



IP Phone

Overview

The customer is a leading R&D organization in India, focusing on military electronics.

Business Need

The customer wanted to satisfy the following business needs:

- Develop a product targeting the evolving market of digital military communications handsets.
- The device should use VoIP as well as Push-To-Talk technologies for communication with military radios.
- The device should operate in extreme harsh environmental conditions and should meet military specific standards.

Challenges

The major challenges faced during product development are:

- High speed, high density design with stringent mechanical constraints
- Provide memory capacity beyond the processor supported limits.
- Selection of components to meet the environmental specifications without affecting the electrical and mechanical specifications.
- Design with dual power supply: DC power & PoE circuitry, meeting the stringent mechanical specifications.

The Project

The NeST team, consisting of around 12 people spent 12 months working on this project. The project aims at the total design and development of a military handset, including hardware and software. The handset requires to be working as a VoIP phone as well as a Push-To-Talk (PTT) handset used by the military. System integration was the most critical stage of the project. The product was developed on WinCE v5.0 with the hardware based on Intel PXA 270. The project scope included development of hardware, firmware, system software, and middleware and application software required for creating the VoIP Handset. The hardware solution was provided as a main board, with plug-in modules for keypad and a touch-screen LCD. The software included the System Software, VoIP Middleware and Application Software modules.



Benefits

The VoIP Handset project designed for the client provided the following benefits:

- A very cost effective IP Phone using VoIP technology.
- Use of state-of-the-art processing technology in the IP Handset.

For further information, please contact:

NeST Software
A-3, Periyar, Technopark Campus, Trivandrum ,India
Ph:91-471-2527441
Visit us at www.nestsoftware.com
Email us at software.info@nestgroup.net