



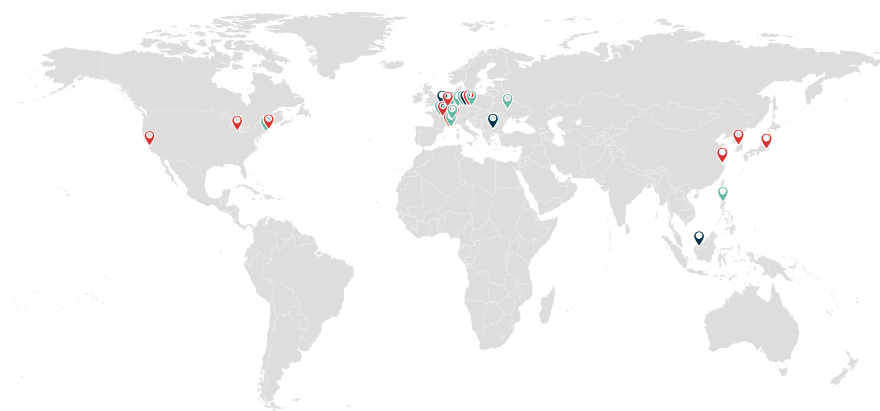
International Presence

www.melexis.com/sales-contact

Europe, Middle East and Africa
sales_europe@melexis.com

Asia and Oceania
sales_asia@melexis.com

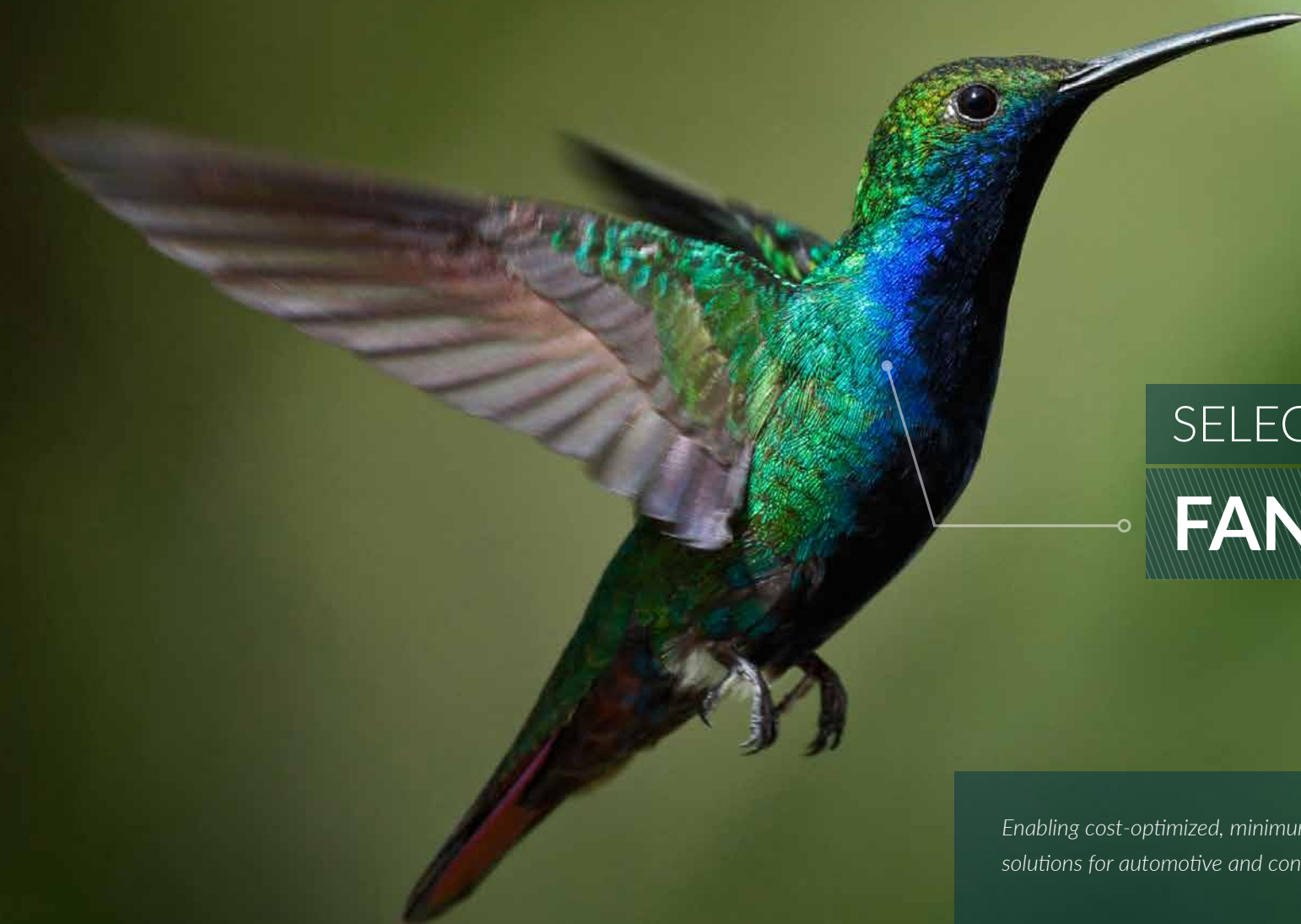
Americas
sales_usa@melexis.com



- Research & Development
