


Rev	Date	Notes
A	8/29/2011	Created from 750-2170-001 rev. D schematic (input power and antenna matching component changes). Added resistor on VBAT to allow overall current measurement.
B	10/6/2011	Changed antenna matching components per final RF testing.

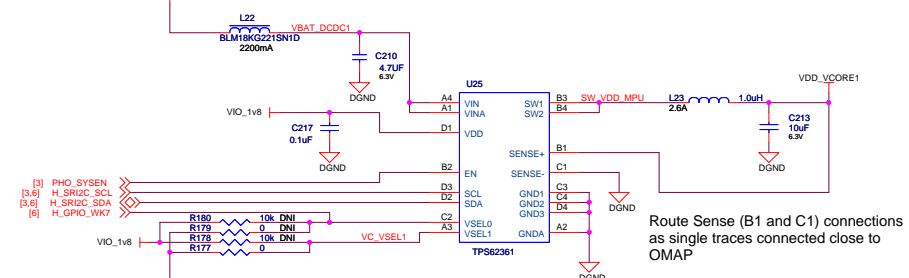
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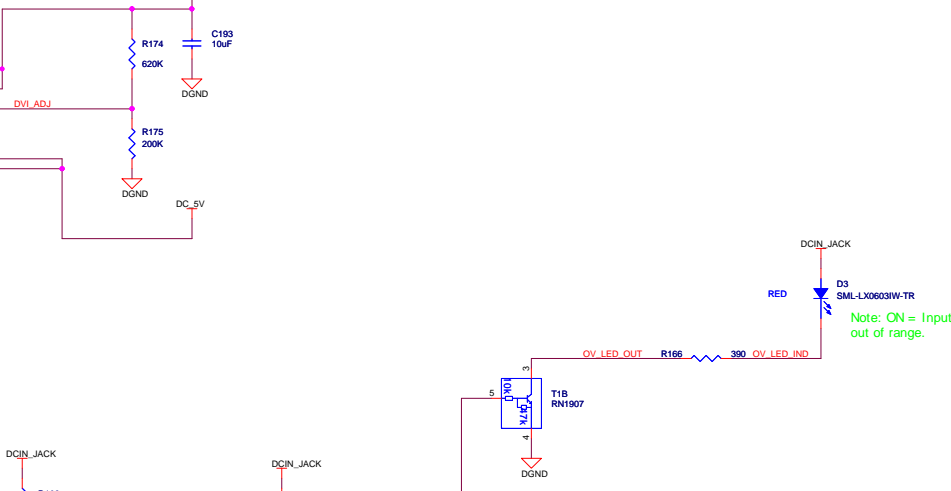
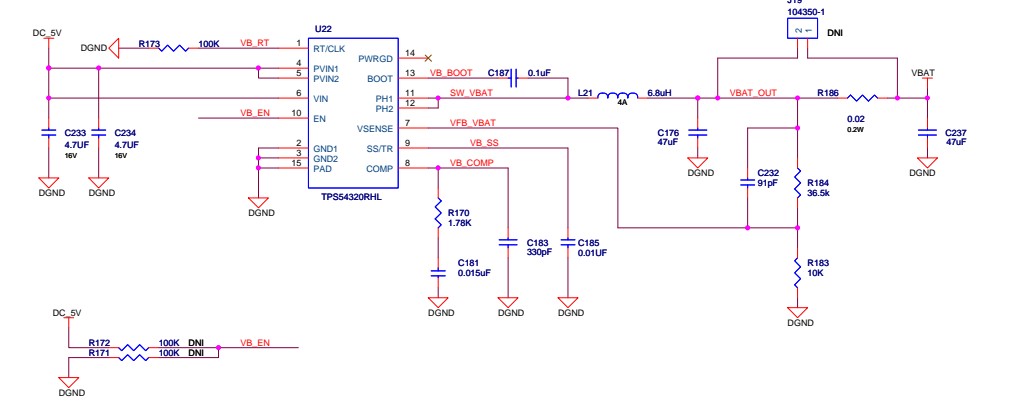
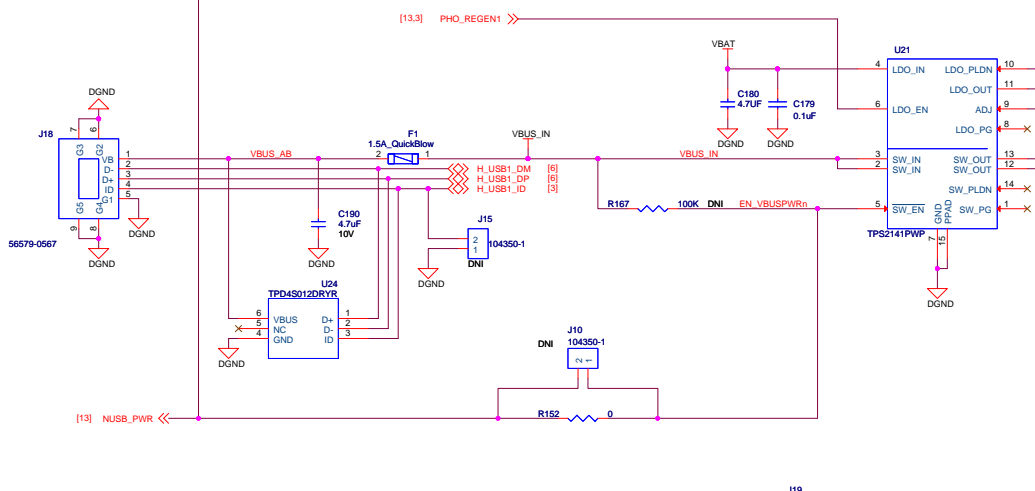
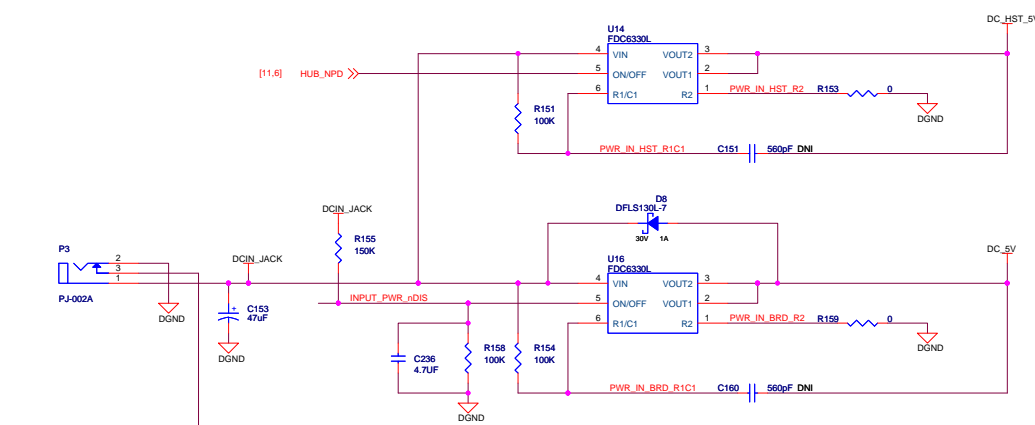
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- 1 - Title Page
 - 2 - Input Power
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 - 4 - Phoenix Audio Component
 - 5 - OMAP4460 Symbol A
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 - 7 - OMAP4460 Symbol C
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 pandaboard.org	
OMAP4460 Panda Board, 8-Layer	
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OMAP VDD_MPU Core Supply (Supplement to PMIC)



