Secure Storage SSD for PCs, addressing FIPS requirements with PBA and Advanced Data 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.
- **Verified Data Erasure:** Crypto and block erasure with the patented capability to verify at the block level that every block has been permanently erased.
- **Enterprise Management:** Cloud or on-premises console or command line interface (CLI) provides efficient administration at scale.

Technical Specificaitons

- **Product Series: MPT560**
- **Capacity:**
  - 64GB, 128GB, 256GB, 512GB, 1024GB
- **Form Factor:**
  - BGA type 1620, 16 mm x 20 mm
  - M.2 type 2230, 22mm x 30mm
- **PCIe Express Base Specifications:**
  - Gen 4 x 4 lanes
  - NVMe 1.4
  - PCI Express Base 4.0
  - PCI Express M.2 Specification Revision
  - 4.0, Version 1.0
- **Performance:**
  - Read: up to 3650MB/s
  - Write: up to 2900MB/s
- **Reliability:**
  - – MTBF > 2 million hours (Mean Time Between Failure)
  - – UBER < 1 sector per 10^{16} bits read (Uncorrectable Bit Error Rate)
- **Package Compliant:**
  - RoHS
  - MSL3

- **Voltage Supply Rails:**
  - BGA type 1620
    - P1=2.5V
    - P2=1.2V
    - P3=0.85V
  - M.2 type 2230 = 3.3V
- **Endurance: Total Bytes Written (TBW):**
  - Up to 1341TB for 1024GB
- **Temperature Range:**
  - Automotive Grade 2: -40°C ~ 105°C
  - Industrial Grade: -40°C ~ 85°C
- **Features Support List:**
  - Self-monitoring, analysis, and reporting technology (SMART)
  - Host-controlled thermal management
  - Power loss protection
  - End to end data path protection
  - Thermal throttling
  - LDPC + RAID ECC
  - SmartRefresh TM
  - Support HMB (Host Memory Buffer) (option support)
  - Support TCG OPAL(option support)
  - RPMB
  - Boot Partition