

## 3-Pin Microprocessor Reset Circuits

### ❖ GENERAL DESCRIPTION

The AX6901/2/3/4 is used for microprocessor ( $\mu$ P) supervisory circuits to monitor the power supplies in  $\mu$ P and digital systems. They provide excellent circuit reliability and low cost by eliminating external components and adjustments when used with +5V, +3.3V, +3.0V, +2.5V powered circuits.

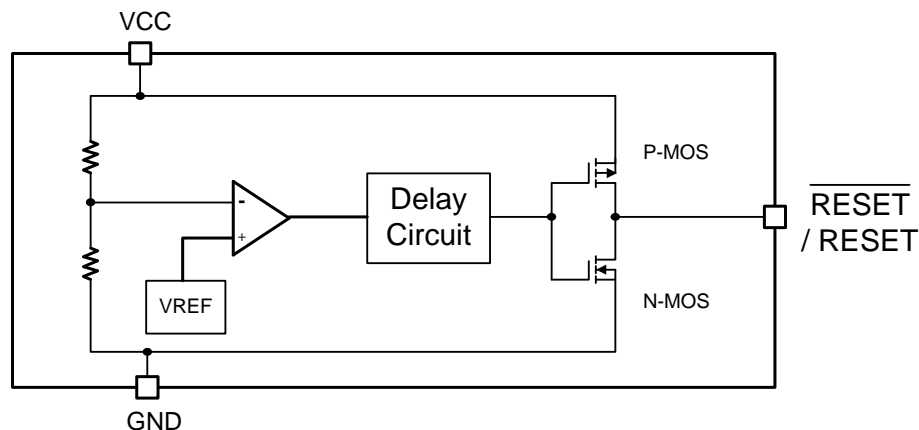
These circuits perform a single function: they assert a reset signal whenever the VCC supply voltage declines below a preset threshold, keeping it asserted for at least 200ms after VCC has risen above the reset threshold. Reset thresholds suitable for operation with a variety of supply voltages are available. The AX6901/2/3/4 has push pull outputs.

The AX6901/3 has an active low  $\overline{\text{RESET}}$  output, while the AX6902/4 has an active high RESET output. The reset comparator is designed to ignore fast transients on VCC, and the outputs are guaranteed to be in the correct logic state for VCC down to 1.0V. Low supply current makes the AX6901/2/3/4 ideal for use in portable equipment. The AX6901/2/3/4 is available in a 3-pin SOT23 and SC70 package.

### ❖ FEATURES

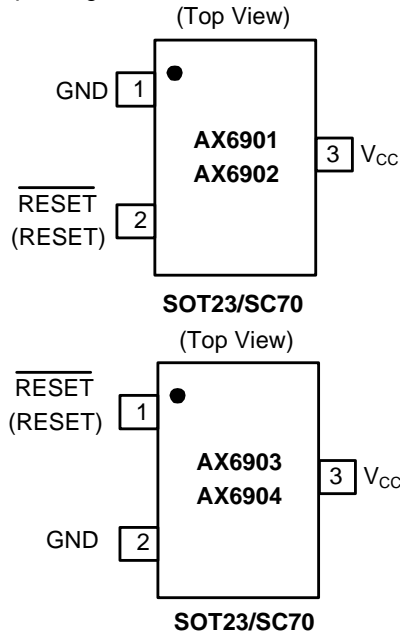
- Precision Monitoring of +2.5, +3V, +3.3V, and +5V Power-Supply Voltages
- Fully Specified Over Temperature
- Available in Three Output Configurations
- Push-Pull  $\overline{\text{RESET}}$  Low Output (AX6901/3)
- Push-Pull RESET High Output (AX6902/4)
- 200ms (Typ.) min Power-On Reset Pulse Width
- 25 $\mu$ A Supply Current
- Guaranteed Reset Valid to  $V_{CC} = +1.0V$
- Power Supply Transient Immunity
- No External Components
- Available in the 3-Pin Pb-Free SOT23 and SC70 Package

### ❖ BLOCK DIAGRAM



## ❖ PIN ASSIGNMENT

The packages of AX6901/2/3/4 are SOT23 and SC70; the pin assignment is given by:



Name	Description
GND	Ground
RESET (RESET)	Reset output pin L: forAX6901/3 H: forAX6902/4
V <sub>CC</sub>	Operating voltage input

## ❖ ORDER/MARKING INFORMATION

Order Information	
<div>AX690 X X X X</div> <div><div>Enable</div><div>Voltage</div><div>Package</div><div>Packing</div></div> <div><div>1: Active-Low</div><div>2: Active-High</div><div>3: Active-Low</div><div>4: Active-High</div></div> <div><div>A: 4.63</div><div>B: 4.38</div><div>C: 4.00</div><div>D: 3.08</div><div>E: 2.93</div><div>F: 2.63</div><div>G: 2.25</div><div>H: 2.70</div><div>I : 4.25</div></div> <div><div>A:SC70</div><div>R:SOT23</div></div> <div><div>A : Taping</div></div>	
Top Marking (SOT23-3L)	Top Marking (SC70-3L)
<div>LLYWX</div> <div>→ ID Code: internal</div> <div>→ WW : 01~26(A~Z)</div> <div>→ 27~52(a~z)</div> <div>→ Year : A = 2010</div> <div>→ 1 = 2011</div> <div>→ Identification code</div>	<div>LLYW</div> <div>→ WW : 01~26(A~Z)</div> <div>→ 27~52(a~z)</div> <div>→ ID Code: internal</div> <div>→ Year : A = 2010</div> <div>→ 1 = 2011</div> <div>→ Identification code</div>