



# Free Programmable Instrument Cluster

## General Description

With the ever increasing functions in a vehicle the amount of driver information that needs to be displayed in a cluster has been growing continuously. A need arises for deciding: when, which and how much information shall be displayed, keeping overall driving situation as well as driver's distraction in mind.

A fully digital instrument cluster that is freely programmable offers great flexibility and adaptability for displaying various vehicle, safety, surrounding, and multimedia information.

Developed with the main focus on flexible, adaptable, and "state-of-the-art" Human Machine Interface our freely programmable cluster supports:

- Free configurability of display by driver
- Multiple designs (Themes/Skins)
- Real-time animations
- 2D, 3D and Vector Graphics

## Features

- Powerful ARM-A9-based multi-core CPU (up to 4 cores)
- High-end GPU with 2D, 3D and VG Engines
- 12.3" (1440 x 540) high performance TFT
- Various 10,1" TFTs possible
- Driving of additional parallel TFTs possible
- Video-In e.g. for night vision camera
- Embedded Linux-based, modular and open Software-Platform
- Automotive HMI Framework and resp. Toolchain

## Benefits

- Highly customizable and interchangeable designs
- Personalized information display
- Faster and easier to develop new HMI concepts
- Reduced development efforts

Design examples of our flexible and customizable display configurations:

