

[Upgrade to revision]

R20TS0458EJ0100

Solution Toolkit

Rev.1.00

Jul. 16, 2019

QE: Development Assistance Tool for Applications

QE for Capacitive Touch V1.1.0: Development Assistance Tool for Capacitive Touch Sensor

Outline

We have updated the QE for Capacitive Touch from V1.0.0 to V1.1.0.

1. Products and Versions to Be Updated

- QE for Capacitive Touch V1.0.0

To check version: From the [Help] menu of e<sup>2</sup> studio, select [e<sup>2</sup> studio Installation details] menu > [Installed Software] tab to see the version of the “Renesas QE for Capacitive Touch”.

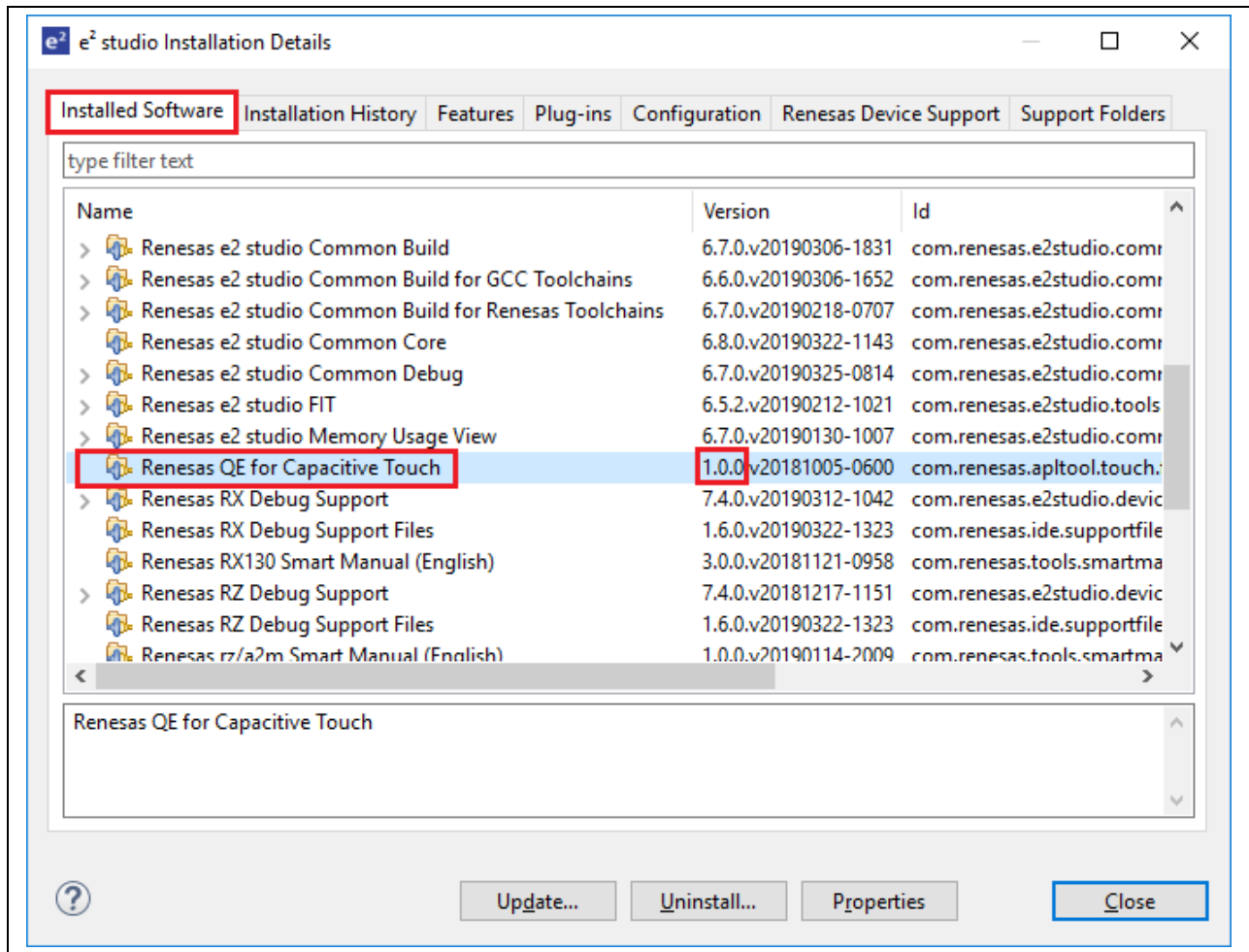


Figure 1 Check version of QE for Capacitive Touch

## 2. Description of the Update

The main features of the update are described in the following sections. See the release note for details. (Scheduled to be released on July 22.)

