

# Creonic Unveils CCSDS 131.2 Wideband Modulator IP Core Achieving 1 GSymb/s



**Kaiserslautern, Germany, July 27, 2023** – Creonic, a leading provider of state-of-the-art IP cores for digital communications, proudly announces the launch of its latest innovation, the CCSDS 131.2 Wideband Modulator IP core.

The design is fully compatible with Creonic's proven CCSDS SCCC Encoder, CCSDS 131.2 Wideband Demodulator, and CCSDS SCCC Turbo Decoder IP cores, creating a comprehensive and efficient ecosystem from a single vendor. The IP core's design allows it to achieve symbol rates of up to 1 GSymb/s on state-of-the-art FPGA devices.

The Creonic CCSDS 131.2 Wideband Modulator IP core acts as an advanced inner transmitter, encompassing crucial functionalities such as mapping, Physical Layer (PL) framing, and modulation. Additionally, the core performs baseband interpolation and output gain adjustment, ensuring a sophisticated and optimized baseband signal for subsequent DAC and RF front-end processing.

With AXI4-Stream data interfaces, the IP core seamlessly integrates into any design, ensuring a hassle-free implementation process. Additionally, the memory-mapped AXI4-Lite interface allows for effortless configuration and monitoring of the IP core, empowering users with convenient control over its functionalities. The IP core boasts a small hardware footprint with no Block RAMs required, making it an optimal choice for resource-constrained applications without compromising on performance.

The IP core is available for ASIC and FPGA technologies such as AMD Xilinx, Intel, and Microchip. It comes as a source code or netlist license with a bit-accurate pre-compiled software library for running simulations in C/C++/Matlab environments.

[Contact us](#) for more information!

## About Creonic GmbH

Creonic is an ISO 9001:2015 certified provider of ready-for-use IP cores for wired, wireless, fiber, and free-space optical communications.

All relevant digital signal processing algorithms are covered, including, but not limited to, forward error correction, modulation, equalization, and demodulation.

The company offers the richest product portfolio in this field, covering standards like 3GPP 5G, DVB-S2X, DVB-RCS2, CCSDS, and WiFi.

The products are applicable for ASIC and FPGA technologies and comply with the highest requirements with respect to quality and performance.

For more information, please visit our website at [www.creonic.com](http://www.creonic.com).

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