

HP ZBook G3 Mobile Workstations



Table of contents

General	2
HP ZBook 15u G3 Mobile Workstation.....	6
HP ZBook Studio G3 Mobile Workstation.....	7
HP ZBook 15 G3 Mobile Workstation.....	9
HP ZBook 17 G3 Mobile Workstation.....	11
HP ZBook G3 graphics	13
HP ZBook G3 drives and storage.....	14
Thunderbolt™ 3	15
Operating systems	16
HP ZBook Dock with Thunderbolt 3.....	17
Warranty and support	17

General

What are HP ZBook G3 Mobile Workstations?

HP ZBook G3 Mobile Workstations are HP's family of revolutionary, next-generation mobile workstation solutions designed for the most demanding technical and creative professionals that support Windows 7 via a downgrade from Windows 10. Combining a world-class industrial design, world-class engineering, robust tools and visual collaboration solutions, the HP ZBook G3 Mobile Workstation family—the HP ZBook 15u G3, HP ZBook Studio G3, HP ZBook 15 G3, HP ZBook 17 G3, and HP ZBook Dock with Thunderbolt 3—takes performance, innovation, and reliability to the next level to help give you and your business a competitive edge.

The HP ZBook G3 Mobile Workstations build on the strength and success of the HP Z Workstation family. Work confidently and accomplish more with HP Mobile Workstations designed around 30 years of HP Z DNA with extensive ISV certification, expanded MIL-STD 810G testing—14 individual tests, and 115,000 hours in HP's Total Test Process.

HP ZBook 15u G3: Thin, Powerful, Affordable.

- Enjoy workstation performance in a low cost, compact package. The HP ZBook 15u, with its 15.6" diagonal display, is the perfect combination of mobility and cost.
- Inspiration can strike any time—be ready with a mobile workstation that starts at 4.18 lb, 19.9 mm thin and offers an optional touch screen, integrated numeric keypad, and impressive battery life.
- If it's value in a lightweight design you want, look no further. This workstation can be configured with up to 32 GB memory², AMD FirePro™ professional graphics, HP Z Turbo Drive G2³, 1.5 TB⁴ of total storage, and a FHD touch display³.

HP ZBook Studio G3: Looks stunning. Works wonders.

- Conquer the workday with the world's first quad core workstation Ultrabook™⁵ offering the perfect combination of brains and beauty. The iconic 15.6" diagonal HP ZBook Studio revolutionises the design language of mobile workstations.
- Make a bold statement with innovative style and performance. Starting at just 4.4 lb and 18 mm thin, the HP ZBook Studio is a meticulously-designed performance machine.
- Get looks and performance with Intel® Xeon® processor⁶ options, including quad core options, dual 1 TB HP Z Turbo Drive G2³ for up to 2 TB⁴ of total storage, up to 32 GB ECC memory², dual Thunderbolt™ 3, and optional HP DreamColor UHD or FHD touch displays³.

HP ZBook 15 G3: Portable powerhouse.

- Work without limits on the 3rd generation of the world's best-selling mobile workstation. Combine mobility and robust configurability to create the perfect mix of style, features and portability in a thin, light, 15.6" diagonal form factor.
- HP's most popular mobile workstation has been redesigned, inside and out. Now 27% thinner and 7% lighter than the previous generation, it offers 100% more wow—it's designed to impress and perform.
- Configure the HP ZBook 15 with Intel® Xeon® processor⁶ options, up to 64 GB ECC memory², dual 1 TB HP Z Turbo Drive G2³ for up to 3 TB⁴ of total storage, dual Thunderbolt™ 3, and optional HP DreamColor UHD or FHD touch displays³.

HP ZBook 17 G3: The ultimate in mobile performance.

- Wish you could take your desktop workstation on the road with you? The HP ZBook 17 offers HP's ultimate in power plus portability with a 17.3" diagonal screen, massive scalability and configurability, and all the latest power-packed features.
- Push the boundaries of performance without pushing the boundaries of portability. HP's biggest and most powerful mobile workstation just got 25% thinner and 11% lighter than the previous generation, with a stunning magnesium aluminum facelift.
- Enjoy Intel® Xeon® processor⁶ options, up to 64 GB ECC memory², dual 1 TB HP Z Turbo Drive G2³ for up to 4 TB⁴ of total storage, dual Thunderbolt™ 3, and optional HP DreamColor UHD or FHD touch displays³.

HP ZBook Dock with Thunderbolt 3: Portable, clutter-free docking for your HP ZBook.

- Create a remarkably powerful and streamlined mobile workstation workspace without the clutter with the HP ZBook Dock with Thunderbolt 3³. Get expansive device, display, and network connectivity plus simultaneous power & charging of your system through one simple cable from the dock to your HP ZBook.

- Have a lot to connect? No problem! Link up to 10 devices at once through ports that include Thunderbolt™ 3³ (which also supports DisplayPort™ 1.2 and USB 3.1 Gen 2), four USB 3.0, RJ-45, VGA, combo audio, and two additional DisplayPort™ ports.
- Rapidly replenish your HP ZBook's power after a demanding day with an impressive charging station that passes power directly through a Thunderbolt™ 3 power cable to your HP ZBook.

Will HP ZBook Mobile Workstations continue to have similar support (i.e. HP Elite Premium support)?

Yes, HP ZBooks will have the same support as the HP EliteBooks. This includes our 3-year (3-3-3) limited warranty and service offering which includes 3 years of parts, labor and on-site repair. Terms and conditions vary by country. Certain restrictions and exclusions apply.

What products are being replaced by the HP ZBook Mobile Workstations and HP ZBook Dock with Thunderbolt 3?

- The HP ZBook 15u G3 replaces both the HP ZBook 14 G2 and HP ZBook 15u G2.
- The HP ZBook 15 G3 and HP ZBook 17 G3 replace the HP ZBook 15 G2 and HP ZBook 17 G2, respectively.
- The HP ZBook Studio G3 creates an exciting new category for the HP ZBook family—providing extreme thin & light & full performance capabilities.
- Finally, the new HP ZBook Dock with Thunderbolt 3 replaces both the HP Standard and Advanced Docking Stations for the HP ZBook Studio G3, 15 G3, and 17 G3.

Note: the HP ZBook 15u G3 will continue to use the HP Ultralim Side Dock previously used on the HP ZBook 15u G2.

When will I need to move to the HP ZBook G4 Mobile Workstations?

The HP ZBook G3 Mobile Workstations will be orderable until July 2018 to support users who require Windows 7 (via downgrade to Windows 10). If you have migrated to Windows 10 we recommend you purchase the HP ZBook G4 Mobile Workstations which offer the latest in performance and innovation.

When would you choose an HP ZBook Mobile Workstation?

If you are looking for the following, an HP ZBook Mobile Workstation may be right for you:

- Highest-performing mobile CPU for best possible workstation application performance
- Highest-performing workstation-class graphics with hardware accelerated OpenGL graphics support
- ISV certifications for reliable application performance
- Optimised mobile workstation form factor
- True 64-bit computing environment
- High-quality display panel technology
- Reliability and durability
- Appealing industrial design
- Common commercial accessories & docks

What type of users are the HP ZBook Mobile Workstations designed for?

Creative or design specialists, travelers, mobile financial professionals, and knowledge workers that need high-performance mobile workstations designed for reliable performance with demanding applications.

Where do HP ZBook Mobile Workstations fit in the overall HP family of Business Notebook PCs?

The HP ZBook Mobile Workstations are HP's best combination of high-performance features and ISV-certified graphics in a business-rugged design. They uniquely provide full performance quad-core CPUs⁶, professional 3D graphics solutions from NVIDIA® and AMD, Thunderbolt™ 3 ports for high-speed connectivity, tremendous expandability for large memory and/or large storage configurations, HP DreamColor³ panel choices for colour-critical workflows, HP Remote Graphics Software⁷, HP Performance Advisor, and ISV certifications from a broad selection of workstation-class applications.

