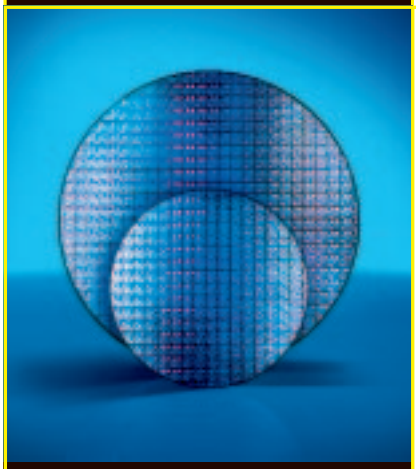
Despite the turbulence of 2001, this historical perspective supports our view that there's plenty of room for growth in the Internet revolution. Even though 500 million PCs are in use worldwide, only 10% of the world's population is online so far. As digital computing and communications increasingly converge, the online revolution is just beginning.

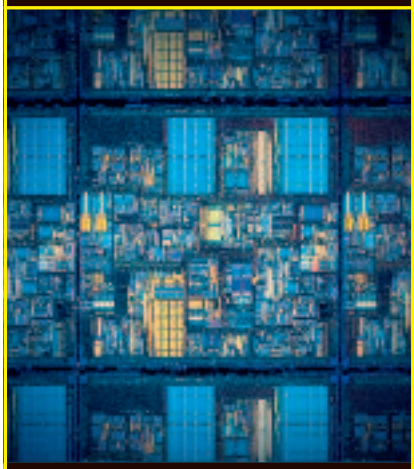
In the next two decades, we predict ubiquitous networks worldwide, with tens of millions of servers connecting billions of PCs and other clients. All of these systems are based on silicon, much of it from Intel. We are well positioned to be at the heart of this long-term technology build-out, with innovative architectures targeted at key Internet areas. Our computing and communications products are the basic building blocks of the Internet.



Jumbo wafers: To make chips, silicon wafers are processed and then cut into individual die. We estimate that converting from our current salad-plate-sized wafers to dinner-plate-sized wafers will yield 2.4 times as many chips per wafer and reduce our manufacturing costs per die by 30%. We began this conversion in 2001.

Manufacturing › *In 2001, we laid the groundwork for increased manufacturing efficiency by ramping four fabrication facilities on our new 0.13-micron manufacturing technology. This process shrinks line widths on silicon transistors to just 1/1000th the width of a human hair, enabling new microprocessors that use less power and run at multi-gigahertz clock speeds, at a lower fabrication cost per chip. We were proud to win the industry-wide race to be the first company to develop and ramp this advanced technology.*

We also began our manufacturing conversion from the 200mm wafer (about 8 inches in diameter) to the 300mm wafer (about 12 inches in diameter). We anticipate that the combination of larger wafers with the smaller chips enabled by our 0.13-micron technology will significantly increase Intel's chip production efficiency.



Extending Moore's Law: In 2001, Intel researchers built the world's smallest and fastest experimental transistor, with a gate only 20 nanometers wide, about three times smaller than that of the most advanced transistor in production today. We expect this design to help us build microprocessors containing a billion transistors by the second half of this decade.

R&D › *Continued innovation is vital to our success. In 2001, we spent $3.8 billion on R&D, mostly for semiconductor products and technologies. We are conducting advanced research to overcome technical barriers so that they will not impede our future manufacturing plans.*

For example, today's techniques for making transistors smaller and faster will also raise leakage current and power consumption, eventually making the transistors unusable for complex chips. In November, we announced a new transistor structure and related materials that we expect will avert this problem for products in the future. The new technology will enable transistors that can switch on and off more than one trillion times per second. By comparison, it would take a person more than 15,000 years to turn a light switch on and off a trillion times.

Computing

Faster chips: In 2001, we launched the Intel® Pentium® 4 processor at 2.0 GHz for high-performance desktop PCs—the world's first chip capable of running at 2.0 billion processing cycles per second. We also introduced 29 chips for mobile PCs, including the world's fastest and lowest voltage mobile PC processors, consuming as little as half a watt of power.

Clients › ***Our 32-bit microprocessor architecture is the heart of our business. It is the core technology of our Intel® Pentium® processor family, which drives a variety of clients, including PCs and mobile computers. In 2001, we ramped the Intel® Pentium® 4 processor, offering different speeds for various desktop systems.***

The Pentium 4 processor's unique Intel® NetBurst™ microarchitecture provides a richer, more powerful online experience, with more realistic 3D effects, smoother animation, clearer audio playback and faster frame rates than any other processor. To accelerate the adoption of Pentium 4 processor-based systems in the mainstream market, we ramped capacity, lowered prices and introduced new cost-effective chipsets designed to help PC makers build their systems around our chips.

Powerful choice for servers: The Intel® Itanium™ processor is compatible with a variety of operating systems. About 100 software applications optimized for this processor are available, with hundreds more under development. In 2001, more than 19 companies offered server and workstation models based on the Itanium processor.

Servers › ***We build powerhouse microprocessors that drive the servers storing data and directing traffic on the Internet. Our strategy is to provide high performance and the best price for performance for servers in every market segment. Our chips run print and e-mail servers; ultra-dense servers used in data centers; and telecommunications servers designed to function in cold, fires, excessive heat and other extreme conditions.***

Our 64-bit Intel® Itanium™ processor family delivers the new levels of computing power required to build the infrastructure of e-Business. We expect it to drive the next generation of high-end servers. In 2001, we introduced the first generation of Intel® Xeon™ processor based on the Intel NetBurst microarchitecture. Major manufacturers are now using this workhorse for their dual-processor workstations and server platforms.

Communications

Building the net: The Intel Communications Group focuses on three key areas: Ethernet connectivity products, network processing solutions and optical components for telecommunications. In 2001, we acquired seven companies with key technologies in these areas, such as opto-electronic components for building optical networks.

Networking › *We offer many silicon products that help build the networks linking clients to servers to the Internet. Intel® Internet Exchange Architecture (Intel® IXA) enables products that are the basic building blocks for modular networks. In 2001, we launched more powerful versions of the Intel® IXP1200 Network Processor, which has already earned more than 175 key design wins.*

We also supply Ethernet controllers, adapters, software and chips used to translate and transmit data across networks. In 2001, we introduced and shipped in volume the world's first single-chip Gigabit Ethernet controller, which runs 10 times faster than the previous industry-standard product, and the industry's first complete family of IEEE 802.11a wireless Ethernet adapters, extending Intel's 20-year history of innovation in Ethernet products.

One-chip solution: In 2001, we announced "wireless Internet on a chip" silicon technology, which integrates the core logic, memory and communications components of cellular phones and handheld computers in a single chip. We expect this technology to help build a new generation of wireless Web-access devices with greater processing power and extended battery life.

Handheld › *The Intel® Personal Internet Client Architecture (Intel® PCA) is used in products providing the brains of tiny cell phones, handheld Web devices, music players and much more. Intel products provide the low power consumption and high performance required by these devices. By the end of 2001, more than 800 companies were members of the Intel® PCA Developer Network, designed to help developers build and market handheld products that support our architecture.*

We remain the world's leading supplier of flash memory, a critical component in wireless handheld devices. In 2001, we produced the industry's first 0.13-micron flash memory products. Our new 3-volt synchronous Intel® StrataFlash® memory is up to four times faster than traditional flash memory but consumes only half the power, making it a leading choice for handheld devices.