# **HP and Autodesk**

Create stunning digital media and entertainment with HP Workstations.





# Autodesk®

# 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. HP DreamColor Technology on HP Workstations puts a billion colors at your fingertips, ensuring what you see is what you get.

**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 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 4K video. Intel® Turbo Boost¹ 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 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.<sup>2</sup> You can be confident in your HP and Autodesk solution.

#### **HP and Autodesk**

HP has a unique relationship with Autodesk. HP Workstations are the internal desktop standard throughout Autodesk. This means that Autodesk chooses HP Workstations to develop, test, and demo their powerful, cutting-edge 3D design and engineering software. Additionally, Autodesk's Media and Entertainment creative finishing systems business has standardized on HP Workstations for its turnkey solutions, including 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 for years to come.

## **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.

#### **Autodesk Entertainment Creation Suites**

The Autodesk® Entertainment Creation Suites 2013 provide costeffective access to the creative toolsets used by leading facilities in the 3D entertainment content creation industry. The Standard Suite offers a choice of either Autodesk® Maya® or Autodesk® 3ds Max®, and includes Autodesk® MotionBuilder®, Autodesk® Mudbox®, and Autodesk® SketchBook® Designer. With the Premium edition, you additionally have access to Autodesk® Softimage®, while the Ultimate edition includes everything in the Premium edition plus both Maya and 3ds Max. Use the power of the Suites to create modern, flexible pipelines that support today's projects and scale for tomorrow's opportunities.

#### **Complete 3D Creativity**

Integrated through single-step interoperability workflows and more consistent user interfaces, the suites help increase productivity and provide enhanced creative opportunities—at a significant cost saving over purchasing all of the products individually.

**Autodesk Maya 2013** software delivers a comprehensive creative feature set with tools for animation, modeling, simulation, rendering, matchmoving, and compositing on a highly extensible production platform.

**Autodesk 3ds Max 2013** software provides powerful, integrated 3D modeling, animation, and rendering tools that enable artists and designers to focus more energy on creative, rather than technical challenges.

**Autodesk Softimage 2013** software is a high-performance 3D character animation and visual effects application. Intuitive, nondestructive workflows, together with the innovative ICE (Interactive Creative Environment) and Autodesk® Face Robot® facial animation toolset, extend Autodesk Maya or Autodesk 3ds Max software pipelines.

**Autodesk Mudbox 2013** 3D digital sculpting and digital painting software delivers the freedom to create production-ready 3D digital artwork. Mudbox combines an intuitive user interface with a powerful creative toolset of stencils and brushes.

**Autodesk MotionBuilder 2013** real-time 3D character animation software builds on emerging techniques embraced by some of the entertainment industry's most successful studios.

**Autodesk SketchBook Designer 2013** illustration software enables exploration of design concepts and production of stunning artwork. In addition to the sketching capabilities and quality results, SketchBook Designer enables professional designers and artists to use a hybrid paint and vector workflow for concept design illustration and graphic design.

#### **Autodesk Solutions for Creative Finishing**

Autodesk's Media and Entertainment Creative Finishing business has standardized HP Workstations for its turnkey solutions sold with Autodesk Flame and Autodesk Flame Premium software, which includes Autodesk Smoke Advanced and Autodesk Lustre software. This close relationship gives you the confidence that your solution providers will work together to support your needs for years to come.

#### Compositing: Putting it All Together

It's virtually impossible to get everything needed for the final frame of a film in a single take or render. In most cases, tens or even hundreds of layers and passes go into the final image. Maya, 3ds Max, and Softimage come with fully featured integrated compositing modules, helping facilitate rapid iterations, and helping reduce time-consuming round-tripping between 3D and 2D departments.

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 Lustre software, available only in Autodesk Flame Premium software, is an Academy Award-winning digital intermediate color-grading system. It enables colorists to shape color and lighting to establish narrative tone, realize creative intent, and help create stylized looks. Lustre provides a rich, creative toolset that can grade both standard and stereoscopic projects; offers collaborative project management tools; and integrates tightly into an Autodesk Smoke Advanced or Flame workflow.

"Artists need power and performance to produce more immersive and complex creations than ever before. A modern pipeline, comprised of Autodesk Digital Entertainment Creation software and HP Workstations, allows designers and artists to take their work to the next level."

-Marc Petit, Senior Vice President, Media and Entertainment, Autodesk Inc.

# Meet the HP Workstation family

Combining bold design and world-class engineering, the HP 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 Boost² and Hyper-Threading³ 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.

#### **HP Z820 Workstation**

#### Our ultimate workstation. >>

The HP Z820 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.

#### **HP Z420 Workstation**

#### Performance you want. Value you need. >>

The HP Z420 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.

#### **HP Z1 Workstation**

#### Power without the tower. >>

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 greater than HD display. Add a wireless keyboard and mouse, the only cord you need is for the power supply. Better still, a tool-less chassis design makes it a snap to upgrade and maintain.

