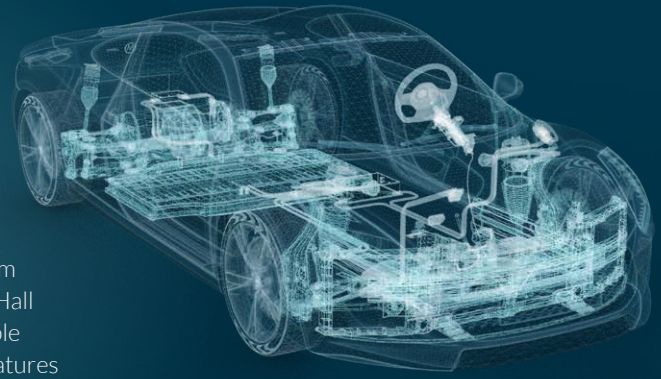


# TRIAxis® MAGNETIC POSITION SENSORS

## MLX9042X

The MLX9042x series is a cost-effective solution for automotive and industrial applications. This versatile series offers superior functional safety, absolute maximum ratings (AMR), and electromagnetic compliance (EMC). With its advanced Triaxis® Hall magnetic front end, on-chip signal conditioner & processing (DSP), and programmable output stage, the MLX9042x delivers reliable performance even in extreme temperatures up to 160°C. Experience the future of efficiency and safety with MLX9042x.



## Key features

- ✓ Stray field immunity (SFI) up to 5 mT (or 4 kA/m) as per ISO11452-8
- ✓ Programmable measurement range and linear transfer characteristic
- ✓ Certification
  - AEC-Q100 Grade-0
  - ISO26262 ASIL B or ASIL C (SEooC)
- ✓ Temperature from -40°C to 160°C
- ✓ Packages, RoHS compliant
  - SOIC-8 single die
  - TSSOP-16 dual die or dual stack die
  - DMP-4, single die PCB-less
  - SMP-3, single die PCB-less
  - SMP-4, dual die or dual stack die PCB-less

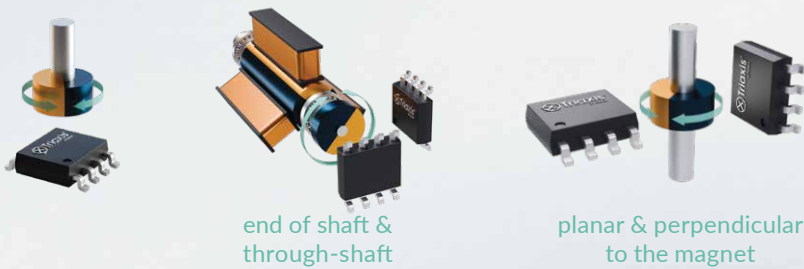
## Highlights

	Motion	Output	
<b>MLX90421</b>	Rotary/Linear	Analog/PWM	
<b>MLX90422</b>	Rotary/Linear	SENT	
<b>MLX90423</b>	Linear SFI	Analog/PWM/SENT	
<b>MLX90424</b>	Linear SFI with wake-up switch	Analog/PWM/SENT	
<b>MLX90425</b>	Rotary SFI 360°	Analog/PWM	
<b>MLX90426</b>	Rotary SFI 360°	SENT	
<b>MLX90427</b>	Rotary SFI 360° Joystick	SPI	

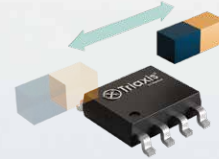


**SIL** READY  
BY MELEXIS

## Rotary



## Linear



## Joystick



## Applications

**MLX90424**  
With integrated switch for brake pedal stroke

**MLX90427**  
for steering for HMI-joystick



### MLX9042X

- Accelerator pedal position
- Brake pedal position
- Steering angle
- Ride height position
- Human machine interfaces
- Shifter position
- Transmission sensor
- Flap actuators
- Coolant valves
- Thermal valves
- Air management valves



[www.melexis.com/MLX9042X](http://www.melexis.com/MLX9042X)

**Melexis**