

R0E53054ECFK60

Converter Board for Connecting R8C/54E, R8C/54F, R8C/54G and R8C/54H Groups 48-pin 0.5mm pitch LQFP

1. Outline

The R0E53054ECFK60 is a converter board for connecting the flexible cable R0E001000FLX10 to a foot pattern for 48-pin 0.5mm pitch LQFP (PLQP0048KB-A).

2. Package Components (See Figure 1)

Check to see if the R0E53054ECFK60 package has all the following contents before using this product.

- (1) R0E53054ECFK60 converter board..... 1 pc.
- (2) YQPACK048SD (made by Tokyo Eletech Corporation) 1 pc.
- (3) NQPACK048SD (made by Tokyo Eletech Corporation) 1 pc.
- (4) YQ-GUIDE (made by Tokyo Eletech Corporation) 4 pcs.
- (5) R0E53054ECFK60 User's Manual (this manual)

3. Specifications

Table 1 Specifications

Applicable package	PLQP0048KB-A (48-pin 0.5mm pitch LQFP)
Insertion/removal iterations of connector	50 times guaranteed

4. Usage (See Figure 2)

The R0E53054ECFK60 can be used for debugging and on-board evaluation in common by mounting the NQPACK048SD on the user system.

- (1) For debugging
Mount the NQPACK048SD on the foot pattern of the user system and attach the YQPACK048SD on it. In addition, connect the R0E53054ECFK60 to the YQPACK048SD, and then connect the flexible cable R0E001000FLX10 of the emulator to the upper connector of the R0E53054ECFK60.
- (2) For on-board evaluation
Mount an MCU with on-chip flash memory or one-time PROM and the HQPACK048SD (not included) in order on the NQPACK048SD on the user system.

Before using the R0E53054ECFK60, be sure to read the precautions on page 3.

* NQPACK, YQPACK, YQSOCKET, YQ-GUIDE, HQPACK, TQPACK, TQSOCKET, CSSOCKET, CSPLUG/W and LSPACK are trademarks of Tokyo Eletech Corporation.

