CRUCIAL DDR5 LAPTOP MEMORY

Not Just Faster. *Better*.

Crucial DDR5 Laptop Memory powers extreme on-the-go performance

Mobile workstations need higher-memory bandwidth to analyze huge data sets, compile complex codes, and render and edit images or 8K videos. Ultimately, business laptop users need next-generation memory for effortless multitasking, seamless switching between apps, and even for opening more browser tabs without lag. Crucial DDR5 Laptop Memory delivers the essential speed and bandwidth needed to satisfy the demands of busy professionals on the go.

Best For

Next-generation laptops and mobile workstations

Key Features

- 4800MT/s — 1.5x the data rates of DDR4[5]
- 8, 16 and 32GB densities[6]
- Nearly 2x the bandwidth of DDR4[4] enabled by:
  - o 2x the burst length of DDR4[2]
  - o 2x the banks and bank groups of DDR4[2]
  - o On-module power management integrated circuit (PMIC)[7]
  - o Two independent 32-bit channels per module (64 bits total)
  - o Improved refresh schemes
- On-die ECC (ODECC) for long-term stability[8]

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Boost your workforce productivity

The innovation of Crucial DDR5 Laptop Memory can empower your computer to transfer data 50% faster than DDR4 at launch, resulting in shorter load times, file transfers, downloads, lag time and improved refresh rates[2], which can translate to higher workforce productivity. Due to higher bus efficiency, DDR5 technology is not just faster than the previous generation, it's *better*[1].

Multitask seamlessly on the go

Crucial DDR5 Laptop Memory offers 50% faster speeds than DDR4 at launch[4], empowering laptop users with extreme performance right out of the box. Even more impressive, Crucial DDR5 Laptop Memory is optimized for enhanced performance and multitasking, not just during testing, but in real-world work conditions. Opening more browser tabs and switching between apps now feels more responsive than ever.

Innovative channel architecture for workstation stability and performance

Significant improvements to DDR5 channel architecture can help your workforce get more work done in less time. With nearly 2x the bandwidth of DDR4, enabled by faster speeds, longer burst lengths, twice the banks and bank groups, two 32-bit channels, and improved refresh schemes, Crucial DDR5 still outperforms DDR4 with higher latency numbers[10].

Optimize power efficiency when scaling your business

For improved efficiency, Crucial DDR5 Laptop Memory introduces on-module voltage regulation with a power management integrated circuit (PMIC), which was on the motherboard with older memory technologies. This results in improved signaling and cleaner power regulation for the modules[7]. Moreover, DDR5's on-module operating voltage is only 1.1V compared to DDR4's 1.2V.

Micron quality – 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 collaboration to squeeze every ounce of performance from our products without compromising reliability. With Micron's 43+ years of manufacturing excellence and Crucial's 25+ years of consumer product development, you get access to superior quality memory products backed by our limited lifetime warranty[9], product information, training opportunities, videos, white papers, award-winning customer support, 1:1 assistance from an experienced sales network, better pricing, and consistent inventory from a trusted, experienced manufacturer. When it comes to memory, don't settle for less.

Available Parts

Crucial DDR5 Laptop Memory is available for DDR5-enabled laptops.
View our complete offering at **www.crucial.com.**

Crucial® DDR5 Laptop Memory*	
Density	8GB, 16GB, 32GB
Speed	4800MT/s
Voltage	1.1V
Pin count	262-pin

Laptop must be DDR5 enabled. Crucial DDR5 Laptop Memory is not compatible with DDR4 laptops.

1. DDR5 architecture includes efficiency improvements that deliver 36% more system bandwidth than DDR4, even at the same theoretical speeds of 3200MT/s, per an internal simulation of dual ranked x8 modules in client platforms. Combined with lower voltage per module, this design provides superior (better) performance.
2. 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 instead of 8), double the banks (32 instead of 16) and bank groups (8 instead of 4), and significantly higher speed than DDR4. It is enabled to support scaling memory performance with improved channel efficiency, even at higher speeds, not just during testing, but under real-world condition, as established by JEDEC, an independent standardization body that develops open standards for the microelectronics industry.
3. Laptop must be DDR5 enabled. Crucial DDR5 Laptop Memory is not compatible with DDR4 laptops.
4. DDR5 launch speeds of 4800MT/s are comparable to extreme-performance DDR4 memory speeds and are 1.5x (50%) faster than maximum standard DDR4 speeds of 3200MT/s. DDR5 launch speeds of 4800MT/s deliver 1.87x the bandwidth of the maximum standard DDR4 speeds of 3200MT/s.
5. 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.
6. Densities at launch and those planned are defined by JEDEC for the life of the DDR5 generation of memory.
7. DDR5 modules (DIMMs) introduce voltage regulation on the module through a power management integrated circuit (PMIC), which enables cleaner power regulation and reduces the scope of DRAM power delivery network (PDN) management on the motherboard for increased efficiency.
8. Crucial DDR5 Laptop 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 Laptop Memory is built with DDR5 components that include ODECC, however these modules do not include the additional components necessary for system level ECC.
9. Limited lifetime warranty valid everywhere except Germany and France, where warranty is valid for ten years from the date of purchase.
10. DDR5 launch speeds of 4800MT/s delivers 1.87x the bandwidth of the maximum standard DDR4 speeds of 3200MT/s. Despite true latency for DDR5-4800 being longer than DDR4-3200, because of the improved channel efficiency, DDR5 still outperforms DDR4 in effective bandwidth.

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