To our customers,

Old Company Name in Catalogs and Other Documents

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Renesas Electronics website: http://www.renesas.com

April 1st, 2010
Renesas Electronics Corporation

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- This product has been developed by assuming its use for program development and evaluation in laboratories. Therefore, it does not fall under the application of Electrical Appliance and Material Safety Law and protection against electromagnetic interference when used in Japan.

CAUTION

If the requirements shown in the "CAUTION" sentences are ignored, the equipment may cause personal injury or damage to the products.
1. Outline

The R0E521134CFG00 is a converter board for connecting the emulation probe R0E521000EPB00 and the compact emulator R0E521000CPE00 for R8C/Tiny Series to a foot pattern for 32-pin 0.8-mm-pitch LQFP (PLQP0032GB-A, formerly 32P6U-A) of R8C/10, 11, 12, and 13 Groups.

2. Package Components (See Figure 1)

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>R0E521134CFG00 (Base board R0E521000CIF00 and 150mm FFC cable included)</td>
<td>1 pc.</td>
</tr>
<tr>
<td>YQPACK032SA (made by Tokyo Eletech Corporation)</td>
<td>1 pc.</td>
</tr>
<tr>
<td>NQPACK032SA (made by Tokyo Eletech Corporation)</td>
<td>1 pc.</td>
</tr>
<tr>
<td>YQ-GUIDE (made by Tokyo Eletech Corporation)</td>
<td>4 pcs.</td>
</tr>
<tr>
<td>R0E521134CFG00 User's Manual (This manual)</td>
<td>1 pc.</td>
</tr>
</tbody>
</table>

3. Specifications

<table>
<thead>
<tr>
<th>Applicable package</th>
<th>PLQP0032GB-A (formerly 32P6U-A) (32-pin 0.8-mm-pitch LQFP)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insertion/removal iterations of connector</td>
<td>Between R0E521134CFG00 and YQPACK032SA: 100 times guaranteed</td>
</tr>
<tr>
<td></td>
<td>Between R0E521000EPB00 or R0E521000CPE00 and R0E521134CFG00: 50 times guaranteed</td>
</tr>
</tbody>
</table>

4. Usage (See Figure 2)

The R0E521134CFG00 can be used for debugging and board mounted evaluation in common by mounting the NQPACK032SA on the user system.

(1) For debugging
Mount the NQPACK032SA and YQPACK032SA on the foot pattern of the user system in that order. And fix them with the YQ-GUIDE’s (do not use the screws included with the YQPACK032SA).
After connecting the R0E521000EPB00 or R0E521000CPE00 and R0E521134CFG00, connect the R0E521134CFG00 to the YQPACK032SA.

(2) For onboard evaluation
Mount an R8C/10, 11, 12 and 13 Groups MCU and HQPACK032SA (separately available) in that order on the NQPACK032SA on the user system. And fix them using a screw included with the HQPACK032SA.

Before using the R0E521134CFG00, be sure to read "7. Precautions" on page 4 and the R0E521000EPB00 or R0E521000CPE00 User’s Manual.
5. Connection Procedure (See Figure 3)

The procedure for connecting the R0E521134CFG00 is shown below.

(1) Mount the NQPACK032SA on the user system.
(2) Attach the YQPACK032SA on the NQPACK032SA.
(3) Secure the four corners of the YQPACK032SA with the YQ-GUIDE’s.

- Do not use the screws included with the YQPACK032SA for fixing the YQPACK032SA.
- The screwdriver included with the NQPACK032SA is used for fixing the HQPACK032SA. Do not use it for fixing the YQ-GUIDE’s.

(4) Attach the R0E521000EPB00 or R0E521000CPE00 to the R0E521134CFG00.
(5) Attach the R0E521134CFG00 to the YQPACK032SA.

6. External Dimensions and a Sample Foot Pattern (See Figure 4)

Figure 3 Connection procedure of the R0E521134CFG00

Figure 4 External dimensions and a sample foot pattern of the R0E521134CFG00

(3/4)
7. Precautions

**CAUTION**

Cautions to Be Taken for This Product:
- Do not pull or excessively flex the cable. The cable may cause a break.
- When connecting the YQPACK032SA, be sure to use the included YQ-GUIDE's.
- Do not use the screws included with the YQPACK032SA to fix it.

**IMPORTANT**

Notes on This Product:
- We cannot accept any request for repair.
- For purchasing the NQPACK032SA, YQPACK032SA and HQPACK032SA, contact the following:
  - Tokyo Eletech Corporation http://www.tetc.co.jp/e_tet.htm
- For inquiries about the product or the contents of this manual, contact your local distributor.
  - Renesas Tools Homepage http://www.renesas.com/en/tools