Rev	Date	Notes
A	7/28/2010	ECN-13097 - Released to Rev. A
A1	7/30/2010	ECN-13101 - No wiring changes, changed the UX10 symbol to reflect the Micron LPDDR2 device
A2	8/11/2010	ECN-13113 - No wiring changes, changed the LPDDR2 back to Elpida, DNI J2, correct notes on sh. 14 for WLAN_EN and BT_EN.
B	8/13/2010	ECN-13116 - Enable FM operation (sheet 14 - DNI R61, install R14, R15, R19, R62, and R63)
B1	9/22/2010	ECN-13116 - Change out to new Pandaboard title blocks and add comments

Table of Contents

Pg# - Schematic Page Name

---

1 - Title Page
2 - Input Power
3 - Phoenix Power Component
4 - Phoenix Audio Component
5 - OMAP4430 Symbol A
6 - OMAP4430 Symbol B
7 - OMAP4430 Symbol C
8 - OMAP4430 Debug Interface
9 - SDMMC Card Interface + USB Phy (Hub)
10 - DVI & HDMI Connector
11 - Debug Ethernet
12 - Audio Jack/RS-232 Connection
13 - Expansion Connectors
14 - WLAN Subsystem

NOTES LEGEND:

Schematic Page Titles

Functional Block Labels

Circuit design notes

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OMAP4430 Panda Board, 8-Layer

Title Page

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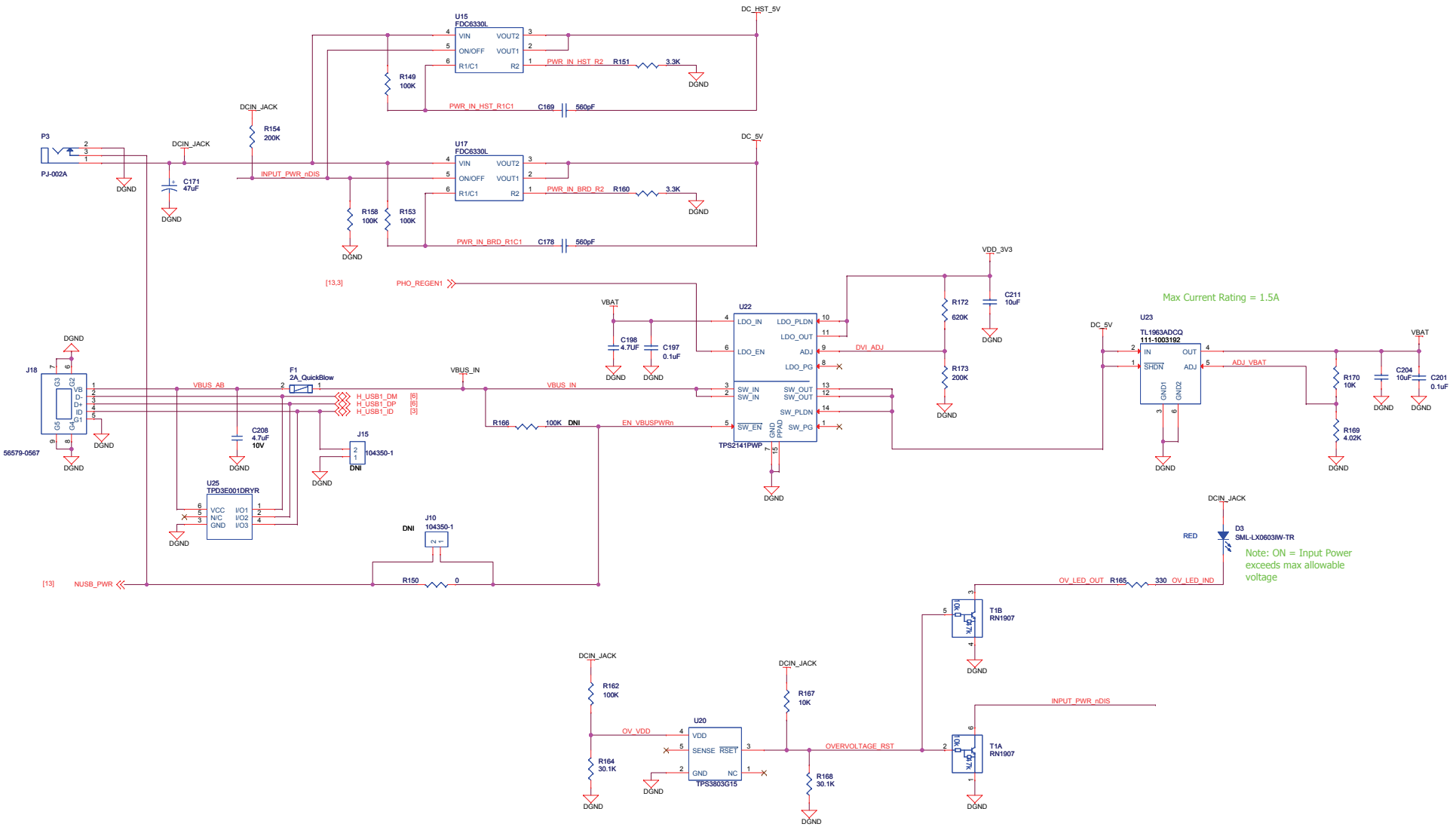

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OMAP4430 Panda Board, 8-Layer

