# ProductSheet

# HP ENVY x360 Convert 15-es2010nr (68U51UA)

# Fuel your creativity with power and precise color

The HP ENVY x360 15.6" 2-in-1 is a carefully crafted touchscreen laptop with a powerful Intel® Processor[1]. Featuring a HD display[2] and narrow bezels, you can see your more of your digital world. Enjoy peace of mind with added security features like an integrated fingerprint reader[3], physical camera shutter and microphone mute button.



## Wirelessly share across devices

Easily share photos, videos, and files between your mobile devices and HP ENVY over Wi-Fi with HP QuickDrop.

## Intelligently adapts to your habits

Smart Sense intelligently adapts to your work habits by adjusting your PC's system for optimal performance.

# **Enhanced security features**

Keep you and your work secure with an integrated fingerprint reader[3], privacy camera shutter, and mute mic button.

# **Featuring**

# Get a fresh perspective

Windows 11 provides a calm and creative space where you can pursue your passions through a fresh experience. From a rejuvenated Start menu, to new ways to connect to your favorite people, news, games, and content—Windows 11 is the place to think, express, and create in a natural way.  $^{[4]}$ 

A dynamic processor that adapts to you for superior multi-tasking performance 12th Gen Intel® Core™ processors distributes performance where you need it the most — saving you time and increasing your ability to do the things you actually want.  $^{[1]}$ 

## Exceptional experience, anywhere

The Intel® Evo<sup>™</sup> platform brings together the perfect combination of performance, responsiveness, battery life and stunning visuals in a new class of laptops. These designs are verified by Intel for an exceptional laptop experience, anywhere. <sup>[5]</sup>

## FHD IPS display

Enjoy crystal-clear images from any angle. With  $178^{\circ}$  wide-viewing angles and a vibrant  $1920 \times 1080$  resolution, you'll always have a great view of your favorite content. [6]

# Eyesafe® Certified Display

Eyesafe® certified displays meet TÜV low blue light requirements and Eyesafe® standards for protecting your eyes from harmful blue light without distorting colors. Laptops with integrated Eyesafe® displays help reduce eyestrain and improve eye comfort when working for long periods of time.