- Sales & Applications
- Manufacturing



WWW.MELEXIS.COM

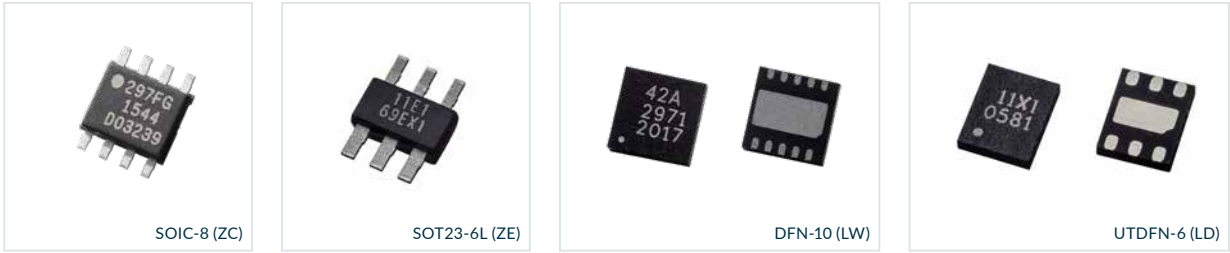


SELECTION GUIDE FANDRIVERS

Enabling cost-optimized, minimum-size and whisper-silent cooling solutions for automotive and consumer applications.

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?

