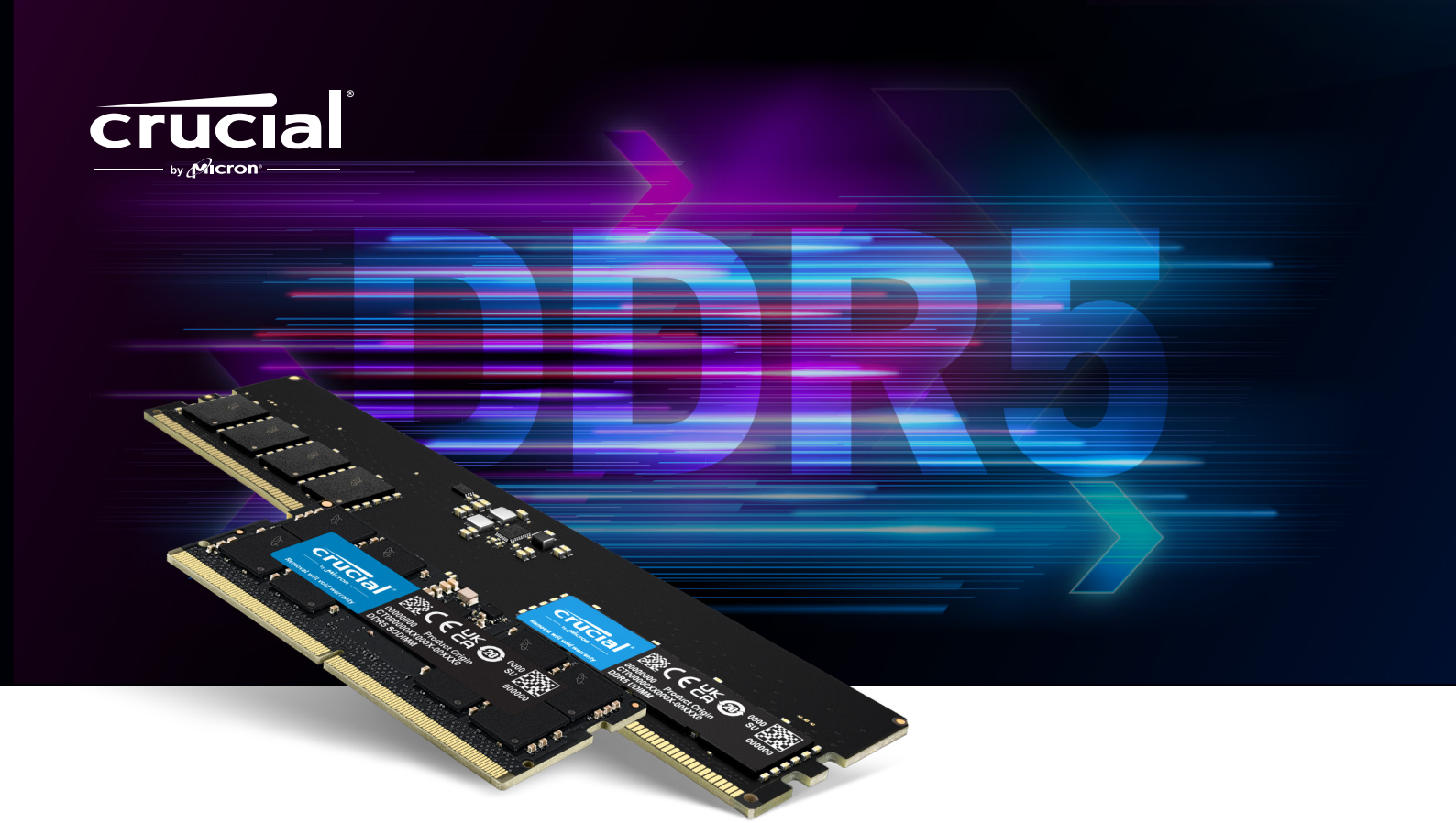

Next-gen performance for evolving computing needs

With high speeds and bandwidth needed for next-gen multi-core CPUs, Crucial DDR5 Memory allows for seamless multitasking, loading, analyzing, editing and rendering even heavy workloads faster — all with higher frame rates, significantly less lag and optimized power efficiency compared to the previous generation (DDR4)[1]. Harness blazing speeds and massive bandwidth of Crucial DDR5 RAM to unlock the full potential of next-gen desktops and laptops.

For more information contact your Micron sales representative.

