

Q1 2009 Consumer Sales Guide

How to use this guide

This Q1 2009 Consumer Sales Guide may be the most important and versatile tool you have for explaining to prospective customers the advantages of having an Intel® processor inside their PC. This useful guide will help you:

- Explain the importance of choosing an Intel processor
- Describe the differences between Intel processors
- Find the right Intel processor for every customer
- Up-sell customers from one Intel processor to another





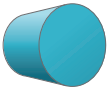





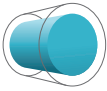





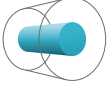





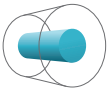





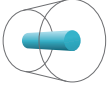





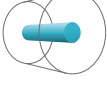



Why choose an Intel® processor?	How to explain processor performance	Intel® 45nm processors	
<p>The processor is the most important element in your computing experience.</p> <p>The processor plays a major role in:</p> <ul style="list-style-type: none">▪ How many fewer waits and delays you experience▪ How fast videos load▪ How smoothly games and videos play <p>Intel processors make the difference between a good computing and a great computing experience.</p>	<p>Many customers believe that processor speed is “all about the gigahertz.” But that is no longer true. This guide compares Intel processors across all the key features to help determine processor performance, including:</p> <ul style="list-style-type: none">▪ Number of processing cores▪ Type and amount of cache▪ “Clock speed” or gigahertz▪ Front Side Bus▪ Other key technology enhancements	<p>New! Intel® Core™ i7 Processor</p> <p>The best processors on the planet.¹</p> <p>Experience new levels of brilliant performance with the Intel® Core™ i7 processor, the smarter way to take on highly-threaded games and applications.</p> <p>Maximize speed for demanding applications thanks to Intel® Turbo Boost Technology, which accelerates performance to match your workload.</p>	<p>New! Intel® Centrino® 2 Processor Technology</p> <p>A breakthrough in notebooks for higher performance, advanced connectivity and long battery life while on the go.*</p> <p>Get up to 50% faster performance when multitasking with advanced new chip design that includes a minimum 3MB Smart Cache and 1066 FSB.²</p>




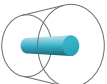



CONSUMER DESKTOP Q1 Sales Guide

Find The Best Desktop Processor For Your Needs



Usage Type	Recommended Sequence	Example Uses	Number of Cores	Number of Threads	Max Freq.	I/O Bandwidth	Total Cache Size
Extreme Gaming	 Core™ i7 965	<ul style="list-style-type: none"> Competitive gaming LAN parties Digital content creation HD video editing 	 4	 8	 3.20 GHz	 6.4 GT/s*	 8 MB
Gaming, HD & DCC	 Core™ i7-9x0	<ul style="list-style-type: none"> Play online & visually intense games Create HD videos Advanced photo editing Digital content creation 	 4	 8	 2.93 GHz	 4.8 GT/s*	 8 MB
	 Q9000/Q8000		 4	 4	 3.00 GHz	 Up to 1333 MHz	 Up to 12 MB
Everyday Performance	 E8000/E7000	<ul style="list-style-type: none"> Create digital photo albums Burn music and photos to CDs Play casual, online games Sync media to a portable device 	 2	 2	 3.33 GHz	 Up to 1333 MHz	 6 MB
Simple Multitasking	 E5000/E2000	<ul style="list-style-type: none"> Store and print digital photos Sync music to a portable device E-mail Homework and research 	 2	 2	 2.60 GHz	 800 MHz	 Up to 2 MB
Just the Basics	 E1000/400	<ul style="list-style-type: none"> Basic multimedia Web surfing E-mail Homework 	 Up to 2	 Up to 2	 2.20 GHz	 800 MHz	 512 KB

Nettops: small and smart devices for easy access to the Internet

Sequence	 300/200
	<ul style="list-style-type: none"> Basic Internet E-mail Basic Homework VoIP/IM
Number of Cores	 Up to 2
Max Frequency	 1.60 GHz
I/O Bandwidth	 533 MHz
Total Cache Size	 Up to 1 MB

