G656/G657

Microprocessor Reset IC

Features

- **Precision Monitoring Voltage of +2.2V and +3.7V**
- **Fully Specified Over Temperature**
- **Available in Three Output Configurations**
  Push-Pull $\overline{\text{RESET}}$ Output (G656L)
  Push-Pull RESET Output (G656H)
  Open-Drain $\overline{\text{RESET}}$ Output (G657L)
- **Reset Deassert Time Smaller than 100μs when V_{CC} Higher than Monitor Voltages (CD Pin Floating)**
- **Externally Programmable Time Delay Generator**
- **27μA Supply Current at V_{CC}=3.3V**
- **Guaranteed Reset Valid to V_{CC} = 0.8V**
- **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

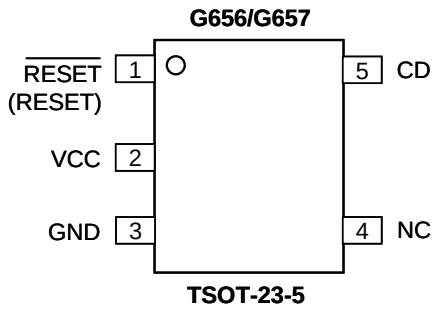
The G656/G657 are microprocessor (μP) supervisory circuits used to monitor the power supplies in μP and digital systems. They provide excellent circuit reliability and low cost.

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.

The G657L has an open-drain output stage, while the G656 have push-pull outputs. The G657L's open-drain $\overline{\text{RESET}}$ output requires a pull-up resistor that can be connected to a voltage higher than V_{CC}. The G656L has an active-low $\overline{\text{RESET}}$ output, while the G656H has an active-high RESET output. The outputs are guaranteed to be in the correct logic state for V_{CC} down to 0.8V.

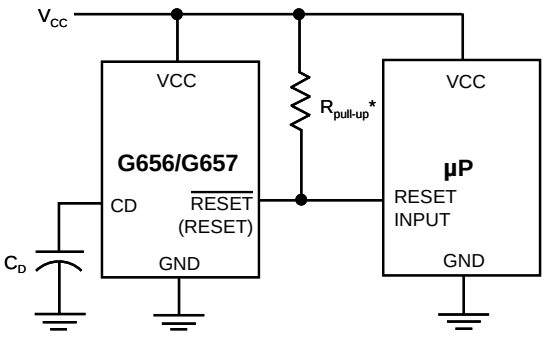
The G656/G657 are available in 5-pin TSOT-23-5 package.

Pin Configuration



()is for G656H

Typical Application Circuit



*G657 only

ICC may increased at high T_A, Therefore, can not connect Resistors to VCC to prevent Icc abnormal behavior at high T_A.