

28 March 2007

Dear Reader,



The Network of Excellence (NoE) Patent-DfMM aims to establish a collaborative team to provide

European industry with support in the field of "Design for Micro & Nano Manufacture (DfMM)" to ensure that problems affecting the manufacturing and reliability of products based on micro & nano technologies (MNT) can be addressed before prototyping and production. For more information: <http://www.patent-dfmm.org/>

Welcome to the new edition of our bi-monthly E-Newsletter, which will keep you updated on project related activities, but also on other DfMM activities that run outside of the project.

We apologise in case you have been added to our database in error: if so, please reply by e-mail with "UNSUBSCRIBE" in the subject field.

We welcome your comments and contributions.
Happy reading!

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www.patent-dfmm.org

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News from the NoE Patent-DfMM

PATENT-DfMM / NEXUS Workshop on Design for Reliability and Manufacturability in MNT, 24 Apr 07, Stresa, Italy

(In conjunction with DTIP 25-27 Apr 2007)

This event is co-organised by PATENT-DfMM and the NEXUS Methodology Working Groups "Reliability & Test" and "Design Modelling Simulation". It will be held in conjunction with the DTIP Design Test Integration and Packaging Conference, 25-27 Apr 2007.

Main emphasis will be on reliability and test problems, where design methodologies can lead to significant improvements.

The workshop will discuss how to leverage the design, reliability and test communities over the coming years for the benefit of European competitiveness; this will include the need for new European and International collaborative initiatives. In addition, further industry demand for advances in Design, Reliability and Test capability will be addressed. More information will be published at www.patent-dfmm.org

PATENT-DfMM and NEXUS are also co-organising a special session within DTIP on "Opportunities for Cooperative R&D" (25 Apr) and a panel discussion on "Design for Reliability and Test of Microsystems" (26 Apr). In the panel industrial microsystems manufacturers will present the way they deal with reliability and test issues currently and what their main challenges are. Also results from the Workshop on 24 April will be summarised. Registration to DTIP is required.

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PATENT-DfMM and INTEGRAMplus to present/exhibit at CEMMNT Launch Event, 2 May, Loughborough, UK

The Centre of Excellence in Metrology for Micro and Nano Technologies (CEMMNT) celebrates its official launch on Wednesday, 2 May 2007, at the Systems Engineering Innovation Centre (SEIC) in Loughborough, UK. CEMMNT provides industry with open access to measurement and characterisation techniques and expertise. A NEXUS sponsored FP7 brokerage session is integral to the event which aims to bring together over 150 major players in Micro and Nano Technology (MNT). The meeting includes technical presentations, panel discussions, an exhibition and ample networking opportunities.

More information: www.cemmnt.co.uk/events.html

PATENT-DfMM to showcase its (planned) Services at Europractice Exhibitions

Having joined the Europractice Family of Microsystems Service Projects in 2006, the "Design for Micro & Nano Manufacture Network" is taking part in this year's Europractice booths at Smart Systems Integration (Paris, France, 27-28 Mar 2007) and Hannover Fair (Hannover, Germany, 16-20 April 2007). At Hannover Fair the Europractice booth will be located within the IVAM Microtechnology area in exhibit hall 015, D34. PATENT-DfMM will showcase its services to industry, some of which already on offer, others still under development:

- . ETS - Embedded Test Solutions for MNT-based Systems
- . HUMS - Health and Usage Monitoring Microsystems
- . Eumirel - European Microsystems Reliability Service Cluster
- . MEF - Service Cluster Micro-ElectronicFluidics
- . Systems Design and Design Support for MNT-based Systems

PATENT-DfMM project partners are keen on discussing industry requirements and needs for such services with potential users. As not all specialists will be available at the exhibition for the complete week, it is advised to make appointments prior to the exhibition.

