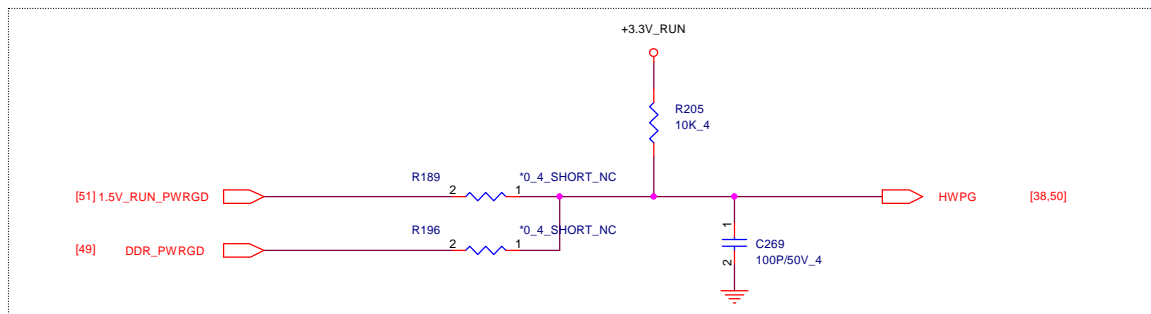
HDD access LED



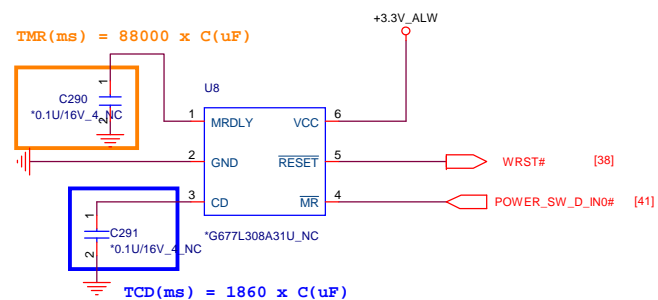
Quanta Computer Inc.

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	LED	A
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HW reset IC



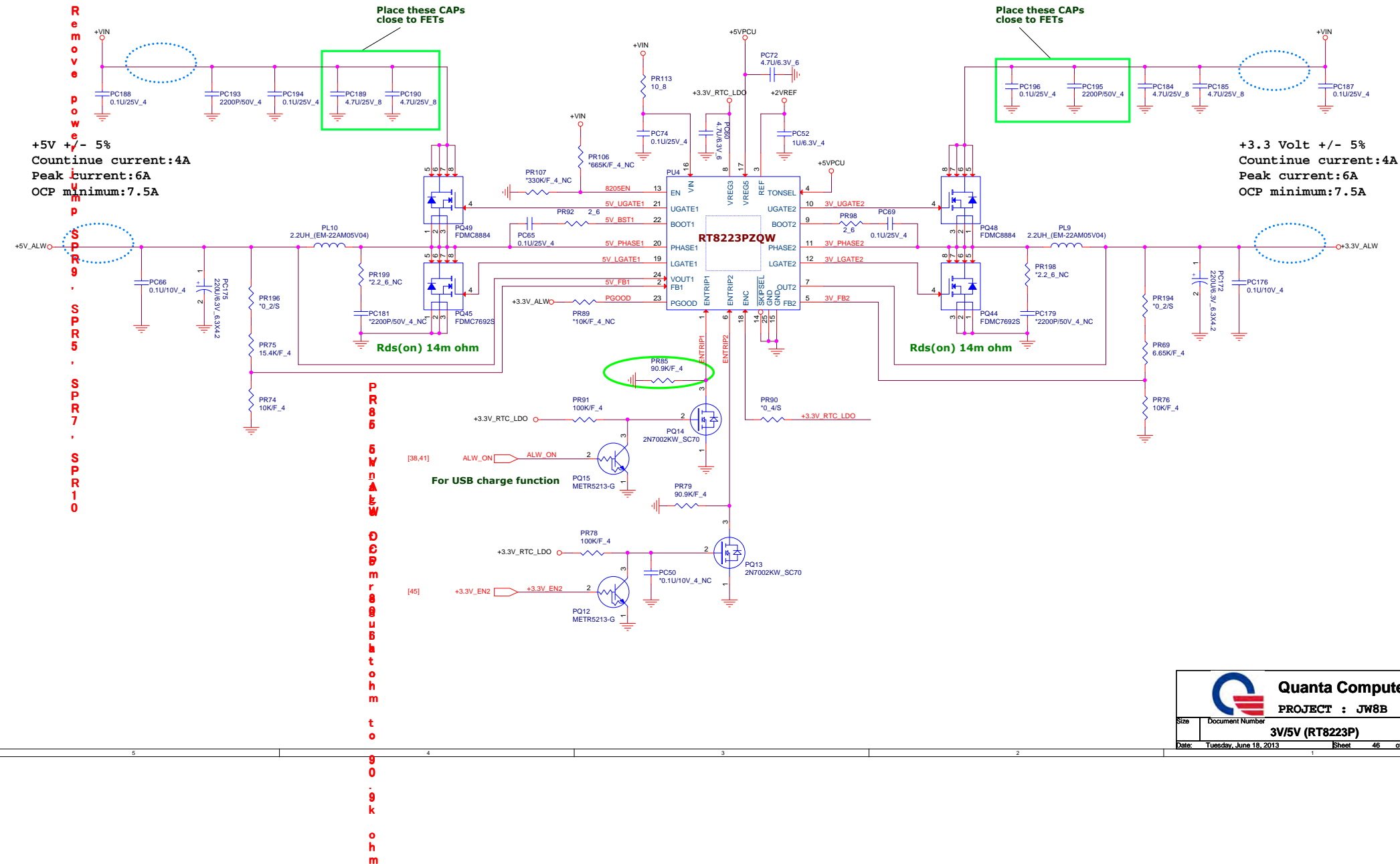
Quanta Computer Inc.

