[Released on the Web]

Solution Toolkit

R20TS0815EJ0100 Rev.1.00 Jan. 16, 2022

QE for Motor[RA] V1.0.0:

Development Assistance Tool for Motor

Outline

QE for Motor[RA] V1.0.0 has been released on the web.

QE for Motor[RA] is an assistance tool for applications that operates under the e2 studio integrated development environment. In the development of an embedded system based on the RA6T2 that incorporates the motor unit, this product supports the configuration of motor middleware and related drivers provided by FSP (Flexible Software Package). Also, QE for Motor[RA] assists tuning and analysis by coordinating Renesas Motor Workbench to support the development of motor software.

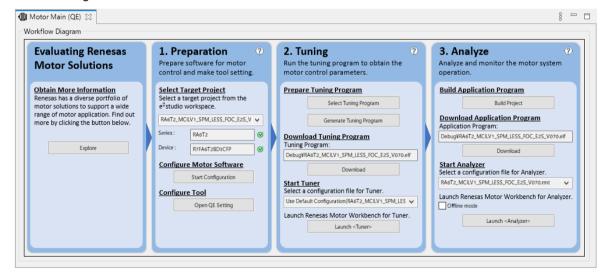
This product is available free of charge

1. Product Features

The three functions below make it easy to develop software for motors.

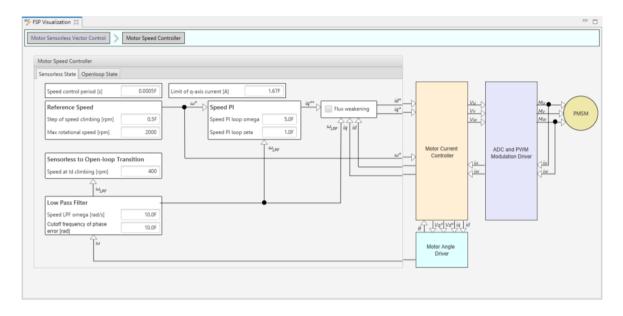
1.1 Workflow View

By following to the Workflow Diagram, it is possible to configurate the middleware and related drivers for motor. Also, tuning and analysis can be easily implemented by coordinating Renesas Motor Workbench from the diagram.



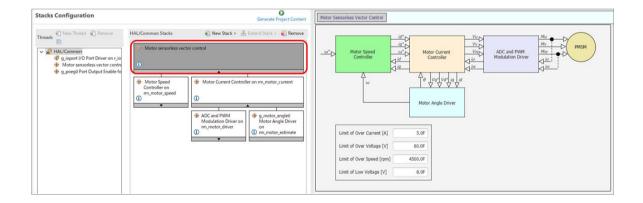
1.2 Motor Configuration GUI

By using motor system configuration diagram with hierarchical structures that synchronize with FSP (Flexible Software Package: a software package for middleware and drivers), you can efficiently configure the middleware and related driver for the motor.



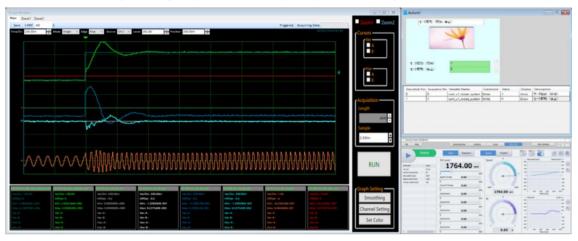
The motor configuration GUI is displayed on [FSP Visualization] view in e2 studio. [FSP Visualization] view is opened in [FSP Configuration] perspective. Also, [FSP Visualization] view can be opened from main menu of e2 studio, [Renesas Views]->[C/C++]->[FSP Visualization].

The motor configuration GUI is displayed when selecting the stack of <u>supported FSP module</u> on the [Stacks] tab in FSP configuration editor.



1.3 Coordination with Renesas Motor Workbench

QE automatically sets the necessary settings for Renesas Motor Workbench, so you can tune and analyze the motor by clicking on [Launch Tuner] and [Launch Analyzer] button in the workflow view.



2. Supported Devices

RA Family

RA6 Series : RA6T2

3. Supported Software

Middleware for motor

- RA Flexible Software Package (FSP)
 - Motor Sensorless Vector Control: rm_motor_sensorless V3.5.0 (or later)
 - · Motor Encoder Vector Control: rm_motor_encoder V3.5.0(or later)
 - 120-degree control: rm_motor_120_degree V3.5.0(or later)

4. Operating Environment

- Windows 8.1, and Windows 10 (64bit)
- Renesas e² studio 2021-10 (or later)
 - If you are using a version of the e2 studio earlier than 2021-10, please update it to 2021-10 or later.
- Renesas Motor Workbench V3.0.0(or later)
 - If you are using a version of the Renesas Motor Workbench earlier than V3.0.0, please update it to V3.0.0 or later.

Obtaining the Product

Obtain QE for Motor [RA] V1.0.0 from the following URL:

https://www.renesas.com/qe-motor

For details on how to use this product, refer to the [Help] menu.



Revision History

		Description	
Rev.	Date	Page	Summary
1.00	Jan.16.22	-	First edition issued

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