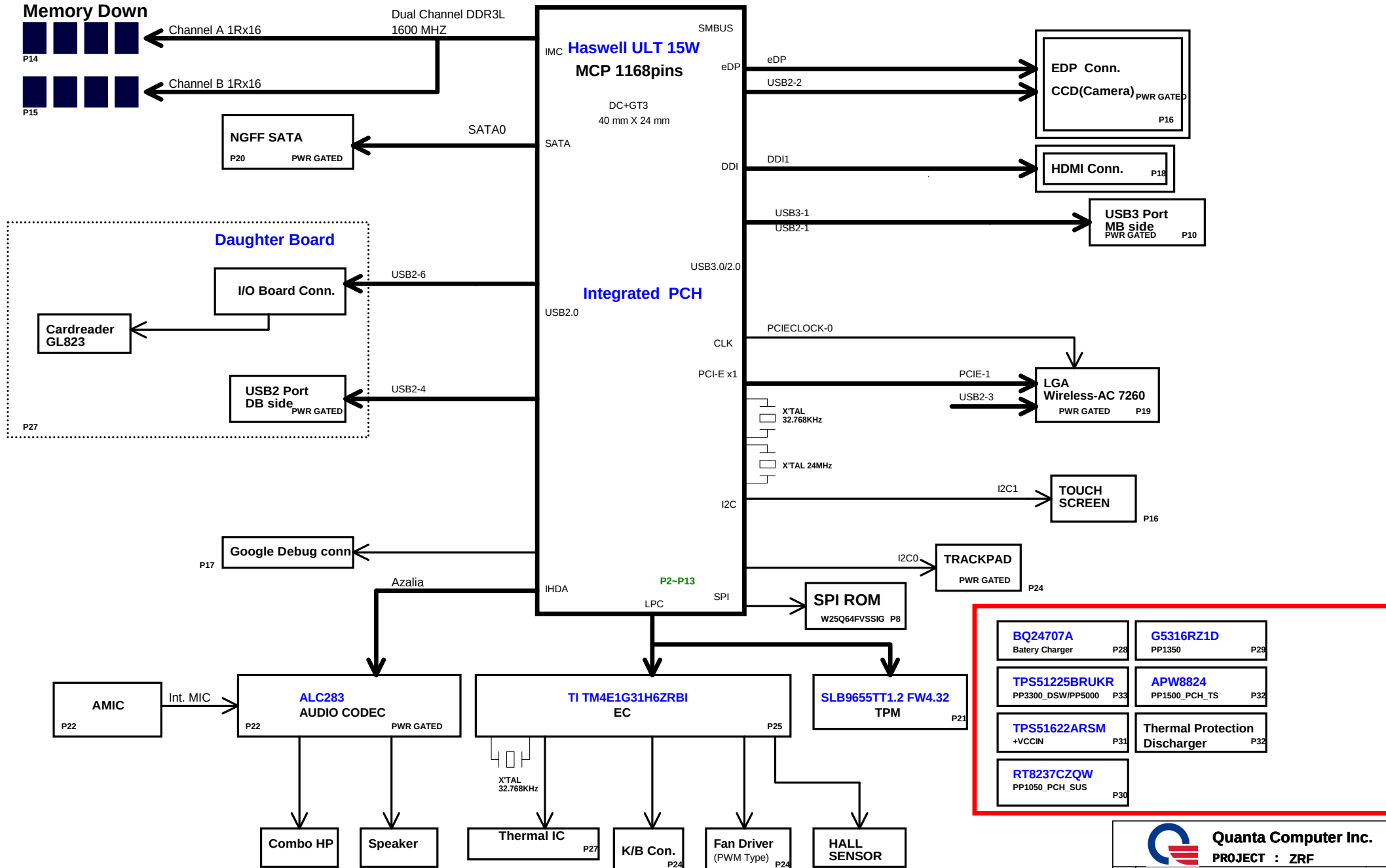


# Melvita (ZRF) SHB ULT SYSTEM BLOCK DIAGRAM

01

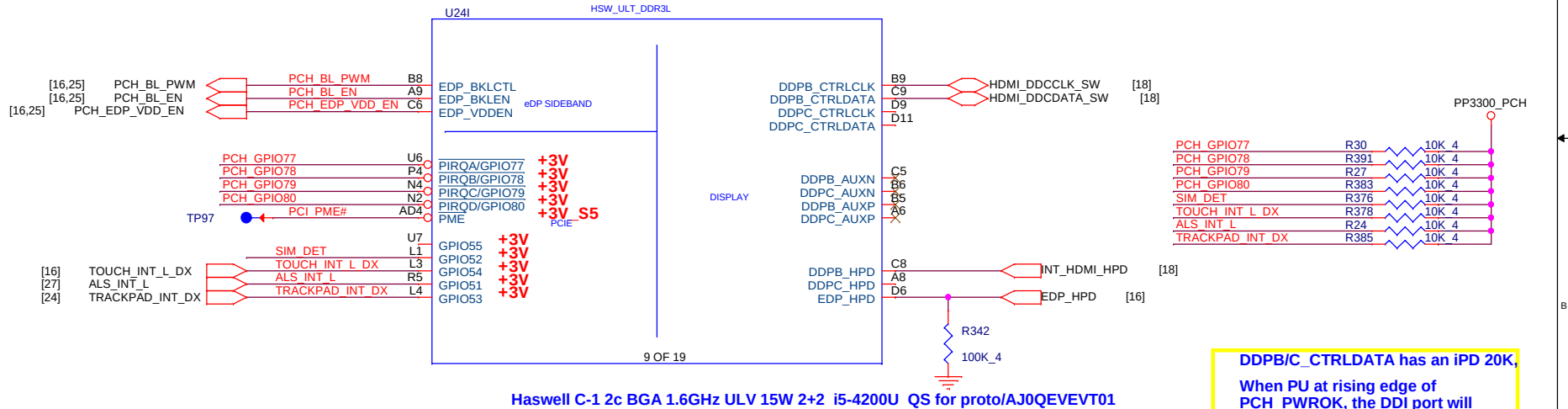
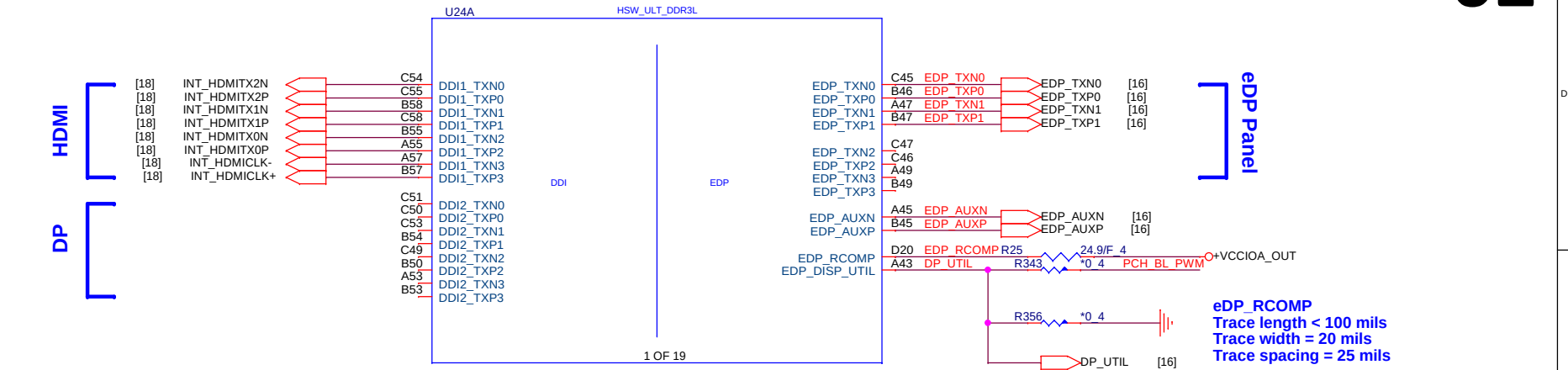


# Haswell ULT (DISPLAY, eDP)

02

HDMI  
DP

eDP Panel



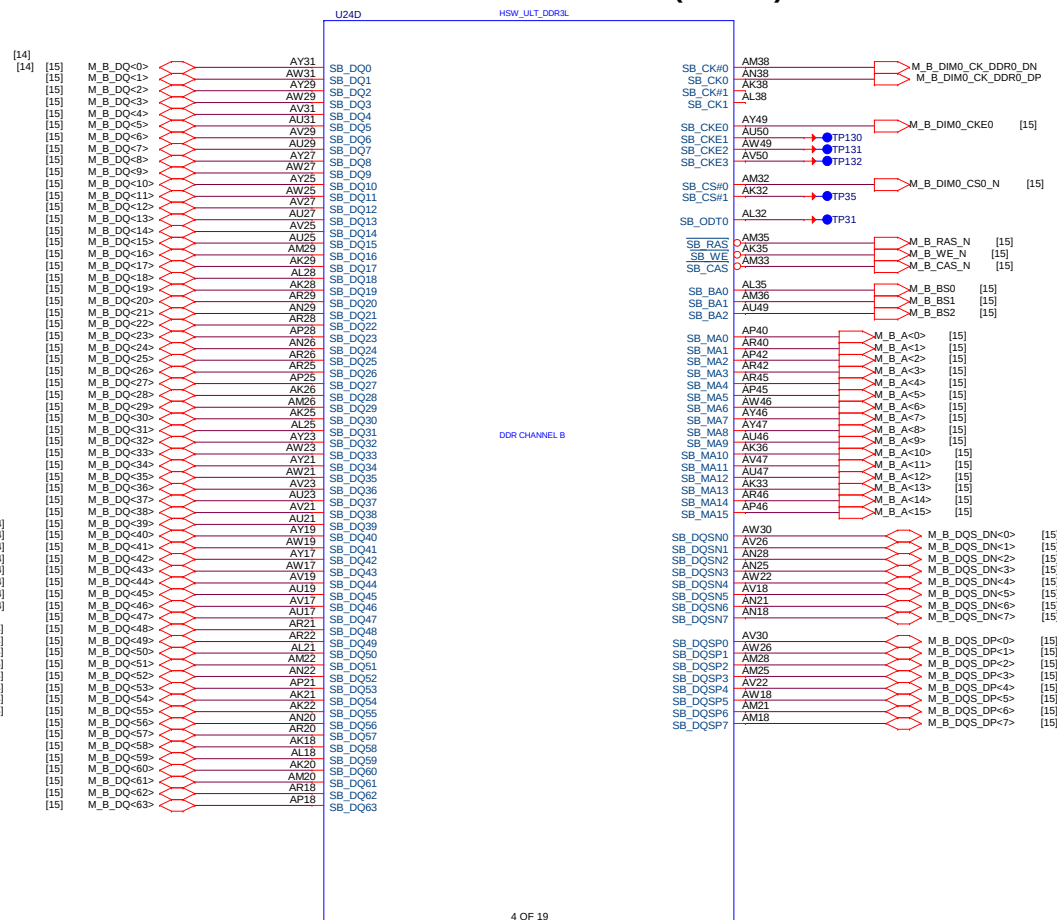
Quanta Computer Inc.

PROJECT : ZRF

**Haswell ULT (DDR3L)**

3 OF 19

### Haswell Processor (DDR3L)



4 OF 19

## Haswell ULT (SIDE BAND)

H\_PECI (50ohm)  
Route on microstrip only  
Spacing >18 mils  
Trace Length: 0.4~6.125 inches

H\_PWRGOOD (50ohm)  
Trace Length: 1~11.25 inches

CPU\_PLTRST# (50ohm)  
Trace Length: 10~17 inches

[25] H\_PECI

[17,25,28,31]

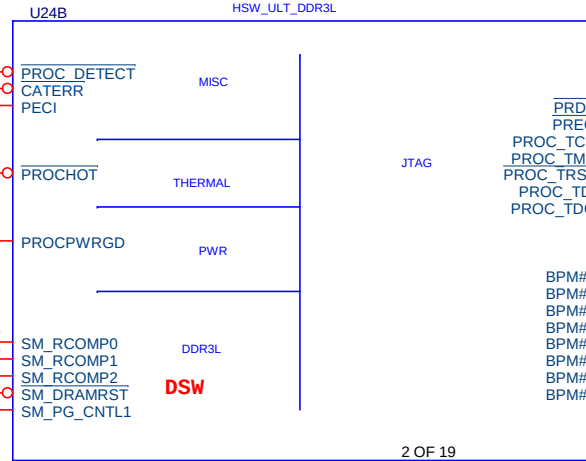
H\_PROCHOT#

[25] CPU\_PGOOD

SM\_RCOMP[0:2]  
Trace length < 500 mils  
Trace width = 12~15 mils  
Trace spacing = 20 mils

