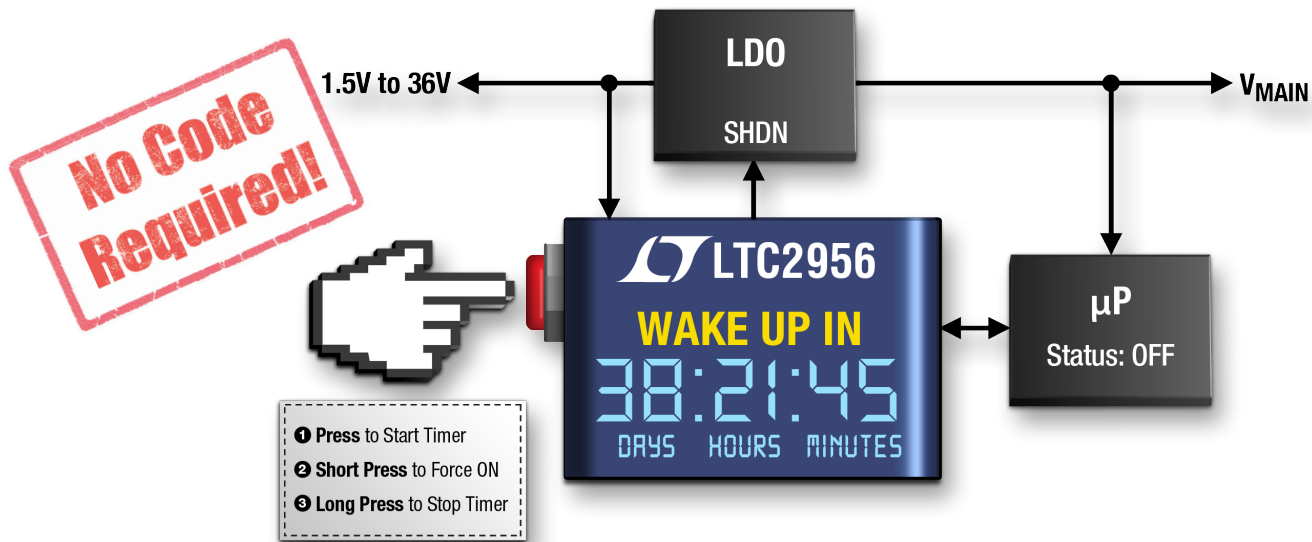


# Configurable Wake-Up Timer with Pushbutton Control



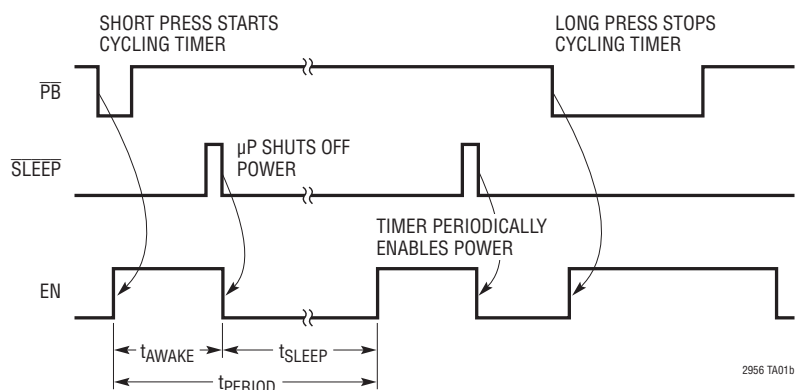
The LTC<sup>®</sup>2956 Wake-Up Timer provides a periodic on/off signal, waking up a system to perform routine tasks (such as measuring a sensor or capturing images) while keeping it off most of the time to save power. While “sleeping,” the LTC2956 sips only 800nA of quiescent current from a battery or rail.