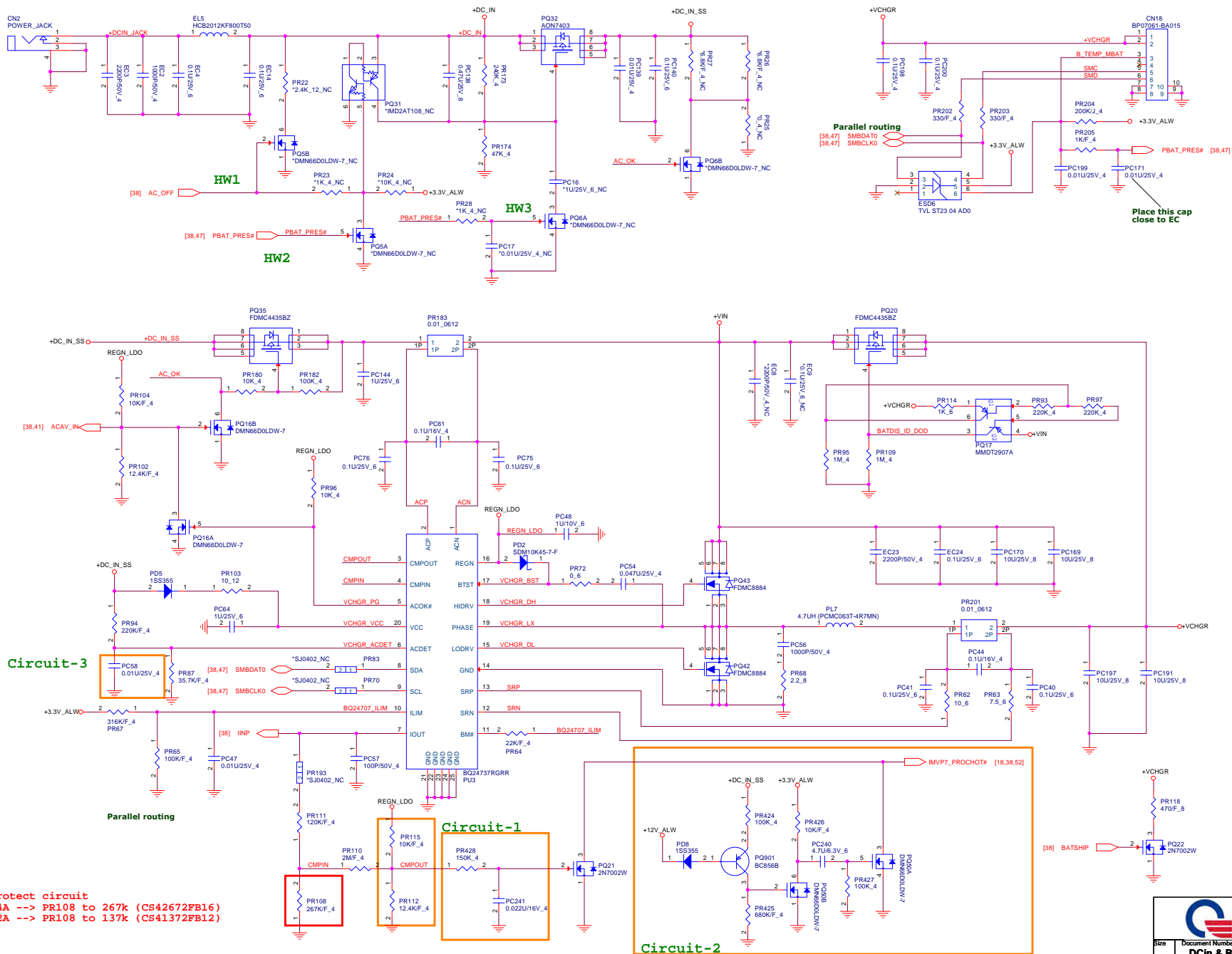
PROJECT : JW8B

System Reset Circuit


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