89-9481P#300 Test Procedure

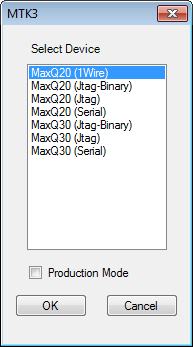
Revision A

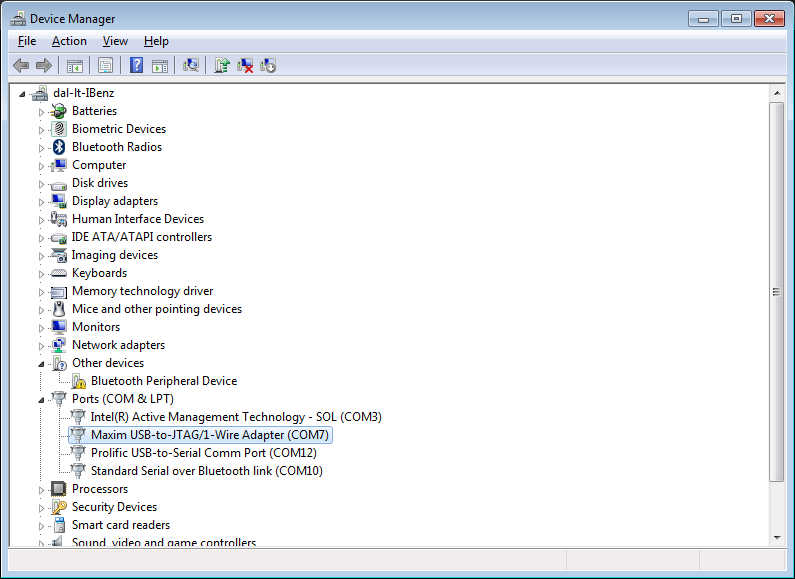
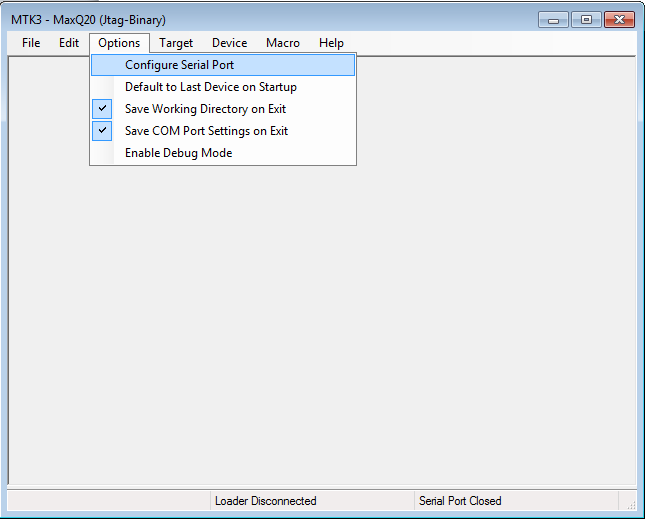
# Required Equipment

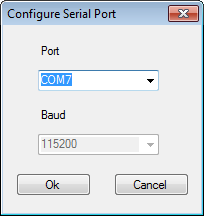
* 89-9481P#300 / DS9481P-300# (Device Under Test)
* MAXREFDES44#
* Maxim USB Programming Adapter (MAXQUSBJTAGOW-KIT)
* DS9481P-300 Firmware (HEX file)
* Windows PC with MTK3 and 1-Wire Drivers installed
* Test Program (DS28E35\_Demo.exe)
* DS9481P-300 Driver (INF file)
* USB Micro B cable
* Digital Voltmeter
* DS9481P-300 Programming Board
* J-clip cable

# Load Firmware

1. Start MTK3 programming application. Select “MaxQ20 (1Wire)” in the “Select Device” list, ensure that “Production Mode” is unchecked, and click “OK”.

