

# GRIP Delta



## General-purpose Rugged Integrated Processor



### Hardware

- 6 or 8th generation Intel Core i7 Mobile Processor
- NVIDIA GTX 1050Ti or GTX 1650 (Pascal with 768/896 CUDA Cores)
- 4 – 16GB DDR3 memory
- 60GB – 1TB ATA III solid state hard drive (MLC or SLC)

### I/O Connections

- DVI-I
- Serial –1 port, RS232 / 422 / 485 capable, DB9 –1 port, RS232 only, DB9
- USB – 4 USB 2.0 or 3.0 (option) ports
- Ethernet – 2 ports, 10/100/1000Base-T, RJ45

### Environmental

- Sealed to IP67
- Operating temperature -20°C to +55°C
- Storage temperature -40°C to +70°C
- Internal shock isolation

### Power

- Power – DC 18V to 32V
- Power consumption <120W (CPU/GPU dependent)

### Operating Systems

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

### 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

Designed and Manufactured in the UK



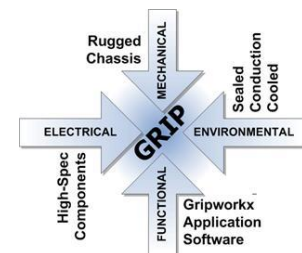
### Rugged PC

The GRIP Delta is a true commercial off the shelf (COTS) high performance rugged computer system with a 6 or 8th generation Intel Core i7 mobile processor with the latest NVIDIA CUDA enabled GTX 1050Ti (Pascal) or 1650 GPUs. The GRIP Delta is targeted at applications which require GPU/GPGPU image or signal processing in harsh environments.

The GRIP chassis provides an IP67 sealed enclosure for the internal COTS hardware. Within the chassis a combination of convection and conduction cooling ensures minimal heat stress of the components. Internal shock isolation is used to ensure reliable operation in harsh environments where the unit is subjected to shock and vibration.

If the GRIP Delta is mounted on a sufficiently large bulkhead (or other cold wall) it may be conduction cooled via its base plate, otherwise external forced air cooling with a minimum flow rate of 50 cfm is required. The GRIP External Fan assembly is normally supplied for this purpose.

The GRIP Delta has been installed operationally in ships, aircraft, vehicles, robots, UAVs. Application areas include security, automotive, transportation, oil and gas, nuclear, military and aerospace. The GRIP architecture integrates the four key elements of embedded design:



### GRIP Options

#### Video Capture

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

- RGB, PAL/NTSC
- HD-SDI (SMPTE 292) up to 1080p resolution
- DVI, CameraLink, Firewire, GigE Vision, CoaXPress and others

#### Additional I/O

- Custom front panel configurations
- MIL-DTL-38999 connectors
- MIL-STD-1553 and ARINC 429 interfaces
- Additional Serial, USB, and LAN ports
- GPIO, WiFi, GPS and others

#### Additional Storage

- Up to 2 additional SSDs, each 1TB maximum
- External storage via front panel SATA connector
- Removable single drive option

#### Vision4ce Software

- The GRIP Delta is fully compatible with
- DART video tracker
- GRIPWorkx
- GRIP-VMSDVR software