# **Specifications**

Operating system	Windows 11 Home	
Product color	Natural silver aluminum	
Processor family	12th Generation Intel® Core™ i7 processor	
Processor	Intel® Core <sup><math>TM</math></sup> i7-1260P (up to 4.7 GHz with Intel® Turbo Boost Technology, 18 MB L3 cache, 12 cores, 16 threads) <sup>[6,7]</sup>	
Chipset	Intel® Integrated SoC	
Memory	8 GB DDR4-3200 MHz RAM (2 x 4 GB)	
Internal Storage	512 GB PCIe® NVMe™ TLC M.2 SSD	
Product design	Sandblasted, anodized finish	
Optical drive	Optical drive not included	
Graphics	Integrated	
Graphics (integrated)	Intel® Iris® Xe Graphics	
Display	39.6 cm (15.6") diagonal, FHD (1920 x 1080), multitouch-enabled, IPS, edge-to-edge glass, micro-edge, Corning® Gorilla® Glass NBT™, 400 nits, 100% sRGB	
Display	15.6" diagonal, FHD (1920 x 1080), multitouch-enabled, IPS, edge-to-edge glass, micro-edge, Corning® Gorilla® Glass NBT™, 400 nits, 100% sRGB	
Display size (diagonal)	39.6 cm (15.6")	
Display size (diagonal)	15.6"	
Audio	Audio by Bang & Olufsen; Dual speakers; HP Audio Boost	
Minimum dimensions (W x D x H)	35.9 x 22.82 x 1.84 cm (Dimensions vary by configuration)	
Minimum dimensions (W x D x H)	14.13 x 8.98 x 0.72 in	
Weight	1.82 kg (Weight varies by configuration)	
Weight	4.02 lb	
Keyboard	Full-size, backlit, natural silver keyboard	
Pointing device	HP Imagepad with multi-touch gesture support; Precision Touchpad Support	
Input devices	Accelerometer; eCompass; Gyroscope; IR Thermal sensor	
Input devices Camera	HP Wide Vision 720p HD camera with camera shutter, temporal noise reduction and integrated dual array digital microphones	
	HP Wide Vision 720p HD camera with camera shutter, temporal noise reduction and integrated dual array	
Camera	HP Wide Vision 720p HD camera with camera shutter, temporal noise reduction and integrated dual array digital microphones  1 Thunderbolt™ 4 with USB4™ Type-C® 40Gbps signaling rate (USB Power Delivery, DisplayPort™ 1.4, HP Sleep and Charge); 1 SuperSpeed USB Type-A 10Gbps signaling rate (HP Sleep and Charge); 1 SuperSpeed USB Type-A 10Gbps signaling rate; 1 HDMI 2.1; 1 AC smart pin; 1 headphone/microphone	
Camera	HP Wide Vision 720p HD camera with camera shutter, temporal noise reduction and integrated dual array digital microphones  1 Thunderbolt™ 4 with USB4™ Type-C® 40Gbps signaling rate (USB Power Delivery, DisplayPort™ 1.4, HP Sleep and Charge); 1 SuperSpeed USB Type-A 10Gbps signaling rate (HP Sleep and Charge); 1 SuperSpeed USB Type-A 10Gbps signaling rate; 1 HDMI 2.1; 1 AC smart pin; 1 headphone/microphone combo <sup>[19,20]</sup>	
Camera  Ports  Expansion slots  Package dimensions (W x D	HP Wide Vision 720p HD camera with camera shutter, temporal noise reduction and integrated dual array digital microphones  1 Thunderbolt™ 4 with USB4™ Type-C® 40Gbps signaling rate (USB Power Delivery, DisplayPort™ 1.4, HP Sleep and Charge); 1 SuperSpeed USB Type-A 10Gbps signaling rate (HP Sleep and Charge); 1 SuperSpeed USB Type-A 10Gbps signaling rate; 1 HDMI 2.1; 1 AC smart pin; 1 headphone/microphone combo <sup>[19,20]</sup> 1 multi-format SD media card reader	
Camera  Ports  Expansion slots  Package dimensions (W x D x H)	HP Wide Vision 720p HD camera with camera shutter, temporal noise reduction and integrated dual array digital microphones  1 Thunderbolt™ 4 with USB4™ Type-C® 40Gbps signaling rate (USB Power Delivery, DisplayPort™ 1.4, HP Sleep and Charge); 1 SuperSpeed USB Type-A 10Gbps signaling rate (HP Sleep and Charge); 1 SuperSpeed USB Type-A 10Gbps signaling rate; 1 HDMI 2.1; 1 AC smart pin; 1 headphone/microphone combo <sup>[19,20]</sup> 1 multi-format SD media card reader  6.9 x 49.3 x 30.5 cm	