Fandriver																																			
Type	Part Number** (ordering code)	Status	Open loop transfer curve	RDS _{ON} typ. (Ohm)	VDD		T _J Max. (Junction Temp.)	I _{peak}		I _{nom}								V _{OV} Over voltage protection	Diagnostics		Integrated protections		EOS/ESD		Noise/Efficiency		Package								
					Min.	Max.		A	Current limit	250	350	450	500	600	1100	1500	1800		FG	RD	LRP	RVProt	HBM [kV]	Soft Start	Soft-Switching	SIP			SO			Exposed pad DFN (LD/LW)			
										mA	mA	mA	mA	mA	mA	mA	mA									mA	UA	VK	VA	SO8 (DC)	SO8 (ZC)	SOT (ZE)	# pins	size	height
2-coil	US79KUA-AAA-000-BU	prod / PPAP		2	2.5V	18V	150C	500mA	-											✓	x	4kV			✓										
2-coil	US62EVK-AAA-000-BU	prod		2,5	3V	18V	125C	700mA	-										✓		✓	x	2kV				✓								
2-coil	US63EVK-AAA-000-BU	prod		2,5	3V	18V	125C	700mA	-											✓	✓	x	2kV				✓								
2-coil	US890EVK-AAA-000-BU	prod		1.0	2.5V	18V	125C	1200mA	-										✓		✓	x	4kV				✓								
2-coil	US891EVK-AAA-000-BU	prod		1.0	2.5V	18V	125C	1200mA	-											✓	✓	x	4kV				✓								
2-coil	US90AEVK-AAA-000-BU	prod		2,5	4.5V	30V	125C	500mA	-										✓		✓	x	4kV				✓								
2-coil	US90AEZE-AAA-000-RE	prod		2,5	4.5V	30V	125C	500mA	-										✓		✓	x	4kV							5					
2-coil	US91AEVA-AAA-000-BU	prod		2,5	4.5V	30V	125C	500mA	-											✓	✓	x	4kV					✓							
2-coil	US91AEVK-AAA-000-BU	prod		2,5	4.5V	30V	125C	500mA	-											✓	✓	x	4kV				✓								
2-coil	US91AEDC-AAA-000-RE	prod		2,5	4.5V	30V	125C	500mA	-											✓	✓	x	4kV						✓						
2-coil	US91AEZE-AAA-000-RE	prod		2,5	4.5V	30V	125C	500mA	-											✓	✓	x	4kV							5					
2-coil	MLX90285LVK-AAA-000-BU	prod		2.0	5V	30V	150C	700mA	-										✓		✓	x	4kV		Linear SS										
2-coil	MLX90285LVK-ABA-000-BU	prod		2.0	5V	30V	150C	700mA	-											✓	✓	x	4kV		Linear SS										
1-coil	US168ELD-AAA-000-RE	prod		2,2	1.8V	6.5V	125C	500mA	-										✓		✓	-	1.5kV		Linear SS						6	1.5x2mm	0.4mm		
1-coil	MLX90287KZC-AAA-000-RE	prod	MINSRP, 10	2,3	4.5V	18V	150C	1.2A	-										✓		✓	x	6kV	30%	SS					✓					
1-coil	MLX90287KZC-AAA-000-RX	prod	MINSRP, 10	2,3	4.5V	18V	150C	1.2A	-										✓		✓	x	6kV	30%	SS					✓					
1-coil	MLX90287LZC-AAA-000-RE	prod* / PPAP	MINSRP, 10	2,3	4.5V	18V	150C	1.2A	-										✓		✓	x	6kV	30%	SS					✓					
1-coil	MLX90287LDC-AAA-000-RE	prod* / PPAP	MINSRP, 10	2,3	4.5V	18V	150C	1.2A	-										✓		✓	x	6kV	30%	SS			✓							
1-coil	MLX90297KZC-AAF-108-RX	prod	MINSRP, 10/20/25/30	2,3	3.0V	18V	150C	CL	800mA										✓		✓		9kV	50%	SFS					✓					
1-coil	MLX90297KLW-AAF-109-RE	prod	MINSRP, 10/20/25/30	1,5	3.0V	18V	150C	CL	960mA										✓		✓		9kV	50%	SFS							10	3x3mm	0.9mm	
1-coil	MLX90297LLW-AAF-108-RE	prod* / PPAP	MINSRP, 10/20/25/30	1,5	3.3V	18V	150C	CL	800mA										✓		✓		9kV	50%	SFS							10	3x3mm	0.9mm	
1-coil	MLX90297LLW-AAF-206-RE	prod* / PPAP	MINSRP, 10/20/25/30	1,5	3.3V	18V	150C	CL	660mA										✓		✓		9kV	50%	FF							10	3x3mm	0.9mm	
1-coil	MLX90297KZC-ABF-108-RX	prod	MINSRP, 10/20/25/30	1,5	3.0V	18V	150C	CL	800mA											✓	✓		9kV	50%	SFS					✓					
1-coil	MLX90297LLW-ABF-206-RE	prod* / PPAP	MINSRP, 10/20/25/30	1,5	3.3V	18V	150C	CL	660mA											✓	✓		9kV	50%	FF							10	3x3mm	0.9mm	
1-coil	MLX90411KZE-BAA-023-RE	prod	10	1,5	3.2V	20V	150C	CL	330mA									18V	✓		✓		6kV	50%	Adapt.-Sine						6				
