

## Product Overview

### MC33161: Voltage Supervisor, Universal Voltage Monitor

For complete documentation, see the data sheet.

The MC34161/MC33161/NCV33161 are universal voltage monitors intended for use in a wide variety of voltage sensing applications. These devices offer the circuit designer an economical solution for positive and negative voltage detection. The circuit consists of two comparator channels each with hysteresis, a unique Mode Select Input for channel programming, a pinned out 2.54 V reference, and two open collector outputs capable of sinking in excess of 10 mA. Each comparator channel can be configured as either inverting or noninverting by the Mode Select Input. This allows over, under, and window detection of positive and negative voltages. The minimum supply voltage needed for these devices to be fully functional is 2.0 V for positive voltage sensing and 4.0 V for negative voltage sensing. Applications include direct monitoring of positive and negative voltages used in appliance, automotive, consumer, and industrial equipment.

### Features

- NCV Version for Automotive
- Unique Mode Select Input Allows Channel Programming
- Over, Under, and Window Voltage Detection
- Positive and Negative Voltage Detection
- Fully Functional at 2.0 V for Positive Voltage Sensing and 4.0 V for Negative Voltage Sensing
- Pinned Out 2.54 V Reference with Current Limit Protection
- Low Standby Current
- Open Collector Outputs for Enhanced Device Flexibility
- Pb-Free Packages are Available

### Benefits

- AEC-Q100 Qualified

### Applications

- Body Electronic
- Braking
- Infotainment
- Instrument Cluster
- Navigator

### Part Electrical Specifications

Product	Pricing (\$/Unit)	Compliance	Status	Voltages Monitored	V <sub>CC</sub> Max (V)	V <sub>(TO)</sub> Typ (V)	I <sub>o</sub> Typ (µA)	Reset Active State	Reset Timer	Manual Reset	Watchdog Timer	Package Type
MC33161DG	0.44	Pb-free Halide free	Active	2	40	1.27	450	Low	No	No	No	SOIC-8
MC33161DMR2G	0.44	Pb-free Halide free	Active	2	40	1.27	450	Low	No	No	No	Micro8™
MC33161DR2G	0.44	Pb-free Halide free	Active	2	40	1.27	450	Low	No	No	No	SOIC-8
MC34161DG	0.44	Pb-free Halide free	Active	2	40	1.27	450	Low	No	No	No	SOIC-8
MC34161DMR2G	0.44	Pb-free Halide free	Active	2	40	1.27	450	Low	No	No	No	Micro8™
MC34161DR2G	0.44	Pb-free Halide free	Active	2	40	1.27	450	Low	No	No	No	SOIC-8

For more information please contact your local sales support at [www.onsemi.com](http://www.onsemi.com).

Created on: 6/3/2020