

# M3T-SSOP42B-450

Dummy IC for 42-pin 0.8-mm-pitch SSOP

## User's Manual

Keep safety first in your circuit designs!

- Renesas Technology Corporation and Renesas Solutions Corporation put the maximum effort into making semiconductor products better and more reliable, but there is always the possibility that trouble may occur with them. Trouble with semiconductors may lead to personal injury, fire or property damage. Remember to give due consideration to safety when making your circuit designs, with appropriate measures such as (i) placement of substitutive, auxiliary circuits, (ii) use of nonflammable material or (iii) prevention against any malfunction or mishap.

Notes regarding these materials

- These materials are intended as a reference to assist our customers in the selection of the Renesas Technology product best suited to the customer's application; they do not convey any license under any intellectual property rights, or any other rights, belonging to Renesas Technology Corporation, Renesas Solutions Corporation or a third party.
- Renesas Technology Corporation and Renesas Solutions Corporation assume no responsibility for any damage, or infringement of any third-party's rights, originating in the use of any product data, diagrams, charts, programs, algorithms, or circuit application examples contained in these materials.
- All information contained in these materials, including product data, diagrams, charts, programs and algorithms represents information on products at the time of publication of these materials, and are subject to change by Renesas Technology Corporation and Renesas Solutions Corporation without notice due to product improvements or other reasons. It is therefore recommended that customers contact Renesas Technology Corporation, Renesas Solutions Corporation or an authorized Renesas Technology product distributor for the latest product information before purchasing a product listed herein. The information described here may contain technical inaccuracies or typographical errors. Renesas Technology Corporation and Renesas Solutions Corporation assume no responsibility for any damage, liability, or other loss rising from these inaccuracies or errors. Please also pay attention to information published by Renesas Technology Corporation and Renesas Solutions Corporation by various means, including the Renesas home page (<http://www.renesas.com>).
- When using any or all of the information contained in these materials, including product data, diagrams, charts, programs, and algorithms, please be sure to evaluate all information as a total system before making a final decision on the applicability of the information and products. Renesas Technology Corporation and Renesas Solutions Corporation assume no responsibility for any damage, liability or other loss resulting from the information contained herein.
- Renesas Technology semiconductors are not designed or manufactured for use in a device or system that is used under circumstances in which human life is potentially at stake. Please contact Renesas Technology Corporation, Renesas Solutions Corporation or an authorized Renesas Technology product distributor when considering the use of a product contained herein for any specific purposes, such as apparatus or systems for transportation, vehicular, medical, aerospace, nuclear, or undersea repeater use.
- The prior written approval of Renesas Technology Corporation and Renesas Solutions Corporation is necessary to reprint or reproduce in whole or in part these materials.
- If these products or technologies are subject to the Japanese export control restrictions, they must be exported under a license from the Japanese government and cannot be imported into a country other than the approved destination. Any diversion or reexport contrary to the export control laws and regulations of Japan and/or the country of destination is prohibited.
- Please contact Renesas Technology Corporation or Renesas Solutions Corporation for further details on these materials or the products contained therein.

Precautions to be taken when using this product

- This product is a development supporting unit for use in your program development and evaluation stages. In mass-producing your program you have finished developing, be sure to make a judgment on your own risk that it can be put to practical use by performing integration test, evaluation, or some experiment else.
- In no event shall Renesas Solutions Corporation be liable for any consequence arising from the use of this product.
- Renesas Solutions Corporation strives to renovate or provide a workaround for product malfunction at some charge or without charge. However, this does not necessarily mean that Renesas Solutions Corporation guarantees the renovation or the provision under any circumstances.
- This product has been developed by assuming its use for program development and evaluation in laboratories. Therefore, it does not fall under the application of Electrical Appliance and Material Safety Law and protection against electromagnetic interference when used in Japan.

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



### CAUTION

If the requirements shown in the "CAUTION" sentences are ignored, the equipment may cause personal injury or damage to the products.

Rev. 1.00

July 1, 2003

REJ10J0181-0100Z

( 1 / 4 )

Renesas Technology

[www.renesas.com](http://www.renesas.com)

## 1. Outline

This accessory tool connects the probe of an emulation pod and the target. Its dimensions are the same as those of the MCU for the 42-pin 0.8-mm-pitch SSOP (17.5 x 8.4 mm) IC package (42P2R-A).

