

INTEL

Procesor Intel CPU S1700 CORE i9 14900K BOX GEN14

SKU: 17013546 · EAN: 5032037278522

SPECIFIKAT TEKNIKE	
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ATRIBUTI	VLERA
Processor	
Processor manufacturer	Intel
Processor generation	Intel® Core™ i9 (14th gen)
Processor model	i9-14900K
Processor family	Intel® Core™ i9
Processor cores	24
Processor socket	LGA 1700
Processor threads	32
Processor operating modes	64-bit
Performance cores	8
Efficient cores	16
Processor boost frequency	6 GHz
Performance-core boost frequency	5.6 GHz
Performance-core base frequency	3.2 GHz
Efficient-core boost frequency	4.4 GHz
Efficient-core base frequency	2.4 GHz
Processor cache	36 MB
Processor cache type	Smart Cache
Package type	Box
Cooler included	No
Processor base power	125 W
Maximum turbo power	253 W
Stepping	B0
Maximum number of DMI lanes	8
Memory bandwidth supported by processor (max)	89.6 GB/s
Processor codename	Raptor Lake
Processor ARK ID	236773
Memory	

Maximum internal memory supported by processor	192 GB
Memory types supported by processor	DDR4-SDRAM, DDR5-SDRAM
Memory channels	Dual-channel
ECC	Yes
Non-ECC	Yes
Memory bandwidth (max)	89.6 GB/s
Graphics	
On-board graphics card	Yes
Discrete graphics card	No
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
On-board graphics card dynamic frequency (max)	1650 MHz
Number of displays supported (on-board graphics)	4
On-board graphics card DirectX version	12.0
On-board graphics card OpenGL version	4.5
On-board graphics card maximum resolution (DisplayPort)	7680 x 4320 pixels
On-board graphics card maximum resolution (eDP - Integrated Flat Panel)	5120 x 3200 pixels
On-board graphics card maximum resolution (HDMI)	4096 x 2160 pixels
On-board graphics card refresh rate at maximum resolution (DisplayPort)	60 Hz
On-board graphics card refresh rate at maximum resolution (eDP - Integrated Flat Panel)	120 Hz
On-board graphics card refresh rate at maximum resolution (HDMI)	60 Hz
On-board graphics card ID	0xA780
Discrete graphics card model	Not available
Number of execution units	32
Multi-Format Codec Engines	2
Features	
Execute Disable Bit	Yes
Idle States	Yes
Thermal Monitoring Technologies	Yes
Market segment	Desktop
Use conditions	Workstation, PC/Client/Tablet

Maximum number of PCI Express lanes	20
PCI Express slots version	4.0, 5.0
PCI Express configurations	1x16+1x4, 2x8+1x4
Supported instruction sets	AVX 2.0, SSE4.1, SSE4.2
Scalability	1S
CPU configuration (max)	1
Embedded options available	No
Thermal solution specification	PCG 2020A
Direct Media Interface (DMI) Revision	4.0
Export Control Classification Number (ECCN)	5A992C
Commodity Classification Automated Tracking System (CCATS)	740.17B1

Processor special features

Intel® Hyper Threading Technology (Intel® HT Technology)	Yes
Intel® Turbo Boost Technology	2.0
Intel® Quick Sync Video Technology	Yes
Intel® Clear Video HD Technology (Intel® CVT HD)	Yes
Intel® AES New Instructions (Intel® AES-NI)	Yes
Enhanced Intel SpeedStep Technology	Yes
Intel® Speed Shift Technology	Yes
Intel® Thermal Velocity Boost	Yes
Intel® Adaptive Boost Technology	Yes
Intel® Turbo Boost Max Technology 3.0 frequency	5.8 GHz
Intel® Gaussian & Neural Accelerator (Intel® GNA) 3.0	Yes
Intel® Thermal Velocity Boost Frequency	6 GHz
Intel® Control-flow Enforcement Technology (CET)	Yes
Intel® Thread Director	Yes
Intel VT-x with Extended Page Tables (EPT)	Yes
Intel® Secure Key	Yes
Intel® OS Guard	Yes
Intel 64	Yes
Intel Virtualization Technology (VT-x)	Yes
Intel Virtualization Technology for Directed I/O (VT-d)	Yes
Intel Turbo Boost Max Technology 3.0	Yes

Intel® Boot Guard	Yes
Intel® Deep Learning Boost (Intel® DL Boost) on CPU	Yes
Intel® Volume Management Device (VMD)	Yes
Mode-based Execute Control (MBE)	Yes
Intel® Standard Manageability (ISM)	Yes
Operational conditions	
Tjunction	100 °C
Technical details	
OpenCL version	3.0
Launch date	Q4'23
Status	Launched
Logistics data	
Harmonized System (HS) code	8542310001
Weight & dimensions	
Processor package size	45 x 37.5 mm
Other features	
L2 cache	32768 KB
Maximum internal memory	192 GB
Graphics output	eDP 1.4b, DP 1.4a, HDMI 2.1