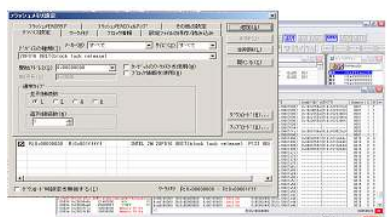




WATCHPOINT Writer for EJ-SCT SH


EJ-SCT is the first Debugger and ROM writer that has the ability to write directly into Flash ROM via H-UDI/AUD port while already installed on the User's board via the JTAG port. Its small size (Width 70mm X 108mm, Height 17mm) and versatility make it a perfect solution for use in the field or on the manufacturing line.



- Supports Renesas Technology SH2/3/4 and SH-Mobile series
- Supports H-UDI/AUD interface and C/C++ high level language
- Special writer for Flash memory
- Useful for field maintenance such as upgrading target firmware.
 - Powered by USB bus (No AC adapter required)
 - Small size(70mm X 108mm X 17mm)
- Automatic script execution via the WRITE button
 - Useful for automatic writing / upgrading in mass production
- USB interface for high-speed communication with host computer

* Please confirm your desired CPU type with Sophia Systems.

Specifications

Supported CPU 	<div>SH2/ SH2-DSPseries (SH7047, SH7083, SH7084, SH7085, SH7086, SH7124, SH7125, SH7144F, SH7145F, SH7146, SH7147, SH7149, SH7615, SH7616, SH7618, SH7619, SH7622),</div> <div>SH-2A series (SH7201, SH7203, SH7205, SH7206, SH7214, SH7216, SH7261, SH7262, SH7263, SH7264, SH7265, SH7268, SH7269, SH726A, SH726B, SH7285, SH7286)</div> <div>SH3-DSPseries (SH7729, SH7729R, SH7709A, SH7709S, SH7705, SH7706, SH7710, SH7712, SH7713, SH7720, SH7727)</div> <div>SH-4 series (SH7750, SH7750S, SH7750R, SH7751, SH7751R)</div> <div>SH-4 A series (SH7723, SH7722, SH7724, SH7730, SH7763, SH7764, SH7770, SH7780, SH7785)</div> <div>SH-Mobile series (SH-Mobile 1(SH7290), SH-Mobile J(SH7294), SH-Mobile V(SH7300), SH-Mobile V2(SH7310), SH-MobileJ3(SH7326)</div> <div>* Please contact Sophia Systems regarding the availability of any other CPU types.</div>
Power Supply	Vcc 3.3V ^{*1}
Flash Memory Write Capability	<div>Memory DUMP capability.</div> <div>Data download from files.</div> <div>Over 300 Flash memory types are supported, including regular software updates to include the latest Flash types. Flash memories not included in the supported list may be supported by describing the writing program instruction. By specifying a batch file to write and by using the write button on the unit (hardware) allows for easy writing. Block erase, chip erase capability.</div> <div> <ul style="list-style-type: none"> ● Execution <ul style="list-style-type: none"> - Program execution - Forced break - Reset - Batch program execution ● Memory <ul style="list-style-type: none"> - Download - Upload - Fill up/check/copy of memory - Clear/fill up/download of Flash memory </div>
Supported Flash manufacturers	<div>Renesas Technology, Intel, MACRONICS, Sharp, Toshiba, NEC, Sanyo, ATMEL, SST, ST, OKI, SPANSION (Fujitsu, AMD), EON</div> <div>*More than 300 Flash memories and memories not included in the list are supported by describing the writing program instruction.</div> <div>* Please contact Sohwa & Sophia Technologies regarding any other Flash types that are not listed in the above.</div>

NOTE Windows XP Professional / Vista/ 7(32bit/64bit) are supported.

If user wants to use Debugger, please purchase WATCHPOINT DEBUGGER.

Contact Sohwa & Sophia Technologies if you have additional Windows OS support questions.

*1. 5v I/O can support if user use option cable for SH-2/SH-2A series

Configuration



CD-ROM



JTAG CABLE types:

SH-4/SH-4A (SCP4100)

SH2/SH-2A/SH3 (SCP4000)

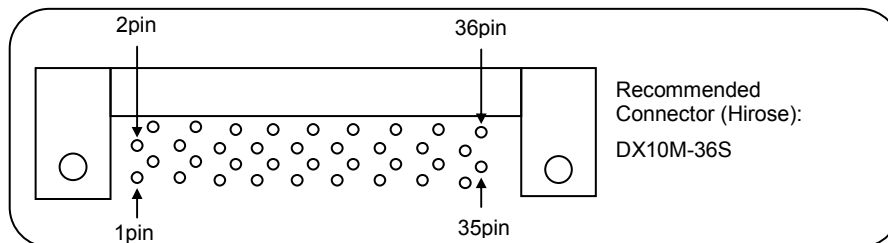
SH MOBILE

The following compilers are supported for the objects to write into Flash memory.

