Small business needs are becoming increasingly sophisticated. Applications that help automate design or iterate financial scenarios are becoming more demanding. Because of these needs, entry-level servers and workstations are becoming foundational to many businesses. At the same time, IT organizations are facing increasing demands for hardware, space, and energy efficiency. Specific solutions for data center graphics and lightweight scale-out workloads are emerging as additional ways to control costs while delivering application-optimized solutions. Meet the latest Intel® Xeon® processor E3-1200 v3 product family-based platforms—a smart investment for a range of business needs.

In addition to gains in CPU performance, CPU performance per watt, and graphics performance, Intel Xeon processor E3-1200 v3 product family-based platforms offer fast access to data, security, and proven reliability for a range of business needs. Explore the expanded product line to discover new options for microservers and data center graphics, in addition to traditional entry-level server and workstation applications.
SMALL BUSINESS SERVERS
No matter what 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 processor E3-1200 v3 product family-based server.

Protect your customer, inventory, and financial records with a server that delivers the security features and reliability of an all-day, all-night workhorse. Implementing a powerful server is also a smart investment in growth. You’ll gain the power to adopt new business-class applications and tools that can help you increase sales and improve margins. A server based on the Intel Xeon processor E3-1200 v3 product family lets you access your information faster and respond to customers sooner from any device on your network.

Learn more about this smart investment in your small business >

ENTRY-LEVEL WORKSTATIONS
Step up to the performance and visuals demanded by professional-grade CAD or media and entertainment applications. With Intel Xeon processor E3-1200 v3 product family-based workstations, you’ll find the capabilities that get designers, engineers, and animators started.

Accelerate exploration of complex data with the graphics performance of Intel HD Graphics P4600. Improve the integrity and uptime of design data with ECC memory technology. And with Intel vPro™ technology, you can make sure your workstations are as secure and manageable as any PC in your organization’s fleet.1, 2

Media and entertainment animators, artists, and editors looking to accelerate nonlinear editing or test select special effects—such as blur and motion filters—can work with greater efficiency. Imaging experts are supported by advanced features, access to OpenCL® acceleration, and fast processing performance. Your software benefits because the Intel Xeon processor E3-1200 v3 product family has been certified on and optimized for a wide range of third-party ISV applications.

Learn more about this smart investment in your innovation >

MICROSERVERS
To achieve optimal performance per watt for specific lightweight scale-out workloads, look no further than an energy-efficient microserver based on the Intel Xeon processor E3-1200 v3 product family.

Enjoy increased node density and improved I/O performance, ideal for lightweight scale-out workloads such as low-end dedicated hosting, simple front-end web, and basic content delivery. Minimize frustrations with capabilities such as x86 compatibility, virtualization support, and integrated security. Get up to 6.0x greater performance per SSI rack as compared to a rack of 1U servers, while also leveraging the existing IA software ecosystem.3, 4, 5, 6 You will be able to scale your infrastructure to meet growing operational needs in a simple and affordable way.

Learn more about this smart microserver investment >

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<td>Generational Performance Gains</td>
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<td>General CPU Performance</td>
<td>Professional Graphics Performance3, 10</td>
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<td>CPU Performance per Watt</td>
<td>E3-1200 w/HD P3000</td>
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<td>CAD Application Performance</td>
<td>E3-1200 w/HD P4000</td>
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<td>E3-1200</td>
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1, 2
DATA CENTER GRAPHICS

Media service providers require transcode solutions with cost-efficient, dense designs that can deliver high-quality images. A data center graphics server based on the Intel Xeon processor E3-1200 v3 product family does just that. Now you can support more concurrent media transcodes per rack than some discrete graphics solutions, lowering your total cost of ownership while enabling smoother content on demand, live broadcasting, or videoconferencing.

Whether you host desktops and workstations remotely or deliver gaming online in the cloud, the graphics performance of Intel HD Graphics P4700 can provide the rich visual experiences end users seek. At the same time, you’ll benefit from more energy-efficient performance that enables greater density of games or users.

