Release Notes
MSS Configurator v2025.1

Introduction (Ask a Question)

Microchip introduces PolarFire® SoC Microprocessor Subsystem (MSS) Configurator, a software tool to configure the PolarFire SoC microprocessor subsystem. The MSS Configurator application provides a common tool to configure the PolarFire SoC MSS platform. The application offers a seamless experience for embedded software developers targeting the MSS and the hardware engineers developing a hardware/software solution using the MSS and the FPGA array fabric.

Note: The MSS Configurator application can be installed as a stand-alone application or as part of the Libero SoC design tool suite.

Download PolarFire SoC MSS Configurator Software (Ask a Question)

You can download the PolarFire SoC MSS Configurator v2025.1 software from the PolarFire SoC MSS Configurator page.

Important: Administrative privileges are required for installing the PolarFire SoC MSS Configurator software on the Windows operating system.

System Requirements (Ask a Question)

This section provides information on supported operating systems, system memory requirements, and other recommendations.

Supported Operating Systems (Ask a Question)

Libero SoC Design Suite supports the following 64-bit operating systems:

- Microsoft® Windows® 10.0 and Windows 11.0
- Red Hat® Enterprise Linux®/CentOS™ 7.x and Red Hat Enterprise Linux/CentOS 8.0-8.2
- OpenSUSE® Leap 42.3 (SLES 12.3 equivalent)
- Ubuntu® 18.04 LTS and 20.04.3 LTS

Attention: Starting from Libero SoC v2024.2, the following operating systems will no longer be supported:

- Red Hat® Enterprise Linux®/CentOS™ 7.x
- CentOS 8.x
- OpenSUSE® 12 SP3
- Ubuntu® 18.04.x LTS

If you are using any of these operating systems, please note that Libero SoC v2024.1 is the last release that supports them.

Support for the following operating systems has ceased. For more information, see PDN20028 and PDN21004:

- Red Hat Enterprise Linux/CentOS 6.x
- CentOS 8.0-8.2
- Microsoft Windows 7

Important: Siemens ModelSim Pro does not directly support the Ubuntu platform. FlashPro5 programmer is not supported with Ubuntu.

System Memory Recommendations (Ask a Question)

A minimum of 16 GB of Random-Access Memory (RAM) is recommended.

Help Documentation (Ask a Question)

The PolarFire® SoC Microprocessor Subsystem (MSS) Configurator documentation is also available as a part of the Libero SoC Design Suite Help Documentation webhelp. The webhelp features a very flexible layout and is designed to adapt to any screen size to provide an optimal viewing and interaction experience. Each topic and subtopic have an **(Ask a Question)** link that allows you to get answers to technical questions or to report inaccurate or incomplete information while viewing the help documentation. You can also use this link to file a technical support case with Microchip Technical Support.

- Click here to visit the new Libero SoC Design Suite Help Documentation WebHelp online.
- Click here to download a copy of the latest Libero SoC Design Suite Help documentation (in HTML file format) for offline reference. Extract the contents of the *.zip* archive and open *index.html* in a web browser of choice.

Important: You will need internet connectivity to view or download help documentation.

Table of Contents

1. New in This Version (Ask a Question)

This section contains information about new features, new devices, enhancements introduced in the PolarFire SoC MSS Configurator v2025.1.

1.1. Software Features and Enhancements (Ask a Question)

- MSS_DDR 16-bit width with ECC enabled: Updated MSS Configurator component XML to enable correct ECC byte-lane and ensure successful DDR memory training.

> **Important:** MPFS HAL versions later than v2.3.105 is required from the PolarFire SoC GitHub to use this change.

2. Known Issues and Limitations (Ask a Question)

The following table lists known issues and limitations associated with MSS Configurator v2025.1.

Table 2-1. Known Issues and Limitations Associated with MSS Configurator v2025.1

Family	Description
PolarFire® SoC	When bus port FIC_3_APB_M_PADDR gets disconnected because of the change in the width from 29-bit to 32-bit, redo the connection to continue with the Libero flow.

For information on the currently known issues and limitations related to the Libero SoC Design Suite, visit Libero SoC Design Suite Release Notes - Known Issues and Limitations.

3. Additional References (Ask a Question)

3.1. Related Release Notes (Ask a Question)

In addition to this document, you may also find the information in the following release notes helpful:

- Libero SoC Release Notes
- Programming and Debug Tools Release Notes
- SmartHLS Release Notes

3.2. Related Documents (Ask a Question)

- PolarFire SoC is built upon the award-winning PolarFire FPGA nonvolatile FPGA platform. To know more about the MSS architecture and its features, see PolarFire™ SoC product overview.
- The PolarFire SoC MSS Configurator provides a graphical user interface allowing embedded software engineers to define the MSS start-up state quickly. For more information, see Standalone MSS Configurator User Guide for PolarFire SoC.
- The PolarFire SoC Microcontroller Subsystem (MSS) is modeled with Microchip AMBA Bus Functional Model (BFM) to support functional simulation. For more information, see MSS Simulation User Guide for PolarFire SoC.
- For detailed information about the MSS clocking features, see PolarFire FPGA and PolarFire SoC FPGA Clocking Resources User Guide .
- For detailed information about the MSS Fabric Interface Controller (FIC), Peripherals, and Trace & Debug features, see PolarFire SoC FPGA MSS Technical Reference Manual.
- For detailed information about the MSS Banks and I/Os features, see PolarFire FPGA and PolarFire SoC FPGA User I/O User Guide.
- For detailed information about the MSS DDR4, DDR3, LPDDR3, and LPDDR4 features, see PolarFire Family Memory Controller User Guide.

Important: PolarFire SoC MSS Configurator documentation is updated frequently. As a result, the PDF documents released with the software might not be the current version.

4. Revision History (Ask a Question)

Revision	Date	Description
N	05/2025	The document was updated for PolarFire SoC MSS configurator v2025.1.
M	09/2024	The document was updated for PolarFire SoC MSS configurator v2024.2.
L	02/2024	The document was updated for PolarFire SoC MSS configurator v2024.1.
K	08/2023	The document was updated for PolarFire SoC MSS configurator v2023.2.
J	04/2023	The document was updated for PolarFire SoC MSS configurator v2023.1.
H	12/2022	The document was updated for PolarFire SoC MSS configurator v2022.3.
G	08/2022	The document was updated for PolarFire SoC MSS configurator v2022.2.
F	04/2022	The document was updated for PolarFire SoC MSS configurator v2022.1.
E	12/2021	The document was updated for PolarFire SoC MSS configurator v2021.3.
D	08/2021	The document was updated for PolarFire SoC MSS configurator v2021.2.
C	04/2021	The document was updated for PolarFire SoC MSS configurator v2021.1.
B	12/2020	The document was updated for PolarFire SoC MSS configurator v2.0.
A	11/2020	Initial Revision

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