- Renesas	SHC
- Green Hills	Green Hills
- Gaio Technology	XCC-V
- IAR	EW/S SH
- GNU	GCC

This product is only for support Renesas Electronics SH-2/3/4 series.

Target Connection



CS2802

AUD connector pin assignment

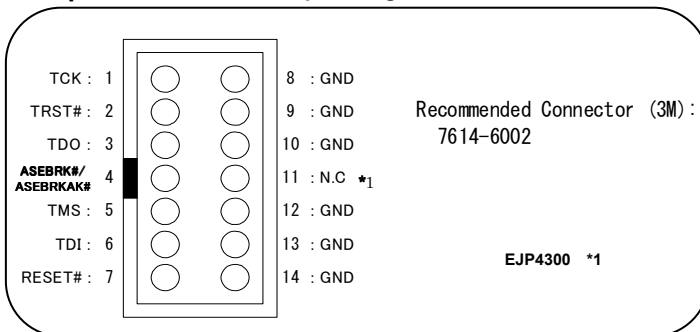
CS2803, CS2808

Pin No.	Signal name	I/O	Pin No.	Signal name	I/O
1	N.C.		19	TMS	Input
2	GND		20	GND	
3	N.C.		21	TRST#	Input
4	GND		22	GND	
5	N.C.		23	TDI	Input
6	GND		24	GND	
7	N.C.		25	TDO	Input
8	GND		26	GND	
9	N.C.		27	ASEBRK#	Input
10	GND		28	GND	
11	N.C.		29	N.C.	*1
12	GND		30	GND	
13	N.C.		31	RESET#	Output
14	GND		32	GND	
15	N.C.		33	GND	
16	GND		34	GND	
17	TCK	Input	35	N.C.	
18	GND		36	GND	

Pin No.	Signal name	I/O	Pin No.	Signal name	I/O
1	N.C.		19	TMS	Input
2	GND		20	GND	
3	N.C.		21	TRST#	Input
4	GND		22	GND	
5	N.C.		23	TDI	Input
6	GND		24	GND	
7	N.C.		25	TDO	Output
8	GND		26	GND	
9	N.C.		27	N.C.	
10	GND		28	GND	
11	N.C.		29	N.C.	*1
12	GND		30	GND	
13	N.C.		31	RESET#	Output
14	GND		32	GND	
15	N.C.		33	GND	
16	GND		34	GND	
17	TCK	Input	35	N.C.	
18	GND		36	GND	

The direction to Input/output the signal is based on the target system.

14-pin H-UDI connector pin assignment:



*1 Connect 5V of the target when you use 5V in the user power supply to SH-2/SH-2A. Adjust 29 pins to 5V when target sides are 36 H-UDI connector pins.

Ordering Information

CUSTOMER should PERPARE		Necessary items for Debugger System			Options
Host PC	CONNECT WITH PC	JTAG EMULATOR (Hardware)	WATCHPOINT (software)	SUPPORT SERVICE (Software updates)	Optional cable
Windows PC *4	USB2.0/1.1	SCD001 EJ-SCT	SCS0430E WP WRT for EJS SH	SSS010 Sophia Support Service	H-UD1 36 pin (for AUD) *2 H-UD1 14 pin (SCP4300)SCP-SHUVCC *3

*1. When user use 5V for SH-2/SH-2A series, connect No11 pin with UVCC(5V) for H-UDI 14 pin, connect No29 pin with UVCC(5V) for H-UDI 36 pin.

*2. The below option is necessary for H-UDI 36pin.

SH-4/SH-4A series :CS2802 EJ-SH4-PB-AUD36-AD , SH-2/SH-2A/SH-3/SH-Mobile :CS2803 EJ-SH3-DSP-PB-AUD36-AD , SH-2/SH-2A series(5V):CS2808 EJ SH7047-PB-AUD36-UVCCAD

*3. This option is necessary for user use 5V for SH-2/SH-2A series.

*4. HostPC, OS: Windows XP/Vista/7, memory is depend on each PC standard. HD: 100MB for install.

All configurations are subject to change without notice. All other brands & product names are trademarks or registered trademarks of their respective companies.