Learn more about this smart investment in data center graphics >
**Intel® Xeon® Processor E3-1200 v3 Product Family Overview**

<table>
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<tr>
<th>Features</th>
<th>Benefits</th>
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| Intel® Xeon® Processor E3-1200 v3 product family | Server-class performance, reliability, and security at entry-level price points  
  • Accelerate your business growth with up to 44% better energy-efficient performance than the first generation of Intel Xeon processor E3 1200 family-based servers<sup>1,4,6</sup> |
| Haswell microarchitecture | Enhanced energy efficiency and performance  
  • Intel's industry-leading 22nm 3-D Tri-Gate transistor technology |

**RELIABILITY AND SECURITY TO PROTECT YOUR BUSINESS**

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<tr>
<th>Features</th>
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<tr>
<td>Support for error-correcting code (ECC) memory</td>
<td>Better data integrity and system reliability through automatic data correction</td>
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| Intel® Rapid Storage Technology enterprise 3.x<sup>11</sup> (Intel® RSTe) [for servers] | Uninterrupted operation and quick data recovery in the event of a hard drive failure  
  • Supports latest server operating systems (OSes), including Red Hat® and SUSE® Linux® OSes |
| Intel® Rapid Storage Technology 12.x<sup>11</sup> (Intel® RST) [for workstations] | Uninterrupted operation and quick data recovery in the event of a hard drive failure  
  • Dynamic storage acceleration—dynamically adjusts system power state policies based on I/O loading conditions and power profile |
| Intel Data Protection Technology (with Advanced Encryption Standard New Instructions<sup>10</sup> [AES-NI]) | Improves security by encrypting data—without slowing response times |
| Intel Platform Protection Technology (with Secure Key<sup>12</sup>) | Enhances security and performance for a wide range of security applications  
  • Enables faster, higher-quality cryptographic keys and certificates |
| Intel Platform Protection Technology (with BIOS Guard<sup>13</sup>) | Protects your system from malware and denial-of-service (DoS) attacks |
| Intel Platform Protection Technology (with OS Guard<sup>13</sup>) | Improves security by strengthening malware protection  
  • Provides hardware-based protection for your server operating system |
| Intel Platform Protection Technology (with Trusted Execution Technology<sup>13</sup> [TXT]) | Protects your business by increasing security against many digital threats  
  • Helps to ensure that the system launches into a known good state |
| USB Blocker [for servers] | Improves security and productivity  
  • Helps prevent malware and unauthorized data transfers by blocking classes of devices while enforcing company policies and allowing flexibility to white-list specific devices |

**RESPONSIVE PERFORMANCE TO GROW YOUR BUSINESS**

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<th>Features</th>
<th>Benefits</th>
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<tr>
<td>Intel Advanced Vector Extensions 2&lt;sup&gt;14&lt;/sup&gt; (Intel® AVX2)</td>
<td>Significant performance benefit for developers of imaging, video editing, modeling, and simulation applications</td>
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| Intel Turbo Boost Technology 2.0<sup>15</sup> | Higher performance when you need it most  
  • Accelerates processor and graphics performance for peak loads |
| Intel Hyper-Threading Technology<sup>16</sup> (Intel® HT Technology) | Faster performance for many demanding business applications  
  • Thread-level parallelism benefits multi-threaded and concurrently running applications |
| PCI Express<sup>®</sup> 3.0 ports | Extra capacity and flexibility for storage and networking connections  
  • Up to double the I/O bandwidth of prior-generation PCIe<sup>®</sup> 2.0<sup>14,17</sup> |
| Serial ATA 3.0 (SATA 3.0) | Faster data access, system startups, and application load times  
  • Doubles data throughput versus previous generation for faster hard drive performance<sup>1,4,18</sup> |
| Intel Virtualization Technology<sup>19</sup> (Intel® VT) for IA-32 and Intel 64 (Intel® VT-x) | Faster performance for core virtualization processes  
  • Improves application performance, live migration, provisioning, dynamic load balancing, and disaster recovery |
| Intel Virtualization Technology<sup>19</sup> (Intel® VT) for Directed I/O (Intel® VT-d) | Built-in hardware support for I/O virtualization  
  • Improves I/O performance, increases system reliability, and provides enhanced memory protection |
| Intel® Pro Wireless Display [for workstations] | Provides complete collaboration solution with flexibility for small businesses  
  • High-quality wireless audio and video experience with award-winning ease of use and security |

