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# Core10GMAC v2.0 Release Notes

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This document accompanies the release of Core10GMAC v2.0. It describes the features and enhancements of Core10GMAC v2.0. This document contains information about the system requirements, supported families, implementations, and known issues and workarounds.

## Key Features

The key features are listed below:

- Ethernet MAC / RS / PAUSE
- Link Training
- Auto-Negotiation

## Documentation

The release contains a copy of the Core10GMAC Handbook. The handbook describes the core functionality, gives step-by step instructions on how to simulate, synthesize, and place-and-route the core, and includes implementation suggestions.

For more information about Intellectual Property, visit: <http://www.microsemi.com/products/fpga-soc/design-resources/ip-cores>. For updates and additional information about software, FPGAs, and hardware, visit: <http://www.microsemi.com>.

## Delivery Types

Core10GMAC is licensed with evaluation and obfuscated RTL.

### Obfuscated

Complete RTL code is provided for the core, enabling the core to be instantiated with SmartDesign. Simulation, Synthesis, and Layout can be performed with Libero software. The RTL code for the core is obfuscated using the IP encryption (encryptP1735.pl) solution.

### Evaluation

Complete RTL code is provided for the core, enabling the core to be instantiated with SmartDesign. Simulation, Synthesis, and Layout can be performed with Libero software. The RTL code for the core is obfuscated using the IP encryption (encryptP1735.pl) solution and has a time bomb feature which will stop functioning after 4 or 8 hours time at 10Gbps data rate using 64bit at 156.25MHz or 32bit at 312.5MHz clock respectfully.

## Supported Families

- PolarFire

## Supported Tool Flows

This version of the core requires Libero SoC v12.0 or later.

## Installation Instructions

The Core10GMAC CPZ file must be installed into Libero SoC. This is done automatically through the Catalog update function in the Libero software, or the CPZ file can be manually added using the **Add Core** catalog feature.

Once installed in the Libero Catalog, the core can be instantiated and configured. If a license is required, it must be installed in the Libero license file. Consult [Libero SoC online help](#) for further instructions on core installation, licensing, and general use.

## Release History

Table 1 provides the release history for Core10GMAC.

**Table 1.** Release History of Core10GMAC

<b>Version</b>	<b>Date</b>	<b>Changes</b>
2.0	April 2017	Initial version of the core.

## Known Issues and Workarounds

There are no known limitations or workarounds in the Core10GMAC v2.0 release.





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