Input Power & Supplies

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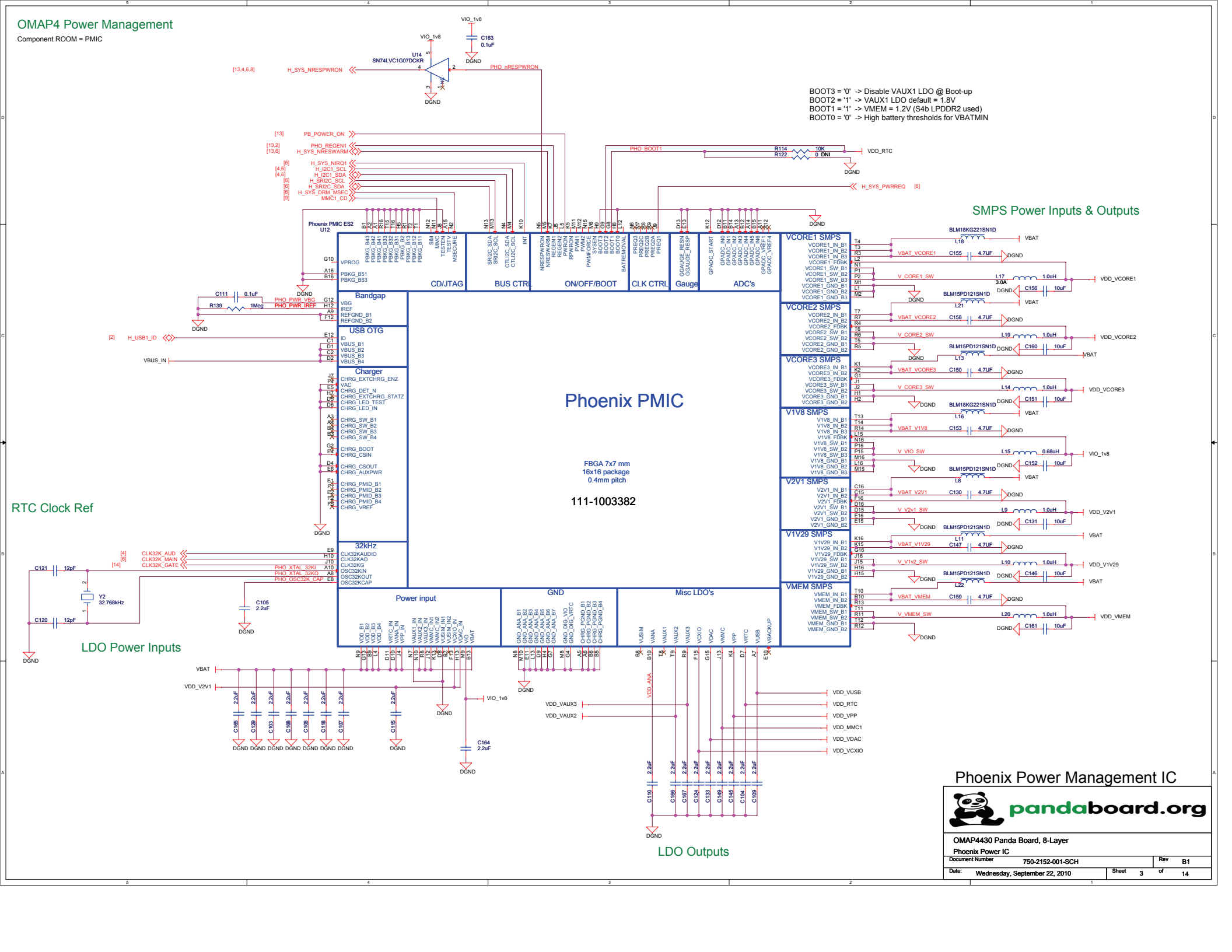
OMAP4 Power Management

Component ROOM = PMIC



Phoenix Power Management IC

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OMAP4430 Panda Board, 8-Layer

Phoenix Power IC

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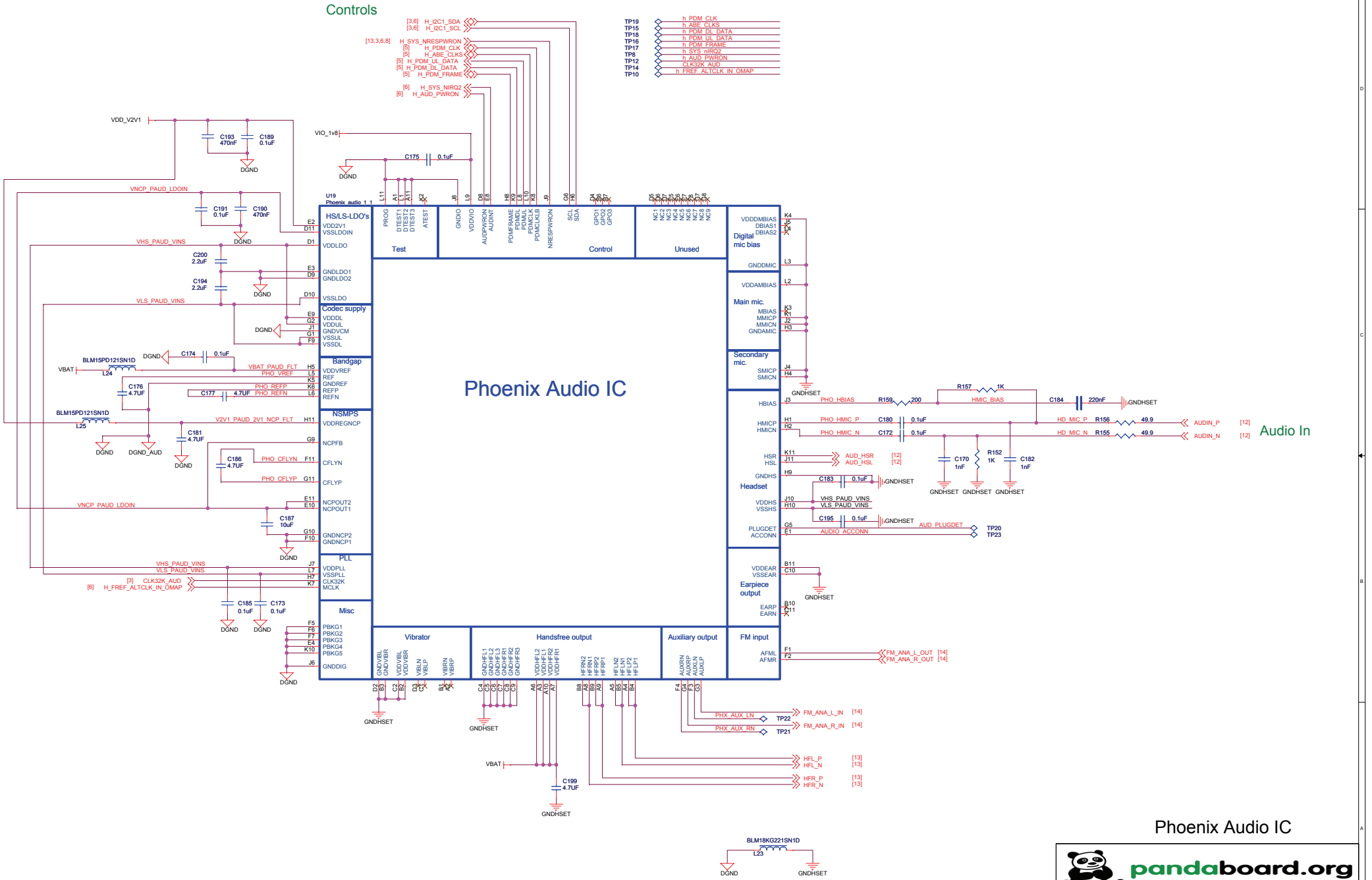
OMAP4 Audio Interfaces

