



DS2482-100

I²C to 1-Wire Bridge Device

REVISION A2 ERRATA

The errata listed below describe situations where DS2482-100 revision A2 components perform differently than expected or differently than described in the data sheet. Dallas Semiconductor/Maxim intends to fix these errata in subsequent die revisions.

This errata sheet only applies to DS2482-100 revision A2 components. Revision A2 components are branded on the topside of the package with a six-digit code of the form yywwA2, where yy and ww are two-digit numbers representing the year and work-week of manufacture, respectively. To obtain an errata sheet on another DS2482-100 die revision, see the Maxim website at www.maxim-ic.com.

1. IMPROPERLY RESPONDS WHEN NOT ADDRESSED FOR READING (09/08/04)

Description

When the component shares the bus with another I²C™ device, it will respond on the bus when any other device is addressed for reading. The DS2482-100 will properly NACK the other address, but will echo the address on the data bus for the next 8 clocks. If that byte of communication is ACK'ed by the host on the 9th clock, the DS2482-100 will continue to echo the address on the data bus for subsequent sequences. If it is NACK'ed, the DS2482-100 and the addressed component will stop responding on the data bus until the next Start/Address sequence. The DS2482-100 only improperly responds when another device is addressed for reading (LSBit = 1), not writing (LSBit = 0).

Work-Around

For I²C devices that have a write-only interface (or an interface that is most typically written and never read, such as an LCD controller), no work-around is necessary since the DS2482-100 only responds on the bus when another device is addressed for reading, not writing. For any I²C devices that will be addressed for reading, they cannot share the bus with a DS2482-100. A dedicated I²C bus for the DS2482-100 is the only known solution.

A die revision is currently in process and the forthcoming DS2482-100 Revision A3 will fix this problem.

I²C is a trademark of Philips Corp. Purchase of I²C components from Maxim Integrated Products, Inc., or one of its sublicensed Associated Companies, conveys a license under the Philips I²C Patent Rights to use these components in an I²C system, provided that the system conforms to the I²C Standard Specification as defined by Philips.