# Target Support Package™ Release Notes

#### How to Contact The MathWorks



(a)

www.mathworks.comWebcomp.soft-sys.matlabNewsgroupwww.mathworks.com/contact\_TS.htmlTechnical Support

suggest@mathworks.com bugs@mathworks.com doc@mathworks.com service@mathworks.com info@mathworks.com Product enhancement suggestions Bug reports Documentation error reports Order status, license renewals, passcodes Sales, pricing, and general information



508-647-7001 (Fax)

508-647-7000 (Phone)

The MathWorks, Inc. 3 Apple Hill Drive Natick, MA 01760-2098

For contact information about worldwide offices, see the MathWorks Web site.

Target Support Package<sup>™</sup> Release Notes

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## **Summary by Version**

This table provides quick access to what is new in each version. For clarification, see "Using Release Notes" on page 1.

Version (Release)	New Features and Changes	Version Compatibility Considerations	Fixed Bugs and Known Problems	Related Documentation at Web Site
New Product V4.0 (R2009b)	Yes Details	Yes "Compatibility Summary for Target Support Package" on page 8	Bug Reports Includes fixes	Printable Release Notes: PDF Current product documentation

### **Using Release Notes**

Use release notes when upgrading to a newer version to learn about:

- New features
- Changes
- Potential impact on your existing files and practices

Review the release notes for other MathWorks<sup>™</sup> products required for this product (for example, MATLAB<sup>®</sup> or Simulink<sup>®</sup>) for enhancements, bugs, and compatibility considerations that also might impact you.

If you are upgrading from a software version other than the most recent one, review the release notes for all interim versions, not just for the version you are installing. For example, when upgrading from V1.0 to V1.2, review the release notes for V1.1 and V1.2.

## What's in the Release Notes

#### **New Features and Changes**

• New functionality

• Changes to existing functionality

#### **Version Compatibility Considerations**

When a new feature or change introduces a reported incompatibility between versions, the **Compatibility Considerations** subsection explains the impact.

Compatibility issues reported after the product is released appear under Bug Reports at The MathWorks<sup>™</sup> Web site. Bug fixes can sometimes result in incompatibilities, so you should also review the fixed bugs in Bug Reports for any compatibility impact.

#### **Fixed Bugs and Known Problems**

The MathWorks offers a user-searchable Bug Reports database so you can view Bug Reports. The development team updates this database at release time and as more information becomes available. This includes provisions for any known workarounds or file replacements. Information is available for bugs existing in or fixed in Release 14SP2 or later. Information is not available for all bugs in earlier releases.

Access Bug Reports using your MathWorks Account.

## Version 4.0 (R2009b) Target Support Package

New Features and Changes	Version Compatibility Considerations	Fixed Bugs and Known Problems	Related Documentation at Web Site
Yes See the following details	Yes "Compatibility Summary for Target Support Package" on page 8	Bug Reports Includes fixes	Printable Release Notes: PDF Current product documentation

This table summarizes what is new in V4.0 (R2009b):

New features and changes introduced in this version are

- "New Target Support Package Product" on page 3
- "Support for Analog Devices<sup>™</sup> Blackfin ADSP-BF537 EZ-KIT Lite Board" on page 4
- "Support for TI's Piccolo Series of C2802x Processors" on page 5
- "Support for TI C28044 Digital Signal Controller" on page 5
- "Support for TI TMS320VC5510 DSP Starter Kit (DSK)" on page 6
- "Support for TI OMAP-L137/TMS320C6747 Floating Point Starter Kit" on page 6
- "Removed To RTDX and From RTDX Blocks for TI C6000 Processors" on page 6
- "Incompatibilities with EDMA3 Driver in C6747EVM ADC/DAC Blocks" on page 7

#### **New Target Support Package Product**

As of R2009b, the following products have been merged into a new product:

- Target Support Package<sup>™</sup> FM5
- Target Support Package IC1
- Target Support Package TC2

• Target Support Package TC6

#### **Compatibility Considerations**

The merged product structure has changed the Start menu functionality:

- To access Target Support Package FM5 features that used to be in the **Start** menu, enter mpc555utils in the Command Window or double-click Launch MPC555 Utilities in the Simulink block library. This action opens the Target Support Package Utilities for Use with MPC555 dialog box. For more information, see "Accessing Utilities for Freescale™ MPC555" in the Target Support Package documentation.
- To access Target Support Package IC1 features that used to be in the **Start** menu, enter c166utils in the Command Window or double-click Launch C166 Utilities in the Simulink block library. This action opens the Target Support Package Utilities for Use with C166 dialog box. For more information, see "Accessing Utilities for Infineon® C166®" in the Target Support Package documentation.

