

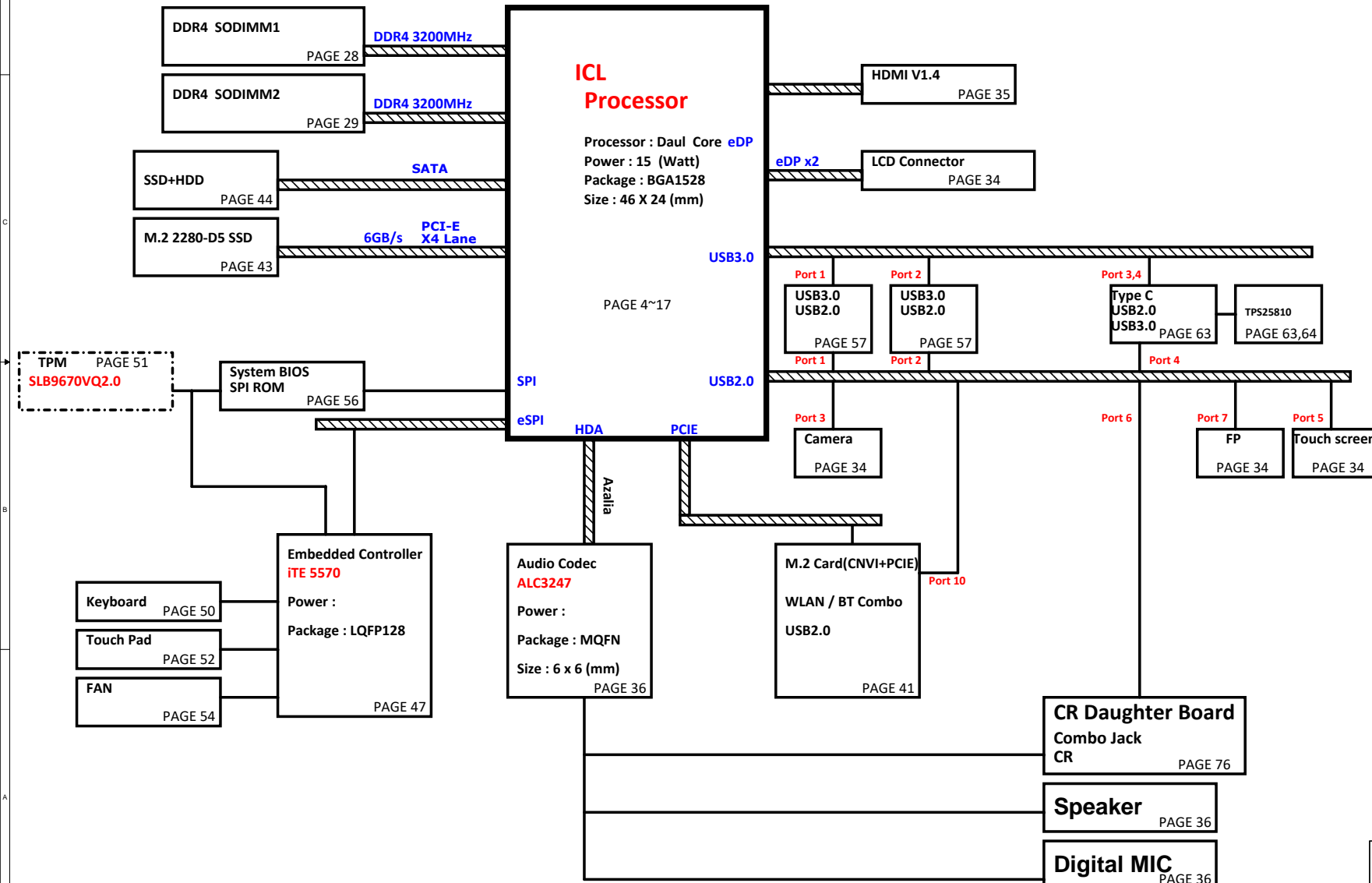
# www.DeviceDB.XYZ - schematic, boardview, bios dump


## Intel ICL Platform Block Diagram

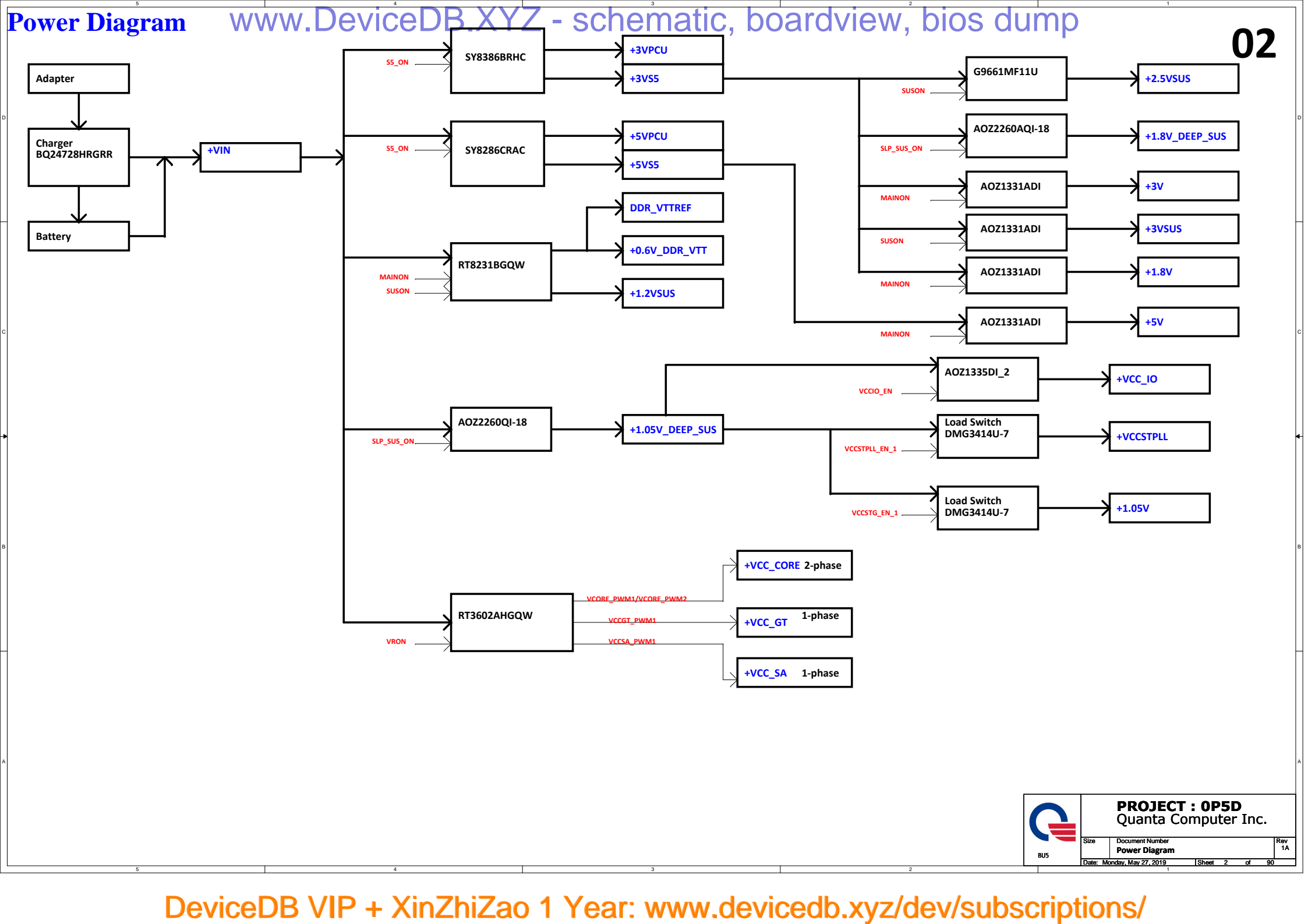
01

PCB 8L STACK UP

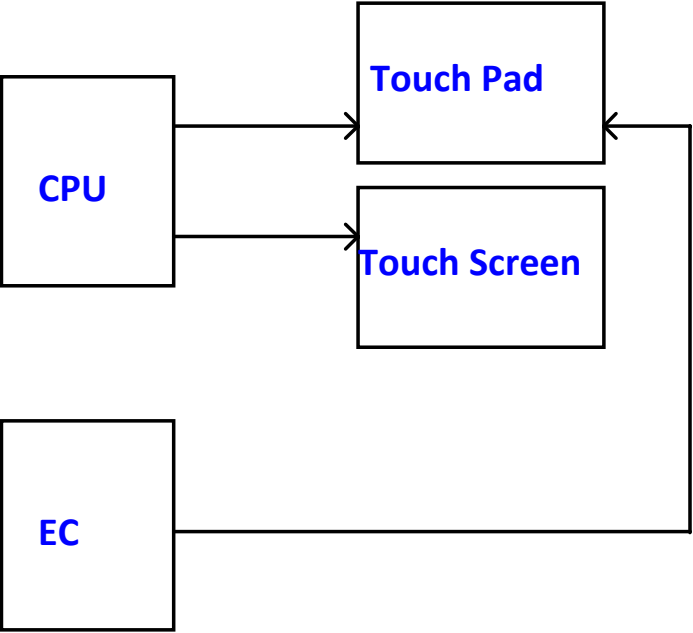
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LAYER 2 : GND  
LAYER 3 : IN1  
LAYER 4 : IN2  
LAYER 5 : SVCC  
LAYER 6 : IN3  
LAYER 7 : GND  
LAYER 8 : BOT




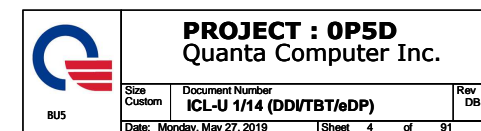
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	Size Custom	Document Number <b>Block Diagram</b>
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I2C Path



