

# Aegis M/B

MS14-Additional  
2010.12.10

# A01 Build

|                           |            |     |
|---------------------------|------------|-----|
|                           |            |     |
|                           |            |     |
|                           |            |     |
|                           |            |     |
|                           |            |     |
|                           |            |     |
| Friday, December 10, 2010 |            |     |
| DATE                      | CHANGE NO. | REV |

|                |            |                      |            |
|----------------|------------|----------------------|------------|
| INVENTEC       |            |                      |            |
| TITLE<br>Aegis |            |                      |            |
| SIZE<br>Custom | CODE<br>ES | DOC.NUMBER<br>CS-131 | REV<br>A01 |

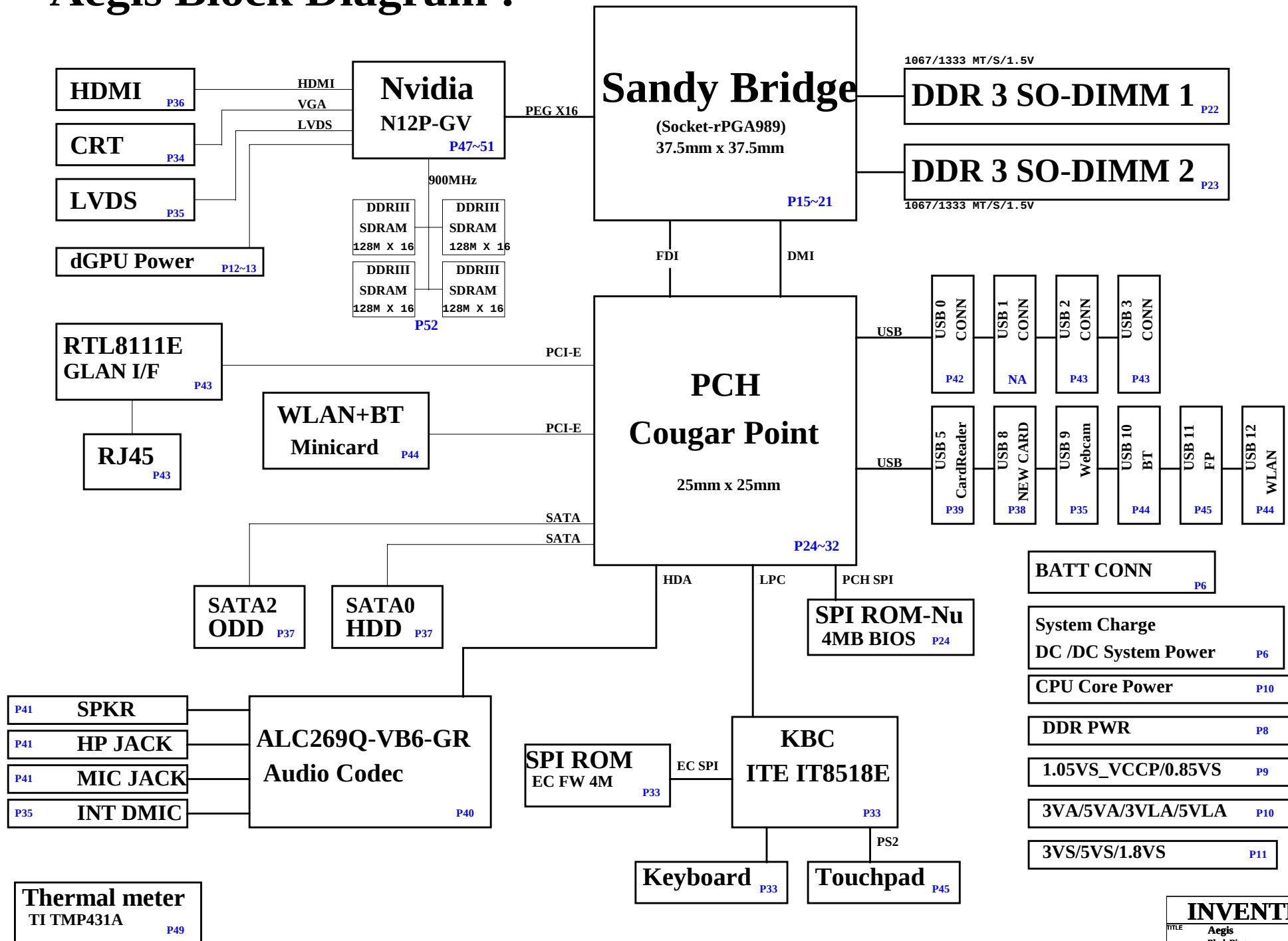
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55. USB Port
56. SW Board Title
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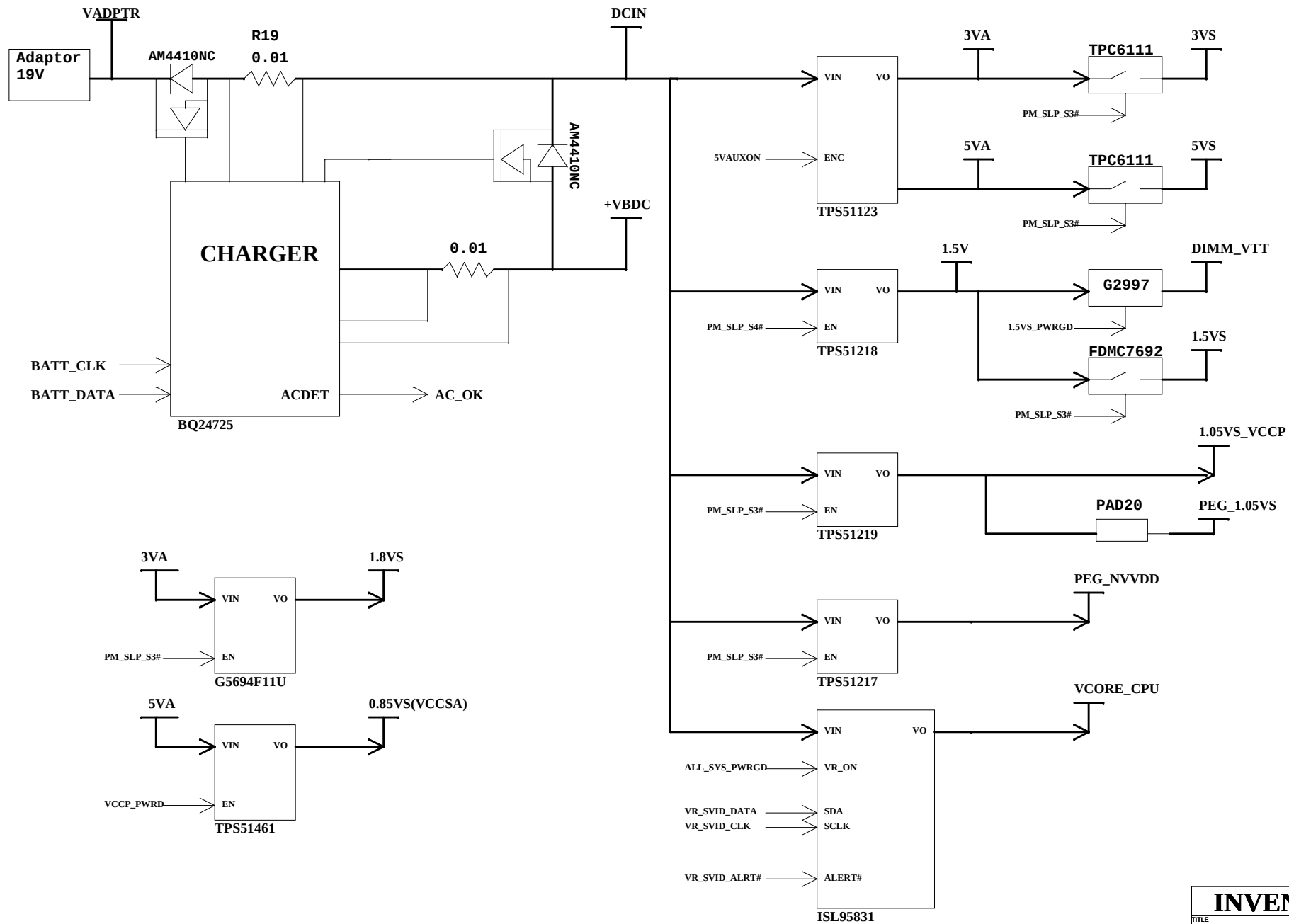
**INVENTEC**

|                       |      |            |       |
|-----------------------|------|------------|-------|
| TITLE                 |      |            |       |
| Aegis                 |      |            |       |
| schematics page DESCR |      |            |       |
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# Aegis Block Diagram :



# Power Block Diagram :



# Net name Description :

# Board Stack up Description

## Voltage Rails

|         |                                       |
|---------|---------------------------------------|
| DCIN    | Primary DC system power supply        |
| 3VLA    | 3.3V always on power rail by DCIN     |
| 5VLA    | 5.0V always on power rail by DCIN     |
| 3VLA_EC | 3.3V always on power rail by 5VAUXON  |
| 3VA     | 3.3V always on power rail by LATCH_ON |
| 5VA     | 5.0V always on power rail by LATCH_ON |
| 5VACP   | 5.0V always on power rail by 5VAUXON  |

|      |                                        |
|------|----------------------------------------|
| 1.5V | 1.5V switched power rail by PM_SLP_S4# |
| 1.8V | 1.8V power rail by PM_SLP_S4#          |

|             |                                              |
|-------------|----------------------------------------------|
| 3VS         | 3.3V power rail by PM_SLP_S3#                |
| 5VS         | 5.0V power rail by PM_SLP_S3#                |
| 1.5VS       | 1.5V power rail by PM_SLP_S3#                |
| 1.05VS_VCCP | 1.05V power rail by PM_SLP_S3#               |
| DIMM_VTT    | 0.75V DDR Termination Voltage by 1.5VS_PWRGD |

|            |                                                        |
|------------|--------------------------------------------------------|
| PEG_1.5VS  | 1.5V switched power rail for N12P-GV by PM_SLP_S3#     |
| PEG_1.05VS | 1.05V switched power rail for N12P-GV by PM_SLP_S3#    |
| PEG_NVVDD  | Variable switched power rail for N12P-GV by PM_SLP_S3# |

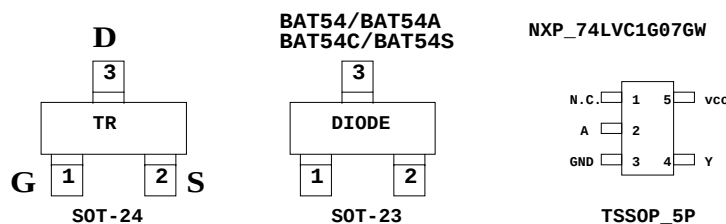
|           |                                                   |
|-----------|---------------------------------------------------|
| VCORE_CPU | Core switched power rail for CPU by ALL_SYS_PWRGD |
| 1.8VS     | 1.8V power rail by PM_SLP_S3#                     |

## Part Naming Conventions

|    |             |    |                          |
|----|-------------|----|--------------------------|
| C  | = Capacitor | Q  | = Transistor             |
| CN | = Connector | R  | = Resistor               |
| D  | = Diode     | RP | = Resistor Pack          |
| F  | = Fuse      | U  | = Arbitrary Logic Device |
| L  | = Inductor  | Y  | = Crystal and Osc        |

## Name Suffix

|    |                     |
|----|---------------------|
| #  | = Active Low signal |
| NU | = No Stuff          |



## PCB Layers

|         |  |                                         |
|---------|--|-----------------------------------------|
| Layer 1 |  | Component Side, Microstrip signal Layer |
| Layer 2 |  | Ground Plane                            |
| Layer 3 |  | Stripline Layer                         |
| Layer 4 |  | Power Plane                             |
| Layer 5 |  | Stripline Layer                         |
| Layer 6 |  | Stripline Layer                         |
| Layer 7 |  | Ground Plane                            |
| Layer 8 |  | Solder Side, Microstrip signal Layer    |

|             | Differential Impedance for Microstrip(5-mils) | Differential Impedance for Stripline(4-mils) |
|-------------|-----------------------------------------------|----------------------------------------------|
| Host Clock  | 95 ohm +/- 20%                                | 100 ohm +/- 20%                              |
| PCI-E Clock | 95 ohm +/- 20%                                | 100 ohm +/- 20%                              |
| DDR2 CLK    | 70 ohm +/- 20%                                | 70 ohm +/- 20%                               |
| DDR2 Strobe | 85 ohm +/- 20%                                | 90 ohm +/- 20%                               |
| DMI Bus     | 95 ohm +/- 20%                                | 100 ohm +/- 20%                              |
| PCI-E Bus   | 95 ohm +/- 20%                                | 100 ohm +/- 20%                              |
| SDVO        | 95 ohm +/- 20%                                | 100 ohm +/- 20%                              |
| SATA        | 95 ohm +/- 20%                                | 100 ohm +/- 20%                              |
| USB         | 90 ohm +/- 20%                                | 95 ohm +/- 20%                               |
| LVDS        |                                               | 100 ohm +/- 20%                              |
| Lan         | 95 ohm +/- 20%                                | 100 ohm +/- 20%                              |

## Mother Board ID setting by PCH

| FJ Mother Board ID setting by PCH |        |        |        |
|-----------------------------------|--------|--------|--------|
| Project                           | MB_ID2 | MB_ID1 | MB_ID0 |
|                                   | 0      | 0      | 0      |
| Aegis (Discrete)                  | 0      | 0      | 1      |
| Neuron (UMA)                      | 0      | 1      | 0      |
| Neuron-V (Optimus)                | 0      | 1      | 1      |
| Strike (UMA)                      | 1      | 0      | 0      |
| Strike-V (Optimus)                | 1      | 0      | 1      |
| Silk (UMA)                        | 1      | 1      | 0      |
| Silk-V (Optimus)                  | 1      | 1      | 1      |
| PCH ----->                        | GPIO41 | GPIO40 | GPIO59 |

## Mother Board ID setting by EC

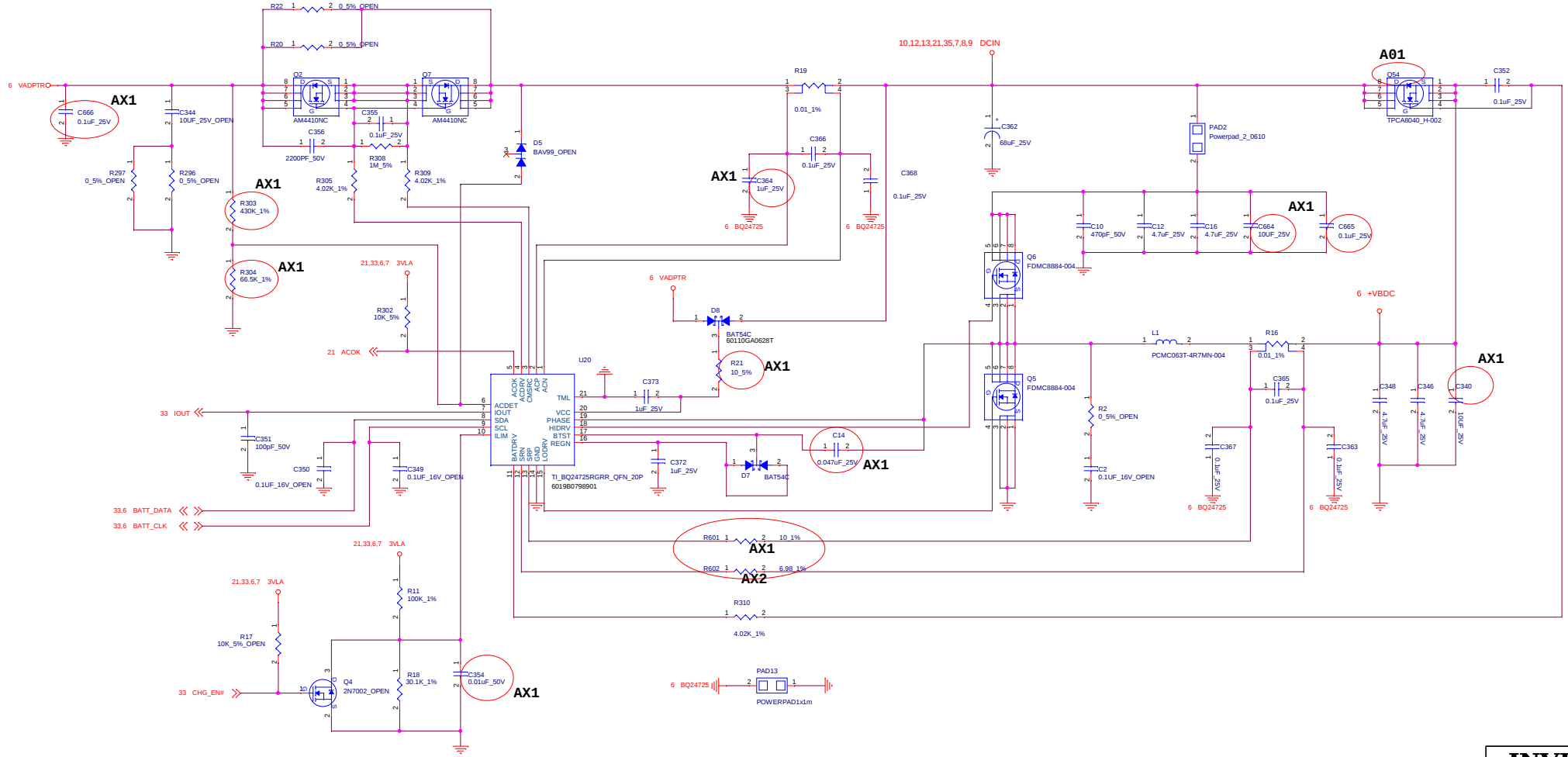
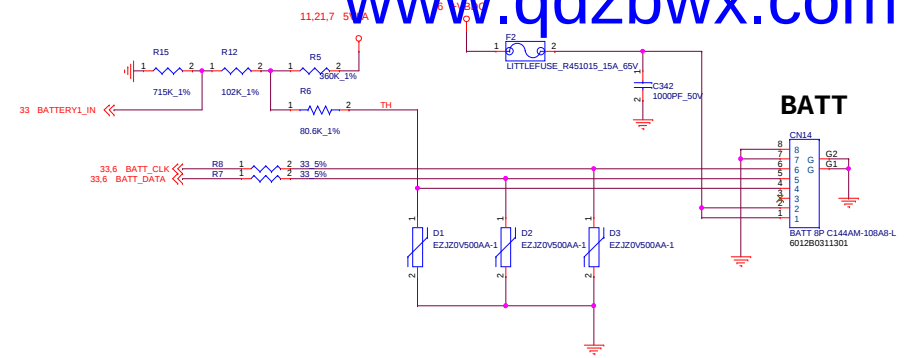
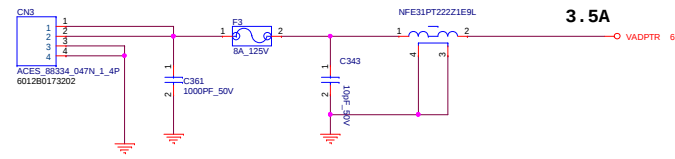
| FJ Mother Board ID setting by EC |                |
|----------------------------------|----------------|
| Project                          | EC_ID0         |
|                                  |                |
| Aegis (Discrete)                 | 1              |
| Neuron (UMA)                     | 0              |
| Neuron-V (Optimus)               | 1              |
| Strike (UMA)                     | 0              |
| Strike-V (Optimus)               | 1              |
| Silk (UMA)                       | 0              |
| Silk-V (Optimus)                 | 1              |
| EC ----->                        | GPC0 (pin 119) |

Please pull up 10k for "1". Pull down 10k for "0"

**INVENTEC**

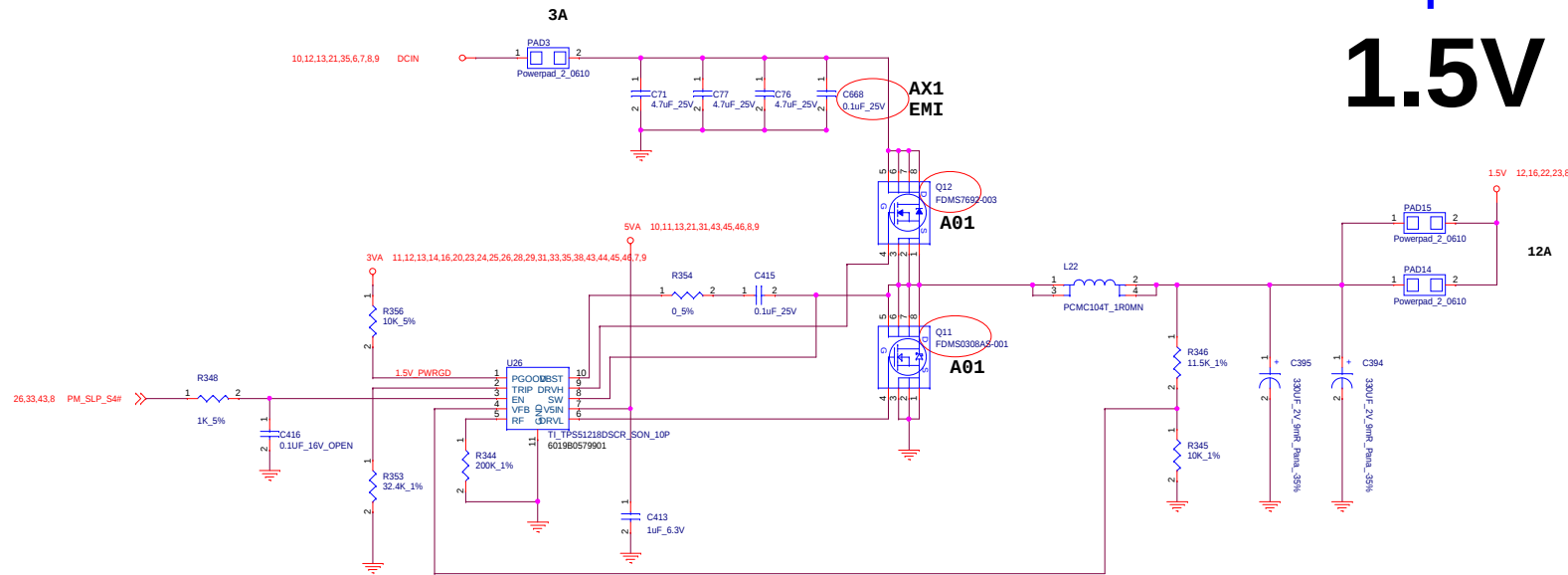
| Aegis Annotations |      |            |     |
|-------------------|------|------------|-----|
| SIZE              | CODE | DOC NUMBER | REV |
| C                 | ES   | CS-131     | A01 |
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# AC-IN



