



Fasten
seat belt

Vehicle Occupant Sensing Solutions

Occupant detection for Seat Belt Reminder (SBR)

When used correctly, wearing a seat belt reduces the risk of fatal injury to front seat occupants by an estimated 50%. Since its invention and then mandatory implementation in vehicles in the mid-1960s, the seat belt has saved hundreds of thousands of lives. Still, not everyone buckles up.

Seat Belt Reminder systems identify unbuckled occupants and trigger a warning signal. The audio-visual seat belt reminders have a high efficacy rate, reducing the number of unbelted occupants by 80%. IEE pioneered in the development and manufacturing of occupant detection sensors for seat belt reminder systems, offering front passenger seat sensor mats since 1997. In 2014 we produced the first rear seat occupant detection sensors to support advanced SBR for all vehicle occupants.

Our offer:

- Proven foil-based pressure-sensitive sensor technology for Seat Belt Reminder systems
- The SBR sensor mat is available in various layouts and reliably detects adult occupants
- High design flexibility, providing for easy integration into A- or B-surface of the front/rear seats
- Robust sensor performance regardless of temperature or humidity
- Supports compliance with SBR regulations and worldwide NCAP incentives
- Unparallel know-how: our SBR sensors equipped over 200 million vehicles worldwide



Contact Us

For more information, please visit www.iee-sensing.com or send us an email at transportation@iee.lu.



Driver Presence Detection - DPD

Occupant detection for driver seat

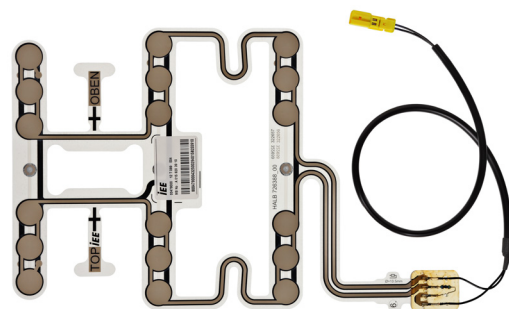
In the context of Advanced Driver Assistance Systems (ADAS) and automated driving, the driver presence confirmation can be safety crucial information. Thus, it reduces the possibility of unwanted autonomous driving off when the driver is not seated, or certain functions are only enabled when driver presence is confirmed.

Various comfort features can also benefit from reliable driver presence information, such as electronic handbrake or engine start/stop systems. Enables deactivation of electrical loads once the driver leaves the vehicle, to avoid battery drain.



Our offer:

- Reliable information regarding physical presence of the driver
- Robust pressure sensitive sensor based on SBR sensor technology
- Increases the credibility of ASIL compliance, required by some driver assistance functions
- Over 4 million passenger cars and trucks equipped with our DPD



About Us

IEE is a worldwide pioneer in passenger presence detection and one of the leading suppliers of advanced automotive interior sensing solutions. Founded in 1989 and headquartered in Luxembourg, it has operations in Europe, America and Asia. The innovation driven company has a long history in developing and manufacturing cutting-edge sensing systems for automotive industry, building management and eHealth. IEE employs 4,100 people worldwide and more than 10% of the company's workforce is engaged in Research & Development.