



Success Story A Fortune 500 Japan-based Telecom Company

RT Linux Porting

The Challenge

- The objective of the project was to port real time Linux module over the IXP425 processor so that both Linux and real-time Linux operating systems run and take care of normal and real time applications.
- The project also required running the sample application on RT Linux and Linux and observing the performance response in both the environments under similar configuration.

Solution

- Linux kernel was ported to IXP425 architecture. This was done by applying arm-specific patches available on Internet
- Analyzing the changes required to port real time Linux path for strong-arm over IXP425, which is based on Xscale architecture
- Changes made to multiple features including interrupt handling, GPIO, timer processing, scheduler and real time FIFO mechanism

Benefits

- ◆ Expertise developed in the area of Linux and real time Linux concepts
- ◆ Expertise developed in the porting and implementing the real-time OS concepts on ARM-based IXP series of network processors
- ◆ Expertise developed specially in the area of IXP series of network processors
- ◆ Availability of optimized Linux with real-time behavior for IXP series of network processors