Route Sense (B1 and C1) connections as single traces connected close to OMAP



Note: ON = Input Power out of range.



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OMAP4460 Panda Board, 8-Layer
 Input Power & Supplies

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OMAP4 Power Management

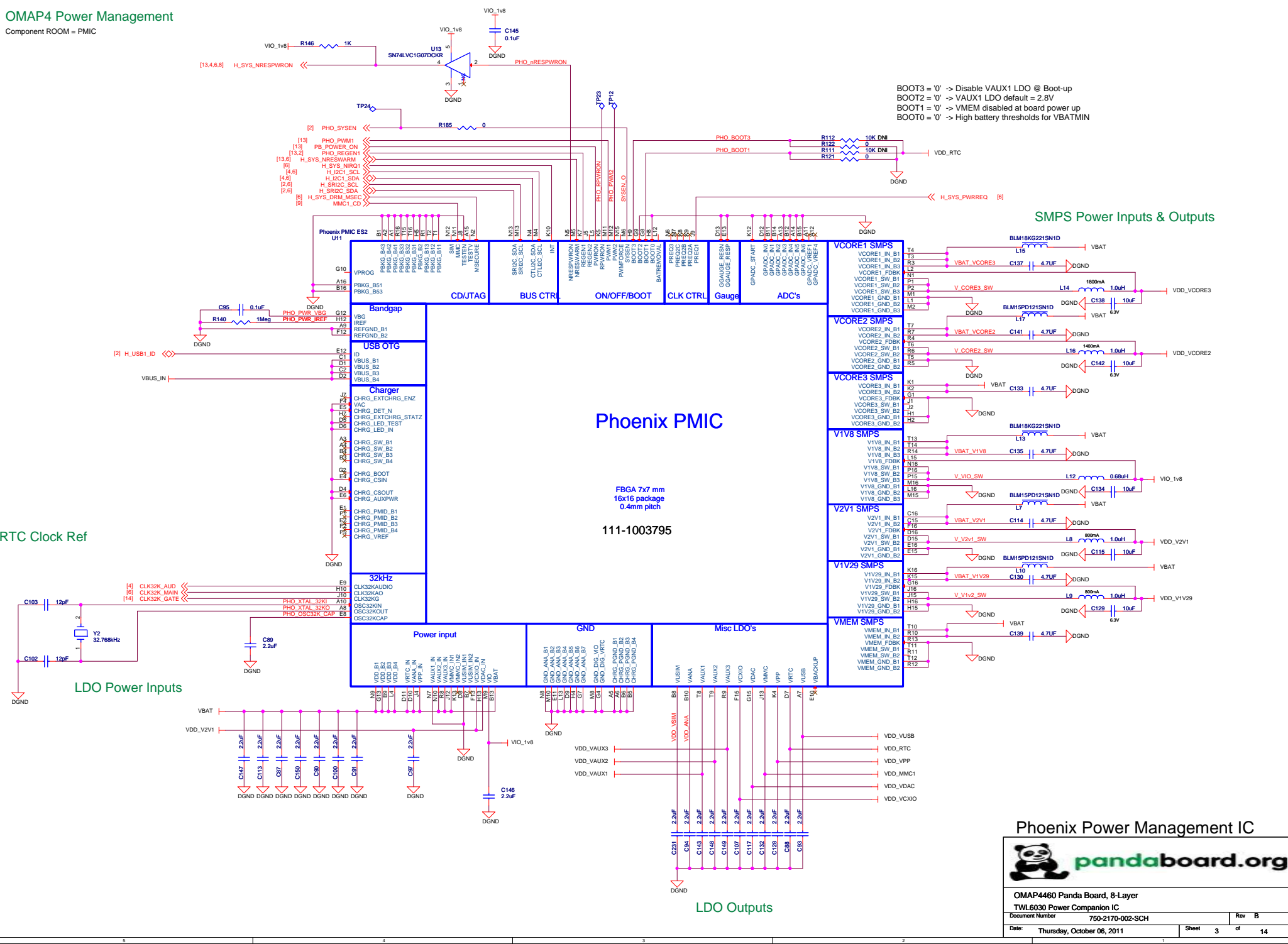
Component ROOM = PMIC

RTC Clock Ref

LDO Power Inputs

LDO Outputs

