



HPEC & GPGPU ▶

MIL-STD **SR700/SR710**

MIL-STD 810G Qualified Rugged Computer

Core i7 Haswell with NVIDIA® GT730M up to 384 CUDA Engine



Extended
Temperature
+75°C
-40°C

CPU Full Speed
HIGH

- ▶ Rugged EBX with stackable PCIe/104 I/O expansion
- ▶ 28V DC MIL-STD-1275/704/DO-160 Power supply with Voltage Transient protections
- ▶ Design for reliability under demanding MIL-STD-810G/-DO-160/MIL-461F Shock, Vibration, Humidity/EMI/EMC conditions
- ▶ Rugged IP65 aluminum chassis with military grade M12 D38999 connectors
- ▶ Operating temperature range : -40°C to 75°C
- ▶ Up to 2x HD-SDI (SMPTE 292M) Digital Video inputs
- ▶ Up to 4x PAL/NTSC Analog Video inputs

STACKRACK

STACKRACK.COM





Almighty Ruggedness

Processor Non-throttling, CPU Full Speed over Wide Range Temperature

Based on EBX SBC—OXY5737A, SR700 is powered by Intel Haswell i7-4700EQ quad core processor and SSD soldered onboard. The all-in-one design rugged system guarantees CPU full speed operation over wide range temperature from -40 up to 75°C , without throttling up to 50°C . $9\text{V}\sim 36\text{V}$ DC input design can protect system from damages caused by sudden surge of voltage, thus further secure the reliability of its critical components and the system itself.

Rugged Expansion I/O Interface

SR700 features with stackable PCIe/104 and FPE expansion slot, which allows the system with optional module connects ability to increase a variety of possibility for device connects. To offer high flexibility and scalability to our customers, SR700 can be equipped with a powerful NVIDIA graphic card SK210 (GPU GT730M, CUDA 384) with the ability to support up to four independent DisplayPort.

Fully IP65 Classified – Dust and Waterproof Design

With full IP65 classification, highlights on its extreme rugged design, high functionality, and specially installed MIL-STD M12 connectors, SR700 can stand against the intrusion of dust, accidental contact, and water. SR700 is the perfect solution to military purposes, such as defense, marine navigation and aviation technology. What's even more impressive is the fact that SR700 can withstand vibration up to 5 Grms and shock up to 50G.

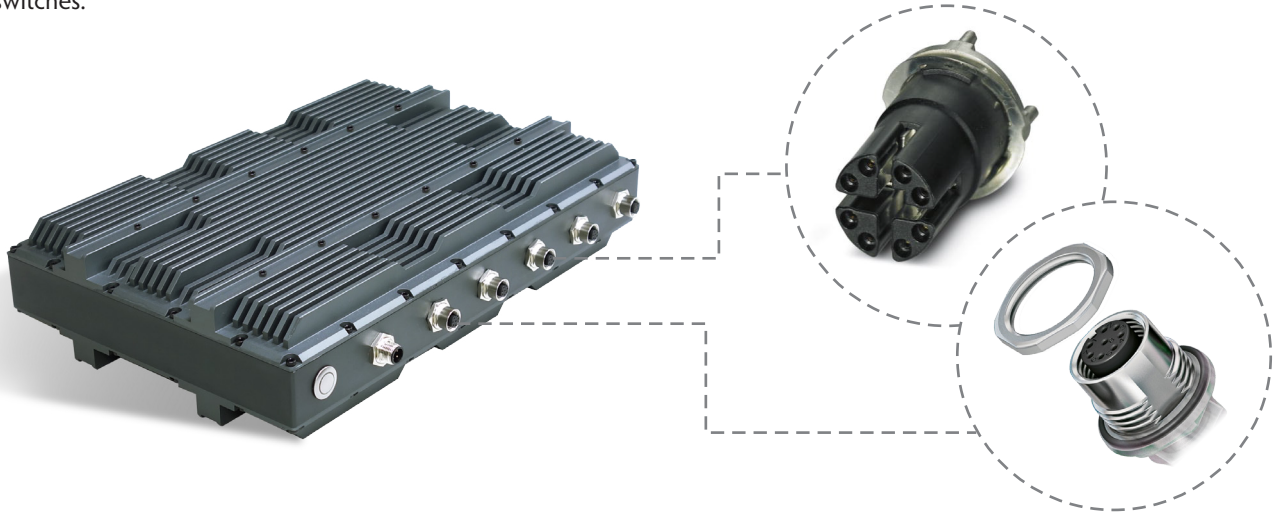
MIL-STD-1275/704/DO-160 Power supply with Voltage transient protections

To enhance reliability, SR700 is designed for rugged extremes. This Size, Weight, and Power (SWaP)- optimized system with an isolated MIL-STD-1275, MIL-STD 704 and RTCA/DO-160G power supply in an IP65 (dust/water proof) sealed aluminum chassis that protects against vehicle/aircraft voltage surges, spikes and transients is well suited for the strictest military requirement and deliver optimal performance in harsh conditions.

SR700 with rugged M12 connectors

SR700 adopts robust and reliable M12 connectors which provide maximum stability and protection. Compact design meets rugged capability, M12 connectors can seal the connector areas securely, operation can continue uninterrupted even under the most severe condition such as contamination, moisture, vibration and extremely rugged environments.

