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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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R0E5212DACFK00

Converter Board for 80-pin 0.5mm pitch LQFP

User's Manual

* NQPACK, YQPACK, YQ-GUIDE and HQPACK are trademarks of Tokyo Eletech Corporation.

Keep safety first in your circuit designs!

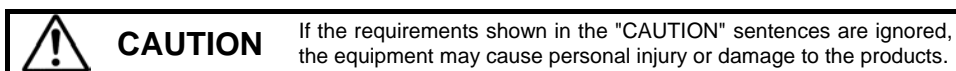
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Renesas Tools Homepage <http://www.renesas.com/tools>

1. Outline

The R0E5212DACFK00 is a converter board for connecting the emulation probe R0E521000EPB00 and the compact emulator R0E521000CPE00 for R8C/Tiny Series to a foot pattern for 80-pin 0.5mm pitch LQFP (PLQP0080KB-A, previous code: 80P6Q-A) of R8C/2C and 2D Groups.

2. Package Components (See Figure 1)

Table 1 Package Components

Item	Quantity
R0E5212DACFK00 (Slave chip mounting board R0E521DAEPBS0 and 150mm FFC cable included)	1 pc.
YQPACK080SD (made by Tokyo Eletech Corporation)	1 pc.
NQPACK080SD-ND (made by Tokyo Eletech Corporation)	1 pc.
YQ-GUIDE (made by Tokyo Eletech Corporation)	4 pcs.
R0E5212DACFK00 User's Manual (This manual)	1 pc.

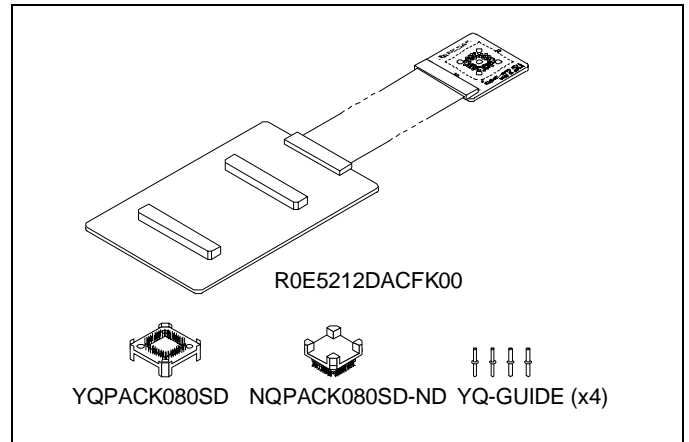


Figure 1 Package components of the R0E5212DACFK00

3. Specifications

Table 2 Specifications

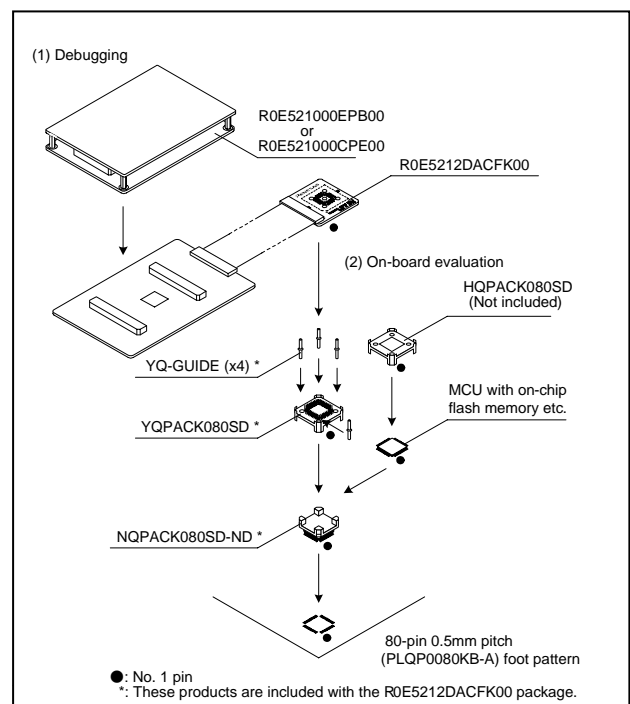
Applicable package	PLQP0080KB-A (80-pin 0.5mm pitch LQFP)
Insertion/removal iterations of connector	Between R0E5212DACFK00 and YQPACK080SD: 100 times guaranteed
	Between R0E521000EPB00 or R0E521000CPE00 and R0E5212DACFK00: 50 times guaranteed

4. Usage (See Figure 2)

The R0E5212DACFK00 can be used for debugging and on-board evaluation in common by mounting the NQPACK080SD-ND on the user system.

- (1) For debugging
Mount the NQPACK080SD-ND on the foot pattern of the user system. Mount the YQPACK080SD on the NQPACK080SD-ND, and fix them with the YQ-GUIDE's (do not use the screws included with the YQPACK080SD). After connecting the R0E521000EPB00 or R0E521000CPE00 to the R0E5212DACFK00, connect the R0E5212DACFK00 to the YQPACK080SD.
- (2) For on-board evaluation
Mount an R8C/2C or 2D Group MCU and HQPACK080SD (separately available) in that order on the NQPACK080SD-ND on the user system. And fix them using a screw included with the HQPACK080SD.

Before using the R0E5212DACFK00, 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 R0E5212DACFK00 is shown below.

- (1) Mount the NQPACK080SD-ND on the user system.
- (2) Attach the YQPACK080SD to the NQPACK080SD-ND.
- (3) Secure the four corners of the YQPACK080SD with the YQ-GUIDE's.