Camera  Ports  Expansion slots  Package dimensions (W x D x H)  Package weight	HP Wide Vision 720p HD camera with camera shutter, temporal noise reduction and integrated dual array digital microphones  1 Thunderbolt™ 4 with USB4™ Type-C® 40Gbps signaling rate (USB Power Delivery, DisplayPort™ 1.4, HP Sleep and Charge); 1 SuperSpeed USB Type-A 10Gbps signaling rate (HP Sleep and Charge); 1 SuperSpeed USB Type-A 10Gbps signaling rate; 1 HDMI 2.1; 1 AC smart pin; 1 headphone/microphone combo <sup>[19,20]</sup> 1 multi-format SD media card reader  6.9 x 49.3 x 30.5 cm  3.13 kg	
Camera  Ports  Expansion slots  Package dimensions (W x D x H)  Package weight  Wireless	HP Wide Vision 720p HD camera with camera shutter, temporal noise reduction and integrated dual array digital microphones  1 Thunderbolt™ 4 with USB4™ Type-C® 40Gbps signaling rate (USB Power Delivery, DisplayPort™ 1.4, HP Sleep and Charge); 1 SuperSpeed USB Type-A 10Gbps signaling rate (HP Sleep and Charge); 1 SuperSpeed USB Type-A 10Gbps signaling rate; 1 HDMI 2.1; 1 AC smart pin; 1 headphone/microphone combo <sup>[19,20]</sup> 1 multi-format SD media card reader  6.9 x 49.3 x 30.5 cm  3.13 kg  Intel® Wi-Fi 6E AX211 (2x2) and Bluetooth® 5.2 combo (Supporting Gigabit data rate)	
Camera  Ports  Expansion slots  Package dimensions (W x D x H)  Package weight  Wireless  Power supply type	HP Wide Vision 720p HD camera with camera shutter, temporal noise reduction and integrated dual array digital microphones  1 Thunderbolt™ 4 with USB4™ Type-C® 40Gbps signaling rate (USB Power Delivery, DisplayPort™ 1.4, HP Sleep and Charge); 1 SuperSpeed USB Type-A 10Gbps signaling rate (HP Sleep and Charge); 1 SuperSpeed USB Type-A 10Gbps signaling rate; 1 HDMI 2.1; 1 AC smart pin; 1 headphone/microphone combo <sup>[19,20]</sup> 1 multi-format SD media card reader  6.9 x 49.3 x 30.5 cm  3.13 kg  Intel® Wi-Fi 6E AX211 (2x2) and Bluetooth® 5.2 combo (Supporting Gigabit data rate)  65 W AC power adapter	
Camera  Ports  Expansion slots  Package dimensions (W x D x H)  Package weight  Wireless  Power supply type  Battery type	HP Wide Vision 720p HD camera with camera shutter, temporal noise reduction and integrated dual array digital microphones  1 Thunderbolt™ 4 with USB4™ Type-C® 40Gbps signaling rate (USB Power Delivery, DisplayPort™ 1.4, HP Sleep and Charge); 1 SuperSpeed USB Type-A 10Gbps signaling rate (HP Sleep and Charge); 1 SuperSpeed USB Type-A 10Gbps signaling rate; 1 HDMI 2.1; 1 AC smart pin; 1 headphone/microphone combo <sup>[19,20]</sup> 1 multi-format SD media card reader  6.9 x 49.3 x 30.5 cm  3.13 kg  Intel® Wi-Fi 6E AX211 (2x2) and Bluetooth® 5.2 combo (Supporting Gigabit data rate)  65 W AC power adapter  3-cell, 51 Wh Li-ion polymer	
Camera  Ports  Expansion slots  Package dimensions (W x D x H)  Package weight  Wireless  Power supply type  Battery type  Battery life	HP Wide Vision 720p HD camera with camera shutter, temporal noise reduction and integrated dual array digital microphones  1 Thunderbolt™ 4 with USB4™ Type-C® 40Gbps signaling rate (USB Power Delivery, DisplayPort™ 1.4, HP Sleep and Charge); 1 SuperSpeed USB Type-A 10Gbps signaling rate (HP Sleep and Charge); 1 SuperSpeed USB Type-A 10Gbps signaling rate; 1 HDMI 2.1; 1 AC smart pin; 1 headphone/microphone combo <sup>[19,20]</sup> 1 multi-format SD media card reader  6.9 x 49.3 x 30.5 cm  3.13 kg  Intel® Wi-Fi 6E AX211 (2x2) and Bluetooth® 5.2 combo (Supporting Gigabit data rate)  65 W AC power adapter  3-cell, 51 Wh Li-ion polymer  Up to 9 hours and 45 minutes <sup>[3]</sup> Supports battery fast charge: approximately 50% in 30 minutes <sup>[5]</sup> 0.46 lb	
