

# CRUCIAL DDR5 DESKTOP MEMORY



## Not Just Faster. Better.

# Empower your business for the next-generation, multi-core CPUs

Workplace desktops and workstations need higher-memory bandwidth to feed next-generation CPU cores, whether analyzing huge data sets, compiling complex codes, rendering, or editing images or 8K videos. Ultimately, mainstream business and workstation users need memory that supports effortless multitasking, switching seamlessly between apps, and even more open browser tabs without lagging systems. Crucial DDR5 Desktop Memory delivers the essential speed and bandwidth to satisfy the demands of next-generation multicore CPUs.

### **Best For**

Next-generation computing platforms

### **Key Features**

- 4800MT/s
- 8, 16 and 32GB densities
- 1.87x the bandwidth of DDR4<sup>4</sup>
- 1.5x the data rates of DDR4<sup>5</sup>
- 2x the burst length of DDR4 (BL 16)<sup>2</sup>
- 2x the banks (32) and bank groups (16) of DDR4<sup>2</sup>
- On-module power management integrated circuit (PMIC)
- 2 independent 32-bit channels per module (64 bits total)
- Limited lifetime warranty<sup>9</sup>



#### Boost your workforce productivity

The innovation of Crucial DDR5 Desktop Memory can empower your business computers to transfer 50% more data than DDR4 at launch, resulting in faster load times, file transfers, downloads, refresh rates, and less lag time<sup>4</sup>, translating to higher workforce productivity. Plus, due to higher bus efficiency, DDR5 technology is not just faster than the previous generation, it's better<sup>1</sup>.

#### Multitask seamlessly

Crucial DDR5 Desktop Memory offers 50% faster speeds than its predecessor at launch<sup>4</sup>, empowering mainstream business and workstation users alike with extreme performance right out of the box. Even more impressive, Crucial DDR5 Desktop Memory is optimized for enhanced performance and multitasking, not just during testing, but in real-world conditions. Opening more browser tabs and switching between apps now feels more responsive than ever.

#### Future-proof your workstation for stability and performance

Crucial DDR5 Desktop Memory takes an extreme step forward in engineering over DDR4 with two independent 32-bit channels per module for optimized performance. Designed with on-die ECC (ODECC)<sup>8</sup> at the component level for long-term stability, Crucial DDR5 Desktop Memory is engineered to maintain the same reliability as the previous generation, even with the rigorous demands of next-gen workstation applications and programs.

#### Optimize power efficiency when scaling your business

For improved efficiency, Crucial DDR5 Desktop 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 for the modules7. 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<sup>9</sup>, 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 desktop memory is available for nearly every system. View our complete offering at www.crucial.com.

Crucial <sup>®</sup> DDR5 Desktop Memory*	
Density	8GB, 16GB, 32GB
Speed	4800MT/s
Voltage	1.1V
Pin count	288-pin



\*Computer must have a DDR5-enabled CPU and motherboard. Crucial DDR5 Desktop Memory is not compatible with DDR4 motherboards.

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- 1. DDR5 architecture includes efficiency improvements that deliver 36% more system bandwidth than DDR4, even at the same theoretical speeds of 3200MT/s, due to the high bus

DBR5 architecture includes efficiency improvements that deliver 36% more system bandwidth than DDR4, even at the same theoretical speeds of 3200MT/s, due to the high bus efficiency of DDR5 technology. Combined with lower voltage per module, this design provides superior (better) performance.
Under memory-intensive workloads, DDR5 delivers 1.87x the bandwidth as a result of double burst length, double the banks and bank groups, 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 microtelectronics industry.
Computer must have a DDR5-enabled CPU and motherboard. Crucial DDR5 Desktop Memory is not compatible with DDR4 motherboards.
DDR5 launch speeds of 4800MT/s delivers 1.87x the bandwidth or the maximum standard DDR4 speeds of 3200MT/s.
DDR5 launch data rate of 4800MT/s transfers 1.5x (50%) more data than the maximum standard DDR4 data rate of 3200MT/s.
Denstiles at launch and those planned are defined by JEDEC for the life of the DDR5 generation of memory.
DDR5 modules (DIMMs) introduce voltage regulation on the module through a power management integrated circuit (PMIC), which enables better power regulation and reduces the scope of DR5 besktop Memory is non-ECC memory. The ECC as it pertains to RDIMMs, LECC UDIMMs and ECC SODIMMs is a function that requires additional DRAM at the module level ECC feature. Crucial DDR5 besktop Memory is built with DDR5 components that include 0DECC, however, is a feature of the DDR5 openstop memory.
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