Solution Summary

TESSERA TECHNOLOGY’s DALI Lighting Control Solution supports your DALI-enabled lighting device development as a one-stop service. Various development tools with RL78 MCUs are available.

Features/Benefits

- Provide many solutions between planning to mass production stage as a one-stop service
- Accurate consulting service from planning stage by a dedicated staff member who understands the latest DALI specifications
- Contract development of hardware and software: experience in developing DALI standards Part 101, 102, 103, 207, and 301, other DALI standards parts supported
- The same condition tests as the official test house’s ones available
- Agency service for requesting certification tests from official test house

Diagrams/Graphics

Lighting Communication Control Gear Evaluation Board

The evaluation board for DALI-2 Control Gear with Renesas MCU RL78 / I1A.

<table>
<thead>
<tr>
<th>Product Name</th>
<th>TS-CG-RL78I1A-102KIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>On-board MCU</td>
<td>Renesas RL78 / I1A (R5F107DE)</td>
</tr>
<tr>
<td>Supported Emulator</td>
<td>Renesas E2 Emulator Lite</td>
</tr>
<tr>
<td>Interface</td>
<td>DALI-2 Interface</td>
</tr>
<tr>
<td></td>
<td>LED x 4</td>
</tr>
<tr>
<td>Power Source Voltage</td>
<td>DC 5V ± 10%</td>
</tr>
</tbody>
</table>

https://www.tessera.co.jp/eng/products/ts-cg-rl78i1a-102kit.html

Target Markets and Applications

- Smart Building
- Smart Home
- Consumer Electronics
- Industrial Lighting Control

https://www.tessera.co.jp/eng/index.html
Strong One-stop Support for the Development of DALI-enabled Lighting Equipment

One-stop Service

**DALI Product Planning**
- Basic Research
- Stay up to date with the latest DALI standards
- Support for expansion of library based on market trends

**Development**
- Applied Development
- Deployment of DALI library in new hardware
- Contract development of hardware and software

**Evaluation**
- Testing Services
- Evaluation and verification services using ProbitLab2
- Test result reporting and consulting
- Agency service for requesting certification tests from official test house

Basic Research
We are a DiiA associate, always up to date with the latest DALI test sequences.

We also have the IEC62386 specifications officially purchased and possessed. By our dedicated staff, who are always up-to-date with the latest specifications, provides accurate consulting.

Applied Development
- Contract development of DALI-PWM conversion control software for lighting equipment manufacturers
- Contract development of LED lighting device control software for lighting device manufacturers
- Development of wireless DALI software for demonstrations
- Development of the Renesas DALI Library (for Part 102, 207)

Testing Services
We are an authorized user of the Lichtvision Engineering ProbitLab2 evaluation equipment, and we conduct our tests under the same conditions as an official DiiA-accredited test house.

In addition, we provide an agency service for requesting certification testing from GRE Alpha, an official test house.

Results:
- Evaluation and verification of DALI-1 Part 102 for lighting equipment manufacturers
- Evaluation and verification of DALI-1 Part 102 + 207 for lighting equipment manufacturers

Contact  [https://www.tessera.co.jp/cgi-bin/admin/C-007/contact_eng/visit/form_submit.pl](https://www.tessera.co.jp/cgi-bin/admin/C-007/contact_eng/visit/form_submit.pl)