

Controller

PS5013-E13TI

PS5013-E13T

Interface	NVMe PCIe Gen 3 x 2		NVMe PCIe Gen3x2	NVMe PCIe Gen 3 x 2	
Form Factor	M.2 2280	M.2 2242	CFX™	BGA SSD 345-ball (11.5 x 13 mm)	
NAND Flash	3D TLC				
Capacity ¹	128GB to 2048GB	128GB to 2048GB	128GB to 1024GB	64GB to 512GB	
Performance² (up to)					
Sequential Read	2500 MB/s	2500 MB/s	1700 MB/s	1730 MB/s	
Sequential Write	2100 MB/s	2100 MB/s	1400 MB/s	1180 MB/s	
4K Random Read	230K IOPS	230K IOPS	210K IOPS	195K IOPS	
4K Random Write	390K IOPS	390K IOPS	295K IOPS	245K IOPS	
Power (up to)					
Supply Voltage	3.3V ± 5%	3.3V ± 5%	3.3V ± 5%	2.45V ~2.75V, Normal: 2.5V	
Active (Average)	3750mW	3750mW	2900mW	1550mW	
Idle	70mW	70mW	70mW	15mW	
L1.2	2mW	2mW	2mW	0.8mW	
Temperature					
Operating	0°C~70°C		0°C~70°C		
Non-Operating	-40°C~85°C		-40°C~85°C		
Advanced Features	<ul style="list-style-type: none"> • Self Encrypting Function(Optional): AES, TCG OPAL, TCG Pyrite • Intelligent FW technology on Data Loss Protection : <ul style="list-style-type: none"> 1) Data Loss Protection End to End Data Path Protection (ETEDPP) 2) SmartFlush™ • Intelligent FW technology on Data Reliability <ul style="list-style-type: none"> 1) SamrECC™: LDPC + RAID ECC 2) SmartRefresh™ • Thermal Protection Mechanism • Support HMB(Host Memory Buffer), Default Disable • Security Function(Optional): Write Protect, Quick Erase 		<ul style="list-style-type: none"> • End to End data path protection • Thermal Throttling • LDPC + RAID ECC • SmartRefresh™ • Drive Log • Support HMB(Host Memory Buffer) • Support TCG OPAL / Pyrite • Support Three Speed Mode: <ul style="list-style-type: none"> 1) Mode 0_PS0: High speed mode (power<1.6W) 2) Mode 1_PS1: Middle speed mode (Max power<1W) 3) Mode 2_PS2: Low speed Mode (Seq. Read >350 MB/s) • RPMB • Boot Partition • Support APST • Support ASPM • Support L1.2 		

¹ 1GB = 1,000,000,000 bytes
² 1MB/s = 1,000,000 bytes / second

The data within this specification is subject to change by Phison without notice. Performance numbers may vary based on system configuration and testing conditions.