

PHISON *PASCARI*

SA52P

Breathe new life into legacy servers,
NAS, and cold storage



PHISON

Servers and NAS produced in the past five to ten years have plenty of life available, especially for the low computing demands of storage. Refurbishing these existing servers and NAS is an excellent cost-saving and eco-conscious way of improving performance and reliability during a time when complete replacements are quite cost-prohibitive.

Many technological advances have occurred since these servers and NAS were put into production environments, including faster NAND and new Phison memory controllers. A simple refresh of the hardware, beginning with Phison Pascari SA52P SSDs, breathes new life into legacy servers, extending usability for many more years to come.

The Challenge

- NAND shortage driving costs for RAM and solid-state storage up
- Sourcing RAM and storage is a difficult endeavor
- The shortages make building out new storage server fleets extremely costly
- Existing servers with hard drives are near the end of MTBF life

The Solution

- Upgrade and refurbish existing server fleet with Phison Pascari SA52P SATA SSDs
- Pascari SA52P modernizes existing server fleets
- SSDs consume less energy and have zero vibration
- Environmentally friendly – upcycling prevents e-waste



SA52P Highlights

- Power Loss Protection (PLP)
- TCG Opal 2.0 Support
- AES-XTS 256-bit Encryption
- End-to-end Data Path Protection



Upgrading to Pascari SA52P SSDs from hard disks brings many benefits, including substantial read and write performance improvements, lightning-fast latency, and superior energy efficiency. SSD performance is next level, delivering incredible sequential read and write speeds up to 530MB/s and 500MB/s – nearly double that of comparable high-performance hard drives.

For random read and write performance, the Pascari SA52 excels with up to 98K and 35K IOPS read and write, respectively. The reduced latency from higher-speed NAND also means the server or NAS can service more concurrent connections simultaneously, too.

That’s multiple orders of magnitude faster than hard disks. There’s also the dependability of a fresh set of drives compared to older drives past life expectancy, and aged to where failures can become more frequent, satisfying the reliability needs of servers and NAS use case. All these improvements come with a rated 2 million MTBF life and 5-year limited warranty for endurance that servers and NAS depend on.

The Pascari SA52P has zero moving internal parts, which means there’s no vibration or noise, resulting in fewer points of failure. Energy consumption is miniscule as well, sipping a mere 2.7-to-3.3-watts under load or 1.3-to-1.7-watts at idle, depending on capacity.

The Pascari SA52P provides the path to modernize legacy servers with faster and more dependable storage for low-compute needs, prolonging the use of existing servers during unprecedented shortages. This reduces e-waste by keeping systems in use for a longer period for added eco-consciousness.

Upcycle legacy servers and NAS with dependable and high-performance Pascari SA52P SSDs today!

Phison PASCARI SA52P Enterprise SSD Specifications

| Pascari SA52P SATA Specifications | | | | | | |
|-----------------------------------|------------|----------|----------|----------|----------|----------|
| Capacity | 240GB | 480GB | 960GB | 1.92TB | 3.84TB | 7.68TB |
| Interface | SATA III | SATA III | SATA III | SATA III | SATA III | SATA III |
| NAND Flash | 3D TLC | 3D TLC | 3D TLC | 3D TLC | 3D TLC | 3D TLC |
| Sequential Read (MB/s) | 530 (Est.) | 530 | 530 | 530 | 530 | 530 |
| Sequential Write (MB/s) | 350 (Est.) | 500 | 500 | 500 | 500 | 500 |
| 4K Random Read (IOPS) | 88K (Est.) | 94K | 98K | 98K | 98K | 98K |
| 4K Random Write (IOPS) | 12K (Est.) | 24K | 30K | 35K | 30K | 19K |
| Read Latency (μs) | TBD | 110 | 110 | 110 | 110 | 115 |
| Write Latency (μs) | TBD | 45 | 45 | 45 | 45 | 50 |
| Max Power (W) | TBD | 2.7 | 2.8 | 2.9 | 3.2 | 3.3 |
| Idle Power (W) | TBD | 1.3 | 1.4 | 1.5 | 1.7 | 1.7 |
| DWPD | 1 | 1 | 1 | 1 | 1 | 1 |
| MTBF (million hours) | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 |
| Warranty | 5 | 5 | 5 | 5 | 5 | 5 |

