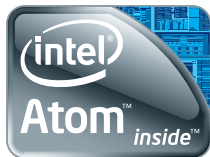
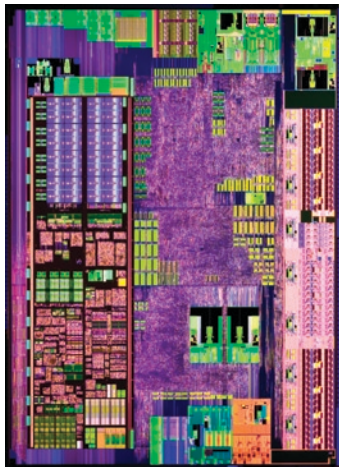


Intel® Atom™ Processor



Product Overview

Available for netbooks, the Intel® Atom™ processor delivers unmatched capabilities in a small package for today's on-the-go consumers. Take Internet connectivity to more places and easily access the Web, e-mail, news, chat, videos, photos, and music—wherever you go.

The Intel® Atom™ Processor— Purpose-Built for Netbooks

The Intel Atom processor is designed to enable affordable netbooks for basic computing and Internet access. It delivers amazing capabilities for a perfect on-the-go companion to your PC. A netbook is also a great introductory computer for children for both learning and entertainment. Take the Internet with you in a more lightweight, practical, and convenient package. Stay unplugged longer thanks to an energy-efficient processor designed for long battery life. Do more things on the Internet, and whether you are at home or away, enjoy Internet access with a compact netbook at an affordable price.

The Intel Atom processor single- and dual-core, combined with the Intel® NM10 Express Chipset, offers best-in-class capabilities and supports both Windows* and MeeGo* Linux* operating systems¹ so you can get online, have fun, and get things done.

With the Intel® Atom™ processor N550 dual-core, enjoy Internet access on the go with more responsive consumer experience in the same compact form factor and with the same great battery life as the Intel® Atom™ processor N450 single-core.

Comparison Table

	INTEL® ATOM™ PROCESSOR N550	INTEL® ATOM™ PROCESSOR N450
Processor Frequency	1.50 GHz	1.66 GHz
Number of Cores / Threads	2 / 4	1 / 2
Intel® Smart Cache	2 x 512 KB L2	512 KB L2
Graphics	Intel® Graphics Media Accelerator 3150	Intel® Graphics Media Accelerator 3150
Intel® 64 Architecture ²	Yes	Yes
Integrated Memory Controller	Yes	Yes
Memory Support	Single-Channel DDR3 667 MHz, up to 2 GB	Single-Channel DDR2 667 MHz, up to 2 GB
Manufacturing Process	45nm	45nm
Processor Package Size	22mm x 22mm	22mm x 22mm
Intel® Express Chipset	NM10	NM10
Chipset Package Size	17mm x 17mm	17mm x 17mm

Intel® Atom™ Processor

For more information on the Intel® Atom™ processor, visit www.intel.com/products/processor/atom/index.htm

Features and Benefits of the Intel® Atom™ Processor for Netbooks	
Feature	Benefit
Intel® Atom™ Microarchitecture and 45nm Process Manufacturing Technology	A purpose-built, low-power processor that delivers an affordable basic computing experience.
Small Form Factor Processor Package Size	The lead-free ³ , halogen-free ⁴ Micro-Flip Chip package is 60 percent smaller in netbooks (22mm x 22mm) than a notebook processor (35mm x 35mm). This saves system board real estate in a much thinner and smaller industrial design, enabling small form factors.
Enhanced Intel® Deeper Sleep (C4 / C4E)	Saves power by flushing cache data to system memory during periods of inactivity to reduce power consumption and enable longer battery life.
Enhanced Intel SpeedStep® Technology	Multiple voltage and frequency operating points provide optimal performance at the lowest power. This allows for better matching of performance to application demand.
Low Thermal Design Power (TDP)	Low TDP enables thinner, lighter, more compact, and portable netbooks by reducing the 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 3150 combined with the integrated memory controller provides enhanced performance and system responsiveness.
Support for Windows* and MeeGo* Linux* Operating Systems ¹	Choice of operating systems for your netbook.
Lower Power Consumption Over First Generation	Allows consumers to stay on the go for longer periods of time.
Support for Wi-Fi*, WiMAX*, and 3G Communication	Consumer choice and flexibility for online access inside and outside the home.



The Intel® Atom™ processor is designed to enable affordable netbooks for basic computing and Internet access.

¹ Supported operating systems include: MeeGo* Linux*, Microsoft* Windows* XP Starter and Home Editions, Windows Vista* Starter and Home Basic Editions, and Windows* 7 Starter and Home Basic Editions.

² 64-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.

³ Intel® 45nm 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.

⁴ Applies to components containing flame retardants and PVC only. Halogens are below 900 PPM bromine, 900 PPM chlorine, and 1500 PPM combined bromine and chlorine.

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* Other names and brands may be claimed as the property of others.

