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|                                       |                         |           |              |    |        |          |
|---------------------------------------|-------------------------|-----------|--------------|----|--------|----------|
| T&I (TPV-INVENTA TECHNOLOGY CO., LTD) |                         | OEM MODEL | CA203M       |    | Size   | A3       |
| Circuit diagram NO.                   | <Circuit diagram NO.>   | T&I MODEL | CA202M       |    | Rev    | DVT_0.1  |
| Key Component                         | COVER                   | PCB NAME  | 6150A0008201 |    | remark | <remark> |
| Date                                  | Friday, August 24, 2012 | Sheet     | 1            | of | 40     |          |

# OTS CA203 EVT Schematics

## CONTENTS

| SCHEMATIC                    | SHEET |
|------------------------------|-------|
| COVER                        | 01    |
| INDEX                        | 02    |
| BLOCK DIAGRAM                | 03    |
| LGA1155_DMI/FDI              | 04    |
| LGA1155_DIMM A               | 05    |
| LGA1155_DIMM B               | 06    |
| DDR3 STANDARD MA-CH0 5.2mm   | 07    |
| DDR3 STANDARD MB-CH0 9.2mm   | 08    |
| LGA1155_PWR                  | 09    |
| LGA1155_GND                  | 10    |
| PCH_DP,CLK BUFFER            | 11    |
| PCH_FDI, DMI,USB,PCIE,NVRAM  | 12    |
| PCH_HOST,SATA,PCI            | 13    |
| PCH_GPIO, CTRL,AUDIO         | 14    |
| PCH_PWR,GND                  | 15    |
| XDP for Processor            | 16    |
| SIO (IT8772E)                | 17    |
| LAN RTL8111F                 | 18    |
| Card reader (RTS5129)        | 19    |
| AUDIO ALC269-VC , WEB CAM    | 20    |
| HDMI_Output                  | 21    |
| Scalar_TSUMU88MDT3-LF-1      | 22    |
| Scalar_Control               | 23    |
| Display VGA out /SPI ROM SYS | 24    |
| MINI CARD WIFI ,TV           | 25    |
| USB 2.0X4                    | 26    |
| SIDE USB3.0x2                | 27    |
| USB3.0 (NEC uPD720202)       | 28    |
| BUTTON                       | 29    |
| Controller 1                 | 30    |

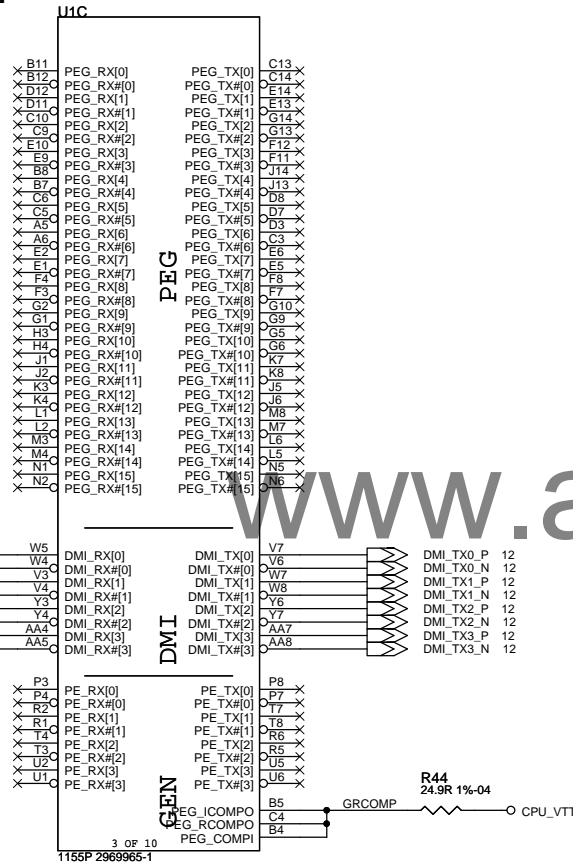
| SCHEMATIC                   | SHEET |
|-----------------------------|-------|
| IVY Bay-CPU 1/2             | 31    |
| IVY Bay-MOSFET 2/2          | 32    |
| SYSTEM V3A/S, V5A/S         | 33    |
| CPU_VTT_1.05V,VCCSA_0.85V   | 34    |
| +1.5VDIMM,+1.5VS+0.75VTT    | 35    |
| VCC1_05_PCH / ME,VCC1_8_PCH | 36    |
| DC-IN,+V12S                 | 37    |
| Discharge Circuit           | 38    |
| Screw                       | 39    |
| Power Map                   | 40    |
| Power Sequence              | 41    |
| History                     | 42    |
|                             |       |
|                             |       |
|                             |       |
|                             |       |

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|                                       |                         |           |              |        |          |
|---------------------------------------|-------------------------|-----------|--------------|--------|----------|
| T&I (TPV-INVENTA TECHNOLOGY CO., LTD) |                         | OEM MODEL | CA203M       | Size   | A3       |
| Circuit diagram NO.                   | <Circuit diagram NO.>   | T&I MODEL | CA202M       | Rev    | DVT_0.1  |
| Key Component                         | INDEX                   | PCB NAME  | 6150A0008201 | remark | <remark> |
| Date                                  | Friday, August 24, 2012 | Sheet     | 2 of 40      |        |          |



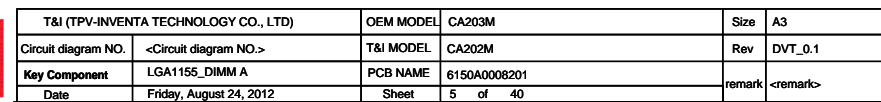
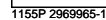


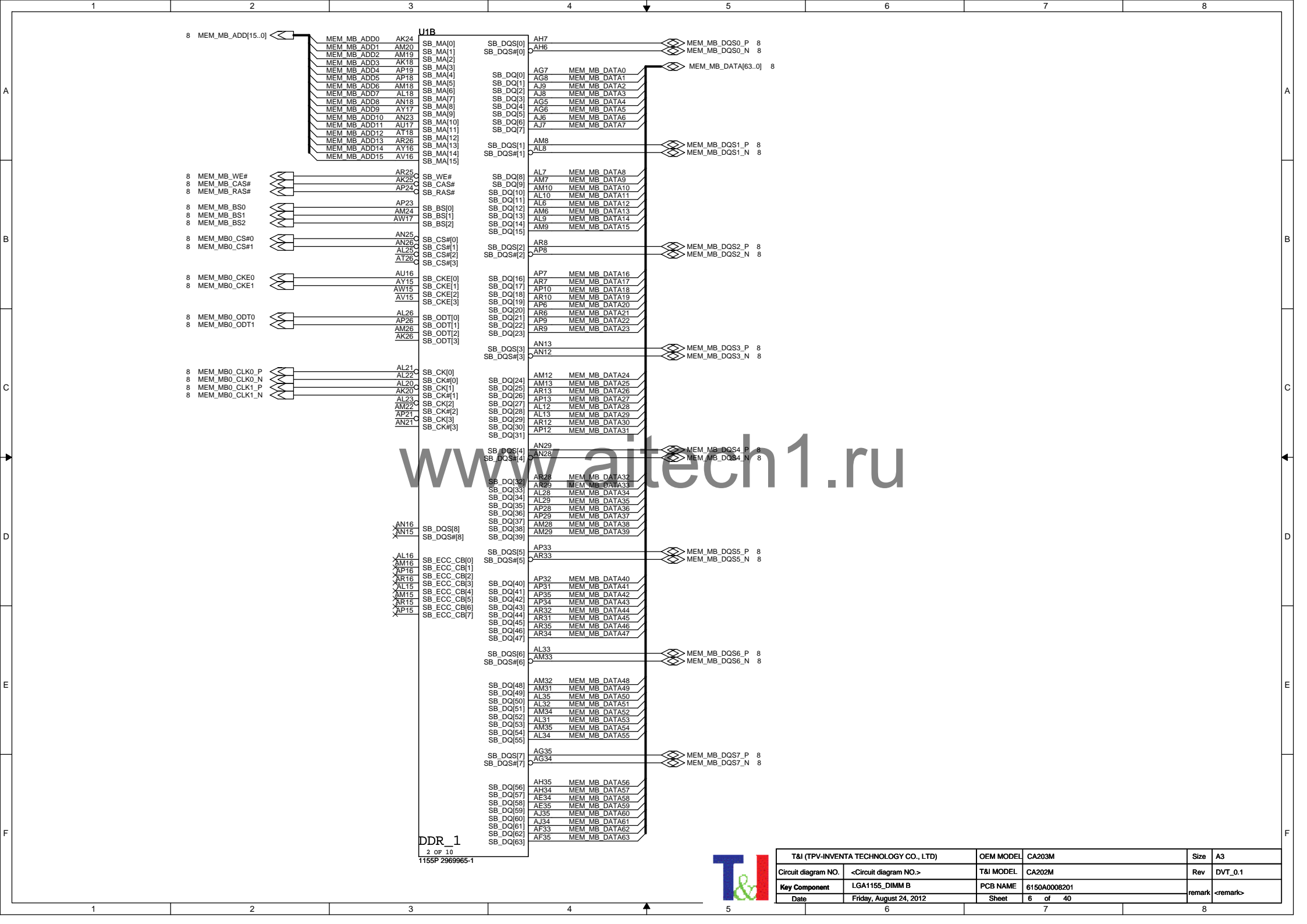
**FDI LINK**

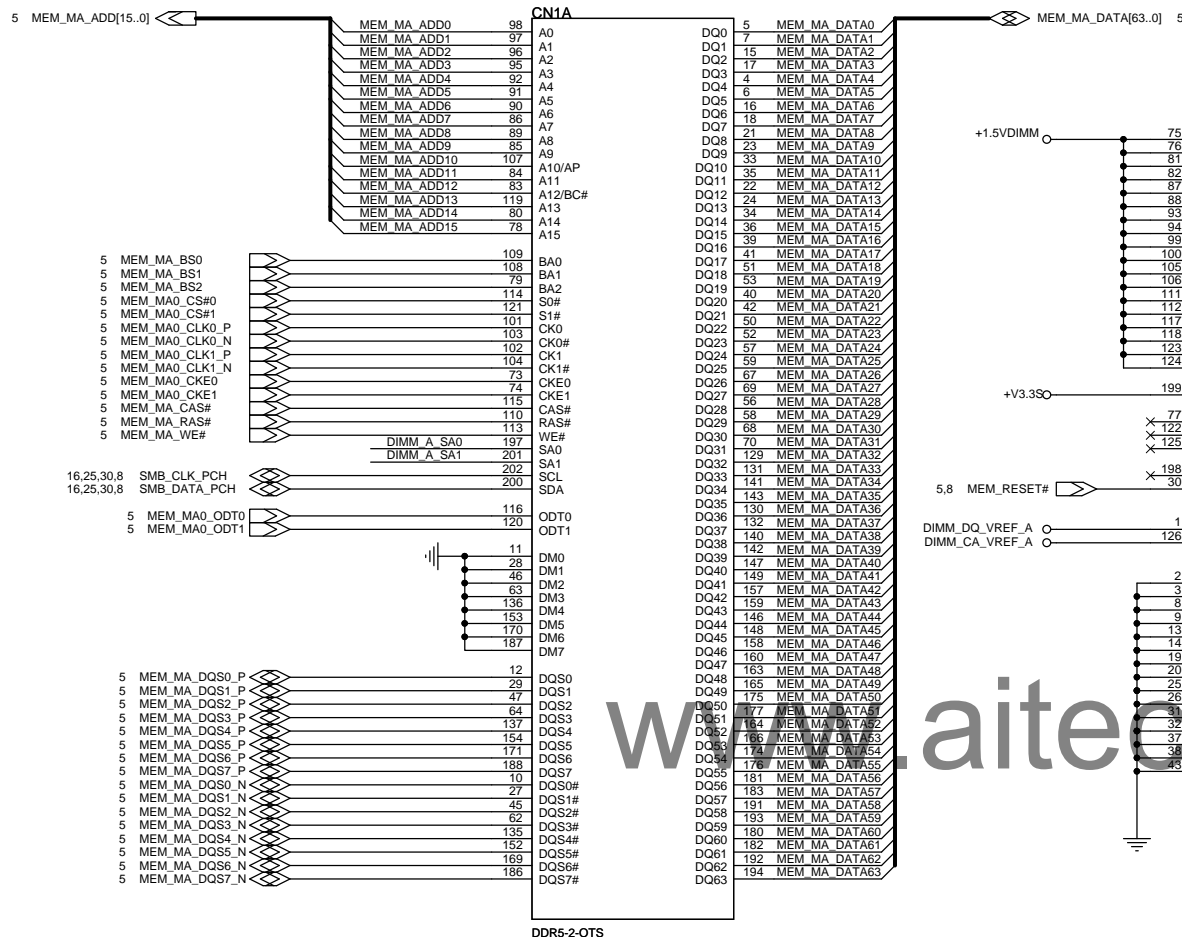
4 OF 10

1155P 2969965-1

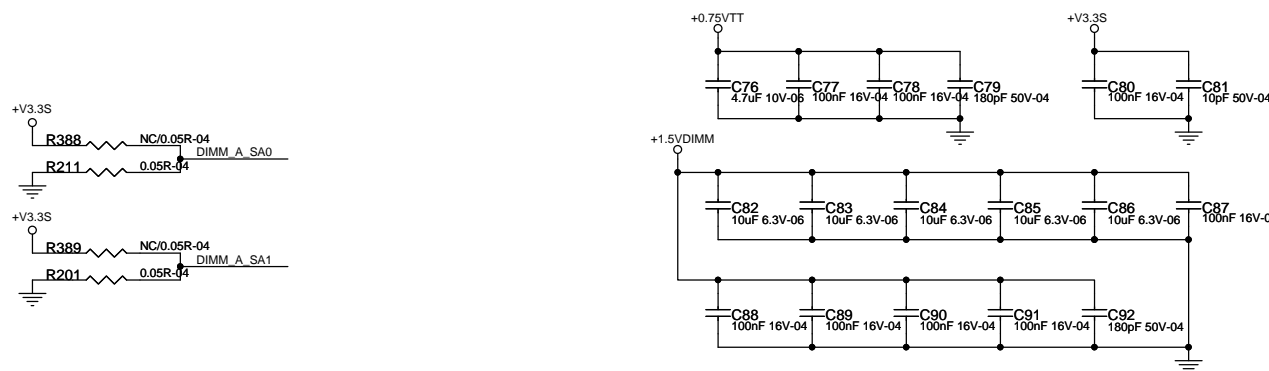
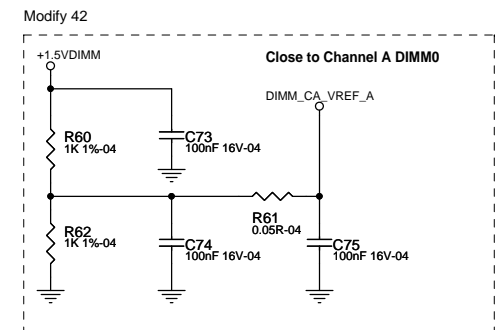
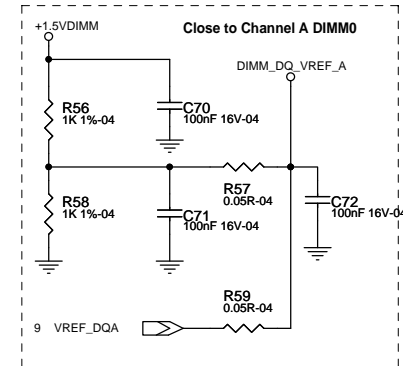
|                                       |                         |           |               |        |          |
|---------------------------------------|-------------------------|-----------|---------------|--------|----------|
| T&I (TPV-INVENTA TECHNOLOGY CO., LTD) |                         | OEM MODEL | CA203M        | Size   | A3       |
| Circuit diagram NO.                   | <Circuit diagram NO.>   | T&I MODEL | CA202M        | Rev    | DVT_0.1  |
| Key Component                         | LGA1155_DM/FPD          | PCB NAME  | 6150AA0008201 | remark | <remark> |
| Date                                  | Friday, August 24, 2012 | Sheet     | 4 of 40       |        |          |

