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April 1st, 2010
Renesas Electronics Corporation

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M3T-FLX-80NSD

Converter Board for Connecting FLX100 to 80-pin 0.5-mm-pitch LQFP

User's Manual

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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 M3T-FLX-80NSD is a converter board for connecting the 100-core flexible cable FLX100 to a foot pattern for 80-pin 0.5-mm-pitch LQFP (80P6Q-A).

2. Package Components

- (1) M3T-FLX-80NSD converter board..... 1 pc.
- (2) YQSOCKET080SDF (made by Tokyo Eletech Corporation)
(pre-mounted on the M3T-FLX-80NSD)..... 1 pc.
- (3) YQPACK080SD (made by Tokyo Eletech Corporation) 1 pc.
- (4) NQPACK080SD-ND (made by Tokyo Eletech Corporation) 1 pc.
- (5) YQ-GUIDE (4 pieces) (made by Tokyo Eletech Corporation)4 pcs.
- (6) M3T-FLX-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	20 times guaranteed

4. Usage (See Figure 2)

The M3T-FLX-80NSD can be used for debugging and board mounted evaluation in common by mounting the NQPACK080SD-ND on the target board.

- (1) For debugging
Mount the NQPACK080SD-ND and YQPACK080SD on the foot pattern of the target board in that order. And connect the probe tip of the emulator to the upper connector of the M3T-FLX-80NSD. Then connect the YQPACK080SD and M3T-FLX-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 target system.

Before using the M3T-FLX-80NSD, be sure to read "7. Precautions" on page 4.

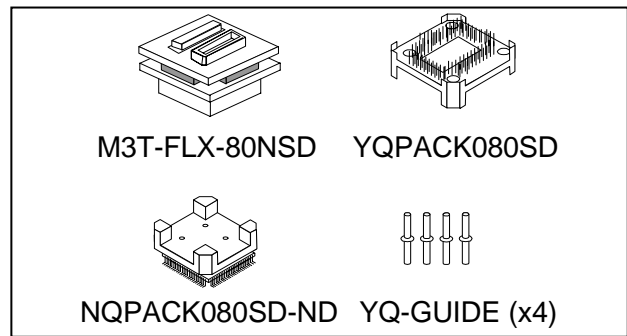


Figure 1 Package components of the M3T-FLX-80NSD

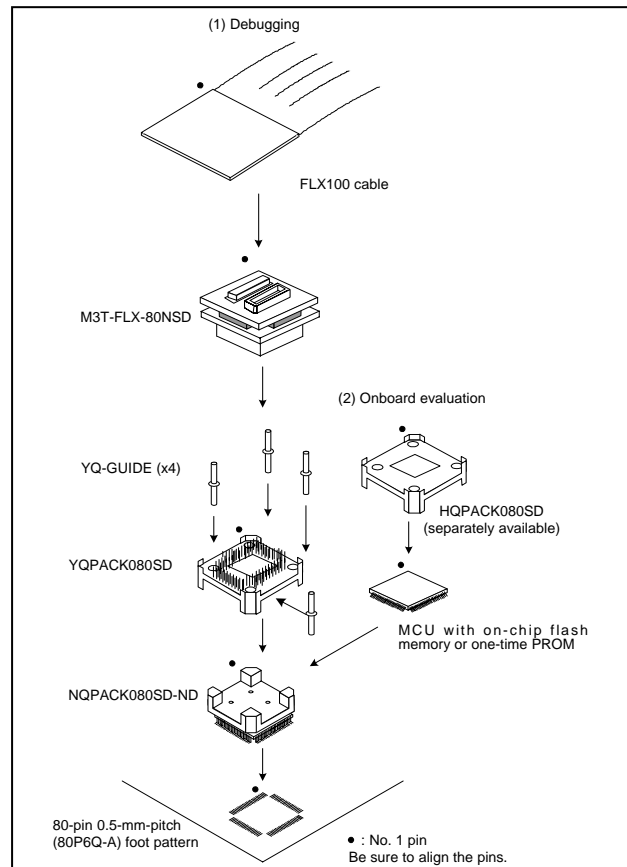


Figure 2 Usage of the M3T-FLX-80NSD

5. Connection Procedure (See Figure 3)

The procedure for connecting the M3T-FLX-80NSD is shown below.

