M30262T-PTC

Converter Board for M30262

User's Manual

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1. Outline

The M30262T-PTC is a converter board for the M30262Group for connecting an emulator for the M16C/62P to M30262 (48P6Q-A)

2. Package Components (See Figure 1)

(1) M30262T-PTC 1 pc.
(Base board M30262T-PTCB and 150mm FFC cable included)
(2) YQPACK048SD (by Tokyo Eletech Corporation) 1 pc.
(3) NQPACK048SD (by Tokyo Eletech Corporation) 1 pc.
(4) YQ-GUIDE's (4 pcs., by Tokyo Eletech Corporation) 1 pkg.
(5) M30262T-PTC User's Manual (This manual) 1 pc.

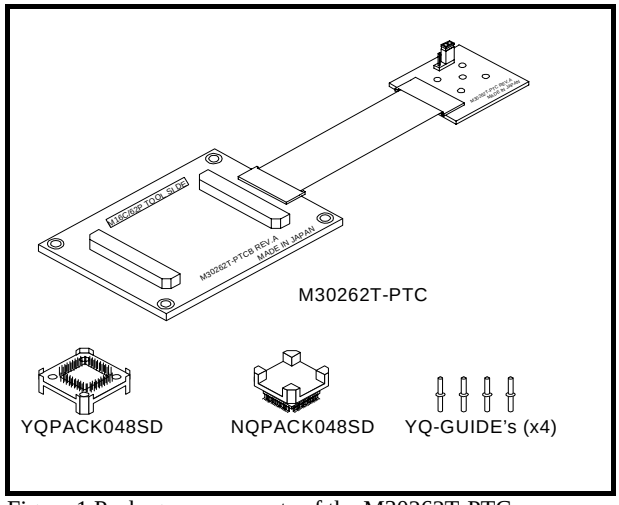

Figure 1 Package components of the M30262T-PTC

3. Specifications

Table 1 Specifications

Applicable package	48P6Q-A (48-pin 0.5-mm-pitch QFP)
Insertion/removal iterations of connector	M30262T-PTC and YQPACK048SD 100 times guaranteed
	M30262T-PTC and emulator for M16C/62P 20 times guaranteed

4. Usage (See Figure 2)

The M30262T-PTC can be used for debugging and onboard evaluation in common by mounting the NQPACK048SD on the target board.

(1) For debugging
Mount the NQPACK048SD and the YQPACK048SDin that order on the foot pattern of the target board. Then attach the YQ-GUIDE's to the YQPACK048SD to connect the M30262T-PTC. Do not use the screws included with the YQPACK048SD. Finally, connect the emulator for M16C/62P to the M30262T-PTC.

(2) For onboard evaluation
Mount the M30262 MCU and the HQPACK048SD (not included) in that order on the NQPACK048SD on the user system. Then secure the screws.

Before using the M30262T-PTC, be sure to read "9. Precautions" (page 4). And, read the user's manual of an emulator for M16C/62P.

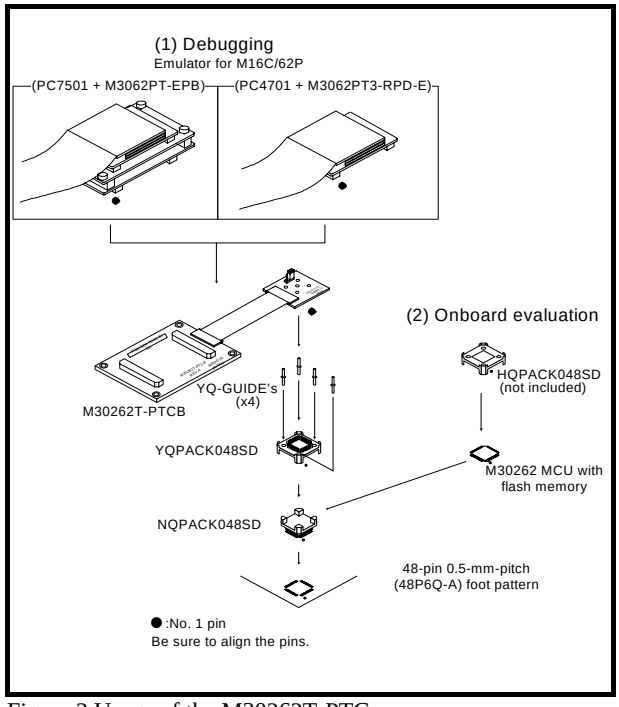

Figure 2 Usage of the M30262T-PTC

5. Hardware Configuration of the M30262T-PTC (See Figure 3)

Hardware configuration of the M30262T-PTC is shown below.