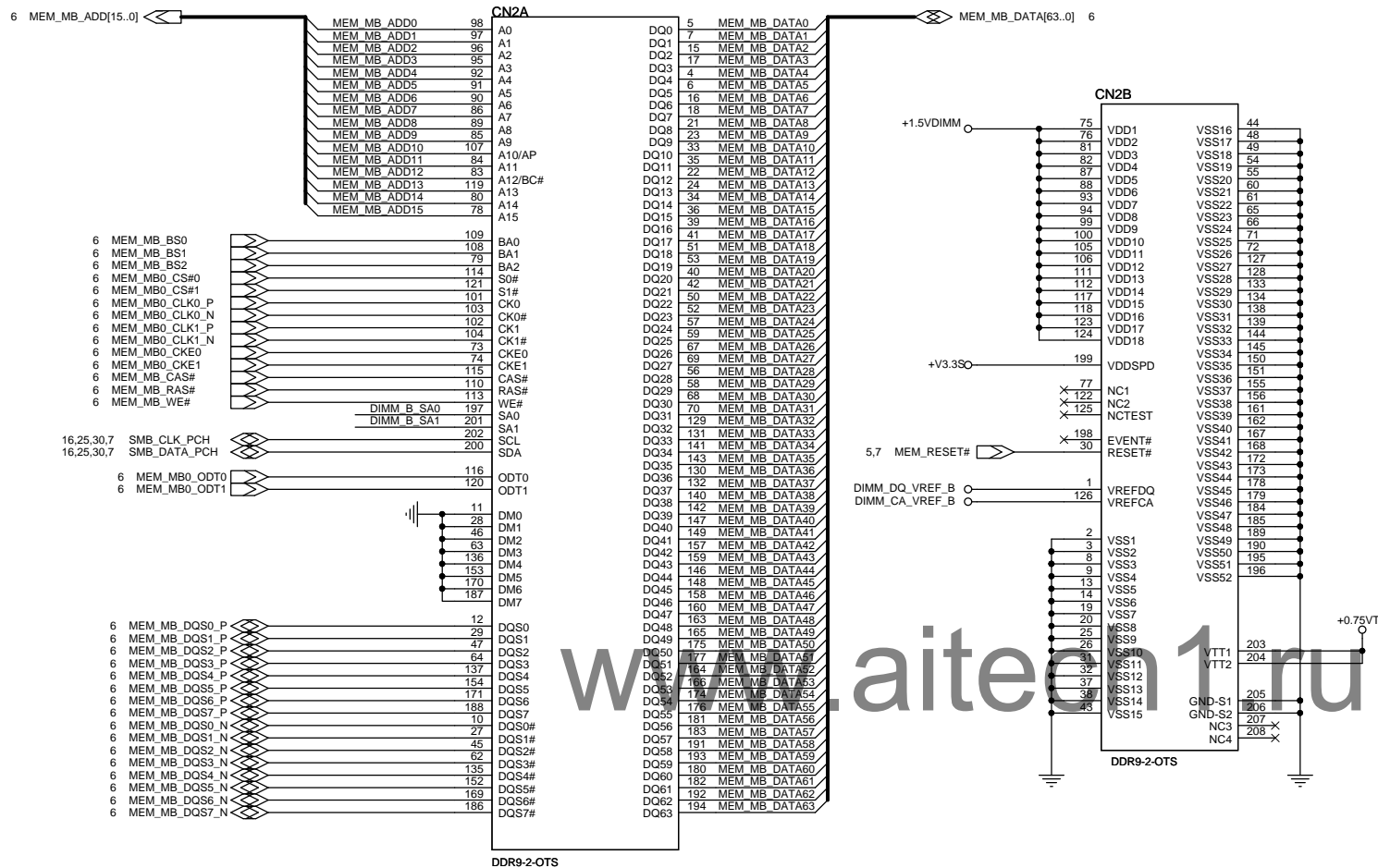




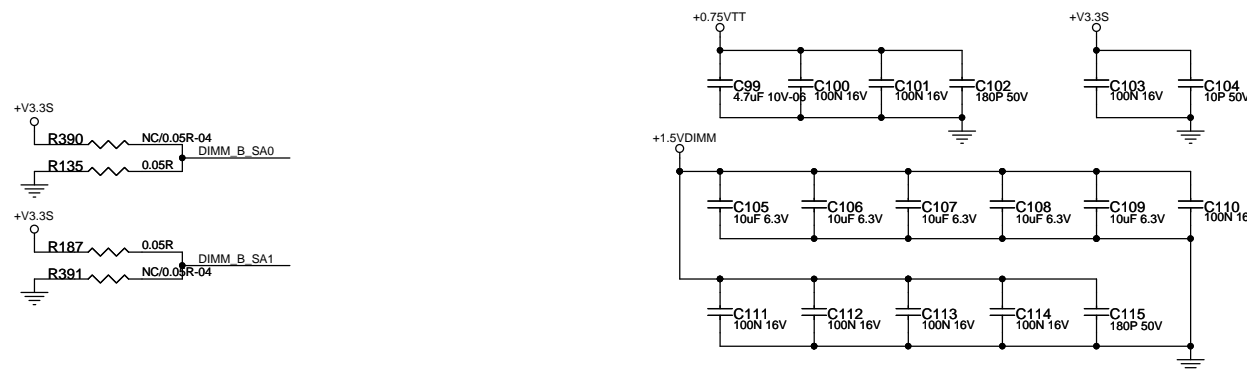
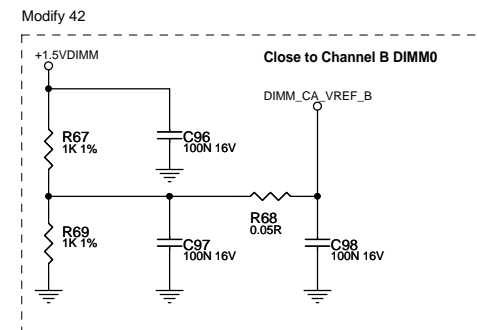
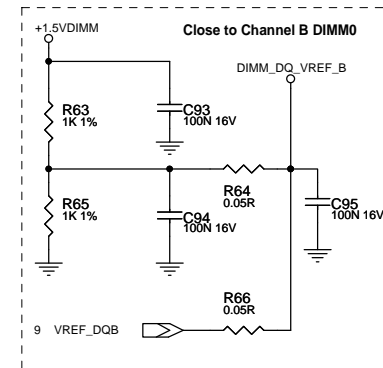


# Channel A DIMM0 (5.2mm) Address : 00



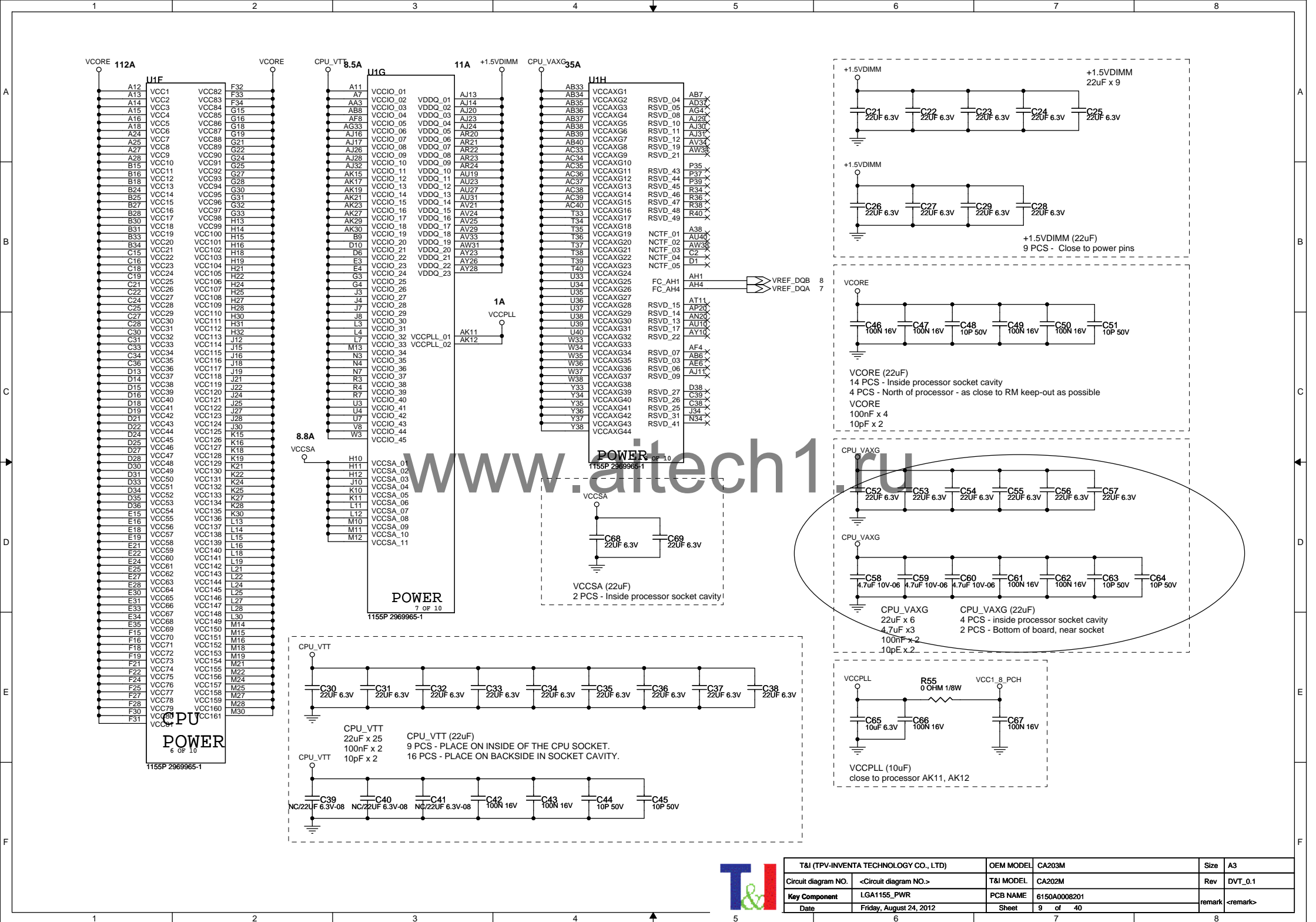


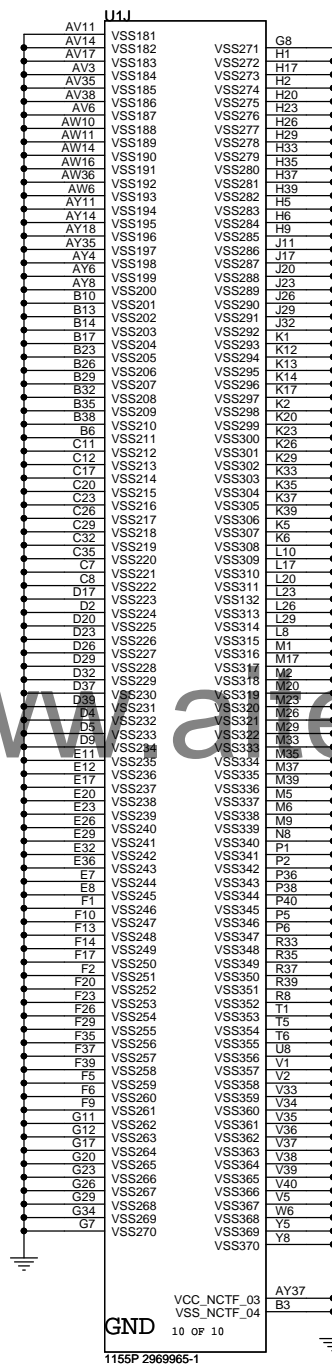
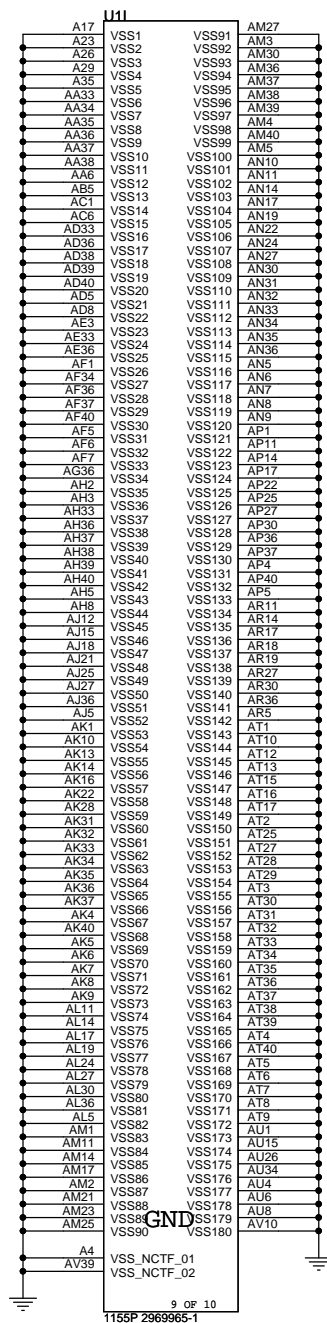
# Channel B DIMM0 (5.2mm) Address : 10



|                                       |                            |           |              |        |          |
|---------------------------------------|----------------------------|-----------|--------------|--------|----------|
| T&I (TPV-INVENTA TECHNOLOGY CO., LTD) |                            | OEM MODEL | CA203M       | Size   | A3       |
| Circuit diagram NO.                   | <Circuit diagram NO.>      | T&I MODEL | CA202M       | Rev    | DVT_0.1  |
| Key Component                         | DDR3 STANDARD MB-CH0 9.2mm | PCB NAME  | 6150A0008201 | remark | <remark> |
| Date                                  | Friday, August 24, 2012    | Sheet     | 8 of 40      |        |          |





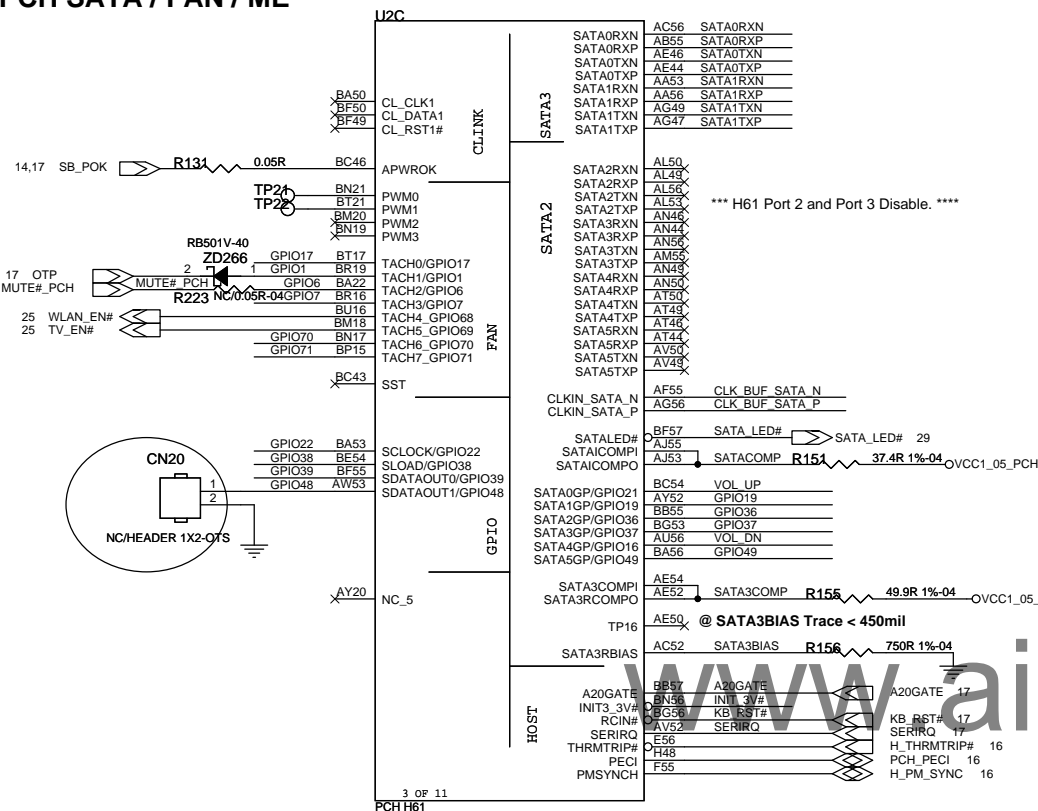


|                                       |                         |           |              |        |          |
|---------------------------------------|-------------------------|-----------|--------------|--------|----------|
| T&I (TPV-INVENTA TECHNOLOGY CO., LTD) |                         | OEM MODEL | CA203M       | Size   | A3       |
| Circuit diagram NO.                   | <Circuit diagram NO.>   | T&I MODEL | CA202M       | Rev    | DVT_0.1  |
| Key Component                         | LGA1155_GND             | PCB NAME  | 6150A0008201 | remark | <remark> |
| Date                                  | Friday, August 24, 2012 | Sheet     | 10 of 40     |        |          |





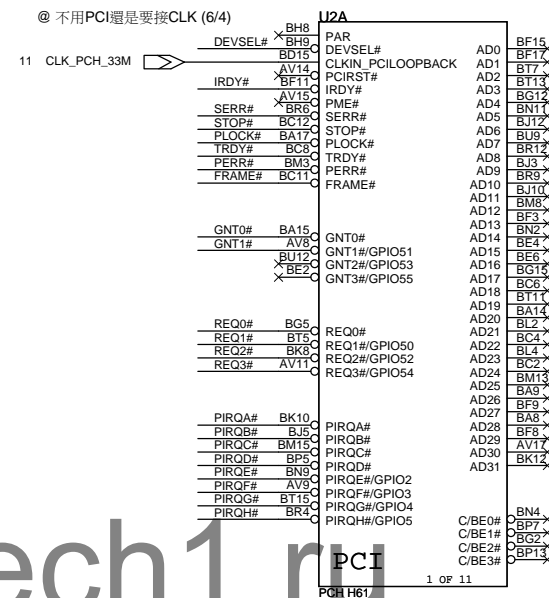
## PCH SATA / FAN / ME



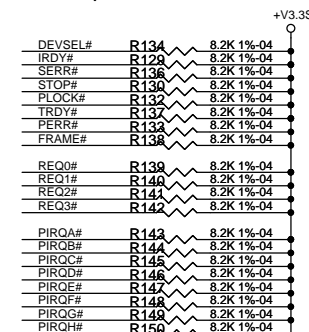
**PCH PCI**

\*\*\* H67 and H61 PCI Disable. \*\*\*\*

@ 不用PCI還是要接CLK (6/4)



### PCI Pull-Up

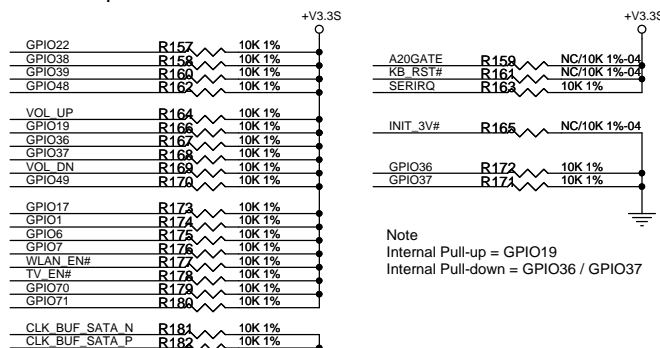


### BOOT select straps

|       |              |              |
|-------|--------------|--------------|
| GNT1- | GNT0-/GPIO19 | Boot device  |
| 0     | 0            | LPC          |
| 1     | 0            | PCI          |
| 1     | 1            | SPI(Default) |

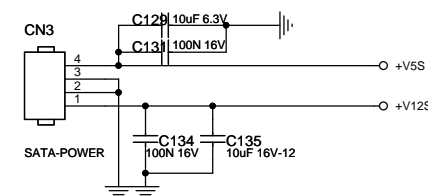
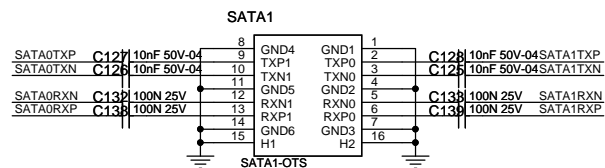
1 means floating / 0 means PD 1K  
Default int pull up

