

HP ZBook X G1i 16 inch Mobile Workstation PC (D5HK2LT)



Pro-certified power within reach.

Upgrade to professional ISV certified performance at an affordable price. Power up your productivity on this durable yet premium AI workstation. Pro-grade components deliver exceptional performance to work with generative AI to explore design concepts, or complete 3D modeling and conceptual design.



Power through professional workflows.

Tackle complex projects and blaze through 3D modeling with an Intel® CPU,[1] with a dedicated NPU,[1] and integrated or discrete graphics.[2] With up to 80W max TDP, get the most performance for rendering and AI-accelerated workflows.

Advanced workflows. Anywhere.

With an all-aluminum chassis and MIL-STD 810 durability,[3] this PC is built to last. Take complex projects on the go with a device that runs quiet and cool. The redesigned thermal solution supports even more power to ensure the device runs at its best.

Accelerate AI workflows

Speed up AI inferencing on the HP ZBook X, with pro-level graphics designed for advanced AI workflows. Focus on the work that matters and enable productivity without diverting resources from your most demanding work.

Featuring

HP recommends Windows 11 Pro for business

Work anywhere without compromising on performance with Windows 11 and HP collaboration, security, and connectivity technology. Summarize and rewrite content, get relevant content recommendations, and stay organized with Microsoft Copilot. [6]

Intel® Core™ Ultra Processor

Unleash power-efficient performance with up to an Intel® Core™ Ultra 9 CPU. This CPU not only unlocks performance for the next era of AI-enhanced software, but the dedicated NPU greatly increases efficiency for productivity tasks.

HP Z Turbo Drive High-speed Storage

Work without limits in any location with local PCIe storage that's up to 6x faster than SATA SSD, and up to 21x faster than traditional HDD storage. [7]

HP Fast Charge

Ultra-fast recharge takes you from zero to 50% charge in just 30 minutes. [8]

Spill-resistant Keyboard

Accidents happen - which is why we designed our keyboard with a drain hole, so minor spills flow out the bottom for easy cleanup.

Specifications

Operating System Software	Windows 11 Pro ^[1]
Processor Family	Intel® Core™ Ultra 9 processor
Processor Name	Intel® Core™ Ultra 9 285H (up to 5.4 GHz with Intel® Turbo Boost Technology, 24 MB L3 cache, 16 cores, 16 threads) [6,7]
Processor Technology Description	Intel® vPro® Technology
Chipset	Intel® integrated SoC
Standard Memory Description 01	32 GB DDR5-5600 MT/s (2 x 16 GB)
Memory Slots	2 SODIMM; supports dual channel
Hard Drive Description (01)	1 TB PCIe® NVMe™ SSD
Graphics Card Segment 01	Integrated
GScardseg 01 Available Card 01	Intel® Arc™ 140T GPU
Display Description (metric)	40.6 cm (16") diagonal, WUXGA (1920 x 1200), IPS, anti-glare, 300 nits, 62.5% sRGB
Display Description	16" diagonal, WUXGA (1920 x 1200), IPS, anti-glare, 300 nits, 62.5% sRGB ^[24,35,37]
Audio Features	Audio by Poly Studio, dual stereo speakers, HP World Facing Microphone dual array digital microphones, functions keys for volume up and down, combo microphone/headphone jack, HD audio
Product Dimensions (metric)	35.9 x 25.1 x 2.3 cm
Product Dimensions (imperial)	14.15 x 9.88 x 0.9 in
Weight (metric)	Starting at 2.04 kg <i>(Weight varies by configuration and components.)</i>
Weight (imperial)	Starting at 4.5 lb <i>(Weight varies by configuration and components.)</i>
Package Dimensions (metric)	552 x 69 x 345 mm
Package Dimensions (imperial)	21.73 x 2.71 x 13.58 in
Keyboard	Spill-resistant, backlit keyboard with numeric keypad
Pointing Device	Clickpad with multi-touch gesture support
Integrated Camera	5 MP IR camera
External I/O Ports	1 USB Type-A 5Gbps signaling rate (charging); 1 HDMI 2.1; 1 headphone/microphone combo; 1 power connector; 2 Thunderbolt™ 4 with USB4 Type-C® 40Gbps signaling rate (USB Power Delivery, DisplayPort™ 2.1) ^[12,13,14]
External I/O Ports 02	1 USB Type-A 5Gbps signaling rate; 1 RJ-45; 1 nano security lock slot
Network Interface	Intel® I219-LM GbE
Wireless Technologies	Intel® Wi-Fi 7 BE201 (2x2) and Bluetooth® 5.4 wireless card, vPro®
Power Supply Required	150 W Slim Smart external AC power adapter ^[42]
Battery Type	HP Long Life 6-cell, 83 Wh Li-ion polymer
Battery Recharge Time	Supports battery fast charge: approximately 50% in 30 minutes ^[43]
Energy Star Certified	ENERGY STAR® certified
Sustainability Specifications	Low halogen PCAs; Molded paper pulp cushion inside box is made of 100% recycled or certified sources; Outside box and corrugated cushions are 100% from certified or recycled sources and recyclable; At least 60% post-consumer recycled plastic; Bulk packaging available; External power supply 90% efficiency
UPC Number	(ABM) 199896882149; (AKH) 199896881814

