# Link for Analog Devices VisualDSP++® Release Notes

# Contents

iii

# 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 |
|---|---|---|---|---|
| **New Product V1** | 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 known 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 compatibility impact, see the "Compatibility Summary for Link for ADI VisualDSP++" on page 7.

Compatibility issues that become known 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.

## 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 (R2007a+) Link for ADI VisualDSP++

This table summarizes what's new in V1 (R2007a+):

| Version (Release) | New Features and Changes | Version Compatibility Considerations | Fixed Bugs and Known Problems | Related Documentation at Web Site |
|---|---|---|---|---|
| **Latest Version V1.0 (R2007a+)** | Yes Details below | Yes—Details labeled as **Compatibility Considerations**, below. See also Summary. | 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 Analog Devices VisualDSP++® 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 Link for ADI VisualDSP++ supports all Analog Devices processors supported by Analog Devices VisualDSP++®. To use Link for ADI VisualDSP++, you must have Analog Devices VisualDSP++®, version 4.5 (for more details, refer to "Supported Version of Analog Devices VisualDSP++®" on page 6

).

## Project Generator Component

The project generator component enables you to generate code from Simulink models into the IDDE as Analog Devices VisualDSP++® projects. When you add a target preferences block to your model and set your model Configuration Parameters for the code generation process. Through this addition, your

model becomes the source for code for an IDDE project and for supported Analog Devices processors

Link for ADI VisualDSP++ supports the following processors:

- Blackfin®

- SHARC®

- TigerSHARC®

Blackfin, SHARC, or TigerSHARC processors that are being discontinued may not be supported.

To support the Project Generator component for creating Analog Devices VisualDSP++® projects, Link for ADI VisualDSP++ provides a block library, vdsplinklib, that contains the block libraries shown in the following table to enable you to configure Simulink models to generate projects and code for Analog Devices processors.

| Block Libraries in vdsplinklib | Contents |
|---|---|
| Blackfin DSP Support (vdsplinklib_blackfin) | Blackfin Hardware Interrupt block |
| Core Support (vdsplinklib_coresupport) | Idle Task block |
| SHARC DSP Support (vdsplinklib_sharc) | SHARC Hardware Interrupt block |
| Target Preferences (vdsplinklib_tgtpref) | Target Preferences block |
| TigerSHARC DSP Support (vdsplinklib_tigersharc) | TigerSHARC Hardware Interrupt block |

## Constructor Name Changed for V1 Release

In the beta version of Link for ADI VisualDSP++, the constructor for the visualdsp object was visualdsp. For this V1 release, the object constructor is changed to

```
adivdsp
```

The object that the constructor `adivdsp` creates is called an `adivdsp` object in the documentation. The `visualdsp` constructor no longer works to construct objects.

## Getting Additional Information About Link for ADI VisualDSP++

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 vdsplink
```

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

Use the following link—Link for ADI VisualDSP++—to access the demos. You will find demos that introduce the components of Link for ADI VisualDSP++:

- Automation Interface Tutorial (`vdspautointtutorial`)

- Project Generator Tutorial (`vdspprjgentutorial`)

- Code Generation Workflow Example (`vdspworkflow12007ap`)

## Using an Analog Devices VisualDSP++® Demo License

If you are using a temporary license for VisualDSP++ while you work with Link for ADI VisualDSP++, you may receive a warning message when your Analog Devices VisualDSP++® license is about to expire.

Starting about seven days before your VisualDSP++ temporary license expires, Analog Devices VisualDSP++® opens a dialog box each time you start Analog Devices VisualDSP++®. The dialog box warns you that your license is about to expire. This dialog box interferes with the ability of Link for ADI VisualDSP++ to register two required components with Analog Devices VisualDSP++®. As a result, Link for ADI VisualDSP++ cannot connect to the Analog Devices VisualDSP++® IDDE and MATLAB hangs.

**5**

To prevent this problem from occurring, either upgrade and validate your Analog Devices VisualDSP++® to a permanent license, or get a new temporary license.

## Supported Version of Analog Devices VisualDSP++®

Link for ADI VisualDSP++ works with Analog Devices VisualDSP++® version 4.5 only.

### Compatibility Consideration

To use this product with Analog Devices VisualDSP++® V4.5, you must apply the following VisualDSP++ update patch. The patch file is available from the Analog Devices Web site.

```
VisualDSP++4.5_November_2006_update.vdu
```

# Compatibility Summary for Link for ADI VisualDSP++

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**<br>**V1 (R2007a+)** | • "Supported Version of Analog Devices VisualDSP++®" on page 6<br><br>• "Constructor Name Changed for V1 Release" on page 4 |