Radar sensors for assistance and automotive applications

Mid- and Long-range radar sensor



Features

- Detects objects and measures their position and velocity
- Independent mode for measurement of heights by means of an elevation beam
- Silicon-germanium semi-conductor technology used in the high-frequency unit
- Frequency range: 76~77GHz
- Detection range:
 - Mid-range radar sensor: 160m
 - Long-range radar sensor: 250m
- Opening angle:
 - Mid-range radar sensor: +/- 42° (12m), +/- 6° (160m)
 - Long-range radar sensor: +/- 20° (5m), +/- 6° (160m)

Benefits

- Robust detection of obstacles and safe braking response also on stationary targets
- Easy to integrate into the vehicle due to small size
- Various mounting options: open or concealed behind the radome/bumper
- Scalable in combination with other radar and video systems, including sensor data fusion
- Robust sensor design
- Frequency of 77GHz released worldwide for automotive applications
- CAN and FlexRay interfaces

Feasible functions



Forward collision warning Predictive emergency



braking system <30km/h (18mph)



Predictive emergency braking system >30km/h (18mph)



Adaptive cruise control ACC



Traffic jam assist



Integrated cruise assist



Highway assist



Left turn assist