- (1) Mount the NQPACK080SD-ND on the target system.
- (2) Attach the YQPACK080SD on 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 M3T-FLX-80NSD on the YQPACK080SD.
- (5) Connect the probe tip of the emulator and the M3T-FLX-80NSD.

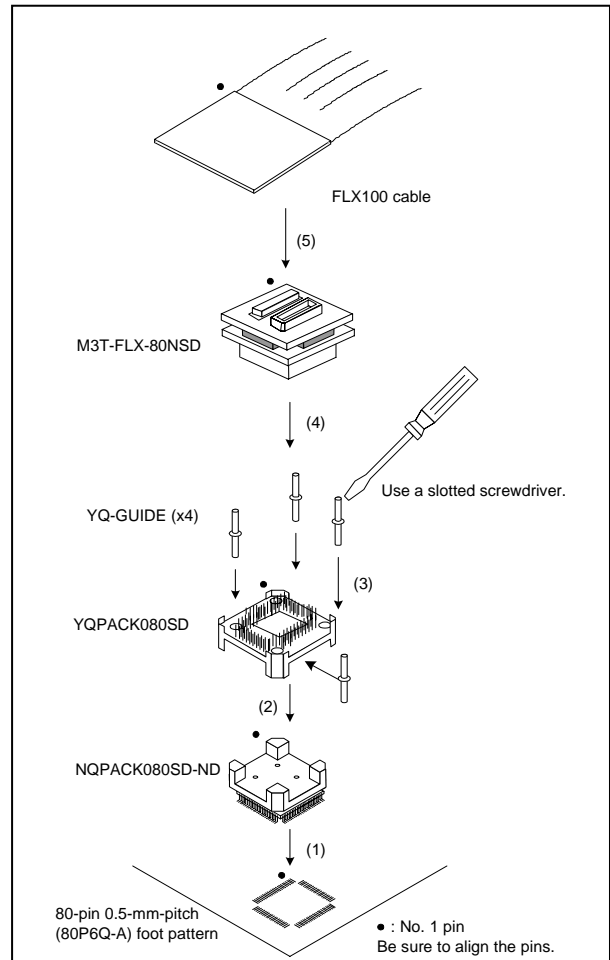


Figure 3 Connection procedure of the M3T-FLX-80NSD

6. External Dimensions and a Sample Foot Pattern

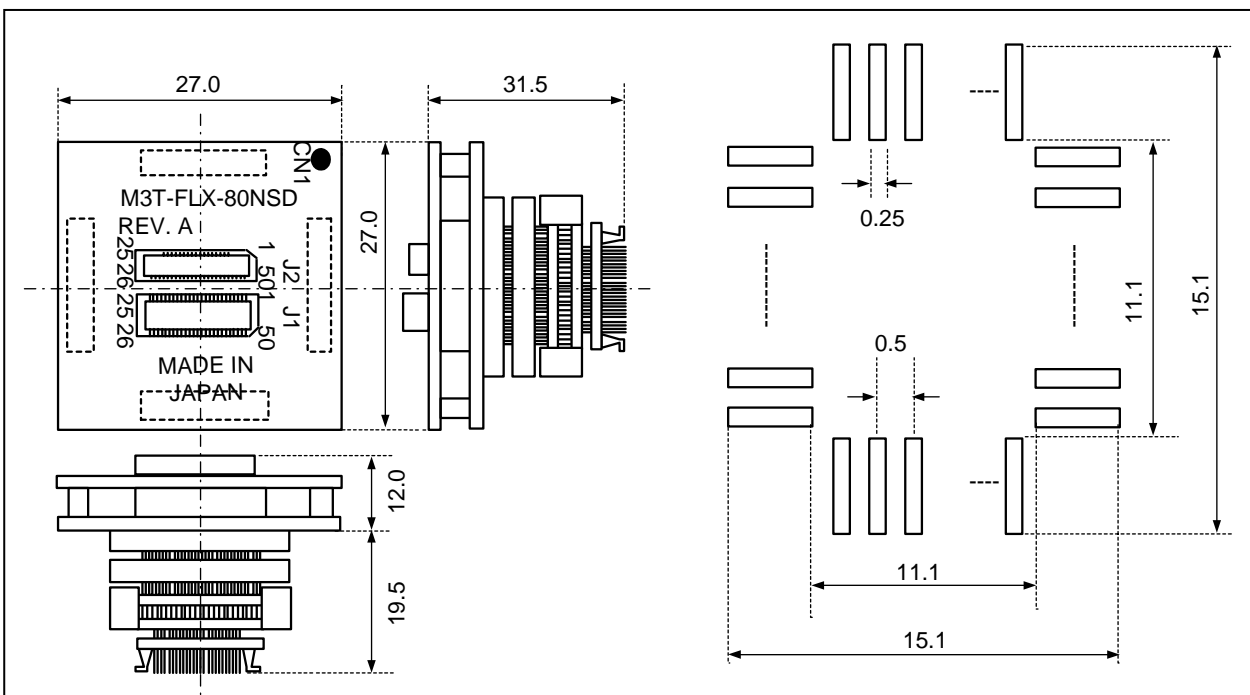


Figure 4 External dimensions and a sample foot pattern of the M3T-FLX-80NSD

7. 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 to fix it.

IMPORTANT

Notes on This Product:

- We cannot accept any request for repair.
- For purchasing the NQPACK080SD-ND, YQPACK080SD, HQPACK080SD and YQ-GUIDE, contact the following:

Daimaru Kogyo Ltd. <http://www.daimarukogyo.co.jp/>
 Tokyo Eletech Corporation http://www.tetc.co.jp/e_tet.htm

- For inquiries about the product or the contents of this manual, contact your local distributor.
 Renesas Tools Homepage <http://www.renesas.com/en/tools>