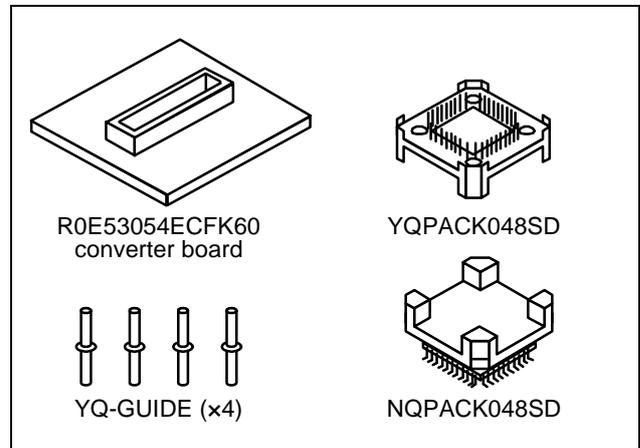


Figure 1 Package components of the R0E53054ECFK60

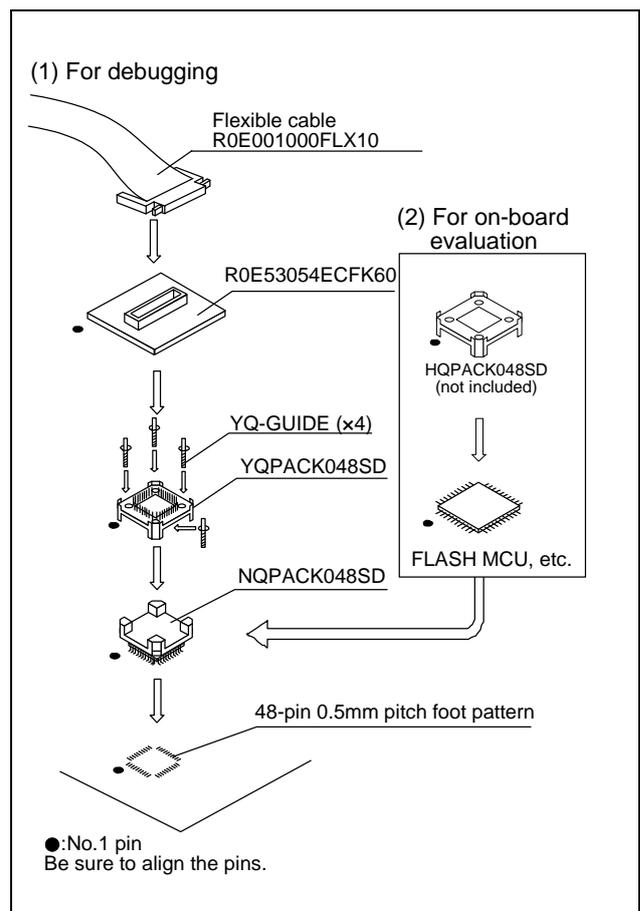


Figure 2 Usage of the R0E53054ECFK60

5. Connection Procedure (See Figure 3)

The procedure for connecting the R0E53054ECFK60 is shown below.

- (1) Mount the NQPACK048SD on the user system.
- (2) Attach the YQPACK048SD on the NQPACK048SD.
- (3) Secure the four corners of the YQPACK048SD with the YQ-GUIDEs.

- Do NOT use the screws included with the YQPACK048SD for fixing the YQPACK048SD.
- Do NOT use the screwdriver included with the NQPACK048SD for fixing the YQ-GUIDEs. That is used only for the HQPACK048SD.

- (4) Mount the R0E53054ECFK60 on the YQPACK048SD.
- (5) Attach the flexible cable R0E001000FLX10 of the emulator to the R0E53054ECFK60.

