Design of a Set-Top Box System on a Chip

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Abstract

This presentation will review system-level issues associated with integrating the major blocks of a Set-Top Box onto a single die. In addition to the challenges of merging several powerful functions into a single chip, the goal of integration

is to yield a composite design that is not only more cost effective but also provides more function than the sum of discrete parts. This is accomplished through consolidated and shared memory, improved system bandwidth and efficiency, and additional inter-macro signals to facilitate improved communication.