*GT/s = Gigatransfers per second






Desktop Processor Number Reference Guide								
Processor Family	Processor Number	Clock Speed (GHz)	Intel® QuickPath Interconnect	Cache	Cores/Total Threads	Built on NEW 45nm Technology with Hafnium	Intel® Turbo Boost Technology	Availability
EXTREME PROCESSORS								
	i7-965	3.20	6.4 GT/sec*	8 MB	4/8	x	x	Now
STANDARD PROCESSORS								
	i7-940	2.93	4.8 GT/sec*	8 MB	4/8	x	x	Now
	i7-920	2.66	4.8 GT/sec*	8 MB	4/8	x	x	Now

*GT/s = Gigatransfers per second





CONSUMER DESKTOP Q1 Sales Guide

Desktop Processor Number Reference Guide								
Processor Family	Processor Number	Clock Speed (GHz)	Front Side Bus (MHz)	Cache	Cores/Total Threads	Built on NEW 45nm Technology with Hafnium	Intel® Turbo Boost Technology	Availability
EXTREME PROCESSORS								
	QX9770	3.20	1600	12 MB	4/4	x	x	Now
	QX9650	3.00	1333	12 MB	4/4	x	x	Now
STANDARD PROCESSORS								
	Q9650	3.00	1333	12 MB	4/4	x	x	Now
	Q9550	2.83	1333	12 MB	4/4	x	x	Now
	Q9400	2.66	1333	6 MB	4/4	x	x	Now
	Q8300	2.50	1333	4 MB	4/4	x	x	Now
	Q8200	2.33	1333	4 MB	4/4	x	x	Now
	E8600	3.33	1333	6 MB	2/2	x	x	Now
	E8500	3.16	1333	6 MB	2/2	x	x	Now
	E8400	3.00	1333	6 MB	2/2	x	x	Now
	E7400	2.80	1066	3 MB	2/2	x	x	Now
	E7300	2.66	1066	3 MB	2/2	x	x	Now
	E7200	2.53	1066	3 MB	2/2	x	x	Now




CONSUMER DESKTOP Q1 Sales Guide

Desktop Processor Number Reference Guide




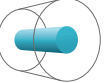




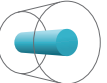



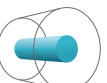




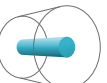




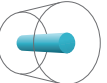




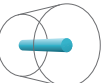

Processor Family	Processor Number	Clock Speed (GHz)	Front Side Bus (MHz)	Cache	Cores/Total Threads	Built on NEW 45nm Technology with Hafnium	Intel® Turbo Boost Technology	Availability
STANDARD PROCESSORS								
	E5300	2.60	800	2 MB	2/2	x		Now
	E5200	2.50	800	2 MB	2/2	x		Now
	E2220	2.40	800	1 MB	2/2			Now
	E2200	2.20	800	1 MB	2/2			Now
	E2180	2.00	800	1 MB	2/2			Now
	E1500	2.20	800	512 K	2/2			Now
	E1400	2.00	800	512 K	2/2			Now
	E1200	1.60	800	512 K	2/2			Now
	450	2.20	800	512 K	1/1			Now
	440	2.00	800	512 K	1/1			Now
	430	1.80	800	512 K	1/1			Now

