M.2 2280 FIPS 140-2 Cigent Feature with ECPM13.1/ECPM15.0

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**

- Capacity:
  - 256GB up to 2048GB
- Form Factor:
  - E12 M.2 2280-D2-M
- PCIe Interface:
  - PCIe Gen3 x 4
- Compliance:
  - NVMe 1.3
  - PCI Express Base 3.1
- Flash Interface:
  - Transfer rate up to 667 MBps
  - Up to 4pcs of BGA132 flash
- Performance:
  - Read: up to 3400 MB/s
  - Write: up to 3100 MB/s
- Reliability:
  - Mean Time Between Failure (MTBF) 1.8 million hours
  - Uncorrectable Bit Error Rate (UBER) < 1 sector per 1016 bits read
- Advanced Flash Management:
  - Advanced Wear Leveling
  - Bad Block Management
  - TRIM
  - SMART
  - Over-Provision
  - Firmware Update

- Power Management:
  - Support APST
  - Support ASPM
  - Support L1.2
- Power Consumption:
  - Idle < 350mW
  - L1.2 < 5 mW
- Temperature Range:
  - Operation: 0°C ~ 70°C
  - Storage: -40°C ~ 85°C
  - Operation airflow: 800 LFM at 35C ambient
- RoHS compliant
- Features Support List:
  - End to end data path protection
  - Thermal throttling
  - SmartECCTM
  - SmartRefreshTM
  - TCG OPAL
  - FIPS 140-2 lv2 certified: certificate number #3758
  - Cigent Feature with ECPM13.1/ECPM15.0

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