

# PALMiCE3 JTAG emulator

## PALMiCE3 V850



PALMiCE3 V850 is a JTAG emulator that incorporates on-chip debugging function in Renesas Electronics-made V850. It supports USB2.0 (High-speed) as the host interface, and the Vbus which requires no power supply. Furthermore, PALMiCE3 V850 has a palm-sized, light and compact body, providing excellent portability to support you with debugging. As for the debugger, it surely incorporates CSIDE, which provides a user-friendly debugging environment. CSIDE supports not only high-level language debugging of a range of C languages but also a wide range of debugging environments by optional debug libraries. Support for SuperH family and H8S/H8SX family are also available with optional CSIDEs.

- Supports V850
- Supports USB2.0(High-speed), allowing high-speed processing
- A palm-sized, compact body
- Requires no power supply with Vbus support
- Real-time watcher feature (Optional)
- Simulated I/O feature
- Allows access to memory and I/O during break
- Supports debugging on on-chip/external flash memories

### Main Specifications

Supporting model	HUDI141(JTAG) model		
Supported CPUs *1	V850E2/MN4, V850E2/ML4		
JTAG clock	Can be set freely in 1MHz increments between 1MHz and 25MHz.		
Target I/F	Voltage	1.65V - 5.5V (Follows target)	
	Voltage measurement	Measures by sampling and shows the results with accuracy of 50mV and precision showing 2 decimal places.	
	Connector	14-pin MIL connector	
Register, memory, I/O operation	Supports referencing/editing of register and downloading to memory during break. It supports referencing/editing of memory and I/O even during execution of the user program.		
Flash memory support	On-chip flash memory:	In addition to downloading, it also supports software break settings and ordinary memory rewriting feature.	
	External flash memory:	Supports software break settings and ordinary memory rewriting feature in addition to downloading. Also new device can be added by the user with definition file format.	
Software break feature	Supports up to 256 points with instruction replacement method.		
CPU break feature	4 points (Can be specified as Before instruction execution/Data access conditions. Besides, the sequential setting can be specified.)		
Execution time measurement	Measures execution time of the user program (64-bit counter, measurement unit=50nS)		
CPU performance measurement	Allows measurement of various cycles and number of accesses to measure and improve the performance.		
Simulated I/O feature	Allows to execute standard input and output function on the target against the host.		
Real-time watcher (Optional)	Allows to capture the data continuously at regular cycles without a temporary break during user program execution.		
Debugger included as standard	CSIDE for PALMiCE3 V850-E		
General specifications	Power specification	DC+5V 250mA (Vbus support for USB)	
	Outside dimensions	95mm(W) x70mm (D) x21mm (H)	
	Host I/F	USB mini-B connector	
	Operating environment	Host computer	The computers running on the supported OSs
		CD drive	Required at the time of installation
USB		USB2.0	
OS	Windows Vista 32-bit version / Windows 7 32-bit version, 64-bit version / Windows 8 32-bit version, 64-bit version		
Product composition contents	PALMiCE3 HUDI141 model main unit / H-UDI cable (specifically for PALMiCE3) / conversion adapter (Specifically for PALMiCE3 V850) / 2m USB cable / dedicated debugger (CD-ROM)		
Support System	Available		

\*1 : As for the individual CPU support, look it up in our website at <http://www.computex.co.jp/asp/cpu/cpu.asp> or contact our Sales Department.

### Supported language

Supported C compiler	Renesas CX compiler
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### Optional CSIDE

Product name	Description
CSIDE for PALMiCE3 SH-E	Optional CSIDE for debugging of SuperH family CPUs.
CSIDE for PALMiCE3 H8S-E	Optional CSIDE for debugging of H8S/H8SX family CPUs.

\* : As for the individual CPU support, look it up in our website at <http://www.computex.co.jp/asp/cpu/cpu.asp> or contact our Sales Department.

\* : Together with optional CSIDE, you will need to purchase the respective conversion adapter, etc. that will go in combination with PALMiCE3 main unit. For details, contact our Sales Department.



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