Embedded IDE Link™ MU Release Notes

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Summary by Version

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

Version (Release)	New Features and Changes	Version Compatibility Considerations	Fixed Bugs and Known Problems	Related Documentation at Web Site
Latest Version 1.0 (R2007b+)	Yes Details	No	Bug Reports	Printable Release Notes: PDF
				Current product documentation

About Release Notes

Use release notes when upgrading to a newer version to learn about new features and changes, and the potential impact on your existing files and practices. Release notes are also beneficial if you use or support multiple versions.

If you are not upgrading from the most recent previous version, review 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 New Features and Changes, Version Compatibility Considerations, and Bug Reports for V1.1 and V1.2.

New Features and Changes

These include

- New functionality
- Changes to existing functionality
- Changes to system requirements (complete system requirements for the current version are at the MathWorks Web site)
- Any version compatibility considerations associated with each new feature or change

Version Compatibility Considerations

When a new feature or change introduces a reported incompatibility between versions, its description includes a **Compatibility Considerations** subsection that details the impact. For a list of all new features and changes that have reported compatibility impact, see the "Compatibility Summary for Embedded IDE LinkTM MU Software" on page 8.

Compatibility issues that are reported after the product has been released are added to Bug Reports at the MathWorks Web site. Because bug fixes can sometimes result in incompatibilities, also review fixed bugs in Bug Reports for any compatibility impact.

About Functions Being Removed. This section lists functions removed or in the process of being removed. Functions typically go through several stages across multiple releases before being completely removed. This provides time for you to make adjustments to your code.

- Announcement the Release Notes announce the planned removal, but there are no functional changes; the function runs as it did before.
- Warning when you run the function, it displays a warning message indicating it will be removed in a future release; otherwise the function runs as it did before.
- Error when you run the function, it produces an error. The error message
 indicates the function was removed and suggests a replacement function, if
 one is available.
- Removal when you run the function, it fails. The error message is the standard message when MATLAB does not recognize an entry.

Functions might be in a stage for one or more releases before moving to another stage. Functions are listed in the Functions Being Removed section only when they enter a new stage and their behavior changes. For example, if a function displayed a warning in the previous release and errors in this release, it appears on the list. If it continues to display a warning, it does not appear on the list because there was no change between the releases.

Not all functions go through all stages. For example, the impending removal of a function might not be announced. Instead, the first notification might be that the function displays a warning.

The Release Notes include actions you can take to mitigate the effects of a function's removal, such as adapting your code to use a replacement function.

Fixed Bugs and Known Problems

MathWorks Bug Reports is a user-searchable database of known problems, workarounds, and fixes. The MathWorks updates the Bug Reports database as new problems and resolutions become known, so check it as needed for the latest information.

Access Bug Reports at the MathWorks Web site using your MathWorks Account. If you are not logged in to your MathWorks Account when you link to Bug Reports, you are prompted to log in or create an account. You then can view bug fixes and known problems for R14SP2 and more recent releases.

Related Documentation at Web Site

Printable Release Notes (PDF). You can print release notes from the PDF version, located at the MathWorks Web site. The PDF version does not support links to other documents or to the Web site, such as to Bug Reports. Use the browser-based version of release notes for access to all information.

Product Documentation. At the MathWorks Web site, you can access complete product documentation for the current version and some previous versions, as noted in the summary table.

Version 1 (R2007b+) Embedded IDE Link™ MU Software

This table summarizes what's new in V1 (R2007b+):

Version (Release)	New Features and Changes	Version Compatibility Considerations	Fixed Bugs and Known Problems	Related Documentation at Web Site
Latest Version V1.0 (R2007b+)	Yes Details below	No	Bug Reports	Printable Release Notes: PDF V1.0 product documentation

Features introduced in this version are described here:

Automation Interface Component

You use the objects, functions, and methods provided by the automation interface component to interact with the Green Hills®MULTI® development environment from the MATLAB command prompt. You can load, add to, and build projects, read and write to processor memory, and manipulate directories and project configurations.

The Automation Interface component of Embedded IDE Link MU software supports the processors listed in "Supported Versions of Green Hills®MULTI®" on page 6. To use the software, you must have Green Hills®MULTI®, version 5.0.1 for NEC® V850, Analog Devices® Blackfin®, or Freescale™ MPC55xx. For more details, refer to "Supported Processors" on page 5

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Project Generator Component

The project generator component enables you to generate code from Simulink models into the IDE as Green Hills® MULTI® projects. After you create your model, you add a target preferences block to your model and set your model configuration parameters for the code generation process. Adding the target

preferences block enables your model to be the source for code for a Green Hills[®] MULTI[®] project for one of the supported processors.

Embedded IDE Link MU software supports the following processors:

- Analog Devices Blackfin®
- FreescaleTM MPC55xx
- FreescaleTM MPC7400
- NEC® V850

To support the Project Generator component for creating Green Hills®MULTI® projects, Embedded IDE Link MU software provides a block library, multilinklib, that contains the block libraries shown in the following table to enable you to configure Simulink models to generate projects and code for the supported processors.

Block Libraries in multilinklib	Blocks in Library
<pre>Target Preferences (multilinklib_tgtpref)</pre>	Target Preferences
Core Support (multilinklib_coresupport)	Memory Allocate, Memory Copy, Idle Task
MPC5500 Support (multilinklib_mpc5500)	HW/SW Interrupt
Blackfin Support (multilinklib_blackfin)	Hardware Interrupt

Getting Started With This Release

To get started using Embedded IDE Link MU software to develop projects, refer to Getting Started in the online documentation.

Supported Processors

The following table lists the processors and operating modes supported by this release of the Embedded IDE Link MU software.

Processor or Family	Operating mode
Analog Devices Blackfin	Interrupt scheduler support
Freescale MPC5500	Interrupt scheduler support
Freescale MPC7400	Free running
NEC V850	Free running

Interrupt scheduler support indicates that the process running on the processor responds to software- and hardware-driven interrupts.

Getting Additional Information About Embedded IDE Link™ MU Software

For information about the objects and methods available for you to use, refer to the online Help system, or enter the following command at the MATLAB prompt:

help ghsmulti

MATLAB displays a list of the functions and methods in the Embedded IDE Link MU product, details about how to access help for those methods, and links to the product demos.

Use the following link—Embedded IDE Link MU—to access the demos. You will find demos that introduce the components of Embedded IDE Link MU software:

- Automation Interface Component Automation Interface Tutorial
- $\bullet \ \ Project \ Generator \ Component -- Project \ Generator \ Tutorial$
- Workflow Demos Code Generation Workflow

Supported Versions of Green Hills®MULTI®

Embedded IDE Link MU software works with the processors and versions of MULTI shown in the following table.

Processor Family or Company	Supported MULTI version
Analog Devices Blackfin	5.0.1
NEC V850	5.0.1
Freescale TM MPC5500	5.0.1
Freescale TM MPC7400	5.0.1

Version 5.0.0 is not supported for this release.

Compatibility Summary for Embedded IDE Link™ MU Software

This table summarizes new features and changes that might cause incompatibilities when you upgrade from an earlier version, or when you use files on multiple versions. Details are provided in the description of the new feature or change.

Version (Release)	New Features and Changes with Version Compatibility Impact
Latest Version V1 (R2007b+)	See the Compatibility Considerations for this change: