M3T-DUMMY80

Dummy IC for 80-pin 0.8-mm-pitch QFP

User's Manual

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

1. Outline

The M3T-DUMMY80 is an accessory tool product which connects the emulator probe and target system. Its dimensions are the same as those of an 80-pin 0.8-mm-pitch QFP (20 x 14 mm) IC package (80P6N-A).

2. Package Components (See Figure 1)

(1)	M3T-DUMMY80 main unit	x 1
(2)	Socket main unit	x 1
(3)	Socket frame (for 80P6N-A)	x 2
(4)	User's manual (This manual)	x 1
(5)	User's manual (Japanese)	x 1

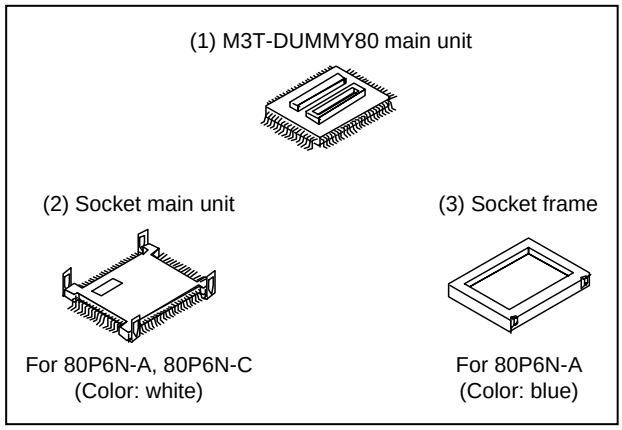


Figure 1 Package components

3. Applicable Sockets

The M3T-DUMMY80 has been tested with the following IC sockets made by Matsushita Electric Works, Ltd. Be sure to use them.

Socket main unit + socket frame (1 set):
AXS4803M195C (for 80P6N-A)

Socket frame for repair (200 pieces):
AXS4802M1 (for 80P6N-A)

4. Specifications

Table 1 Specifications

Applicable package	80P6N-A, 80P6N-C (80-pin 0.8-mm-pitch QFP)
Max. permissible current	200 mA at 5 V
Insertion/removal iterations of connector	20 times guaranteed
Insulation resistance	100M Ω or more

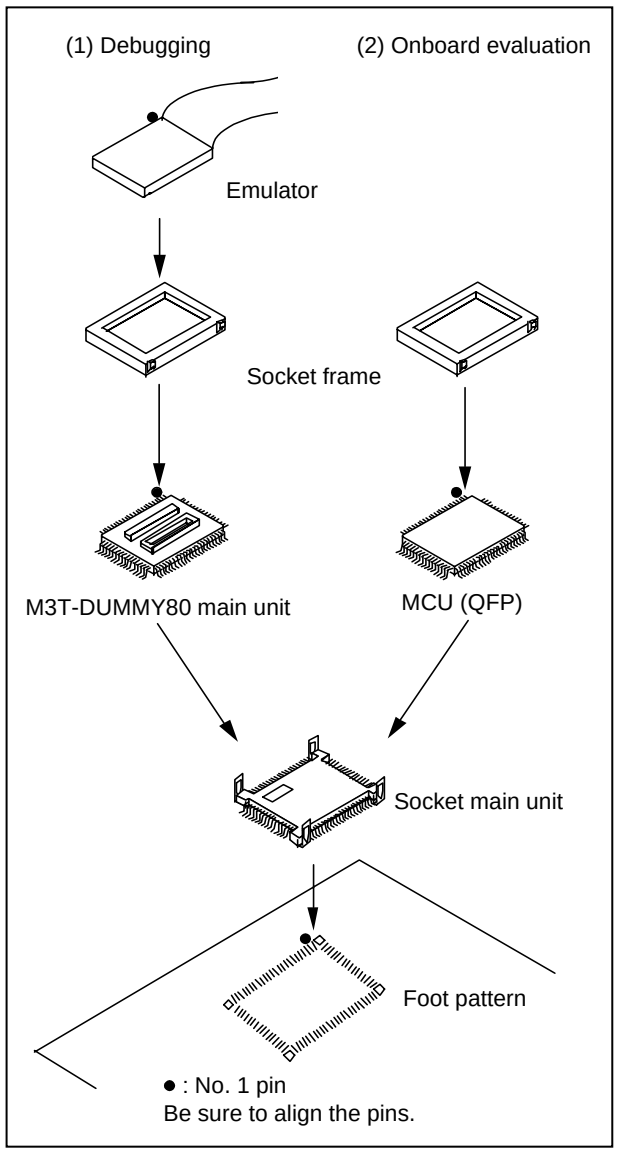
5. Usage (See Figure 2)