<https://www.renesas.com/search/keyword-search.html#genre=document&q=r20ut4567>

### 2.1 New Features

➤ Show Sample Code function

Added a function to show sample code of main() function according to the structure of user's Touch I/F. This enables users to easily use sample codes for developing a program that uses the touch keys.

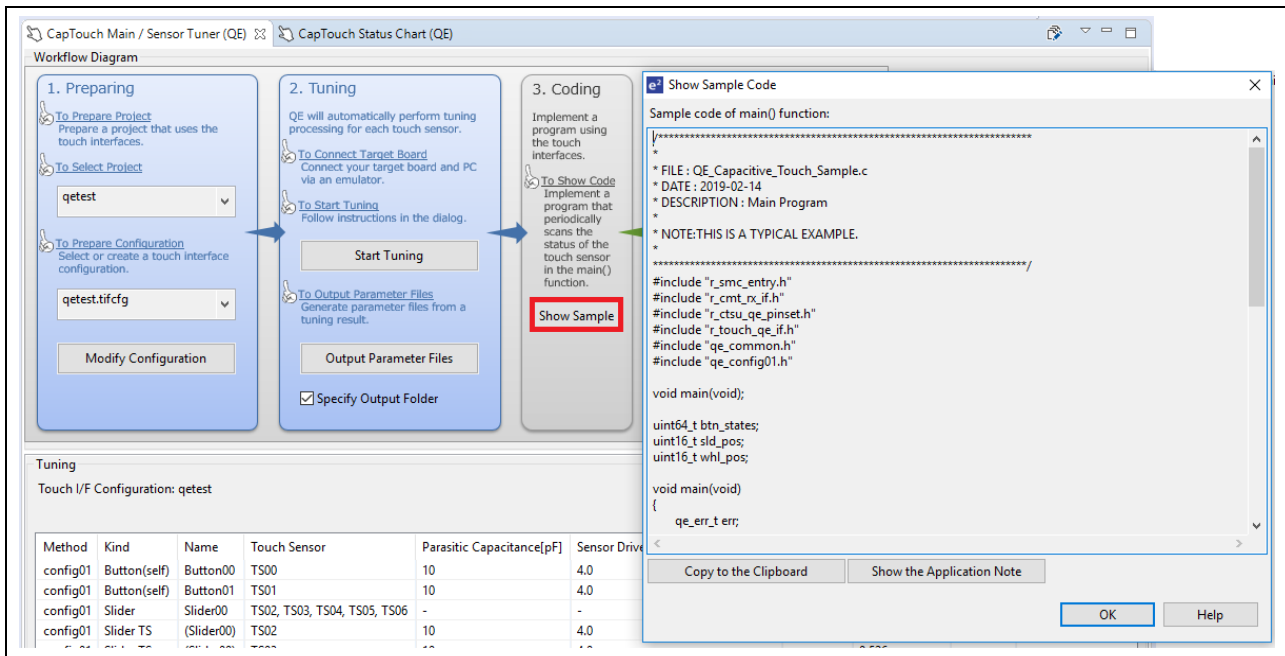


Figure 2 Show Sample Code

- Changed the extension of monitoring files / Added Convert Log file function

The content of monitoring log file is not the content of an actual “.csv” file and therefore cannot be read correctly as “.csv” file. We have changed the extension of QE for Capacitive Touch monitoring log file from “.csv” to “. **qetmon**” to prevent the confusion of mistaking one with another.

We have also added the function that converts the monitoring log file to CSV format. Refer to the release note for details. (Scheduled to be released on July 22.)

