



HBM2E

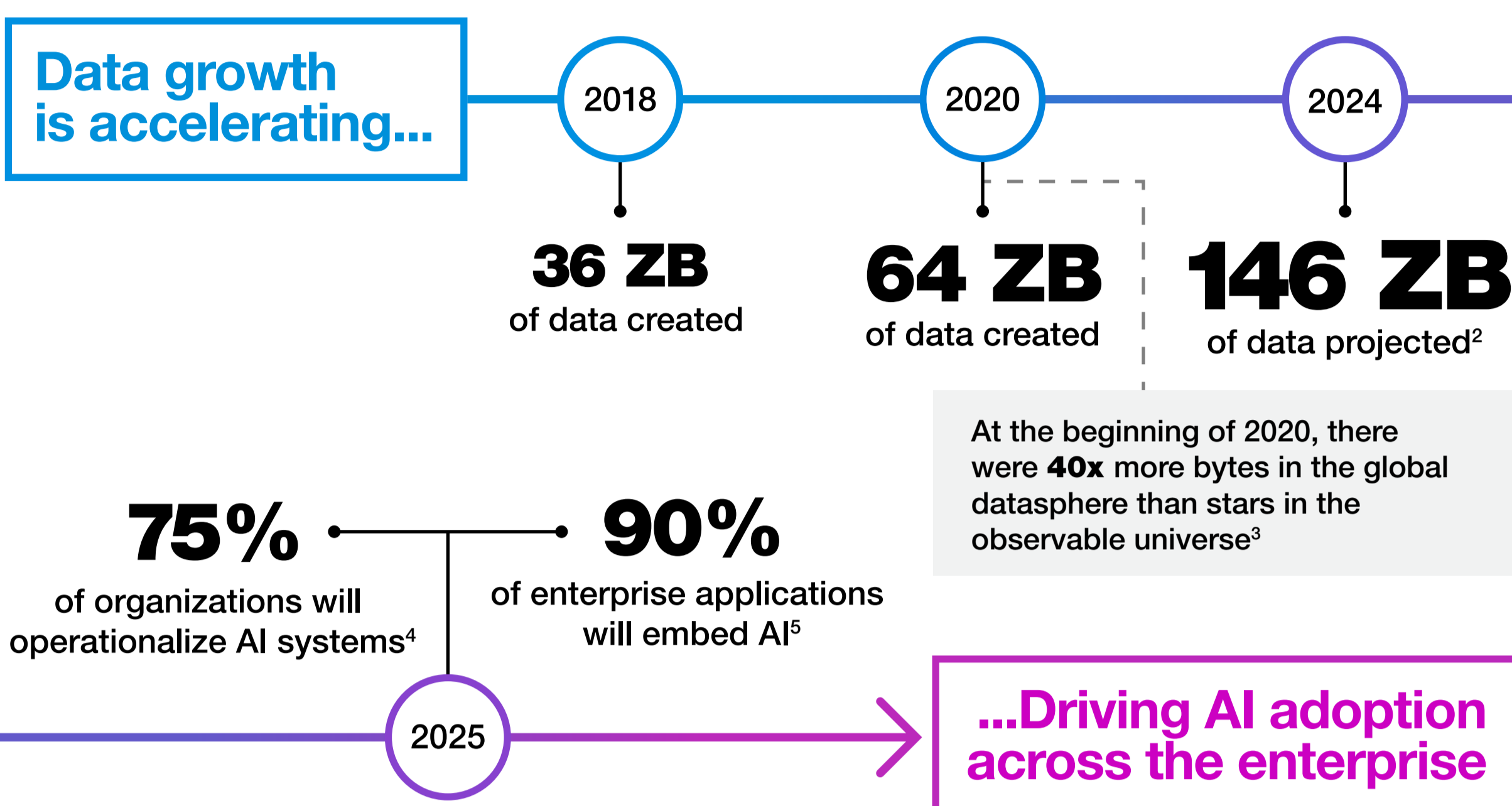
The Leader in High Bandwidth

Modern data centers are using artificial intelligence (AI) and high-performance computing (HPC) environments to solve today's most pressing challenges. But for AI and HPC to operate at their peak, each must be fed massive amounts of data — quickly, efficiently and continuously.