The M3T-DUMMY80 can be used for debugging and onboard evaluation in common by mounting the socket main unit on the target board.

(1) For debugging
Mount the socket main unit on the foot pattern of the target board. And mount the M3T-DUMMY80 and socket frame on it. Then attach the connector of the emulator.

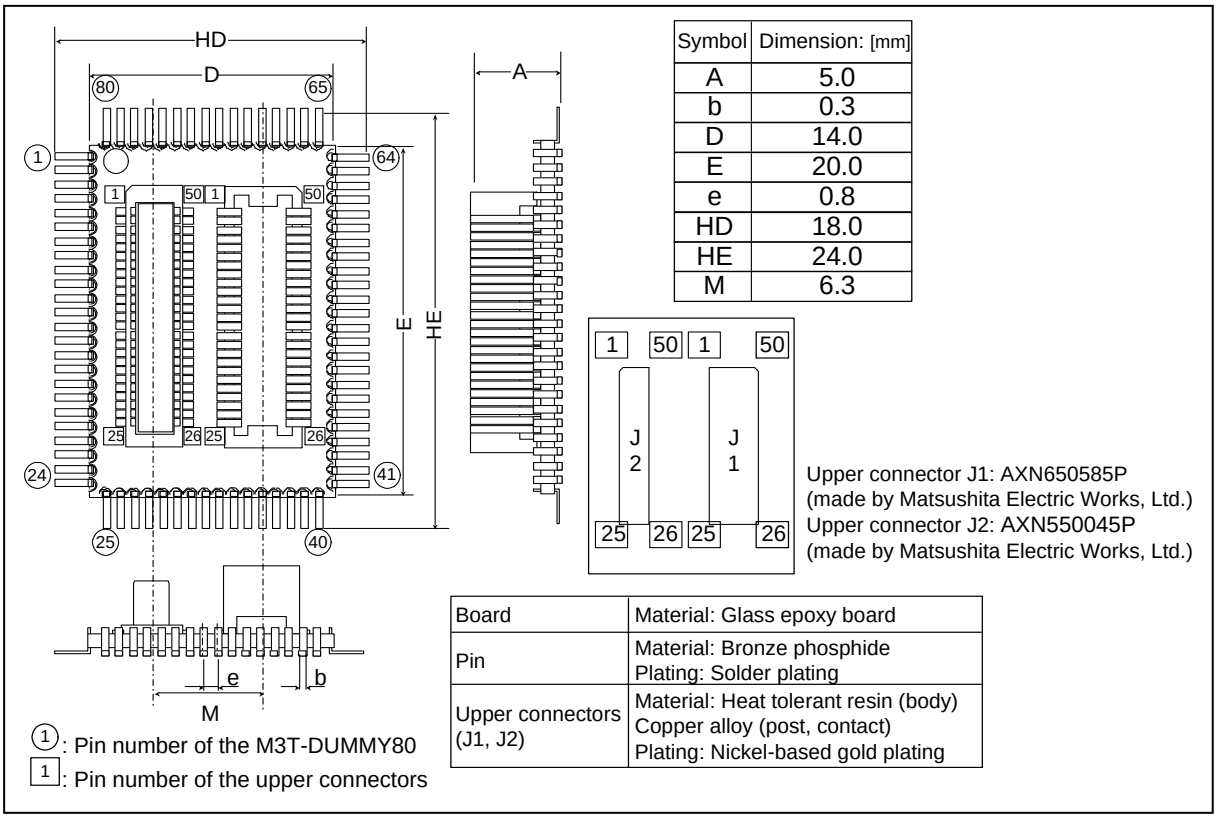
(2) For onboard evaluation
Mount the socket main unit on the foot pattern of the target board. Mount an MCU with on-chip flash memory or one-time PROM on it. Then attach the socket frame on it.