<https://www.renesas.com/search/keyword-search.html#genre=document&q=r20ut4567>

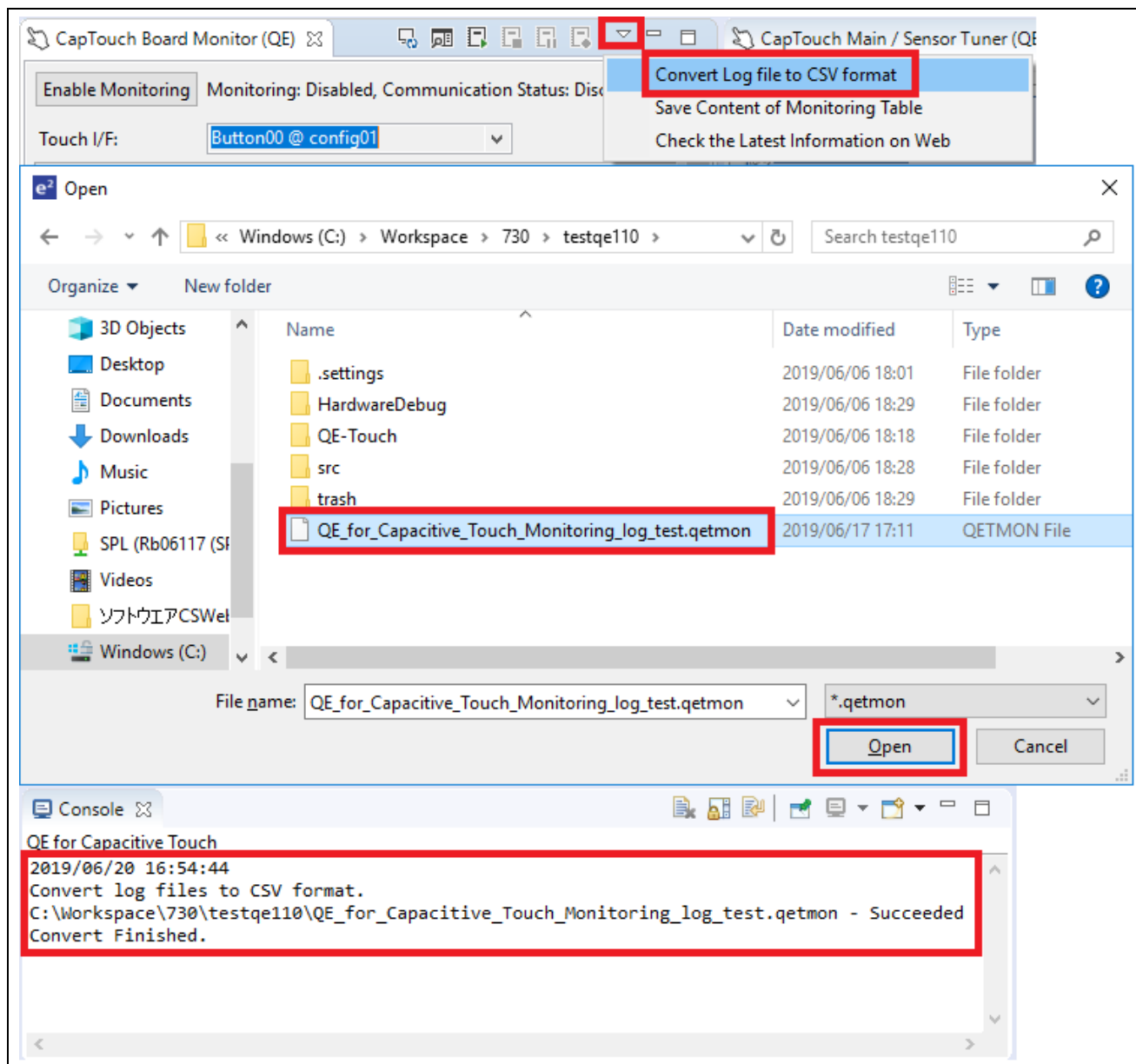


Figure 3 Convert Log file: Convert file to CSV format

➤ Save Content of Tuning Table function

Added a function to save tuning results in CSV file format. You can now save every tuning result and use these data for comparison and analysis when deciding on optimal tuning.

