



 Intel Core i9-10850K 3.6
GHz Ten-Core LGA 1200

\$409.99

Product Images



Short Description

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Graphically, the Core i9-10850K uses the integrated Intel UHD Graphics 630 chipset, which has a base frequency of 350 MHz and a dynamic frequency of 1.2 GHz. If you need even more performance, this processor is unlocked, which lets you overclock the processor over its maximum speed. However, this is not recommended, as it will void the limited 3-year warranty.

Please note that this processor does not include a heatsink or fan and requires a separately-sold CPU cooling solution.

Features

Performance

Number of Cores	10
Number of Threads	20
Base Clock Speed	3.6 GHz
Maximum Boost Speed	5.2 GHz
L3 Cache	20 MB

Memory Support

Maximum Capacity	128 GB
Memory Support	DDR4 2933 MHz
ECC Memory	No

Channel Architecture	Dual Channel
Maximum Memory Bandwidth	45.8 GB/s
Power	
Thermal Design Power (TDP)	125 W
Included Thermal Solution	<i>None</i>
Maximum Temperature	212°F / 100°C
Thermal Monitoring Technologies	Yes
Technology	
AES Support	Yes
Extension	AVX 2.0, SSE 4.1/4.2
Instruction Set	64-Bit
Virtualization	Yes: Intel VT-d, Intel VT-x, Intel VT-x with Extended Page Tables (EPT)
Integrated Graphics	
Graphics Chipset	Intel UHD Graphics 630
Maximum Resolution Support	4096 x 2304 at 60 Hz
Supported APIs	DirectX: 12 OpenGL: 4.5
Number of Displays	3
Maximum Shared Video Memory	64 GB
Output Support	eDP, DisplayPort, HDMI
Base Clock Speed	350 MHz
Maximum Boost Speed	1.2 GHz
Intel	
Optane Memory Support	Yes
vPro Support	No
Performance Technologies	Hyper-Threading, SpeedStep, Turbo Boost 2.0, Turbo Boost Max 3.0
Security Technologies	Device Protection with Boot Guard, Execute Disable Bit, Identity Protection, OS Guard, Secure Key, Software Guard Extensions
Video Technologies	Clear Video, Clear Video HD, InTru 3D, Quick Sync Video

Specifications

CPU Model	Intel Core i9-10850K
CPU Socket	LGA 1200
Manufacturing Process	14 nm
Maximum CPU Configuration	15
Maximum Number of PCIe Lanes	16 (Revision 3.0)
Unlocked	Yes

Additional Information

Brand	Intel
SKU	BX-8070110850K
Weight	0.2000
Compatibilty	Intel LGA 1200
Series	Core i9
Cores	10
Core Name	Comet Lake
Operating Frequency	3.5 GHz
Hyper Threading Support	Yes
Threads	20
Thermal Design Power	125W
Vendor SKU/EAN	735858459273