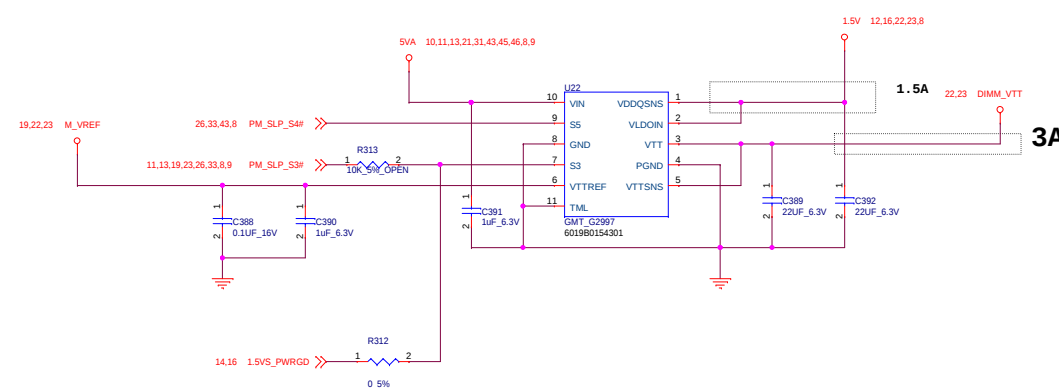
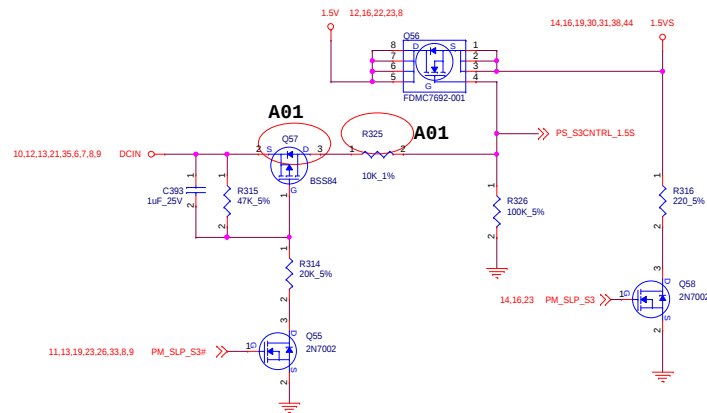


1.5V

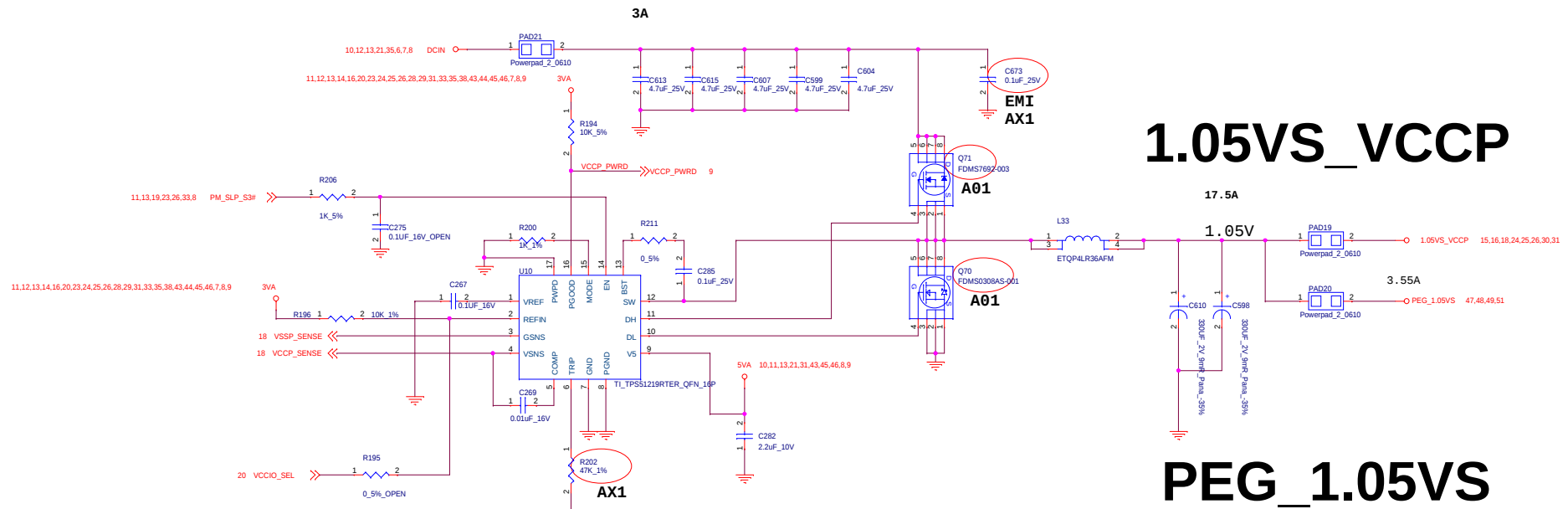


1.5VS

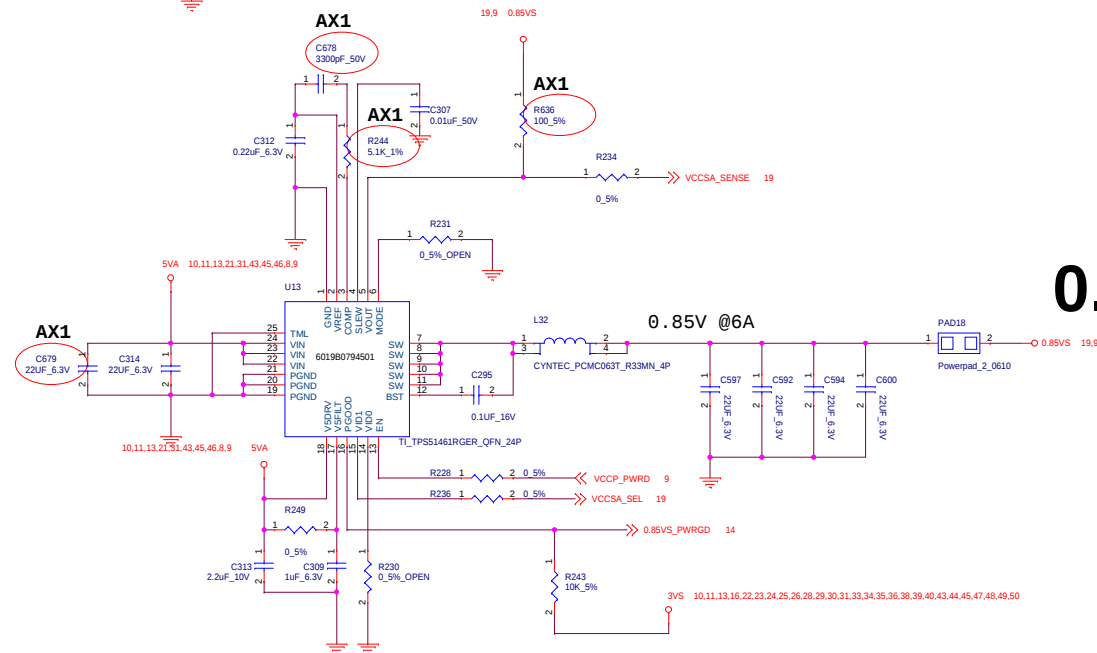
0.75V



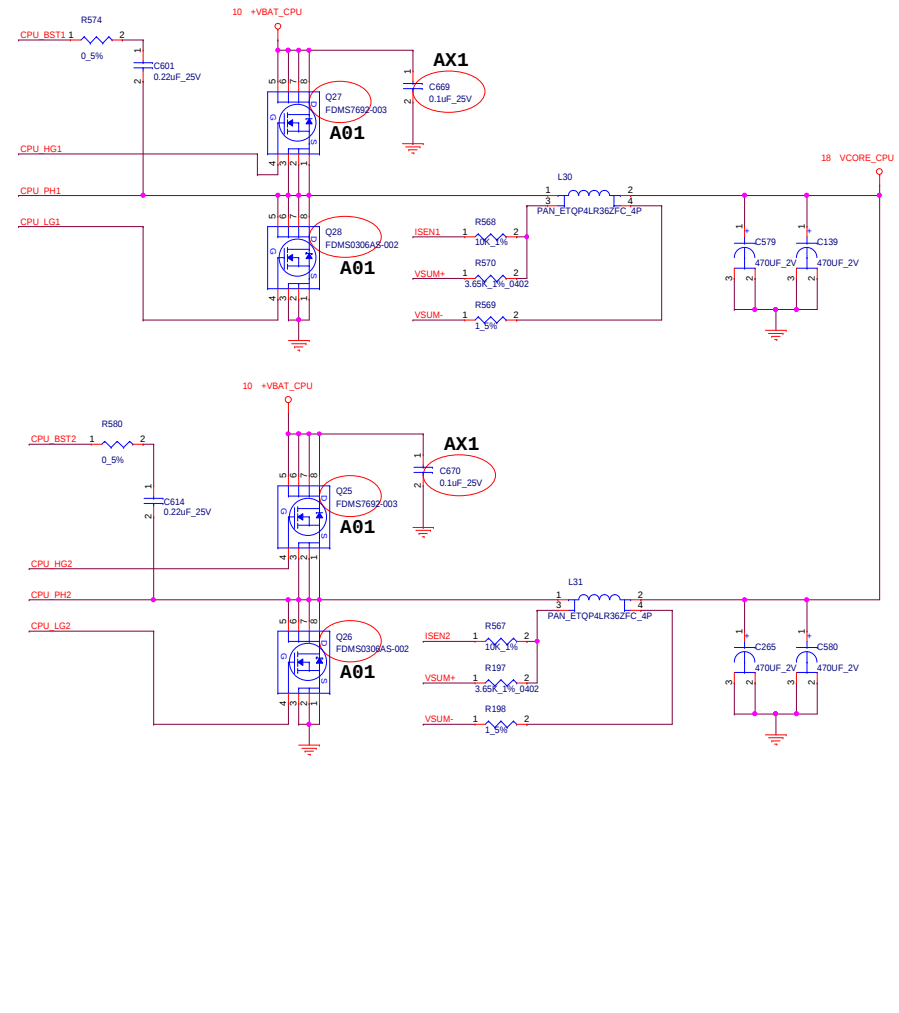
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|----------------------|------|------------|-------|--|
| TITLE: Aegis         |      |            |       |  |
| 1.5V / 0.75V / 1.5VS |      |            |       |  |
| SIZE                 | CODE | DOC NUMBER | REV   |  |
| C                    | ES   | CS-131     | A01   |  |
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# PEG\_1.05VS



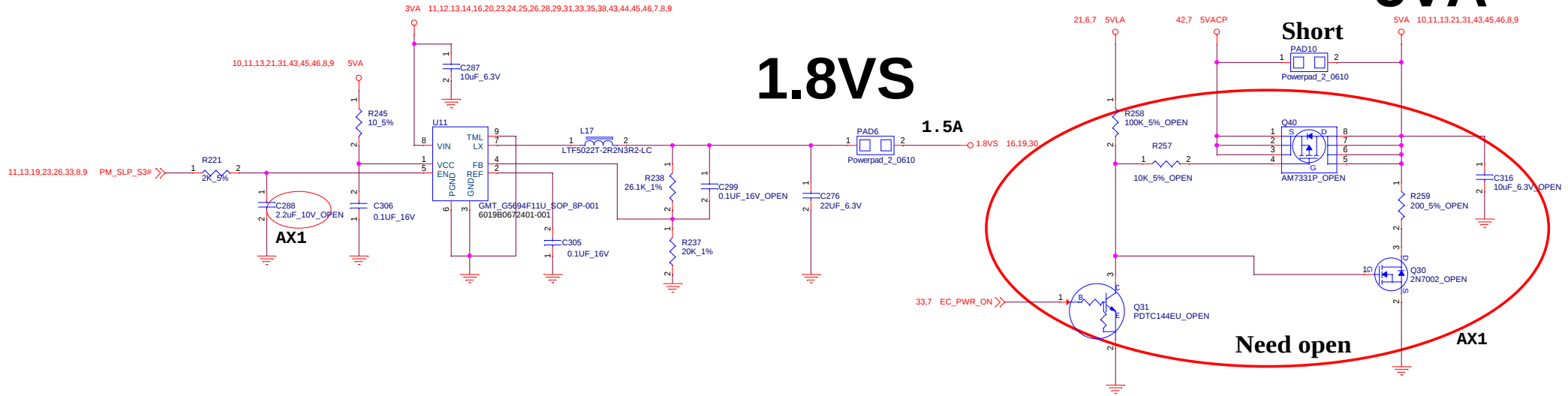
**0.85VS**



5VA

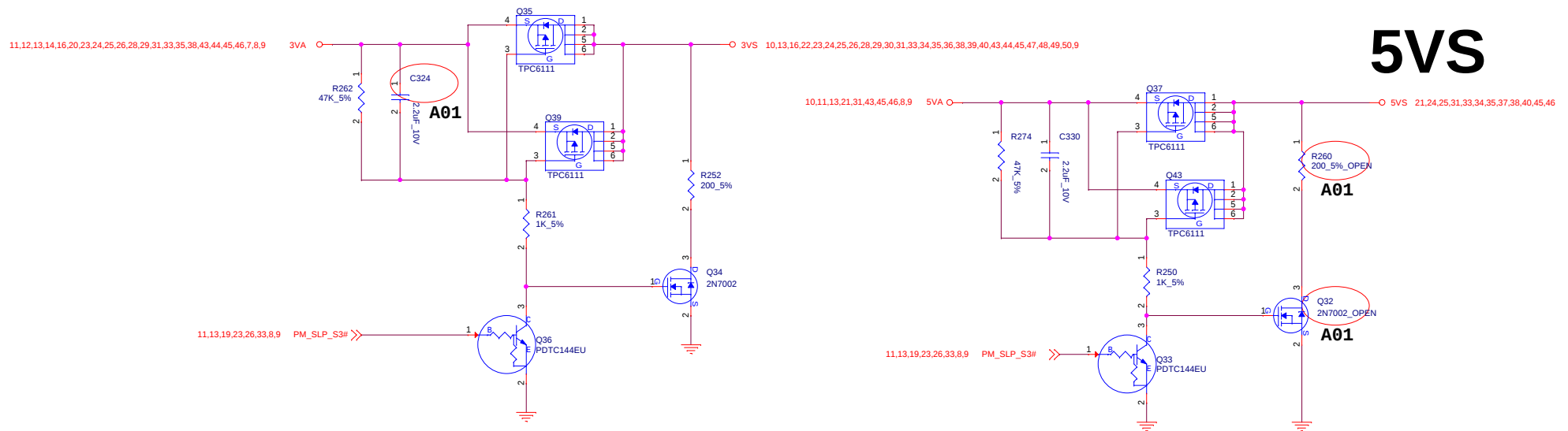
1.8VS

1.5A



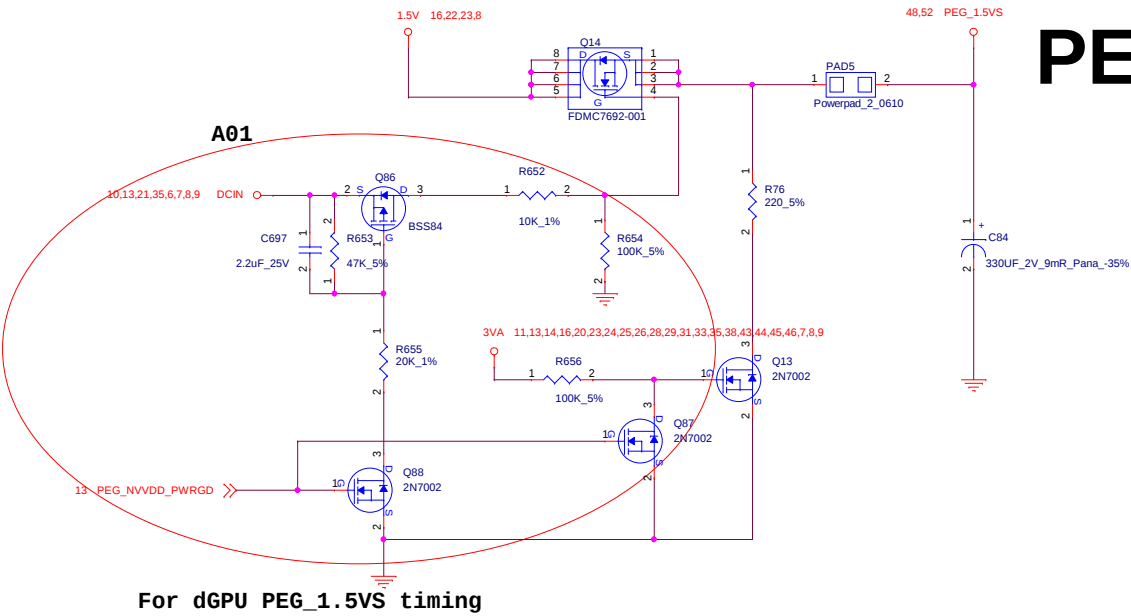
3VS

5VS



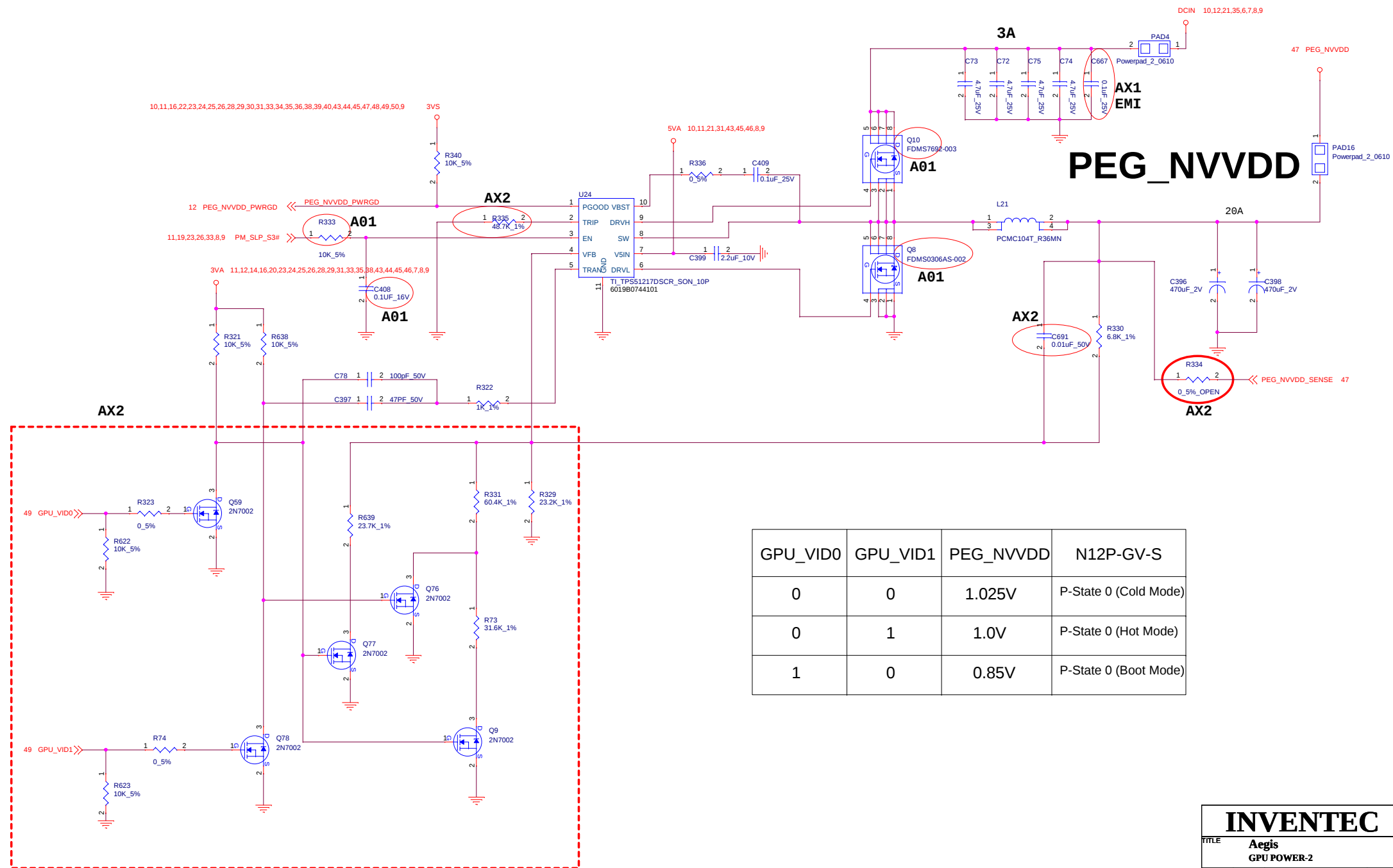
INVENTEC

|                |      |            |     |
|----------------|------|------------|-----|
| TITLE          |      |            |     |
| Aegis          |      |            |     |
| 3VS/5VS/1.8VS  |      |            |     |
| SIZE           | CODE | DOC NUMBER | REV |
| Custom         | ES   | CS-131     | A01 |
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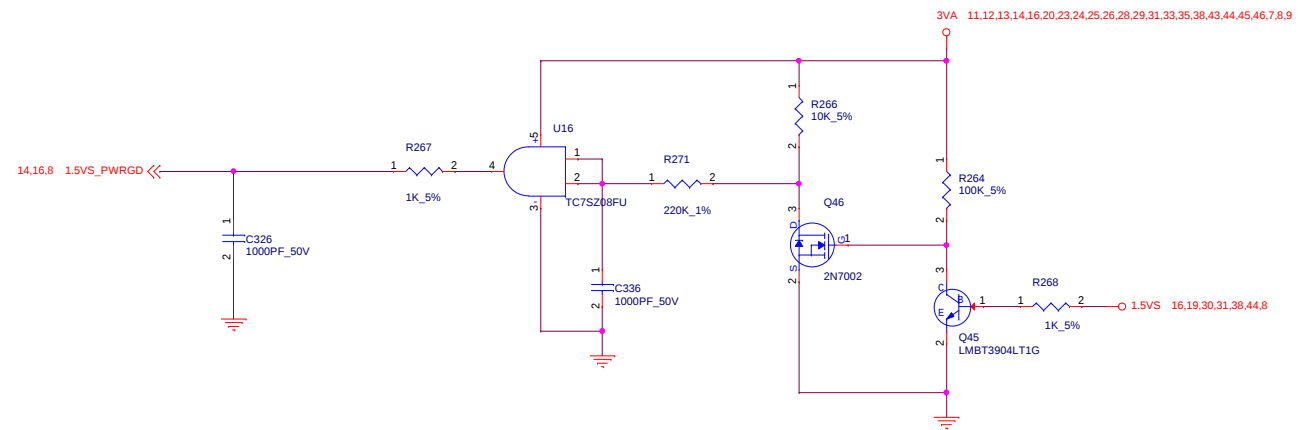
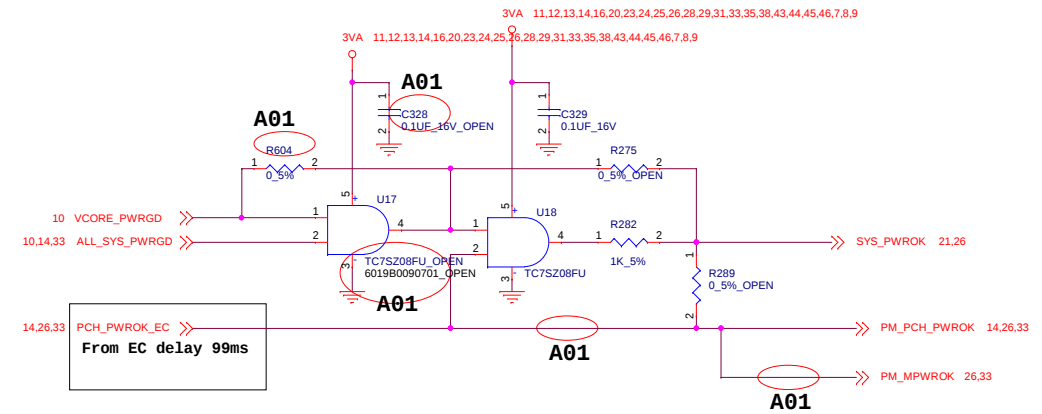
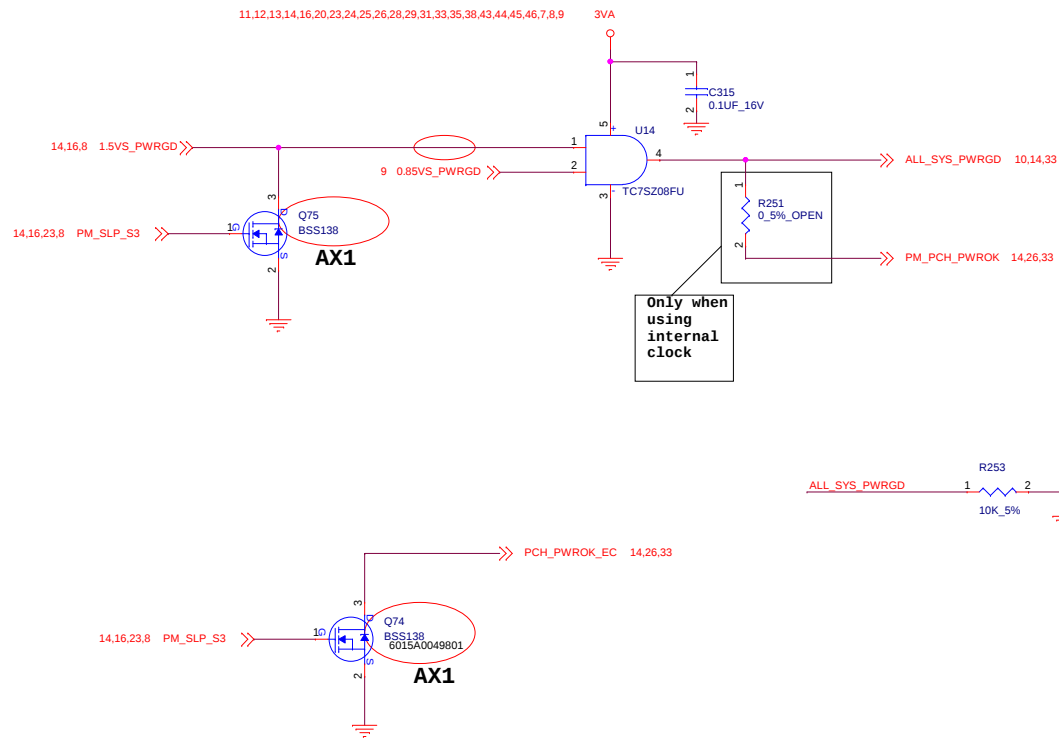
PEG\_1.5VS

