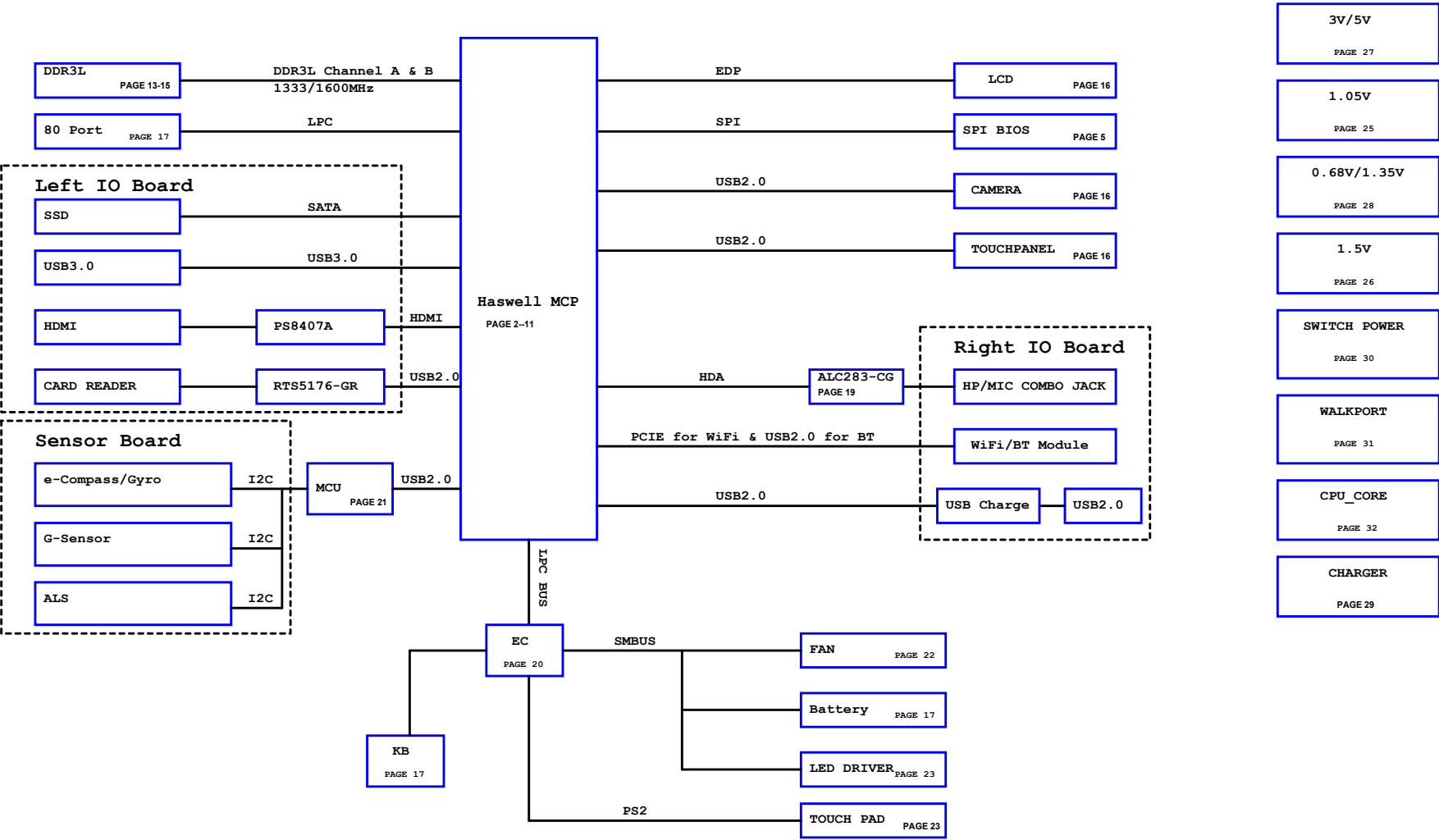
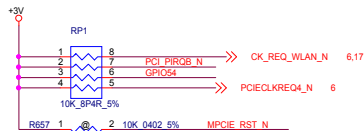
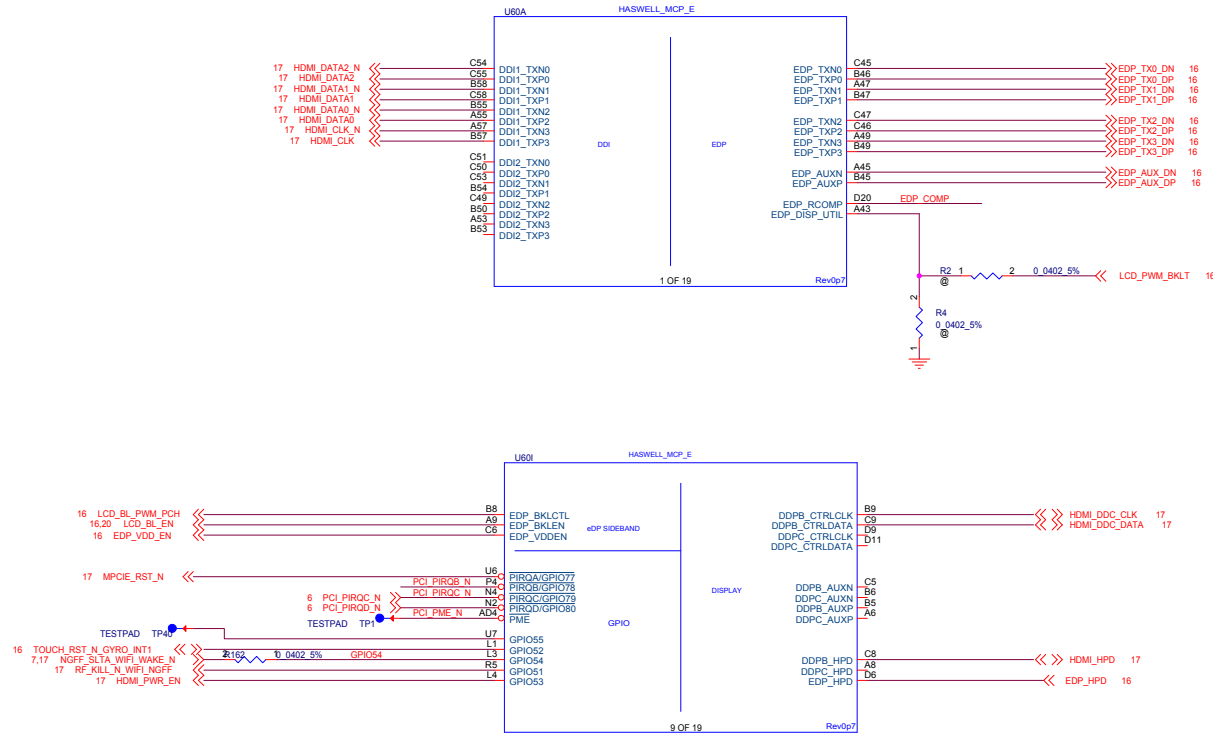
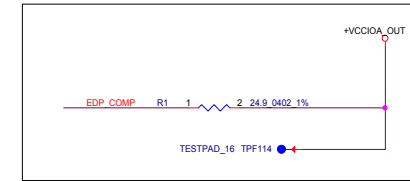
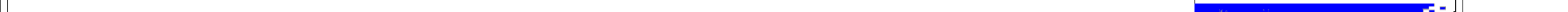
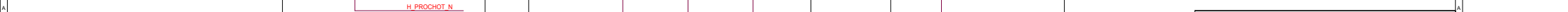
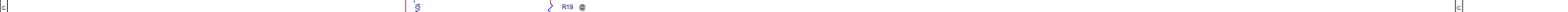


Kona SVT-NCS Schematic Block Diagram



# Haswell MCP (DDI,EDP)





**Haswell MCP (LPDDR3)**

**U600**

Left pins name: Option A/Option B/Option C/Option D

Right pins name: Option D/Option C/Option B/Option A

4 memory types:  
Option A: DDR3L Interleaved  
Option B: LP-DDR3 Interleaved  
Option C: DDR3L Non-Interleaved  
Option D: LP-DDR3 Non-Interleaved

**U601**

Left pins name: Option A/Option B/Option C/Option D

Right pins name: Option D/Option C/Option B/Option A

4 memory types:  
Option A: DDR3L Interleaved  
Option B: LP-DDR3 Interleaved  
Option C: DDR3L Non-Interleaved  
Option D: LP-DDR3 Non-Interleaved

**U602**

Left pins name: Option A/Option B/Option C/Option D

Right pins name: Option D/Option C/Option B/Option A

4 memory types:  
Option A: DDR3L Interleaved  
Option B: LP-DDR3 Interleaved  
Option C: DDR3L Non-Interleaved  
Option D: LP-DDR3 Non-Interleaved

