

## Controller

## PS5012-E12C

Capacity <sup>1</sup>	128GB	256GB	512GB
Interface	PCIe Gen3x4 NVMe 1.3		
Form Factor	M.2 2280-S2		
NAND Flash	3D TLC		
<b>Performance (Up to)<sup>2,3</sup></b>			
Sequential Read	1500 MB/s	1750 MB/s	1750 MB/s
Sequential Write	500 MB/s	1100 MB/s	1550MB/s
4K Random Read	90K IOPS	180K IOPS	320K IOPS
4K Random Write	110K IOPS	250K IOPS	340K IOPS
<b>Power</b>			
Supply Voltage	M.2 3.3V ± 5; HHHL 12V ± 5; U.2 12V ± 5		
Max (Average)	2.9 W	3.2 W	3.3 W
Active (Average) <sup>4</sup>	3.0 W	3.3 W	4.4 W
Idle			
Low Power PS4 (L1.2)	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

<sup>5</sup> Host memory buffer enabled