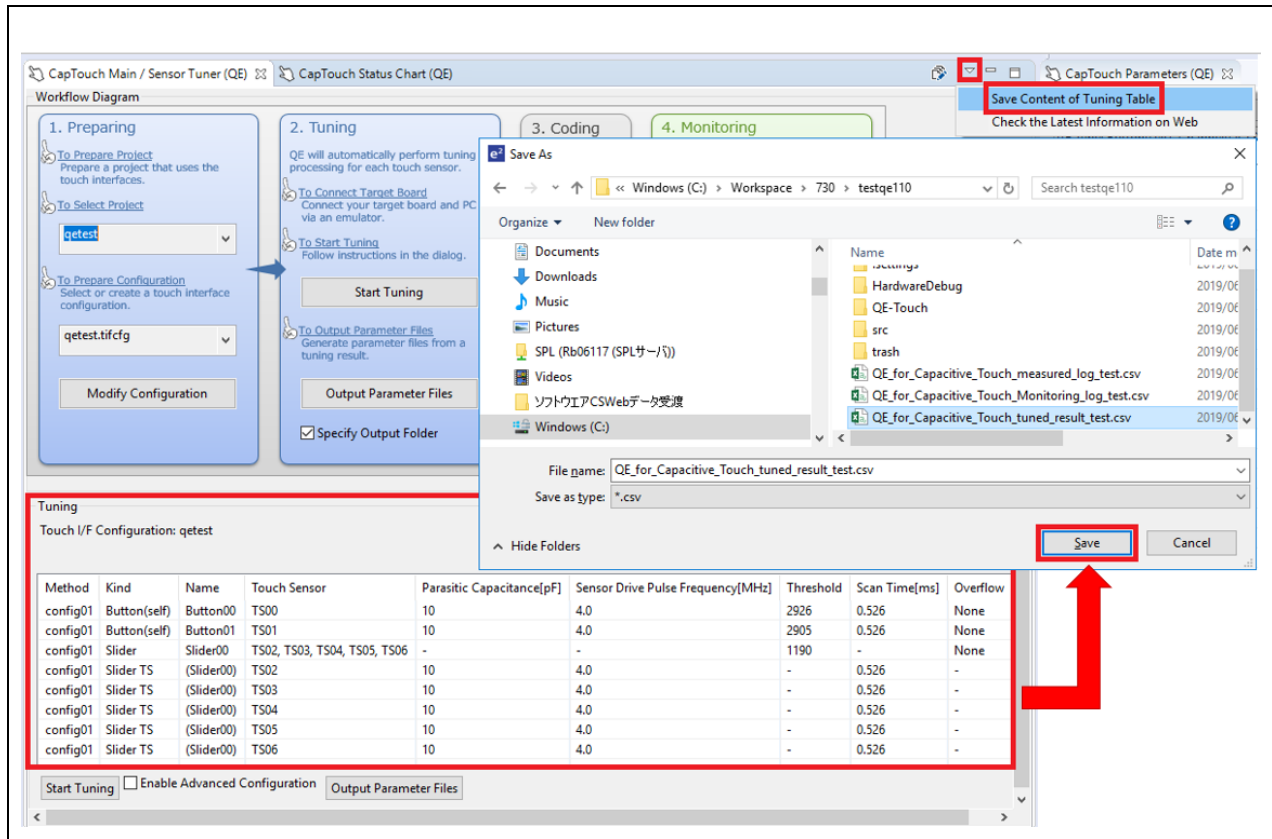


Figure 4. Save Content of Tuning Table

➤ Save Content of Monitoring Table function

Added a function that can save content of monitoring table in the “CapTouch Board Monitor (QE)” view. You can save the measurement results of touch key status when an error occurs and use these data to find out what caused it.