SM\_RCOMP\_0 AU60  
SM\_RCOMP\_1 AV60  
SM\_RCOMP\_2 AU61  
CPU\_DRAMRST# AV15  
DDR\_PG\_CTRL AV61

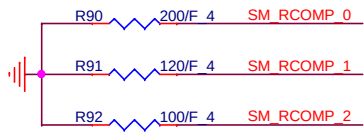
TP108



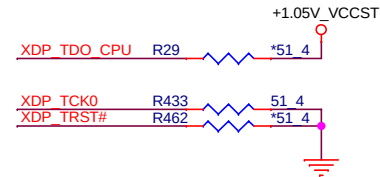
TCK,TMS  
Trace Length < 9000mils

BPM#[0:7]  
Trace Length 1~6 inches  
Length match < 300 mils

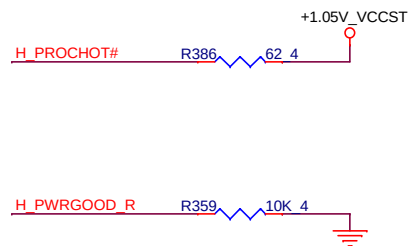
## DRAM COMP



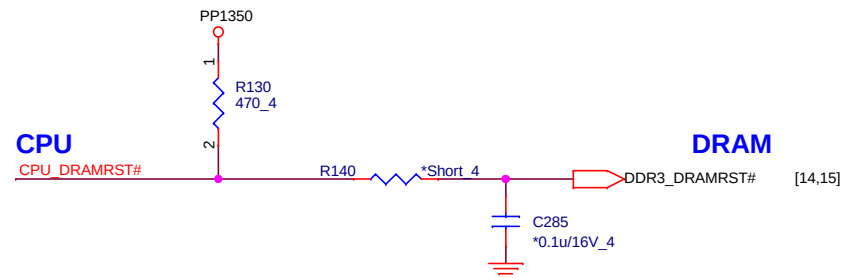
## XDP PU/PD



## PU/PD of CPU

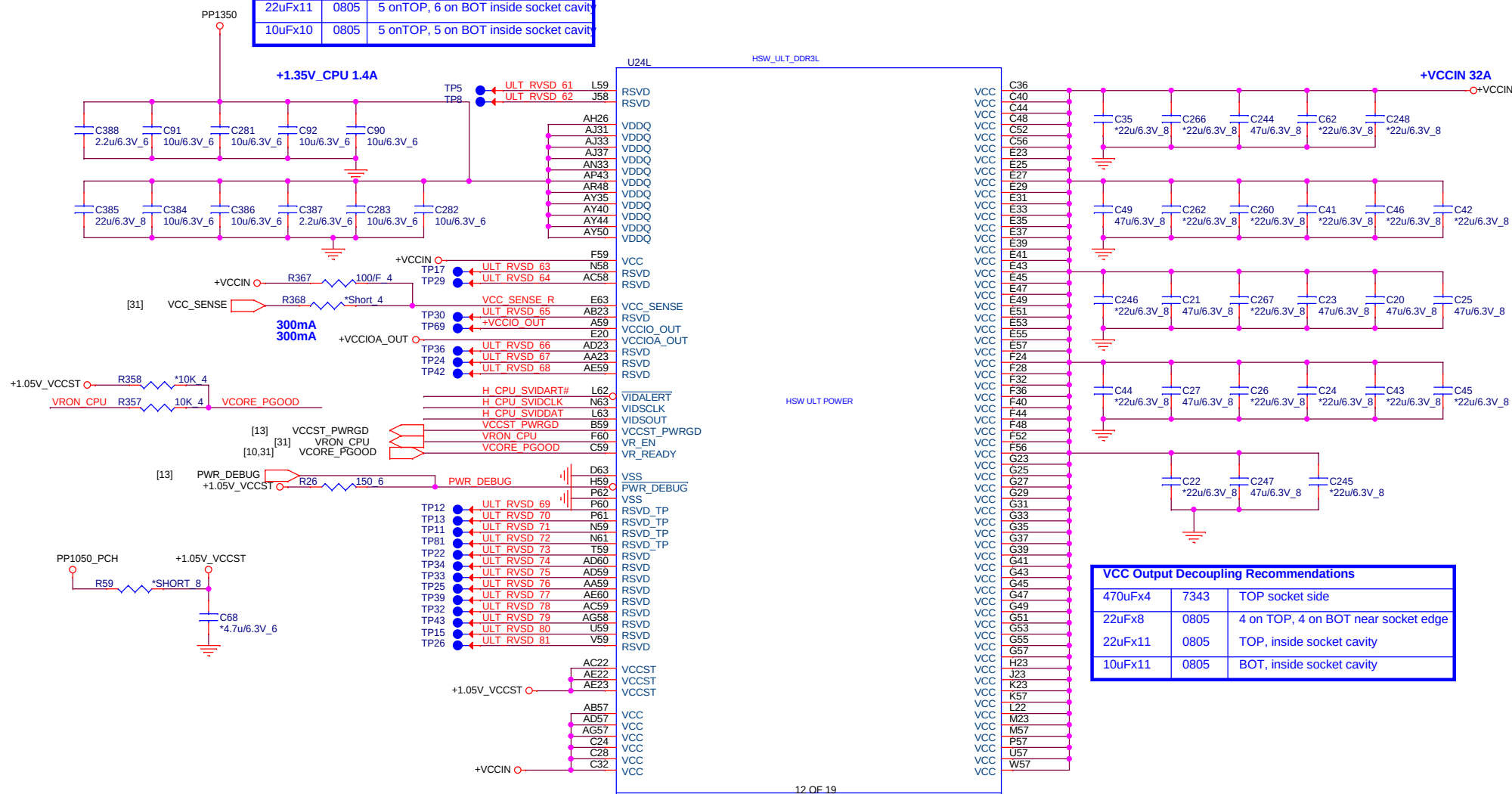


## DRAMRST

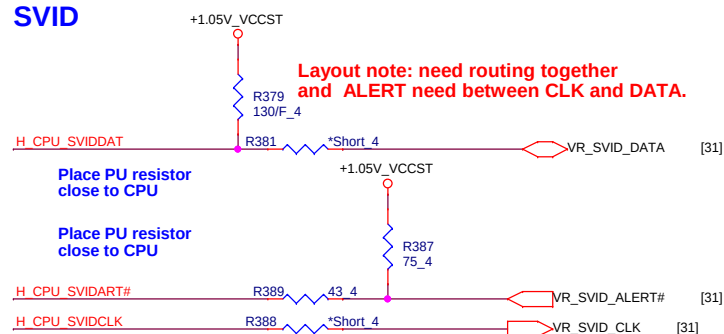


## Haswell ULT (POWER)

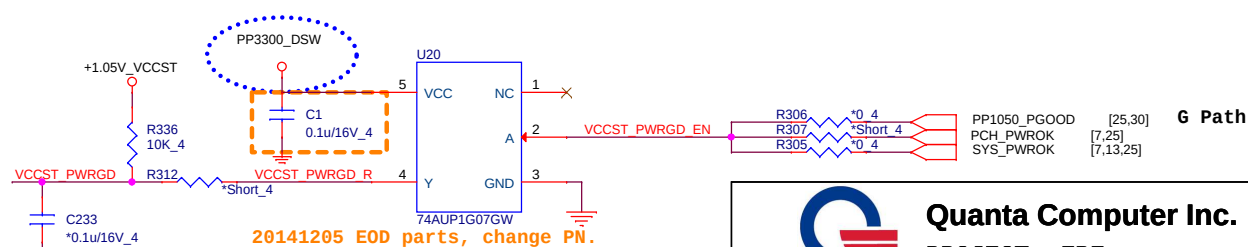
| VDDQ Output Decoupling Recommendations |      |                                        |
|----------------------------------------|------|----------------------------------------|
| 330uFx2                                | 7343 | BOT socket side                        |
| 22uFx11                                | 0805 | 5 onTOP, 6 on BOT inside socket cavity |
| 10uFx10                                | 0805 | 5 onTOP, 5 on BOT inside socket cavity |



## SVID



## VCCST PWRGD



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**Haswell 4/5 (POWER)**

Date: Monday, January 12, 2015 Sheet 5 of 38



**Quanta Computer Inc.**  
**PROJECT : ZRF**

|       |                              |               |
|-------|------------------------------|---------------|
| Size  | Document Number              | Rev           |
|       | <b>Haswell 5/5 (CFG/GND)</b> | A             |
| Date: | Monday, January 12, 2015     | Sheet 6 of 38 |

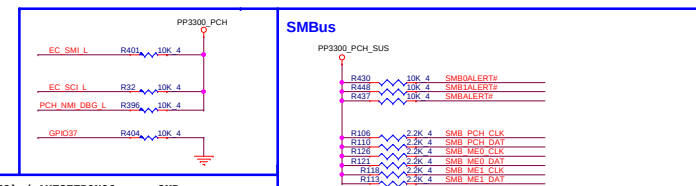
# 07



**PROJECT : ZRF**

|       |                                        |               |
|-------|----------------------------------------|---------------|
| Size  | Document Number<br><b>PCH 1/6 (PM)</b> | Rev<br>A      |
| Date: | Monday, January 12, 2015               | Sheet 7 of 38 |

## 08



**PCH dual I/O SPI ROM** W25Q64FVSSIG (SOIC) / AKE3EFP0N06----->8MB

PP3300\_PCH R408 \*SHORT E223 R550V0-40 +3V\_PCH\_ME  
PP3300\_DSW R407 \*Y0.6

near SPI ROM as possible

PCH\_SPI\_CS0w\_R R414 Short\_4 R424 4.7K\_4 +3V\_PCH\_ME  
PCH\_SPI\_CLKw\_R R455 Short\_4  
PCH\_SPI\_SI\_R R411 Short\_4  
PCH\_SPI\_SO\_R R413 Short\_4

PCH\_SPI\_CS0w\_R R413 33.4 U25 VDD 8  
PCH\_SPI\_CLKw\_R R450 33.4 CE# SCK  
PCH\_SPI\_SI\_R R449 33.4 SI SO HOLD# 7 SPI\_HOLD\_ME R452 100K\_4  
PCH\_SPI\_SO\_R R412 33.4 WPI# VSS 4

C280 \*22p50V\_4 SPI\_WP\_ME ROM 3 ROM-BM  
+3V\_PCH\_ME  
C275 0.1u16V\_4

20141205  
EOD parts, change PN.

SPI\_WP\_ME 2 1 4 SPI\_WP\_ME ROM  
U3 TCT380FU  
R410 10K\_4

near SPI ROM as possible

SPI\_WP\_ME R105 Short\_4 GPIO\_SPI\_WP [I7]  
SPI\_HOLD\_ME R458 Short\_4 SPI\_HOLDw\_BIOS [I7]

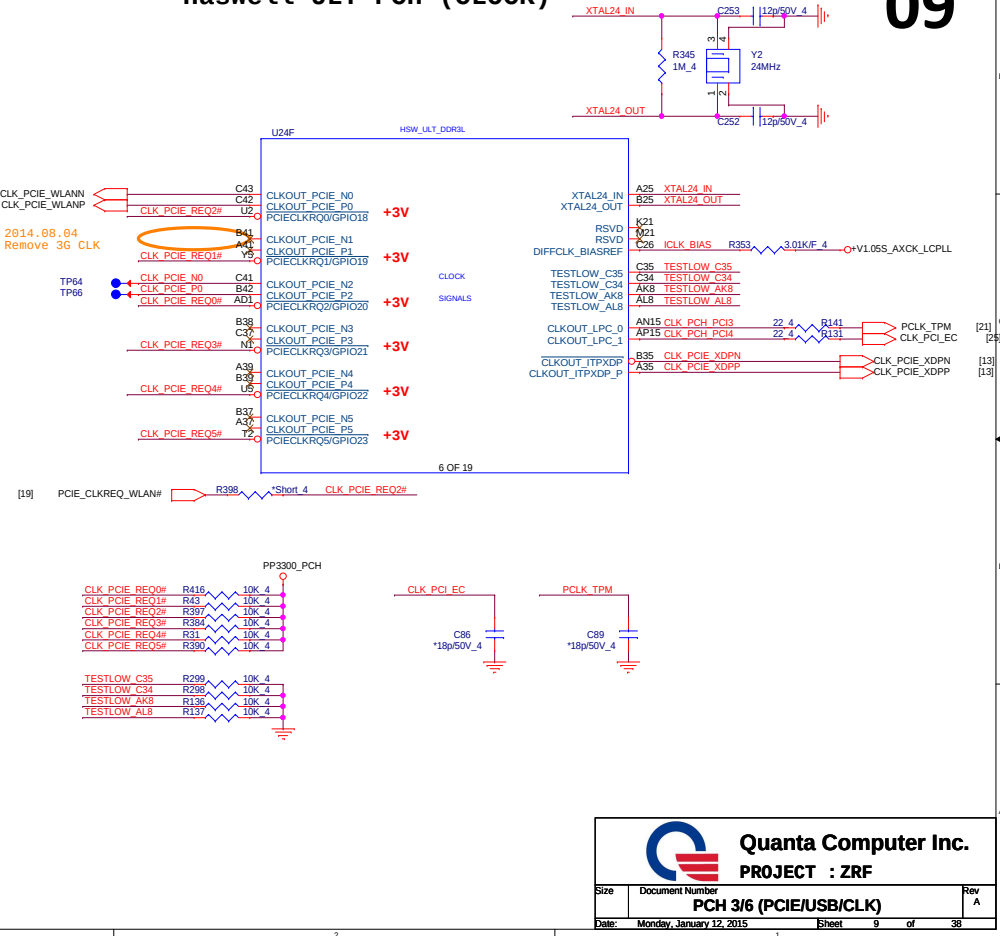
2N7002K Q1  
PCH\_SPI\_WP\_D [I0] To PCH  
PCH\_SPI\_WP\_D connect to GP1058 at GRB

SPI\_WP\_ME SPI\_WP\_ME [25.26] From ScrewEC

|                                                                                                                                           |                                   |          |         |
|-------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|----------|---------|
|  <b>Quanta Computer Inc.</b><br><b>PROJECT : ZRF</b> |                                   |          |         |
| Size                                                                                                                                      | Document Number                   | Rev      |         |
|                                                                                                                                           | <b>PCH 2/6 (RTC/HDA/SATA/SPI)</b> | <b>A</b> |         |
| Date:                                                                                                                                     | Monday, January 12, 2015          | Sheet    | 8 of 38 |



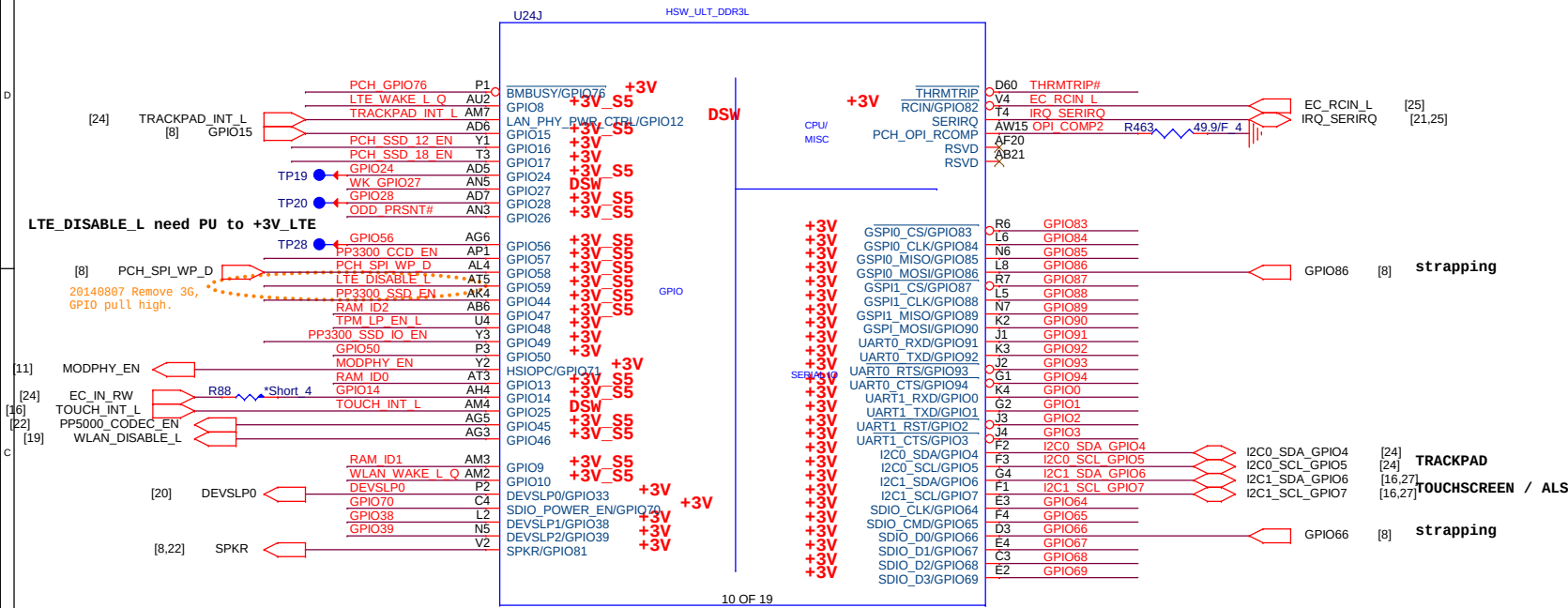
09



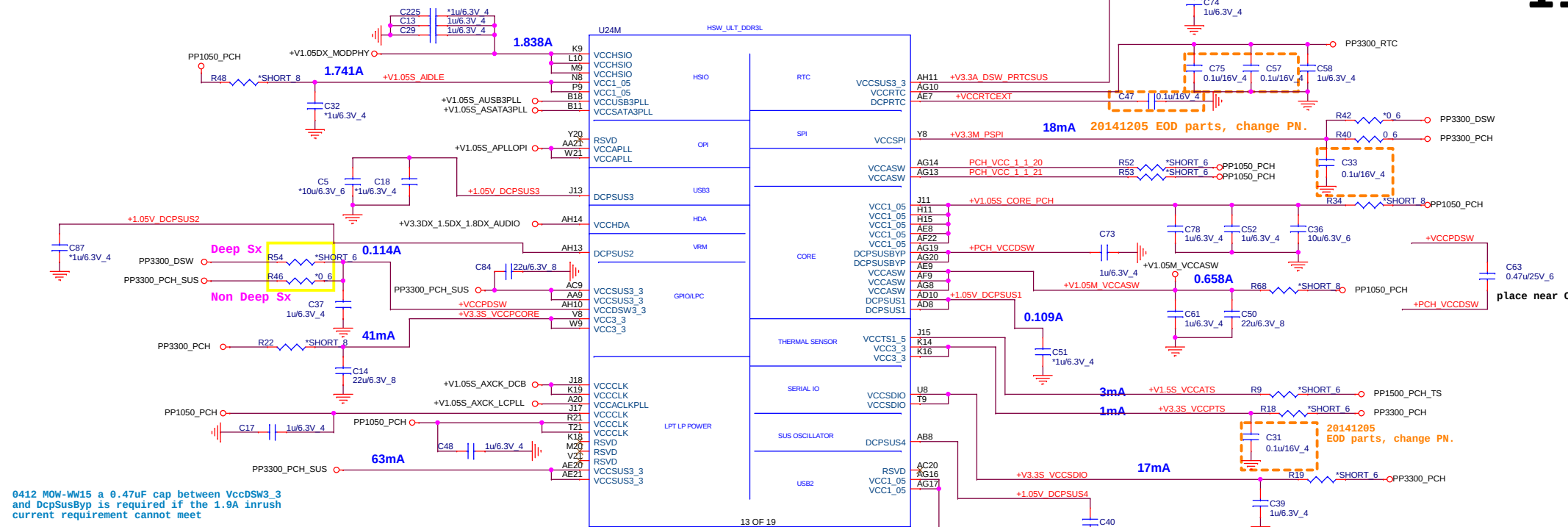
# Haswell ULT PCH (GPIO,CPU/MISC,NCTF)

## PCH GPIO PU/PD

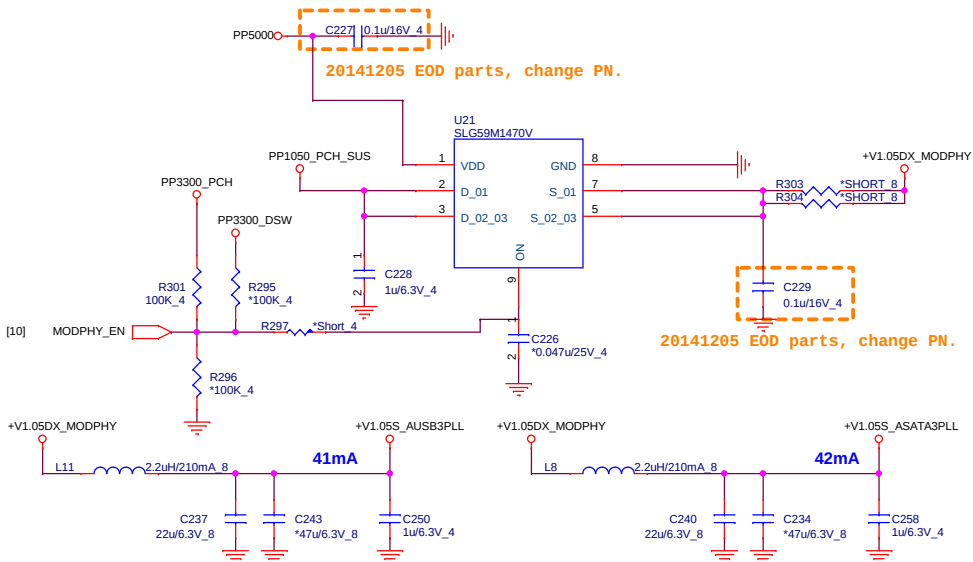
10



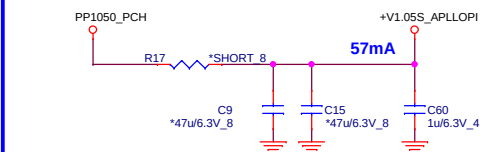
## Haswell ULT PCH (Power)



