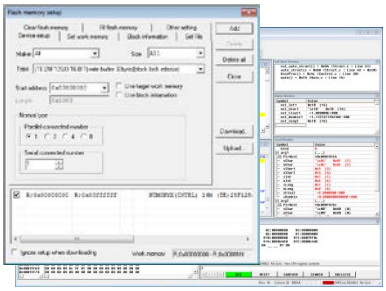
Sohwa & Sophia Technologies

Product Brief

WATCHPOINT Writer for EJSCT Cortex-M Series



Flash Memory Writer having excellent cost performance dedicated to ARM Cortex-M series core support.

Features

- ■Supports Cortex-M series of ARM licensees (STMicroelectronics, NXP, Actel, TI, Freescale, Toshiba, Spansion, etc.)
- ■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
- ■Supports half pitch connector of SWD
- ■Small size (70mm × 108mm × 17mm)
- ■Supports over 300 types of flash memory devices*4
- ■Possible to write to not-supported flash memory when users make a custom program
- ■Works on various PC*2, note PC and other host computers. (by connecting USB)

Specifications

Target CPU	ARM Cortex-M0, Cortex-M3, Cortex-M4 Supports Cortex-M series of ARM licensees (STMicroelectronics, NXP, Actel, TI, Freescale, Toshiba, Spansion, etc.)
Target Vcc	VCC 0.8～5.0V
Flash memory Writer capability*3	・Memory DUMP capability ・Data download from files ・Writes via PLAY button on the unit or Write button on the writer software by recording batch file for writing ・Writes by inputting signal to external input terminal ・Block erase capability ・Stand-alone writer capability 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)
Flash memory makers*4	Renesas Technology, Numonyx (Intel, ST Micro,), MACRONIX, Sharp, Toshiba, NEC, Sanyo, ATMEL, SST, OKI, Spansion (Fujitsu, AMD), EON

*1 Supports Windows XP Professional x64Edition（64 bit）and Windows Vista/7（32 bit, 64 bit）
*2 Please confirm in advance because some machines need an operation check.
*3 This WATCHPOINT writer supports capability only for download to flash memory. Debugger capability such as breakpoints, registers and step execution are not included. Please purchase Debugger for Cortex-M series when you need debugger capability.
*4 Please refer to our website for more details.

Configuration

■CD-ROM

* This product supports ARM Cortex-M series only, and cannot be used for other CPUs.

■JTAG Cable

SCP7500 : SCP 20to20
SCP7200 : SCP CortexMx-PB-HF10-JCB
SCP7300 : SCP CortexMx-PB-HF20-JCB
VK0019 : TI-ARM exclusive JTAG cable

Object Data for Flash memory writing:
Supports the below compilers output

ARM	MDK-ARM, DS-5
IAR	EWARM
GreenHills	GHS
GAIO	XCC-V
GNU	GCC
Metaware	High C/C++/EC++ for ARM

Target Connections

JTAG Header Connector pin Assignment (Top View)

0.1 inch 2×10 Connector

VTRef		1	2		VSupply
NC	(nTRST)	3	4		GND
NC	(TDI)	5	6		GND
SWDIO	(TMS)	7	8		GND
SWCLK	(TCK)	9	10		GND
NC	(RTCK)	11	12		GND
SWO	(TDO)	13	14		GND
nSRST		15	16		GND
DBGRQ		17	18		GND
DBGACK		19	20		GND

Recommended connector: 7620-6002 (3M)
VTRef Vsupply Connect to Target power supply
SCP7500: SCP 20 to 20

0.05 inch 2×5 Connector

VTref	1	2	SWDIO / TMS
GND	3	4	SWCLK / TCK
GND	5	6	SWO / TDO
KEY	7	8	NC/EXTb / TDI
GNDDetect	9	10	nRESET

Recommended Connector:
SHF-105-01-L-D-** (SAMTEC)

VTRef Connect to Target power supply

Option cable:SCP7200
* SCP7200 is required when half pitch 10 pin connector is mounted on the target board.

0.05 inch 2×10 Connector

VTref	1	2	SWDIO / TMS
GND	3	4	SWCLK / TCK
GND	5	6	SWO/EXTa/TRACECTL / TDO
KEY	7	8	NC/EXTb / TDI
GNDDetect	9	10	nRESET
GND	11	12	TRACECLK
GND	13	14	TRACEDATA[0]
GND	15	16	TRACEDATA[1]
GND	17	18	TRACEDATA[2]
GND	19	20	TRACEDATA[3]

Recommended connector:
SHF-110-01-L-D-** (SAMTEC)

VTRef Connect to Target power supply

Option cable:SCP7300
* SCP7300 is required when half pitch 20 pin connector is mounted on the target board
* ETM is not supported.

Ordering Information

System requirements		Items necessary for standard Writer System		
Host PC *1	Connect with PC	JTAG emulator (WATCHPOINT)	Support Service	JTAG cable (Must select at least 1 cable)
Windows PC	USB2.0/1.1 Connection	SCD002W : WRT for EJSCT Cortex-M Series	SSS010 : Sophia Support Service	SCP7500 : SCP 20to20 SCP7200 : SCP CortexMx-PB-HF10-JCB SCP7300 : SCP CortexMx-PB-HF20-JCB VK0019 : TI-ARM exclusive JTAG cable*2

*1 Host PC
OS: Windows 2000/XP Professional x64Edition(64 bit) or Windows Vista/7(32 bit, 64 bit)
Memory: Minimum 32MB, 64MB+ recommended
Hard Disk: 100MB for installation
*2 VK0019 is required to connect with TI 14pin JTAG header.

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(Ver.140408)

Please contact us about the prices