

# ADVANCE INFORMATION

FIRST PAGE OF DATA SHEET IN PREPARATION

# MAXIM

## High-Performance Supervisory Circuits

MAX790/MAX791

### General Description

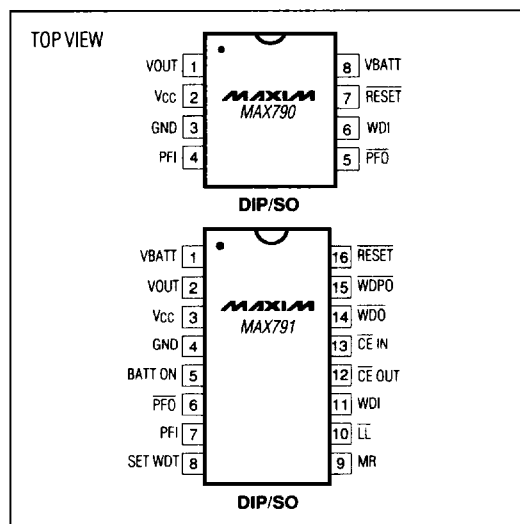
The MAX790/MAX791 supervisory circuits reduce the complexity and number of components required for power-supply monitoring and battery-control functions in microprocessor ( $\mu$ P) systems. These include  $\mu$ P reset, backup-battery switchover, watchdog timer, CMOS RAM write protection, and power-failure warning. The RESET output of the ICs is guaranteed to be in the correct state for  $V_{CC}$  voltages down to 1V.

The MAX790/MAX791 offer several improvements over Maxim's MAX690 Series of supervisory circuits, including 70 $\mu$ A supply current, 10ns CE propagation delay, 250mA output current ( $V_{CC}$  mode), and 25mA output current ( $V_{BATT}$  mode). The MAX790 is pin compatible with the MAX690.

### Applications

- Computers
- Controllers
- Intelligent Systems
- Automotive Systems
- Critical  $\mu$ P Power Monitoring

### Pin Configurations



### Features

- ◆ Precision 4.72V Monitor
- ◆ 250ms RESET  $V_{CC}$  Assertion Time
- ◆ 1.6sec or Adjustable Watchdog Timeout Period
- ◆ Min Component Count
- ◆ 1 $\mu$ A Standby Current
- ◆ Monitors Backup Battery
- ◆ Battery-Backup Power Switching
- ◆ On-board Gating of Chip-Enable Signals

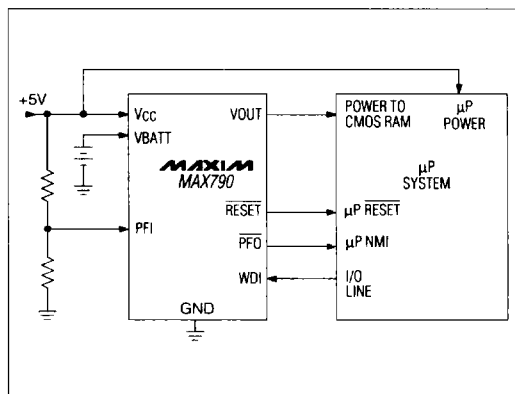
### Ordering Information

PART	TEMP. RANGE	PIN-PACKAGE
MAX790CPA	0°C to +70°C	8 Plastic DIP
MAX790C/D	0°C to +70°C	Dice*
MAX790EPA	-40°C to +85°C	8 Plastic DIP
MAX790MJA	-55°C to +125°C	8 CERDIP
MAX791CPE	0°C to +70°C	16 Plastic DIP
MAX791CWE	-0°C to +70°C	16 Wide SO
MAX791C/D	0°C to +70°C	Dice*
MAX791EPE	-40°C to +85°C	16 Plastic DIP
MAX791EWE	-40°C to +85°C	16 Wide SO
MAX791MJE	-55°C to +125°C	16 CERDIP

\*Consult factory for dice specifications.

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### Typical Operating Circuit



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