



## Intel® Core™ i3-13100 Processor

### 12M Cache, up to 4.50 GHz

Ordering Code

CM8071505092202

Spec Code

SRMBU

|                                                            |                                            |
|------------------------------------------------------------|--------------------------------------------|
| Intel® Core™ i3-13100 Processor (12M Cache-up to 4.50 GHz) |                                            |
| Essentials                                                 |                                            |
| Product Collection                                         | 13th Generation Intel® Core™ i3 Processors |
| Code Name                                                  | Products formerly Raptor Lake              |
| Vertical Segment                                           | Desktop                                    |
| Processor Number                                           | i3-13100                                   |
| Lithography                                                | Intel 7                                    |
| Recommended Customer Price                                 | \$134.00 - \$144.00                        |
| Use Conditions                                             | PC/Client/Tablet                           |
| CPU Specifications                                         |                                            |
| Total Cores                                                | 4                                          |
| # of Performance-cores                                     | 4                                          |
| # of Efficient-cores                                       | 0                                          |
| Total Threads                                              | 8                                          |
| Max Turbo Frequency                                        | 4.50 GHz                                   |
| Performance-core Max Turbo Frequency                       | 4.50 GHz                                   |
| Performance-core Base Frequency                            | 3.40 GHz                                   |
| Cache                                                      | 12 MB Intel® Smart Cache                   |
| Total L2 Cache                                             | 5 MB                                       |
| Processor Base Power                                       | 60 W                                       |
| Maximum Turbo Power                                        | 89 W                                       |
| Supplemental Information                                   |                                            |
| Marketing Status                                           | Launched                                   |
| Launch Date                                                | Q1'23                                      |

|                                               |                                           |
|-----------------------------------------------|-------------------------------------------|
| Embedded Options Available                    | Yes                                       |
|                                               |                                           |
| 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                            |                                           |
| Processor Graphics ‡                          | Intel® UHD Graphics 730                   |
| Graphics Base Frequency                       | 300 MHz                                   |
| Graphics Max Dynamic Frequency                | 1.50 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                                       |
| OpenCL* Support                               | 3                                         |
| Multi-Format Codec Engines                    | 1                                         |
| Intel® Quick Sync Video                       | Yes                                       |
| Intel® Clear Video HD Technology              | Yes                                       |
| # of Displays Supported ‡                     | 4                                         |
| Device ID                                     | 0x4692                                    |
|                                               |                                           |
| 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® Speed Shift Technology                              | Yes                                            |
| Intel® Turbo Boost Max Technology 3.0 ‡                    | No                                             |
| Intel® Turbo Boost Technology ‡                            | 2                                              |
| Intel® Hyper-Threading Technology ‡                        | Yes                                            |
| Intel® 64 ‡                                                | Yes                                            |
| Instruction Set                                            | 64-bit                                         |
| Instruction Set Extensions                                 | Intel® SSE4.1   Intel® SSE4.2  <br>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® Control-Flow Enforcement Technology                 | 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® Virtualization Technology (VT-x) ‡                  | Yes                                            |
| Intel® Virtualization Technology for Directed I/O (VT-d) ‡ | Yes                                            |
| Intel® VT-x with Extended Page Tables (EPT) ‡              | Yes                                            |



# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Advantech:](#)

[96MPI-13100-4E](#)