## Controller

## PS3112-S12

Interface	SATA III	
Form Factor	2.5"	M.2 2280
NAND Flash	3D TLC	
Capacity <sup>1</sup>	256GB to 8TB	256GB to 2TB
Performance (Up to) <sup>2, 3</sup>		
Sequential Read	550 MB/s	550 MB/s
Sequential Write	530 MB/s	530 MB/s
4K Random Read	100K IOPS	100K IOPS
4K Random Write	90K IOPS	90K IOPS
Power		
Supply Voltage	5V ± 5%	3.3V ± 5%
Max (Average)	TBD	TBD
Active (Average) <sup>4</sup>	TBD	TBD
Idle	TBD	TBD
DEVSLP	TBD	TBD
Temperature		
Operating	0°C - 70°C -40°C - 85°C	
Non-Operating	-40°C - 85°C	
Advanced Features	<ul> <li>Power Loss Protection(pFail) Circuit (Optional on 2.5")</li> <li>Intelligent FW Technology on Data Loss Protection: <ol> <li>Data Loss Protection End-to-End Data Protection (ETEDPP)</li> <li>SmartFlush™</li> <li>Intelligent FW Technology on Data Loss Protection:</li> <li>SmartECC™: LDPC + RAID ECC</li> <li>Cross Die Bad Block Management</li> <li>SmartFlush™</li> <li>Thermal Protection Mechanism</li> <li>Security Function(Optional): Write Protect, Quick Erase, Data Destroy</li> <li>Self Encrypting Function(Optioanl): AES, TCG OPAL</li> </ol> </li> </ul>	

<sup>&</sup>lt;sup>1</sup> 1GB = 1,000,000,000 bytes

<sup>&</sup>lt;sup>4</sup> Measured with MobileMark 2014



 $<sup>^{2}</sup>$  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