NETTOP PROCESSORS




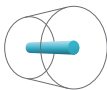

	330	1.60	533	1 MB	2/4	x		Now
	230	1.60	533	512 K	1/2	x		Now



Find The Best Mobile Processor For Your Needs









Usage Type	Recommended Sequence	Example Uses	Number of Cores	Max Freq.	I/O Bandwidth	Total Cache Size
Extreme Gaming	 QX9000/X9000	<ul style="list-style-type: none"> Competitive gaming LAN parties Digital content creation HD video editing 	 Up to 4	 Up to 3.06 GHz	 1066 MHz	 Up to 12 MB
Ultimate Mobility	 Q9000 T9000/P9000/ P8000/P7000	<ul style="list-style-type: none"> Play online & visually intense games Create HD videos Advanced photo editing Digital content creation 	 4	 2.26 GHz	 1066 MHz	 Up to 12 MB
			 2	 Up to 2.93 GHz	 1066 MHz	 Up to 6 MB
Everyday Performance	 T6000/T5000	<ul style="list-style-type: none"> Create digital photo albums Burn music and photos to CDs Play casual, online games Sync media to a portable device 	 2	 Up to 2.20 GHz	 800 MHz	 2 MB
Simple Multitasking	 T4000/T3000	<ul style="list-style-type: none"> Store and print digital photos Sync music to a portable device E-mail Homework and research 	 2	 Up to 2.16 GHz	 Up to 800 MHz	 1 MB
Just the Basics	 T1000/500	<ul style="list-style-type: none"> Basic multimedia Web surfing E-mail Homework 	 Up to 2	 Up to 1.83 GHz	 Up to 667 MHz	 Up to 1 MB

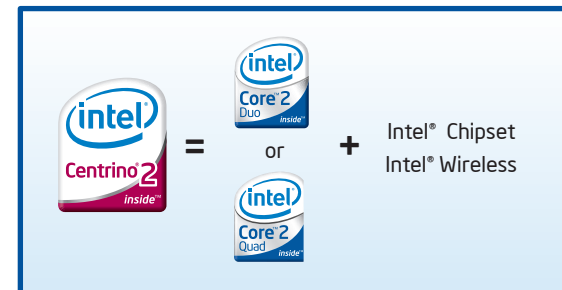
Netbooks: small and smart devices for easy access to the Internet

Sequence	 N200
	<ul style="list-style-type: none"> Basic Internet E-mail Basic Homework VoIP/IM
Number of Cores	 1
Max Frequency	 Up to 1.66 GHz
I/O Bandwidth	 Up to 667 MHz
Total Cache Size	 512 KB

CONSUMER NOTEBOOK Q1 Sales Guide


Mobile Processor Number Reference Guide

Processor Technology	Processor Family	Processor Number ^a	Clock Speed (GHz)	Front Side Bus (MHz)	Total L2 Cache	Cores / Total Threads	Built on NEW 45nm technology with Hafnium	Intel® HD Boost	Availability
EXTREME PROCESSORS									
		QX9300	2.53	1066	12 MB	4 / 4	x	x	Now
		X9100	3.06	1066	6 MB	2 / 2	x	x	Now
		Q9100	2.26	1066	12 MB	4 / 4	x	x	Now
		Q9000	2.00	1066	6 MB	4 / 4	x	x	Now
		T9800	2.93	1066	6 MB	2 / 2	x	x	Now
		T9600	2.80	1066	6 MB	2 / 2	x	x	Now
		T9550	2.66	1066	6 MB	2 / 2	x	x	Now
		T9400	2.53	1066	6 MB	2 / 2	x	x	Now
		P9600	2.66	1066	6 MB	2 / 2	x	x	Now
		P8700	2.53	1066	3 MB	2 / 2	x	x	Now
		P8600	2.40	1066	3 MB	2 / 2	x	x	Now
		P7450	2.13	1066	3 MB	2 / 2	x	x	Now
		P7350	2.00	1066	3 MB	2 / 2	x	x	Now
		T6600	2.20	800	2 MB	2 / 2	x	x	Now
		T6400	2.00	800	2 MB	2 / 2	x	x	Now
		T5900	2.20	800	2 MB	2 / 2			Now
		T5800	2.00	800	2 MB	2 / 2			Now
		T4200	2.00	800	1 MB	2 / 2			Now
		T3400	2.16	667	1 MB	2 / 2			Now
		T3200	2.00	667	1 MB	2 / 2			Now



