CM-T3730 PCN-AM20022012

Product Change Notice

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1. PRODUCT CHANGE NOTICE

Overview

CM-T3730 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. CM-T3730 board revisions before rev1.2 supported only a micro-SD based onboard storage device. Revision 1.2 of the board supports additional onboard storage options.
    a. CM-T3730 board rev1.2 supports a 128MB or a 512MB onboard NAND flash as the main onboard storage device (N512 or N128 product options). The N128/N512 options preclude the onboard micro-SD slot (N8 and N0) options. When N128 or N512 options are used, an additional MMC/SD interface is available at the baseboard interface (MMC/SD1).
    b. Onboard micro-SD slot (Precludes onboard NAND storage option N512/N128), 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 micro-SD storage option as in previous board revisions.

Figure 1 CM-T3730 revision 1.2, Top View

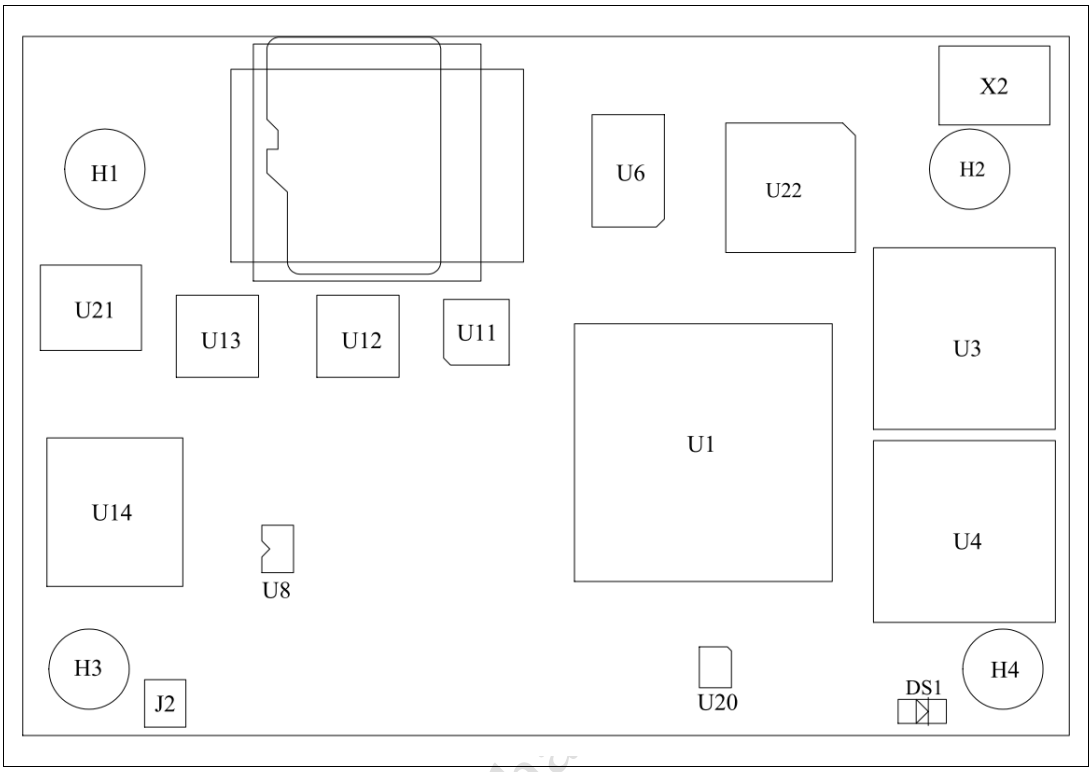


Figure 2 CM-T3730 previous revisions, Top View

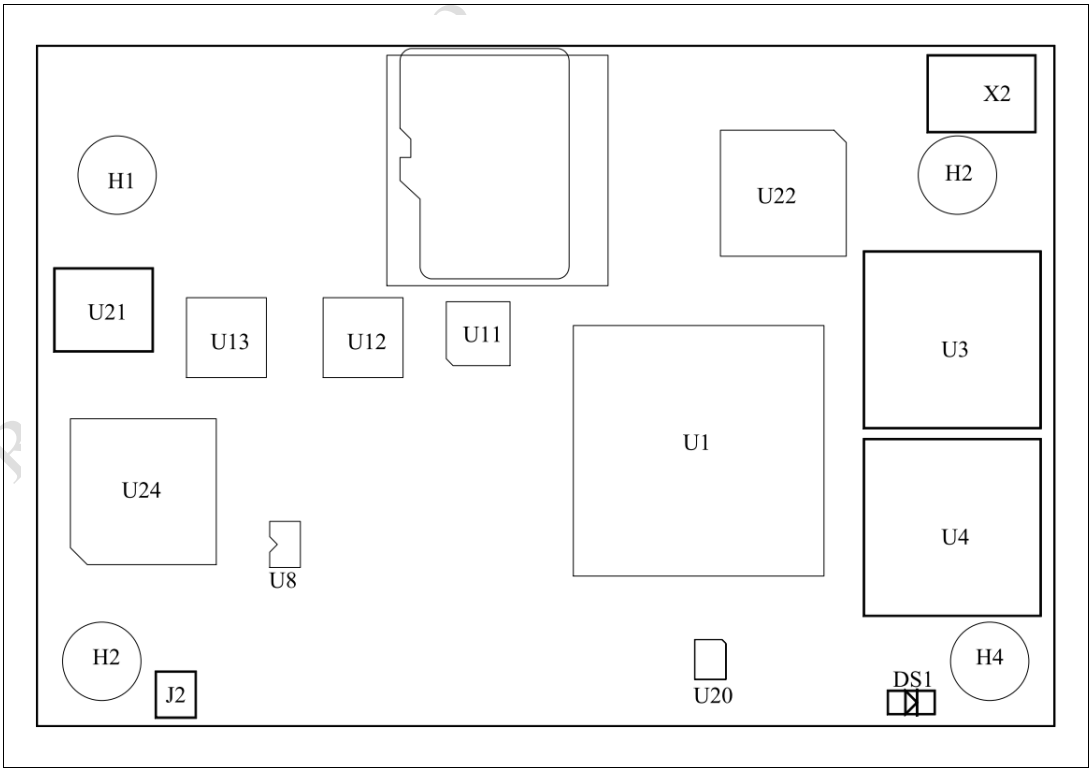


Figure 3 CM-T3730 revision 1.2, Bottom as seen from top (X-Ray)

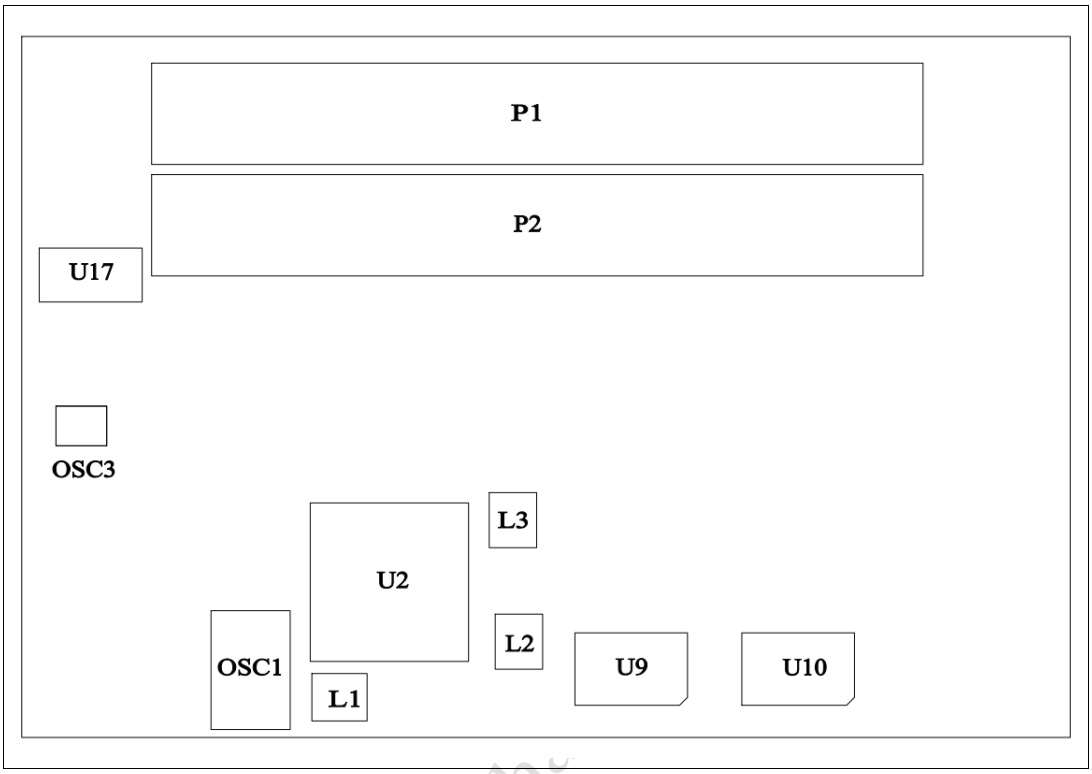
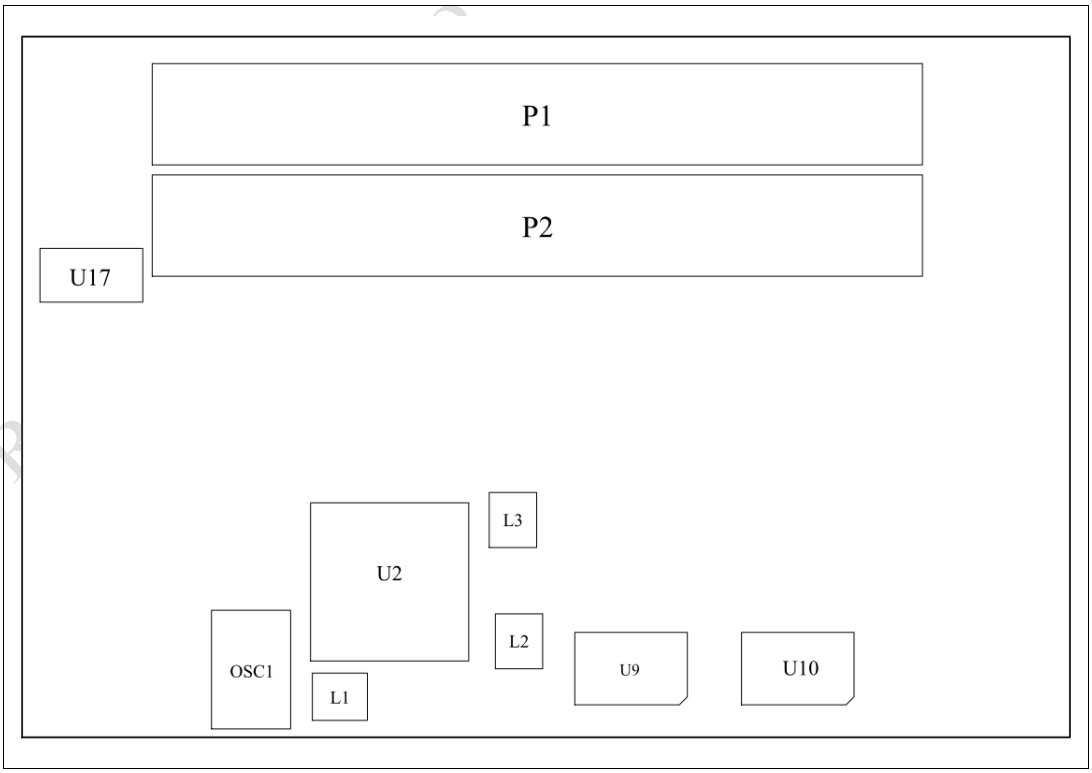


