



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.

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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

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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 |