**3 OF 19**

**Rev07**

**lenovo 联想**

**LENVO.CRDN**

**Haswell MCP (LPDDR3)**

**Document Number**

**Size**

**C**

**Kona**

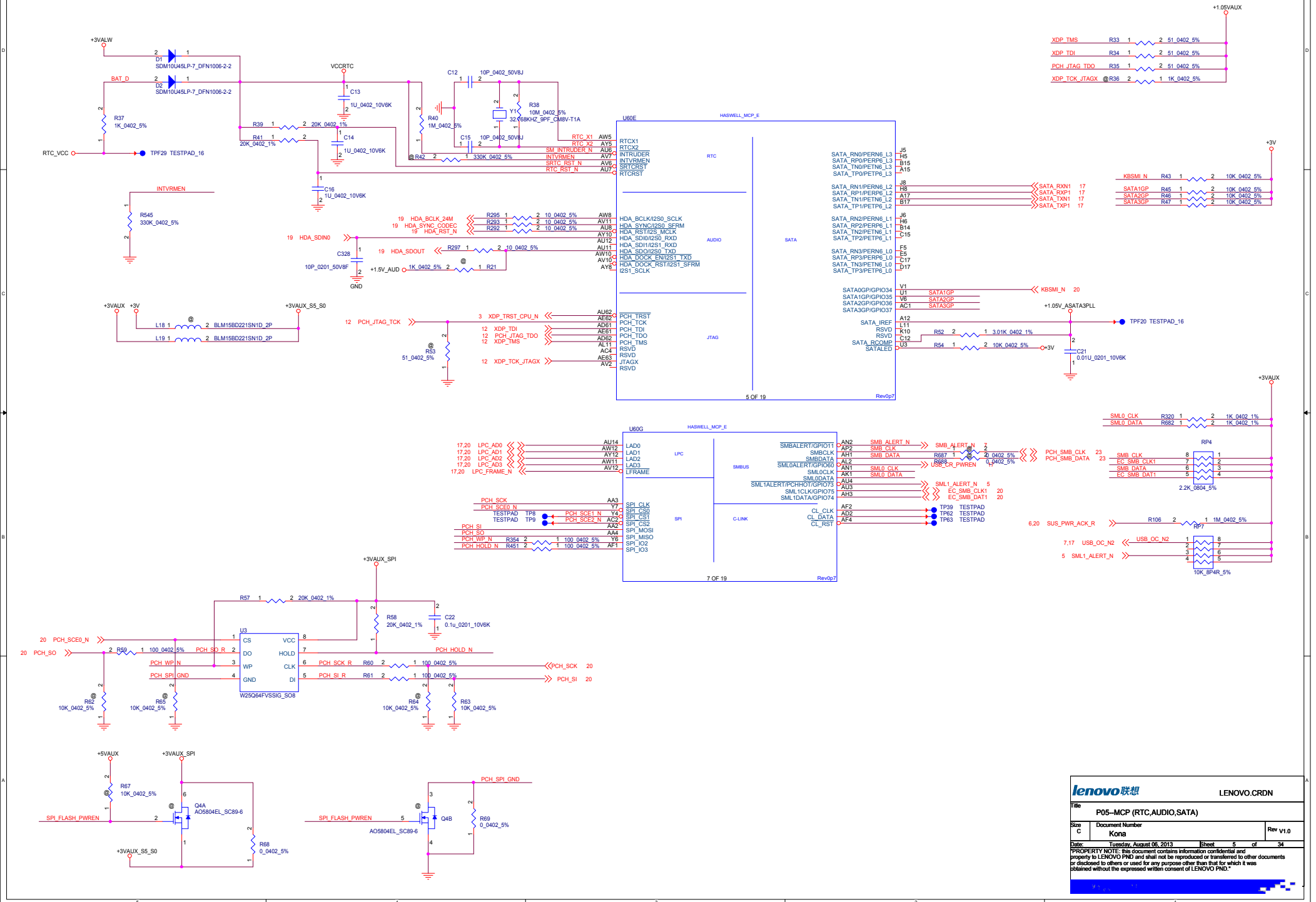
**Rev V1.0**

**Date:** Tuesday, August 06, 2013

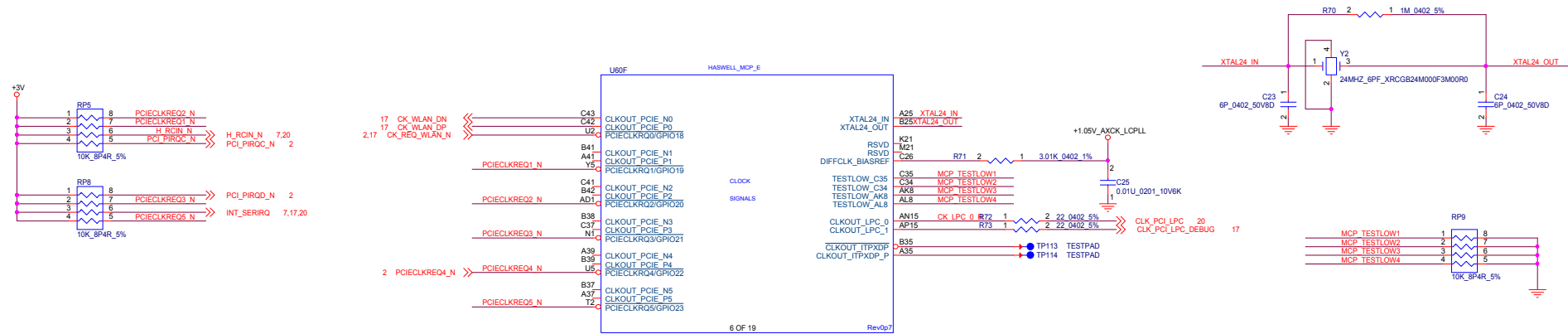
**Sheet** 4 of 34

**PROPERTY NOTE:** This document contains information confidential and proprietary to LENOVO PND and shall not be reproduced or transferred to other documents or disclosed to others or used for any purpose other than that for which it was obtained without the expressed written consent of LENOVO PND.

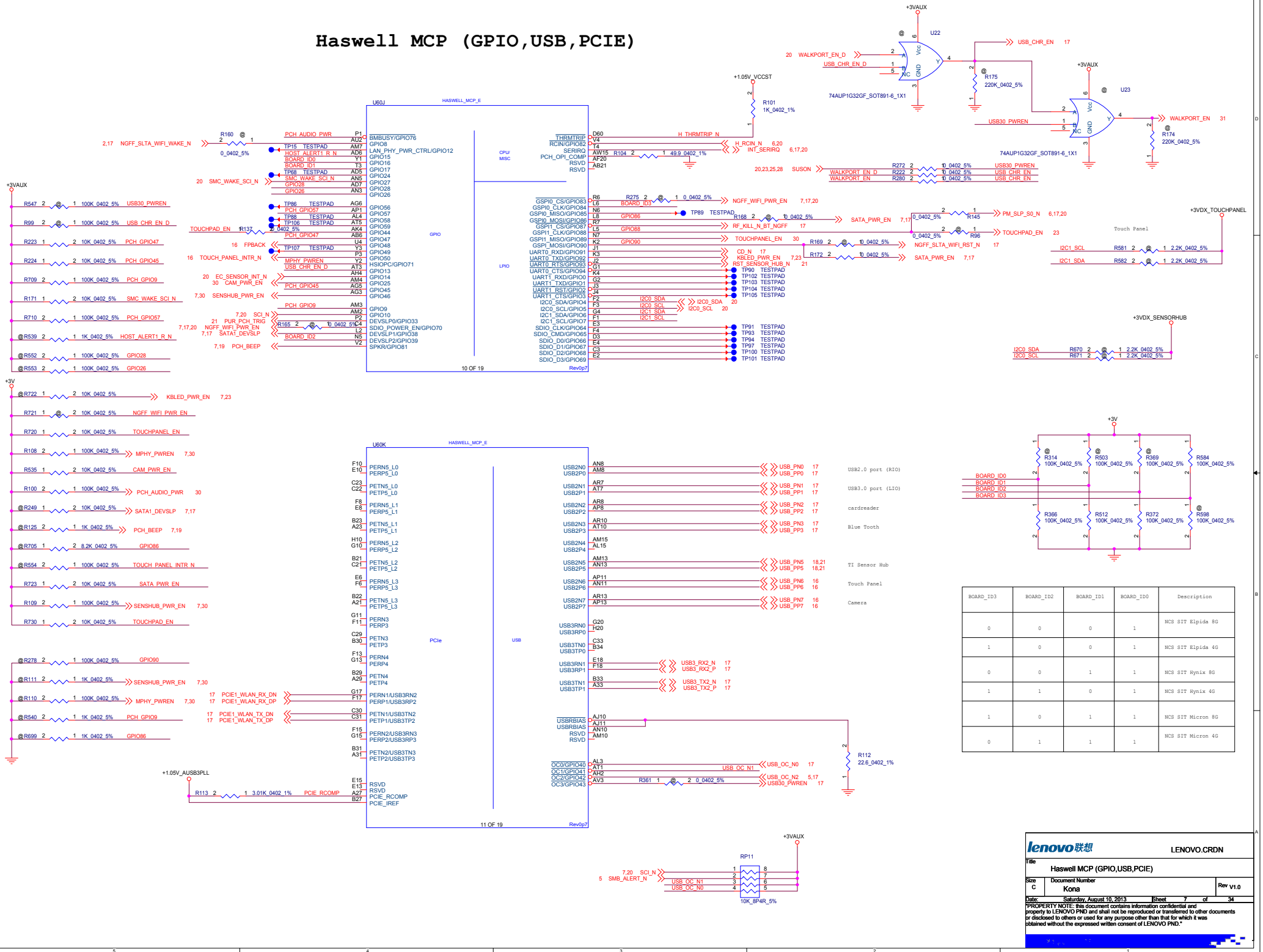
**Haswell MCP (RTC,AUDIO,JTAG,SATA,LPC,SPI,SMBUS)**



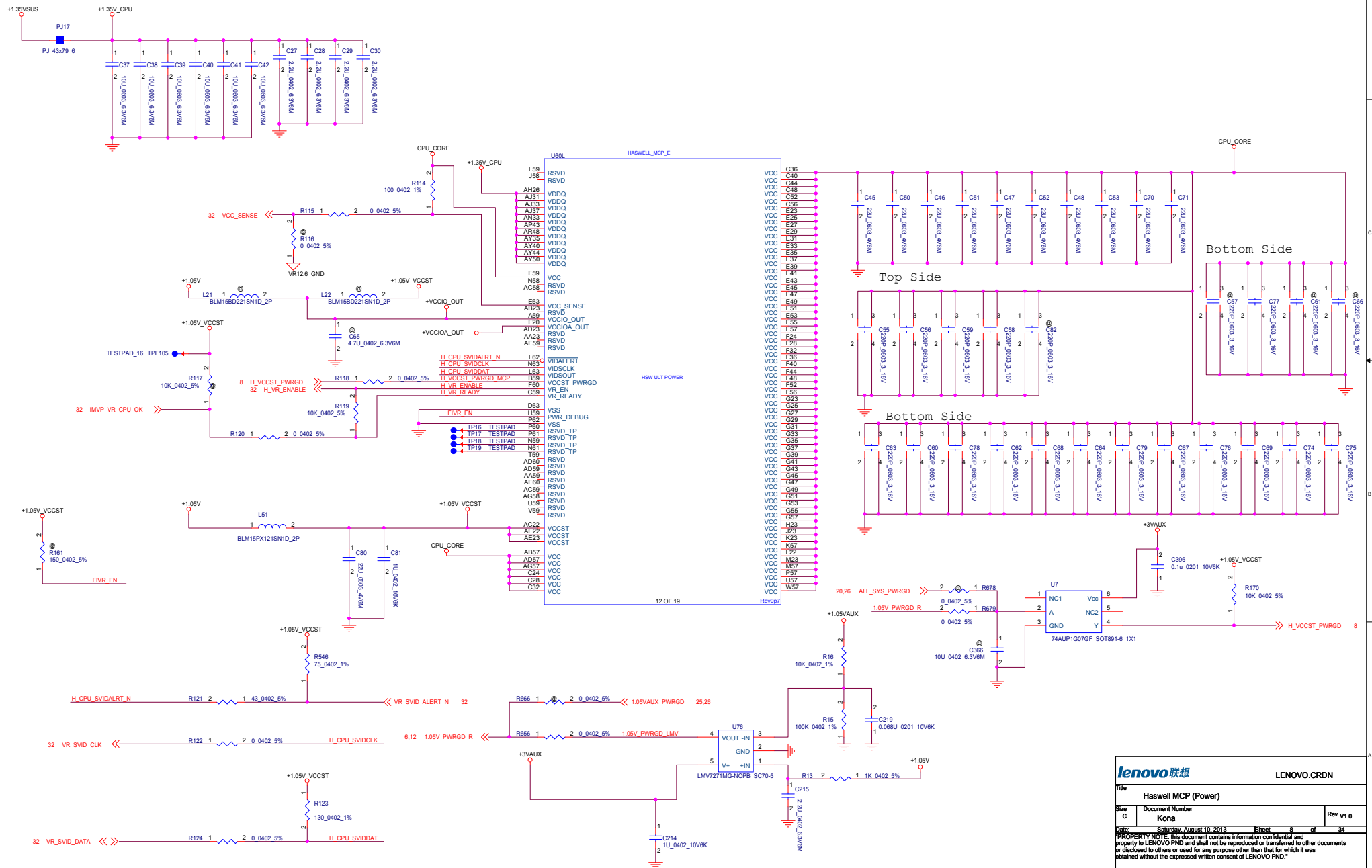
# Haswell MCP (Clock,PM)