Best For

Next-gen computing platforms

Key Features

- 4800MT/s — 1.5x the data rates of DDR4[2]
- 8, 16 and 32GB densities
- Nearly 2x the bandwidth of DDR4[4] enabled by:
  - 2x the burst length of DDR4[1]
  - 2x the banks and bank groups of DDR4[1]
  - On-module power management integrated circuit (PMIC)
  - Two independent 32-bit channels per module (64 bits total)
  - Improved refresh schemes
- Intel® XMP 3.0 enabled for easy performance recovery up to 4800MT/s[3]
- On-die ECC (ODECC) for long-term stability[4]

Next-Gen CPUs Need DDR5 RAM

DDR5 is new groundbreaking technology that's engineered to handle the skyrocketing processing demands of next-gen computers[5], taking a giant leap forward in speed and bandwidth from the previous generation.

DDR5 RAM: Next-Level Performance

The phenomenal speed of Crucial DDR5 means you can have multiple Chrome tabs open while watching YouTube, editing family photos, and chatting with friends on social media. To work not just faster but better, Crucial DDR5 is engineered for efficiency so you can load, transfer, and download files faster, with less lag time.

- Two independent 32-bit channels per module for twice the concurrent operations
- 2x the banks and bank groups increase data bus efficiency
- Doubling the burst length to 16 enables higher data rates and bus efficiency

Intel XMP 3.0 enabled for easy performance recovery up to JEDEC speeds

Crucial DDR5 Desktop Memory is the standard JEDEC DDR5 RAM that is Intel® Extreme Memory Profile (XMP) 3.0 technology enabled for easy performance recovery. This means that even with CPUs that have suppressed memory speed, Crucial DDR5 can reach its full speed of 4800MT/s with XMP enabled. With XMP, break through those CPU limitations to realize the full speed of JEDEC DDR5 RAM.

Future DDR5 Speeds and Densities

As DDR5 technology matures over its five to seven-year lifespan, new products will become available that are even faster, in more densities.

Speed
Products with speeds of 4800MT/s launched in late 2021. As the technology matures, new products will reach speeds up to 8400MT/s, which is 2.63x faster than DDR4.[3]

Density
Products in densities of 8, 16 and 32GB launched in late 2021. As the technology matures, new products will reach densities of 128GB, which is 4x larger than DDR4.[2]

Micron X Crucial — quality and tested reliability you can trust

As the vertically integrated consumer brand of Micron, Crucial is trusted by millions for reliability, performance, and compatibility. Unlike module assemblers, our unique relationship with Micron involves a deeper level of engineering that delivers powerful performance you can trust. When it comes to memory, don't settle for less.

Unique Industry Relationships

Crucial works with top-tier CPU and motherboard vendors to perform stringent pre-market testing and validation to ensure consistent performance.

- Intel
- AMD
- ASUS
- Republic of Gamers
- AORUS
- MSI
- ASRock
- Gigabyte

crucial.com/ddr5

1. Under memory-intensive workloads, DDR5 can deliver up to 1.87x the bandwidth, per an internal simulation of dual ranked x8 modules in client platforms, due to double burst length (16), double the banks (32) and bank groups (8), and higher speed than DDR4, as established by JEDEC, an independent standardization body for the microelectronics industry.
2. DDR5 launch data rate of 4800MT/s transfers 1.5x (50%) more data than the maximum standard DDR4 data rate of 3200MT/s. JEDEC projected speeds of 8400MT/s are 2.6x faster than DDR4's maximum standard data rate of 3200MT/s.
3. Crucial DDR5 desktop memory modules (UDIMM) have been tested by Intel's XMP test plans and added to the Intel XMP certification list, which can be found on Intel.com. Altering clock frequency or voltage may result in damage to computer components, and Micron disclaims any and all liability for such damage. Warranty voided if Crucial DRAM modules are set to overclock beyond JEDEC specifications.
4. Crucial DDR5 Desktop Memory is non-ECC memory. The ECC as it pertains to RDIMMs, LRDIMMs, ECC UDIMMs and ECC SODIMMs is a function that requires additional DRAM at the module level so that platforms, such as servers and workstations, can correct for errors on individual modules (DIMMs). On-die ECC (ODECC), however, is a feature of the DDR5 component specification and should not be confused with the module-level ECC feature. Crucial DDR5 Desktop Memory is built with DDR5 components that include ODECC, however these modules do not include the additional components necessary for system level ECC.
5. Compared to published DDR4-3200 speeds.