Camera  Ports  Expansion slots  Package dimensions (W x D x H)  Package weight  Wireless  Power supply type  Battery type  Battery life  Battery recharge time	HP Wide Vision 720p HD camera with camera shutter, temporal noise reduction and integrated dual array digital microphones  1 Thunderbolt™ 4 with USB4™ Type-C® 40Gbps signaling rate (USB Power Delivery, DisplayPort™ 1.4, HP Sleep and Charge); 1 SuperSpeed USB Type-A 10Gbps signaling rate (HP Sleep and Charge); 1 SuperSpeed USB Type-A 10Gbps signaling rate; 1 HDMI 2.1; 1 AC smart pin; 1 headphone/microphone combo <sup>[19,20]</sup> 1 multi-format SD media card reader  6.9 x 49.3 x 30.5 cm  3.13 kg  Intel® Wi-Fi 6E AX211 (2x2) and Bluetooth® 5.2 combo (Supporting Gigabit data rate)  65 W AC power adapter  3-cell, 51 Wh Li-ion polymer  Up to 9 hours and 45 minutes <sup>[3]</sup> Supports battery fast charge: approximately 50% in 30 minutes <sup>[5]</sup>	
Camera  Ports  Expansion slots  Package dimensions (W x D x H)  Package weight  Wireless  Power supply type  Battery type  Battery life  Battery recharge time  Battery weight  Battery weight  Ecolabels	HP Wide Vision 720p HD camera with camera shutter, temporal noise reduction and integrated dual array digital microphones  1 Thunderbolt™ 4 with USB4™ Type-C® 40Gbps signaling rate (USB Power Delivery, DisplayPort™ 1.4, HP Sleep and Charge); 1 SuperSpeed USB Type-A 10Gbps signaling rate (HP Sleep and Charge); 1 SuperSpeed USB Type-A 10Gbps signaling rate; 1 HDMI 2.1; 1 AC smart pin; 1 headphone/microphone combo <sup>[19,20]</sup> 1 multi-format SD media card reader  6.9 x 49.3 x 30.5 cm  3.13 kg  Intel® Wi-Fi 6E AX211 (2x2) and Bluetooth® 5.2 combo (Supporting Gigabit data rate)  65 W AC power adapter  3-cell, 51 Wh Li-ion polymer  Up to 9 hours and 45 minutes <sup>[3]</sup> Supports battery fast charge: approximately 50% in 30 minutes <sup>[5]</sup> 0.46 lb	
Camera  Ports  Expansion slots  Package dimensions (W x D x H)  Package weight  Wireless  Power supply type  Battery type  Battery life  Battery recharge time  Battery weight  Battery weight  Ecolabels  Energy star certified	HP Wide Vision 720p HD camera with camera shutter, temporal noise reduction and integrated dual array digital microphones  1 Thunderbolt™ 4 with USB4™ Type-C® 40Gbps signaling rate (USB Power Delivery, DisplayPort™ 1.4, HP Sleep and Charge); 1 SuperSpeed USB Type-A 10Gbps signaling rate (HP Sleep and Charge); 1 SuperSpeed USB Type-A 10Gbps signaling rate; 1 HDMI 2.1; 1 AC smart pin; 1 headphone/microphone combo <sup>[19,20]</sup> 1 multi-format SD media card reader  6.9 x 49.3 x 30.5 cm  3.13 kg  Intel® Wi-Fi 6E AX211 (2x2) and Bluetooth® 5.2 combo (Supporting Gigabit data rate)  65 W AC power adapter  3-cell, 51 Wh Li-ion polymer  Up to 9 hours and 45 minutes <sup>[3]</sup> Supports battery fast charge: approximately 50% in 30 minutes <sup>[5]</sup> 0.46 lb  210 g	