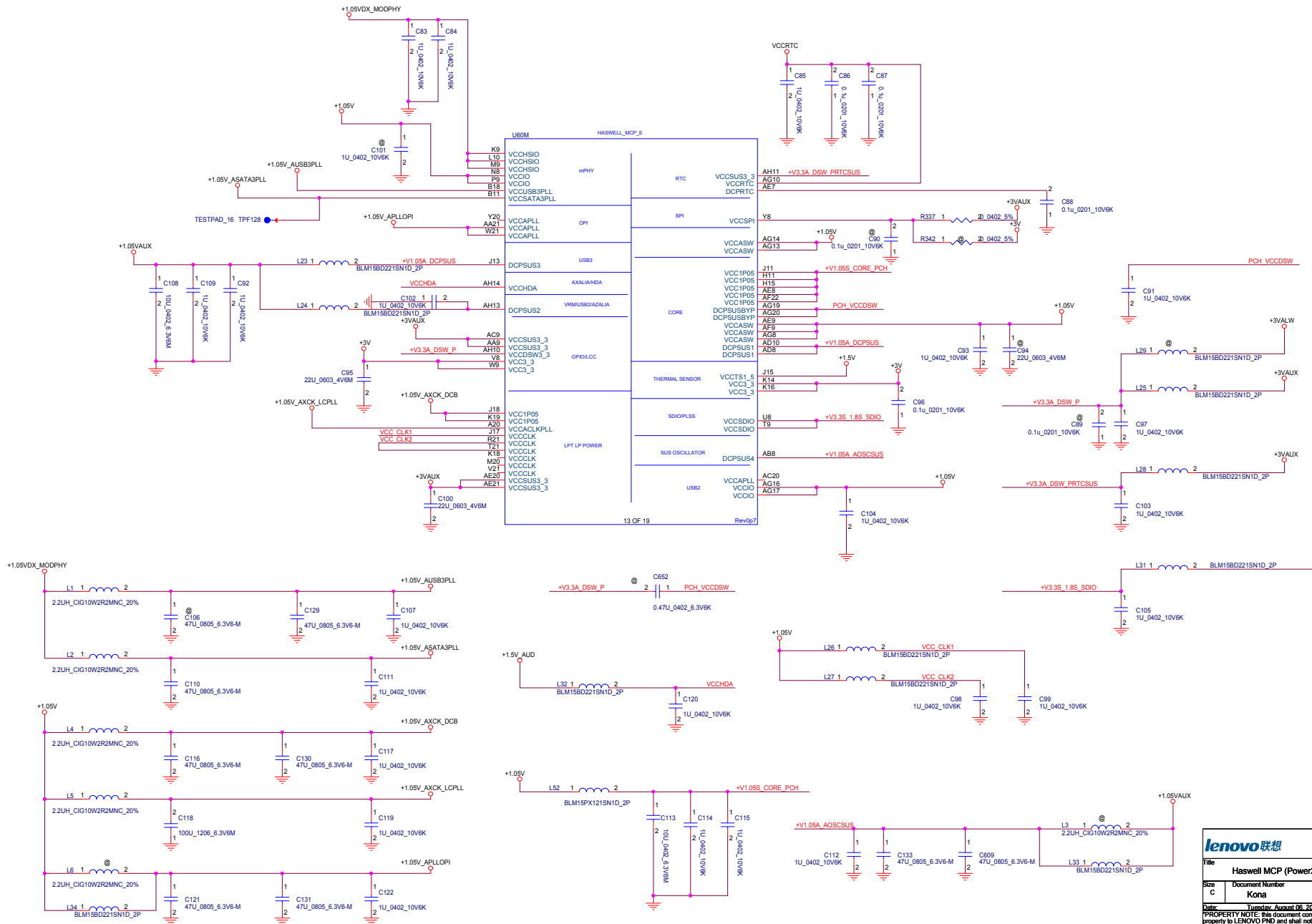
# Haswell MCP (GPIO,USB,PCIE)



## Haswell MCP (Power)



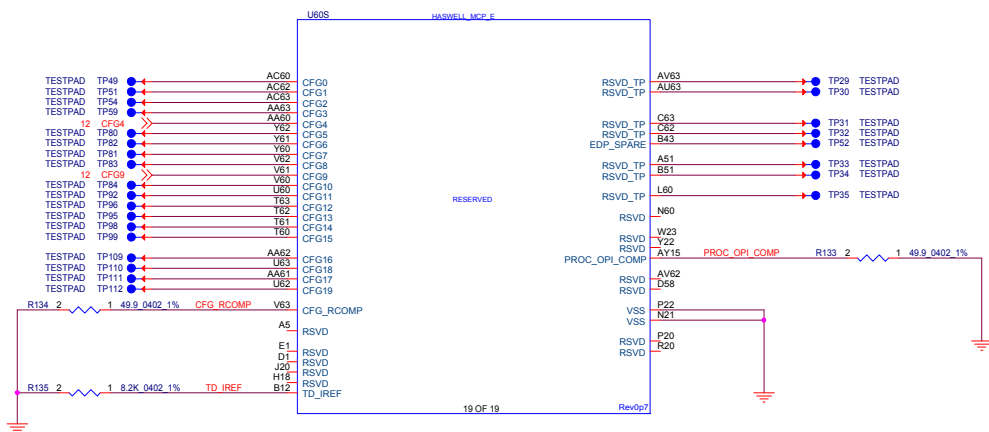
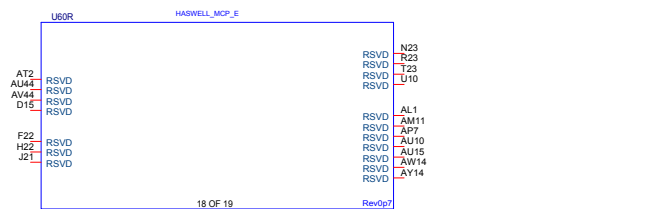
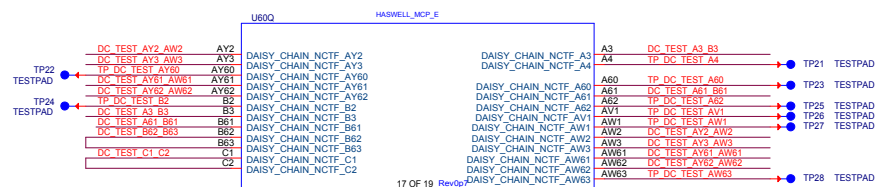


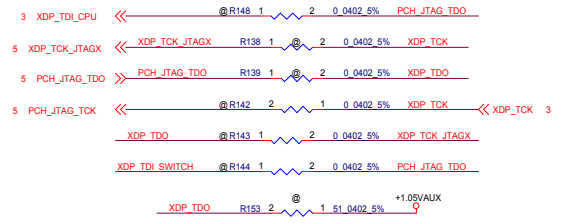
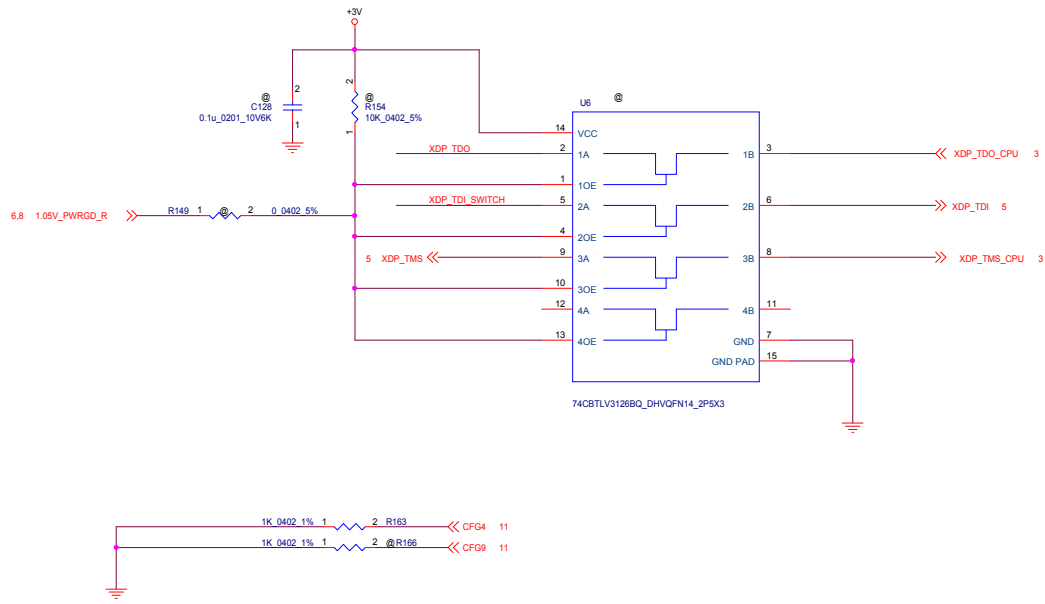
**Haswell MCP (Power2)**

# Haswell MCP (VSS)



Haswell MCP (OTHER)





