

Electronic System Design Methodology: Europe's Positioning

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Abstract

The engine that drives all the ICT industries is microelectronics. By 2015, according to Mark Pinto of Bell Labs, the microelectronics industry "will be manufacturing 10 million silicon transistors per human being per day ... and the applications will exist to consume them".

Microelectronics, through its dramatic increase in performance, is the enabler of this revolution. Soon entire products - such as mobile telephones, computers and camcorders - will be based on single silicon chips, reducing product cost and price, opening new markets and boosting manufacturing.

Microelectronic chips, together with embedded software, drive the entire ICT industry, by doubling performance and halving cost every 18 months, allowing continuous innovation in products such as mobile phones and smart cards and in services like the Internet and e-commerce. The chips generate new products used by professionals and laymen: 60% of today's electronics applications have been made possible solely by the technical progress of microelectronics.

Gérard Matheron will describe how the evolution of electronic system design is changing the world