The demands of technology for small businesses, professional creators, and cloud services require intelligently designed solutions to fuel their growth.

Business computing needs are growing in sophistication and complexity. Servers and workstations that are just a few years old are no longer sufficient to support the demands of today’s workloads, which are increasing in capabilities to deliver business intelligence, acceleration, and agility. New business opportunities, customers, and workloads drive a need for tools and technology that will help you win and stay ahead of the competition. With a wide-range of solutions in the marketplace, it can be difficult to identify the right solution for your needs of today and prepare for a winning future.

At Intel, we appreciate these challenges and have worked to understand your needs and demands. We have partnered with industry leaders and solution providers to deliver you a professional-grade solution built from the ground-up with your needs in mind. The Intel® Xeon® processors deliver trusted performance and proven innovation, starting with our new entry Intel® Xeon® E processor family. As your business grows and demands increase, so does the Intel Xeon processor portfolio with performance scale and capabilities that extend to our Intel® Xeon® Scalable processor family of solutions.

Entry servers, secure cloud services, and entry and mobile workstations built on the Intel Xeon E processor offer a foundation of capabilities that support your growing and changing demands.
Entry server solutions for small business
Experience up to 48% more entry server performance for small business¹

Small businesses are looking for server solutions that deliver productivity, reliability, and hardware-enhanced security, and complement other IT investment options such as cloud-based services. An on-premise server can help address a number of challenges, including the uncertainty for setup and ongoing cost of cloud services, support for legacy applications, regulatory compliance and the need to protect sensitive customer data. A mix of cloud services and in-house solutions provides the flexibility to choose and mix the correct balance for your business needs.

An entry server built with the Intel Xeon E processor is a smart investment positioning you for growth while providing a reliable, always available solution to protect your data and host critical business software solutions. No matter the size of your business, the value of your data is enormous. Keep it accessible and better protected at all times with an affordable Intel® Xeon® E processor-based server.

A dedicated, on-premise server delivers answers for a number of small business customers including:

• Bandwidth constraints, latency, or heavy data usage that cause performance issues

• Uncertainty and inability to plan for setup and ongoing cloud service costs

• Preference for up-front payment over extended payment schedule

• Some legacy applications cannot be migrated to the cloud

• Regulatory, compliance, or data sovereignty requirements mandate that data must be secured on-premises

Implementing a powerful server is also a smart investment in growth. You’ll gain the power to deploy new business-class applications and tools that can help you increase sales and improve margins. A server based on the Intel Xeon E processor lets you access your information faster and respond to customers sooner from any device on your network. Keep valuable business data safe, help you and your employees become more productive, and position your company for growth with a powerful and affordable small business server based on the Intel Xeon E processor.

Hardware-enhanced security and reliability
A primary motivator in considering a professional-grade entry server or workstation is the increasing need for hardware-enhanced security and reliability of the Intel Xeon processor family. The Intel® Xeon® E-2100 processor includes support for the following hardware-enhanced security features:

• Intel® Data Protection Technology: Accelerate encryption and decryption, enhance security, performance, and protect your system using software enhanced with Intel® Data Protection Technology.

• Enhanced Intel® Software Guard Extensions: Software enhanced with Intel® SGX protects application code and data from disclosure and modification, enhancing the security of your workloads and applications.

• Intel® Authenticate: Intel® Authenticate solution delivers custom-izable multifactor authentication options to fit your IT policy needs while giving you a comprehensive solution that is easy to deploy.

Learn more about Intel® Xeon® E processor for Small Business at www.intel.com/xeone
Advanced security for enhanced secure cloud services

Intel Xeon E processors feature an advanced security technology, known as Intel SGX, which can help protect selected code and data from disclosure or modification. Developers can use Intel® SGX to partition their application into protected areas of execution in memory known as processor-hardened enclaves to enhance security even on a platform that becomes compromised. Intel Xeon E processors with Intel SGX can be used in concert with existing data center infrastructure, to protect the most sensitive portions of an application or data being used in a workload or service.

