

## CAST Releases First Dual LZ4 and Snappy Lossless Data Compression IP Core

*Joins LZ4/Snappy Decompressor for a fast, efficient, end-to-end accelerated lossless data compression solution supporting both algorithms.*

**Woodcliff Lake, New Jersey — June 26, 2025** — Semiconductor intellectual property core provider CAST today announced a new IP core that provides lossless data compression using either the LZ4 or the Snappy algorithms. It joins CAST's existing LZ4 and Snappy decompression IP core to provide what the company believes are the first available hardware engines that support both popular lossless compression standards.

The new [LZ4SNP-C LZ4/Snappy Data Compressor](#) is a stand-alone hardware compression engine that frees a system's processor from the computationally intensive task of data compression. Its ability to produce standards-compliant output for either algorithm makes it ideal for platforms that must interface with third-party systems using either LZ4 or Snappy compression. The core features:

**Autonomous operation**, producing complete and compliant compressed files without requiring software assistance, or pre- or post-data processing.

**Scalable throughput**, from one to several tens of bytes per clock cycle, thanks to the synthesis-time configurable number of engines that compress blocks of data in parallel. Being able to run at hundreds of MHz, the core can process over 100 Gbps on FPGA targets. Several hundreds of Gbps are possible with moderate silicon resources on modern ASIC technologies.

**Flexible architecture**, with a configurable number of processing engines, LZ77 history sizes, and other architectural and algorithmic parameters that enable optimization of throughput, hardware resources, or compression efficiency as required.

**Easy integration and use**, offering an AMBA® AXI4-Stream interface for drop-in streaming systems compatibility, and seamless operation with CAST's streaming DMA engines for systems compressing data from/to host memory system. Its autonomous operation further simplifies system integration, while its comprehensive set of deliverables shortens development time and CAST's industry-leading customer support helps you meet project deadlines.

"This new compression core—along with our matching decompressor—mean designers no longer need to choose between LZ4 or Snappy fast compression; they can now easily and efficiently do both," said Dr. Calliope-Louisa Sotiropoulou, lossless compression expert for CAST. "Dual-format support with high throughput and easy configurability make these cores stand out as one of the best available solutions for high-speed data transmission, data storage systems, edge and gateway devices, and accelerating databases for machine learning and AI."

The LZ4/Snappy Compressor and Decompression cores are available now for ASICs or FPGAs. Learn more about the new compression core—including comparing sample implementation results—by visiting its [product page](#) or contacting [CAST Sales](#). Gain understanding about choosing IP for different lossless compression algorithms—including LZ4 and Snappy—by registering for this free July 17<sup>th</sup> webinar by CAST's Dr. Calliope-Louisa Sotiropoulou: [Unpacking System Performance: Supercharge Your Systems with Lossless Compression IPs](#).

## About CAST

Computer Aided Software Technologies, Inc. (CAST) is a digital silicon IP provider founded in 1993. The company's ASIC and FPGA IP cores product line includes microcontrollers and processors; compression engines for data, images, and video; interfaces for automotive, aerospace, and other applications; security primitives and comprehensive SoC security modules; and various common peripheral devices.

Learn more by visiting [www.cast-inc.com](http://www.cast-inc.com).

# # #

CAST is a trademark of Computer Aided Software Technologies Inc. Other trademarks are the property of their respective owners.

Media Contact: Artemis Couroupaki, [a.couroupaki@cast-inc.com](mailto:a.couroupaki@cast-inc.com)