



# LX3302A ☆

## Inductive Sensor Interface IC

Status: In Production.

- Download Data Sheet
- Documentation
- Symbols

The LX3302A is a highly integrated programmable data conversion IC designed for interfacing to and managing of inductive position sensors. These sensors use printed circuit board (PCB) traces to accurately detect the location of the metal target and are immune to stray magnetic fields and eliminate the need of a magnet, required with other types of magnetic field based sensors. The device includes an integrated oscillator circuit for driving the primary coil of an inductive sensor, along with two independent analog conversion paths for conditioning, converting, and compressing of sine and cosine analog signals from the secondary.

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### Product Features

- Recommended for Automotive Design
- 12-bit Position Output Resolution
- 12-bit DAC Output Interface, 16-bit PWM Output Interface
- SENT and PSIS Output Interface
- 40°C to 150°C Operation
- AEC-Q100 Grade 0 Certification
- ISO26262 ASIL B Support
- Digital Calibration with Non-volatile Configuration Storage (EEPROM)
- Power Pin (VIN) Calibration Programming
- GPIO (SPI) Calibration Programming

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### Parametrics

Click on a property to perform a parametric search for other products with that property.

Operating Temperature	-40C to 150C (Grade 0)
ISO26262 Support	ASIL B
Output Interface	Analog, PWM, SENT, PSIS, SIN/COS
EEPROM Program	VIN, GPIO
Temperature Sensor	Yes
Operating Voltage Range	4V to 6V
Max Rated Voltage	20V
Reverse Voltage Rating	-7V
MaxRefreshRate	2kHz

All Application Notes

### Documentation

View All

Search Documentation

Title	Document Category	DS Number	Download	Link
LX3302A Summary Data Sheet	Data Sheets	20006496	Download	
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LX3302A: Interfacing with 5v and 3.3v powered Microcontrollers	Application Notes		Download	Link
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Inductive Position Sensor Pro Evaluation Kit User's Guide	User Guides	50003122	Download	

### Embedded Software

Title	Download	Link
Sensor Evaluation and Calibration Software (2.8)	Download	

### Development Environment

#### Demo & Evaluation Boards

**LXM9518 - PROGRAMMER FOR INDUCTIVE POSITION SENSOR**

IPCE Programmer for Inductive Sensors

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**LXK3302ARD001 - LX3302A 90 DEGREE ROTARY DUAL REDUNDANCY INDUCTIVE SENSOR EVB WITH PROGRAMMER**

LX3302A Rotary Dual Redundancy Evaluation Kit

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### RoHS Information

Product	JEDEC Indicator	ROHS	China EFUP	Device Weight (g)	Shipping Weight (kg)	Lead Count	Package
	0	0		0	0	0	0

1 of 1 results

To see a complete listing of RoHS data for this device, please [Click here](#)

Shipping Weight = Device Weight + Packing Material weight. Please [contact sales office](#) if device weight is not available.

### Buy from Microchip

Product Details	Pins   Packaging	Temp Range	Packing Media	Pricing	Availability	Add to Cart
				QUANTITY	USD	
LX3302AQPW Automotive Grade Sample Product	14   TSSOP	-40C to +150C	Tube (96)	Buy Now Price, Any Volume 1-24 \$2.41 25-99 \$2.00 100+ \$1.83 Estimated High-Volume Pricing 1000-4999 *\$1.77 5000+ *\$1.75 Special Pricing Available for Larger Quantities	Out of Stock Order now, can ship on 23-Feb-2023	<a href="#">Add to Cart</a>
LX3302AQPW-TR Automotive Grade Sample Product	14   TSSOP	-40C to +150C	Tape and reel (2500)	Buy Now Price, Any Volume 1-24 \$2.55 25-99 \$2.13 100+ \$1.94 Estimated High-Volume Pricing 1000-4999 *\$1.87 5000+ *\$1.85 Special Pricing Available for Larger Quantities	Out of Stock Order now, can ship on 23-Feb-2023	<a href="#">Add to Cart</a>
LX3302AQPW-TR-EASY Automotive Grade Sample Product	14   TSSOP	-40C to +150C	Tape and reel (2500)	Buy Now Price, Any Volume 1-24 \$2.73 25-99 \$2.28 100+ \$2.07 Estimated High-Volume Pricing 1000-4999 *\$2.00 5000+ *\$1.97 Special Pricing Available for Larger Quantities	Out of Stock Order now, can ship on 23-Feb-2023	<a href="#">Add to Cart</a> Multiples of 2500
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