

### R0E53038ACFK30

REJ10J1898-0200

Rev.2.00

Converter Board for Connecting R8C/38A, /38C, /38E, /38F, /38G and /38H Groups 80-pin 0.5mm pitch LQFP

Apr 16, 2010

## 1. Outline

The R0E53038ACFK30 is a converter board for connecting the signals of the MCU unit R0E521300MCU00 for R8C Family R8C/3x Series to a foot pattern for 80-pin 0.5mm pitch LQFP of R8C/38A, /38C, /38E, /38F, /38G and /38H Groups.

## 2. Package Components (See Figure 1)

Check to see if the R0E53038ACFK30 package has all the following contents before using this product.

- (1) R0E53038ACFK30 converter board ..... 1 pc.
- (2) YQPACK80SD (made by Tokyo Eletech Corporation) ..... 1 pc.
- (3) NQPACK80SD-ND (made by Tokyo Eletech Corporation) ..... 1 pc.
- (4) YQ-GUIDE (made by Tokyo Eletech Corporation) ..... 4 pcs.
- (5) R0E53038ACFK30 User's Manual (this manual)

## 3. Specifications

Table 1 Specifications

Applicable package	PLQP0080KB-A (80-pin 0.5mm pitch LQFP)
Insertion/removal iterations of connector	50 times guaranteed

## 4. Usage (See Figure 2)

The R0E53038ACFK30 can be used for debugging and on-board evaluation in common by mounting the NQPACK80SD-ND on the user system.

- (1) For debugging  
Mount the NQPACK80SD-ND on the foot pattern of the user system and attach the YQPACK80SD on it. In addition, connect the R0E53038ACFK30 to the YQPACK80SD, and then connect the flexible cable R0E001000FLX10 of the emulator to the upper connector of the R0E53038ACFK30.
- (2) For on-board evaluation  
Mount an MCU with on-chip flash memory or one-time PROM and the HQPACK80SD (not included) in order on the NQPACK80SD-ND on the user system.

Before using the R0E53038ACFK30, be sure to read the precautions on page 3.

