

# High Precision Hall Switches

for Consumer, Industrial and Automotive

Sensor+Test 2015, Nuremberg



# The Main Families of Hall Sensors in the Switches Portfolio



## TLE49x6

- Chopped
- SMD and leaded package
- Open collector or current interface
- Single or double Hall plate
- Low Power version available
- Temperature compensated
- Up to 18V supply

Automotive

## TLE496x

- Chopped
- SMD and leaded package
- Open collector
- High ESD capabilities
- Low power consumption
- Temperature compensated
- Up to 32V supply
- Overvoltage up to 42V

Automotive

## TLI496x-xM (5V) TLE496x-xM

- Chopped
- 5.5V operating supply voltage
- Low current consumption 1.4mA
- ESD protection 4kV HBM
- Leaded package

**NEW**

Automotive  
Industrial

## TLV496x-xTA/TB

- Chopped
- Up to 26V operating supply voltage
- Low current consumption 1.6mA
- ESD protection 4kV HBM
- Leaded package

**NEW**

Consumer

# TLV496x-xM Hall Sensor Family for cost-sensitive Consumer Systems



## Position detection

Unipolar Switches  
TLV4964-xTA/TB

## BLDC commutation

Latches  
TLV4961-xTA/TB  
TLV4968-xTA/TB

## Product Highlights

- 3.0 V to 26 V operating supply voltage
- Low current consumption 1.6 mA
- ESD protection 4 kV HBM
- Operating from unregulated power supply
- Output overcurrent & overtemperature protection
- Active error compensation (chopping)
- High stability of magnetic thresholds
- Operating temperature range from -40 °C to 125 °C
- Leadless package PG-T092S
- JEDEC47 qualified



# TLI496x-xM (5V) Hall Sensor Family for cost-sensitive Industrial Systems



## Position detection

Unipolar Switches  
TLI4965-5M

## BLDC commutation

Latches  
TLI4963-1M / TLI4963-2M

## Product Highlights

- 3V to 5.5V operating supply voltage
- Low current consumption 1.4mA
- ESD protection 4kV HBM
- Active error compensation (chopping)
- High stability of magnetic thresholds
- Low jitter (typ. 0.35 $\mu$ s)
- Operating temperature range from -40°C to 125°C
- Small SMD package PG-SOT23 (just 2.9x1.3x1.0 cm)
- JEESD47 qualified



# TLE496x-xM (5V) Hall Sensor Family for cost-sensitive Automotive Systems



## Position detection

Unipolar Switches  
TLE4965-5M

## BLDC commutation

Latches  
TLE4963-1M  
TLE4963-2M

## Product Highlights

- 3.0 V to 5.5 V operating supply voltage
- Low current consumption 1.4 mA
- ESD protection 4 kV HBM
- Active error compensation (chopped)
- High stability of magnetic thresholds
- Low jitter (typ. 0.35  $\mu$ s)
- Operating temperature range from -40 °C to 170 °C
- Small SMD package SOT23
- AEC-Q100 qualified





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