

SOLID STATE DRIVES: The Best Fit for Software Defined Storage

Software defined storage (SDS) is an emerging approach to data storage that resolves a growing but fundamental issue: How to store and retrieve massive amounts of data.



NETWORKING APPROACH...

Before SDS:

- Co-mingled control and data planes
- Complex virtual environments
- Difficult-to-manage abstraction and virtualization
- Data stored in siloed servers
- Significant server array investment

After SDS:

- Abstract data from hardware
- Integrated storage, compute, and networking
- Software-orchestrated data storage and retrieval
- Standard interfaces
- Virtualized data path

In summary?

SDS separates storage software and software services from underlying hardware to yield cost benefits, flexibility, and scalability.

SDS BENEFITS RELY ON SMART HARDWARE DECISIONS

SDS reduces the need for—and cost of—future hardware purchases, and that's a big deal. But hardware quality matters. That's where SSDs pull far ahead of HDDs.

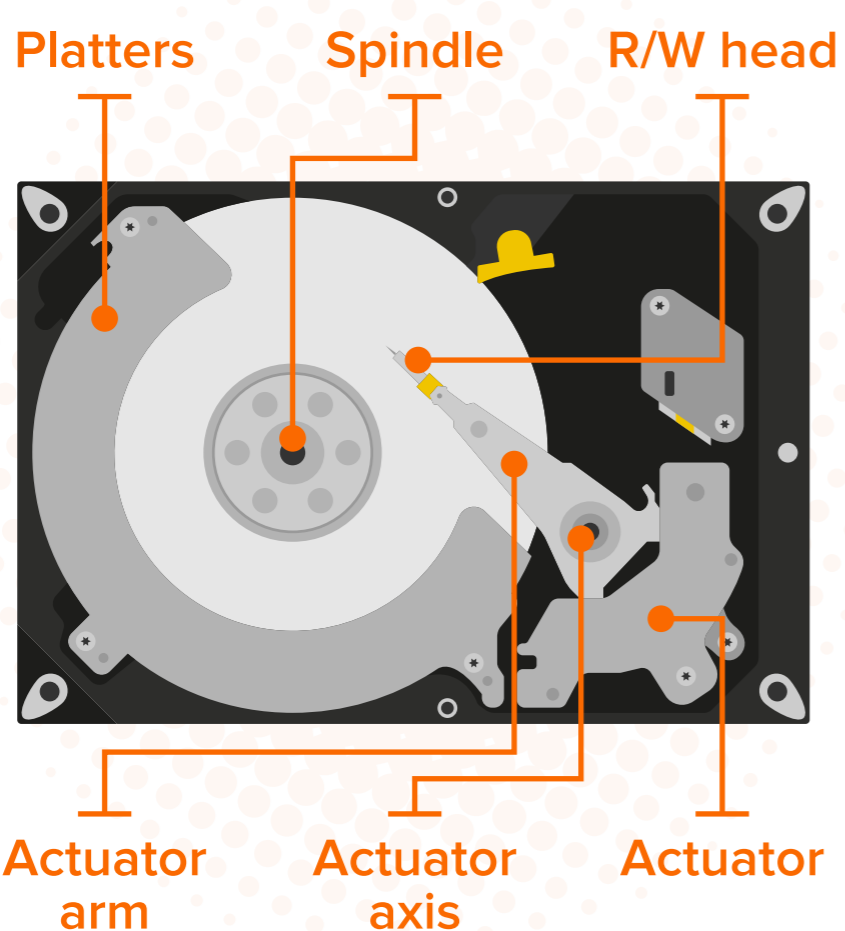
Other SSD benefits:

- Survives vibrations and drops
- Endures temperature extremes
- Instant data access
- Runs cooler and quieter than HDD

HARD DISK DRIVES VS. SOLID STATE DRIVES

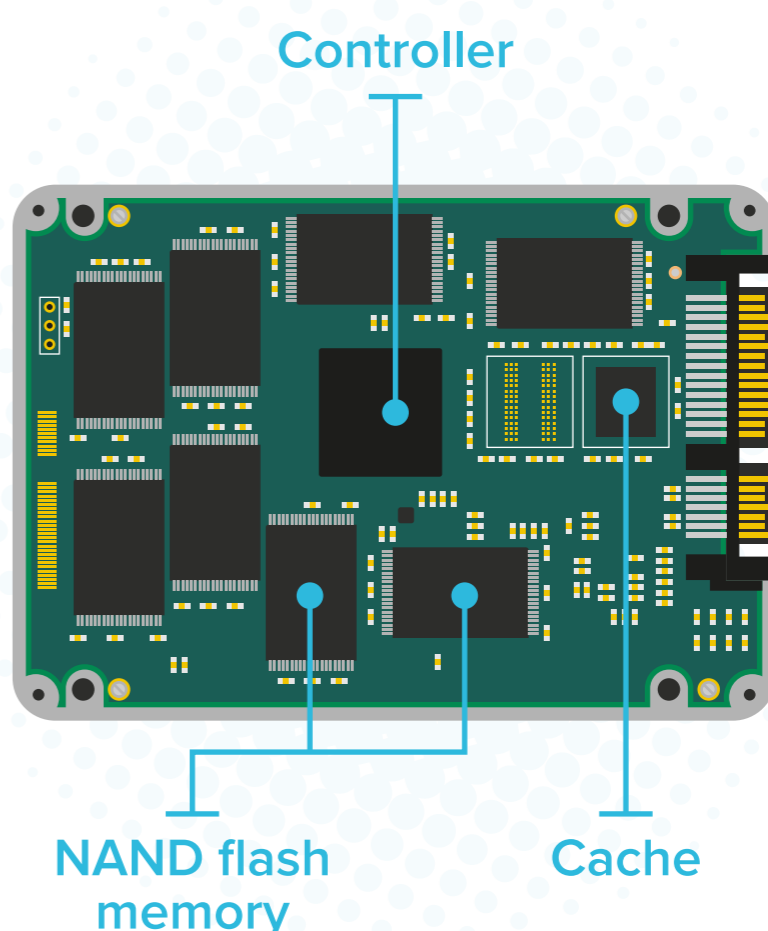
What's the difference between HDD and SSD? *Plenty.*

HDD



- Shock resistant up to **350g/2ms**
- Many** moving (and delicate) parts
- Well suited for **data archival**

SSD



- Shock resistant up to **1500g/0.5ms**
- No** moving parts
- Well suited for **critical, often-accessed data**

SSDs are about **100x** faster than **HDD**—so you can access data instantaneously and accelerate your entire system.

Accelerate your organization with Kingston SSDs

IT teams around the globe trust Kingston, the world's largest independent manufacturer of memory products. The Kingston storage hardware needed to power SDS data centers—now and into the future—delivers superior performance, unparalleled reliability, cost-effectiveness, and efficiency.

Learn more about why the future of business depends on SSD-enabled SDS.

[Download the white paper](#)