

OSBDM Errata

Version 2.0 – August 2011

CodeWarrior for Microcontrollers v10 brings in several new features, and the Open-Source BDM firmware found on some evaluation boards may need to be updated to take advantage of these additional features. This document describes how to determine which version of OSBDM is on your board, and how to update it.

OSBDM version 30.7 is the latest version as of this writing, and is required when using Linux or 64-bit platforms. Also TWR-MCF51CN boards sold before May 2010 need to be updated to OSBDM version 20.1 or later to work with CW10. OSBDM version 30.7 is backwards compatible with previous versions of CodeWarrior. You can always find the latest drivers and firmware at <http://www.pemicro.com/osbdm>

OSBDM Firmware Updater Program:

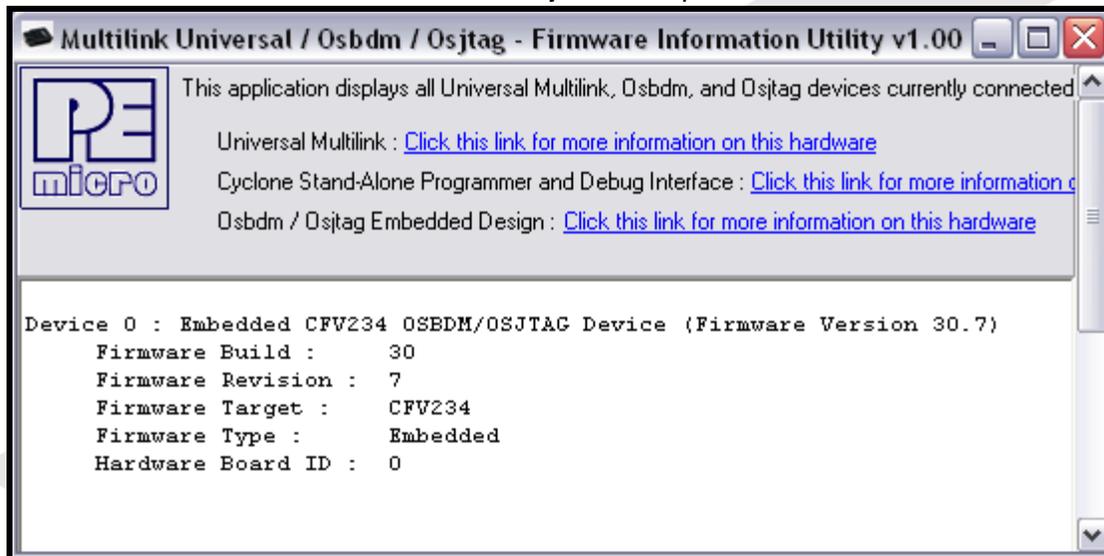
First download the latest **P&E Firmware Updates and Recovery** program which can be found at <http://www.pemicro.com/osbdm>

It will install 3 programs onto your computer that will assist in updating OSBDM

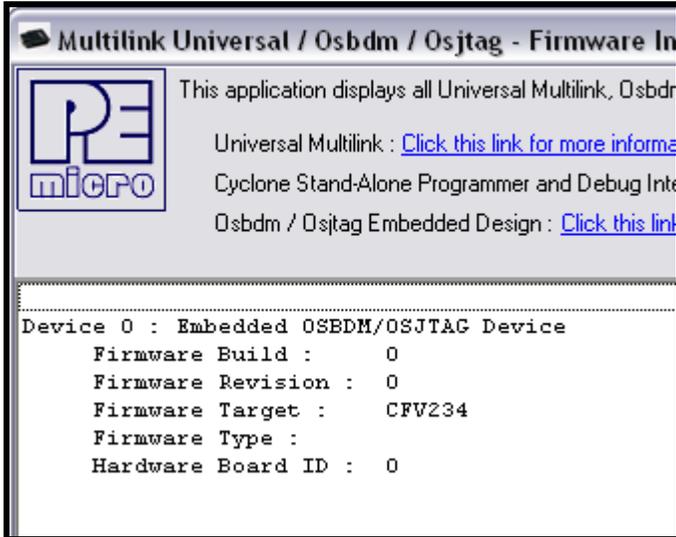
- P&E Firmware Information Utility
- P&E Firmware Recovery Utility
- P&E Firmware Updater Utility

OSBDM Version:

Run the **P&E Firmware Information Utility**. It will report the current OSBDM version on your board



If you see the following message, then you have an OSBDM version prior to 20.1.



If you see the following message, then OSBDM is not being properly detected. Make sure you have the latest drivers, which can be found at <http://www.pemicro.com/osbdm>



Updating OSBDM Firmware:

Make sure your tower board is plugged in, and run the **P&E Firmware Updater Utility** to use the OSBDM boot loader to upgrade to the latest OSBDM version.