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## DDR CHANNEL A/B

U1B

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M\_A\_DQ2 CA49

M\_A\_DQ3 BV49

M\_A\_DQ4 CA45

M\_A\_DQ5 BV47

M\_A\_DQ6 BV45

M\_A\_DQ7 BV48

M\_A\_DQ8 CC42

M\_A\_DQ9 CC39

M\_A\_DQ10 CC43

M\_A\_DQ11 CC38

M\_A\_DQ12 CC38

M\_A\_DQ13 CE39

M\_A\_DQ14 CE42

M\_A\_DQ15 CE43

M\_A\_DQ16 BT48

M\_A\_DQ17 BT47

M\_A\_DQ18 BT49

M\_A\_DQ19 BN49

M\_A\_DQ20 BT45

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M\_A\_DQ23 BN48

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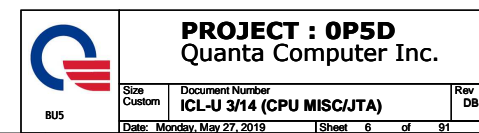
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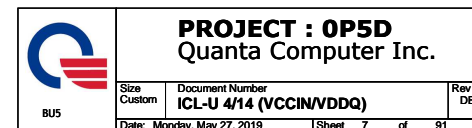
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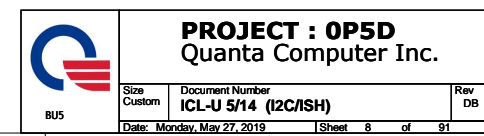
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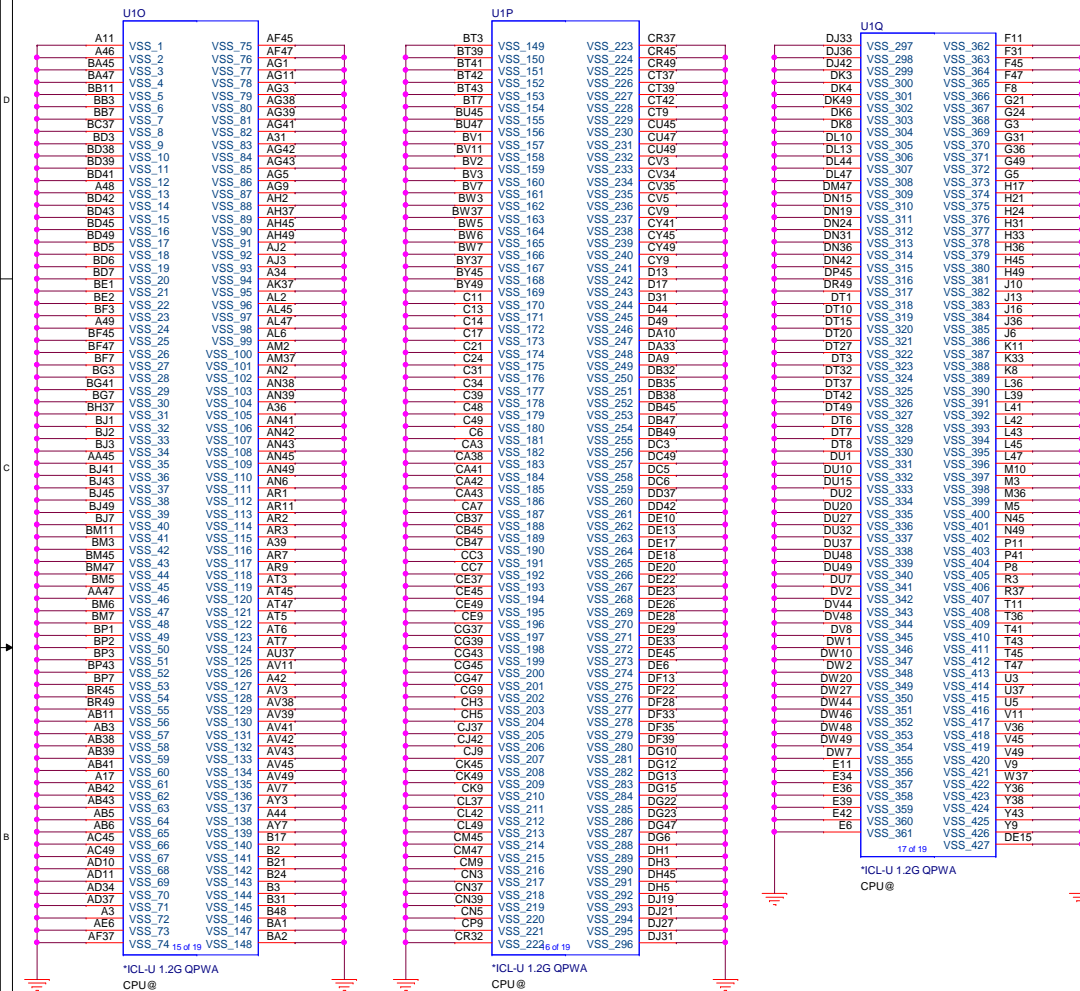
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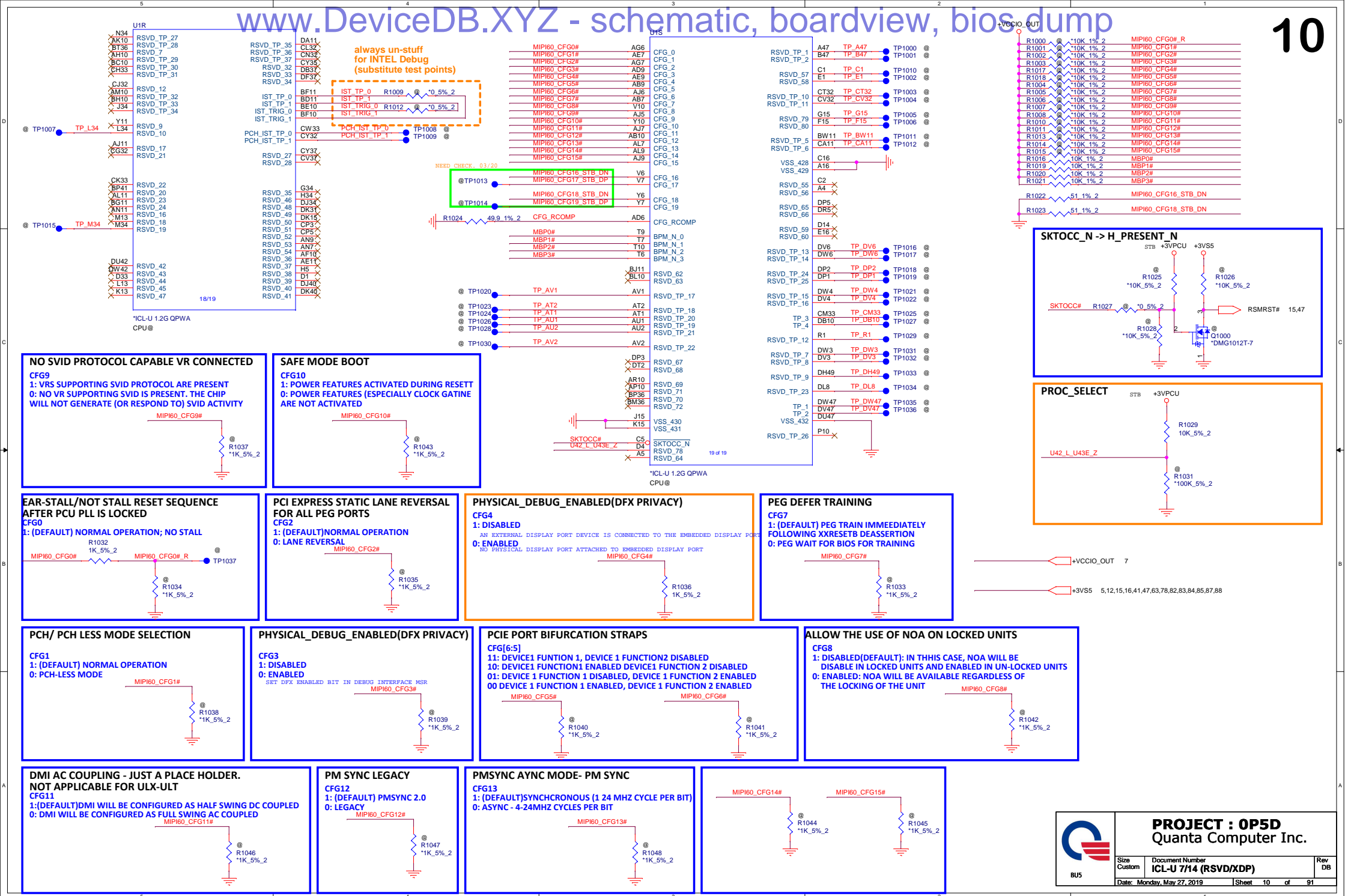




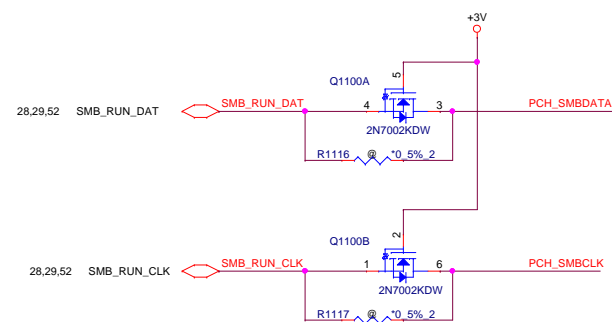








### Touch Pad



*For DDR add*

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SMB\_RUN\_CLK R1170 4.7K 5% 2

strap pin

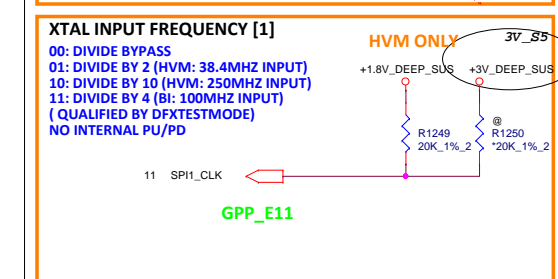
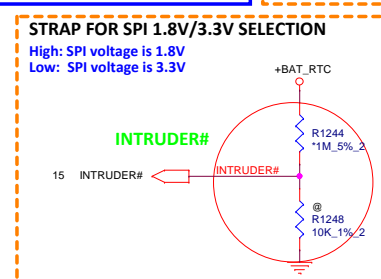
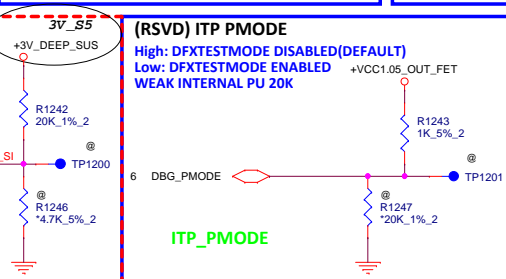
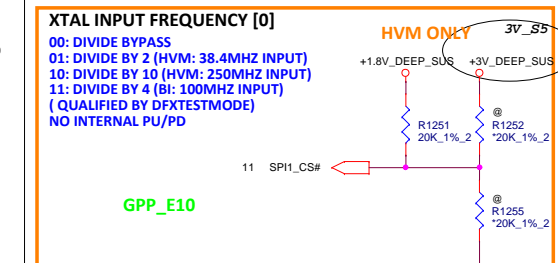
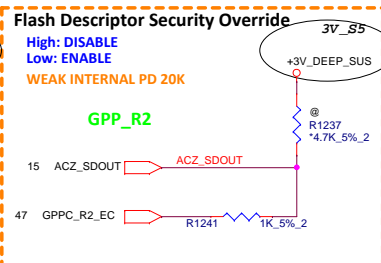
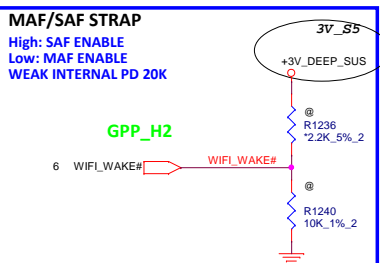
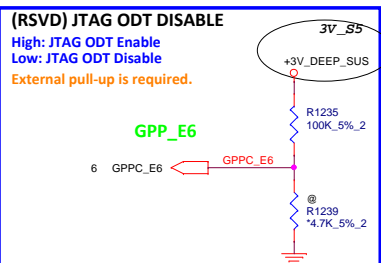
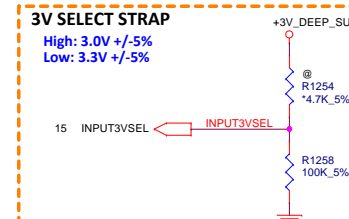
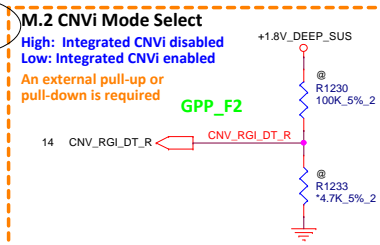
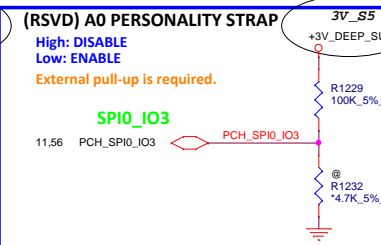
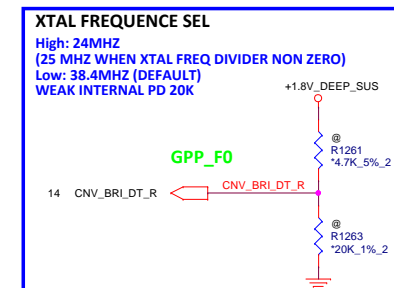
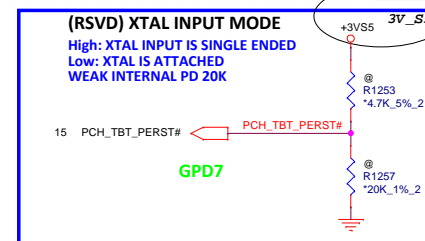
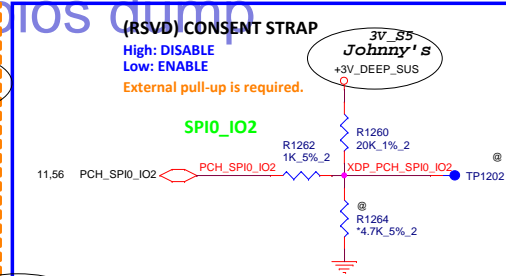
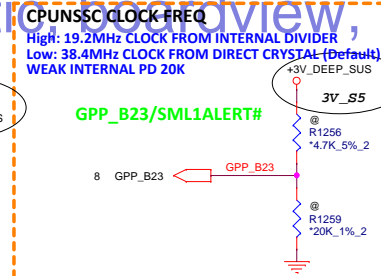
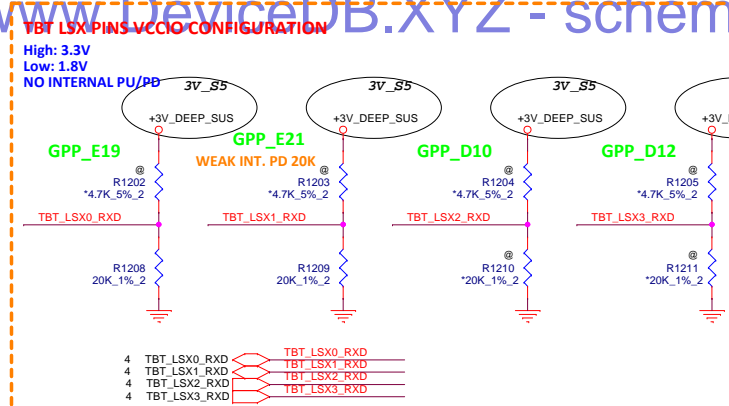
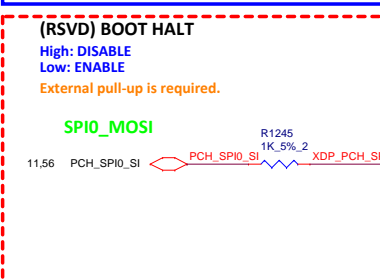
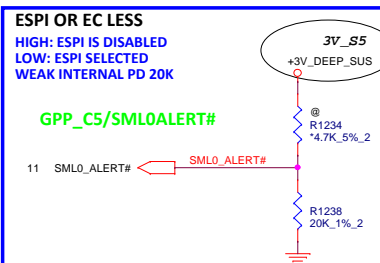
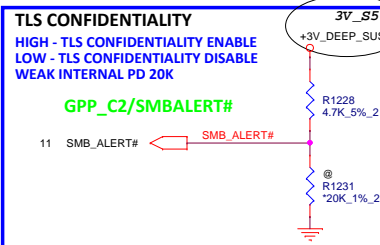
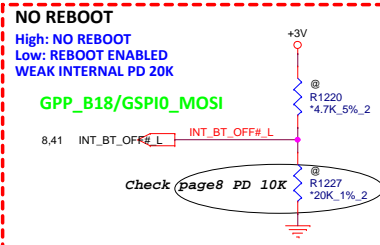
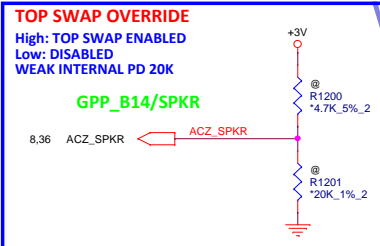