SMPS Power Inputs & Outputs



BOOT3 = '0' -> Disable VAUX1 LDO @ Boot-up
 BOOT2 = '0' -> VAUX1 LDO default = 2.8V
 BOOT1 = '0' -> VMEM disabled at board power up
 BOOT0 = '0' -> High battery thresholds for VBATMIN

Phoenix PMIC
 FBGA 7x7 mm
 16x16 package
 0.4mm pitch
 111-1003795

Phoenix Power Management IC

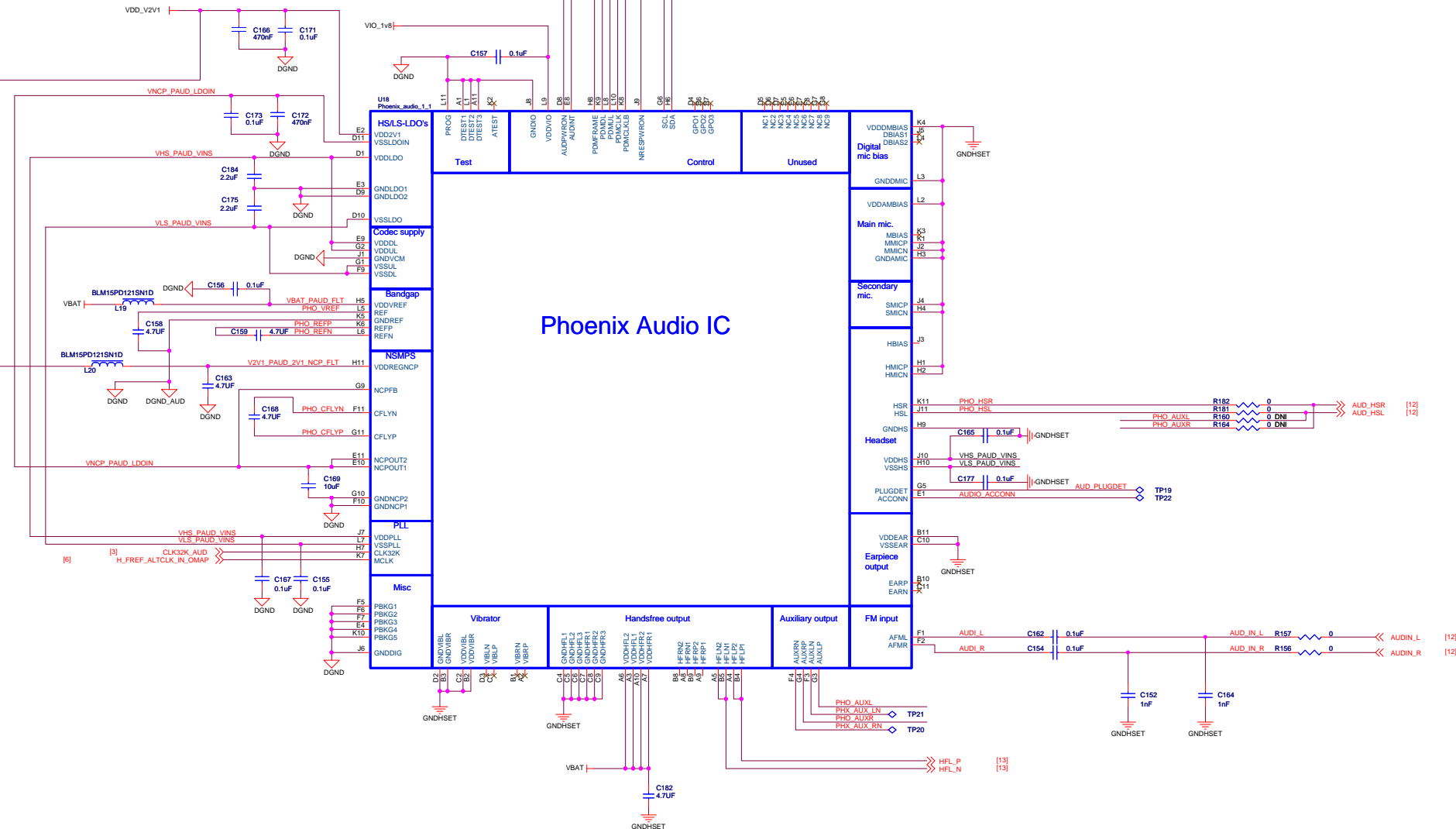
OMAP4460 Panda Board, 8-Layer
 TWL6030 Power Companion IC

