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

Issued by: Renesas Electronics Corporation (http://www.renesas.com)
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CAUTION

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

Renesas Tools Homepage  http://www.renesas.com/en/tools
1. Outline

The R0E521276CFG00 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/26 and 27 Groups.

2. Package Components (See Figure 1)

Table 1 Package Components

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
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<tbody>
<tr>
<td>R0E521276CFG00 (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>R0E521276CFG00 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>PLQP0032GB-A (32-pin 0.8-mm-pitch LQFP)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insertion/removal iterations of connector</td>
<td>Between R0E521276CFG00 and YQPACK032SA: 100 times guaranteed</td>
</tr>
<tr>
<td></td>
<td>Between R0E521000EPB00 or R0E521000CPE00 and R0E521276CFG00: 50 times guaranteed</td>
</tr>
</tbody>
</table>

4. Usage (See Figure 2)

The R0E521276CFG00 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 R0E521276CFG00, connect the R0E521276CFG00 to the YQPACK032SA.

(2) For onboard evaluation
Mount an R8C/26 and 27 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 R0E521276CFG00, 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 R0E521276CFG00 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 R0E521276CFG00.
(5) Attach the R0E521276CFG00 to the YQPACK032SA.

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

Figure 3 Connection procedure of the R0E521276CFG00

Figure 4 External dimensions and a sample foot pattern of the R0E521276CFG00
7. Precautions

<table>
<thead>
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8. How to Add an MCU File

If an MCU file for the R8C/26 and 27 Groups cannot be selected after starting up the emulator debugger, add an MCU file following the procedure below.

1. Please download an MCU file installer which is suitable for your emulator from the download site below.
   [http://tool-support.renesas.com/eng/toolnews/download/r8c26_29.htm](http://tool-support.renesas.com/eng/toolnews/download/r8c26_29.htm)
   - When using with the compact emulator R0E521000CPE00
     MCU file installer: `MCU_Files_install_cpe_R8C_26-29.exe`
   - When using with the emulation probe R0E521000EPB00
     MCU file installer: `MCU_Files_install_epb_R8C_26-29.exe`

2. Execute the installer to add the MCU file.