CONSUMER NOTEBOOK Q1 Sales Guide


Mobile Processor Number Reference Guide

Processor Family	Processor Number ^a	Clock Speed (GHz)	Front Side Bus (MHz)	Total L2 Cache	Cores / Total Threads	Built on NEW 45nm technology with Hafnium	Intel® HD Boost	Availability
VALUE PROCESSORS								
	T1700	1.83	667	1 MB	2 / 2			Now
	T1600	1.66	667	1 MB	2 / 2			Now
	T1500	1.86	533	512 KB	2 / 2			Now
	T1400	1.73	533	512 KB	2 / 2			Now
	585	2.16	667	1 MB	1 / 1			Now
	575	2.00	667	1 MB	1 / 1			Now

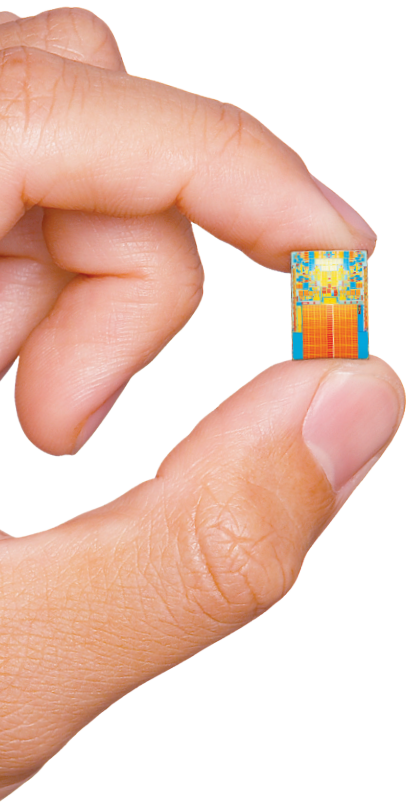
NETBOOK PROCESSORS

	N270	1.60	533	512 KB	1 / 2	x		Now
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MOBILE INTERNET DEVICE (MID) PROCESSORS

	Z540	1.86	533	512 KB	1 / 2	x		Now
	Z530	1.60	533	512 KB	1 / 2	x		Now
	Z520	1.33	533	512 KB	1 / 2	x		Now
	Z510	1.10	400	512 KB	1 / 2	x		Now
	Z500	800	400	512 KB	1 / 2	x		Now





¹ System performance, battery life, power savings, high-definition quality, video playback and functionality, and wireless performance and functionality will vary depending on your specific operating system, hardware, chipset, connection rate, site conditions, and software configurations. Wireless connectivity and some features may require you to purchase additional software, services or external hardware.

² As measured using Photoshop* Lightroom* comparing latest generation comparing Intel® Centrino® 2 processor technology-based notebooks with comparable frequency first generation dual-core Intel Centrino processor technology based notebooks. Actual performance may vary. See <http://www.intel.com/go/consumerbenchmarks> for important additional information.

* System performance, battery life, power savings, high-definition quality, video playback and functionality, and wireless performance and functionality will vary depending on your specific operating system, hardware, chipset, connection rate, site conditions and software configurations. References to enhanced performance including wireless refer to comparisons with previous generation Intel technologies. Wireless connectivity and some features may require you to purchase additional software, services or external hardware. Availability of public wireless LAN access points is limited, wireless functionality may vary by country and some hotspots may not support Linux-based Intel® Centrino® processor technology systems. See <http://www.intel.com/products/centrino/index.htm> and <http://www.intel.com/performance/mobile/benchmarks.htm> for more information on performance, wireless, power savings and energy efficiency.

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⁴ Intel processor numbers are not a measure of performance. Processor numbers differentiate features within each processor family, not across different processor families. See www.intel.com/products/processor_number for details.

¹ Performance based on select industry benchmarks, game titles and multimedia creation applications. Actual performance may vary. See <http://www.intel.com/performance/desktop/extreme/index.htm> for additional information.

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