Component ROOM = PAUD



Phoenix Audio IC

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OMAP4430 Panda Board, 8-Layer

Phoenix Audio IC

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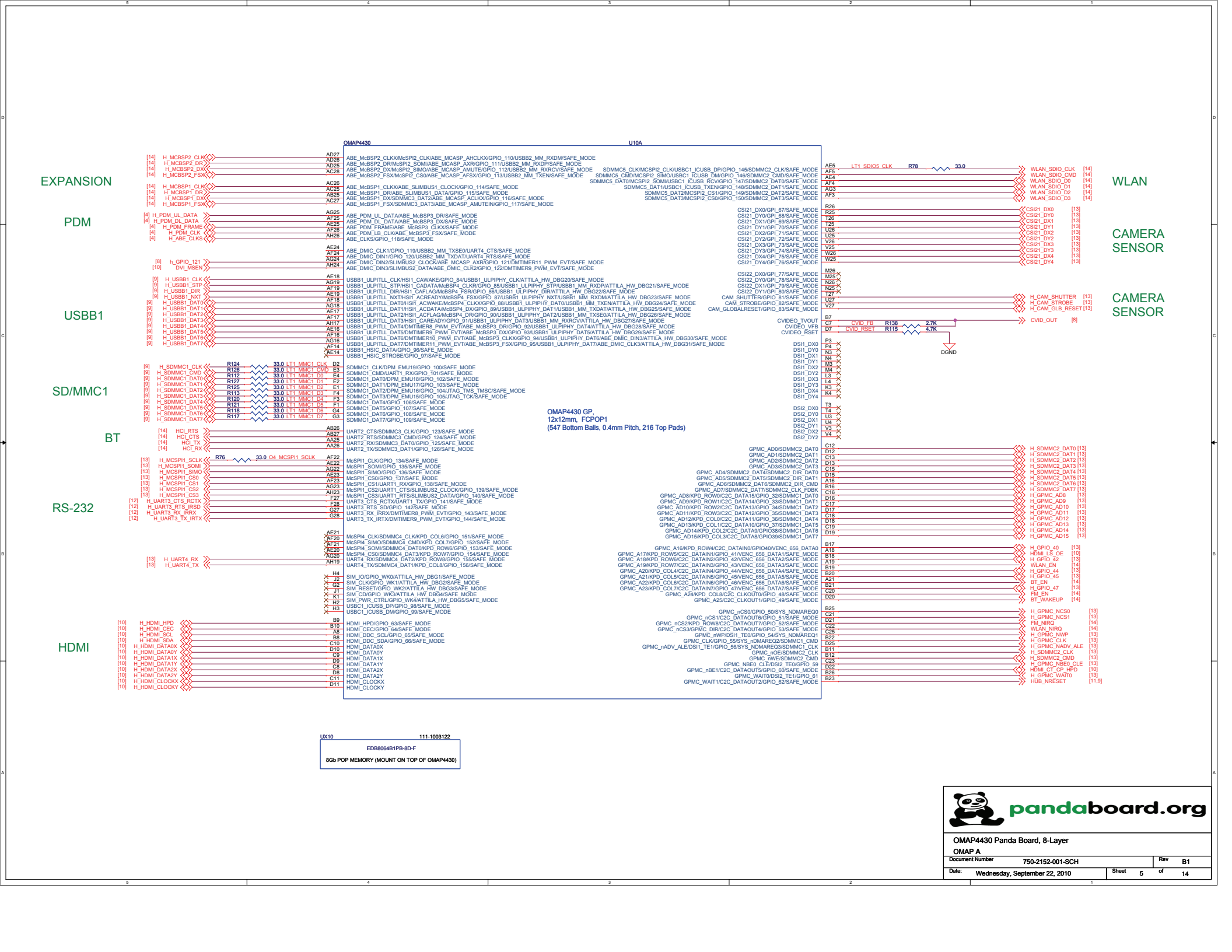
EXPANSION
PDM
USBB1
SD/MMC1
BT
RS-232
HDMI
WLAN
CAMERA SENSOR
CAMERA SENSOR
OMAP4430
U10A
OMAP4430 GP,
12x12mm, FCPOP1
(547 Bottom Balls, 0.4mm Pitch, 216 Top Pads)
UX10
111-1003122
EDB8064B1PB-8D-F
8Gb POP MEMORY (MOUNT ON TOP OF OMAP4430)
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OMAP4430 Panda Board, 8-Layer
OMAP A
