

## Controller

**PS5012-E12**

Capacity <sup>1</sup>	128GB	256GB	512GB	1024GB	2048GB
Interface	PCIe Gen3x4 NVMe 1.3				
Form Factor	M.2 2280-S2, M2 2280-D2				
NAND Flash	3D TLC				
<b>Performance (Up to)<sup>2,3</sup></b>					
Sequential Read	1500 MB/s	3200 MB/s	3200 MB/s	3200 MB/s	3200 MB/s
Sequential Write	500 MB/s	1000 MB/s	2000 MB/s	3000 MB/s	3000 MB/s
4K Random Read	90K IOPS	180K IOPS	360K IOPS	600K IOPS	600K IOPS
4K Random Write	110K IOPS	250K IOPS	500K IOPS	600K IOPS	600K IOPS
<b>Power</b>					
Supply Voltage	M.2 3.3V ± 5; HHHHL 12V ± 5; U.2 12V ± 5				
Max (Average)	3.6 W	5.9 W	7 W	7.3 W	7.6 W
Active (Average) <sup>4</sup>	3.5 W	5.5 W	6.7 W	7.2 W	7.5 W
Idle					
Low Power PS4 (L1.2)	2 mW	2 mW	2 mW	2 mW	2 mW
<b>Temperature</b>					
Operating	0°C - 70°C				
Non-Operating	0°C - 85°C				
Advanced Features	<ul style="list-style-type: none"> <li>• End-to-End Data Protection</li> <li>• Pyrite/OPAL Support</li> <li>• Thermal Monitoring</li> </ul>				

<sup>1</sup> 1GB = 1,000,000,000 bytes

<sup>2</sup> 1MB/s = 1,000,000 bytes / second

<sup>3</sup> Performance is based on Crystal Disk Mark 6.0.0, test size 1GiB, and test drive set as secondary

<sup>4</sup> Measured with MobileMark 2014