



**PROM
WAD**
ELECTRONICS
DESIGN

AUTOMOTIVE: Multimedia computer



CLIENT

A first-tier European automotive company that is engaged in the design & production of dashboards, including in-vehicle infotainment (IVI) systems.

CHALLENGE

We were commissioned to design a new version of the 2-DIN multimedia system for the world market, with a certain set of features for different car models.

SOLUTION

We helped our client to develop a complex hardware and software system for entertainment and multimedia, GPS navigation, travel time calculation, control of air conditioning, etc. — all features with the multilingual voice activation.

Working as a part of the pan-European software engineering team, Promwad was responsible for the integration of new features, software testing and error correction in the previous software code base provided by our client.

We relied on the MISRA C standards and model-based software development in

compliance with ISO 26262 to ensure flexible setup of user interfaces with different functionality and easy upgrades in the future product versions.

Also, we abstracted the software from the hardware platform features to enable transitioning to another platform without changing the software.

BUSINESS VALUE

Within 2 months we formed a highly qualified dedicated team of 10 engineers and established the development process according to ISO 26262 with the predictable features and release deliveries.

With the modular and customizable software for multimedia in-car computer developed at Promwad, our client actually received a product line in different price ranges. He was able to block selected features in mid-range models (such as voice control) and plan the development of the device, focusing on the product life cycle.

With three-level testing and QA, our cooperation allowed significant costs reduction without compromising on quality.