

Solid state drives (SSDs) has been widely deployed due to the development of **high-density** and **low-cost** NAND flash memories.

*However, the read performance is degraded because of its low reliability.*

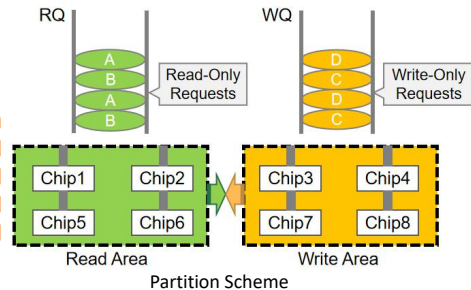
**Work 1:** Interference between Reads and Writes is serious due to the significant latency gap in high-density flash memory.

-- Access Characteristic guided Partition Scheme

**Reliability degraded!**

**Work 2:** The read latency of high-density flash is increasing due to the latency variation among multiple bits.

-- Read Latency Variation Aware Scheme

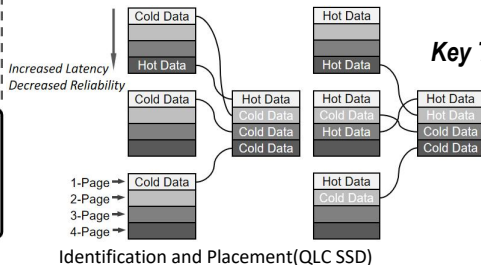


**Key Takeaways:**

Flash memory is developed with large capacity, low cost but low reliability.

**We focus:**

- ✓ Interference between R&W
- ✓ Exploit the read latency variation among multiple pages in a wordline



Identification and Placement(QLC SSD)

