

# Voltage Monitors and Microprocessor Supervisor Selection Guide

## Micrel Advantage

- Industry Standards
- Cross to Maxim
- Low  $I_Q$
- Low Supply Voltage
- Adjustable Hysteresis

## Single Voltage Supervisors

Device	Reset Output	Reset Threshold Voltage	$t_{RESET}$ (ms)	$I_{SUPPLY}$ ( $\mu A$ )	Package
MIC803 <i>New!</i>	Active-Low/Open-Drain	2.63V, 2.93V, 3.00V, 3.08V, 4.00V, 4.10V, 4.38V, 4.63V	20/140/1100	5.0	SOT-23-3, SC-70-3
MIC809	Active-Low/Push-Pull	2.63V, 2.93V, 3.08V, 4.00V, 4.38V, 4.63V	140	5.0	SOT-23-3, SC-70-3
MIC809-5	Active-Low/Push-Pull	2.93V	30	5.0	SOT-23-3, SC-70-3
MIC810	Active-High/Push-Pull	2.63V, 2.93V, 3.08V, 4.00V, 4.38V, 4.63V	140	5.0	SOT-23-3, SC-70-3
MIC1810	Active-Low/Push-Pull	4.12V, 4.37V, 4.62V	100	5.0	SOT-23-3
MIC1815	Active-Low/Push-Pull	2.55V, 2.88V	100	5.0	SOT-23-3
MIC8114	Active-Low/Push-Pull	3.08V	790	5.0	SOT-143

## Single Voltage Supervisors with Manual Reset

Device	Reset Output	Reset Threshold Voltage	$t_{RESET}$ (ms)	$I_{SUPPLY}$ ( $\mu A$ )	Package
MIC811	Active-Low/Push-Pull	2.63V, 2.93V, 3.08V, 4.00V, 4.38V, 4.63V	140	5.0	SOT-143
MIC812	Active-High/Push-Pull	2.63V, 2.93V, 3.08V, 4.00V, 4.38V, 4.63V	140	5.0	SOT-143
MIC2775	Active-High/Low/Push-Pull	1.69V, 2.25V, 2.34V, 2.53V, 2.67V, 2.81V, 2.93V, 3.09V, 4.43V, 4.68V	140	5.0	SOT-23-5
MIC2776N	Active-Low/Open-Drain	0.3V, external adjustable w/resistor divider	140	3.0	SOT-23-5
MIC2776H	Active-High/Push-Pull	0.3V, external adjustable w/resistor divider	140	3.0	SOT-23-5
MIC2776L	Active-Low/Push-Pull	0.3V, external adjustable w/resistor divider	140	3.0	SOT-23-5
MIC2785	Active-Low/Push-Pull	1.62V	0.025	4.5	Thin MLF <sup>®</sup> -6 (1.2x1.2mm)
MIC6315	Active-Low/Open-Drain	2.63V, 2.93V, 3.00V, 3.08V, 4.00V, 4.10V, 4.38V, 4.63V	20/140/1100	5.0	SOT-143
MIC8115	Active-Low/Push-Pull	3.08V	1100	5.0	SOT-143

## Single Voltage Supervisors with Manual Reset and Watchdog Timer

Device	Reset Output	Reset Threshold Voltage	$t_{RESET}$ (ms)	$I_{SUPPLY}$ ( $\mu A$ )	Watchdog Timer	Package
MIC1232	Active-High/Low/Push-Pull	4.37V, 4.62V	250	18	62.5/250/500	SOIC-8, PDIP-8
MIC1832	Active-High/Low/Push-Pull	2.55V, 2.88V	250	15	62.5/250/500	SOIC-8, PDIP-8