What are the key differences between the HP ZBook Mobile Workstations and the HP EliteBook Business Notebooks?

Differences between the HP EliteBook Business Notebooks and the HP ZBook Mobile Workstations can be seen in areas of industrial design, memory and storage, reliability, graphics, and warranty. See the detailed table below.



	HP EliteBook 800 series Notebook	HP ZBook G3 Mobile Workstations*
Form factors	14.0-inch diagonal 15.6-inch diagonal	15.6-inch diagonal 17.3-inch diagonal
Expandability	Up to 16 GB memory ² Up to 2 storage bays	Up to 64 GB memory ² Up to 4 storage bays Thunderbolt™ 3 ports for faster data transfers Dual HP Z Turbo Drive G2 (PCIe SSD) for accelerated storage performance Quad-core Intel® Core™ i5, i7 and Xeon® processors Support for up to FHD Touch UWVA, UHD DreamColor screen options
Reliability	Business-rugged, MIL-STD-810G testing ¹ HP DuraCase HP DuraKeys HP Premium Keyboard Audio by Bang & Olufsen Magnesium and aluminum chassis Chemically strengthened glass touchpad Cast titanium alloy display latch	All the reliability features in the HP EliteBook 800 series notebook plus: <ul style="list-style-type: none"> • Rigorous ISV testing and certifications • Expanded Mil-STD 810G testing¹ • Support for RAID (0, 1)⁸ • Productivity-boosting software tools such as HP Performance Advisor, HP Velocity, and HP Remote Graphics Software⁷ preloaded
Graphics	Intel® UMA or AMD Radeon™ graphics	ISV-certified, workstation-caliber AMD FirePro™ or NVIDIA® Quadro® professional graphics plus support for Intel® UMA graphics
Warranty	1/1/0 or 3/3/0 support, on-site service is extra	3/3/3 or 3/3/0 support**

* Many workstation technologies are selectable options. Specifications can vary by workstation platform.

** Varies by region.

Brand and industrial design

What are the key industrial design elements of the HP ZBook G3 Mobile Workstations?

- Precision engineering
- Premium materials/finishes
- Business-rugged/designed to pass 15 MIL-STD tests⁷
- Thinner/lighter completely redesigned chassis
- High-end processing (Intel® Core™ i5/i7, Xeon® and next generation graphics options)
- Choice of workstation Ultrabook™⁵ with the HP ZBook 15u G3, quad core full performance workstation Ultrabook™⁵ HP ZBook Studio G3 or fully featured mobile performance on the HP ZBook 15 G3 and 17 G3
- Superior display panel technology with outstanding resolution and colour accuracy
- Precise dual fan cooling and acoustics

What is the logic behind the HP ZBook Mobile Workstation industrial design for the HP ZBook 15u G3, HP ZBook 15 G3, and HP ZBook 17 G3?

The HP Mobile Workstation team chose a Space Silver and Gravity Black colour combination that represents power, performance, and high-end aesthetics. These colours scored very well in human factors studies and in early customer evaluations. This colour combination will be unique to the HP ZBook family.

One example of HP ZBook uniqueness is the soft-touch paint border around the top cover of the unit. This soft-touch paint provides added aesthetics and is applied to “high traffic” areas that might otherwise be exposed to excessive fingerprint smudging.

Other innovations include a high quality aluminum insert on the centre of the top cover with chemically etched patterns. The keyboard deck has also been redesigned using anodised stamped aluminum for added durability. An HP Spill Resistant Keyboard with Durakeys and touchpad buttons featuring a Duracoat finish ensure an overall business rugged experience. Finally, a diamond cut process has been applied around the keyboard deck providing an enhanced visual appeal.

In addition to visual changes, the HP ZBook 15 G3 and 17 G3 have moved from an overall wedge to a flat, thinner design to reduce height and provide a streamlined overall look.

What is the logic behind the HP ZBook Mobile Workstation industrial design for the HP ZBook Studio G3?

For the HP ZBook Studio, the HP Mobile Workstation team chose a uniform Space Silver throughout the industrial design with Black Licorice colour for the bottom cover—representing premium design, performance, and high-end beautiful aesthetics.

The HP ZBook Studio uses a manufacturing process called CNC machining which stands for computer numeric controlled machining for the top cover and keyboard deck. This technique allows us to create a very fine detailed design out of a single sheet of premium lightweight aluminum—providing overall added durability, an overall thinner and lighter design, and an anodised finish throughout.

The bottom cover is constructed of magnesium for solid rigidity and durability with a 2 piece aluminum bottom which serves as an air intake that dramatically improves air flow for an overall optimised system thermal profile.

Finally, a meticulous diamond cut process is applied around the keyboard deck and around the clickpad which showcases the overall style.

What materials are used in the new HP ZBook Mobile Workstation platforms?

The HP ZBook Mobile Workstations are constructed from aluminum and magnesium with other metal alloys and rubber elements. These materials create the best possible combination of durability, light weight, and low flexibility.

How were the thinner & lighter designs achieved over the previous generation?

The new HP Mobile Workstations are dramatically thinner and lighter over previous generation.

- The HP ZBook 15 G3 is 25% thinner and 7% lighter than previous generation.
- The HP ZBook 17 G3 is now 27% thinner and 11% lighter than its predecessor.
- The HP ZBook 15u G3 sports a thin and light profile.
- Finally, the HP ZBook Studio provides industry leadership in design being just 18 mm thin and starting at 4.4 lb, and is the portfolio's, and the world's, first quad-core workstation Ultrabook™^{5,9}.

In order to optimise thinness, strategic decisions were made to remove the optical drive and express card (consistent with the overall mobile workstation market moving away from these commodities).

The tool-less entry door was also removed allowing for a thinner unibody design. This feature has become less critical as battery life becomes longer. In fact, in the HP ZBook G3 Mobile workstations, prismatic battery technology and Intel's more energy efficient 6th generation processor architecture are used to achieve outstanding battery results.

HP ZBook 15u G3 Mobile Workstation

What is special about the HP ZBook 15u G3 Mobile Workstation?

The HP ZBook 15u G3 is HP's next generation workstation Ultrabook™⁵ sporting a thin industrial design. If it's value in a lightweight design you want, look no further. This customisable workstation contains the latest 6th generation Intel® Core™ processors, professional AMD FirePro™ 3D graphics (2 GB VRAM), up to 32 GB memory², and is designed to pass 14 MIL-STD tests¹. It can handle up to 2 internal storage devices (up to 1.5 TB⁴), including the HP Z Turbo Drive (NVMe PCIe SSD), and has an optional FHD resolution touch display, numeric keypad, and Ultrabook™-class long battery life. It also comes standard with HP Remote Graphics Software (HP RGS)⁷ for high-end screen sharing or remote access to a workstation from home.

How does the HP ZBook 15u G3 compare to the HP ZBook 15u G2?

