

Intel Core i7-14700KF processor 33 MB Smart Cache

Brand : Intel

Product family: Core

Product code:
CM8071504820722

Product name : i7-14700KF



Intel® Core™ i7 processor 14700KF (33M Cache, up to 5.60 GHz) FC-LGA16A, Tray
Intel Core i7-14700KF. Processor family: Intel® Core™ i7, 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: 4.0, 5.0. Intel® Turbo Boost Max Technology 3.0 frequency: 5.6 GHz. Processor package size: 45 x 37.5 mm



Processor		Features	
Processor manufacturer *	Intel	Thermal solution specification	PCG 2020A
Processor generation	Intel Core i7-14xxx	Direct Media Interface (DMI) Revision	4.0
Processor model *	i7-14700KF	Export Control Classification Number (ECCN)	5A992C
Processor family *	Intel® Core™ i7	Commodity Classification Automated Tracking System (CCATS)	740.17B1
Processor cores *	20	Processor special features	
Processor socket *	LGA 1700	Intel® Hyper Threading Technology (Intel® HT Technology)	✓
Processor threads	28	Intel® Turbo Boost Technology	2.0
Processor operating modes *	64-bit	Intel® AES New Instructions (Intel® AES-NI)	✓
Performance cores	8	Enhanced Intel SpeedStep Technology	✓
Efficient cores	12	Intel® Speed Shift Technology	✓
Processor boost frequency	5.6 GHz	Intel® Turbo Boost Max Technology 3.0 frequency	5.6 GHz
Performance-core boost frequency	5.5 GHz	Intel® Gaussian & Neural Accelerator (Intel® GNA) 3.0	✓
Performance-core base frequency	3.4 GHz	Intel® Control-flow Enforcement Technology (CET)	✓
Efficient-core boost frequency	4.3 GHz	Intel® Thread Director	✓
Efficient-core base frequency	2.5 GHz	Intel VT-x with Extended Page Tables (EPT)	✓
Processor cache	33 MB	Intel® Secure Key	✓
Processor cache type	Smart Cache	Intel® OS Guard	✓
Box *	✗	Intel 64	✓
Processor base power	125 W	Intel Virtualization Technology (VT-x)	✓
Maximum turbo power	253 W	Intel Virtualization Technology for Directed I/O (VT-d)	✓
Stepping	B0	Intel Turbo Boost Max Technology 3.0	✓
Maximum number of DMI lanes	8	Intel® Boot Guard	✓
Memory bandwidth supported by processor (max)	89.6 GB/s	Intel® Deep Learning Boost (Intel® DL Boost)	✓
Processor codename	Raptor Lake	Intel® Volume Management Device (VMD)	✓
Processor ARK ID	236789	Mode-based Execute Control (MBE)	✓
Memory		Intel® Standard Manageability (ISM)	✓
Maximum internal memory supported by processor	192 GB	Operational conditions	
Memory types supported by processor	DDR4-SDRAM, DDR5-SDRAM	Tjunction	100 °C
Memory channels *	Dual-channel	Logistics data	
Memory bandwidth (max)	89.6 GB/s	Harmonized System (HS) code	8542310001
Graphics			
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	✓		
Market segment	Desktop		

Features		Technical details	
Use conditions	PC/Client/Tablet	Launch date	Q4'23
Maximum number of PCI Express lanes	20	Status	Launched
PCI Express slots version	4.0, 5.0	Weight & dimensions	
PCI Express configurations	1x16+1x4, 2x8+1x4	Processor package size	45 x 37.5 mm
Supported instruction sets	AVX 2.0, SSE4.1, SSE4.2	Other features	
Scalability	1S	L2 cache	28672 KB
CPU configuration (max)	1	Maximum internal memory	192 GB
Embedded options available	✘		



5056489771288

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