



COMMUNICATION PLATFORMS ANNUAL SEMINAR 2009

Place: **VTT, Kaitoväylä 1, Oulu**, lecture room
Date/Time: **Tuesday 6 October 2009** at 8.30 – 12.00
Registration: By Monday 28 September 2009 (birgitta.henttunen@vtt.fi), seminar is open and free

Computing and Communication in 2010's

8.30	Registration and coffee
8.45	Opening words Kyösti Rautiola, Technology Manager, VTT
9.00	Invited keynote speech: Embedding Intelligence Ian Phillips, Prof., Principal Staff Engineer, ARM Ltd, UK
9.45	Future mobile communication systems - Implications on digital implementation Aarne Mämmelä, Research Professor, VTT
10.15	Coffee break
10.30	Smart environment scenarios – Technologies and platforms Juha-Pekka Soininen, Research Professor, VTT
11.00	Massively parallel computing – Heterogeneous/homogeneous and programming applications Martti Forsell, Chief Research Scientist, VTT
11.30	System-level modelling and exploration – Managing application and platform complexity Kari Tiensyrjä, Team Leader, VTT
12.00	Closing

Keynote speech by Ian Phillips

Abstract:

Coined in 1965, Moore's Law has been the guiding vector for the System Industry ever since. A billion-fold increase in integration density followed this law, and innovations based on its application enabling the electronic systems revolution that pervades every aspect of our lives today. We know this cannot go on forever, as silicon feature sizes approach the fundamental building blocks of matter a barrier to further shrinking must occur ... And predictions and observations seem to suggest that we may already be at its threshold! So do we face a future with no more scaling, or are the ephemeral Nano Technologies and Plastic Electronics poised in some way to perpetuate our headlong dash towards electronic ubiquity. Ian will look at some of these issues and reveal a little of his view of the future.

Biography:

Ian Phillips. Born in 1949, Ian has worked in electronics since 1964 and in microelectronic design since 1974. Graduating with a 1st from University of Swansea, Wales in 1974, he joined PYE TMC, then moved with and between the companies Philips, Plessey, GEC and Mitel before joining ARM as Principal Staff Engineer (His current role) in 1998. During this time he gained a wide appreciation of the various engineering aspects of electronic systems design and manufacture. His role in ARM is inward and outward looking, to identify and nurture technology and business opportunities before they are strong enough to be judged by normal commercial criteria. Outwardly this means he is involved with many European Research Universities, Institutions and Government Bodies, as both advisor and technology scout. He is a frequent presenter on European technical and business stages; an advocate of improved University/Industry relationships; Visiting Professor at University of Liverpool; and the winner of the 2008 NMI award for his personal Contribution to Industry.