Product Brief Intel<sup>®</sup> H170 Chipset



# **CONTENT CREATORS REJOICE** THE INTEL® H170 CHIPSET AND 6TH GENERATION INTEL® CORE™ PROCESSORS

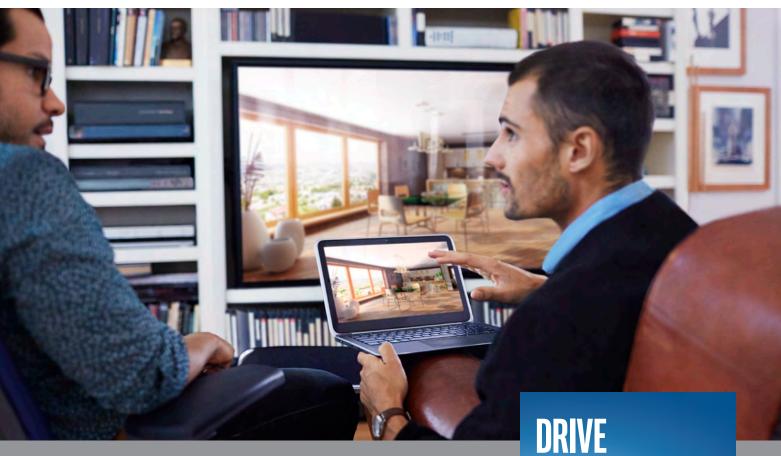
From defeating your opponents in battle to creating the perfect CGI landscape, the Intel® H170 chipset and 6th generation Intel® Core™ processor provide you with the tools to make your dreams a reality.

### **OUT-OF-THIS-WORLD PERFORMANCE**

Content creators and gamers can now celebrate with the Intel® H170 chipset and the 6th generation Intel® Core™ processors. The Intel H170 chipset and 6th gen Intel Core processors arm you with Intel® Turbo Boost Technology 2.0<sup>1</sup> and Intel® Hyper-Threading Technology<sup>1</sup> to give you the edge you need, exactly when you need it. From content creation to gaming, the Intel H170 chipset provides you with the power and performance you need.

#### QUICK ACCESS TO YOUR DIGITAL LIFE

The Intel H170 chipset and the 6th gen Intel Core processors allow you quick access to your digital life with Intel® Ready Mode Technology.<sup>1</sup> Voice command support makes your life easier along with providing the assurance that your favorite apps are always up-to-date. The Intel H170 chipset also treats your ears to amazing sound with Intel® Smart Sound Technology.<sup>1</sup> Studio-quality sound and enhanced voice support allows you to use your PC in ways you have never imagined.



### STUNNING VISUALS WITH INTEL® PROCESSOR GRAPHICS

Enhance your computing experience with Intel® processor graphics. Systems with the 6th gen Intel Core processors and the Intel H170 chipset provide eye-catching built-in graphics capabilities that immerse you into new worlds. Intel® Quick Sync Video<sup>1</sup> can reduce transcoding times, allowing you to have quick access to your favorite movies and music. Along with the ability to drive up to three independent displays,<sup>2</sup> the Intel H170 chipset and the 6th gen Intel Core processors also allow you to use Intel® Wireless Display<sup>1</sup> (Intel® WiDi) to effortlessly cast your PC's screen to any Intel WiDi-enabled television.

## DRIVE UP TO THREE INDEPENDANT DISPLAYS

#### **ADVANCED STORAGE CAPABILITIES**

When the Intel H170 chipset is paired with 6th gen Intel Core processors, your storage capabilities are expanded as far as your imagination. Integrated USB 3.0 makes moving files to your tablet and cellphone blazing fast. RAID support on PCI Express\* and Serial ATA storage devices enables speedy app launch and allows your data backups to finish in a flash! Enable eyepopping data transfers with support for PCI Express\* 3.0 storage devices. By pairing a small flash memory device with a large HDD volume, you can enable SSD-like performance with Intel® Smart Response Technology.<sup>1</sup> Dynamic Storage Accelerator unleashes the performance of your SSDs. It maximizes storage I/O performance by dynamically adjusting system power management policies to deliver up to a 15 percent<sup>3</sup> performance boost compared to default power management. The Intel® H170 chipset gives you quick access and expansion options for all your computing needs.

