The AMD Difference:

- Reliability.
- Manageability.
- Security.
- Value.
Meeting the challenges of the future with innovative solutions for public sector IT needs

AMD has a proven history of innovative solutions ideally suited for public sector IT needs. From secure, manageable notebooks and desktops, to scalable, energy-efficient servers for data centers and cloud installations, AMD technology helps maximize your budget while seamlessly integrating across existing infrastructure elements – all while delivering long-term value.

The right performance at the right price
Stretch your budget with affordable systems that allow you to optimize on efficiency and reliability while generating savings to help you meet other needs. AMD’s innovative technology helps reduce power consumption across all workloads and provides a host of leading-edge workload performance features – without the premium price tag. The world’s leading computer manufacturers offer a wide range of AMD-based systems.

Secure, manageable technology
AMD technology works with your existing security and manageability infrastructure investments to provide strong security and enhanced manageability features. With manageability features built on open standards, AMD systems are easy to integrate with your existing infrastructure and tools while providing enhanced performance. Consistent architecture and features reduce the number of drivers and images needed, simplifying management. Standards-based security features help ensure sensitive data is protected 24/7/365.

Long-term value
Reliable AMD-based systems are designed to deliver performance and stability for the long haul, keeping your organization productive and extending the life of your IT investments. AMD’s standards-based approach to innovation means that you have more flexibility to adapt as your needs change.

A Brief History of AMD

1969
AMD cofounded by Jerry Sanders in Sunnyvale, CA.

1996
HP and AMD begin their collaboration with the introduction of the HP Pavilion 6530 with an AMD K6-2 microprocessor.

2000
AMD Athlon® processor is first to break the historic 1GHz barrier.

2003
AMD launches the first x86 processors featuring simultaneous 32- and 64-bit computing and demonstrates world’s first x86 dual-core processor.

2005
AMD introduces the world’s highest performing processors for 1-8P x86 servers and workstations.

2006/2007
AMD demonstrates the industry’s first native quad-core x86 server processor.

AMD partners with MIT Media Lab to develop affordable laptop technology for schools.

AMD technology powers public sector operations around the globe from performance-leading supercomputing installation to large and small-scale datacenters to agency and classroom notebook and desktop deployments.

Federal
The rich visual experience enabled by AMD graphics technology supports NASA’s Advanced Supercomputing Division’s Visualization System in its mission to explore the far reaches of space.

Local
At the local government level, AMD server technology is helping a public water utility optimize its services to deliver more than 50 billion gallons of water annually for 850,000 people.¹

K–12
In classrooms around the world, students and teachers use AMD technology to optimize learning through multimedia, distance learning and a host of other learning tools.

Higher Education
AMD is also the technology of choice for leading academic institutions, including academic research performed on the world’s leading supercomputers dedicated to academic research.

¹ "There is no better example of the strength of HP’s partnership with AMD than the latest performance results from our refreshed line of HP ProLiant G7 servers. With the launch of the world’s fastest dual socket database engine¹ and the largest number of VMs on a blade², we are once again setting the bar for performance. The combination of HP and AMD is bringing new levels of efficiency, performance and scalability to the market with products that are ideal for key applications such as virtualization, database and technical computing.”

– McLeod Glass, HP Director of Marketing, Industry Standard Servers and Software


“ORNL is deploying more than 25,000 of AMD’s ‘Interlagos’ processors over the next few months as we upgrade Jaguar to the new Titan system. Our users are excited about the increase in performance over previous-generation processors, and our sponsors are delighted with the power savings that will make Titan one of the world’s most powerful and efficient research tools”

– Buddy Bland, Project Director,
Oak Ridge National Laboratory (ORNL) Leadership Computing Facility

Oak Ridge National Labs is using AMD Opteron™ processors as part of their new Titan Supercomputer, which ORNL expects to become one of the world’s most powerful supercomputers with performance exceeding 10 petaflops. http://www.olcf.ornl.gov/titan/titan-overview/

“A decade and a half ago, AMD, HP and MIT Media Lab joined together to produce a new microprocessor which would move 32-bit technology into the next generation. AMD’s K6 microprocessor marked the beginning of what would later become the AMD processor roadmap. This new processor provided a performance boost to HP’s HP Pavilion desktops that was the beginning of a strong partnership.”

