



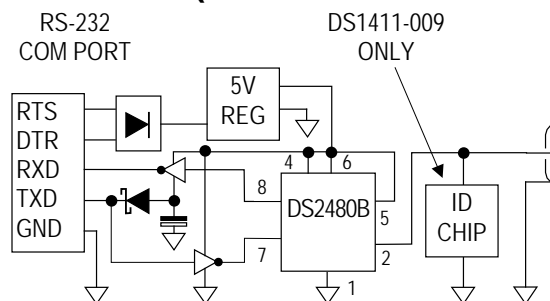
## DS1411 Serial Port iButton Holder

### 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  $\pm 5V$  to  $\pm 12V$  (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-EEPROM 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](http://www.maxim-ic.com/1-Wiredrivers).

iButton and 1-Wire are registered trademarks of Maxim Integrated Products, Inc.  
Windows is a registered trademark of Microsoft Corp.

## REVISION HISTORY

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