# Micron® 5200 SSD: Security Features of the TCG Enterprise SED



## The Micron 5200 Self-Encrypting Drive: Solid and Secure

The Micron 5200 SSD is available in models that include Micron's solid, secure firmware features plus 256-bit hardware encryption that follows the Trusted Computing Group's Security Subsystem Class (SSC) Enterprise specification for storage devices for servers, data centers and enterprise applications.

The Micron 5200 self-encrypting drive, or "SED," supports two modes of encryption protection, both operating with the drive's on-board AES-256 encryption engine:

- ATA Security: Provides basic protection by locking access to the drive using the ATA password, most frequently set and managed by the host system BIOS or UEFI.
- TCG SSC Enterprise: Provides a higher level of security and manageability by supporting the industry standard from TCG, with capability to manage multiple passwords and encryption keys for each drive.




## Solid, Secure, Feature-Rich Micron Self-Encrypting SSDs

### Secure Firmware

Incorporates secure digital signatures and boot-time attestation, which help to protect storage devices against low-level attacks.

### Advanced Encryption

Advanced Encryption Standard (AES) 256-bit hardware encryption engine (XTS mode) allows encryption of data-at-rest with no loss of performance.

### Standards-Based Security

TCG Security Subsystem Class (SSC) Enterprise compliance for SSDs in the enterprise and data center.

### Instant Scramble Erase

A complete sanitization of data on the SSD, capable of completion in under two seconds, simplifying device retirement or redeployment.

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## The Micron 5200 Self-Encrypting Drive: Features and Functions

The 5200 features an Advanced Encryption Standard (AES) 256-bit encryption engine, encrypting data stored on the media at full interface bandwidth — with no loss of performance. Encryption is implemented in XTS mode, improving upon previously deployed Cipher Block Chaining (CBC) modes.

The 5200 allows the system builder to select one of two security modes during the configuration process:

### TCG Security Subsystem Class-Enterprise

Often known as "TCG-E", this is an open security standard supported by TCG members, including the world's leading technology firms and organizations. TCG-E enables advanced security management, taking advantage of multiple self-generated keys corresponding to LBA ranges, with a master key managing the full drive with corresponding host-generated passwords. Micron's TCG-E SSDs work with Broadcom MegaRAID® SafeStore™ and with WinMagic® SecureDoc™ Enterprise Server.

TCG-E also provides the PSID revert function. PSID is the physical security ID — a 32-character code unique to each drive, printed on the label. In the unlikely event that a drive password is lost and access to the drive lost, the PSID can be used to reset the drive to factory defaults for re-deploying the drive.

### ATA Security

ATA security is a basic security mode providing protection by locking access to the drive using the ATA password, most frequently set and managed by the host system BIOS or UEFI. Only one password is supported, which is used to "wrap" the encryption key.

**Micron 5200 TCG-E Part Numbers**

| Product | Capacity | Part Number |
|---|---|---|
| 2.5" ECO | 480GB | MTFDDAK480TDC-1AT16ABYY |
| | 960GB | MTFDDAK960TDC-1AT16ABYY |
| | 1.92TB | MTFDDAK1T9TDC-1AT16ABYY |
| | 3.84TB | MTFDDAK3T8TDC-1AT16ABYY |
| | 7.68TB | MTFDDAK7T6TDC-1AT16ABYY |
| 2.5" PRO | 960GB | MTFDDAK960TDD-1AT16ABYY |
| | 1.92TB | MTFDDAK1T9TDD-1AT16ABYY |
| | 3.84TB | MTFDDAK3T8TDD-1AT16ABYY |
| 2.5" MAX | 240GB | MTFDDAK240TDN-1AT1ZABYY |
| | 480GB | MTFDDAK480TDN-1AT16ABYY |
| | 960GB | MTFDDAK960TDN-1AT16ABYY |
| | 1.92TB | MTFDDAK1T9TDN-1AT16ABYY |

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