

# UTMC Errata Sheet

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## UT80CXX196KD (JD02X) External Timer2 Reset Functionality

### Anomaly:

There exists an anomaly with the “A,” “B,” and “C” revisions of the JD02 die (UT80CXX196KD) where the external Timer2 reset function is not edge sensitive. The industry standard 80C196KD specifies that a rising edge on an external Timer2 reset pin clears Timer2. The current design of the UT80CXX196KD holds Timer2 in a reset state whenever an active external Timer2 reset pin is high. In order to use an external Timer2 reset source with the UT80CXX196KD, the user must pulse the active Timer2 reset signal (Port2 pin 4, or HSI pin 0) so that it transitions from low-high-low.

### Background:

The UT80CXX196KD has three methods available to the user for resetting Timer2. These reset methods include software, the HSO Module, and hardware. For users who require a hardware or external reset source on Timer2, they can use either pin 4 of IOPORT2 or pin 0 of the High Speed Input Module. To use IOPORT2.4 as the external Timer2 reset source, the user must set the T2RST\_ENA bit in the IOC0 SFR (IOC0.3) and clear bit 5 of IOC0 (IOC0.5). To use the High Speed Input Module as the external Timer2 reset source, the user must set the T2RST\_ENA bit in the IOC0 SFR (IOC0.3), and set bit 5 of IOC0.

Once the external Timer2 reset source is selected and enabled, the user supplies an external signal to the selected Timer2 reset pin to clear the Timer. However, in order to reset Timer2 and allow it to continue counting from 0000h the external reset signal must be pulsed. If the external reset signal is high, Timer2 remains in reset and will not begin counting until the reset signal is removed (in its low state).

### Anomaly Solution:

UTMC plans to redesign the UT80CXX196KD to correct the external Timer2 reset functionality allowing the reset to only occur on the rising edge of the reset signal. The D revision of the UT80CXX196KD JD02 die will be available in the 3rd quarter of 2000. If you are using the JD02A, JD02B, or JD02C versions of the UT80CXX196KD you must implement a pulsed reset signal on the external Timer2 reset pin.