



Rugged Embedded Computing for Mission-Critical Defence Applications

ITAR free 3U VPX boards, modern VME boards, and rugged COTS VPX systems.

Powering mission-critical defence applications across land, air, and sea.



CONTENT



- **About us** pg.3
 - **Land CEMA, STICS and electronic intelligence gathering** pg.4
 - **Vehicle protection and enhanced survivability** pg.6
 - **Real-time data fusion for ISR platforms** pg.8
 - **Situational awareness** pg.10
 - **Capability sustainment** pg.12
 - **Cyber & secure communications** pg.14
 - **Contacts** pg.16
- 



ABOUT US

We build rugged embedded computing, engineered for defence.

From vehicle-mounted countermeasures to sensor integration and secure communications, our technology supports some of the most demanding mission profiles across the globe.

We design and manufacture:

- 3U VPX boards – OpenVPX, SOSA® aligned, delivering high-performance compute, I/O, Ethernet, and PNT
- VME boards – Modernised solutions that extend long-life programs
- Rugged systems – Deployable enclosures hosting VPX/SOSA® payloads for use in harsh environments

All of our ITAR-free boards are designed and built in the UK

Everything we do is focused on powering your mission.



Land CEMA, STICS and electronic intelligence gathering

Electronic warfare requires rugged, secure, and low-latency systems for signal analysis, intercept, spectrum monitoring, and data fusion. Our modular platforms integrate directly into LCA- (STICS) and GVA-compliant architectures, delivering intelligence at the edge with proven ruggedisation and deterministic networking.

Huey



3-slot 3U VPX, ATR-mounted, deployable system with external fan housing, designed for high availability and rapid servicing. It achieves excellent power-to-weight performance and supports both RF and digital payloads.



SCAN TO FIND OUT MORE

TR MDA

Suitable for integration into rugged system such as Huey, a highly performant compute intensive SOSA® SBC thermally designed to extract all the performance from server class Intel® Xeon® Ice Lake D technology at temperature, with 128GB DDR4, FIPS 140-3 SSD options. 100GbE connectivity and low mass.



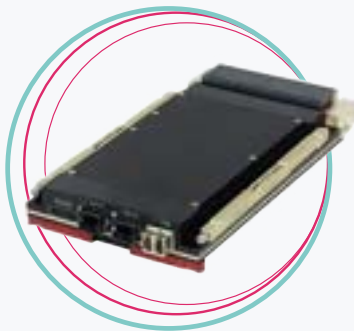
PR A11

Assured Position, Navigation and Timing (PNT) card for synchronised CEMA and signal coordination. UK designed and developed with UK assurance software, multi-constellation support, anti-jamming and anti-spoofing. Precise timing and positioning with long holdover in GNSS denied environments. Provides support for precise synchronisation of multiple SDR payloads.



Iris

SOSA® aligned, dual-enclave 3U VPX Ethernet switch for high-throughput sensor integration across EW systems. Supports 10, 40 and 100Gbps with two separate switch devices, for red/black security.



TR MDA



PR A11



Iris



Vehicle protection and enhanced survivability



Modern vehicle protection demands reliable compute and fast sensor fusion under severe space, thermal, and shock constraints.

Our platforms combine powerful data processing and support virtualisation, with advanced Ethernet networks, including TSN over copper and fibre, whilst still offering support for legacy, approved, interfaces such as CAN or MIL-1553.

Cronos



Flexible 7-slot conduction-cooled 3U VPX rugged system with integrated GPU and 10G optical TSN connectivity. It's ideal for land vehicle applications, but also usable in maritime or airborne environments. Designed to support multiple processing payloads such as Hermes (TR LBE) SBC alongside the latest GPU, FPGA and MPSoC boards.

Get in touch to
find out more



Hermes

I/O-intensive VPX card with 10/25/100GbE ports and PCIe Gen 4, perfect for sensor fusion and data routing. XMC site for expansion and great performance per watt. High performance, integrated GPU, for driving tactical displays or offload media encoding.



Hermod II



Rugged, fully-managed 1G/10G Ethernet switch with TSN, enabling deterministic vehicle networks and ultra-low latency over copper and fibre. Field proven, with accredited cyber security features and long-term support.

