



THE DATASHEET OF MLX90287LLD-AAA-000-SP

All-In-One Single-coil Fan drivers

Since 2000 **MELEXIS**
has been **INNOVATING**
in the fan market
offering **QUALITATIVE**
and **COST EFFECTIVE**
fandriver



"With the expansion of its single coil fandrider family Melexis continues to offer its advance design capabilities in hall sensing and motor control to the benefit of the fandrider market."

INNOVATION

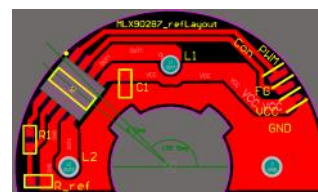
- Soft start and soft switching for low acoustic noise
- Integrated reverse polarity protection, avoids the need for protection diode, and allows smaller decoupling capacitor
- All-In-One single coil fandrider with PWM control in straight leads SOIC8 package
- Wettable flanks QFN package allows assembly using standard optical inspection (no XRAY required)

QUALITY

- AECQ-100 compliant
- 100% production tested at two temperatures
- Qualified to automotive standard including Automotive PPAP
- State of the art protection against ESD and EOS

COST

- Single layer pcb, even half size pcb possible.
- Low BOM cost: Minimum discrete components
 - Integrated high sensitive hall sensor,
 - Integrated reverse polarity protection diode.
- One IC fits all:
 - Configurable speed curve
 - High drive strength up to 600mA
 - Standardized pcb / stator design, from 40mm to 120mm fans



Layout example :
Half size single layer pcb



Picture :

Melexis straight leads PWM Single coil fandrider on a single layer pcb **(on the left)**.

Compared to a **TSSOP16 competitor** with external straight leads SOT hall element **(on the right)**.

Motor control

LIN communication

Pressure Sensors

Wireless ICs

Hall Effect ICs
And Sensors

Optoelectronic
Sensors

Sensor Interface ICs

Infrared Sensors

Target Applications



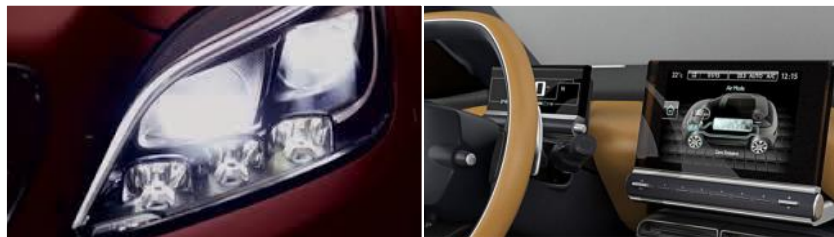
CPU/VGA/PSU



Game consoles



White goods



Automotive: LED headlamp, Battery cooling, VGA

Quick Reference	MLX90287	MLX90297
Minimum speed	Configurable	Configurable
Speed curve	Fixed	Configurable
Average Fan current	< 450 mA	< 600 mA
Current limiting	No	Yes
Soft start	Yes	Yes
Soft switching	Yes	Yes
Reverse polarity	Built-in	External diode
Supply voltage	[4.5, 18]	[3.3, 18]
ESD—HBM	6kV	9kV

Order code (*)	Grade	Package	FG/RD	Current Limit
MLX90287KZC-AAA000-RX	Industrial/Consumer	ZC: Straight leads SOIC8	FG	n/a
MLX90287LZC-AAA000-RX	Automotive	ZC: Straight leads SOIC8	FG	n/a
MLX90287LLD-AAA000-RX	Automotive	DFN10 3*3mm	FG	n/a
MLX90297KZC-AAA008-RX	Industrial/Consumer	ZC: Straight leads SOIC8	FG	Yes
MLX90297KZC-ABA008-RX	Industrial/Consumer	ZC: Straight leads SOIC8	RD	Yes
MLX90297KLD-AAA009-RX	Industrial/Consumer	DFN10 3*3mm	FG	Yes

(*) More order code options available. Please contact your sales representative for more information.



For additional information email info@melexis.com
or go to our website at: www.melexis.com

Disclaimer:

Devices sold by Melexis are covered by the warranty and patent indemnification provisions appearing in its Term of Sale. Melexis makes no warranty, express, statutory, implied, or by description regarding the information set forth herein or regarding the freedom of the described devices from patent infringement. Melexis reserves the right to change specifications and prices at any time and without notice. Therefore, prior to designing this product into a system, it is necessary to check with Melexis for current information. This product is intended for use in normal commercial applications. Applications requiring extended temperature range, unusual environmental requirements, or high reliability applications, such as military, medical life-support or life-sustaining equipment are specifically not recommended without additional processing by Melexis for each application. The information furnished by Melexis is believed to be correct and accurate. However, Melexis shall not be liable to recipient or any third party for any damages, including but not limited to personal injury, property damage, loss of profits, loss of use, interrupt of business or indirect, special incidental or consequential damages, of any kind, in connection with or arising out of the furnishing, performance or use of the technical data herein. No obligation or liability to recipient or any third party shall arise or flow out of Melexis' rendering of technical or other services. © 2010 Melexis NV. All rights reserved.

Motor control

LIN communication

Pressure Sensors

Wireless ICs

Hall Effect ICs
And Sensors

Optoelectronic
Sensors

Sensor Interface ICs

Infrared Sensors

Looking for pricing, stock, or lifecycle information?

Click below to explore more details on WIN SOURCE:

- ⊖ View [MLX90287LLD-AAA-000-SP](#) on WIN SOURCE
- ⊖ [Melexis Technologies NV](#) Information

Optimize Your Supply Chain with WIN SOURCE Solutions

- ✓ Global Sourcing Solution
- ✓ Obsolete Management
- ✓ Cost Control Management
- ✓ Shortage Management
- ✓ Alternative Solution
- ✓ Excess Inventory Management