

Intel Core i9 i9-14900K / 3.2 GHz processor - Box(BX8071514900K)

Intel Core i9 i9-14900K - 3.2 GHz - 24-core - 32 threads - 36 MB cache - FCLGA1700 Socket - Box



These processors feature an innovative architecture designed for intelligent performance (AI), immersive display and graphics, plus enhanced tuning and expandability to put gamers and PC enthusiasts fully in control of real-world experiences.

Main Specifications

Product Description	Intel Core i9 i9-14900K / 3.2 GHz processor - Box
Product Type	Processor
Processor Type	Intel Core i9 i9-14900K (14th Gen)
Number of Cores	24-core / 32 threads
Cache	36 MB
Integrated Graphics	Intel UHD Graphics 770
Compatible Processor Socket	FCLGA1700 Socket
Processor Qty	1
Clock Speed	3.2 GHz (P-core) / 2.4 GHz (E-core)
Max Turbo Speed	6 GHz (P-core) / 4.4 GHz (E-core)
Manufacturing Process	10 nm
Features	Intel Gaussian and Neural Accelerator 3.0, Intel Thread Director, Intel Deep Learning Boost (DL Boost), Intel Speed Shift Technology, Intel Thermal Velocity Boost, Intel Turbo Boost Max Technology 3.0, Intel Turbo Boost Technology 2.0, Hyper-Threading Technology, Intel 64 Technology, Instruction Set 64-bit, Idle States, Enhanced SpeedStep technology, Thermal Monitoring Technologies, Intel Volume Management Device (VMD), Intel Standard Manageability (ISM), Intel Control-Flow Enforcement Technology, Intel AES New Instructions (AES-NI), Intel Secure Key, Intel OS Guard, Execute Disable Bit capability, Intel Boot Guard, Mode-based Execute Control (MBE), Intel Virtualization Technology, Intel Virtualization Technology for Directed I/O (VT-d), Intel VT-x with Extended Page Tables (EPT), Intel Adaptive Boost Technology, Intel SSE4.1, Intel SSE4.2, Advanced Vector Extensions 2 (AVX2)
Manufacturer Warranty	3-year warranty

Extended Specification

General

Product Type	Processor
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Manufacturer Warranty

Service & Support	Limited warranty - 3 years
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Processor

Type / Form Factor	Intel Core i9 i9-14900K (14th Gen)
Number of Cores	24-core
Number of Threads	32 threads
Cache	36 MB
Cache Memory Details	Smart Cache - 36 MB L2 - 32 MB

Processor Qty	1
Clock Speed	3.2 GHz (P-core) / 2.4 GHz (E-core)
Max Turbo Speed	6 GHz (P-core) / 4.4 GHz (E-core)
Compatible Processor Socket	FCLGA1700 Socket
Manufacturing Process	10 nm
Thermal Design Power	253 W
Thermal Specification	100 °C
PCI Express Revision	4.0/5.0
PCI Express Configurations	1x16+4, 2x8+4
PCI Express Lanes Qty	20

Architecture Features	Intel Gaussian and Neural Accelerator 3.0, Intel Thread Director, Intel Deep Learning Boost (DL Boost), Intel Speed Shift Technology, Intel Thermal Velocity Boost, Intel Turbo Boost Max Technology 3.0, Intel Turbo Boost Technology 2.0, Hyper-Threading Technology, Intel 64 Technology, Instruction Set 64-bit, Idle States, Enhanced SpeedStep technology, Thermal Monitoring Technologies, Intel Volume Management Device (VMD), Intel Standard Manageability (ISM), Intel Control-Flow Enforcement Technology, Intel AES New Instructions (AES-NI), Intel Secure Key, Intel OS Guard, Execute Disable Bit capability, Intel Boot Guard, Mode-based Execute Control (MBE), Intel Virtualization Technology, Intel Virtualization Technology for Directed I/O (VT-d), Intel VT-x with Extended Page Tables (EPT), Intel Adaptive Boost Technology, Intel SSE4.1, Intel SSE4.2, Advanced Vector Extensions 2 (AVX2)
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Miscellaneous

Package Type	Intel Boxed
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Dimensions & Weight (Shipping)

Shipping Width	4.5 cm
Shipping Depth	3.75 cm

Integrated Graphics

Type	Intel UHD Graphics 770
Base Frequency	300 MHz
Max Dynamic Frequency	1.65 GHz
Max Supported Resolution	4096x2160@60Hz (HDMI), 7680x4320@60Hz (DP), 5120x3200@120Hz (eDP)
Features	Intel Clear Video HD Technology, Intel Quick Sync Video, Quad Display Capable

Product data is provided by CNET, we do not warrant the accuracy and completeness of the material contained in this data sheet