D

D

C

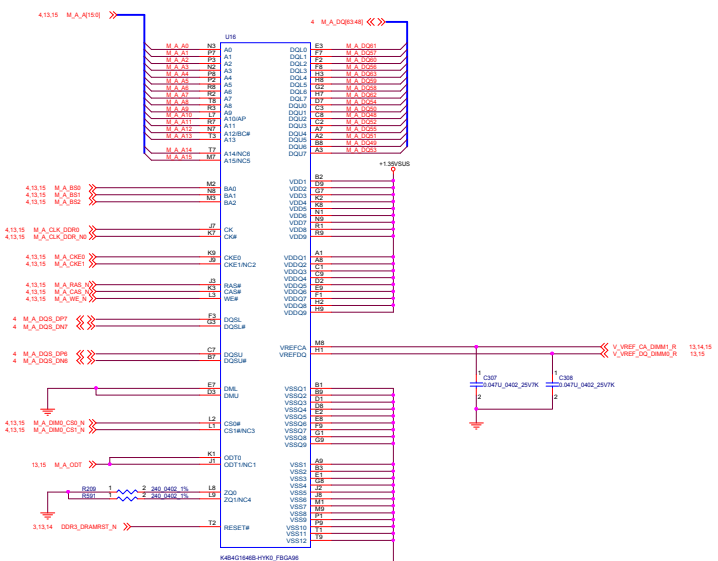
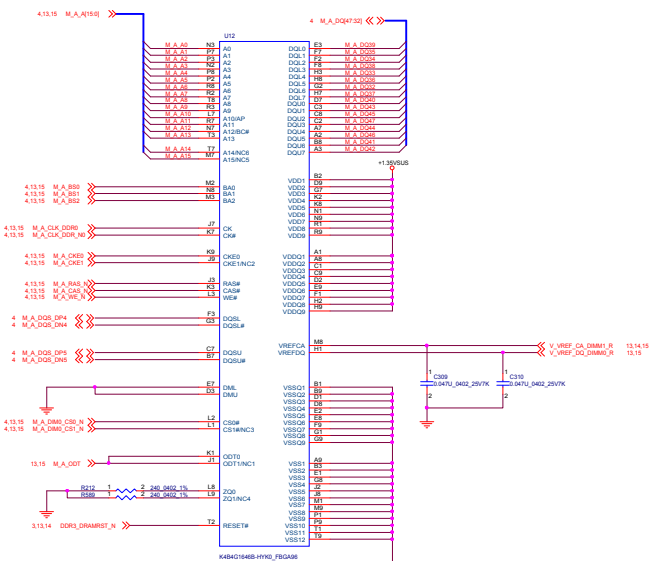
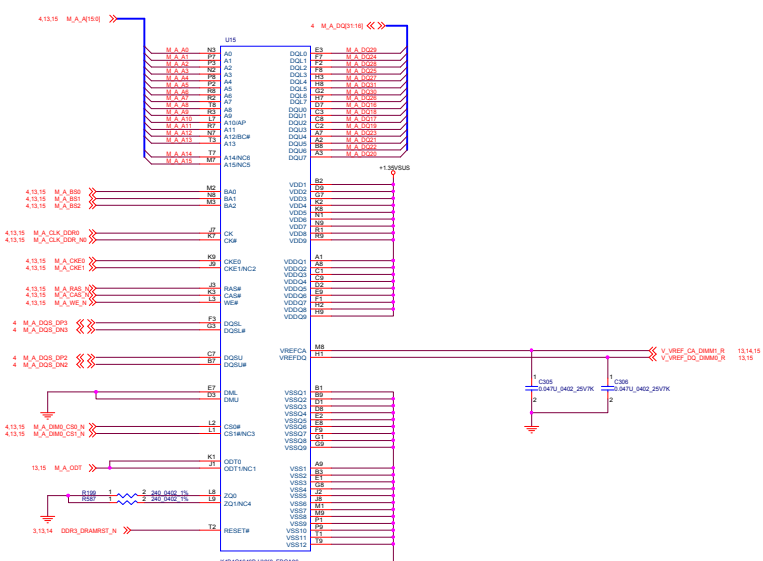
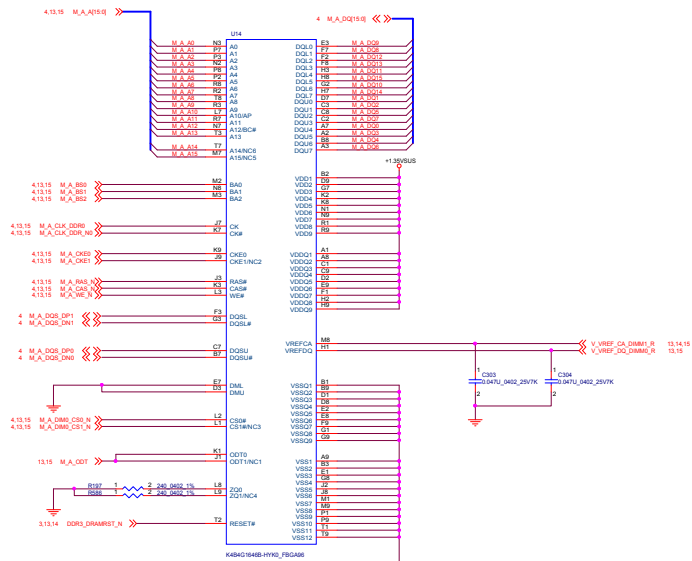
C

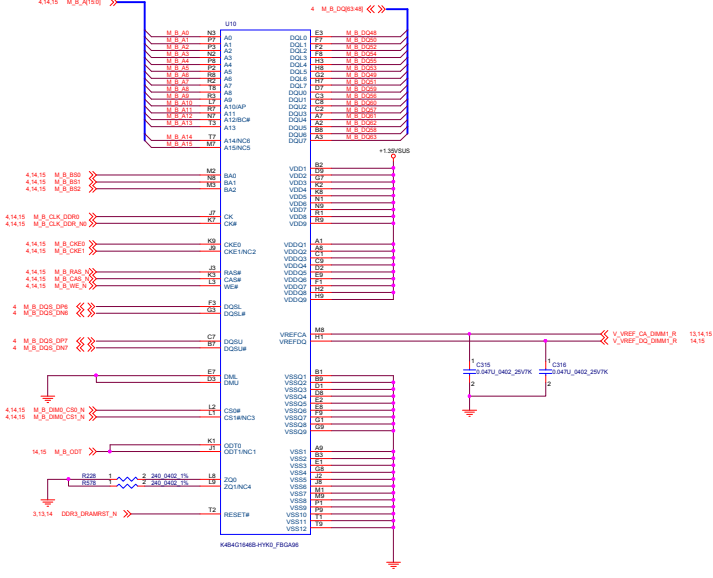
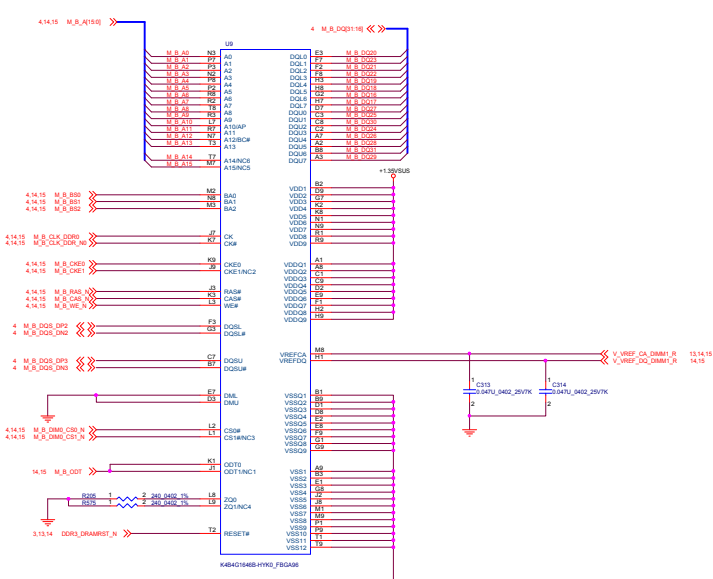
B

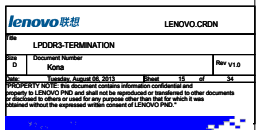
B

A

A

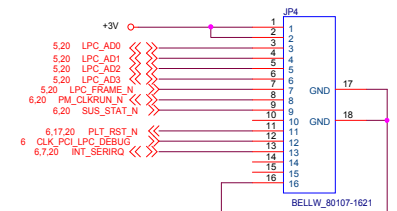
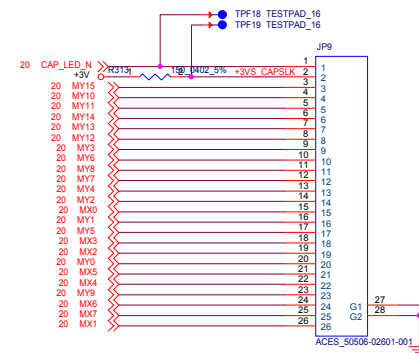
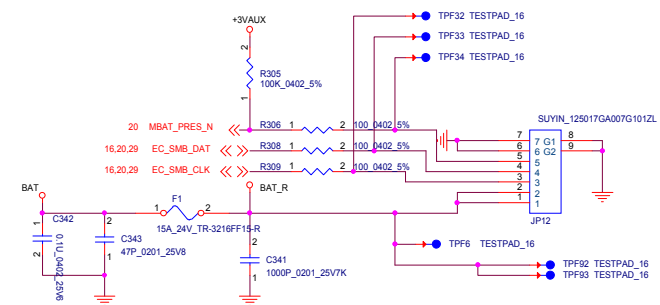