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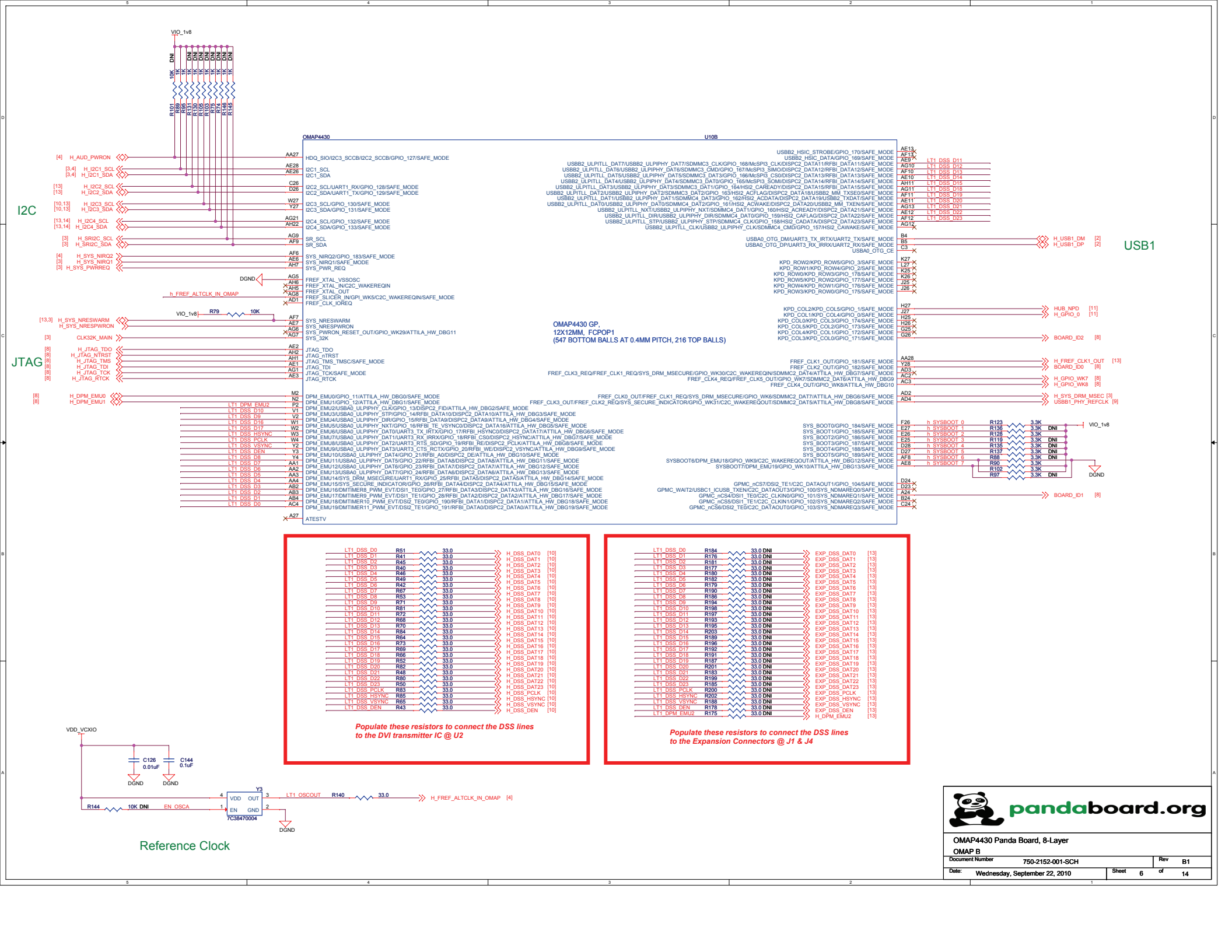
I2C
JTAG
USB1
OMAP4430
U10B
OMAP4430 GP,
12X12MM, FCPOP1
(547 BOTTOM BALLS AT 0.4MM PITCH, 216 TOP BALLS)
VIO_1v8
DGND
Populate these resistors to connect the DSS lines to the DVI transmitter IC @ U2
Populate these resistors to connect the DSS lines to the Expansion Connectors @ J1 & J4
Reference Clock
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OMAP4430 Panda Board, 8-Layer
OMAP B
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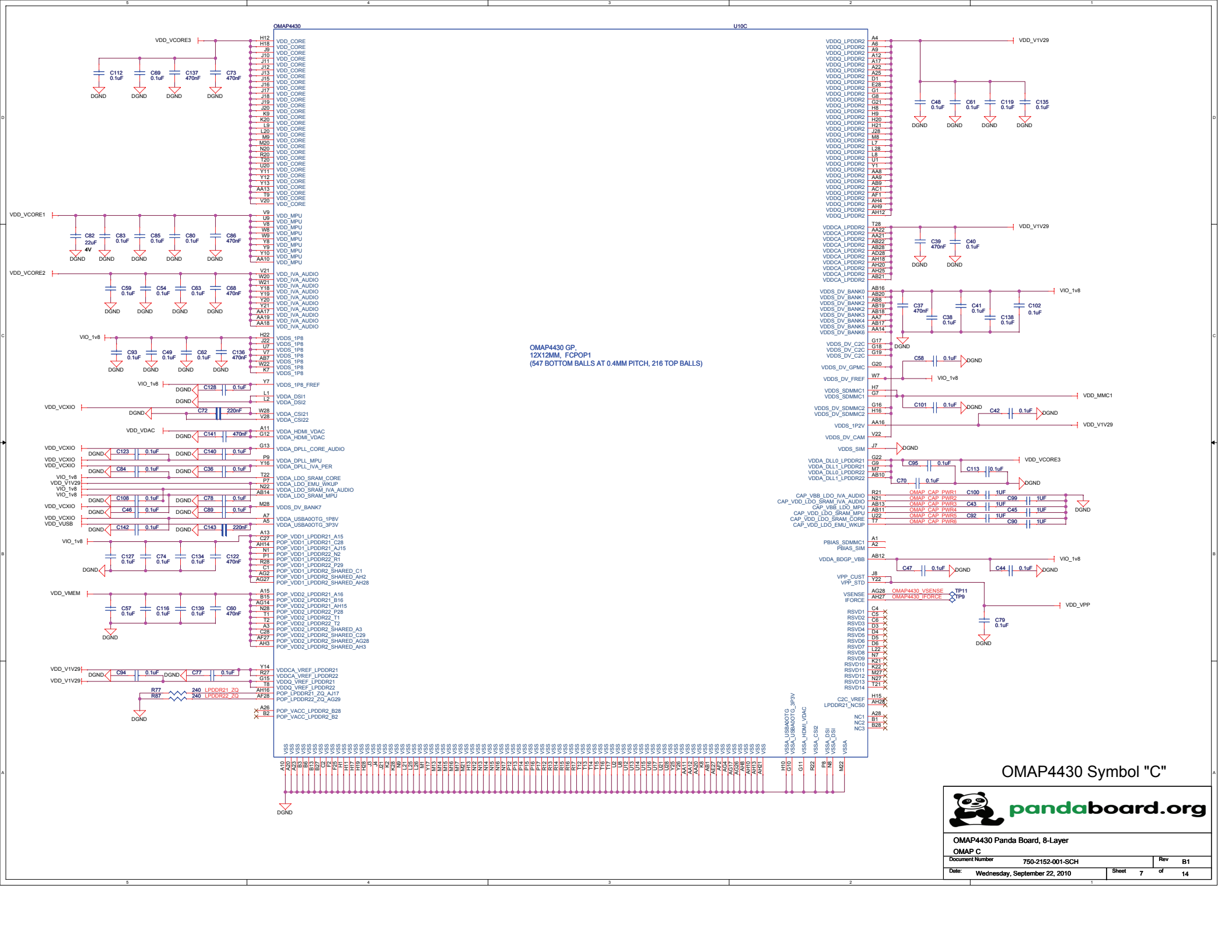