		HP ZBook 15u G2	HP ZBook 15u G3
Dimensions	Depth	253.6 mm/9.9"	257.7 mm/10.1"
	Width	375.5 mm/14.8"	383.3 mm/15.1"
	Height	21.4 mm/.84"	19.9 mm/.83"
Starting weight		1.92 kg/4.23 lb	1.95 kg/4.18 lb
Display		FHD SVA, FHD (UWVA)	FHD SVA/AG, FHD UWVA/AG, Touch FHD SVA/AG, UHD UWVA/AG
Chipset		Chipset integrated within processor	Chipset integrated within processor
Processor		5th generation dual-core ULT Intel® Core™ i7 and i5 processors	6th generation dual-core ULT Intel® Core™ i7 and i5 processors
Graphics		AMD FirePro™ M4170 (1 GB GDDR5)	AMD FirePro™ W4190M (2 GB GDDR5)
Memory ²		Up to 32 GB DDR3L-1600 non-ECC SDRAM (Transfer rates up to 1600 MT/s)	Up to 32 GB DDR4-2133 non-ECC SDRAM (Transfer rates up to 2133 MT/s)
Internal storage ⁴		Up to 1 TB 2.5" HDD Up to 512 GB SATA SSD Up to 512 GB PCIe SSD	Up to 1 TB 2.5" HDD Up to 512 GB SATA SSD Up to 512 GB M.2 PCIe SSD
ODD		N/A	N/A
Battery		HP Long Life 3-cell 50 WHr Li-ion	HP Long Life 3-cell 46 WHr Li-ion
Battery life ^{12,13}		Up to 11:45	Up to 10:00
Adapter		Slim Smart AC Adapter (65 w)	Slim Smart AC Adapter (65 w)
Ports		(1) USB 3.0 charging (3) USB 3.0 (1) DisplayPort™ 1.2 (1) RJ-45 (Ethernet) (1) VGA (1) Power connector (1) Combo headphone/microphone	(1) USB 3.0 charging (1) USB 3.0 (1) USB 3.1 Gen 1 (1) RJ-45 (Ethernet) (1) Power connector (1) Stereo microphone-in/headphone-out combo

What processors does the HP ZBook 15u G3 offer?

The HP ZBook 15u G3 will offer future 6th generation Intel® Core™ dual core processors. These ULT (low power) 15 W processors will only be available on the HP ZBook 15u G3.

- Intel® Core™ i7-6600U with Intel® HD Graphics 520 (2.6 GHz, up to 3.4 GHz with Intel® Turbo Boost technology, 4 MB cache, 2 cores)
- Intel® Core™ i7-6500U with Intel® HD Graphics 520 (2.5 GHz, up to 3.1 GHz with Intel® Turbo Boost technology, 4 MB cache, 2 cores)
- Intel® Core™ i5-6300U with Intel® HD Graphics 520 (2.4 GHz, up to 3.0 GHz with Intel® Turbo Boost technology, 3 MB cache, 2 cores)
- Intel® Core™ i5-6200U with Intel® HD Graphics 520 (2.3 GHz, up to 2.7 GHz with Intel® Turbo Boost technology, 3 MB cache, 2 cores)

How will the Intel® Ultrabook™ (UTL) processors perform on real-world, workstation-class applications?

The ULT processors on the HP ZBook 15u G3 will work with the discrete AMD FirePro™ graphics to provide up to mid-level workstation-class performance. However, for heavily threaded applications or users requiring the greatest CPU performance, the HP ZBook Studio G3, HP ZBook 15 G3 and 17 G3 should be considered.

What is the docking solution for the HP ZBook 15u G3?

The HP ZBook 15u G3 will continue to use a side docking solution (same as HP ZBook 15u G2) due to its thin design. The HP ZBook Studio G3, HP ZBook 15 G3 and HP ZBook 17 G3 will transition to the new HP ZBook Dock with Thunderbolt 3 due to support of Intel's next generation of Thunderbolt™.

How does the HP ZBook 15u G3 compare to the HP Elitebook 850 G3?

- The HP ZBook 15u G3 will have the same chassis and I/O ports arrangement. The HP ZBook 15u G3 will feature a unique magnesium with aluminum insert top cover—sharing the same space silver colour as the rest of the HP ZBook family.
- HP ZBook 15u G3 will have FHD SVA, FHD UWVA IPS, FHD SVA Touch, and UHD UWVA IPS display options. HP Elitebook 850 G3 will not offer the FHD UWVA IPS display.
- HP ZBook 15u G3 will have z-height at 19.9 mm while EliteBook 850 G3 will have z-height of 19.3 mm.
- HP ZBook 15u G3 will have up to 32 GB max memory⁹ while EliteBook 850 G3 will offer up to 16 GB memory.⁹
- HP ZBook 15u G3 will contain a ISV-certified, workstation-caliber AMD FirePro™ 3D graphics card while HP EliteBook 850 G2 will offer Intel UMA Graphics and AMD Radeon™ Graphics.
- Both platforms will offer the same primary hard disk drive assortment.
- HP ZBook 15u G3 will assort M.2 SATA SSDs and two HP Z Turbo Drive G2 (M.2 NVMe PCIe SSD) for M.2 storage offerings (256 GB and 512 GB capacities) while the HP Elitebook 850 G3 will offer only a 256 GB NVMe PCIe SSD along with other M2 SATA SSDs.
- HP ZBook 15u G3 will feature productivity-boosting software tools such as HP Performance Advisor, HP Velocity, and HP Remote Graphics Software⁷ preloaded.

HP ZBook Studio G3 Mobile Workstation

What is special about the HP ZBook Studio G3 Mobile Workstation?

HP ZBook Studio is an exciting new category for the HP ZBook family. It is the industry's first true ground-up mobile device designed for commercial-class customers and delivers a thin & light user experience with full performance workstation-class capabilities¹⁰. The HP ZBook Studio G3 contains Intel 6th generation quad-core processors, next generation professional NVIDIA® Quadro® graphics with Optimus® technology, Intel Iris™ Graphics and Intel® HD Graphics options, up to 32 GB memory², dual Thunderbolt™ 3, and is designed to pass an expanded set of 14 MIL-STD tests¹. It can handle up to 2 internal storage devices (up to 2 TB)⁴ including up to 2 simultaneous next generation 1 TB HP Z Turbo Drive G2 (NVMe PCIe SSD) devices³. It also has UHD UWVA, UHD DreamColor, or FHD Touch optional displays.

How does the HP ZBook Studio G3 compare to the HP ZBook 15 G2?

	HP ZBook 15 G2	HP ZBook Studio G3
Dimensions	Depth	257 mm/10.1"
	Width	381.5 mm/15.0"
	Height (front)	30.5 mm/1.52"
Starting weight	2.82 kg/6.20 lb	2.04 kg/4.49 lb
Display	FHD (1920 x 1080, SVA) FHD (1920 x 1080 UWVA) FHD DreamColor (1920 x 1080, AG/WVA) QHD+ (3200 x 1800, AG/UWVA)	FHD (1920 x 1080, UWVA) UHD (3840 x 2160, UWVA) UHD DreamColor (3840 x 2160, UWVA)
Chipset	Mobile Intel® QM87	Mobile Intel® CM236
Processor	4th generation quad-core Intel® Core™ i7 processors 4th generation dual-core Intel® Core™ i5 processors	6th generation quad-core Intel® Xeon® processors 6th generation quad-core Intel® Core™ i7 processors
Graphics	NVIDIA® Quadro® K2100M (2 GB GDDR5) NVIDIA® Quadro® K1100M (2 GB GDDR5) AMD FirePro™ M5100 (2 GB GDDR5) NVIDIA® Quadro® K610M (1 GB GDDR5)	HP ZBook Studio special edition: NVIDIA® Quadro® M1000M with 4 GB dedicated GDDR5 graphics memory (Extra 2 GB of graphics memory provides enhanced application performance with larger graphics datasets).
Memory²	Up to 32 GB DDR3L-1600 MHz (Transfer rates up to 1600 MT/s)	Up to 32 GB DDR4-2133 MHz non-ECC or ECC (Transfer rates up to 2133 MT/s)
Internal storage⁴	Up to 1 TB Up to 500 GB Up to 512 GB SATA SSD 512 GB HP Z Turbo Drive G1 (M.2 AHCI PCIe SSD)	Up to 1 TB Up to 512 GB SATA SSD 1 TB HP Z Turbo Drive G2 (M.2 NVMe PCIe SSD)
ODD¹¹	DVD R/W Blu-ray ROM + DVD R/W Blu-ray R/W + DVD R/W	No optical bay
Battery	8-cell 83 WHr 8-cell long life 75 WHr Secondary batteries: HP ST09 Extended Life HP BB09 Ultra Extended Life	4-cell long life 64 WHr
Battery life^{12,13}	Up to 11:15	Up to 9:30
Adapter	Smart AC Adapter (150 w/200 w)	Slim Smart AC Adapter (150 w)

