

## **IEEE Rebooting Computing Initiative, Standards Association, and Computer Society Introduce New International Roadmap for Devices and Systems to Set the Course for End-to-End Computing**

**PISCATAWAY, N.J., USA, 4 MAY 2016** – IEEE, the world's largest technical professional organization dedicated to advancing technology for humanity, today announced the launch of the International Roadmap for Devices and Systems (IRDS), a new IEEE Standards Association (IEEE-SA) Industry Connections (IC) program to be sponsored by the [IEEE Rebooting Computing \(IEEE RC\) Initiative](#) in consultation with the [IEEE Computer Society](#). Together, this group will ensure alignment and consensus across a range of stakeholders to identify trends and develop the roadmap for all of the related technologies in the computer industry.

The IRDS represents the next phase of work that began with the partnership between the IEEE RC Initiative and the [International Technology Roadmap for Semiconductors 2.0](#) (ITRS 2.0). With the launch of the IRDS program, IEEE is taking the lead in building a comprehensive, end-to-end view of the computing ecosystem, including devices, components, systems, architecture, and software. The Methods of governance, reports, and strategic roadmaps developed by the ITRS and ITRS 2.0 will inform the IRDS within the IEEE-SA IC program.

“The computer industry has benefitted from roadmaps since it was first published in 1965,” said IEEE Fellow Thomas M. Conte, 2015 president, IEEE Computer Society; co-chair, IEEE Rebooting Computing Initiative; and Professor, Schools of Computer Science, and Electrical and Computer Engineering, Georgia Institute of Technology. “Bringing the IRDS under the IEEE umbrella will create a new ‘Moore’s law’ of computer performance, and accelerate bringing to market new, novel computing technologies.”

“The broad scope of IRDS spanning from base technology through systems and architecture will create an environment where known end-requirements will drive technological solutions and decrease the time to market for implementation, ultimately creating a new Moore’s law,” added IEEE Fellow and Senior Director, IEEE Future Directions, William R. Tonti. “The integration of the work of the IRDS into IEEE and governance of the semiconductor to system roadmap through the IEEE Rebooting Computing Initiative opens the door to innovative end-to-end computing solutions.”

“Over the past decade, the structure and requirements of the electronics industry have evolved well beyond the semiconductor’s industry requirements. In line with the changes in the new electronics ecosystem, the IRDS will build upon the past groundwork and move up a level to identify challenges and include recommendations on possible solutions,” said Paolo A. Gargini, IEEE Fellow and chairman, of IRDS. “The IRDS will deliver a 15-year vision that encompasses systems and devices, setting a new direction for the future of the semiconductor, communications, IoE and computer industries.”

Participants in the IRDS will convene 12-13 May 2016 in Leuven, Belgium. Over the course of the two-day workshop, the group will review the roadmap activities of the Focus Teams (FT) and of the International Technology Working Groups (ITWG) and lay out plans for additional activities in 2016. Some of the fields of discussion include System Integration, Heterogeneous Integration, Connectivity, Future IC Devices and Factory Integration.

The IEEE Rebooting Computing Initiative is a program of the [IEEE Future Directions Committee](#), designed to develop and share educational tools, events and content for emerging technologies.

IEEE-SA's [Industry Connections](#) Program helps incubate new standards and related products and services, by facilitating collaboration among organizations and individuals as they hone and refine their thinking on rapidly changing technologies.

#### **About the IEEE Standards Association**

The IEEE Standards Association, a globally recognized standards-setting body within IEEE, develops consensus standards through an open process that engages industry and brings together a broad stakeholder community. IEEE standards set specifications and best practices based on current scientific and technological knowledge. The IEEE-SA has a portfolio of over 1,100 active standards and more than 500 standards under development. For more information visit <http://standards.ieee.org>.

#### **About IEEE**

IEEE is a large, global professional organization dedicated to advancing technology for the benefit of humanity. Through its highly cited publications, conferences, technology standards, and professional and educational activities, IEEE is the trusted voice on a wide variety of areas ranging from aerospace systems, computers and telecommunications to biomedical engineering, electric power and consumer electronics. Learn more at <http://www.ieee.org>.

###

Contacts: Carmen A. Harris, Interprose for IEEE  
+1 919.246.6074, [carmen\\_harris@interprosepr.com](mailto:carmen_harris@interprosepr.com)

Francine Tardo, IEEE  
+1 732.465.5865, [f.tardo@ieee.org](mailto:f.tardo@ieee.org)