

# Diamond Introduces Elton Carrier Board for NVIDIA® Jetson™ Computer Modules

Sunnyvale, California — February 26, 2019 — Diamond Systems, a leading global provider for rugged, I/O-rich embedded computing solutions, has introduced Elton<sup>™</sup>, a carrier board solution built to deliver AI-at-the-edge high performance computing based on NVIDIA<sup>®</sup> Jetson<sup>™</sup> AGX Xavier<sup>™</sup> modules. Elton targets a range of industrial and military applications, with a focus on harsh environments such as vehicles and other outdoor applications.

Elton is particularly noteworthy as it has a full-fledged PCI/104-Express expansion socket present on the carrier board. Unique in the NVIDIA ecosystem, Elton bridges the emerging world of AI/ML technology with the long-life, highly



**Elton Carrier Board** 

successful, rugged industrial embedded computing ecosystem of PC/104. Elton provides support for PCI-104, PCIe/104 type 2 (x8 lane), and PCIe/104 OneBank expansion modules (4 x1 lanes), enabling rapid creation of truly rugged, custom-configured, high performance, PCIe-based solutions using off-the-shelf I/O modules from a large number of manufacturers worldwide.

Elton utilizes a 50% thicker PCB, latching connectors, and the rugged PCI/104-Express expansion bus to create a rugged platform ideal for the most demanding compute-intensive harsh-environment applications. Elton's larger size of 102x152mm includes standard PC I/O and additional expansion capabilities like data acquisition, M.2 and PCIe MiniCard sockets, and an LTE modem socket.

Elton comes with a compact and 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 Embedded Computing Solutions for NVIDIA Jetson Computer Modules

In addition to Elton, Diamond Systems has introduced a family of solutions for delivering AI-at-the-edge high performance computing solutions based on NVIDIA Jetson TX2, TX2i and AGX Xavier<sup>™</sup> modules. The family includes four carrier boards as well as a finished system housed in an ultra-compact enclosure. These solutions target a range of industrial and military applications, with a focus on harsh environments such as vehicles and other outdoor applications.

Product	Size	NVidia Module	Notable Features
Ziggy	50 x 87mm	TX2 and TX2i	Compact, low-cost, data acquisition
Jethro	76 x 107mm	TX2 and TX2i	Expandable, data acquisition
Stevie	100 x 87mm	Jetson AGX Xavier	High performance, feature-rich
Elton	102 x 152mm	Jetson AGX Xavier	Highest performance, PCI/104-Express expansion,
			data acquisition
ZiggyBox	63 x 67 x 96mm	TX2 and TX2i	Compact, I/O-rich, ideal for industrial control

#### **Product Family Roundup**

#### **Media Resources**

Ziggy: http://www.diamondsystems.com/products/ziggy Jethro: http://www.diamondsystems.com/products/jethro Elton: http://www.diamondsystems.com/products/elton ZiggyBox: http://www.diamondsystems.com/products/ziggybox Stevie: http://www.diamondsystems.com/products/stevie

### Availability

Elton will be available in early Q2 2019.

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

#### **About Diamond Systems**

Celebrating its 30<sup>th</sup> year, Diamond Systems Corporation is an innovator of compact, rugged, board and system-level real world embedded computing solutions to companies in a broad range of markets worldwide.

In addition to complete system-level solutions, Diamond's extensive product line of compact, highly integrated solutions include Nvidia Jetson and Xavier carrier boards; single-board computers (SBCs); an extensive line of expansion modules for analog and digital I/O, wired and wireless communications, GPS, solid-state disk, and power supply functions. In support of performance-critical embedded application requirements, these products are engineered 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 a comprehensive hardware, software, and system integration and customization services. For further information, please visit <u>www.diamondsystems.com</u>.

Diamond Systems will have the NVidia Jetson platform carrier solutions on display at the Embedded World Show (February 26-28) on display in Hall 2, Booth 2-350. The company will offer daily presentations and giveaways featuring its Jetson products.

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