Intel® Atom™ Processor
D2700/D2500

The new entry-level desktop processors delivering design innovation, digital media experience, and improved performance

Product Overview
The Intel® Atom™ processor delivers the best-in-class performance and capabilities in meeting the essential computing demand from today’s consumers. Whether it is running desktop applications, browsing the web, checking e-mail and social media, or viewing videos and photos, the Intel Atom processor provides the processing power for an incredible entry desktop experience for everyday computing.

The Intel® Atom™ Processor
The new Intel® Atom™ processor D2500 and D2700 bring the next-level computing experience to life with improved performance, low power efficiency and new media capabilities.

The small and power-efficient processor design enables innovative form factor designs that are fanless, compact and slim. New, appealing small form factors provide flexibility for placement in home and office.

Affordable all-in-one systems with the monitor and PC built into a single convenient package allow for even greater space saving and sleek PC design.

With the enhanced processor graphics and newly added digital connectivity (e.g., VGA, HDMI, Display Port and DVI), the new Intel Atom processor for desktops delivers a great media entertainment experience. Whether it is playing basic online games, streaming high-definition videos, viewing Blu-ray® movies, or multi-tasking on dual displays, you are able to have fun and enjoy high-quality entertainment enabled by the integrated graphics.

The D2700 and D2500 models of the Intel Atom processor support select major operating systems1 (e.g., Windows® 7, MeeGo® and other open-source operating systems). With your choice of OS and the performance gain from the new Intel Atom processor technology, you can get things done faster and more efficiently.

With Intel inside®, your PC is backed by a long history of technology leadership and a brand that stands for quality and reliability.

Comparison Table

<table>
<thead>
<tr>
<th>Feature</th>
<th>INTEL® ATOM™ PROCESSOR D2700</th>
<th>INTEL® ATOM™ PROCESSOR D2500</th>
</tr>
</thead>
<tbody>
<tr>
<td>Processor Frequency</td>
<td>2.13 GHz</td>
<td>1.86 GHz</td>
</tr>
<tr>
<td>Number of Cores/Threads</td>
<td>2/4</td>
<td>2/2</td>
</tr>
<tr>
<td>Intel® Smart Cache</td>
<td>1 MB</td>
<td>1 MB</td>
</tr>
<tr>
<td>Graphics</td>
<td>Intel® Graphics Media</td>
<td>Intel® Graphics Media</td>
</tr>
<tr>
<td>Accelerator 3650</td>
<td>Accelerator 3600</td>
<td></td>
</tr>
<tr>
<td>Intel® 64 Architecture2</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Integrated Memory Controller</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Memory Support</td>
<td>Single-Channel DDR3</td>
<td>Single-Channel DDR3 SO-DIMM</td>
</tr>
<tr>
<td></td>
<td>up to 4 GB</td>
<td>1066 MHz, up to 4 GB</td>
</tr>
<tr>
<td>Manufacturing Process</td>
<td>32nm</td>
<td>32nm</td>
</tr>
<tr>
<td>Processor Package Size</td>
<td>22mm x 22mm</td>
<td>22mm x 22mm</td>
</tr>
<tr>
<td>Intel® Express Chipset</td>
<td>NM10</td>
<td>NM10</td>
</tr>
<tr>
<td>Chipset Package Size</td>
<td>17mm x 17mm</td>
<td>17mm x 17mm</td>
</tr>
</tbody>
</table>
Features and Benefits of the Intel® Atom™ Processor for Entry-Level Desktops

**FEATURE** | **BENEFIT**
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Intel® Atom™ Microarchitecture and 32nm Process Manufacturing Technology | Smaller design with low-power and high-efficiency deliver an affordable everyday computing experience.
Small Form Factor Processor Package Size | The lead-free¹, halogen-free² Micro-Flip Chip package is 70 percent smaller (22mm x 22mm) than a desktop processor (37.5mm x 37.5mm). This saves system board real estate in a much thinner and smaller industrial design, enabling small form factors.
Low Thermal Design Power (TDP) | Low TDP enables smaller, sleeker desktops by reducing cooling requirements.
Enhanced Data Prefetcher and Enhanced Register Access Manager | Anticipates data the processor is likely to need and stores the information within the processor’s L2 cache, resulting in improved performance because the processor doesn’t have to wait as long for data.
Intel® Smart Cache | Cache and bus design for efficient data sharing, providing enhanced performance, responsiveness, and power savings.
Integrated Graphics and Memory Controller | Integrated Intel® Graphics Media Accelerator 3600/3650 combined with the integrated memory controller provides enhanced performance and system responsiveness.
Intel® Graphics Media Accelerator | Integrated hardware accelerated decoder enables smooth full HD (up to 1080p) video playback and streaming at a fraction of the power consumption.³
PCI Express x1 Interface | Offers up to 3.5 times the bandwidth over traditional PCI architecture. Supports LPC serial interface, ExpressCard*, and PCI Mini-Card, and delivers fast access to peripheral devices and networking.
HDMI and additional display port | Integrated with VGA, HDMI, Display Port, eDP and LVDS display option support for rich media and visual experience.
Support for Windows*, MeeGo*, and Linux* Operating Systems¹ | Choice of operating system for your desktop.

¹Supported operating systems include: MeeGo*-compliant Linux* distributions, Microsoft Windows* XP Starter and Home Editions, Windows Vista* Starter and Home Basic Editions, and Windows* 7 Starter and Home Basic Editions.
²64-bit computing on Intel® architecture requires a computer system with a processor, chipset, BIOS, operating system, device drivers, and applications enabled for Intel® 64 architecture. Processors will not operate (including 32-bit operation) without an Intel® 64 architecture-enabled BIOS. Performance will vary depending on your hardware and software configurations. Consult with your system vendor for more information.
³System resources and hardware (such as PCI and PCI Express*) require physical memory address locations that can reduce available addressable system memory. This could result in a reduction of as much as 1 GB or more of physical addressable memory being available to the operating system and applications, depending on the system configuration and operating system.
⁴Intel® 32nm products are manufactured on a lead-free process, per EU RoHS Directive (2002/95/EC, Annex A). Some RoHS exemptions may apply to other components used in the product package.
⁵Applies to components containing flame retardants and PVC only. Halogens are below 900 PPM bromine, 900 PPM chlorine, and 1500 PPM combined bromine and chlorine.
⁶Video playback performance may vary depending on display resolution and video format; media players must take advantage of appropriate codecs to ensure hardware acceleration.

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