



# MP27631

5kV<sub>RMS</sub>, Quad-Channel Digital Isolator

**PRELIMINARY SPECIFICATIONS SUBJECT TO CHANGE**

## DESCRIPTION

The MP27631 is a quad-channel digital isolator that replaces a traditional optocoupler isolator in applications. It can support up to 150Mbps of data rate signal isolation.

It employs capacitive isolation technology to support up to 5kV<sub>RMS</sub> of insulation voltage. This isolator offers a compact solution, with low power consumption and improved reliability compared to traditional optocoupler isolators.

The MP27631 provides a Schmitt trigger input as well as isolated encoding and decoding for high immunity in a noisy environment. The default high failsafe output can support a fixed output, even if the input signal power fails.

The MP27631 is available in a wide SOICW-16 package.

## FEATURES

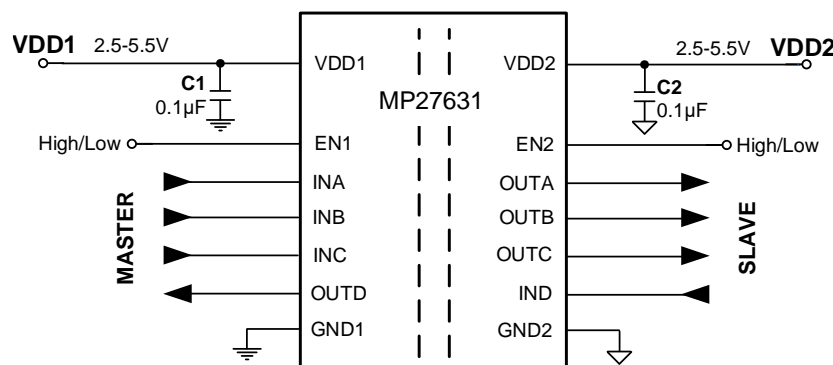
- 5kV<sub>RMS</sub> Isolation Voltage
- Supports DC to 150Mbps Data Rate
- 2.5V to 5.5V Operation Range
- Up to 7.5V Absolute VDD Rating
- >±100kV/μs Common-Mode Transient Immunity (CMTI)
- High System-Level ESD, EFT, and Surge Immunity Performance
- Low Emissions
- 13ns Propagation Delay for 5V Operation
- Ultra-Low Power Supply Current
- Tri-State Outputs with Enable (EN) Control
- Voltage High Failsafe Output
- 1.2kV peak V<sub>IORM</sub> Working Insulation
- Wide -40°C to 125°C Temperature Range
- Available in a SOICW-16 Package

## APPLICATIONS

- Isolated ADC/DAC
- Motor Controllers
- Isolated Switch-Mode Supplies
- Industrial Automation Systems
- Serial Peripheral Interface (SPI) Isolation

All MPS parts are lead-free, halogen-free, and adhere to the RoHS directive. For MPS green status, please visit the MPS website under Quality Assurance. "MPS", the MPS logo, and "Simple, Easy Solutions" are trademarks of Monolithic Power Systems, Inc. or its subsidiaries.

## TYPICAL APPLICATION



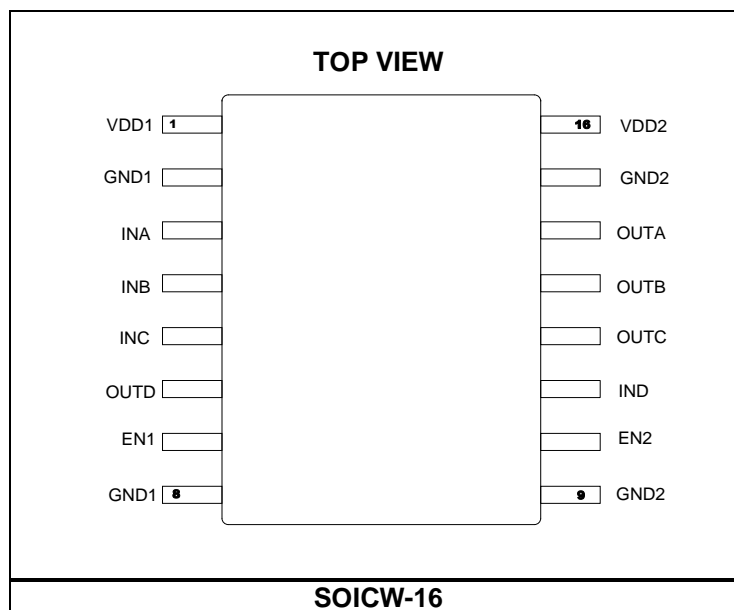

**MP27631 – 5KV<sub>RMS</sub>, QUAD-CHANNEL DIGITAL ISOLATOR**
**PRELIMINARY SPECIFICATIONS SUBJECT TO CHANGE**
**ORDERING INFORMATION**

Part Number*	Package	Top Marking	MSL Rating
MP27631GY	SOICW-16	See Below	TBD

\* For Tape & Reel, add suffix -Z (e.g. MP27631GY-Z).

**TOP MARKING**

TBD

**PACKAGE REFERENCE**


**Notice:** The information in this document is subject to change without notice. Please contact MPS for current specifications. Users should warrant and guarantee that third-party Intellectual Property rights are not infringed upon when integrating MPS products into any application. MPS will not assume any legal responsibility for any said applications.