Before using the M3T-DUMMY80, be sure to read "8. Precautions" on page 4.



(3) Figure 2 Usage of the M3T-DUMMY80

6. External Dimensions of the M3T-DUMMY80



Symbol	Dimension: [mm]
A	5.0
b	0.3
D	14.0
E	20.0
e	0.8
HD	18.0
HE	24.0
M	6.3

Board	Material: Glass epoxy board
Pin	Material: Bronze phosphide Plating: Solder plating
Upper connectors (J1, J2)	Material: Heat tolerant resin (body) Copper alloy (post, contact) Plating: Nickel-based gold plating

Figure 3 External dimensions of the M3T-DUMMY80

7. Sample Foot Pattern of the Target System

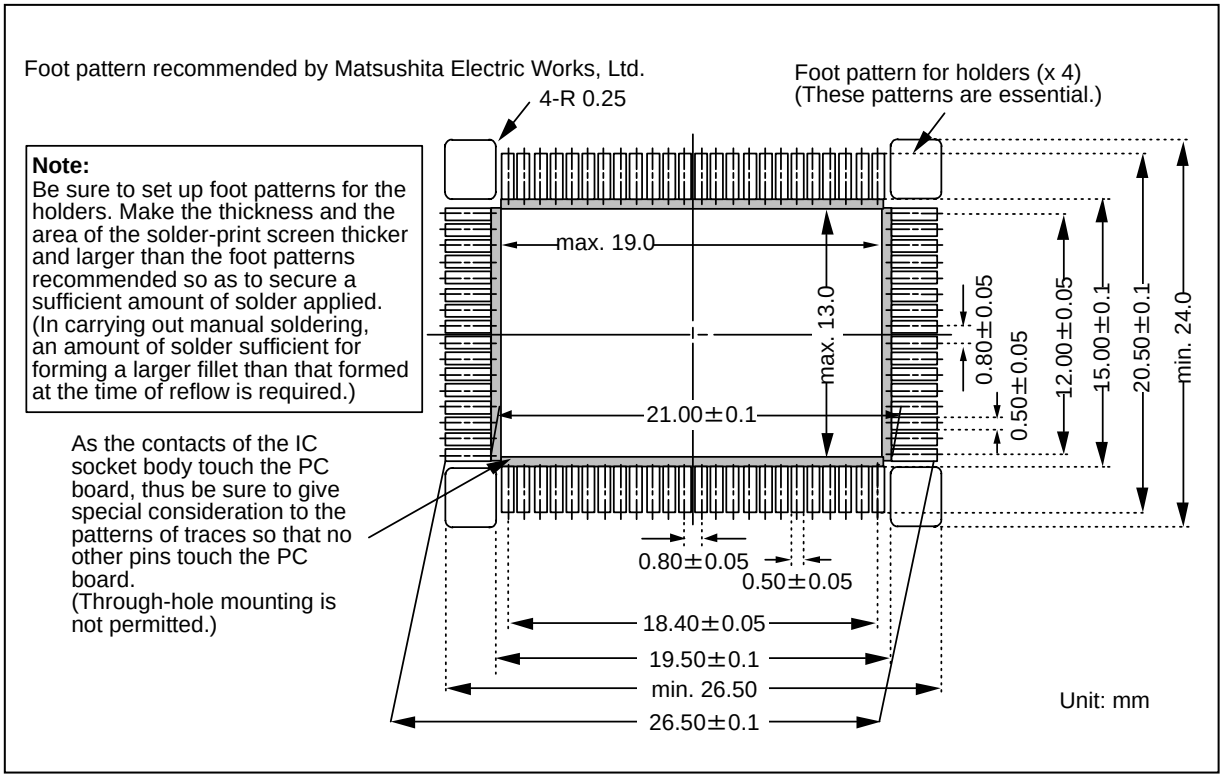


Figure 4 Dimensions of a target foot pattern (Quoted from the specifications of IC socket for QFP by Matsushita Electric Works, Ltd.)

