



MPPHY Module

IP Version: v3.0.0

Release Notes

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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 v3.0.0

Software	Software Version	Summary of Changes
Lattice Radiant	2026.1	<ul style="list-style-type: none"> • Added support for Certus-N2 devices. • Added support for SDI protocol modes. • Added support for Ethernet 100GBASE-KX_10GHz, 10GBASE-R (ANLT = Enabled), and 25GBASE-R (ANLT = Enabled) protocol modes. • Removed support for the DP_eDP_2.7G (Oversampling PMA 8.1G) protocol mode. • Enabled the PHY Reconfiguration File (PRF) generation for dynamic reconfiguration. • Added the Cascade Reference Clock option. • Removed the pma_rx[n]_anxmit_i signal to align with IEEE 802.3 requirements. • Added 8b10b disparity patch for 8b10b Ethernet protocols. • Updated all soft logic patches to use tx_in_clk_q[m]_i, allowing you to select either regional clock or global clock. • Changed attribute name from <i>TX Amplitude Control</i> to <i>TX Main Cursor</i>. • Fixed PMA TX EQ main, post, and pre cursor ranges. • Added PMA TX amplitude control. • Added PCS TX and RX data polarity options. • Fixed the supported number of bonding quads and lanes for each device. • Fixed alignment issues for bonding modes. • Fixed incorrect gearing values displayed in the GUI. • Updated GUI to hide unused parameters. • Updated reference clock sorting for Generic mode.

MPPHY Module v2.6.0

Software	Software Version	Summary of Changes
Lattice Radiant	2025.2	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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.

Software	Software Version	Summary of Changes
		<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> Added support for DP/eDP, SyncE, generic, JESD204B, and PCS bypassed modes.
2.0.0	<ul style="list-style-type: none"> New MPPHY parameters and ports.
1.1.0	<ul style="list-style-type: none"> Added reset and configure manager (RCM) support. Updated testbench to support RCM-enabled test.
1.0.0	<ul style="list-style-type: none"> 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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