

Diamond Introduces STEVIE™ Carrier Board for NVIDIA® Jetson™ AGX Xavier Modules

Sunnyvale, California — January 27, 2020 — Diamond Systems, a leading global provider for rugged, I/O-rich embedded computing solutions, has introduced STEVIE, a carrier board solution built to deliver AI-at-the-edge high performance computing based on NVIDIA® Jetson™ AGX Xavier™ modules. Packed with I/O and expandability, STEVIE targets a range of AI, machine learning, image processing and other compute-intensive tasks.

STEVIE offers a combination of latching and commercial connectors for flexibility and convenience. The front edge features industry-standard connectors for dual Ethernet, dual USB, HDMI, and power input. This enables the creation of a low-cost quick-assembly box-level product. Additional I/O, including a second HDMI port, dual CAN ports, serial ports,



STEVIE carrier board mounted on the NVIDIA Jetson AGX Xavier module.

and additional USB ports, is available on a series of latching connectors for applications requiring greater functionality. Expansion sockets include M.2 2280 flashdisk, PCIe minicard, and a camera module connector that enables interfacing to a range of embedded high-resolution cameras designed for the Jetson ecosystem. The carrier board measures 92 x 105mm (~ 3.6" x 4.1"), just slightly larger than the AGX Xavier module (87 x 100mm). This size enables Stevie to provide the maximum amount of I/O in the smallest size while supporting full-size 2280 M.2 flashdisk modules.

STEVIE integrates a compact, cost-effective yet full-featured data acquisition circuit with analog input, analog output, and digital I/O to interface to the "real world" of analog and digital sensors and controls. A programming library provides support for rapid development of custom applications, while a ready-to-run application with graphical user interface provides convenient real-time control of the data acquisition I/O as well as data logging.

Diamond's Family of Solutions for NVIDIA Jetson Computer Modules

STEVIE is the newest member of Diamond Systems' family of solutions for delivering Al-at-the-edge high performance computing solutions based on NVIDIA Jetson modules. The family currently includes four carrier boards, as well as a finished system housed in an ultra-compact enclosure and a low-cost enclosure for the NVIDIA Jetson Nano development kit. These solutions target a range of industrial and military applications, with a focus on harsh environments such as vehicles and other outdoor applications.

Product Family Roundup

Product	Size	NVIDIA Module	Notable Features
<u>ZIGGY</u>	50 x 87mm/ 1.97" x 3.43"	Jetson TX2 and TX2i	Compact, low-cost, data acquisition
<u>JETHRO</u>	76 x 107mm/ 3.0" x 4.2"	Jetson TX2 and TX2i	Expandable, data acquisition
STEVIE	92 x 105mm/ 3.6" x 4.1"	Jetson AGX Xavier	Low-cost, high performance
ELTON	102 x 152mm/ 4.0" x 6.0"	Jetson AGX Xavier	Highest performance, PCI/104-Express expansion, data acquisition
ZIGGYBOX	63 x 67 x 96mm 2.4" x 2.6" x 3.7"	Jetson TX2 and TX2i	Complete system, compact I/O-rich AI-at-the-edge solution ideal for industrial control applications
JETBOX-nano	125 x 95 x 34mm 4.9" x 3.7" x 1.3"	Jetson Nano	Compact, low-cost enclosure for the Jetson Nano Development Kit

NVIDIA Solutions web page: www.diamondsystems.com/products/nvidiasolutions.php
STEVIE webpage on Diamond Systems web site: http://www.diamondsystems.com/products/Stevie

Availability

STEVIE is available now.

For more information, please visit the STEVIE webpage or contact the Diamond's sales team: sales@diamondsystems.com

About Diamond Systems

Diamond provides highly integrated solutions such as carrier boards and systems for NVIDIA Jetson TX2/TX2i and AGX Xavier modules; single-board computers (SBCs); ultra-compact and 10G Ethernet switches, an extensive line of expansion modules for analog and digital I/O, solid-state disk, and power supply functions.

Diamond Systems is an innovator of rugged, I/O-rich board and system-level solutions for embedded computing in a broad range of markets worldwide. With over 30 years of embedded systems and board-level expertise, Diamond's unique custom solutions are engineered for harsh environments where there is a need for compact, often long-life, and I/O-centric computing but where traditional commercial or industrial solutions cannot survive. Diamond's products are designed to operate reliably over wide operating temperature ranges, such as –40°C to +85°C, and at high levels of shock and vibration. Additionally, the company offers comprehensive hardware, software, and system integration services. For further information, please visit www.diamondsystems.com.

Diamond Systems will be exhibiting at Embedded World February 25–27, 2020. Visit us in Hall 2, booth 2-350 to see STEVIE and other NVIDIA solutions.

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STEVIE Carrier Board for NVIDIA AGX Xavier