





Four cornerstones for a winning Al PC strategy

Discover how Intel powers breakthrough efficiency and productivity



Introduction: A new era of computing begins



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75% of IT decisionmakers believe AI PCs will accelerate workflows, while 68% see an improved employee experience as a key benefit.² Al-capable PCs are transforming the computing landscape, with adoption accelerating fast. By 2024, 19% of PCs shipped were estimated to be Al-enabled, a figure expected to surge to 60% by 2027, largely driven by commercial demand.¹ This sharp increase reflects the significant value business leaders expect from AI PCs. According to a study by CRN, 75% of IT decision-makers believe AI PCs will accelerate workflows, while 68% see an improved employee experience as a key benefit.²

With end of support (EOS) due on Windows 10 in October 2025, IT teams will already be looking at renewing their devices. Investing in AI PCs during the current refresh cycle not only future-proofs IT fleets but also unlocks immediate transformative applications. From Adobe's creative AI tools to Accenture's digital employee experiences, and Microsoft Copilot's productivity enhancements, Intel and its partners are delivering real-world solutions that redefine how businesses operate.³

But to unlock full value from their investment in AI PCs, organisations must focus on cybersecurity, manageability, compatibility and user experience. This eBook explores how Intel equips businesses to excel across these four critical pillars.



Cybersecurity in the age of Al

AI PCs represent a huge leap forward in computing capability, but their complexity introduces new cybersecurity challenges. By integrating diverse AI models and applications, these devices significantly increase the potential points of attack for cybercriminals. Each AI-driven component—be it hardware, software, or the interface between them—represents a possible vulnerability and requires robust measures to guard against evolving threats and to ensure system integrity.

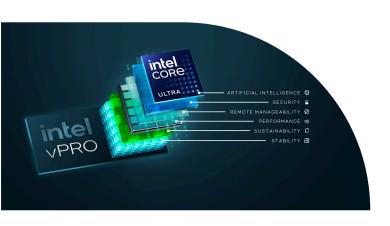


Hardware-based security from Intel

Intel delivers enterprise-grade security designed to meet these demands. The Intel vPro® platform stands as the only business solution with built-in hardware security capable of detecting advanced threats, including ransomware and software supply chain attacks. While Intel vPro® has been available for corporate devices for nearly 20

years, combining it with an AI-capable device elevates the platform and ensures that organisations enjoy the utmost performance and protection.

Intel's commitment to collaboration with leading security software vendors enhances its value further. For instance, the pre-integration of Intel® Threat Detection Technology (Intel® TDT) enables IT teams to swiftly activate hardware-based security features, reinforcing defences on Intel vPro®-based systems.



At the processor level, Intel® Core Ultra™ processors deliver comprehensive protection across multiple layers, leveraging four powerful security engines (Intel® Silicon Security Engine; Intel® Graphics Security Controller; Converged Security & Manageability Engine; and Intel® Partner Security Engine). These processors also unlock the potential for Al-powered security tools, enabling advanced capabilities such as anti-phishing, memory scanning, ransomware detection and on-device security machine learning.



Bufferzone, for instance, has developed a nocloud, anti-phishing solution that uses the Neural Processing Unit (NPU) in Intel® Core Ultra™ processors for local processing. The approach reduces cloud costs for Bufferzone's customers, mitigates privacy concerns and improves the user experience through lower latency compared to cloud-based solutions. ⁵

Similarly, CrowdStrike is working with Intel to push the boundaries of how much security data analysis can take place on device.

Leveraging AI and the Intel® Core Ultra™ processor's NPU, CrowdStrike is accelerating the detection and investigation of cyber threats and addressing CPU, memory and network challenges. ⁶

Investing in Intel-powered AI PCs equips organisations with a multi-year security foundation, helping them avoid the financial and reputational damage of breaches. By combining proactive threat detection, innovative hardware and seamless integration with AI-driven tools, Intel empowers businesses to navigate cybersecurity with confidence.

