

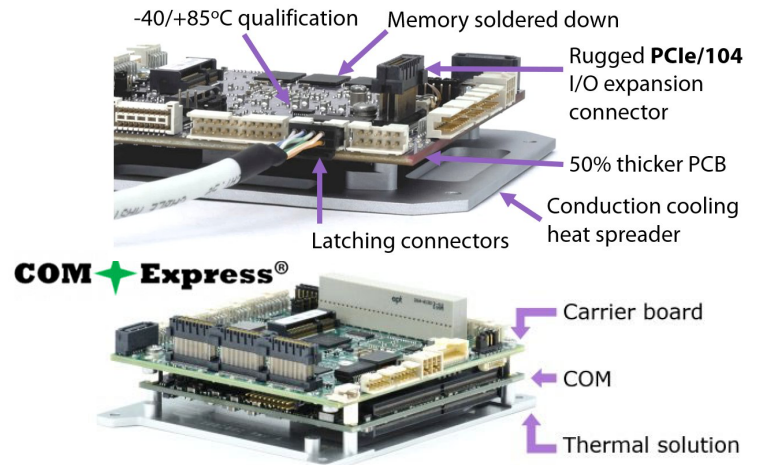
EMBEDDED COMPUTERS

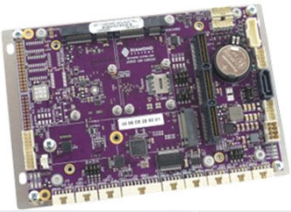
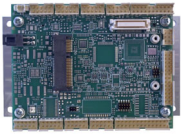


Diamond Systems offers a range of single-board computers based on x86 technology designed specifically for the rigors of industrial and military applications. Our SBCs offer numerous features and benefits for embedded applications:

Rugged - All boards support -40 to +85°C operation. Products feature thicker PCBs and latching I/O connectors. Many products are qualified to MIL-STD-202H shock & vibration.

COM-based design - our COM-based SBCs feature performance scalability and extended lifecycle by enabling quick changeover to a new COM if the processor reaches end of life. A COM-based design provides earlier access to new CPU technology as well as flexibility in an uncertain and rapidly changing market. A 2-layer solution also provides higher feature density in a given footprint.



	Product	CPU / RAM	Display	I/O	DAQ	Expansion	Size
Jasper		i7-1185GRE 32GB i7-1365URE 64GB i7-1370PRE 64GB i5-120U 64GB Xeon 11865MRE 64GB	2 HDMI 24-bit LVDS	2 GbE 3 USB 3.1 2 USB 2.0 4 RS-232 /422/485	16 16-bit A/D 4 16-bit D/A 22 GPIO	• PCIe/104 • 2x Minicard	575 x 4.0" 146 x 102mm
Gemini		i7-1185GRE 32GB i7-1365URE 64GB i7-1370PRE 64GB i5-120U 64GB	2 HDMI 24-bit LVDS	2 GbE 2 USB 3.0 4 USB 2.0 4 RS-232/ 422/485	8 GPIO	• PCI/104-Express (PCI + PCIe) • Minicard	4.0 x 4.0" 102 x 102mm
Vesta		i7-1365URE 32GB X7211/x7433 (coming soon)	1 HDMI	2 2.5GbE 2 USB 3.0 4 USB 2.0 4 RS-232 /422/485	16 16-bit A/D 4 16-bit D/A 27 GPIO	• Minicard • Daughterboard connector with PCIe	3.3 x 2.6" 84 x 65mm
Zeta		x7-E3940 8GB x7-E3950 8GB	VGA 24-bit LVDS	2 GbE 1 USB 3.0 4 USB 2.0 4 RS-232 /422/485	16 16-bit A/D 4 16-bit D/A 27 GPIO	• Minicard • Daughterboard connector with PCIe	3.3 x 2.2" 84 x 55mm
Athena IV		x7-E3940 8GB x7-E3950 8GB	VGA 24-bit LVDS	2 GbE 1 USB 3.0 4 USB 2.0 4 RS-232 /422/485	16 16-bit A/D 4 12-bit D/A 24 GPIO	• PC/104	4.2 x 4.5" 106 x 114mm
Saturn		x7-E3950 8GB	2 HDMI 24-bit LVDS	2 GbE 2 USB 3.0 2 USB 2.0 3 COM	16 16-bit A/D 4 16-bit D/A 22 GPIO	• PCIe/104 • Minicard	4.5 x 4.0" 114 x 102mm



Custom Solutions

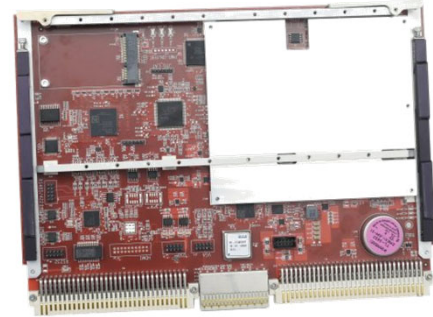
Custom SBC design and manufacturing services are available. Our capabilities include:

- Rugged design
- Wide temperature operation
- Extensive I/O, both on-board and with expansion sockets
- Performance scalability
- Long life.

Multiple factories around the world support US-based manufacturing for military customers as well as overseas sites for significant cost savings.

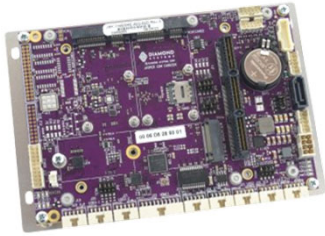
Custom Rugged VME SBC

Diamond designed this VME form factor SBC with CAN and MIL-STD-1553 for a military ground vehicle monitoring system to replace another vendor's product that had become obsolete and extend the original program's lifetime.



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.

- All boards include ample I/O and expansion sockets.
- COM-based designs provide performance scalability, smaller footprint, and extended lifetime.
- Many SBCs include an on-board high-quality data acquisition subsystem.

Ethernet Switches



Ethernet switches range from 8 to 64 ports with a combination of 1Gbps / 2.5Gbps copper and 2.5G/10G SFP+ sockets. Embedded management software with web and serial 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.

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.