



Aitech U-C8770

High-Performance Secure 3U SBC



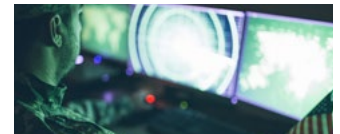
More than a computer, the Intel® Xeon-based U-C8770 SBC features Aitech's proprietary AiSecure™ architecture coupled with an on-board Xilinx® UltraScale+ FPGA and 64GB RAM. Aligned with The Open Group Sensor Open Systems Architecture™ (SOSA) the SBC is perfect for systems that need to combine high performance with advanced protection against cyber-attacks and IP theft for higher survivability and safer export. The rugged 3U VPX U-C8770 is ideal for I/O-intensive data processing applications in a variety of military and aerospace markets.

CUSTOMER BENEFITS & TECHNOLOGY HIGHLIGHTS

- **Advanced cybersecurity** via proprietary AiSecure™ framework increases survivability and level of confidence
- **3U VPX SBC aligned with the SOSA™ technical standard**, allows faster fielding and significantly lower integration costs
- **SWaP-C-optimized design** includes large on-board Xilinx Zynq® Ultrascale+™ FPGA with integrated ARM CPU
- **40GE data plane connectivity option** for fast transport of uncompressed video and sensor data
- **Rapid SOSA aligned AI/ML solutions development** when bundled with U-C5300 GPGPU 3U VPX board
- **Excellent signal processing performance** featuring Intel® Xeon® D processor with 16 cores
- **Lower cost of ownership** through COTS Lifecycle+™ obsolescence management
- **Reduced time to market** using our in-house hardware and software design and integration services

PRODUCT APPLICATIONS & TARGET MARKETS

- Unmanned aerial vehicles (UAVs)
- Unmanned ground vehicles (UGVs)
- Radar
- Signal intelligence (SIGINT)
- Electronic warfare (EW)
- Sensor signal processing
- Mission computers



KEY PRODUCT INSIGHTS

Rugged 3U VPX single slot SBC aligned with SOSA	AiSecure™ cybersecurity framework
Intel Xeon D 1500 series CPU, up to 16 cores/32 threads	Versatile board I/O: USB 3.0 & 2.0, serial, 1GE, SATA III, discrete, 10GE
Xilinx Zynq® UltraScale+™ FPGA w/ARM® CPU	XMC slot w/PCLe x8 Gen3
Up to 64 GB RAM, 1 TB SSD to handle advanced, demanding software algorithms	-40°C to +85°C operating temperature range, vibration and shock resistant
Support for both PCIe x4 and 40GE data plane options	Windows®, Linux®, VxWorks® support

As a pioneer in the field of computing technologies, Aitech provides reliable, rugged embedded systems for the harshest, most unforgiving operating environments across the globe, to secure a better tomorrow.

Contact Aitech Today!

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