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Manageability for AI PCs

The rapid evolution of AI models presents a unique challenge for IT teams. Frequent updates, retraining and fine-tuning are essential to keep AI PCs performing optimally. Coordinating these updates across an organisation's fleet of devices without disrupting workflows requires robust manageability solutions tailored to the demands of AI-driven systems.



Industry-leading manageability solutions from Intel

With Intel vPro®, organisations can achieve up to a 90% reduction in hardware-related on-site visits and up to 65% less time spent on device management. These efficiencies allow IT teams to focus on strategic priorities while maintaining a high level of support.

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Intel vPro® remote management capabilities give IT administrators the tools to discover,

diagnose, repair and retire devices from virtually anywhere. This modern approach to device management boosts both operational efficiency and sustainability, as it reduces the environmental impact associated with traditional on-site PC maintenance and repairs. On-device AI can also play a key role, analysing telemetry and fleet data to shift IT operations from reactive to predictive and proactive, further optimising resource allocation.

Intel vPro® ensures seamless scaling and maintenance of PC fleets, with rigorous hardware testing guaranteeing a



By equipping IT teams with tools to manage complex PC environments effectively, Intel empowers organisations to scale confidently, minimise downtime and ensure business continuity.



professional-grade experience. Organisations can confidently transition between OS generations on their own schedules, reducing operational disruptions.

Intel also supports resilience and contingency planning. For example, during a major CrowdStrike outage, Intel's technologies enabled one airline to maintain operations with minimal disruption, cancelling just 1% of flights. This was possible because Intel vPro® enables one person to work on multiple

systems remotely (rather than needing to be present at the PC, one at a time). And as no physical access is required, the approach also saves on the cost of truck rolls. As AI PCs become integral to business operations, such resilience will become even more critical.

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Chapter 3: Maximising compatibility and value

Maximising compatibility and value

As the AI ecosystem evolves, IT teams need the flexibility to integrate diverse tools and software with ease. Such flexibility is not a given and is possible with Intel due to its x86 legacy and the work it has put into its technology ecosystem. This ecosystem delivers access to an open independent software vendor (ISV) ecosystem, compatibility with multiple operating systems, and support for a large number of developers, and it allows organisations to tailor AI PCs to their specific needs. This adaptability fosters innovation, streamlines workflow and enhances collaboration across platforms.



Enterprise-grade compatibility from Intel

When powered by Intel® Core Ultra™ processors, AI PCs are ready to run cuttingedge AI software, ensuring performance and flexibility across a range of applications. With the broadest ISV ecosystem in the PC

processor industry, Intel supports more than 300 ISV features, more than 100 applications and 500 optimised models, ushering in a new class of AI-powered applications that can help organisations realise the full potential of AI PCs.

With 45 years of building an unmatched software ecosystem and over 50 years of x86 development, Intel ensures legacy

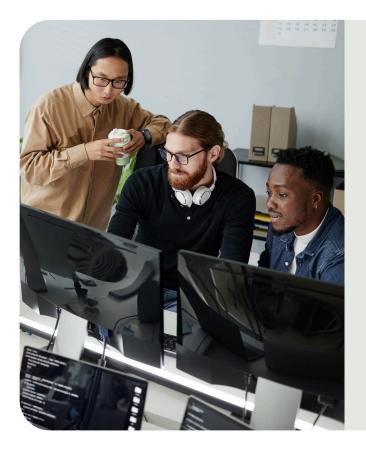


compatibility, including 99.7% Windows Pro application compatibility. This guarantees seamless operation across multiple operating systems, hundreds of applications and thousands of developers working at scale.

Intel's multi-layered approach adds further benefits. By sharing early disclosures, mapping use cases and conducting in-depth architecture reviews, Intel co-engineers solutions with its partners. Through the Intel Developer Zone, robust Software Developer Kits (SDKs), and the AI PC Acceleration Program, Intel empowers developers to innovate and optimise applications for AI PC environments.

