![MPS - The Future of Analog IC Technology logo]

MagAlpha MA800
8-Bit Contactless Angle Encoder with Push Button Function

PRELIMINARY SPECIFICATIONS SUBJECT TO CHANGE

DESCRIPTION

The MA800 is an easy-to-use, magnetic, angle encoder with a digital output designed to replace analogic potentiometers or rotary switches. The sensor detects the absolute angular position of a permanent magnet attached to a rotating shaft.

The magnet shapes and configurations are very flexible. Typically, the MA800 is used with a diametrically magnetized cylinder of 2 to 8mm in diameter.

The MA800 features programmable magnetic field strength thresholds, which allow for the implementation of a push or pull button function. These are output as two logic signals.

On-chip non-volatile memory provides storage for configuration parameters, including the reference zero angle position and magnetic field detection threshold settings.
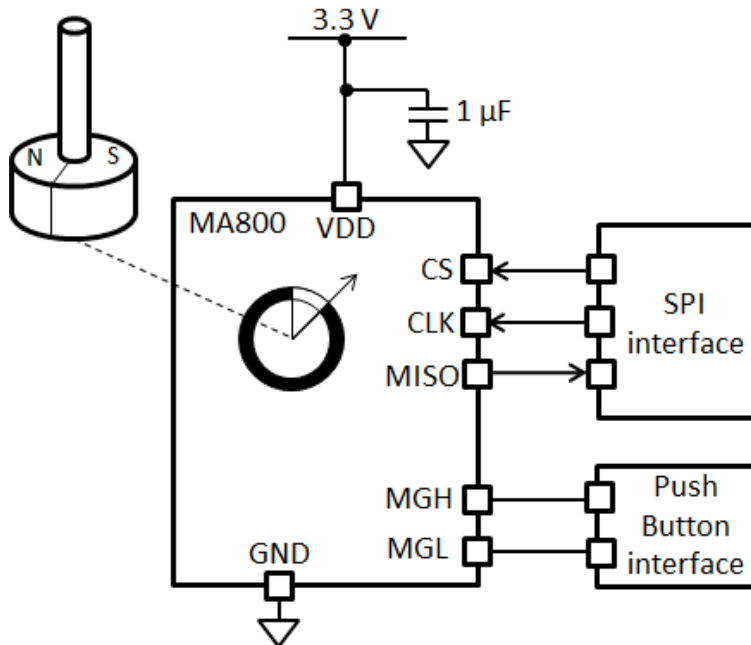
FEATURES

- 8-Bit Resolution Absolute Angle Encoder
- Contactless Sensing for Long Life with No Wear
- SPI and SSI Serial Interface
- Programmable Magnetic Field Strength Detection for Push/Pull Button Detection
- 3.3V, 12mA Supply
- -40 to +125°C Operating Temperature
- Available in a QFN-16 (3mmx3mm) Package

APPLICATIONS

- Rotary Knob Control Interfaces
- Encoders
- Automotive
- White Goods

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TYPICAL APPLICATION

MA800 Rev. 0.45
4/3/2017
Preliminary Specifications Subject to Change

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ORDERING INFORMATION

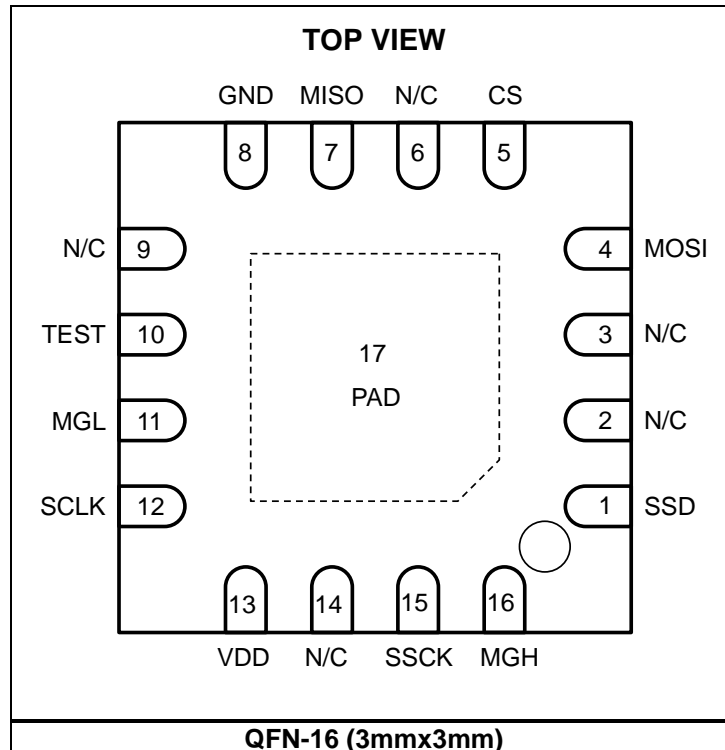| Part Number*	Package	Top Marking
MA800GQ	QFN-16 (3mmx3mm)	*See Below*

* For Tape & Reel, add suffix –Z (e.g. MA800GQ–Z)

TOP MARKING

AXV_
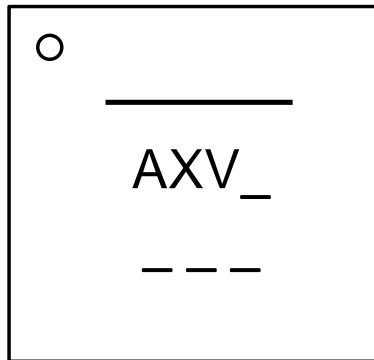
Underscore sign (_): Internal identifiers

PACKAGE REFERENCE

TOP VIEW

QFN-16 (3mmx3mm)

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