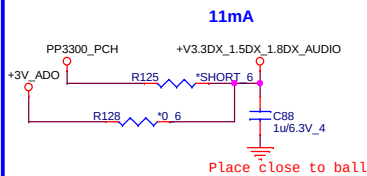
### PCH VCCHSIO Power



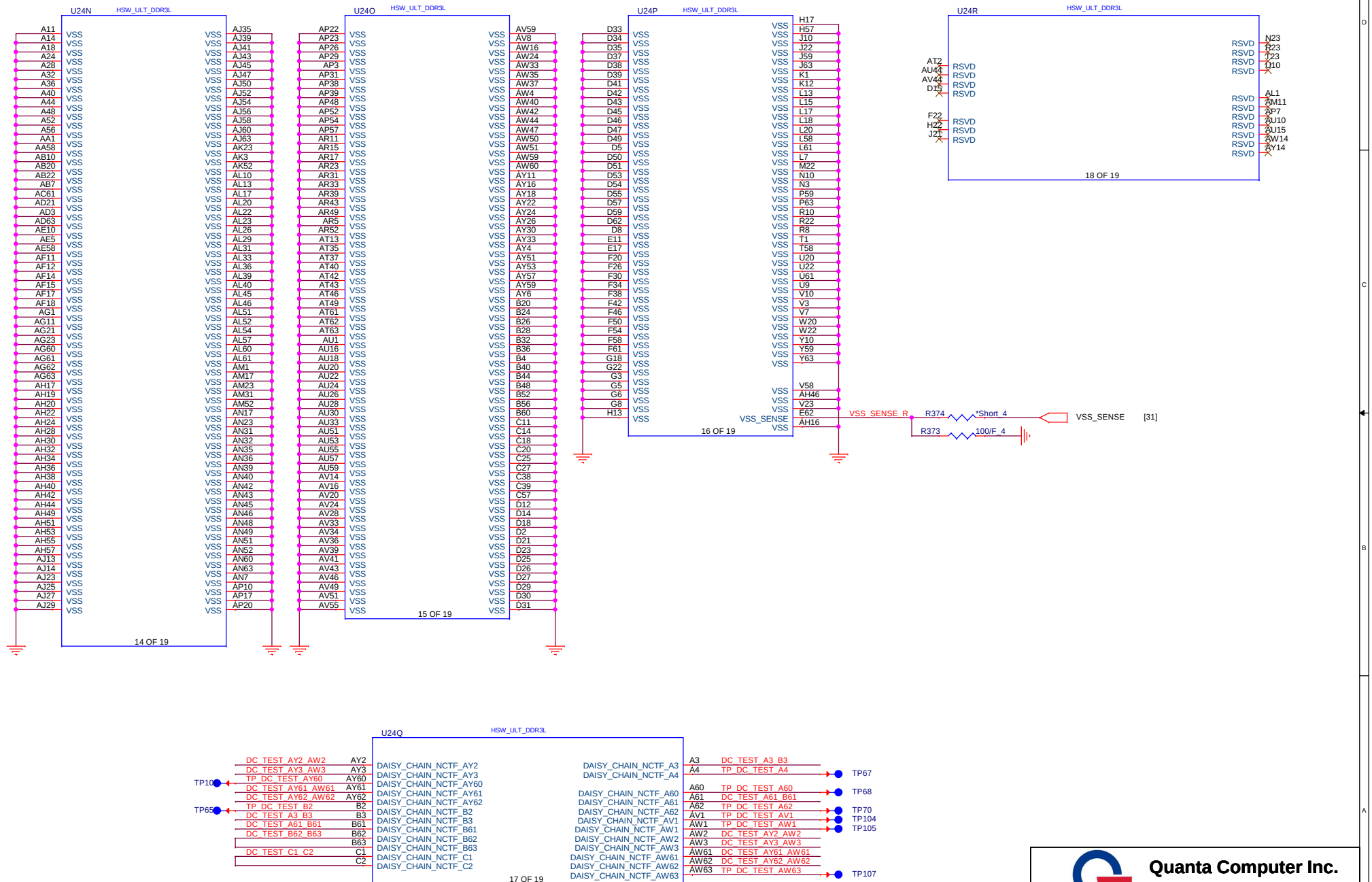
VCCAPLL power



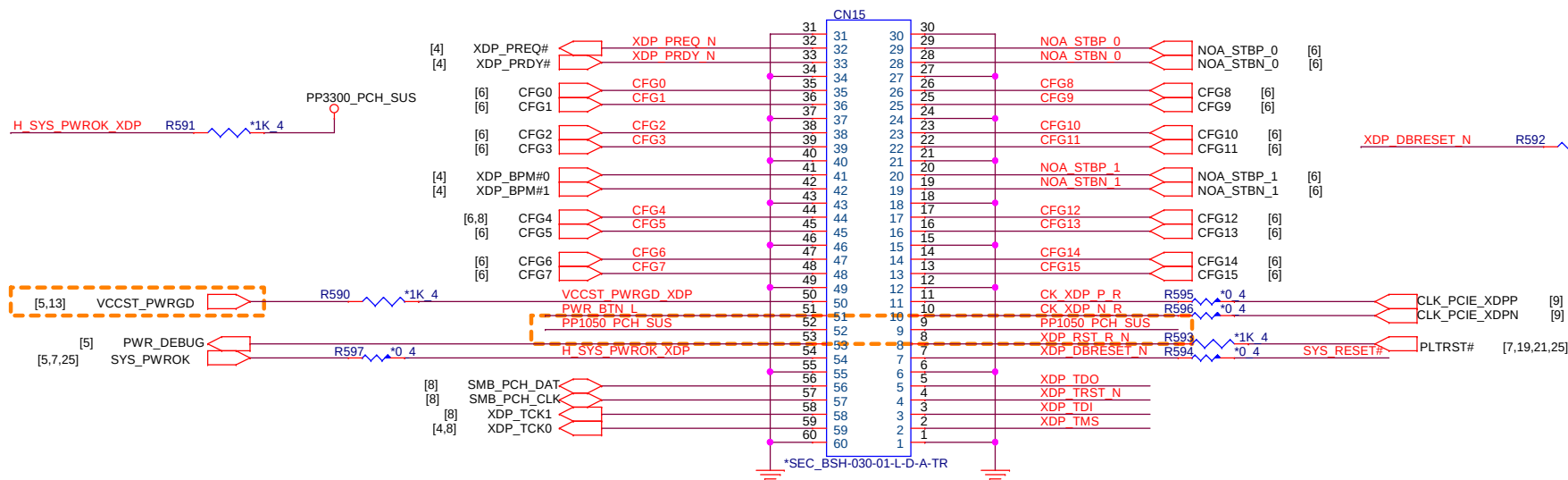
## PCH HDA Power



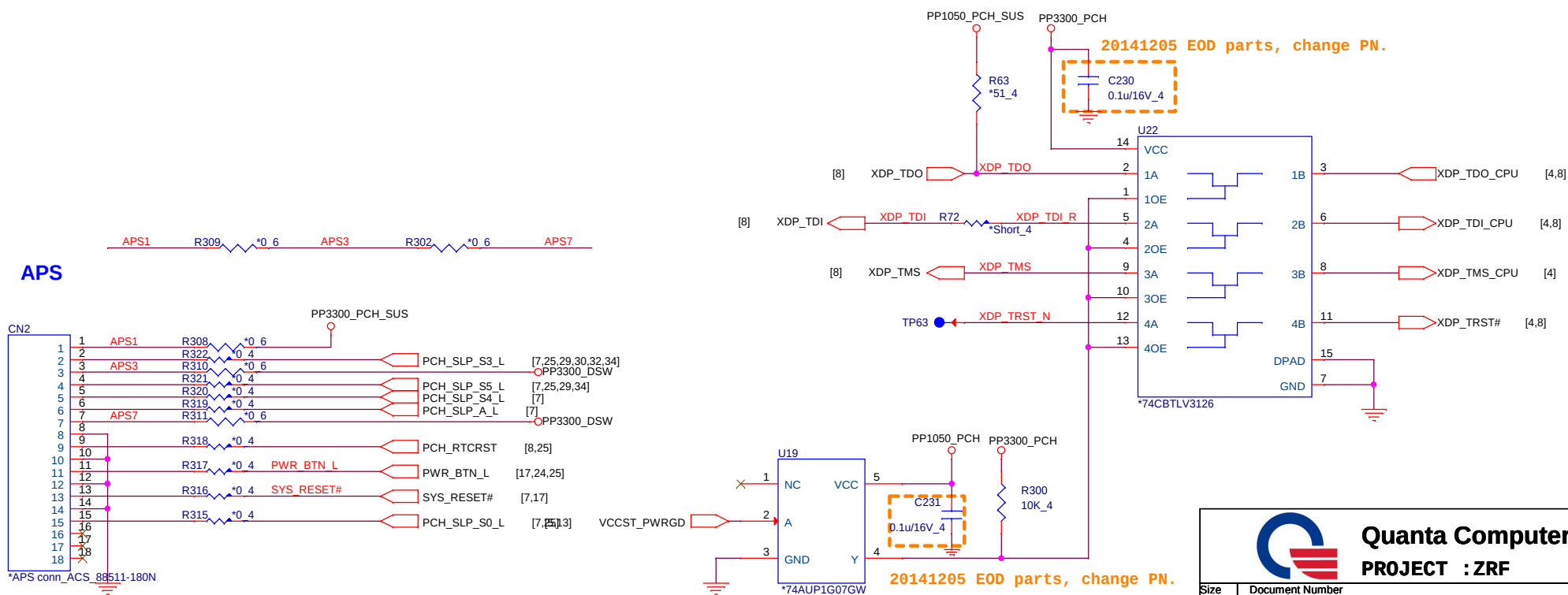
## Haswell ULT (GND)



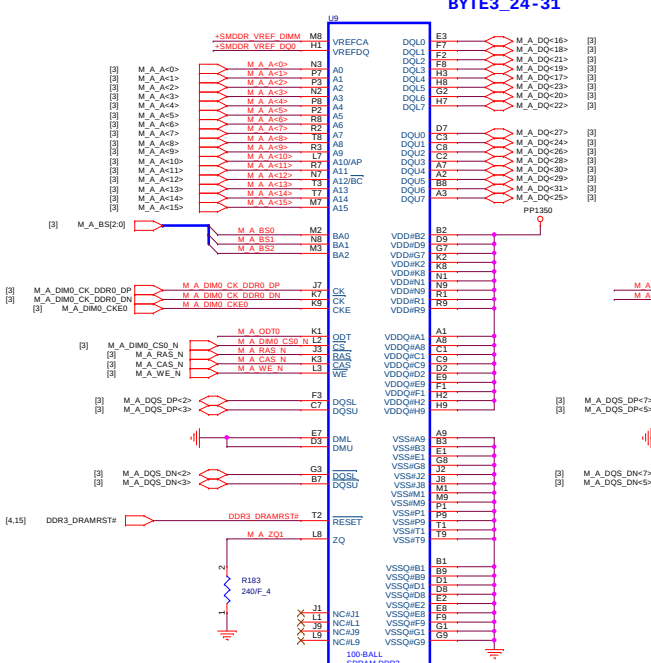
Quanta Computer Inc.  
PROJECT : ZRF



20141021 Intel require modify ITP CN15 P9/P51 add PP1050\_PCH\_SUS, P50 PP1050\_PG00D change to VCCST\_PWRGD.

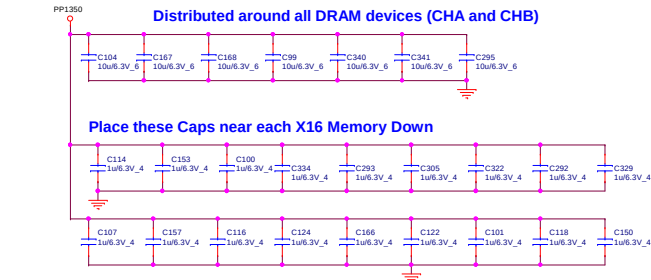


**<DDR>**



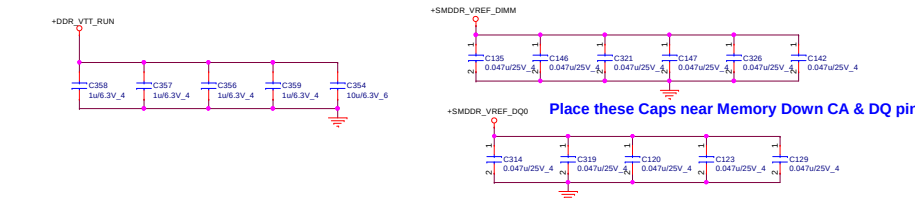
|        |             |                   |
|--------|-------------|-------------------|
| Vendor | P/N         |                   |
| Hynix  |             |                   |
| Elpida | AKD5JGST400 | DDR3L 1333Mhz 4Gb |
|        | AKD5JGST404 | DDR3L 1600Mhz 4Gb |

**Micron/MT41K256M16HA-125:E/AKD5JGSTL02 for proto board**

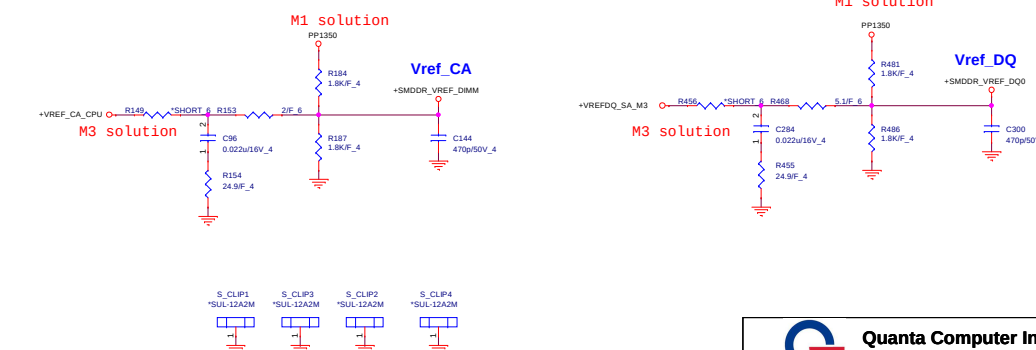
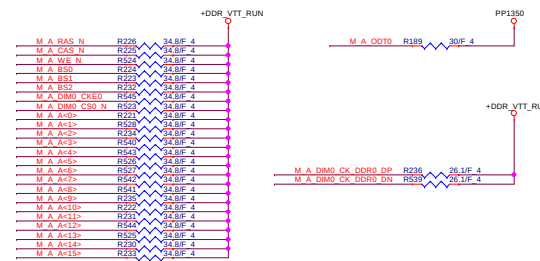
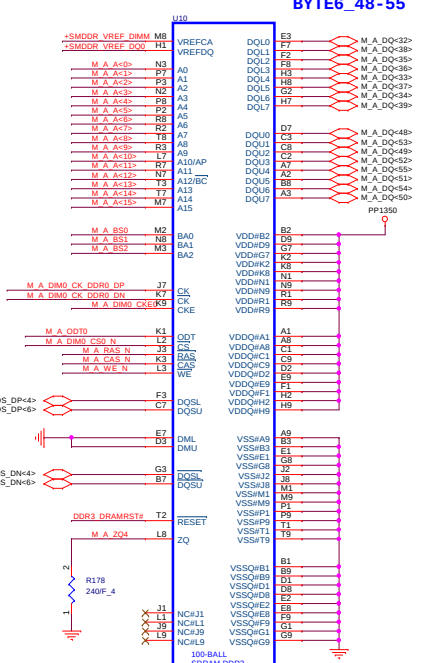
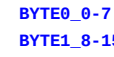
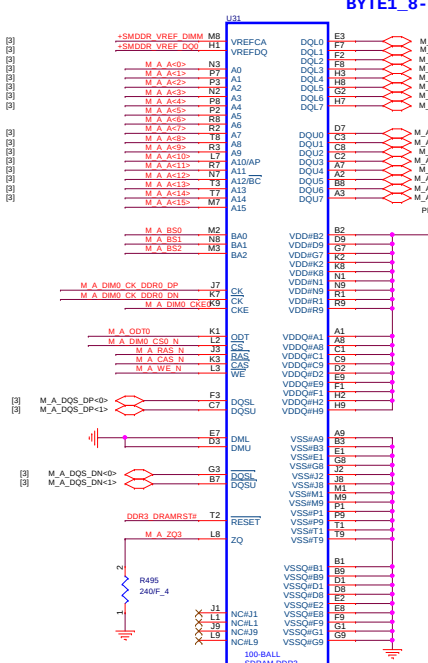


