



Embedded News

The ARTEMIS office's Bi-Weekly Newsletter, Number 7

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ARTEMIS Platform: what's new?

The ARTEMIS Annual conference 2006 will take place 23th and 24th May in Graz (Austria) during the Austrian presidency. A registration form will be available soon on the ARTEMIS website.

The WG Innovation on Standards and regulation took place on the 11th of January in Brussels.

ARTEMIS Executive Board members met on the 12th of January in Brussels.

The WG SRA on reference design and architectures took place in Brussels on the 17th and 18th of January.

ARTEMIS AGENDA

WG Innovation on EcoSystems, January 23, Brussels

WG on Design Tools and Methods, January 25, Brussels

WG SRA on Seamless Connectivity and Middleware, January 27, Brussels

Steering Board Meeting, February 16, Brussels, EC building

Executive Board meeting, February 21, Brussels

IST/ICT Calls

European Information and Communication Technologies Prize (European ICT Prize) - Prior information notice

Deadline: To be announced

The object of the contract is to organise and manage the European ICT Prize, which will be awarded annually by the European Commission. The objective of the European ICT Prize is to promote European innovation and entrepreneurship in Information and Communications Technologies (ICT) by providing public recognition to companies or other organisations that excel in turning technology and research results into products for the market. The European ICT Prize will build upon the success of the European IST Prize, which has successfully promoted information society technologies in Europe since 1995. Likely publication date of the call will be Autumn 2005.



Call for tender to support EU Commission on RFID published

Deadline: 30 January 2006

An invitation to offer the EU Commission assistance in the "Preparation and implementation of a series of consultation initiatives on Radio Frequency Identification (RFID)" was published in the Official Journal. The work will involve the following tasks : preparation, implementation and follow-up of 5 workshops, rooms, multimedia, invitations, participants managements, helpdesk, preparatory material, printing, decoration, contracting experts to draft conclusions, follow-up of participants contributions, web-hosting, minutes and final conclusions ; analysis of the response to the public consultation and drafting of the final report based on the workshops and the public consultation.

IST Call 6 Now Open

Deadline: 25 April 2006

IST Call 6, with a total indicative budget of €140 million, opened on 22 December 2005 and will close on 25 April 2006. This Call covers Ambient Assisted Living (AAL), Advanced Robotics, Search Engines for Audio-Visual Content and International Cooperation.

Focus on...

This section contains information about events and news in the area of embedded systems. ARTEMIS Office would like to thank all the contributors to this section and welcome all your input if you are aware of relevant information.

3rd European Congress Embedded Real Time Software

The three engineering societies, SIA,AAAF and SEE, representing automotive, aeronautics and space, are organizing the third edition of the Embedded Real Time Software congress ERTS 2006.

The co-chairing of this congress by AIRBUS and SIEMENS VDO indicates that cross-fertilization and synergies between aerospace and automotive are possible.

2006 is a good time to obtain feedback from recent industrial developments, such as modular avionics, flying with A380 and Autosar, an industrial initiative close to delivering the expected world open standard platform for the vehicle industry.

ERTS 2006 will also be the right time to look into other fields that have solved complex architecture challenges.

From space down to subway, from telecom networks to energy distribution, key examples will be explored for the benefit of participants in search of brilliant new ideas. ERTS 2006 will also provide the opportunity to learn from players in research fields and the newest trends in basic research that we need to consider in our embedded system roadmap, to maintain leadership in this domain.

All these issues and more will be addressed during ERTS 2006 in the form of conference presentations, highlevel round tables, or panel discussions.

Last but not least, everybody delivering value in the supply chain of ERTS is invited to exhibit their specific solutions from microcontroller platforms to software modules, case tools, testing and certification as well as engineering services.

