



# **Color Correction Matrix (CCM) IP**

IP Version: v1.3.1

## **Release Notes**

FPGA-RN-02030-1.1

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## 1. Introduction

This document contains the Release Notes for the Color Correction Matrix (CCM) IP. For specific details about the IP, refer to the following:

- [Color Correction Matrix \(CCM\) IP User Guide \(FPGA-IPUG-02214\)](#)

### Color Correction Matrix (CCM) IP v1.3.1

Software	Software Version	Summary of Changes
Lattice Radiant	2025.2	<ul style="list-style-type: none"><li>• Added support for Certus-N2 devices.</li><li>• Removed the IP licensing requirement.</li><li>• Updated the constraint files.</li><li>• Updated the AXI-Lite write strobe bus interface.</li></ul>

### Color Correction Matrix (CCM) IP v1.3.0

Software	Software Version	Summary of Changes
Lattice Radiant	2025.1	Added support for LFD2NX-25 and LFD2NX-28 devices.

### Color Correction Matrix (CCM) IP Earlier Versions

IP Version	Summary of Changes
1.2.1	<ul style="list-style-type: none"><li>• Fixed an issue with proper handling of PPC during the vertical blanking period.</li><li>• Fixed testbench-related issues.</li></ul>
1.2.0	<ul style="list-style-type: none"><li>• Fixed bus interface connectivity issues.</li><li>• Fixed incorrect assertion of the End of Frame output port.</li><li>• Fixed issues with handling <i>TVALID</i> going <i>LOW</i> during the vertical blanking period.</li><li>• Implemented other minor IP enhancements.</li></ul>
1.1.0	<ul style="list-style-type: none"><li>• Added support for the Lattice Avant devices.</li><li>• Improved timing and optimized resource utilization.</li><li>• Added support for partial resolution.</li><li>• Added regression support in the Verilog testbench.</li></ul>
1.0.0	Initial release.

## References

- [Color Correction Matrix \(CCM\) IP User Guide \(FPGA-IPUG-02214\)](#)
- [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](#)
- [Lattice Propel Design Environment web page](#)
- [Lattice Radiant Software web page](#)
- [Lattice Insights web page for Lattice Semiconductor training courses and learning plans](#)

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[www.latticesemi.com/Support/AnswerDatabase](http://www.latticesemi.com/Support/AnswerDatabase).



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