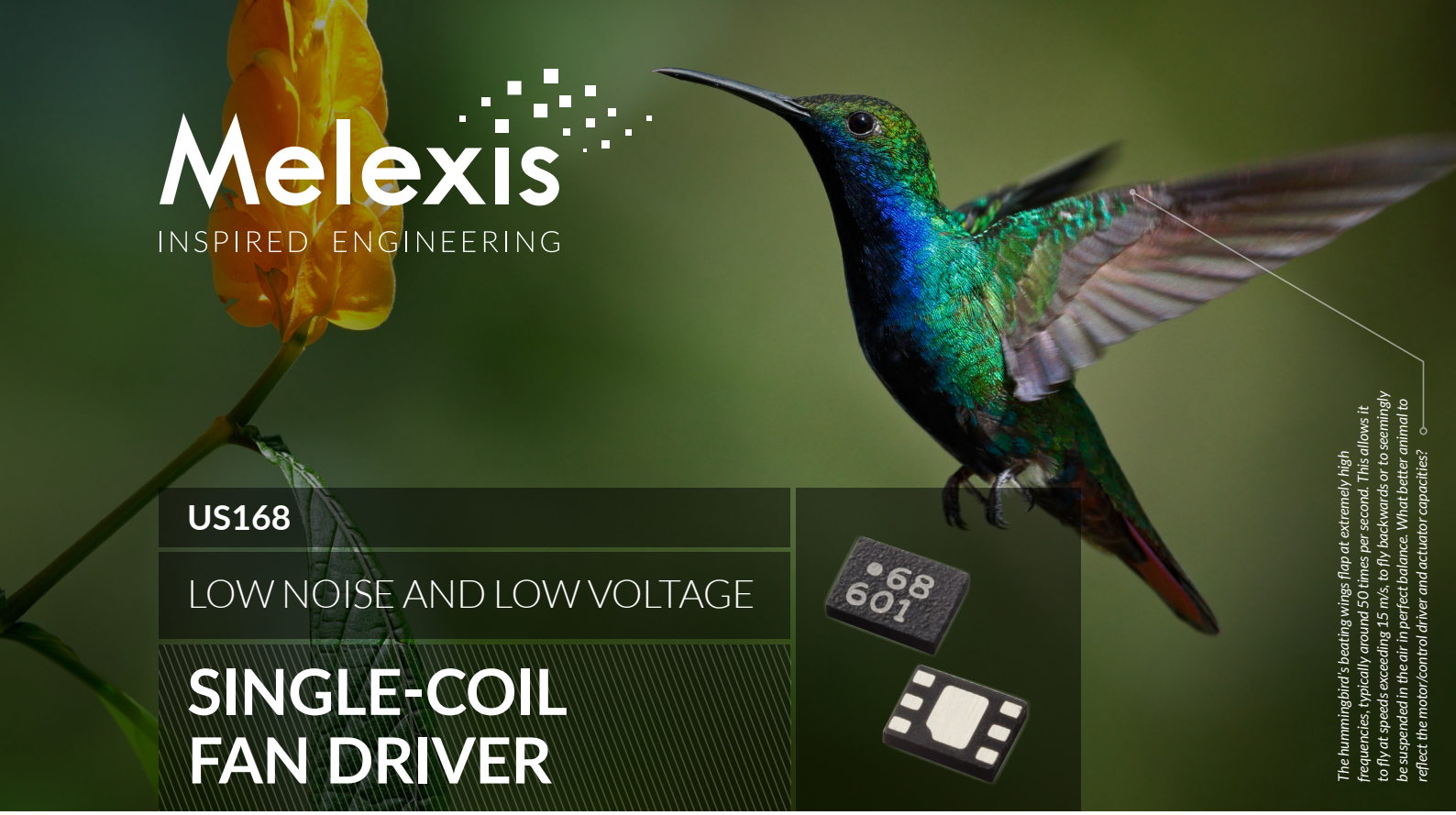
Melexis
INSPIRED ENGINEERING



US168

LOW NOISE AND LOW VOLTAGE

SINGLE-COIL FAN DRIVER

LOW EMI EMISSIONS AND LOW ACOUSTIC NOISE

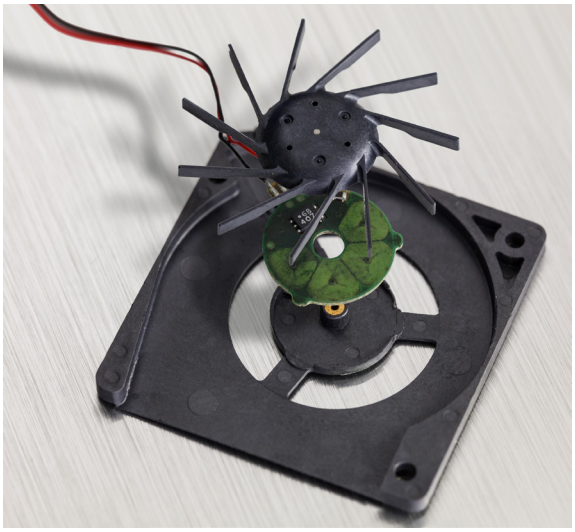
One-chip solution for driving tiny single-coil brushless DC (BLDC) fans and motors.

US168

The US168 is a one-chip solution for driving single-coil brushless DC (BLDC) fans and motors. The use of linear Soft switching realizes low acoustic noise performance without introducing electromagnetic (EMI) noise. This avoids the need for expensive filter components to achieve automotive certification. Additionally the linear driving, in combination with the ultra-thin (0.4mm height) package , with 3mm^2 footprint, allows to use the fandriver in ultra thin fans (< 1cm height), including fans with coils embedded into the PCB. The US168 device includes reverse voltage protection, locked rotor protection and thermal protection. Therefore, the IC robustness perfectly suits for consumer and automotive-on-board applications.

KEY FEATURES

- Soft switching for low noise
- Low supply voltage: 1.8 to 6.5 volt
- Full bridge driver
- High sensitivity integrated Hall sensor
- Low power consumption
- Reverse voltage protection
- Locked rotor protection and auto-restart
- Thermal protection and auto-restart
- No external components needed
- Tachometer output signal (FG)
- Ultra thin (0.4mm) UTDFN 6L 1.5x2mm



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