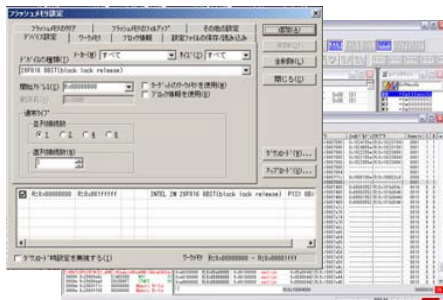


# WATCHPOINT Debugger for EJ-SCT FR-V



This software is used in combination with our JTAG emulator "EJSCT".



- Small size (70mm × 108mm × 17mm)
- Powered by USB bus when using in connection with PC

## Features

- Supports Fujitsu FR-V series
- Supports DSU system debugging
- View and modify the internal peripheral registers
- 6 hardware breakpoints (4 for instruction break, 2 for data break)
- Unlimited software breakpoints
- Supports C/C++ (OS: Windows Vista/7)
- USB2.0 host interfaces for high-speed communication with host computer
- One common hardware unit supports other CPU series by purchasing software license additionally
- Download capability to flash memory
- Writes to on-board and CPU internal flash memory
- Useable as a stand-alone writer. (operate by AC adaptor)
- One-touch automatic script execution via the PLAY button on the unit
- The external terminal setup for executing a script by signal input and detecting the end state of a script externally
- Perfect for use in auto-verification of the target on mass production or for updating new versions

## Specifications

Target CPU	<ul style="list-style-type: none"> <li>FR400series FR401A (MB93401A)、FR403 (MB93403)、FR405 (MB93405)、FR423 (MB93423)、FR461 (MB93461)</li> <li>FR550series FR555 (MB93555)、FR577 (MB93577)</li> </ul>
Target Vcc	VCC 3.3V
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"> <li>6 hardware breakpoints(4 points for instruction break, 2 points for data break)</li> <li>Unlimited software breakpoints(Not available for ROM area)</li> </ul> Other break options: <ul style="list-style-type: none"> <li>Forced break from Debug Monitor</li> </ul>
Branch Trace	Records Branch instruction history Specify Free run and trigger all
Flash Memory	<ul style="list-style-type: none"> <li>Download to target external Flash memory</li> <li>Possible to write to not-supported flash memory when users make a custom program</li> <li>Stand-alone writer capability</li> </ul> Without a command from the computer, users can download to flash memory by recording flash memory writing script into the attached MicroSD. (Two different operation scripts can be recorded)
Cache Profile	Measures cache hit rate

# Configuration



## CD-ROM

※This product was developed as FR-V Series debugger.  
It can not be used for software development of the other CPU.

## Supported Tool Chains:

WATCHPOINT supports the following compilers and OS:  
Please contact Sohwa & Sophia Technologies for the latest tool chain information.

## Compiler:

Fujitsu : SOFTUNE V5, V6  
GNU : GCC

## Support OS:

OS		
REALOS	Linux(axLinux)	Linux(uClinux)



JTAG CABLE types:  
SCP5000: SCP FR-V

# Target ICE Connections

10-pin DSU connector pin assignment(Top View)

NC : 1

NC : 3

GND : 5

GND : 7

GND : 9

2 : UVCC

4 : ERST#

6 : ECV

8 : ED

10 : ECLK

Recommended connector:  
7610-6002 (3M)

UVCC: Connect to target  
power supply, 3.3V

# WATCHPOINT Software License

The WATCHPOINT for EJSCT is a licensed software product. One common hardware unit supports other CPU series by acquiring and registering additional software licenses.

\* The WATCHPOINT license operates with the registered EJSCT hardware unit only. Once the license is registered with one EJSCT unit, users need to purchase a new WATCHPOINT license in order to use with another EJSCT unit.

# Ordering Information

CUSTOMER should PERPARE		Necessary items for Debugger System			
HOST PC	CONNECT WITH PC	JTAG EMULATOR (Hardware)	WATCHPOINT Debugger (software)	JTAG Cable	SUPPORT SERVICE (Software updates)
Windows PC	USB2.0/1.1 CONNECTION	SCD001: EJSCT	SCM0500E: WP DBG for EJS FR-V E	SCP5000: SCP FR-V	SSS010: Sophia Support Service

Items in the box surrounded by bold lines are necessary for Systems.  
The EJSCT JTAG emulator serves as the hardware key when using software license

## System requirements for WATCHPOINT:

OS : Windows Vista/7 (32 bit, 64 bit)  
Memory : Minimum memory requirements are amount of memory recommended for each operating system by the operating systems vendor.  
Hard Disk : 50MB for installation

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\* Product specifications are subject to change without notice.



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Please contact us about the prices