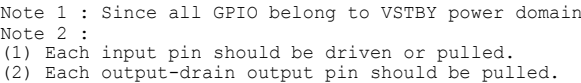




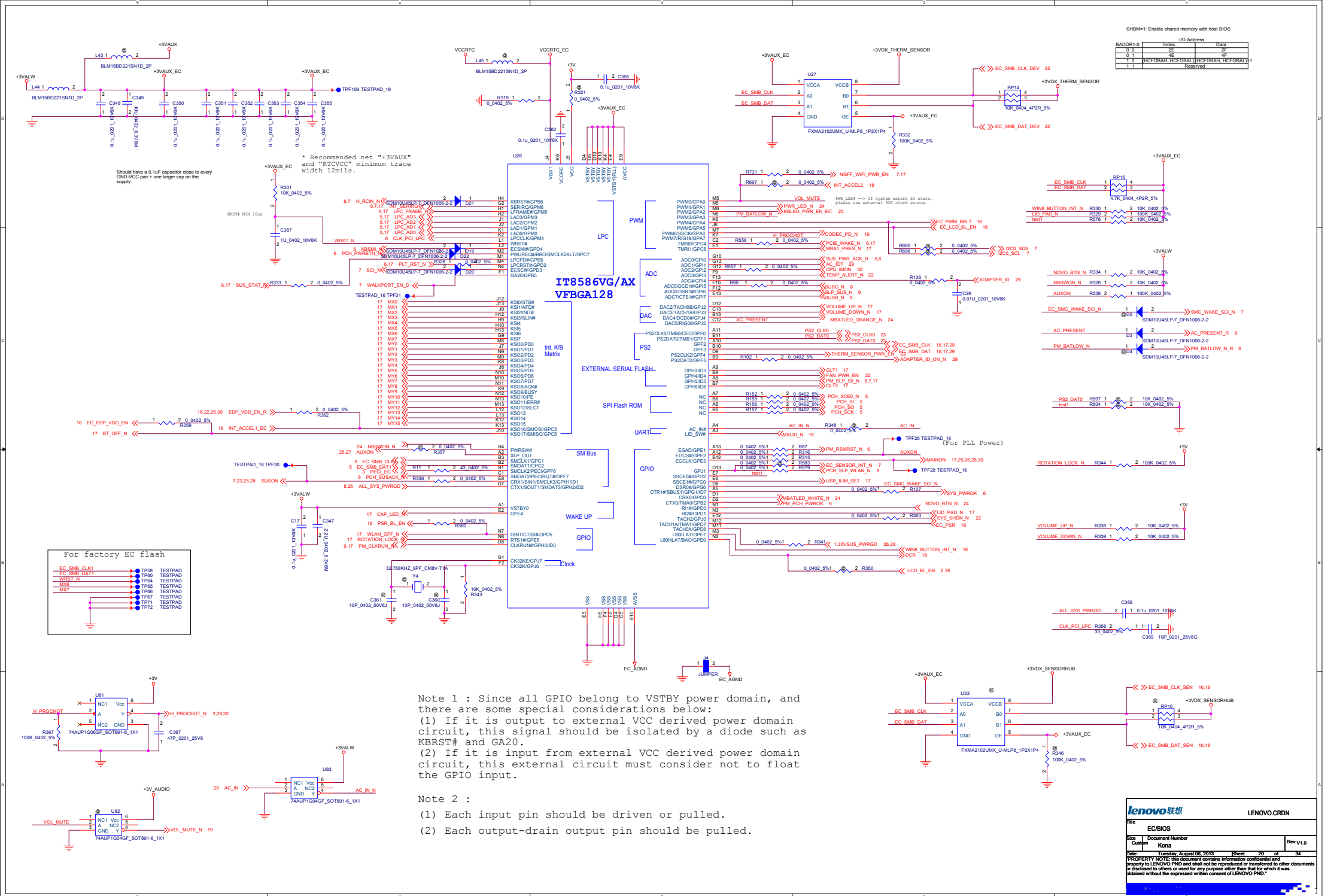


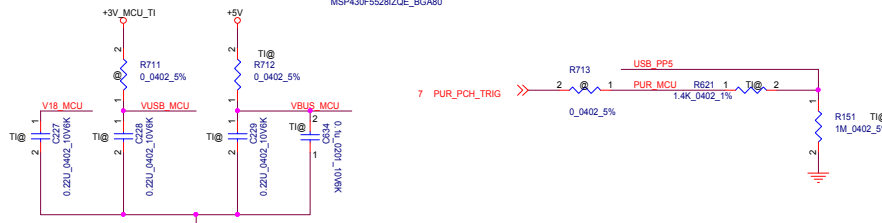
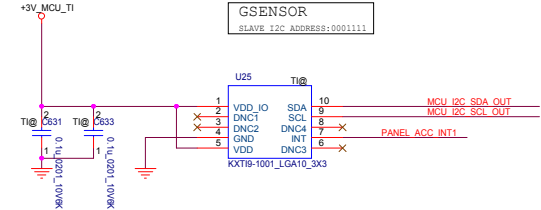
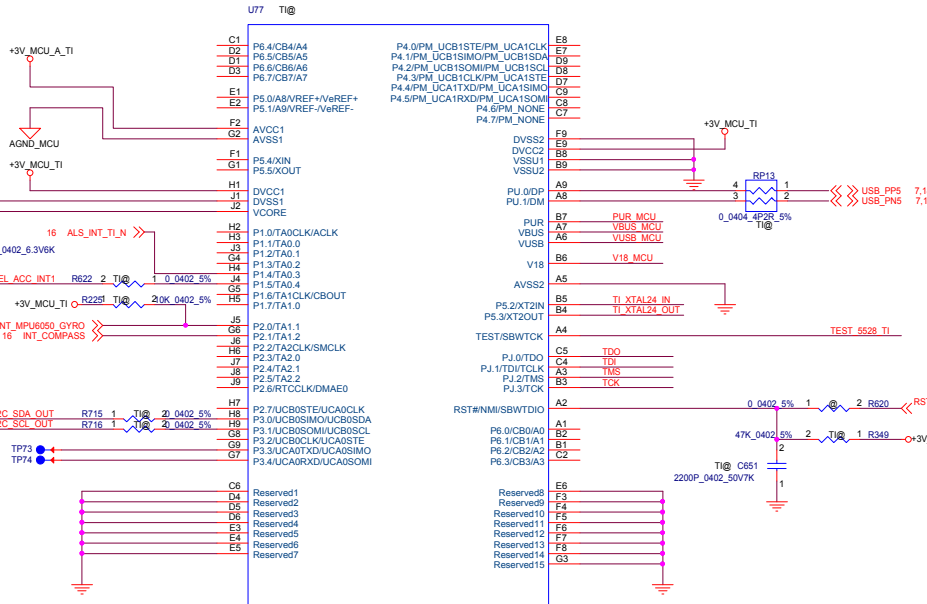
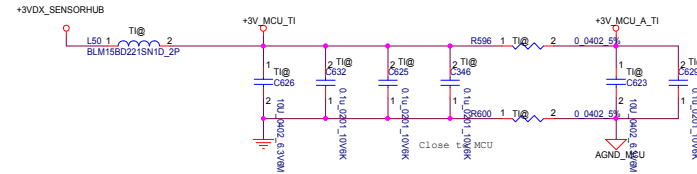
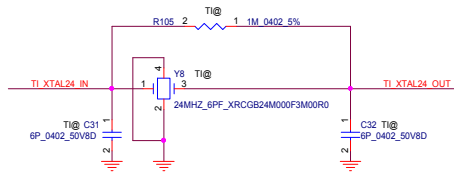
5 SATA\_RXP1 <<< C276 2 | 1 0.01U 0201 10V8K >>> SATA\_RXP1\_C 17  
5 SATA\_RXN1 <<< C277 2 | 1 0.01U 0201 10V8K >>> SATA\_RXN1\_C 17

5 SATA\_TXN1 <<< C272 2 | 1 0.01U 0201 10V8K >>> SATA\_TXN1\_C 17  
5 SATA\_TXP1 <<< C273 2 | 1 0.01U 0201 10V8K >>> SATA\_TXP1\_C 17

