

# “Slower than you think” – The Evolution of Processor and SoC Architectures

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**Abstract.** Research projects talk about thousands of processing elements on an SoC. Various commercial companies talk about their specialised homogeneous or heterogeneous processing arrays. Graphics devices are being applied for solving a variety of computing problems outside their design domain. Finally, it seems that everyone, and their brother, is offering a multicore or multiprocessor programming model to bring all this technology under some control - and if we don't use it, we should all panic. This talk will focus on where we are and where we are likely to go with the evolution of processors and SoC architectures for embedded applications. Driven from a concrete industrial perspective, I will discuss some of the progress made in exploiting advances in processor technology and multiprocessor SoC. I will also discuss some possible future scenarios for evolution in these areas.