OMAP4430 Symbol "C"

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OMAP4430 Panda Board, 8-Layer	
OMAP C	
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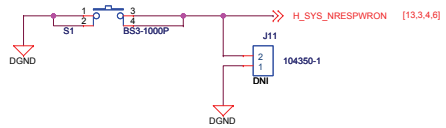
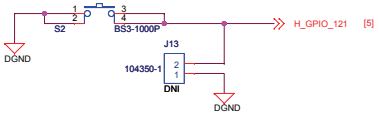
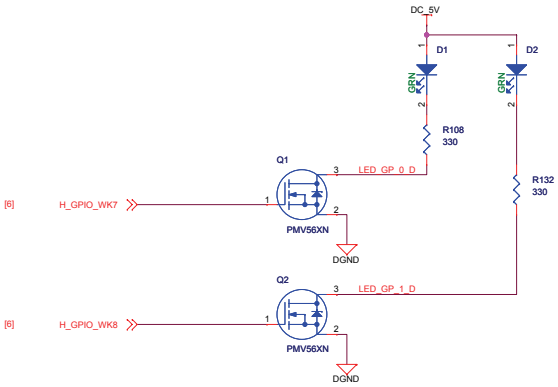
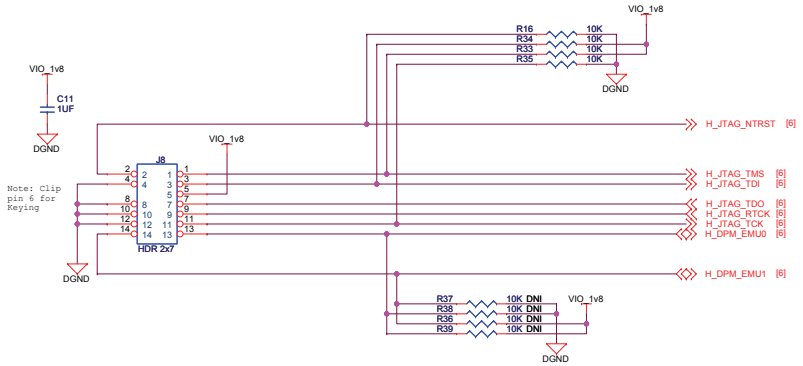




These three OMAP GPIOs are intended for use as board ID indicators, allowing up to 8 unique Panda builds/variants.

Initial value of 001, which will allow S/W to differentiate this board from 6-layer board (which would read 000).





OMAP Debug IF - JTAG Connectors

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OMAP4430 Panda Board, 8-Layer

JTAG Debug Connector

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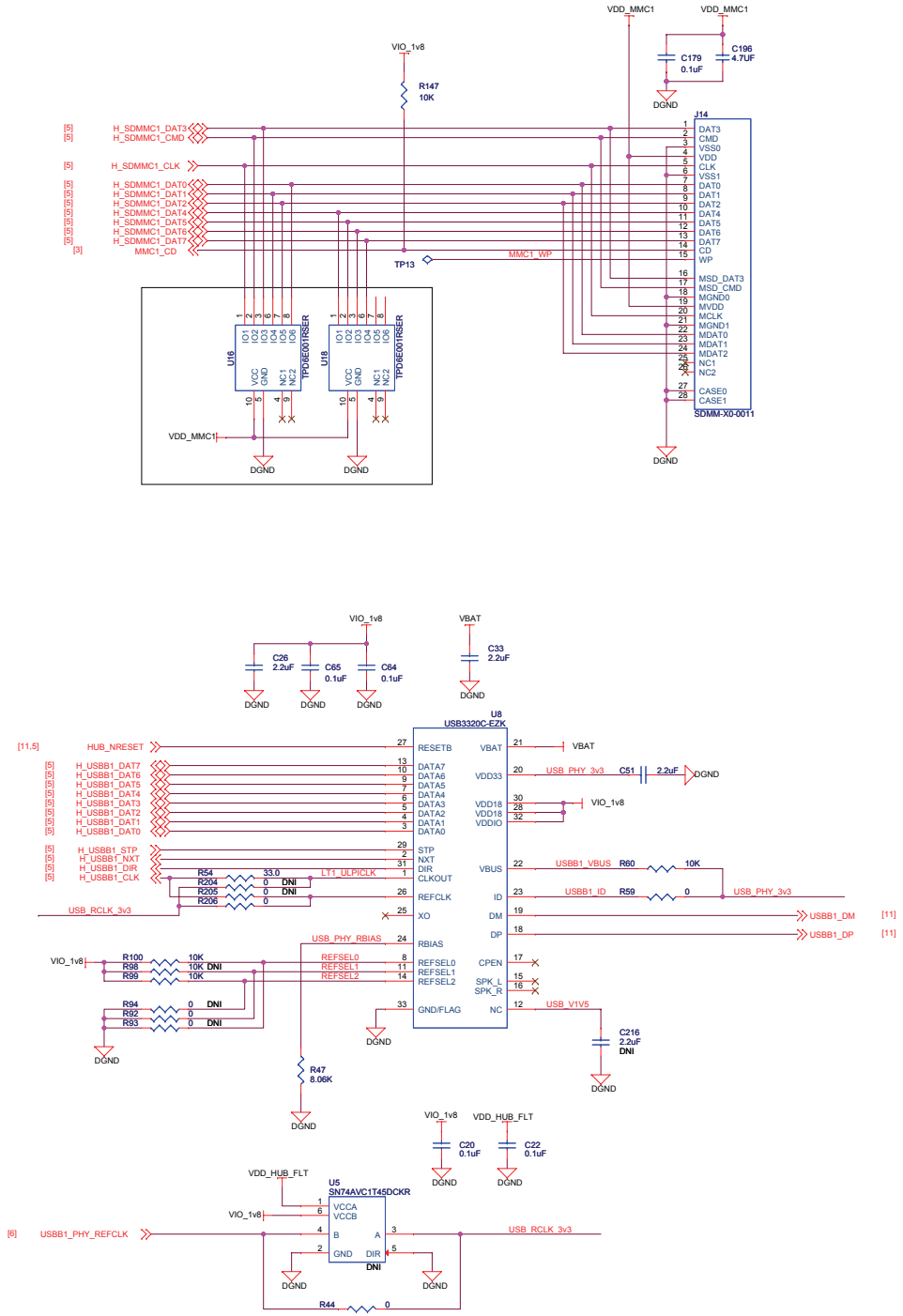

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OMAP4430 Panda Board, 8-Layer