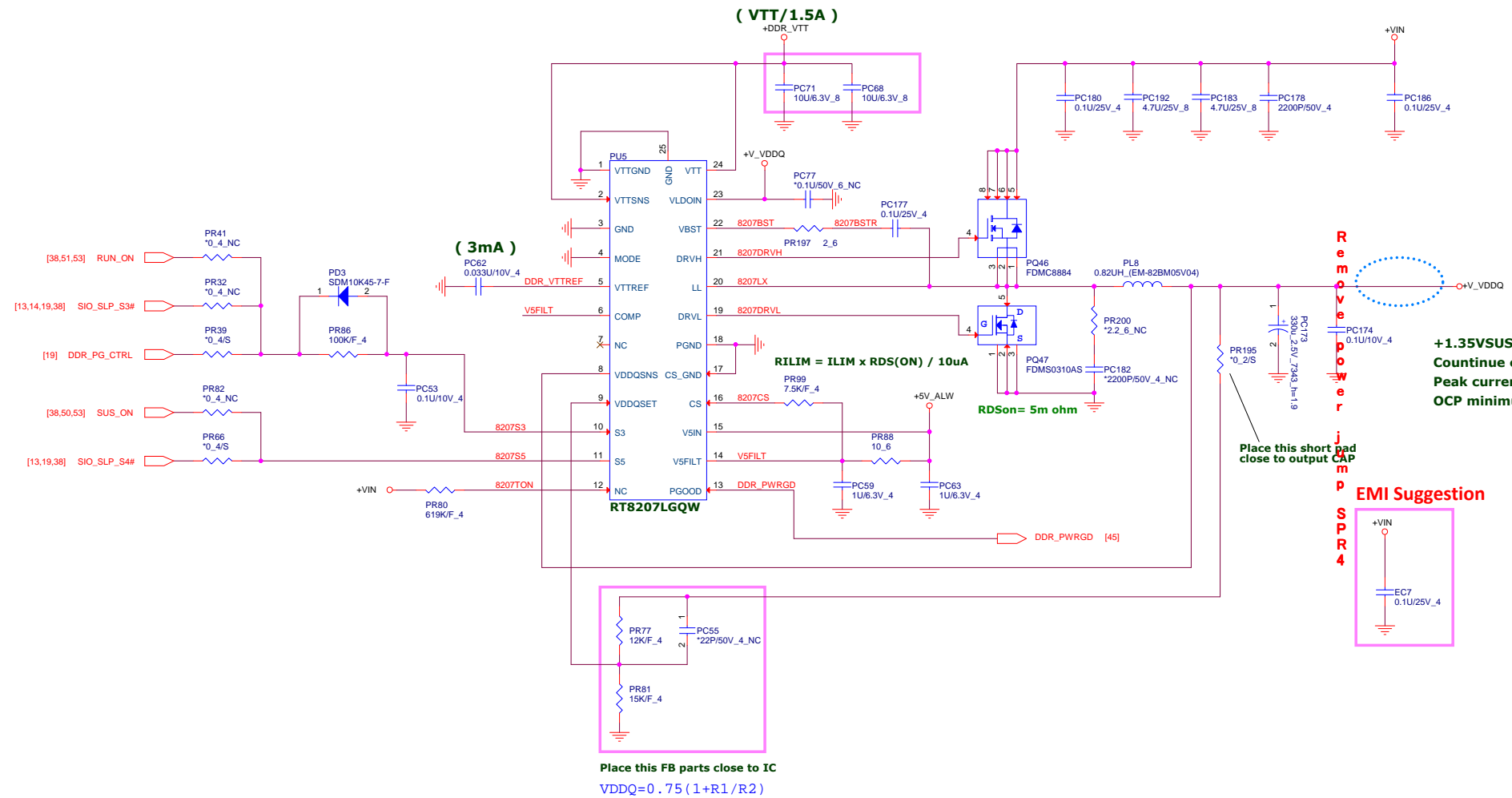
DC/DC +3V_ALW/+5V_ALW/+5V_ALW2 /+15V_ALW