Camera  Ports  Expansion slots  Package dimensions (W x D x H)  Package weight  Wireless  Power supply type  Battery type  Battery life  Battery recharge time  Battery weight  Battery weight  Ecolabels	HP Wide Vision 720p HD camera with camera shutter, temporal noise reduction and integrated dual array digital microphones  1 Thunderbolt™ 4 with USB4™ Type-C® 40Gbps signaling rate (USB Power Delivery, DisplayPort™ 1.4, HP Sleep and Charge); 1 SuperSpeed USB Type-A 10Gbps signaling rate (HP Sleep and Charge); 1 SuperSpeed USB Type-A 10Gbps signaling rate; 1 HDMI 2.1; 1 AC smart pin; 1 headphone/microphone combo <sup>[19,20]</sup> 1 multi-format SD media card reader  6.9 x 49.3 x 30.5 cm  3.13 kg Intel® Wi-Fi 6E AX211 (2x2) and Bluetooth® 5.2 combo (Supporting Gigabit data rate)  65 W AC power adapter  3-cell, 51 Wh Li-ion polymer  Up to 9 hours and 45 minutes <sup>[3]</sup> Supports battery fast charge: approximately 50% in 30 minutes <sup>[5]</sup> 0.46 lb  210 g  EPEAT® registered	
Camera  Ports  Expansion slots  Package dimensions (W x D x H)  Package weight  Wireless  Power supply type  Battery type  Battery life  Battery recharge time  Battery weight  Battery weight  Ecolabels  Energy star certified  Sustainable impact	HP Wide Vision 720p HD camera with camera shutter, temporal noise reduction and integrated dual array digital microphones  1 Thunderbolt™ 4 with USB4™ Type-C® 40Gbps signaling rate (USB Power Delivery, DisplayPort™ 1.4, HP Sleep and Charge); 1 SuperSpeed USB Type-A 10Gbps signaling rate (HP Sleep and Charge); 1 SuperSpeed USB Type-A 10Gbps signaling rate; 1 HDMI 2.1; 1 AC smart pin; 1 headphone/microphone combol [19,20]  1 multi-format SD media card reader  6.9 x 49.3 x 30.5 cm  3.13 kg Intel® Wi-Fi 6E AX211 (2x2) and Bluetooth® 5.2 combo (Supporting Gigabit data rate)  65 W AC power adapter  3-cell, 51 Wh Li-ion polymer  Up to 9 hours and 45 minutes [3]  Supports battery fast charge: approximately 50% in 30 minutes [5]  0.46 lb  210 g  EPEAT® registered  ENERGY STAR® certified  Ocean-bound plastic in speaker enclosure(s); Recycled metal in cover, keyboard frame and base; Keyboard	
Camera  Ports  Expansion slots  Package dimensions (W x D x H)  Package weight  Wireless  Power supply type  Battery type  Battery life  Battery recharge time  Battery weight  Battery weight  Ecolabels  Energy star certified  Sustainable impact specifications	HP Wide Vision 720p HD camera with camera shutter, temporal noise reduction and integrated dual array digital microphones  1 Thunderbolt™ 4 with USB4™ Type-C® 40Gbps signaling rate (USB Power Delivery, DisplayPort™ 1.4, HP Sleep and Charge); 1 SuperSpeed USB Type-A 10Gbps signaling rate (HP Sleep and Charge); 1 SuperSpeed USB Type-A 10Gbps signaling rate; 1 HDMI 2.1; 1 AC smart pin; 1 headphone/microphone combo <sup>[19,20]</sup> 1 multi-format SD media card reader  6.9 x 49.3 x 30.5 cm  3.13 kg  Intel® Wi-Fi 6E AX211 (2x2) and Bluetooth® 5.2 combo (Supporting Gigabit data rate)  65 W AC power adapter  3-cell, 51 Wh Li-ion polymer  Up to 9 hours and 45 minutes <sup>[3]</sup> Supports battery fast charge: approximately 50% in 30 minutes <sup>[5]</sup> 0.46 lb  210 g  EPEAT® registered  ENERGY STAR® certified  Ocean-bound plastic in speaker enclosure(s); Recycled metal in cover, keyboard frame and base; Keyboard keycaps made with post-consumer recycled plastic	
Camera  Ports  Expansion slots  Package dimensions (W x D x H)  Package weight  Wireless  Power supply type  Battery type  Battery life  Battery recharge time  Battery weight  Battery weight  Ecolabels  Energy star certified  Sustainable impact specifications  Security management	HP Wide Vision 720p HD camera with camera shutter, temporal noise reduction and integrated dual array digital microphones  1 Thunderbolt™ 4 with USB4™ Type-C® 40Gbps signaling rate (USB Power Delivery, DisplayPort™ 1.4, HP Sleep and Charge); 1 SuperSpeed USB Type-A 10Gbps signaling rate (HP Sleep and Charge); 1 