The firmware for this product now utilizes the open source version created by pgo. You can find detailed documentation under the USBDM JS16 minimal version sections.

1) Install Freescale's CodeWarrior for HC(S)08 microcontrollers v6.1 (or newer for S08 devices), CodeWarrior HCS12 v4.6 (or newer for S12 devcies) or the Eclipse version of Codewarrior on the host computer. Free versions can be found at http://www.freescale.com/codewarrior/downloads.

2) Insert the WTUSBDML cd and run the USBDM_4_12_x_Win.msi installation file. This will auto detect your Codewarrior installation and install the necessary files, device programmers and documentation.

3) From the CD, install the USB drivers by running one of the following files:

    1. USBDM_Drivers_x_x_x_Win7_x32.msi – for 32-bit Windows 7 machine
    2. USBDM_Drivers_x_x_x_Win7_x64.msi – for 64-bit Windows 7 machine
    3. USBDM_Drivers_x_x_x_WinXP_x32.msi – for 32-bit Windows XP machine
    4. USBDM_Drivers_x_x_x_WinXP_x64.msi – for 64-bit Windows XP machine
    5. For Linux machines, see the included software installation document.

4) Carefully open the plastic enclosure and set JP2 for the proper target voltage on the WTBDMJS16. Connect ribbon cable to J2 for the standard Freescale debug pin-out. Connect ribbon cable to J4 for custom pin-out. The options highlighted in red are the default configurations.
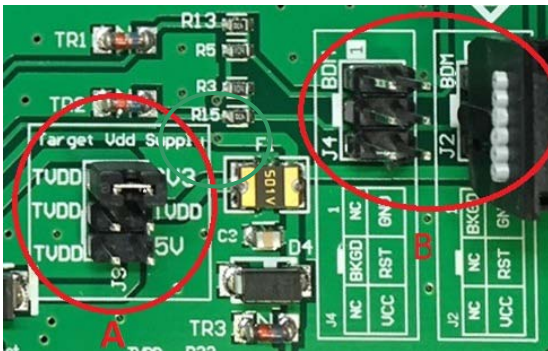
J3 – target voltage	J2 / J4 BKGD config
3.3V to target	J2 - standard
Provided by Target	J4 – BKGD on pin#1 (custom)
5.0V to target	

Note: The WTUSBDML is an electrostatic sensitive device and handling precautions should be observed.

5) After a few minutes, the drivers should be installed and then select "finish".

6) Connect the WTUSBDML to the BDM program/debug header on the target PCB.

7) Create or open a project using Freescale's CodeWarrior tools. For Codewarrior eclipse versions, see included document, "codewarrior Eclipse v10"

8) Select the appropriate target as "TBDML", "HCS08 Open Source BDM" or "Cfv1 Open Source BDM" for a S12, S08 or Cfv1 device respectively. This can also be changed in the project manager window.

9) Create and compile the target firmware.

10) Launch the Debugger

11) "HCS08 Open Source BDM" or "Cfv1 Open Source BDM" for a S08 or Cfv1 device respectively. When starting the debugger you will be presented with a new dialog box. After making your selections and closing this dialog box, debugging will proceed as usual.

The software controlled Vdd options are not supported with the current WTUSBDML *hardware. See step 4 for Vdd options.*