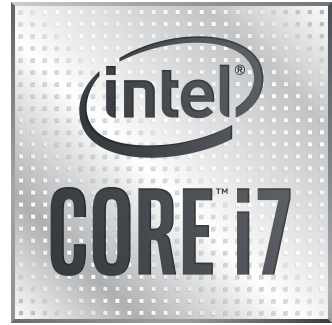![intel]

Intel Core i7-10700KF processor 3.8 GHz 16 MB Smart Cache Box

Brand : Intel

Product family: Core

Product code:
BX8070110700KF

Product name : i7-10700KF

Intel® Core™ i7-10700KF Processor (16M Cache, up to 5.10 GHz)
Intel Core i7-10700KF. Processor family: Intel® Core™ i7, Processor socket: LGA 1200 (Socket H5),
Processor lithography: 14 nm. Memory channels: Dual-channel, Maximum internal memory supported by
processor: 128 GB, Memory types supported by processor: DDR4-SDRAM. Market segment: Desktop, PCI
Express configurations: 1x16, 2x8, 1x8+2x4, Supported instruction sets: SSE4.1, SSE4.2, AVX 2.0. Intel®
Turbo Boost Max Technology 3.0 frequency: 5.1 GHz, Intel® Turbo Boost Technology 2.0 frequency: 5
GHz. Package type: Retail box

Processor

Processor manufacturer *	Intel
Processor generation	10th gen Intel® Core™ i7
Processor model *	i7-10700KF
Processor base frequency *	3.8 GHz
Processor family *	Intel® Core™ i7
Processor cores *	8
Processor socket *	LGA 1200 (Socket H5)
Component for	PC
Processor lithography *	14 nm
Processor threads	16
System bus rate	8 GT/s
Processor operating modes *	64-bit
Processor boost frequency	5.1 GHz
Processor cache	16 MB
Processor cache type	Smart Cache
Thermal Design Power (TDP)	125 W
Box *	✔
Configurable TDP-down frequency	3.5 GHz
Cooler included *	✖
Configurable TDP-down	95 W
Generation	10th Generation
Memory bandwidth supported by processor (max)	45.8 GB/s
Processor codename	Comet Lake
Processor ARK ID	199325

Memory

Maximum internal memory supported by processor	128 GB
Memory types supported by processor	DDR4-SDRAM
Memory clock speeds supported by processor	2933 MHz
Memory channels *	Dual-channel
ECC	✖

Graphics

On-board graphics card *	✖
Discrete graphics card *	✖
On-board graphics card model *	Not available
Discrete graphics card model *	Not available

Features

Commodity Classification Automated Tracking System (CCATS)	G077159

Processor special features

Intel® Hyper Threading Technology (Intel® HT Technology)	✔
Intel® Identity Protection Technology (Intel® IPT)	✔
Intel® Turbo Boost Technology	2.0
Intel® AES New Instructions (Intel® AES-NI)	✔
Enhanced Intel SpeedStep Technology	✔
Intel Trusted Execution Technology	✖
Intel® Thermal Velocity Boost	✖
Intel® Turbo Boost Max Technology 3.0 frequency	5.1 GHz
Intel® Turbo Boost Technology 2.0 frequency	5 GHz
Intel® Transactional Synchronization Extensions	✖
Intel VT-x with Extended Page Tables (EPT)	✔
Intel® Secure Key	✔
Intel Stable Image Platform Program (SIPP)	✖
Intel® OS Guard	✔
Intel Software Guard Extensions (Intel SGX)	✔
Intel 64	✔
Intel Virtualization Technology (VT-x)	✔
Intel Virtualization Technology for Directed I/O (VT-d)	✔
Intel Turbo Boost Max Technology 3.0	✔
Intel® Optane™ Memory Ready	✔
Intel® Boot Guard	✔
Intel® vPro™ Platform Eligibility	✖

Operational conditions

Tjunction	100 °C

Features

Execute Disable Bit	✔
Idle States	✔
Thermal Monitoring Technologies	✔
Market segment	Desktop
Maximum number of PCI Express lanes	16
PCI Express slots version	3.0
PCI Express configurations	1x16, 2x8, 1x8+2x4
Supported instruction sets	SSE4.1, SSE4.2, AVX 2.0
Scalability	1S
CPU configuration (max)	1
Embedded options available	✘
Thermal solution specification	PCG 2015D
PCI Express CEM revision	3.0
Export Control Classification Number (ECCN)	5A992C

Technical details

Target market	Gaming, Content Creation
Launch date	Q2'20
Product type	Processor
Status	Launched
Maximum memory	128 GB
Supported memory types	DDR4-SDRAM
Bus speed	8 GT/s

Logistics data

Harmonized System (HS) code	85423119

Packaging data

Package type	Retail box

Weight & dimensions

Processor package size	37.5 x 37.5 mm

Other features

Maximum internal memory	128 GB

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735858447690

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