_____**Elektronik Informationen**_____**Fachzeitschrift für den professionellen Entwickler // Daily News**

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Cooperation Plan to insure Competitiveness of European embedded computing Technologies

In the European automotive sector, 20% of the value of each car today is due to embedded electronics and this will increase to approximately 40% by 2015. This increase will create more than 600,000 new jobs in Europe in the automotive sector alone. A similar situation can be found in virtually every sector of industry.

Embedded systems are intelligent subsystems combining sensors, data processing and communication functions to manage and supervise the system or environment in which they are incorporated (aircraft, automobile, mobile telephone, network, factory, distribution network, etc.) virtually invisibly.

The combination of increased computing power, new software technologies and the Internet revolution has the potential to drive exponential growth in the functions and services provided by embedded systems and in their interoperability capacities. The sheer diversity of value-added functions and services, and the potential for networking and interoperability generate unprecedented levels of complexity and present major new technical challenges.

Already today 98% of computing devices worldwide are in Embedded Systems not in PC's; there will be over 40 billion devices by 2020. In Europe, the number of researchers looking into Embedded Systems is estimated at 150,000 growing to 180,000 in 2007 at the start of FP7. This population is expected to double over a 10 year period.

ARTEMIS, European Technology Platform, being set up for Embedded Intelligence and Systems, is designed to consolidate and strengthen that leadership as a crucial step in ensuring the competitiveness of industry.

In the framework of their second annual conference, ARTEMIS partners launch the Strategic Research Agenda. The ARTEMIS Strategic Research Agenda outlines a number of Grand Challenges, in addition to clear and quantifiable targets for European research in this area until 2016.

Its financial objectives include an increase of more than 40% of pre-competitive cooperative R&D from 2005 to 2010, supported by 640 M? funding (National and European programs) in 2010 for the different European research instruments and programmes.

Hi-Tech European SMEs, through the HICH-TECH Federation, are closely involved in the conference highlighting that SME'S will play a significant role in the ARTEMIS work programme.

The steering group of Artemis is composed of industrial groups, research institutes and organization bodies among which ABB, AIRBUS, ARM, AVL, British Telecom, BOSCH, CEA, CNRS - VERIMAG , COMAU, Continental Teves, Daimler Chrysler, Ericsson, Finmeccanica, Fraunhofer Institut, HITECH Federation, IMEC, Infineon Technologies, ITEA, Medea+, NOKIA, Parades, Philips, Siemens, STMicroelectronics, SYMBIAN, Telenor, Thales, Vienna University of Technology, Universitat Politecnica de Catalunya. Two main documents are already available on the website of Artemis: Building Artemis and Artemis Strategic Research Agenda.

www.cordis.lu/ist/artemis