



ESPRESSO COFFEE MACHINE WITH PATENTED TECHNOLOGY

Datasheet

Project objective

Refine the firmware of commercial coffee machine prototype in order to produce a market-ready product and submit it to certification. Provide the highest performance and UX with cutting-edge technology.



Result

Our efforts resulted in an easy-to-use coffee machine that performs all the predefined functions without compromising performance. As an output, the client received embedded firmware source code, firmware binaries, development infrastructure build instructions, and firmware build instructions for their brand-new product. While the product is undergoing certification, we negotiate architecture, UX, and functional updates to be implemented before the market launch.

Scope of work

- ❖ Transfer of Modbus protocol from TCP to RS-232 interface
- ❖ Optimization of business logic and ensuring functional stability
- ❖ Implementation of the possibility of firmware updates
- ❖ Implementation of synchronization between devices comprising a coffee machine
- ❖ Improvement for HMI screens providing better UX and faster interaction
- ❖ Remote testing by integration with customer's test software for machine control

Activities

- ❖ Project investigation
- ❖ Firmware development
- ❖ HMI development
- ❖ Product testing
- ❖ Requirements review and updates
- ❖ Estimation for further updates

About the project

Technologies

- ❖ Toradex Colibri iMX6UL SoM
- ❖ C++
- ❖ Javascript
- ❖ Electron
- ❖ Yocto
- ❖ RS-232, Ethernet

- ❖ Flash
- ❖ UART
- ❖ Modbus

Platform

- ❖ Embedded Linux

Project size

- ❖ 2 Software Engineers

Duration