### Pull-Up / Pull-down



Close to PCH ball pin / Reserved for disable EXT CLK

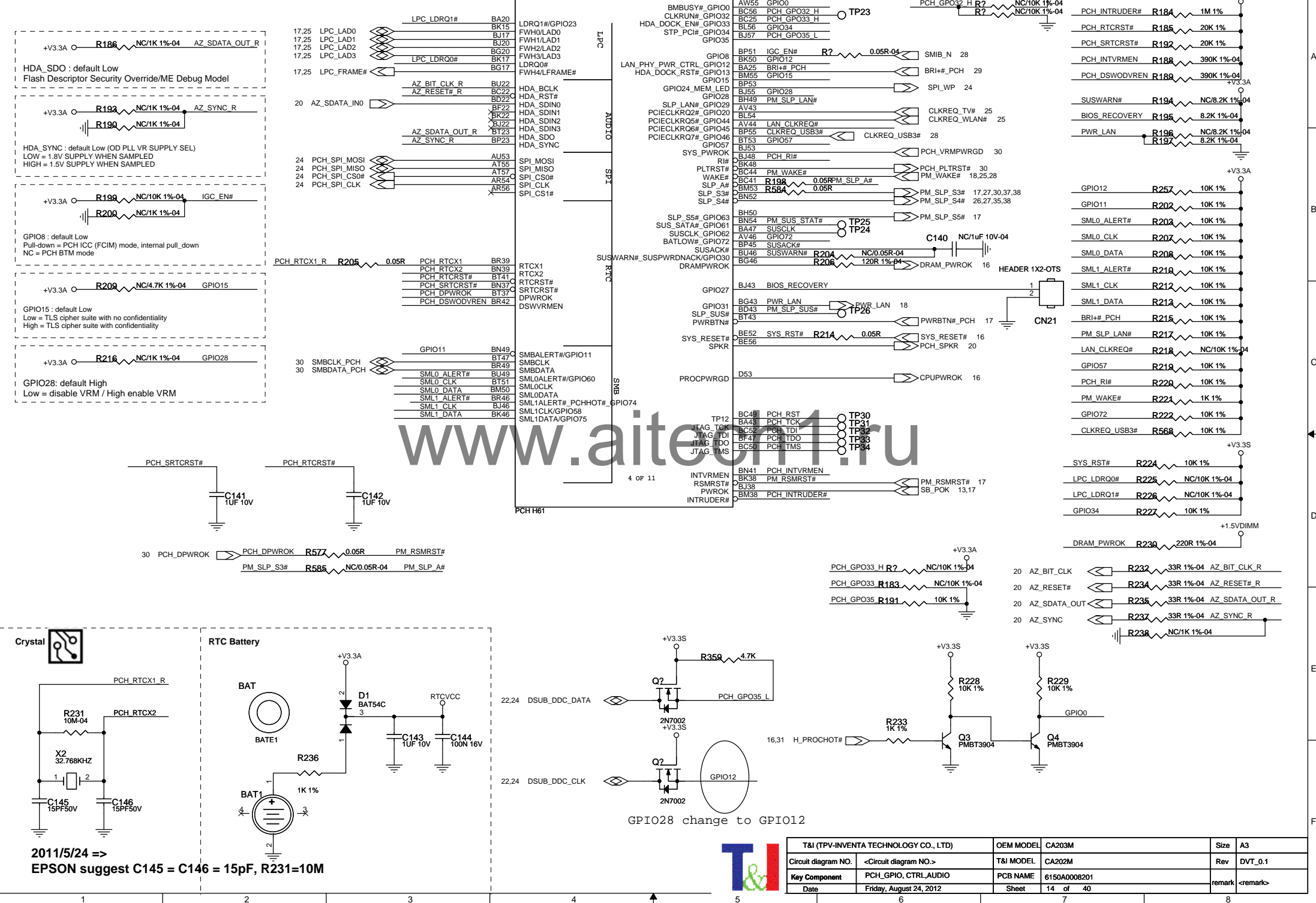
### SATA CON (HDD + ODD)



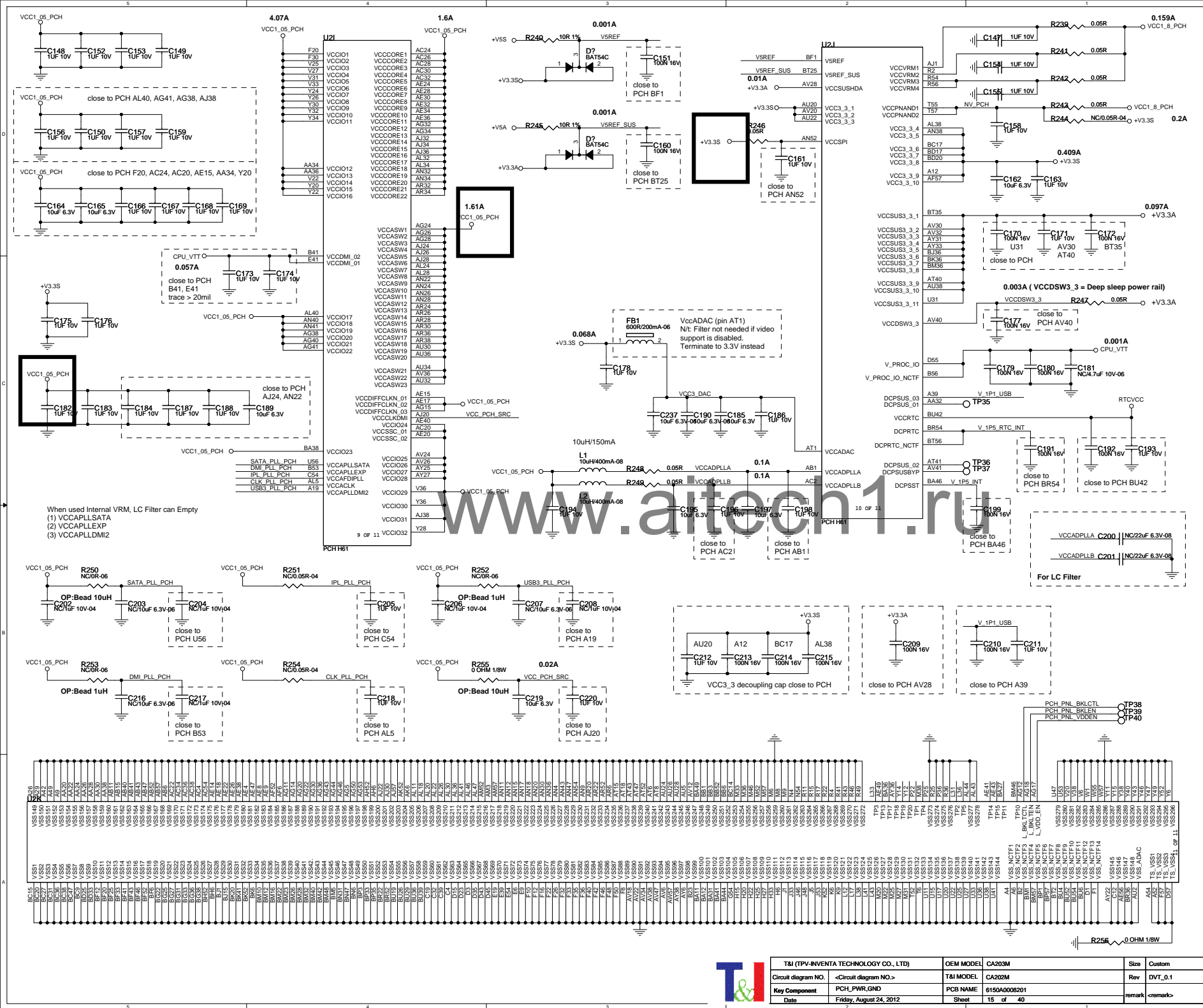
|                                       |                         |           |              |        |          |
|---------------------------------------|-------------------------|-----------|--------------|--------|----------|
| T&I (TPV-INVENTA TECHNOLOGY CO., LTD) |                         | OEM MODEL | CA203M       | Size   | A3       |
| Circuit diagram NO.                   | <Circuit diagram NO.>   | T&I MODEL | CA202M       | Rev    | DVT_0.1  |
| Key Component                         | PCH_HOST,SATA,PCI       | PCB NAME  | 6150A0008201 | remark | <remark> |
| Date                                  | Friday, August 24, 2012 | Sheet     | 13 of 40     |        |          |



## PCH HDA / SPI / LPC / MISC



|                                       |                         |           |              |        |          |
|---------------------------------------|-------------------------|-----------|--------------|--------|----------|
| T&I (TPV-INVENTA TECHNOLOGY CO., LTD) |                         | OEM MODEL | CA203M       | Size   | A3       |
| Circuit diagram NO.                   | <Circuit diagram NO.>   | T&I MODEL | CA202M       | Rev    | DVT_0.1  |
| Key Component                         | PCH_GPIO, CTRL_AUDIO    | PCB NAME  | 6150A0008201 | remark | <remark> |
| Date                                  | Friday, August 24, 2012 | Sheet     | 14 of 40     |        |          |



|                                       |                         |           |              |         |
|---------------------------------------|-------------------------|-----------|--------------|---------|
| T&I (TPV-INVENTA TECHNOLOGY CO., LTD) | OEM MODEL               | CA203M    | Size         | Custom  |
| Circuit diagram NO.                   | <Circuit diagram NO.>   | T&I MODEL | CA202M       | Rev     |
| Key Component                         | PCH_PWR_GND             | PCB NAME  | 6150A0008201 | DVT_0.1 |
| Date                                  | Friday, August 24, 2012 | Sheet     | 15 of 40     | remark  |

CLK\_CPU\_BCLK\_P  
1 CLK\_CPU\_BCLK\_N

31 H\_VIDSCLK  
31 H\_VIDSOUT  
31 H\_VIDALRT#

14,16 CPUPWROK  
14 DRAM\_PWROK

13 H\_PM\_SYNC  
13 PCH\_PECI  
17 SIO\_PECI  
14,31 H\_PROCHOT#  
13 H\_THRMTRIP#

12 H\_SNB#

H\_VIDSCLK  
H\_VIDSOUT  
H\_VIDALRT#

R5  
R2

47R 1%-04  
NC/100R 1%-04

CPUPWROK

H\_PECI  
CATERR#  
PROCHOT#\_R  
H\_THRMTRIP#

R4  
R7  
R8

NC/0.01R-04  
0.05R  
0.05R

H\_SKTOCC#

SM\_VREF

W1  
W2  
W3

BCLK#0  
BCLK#0

VIDSCLK  
VIDSOUT  
VIDALRT#

CPUPWROK

CPU\_RST#

UNCOREPWR  
SM\_DRAMPWR  
RESET#

PM\_SYNC  
PECI  
CATERR#  
PROCHOT#  
THERMTRIP#

SKTOCC#  
PROC\_SEL

SM\_VREF

R13  
R14  
R15  
R16  
R17  
R18  
R19  
R20  
R21  
R22  
R23  
R24  
R25  
R26  
R27  
R28  
R29  
R30

NC/1K 1%-04  
NC/1K 1%-04  
1K 1%  
NC/1K 1%-04  
NC/1K 1%-04  
NC/1K 1%-04  
NC/1K 1%-04  
NC/1K 1%-04  
NC/1K 1%-04  
NC/1K 1%-04  
NC/1K 1%-04  
NC/1K 1%-04  
NC/1K 1%-04  
NC/1K 1%-04  
NC/1K 1%-04  
NC/1K 1%-04  
NC/1K 1%-04  
NC/1K 1%-04

SND\_CFG0  
SND\_CFG1  
SND\_CFG2  
SND\_CFG3  
SND\_CFG4  
SND\_CFG5  
SND\_CFG6  
SND\_CFG7  
SND\_CFG8  
SND\_CFG9  
SND\_CFG10  
SND\_CFG11  
SND\_CFG12  
SND\_CFG13  
SND\_CFG14  
SND\_CFG15  
SND\_CFG16  
SND\_CFG17

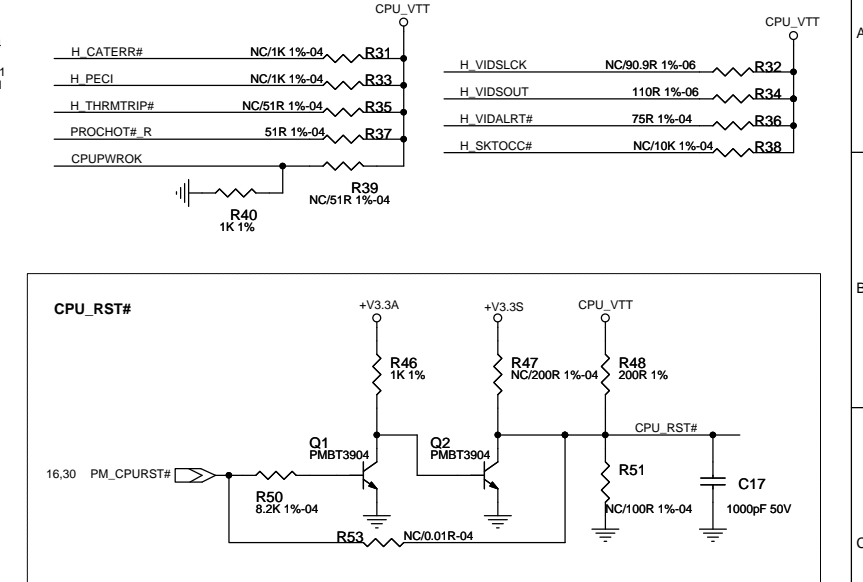
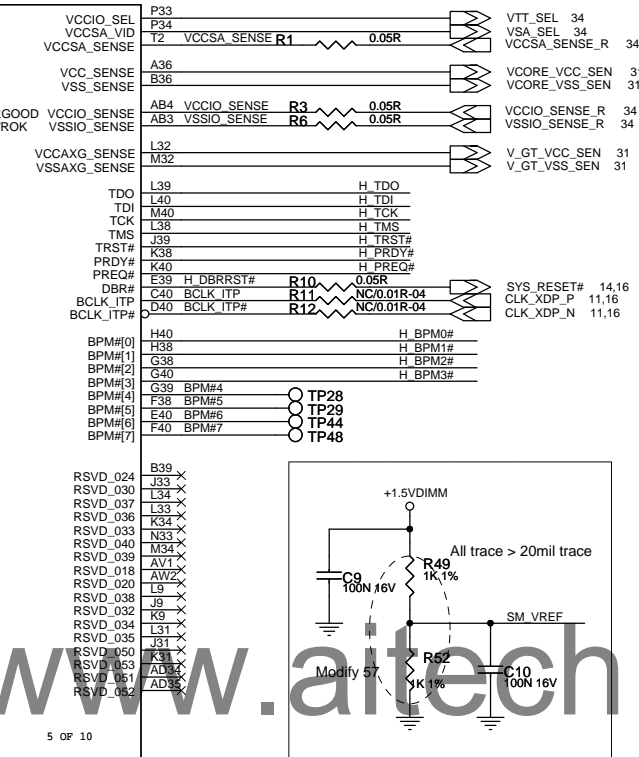
H36  
J36  
J37  
J36  
L36  
N35  
L37  
M36  
J38  
L35  
M38  
N36  
N38  
N39  
N37  
N40  
G37  
G36

CFG[0]  
CFG[1]  
CFG[2]  
CFG[3]  
CFG[4]  
CFG[5]  
CFG[6]  
CFG[7]  
CFG[8]  
CFG[9]  
CFG[10]  
CFG[11]  
CFG[12]  
CFG[13]  
CFG[14]  
CFG[15]  
CFG[16]  
CFG[17]

AT14  
AY3  
H7  
H8

RSVD\_016  
RSVD\_023  
RSVD\_026  
RSVD\_029

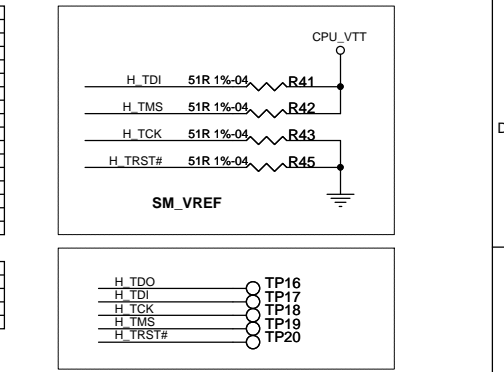
1155P 296996



|    | CFG  | H    | L    | NOTE |
|----|------|------|------|------|
| 0  | RSVD | RSVD | RSVD |      |
| 1  | RSVD | RSVD | RSVD |      |
| 2  | RSVD | RSVD | RSVD |      |
| 3  | RSVD | RSVD | RSVD |      |
| 4  | RSVD | RSVD | RSVD |      |
| 7  | RSVD | RSVD | RSVD |      |
| 8  | RSVD | RSVD | RSVD |      |
| 9  | RSVD | RSVD | RSVD |      |
| 10 | RSVD | RSVD | RSVD |      |
| 11 | RSVD | RSVD | RSVD |      |
| 12 | RSVD | RSVD | RSVD |      |
| 13 | RSVD | RSVD | RSVD |      |
| 14 | RSVD | RSVD | RSVD |      |
| 15 | RSVD | RSVD | RSVD |      |
| 16 | RSVD | RSVD | RSVD |      |
| 17 | RSVD | RSVD | RSVD |      |

