Enterprise Secure Storage SSD delivering performance with advanced protection features.

Key Security Features

- **Hardware AES-256 Full Drive Encryption:** NAS and CISA validated encryption methodology.
- **Pre-boot Authentication:** NSA and NIST validated PBA, providing a separate, secure authentication prior to initiating boot.
- **Hidden Partitions:** Ability to create eight separate locked partitions where data is locked and unreadable at the sector level, even when the device is in use. User accesses with step-up authentication. Protects against wiping and cloning.
- **Crypto and Full Block Erasure:** Crypto and block erasure with local and remote execution provides efficient data sanitization for emergency data destruction or storage retirement or repurpose.
- **Enterprise Management:** Cloud or on-premises console or command line interface (CLI) provides efficient administration at scale.

Technical Specifications

- **Product Series:** X200
- **Capacity:**
  - OP=7%: 1920, 3840, 7680, 15360
  - OP=28%: 1600, 3200, 6400, 12800
- **Form Factor:**
  - E3.S
- **PCIe Interface:**
  - PCIe Gen5x4
  - Single Port x4 lanes/Dual port 2x2 lanes
  - PCIe AER (Advanced Error Reporting)
- **Performance:**
  - Maximum Sequential Read/Write
  - Maximum Random Read/Write
  - Latency (Sustained workload)
  - IOPS Consistency
  - QoS (Quality of Service, 99%) [1]
- **Power Consumption:** [2]
  - Typical Power Consumption: 25 W
  - Inrush Current: 2.5A
  - Idle Power: <9W

- **DWPD:**
  - 1DWPD -1920, 3840, 7680, 15360
  - 3DWPD -800, 1600, 3200, 6400, 12800
- **TBW:** [3]
  - 1600GB SSD - 8760 TB
  - 19200 GB SSD - 3504 TB
  - 3200GB SSD - 1750 TB
  - 38400GB SSD - 7008 TB
  - 7680GB SSD - 14016 TB
  - 12800GB SSD - 70080 TB
  - 15360GB SSD - 28032 TB
- **LBAF**: 512 / 512+ 8 / 4K / 4K + 8/ 4K + 64 Bytes
- **MTBF** [4]
- **UBER**

Technical Specifications

- **Advanced Flash Management:**
  - ECC
  - Static and Dynamic Wear Leveling
  - Bad Block Management
  - Deallocate (TRIM) Commane
  - SMART
  - Over-Provision
  - Firmware Upgrade
- **Temperature Range:**
  - Operation: 0° ~ 70° C with specified airflow
  - Storage: -40° ~ 85° C
- **RoHS Compliant**
- **Enterprise Features Support List:**
  - Namespace
  - Single/Dual Port
  - Reservation
  - Metadata Protection
  - Thermal throttling
  - Power Loss Protection

- **Hardware AES-XTS 256-bit Encryption**
- **Support SMBus**
- **Support NVMe-MI (Management Interface)**
- **Data Retention - 3 months**
- **Physical Dimension:**
  - 112.75(L)x76(W)x7.45(H) mm^3
- **Compliance:**
  - PCIe Express Base 5.0
  - NVMe Express 2.0
  - NVMe Express Management Interface Rev 1.2
  - PCIe Express SFF-8639 Module Specification Revision 4.0, Version1.0

Notes:
1. Please see "Performance to Quality of Service (QoS)" Chapter 2.5 for details.
2. Please see "Power Consumption" Chapter 4.2 for details.
3. Please see "TBW (Terabytes Written)" Chapter 3.2 for details.
4. MTBF is a prediction simulation based on Telcordia SR-332 model.