SuperSpeed USB Type-A 10Gbps signaling rate; 1 HDMI 2.1; 1 AC smart pin; 1 headphone/microphone combo <sup>[19,20]</sup> 1 multi-format SD media card reader  6.9 x 49.3 x 30.5 cm  3.13 kg Intel® Wi-Fi 6E AX211 (2x2) and Bluetooth® 5.2 combo (Supporting Gigabit data rate)  65 W AC power adapter  3-cell, 51 Wh Li-ion polymer  Up to 9 hours and 45 minutes <sup>[3]</sup> Supports battery fast charge: approximately 50% in 30 minutes <sup>[5]</sup> 0.46 lb  210 g  EPEAT® registered  ENERGY STAR® certified  Ocean-bound plastic in speaker enclosure(s); Recycled metal in cover, keyboard frame and base; Keyboard keycaps made with post-consumer recycled plastic  All-in-One keyboard; Trusted Platform Module (Firmware TPM) support	
Camera  Ports  Expansion slots  Package dimensions (W x D x H)  Package weight  Wireless  Power supply type  Battery type  Battery life  Battery recharge time  Battery weight  Ecolabels  Energy star certified  Sustainable impact specifications  Security management  Software included  Software - Productivity &	HP Wide Vision 720p HD camera with camera shutter, temporal noise reduction and integrated dual array digital microphones  1 Thunderbolt™ 4 with USB4™ Type-C® 40Gbps signaling rate (USB Power Delivery, DisplayPort™ 1.4, HP Sleep and Charge); 1 SuperSpeed USB Type-A 10Gbps signaling rate (HP Sleep and Charge); 1 SuperSpeed USB Type-A 10Gbps signaling rate; 1 HDMI 2.1; 1 AC smart pin; 1 headphone/microphone combo <sup>[19,20]</sup> 1 multi-format SD media card reader  6.9 x 49.3 x 30.5 cm  3.13 kg  Intel® Wi-Fi 6E AX211 (2x2) and Bluetooth® 5.2 combo (Supporting Gigabit data rate)  65 W AC power adapter  3-cell, 51 Wh Li-ion polymer  Up to 9 hours and 45 minutes <sup>[3]</sup> Supports battery fast charge: approximately 50% in 30 minutes <sup>[5]</sup> 0.46 lb  210 g  EPEAT® registered  ENERGY STAR® certified  Ocean-bound plastic in speaker enclosure(s); Recycled metal in cover, keyboard frame and base; Keyboard keycaps made with post-consumer recycled plastic  All-in-One keyboard; Trusted Platform Module (Firmware TPM) support	
Camera  Ports  Expansion slots  Package dimensions (W x D x H)  Package weight  Wireless  Power supply type  Battery type  Battery life  Battery recharge time  Battery weight  Battery weight  Ecolabels  Energy star certified  Sustainable impact specifications  Security management  Software included  Software - Productivity & finance	HP Wide Vision 720p HD camera with camera shutter, temporal noise reduction and integrated dual array digital microphones  1 Thunderbolt™ 4 with USB4™ Type-C® 40Gbps signaling rate (USB Power Delivery, DisplayPort™ 1.4, HP Sleep and Charge); 1 SuperSpeed USB Type-A 10Gbps signaling rate (HP Sleep and Charge); 1 SuperSpeed USB Type-A 10Gbps signaling rate; 1 HDMI 2.1; 1 AC smart pin; 1 headphone/microphone combo <sup>[19,20]</sup> 1 multi-format SD media card reader  6.9 x 49.3 x 30.5 cm  3.13 kg  Intel® Wi-Fi 6E AX211 (2x2) and Bluetooth® 5.2 combo (Supporting Gigabit data rate)  65 W AC power adapter  3-cell, 51 Wh Li-ion polymer  Up to 9 hours and 45 minutes <sup>[3]</sup> Supports battery fast charge: approximately 50% in 30 minutes <sup>[5]</sup> 0.46 lb  210 g  EPEAT® registered  ENERGY STAR® certified  Ocean-bound plastic in speaker enclosure(s); Recycled metal in cover, keyboard frame and base; Keyboard keycaps made with post-consumer recycled plastic  All-in-One keyboard; Trusted Platform Module (Firmware TPM) support  McAfee LiveSafe™  1 month trial for new Microsoft 365 customers <sup>[24]</sup>	