**Distributed around all DRAM devices (CHA and CHE**

**Place these Caps near each X16 Memory Down**



Place these Caps near Memory Down CA & DO pin



### M1 solution

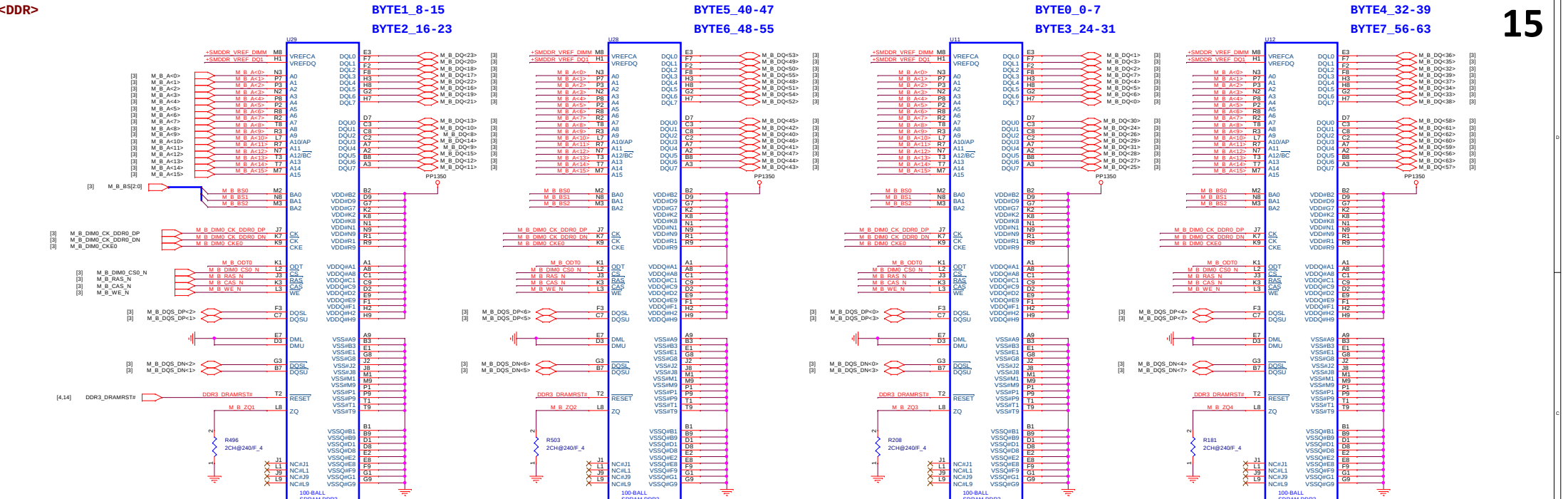
Vref\_DQ



**Quanta Computer Inc**  
**PROJECT : ZRE**

|       |                               |       |          |
|-------|-------------------------------|-------|----------|
| Size  | Document Number               |       |          |
|       | <b>DDR3L MEMORY DOWNx16 A</b> |       |          |
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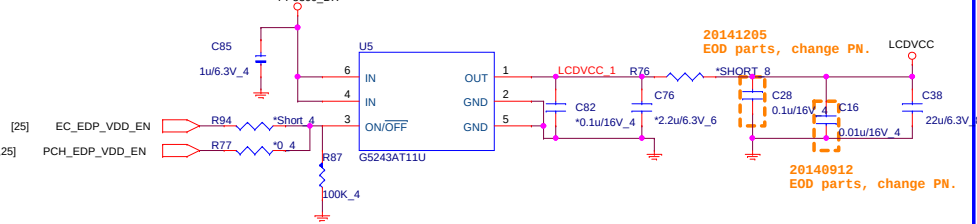


| Vendor | P/N         |
|--------|-------------|
| Hynix  | AKD5J6ETW04 |
| Elpida | AKD5J6ST407 |
| Micron | AKD5J6STL10 |

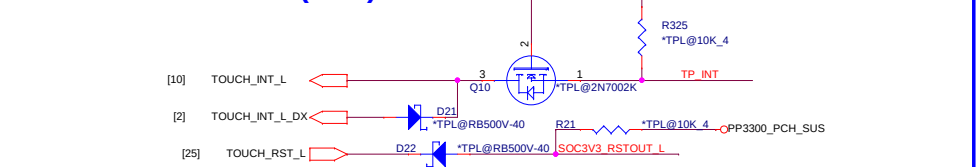
MicronMT41K256M16HA-12S/E/AKD5J6STL02 for proto board



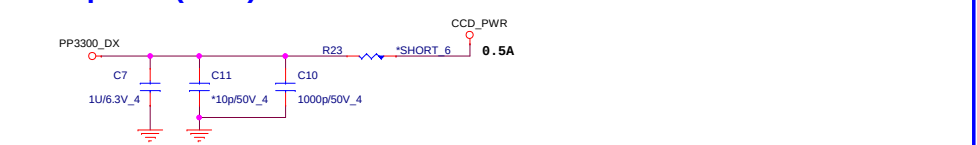
LVDS Power(LDS)



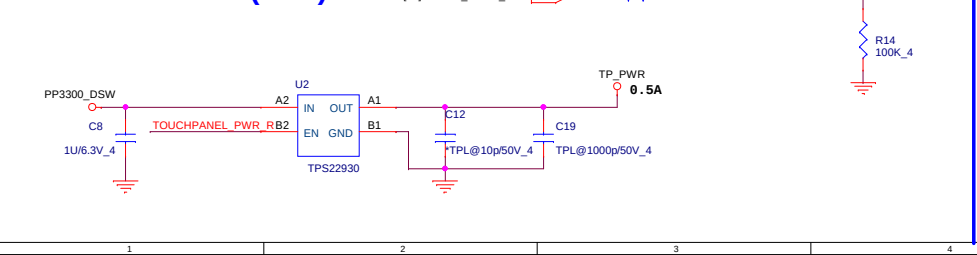
Touch Panel INT/RST(TSN)



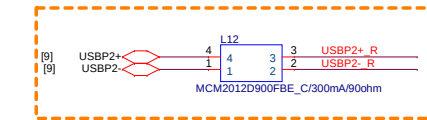
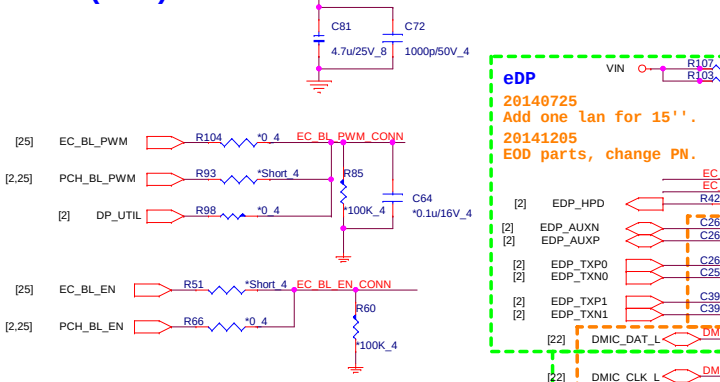
CCD power(CCD)



Touch Pad Power(TPD)

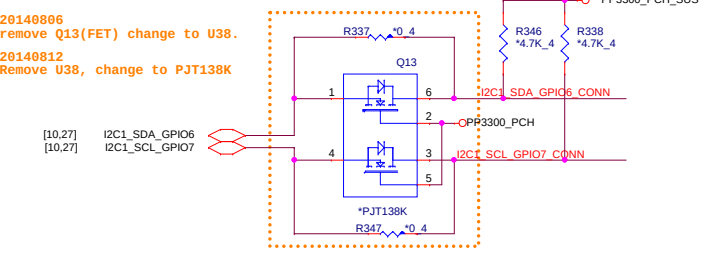


LVDS(LDS)



20141201 Stuff L12, remove R371/R372.

Touch Panel level shift(TSN)



LVDS\_CONN  
DFHS40FS095  
footprint lvds-cvs5402m1rb-nh-40p-1

20140725  
Add one lan for 15''.

20141205  
EOD parts, change PN.

20140821  
Reserve a 15pF capacitor.

20140922  
Add 0-MIC PWR P2.

20140923  
Remove PP1800\_PCH  
change use PP3300\_PCH

20140808  
LCD conn. 30pin change to 40pin,  
1 LEN change to 2 LEN.

20140827  
LCD conn. change PN / footprint  
same as ZQ0.

20140930  
Change LCD conn. footprint.

20141021  
LCD conn. footprint return to ZQ0.

EDP

EDP\_AUXN

EDP\_AUXP

EDP\_TXP0

EDP\_TXN0

EDP\_TXP1

EDP\_TXN1

DMIC\_DAT\_L

DMIC\_CLK\_L

CCD\_PWR

USBP2+ R

USBP2- R

CCD

Touch Panel

SOC3V3\_RSTOUT\_L

TP\_INT

I2C1\_SDA\_GPIO6\_CONN

I2C1\_SCL\_GPIO7\_CONN

PP3300\_PCH

PP5000

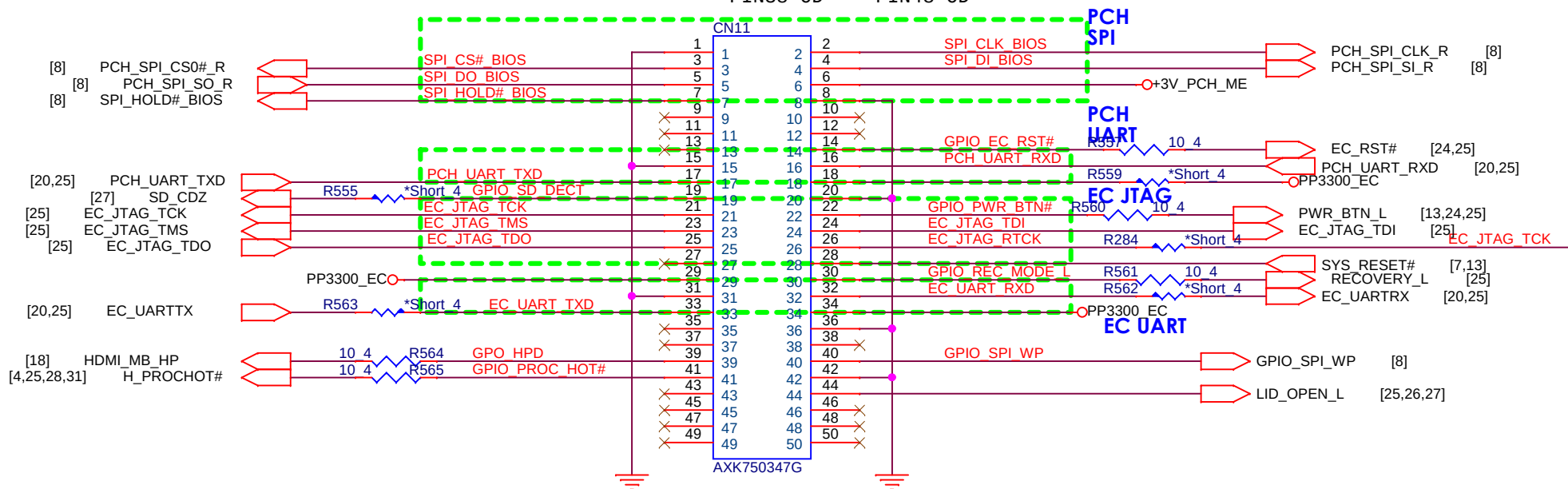
PP5000\_TS

EDP\_50406-04071-001



# Debug Port(DBG)

PIN7 OD    PIN39 OD    PIN49 OD  
 PIN14 OD    PIN41 OD    PIN50 OD  
 PIN19 OD    PIN43 OD  
 PIN22 OD    PIN44 OD  
 PIN28 OD    PIN45 OD  
 PIN30 OD    PIN46 OD  
 PIN37 OD    PIN47 OD  
 PIN38 OD    PIN48 OD

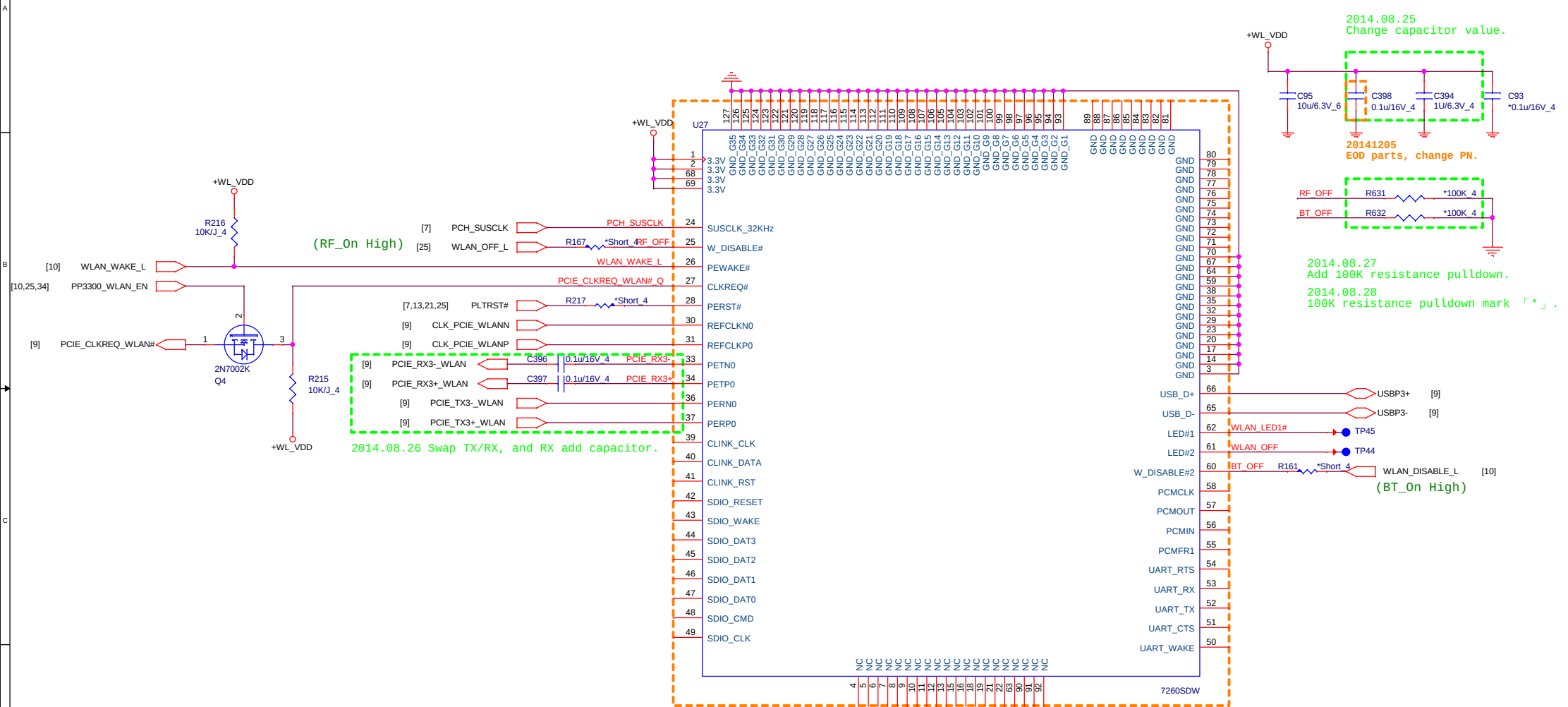


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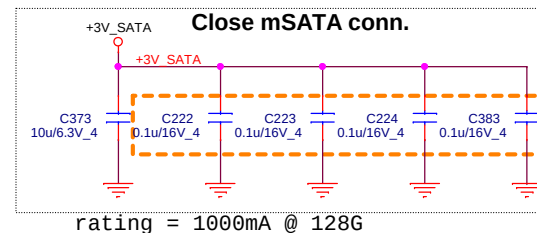
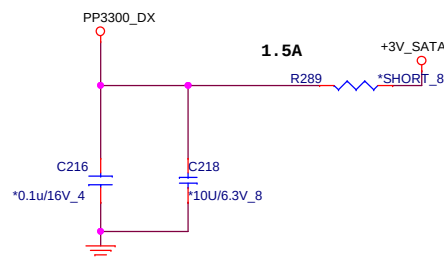
|              |                 |       |
|--------------|-----------------|-------|
| Size         | Document Number | Rev A |
| Google Debug |                 |       |

