APLICATA

QUATTRO 220
8TB NVME SSD XMC

OVERVIEW

The Quattro 220 is a secure solid-state XMC solution designed for C4ISR systems operating in demanding environments. Featuring up to 8TB of PCIe Gen4 NVMe memory, it delivers sustained high-throughput performance required for real-time sensor data capture, recording, and processing. Built using automotive-grade components, the Quattro 220 is engineered for maximum reliability and long service life in rugged deployments.

At the core of the design is a high-bandwidth, non-blocking PCIe Gen4 switch that enables flexible data-path topologies tailored to the application. This architecture allows memory resources to be partitioned and optimized for different workloads.

Security is built in at the hardware level. The Quattro 220 supports the TCG Opal 2.02 standard and implements AES-256-XTS encryption, ensuring data remains protected both at rest and in use.

The design also addresses long-term system sustainability. The M.2 BGA memory architecture protects against memory obsolescence by allowing upgrades to newer NVMe devices as they become available, without requiring a system redesign.
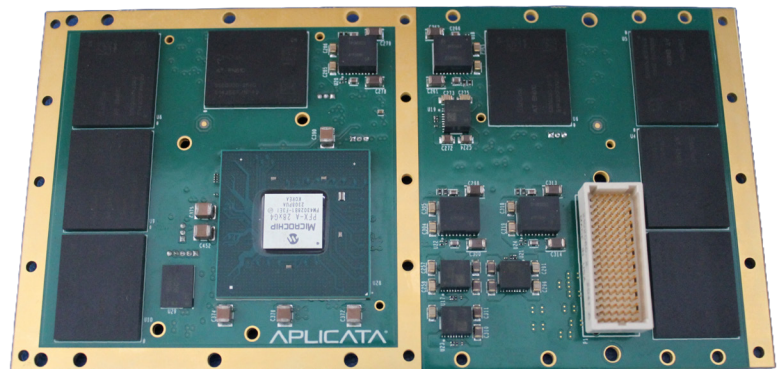
KEY BENEFITS

Risk Mitigation for Obsolescence: Engineered for the future with flexible upgrade paths that allow new technology to be integrated as it emerges, maintaining long-term system performance.

Enhanced Real-Time Capabilities: PCIe Gen4 performance and low-latency DAS in SOSA systems enable new real-time capabilities for advanced mission-critical applications.

Secure Storage: Integrated AES-256 encryption ensures data is securely protected at all times.

Compact and Efficient Design: Operates in rigorous environments with a small form factor, ideal for space-constrained systems.

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TECHNICAL SPECIFICATIONS

Memory	8TB NVMe SSD M.2 1620 BGA form factor
Performance	Sequential Read: 3700 MB/s Sequential Write: 3000 MB/s Randon Read: 270K IOPS Random Write: 220K IOPS Endurance (TBW): 2800
Security	TCG Opal 2.02 AES-256-XTS
Host Interface	x8 PCI Express Gen4 over Pn5
Operating System	Windows, Linux
Compliance	VITA 42.3 NVM Express Specification Rev 1.4c RoHS Directive 2002/95EC
Form Factor	XMC single-width form factor 74 mm (width) x 149 mm (length)
Environmental	Operating Temperatue: -40° C to 71°C Storage Temperature: -40° C to 85°C Vibration Sign: 2g Peak 5-2000Hz Vibration Random: 0.04 @ 5Hz, 0.04 @ 100Hz, 0.01 @ 2000Hz Shock: 20g Peak Conformal Coat: Yes
Power	Input: 5V or 12V Consumption: 30W (typical)
Ordering Information	300-01120 Quattro 220 8TB NVMe XMC

For more information on our products:

www.aplicata.com   sales@aplicata.com