

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 (G690L)
 - Push-Pull RESET Output (G690H)
 - Open-Drain $\overline{\text{RESET}}$ Output (G691L)
- 140ms min Power-On Reset Pulse Width
- 10 μ A Supply Current
- Guaranteed Reset Valid to $V_{CC} = +1V$
- Power Supply Transient Immunity
- No External Components
- 3-Pin SOT-23 and SC-70-3(SOT-323) Packages

Applications

- Computers
- Controllers
- Intelligent Instruments
- Critical μ P and μ C Power Monitoring
- Portable / Battery-Powered Equipment
- Automotive

General Description

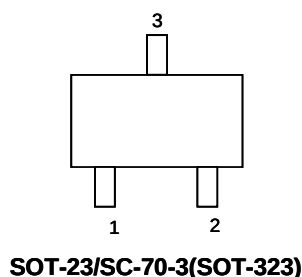
The G690/G691 are microprocessor (μ P) supervisory circuits used to monitor the power supplies in μ P and digital systems. They provide excellent circuit reliability and low cost by eliminating external components and adjustments when used with +5V, +3.3V, +3.0V- powered circuits.

These circuits perform a single function: they assert a reset signal whenever the V_{CC} supply voltage declines below a preset threshold, keeping it asserted for at least 140ms after V_{CC} has risen above the reset threshold. Reset thresholds suitable for operation with a variety of supply voltages are available.

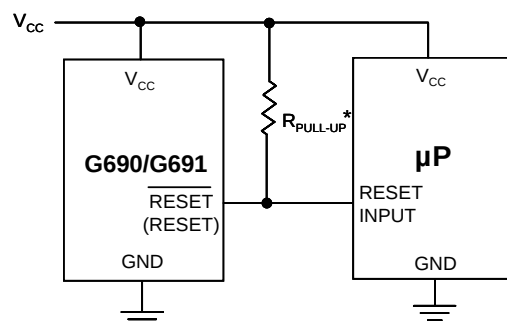
The G691L has an open-drain output stage, while the G690 have push-pull outputs. The G691L's open-drain $\overline{\text{RESET}}$ output requires a pull-up resistor that can be connected to a voltage higher than V_{CC} . The G690L have an active-low $\overline{\text{RESET}}$ output, while the G690H has 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 G690/G691 ideal for use in portable equipment. The G690/G691 are available in 3-pin SOT-23 and SC-70-3(SOT-323) packages.

Pin Configuration



Typical Application Circuit



***G691 ONLY**

I_{CC} may increased at high T_A . Therefore, can not connect Resistors to VCC to prevent I_{CC} abnormal behavior at high T_A .