

## Press Release

**For Release Noon CET  
18 Jan 2008**

### **Barcelona Supercomputing Center and Microsoft Create Joint Research Centre in Barcelona for Parallel Computing**

*Centre seeks solutions to challenges and opportunities coming with multi-core processors.*

**BARCELONA — 18 Jan 2008 —** During a press conference at the Universitat Politècnica de Catalunya in Barcelona, the Barcelona Supercomputing Center – Centro Nacional de Supercomputación (BSC) and Microsoft Corp today announced the creation of the BSC-Microsoft Research Centre, which will focus on the way microprocessors and software for the mobile and desktop market segments will be designed and interact over the next 10 years and beyond. The advent of many- and multi-core processor computing architectures will make it possible to deliver enormous computational power on a single chip, with profound implications for the way software is developed. Optimizing the design and interaction of hardware and software architectures to take advantage of the new computing power will require tight integration across the industry.

Computer architecture experts at BSC have teamed up with computer scientists at Microsoft Research Cambridge (MSRC) in the United Kingdom to look for innovative solutions to the challenges and opportunities that massively parallel processing represents. The vision of the centre is of a top-down computer architecture in which software requirements drive the hardware innovation forward rather than letting the hardware design condition software development. In addition to fundamental and applied research in transactional memories, a promising technology that facilitates writing of parallel programs for multi-core processors, hardware support for managed runtimes will be conducted in the initial research projects.

The official inauguration of the centre was attended by Josep Huguet, minister of Innovation, Universities and Enterprise of the Generalitat de Catalunya; Prof Antoni Giró, rector of the Technical University of Catalonia; Prof Mateo Valero, BSC's director; Dr Andrew Herbert,

managing director of the Microsoft Research Laboratory in Cambridge; Tony Hey, corporate vice president of External Research in Microsoft Research; and Rosa Garcia, president of Microsoft Spain.

“Two years after the initial agreement, we are reaffirming our research commitment by establishing a research centre in Barcelona, building upon the successful collaboration of a group of researchers from the Computer Architecture team in BSC and Microsoft Research. To optimize the designs and interactions of multi-core processors and software, we need to start from parallel programming. The way to deal with this multi-core architecture challenge is to bring together computer architects and programming language experts,” stressed Mateo Valero, director of BSC.

“We are pleased to partner with the Barcelona Supercomputing Center to create this new research centre,” said Tony Hey, corporate vice president of External Research in Microsoft Research. “Partnerships like this help us to reach our goal of supporting the global research community and ultimately assisting researchers and scientists to address some of the toughest, most urgent societal and technological challenges worldwide. Microsoft Research has a strong track record of collaboration with public research centres and academic institutes to advance the state of the art in computing. The BSC-Microsoft Research Centre is our most recent step, combining our respective areas of expertise to address the challenges of writing trustworthy software for multi-core processors.”

“At Microsoft we are committed to joining and building partnerships between businesses, research centres, education institutions and governments to promote Knowledge Society across Europe and to seeing Spain and Catalonia’s excellence in research and innovation achieve the worldwide recognition it deserves through increased investment and commercial collaboration,” explained Rosa García, president of Microsoft Spain.

#### **About BSC**

The Barcelona Supercomputing Center - Centro Nacional de Supercomputación (BSC) houses MareNostrum, one of the most powerful supercomputers in the world. Their mission is to investigate, develop and manage information technology in order to facilitate scientific progress. With this objective, there has been taken special dedication to research areas such as Computer Sciences, Life Sciences and Earth Sciences. In the context of this multi-disciplinary approach, the BSC has a large number of researchers and experts in HPC (High Performing Computing), which facilitate scientific progress together with state-of-the-art supercomputing resources.

This Spanish multi-disciplinary supercomputing center was established by a consortium made up by the Ministry of Education and Science (MEC), by the Government of Catalonia and by the Universitat Politècnica de Catalunya (UPC) and is headed by Professor Mateo Valero.

Further information about the BSC, please visit [www.bsc.es](http://www.bsc.es)

#### **About Microsoft Research**

Founded in 1991, Microsoft Research is dedicated to conducting both basic and applied research in computer science and software engineering. Its goals are to enhance the user experience on computing devices, reduce the cost of writing and maintaining software, and invent novel computing technologies. Researchers focus on more than 55 areas of computing and collaborate with leading academic, government and industry researchers to advance the state of the art in such areas as graphics, speech recognition, user-interface research, natural language processing, programming tools and methodologies, operating systems and networking, and the mathematical sciences. Microsoft Research employs more than 800 people in five labs located in Redmond, Wash.; Silicon Valley, Calif.; Cambridge, England; Beijing, China; and Bangalore, India. Microsoft Research collaborates openly with colleges and universities worldwide to enhance the teaching and learning experience, inspire technological innovation, and broadly advance the field of computer science. More information can be found at <http://www.research.microsoft.com>.

#### **About Microsoft**

Founded in 1975, Microsoft (Nasdaq "MSFT") is the worldwide leader in software, services and solutions that help people and businesses realise their full potential.

#### **About Microsoft EMEA (Europe, Middle East and Africa)**

Microsoft has operated in EMEA since 1982. In the region Microsoft employs more than 13,000 people in 60 subsidiaries, delivering products and services in 138 countries and territories.

#####

This material is for informational purposes only. Microsoft Corp disclaims all warranties and conditions with regard to use of the material for other purposes. Microsoft Corp shall not, at any time, be liable for any special, direct, indirect or consequential damages, whether in an action of contract, negligence or other action arising out of or in connection with the use or performance of the material. Nothing herein should be construed as constituting any kind of warranty.

#### **BSC PR Contacts**

Renata Giménez Binder, BSC-CNS

**Phone:** 93 4134082

**E-mail:** [press@bsc.es](mailto:press@bsc.es)

#### **Microsoft PR Contacts**

Jeff Sharpe, Waggener Edstrom Worldwide

**Phone:** +44 207 632 3883

**E-mail:** [jeffs@waggeneredstrom.com](mailto:jeffs@waggeneredstrom.com)

#### **Note to editors**

If you are interested in viewing additional information on Microsoft in EMEA, please visit <http://www.microsoft.com/emea> or the EMEA Press Centre at <http://www.microsoft.com/emea/presscentre>. Web links, telephone numbers and titles were correct at the time of publication, but may since have changed. For additional assistance, journalists and analysts may contact the appropriate contacts listed at <http://www.microsoft.com/emea/presscentre/contactus.aspx>.

If you are interested in viewing additional information on Microsoft Corp, please visit the Microsoft web page at <http://www.microsoft.com/presspass> on Microsoft's corporate information pages.