

## Press Release

Or-Akiva, Israel, January 30, 2023

Gidel, an Israel-based tech company specialized in high-speed image acquisition and processing, today announced that the new NVIDIA Jetson Orin NX™ 16GB system-on-module (SoM) will be added to Gidel's FantoVision family of high-bandwidth compact computers for vision on the edge.



With up to 100 sparse TOPS, the Jetson Orin NX 16GB module increases the AI processing power of FantoVision computers by a factor of 5. Paired with Gidel's high-speed camera interfaces and FPGA-based frame grabbing and processing technology, the new processor opens unprecedented possibilities for real-time, low-latency image processing on the edge for industrial machine vision and other applications. It includes 10GigE, CoaXPRESS 12 and Camera Link interfaces for image acquisition, processing and compression at over 1 gigapixel per second.

### [FantoVision: Ready-to-use computer for vision on the edge](#)

Gidel's FantoVision edge computers have been specially designed to make NVIDIA Jetson modules easily accessible to high-end imaging and vision system developers. They combine NVIDIA Jetson processors with high-bandwidth camera interfaces and Gidel's acclaimed FPGA-based frame grabbing and acceleration technology. The result is a ready-to-use, compact, low-power industrial computer that fulfills the highest image acquisition standards.

With Gidel's high-bandwidth interfaces, including 10GigE, CoaXPRESS 12 and Camera Link, FantoVision computers can capture and process images at up to 40 gigabits per second for high-resolution, high-speed, or multi-camera applications.

### [Unique platform for AI machine vision](#)

The NVIDIA Jetson Orin NX 16GB module delivers five times more performance than the previous-generation Jetson Xavier NX platform with 100 TOPS vs. 21 TOPS, respectively. It also features a more powerful, new-generation CPU and GPU. With this level of performance, it can process the high image data throughput delivered by the Gidel frame grabber in real time at more than 1 gigapixel per second using the NVIDIA JetPack SDK.

This makes FantoVision a unique solution for machine vision system designers who want to run a deep learning model on the edge without compromising on real-time processing capabilities.

"The combination of Gidel's FPGA and image processing know-how and NVIDIA accelerated computing breaks another barrier between AI and machine vision," said Reuven Weintraub,



Founder and CTO of Gidel. "With our NVIDIA Jetson Orin-based FantoVision edge computers, vision system engineers have a turn-key solution to implement AI in machine vision systems."

Gidel will present the new FantoVision with the NVIDIA Jetson Orin edge AI platform at the Embedded World show in Nuremberg, Germany, on March 14-16, 2023.

### **Embedded World 2023**

March 14-16, 2023

Messe Nürnberg

Nuremberg, Germany

Hall 2/Booth 440

### **More information:**

[www.gidel.com/imaging-and-vision/edge-computers/](http://www.gidel.com/imaging-and-vision/edge-computers/)

[www.nvidia.com/en-us/autonomous-machines/embedded-systems/jetson-orin/](http://www.nvidia.com/en-us/autonomous-machines/embedded-systems/jetson-orin/)

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### **About Gidel:**

For 30 years, Gidel has been a technology leader in FPGA-based imaging and vision solutions. When high data rate applications require real-time processing, low latency, or high customization options, customers partner with Gidel. Our customers benefit from Gidel's world class FPGA platforms, development tools, expertise in algorithms, and design services. Gidel's easy-to-use system development tools significantly reduce customers' time to market and production of FPGA-based acceleration systems.

Typical applications are edge computing, mission-critical systems, embedded vision, and data centers. Besides custom solutions, Gidel also features a broad range of high-bandwidth frame grabbers for 10, 40, and 100 Gigabit Ethernet, CoaXPress and Camera Link as well as diverse off-the-shelf PCIe FPGA boards and FPGA modules.