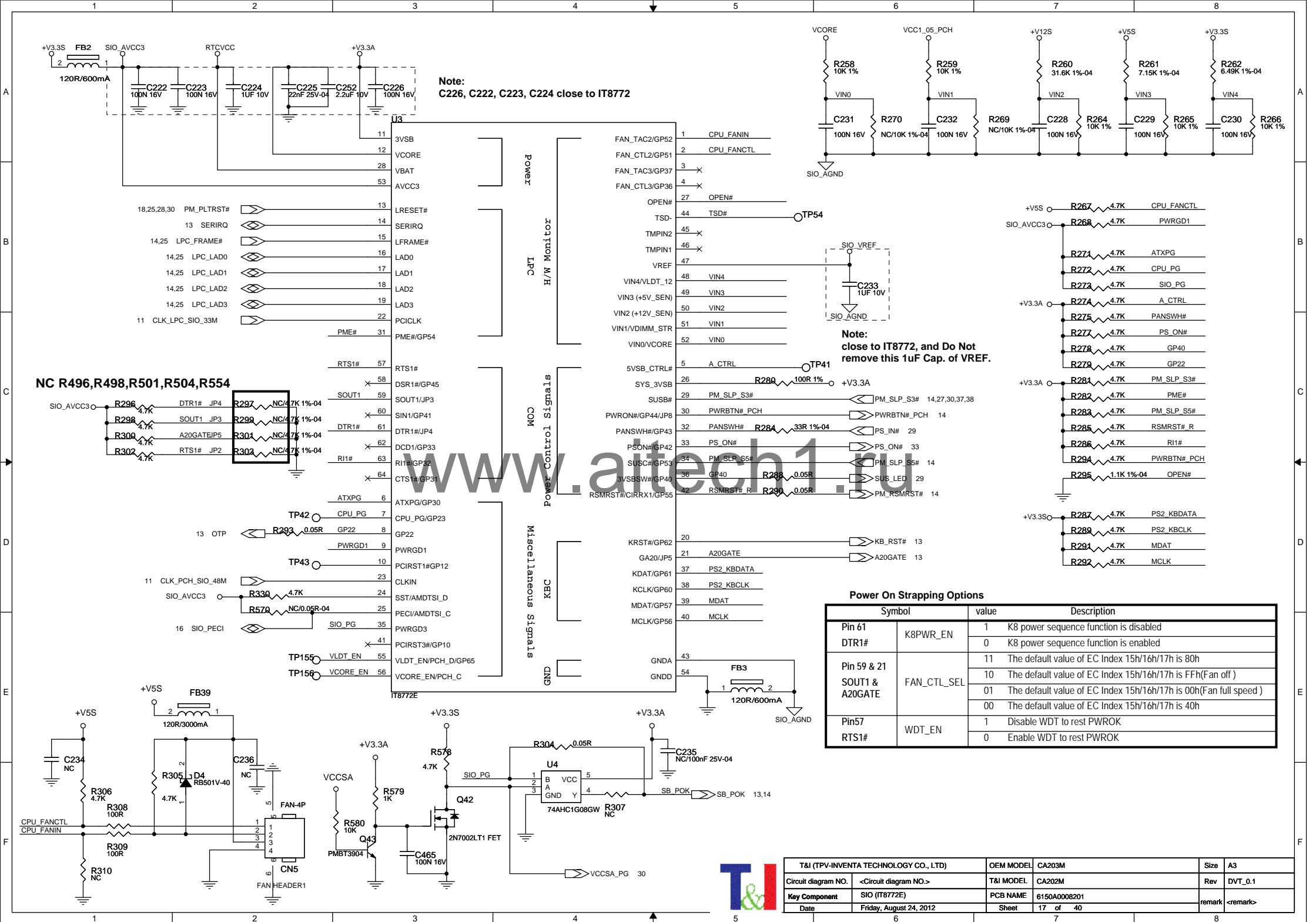
| CFG6 | CFG5 | PCIE CONFIG    |
|------|------|----------------|
| 1    | 1    | 1X16 , Default |
| 1    | 0    | 2X8            |
| 0    | 1    | RSVD           |
| 0    | 0    | X8,X4,X4       |

**CFG 0-17 all internal PULL-UP**

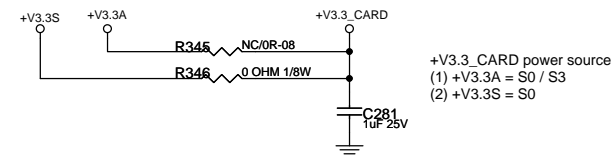
[illegible]

|                                       |                         |           |              |        |          |
|---------------------------------------|-------------------------|-----------|--------------|--------|----------|
| T&I (TPV-INVENTA TECHNOLOGY CO., LTD) |                         | OEM MODEL | CA203M       | Size   | A3       |
| Circuit diagram NO.                   | <Circuit diagram NO.>   | T&I MODEL | CA202M       | Rev    | DVT_0.1  |
| Key Component                         | XDP for Processor       | PCB NAME  | 6150A0008201 | remark | <remark> |
| Date                                  | Friday, August 24, 2012 | Sheet     | 16 of 40     |        |          |



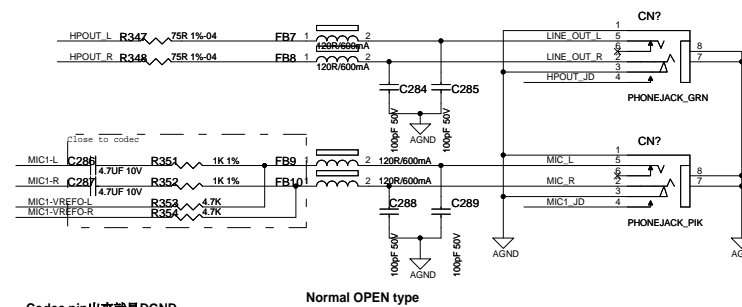
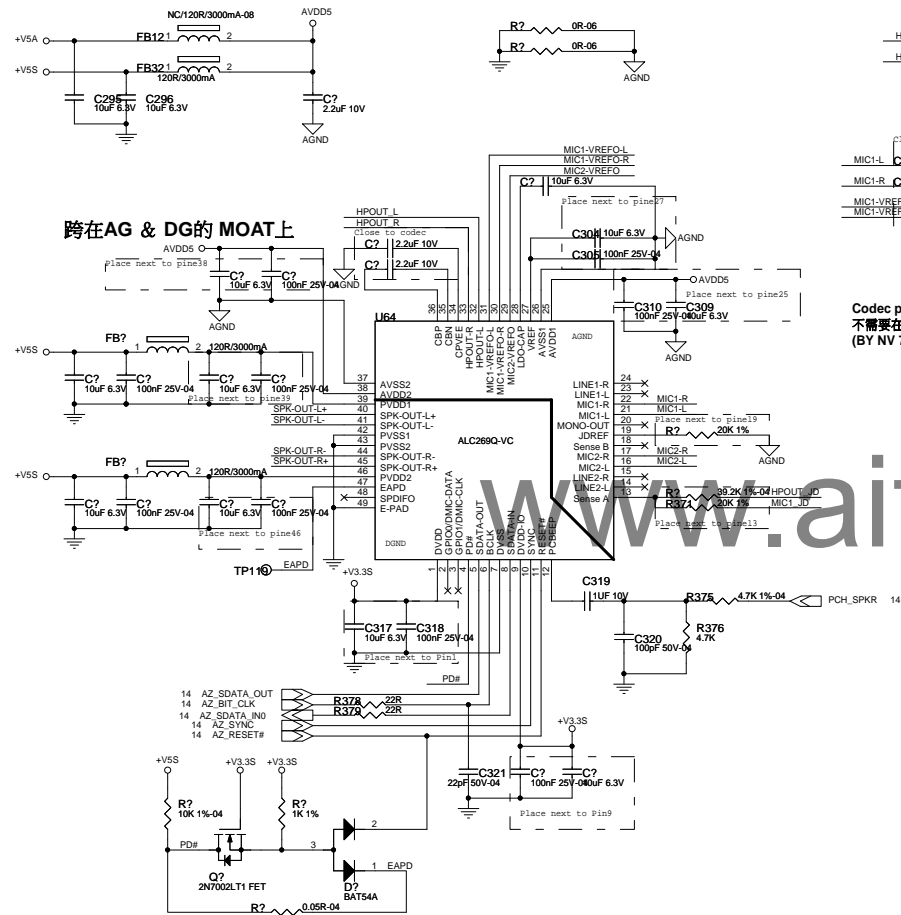




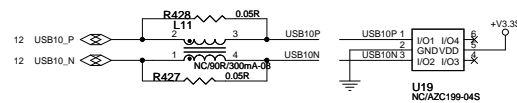
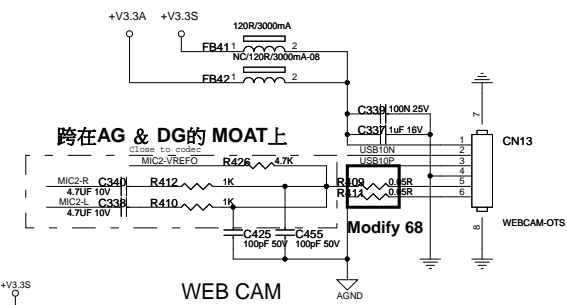
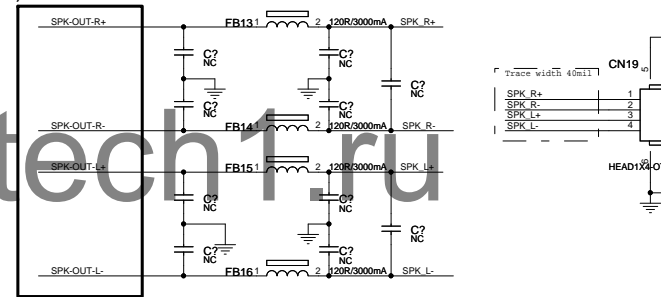
Share Pin

|                                       |                         |           |              |        |          |
|---------------------------------------|-------------------------|-----------|--------------|--------|----------|
| T&I (TPV-INVENTA TECHNOLOGY CO., LTD) |                         | OEM MODEL | CA203M       | Size   | A3       |
| Circuit diagram NO.                   | <Circuit diagram NO.>   | T&I MODEL | CA202M       | Rev    | DVT_0.1  |
| Key Component                         | Card reader (RT55138)   | PCB NAME  | 6150A0008201 | remark | <remark> |
| Date                                  | Friday, August 24, 2012 | Sheet     | 19 of 40     |        |          |

**DEL U7,FB16 ; ADD FB17,L1,FB63,R150 ,C637,C638,C639,C640三個AGND1**

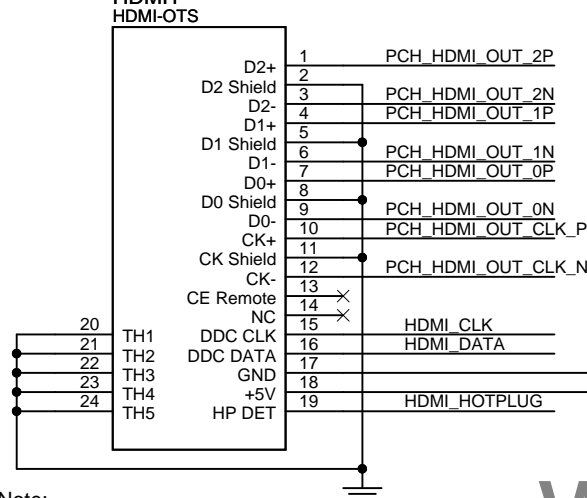


Codec pin出來就是DGND  
不需要在0 ohm 再切成AGND /DGND  
(BY NV 7/25)

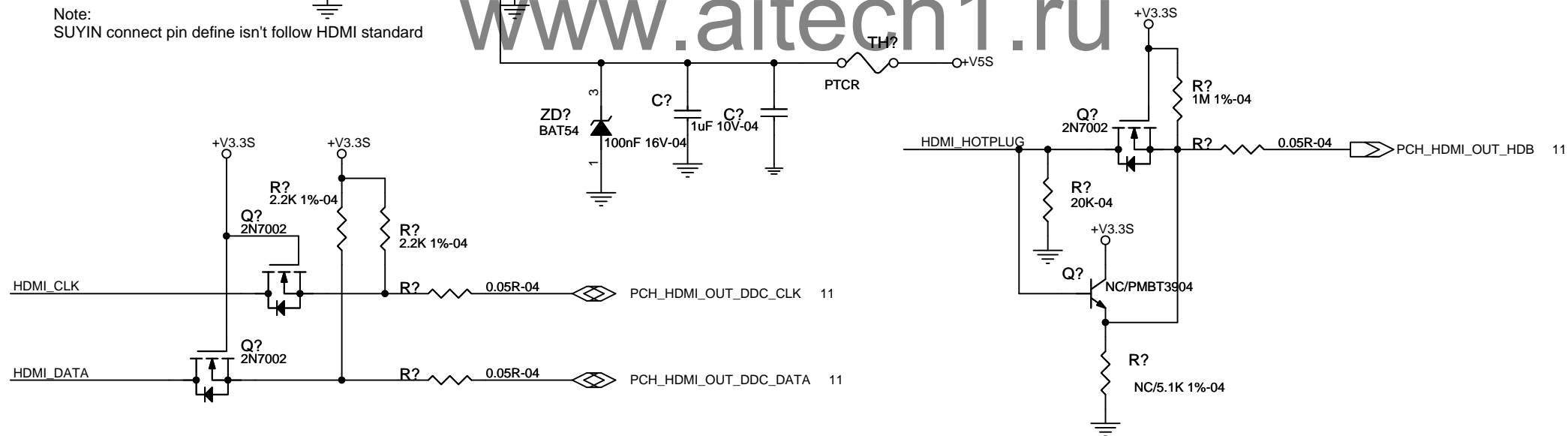


# Scalar Output HDMI

## HDMI OUT PIN 19 HIGH



Note:  
SUYIN connect pin define isn't follow HDMI standard

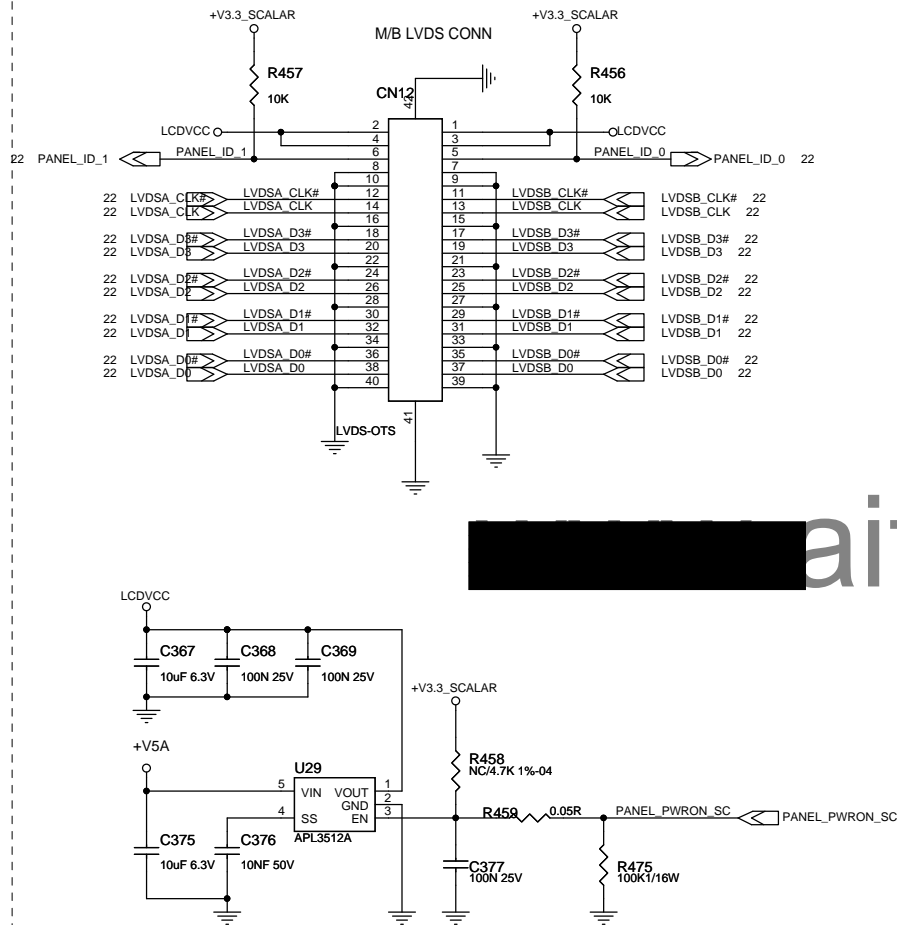


|                                       |                         |           |              |          |
|---------------------------------------|-------------------------|-----------|--------------|----------|
| T&I (TPV-INVENTA TECHNOLOGY CO., LTD) | OEM MODEL               | CA203M    | Size         | A4       |
| Circuit diagram NO.                   | <Circuit diagram NO.>   | T&I MODEL | CA202M       | Rev      |
| Key Component                         | LGA1155_DIMM B          | PCB NAME  | 6150A0008201 | remark   |
| Date                                  | Friday, August 24, 2012 | Sheet     | 21 of 40     | <remark> |



|                                       |                             |           |              |        |          |
|---------------------------------------|-----------------------------|-----------|--------------|--------|----------|
| T&I (TPV-INVENTA TECHNOLOGY CO., LTD) |                             | OEM MODEL | CA203M       | Size   | A3       |
| Circuit diagram NO.                   | <Circuit diagram NO.>       | T&I MODEL | CA202M       | Rev    | DVT_0.1  |
| Key Component                         | Scalar_TSUMU88MDT3-LF-1 2/3 | PCB NAME  | 6150A0008201 | remark | <remark> |
| Date                                  | Friday, August 24, 2012     | Sheet     | 22 of 40     |        |          |