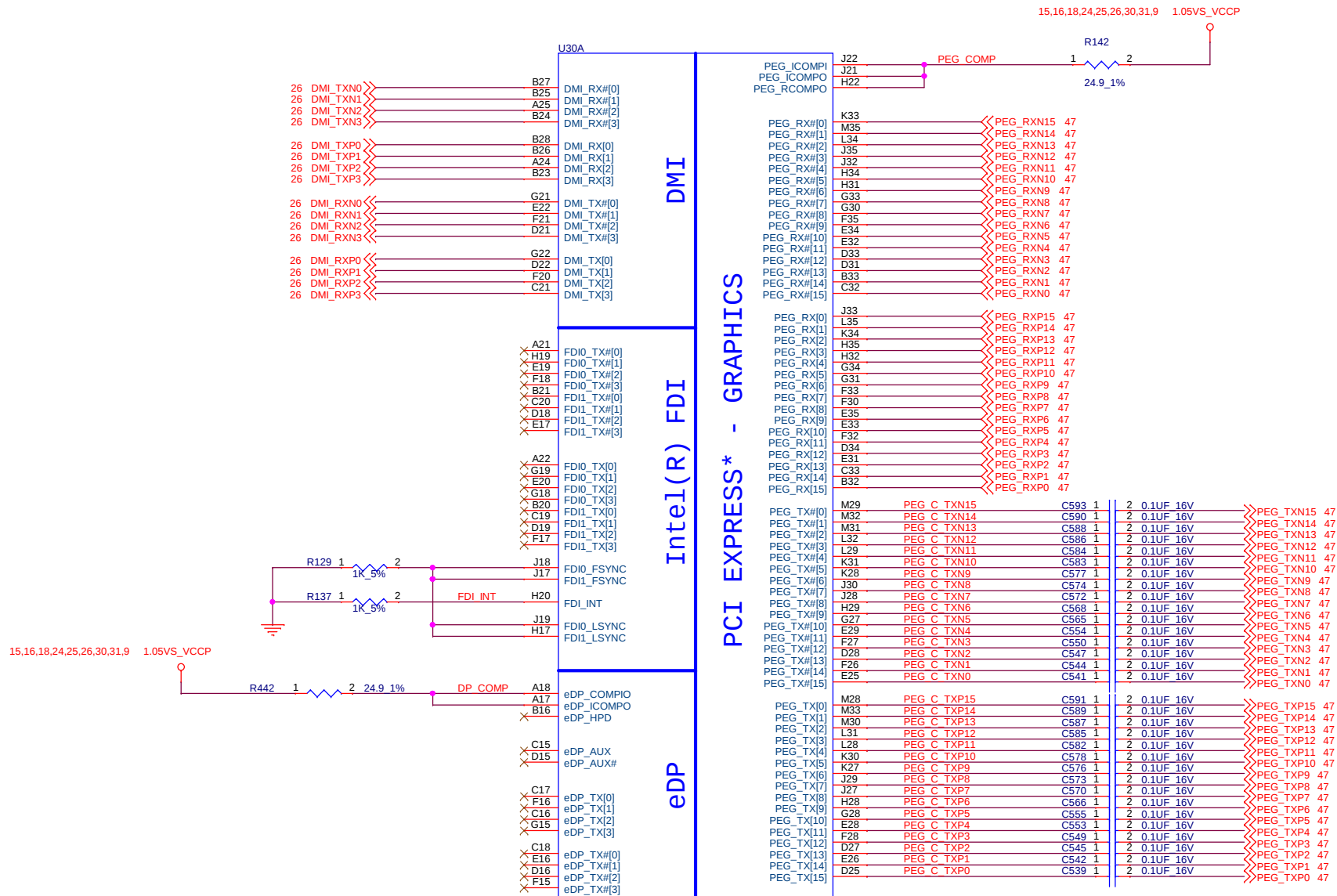
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| TITLE Aegis GPU Power-1 |         |                   |         |
| SIZE Custom             | CODE ES | DOC.NUMBER CS-131 | REV A01 |
| SHEET 12 of 61          |         |                   |         |



| GPU_VID0 | GPU_VID1 | PEG_NVVDD | N12P-GV-S             |
|----------|----------|-----------|-----------------------|
| 0        | 0        | 1.025V    | P-State 0 (Cold Mode) |
| 0        | 1        | 1.0V      | P-State 0 (Hot Mode)  |
| 1        | 0        | 0.85V     | P-State 0 (Boot Mode) |

### Main S0 PWR0K Logic



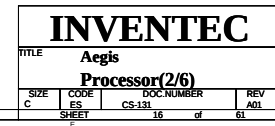
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6026B0154901

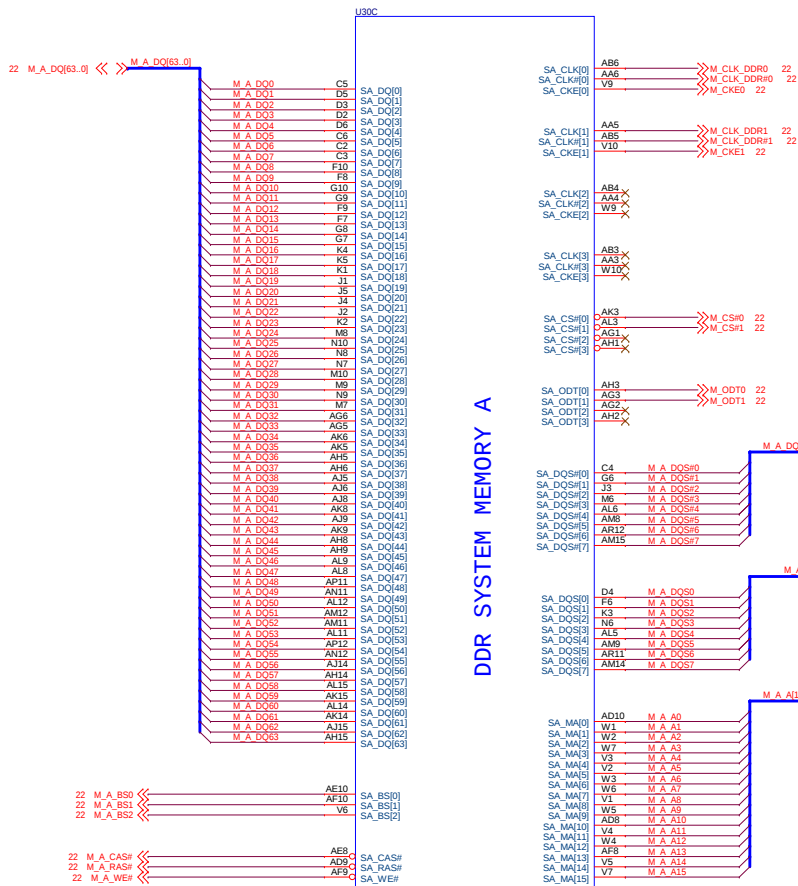
CLOSED TO CPU

INVENTEC

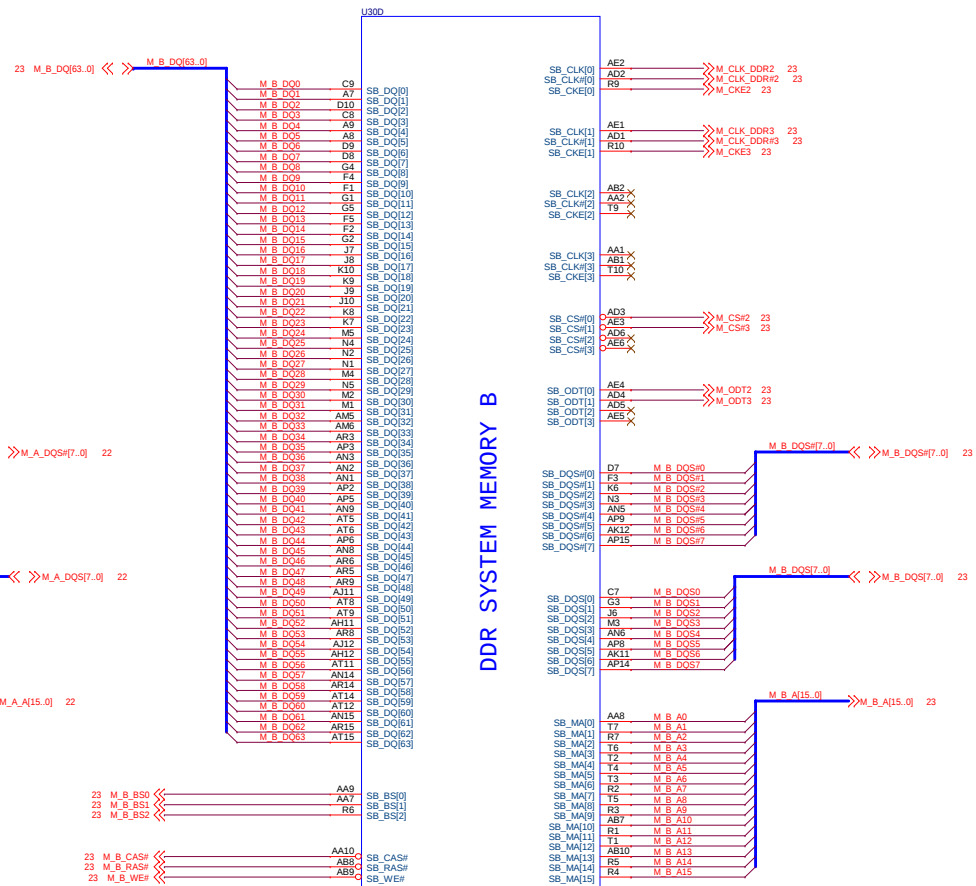
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|----------------|------|------------|-------|
| TITLE          |      |            |       |
| Aegis          |      |            |       |
| Processor(1/6) |      |            |       |
| SIZE           | CODE | DOC.NUMBER | REV   |
| B              | ES   | CS-131     | A01   |
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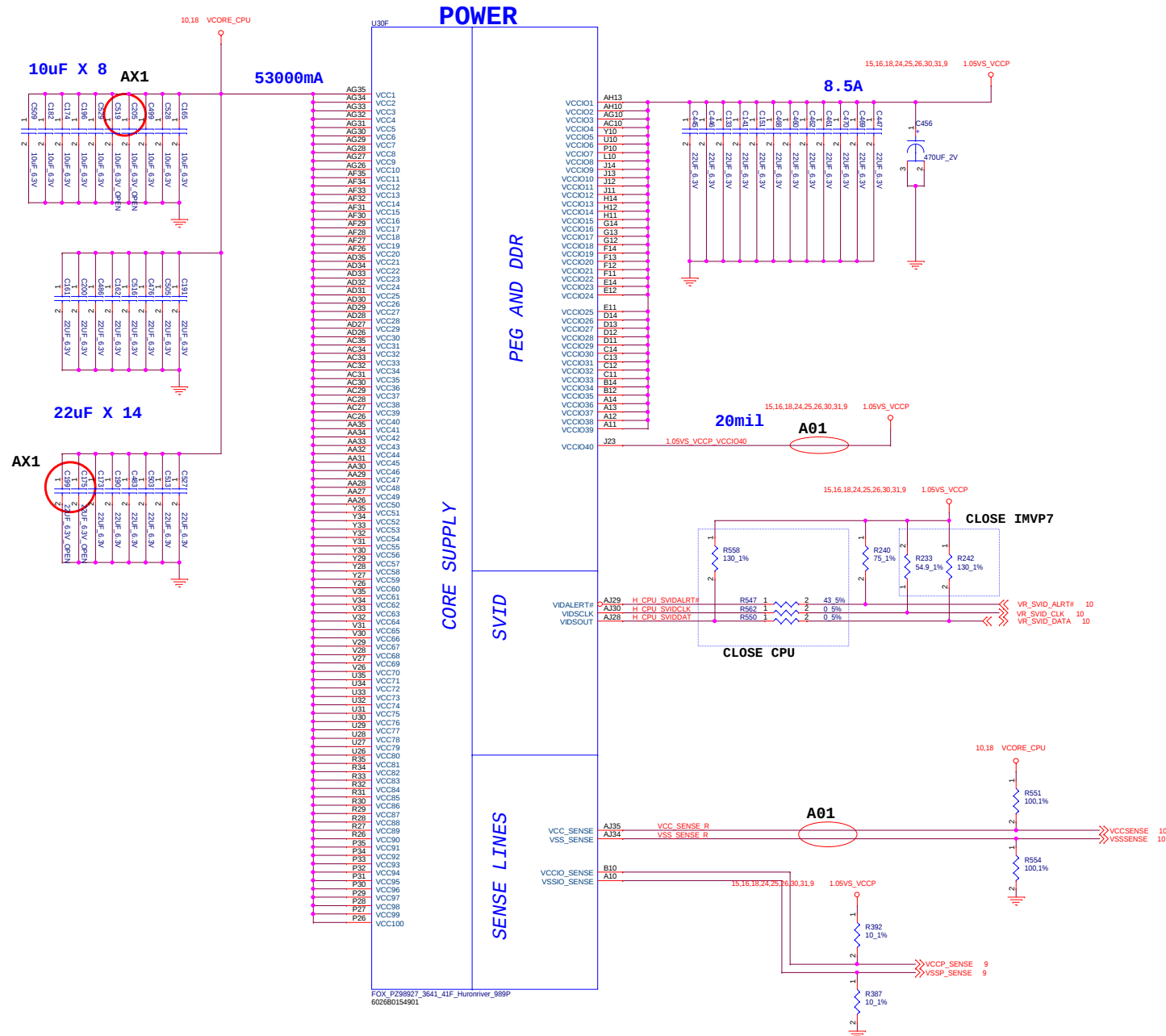




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6026B0154901

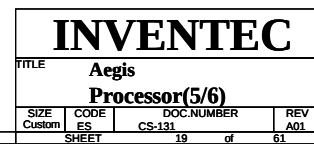


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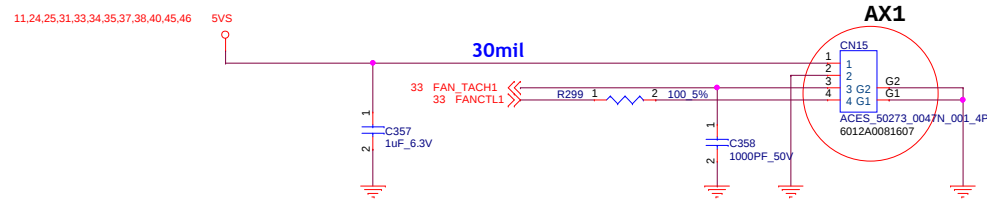
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|-------|---------------------------------|
| TITLE | <b>Aegis<br/>Processor(4/6)</b> |
|-------|---------------------------------|

|           |            |                       |            |
|-----------|------------|-----------------------|------------|
| SIZE<br>C | CODE<br>ES | DOC. NUMBER<br>CS-131 | REV<br>A01 |
| SHEET     |            | 18 of                 | 61         |

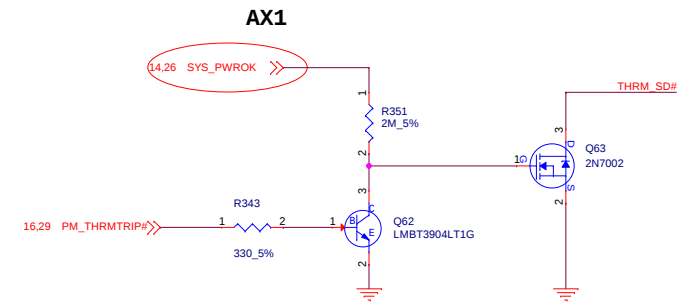
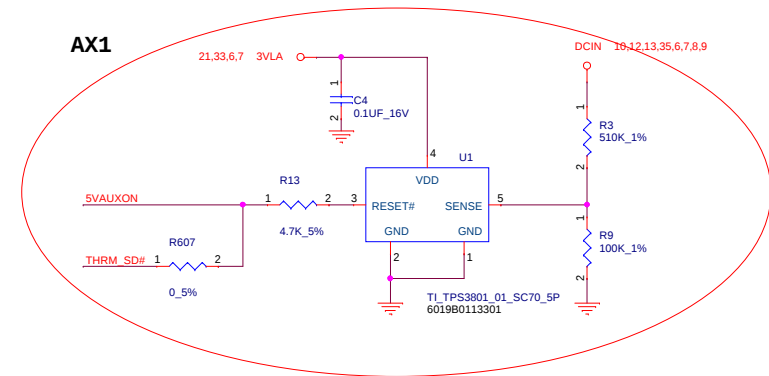
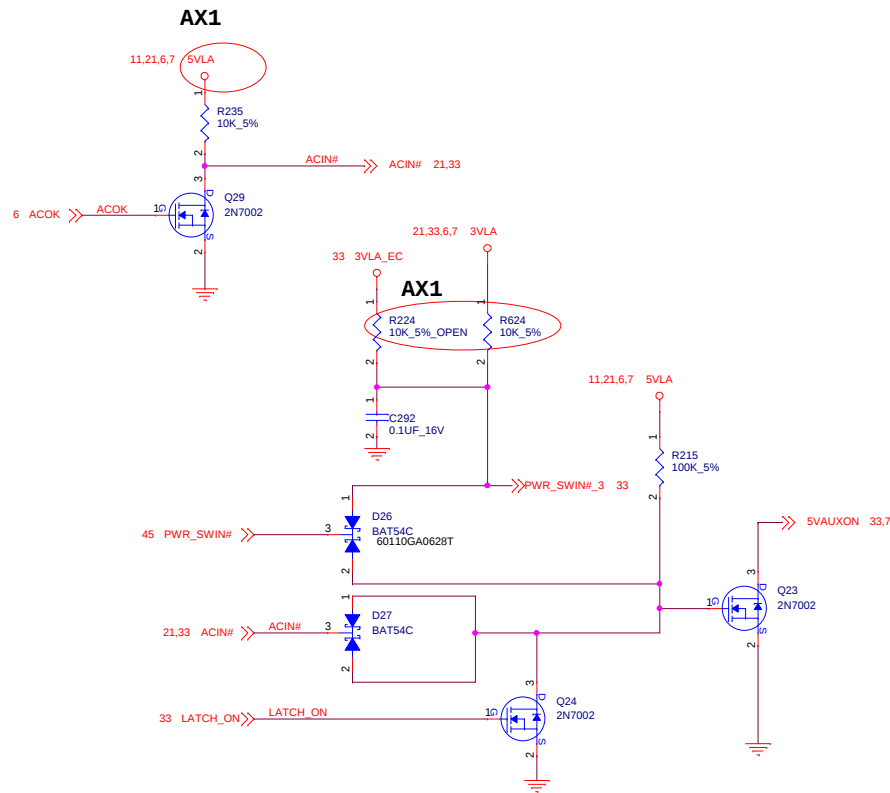
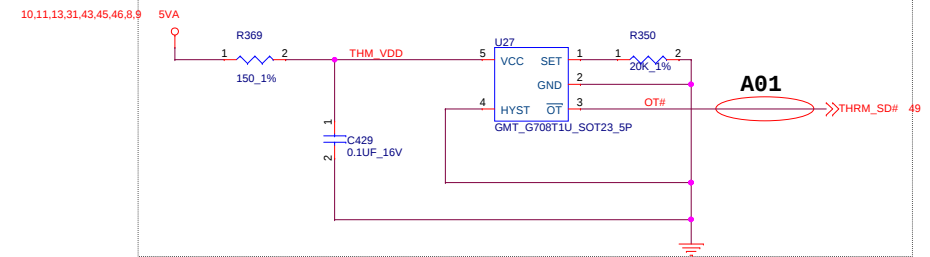