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 +3VS5 5,10,12,15,16,41,47,63,78,82,83,84,85,87,88



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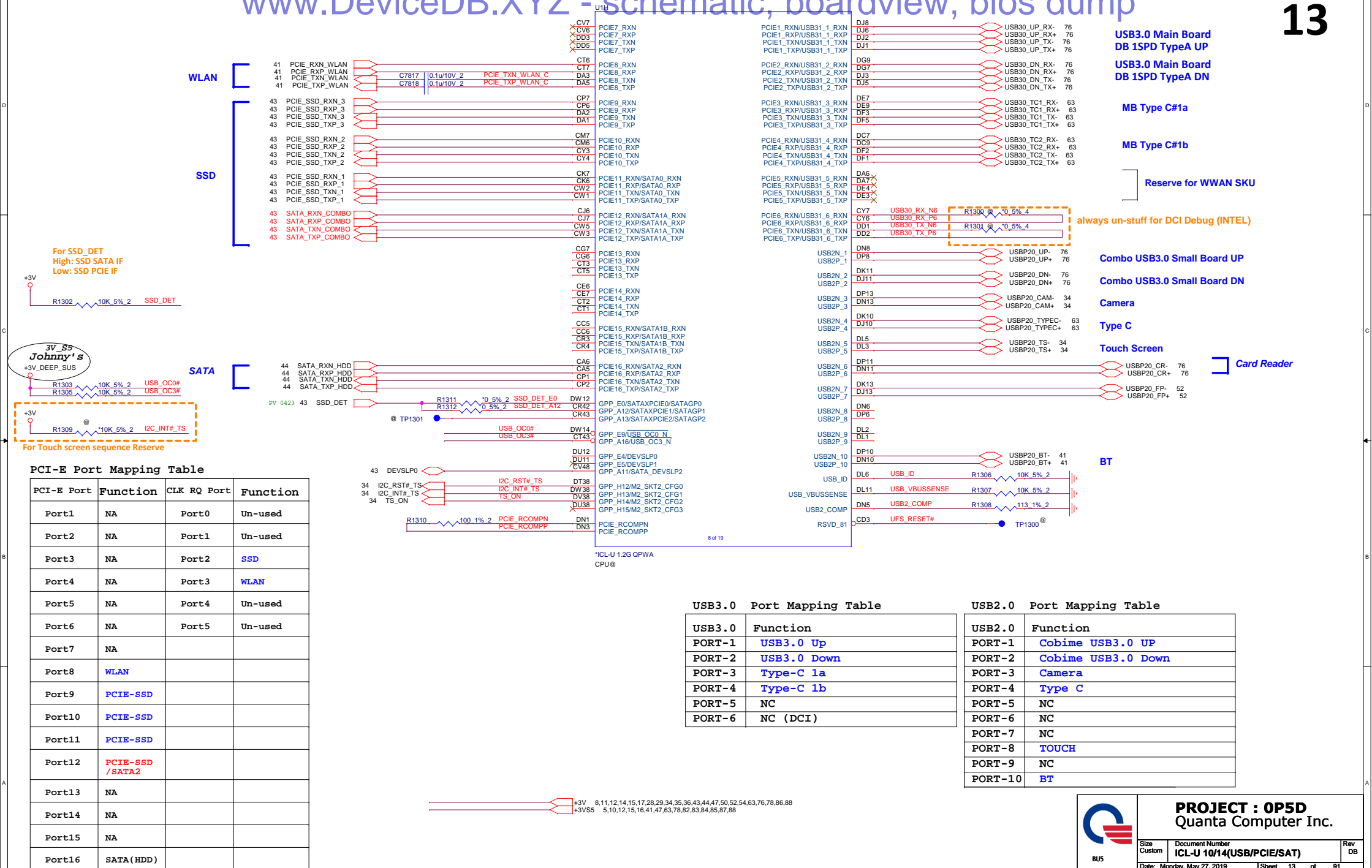


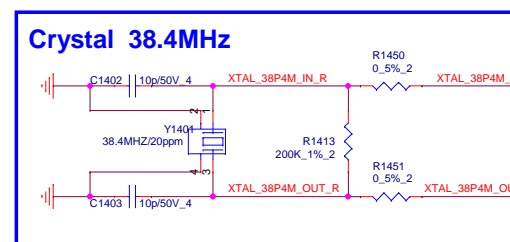
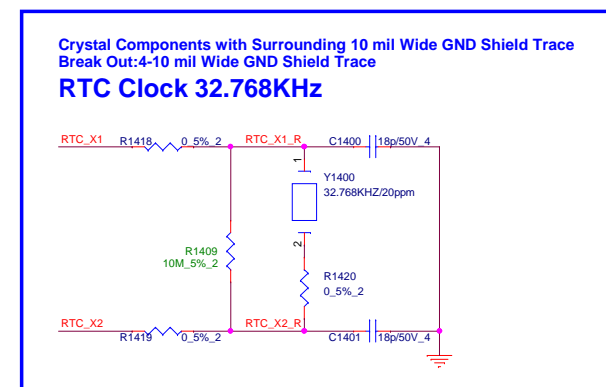
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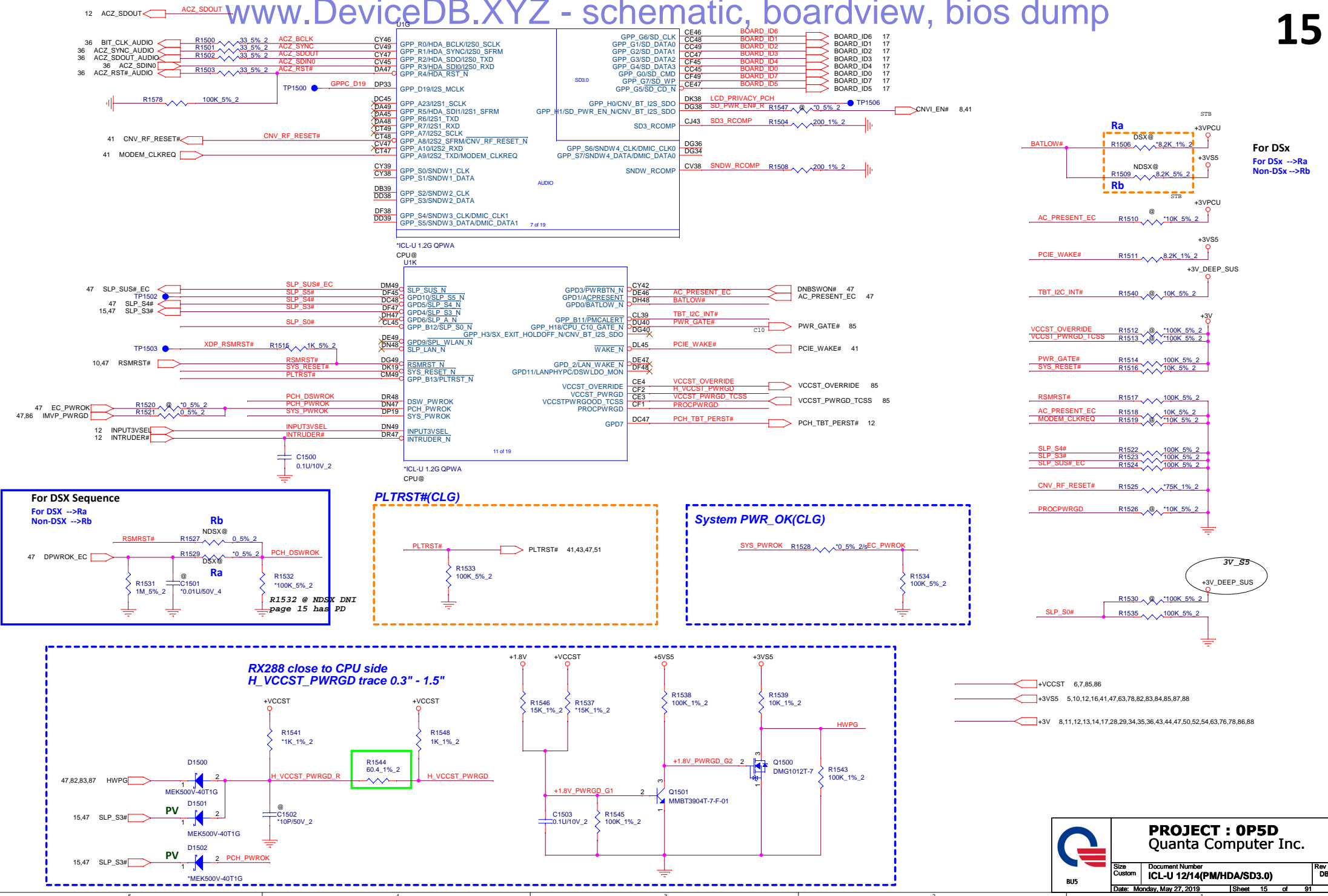
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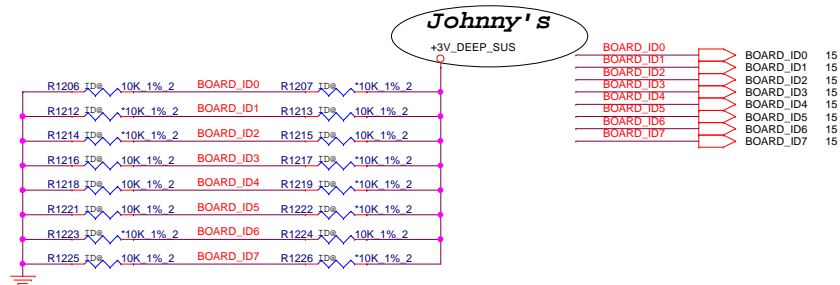
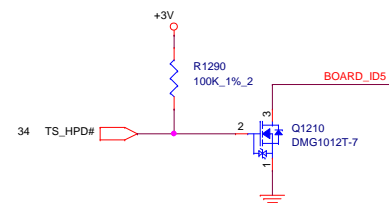












For Touch screen  
Determination

GoT ICE	BOARD_ID 7	BOARD_ID 6	Board ID 5	Board ID 4	BOARD_ID[3:1]	Board ID 0
Model	ID7	ID6	ID5	ID4	ID3 ID2 ID1	ID0
Definition GoT ICE	Default : 0 For U6 CPU(W/TPM) : 1	0: 14" 1: 15"	0: No I2C touch Screen Active By eDP Cable 1: I2C touch	0: T/P ( I2C ) 1: T/P (USB)	000: GoT Mormont 001: GoT Martell 010: GoT Lannister 011: GoT OPP	0: UMA 1: DIS

+3V 8,11,12,13,14,15,28,29,34,35,36,43,44,47,50,52,54,63,76,78,86,88  
+3VS5 5,10,12,15,16,41,47,63,78,82,83,84,85,87,88


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## Functional Strap Definitions


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MEMORY



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MEMORY



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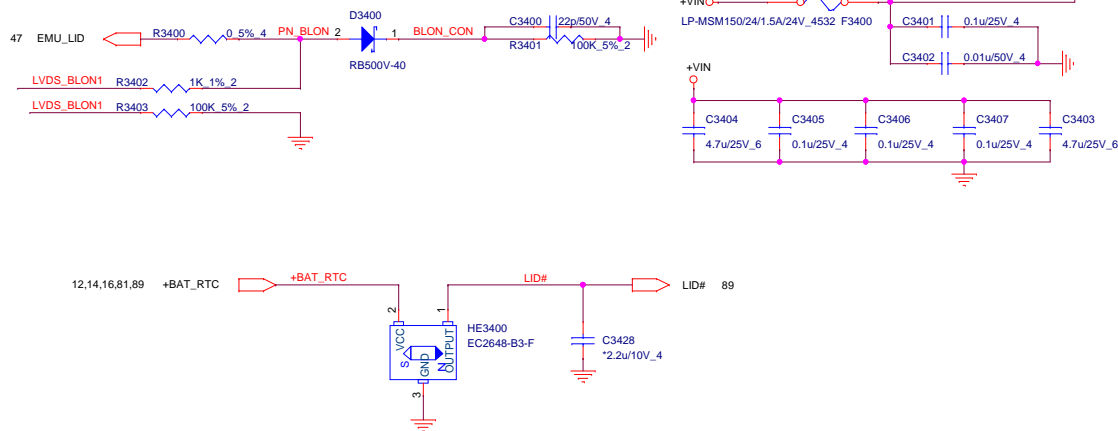


