

*Monday Afternoon Plenary Talk*

**Configurable Processor the building block for SOC  
(System-On-a-Chip)**

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While silicon scaling makes possible highly integrated SOCs for function rich electronic products, the efforts required to design such an SOC has increased more rapidly than the transistor complexity of the SOC itself. At the same time, market competitiveness continues to demand feature differentiation and short TTM (time-to-market) for the high volume electronic products.

This talk will describe the emerging methodology of using configurable processors as the building blocks for complex SOC designs. Using processors to replace hardwired logic to accelerate hardware design and bring full chip-level programmability. Using configurability to deliver domain-specific efficiency, high throughput, low cost and low power dissipation. Configurable processor technology has made the creation and adoption of these tuned processors easy. Configurable processors have been used in a variety of high volume SOC platforms and adopted by market leaders. Will include product examples.

*Beatrice Fu is the Senior Vice President of Engineering at Tensilica Inc. Beatrice joined Tensilica in 1998 and has been responsible for the development of Tensilica's configurable processor technology. Before that, she spent 17 years with Intel Corporation holding a number of technical and management positions in semiconductor manufacturing, VLSI design, processor architecture and software development. Most recently, she was the Director of Microcomputer Software Lab responsible for the system software development for all Intel's leading edge processors. Beatrice received her BS from California Institute of Technology and her MS from UC Berkeley.*