

Melexis

INSPIRED ENGINEERING

MLX90640

32X24 PIXEL

INFRARED (IR)
ARRAY



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.

Like the pit viper, get access to the thermal world around you with the MLX90640.

MLX90640

Addresses growing demands seen across numerous applications for thermal analysis. The sensor provides enhanced resolution while still occupying an attractive price point. Primary applications for this device include people detection, fire prevention, building automation, lighting control, surveillance and air conditioning systems.

KEY FEATURES

- ✓ -40°C to 85°C operational temperature range, allows deployment in difficult industrial environments
- ✓ Can measure object temperatures between -40°C and 300°C
- ✓ A typical target object temperature accuracy of $\pm 1^\circ\text{C}$, precision across its full measurement scale
- ✓ Noise equivalent temperature difference (NETD) of just 0.1K RMS at a 1Hz refresh rate, offers superior noise performance
- ✓ Unlike microbolometer solutions, this sensor does not need re-calibration to specific temperature requirements ensuring greater convenience and lowering operational expense
- ✓ Two different field of view (FoV) options - standard 55°x35° version and a 110°x75° wide angle version
- ✓ Supplied in a 4-pin TO39 package, with the compact dimensions lowering the overall cost of the thermal imaging system
- ✓ I²C compatible digital interface, simplifying integration



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/MLX90640

Melexis