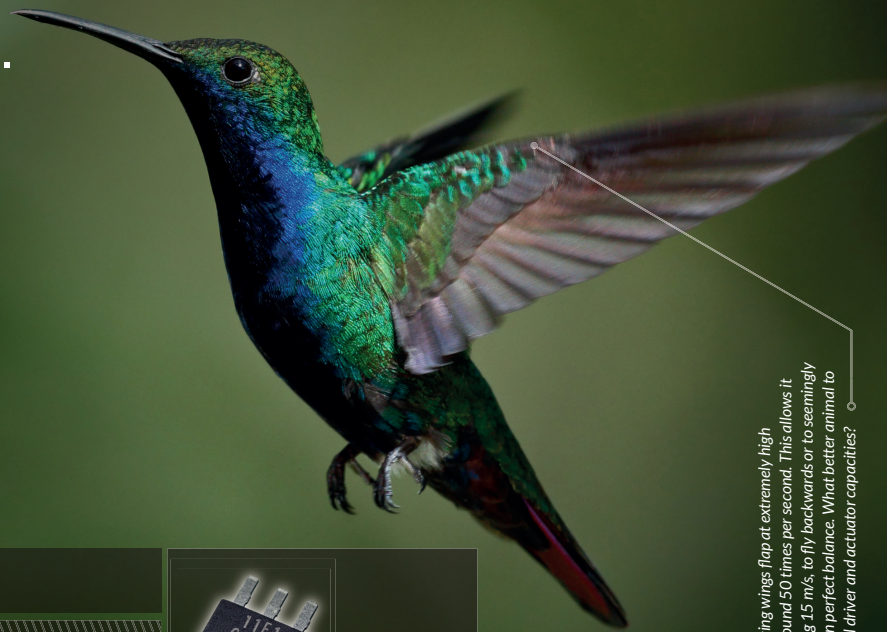
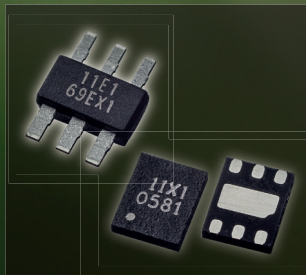




The hummingbird's beating wings flap at extremely high frequencies, typically around 50 times per second. This allows it to fly at speeds exceeding 15 m/s, to fly backwards or to seemingly be suspended in the air in perfect balance. What better animal to reflect the motor/control driver and actuator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

MLX90411

SINGLE-COIL FAN DRIVER



LOW NOISE FAN DRIVER FOR AUTOMOTIVE APPLICATIONS

MLX90411

The MLX90411 operates over a supply voltage range from 3 V to 28 V, and is robust up to 40 V, making it suitable for any fan, blower or pump applications operating from 5 V, 12 V or 24 V supply rails. Typical applications include home appliances, white goods, and automotive applications. With its integrated current limiting, the MLX90411 can drive applications up to 600 mA or 15 W. The closed-loop speed control is a unique new feature for this family of plug-and-play fan drivers, offering extra freedom to design the fan and allowing to optimize towards higher efficiency, lower acoustic noise, and a longer lifetime compared to previous generation fan drivers that only offered open-loop speed control.

KEY FEATURES

- ✓ All-in-one fan driver, including high-sensitivity Hall-effect sensor
- ✓ 600 mA motor current
- ✓ Adaptive commutation control, with programmable lead angle
- ✓ Commutation options
 - Low noise maximum torque
 - Very low acoustic noise
 - Low electromagnetic emissions
- ✓ PWM speed control input
 - Open-loop control with max duty cycle limiting
 - Closed-loop control up to 45k e-rpm
- ✓ Protections and diagnostics
 - LRP, CL, OC, OV, OT
 - FG/RD open drain diagnostics output
- ✓ Certifications
 - UL/VDE/CE, PPAP, ASIL-A



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