



# Intel® Core™ i5-12400 Processor

18M Cache, up to 4.40 GHz

Spec Code

SRL5Y

Ordering Code

CM8071504650608

## Intel® Core™ i5-12400 Processor (18M Cache- up to 4.40 GHz)

|                                            |                                            |
|--------------------------------------------|--------------------------------------------|
| Essentials                                 |                                            |
| Product Collection                         | 12th Generation Intel® Core™ i5 Processors |
| Code Name                                  | Products formerly Alder Lake               |
| Vertical Segment                           | Desktop                                    |
| Processor Number                           | i5-12400                                   |
| Status                                     | Launched                                   |
| Launch Date                                | Q1'22                                      |
| Lithography                                | Intel 7                                    |
| Use Conditions                             | PC/Client/Tablet                           |
| Recommended Customer Price                 | \$192.00 - \$199.00                        |
| CPU Specifications                         |                                            |
| Total Cores                                | 6                                          |
| # of Performance-cores                     | 6                                          |
| # of Efficient-cores                       | 0                                          |
| Total Threads                              | 12                                         |
| Max Turbo Frequency                        | 4.40 GHz                                   |
| Performance-core Max Turbo Frequency       | 4.40 GHz                                   |
| Performance-core Base Frequency            | 2.50 GHz                                   |
| Cache                                      | 18 MB Intel® Smart Cache                   |
| Total L2 Cache                             | 7.5 MB                                     |
| Processor Base Power                       | 65 W                                       |
| Maximum Turbo Power                        | 117 W                                      |
| Supplemental Information                   |                                            |
| Embedded Options Available                 | Yes                                        |
| Datasheet                                  | <a href="#">View now</a>                   |
| Memory Specifications                      |                                            |
| Max Memory Size (dependent on memory type) | 128 GB                                     |
| Memory Types                               | Up to DDR5 4800 MT/s Up to DDR4 3200 MT/s  |
| Max # of Memory Channels                   | 2                                          |
| Max Memory Bandwidth                       | 76.8 GB/s                                  |
| Processor Graphics                         |                                            |

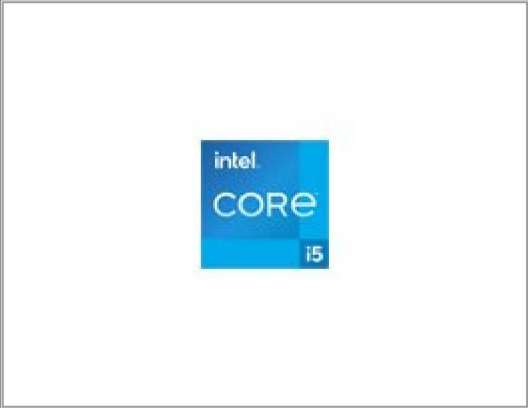
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|------------------------------------------------------------|---------------------------------------------|
| Processor Graphics ‡                                       | Intel® UHD Graphics 730                     |
| Graphics Base Frequency                                    | 300 MHz                                     |
| Graphics Max Dynamic Frequency                             | 1.45 GHz                                    |
| Graphics Output                                            | eDP 1.4b   DP 1.4a   HDMI 2.1               |
| Execution Units                                            | 24                                          |
| Max Resolution (HDMI)‡                                     | 4096 x 2160 @ 60Hz                          |
| Max Resolution (DP)‡                                       | 7680 x 4320 @ 60Hz                          |
| Max Resolution (eDP - Integrated Flat Panel)‡              | 5120 x 3200 @ 120Hz                         |
| DirectX* Support                                           | 12                                          |
| OpenGL* Support                                            | 4.5                                         |
| Multi-Format Codec Engines                                 | 1                                           |
| Intel® Quick Sync Video                                    | Yes                                         |
| Intel® Clear Video HD Technology                           | Yes                                         |
| # of Displays Supported ‡                                  | 4                                           |
| Device ID                                                  | 0x4692 / 0x4682                             |
| OpenCL* Support                                            | 2.1                                         |
|                                                            |                                             |
| Expansion Options                                          |                                             |
| Direct Media Interface (DMI) Revision                      | 4                                           |
| Max # of DMI Lanes                                         | 8                                           |
| Scalability                                                | 1S Only                                     |
| PCI Express Revision                                       | 5.0 and 4.0                                 |
| PCI Express Configurations ‡                               | Up to 1x16+4   2x8+4                        |
| Max # of PCI Express Lanes                                 | 20                                          |
|                                                            |                                             |
| Package Specifications                                     |                                             |
| Sockets Supported                                          | FCLGA1700                                   |
| Max CPU Configuration                                      | 1                                           |
| Thermal Solution Specification                             | PCG 2020C                                   |
| TJUNCTION                                                  | 100°C                                       |
| Package Size                                               | 45.0 mm x 37.5 mm                           |
|                                                            |                                             |
| Advanced Technologies                                      |                                             |
| Intel® Gaussian & Neural Accelerator                       | 3                                           |
| Intel® Thread Director                                     | No                                          |
| Intel® Deep Learning Boost (Intel® DL Boost)               | Yes                                         |
| Intel® Optane™ Memory Supported ‡                          | Yes                                         |
| Intel® Speed Shift Technology                              | Yes                                         |
| Intel® Turbo Boost Max Technology 3.0 ‡                    | No                                          |
| Intel® Turbo Boost Technology ‡                            | 2                                           |
| Intel® Hyper-Threading Technology ‡                        | Yes                                         |
| Intel® Virtualization Technology (VT-x) ‡                  | Yes                                         |
| Intel® Virtualization Technology for Directed I/O (VT-d) ‡ | Yes                                         |
| Intel® VT-x with Extended Page Tables (EPT) ‡              | Yes                                         |
| Intel® 64 ‡                                                | Yes                                         |
| Instruction Set                                            | 64-bit                                      |
| Instruction Set Extensions                                 | Intel® SSE4.1   Intel® SSE4.2   Intel® AVX2 |
| Idle States                                                | Yes                                         |
| Enhanced Intel SpeedStep® Technology                       | Yes                                         |
| Thermal Monitoring Technologies                            | Yes                                         |
| Intel® Volume Management Device (VMD)                      | Yes                                         |