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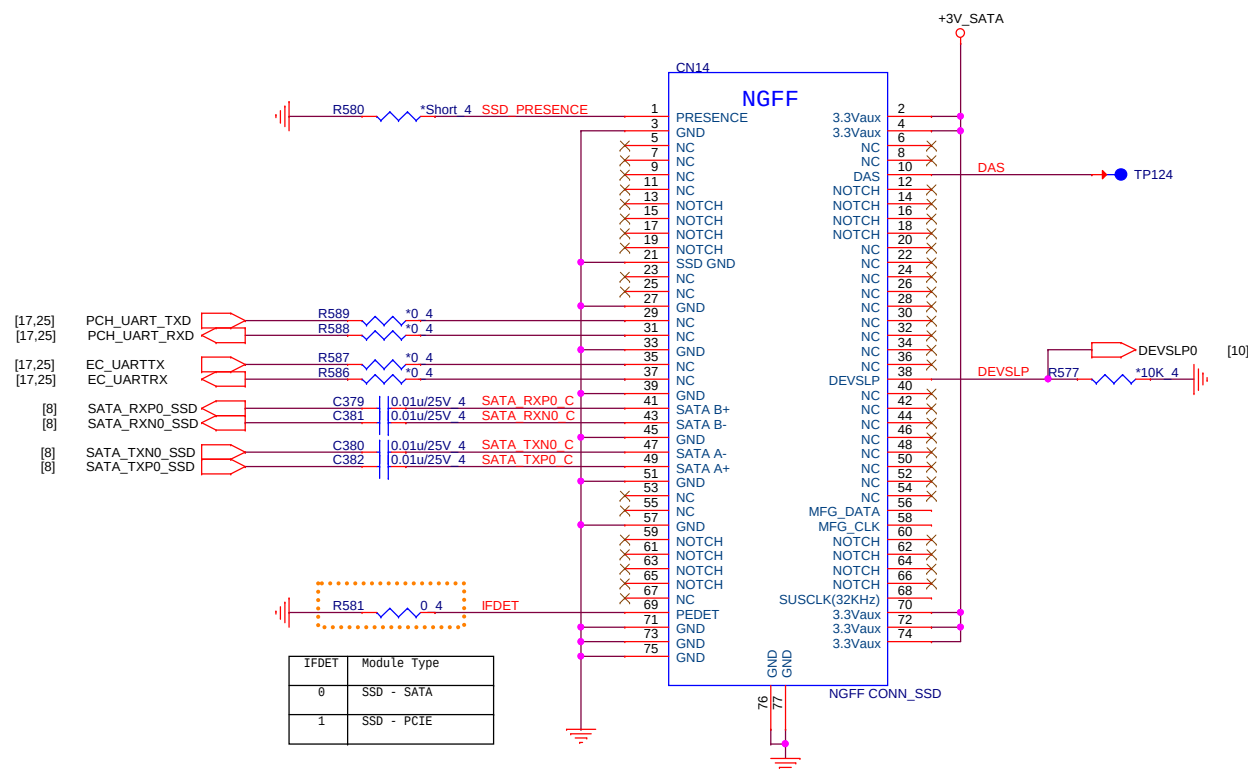




- 20140820 On board IC change to same as ZS8 connector
- 20140822 Return to another wifi onboard module 7260SDW
- 20140826 Change wifi onboard module 7260SDW footprint
- 20140909 Change wifi onboard module 7260SDW footprint
- 20141014 Change wifi onboard module 7260SDW PN.



20141205 EOD parts, change PN.

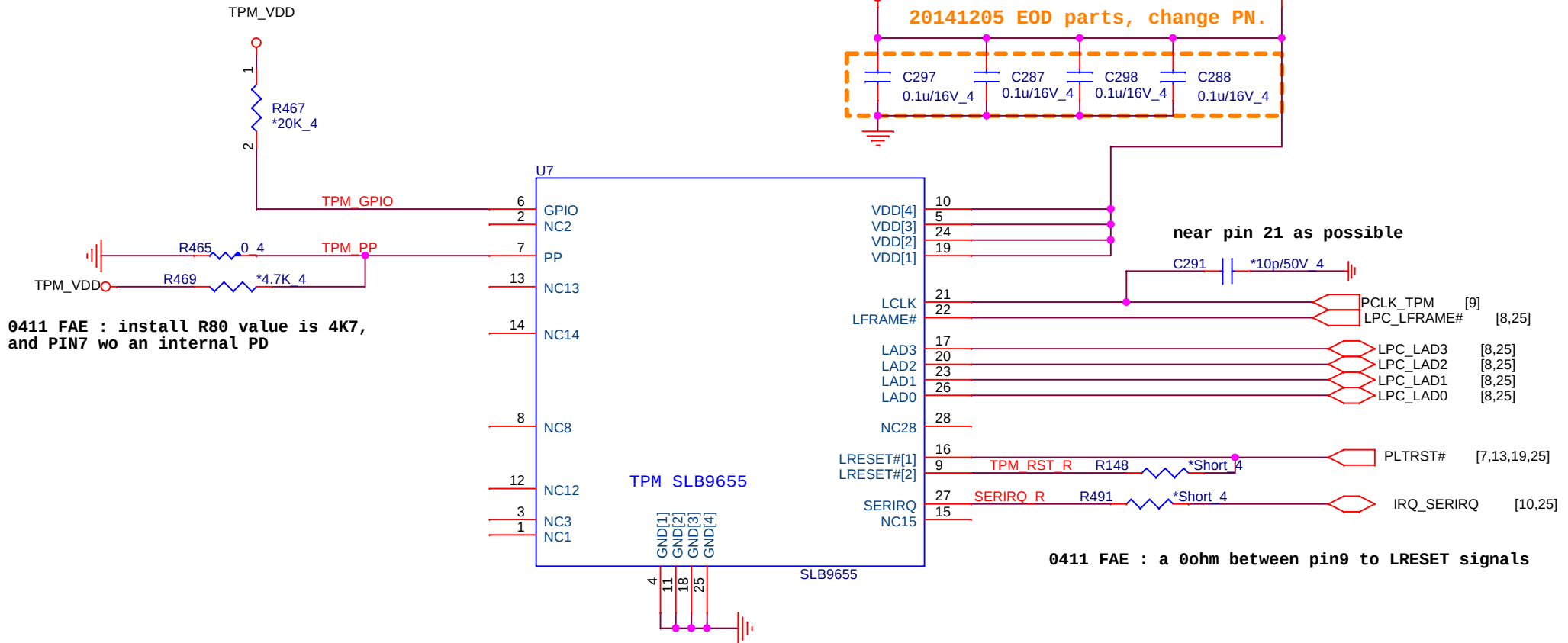


# TPM (TPM)

21

20141201 Change TPM power.  
4 x100nF (place close to device VDD/GND pins)

20141205 EOD parts, change PN.

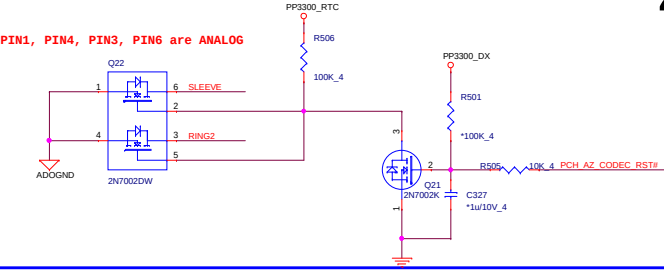
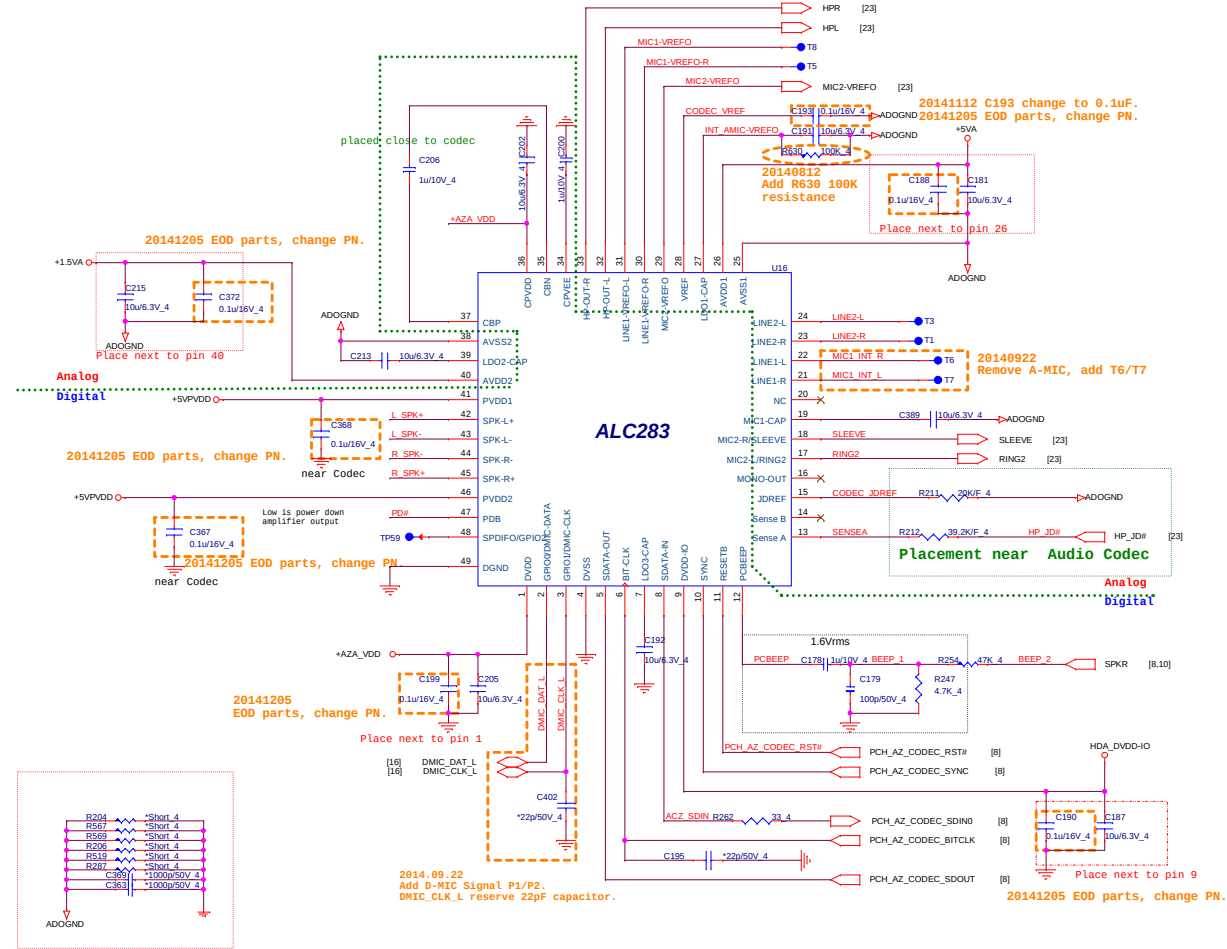


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PROJECT : ZRF

| Size | Document Number   | Rev |
|------|-------------------|-----|
|      | TPM SLB9655 / LED | A   |

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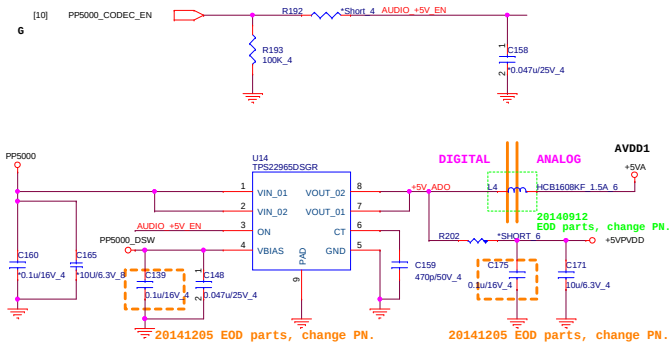


D-Mic

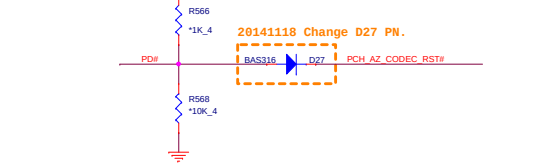


20140922 Remove A-MIC, add D-MIC same as Hugo(ZHQ)

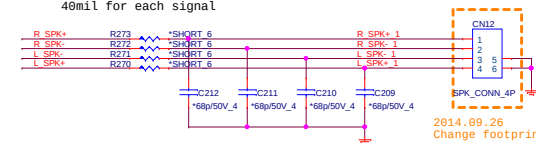
Codec PWR 5V(ADO)



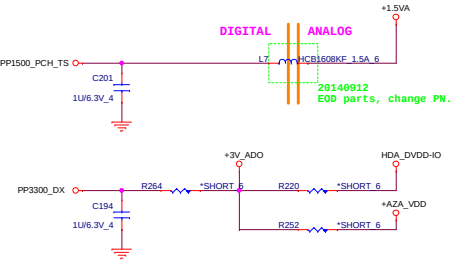
Mute(ADO)



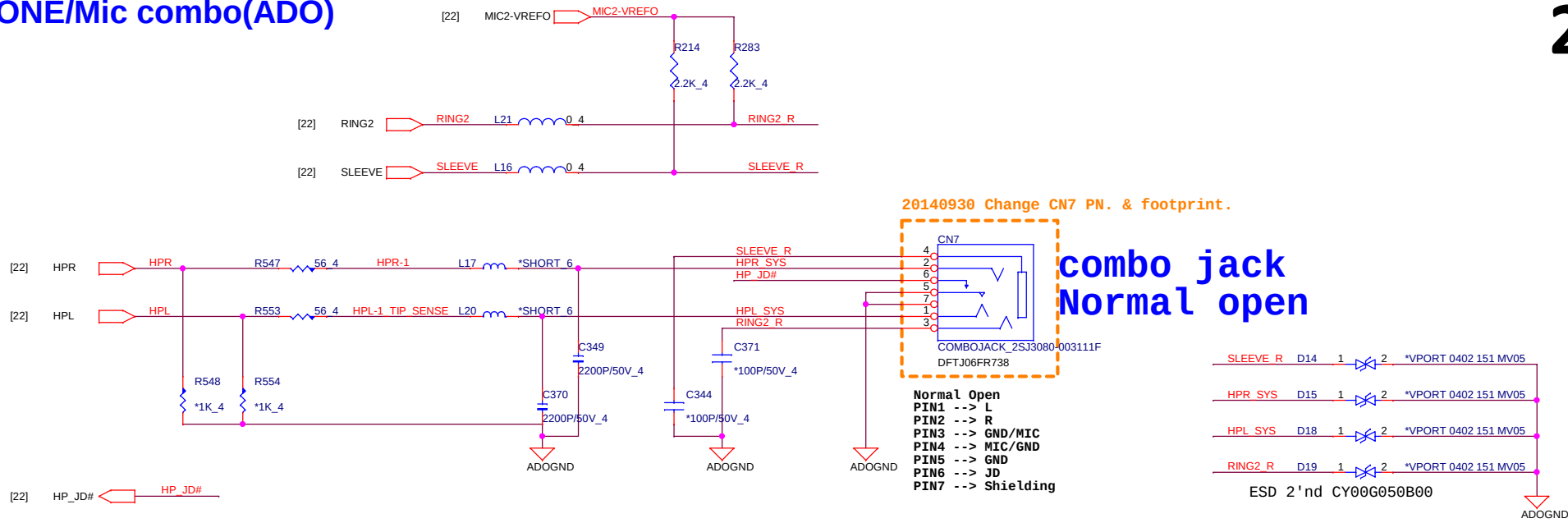
Internal Speaker



Codec PWR 3V/1.5V(ADO)



