



Intel® Core™ i9-7980XE Extreme Edition Processor

24.75M Cache, up to 4.20 GHz

☐ Add to Compare

Specifications

Essentials

Performance

Supplemental Information

Memory Specifications

Expansion Options

Package Specifications

Advanced Technologies

Security & Reliability

Ordering and Compliance

Compatible products

Downloads and Software

Essentials

⬇ Export specifications

| | |
|----------------------------|--|
| Product Collection | Intel® Core™ X-series Processors |
| Code Name | Products formerly Skylake |
| Vertical Segment | Desktop |
| Processor Number | i9-7980XE |
| Status | Launched |
| Launch Date | Q3'17 |
| Included Items | Please note: The boxed product does not include a fan or heat sink |
| Recommended Customer Price | - |

Performance

| | |
|--|-------------|
| # of Cores | 18 |
| # of Threads | 36 |
| Processor Base Frequency | 2.60 GHz |
| Max Turbo Frequency | 4.20 GHz |
| Cache | 24.75 MB |
| Bus Speed | 8 GT/s DMI3 |
| # of QPI Links | 0 |
| Intel® Turbo Boost Max Technology 3.0 Frequency [†] | 4.40 GHz |
| TDP | 165 W |

Supplemental Information

| | |
|----------------------------|--------------------------|
| Embedded Options Available | No |
| Datasheet | View now |
| Product Brief | View now |

Memory Specifications

| | |
|--|-----------|
| Max Memory Size (dependent on memory type) | 128 GB |
| Memory Types | DDR4-2666 |
| Max # of Memory Channels | 4 |

ECC Memory Supported ‡ ⓘ No

Expansion Options

| | |
|------------------------------|---------|
| Scalability | 1S Only |
| PCI Express Revision ⓘ | 3.0 |
| Max # of PCI Express Lanes ⓘ | 44 |

Package Specifications

| | |
|----------------------------------|-----------|
| Sockets Supported ⓘ | FCLGA2066 |
| Max CPU Configuration | 1 |
| Thermal Solution Specification ⓘ | PCG 2017X |
| T _{JUNCTION} ⓘ | 94°C |
| Low Halogen Options Available | No |

Advanced Technologies

| | |
|--|---|
| Intel® Optane™ Memory Supported ‡ ⓘ | Yes |
| Intel® Turbo Boost Max Technology 3.0 ‡ ⓘ | Yes |
| Intel® Turbo Boost Technology ‡ ⓘ | 2.0 |
| Intel® Hyper-Threading Technology ‡ ⓘ | Yes |
| Intel® Virtualization Technology (VT-x) ‡ ⓘ | Yes |
| Intel® Virtualization Technology for Directed I/O (VT-d) ‡ ⓘ | Yes |
| Intel® 64 ‡ ⓘ | Yes |
| Instruction Set Extensions ⓘ | Intel® SSE4.1, Intel® SSE4.2, Intel® AVX2, Intel® AVX-512 |
| # of AVX-512 FMA Units ⓘ | 2 |
| Enhanced Intel SpeedStep® Technology ⓘ | Yes |

Security & Reliability

| | |
|-------------------------------|-----|
| Intel® AES New Instructions ⓘ | Yes |
| Execute Disable Bit ‡ ⓘ | Yes |

More support options for Intel® Core™ i9-7980XE Extreme Edition Processor (24.75M Cache, up to 4.20 GHz)



Product Support



Downloads and Software



Support Community



Warranty and
Replacement





All information provided is subject to change at any time, without notice. Intel may make changes to manufacturing life cycle, specifications, and product descriptions at any time, without notice. The information herein is provided "as-is" and Intel does not make any representations or warranties whatsoever regarding accuracy of the information, nor on the product features, availability, functionality, or compatibility of the products listed. Please contact system vendor for more information on specific products or systems.

Intel classifications are for informational purposes only and consist of Export Control Classification Numbers (ECCN) and Harmonized Tariff Schedule (HTS) numbers. Any use made of Intel classifications are without recourse to Intel and shall not be construed as a representation or warranty regarding the proper ECCN or HTS. Your company as an importer and/or exporter is responsible for determining the correct classification of your transaction.

Refer to Datasheet for formal definitions of product properties and features.

‡ This feature may not be available on all computing systems. Please check with the system vendor to determine if your system delivers this feature, or reference the system specifications (motherboard, processor, chipset, power supply, HDD, graphics controller, memory, BIOS, drivers, virtual machine monitor-VMM, platform software, and/or operating system) for feature compatibility. Functionality, performance, and other benefits of this feature may vary depending on system configuration.

Max Turbo Frequency refers to the maximum single-core processor frequency that can be achieved with Intel® Turbo Boost Technology. See www.intel.com/technology/turboboost/ for more information.

System and Maximum TDP is based on worst case scenarios. Actual TDP may be lower if not all I/Os for chipsets are used.

"Announced" SKUs are not yet available. Please refer to the Launch Date for market availability.

Processors that support 64-bit computing on Intel® architecture require an Intel 64 architecture-enabled BIOS.

Intel processor numbers are not a measure of performance. Processor numbers differentiate features within each processor family, not across different processor families. See <http://www.intel.com/content/www/us/en/processors/processor-numbers.html> for details.

Some products can support AES New Instructions with a Processor Configuration update, in particular, i7-2630QM/i7-2635QM, i7-2670QM/i7-2675QM, i5-2430M/i5-2435M, i5-2410M/i5-2415M. Please contact OEM for the BIOS that includes the latest Processor configuration update.

See <http://www.intel.com/content/www/us/en/architecture-and-technology/hyper-threading/hyper-threading-technology.html?wapkw=hyper+threading> for more information including details on which processors support Intel® HT Technology.



[Company Information](#) [Our Commitment](#) [Communities](#) [Investor Relations](#) [Contact Us](#)

[Newsroom](#) [Jobs](#)



[© Intel Corporation](#) | [Terms of Use](#) | [*Trademarks](#) | [Privacy](#) | [Cookies](#) | [Supply Chain Transparency](#) | [Site Map](#)