  
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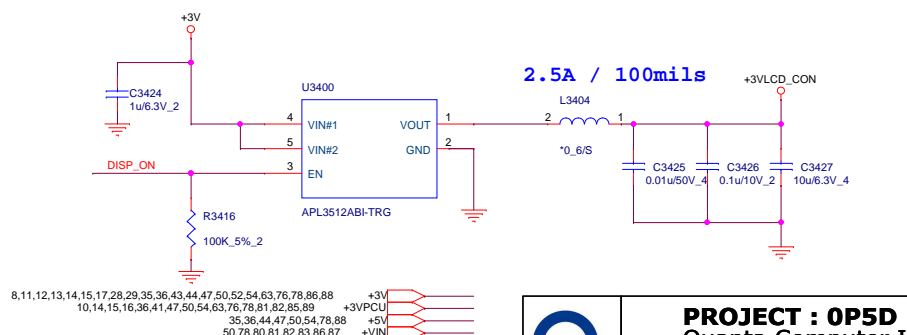
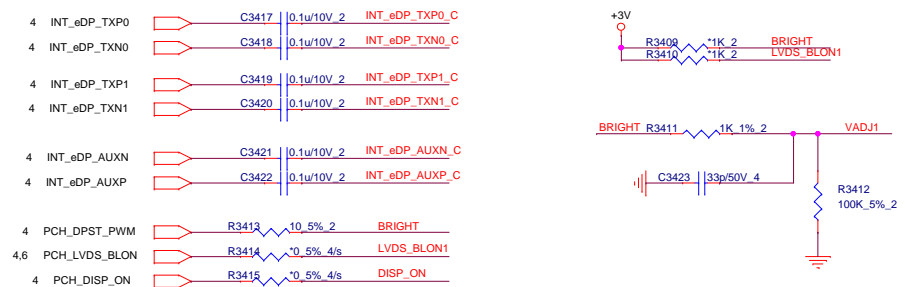
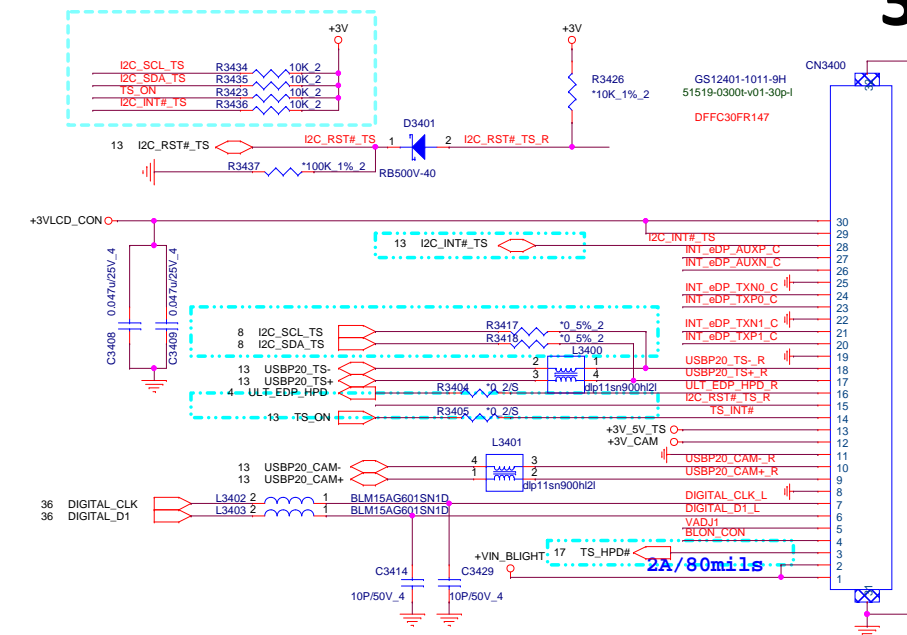
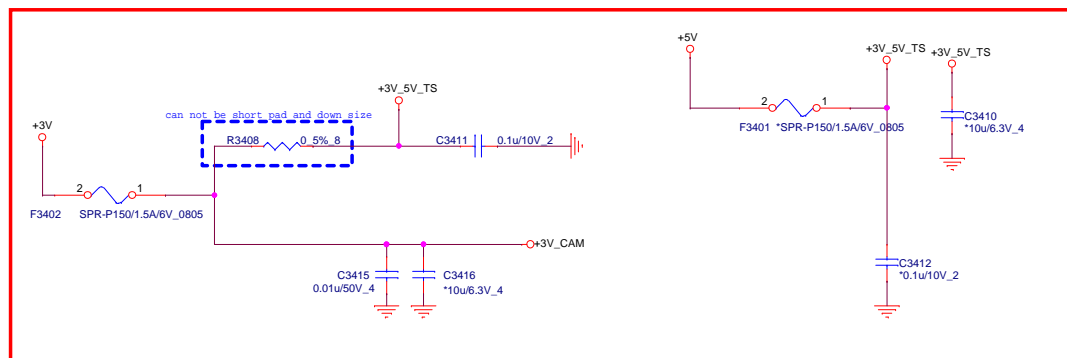
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Size	Document Number	Rev
	I2C Path	1A
Date: Monday, May 27, 2019		Sheet 33 of 90

# LID Switch

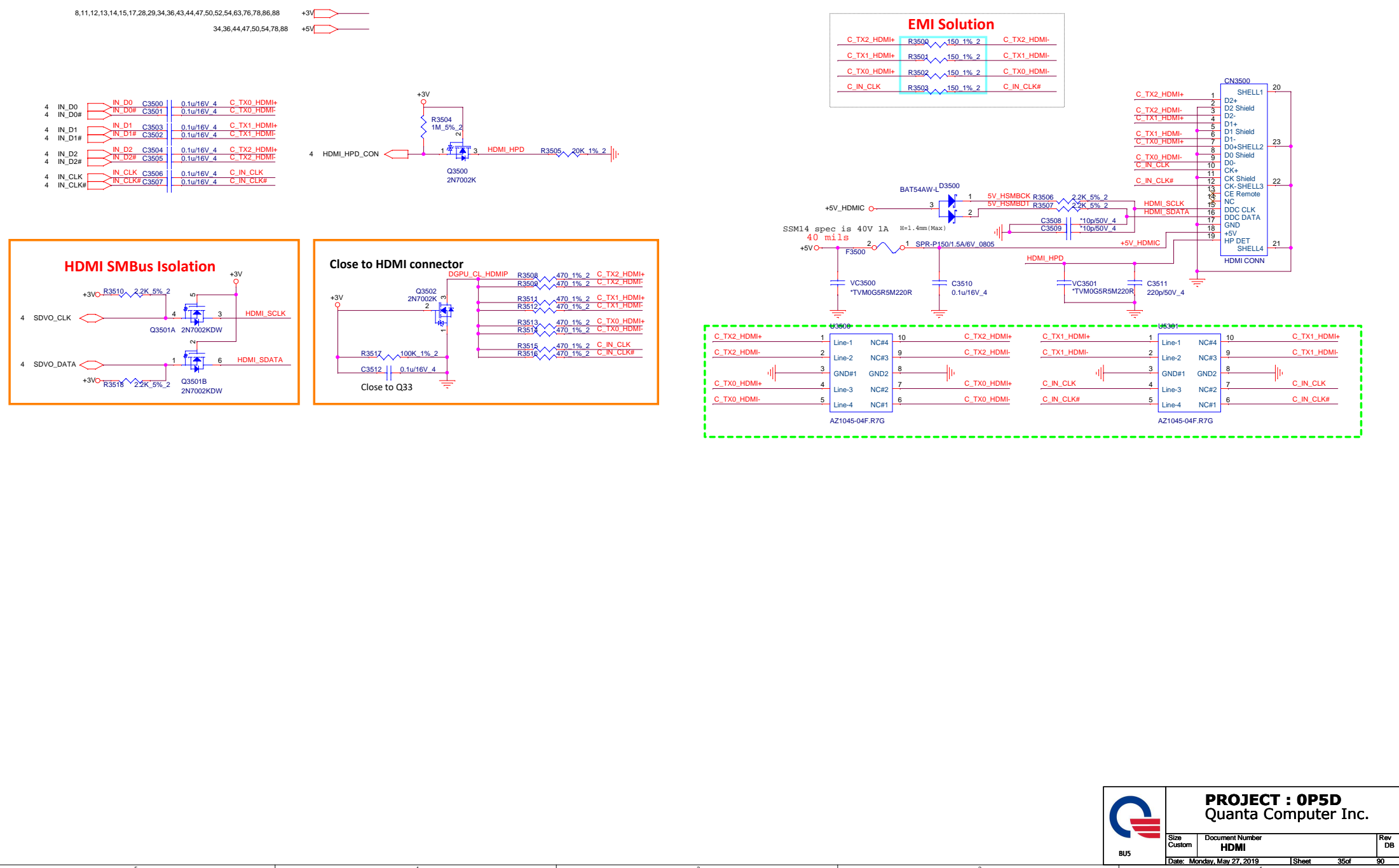


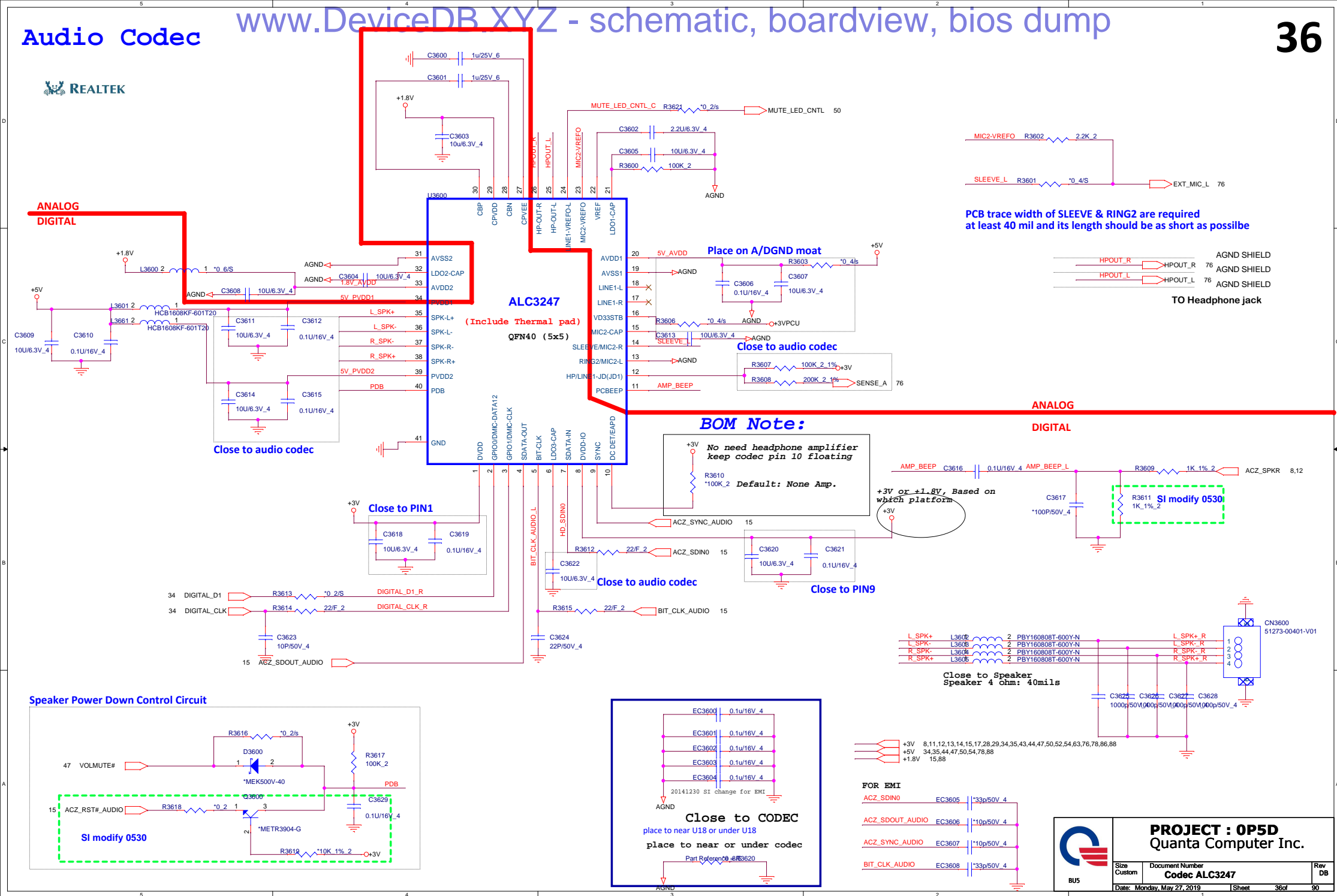
# Touch screen




**PROJECT : 0P5D**  
Quanta Computer Inc.

Size	Document Number	Rev
Custom	eDP/R CAM/LID/CAM/MIC/TS	DB
Date: Monday, May 27, 2019		Sheet 34 of 90








**PROJECT : 0P5D**  
Quanta Computer Inc.

Size Custom	Document Number <b>Audio Jack</b>	Rev DB
Date: Monday, May 27, 2019		Sheet 37 of 90

AUDIO




BU5

**PROJECT : 0P5D**  
Quanta Computer Inc.

Size Custom	Document Number <b>Audio</b>	Rev DB
Date: Monday, May 27, 2019		Sheet 38 of 90


AUDIO



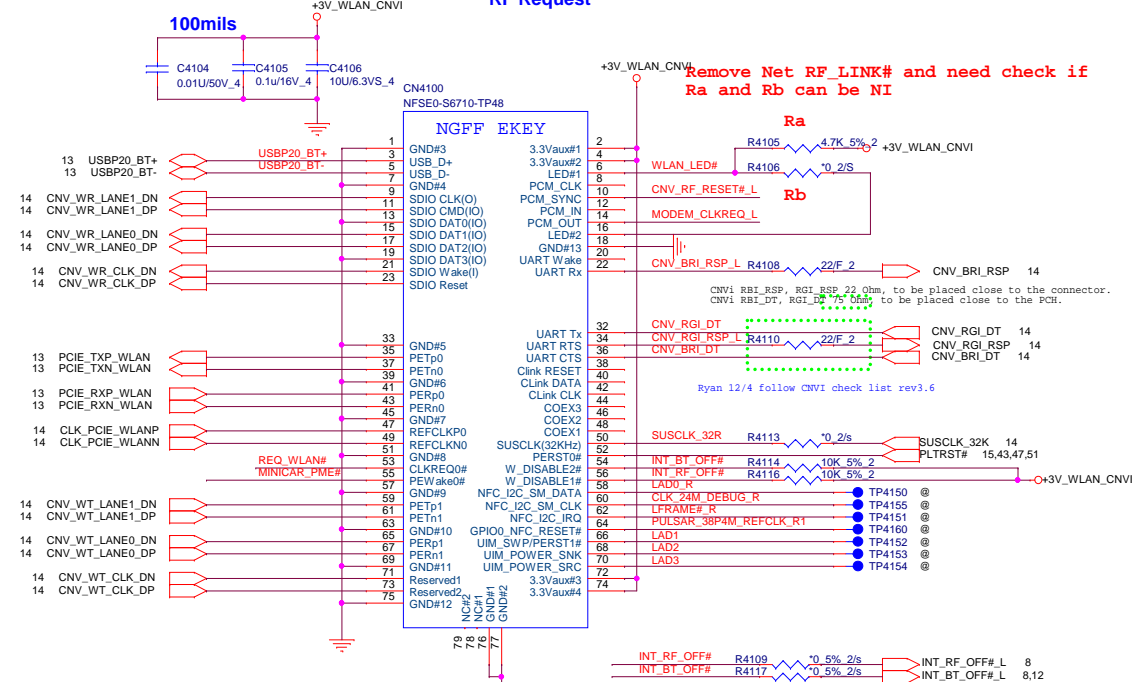
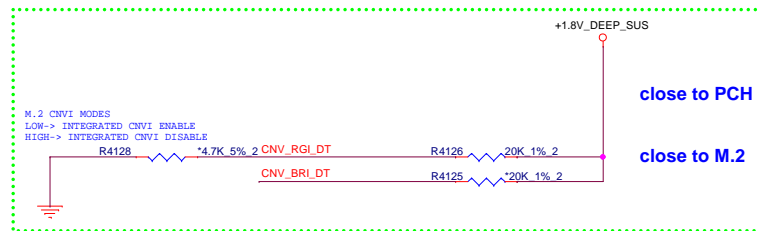
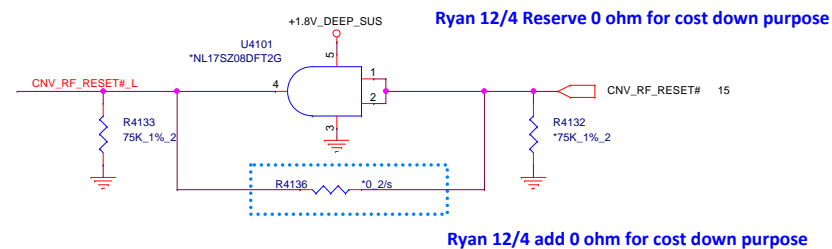
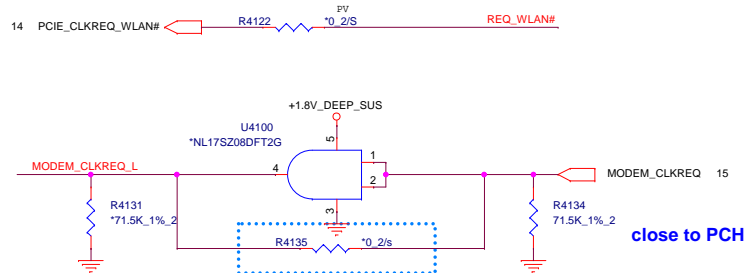
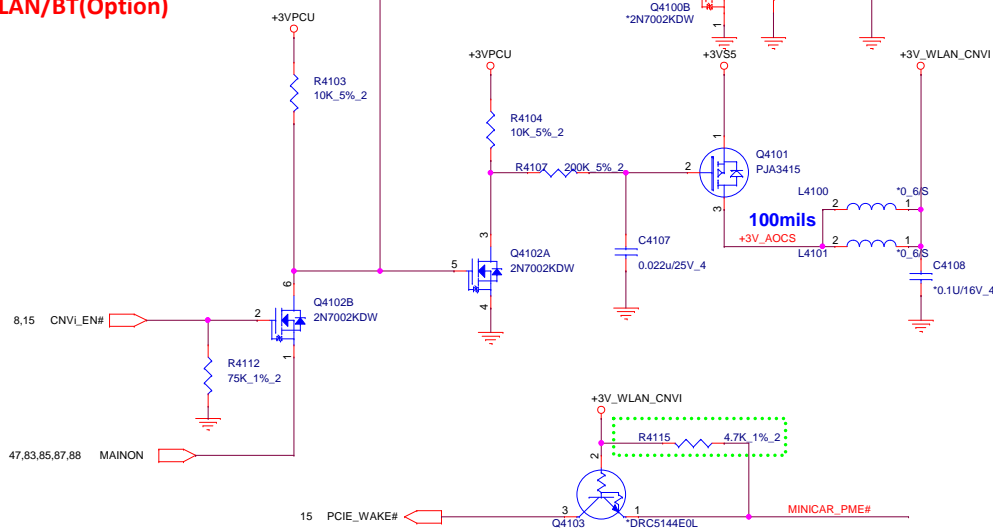
BU5


**PROJECT : 0P5D**  
Quanta Computer Inc.


Size Custom	Document Number <b>Audio</b>	Rev DB
Date: Monday, May 27, 2019		Sheet 39 of 90

 BU5	<b>PROJECT : 0P5D</b> Quanta Computer Inc.		
	Size Custom	Document Number <b>LAN RTL8111HSH</b>	Rev DB
	Date: Monday, May 27, 2019		Sheet 40 of 90



Mini Card  
WLAN/BT(Optional)

	<b>PROJECT : 0P5D</b> Quanta Computer Inc.		
	Size Custom	Document Number <b>WLAN(NGFF)</b>	Rev DB
BU5	Date: Monday, May 27, 2019	Sheet 41 of 90	

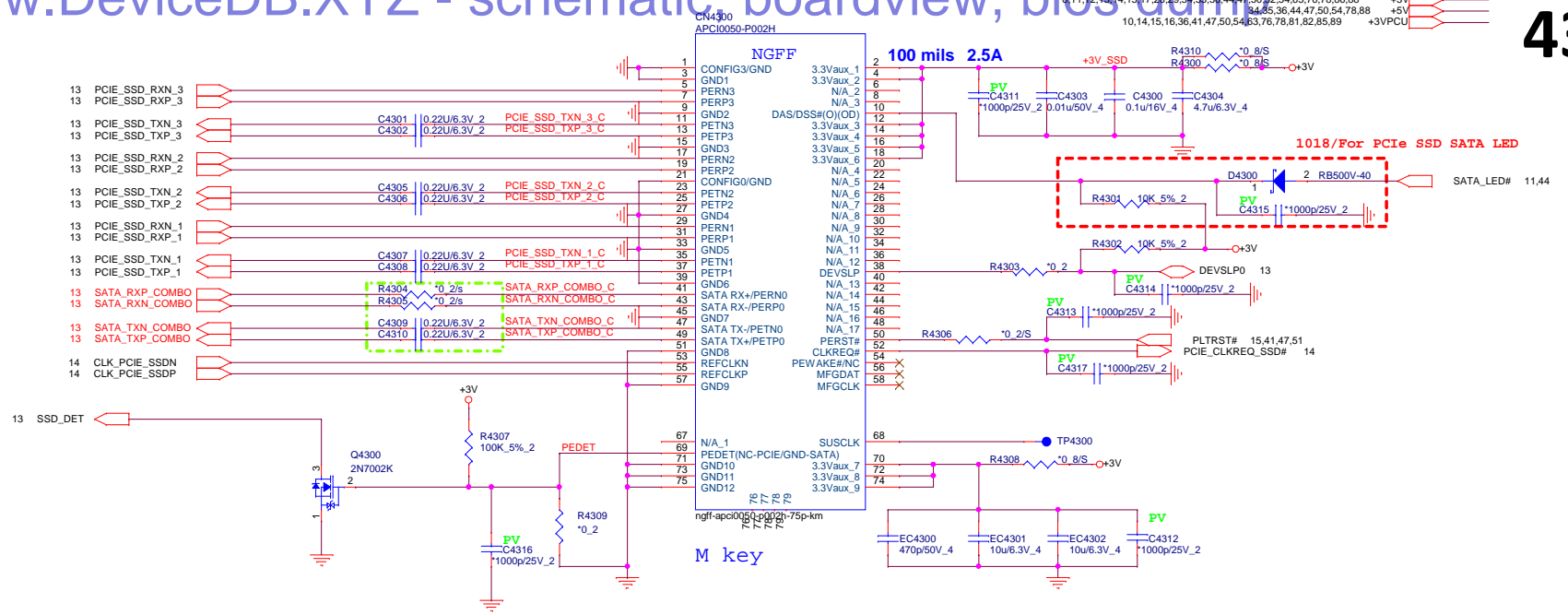



BU5

**PROJECT : 0P5D**  
Quanta Computer Inc.

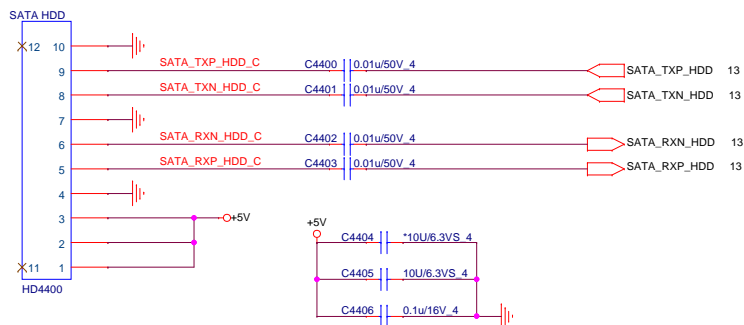
Size Custom	Document Number <b>WWAN</b>	Rev DB
Date: Monday, May 27, 2019		Sheet 42 of 90

# SATA SSD

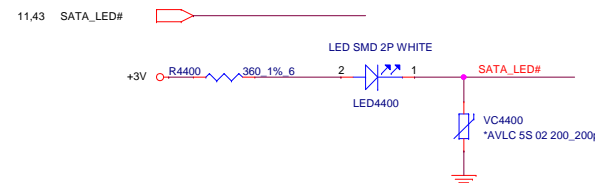



	<b>PROJECT : 0P5D</b>		
	Quanta Computer Inc.		
	Size Custom	Document Number <b>SSD(NGFF)</b>	Rev DB
	Date: Monday, May 27, 2019	Sheet 43 of	90

## SATA HDD & LED




## SATA LED





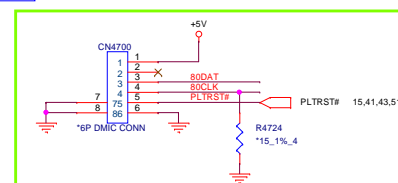
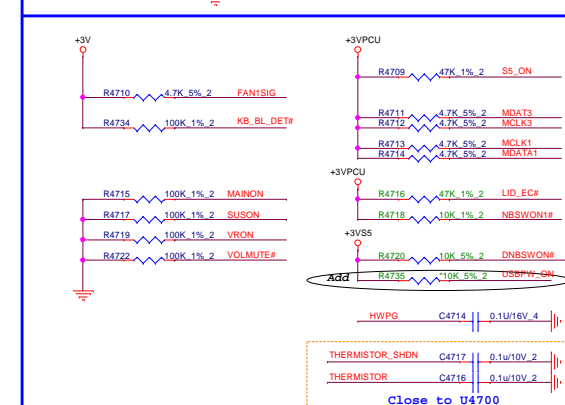
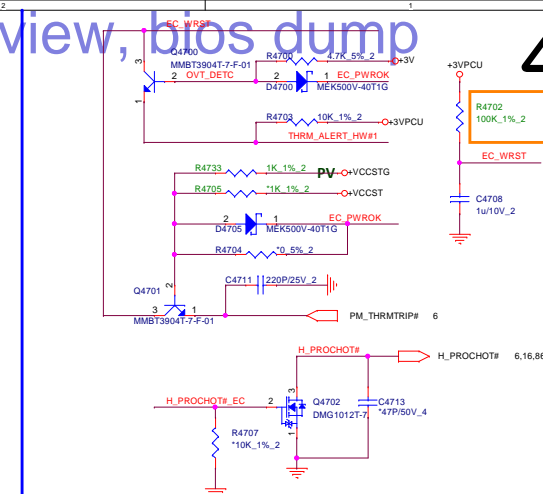
**PROJECT : 0P5D**  
Quanta Computer Inc.

