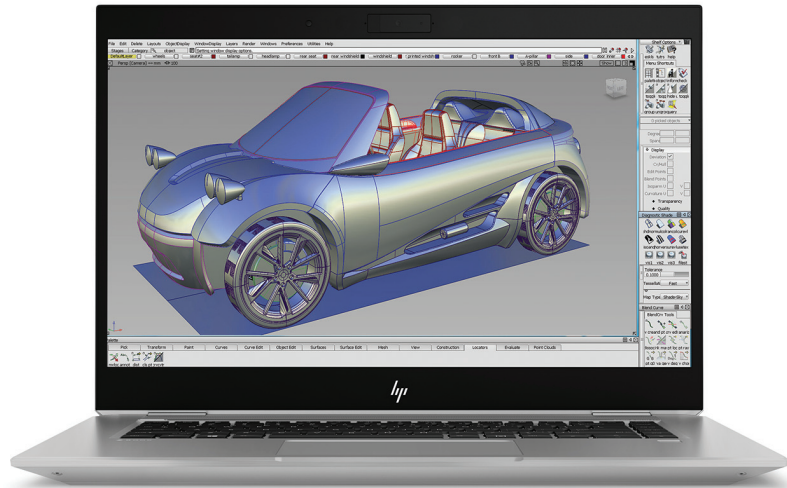Datasheet

HP ZBook Studio G5 Mobile Workstation

Smaller, faster and brighter than ever

Get the ultimate blend of design and performance in the next generation HP ZBook Studio. Speed through your work and bring your ideas to life on HP's brightest 4K laptop.

HP recommends Windows 10 Pro.

HP's brightest 4K laptop
- See your work in one billion vibrant colors on the HP DreamColor display with 600 nits of brightness. Master color-critical work with a built-in color calibration system that helps maintain perfect color every single time.

More powerful than ever before
- Get ultra-fast, 6-core Intel® Xeon® processors and enhanced thermals that keep your laptop cool and quiet. Render photorealistic images with certified NVIDIA® Quadro® graphics - optimized for stability and peak performance with leading software apps.

HP's most secure mobile workstation
- Protect your confidential work with security features like facial recognition and a webcam shutter[2]. With HP Sure View privacy display[3], your screen becomes visible only to you at the touch of a button, so you can do private work in busy, open areas.

Featuring
- Be productive in any situation. Windows 10 Pro and powerful security, collaboration, and connectivity features from HP help you power through your day on the HP ZBook Studio.[4]
- Get remarkable performance with heavy workloads with six-core Intel® Xeon® processors. Experience stability, data integrity and protection against potential crashes with ECC memory.
- Seamlessly edit your designs and render multi-layered files with certified NVIDIA® Quadro® P1000 graphics, optimized for stability and performance with professional software apps.
- Accelerate your productivity with up to 4TB local PCIe NVMe storage that's up to 21 times faster than standard HDD storage and six times faster than SATA SSD.[5]
- Get remarkable, real time performance running multiple applications simultaneously with 32 GB RAM.
- Take your work on the road with up to 16 hours of battery life for maximum productivity. When you need it, recharge ultra-fast (50% in just 30 minutes)10.[6,7]
- Travel anywhere with this powerful laptop that weighs only 4.4 pounds. Get a full-sized, backlit minor spill-resistant keyboard for worry-free, flexible working on-the-go.
- Easily transition from indoors to outdoors with the ambient light sensor that dims or brightens based on your surroundings. Experience precise color accuracy with 100% Adobe® RGB.
- Host virtual meetings with the HP Collaboration Keyboard, world-facing 3rd mic & optional web cam. Get premium audio with 4 speakers custom tuned by Bang & Olufsen & a discrete amp.
- Experience fast transfer and upload speeds with dual Thunderbolt™ 3 ports. Stay connected with 2 USB 3.0, 1 HDMI and 1 SD card port.
- Confidently take your work anywhere knowing your HP ZBook Studio was built for 24x7x365 workloads and designed to pass rigorous military standard tests.
- Connect your HP ZBook Studio x360 to external displays with HP's most powerful docking solution. Experience lightning fast Thunderbolt™ connectivity with remarkable performance.

