



**ARM BP063 AMBA[®] 4 AXI4[™],
AXI4-Lite and AXI4-Stream
Protocol Assertions**

Release Note (r0p1-00rel0)

AMBA 4 AXI4, AXI4-Lite and AXI4-Stream Protocol Assertions BP063

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The information in this document relates to the BP063-BU-01000-r0p1-00rel0.

Web address

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ARM Limited welcomes feedback on both the product and the documentation.

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Feedback on the AMBA 4 AXI4, AXI4-Lite and AXI4-Stream Protocol Assertions

If you have any comments or suggestions about this product, please contact your supplier giving:

- The product name
- A concise explanation of your comments.

Alternatively you can email support-fabric@arm.com.

Change history

Issue	Date	Change
1.0	11 May 2010	Release information for r0p0-00bet0
2.0	29 Jun 2010	Release information for r0p0-00rel0
3.0	06 Dec 2012	Release information for r0p1-00rel0

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1 Deliverables

Introduction

The BP063 AMBA 4 AXI4, AXI4-Lite and AXI4-Stream Protocol Assertions product is a verification and validation product designed to work with a range of different user environments and usage scenarios. The underlying goal is to provide protocol specific SystemVerilog assertions for the AMBA 4 AXI4, AXI4-Lite and AXI4-Stream protocols.

Product Release Status

These deliverables are being released under the terms of the agreement between ARM and each licensee (the “Agreement”). Use by recipient of the deliverables is subject to the terms and conditions of the Agreement.

Deliverables

This release note refers to the installation of the bundle BP063-BU-01000-r0p1-00rel0 obtained through ARM’s IP delivery server. The deliverables are supplied as a single UNIX compressed tar file which has been gzipped. The download filename will be of the form:

<download_name>.tgz

where <download_name> is typically of the form arm-download-<transaction_id> and where <transaction_id> is a unique 6 digit number identifying the specific download.

This tar file contains a number of parts bundled together in a single design directory structure to form the release. Table 1-1 lists the part numbers and their descriptions.

Table 1-1: Parts included in bundle BP063-BU-01000-r0p1-00rel0

Part Number	Description
Main product part	
BP063-VL-70004-r0p1-00rel0	AXI4 System Verilog Assertions (SVA)
Documentation	
BP063-DC-06002-r0p1-00rel0	AXI4 Protocol Assertions Release Note
BP063-DC-08001-r0p1-00rel0	AXI4 Protocol Assertions User Guide

NOTE: These deliverable part numbers do not exist in the installed directory structure as distinguishable parts and are defined for contractual purposes only.

2 Installation

These installation instructions only cover the UNIX platform/operating system.

Disk space required

The BP063 deliverables require approximately 1 MB of disk space when installed.

Unpacking files

Relocate the `tgz` file to an appropriate installation location and unpack the `*.tgz` file using the GNU tar utility as follows:

```
gtar -zxvf <download_name>.tgz
```

NOTE: Use GNU tar version 1.13.25 (or later) to unpack the deliverables as other versions of tar have problems dealing with very long path names. To find the version of gtar being used type

```
gtar --version
```

This extracts the deliverables into a directory named the same as the bundle number BP063-BU-01000-r0p1-00rel0.

Figure 2-1 shows the top-level directory structure created after unpacking the tar file:

```
BP063-BU-01000-r0p1-00rel0/  
|-- docs  
|   |-- BP063-RLNC-000313.pdf  
|   `-- DUI0534B_amba4_axi4_svpa_ug.pdf  
|-- sva  
    `-- <various design files>
```

Figure 2-1: Top-level directory structure after unpacking the bundle

BP063 Usage

For details on how to use the BP063 AMBA 4 AXI4, AXI4-Lite and AXI4-Stream Protocol Assertions please refer to the BP063 AXI Protocol Assertions User Guide (ARM DUI 0534).

3 Documentation

Product documents supplied

The following documents are supplied with BP063 AMBA 4 AXI4 SystemVerilog Protocol Assertions:

AMBA 4 AXI4, AXI4-Lite and AXI4-Stream Protocol Assertions User Guide (ARM DUI 0534 B)

AMBA 4 AXI4, AXI4-Lite and AXI4-Stream Protocol Assertions Release Note (BP063-RLNC-000313)

The documents are located in the following directory:

BP063-BU-01000-r0p1-00rel0/docs

The User Guide defines the features and interfaces of the product.

4 Tools

This release of BP063 has been developed and tested with tool versions listed below.

SystemVerilog version 3.1a.

Cadence Incisive 11.10.008

Mentor ModelSim SE 10.1a

Synopsys VCS 2011.12-3

Standards compliance

AXI4 interfaces are tested to:

AMBA® 4 AXI and ACE Protocol Specification (ARM IHI 0022 D)

AMBA® 4 AXI4-Stream Protocol Specification (ARM IHI 0051 A)

5 Differences between prior releases and r0p1-00rel0

Changes to the AXI4 Protocol Checker are as follows:

- Support for the latest version of the AXI Specification.
- Support for separate parameterisation for read and write ID widths.
- Enhancements to end of simulation checks

Changes to the AXI4 Lite Protocol Checker are as follows:

- Support for the latest version of the AXI Specification.
- Enhancements to end of simulation checks

There are no changes to the AXI4 Stream Protocol Checker AXI4Stream

6 Known Limitations of this release

There are no known issues with this release

7 Support and maintenance

Please contact support-fabric@arm.com regarding any issues with the installation, content or use of this release and a member of the ARM Product Support Group will log your query in the support database and respond as soon as possible. Note that Support for this release of the product is only provided by ARM to a recipient who has a current support and maintenance contract for the product.