PHISON
Knows What You Need

Your data is an extremely important asset.
For the past two decades, Phison Electronics has been a market leader in delivering high speed data storage solutions for our OEM customers.
In 2000, we announced the world's first system on chip USB flash controller.
Fast forward 20 years - the company launches the evolved version of its flagship product - the world's first and fastest USB 3.2 Gen 2x2 native UFD controller for best-in-class high-performance professional applications.

PS2251-17 (U17)
PS2251-18 (U18)

The world's first and fastest USB 3.2 native UFD controller for high capacity USB flash drives

U17/U18 - Facts you should know

- Up to 4TB capacity in a small 26mmx60mm PCBA footprint
- Compatible with any device that has a USB Type-C connector (PCs, Mac, notebooks, tablets, smart phones, and gaming consoles)
- Backwards compatible to USB 2.0, USB 3.0, USB 3.1 using a USB Type-A adapter
- 15 times faster and more quiet compared to external HDDs
- High sequential read and sequential write performance
- DRAM-less
- 56% more efficient compared to bridge-based USB external SSD.

PS2251-17 U17 USB 3.2 Gen 2x1

Best-in-class for entry-level external USB flash drive applications

3D-TLC	Sequential (MB/s)		Random (MB/s)	
	Read	Write	Read	Write
250GB	1000	375	165	250
500GB	1000	800	185	260
1000GB	1000	800	185	260
3D-QLC	Sequential (MB/s)		Random (MB/s)	
	Read	Write	Read	Write
250GB	1000	320	TBD	TBD
500GB	1000	630	TBD	TBD
1000GB	1000	800	TBD	TBD

Features	Specifications
USB	· USB 3.2 Gen 2x1 (10Gbps) · Backwards compatible with USB 3.2 Gen1 (5Gbps) · Backwards compatible with USB 2.0 (480Mbps) · Backwards compatible with USB 1.1 (12Mbps)
NAND Flash	· Support up to 4TB · Support Triple-level cell (TLC) and Quad-level cell (QLC) NAND flash memory · Compliant with Toggle 1.0/2.0/3.0/4.0 NAND flash interface · Compliant with ONFI 2.0/3.0/4.1 · Transfer rate: up to 800 MT/s · Support up to 2 channels/ 16 Chip Enable (CE) within Single Design · Flash IO Operating voltage supply 1.2v/1.8v
Data Reliability	· 4th Generation LDPC ECC protection
OS Compatibility	· Support Windows XP and later version · Support MAC OS 10.8 and later version · Support Linux kernel 2.4.10 and later version
Temperature Range	· Operating Range: 0~70 °C · Storage Range: -40~85 °C
Humidity	· 20%~90%
Other Features	· Built-in internal Thermal Sensor

PS2251-18 U18 USB 3.2 Gen 2x2

Best-in-class for high-performance USB flash drive applications

3D-TLC	Sequential (MB/s)		Random (MB/s)	
	Read	Write	Read	Write
500GB	1850	1000	250	320
1000GB	1850	1600	250	320
2000GB	1850	1600	260	330
4000GB	1900	1700	260	330

Features	Specifications
USB	· USB 3.2 Gen 2x2 (20Gbps) · Backwards compatible with USB 3.2 Gen1 (5Gbps) · Backwards compatible with USB 2.0 (480Mbps) · Backwards compatible with USB 1.1 (12Mbps)
NAND Flash	· Support up to 4TB · Support Triple-level cell (TLC) and Quad-level cell (QLC) NAND flash memory · Compliant with Toggle 1.0/2.0/3.0/4.0 NAND flash interface · Compliant with ONFI 2.0/3.0/4.1 · Transfer rate: up to 1400 MT/s · Support up to 2 channels/ 16 Chip Enable (CE) within Single Design · Flash IO Operating voltage supply 1.2v/1.8v
Data Reliability	· 4th Generation LDPC ECC protection
OS Compatibility	· Support Windows XP and later version · Support MAC OS 10.8 and later version · Support Linux kernel 2.4.10 and later version
Temperature Range	· Operating Range: 0~70 °C · Storage Range: -40~85 °C
Humidity	· 20%~90%
Other Features	· Built-in internal Thermal Sensor

Best in class low power consumption

U17 / U18	Power (mA)
Read	500
Write	550
Idle	150
Suspend	1.7