

## Solutions - X1 - Mixed Workload

U.3/U.2							
Capacity <sup>(1)</sup>		800GB	1600GB	3200GB	6400GB	12800GB	25600GB
Performance <sup>(2,3)</sup>	Sequential Read	7000 MB/s	7000 MB/s	7000 MB/s	7000 MB/s	7000 MB/s	7000 MB/s
	Sequential Write	1800 MB/s	3500 MB/s	6700 MB/s	6800 MB/s	6800 MB/s	6000 MB/s
	4K Random Read	1000K IOPS	1600K IOPS	1600K IOPS	1600K IOPS	1600K IOPS	1600K IOPS
	4K Random Write	130K IOPS	280K IOPS	430K IOPS	450K IOPS	480K IOPS	450K IOPS
Power Consumption <sup>(4)</sup>	Max	9 W	14W	19 W	20 W	21 W	21 W
	Idle	5 W	6 W	6 W	6 W	8 W	9W
Latency	4K Random Read	90 us	110 us	100 us	100 us	100 us	90 us
	4K Random Write	15 us	15 us	15 us	15 us	15 us	15 us
Features							
Interface		PCIe 4.0 x4 (single port x4 lanes/dual port x2 lanes)					
NAND Flash		3D TLC					
DWPD <sup>(5)</sup>		3					
UBER		1 in 10 <sup>18</sup>					
Operating Temperature		0°C - 70°C					
Non-Operating Temperature		-40°C - 85°C					
Key Features							
<ul style="list-style-type: none"> <li>Enterprise features support list:               <ul style="list-style-type: none"> <li>Namespace</li> <li>Dual port</li> <li>Reservation</li> <li>Metadata protection</li> <li>Power loss protection</li> </ul> </li> <li>Hardware AES-XTS 256-bit encryption</li> <li>Support SMBus</li> </ul>				<ul style="list-style-type: none"> <li>Compliance               <ul style="list-style-type: none"> <li>PCIe 4.0</li> <li>NVMe 1.4</li> <li>NVMe Management Interface Rev 1.1</li> </ul> </li> <li>TCG Opal 2.0<sup>(6)</sup></li> <li>Sanitize<sup>(6)</sup></li> </ul>			

(1) 1 GB = 1,000,000,000 bytes.

(2) Sequential Performance is based on FIO on Linux, 128K, with QD=32, 1 worker, and test drive set as secondary.

(3) Random Performance is based on FIO on Linux, 4K data size, QD=32, 1 worker, 4K aligned.

(4) Power consumption is measured during the sequential read/write and random read/write operations performed by iometer with the conditions described in (2)(3).

(5) The results of DWPD are obtained in compliance with JESD219A Standards.

(6) Supported by a separate firmware setting. Further information available upon request.



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## Solutions - X1 - Read Intensive

U.3/U.2						
	Capacity <sup>(1)</sup>	1920GB	3840GB	7680GB	15360GB	30720GB
Performance <sup>(2,3)</sup>	Sequential Read	7000 MB/s	7000 MB/s	7000 MB/s	7000 MB/s	7000 MB/s
	Sequential Write	3500 MB/s	6700 MB/s	6800 MB/s	6800 MB/s	6000 MB/s
	4K Random Read	1600K IOPS	1600K IOPS	1600K IOPS	1600K IOPS	1600K IOPS
	4K Random Write	95K IOPS	170K IOPS	180K IOPS	180K IOPS	180K IOPS
Power Consumption <sup>(4)</sup>	Max	14W	19 W	20 W	21 W	21 W
	Idle	6 W	6 W	6 W	8 W	9W
Latency	4K Random Read	110 us	100 us	100 us	100 us	90 us
	4K Random Write	15 us	15 us	15 us	15 us	15 us
Features						
	Interface	PCIe 4.0 x4 (single port x4 lanes/dual port x2 lanes)				
	NAND Flash	3D TLC				
	DWPD <sup>(5)</sup>	1				
	UBER	1 in 10 <sup>18</sup>				
	Operating Temperature	0°C - 70°C				
	Non-Operating Temperature	-40°C - 85°C				
Key Features						
	<ul style="list-style-type: none"> <li>Enterprise features support list:                             <ul style="list-style-type: none"> <li>Namespace</li> <li>Dual port</li> <li>Reservation</li> <li>Metadata protection</li> <li>Power loss protection</li> </ul> </li> <li>Hardware AES-XTS 256-bit encryption</li> <li>Support SMBus</li> </ul>		<ul style="list-style-type: none"> <li>Compliance                             <ul style="list-style-type: none"> <li>PCIe 4.0</li> <li>NVMe 1.4</li> <li>NVMe Management Interface Rev 1.1</li> </ul> </li> <li>TCG Opal 2.0<sup>(6)</sup></li> <li>Sanitize<sup>(6)</sup></li> </ul>			

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