

## CHECK OUT NOW THAT HISTORY IS CREATED!

Enterprise SSD

**MZ7KM240HAGR (SM863)**

240 GB Serial ATA 6.0 Gbps 2.5 inch

**MZ7KM240HAGR**

OVERVIEW

SPECIFICATIONS

RELATED RESOURCES

Samsung Enterprise Solid State Drives (SSDs) are being used increasingly as data storage media in computing, communication, and multimedia devices. Most SSDs use NAND Flash memory as the storage media, which is capable of retaining data without an external power supply. A typical SSD consists of two main components: the data storage device and a controller for the storage device that acts as an interface between the SSD and the host system. The SSD controller manages the interfaces from both the host side and the device side, which includes mapping bad data blocks, caching read/write data, and error checking and correction (ECC); and the controller's built-in ROM contains the firmware needed to control the drive. An SSD is an example of an embedded system, and needs a Real-Time OS (RTOS) for its operation. Several open source and proprietary firmware solutions are available for SSD controllers

The primary advantage of using Samsung SSDs is their lack of moving parts, resulting in extremely short startup and shutdown/standby times. SSDs offer superior reliability compared to traditional Hard Disk Drives (HDDs). Advances in semiconductor flash memory technologies have enabled the development of SSDs that are equal in capacities to HDDs and can be used as direct replacements. SSDs also prove to be highly cost effective in-use due to their much lower power consumption and maintenance costs. As the world leader in semiconductor memory technology, Samsung offers a comprehensive range of SSDs for deployment in a wide range of devices across every industry segment.

**SPECIFICATIONS****ENTERPRISE SSD › MZ7KM240HAGR**

Model	SM863	Interface	Serial ATA 6.0 Gbps
Form Factor	2.5 inch	Density	240 GB
VoltageV	+5V ± 5%	Sequential Read (128KB)	520 MB/s
Sequential Write (128KB)	485 MB/s	Random Read IOPS (4KB)	97 KIOPS
Random Write IOPS (4KB)	20 KIOPS	DWPD	3.6 DWPD

## RELATED RESOURCES

Brochure (2)



Case Study (6)



Data Sheet (2)



Others (3)



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