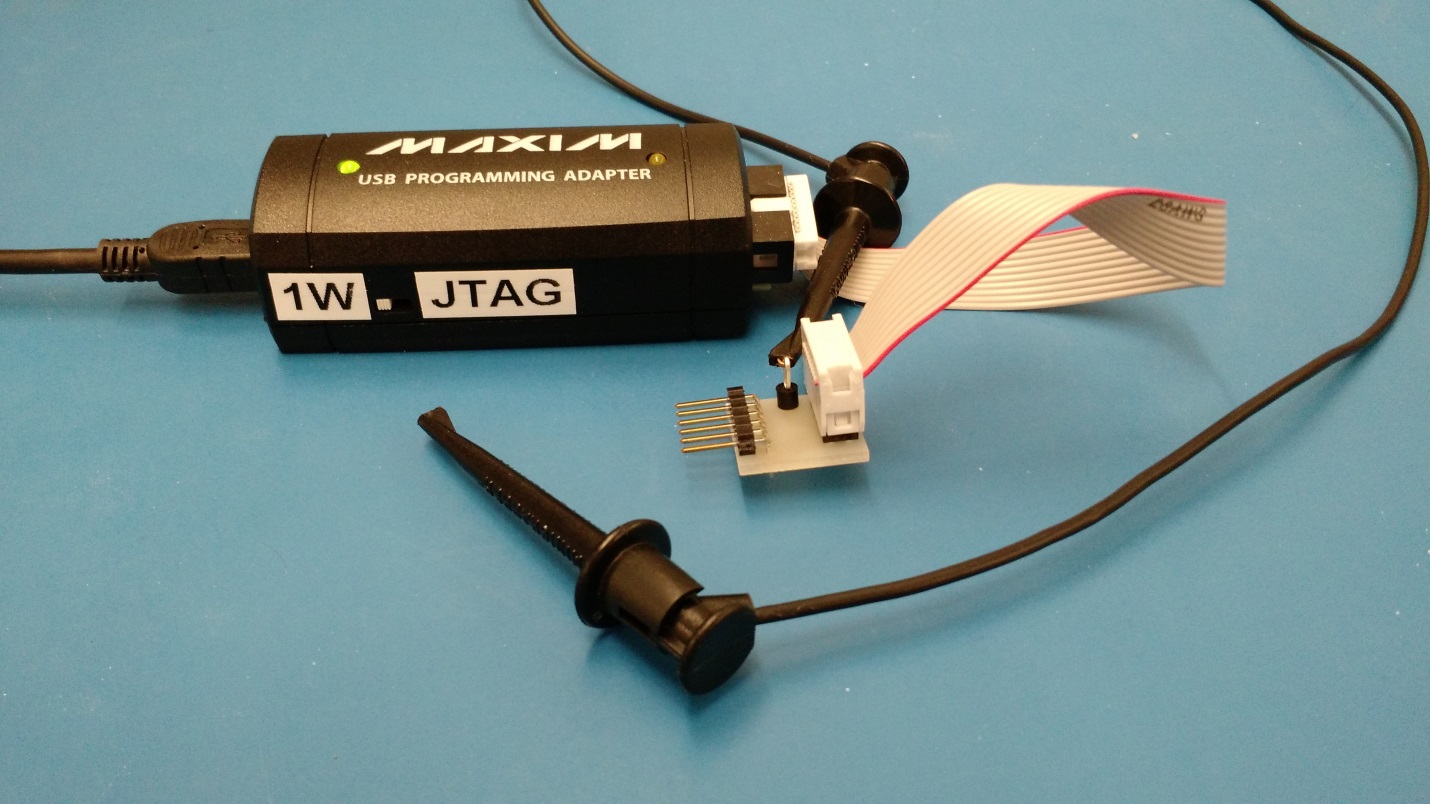


1. Find which port the USB Programming Adapter is connected on using the Windows Device Manager. The USB Programming Adapter will be listed under the “Ports (COM & LPT)” heading as “Maxim USB-to-JTAG/1-Wire Adapter (COM#)”. Note which port (COM1, COM2, etc.) that the USB Programming Adapter is connected on. 
2. In MTK3, select “Configure Serial Port” in the “Options” menu. Enter the USB Programming Adapter port (COM1, COM2, etc.) found in the previous step under “Port”. 