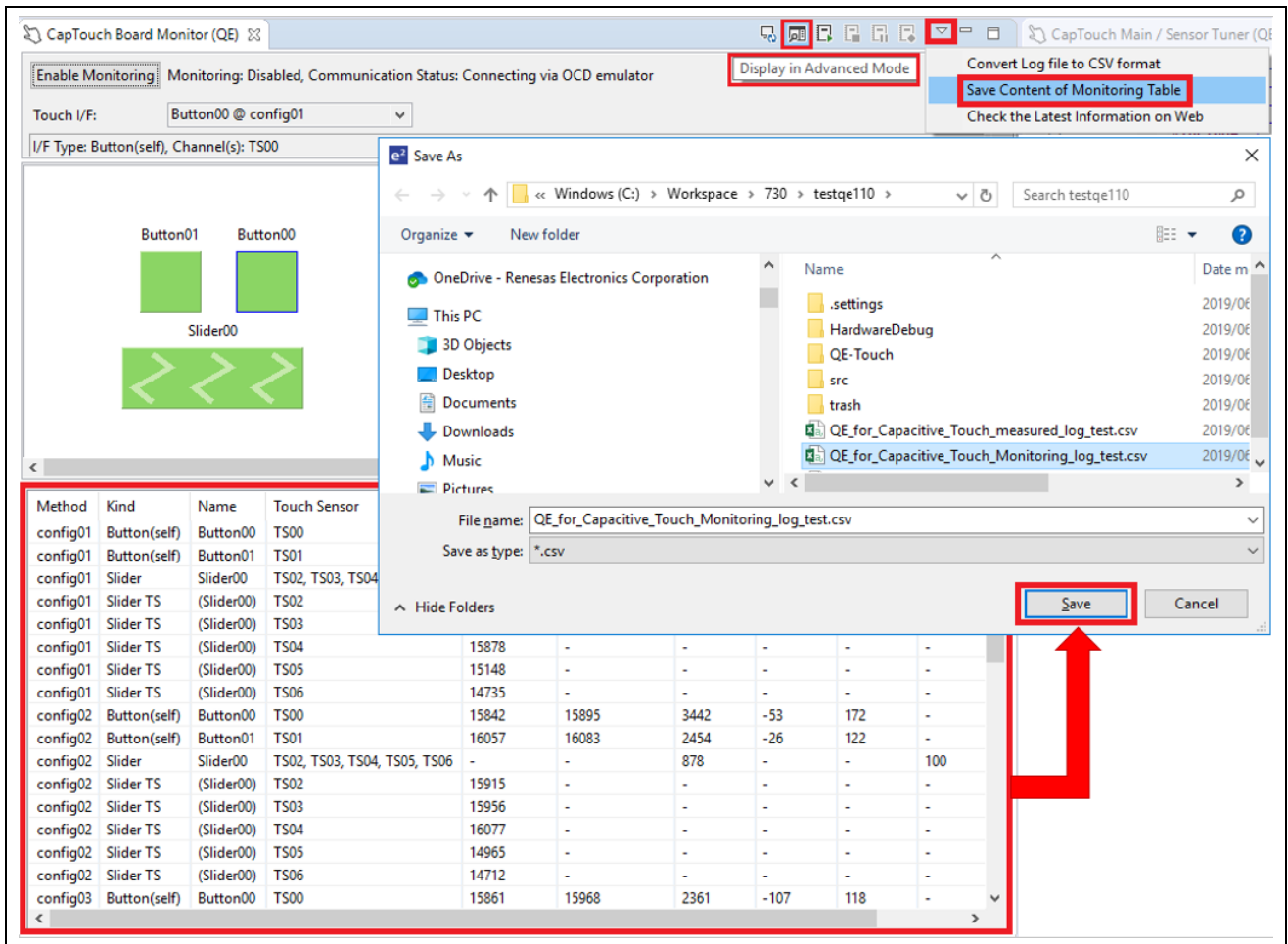


Figure 5. Save Content of Monitoring Table

## 2.2 Improved Functionalities

- Resolved a restriction when using some language version of Windows (ex. German)

The following restriction has been resolved.

QE for Capacitive Touch may fail to perform an automatic tuning processing when it is running on some version of Windows which are based on a language (such as German and Portuguese) that uses a comma as the decimal symbol instead of a period.

- Show multiple “CapTouch Status Chart (QE)” views

By clicking on the [Show Sub View] menu, you can open multiple “CapTouch Status Chart (QE)” views at the same time.

Although the previous version could display up to 8 touch sensor status in the “CapTouch Multi Status Chart (QE)” view, to see the details (ex. count values and reference values) of each touch sensor, you had to switch between them each time in the “CapTouch Status Chart (QE)” view.

The updated version can open multiple “CapTouch Status Chart (QE)” views at the same time, allowing users to check the detailed information of each touch sensor.

