



# 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 Radian™	2025.2	<p>Driver release v25.2.0.</p> <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 Radian	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.</li><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>

### Octal SPI Controller IP v1.2.0

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

### Octal SPI Controller IP v1.1.0

Software	Software Version	Summary of Changes
Lattice Radian	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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