Intel vPro®, an Intel® Evo™ Design

Built for What IT Needs and What Users Want

Intel vPro® is built for what IT needs. Intel® Evo™ is built for what users want. Combining these two platforms creates a class of laptops that provide business-class performance and comprehensive security in a sleek design with features to delight the user. Enjoy optimized productivity every day with 12th Gen Intel® Core™ processors, which intelligently allocate workloads based on how PCs are actually used. Rest easy with hardware-based security and active monitoring against attacks that won't bog down performance.

See backup for workloads and configurations. Results may vary.

intel.

New Work-from-Everywhere Challenges Are Emerging

The technology requirements of enterprise IT departments are shifting faster and in ways never seen before. Because unparalleled performance and collaboration are crucial for the modern workforce, IT departments need increased flexibility, superior manageability, and hardware-based security solutions to meet worker needs.

85% of ITDMs noted that their leadership understands the link between PC refresh, employee experience, and productivity[1]

<36% of ITDMs, however, strongly agree that their current computing environment enables employee productivity[1]

+300% increase in remote work from pre-COVID-19 levels[2]

30% of firms will increase their spending on cloud, security and risk, networks, and mobility[3]

$8.19 million USD is the estimated average cost of a security breach[4]

Technology Solutions for a Distributed Workforce

Today's increasingly remote workforce has different needs and demands than it did even one year ago. This shift means the importance of managing employee devices and ensuring great user experiences for all employees — no matter where they work — is becoming more and more critical.

That's why we've developed a higher standard for laptops with Intel vPro®, an Intel® Evo™ Design. This innovative, new class of laptops meets the needs of IT and provides the best overall laptop experience[5] — all on one integrated and validated platform. With Performance-cores (P-cores) for heavy applications and Efficient-cores (E-cores) for multitasking, users are more productive based on how PCs are actually used.[6]

intel vPRO + intel evo™

The Intel vPro® platform, powered by 12th Gen Intel® Core™ processors, provides what IT needs:

- **Unrivaled performance** that powers amazing business experiences.
- **Built-in security** features that help deliver comprehensive protections.
- **Remote manageability** that helps improve IT performance and end-user support.
- **Reliable stability** that helps manage PC lifecycle complexities.

Intel® Evo™-verified designs deliver the premium experience users want:

- **Consistent responsiveness** that empowers users to work their way, with minimal disruptions.
- **All-day battery life** and fast charging that meets users' real-world demands.
- **Instant wake**[7] that allows users to pick up right where they left off.
- **Ready-when-you-are connectivity** that enables productivity from anywhere.

5. As measured by unique features of Intel Evo designs such as high performing Intel® Core™ CPUs, premium components, unmatched compatibility, and the latest connectivity solutions in sleek innovative designs. All Intel Evo branded designs must meet demanding thresholds for key mobile user experiences like responsiveness and battery life; individual device performance may vary. Details at www.intel.com/PerformanceIndex (platforms).

Advantages of Intel vPro®, an Intel® Evo™ Design

Powered by 12th Gen Intel® Core™ processors

Intel vPro®, an Intel® Evo™ Design, delivers built-for-business performance, security, manageability, and stability wherever business happens.

Groundbreaking Performance & Collaboration

Intel vPro® on 12th Gen Intel® Core™ processors empowers your workforce to do their best work — wherever they work.

Intel® Iris® Xᵉ graphics deliver stunning graphics capabilities for immersive work experiences.

Thunderbolt™ 4 at 40 Gbps, delivers the best — the fastest, simplest and most reliable — cable solution.[8]

Intel® Wi-Fi 6/6E (Gig+) allows users to gain access to exclusive high-speed channels that other devices cannot use.[9]

Be ready for the future of **AI on PCs**. Devices on Intel vPro® with 12th Gen Intel® Core™ processors are equipped to handle AI-enhanced applications and workloads.

Comprehensive Security Features

Intel® Hardware Shield, exclusive to Windows devices on Intel vPro®, offers your business comprehensive hardware-based security features. It provides above- and below-the-OS protections, enhanced app and data security, and advanced threat detection.

Intel® Hardware Shield is part of Intel's unmatched breadth of industry-leading security features and initiatives:

- Detecting the latest threats at the highest efficacy for businesses at record speed, starts with Intel hardware-based security.[10]
- Groundbreaking technology to help shut down an entire class of attacks that long evaded software-only solutions.[11]
- Integrated security at every step, backed by dedicated teams evaluating security resilience.[12]
- Unrivaled product security response to help keep your business safe.[13]
- Intel's leading Bug Bounty program, inviting the security research community to partner, identify, and help eliminate issues.[14]

Leading Remote Manageability & Stability

Save time and money while enhancing IT capabilities. Leading remote manageability and stability tools help IT keep devices up and running from anywhere — without interrupting end users.

