



# **Byte-to-Pixel Converter IP**

IP Version: v1.9.2

## **Release Notes**

FPGA-RN-02019-1.2

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# Contents

Contents ..... 3

1. Introduction ..... 4

    Byte-to-Pixel Converter IP v1.9.2..... 4

    Byte-to-Pixel Converter IP v1.9.1..... 4

    Byte-to-Pixel Converter IP v1.9.0..... 4

    Byte-to-Pixel Converter IP Earlier Versions ..... 4

References ..... 6

Technical Support Assistance ..... 7

# 1. Introduction

This document contains the Release Notes for the Byte-to-Pixel Converter IP. For specific details about the IP, refer to the following:

- [Byte-to-Pixel Converter IP User Guide \(FPGA-IPUG-02079\)](#)

## Byte-to-Pixel Converter IP v1.9.2

Software	Software Version	Summary of Changes
Lattice Radiant	2025.2	<ul style="list-style-type: none"> <li>• Removed the IP licensing requirement.</li> <li>• Updated the constraint file.</li> </ul>

## Byte-to-Pixel Converter IP v1.9.1

Software	Software Version	Summary of Changes
Lattice Radiant	2025.1	<ul style="list-style-type: none"> <li>• Added support for LFD2NX-15, LFD2NX-25, LFD2NX-35, and LFD2NX-65 devices.</li> <li>• Added support for LFMXO5-35, LFMXO5-35T, LFMXO5-65, and LFMXO5-65T devices.</li> <li>• Removed <i>axis_vid_aresetn_i</i> and <i>axis_vid_aclt_i</i> ports when Unified Video Streaming Tx Interface is enabled.</li> <li>• Updated the constraint file and fixed bugs.</li> </ul>

## Byte-to-Pixel Converter IP v1.9.0

Software	Software Version	Summary of Changes
Lattice Radiant	2024.2	<ul style="list-style-type: none"> <li>• Added support for Certus-N2 devices.</li> <li>• Added support for the AXI4-Lite interface protocol.</li> <li>• Added support for the AXI4-Stream protocol through Unified Video Streaming Tx interface.</li> <li>• Added the RGB remapping support to <i>pd_red_o</i>, <i>pd_green_o</i>, and <i>pd_blue_o</i> ports for DSI and CSI-2 RGB data types.</li> <li>• Added the <i>Enable Byte Swap per Pixel</i> attribute in the GUI.</li> <li>• Fixed the <i>pd_o</i> pixel output for RAW14 and YCbCr data types for MIPI compliance.</li> </ul>

## Byte-to-Pixel Converter IP Earlier Versions

IP Version	Summary of Changes
1.8.0	Added support for Certus-N2 devices (for early access).
1.7.0	<ul style="list-style-type: none"> <li>• Made quality enhancement.</li> <li>• Made other bug fixes.</li> <li>• Made minor GUI enhancements.</li> </ul>
1.6.1	<ul style="list-style-type: none"> <li>• Fixed timing issue encountered in DSI configurations.</li> <li>• Fixed output issue encountered when AXI4-Stream Transmitter Interface is enabled.</li> <li>• Updated constraint file.</li> <li>• Added support for 4 output pixel lanes for RAW12 data type.</li> <li>• Made other bug fixes.</li> <li>• Made minor GUI enhancements.</li> </ul>
1.6.0	<ul style="list-style-type: none"> <li>• Added support for Lattice Avant devices.</li> </ul>

IP Version	Summary of Changes
	<ul style="list-style-type: none"> <li>Separated RTL per data type under CSI-2 configurations.</li> <li>Updated constraint file.</li> </ul>
1.5.0	Added support for MachXO5-NX devices.
1.4.0	<ul style="list-style-type: none"> <li>Added DSI Sync Packet Delay attribute.</li> <li>Fixed unintended early read from the FIFO even when the GUI threshold is manually adjusted.</li> </ul>
1.3.0	<ul style="list-style-type: none"> <li>Fixed Ip_av_en issue encountered in DSI configurations.</li> <li>Fixed synthesis issue encountered in Synplify Pro.</li> <li>Updated constraint file.</li> </ul>
1.2.0	Added support for CertusPro-NX devices.
1.1.1	<ul style="list-style-type: none"> <li>Added support for RAW12, RAW14 and RAW16 data types.</li> <li>Fixed wire declaration of ports (multicycle nets).</li> </ul>
1.1.0	<ul style="list-style-type: none"> <li>Updated RTL to optimize FIFO instance.</li> <li>Added Rx and Tx data rates (read-only).</li> <li>Updated IP to work correctly for YUV420_8 and YUV420_10 data types.</li> <li>Removed Odd/Even attribute from YUV data types.</li> <li>Fixed threshold calculation issue for small word counts.</li> </ul>
1.0.3	Added support for Certus-NX devices.
1.0.2	Updated for Radiant 2.0 Service Pack 1.
1.0.1	Production release.
1.0.0	Initial release.

## References

- [Byte-to-Pixel Converter IP User Guide \(FPGA-IPUG-02079\)](#)
- [Avant-E](#) web page
- [Avant-G](#) web page
- [Avant-X](#) web page
- [Certus-N2](#) web page
- [Certus-NX](#) web page
- [CertusPro-NX](#) web page
- [CrossLink-NX](#) web page
- [MachXO5-NX](#) web page
- [Byte-to-Pixel Converter IP Core](#) web page
- [Lattice Propel Design Environment](#) web page
- [Lattice Radiant Software](#) web page
- [Lattice Solutions IP Cores](#) web page
- [Lattice Solutions Reference Designs](#) web page
- [Lattice Insights](#) web page for Lattice Semiconductor training courses and learning plans

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