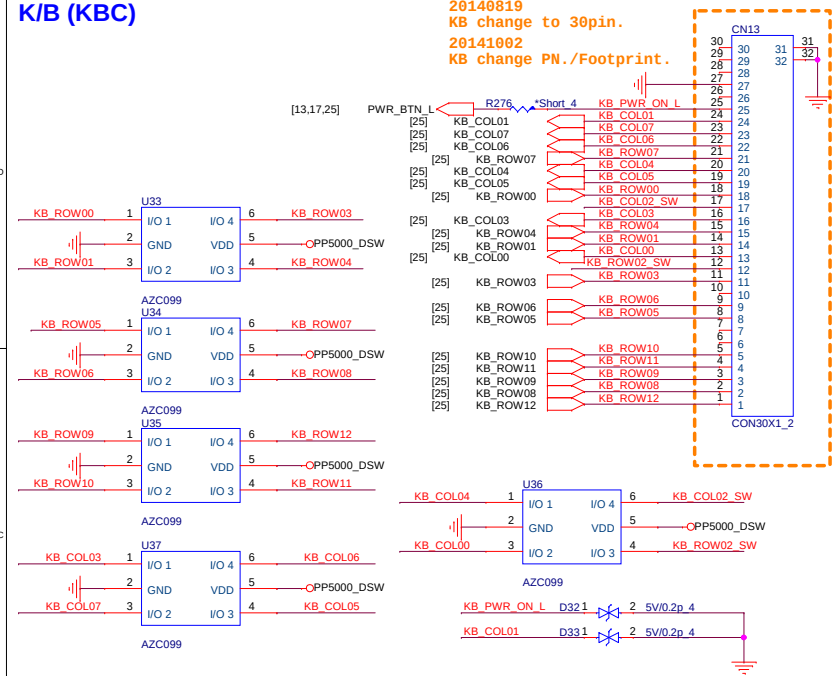
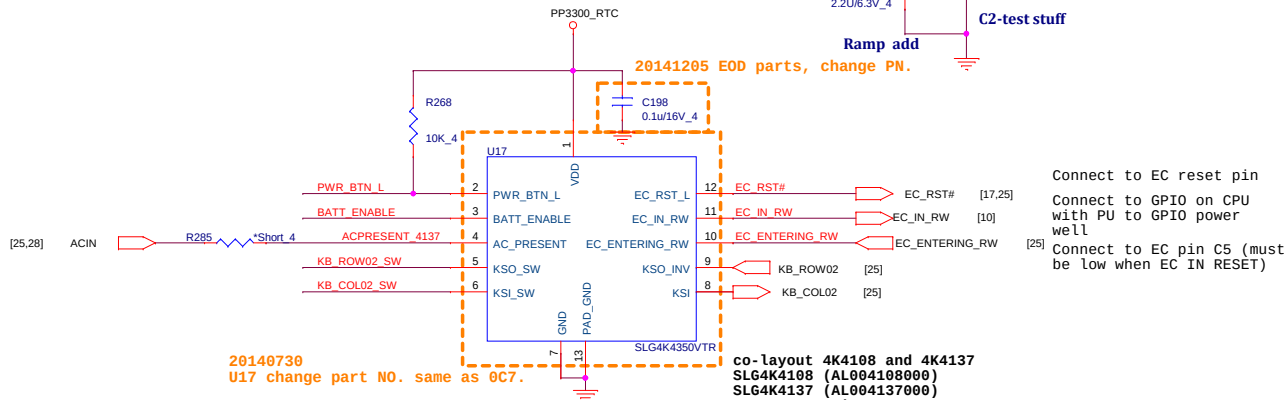
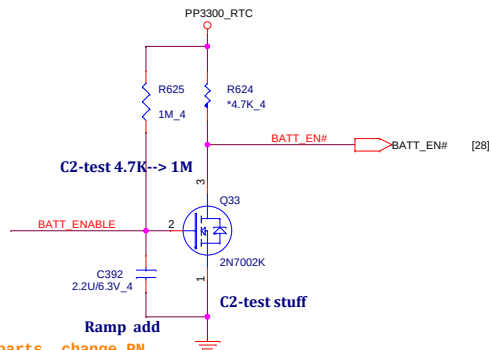
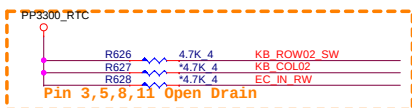
HEADPHONE/Mic combo(ADO)





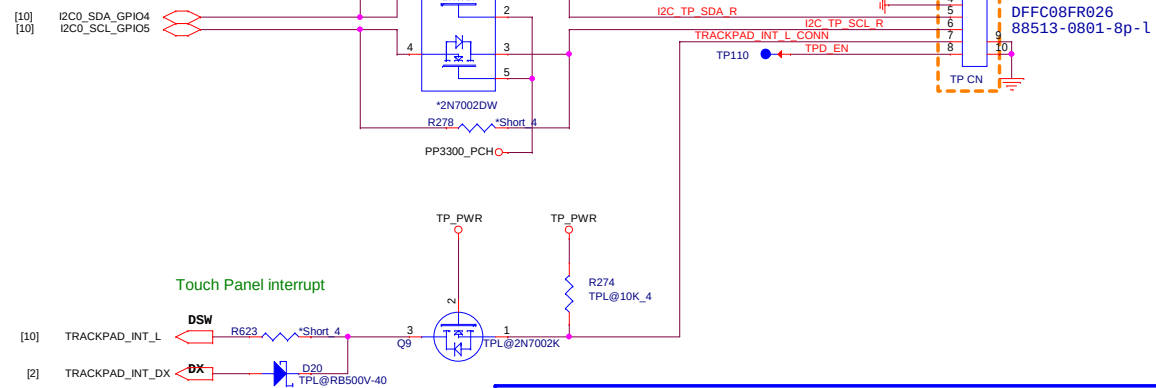
## K/B (KBC)

20140819  
KB change to 30pin.  
20141002  
KB change PN./Footprint.

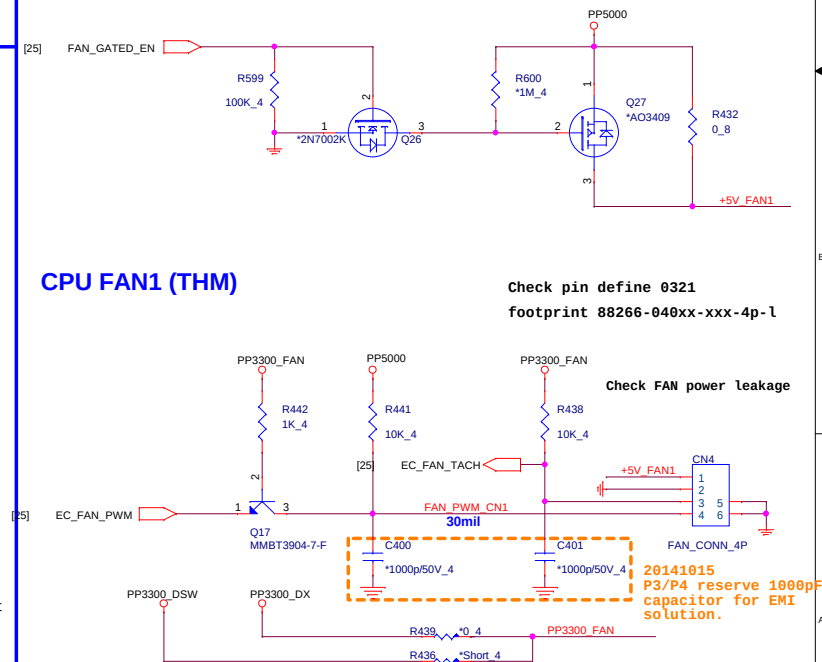
HOLELESS RESET  
2-CHIP(KBC)

co-layout 4K4108 and 4K4137  
SLG4K4108 (AL004108000)  
SLG4K4137 (AL004137000)  
4K4137 PIN3 is BATT\_ENABLE  
4K4137 PIN4 is AC\_PRESENT

## TOUCHPAD BOARD CONN (TPD)



## CPU FAN1 (THM)

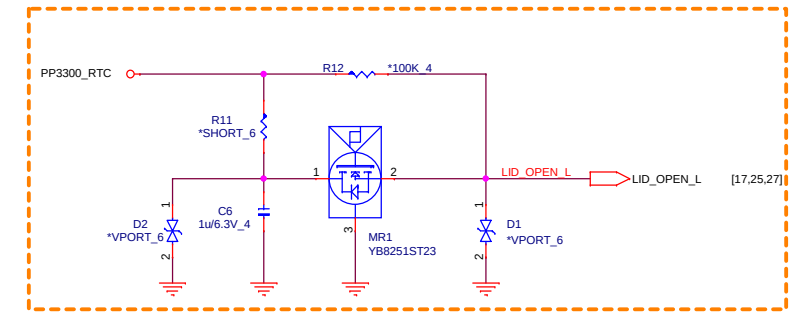


Quanta Computer Inc.  
PROJECT : ZRF

| Size                           | Document Number    | Rev |
|--------------------------------|--------------------|-----|
|                                | KB/TP/FAN/HW Reset | A   |
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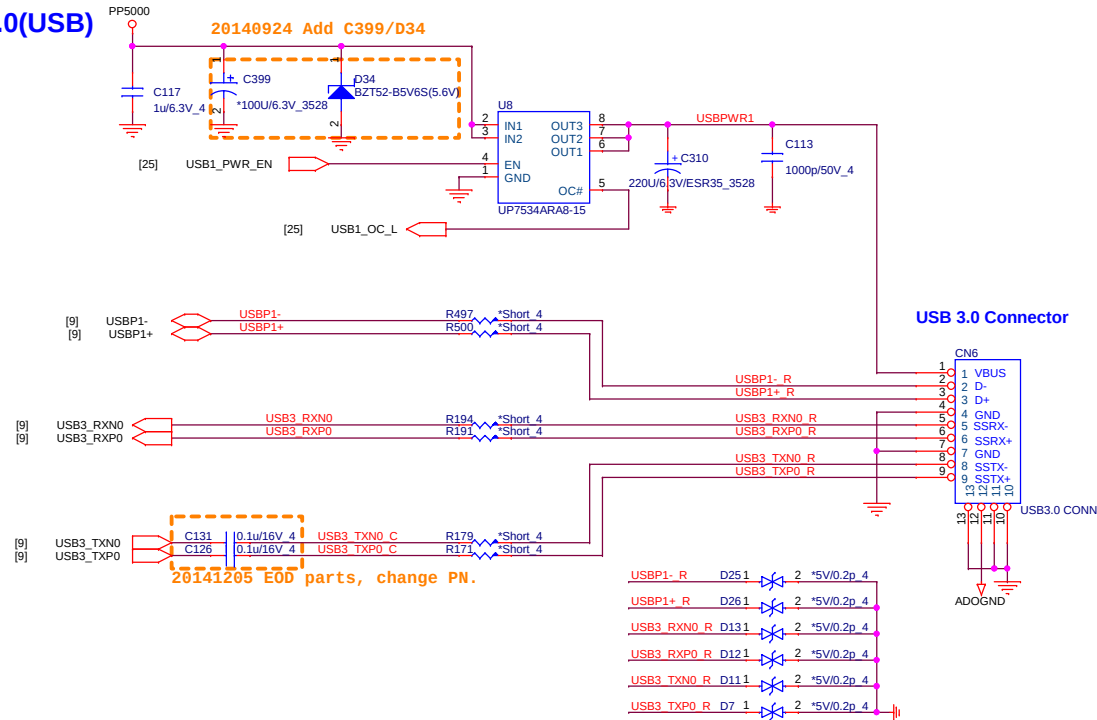


## Lid Switch (HSR)

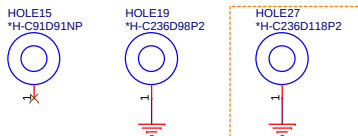
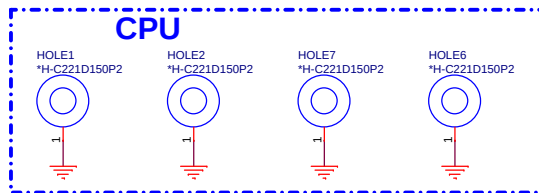
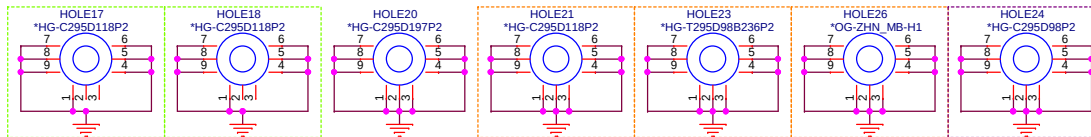


20140923 Add Lid Switch (HSR)

## USB3.0(USB)



## HOLE(OTH)



20140828

1. Add HOLE27
2. Change HOLE17/HOLE18/HOLE21/HOLE22 /HOLE23/HOLE26 footprint
3. Remove HOLE9/HOLE16

20140829

1. Change HOLE27 footprint
2. HOLE17/HOLE18/HOLE22 remove Pin1/Pin2/Pin3

20140901

1. Remove HOLE22

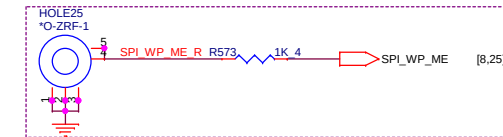
20140923

1. Remove battery enable, change to HOLE24

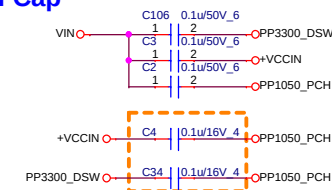
20140926

1. HOLE24 change footprint.
2. HOLE25 Add more 2pin & change footprint.
3. Remove HOLE3/4/5/6/8/10/11/12/13/14.

## ROM WP#



## EMI Cap

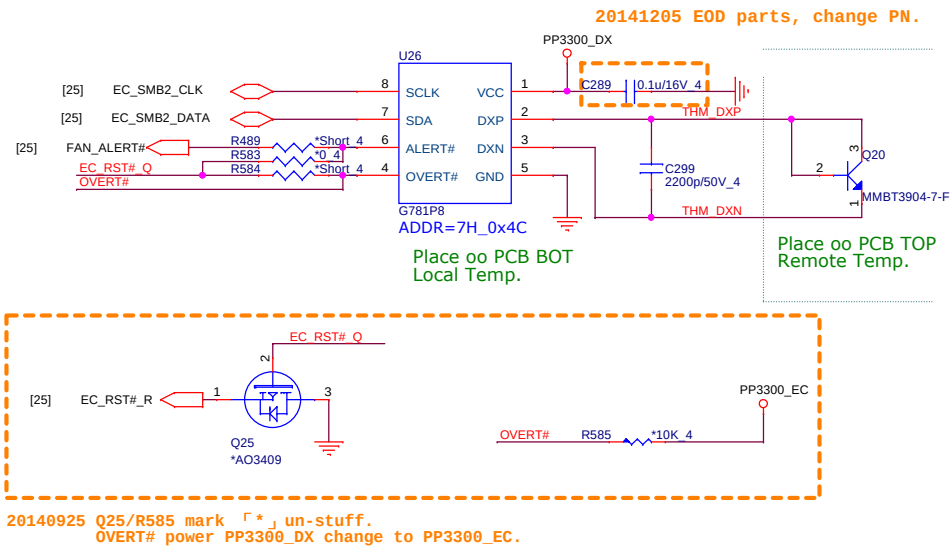


20141205 EOD parts, change PN.

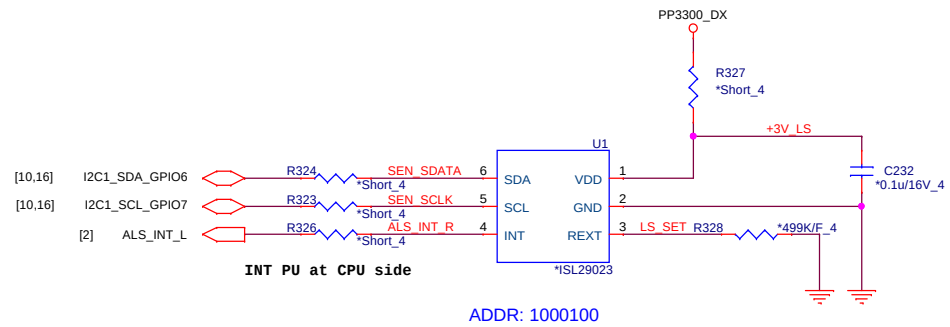


Quanta Computer Inc.  
PROJECT : ZRF

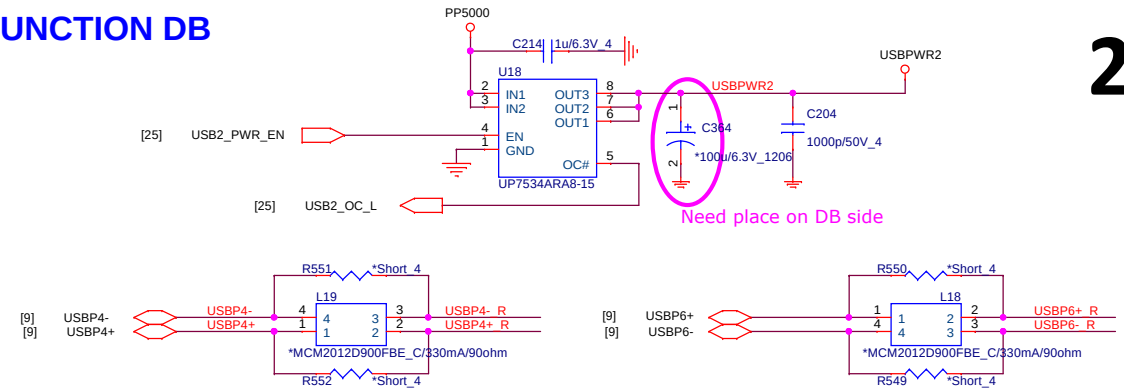
# Thermal Sensor(THM)