To get the brochure, please contact ARTEMIS Office or register directly online via: www.erts2006.org

Europe's Largest Event for Electronic System Design & Test, 6 - 10 March, 2006, ICM, Messe Munich, Germany

At the beginning of March, an important european conference annex exhibition on electronic system design will be organised. Please register before 15 February, 2006 for an early booking discount on Conference Registration Fees

The full DATE 06 conference program can now be viewed online at: <http://www.date-conference.com/conference/index.htm>

To register please visit: <http://www.date-conference.com/registration/index.htm>

The Num@tec Automotive project

Num@tec Automotive project agreement has been signed on Friday October 14, 2005, during a special event at the EquipAuto show in Paris, with keynote speech of Mr Benoît Formery (Ministry for industry), Mr Jacques Seris (Ministry for research), Mr Pierre Beuzit (Renault) and Mr Dominique Vernay (System@Tic Paris Region competitiveness cluster).

This strategic partnership for “Embedded software for automotive electronics” is a major automotive R&D project of System@Tic Paris Region Cluster, gathering manufacturers, equipment suppliers and techno-providers (11 founder members and 1 associated member) : 6 industrial partners (Renault, Renault Trucks, Delphi, Freescale, Siemens VDO, Valeo and Visteon) and 5 research laboratories (CEA LIST, INRIA, CNRS/STIC, INRETS and ARMINES). Num@tec Automotive project objectives will be focussed on embedded system software and architectures :

- Electronics / software architectures and dependability
- Dependability
- Software methods and tools
- Diagnostics
- HMI with 15 years
- Algorithms and data fusion

More: www.num@tec-automotive.com

N E W S

INNOVATION

Innovation scoreboard: Summaries of Member States results

Innovation performance observed in the 25 Member States is extremely diverse. The following abstracts for each country are extracted from the innovation strengths and weaknesses thematic report accompanying the European Innovation Scoreboard. [Link](#)

2004 - 2005 Country Reports on innovation policy trends

The 2004-2005 country reports and country group reports on annual innovation policy trends have been published on the Trendchart website.

The 35 reports provide an in-depth analysis of policy trends in 2004-2005 and an assessment of the overall environment for innovation and cover all 25 EU Member States, Romania, Bulgaria, the three associated EFTA countries,

Switzerland and Turkey as well as three country groups outside Europe: NAFTA/Brazil, the Asian countries and the MEDA countries. [Link](#)

Friday 20th January: Boosting European research and innovation: Hampton Court follow-up

The group established by the Commission after the Hampton Court Council to look at Europe’s research and innovation challenges in the face of globalisation will present its report to the Commission.

The Group is chaired by Esko Aho, former Prime Minister of Finland, and a driving force behind the high levels of innovation and research in Finland. Other members of the group are Catalonian Minister of Industry Antoni Subira, Chairman of the Commission’s Information Technology Advisory Group Jo Cornu and Professor Luke Georghiu of Manchester Business School.

The report will give a brief diagnosis of the state of Europe in research and innovation and propose essential remedies. It will take a radical approach to the problem, arguing that existing efforts need to be complemented with a top down vision of what an Innovative Europe would look like, and a programme of necessary actions to achieve it that go well beyond the narrow issue of R&D expenditure.

Detailed recommendations will cover a wide range of issues such as the supply of venture capital, public procurement, Structural Funds and European Technology Platforms. [Link](#)

If you want to get the presentation made during the Press conference, please contact ARTEMIS Office

EUROPEAN TECHNOLOGY PLATFORMS

Manufacture: from inspiration to implementation

The presentation of a draft Strategic Research Agenda at the Manufacture 2005 conference marked an important milestone in the progress of this manufacturing industry initiative. European Commission coordinator Andrea Gentili looks to the future. [Link](#)

