[Notification]

End of Life (EOL) Notice for E1 Emulator

Outline

We are announcing discontinuation of production of the on-chip debugging emulator/flash programmer E1 emulator (hereafter, E1) due to EOL (end of product) of the product components. We hereby inform you of the final date on which we will be accepting orders of this product.

This tool news has been updated to add more information to the news issued in December. 16, 2018.

For an overview of the E1, refer to the URL below.
https://www.renesas.com/e1

1.   Applicable Products

Product name: E1 emulator

Orderable part number: R0E000010KCE00

2.   Final Date for Accepting Product Orders (LBO)

December 31, 2019

Place an order for the required amount by the above final date.

Repair services for the E1 will be supported until December 2022.

3.   Addition of Supported MCUs After End-of-Sale Date

Supported MCUs will continue to be added for the E1 after the end-of-sale date. The end date of this service will be notified via tool news.

4. Introducing Successor Products E2 and E2 Lite

If you are considering purchasing a new emulator, we recommend the successor products, E2 emulator (hereafter, E2) and E2 emulator Lite (hereafter, E2 Lite).

The E2 and E2 Lite pin assignments are compatible with the E1 for connecting with the user system, and can therefore connect with a user system designed for the E1. All options for the E1 (e.g., isolator) can also be used for the E2 or E2 Lite.

> E2

The E2 is an advanced on-chip debugging emulator/flash programmer that supports RH850, RX and RL78 family MCUs, designed to "improve development efficiency". The download speed is up to two times faster than the E1. In addition, the E2 provides CAN Communication Time Measurement Solution for RH850 family, and Current Consumption Tuning Solution for RX and RL78 family, to help accelerate development time.

For details, refer to the URL below.
https://www.renesas.com/e2

> E2 Lite

The E2 Lite is an on-chip debugging emulator/flash programmer for the RX and RL78 family MCUs. Supporting debugging features equivalent to the E1, the E2 Lite is available at a lower-cost and can be used for many uses from education, hobby to a full-scale development.

For details, refer to the URL below.
https://www.renesas.com/e2_lite

> Supported software for E2 and E2 Lite

e^2 studio and CS+ integrate development environment are supported by the E2 and E2 Lite.

For the supported versions, see the table below.

	RH850 Family			RX family			RL78 family		
	e^2 studio	CS+	RFP	e^2 studio	CS+	RFP	e^2 studio	CS+	RFP
E2	V7.0.0 or later	CC:V5.00 or later	V3.02.01 or later	V6.2.0 or later	CC:V6.01 or later	V3.04.00 or later	V6.0.0 or later	CC:V6.00 or later	V3.03.00 or later
E2 Lite	-	-	-	V4.0.1 or later	CC:V5.00 or later	V3.00.00 or later	V4.1.0 or later	CC:V5.00 or later CA,CX:V4.00 or later	V3.00.00 or later

- : Not Supported
CC: CS+ for CC
CA,CX: CS+ for CA,CX

Note that High-performance Embedded Workshop (hereafter, HEW) and "Flash Development Toolkit (hereafter, FDT)" are not supported by the E2 and E2 Lite.

➢ Comparison of specifications (E1, E2 and E2 Lite)

		E1	E2	E2 Lite
Supported Operating Voltage		1.8 to 5.0V	1.8 to 5.0V	1.8 to 5.0V
Power Supply Function		3.3 V or VBUS (5V)	1.8 to 5.0V	3.3 V
Support for 2 power supplies (some of RL78)		Supported	Supported	Not supported
PC interface		USB 2.0 high speed	USB 2.0 high speed	USB 2.0 full speed
Debugging I/F	RH850	LPD 16.5MHz	LPD 33 MHz	–
	RX	JTAG TCK 16.5 MHz FINE 2 Mbps	JTAG TCK 16.5 MHz FINE 2 Mbps	JTAG TCK 6MHz FINE 1.5 Mbps
	RL78	TOOL0 1 Mbps	TOOL0 1 Mbps	TOOL0 1 Mbps
Extended Function		–	CAN communication time measurement solution (RH850) Current Consumption Tuning Solution (RX and RL78)	–

5. Support for V850 Family, 78K Family and R8C Family

If you need to purchase the E1 for the V850, 78K, or R8C family after the end-of-sale date, contact your distributor.

For the tools supported by each MCU product, see the table below.

Applicable MCU	Emulator		Integrated development environment (IDE)		Programmer	
	E1	E8a	CS+	HEW	RFP	FDT
V850 family	Yes	-	Yes	-	Yes	-
78K0R/78K0 group	Yes	-	Yes	-	Yes	-
R8C/3x series	Yes	Yes*	-	Yes	-	Yes
R8C/5x series	Yes	-	-	Yes	-	Yes

Yes: Supported, - : Not supported

*No EOL is scheduled for the E8a emulator.

Revision History

Rev.	Date	Description	
		Page	Summary
1.00	Dec. 16, 2018	-	First edition issued
1.01	Dec. 21, 2018	2	Corrected table for successor products
2.00	Jul. 01, 2019	1	- Updated Outline - Added the end of repair service date for E1 in section 2.
		2	Added the list of supported tools for E2 and E2 Lite and more information in section 4.
		3	Added section 5.

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