**2**

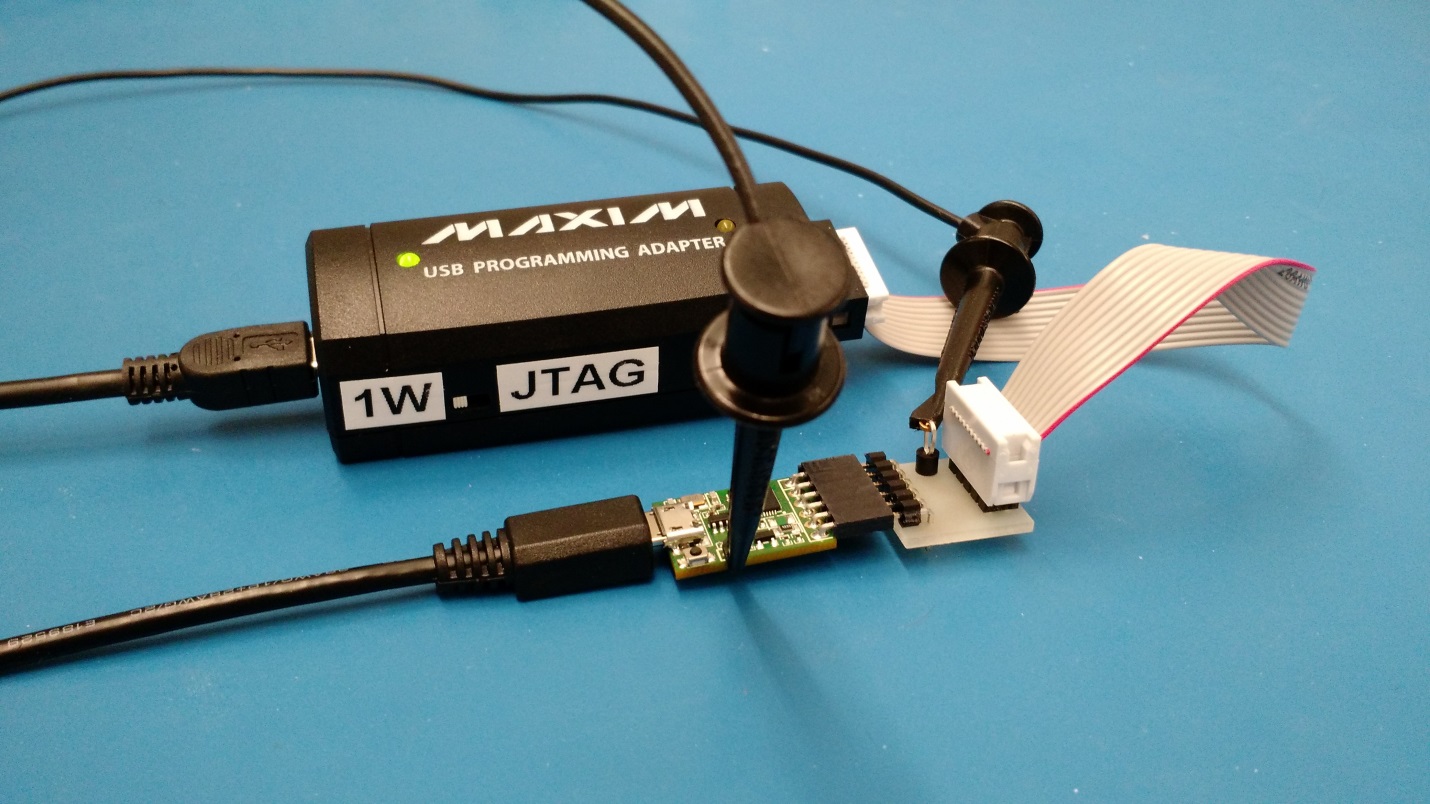
**1**

1. Ensure that USB Programming Adapter switch is set to the left for 1W programming. Connect the USB Programming Adapter to the DS9481P-300 Programming Board. Connect one end of the J-clip cable to the test point on the DS9481P-300 Programming Board.