# Light sensor & TP (ALS)

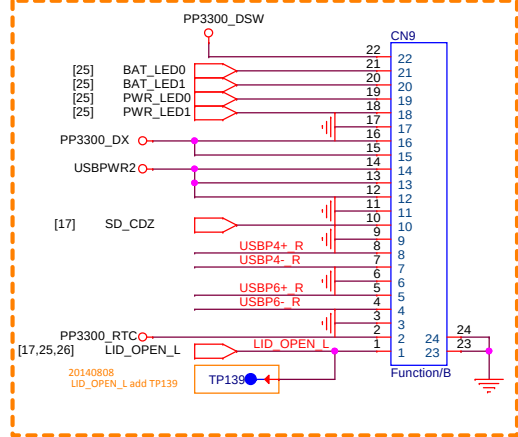


# FUNCTION DB



|     |            |
|-----|------------|
| HSR | +3VPCU     |
|     | LID_OPEN_L |
|     | GND        |
| LED | +3VPCU     |
|     | LED x 4    |
|     | GND        |
| USB | +3V x 2    |
|     | GND x 2    |
|     | USBP0+     |
| CR  | CR_DET     |
|     | +3V x 2    |
|     | GND x 2    |
| LID | PP3300_RTC |
|     | LID_OPEN_L |

footprint 50501-0220n-v01-22p-1  
DFFC22FR019

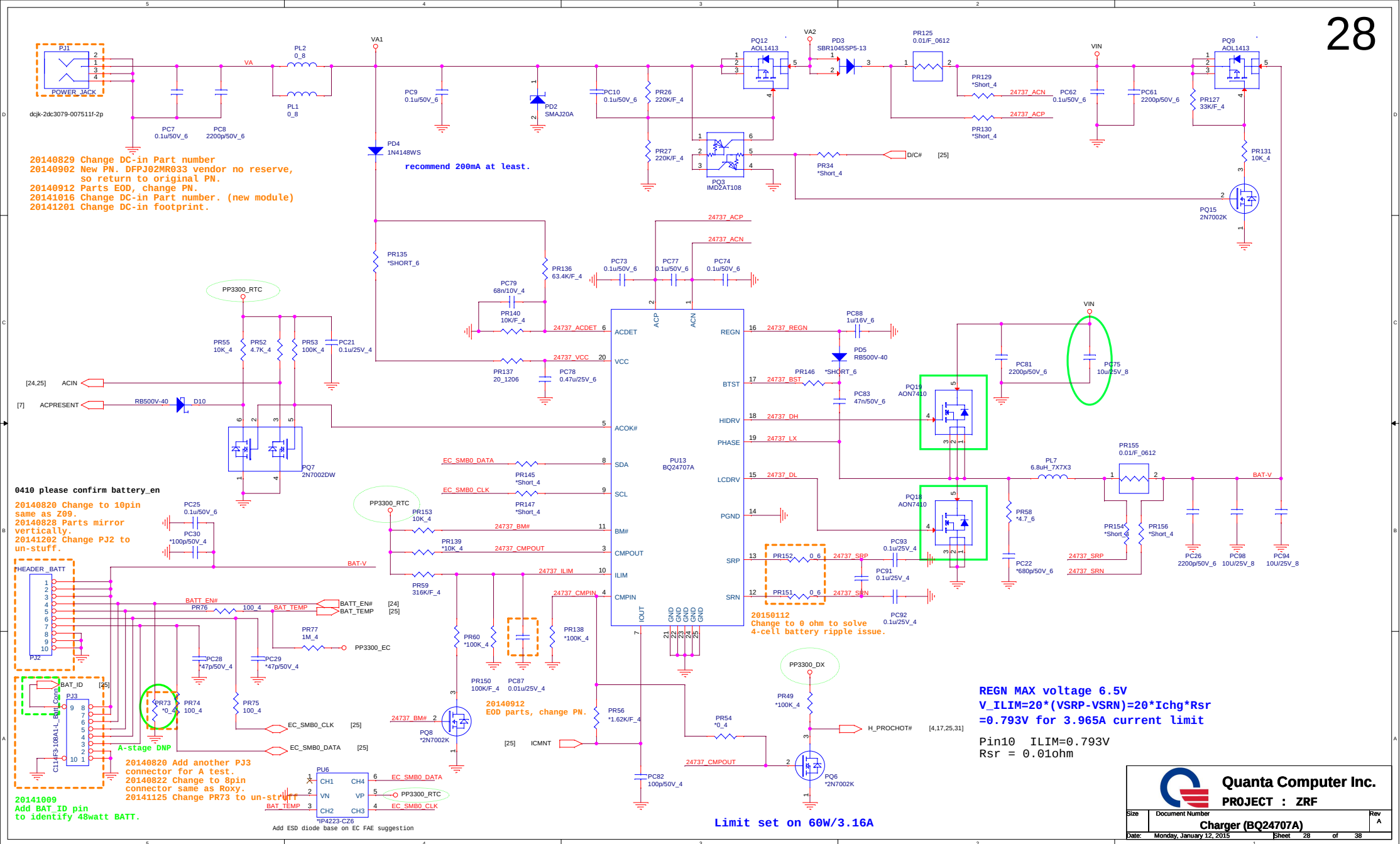


20140728 Modify to 22pin.  
20140819 Change footprint

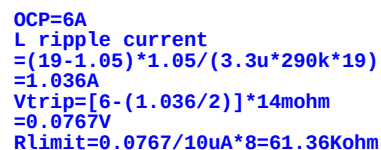
Quanta Computer Inc.

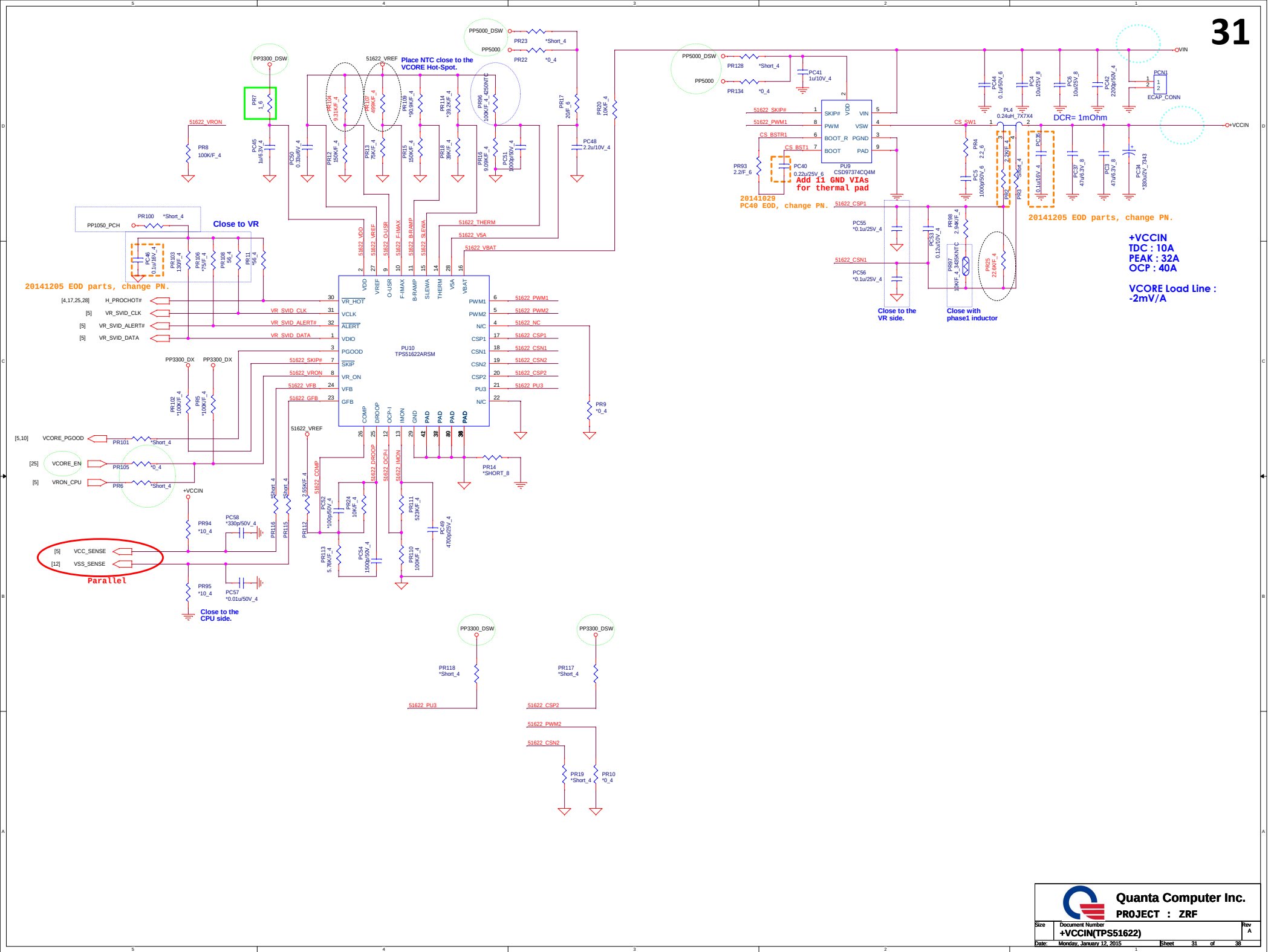
PROJECT : ZRF

|       |                          |                |
|-------|--------------------------|----------------|
| Size  | Document Number          | Rev            |
|       | DB/ALS/Thermal sensor    | A              |
| Date: | Monday, January 12, 2015 | Sheet 27 of 38 |

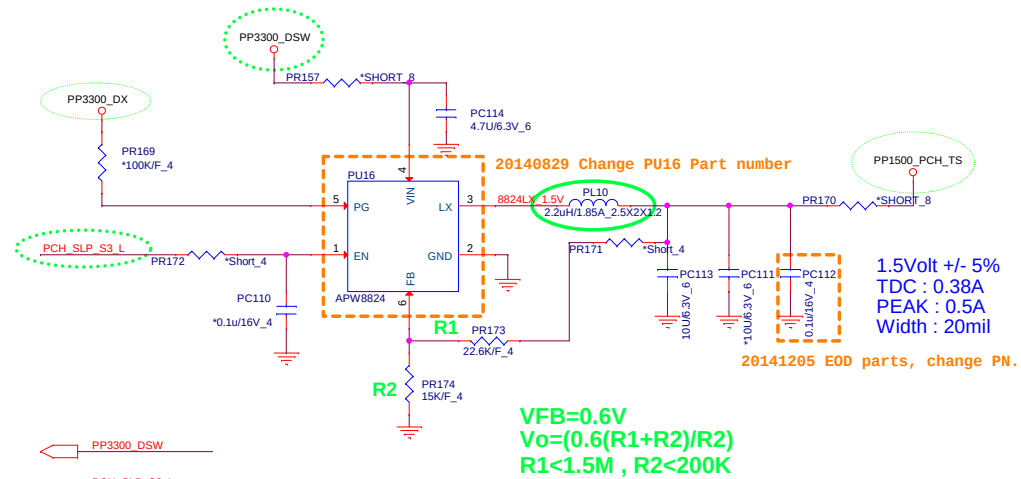


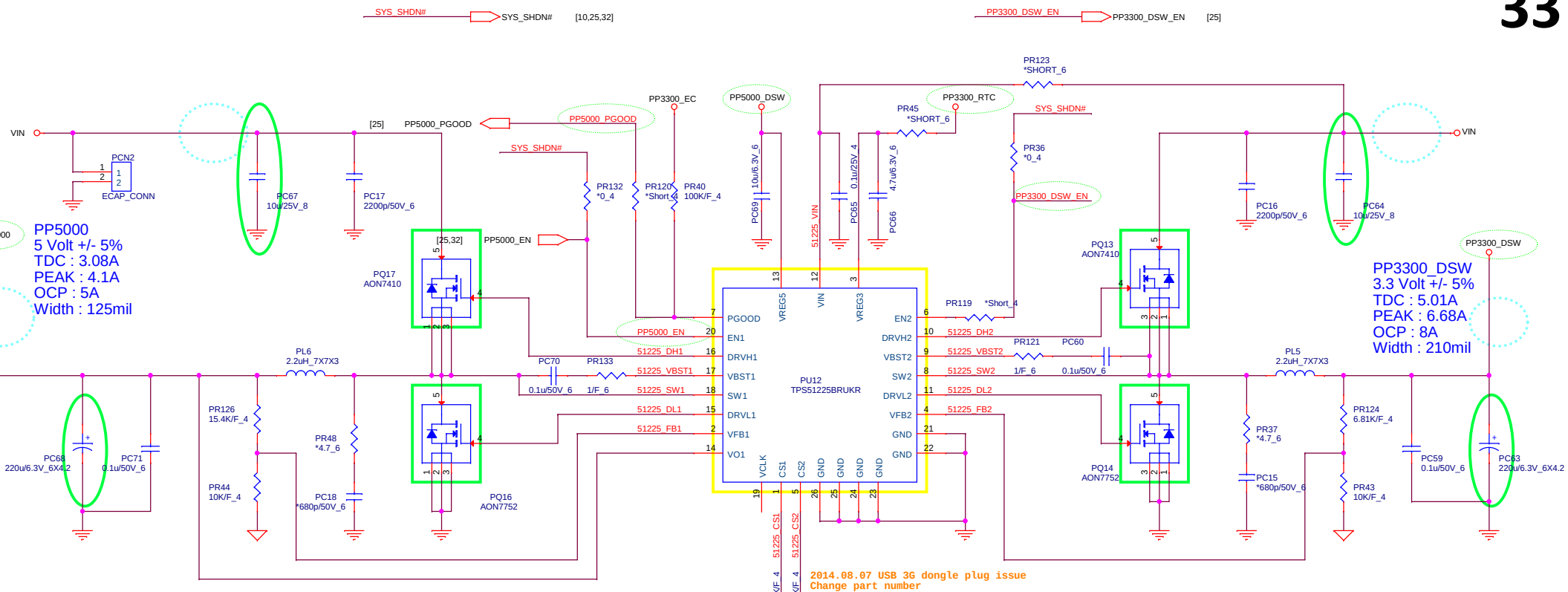








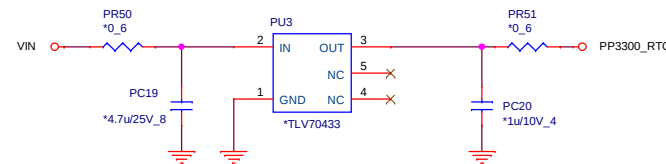


**OCP:5A**

$L(\text{ripple current}) = (9-5) \cdot 5 / (2.2 \mu \cdot 0.3 \text{M} \cdot 9) = 3.367 \text{A}$   
 $I_{\text{ocp}} = 5 - (3.367/2) = 3.316 \text{A}$   
 $V_{\text{th}} = (3.316 \text{A} \cdot 14 \text{mOhm}) + 1 \text{mV} = 47.43 \text{mV}$   
 $R(\text{lim}) = (47.43 \text{mV} \cdot 8) / 10 \mu \text{A} = 37.94 \text{K}$

**OCP:8A**

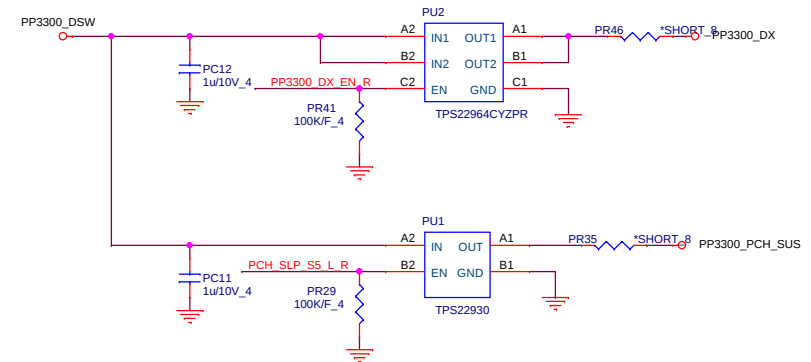
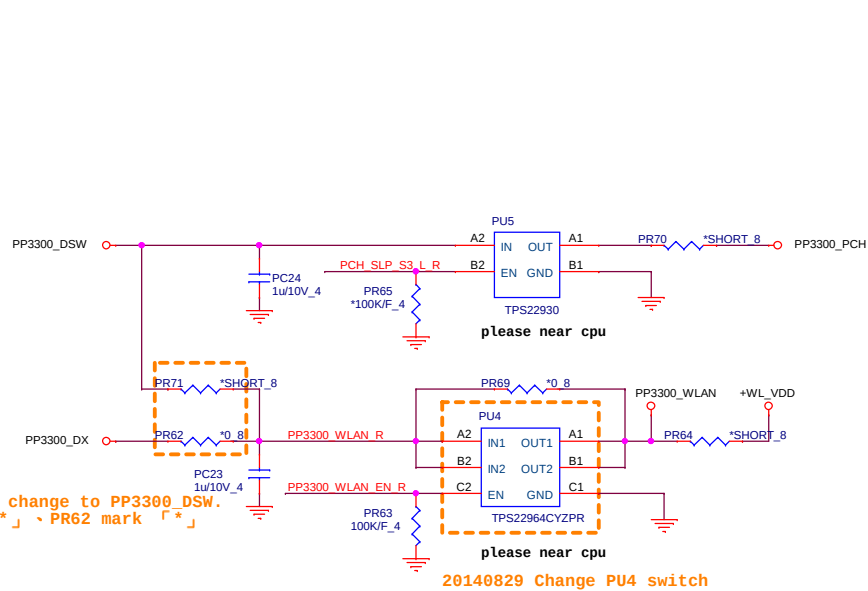
$L(\text{ripple current}) = (9-3.3) \cdot 3 / (2.2 \mu \cdot 0.355 \text{M} \cdot 9) \sim 2.676 \text{A}$   
 $I_{\text{ocp}} = 8 - (2.676/2) = 6.662 \text{A}$   
 $V_{\text{th}} = (6.662 \text{A} \cdot 14 \text{mOhm}) + 1 \text{mV} = 94.27 \text{mV}$   
 $R(\text{lim}) = (94.27 \text{mV} \cdot 8) / 10 \mu \text{A} = 75.41 \text{K}$



