Intel® P67 Express Chipset and 2nd Generation Intel® Core™ Processors

Get smart performance at its best

For a smarter PC experience, look for the 2nd generation Intel® Core™ processor family and the Intel® P67 Express Chipset. This new PC platform features improved adaptive performance that adds speed when you need it for a better PC experience. We call that smart performance at its best. You will call it amazing.

Smart Performance
The combination of the Intel® P67 Express Chipset and 2nd generation Intel® Core™ processors delivers increased desktop performance for incredible PC responsiveness. You'll get maximum power for whatever you do, thanks to the combination of smart features like Intel® Turbo Boost Technology1 2.0 and Intel® Hyper-Threading Technology2, which together activate full processing power exactly where and when you need it.

Unlocked Flexibility and Freedom
The Intel P67 Express Chipset enables the performance tuning features of unlocked Intel Core processors, allowing the user to change the core multiplier to increase frequencies without having to run any other part of the system above specifications. Get smart performance at its best with the flexibility to set your system specs just the way you like.

The Intel P67 Express Chipset delivers the latest platform features for superb system performance
Platforms based on the Intel P67 Express Chipset and 2nd generation Intel Core processors deliver the must-have capabilities for enthusiast performance. The Intel P67 Express Chipset integrates several capabilities to provide flexibility for connecting I/O devices. The latest Intel® Rapid Storage Technology3 10.0 enables the full Serial ATA (SATA) interface speed of up to 6 Gb/s to support next-generation Solid State Drives (SSDs) and traditional Hard Disk Drives (HDDs). In addition, the Intel P67 Express Chipset drives lower power through enhanced link power management of the Advanced Host Controller Interface (AHCI), enables easier expandability with support for native hot plug, and boosts boot and multitasking performance with Native Command Queuing (NCQ).

Intel® Rapid Recover Technology
Intel Rapid Recover Technology (part of the Intel® Rapid Storage Technology suite) provides a fast, easy-to-use method for the end user to recover their data and return their system to an operational status.
Intel® P67 Express Chipset Block Diagram

16 Lanes – 16 GB/s
8 Lanes – 8 GB/s
8 Lanes – 8 GB/s

480 Mb/s each

480 Mb/s each

14 Hi-Speed USB 2.0 Ports; Dual EHCI; USB Port Disable

Intel® Integrated 10/100/1000 MAC
PCI Express* x1, SM Bus
Intel® Gigabit LAN Connect

16 Lanes – 16 GB/s
8 Lanes – 8 GB/s
8 Lanes – 8 GB/s

5 Gb/s each x1
Up to 6 Gb/s²

5 Gb/s each x1
Up to 6 Gb/s²

Intel® ME Firmware and BIOS Support
Intel® Extreme Tuning Support

DDR3 1333 MHz
DDR3 1333 MHz

DMI 20 Gb/s

Intel® High Definition Audio
8 PCI Express® 2.0
6 Serial ATA Ports; eSATA; Port Disable

Intel® Rapid Storage Technology

Optional

²All SATA ports capable of 3 GB/s, 2 ports capable of 6 GB/s
### Intel® P67 Express Chipset Features at a Glance

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<th>Features</th>
<th>Benefits</th>
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<tr>
<td>Support for 2nd Generation Intel® Core™ processors</td>
<td>• Supports the 2nd generation Intel® Core™ processors with Intel® Turbo Boost Technology® 2.0, Intel® Pentium® processor, and Intel® Celeron® processor. Intel P67 Express Chipset also enables overclocking features of unlocked 2nd generation Intel Core processors.</td>
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<tr>
<td>Intel® Rapid Storage Technology³ 10.0</td>
<td>• With additional hard drives added, provides quicker access to digital photo, video and data files with RAID 0, 5, and 10, and greater data protection against a hard disk drive failure with RAID 1, 5, and 10. Support for external SATA (eSATA) enables the full SATA interface speed outside the chassis, up to 3 Gb/s.</td>
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<tr>
<td>Intel® Rapid Recover Technology</td>
<td>• Intel’s latest data protection technology provides a recovery point that can be used to quickly recover a system should a hard drive fail or if there is data corruption. The clone can also be mounted as a read-only volume to allow a user to recover individual files.</td>
</tr>
<tr>
<td>Intel® High Definition Audio⁴</td>
<td>• Integrated audio support enables premium digital surround sound and delivers advanced features such as multiple audio streams and jack re-tasking.</td>
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<tr>
<td>Universal Serial Bus (USB)</td>
<td>• Hi-Speed USB 2.0 provides greater enhancement in performance with a design data rate of up to 480 Mbps with up to 14 USB 2.0 Ports.</td>
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<td>USB 2.0 Rate Matching Hub</td>
<td>• Enables lower power requirements and manages the transition of the communication data rate from the high speed of the host controller to the lower speed of USB full-speed/low-speed devices.</td>
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<tr>
<td>Serial ATA (SATA) 6 Gb/s</td>
<td>• Next-generation high-speed storage interface supporting up to 6 Gb/s transfer rates for optimal data access with up to 2 SATA ports.</td>
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<tr>
<td>Serial ATA (SATA) 3 Gb/s</td>
<td>• High-speed storage interface supporting up to 4 SATA ports.</td>
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<tr>
<td>eSATA</td>
<td>• 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.</td>
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<td>SATA Port Disable</td>
<td>• Enables individual SATA ports to be enabled or disabled as needed. This feature provides added protection of data by preventing malicious removal or insertion of data through SATA ports. Especially targeted for eSATA ports.</td>
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<tr>
<td>PCI Express* 2.0 Interface</td>
<td>• Offers up to 5 GT/s for fast access to peripheral devices and networking with up to 8 PCI Express 2.0 x1 ports, configurable as x2 and x4 depending on motherboard designs.</td>
</tr>
<tr>
<td>USB Port Disable</td>
<td>• Enables individual USB ports to be enabled or disabled as needed. This feature provides added protection of data by preventing malicious removal or insertion of data through USB ports.</td>
</tr>
<tr>
<td>Intel® Integrated 10/100/1000 MAC</td>
<td>• Support for the Intel® 82578DC Gigabit Network Connection.</td>
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<tr>
<td>Green Technology</td>
<td>• Manufactured with lead-free and halogen-free component packages.</td>
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For more information, visit the Intel Web site: www.intel.com/products/desktop/chipsets

1 Intel® 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.

2 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.

3 Intel® Rapid Storage Technology requires a computer to have an Intel RST-enabled Intel chipset, RAID controller in the BIOS enabled and the Intel Rapid Storage Technology software driver installed. Please consult your system vendor for more information.

4 Intel® High Definition Audio requires a system with an appropriate Intel chipset and a motherboard with an appropriate codec and the necessary drivers installed. System sound quality will vary depending on actual implementation, controller, codec, drivers and speakers. For more information about Intel® HD audio, refer to http://www.intel.com/