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Powering the Future of Business: Why You Should Champion Intel Core Ultra Series

AI has quickly become a foundational element of the tech landscape. This has driven a demand for computing solutions that balance high performance with energy efficiency and adaptability. The rapidly changing landscape also means that AI-enabled tech must be futureproof and scalable to manage these diverse processing loads.

Exertis enables its Partners to provide their customers with products that will ensure cutting-edge AI viability. The Series 2 range of Intel Core Ultra processors is purpose-built with native AI capabilities, allowing Exertis Partners to offer their end-users unparalleled performance.

Why Intel Core Ultra?

The Intel Core Ultra Series 2 processors unlock new levels of performance in daily tasks. Combining up to 8 performance-focused P-cores and up to 16 efficiency-focused E-cores, the Ultra Series 2 offers flexibility to switch between resource-intensive and multitasking applications.

The Series 2 processors feature upgraded graphics architecture, memory support, Intel Deep Learning Boost DP4A, and CPU PCIe 5.0 lanes, along with brand new Thunderbolt 5 support, overclocking features, and Intel Gaussian and Neural Accelerator.

Improved hardware in the Intel Core Series 2 processors also provides greater performance for gaming and standard workloads. End users can benefit from a 62% increase in FPS when gaming as well as 75% faster 3D rendering performance and 82% greater multi-threading.

Front-loaded with AI Capabilities

The Intel Ultra Series 2 processors are built with AI in mind. Seen as the future of tech, AI is resource-heavy and requires a lot of processing power. To address this, Intel Ultra cores include a dedicated neural processing unit (NPU) for accelerating AI workloads.

- **GPU**. Intel's GPU provides high throughput that enables fast data processing and efficient multitasking – both critical for generative AI performance.
- **CPU**. The Ultra's CPU offers fast response for low-latency workloads. When dealing with AI, this means minimal delay between input and response.
- **NPU**. The NPU handles the neural networks that sit at the heart of AI's learning algorithms. Making vast maps of connections and synthesising the information requires a lot of power, which the NPU can handle with ease.

Built with AI functionality in mind, the NPU can handle up to 13 trillion operations per second (TOPS). This translates to greater processing power and lower latency. Combined with the GPU and CPU, it results in up to 36 total platform TOPS for efficient and reactive dedicated pathways in AI processing.

The Ultra Core Series 2 Features

Intel's Ultra Core Series 2 processors are built to handle the future of technology. For end-users, some of the main features for AI-focused working include:

Optimised Core Performance

As a core component of the P-core and E-core setup, the Intel Thread Detector allows the device's operating system to distribute workloads across available cores for the best balance of performance and efficiency.

This works alongside Intel Speed Shift and Intel Turbo Boost 3.0. Speed Shift allows the CPU in-depth control over its own clock speed, while Turbo Boost identifies the fastest cores and directs high-intensity and critical workloads to them.

Efficient Processing Power

The Intel Ultra Core Series 2 offers up to 33% better overall performance compared to the Intel Core i9. This includes up to 30% greater gaming performance and 33% more efficient content creation.

End users can also benefit from an increase of 25% in streaming and recording as well as a 21% boost in office productivity. In short, the Ultra Series 2 range offers all-around greater performance in various applications.

AI Learning and Responsiveness

Along with the dedicated NPU and high TOPS rating, Ultra Cores feature Intel's Deep Learning Boost. This accelerates inference performance, allowing trained models to make predictions based on unseen data using existing knowledge.

The Gaussian and Neural Accelerator 3.5 process AI speech and audio apps to deal with neural noise with as little processing power as possible. It diverts resources away from the CPU to improve overall system performance.

Next-Gen Support

Ultra Core processors incorporate Thunderbolt 5 technology, currently at the forefront of cable connectivity. There is also support for existing Thunderbolt 4 technology and Thunderbolt Share.

There is also support for Wi-Fi 7, the next generation of wireless connectivity. It allows for unprecedented speeds and reliability over wireless internet networks, an essential component in a high-intensity AI application.

The Exertis and Intel Advantage for Resellers

As an industry leader in IT distribution, Exertis offers its Partners exclusive access, expert support, and tailored solutions to provide end-users with cutting-edge IT infrastructure.

Exertis components allow Partners to build scalable, future-proof solutions for their customers thanks to our configurator and upgrade solutions, combined with our strong partner ecosystem.

Gain priority stock from major tier-1 brands like Intel through our partner access scheme.

We provide unmatched expertise in Intel solutions thanks to our more than 118 years of combined experience and our focus on a relationship-led business model.

For end-users, computing power and efficiency are the future of IT. For technology resellers, understanding how to leverage these concepts into solution-driven hardware is a necessity. Trust Exertis to simplify your journey with tailored services, exclusive products, and unmatched reliability.

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