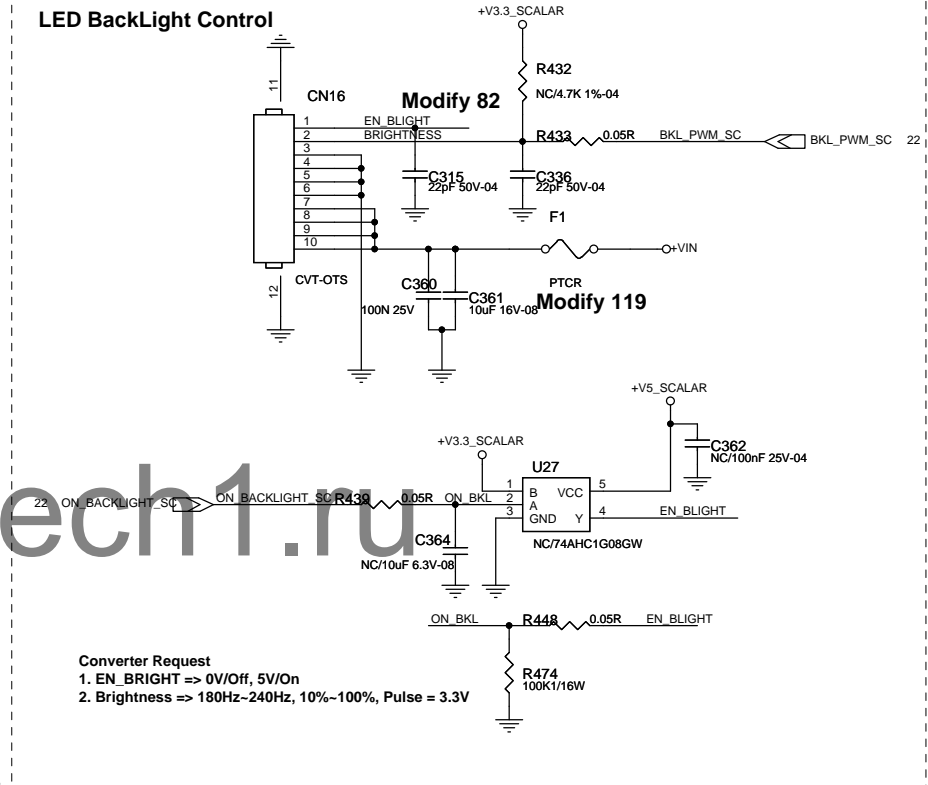
## Panel Control



Modify 34

The trace width of +V5A for LCDVCC should over 40 mil

## LED BackLight Control

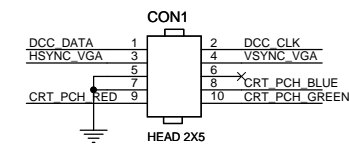
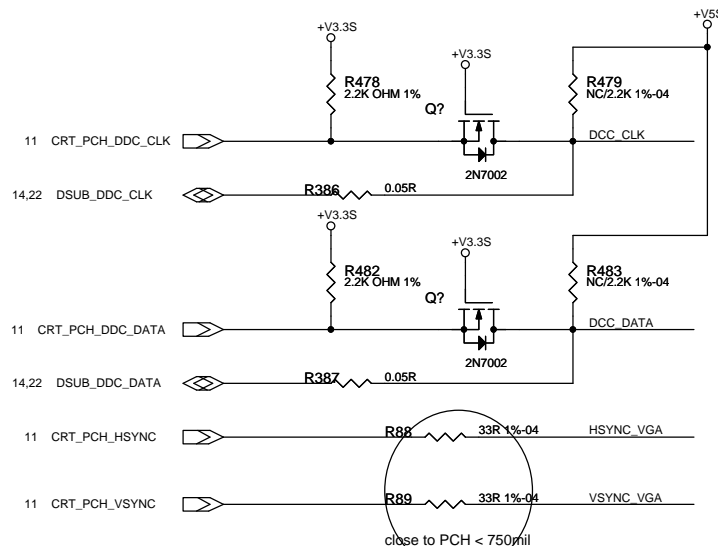
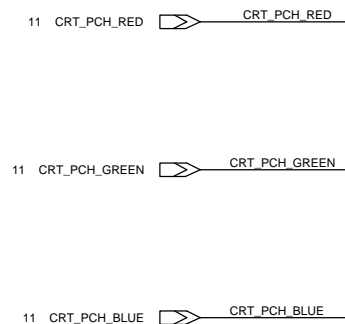


Converter Request  
1. EN\_BRIGHT => 0V/Off, 5V/On  
2. Brightness => 180Hz~240Hz, 10%~100%, Pulse = 3.3V

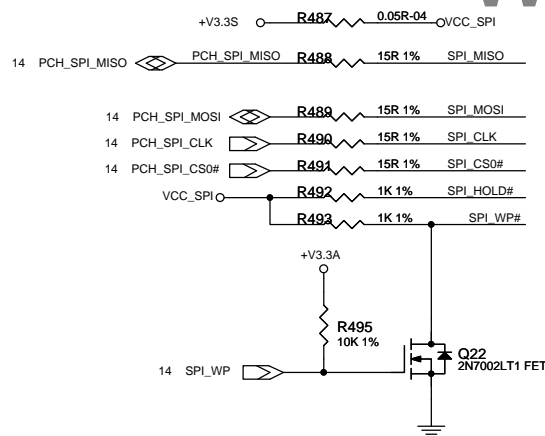


|                                       |                         |           |              |          |
|---------------------------------------|-------------------------|-----------|--------------|----------|
| T&I (TPV-INVENTA TECHNOLOGY CO., LTD) | OEM MODEL               | CA203M    | Size         | A3       |
| Circuit diagram NO.                   | <Circuit diagram NO.>   | T&I MODEL | CA202M       | Rev      |
| Key Component                         | Scalar_Control 3/3      | PCB NAME  | 6150A0008201 | remark   |
| Date                                  | Friday, August 24, 2012 | Sheet     | 23 of 40     | <remark> |

## VGA Header for Debug



## BIOS SPI ROM

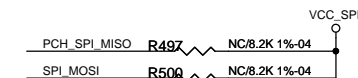
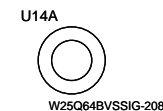
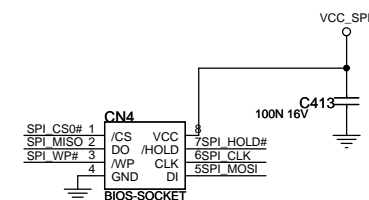


**1MB SPI ROM**  
1st -- 056G2233 5 Winbond W25X80BVSSIG

**2MB SPI ROM**  
1st -- 056G1133951 Winbond W25Q16BVSSIG  
2nd -- 056G1133 97 MXIC MX25L1605MC-12G

**4MB SPI ROM**  
1s4 -- 056G2233 34 MX25L3206EM2I-12G

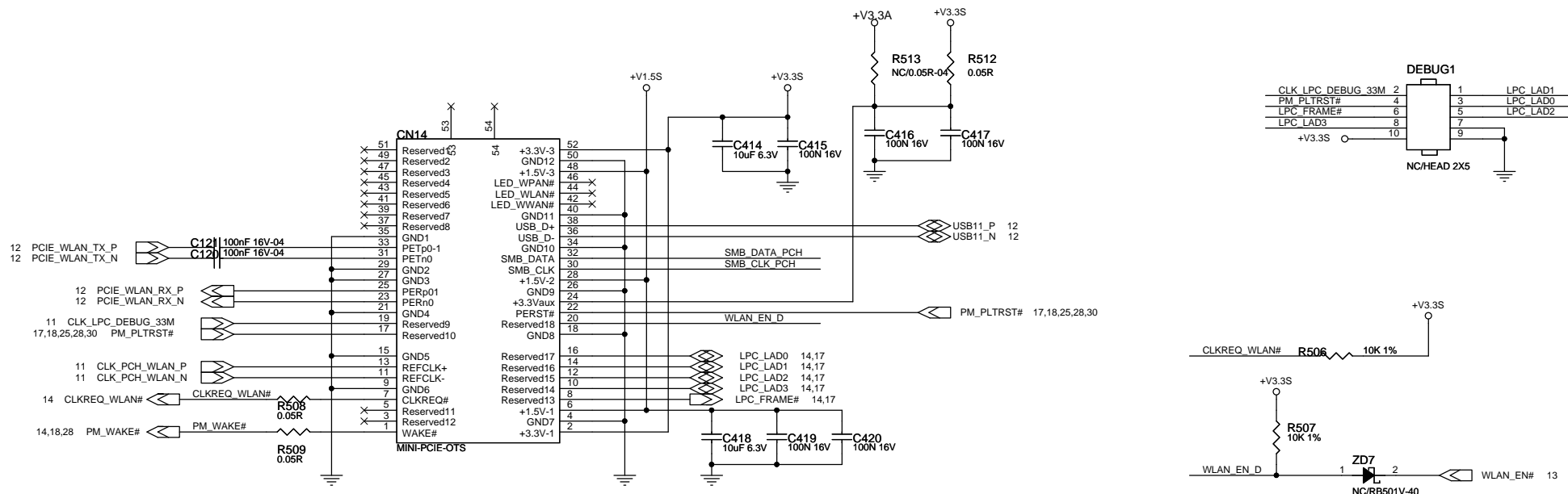
**8MB SPI ROM**  
1st -- 056G2233 16 Winbond W25Q64BVSSIG  
2nd -- 056G2233 15 MXIC MX25L6445EM2I-10G



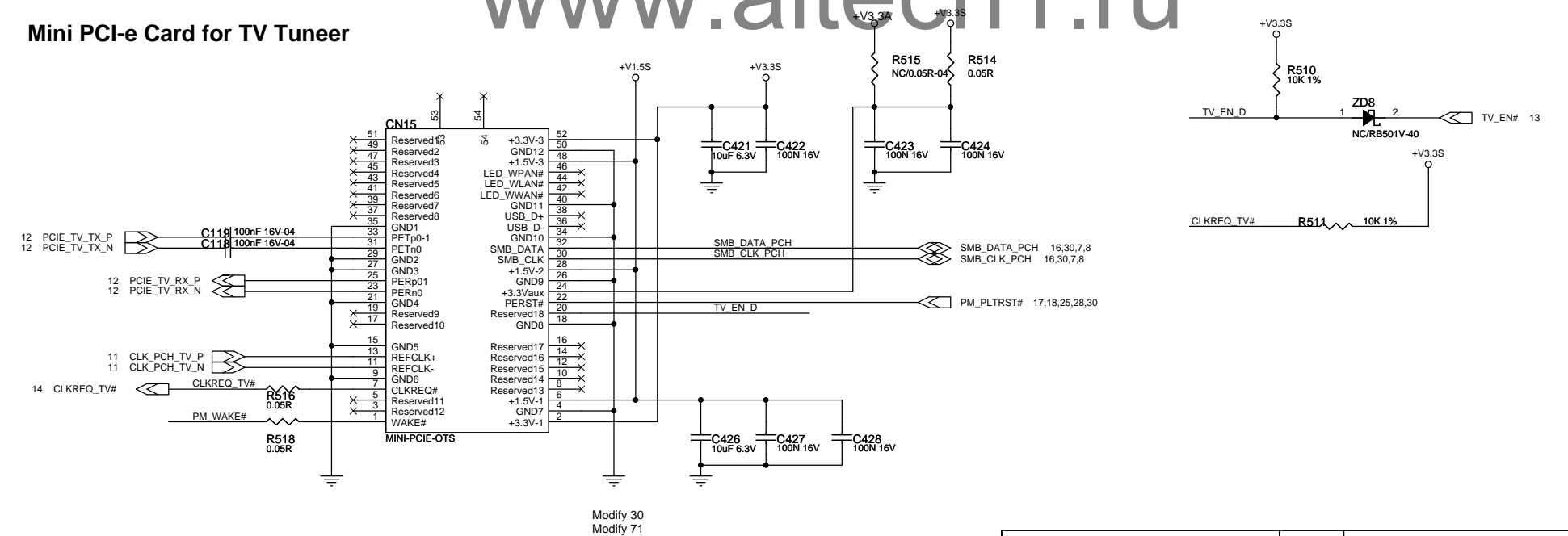
|                                       |                              |           |              |        |          |
|---------------------------------------|------------------------------|-----------|--------------|--------|----------|
| T&I (TPV-INVENTA TECHNOLOGY CO., LTD) |                              | OEM MODEL | CA203M       | Size   | A3       |
| Circuit diagram NO.                   | <Circuit diagram NO.>        | T&I MODEL | CA202M       | Rev    | DVT_0.1  |
| Key Component                         | Display VGA out /SPI ROM SYS | PCB NAME  | 6150A0008201 | remark | <remark> |
| Date                                  | Friday, August 24, 2012      | Sheet     | 24 of 40     |        |          |



## Mini PCI-e Card for WLAN



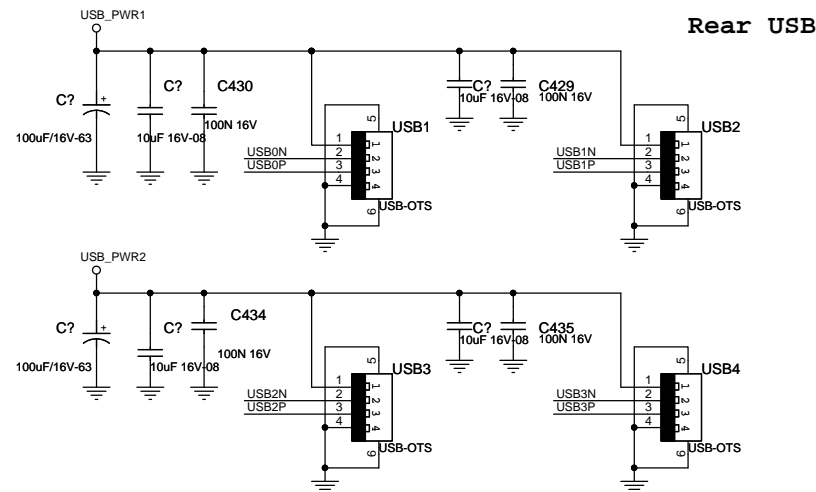
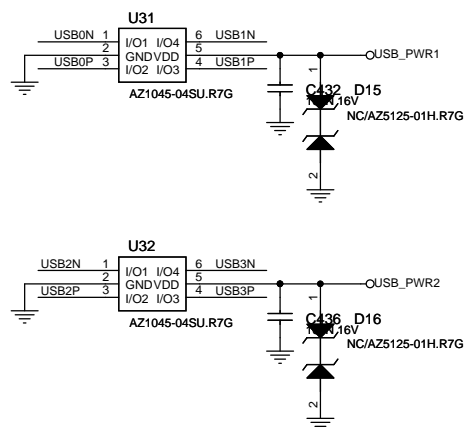
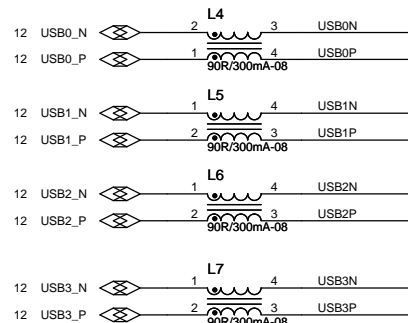
## Mini PCI-e Card for TV Tuner



Modify 30  
Modify 71



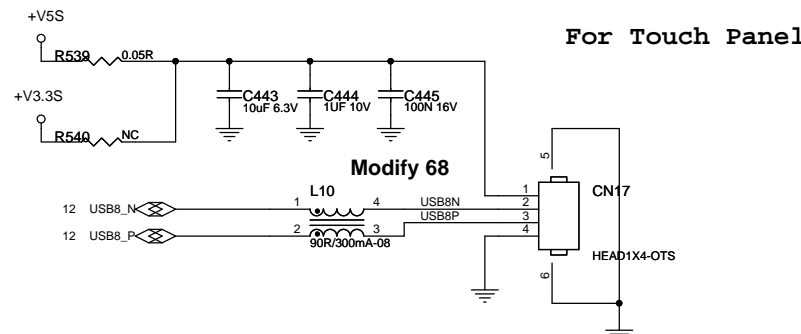
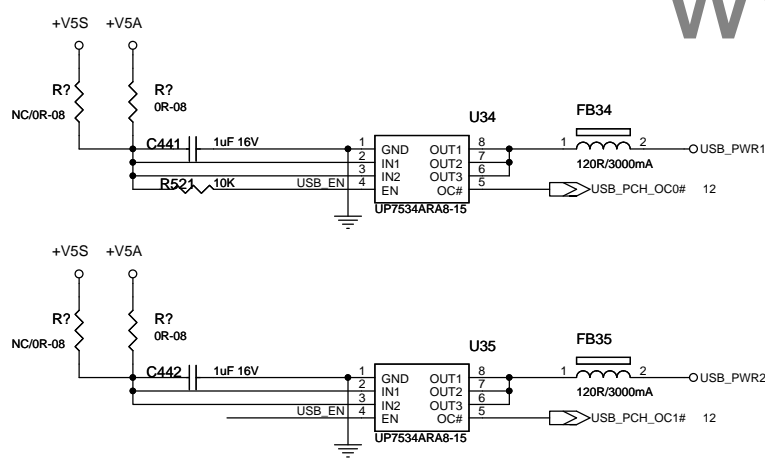
|                                       |                         |           |              |        |          |
|---------------------------------------|-------------------------|-----------|--------------|--------|----------|
| T&I (TPV-INVENTA TECHNOLOGY CO., LTD) |                         | OEM MODEL | CA203M       | Size   | A3       |
| Circuit diagram NO.                   | <Circuit diagram NO.>   | T&I MODEL | CA202M       | Rev    | DVT_0.1  |
| Key Component                         | MINI CARD WIFI_TV       | PCB NAME  | 6150A0008201 | remark | <remark> |
| Date                                  | Friday, August 24, 2012 | Sheet     | 25 of 40     |        |          |