1-coil	MLX90411KZE-BAA-026-RE	prod	10	1,5	3.2V	20V	150C	CL	660mA									18V	✓		✓		6kV	50%	Adapt. -1/16						6				
1-coil	MLX90411KZE-BAA-028-RE	prod	10	1,5	3.2V	20V	150C	CL	800mA									18V	✓		✓		6kV	50%	Adapt. -1/16						6				
1-coil	MLX90411KLD-BAA-029-RE	prod	10	1,5	3.2V	20V	150C	CL	960mA									18V	✓		✓		6kV	50%	Adapt. -1/16						6	2.5x2mm	0.4mm		
1-coil	MLX90411KZE-BAA-043-RE	prod	10	1,5	3.2V	40V	150C	CL	330mA									35V	✓		✓		6kV	50%	Adapt. -1/16						6				
1-coil	MLX90411KZE-BAA-046-RE	prod	10	1,5	3.2V	40V	150C	CL	660mA									35V	✓		✓		6kV	50%	Adapt. -1/16						6				
1-coil	MLX90411KLD-BAA-049-RE	prod	10	1,5	3.2V	40V	150C	CL	960mA									35V	✓		✓		6kV	50%	Adapt. -1/16						6	2.5x2mm	0.4mm		
1-coil	MLX90411LLD-BAA-023-RE	prod / PPAP	10	1,5	3.2V	20V	150C	CL	330mA									18V	✓		✓		6kV	100%	Adapt.-2/16						6	2.5x2mm	0.4mm		
1-coil	MLX90411LZE-BAA-043-RE	prod / PPAP	10	1,5	3.2V	40V	125C	CL	330mA									22V	✓		✓		6kV	100%	Adapt.-Flat						6				
1-coil	MLX90411LLD-BAA-043-RE	prod / PPAP	10	1,5	3.2V	40V	150C	CL	330mA									22V	✓		✓		6kV	100%	Adapt.-Flat						6	2.5x2mm	0.4mm		
1-coil	MLX90411LLD-BAA-046-RE	prod / PPAP	10	1,5	3.2V	40V	150C	CL	660mA									22V	✓		✓		6kV	100%	Adapt.-Flat						6	2.5x2mm	0.4mm		
1-coil	MLX90411LLD-BAA-029-RE	prod / PPAP	10	1,5	3.2V	20V	150C	CL	960mA									18V	✓		✓		6kV	12,5%	Adapt. -1/16						6	2.5x2mm	0.4mm		
1-coil	MLX90411LLD-BAA-048-RE	prod / PPAP	10	1,5	3.2V	40V	150C	CL	960mA									22V	✓		✓		6kV	50%	Adapt. -1/16						6	2.5x2mm	0.4mm		
1-coil	MLX90412KLW-BAA-022-RE	prod	10	0,35	3.5V	20V	150C	CL	2200mA									18V	✓		✓		9kV	12,5%	Adapt. -1/16						10	3x3mm	0.9mm		
1-coil	MLX90412KLW-BAA-045-RE	prod	10	0,35	3.5V	40V	150C	CL	1500mA									35V	✓		✓		9kV	12,5%	Adapt. -1/16						10	3x3mm	0.9mm		
1-coil	MLX90412KLW-BAA-042-RE	prod	10	0,35	3.5V	40V	150C	CL	2200mA									35V	✓		✓		9kV	50,0%	Adapt.-Flat						10	3x3mm	0.9mm		
1-coil	MLX90412LLW-BAA-042-RE	prod / PPAP	10	0,35	3.5V	40V	150C	CL	2200mA									22V	✓		✓		9kV	50,0%	Adapt.-Flat						10	3x3mm	0.9mm		
1-coil	MLX90412GLW-BAA-042-RE	prod / PPAP	10	0,35	3.5V	40V	160C	CL	2200mA									22V	✓		✓		9kV	12,5%	Adapt.-Flat						10	3x3mm	0.9mm		



Explanation

Rvprot: Reverse polarity protection, especially for 2-coil fan drivers based on No-VDD patent
Soft Switching: SS: Slope-Slope, FF: Flat Flat (low EMI), SFS: Slope-Flat-Slope (reduced reverse current)
Open loop tranfer curve: open loop duty cycle transfer curve starts from (Dcin = "Transfer curve", Dcout = 10%) to (Dcin=100%, Dcout=100%) input duty cycle required to set Dcout=10%, or to MINSRP
VDD min: minimum guarantee operating voltage over temperature, supply voltage and process variation. Typically fandriver operation is 0.2V below minimum guaranteed voltage
Ipeak: CL indicates that the IC is protected from excessive peak currents by the Current Limit,
MINSRP: Minimum speed

SO8 (ZC) and SOT (ZE) package variants are straight leads options.
SO8 (DC) package variants are bent leads options.
DFN (LD): non wettable flanks, (LW): wettable flanks
-RX: dead bug in T&R, -RE: live bug in T&R

*: not recommended for new designs
**: Limited view only. The full list with all the possible variants is available on demand

