

Case Study Embedded System (Power Optimization):

Title:

Reference Design implementation for Power Optimization.

Objective:

This project activity involves in optimizing power on reference designs for various use-cases like Sleep, static display and multimedia (use cases like audio, Video/Audio decode, video encode) and Data use cases like LTE, 3G and WIFI.

Description:

Optimizing Power by taking breakdown from waveforms generated by Kratos to understand battery current at each rail. Generating Debugger Extensions for Windbg, by understanding clock voltage plans of chip designs for every use-cases. If anything is not according to plans then debugging for root cause using Windbg. Also analysing the impact using log files (.etl's) with the help of Windows Performance Analyser (WPA) and then optimizing the power based on various log files and crash dumps that are collected using Windbg from various subsystems.

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Languages & Tools:

- Kratos, Power Monitor, Windows Performance Analyser (WPA),
- GPIO Profiler, Crash Scope, Perforce and customer proprietary tools
- C programming.