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XPG SX8000 PCIe Gen3x4 M.2 2280 Solid State Drive

The first M.2 2280 SSD from XPG, the SX8000 delivers massive speed for gaming notebooks and high-end desktops. Utilizing the super-fast PCIe Gen3x4 interface, the SX8000 reaches extremely high speeds of up to 2500/1100MB per second (read/write), outperforming SATA 6Gb/s by a huge margin - several times over, in fact! NVMe 1.2 qualified, the SX8000 delivers superior random read/write performance and multi-tasking capabilities. It implements 3D NAND Flash, which provides higher storage density and reliability compared to 2D NAND. With support for SLC Caching, DRAM Cache Buffer and LDPC ECC technologies, the SX8000 maintains optimized performance and data integrity during even the most intense gaming, rendering, overclocking, or other high-demand applications.

Features

- Ultra-fast PCIe Gen3x4 interface: R/W speed up to 2500/1100MB/s
- NVMe 1.2 certified
- 3D MLC NAND Flash
- Advanced LDPC ECC technology
- Intelligent SLC caching and DRAM cache buffer
- RAID Engine and Data Shaping
- Compact M.2 2280 form factor – ideal for gaming notebooks and high-end desktops

Ordering Information

Capacity	Model Number	EAN Code
128GB	ASX8000NP-128GM-C	4712366967281
256GB	ASX8000NP-256GM-C	4712366967298
512GB	ASX8000NP-512GM-C	4712366967304
1TB	ASX8000NP-1TM-C	4712366967311
128GB (w/heatsink)	ASX8000NPC-128GM-C	4712366962477
256GB (w/heatsink)	ASX8000NPC-256GM-C	4712366962484
512GB (w/heatsink)	ASX8000NPC-512GM-C	4712366962491
1TB (w/heatsink)	ASX8000NPC-1TM-C	4712366962507

Specifications

- Capacities: 128GB / 256GB / 512GB / 1TB
- Controller: SMI 2260
- NAND Flash: 3D MLC
- Interface: PCIe Gen3x4
- Form Factor: M.2 2280
- MTBF: 2,000,000 hours
- Dimensions (L x W x T): 22 x 80 x 3.5mm
- Weight: 8g
- Power Consumption: 0.33W Active (Typical), 0.14W Slumber (Typical) (*measured by power meter)
- Operating Temperature: 0˚C~70˚C,
- Storage Temperature: -40˚C~85˚C
- Shock Resistance: 1500G/0.5ms
- LDPC ECC Engine
- Certifications: RoHS, CE, FCC, BSMI, VCCI
- Warranty: 5 years

Performance

Capacity	ATTO Seq. Read (MB/sec)	ATTO Seq. Write (MB/sec)	CDM (QD32) Seq. Read (MB/sec)	CDM (QD32) Seq. Write (MB/sec)	AS SSD Seq. Read (MB/sec)	AS SSD Seq. Write (MB/sec)	4K Random Read IOPS	4K Random Write IOPS	TBW
128GB	1000	550	1000	550	900	500	45K	100K	80TB
256GB	1900	1100	2000	1100	1400	1000	85K	140K	160TB
512GB	1900	1100	2500	1100	1400	1000	140K	150K	320TB
1TB	1900	1100	2500	1100	1400	1000	160K	140K	640TB

*Performance may vary based on SSD capacity, hardware test platform, test software, operating system and other system variables

Schematics