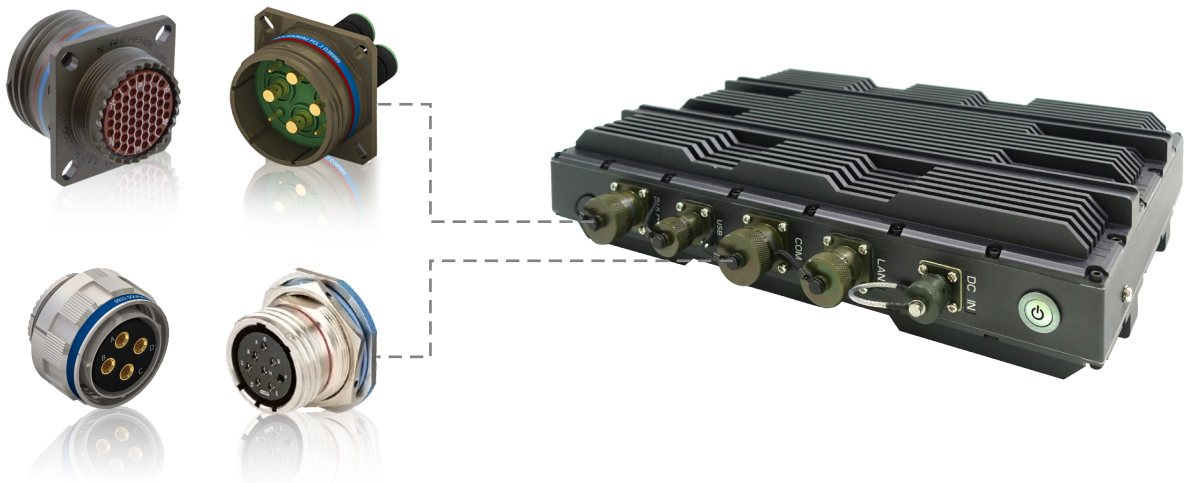
All its M12 connectors are from the famous connector manufacturer Phoenix Contact. Phoenix Contact's M12 connectors are ideal for applications that utilize construction machinery and equipment, forestry equipment, navigation, GPS and telematics, mining machinery and equipment, agricultural machinery and equipment and harsh environment sensors, controllers, actuators and switches.



SR710 with D38999 Series connectors

To fulfill the most demanding of applications, SR710 with D38999 series connectors is without doubt an ideal choice. What makes SR710 distinguished is MIL-DTL-38999 series connectors from the well-known connector manufacturer Amphenol. Amphenol is the industry leader of D38999 connector and has the broadest D38999 connector portfolio in the world.

D38999 connectors offer the highest performance capabilities and reliability for both general duty and severe environment applications. This cylindrical connector family designed for cable-to-panel I/O applications in military, aerospace and other demanding hazardous situations. D38999 connectors are capable of operation within a temperature range -65 to 200°C. They are lightweight and can stand up to environmental challenges. Made with removable crimp or fixed hermetic solder contacts, these connectors provide high-vibration characteristics and are suitable for severe wind and moisture problem areas.



Technical Specifications ▶

CPU

- Intel® Haswell Quad Core™ i7-4700EQ(2.4GHz, 47W)

Chipset

- Intel® QM87 PCH (Intel® DH82QM87 PCH)

Memory

- 8GB DDR3 XR-DIMM

Storage

Onboard SATA NAND Drive 64GB

Housing

- Aluminum

Dimension (W x H x D)

- 350 x 230 x 76 mm

Ethernet

- 2 x LAN

COM

- 1 x RS232

Display

- 1 x VGA

USB

- 2 x USB 2.0

Power Button

- 1

Power Input

- 9V~36V

Power Supply

- 9V to 36V DC-in, AT/ATX mode supports with power delay on/off, MIL-1275/704 by request 28V DC-in

Operating Temp.

- -40°C ~ 75°C(ambient with air flow)

Storage Temp.

- -40 to 85°C

Relative Humidity

- 5% to 95%, non-condensing

EMC

- CE and FCC compliance

Green Product

- RoHS, WEEE compliance

MIL-STD-810G Test

- Method 507.5, Procedure II (Temperature & Humidity)
- Method 516.6 Shock-Procedure V Non-Operating (Mechanical Shock)
- Method 516.6 Shock-Procedure I Operating (Mechanical Shock)
- Method 514.6 Vibration Category 24/Non-Operating (Category 20 & 24, Vibration)
- Method 514.6 Vibration Category 20/Operating (Category 20 & 24, Vibration)
- Method 501.5, Procedure I (Storage/High Temperature)
- Method 501.5, Procedure II (Operation/High Temperature)
- Method 502.5, Procedure I (Storage/Low Temperature)
- Method 502.5, Procedure II (Operation/Low Temperature)
- Method 503.5, Procedure I (Temperature shock)

Ordering Information ▶

SR700-UT

Intel® QM87, IP65 MIL-STD Fanless Rugged Computer with Intel® Core i7-4700EQ Haswell Processor, 8GB DDR3 XR-DIMM, 64GB SSD soldered onboard, NVIDIA® GT730M, 9V to 36V DC-in, Extended Temperature -40 to 75°C

SR710-UT

Intel® QM87, IP65 MIL-STD Fanless Rugged Computer with Intel® Core i7-4700EQ Haswell Processor, 8GB DDR3 XR-DIMM, 64GB SSD soldered onboard, NVIDIA® GT730M, MIL-DTL-38999 connectors, 9V to 36V DC-in, Extended Temperature -40 to 75°C

Contact us

srsales@stackrack.com

www.stackrack.com

+886-2-8911-8077

