

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 (G696L)
 - Push-Pull RESET Output (G696H)
 - Open-Drain $\overline{\text{RESET}}$ Output (G697L)
- Externally Programmable Time Delay Generator
- 14 μA Supply Current
- Guaranteed Reset Valid to $V_{\text{CC}} = 0.8\text{V}$
- Power Supply Transient Immunity
- 5 pin SOT-23-5 or TSOT-23-5 Packages
- 2% Threshold Accuracy

Applications

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

General Description

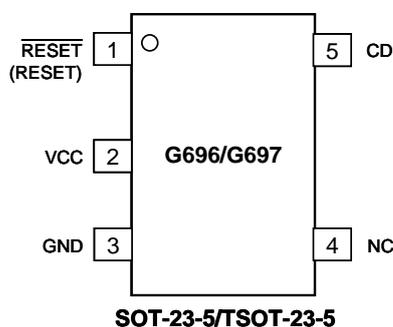
The G696/G697 are microprocessor (μP) supervisory circuits used to monitor the power supplies in μP and digital systems. They provide excellent circuit reliability and low cost and adjustments when used with +5V, +3.3V, +3.0V- powered circuits.

These circuits perform a single function: they assert a reset signal whenever the V_{CC} supply voltage declines below a preset threshold, with hysteresis keeping it asserted for time delay determined by externally programmable time delay generator after V_{CC} has risen above the reset threshold. Reset thresholds suitable for operation with a variety of supply voltages are available.

The G697L has an open-drain output stage, while the G696 have push-pull outputs. The G697L's open-drain $\overline{\text{RESET}}$ output requires a pull-up resistor that can be connected to a voltage higher than V_{CC} . The G696L have an active-low $\overline{\text{RESET}}$ output, while the G696H 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 0.8V.

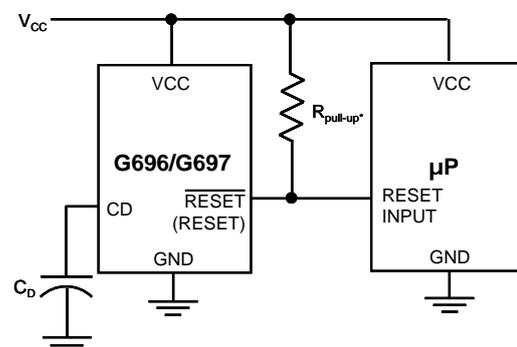
Low supply current makes the G696/G697 ideal for use in portable equipment. The G696/G697 are available in 5-pin SOT23-5 or TSOT-23-5 packages.

Pin Configuration



() is for G696H

Typical Application Circuit



*G697 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} .