

**WESTERN DIGITAL UNLEASHES NEW ERA OF GROWTH FOR CLOUD MARKET with world’s first 22TB CMR and 26TB ULTRASMR HDDs**

*New Innovation Reduces TCO for Hyperscale Cloud Customers and Accelerates Adoption of SMR*

**SAN FRANCISCO – May 9, 2022** – [**What’s Next Western Digital Event**](https://web.cvent.com/event/35af293e-eff6-4874-8d2f-1e4af1e6623a/summary)–Building on significant technology innovations cultivated over decades, Western Digital (NASDAQ: WDC) today announced that it is sampling its new industry-leading 22TB¹ and 26TB UltraSMR HDDs to select hyperscale cloud customers, further expanding its areal density leadership and delivering customer value by driving TCO lower.

Western Digital’s HDD technology portfolio and areal density leadership puts it at the center of storage innovation. Leveraging its unique [OptiNAND™ technology](https://blog.westerndigital.com/optinand/), energy-assisted PMR ([ePMR](https://blog.westerndigital.com/the-magnetic-attraction-of-epmr/)), triple-stage actuator (TSA), HelioSeal® and now UltraSMR technologies, Western Digital is on a clear path to delivering 30+ TB with ePMR.

“As a longstanding partner of the industry’s leading cloud providers, we understand their unique requirements in building next-generation cloud infrastructure and invested in several HDD innovations we developed alongside our areal density technology,” said Ashley Gorakhpurwalla, EVP and GM, HDD Business Unit, Western Digital. “Our intent with taking this development strategy was not only to address the capacity demands of the world’s largest cloud titans but to deliver on a roadmap that would also support the evolving economics of their data centers for decades to come. With ePMR, OptiNAND and now UltraSMR as the foundation of Western Digital’s HDD roadmap, our cloud customers can continue rapidly scaling their business by taking advantage of our innovations to lower their storage TCO.”

**OptiNAND, UltraSMR and ePMR Drive Cloud TCO Lower**

The new ePMR drives leverage Western Digital’s OptiNAND technology to unlock unprecedented levels of capacity, performance and data resiliency. The 22TB CMR HDD incorporates OptiNAND to deliver areal-density leadership on a mature 2.2TB/platter HelioSeal platform with ten disks.

Combining OptiNAND with proprietary firmware that leverages HDD system-level hardware advancements, Western Digital’s new UltraSMR technology introduces large block encoding along with an advanced error correction algorithm that increases tracks-per-inch (TPI) to enable higher capacity. The result is Western Digital's new 26TB Ultrastar® DC HC670 UltraSMR HDD that delivers 2.6TB per platter, offering 18% more capacity for cloud customers optimizing their stacks to take advantage of the benefits of SMR. With cloud service providers increasingly adding SMR to their datacenter roadmaps, the 26TB capacity serves as a tipping point to accelerate adoption.

Uniquely capable with OptiNAND, the HDDs also include the ArmorCache™ write cache data safety feature, which gives customers the performance of write cache enable (WCE) combined with the data protection of write cache disable (WCD) for added data protection or resiliency in case of an emergency power off (EPO). For the first time in HDD history, this Write Cache Data Safety feature gives users both performance and data protection, no matter which mode is selected. OptiNAND gives the drives a significant performance increase also in WCD mode, which is greatest in random writes with larger block transfers. At common HDD application transfer lengths of 256KB or greater, IOPS and throughput improve by more than 40% relative to a non-OptiNAND drives, with a peak improvement of over 80% at 1MB transfer length. See the [tech brief here for more details](https://documents.westerndigital.com/content/dam/doc-library/en_us/assets/public/western-digital/collateral/tech-brief/tech-brief-write-cache-data-safety.pdf).

**22TB CMR and 26TB UltraSMR HDD Availability:**

* The 22TB Ultrastar DC HC570 HDD and the new 26TB Ultrastar DC HC670 UltraSMR HDD are now sampling to select hyperscale customers. The DC HC570 HDD will begin volume shipments to the channel, and the UltraSMR HDD will begin shipping to select customers in the summer of 2022.
* The [Ultrastar Data60](https://www.westerndigital.com/products/data-center-platforms/ultrastar-data60-hybrid-platform#data60-one-pt-two-pb) and [Data102](https://www.westerndigital.com/products/data-center-platforms/ultrastar-data102-hybrid-platform#data102-two-pb) JBODs will feature the new 22TB CMR Ultrastar HDDs this summer, delivering the industry’s highest storage density in a fully optimized platform for added durability and data reliability for software-defined storage.
* Extending OptiNAND innovations across its HDD portfolio, Western Digital will deliver 22TB [WD Purple® Pro](https://www.westerndigital.com/products/internal-drives/wd-purple-pro-sata-hdd#WD8001PURP) HDDs for smart video/surveillance, [WD Red® Pro](https://www.westerndigital.com/products/internal-drives/wd-red-pro-sata-hdd#WD2002FFSX) HDDs for NAS solutions, and [WD Gold®](https://www.westerndigital.com/products/internal-drives/wd-gold-sata-hdd#WD1005FBYZ) HDDs for system integrators and resellers serving enterprises and SMBs. These drives will be available this summer.

**Resources**

* Blog: [What's Next: Western Digital Unveils Its Mission to Unlock the Potential of Data](https://blog.westerndigital.com/whats-next-western-digital-2022/)
* Media Kit: [What’s Next 2022 – Ultrastar 22TB CMR & 26TB UltraSMR HDDs](https://www.westerndigital.com/content/dam/western-digital/en-us/assets/newsroom/media-kits/2022/05/mediakit-ultrastar-22tb-cmr-26tb-ultrasmr-hdd.zip)

**About Western Digital**

Western Digital is on a mission to unlock the potential of data by harnessing the possibility to use it. With Flash and HDD franchises, underpinned by advancements in memory technologies, we create breakthrough innovations and powerful data storage solutions that enable the world to actualize its aspirations. Core to our values, we recognize the urgency to combat climate change and have committed to ambitious carbon reduction goals approved by the Science Based Targets initiative. Learn more about Western Digital and the Western Digital®, SanDisk® and WD® brands at [www.westerndigital.com](http://www.westerndigital.com/).

1One terabyte (TB) is equal to one trillion bytes and one petabyte (PB) is equal to one thousand terabytes. Actual user capacity may vary depending on operating environment.

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**Forward-Looking Statements**

This news release contains certain forward-looking statements, including statements regarding expectations for the available uses and applications for the company’s products; expectations for the availability and performance of the company’s products, and the development of future products; and expectations for demand and market trends.  There are a number of risks and uncertainties that may cause these forward-looking statements to be inaccurate including, among others: future responses to and effects of the COVID-19 pandemic; volatility in global economic conditions; impact of business and market conditions; impact of competitive products and pricing; our development and introduction of products based on new technologies and expansion into new data storage markets; risks associated with cost saving initiatives, restructurings, acquisitions, divestitures, mergers, joint ventures and our strategic relationships; difficulties or delays in manufacturing or other supply chain disruptions; hiring and retention of key employees; our substantial level of debt and other financial obligations; changes to our relationships with key customers; disruptions in operations from cyberattacks or other system security risks; actions by competitors; risks associated with compliance with changing legal and regulatory requirements and the outcome of legal proceedings; and other risks and uncertainties listed in the company’s filings with the Securities and Exchange Commission, including the company’s most recently filed periodic report, to which your attention is directed. You should not place undue reliance on these forward-looking statements, which speak only as of the date hereof, and the company undertakes no obligation to update these forward-looking statements to reflect subsequent events or circumstances.

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