# **GRIP Delta-LP**

## **General-purpose Rugged Integrated Processor**







#### Hardware

- CPU: 3<sup>rd</sup> gen i7-Quad core, 2.1GHz, 6MB Cache
- GPU: Intel HD4000 graphics processor
- 8GB Memory
- Removable SSD Bay

#### I/O Connections

- DVI-I
- Serial -1 port, RS232 / 422 / 485 capable, DB9
  -1 port, RS232 only, DB9
- USB 2 USB 2.0 ports
   2 USB 3.0 ports
- Ethernet 2 ports, 10/100/1000Base-T, RJ45

## **Environmental**

- Sealed to IP67
- Operating temperature -20°C to +50°C
- Storage temperature -40°C to +70°C
- Internal shock isolation

## **Power**

- Power DC 18V to 32V
- Power consumption <60W</li>

#### **Operating Systems**

- Microsoft Windows© XP SP3 or Windows 7 Professional
- Ubuntu 12.04 Linux (32 or 64Bit) (optional)

## Mechanical

- Weight 16.3lbs, 7.5Kg
- Dimensions 15.0" x 8.3" x 4.3" (380mm x 210mm x 110mm)

## **EMC**

- EN55022 Class A, EN55024
- Part 15, Class A
- IEC 60533

## **Rugged PC**

The GRIP Delta LP is a true commercial off the shelf (COTS) high performance rugged computer system which is targeted at applications which require high- end CPU and GPU processing in harsh environments.

The GRIP Delta features an Intel 3<sup>rd</sup> generation Intel Core™ i7 Mobile Processor and embedded HD4000 graphics processor. The GRIP chassis provides an IP67 sealed enclosure for the internal COTS hardware technology. Within the chassis, a combination of convection and conduction cooling ensures minimal heat stress of the components. Internal shock isolation is also used to ensure reliable operation in harsh environments where the unit is subjected to shock and vibration.

Application areas of this technology include engine room monitoring and control, security, automotive, transportation, oil and gas, nuclear, military and aerospace sectors.

The GRIP architecture integrates the four key elements of embedded design:



## **GRIP Options**

## **Data Capture**

A single half length PCI or PCIe card can be integrated into the GRIP with I/O connection provided via a custom connector on the GRIP connector panel. Typically, this is used to customize the I/O capability of the GRIP to support video interfaces such as:

- PAL/NTSC Analog Video (Up to 4 inputs)
- HD/SDI (SMPTE 292) up to 1080p resolution
- RGB up to WUXGA resolution
- CameraLink, Firewire, GigE Vision and others available

#### **Hardware Options**

- SSD up to 512GB, with up to 1TB additional storage, eSATA interface
- Power interruption enabled SSD
- Custom connector panel
- Custom Option for MilStd 38999 connectors
- Mini PCIe for WiFi, additional LAN + other
- Additional serial, USB, Ethernet ports available, conditional on total ports and unit configuration
- Video I/O customization