

HP Z Workstations and Autodesk



Create stunning media and entertainment content with HP Z Workstations.



HP recommends Windows.

“Today’s artists need a solution that combines power and performance to create more engaging and visually stunning projects. With Autodesk Digital Entertainment Creation software and HP Z Workstations, artists can count on a modern production pipeline to help bring their work to the next level.”

– Marc Stevens, Vice-President, Media & Entertainment, Autodesk Inc.



Does your workstation meet your digital media challenges?

It’s no secret that the media and entertainment industry is constantly evolving, and the push to deliver better content faster is an everyday challenge. To meet those demands, technology matters—a lot. You need innovative, high-performing, reliable hardware and software tools tuned to your applications so your team can create captivating content, meet tight production schedules, and stay on budget. HP offers an expansive portfolio of integrated workstation hardware and software solutions designed to maximize the creative capabilities of Autodesk software. Together, HP and Autodesk help you create stunning digital media.

The HP Difference

HP Z Workstations are engineered to optimize the way hardware and software components work together, delivering massive, whole-system computational power that helps maximize your productivity and makes creating digital media faster and more efficient than ever before.

Innovation

Enjoy next-generation technology, including the award winning Z Workstation design, to help you create and visualize even the most complex designs. This revolutionary design brings a tool-less chassis, advanced cooling and choice of power with up to 90% efficient power supplies. Add the HP Z Turbo Drive² to reduce boot up and graphic response times (even 4K³ video), and boost your creative workflow with the powerful HP DreamColor Professional Displays that offer breakthrough color accuracy and unbelievably affordable 4K³ support.

Performance

Advanced compute and visualization power help speed your work, beat deadlines, and meet expectations. At the heart of HP Z Workstations are the new Intel[®] processors with advanced processor performance technologies, Thunderbolt™ 2¹—the industry’s fastest, most versatile I/O connection and NVIDIA[®] Quadro[®] professional graphics cards with the NVIDIA[®] CUDA[®] parallel processing architecture; delivering real-time previewing and editing of native, high-resolution footage, including multiple layers of 4K³ video. Intel[®] Turbo Boost⁴ is designed to enhance the base operating frequency of processor cores, providing more processing speed for single and multi-threaded applications. The HP Z Workstation cooling design enhances this performance.

Reliability

HP product testing includes application performance, graphics and comprehensive ISV certification for maximum productivity. All HP Z Workstations come with a limited 3-year parts, 3-year labor and 3-year onsite service (3/3/3) standard warranty that is extendable up to 5 years.⁵ You can be confident in your HP and Autodesk solution.

HP and Autodesk

HP has a unique relationship with Autodesk. HP Z Workstations are the internal desktop standard throughout Autodesk. Autodesk chooses HP Z Workstations to develop, test, and demo their powerful, cutting-edge 3D design software. Additionally, Autodesk's Media and Entertainment Creative Finishing business has standardized HP Z Workstations for its turnkey solutions, Autodesk Flame® and Autodesk Flame® Premium software. This close relationship gives you the confidence that your solution providers will work together to support your needs.

Autodesk Media and Entertainment

Whether in film, video games, or television, Autodesk provides digital artists and animators with technologies that are redefining digital content creation.



The Autodesk Entertainment Creation Suite Standard edition offers a choice of either Autodesk Maya® or Autodesk 3ds Max® animation software, together with Autodesk Mudbox® 3D sculpting and painting software and Autodesk MotionBuilder® real-time virtual production, motion capture editing software. With the Ultimate edition, you get all of the products in the Standard edition plus the added advantage of having both 3ds Max and Maya in one suite.

Autodesk Entertainment Creation Suites:

With specialized toolsets designed to help optimize end-to-end production workflows, the Autodesk Entertainment Creation Suites help you accelerate your 3D animation workflow—at a significant cost savings over purchasing all of the products individually. Available in three editions:

- **Standard:** Get powerful 3D modeling and animation tools. Choose either 3ds Max or Maya.
- **Ultimate:** Get the freedom to use the 3D tool of your choice with 3ds Max and Maya.