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- [3,6] H_12C1_SDA
- [3,6] H_12C1_SCL
- [13,3,6,8] H_SYS_ARESPIRON
- [5] H_PDM_CLK
- [5] H_ABE_CLKS
- [5] H_PDM_DL_DATA
- [5] H_PDM_UL_DATA
- [5] H_PDM_DL_DATA
- [5] H_PDM_FRAME
- [6] H_SYS_NIRQ2
- [6] H_AUD_PWRON

- TP18 h_PDM_CLK
- TP14 h_ABE_CLKS
- TP17 h_PDM_DL_DATA
- TP16 h_PDM_UL_DATA
- TP8 h_PDM_FRAME
- TP10 h_SYS_NIRQ2
- TP13 h_AUD_PWRON
- TP9 h_FREQ_ALTCLK_IN OMAP

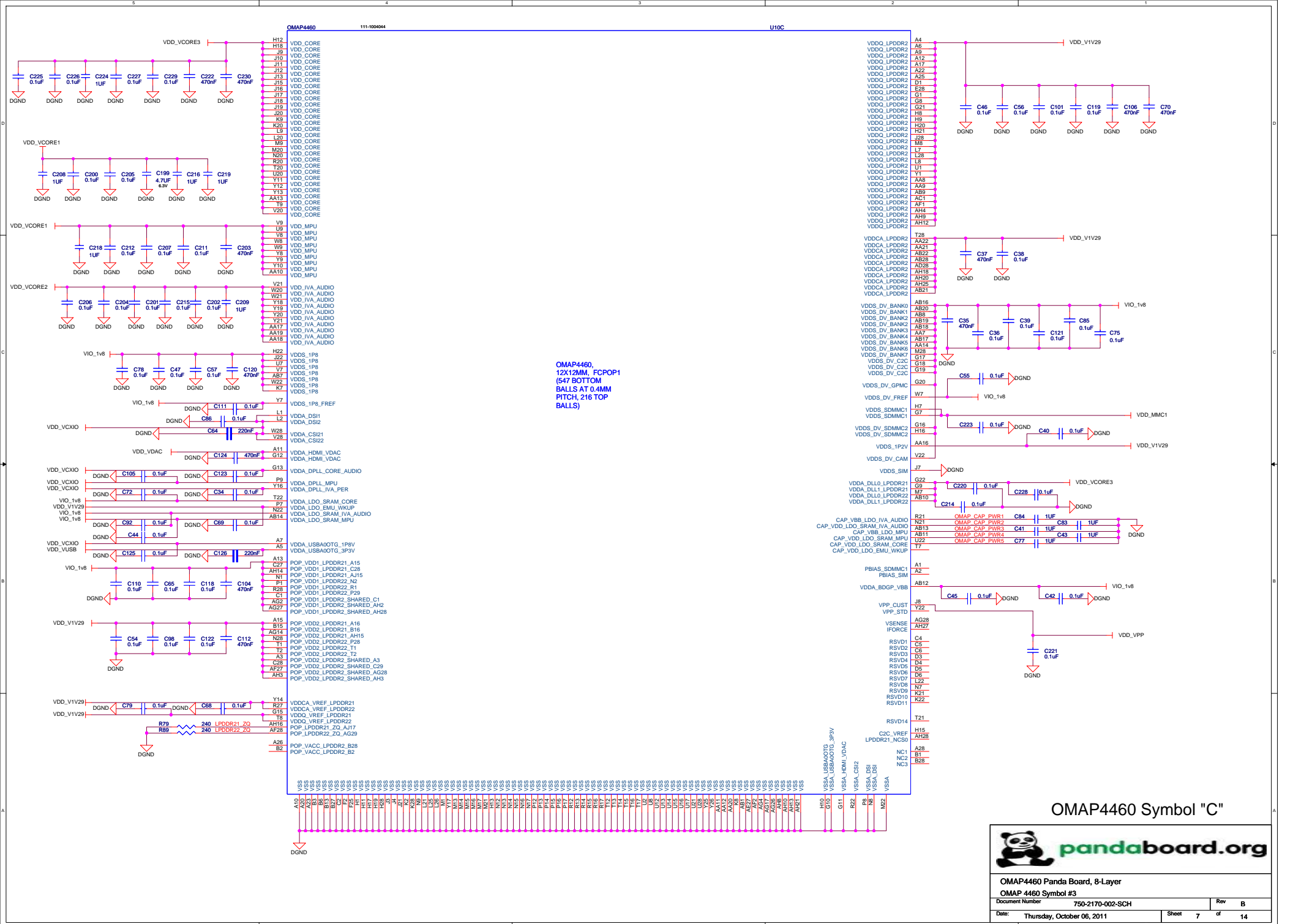
Phoenix Audio IC

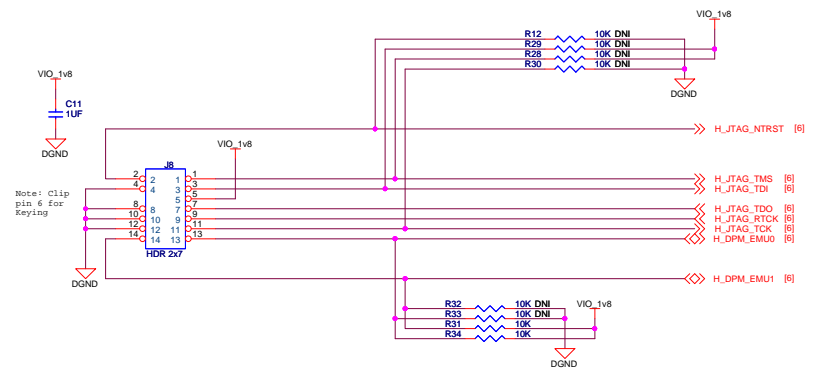
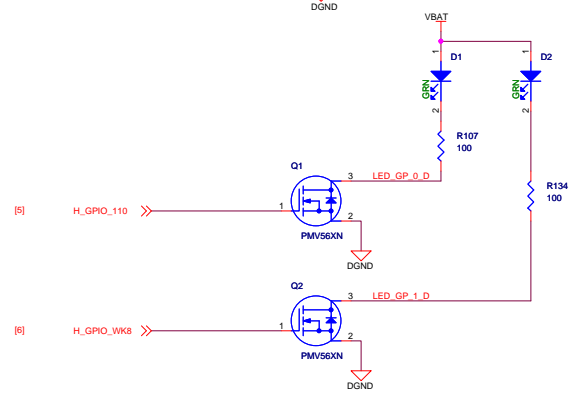
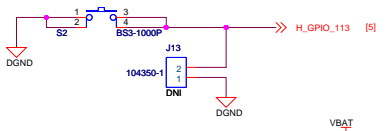
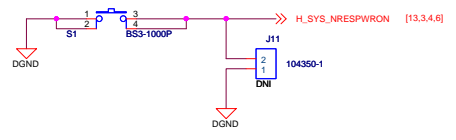


Audio In

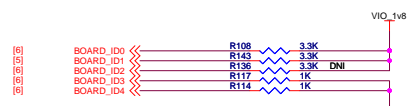
Phoenix Audio IC







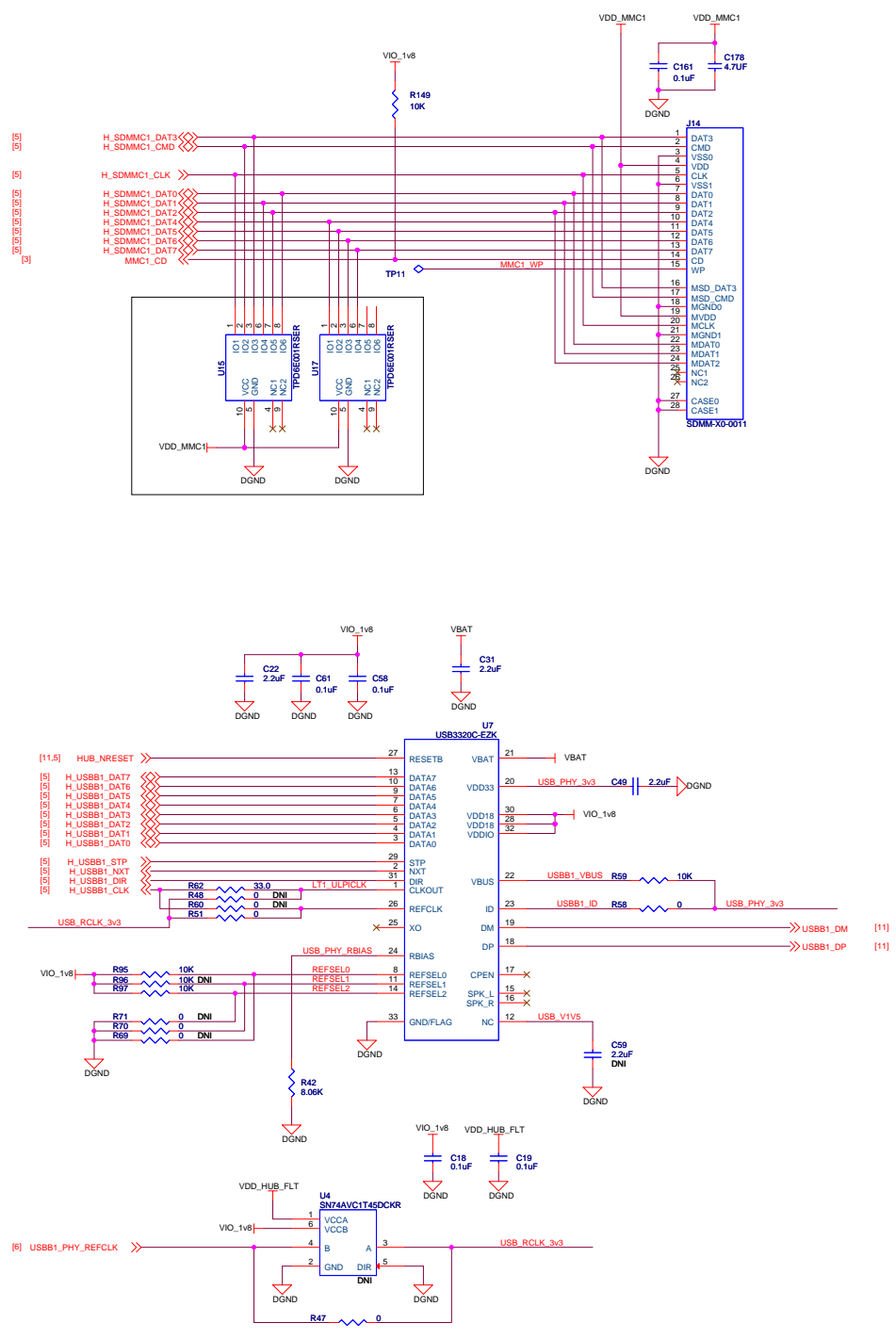
These OMAP GPIOs are intended for use as board ID indicators



