

## Hi-Speed USB-to-SD Card Readers with Bypass

### General Description

The MAX14502 USB-to-SD™ card reader provides a means for portable devices that support full-speed USB communication (12Mbps) with one or two SD card slots, upgrading the USB SD card reader function to USB high-speed (480Mbps) operation. The MAX14502 has two modes of operation: Pass Thru and Card Reader. In pass thru, the SD and USB signals pass through the MAX14502 without modification, appearing like the device is not present. The host microprocessor firmware does not need modification, as there is no change from the host microprocessor's perspective. In Card Reader mode, the MAX14502 implements a high-speed USB card reader that operates independently of the host microprocessor. All the capabilities of the full-speed USB port and SD card slot are preserved with the additional feature that allows a faster way for a PC to read or write to the SD card. The MAX14502 supports high-capacity SDHC cards. The 40-pin TQFN version supports one SD card, while the 56-bump wafer-level package (WLP) version supports two SD cards.

The MAX14502 features advanced power-saving modes to reduce power consumption in portable applications. The low-power sleep modes allow the ability to disable internal circuit blocks, providing power-saving operating modes. The default clock input for is specified in the ordering information. The MAX14502 features the option to change the default values using the I<sup>2</sup>C interface.

The MAX14502 is available in a 5mm x 5mm, 40-pin TQFN package. This device operates over a wide supply voltage range and is specified over the -40°C to +85°C extended temperature range.

### Applications

- Cell Phones
- PDAs
- MP3 Players
- Digital Still Cameras
- GPS

*SD is a trademark of the SD Card Association.*

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Rev. 3

**DOCUMENT FEEDBACK**

**TECHNICAL SUPPORT**

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