



# IBM® FlashCore® Modules

Built on award-winning IBM FlashCore Technology, FCM2 flash drives deliver extreme performance, greater density, unprecedented scalability, and mission-critical reliability.



## What makes FlashCore technology unique?

Hardware-Accelerated Architecture	Deliver extreme performance, low latency, greater density, unlimited scalability, and mission-critical reliability by using IBM-designed, purpose-engineered NVMe flash storage modules.
Compression with no performance impact	Powerful 2:1 inline hardware-accelerated compression and encryption in every FlashCore Module that has zero impact to performance across the full range of workloads.
Encryption with no performance impact	Supports FIPS140-2 Level 2 encryption with IBM Security Key Lifecycle Manager centralized key management and full hot-swap capabilities without performance impact.
Groundbreaking density and performance	This storage media provides extraordinary density with the large 38.4TB being the highest capacity flash drive available in the market, while still achieving latency as low as 70 microseconds.
Smart data placement	Automatically position the most active data in SLC flash and the fastest QLC pages for highest performance, while the other data is placed on slower QLC pages to provide the highest flash drive density available.
Continuous health monitor for higher endurance	Heat bins get moved around, keeping blocks within 5% of wear. Health binning brings up to a 57% improvement to the endurance of the flash. Heat segregation brings up to a 45% reduction in write amplification.
Optimizing Voltage Thresholds	Think of optimizing voltage as the fountain of youth for flash, shifting voltage as necessary to ensure correct operation of all flash cells regardless of age or wear.
FlashCore Modules capacities	Available raw capacities: 4.8TB, 9.6TB, 19.2TB and 38.4TB Available max raw effective capacities: 22TB, 22TB, 44TB and 88TB

Discover how IBM FlashSystem can help you optimize your data infrastructure visit:  
[ibm.com/it-infrastructure/storage/flash](http://ibm.com/it-infrastructure/storage/flash)