# HP ProBook 640 G5 Notebook PC



Everyday made special

The contemporary and purposeful design of the HP ProBook 640 compliments enterprise-grade performance, security, manageability all with flexible configuration options to suit the needs of a broad spectrum of users.



HP recommends Windows 10 Pro.

## Modern professional design

 This PC is built for business. The HP ProBook 640 undergoes MIL-STD 810G testing<sup>2</sup> and has a striking silver finish with sharp lines that embody today's bold design.

#### High performance

 Help speed up demanding business applications with an optional 8th Gen quad-core Intel<sup>®</sup> Core<sup>™</sup> processor<sup>3</sup> and optional Intel<sup>®</sup> Optane<sup>™4</sup> memory. Help keep connected with HP Extended Range Wireless LAN and optional Wi-Fi 6.<sup>5,6,13</sup>

## Built on a secure foundation

- Protect your PC against the evolving malware threats of the future, with self-healing and manageable hardware-enforced security solutions from HP. From the BIOS to the browser, HP Sure Start Gen5<sup>7</sup> and HP Sure Click<sup>8</sup> help secure your PC.
- Power through your day with Windows 10 Pro and the powerful security, collaboration and connectivity features from HP.<sup>1</sup>
- Take on demanding graphics and video tasks using high resolution 4k displays with optional AMD Radeon<sup>™</sup> 540X Discrete Graphics.<sup>9,13</sup>
- Get gigabit speed with optional Wi-Fi 6 on the HP ProBook  $640.^{5,6,13}$
- Cover more ground and improve connectivity with HP Extended Range Wireless LAN.<sup>10</sup>
- Never wonder if someone is watching you with the added peaceof-mind that comes from the integrated HP Privacy Camera, with a physical shutter to protect from malicious surveillance.<sup>11</sup>
- Firmware attacks can completely devastate your PC. Stay protected with HP Sure Start Gen5, the self-healing BIOS that automatically recovers itself from attacks or corruption.<sup>7</sup>
- Fortify your security with up to three authentication factors including fingerprints and facial recognition.<sup>12</sup>
- Help protect your PC from websites, attachments, malware, ransomware, and viruses with hardware-enforced security from HP Sure Click.<sup>8</sup>

