

## ETM JTAG Emulator EJ-Debug for TI ARM7/9/11



- Works with Code Composer Studio® IDE
  - Supports ARM7TDMI® ARM9TDMI® ARM11\*
  - ARM®/Thumb® state debugging supported
  - Set hardware breakpoints on address and status
  - Unlimited software breakpoints
  - Clear, read and program FLASH
  - 512 K-step ETM trace including ETB
  - Available ETM trace up to 200MHz clock
  - 1.8V up to 3.6V target voltage support
  - Perfect for field debugging or maintenance.
    - USB bus powered - No AC adapter required.
    - Pocket sized, 86x101x23mm
  - JTAG pod button runs User macro scripts
    - Perfect for hardware test, small run programming and automatic field upgrades.
  - Fast USB PC interface.
  - EJ-Debug includes Watchpoint® for Windows®
- \* Multi-core debugging available as an optional feature.

### Specifications

<b>Target CPU</b>	ARM11 OMAP2430, OMAP2420, OMAPV2230, etc. ARM1156, ARM1136, etc. ARM9 OMAP17xx, OMAP16xx, OMAP15xx, OMAP59xx OMAPV2230, OMAPV1030, OMAP-DM270, OMAP850, OMAP7xx, etc. ARM9TDMI, ARM9TDMI-S, ARM910T, ARM920T, ARM940T ARM9E, ARM946E, ARM966E, ARM922, ARM925, ARM926, etc. ARM7 TMS320, TMS470, etc. OMAP-DM270, OMAP850, OMAP7xx ARM7TDMI, ARM7TDMI-S, ARM710T, ARM720T, ARM740T, etc.
<b>Clock</b>	200 MHz Maximum CPU clock
<b>Target Vcc</b>	Target Vcc from +1.8 V to 3.6 V
<b>Memory &amp; I/O</b>	Entire space is available to the User
<b>Interrupts</b>	Both internal and external interrupts are available to user
<b>Breakpoints and Break Options</b>	Hardware breakpoints 2 hardware breakpoints in ARM7 and ARM9)* Instruction execution address, memory access, data can be specified. 7 hardware breakpoints(ARM11): Instruction execution address(3 points), memory access(2 points), others(2 points) Unlimited software breakpoints Other break options: Forced break from Debug Monitor *ARM7 & 9, Step Over, Step Out, & Run to Cursor functions use one core hardware breakpoint.
<b>ETM Trace + ETB Embedded Trace Macro cell</b>	200Mhz clock support 512 K-step trace memory The following conditions can be specified: Set area start and stop trace triggers Time stamp capability ETB capability
<b>Flash Memory</b>	JTAG target FLASH read, test, clear and programming functions

## Configuration

### Hardware

The EJ-Debug ETM for ARM7/9/11 system consists of a ARM7/9/11 JTAG pod with a USB to PC interface. This JTAG emulator is for ARM7/9/11 only.

### Software

Watchpoint®, a high-level language debugger for Windows® Vista\*/XP/2000, is included with the EJ-Debug for ARM7/9/11.

### Media

CD-ROM

### Supported Tool Chains

Watchpoint supports the following compilers and OS

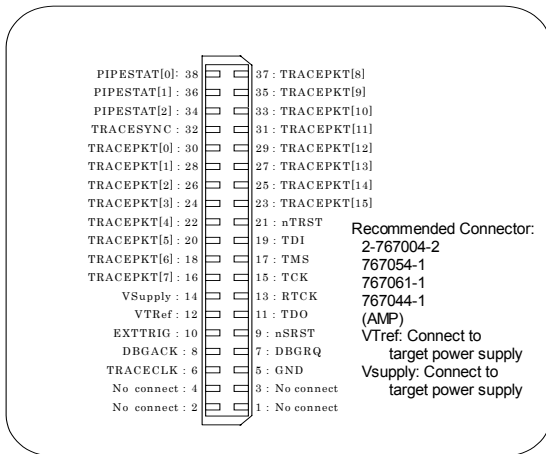
#### Compilers

TI Code Composer Studio®  
 ARM: ADS, SDT, RVCT  
 Metaware: High C/C++/EC++ for ARM  
 Green Hills: GHS  
 GAIO: XCC-V  
 GNU:  
 IAR: EWARM

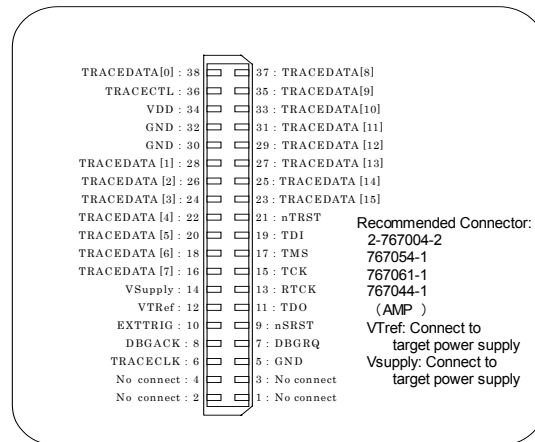
#### Supported OS

Linux Windows CE™ Symbian OS™  
 NORTI G-OS PrKERNEL  
 VxWorks ITRON Othe

## Target JTAG Connections

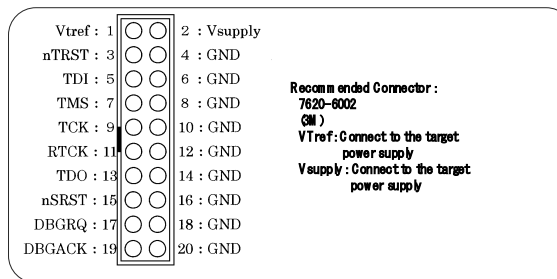


Single ETM Target connector pins for ARM7/9 - Top View



Single ETM connector pins for ARM11 – Top View

JTAG Connector pins – Top View



## Ordering Information

**Part No.** **Description**  
 EJD7201E JTAG Emulator, EJ-Debug ETM for ARM7/9/11 with USB host interface. Includes Watchpoint® debugger for Windows®XP / 2000

### System requirements for Watchpoint® Debugger:

OS	Memory	Hard Disk
Windows XP/2000	64 Mbytes	25 Mbyte for installation
Windows Vista	512 Mbytes	25 Mbyte for installation

**Notes:**

- \* Vista (32-bit version): driver software update is required.
- \* Vista (64-bit version): not supported by current version of Watchpoint.
- \* XP (64-bit version): driver software update is required.

**Current version of Watchpoint does not support Windows Vista. But an interim version is available now. Please contact your local Rep/Distributor.**

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