EP7000 Series

Enterprise SSD: EP7011

Ideal for Cloud Storage & Data Centers
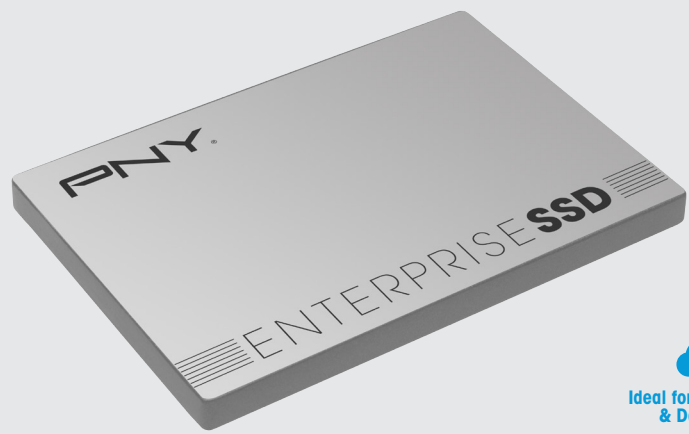
The EP7011 2.5-inch SATA-III (6 Gb/s) Enterprise Solid-State Drive (SSD) is a high performance, read-intensive drive geared for the datacenter. The EP7011 SSD is designed and tested to meet stringent, Enterprise-grade quality and reliability requirements. This drive features enhanced security features 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 pfail 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 535 MB/s
- Read latency of less than 0.22 ms

RELIABILITY

- 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^{16} bits read

APPLICATIONS

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

Available Options

EP7011
Enterprise SSD

SPECIFICATIONS

Enterprise SSD: EP7011				
Usable Capacities (IDEMA)	80GB, 240GB, 480GB			
PNY Part Number	80GB: SSD7EP7011-080-* 240GB: SSD7EP7011-240-* 480GB: SSD7EP7011-480-*			
Box Dimensions	5.25″ × 4.65″ × 1.25″			
NAND Components	Multi-Level Cell (MLC) NAND Flash Memory			
Interface	SATA-III (6 Gb/s)			
Form Factor	2.5-inch			
Dimensions (L × W × H)	100 × 70 × 7 mm			
Weight	80g			
PERFORMANCE**	**80GB**	**240GB**	**480GB**	
Sequential Read	525	525	535	MB/s
Sequential Write	460	490	490	MB/s
Random Read (4KB)	26,000	47,000	49,000	IOPS
Random Write (4KB)	34,000	42,000	19,000	IOPS
LATENCY**				
Read Latency (avg)	< 0.22 ms			
Write Latency (avg)	< 0.30 ms			
POWER				
Power Consumption	3.3W Active, 0.56W Idle; Power Loss Protection			
ENVIRONMENTAL				
Operating Temperature	0°C ~ 70°C			
Storage Temperature	-40°C ~ 85°C			
Certifications	SATA-IO, FCC, CE, IC, UL, CSA, VCCI, BSMI, RCM, KC, RoHS, REACH, WEEE, Halogen Free			
RELIABILITY / SECURITY				
Mean Time Between Failures (MTBF)	2,000,000 Hours			
Data Path	End-to-End Data Path Protection			
Data Encryption	AES 256-bit encryption			
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)			
COMPATABILITY				
Serial ATA	Fully compliant with SATA-IO: Serial ATA Revision 3.0. ATA ACS2 Standard Native Command Queuing (NCQ)			
Operating Systems	Red Hat Enterprise Linux 6.6, Red Hat Enterprise Linux 7.1, SUSE Enterprise Linux 12, Windows Server 2008 R2, Windows Server 2012 R2			
Power Requirements	Standard SATA Power Connector			
ADDITIONAL FEATURES				
Performance Optimization	TRIM (requires OS support)			
Service & Support	5-Year Limited Warranty (Details at pny.com), Toll free technical support lines			

* RB (Retail Box), BLK (Bulk)

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

DESIGNED, DEVELOPED & ASSEMBLED IN THE USA