Size Custom	Document Number <b>EMMC</b>	Rev DB
Date: Monday, May 27, 2019		Sheet 45 of 90



**PROJECT : 0P5D**  
Quanta Computer Inc.

Size Custom	Document Number <b>CAMERA</b>	Rev DB
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Adapter select for EC

Ra Rb

+3VPCU R4727 \*10K 5% ADAPTER\_SEL\_EC R4728 10K 5% 2

	Ra	Rb	ADAPTER_SEL_EC	BOM
200W	10K(CS31002FB26)	100K (CS41002FB28)	3V	
150W	10K(CS31002FB26)	100K (CS41002FB28)	3V	
120W	10K(CS31002FB26)	21.5K(CS32152FB09)	2.25V	MAXQ DIS
90W	10K(CS31002FB26)	8.25K(CS28252FB15)	1.5V	MAXQ DIS
65W	10K(CS31002FB26)	2.94K(CS22942FB01)	0.75V	DIS
45W	NC	10K(CS31002JB28)	0V	UMA




BU5

**PROJECT : 0P5D**  
Quanta Computer Inc.

Size Custom	Document Number <b>EC1</b>	Rev DB
Date: Monday, May 27, 2019		Sheet 48 of 90



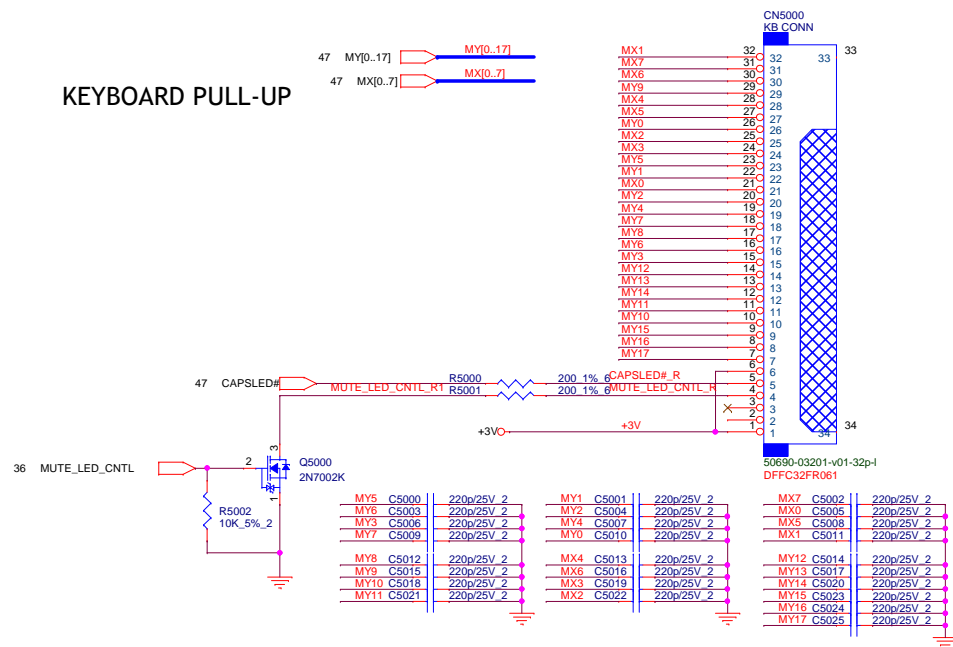


BU5

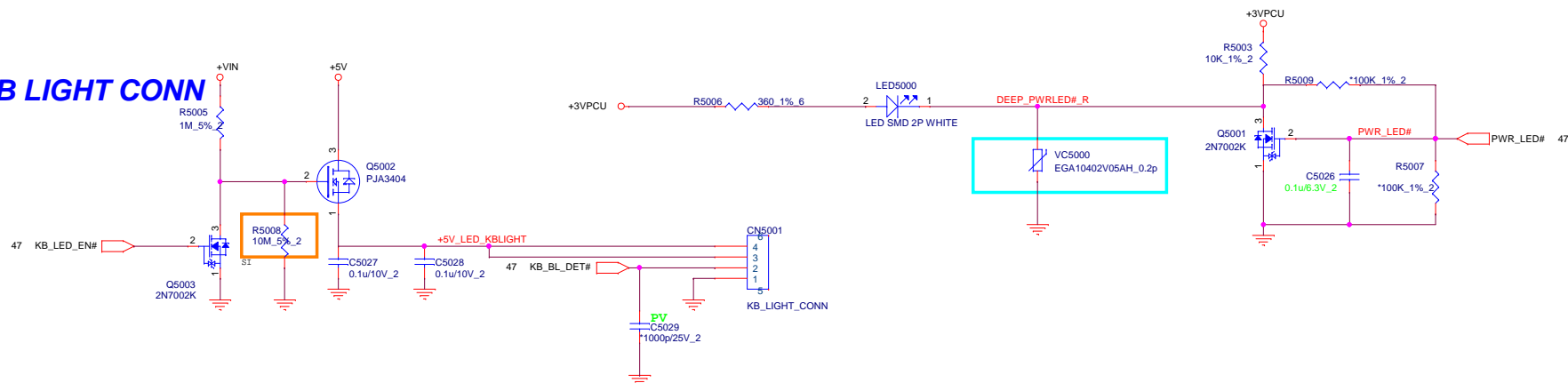
**PROJECT : 0P5D**  
Quanta Computer Inc.

Size Custom	Document Number <b>EC2</b>	Rev DB
Date: Monday, May 27, 2019		Sheet 49 of 90

## KEYBOARD PULL-UP



## KB LIGHT CONN

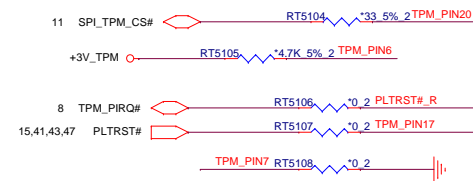
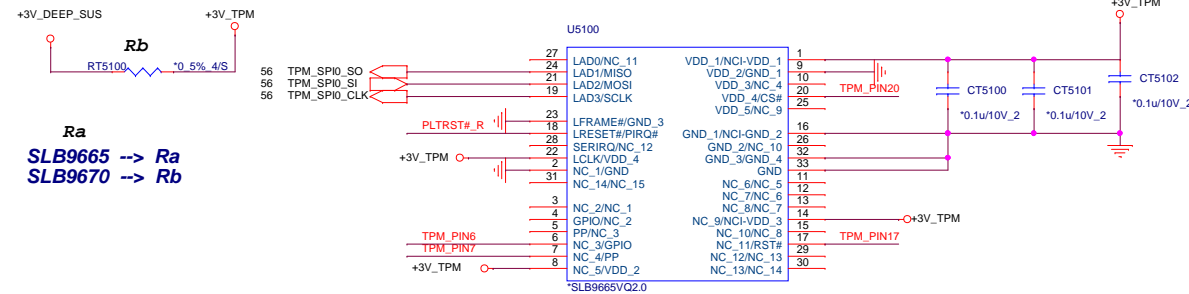


5,10,12,15,16,41,47,63,78,82,83,84,85,87,88 +3VS5  
8,11,12,13,14,15,17,28,29,34,35,36,43,44,47,52,54,63,76,78,86,88 +3V  
15,63,76,78,82,83,85,86,87,88 +5VS5  
63,64 +TYPEC\_VBUS

**PROJECT : 0P5D**  
**Quanta Computer Inc.**

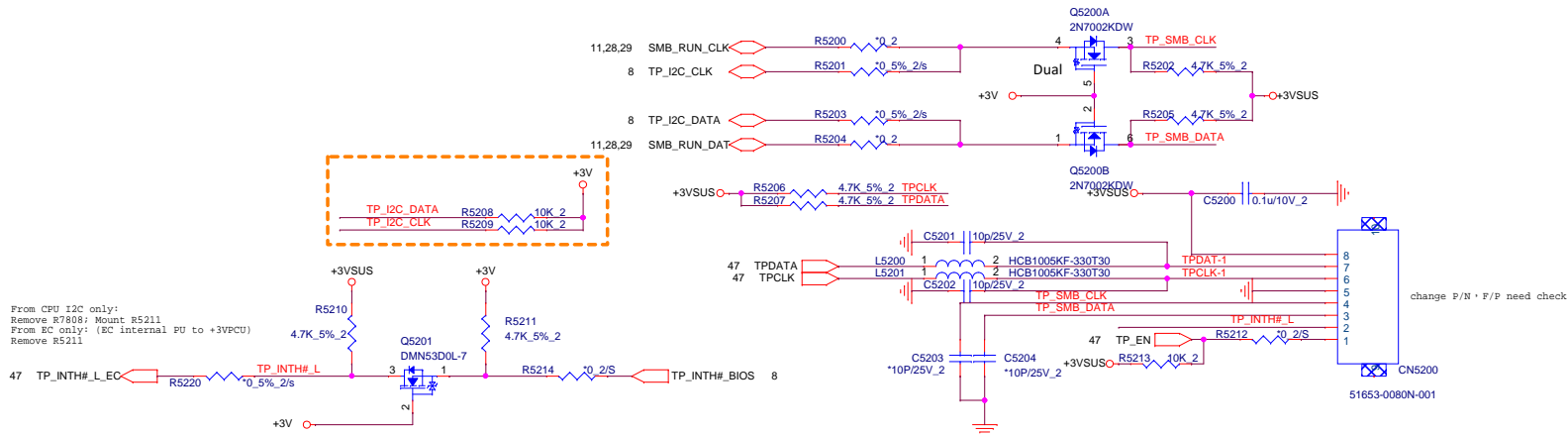
Size Custom	Document Number	Rev DB
KB/KB LIGHT		
Sheet	50 of	90

FW 7.83 PN:AL009670037

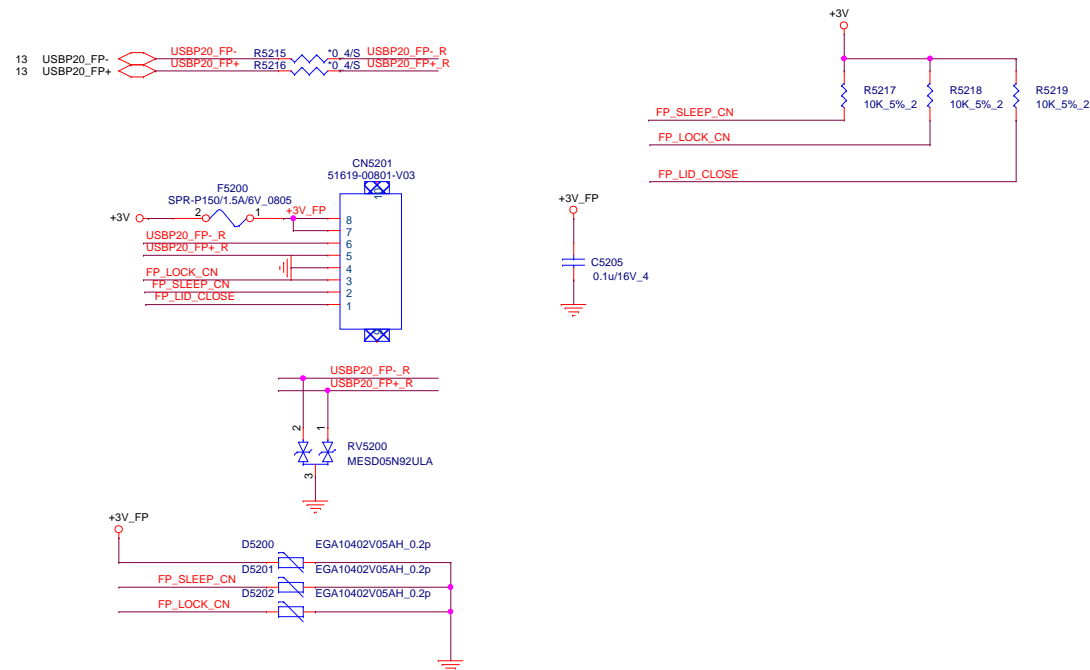



## For 9670 stuff


## Touch Pad



## Finger print



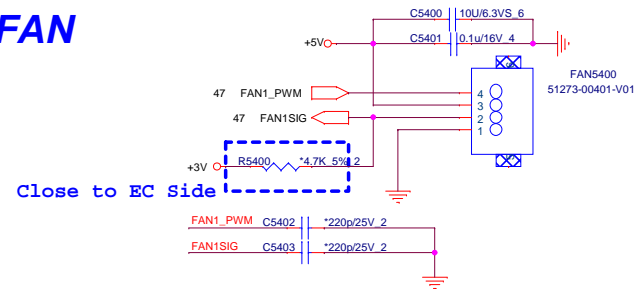
	<b>PROJECT : 0P5D</b>		
	Quanta Computer Inc.		
	Size Custom	Document Number <b>Touch pad/Finger Print</b>	Rev DB
	Date: Monday, May 27, 2019	Sheet 52 of 90	



**PROJECT : 0P5D**  
Quanta Computer Inc.

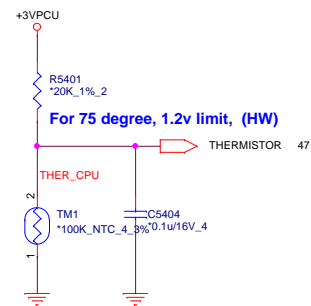
Size Custom	Document Number <b>Sensor &lt;G-Sensor&gt;</b>	Rev DB
Date: Monday, May 27, 2019		Sheet 53 of 90

## FAN

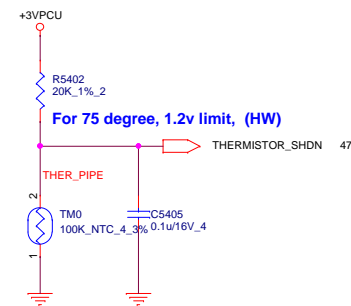


## IO Thrm Protect


### For PIPE USE



### For CPU USE



CardReader



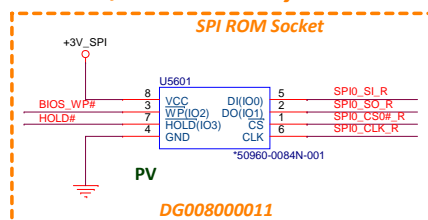
**PROJECT : 0P5D**  
Quanta Computer Inc.

