Broadcom Delivers the World's First End-to-End PQC-safe, In-flight Network Encryption Solution

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Emulex SecureHBA, the First CNSA 2.0 and NIS2/DORA-Compliant Network Adapter, Is Now Available in Everpure's Latest Arrays

PALO ALTO, Calif., March 19, 2026 (GLOBE NEWSWIRE) -- Broadcom Inc. (NASDAQ:AVGO) a global leader that designs, develops and supplies semiconductor and infrastructure software solutions, today announced that it is shipping the world's first end-to-end Post-Quantum Cryptography (PQC)-safe, in-flight network encryption solution. Over the last year, more than 120,000 Emulex SecureHBAs have shipped on OEM server platforms. Everpure now becomes the industry's first storage platform to embed Emulex SecureHBAs in its FlashArray product family, completing the end-to-end solution.

Emulex SecureHBA enables organizations to encrypt all in-flight data across Fibre Channel networks ensuring PQC-safe encryption. The solution protects data transfers end-to-end, from application servers to storage, providing protection against harvest now, decrypt later (HNDL) attacks. As enterprise AI moves from proof of concept to production, PQC-safe network encryption has become an essential security requirement.

"As enterprise customers recognize that HNDL attacks present an ever-increasing threat, closing an infrastructure's security vulnerabilities becomes a corporate imperative. Extending an enterprise's Encrypt Everything policy from today's data-at-rest encryption to include PQC-safe in-flight network encryption is the next obvious step for securing mission critical data," said Jeff Hoogenboom, vice president and general manager, Emulex Connectivity Division, Broadcom.

"In an era of AI-enabled threats and quantum computing, robust data encryption is table stakes," said Shawn Hansen, vice president and general manager, Core Platform Business Unit, Everpure. "By embedding Broadcom's Emulex SecureHBA into our Everpure Platform, Everpure is delivering the industry's first end-to-end solution for automatic, in-flight encryption using Post-Quantum Cryptography. Crucially, this standards-based approach secures data between servers and arrays without compromising performance or sacrificing essential storage services like compression and deduplication."

In concert with the Emulex SecureHBA, Broadcom also announced Emulex SAN Manager 3.0 Podman-based software solution. Adding security compliance reporting, the Emulex SAN Manager 3.0 enables administrators to easily identify and manage encrypted ports across the entire Fibre Channel environment, simplifying CNSA 2.0, and NIS2/DORA reporting, compliance and data classification.

Solution Benefits

- **Easy-to-use:** Session-based, touchless, autonomous end-to-end network encryption. No external key managers, no long-lived keys, and transparent to all OSs, Fabric, and applications.
- **Quantum-safe**: Hardware-based PQC-safe encryption using LMS Silicon Root of Trust and AES-GCM-256 in-flight encryption algorithms with keys negotiated using ML-DSA-87 and ML-KEM-1024. PQC support for SPDM 1.4 with ML-DSA-87 and ML-KEM-1024.
- **High Performance:** Unlike performance-crushing Ethernet/TCP IPsec encryption, SecureHBA in-flight encryption is fully offloaded with no impact to server or storage array CPU utilization.
- **Scalable:** Delivers enterprise-class scalability with support for thousands of automatically encrypted connections that aids fast fail-over recovery. Each connection is independently keyed.
- **Lowest Cost:** Unlike application-based encryption, storage array services remain intact—including dedupe, compression, and ransomware detection and recovery.
- **Standards-based:** Industry-standard autonomous in-flight encryption

(INCITS FC-SP-3) ensures no proprietary vendor lock-in.

- **Extending Native Fibre Channel for Virtual SANs**: VMware vSAN Storage Clusters and Microsoft Azure Local both have announced plans to support native Fibre Channel with all the benefits of the SecureHBA.

"Testing of the Everpure FlashArray//XL130 R5 with Emulex SecureHBAs confirmed that enabling end-to-end encryption introduced no measurable performance penalty and no CPU overhead on either the host or the array. What stood out the most though was operational simplicity. Encryption was negotiated automatically as part of the standard Fibre Channel login process, with no switch changes, no external key managers, and no fabric reconfiguration required. From both a performance and architectural standpoint, this demonstrates that transport-layer SAN encryption can be deployed at scale without adding complexity to the environment," said Brian Beeler, president, StorageReview.com.

Learn more about the StorageReview Product Evaluation here, Everpure FlashArrays, Emulex SAN Manager and Emulex Secure HBAs.

About Broadcom
Broadcom Inc. (NASDAQ: AVGO) is a technology leader that designs, develops, and supplies semiconductors and infrastructure software for global organizations' complex, mission-critical needs. Broadcom combines long-term R&D investment with superb execution to deliver the best technology, at scale. Broadcom is a Delaware corporation headquartered in Palo Alto, CA. For more information, visit www.broadcom.com.

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