PATENT-DfMM is also planning to be available for discussion and inquiries at the following events:

- . AMAA 2007 - Advanced Microsystems for Automotive Applications (Berlin, Germany, 9-10 May 2007)
- . METRIC (Pittsburgh, USA, 14-16 May 2007)
- . MINOS Brokerage Event (Bucharest, Romania, 23-24 May 2007)
- . Transducers / Eurosensors (Lyon, 11-14 Jun 2007)

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News from the DfMM community

MEMUNITY Workshop on March 6 in Grenoble, France – Presentations available

MEMUNITY likes to thank all speakers and attendees for a successful workshop in Grenoble at Minatec. The high number of registrations – the workshop was fully booked – demonstrates the growing interest in the MEMS field. The one-day workshop consisted of experiences, solutions and measurements all around MEMS presented via talks and a setup of SUSS and Polytec equipment and was concluded by a visit to different CEA-LETI and Minatec facilities. All presentations held during the workshop are available free of charge within MEMUNITY's member area: www.memunity.org.

Event Announcements

2nd MINOS-EURONET Strategy Forum "Micro-Nanotechnologies in Future manufacturing", 12-13 Apr 07, Vilnius, Lithuania

The Forum will provide the present status and the future vision of manufacturing industry in the Baltic Region with focus on Micro-Nano related technologies. European and Regional participants will present their point of view on the selected field. The forum seeks to bring together a range of public and private stakeholders focused around this strategically important area. The first day is focused on Micro-Nano technologies in 7th Framework Programme and RTD policy and ESF investment priorities for 2007-2013, while the second day is devoted to Micro-Nano technologies in Baltic region.

More information: www.minos-euro.net

DTIP, 25-27 Apr 07, Stresa, Italy

DTIP is the symposium on Design, Test, Integration and Packaging of MEMS and MOEMS. The goal of DTIP is to provide a forum for in-depth investigations and interdisciplinary discussions involving design, modelling, testing, micromachining, microfabrication, integration and packaging of structures, devices, and systems.

More information at <http://tima.imag.fr/conferences/dtip>

Mini-symposium on "Computational methods for Micro and Nano Systems" at the US National Congress on Computational Mechanics, 22-26 Jul 07, San Francisco, CA, USA

The purpose of this symposium is to focus on the most recent developments in the fields of numerical methods for the simulation of the mechanical responses of MEMS and NEMS. Particular attention will be devoted to procedures able to merge experiments and simulations and to help in assessing the reliability of micro and nano systems. Issues like micro fluidics, damping, topology optimization, nanoscale simulations, fracture, poly-crystal simulations will all be of interest in the symposium. More information about the congress: <http://www.me.berkeley.edu/compmat/USACM/main.html>

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COMS2007 - International Conference on Commercialisation of Micro and Nano Systems, 2-7 Sep 07, Melbourne, Australia

For the first time COMS will be held in the Asia-Pacific region. COMS2007 will focus on the commercialization of micro and nano systems – bringing together hundreds of international delegates to hear from and interact with a broad range of industry experts, including researchers, suppliers, end-users and venture capitalists. Come and discover Australia's dynamic nanotechnology community, participate in interactive sessions, product demonstrations and facility tours.

The official COMS 2007 website: www.mancef-coms2007.org

Other Events

12 -13 April 2007

Second MINOS-EURONET Strategy Forum "Micro-Nanotechnologies in Future manufacturing"
Vilnius, Lithuania

www.minos-euro.net

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16 - 19 April 2007

STIMESI training course on MEMS Design and INTEGRAMplus Prototyping Services

Warsaw, Poland

www.stimesi.org

16 - 20 April 2007

DATE 07 Design, Automation and Test in Europe

Nice, Côte d'Azur, France

www.date-conference.com

16 - 20 April 2007

HANNOVER Fair

Hannover, Germany

www.hannovermesse.de

18 April 2007

4M "Ceramic and Sensors & Actuators" cluster meeting at Hannover Fair

Hannover, Germany

www.4m-net.org/node/1826

24 April 2007

PATENT-DfMM/ NEXUS Workshop on Design for Reliability and Manufacturability

Stresa, Lago Maggiore, Italy

www.patent-dfmm.org

24 - 26 April 2007

STIMESI Training Course "Sensor & Tronics : MEMS processes"