This partner ecosystem is flourishing and already providing a wide range of value-add applications and tools. GIMP, for example, leveraged the Intel® Core Ultra™ processors in tandem with its Stable Diffusion platform to enable the creation of original images using nothing more than text prompts.

2 Zoom, meanwhile, has increased power efficiency for video and audio AI workloads with the



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Intel® Core Ultra™ processor NPU to help users to draft messages, generate meeting summaries and spark creativity. 10

By offering unparalleled compatibility across hardware, software and development

platforms, Intel enables IT teams to integrate diverse tools confidently. This ensures organisations can innovate at scale and future-proof their technology investments.



Enhancing the user experience

It goes without saying that the user experience is pivotal to the success of AI PCs. A well-designed experience reduces barriers to adoption, enhances efficiency and ensures that advanced features deliver meaningful, tangible value in everyday tasks. For AI PCs to achieve their full potential, users must see real-world benefits, such as greater productivity and improved collaboration.



Delivering the experience that users demand

Now in their second generation, Intel® Core Ultra™ processors are the most efficient x86 processors yet, achieving 50% lower power consumption compared to legacy versions. This efficiency translates to up to 20 hours of battery life (based on UL Procyon® Office Productivity benchmarks), enabling users to work untethered for an entire working day, no matter how intensive their tasks or

applications. Importantly, Intel benchmarks its processors against "real-life-usage" metrics, rather an synthetic benchmarks, for a more accurate result.

Performance is equally exceptional. Intel®
Core Ultra™ processors feature the fastest
CPU cores with enhanced prediction
capabilities to identify and process
instructions faster. With up to a 31%
performance increase on Intel® Core Ultra™ 7
155H, these processors deliver the highest
levels of performance and compatibility in
thin, light devices.



Intel's AI compute power sets a new standard, supporting up to 120 tera operations per second (TOPS). The result is a 58% faster AI performance, enabling users to run AI workloads efficiently, whether they're engaging with AI-powered applications, creative workflows or productivity tools.

By delivering efficient, high-performance AI PCs, Intel empowers users to be more productive, collaborative, and secure, enhancing overall satisfaction with their technology.



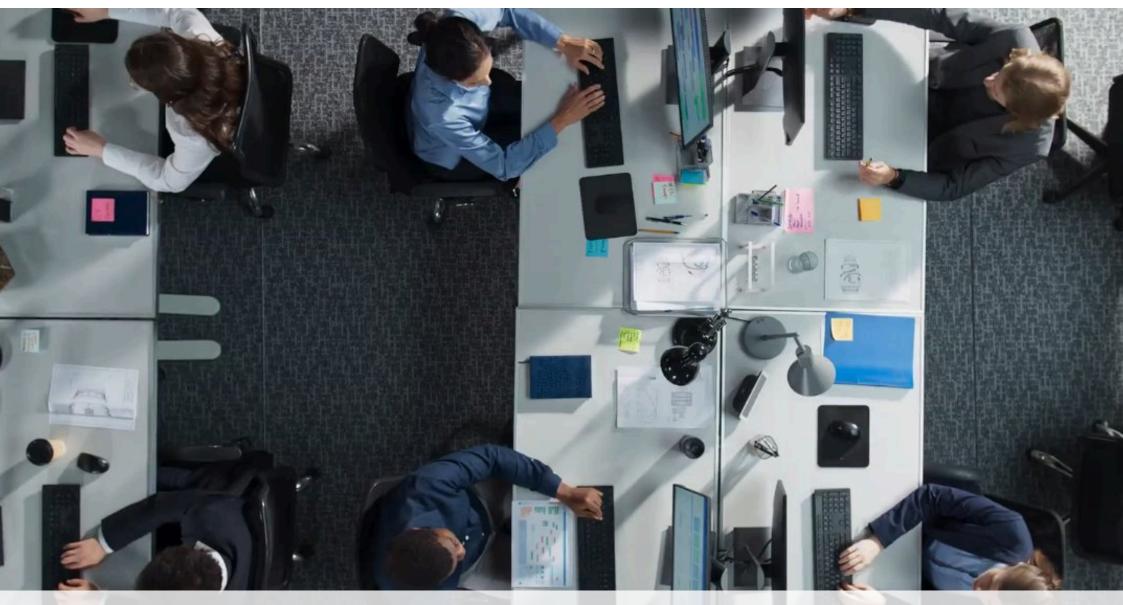
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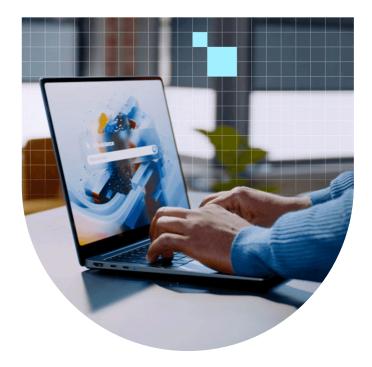
Conclusion:

Unlock the full value of AI PCs with Intel

Al PCs are set to transform the world of work, offering unprecedented opportunities for businesses to enhance productivity, efficiency and innovation. At the heart of this transformation is Intel's second-generation Intel® Core Ultra™ processors, which deliver unmatched performance, efficiency and battery life. Combined with the Intel vPro® business PC platform, businesses gain a secure, manageable and high-performing fleet capable of running any workload seamlessly.

By investing in Intel-powered AI PCs, organisations position themselves to unlock the full value of today's AI applications while future-proofing their operations for the next wave of innovation. The ability to harness AI capabilities efficiently and at scale will empower businesses to drive smarter workflows, improve user experiences and stay competitive.

Intel's commitment to delivering secure, compatible and efficient solutions, while staying true to its legacy, ensures that AI PCs provide tangible value today and a robust foundation for the future of business.



To learn more visit intel.co.uk/aipc

Endnotes

- 1 Canalys, Now and next for Al-capable PCs, 2024 https://www.canalys.com/reports/Al-PC-market-forecasts
- 2 CRN, AI PCs set to transform workplaces New report highlights key benefits for businesses, September 2024 https://www.channelweb.co.uk/news/2024/partner-content-td-synnex-ai-pcs
- 3 Al PC User Cases, Intel, https://www.intel.co.uk/content/www/uk/en/products/docs/processors/core-ultra/ai-pc-resources.html#onecolumn.copy.copy
- 4 As of March 2023, Intel has the first and only hardware-based threat detection of its kind that works to augment security software for high-efficacy detection of the latest ransomware, cryptojacking, supply chain style attacks and even zero-day attacks in Windows-based systems. Based on SE Labs Enterprise Advanced Security (Ransomware) Intel Threat Detection Technology study published March 2023 (commissioned by Intel), which compared ransomware detection capabilities of an Intel vPro system powered by Intel Core processor against systems powered by AMD Ryzen Pro processors on Windows OS. SE Labs tested Intel's hardware approach to ransomware detection, using a wide range of ransomware attacks similar to those used against victims in recent months. Systems tested included Intel® Core™ i7-1185G7, AMD Ryzen Pro 5675U, AMD Ryzen Pro 5875U, AMD Ryzen Pro 6650U, and AMD Ryzen Pro 6850U. Visit www.intel.com/tdt to learn more. No product or component can be absolutely secure. Other names and brands may be claimed as the property of others.
- 5 Al PC Use Case, Intel, https://www.intel.co.uk/content/www/uk/en/products/docs/processors/core-ultra/ai-pc-resources.html#onecolumn_copy_copy_837491961
- 6 Ibid

7	Intel, Intel vPro®: An Unrivaled Business PC Platform, https://www.intel.co.uk/content/www/uk/en/architecture-and-technology/vpro/overview.html
8	Microsoft Azure program data from October 2018 to February 2022
9	Intel, AI PC Use Cases, https://www.intel.co.uk/content/www/uk/en/products/docs/processors/core-ultra/ai-pc-resources.html#onecolumn_copy_copy_837491961
10	Ibid