#### **HP Z220 Workstation**

#### Our most affordable workstation. >>

The HP Z220 CMT Workstation delivers excellent performance and was designed with Autodesk application users in mind, providing the workstation power for entry-level 3D and visual effects professionals to pre-visualize and create astounding effects. It provides ECC memory for larger files and is expandable up to mid-range graphics for even more 3D performance capability.

#### **HP Mobile Workstations**

#### Mobility for life. >>

The HP EliteBook 8770w Mobile Workstation redefines power on the move, combining the best in visualization and computational power with a 17.3-inch diagonal display for HP's highest performing mobile workstation. The HP EliteBook w-series features a timeless construction, with precision-engineered durability features that are designed for maximum reliability and with the environment in mind. The mobile workstations has passed most Mil-Std-810G testing, 5 making it a great tool for professionals on the go. The choice of an HP DreamColor display enables true color visualization in addition to top performance for use with any of the Autodesk Entertainment Creation Suites.

#### **HP Performance Series Displays**

#### Stunning at every angle. >>



HP Performance Displays are engineered to outperform, so you can create with striking visual results. These displays deliver maximum image performance and accuracy, thanks to vivid IPS panels, 178-degree viewing angles, and up to 100:1 contrast ratio of mainstream displays, with top end resolutions. They also offer 30-bit panels (over 1 billion colors)<sup>6</sup> for outstanding visualization. With the DreamColor engine, HP delivers color consistent control from start to finish on a project both when mobile or in the edit suite. DreamColor displays on both Z and mobile Workstations feature an easy dial in pre-set for seven color spaces. Rec.709 Adobe RGB pre-set now comes standard on all performance displays.

#### **HP Performance Advisor**

#### The built-in workstation guru. >>

HP Performance Advisor delivers a simple, effective way to keep your HP 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.

"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

**■** WATCH

https://www.youtube.com/ watch?v=vwo5jVuT7jMM

### **HP** recommendations

Autodesk products	
Autodesk Entertainment Creation Suite Ultimate	Ultimate 3D suite for animation pipeline flexibility
Autodesk Entertainment Creation Suite Premium	Sophisticated animation and effects
Autodesk Entertainment Creation Suite Standard	Powerful 3D modeling and animation
Autodesk 3ds Max	3D modeling, animation and rendering software
Autodesk Maya	3D animation, modeling, visual effects, rendering and compositing solution for film, games and television
HP Z Workstations	
HP Z820	Ultimate multi-core workstation for performance and expandability
HP Z420	Performance you want, value you need
HP Z220	Most affordable, workstation performance
HP Z1	The world's first 27" all-in-one workstation
HP Mobile Workstations	
HP EliteBook 8770w	17" diagonal and HP's highest performance with DreamColor for mobile production
HP EliteBook 8570w	15" diagonal and HP's most versatile price and size with DreamColor display
HP EliteBook 8470w	14" diagonal and HP's lightest weight HP Mobile Workstation
HP Performance Displays	
HP DreamColor LP2480zx 24"	Switch between several factory-calibrated color space presets—including sRGB, AdobeRGB, Rec.709 and DCI-P3— and over 1 billion colors.
HP ZR30w S-IPS LCD 30"	30" diagonal with 4.1 Million pixels and over 1 billion colors
HP ZR2740w LED Backlit LCD	27" diagonal with 2560x1440 resolution and over 1 billion colors
HP ZR2440w LED Backlit LCD	24" diagonal with 1920x1200 resolution







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, Autodesk MotionBuilder real-time virtual production and motion capture editing software, and—newly included for the Entertainment Creation Suite 2013 releases—Autodesk SketchBook Designer concept art software. The Premium edition additionally offers Autodesk Softimage 3D animation and visual effects software. Best of all, with the Ultimate edition, you get all of the products in the Premium edition plus the added advantage of having both Maya and 3ds Max.

# 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-core<sup>7</sup> Intel<sup>®</sup> Xeon<sup>®</sup> processors
- · Professional graphics cards from NVIDIA and AMD
- Microsoft Windows operating systems
- · Expanded I/O, and massive storage
- Fast, reliable memory
- EPEAT® Gold-rated and ENERGY STAR®-qualified configurations

#### Learn more

# hp.com/go/dmeautodesk and hp.com/go/hpautodesk

Screen images courtesy of Autodesk, Inc.

- 1 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 <a href="intel@theology/turboboost">intel.com/technology/turboboost</a>.
- 2 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/carepacks. Service levels and response times for HP Care Packs may vary depending on your geographic location.
- 3 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 <a href="intel.com/info/hyperthreading">intel.com/info/hyperthreading</a> for more information.
- 4 HD content required to view HD images. Internet access required. Performance dependent on network latency and image frame content.
- 5 Testing was not intended to demonstrate fitness for DOD contracts requirements or for military use. Test results are not a guarantee of future performance under these test conditions.
- 6 1.07B colors through A-FRC technology
- 7 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.

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