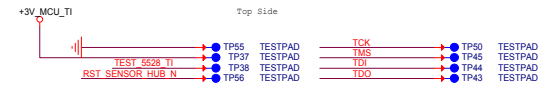


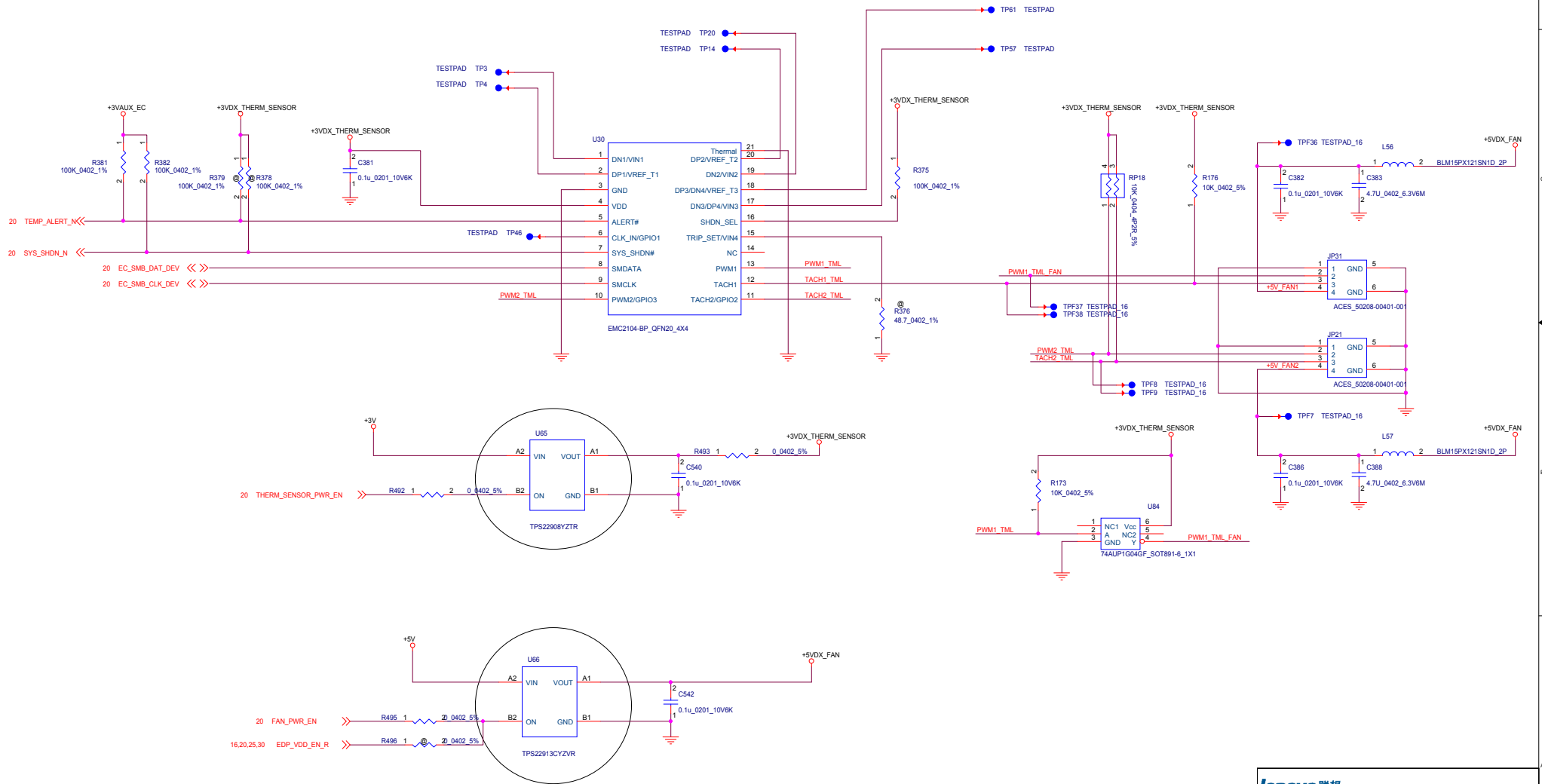


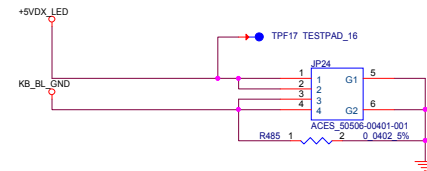
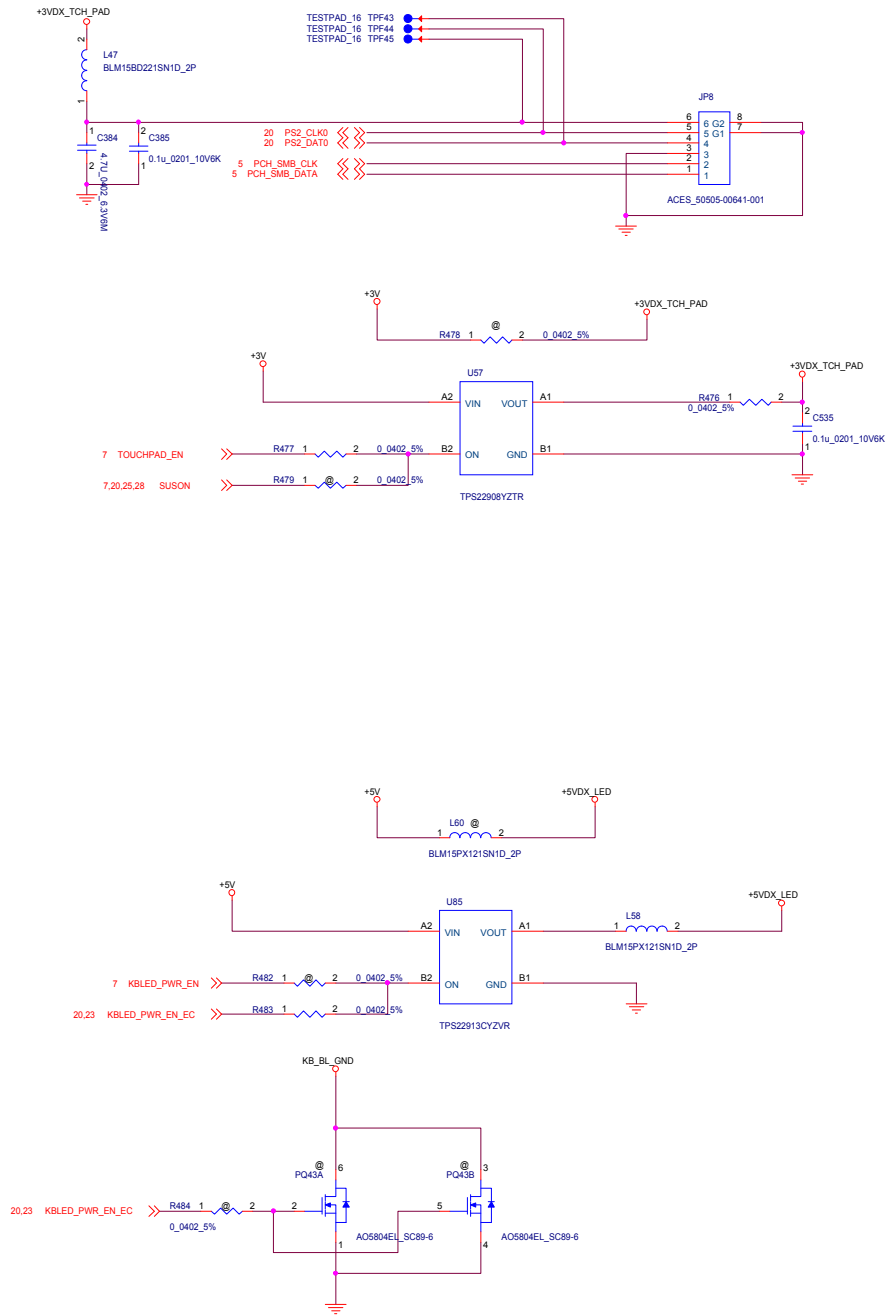


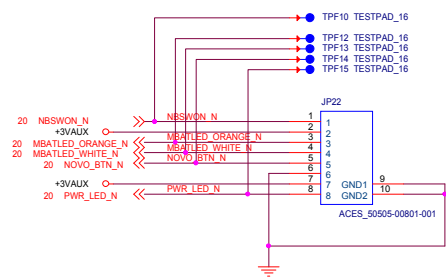


MCU JTAG



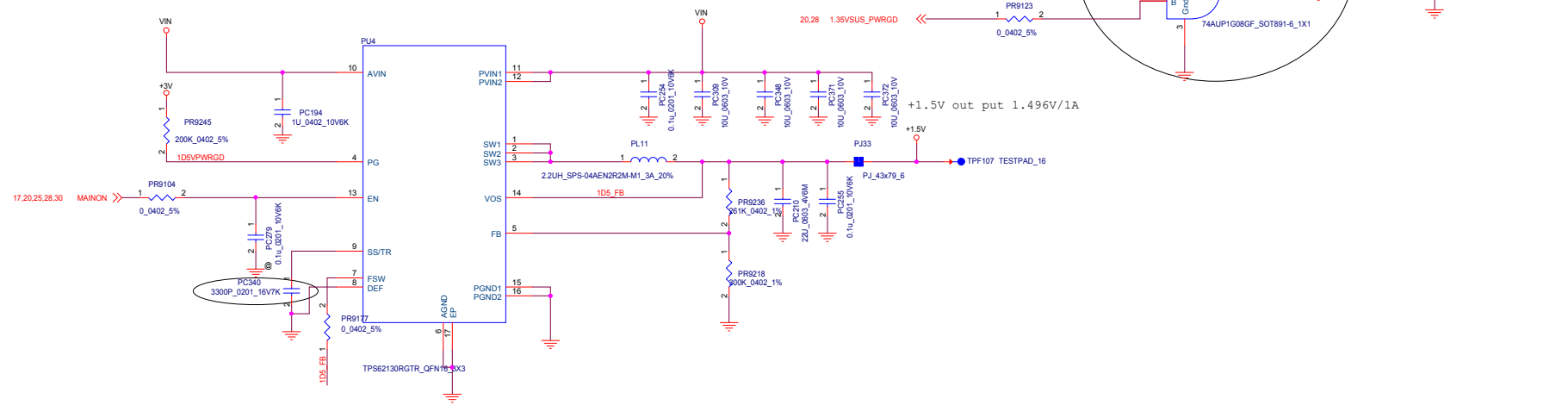


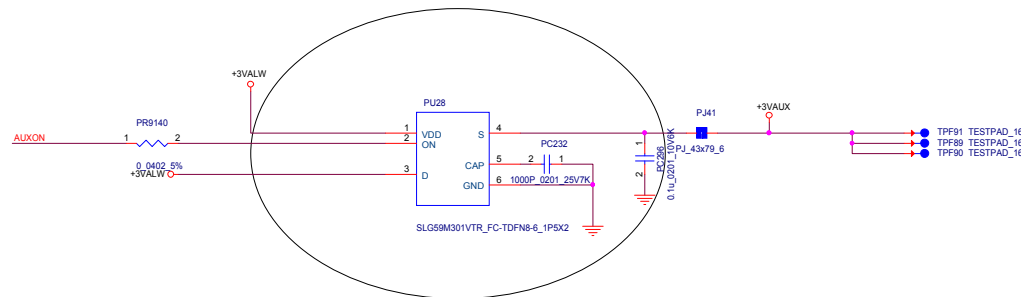
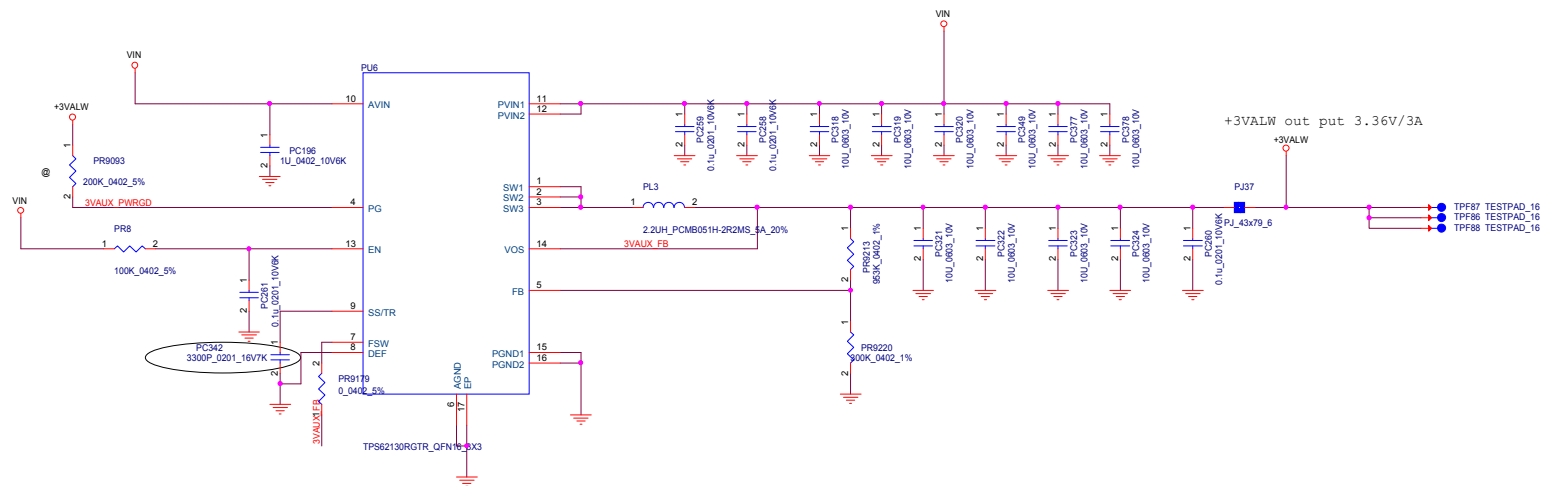
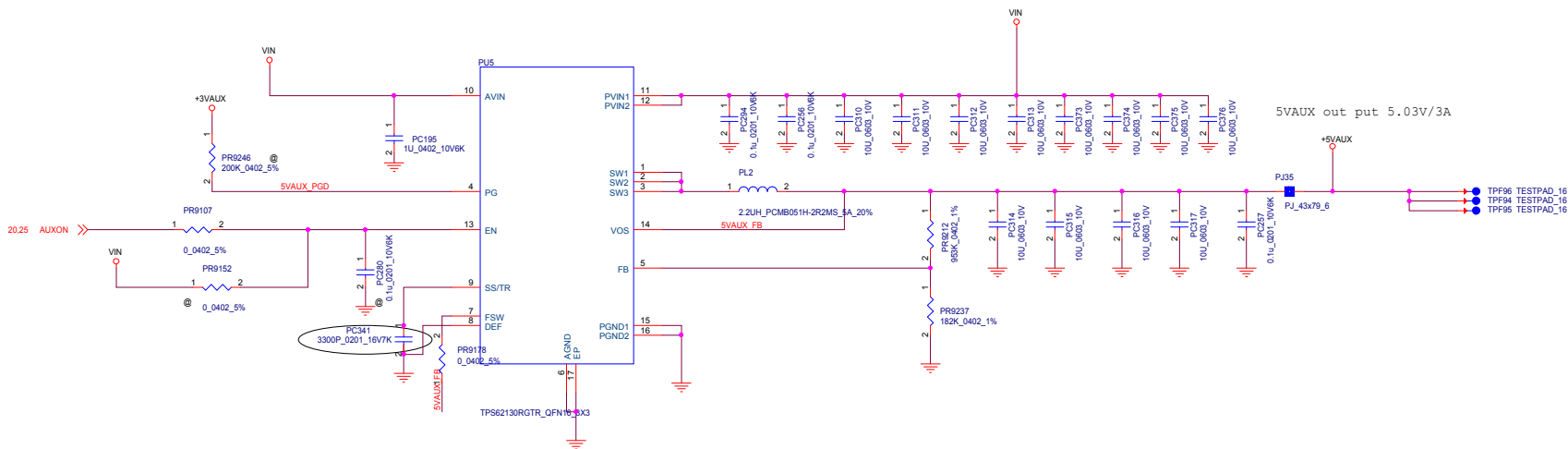