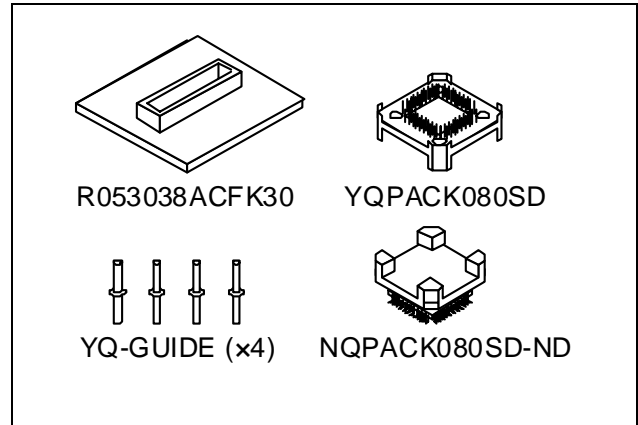


Figure 1 Package components of the R0E53038ACFK30

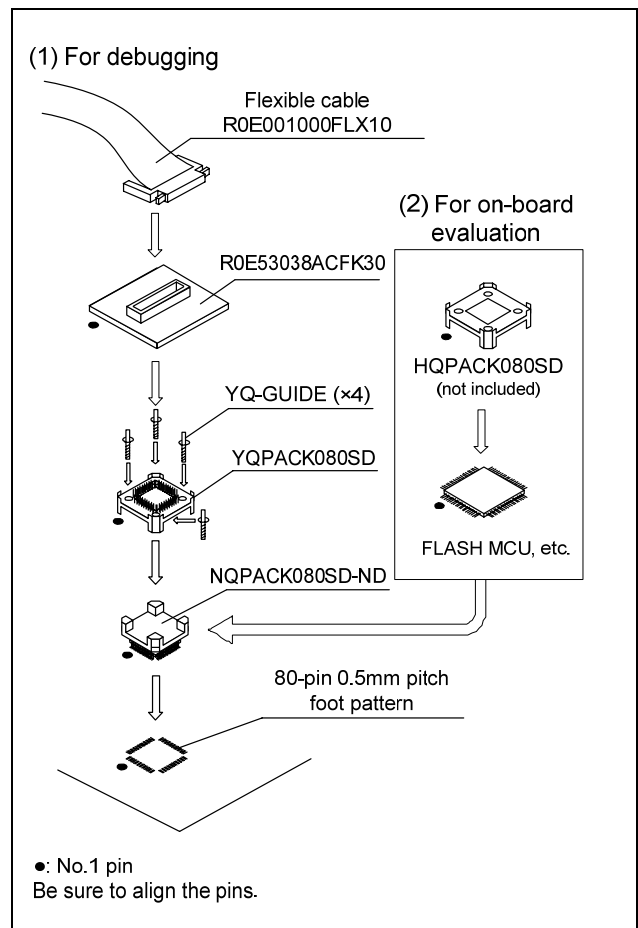


Figure 2 Usage of the R0E53038ACFK30

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

### 5. Connection Procedure (See Figure 3)

The procedure for connecting the R0E53038ACFK30 is shown below.

- (1) Mount the NQPACK80SD-ND on the user system.
- (2) Attach the YQPACK80SD on the NQPACK80SD-ND.
- (3) Secure the four corners of the YQPACK80SD with the YQ-GUIDES.

- Do NOT use the screws included with the YQPACK80SD for fixing the YQPACK80SD.
- Do NOT use the screwdriver included with the NQPACK80SD-ND for fixing the YQ-GUIDES. That is used only for the HQPACK80SD.

- (4) Mount the R0E53038ACFK30 on the YQPACK80SD.
- (5) Attach the flexible cable R0E001000FLX10 of the emulator to the R0E53038ACFK30.

