Power and Thermal Modeling

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Abstract

The Tegra is a processor made by Nvidia which is used in many mobile applications. In designing advanced digital systems like the Tegra processor, it is essential to perform detailed simulations to understand and optimize the behaviors of many aspects of the chip. Specifically, power and thermal considerations are two co-dependent parameters that must be understood during the design phase. This project developed a flow to import existing power and thermal models of the Tegra processor into a new software package from Docea Power that integrated the power and thermal domains for simulations and architectural analysis.

The full report is confidential to the Nvidia Corporation.