

EJ-Debug for IXP4xx In-Circuit Emulator



- ❑ Supports Intel® IXP4xx Network Processor
- ❑ Supports CPU maximum clock speed
- ❑ ARM/Thumb® state code debugging in Watchpoint®
- ❑ Hardware breakpoint can be set for address/data/status conditions (Max 4 points: 2 instruction BPs, 2 access BPs)
- ❑ Unlimited software breakpoints
- ❑ Branch trace capability
- ❑ Performance measurement
- ❑ Download to Flash memory
- ❑ View/modify internal registers
- ❑ Watchpoint®, powerful C/C++ source language debugger, is included
- ❑ USB host interfaces supported for high-speed communication with host computer. EJ-Debug/JTAG is powered by the USB cable connected to the Host PC.

Specifications

Target CPU	Intel® IXP435/425/422/421/420, IXC1100 Plans to support these: Intel® IXP465/460
Target Vcc	Vcc= 3.0 ~ 3.6 VDC (3.3 V output signals from ICE)
Target Connection	EmbeddedICE interface (14-pin header), Multi-ICE interface (20-pin header)
Memory and I/O	Entire space is available to user
Interrupts	Both internal and external interrupts are available to user
Breakpoints and Break Options	Execution instruction address, memory access, data breakpoints can be specified. Max 4 Hardware breakpoints available (*1): <ul style="list-style-type: none"> • 2 instruction execution breakpoints • 2 data access breakpoints Unlimited software breakpoints Other break options: <ul style="list-style-type: none"> • Forced break from Debug Monitor <i>Note *1: When 2 execution breakpoints are in use, some limitations apply during Step Over, Step Out, Come To.</i>
Branch Trace	Records Branch instruction history, and trace instructions until break
Performance Analyzer	Measures cache hit rate, and number of execution cycle for one target instruction
Download to external Flash memory	Download to external Flash ROM capability

Configuration

The EJD/IXP4xx provides a high level of software debugging from your PC or notebook computer. It is a development tool for designs containing an Intel® IXP4xx Network Processor with a JTAG interface for debugging. The EJD/ IXP4xx unit connects to the JTAG port connector on the target board.

Hardware

A EJ-Debug /IXP435/425/4xx emulation system consists of the IXP425 Probe Set with USB that connects Probe to your Host PC(Windows-XP, or Vista OS based).

Probe Set

The Probe Set consists of the IXP4xx Probe Unit, USB cable, JTAG Cable A, JTAG Cable B, and AC Adapter.

USB

USB interface is used for high-speed communication between the Host PC and the EJD/IXP4xx JTAG unit using the WATCHPOINT debugger. USB cable is also used to provide power to the EJ-Debug/IXP4xx hardware.

System requirements for WATCHPOINT® Debugger:

OS: Windows-XP, and Windows Vista

Memory: 64 Mbyte recommended

Hard Disk: 25 Mbyte for installation

Software

Watchpoint®, a high-level language debugger for Windows® 98/Me/NT/2000/XP, is included with the IXP425 Probe Set.

Media:

CD-ROM

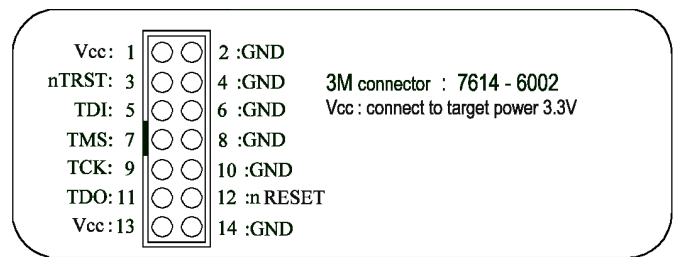
Supported OS

Linux

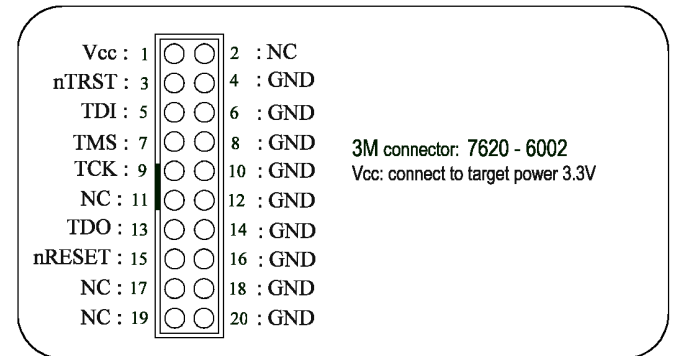
Supported Tool Chains:

WATCHPOINT supports the following compilers and real-time OS:
ARM RVS, ADS

Target JTAG ICE Connection



EmbeddedICE interface (JTAG A) connection



Multi-ICE interface (JTAG B) connection

Ordering Information

Part No.	Description
EJD3000E	EJD IXP4xx-E/ WATCHPOINT® IXP435 debugger

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