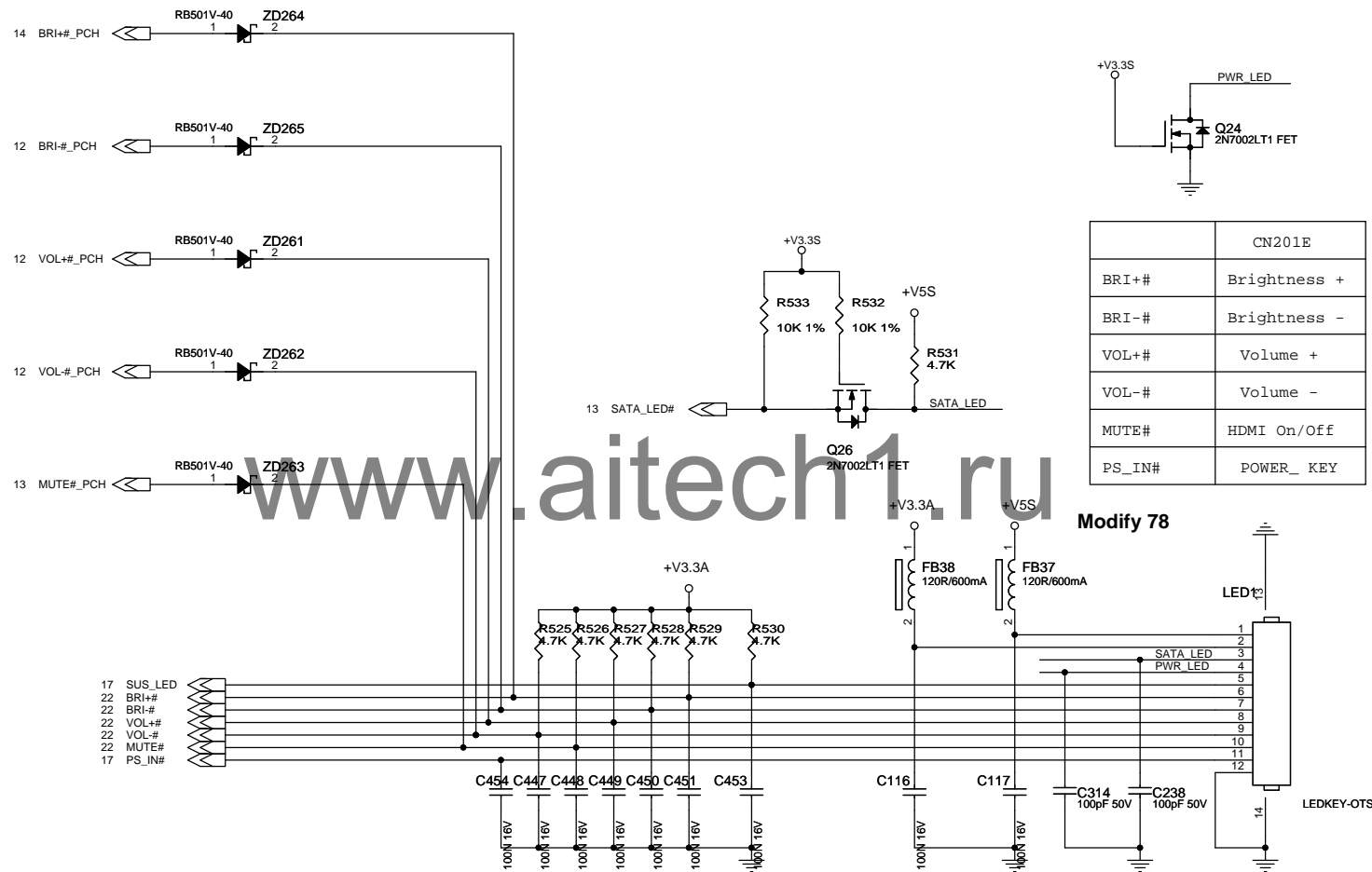
14,27,35,38 PM\_SLP\_S4# R520 0.05R-04 USB\_EN

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USB side IO change to USB3.0

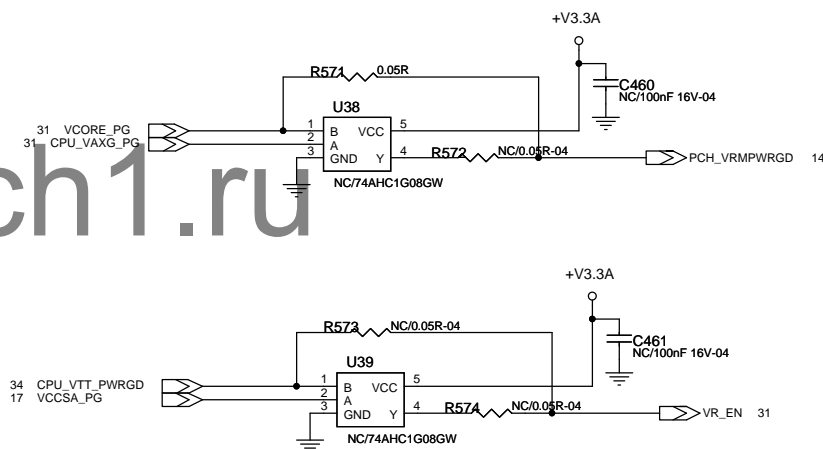
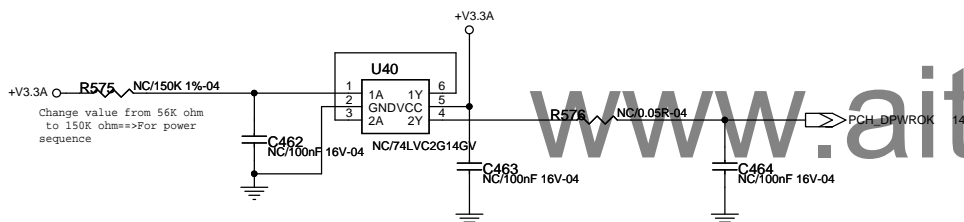
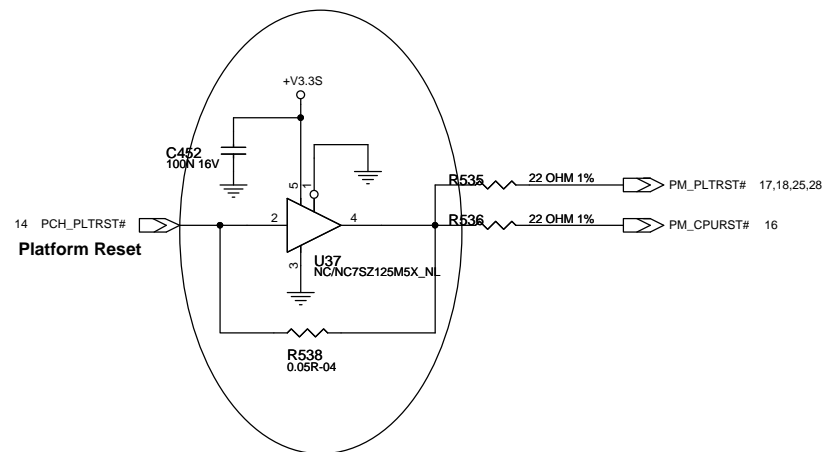
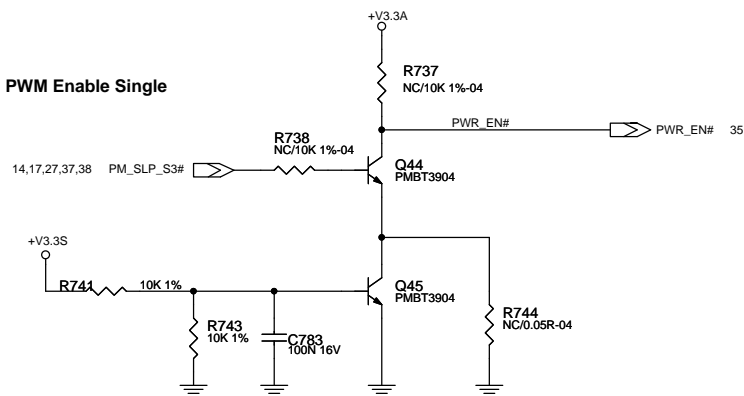


|                                       |                         |           |              |        |          |
|---------------------------------------|-------------------------|-----------|--------------|--------|----------|
| T&I (TPV-INVENTA TECHNOLOGY CO., LTD) |                         | OEM MODEL | CA203M       | Size   | A3       |
| Circuit diagram NO.                   | <Circuit diagram NO.>   | T&I MODEL | CA202M       | Rev    | DVT_0.1  |
| Key Component                         | USB                     | PCB NAME  | 6150A0008201 | remark | <remark> |
| Date                                  | Friday, August 24, 2012 | Sheet     | 26 of 40     |        |          |

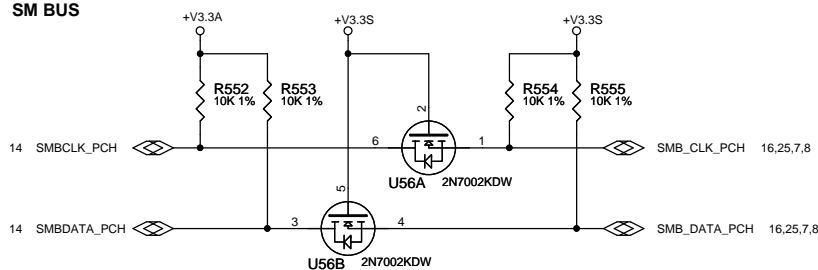


|                                       |                         |           |              |        |          |
|---------------------------------------|-------------------------|-----------|--------------|--------|----------|
| T&I (TPV-INVENTA TECHNOLOGY CO., LTD) |                         | OEM MODEL | CA203M       | Size   | A3       |
| Circuit diagram NO.                   | <Circuit diagram NO.>   | T&I MODEL | CA202M       | Rev    | DVT_0.1  |
| Key Component                         | BUTTON                  | PCB NAME  | 6150A0008201 | remark | <remark> |
| Date                                  | Friday, August 24, 2012 | Sheet     | 27 of 40     |        |          |

# PWM Enable Single

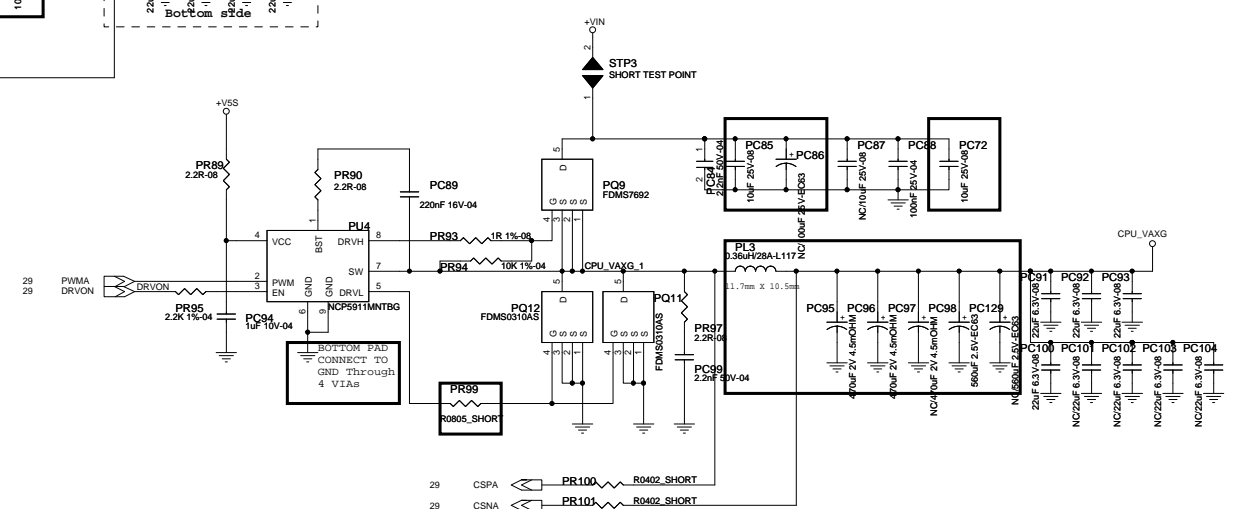
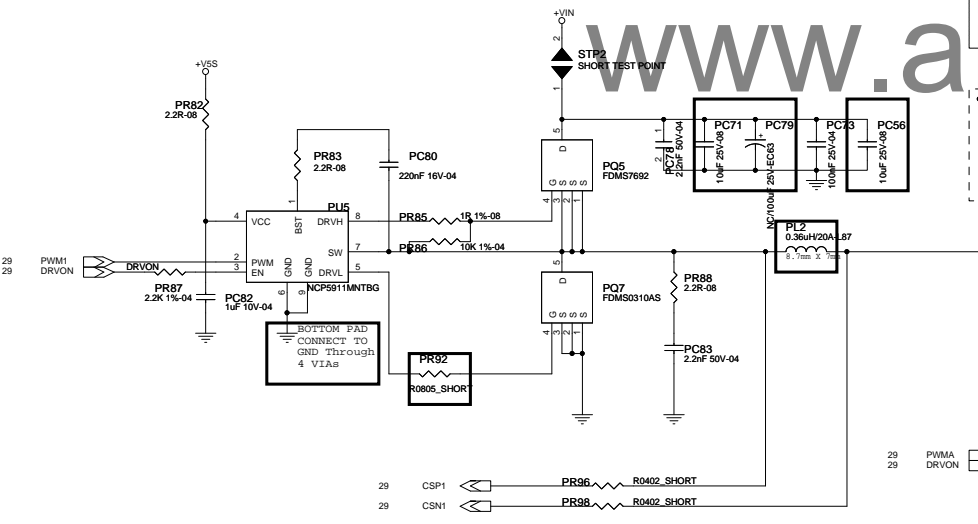
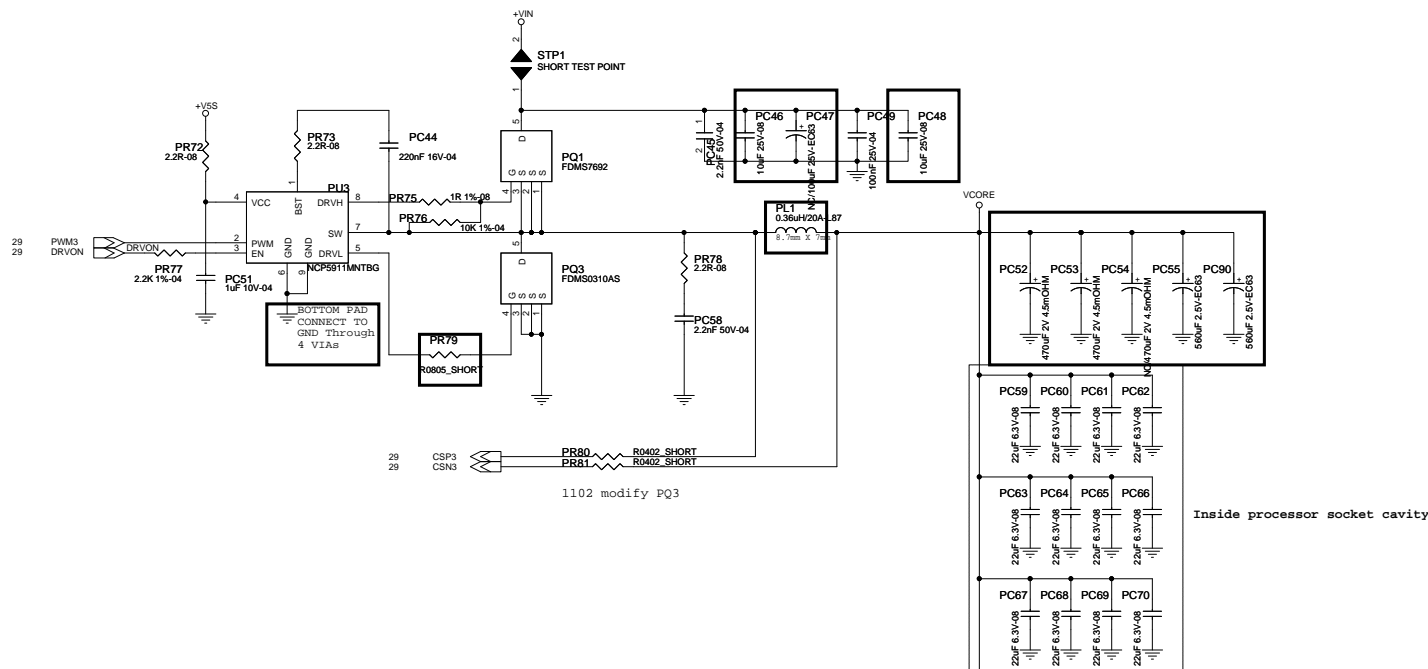


# SM BUS



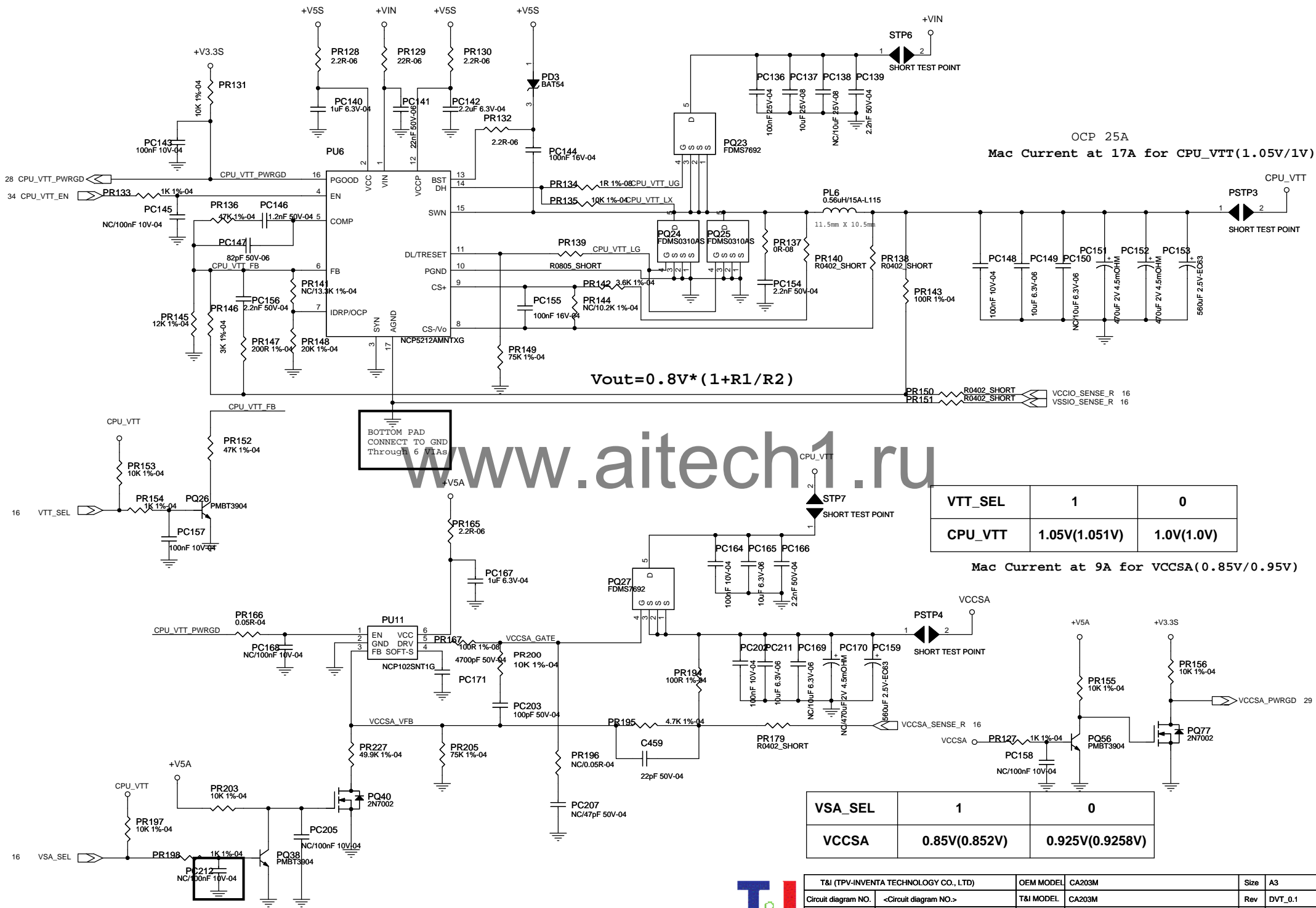
|                                       |                         |           |              |        |          |
|---------------------------------------|-------------------------|-----------|--------------|--------|----------|
| T&I (TPV-INVENTA TECHNOLOGY CO., LTD) |                         | OEM MODEL | CA203M       | Size   | A3       |
| Circuit diagram NO.                   | <Circuit diagram NO.>   | T&I MODEL | CA202M       | Rev    | DVT_0.1  |
| Key Component                         | Controller 1            | PCB NAME  | 6150A0008201 | remark | <remark> |
| Date                                  | Friday, August 24, 2012 | Sheet     | 28 of 40     |        |          |