8. Precautions

⚠ CAUTION

Cautions to Be Taken for This Product:

- Do not solder the M3T-DUMMY80 main unit directly on the target board. Be sure to use the included socket.
- Before mounting the M3T-DUMMY80, be sure to check the pin positions.
- Holder patterns are required at each of the four corners of the target foot pattern. (see Figure 4).
- Be sure to solder the holders of the socket. An insufficient amount of solder applied to the holders may cause a poor contact, so be careful.
- For soldering the socket and mounting the M3T-DUMMY80, refer to the supplementary document "Mounting the Socket Included with the M3T-DUMMY80" and "Notes on Handling the M3T-DUMMY80".
- Do not apply unnecessary stress to the M3T-DUMMY80.
- Do not touch the pins of the M3T-DUMMY80.
- Store the M3T-DUMMY80 in the dedicated case.

IMPORTANT

Notes on This Product:

- We cannot accept any request for repair.
- To remove the socket frame, use the dedicated tool AXY8580N1 made by Matsushita Electric Works, Ltd. To purchase this product and the socket frame for repair, contact Matsushita Electric Works, Ltd. (http://www.mew.co.jp/e-index.html)
- For onboard evaluation, choose an appropriate socket frame by Matsushita Electric Works, Ltd. listed below.
  For 80P6N-A package: Socket frame AXS4802M1 (included)
  For 80P6N-C package: Socket frame AXS4802N1 (not included)
- For inquiries about this product or the contents of this manual, contact your local distributor.
  Renesas Tools Homepage http://www.renesas.com/en/tools

9. Correspondence of Connectors J1, J2

Table 2 Correspondence of the M3T-DUMMY80 and connectors J1, J2

Pin No. of connector	Pin No. of M3T-DUMMY80	Pin No. of connector	Pin No. of M3T-DUMMY80	Pin No. of connector	Pin No. of M3T-DUMMY80	Pin No. of connector	Pin No. of M3T-DUMMY80
J1-1	65	J1-26	NC	J2-1	1	J2-26	25
J1-2	66	J1-27	41	J2-2	2	J2-27	26
J1-3	67	J1-28	42	J2-3	3	J2-28	27
J1-4	68	J1-29	43	J2-4	4	J2-29	28
J1-5	69	J1-30	44	J2-5	5	J2-30	29
J1-6	70	J1-31	45	J2-6	6	J2-31	30
J1-7	71	J1-32	46	J2-7	7	J2-32	31
J1-8	72	J1-33	47	J2-8	8	J2-33	32
J1-9	NC	J1-34	48	J2-9	9	J2-34	NC
J1-10	NC	J1-35	49	J2-10	10	J2-35	NC
J1-11	NC	J1-36	50	J2-11	11	J2-36	NC
J1-12	NC	J1-37	51	J2-12	12	J2-37	NC
J1-13	NC	J1-38	52	J2-13	13	J2-38	NC
J1-14	NC	J1-39	53	J2-14	14	J2-39	NC
J1-15	NC	J1-40	54	J2-15	15	J2-40	NC
J1-16	NC	J1-41	55	J2-16	16	J2-41	NC
J1-17	NC	J1-42	56	J2-17	17	J2-42	NC
J1-18	33	J1-43	57	J2-18	18	J2-43	73
J1-19	34	J1-44	58	J2-19	19	J2-44	74
J1-20	35	J1-45	59	J2-20	20	J2-45	75
J1-21	36	J1-46	60	J2-21	21	J2-46	76
J1-22	37	J1-47	61	J2-22	22	J2-47	77
J1-23	38	J1-48	62	J2-23	23	J2-48	78
J1-24	39	J1-49	63	J2-24	24	J2-49	79
J1-25	40	J1-50	64	J2-25	NC	J2-50	80

(NC: No connection)