PHISON
Knows What You Need

2018

Embedded UFS
SSD Performance for Mobile Devices

New!

Controller	PS8313	PS8317
Host Interface	M-PHY 3.1, UniPro 1.61, UFS 2.1 Up to HS-Gear 3 (6Gbps) x 2-Lanes	M-PHY 4.1, UniPro 1.8, UFS 3.0 Up to HS-Gear 4B (12Gbps) x 2-Lanes
Flash Interface	2 channels, up to 667 MT/s (each channel) 1/2/4/8 CE, ONFI 4.0 / Toggle 2.0	2 channels, up to 1,200 MT/s (each channel) 1/2/4/8 CE, ONFI 4.1 / Toggle 3.0
Supported Capacities	32GB~256GB	64GB~2TB
Supported NAND Flash	3D TLC	3D TLC/QLC
ECC Engine	Phison 3rd Gen. LDPC	Phison 4th Gen. LDPC
Sequential Performance (up to)	Read 920 (MB/s); Write 520 (MB/s)	Read > 1,800 (MB/s); Write > 810 (MB/s)
4KB Random Read QD8 (up to)	48,500 (IOPS)	> 90,000 (IOPS)
4KB Random Read QD32 (up to)	67,000 (IOPS)	> 100,000 (IOPS)
4KB Random Write (up to)	93,500 (IOPS)	> 160,000 (IOPS)

Feature
- CoXProcessor Architecture from PCIe SSDs
- LDPC and RAID ECC to Support Latest 3D TLC NAND Flash

In-House IPs
- M-PHY 3 (Gear 3) and M-PHY 4 (Gear 4)
- UniPro 1.6 and UniPro 1.8
- UFS 2.1 and UFS 3.0