ABRIDGED DATA SHEET

DS28C36 Evaluation System

Evaluates: DS28C36 and DS2476

General Description

The DS28C36 evaluation system (EV system) provides the hardware and software necessary to evaluate the DS28C36 and DS2476. The EV system consists of five DS28C36/DS2476 devices in a 6-pin TDFN package, a DS9121AQ+ evaluation TDFN socket board, and a DS9481P-300# USB-to-I2C/1-Wire® adapter. The evaluation software runs on Windows® 10, Windows 8, and Windows 7 operating systems (64- and 32-bit versions). The EV system provides a handy user interface to exercise the features of the DS28C36 and DS2476.

EV System Contents

QTY	DESCRIPTION
5	DS28C36Q+ DeepCover Secure Authenticator (6-pin TDFN)
5	DS2476Q+ DeepCover Secure Coprocessor (6-pin TDFN)
1	DS9121AQ+ socket board (6-pin TDFN)
1	DS9481P-300# USB-to-I2C/1-Wire Adapter
1	USB Type-A to USB Mini Type-B cable

***Ordering Information* appears at end of data sheet.**

Benefits and Features

- Demonstrates the Features of the DS28C36 DeepCover® Secure Authenticator
- Demonstrates the Features of the DS2476 DeepCover Secure Coprocessor
- I2C Communication is Logged to Aid Firmware Designers Understanding of the DS2476 and DS28C36
- I2C-USB Adapter Creates a Virtual COM Port on Any PC
- Fully Compliant with USB Specification v2.0
- Software Runs on Windows 10, Windows 8, and Windows 7 for Both 64-Bit and 32-Bit Versions
- 3.3V ±3% 1-Wire Operating Voltage
- Convenient On-Board Test Points and TDFN Socket
- Evaluation Software Available by Request
- Proven PCB Layout
- Fully Assembled and Tested

DS28C36 EV System

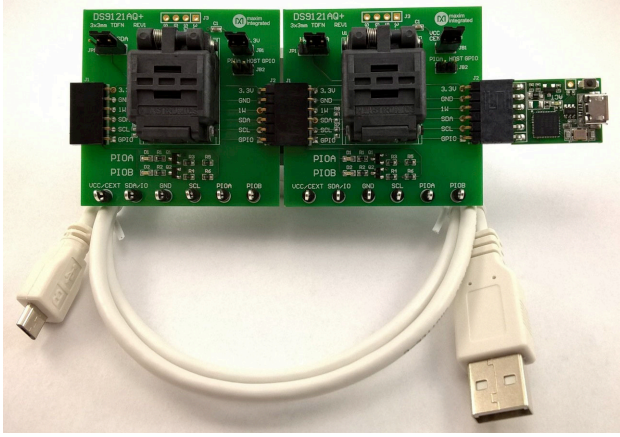

Figure 1. DS28C36EV with USB Cable

19-8600; Rev 0; 8/16

maxim integrated™

Detailed Description of Software

The DS28C36 evaluation program user interface (Figure 13) has four tabs, **General Commands**, **SHA2 Commands**, **ECDSA Commands**, and **Other Coprocessor Commands**. The **Setup** section is used to make the device selections that apply to the **General Commands**, **SHA2 Commands**, **ECDSA Commands**, and **Other Coprocessor Commands** tabs. Here is a summary of the function of each tab:

- **General Commands** is used as the main tool to evaluate the DS28C36/DS2476 general functions to write or read from the user memory pages, crypto-related memory pages, decrement counter, RNG, and protection registers.
- **SHA2 Commands** is used to evaluate the DS28C36/DS2476 symmetric (SHA-256) security function commands.
- **ECDSA Commands** is used to evaluate the DS28C36/DS2476 integrated asymmetric (ECC-P256) security function commands.
- **Other Coprocessor Commands** is used to evaluate the DS2476 coprocessor that computes any required HMACs or ECDSA signatures with its additional command set to do any operations on the DS28C36. **Note:** Grayed out when DS28C36 is selected.

All tabs include a communications **Log** area consisting of an I²C Log or 1-Wire Log output.

