



CASE STUDY

High Precision Analog Output Analog Front End (AO-AFE) Verification

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CUSTOMER & THE NEED

A Tier 1 semiconductor company providing solutions targeting automotive, industrial, mobile, and IOT markets approached Ignitarium for the verification of mixed signal circuits of the AO-AFE

DESCRIPTION

Ignitarium was responsible for the following

- Developing Wreal models and checking model vs schematic behavior
- Developing testcases and perform AMS verification, (SPICE+RTL+Models)
- Perform Safe operating checks (SOA)
- Developed Digital and Analog (Voltage and Current checkers) to ease the debug

Modeling
and
Verification

Comprehensive
AMS verification
portfolio

HIGHLIGHTS & TOOLS

- Worked on Modeling different blocks in Wreal and performed model vs schematic checks
- Developed testcases by updating the program registers, creating maestro and config views
- Testcases covered powerup, functional, ATE, and SOA checks
- Developed checkers to obtain voltage, current, delay values

TOOLS

- Cadence Virtuoso, Cadence ADEXL, Xcelium

CUSTOMER BENEFITS

- Ownership of multiple IP Modeling, SOA checks
- Ownership of around 45% of total functional and ATE testcases

Thank You

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