

# GRIP Epsilon



General-purpose Rugged Integrated Processor Convection Cooled



GRIP Epsilon with removable drive



## Hardware

- 4th or 6th gen Intel Core i7 Mobile Quad Core Processor
- MIL-DTL-38999 connectors
- Integrated Intel HD Graphics or discrete mainstream GPU with NVIDIA GTX 750Ti or 1050Ti (Pascal with 768 CUDA Cores - 1900GFLOPS)
- 16GB DDR3 memory
- 60GB – 1TBGB SATA MLC or SLC SSD

## I/O Connections

- Display – Up to 3 outputs combining single or dual link DVI, HDMI 2.0b, DisplayPort 1.4 or VGA
- Serial – 1x RS232/ RS422 / 485  
– 3x RS232
- USB – 4x USB 2.0
- Ethernet – 2x 10/100/1000Base-T

## Cooling

Natural convection cooling

## Environmental

- Sealed to IP67
- Operating temperature -40°C to +71°C  
(Reduced CPU/GPU load for temperatures above 50°C)
- Storage temperature -40°C to +85°C
- Qualified for harsh environmental conditions, including MIL-STD-810G, RTCA/DO-160G and MIL-STD-461F

## Power

- Power – DC 18V to 32V (MIL-STD-1275D)
- Power consumption – 70 to 140W (GPU dependent)

## Operating Systems -Options

- Microsoft Windows 7 or 10 (32/64 bit)
- Ubuntu or CentOS Linux (32/64 bit)

## Mechanical

- Weight 15.4lbs, 7.0kg
- Dimensions 10.83” (d) x 9.44” (w) x 4.37” (h) (275 mm x 240mm x 111mm), excluding connectors

Designed and Manufactured in the UK



## Rugged PC

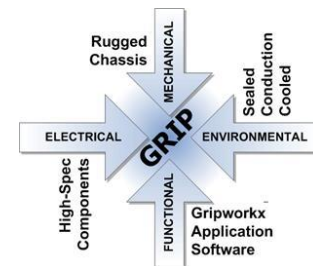
The GRIP Epsilon is a true commercial off the shelf (COTS) high performance rugged computer system which is targeted at applications that require GPU/GPGPU processing in harsh environments with an extended operating temperature range.

The GRIP Epsilon combines the latest 4th or 6th generation Intel Core i7 Mobile Processors with either high performance Intel HD Graphics or a range of powerful leading-edge GPUs, such as the CUDA enabled NVIDIA GTX 750Ti or 1050Ti (Pascal).

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.

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

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



## GRIP Options

### Video Capture

The GRIP Epsilon can be supplied with a wide range of analog and digital video capture interfaces, including

- RGB, PAL/NTSC
- HD-SDI, 3G-SDI
- DVI, CameraLink, Firewire, GigE Vision and others

### Additional I/O

- Custom front panel configurations
- MIL-STD-1553 and ARINC 429 interfaces
- Additional Serial, USB, and LAN ports
- GPIO, WiFi, GPS and others

### Additional Storage

- Removable or fixed additional SSD, maximum of 500GB SLC type or 1TB MLC type
- External storage via front panel SATA connector

### Vision4ce Software

The GRIP Epsilon is fully compatible with

- DART video tracker
- GRIP-VMS
- DVR software