

Intel Core Ultra 7 265 / 2.4 GHz processor - Box(BX80768265)

Intel Core Ultra 7 265 - 2.4 GHz - 20-core - 20 threads - 30 MB cache - FCLGA1851 Socket - Box



The Intel Core Ultra 7 processor integrates advanced technologies to enhance performance and security. With Smart Cache technology, it efficiently manages data for faster processing speeds. Features like Intel Quick Sync Video facilitate seamless multimedia experiences, while support for virtualization ensures optimal resource management. Built with numerous security features such as Intel Secure Key and Intel Boot Guard, this processor provides protection against threats. Designed for high-performance computing, it includes Intel Advanced Vector Extensions 2 (AVX2.0) and Intel Deep Learning Boost (DL Boost) to accelerate workloads, from data analysis to AI applications. This processor is a reliable choice for users seeking improved performance and security in their computing tasks.

Key Selling Points

- Smart Cache technology for efficient data management
- Supports multiple advanced security features
- Integrated Intel Quick Sync Video for enhanced multimedia performance
- Flexible virtualization capabilities for optimal resource allocation
- Includes Intel Deep Learning Boost for accelerated AI workloads

Product Features

- Efficient data management**
Smart Cache technology dynamically allocates cache space, improving data access speed and processing efficiency.
- Advanced security capabilities**
Features like Intel Secure Key and Intel Boot Guard protect sensitive data and ensure secure boot processes.
- Optimized multimedia performance**
Intel Quick Sync Video allows for fast video encoding and decoding, enhancing the multimedia experience for users.
- Robust virtualization support**
Supports Intel Virtualization Technology (VT-x and VT-d), allowing efficient management of system resources across virtual machines.
- Accelerated AI workloads**
Intel Deep Learning Boost (DL Boost) enhances AI and machine learning performance, making it ideal for data-intensive applications.

Main Specifications

Product Description	Intel Core Ultra 7 265 / 2.4 GHz processor - Box
Product Type	Processor
Processor Type	Intel Core Ultra 7 265 (Series 2)
Number of Cores	20-core / 20 threads
Cache	30 MB
Integrated Graphics	Intel HD Graphics
Compatible Processor Socket	FCLGA1851 Socket
Processor Qty	1
Clock Speed	2.4 GHz (P-core) / 1.8 GHz (E-core)
Max Turbo Speed	5.3 GHz (P-core) / 4.6 GHz (E-core)

Features	Enhanced SpeedStep technology, Execute Disable Bit capability, Intel 64 Technology, Intel Trusted Execution Technology, Intel Turbo Boost Technology 2.0, Intel AES New Instructions (AES-NI), Thermal Monitoring Technologies, Intel Virtualization Technology for Directed I/O (VT-d), Intel Smart Cache, Idle States, Intel VT-x with Extended Page Tables (EPT), Intel Secure Key, Intel Advanced Vector Extensions 2 (AVX2.0), Intel OS Guard, Intel Turbo Boost Max Technology 3.0, Intel Speed Shift Technology, Intel Volume Management Device (VMD), Intel Boot Guard, Intel Deep Learning Boost (DL Boost), Intel vPro Platform Eligibility, Intel Control-Flow Enforcement Technology, Intel Thread Director, Instruction Set 64-bit, Intel SSE4.1, Intel SSE4.2, Intel Stable IT Platform Program (SIPP), Intel vPro Enterprise Platform Eligibility, Intel Threat Detection Technology (TDT), Intel Standard Manageability (ISM), Intel One-Click Recovery, Intel Hardware Shield Eligibility, Intel Total Memory Encryption - Multi Key, Intel Virtualization Technology with Redirect Protection (VT-rp), Mode-based Execute Control (MBEC), Intel Virtualization Technology for Directed (VT-x), Intel Gaussian and Neural Accelerator 3.5
Neural Processor Unit (NPU)	Intel AI Boost
Manufacturer Warranty	3-year warranty

Extended Specification

General

Product Type	Processor
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Manufacturer Warranty

Service & Support	Limited warranty - 3 years
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Processor

Type / Form Factor	Intel Core Ultra 7 265 (Series 2)
Number of Cores	20-core
Number of Threads	20 threads
Cache	30 MB
Cache Memory Details	Smart Cache - 30 MB L2 - 36 MB
Processor Qty	1
Clock Speed	2.4 GHz (P-core) / 1.8 GHz (E-core)
Max Turbo Speed	5.3 GHz (P-core) / 4.6 GHz (E-core)
Compatible Processor Socket	FCLGA1851 Socket
Thermal Design Power	182 W
Thermal Specification	105 °C
PCI Express Revision	4.0/5.0
PCI Express Configurations	1x16+2x4, 2x8+2x4, 1x8+4x4
PCI Express Lanes Qty	24

Architecture Features	Enhanced SpeedStep technology, Execute Disable Bit capability, Intel 64 Technology, Intel Trusted Execution Technology, Intel Turbo Boost Technology 2.0, Intel AES New Instructions (AES-NI), Thermal Monitoring Technologies, Intel Virtualization Technology for Directed I/O (VT-d), Intel Smart Cache, Idle States, Intel VT-x with Extended Page Tables (EPT), Intel Secure Key, Intel Advanced Vector Extensions 2 (AVX2.0), Intel OS Guard, Intel Turbo Boost Max Technology 3.0, Intel Speed Shift Technology, Intel Volume Management Device (VMD), Intel Boot Guard, Intel Deep Learning Boost (DL Boost), Intel vPro Platform Eligibility, Intel Control-Flow Enforcement Technology, Intel Thread Director, Instruction Set 64-bit, Intel SSE4.1, Intel SSE4.2, Intel Stable IT Platform Program (SIPP), Intel vPro Enterprise Platform Eligibility, Intel Threat Detection Technology (TDT), Intel Standard Manageability (ISM), Intel One-Click Recovery, Intel Hardware Shield Eligibility, Intel Total Memory Encryption - Multi Key, Intel Virtualization Technology with Redirect Protection (VT-rp), Mode-based Execute Control (MBEC), Intel Virtualization Technology for Directed (VT-x), Intel Gaussian and Neural Accelerator 3.5
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Miscellaneous

Package Type	Intel Boxed
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Integrated Graphics

Type	Intel HD Graphics
Base Frequency	300 MHz
Max Dynamic Frequency	1.95 GHz
Max Supported Resolution	3840x2160@60Hz (eDP), 3840x2160@60Hz (HDMI), 7680x4320@60Hz (DP), 7680x4320@60Hz (HDMI)
Features	Intel Quick Sync Video, Quad Display Capable

Neural Processor Unit (NPU)

Neural Processor Unit (NPU)	Intel AI Boost
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