# 500mA Single Phase Hall-Effect DC Fan Driver

#### General Description

The OCH2988 is an integrated Hall sensor with H-Bridged output driver designed for brushless DC motor applications. The device is using HV process includes an on-chip Hall sensor for magnetic sensing, an amplifier that amplifies the Hall voltage, a comparator to provide switching hysteresis for noise rejection, a bi-directional drivers for sinking and driving large current load.

Placing the device in a variable magnetic field, if the magnetic flux density is larger than threshold BOP, the DO is turned to sink and DOB is turned to drive. This output state is held until the magnetic flux density reverses and falls below BRP, then causes DO to be turned to drive and DOB turned to sink.

OCH2988 is available in SIP-4L package and is rated over the -40°C to 85°C.

#### **■** Features

- One-chip Solution (Hall Element + Driver)
- Input Voltage Range: 3V to 20V
- Continuous Output Current : 500mA
- High Sensitivity Hall Sensor BOP25GS、BRP-25GS
- Lock-shutdown protection & auto-restart function
- Thermal Shutdown Protection
- Low Output Switching Current Noise
- -40 ℃ to +85 ℃ Temperature Range
- RoHS Compliant
- Available in SIP-4L(TO94) Packages

## ■ Applications

- Single Coil Design Cooling Fans
- Single Coil DC Brushless Fan
- Single Coil DC Brushless Motor
- Office Automated Equipment
- Brown-Goods
- Home Applications
- Car Audio Cooling Fan

## ■ Pin Configuration

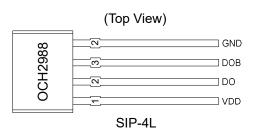


Figure 1, Pin Assignments of OCH2988

Pin Name	Pin No.	Pin Function
VDD	1	Positive Power Supply
DO	2	Output 1
DOB	3	Output 2
GND	4	Ground

#### Typical Application Circuit

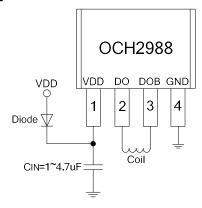


Figure 2, Typical Application Circuit of OCH2988 (SIP-4L)

**OCH2988** 

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# **■** Block Diagram

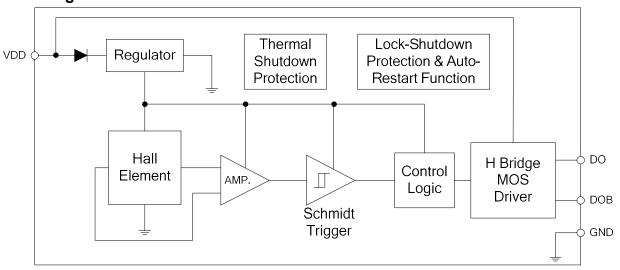


Figure 3, Block Diagram of OCH2988