

# High-Tech Bathroom Fittings

## Hard and software development of networked bathroom fittings

### Customer requirements

For the premium product line of the customer a digital control system for the bathroom was to be developed. The aim was the development of an integrated system to regulate the power and water supply. Operation of the system is done over a touchscreen containing the personal settings with which the water inlet, the amount and the temperature can be programmed in a user-friendly manner.

In the future, the operating unit will assume central functions for the entire bathroom and, for example, thereby control the shower fittings, the toilet flushing or the water inlet for the bathtub as well as lighting and connected audio systems.

### Technology used

CAD/CAE, LIN-BUS-V2.1, MSP430,  
DC servo regulating controller,  
Sepic DC/DC converter

### comlet solution

After an in-depth analysis comlet designed an easy to configure bus system for this network with a software interface based on the LIN specification 2.1.

comlet developed the entire hardware and software of the mixing unit connected with an operating unit via LIN bus. In addition, the energy management, the regulation of the mixed water temperature and the amount of water including thermal disinfection is controlled over this.