**ENERGY EFFICIENCY AND MANAGEABILITY**

<table>
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<th>Features</th>
<th>Benefits</th>
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| Range of CPU options | Matches performance versus energy efficiency to maximize total value  
  • Choice of 84W/82W/80W/65W/45W/25W/13W processor SKUs |
| Intel® Node Manager (Intel® NM) | Hosts more and heavier workloads per server while guarding against server overheating  
  • Lets you dynamically monitor and limit server power consumption |
| Intel® Active Management Technology<sup>20</sup> (Intel® AMT) [for small business servers] | Flexible local and remote management for troubleshooting, repair, and maintenance to increase reliability and uptime  
  • Secure, out-of-band access, even for failed power states or a crashed OS |
For more information on the Intel Xeon processor E3-1200 v3 product family, visit intel.com/xeone3.
Intel processor numbers are not a measure of performance. Processor numbers differentiate features within each processor series, not across different processor families. See intel.com/products/processor_numbers for details. Intel products are not intended for use in medical, lifesaving, life sustaining, critical control, or safety systems, or in nuclear facility applications. All dates and products specified are for planning purposes only and are subject to change without notice.

1. No computer system can provide absolute security under all conditions. Built-in security features available on select Intel® Core™ processors may require additional software, hardware, services, and/or an internet connection. Results may vary depending upon configuration. Consult your system manufacturer for more details. For more information, visit intel.com/technology/security.

2. Intel® vPro technology is sophisticated and requires setup and activation. Availability of features and results will depend upon the setup and configuration of your hardware, software, and IT environment. To learn more, visit intel.com/technology/vpro.

3. Software and workloads used in performance tests may have been optimized for performance only on Intel microprocessors. Performance tests such as SYSmark and MobileMark are used using specific computer systems, components, software, operations, and functions. Any change to any of those factors may cause the results to vary. You should consult other information and performance tests to assist you in evaluating your contemplated purchases, including the performance of that product when combined with other products.

4. Results have been estimated based on internal Intel analysis and are provided for informational purposes only. Any difference in system hardware or software design or configuration may affect actual performance.

5. Intel does not control or audit the design or implementation of third-party benchmark data or websites referenced in this document. Intel encourages all of its customers to visit the referenced web sites or others where similar performance benchmark data are reported and confirm whether the referenced benchmark data are accurate and reflect performance of systems available for purchase.


9. SPECpower_ssj2008 as of April 2014.

10. Previous configuration: Fujitsu PRIMEPOWER™ TX 120 53* with one Intel® Xeon® processor E3-1265L v2 (4 core, 2.4 GHz, 8 MB cache), Turbo Boost Disabled, Hyper-Threading Enabled, 8 GB (2 x 4 GB DDR3-1333 ECC DIMM), 64 GB 512 SATA SSD, Windows® 2008 R2 SP1, Java* SE Runtime Environment (build 1.6.0_25). Score: TR1276, Intel internal testing as of April 2013. Source: spec.org/power_ssj2008/results/res2012p2/power_ssj2008/power_ssj2008-20120511-00567.html. SPECpower_ssj2008 ssj_ops/Watt: 6,797.

SPECapc® for SolidWorks® 2013 as of April 2014.


11. Previous configuration: Intel® C26760T-based Intel® Xeon® workstation platform with one Intel® Xeon® processor E3-1275 v2 (quad-core, 3.4 GHz, 8 MB cache), ACRVMBY1.86C.0091.P00 September 9, 2012, Intel® Hyper-Threading Technology (Intel® HT Technology) best configuration, 8 GB memory (2 x 4 GB DDR3-1600 ECC UDIMM), Intel® HD Graphics P4000 with driver ASNBCPT1.86C.0091.P00 July 5, 2012, Intel HT Technology best configuration, 8 GB memory (2 x 4 GB DDR3-1600 ECC UDIMM), 500 GB SATAII 7200RPM HDD, Red Hat® Enterprise Linux® Server 6.5, compiler version: 14.0 of Intel® C++ Studio XE and Intel® Fortran. Source: SPECint_rate_base 2006 of 151, 144 nodes = 21,740.
