MPPHY Module

IP Version: v2.6.0

Release Notes

FPGA-RN-02043-1.4

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Contents

1. Introduction

This document contains the Release Notes for the MPPHY Module. For specific details about the IP, refer to the following:

- MPPHY Module User Guide (FPGA-IPUG-02233)

MPPHY Module v2.6.0

Software	Software Version	Summary of Changes
Lattice Radiant	2025.2	• Added support for LN2-CT-20ES1 devices. • Added continuous data rate support for JESD204B and JESD204C protocols. • Added support for DP_eDP_2.7G (Oversampling PMA 8.1G). • Enhanced testbench to support far end parallel loopback and RX-to-TX parallel loopback. • Enabled **PMA Control RX Adaptation Mode** GUI option.

Lattice Avant-G/X MPPHY Module v2.5.0

Software	Software Version	Summary of Changes
Lattice Radiant	2025.1.1	• Added support for 25GAUI protocol. • Added RX-to-TX parallel loopback mode. • Added Ethernet mix mode lane merging feature. • Added continuous data rate support for Generic 8b10b and 64b66b, and PCS Bypass modes. • Enhanced testbench to support Generic 8b10b and 64b66b, and PCS Bypass modes. • Enhanced testbench to support near end TX-to-RX loopback and TX-to-RX serial loopback.

Lattice Avant-G/X MPPHY Module v2.4.0

Software	Software Version	Summary of Changes
Lattice Radiant	2025.1	• Added support for 1000BASE-KX, 2.5GBASE-KX, 5GBASE-R, and RXAUI, XAUI. • Added support for SLVS_EC 1.25G and 2.5G rates. • Fixed clock settings for Generic and PCS bypass modes. • Enhanced testbench for JESD204B/C, PIPE Direct Gen2, Gen3, and Gen4. • Added support for JESD204B_1G, JESD204C_8G, and JESD204C_12G. All protocols support x1, x2, x4, x6, and x8.

Lattice Avant-G/X MPPHY Module v2.3.0

Software	Software Version	Summary of Changes
Lattice Radiant	2024.2.1	• Added JESD204C normal transaction test. • Updated data width support for generic modes. • Added TX-to-RX serial loopback support. • Removed 10GBASE-KR and 25GBASE-KR support.

Lattice Avant-G/X MPPHY Module v2.2.0

Software	Software Version	Summary of Changes
Lattice Radiant	2024.2	• Added support for CoaXpress, CPRI, JESD204C, and SLVS-EC protocol modes. • Added multi-quad support.

Lattice Avant-G/X MPPHY Module Earlier Versions

IP Version	Summary of Changes
2.1.0	• Added support for DP/eDP, SyncE, generic, JESD204B, and PCS bypassed modes.
2.0.0	• New MPPHY parameters and ports.
1.1.0	• Added reset and configure manager (RCM) support. • Updated testbench to support RCM-enabled test.
1.0.0	• Initial release.

References

- MPPHY Module User Guide (FPGA-IPUG-02233)
- Avant-G web page
- Avant-X web page
- Certus-N2 web page
- Lattice Radiant Software web page
- Lattice Propel Design Environment web page
- Lattice Insights for Lattice Semiconductor training courses and learning plans

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For frequently asked questions, refer to the Lattice Answer Database at www.latticesemi.com/Support/AnswerDatabase.

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