Under “Select Hardware Type” make sure OSBDM/OSJTAG is selected. It should automatically detect your board settings and fill out the rest of the fields automatically and select the latest OSBDM version available for your hardware. The result for a TWR-MCF52259 board would be:



Click on “Update Firmware” to update the firmware. It will prompt you to disconnect the USB cord from your computer, and then short the JM60 boot loader jumper header for your particular board. It is the jumper labelled **BTLD** on the silk screen. For example, on the TWR-MCF52259 it is J20. On the TWR-MCF51CN it is J16. On the MCF52259DEMO it is J5. Then re-connect the board to your computer.

The firmware will then be updated on your board. When it is finished, it will prompt you again to disconnect the USB cable, remove the jumper, and then re-connect the board again. OSBDM is now updated.

Bootloader Errata:

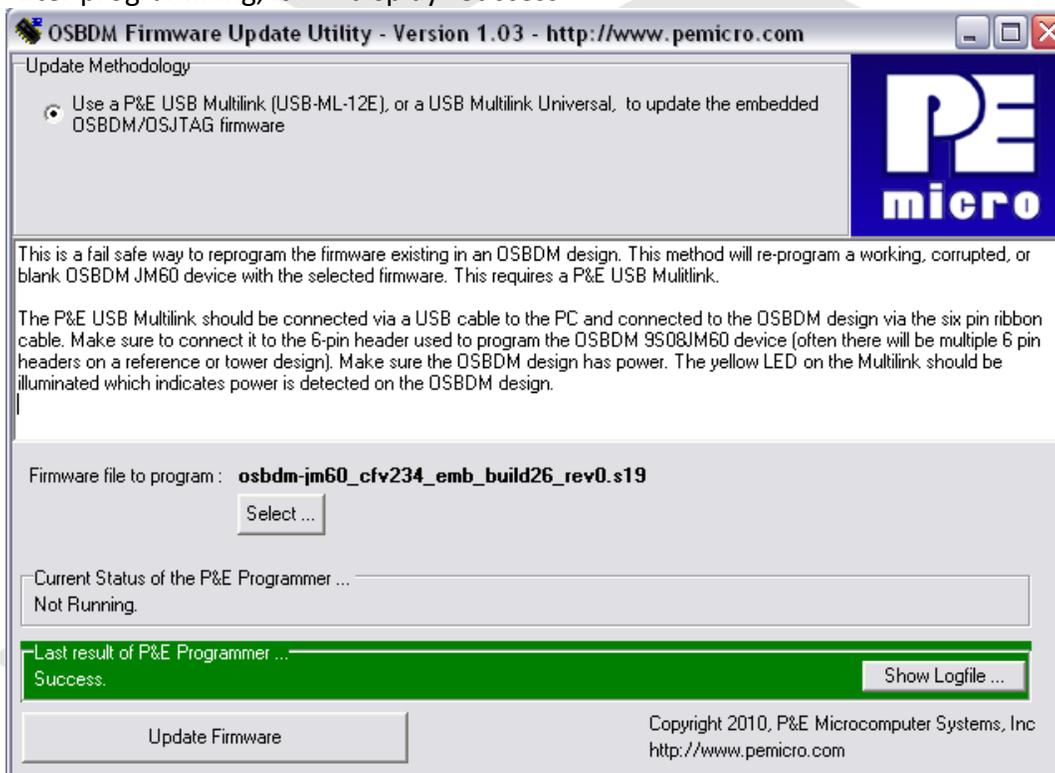
OSBDM releases prior to 20.1 have a bug in the OSBDM bootloader. The OSBDM firmware can only be updated one time if using the bootloader. During that initial upgrade, the bootloader is corrupted, and later upgrades to future versions are not possible using the above steps.

A work-around if you wish to upgrade again is to program the OSBDM firmware using a P&E USB Multilink tool for S08/V1 devices. This will allow you to update to the bootloader section of the OSBDM firmware, and thus fix the bootloader bug. Use the 6-pin header footprint labeled **OS_BDM** to update the JM60 using this method.

This bootloader bug only affects MCF52259DEMO, TWR-MCF52259, and TWR-MCF51CN128 boards sold prior to May 2010.

Open the **P&E Firmware Recovery Utility** and click on the **Select...** button to choose the correct version of OSBDM for your board. For the TWR-MCF52259 and MCF52259DEMO boards, that would be **osbdm-jm60_cfv234_emb_build26_rev0.s19**. For the TWR-MCF51CN128 it would be **osbdm-jm60_cfv1_build26_rev0.s19**

Connect the P&E USB Multilink to the OS_BDM header on the board, and then click on Update Firmware. After programming, it will display "Success"



Thank you again for your interest in Freescale solutions!