

Perspective on Embedded Systems: Challenges, Solutions and Research Priorities

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The societal demands in Europe for Health, Security & Safety, Energy & Environment, and the market demands in nomadic, transport, communications, entertainment products, ask for innovations and technical leadership. Enabling embedded Systems require new challenging solutions like multi-physics devices, millions of interconnected nodes, very low power for autonomy, trusted and safe operations, reliability.

The talk will introduce THALES vision and research priorities for embedded systems and will illustrate them through presentations of solutions and on-going research projects and initiatives. Thales effort related to mission-critical systems is focused on advanced high-performance embedded computing platforms, on middleware technologies, on software systems design and verification tools for safety and security and on the emergence of open standards in these domains. THALES is also actively contributing to the development of innovation eco-systems: the Joint Undertaking ARTEMIS in Europe; the Pôle de Compétitivité SYSTEM@TIC PARIS REGION in France.