



FORTECH Software

Our Services Embedded Systems

Microcontroller and Multiprocessor Systems

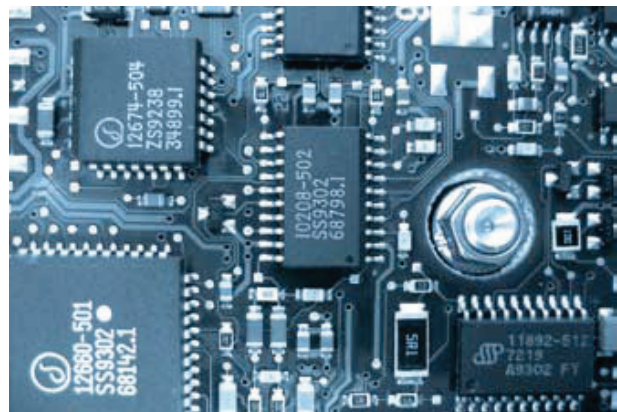
Since its foundation FORTECH Software has developed software for embedded systems. The spectrum of our solutions includes:

- Microcontroller-based systems with memory of a few kilobytes
- Digital signal processor systems for image processing of video streams
- Complex systems with operating systems such as Windows CE or Embedded Linux

As a rule the applications have to meet hard real time requirements and make the highest demands on stability and availability of the embedded system. The Quality Control for solutions of this type is handled on the basis of Software-in-the-Loop- and Hardware-in-the-Loop test procedures.

Typical issues are:

- Initial software provision in manufacturing
- Calibration of sensors and actuators
- End-of-Line manufacturing test
- Post mortem fault diagnosis
- Complex process field update scenarios, e.g. with component replacement



System Development

Typically we work on specific customer hardware platforms. We are used to implementing software in parallel to the development of the hardware and supporting the commissioning of the hardware.

During requirement analysis and conceptual design we consider, in addition to the devices primary function, the frequently underestimated requirements induced by production, integration and maintenance.

Project Examples

- Cardiogram recording and evaluation for a mobile, pen sized unit, data transfer via IrDA/Mobile phone
- Firmware development for various complex analyzers based on the chromatography and spectrometry measuring principles
- Firmware development for a combined microcontroller and FPGA-based actuator unit for laser heads