

IEEE PORTABLE 2007

International Conference on Portable Information Devices

An IEEE @ CTIA WIRELESS 2007® Interdisciplinary-Intersociety Event

Co-located with IEEE ComSoc 802.16e Standards Symposium and
IEEE BTS International Symposium on Broadband Multimedia Systems and Broadcasting
Orange County Convention Center, Orlando, FL USA / 25-29 March / www.ieee-ctiawireless.org



Sponsoring IEEE entities:

IEEE Technical Activities Board (TAB) New Technology Directions Committee (NTDC)
IEEE Components Packaging and Manufacturing Technology Society (CPMTS)
IEEE Broadcast Technology Society (BTS)
IEEE Communications Society (ComSoc)

Technical co-Sponsors:

IEEE Engineering in Medicine and Biology Society (EMBS)
IEEE Vehicular Technology Society (VTS)
University of California at Santa Cruz (UCSC)

CALL FOR PARTICIPATION

“Any sufficiently advanced technology is indistinguishable from magic”

Arthur C. Clarke – Science Fiction Author

Over the past decade, progress in Portable Information Devices (PIDs) has revolutionized telecommunications, information engineering, and entertainment systems, and become an essential part of everyday life and business. PIDs make possible vastly enhanced lifestyles - from basics such as reading, note taking, or listening to music, to crunching numbers, watching videos, and following news and sports events while on the go. Today's PIDs include cellular phones, personal digital assistants, medical devices, intelligent clothing, and iPods. Some devices provide built-in organizers for shopping lists, scheduling and appointments, phone numbers, address books, customer contacts, even games and video display. Both hardware and software are equally important in the design, use and reliability of these devices, which should be easy to handle and operate, and last a long time.

IEEE PORTABLE 2007 will bring together communications, electrical, industrial, manufacturing, materials, mechanical, optical, and reliability engineers and business leaders involved in various types of PIDs, to address and discuss state-of-the-art challenges, attributes and pitfalls in PID-related areas of engineering and applied science, with an emphasis on the interaction of the hardware and software, as well as their functional and physical (mechanical) performance, reliability and durability. Visit: www.ieee-portable.org/2007

CALL FOR PAPERS

IEEE PORTABLE 2007 seeks technical papers (initially in the form of extended abstracts, then in the form of full-length papers), tutorial presentations, panel discussions, and trade-show-like demonstrations on different aspects of PID engineering, including - but not limited to - the following topics, technologies and directions.

Topics: Cell Phones (including “Smart” Cell Phones) • Medical Devices • Intelligent Clothing • Portable Digital Assistants (PDAs) • Portable Musical Devices (e.g. MP3 Players) • Portable Video Devices • Portable Multimedia Devices • Global Positioning Systems (GPS) • Hand-held (“Wearable”) Computers (HHC) • Multi-function entertainment and communications terminals

Technologies: New and emerging PID Technologies • Wireless Technologies (Antennas, RF Circuits, Signal Processing, Security) • Microwave Technologies • Input/Output (User Interfaces, Displays) • Distributed Networking (peer-to-peer, wireline-wireless) • Battery/Power (microfuel cells, others) • Sensors

Directions: PID Packaging • Functional (Electrical, Optical), Physical (Mechanical) and Thermal Design • Manufacturing • Materials (with an emphasis on Nano- and Polymeric Materials) • Reliability and Performance in Harsh Environments • Shock Protection; Power Generation, Supply and Conversion • Advanced Experimental Techniques and Testing • Predictive Modeling.

Other areas include: Voice and Image Recognition and Processing • Audio and Video Processing • Bio-Medical Applications • Nanotechnology Applications • Economics and Business Related Problems • Homeland Security-Related Issues • Impact on Society and other Social Areas • Home Entertainment Systems and Networks.

Duration and Content:

It is anticipated that eight half-day tutorials will be held: four on Sunday, March 25 (the day preceding the conference), two on Monday afternoon, and two on Tuesday afternoon. A welcome reception will be held on Sunday evening, with a dinner on Monday evening. Keynote presentations, invited talks, technical sessions and business-related panel discussions will be held Monday through Tuesday, 26-27 March. The CTIA exhibit floor will be open Tuesday, Wednesday and Thursday, 27-29 March.

Steering Committee:

General Co-Chairs: Ephraim Suhir (University of California, USA), Curtis Siller (IEEE ComSoc Past President, USA), Tom Gurley (IEEE BTS President, USA)

Administrative Assistant: Nicole Tom (UCSC, USA)

Technical Program Co-Chairs: Rolf Aschenbrenner (Fraunhofer Institute, Germany), Claire Gu (UCSC, USA), Hideo Itoh (AIST, Japan), Kanji Otsuka (Meisei Univ., Japan), Algirdas Pakstas (LONDONMET, UK), Tong-Yan Tee (STMicroelectronics, Singapore)

Keynote/Panel Sessions Co-Chairs: Ephraim Suhir (UCSC, USA) and David Whalley (Loughborough Univ., UK)

Tutorial Co-Chairs: John Emerson (Sandia National Laboratories, USA), Ramesh Harjani (University of Minnesota, USA), Demin Wang (Communications Research Center, Canada), Yiyang Wu (Communications Research Center, Canada)

