

To our customers,

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## Old Company Name in Catalogs and Other Documents

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April 1<sup>st</sup>, 2010  
Renesas Electronics Corporation

Issued by: Renesas Electronics Corporation (<http://www.renesas.com>)

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# M30262T-PTC

Converter Board for M30262

## 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 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.

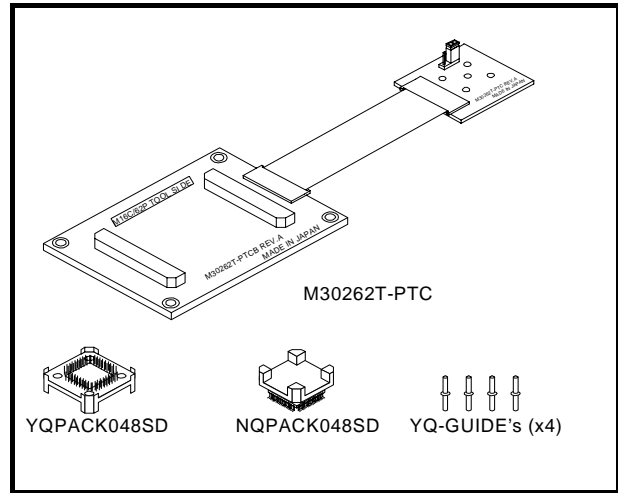


Figure 1 Package components of the M30262T-PTC

# 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 YQPACK048SD in 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.

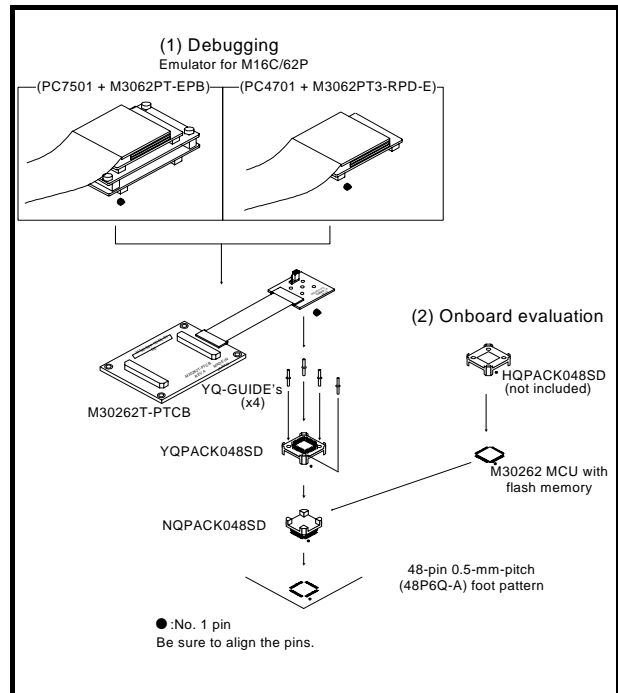


Figure 2 Usage of the M30262T-PTC

## 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.

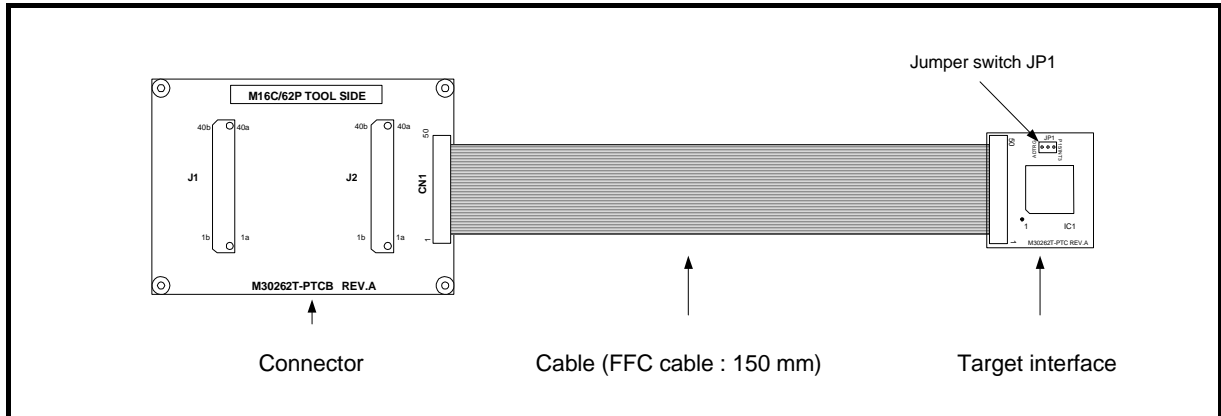


Figure 3 Hardware configuration of the M30262T-PTC

## 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 YQPACK048SD).

- (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<sub>5</sub>/INT<sub>3</sub>/ADTRG), set switch JP1 according to port functions.