Lausanne, Switzerland

<http://www.stimesi.org/pdf/Sensoror-Tronics1H2007.pdf>

25 - 27 April 2007

DTIP 2007 - SYMPOSIUM on Design, Test, Integration and Packaging of MEMS/MOEMS

Stresa, Lago Maggiore, Italy

<http://tima.imag.fr/conferences/dtip/>

2 May 2007

CEMNT Launch Event

Loughborough, UK

www.cemmnt.co.uk/events.html

9 - 10 May 2007

AMAA 2007 - Advanced Microsystems for Automotive Applications

Berlin, Germany

www.amaa.de

22 - 24 May 2007

MEDEA+ Design Automation Conference "Nano-Electronics towards System Integration: The EDA Challenge"

Grenoble, France

www.medeaplus.org/web/events/events_upcoming

Abstract deadlines for conferences

Call for Papers: THERMINIC'07 Int'l Workshop on Thermal investigations of ICs and Systems, 17-19 Sep 07, Budapest, Hungary

Submission deadline: 30 April 2007

THERMINIC Workshops are a series of events to discuss the essential thermal questions of microelectronic microstructures and electronic parts in general. These questions are becoming more and

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more crucial with the increasing element density of circuits packaged together and with the move to nanotechnology. These trends are calling for thermal simulation, monitoring and cooling. Thermal management is expected to become an increasingly dominating factor of a system's cost. The growing power dissipated in a package, the mobile parts of microsystems raise new thermal problems to be solved in the near future necessitating the regular discussion of the experts in these fields. Finally, there is an increasing need for accurate assessment of the boundary conditions used in the analysis of electronic parts, which requires a concurrent solution of the thermal behaviour of the whole system.

More information: <http://tima.imag.fr/conferences/therminic/>

World Congress of Computational Mechanics and European Congress on Computational Methods in Applied Sciences and Engineering, 30 Jun - 5 Jul 08, Venice, Italy

The International Association for Computational Mechanics (IACM) and the European Community on Computational Methods in Applied Sciences (ECCOMAS) are happy to announce the joint organization of the 8th World Congress on Computational Mechanics (WCCM8) and the 5th European Congress on Computational Methods in Applied Sciences and Engineering (ECCOMAS 2008) to be held at the Lido Island in Venice (Italy) on 30 June - 5 July 2008. Authors are invited to submit individual contributions to any of the Congress topics listed in the Call for contributions. Both, registration and submission of abstracts and, once being accepted, final contribution, should be submitted electronically. More information: <http://congress.cimne.upc.es/iacm08/frontal/default.asp>

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THERMINIC 2007

17 - 19 September 2007

Budapest, Hungary

Abstract Deadline: 30 Apr 07

<http://tima.imag.fr/conferences/therminic/>

CAS2007 International Semiconductor Conference

15 - 17 October 2007

Sinaia, Romania

Abstract Deadline: 10 Jun 07

www.imt.ro/cas

COMSOL Conference 2007

23 - 24 October 2007

Grenoble, France

Abstract Deadline: 29 Jun 07

www.femlab.de/conference2007/europe/welcome

Next issue planned : **4 May 2007** (deadline for contributions: **1 May 07**)

Please feel free to send us any DfMM-related news that might be of interest for our readership.

This e-mail newsletter contains public information, only. Please feel free to distribute it to anyone who might be interested in the topics.

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Published on behalf of the project "Design for Micro & Nano Manufacture (Patent-DfMM)", a Network of Excellence funded by the European Commission DG INFSO E5 within the Information Society Technologies (IST) Programme of FP6.

www.patent-dfmm.org

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