



Product Brief

2EDN MOSFET EiceDRIVER™ family

Rugged, cool and fast, 2-channel low-side 5 A driver ICs

2EDN family overview

2-channel MOSFET driver ICs are the crucial link between control ICs and powerful MOSFET and GaN switching devices. MOSFET driver ICs enable high system level efficiencies, excellent power density and consistent system robustness.

2EDN family: Fast, precise, strong and compatible

- › Highly efficient SMPS enabled by 5 ns short slew rates and 10 ns propagation delay precision for fast MOSFET and GaN switching
- › Numerous deployment options due to two 5 A channels. 1 ns channel-to-channel accuracy to use two channels in parallel
- › Industry standard packages and pinout ease system design upgrades

2EDN family: The new reference in ruggedness and low power dissipation

- › 4 V and 8 V UVLO (Under Voltage Lock Out) options for instant MOSFET protection under abnormal conditions
- › -10 V robustness of control and enable inputs provides crucial safety margin when driving pulse transformers or driving MOSFETs in TO-220 and TO-247 packages
- › 5 A reverse output current robustness eliminates the need for Schottky switching Diodes and reduces bill-of-material
- › Cool driver ICs from true rail-to-rail low impedance output stages

Applications

- › Server
- › Telecom
- › DC-DC converters
- › Bricks
- › Power tools
- › Industrial SMPS
- › Motor control
- › Solar



Product features
› 5 A source/sink current
› 5 ns rise/fall times
› <10 ns propagation delay precision
› True rail-to-rail low impedance output stages
› 4 V and 8 V UVLO options
› 19 ns propagation delay for both control and enable inputs
› -10 V robustness of control and enable inputs
› 5 A reverse output current robustness
› 2 independent channels
› Excellent 1 ns channel-to-channel accuracy
› Industry standard pinout and packages

Product benefits
› Fast Miller plateau transition
› Precise timing
› Low power dissipation in Driver IC
› Fast and reliable MOSFET turn-off, independent of control IC
› Increased GND-bounce robustness
› Saves switching diodes
› Option to increase drive current by truly concurrent switching of 2 channels
› Straight forward design upgrades

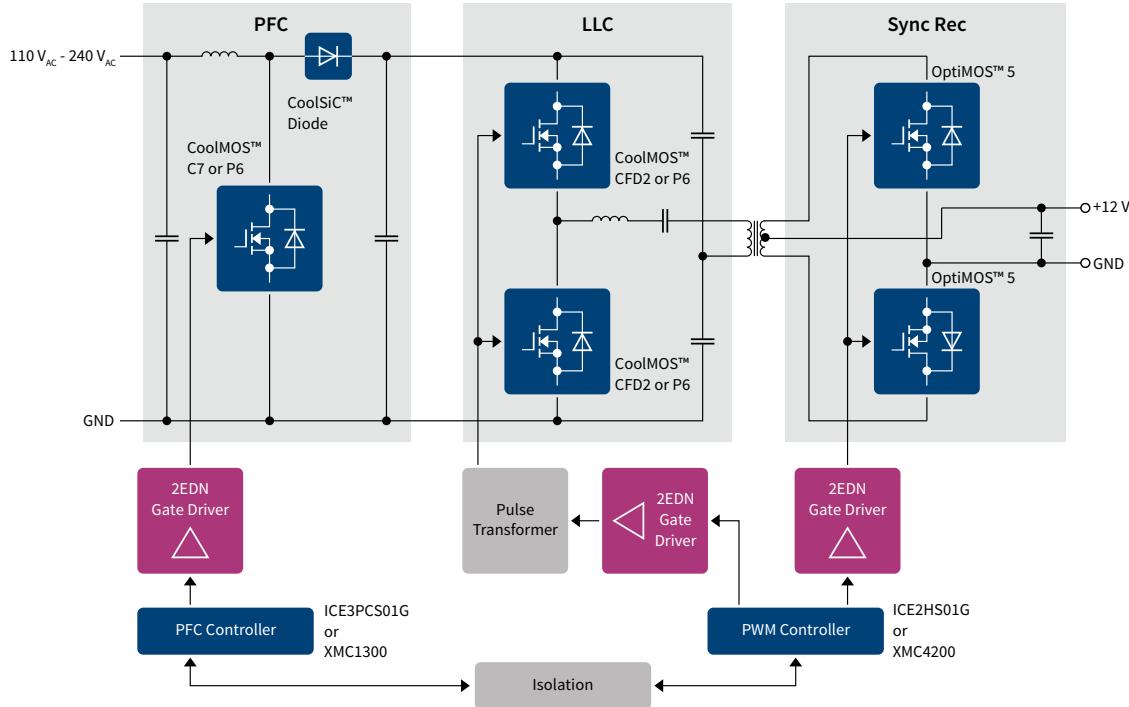
System benefits
› High power efficiency <ul style="list-style-type: none">- in hard switching PFC with SiC Diode- in half-bridges and synchronous rectifications
› Cooler driver IC operation
› Higher MOSFET drive capability
› Instant MOSFET protection under abnormal operation
› Crucial safety margin to drive pulse transformer
› Increases power density
› BOM savings
› One IC covering many applications
› Short time to market



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Application overview 800 W 130 kHz switched mode power supply



Product portfolio

Package	UVLO	Inputs	Product name	Orderable part number
DSO 8pin	4 V	Direct	2EDN7524F	2EDN7524FXTMA1
		Inverted	2EDN7523F	2EDN7523FXTMA1
	8 V	Direct	2EDN8524F	2EDN8524FXTMA1
		Inverted	2EDN8523F	2EDN8523FXTMA1
TSSOP 8pin	4 V	Direct	2EDN7524R	2EDN7524RXUMA1
		Inverted	2EDN7523R	2EDN7523RXUMA1
	8 V	Direct	2EDN8524R	2EDN8524RXUMA1
		Inverted	2EDN8523R	-
WSON 8pin	4 V	Direct	2EDN7524G	2EDN7524GXTMA1
		Inverted	2EDN7523G	2EDN7523GXTMA1

Industry standard pinout configuration

ENA	1	ENB	8
INA	2	OUTA	7
GND	3	VDD	6
INB	4	OUTB	5



For more information visit:
www.infineon.com/2edn

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