

[Released on the Web]

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Rev.1.00

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## Solution Tool Kit

### QEs: Dedicated Tools for Particular Applications

#### QE for TCP/IP: A Dedicated Tool for TCP/IP Development

#### Technical Preview V1.0.0

### Outline

We are releasing Technical Preview V1.0.0 of the QE for TCP/IP solution tool kit on the Web.

We supply the product free of charge.

### 1. Features

QE for TCP/IP is one of several solution tool kits which operate under the e<sup>2</sup> studio integrated development environment, and is a dedicated solution tool for TCP/IP.

This product is for use in developing embedded systems which use the M3S-T4-Tiny communications protocol software library for the RX family, and has the following features for helping the user to solve problems in communications that originate in TCP/IP.

- The state of TCP communications can immediately be checked.

Since the state of a TCP connection between your system and another party in communications can be checked for each end point, analyzing or breaking down problems in the form of communications not starting even when a connection has been made becomes easy.

The screenshot shows a software window titled "TCP Communication Path Info. (QE)". At the top, there is a dropdown menu for "Select data (acquired time):" with the value "2016-08-31T14:31:16.076". Below this, there are two tabs: "All CEPs" and "TCB Detail Info.". The "TCB Detail Info." tab is active, displaying a table with the following columns: "End Point ID", "Local Address", "Foreign Address", "State", and "API Error".

End Point ID	Local Address	Foreign Address	State	API Error
1	192.168.0.3:1024	0.0.0.0:0	Listening (LISTE...	
2	192.168.0.10:0	0.0.0.0:0	Disconnect (CL...	
3	192.168.0.3:0	0.0.0.0:0	Disconnect (CL...	
4	192.168.0.3:0	0.0.0.0:0	Disconnect (CL...	
5	192.168.0.3:0	0.0.0.0:0	Disconnect (CL...	
6	192.168.0.3:0	0.0.0.0:0	Disconnect (CL...	

- The states of API errors occurring within the TCP/IP middleware can be checked.

When a problem in communications originates in TCP/IP, this product helps you to resolve it by quickly getting the answers to questions “Did the problem arise in the TCP/IP middleware?” and “When the problem arises, what kind of error is involved?”

Using QE for TCP/IP under the e<sup>2</sup> studio eases the debugging of TCP/IP systems, shortening development periods and lowering costs.

Refer to the following URL for the details of M3S-T4-Tiny.

<https://www.renesas.com/mw/t4>

For details of the QE tools for particular applications, visit our Web site at:

<https://www.renesas.com/qe>

## 2. Supported MCUs

RX family\*

\*: The recommended MCUs depend on whether you will be using a wireless or physical Ethernet connection.

- For an Ethernet connection

We recommend the following MCUs, which include Ethernet controllers.

- RX600 series: RX62N, RX63N, and RX64M
- RX700 series: RX71M

- For a wireless LAN connection

We recommend the following MCUs, which include SD host interfaces.

- RX200 series: RX231
- RX600 series: RX64M
- RX700 series: RX71M

## 3. Operating Environment

- Integrated development environment e<sup>2</sup> studio V4.2.0 and later versions
- M3S-T4-Tiny communications protocol software library V2.02 and later versions

## 4. Obtaining the Product

Obtain the product from the URL below. This product will be available from October 5.

<https://www.renesas.com/qe-tcpip-download>

QE for TCP/IP Technical Preview V1.0.0

**Revision History**

Rev.	Date	Description	
		Page	Summary
1.00	Oct. 01, 2016	-	First edition issued

TOYOSU FORESIA, 3-2-24 Toyosu, Koto-ku, Tokyo 135-0061 Japan  
 Renesas Electronics Corporation

■Inquiry

<http://www.renesas.com/contact/>

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