

SAMSUNG MEMORY

840 EVO Solid State Hard Drive



THE MUST-HAVE SOLUTION FOR YOUR PC UPGRADE

The evolution of the SSD has arrived as the Samsung SSD 840 EVO with more speed, more reliability and much easier upgrade tools. Combining the best SSD technology, the Samsung 840 EVO delivers superior performance for your everyday PC usage.

FASTER PERFORMANCE FOR EVERYDAY USE

- Optimized to improve everyday PC productivity, including web-browsing, email, multimedia and gaming.
- Enables you to boot up your computer in as little as 15 seconds.
- Samsung RAPID technology boosts overall PC performance by using idle DRAM as an ultra-fast buffer.*
- Samsung's TurboWrite write acceleration technology for significantly faster sequential write performance.

UNMATCHED RELIABILITY FOR CONSISTENTLY SUPERIOR PERFORMANCE

Solid-state design provides greater shock protection for data and brushed metal case blocks dust and corrosion.

ROCK-SOLID ENCRYPTION TO SECURE YOUR DATA

Worry-free data security with AES 256-bit full-disk encryption.

INCREASED ENERGY EFFICIENCY TO KEEP YOU DOING WHAT YOU LOVE

Ultra energy efficient - improves battery life by up to 45 minutes.**

MUCH EASIER - EASIER-THAN-EVER UPGRADE TOOLS

- Easier-than-ever upgrade tools – including One-Stop Install Navigator, a comprehensive guide for software setup, data migration process and hardware installation.
- Samsung Data Migration simply and safely migrates your existing data to your new SSD – making the installation process as smooth as possible.
- Laptop Upgrade Kit includes SATA to USB 3.0 cable for data migration up to 3 times faster than USB 2.0.†

PRODUCT HIGHLIGHTS

Faster Performance for Everyday Use
Proven Quality and Reliability to Trust
Easier-than-ever Upgrade Tools

KEY FEATURES

INTERFACE

- 2.5" SATA III (6Gb/s) compatible with SATA II (3Gb/s) and SATA I (1.5Gb/s)

NAND FLASH

- 1x nm Samsung Toggle DDR 2.0 3-Bit MLC NAND Flash Memory (400Mbps)

CONTROLLER

- Samsung 3-core MEX Controller

DRAM CACHE MEMORY

- 256MB (120GB) or 512MB (250GB&500GB) or 1GB (750&1TB) LPDDR2

PRODUCT DIMENSION (W x H x L)

- .27 x 2.75 x 3.94 in
- 2.5" Form Factor
- Only 7mm Thick to Accomodate Ultraportables and Netbooks

PRODUCT WEIGHT

- 1TB: Max. .12 lbs



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OPERATING FEATURES

- Standard Operating Voltage 5V ± 5%
- Power Consumption (Active) 0.24W
- Power Consumption (Idle) 0.14W
- Power Consumption Average : 0.1W *** (Typical)
Idle : 0.045W (Typical, DIPM ON)

RELIABILITY (MTBF)

- 1.5M Hours

TEMPERATURE

- 32°F to 158°F (Operating)

HUMIDITY

- 5% to 95%, non-condensing

VIBRATION AND SHOCK

- Operating: Random: 2.17Grms (7~800Hz)
- Non-Operating: Random: 3.08Grms (7~800Hz)
- 1500G & 0.5ms (Half sine)

SOFTWARE (INCLUDED WITH ALL DRIVES)

- Samsung One-Stop Installation Navigator
- Samsung SSD Magician 4.x (featuring User-Configurable Overprovisioning, SecureErase, S.M.A.R.T. Drive Analysis, Performance Benchmark, OS Optimization)
- Samsung Data Migration
- Samsung Rapid Client Software

SOFTWARE COMPATIBILITY

- Windows 8 (32-bit and 64-bit)
- Windows 7 (32-bit and 64-bit)
- Vista (SP1 and above)
- XP (SP2 and above)
- Windows Server 2008 (32-bit and 64-bit)
- Windows Server 2003 (32-bit and 64-bit with SP2 and above)
- Mac OSX
- Linux

KIT CONTENTS:

Desktop upgrade kit:

- 3.5" Bracket & Screws
- SATA to USB 2.0 connector
- SATA data cable

Laptop upgrade kit:

- Mounting Spacer
- SATA to USB 3.0 connector

WARRANTY

- 3 Year limited

TECH SUPPORT

- 1-800-SAMSUNG (1-800-726-7864)

CAPACITY	MODEL NAME	BOX CONTENTS	SEQUENTIAL READ SPEED	SEQUENTIAL WRITE SPEED**	RANDOM READ SPEED (IOPS)*	RANDOM WRITE SPEED (IOPS)*	UPC CODE
120 GB	MZ-7TE120BW	Basic (SSD Only)	540 MB/s	410 MB/S	94K	35K	887276851365
	MZ-7TE120KW	Desktop Upgrade Kit					887276851464
250 GB	MZ-7TE250BW	Basic (SSD Only)	540 MB/s	520 MB/S	97K	66K	887276851372
	MZ-7TE250KW	Desktop Upgrade Kit					887276851471
	MZ-7TE250LW	Laptop Upgrade Kit					887276851488
500 GB	MZ-7TE500BW	Basic (SSD Only)	540 MB/s	520 MB/S	98K	90K	887276851389
	MZ-7TE500LW	Laptop Upgrade Kit					887276851495
750 GB	MZ-7TE750BW	Basic (SSD Only)	540 MB/s	520 MB/S	98K	90K	887276851396
1TB	MZ-7TE1T0BW	Basic (SSD Only)	540 MB/s	520 MB/S	98K	90K	887276851402

* Sequential performance measurements based on CrystalDiskMark v.3.0.1. Random performance measurements based on Iometer 2010. Performance may vary based on SSD's firmware version, system hardware & configuration.

** Sequential Write performance measurements reflect TurboWrite operation.

*** Power consumption measured with MobileMark 2007 in Windows 7. Values calculated using laptop computer and represent system-level power consumption.

† SATA to USB 3.0 connector is bundled only with Laptop Upgrade package.

