

[New Release]

R20TS1081EJ0100

Rev.1.00

Dec. 5, 2024

RZ/T2H Evaluation Board Kit

Possible evaluation simultaneously of multi-axis control of motors, industrial Ethernet communication.

Outline

RZ/T2H Evaluation Board Kit has been released. It supports the RZ family RZ/T2H group.

1. Product Overview

The RZ/T2H Evaluation Board Kit is an evaluation board kit that is ideal for evaluation simultaneously of motor multi-axis control and industrial Ethernet communication processing. It has a built-in emulator, so you can start your evaluation by simply connecting the included USB cable to your PC. It is equipped with a wide range of functional ICs such as Gigabit Ethernet PHY, non-volatile memory, and LPDDR4 memory, allowing you to evaluate various functions of the RZ/T2H without an expansion board.

In addition, by expanding the inverter board (sold separately), it is possible to realize motor control of up to 9 axes.

The kit includes the following hardware necessary for development.

➤ Hardware

- CPU board with RZ/T2H group device (quad CPU, internal RAM 2MB, pin count 729-pin), and on-board emulator
- Power supply USB cable (Type C – Type C) # Need to prepare a separate 45W (15V-3A) USB-PD power supply adapter
- On-board emulator connection USB cable (Type A – Type Micro B)
- PC terminal debugging USB cable (Type A – Type Mini B)

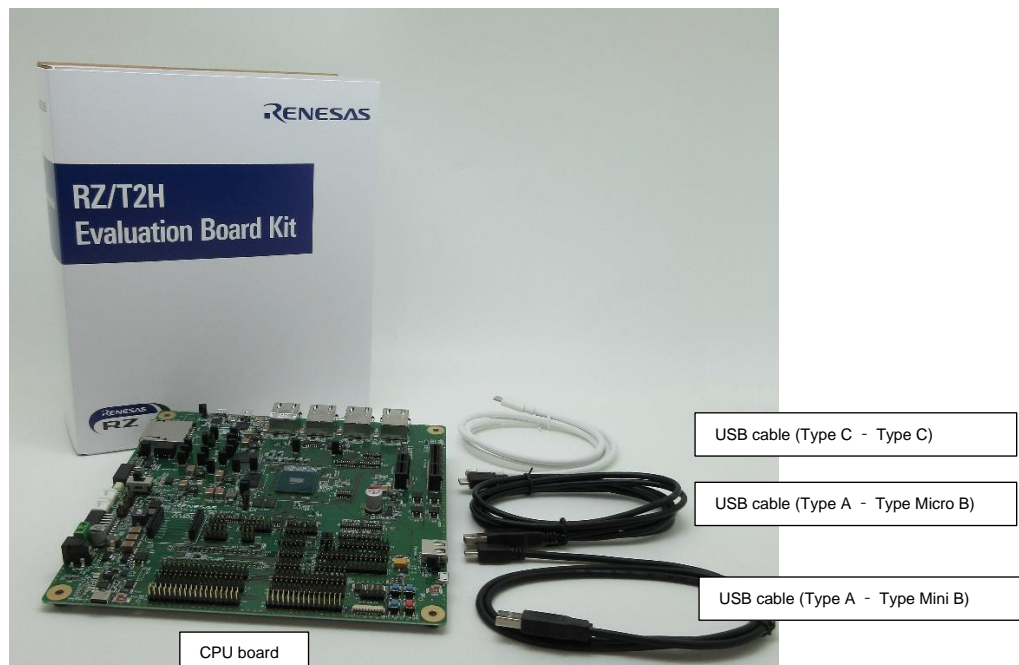


Figure 1 RZ/T2H Evaluation Board Kit

➤ Software

The development environment, sample code, and application notes are available on the website. Please visit the URL below.

- RZ/T2H Evaluation Board Kit product web page
<https://www.renesas.com/rzt2h-evkit>

2. Product Features

- Implemented RZ/T2H with 4x Cortex-A55® and 2x Cortex-R52® CPU cores
 High application processing performance and high-precision real-time control are achieved on a single chip. It can be used for a variety of software development, from Linux applications to RTOS applications.
- Equipped with an on-board emulator, debugging can be started simply by connecting to a PC and turning on the power
- Equipped with four Gigabit Ethernet PHYs, non-volatile memory (QSPI Flash, Octa Flash, eMMC), DDR, and other high-performance ICs, the functionality of the target MPU can be fully evaluated.
- By connecting an optional inverter board to the pin header (PWM, $\Delta\Sigma$ I/F, Encoder I/F), it is possible to evaluate motor control of up to 9 axes.
- Equipped with the microSD card slot, the SD card slot, and the PCIe connector.
 Versatile expansion interfaces such as Pmod™/Grove®/QWIIIC®/mikroBUS™ are also available, allowing various use cases to be evaluated.