## Fan control



## Temperature Security

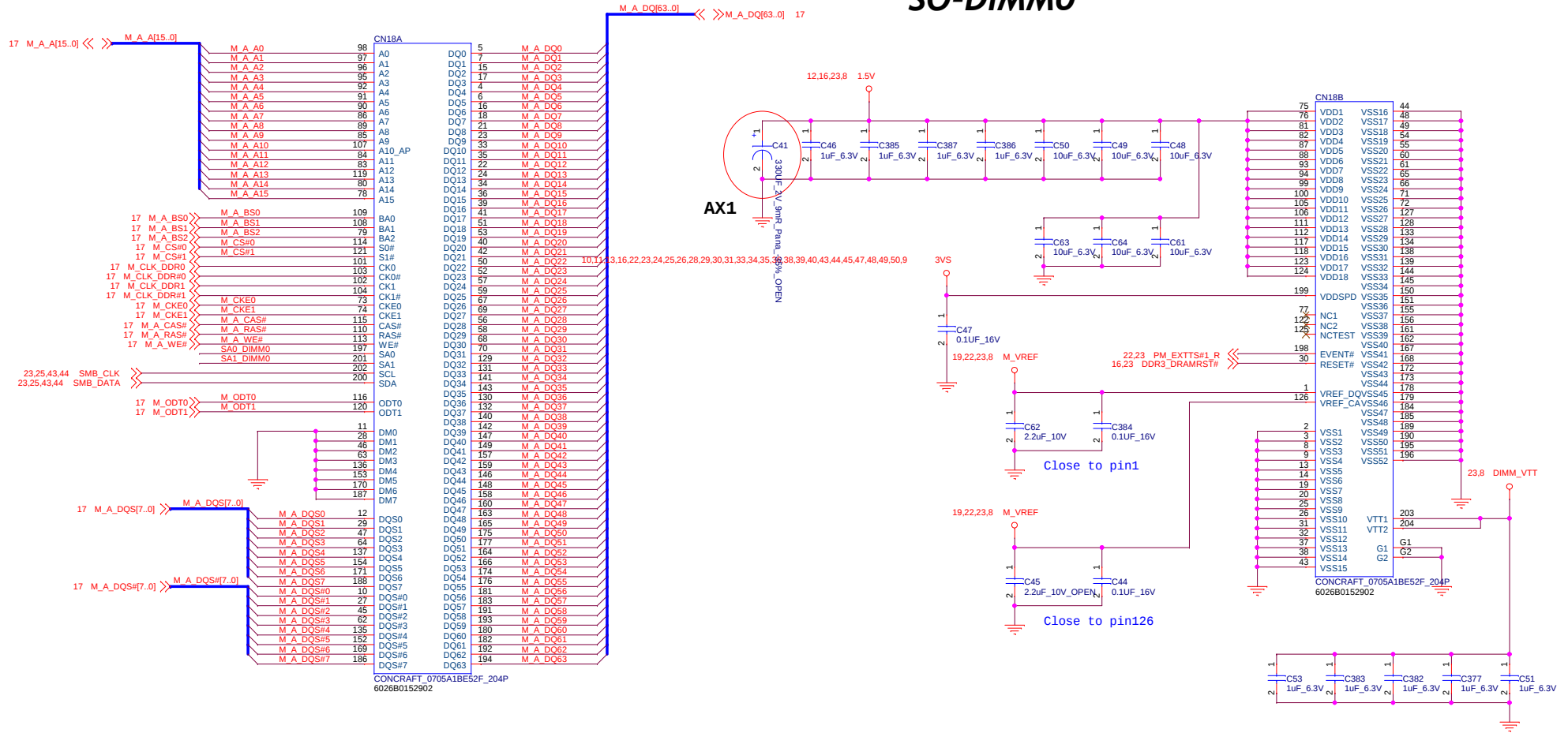


**INVENTEC**

| TITLE          |      |            |     |
|----------------|------|------------|-----|
| Aegis          |      |            |     |
| FAN / THERMAL  |      |            |     |
| SIZE           | CODE | DOC NUMBER | REV |
| Custom         | ES   | CS-131     | A01 |
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## Need change for layout

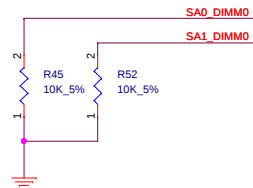
## SO-DIMM0



## NOTE:

IF SA0\_DIMM0=0, SA1\_DIMM0=0  
 SO-DIMMA SPD ADDRESS IS 0XA0  
 SO-DIMMA TS ADDRESS IS 0X30

IF SA0\_DIMM0=1, SA1\_DIMM0=0  
 SO-DIMMA SPD ADDRESS IS 0XA2  
 SO-DIMMA TS ADDRESS IS 0X32



INVENTEC

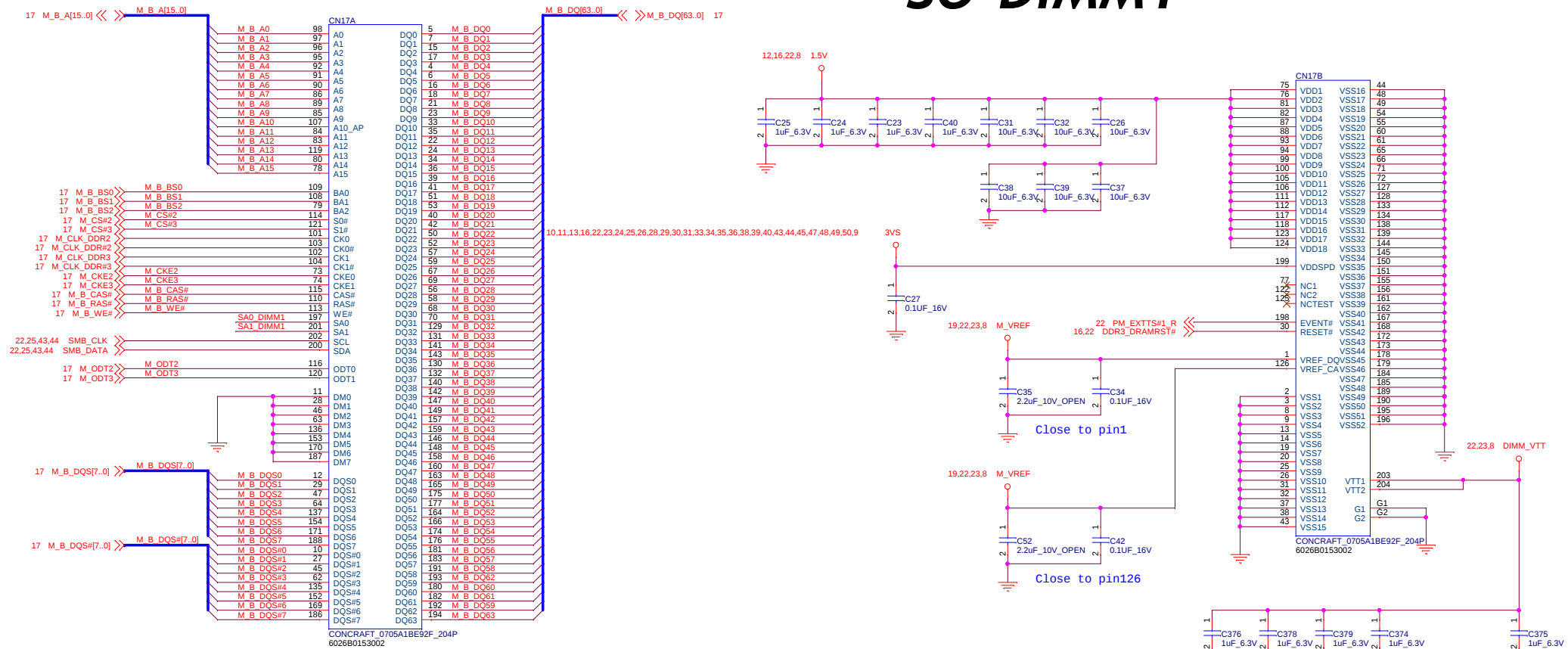
TITLE  
**Aegis**  
**DDR3 SODIMM-A**

| SIZE   | CODE | DOC.NUMBER | REV |
|--------|------|------------|-----|
| Custom | ES   | CS-131     | A01 |

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## SO-DIMM1



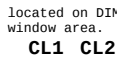
## NOTE:

IF SA0 DIMM0=0, SA1 DIMM0=0  
SO-DIMMA SPD ADDRESS IS 0XA0  
SO-DIMMA TS ADDRESS IS 0X30

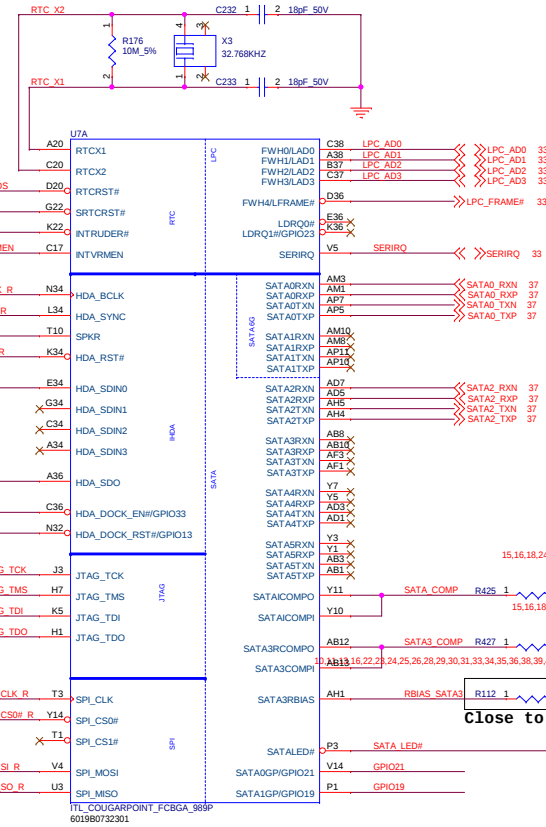
IF SA0 DIMM0=1, SA1 DIMM0=0  
SO-DIMMA SPD ADDRESS IS 0XA2  
SO-DIMMA TS ADDRESS IS 0X32

INVENTEC

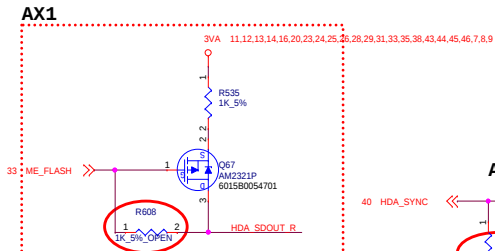
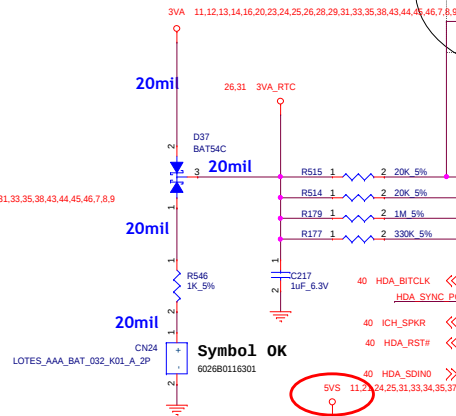
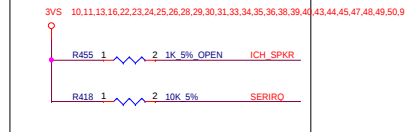
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|---------------|------|------------|-------|
| Aegis         |      |            |       |
| DDR3 SODIMM-B |      |            |       |
| SIZE          | CODE | DOC.NUMBER | REV   |
| Custom        | ES   | CS-131     | A01   |
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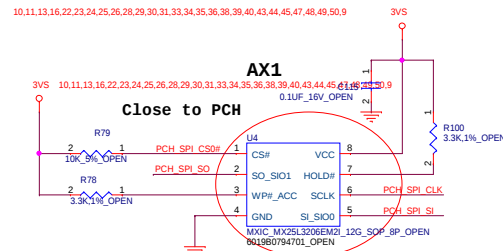
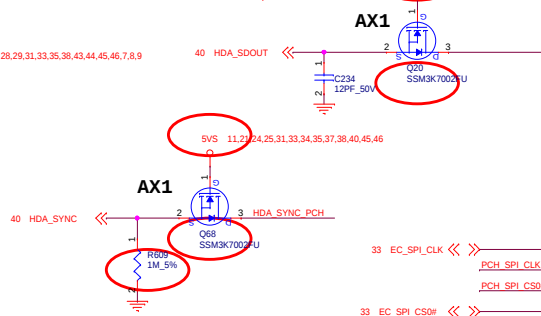
(HDA, JTAG, SPI, SATA)



## ESATA I/F



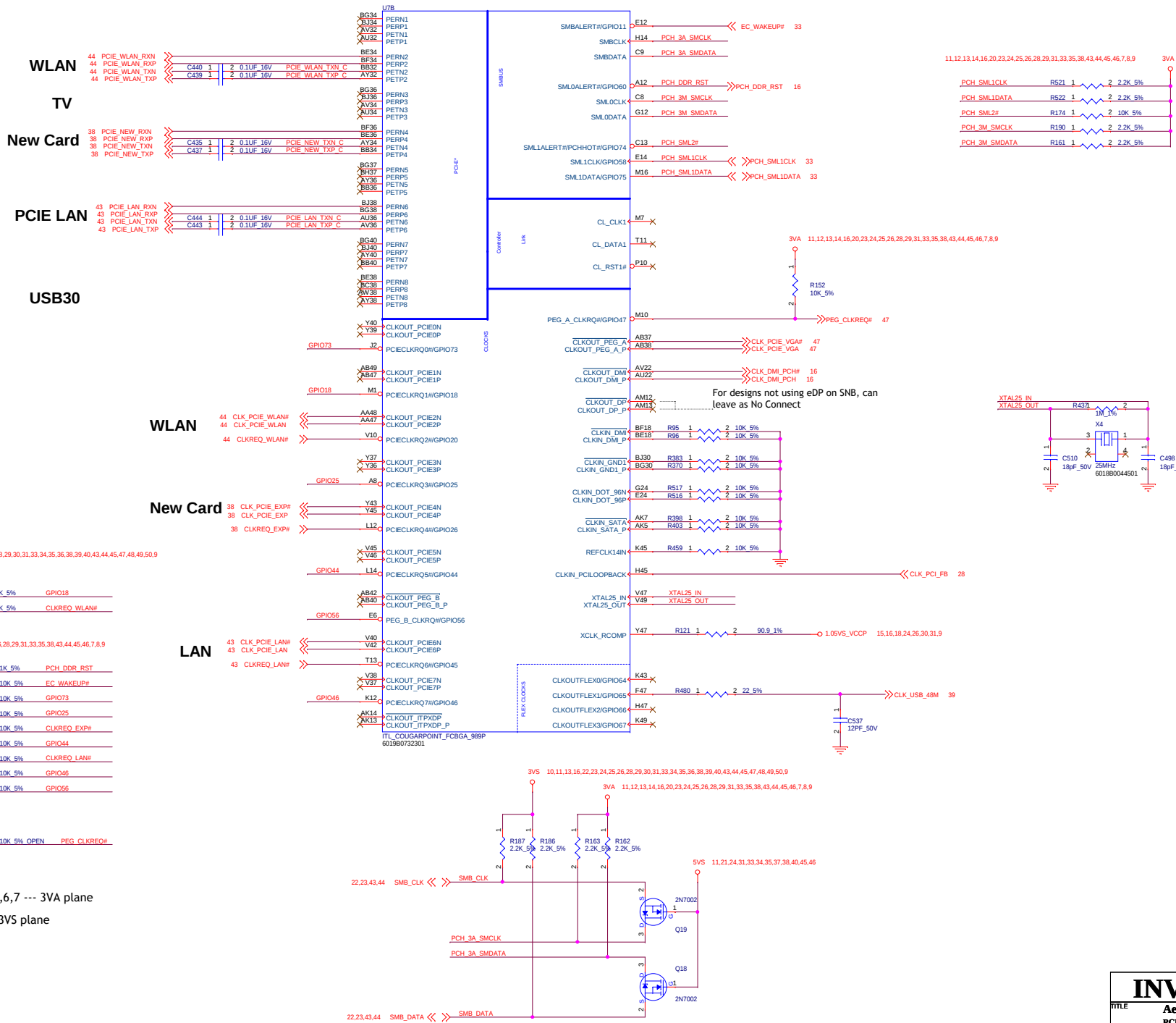
| Flash Descriptor Security Override |                                |
|------------------------------------|--------------------------------|
| HDA_SDOUT_R                        | High : Enable<br>Low : Disable |



Change to OPEN

|                                                          |            |                       |            |
|----------------------------------------------------------|------------|-----------------------|------------|
| <b>INVENTEC</b>                                          |            |                       |            |
| TITLE <b>Aegis</b><br><b>PCH (1/9)-(HDA, JTAG, SATA)</b> |            |                       |            |
| SIZE<br>C                                                | CODE<br>ES | DOC. NUMBER<br>CS-131 | REV<br>A01 |
| SHEET                                                    |            | 24 of                 | 61         |

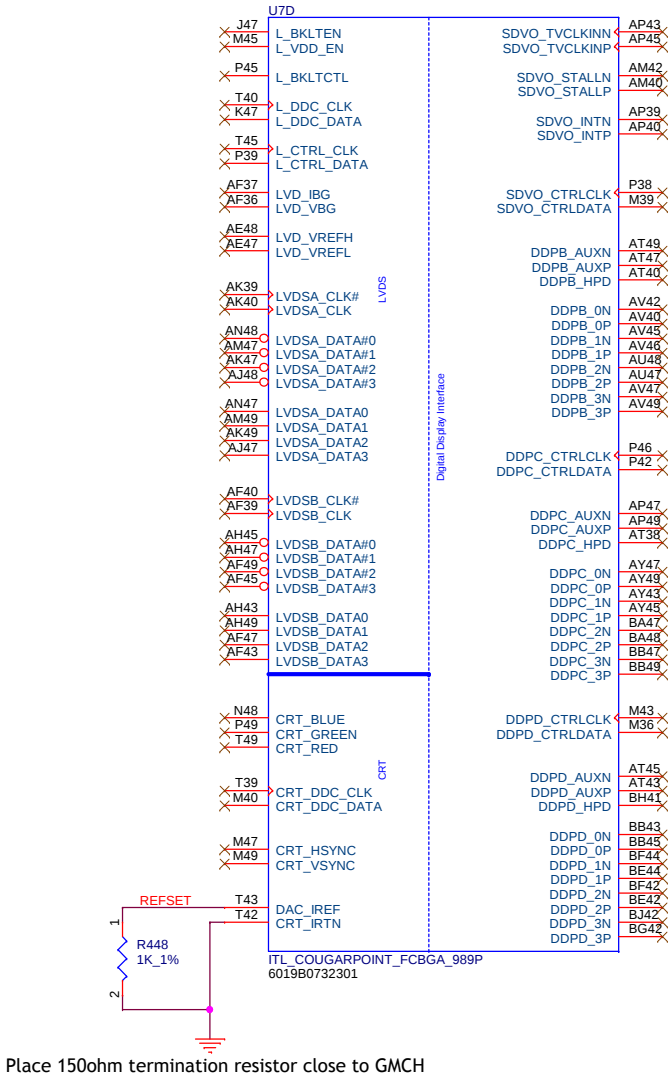
(PCI-E, SMBUS, CLK)





|           |     |      |                           |
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| CHANGE by | IEC | DATE | Friday, December 10, 2010 |
|-----------|-----|------|---------------------------|

( LVDS, DDI )



| INVENTEC                         |         |                                |          |       |
|----------------------------------|---------|--------------------------------|----------|-------|
| TITLE Aegis PCH (4/9)-(LVDS,DDI) |         |                                |          |       |
| SIZE B                           | CODE ES | DOC.NUMBER CS-131              | REV A01  |       |
| CHANGE by IEC                    |         | DATE Friday, December 10, 2010 | SHEET 27 | of 61 |

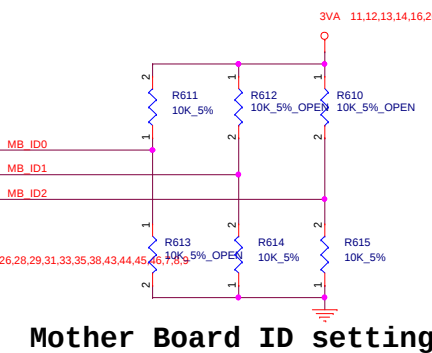
## (PCI, USB, NVRAM)

## FJ Mother Board ID setting

| Project            | MB_ID2 | MB_ID1 | MB_ID0 |
|--------------------|--------|--------|--------|
|                    | 0      | 0      | 0      |
| Aegis (Discrete)   | 0      | 0      | 1      |
| Neuron (UMA)       | 0      | 1      | 0      |
| Neuron-V (Optimus) | 0      | 1      | 1      |
| Strike (UMA)       | 1      | 0      | 0      |
| Strike-V (Optimus) | 1      | 0      | 1      |
| Silk (UMA)         | 1      | 1      | 0      |
| Silk-V (Optimus)   | 1      | 1      | 1      |
| PCH ----->         | GPIO41 | GPIO40 | GPIO59 |

For Debug

## AX1



Mother Board ID setting

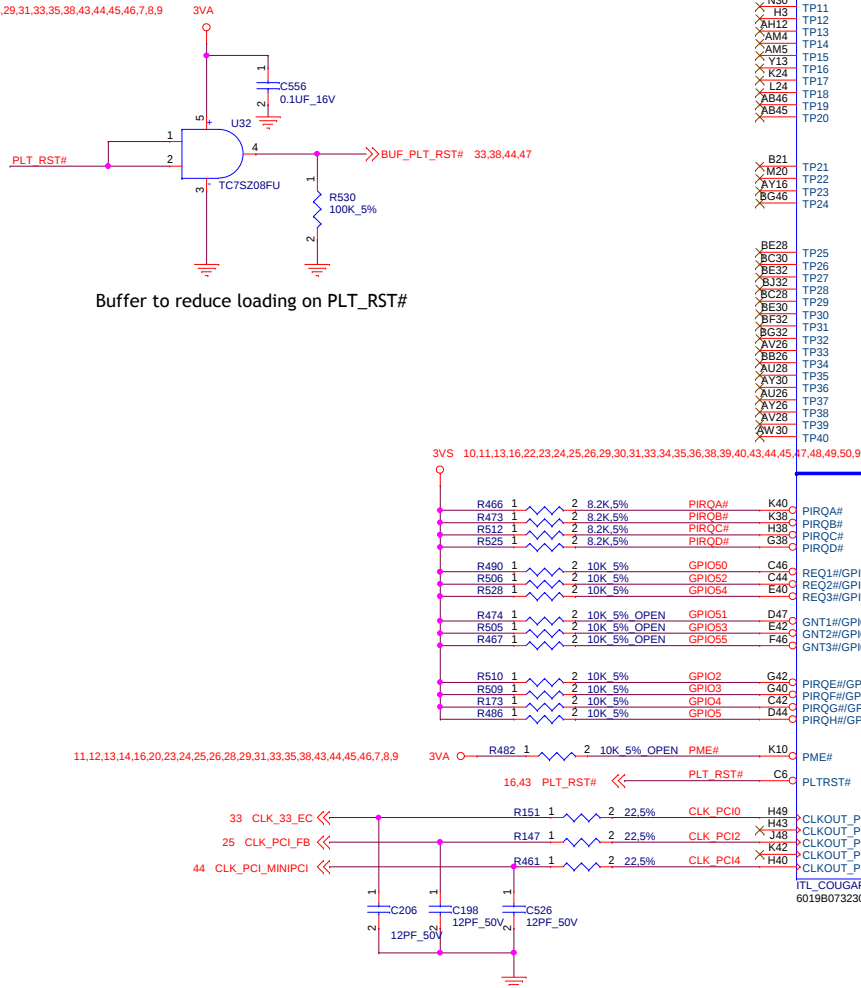
INVENTEC

TITLE  
Aegis  
PCH (5/9)-(PCI,USB,NVRAM)

|                |            |                      |            |
|----------------|------------|----------------------|------------|
| SIZE<br>Custom | CODE<br>ES | DOC.NUMBER<br>CS-131 | REV<br>A01 |
|----------------|------------|----------------------|------------|