SD/MMC Card Cage

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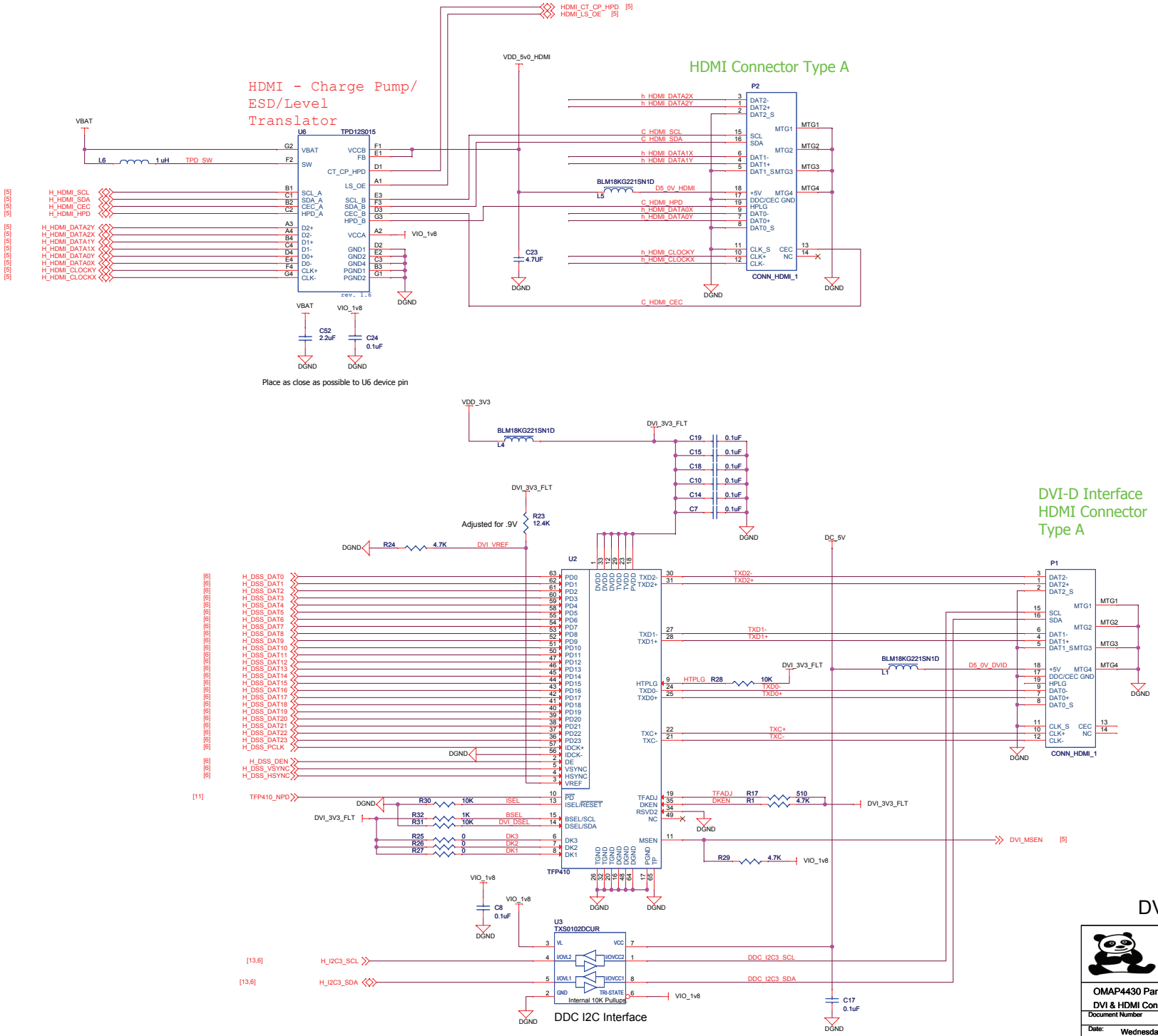

DVI & HDMI Interfaces

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OMAP4430 Panda Board, 8-Layer

DVI & HDMI Connectors

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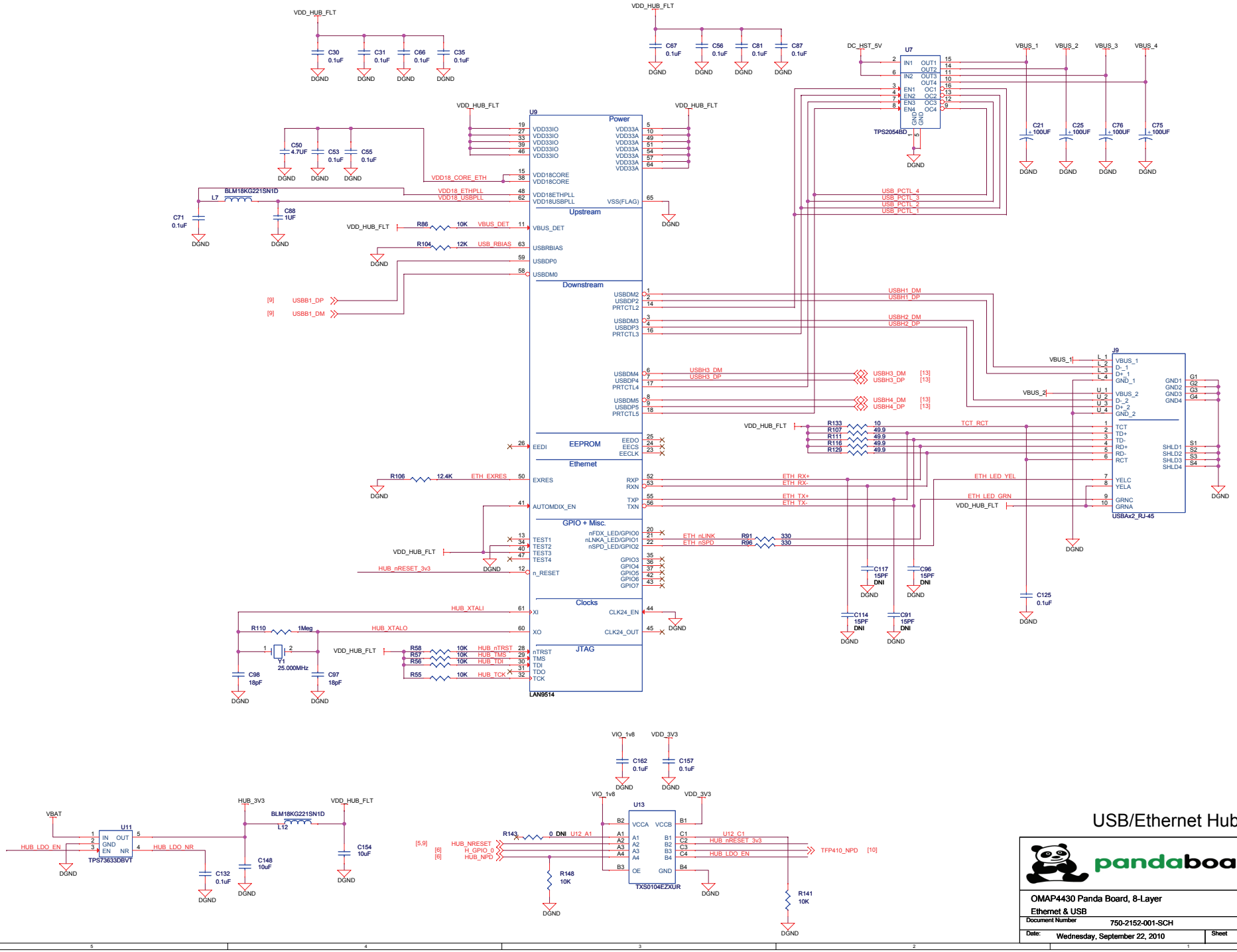
USB + Ethernet Hub