### INTEL® H170 CHIPSET FEATURES AT A GLANCE

FEATURES	BENEFITS
Support for the 6th gen Intel® Core™ processors	Supports the 6th gen Intel® Core™ processors with Intel® Turbo Boost Technology 2.0,¹ Intel® Pentium® processors, and Intel® Celeron® processors
Intel <sup>®</sup> Ready Mode Technology <sup>1</sup>	Provides quick access to your PC with applications that are up-to-date and constantly connected
Intel® Rapid Storage Technology <sup>1</sup>	With additional hard drives added, helps provide quick access to digital photo, video, and data files, and data protection against a hard disk drive failure with RAID 0, 5, and 10
	Support for external SATA (eSATA) enables the full SATA interface speed outside the chassis, up to 3 Gb/s
Intel® Rapid Storage Technology for PCI Express* Storage <sup>1</sup>	Enables Intel $^{\circ}$ Rapid Storage Technology $^{1}$ features with PCI Express*-based SSDs
Intel <sup>®</sup> Smart Sound Technology <sup>1</sup>	Integrated digital signal processor (DSP) for audio offload and audio/voice features
Intel <sup>®</sup> High Definition Audio <sup>1</sup>	Integrated audio support enables premium digital surround sound and delivers advanced features such as multiple audio streams and jack re-tasking
Intel <sup>®</sup> Smart Response Technology <sup>1</sup>	Implements storage I/O caching for fast response times of application startup and quick access to user data
Universal Serial Bus 3.0	Integrated USB 3.0 support provides great enhancement in performance with a design data rate of up to 5 Gb/s with up to six USB 3.0 ports
Universal Serial Bus 2.0	High-Speed USB 2.0 support with a design data rate of up to 480 Mb/s with up to 14 USB 2.0 ports
Serial ATA (SATA) 6 Gb/s	Next-generation high-speed storage interface supporting up to 6 Gb/s transfer rates for optimal data access with up to six SATA ports
Intel® Device Protection Technology with Boot Guard⁵	Helps protect the system's pre-OS environment from viruses and malicious software attacks
eSATA	SATA interface designed for use with external SATA devices
	Provides a link for 3 Gb/s data speeds to eliminate bottlenecks found with current external storage solutions
SATA Port Disable	Enables individual SATA ports to be enabled or disabled as needed, helping to provide added protection of data by preventing malicious removal or insertion of data through SATA ports
	Especially targeted for eSATA ports
PCI Express 3.0 Interface	Offers up to 8 GT/s for fast access to peripheral devices and networking with up to eight PCI Express 3.0 x1 ports, configurable as x1, x2, and x4 depending on desktop motherboard designs
USB Port Disable	Enables individual USB ports to be enabled or disabled as needed, helping to provide added protection of data by preventing malicious removal or insertion of data through USB ports
Intel® Integrated 10/100/1000 MAC	Support for the Intel® Ethernet Connection I219-V
Green Technology	Manufactured with lead-free and halogen-free6 component packages

For more information, visit http://www.intel.com/content/www/us/en/chipsets/mainstream-chipsets/ h170-chipset-brief.html

- 1 Intel technologies' features and benefits depend on system configuration and may require enabled hardware, software or service activation. Performance varies depending on system configuration. Check with your system manufacturer or retailer or learn more at www.intel.com.
- 2 Requires the use of a 6th generation Intel<sup>®</sup> Core<sup>™</sup> processor. This feature is dependent on your system configuration.
- 3 Dynamic Storage Accelerator performance is dependent upon several factors including workload, storage configuration, operating system, and CPU C-state transition efficiency. Intel analysis has found that Dynamic Storage Accelerator performance mode, 2 SSD RAID 0 provides up to a 15 percent performance gain as compared to default power management. Test configuration: 3 GHz processor, 2 x 2 GB @ 1333 MHz RST 12.0.0.1075OS HDD: Western Digital Black WD2002FAEX 2 TB; Intel® SSD 320 Series; OS Tested: RAID 0, Two Disk; Windows\* 7 SP1 build 7601; Benchmark software: PCMark\* Vantage 1.0.2 patch 1901.
- 4 DDR3L memory supported at 1.35V only.
- 5 Intel technologies' features and benefits depend on system configuration and may require enabled hardware, software or service activation. Performance varies depending on system configuration. No computer system can be absolutely secure. Check with your system manufacturer or retailer or learn more at www.intel.com.
- 6 Applies only to brominated and chlorinated flame retardants (BFRs/CFRs) and PVC in the final product. Intel components as well as purchased components on the finished assembly meet JS-709A requirements, and the PCB/Substrate meet IEC 61249-2-21 requirements. The replacement of halogenated flame retardants and/or PVC may not be better for the environment.

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 measured 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 fully evaluating

## POWER AND PERFORMANCE YOU NEED

your contemplated purchases, including the performance of that product when combined with other products.

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