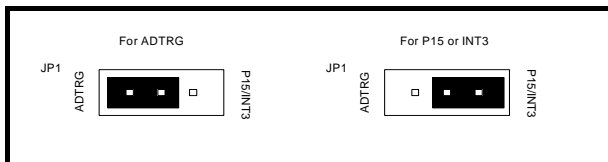


Figure 5 JP1 Settings

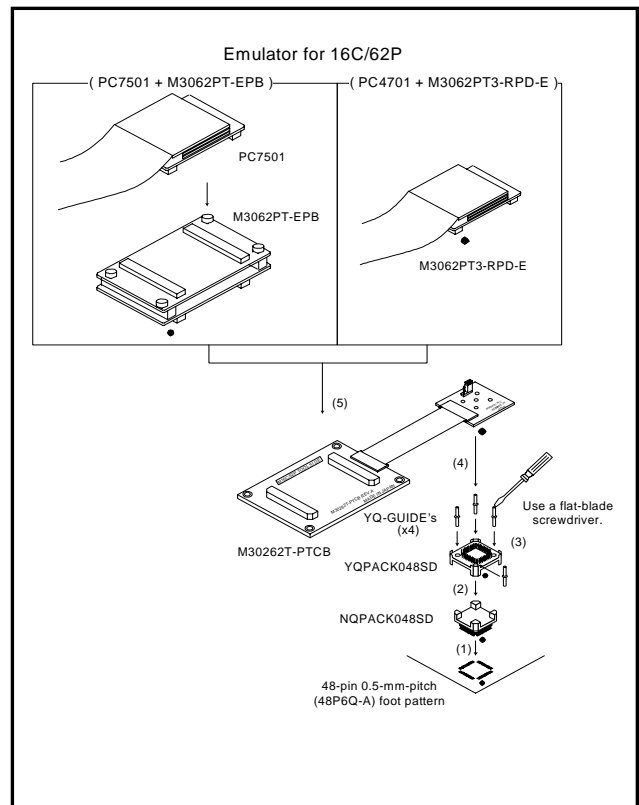


Figure 4 Connection Procedure

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

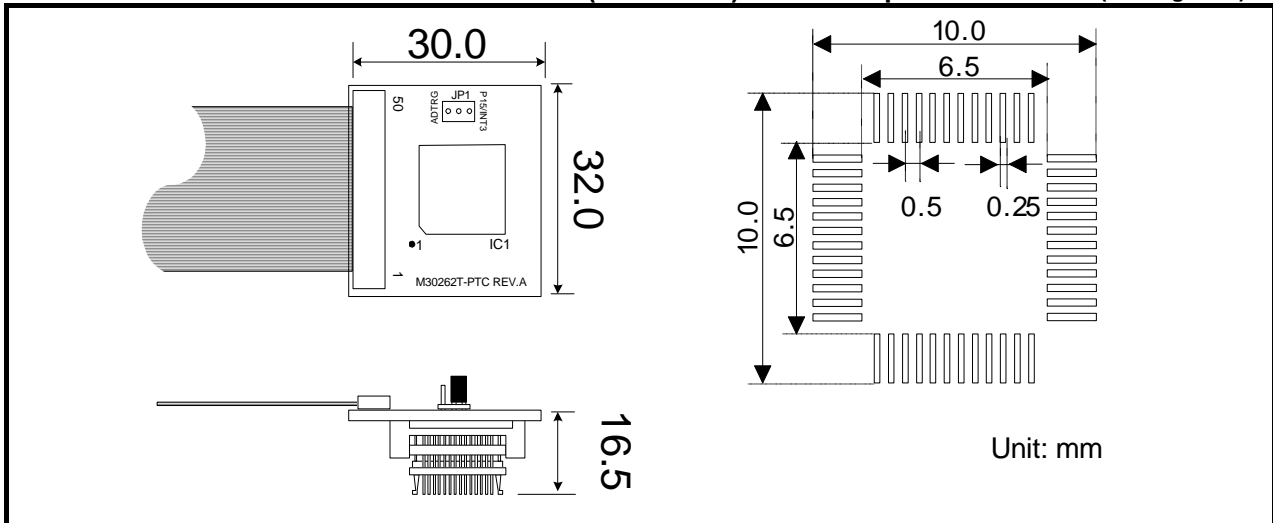


Figure 6 External dimensions of M30262T-PTC and sample foot pattern

## 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<sub>5</sub>/NMI\* function select bit (bit 4 of address 001E<sub>16</sub>) to "1" to use the NMI\* interrupt.  
M16C/62P: NMI\* is enabled after reset.
  - (2) **Port P8<sub>5</sub>**  
M16C/26: Port P8<sub>5</sub> has direction and pull-up control registers.  
M16C/62P: Port P8<sub>5</sub> functions only as an input port. Thus, debugging of port P8<sub>5</sub> 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 Corporation [http://www.tetc.co.jp/e\\_tet.htm](http://www.tetc.co.jp/e_tet.htm)
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