**WT** Witztronics

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Designs

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

2) Insert the WTBDMJS16 cd and run the USBDM_4_12_x_Win.msi installation file. This will auto detect your Codewarrior installation and install the necessary drivers, programmers and documentation.

3) From the included 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 documentation installed in the USBDM folder.

4) The latest WTBDMJS16 provides a 5V output to the target board. If your target board requires a supply other than 5V, then DO NOT connect the BDM pin#6 on the target board. Damage to the WTBMDJS16 or the target board may occur if both boards are supplying power to the BDM header.
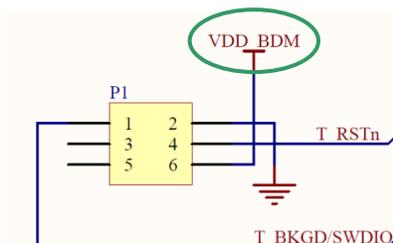
Note: The WTBDMJS16 is an electrostatic sensitive device and handling precautions should be observed.

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

6) Connect the WTBDMJS16 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 installed documentation.

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 WTBDMJS16 *hardware.*