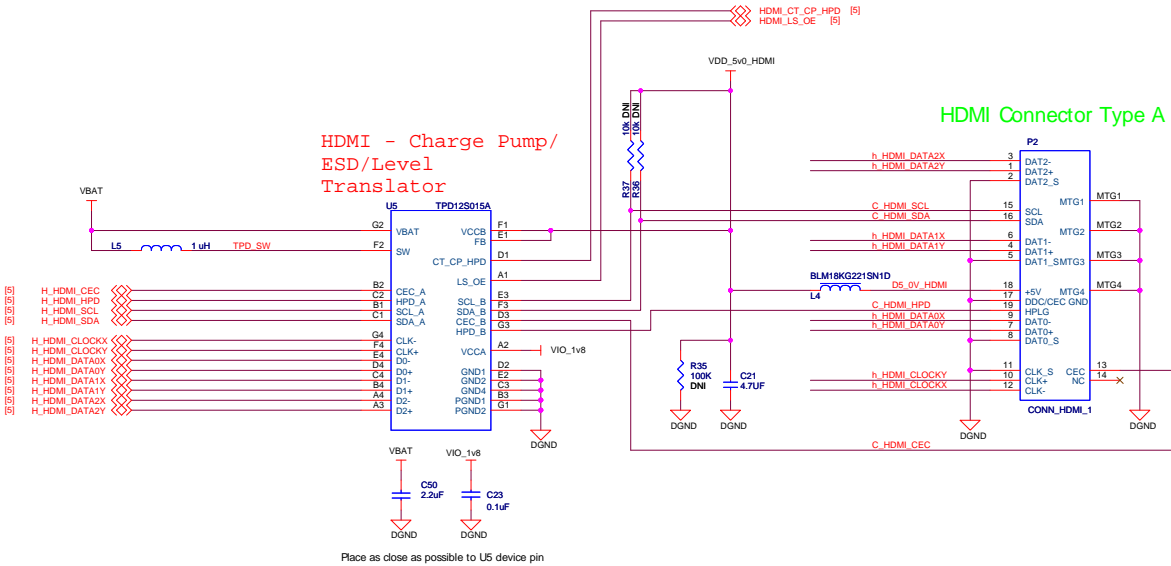
OMAP Debug IF - JTAG Connectors



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JTAG, Debug Connectors			
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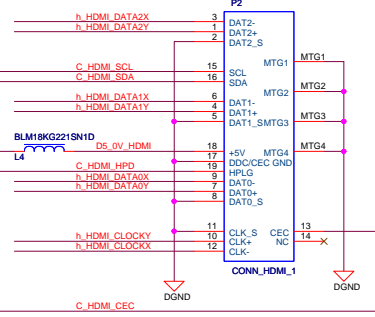


