The notebook computer has benefited from four decades of innovation, with each generation coming one step closer to delivering the vision of anytime, anywhere computing. As the preferred form factor for the modern worker, notebooks must capture the perfect balance between performance, battery life, connectivity, and mobility. Systems based on the latest 8th Gen Intel® Core™ vPro™ processors make strides in all these areas, while also providing the rich set of stability, manageability and security features that business PC buyers have come to expect.

Mainstream Mobile Processor

The latest 8th Gen Intel Core vPro processor refreshes the older U-series 15W processors targeting mainstream mobile computing. As shown in Figure 1, it features four processor cores (14nm), Gen 9 Intel® UHD Graphics, two-channel memory controller, and a new on-package Intel® 300 Series Platform Controller Hub (PCH).

Empowering the Mobile Worker

The latest U-series processor delivers 58% better overall system performance versus a 3-year old PC and up to 11 hours of battery life for a productive work day. Longer battery life is made possible by power management features such as Intel® Dynamic Tuning Technology, Intel® Display Power Saving Technology, and Intel® Power Optimizer. Systems may also support Microsoft Windows® Modern Standby as recommended in the Intel® vPro™ platform specification. In addition, a variety of thermal management features within the processor enable attractive mobile form factors ranging from thin and light notebooks to versatile detachable and convertible systems.

Maximum Connectivity

The new PCH offers a wide range of connectivity options including integrated Intel® Wireless-AC which supports 802.11ac Wi-Fi and Bluetooth® 5.0 when paired with the Intel® Wireless-AC 9560 external RF transceiver chip. For businesses transitioning their network infrastructure to the latest technology, some mobile systems may alternatively feature the next generation Intel® Wi-Fi 6 AX200 component for improved performance, scalability, and enhanced security via the WPA3 protocol. Remote management of the platform using Intel® Active Management Technology is possible over both Wi-Fi and wired Local Area Network connections.

In addition, the platform has been validated with the Intel® XMM 7360 M.2 module, which offers a power-efficient RF architecture supporting world coverage and up to LTE Advanced Cat. 10 speeds.

Next generation 40 Gbps Thunderbolt™ 3 enables a flexible computing experience with single-cable docking solutions that easily integrate the mobile PC into a peripheral-rich, stationary computing environment. The new PCH also supports 16 PCIe 3.0 lanes and integrated USB 3.1 Gen 2 with up to 10 Gbps data transfer rates.
Built for Business

Mobile computing systems identified by the processor SKUs and on-system brands shown on Figure 2 provide various optimizations for corporate environments. In concert with Microsoft Windows* 10 Pro or Windows 10 Enterprise versions of the operating system, mobile computers using the latest Intel Core vPro processors address the needs of both users and technology decision makers.

Platform Stability

The Intel® Stable Image Platform Program enables predictable transitions for businesses that test devices for performance, compatibility, and compliance within their computing environment. In combination with extensive validation by Intel and system vendors of multiple versions of the Windows OS, businesses can deploy a consistent set of hardware and software throughout the buying cycle for that stable platform.

Manageability and Security Features

The Intel® vPro™ platform provides businesses with the tools to efficiently manage and help secure computing endpoints. Consequently, systems based on the latest 8th Gen Intel Core vPro processor support a rich suite of established and innovative features (Figure 3). For instance, Intel® Hardware Shield provides an evolving set of configurable platform protection technologies. In the latest systems, low-level system critical software may utilize Intel Hardware Shield to reduce each platform’s attack surface while communicating the current set of security policies to the operating system. The capabilities of the Intel vPro platform are designed to enable, accelerate, or compliment Windows* 10 Pro and Enterprise, thus providing a robust computing solution for business.

Ready for Refresh

The latest 8th Gen Intel Core vPro processor brings mobile computing closer to the goal of anytime anywhere productivity [Figure 4]. With a new wave of designs from top vendors, businesses that refresh their computing fleets to the latest technology can reap the benefits of a more modern workplace. To learn more about the Intel vPro platform please visit intel.com/vpro.

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1 Intel® vPro™ eligible i7-8665U and i5-8365U processors
2 As measured by Intel (2018) using SYSmark® 2018. All other system configurations: Intel® Reference Platform with Intel® Core™ i5-8365U processor, PL1=15W TDP, 4C8T, Turbo up to 4.1 GHz, Intel® UHD Graphics 620, 2 x 4 GB DDR4-2400, 512 GB Intel® SSD 760p, Microsoft Windows® 10 RS5 Version 1809 (Build 17631), BIOS x177 and MCU: A8. Intel® Reference Platform with Intel Core i5-6300U processor, PL1=15W TDP, 2C4T, Turbo up to 3.0 GHz, Intel® HD Graphics 520, 8 GB DDR4, 512 GB SSD, Microsoft Windows® RS5 Version 1809 (Build 17631), BIOS x144 and MCU: C6
3 As measured by Intel (2018) using MobileMark 2018 with the following system configuration: pre-production OEM system with Intel® Core™ i7-8665U processor, PL1=15W TDP, 4C8T, Turbo up to 4.8 GHz, Intel® UHD Graphics 620, 14” screen with 1920 x 1080 resolution, 16GB RAM, Hynix 256 GB, 52 WHr battery, Microsoft Windows® 10 Pro, BIOS v1.0.7 and MCU C6

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