## 2. Package Components

- (1) M3T-SSOP42B-450 main unit ..... x1
- (2) Socket ..... x1
- (3) Socket frame (for 42P2R-A) ..... x2
- (4) M3T-SSOP42B-450 User's Manual (This manual)

## 3. Applicable Socket

As this product is evaluated in combination with IC sockets made by Matsushita Electric Works, Ltd., be sure to use the sockets specified below.

Socket + socket frames (5 pieces)

AXS69204201 made by Matsushita Electric Works, Ltd.

Socket frame for repair (one piece)

AXS69304201 made by Matsushita Electric Works, Ltd.

## 4. Specifications

Table 1 Specifications

Applicable package	42P2R-A (42-pin 0.8-mm-pitch SSOP)
Insertion/removal iteration of connector	50 times guaranteed

## 5. Usage

The M3T-SSOP42B-450 can be used for debugging and board mounted evaluation in common by mounting the socket directly on the target board.

(1) For debugging

Mount the socket directly to the foot pattern on the target board. On top of it, mount the M3T-SSOP42B-450 and socket frame in that order. Then connect the pod probe of the emulation pod, etc. to the connector provided at the top of the M3T-SSOP42B-450.

(2) For board-mounted evaluation

Mount an MCU with on-chip flash memory or one-time PROM and socket frame in that order to the socket on the target system.

Before using the M3T-SSOP42B-450, be sure to read "8. Precautions" on page 4.

