

CONNECTIVITY SoC – RTL TO GDS II

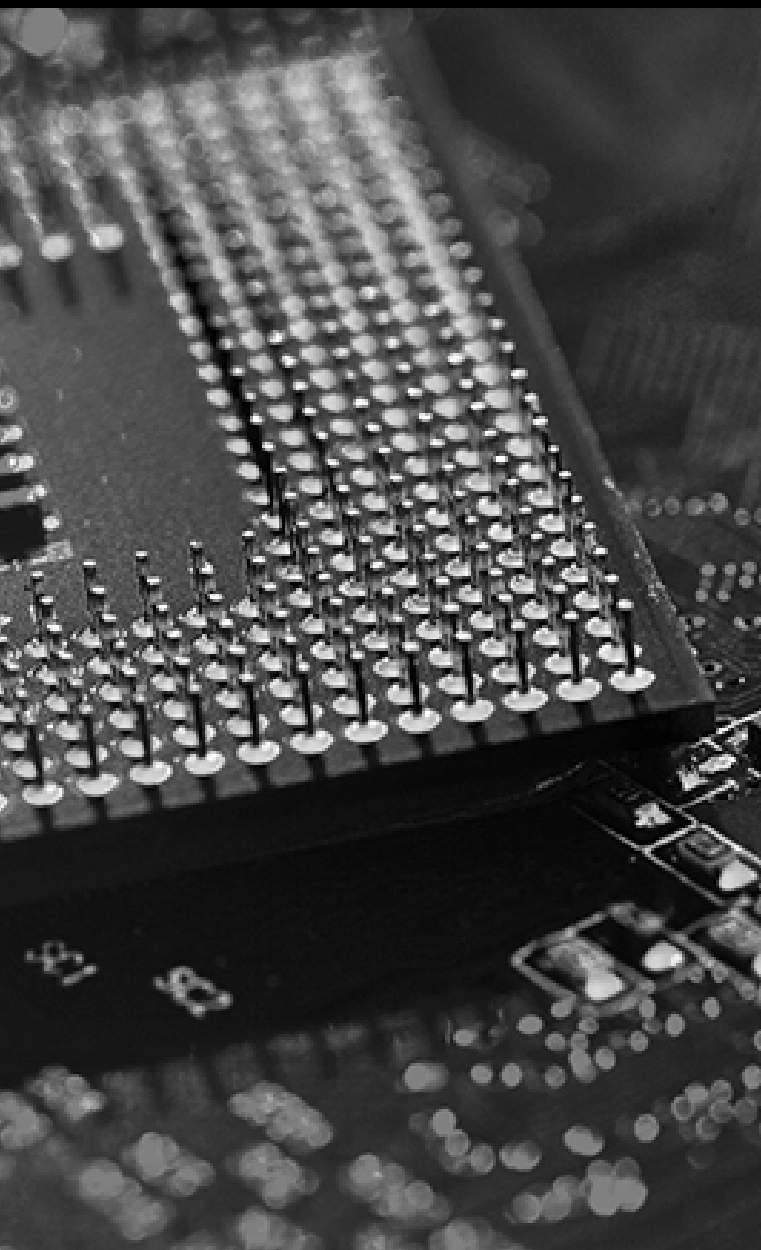


OVERVIEW

The customer is a Tier-1 Semiconductor Company and wanted a partner for Connectivity SoC derivative.

DESIGN FEATURE & CHALLENGES

- 1 WiFi & BT chip with high density, dynamic power transmission
- 2 Low tech process, low power for versatile applications
- 3 Industry leading microcontrollers at industry benchmark speeds for high performance applications
- 4 Peripherals: PCIE, SDIO, UART, I2C, SPI, PCM, I2S, JTAG covering industrial, consumer, networking use cases
- 5 PPA Optimization
- 6 Complex Low Power State Machine Verification



CONTRIBUTIONS & OUTCOME

- › Implementation of (RTL2GDSII)
- › Analyzed the Channel Length, VT analysis and its usage based on PPA targets
- › Cross talk and EMI/EMC aware designing for co-existing digital and Analog blocks in a mixed signal chip
- › DVFS aware STA corner definitions and analysis
- › Custom Placement strategy
- › DFT implementation, Coverage analysis
- › Post Silicon support
- › Full chip verification and signoff
- › First Pass Success



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