CM-T3517 PCN-AM01052012

Product Change Notice

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1. PRODUCT CHANGE NOTICE

Overview

CM-T3517 CoMs are scheduled to move to a new board revision at Q2-2012.

The following describes the hardware changes introduced with the new board revision.

Board Revision Notes

1. Older CM-T3517 board revisions supported only a NAND based onboard storage. Revision 1.2 of the board supports additional onboard storage options:
    a. Onboard micro-SD slot (Precludes onboard NAND storage option)
    b. Onboard NAND storage (Precludes onboard micro-SD slot option), same as with older board revisions.
2. WIFI and BLUETOOTH circuitry has been changed to support a different WIFI/BT combo SiP (Texas Instruments WiLink6.0 based SiP)
3. Placement of several board components has been changed to allow integration of the above changes.

Mechanical implications

1. Several board components are placed differently compared to older board revisions. Refer to Figures 1-4 for high level comparison.
2. Several new components have been added to the board. Refer to Figures 1-4 for high level comparison.
3. Board dimensions have not changed when using the NAND storage option as in previous board revisions.
4. When onboard micro-SD storage option is used, the top side highest component is the micro-SD slot (less than 2.3mm when the micro-SD door is closed). Other board dimensions remain unchanged.

Figure 1 CM-T3517 revision 1.2, Top View

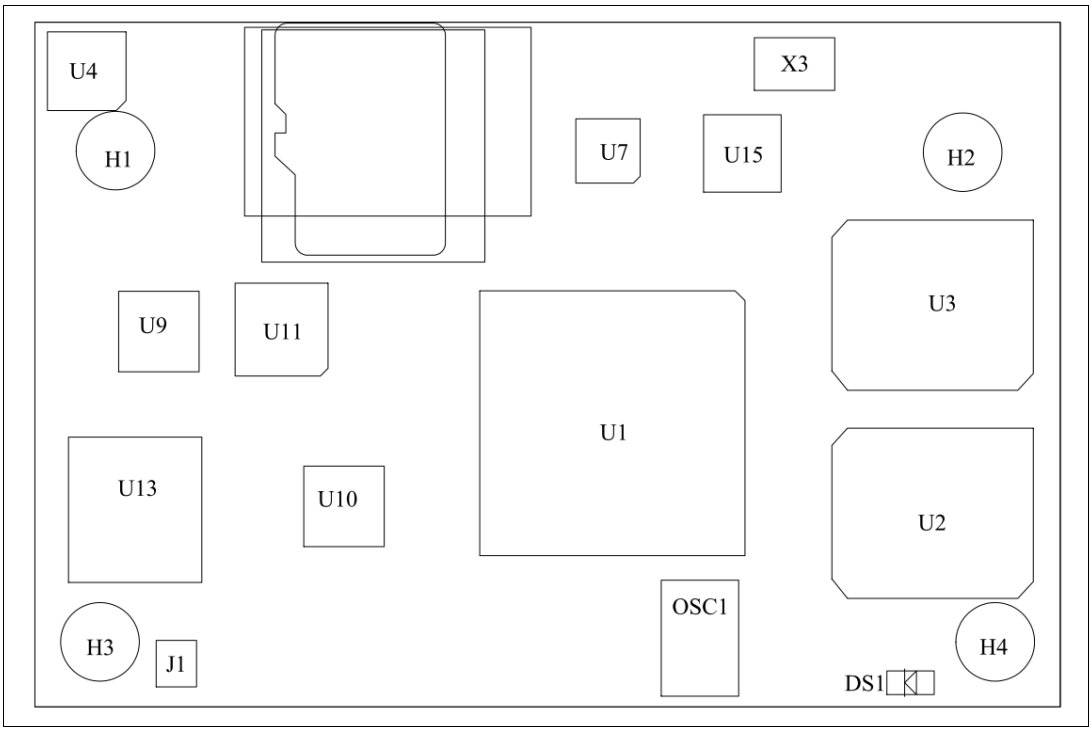


Figure 2 CM-T3517 previous revisions, Top View

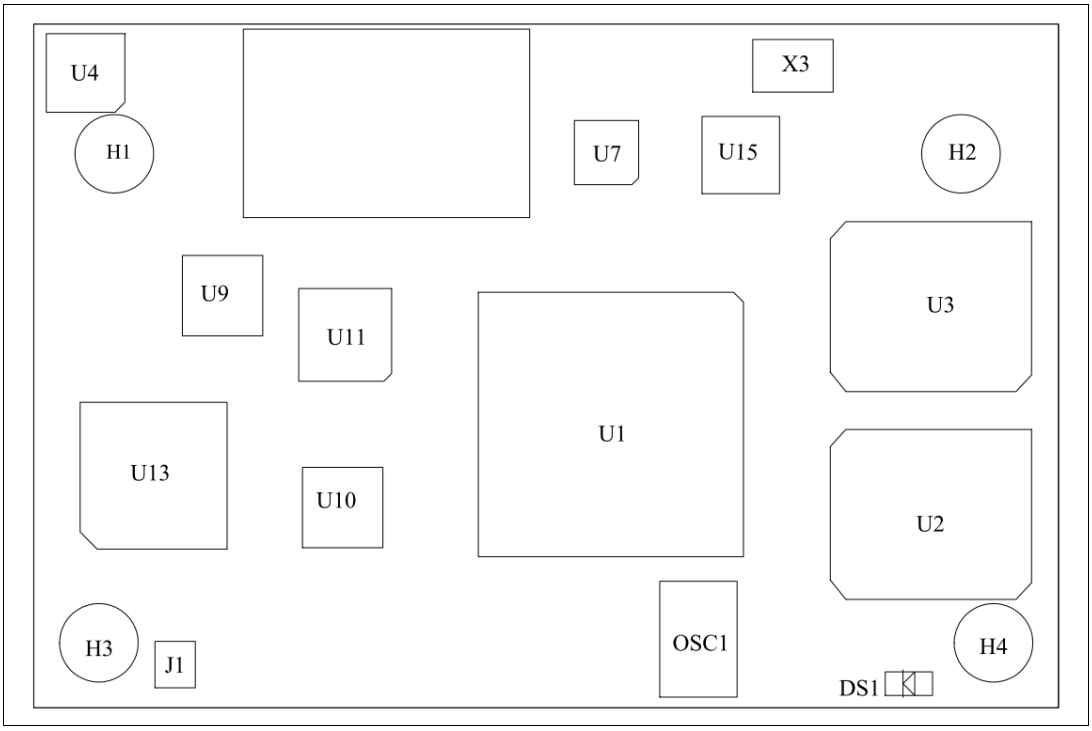


Figure 3 CM-T3517 revision 1.2, Bottom as seen from top (X-Ray)