Ports		
	(1) Thunderbolt™ 2 (mini-DP 1.2)	(2) Thunderbolt™ 3 (USB-C)
	(2) USB 3.0	(3) USB 3.0
	(1) USB 3.0 w/ USB powered/charging)	(1) USB 3.0 w/ USB powered/charging)
	(1) USB 2.0	(1) HDMI RJ-45 (Ethernet)
	(1) DisplayPort™ 1.2	(1) Combo headphone/microphone
	(1) RJ-45 (Ethernet)	(1) Power connector
	(1) VGA	
	(1) Combo headphone/microphone	
	(1) Power connector	

What processors does the HP ZBook Studio G3 offer?

The following 6th generation Intel® Core™ i5 and i7 processors⁶ will be offered:

- Intel® Xeon® E3-1545M v5 with Intel® Iris™ Pro Graphics P580 (x.x GHz, up to x.x GHz with Intel® Turbo Boost Technology, 8 MB cache, 4 cores) (Available in 1H16)
- Intel® Xeon® E3-1505M v5 with Intel® HD graphics P530 (2.80 GHz, up to 3.70 GHz with Intel® Turbo Boost Technology, 8 MB L3 cache, 4 cores)
- Intel® Core™ i7-6820HQ with Intel® HD graphics 530 (2.70 GHz, up to 3.60 GHz with Intel® Turbo Boost Technology, 8 MB L3 cache, 4 cores)
- Intel® Core™ i7-6700HQ with Intel® HD graphics 530 (2.60 GHz, up to 3.50 GHz with Intel® Turbo Boost Technology, 6 MB L3 cache, 4 cores)

What are the UHD display panel and UHD DreamColor display panel choices on the HP ZBook Studio G3?

UHD panels offer extremely high resolution (3840 x 2160) for maximum screen real estate and vibrant, clear pictures. Two versions of the UHD panel will be offered on HP ZBook Studio: UHD UWVA display and UHD UWVA with DreamColor technology. We've decided to bring the DreamColor technology to this screen resolution of a display for our key customers who desire colour accuracy for their workflows. The panel will be colour calibrated out of the factory and come outfitted with the HP DreamColor assistant software application that allows colour management and display calibration capabilities.

HP ZBook 15 G3 Mobile Workstation

What is special about the HP ZBook 15 G3 Mobile Workstation?

HP's most popular mobile workstation has been redesigned, inside and out. Now 27% thinner and 7% lighter than the previous generation—offering 100% more wow. The HP ZBook 15 G3 contains Intel® 6th generation quad core processors, a choice of next generation professional NVIDIA® Quadro® graphics with Optimus® technology or AMD FirePro™ graphics with AMD Enduro™ Technology, Intel Iris™ Graphics and Intel® HD Graphics options, up to 64 GB memory², dual Thunderbolt™ 3, and is designed to pass an expanded set of 14 MIL-STD tests¹. It can handle up to 3 internal storage devices (up to 3.0 TB)⁴ including up to 2 simultaneous next generation HP Z Turbo Drive G2 (M.2 NVMe PCIe SSD)³ and has a UHD HP DreamColor display option.

How does the HP ZBook 15 G3 compare to the HP ZBook 15 G2?

		HP ZBook 15 G2	HP ZBook 15 G3
Dimensions	Depth	257 mm/10.1"	264 mm/10.4"
	Width	381.5 mm/15.0"	386 mm/15.2"
	Height	30.5 mm/1.52"	26.0 mm/1.0"
Starting weight		2.82 kg/6.20 lb (w/o ODD)	2.63 kg/5.80 lb
Display ⁸		FHD (1920 x 1080, SVA) FHD (1920 x 1080 UWVA) FHD DreamColor (1920 x 1080, AG/WVA) QHD+ (3200 x 1800, AG/UWVA)	FHD (1920 x 1080, SVA) FHD (1920 x 1080, AG/UWVA) UHD DreamColor (3840 x 2160, UWVA)
Chipset		Mobile Intel® QM87	Mobile Intel® CM236

Processor	4th generation quad-core Intel® Core™ i7 processors 4th generation dual-core Intel® Core™ i5 processors	6th generation quad-core Intel® Xeon® processors 6th generation quad-core Intel® Core™ i7 processors 6th generation quad-core Intel® Core™ i5 processors
Graphics	NVIDIA® Quadro® K2100M (2 GB DDR5) NVIDIA® Quadro® K1100M (2 GB DDR5) AMD FirePro™ M5100 (2 GB DDR5) NVIDIA® Quadro® K610M (1 GB GDDR5)	NVIDIA® Quadro® M2000M (4 GB DDR5) NVIDIA® Quadro® K1000M (2 GB GDDR5) AMD FirePro™ W5170M (2 GB DDR5) Intel integrated graphics (GT2 and GT4e)
Memory²	Up to 32 GB DDR3L-1600 MHz (Transfer rates up to 1600 MT/s)	Up to 64 GB DDR4-2133 MHz non-ECC or ECC (Transfer rates up to 2133 MT/s)
Internal storage⁴	Up to 1 TB 7200 rpm Up to 500 GB 5400 rpm Up to 512 GB SATA SSD 512 GB HP Z Turbo Drive G1 (M.2 AHCI PCIe SSD)	Up to 500 GB 7200 rpm Up to 1 TB 5400 rpm Up to 256 GB SATA SSD 1 TB HP Z Turbo Drive G2 (M.2 NVMe PCIe SSD)
ODD¹¹	DVD R/W Blu-ray ROM + DVD R/W Blu-ray R/W + DVD R/W	No optical bay
Battery	8-cell 83 WHr 8-cell long life 75 WHr Secondary Batteries: HP ST09 Extended Life HP BB09 Ultra Extended Life	9-cell long life 90 WHr
Battery life^{12,13}	Up to 11:15	Up to 15:45
Adapter	Smart AC Adapter (150 w/200 w)	Slim Smart AC Adapter (150 w)
Ports	(1) Thunderbolt™ 2 (mini-DP 1.2) (2) USB 3.0 (1) USB 3.0 (charging) (3) USB 2.0 (1) DisplayPort™ 1.2 (1) RJ-45 (Ethernet) (1) VGA (1) Combo headphone/microphone (1) Power connector	(2) Thunderbolt™ 3 (USB-C) (3) USB 3.0 (1) USB 3.0 (charging) (1) HDMI (1) RJ-45 (Ethernet) (1) VGA (1) Combo headphone/microphone (1) Power connector

What processors does the HP ZBook 15 G3 offer?

The following 6th generation Intel® Xeon® and Core™ i5 and i7 processors² will be offered:

- Intel® Xeon® E3-1545M v5 with Intel® Iris™ Pro Graphics P580 (x.x GHz, up to x.x GHz with Intel® Turbo Boost Technology, 8 MB cache, 4 cores) (Available in 1H16)
- Intel® Xeon® E3-1505M v5 with Intel® HD graphics P530 (2.80 GHz, up to 3.70 GHz with Intel® Turbo Boost Technology, 8 MB cache, 4 cores)
- Intel® Core™ i7-6820HQ with Intel® HD graphics 530 (2.70 GHz, up to 3.60 GHz with Intel® Turbo Boost Technology, 8 MB cache, 4 cores)
- Intel® Core™ i7-6700HQ with Intel® HD graphics 530 (2.60 GHz, up to 3.50 GHz with Intel® Turbo Boost Technology, 6 MB cache, 4 cores)
- Intel® Core™ i5-6440HQ with Intel® HD graphics 530 (2.60 GHz, up to 3.50 GHz with Intel® Turbo Boost Technology, 6 MB cache, 4 cores)

What is the UHD HP DreamColor display panel choice on the HP ZBook 15 G3?

