Linux Driver Development

Business Challenge

Codecs interface (in FPGA) and Linux device driver developed in parallel.
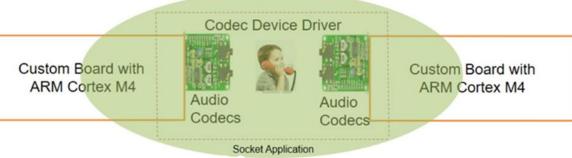
Requirement

This project involves developing device driver for audio codecs in VoIP domain. The custom board has audio codecs designed in the FPGA. The implemented device driver access/control the audio codecs through memory mapped registers using IOCTL functions which is part of the Linux device driver.

Technology & Tools

- Programming language - C
- Hardware - ARM Cortex M4 based custom board
- OS - Linux 3.x kernel
- Tools - Trace 32 debugger.

Value add by Mirafra

- Analyse the audio codecs data sheet and Board features
- Develop the Linux device driver for the audio codecs
- Develop the VoIP Socket application to test the device driver.
- Test completion
- Completion of project by planned finished timelines

Codec Device Driver

Custom Board with ARM Cortex M4

Audio Codecs

Audio Codecs

Custom Board with ARM Cortex M4

Socket Application

mirafra
TECHNOLOGIES