(1) Connector
Connector for the emulator for M16C/62P (M3062PT-EPB).
(2) Cable
Flat cable which connects the user system flexibly (Length: 150 mm).
(3) Target interface
Interface which has a connector for a user system and jumper switch JP1.

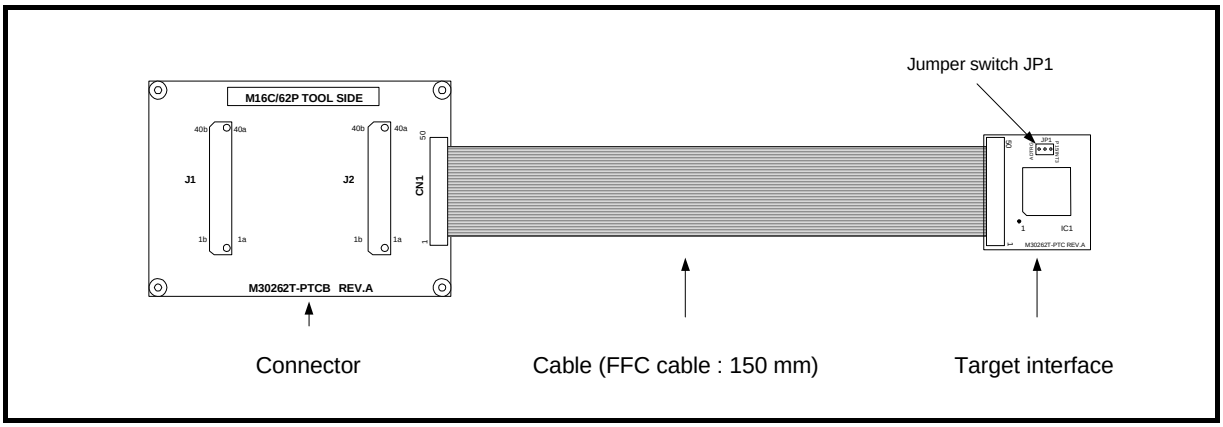

Figure 3 Hardware configuration of the M30262T-PTC

6. Connection Procedure (see Figure 4)

The procedure for connecting the M30262T-PTC is shown below.

(1) Mount the NQPACK048SD.
(2) Mount the YQPACK048SD on the NQPACK048SD.
(3) Secure the four corners of the YQPACK048SD with the YQ-GUIDE's.

> Do NOT use the screws in the YQPACK048SD package.
>
> Do NOT use the screwdriver in the NQPACK048SD package for securing YQ-GUIDE's (used for securing HQPACK048SD).

(4) Attach the M30262T-PTC to the YQPACK048SD.
(5) Connect the emulator for M16C/62P to the M30262T-PTC.

7. Switch Settings

When you use No. 36 pin (Port $P1_5$/INT_3/ADTRG), set switch JP1 according to port functions.

