

4-Pin μ P Voltage Monitors with Manual Reset Input

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 (G692L)
 - Push-Pull RESET Output (G692H)
 - Open-Drain $\overline{\text{RESET}}$ Output (G693L)
- 230ms Min Power-On Reset Pulse Width
- 14 μ A Supply Current
- Guaranteed Reset Valid to $V_{CC} = +1V$
- Power Supply Transient Immunity
- No External Components
- Manual Reset Input
- SOT-143, SC-70-5(SOT-353) and SOT-23-5 Package
- 2% Threshold Accuracy

Applications

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

General Description

The G692/G693 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. The G692/G693 also provides a de-bounced manual reset input.

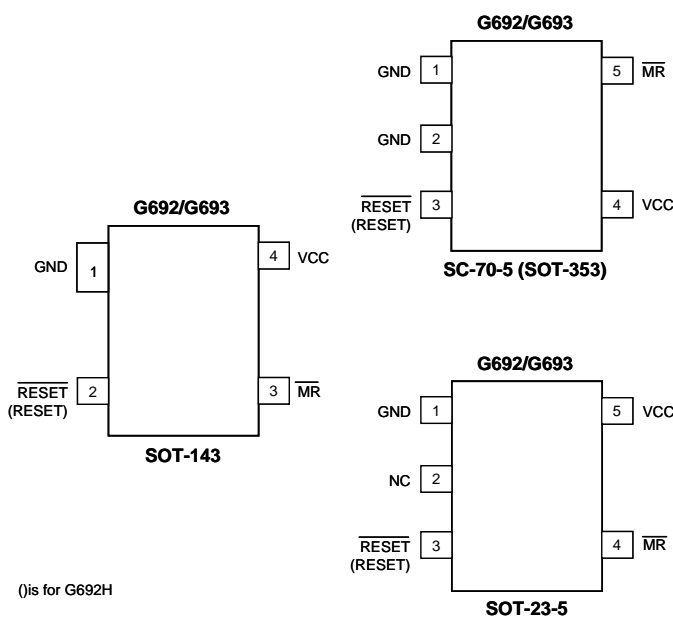
These circuits perform a single function: they assert a reset signal whenever the V_{CC} supply voltage declines below a preset threshold, keeping it asserted for at least 230ms after V_{CC} has risen above the reset threshold. Reset thresholds suitable for operation with a variety of supply voltages are available.

The G693L has an open-drain output stage, while the G692 have push-pull outputs. The G693L's open-drain $\overline{\text{RESET}}$ output requires a pull-up resistor that can be connected to a voltage higher than V_{CC} .

The G692L have an active-low $\overline{\text{RESET}}$ output, while the G692H 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 G692/G693 ideal for use in portable equipment. The G692/G693 are available in a SOT-143, SC-70-5(SOT-353), SOT-23-5 packages.

Pin Configuration



Typical Application Circuit