# HP ProBook 640 G5 Notebook PC Specifications Table







Available Operating Systems	Windows 10 Pro 64 <sup>1</sup> Windows 10 Pro 64 (National Academic only) <sup>2</sup> Windows 10 Home 64 – HP recommends Windows 10 Pro for business <sup>1</sup> Windows 10 Home Single Language 64 <sup>1</sup>	
	Windows 10 Pro (Windows 10 Enterprise available with a Volume Licensing Agreement) <sup>1</sup> FreeDOS	
Processor family <sup>5</sup>	8th Generation Intel® Core™ i7 processor (i7-8565U); 8th Generation Intel® Core™ i5 processor (i5-8265U); 8th Generation Intel® Core™ i3 processor (i3-8145U); 8th Generation Intel® Core™ i7 processor (i7-8665U); 8th Generation Intel® Core™ i5 processor (i5-8365U)	
Available Processors <sup>3,4,5</sup>	Intel® Core™ i7-8565U with Intel® UHD Graphics 620 (1.8 GHz base frequency, up to 4.6 GHz with Intel® Turbo Boost Technology, 8 MB L3 cache, 4 cores); Intel® Core™ i7 8665U vPro™ processor with Intel® UHD Graphics 620 (1.8 GHz base frequency, up to 4.8 GHz with Intel® Turbo Boost Technology, 8 MB L3 cache, 4 cores); Intel® Core™ i5-8265U with Intel® UHD Graphics 620 (1.6 GHz base frequency, up to 3.9 GHz with Intel® Turbo Boost Technology, 6 MB L3 cache, 4 cores); Intel® Core™ i5-8265U with Intel® VHD Graphics 620 (1.6 GHz base frequency, up to 3.9 GHz with Intel® Turbo Boost Technology, 6 MB L3 cache, 4 cores); Intel® Core™ i5-8365U vPro™ processor with Intel® UHD Graphics 620 (1.6 GHz base frequency, up to 4.1 GHz base frequency, up to 3.9 GHz with Intel® Turbo Boost Technology, 6 MB L3 cache, 4 cores); Intel® Core™ i5-8365U vPro™ processor with Intel® UHD Graphics 620 (1.6 GHz base frequency, up to 4.1 GHz with Intel® Turbo Boost Technology, 6 MB L3 cache, 4 cores); Intel® Core™ i5-8365U vPro™ processor with Intel® UHD Graphics 620 (1.6 GHz base frequency, up to 4.1 GHz with Intel® Turbo Boost Technology, 6 MB L3 cache, 4 cores); Intel® Core™ i3-8145U with Intel® UHD Graphics 620 (2.1 GHz base frequency, up to 3.9 GHz with Intel® Turbo Boost Technology, 4 MB L3 cache, 2 cores)	
Display size (diagonal)	14"11,12,16,17,45	
Maximum memory	32 GB DDR4-2400 SDRAM <sup>6</sup> Both slots are customer accessible/upgradeable. Supports dual channel memory.	
Memory slots	2 SODIMM	
Internal storage	up to 512 GB Intel® PCIe® NVMe™ QLC M.2 SSD with 32 GB Intel® Optane™ memory H10 <sup>7,40,42</sup> up to 256 GB Intel® PCIe® NVMe™ QLC M.2 SSD with 16 GB Intel® Optane™ memory H10 <sup>7,40,42</sup> 256 GB up to 2 TB PCIe® Gen3x4 NVMe™ M.2 SSD TLC <sup>7</sup> up to 512 GB PCIe® Gen3x4 NVMe™ M.2 SED SD TLC <sup>7</sup> up to 512 GB PCIe® M.2 SATA FIPS 140-2 SSD TLC <sup>7</sup> up to 512 GB PCIe® M.2 Value SSD <sup>7</sup> up to 256 GB PCIe® NVMe™ Value M.2 SSD <sup>7</sup> up to 256 GB M.2 SATA-3 SED SSD <sup>7</sup> up to 128 GB M.2 SATA-3 SSD TLC <sup>7</sup> 500 GB up to 1 TB 7200 rpm SATA <sup>9,43</sup> up to 500 GB 7200 rpm SATA FIPS 140-2 SED <sup>9,44</sup>	
Display	14" diagonal FHD IPS eDP anti-glare WLED-backlit slim, 250 nits, 45% NTSC (1920 x 1080); 14" diagonal HD SVA eDP anti-glare WLED-backlit slim, 220 nits, 45% NTSC (1366 x 768); 14" diagonal FHD IPS eDP WLED-backlit slim touch screen, 250 nits, 45% NTSC (1920 x 1080); 14" diagonal FHD IPS eDP + PSR WLED-backlit ultraslim touch screen with HP Sure View Gen3 Integrated Privacy Screen, 700 nits, 72% NTSC (1920 x 1080) 11,12,16,17,45	
Available Graphics	Integrated: Intel® UHD Graphics 620 <sup>12</sup> Discrete: AMD Radeon™ 540X (2 GB GDDR5 dedicated) <sup>13</sup> (Support HD Decode, DX12, and HDMI 1.4b.)	
Audio	Dual stereo speakers, dual array microphone	
Wireless technologies	Intel® Dual Band Wireless-AC 9560 802.11a/b/g/n/ac (2x2) Wi-Fi® and Bluetooth® 5 Combo, vPro™; Intel® Dual Band Wireless-AC 9560 802.11a/b/g/n/ac (2x2) Wi-Fi® and Bluetooth® 5 Combo, non-vPro™; Intel® XMM™ 7360 LTE-Advanced Cat 9; Intel® XMM™ 7262 LTE-Advanced Cat 6; Intel® AX200 Wi-Fi 6 (2x2) and Bluetooth® 5 Combo, vPro™; Intel® AX200 Wi-Fi 6 (2x2) and Bluetooth® 5 Combo, non-vPro™ 8.9.11	
Expansion slots	1 microSD	
Ports and Connectors	3 USB 3.1 Gen 1 (1 charging); 1 VGA; 1 USB 3.1 Type-C™ Gen 1 (Power delivery, DisplayPort™); 1 RJ-45; 1 headphone/microphone combo; 1 HDMI 1.4; 1 docking connector; 1 AC power (Cables are not included.)	
Input devices	HP Advanced Keyboard, Spill-resistant with drain, optional DuraKeys and backlit <sup>14</sup> ; Clickpad with multi-touch gesture support	
Communications	HP Module with NXP NFC Controller NPC300 I2C NCI; Intel® I219-LM GbE, vPro™; Intel® I219-V GbE, non-vPro™ <sup>10,11</sup>	
Camera	HD Privacy webcam <sup>11,12,15</sup>	
Available Software	HP Connection Optimizer; HP Hotkey Support; HP Image Assistant; HP JumpStart; HP Noise Cancellation Software; HP Support Assistant; Native Miracast support; Buy Office (Sold separately) <sup>18,19</sup>	
Security management	Absolute persistence module; HP DriveLock and Automatic DriveLock; HP Fingerprint Sensor; HP Secure Erase; Power-on authentication; Preboot authentication; Smart card reader; TPM 2.0 embedded security chip shipped with Windows 10 (Common Criteria EAL4+ Certified); HP Sure Click; Windows Defender; HP Sure Start Gen5; HP BIOSphere Gen5; HP Client Security Gen5; HP Sure Sense <sup>22,23,24,25,26,27,28,29,30,31,39,41</sup>	
Management features	HP Driver Packs; HP System Software Manager (SSM); HP BIOS Config Utility (BCU); HP Client Catalog; HP Manageability Integration Kit Gen3 <sup>20,21</sup>	
Power	HP Smart 65 W External AC power adapter; HP Smart 65 W EM External AC power adapter; HP Smart 65 W USB Type-C™ adapter; HP Smart 45 W External AC power adapter; HP Smart 45 W USB Type-C™ adapter; HP Smart 45 W 2-prong External AC power adapter <sup>34,35</sup>	
Battery type	HP Long Life 3-cell, 48 Wh Li-ion <sup>33,34</sup>	
Battery life	Up to 15 hours and 30 minutes <sup>32</sup>	
Dimensions	34 x 24 x 2.09 cm (non-touch); 34 x 24 x 2.19 cm (touch)	
Weight	Starting at 1.73 kg (non-touch); Starting at 1.95 kg (touch) (Weight will vary by configuration.)	
Energy efficiency compliance	ENERGY STAR® certified; EPEAT® Silver <sup>37</sup>	
Environmental specifications	Low halogen; TCO 5.0 Certified <sup>38</sup>	
Warranty	HP Services offers 3-year and 1-year limited warranties and 90 day software support options depending on country and the SKU selected by the customer. Batteries have a default one year limited warranty except for Long Life batteries which will have same 1-year or 3-year limited warranty as the platform. On-site service and extended coverage is also available with HP Care Pack Services, optional extended service contracts that go beyond the standard limited warranties. To choose the right level of service for your HP product, use the HP Care Pack Services Lookup Tool at: http://www.hp.com/go/cpc.	