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**AMD Opteron™** processor-based servers set the new standard for performance, scalability and efficiency.

AMD’s innovative product for servers, the **AMD Opteron™** processor, is designed to deliver faster processing, and lower power consumption, all with a better value. With two platforms designed to address specific parts of the market, AMD has robust server solutions to address the key workloads in the market.

**AMD Opteron™** processors offer:

**Performance for data centers**
- Up to 84% higher performance

**Scalability for virtualization**
- Up to 73% more memory bandwidth

**Economics for the cloud**
- As low as 1/2 the power-per-core
- Requires up to 2/3 less floor space
- Up to 39% lower processor price for 2P

AMD offers competitive security features that address information-sharing and control at the platform level.

The new **AMD Opteron™** 6200 Series processor delivering the world’s highest x86 core density is designed to let users host more virtual machines per server, handle more database servers and solve more complex HPC applications with fewer nodes and less power and offer a better option for the hyper-efficient, virtualized, cloud-ready world.

The new **AMD Opteron™** 4200 Series processor brings unparalleled processing efficiency to your power and IT budgets with the lowest power per core – without compromising scalability or performance.

**AMD stands for fair and open markets**

AMD promotes innovation and choice, while encouraging fair and open competition in the marketplace. Open and competitive markets encourage innovation and expand the boundaries of technology development, product choice and competition. Visit [amd.com/breakfree](http://amd.com/breakfree) for more information.

**AMD: ahead of the trends in public sector computing**

**Agile Cloud Computing**

Public sector IT departments have complex needs. One-size solutions do not fit all. The new AMD platform allows unprecedented customization and control of the server. The new features allow IT managers flexibility in processing function, power management and upgrade options. The world’s highest core count of up to 16 x86 cores means greater virtual machine (VM) density (assuming 1VM per core). Coupled with ample memory, departments can add fewer servers over time, saving capital and operational expenses.

- More than two million **AMD Opteron™** processors are at work today in the cloud.
- **AMD energy-efficient solutions** offer per core power under five watts to help drive cloud scalability.

**Virtualization**

Doing more with less is an unavoidable challenge when running your organization – particularly when tasked with balancing the evolving needs of a company’s IT department against budget-conscious expectations. Virtualization can help increase your datacenter efficiency while increasing the value and capabilities of your company’s IT investment by allowing multiple operating systems, applications and user sessions to run simultaneously on a single computing system.

AMD is a leader in virtualized solutions. By integrating key virtualization features directly into silicon, **AMD Opteron™** processor-based platforms deliver unprecedented value and scalability to virtualized datacenters.

- **Minimize power and cooling costs**
- **Maximize your software investment**
- **Streamline deployments and upgrades**
- **Minimize datacenter space and overhead expenses**
- **Simplify your server and client systems’ infrastructure**
- **Improve system performance, manageability and data security**

**Datacenter consolidation**

AMD maximizes computing density and power efficiency to help public sector customers consolidate datacenters. Our solutions enable fast, secure and efficient applications for datacenters, including virtualization, power optimization, collaborative work environments, and database management.

- Up to 16 cores, 4 memory channels and even greater memory capacity than ever before.
- 4P servers based on the **AMD Opteron™** 6200 Series processors, with up to 64 cores in 2U 4P systems can handle complex multithreaded problems and business intelligence.
- **AMD Virtualization™ technology** (AMD-V”) optimizes virtualization and security features to help improve performance.
- Low-power processors help keep virtualized datacenter power budgets in check.