Improve your IT team's performance with cloud-based PC fleet remote manageability from **Intel® Active Management Technology (Intel® AMT)** with **Intel® Endpoint Management Assistant (Intel® EMA)**.

Intel® Stable IT Platform Program (Intel® SIPP) is an extensive validated platform that helps transition and upgrade end-user systems with assured quality and performance and no anticipated hardware changes for at least 15 months.

8. As compared to other current PC Client bidirectional I/O connection technologies like eSATA and USB. Must be connected via Thunderbolt 3 or newer accessory to enable full performance. See www.intel.com/PerformanceIndex (connectivity) for details. Results may vary.
9. Subject to 6 GHz band availability, operating system support, and router compatibility. Details at www.intel.com/PerformanceIndex (connectivity).
10. The Intel vPro platform delivers the first and only silicon-enabled AI threat detection to help stop ransomware and Cryptomining attacks for Windows-based systems. See www.intel.com/PerformanceIndex (platforms) for details. No product or component can be absolutely secure.

intel vPRO i9 · vPRO i7 · vPRO i5 — An Evo™ Design

Intel vPro®, an Intel® Evo™ Design, provides stylish, thin, and light laptops built to meet the needs of today's highly mobile business users. These co-engineered designs are verified to deliver:

- **<1-second instant wake**[15] allows employees to pause, pivot, and pick up right where they left off with minimal interruption.
- **Fast charge: 4+ hours of real-world battery life** in a 30-minute charge on laptops with FHD displays[16] so employees can be productive anywhere their work takes them.
- **Best-in-class Wi-Fi and wired connectivity**[17] enable your workforce to connect and collaborate seamlessly in real time.
- **9+ hours of real-world battery life** on laptops with FHD displays[18] to keep employees — and all of their video conferencing and other critical applications — up and running for longer.
- **Up to 66% lower latency** on real-time voice/video calls (during network contention) with Intel® Connectivity Performance Suite.[19]

See backup for workloads and configurations. Results may vary.

16. Minimum charge attained from OEM-default shutdown level. Individual system results may vary. See www.intel.com/PerformanceIndex (platforms) for details.
17. All Intel® Evo™ designs have integrated Intel® Wi-Fi 6/6E (Gig+) and Thunderbolt™ 4 technology. See www.intel.com/PerformanceIndex (connectivity) for details.
18. Time taken to drain from 100% to critical battery level while performing typical workflows in a realistic environment. Individual system results may vary. See www.intel.com/PerformanceIndex (platforms) for details.

Amazing Business PC Experiences Start Here

with Laptops on Intel vPro®, an Intel® Evo™ Design

Learn more about the Intel vPro® Platform: **intel.com/vpro**

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Notices and Disclaimers

1. Forrester, How PCs Will Drive the Future of Work, January 2020.

2. Forrester, Predictions 2021: Technology And Customer Obsession Help Firms Emerge From Crisis Mode, October 2020.

3. Forrester Research, Forrester Predictions 2021, October 2020.

4. IBM, Cost of a Data Breach Report 2020, July 2020.

5. As measured by unique features of Intel Evo designs such as high performing Intel® Core™ CPUs, consistent responsiveness, premium audio & visual components, broad ecosystem compatibility, sleek form factor innovations, optional touch screen and connectivity solutions. Intel's comprehensive laptop innovation program Project Athena ensures all designs with the Intel Evo brand have been tested, measured and verified against a premium specification and key experience indicators. Verification testing includes time taken to perform up to 25 workflows predictive of performance under a typical-use environment of multiple cloud-based and (where available) local apps and web pages. The typical-use environment includes Google Chrome browser, Google G-Suite or Microsoft Office 365, YouTube and Google Meet or Zoom. Testing is conducted on unplugged laptops with at least 30% charge level on battery, connected to 802.11ax wireless, and with shipped hardware configurations including Windows 11 (Windows-based devices) and Chrome OS (Chrome-based devices) and 250-nit (LCD displays)/200-nit (OLED displays) screen brightness. Testing results as of February 2022, and do not guarantee individual laptop performance. Learn more at www.intel.com/Evo.

6. Not available on certain 12th Gen Intel Core processors. Performance hybrid architecture combines two new core microarchitectures, Performance-cores (P-cores) and Efficient-cores (E-cores), on a single processor die. Select 12th Gen Intel® Core™ processors (certain 12th Gen Intel Core i5 processors and lower) do not have performance hybrid architecture, only P-cores.

