Intel Corporation
2200 Mission College Blvd.
P.O. Box 58119
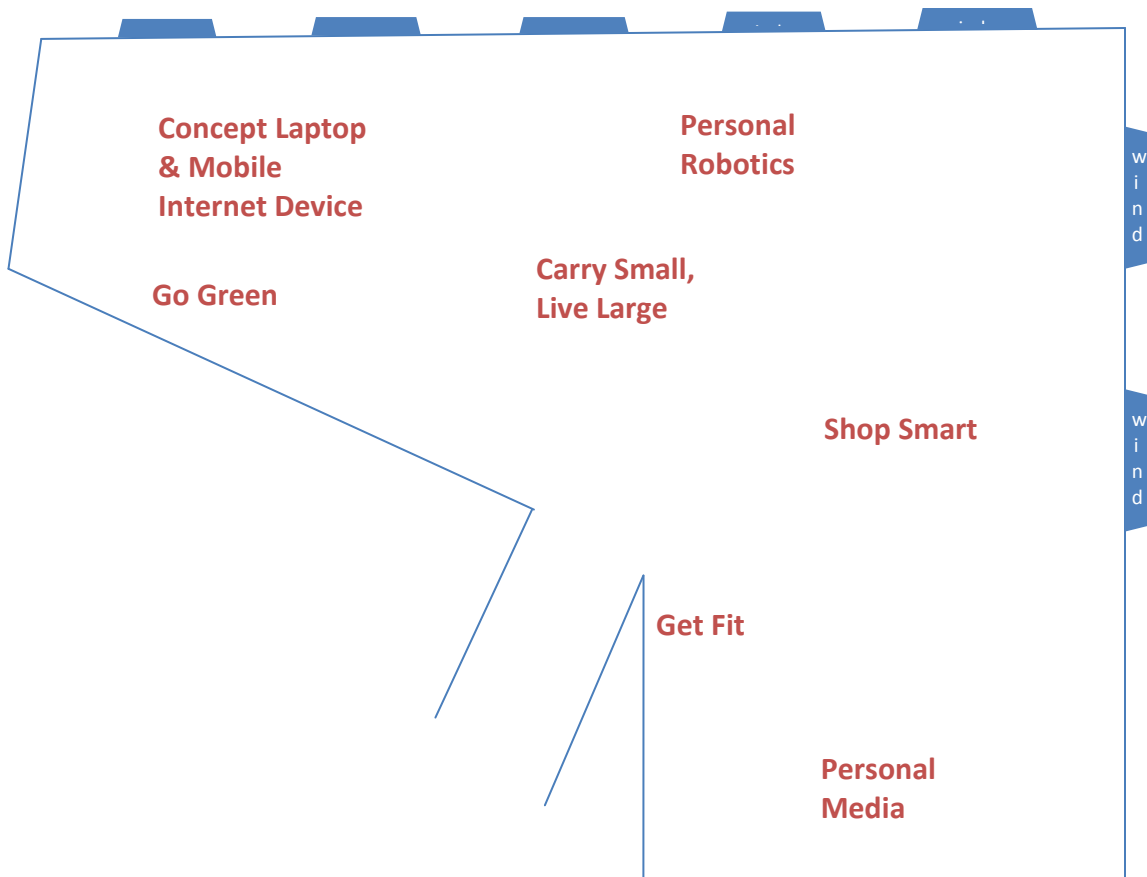Santa Clara, CA 95052-8119

Showcase Overview

Tech Heaven: Intel Technology Innovation On Display

See today what may be possible tomorrow. An interactive showcase highlights Intel Corporation technology innovations that are in some stage of active research or development and have the potential to change how we live, work and play.

Demonstration Areas

Concept Laptop & Mobile Internet Device

Personal Robotics

Go Green

Carry Small, Live Large

Shop Smart

wind

wind

Get Fit

Personal Media

Get Fit: Health & Fitness

Steve Agritelley, Intel Digital Health Group

Connecting Patients and Care – The Intel Health Guide is a new device that connects patients and their care teams for personalized care management. It combines an in-home patient device with an online interface that enables clinicians to monitor patients and remotely manage care.

Technology has the potential to transform healthcare, improve chronic disease management, and enhance wellness and independence. Intel's Digital Health Group shares a vision with global health leaders of a "new normal" that removes barriers of time, usage and location in healthcare. By connecting people and information through innovative technologies, Intel empowers people to make better, more informed health decisions while reducing the burden on the healthcare system.

Sunny Consolvo, Intel Corporate Technology Group

Tracking Fitness – The UbiFit Garden concept uses self-monitoring and positive feedback to encourage individuals to participate in regular and varied physical activity. As you perform physical activities throughout the week, a garden blooms on your mobile phone's background screen. The activities are detected automatically by a wearable sensing device and manually added and edited through a journal on your mobile phone. The more active you are, the more flowers will bloom in your virtual garden. Different flowers represent different types of activities (for example, cardio, strength, flexibility and walking). A butterfly indicates that you met your weekly goal.