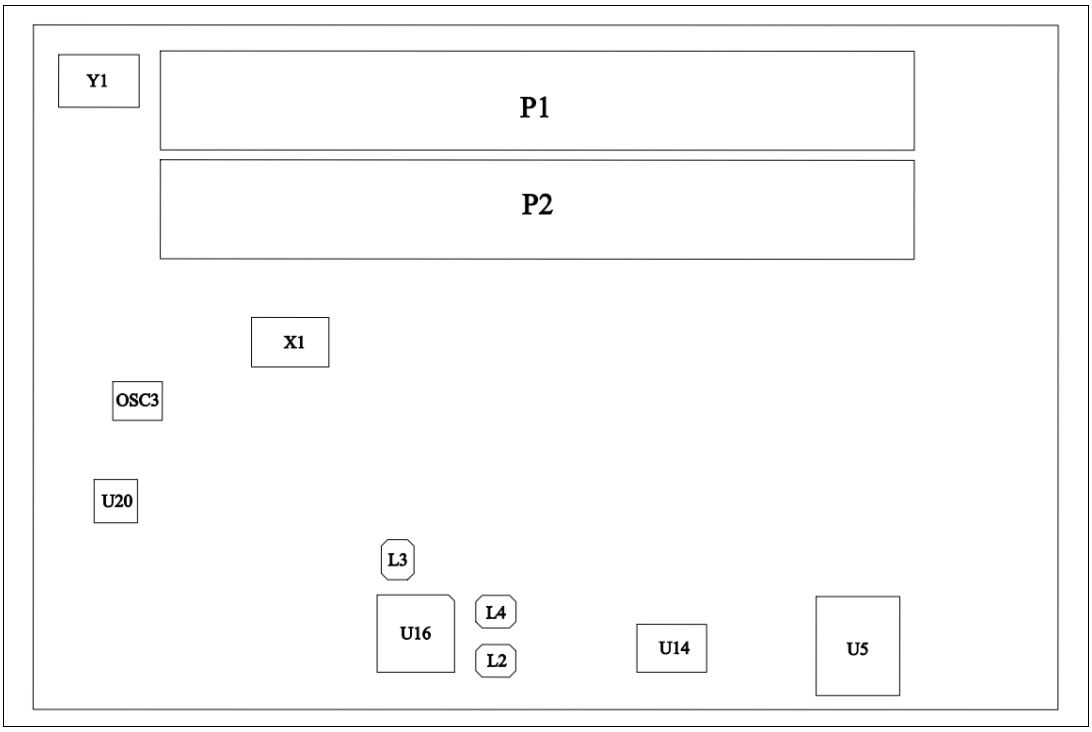
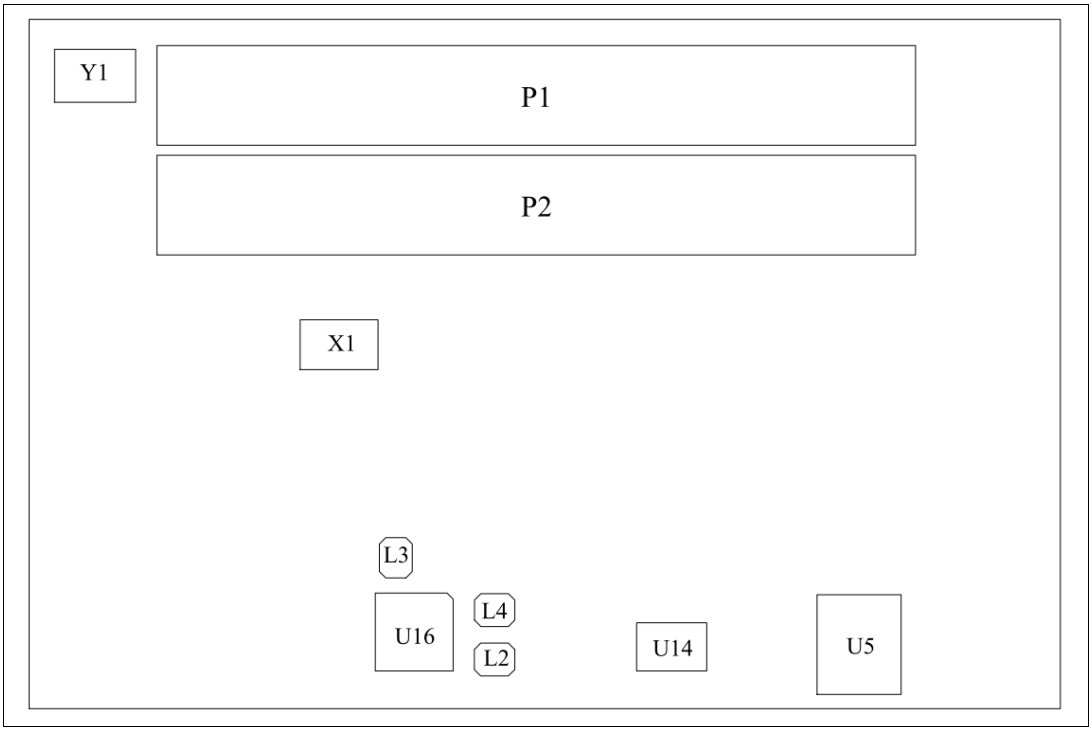


Figure 4 CM-T3517 previous revisions, Bottom as seen from top (X-Ray)



Software and Hardware implications

1. CM-T3517 UART2 interface and several GPIO signals are now occupied by the WIFI/BT SiP Bluetooth interface and other WIFI/BT functions. The table below summarizes the changes to CM-T3517 baseboard interface pins and signals related to the WIFI/BT SiP introduction. Customer hardware (carrier board) and software design must take the following modifications into account. **This change does not affect boards where option "W" is not populated.**

Table 1 Baseboard interface pins and signals affected by "W" option modification.

