

Intel® Core™ Processors (Series 2)

Deliver powerful, flexible edge innovations, faster

Intel® Core™ processors power AI and compute-intensive use cases at the edge – with tailored performance, high-performing graphics capabilities, flexible LGA designs, and long-life availability and support.

Get more choices for tailored performance at the edge. Intel® Core™ 200S series processors feature options with up to 24 cores, and P-core turbo frequency of up to 5.6 GHz. Help build what you need for compute-intensive AI, data processing, multitasking, and more – all optimized for performance at the edge.

Unlock performance for AI at the edge with Intel® Core™ processors

Tailor Performance for Versatile Edge Computing Demands

Intel® Core™ 200S series processors offer a range of performance options for AI and diverse workloads at the edge, with up to 8 P-cores and 16 E-cores. Handle compute-heavy workloads with a P-core frequency of up to 5.6GHz, up to 200 MHz faster than the previous generation. Innovate for diverse use cases with up to 48 PCIe lanes for more accelerators, peripherals, and sensors.

Enable Rich Graphics and Media Experiences

Intel® Core™ processors bring robust graphics capabilities to the socketed edge platform, across many use cases. Integrated Intel® Graphics supports a range of visually engaging experiences, from smooth video wall synchronization to detailed user interfaces, enabled by Intel X® architecture, Pipelock, Genlock, 8K HDR support, and more.

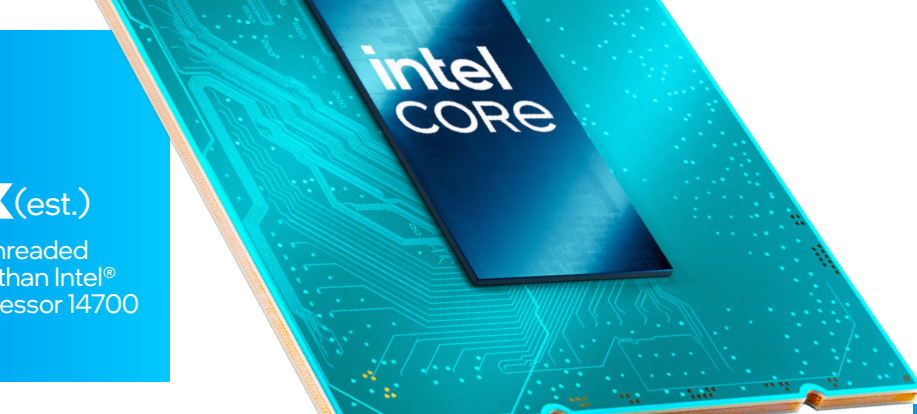
Accelerate Time to Market and Extend Longevity

Intel® Core™ 200S series processors are built to help expedite product development and time-to-market with LGA-compatible designs while facilitating faster, easier upgrades with backwards compatibility for 12th, 13th, and 14th Gen Intel® Core™ processors. Extend support and reliability with up to 10 years of availability⁴ and Windows 10 IoT Enterprise LTSC 2021 & Windows 11 IoT Enterprise LTSC 2024.

Intel® Core™ 7 processor 251E delivers

Up to **1.08x**(est.) faster **multi**-threaded performance than Intel® Core™ i7 processor i4700

Up to **1.06x**(est.) faster **single**-threaded performance than Intel® Core™ i7 processor i4700



As estimated by SPECrate®2017_int_base (1-copy and n-copies) on Intel® Core™ 7 processor 251E vs. Intel® Core™ i7 processor i4700. Individual system results may vary as power and performance are affected by use, configuration and other factors. Details at [intel.com/performanceindex](https://www.intel.com/performanceindex).

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Deliver powerful, flexible edge innovations, faster

Retail, banking, education, hospitality

Easily deploy numerous edge devices with a top-to-bottom SKU stack, and powerful compute headroom to support data generation and analysis. Drop in compatibility with previous generations help reduce product development time and cost.



Industrial

Support Industry 4.0 use cases such as AI automation, robotics, and real-time control on the factory floor. Manufacturers can benefit from more consistency, predictability, and safety while driving higher output and overall equipment effectiveness.



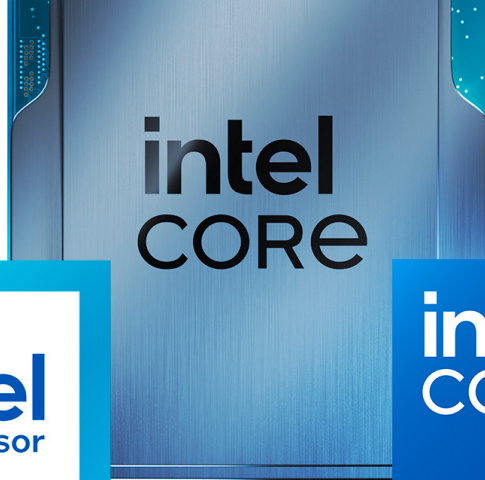
Healthcare

Deliver exceptional performance and responsiveness for data-intensive use cases at the medical edge. This platform supports detail-rich displays to help clinicians with AI-assisted workflows and can help meet power and efficiency limitations for devices in and around hospital environments.



Cities, Government and critical infrastructure

Process and store more data for more video streams compared to prior gen, in smart city use cases while delivering integrated graphics to support edge inference in hard-to-reach places.



intel
processor

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CORE

Unlock performance for AI at the edge.

Learn more about the Intel® Core™ Processors (Series 2) at intel.com/content/www/us/en/products/details/processors/core/edge

Notices and disclaimers

¹Intel® Hyper-Threading Technology, Intel® Turbo Boost Max Technology 3.0, and Intel® Thermal Velocity Boost are only available on Performance-cores.

²Socket compatible with 12th, 13th, and 14th Gen Intel® Core™ processors for edge.

³Intel does not commit or guarantee product availability or software support by way of road map guidance. Intel reserves the right to change road maps or discontinue products, software, and software support services through standard EOL/PDN processes. Contact your Intel account rep for additional information.

⁴Support for Intel® Thread Director is expected in Windows 11 IoT Enterprise LTSC.

⁵Available on select SKUs.

⁶Performance results are based on testing as of 12/02/2024. Software and workloads used in performance tests may have been optimized for performance only on Intel microprocessors. For more information go to [http://www.intel.com/benchmarks](https://www.intel.com/benchmarks). Availability of accelerators varies depending on SKU. Visit the Intel® Product Specifications page for additional product details. Performance varies by use, configuration, and other factors. Learn more at intel.com/PerformanceIndex. Performance results are based on testing as of dates shown in configurations and may not reflect all publicly available updates. No product or component can be absolutely secure.

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