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April 1st, 2010
Renesas Electronics Corporation

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

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M3T-F160-80NSD

Converter Board for Connecting FLX160 to 80-pin 0.5-mm-pitch LQFP

User's Manual

Keep safety first in your circuit designs!

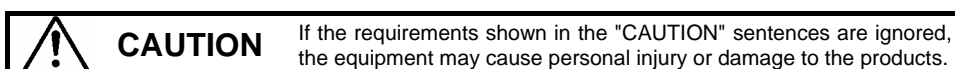
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Renesas Tools Homepage <http://www.renesas.com/en/tools>

1. Outline

The M3T-F160-80NSD is a converter board for connecting the 160-core flexible cable FLX160 to a foot pattern for 80-pin 0.5-mm-pitch LQFP (80P6Q-A).

2. Package Components (See Figure 1)

- (1) M3T-F160-80NSD converter board 1 pc.
- (2) NQPACK080SD-ND (made by Tokyo Eletech Corporation) 1 pc.
- (3) YQPACK080SD (made by Tokyo Eletech Corporation) 1 pc.
- (4) YQSOCKET080SDF (made by Tokyo Eletech Corporation) 1 pc.

Pre-mounted on the converter board M3T-F160-80NSD

- (5) YQ-GUIDE's (made by Tokyo Eletech Corporation) 4 pcs.
- (6) M3T-F160-80NSD User's Manual (This manual)

3. Specifications

Table 1 Specifications

Applicable package	80P6Q-A (80-pin 0.5-mm-pitch LQFP)
Insertion/removal iterations of connector	50 times guaranteed

4. Usage (See Figure 2)

The M3T-F160-80NSD can be used for debugging and board-mounted 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 and attach the YQPACK080SD on it. And connect the probe of the emulation pod to the upper connector of the M3T-F160-80NSD. Then connect the YQPACK080SD and the M3T-F160-80NSD.
- (2) For onboard evaluation
Mount an MCU with on-chip flash memory or one-time PROM and the HQPACK080SD (separately available) in that order on the NQPACK080SD-ND on the user system.

Before using the M3T-F160-80NSD, be sure to read "6. Precautions" on page 3.