Size Custom	Document Number <b>CR</b>	Rev DB
Date: Monday, May 27, 2019		Sheet 55 of 90

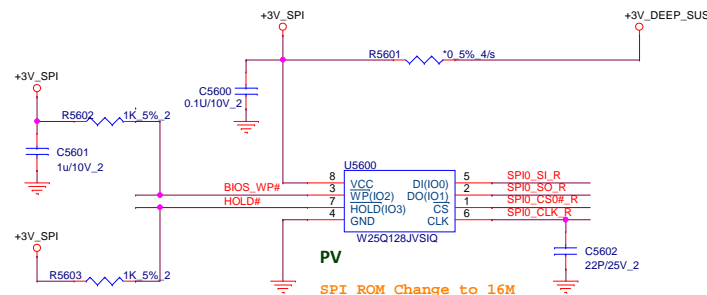
## PCH SPI ROM(CLG)

Vender	Size	P/N
	16MB	
	16MB	
GigaDevice	16MB	AKE2EZNO0Q00 (GD25B64CSIGR)
Adesto	16MB	AKE3GZN0S01 (AT25QF641)
Socket		DFHS08FS023

## U5600,U5601 co-lay



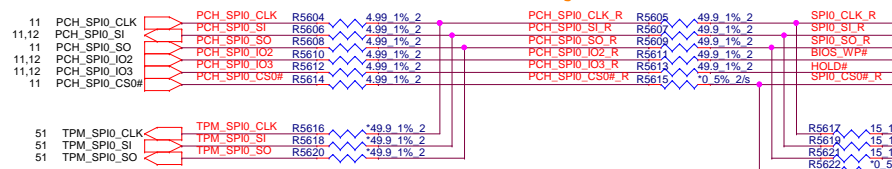
TPX72~TPX77 need place to All BOT or All TOP



**PCH Side**

## TPM Side

Branching 100mil

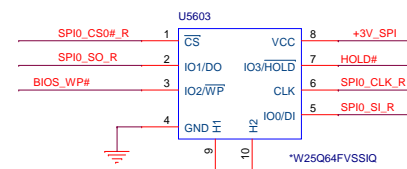
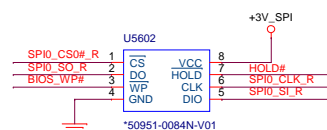


## ROM

**EC Side**

## U5600,U5601,U5602co-lay


Without Boss /SPI ROM Socket  
DG008000012



**PROJECT : 0P5D**  
Quanta Computer Inc.

Size Custom	Document Number <b>Flash ROM (BIOS,EC)</b>	Rev 1A
Date: Monday, May 27, 2019	Sheet 56 of 89	






BU5

**PROJECT : 0P5D**  
Quanta Computer Inc.


Size Custom	Document Number <b>USB TYPEA</b>	Rev DB
Date: Monday, May 27, 2019		Sheet 57 of 90



BU5

**PROJECT : 0P5D**  
Quanta Computer Inc.


Size Custom	Document Number <b>TBT1</b>	Rev DB
Date: Monday, May 27, 2019		Sheet 58 of 90




BU5

**PROJECT : 0P5D**  
Quanta Computer Inc.

Size Custom	Document Number <b>TBT2</b>	Rev DB
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BU5

<b>PROJECT : 0P5D</b> Quanta Computer Inc.		
Size Custom	Document Number <b>TBT3</b>	Rev DB
Date: Monday, May 27, 2019		Sheet 60 of 90



BU5

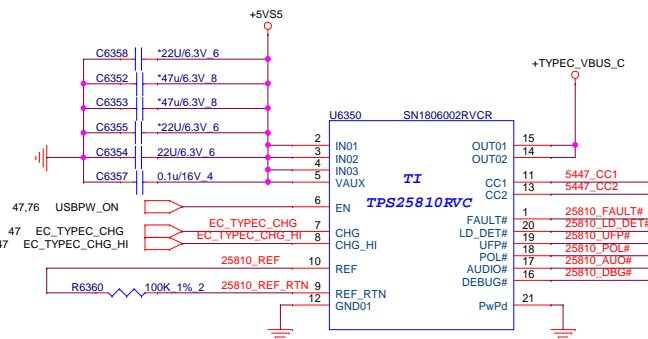
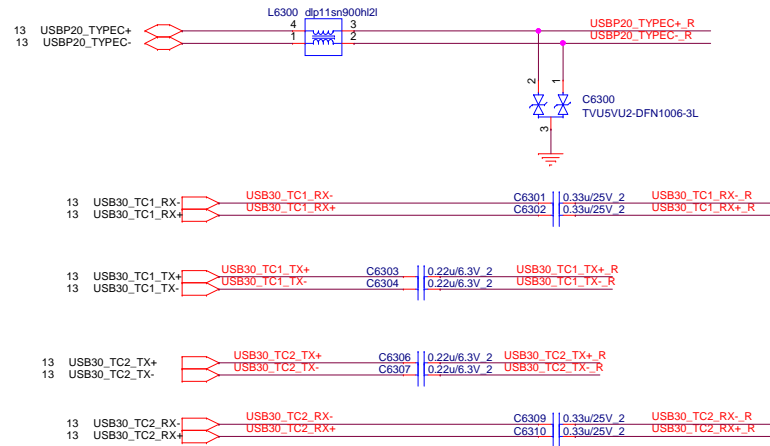
<b>PROJECT : 0P5D</b> Quanta Computer Inc.		
Size Custom	Document Number <b>USB TYPEC PD</b>	Rev DB
Date: Monday, May 27, 2019	Sheet	61 of 90



**PROJECT : 0P5D**  
Quanta Computer Inc.

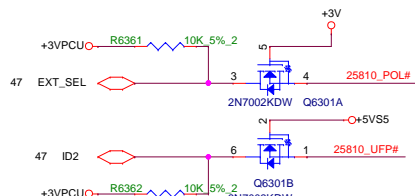
Size Custom	Document Number <b>USB TYPEC PD1</b>	Rev DB
Date: Monday, May 27, 2019		Sheet 62 of 90

## USB2.0

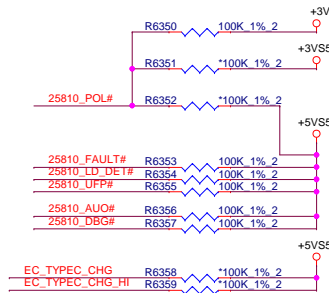
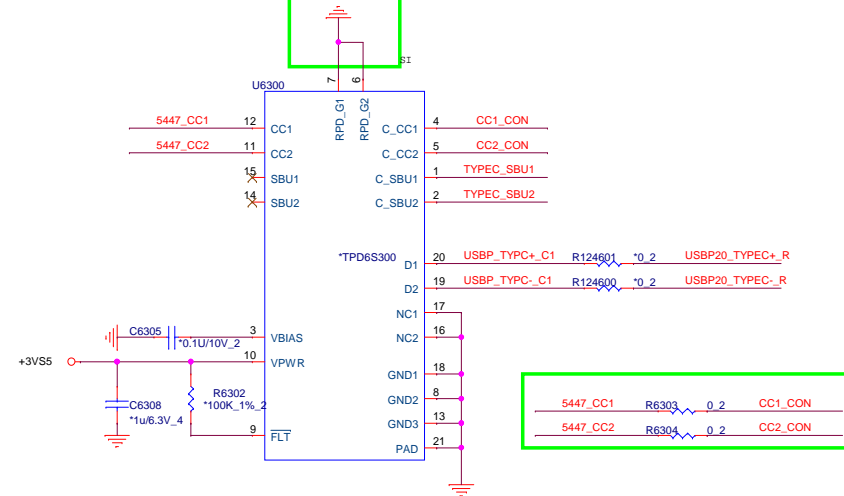


64 25810\_UFP#

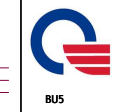
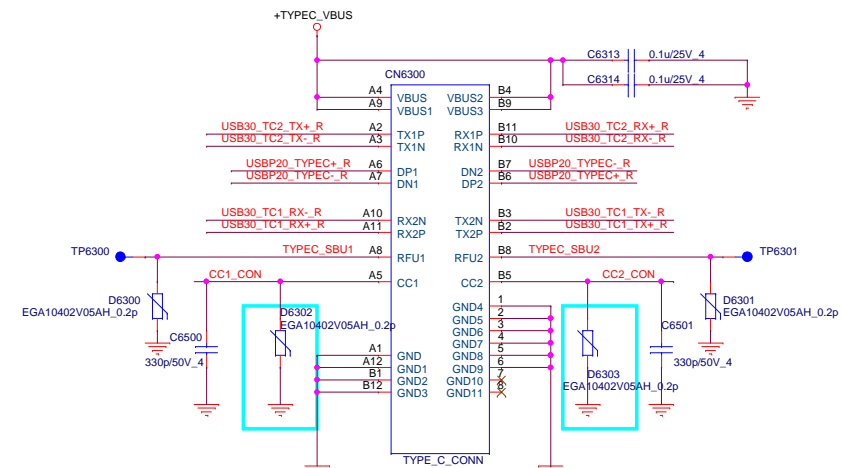
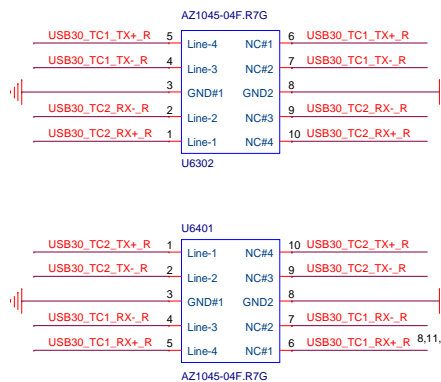
## Add Type-C A/B side recognition



## CC/SBU Overvoltage protection

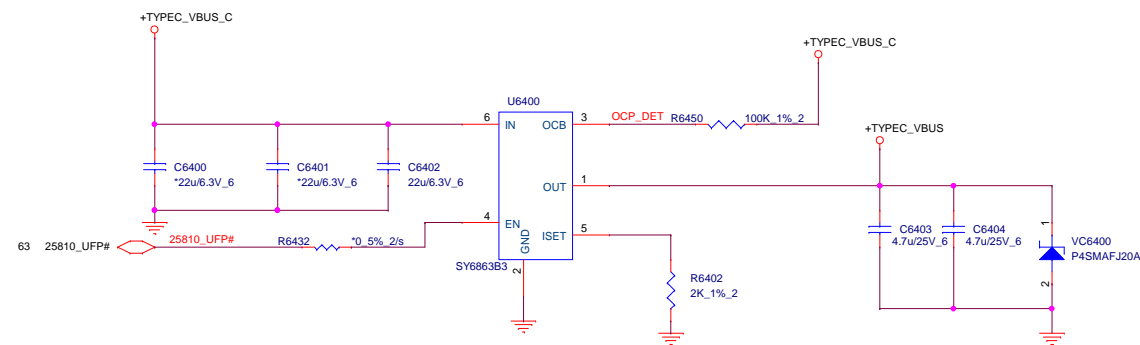



## TYPE C USB3.0 ESD




**PROJECT : 0P5D**  
Quanta Computer Inc.

Size	Document Number	Rev
Custom	TYPE-C TPS25810	DB
Date: Monday, May 27, 2019	Sheet 63 of 90	




 BU5	<b>PROJECT : 0P5D</b> Quanta Computer Inc.		
	Size Custom	Document Number <b>TYPE-C Load Switch</b>	Rev DB
	Date: Monday, May 27, 2019	Sheet	64 of 90






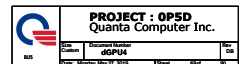
BU5


<b>PROJECT : 0P5D</b> Quanta Computer Inc.		
Size Custom	Document Number <b>USB TYPE-C #3</b>	Rev DB
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 BUS	<b>PROJECT : 0P5D</b> Quanta Computer Inc.		
	Size Custom	Document Number dGPU1	Rev DB
	Date: Monday, May 27, 2019	Sheet 66of	90

 BUS	<b>PROJECT : 0P5D</b> Quanta Computer Inc.		
	Size Custom	Document Number <b>dGPU2</b>	Rev DB
	Date: Monday, May 27, 2019	Sheet 67 of	90





 BUS	<b>PROJECT : 0P5D</b> Quanta Computer Inc.		
	Size Custom	Document Number <b>dGPUS</b>	Rev D6
	Date: Monday, May 27, 2019	Sheet 70 of 90	




PROJECT : **OP5D**  
Quanta Computer Inc.

