

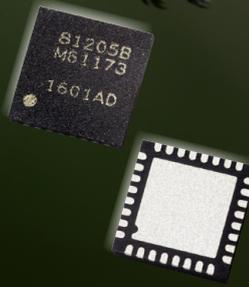
Melexis

INSPIRED ENGINEERING

MLX81205/06/07/08

SENSORLESS SINEDRIVE

BLDC MOTOR
CONTROLLER



The hummingbird's beating wings flap at extremely high frequencies, typically around 50 times per second. This allows it to fly at speeds exceeding 15 m/s, to fly backwards or to seemingly be suspended in the air in perfect balance. What better animal to reflect the motor/control driver and actuator capacities?

LOWEST NOISE AND LOWEST POWER OPERATION

Highly integrated 3-phase motor controller for 12V automotive application with TruSense technology.

MLX81205/06/07/08

The Melexis MLX81205/06/07/08 IC family is a single-IC motor driver for 12V automotive BLDC applications. The IC can be directly connected to the 12V battery, it includes a 32 KB or 64 KB Flash-Microcontroller, PowerFET gate driver and ready-to-use LIN-communication interface. The device supports silent sensorless drive for blowers and cooling fans, based on more than 10 year of TruSense know-how to drive motors.

KEY FEATURES

- ✓ AEC-Q100 grade 0 qualified up to 150 °C ambient temperature
- ✓ Dedicated solution for HVAC blowers, engine cooling fans and electric pumps
- ✓ Sensorless motor drive from 0 to maximum RPM for 10W to 1,000W BLDC motors
- ✓ Integrated LIN or PWM communication, with Flash re-programming via LIN pin
- ✓ Lowest noise and lowest power operation



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/MLX81205

Melexis