CHANGE by IEC DATE Friday, December 10, 2010

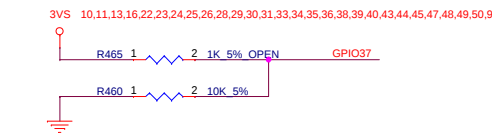
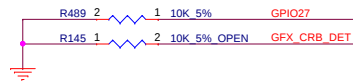
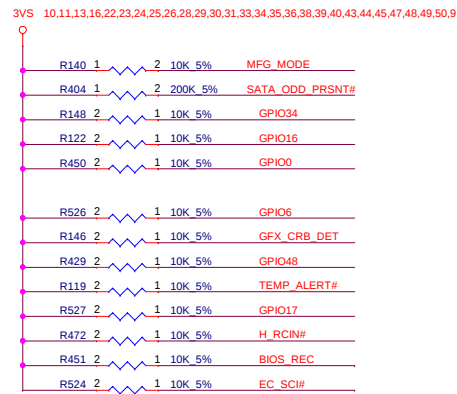
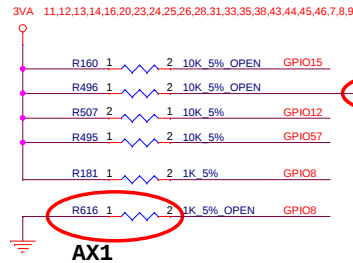
SHEET 28 of 61



Buffer to reduce loading on PLT\_RST#

A01

AX1



AX2

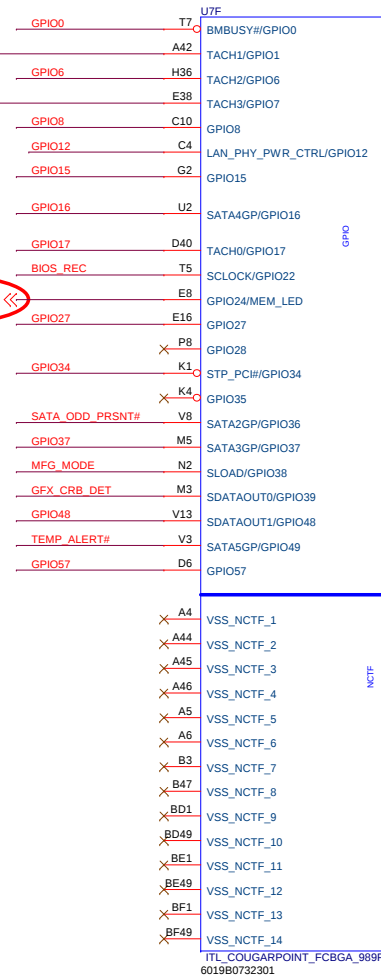
NEWCARD\_SHDN# 29,33

33 EC\_SM#

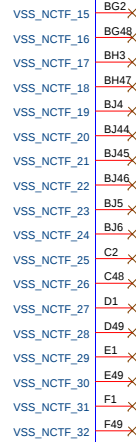
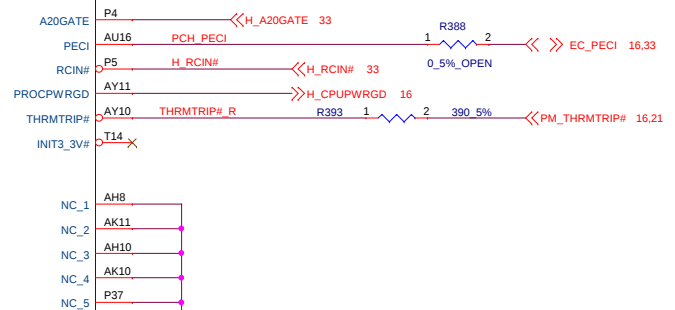
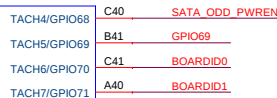
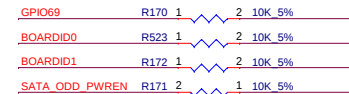
33 EC\_SCI#

AX2

NEWCARD\_SHDN# 33

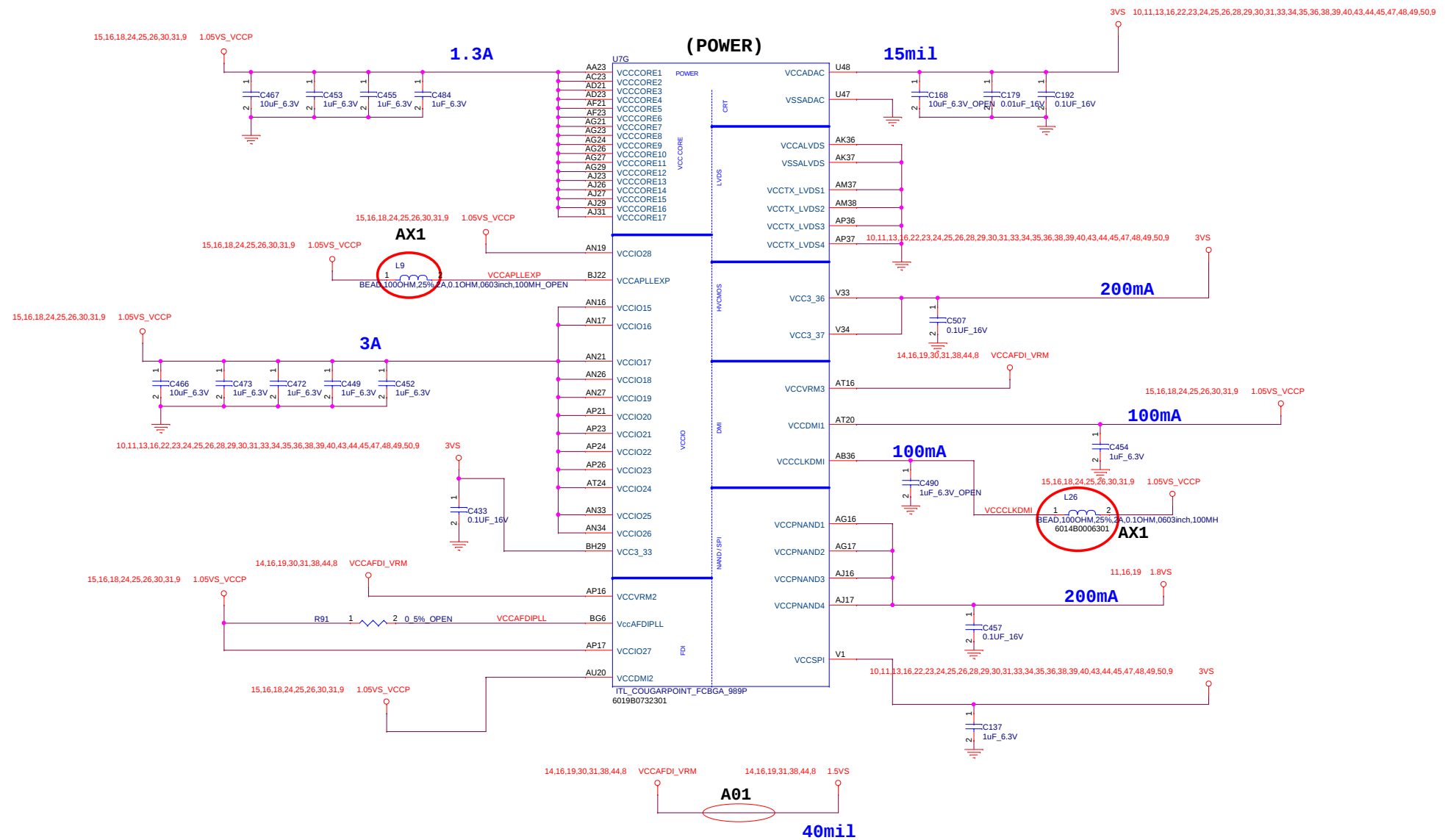


(GPIO, VSS, NCTF, RSVD)



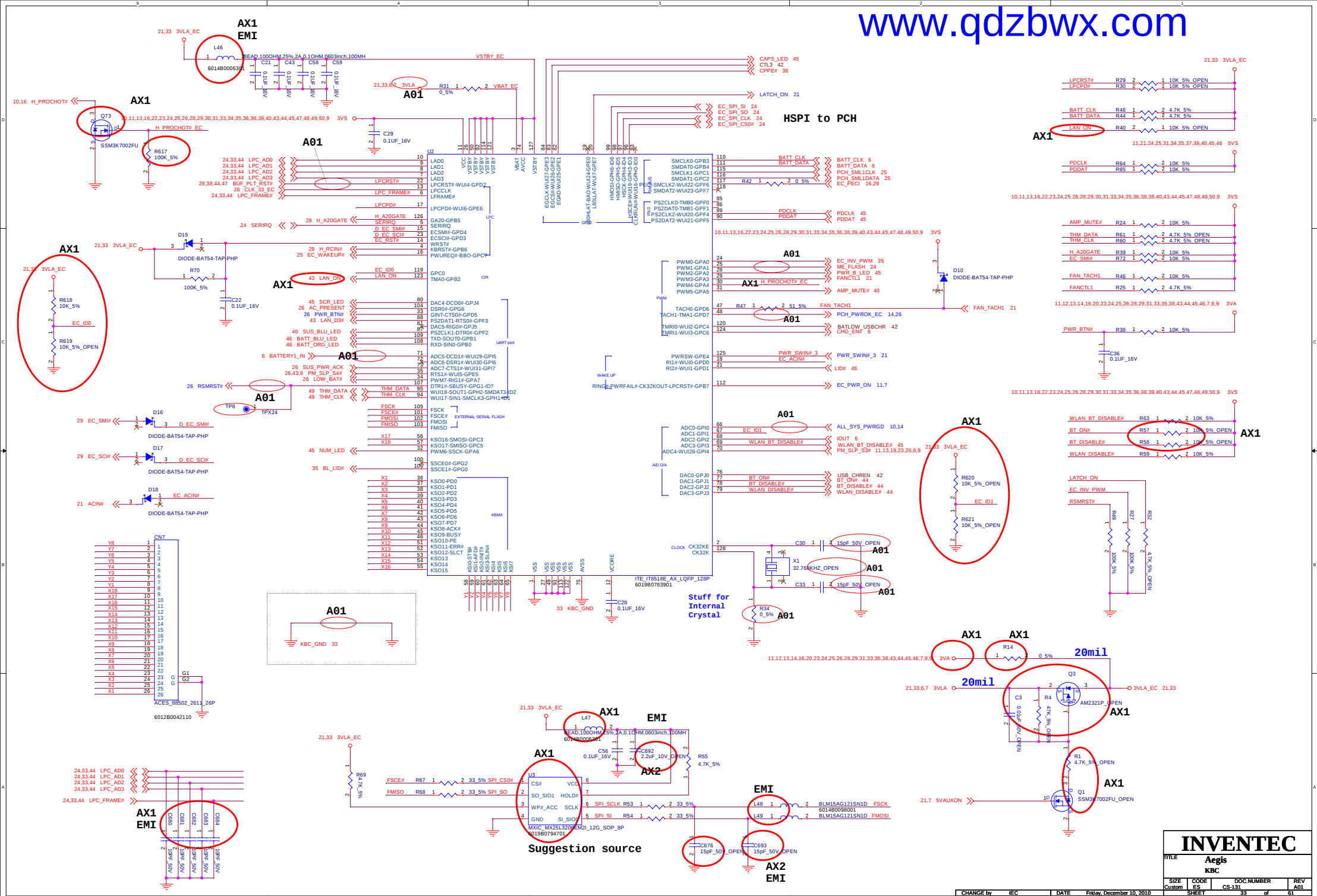
| INVENTEC                      |         |                   |         |
|-------------------------------|---------|-------------------|---------|
| TITLE Aegis                   |         |                   |         |
| PCH (69)-(GPIO,VSS,NCTF,RSVD) |         |                   |         |
| SIZE Custom                   | CODE ES | DOC.NUMBER CS-131 | REV A01 |
| SHEET 29                      |         | of 61             |         |

CHANGE by IEC DATE Friday, December 10, 2010

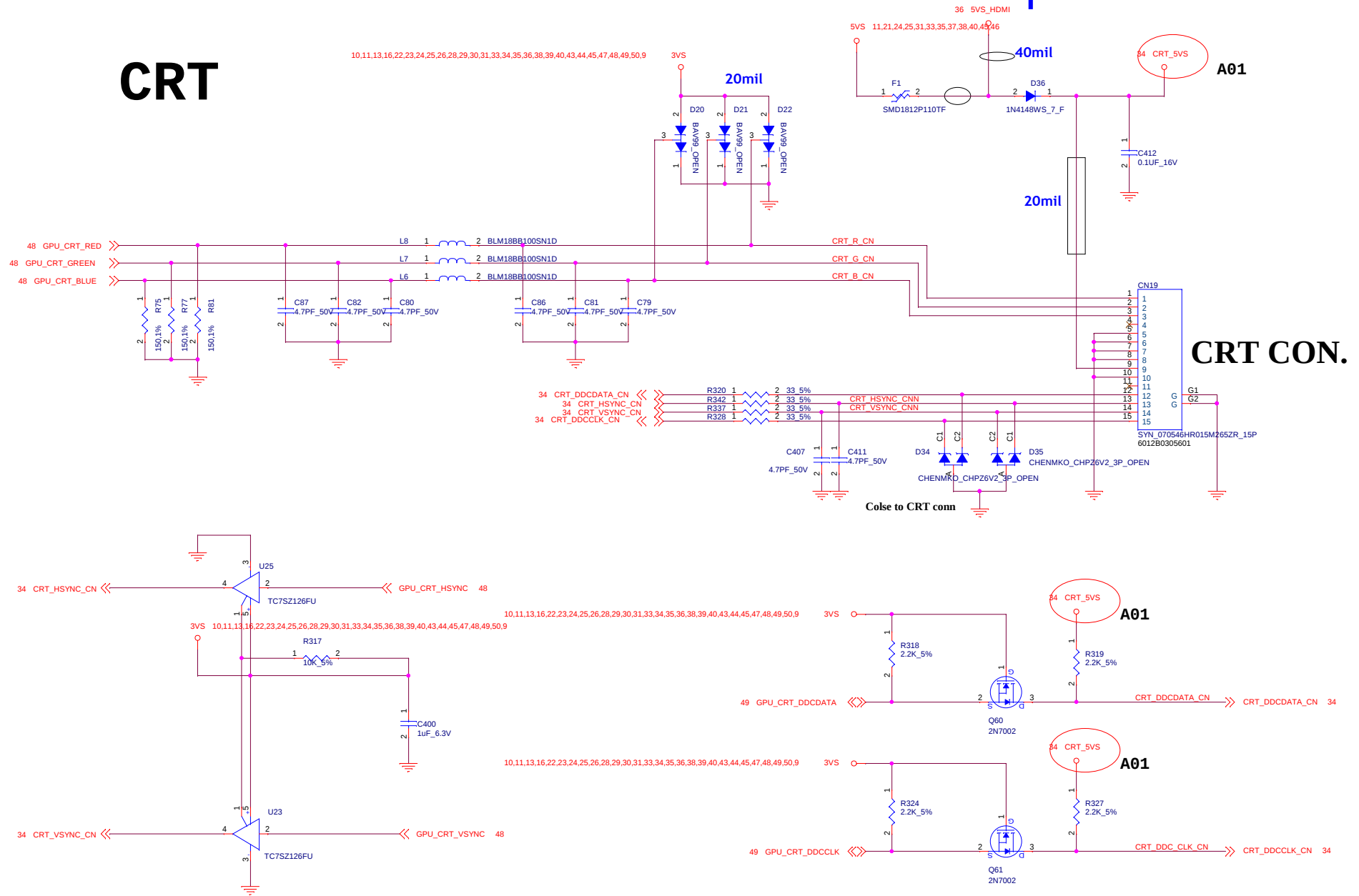






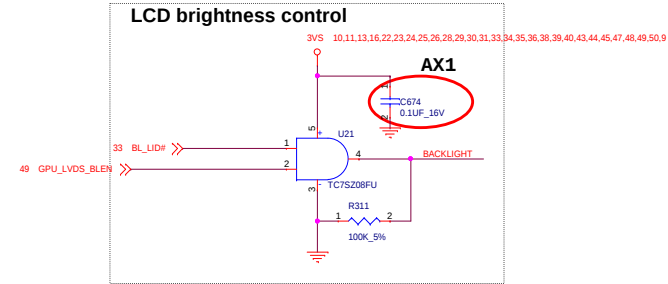
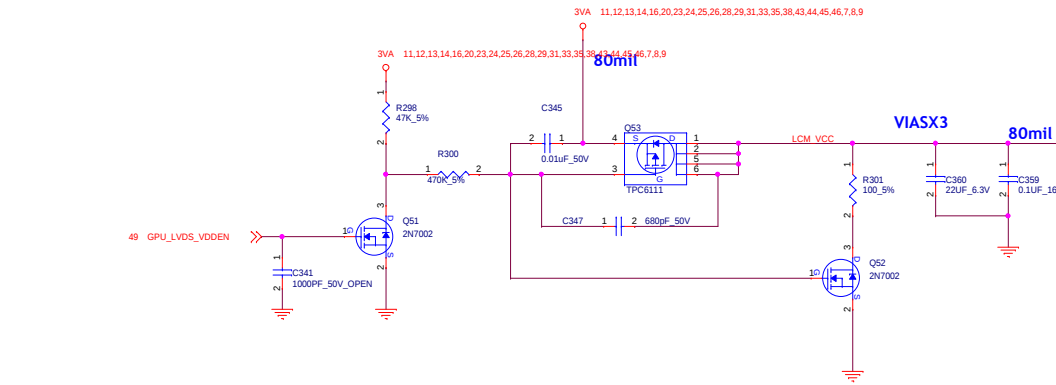


# CRT



INVENTEC

|                |      |            |     |
|----------------|------|------------|-----|
| TITLE          |      |            |     |
| Aegis CRT      |      |            |     |
| SIZE           | CODE | DOC NUMBER | REV |
| Custom         | ES   | CS-131     | A01 |
| SHEET 34 of 61 |      |            |     |



LVDS Interface

Symbol OK

FJ request

WEB Cam.

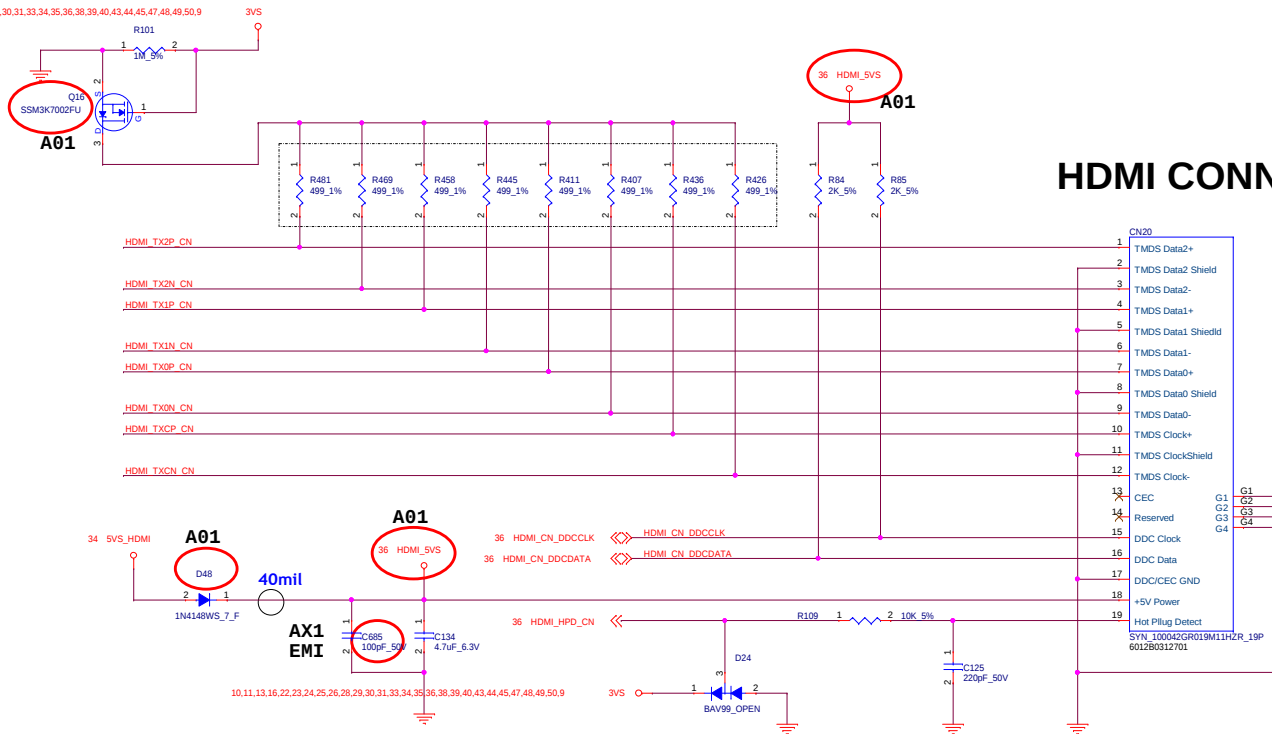
INVERT CONTROL

Please as close as possible to the LVDS CONN

INVENTEC

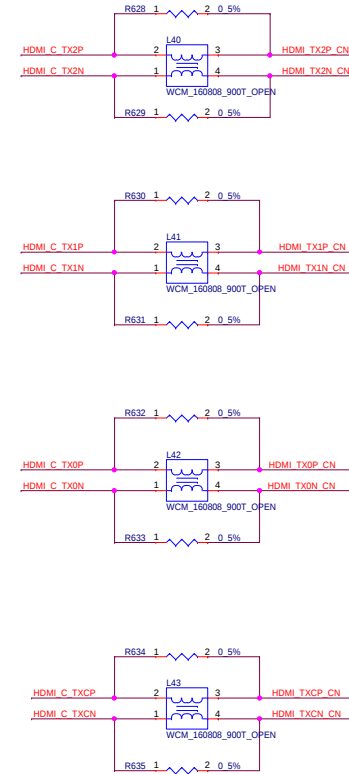
|       |      |            |       |
|-------|------|------------|-------|
| TITLE |      |            |       |
| Aegis |      |            |       |
| LVDS  |      |            |       |
| SIZE  | CODE | DOC NUMBER | REV   |
| C     | ES   | CS-131     | A01   |
| SHEET |      | 35         | of 61 |

10,11,13,16,22,23,24,25,26,28,29,30,31,33,34,35,36,38,39,40,43,44,45,47,48,49,50,9