**High Performance Computing**

AMD’s leading-edge High Performance Computer (HPC) solutions are in some of the leading supercomputers, enabling our customers and partners to solve complex problems around the world. **AMD Opteron™** processors provide consistent, energy-efficient server platforms that scale to meet any HPC demands.

With AMD’s continued advancements in multi-core x86 architectural designs, our HPC solutions are helping the public sector meet expanding high performance computing requirements.

- **AMD Opteron™** processor technology is featured prominently on the latest TOP500 supercomputer list.
- Half a million **AMD Opteron™** 6200 Series processor cores have already shipped to some of the most demanding customers in the world including Sandia National Laboratories, the Department of Defense and the National Oceanic and Atmospheric Administration. Why?
  - AMD offers 8-, 12- and 16-core processors with up to four memory channels for high throughput HPC applications.
  - Scalability to 4P with no “4P tax” for lower node latency in highly parallel applications.
The security, reliability and performance you need — all at a price that won’t break your budget

Ideal suited for the needs of the public sector, PCs based on VISION Pro Technology from AMD are easy to choose, easy to deploy and easy to own. AMD technology helps you maximize your budget by delivering affordable performance innovations that help drive productivity on the applications that matter most. Plus, they offer standards-based features that can help reduce management headaches while helping to ensure that sensitive data is protected 24/7/365.

See more. Do more. Get more.
VISION Pro Technology from AMD.
VISION Pro Technology offers the right features and performance for public sector customers, delivering the best value on the market while propelling organizations to the next level. The right business systems are designed to deliver the best value, manageability and security for your organization. You will get:
> Support for multiple displays, enabling enhanced productivity, video conferencing and e-learning.
> Supports new Windows® 7 Enterprise management features through the DASH standard.
> Secure passwords and other sensitive data through hardware encryption with mRNA/TPM support.
> A unified display driver for client workstations, making system upgrades easy.
> Remote diagnostics and troubleshooting on systems to help resolve end-user problems quickly.

Easing client manageability for public sector customers
AMD also helps the public sector improve manageability and the lifecycle longevity required by today’s diverse IT environments. You will appreciate getting support for management and security features that help protect your data and simplify maintenance with:
> Support for open standards, enabling greater network flexibility. AMD client systems that support out-of-band management all support DASH (Desktop and Mobile Architecture for System Hardware). DASH is a suite of specifications that delivers open standards-based web services management for desktop and mobile client systems.
> A unified display driver for client workstations, making system upgrades easy.
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Notebooks with the perfect balance of mobility, productivity and value
Get the done with VISION Pro Technology-based notebooks.
• Nearly 300% better performance in Microsoft PowerPoint with App Acceleration turned on.14
• Excel spreadsheet charts display faster with App Acceleration on.15
• Build word documents with images in less time with App Acceleration turned on.16
• Spend less time waiting for Microsoft Outlook to open and close with App Acceleration turned on.17
• With AMD A-Series APUs-based notebooks, the get of average up to 33% better battery life while viewing PowerPoint slide shows with App Acceleration on.

Superior performance in desktops
AMD processor-powered desktop systems enable the performance necessary for today’s applications along with enhanced security, reliability and manageability.
> Maximum security with hardware acceleration of encryption.
> Lock down passwords and authentication keys with open industry standard Trusted Platform Module (TPM).
> Full featured and robust out-of-band management with the latest open-industry standard DASH-based solutions to enable:
• Energy savings
• Fast security
• Remote diagnostics for reducing desk side visits

Why does AMD have more new public sector customers than ever before?
Easy to choose, deploy and own
> Right performance, right price
> Secure, manageable technology
> Long-term value

Energy efficiency
> The lowest available power-per-core processor4
> Low notebook energy consumption and AMD AllDay™ Power13

Scalability for future expansion
> 1P, 2P and 4P platforms with the same platform and chipset
> Multi-generational platform consistency
> Consistent features, images and software

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