Intel Core i9-14900 processor 36 MB Smart Cache Box

Brand : Intel

Product family: Core

Product code: BX8071514900

Product name : i9-14900

Boxed Intel® Core[™] i9 processor 14900 (36M Cache, up to 5.80 GHz) FC-LGA16A Intel Core i9-14900. Processor family: Intel® Core[™] i9, Processor socket: LGA 1700, Processor manufacturer: Intel. Memory channels: Dual-channel, Maximum internal memory supported by processor: 192 GB, Memory types supported by processor: DDR4-SDRAM, DDR5-SDRAM. On-board graphics card model: Intel UHD Graphics 770, On-board graphics card outputs supported: Embedded DisplayPort (eDP) 1.4b, DisplayPort 1.4a, HDMI 2.1, On-board graphics card base frequency: 300 MHz. Market segment: Desktop, Use conditions: Workstation, PC/Client/Tablet, PCI Express slots version: 4.0, 5.0. Intel® Turbo Boost Max Technology 3.0 frequency: 5.6 GHz, Intel® Thermal Velocity Boost Frequency: 5.8 GHz





Processor manufaturer * Intel Core 9-14xxx Maximum number of PCI Expressor manufaturer * Vecksation, PC/Client/Table Processor generation Intel Core 9-14xxx Maximum number of PCI Express softs version 4.0, 5.0 Processor cores * 24 PCI Express softs version 4.0, 5.0 Processor socket * Intel © Core * 9 PCI Express softs version 4.0, 5.0 Processor socket * IA14 000 Supported instruction sets 4.0, 5.0 Processor socket * IA14 000 Supported instruction sets 4.0, 5.0 Processor socket * IA14 000 Supported instruction sets 4.0, 5.0 Processor socket * IA14 000 Supported instruction sets 4.0, 5.0 Processor socket * IA14 000 INTEC Media Interface (DMI) 4.0 Processor cobost frequency 5.4 GHZ Export Control Classification Automated Tracking System 70.01781 Processor cache SMB Commodity Classification 10.01781 20.01781 Processor cache SMB N Commodity Classification 10.01781 20.01781 Processor cache type				
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Processor codenameRaptor LakeIntel® Speed Shift TechnologyProcessor ARK ID236793Intel® Thermal Velocity BoostMemoryIntel® Adaptive Boost TechnologyMaximum internal memory supported by processor192 GBIntel® Turbo Boost Max Technology 3.0 frequency5.6 GHzMemory types supported by processorDDR4-SDRAM, DDR5-SDRAMIntel® Turbo Boost Max Technology 3.0 frequencyMemory channels * ECCDual-channelIntel® Thermal Velocity Boost 4.ccelerator (Intel® GNA) 3.0Memory bandwidth (max)89.6 GB/sIntel® Thermal Velocity Boost FrequencyGraphicsIntel® Thermal Velocity Boost FrequencyOn-board graphics card * supportedOn-board graphics card model * supportedIntel UHD Graphics 770 DisplayPort 1.4a, HDMI 2.1Intel® OS Guard Intel Virtualization Technology (VT- AOn-board graphics card base supported300 MHzIntel Virtualization Technology (VT- A			Enhanced Intel SpeedStep	4
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Maximum internal memory supported by processor192 GBIntel® Turbo Boost Max Technology 3.0 frequency5.6 GHzMemory types supported by processorDDR4-SDRAM, DDR5-SDRAMIntel® Gaussian & Neural Accelerator (Intel® GNA) 3.0Memory channels * ECCDual-channelIntel® Thermal Velocity Boost Frequency5.8 GHzMemory bandwidth (max)89.6 GB/sIntel® Control-flow Enforcement Technology (CET)GraphicsIntel WID Graphics 770Intel VT-x with Extended Page Tables (EPT)On-board graphics card * supportedIntel UHD Graphics 770Intel® Scure KeyOn-board graphics card dupturs supportedEmbedded DisplayPort (eDP) 1.4b, DisplayPort 1.4a, HDMI 2.1Intel Virtualization Technology (VT- dualOn-board graphics card base300 MHzIntel Virtualization Technology (VT- dual	Memory			
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Memory bandwidth (max) 89.6 GB/s Intel® Control-flow Enforcement Technology (CET) Intel® Thread Director Intel® Thread Director Graphics Intel UHD Graphics 770 Intel VT-x with Extended Page Tables (EPT) Intel® Secure Key Intel® OS Guard On-board graphics card model multiply of the UHD Graphics 770 Intel® OS Guard Intel® OS Guard Intel® OS Guard On-board graphics card outputs supported Embedded DisplayPort (eDP) 1.4b, DisplayPort 1.4a, HDMI 2.1 Intel Virtualization Technology (VT- Intel VIrtualization Technology (VT-				5.8 GHz
On-board graphics card * Intel VT-x with Extended Page Tables (EPT) Discrete graphics card * Intel UHD Graphics 770 On-board graphics card model * Intel UHD Graphics 770 Intel ® Secure Key Intel ® OS Guard On-board graphics card outputs Embedded DisplayPort (eDP) 1.4b, DisplayPort 1.4a, HDMI 2.1 On-board graphics card base 300 MHz		· ·		✓
Discrete graphics card * X Tables (EPT) On-board graphics card model * Intel UHD Graphics 770 Intel® Secure Key On-board graphics card outputs supported Embedded DisplayPort (eDP) 1.4b, DisplayPort 1.4a, HDMI 2.1 Intel 04 On-board graphics card base 300 MHz Intel Virtualization Technology (VT-	Graphics		Intel [®] Thread Director	1
On-board graphics card model * Intel UHD Graphics 770 Intel ® Secure Key Intel ® OS Guard On-board graphics card outputs supported Embedded DisplayPort (eDP) 1.4b, DisplayPort 1.4a, HDMI 2.1 Intel ® OS Guard Intel ® OS Guard On-board graphics card base 300 MHz Intel Virtualization Technology (VT- Intel Net Virtualization Technology (VT-	5		5	∢
On-board graphics card outputs supported Embedded DisplayPort (eDP) 1.4b, DisplayPort 1.4a, HDMI 2.1 Intel ® OS Guard Intel 64 On-board graphics card base 300 MHz Intel Virtualization Technology (VT-	5 1		Intel [®] Secure Key	1
supported DisplayPort 1.4a, HDMI 2.1 Intel 64 On-board graphics card base 300 MHz Intel Virtualization Technology (VT-	5	•	Intel [®] OS Guard	1
- 3U0 MHZ	5 1 1		Intel 64	1
	5 1	300 MHz		✓