## HDMI CONN

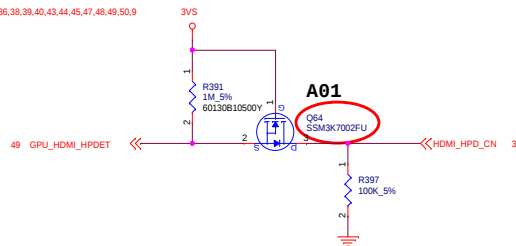
AX1



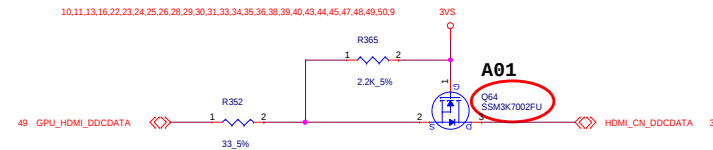
EMI

|                  |    |      |   |   |           |             |
|------------------|----|------|---|---|-----------|-------------|
| 49 GPU_HDMI_TX2P | >> | C536 | 1 | 2 | 0.1uF 16V | HDMI_C_TX2P |
| 49 GPU_HDMI_TX2N | >> | C535 | 1 | 2 | 0.1uF 16V | HDMI_C_TX2N |
| 49 GPU_HDMI_TX1P | >> | C521 | 1 | 2 | 0.1uF 16V | HDMI_C_TX1P |
| 49 GPU_HDMI_TX1N | >> | C511 | 1 | 2 | 0.1uF 16V | HDMI_C_TX1N |
| 49 GPU_HDMI_TX0P | >> | C471 | 1 | 2 | 0.1uF 16V | HDMI_C_TX0P |
| 49 GPU_HDMI_TX0N | >> | C463 | 1 | 2 | 0.1uF 16V | HDMI_C_TX0N |
| 49 GPU_HDMI_TXCP | >> | C489 | 1 | 2 | 0.1uF 16V | HDMI_C_TXCP |
| 49 GPU_HDMI_TXCN | >> | C485 | 1 | 2 | 0.1uF 16V | HDMI_C_TXCN |

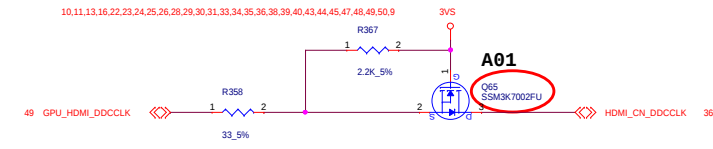
10,11,13,16,22,23,24,25,26,28,29,30,31,33,34,35,36,38,39,40,43,44,45,47,48,49,50,9



10,11,13,16,22,23,24,25,26,28,29,30,31,33,34,35,36,38,39,40,43,44,45,47,48,49,50,9



10,11,13,16,22,23,24,25,26,28,29,30,31,33,34,35,36,38,39,40,43,44,45,47,48,49,50,9



INVENTEC

Agis

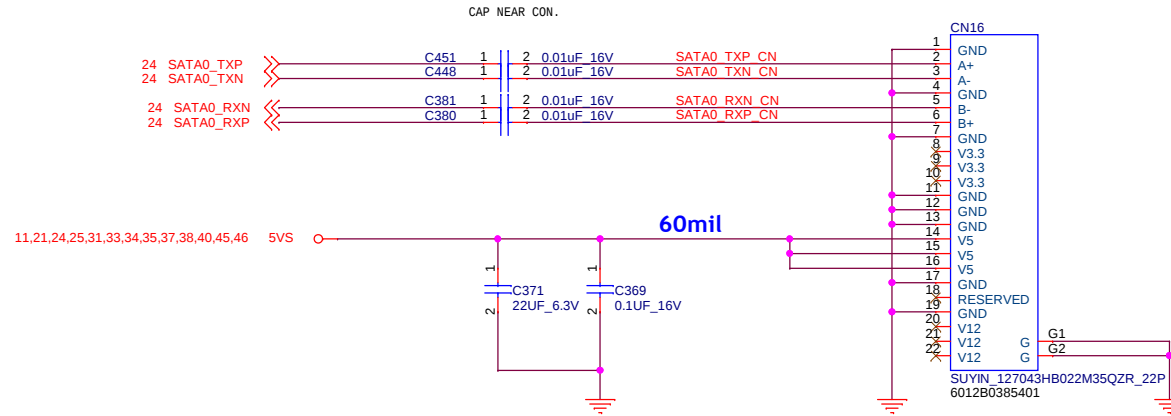
HDMI

SIZE CODE DOCNUMBER REV

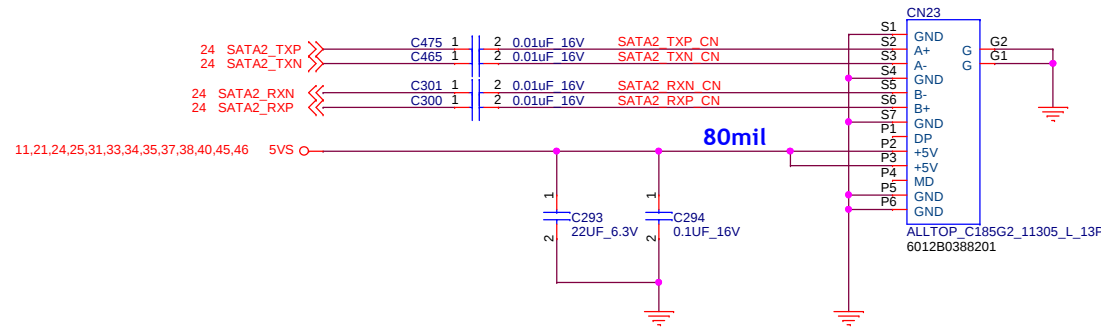
C ES CS-131 36 of 61

CHANGE by IEC DATE Friday, December 10, 2010

## HDD I/F



## ODD I/F

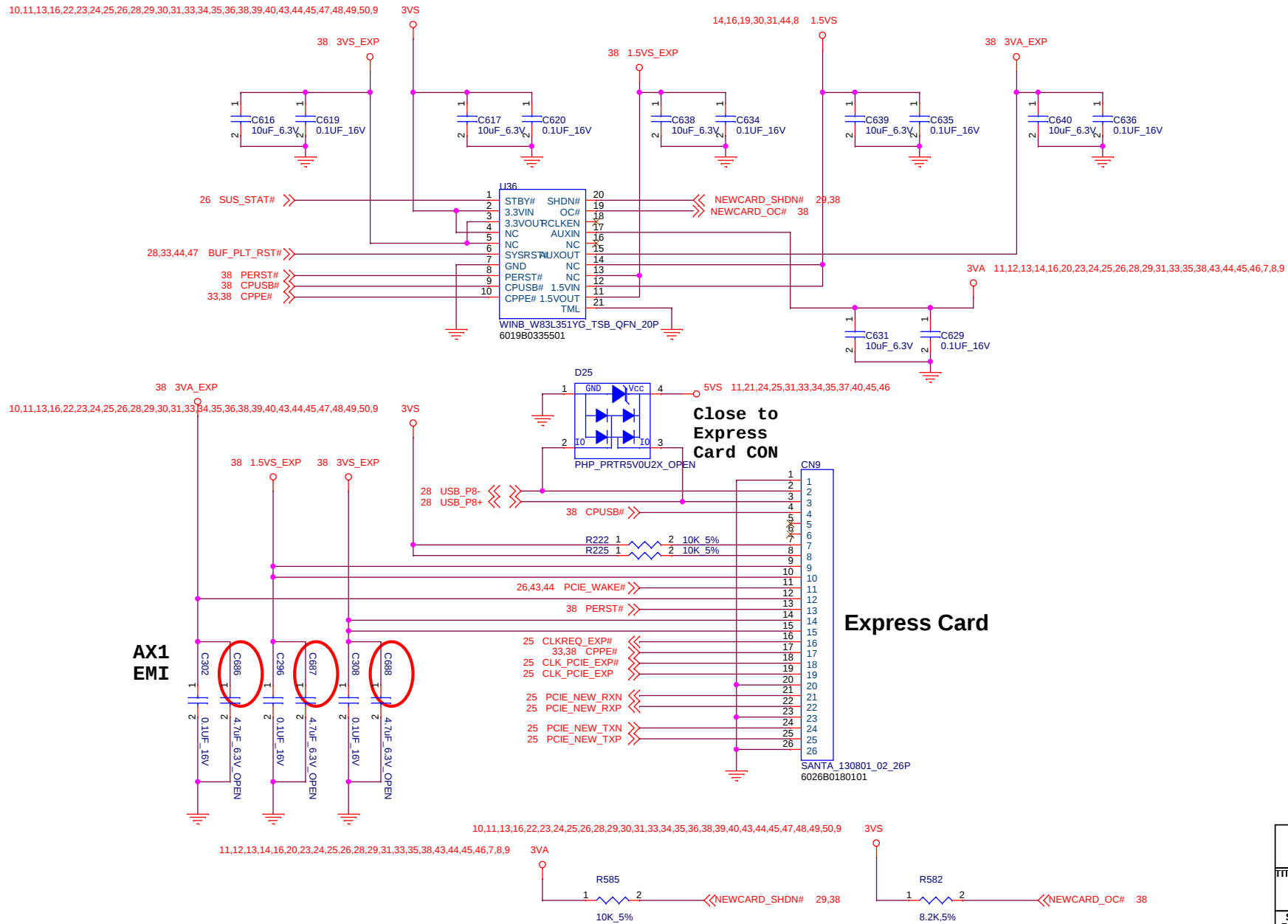


# INVENTEC

| TITLE        |      |            |       |
|--------------|------|------------|-------|
| Aegis        |      |            |       |
| SATA HDD/ODD |      |            |       |
| SIZE         | CODE | DOC.NUMBER | REV   |
| B            | ES   | CS-131     | A01   |
| SHEET        |      | 37         | of 61 |

CHANGE by IEC DATE Friday, December 10, 2010

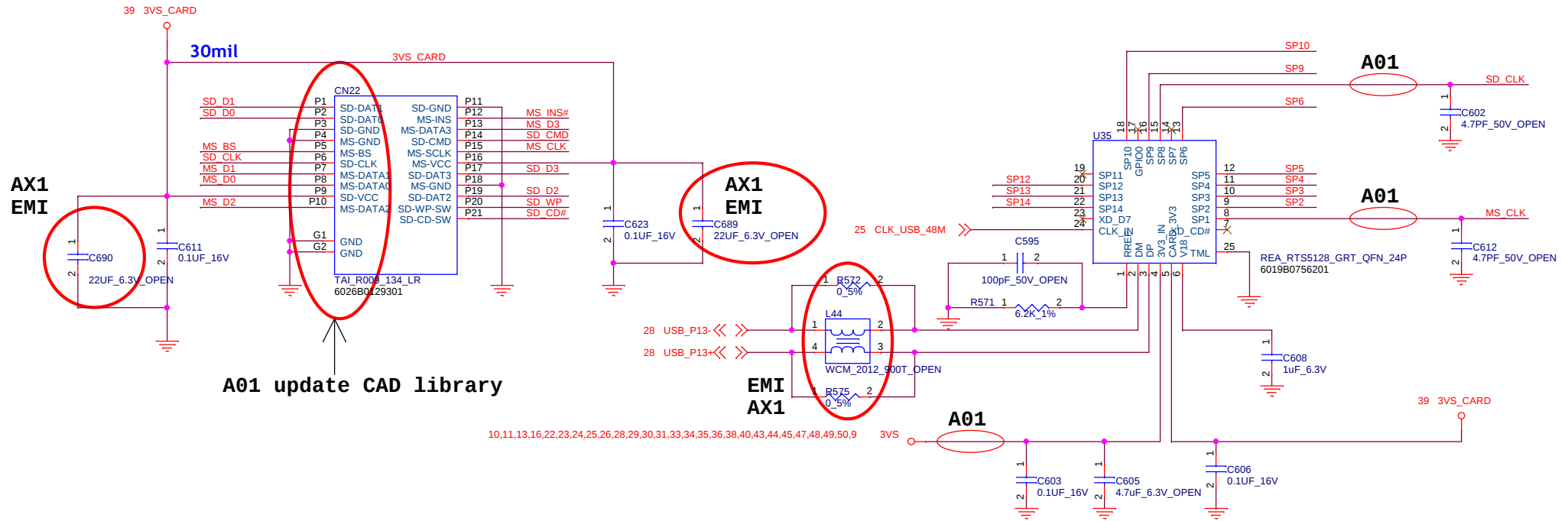
# New Card Board



| INVENTEC           |            |                                |                |
|--------------------|------------|--------------------------------|----------------|
| TITLE <b>Aegis</b> |            |                                |                |
| Express Card       |            |                                |                |
| SIZE<br>B          | CODE<br>ES | DOC.NUMBER<br>CS-131           | REV<br>A01     |
| CHANGE by IEC      |            | DATE Friday, December 10, 2010 | SHEET 38 of 61 |

|      |        |         |
|------|--------|---------|
| SP1  | SD WP  | MS CLK  |
| SP2  |        | MS INS# |
| SP3  | SD D1  |         |
| SP4  | SD D0  | MS D7   |
| SP5  | SD D7  | MS D3   |
| SP6  | SD CD# |         |
| SP8  | SD CLK | MS D2   |
| SP9  | SD D5  | MS D0   |
| SP10 | SD CMD |         |
| SP12 | SD D3  | MS D1   |
| SP13 | SD D2  | MS D5   |
| SP14 |        | MS BS   |

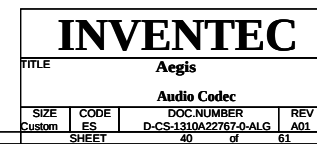
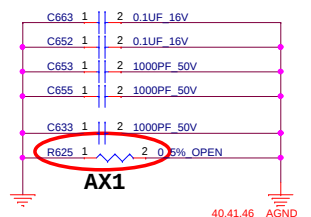
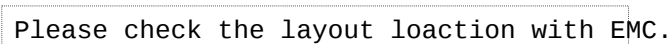
SD\_CLK, MS\_CLK trace layout be stripline layer.

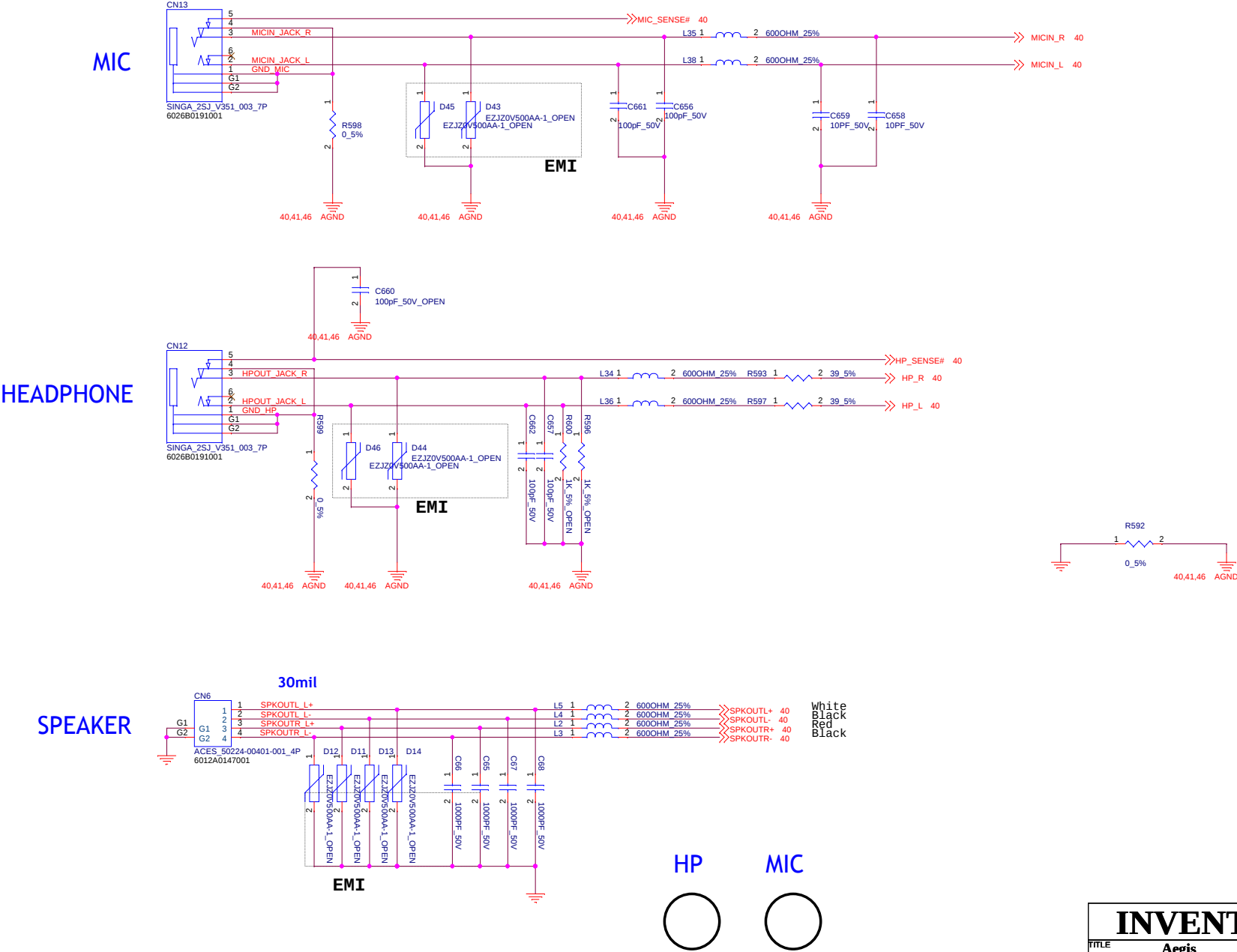


**INVENTEC**

|                                |         |                   |         |
|--------------------------------|---------|-------------------|---------|
| TITLE <b>Aegis Card Reader</b> |         |                   |         |
| SIZE Custom                    | CODE ES | DOC.NUMBER CS-131 | REV A01 |
| SHEET                          | 39      | of                | 61      |

CHANGE by IEC DATE Friday, December 10, 2010



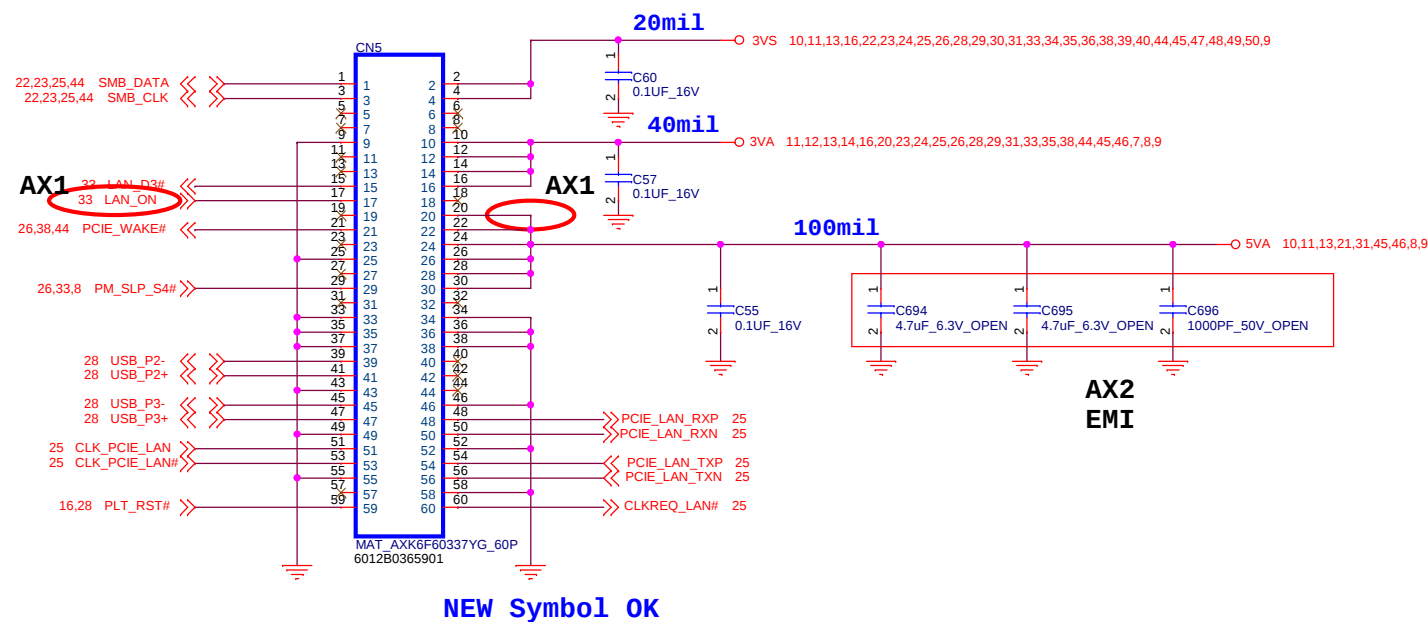


| INVENTEC         |      |            |     |    |
|------------------|------|------------|-----|----|
| TITLE            |      |            |     |    |
| Aegis            |      |            |     |    |
| HP/ MIC JACK/SPK |      |            |     |    |
| SIZE             | CODE | DOC.NUMBER | REV |    |
| Custom           | ES   | CS-131     | A01 |    |
| SHEET            |      | 41         | of  | 61 |



Symbol Ok

TO USB/LAN BOARD

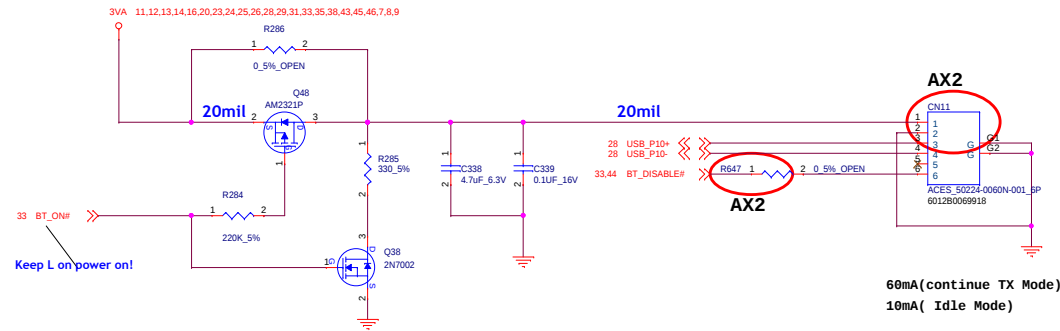


INVENTEC

| TITLE       |      |            |       |
|-------------|------|------------|-------|
| Aegis       |      |            |       |
| USB/LAN I/F |      |            |       |
| SIZE        | CODE | DOC.NUMBER | REV   |
| B           | ES   | CS-131     | A01   |
| SHEET       |      | 43         | of 61 |

