5 Reasons Many Customers Choose Intel® Workstations Over AMD

Here are key reasons customers continue to look for workstation solutions from Intel.

intel.

The roots of advanced workstation technologies that enterprises continue to depend on were planted by Intel. Intel continues to innovate and build on those foundational technologies that customers expect in their workstations. AMD does not have the track record that Intel® Xeon® processor-based workstations offer.

1 A Market Leader

As a technology industry and workstation market leader, enterprises have trusted Intel for decades and continue to trust Intel to power their workstation deployments across market segments. We are the reliable, LONG-TERM supplier for workstations.

Expertise
Decades of professional-grade computing for scientific, engineering, financial, and visualization workloads

Capabilities
Architectures optimized for massive datasets, complex algorithms, machine learning, and high-resolution graphics

Leadership
Innovative designs, game-changing technologies, leading-edge performance

2 Intel® Xeon® Processor = Enterprise

Intel Xeon processors power the enterprise— from the datacenter to the workstation.

AMD's Threadripper brand was initially launched as an enthusiast CPU desired by gamers. AMD is trying to enter the workstation market—where they are unproven.

Capabilities designed for playing games do not command the enterprise-class workstation resources that Intel Xeon processors deliver including high-performance floating-point/vector/AI computing with Intel® Advanced Vector Extensions 512 (Intel® AVX512). Professional workstation users and IT need next-generation technologies to innovate and compete, including:

intel. XEON

Accelerated Machine Learning Training and Inferencing Technologies
• Enhanced Intel® Deep Learning Boost (Intel® DL Boost) with VNNI
• High-performance floating-point/vector/AI computing with 512-bit Intel AVX512

Support for Continued Innovation—On-Chip and Off-Chip
• Breakthrough Intel® Optane™ persistent memory allows for unprecedented affordability for large (up to 3 TB per socket) memory capacities
• Intel® PAC with Intel® Arria® 10 FPGA accelerates a wide range of applications

Capabilities Designed for Business
• **Performance:** Intel Xeon processors are designed for demanding enterprise workload and work environment
• **Data/IP Protection, Low TCO:** Hardware and software to support security, manageability, and availability for on-site and remote workers/workstations
• **Certifications:** Commitment to compatibility with enterprise software[1]

3 Extensive Software Certifications

A Wide Range of Software Certifications by ISVs/OEMs Means Compatible and Reliable Operation with Professional Workloads. Certifications mean a commitment to compatibility to support productive workflows—i.e., a certified workstation is a productive workstation.

It can take up to a year to certify software on a new platform. Until then, users and projects are at risk for downtime due to unforeseen incompatibilities.

Intel has a massive software organization that partners with the ecosystem to enable high-tiered performance. That means an unmatched level of commitment.

Commitment to Customer Solutions
Strong Partner Relationships and Deep Investments
• Continuing investments in components, systems, accelerators, software, and more enable a future of workstation and workload innovations
• Decades-long investment and commitment to software providers across markets help optimize industry toolsets on Intel® hardware

Commitment to Platforms
Trusted System Certifications
• Certifications for professional applications offer verified assurance software will work as expected
• Dedicated software and hardware provider support offered for certified applications
• Co-engineering and validation programs with thousands of partners help strengthen and evolve workstation solutions

Commitment to Solution Providers
Advanced Resources for Developers and Solution Builders
• **Intel® Technology Provider program** results in innovative solutions for customers
• **Intel Production Suites** offer optimizing compilers, performance libraries, and analysis tools to aid in development of next-generation applications
• **Intel® oneAPI toolkits** enable a unified, standards-based programming model across diverse architectures

4 Solution for Every User

Intel has a workstation solution for every level of user and use case. Compare the Intel Xeon processors' scalable and flexible product line to AMD's single-socket, born-from-gaming, and wants-to-be-high-end stationary-only platform. Intel's decades-long commitment to workstations has resulted in wide-ranging, comprehensive enhancements for enterprise workloads.

intel. XEON BRONZE **intel. XEON SILVER** **intel. XEON GOLD** **intel. XEON PLATINUM**

Entry
• Frequency optimized
• Intel® Xeon® W-1000 processors at up to 5.30 GHz, 10 cores, and 128 GB memory support
• Designed for mobile solutions: Intel® Xeon® W-1000M processors deliver high-performance, on-the-go productivity

Mainstream
• Core/frequency optimized
• Intel® Xeon® W-2000 processors at up to 4.80 GHz, 18 cores, and quad-channel ECC memory support
• Best Intel AVX512 performance as tested on Intel® Xeon® W-2295 processor

Expert
• Scalable with support for multi-socket configurations
• 2nd Gen Intel® Xeon® Scalable and Intel® Xeon® W-3000 processor families
• Up to 56 cores with 12 memory channels
• Platform flexibility lets you purchase compute capacity for today's workflows and upgrade when needed

5 Intel vPro® Platform is Built for Business

Intel Xeon processor-based workstations with Intel vPro® technology are built for your business. Intel's enterprise-class "out-of-the-box" remote management gives IT the tools to remotely manage large fleets of systems.

Due to the remote work impacts of COVID-19, IT management and up-time are paramount. Built-in, enhanced, and secure out-of-band (OOB) remote management capabilities are critical for IT to effectively and efficiently support remote workers. With AMD platforms' limited OOB support, remote workers—and their sensitive projects—are stranded without support and at risk. An Intel Xeon processor workstation features Intel vPro® technology which allows IT to ensure users can access the systems they need, functioning properly 24/7, patched and ready each day.

intel vPRO PLATFORM

Capability/Solution	Value to Customer	Intel vPro® Platform	AMD
DASH 1.1 compliance	Compliance to a specific version of DASH profiles supporting basic manageability.	✓	✓
Beyond DASH 1.1, Intel supports additional profiles that IT has come to expect in workstations.			
Intel vPro® platform: end-to-end solution	Saves IT time configuring and deploying platforms. Current AMD solution is just a framework, documentation is out of date or non-existent.	✓	
Modern manageability with Intel® Active Management Technology (Intel® AMT)	Always on manageability. Rich, hardware-based In-band and OOB management capabilities, regardless of power or OS state. AMD solution is software.	✓	
Intel® Endpoint Manageability Assistant	Flexible on-boarding. Scalable, CIRA-enabled, cloud-based activation and deployment capability that works in and outside of the corporate domain.	✓	
Intel AMT Remote activation solution	Reduces IT burden. Secure, automated, hands-off remote activation of manageability capabilities, scalable from medium to large deployments.	✓	
Wired or wireless manageability solution: Wi-Fi 6, dense environment	Enables always managed, up to date connectivity within the enterprise domain (where WiFi 6 is installed and activated), even in congested network environments.	✓	
Intel vPro platform: Remote KVM (Keyboard, video, mouse redirection w/privacy support) with Intel® Integrated graphics	Enables IT to remotely diagnose, remediate most client platform issues without an IT service center visit, protects user privacy.	✓	