



# DW9828N

## eOIS Driver with Digital Controller & Internal Hall

### Overview

The DW9828N is motor driver for camera auto focus. DW9828N includes internal hall, digital PID controller, 32 byte EEPROM for user, 1 channel H-bridge, A/D converter and D/A converter for driving of internal Hall sensor.

The DW9828N operates from a single 2.65V to 3.6V supply. It is controlled via an I<sup>2</sup>C serial interface that operates at clock rate up to 3.4MHz.

The DW9828N can be used for auto focus applications in mobile cameras, digital still cameras, camcorders, web cameras and action cameras.

### Features

- Supply voltage: 2.65V to 3.6V
- Fast Mode, Fast Mode plus and HS mode I<sup>2</sup>C Interface
- 1.2V I<sup>2</sup>C Interface available
- Reverse I<sup>2</sup>C interface available
- H-Bridge driver
- Hall sensor calibration
- Internal FRA test mode
- Internal Loop Gain adjust
- Internal AF settling time measure
- Coil resistance measure
- High resolution Analog-to-Digital Converter (ADC)
- PID Controller
- PKG: 6 pins WLCSP (0.620mm X 1.840mm X 0.335mm)

### Applications

- Mobile cameras
- Digital still cameras
- Camcorders
- Web cameras and action cameras

## Simplified Application Diagram

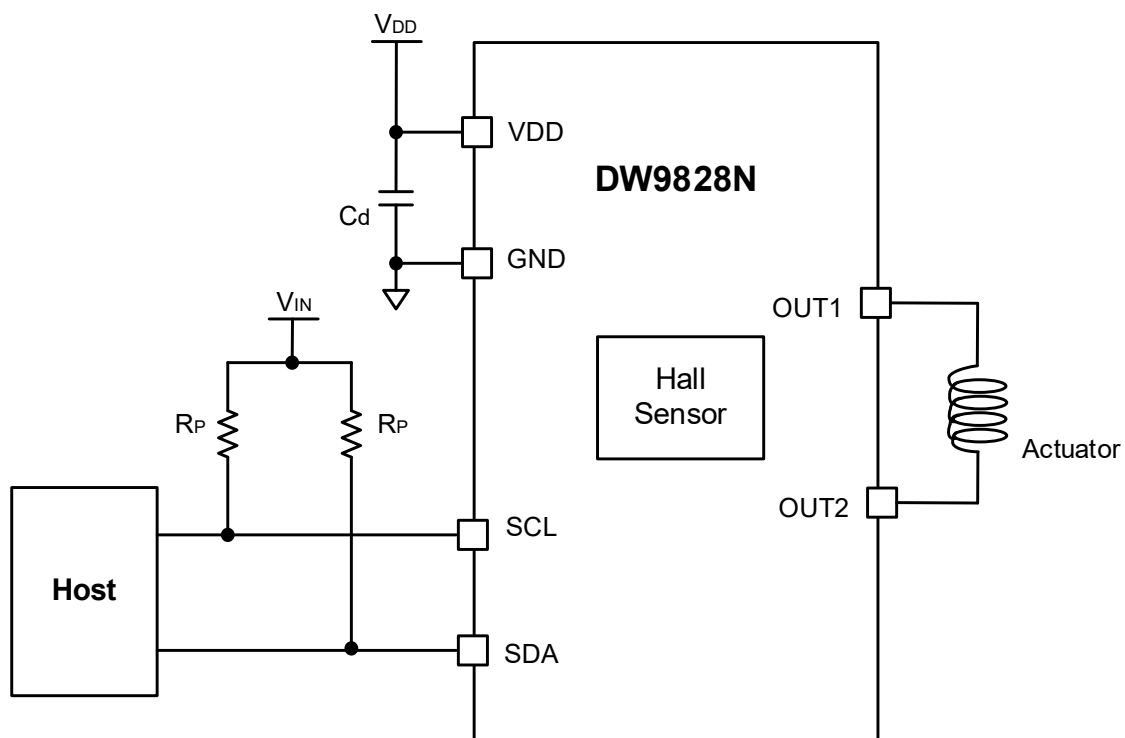


Figure 1. Simplified Application Diagram

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