USB/Ethernet Hub

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OMAP4430 Panda Board, 8-Layer

Ethernet & USB

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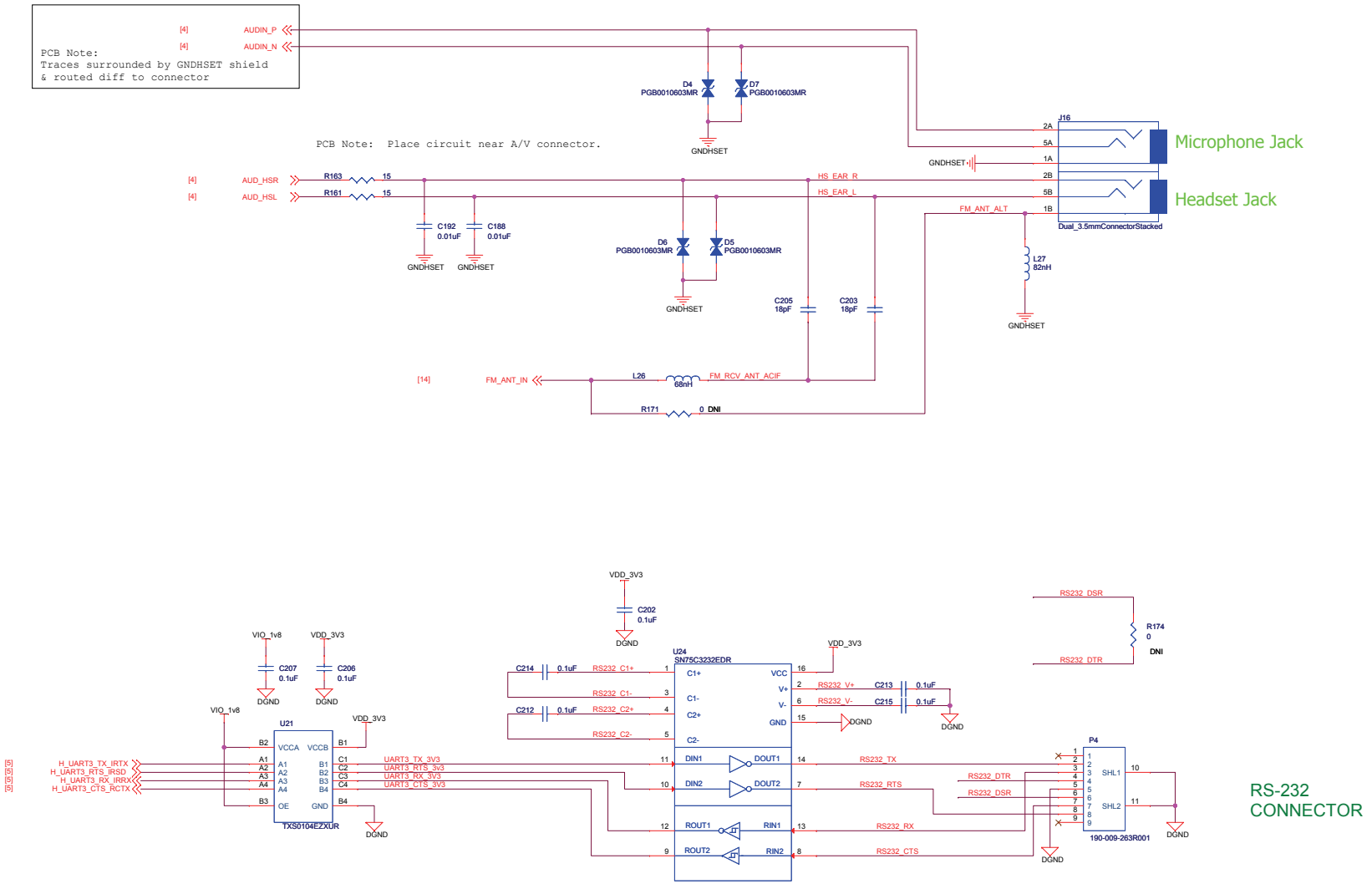

RS-232 CONNECTOR

3.5mm Audio Conn + RS-232 I/F

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OMAP4430 Panda Board, 8-Layer
Audio Jack & RS-232 Connector

