

# Melexis

INSPIRED ENGINEERING

MLX90632

SURFACE MOUNT

MINIATURE INFRARED (IR)  
THERMOMETER IC



Pit viper snakes have a cool heat sensing system to find prey in the dark. The pit is a special organ that senses body heats from animals and gives an infrared heat vision which accurately judges distance and size.

## ROBUST TEMPERATURE SENSING WHEN SIZE REALLY MATTERS

### MLX90632

The MLX90632 is a miniature SMD thermometer IC for accurate non-contact temperature measurement, especially in thermally dynamic environments and when available space is limited. Primary applications for this device can be found in server rooms, white goods, room temperature monitoring in smart thermostats or integration into portable electronics devices. A medical grade version is available for body temperature measurements applications such as health monitoring wearables and forehead/ear thermometers.

### KEY FEATURES

- ✓ Accurate and stable operation in thermally challenging environments
- ✓ 3x3x1mm QFN package, eliminating the need for bulky TO-can packages
- ✓ Factory calibrated with I2C digital interface, 50° field of view
- ✓ Commercial grade: object temperatures between -20 °C and 200 °C with typical accuracy of  $\pm 1^\circ\text{C}$
- ✓ Medical grade: object temperatures between -20 °C and 100 °C with accuracy of  $\pm 0.2^\circ\text{C}$  in the human body temperature range
- ✓ -20 °C to 85 °C operational temperature range



The above information is "as is" and believed to be correct and accurate. Melexis disclaims any and all liability in connection with or arising out of the furnishing, application or use of the information or products; any and all liability, including without limitation, special, consequential or incidental damages; and any and all warranties, express, statutory, implied, or by description, including warranties of fitness for particular purpose, non-infringement and merchantability. Melexis reserves the right to change it at any time and without notice. Users should obtain the latest version of the information to verify it is current. Users must further determine the suitability of a product for its application, including the level of reliability required and determine whether it is fit for a particular purpose. Export control regulations may apply and export might require a prior authorization from competent authorities. Melexis products are intended for use in normal commercial applications. Unless otherwise agreed upon in writing, the products are not designed, authorized or warranted to be suitable in applications requiring extended temperature range and/or unusual environmental requirements. High reliability applications, such as medical life-support or life-sustaining equipment are specifically not recommended by Melexis. Melexis products are sold under the Melexis Terms of Sale, which can be found at <https://www.melexis.com/en/legal/terms-and-conditions>.

FOR MORE INFORMATION: [WWW.MELEXIS.COM/MLX90632](http://WWW.MELEXIS.COM/MLX90632)

Melexis