GRIP Epsilon

General-purpose Rugged Integrated Processor Forced Air Cooled

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
Forced air cooled

Environmental
- Sealed to IP67
- Operating temperature -40°C to +71°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 12.95" (d) x 9.44" (w) x 4.29" (h) (330 mm x 240mm x 109mm), excluding connectors

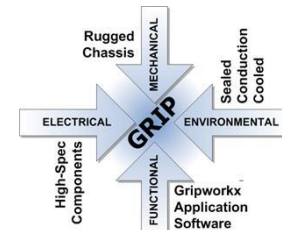## Designed and Manufactured in the UK

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