UHD panels offer extremely high resolution (3840 x 2160) for maximum screen real estate and vibrant, clear pictures. HP DreamColor technology is for our key customers who desire colour accuracy for their workflows. The panel will be colour calibrated out of the factory and comes outfitted with the HP DreamColor Assistant software application that allows colour management and display calibration capabilities.

Are the batteries and other accessories from the HP ZBook 15 G2 compatible with the HP ZBook 15 G3?

Although the internal batteries are similar, they are not forward or backward compatible between HP ZBook 15 G2 and HP ZBook 15 G3. The HP ZBook 15 G2 battery is accessible from the outside rear of the unit. In order to achieve significant thinness reduction and with the improvements in battery technology, the HP ZBook 15 G3 9-cell Long Life Polymer battery is enclosed within the chassis. The 9-cell Long Life Polymer battery comes standard with a 3 year warranty¹⁴.

The common docking stations used on the HP ZBook 15 G2 will not work with the HP ZBook 15 G3. HP is driving the industry forward with the HP ZBook Dock with Thunderbolt 3³.

HP ZBook 17 G3 Mobile Workstation**What is special about the HP ZBook 17 G3 Mobile Workstation?**

HP's biggest and most powerful mobile workstation just got 25% thinner and 11% lighter with a stunning industrial redesign.

The HP ZBook 17 G3 contains Intel® 6th generation quad core processors, the choice of next generation professional NVIDIA® Quadro® graphics with Optimus® technology, AMD FirePro™ graphics with AMD Enduro™ Technology, or Intel® Iris™ or HD Graphics, up to 64 GB memory², dual Thunderbolt™ 3, and is designed to pass an expanded set of 14 MIL-STD tests¹. It can handle up to 4 internal storage devices (up to 4.0 TB)⁴ including up to 2 simultaneous

HP Z Turbo Drive G2 (M.2 NVMe PCIe SSD)³ and offers a UHD HP DreamColor display option. It also comes standard with HP Remote Graphics Software (RGS)⁷ for high-end screen sharing or remote access to a workstation from home.

How does the HP ZBook 17 G3 compare to the HP ZBook 17 G2?

		HP ZBook 17 G2	HP ZBook 17 G3
Dimensions	Depth	272 mm/10.7	280mm/11.0"
	Width	416 mm/16.37"	420mm/16.50"
	Height (front)	34.0 mm/1.33"	30.0mm/1.2"
	Height (rear)	40.0 mm/1.57"	30.0mm/1.2"
Starting weight		3.36 kg/7.4 lb	3.52kg/7.75 lb
Display		HD+ (1600 x 900, SVA) FHD (1920 x 1080, WVA) FHD DreamColor (1920 x 1080, UWVA)	HD+ (1600x900, SVA) FHD (1920x1080, UWVA) UHD DreamColor (3840x2160, UWVA)
Chipset		Mobile Intel® QM87	Mobile Intel® CM236
Processor		4th generation quad-core Intel® Core™ i7 processors 4th generation dual-core Intel® Core™ i5 processors	6th generation quad-core Intel® Xeon® processors 6th generation quad-core Intel® Core™ i7 processors 6th generation quad-core Intel® Core™ i5 processors
Graphics		NVIDIA® Quadro® K5100M (8 GB GDDR5) NVIDIA® Quadro® K4100M (4 GB GDDR5) NVIDIA® Quadro® K3100M (4 GB GDDR5) NVIDIA® Quadro® K2200M (2 GB GDDR5) NVIDIA® Quadro® K1100M (2 GB GDDR5) NVIDIA® Quadro® K610M (1 GB GDDR5) AMD FirePro™ M6100 (2 GB GDDR5)	NVIDIA® Quadro® M5000M (8 GB GDDR5) NVIDIA® Quadro® M4000M (4 GB GDDR5) NVIDIA® Quadro® M3000M (4 GB GDDR5) NVIDIA® Quadro® M2000M (4 GB GDDR5) NVIDIA® Quadro® M1000M (2 GB GDDR5) AMD FirePro™ W6150M (4 GB GDDR5) Intel® Integrated Graphics (GT2 and GT4e)
Memory²		Up to 32 GB DDR3L-1600 MHz (Transfer rates up to 1600 MT/s)	Up to 64 GB DDR4-2133 MHz non-ECC or ECC (Transfer rates up to 2133 MT/s)

Internal storage¹⁰	Up to 1 TB 7200 rpm Up to 500 GB 5400 rpm Up to 512 GB SATA SSD 512 GB HP Z Turbo Drive G1 (M.2 AHCI PCIe SSD)	Up to 1 TB 7200 rpm Up to 500 GB 7200 rpm Up to 256 GB SATA SSD Up to 1 TB HP Z Turbo Drive G2 (M.2 NVMe PCIe SSD)
ODD¹¹	DVD-ROM DVD R/W Blu-ray ROM + DVD R/W Blu-ray R/W + DVD R/W	No optical bay
Battery	8-cell 83 WHr 8-cell long life 75 WHr Secondary Batteries: HP ST09 Extended Life HP BB09 Ultra Extended Life	6-cell long life 96 WHr
Battery life^{12,13}	TBD	Testing not final
Adapter	Smart AC Adapter (200 w/230 w)	Slim Smart AC Adapter (200 w)
Ports	(1) Thunderbolt™ 2 (mini-DP 1.2) (2) USB 3.0 (1) USB 3.0 (charging) (1) USB 2.0 (1) DisplayPort™ 1.2 (1) RJ-45 (Ethernet) (1) VGA (1) Combo headphone/microphone (1) Power connector	(2) Thunderbolt™ 3 (USB-C) (3) USB 3.0 (1) USB 3.0 (charging) (1) HDMI (1) RJ-45 (Ethernet) (1) VGA (1) Combo headphone/microphone (1) Power connector

What processors does the HP ZBook 17 G3 offer?

The following 6th generation Intel® Xeon® and Core™ i5 and i7 processors² will be offered:

- Intel® Xeon® E3-1575M v5 with Intel® Iris Pro Graphics P580 (3.0 GHz, up to 3.9 GHz with Intel® Turbo Boost Technology, 8 MB cache, 4 cores) (Available in 1H16)
- Intel® Xeon® E3-1535M v5 with Intel® HD graphics P530 (2.90 GHz, up to 3.80 GHz with Intel® Turbo Boost Technology, 2133 MHz, 8 MB L3 Cache, 4 cores)
- Intel® Core™ i7-6820HQ with Intel® HD graphics 530 (2.70 GHz, up to 3.60 GHz with Intel® Turbo Boost Technology, 2133 MHz, 8 MB L3 Cache, 4 cores)
- Intel® Core™ i7-6700HQ with Intel® HD graphics 530 (2.60 GHz, up to 3.50 GHz with Intel® Turbo Boost Technology, 2133 MHz, 6 MB L3 Cache, 4 cores)
- Intel® Core™ i5-6440HQ with Intel® HD graphics 530 (2.60 GHz, up to 3.50 GHz with Intel® Turbo Boost Technology, 2133 MHz, 6 MB L3 Cache, 4 cores)

What is the UHD HP DreamColor display panel choice on the HP ZBook 17 G3?