|                                            |     |
|--------------------------------------------|-----|
|                                            |     |
| Security & Reliability                     |     |
| Intel® Threat Detection Technology (TDT)   | Yes |
| Intel® Standard Manageability (ISM) ‡      | Yes |
| Intel® AES New Instructions                | Yes |
| Secure Key                                 | Yes |
| Intel® OS Guard                            | Yes |
| Execute Disable Bit ‡                      | Yes |
| Intel® Boot Guard                          | Yes |
| Mode-based Execute Control (MBEC)          | Yes |
| Intel® Control-Flow Enforcement Technology | Yes |
|                                            |     |
|                                            |     |
|                                            |     |
|                                            |     |

# Intel Core i5 12400F - 2.5 GHz

6-core - 12 threads - 18 MB cache - LGA1700 Socket - Box

|                       |               |
|-----------------------|---------------|
| Group                 | CPUs          |
| Manufacturer          | Intel         |
| Manufacturer item no. | BX8071512400F |
| EAN/UPC               | 5032037237758 |



## Description

Create, edit, share 4K content, and enjoy immersive experiences with these processors.

## Main features

|                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|-----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product Description         | Intel Core i5 12400F / 2.5 GHz processor - Box                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Product Type                | Processor                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Processor Type              | Intel Core i5 12400F (12th Gen)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Number of Cores             | 6-core / 12 threads                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Cache                       | 18 MB                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Compatible Processor Socket | LGA1700 Socket                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Processor Qty               | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Clock Speed                 | 2.5 GHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Max Turbo Speed             | 4.4 GHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Manufacturing Process       | 10 nm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Features                    | Enhanced SpeedStep technology, Hyper-Threading Technology, Execute Disable Bit capability, Intel Virtualization Technology, Intel 64 Technology, streaming SIMD extensions 4.1, streaming SIMD extensions 4.2, Intel Turbo Boost Technology 2.0, Intel AES New Instructions (AES-NI), Thermal Monitoring Technologies, Intel Virtualization Technology for Directed I/O (VT-d), Idle States, Intel VT-x with Extended Page Tables (EPT), Intel Secure Key, Intel Advanced Vector Extensions 2 (AVX2.0), Intel OS Guard, Intel Speed Shift Technology, Intel Optane Memory Supported, Mode-based Execute Control (MBE), Intel Volume Management Device (VMD), Intel Boot Guard, Intel Deep Learning Boost (DL Boost), Intel Control-Flow Enforcement Technology, Intel Gaussian and Neural Accelerator 3.0, Instruction Set 64-bit |

## Extended details

|                    |                                 |
|--------------------|---------------------------------|
|                    | <b>General</b>                  |
| Product Type       | Processor                       |
|                    | <b>Processor</b>                |
| Type / Form Factor | Intel Core i5 12400F (12th Gen) |
| Number of Cores    | 6-core                          |
| Number of Threads  | 12 threads                      |