Manufacture marches on

At the Manufacture 2005 conference hosted by Rolls Royce in Derby, UK, on 6-7 December, more than 300 interested stakeholders met to exchange views on a consultation version of an ambitious Strategic Research Agenda. Over 300 representatives of industry, academia, development agencies, national and sectoral technology platforms, and other stakeholder groups met in Derby, UK, on 6-7 December for the Manufacture 2005 conference, ‘Making it in Europe’. This was the third in a series of annual conferences addressing the need for a concerted research effort to sustain the competitiveness and employment capacity of European manufacturing. [Link](#)

VARIOUS

Home State Taxation pilot project for SMEs: frequently asked questions. [Link](#)

Employment in High Technology, Statistics in Focus. Employment in the manufacturing sector decreased between 1999 and 2004 in the EU-15, especially in the High Tech manufacturing sector. On the contrary employment in total services increased during the same period, in particular in the High Tech “Knowledge Intensive Services” (KIS). German regions were in the lead in high and medium high tech manufacturing in 2004 while capital regions specialised in KIS. [Link](#)

B U S I N E S S

INTELLECTUAL PROPERTY: ARM’s Reach with IP .

The jewel in England’s microelectronics crown is ARM Holdings, which has established a runaway lead in the field of semiconductor IP. The question now is whether ARM will forever be tethered to its current market? [Link](#)

CALL for Papers

EC set to review 15 RoHS exemptions
The European Commission has launched a public consultation for stakeholders on a new set of 15 proposed substance application exemptions under the Restriction of Hazardous Substances (RoHS) Directive. Comments must be submitted by February 10, 2006.

[More](#)

For embedded consumer electronics players, it’s all about the Web. Bob Perry, vice president of consumer electronic sales at TV giant LG Electronics, sounded surprisingly like Bill Gates or Paul Otellini as he rolled out three portable media players at the Consumer Electronics Show last week. [Link](#)

A rant about tools. Too many embedded software vendors seem to purposely cripple their tools by using non-standard installations and interfaces. [Link](#)

ST offers digital television reference design

STMicroelectronics has announced it has a reference design for digital television called the DTV100 that is based on the STD2000 processor, a high-definition television processor made using 90-nanometer CMOS technology. [Link](#)

Philips downplays ST as merger candidate

Without committing Philips Semiconductors one way or another, CEO Frans van Houten downplayed the prospects of fellow European chip company STMicroelectronics as a potential merger partner for the group he leads. [Link](#)

Technology centre lays foundations for growth

Rohde and Schwarz reckons its new Eur 35 million technology centre is an important step forward toward further growth and innovation. [Link](#)

ARM, CMP extend licensing to include ESL tools

ARM has extended its licensing deal with French group Circuits-Multi-Projects (CMP), who will use ARM’s RealView CREATE Electronic System Level (ESL) tools for SoC projects in universities and research laboratories across Europe, Turkey, Egypt and Israel. [Link](#)

Nokia, Kyocera resolve dispute

Kyocera and Nokia entered into a patent license agreement involving Nokia’s patents relating to CDMA, PHS and PDC standards. [Link](#)

Ember, ST team for ZigBee chip platforms

STMicroelectronics and Ember Corporation have teamed to develop complete solutions for the fast growing ZigBee wireless networking market. [Link](#)

Report: Philips boosts stake in China TV maker

A Chinese business unit of Royal Philips Electronics NV will buy an additional 5 percent stake in Chinese television and mobile phone maker TCL Corp., becoming the company’s third-largest shareholder, TCL said in an Associated Press report. [Link](#)

Double-digit growth all round at R and S

With consolidated sales of Eur 1.1 billion and 20% sales growth, Rohde and Schwarz has just completed the most successful year in its history. [Link](#)

Achieving environmental compliance requires a strategic plan

OEMs face several key challenges in developing an environmental compliance plan. To do it right, it will be critical for companies to develop a compliance roadmap and implement a structured environmental monitoring and compliance process. [Link](#)

Automotive gateways spearhead in-car network integration

Electronic gateways must provide bandwidth and latency in tying together diverse data buses. Here's what challenges design engineers face, and how to overcome them. [Link](#)

