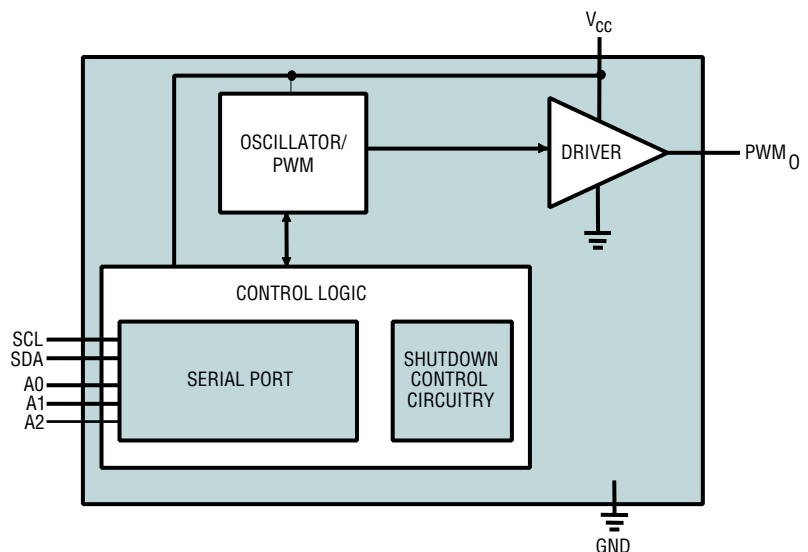


# TINY PULSE WIDTH MODULATOR IN $\mu$ SOP CONSUMES LESS THAN 50 $\mu$ A

## 2-Wire Interface Gives Processor Control of PWM Functions

The DS1050 programmable pulse width modulator (PWM) uses a combination of 2-wire control interface, microamp power consumption, and packaging options to minimize power, space and weight. The DS1050 generates a square wave output in standard frequencies of 1kHz, 5kHz, 10kHz, 25kHz and 100kHz, with a duty cycle variable from 0% to 100% in 3% steps. Processor control of a PWM over a 2-wire interface has several advantages: single-bus control and compatibility with other 2-wire devices and the ability to make design changes in software. Operating in the 2.5V to 5.5V range, the DS1050 typically consumes 50 $\mu$ A at full operation and 1 $\mu$ A in power-down mode. Available in 8-pin SOIC and 8-pin  $\mu$ SOP packaging; flip chip packages are available on request.

- ◆ **Single Adjustable Duty Cycle: 0% to 100% in 3% Increments**
- ◆ **2.5V to 5.5V Operation**
- ◆ **Standard Frequency Values: 1kHz, 5kHz, 10kHz, 25kHz, and 100kHz**
- ◆ **2-Wire Control Interface: Multidrop up to 8 devices**
- ◆ **Low Power Requirements and Standby Mode**
- ◆ **Multiple Applications:**
  - Temperature Control
  - Voltage and Current Control
  - Power Supplies
  - Brightness Control for Lamps, LCDs and PC Displays
  - Switched-Mode Power Supplies
  - Motor Controls
  - Actuators and Mechanical Controls
- ◆ **8-pin  $\mu$ SOP, SOIC, or DIP packages**



PART	OPERATING FREQUENCY
DS1050-1	1kHz
DS1050-5	5kHz
DS1050-10	10kHz
DS1050-25	25kHz

CALL TOLL-FREE 1-800-998-8800 for a Brochure or Free Sample  
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