



# Octal SPI Controller IP

IP Version: v1.4.0

## Release Notes

FPGA-RN-02011-1.4

December 2025

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# 1. Introduction

This document contains the Release Notes for the Octal SPI Controller IP and Octal SPI Controller Driver. For specific details about the IP and driver, refer to the following:

- [Octal SPI Controller IP User Guide \(FPGA-IPUG-02273\)](#)
- [Octal SPI Controller Driver API Reference \(FPGA-TN-02400\)](#)

## Octal SPI Controller IP v1.4.0

Software	Software Version	Summary of Changes
Lattice Radiant™	2025.2	Driver release v25.2.0. <ul style="list-style-type: none"> <li>• Optimized erase, program, and read functions.</li> <li>• Added single lane configuration support in read function.</li> <li>• Fixed incorrect QE bit command for Macronix™ SPI flash.</li> <li>• Added pre-processor checking for SPI manufacturer.</li> <li>• Fixed SUCCESS and FAILURE define values.</li> </ul>

## Corrections to Previous Release Notes

- In IP version 1.3.0, the correct driver version format is v25.1.0.

## Octal SPI Controller IP v1.3.0

Software	Software Version	Summary of Changes
Lattice Radiant	2025.1	<ul style="list-style-type: none"> <li>• Added support for dual bus.</li> <li>• Added bus options: APB and AXI4-Lite.</li> <li>• Driver release v25.01.00.               <ul style="list-style-type: none"> <li>• Added Macronix SPI flash support.</li> <li>• Fixed fast read issue with O2 optimization build.</li> <li>• Minor cleanup and restructuring to simplify the source code.</li> </ul> </li> </ul>

## Octal SPI Controller IP v1.2.0

Software	Software Version	Summary of Changes
Lattice Radiant	2024.2	Initial driver release v24.2.0.

## Octal SPI Controller IP v1.1.0

Software	Software Version	Summary of Changes
Lattice Radiant	2024.2	<ul style="list-style-type: none"> <li>• Added other Avant™ and Nexus™ device support.</li> <li>• Removed programmable endianness option.</li> <li>• Added GUI option for XiP address padding, AXI ID width, and FIFO implementation.</li> <li>• Enabled UMXSPI primitive for Avant-X device.</li> <li>• SPI clock frequency can operate up to 200 MHz.</li> </ul>

## Octal SPI Controller IP v1.0.0

Software	Software Version	Summary of Changes
Lattice Radiant	2024.1 SP1	Initial release.

## References

- [Octal SPI Controller IP User Guide \(FPGA-IPUG-02273\)](#)
- [Octal SPI Controller Driver API Reference \(FPGA-TN-02400\)](#)
- [Avant-E](#) web page
- [Avant-G](#) web page
- [Avant-X](#) web page
- [Certus-NX](#) web page
- [CertusPro-NX](#) web page
- [CrossLink-NX](#) web page
- [MachXO5-NX](#) web page
- [Octal SPI Controller IP Core](#) web page
- [Lattice Radiant Software](#) web page
- [Lattice Propel Design Environment](#) web page
- [Lattice Solutions IP Cores](#) web page
- [Lattice Solutions Reference Designs](#) web page
- [Lattice Insights](#) for Lattice Semiconductor training courses and learning plans

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