CES: OpenMAX IL 1.0 embedded media codec spec ratified

At the Consumer Electronics Show, The Khronos Group announced it has ratified and publicly released the royalty-free OpenMAX IL 1.0 specification that defines consumer media component interfaces. [Link](#)

Software expands scope of wireless testers

New PC-based multiformat OFDM analysis and generation software extends wireless test instruments to emerging technologies such as WiMAX, 802.11n, Super3G, 4G and ISDB-T and DVB-T. [Link](#)

Too many options tie home networks in KNOTS

From wired to wireless, technologies must achieve ease of use if they are to win out. [Link](#)

European research attacks CMOS leakage current

The European Commission has agreed to provide 4.5 million euro (about \$5.4 million) to a consortium of 14 European research institutes and companies to help fund the development of CMOS manufacturing processes below 65-nm with reduced leakage current. [Link](#)

Reference design supports wireless video monitoring systems

Vishay's design features a 2.4-GHz wireless link with ranges up to 1000m for home intercoms, video baby monitors, home video monitoring systems, and business video surveillance. [Link](#)

SmartLabs announces partners for its home networking protocol

Perception Automation and Home Automated Living (HAL) will use INSTEON and develop apps for the Mac and PCs. [Link](#)

ICT for Biomedical Sciences, 29 - 30 June 2006, Brussels, Belgium

(12/01/2006) The synergy of ICT with Biomedical Sciences has led to great advances in health and information technology. This conference will provide a platform where the developments of ICT research and life science research meet, to present achievements to date, to discuss future challenges including common strategies for issues of mutual interest, and to communicate the benefits to everyday life to every person in Europe and beyond. Contact: ehhealth@cec.eu.int

IST Research Programme - Call 6 Information Day on International co-operation, 27 January 2006, Brussels, Belgium

(12/01/2006) This information day will cover targeted research actions in the fields of GRID technologies (target country : China) and Digital broadcasting/mobile convergence (target countries/areas : China and Latin America). Registration to this Information Day is free of charge and mandatory. The European Commission will also organise information days on the same topics in Shanghai (22 February 2006) and Beijing (23 February 2006). [Link](#)

Finland: International Innovation Pressure Conference, 15-17 March 2006

The conference "International INNOVATION PRESSURE - Rethinking Competitiveness, Policy and Society in a Globalised Economy" will be held in Tampere in Finland on 15 - 17 March 2006.

The event aims to bring together leading international producers and users of innovation related studies and to provide a forum to discuss development trends and aspects of innovation in various contexts. The conference will be dominated by the central topic of "rethinking competitiveness, policy and society in a globalised economy". [More](#)

Advanced simulation eases UWB RFIC design flow

Designing an MB-OFDM UWB radio becomes easier when high-performance circuit simulation is combined with reliable electromagnetic extraction in a single flow. [Link](#)

Industrial Design Services

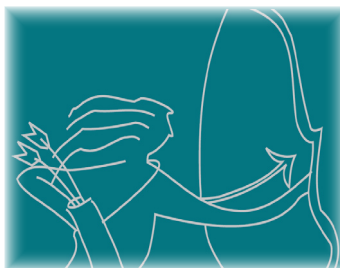
Industrial design services develop and enhance the appearance, usability, and value of many types of products. Considerations include product styling and architecture, as well as ergonomic and safety considerations. Global-Spec provides you with contact information for 99 manufacturers in this category. [Link](#)

Low-frequency, voltage-controlled oscillator has adjustable duty cycle

Using a few op amps and diodes, engineers can implement a low-frequency VCO which is useful in many basic system designs. [Link](#)

CPU power control: Compare single-edge, dual-edge controller architectures

Current requirements in the past eight years have increased dramatically from 30A to peak currents as high as 130A. Slew rate requirements have increased in a similar manner as have voltage transitions to levels exceeding 300V/microsecond, add to that tighter voltage accuracy of the CPU. The days of using a single-phase switching regulator to address these stringent requirements are long gone. Here's some help navigating these demands with better controller architectures. [Link](#)



