

### FEATURES

- Small size, true-ground interface to an RS232 COM Port for reading and writing iButton<sup>®</sup> devices
- CE and FCC compliant
- Works with bipolar logic signals of  $\pm 5V$  to  $\pm 12V$  (RS232C) 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, Crypto iButton and EEPROM iButton
- Communicates at data rates of 9.6k (default), 19.2k, 57.6k, and 115.2k bits/s
- Powered entirely from an RS232 interface
- Standard DB 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)

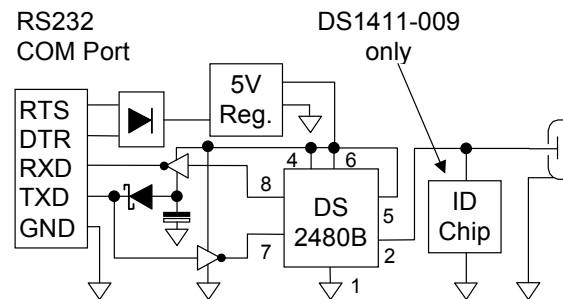
### DESCRIPTION

The DS1411 is a sophisticated RS232-to-1-Wire<sup>®</sup> adapter and iButton holder that performs RS232-level conversion and actively generates the 1-Wire communication signals. Together with an adequate TMEX software driver it enables an IBM-compatible PC or laptop computer to directly read all and write any non-EPROM iButton devices. The DS1411 has a DS9098P retainer for a single F5 MicroCan<sup>®</sup> and can replace the DS9097U-009 or DS9097U-S09, respectively, in applications that use only a single iButton. 1-Wire communication is supported by the adapter for standard 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 RS232 data rates of 19200, 57600 and 115200 bits per second. 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 RS232 port generates eight time slots on the 1-Wire bus.

The DS1411 is based on the DS2480B Serial 1-Wire Line Driver chip and therefore is not a plug-in replacement for the DS1412 Serial Port Adapter. The RXD/ TXD Polarity Select input of the DS2480B is tied to  $V_{DD}$  (non-inverting).



### SCHEMATIC (for illustration)



### ORDERING INFORMATION

DS1411-009# DB-9 Connector, with ID chip  
 DS1411-S09# DB-9 Connector, no ID chip  
 # Denotes an RoHS-compliant device that may include lead(Pb) that is exempt under the RoHS requirements.

**REVISION HISTORY**

<b>REVISION DATE</b>	<b>DESCRIPTION</b>	<b>PAGES CHANGED</b>
7/99	Initial release.	—
8/09	Added # to the Ordering Information to reflect conversion to a RoHS-compliant product.	1