



Services and Skills

case study

Embedded Software for Mobile Devices

Overview

An electronic equipment company had a need to modify and upgrade their existing embedded software for two of their industrial handheld devices. The company wanted to add new features and improve performance on their existing devices while allowing their current engineering teams to focus on next generation products.

Project Goals

- Extending the life of an existing product
- Testing of new features for next generation products

System features

- Update and upgrade internal devices drivers
- Tablet like device based on ARM with 10 inch screen
- The devices include: Finger print reader, digital camera with LED flash, microphone, bar code reader etc.
- Communication: Bluetooth, WI-FI communication software modules.
- Video - MJPEG technologies improvement combine with audio VoIP

Technologies Utilized

- Specialized microcontroller devices designed and installed based on ARM microprocessor
- Embedded software design based on Windows CE 4.2, CE5.0, MS embedded C++, .net CF 2.0
- Driver development, application development, OS modifications

Outcome

The project provided the customer with the following achievements:

- New features were inputted to the old product
- Improved product management and customer support
- Introduction of new technologies into older products. Not requiring a new product to be rolled out.