Select the 3rd Generation Intel® Core™ Processor to Fit Your Lifestyle

Intel® Core™ i7 Processor—Visibly Smart Performance at its Best.
Top-of-the-line performance for your most demanding tasks.

Intel® Core™ i5 Processor—Visibly Smart Performance with a Boost.
The visibly smart Intel® Core™ i5 processor delivers performance that adapts to your needs and stunning visuals.

Intel® Core™ i3 Processor—A Visibly Smart Start.
The visibly smart Intel® Core™ i3 processor provides amazing multitasking performance and stunning visuals.

Product Overview
A new PC can provide you with unique and expanded capabilities. And when it is powered by a visibly smart 3rd generation Intel® Core™ processor, it can deliver amazing performance. Smart features give your PC the ability to adapt to your needs, as well as stunning visuals built-in for an enhanced experience that you can both see and feel. You can enjoy a wide selection of entertainment, create and share your great memories, and explore and connect to what interests you most. Rediscover what’s possible with a new computer. The only thing more amazing than our technology is what you’ll do with it.

The 3rd gen Intel Core processor family features Intel® Turbo Boost Technology 2.0, delivering a burst of processor speed automatically when the workload demands additional performance and greater adaptability, and Intel® Hyper-Threading Technology, allowing each processor core to work on two tasks at the same time, improving multitasking and speeding up the workflow. So whether you use your PC to be creative, play games, or for everyday tasks such as homework, these new processors offer the performance and features you want to get more done in less time.

Add to Your Imagination
The 3rd gen Intel Core processors feature built-in visuals, a suite of visual enhancements that provide everything you need to enjoy a smooth, seamless, stunning experience on your PC. Spend minutes rather than hours to edit, convert, and share your videos. Add a new dimension to your viewing experience with 3-D. Unlock a world of premium HD movies and content, viewing images and HD video the way they were meant to be seen—sharper, smoother, and richer. Play your favorite games with no extra hardware needed. The built-in visuals of the 3rd gen Intel Core processor eliminate the need for many of the functions provided by a discrete graphics card, reducing power consumption and system cost.

Unlock Your Full Potential
Unlocked 3rd gen Intel Core processors feature top-of-the-line speed and our best desktop visuals built in. With overclocking enabled, you get the flexibility to set your system specs just the way you like.

Energy Efficient
The 3rd gen Intel Core processors provide options for innovative system designs and enable more energy-efficient platforms that can meet ENERGY STAR® and other global environmental requirements.
## 3rd Generation Intel® Core™ Desktop Processor Family

**3rd Generation Intel® Core™ Processor Family Comparison**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Intel® Core™ i7 Processor</th>
<th>Intel® Core™ i5 Processor</th>
<th>Intel® Core™ i3 Processor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Processor Cores / Threads</td>
<td>4 / 8</td>
<td>4 / 4</td>
<td>2 / 4</td>
</tr>
<tr>
<td>Intel® Turbo Boost Technology1, 2.0</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Intel® Hyper-Threading Technology1</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Intel® Smart Cache</td>
<td>8 MB L3</td>
<td>6 MB L3</td>
<td>3 MB L3</td>
</tr>
<tr>
<td>AES New Instructions (AES-NI)</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Intel® HD Graphics with DirectX11</td>
<td>4000</td>
<td>2500 / 4000</td>
<td>2500 / 4000</td>
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<tr>
<td>Intel® Virtualization Technology (Intel® VT-x)1</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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<tr>
<td>Performance Tuning Enabled5,7</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
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<tr>
<td>Recommended Intel® Express Chipset</td>
<td>Z77</td>
<td>H77</td>
<td>H51</td>
</tr>
</tbody>
</table>

**Features and Benefits of the 3rd Generation Intel® Core™ Processor Family**

**Feature** | **Benefit**
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Intel® Turbo Boost Technology1, 2.0 | Dynamically increases the processor's frequency as needed by taking advantage of thermal and power headroom to give you a burst of speed when you need it.
Intel® Hyper-Threading Technology1 | Delivers two processing threads per physical core. Highly threaded applications can get more work done in parallel, completing tasks sooner.
Integrated Memory Controller | An integrated memory controller offers stunning memory read/write performance through efficient prefetching algorithms, lower latency, and higher memory bandwidth.
Built-In Visuals2 | - Intel® Quick Sync Video—Delivers fast conversion of video for portable media players, online sharing, and video editing and authoring.
- Intel® Clear Video HD—Visual quality and color fidelity enhancements for HD playback for a sharper, smoother, and richer picture.
- Intel® InTru™ 3D—Stereoscopic 3-D Blu-ray® playback in full 1080p resolution over HDMI® 1.4 and premium audio.
- Intel® Advanced Vector Extensions—A set of new instructions to improve software performance for floating point-intensive applications such as audio processing, audio codecs, and image and video editing applications.
Intel® Smart Cache | The shared cache is dynamically allocated to each processor core, based on workload. This significantly reduces latency, improving performance.
AES New Instructions (AES-NI) | New AES instructions add hardware acceleration to AES algorithms and speeds up the execution of AES applications.
Intel® Virtualization Technology1 | Allows one hardware platform to function as multiple "virtual" platforms. Offers improved manageability by limiting downtime and maintaining productivity by isolating computing activities into separate partitions.
Thermal Solution for Boxed Processors | Includes a four-pin connector for fan speed control to help minimize the acoustic noise levels generated from running the fan at higher speeds for thermal performance.3

1 Intel® Turbo Boost Technology, Intel® Hyper-Threading Technology, and Intel® Virtualization Technology require a computer system with a processor, chipset, BIOS, enabling software and/or operating system, device drivers, and applications designed for these features. Performance will vary depending on your configuration. Contact your vendor for more information.

2 Viewing stereo 3-D content requires 3-D glasses and a 3-D capable display. Physical risk factors may be present when viewing 3-D material.

3ENERGY STAR* denotes a system level energy specification, defined by the U.S. Environmental Protection Agency, that relies upon all of the system’s components, including processor, chipset, power supply, HDD, graphics controller, and memory to meet the specification. For more information, visit www.energystar.gov.

4 Requires Intel® Insider™, a hardware-based content protection mechanism, requires an Intel® Core™ processor-based PC with built-in visuals. Consult your PC manufacturer: Online content available from qualified providers. For more information, visit www.intel.com/go/intelinsider.

5 Warning: Altering clock frequency and/or voltage may (i) reduce system stability and useful life of the system and processor; (ii) cause the processor and other system components to fail; (iii) cause reductions in system performance; (iv) cause additional heat or other damage; and (v) affect system data integrity. Intel has not tested, and does not warranty, the operation of the processor beyond its specifications.

6 Performance tuning is supported via Intel® Enhanced Intel® SpeedStep® Technology, Intel® Turbo Boost Technology, and enabling applications such as Intel® Performance Tuning Utility. Performance will vary depending on your hardware and software configurations.

7 The acoustic benefits of the four pin header are reliant on a properly designed motherboard. Contact your board manufacturer for compatibility.

For more information on the 3rd generation Intel® Core™ processor family, visit www.intel.com