

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

Release Note (r0p0-00rel0)

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-r0p0-00rel0 release.

Web address

<http://www.arm.com>

Feedback and support

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

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If you have any comments about this document, please send email to errata@arm.com giving:

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- The page number(s) to which your comments refer
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General suggestion for additions and improvements are also welcome.

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

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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.

Disk space required

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

Deliverables

This release note refers to the installation of the bundle BP063-BU-01000-r0p0-00rel0 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-r0p0-00rel0

Part Number	Description
Documentation	
BP063-DC-06002-r0p0-00rel0	AXI4 Protocol Assertions Release Note
BP063-DC-08001-r0p0-00rel0	AXI4 Protocol Assertions User Guide
BP063-DC-11001-r0p0-00rel0	AXI4 Protocol Assertions Errata
Other parts	
BP063-VL-70004-r0p0-00rel0	AXI4 System Verilog Assertions (SVA)

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

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-r0p0-00rel0.

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

```
BP063-BU-01000-r0p0-00rel0/  
|-- docs  
|   |-- BP063-RLNC-000313.pdf  
|   |-- DUI0534A2_amba4_axi4_svpa_ug.pdf  
|   |-- BP063-RLNC-000314.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 0534A).

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 A)

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

AMBA 4 AXI4, AXI4-Lite and AXI4-Stream Protocol Assertions Errata (BP063-RLNC-000314)

The documents are located in the following directory:

BP063-BU-01000-r0p0-00rel0/docs

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

3 Tools

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

SystemVerilog version 3.1a.

Cadence Incisive 8.20.012

Mentor ModelSim SE 6.5a

Synopsys VCS 2009.06

4 Third-party IP Requirements

There are no 3rd party IP requirements for this product.

5 Product Status

EAC Quality Definition

Early Access release status has a particular meaning to ARM of which the recipient must be aware. A deliverable so designated has satisfactorily achieved all criteria for its promotion to a Mature Release status. It may be delivered in accordance with the contract and be expected to perform as described in the data-sheet. However, there remain some elements of uncertainty, which cannot finally be validated until the deliverable has been successfully deployed by customers. Accordingly, the recipient of a deliverable with Early Access-Release status may be directly contributing to the final stage of approval of that deliverable.

In due course, after the Early Access-Release the product status will change to Mature. It should be noted that Support for the Early Access release of the deliverable will only be provided by ARM to a recipient who has a current support and maintenance contract for the deliverable.

Limitations or known issues in this release

- There are no known issues with this release
- Please note the protocol assertions contains references to protocol coverage macros. The functionality of these macros is not available as part of the BP063 product and they are defined as empty macros. These macros are not intended for use or modification at this time.

Standards compliance

AXI4 interfaces are tested to:

AMBA® 4 AXI Protocol Specification (ARM IHI 0022 C)

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

6 Differences between prior releases and r0p0-00rel0

This is the first release of this product.

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.

Any issues that arise subsequent to this release are to be documented in a BP063 Errata Notice document (part number BP063-DC-11001) and re-issued as required.