**3**

**2**

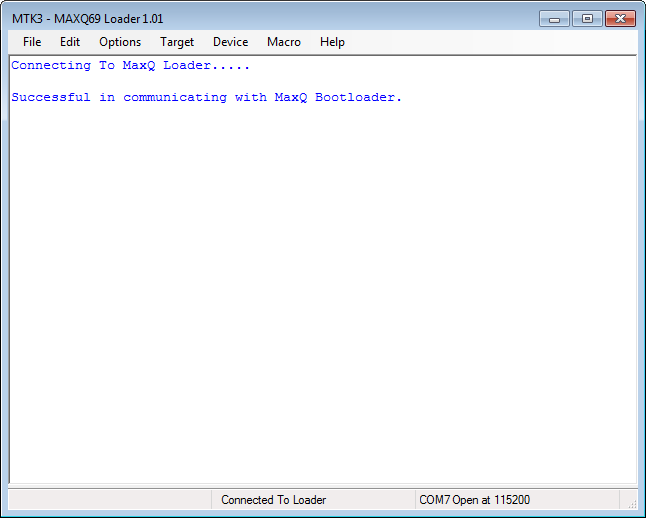
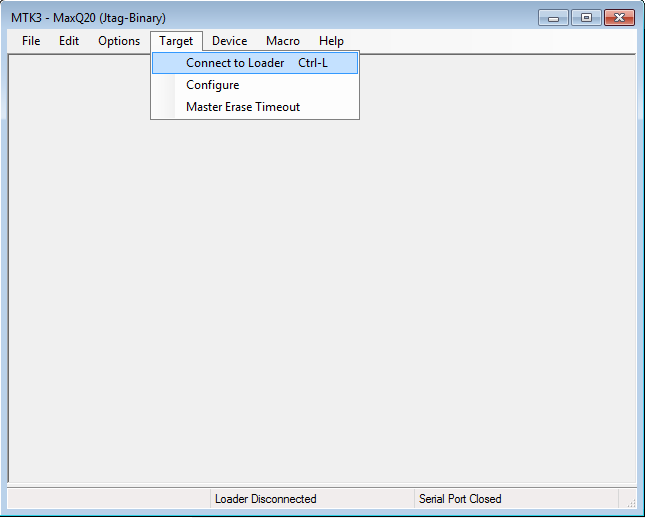
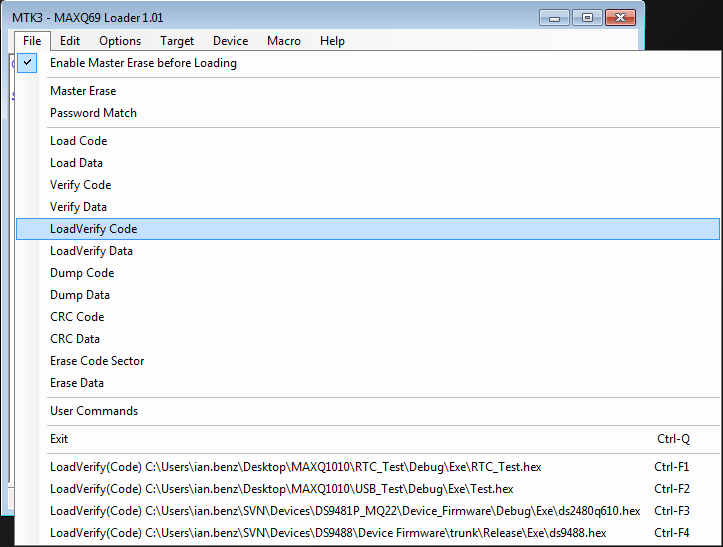
**1**

