

Solutions

PS5013-E13T BGA SSD

Capacity ¹	32GB	64GB	128GB	256GB	512GB
Interface	PCIe Gen3x2 NVMe 1.3				
Form Factor	BGA SSD 1113 / Embedded on M.2 2242/2230				
NAND Flash	3D TLC				
Performance (Up to)^{2, 3, 5}					
Sequential Read	380 MB/s	800 MB/s	1600 MB/s	1730 MB/s	1730 MB/s
Sequential Write	230 MB/s	300 MB/s	600 MB/s	1180 MB/s	1180 MB/s
4K Random Read	24K IOPS	50K IOPS	100K IOPS	195K IOPS	195K IOPS
4K Random Write	47K IOPS	65K IOPS	130K IOPS	245K IOPS	245K IOPS
Power⁴					
Supply Voltage	Type 1113 2.5V/ 1.2V/ 0.9V (Min. -50mV / Max. +5%) M.2 3.3V ± 5%				
Active (Average)	Read: 0.6~0.65W Write: 0.5~0.55W	Read: 0.93W Write: 0.78W	Read: 1.42W Write: 1.03W	Read: 1.50W Write: 1.47W	Read: 1.55W Write: 1.57W
PS2 (Lite)	TBD	0.65W	0.7W	0.7W	0.7W
PS4	TBD	0.75mW	0.8mW	0.8mW	0.8mW
Temperature					
Operating	Commercial temp: 0 ~ 70°C Industrial temp: -40 ~ 85°C				
Non-Operating	-40°C - 85°C				
Advanced Features	<ul style="list-style-type: none"> • DRAM-less • Pyrite / OPAL Support • End to End Data Protection • Thermal Monitoring 				

¹ 1GB = 1,000,000,000 bytes

² 1MB/s = 1,000,000 bytes/second

³ Sequential performance is based on Crystal Disk Mark 6.0.0, test size 1GB, and test drive set as secondary

⁴ Calculations are based on the average current which is measured over an RMS(100ms) window and voltage's of their respective power rails @25°C

⁵ Host memory buffer enabled