

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China







# **Product Information**

## **Automotive Sensor Interface**

#### MLX90320

MLX90320 interface IC amplifies and temperature compensates resistive Wheatstone bridge type sensing elements. The signal conditioning circuitry includes gain adjustment, offset control and second order temperature compensation of the resistive sensing element. Compensation values are stored in EEPROM. MLX90320 is programmed through a single serial wire (output pin). The user can specify on-chip clamping levels (fault detection bands).

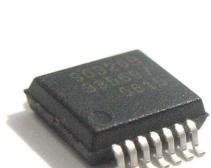


### **Features**

- Cost optimized sensors: single chip automotive sensor conditioning solution
- Dedicated for automotive applications with wide temperature range
- Second order gain and offset correction by programmable coefficient
- External or internal temperature sensor
- Over-voltage protection (no additional protection IC needed)
- Fault detection and programmable clamping levels
- Ratiometric output: 0 to 5V
- Single pin programming (through output pin)
- Fast response time (fully analog signal path)
- SSOP14 package or die form

## **Applications**

- Pressure transducers, strain gauges
- Accelerometers, position sensors, magnetic sensors
- Steering systems (e.g. torque sensors)
- Safety restraints systems (e.g. seat occupant detection)
- Braking systems (e.g. ABS, force)
- Comfort systems (e.g. air conditioning)
- Engine management (e.g. injection)
- Any resistive bridge type sensor



## **Application Schematics**

Very few off-chip components needed.

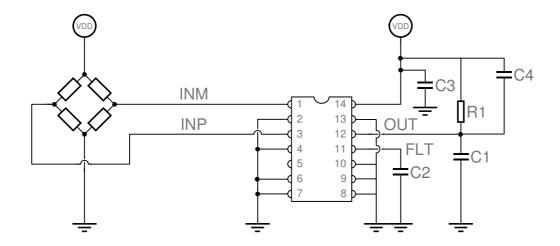




Illustration of a pressure module using Melexis' Sensor Interface IC



For additional information email **info@melexis.com** or go to our website at: **www.melexis.com** 

#### Disclaimer:

Devices sold by Melexis are covered by the warranty and patent indemnification provisions appearing in its Term of Sale or Welexis makes no warranty, express, statutory, implied, or by description regarding the information set forth herein regarding the freedom of the described devices from patent infringement. Melexis reserves the right to change specifications and prices at any time and without notice. Therefore, prior to designing this product into a system, it is necessary to check with Melexis for current information. This product is intended for use in normal commercial applications, such as military, melical file-support of the-systaming equipment are specification entered without accurate. However, Melexis shall not be liable to recipient or any that party for any damages, including but not limited to personal injury, property damage, loss of profits, loss of use, interrupt of business or indirect, special incidental or consequential damages, of any kind, in connection with or arising out of the furnishing, performance or use of the eichnical data herein. No obligation or liability to recipient or any third party shall arise or flow out of Melexis' rendering of rechnical or other services. © 2010 Melexis' rendering of rechnical or other services. © 2010 Melexis' Rendering of rechnical or other services.