High Bandwidth Memory (HBM) offers ultra-wide bandwidth and scalable density¹ with low power consumption to do just that. At the forefront is HBM2E, the fastest memory on the planet and the flagship of Micron's complete Ultra-Bandwidth Solutions portfolio.

AI transforms data into actionable intelligence

Driving the need for High Bandwidth Memory

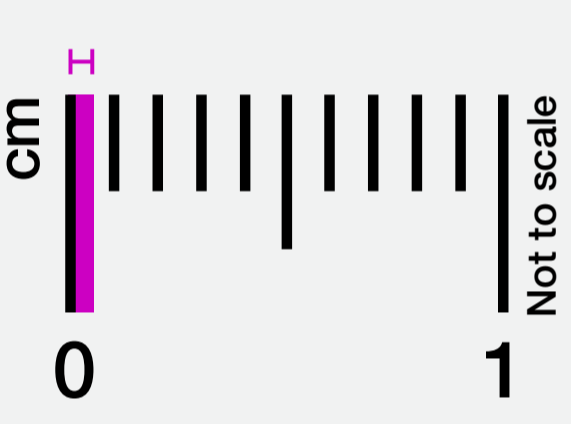


Why is HBM2E better?

Because it's closer.⁶

Closer is faster

Saving millimeters may not sound like a lot, but to data at nanoscale, it is.



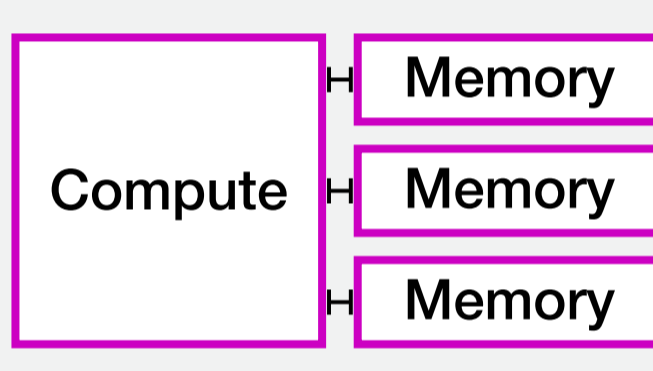
Closer means more bandwidth

It uses a wide (1,024 bits) multichannel I/O for maximum bandwidth and capacity.

1,024 bit multichannel I/O

Closer is cooler

Less power consumption, thanks to the memory's close physical placement next to the compute.



How does HBM2E performance stack up?⁷

8x greater package density compared to GDDR6

HBM2E ●●●●●●●● 16GB
GDDR6 ●● 2GB

7x more package bandwidth than GDDR6

HBM2E ■■■■■■■■
GDDR6 ■

87.5% smaller footprint than GDDR6*

HBM2E ■
GDDR6 ■■■■■■■■■■■■

*for estimated peak workloads in super compute bandwidth scenarios



Why Micron for High Bandwidth Memory

The industry's most complete high performance memory portfolio

- 1** and only company in the world to offer a complete portfolio of Ultra-Bandwidth Solutions
- 20+** years of innovation in stacked DRAM technology
- 40+** years of memory manufacturing expertise and leadership
- 1000+** patents in memory stacking and advanced packaging solutions

When performance is everything, choose the memory that outperforms all.

Learn more: micron.com/hbm2e

Sources

¹ Table at <https://www.micron.com/products/ultra-bandwidth-solutions>
<https://www.micron.com/products/ultra-bandwidth-solutions/gddr6x>
<https://www.micron.com/products/ultra-bandwidth-solutions/hbm2e>

² IDC, "Global DataSphere 2021," https://www.idc.com/getdoc.jsp?containerId=IDC_P38353

³ SeedScientific, "How Much Data Is Created Every Day?," <https://www.visualcapitalist.com/how-much-data-is-generated-each-day>

⁴ Gartner, "Top 10 Data and Analytics Technology Trends for 2020," <https://www.gartner.com/en/newsroom/press-releases/2020-06-22-gartner-identifies-top-10-data-and-analytics-technolo>

⁵ IDC, "IDC FutureScape: Worldwide IT Industry 2020 Predictions," <https://www.idc.com/research/viewtoc.jsp?containerId=US45599219>

⁶ [Micron HBM2E: Performance Is Everything - YouTube](#)

⁷ <http://www.micron.com/products/ultra-bandwidth-solutions>. Comparisons in table based on JEDEC standards and product definitions.

