

This document addresses known errata and documentation changes for DSP Builder version 5.1 (SP1). Errata are functional defects or errors which may cause DSP Builder to deviate from published specifications. Documentation issues include errors, unclear descriptions, or omissions from current published specifications or product documents.

## DSP Builder v5.1 (SP1) Issues

Altera has identified the following issues that affect DSP Builder 5.1 (SP1):

- “Signed Fractional HIL Simulation is Incorrect” on page 1
- “Unique Entity Names Option Cannot be Unset” on page 2
- “VHDL for Black Box Not in Generated Scripts” on page 2
- “SignalCompiler Flow Shortcut Fails” on page 3
- “Previous DSP Builder Path Not Removed” on page 3



For the most up-to-date errata for this release, refer to the errata page on the Altera website:

[www.altera.com/literature/es/es\\_dsp\\_builder\\_51.pdf](http://www.altera.com/literature/es/es_dsp_builder_51.pdf)

### **Signed Fractional HIL Simulation is Incorrect**

HIL signed fractional simulation does not match the non-HIL simulation

#### *Affected Configurations*

All configurations are affected.

#### *Design Impact*

HIL simulation matches the non HIL simulation in a signed integer design but does not match in a signed fractional version of the design.

#### *Workaround*

The HIL (and HDL Import) blocks require integer inputs and outputs. Insert Binary Point Casting blocks at the inputs and outputs to convert between signed fractional and integer.

### *Solution Status*

This issue will be fixed in a future release of DSP Builder.

## **Unique Entity Names Option Cannot be Unset**

The option in SignalCompiler to generate unique hierarchical names cannot easily be unset.

### *Affected Configurations*

All configurations are affected.

### *Design Impact*

When running SignalCompiler, the analyze stage has a check box for **Hierarchical VHDL entity names are unique**. Once turned on, this setting can not be easily turned off, as it makes changes to the model.

### *Workaround*

The unique names option has been disabled in version 5.1. However, it can be enabled by setting the following MATLAB workspace variable:  
`dspbuilder_enable_unique_hierarchy_name = true;`

### *Solution Status*

This issue will be fixed in a future release of DSP Builder.

## **VHDL for Black Box Not in Generated Scripts**

The VHDL source code for black box blocks is not included in the generated scripts.

### *Affected Configurations*

All configurations are affected.

### *Design Impact*

When SignalCompiler generates Tcl scripts for the Quartus® II software and all 3rd party synthesis and simulation tools, the VHDL source code for the top level is included. However, VHDL source code for any black boxes in the design is not included.

### *Workaround*

Manually edit the Tcl scripts to include VHDL source code for all black box sources in the design. If any VHDL source refers to any special libraries, those libraries also need to be included with appropriate compiler directives.

### *Solution Status*

This issue will be fixed in a future release of DSP Builder.

## **SignalCompiler Flow Shortcut Fails**

The flow shortcut in the SignalCompiler dialog box does not work for 3rd party synthesis tools.

### *Affected Configurations*

All configurations are affected.

### *Design Impact*

Step 2 is missing from the flow for the **Execute steps 1, 2, and 3** shortcut button on the configuration page of the SignalCompiler dialog box.

### *Workaround*

Run the steps separately instead of using the shortcut button to make certain that the 2nd step is executed properly.

### *Solution Status*

This issue will be fixed in a future release of DSP Builder.

## **Previous DSP Builder Path Not Removed**

If DSP Builder version 5.0 has been previously installed then its path will not be removed from the MATLAB path list when DSP Builder version 5.0 is un-installed.

### *Affected Configurations*

Configurations which have been updated from DSP Builder version 5.0.

### Design Impact

Error messages are issued due to library objects existing at more than one location.

### Workaround

The DSP Builder path for version 5.0 was written to a **startup.m** file in the MATLAB installation (for example: *<MATLAB install directory> \toolbox\local\startup.m*). You should manually comment out (using the % character) or remove the DSP Builder path specified in this file. For example:

```
%path(path, 'C:\altera\DSPBuilder\AltLib');
```

### Solution Status

This issue will be fixed in a future release of DSP Builder.

## Contact Information

For more information, contact Altera's mySupport website at [www.altera.com/mysupport](http://www.altera.com/mysupport) and click **Create New Service Request**. Choose the **Product Related Request** form.

## Revision History

Table 1 shows the revision history for the *DSP Builder 5.1 (SP1) Errata Sheet*.

Version	Date	Errata Summary
1.1	January 2006	Updated document for DSP Builder 5.1 (SP1).
1.0	October 2005	New document for DSP Builder 5.1.



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