

EJ-Debug for SH-4A



- ❑ Supports Renesas SH-4A cores
- ❑ Supports H-UDI interface
- ❑ View and modify the internal peripheral registers
- ❑ 3 hardware breakpoints can be set for address, data, and status conditions
- ❑ Unlimited software breakpoints
- ❑ Download to Flash Memory capability
- ❑ Useful for field debugging or maintenance
 - Powered by USB bus(No AC adapter required)
 - Small size(86mm X 101mm X 23mm)
- ❑ Auto-script execution by BATCH button on the hardware unit
 - perfect use in auto-verification of the target on mass production or for updating new versions
- ❑ USB host interfaces for high-speed communication with host computer
- ❑ Sophia's high-level language debugger, Watchpoint®, is included with all Sophia Systems emulators (Windows®98/Me/2000/XP platforms)

Specifications

Target CPU	SH-4A series(SH7770, SH7780), SH7763*1 *1 = Future support
Target Vcc	Vcc 3.3V output
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 address break options: <ul style="list-style-type: none"> • 3 hardware breakpoints • Unlimited software breakpoints (invalid for ROM area) Execution instruction address, memory access, data break can be specified. Other break options: <ul style="list-style-type: none"> ▪ Forced break from Debug Monitor
Flash Memory	Download to target external Flash memory

Configuration

The EJ-Debug for SH-4A provides a high level of software debugging from your PC/AT or notebook computer.

Hardware

An EJ-Debug for SH-4A system consists of the SH4 Probe Set with USB host interface.
(EJ-Debug for SH-4A can not be used for other CPUs)

Software

Watchpoint®, a high-level language debugger for Windows®98/Me/2000/XP, is included with the EJ-Debug for SH-4A.

Media:

CD-ROM

Supported Tool Chains:

Watchpoint supports the following compilers and supported OS:

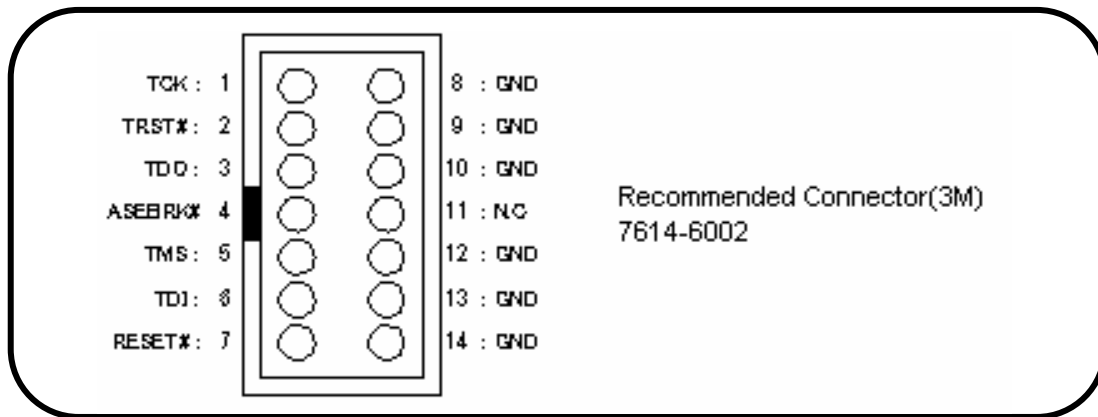
Compiler:

Renesas	SHC
Green Hills	GreenHills SH
GAIO	XCC-V
IAR	EW/S SH
GNU	

Supported OS:

HISH7750	G-OS	
NORTi3	NORTi4	PrKERNEL
Linux		

Target ICE Connections



14-pin H-UDI connector pin assignment(Top View)

Ordering Information

Part No.	Description
EJD4101E	Probe Set, EJ-Debug for SH-4A with USB host interface and Watchpoint® SH4 debugger for Windows®98/Me/2000/XP

System requirements for Watchpoint® Debugger:

OS: Windows98/Me/2000/XP **Memory:** 32 Mbyte (64 Mbyte recommended)
Hard Disk: 20 Mbyte for installation

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