

Microprocessor Reset IC

Features

- Precision Monitoring of +3V, +3.3V, and +5V Power-Supply Voltages
- Fully Specified Over Temperature
- Available in Three Output Configurations
 - Push-Pull $\overline{\text{RESET}}$ Output (G670L)
 - Push-Pull RESET Output (G670H)
 - Open-Drain $\overline{\text{RESET}}$ Output (G671L)
- 2ms max Power-On Reset Pulse Width
- 14 μA Supply Current
- Guaranteed Reset Valid to $V_{\text{CC}} = +1\text{V}$
- Power Supply Transient Immunity
- No External Components
- 3-Pin SOT-23, TO-92, SC-70-3(SOT-323) and SOT-89 Packages
- 2% Reset Threshold Accuracy with 5% Hysteresis

Applications

- Computers
- Controllers
- Intelligent Instruments
- Critical μP and μC Power Monitoring
- Portable / Battery-Powered Equipment
- Automotive

General Description

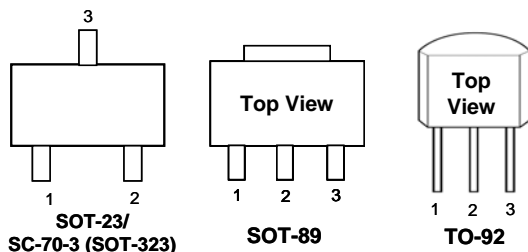
The G670/G671 are microprocessor (μP) supervisory circuits used to monitor the power supplies in μP and digital systems. They provide excellent circuit reliability and low cost by eliminating external components and adjustments when used with +5V, +3.3V, +3.0V- powered circuits.

These circuits perform a single function: they assert a reset signal whenever the V_{CC} supply voltage declines below a preset threshold. Reset thresholds suitable for operation with a variety of supply voltages are available.

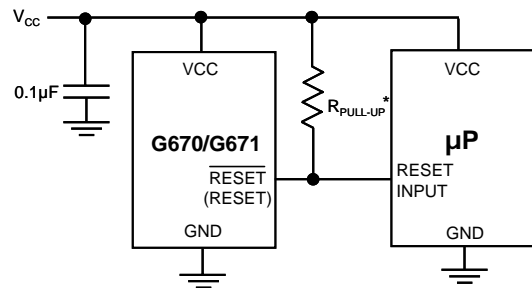
The G671L has an open-drain output stage, while the G670 have push-pull outputs. The G671L's open-drain $\overline{\text{RESET}}$ output requires a pull-up resistor that can be connected to a voltage higher than V_{CC} . The G670L have an active-low $\overline{\text{RESET}}$ output, while the G670H has an active-high RESET output. The reset comparator is designed to ignore fast transients on V_{CC} , and the outputs are guaranteed to be in the correct logic state for V_{CC} down to 1V.

Low supply current makes the G670/G671 ideal for use in portable equipment. The G670/G671 are available in 3-pin SOT-23, TO-92, SC-70-3(SOT-323) and SOT-89 packages.

Pin Configuration



Typical Application Circuit



*G671 only

ICC may increased at high T_{A} , Therefore, can not connect Resistors to VCC to prevent Icc abnormal behavior at high T_{A} .