HDMI - Charge Pump/ ESD/Level Translator

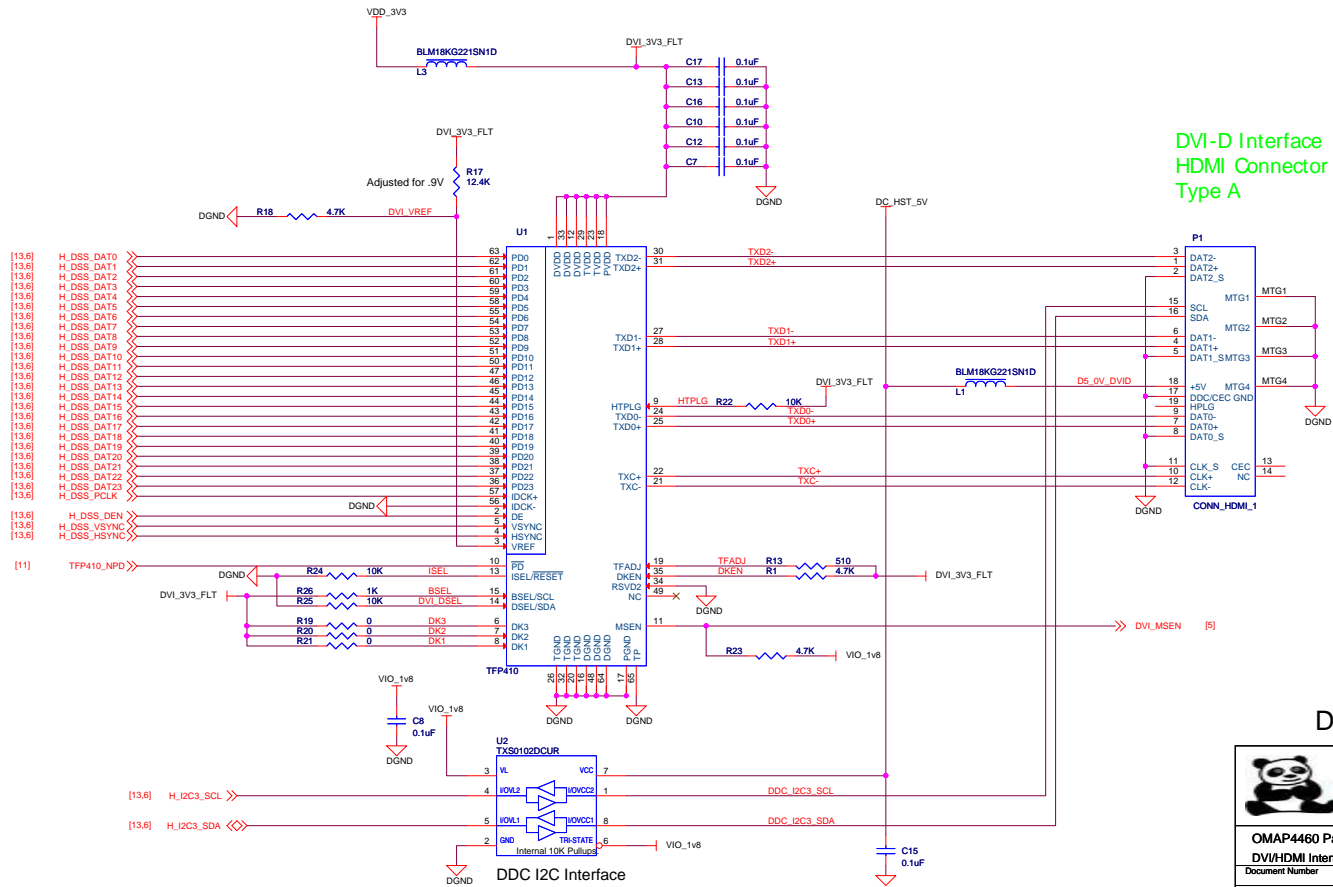


Place as close as possible to U5 device pin

HDMI Connector Type A



DVI-D Interface HDMI Connector Type A

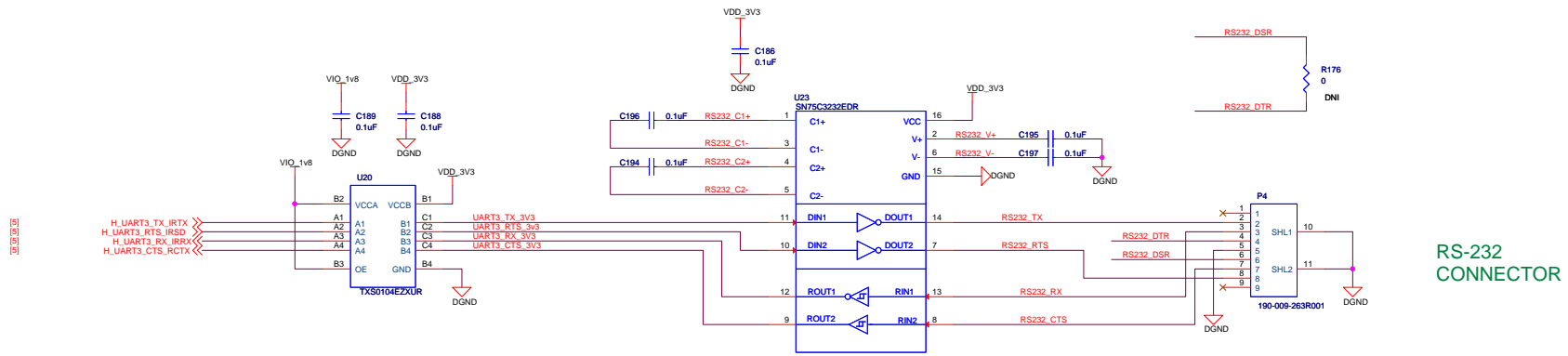
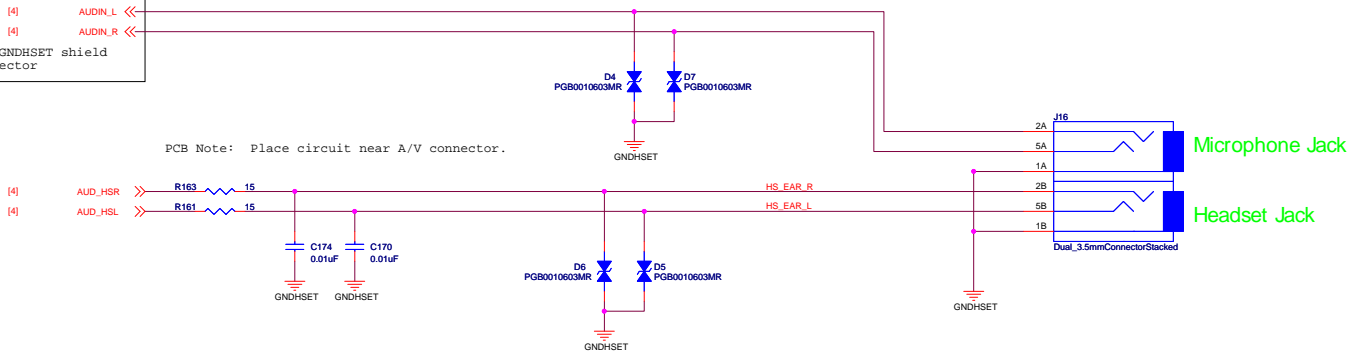


