

# EP7000 Series

## Enterprise SSD: EP7011

The PNY EP7011 2.5-inch SATA-III (6 Gb/s) Enterprise Solid-State Drive (SSD) is a high performance, read-intensive drive geared for the datacenter. The EP7011 SSD is designed and tested to meet stringent, Enterprise-grade quality and reliability requirements.

The PNY EP7011 drive features enhanced security features and advanced NAND endurance algorithms that help to extend the lifetime of the drive. This fully featured drive offers a robust solution to satisfy even the most demanding datacenter storage applications.

The EP7011 features high quality MLC NAND, ultra-low power operation, and a 5-year limited warranty in order to provide a lower total cost of ownership (TCO) for your datacenter without compromising on performance or reliability. Complete with AES 256-bit encryption and NAND die-level error protection, you can be confident that your organization's data is safe and secure.

The EP7011 also includes advanced fail protection by using high quality, on-board tantalum capacitors. These work to provide power to the drive in the event of an unplanned power loss, allowing the drive to complete both cached and in-flight data commands before safely powering down. Other features include intelligent flash block management, full end-to-end data path protection, enhanced ECC, and data reduction algorithms to further improve NAND endurance and increase drive longevity.

### PERFORMANCE & SECURITY

- AES 256-bit encryption support and Secure Erase
- Power failure protection
- High speed read data transfers of up to 540 MB/s
- Read latency of less than 0.22 ms

### RELIABILITY

- 24/7 certified
- Drive health is monitored using an SSD specific set of S.M.A.R.T attributes
- DuraWrite® technology to extend the endurance of the SSD
- RAISE™ error recovery
- Uncorrectable Bit-Error Rate (UBER): <= 1 sector per 10<sup>16</sup> bits read

### APPLICATIONS

- Server virtualization, cloud storage, data centers, enterprise servers, video on demand and hyper scale computing environments

<sup>1</sup> -RB (Retail Box), -BLK (Bulk)

<sup>2</sup> Steady State performance/latency measured internally at PNY. Performance/Latency may vary based on host device/application. Performance measured using compressible data.



### SPECIFICATIONS

PNY Part Number	80 GB: SSD7EP7011-080-1 240 GB: SSD7EP7011-240-1 480 GB: SSD7EP7011-480-1
UPC	80 GB -RB: 751492581170 240 GB -RB: 751492581309 480 GB -RB: 751492581187
Box Dimensions	133,35 x 118,36 x 31,75 mm
Usable Capacities	80 GB, 240 GB, 480 GB
NAND Components	Multi-Level Cell (MLC) NAND Flash memory
Interface	SATA-III (6 Gb/s)
Form Factor	2.5 -inch
Dimensions	100 x 70 x 7 mm
Weight	80g

### PERFORMANCE<sup>2</sup>

### 80GB 240GB 480GB

Sequential Read up to	525	525	535	MB/s
Sequential Write up to	460	490	490	MB/s
Random Read (4KB) up to	26,000	47,000	49,000	IOPS
Random Write (4KB) up to	34,000	42,000	19,000	IOPS
Read Latency (avg)	< 0.22 ms			
Write Latency (avg)	< 0.3 ms			

### ENVIRONMENTAL

Power Consumption	3.3W Active, 0.56W Idle, Power loss Protection (PLI)
Operating Temperatures	0° ~ 70°C
Storage Temperatures	-40° ~ 85°C
Certifications	SATA-IO, FCC, CE, IC, UL, CSA, VCCI, BSMI, RCM, RoHS, REACH, WEEE

### RELIABILITY / SECURITY

MTBF	2,000,000 Hours
Data Path	End-to-End Data Path Protection
Data Encryption	AES-256 compliant
Die Protection	Recovers data from up to one NAND flash block
Product Health Monitoring	Self-Monitoring, Analysis and Reporting Technology (S.M.A.R.T)

### COMPATIBILITY

Serial ATA	Fully compliant with SATA-IO: Serial ATA Revision 3.0. ATA ACS2 Standard Native Command Queuing (NCQ)
Power Requirements	Standard SATA Power Connector

### ADDITIONAL FEATURES

Performance Optimization	TRIM (requires OS support)
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