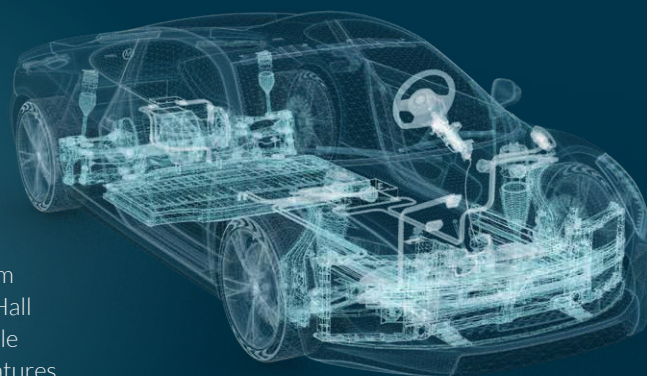


TRIAxis® MAGNETIC POSITION SENSORS

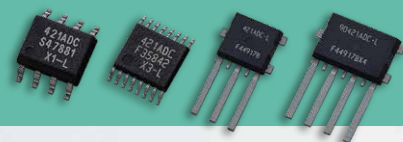
MLX9042X

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

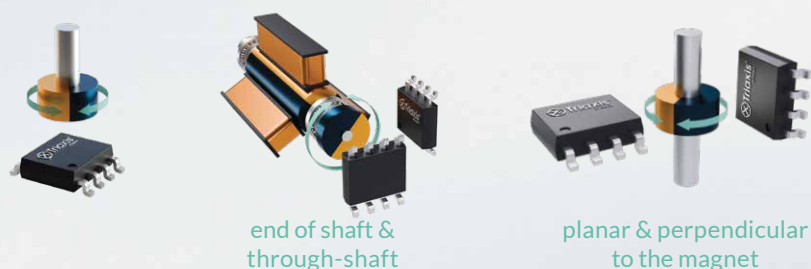


Highlights

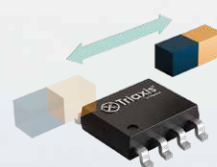
	Motion	Output	
MLX90421	Rotary/Linear	Analog/PWM	
MLX90422	Rotary/Linear	SENT	
MLX90423	Linear SFI	Analog/PWM/SENT	
MLX90424	Linear SFI with wake-up switch	Analog/PWM/SENT	
MLX90425	Rotary SFI 360°	Analog/PWM	
MLX90426	Rotary SFI 360°	SENT	
MLX90427	Rotary SFI 360° Joystick	SPI	

ASIL | 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

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