To our customers,

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Renesas Electronics website: http://www.renesas.com

April 1st, 2010
Renesas Electronics Corporation

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M32176T-PTC
Converter Board for In-circuit Connection (for 32176 Group)

Function
This converter is used exclusively for debugging with the
emulator M32100T5-SDI-E, M32100T3-SDI-E,
M32100T2-SDI-E or M32100T-SDI-E (Discontinued product)
when the target is an M32176FxxFP of M32R Family 32176
Group MCUs and is connected in-circuit with the emulator. It
allows debugging such as real-time tracing. It is not only for
debugging but also for evaluation by mounting on the target
system.

Attaching Procedure
When debugging
(1) Mount the NQPACK144SD on the foot pattern on the target
system.
(2) On top of (1), mount YQPACK144SD.
(3) Screw down the YQPACK144SD with YQ-GUIDE’s.
(4) Connect the JTAG cables on the probe of the emulator to
M32176T-PTC.
(5) Connect YQPACK144SD and M32176T-PTC.

During board-mounted evaluation
On NQPACK144SD mounted on the target system, first put an
MCU (M32176FxxFP), and then the HQPACK144SD (option).

External View and Dimensions

Package Components
• M32176T-PTC converter
• YQPACK144SD (made by Tokyo Eletech Co., Ltd.)
• HQPACK144SD (made by Tokyo Eletech Co., Ltd.)
• YQ-GUIDE (× 4)
• Phillips screw driver (made by Tokyo Eletech Co., Ltd.)
• User's manual
*Required components to connect to the target system are included with
this product package. Each component made by Tokyo Eletech Co., Ltd.
is optionally available alone from Tokyo Eletech Co., Ltd.
See Appendix G "Contact Addresses for Partner Products".

Recommended Foot Pattern (Unit: mm)

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