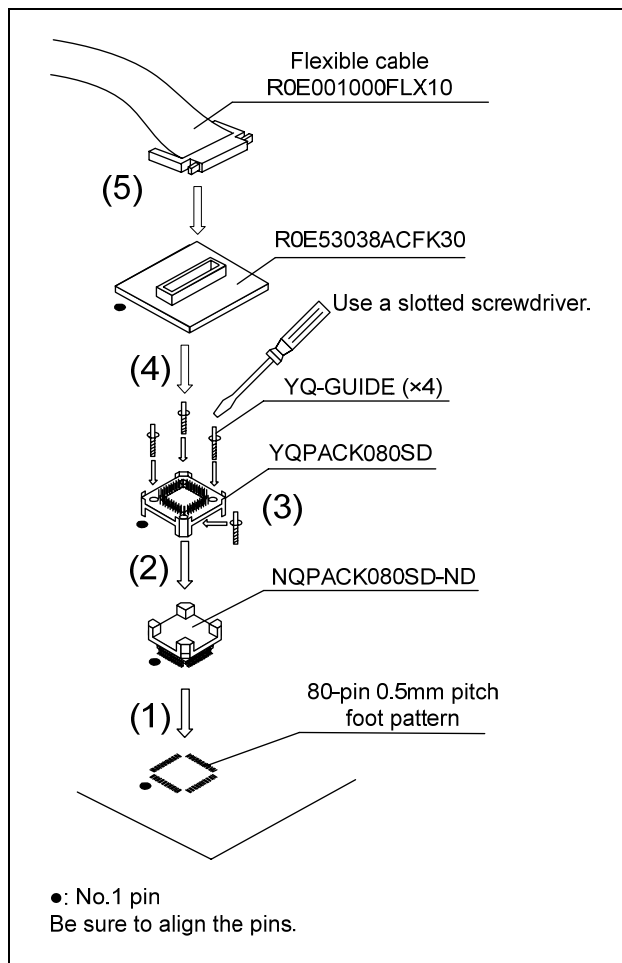


Figure 3 Connection procedure of the R0E53038ACFK30

### 6. External Dimensions and a Sample Foot Pattern

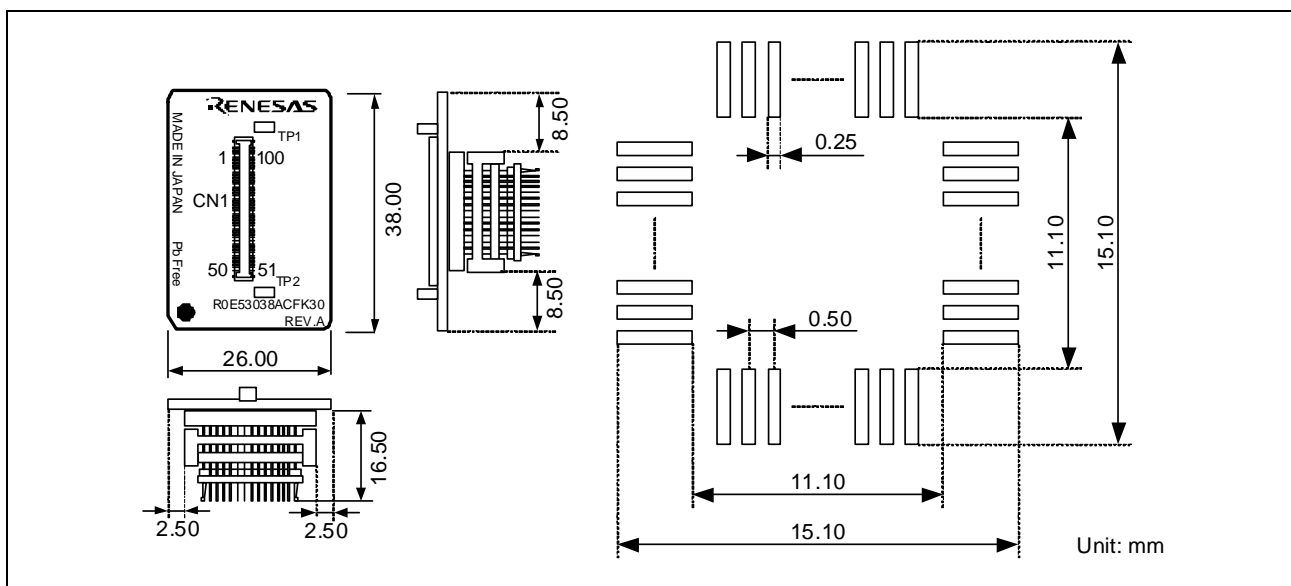


Figure 4 External dimensions and a sample foot pattern of the R0E53038ACFK30

## 7. Precautions and WEEE Directive

### ⚠ CAUTION

Cautions to Be Taken for This Product:



- When connecting the YQPACK80SD, be sure to use the included YQ-GUIDEs.
- Do not use the screws included with the YQPACK80SD for connecting the YQPACK80SD.

### IMPORTANT

Notes on This Product:

- We cannot accept any request for repair.
- For purchasing the NQPACK80SD-ND, YQPACK80SD and HQPACK80SD, contact the following:  
Tokyo Eletech Corporation [http://www.tetc.co.jp/e\\_index.htm](http://www.tetc.co.jp/e_index.htm)

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## 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	51	96	50
6	52	95	49
7	53	94	48
8	54	93	47
9	55	92	46
10	56	91	45
11	57	90	44
12	58	89	43
13	59	88	42
14	60	87	41
15	-	86	-
16	61	85	40
17	62	84	39
18	63	83	38
19	64	82	37
20	65	81	36
21	66	80	35
22	67	79	34
23	68	78	33
24	69	77	32
25	70	76	31
26	-	75	-
27	71	74	30
28	72	73	29
29	73	72	28
30	74	71	27
31	75	70	26
32	76	69	25
33	77	68	24
34	78	67	23
35	79	66	22
36	80	65	21
37	-	64	-
38	1	63	20
39	2	62	19
40	3	61	18
41	4	60	17
42	5	59	16
43	6	58	15
44	7	57	14
45	8	56	13
46	9	55	12
47	10	54	11
48	-	53	-
49	-	52	-
50	-	51	-

(-:No connection or signals in the emulator)

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