■ General Description

The OCH1611 is a Hall-effect **Latch sensor** IC, It is fabricated from mixed signal CMOS technology. It is comprised of a Hall plates and a CMOS output driver, mainly designed for battery-operation. The total power consumption in normal operation is typically 2.4μW with a 3V power source. When the magnetic flux density of the Antarctic magnetic field is greater than the operating point, the output will be turned on (low); when the magnetic flux density of the arctic magnetic field is greater than the release point, and then turned off(High).

The OCH1611 is available in many flexible packaging options, such as SOT23-3L/SIP-3L. Operating temperature range of the OCH1611 is from -40°C to 85°C.

■ Features

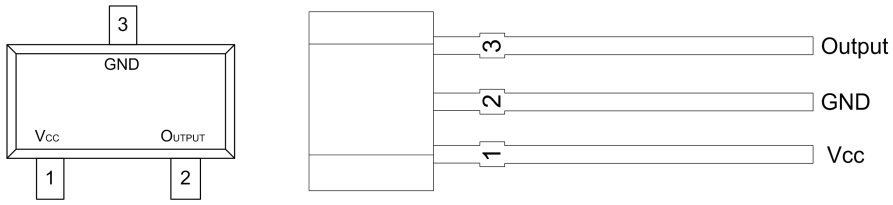
- **1uA** Micro power design
- CMOS Output
- 2.4V to 5.5V operation voltage
- High sensitivity and high stability of the magnetic switching points
- High resistance to mechanical stress
- Digital output signal
- -40℃to 85℃operating temperature
- SOT23-3L/SIP-3L(TO92S) package

■ Applications

- Smart meter
- Flow measurement

■ Pin Configuration

(Top View)



SOT23-3L SIP-3L(TO92S)

Pin Name	Pin		Description
	SOT23-3L	SIP-3L	
V_{CC}	1	1	IC Power Supply
O_{UTPUT}	2	3	Output pin
GND	3	2	IC Ground

■ Application Circuit

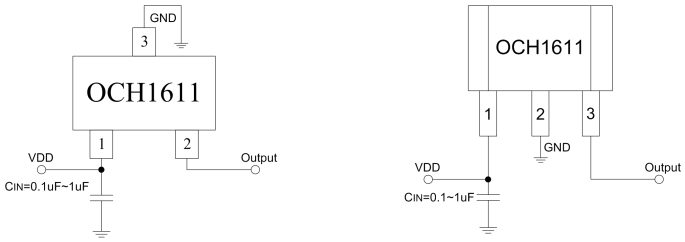


Figure 1, application circuit

Note: C_{IN} is for power stabilization and to strengthen the noise immunity, the recommended capacitance is 0.1~1uF.

■ Ordering Information

Part Number	Package Type	Packing Qty	B_{OP} (Gauss)	B_{RP}(Gauss)	Temperature	Eco Plan	Lead
OCH1611WAD	SOT23-3L	3000pcs/Reel	+7(Typ.)	-8(Typ.)	-40~ +85℃	ROHS	Cu
OCH1611MD	SIP-3L	1000pcs/Bag	+7(Typ.)	-8(Typ.)	-40~ +85℃	ROHS	Cu

■ Block Diagram

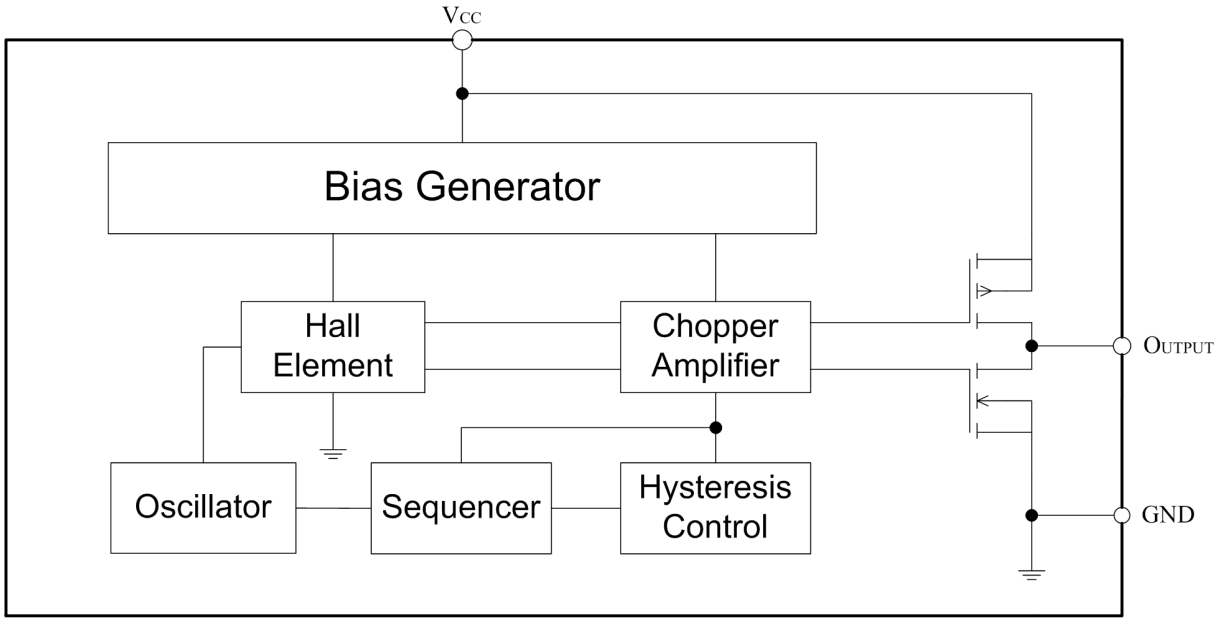


Figure 2, Block Diagram Of OCH1611

■ Absolute Maximum Ratings[1] (T_A=25°C unless otherwise noted)

Parameter		Symbol	Rating	Unit
$V_{CC}$to GND		V_{CC}	-0.3 to 6	V
Magnetic Flux Density		B	Unlimited	
Storage Temperature Range		T_S	-40 to 150	℃
Operating Junction Temperature Range		T_J	-40 to 150	℃
Maximum Power Dissipation	SOT23-3L	P_D	230	mW
	SIP-3L		300	
Maximum Soldering Temperature(at leads, 10 sec)		T_{LEAD}	260	℃

■ Recommended Operating Conditions (T_A=25°C unless otherwise noted)

Parameter	Symbol	Conditions	Rating	Unit
Supply Voltage	V_{DD}	Operating	2.4 ~ 5.5	V
Operating Temperature Range	T_A	Operating	-40 ~ +85	℃