## HP ProBook 640 G5 Notebook PC

## Accessories and services (not included)

HP 17.3 Business Backpack	Keep your hands free and your notebook safe with the HP 17.3 Business Backpack, designed to go with you in and out of the office and on the road. It has lockable1 zippers, a secure RFID pocket, and room for your device up to 17.3" diagonal, phone, accessories, and so much more. Offering flexibility and wireless connectivity in the office and on the road. HP's extensive range of notebook PCs enable increased productivity and efficiency, by providing the perfect combination of built-in mobility features to match the particular needs of individuals from businesses large and small. <b>Product number: 2SC67AA</b>
HP USB-C Dock G4	Maximize productivity in the office with one USB-C <sup>™</sup> cable connection to the enterprise-ready HP USB-C Dock G4 <sup>1</sup> . It delivers device charging <sup>2</sup> to your HP notebook, supports up to three displays <sup>3</sup> , and enables connectivity to your wired network and accessories. Offering flexibility and wireless connectivity in the office and on the road. HP's extensive range of notebook PCs enable increased productivity and efficiency, by providing the perfect combination of built-in mobility features to match the particular needs of individuals from businesses large and small. <b>Product number: 3FF69AA</b>
HP 65W USB-C Slim Travel Power Adapter	Use one adapter to power and charge your notebook or mobile device <sup>1</sup> and a USB accessory at the same time, in the office or on the go, with the surprisingly compact HP 65W USB-C Slim Travel Power Adapter. Offering flexibility and wireless connectivity in the office and on the road. HP's extensive range of notebook PCs enable increased productivity and efficiency, by providing the perfect combination of built-in mobility features to match the particular needs of individuals from businesses large and small. <b>Product number: 3PN48AA</b>
HP Slim Bluetooth Mouse	Enjoy easy wireless notebook and tablet navigation with the HP Slim Bluetooth Mouse. The stylish mouse works with a range of operating systems, supports ambidextrous use, and is easy to pack and go. Offering flexibility and wireless connectivity in the office and on the road. HP's extensive range of notebook PCs enable increased productivity and efficiency, by providing the perfect combination of built-in mobility features to match the particular needs of individuals from businesses large and small. <b>Product number: F3J92AA</b>
HP 3-year Travel Next Business Day Low End Notebook Only Hardware Support HP Care Pack	This HP services offers notebook users on the go prompt, reliable coverage in major geographies of the world, for 3 years. For more information on Care Pack services, please visit www.hp.com/go/cpc. <b>Product number: UC909E</b>