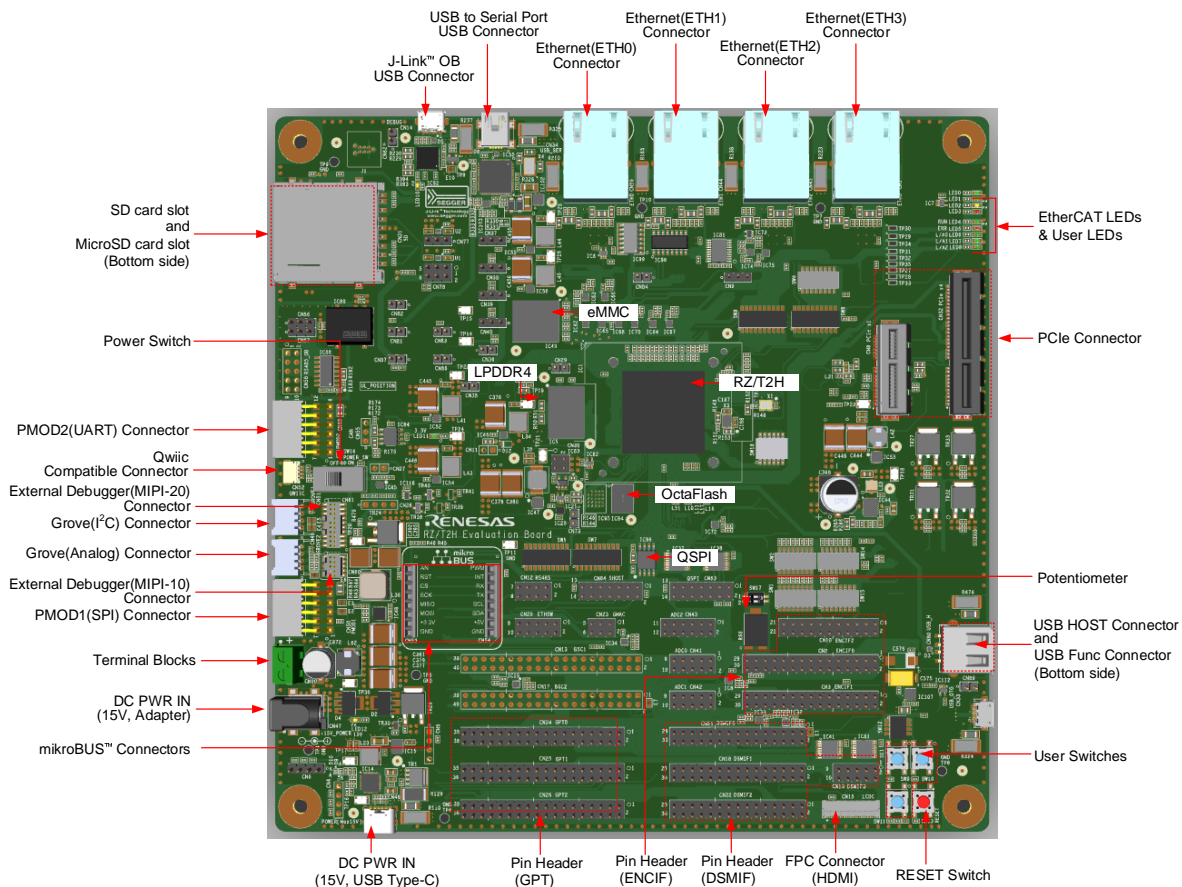


Figure 2 CPU board (component side)

3. Purchasing the Product

Contact your local Renesas Electronics sales office or distributor and inform them of the following product information.

Regarding the price of the product, contact the sales office or distributor.

Product part number (orderable part name)	Status
RTK9RZT2H0S00000BJ	Mass production

Revision History

Rev.	Date	Description	
		Page	Summary
1.00	Dec.5.24	-	First edition issued

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Corporate Headquarters

TOYOSU FORESIA, 3-2-24 Toyosu,
Koto-ku, Tokyo 135-0061, Japan
www.renesas.com

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