# **Top Recommended Displays, Accessories and Services**

HP Home Monitors	
HP U32 4K HDR Monitor	368Y5AA
HP U32 4K HDR Monitor	368Y6AA
HP U28 4K HDR Monitor	1Z978AA
HP U28 4K HDR Monitor	1Z979AA
HP U28 4K HDR Monitor	1Z980AA
HP Value Displays	
HP M27fq QHD Monitor	2H4B5AA
HP M27fq QHD Monitor	2H4B8AA
Docking Stations	
HP Thunderbolt Dock 120W G2	2UK37AA
HP Thunderbolt Dock 120W with HDMI Adapter	6HP48AA
HP Travel USB-C Multi Port Hub	1C1Y5AA
Keyboard and Mouse Kits	
HP Pavilion Wireless Keyboard and Mouse 800	4CE99AA
Keyboards	
HP Pavilion Wireless Keyboard 600	4CE98AA
Mice	
HP Spectre Rechargeable Mouse 700	3NZ71AA
HP ENVY Rechargeable Mouse 500	2LX92AA

## **Messaging Footnotes**

- [1] Multi-core is designed to improve performance of certain software products. Not all customers or software applications will necessarily benefit from use of this technology. Performance and clock frequency will vary depending on application workload and your hardware and software configurations. Intel's numbering is not a measurement of higher performance.
- [2] High-definition (HD) content required to view HD images.
- [3] Internet service required and not included.
- [4] Not all features are available in all editions or versions of Windows. Systems may require upgraded and/or separately purchased hardware, drivers, software or BIOS update to take full advantage of Windows functionality. Windows is automatically updated and enabled. High speed internet and Microsoft account required. ISP fees may apply and additional requirements may apply over time for updates. See http://www.windows.com.
- [5] Intel and Core are trademarks of Intel Corporation in the U.S. and other countries.
- [6] Full high-definition (FHD) content is required to view FHD images.

## **Technical Specifications Footnotes**

- [1] 25 GB of free Dropbox storage for 12 months from date of registration. For complete details and terms of use, including cancellation policies, visit the Dropbox website at https://www.dropbox.com/help/space/hp-promotion. Internet service required and not included.
- [3] Windows MobileMark 18 Battery life will vary depending on various factors including product model, configuration, loaded applications, features, use, wireless functionality, and power management settings. The maximum capacity of the battery will naturally decrease with time and usage. See https://bapco.com/products/mobilemark-2018/ for additional details.
- [5] Recharges your battery up to 50% within 30 minutes when the system is off (using "shut down" command). Recommended for use with the HP adapter provided with the notebook, not recommended with a smaller capacity battery charger. After charging has reached 50% capacity, charging speed will return to normal speed. Charging time may vary +/-10% due to System tolerance. Available on select HP products. See http://store.hp.com for a full list of product features.
- [6] Multi-core is designed to improve performance of certain software products. Not all customers or software applications will necessarily benefit from use of this technology. Performance and clock frequency will vary depending on application workload and your hardware and software configurations. Intel's numbering, branding and/or naming is not a measurement of higher performance.
- [7] Intel® Turbo Boost performance varies depending on hardware, software and overall system configuration. See http://www.intel.com/technology/turboboost/ for more information.
- [19] For best results with HP Sleep and Charge, use a USB charging protocol standard cable or cable adapter with an external device.
- [20] SuperSpeed USB 20Gbps is not available.
- [24] Must activate within 180 days of Windows activation.

© Copyright 2022 HP Development Company, L.P. The information contained herein is subject to change without notice. The only warranties for HP products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. HP shall not be liable for technical or editorial errors or omissions contained herein.

Intel, Core, Optane, Celeron, Pentium, Iris, XMM, and Thunderbolt are trademarks or registered trademarks of Intel Corporation or its subsidiaries in the United States and other countries. AMD, Ryzen, Athlon, and Radeon are trademarks of Advanced Micro Devices, Inc. Bluetooth is a trademark owned by its proprietor and used by HP Inc. under license. NVIDIA and GeForce are trademarks and/or registered trademarks of NVIDIA Corporation in the U.S. and other countries. USB Type-C® and USB-C® are registered trademarks of USB Implementers Forum. DisplayPort™ and the DisplayPort™ logo are trademarks owned by the Video Electronics Standards Association (VESA®) in the United States and other countries. McAfee and McAfee LiveSafe are trademarks or registered trademarks of McAfee LLC in the United States and other countries. ENERGY STAR is a registered trademark of the U.S. Environmental Protection Agency. All other trademarks are the property of their respective owners.