Doc	Document Number	Rev
Custom	dGPU5	DB
Date: Monday, May 27, 2019		Sheet 71 of 80









**PROJECT : 0P5D**  
Quanta Computer Inc.

Size Custom	Document Number <b>dGPU8</b>	Rev DB
Date: Monday, May 27, 2019		Sheet 73 of 90



**PROJECT : 0P5D**  
Quanta Computer Inc.

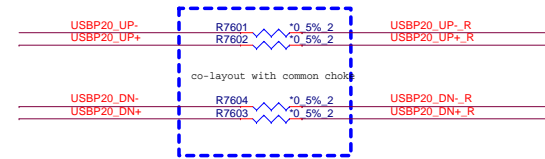
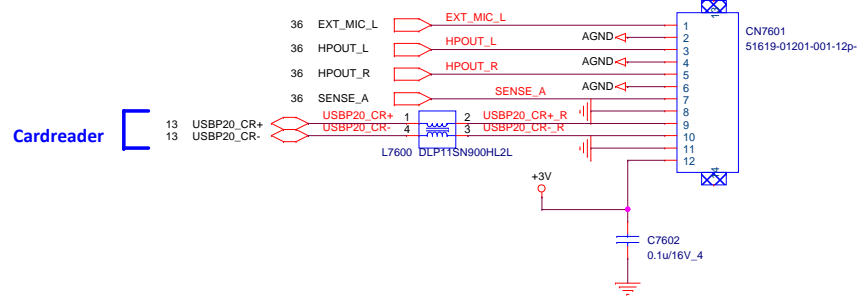
Size Custom	Document Number <b>dGPU9</b>	Rev DB
Date: Monday, May 27, 2019		Sheet 74 of 90



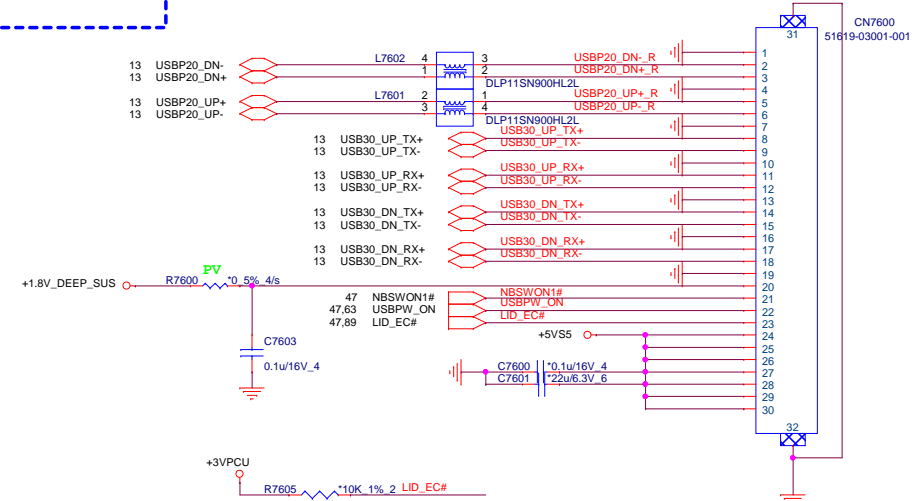
BU5


<b>PROJECT : 0P5D</b> Quanta Computer Inc.		
Size Custom	Document Number <b>empty</b>	Rev DB
Date: Monday, May 27, 2019		Sheet 75 of 90

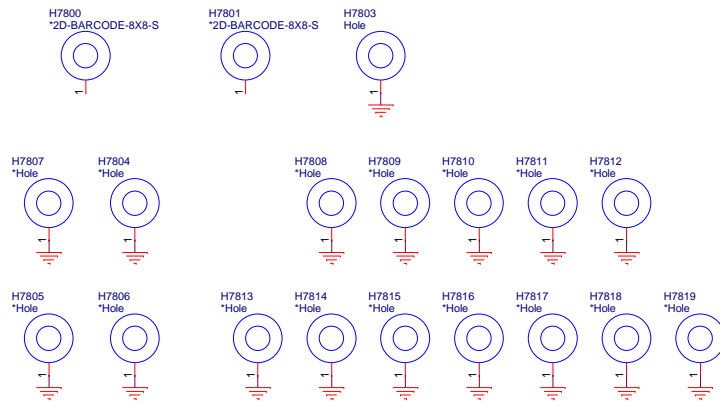
## SD Board



## USB Board



 BU5			<b>PROJECT : 0P5D</b> Quanta Computer Inc.		
Size Custom		Document Number <b>empty</b>			Rev DB
Date: Monday, May 27, 2019		Sheet		77 of	90



51 level BOM option 电阻

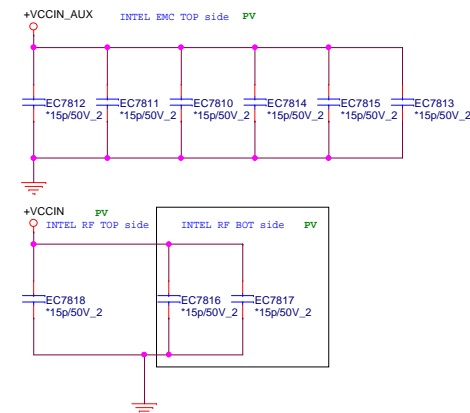
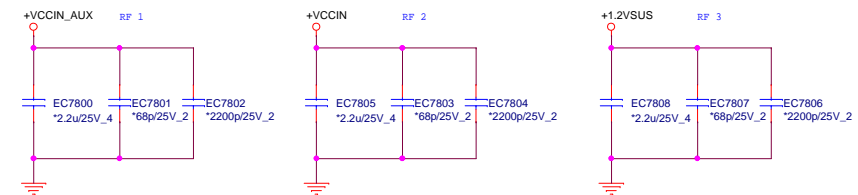
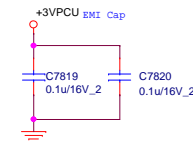
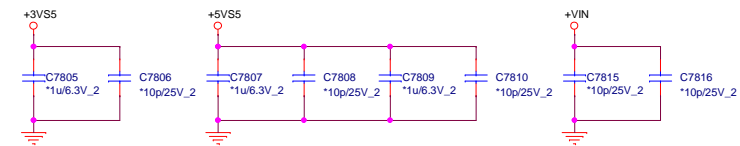
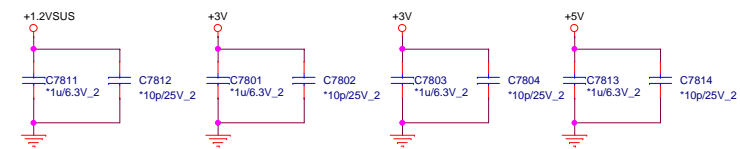
RA stuff TOP


R7802 10K\_5%\_2


RB stuff TOP

R7803 10K\_5%\_2

Johnny suggestion 跨moat cap



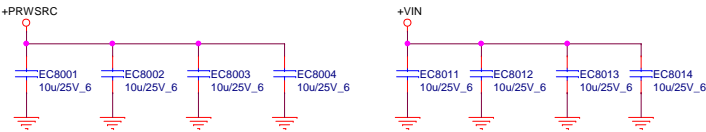
	PROJECT : 0P5D Quanta Computer Inc.		
	Size	Document Number	Rev
	Custom	EMI Cap/RF Cap/HOLE	DB
	Date: Monday, May 27, 2019	Sheet	78of 90




BU5

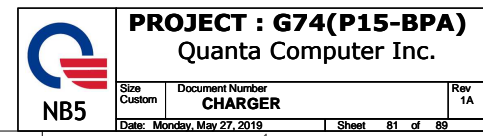
<b>PROJECT : 0P5D</b> Quanta Computer Inc.		
Size Custom	Document Number <b>empty</b>	Rev DB
Date: Monday, May 27, 2019		Sheet 79 of 90

Reserve for EMI function test

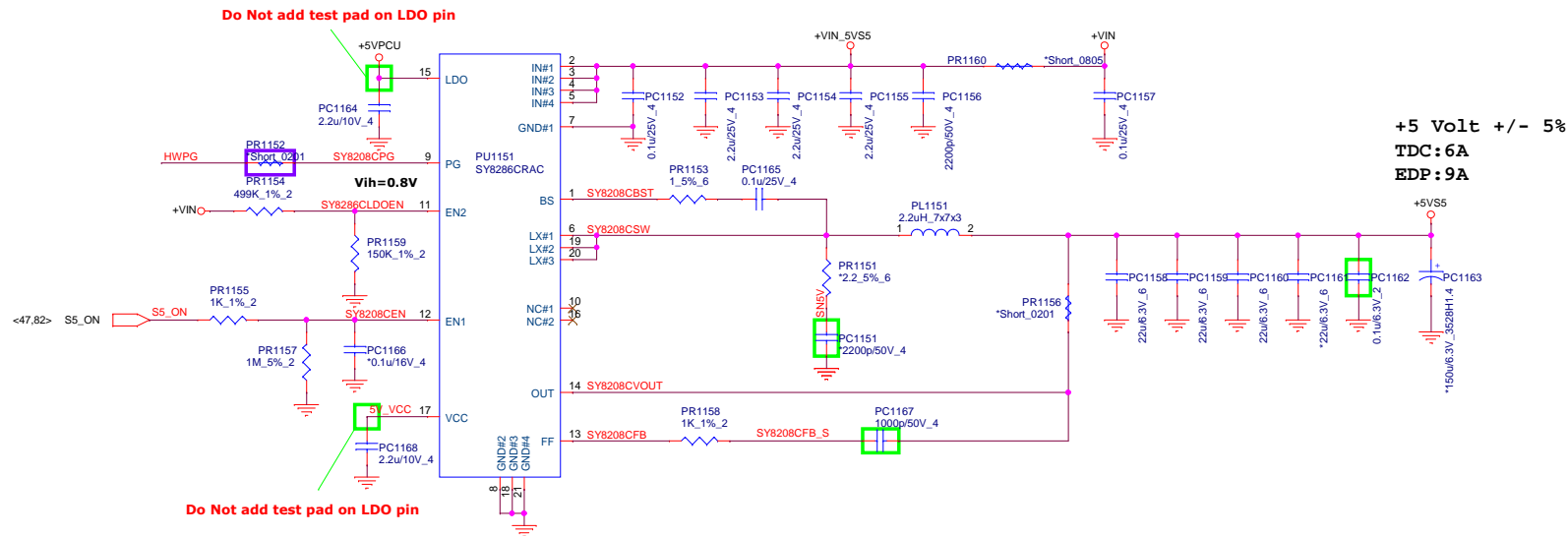
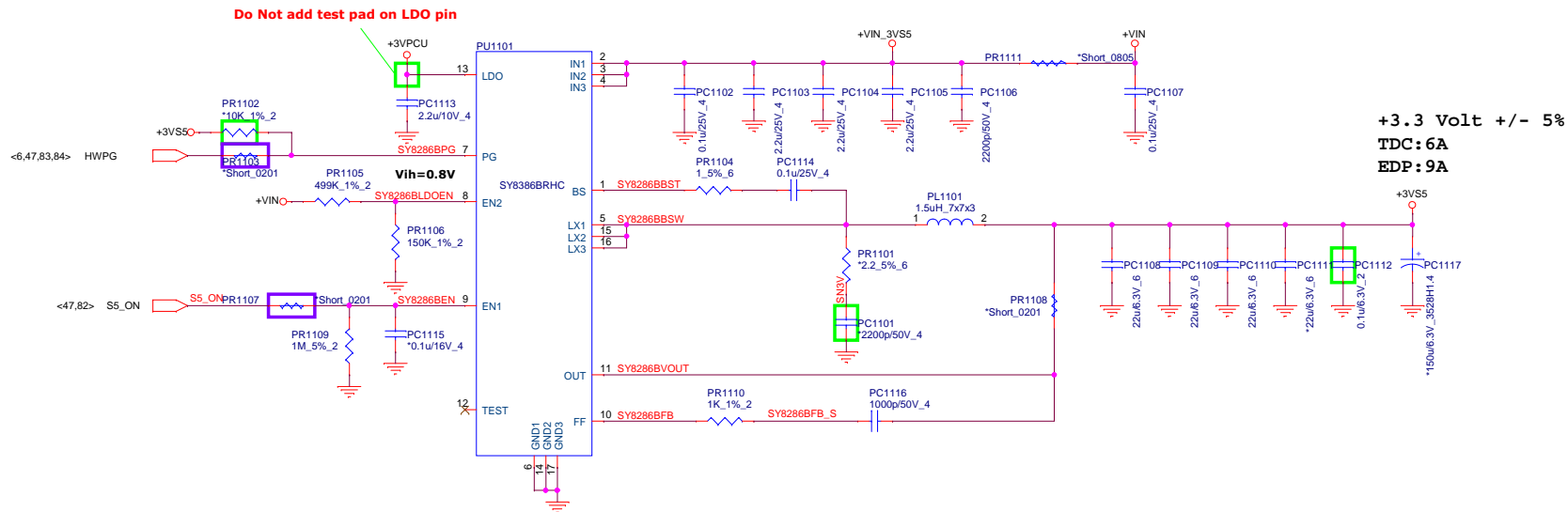


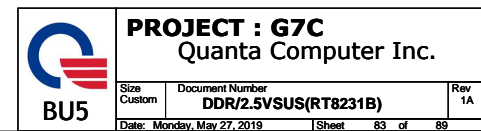
	<b>PROJECT : G7E</b> Quanta Computer Inc.		
	Size Custom	Document Number <b>EMI FOR POWER RESERVE</b>	Rev 1A
	Date: Monday, May 27, 2019   Sheet 80 of 89		

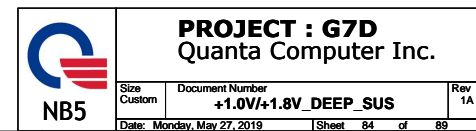




+VIN <34,50,78,80,81,83,84,87,88>  
 +3VS5 <6,12,14,15,17,41,47,63,78,83,84,85,89>  
 +5VS5 <6,63,76,78,83,84,85,86,87,89>  
 +3VPCU <15,36,41,47,50,54,63,76,81,90>  
 +5VPCU <41,81,89>







**Volume Segment**  
**VCCST: 0.65A**  
**<= 65us full load ready**

**C10: turn off VCCPLL\_OC, VCCIO, VCCSTG**

**<= 240us, full load ready**  
**TDC:0.26A**

**fine tune <65usec**

**fine tune <65usec**

**VCCSTG: 0.15A**

**VCCST\_CPU GENERATION**

NB5	<b>PROJECT : G7DC</b> Quanta Computer Inc.	
	Size Custom	Document Number <b>+1.0V/+VCCSTPLL</b>
Date: Monday, May 27, 2019	Sheet 85 of 89	Rev 1A