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Specifications Table

Operating System	Windows 10 Pro 64 – HP recommends Windows 10 Pro.[1] Windows 10 Home 64[1] Windows 10 Pro for Workstations 64[1] Red Hat® Enterprise Linux® 7 FreeDOS 2.0
Processor Family	8th Generation Intel® Core™ i7+ processor (Core™ i7 and Intel® Optane™ memory); 8th Generation Intel® Core™ i5+ processor (Core™ i5 and Intel® Optane™ memory); Intel® Xeon® E3 processor[2,3]
Maximum Memory	Up to 32 GB DDR4-2667 ECC SDRAM; 32 GB DDR4-2667 non-ECC SDRAM[5] Standard memory note: Transfer rates up to 2667 MT/s.
Memory Slots	2 SODIMM
Internal Storage	500 GB up to 1 TB 7200 rpm SATA[6] up to 500 GB 7200 rpm SATA SED[6] up to 500 GB 7200 rpm SATA FIPS 140-2 SED[6] 500 GB up to 2 TB SATA SSHD[6] 256 GB up to 1 TB SATA SSD[6] up to 256 GB M.2 SATA SED SSD[6]
Display	39.62 cm (15.6") diagonal FHD IPS eDP anti-glare LED-backlit ambient light sensor, 400 cd/m² (1920 x 1080); 39.62 cm (15.6") diagonal 4K IPS eDP anti-glare LED-backlit ambient light sensor, 400 cd/m² (3840 x 2160); HP Sure View 39.62 cm (15.6") diagonal FHD IPS anti-glare LED-backlit ambient light sensor, 650 cd/m² (1920 x 1080); HP DreamColor 39.62 cm (15.6") diagonal 4K IPS anti-glare LED-backlit, 600 cd/m², 100% AdobeRGB (3840 x 2160)[8]
Available Graphics	Integrated: Intel® UHD Graphics 630; Intel® UHD Graphics P630[8,9] Discrete: NVIDIA® Quadro® P1000 (4 GB GDDR5 dedicated)[10] Intel® UHD Graphics 630 integrated on Core™ i7 and Core™ i5 processors. Intel® UHD Graphics P630 integrated on Xeon® processors.
Expansion Slots	1 UHS-II SD card reader SD supports next generation secure digital and is backward compatible to SDHC, SDXC
Ports and Connectors	Left side: 1 USB 3.0; 1 USB 3.0 (charging) Right side: 1 HDMI 2.0; 1 headphone/microphone combo; 1 power connector; 2 USB 3.1 Type-C™ Thunderbolt™ 3 (DisplayPort™ 1.3)
Communications	: WLAN: Intel® Dual Band Wireless-AC 9560 802.11ac (2x2) Wi-Fi® and Bluetooth® 5.0 Combo; Intel® Dual Band Wireless-AC 9560 802.11ac (2x2) Wi-Fi® and Bluetooth® 5.0 Combo, non-vPro™[7,12] Optional Near Field Communication (NFC) module
Audio	Bang & Olufsen, dual stereo speakers, dual array digital microphone, functions keys for volume up and down, combo microphone/headphone jack, HD audio[13]
Camera	HP Privacy HD IR Camera 720p, face authentication with Windows Hello[8,11,13,29]
Power	150 W Slim Smart external AC power adapter
Input Device	HP Collaboration Keyboard, full-size, spill-resistant, backlit, with drain and DuraKeys, clickpad with image sensor and glass surface, multi-touch gestures and taps enabled Image sensor clickpad with on/off button, two-way scroll, gestures, two buttons
Security	Absolute persistence module; Common Criteria EAL4+ Augmented Certified Discrete TPM 2.0 Embedded Security Chip; DriveLock and Automatic DriveLock; HP Device Access Manager; HP FingerPrint Sensor; HP Password Manager; HP Power On Authentication; HP Security Manager; Pre-boot authentication; Microsoft Security Defender; HP Sure Click; Measured Boot; HP BIOS Config Utility (BCU); HP Client Catalog; HP Driver Packs; HP System Software Manager (SSM); HP Manageability Integration Kit Gen2; HP BIOSphere with Sure Start Gen4; HP Secure Disk Erase; HP Host Based Mac Address[18,19,20,21,25,26,27,28]
Software	Bing search for IE11; Buy Office; HP ePrint Driver + JetAdvantage; HP Hotkey Support; HP Noise Cancellation Software; HP Performance Advisor; HP Recovery Manager; HP Remote Graphics Software; HP Support Assistant; HP Velocity; HP WorkWise (requires Bluetooth); Skype for Business Certified; HP LAN-WLAN Protection; HP JumpStart; HP Client Security Suite Gen4[14,15,16,17]
Dimensions	36 x 25.4 x 0.88 to 1.74 cm (front to rear)
Weight	Starting at 2 kg Weight varies by configuration and components.
Energy Efficiency Compliance	ENERGY STAR® certified and EPEAT® registered configurations available[23]
Environmental Certification	Low halogen[24]
Warranty	1 year (1-1-0) limited warranty and service offering includes 1 year of parts and labor. Terms and conditions vary by country.

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Accessories and services (not included)

HP lt4132 LTE/HSPA+ 4G WWAN		Check e-mail, browse the Internet, and connect to your corporate network with dedicated broadband from the HP lt4132 LTE/HSPA+ 4G WWAN[1] for select HP Business Notebooks. **Product number: 1HC91AA**
HP External USB DVDRW Drive		Connect the HP External USB DVD/RW to any available USB port on your PC[1] to get immediate read/write access to your optical media. **Product number: F2B56AA**
HP 500GB 7200rpm SATA Hard Drive		The HP 500 GB[1] 7200 rpm Primary SATA Hard Drive is a convenient and affordable high-capacity storage solution for users who require additional storage or a faster dedicated second hard drive. **Product number: F3B97AA**
3Dconnexion CadMouse		Simplify scroll, click, and zoom functions and comfortably drive your CAD projects with the 3Dconnexion CADMouse. **Product number: M5C35AA**
HP 3 year Next Business Day Onsite Hardware Support for Notebooks		Receive 3 years of next business day onsite HW support from an HP-qualified technician for your computing device, if the issue cannot be solved remotely. **Product number: U4414E**