[7,13,25,29,30,32] PCH\_SLP\_S3\_L  PCH\_SLP\_S3\_L PR166  \*Short\_4 PCH\_SLP\_S3\_L R

[25] PP3300\_DX\_EN  PP3300\_DX\_EN PR167  \*Short\_4 PP3300\_DX\_EN R

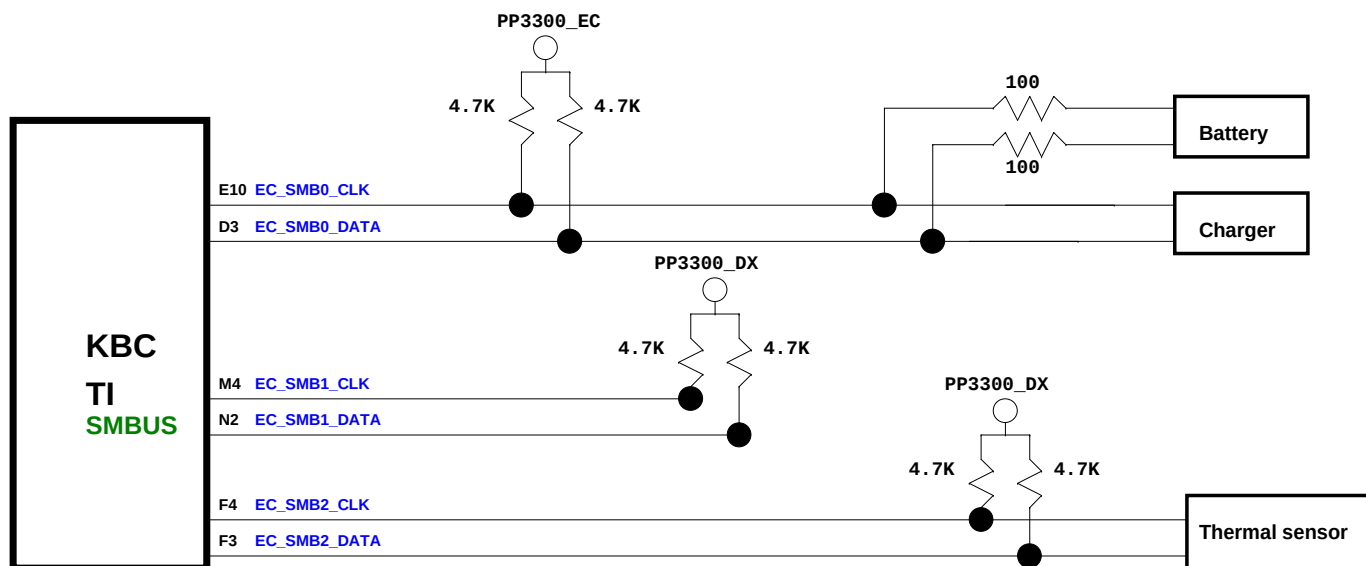
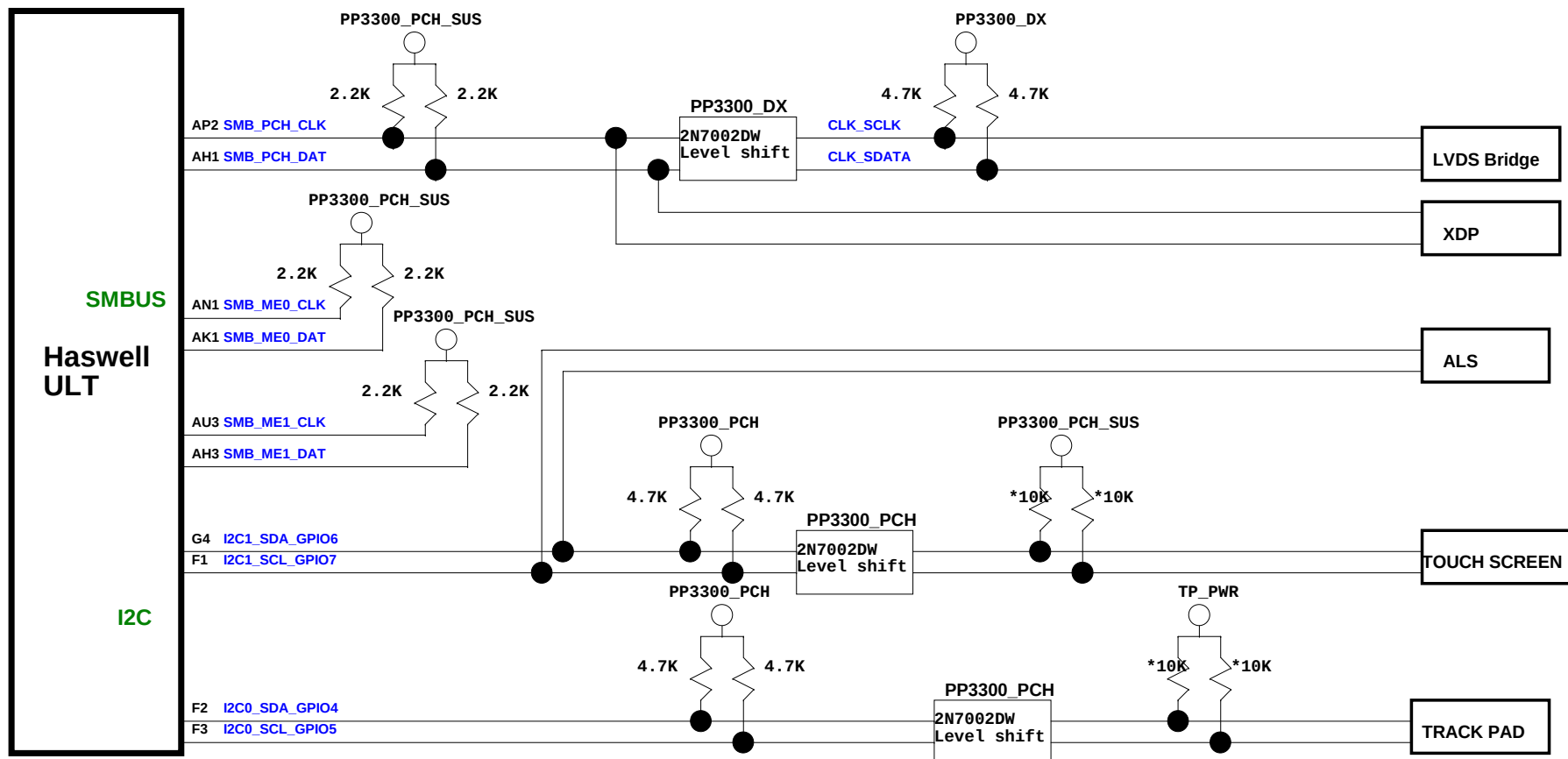
[10,19,25] PP3300\_WLAN\_EN  PP3300\_WLAN\_EN PR168  \*Short\_4 PP3300\_WLAN\_EN R

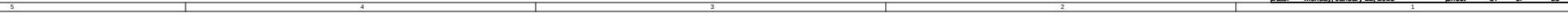


[7,25] PCH\_SLP\_SUS\_L  R115  \*Short\_4 PCH\_SLP\_S5\_L R

[7,13,25,29] PCH\_SLP\_S5\_L  PCH\_SLP\_S5\_L R112  \*0.4







| Model | Version | CHANGE LIST                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|-------|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ZRF   | 1A-1    | 201407/28 Page16: Half sensor change to LED board, (H81)<br>201407/28 Page24: Change input/comp. as Hugs. (CN10) (change to larger pitch)<br>201407/28 Page27: Luminance sensor, 20 pins change to 22 pins, (CN9)<br>201407/28 Page28: Add on Track Pad Driver for leakage issue                                                                                                                                                                                                                                                                                                                                                                             |
|       | 1A-2    | 201407/28 Page24: I1F change part NO, same as B-C7.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|       | 1A-3    | 201408/04 Page18: LCD conn. 30pin change to 40pin, 1.1EN change to 2.1.1EN, (CN3)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|       | 1A-4    | 201408/06 Page16: Inaugment level shift sensor Q11 change to USB<br>201408/07 Page16: Remove J503M, Q11 MOS 1 channel change to 2 channel, remove USBP9+ - USBP5+ pins, remove NGFF PCIe pin, remove NGFF CLK pin, GPIO59 pull high.<br>201408/07 Page16: System SV/VS change part NO, (P12)                                                                                                                                                                                                                                                                                                                                                                 |
|       | 1A-6    | 201408/08 Page16: Touch panel INTERVIEWP1 mark " * "<br>201408/08 Page24: Change CN10 same as ZQ9<br>201408/08 Page27: LED, GREEN 1 pin add TP13                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|       | 1A-7    | 201408/11 Page19: 1.1E, DSNMEL, 3, (GPIO59) pull high to PP330H_PCH_SUS<br>201408/11 Page27: Remove light sensor.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|       | 1A-8    | 201408/12 Page16: Inaugment level shift sensor USB change to FT118M.<br>201408/12 Page27: Cable (pin27) add 100K resistance                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|       | 1A-9    | 201408/13 Page24: KR change to 30pin.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|       | 1A-10   | 201408/13 Page27: CR cable connector change footprint<br>201408/28 Page19: With on board EC change to same as ZQ8 connector.<br>201408/28 Page28: P33 battery connector change to 40pin same as ZQ9.<br>201408/28 Page28: Add another P33 battery connector for A test.                                                                                                                                                                                                                                                                                                                                                                                      |
|       | 1A-11   | 201408/21 Page16: LCD conn. ECL, SDA, GPIO0, CCONN pins reserve a 150pf capacitor.<br>201408/21 Page19: With PCB T.XOR, swap, and RX add capacitor.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|       | 1A-12   | 201408/22 Page19: With return to another subboard module 7280SDW<br>201408/22 Page28: P33 battery connector change to 40pin same as Revy.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|       | 1A-13   | 201408/25 Page16: Change power capacitor value.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|       | 1A-14   | 201408/26 Page28: Change power output MOS/capacitor: (PQ18 + PQ21 + PC75)<br>201408/26 Page28: Change power output MOS/capacitor: (PQ20 + PQ21 + PC13)<br>201408/26 Page28: Change power output MOS/capacitor: (PQ18 + PQ11 + PC47)<br>201408/26 Page32: Change 1.5V solution IC.<br>201408/26 Page32: Change power output MOS/capacitor: (PQ13 + PQ14 + PQ16 + PQ17 + PC43 + PC54 + PC47)<br>201408/26 Page19: With PCB T.XOR, swap, and RX add capacitor.<br>201408/26 Page28: Change with enhanced module 7280SDW footprint.                                                                                                                              |
|       | 1A-15   | 201408/27 Page19: Pin W, J504B1E1, W, 20140812/2 add 100K resistance pulldown.<br>201408/27 Page16: LCD conn. change PN / footprint same as ZQ9.<br>201408/27 Page28: Change HDMI conn. CN3 footprint.                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|       | 1A-16   | 201408/28 Page28: BATT conn. P12 reserve vent-hole.<br>201408/28 Page26: 1. Add H0K E27.<br>2. Change H0LE12H0LE1E1H0LE21H0LE22H0LE23H0LE23E1 footprint.<br>3. Remove H0LE3H0LE1E1H0.<br>201408/28 Page19: With 100K resistance R011R032 mark " * "<br>201408/28 Page28: Change LED P14 with cable                                                                                                                                                                                                                                                                                                                                                           |
|       | 1A-17   | 201408/28 Page28: Change LED P14 with cable<br>201408/28 Page28: Change P31 EC, IN part number.<br>201408/28 Page28: Change 1.5V P14 part number.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|       | 1A-18   | 201408/27 Page16: DC-in return to original PN.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|       | 1A-19   | 201409/19 Page19: Change with subboard module 7280SDW footprint.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|       | 1A-20   | 201409/12 Page16: CH EOD, change PN.<br>201409/12 Page28: C7P6 300V 300V 100V EOD, change PN.<br>201409/12 Page22: L4/L7 EOD, change PN.<br>201409/12 Page27: C20M 322V 300V 1.5 EOD, change PN.<br>201409/12 Page28: PC E7V P1 EOD, change PN.<br>201409/12 Page28: PC100 EOD, change PN.<br>201409/12 Page30: P001 EOD, change PN.                                                                                                                                                                                                                                                                                                                         |
|       | 1B-1    | 201409/22 Page22: A-MIC change to D-MIC same as Hugs(Z81).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|       | 1B-2    | 201409/23 Page26: Add L4 Switch (H58)<br>201409/23 Page27: D-MIC PWB reserve MOS/PCH, change use PP330H_PCH.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|       | 1B-3    | 201409/24 Page26: USB3.0 USB P1/P2 add C399D3A.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|       | 1B-4    | 201409/25 Page27: Thermal MOSFET Q25/Resistance R5R5 mark " * ", on-stuff.<br>ONOFF power PP330H_D3X change to PP330H_EC.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|       | 1B-5    | 201409/26 Page22: Change CN3 footprint.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|       | 1B-6    | 201409/28 Page28: Change CN7 Audio Jack PN, & footprint.<br>201409/28 Page16: Change CN1 LCD conn. footprint.<br>201409/28 Page25: Change US EC, PN.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|       | 1B-7    | 201410/02 Page24: KR change PN & footprint.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|       | 1C-1    | 201410/09 Page25: EC N12 pin add BATT_ID to identify different BATT. conn. & add B033 pull high.<br>201410/09 Page28: BATT. conn. add BATT_ID to identify different BATT.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|       | 1C-2    | 201410/14 Page19: Change with subboard module 7280SDW PN.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|       | 1C-3    | 201410/15 Page24: Fan connector Pin3/Pad reserve 1000pf capacitor for EMI solution.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|       | 1C-4    | 201410/16 Page28: Change DC-in conn. (new module)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|       | 1C-5    | 201410/18 Page34: LED P14 power change to PP330H_D3W, P011 cannot " * ", P082 mark " * "                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|       | 1C-6    | 201410/21 Page16: LCD conn. footprint return to ZQ9.<br>201410/21 Page13: head register module TTP C531 P0P15 add PP105H_PCH_SUS, P10 PP105H_PGCHD change to VCCT3_PWB02D.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|       | 1D-1    | 201410/29 Page31: PC40 EOD, change PN.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|       | 1D-2    | 201411/12 Page22: C193 change to 8.1uf.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|       | 1D-3    | 201411/12 Page27: add 2 ohm resistors change to short pad.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|       | 1D-4    | 201411/08 Page22: change 107000 PN.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|       | 1D-4    | 201411/28 Page25 Change EC, BRD, ID, I02 change to High, I03 change to Low, because EC change code.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|       | 1D-5    | 201411/25 Page28 Change P073 to on-stuff.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|       | 1D-6    | 201412/01 Page23 Change TP41 power.<br>201412/01 Page23 D0M2, CLK, L, reserve 220pf capacitor.<br>201412/01 Page25 Change EC new PN.<br>201412/01 Page27: Add L12, remove R071/R072.<br>201412/01 Page28 Change DC-in footprint.                                                                                                                                                                                                                                                                                                                                                                                                                             |
|       | 1D-6    | 201412/02 Page28 Change P12 to on-stuff.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|       | 1D-7    | 201412/05 CH402N-D001 EOD parts, change PN, CH403N-D008.<br>201412/05 CH402N-D001 EOD parts, change PN, CH403N-D008.<br>201412/05 CH402N-D008-D001 EOD parts, change PN, CH403N-D008.<br>201412/05 CH402N-D008-D001 EOD parts, change PN, CH403N-D008.<br>201412/05 CH402N-D008-D001 EOD parts, change PN, CH403N-D008.<br>201412/05 CH402N-D008-D001 EOD parts, change PN, CH403N-D008.<br>201412/05 CH402N-D008-D001 EOD parts, change PN, CH403N-D008.<br>201412/05 CH402N-D008-D001 EOD parts, change PN, CH403N-D008.<br>201412/05 CH402N-D008-D001 EOD parts, change PN, CH403N-D008.<br>201412/05 CH402N-D008-D001 EOD parts, change PN, CH403N-D008. |
|       | 1D-8    | 2015/01/09 Page25 Change US EC, IC, PN, for MP.</                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |