



# MSDI with Suppressed Wakeup

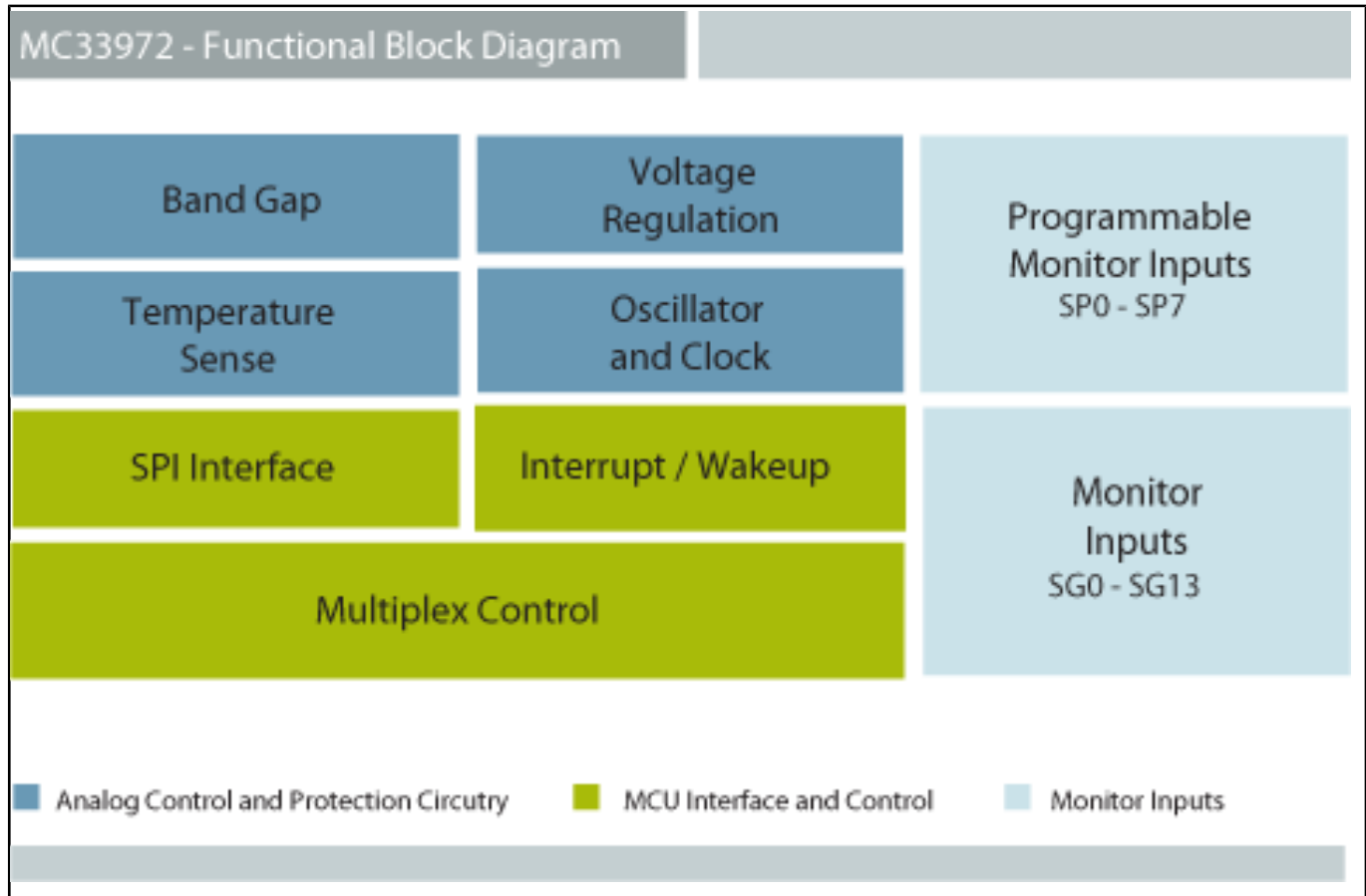
## MC33972

Last Updated: Dec 28, 2022

The NXP® MC33972 multiple switch detection interface with suppressed wake-up is designed to detect the closing and opening of up to 22 switch contacts.

- The switch status, either open or closed, is transferred to the MCU through a SPI
- Features a 22-to-1 analog multiplexer for reading inputs as analog. The analog input signal is buffered and provided on the AMUX output pin for the MCU to read
- Two modes of operation:
  - Normal: allows programming of the device and supplies switch contacts with pull-up or pull-down current monitoring switch change of state
  - Sleep: provides low quiescent current, making MC33972 ideal for automotive and industrial products requiring low sleep state currents

## NXP MC33972 Power Actuation Block Diagram



View additional information for [MSDI with Suppressed Wakeup](#).

**Note:** The information on this document is subject to change without notice.

---

### [www.nxp.com](http://www.nxp.com)

NXP and the NXP logo are trademarks of NXP B.V. All other product or service names are the property of their respective owners. The related technology may be protected by any or all of patents, copyrights, designs and trade secrets. All rights reserved. © 2024 NXP B.V.