

## Product Brief

# KP200

## PRO-SIL™ Pressure Sensor for Side Crash Detection and Pedestrian Protection Systems

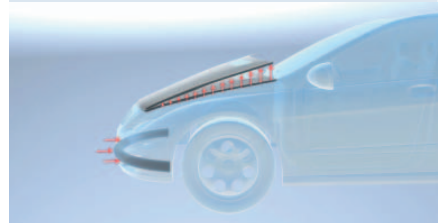
Infineon Technologies' KP200 is a PSI5 and AK-LV 29 compliant and fully monolithically integrated pressure sensor for the detection of side crashes and pedestrian impacts in passenger cars.

In the application side airbag, the pressure sensor is assembled in a module located within the car's side doors. When the door is compressed due to a side impact, KP200 provides a signal pulse which is proportional to the pressure change inside the door.

The height of the signal pulse is independent of the ambient pressure, but dependent on the relative pressure change.

### Typical Applications

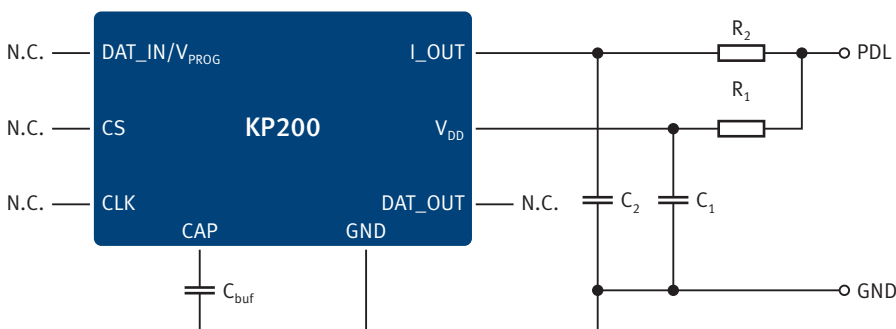
- Side crash detection
- Pedestrian input detection
- Pinch protection for doors and windows



### Features

- Fully compliant to PSI5 and AK-LV 29
- Patented online diagnoses for pressure cells and circuitry with PRO-SIL™ support IEC 61508 and ISO WD 26262
- Synchronous and asynchronous data transmission
- 2-wire current interface
- Unique ID number for traceability
- Reverse polarity protection
- SMD Package (PG-DSOF-8)

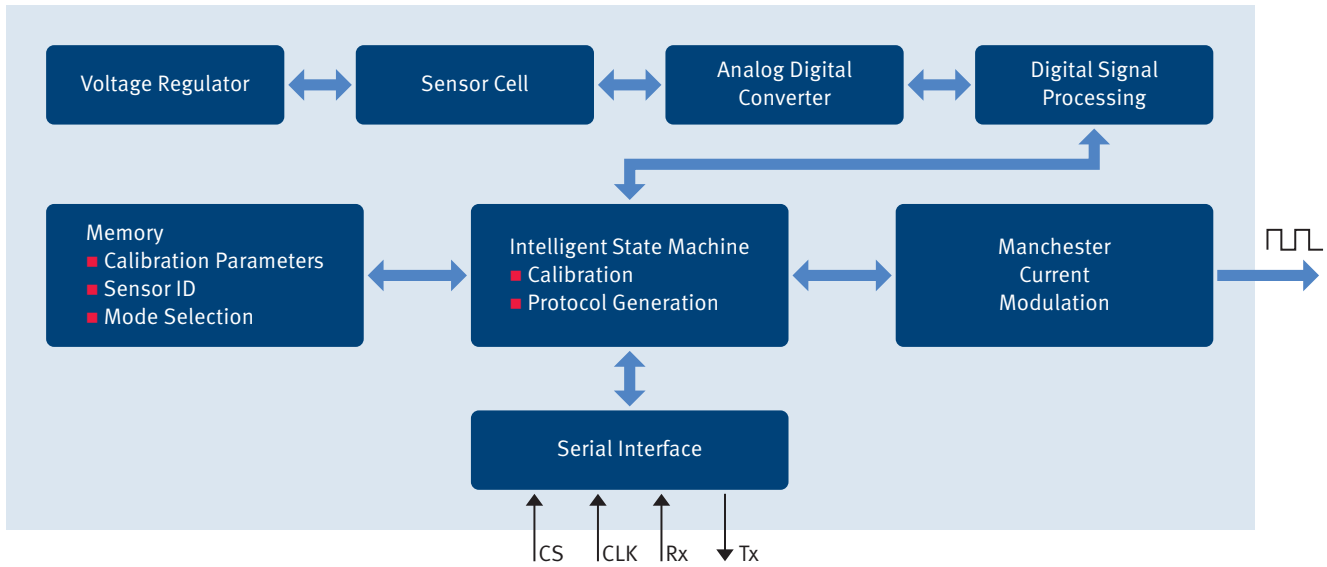
### Typical Application Circuit



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### Block Diagram



### KP200 Key Parameters for PSIS and AK-LV 29 Compliance

Parameter	Range			Unit
	min.	typ.	max.	
Ambient pressure range	53.6		110	kPa
Absolute pressure range	50.9		126.5	kPa
Supply voltage	4.5		11	V
Supply current into V <sub>DD</sub>	6	8	10	mA
Signal modulation current	22	26	30	mA
Operating temperature	-40		85	°C
Nominal sensitivity		20.48		LSB/%

### Deliverables on request

- Evaluation kit for KP200
- Datasheet

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