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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1. Outline

The R0E5212L4CFG00 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 0.8mm pitch LQFP (PLQP0032GB-A, formerly 32P6U-A) of R8C/2K and 2L Groups.

2. Package Components (See Figure 1)

Check to see if the R0E5212L4CFG00 package has all the following contents before using this product.

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>R0E5212L4CFG00 (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>R0E5212L4CFG00 User’s Manual (This manual)</td>
<td>1 pc.</td>
</tr>
</tbody>
</table>

3. Specifications

Table 2 Specifications

<table>
<thead>
<tr>
<th>Applicable package</th>
<th>Insertion/removal iterations of connector</th>
</tr>
</thead>
<tbody>
<tr>
<td>PLQP0032GB-A (32-pin 0.8mm pitch LQFP)</td>
<td>Between R0E5212L4CFG00 and YQPACK032SA: 100 times guaranteed</td>
</tr>
<tr>
<td></td>
<td>Between R0E521000EPB00 or R0E521000CPE00 and R0E5212L4CFG00: 50 times guaranteed</td>
</tr>
</tbody>
</table>

4. Usage (See Figure 2)

The R0E5212L4CFG00 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 R0E5212L4CFG00, connect the R0E5212L4CFG00 to the YQPACK032SA.

2) For onboard evaluation

Mount an R8C/2K and 2L Group MCU and HQPACK032SA (not included) in that order on the NQPACK032SA on the user system. And fix them using a screw included with the HQPACK032SA.

Before using the R0E5212L4CFG00, 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 R0E5212L4CFG00 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 R0E5212L4CFG00.
(5) Attach the R0E5212L4CFG00 to the YQPACK032SA.

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

Figure 3 Connection procedure of the R0E5212L4CFG00

Figure 4 External dimensions and a sample foot pattern of the R0E5212L4CFG00
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/tools

8. Adding an MCU file

If you cannot select the MCU file for the R8C/2K and /2L Groups when the emulator debugger is launched, follow as below to add the MCU file.

(1) Download the MCU file installer for the emulator to be used from the following download site.

   http://tool-support.renesas.com/eng/toolnews/download/r8c2k_2l.htm

   - When using with the compact emulator R0E521000CPE00
     MCU file installer name: MCU_Files_install_cpe_R8C_2K-2L.exe
   - When using with the emulation probe R0E521000EPB00
     MCU file installer name: MCU_Files_install_epb_R8C_2K-2L.exe

(2) Start the downloaded installer to add the MCU file.