

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 μ A Supply Current
- Guaranteed Reset Valid to $V_{CC} = +1V$
- 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 μ P and μ C Power Monitoring
- Portable / Battery-Powered Equipment
- Automotive

General Description

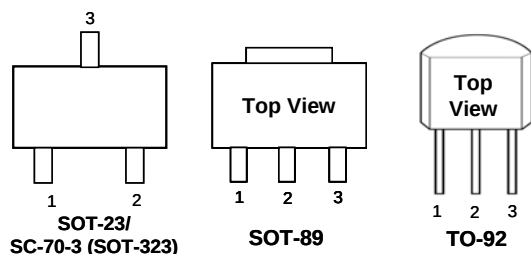
The G670/G671 are microprocessor (μ P) supervisory circuits used to monitor the power supplies in μ P and digital systems. They provide excellent circuit reliability and low cost by eliminating external components and adjustments when used with +5V, +3.3V, +3.0V- powered circuits.

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.

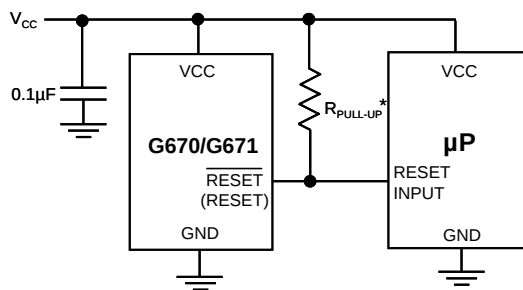
The G671L has an open-drain output stage, while the G670 have push-pull outputs. The G671L's open-drain $\overline{\text{RESET}}$ output requires a pull-up resistor that can be connected to a voltage higher than V_{CC} . The G670L have an active-low $\overline{\text{RESET}}$ output, while the G670H has 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 V_{CC} to prevent I_{CC} abnormal behavior at high T_A .