

RN0182

Release Notes

CoreSmartBERT v2.6



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1 Revision History

The revision history describes the changes that were implemented in the document. The changes are listed by revision, starting with the most current publication.

1.1 Revision 7.0

Modified PF_XCVR information and fixed SAR (111800). Updated for CoreSmartBERT v2.6, March 2020.

1.2 Revision 6.0

Modified PF_XCVR information and fixed SAR (107311). Updated for CoreSmartBERT v2.5, August 2019.

1.3 Revision 5.0

Modified PF_XCVR information and fixed SAR (105234). Updated for CoreSmartBERT v2.4, March 2019.

1.4 Revision 4.0

Modified PF_XCVR information and fixed SAR (102452). Updated for CoreSmartBERT v2.3, December 2018.

1.5 Revision 3.0

Modified PF_XCVR information and fixed SAR (99815). Updated for CoreSmartBERT v2.2, August 2018.

1.6 Revision 2.0

Added PF_XCVR information. Updated for CoreSmartBERT v2.1, May 2018.

1.7 Revision 1.0

Revision 1.0 was the first publication of this document. Created for CoreSmartBERT v2.0, August 2017.

2 CoreSmartBERT v2.6 Release Notes

This document accompanies the release of CoreSmartBERT v2.6. It describes the features and enhancements of CoreSmartBERT v2.6. It also contains the information on system requirements, supported families, implementations, known issues and workarounds, and resolved issues with the previous version.

2.1 Features

CoreSmartBERT has the following features:

- Ability to support PF_XCVR built-in PRBS generator/checker
- Ability to generate a list of patterns
- Ability to insert an error into the transmit pattern
- Ability to support checking of errors in the receive pattern
- Ability to instantiate the pattern functionality several times to support multiple lanes simultaneously.

2.2 Delivery Types

CoreSmartBERT is license free RTL.

2.2.1 RTL

Complete RTL source code is provided for the core and testbenches.

2.3 Supported Families

CoreSmartBERT supports the following families:

- PolarFire®

2.4 Supported Tool Flows

CoreSmartBERT v2.6 requires Libero SoC PolarFire.

2.5 Installation Instructions

The CoreSmartBERT CPZ file must be installed into Libero software. This is done automatically through the Catalog update function in Libero, or the CPZ file can be manually added using the **Add Core** catalog feature. Once the CPZ file is installed in Libero, the core can be configured, generated, and instantiated within SmartDesign for inclusion in the Libero project.

Refer to the *Libero SoC Online Help* for further instructions on core installation, licensing, and general use.

2.6 Documentation

This release contains a copy of the *CoreSmartBERT Handbook*. The handbook, describes the core functionality and gives step-by-step instructions on how to simulate, synthesize, and place-and-route this core, and also implementation suggestions. Refer to the *Libero SoC Online Help* for instructions on obtaining IP documentation.

For updates and additional information about the software, devices, and hardware, visit the Intellectual Property pages on the Microsemi SoC Products Group website: visit:

<http://www.microsemi.com/products/fpga-soc/design-resources/ip-cores>.

2.7 Resolved Issues in the v2.6 Release

Table 1 • Resolved Issues in the v2.6 Release

SAR Number	Changes
111800	Repackaged CoreSmartBERT with support for PF_XCVR v2.0.110.

2.8 Resolved Issues in the v2.5 Release

Table 2 • Resolved Issues in the v2.5 Release

SAR Number	Changes
107311	Repackaged CoreSmartBERT with support for PF_XCVR v2.0.109.

2.9 Resolved Issues in the v2.4 Release

Table 3 • Resolved Issues in the v2.4 Release

SAR Number	Changes
105234	Repackaged CoreSmartBERT with support for PF_XCVR v2.0.107.

2.10 Resolved Issues in the v2.3 Release

Table 4 • Resolved Issues in the v2.3 Release

SAR Number	Changes
102452	Repackaged CoreSmartBERT with support for PF_XCVR v2.0.100.

2.11 Resolved Issues in the v2.2 Release

Table 5 • Resolved Issues in the v2.2 Release

SAR Number	Changes
99815	Repackaged CoreSmartBERT with support for PF_XCVR.

2.12 Known Issues and Workarounds

There are no known limitations or workarounds in the CoreSmartBERT v2.6 release.