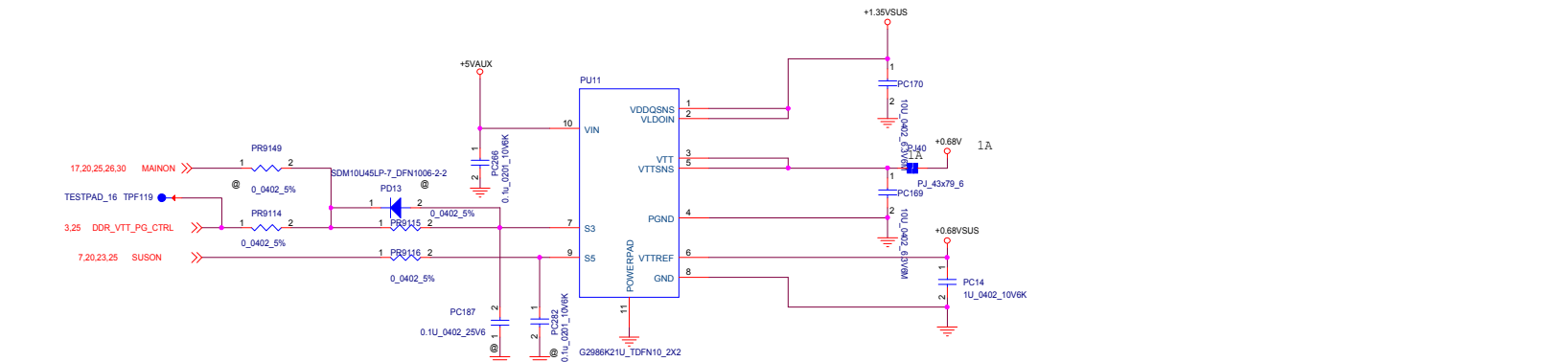


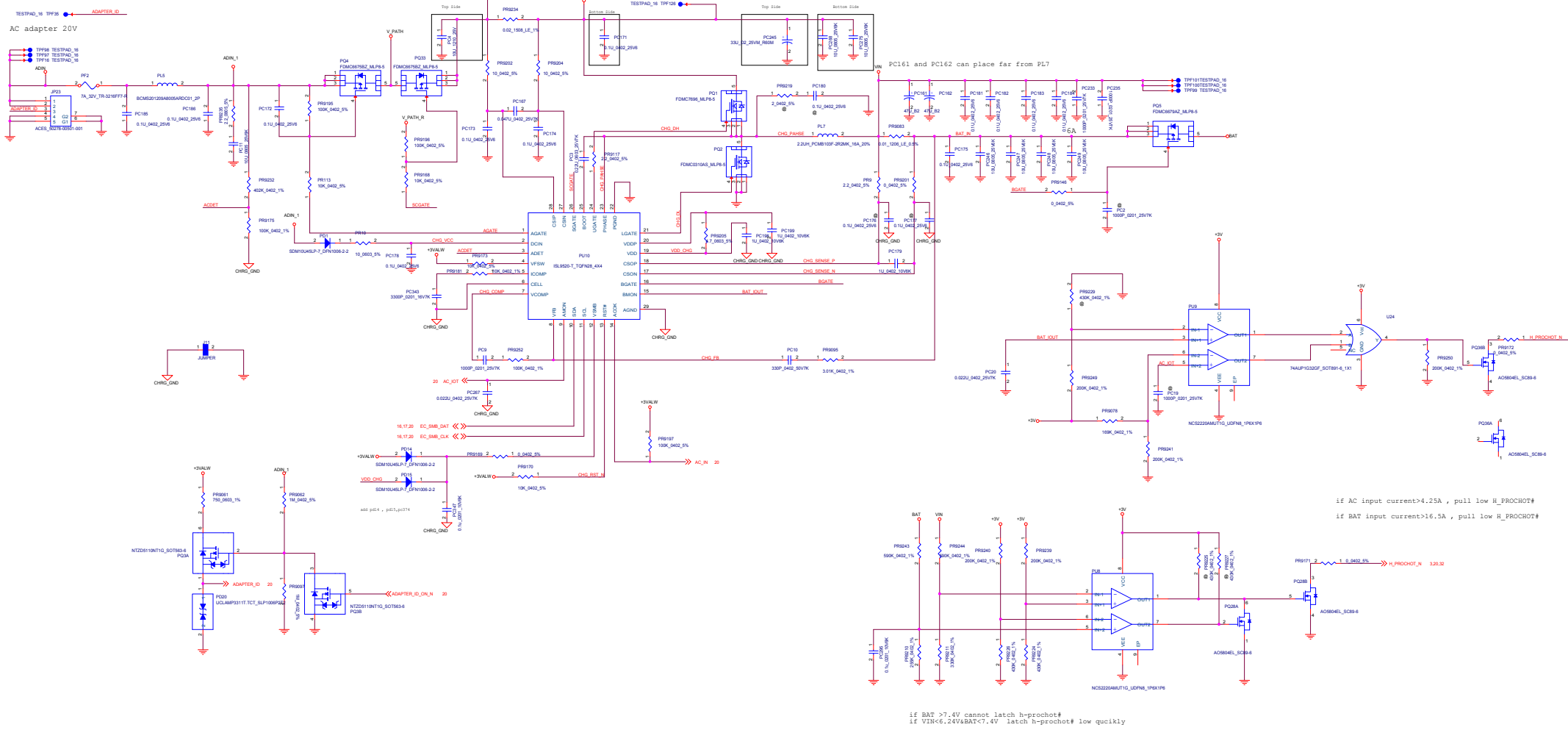




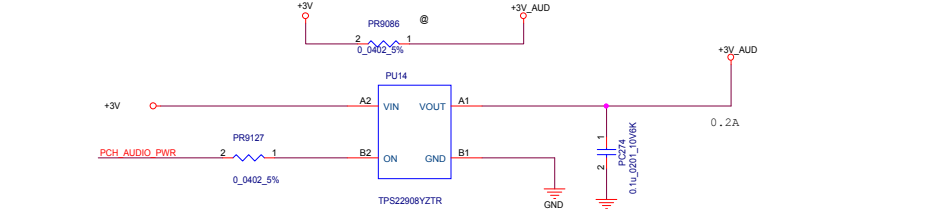
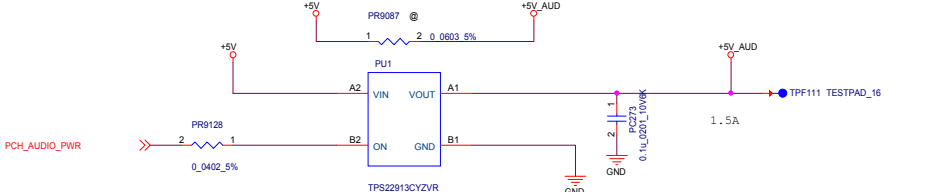
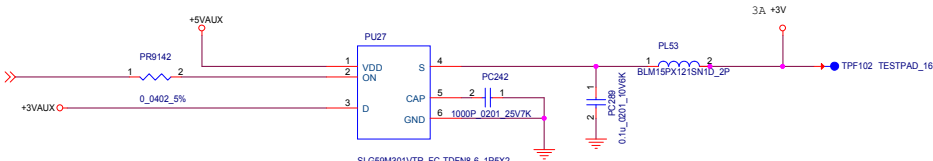
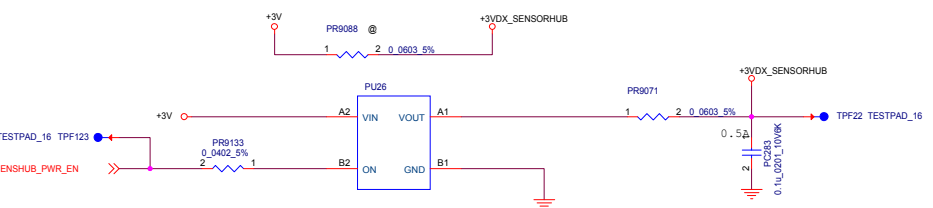
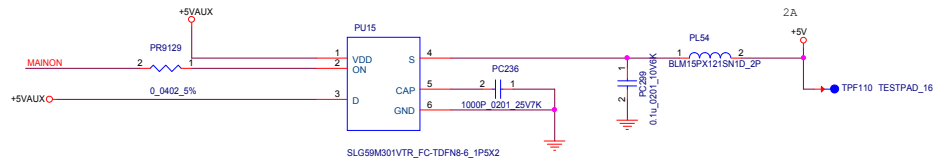
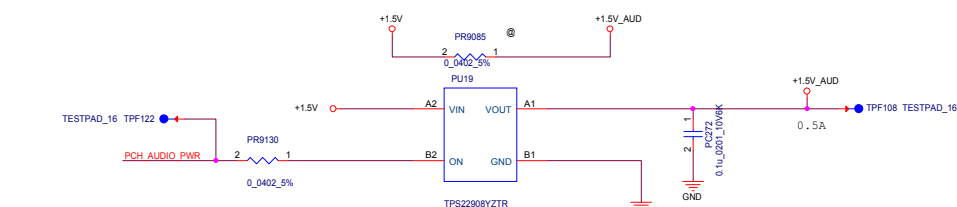
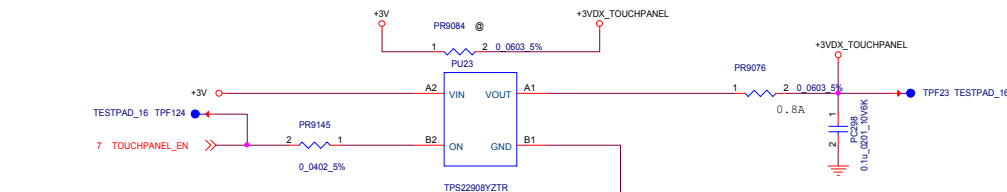
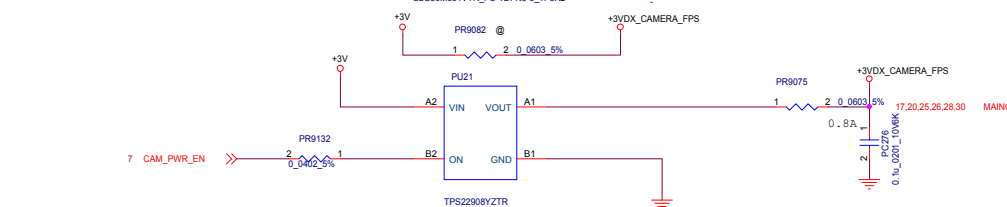
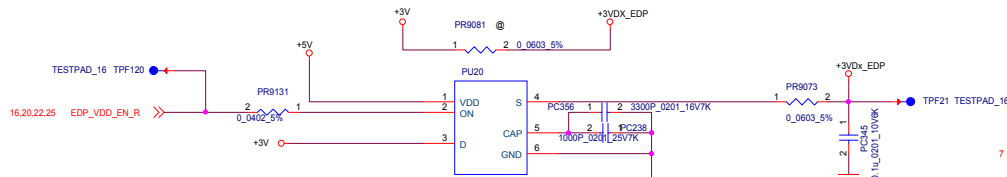
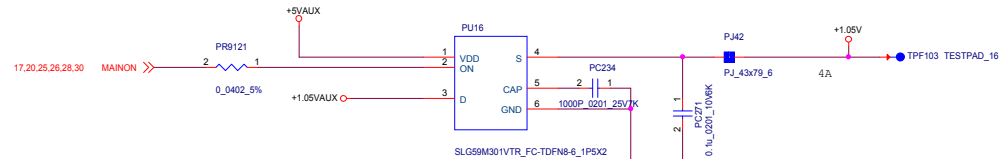
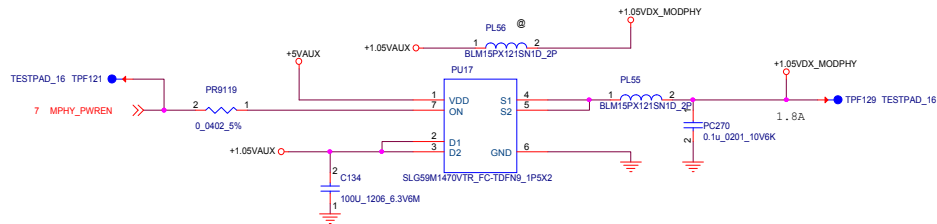