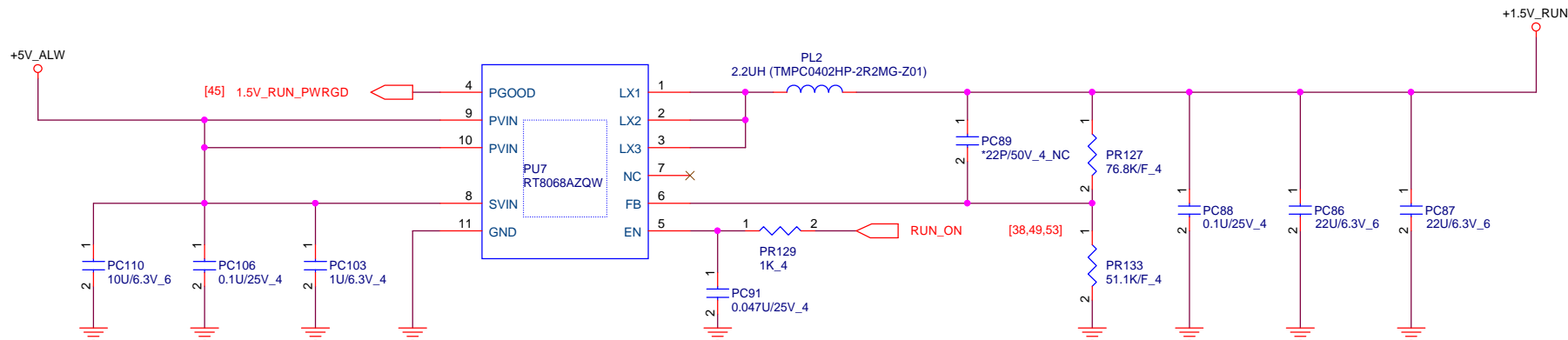




	A	B	C	D	E
1					
2					
3					
4					

		Quanta Computer Inc.	
		PROJECT : JW8B	
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	NC		A
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		E	





+1.5V_RUN
 1.5 Volt +/- 5%
 Fsw : 1MHz
 TDC : 1A
 Max : 1.5A
 OCP :3A



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PROJECT : JW8B

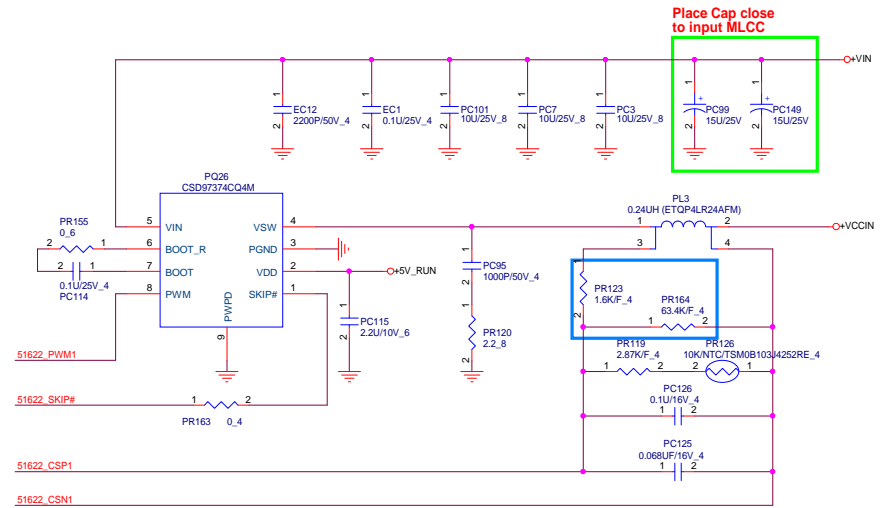
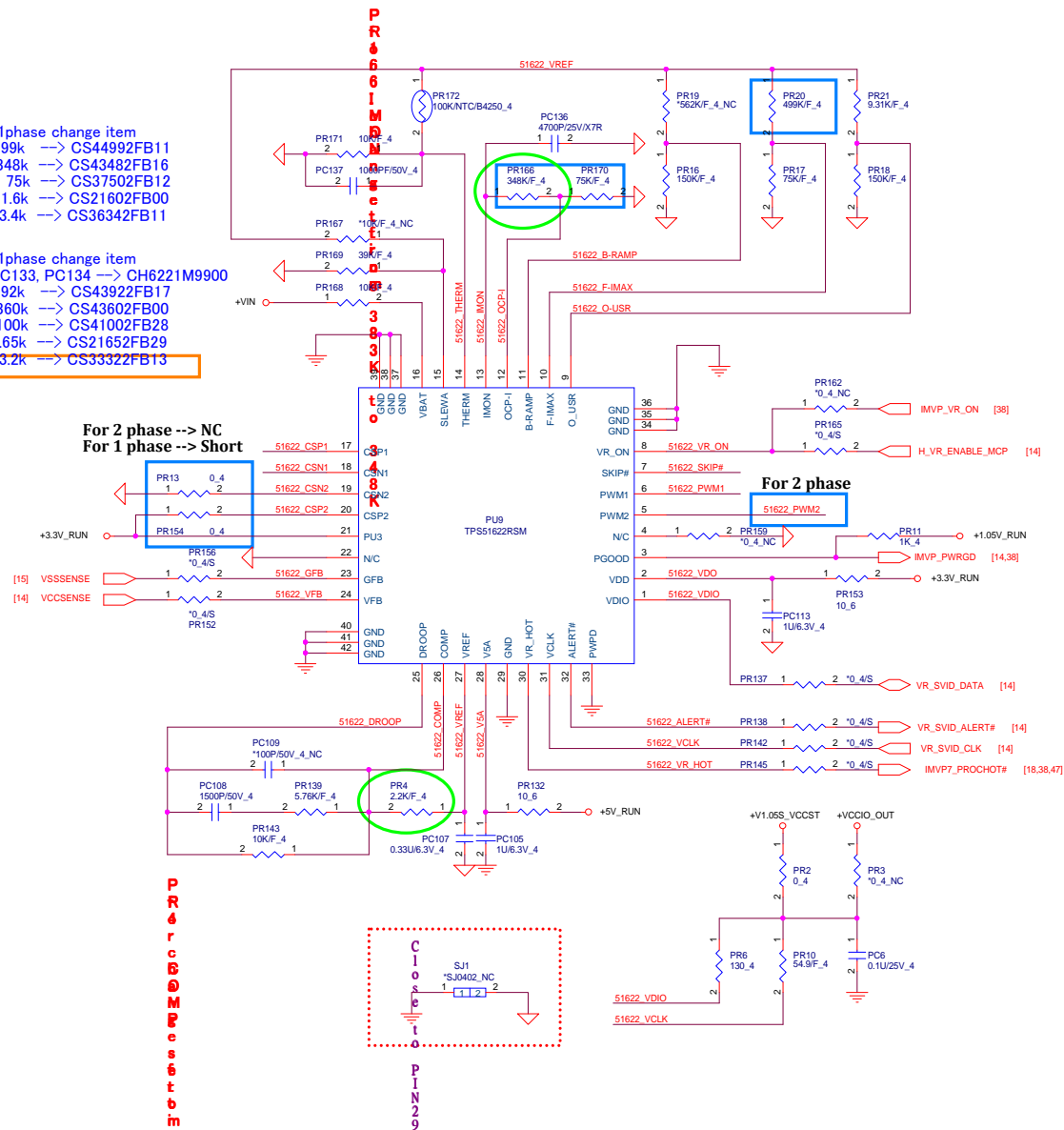
Size	Document Number	Rev
	+1.5V_RUN (RT8068AZQW)	1A

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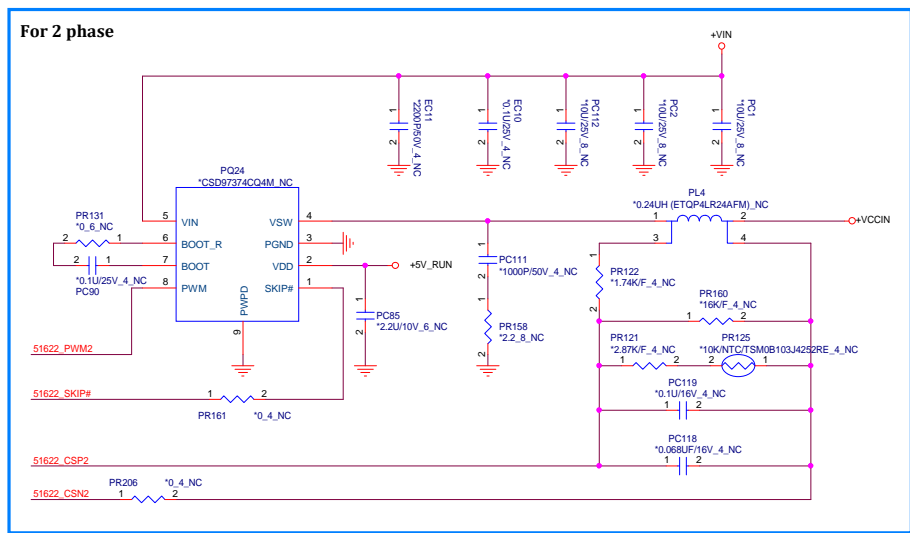
For 15W 1phase change item
 PR20 499k → CS44992FB11
 PR166 348k → CS43482FB16
 PR170 75k → CS37502FB12
 PR123 1.6k → CS21602FB00
 PR164 63.4k → CS36342FB11

For 28W 1phase change item
 PC132, PC133, PC134 → CH6221M9900
 PR20 392k → CS43922FB17
 PR166 360k → CS43602FB00
 PR170 100k → CS41002FB28
 PR123 1.65k → CS21652FB29
 PR164 33.2k → CS33322FB13

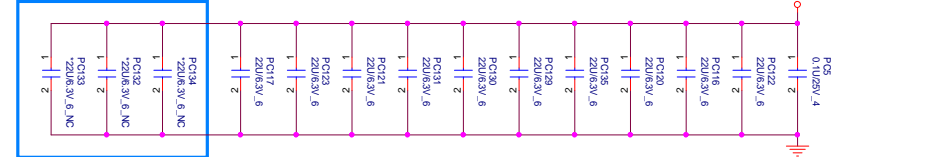
For 2 phase → NC
 For 1 phase → Short



For 2 phase



For ULT 28W

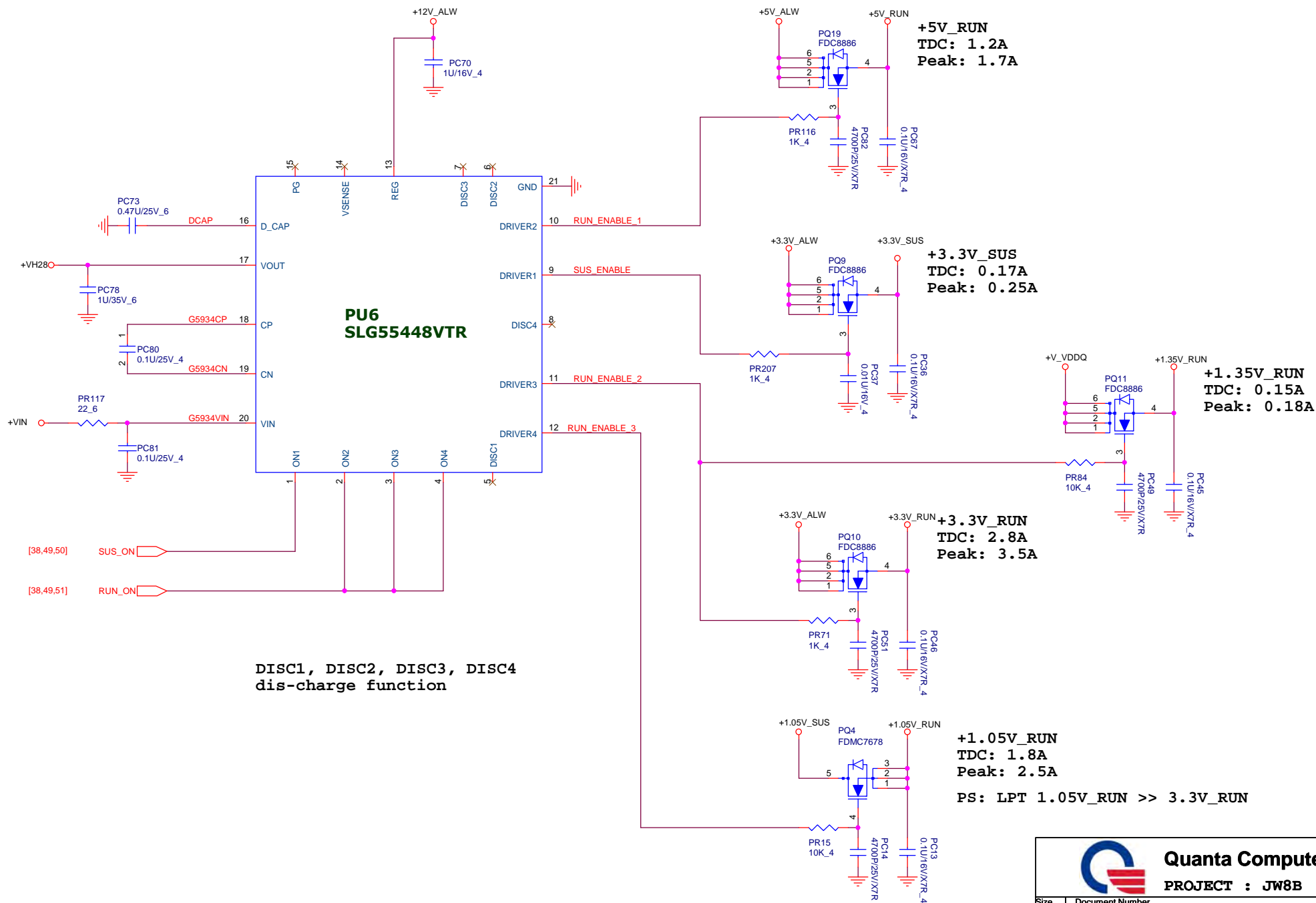


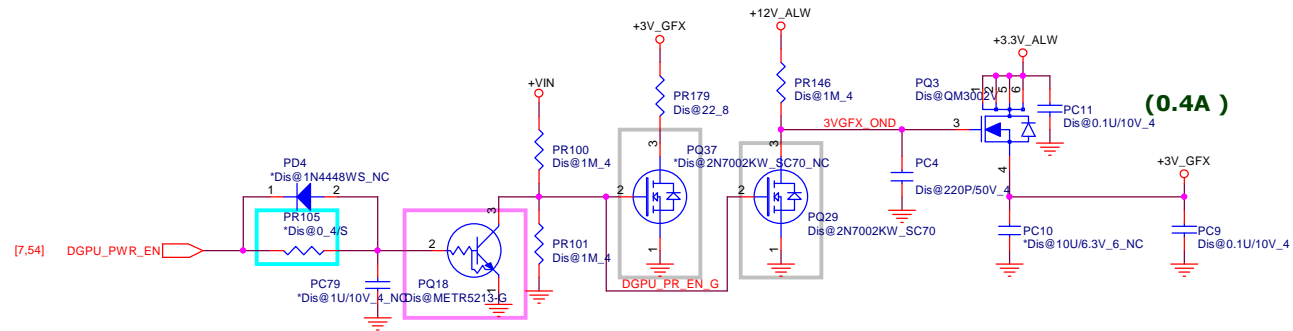
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Size	Document Number	CPU Core (TPS51622RSM)	Rev
			A