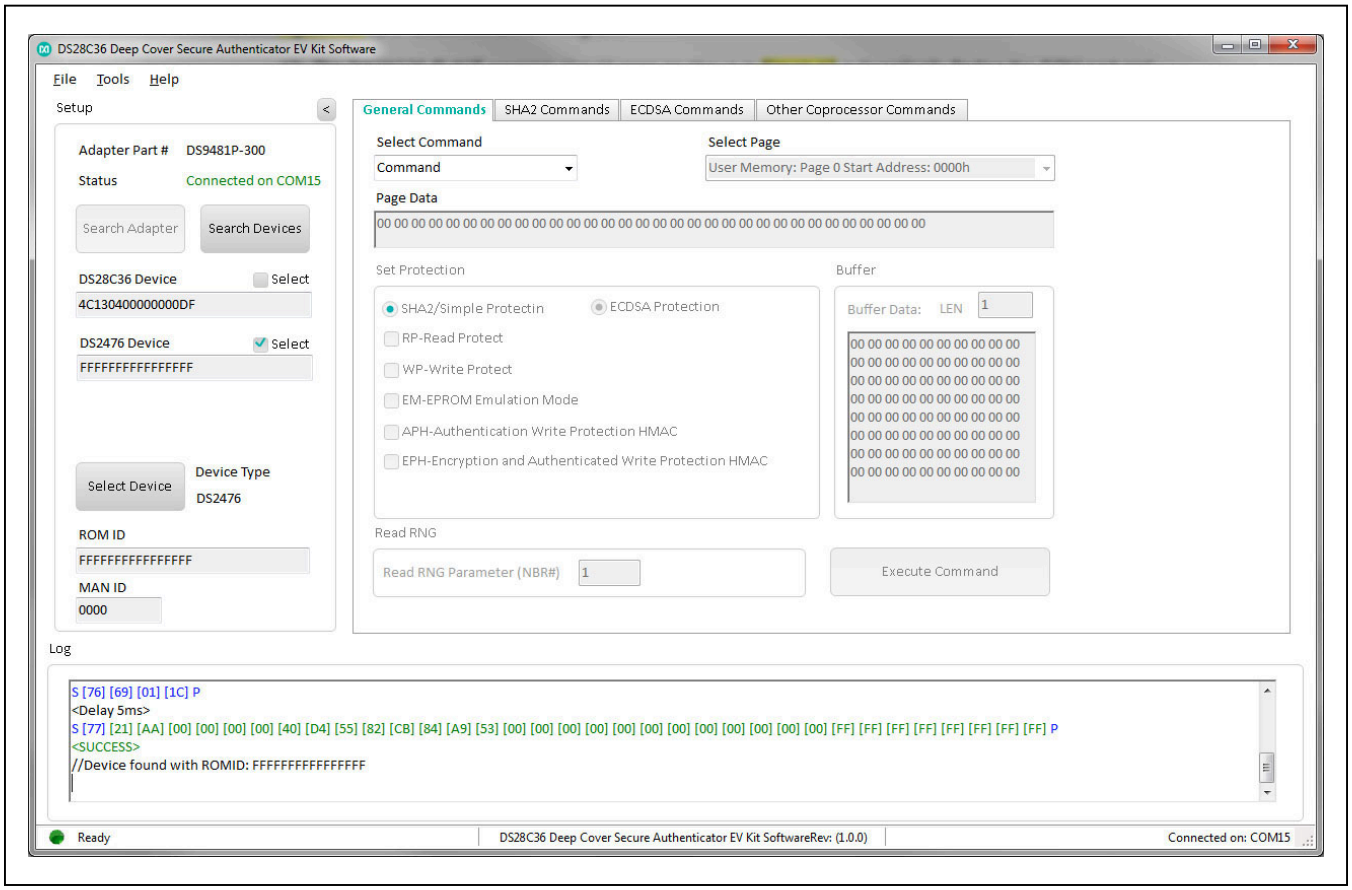

Figure 13. DS28C36 EVKIT Program (Default View Upon Opening)

Ordering Information

PART	TYPE
DS28C36EVKIT#	EV System

#Denotes RoHS compliant.

Revision History

REVISION NUMBER	REVISION DATE	DESCRIPTION	PAGES CHANGED
0	8/16	Initial release	—