SCAN TO FIND
OUT MORE

Hermes



Hermod II



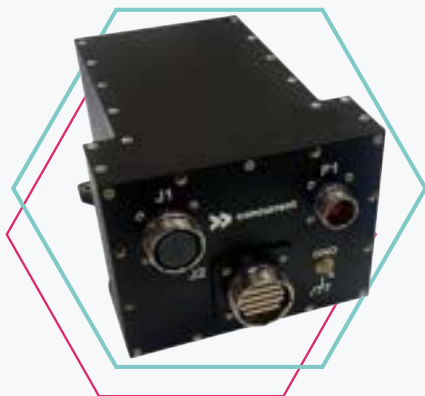


Real-time data fusion for ISR platforms

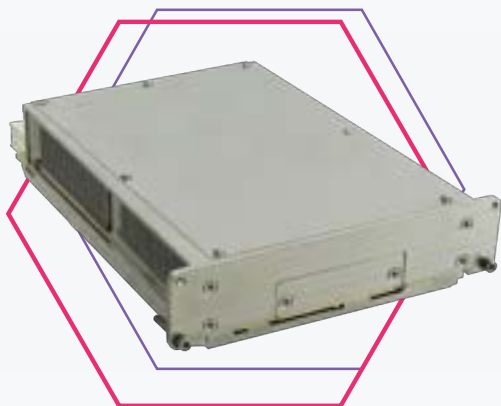
ISR platforms demand scalable compute, high-bandwidth data ingest, and precise synchronisation to support multi-function missions. Our VPX boards and systems are field-proven in operational ISR deployments, delivering config management, sensor fusion, and future AI acceleration.

Hornet

Multi-domain GPU-ready (NVIDIA AGX IOX or discreet GPU) VPX system for high-throughput ISR and onboard analytics. Modular I/O support for current and legacy I/O interfaces and removable storage. Cold-plate conduction cooled.



Kratos



High-core count compute 3U VPX for accelerated AI and high throughput data processing, target tracking, and onboard analytics. Supports 100GbE on data plane, PCIe gen 5 and has 256GB DRAM for outstanding performance in virtualised environments.

**SCAN TO
FIND OUT
MORE**

Kratos



Hornet



Situational awareness

The modern battlespace demands AI enhanced multi-sensor data processing at the far edge to achieve and maintain advantage. Our boards and systems combine powerful data capture and processing with secure, scalable I/O for decision support across all domains.

Delivered in packaging designed to enhance reliability across extremes of temperature, shock and vibration, while meeting stringent standards for EMC/EMI emissions and immunity.

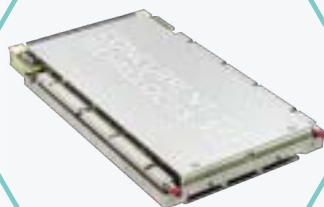
Hornet

GPU-enabled rugged system for AI vision and data analytics. 10GbE connectivity for video ingress, removable storage. Modular I/O support for current and legacy I/O interfaces. Cold-plate conduction cooled.



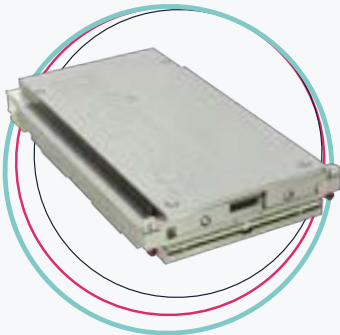
Hermes

I/O-intensive VPX card with 10/25/100GbE ports and PCIe Gen 4, perfect for sensor fusion and data routing. XMC site for expansion and great performance per watt. High performance, integrated GPU, for driving tactical displays or offload media encoding.



TR MDA

High performance Intel® Xeon® VPX processor with 128GB DRAM, 100GbE and PCIe gen 4 for compute-intensive applications. Advanced thermal design enables highest performance across extended temperatures, -40C to +85C at card edge.



Bragi (GPU)

SOSA® Aligned 3U VPX GPGPU Card with NVIDIA RTX Pro™ 4000/5000 Blackwell GPU. Powerful AI engine to compliment SBC such as TR MDA.



