



# Edge Computing System For Mission Critical Defence Platforms

## **Key Features**

HORNET is a 2-slot rugged Commercial Off the Shelf (COTS) system optimized for Size, Weight, Power and Cost (SWaP-C) designed to operate in harsh environments. The system is based on an Intel<sup>®</sup> processor connected to a GPGPU or FPGA, with options for a rich set of I/O and high-capacity removable storage.

- Processor Slot:
  - SOSA<sup>®</sup> Aligned I/O Intensive Intel processor Plug In Card (PIC) with XMC site for expansion
- Second Slot:
  - SOSA<sup>®</sup> Aligned slot fitted by default with NVIDIA<sup>®</sup> Jetson AGX Orin with option for alternative FPGA and GPGPU PIC
- Mini-PCIe site for user specific I/O
- Removable storage option
- Operating Temperature -40°C to 55°C
- IP67 Dust/Waterproof Aluminium Chassis





#### Slot 1 - Processing Engine 14.2.16 Slot

- 14-core Intel<sup>®</sup> Core<sup>™</sup> i7-13800HRE Processor
- 64 GBytes LPDDR5 IBECC DRAM
- 1x XMC Site (VITA 42.0 or VITA 61)
- Boot Guard, Secure Boot and TPM 2.0
- 1x 2.5 GBASE-T TSN Ethernet port
- 1x Display Port
- PCIe Gen 4
- up to 2TB SSD storage with OPAL 2.0 encryption and write protection or 1TB FIPS 140-3 option

#### **XMC Site Options:**

- 2x 10GBASE-T Ethernet
- 1x 100GBASE-T Ethernet
- 4x 1GBASE-T Ethernet

#### Slot 2 - GPGPU or FPGA 14.2.16 Slot:

- NVIDIA Jetson AGX Orin 64GB PIC
- for additional options contact Concurrent

#### **Removable Storage:**

- up to 30TB SSD
- Opal 2.0 Data at Rest encryption
- write protection
- FIPS 140-3 compliant option

#### Mini-PCIe Site Optional I/O (Pick One):

- 2x MIL-STD-1553
- 4x ARINC 429
- 2x 1GBE Ethernet (TSN Enabled)
- 2x CAN Bus
- 1x GPS Signal
- 1x WIFI Modem
- 4x RS 232/424/485 ports
- for additional options contact Concurrent

#### Power

power consumption approximately 150 W

### **Mechanical Specification**

- dimensions 6.38" (W) x 4.88" (H) x 9.56" (L) / 162mm (W) x 124mm (H) x 243mm (L)
- mass 11.8 lbs / 5.35 kg
- cooling method is baseplate conduction cooled
- system is painted in MIL-C-85285 BLACK or OLIVE DRAB, MATTE FINISH (IAW FED-STD-595 COLOR NO. 33446)
  - alternative colour options are available