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KIT33975AEWEVBE: Evaluation Kit - 33975, Multiple Switch Detection Interface with 32mA Suppressed Wakeup ☆

Overview   **Documentation**   **Downloads**   **Buy / Specifications**

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The Evaluation Kit features the 33975 a multiple switch detection interface with suppressed wake-up designed to detect the closing and opening of up to 22 switch contacts. The switch status, either open or closed, is transferred to the microprocessor unit (MCU) through a serial peripheral interface (SPI). The device also features a 22-to-1 analog multiplexer for reading inputs as analog.

The 33975 device has two modes of operation, Normal and Sleep. Normal Mode allows programming of the device and supplies switch contacts with pull-up or pull-down current as it monitors the switch change of state. The Sleep Mode provides low quiescent current, which makes the 33975 ideal for automotive and industrial products requiring low sleep state currents. Improvements are a programmable interrupt timer for Sleep Mode that can be disabled, switch detection currents of 32mA and 4.0mA for switch-to-ground inputs, and an interrupt bit that can be reset.

This Evaluation kit may be used with the KITUSBSPIDGLEVME.

Features

- Designed to operate from 5.5V ≤ VPWR ≤ 28V
- Switch input voltage range -14V to VPWR
- Interfaces to microprocessor using 3.3V/5.0V SPI protocol
- Selectable wake-up on change of state
- 14 switch-to-ground inputs
- 8 programmable inputs (switches to battery or ground)
- Selectable wetting current (32mA or 4.0mA for switch-to-ground inputs)
- VPWR standby current 100µA typical, VDD standby current 20µA typical

Supported Devices

MC33975: Multiple Switch Detection Interface with 32 mA Suppressed Wakeup

Featured Documentation

MC33975: MC33975, Multiple Switch Detection Interface with Suppressed Wake-Up and 32mA Wetting Current
MC33975FS: MC33975FS, Multiple Switch Detection Interface with Suppressed Wake-Up and 32mA Wetting Current

Current Updates and Releases

SPIGEN: SPI Generator (SPIGen) Software

Kit Contains

- Assembled and tested evaluation board/module in anti-static bag.
- CD-ROM containing:
  - Supporting Documentation for featured device (may include datasheet, user's guides, app notes...etc)
  - Schematic of evaluation board
  - Bill-of-Material for evaluation board
  - Instruction sheet for evaluation board
  - Software and configuration files (if applicable)

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