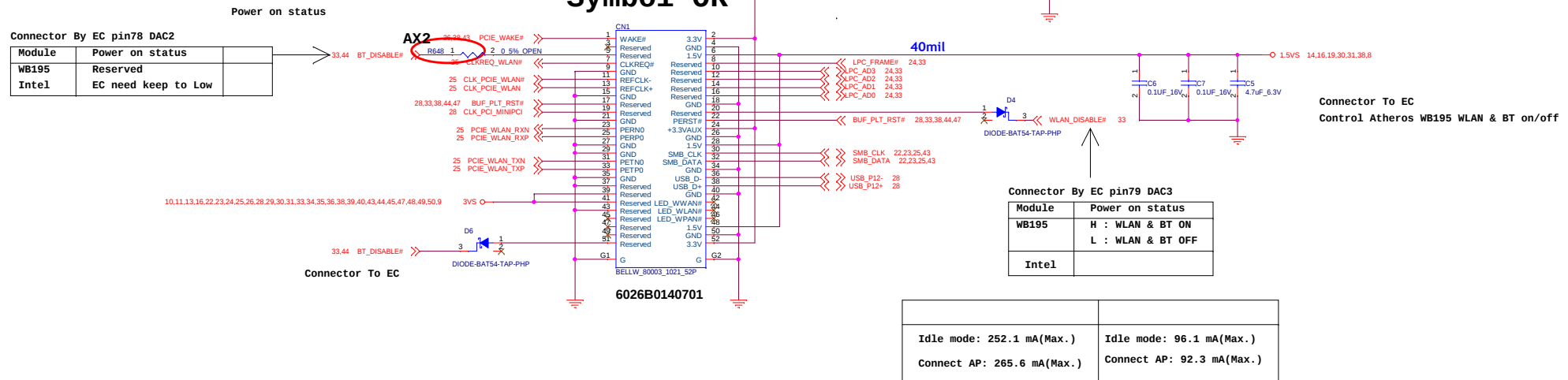
CHANGE by IEC DATE Friday, December 10, 2010

# Bluetooth CNN.



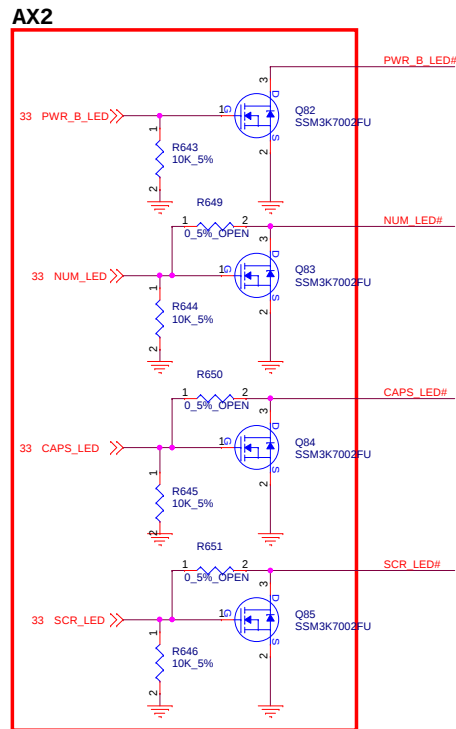
## PCIE Mini Card(WLAN)

Symbol OK

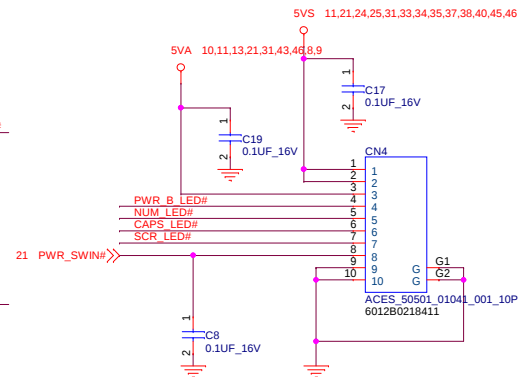


**INVENTEC**

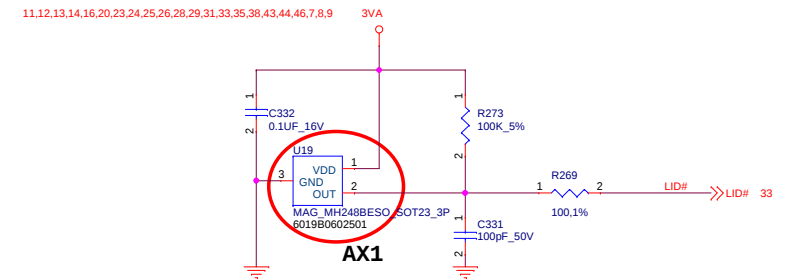
|         |      |            |       |
|---------|------|------------|-------|
| TITLE   |      |            |       |
| Aegis   |      |            |       |
| WLAN/BT |      |            |       |
| SIZE    | CODE | DOC NUMBER | REV   |
| C       | ES   | CS-131     | A01   |
| SHEET   |      | 44         | of 61 |



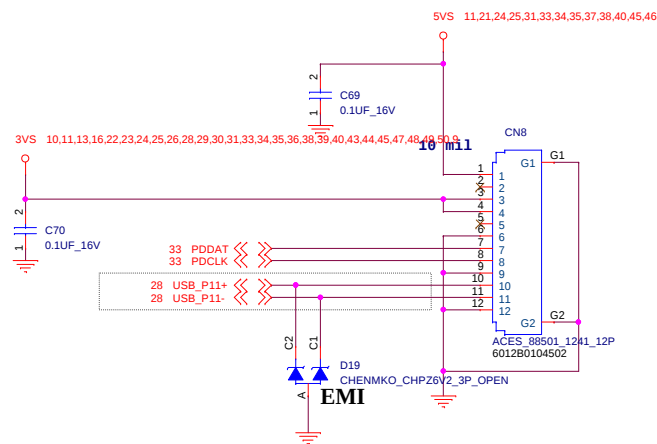
## PWS + LED CNN.



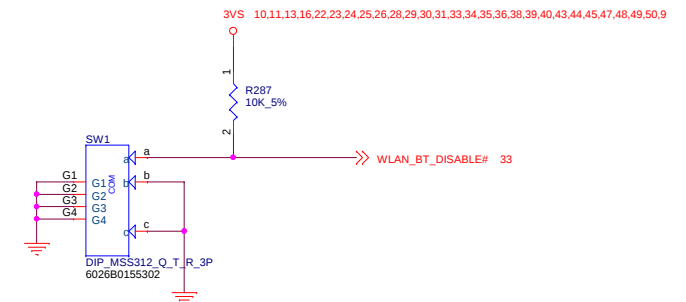
## HALL Switch



## GP + FP CNN.



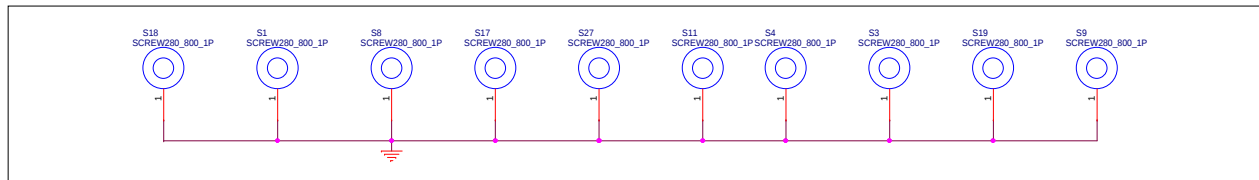
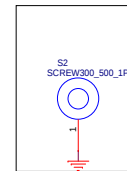
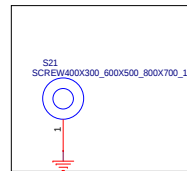
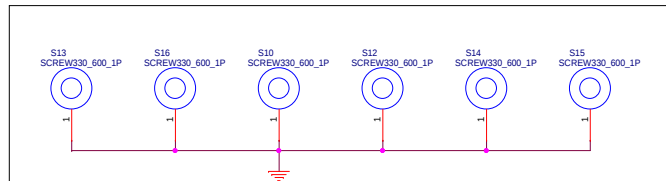
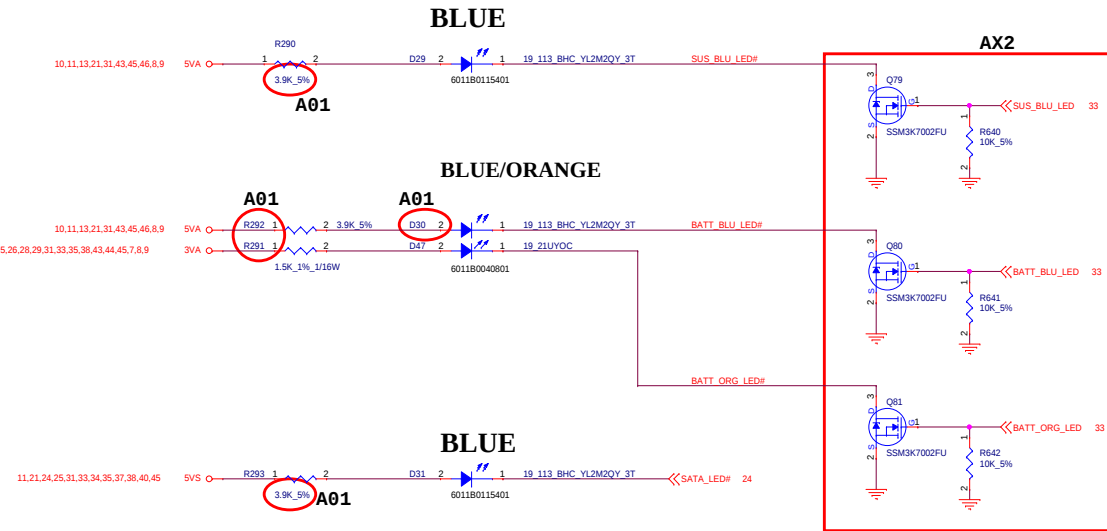
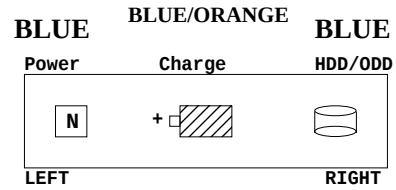
## (W-LAN, BT) sliding switch



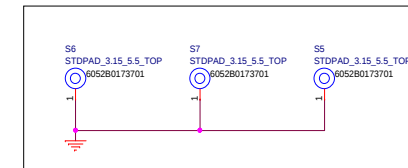
**INVENTEC**

| TITLE                |      |            |       |
|----------------------|------|------------|-------|
| Aegis                |      |            |       |
| PSW/LID/ GP/FP/SL SW |      |            |       |
| SIZE                 | CODE | DOC.NUMBER | REV   |
| Custom               | ES   | CS-131     | A01   |
| SHEET                |      | 45         | of 61 |

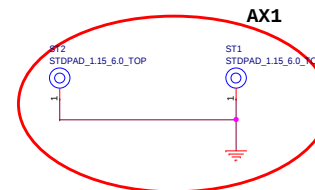
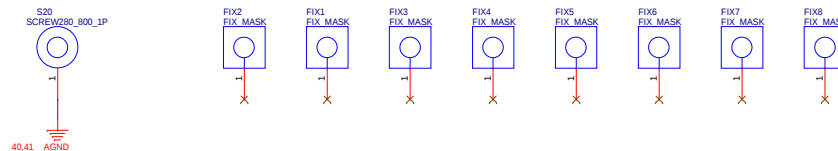
# LED Seat



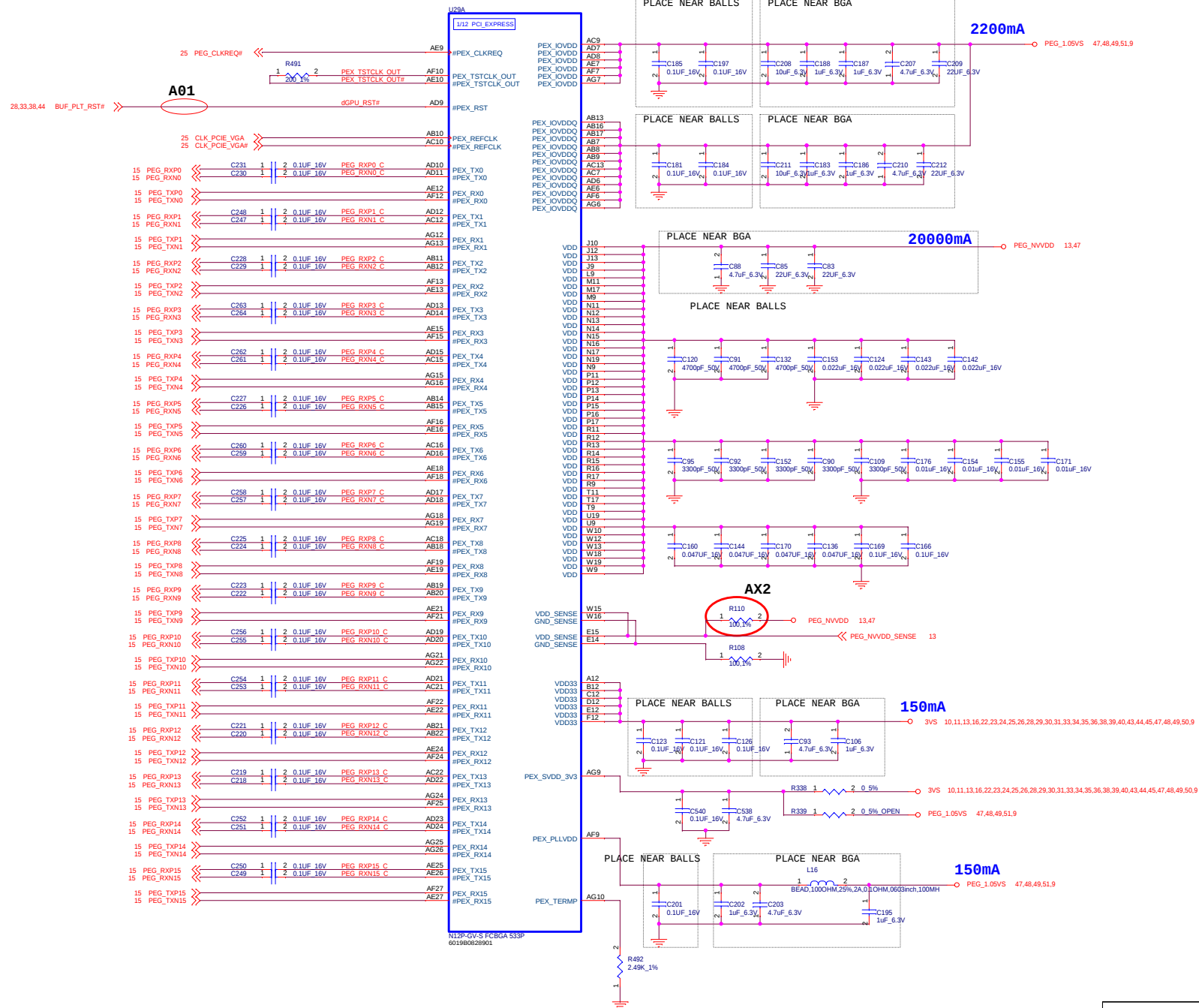
For USB B to B NUT



# SCREW

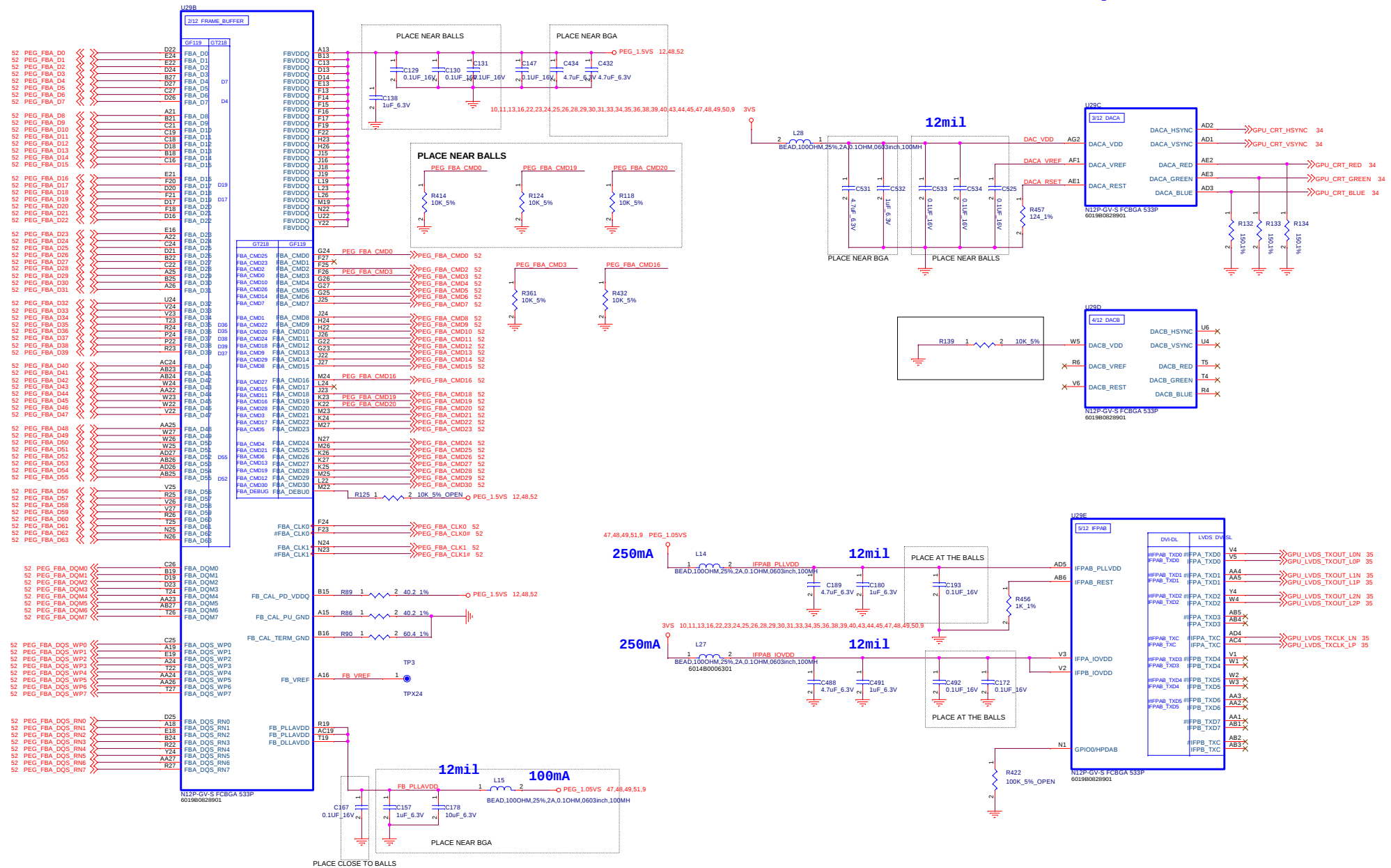


|                                          |      |            |     |
|------------------------------------------|------|------------|-----|
| <b>INVENTEC</b>                          |      |            |     |
| TITLE <b>Aegis</b><br><b>LED / SCREW</b> |      |            |     |
| SIZE                                     | CODE | DOC NUMBER | REV |
| C                                        | ES   | CS-131     | A01 |
| SHEET 46 of 61                           |      |            |     |



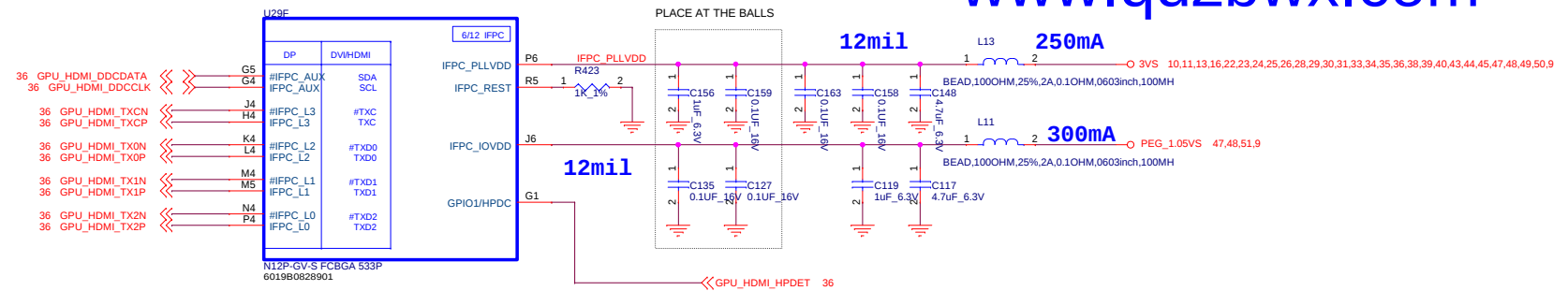
INVENTEC

|               |      |            |       |
|---------------|------|------------|-------|
| TITLE         |      |            |       |
| Aegis         |      |            |       |
| N12P-GV (1/5) |      |            |       |
| SIZE          | CODE | DOC NUMBER | REV   |
| C             | ES   | CS-131     | A01   |
| SHEET         |      | 47         | of 61 |

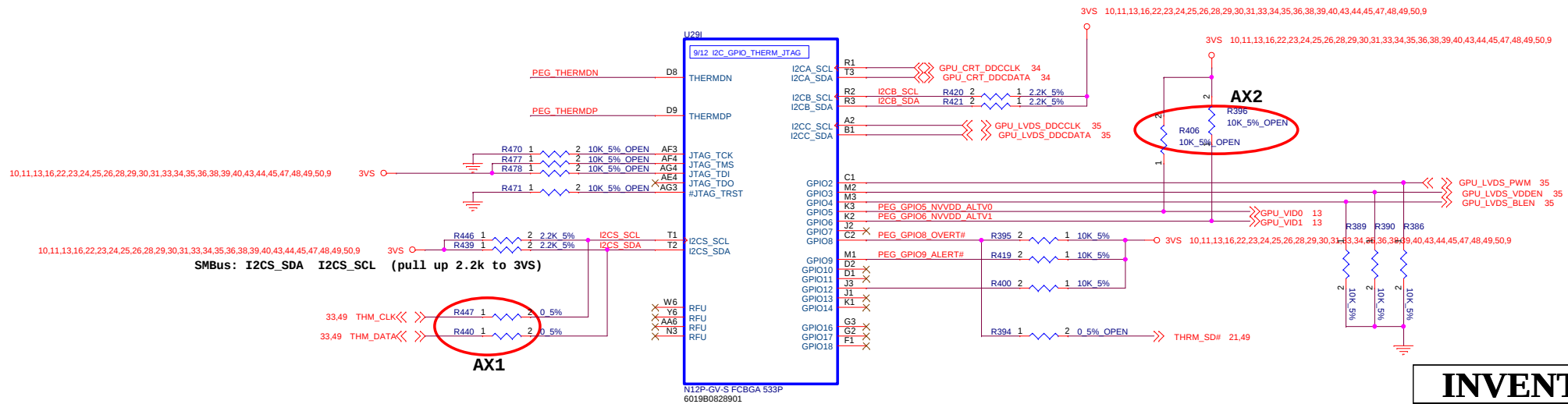
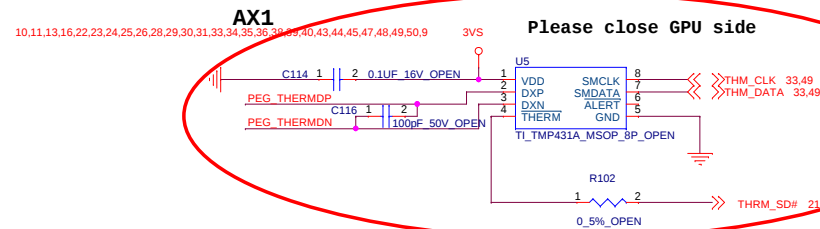


