## Product Brief



**Entry-Level Workstation Product Brief** 

Intel® Xeon® processor 3400 Series and Intel® Core $^{\rm TM}$  i5 processor, both with the Intel® 3450 chipset

# Intel® Entry-Level Workstation Product Brief

Unleash your imagination by moving up from a desktop PC to a singleprocessor professional workstation based on an Intel® Xeon® processor 3400 series or Intel® Core™ i5 processor with the Intel® 3450 Chipset.

True workstation experience is now within your reach. In fact, workstations built with Intel Core i5 processor or Intel Xeon processor 3400 series, when paired with the Intel 3450 Chipset, can easily meet your content creation needs. Combined with the Intel 3450 Chipset, entry-level workstations now include a broader set of security and manageability features, making it even easier for you to do your job without constant IT disruptions, and for an organization to deploy, manage and maintain a workstation with certified and tested third-party software.

Deciding on which processor to use with your workstation is simple when you know what your platform goal is. Below are guidelines to help you choose the right processor for your application.

### Intel® Xeon® Processor 3400 series/Intel® 3450 Chipset-based Workstations

#### High-Level Overview

- Delivers the processing capacity to scale with your needs beyond basic interactive design and content creation.
- 4 cores and up to 8 computational threads necessary to meet the demands of moderate rendering and ray-tracing requirements.
- Supports PCI Express\* Gen 2 "professional" add-in graphics cards.

### Intel® Core™ i5 Processor/Intel® 3450 Chipset-based Workstations with Integrated Intel® HD Graphics<sup>1</sup>

#### High-Level Overview

- Delivers certified integrated graphics solution to meet entry CAD and DCC applications requirements.
- 2 cores and 4 threads with integrated graphics, providing the computational capacity to meet casual rendering and ray-tracing requirements.
- Supports PCI gen 2 professional add-in graphics cards.

## Intel<sup>®</sup> Active Management Technology<sup>2</sup> (Intel<sup>®</sup> AMT)

Using built-in platform capabilities and popular third-party management and security applications, Intel AMT allows IT to better discover, heal, and protect their networked workstation assets.

## Intel's processor features that can help dynamically increase your workstation performance

- Intel<sup>®</sup> Turbo Boost Technology<sup>3</sup> allows processor cores to run faster than the base operating frequency resulting in increased performance for both multi-threaded and singlethreaded workloads.
- Intel® Hyper-Threading Technology<sup>4</sup> (Intel® HT Technology) delivers thread-level parallelism on each processor, resulting in more efficient use of processor resources and improved performance on the multi-threaded software of today and tomorrow.

Together, these technologies combine to help workstation users to:

- Run moderately demanding workstation applications simultaneously while maintaining an adequate system responsiveness.
- Keep systems more secure, efficient, and manageable by allowing IT services to run in the background and minimize performance impact on end-user productivity.
- Provide headroom for future workstation application needs as new solution capabilities are brought to market via the ecosystem.

## Intel® Virtualization Technology<sup>5</sup> (Intel® VT)

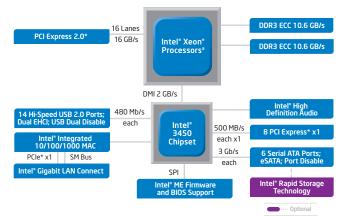
With Intel VT, workstation users get near native access to key workstation services, such as those delivered by graphics cards or network adapters needed to run multiple high-performance applications regardless of the operating system.

#### Integrated Intel<sup>®</sup> HD Graphics – Available on Intel Core i5 Processor-based Workstations<sup>1</sup>

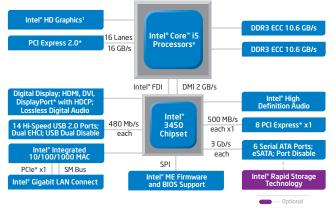
With the dramatic improvements in Intel® Graphics Technology as part of Intel Core i5 processor-based workstations, it may no longer be necessary for entry "CAD" and "Media and Entertainment" users to buy expensive add-on graphics cards.



#### Intel® Xeon® Processor 3400 series/Intel® 3450 Chipset-based Workstations



Intel® Core™ i5 Processor/Intel® 3450 Chipset-based Workstations with Integrated Graphics Support



<sup>a</sup>Compatible with Intel<sup>®</sup> Xeon<sup>®</sup> processor 3400 series

<sup>a</sup>Compatible with Intel<sup>®</sup> Core<sup>™</sup> i5 and Intel<sup>®</sup> Core<sup>™</sup> i3 processor

Feature	Benefit	Entry-Level Workstation	
Processor		Intel® Xeon® 3400 series	Intel® Core™ i5
Chipset		Intel® 3450	
Intel® Hyper-Threading Technology <sup>4</sup>	Better responsiveness on compute-bound applications	•	0
	Head room for future business growth	•	0
	CPU SKU stack optimized for workstation workloads	•	0
I/O Expansion	Flexibility to add storage, network, and other adapters	•	0
Intel® Active Management Technology <sup>2</sup>	Reduced service depot and desk-side visits, and less interruption to business	0	0
Intel® Virtualization Technology <sup>5</sup>	Users get near native performance to key workstation services in a virtualized environment	0	0
Error Correcting Code (ECC) Memory	Protects data by self correcting 99.988% memory errors to keep the system up and running	0	0
Tested and Validated with Workstation-Class Application	Validated and tested workstation applications ensure proper visualization	0	0
Application Certified Intel® HD Graphics <sup>1</sup>	Tested and validated with entry-level workstation applications	N/A	0
		Standard capability	Advanced capability

Standard capability

Advanced capability

#### For more information on workstation, visit www.intel.com/go/workstation

Intel processor numbers are not a measure of performance. Processor numbers differentiate features within each processor family, not across different processor families. See http://www.intel.com/products/processor\_number for details. 1 Available on Intel® Core<sup>™</sup> i5 processors 670, 660, and 650.

<sup>2</sup> Intel<sup>®</sup> Active Management Technology (Intel<sup>®</sup> AMT) requires the computer system to have an Intel<sup>®</sup> AMT-enabled chipset, network hardware and software, as well as connection with a power source and a corporate network connection. Setup requires configuration by the purchaser and may require scripting with the management console or further integration into existing security frameworks to enable certain functionality. It may also require modifications of implementation of new business processes. For more information, see www.intel.com/technology/intel-amt/.

<sup>3</sup> Intel<sup>®</sup> Turbo Boost Technology requires a platform with a processor with Intel Turbo Boost Technology capability. Intel Turbo Boost Technology performance varies depending on hardware, software and overall system configuration. Check with your platform manufacturer on whether your system delivers Intel Turbo Boost Technology. For more information, see http://www.intel.com/technology/turboboost.

<sup>4</sup> Hyper-Threading Technology requires a computer system with an Intel processor supporting Hyper-Threading Technology and an HT Technology enabled chipset, BIOS and operating system. Performance will vary depending on the specific hardware and software you use. See http://www.intel.com/info/hyperthreading/ for more information including details on which processors support HT Technology.

<sup>5</sup> Intel<sup>®</sup> Virtualization Technology requires a computer system with an enabled Intel<sup>®</sup> processor, BIOS, virtual machine monitor (VMM) and, for some uses, certain platform software enabled for it. Functionality, performance or other benefits will vary depending on hardware and software configurations and may require a BIOS update. Software applications may not be compatible with all operating systems. Please check with your application vendor.

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