Autodesk Maya 3D animation, modeling, simulation, rendering, and software offers a comprehensive creative feature set for 3D computer animation, modeling, simulation, and rendering on a highly extensible production platform. Maya provides high-end character and effects toolsets along with increased productivity for modeling, texturing, and shader creation tasks.

Autodesk 3ds Max 3D modeling software provides a comprehensive modeling, animation, simulation, and rendering solution for games, film, and motion graphics artists. 3ds Max delivers efficient new tools, accelerated performance, and streamlined workflows to help increase overall productivity for working with complex, high-resolution assets.

Autodesk Mudbox digital sculpting and digital painting software enables you to create production-ready 3D digital artwork. Mudbox offers a high-performance environment and professional-quality tools to help you create highly realistic 3D characters, engaging environments, detailed props, and compelling concept designs in less time.

Autodesk MotionBuilder 3D character animation software for virtual production helps you to more efficiently manipulate and refine data with greater reliability. Capture, edit, and play back complex character animation in a highly responsive, interactive environment, and work with a display optimized for both animators and directors.

Autodesk Solutions for 3D visual effects

Autodesk's Media and Entertainment Creative Finishing business has standardized HP Z Workstations for its turnkey solutions sold with Autodesk Flame and Autodesk Flame Premium software, which includes Autodesk Flame® Assist and Autodesk Flame® software.

Compositing: Putting it All Together

Whenever interactivity is of the essence, such as in a look-design session attended by a director, or a finishing session as the project approaches its final 'crunch' time, Autodesk Flame software provides the award-winning creative toolset that helps you to make instant changes, and experiment with multiple possibilities. From tracking to keying, color correction to motion estimation, advanced timeline editing to interactive 3D compositing, Flame offers a broad and rich toolset with great performance.

Grading and Finishing: The Final Polish

Film productions reach their full potential in the color grading process. Autodesk Flame Premium 3D visual effects software combines Autodesk's best finishing tools for visual effects, editorial, and real-time color grading, along with a fully integrated timeline workflow, in a single offering. With Flame Premium, visual effects artists can supervise projects and perform creative tasks in an artist-driven visual environment, to meet today's toughest creative challenges.



Raised by Wolves: Using Autodesk Flame for fast uncompromising creativity

http://youtu.be/YFk9LCCm_vM

“What we like about HP machines is the build quality. No other manufacturers compare. When we buy HP equipment, we know that it will run.”

– Terry Dale, Vice President of Operations, Starz Animation, Toronto, Canada



Eidos Game Development and HP Workstations

youtube.com/watch?v=kwms3ISi4fc

Meet the HP Z Workstation family

Combining bold design and world-class engineering, the HP Z Workstation family takes innovation, performance, and reliability to the next level—to give you and your business a competitive edge. HP Z Workstations are tested and certified for Autodesk applications, helping ensure powerful, dependable performance. HP Z Workstations deliver enhanced workstation performance with the latest Intel processors with Intel® Turbo Boost⁴ and Hyper-Threading⁶ technologies, in a very affordable package that transforms the way digital media and entertainment professionals work. The next-generation system architecture enables fast and efficient performance while built-in HP reliability helps you work more productively and get the job done faster.