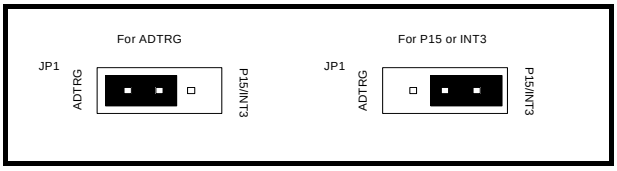

Figure 5 JP1 Settings

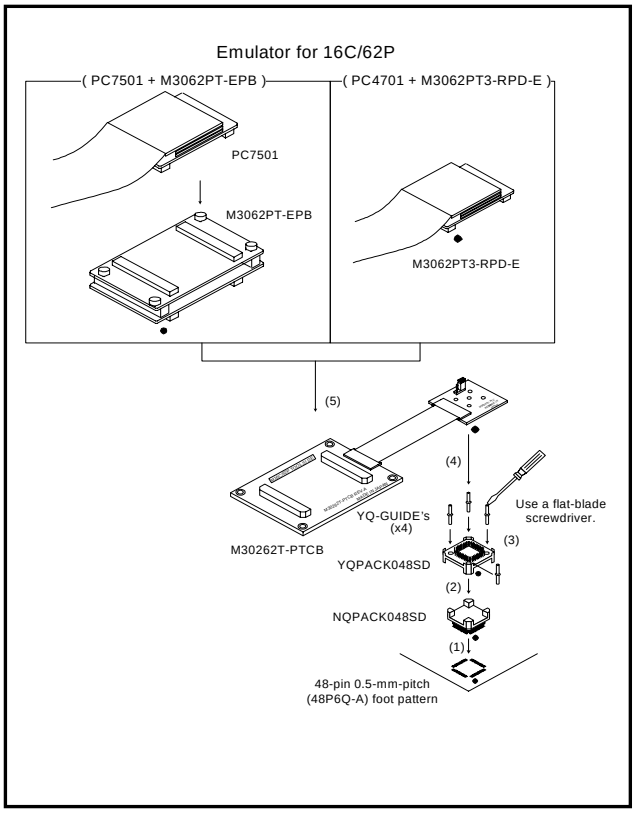

Figure 4 Connection Procedure

8. External Dimensions of the M30262T-PTC (Connector) and a Sample Foot Pattern (see Figure 6)

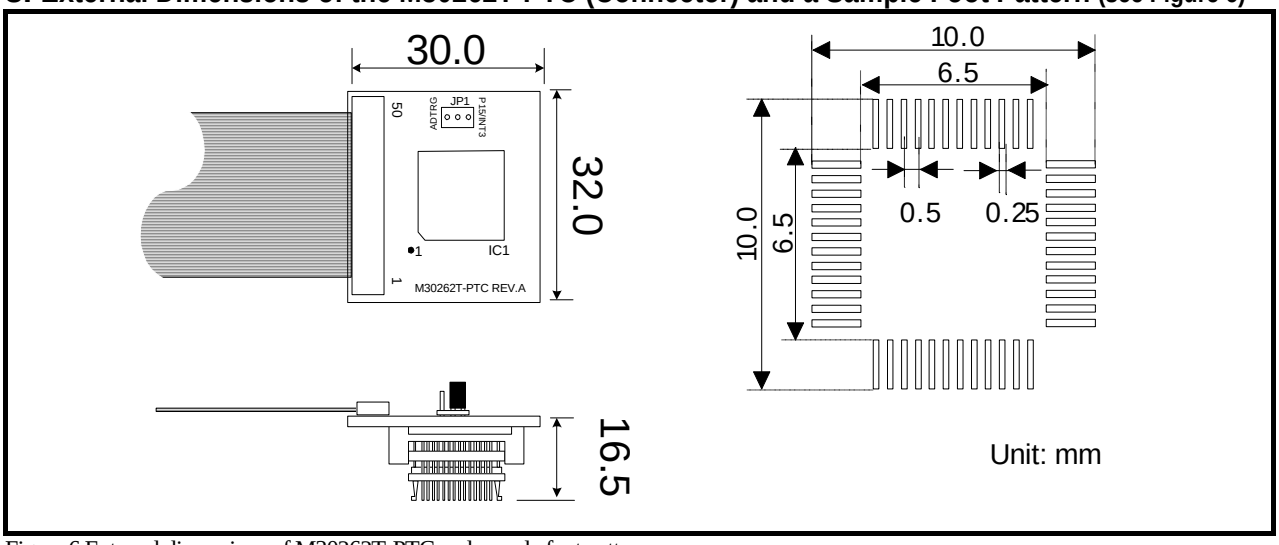

Figure 6 External dimensions of M30262T-PTC and sample foot pattern

9. Precautions

⚠ CAUTION

Cautions for Debugging M16C/262 with an Emulator for M16C/62P:

- The cautions for software development of M16C/26 using the emulator for M16C/62P (M3062PT-EPB or M3062PT3-RPD-E) are as follows.

  (1) NMI*

  M16C/26: NMI* is disabled after reset. Set the $P8_5$/NMI* function select bit (bit 4 of address $001E_{16}$) to "1" to use the NMI* interrupt.

  M16C/62P:NMI* is enabled after reset.

  (2) Port $P8_5$

  M16C/26: Port $P8_5$ has direction and pull-up control registers.

  M16C/62P: Port $P8_5$ functions only as an input port. Thus, debugging of port $P8_5$ output and pull-up functions cannot be performed with the M16C/62P tool.

  (3) Flash memory suspend mod

  M16C/62P flash memory does not support the M16C/26 suspension mode. Thus, debugging of the suspension function cannot be performed with the M16C/62P tool.

- When starting up a debugger (M3T-PD30F or M3T-PD30), select the following MCU file according to the emulator for M16C/62P.
  (1) When you start up the M3T-PD30F using the PC7501 + M3062PT-EPB, select “M16C62P.mcu”.
  (2) When you start up the M3T-PD30 using the PC4701 + M3062PT3-RPD-E, select “M3062PT3.mcu”.

IMPORTANT

Notes on This Product:

- When connecting the M30262T-PTC, be sure to use the included YQ-GUIDE's
- Do not use the screws included with the YQPACK048SD for connecting the YQPACK048SD
- We cannot accept any request for repair.
- For purchasing the NQPACK048SD, YQPACK048SD and HQPACK048SD, contact the following:
  ~~Daimaru Kogyo Ltd.http://www.daimarukogyo.co.jp/~~
  Tokyo Eletech Corporationhttp://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