Personal Media

Bill Leszinske, Intel Digital Home Group

Intel Widget Channel – This demonstration shows how Intel is re-defining the TV experience, bringing the best of the Internet experience to the living room through the power of a new Media Processor and TV applications framework called the Widget Channel. The demonstration runs a wide array of TV Widgets from content providers. The MyMedia Widget, developed by Intel, incorporates personal media like music, photos and videos into a widget for display on TV.

Leading CE manufacturers, broadcasters and content and service providers are supporting this effort to enhance today's traditional TV watching with complementary TV widgets that offer interactive features that can be personalized to fit the viewer's needs.

According to the Consumer Electronics Association*, women are the lead or joint decision-maker in over 60 percent of CE purchases, making this technology arena particularly relevant to female buyers.

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Sean Koehl, Intel Corporate Technology Group

Intelligent Multimedia – This demonstration shows examples of how many-core PCs could "interpret" video streams to increase the resolution, find the most exciting plays in a sports event or even warn you if a pedestrian is about to walk behind your car before you drive in reverse.

As future Intel chips scale from a few cores to many (i.e. one "brain" in the PC to many "brains"), computers can do more clever things with photos and videos. This may result in an explosion of visual computing capabilities, including life-like 3-D environments; immediate, real-world analysis of video feeds; and more natural ways for people to interact with their devices.

Shop Smart

Edwin Verplanke, Intel Embedded and Communications Group

Shopping Made Smart – Intel's proof-of-concept kiosk showcases the latest in digital signage and point-of-sale (POS) technology, demonstrating the ways the Internet and technology could enhance the brick-and-mortar shopping experience. The POS demonstrates unique capabilities that may enhance the efficiency of a trip to the store, such as providing an all-touch-screen menu and display, suggesting items based on current and past purchases, and including an RFID reader and pay-by-mobile scanner. The POS is based on the Intel® Core™2 Duo mobile processor with Active Management Technology, which brings the benefits of remote management and energy savings of up to 70 percent in a typical retail environment.

Sean Koehl, Intel Corporate Technology Group

3-D Internet: Shifting Toward Virtual Dressing Rooms – This demonstration shows several technologies that may one day be combined to create 3-D Internet experiences, such as a virtual dressing room for immersive online shopping. This includes ray-tracing software that easily renders true-to-life reflections and makes 3-D graphics more realistic. With physics modeling, cloth and fabrics shown online would mimic how clothes behave in real-life, like how fabric flows and fits to the body. With body tracking and modeling, mainstream PCs could also create an accurate 3-D model of someone's body from video inputs from cameras. Marrying these technologies with future multi-core processors, you may be able to try on clothes in the virtual world with real-world results.

Carry Small, Live Large

Edwin Verplanke, Embedded and Communications Group

Reinventing the Home Phone – This demonstration shows a concept media phone from OpenPeak*. The Intel® Atom™ processor brings the advantages of lower power consumption, small shapes and sizes, and performance to this phone. With the OpenPeak media phone connected to the home network through a built-in Wi-Fi/Ethernet link, consumers could use a single device to easily access applications, such as their personal calendar, e-mail, text messaging and address book and directory services; make phone calls; and access up-to-date weather information, recipes, YouTube*, horoscopes and digital photo albums.

Edwin Verplanke, Embedded and Communications Group

Rolling Digital Entertainment – The car is now an environment where digital-savvy consumers expect an uninterrupted experience of their digital world. The Azentek* Atlas Car PC concept shows how the same digital technologies we enjoy in our office and home may come to the car, providing an enhanced experience for both the driver and rear-seat passengers. The Intel Atom processor provides the energy-efficiency and performance needed to run all the infotainment applications in the car, including 3-D navigation, hands-free phone capability, voice-activated email and text, Bluetooth capability, Internet connectivity, gaming, music purchase, DVD and streaming video, satellite TV and more.

David Meyer, Intel Corporate Technology Group

Cutting the Last Cord – Imagine being able to walk into an airport or room with your laptop and instead of consuming battery power, it is already re-charged. Based on principles proposed by MIT physicists, Intel researchers have been working on a Wireless Resonant Energy Link (WREL) that will charge your devices without the hassle of tangled cords and lack of electrical outlets.

Personal Robotics

Jason Campbell, Intel Corporate Technology Group

Programmable Matter – How would you like to have a device that morphs into different shapes based on what you want to do with it? This demonstration illustrates, for example, how a mobile computer would turn into a phone when you want to talk, or "grow" a larger screen when you are surfing the Web or watching a movie. Intel researchers are

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collaborating with students and faculty at Carnegie Mellon University to develop "programmable matter" that could do just that. This demonstration will show experimental prototype "catoms" that could be the building blocks of such shape-shifting materials and describes what Intel is doing to help accelerate this research.