<p>HP Z1 Workstation (with Touch option)*</p>	<p><u>All-in-One evolution. >></u> When you work in the creative sector, space on your desk is often at a premium. The all-in-one HP Z1 Workstation helps you simplify your desktop, save space, and eliminate wires. It puts the performance and reliability of a complete HP Z Workstation expertly designed into the back of a 27-inch diagonal, brilliant, large-screen HD display. Customize your display with optional 10-point touch technology in a stunning edge-to-edge glass design.² Better still, easily add a hard drive, a Thunderbolt™ 2¹ module, upgrade memory, or access the graphics card with the tool-less chassis design.</p>
<p>HP Z440 Workstation</p>	<p><u>Expand your power. >></u> The HP Z440 Workstation is ideal for digital media and entertainment professionals who need the maximum in single-socket processor power. Autodesk Maya and Autodesk 3ds Max users will find this as their mainstream workstation. It combines ECC memory to handle large files, as well as the full range of 3D professional graphics and the latest Intel® processors.</p>
<p>HP Z640 Workstation</p>	<p><u>Flexible, powerful, ready to work. >></u> Expand your capabilities with the HP Z640 Workstation, a system that lets you configure and reconfigure with ease to create your perfect solution. Then concentrate on your work, not your workstation, as you experience powerful performance, whisper-quiet computing, and tool-less access in a conveniently compact design. With the innovative HP Z Turbo Drive,¹⁰ set a new performance curve as you revolutionize how you handle large files and reduce boot up, calculation, and graphics response time.</p>
<p>HP Z840 Workstation</p>	<p><u>More power to you. >></u> The HP Z840 Workstation delivers the latest in performance in a revolutionary next-generation design that accelerates even the biggest, most complex digital media and entertainment projects. This high-end workstation offers the maximum in dual-socket performance, data storage, and expandability available in the HP Z Workstation line and is ideal for power users of the new Autodesk Maya and Autodesk 3ds Max Entertainment Creation Suites, as well as Autodesk Flame Premium and Autodesk Flame.</p>
<p>HP ZBook Mobile Workstations</p>	<p><u>On the go creativity knows no limits. >></u> Showcase your best work in the office or in the field with the HP ZBook 15 and 17 Mobile Workstations. The ZBook 15 is our most versatile mobile workstation with Thunderbolt™ 2¹ and optional quad-core CPUs,² HP Z Turbo Drive storage,² and optional QHD+ display options.² The HP ZBook 17 Mobile Workstation redefines power on the move, combining the best in visualization and computational power with a 17-inch diagonal display for HP's high performance mobile workstation. The HP ZBook 17 features the Thunderbolt™ 2¹ port and an optional DreamColor Display panel that provides accurate and consistent color from the display to print and the big screen.</p>
<p>The HP DreamColor and HP Z Displays</p>	<p><u>You dream it, we deliver it in breathtakingly accurate color. >></u> The HP DreamColor and HP Z Displays are designed and engineered with HP Z Workstations to outperform, so you can outperform with striking visual results. Work in brilliant, trusted 10-bit color that drives up to 1.07 billion on screen colors and bring your ideas to life with the HP DreamColor Professional displays. Both DreamColor displays are user callibratable and the Z27x features 4K³ support, and an integrated calibration engine for calibration without a PC and can be managed remotely via Ethernet port. HP DreamColor displays are ideal for a wide range of color workflows, including visual effects, film and video post-production, and broadcast news editing.</p>
<p>HP Performance Advisor</p>	<p><u>The built-in workstation guru. >></u> HP Performance Advisor delivers a simple, effective way to keep your HP Z Workstation operating at its peak potential. Like having an IT pro always on hand, this helpful software wizard can take you from initial configuration and customization through the optimization of your system for each new application and driver you install.</p>