Figure 4 CM-T3730 previous revisions, Bottom as seen from top (X-Ray)



Software and Hardware implications

1. CM-T3730 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-T3730 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	Pin is not available at baseboard interface with "W" option populated
	UART2_TX	Not available	
	GPIO142	Not available	
P1-33	McBSP3_DX	P2-32	Pin is not available at baseboard interface with "W" option populated
	UART2_CTS	Not available	
	GPIO140	Not available	
P1-34	McBSP3_FSX	P2-27	Pin is not available at baseboard interface with "W" option populated
	UART2_RX	Not available	
	GPIO143	Not available	
P1-35	McBSP3_DR	P2-34	Pin is not available at baseboard interface with "W" option populated
	UART2_RTS	Not available	
	GPIO141	Not available	
P1-58	LCD_D0	P2-95	Pin is not available at baseboard interface with "W" option populated
	UART1_CTS	P1-27	
	GPIO70	Not available	
P1-68	LCD_D1	P2-97	Pin is not available at baseboard interface with "W" option populated
	UART1_RTS	P1-29	
	GPIO71	Not available	
P1-113	LCD_D2	P2-100	Pin is not available at baseboard interface with "W" option populated
	GPIO72	Not available	
P1-118	LCD_D3	P2-99	Pin is not available at baseboard interface with "W" option populated
	GPIO73	Not available	
P1-54	MMC2_DAT4	Not available	Pin is not available at baseboard interface with "W" option populated
	MMC2_DIR_DAT0	Not available	
	MMC3_DAT0	P1-120	
	GPIO136	Not available	

2. The onboard NAND storage option enables MMC/SD1 baseboard interface availability. The table below summarizes the modifications to the CM-T3730 baseboard interface pins and signals related to the new onboard NAND storage option. Customer hardware (carrier board) and software design must take these modifications into account. **This change does not affect boards where the NAND storage option (N512 or N128) 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
P1-10	N.C.	None	These pins are available for MMC/SD1 interface with new board revision. MMC/SD1 is only available when NAND storage is used onboard CM-T3730.
P1-12	N.C.	None	
P1-13	N.C.	None	
P1-15	N.C.	None	
P1-16	N.C.	None	
P1-18	N.C.	None	
P2-4	N.C.	None	