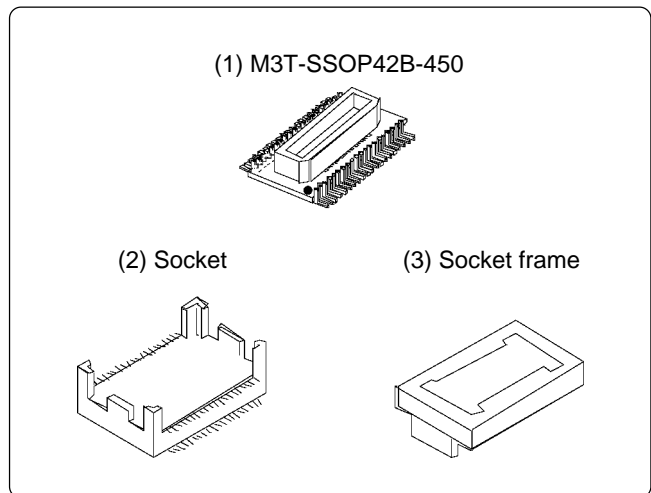


Figure 1 Package components of the M3T-SSOP42B-450

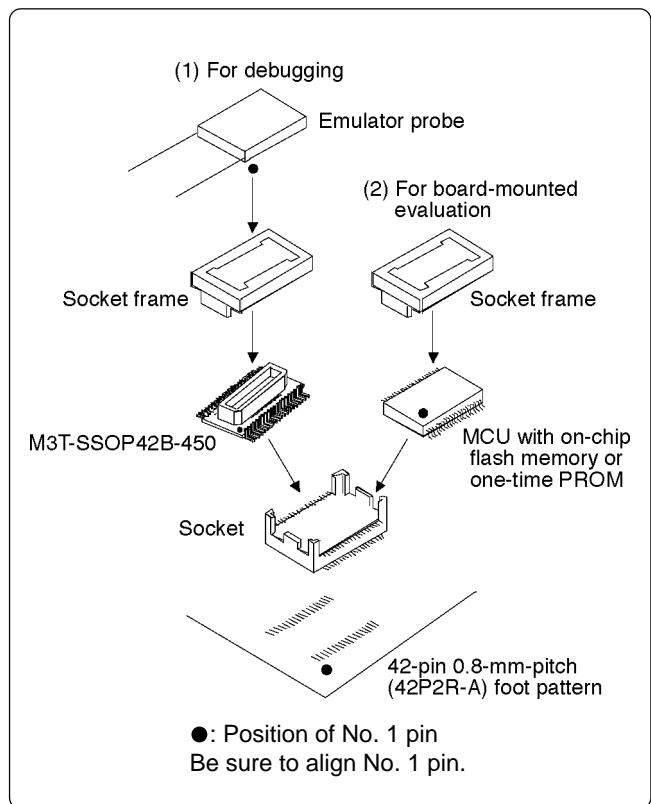


Figure 2 Usage of the M3T-SSOP42B-450

## 6. External Dimensions of the M3T-SSOP42B-450

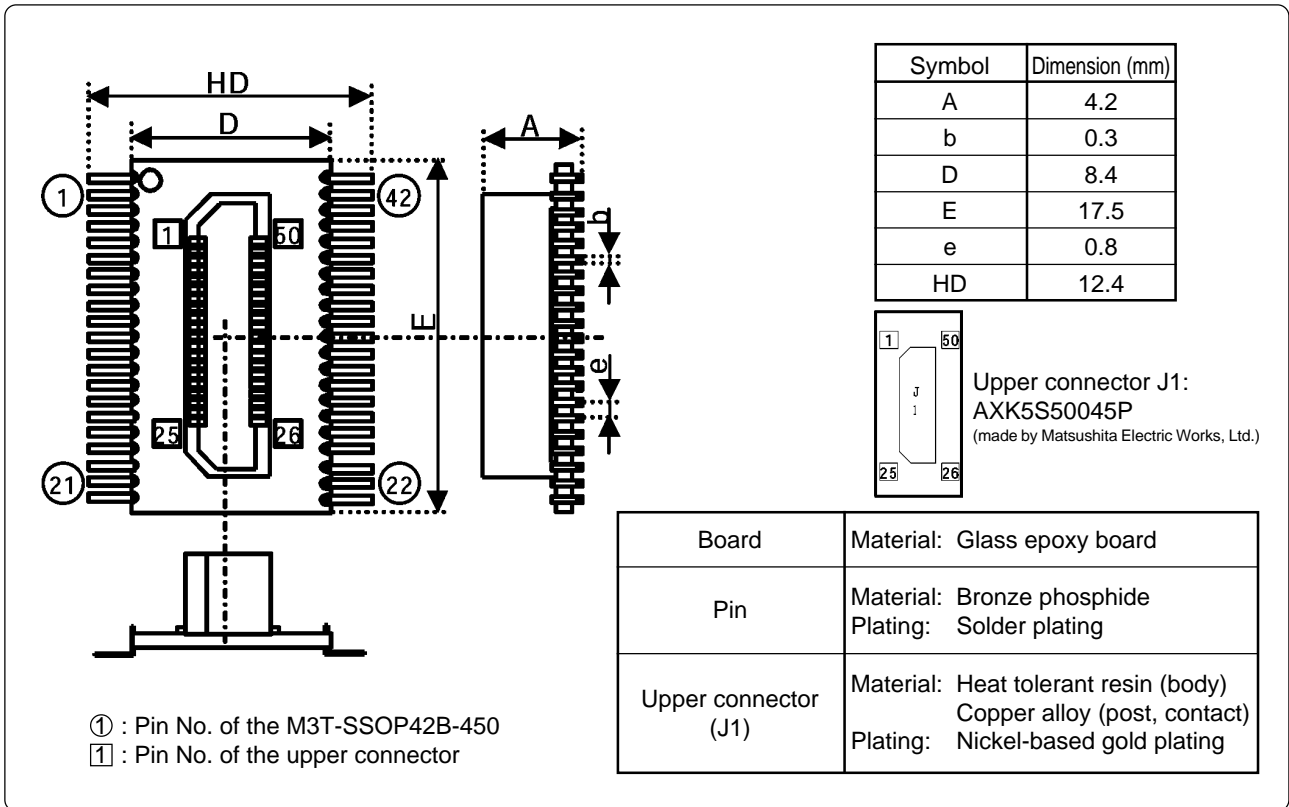


Figure 3 External dimensions of the M3T-SSOP42B-450

## 7. Target Foot Pattern

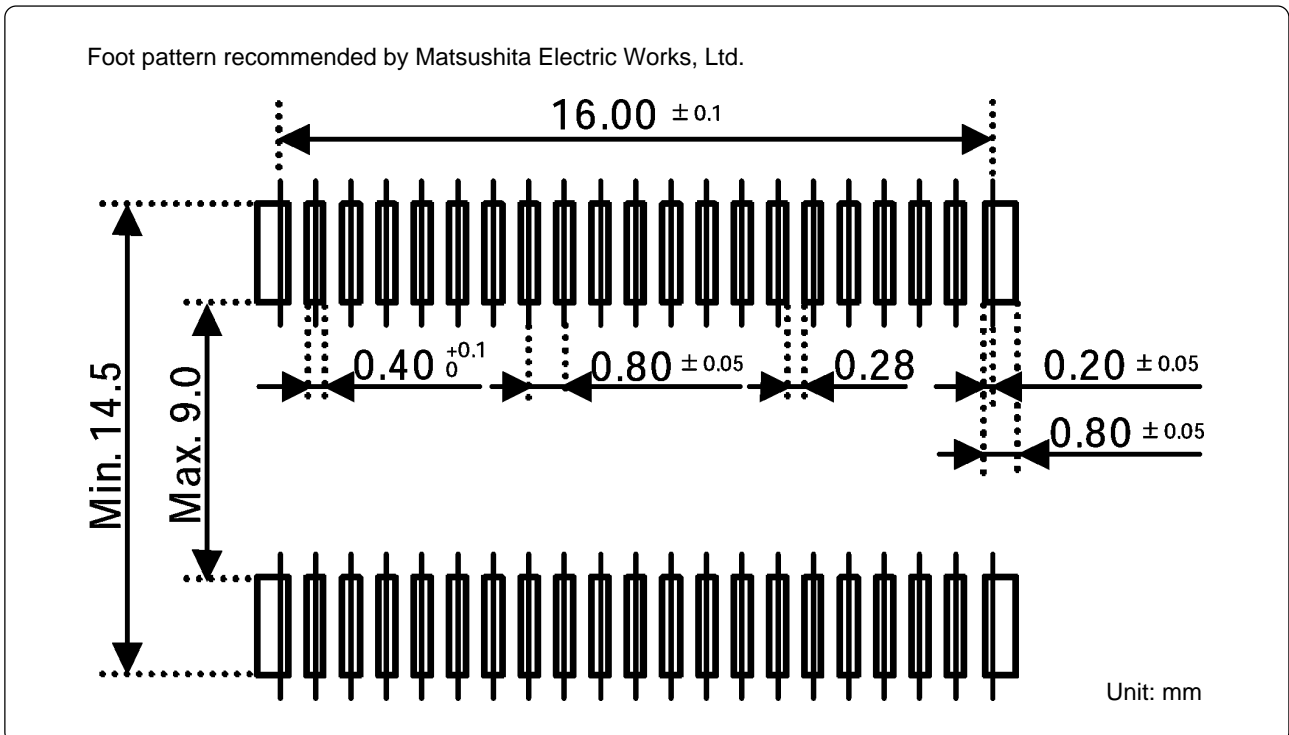


Figure 4 Dimensions of the target foot pattern

## 8. Precautions

### CAUTION

#### Cautions to Be Taken for This Product:



- Do not solder the M3T-SSOP42B-450 directly on the target. Use the included socket.
- When attaching the M3T-SSOP42B-450, be sure to confirm the pin positions.
- When soldering the socket's body and mounting the M3T-SSOP42B-450, refer to the supplementary document "Mounting the Socket Included with the M3T-SSOP42B-450" and "Notes on Handling M3T-SSOP42B-450".
- Do not apply an unnecessary stress to the M3T-SSOP42B-450.
- Do not touch the pins of the M3T-SSOP42B-450.