7. All Intel Evo designs are co-engineered and verified to specification requirement of 1 sec or less. Individual system results may vary; power and performance vary by use, configuration and other factors. Testing results are as of February 2022 and do not guarantee individual laptop performance.

8. As compared to other current PC Client bidirectional I/O connection technologies like eSATA and USB. Must be connected via Thunderbolt 3 or newer accessory to enable full performance. See www.intel.com/PerformanceIndex (connectivity) for details. Results may vary.

9. Subject to 6 GHz band availability, operating system support, and router compatibility. Details at www.intel.com/PerformanceIndex (connectivity).

10. The Intel vPro platform delivers the first and only silicon-enabled AI threat detection to help stop ransomware and Cryptomining attacks for Windows-based systems. See www.intel.com/PerformanceIndex (platforms) for details. No product or component can be absolutely secure.

11. Intel CET is designed to protect against the misuse of legitimate code through control-flow hijacking attacks - widely used techniques in large classes of malware. Intel CET offers software developers two key capabilities to help defend against control-flow hijacking malware: indirect branch tracking and shadow stack. Indirect branch tracking delivers indirect branch protection to defend against jump/call-oriented programming (JOP/COP) attack methods. Shadow stack delivers return address protection to help defend against return oriented programming (ROP) attack methods. These types of attack methods are part of a class of malware referred to as memory safety issues, and include tactics such as the corruption of stack buffer overflow and use-after-free. According to Trend Micro Zero Day Initiative- https://www.zerodayinitiative.com/advisories/published. 63.2% of the 1,097 vulnerabilities disclosed by ZDI were memory-safety related. To learn more about how CET works, see here- https://software.intel.com/content/www/us/en/develop/articles/technical-look-control-flow-enforcement-technology.html. No product or component can be absolutely secure.

12. Intel applies the security development lifecycle from inception to production, with testing from teams of dedicated security experts. Learn more at intel.com/PerformanceIndex.

13. The Intel Platform Update (IPU) process proactively and transparently enables product security updates across the ecosystem, providing vulnerability mitigation for Intel products and customers. Learn more at intel.com/PerformanceIndex.

14. Intel's leading Bug Bounty program invites the security research community to partner, discover, and eliminate issues.

15. All Intel Evo designs are co-engineered and verified to specification requirement of 1 sec or less. Individual system results may vary; power and performance vary by use, configuration and other factors. Testing results are as of February 2022 and do not guarantee individual laptop performance.

16. Minimum charge attained in 30-minute window while powered off from OEM-default shutdown level. Individual system results may vary; power and performance vary by use, configuration and other factors. Testing results are as of February 2022 and do not guarantee individual laptop performance.

17. Intel® Wi-Fi 6/6E (Gig+) products enable the fastest possible maximum speed for typical laptop Wi-Fi products. Thunderbolt™ 4 is the fastest port available on a laptop, at 40 Gb/s, as compared to other laptop I/O connection technologies including eSATA, USB, and IEEE 1394 Firewire. Performance varies by use, configuration and other factors. See www.intel.com/PerformanceIndex (connectivity) for details.

18. Time taken to drain from 100% to critical battery level while performing workflows under a typical-use environment comprising multiple cloud-based and (where available) local apps and web pages. The typical-use environment includes Google Chrome browser, Google G-Suite or Microsoft Office 365, YouTube and Google Meet or Zoom. Testing is conducted on unplugged laptops, connected to 802.11ax wireless, and with shipped hardware configurations including Windows 11 (Windows-based devices) and Chrome OS (Chrome-based devices) and 250-nit (LCD displays)/200-nit (OLED displays) screen brightness. Individual system results may vary; power and performance vary by use, configuration and other factors. Testing results are as of February 2022 and do not guarantee individual laptop performance.

19. The Intel® Connectivity Performance Suite software application enables automated wireless traffic prioritization and connection optimization for Intel PC platforms configured with Intel® Wi-Fi 6E (Gig+) products. Test data represents best case results in a controlled local network to show relative platform performance differences with vs. without ICPS software application wireless traffic prioritization. Visit intel.com/PerformanceIndex (Connectivity) for details. Results may vary.

Performance varies by use, configuration and other factors. Learn more at www.Intel.com/PerformanceIndex.

Performance results are based on testing as of dates shown in configurations and may not reflect all publicly available updates. See configuration disclosure for additional details.

No product or component can be absolutely secure.

Intel technologies may require enabled hardware, software or service activation.

Your costs and results may vary.

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