NVIDIA® JETSON SOLUTIONS

DIAMOND SYSTEMS

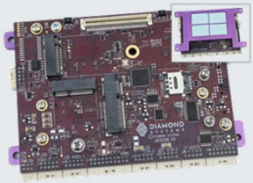
NVIDIA PARTNER

Diamond Systems's family of NVIDIA embedded solutions delivers cost-effective, rugged and I/O-rich AI-at-the-edge computing solutions based on the latest Jetson modules. The family includes products in varying levels of integration:

- Carrier boards, letting you buy the remaining components and build your own solution
- Integrated assemblies with Jetson module installed and programmed
- Complete commercial- and rugged-grade systems.

A free downloadable Linux OS based on the latest JetPack release is available for all products.

Our NVIDIA solutions target a range of industrial and military applications, with a focus on harsh environments (such as vehicles and other outdoor applications) and I/O-intensive applications. All products are tested for performance over the full rated operating temperature of the associated Jetson module. Select products are qualified for MIL-STD-202H and/or -810H compliance.

Product	Jetson Module	Description	Camera	I/O	DAQ	Expansion & Storage	Size
 **Osbourne-ER**	AGX Orin	Rugged deployable solution for AGX Orin with Orin module, embedded Linux OS, and thermal plate	8x CSI 2-lane	1x HDMI, 4x serial, 3x USB 3.2, 4x USB 2.0, 1x 10GbE, 1x 1Gbe, 2x CAN	6 A/D, 2 D/A, 12 GPIO 3.3V/5V	M.2 2280 NVMe, PCIe/USB Minicard	165 L x 137 W x 36mm H / 6.5 x 5.4 x 1.4”
 **Osbourne**	AGX Orin	Carrier and Dev Kit for NVIDIA Jetson AGX Orin	8x CSI 2-lane	1x HDMI, 4x serial, 3x USB 3.2, 4x USB 2.0, 1x 10GbE, 1x 1Gbe, 2x CAN	8x GPIO 3.3V	M.2 2280 NVMe	4.7 x 4.5” / 120 x 115mm
 **JetBox Osbourne**	AGX Orin	Ready-to-deploy AGX Orin AI-at-the-edge computer	8x GMSL	1x HDMI, 4x serial, 3x USB 3.2, 4x USB 2.0, 1x 10GbE, 1x 1Gbe, 2x CAN		Minicard and M.2 E-Key with expansion-ready front panel	180 W x 85 H x 198 D (mm) / 7.1 W x 3.3 H x 7.8 D (in)
 **Jackson-ER**	Orin NX & Nano	Rugged embedded carrier board and compute platform for Orin NX / Nano	8x MIPI/CSI	2x Gbe, 3x USB 3.0, 1x USB 2.0, 2x serial, 1x HDMI, 1x CAN	16x GPIO 3.3V/5V	M.2 M-Key 2242/2280 NVMe, M.2 E Key 2230, PCIe Minicard	4.33x3.15” / 110x80mm
 **Jackson**	Orin NX & Nano	Carrier board and dev kit for Orin NX / Nano	8x MIPI/CSI	2x Gbe, 3x USB 3.0, 1x USB 2.0, 2x serial, 1x HDMI, 1x CAN	16x GPIO 3.3V/5V	M.2 M-Key 2242/2280 NVMe, M.2 E Key 2230, PCIe Minicard	4.33x3.35” / 110x85mm

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Custom Solutions

Custom Jetson carrier and system design and manufacturing services are available using our extensive proven technology library and global design / manufacturing network.

Contact us to learn how we can fulfill your unique requirements.

Custom AGX Orin Carrier Board
Used in Very-Low-Earth-Orbit communications satellite network

Custom Xavier NX Carrier Board
Used in building access control system

Custom AGX Xavier Carrier Board
Used in rugged GPU system for military application

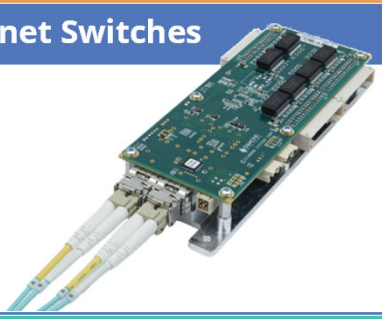
Discover the full breadth of Diamond's rugged and I/O-rich embedded computing product line!

Embedded Computer Boards

SBCs range from low-end 486 processors up to Core i7 and Xeon. All products are rated -40 to 85ºC.

- COM-based designs provide performance scalability and extended lifetime.
- Many SBCs include an on-board professional quality data acquisition system.

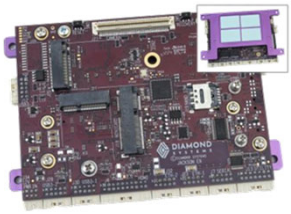
Ethernet Switches



Ethernet switches range from 8 to 28 ports with a combination of 1G copper and 10G SFP+ sockets. Embedded management software with web and serial command interfaces is included on all products.

- Boards provide a complete solution on a single board.
- Modules provide the core technology and embedded software to take the risk and complexity out of designing a custom Ethernet switch solution.

NVIDIA® Jetson



NVIDIA® Jetson solutions support the latest generation of Jetson modules and related technologies.

- Carrier boards feature built-in I/O and expansion sockets
- Integrated assemblies contain the Jetson module installed and programmed along with a thermal solution
- Commercial- and military-grade systems are ready-to-deploy complete solutions

Rugged Systems

Rugged computers and Ethernet switches provide the ultimate in ruggedness for harsh environment applications. SBCs feature extreme configuration flexibility with COM-based design for performance scalability and extended lifetime plus a multitude of sockets and built-in connectors for easy I/O expansion.