# Mangstor Announces TITAN NVMf Software for Storage Arrays

*TITAN Software Delivers Dramatic Bandwidth and Latency Improvements Over Existing SAN-Based All-Flash Arrays at Flash Memory Summit, August 9- 11, Booth #601*

SANTA CLARA, CA / ACCESSWIRE / August 9, 2016 / Flash Memory Summit 2016 — Mangstor Inc., a leading developer of high performance, next-generation, non-volatile memory storage solutions, today announced availability of its TITAN NVMe over Fabric (NVMf) Target Software Storage Stack. TITAN Software delivers leading performance and ultra-low latencies by tightly integrating NVMe SSDs with Remote Direct Memory Access (RDMA) Network Interface Cards (NICs) and efficient use of x86 server capabilities.
The software delivers key capabilities such as accelerated application response times, efficient storage resource sharing, tiering, scalability, connectivity to existing SANs, and operational efficiencies that enable IT managers to dynamically provision NAND flash memory locally or remotely, and with centralized management. Advanced capabilities include storage caching, cluster management, and NIC support up to 100 Gbps speeds. The management software included within TITAN is a scalable REST API and GUI tools that enable IT managers to easily deploy and manage large clusters of NVMf storage. Presentations of TITAN software begin today at Flash Memory Summit 2016, in Mangstor's Booth #601, Santa Clara Convention Center, Santa Clara, California. FMS concludes on Thursday, August 11th.

TITAN software provides a single web-based management interface for managing entire clusters of NVMf storage arrays. Centralized management enables easier and faster storage system configurability in the datacenter and the ability to manage these systems in a more reliable manner. The software supports multiple fabric options, including Mellanox RoCE (Ethernet) and Infiniband, as well as emerging RDMA fabrics such as Intel OmniPath.
"Accelerated application response times are the big advantage of NVMf arrays as they deliver Read and Write latencies comparable with internal PCIe SSDs," said Ashwin Kamath, SVP Engineering for Mangstor Inc. "TITAN delivers sustained performance of millions of IOPS, with latencies under 200µs, and an order of magnitude better than typical FC or iSCSI interfaces — in fact, on the NX6320 2U supported platform, TITAN has been measured at up to 10x higher bandwidth and one-tenth the latency when compared to iSCSI and FC-based AFAs."

NVMf arrays based on TITAN software scales to petabytes of capacity and hundreds of GB/s as arrays are added with virtually no increase in latency. As more capacity or performance is needed, arrays can simply be added as required. Latency is consistently low, similar with local SSD access times at low

IOPS levels due to the optimized RDMA network, and remains low up to millions of IOPS. NVMf storage arrays are an ideal solution for data-intensive storage, latency-sensitive applications and real-time analytics and the first available storage array solution for the newly released NVMf specification.
TITAN is now available for OEM customers and storage provider partners worldwide. The NX-Series Storage Arrays are available through Mangstor's worldwide sales channel of distributors, resellers, system integrators and manufacturing representatives. Product information is available at



About Mangstor Inc.
Mangstor Inc., founded in 2012 and headquartered in Austin, Texas, is a leading developer of next generation non-volatile memory storage products optimized for low latency, high performance applications. Its product portfolio includes MX-Series PCIe NVMe SSDs, NX-Series NVMf storage arrays, and TITAN NVMf storage target software. First presented at last year's Flash Memory Summit, the NX6320 array with TITAN software earned a Best of Show award as the Most Innovative Flash Memory Technology, and the first available storage array solution for NVMf.

About Flash Memory Summit 2016
The Flash Memory Summit program provides attendees with practical information on the current state of flash memory and its applications. Summit themes include: Solid State Drives (SSDs), Flash Memory Based Architectures, Enterprise Storage, Controllers, Enterprise Applications, PCIe SSDs, new non-volatile technologies, standards, testing, and applications. The Summit Program consists of a day of pre-conference seminars, followed by three days of panel discussions, keynotes, forums, paper sessions, tutorials, updates, and special sessions. The show is located at the Santa Clara Convention Center, Santa Clara, California, beginning Tuesday, August 9th and concluding on Thursday, August 11th.
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