



# PERFORMANCE FOR THE BIGGER PICTURE

Turn data into better decisions with business-class laptops powered by 8th Gen Intel® Core™ vPro™ processors.

Analyze and visualize data

**UP TO 40% FASTER<sup>1</sup>**

Maximize productivity with

**UP TO 2.1X FASTER MULTITASKING<sup>2</sup>**

Do more with

**UP TO 10 HOURS OF BATTERY LIFE<sup>3</sup>**



For more complete information about performance and benchmark results, visit [www.intel.com/benchmarks](http://www.intel.com/benchmarks)

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 [www.intel.com/benchmarks](http://www.intel.com/benchmarks).

See reverse for complete performance and benchmarks.

The benchmark results reported above may need to be revised as additional testing is conducted. The results depend on the specific platform configurations and workloads utilized in the testing, and may not be applicable to any particular user's components, computer system or workloads. The results are not necessarily representative of other benchmarks and other benchmark results may show greater or lesser impact from mitigations.

System Configuration: NEW: Intel® Core™ i7-8650U (Intel Reference Platform), 15W, 4C8T, Turbo up to 4.2GHz, Memory: 2x4GB DDR4-2400, Storage: Intel® 6000p SSD, Graphics: Intel(R) UHD Graphics 620, BIOS version 117.07 with MCU 0x84, OS: Windows\* 10 (version 10.0.16299.192). 4-YEAROLD: Intel® Core™ i7-4600U (Intel Reference Platform), 15W, 2C4T, Turbo up to 3.3GHz, Memory: 2x4GB DDR3-1600, Storage: Intel 540s SSD, Graphics: Intel(R) HD Graphics 4400, BIOS version 139 with MCU 0x23, OS: Windows\* 10 (version 10.0.16299.192)

<sup>1</sup> As measured by Microsoft\* Power BI Data Source Change Workload: Measures the time to load, query, calculate statistics, and draw 6 charts from a different local data source containing 2.2 million sales records.

<sup>2</sup> As measured by Office Productivity and Multitasking Workload: Slack\* is open in the background while a 2.28 MB, Microsoft\* PowerPoint .ppt presentation is exported as a 1920x1080 H.264 .mp4 video presentation. While the video presentation is being created 1) a 6.49 MB, 844 page, Microsoft Word .docx document is converted to a 7.98 MB, PDF file and 2) a 70.4 MB, Microsoft\* Excel .xlsm macro-enabled worksheet that is recalculated.

<sup>3</sup> Battery Life projections: Intel® Core™ i7-8650U Processor (Intel Reference Platform), 15W, 4C8T, Turbo up to 4.2GHz, Memory: 2x4GB DDR4-2133, Storage: Intel 540s m.2 SSD, Graphics: Intel UHD Graphics 620, OS: Windows\* 10, Battery Size: 42Whr, Screen: 25x14 12.5", Windows\* 10 Power Slider – Better Performance. As measured by EEMBC Browsing Bench Component Average Power. Disconnect all USB devices, connect to a local WiFi access point and set the screen brightness to 200 nits (disable DPST, set brightness to 200 nits on a white background and enable DPST). Wait for 10 mins for the OS to completely idle and then launch EEMBC Browsing Bench using Microsoft\* Edge Browser. Set the web pages to idle for 20s in between page loads. Measure power for the duration of all page loads and report 3 run median.

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