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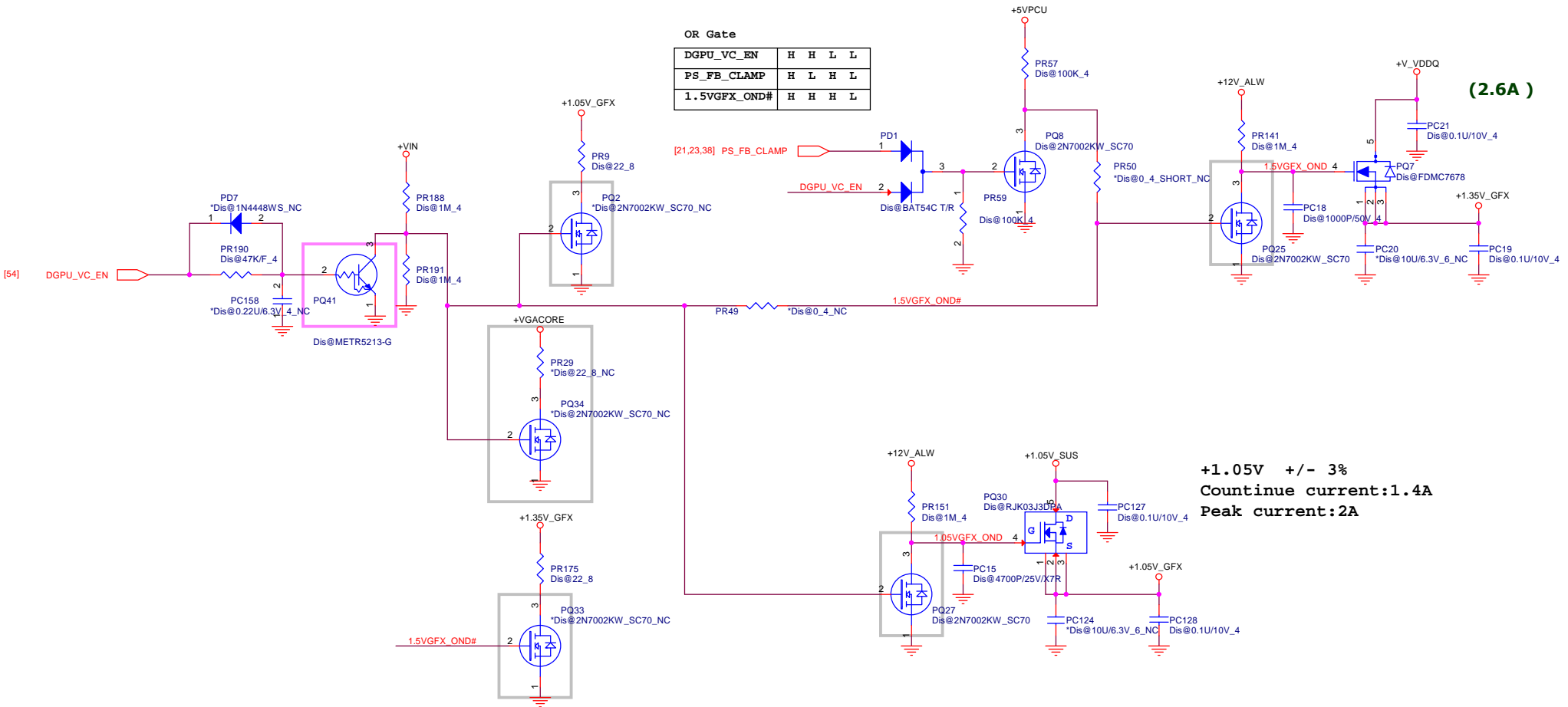




(0.4A)

OR Gate

DGPU_VC_EN	H	H	L	L
PS_FB_CLAMP	H	L	H	L
1.5VGFX_OND#	H	H	H	L



(2.6A)

+1.05V +/- 3%
Countinue current:1.4A
Peak current:2A



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PROJECT : JW8B