# HP ProBook 640 G5 Notebook PC

#### Messaging Footnotes

<sup>1</sup> Not all features are available in all editions or versions of Windows. Systems may require upgraded and/or separately purchased hardware, drivers and/or software to take full advantage of Windows functionality. Windows 10 is

automatically updated, which is always enabled. ISP fees may apply and additional requirements may apply over time for updates. See http://www.windows.com. <sup>2</sup> MIL STD 810G testing is pending and is not intended to demonstrate fitness for U.S. Department of Defense contract requirements or for military use. Test results are not a guarantee of future performance under these test conditions. Damage under the MIL STD test conditions or any accidental damage requires an optional HP Accidental Damage Protection Care Pack.

Damage under the MLL SID test conditions of any accidental damage requires an optional. HP Accidental Damage Protection Care Pack. 3 Quad core potional. HUIL SID test conditions of any accidental damage requires an optional. HP Accidental Damage Protection Care Pack. 3 Quad core potional. Multicore 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. 4 Intel® Optane<sup>™</sup> memory is sold separately. Intel® Optane<sup>™</sup> memory system acceleration does not replace or increase the DRAM in your system. Available for HP commercial desktops and notebooks and for select HP workstations (HP Z240 Tower/SFF, Z240 Min, Zbook Studio, 15 and 17 G5) and requires a SATA HDD. Th Ge on r higher Intel® Core<sup>™</sup> processor or 12-1200 V6 product family or higher, BIOS version with Intel® Optane<sup>™</sup> supported. Windows 10 version 1703 or higher, M.2 type 2280-S1-B-M connector on a PCH Remapped PCIe Controller and Lanes in a x2 or x4 configuration with B-M keys that meet NVMe<sup>™</sup> Spec 1.1, and an Intel® Rapid Storage Technology (Intel® RST) 15.5 driver.

<sup>5</sup> Wir-Fi® supporting gigabit speeds is achievable with Wi-Fi 6 (802.11ax) when transferring files between two devices connected to the same router. Requires a wireless router, sold separately, that supports 160MHz channels. <sup>6</sup> Wireless access point and internet service required and sold separately. Availability of public wireless access points limited. Wi-Fi 6 is backwards compatible with prior 802.11 approx. The specifications for Wi-Fi 6 (802.11ax) are draft and are not final. If the final specifications differ from the draft specifications, it may affect the ability of the notebook to communicate with other 802.11ax devices.

<sup>7</sup> HP Sure Start Gen5 is available on select HP PCs with Intel processors. See product specifications for availability. <sup>8</sup> HP Sure Click is available on select HP platforms and supports Microsoft Internet Explorer, Google Chrome™, and Chromium™. Supported attachments include Microsoft Office (Word, Excel, PowerPoint) and PDF files in read only mode. Check http://h20195.www2.hp.com/v2/GetDocument.aspx?docname=4AA7-0922ENW for all compatible platforms as they become available 9 Video conferencing requires internet connection and creative applications are sold separately.