Jason Campbell, Intel Corporate Technology Group

Real-Time Visual Mobile Object Recognition – Object recognition has been a goal in computer vision for decades because it will let computers see the world the way humans do. Based on advances in technology, this demonstration showcases a computer with the capability to recognize objects by "looking" at them, like a mug or a slice of pizza.

Jason Campbell, Intel Corporate Technology Group

From the Factory Floor to Your Kitchen and Car – To make robotics personal, they need to move and manipulate objects in cluttered and dynamic human environments, be cognizant of their surroundings by sensing and recognizing movement in a dynamic physical world, and learn to adapt to new scenarios. This demonstration previews a sensing technique currently used by fish to electrically "feel" objects without touching them and may be used to give the future *home-bots* the ability to grasp odd-shaped objects without breaking them.

Go Green

David Meyer, Intel Corporate Technology Group

Harvesting Energy – Intel researchers are looking for new ways to identify and harness sources of power for consumer electronics devices and make them less reliant on the electrical grid. Solar energy, body heat, even signals from cell towers could be used to help power personal electronics devices. The efforts include Wireless Identification and Sensing Platforms (WISPs), which are small devices that can sense and communicate and power themselves from ambient energy without having to use batteries. Another system, WARP (Wireless Ambient Radio Power), harvests energy "from the air" that is emitted by the radio waves from TV towers. This energy can then be used to power small devices, such as a digital thermometer/humidity meter with LCD display.

Manny Vara, Intel Corporate Technology Group

Power Management – This demonstration shows technology that Intel researchers are developing that could reduce the overall power consumption of any device – from big servers to small handheld devices – by almost

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half. This could result in the doubling of battery life for future mobile devices and significant power savings for devices that are plugged in. Intel and others in the technology industry have made efforts to reduce the power consumption of individual components in PCs (processors, chipsets, power supplies, etc.). However, there are still significant reductions in power consumption that can be achieved on a platform level.

Sunny Consolvo, Intel Corporate Technology Group

UbiGreen – Similar to UbiFit, the UbiGreen concept uses on-body sensing, activity inference, and a personal, mobile display to encourage individuals to make green transportation choices. The system tracks your transportation patterns and rewards you for taking green forms of transportation (for example, walking, cycling, taking the bus or carpooling). As you take green forms of transportation throughout the week, your mobile phone's background screen will change, like a tree blooming or a polar bear's ecosystem growing.

Concept Laptops and Future Mobile Internet Devices

Mobile Internet Device Concept – This is a static concept mobile Internet device (MID) based on Intel's next generation platform, code name Moorestown. The platform consists of a system on a chip, codenamed "Lincroft," that integrates the Intel Atom processor core, graphics, video and memory controller onto a single chip and the Linux operating system. This demonstration is designed specifically to deliver a great PC-like Internet experience while also supporting smart phone voice capabilities. Small and compact, the Intel Atom processor gives a new generation of handheld mobile, portable and desktop devices the power of the Internet with the performance needed for video streaming/playback, long battery life and integrated wireless.

UrbanMax –The Intel Mobile Innovation Platform for 2008-2009 is a concept designed from the ground up to be an ultimate portable Web 2.0 device, incorporating technologies ranging from WiMAX, multi-touch screen and full Intel® Centrino™ 2 capabilities. Using the Intel Core 2 Duo processor Ultra-Low Voltage (ULV) allows the UrbanMAX to be aggressively thin and light while delivering performance of a fully-equipped PC. Intel hopes to inspire PC manufacturers to bring aspects of this concept to market in their future laptops.

Intel Capital – Intel's strategic investment program, Intel Capital invests in companies with emerging technologies that it believes will help drive demand for and create new ways to use Intel-based products. This group invests today in new technologies that may become the mainstream communications, networking and computing tools of tomorrow. For more information go to http://www.intel.com/capital.

Intel Science Talent Search – Catch a glimpse of the innovations from the future inventors of tomorrow at the Intel Science Talent Search, which celebrates the nation's best and brightest young minds. More than 1,600 U.S. high school seniors entered this year, and 40 finalists have been selected to travel in March to Washington, D.C. to compete for over $500,000 in awards and scholarships, including the top prize of a $100,000 scholarship, that support the students' pursuit of careers in science and math. For more information, visit www.intel.com/pressroom/kits/events/sts2009/index.htm.

Additional photos, videos and facts are available at the following locations:

Intel Innovation
www.intel.com/pressroom/innovation
http://blogs.intel.com/research/
http://scoop.intel.com/innovation
http://www.intel.com/pressroom/archive/releases/20080611corp_sm.htm

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Get Fit
http://www.intel.com/healthcare/
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http://www.intel.com/pressroom/archive/releases/20090108corp.htm

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www.intel.com/pressroom/archive/releases/20090112comp_sm.htm

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Go Green
www.intel.com/technology/ecotech/?iid=SEARCH

Concept mobile devices
www.youtube.com/watch?v=uFxIqOAeIv8
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