

Intel Core i9-13900F processor 36 MB Smart Cache

Brand : Intel

Product family: Core

Product code:
CM8071504820606

Product name : i9-13900F

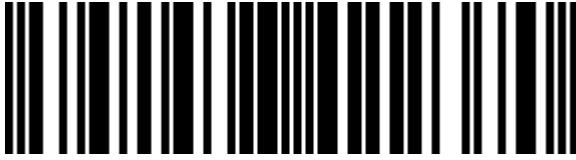


Intel® Core™ i9-13900F Processor (36M Cache, up to 5.60 GHz) FC-LGA16A, Tray
 Intel Core i9-13900F. Processor family: Intel® Core™ i9, Processor socket: LGA 1700, Processor manufacturer: Intel. Memory channels: Dual-channel, Maximum internal memory supported by processor: 192 GB, Memory types supported by processor: DDR4-SDRAM, DDR5-SDRAM. Market segment: Desktop, Use conditions: PC/Client/Tablet, PCI Express slots version: 5.0, 4.0. Intel® Turbo Boost Max Technology 3.0 frequency: 5.5 GHz, Intel® Thermal Velocity Boost Frequency: 5.6 GHz. Package type: Retail box



Processor		Features	
Processor manufacturer *	Intel	Commodity Classification	
Processor generation	13th gen Intel® Core™ i9	Automated Tracking System (CCATS)	740.17B1
Processor model *	i9-13900F	Processor special features	
Processor family *	Intel® Core™ i9	Intel® Hyper Threading Technology (Intel® HT Technology)	✓
Processor cores *	24	Intel® Turbo Boost Technology	2.0
Processor socket *	LGA 1700	Intel® AES New Instructions (Intel® AES-NI)	✓
Processor threads	32	Enhanced Intel SpeedStep Technology	✓
Processor operating modes *	64-bit	Intel® Speed Shift Technology	✓
Performance cores	8	Intel® Thermal Velocity Boost	✓
Efficient cores	16	Intel® Adaptive Boost Technology	✓
Processor boost frequency	5.6 GHz	Intel® Turbo Boost Max Technology 3.0 frequency	5.5 GHz
Performance-core boost frequency	5.2 GHz	Intel® Gaussian & Neural Accelerator (Intel® GNA) 3.0	✓
Performance-core base frequency	2 GHz	Intel® Thermal Velocity Boost Frequency	5.6 GHz
Efficient-core boost frequency	4.2 GHz	Intel® Control-flow Enforcement Technology (CET)	✓
Efficient-core base frequency	1.5 GHz	Intel® Thread Director	✓
Processor cache	36 MB	Intel VT-x with Extended Page Tables (EPT)	✓
Processor cache type	Smart Cache	Intel® Secure Key	✓
Box *	✗	Intel® OS Guard	✓
Processor base power	65 W	Intel 64	✓
Maximum turbo power	219 W	Intel Virtualization Technology (VT-x)	✓
Bus type	DMI4	Intel Virtualization Technology for Directed I/O (VT-d)	✓
Maximum number of DMI lanes	8	Intel Turbo Boost Max Technology 3.0	✓
Memory bandwidth supported by processor (max)	89.6 GB/s	Intel® Boot Guard	✓
Processor codename	Raptor Lake	Intel® Deep Learning Boost (Intel® DL Boost)	✓
Processor ARK ID	230502	Intel® Volume Management Device (VMD)	✓
Memory		Mode-based Execute Control (MBE)	✓
Maximum internal memory supported by processor	192 GB	Intel® Standard Manageability (ISM)	✓
Memory types supported by processor	DDR4-SDRAM, DDR5-SDRAM	Operational conditions	
Memory channels *	Dual-channel	Tjunction	100 °C
Memory bandwidth (max)	89.6 GB/s	Logistics data	
Graphics		Harmonized System (HS) code	8542310001
On-board graphics card *	✗		
Discrete graphics card *	✗		
On-board graphics card model *	Not available		
Discrete graphics card model *	Not available		
Features			
Execute Disable Bit	✓		
Idle States	✓		
Thermal Monitoring Technologies	✓		

Features		Packaging data	
Market segment	Desktop	Package type	Retail box
Use conditions	PC/Client/Tablet	Technical details	
Maximum number of PCI Express lanes	20	Target market	Gaming, Content Creation
PCI Express slots version	5.0, 4.0	Launch date	Q1'23
PCI Express configurations	1x16+1x4, 2x8+1x4	Status	Launched
Supported instruction sets	SSE4.1, SSE4.2, AVX 2.0	Weight & dimensions	
Scalability	1S	Processor package size	45 x 37.5 mm
CPU configuration (max)	1	Other features	
Embedded options available	✘	L2 cache	32768 KB
Direct Media Interface (DMI) Revision	4.0	Maximum internal memory	192 GB
Export Control Classification Number (ECCN)	5A992C		



8592978422370

Disclaimer. The information published here (the "Information") is based on sources that can be considered reliable, typically the manufacturer, but this Information is provided "AS IS" and without guarantee of correctness or completeness. The Information is only indicative and can be changed at any time without notification. No rights can be based on the Information. Suppliers or aggregators of this Information do not accept any liability with regard to the content of (web)pages and other documents, including its Information. The publisher of the Information can not be held liable for the content of 3rd party websites that are linking this Information or are linked to from this Information. You as the User of the Information are solely responsible for the choice and usage of this Information. You are not entitled to transfer, copy or otherwise multiply or distribute the Information. You are obliged to follow the directions of the copyright owner(s) with regard to the use of the Information. Exclusively Dutch law is applicable. With regard to price and stock data on the site, the publisher followed a number of starting points, which are not necessarily relevant for your private or business circumstances. Therefore, the price and stock data are only indicative and are subject to changes. You are personally responsible for the way you use and apply this information. As a user of the Information or sites or documents in which this Information is included, you will adhere to standard fair use including avoidance of spamming, ripping, intellectual-property violations, privacy violations, and any other illegal activity.

Publication date: 24-JAN-2024. Prints or copies of Information are only valid on the printed Publication date