Top Recommended Displays, Accessories and Services

Series 7 Pro

HP Series 7 Pro 27 inch QHD Monitor - 727pq	8J4D8UT
HP Series 7 Pro 27 inch 4K Thunderbolt 4 Monitor - 727pk	8J9G2AA
HP Series 7 Pro 31.5 inch 4K Thunderbolt 4 Monitor - 732pk	8Y2K9AA

Wired Headset

Poly Blackwire 8225 Stereo USB-C Headset +USB-C/A Adapter	8X223AA
---	---------

Wireless Headset

Poly Voyager Legend 50 Headset UC	AT9M9AA
Poly Voyager Focus 2 USB-C-C Headset +USB-C/A Adapter	9T9J3AA

Backpacks

HP Everyday 16-inch Laptop Backpack	A08KLUT
HP Travel Plus 30L 17-inch Laptop Backpack	A2CE0AA

Topload Bags

HP Travel Plus 22L 16-inch Laptop Bag	A2CE1AA
---------------------------------------	---------

Wireless Keyboards

HP 685 Comfort Dual-Mode Keyboard	8T6L9UT
HP 725 Multi-Device Rechargeable Wireless Keyboard	9T5B2AA
HP 965 Ergonomic Wireless Keyboard	7E756AA

Wireless Mice

HP 515 Ultra-Fast Rechargeable Wireless Mouse	9C2F7AA
HP 685 Comfort Dual-Mode Mouse	8T6M0UT
HP 925 Ergonomic Vertical Mouse	6H1A5AA

Docking

HP Thunderbolt 4 Ultra 280W G6 Dock	AW5M5UT
-------------------------------------	---------

Power Adapters

HP 230W Smart AC Adapter	AQ9X8AA
--------------------------	---------

Messaging Footnotes

[1] 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. Optional feature that must be configured at purchase. Features and software that require a NPU may require software purchase, subscription or enablement by a software or platform provider, and third-party software may have specific configuration or compatibility requirements. Performance varies by use, configuration, and other factors.

[2] Optional feature that must be configured at purchase.

[3] 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.

[6] 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 11 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>. Microsoft Copilot requires Windows 11. Some features require an NPU. Timing and availability will be dependent on Microsoft and varies by market and device. Requires Microsoft account to log in. Where Copilot is not available, the Copilot key will lead to the Bing search engine. See <http://aka.ms/WindowsAIFeatures>.

[7] 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.

[8] 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.

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 is automatically updated and enabled. High speed internet and Microsoft account required. ISP fees may apply and additional requirements may apply over time for updates. See <http://www.windows.com>.

[6] Multi-core is designed to improve performance of certain software products. Not all customers or software applications will necessarily benefit from use of this technology. Performance and clock frequency will vary depending on application workload and your hardware and software configurations. Intel's numbering, branding and/or naming is not a measurement of higher performance.

[7] Intel® Turbo Boost performance varies depending on hardware, software and overall system configuration. See <http://www.intel.com/technology/turboboost/> for more information.

[12] Thunderbolt™ 4 and USB4™ maximum speed of 40Gbps will be divided between the different data workstreams.

[13] HDMI cable sold separately.

[14] SuperSpeed USB 20Gbps is not available with Thunderbolt™ 4.

[24] HD content required to view HD images.

[35] HP Sure View Reflect integrated privacy screen is an optional feature that must be configured at purchase and is designed to function in landscape orientation.

[37] HP Sure Sense requires Windows 10 and higher. See product specifications for availability. On units with WWAN shipping to China, HP Sure Sense is only available via Softpaq download.

[42] 150 W power adapter is only available with discrete graphic options.

[43] Recharges up to 50% within 30 minutes when the system is off or in standby mode when used with the power adapter provided with the notebook. Power adapter minimum of 65 watts required for battery capacities 56Whr or less. Power adapter minimum of 100 watts required for battery capacities greater than 56Whr and less than 83Whr. Power adapter minimum of 120 watts required for battery capacities greater than 83Whr and less than 100Whr. After charging has reached 90% capacity, charging speed will return to normal. Charging time may vary +/-10% due to System tolerance.

© Copyright 2026 HP Development Company, L.P. The information contained herein is subject to change without notice. The only warranties for HP products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. HP shall not be liable for technical or editorial errors or omissions contained herein.

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