|      |                 |
|------|-----------------|
| File | MMDC charger    |
| Rev  | 1.0             |
| D    | Document Number |
| Rev  | 1.0             |
| Date | 1/20/2018       |
| Page | 29 of 34        |

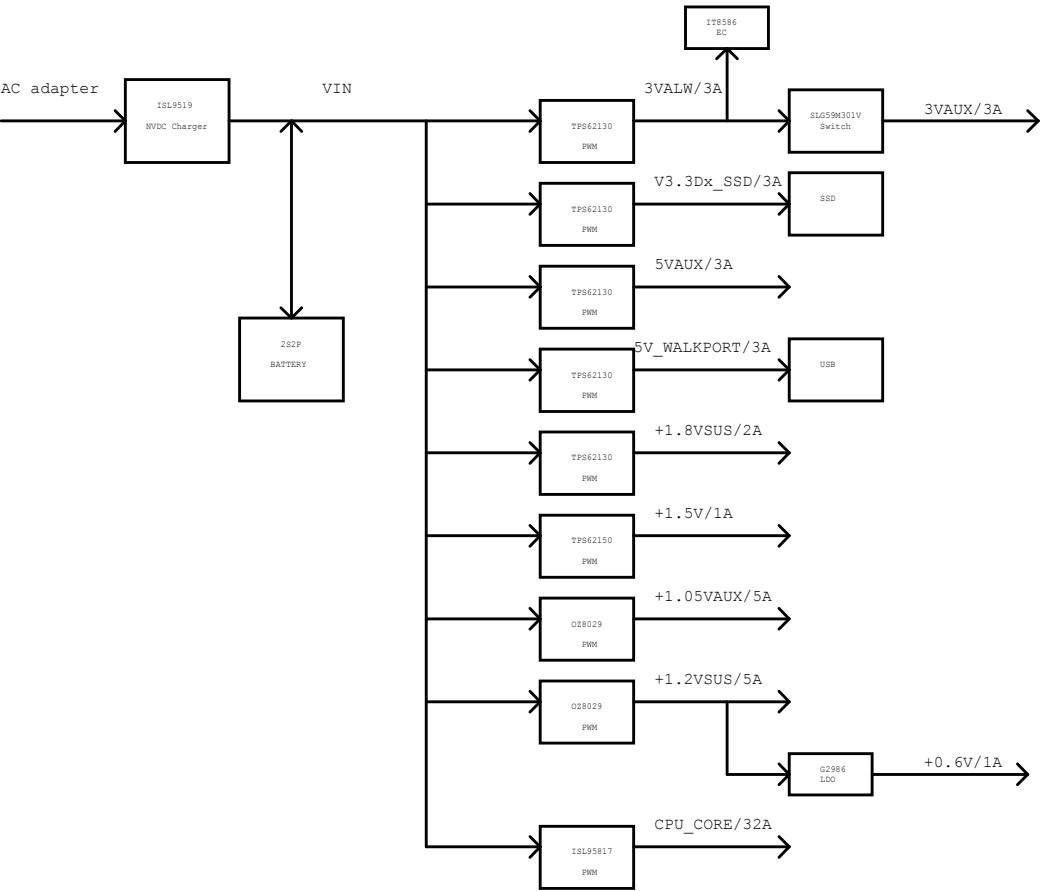


|              |                          |       |          |
|--------------|--------------------------|-------|----------|
|              |                          |       |          |
| Title        |                          |       |          |
| SWITCH POWER |                          |       |          |
| Size         | Document Number          |       | Rev      |
| C            | Kona                     |       | V        |
| Date:        | Tuesday, August 06, 2013 | Sheet | 30 of 34 |









|            | VCCRTC | VIN | +3VALW | +3VAUX<br>+5VAUX<br>+1.8VAUX | +1.35VSUS<br>+0.68VSUS | +3V/+5V<br>+1.0V/+1.05V<br>+V1.05_VCCST<br>COS3_VPE<br>CPU_CORE |
|------------|--------|-----|--------|------------------------------|------------------------|-----------------------------------------------------------------|
| S0         | V      | V   | V      | V                            | V                      | V                                                               |
| S3         | V      | V   | V      | V                            | V                      | X                                                               |
| S4/S5 (AC) | V      | V   | V      | V                            | X                      | X                                                               |
| S4/S5 (DC) | V      | V   | V      | X                            | X                      | X                                                               |
| G3         | V      | X   | X      | X                            | X                      | X                                                               |

|            | SUSC#<br>(SLP_S4) | SUSB#<br>(SLP_S3) | +VALW | +VAUX | +VSUS | +V |
|------------|-------------------|-------------------|-------|-------|-------|----|
| S0         | V                 | V                 | V     | V     | V     | V  |
| S3         | V                 | X                 | V     | V     | V     | X  |
| S4/S5 (AC) | X                 | X                 | V     | V     | X     | X  |
| S4/S5 (DC) | X                 | X                 | V     | X     | X     | X  |
| G3         | X                 | X                 | X     | X     | X     | X  |

TESTPAD\_16 TPF47  
TESTPAD\_16 TPF46  
TESTPAD\_16 TPF48  
TESTPAD\_16 TPF50  
TESTPAD\_16 TPF49  
TESTPAD\_16 TPF51  
TESTPAD\_16 TPF53  
TESTPAD\_16 TPF52  
TESTPAD\_16 TPF54  
TESTPAD\_16 TPF55

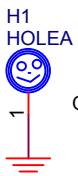
TESTPAD\_16 TPF57  
TESTPAD\_16 TPF56  
TESTPAD\_16 TPF58  
TESTPAD\_16 TPF60  
TESTPAD\_16 TPF59  
TESTPAD\_16 TPF61  
TESTPAD\_16 TPF63  
TESTPAD\_16 TPF62  
TESTPAD\_16 TPF64  
TESTPAD\_16 TPF65

TESTPAD\_16 TPF67  
TESTPAD\_16 TPF66  
TESTPAD\_16 TPF68  
TESTPAD\_16 TPF70  
TESTPAD\_16 TPF69  
TESTPAD\_16 TPF71  
TESTPAD\_16 TPF73  
TESTPAD\_16 TPF72  
TESTPAD\_16 TPF74  
TESTPAD\_16 TPF75

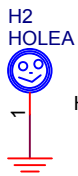
TESTPAD\_16 TPF77  
TESTPAD\_16 TPF76  
TESTPAD\_16 TPF78  
TESTPAD\_16 TPF80  
TESTPAD\_16 TPF79  
TESTPAD\_16 TPF81  
TESTPAD\_16 TPF83  
TESTPAD\_16 TPF82  
TESTPAD\_16 TPF84  
TESTPAD\_16 TPF85

Put these 20 test point to TOP

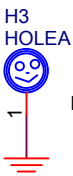
Put these 20 test point to Bottom



OVAL\_Hole\_22\_55\_SMD



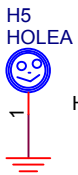
Hole\_22\_55\_SMD\_Half



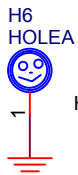
Hole\_38\_6\_SMD



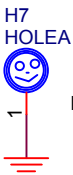
Hole\_22\_55\_SMD



Hole\_38\_55\_70\_SMD



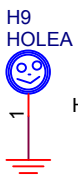
Hole\_38\_55\_70\_SMD



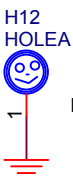
Hole\_38\_55\_70\_SMD



Hole\_38\_55\_70\_SMD



Hole\_14\_20\_SMD



Hole\_22\_SMD



OVAL\_Hole\_14\_18\_SMD

|                                                                                                                                                                                                                                                                                                         |                 |                          |                |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|--------------------------|----------------|
|                                                                                                                                                                                                                                                                                                         |                 | LENOVO.CRDN              |                |
| Title                                                                                                                                                                                                                                                                                                   |                 |                          |                |
| Mounting Hole/EMI                                                                                                                                                                                                                                                                                       |                 |                          |                |
| Size                                                                                                                                                                                                                                                                                                    | Document Number |                          | Rev            |
| A                                                                                                                                                                                                                                                                                                       | Kona            |                          | v1.0           |
| Date:                                                                                                                                                                                                                                                                                                   |                 | Tuesday, August 06, 2013 | Sheet 34 of 34 |
| "PROPERTY NOTE: this document contains information confidential and property to LENOVO PND and shall not be reproduced or transferred to other documents or disclosed to others or used for any purpose other than that for which it was obtained without the expressed written consent of LENOVO PND." |                 |                          |                |