CIGENT
Data Secured. Mission Assured.

SPEC SHEET

Cigent Secure SSD M.2 2230 PCIe Gen 4

Cigent's Secure SSD (M.2 2230, PCIe Gen 4) is designed for mission-critical deployments requiring NSA CSfC for Data-at-Rest (DAR) compliance. When integrated with Cigent Pre-Boot Authentication (PBA) and Cigent Software Full Drive Encryption (FDE), it enables a complete, dual-layered encryption strategy that satisfies the NSA's CSfC layered protection mandate. Cigent's unified solution simplifies deployment while meeting the rigorous security standards required by federal agencies.

Technical Specifications

- **Capacity**
  - 256GB, 512GB, 1024GB
- **Memory**
  - DRAMless
- **Form Factor**
  - M.2 2230, 22mm x 30mm
- **PCIe Interface**
  - PCIe Gen 4 x 4
  - NVMe 1.4
  - PCI Express Base 4.0
- **Performance**
  - Sequential Read: up to 3650 MB/s
  - Sequential Write: up to 2900 MB/s
  - Random 4k Read: up to 380K IOPS
  - Random 4K Write: up to 500K IOPS
- **Temperature Range**
  - Automotive Grade 2: -40°C ~ 105°C
- **Reliability**
  - MTBF : 2.0 million hours
  - UBER4: < 1 sector per 10^{16} bits
  - DWPD ≥ 1.2
  - TBW: 256GB - 248TB
    512GB - 661TB
    1024GB - 1341TB
- **ECC Performance**
  - LDPC/RAID ECC
  - Low density parity check code
- **Power Consumption**
  - Active Write (Max.) ≤ 4.2W
  - Active Read (Max.) ≤ 4.5W
  - Idle ≤ 1.5W
- **Feature Support List**
  - Hardware AES-XTS 256-bit Encryption
  - SMART
  - End to end data path protection
  - TCG Opal 2.0

Mission-Driven Data at Rest Protection

Cigent is a trusted partner in protecting mission critical Data at Rest. Our CSfC-compliant solutions were developed with and for U.S. federal agencies to secure data on edge devices, no matter where it resides. Learn how we can support your program's data security goals.

DATA SECURED. MISSION ASSURED.

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