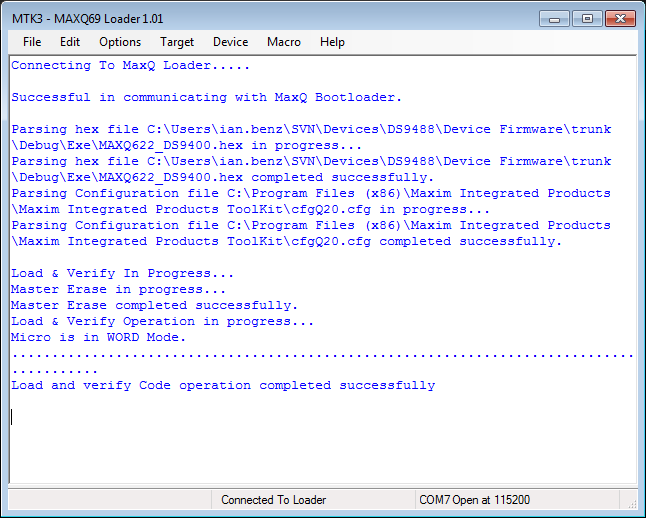
1. Connect the DS9481P-300 to the header on the DS9481P-300 Programming Board. Then connect the free end of the J-clip cable on the DS9481P-300 Programming Board to the OWD test point on the DS9481P-300. Finally connect DS9481P-300 to PC with USB cable. 

**3**

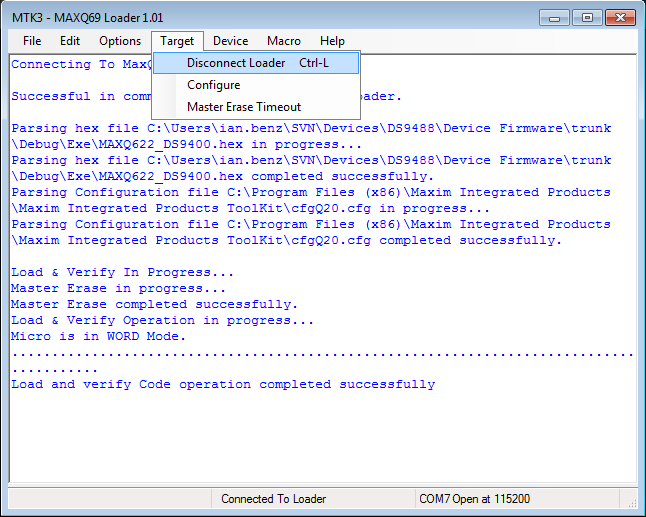
**2**

**1**

1. In MTK3, select “Connect to Loader” under the “Target” menu. 
2. In MTK3, select “LoadVerify Code” under the “File” menu. Select the supplied hex file in the file browser window, and click “Open” to begin programming. MTK3 should indicate that “Load and verify Code operation completed successfully”. 