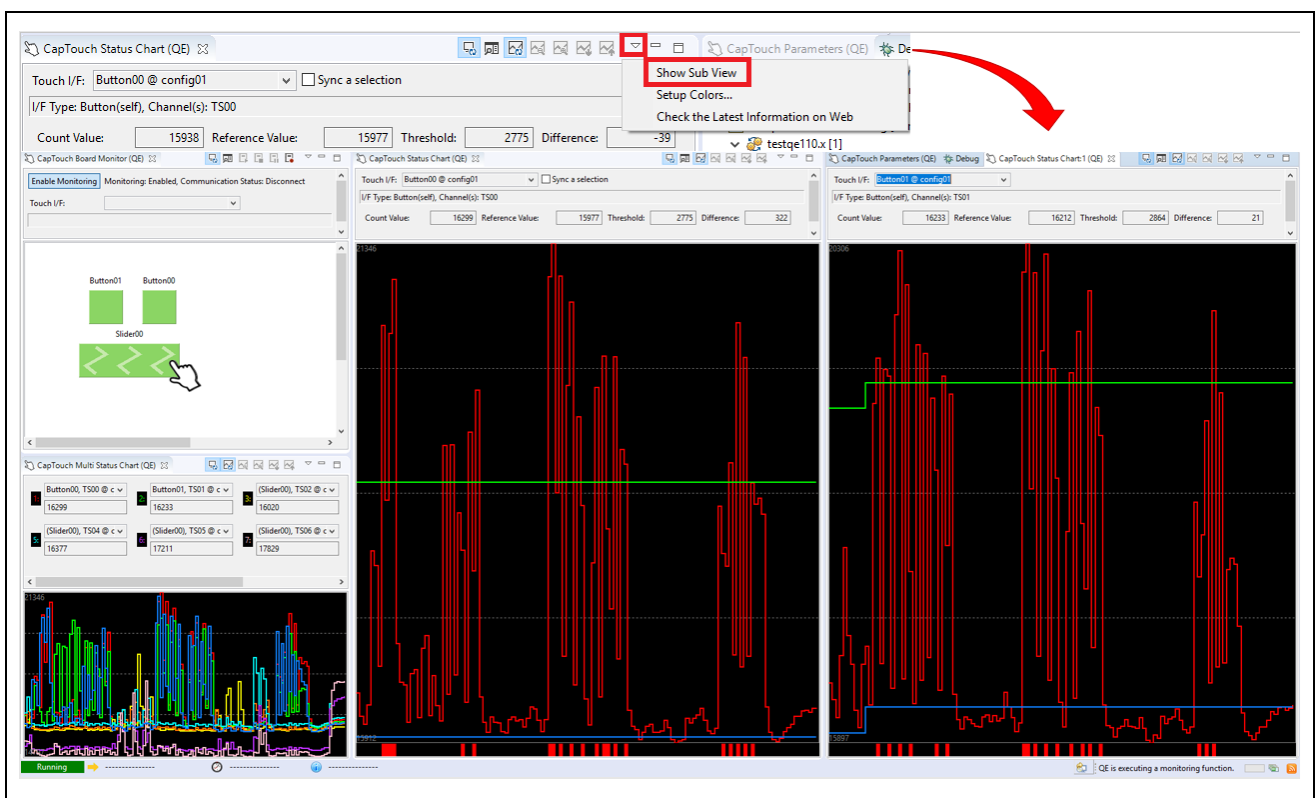


Figure 6. Show Multiple “CapTouch Status Chart (QE)” view

- Specify Output Folder of tuning result file

You can now specify the output folder of tuning result file.

While the previous version had output the tuning result file to the e<sup>2</sup> studio project selected in QE for Capacitive Touch by default, the updated version can specify the output folder and save only the tuning result file.