DVI & HDMI Interfaces




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DVI/HDMI Interfaces			
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PCB Note:
Traces surrounded by GNDHSET shield
& routed diff to connector



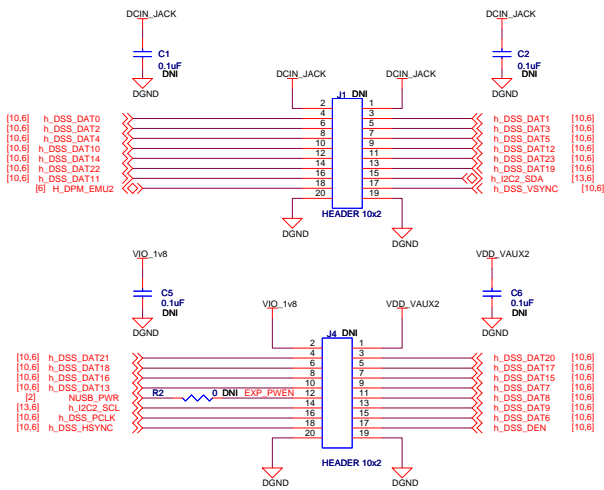
3.5mm Audio Conn + RS-232 I/F

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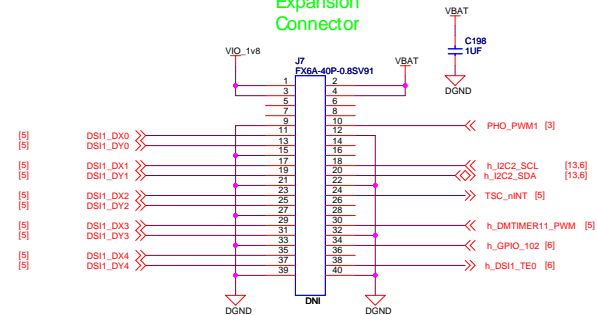
OMAP4460 Panda Board, 8-Layer
Audio Jack & RS-232 Connector

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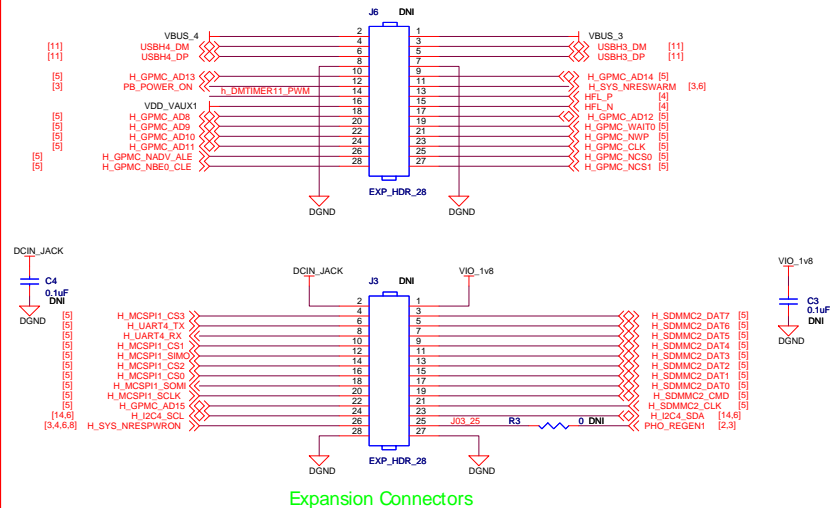
LCD Expansion Connectors (Beagle Legacy)



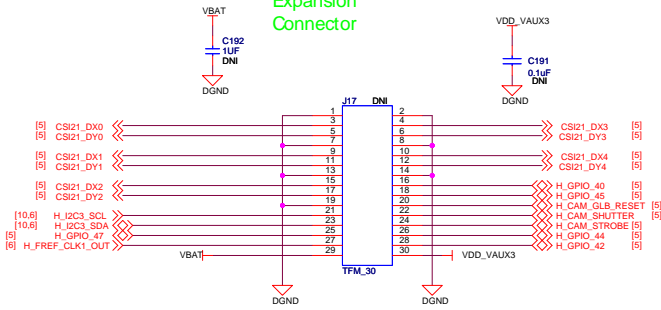
DSI Display Expansion Connector



Expansion Connectors



Camera Sensor Expansion Connector



ECN-13455 - Changed C235 from 0.5pF capacitor to zero ohm resistor, and L2 from 5.1nH to 5.6nH inductor per results of RF performance testing.

