

Intel® Core™ i3 processor 14100 (12M Cache- up to 4.70 GHz)

Essentials

Product Collection	Intel® Core™ i3 Processors (14th gen)
Code Name	Products formerly Raptor Lake
Vertical Segment	Desktop
Processor Number	i3-14100
Lithography	Intel 7
Use Conditions	PC/Client/Tablet

CPU Specifications

Total Cores	4
# of Performance-cores	4
# of Efficient-cores	0
Total Threads	8
Max Turbo Frequency	4.7 GHz
Performance-core Max Turbo Frequency	4.7 GHz
Performance-core Base Frequency	3.5 GHz
Cache	12 MB Intel® Smart Cache
Total L2 Cache	5 MB
Processor Base Power	60 W
Maximum Turbo Power	110 W

Supplemental Information

Marketing Status	Launched
Launch Date	Q1'24
Embedded Options Available	Yes

Memory Specifications

Max Memory Size (dependent on memory type)	192 GB
Memory Types	Up to DDR5 4800 MT/s Up to DDR4 3200 MT/s
Max # of Memory Channels	2
Max Memory Bandwidth	76.8 GB/s

GPU Specifications

GPU Name‡	Intel® UHD Graphics 730
Graphics Max Dynamic Frequency	1.5 GHz
Graphics Output	eDP 1.4b DP 1.4a HDMI 2.1
Execution Units	24
Max Resolution (HDMI)‡	4096 x 2160 @ 60Hz
Max Resolution (DP)‡	7680 x 4320 @ 60Hz
Max Resolution (eDP - Integrated Flat Panel)‡	5120 x 3200 @ 120Hz
DirectX* Support	12
OpenGL* Support	4.5
OpenCL* Support	3
Multi-Format Codec Engines	1
Intel® Quick Sync Video	Yes
Intel® Clear Video HD Technology	Yes
# of Displays Supported ‡	4
Device ID	0x4692

Expansion Options

Direct Media Interface (DMI) Revision	4
Max # of DMI Lanes	8
Scalability	1S Only
PCI Express Revision	5.0 and 4.0
PCI Express Configurations ‡	Up to 1x16+4 2x8+4
Max # of PCI Express Lanes	20

Package Specifications

Sockets Supported	FCLGA1700
Max CPU Configuration	1
Thermal Solution Specification	PCG 2020C
TJUNCTION	100°C
Package Size	45.0 mm x 37.5 mm

Advanced Technologies

Intel® Gaussian & Neural Accelerator	3
Intel® Deep Learning Boost (Intel® DL Boost) on CPU	Yes
Intel® Speed Shift Technology	Yes
Intel® Turbo Boost Technology ‡	2
Intel® Hyper-Threading Technology ‡	Yes
Intel® 64 ‡	Yes
Instruction Set	64-bit
Instruction Set Extensions	Intel® SSE4.1 Intel® SSE4.2 Intel® AVX2
Idle States	Yes
Enhanced Intel SpeedStep® Technology	Yes
Thermal Monitoring Technologies	Yes
Intel® Volume Management Device (VMD)	Yes

Security & Reliability

Intel® Standard Manageability (ISM) ‡	Yes
Intel® Control-Flow Enforcement Technology	Yes
Intel® AES New Instructions	Yes
Secure Key	Yes
Intel® OS Guard	Yes
Execute Disable Bit ‡	Yes
Intel® Boot Guard	Yes
Mode-based Execute Control (MBEC)	Yes
Intel® Virtualization Technology (VT-x) ‡	Yes
Intel® Virtualization Technology for Directed I/O (VT-d) ‡	Yes
Intel® VT-x with Extended Page Tables (EPT) ‡	Yes