



Intel Core i5-10500 3.1 GHz Six-Core LGA 1200 Processor

\$239.95

Product Images



Short Description

The Core i5-10500 3.1 GHz Six-Core LGA 1200 Processor from Intel has a base clock speed of 3.1 GHz and

comes with features such as Intel Optane Memory support, Intel vPro, Intel Boot Guard, Intel VT-d Virtualization Technology for Directed I/O, and Intel Hyper-Threading technology. With Intel Turbo Boost 2.0, the maximum turbo frequency this processor can achieve is 4.5 GHz.

Description

The Core i5-10500 3.1 GHz Six-Core LGA 1200 Processor from Intel has a base clock speed of 3.1 GHz and comes with features such as Intel Optane Memory support, Intel vPro, Intel Boot Guard, Intel VT-d Virtualization Technology for Directed I/O, and Intel Hyper-Threading technology. With Intel Turbo Boost 2.0, the maximum turbo frequency this processor can achieve is 4.5 GHz. Additionally, this processor features 6 cores with 12 threads in an LGA 1200 socket, has 12MB of cache memory, and 16 PCIe 3.0 lanes.

Having 6 cores allows the processor to run multiple programs simultaneously without slowing down the system, while the 12 threads allow a basic ordered sequence of instructions to be passed through or processed by a single CPU core. This processor also supports 128GB of dual-channel 2666 MHz DDR4 RAM and utilizes 10th-generation technology. Graphically, the Core i5-10500 uses the integrated Intel UHD Graphics 630 chipset, which has a base frequency of 350 MHz and a dynamic frequency of 1.15 GHz. A thermal solution is included and protection is provided by a limited 3-year warranty.

Features

10th Gen Intel® Core™ i5-10500 Desktop Processor

ELITE REAL-WORLD PERFORMANCE

For seamless gameplay & entertainment

10TH GEN
CORE i5

SPECIFICATIONS

UP TO
4.5 GHZ
max clock speed with
Intel® Turbo Boost
Technology 2.0¹

6 CORES
12 THREADS

Base Clock Speed (GHz)	Up to 3.1
Intel® Smart Cache	12 MB
TDP	65 W
Platform PCI Express Lanes	Up to 40
Memory Support	Two channels DDR4-2666 ²
Chipset	400 Series



Get up to 4.5 GHz clock speed
with Intel® Turbo Boost
Technology 2.0¹



Multi-task effortlessly
with Intel® Hyper-Threading
Technology



Intel® Quick Sync Video allows you
to create Ultra HD videos with
incredible speed



LEVEL UP YOUR TECHNOLOGY

Experience amazing gameplay and creativity with Intel's supported platform features. Get more from your PC build by untethering with Intel® Wi-Fi 6 (Gig+), versatile connectivity with Thunderbolt™ 3, and accelerated responsiveness with Intel® Optane™ memory.

INTEL® EASY STREAMING WIZARD

LIVE STREAM IN MINUTES, NOT HOURS

Looking to start a live stream, but unsure how to start? Intel® Easy Streaming Wizard makes it easier than ever to get up and streaming with Open Broadcaster Software (OBS) in minutes, instead of hours.³

CHOOSE YOUR PERFECT FIT

FOR EVERYDAY
PRODUCTIVITY



FOR SEAMLESS GAMEPLAY
& ENTERTAINMENT



FOR COMPETITIVE GAMING
& CONTENT CREATION



FOR ENTHUSIAST GAMING
& CONTENT CREATION



UP TO				
Cores/Threads:	4/8	6/12	8/16	10/20
Max Frequency (GHz) ¹ :	4.6	4.8	4.8	5.2

Intel® technologies' features and benefits depend on system configuration and may require enabled hardware, software or service activation. Performance varies depending on system configuration. No product or component can be absolutely secure. Check with your system manufacturer or retailer or learn more at <http://support.intel.com>.

¹ Maximum turbo frequency using Intel Turbo Boost Technology 2.0

² DDR4 maximum speed support is 1 and 2 DPC for UDIMMs but only 1 DPC for SODIMMs. DDR4 2DPC UDIMM 2933 or 2666 is capable when same UDIMM part number are populated with in each channel.

³ Some features may only be available with the latest version of Intel® Easy Streaming Wizard. For more information and a full list of compatible processors, please visit intel.com/easystreaming

© Intel Corporation. Intel, the Intel logo, Intel Core, Intel Inside, Intel Optane, Thunderbolt, the Thunderbolt logo and other Intel marks are trademarks of Intel Corporation or its subsidiaries. Other names and brands may be claimed as the property of others.

Intel i5-10500 Specs

General

CPU Model	Intel Core i5-10500
CPU Socket	LGA 1200
Manufacturing Process	14 nm
Maximum CPU Configuration	1S
Maximum Number of PCIe Lanes	16 (Revision 3.0)
Unlocked	No

Performance

Number of Cores	6
Number of Threads	12
Base Clock Speed	3.1 GHz
Maximum Boost Speed	4.5 GHz
L3 Cache	12 MB

Memory Support

Maximum Capacity	128 GB
Memory Support	DDR4 2666 MHz
ECC Memory	No
Channel Architecture	Dual Channel
Maximum Memory Bandwidth	41.6 GB/s

Power

Thermal Design Power (TDP)	65 W
Included Thermal Solution	PCG 2015C
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	1.15 GHz

Intel	
DMI	DMI3 (8 GT/s)
Optane Memory Support	Yes
vPro Support	Yes
Performance Technologies	Hyper-Threading, SpeedStep, Stable Image Platform Program, Turbo Boost 2.0
Security Technologies	Device Protection with Boot Guard, Execute Disable Bit, Identity Protection, OS Guard, Secure Key, Software Guard Extensions, Trusted Execution Technology
Video Technologies	Clear Video, Clear Video HD, InTru 3D, Quick Sync Video

Additional Information

Brand	Intel
SKU	BX8070110500
Weight	1.5000
Compatibilty	Intel LGA 1200
Series	Core i5
Cores	6
Core Name	Comet Lake
Operating Frequency	3.1 GHz
Hyper Threading Support	No
Threads	12
Thermal Design Power	65W