Businesses and cloud service providers are using Intel Xeon E processors with Intel SGX to protect a variety of applications and data. Here are some examples of how businesses are using Intel SGX:

- Enables multi-party, joint computation on sensitive data, in a privacy-preserving manner
- Supports encrypted database operations
- Running unmodified applications within enclave
- Trust established for protecting and virtualizing network functions
- Protect encryption keys and/or Hardware Security Module (HSM) replacement
- Protecting keys on local file system; hardening disk protection, building scalable cloud Key Management Service (KMS)
- Secure transaction processing for Crypto currency, Secure Contracts, and Hyper ledger protection
- Secure IoT edge devices and cloud communications

Intel Xeon E processors deliver a powerful component in enhanced application and data protection.

Entry and mobile workstations, built for today's professional creators

Up to 39% more performance than a 2017 entry workstation⁵

The entry and mobile workstation workloads of yesterday are evolving and expanding. Today’s entry workstation workloads have an increasing number of software solutions and extensions that require high performing, multi-core, professional-grade solutions to support your growing workflows. These workflows include design, analytics, rendering, professional virtual reality visualization, production, and distribution. Comprehending the full demands of a growing workload and workflow is why the Intel Xeon E processor is the trusted choice for of professional CAD and media customers. In addition to gains in processor performance and graphics performance for workstations, Intel Xeon E processor-based platforms offer fast access to data, protect the data integrity, and have proven reliability for a range of business needs.

Learn more about Intel® Xeon® E processor with Intel® Software Guard Extensions and Secure Enclaves at www.intel.com/sgx

Learn more about Intel® Xeon® E processor for entry and mobile workstation at www.intel.com/workstations
Introducing the new Intel® Xeon® E-2100 processor

Improvements in processor speed, enhanced memory capabilities, hardware-enhanced security and reliability all with support for the latest Intel processor graphics technology, the Intel® Xeon® E-2100 processor delivers a significant impact, especially compared with hardware that is just a few years old. With up to a 39% overall performance increase, compared to a 2017 Intel® Xeon® E3-1200 V6 processor, the Intel® Xeon® E-2100 processor delivers performance to manage today’s most demanding entry workloads. The Intel Xeon E-2100 processor supports up to 3.8 GHz base frequency with Intel® Turbo Boost Technology 2.0 frequency up to 4.7 GHz.

Please contact your hardware or equipment manufacturer for a full list of supported features and capabilities.

Platform reliability, availability, and serviceability

The Intel Xeon® E-2100 processor includes support for the following hardware-enhanced reliability features, including:

• **ECC Memory Support:**
  Avoid business interruptions with automatic data checking for errors, providing increased reliability for the storage of your business data and execution of your critical workloads. Intel® Xeon® E-2100 processor supports DDR4 memory speeds up to 2666 MHz.

• **Intel® vPro™ technology:**
  Built in Intel® vPro™ technology provides hardware-enhanced security, remote manageability, and productivity-enhancing capabilities.

• **Intel® Active Management Technology:**
  Intel® AMT uses integrated platform capabilities and popular third-party management and security applications, to allow IT or managed service providers to better discover, repair, and protect their networked computing assets.

• **Intel® Server Platform Services (Intel® SPS):**
  Designed for managing rack-mount servers, Intel SPS provides a suite of tools to control and monitor power, thermal and resource utilization.

• **Intel® Rapid Storage Technology:**
  Protect your critical business information with redundant storage capabilities that allow quick recovery in the event of a hard drive failure.
Typical Intel® Xeon® E platform configuration

- Up to 16 Lanes PCI Express® 3.0
- Intel® UHD Graphics P630
- Up to Two Channels DDR4 2666 with ECC
- Intel® vPro™ Technology
- Intel® Optane™ memory support
- Thunderbolt™ 3.0 support
- Intel® Rapid Storage Technology PCIe® 3.0

Processors, chipset, and diagram provided for illustration purposes only. Not comprehensive of all features and capabilities.

Intel® Xeon® E Processor SKUs and chipset

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<th>SKUS</th>
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Visit intel.com/xeone for a complete list of available Intel® Xeon® E processors.