



# **FIFO Memory Modules**

## **Release Notes**

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## Inclusive Language

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# 1. Introduction

This document contains the Release Notes for the FIFO and FIFO\_DC Memory Modules IPs. For specific details about the IPs, refer to the following:

- [FIFO Memory Modules User Guide \(FPGA-IPUG-02182\)](#)

## 2. Non-MachXO4 Devices

### 2.1. FIFO IP

#### FIFO IP V2.5.0

| Software         | Software Version | Summary of Changes                                                                        |
|------------------|------------------|-------------------------------------------------------------------------------------------|
| Lattice Radiant™ | 2024.2           | Fixed inconsistent reset behavior of registered data output for LUT-based FIFO Controller |

#### FIFO IP Earlier Version

| IP Version | Summary of Changes                                        |
|------------|-----------------------------------------------------------|
| 2.4.0      | Updated fix for FWFT behavior                             |
| 2.3.0      | Fix PMI support                                           |
| 2.2.0      | Fixed FWFT behavior                                       |
| 2.1.0      | Added FWFT Support for Nexus and Avant devices.           |
| 2.0.0      | Added LAV-AT support.                                     |
| 1.4.0      | Fixed almost empty flag for HW Controller Implementation. |
| 1.3.0      | Added UT24C and UT24CP support.                           |
| 1.2.0      | Added LFMXO5 support and Propel 2.1 Software support.     |
| 1.1.0      | Added LFCPNX support and Hard FIFO flag sync.             |
| 1.0.2      | Updated testbench.                                        |
| 1.0.1      | Added LFD2NX support and Hard FIFO Controller support.    |
| 1.0.0      | Initial release.                                          |

## 2.2. FIFO\_DC IP

### FIFO\_DC IP v2.7.2

| Software        | Software Version | Summary of Changes                                        |
|-----------------|------------------|-----------------------------------------------------------|
| Lattice Radiant | 2026.1           | Fixed timing constraints for empty and almost empty flags |

### FIFO\_DC IP v2.7.1

| Software        | Software Version | Summary of Changes              |
|-----------------|------------------|---------------------------------|
| Lattice Radiant | 2026.1           | Fixed GSR instance in testbench |

### FIFO\_DC IP v2.7.0

| Software        | Software Version | Summary of Changes                             |
|-----------------|------------------|------------------------------------------------|
| Lattice Radiant | 2025.2           | Disable Hard IP Implementation for LAV-AT-E30B |

### FIFO\_DC IP Earlier Versions

| IP Version | Summary of Changes                                                             |
|------------|--------------------------------------------------------------------------------|
| 2.6.0      | Disable Hard IP Implementation for LAV-AT-E70B                                 |
| 2.5.0      | Fixed mixed-width configurations                                               |
| 2.4.0      | Various fixes and performance improvements                                     |
| 2.3.0      | Fixed asynchronous reset of FIFO flags for LUT-based Controller Implementation |
| 2.2.0      | Fixed FWFT behavior                                                            |
| 2.1.0      | Added FWFT support for Nexus and Avant devices.                                |
| 2.0.0      | Added LAV-AT support.                                                          |
| 1.4.0      | Fixed almost empty flag for HW Controller Implementation.                      |
| 1.3.0      | Added UT24C and UT24CP support.                                                |
| 1.2.0      | Added LFMXO5 support and Propel 2.1 Software support.                          |
| 1.1.0      | Added LFPCNX support and Hard FIFO flag sync.                                  |
| 1.0.2      | Updated testbench.                                                             |
| 1.0.1      | Added LFD2NX support and Hard FIFO Controller support.                         |
| 1.0.0      | Initial release.                                                               |

## 3. MachXO4 Devices

### 3.1. FIFO\_DC IP

#### FIFO\_DC IP v3.0.1

| Software        | Software Version | Summary of Changes                                                                                                                                                                                                                                                                    |
|-----------------|------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Lattice Radiant | 2025.2.1         | <ul style="list-style-type: none"><li>Converted RTL to Verilog files</li><li>Added support for LUT memory type</li><li>Added <i>Static – Dual Threshold, Dynamic – Single Threshold, and Dynamic – Dual Threshold</i> support for almost full and almost empty flags in EBR</li></ul> |

#### FIFO\_DC IP v3.0.0

| Software        | Software Version | Summary of Changes                |
|-----------------|------------------|-----------------------------------|
| Lattice Radiant | 2025.2           | Added support for MachXO4 device. |

## References

- [FIFO Memory Modules User Guide \(FPGA-IPUG-02182\)](#)
- [Certus-N2](#) web page
- [Certus-NX](#) web page
- [CertusPro-NX](#) web page
- [CrossLink-NX](#) web page
- [IP Core](#) web page
- [iCE40 UltraPlus](#) web page
- [Lattice Avant Platform](#) web page
- [Lattice Insights](#) for Lattice Semiconductor training courses and learning plans
- [Lattice Propel Design Environment](#) web page
- [Lattice Radiant Software](#) web page
- [Lattice Solutions IP Cores](#) web page
- [Lattice Solutions Reference Designs](#) web page
- [MachXO4](#) web page
- [MachXO5-NX](#) web page

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For frequently asked questions, please refer to the Lattice Answer Database at [www.latticesemi.com/Support/AnswerDatabase](http://www.latticesemi.com/Support/AnswerDatabase).





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