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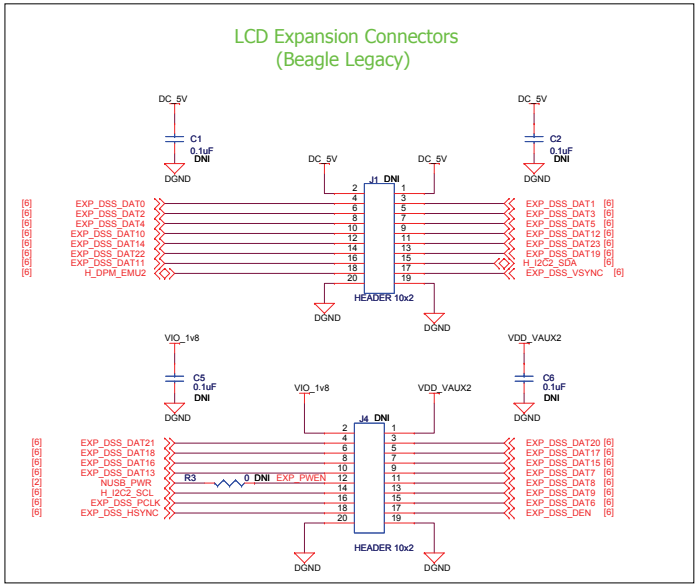
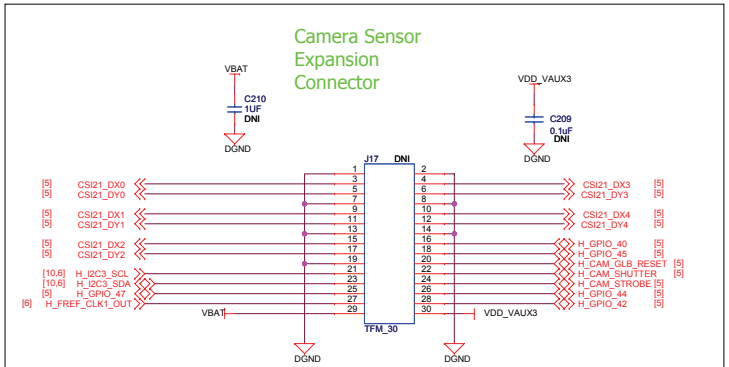
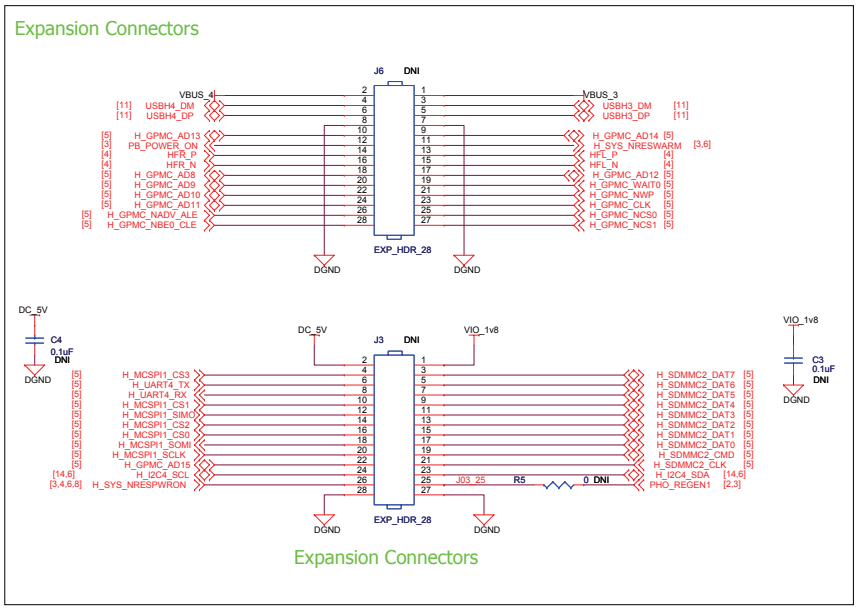
LCD Expansion Connectors (Beagle Legacy)



Camera Sensor Expansion Connector



Expansion Connectors



Expansion Connectors

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Expansion Connectors	
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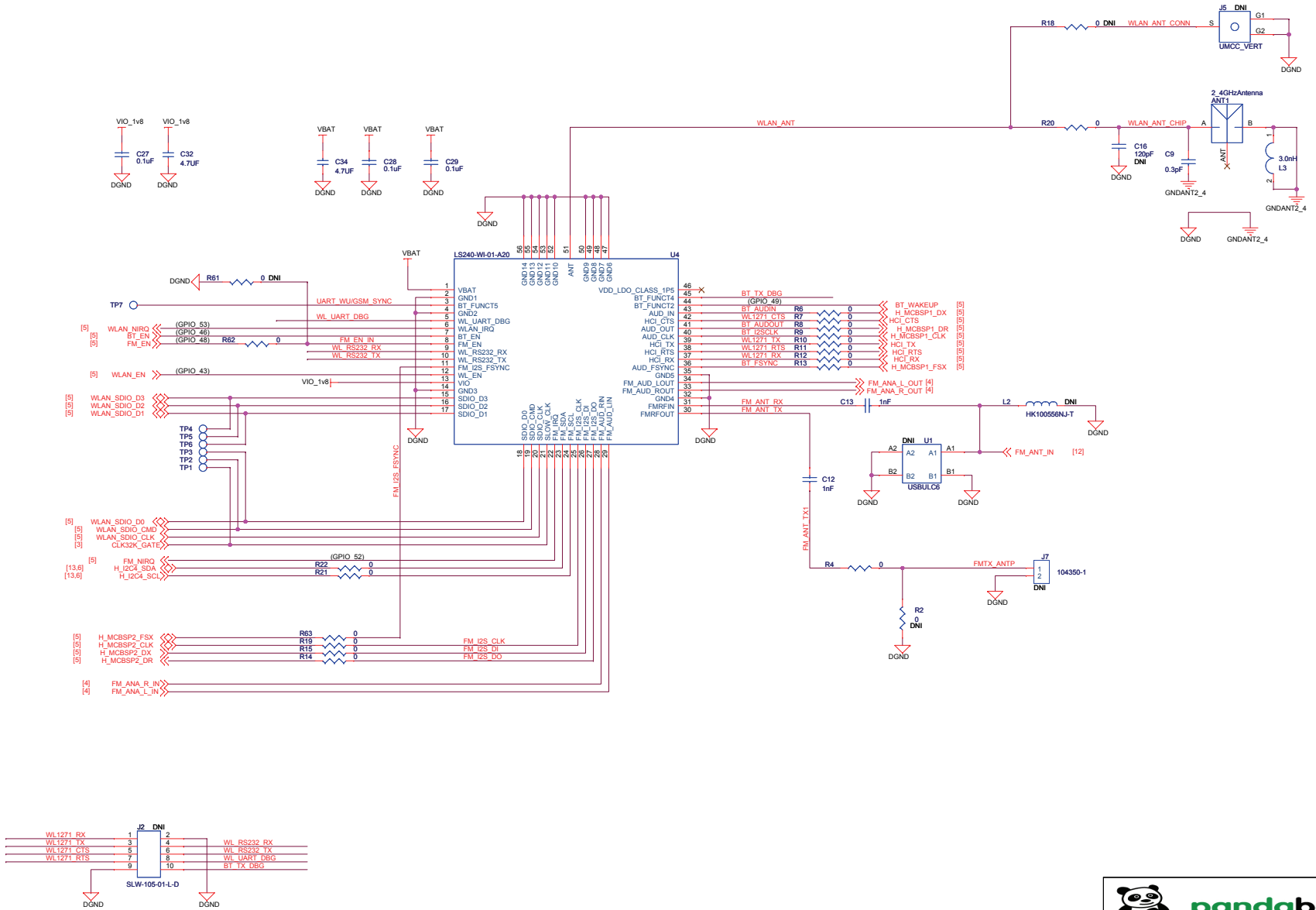

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OMAP4430 Panda Board, 8-Layer
WLAN/Bluetooth/FM

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