

Single-Coil Fan Driver

NOHall series

Streamline your motor control design with the NoHall series of sensorless 1-coil BLDC motor driver ICs. These code-free, plug-and-play solutions support 12V or 24V applications up to 60W, enabling faster development, reduced engineering workload, and accelerated production



Key features

- ✓ Open and closed-loop speed control:
 - 40k m-RPM (for 2 pole-pair motors)
 - $\pm 1.5\%$ closed-loop speed accuracy
 - Soft-switching / Lead angle control
- ✓ Configurable motor start & stop options:
 - Forward / Reverse windmilling
 - Brake & start
- ✓ Integrated bridge driver
 - 135 mOhm (HS+LS)
 - Programmable current limit up to 4 A / 8 A braking
 - Integrated supply clamp
- ✓ Junction temperature from $-40\text{ }^{\circ}\text{C}$ to $150\text{ }^{\circ}\text{C}$
- ✓ Package RoHS compliant DFN10 3.5x3 mm² exposed pad
- ✓ Extensive programmability (MTP)
 - Sleep mode option
 - 8-point configurable speed curves
 - Synthesized FG output for easy retrofitting of legacy 3-phase solutions
- ✓ Protections & Diagnostics
 - LRP / UVP / OCP / TSD
 - Hot unplug handling



Applications

- ✓ **MLX90416**
 - Supply voltage range from 6.7 V to 27.6 V
 - Bidirectional operation
 - Fans, blowers and pumps up to 60 W
 - Home/small appliances, whitegoods and industrial
- ✓ **MLX90418**
 - Supply voltage range from 6.7 V to 18 V
 - High speed server cooling fans



1 x 30 W
single fan driver



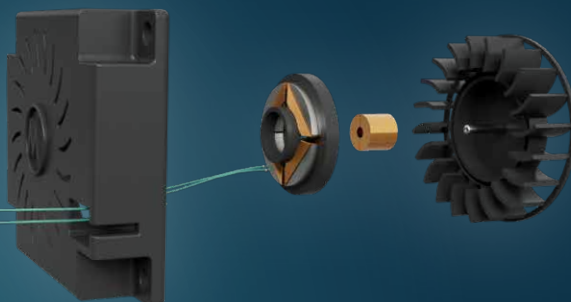
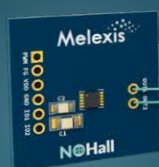
2 x 15 W
twin fan driver



Sensorless

PCB inside the fan
reduced height and diameter

PCB outside the fan



www.melexis.com/NoHall-series