- Do not use the screws included with the YQPACK080SD for fixing the YQPACK080SD.
- The screwdriver included with the NQPACK080SD-ND is used for fixing the YQPACK080SD. Do not use it for fixing the YQ-GUIDE's.

- (4) Attach the R0E521000EPB00 or R0E521000CPE00 to the R0E5212DACFK00.
- (5) Attach the R0E5212DACFK00 to the YQPACK080SD.

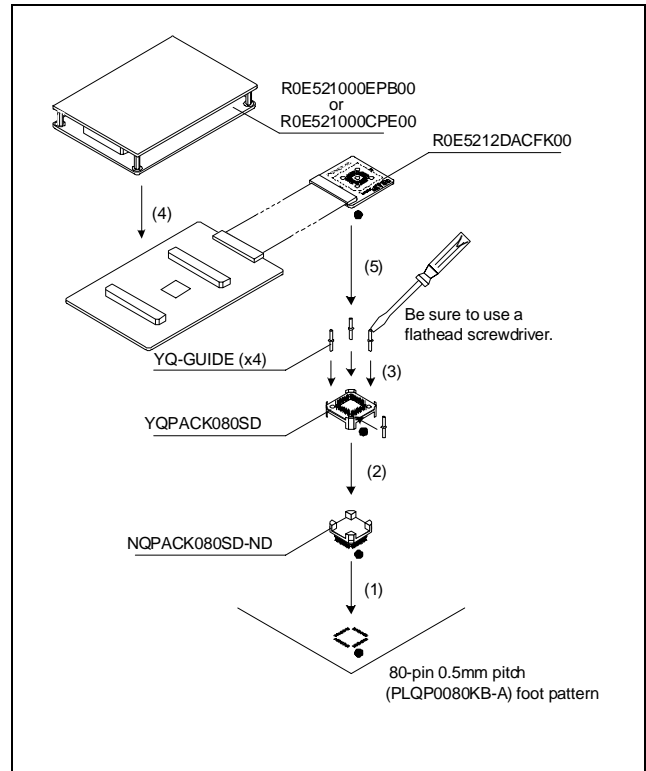


Figure 3 Connection procedure of the R0E5212DACFK00

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

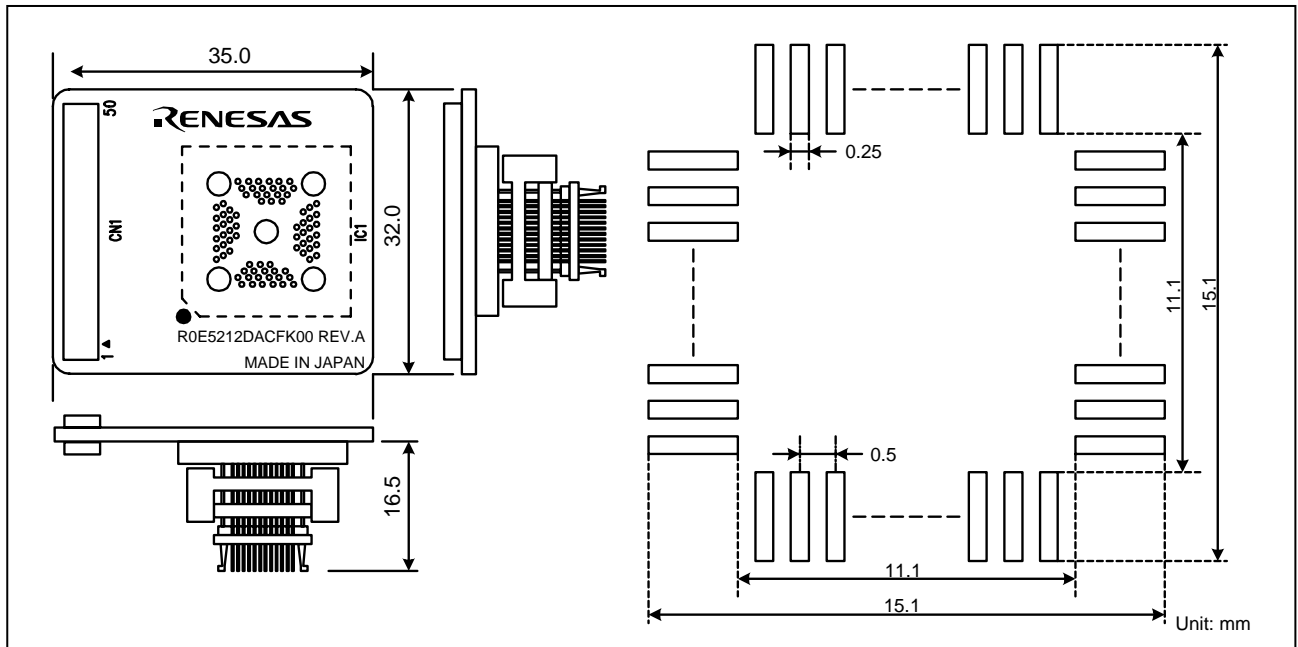


Figure 4 External dimensions and a sample foot pattern of the R0E5212DACFK00

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 YQPACK080SD, be sure to use the included YQ-GUIDE's.
- Do not use the screws included with the YQPACK080SD to fix it.

IMPORTANT

Notes on This Product:

- We cannot accept any request for repair.
- For purchasing the NQPACK080SD-ND, YQPACK080SD and HQPACK080SD, contact the following:
Tokyo Eletech Corporation http://www.tetc.co.jp/e_index.htm
- For inquiries about the product or the contents of this manual, contact your local distributor.
Renesas Tools Homepage <http://www.renesas.com/tools>