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Messaging Footnotes:

[1] Based on HP's unique and comprehensive security capabilities at no additional cost among desktop workstation vendors as of Sept. 2017 on HP Mobile Workstations with 7th Gen and higher Intel® Processors.
[2] Facial recognition and webcam shutter are optional features that must be configured at purchase.
[3] HP Sure View integrated privacy screen is an optional feature that must be configured at purchase.
[4] 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.
[5] For hard drives, GB = 1 billion bytes. TB = 1 trillion bytes. Actual formatted capacity is less. Up to 30GB (for Windows 10) of system disk is reserved for system recovery software.
[6] 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.
[7] Recharges the battery up to 50% within 30 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 50% capacity, charging will return to normal. Charging time may vary +/-10% due to System tolerance.
[8] Weight will vary by configuration.
[9] Ambient light sensor only available on select models with standard and full UHD (not available with HP DreamColor or privacy display models).
[10] MIL-STD-810G testing is pending . Testing is not intended to demonstrate fitness of U.S. Department of Defense (DoD) contract requirements or for military use. Test results are not a guarantee of future performance under these test conditions. Accidental damage requires an optional HP Accidental Damage Protection Care Pack.
[11] ZBook dock with Thunderbolt™ sold separately.
Screen images courtesy of Mind Frame Cinema, Local Motors, and HaZ.com

Technical Specifications Footnotes:

[1] 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.
[2] 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.
[3] 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 drivers on http://www.support.hp.com
[4] vPro. Some functionality of this technology, such as Intel Active management technology and Intel   Virtualization technology, requires additional 3rd party software in order to run. Availability of future "virtual appliances" applications for Intel vPro technology is dependent on 3rd party software providers. Compatibility future "virtual appliances" is yet to be determined.
[5] Only 2 DIMM configurations run at 2400 MHz and 4 DIMM configurations run at 2133 MHz.
[6] For storage drives GB = 1 billion bytes. TB = 1 trillion bytes. Actual formatted capacity is less. Up to 30 GB (for Windows 10) is reserved for system recovery software.
[7] Wireless cards are optional or add-on features and requires separately purchased wireless access point and internet service. Availability of public wireless access points limited. The specifications for the 802.11ac 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 802.11ac WLAN devices.
[8] HD content required to view HD images.
[9] Intel® HD graphics 630 is configurable as a standalone graphics option; Intel® HD graphics P630 only used when NVIDIA® Optimus™ Technology is enabled.
[10] NVIDIA® Quadro® mobile professional graphics support up to four independent displays when using a HP ZBook Dock with Thunderbolt 3 (sold separately) or DP 1.2 hubs with MST. AMD Radeon™ Pro professional graphics support up to six independent displays when using an HP ZBook Dock with Thunderbolt 3 (sold separately) or DP 1.2 hubs with MST.
[11] Privacy camera is not available on touchscreen.
[12] Dual-microphone array when equipped with optional webcam and optional world facing microphone.
[13] Optional or add-on feature.
[14] HP ePrint Driver requires an internet connection to HP web-enabled printer and HP ePrint account registration (for a list of eligible printers, supported documents and image types and other HP ePrint details, see www.hp.com/go/businessmobileprinting.
[15] HP Remote Graphics Software requires a Windows, Linux®, or Mac®OS X 10.10 and newer operating system and network access.
[16] HP Workwise smartphone app is available as a free download on the App Store and Google Play. See requirements at www.hp.com/go/workwise.
[17] HP Client Security Suite Gen 4 requires Windows and Intel® or AMD 8th generation processors.
[18] BIOS Absolute Persistence module is shipped turned off, and will be activated when customers purchase and activate a subscription. Service may be limited. Check with Absolute for availability outside the U.S. The optional subscription service of Absolute Recovery Guarantee is a limited warranty. Certain conditions apply. For full details visit: http://www.absolute.com/company/legal/agreements/computrace-agreement.
[19] Finger Sensor is optional
[20] HP Manageability Integration Kit can be downloaded from http://www.hp.com/go/clientmanagement.
[21] HP BIOSphere Gen4 requires Intel® or AMD 8th generation processors. HP Sure Start Gen4 is available on HP Z Workstations products equipped with 8th generation Intel® or AMD processors.
[22] HP Password manager requires Windows.
[23] EPEAT® registered where applicable. EPEAT registration varies by country. See www.epeat.net for registration status by country.
[24] External power supplies, power cords, cables and peripherals are not low halogen. Service parts obtained after purchase may not be low halogen.
[25] Battery is internal and not replaceable by customer. Serviceable by warranty. 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.
[26] HP Secure Disk Erase is for the methods outlined in the National Institute of Standards and Technology Special Publication 800-88.
[27] 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.
[28] Microsoft Security Defender requires Windows 10
[29] Windows Hello optional

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