UHD panels offer extremely high resolution (3840 x 2160) for maximum screen real estate and vibrant, clear pictures. HP DreamColor technology is for our key customers who desire colour accuracy for their workflows. The panel will be colour calibrated out of the factory and come outfitted with the HP DreamColor assistant software application that allows colour management and display calibration capabilities.

Are the batteries and other accessories from the HP ZBook 17 G2 compatible with the HP ZBook 17 G3?

Although the internal batteries are similar, they are not forward or backward compatible between HP ZBook 17 G2 and HP ZBook 17 G3. The HP ZBook 17 G2 battery is accessible from the outside rear of the unit. In order to achieve significant thinness reduction and with the improvements in battery technology, the HP ZBook 17 G3 9-cell Long Life Polymer battery is enclosed within the chassis. The 9-cell Long Life Polymer battery comes standard with a 3 year warranty. The common docking stations used on the HP ZBook 17 G2 will not work with the HP ZBook 17 G3. HP is driving the industry forward with the HP ZBook Dock with Thunderbolt3.

HP ZBook G3 graphics

What graphics solutions are available on each HP ZBook model?

		HP ZBook 15u G3	HP ZBook Studio G3	HP ZBook 15 G3	HP ZBook 17 G3
Professional 2D	Intel® Integrated Graphics (Intel® HD or Iris™ Pro) (now a standalone configurable option)	•	•	•	•
Professional 3D	AMD FirePro™ W4190M (2 GB GDDR5)	•			
	NVIDIA® Quadro® M1000M (2 GB GDDR5)			•	•
	NVIDIA® Quadro® M1000M (4 GB GDDR5)		•		
	AMD FirePro™ W5170M (2 GB GDDR5)			•	
	AMD FirePro™ W6150M (4 GB GDDR5)				•
	NVIDIA® Quadro® M1000M (2 GB GDDR5/4 GB GDDR5)		•	•	•
	NVIDIA® Quadro® M2000M (4 GB GDDR5)			•	•
	NVIDIA® Quadro® M3000M (4 GB GDDR5)				•
	NVIDIA® Quadro® M4000M (4 GB GDDR5)				•
	NVIDIA® Quadro® M5000M (8 GB GDDR5)				•

What are the recommended maximum display configurations by platform?

All resolutions @60 Hz refresh rate. VGA/DVI displays up to 24 bpp and DP displays up to 30 bpp colour depth.

HP ZBook 15 G3 and 17 G3:

• Without dock:

HP ZBook 15 and 17 with hybrid graphics and without the use of the HP ZBook Dock with Thunderbolt 3 supports up to a maximum of four independent displays. These four displays are the internal panel plus three external displays connected to the VGA and two of the three following ports: HDMI, Thunderbolt™ 3, Thunderbolt™ 3.

• With HP ZBook Dock with Thunderbolt 3:

The HP ZBook Dock with Thunderbolt 3 has Thunderbolt™ 3, VGA, and two DisplayPort™ 1.2. When used together with the HP ZBook 15 and 17 configuration with hybrid graphics, a maximum of 6 independent displays are supported. These six displays are internal panel, one external display connected to the system's VGA port and four external displays connected to the HP ZBook Dock with Thunderbolt 3, Thunderbolt™ 3, VGA, and two DisplayPort™ ports.

HP ZBook Studio G3:

• Without dock:

The HP ZBook Studio with hybrid graphics and without the use of the HP ZBook Dock with Thunderbolt 3 supports up to a maximum of three independent displays. These three displays are the internal panel plus two external displays connected to two of the three following ports: HDMI, Thunderbolt™ 3, Thunderbolt™ 3.

• With HP ZBook Dock with Thunderbolt 3:

The HP ZBook Dock with Thunderbolt 3 has a Thunderbolt™ 3 port, VGA port, and two DisplayPort™ 1.2 ports. When used together with the HP ZBook Studio configuration with hybrid graphics, a maximum of 5 independent displays are supported. These five displays are internal panel plus four external displays connected to the HP ZBook Dock with Thunderbolt 3, Thunderbolt™ 3, VGA, and two DisplayPort™ ports.

HP ZBook 15u G3:

• With and without HP Ultralim Docking Station:

Supports up to 3 independent displays via internal LCD Panel, system DisplayPort™, system VGA, or using the HP UltraSlim Docking Station DisplayPort™ and VGA ports (sold separately).

How is a 4K monitor supported on the system and via docking?

• HP ZBook Studio G3, HP ZBook 15 G3, HP ZBook 17 G3

- 4096 x 2160 @ 60 Hz supported on both system Thunderbolt™ 3 ports
- 4096 x 2160 @ 60 Hz supported on the HP ZBook Dock with Thunderbolt 3 via the Thunderbolt™ 3 port and one DisplayPort™ 1.2 port

- **HP ZBook 15u G3**

- 4096 x 2160 @ 60 Hz supported on system DisplayPort™
- 4096 x 2160 @ 60 Hz supported on HP Ultralim Docking station's DisplayPort™

For more information, please see the [Multi-Display Whitepaper](#) and the appropriate HP ZBook G3 QuickSpecs for your system.

HP ZBook G3 drives and storage

What is the HP Z Turbo Drive G2 and how does it compare to previous generation offerings?

HP Z Turbo Drive G2 is the next generation of PCIe SSD storage based on the lower latency NVMe protocol. The HP Z Turbo Drive G2 is dramatically faster than the previously offered SATA connection. It reduces boot up, calculation, and graphics response times (even with 4K video) and revolutionises how your HP ZBook Mobile Workstation handles large files. It is a remarkably affordable and innovative storage solution for fast data access.

The entire HP ZBook G3 family will take advantage of this blazing fast storage technology. This is the same storage solution offered on our latest HP Z Desktop Workstations. Up to two simultaneously running HP Z Turbo Drives will be configurable on the HP ZBook Studio, 15, 17 for a total of 2 TB⁴ of NVMe PCIe storage. This technology is a significant leap forward from the HP Z Turbo Drive G1 which was based on the AHCI protocol. The HP Z Turbo Drive G2 allows for over 2 Gb/s sequential write speeds while HP Z Turbo Drive G1 offered in the HP ZBook G2 family allowed for approximately 750 MB/s sequential write speeds. RAID (0,1)⁸ will be supported on the HP ZBook Studio G3, HP ZBook 15 G3, and HP ZBook 17 G3.

How many storage devices do each of the new HP ZBook Mobile Workstations support and what is the maximum capacity supported?

Storage devices vary by HP ZBook model according to the chart below:

	Max 2.5 drives/bays	Max HP Z Turbo Drives	Max total capacity
HP ZBook 15u G3	1	1	1.5 TB
HP ZBook Studio G3	0	2	2 TB
HP ZBook 15 G3	1	2	3 TB
HP ZBook 17 G3	2	2	4 TB

Do the new HP ZBook Mobile Workstations offer and support solid-state drives?

Yes. See below for supported configurations.

	SSD drive support ⁴
HP ZBook 15u G3	128 GB SATA SSD 256 GB SATA SED SSD 256 GB up to 512 GB HP Z Turbo Drive G2 (M.2 PCIe NVMe SSD)
HP ZBook Studio G3	128 GB SATA SSD 256 GB up to 512 GB SATA SED SSD 256 GB up to 1 TB HP Z Turbo Drive G2 (M.2 PCIe NVMe SSD)
HP ZBook 15 G3	256 GB up to 512 GB SATA SED SSD 256 GB up to 1 TB HP Z Turbo Drive G2 (M.2 PCIe NVMe SSD)
HP ZBook 17 G3	256 GB up to 512 GB SATA SED SSD 256 GB up to 1 TB HP Z Turbo Drive G2 (M.2 PCIe NVMe SSD)

Thunderbolt™ 3

Why did HP decide to include Thunderbolt™ 3 port on the new HP ZBook Studio/15/17 Mobile Workstations?

