# 22 I/O MSDI Programmable Current Analog Mux

## MC33978

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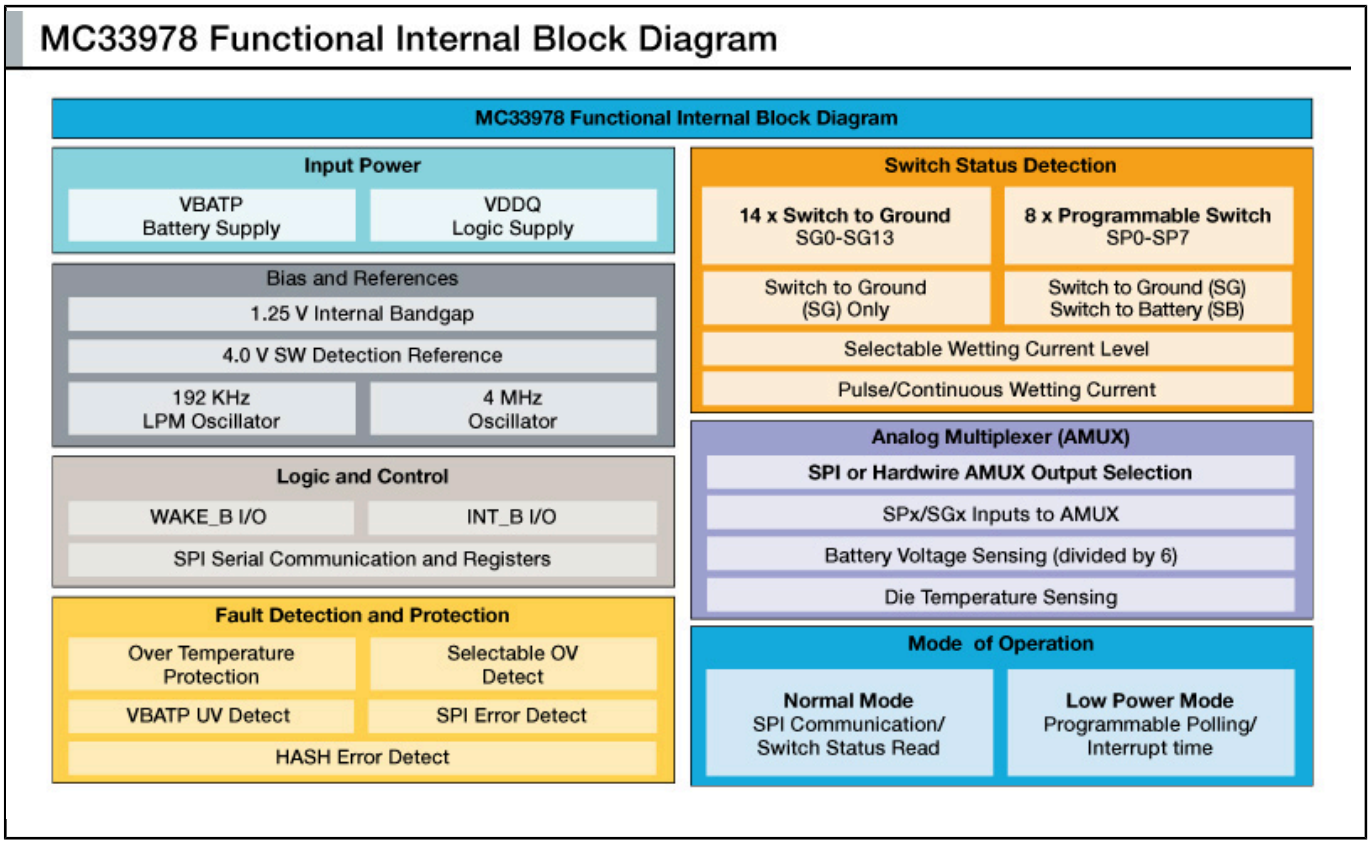
The NXP® MC33978 is a multiple switch detection interface (MSDI) designed to detect the closing and opening of up to 22 switch contacts. The switch status, either open or closed, is transferred to the microprocessor through a SPI in automotive environments.

- This SMARTMOS® device features a 24-to-1 analog multiplexer for reading analog inputs
- The analog input signal is buffered and provided on the analog multiplexer (AMUX) output pin for the MCU to read
- Individually selectable input currents are available in Normal and Low-Power Mode
- Battery and temperature monitor are included in the IC and available via the AMUX pin
- Interfaces with any MCU that supports SPI communications

## MC33978: 22 I/O Switch Detection Interface, Programmable Wetting Current, Analog Mux Block Diagram




View additional information for 22 I/O MSDI Programmable Current Analog Mux.

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