C O N S U M E R
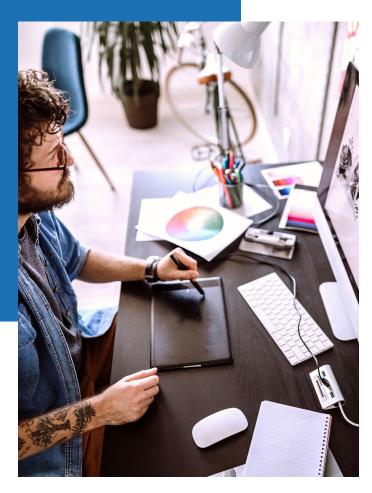

World's First Native USB 4.0 Controller

Phison's PS2251-21 (U21) USB 4.0 NAND flash controller IC solution eliminates bridge boards to enable compact single chip portable SSDs with lightning-fast speed. PS2251-21 prevails in low cost and heat dissipation with advanced manufacturing process and design while offering extreme performance and power efficiency. With backward compatibility to all existing USB standards across various generations and lane configurations, it effortlessly accommodates all your USB interface needs.

U21 Portable SSD − Light and Fast, with Style

Phison PS2251-21 powers external SSDs with incomparable data transfer speeds of up to 4000 MB/s and up to 16TB of storage capacity. On top of the extreme performance and capacity, the single PCB design provides the portability you need and opens up the world of instant storage of 8K and iOS ProRes videos during live recording. U21 is crafted for everyone seeking an elevated data storage experience while taking a step forward in the evolution of portable data storage.

SOLUTIONS

PS2251-21 (U21)

Features	Specifications
Interface	- USB 4 (40Gbps) - Compliant with USB 3.2 Gen 2x2 (20Gbps) - Compliant with USB 3.2 Gen 2x1 (10Gbps) - Compliant with USB 3.2 Gen1 (5Gbps) - Compliant with USB 2.0 (480Mbps)
NAND Characteristics	- 4 Channels with 16 Chip Enable (CE) counts within single-chip design - Up to 1600 MT/s transfer rate - 500GB to 16TB capacity support - TLC and QLC NAND flash technology support - Compliant with Toggle 1.0/2.0/3.0/4.0 NAND flash interfaces - Compliant with ONFI 2.0/3.0/4.1 NAND flash interfaces - 1.2V NAND IO operating voltage supply
Performance	- Up to 4000 MB/s sequential read speed - Up to 4000 MB/s sequential write speed
Data Reliability	- LDPC ECC protection
OS Compatibility	- Windows XP and later versions - MAC OS 10.8 and later versions - Linux kernel 2.4.10 and later versions
Temperature Range	- Operating range: 0~70 °C - Storage range: -40~85 °C
Environmental	- Humidity: 20%~90%
Certification	- USB IF Compliance

Find more information and resources at: **phisonblog.com** and **phison.com**