Thunderbolt™ 3 is the industry's fastest and most versatile connection over the new USB-C connector. Thunderbolt™ 3 provides the highest speed I/O and is required by the most demanding users to maximise the overall performance of the workstation. The HP Mobile Workstation outfit the HP ZBook Studio/15/17 Mobile Workstations with dual Thunderbolt™ 3 capabilities. This allows unique differentiation in the market but also allows for added capabilities by connecting to the new HP ZBook Dock with Thunderbolt 3 and still have a native Thunderbolt™ 3 available for use on the system.

What is the difference between Thunderbolt™ 3 and USB-C?

Thunderbolt™ 2 was previously the fastest I/O port available and standardised on the mini-DisplayPort™ 1.2 (mDP). Thunderbolt™ 3 is the next generation I/O port and Intel has chosen to standardise this technology on the new USB-C connector. The HP ZBook Studio/15/17 G3 feature (2) Thunderbolt™ 3 ports. The HP ZBook 15u and other Elitebook products feature a standard USB-C port – not supporting Thunderbolt™ 3. Specifically, the difference is a standard USB-C port is based on the USB 3.1 gen 1 interface with data transfer speeds equivalent to that of a USB 3.0 port at 5 Gb/s. Thunderbolt™ 3 allows for transfer speeds of 40 Gb/s. See below for comparison matrix.

Port	USB 3.0	USB 3.1 (Gen 1)	USB 3.1 (Gen 2)	Thunderbolt™ 2	Thunderbolt™ 3
Port connector	USB Type A	USB-C	USB-C	Mini DisplayPort™	USB-C
Transfer speeds	5 Gb/s	5 Gb/s	10 Gb/s	20 Gb/s	40 Gb/s
Protocols supported	USB 3.0	USB 3.1 Gen 1	USB 3.1 Gen 2 (SuperSpeed USB)	PCIe, DisplayPort™	PCIe, DisplayPort™, USB 3.1 Gen 2
Platforms supported	All HP ZBooks	HP ZBooks G3: • HP ZBook 15u	HP ZBook G3: • HP ZBook Studio • HP ZBook 15 • HP ZBook 17	HP ZBook G2: • HP ZBook 15 • HP ZBook 17	HP ZBook G3: • HP ZBook Studio • HP ZBook 15 • HP ZBook 17
Note		USB-port on 15u G3 and EliteBook G3 series is spec'ed as USB 3.1 Gen 1	Thunderbolt™ 3 port integrates a USB 3.1 host controller	(1) Thunderbolt™ 2 port supported on HP ZBooks G2	(2) Thunderbolt™ 3 ports supported on HP ZBooks G3

What specifically are the unique features of Thunderbolt™ 3 available on the HP ZBook G3 Mobile Workstations?

- Thunderbolt™ 3 is a super-set port supporting multiple protocols over a single connection simultaneously: DisplayPort™ 1.2, SuperSpeed USB (USB 3.1 Gen 2), and PCI Express
- Industry leading I/O speeds at 40 Gb/s
- Support for 2 x 4K Displays @ 60 Hz through a single port
- Power—15 W to bus-powered devices
- Daisy chain up to 6 Thunderbolt™ devices
- Connectivity with the HP ZBook Dock with Thunderbolt 3

Why didn't HP include Thunderbolt™ support on the HP ZBook 15u G3?

The HP ZBook 15u G3 is a highly mobile workstation platform that does not have the same throughput requirements as the HP ZBook Studio, 15, and 17 products. With a highly portable chassis, the HP ZBook 15u G3 meets the needs of the target customers demanding performance and portability at a value. Even though Thunderbolt™ was not added, USB 3.0 ports, full size DisplayPort™ 1.2, and standard USB-C (USB 3.1 Gen 1) are available.

How does Thunderbolt™ 3 compare to USB 3.0?

Thunderbolt™ 3 provides 8x the throughput of USB 3.0.

What is the difference between Thunderbolt™ 2 and Thunderbolt™ 3?

Bandwidth, connector, and protocols. Thunderbolt™ 2 enables 20 Gb/s, Thunderbolt™ 3 is 40 Gb/s. Thunderbolt™ 2 supports DisplayPort™ 1.2 and PCIe devices over a single port. Thunderbolt™ 3 supports DisplayPort™ 1.2, Superspeed USB (USB 3.1 Gen 2), and PCIe devices over a single port. Finally, Thunderbolt™ 2 was standardised over a mini-DisplayPort™ (mDP) and Thunderbolt™ 3 has now standardised over the new USB-C connector.

What are the type of customers that require Thunderbolt™ 3?

Workstation customers from all segments have been asking for Thunderbolt™ 3, with the Media & Entertainment segment having the most momentum. Expansion into Oil & Gas, Control, and Healthcare segments is also occurring. As data files get larger and the adoption of 4K resolutions displays and video continues to expand—having high storage capacity and blazing fast I/O speeds will become more mainstream.

Operating systems

What operating systems (OSs) are available on the HP ZBook G3 Mobile Workstations?

A variety of OSs are available, including the following: (Please note that the exact OSs carried by each workstation vary by product. For more information, see individual product datasheets and QuickSpecs.)

- Windows 10 Professional 64¹³
- Win 10 Professional 64 Downgrade to Windows 7 64
- FreeDOS

Is dual OS preload an option?

Dual OS preload will not be offered due to restrictions of licensing agreements.

Will the HP ZBook Mobile Workstations support Linux®?

Yes. Red Hat® Enterprise Linux® will be supported on HP ZBook Studio, 15, 17. For a complete list of Linux® supported hardware, go to hp.com/support/linux_hardware_matrix.

What Linux solutions are available as a preinstalled option?

HP ZBook Mobile Workstations offer FreeDOS. FreeDOS is a bare-bones OS, intended for those who want to load their own Linux® version.

What value does HP bring to Linux® on Personal Workstations?

HP brings the following value:

- Dedicated Linux® R&D team with 25+ years of experience in OS and driver development
- Close relationship with multiple third-parties to enable the complete Linux® workstation solution
- Extensive pre-sales technical support provided by HP engineering
- Detailed documents, drivers, and white papers published by HP on the support website regarding Linux® on HP Workstations

Software

What is HP RGS⁷ and what value does it bring to the new HP ZBook G3 Mobile Workstations?

HP RGS⁷ or Remote Graphics Software is software that allows you to access, share, and broadcast your Windows and Linux® workstation and virtual workstation apps in amazing, high-speed clarity from any remote PC, Mac®, MacBook®, Windows tablet or thin client. The application has been built from the ground up with HP's workstation expertise and gives you workstation-class performance everywhere you work, with transfer speeds up to 60 fps for your most demanding apps, to allow you to work like you're local. HP RGS looks fantastic even at 4K. And with integrated HP Velocity and advanced video compression you get a premium experience regardless of connectivity strength.

What is HP Performance Advisor and what value does it bring to the new HP ZBook G3 Mobile Workstations?

Designed for non-techies, this ultra-savvy software wizard is the simplest and most effective way to make sure your computer is always operating at its optimum potential. HP Performance Advisor⁶ comes pre-installed with every HP Workstation.

When Performance Advisor is run on a mobile workstation, it takes a thorough inventory of the hardware and software components in the system. Details of the configuration are revealed through an interactive block diagram that shows how the individual devices are interconnected, and allows access to certain system-level settings that can affect performance and reliability. HP Performance Advisor utilises an extensive database to report the certified driver versions of over one hundred recognised applications that may be installed on the system, and it simplifies the download and installation of those drivers to prepare the workstation to begin crunching your workflow. The Workstation Monitor feature of HP Performance Advisor can be employed to examine the long-term resource usage of the machine to report how the system is able to handle your dataset, possibly suggesting configuration changes to enable even more performance out of the system.