Graphics		Processor special features	
On-board graphics card dynamic frequency (max)	1650 MHz	Intel Virtualization Technology for Directed I/O (VT-d)	✓
Number of displays supported (on- board graphics)	4	Intel Turbo Boost Max Technology 3.0	✓
On-board graphics card DirectX version	12.0	Intel® Boot Guard	✓
On-board graphics card OpenGL version	4.5	Intel® Deep Learning Boost (Intel® DL Boost) Intel® Volume Management Device	4
On-board graphics card maximum resolution (DisplayPort)	7680 x 4320 pixels	(VMD)	4
On-board graphics card maximum resolution (eDP - Integrated Flat Panel)	5120 x 3200 pixels	Mode-based Execute Control (MBE) Intel® Standard Manageability (ISM)	•
		Operational conditions	
On-board graphics card maximum resolution (HDMI)	4096 x 2160 pixels	Tjunction	100 °C
On-board graphics card refresh rate at maximum resolution (DisplayPort)	60 Hz	Technical details	
		OpenCL version	3.0
On-board graphics card refresh rate		Launch date	Q1'24
at maximum resolution (eDP - Integrated Flat Panel)	120 Hz	Status	Launched
On-board graphics card refresh rate		Logistics data	
at maximum resolution (HDMI)	60 Hz	Harmonized System (HS) code	8542310001
On-board graphics card ID	0xA780	Weight & dimensions	
Discrete graphics card model *	Not available	Processor package size	45 x 37.5 mm
Number of execution units	32	Other features	
Multi-Format Codec Engines	2	L2 cache	32768 KB
Features		Maximum internal memory	192 GB
Execute Disable Bit	1	,	eDP 1.4b, DP 1.4a, HDMI 2.1
Idle States	4	-	
Thermal Monitoring Technologies	1		
Market segment	Desktop		





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