

[Released on the Web]

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Rev.1.00

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Solution Toolkit

Development Assistance Tool for Lighting System

QE for Lighting V1.0.0

Outline

QE for Lighting V1.0.0, a development assistance tool for lighting system, has been released on the web.

This product is available free of charge.

1. Product Features

QE for Lighting is an assistance tool for smart lighting system solution development, which seamlessly integrates with Renesas' lighting system libraries, solution programs, various compilers, and evaluation boards. It simplifies design activities, reduces development time, and saves costs. Using this tool makes the development of the smart lighting solution simple, quick, and efficient.

1.1 Guidance display to help develop lighting systems

While following the workflow and looking at the guide for each item, you can create a sample project, configure DALI, generate source code, and write the program to the evaluation board after compilation with only simple GUI operations.

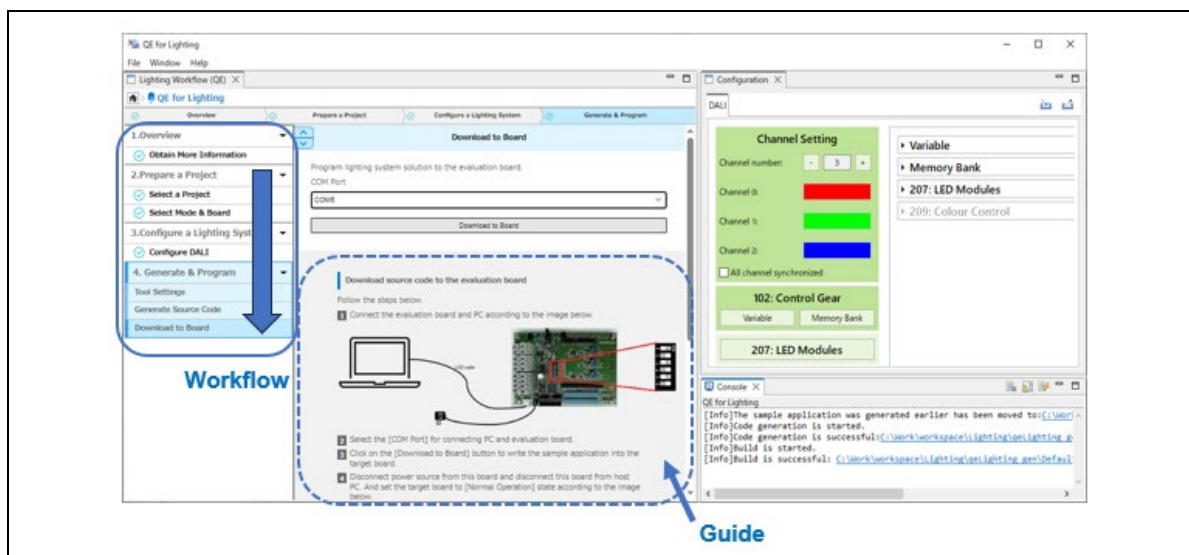


Figure 1 QE for Lighting main window

- Overview
The information of the Renesas QE Lighting tool can be referred in this step.
- Prepare a Project
Specify a project name and location. Select the mode and evaluation board for the lighting system solution.
- Configure a Lighting System
Configure DALI protocol parameters.

- Generate & Program
Configure QE for Lighting settings.
Generate the lighting solution files and build with specified compiler.
- Download to Board
Program lighting system solution to the evaluation board.

1.2 DALI parameter setting for lighting control

QE for Lighting supports the following items.

- DALI control gear libraries (compliant with IEC 62386-102)
- Particular requirements of IEC 62386-207 edition 1.0 (LED modules) for LED lighting
- Particular requirements of IEC 62386-209 edition 1.0 (color control) for production lighting
- Multiple types of LED dimming control (by the CPU or FAA)
- Combining different protocols for generating various sample applications
IEC 62386-102 + IEC 62386-207
IEC 62386-102 + IEC 62386-207 + IEC 62386-209

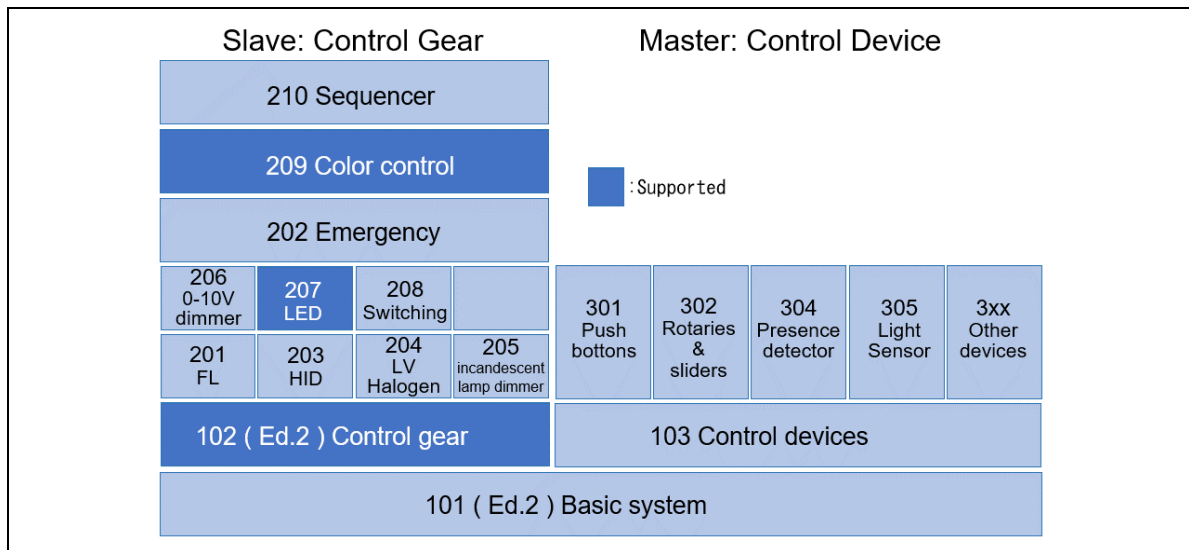


Figure 2 DALI Standard Listing

2. Supported Devices

RL78 Family RL78/G24

- Board : RL78/G24 DC/DC LED Control Evaluation Board (RTK7RLG240P00000BJ)

3. Operating Environment

- Windows 10、Windows 11 (all are 64-bit version)
- CS+ for CC V8.09.01 (or later)
- IAR Embedded Workbench for Renesas RL78 V5.10.3 (or later)
- FAA/GREEN_DSP Structured Assembler V1.04.02 (or later)
- Renesas Flash Programmer V3.11.02 (or later)

4. Obtaining the Product

Download the product from the URL below.

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

Please refer to the release notes for this product for installation instructions, caveats and limitations.

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

Revision History

Rev.	Date	Description	
		Page	Summary
1.00	Jul.05.24	-	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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