

Demonstrator Infotainment

Development of **multimedia car radio** for demonstration purposes when acquiring new projects

Customer requirements

The customer has commissioned the development of an entry-level car radio for the original equipment manufacturer market. As a first step, a demonstrator is to be developed that helps to acquire new projects.

The following requirements were to be realized:

- Support of FM and DAB radio
- Media playback from SD cards, USB, Bluetooth A2DP and AUX
- Support of Bluetooth telephony
- Graphic user interface with operation via touch screen and operating panel
- Option for the simple integration of a navigation application

Technology used:

ARM 11, Embedded Linux

comlet solution

As a first step the operating system Embedded Linux was adapted and integrated for the hardware platform. The starting time of the system was shortened by optimizing the boot procedure.

In order to set the basis for the ongoing development, the touchscreen was put into operation and the driver development for the operating panel was executed.

Following this, an application framework was worked out that contains a tracing concept and methods for inter-processor communication. For the operation of the required components, a HMI was developed. After this the development and the integration of the components Radio Player and Media Player followed. The last step involved the design and implementation of the interface for carrying out automated tests.