HP Z Workstations for Autodesk products

Autodesk products	
Autodesk Entertainment Creation Suite Ultimate	Ultimate 3D suite for animation pipeline flexibility
Autodesk Entertainment Creation Suite Standard	Powerful 3D modeling and animation
Autodesk 3ds Max	3D modeling, animation, simulation, and rendering solution
Autodesk Maya	3D computer animation, modeling, simulation, and rendering solution
HP Z Workstations	
HP Z1 (with Touch option)*	All-in-One evolution—powerful and refined with Touch option*
HP Z440	Performance you want, value you need
HP Z640	Flexible, powerful, ready to work
HP Z840	Ultimate multi-core workstation for performance and expandability
HP Mobile Workstations	
HP ZBook 14	The world's first workstation Ultrabook™ ⁷ redefines mobile computing with a 14" diagonal display.
HP ZBook 15	Empower your creativity with Thunderbolt™ 2 ¹ technology.
HP ZBook 17	HP's most powerful mobile workstation with a 17" diagonal optional DreamColor display and Thunderbolt™ 2 ¹ technology.
HP Performance Displays	
HP Z27x DreamColor 27" AH-IPS LED LCD	16:9 2560 x 1600 with 7 factory calibrated color space presets; 10-bit 1.07 Billion color output; 100% gamut coverage in sRGB, Adobe RGB, BT.709 and 99% DCI-P3; Internal Calibration engine; Two DP 1.2 and one HDMI inputs
HP Z24x DreamColor 24" AH-IPS LED LCD	16:10 1920 x 1200 with 5 factory calibrated color space presets; 10-bit 1.07 Billion color output; 100% gamut coverage in sRGB, Adobe RGB, BT.709 and 96% DCI-P3; DP 1.2 input, DP 1.2 output (MST), DVI-D, HDMI inputs
HP Z30i 30" AH-IPS LED LCD	30" diagonal with 4.1 million pixels and 100% Adobe RGB gamut coverage
HP Z27i 27" AH-IPS LED LCD	27" diagonal with 2560 x 1440 resolution with DisplayPort 1.2, DVI-D, HDMI and VGA inputs
HP Z244 24" IPS LED LCD	24" diagonal with 1920 x 1200 resolution with DisplayPort 1.2, DVI-D and VGA inputs

Autodesk Professional Software demands workstation power

HP Z Workstations are designed, tested, and built for Autodesk users looking for high performance and extreme stability. HP does this with features that include:

- Multi-core⁸ Intel® Xeon® processors
- Professional graphics cards from NVIDIA® and AMD
- Microsoft Windows operating systems
- Thunderbolt™ 2¹ port offered on HP Z1, Z230, Z440, Z640, Z840, ZBook 15 and ZBook 17 Workstations
- Fast, reliable memory and expanded I/O options
- EPEAT® Gold⁹-rated and ENERGY STAR®-qualified configurations
- 2x storage performance over SATA SSDs with HP Z Turbo Drive² and massive storage options (up to 15 GB)

Learn more at

hp.com/go/autodeskmte and hp.com/go/zworkstations

Screen images courtesy of Autodesk, Inc.

* Not available in all countries. Check with your HP representative for availability in your location.

1. Thunderbolt™ 2 is available via an optional add-in card. Thunderbolt is new technology. Thunderbolt cable and Thunderbolt device (sold separately) must be compatible with Windows. To determine whether your device is Thunderbolt Certified for Windows, see thunderbolttechnology.net/products.
2. Sold separately or as an optional feature.
3. 4K content required to view 4K resolution.
4. Enabling Intel® Turbo Boost Technology (Intel® TBT) requires a PC with a processor with Intel TBT capability. Intel TBT performance varies depending on hardware, software, and overall system configuration. For more information, see intel.com/technology/turboboost.
5. Limited three-year Mon-Fri 8-5 next business day, parts, labor and 24x7 phone support, terms and conditions may vary. HP Care Pack Services extend service contracts beyond the standard warranties. Service starts from date of hardware purchase. To choose the right level of service for your HP product, use the HP Care Pack Services Lookup Tool at hp.com/go/lookuptool. Additional HP Care Pack Services information by product is available at hp.com/go/cpc. Service levels and response times for HP Care Packs may vary depending on your geographic location. The HP Thunderbolt™ 2 Module has a one-year Limited Warranty or the remainder of the warranty of the HP supported product in which it is installed. Technical support is available seven days a week, 24 hours a day, by phone, as well as online support forums. Certain restrictions and exclusions apply.
6. Intel HT Technology (HT) is designed to improve performance of multi-threaded software products and requires a computer system with a processor supporting HT and an HT-enabled chipset, BIOS, and operating system. Please contact your software provider to determine compatibility. Not all customers or software applications will benefit from the use of HT. See intel.com/info/hyperthreading for more information.
7. Not all configurations qualify as an Ultrabook™.
8. Multi-core technologies are designed to improve performance of multithreaded software products and hardware-aware multitasking operating systems and may require appropriate operating system software for full benefits; Not all customers or software applications will necessarily benefit from use of these technologies.
9. EPEAT® Gold registered in the U.S. See epeat.net for registration status by country.

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