

## Nomadic Platform Approach for Wireless Mobile Multimedia

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There is a lot of talk today about the convergence of computing and communications, and the resulting transformation of the PC, television and mobile phone. Silicon technology is the engine driving this convergence, and silicon platforms will play a key role in shaping these products.

STMicroelectronics is a major global supplier of SoC ASICs for mobile and wired communications, mass storage, digital consumer electronics and automotive entertainment systems. Like other companies, ST is developing silicon platforms for convergence products to offer versatility, scalability and faster time-to-market. This signals a move from the custom ASIC model to a system solution model based on platforms and complimentary chips and software from ST and its partners.

The general platform concept is nothing new. A classic platform example is the PC with an x86 instruction-set-architecture, standardized buses and fully specified I/O devices. The basic idea of a platform is to avoid designing chips and software from scratch, and to amortize platform investment across present and future designs.

What is interesting is how companies are employing platform-strategies in new application domains at the levels of IP building blocks, complex chip design and system software. This trend is partly motivated by a need to secure strategic value chain position in rapidly evolving industries. Some of these platform strategies are unproven or in conflict with each other.

This presentation introduces the mobile application processor platform called Nomadik, and explains how it provides a roadmap for ST's vision of the mobile future. It looks at Nomadik from a SoC architecture view, a software view and an interface view, and contains information about ST strategies for hardware abstraction and interfacing external peripherals and software.