<sup>10</sup> Based on internal testing vs. previous generation product with 802.11 ac wireless LAN module

 <sup>11</sup> HP Privacy (Camera only available PCs equipped with HD or IR camera and must be installed at the factory.
 <sup>12</sup> HP Multi Factor Authenticate Gen3 is available on select HP PCs and requires Intel<sup>®</sup> Core™ processor, Intel<sup>®</sup> integrated graphics, and Intel<sup>®</sup> WLAN. Three authentication factors require Intel<sup>®</sup> vPro™. (If facial recognition is mentioned: Authentication factors may require optional hardware.) <sup>13</sup> Sold separately or as an optional feature.

#### Technical Specifications Footnotes

<sup>1</sup> 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 10 is automatically updated, which is always enabled, ISP fees may apply and additional requirements may apply over time for updates. See http://www.windows.com/

<sup>2</sup> Some devices for academic use will automatically be updated to Windows 10 Pro Education with the Windows 10 Anniversary Update. Features vary; see https://aka.ms/ProEducation for Windows 10 Pro Education feature information. <sup>3</sup> Multicore 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 applications workload and your hardware and software configurations. Intel's numbering, branding and/or naming is not a measurement of higher performance. <sup>4</sup> Processor speed denotes maximum performance mode; processors will run at lower speeds in battery optimization mode.

<sup>5</sup> In accordance with Microsoft's support policy, HP does not support the Windows 8 or Windows 7 operating system on products configured with Intel and AMD 7th generation and forward processors or provide any Windows 8 or Windows 7 <sup>6</sup> Due to the non-industry standard nature of some third-party memory modules, we recommend HP branded memory to ensure compatibility. If you mix memory speeds, the system will perform at the lower memory speed.

<sup>7</sup> For storage drives, GB = 1 billion bytes. TB = 1 trillion bytes. Actual formated capacity is less. Up to 30 GB (for Windows 10) is reserved for system recovery software.
 <sup>8</sup> Wireless access point and Internet service required and sold separately. Availability of public wireless access points limited. The specifications for the 802.11 ac WLAN are draft specifications and are not final. If the final specifications differ from the draft specifications, it may affect the ability of the notebook to communicate with other 802.11 ac WLAN devices.

9 WWAN module requires sparately purchased service contract. Check with service provider for coverage and availability in your area. Connection speeds will vary due to location, environment, network conditions, and other factors. 4G LTE not available on all products, in all regions.

<sup>10</sup> The term "10/100/1000" or "Gigabit" Ethernet indicates compatibility with IEEE standard 802.3ab for Gigabit Ethernet, and does not connote actual operating speed of 1 Gb/s. For high-speed transmission, connection to a Gigabit Ethernet server and network infrastructure is required.

<sup>11</sup> Sold separately or as an optional feature. <sup>12</sup> HD content required to view HD images. <sup>13</sup> AMD Dynamic Switchable Graphics technology requires an Intel processor, plus an AMD Radeon™ discrete graphics configuration and is not available on FreeDOS and Linux OS. With AMD Dynamic Switchable Graphics technology, full enablement of all discrete graphics video and display features may not be supported on all systems (e.g. OpenGL applications will run on the integrated GPU or the APU as the case may be). 14 Backlit keyboard is an optional feature.

<sup>15</sup> Internet access required.

<sup>16</sup> Resolutions are dependent upon monitor capability, and resolution and color depth settings.
<sup>17</sup> HP Sure View integrated privacy screen is an optional feature that must be configured at purchase and is designed to function in landscape orientation.

 <sup>19</sup> HP Support Assistant requires Windows and Internet access.
 <sup>19</sup> Microards is a wireless technology your PC can use to project your screen to TVs, projectors, and streaming.
 <sup>20</sup> HP Driver Packs not preinstalled, however available for download at http://www.hp.com/go/clientmanagement.
 <sup>21</sup> HP Manageability Integration Kit can be downloaded from http://www.hp.com/go/clientmanagement.
 <sup>22</sup> Absolute agent is shipped turned off, and will be activated when customers activate a purchased subscription. Subscriptions can be purchased for terms ranging multiple years. Service is limited, check with Absolute for availability outside the U.S. The Absolute Recovery Guarantee is a limited warranty. Certain conditions apply. For full details visit: http://www.absolute.com/company/legal/agreements/ computrace-agreement. Data Delete is an optional service provided by Absolute Software. If utilized, the Recovery Guarantee is null and void. In order to use the Data Delete service, customers must first sign a Pre-Authorization Agreement and either obtain a PIN or purchase one or more RSA SecurID tokens from Absolute Software

<sup>23</sup> HP Drive Lock & Automatic Drive Lock is not supported on NVMe drives
<sup>24</sup> HP Fingerprint Sensor sold separately or as an optional feature.

