

# PCIe 4.0 SSD

## High Capacity, High-Performance



## PBlaze<sup>®</sup> 6 6930 Series NVMe<sup>™</sup> SSD

PBlaze6 6930 series provides up to 1,600K IOPS 4K random read performance, presents more enterprise security features and higher reliability, and a maximum user capacity of 30.72TB. All these features will better support the cloud computing, big data, artificial intelligence, and other I/O-intensive applications.

### Ultimate Performance, Further Accelerate Applications for Data Centers

The PBlaze6 6930 Series NVMe SSD adopt 176-layer TLC NAND, optimized by hardware design and self-developed MemSpeed 4.0 technology set to achieve further improvement in IO performance and power consumption ratio.

### Up to 32TB, With Higher Capacity and Endurance Lifetime

The PBlaze6 6930 series support 25.6TB and 30.72TB user capacities, which can bring more than 700TB of storage capacity on a standard 2U server, allowing customers to achieve more metrics such as storage capacity, I/O performance, endurance lifetime, and power consumption ratio with less hardware investment. It also supports 6.4TB, 7.68TB, 12.8TB and 15.36TB capacities, provides 1.5 DWPD and 3.3 DWPD models to satisfy the needs from diverse users.

### Fully Optimized NMA to Secure Critical Business Data

The PBlaze6 6930 Series is fully optimized with NMA (NAND Management Algorithm) in MemSolid<sup>®</sup> technology set, including dynamic read reference voltage, enhanced background scanning, proactive read disturb scan and enhanced LDPC, thus guarantees UBER (Uncorrectable Bit Error Rate) above enterprise SSD standard. The PBlaze6 6930 series supports secure boot, which firmware verifies integrity and encryption before loading, avoiding potential data risks caused by the device executing unauthorized code.

### Rich Enterprise Features, make Data Safe

PBlaze6 6930 Series NVMe SSD support NVMe 1.4 specification, provides Full Data Path Protection, NVMe-MI for Out-of-band Management, Telemetry, Persistent Event Log, Sanitize, Firmware Upgrade without Reset, AES Data Encryption, Secure Boot and other important features.

#### Key Features

- PCIe 4.0, NVMe1.4
- 6.4TB ~ 30.72TB Capacity
- 1600K IOPS
- 7.1 GB/s throughput
- 12~25W flexible Power Management

#### Reliability

- AES 256 Data Encryption
- Sanitize
- Full Data Path Protection
- Power Failure Protection
- Secure Download and Secure Boot

#### Easy-to-use

- Telemetry
- Firmware Upgrade without Reset
- NVMe-MI for Out-of-Band Management

#### Advanced Feature Support

- Weighted Round Robin
- 8TB/s Enterprise TRIM
- Persistent Event Log

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## PBlaze® 6 6930 Series NVMe™ SSD

PRODUCT BRIEF

### Applications & Workloads

Database  
Searching, Indexing, CDN  
Cloud and Hyper-scale Computing  
High Performance Software-defined Storage  
Deep Learning and Big Data Analytics  
High Performance Storage System  
ERP, SAP HANA  
BOSS, Banking, Taxing  
High Frequency Trading  
Online Payment



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<i>PBlaze6 6930 Series</i> <sup>[1]</sup>	<i>6930</i>			<i>6936</i>		
User Capacity (TB)	7.68	15.36	30.72	6.4	12.8	25.6
128KB Sequential Read(GB/s)	6.9	7.1	7.1	6.9	7.1	7.1
128KB Sequential Write(GB/s)	7.0	7.0	7.0	7.0	7.0	7.0
Sustained Random Read (4KB) IOPS	1600K	1600K	1480K	1600K	1600K	1500K
Sustained Random Write (4KB) IOPS (Steady State) <sup>[2]</sup>	340K	420K	360K	660K	680K	650K
Lifetime Endurance DWPD <sup>[3]</sup>	1.5			3.3		
Latency Read/Write (μs) <sup>[4]</sup>	69 / 9					
Form Factor	2.5-inch U.3					
Interface	PCIe 4.0 x 4					
Operating Temperature	Ambient: 0°C to 35°C with suggested airflow; Case: 0°C to 77°C					
Uncorrectable Bit Error Rate	< 10 <sup>-17</sup>					
Mean Time Between Failures	2 million hours					
Protocol	NVMe 1.4					
NAND Flash Memory	3D TLC NAND					
Operation System	RHEL, SLES, CentOS, Ubuntu, Windows Server, VMware ESXi					
Power Consumption	< 25 W					
Basic Feature Support	Power Failure Protection, Full Data Path Protection, S.M.A.R.T, Flexible Power Management, Hot Pluggable					
Advanced Feature Support	TRIM, Multi-namespaces, AES 256 Data Encryption & Crypto Erase, EUFI64/NGUID, Firmware Upgrade without Reset, Timestamp, Telemetry, Weighted Round Robin, Persistent Event Log, Secure Download, Secure Boot					
Software Support	Open-source management tool, CLI debug tool OS in-box driver (Easy system integration)					

### NOTES:

- [1] Performance may vary due to different system configurations and firmware version.
- [2] Measurement is performed at Steady State.
- [3] DWPD, Drive Writes per Day for 5 years.
- [4] Average latency measured with 4KB random I/O pattern.

[memblaze.com](http://memblaze.com)



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