INVENTEC

Aegis  
N12P-GV (2/5)SIZE  
CustomCODE  
ESDOC NUMBER  
CS-131REV  
A01



## GPU Thermal sensor

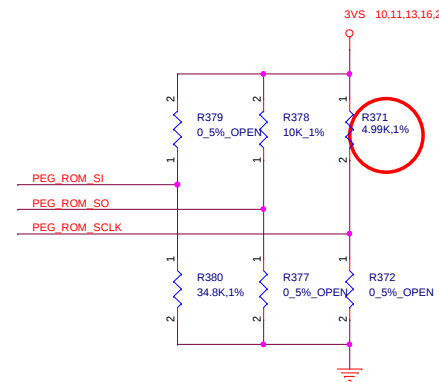
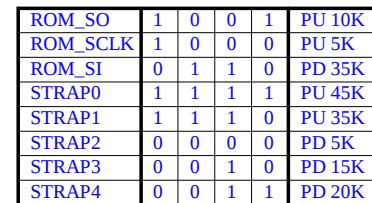


**INVENTEC**

|               |      |             |     |
|---------------|------|-------------|-----|
| TITLE         |      |             |     |
| Aegis         |      |             |     |
| N12P-GV (3/5) |      |             |     |
| SIZE          | CODE | DOC. NUMBER | REV |
| Custom        | ES   | CS-131      | A01 |

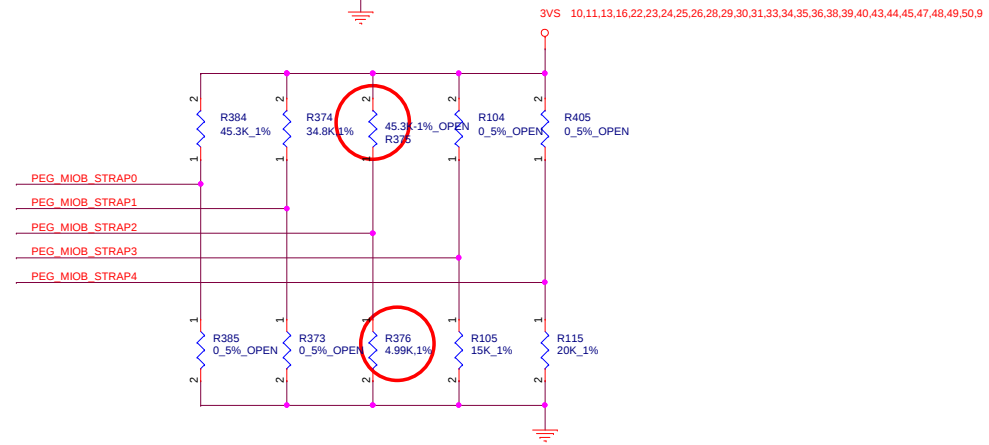
CHANGE by IEC DATE Friday, December 10, 2010

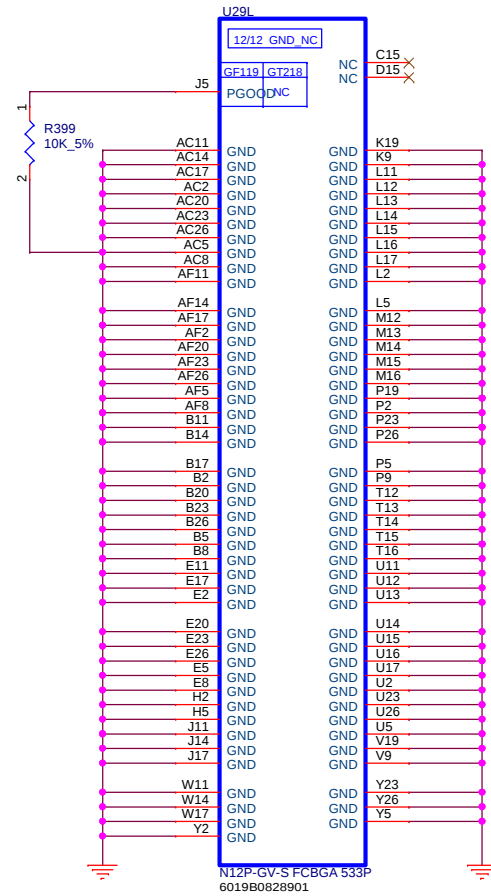
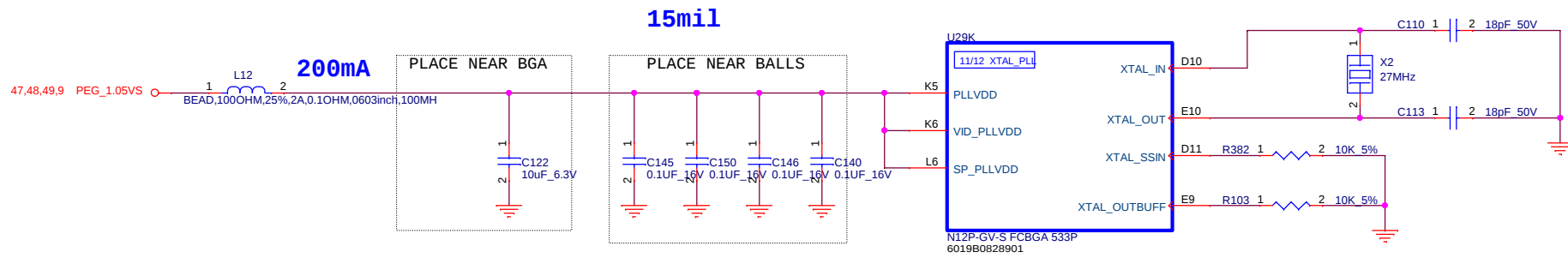
SHEET 49 of 61



Because use GF119-630-A1 Device ID (0x1050). Please transfer ROM\_SCLK & STRAP2 setting as below.

ROM\_SCLK= 1000 (Pull-up 5K ohm)  
STRAP2=0000 (Pull-Down 5K ohm)





|                      |      |                       |     |
|----------------------|------|-----------------------|-----|
| <b>INVENTEC</b>      |      |                       |     |
| TITLE <b>Aegis</b>   |      |                       |     |
| <b>N12P-GV (5/5)</b> |      |                       |     |
| SIZE                 | CODE | DOC.NUMBER            | REV |
| B                    | ES   | D-CS-1310A22767-0-ALG | A01 |
| SHEET                |      | 51 of                 | 61  |



Aegis

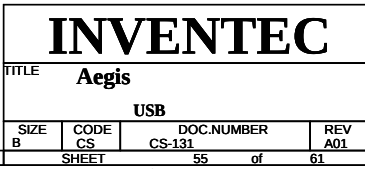
USB Board

2010.12.10      A01 Build

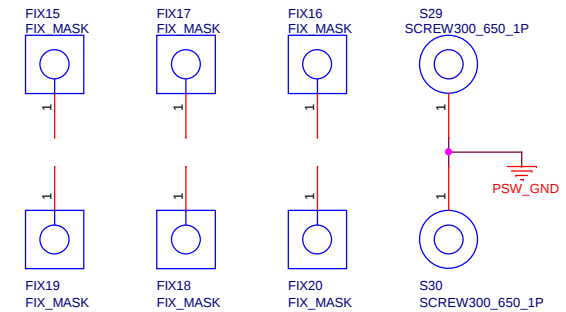
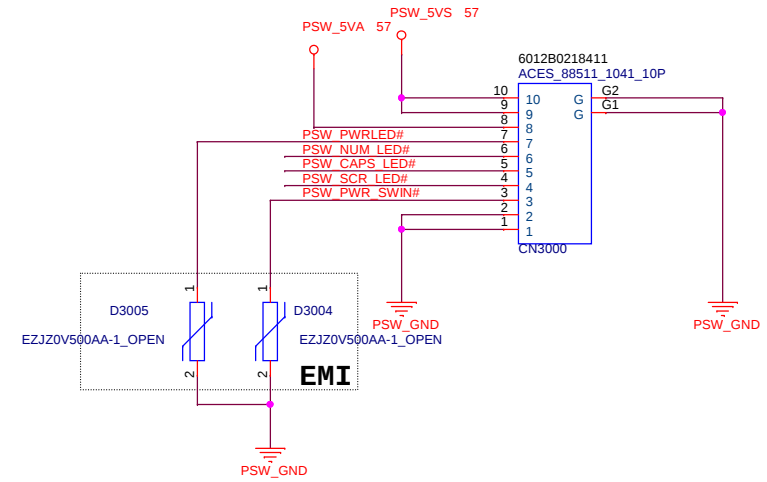
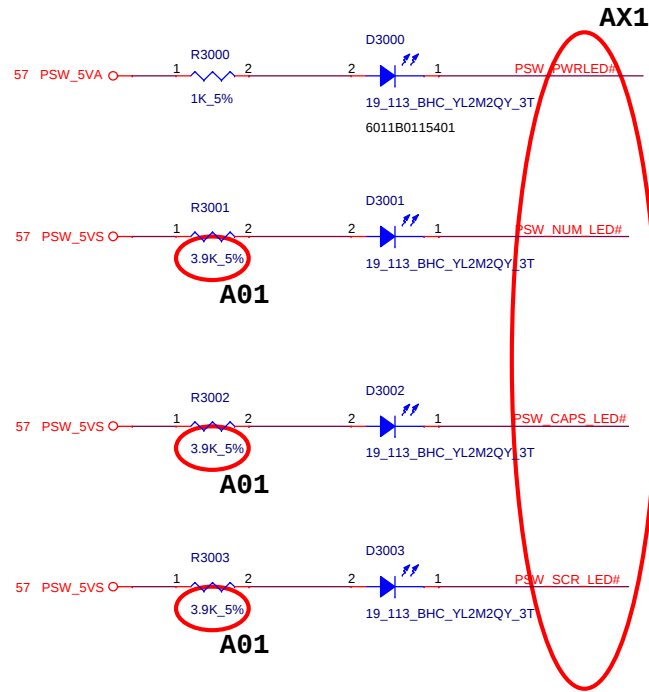
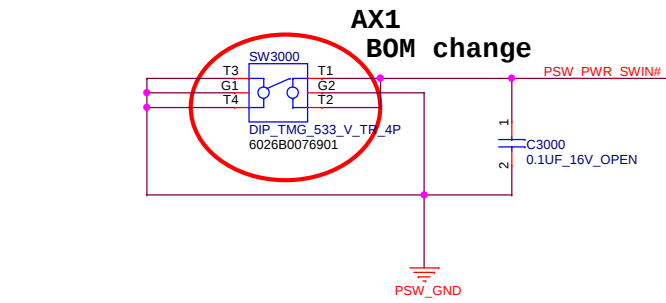
|                          |              |     |
|--------------------------|--------------|-----|
|                          |              |     |
|                          |              |     |
|                          |              |     |
| Thursday, Jun 26, 2008   | 3rd Issue    | A01 |
| Monday, May 26, 2008     | Second Issue | AX1 |
| Thursday, April 17, 2008 | First Issue  | A01 |
| DATE                     | CHANGE NO.   | REV |

|                           |    |      |       |      |                    |      |                     |     |
|---------------------------|----|------|-------|------|--------------------|------|---------------------|-----|
|                           | EE | DATE | POWER | DATE | INVENTEC           |      |                     |     |
| DRAWER                    |    |      |       |      | TITLE<br>USB Board |      |                     |     |
| DESIGN                    |    |      |       |      |                    |      |                     |     |
| CHECK RESPONSIBLE         |    |      |       |      |                    |      |                     |     |
| SIZE=                     |    |      |       |      | SIZE               | CODE | DOC NUMBER          | REV |
| FILE NAME: XXXX-XXXXXX-XX |    |      |       |      | C                  | CS   | K-CS-1310A2221S-ALG | A01 |
| PIN: XXXXXXXXXX           |    |      |       |      | SHEET              | 53   | of                  | 51  |









| INVENTEC           |            |                                   |            |
|--------------------|------------|-----------------------------------|------------|
| TITLE <b>Aegis</b> |            |                                   |            |
| Power Switch       |            |                                   |            |
| SIZE<br>B          | CODE<br>CS | DOC NUMBER<br>K-CS-1310A22219-ALG | REV<br>A01 |
| SHEET              | 57         | of                                | 61         |

CHANGE by BEN LEE DATE Friday, December 10, 2010

# Aegis

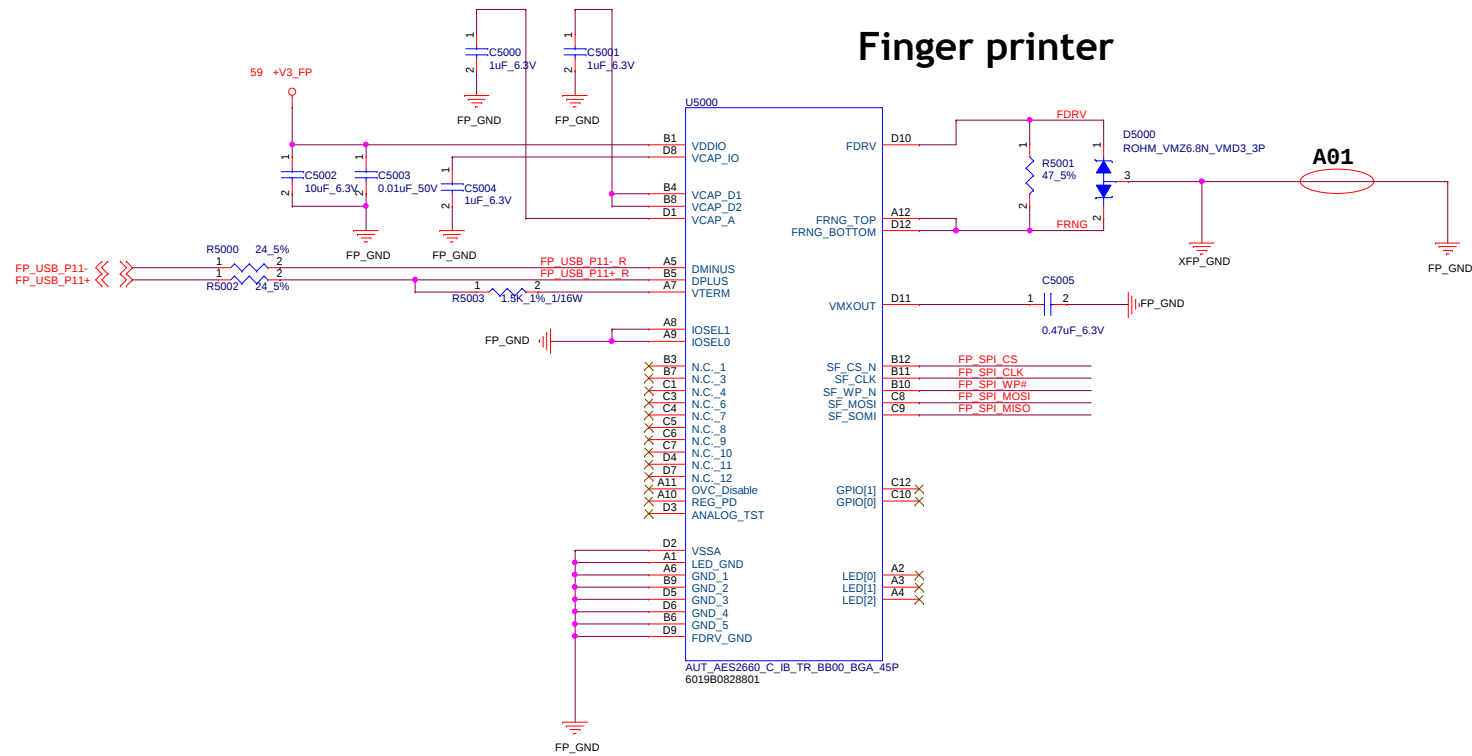
# Finger Print board

2010.12.10

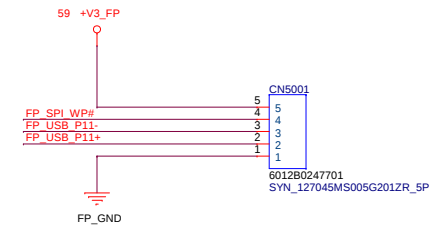
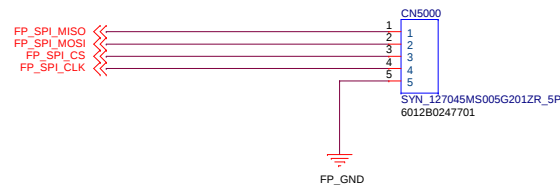
## A01 Build

|                           |            |     |
|---------------------------|------------|-----|
|                           |            |     |
|                           |            |     |
|                           |            |     |
|                           |            |     |
|                           |            |     |
| Friday, December 10, 2010 |            |     |
| DATE                      | CHANGE NO. | REV |

|                           |              |      |       |      |                    |      |                 |     |
|---------------------------|--------------|------|-------|------|--------------------|------|-----------------|-----|
|                           | EE           | DATE | POWER | DATE | INVENTEC           |      |                 |     |
| DRAWER                    |              |      |       |      | TITLE              |      |                 |     |
| DESIGN                    |              |      |       |      |                    |      |                 |     |
| CHECK                     |              |      |       |      | Finger Print board |      |                 |     |
| RESPONSIBLE               |              |      |       |      |                    |      |                 |     |
| SIZE=                     |              |      |       | VER: | SIZE               | CODE | DOC NUMBER      | REV |
| FILE NAME: XXXX-XXXXXX-XX |              |      |       |      | CustomCS           |      | K-CS-1310A22499 | A01 |
| P/N                       | XXXXXXXXXXXX |      |       |      | SHEET              | 58   | of              | 61  |



### TO GP PIN HEADER



| INVENTEC                  |      |                 |     |  |
|---------------------------|------|-----------------|-----|--|
| TITLE: Aegis Finger Print |      |                 |     |  |
| SIZE                      | CODE | DOC NUMBER      | REV |  |
| Custom                    | CS   | K-CS-1310A22499 | A01 |  |

# Aegis GP board

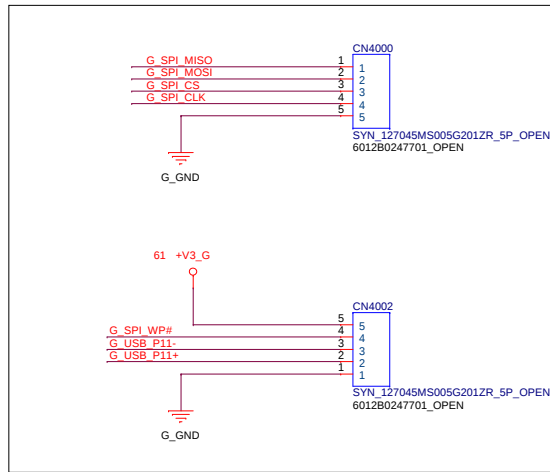
2010.12.10

A01 Build

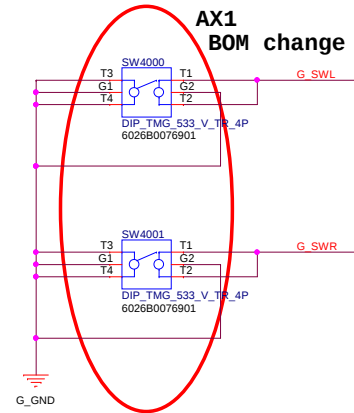
|                           |            |     |
|---------------------------|------------|-----|
|                           |            |     |
|                           |            |     |
|                           |            |     |
|                           |            |     |
|                           |            |     |
| Friday, December 10, 2010 |            |     |
| DATE                      | CHANGE NO. | REV |

|                           |              |      |       |      |          |      |                 |     |
|---------------------------|--------------|------|-------|------|----------|------|-----------------|-----|
|                           | EE           | DATE | POWER | DATE | INVENTEC |      |                 |     |
| DRAWER                    |              |      |       |      | TITLE    |      |                 |     |
| DESIGN                    |              |      |       |      |          |      |                 |     |
| CHECK                     |              |      |       |      | GP Board |      |                 |     |
| RESPONSIBLE               |              |      |       |      |          |      |                 |     |
| SIZE=                     |              |      |       | VER: | SIZE     | CODE | DOC NUMBER      | REV |
| FILE NAME: XXXX-XXXXXX-XX |              |      |       |      | CustomCS |      | K-CS-1310A22499 | A01 |
| P/N                       | XXXXXXXXXXXX |      |       |      | SHEET    | 60   | of              | 61  |

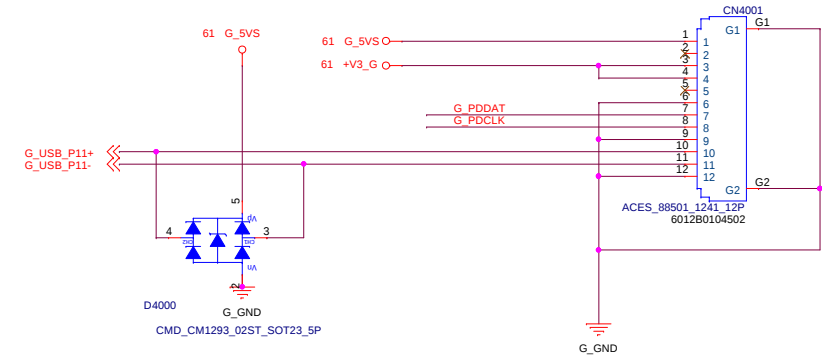
## TO FP PIN HEADER



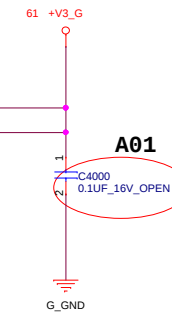
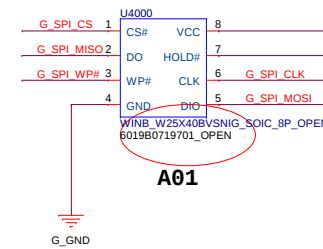
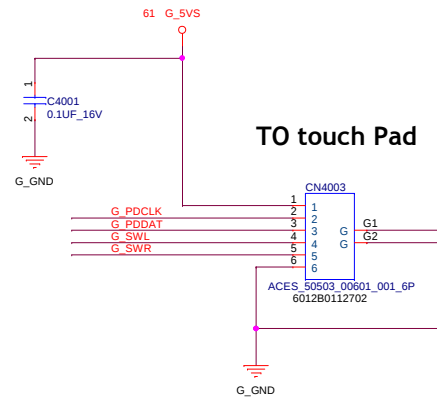
## GP Button



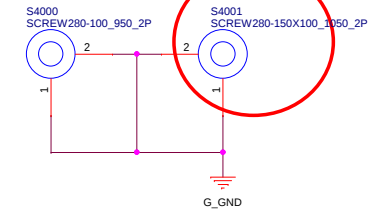
## TO MB



## TO touch Pad



## AX2



## INVENTEC

|              |      |                 |     |
|--------------|------|-----------------|-----|
| TITLE        |      |                 |     |
| Aegis        |      |                 |     |
| USB Board/GP |      |                 |     |
| SIZE         | CODE | DOC NUMBER      | REV |
| CustomCS     |      | K-CS-1310A22499 | A01 |