An optional pushbutton starts the timer, and allows users to override the timer for early wake-up or give a long pushbutton press to stop the timer completely and shut down the entire system. The LTC2956 can also be configured to run automatically without a pushbutton. The wake-up period is resistor-adjustable from 250ms to 39 days, requires no software code and allows easy timer configuration via jumpers or switches.

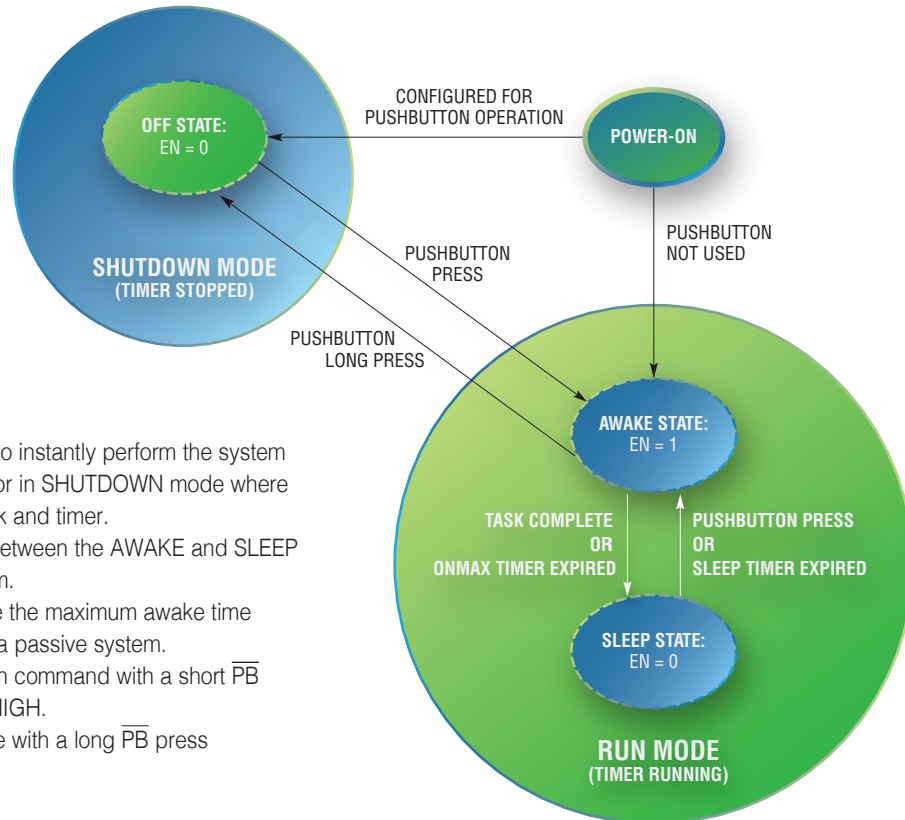
## Features

- Wide Input Supply Range: 1.5V to 36V
- Adjustable Wake-up Period: 250ms to 39 days
- 800nA Quiescent Current
- Low Leakage EN Output Allows DC/DC Converter Control (LTC2956-1)
- High Voltage/EN Output Allows Circuit Breaker Control (LTC2956-2)
- Debounced Pushbutton Status Output
- Pushbutton Interrupt
- Adjustable Power Off Timer
- ±25kV ESD HBM on  $\overline{\text{PB}}$  Input
- 12-Lead 3mm x 3mm QFN and MSOP Packages

## LTC2956 Timing Diagram Example



## Simplified State Diagram



### User Actions:

- Power up in RUN mode to instantly perform the system task and start the timer, or in SHUTDOWN mode where a PB press starts the task and timer.
- Toggle **SLEEP** to cycle between the AWAKE and SLEEP states in an active system.
- Set ONMAX to determine the maximum awake time before going to sleep in a passive system.
- While asleep, wake up on command with a short **PB** press or pulling **SLEEP HIGH**.
- Shut down from any state with a long **PB** press or long **SLEEP HIGH**.

## Code-Free Operation Enables Adjustment of Device Countdown Timers Using Jumpers or Switches

