

Controller

PS3112-S12DI

Interface	SATA III		
Form Factor	2.5"(U.2)	M.2 2280	M.2 2242
NAND Flash	3D TLC		
Capacity ¹	240GB to 7680GB	240GB to 1920B	120GB to 240GB
Performance² (up to)			
Sequential Read	550 MB/s	550 MB/s	550 MB/s
Sequential Write	520 MB/s	520 MB/s	320 MB/s
4K Random Read	88K IOPS	87K IOPS	84K IOPS
4K Random Write	98K IOPS	94K IOPS	72K IOPS
Power (up to)			
Supply Voltage	5V ± 5%	3.3V ± 5%	3.3V ± 5%
Active (Average)	4.9W	2.1W	2W
Idle	1.8W	0.9W	1W
Temperature			
Operating	0°C~70°C -40°C~85°C		
Non-Operating	-40°C~85°C		
Advanced Features	<ul style="list-style-type: none"> • Self Encrypting Function(Optional): AES+TCG OPAL 2.0 • Security Function(Optional): Write Protect, Quick Erase, Military Erase • Thermal Protection Mechanism(Thermal Throttling) • Power Loss Protection(pFail) circuit (Optional on 2.5" 480GB~3840GB) • Power Loss Protection(pFail) circuit (Optional on M.2 2280 240~960GB) • Power Loss Protection(pFail) circuit (Default on M.2 2242) • Intelligent FW technology on Data loss Protection : <ol style="list-style-type: none"> 1) Data Loss Protection End to End Data Path Protection (ETEDPP) 2) SmartFlush™ 3) GuaranteedFlush™ (Optional) • Intelligent FW technology on Data Reliability <ol style="list-style-type: none"> 1) SamrteCC™: LDPC + RAID ECC 2) Cross Die Bad Block Management 3) SmartRefresh™ 		

¹ 1GB = 1,000,000,000 bytes² 1MB/s = 1,000,000 bytes / second