New PNG Encoder IP Core Expands CAST's Lossless Compression Suite

Standard-compliant hardware engine provides fast, optimized, lossless compression for one of the most popular image formats.

Woodcliff Lake, New Jersey — **July 6, 2023** — Semiconductor intellectual property provider CAST today announced the availability of a PNG Encoder IP core that performs lossless image compression compliant with the ISO/IEC 15948 and RFC 2083 standards.

The new [PNG-E PNG Lossless Compression Encoder](#) is one of the few such IP cores available. It can compress color or grayscale images with 8 or 16 bits per color, thus supporting 24- and 48-bit TrueColor (RGB) or 8- and 16-bit greyscale images, all with or without alpha transparency.

PNG Encoder IP Core
- Fast, hardware, lossless compression engine
- PNG standard compliant
- 24- and 48-bit color and grayscale images, with or without transparency
- Easy to use: standard interfaces, program-once encode-many operation
- Joins PNG Decoder plus JPEG-LS and QOI lossless image/video codecs

The Encoder supports all four available PNG prediction filters, and it improves the compression ratio by automatically applying the best prediction filter to each scan line of the image. It processes images at a fast one byte per clock cycle and has an ultra-low latency of just one image line plus 40 clock cycles. Standard AMBA® interfaces, run-time programmable image format parameters, and automatic program-once encode-many operation ensure the Encoder is easy to integrate and use.

The new PNG Encoder joins an existing PNG Decoder in what CAST believes is the most comprehensive suite of lossless image compression IP cores available anywhere, including image/video encoders and decoders for PNG, JPEG-LS, and the Quite Okay Image (QOI) format.

Sourced from [IObundle Lda](#)., the new PNG-E encoder core is available now, in synthesizable RTL for ASICs or as a targeted netlist for FPGAs.

— more —

Like all the IP products available from CAST, the new core offers high quality, excellent reliability, and low risk by being developed following CAST's strict design, verification, and productization standards. These, along with CAST's responsive support, ensure designers using IP from CAST enjoy *A Better IP Experience*.

About CAST

Computer Aided Software Technologies, Inc. (CAST) is a silicon IP provider founded in 1993 and celebrating its 30th anniversary this year. CAST's ASIC and FPGA IP product line includes microcontrollers and processors; compression engines for data, images, and video; interfaces for automotive, aerospace, and other applications; various common peripheral devices; and comprehensive SoC security modules. Learn more by visiting www.cast-inc.com.

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