



New Product Announcement

APX80xS

3-PIN Microprocessor Supervisor/Reset Circuit

The APX80xS are microprocessor (μ P) supervisory/reset generator circuits, which monitor the power supplies in μ P, μ C and digital systems, and issue a reset pulse at power-up and supply failure. They enhance circuit reliability by ensuring the system starts into a known state and reduces cost by eliminating external components.

The APX80xS are available with different reset thresholds suitable for operation with a variety of supply voltages (+5V, +3.3V, +3.0V and +2.5V). They assert a reset signal whenever the supply voltage falls below its preset threshold and is kept asserted for a minimum period of time (delay time) after V_{CC} has risen above the reset threshold. The outputs are guaranteed to be in the correct logic state for V_{CC} down to 1V.

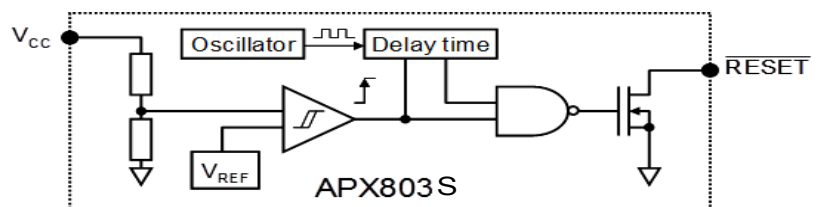
The APX803S has an open-drain active low output and complements Diode's APX809S which has an active-low push-pull output stage output. The APX810S has an active-high push-pull output. All three are available with different delay times of 1.7, 50 or 240ms.

The APX80xS is available in different pinout SOT23 packages.



The Diodes Advantage

- **Low Supply Current: 10 μ A**
Minimal operating current for system efficiency
- **High Threshold Voltage Accuracy: $\pm 1.5\%$**
Provides precise V_{CC} reset thresholds
- **RESET Output Active when $V_{CC} \geq 0.9V$**
Prevents the μ P/ μ C from incorrect operation at power-up
- **Pre-set Recovery Delay Time Options:
1.7ms, 50ms & 240ms**
Meets different system requirements

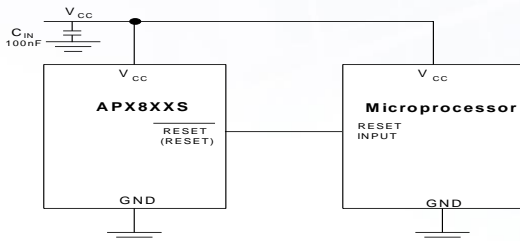




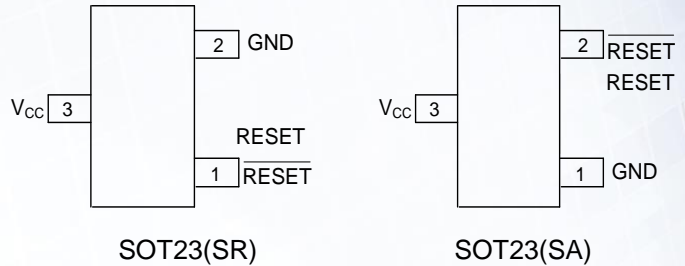
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Typical Applications Circuit



Pin Assignments



Product Portfolio

Part Number	Detect Voltages (V)	Mini. Input Voltage (V)	Max. Input Voltage (V)	Quiescent Current (µA)	Time Delay (ms)	RESET Output		MR	Watchdog	Reset Output Topology	Ambient Temperature Range (°C)	Package Outlines
						Active High	Active Low					
APX803S	2.25 2.63 2.93	1.0	5.5	10	1.7 50, 240	No	Yes	No	No	Open Drain	-40 to 85	SOT23 (SA/SR)
APX809S	3.08 4.00 4.38					No	Yes			Push-Pull		
APX810S	4.63					Yes	No			Push-Pull		

Ordering Information

APX8XXS XX - XX XX - X

