Crypto mSATA SSD - SATA III (MO-300) - FIPS 140-2

Full Disk Encryption
AES 256-bit

Epoxy Resin

FIPS VALIDATED 140-2

| 64 GB | 128 GB | 256 GB | 512 GB |

INTRODUCTION

The most secure small form factor encrypted mSATA SSD available (MO-300).

If a laptop with an Integral Crypto mSATA SSD installed is lost or stolen, sensitive data is secure and cannot be accessed without the high-strength password. When the system is shut down, 256-bit full disk encryption is instigated.

Crypto mSATA SSD is the no-fuss and highly-secure solid state encryption solution for many industries including; finance, legal, health, education and government.

mSATA is a small form factor SSD that is around 8 times smaller than the typical 2.5 inch SSD / HDD available. It is ideal for adding storage to small form factor and embedded systems.

FEATURES

- **Military level security with AES 256-bit hardware encryption** - More secure than a software-only solution.

- **FIPS 140-2 Validated** - Certificate No. 2126

- **mSATA form factor with SATA III 6Gbps interface** (backwards compatible with SATA 3Gbps and SATA 1.5Gbps)

- **Multi-lingual interface** – in 14 languages*

Security Features

- **Total Drive Encryption** - All data stored on the Crypto mSATA SSD is encrypted (including the Operating System).

- **Dual Password** - As an option an Administrator can setup a user password and a master override password. If the user forgets their password, the Crypto mSATA SSD can be unlocked by the Administrator and the user password reset.

- **Secure Entry -** Encrypted data cannot be accessed without the correct high-strength 8-16 character alphanumeric password. An optional password hint can be set-up which cannot be the same as the password. Before use a high-strength password must be set.

- **Brute-Force Password Attack Protection** - Encrypted data is automatically erased after the default 6 failed password attempts (password attempts configurable to a maximum of 20). The data and encryption key are securely destroyed and the Crypto mSATA SSD is reset and can then be reused.

- **Anti-Clone** - Crypto mSATA SSD cannot be cloned once encryption is set.

- **Tamper-Proof Design** - The electronics are sealed in tamper-proof epoxy resin.

- **High-speed Read/Write** – The Crypto mSATA SSD has both high encryption and the main benefit of a performance SSD; a high-speed sustained data transfer rate.

- **Quick Boot** - Using a Crypto mSATA SSD in place of a traditional HDD can cut your desktop computer or laptop's boot time in half.

- **No moving parts** - greater resistance to shock and vibration

- **Noise free** - no spin or seek time

- **Endpoint security software compatible** – The Integral Crypto mSATA SSD operates comfortably with endpoint security solutions by using the configurable unique ID feature, which is part of the setup program

- **Warranty** – 3 Years

APPROVED SECURITY FUNCTION	CERTIFICATE
AES (H/W implementation) • CBC (enc/dec; 256)	2175
XTS 128, XTS 256	2175
HMAC 512 HMAC 256	1335
DRBG	254
SHA 512 SHA 256	1887

Technical Features

- MLC-NAND Flash Technology
- Cache Size: 64GB & 128GB = 256MB DDR 3, 256GB & 512GB = 512MBDDR 3
- mSATA
- JEDEC standard - M0-300
- Supports TRIM (OS support required)
- Supports S.M.A.R.T.
- CE and FCC certified and RoHs compliant
- Compatible with Windows XP, Vista, 7, 8.1

PERFORMANCE		
64GB	Read	450MB/s (up to)*
	Write	190MB/s (up to)*
128GB	Read	450MB/s (up to)*
	Write	165MB/s (up to)*
256GB, 512GB	Read	450MB/s (up to)*
	Write	350MB/s (up to)*
INTERFACE		
Interface		SATA III 6Gbps Also Compatible with SATA II 3Gbps and SATA 1.5Gbps
*Based on internal testing		
RELIABILITY		
MTTF		2,000,000 hours
ECC algorithm		24 9-bit Symbols Correction per 512 9-bit Symbol
POWER CONSUMPTION		
Supply Voltage		3.3V
Read Mode (mW)		64GB = 2,483; 128GB = 2,530; 256GB = 2,610; 512GB = 2,661
Write Mode (mW)		64GB = 2,251; 128GB = 3,547; 256GB = 3,674; 512GB = 3,790
Sleep Mode (mW)		64GB = 302; 128GB = 298; 256GB = 312; 512GB = 301
ECC algorithm		Supports 72-bit ECC correct per 1K Byte
MTBF		>1 Million Hours
ENVIRONMENTAL		
Operating Temp		0° - +70°C
Non - Operating Temp		-40° - +85°C
Humidity		RH 90% under 40C in operation
DIMENSIONS		
Length		50.8mm
Width		29.85mm
Height		3.8mm
Weight		8g
Length (Packed)		195mm
Width (Packed)		125mm
Height (Packed)		16mm
Weight (Packed)		69g
WARRANTY		
3 years		

*14 languages supported by the software GUI -

- – Arabic
- – Chinese
- – Dutch
- – English
- – French
- – German
- – Hindi
- – Italian
- – Norwegian
- – Polish
- – Portuguese
- – Russian
- – Spanish
- – Swedish

CAPACITY	PART CODE	BARCODE (EAN)
64GB	INSSD64GMSA6MCR140	5055288425866
128GB	INSSD128GMSA6MCR140	5055288425873
256GB	INSSD256GMSA6MCR140	5055288425880
512GB	INSSD512GMSA6MCR140	5055288428058

1GB = 1,000,000,000 bytes. Formatted capacity is less.

Please Note: No security software can be guaranteed 100% secure.

This device should not be used as your sole backup.

Product design and specification subject to change or modification without notice. E&OE.

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For products with security software or hardware; the product cannot be guaranteed to be fully secure. No security system can be considered absolute.

For warranty information please visit www.integralmemory.com/warranty