Analog Integration in Mixed Signal SoCs – Art, Craft or Magic?

by

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Abstract: Mixed-signal – that’s the best way to describe the majority of products in the semiconductor industry today. A typical design today will integrate multiple analog macros with many digital cores, memories and IOs, all on the same mixed signal SoC. This talk will explore chip design from an analog designer’s perspective and focus on SoC level topics that are not usually considered during the design phase of high performance Analog blocks. Specific emphasis will be given to SoC level integration of Analog content, timing requirements, power domains, modeling and verification. In addition, we will touch upon Analog test and review what needs to be considered in the design phase to simplify production test.

Vinay Jayaram has been with Texas Instruments in Dallas for over 10 years and has held various positions in the Custom ASIC and Microcontroller business units. In his most recent role, he focuses on mixed-signal integration and test of Analog cores in Microcontroller products. He is a Senior Member of TI’s Technical Ladder, and graduated with a Master’s degree in Computer Engineering from Virginia Tech.