Publicity Co-Chairs: Mario El-Khoury (CSEM, Switzerland), Joseph Fjelstad (SiliconPipe, Inc, USA), Michael Kincaid (IEEE ComSoc, USA), David Whalley (Loughborough Univ., UK),

Publications Co-Chairs: Ephraim Suhir (UCSC, USA), Heather Yu (Panasonic, USA)

Demonstrations Co-Chairs: Debora Kingston (IEEE ComSoc, USA), Tom Gurley (IEEE BTS, USA)

Meeting Management: Debora Kingston, IEEE Communications Society

Liaison with CTIA: Debora Kingston / Brian Bigalke, IEEE Communications Society

Liaison with IEEE and non-IEEE entities: Ephraim Suhir (UCSC, USA), Bichlien Hoang (IEEE NTDC, USA)

Local Hosts: Joe Juisai and Thomas M. Wandeloski (both IEEE Orlando Chapter)

Organizing Committee (Partial List):

Joe Barrett (Intel, USA), Avram Bar-Cohen (UMD, USA), Phil Chan (HKUST, Hong Kong), George McClure (IEEE, USA), Rich Cox (AT&T, USA), Steve Diamond (IEEE, USA), Mario El-Khoury (CSEM, Switzerland), Harvey Freeman (Booz Allen Hamilton, USA), Alex Gelman (Panasonic, USA), Reza Ghaffarian (NASA, USA), William Gruver (Intelligent Robotics Corporation, USA), Ronald Kelley (Motorola, USA), Jorma Kivilahti (HUT, Finland), Ricky Lee (HKUST, Hong Kong), Robert Lorenz (IEEE, USA), Petri Mahonen (MOBNETS, Germany), Louis Manzione (Lucent, Ireland), Wataru Nakayama (Japan), Shlomo Novotny (AAVID, USA), Kanji Otsuka (EI MEISEI-U, Japan), CP Wong (Georgia Tech, USA), Heather Yu (Panasonic, USA), Richard Ziolkowski (Univ. of Arizona, USA).

Abstract Submission:

Extended abstracts, in English, should consist of a minimum 1000 words and a maximum of 1500 words, with relevant figures and tables. Abstracts should include the following sections: 1) background/incentive/motivation; 2) objective(s); 3) approach; 4) major results; 5) conclusions and recommendations; 6) future directions; and 7) references. The abstracts will be reviewed by the Technical Program Committee. A *preliminary* decision as to scheduling a talk as part of the Conference program will be based on the submitted abstract. The *final* decision will be made based on a subsequent full-length (typically 6-pages) paper.

Schedule for Abstract and Paper Submissions:

Deadline for Submission of Extended Abstract:	1 June 2006
Notification of Abstract Receipt and Tentative Acceptance:	1 July 2006
Full-Length Paper Due:	1 September 2006
Notification of Full Paper Acceptance:	15 November 2006
Final Papers Due:	6 January 2007

All paper submissions will be handled electronically through the EDAS paper submission system. Details regarding the paper format and the submission process can be found by visiting: www.ieee-portable.org/2007.

Accepted papers will be published in the conference proceedings and will appear in IEEE Xplore. Further, accepted papers must have at least one registration at the regular rate. For authors co-authoring multiple papers, one regular registration is valid for up to three papers.

CALL FOR TUTORIALS

Proposals for half-day tutorials are also solicited, based on the topics above or others related to issues and opportunities for the future of portable information communications, systems and applications. Tutorial presenters will receive an honorarium.

Please submit tutorial proposals (*including a record of previous tutorials presented*) by e-mail to Nicole Tom at Nicole@soe.ucsc.edu, with copy to E. Suhir at suhire@aol.com, and Curtis Siller at c.siller@comsoc.org. Questions, if any, should be directed to Ephraim Suhir, Curtis Siller, and/or to the tutorial co-chairs: John Emerson (jaemers@sandia.gov), Ramesh Harjani (harjani@umn.edu), Yiyang Wu (yiyang.wu@crc.ca), and Demin Wang (demin.wang@crc.ca).

- Tutorial proposal deadline: 1 September 2006 (firm)
- Acceptance notification deadline: 15 October 2006
- Tutorial handouts/materials deadline: 15 January 2007

CALL FOR TECHNOLOGY/BUSINESS APPLICATION PANELS

Proposals are also solicited for Technology/Business Application Panels in the topical areas described above, or others related to business and policy-related issues and opportunities for the portable information communications industry. Enquiries; contact: Ephraim Suhir (suhire@aol.com) and David Whalley (D.C.Walley@lboro.ac.uk).

- Panel proposal deadline: 15 August 2006
- Panel acceptance notification deadline: 15 September 2006
- Panel speaker confirmation deadline: 20 November 2006
- Panel materials/hand out deadline: 1 January 2007

CALL FOR DEMONSTRATIONS

Submissions should be in the form of a proposal describing the main contributions of the demonstration and the merits of the proposed ideas. Authors should indicate if their demonstration presentation is a prototype or a poster. Proposals that demonstrate actual prototypes should include space, power and networking requirements. Submission details, including proposal templates, will soon be available at the conference web site www.ieee-portable.org/2007. Contact: Debora Kingston, Demonstration co-Chair, d.kingston@comsoc.org

- Demonstration proposal submission deadline: 1 September 2006
- Demonstration acceptance notification deadline: 15 October 2006