More-powerful processors for the edge intel.

With more options, including new mobile industrial capabilities core

13th Gen Intel® Core™ processor family for IoT edge Accelerate time to market for your most demanding IoT

projects with higher processor performance. More portfolio flexibility helps providers design and deploy the targeted solutions their customers need.

Up to

faster multithread performance¹

Up to

performance¹

faster single-thread

Up to

faster in CPU image

performance¹

Estimated performance

classification inference

and configurations, visit intel.com/PerformanceIndex. Results may vary.

compared to 12th Gen Intel® Core™ processors for IoT. For workloads

a feature-rich set of offerings

Boost solution success with

13th Gen Intel® Core® mobile processors

and graphics



Up to **14** cores and up to **20** threads Up to 24 MB Intel® Smart Cache

Soldered-down **BGA** package

Industrial-grade capabilities²

Industrial use conditions, extended temp ranges, in-band error correction code memory, real-time capabilities on select SKUs

intel. iRIS_{xe}



management, and bezel correction

I/O, memory, and connectivity

Up to 28 PCIe lanes: 2x4 PCIe 4.0 on

CPU (plus 1x8 PCIe 5.0 on H-series),

up to 12x PCIe 3.0 on PCH Up to four Thunderbolt™ 4/USB4 lanes

2.5GbE TSN MAC/PHY

Up to DDR5-4800, LPDDR5x-6400,3 DDR4-3200, LP4x-4266 Integrated 1GbE MAC, support for

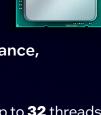
Included in both offerings

Maximize performance, memory, and I/O Up to 24 cores and up to 32 threads

13th Gen

Intel® Core[™]

processors



intel. CORE

LGA-socket compatibility with 12th Gen Intel® Core™ processors

Up to 36 MB Intel Smart Cache

Portfolio flexibility Mainstream and IoT (embedded use

condition)4 SKUs running the IoT

software stack, real-time capabilities on select SKUs



Pipelock, 2x2 combined mode, EDID management, and bezel correction

I/O, memory, and connectivity Up to 48 PCIe lanes on CPU + PCH,

including up to 16x PCIe 5.0 lanes

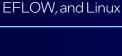
Two optional discrete Thunderbolt 4/ **USB4** lanes

2x 2.5GbE TSN MAC

Up to DDR5-5600, up to DDR4-3200 Integrated 1GbE MAC, integrated

Accelerated AI Intel® Distribution of OpenVINO™ toolkit





(1)

Long-life availability⁴

OS support

Windows 10 IoT

Enterprise 2021 Long-Term Servicing

Channel (LTSC),

More value for lengthy certification cycles



Retail, banking, hospitality,

Build video walls with up to four 4K60 HDR synchronized displays and AI analytics. Point of sale (POS), kiosks, video walls, digital security, and digital signage

Healthcare

Accelerate Al and graphics in

diagnostics while driving value from

education

Intel® oneAPI toolkit with write-once, deploy-anywhere

flexibility

in varied industries



long product life cycles. Ultrasound imaging, medical carts, endoscopy, and clinical devices

Military and aerospace Powerful multitasking in space-

environments. Embedded computing for vehicles, avionics, and intelligence, safety, and reconnaissance (ISR)

constrained applications and ruggedized

(AIPC), industrial PCs, vision systems, programmable logic controllers, and autonomous mobile robots

PCIe lanes. Al video at the edge and network video recorders (NVRs)

Notices and disclaimers

Learn more about 13th Gen Intel®

Smart cities Support more video streams and flexible expansion with more display pipes and

Core[™] mobile processors. intel.com/13thgencoremobile-iot>

> of 13th Gen Intel® Core™ processors. intel.com/13thgencore-iot >

Explore the capabilities

intel

1. Performance varies by use, configuration, and other factors. Learn more at edc.intel.com/content/www/us/en/products/performance/benchmarks/internet-

2. Available on select SKUs. 3. LPDDR5x DRAMs operating in LPDDR5 speed mode are supported. 4. Intel 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

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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. Performance hybrid architecture combines two new core microarchitectures, Performance-cores (P-cores) and Efficient-cores (E-cores), on a single processor die. Select 13th Gen Intel® Core™ processors (certain 13th Gen Intel® Core™ i3 processors and lower) do not have performance hybrid architecture, only P-cores © 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. 1222/BC/CMD/PDF

Industrial Enable real-time-capable features and industrial use conditions on select SKUs. Al-based industrial process control