



Case Study

Design of a Cortex M3 Based Security Authentication SoC

Project/Client Details

- Cortex M3 based Security authentication chip with real time boot decryption engine, battery backed up tamper protection unit and USB based finger print authentication interface
- This program was done for a ***Tier 1 Semiconductor Company***

Design Scope

- SoC integration and system IP design
- IO Mux Design
- Bridge IP design
- Low power implementation
- LINT, CDC, Conformal checks
- Synthesis and Post Layout STA
- Working closely with PD and DFT team till tape-out

Highlights

Execution Highlights

- Low Power SoC
- Multiple power mode support
- Multiple Voltage domain
- Memory retention
- Clock fault monitor and switching schemes

Tools

- SV-UVM, NCSIM, Conformal LP



THANK YOU



email: info@ignitarium.com

Ignitarium Technology Solutions Pvt. Ltd.

Bangalore, India
#2615, 3rd Floor,
27th Main Road, Sector 1,
HSR Layout,
Bangalore – 560102
Phone: +91-80-30723694

Kochi, India
5th Floor, Crescens Tower,
NH-47, Changampuzha Nagar,
Kochi - 682033
Phone: +91 484 2933073

Ignitarium Inc.

United States
2570 N. First Street,
Suite 200 San Jose, CA 95131
Phone: +1 512 640 3488