Know the power considerations for Voice over IP and other critical network applications

Voice over IP (VoIP) is emerging as a critical IT concern for businesses. Moving to IP telephony is a key decision in the evolution of an enterprise network. Here's how to supply reliable, uninterrupted power to IP telephones, wireless LAN access points, and other devices. [Link](#)

CES: Mobility and media built into devices

Technology that enables smaller, more media-ready mobile devices was rolled out at this week's Consumer Electronics Show. [Link](#)

A better path to video-over-wireless LAN

Video multimedia sharing is critical to the convergence of consumer electronics and wireless networking. A wireless networking technology is required that is capable of providing sufficiently high bit rates to support the distribution of video and HDTV streams from a central location, along with total-home coverage. Video applications cannot tolerate bandwidth fluctuations, so guaranteed bandwidth and

quality-of-service (QoS) are essential requirements. [Link](#)

GALILEO on track: successful launch of the GIOVE-A satellite

GALILEO, Europe's global satellite navigation system is now a concrete reality. Today, the 600-Kilogram GIOVE-A satellite, manufactured by the British company Surrey Satellite Technology Limited, was placed in a 23,222 kilometres orbit by a Soyuz rocket from the Baikonur cosmodrome in Kazakhstan. Jacques Barrot, Vice-President of the European Commission responsible for transport declared: "radionavigation based on GALILEO will be a feature of everyday's life, helping to avoid traffic jams and tracking dangerous cargos, for example. The launch of GIOVE today is the proof that Europe can deliver ambitious projects to the benefit of its citizens and companies".

Radio reference design has universal appeal

A reference design for a universal tuner box plugs into satellite-ready head units, enabling them to receive digital AM and FM signals, as well as FM multicast signals. [Link](#)

P R O D U C T S

Free multicore debug configuration tool available

To help developers just getting their feet wet in their first multicore SoC or multiprocessor designs, Lauterbach is providing a free extension to its TRACE32 debug tool, called T32Start. [Link](#)

Conduction cooled audio card has front and rear I/O - AcQ InduCom [Link](#)

Boards adapt to video and display interface standards - Inova Semiconductors [Link](#)

Single-chip broadcast decoder speeds transition to PCI Express

Conexant has introduced a single-chip broadcast decoder that is designed to help consumer electronics manufacturers speed the transition to PCI Express (PCIe). [Link](#)

RF connectors deliver fast connectivity, secure termination - [Link](#)

Broadcom launches Wi-Fi video phone chipset

The chipset includes the company's mobile VoIP processor; its single-chip 802.11b/g WLAN solution; and its VideoCore multimedia processor. [Link](#)

Verification software cuts costly mask respins

Calibre OPCverify signals the beginning of a new generation of OPC technology, and expands the design for manufacturing (DFM) solutions from Mentor. [Link](#)

GPS-enabled logger knows where it's at

The DaqLog 4000/GPS is a stand-alone data logger that uses GPS technology to identify its location and the standard GSM network to communicate with a modem-equipped PC. [Link](#)

Flash microcontroller meets USB specs

Atmel has been granted certification by the USB Implementers Forum (USB-IF) for its AT91SAM7S64 ARM-based 32bit Flash microcontroller. [Link](#)

ARTEMIS OFFICE

IVO BETTENS

Head of Office

Tél: +32 2 627 03 24

ivo.bettens@thalesgroup.com

Sophie BATAS BJELIC

Editor

Té:: +32 2 627 03 17

Fax: +32 2 627 03 20

sophie.batasbjelic@thalesgroup.com

Thales Succursale

Boite 3

Avenue de Cortenbergh 60

1000 Brussels

Belgium

artemis2005@thalesgroup.com