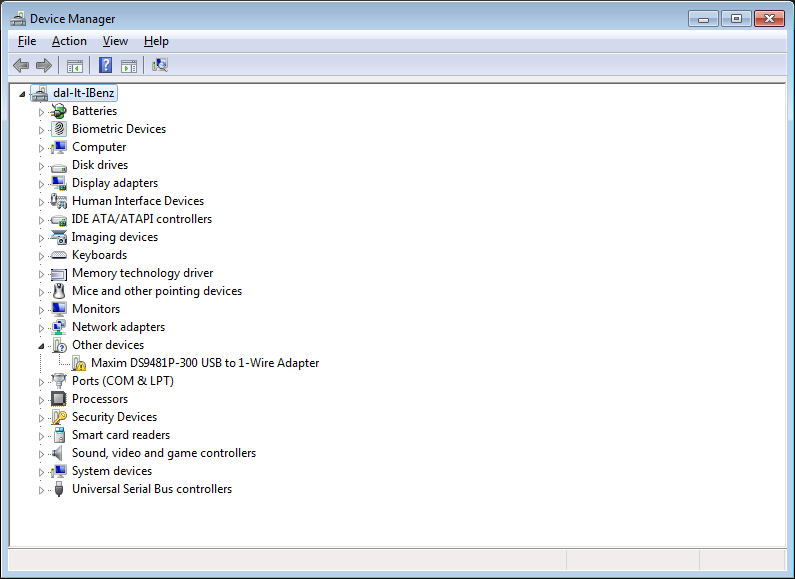
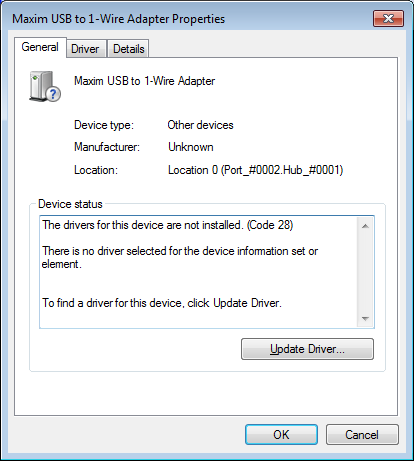
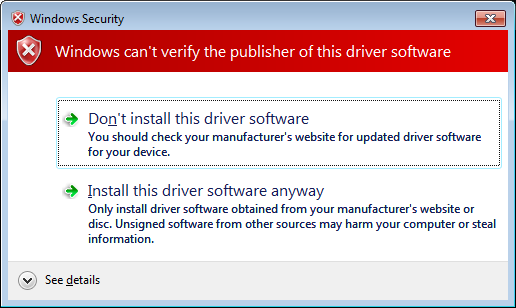
1. When the programming operation is complete, select “Disconnect from Loader” in the “Target” menu.



1. Disconnect USB port on DS9481. Then disconnect DS9481P-300 Programming Board.
2. Repeat Steps 5-9 for each subsequent device.

