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Tackle 2020's Toughest Productivity Challenges with the Intel vPro Platform (Tackle 2020's Toughest Productivity Challenges with the Intel vPro Platform – Connected IT Blog (connection.com)**)**

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Some call it the "new normal" while others call it the "next normal." Regardless of what you call it, workforce productivity and IT management of resources has taken a drastic shift to a level not seen before. Whether you've moved your workforce to a remote model overnight or you're operating your facility with as little contact as possible, recent events have generated a need to manage technology in a whole new way. With those factors in mind, we have identified priorities in technology platforms that took features that were "nice to have" and made them mission critical.

In May 2020, Intel launched their 10th Generation Intel Core™ vPro® processors. For all of us who have watched the evolution of computing, new lines of technology present key opportunities to take advantage of fresh ideas and exciting innovations. All of this is true in the technology you will find in 10th Generation Intel Core vPro processors. But are these *nice*-to-have or *need*-to-have devices? The circumstances we navigate in 2020 make a strong business case for the latter.

Why choose a processor that offers the Intel vPro® platform? There are areas of need where the Intel vPro platform offers essential functionality in this new working environment: fewer interruptions, built-in security features, and responsive performance. There are many examples of organizations who moved to a remote model without proper planning and now struggle to achieve optimal levels of connectivity and productivity because they're using technology in ways not designed for the new 2020 work environment. Other organizations may be assessing their choice of technology to make long-term changes in the way their workforce is set up for business continuity. Regardless, the criteria that goes into making those important technology decisions are different now and will be relevant moving forward.

When it comes to IT taking a proactive role in lowering incidents over the PC life cycle, the Intel vPro platform has built-in technology to meet that need. This includes improving response times, enabling automated patch updates, enabling same-day service, and providing faster incident resolution via full in-band/out-of-band PC control through the cloud. Intel® Active Management Technology (Intel® AMT) and Intel® Endpoint Management Assistant (Intel® EMA) are hardware-based manageability tools that can be run from the cloud and enable IT to optimize employees' work machines (whether they are mobile, desktop, or workstations) to minimize interruptions. If there is a machine down, don't worry. Intel AMT allows IT support to access the machine remotely, even if you can't power it up or if the operating system is down.

Having remote workers—or even workers in the building—will always present a level of security concern to your organization. Complementing the security tools you use to ensure malicious content does not get onto your machines and into your network, Intel vPro platform security features help protect machines from receiving malware. Exclusive to the Intel vPro platform, Intel® Hardware Shield not only protects the operating system, but also ensures the operating system runs on trusted hardware and reports to the operating system to help make for a better operational security practice.

For all that your workforce is being tasked to do in a remote environment, responsive PC performance is essential to productivity. There are features built into the Intel vPro platform that learn and respond to the work you are performing and direct power to those platforms that need it the most.

The computing platforms you deploy across your organization can all benefit from the Intel vPro platform Powered by Intel Core vPro processors. They are available for a variety of workloads, including Intel® Core™ i5 vPro™, Intel® Core™ i7 vPro™, Intel® Core™ i9 vPro™, and Intel® Xeon® W processors with a range of processing power within each category. The Intel vPro platform is available in a variety of computers, including micro form factor (MFF) desktops, desktop towers, laptops, 2-in-1s, and workstations.

What can you expect by going with a 10th Gen Intel Core vPro processor? In their launch, Intel announced metrics that make a pretty compelling case.

- Up to 40 percent better overall application performance compared with a three-year-old laptop[1,2]
- Up to 35 percent faster multitasking compared with a three-year-old laptop[1,2,3]
- Nearly 3x faster[4] 5 Gigabit speeds and improved performance in dense environments with integrated Intel Wi-Fi 6 (Gig+) for the best Wi-Fi technology for videoconferencing5

Today's work environment implores IT departments to have more robust tools at their disposal to maximize system stability, security, efficiency, and connectivity. To learn more about the Intel vPro platform, visit connection.com/intel or call your Account Manager. Connection.com offers convenient in-house resources specializing in Intel technology and can help you choose the right solution for your operational needs—in 2020 and beyond.

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1. Performance results are based on testing as of May 4, 2020, and may not reflect all publicly available security updates. See configuration disclosure for details. No product can be absolutely secure.
   Software and workloads used in performance tests may have been optimized for performance only on Intel® microprocessors.
   Performance tests, such as SYSmark* and MobileMark*, are measured using specific computer systems, components, software, operations, and functions. Any change to any of those factors may cause the results to vary. You should consult other information and performance tests to assist you in fully evaluating your contemplated purchases, including the performance of that product when combined with other products. For more complete information, visit intel.com/benchmarks.

