Technology Innovation Holds Promise to Help Solve Global Challenges

Intel Progress Thru Processors Application Helps Fight Disease and Climate Change

NEWS HIGHLIGHTS

- Intel is focused on developing cutting-edge innovations that hold the promise of helping to create a better future for the next generations.
- Intel "Tech Wonders" – a philanthropic campaign – is bringing together communities of people to discover how technology may help solve global challenges, such as climate change and disaster prevention, health and wellness, and exploration.
- Individuals can donate their spare computing power with Progress Thru Processors to aid researchers who otherwise could not efficiently conduct life-changing research.

April 27, 2011 – Technology is paving the way to find solutions to major global challenges. Intel Corporation innovation doesn’t stop with just today’s technology – the future possibilities are endless. From sensing technology and biocomputing to energy harvesting and molecular research, cutting-edge innovations hold the promise of helping to solve climate change, improve disaster prediction, increase health and wellness, and encourage exploration.

Creating a better future also requires help today from everyday individuals. Through a philanthropic effort called “Tech Wonders,” Intel aims to raise awareness of the far-reaching impact individuals can collectively have on the world through Progress Thru Processors.

Simply by keeping their computers on as they normally would, individuals can run the Progress Thru Processors application without affecting performance. The processing – or “computer brain” – power provided through volunteer computing is critical for researchers to conduct life-changing research. To-date, the work by climateprediction.net for example, would have taken over 16,000 years to compute on an average Intel® Core™ i5-powered laptop.¹

Climate Change: Saving the World’s Greatest Resources and Predicting Disasters

There is scientific evidence that Earth will probably warm over the coming century. Climate change, and the response to it, affects weather patterns and natural related disasters, food production, water resources, ecosystems and energy demand. Through Progress Thru Processors, individuals can assist Climateprediction.net in its effort to forecast climate conditions in the 21st century and tell us what is most likely to happen.

Technology is playing a major role in addressing these environmental concerns. The Information and Communications Technology (ICT) industry, for example, only contributes 2 percent to the global CO2 emissions but has the capability to positively impact the 98 percent contributed by other industries.²
Intel researchers are developing new ways of applying technology in areas such as disaster prediction, energy management, water conservation and agriculture. For instance, Intel research has looked at solutions for personal energy usage management, such as the Home Energy Management System, and ways to empower communities-at-large, such as joining with the city of San Francisco through the “Common Sense” project.

Health is Wealth

There is an incredible opportunity to use technology to change the trajectory of health and health care. Through Progress Thu Processors, individuals can support independently run scientific research projects such as Africa@Home,* which is working to determine optimal strategies for controlling the spread of malaria, or Rosetta@Home* which focuses its research on such diseases as AIDS/HIV, malaria, cancer and Alzheimer’s.

Intel is researching and developing technologies that may improve human health and advance the scientific understanding of life, making diseases more preventable, illness diagnosed earlier and treatment more personalized. For instance, the use of technology among doctors and health workers in developing countries today accounts for a 50 percent increase in productivity and quality of care³. Intel research has spanned from envisioning the hospital of the future to conducting biocomputing research to using sensor technology to improve personal healthcare for seniors and those with chronic diseases.

Exploring Unchartered Territories

Technology allows greater exploration – explorations of lands, seas and roads. Beginning with compasses and maps, technology has helped set the course for adventure into new and unchartered territories. Intel has worked, for example, with such organizations as NASA* on advanced space exploration and Sony* on uncharted sea exploration. Technology will enable researchers and scientists to further explore the unknown.

Progress Thru Processors is a collaboration with GridRepublic, a not-for-profit volunteer computing organization that seeks to bring together people with spare processing power with worthy projects in need of computing resources. The Progress Thru Processors software client was built in collaboration with the BOINC project at the University of California, Berkeley.

About Intel

Intel (NASDAQ: INTC) is a world leader in computing innovation. The company designs and builds the essential technologies that serve as the foundation for the world’s computing devices. Additional information about Intel is available at newsroom.intel.com and blogs.intel.com.

CONTACT:  Alison Wesley
408-765-0607
alison.e.wesley@intel.com

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1. www.intel.com/support/processors/sb/cs-023143.htm states that the average 2nd Generation Intel® Core™ i5 processor is capable of ~26 GigaFlops. The total volunteer contributions to climateprediction.net are reported as 418,319 gYears according to the organization. Therefore, 418,319/26=16,089 years on an average 2nd Generation Intel® Core™ i5 processor.
2. Data for CO2 emissions on industry from The Climate Group