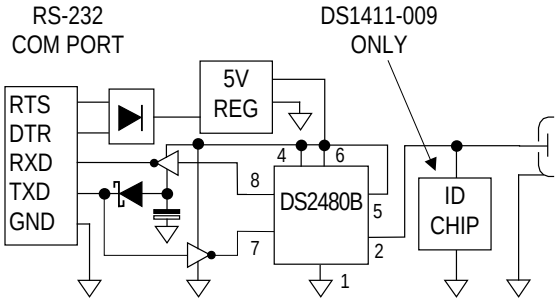
DS1411
Serial Port iButton Holder

FEATURES

- **Small Size, True-Ground Interface to an RS-232 COM Port for Reading and Writing iButton® Devices**
- **CE and FCC Compliant**
- **Works with Bipolar Logic Signals of ±5V to ± 12V (RS-232C) as well as Unipolar Signals of 5V to 12V**
- **Supports Reading and Writing at Standard and Overdrive Speeds**
- **Provides Strong Pullup to 5V for Temperature iButton and EEPROM iButton**
- **Communicates at Data Rates of 9.6kbps (default), 19.2kbps, 57.6kbps, and 115.2kbps**
- **Powered Entirely from an RS-232 Interface**
- **Standard DB9 Female Connector for Mating to the COM Port of a Computer with DS9098P iButton Retainer for a Single iButton**
- **Includes DS2502 Identification Chip (DS1411-009 Version Only)**



SCHEMATIC (FOR ILLUSTRATION)



ORDERING INFORMATION

PART	TYPE
DS1411-009#	DB9 connector, with ID chip
DS1411-S09#	DB9 connector, no ID chip

#Denotes a RoHS-compliant device that may include lead(Pb) that is exempt under the RoHS requirements.

DESCRIPTION

The DS1411 is a sophisticated RS-232-to-1-Wire® adapter and iButton holder that performs RS-232-level conversion and actively generates the 1-Wire communication signals. Together with an adequate software driver, it enables a Windows®-based PC to directly read all and write any non-EPROM iButton devices. The DS1411 has a DS9098P retainer for a single F5 MicroCan. For a list of suitable 1-Wire network cables, e.g., to connect multiple iButtons, refer to the *Connectivity Matrix* table in the DS1402x 1-Wire network cables data sheet. 1-Wire communication is supported by the adapter for standard speed as well as overdrive speed. The serial port must support a data transmission rate of 9600 bits/s. Under software control, the adapter can be set up for RS-232 data rates of 19200bps, 57600bps, and 115200bps. The two higher rates are recommended for communication at overdrive speed with overdrive capable devices. Since the DS1411 operates in a byte mode, every data byte received from the RS-232 port generates eight time slots on the 1-Wire bus. The DS1411 is based on the DS2480B serial 1-Wire line driver chip. The RXD/TXD polarity select input of the DS2480B is connected to V_{DD} (noninverting). Free software drivers can be downloaded from **www.maxim-ic.com/1-Wiredrivers**.

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Windows is a registered trademark of Microsoft Corp.

REVISION HISTORY

REVISION DATE	DESCRIPTION	PAGES CHANGED
7/99	Initial release	—
7/02	Updated *Ordering Information*; updated *Schematic* for conversion from DS2480 to DS2480B and optional ID chip; replaced product graphic with photo; added CE and FCC compliance bullet to *Features*; changed iButton retainer model from DS9098 to DS9098P	1
8/09	Added # to the *Ordering Information* to reflect conversion to a RoHS-compliant product; added *Revision History* table	1, 2
6/11	Deleted references to Crypto iButton, TMEX, DS9097U, and DS1412; added reference to the *Connectivity Matrix* table in the DS1402x 1-Wire network cables data sheet; added the URL for software drivers download	1

Maxim cannot assume responsibility for use of any circuitry other than circuitry entirely embodied in a Maxim product. No circuit patent licenses are implied. Maxim reserves the right to change the circuitry and specifications without notice at any time.

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