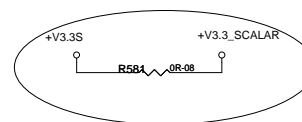
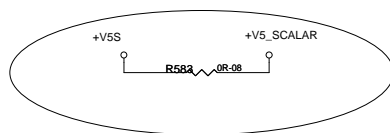
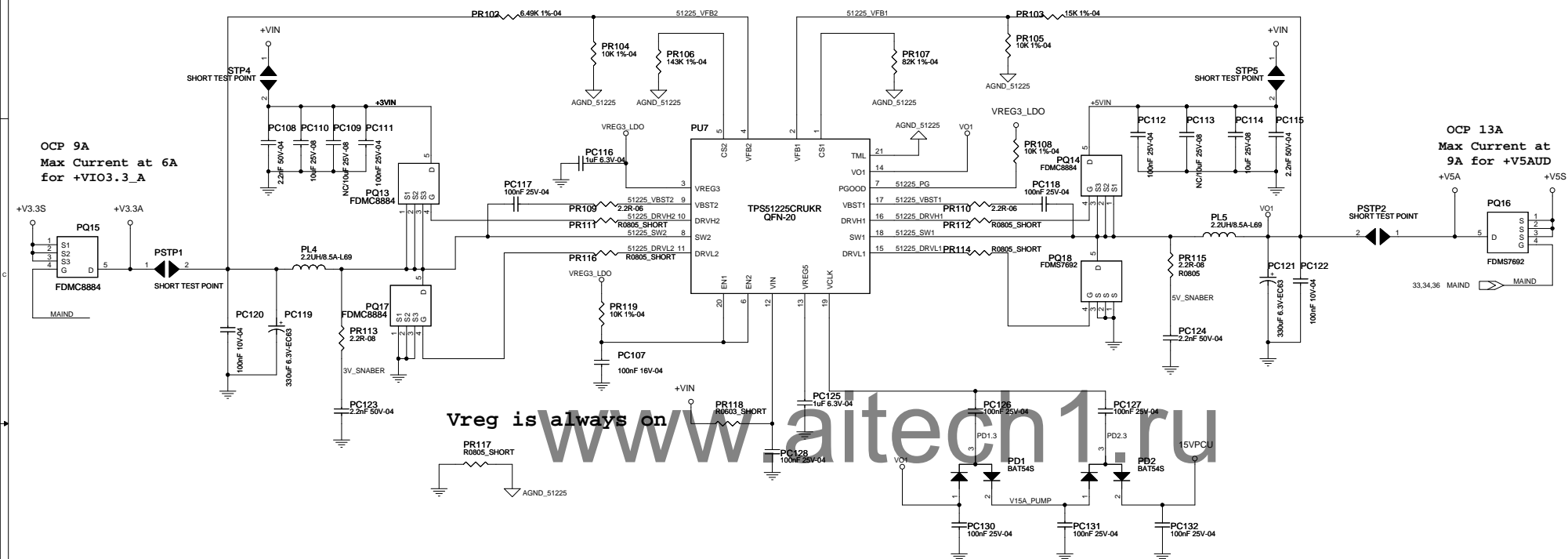


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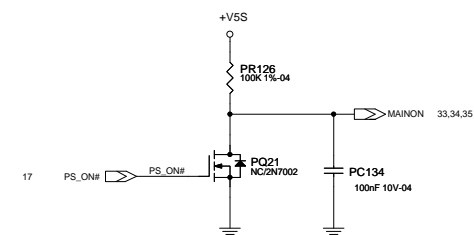
|                                       |                         |           |              |        |          |
|---------------------------------------|-------------------------|-----------|--------------|--------|----------|
| T&I (TPV-INVENTA TECHNOLOGY CO., LTD) |                         | OEM MODEL | CA203M       | Size   | Custom   |
| Circuit diagram NO.                   | <Circuit diagram NO>    | T&I MODEL | CA203M       | Rev    | DVT_0.1  |
| Key Component                         | Sugar Bay-MOSFET 22     | PCB NAME  | 6150A0008201 | remark | <remark> |
| Date                                  | Friday, August 24, 2012 | Sheet     | 30 of 40     |        |          |



**SYSTEM +3V\_ALW/+3V\_S5/+3V\_S3/+3V\_S0  
+5V\_ALW/+5V\_S3/+5V\_S0**

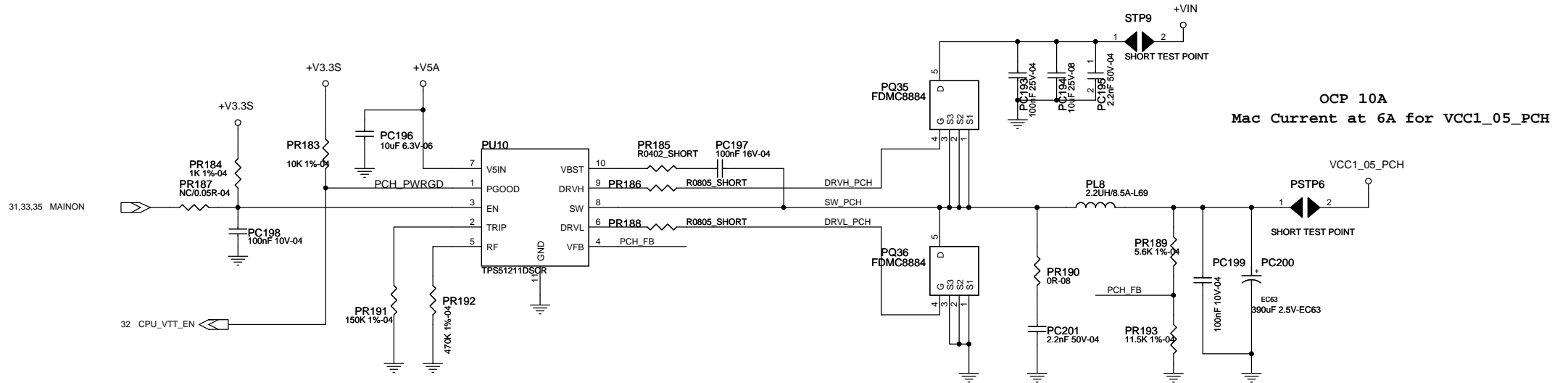


FOR CA203 EUP

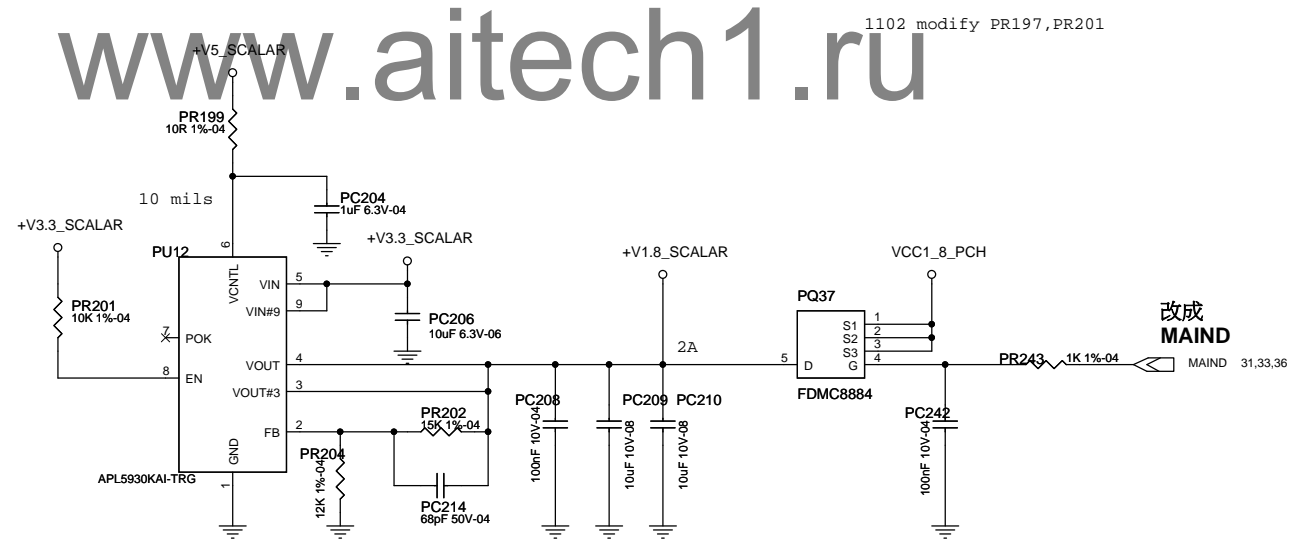








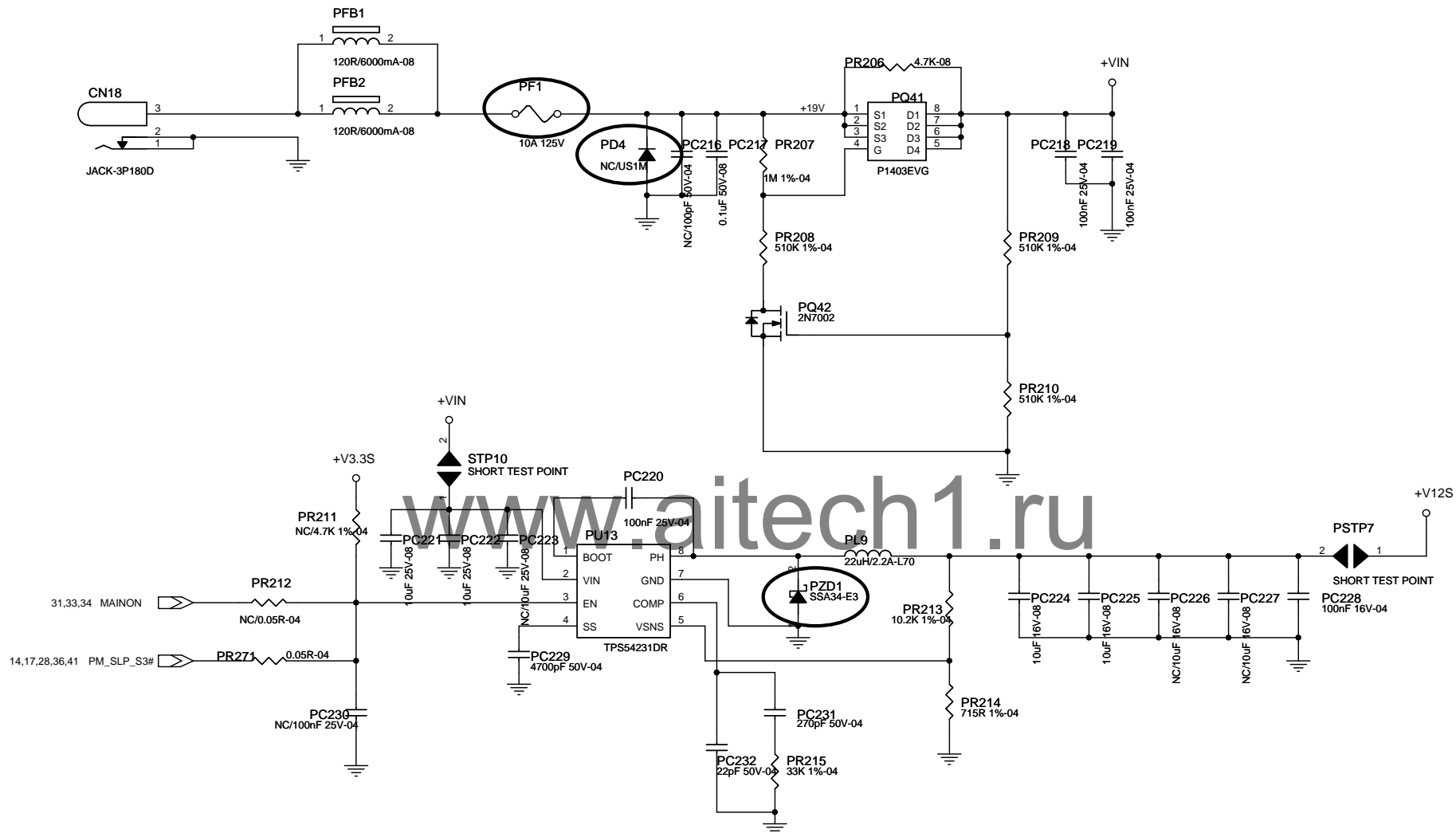
1102 modify PR197,PR201



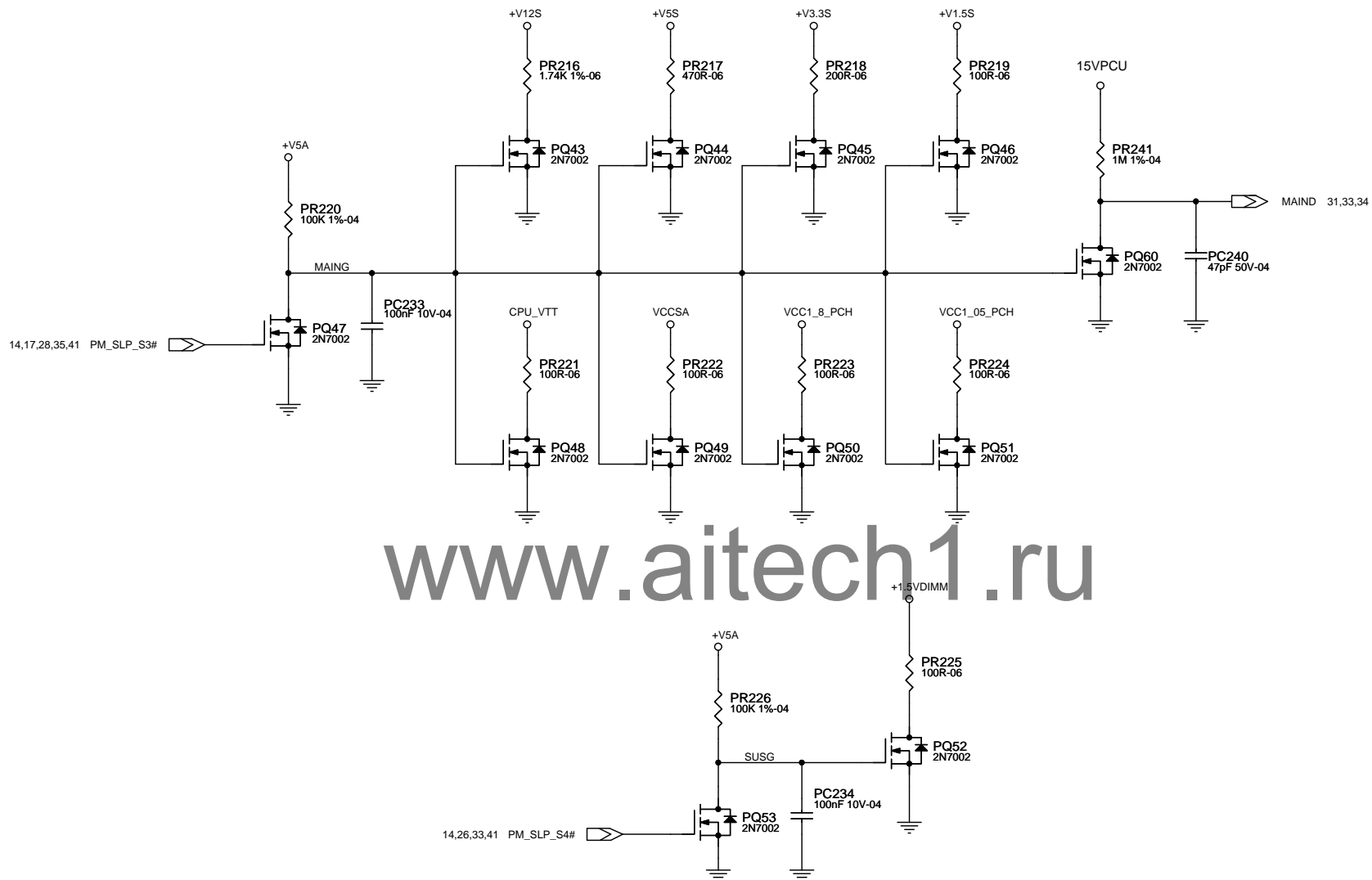
$$V_{out} = 0.8V * (R1 + R2) / R2$$



|                                       |                             |           |              |          |
|---------------------------------------|-----------------------------|-----------|--------------|----------|
| T&I (TPV-INVENTA TECHNOLOGY CO., LTD) | OEM MODEL                   | CA203M    | Size         | A3       |
| Circuit diagram NO.                   | <Circuit diagram NO.>       | T&I MODEL | CA203M       | Rev      |
| Key Component                         | VCC1_05_PCH / ME,VCC1_8_PCH | PCB NAME  | 6150A0008201 | remark   |
| Date                                  | Friday, August 24, 2012     | Sheet     | 34 of 40     | <remark> |