What is HP Velocity and what value does it bring to the HP ZBook G3 Mobile Workstations?

HP Velocity is a software solution that improves the user experience for cloud, mobile, and network-based applications by addressing common network bottlenecks, such as packet loss, network latency and Wi-Fi congestion. HP Velocity provides the greatest performance improvement for remote and branch offices, teleworkers, Wi-Fi, and 3G/4G.

HP Velocity works by first sensing the network conditions and network technologies used on the network edge, and then intelligently applying optimisers to improve traffic quality by reducing packet loss, reducing latency, and generally improving the networking user experience. HP Velocity is also adaptive—when network conditions change, so do the optimisations that are applied to ensure the best QoS possible for your situation.

HP ZBook Dock with Thunderbolt 3

Will the legacy standard and advanced docking solutions used for the HP ZBook 15/17 G2 work with the new HP ZBook G3 Mobile Workstations?

The HP Standard and Advanced Docking Stations used for the HP ZBook 15/17 will not work on any of the new HP ZBook Mobile Workstations. The previous docking connector was located on the bottom of the chassis. The new HP ZBook Studio/15/17 Mobile Workstations no longer have this bottom connector and will leverage the Thunderbolt™ port to transition to the HP ZBook Dock with Thunderbolt 3. The HP ZBook 15u G3 will continue to utilise the existing HP Ultralim side-docking station that is available on HP EliteBooks and the current HP ZBook 15u G2.

Why did HP make the decision to transition to the HP ZBook Dock with Thunderbolt 3?

Thunderbolt™ 3 significant leap forward in transfer speeds (40 Gb/s) presented an opportunity to leverage connectivity over an existing port rather than having to design a docking connector into the mobile workstation. This new dock allows for a thinner, lighter, and overall optimised chassis to allow for other expandability features that our key workstation customers value. Additionally, with the continued shift towards mobility—a traditional bottom docking solution adds thickness, weight, and overall clutter to the workspace—the extremely compact and travel friendly HP ZBook Dock with Thunderbolt 3 streamlines and frees up the workspace.

What are the key features of the HP ZBook Dock with Thunderbolt 3?

- Link up to 10 devices at once through ports that include Thunderbolt™ 3 (which also supports DisplayPort™ 1.2 and USB 3.1 Gen 2), four USB 3.0, RJ-45, VGA, combo audio, and two additional DisplayPort™ ports.
- Simple, single cable connection delivering both power/charging and connectivity.
- Small, lightweight portable ID—allowing for optimised cable management.

Will the HP ZBook Dock with Thunderbolt 3 be able to power a mobile workstation?

Absolutely. Only a single combo cable will connect the HP ZBook Dock with Thunderbolt 3 with the HP ZBook Mobile Workstation delivering both power and connectivity. The AC adapter will plug into the dock and not be required on the mobile workstation. There will be two versions of the HP ZBook Dock with Thunderbolt 3: a 150 W version for the HP ZBook 15 and a 200 W version for the HP ZBook 17.

What is the difference between the HP ZBook Dock with Thunderbolt 3 and a port replicator?

The HP ZBook Dock with Thunderbolt 3 has a custom designed Thunderbolt™ 3 power cable that allows you to power and charge your unit without having to connect an AC adapter onto your mobile workstation. A traditional port replicator requires you to have an AC Adapter plugged into your mobile workstation. Overall, the HP ZBook Dock with Thunderbolt 3 allows you to expansive device, display, and network connectivity while simultaneous charging of your system.

Where can I find more information on the features of the HP ZBook Dock with Thunderbolt 3?

Please see the following resources:

[HP ZBook Dock with Thunderbolt 3 webpage](#)
[3 & HP ZBook Dock with Thunderbolt 3 white paper](#)

Warranty and support

Will the HP ZBook G3 Mobile Workstations utilise the same HP Elite Support that the HP EliteBook notebooks use today?

Yes. Our HP Elite Premium Support offers support to our customers that reside in the US or English-speaking regions of Canada.

- Simply call us at 1.866.625.1175. There are no phone trees, and no time-consuming menus to wade through
- Connect to an exclusively U.S.-based team of Elite accredited specialists available 24/7/365
- Schedule appointments to suit you—we'll make our schedule match yours
- Work with your agent of choice when calling—just ask for them by name
- Receive priority repair status at any HP repair centre

What is the warranty and support for HP Workstations with Windows?

The standard is 3-year or 1-year limited warranty, depending on country. 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. Optional HP Care Pack Services are extended service contracts which go beyond your 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>.

Resources, contacts, or additional links for HP ZBooks

- HP ZBook 15u G3: hp.com/go/zbook15u
- HP ZBook Studio G3: hp.com/go/zbookstudio
- HP ZBook 15 G3: hp.com/go/zbook15
- HP ZBook 17 G3: hp.com/go/zbook17
- HP ZBook Dock with Thunderbolt 3: hp.com/go/zbookdock

Learn more about the HP Z family of products at hp.com/zworkstations

¹ All HP ZBooks are designed to MIL-STD 810G testing. Testing was 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.

² Maximum memory capacities assume Windows 64-bit operating systems or Linux®. With Windows 32-bit operating systems, memory above 3 GB may not all be available due to system resource requirements.

³ Sold separately or as an optional feature.

⁴ For hard drives, GB = 1 billion bytes. TB = 1 trillion bytes. Actual formatted capacity is less. Up to 30 GB of system disk is reserved for system recovery software.

⁵ Not all configurations qualify as an Ultrabook™.

⁶ 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 is not a measurement of higher performance.

⁷ HP Remote Graphics Software requires a Windows, Linux®, or Mac® OS X 10.10 and newer operating system and network access.

⁸ SATA hardware RAID is not supported on Linux systems. The Linux® kernel, with built-in software RAID, provides excellent functionality and performance. It is a good alternative to hardware-based RAID. Please visit h20000.www2.hp.com/bc/docs/support/SupportManual/c00060684/c00060684.pdf for RAID capabilities with Linux®.

⁹ Based on HP's internal analysis of all mobile workstation models from any vendors with >200 thousand unit annual sales as of October 29, 2015, having quad-core CPU's, with Intel's Ultrabook Certification.

¹⁰ Based on HP's internal analysis as March 1, 2016 of HP workstations with quad core processing, mid-range professional graphics and commercial grade storage.

¹¹ With Blu-Ray, certain disc, digital connection, compatibility and/or performance issues may arise, and do not constitute defects in the product. Flawless playback on all systems is not guaranteed. In order for some Blu-ray titles to play, they may require a DVI or HDMI digital connection and your display may require HDCP support. HD-DVD movies cannot be played.

¹² Windows 7 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 bapco.com for additional details.

¹³ Battery life results based on MobileMark benchmark measured in hours:minutes. HP ZBook G2 configurations were measured with MM07 and HP ZBook G3 configurations were measured with MM14.

¹⁴ 3 year battery warranty on platforms with 3 year warranty only.

Sign up for updates
hp.com/go/getupdated



Share with colleagues

© Copyright 2017 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, Xeon, and Thunderbolt are trademarks of Intel Corporation in the U.S. and other countries. AMD, FirePro, and Enduro are trademarks of Advanced Micro Devices, Inc. NVIDIA, Optimus, and Quadro are trademarks and/or registered trademarks of NVIDIA Corporation in the U.S. and other countries. Red Hat Enterprise Linux Desktop is a trademark of Red Hat, Inc. in the United States and other countries. Linux® is the registered trademark of Linus Torvalds in the U.S. and other countries. Microsoft and Windows are U.S. registered trademarks of the Microsoft group of companies.