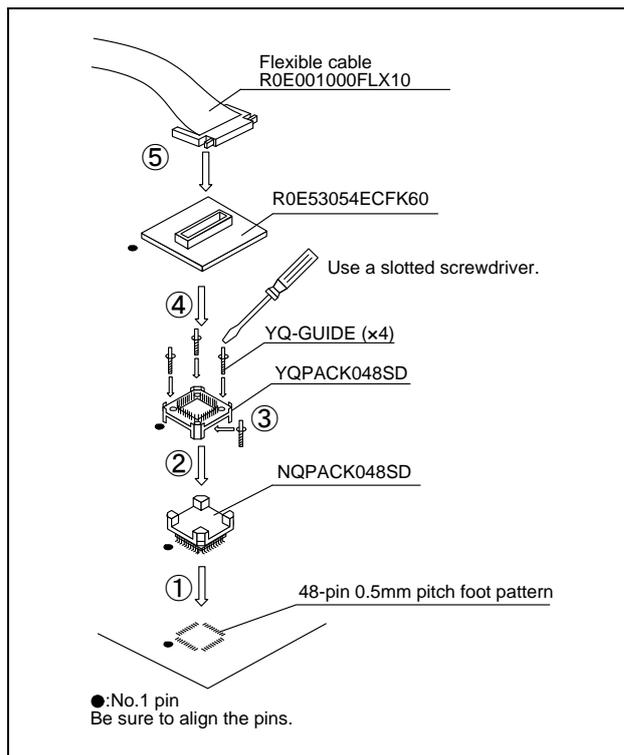


Figure 3 Connection procedure of the R0E53054ECFK60

6. External Dimensions and a Sample Foot Pattern

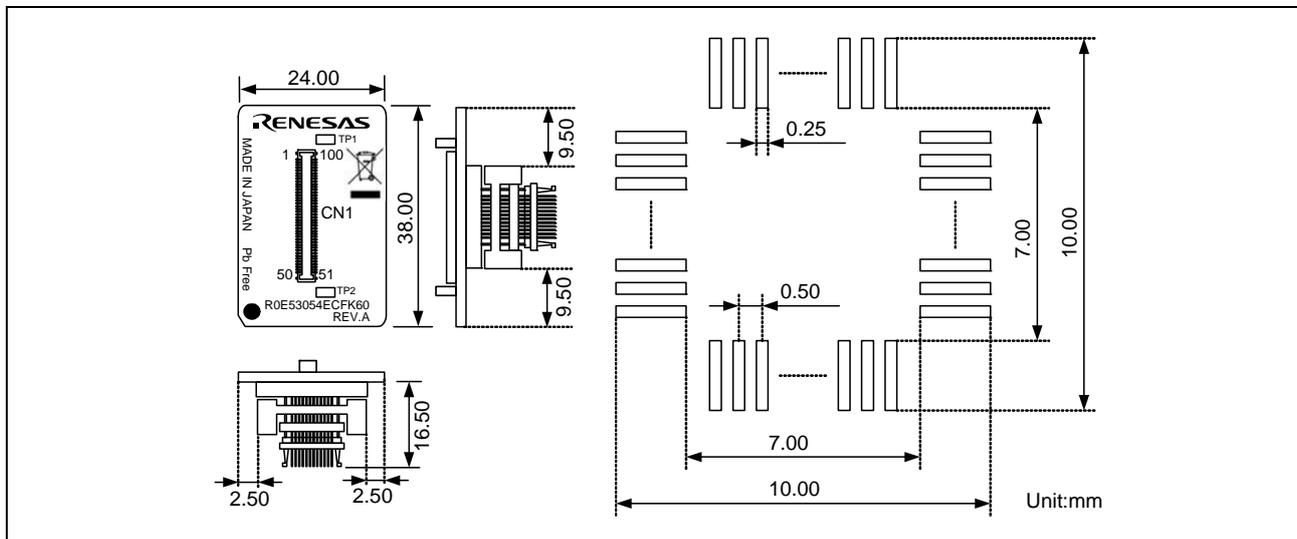


Figure 4 External dimensions and a sample foot pattern of the R0E53054ECFK60

7. Precautions

Cautions to Be Taken for This Product:

- When connecting the YQPACK048SD, be sure to use the included YQ-GUIDEs.
- Do not use the screws included with the YQPACK048SD for connecting the YQPACK048SD.

Notes on This Product:

- We cannot accept any request for repair.
- For purchasing the NQPACK048SD, YQPACK048SD and HQPACK048SD, contact the following:
Tokyo Eletech Corporation http://www.tetc.co.jp/e_index.htm

Regulatory Compliance Notices

European Union regulatory notices

This product complies with the following EU Directive. (This directive is only valid in the European Union.)

Environmental Compliance and Certifications:

- Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment (RoHS) Directive 2002/95/EC
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Renesas Electronics Europe GmbH can take back end of life equipment, register for this service at "<http://www.renesas.eu/weee>"

8. Correspondence of Connectors CN1

Table 2 Correspondence of the connectors

CN1 Pin No.	IC1	CN1 Pin No.	IC1
1	—	100	—
2	—	99	—
3	—	98	—
4	—	97	—
5	31	96	30
6	32	95	29
7	33	94	28
8	34	93	27
9	35	92	26
10	36	91	25
11	—	90	—
12	—	89	—
13	—	88	—
14	—	87	—
15	—	86	—
16	—	85	—
17	—	84	—
18	—	83	—
19	—	82	—
20	37	81	24
21	38	80	—
22	39	79	—
23	41	78	—
24	42	77	—
25	43	76	—
26	—	75	—
27	44	74	23
28	45	73	22
29	46	72	21
30	47	71	20
31	—	70	19
32	48	69	18
33	1	68	17
34	—	67	16
35	—	66	15
36	—	65	14
37	—	64	—
38	—	63	13
39	—	62	12
40	2	61	—
41	3	60	—
42	40	59	—
43	4	58	—
44	5	57	—
45	6	56	11
46	7	55	10
47	8	54	9
48	—	53	—
49	—	52	—
50	—	51	—

(-:No connection or signals in the emulator)

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