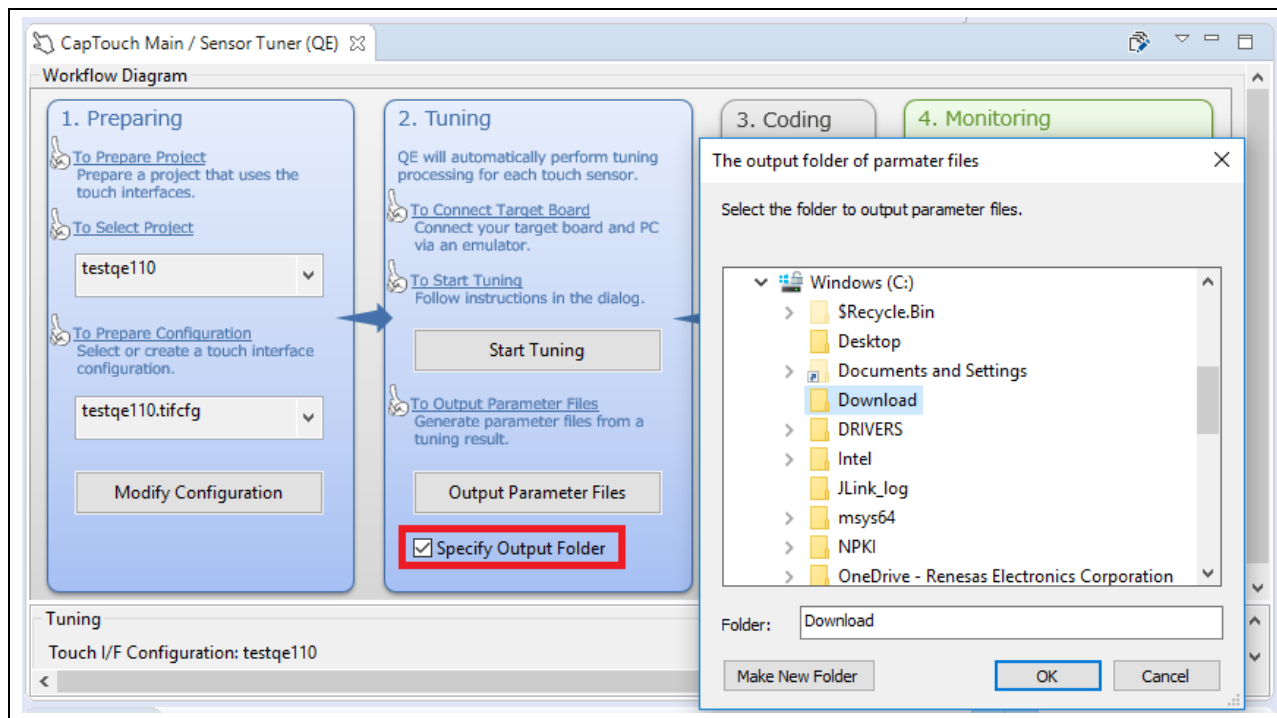


Figure 7. Specify Output Folder

### 3. Operating Environment

- e<sup>2</sup> studio integrated development environment V7.4.0 and later versions

### 4. Obtaining the Product

Download the installer for QE for Capacitive Touch V1.1.0 from the URL below.  
(Scheduled to be released on July 22.)

<https://www.renesas.com/qe-capacitive-touch>

## 5. Installation

To install the product, follow the steps below.

- (1) Activate e<sup>2</sup> studio.
- (2) Click [Help] > [Install New Software...] menu to open the [Install] dialog box.
- (3) Click the [Add (A)...] button to open the [Add Repository] dialog box.
- (4) Click the [Archive (A)...] button, select the installation file (zip file) in the opened file select dialog box, and then click the [Open (O)] button.
- (5) Click the [OK] button in the [Add Repository] dialog box.
- (6) Expand the [Renesas QE] item shown in the [Install] dialog box, select the [Renesas QE for Capacitive Touch] check box, and then click the [Next (N)>] button.
- (7) Confirm that the installation target is correct, and then click the [Next (N)>] button.
- (8) After checking the license, select the [I agree to the terms of use (A)] radio button, and then click the [End (F)] button.
- (9) When the dialog box for selecting a trusted certificate appears, check the displayed certificate, and then click the [OK] button to continue installation.
- (10) Restart e<sup>2</sup> studio according to the instructions on the screen.
- (11) Start this product from the [Renesas Views] - [Renesas QE] menu of e<sup>2</sup> studio.

For usage of this product, see the QE items from the [Help] menu of e<sup>2</sup> studio.



## Revision History

Rev.	Date	Description	
		Page	Summary
1.00	Jul.16.19	-	First edition issued

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