SCAN TO FIND OUT MORE

Hornet



Hermes



TR MDA



Bragi



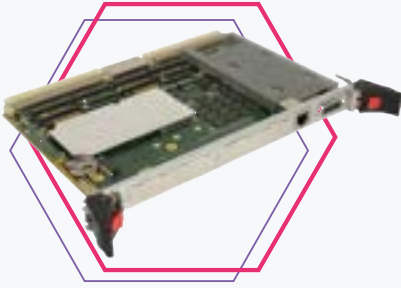


Capability sustainment

Programmes demand long-term availability, support and consistency. Concurrent continue to support the VME standard and users, with modern plug-compatible products. VME remains a popular choice for integrated management systems on surface and sub-surface vessels. VME is also still widely used in a variety of control and processing applications in other domains.

Concurrent is offering VME users support for legacy OS and RTOS as well as the latest Intel Atom® architectures. We have decades of experience you can leverage to sustain your systems and keep your customers operating in long-life programs.

Rhea



Intel Atom® VME processor providing low power consumption but enhanced performance using latest Intel Atom® technology and XMC I/O expansion.

VP B7x

High performance Xeon® based VME processor SBC with air-cooled and rugged options, 2TB+ storage and XMC expansion.



TR K9x

Modern OpenVPX SBC available in air-cooled and rugged conduction cooled options. A flexible board with a wide range of applications. 11th Gen Intel® Core™ with integrated Iris® Xe GPU VPX card, ideal for AI, image processing and acceleration in applications where scalability, reconfigurability, and SWaP optimisation matter. Onboard XMC site allows reconfiguration for mission-specific compute or I/O.



SCAN TO
FIND OUT
MORE

Rhea



VP B7x



TR K9x



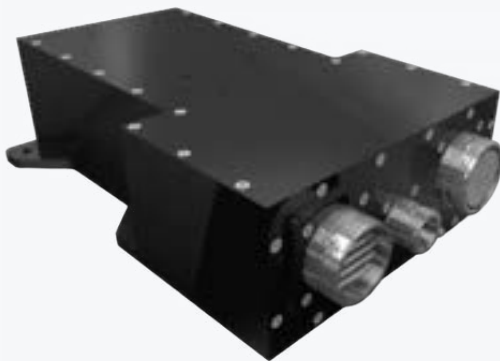
Cyber and secure communications

From SIGINT to tactical cloud, cyber resilience depends on high-performance compute and secure networking with precise synchronisation. Our VPX, VME and system solutions are engineered to enable assured communications and data processing in sensitive missions.

Our latest product releases enable customers to utilise their own cyber security measures, building on our range of pre-OS security packages, which combine our hardware and software expertise.

Apollo

Very compact deployable system for tactical cloud, cross-domain and cyber defence nodes. Can support range of different SBC payloads such as the Hermes SBC and XMC I/O.



SCAN TO FIND
OUT MORE

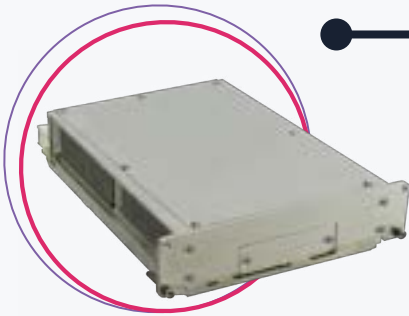
Hermod II

Rugged fully managed copper and fibre L2/L3 Ethernet switch with cyber-security accreditations. 10Gb TSN Fiber connectivity and future-proof FPGA based network controller implementation.



Kratos

Intel® Xeon® 6 SoC VPX SBC. The 20-core variant offers vRAN acceleration ideal for secure 5G comms. Talk to us about the enhanced security options available.

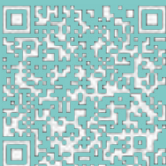


TR MDA + FIPS 140-3

High performance Intel® Xeon® VPX processor with 128GB DRAM, 100GbE and PCIe gen 4 for compute-intensive applications. Complemented with 1TB direct attached storage FIPS 140-3 1TB option provides a secure compute engine for sensitive datasets and applications.



Hermod II



Kratos



TR MDA



We're the experts in rugged embedded computing.

Talk to our team about how our products and expert support can help reduce programme risk and accelerate time to deployment.



Explore our full product range

Designed and made in Britain.

Trusted across land, air, sea and cyber since 1985.

sales@cct.co.uk | concurrent.tech

