

PS5018-E18

THE SUCCESSOR OF REVOLUTIONARY E16



We Define the Evolution

In 2019 Phison introduced the industry's first consumer-grade Gen 4x4 NVMe SSD Controller (the revolutionary PS5016-E16), becoming the industry leader in high-performance computing for gaming, 5G, and other bandwidth-hungry applications seemingly overnight. Today we continue our tradition of breaking boundaries with the all-new PS5018-E18 second-generation PCIe controller.

The E18 is the only solution on the market to break the 7GB/s barrier for both read and write access with superior power efficiency. Your device stays cool even while running the most blazingly fast applications.

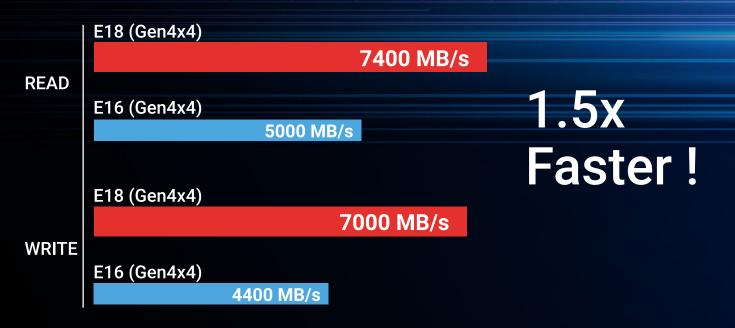


Industrial Leading Controller Capable of 7400 MB/s

E18 Compared to PCIe Gen3x4

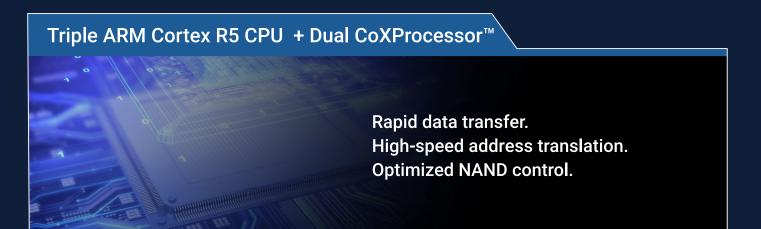


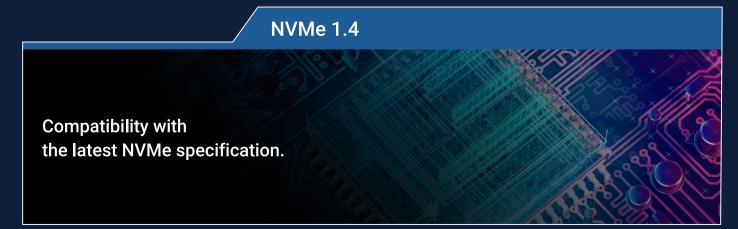
E18 Compared to E16



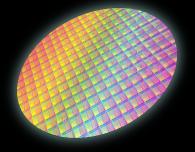


Advanced Features

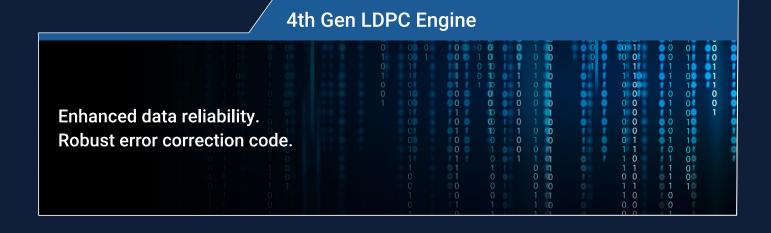








Less power, lower heat, longer battery life. Outstanding performance.





Technical Specification

PS5018-E18	
Technology Node	TSMC 12nm
Capacities	Up to 8TB
PCIe	
Speed & Lanes	Gen4 x4L
NVMe Revision	1.4
NAND	
Channels	8
CE#	Max 32
Speed	1,600 MT/s Per Channel
DRAM	DDR4
Performance	
Sequential Read	7,400 MB/s
Sequential Write	7,000 MB/s
Random Read	1,000,000 IOPS
Random Write	1,000,000 IOPS
Architecture	
Processor	3x ARM Cortex R5
CoXProcessor	Yes
Data Reliability	4th Gen LDPC Engine End-to-End Data Path Protection SmartECC
Security	
Hardware AES	AES 128/256 bit SHA 160/256/512
RSA	4096
Encryption	TCG & Opal 2.0 Pyrite
Crypto Erase	Yes