To use Target Support Package with Freescale MPC5xx, install the latest version of the boot code. See "Download Boot Code to Flash Memory" in the Target Support Package documentation. If you do not have the latest boot code version installed on your MPC5xx processor, then the processor does not handle interrupts correctly, causing real-time, stand-alone applications to fail at run time.

### Support for Analog Devices Blackfin ADSP-BF537 EZ-KIT Lite Board

This release introduces a new block library for the ADSP-BF537 EZ-Kit Lite (bf537ezkitlite), which includes the following blocks:

- ADSP-BF537 EZ-KIT Lite Target Preferences
- Blackfin537 bf537\_adc
- Blackfin537 bf537\_dac
- Blackfin537 bf537\_uart\_config
- Blackfin537 bf537\_uart\_rx

• Blackfin537 bf537\_uart\_tx

## Support for TI's Piccolo Series of C2802x Processors

This release introduces a new block library, the C2802x Chip Support library (c2802x1ib), for the Texas Instruments<sup>™</sup>Piccolo<sup>™</sup> Series, which includes the following blocks:

- C2802x ADC
- C2802x AnalogIO Input
- C2802x AnalogIO Output
- C2802x COMP
- C280x/C28x3x/C2802x GPIO Digital Input
- C280x/C28x3x/C2802x GPIO Digital Output
- C280x/C28x3x/C2802x I2C Receive
- C280x/C28x3x/C2802x I2C Transmit
- C280x/C28x3x/C2802x SCI Receive
- C280x/C28x3x/C2802x SCI Transmit
- C280x/C28x3x/C2802x SPI Receive
- C280x/C28x3x/C2802x SPI Transmit
- C280x/C28x3x/C2802x Software Interrupt Trigger
- C28x Watchdog
- C280x/C28x3x/C2802x eCAP
- C2802x ePWM

### Support for TI C28044 Digital Signal Controller

This release adds the following support for the C28044 digital signal controller:

- Configure your models for the Spectrum Digital eZdsp<sup>™</sup> F28044 board using two new blocks:
  - F28044 eZdsp Target Preferences

- F28044 eZdsp Stand alone code using Flash Memory Target Preferences
- Use high-resolution pulse width modulation (HRPWM) on the C28044. To do so, select the Allow use of 16 HRPWMs (for C28044) instead of 6 PWMs parameter in the C280x/C28x3x ePWM block.
- Use any of the blocks in the C280x DSP Chip Support (c280xdspchiplib) library for the C28044.

## Support for TI TMS320VC5510 DSP Starter Kit (DSK)

This release introduces a new block library for the C5510 DSK (c5510dsk), which includes the following blocks:

- C5510DSK Target Preferences
- C5510 DSK ADC
- C5510 DSK DAC

### Support for TI OMAP-L137/TMS320C6747 Floating Point Starter Kit

This release introduces a new block library, the C6747 EVM library (C6747evmlib), which includes the following blocks:

- C6747EVM Target Preferences
- C6747EVM ADC
- C6747EVM DAC
- C6747EVM DIP Switch
- C6000 IP Config
- C6747EVM LED

# Removed To RTDX and From RTDX Blocks for TI C6000 Processors

The **To RTDX** and **From RTDX** blocks are no longer available for the C6000 family of processors.

#### **Compatibility Considerations**

Consider replacing the RTDX blocks with TCP/IP or UDP blocks instead.

# Incompatibilities with EDMA3 Driver in C6747EVM ADC/DAC Blocks

TI's EDMA3 driver is incompatible with TI's NDK v2.00.00. The C6747EVM ADC and C6747EVM DAC blocks use the EDMA3 driver. The TCP/IP and UDP blocks, and External Mode use TI's NDK v2.00.00. As a result, you may experience silent run-time failures when your model uses these capabilities together.

For more information, see the Texas Instruments FAQ.

## **Compatibility Summary for Target Support Package**

This table summarizes new features and changes that can cause incompatibilities when you upgrade from an earlier version, or when you use files on multiple versions. The description of the new feature or change provides additional details.

Version (Release)	New Features and Changes with Version Compatibility Impact
Latest Version V4.0 (R2009b)	See the <b>Compatibility</b> <b>Considerations</b> subheading for this new feature or change:
	<ul> <li>"New Target Support Package Product" on page 3</li> </ul>
	<ul> <li>"Removed To RTDX and From RTDX Blocks for TI C6000 Processors" on page 6</li> </ul>
	• "Incompatibilities with EDMA3 Driver in C6747EVM ADC/DAC Blocks" on page 7