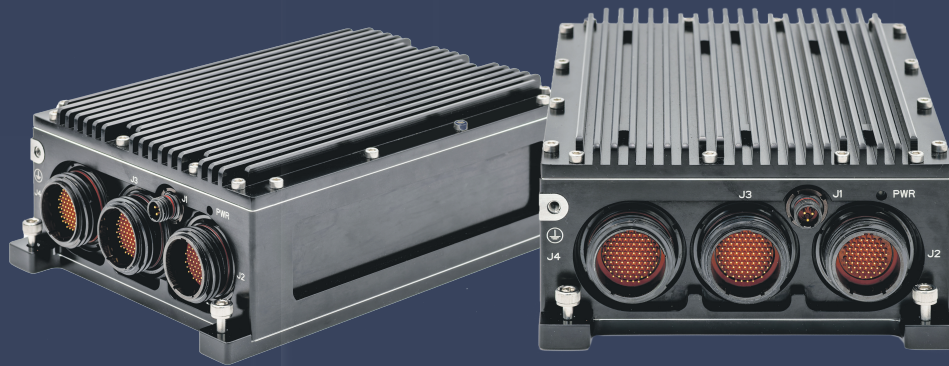


ULTRA SMALL LOW POWER RUGGED COMPUTER

expando



This Ultra-SFF rugged embedded computer manufactured in Europe is ideal for field deployments or mission-critical applications. When low power, very compact footprint and lightweight is key.

The system supports both Intel® Atom™ and Intel® Core™ i7 processors, offering flexible performance options. Whether optimized for ultra-low power consumption or higher processing throughput, the platform delivers reliable performance in compact, sealed environments. Its efficient architecture is ideal where SWaP-C (Size, Weight, Power, and Cost) considerations are paramount, making it suitable for mobile, airborne, and embedded defense systems.

It is built on a Mini-COM Express Type 10 processor module and includes four expansion slots compatible with AcroPack® mPCIe-based rugged I/O modules, enabling a broad range of additional interfaces.

The system features four AcroPack / mini PCIe slots, allowing users to integrate mission-specific I/O such as ethernet, CAN bus, ARINC429, or MIL-STD-1553.

It supports a wide array of external connections, including multiple serial interfaces, USB ports, Gigabit Ethernet, discrete GPIOs, and a DVI-D video output.

Its fanless, conduction-cooled architecture ensures reliable thermal performance in sealed or dusty environments, utilizing heat sinks and cold plates rather than active airflow.

The computer is qualified for extreme environmental conditions and meets military standards including DO-160, MIL-STD-810, and MIL-STD-461

FEATURES

- **CPU Options: Intel® Atom™ or Intel® Core™ i7**
- **Compact Memory: 8GB DDR3L standard (up to 16GB on request)**
- **Mini-COM Express Type 10 module for modularity**
- **TPM 2.0 (configuration depends on CPU)**
- **4x AcroPack® / mini PCIe slots for flexible I/O**
- **Internal M.2 SATA SSD slot for secure on board storage**
- **Conduction cooled system**
- **IP67-rated enclosure with MIL-DTL-38999 connectors**
- **MIL-STD-810 & MIL-STD-461**
- **ITAR-Free**

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TECHNICAL SPECIFICATIONS

SYSTEM

CPU Option	Intel® Atom™ E3950 @ 1.6GHz, 12W, Quad-Core, 8GB DDR3L Intel® Core™ i7-8665UE @ 1.7GHz, 15W, Quad-Core, 8GB DDR3L (16GB on request) Intel® Core™ i7-1185GRE @ 1.80 GHz 15W, Quad-core, 16GB LPDDR4X
TPM	Hardware TPM 2.0 (Infineon SLB 9665) with Atom E3950 Software TPM with Core i7-8665UE
Ethernet	2x 10/100/1000Base-T Ethernet (i210 / i219)
Storage	1x M.2 (S42) SATA SSD internal slot
Expansion slots	4x AcroPack / mini PCIe slots
Com ports	2x RS232 (Tx, Rx, GND) 2x RS422 (Tx+, Tx-, Rx+, Rx-, GND)
GPIO	2x GP Inputs (LVTTL) 2x GP Outputs (LVTTL)
Audio	1x Line In, 1x Line Out
Video	1x DVI-D single link output
Operating system	Windows 10 (32/64-bit), Linux (32/64-bit), ElinOS

POWER SUPPLY

Power Input	+28VDC (+12VDC up to +36VDC)
Power consumption	Up to 25 Watts (<15 Watts)

MECHANICAL

Dimensions	205mm (L) x 140 mm (W) x 67.5 mm (H) including connectors
Weight	1,9kg without AcroPack modules
Cooling types	Conduction cooled system: convection & radiation by fins, conduction by cold plate or forced air flow
Connectors	Military circular IP67 locking connectors (MIL-DTL-38999)

ENVIRONMENTAL

Operating Temperature	Standard: 0 C / +50 C Extended: -40 C / +71 C (depending on the configurations)
Operating Humidity	0% to 95% non-condensed (depending on the configurations)
Storage Temperature	-40C / +85 C (depending on the configurations)
Vibrations	40g@11ms; DO-160
Altitude	Up to 50,000 ft
Operating Shock	40g@11ms; DO-160
Certifications	European CE Mark, REACH, RoHS, WEEE, CoC

The computers are designed in accordance with the environmental specifications indicated.
Some parameters depend on the configuration. Equipment may be subjected to dedicated test profiles.