

GLS AND FUNCTIONAL VERIFICATION OF A MULTIMILLION GATE MOBILE SOC

The customer:

World leader in smartphone and tablet SoCs.

The Application:

A high end multimedia application based SoC targeting smartphone and tablet business. It is a complex SoC running on four CortexA7 and four CortexA53 processors with more than 250 IPs put in to different subsystems ranging from multimedia, modem, GPU, IPA, PMU and PUSS, with large number of voltage domains, power domains, and clock domains to fulfill the growing needs of end customer in terms of portability, advanced features and low cost.

Mirafra's Responsibility:

- Ownership of verification activities of Modem, IPA, Security, Multimedia, and DDR subsystems.
- Coding and debugging SV and C test cases for above subsystems.
- Hookup verification for modules in above subsystems.
- Development of test bench components.
- Gate level simulations for tests targeting all sub systems.
- Ownership of 1000+ tests across different subsystems in the design.

Summary and Achievements:

Team of twelve Mirafra engineers owned more than 1200 test cases across different subsystems, and filed close to 200 rtl bugs in SoC.

- Helped client execute this specific SoC based Icecream sandwich platform on time.

Engagement Model:

A team of twelve engineers for six months onsite based on T&M (Time & Material).