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Press Release

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Intel puts innovation on centre stage - Making IT happen!

Hanover/CeBIT, Feldkirchen, March 3rd 2009 – Innovation is the name of the game when Intel presents itself at CeBIT 2009, with the chance to experience tomorrow's technology, live. Intel's chairman, Dr. Craig Barrett, goes into more detail about Intel Labs Europe (ILE), the recently announced organisation whose Munich location was formally opened on March 2nd 2009. Intel founded the ILE to drive the dialogue between Intel, the industry and academia and to catalyse and coordinate the company's European research and development activities. Intel also discloses details of its 32 nanometer manufacturing technology and announces the first 32nm based notebook and desktop products for the end of 2009. In addition, the next generation Intel® Xeon® processors for server are demonstrated along with the Intel® Atom™ Z5xx processors, which address the market for embedded systems.

The next size: 32nm

Intel makes the largest-ever investment for a new manufacturing process and spends eight billion US Dollars on its 32nm manufacturing technology. With this investment the company will modernize the production facilities in New Mexico, Arizona and Oregon. Production of the first 32nm chips is planned for the end of 2009. Second generation High-k and Metal Gate transistor technology will be used for computer chips based on this new manufacturing process. Intel utilizes 193nm immersion lithography for the chip's critical layers as well as an improved transistor strain technique to improve switching capabilities of the transistor. This allows for considerable improvements in performance and energy efficiency for products based on Intel's new 32nm process technology.

Latest processor technologies and High Performance Computing

The upcoming next generation Intel® Xeon® processor offers noticeably higher data throughput rates, considerably increased performance and highest levels of energy efficiency. The server chip has already won several tenders for High Performance Computing (HPC) environments: at the research centre in Juelich in Germany, the next generation Intel® Xeon® processors is set for a system with 1080 processing nodes and 8640 computing cores to enable realistic physical effects in running computer simulations in building and running the fusion experiment ITER which will support to have fusion as new source of energy in a long term perspective.

Another example is the Nordrhein-Westfalen Technical University (RWTH) in Aachen, Germany. A cluster is to be created here, based on the next Generation Intel® Xeon® processors, with a performance of 200 TFLOPS and a storage capacity of 60 terabytes.

Solutions for embedded computing

Intel expects strong growth in the embedded computing market. The company estimates around 15 billion networked appliances for 2015, in a range of sectors including In-Car Infotainment, system integration, home automation and health-care. The Atom processor, Intel's smallest and most energy-efficient CPU addresses this growth segment, along with System-on-a-Chip (SoC) solutions. Intel presents four new chips and two new system controller hubs in the Atom Z5xx series, especially designed for embedded solutions. The solution offers two different packages for commercial and industrial applications and is validated for operation at extreme temperatures. At CeBIT umc.global presents an application from the area of marine communications. This solution is based on the Intel Atom Z5xx processor which in line with the Crew Welfare Initiative lets sailors communicate at sea for the first time ever at a lower cost and across greater distances.

Intel Labs Europe

Intel is currently actively involved in 18 research facilities with around 800 scientists in Europe. Recently Intel has founded the Intel Labs Europe (ILE) headed by Prof. Dr. Martin Curley, to grow the Intel R&D efforts in Europe in the future. The goal is to strengthen synergies and facilitate the dialogue between researchers from Intel, the industry and academia to generate new ideas and accelerate inventions. Moreover Intel's goal is to expand the partner network and R&D activities successively over time. The Intel Open Lab in Munich, opened on March 2nd 2009 works in close cooperation with its counterpart in Leixlip, Ireland.

Intel (NASDAQ: INTC), the world's leaders in semiconductor innovation, develops technologies, products and initiatives to continually improve the way people live and work. You will find further information about Intel at www.intel.de/pressroom and <http://blogs.intel.com>.

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