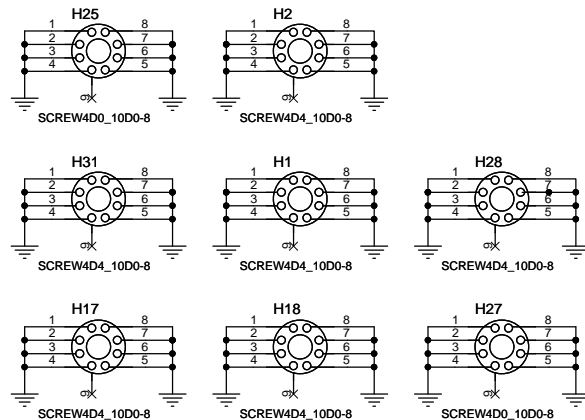


|                                       |                         |           |              |        |          |
|---------------------------------------|-------------------------|-----------|--------------|--------|----------|
| T&I (TPV-INVENTA TECHNOLOGY CO., LTD) |                         | OEM MODEL | CA203M       | Size   | B        |
| Circuit diagram NO.                   | <Circuit diagram NO.>   | T&I MODEL | CA203M       | Rev    | DVT_0.1  |
| Key Component                         | DC-IN,+V12S             | PCB NAME  | 6150A0008201 | remark | <remark> |
| Date                                  | Friday, August 24, 2012 | Sheet     | 35 of 40     |        |          |



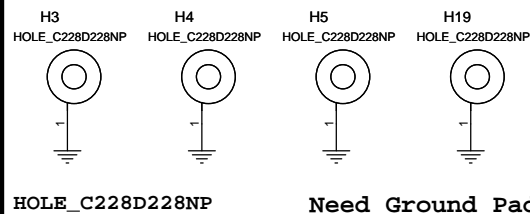
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|---------------------------------------|-------------------------|-----------|--------------|--------|----------|
| T&I (TPV-INVENTA TECHNOLOGY CO., LTD) |                         | OEM MODEL | CA203M       | Size   | B        |
| Circuit diagram NO.                   | <Circuit diagram NO.>   | T&I MODEL | CA203M       | Rev    | DVT_0.1  |
| Key Component                         | Discharge Circuit       | PCB NAME  | 6150A0008201 | remark | <remark> |
| Date                                  | Friday, August 24, 2012 | Sheet     | 36 of 40     |        |          |

**SCREW 4/10-8 (MB)**

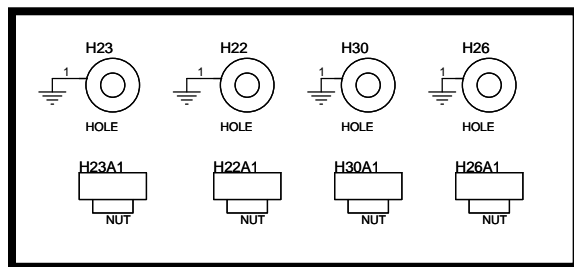


**SCREW FOR CPU HEATSINK**

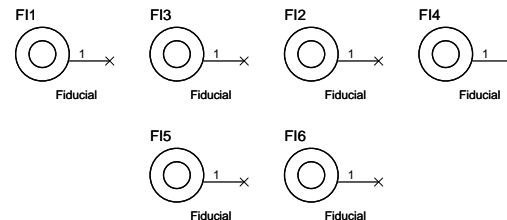
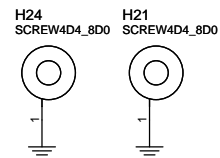
**SCREW 4.4/8 \* 4 (HEATSINK)**



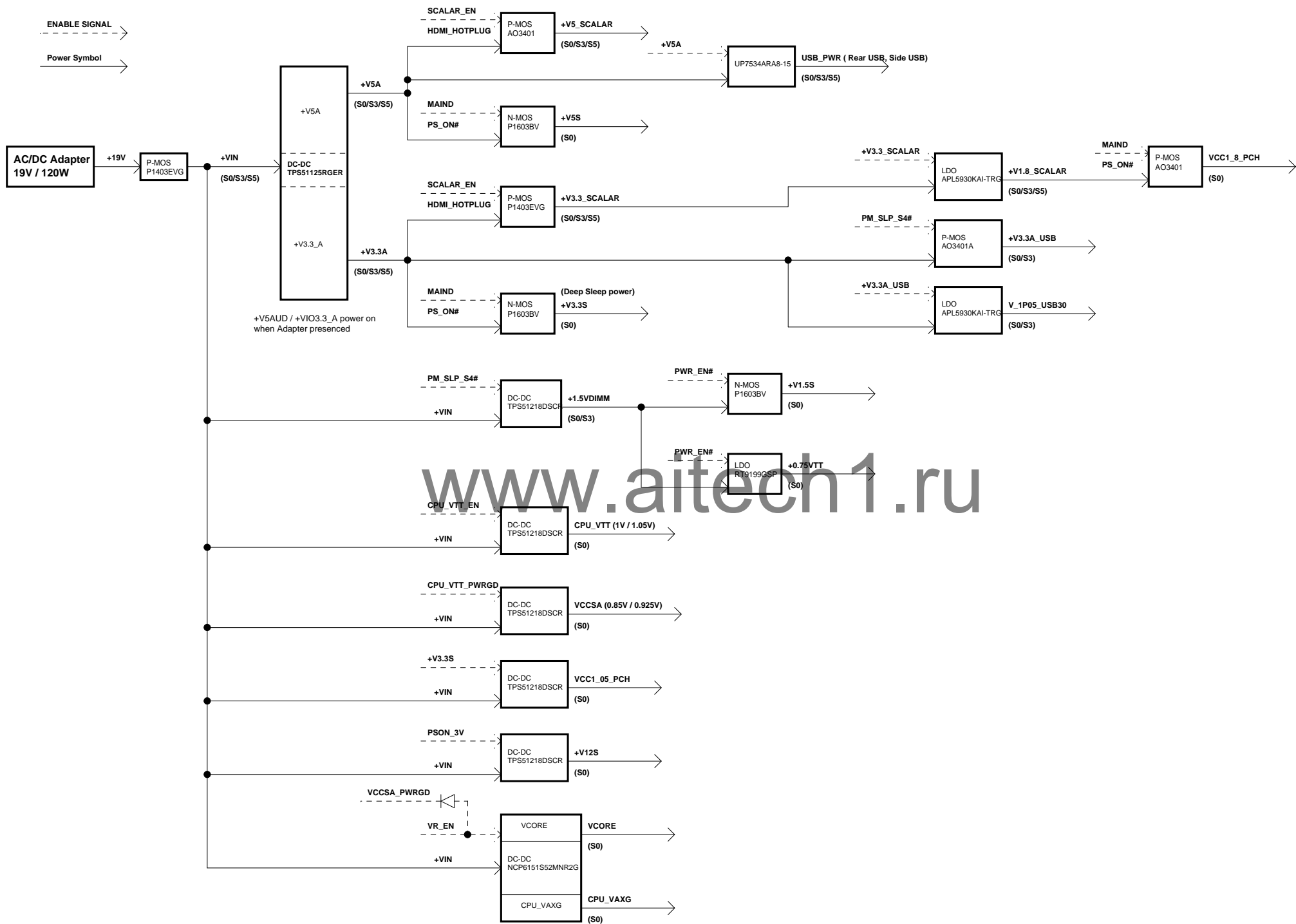
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**SCREW FOR PCH HEATSINK**



|                                       |                         |           |              |        |          |
|---------------------------------------|-------------------------|-----------|--------------|--------|----------|
| T&I (TPV-INVENTA TECHNOLOGY CO., LTD) |                         | OEM MODEL | CA203M       | Size   | A3       |
| Circuit diagram NO.                   | <Circuit diagram NO.>   | T&I MODEL | CA202M       | Rev    | DVT_0.1  |
| Key Component                         | Screw                   | PCB NAME  | 6150A0008201 | remark | <remark> |
| Date                                  | Friday, August 24, 2012 | Sheet     | 37 of 40     |        |          |



|                                       |                         |           |              |        |          |
|---------------------------------------|-------------------------|-----------|--------------|--------|----------|
| T&I (TPV-INVENTA TECHNOLOGY CO., LTD) |                         | OEM MODEL | CA203M       | Size   | C        |
| Circuit diagram NO.                   | <Circuit diagram NO.>   | T&I MODEL | CA202M       | Rev    | DVT_0.1  |
| Key Component                         | Power Map               | PCB NAME  | 6150A0008201 | remark | <remark> |
| Date                                  | Friday, August 24, 2012 | Sheet     | 38 of 40     |        |          |

[illegible]

The diagram shows three digital signals over time:

- (VCCRTC) RTCVCC**: A signal that transitions from low to high. A pulse width of  $t_{200} \text{ min}=9\text{ms}$  is indicated.
- (RTCRST#) PCH\_RTCRST#**: A signal that transitions from high to low (active low) immediately after the RTCVCC signal rises. A pulse width of  $t_{200a} \text{ min}=0\text{ms}$  is indicated.
- (DPWROK) PCH\_DPWROK**: A signal that transitions from low to high after the PCH\_RTCRST# signal has been active.

The diagram illustrates the power-up sequence for the system. The signals and their transitions are as follows:

- VIN**: Adapter in (19V). It transitions from low to high.
- V5AUD**: PWM TP5S1125RGER, Turn on by +VIN. It transitions from low to high.
- VIO3.3\_A**: PWM TP5S1125RGER, Turn on by +VIN. It transitions from low to high.
- WAKE Event**: (1) PC Mode = Power Button (2) Monitor Mode = VGA\_IN or HDMI\_IN = High. It transitions from low to high.
- Controller Single**: From EC.
  - (1) PC Mode, When push power button system entry S0.
  - (2) Monitor Mode, Plug VGA or HDMI machine in S5 state.
- PSON\_SCALAR**: It transitions from low to high.
- V5\_SCALAR**: PMOS, +V5AUD => +V5\_SCALAR. Turn on by PSON\_SCALAR. It transitions from low to high.
- V3.3\_SCALAR**: PMOS, +VIO3.3\_A => +V3.3\_SCALAR. Turn on by PSON\_SCALAR. It transitions from low to high.
- V1.8\_SCALAR**: LDO, +V3.3\_SCALAR => +V1.8\_SCALAR. Turn on by +V3.3\_SCALAR. It transitions from low to high.

Scalar power can turn on before SUS\_PWR (+V5A / +V3.3A) or later, ,but will never go high later than SLP\_S3#

REVISION HISTORY

| Date      | Author | Ver | Comments   |
|-----------|--------|-----|--|
| 2012/7/30 |        |     | 1. L11,L15,L18,L19,L20 微gate swapping  |
| 2012/7/31 |        |     | 1. R488.R489.R490.R491 change to 0.05R-04  |
| 2012/8/8  |        |     | 1. U37 change to NC,R538 add 0R  |
| 2012/8/9  |        |     | 1. change NEC to ASM1042 focus on P27 P28  |
| 2012/8/10 |        |     | 1. Footprint 0.05R-04 R0402_SHORT<br>PR9,PR37,PR52,PR80,PR81,PR96,PR98,PR100,PR101,PR120,PR138,PR140,PR150,PR151,PR169,PR179,PR180,PR185<br>CHANGE SHORT PAD FOOTPRINT<br>PSTP1~PSTP7 , STP1~STP10<br>PU7=TPS51125 TPS51225 (6019B0945001)<br>PQ31,PQ37=P1603BV FDMC8884<br>PU8,PU10=TPS51218 TPS51211 |
| 2012/8/14 |        |     | 1. U59.U60 change to uP7550PMA8  |
| 2012/8/16 |        |     | 1. Del FB27 FB28 FB29  |
| 2012/8/20 |        |     | 1. PQ16 change,L13 L14 L16 L17 L19 L20 swap pin  |
| 2012/8/23 |        |     | 1. For Power change  |

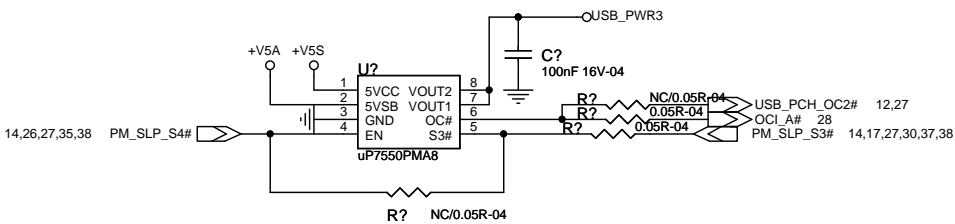
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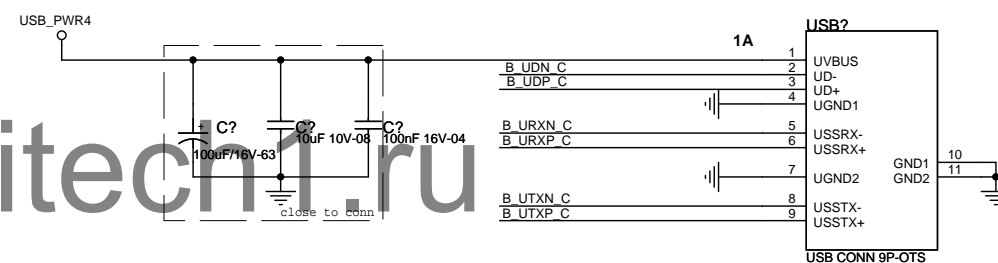
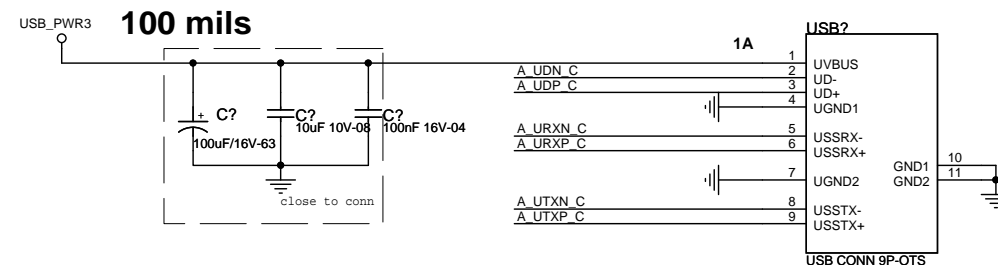
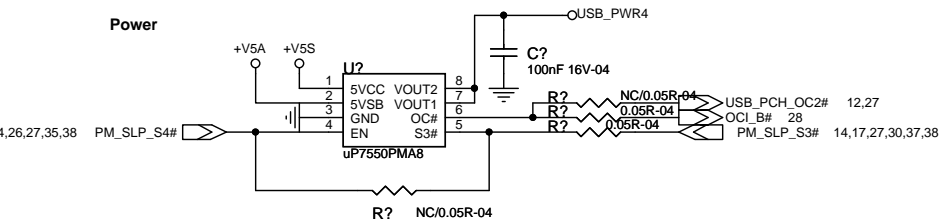
|                                       |                         |           |              |        |          |
|---------------------------------------|-------------------------|-----------|--------------|--------|----------|
| T&I (TPV-INVENTA TECHNOLOGY CO., LTD) |                         | OEM MODEL | CA203M       | Size   | A3       |
| Circuit diagram NO.                   | <Circuit diagram NO.>   | T&I MODEL | CA202M       | Rev    | DVT_0.1  |
| Key Component                         | History                 | PCB NAME  | 6150A0008201 | remark | <remark> |
| Date                                  | Friday, August 24, 2012 | Sheet     | 40 of 40     |        |          |



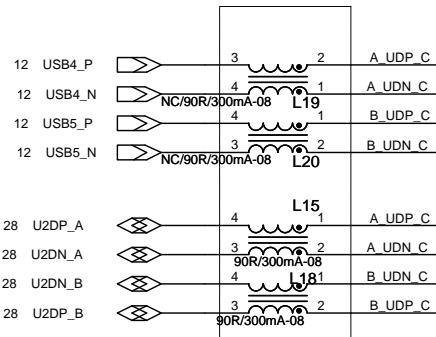
## SIDE USBx2 2.0&3.0 co-lay



Power

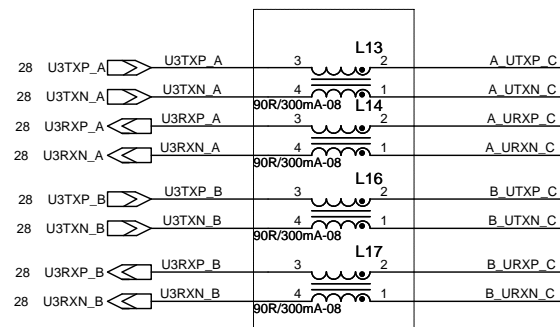


### USB2.0 TO PCH



### USB2.0 TO ASMedia

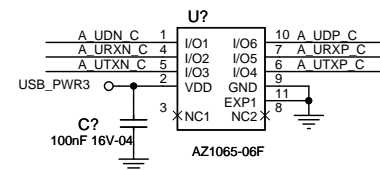
Please place these common-mode-choke to together



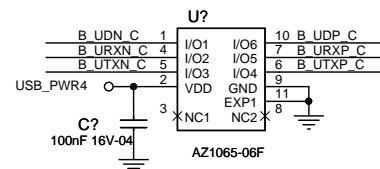
For ASMedia

Please place these common-mode-choke to together

### ESD USB3.0



### ESD USB3.0



| T & I         |                         | OEM MODEL | CA203        | Size | B       |
|---------------|-------------------------|-----------|--------------|------|---------|
| 線路圖編號         | 6050A2525101            | T&I MODEL | CA203        | Rev  | DVT_0.1 |
| Key Component | SIDE USB3.0x2           | PCB NAME  | 6050A2525101 | 備註   | <備註>    |
| Date          | Friday, August 24, 2012 | Sheet     | 41 of 42     |      |         |