<sup>25</sup> HP Secure Erase for the methods outlined in the National Institute of Standards and Technology Special Publication 800-88 "Clear" sanitation method. HP Secure Erase does not support platforms with Intel® Optane<sup>™</sup>. <sup>26</sup> Firmware TPM is version 2.0. Hardware TPM is v1.2, which is a subset of the TPM 2.0 specification version v0.89 as implemented by Intel Platform Trust Technology (PTT).re TPM is version 2.0. Hardware TPM is v1.2, which is a subset of the TPM 2.0 specification version v0.89 as implemented by Intel Platform Trust Technology (PTT).re TPM is version 2.0. Hardware TPM is v1.2, which is a subset of the TPM 2.0 specification version v0.89 as implemented by Intel Platform Trust Technology (PTT).re TPM is version 2.0. Hardware TPM is v1.2, which is a subset of the TPM 2.0 specification version v0.89 as implemented by Intel Platform Trust Technology (PTT).

<sup>27</sup> HP Sure Click is available on most HP PCs and supports Microsoft® Internet Explorer and Chromium<sup>™</sup>. Supported attachments include Microsoft Office (Word, Excel, PowerPoint) and PDF files in read only mode, when Microsoft Office or Adobe Acrobat are installed.

<sup>29</sup> Windows Defender Opt in and internet connection required for updates.
 <sup>29</sup> HP Sure Start Gen5 is available on select HP PCs with Intel processors. See product specifications for availability.
 <sup>30</sup> HP BIOSphere Gen5 is available on select HP Pro and Elite PCs. See product specifications for details. Features may vary depending on the platform and configurations.

<sup>31</sup> HP Client Security Manager Gen5 requires Windows and is available on the select HP Pro and Elite PCs. See product specifications for details. <sup>32</sup> Windows 10 MM14 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 www.bapco.com for additional details. <sup>33</sup> Supports HP Fast Charging.

<sup>34</sup> Recharges the battery up to 90% within 90 minutes when the system is off or in standby mode. Power adapter with a minimum capacity of 65 watts is required. After charging has reached 90% capacity, charging will return to normal. Charging time may vary +/-10% due to System tolerance. <sup>35</sup> Availability may vary by country.

<sup>36</sup> HP Care Packs are sold separately. Service levels and response times for HP Care Packs may vary depending on your geographic location. Service starts on date of hardware purchase. Restrictions and limitations apply. For details, visit www.hp.com/go/cpc. HP services are governed by the applicable HP terms and conditions of service provided or indicated to Customer at the time of purchase. Customer may have additional statutory rights according to applicable local laws, and such rights are not in any way affected by the HP terms and conditions of service or the HP Limited Warranty provided with your HP Product.

<sup>37</sup> EPEAT® registered where applicable. EPEAT registration varies by country. See http://www.epeat.net for registration status by country. Search keyword generator on HP's 3rd party option store for solar generator accessories at www.hp.com/go/options.

<sup>38</sup> External power supplies, power cords, cables and peripherals are not Low Halogen. Service parts obtained after purchase may not be Low Halogen.
<sup>39</sup> Smart Card reader is sold separately or as an optional feature.

<sup>40</sup> Intel<sup>®</sup> Optime™ memory system acceleration does not replace or increase the DRAM in your system. Requires 8th Gen or higher Intel<sup>®</sup> Core™ processor, BIOS version with Intel<sup>®</sup> Optane™ supported, Windows 10 64-bit, and an Intel<sup>®</sup> Rapid Storage Technology (Intel<sup>®</sup> RST) driver. <sup>41</sup> HP Sure Sense requires Windows 10. See product specifications for availability.

<sup>42</sup> Intel® Optane™ memory H10 only for Intel® PCIe® NVMe™ QLC M.2 SSD.
<sup>43</sup> Not required if Primary M.2 Storage is selected.

<sup>44</sup> Not available with Optane Memory or SSD.

<sup>45</sup> Touch-enabled display and Sure View privacy panel will lower actual brightness

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