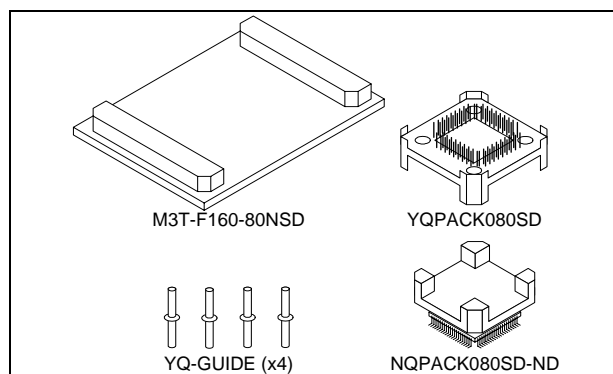


Figure 1 Package components of the M3T-F160-80NSD

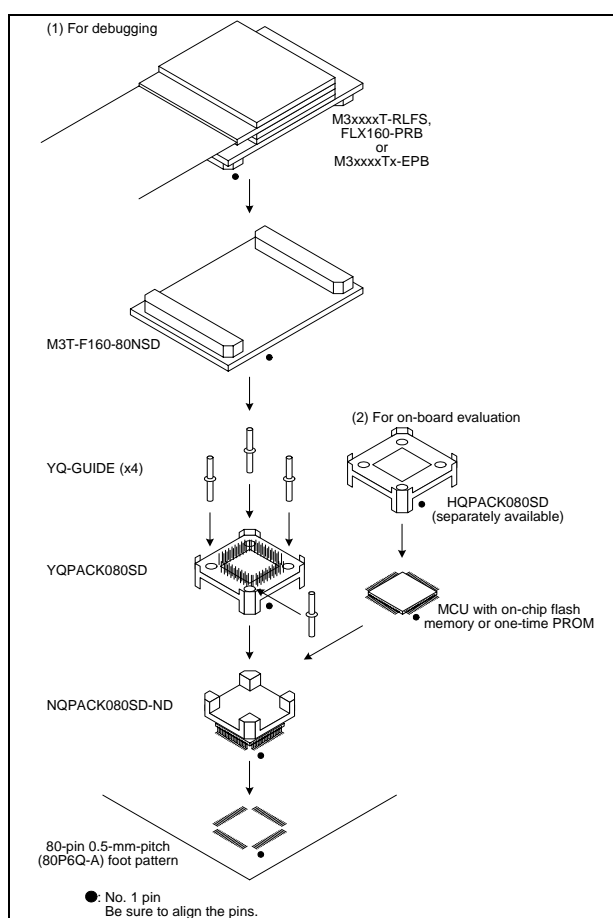


Figure 2 Usage of the M3T-F160-80NSD

5. External Dimensions and a Sample Foot Pattern

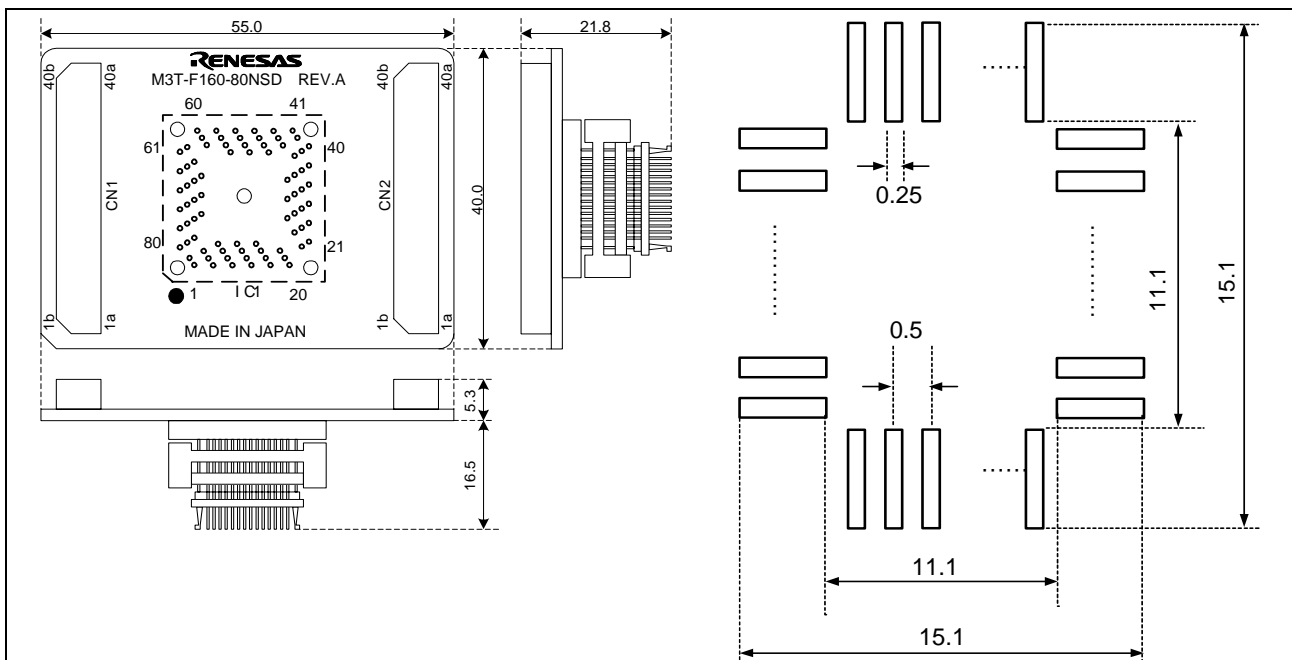


Figure 3 External dimensions and a sample foot pattern of the M3T-F160-80NSD

6. Precautions

⚠ CAUTION

Caution to Be Taken for This Product:



- When connecting the YQPACK080SD, be sure to use the included YQ-GUIDE's.
- Do NOT use the screws included with the YQPACK080SD for connecting the YQPACK080SD.

IMPORTANT

Notes on This Product:

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

7. Correspondence of Connectors CN1 and CN2

Table 2 Correspondence of the connectors

CN1	IC1	CN1	IC1	CN2	IC1	CN2	IC1
1a	-	1b	6	1a	-	1b	7
2a	5	2b	4	2a	8	2b	9
3a	3	3b	-	3a	10	3b	11
4a	-	4b	-	4a	12	4b	13
5a	-	5b	-	5a	14	5b	15
6a	-	6b	-	6a	16	6b	17
7a	2	7b	1	7a	18	7b	19
8a	80	8b	79	8a	20	8b	21
9a	-	9b	-	9a	22	9b	-
10a	-	10b	-	10a	-	10b	-
11a	-	11b	-	11a	-	11b	-
12a	-	12b	78	12a	-	12b	-
13a	77	13b	76	13a	-	13b	-
14a	75	14b	74	14a	23	14b	24
15a	73	15b	72	15a	25	15b	26
16a	71	16b	70	16a	27	16b	28
17a	69	17b	-	17a	-	17b	-
18a	-	18b	-	18a	-	18b	-
19a	-	19b	-	19a	29	19b	30
20a	-	20b	-	20a	31	20b	-
21a	-	21b	-	21a	-	21b	32
22a	-	22b	-	22a	-	22b	-
23a	-	23b	68	23a	-	23b	-
24a	67	24b	66	24a	-	24b	-
25a	65	25b	-	25a	33	25b	34
26a	-	26b	-	26a	35	26b	36
27a	-	27b	-	27a	-	27b	-
28a	64	28b	63	28a	-	28b	37
29a	-	29b	-	29a	38	29b	-
30a	-	30b	-	30a	-	30b	-
31a	-	31b	-	31a	-	31b	-
32a	-	32b	62	32a	-	32b	-
33a	61	33b	60	33a	-	33b	-
34a	59	34b	58	34a	39	34b	40
35a	57	35b	56	35a	41	35b	42
36a	55	36b	54	36a	43	36b	44
37a	53	37b	52	37a	45	37b	46
38a	51	38b	50	38a	-	38b	-
39a	49	39b	48	39a	-	39b	-
40a	47	40b	-	40a	-	40b	-

("-": No connection)

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