## Single Voltage Supervisors with Manual Reset and Power Fail Comparator

Device	Power Fail Threshold Voltage	Reset Output	Reset Threshold Voltage	$t_{RESET}$ (ms)	$I_{SUPPLY}$ ( $\mu A$ )	Package
MIC707	1.25V	Active-High/Low/Push-Pull	4.65V	140	30	SOIC-8, PDIP-8
MIC708	1.25V	Active-High/Low/Push-Pull	2.63V, 2.93V, 3.08V, 4.40V	140	30	SOIC-8, PDIP-8

## Single Voltage Supervisors with Manual Reset, Watchdog Timer and Power Fail Comparator

Device	Power Fail Threshold Voltage	Reset Output	Reset Threshold Voltage	$t_{RESET}$ (ms)	$I_{SUPPLY}$ ( $\mu A$ )	Watchdog Timer	Package
MIC705	1.25V	Active-Low/Push-Pull	4.65V	140	30	1600	SOIC-8, PDIP-8
MIC706	1.25V	Active-Low/Push-Pull	2.63V, 2.93V, 3.08V, 4.40V	140	30	1600	SOIC-8, PDIP-8

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## Dual Voltage Supervisors

Device	Reset Output	Reset Threshold Voltage	Second Reset Threshold Voltage	t <sub>RESET</sub> (ms)	I <sub>SUPPLY</sub> (μA)	Manual Reset	Package
MIC2772	Active-Low/Open-Drain	2.93V, 3.08V, 4.38V, 4.63V	2.93V, 3.08V, 4.38V, 4.63V	20/140/1100	10	Yes	MLF <sup>®</sup> -8 (2x2mm)
MIC2774N	Active-Low/Open-Drain	1.69V, 2.25V, 2.34V, 2.53V, 2.67V, 2.81V, 2.93V, 3.09V, 4.43V, 4.68V	300mV	140	3.5	Yes	SOT-23-5
MIC2774H	Active-High/Push-Pull	1.69V, 2.25V, 2.34V, 2.53V, 2.67V, 2.81V, 2.93V, 3.09V, 4.43V, 4.68V	300mV	140	3.5	Yes	SOT-23-5
MIC2774L	Active-Low/Push-Pull	1.69V, 2.25V, 2.34V, 2.53V, 2.67V, 2.81V, 2.93V, 3.09V, 4.43V, 4.68V	300mV	140	3.5	Yes	SOT-23-5
MIC2777	Active-High/Low/Push-Pull	1.69V, 2.25V, 2.34V, 2.53V, 2.67V, 2.81V, 2.93V, 3.09V, 4.43V, 4.68V	300mV	140	3.5	No	SOT-23-5

## Under and Over-Voltage Supervisors

Device	Manual Reset	Reset Output	Under-Voltage Threshold	Over-Voltage Threshold	t <sub>RESET</sub> (ms)	I <sub>SUPPLY</sub> (μA)	Package
MIC2755	Yes	Active-Low/Open-Drain	1.24V	0.31V	700	2.0	MSOP-8
MIC2778	No	Active-Low/Open-Drain	1.24V	1.24V	140	1.0	SOT-23-5
MIC2779H	No	Active-High/Push-Pull	1.24V	1.24V	140	1.0	SOT-23-5
MIC2779L	No	Active-Low/Push-Pull	1.24V	1.24V	140	1.0	SOT-23-5

## Single Comparators with Reference

Device	Reset Output	Reference Voltage	Propagation Delay	I <sub>SUPPLY</sub> (μA)	Package
MIC834	Open-Drain	1.24V	8μs	1.5	SOT-23-5
MIC842	Open-Drain/Push-Pull	1.24V	8μs	1.5	SC-70-5
MIC845	Open-Drain/Push-Pull	2.55V	8μs	1.0	SC-70-5

## Comparators with Reference and Adjustable Hysteresis

Device	Reset Output	Reference Voltage	Propagation Delay	I <sub>SUPPLY</sub> (μA)	Package
MIC833	Open-Drain	1.24V	5μs	1.0	SOT-23-5
MIC841	Open-Drain/Push-Pull	1.24V	8μs	1.5	SC-70-5