2. Overall performance: As measured by SYSmark 2018 Overall Score on preproduction 10th Gen Intel® Core™ i7-10810U vs. 8/15/19 testing of 7th Gen Intel® Core™ i7-7600U. SYSmark 2018 is published by the Business Applications Performance Corporation (BAPCo), a benchmarking consortium. SYSmark tests Windows desktop applications performance using real-world scenarios: productivity, creativity, and responsiveness. Mainstream applications used in the scenarios include Microsoft Office, Adobe Creative Cloud, and Google Chrome. Each scenario produces individual metrics that roll up to an overall score. REFRESH CONFIGURATIONS. NEW: Preproduction system with: Processor: Intel® Core™ i7 10810U (CML-U 6+2) PL1=15W/25W, 6C12T, Turbo up to 4.9 GHz; Memory: 2×16 GB DDR4-2667 2Rx8; Storage: Intel® 760p M.2 PCIe NVMe SSD, Intel® Optane™ Memory H10 with Intel® RST driver, and Samsung SSD 970 Evo Plus with Samsung driver; Display resolution: 3840×2160 eDP Panel 12.5"; OS: Windows 10 19H2-18363.ent.rx64.691-Appx68. Power policy set to AC/Balanced mode for all benchmarks except SYSmark 2018 which is measured in AC/BAPCo mode for Performance. Power policy set to DC/Balanced mode for power. All benchmarks run in Admin mode and Tamper Protection Disabled/Defender Disabled, Graphics driver: 2020-02-11-ci-master-4102-revenue-pr-1007926-whql; Temperature: Tc=70c for all performance measurements. Tc=50c for MobileMark 2018. THREE-YEAR-OLD: OEM system with Processor: Intel® Core™ i7 -7600U (KBL-U 2+2) PL1=15W, 2C4T, Turbo up to 3.9 GHz; Memory: 2 X 4 GB DDR4; Storage: Intel® 760p M.2 PCIe NVMe SSD; Display resolution: 1920×1080; OS: 10.0.18362.175. Power policy set to AC/Balanced mode for all benchmarks except SYSmark 2018 which is measured in AC/BAPCo mode for Performance. Power policy set to DC/Balanced mode for power. All benchmarks run in Admin mode & Tamper Protection Disabled/Defender Disabled, Graphics driver: n/a BIOS version: n/a; Temperature: Tc=70c for all performance measurements. Tc=50c for MobileMark 2018.

3. Multitasking: As measured by Office 365 Multithreaded Workload on preproduction 10th Gen Intel® Core™ i7-10810U vs. 7th Gen Intel® Core™ i7-7600U. Measures the time it takes Microsoft

Office to perform three tasks in a multitasking scenario: 1. Export a PowerPoint File as Video. 2. Export a Word Document to PDF. 3. Excel spreadsheet calculation. REFRESH CONFIGURATIONS. NEW: Preproduction system with: Processor: Intel® Core™ i7 -10810U (CML-U 6+2) PL1=15W/25W, 6C12T, Turbo up to 4.9 GHz; Memory: 2×16 GB DDR4-2667 2Rx8; Storage: Intel® 760p M.2 PCIe NVMe SSD, Intel® Optane™ Memory H10 with Intel RST driver, and Samsung SSD 970 Evo Plus with Samsung driver; Display resolution: 3840×2160 eDP Panel 12.5”; OS: Windows 10 19H2-18363.ent.rx64.691-Appx68. Power policy set to AC/Balanced mode for all benchmarks except SYSmark 2018 which is measured in AC/BAPCo mode for Performance. Power policy set to DC/Balanced mode for power. All benchmarks run in Admin mode and Tamper Protection Disabled/Defender Disabled, Graphics driver: 2020-02-11-ci-master-4102-revenue-pr-1007926-whql; Temperature: Tc=70c for all performance measurements. Tc=50c for MobileMark 2018. THREE-YEAR-OLD: OEM system with Processor: Intel® Core™ i7 -7600U (KBL-U 2+2) PL1=15W, 2C4T, Turbo up to 3.9 GHz; Memory: 8117 MB (DDR4 SDRAM); Storage: Intel® 760p M.2 PCIe NVMe SSD; Display resolution: 1920×1080; OS: 10.0.18363.657 (Win10 19H2 [1909] November 2019 Update). Power policy set to AC/Balanced mode for all benchmarks except SYSmark 2018 which is measured in AC/BAPCo mode for Performance. Power policy set to DC/Balanced mode for power. All benchmarks run in Admin mode & Tamper Protection Disabled/Defender Disabled, Graphics driver: 25.20.100.6374; BIOS version: KBLSE2R1.R00.X146.P02.1812100910; Temperature: Tc=70c for all performance measurements. Tc=50c for MobileMark 2018.

4. Nearly 3X Faster: 802.11ax 2×2 160 MHz enables 2402 Mbps maximum theoretical data rates, ~3X (2.8X) faster than standard 802.11ac 2×2 80 MHz (867 Mbps) as documented in IEEE 802.11 wireless standard specifications, and require the use of similarly configured 802.11ax wireless network routers.

5. As measured by by OTA (Over the Air) Wi-Fi 6 (802.11ax) vs. Wi-Fi 5 (802.11ac) NB client Skype video conferencing test data, obtained in standard corporate IT 20 MHz and 40 MHz network deployment scenarios. Wi-Fi networks consist of 8 NB clients with 7 clients generating 10-20 Mbps Wi-Fi traffic (using iChariot traffic simulator) while 1 client conducts a 5 min Skype video conference session with a 9th client connected via 10/100/1000 Ethernet to a local server. Skype data obtained via Skype reporting application.

Notices and Disclaimers

Performance results are based on testing as of dates shown in configurations and may not reflect all publicly available updates. Your costs and results may vary. Intel® technologies may require enabled hardware, software or service activation.

No product or component can be absolutely secure.

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