

intel.
ATOM

intel.
CORE

i3

intel
INSIDE

AI, graphics, and media processing meet power-efficient performance

Intel Atom[®] processors x7000E Series and Intel[®] Core[™] i3 processors

Intel[®] AVX2 and Intel[®] Deep Learning Boost plus Intel[®] UHD Graphics bring new capabilities to 6W–15W edge applications. Now even compact, fanless designs can support accelerated AI, media processing workloads, and up to three 4K displays with minimal power consumption.

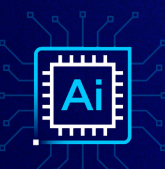
Efficiency plus performance for edge applications

Intel Atom[®] processors x7000E Series

Up to four Efficient-cores
Up to 24 execution units (EUs)
6W–12W TDP

Intel[®] Core[™] i3-N305 processor

Eight Efficient-cores
32 execution units (EUs)
9W–15W TDP



Designed for deep learning AI¹

Intel[®] Deep Learning Boost

Accelerates deep learning inference workloads on the CPU.

Intel[®] UHD Graphics

Integrated GPU processes inference workloads at FP32, FP16, and INT8 precision.

Fully supported by the OpenVINO[™] toolkit

Optimized inference engines autodetect hardware and load balance workloads across CPUs, GPUs, and accelerators.



Supports ultrahigh-definition displays and video processing¹

Intel[®] UHD Graphics

Driven by Intel[®] Xe architecture, the integrated GPU drives up to three concurrent 4K60 SDR displays.

Pipelock synchronization

Sync two displays for video wall applications using Pipelock on Windows OS.

Media API

Programmable processing for precise control of image quality, encode/decode performance, and acceleration.



Enhanced for embedded IoT edge applications¹

Real-time computing

Intel[®] Time Coordinated Computing² and integrated 2.5GbE Time-Sensitive Networking-capable MAC to support deterministic workloads and networking.

Hardware virtualization

Intel[®] VT-d/x plus support for open source and proprietary hypervisors allows workloads to run in isolation simultaneously.

Multiple operating systems

Run Windows, multiple versions of Linux, plus real-time operating systems from Wind River, QNX, and others.

Significant gains in performance and capabilities

Intel[®] Processor N200 posts significant performance gains over Intel[®] Pentium[®] N6415 processors.

Up to
1.30x

faster single-thread performance³

Up to
1.68x

faster graphics performance³

Up to
1.09x

faster multithread performance³

Up to
6.85x

faster GPU object detection inference performance³

Do more within a 6W–15W power budget



Retail

Small footprint and mobile point-of-sale (POS) systems with computer vision and multidisplay support.



Healthcare

Portable imaging devices with UHD graphics and onboard deep learning AI.



Office automation

Copiers, printers, and scanners with AI-powered image and text recognition.



Safety and security

Entry-network video recorders and appliances with deep learning AI capabilities.

Learn about Intel Atom processors x7000E Series and Intel Core i3 processors.

[Visit intel.com/atomx7000e-iot](https://www.intel.com/atomx7000e-iot)

intel.

Notices and disclaimers

- Not all features are available on every SKU.
- Intel[®] Time Coordinated Computing will not be available at launch. It is part of a planned update after launch.
- Performance varies by use, configuration, and other factors. Learn more at [intel.com/processors](https://www.intel.com/processors).

Performance results are based on testing as of dates shown in configurations and may not reflect all publicly available updates. See backup for configuration details. No product or component can be absolutely secure.

Intel is committed to respecting human rights and avoiding complicity in human rights abuses. See Intel's Global Human Rights Principles. Intel[®] products and software are intended only to be used in applications that do not cause or contribute to a violation of an internationally recognized human right.

Intel[®] technologies may require enabled hardware, software, or service activation.

Your costs and results may vary.

© Intel Corporation. Intel, the Intel logo, and other Intel marks are trademarks of Intel Corporation or its subsidiaries. Other names and brands may be claimed as the property of others.

0123/BC/CMD/PDF