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Rev.1.00

Jul. 16, 2022

[Upgrade to Revision] Solution Toolkit QE for Motor[RA] V1.1.0: Development Assistance Tool for Motor

Outline

QE for Motor, a development assistance tool for motor, has been updated from V1.0.0 to V1.1.0.

1. Description

For details of the update and how to install the product, refer to the release note at the link below.

QE for Motor[RA] V1.1.0 Release Note <u>https://www.renesas.com/document/rln/qe-motor-v110-release-note</u>

The main changes are as follows.

1.1 Addition of Supported Devices

QE for Motor[RA] V1.1.0 now supports the RA6T1 group devices.
 The features available in the RA6T1 group are the same as those of the RA6T2 group.

1.2 Improved Functionality

> Added the support feature for importing sample projects

Sample programs can now be downloaded and imported by clicking the [Start] button in the Workflow Diagram.

Evaluating Renesas Motor Solutions	1. Preparation Prepare software for motor control and make tool setting.	2. Tuning O O Run the tuning program to obtain the motor control parameters. O	3. Analyze ⑦ Analyze and monitor the motor system operation.
Obtain More Information Renesas has a diverse portfolio of motor solutions to support a wide range of motor application. Find out more by clicking the button below. Explore Introduce Sample Program Download and import sample programs for motors. Start	Select Target Project Select a target project from the e ² studio workspace. RA6T2_MCILV1_SPM_LESS_FI ♥ Series: RA6T2 ♥ Device: R7FA6T2BD3CFP ♥ Configure Motor Software Start Configuration Introduce Related Tool Download and install Renesas Motor Workbench. Start ♥ Configure Tool Øpen QE Setting	Prepare Tuning Program Select Tuning Program Generate Tuning Program Download Tuning Program Debug¥RA6T2_MCILV1_SPM_LESS_FOC_E2! Download Start Tuner Select a configuration file for Tuner. RA6T2_MCILV1_SPM_LESS_FOC_E2S_V Launch Renesas Motor Workbench for Tuner. Launch <tuner></tuner>	Build Application Program Build Project Download Application Program Application Program: Debug¥RA6T2_MCILV1_SPM_LESS_FOC_E2: Download Start Analyzer Select a configuration file for Analyzer. RA6T2_MCILV1_SPM_LESS_FOC_E2S_V Launch Renesas Motor Workbench for Analyzer. Offline mode Launch <analyzer></analyzer>

Start button



> Added the support feature for Renesas Motor Workbench installation

It is now possible to see the installation status of Renesas Motor Workbench on the currently used PC from the icon in the Workflow Diagram. If Renesas Motor Workbench or the latest version is not installed, the latest version can now be installed by clicking the [Start] button.

Evaluating Renesas Motor Solutions	1. Preparation ⑦ Prepare software for motor control and make tool setting.	2. Tuning ② Run the tuning program to obtain the motor control parameters.	3. Analyze Analyze and monitor the motor system operation.	
Obtain More Information Renesas has a diverse portfolio of motor solutions to support a wide range of motor application. Find out more by clicking the button below. Select a target project from the e ² studio workspace. Explore RA6T2_MCILV1_SPM_LESS_Fi v Introduce Sample Program Download and import sample programs for motors. Select a target project from the e ² studio workspace. Start Select a target project from the e ² studio workspace. Download and import sample programs for motors. Start Configure Motor Software Start Configure Motor Software Oownload and install Renesas Motor Workbench. Start Open QE Setting		motor control parameters. Prepare Tuning Program Select Tuning Program Generate Tuning Program Tuning Program Tuning Program Download Tuning Program Tuning Program: Debug¥RA6T2_MCILV1_SPM_LESS_FOC_E2! Download Start Tuner Select a configuration file for Tuner. RA6T2_MCILV1_SPM_LESS_FOC_E2S_V Launch Renesas Motor Workbench for Tuner. Launch <tuner></tuner>	operation. Build Application Program Build Project Download Application Program Application Program: Debug#RA6T2_MCILV1_SPM_LESS_FOC_E2! Download Start Analyzer Select a configuration file for Analyzer. RA6T2_MCILV1_SPM_LESS_FOC_E2S_V Launch Renesas Motor Workbench for Analyzer. Offline mode Launch <analyzer></analyzer>	
Start I		heck result of Renesas Motor Wo latest version of RMW is installed W is not installed or an old version	d.	

The icon tooltip shows details.

> Added the zoom-in and zoom-out feature in the motor configuration GUI

It is now possible to zoom in and out the property setup block diagram of the motor middleware FSP displayed in the FSP Visualization window.





2. 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)

3. Operating Environment

- > Renesas e^2 studio 2022-04 (or later)
 - % If you are using a version of e² studio earlier than 2022-04, update it to 2022-04 or later.
- Renesas Motor Workbench V3.0.0 (or later)
 - % If you are using a version of Renesas Motor Workbench earlier than V3.0.0, update it to V3.0.0 or later.

4. Obtaining the Product

Download the installer for QE for Motor V1.1.0 from the following URL:

https://www.renesas.com/software-tool/qe-motor-development-assistance-tool-motor-applications#tabrelease-information



Revision History

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

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