



M34553T-PTCA

50-pin Narrow-Pitch Connector Converter Board for 4553 and 4556 Groups

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, puclear, or undersea repeater use
- 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.



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 M34553T-PTCA is a converter board for connecting the 50-conductor standard-pitch pins of the M34552T2-CPE main unit to a 50-conductor narrow-pitch connector.

2. Components (See Figure 1)

(1) M34553T-PTCA converter board

x 1

3. Specifications

Table 1 Specifications

| 1 | |
|---|----------|
| Insertion/removal iterations of connector | 20 times |

4. Usage (See Figure 2)

Connect the M34553T-PTCA to the M34552T2-CPE. Then, you can connect the M34553T-PTCB or M3T-SSOP42B-450 to the 50-pin narrow-pitch connector of the M34553T-PTCA.

Before using the M34553T-PTCA, read "7. Precautions" on page 4.

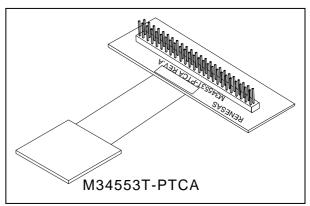


Figure 1 Package Components

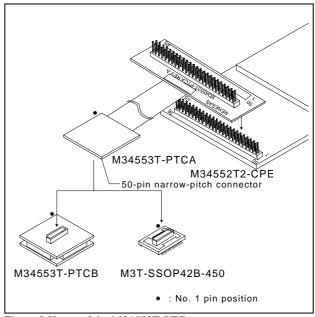


Figure 2 Usage of the M34553T-PTCA

5. Connection Procedure (See Figure 3)

- 1. Attach the M34553T-PTCA to the compact emulator main unit.
- For details on connecting the 50-pin narrow-pitch connector of the M34553T-PTCA, see the user's manual of each accessory product.

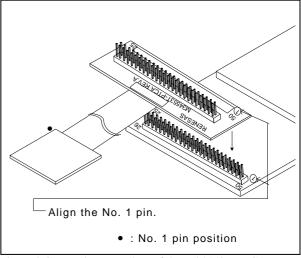


Figure 3 Connection procedure of the M34553T-PTCA

6. External Dimensions

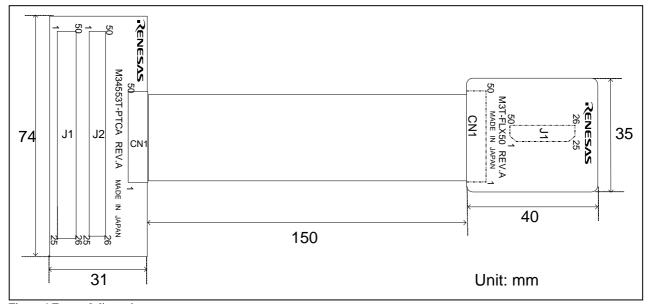


Figure 4 External dimensions

7. Precautions

⚠ CAUTION

Cautions to Be Taken for Handling This Product:



- Be sure to align the pins when connecting the M34553T-PTCA.
- Do not apply excessive stress to the M34553T-PTCA main unit.

IMPORTANT

Regarding This Product:

- We cannot accept any request for repair.
- For inquiries about this product or the contents of this manual, contact your local distributor. Renesas Tool Homepage http://www.renesas.com/en/tools

8. Correspondence of Connectors J1, J2

Table 2 lists the correspondence of the M34553T-PTCA and connectors J1, J2.

Table 2 Correspondence of the M34553T-PTCA and connectors J1, J2

| M34553T-PTCA board | M3T-FLX50 board | M34553T-PTCA board | M3T-FLX50 board |
|--------------------|---------------------|--------------------|---------------------|
| standard-pitch | 50-pin narrow-pitch | standard-pitch | 50-pin narrow-pitch |
| connectors J1, J2 | connector J1 | connectors J1, J2 | connector J1 |
| 1 | 30 | 26 | 26 |
| 2 | 31 | 27 | 8 |
| 3 | 32 | 28 | 9 |
| 4 | 33 | 29 | 10 |
| 5 | 34 | 30 | 11 |
| 6 | 35 | 31 | 12 |
| 7 | 36 | 32 | 13 |
| 8 | 37 | 33 | 14 |
| 9 | 38 | 34 | 15 |
| 10 | 39 | 35 | 16 |
| 11 | 40 | 36 | 17 |
| 12 | 41 | 37 | 18 |
| 13 | 42 | 38 | 19 |
| 14 | 43 | 39 | 20 |
| 15 | 44 | 40 | 21 |
| 16 | 45 | 41 | 22 |
| 17 | 46 | 42 | 23 |
| 18 | 47 | 43 | 24 |
| 19 | 48 | 44 | 1 |
| 20 | 3 | 45 | 2 |
| 21 | 4 | 46 | 49 |
| 22 | 5 | 47 | 50 |
| 23 | 6 | 48 | 27 |
| 24 | 7 | 49 | 28 |
| 25 | 25 | 50 | 29 |