8. Correspondence of Connectors J1 and J2

Table 2 Correspondence of the Connectors

Pin No.	IC1	Pin No.	IC1	Pin No.	IC1	Pin No.	IC1
J1-1	63	J1-26	NC	J2-1	79	J2-26	23
J1-2	64	J1-27	39	J2-2	80	J2-27	24
J1-3	65	J1-28	40	J2-3	1	J2-28	25
J1-4	66	J1-29	41	J2-4	2	J2-29	26
J1-5	67	J1-30	42	J2-5	3	J2-30	27
J1-6	68	J1-31	43	J2-6	4	J2-31	28
J1-7	69	J1-32	44	J2-7	5	J2-32	29
J1-8	70	J1-33	45	J2-8	6	J2-33	30
J1-9	NC	J1-34	46	J2-9	7	J2-34	NC
J1-10	NC	J1-35	47	J2-10	8	J2-35	NC
J1-11	NC	J1-36	48	J2-11	9	J2-36	NC
J1-12	NC	J1-37	49	J2-12	10	J2-37	NC
J1-13	NC	J1-38	50	J2-13	11	J2-38	NC
J1-14	NC	J1-39	51	J2-14	12	J2-39	NC
J1-15	NC	J1-40	52	J2-15	13	J2-40	NC
J1-16	NC	J1-41	53	J2-16	14	J2-41	NC
J1-17	NC	J1-42	54	J2-17	15	J2-42	NC
J1-18	31	J1-43	55	J2-18	16	J2-43	71
J1-19	32	J1-44	56	J2-19	17	J2-44	72
J1-20	33	J1-45	57	J2-20	18	J2-45	73
J1-21	34	J1-46	58	J2-21	19	J2-46	74
J1-22	35	J1-47	59	J2-22	20	J2-47	75
J1-23	36	J1-48	60	J2-23	21	J2-48	76
J1-24	37	J1-49	61	J2-24	22	J2-49	77
J1-25	38	J1-50	62	J2-25	NC	J2-50	78

(NC: No connection)