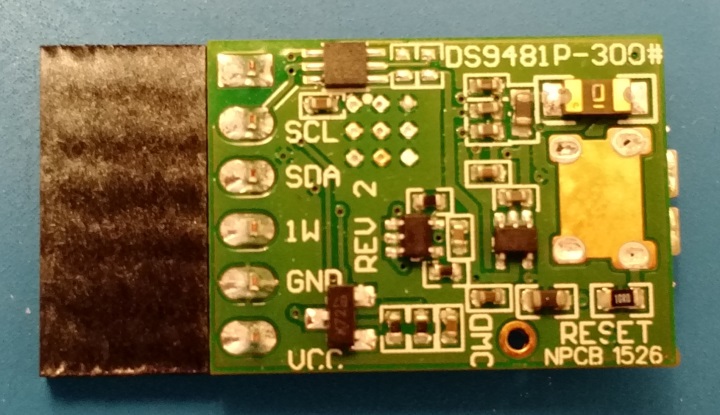
# Driver Installation

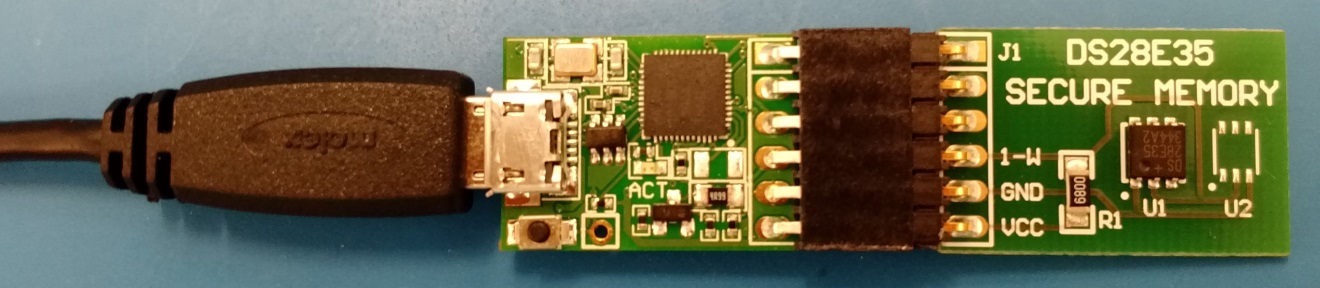
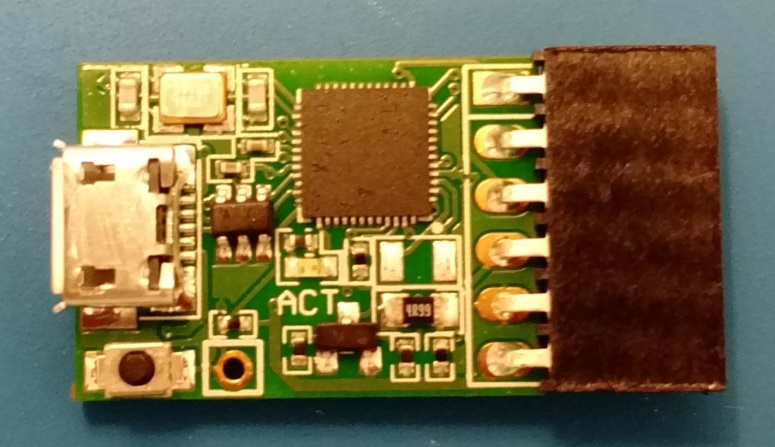
This step only needs to be completed once on each computer used to perform the Hardware Test.

1. Connect DS9481P-300 to PC with USB cable (Shown above). Windows will detect the device but fail to locate a driver.
2. Open the Windows Device Manager and locate the entry marked “Maxim DS9481P-300 USB to 1-Wire Adapter” under “Other devices”. 
3. Right click on this entry and select “Properties”. In the window that appears, click on the “Update Driver…” button, and locate the folder containing the provided INF file. 
4. Continue through any Windows security prompts to finish installing the driver. 

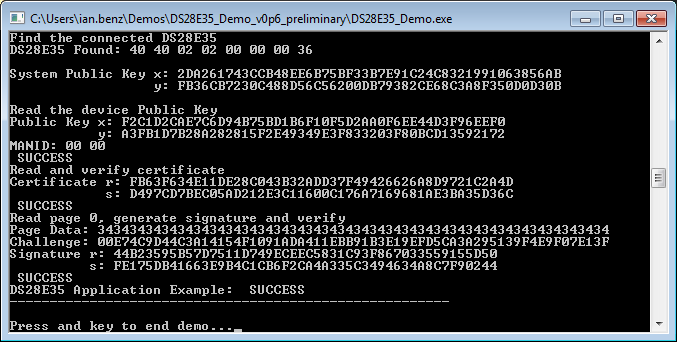
# Hardware Test

1. Connect DS9481P-300 to PC with USB cable. (Shown above)
2. Use voltmeter to verify that VCC test point is in the range of 3.20 – 3.40 V with respect to GND the GND test point. The VCC and GND test points can be located by labels on the back side of the PCB as shown.



1. Connect MAXREFDES44 to DS9481P-300 using headers as shown.
2. Launch the Test Program. Program will begin running automatically.
3. Check that LED1 (ACT) is blinking when the test program is running.

**LED1**

1. Test result will be displayed when the program is complete as shown. 
2. Press any key to exit the application.
3. Disconnect the DS9481P-300 from USB, and disconnect MAXREFDES44 from DS9481P-300.

# Contact Information

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