- Store this product 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 AXY89404201\* (made by Matsushita Electric Works, Ltd.).
- \* To purchase this product and socket frame for repair, contact Matsushita Electric Works, Ltd.
- For inquiries about the product or the contents of this manual, contact your local distributor.

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

## 9. Pin Assignments of Connector J1

Table 2 Pin assignments of the M3T-SSOP42B-450 and connector

Connector pin No.	M3T-SSOP42B-450 pin No.	Connector pin No.	M3T-SSOP42B-450 pin No.
J1-1	NC	J1-26	NC
J1-2	NC	J1-27	NC
J1-3	1	J1-28	22
J1-4	2	J1-29	23
J1-5	3	J1-30	24
J1-6	4	J1-31	25
J1-7	5	J1-32	26
J1-8	6	J1-33	27
J1-9	7	J1-34	28
J1-10	8	J1-35	29
J1-11	9	J1-36	30
J1-12	10	J1-37	31
J1-13	11	J1-38	32
J1-14	12	J1-39	33
J1-15	13	J1-40	34
J1-16	14	J1-41	35
J1-17	15	J1-42	36
J1-18	16	J1-43	37
J1-19	17	J1-44	38
J1-20	18	J1-45	39
J1-21	19	J1-46	40
J1-22	20	J1-47	41
J1-23	21	J1-48	42
J1-24	NC	J1-49	NC
J1-25	NC	J1-50	NC

(NC: No connection)