

Product brief

ISOFACE™ dual-channel digital isolators

Robust isolation with accurate timing performance and low power consumption

Overview

The ISOFACE™ 2DIBx4xxF dual-channel digital isolator family supports data rates up to 40 Mbps and ensures signal integrity over a wide ambient operating temperature range (-40 °C to +125 °C) and across production spread. Infineon's robust coreless transformer (CT) technology guarantees high immunity against system noise (CMTI >100 kV/μs) and withstands up to 3000 V_{RMS} isolation voltage (V_{ISO}). Two data channels in a narrow-body DSO-8 package allow for simplified and high power density designs and improve system efficiency with low current consumption. Product variants with different channel configurations, fail-safe default output states and variable or fixed input thresholds are available.



Potential applications

- > Server, telecom and industrial SMPS
- > Industrial automation systems
- > Medical equipment
- > Motor drives
- > Solar inverters

Key features

- > Two data channels in a NB DSO-8 package
- > Low current consumption
- > High isolation and signal robustness
- > Accurate timing performance
- > Variants with
 - Default high and low output state
 - Fixed or variable input thresholds

Product benefits

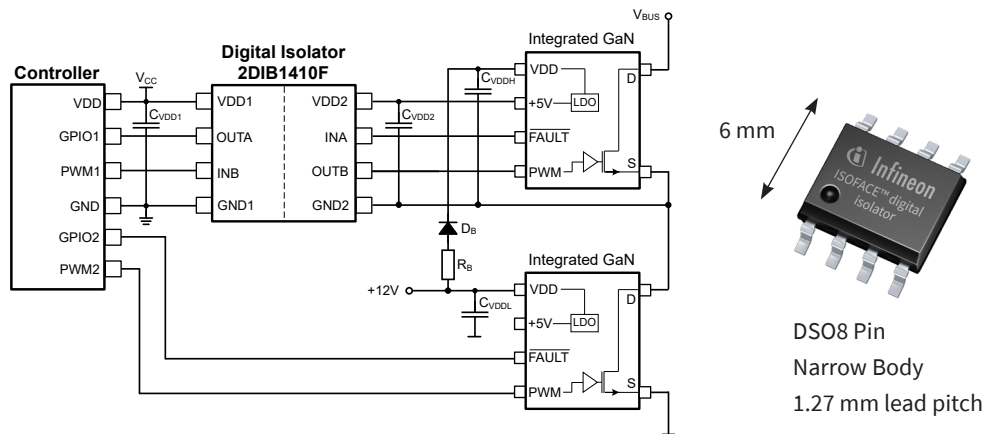
- > Efficiency gain and PCB space savings
- > Safe and reliable operation
- > Signal integrity
- > Regulatory safety

System benefits

- > Higher system efficiency in simplified and high power density designs
- > Reliable system operation in noisy environments with a trusted isolation solution
- > Stable system operation with predictable data communication
- > Simplified system safety approval
EN and CQC certification
(IEC 62368-1, IEC 60601-1, IEC 61010-1 and GB4943.1)

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Product portfolio

Part number	Orderable part number (OPN)	Channel direction	Data rate (max)	Propagation delay (typ)	Min. pulse width*** (min/max)	Default output states	Input thresholds	Isolation rating	Safety certification*	Package
2DIB0400F	2DIB0400FXUMA1	2+0 (2 forward 0 reverse)	40 Mbps	26 ns	10 ns / 15 ns	Low	Variable (CMOS)	$V_{ISO} = 3000 V_{RMS}$ (UL1577)	UL1577** VDE 0884-17 IEC 60747-17	PG-DSO-8 5 x 6 mm
2DIB0401F	2DIB0401FXUMA1					High				
2DIB1400F	2DIB1400FXUMA1	Low								
2DIB1401F	2DIB1401FXUMA1	High								
2DIB0410F	2DIB0410FXUMA1	2+0 (2 forward 0 reverse)				Low	Fixed (TTL)			
2DIB0411F	2DIB0411FXUMA1					High				
2DIB1410F	2DIB1410FXUMA1	1+1 (1 forward 1 reverse)				Low				
2DIB1411F	2DIB1411FXUMA1					High				

* Certification planned

** Certification n. E311313

*** Minimum input pulse width that changes the output state

www.infineon.com/digitalisolators



www.infineon.com

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