Affected Pin #	Affected Signals (at affected pin)	Alternative pin for each affected signal	Affected Pin Notes
P1-32	McBSP3_CLKX	P2-29 previous availability restrictions apply	Pin is not available at baseboard interface with "W" option populated
	UART2_TX	Not available	
	GPIO142	Not available	
P1-33	McBSP3_DX	P2-32 or P1-25 previous availability restrictions apply	Pin is not available at baseboard interface with "W" option populated
	UART2_CTS	Not available	
	GPIO140	Not available	
P1-34	McBSP3_FSX	P2-27 previous availability restrictions apply	Pin is not available at baseboard interface with "W" option populated
	UART2_RX	Not available	
	GPIO143	Not available	
P1-35	McBSP3_DR	P2-34 previous availability restrictions apply	Pin is not available at baseboard interface with "W" option populated
	UART2_RTS	Not available	
	GPIO141	Not available	
P1-58	GPMC_nCS5	Not available	Pin is not available at baseboard interface with "W" option populated
	nDMAREQ2	P1-81 previous availability restrictions apply	
	GPIO56	Not available	
P1-25	UART2_CTS	Not available	Other signals related to this pin remain unchanged
P2-18	JTAG_EMU0	Available	WIFI/BT functionality in JTAG operation modes is not available
	GPIO11	Not available	
P2-20	JTAG_EMU1	Available	WIFI/BT functionality in JTAG operation modes is not available
	GPIO31	Not available	

2. The onboard micro-SD storage option precludes MMC1 baseboard interface availability. The table below summarizes the modifications to the CM-T3517 baseboard interface pins and signals related to the new onboard micro-SD storage option. Customer hardware (carrier board) and software design must take these modifications into account. **This change does not affect boards where the micro-SD storage option (NS8 or NS0) is not populated.**

Table 2 Baseboard interface pins and signals affected by onboard micro-SD options

Affected Pin #	Affected Signals (at affected pin)	Alternative pin for each affected signal	Affected Pin Notes
P1-12	MMC1_CLK	Not available	Pin is not available at baseboard interface with "NS0/NS8" option populated
	GPIO120	Not available	
P1-13	MMC1_CMD	Not available	Pin is not available at baseboard interface with "NS0/NS8" option populated
	GPIO121	Not available	
P1-15	MMC1_DAT0	Not available	Pin is not available at baseboard interface with "NS0/NS8" option populated
	SPI2_CLK	P2-45 previous availability restrictions apply	
	GPIO122	Not available	
P1-16	MMC1_DAT1	Not available	Pin is not available at baseboard interface with "NS0/NS8" option populated
	SPI2_SIMO	P2-39 previous availability restrictions apply	
	GPIO123	Not available	
P2-4	MMC1_DAT2	Not available	Pin is not available at baseboard interface with "NS0/NS8" option populated
	SPI2_SOMI	P2-49 previous availability restrictions apply	
	GPIO124	Not available	
P1-18	MMC1_DAT3	Not available	Pin is not available at baseboard interface with "NS0/NS8" option populated
	SPI2_CS0	P2-47 previous availability restrictions apply	
	GPIO125	Not available	
P1-9	MMC1_DAT4	Not available	Other signals related to this pin remain unchanged
P1-17	MMC1_DAT5	Not available	Other signals related to this pin remain unchanged
P1-21	MMC1_DAT6	Not available	Other signals related to this pin remain unchanged
P1-23	MMC1_DAT7	Not available	Other signals related to this pin remain unchanged
P1-10	VCC_MMC	Not available	Pin is not available at baseboard interface with "NS0/NS8" option populated