# **RUGGED COMPUTERS**



**Diamond Systems** delivers military-grade rugged embedded computing systems and Ethernet switches with breakthrough pricing and delivery times. Features include:

- Solid-body aluminum CNC construction
- MIL-DTL-38999 connectors
- IP67 environmental protection
- MIL-STD-810H shock and vibration qualified
- -40 to +85 deg. C or similar operating temperature
- MIL-STD-461/704/1275 compliant power supply
- Impressive I/O features
- High degree of configurability and customizability
- Short leadtimes and competitive prices

**SabreCom** systems utilize traditional internal cable assemblies to enable greater flexibility, which is key to delivering systems with a high degree of custom I/O.

**Geode** systems enable rapid delivery by using PCB-mounted I/O connectors to eliminate most cable assemblies and reduce manufacturing leadtime. These systems are more rugged and easier to manufacture as a result.

Both families are based on our Jasper SBC utilizing COM Express modules with 11th / 13th generation Core i7 / Xeon processors for maximum performance scalability and product lifetime. The built-in I/O can be expanded with user choice of minicard and PCIe/104 I/O modules utilizing built-in I/O connectors to eliminate enclosure redesign efforts.



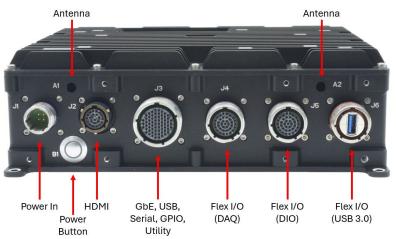
**SabreCom-300**Combined computer + Ethernet switch



**Geode-JSP**Rugged computer with expandability and short leadtime



**Geode-OSB**Rugged computer with NVIDIA AGX Orin GPU



SabreCom-JSP
Rugged computer with maximum configuration flexibility

# **RUGGED ETHERNET SWITCHES**



**SabreNet** Ethernet Switches feature both 1Gbe copper and 10Gbe copper/fiber (SFP) connectivity and Layer 3 routing software with IEEE1588 PTP option. The embedded switch software is managed via a web-based graphical user interface as well as an RS-232 port. The software can be upgraded to offer customer-specific branding and functionality. These systems are built to IP67 standards and are qualified to MIL-STD-810G shock and vibration specifications.



SabreNet-24000

24 1GbE copper ports + 4 10Gb SFP+ sockets

### 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 85°C.

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



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.