

### LTC1841/LTC1842/LTC1843 Ultralow Power Dual Comparators with Reference

#### FEATURES

- **Ultralow Quiescent Current: 3.5µA Typ**
- **Open-Drain Outputs Typically Sink Greater Than 20mA**
- **Wide Supply Range: (LTC1841)**  
Single: 2V to 11V  
Dual: ±1V to ±5.5V
- **Input Voltage Range Includes the Negative Supply**
- **Reference Output Drives 0.01µF Capacitor**
- **Adjustable Hysteresis**
- 12µs Propagation Delay with 10mV Overdrive
- No Current Spike When Switching

#### APPLICATIONS

- Battery-Powered System Monitoring
- Threshold Detectors
- Window Comparators
- Oscillator Circuits

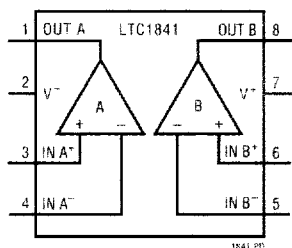
#### DESCRIPTION

The LTC<sup>®</sup>1841/LTC1842/LTC1843 are ultralow power dual comparators with built-in reference (LTC1842/LTC1843). The comparators feature less than 5.7µA supply current over temperature, a 1.182V ±1% reference, programmable hysteresis and open-drain outputs that sink current. The reference output can drive a bypass capacitor of up to 0.01µF without oscillation.

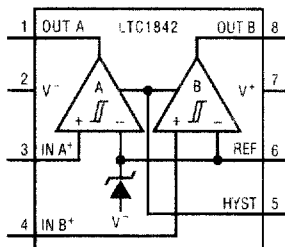
The LTC1841 operates from a single 2V to 11V supply or a dual ±1V to ±5.5V supply. The LTC1842/LTC1843 operate from a single 2.5V to 11V supply or a dual ±1.25V to ±5.5V supply. The LTC1842/LTC1843 hysteresis is easily programmed by using two resistors and the HYST pin. The comparators' input operates from the negative supply to within 1.3V of the positive supply. The comparators' output stage can typically sink greater than 20mA. By eliminating the cross-conduction current that normally happens when the comparators change logic states, power supply glitches are eliminated.

The LTC1841/LTC1842/LTC1843 are available in SO-8 packages.

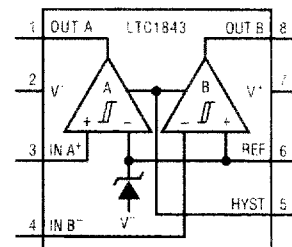
LTC and LT are registered trademarks of Linear Technology Corporation



S8 PACKAGE  
8-LEAD PLASTIC SO  
LTC1841CS8  
LTC1841IS8

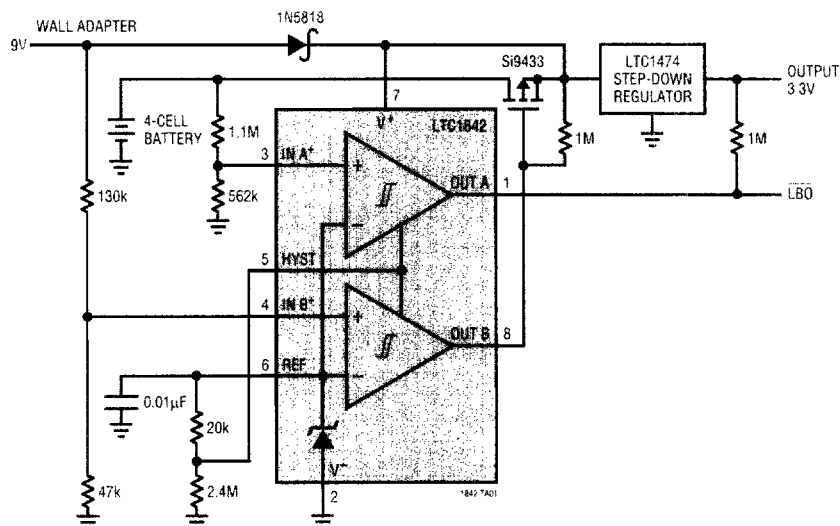


S8 PACKAGE  
8-LEAD PLASTIC SO  
LTC1842CS8  
LTC1842IS8



S8 PACKAGE  
8-LEAD PLASTIC SO  
LTC1843CS8  
LTC1843IS8

#### Battery Switchover Circuit



#### LTC1842 Supply Current vs Supply Voltage

