BACKGROUND
Application domains have had a considerable impact on the evolution of embedded systems, in terms of required methodologies and supporting tools and resulting technologies. SoCs are making inroads in to the area of industrial automation to implement complex field-area intelligent devices which integrate the intelligent sensor/actuator functionality by providing on-chip signal conversion, data processing, and communication functions. There is a growing tendency to network field-area intelligent devices around industrial type of communication networks. Similar trends appear in the automotive electronic systems where the Electronic Control Units (ECUs), typically implemented as heterogeneous system-on-chip, are networked by means of one of safety-critical communication protocols such as FlexRay, for the purpose of controlling one of vehicle functions: electronic engine control, ABS, active suspension, etc. The design of this kind of networked embedded systems and cyber-physical systems (this includes also hard real-time industrial control systems) is a challenge in itself due to the distributed nature of processing elements, sharing common communication medium, and safety-critical requirements to mention some. The Internet of Things (IoT) promises to bring revolution to fields such as health care, manufacturing, smart homes, and smart city. Such systems often have to operate with extremely limited resources (e.g. low energy levels), at ultra large-scale (similar to that of Internet), while maintaining high fidelity (e.g. security and privacy).

The aim of the symposium is to bring together researchers and practitioners from industry and academia and provide them with a platform to report on recent developments, deployments, technology trends and research results, as well as initiatives related to embedded systems and their applications in a variety of industrial environments.

TOPICS INCLUDE, BUT ARE NOT LIMITED TO

System-on-Chip and Network-on-Chip Design & Testing: Design of Application-Specific Instruction-Set Processors; Design and Programming of Embedded Multiprocessors; SoC Communication and Architectures; NoC Communication and Architectures; Design of SoC/NoC; Platform-Based Design for Embedded Systems; Reconfigurable Platforms; Multiprocessor SoC Platforms and Tools; Testing of Embedded Core-based Integrated Circuits.


Embedded Applications: Cyber-physical systems and Internet of Things, including Industrial Automation and Controls; Automotive Applications; Intelligent Transportation Systems; Smart Home; Wireless Health Care; Industrial Building Automation and Control; Power (sub-) Station Automation and Control; etc. Design, maintenance, fault tolerance & dependability, networks, infrastructure; Safety and Security; Certification.

SUBMISSION OF PAPERS
Manuscripts must be submitted electronically in PDF format, according to the instructions contained in the Conference web site. Contributions must contain original unpublished work. Papers that have been concurrently submitted to other conferences or journals (double submissions) will be automatically rejected. Papers are to be submitted electronically in PDF format. Two types of submissions are solicited: Long Papers - from 6 to 10 double-column pages (typically 8 pages). Work-in-Progress Papers - limited to 4 double-column pages. For further details, please consult the conference web pages.