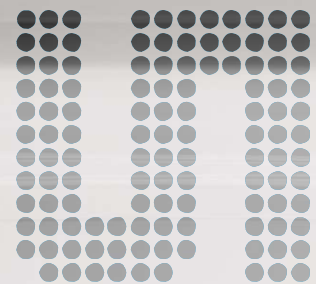


Accurate Position Sensing in demanding Automotive Applications

www.ams.com/POS



Contactless high resolution angle sensing for automotive applications

- Automotive AEC-Q100 qualified
- Industry-leading robustness against unwanted magnetic stray fields
- Developed in compliance to the functional safety standard ISO26262

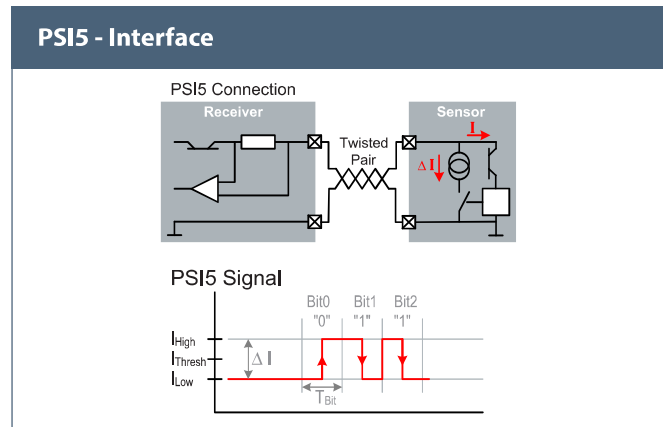
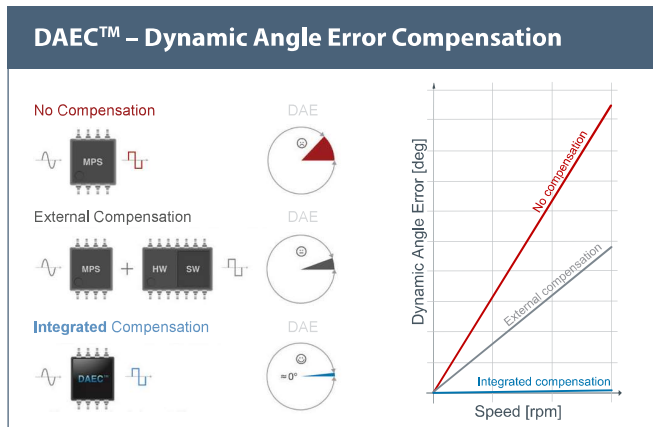
**Sensing
is life.**

General Description

Automotive vehicles are becoming more and more automatized and in the not so distant future we can expect to commonly see autonomous driving cars on our streets and freeways. A world full of autonomous/automatized vehicles can only come to fruition with the use of the right sensors.

ams sensors are ideal for automotive applications due to their high reliability and fully automotive qualifications. Dual die versions make fully redundant system possible. ams' automotive functional safety process

increases system reliability and is easy to integrate into vehicle subsystems. The sensors provide highly accurate angle position sensing and dynamic motor control. In high speed applications ams' sensors can deliver angle position feedback with near zero latency (DAEC™). On-chip robust differential signal processing helps to suppress the influence of any homogeneous external stray magnetic fields. All sensor-device configurations can be programmed permanently over a digital standard interface (no special programmer required).



	AS5115	AS5147y	AS516x	AS517x	AS5172
Motor	•	•	-	-	-
Position	-	•	•	•	•
Dual-Die variant available	•	•	•	•	-
Functional Safety	•**	•	•**	•	•
Interface	Analog	PWM/ABI/UVW	Analog/PWM	Analog/PWM/SENT	PSI5
Programming Interface		SPI	UART	UART	PSI5
Package	SSOP16	TSSOP14	SOIC8	SOIC8 / SIP	TSSOP14 / SIP

**... devices are "functional safety ready"

Features

- Highly accurate, contactless position sensing
- Immunity to magnetic interference
- Integrated DAEC™ for high-speed applications
- Developed in accordance to functional safety standard ISO 26262
- System in Package (SIP)
- Flexible configuration settings

Benefits

- Robustness against harsh environments
- System cost saving, because of no additional external shielding variants are necessary
- The revolutionary integrated dynamic angle error compensation (DAEC™) yields almost zero output latency and ultra-fast refresh rates
- Improves system ESD/EMC performance and lower system costs
- Provides an intelligent configuration setup for easy system integration

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