

For Immediate Release



Gidel Launches Lossless Compression IP that Reduces Storage Needs by Over 50%, Utilizing Only 1% of the FPGA, with Low Power Consumption

FPGA specialist announces renewed focus on compression and encryption algorithms.

Santa Clara, California, and Or-Akiva, Israel, 21 June, 2018 – Gidel, a technology leader in high-performance accelerators utilizing FPGAs, today announced a new compression IP and a renewed focus on compression and encryption algorithms for the HPC and Vision markets. The compression algorithm requires extremely low power, encoding more than 1 GB/sec utilizing just 1% of the FPGA, thus opening up new possibilities for data centers in particular.

Gidel has been creating IPs and products for 25 years, and its latest IP effort focuses on real-time, lossless compression. Lossless compression allows original data to instantly be perfectly reconstructed from compressed data, and reduces a file's size with no loss of data. Gidel's IP was developed in response to requests for better performing compression capabilities from one of its strategic customers, and is dramatically better than commercially available compression formats commonly used today when comparing total compression ratios, computation time, and power consumption.

Gidel's lossless compression IP is a tiny IP with a small number of logic elements, resulting in a power consumption of less than 0.2W on an FPGA board. Additionally, the IP has an extremely small footprint. When used with Gidel's HawkEye FPGA board with Arria 10 480, for example, the size of the silicon needed to implement the lossless IP is only 1% of this particular FPGA. Gidel's lossless compression IP can be used with all Gidel advanced boards.

"Real-time compression capability provides a number of advantages in storage and efficiency," notes Ofer Pravda, VP Marketing & Sales at Gidel. "Compressed data can be stored in real-time, as opposed to systems that store the raw data and then compress offline at a later date. Additionally, data can be compressed more efficiently to host computer memory, increasing total bandwidth."

Real-time compression also significantly increases overall memory performance (data capacity and bandwidth). This is an especially important feature for sensor-based systems that record massive amounts of data in the field and have limited local storage capabilities and/or limited bandwidth for transmitting that data back to the local storage. When storage capacity or bandwidth are limited, Gidel's lossless IP

doubles system performance by doubling the speed, capacity, number of sensors, or any combination of the three.

Initial tests have been run on the lossless compression IP using hundreds of representative images supplied by several of Gidel's strategic customers. Today, Gidel announces its lossless compression IP is available for commercial sale.

Gidel offers many IPs, including other compression IPs, and will be releasing encryption IPs shortly. When utilized together, compression IP followed by encryption IP provides a complete cloud solution. Gidel's compression and encryption IPs can also be viewed as two different building blocks in the Gidel tools library.

Gidel's renewed focus on compression and encryption results in better ROI for customers, who save both storage and power. Bundling Gidel's compression and encryption algorithms together and adding proven Vision capabilities opens new markets for the FPGA maker, such as recording systems, mapping and autonomous vehicles, homeland security, and more.

Visit Gidel at booth G-814 at ISC 2018 in Frankfurt, Germany from June 25–27 for a demo of the lossless compression IP.

About Gidel

For 25 years, Gidel has been a technology leader in high performance, innovative, FPGA-based accelerators. Gidel's reconfigurable platforms and development tools have been used for optimal application tailoring and for reducing the time and cost of project development. Gidel's dedicated support and its products' performance, ease-of-use, and long-life cycles have been well appreciated by satisfied customers in diverse markets who continuously use Gidel's products, generation after generation. For more information visit www.gidel.com.

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