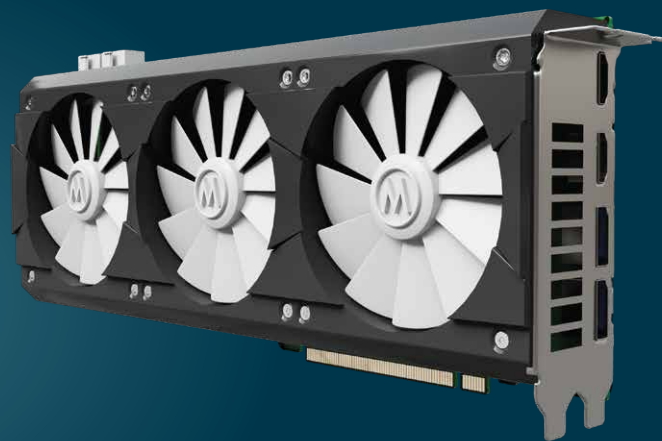


# Single-Coil Fan Driver

## Integrated Hall series

### MLX90411-consumer

Upgrade your cooling and pumping designs with the MLX90411, an all-in-one, code-free solution for 5V, 12V, and 24V applications. Delivering up to 15W of power with adaptive low-noise commutation, this driver ensures industry-leading efficiency and whisper-quiet operation. For higher configurability, see the advanced MLX90411-D version.



## Key features

- ✓ All-in-one fan driver: reduce Bill of Materials (BOM) and PCB footprint
- ✓ Easy configuration code-free: no programming required
- ✓ Adaptive commutation: lowest acoustic noise and lowest vibration
- ✓ PWM input: standby, open-loop or closed-loop speed control (+/-1.5%)
- ✓ Operating supply range from 3.2 V to 32 V
- ✓ Operating junction temperature from -40 to 125°C
- ✓ Protections and diagnostics: Locked rotor, temperature shutdown, over voltage, short circuit, current limit and FG/RD open drain diagnostics
- ✓ Certifications MLX90411-consumer:
  - UL/VDE/CE ready
  - JEDEC qualified package
- ✓ I2C programming: Fast prototyping (FanDriverEVB2) and End-of-line programming (FanProgrammerB)
- ✓ Package
  - Straight-lead SOT package (ZE)
  - Tiny UTDFN 2.5 x 2.0 x 0.4 mm (LD)



## Highlights

### MLX90411-B

- ✓ Up to 1A / 15 W
- ✓ Standard options
- ✓ UTDFN package

### MLX90411-D [high configurability]

- ✓ Up to 0.8A / 10 W
- ✓ PWM input for on chip speed control
  - Integrated pull-up or pull-down
  - Option for inverted PWM input
  - Transfer curve with flexible min. point
- ✓ Extensive FG|RD output options
  - Multiple FG ratio's (programmable)
  - RD alarm 'high' or 'low' (programmable)
- ✓ SOT package

## Applications

### MLX90411

Graphic card cooling fan  
Refrigerator fan  
Epilator  
Printer cooling fan  
Toilet fan  
Water spreading in mobile air-conditioner



melexis.com/  
MLX90411-consumer

<Code Free>