![Microsemi, a Microchip company logo]

Silicon Sculptor 4
Quickstart Card

Kit Contents

Quantity	Description
1	Silicon Sculptor 4 Concurrent Programmer
1	Power Supply
1	Power Cord
1	USB 2.0 A to B Cable
1	Quickstart Card

Overview

Congratulations on your purchase of a Microsemi device programmer. Your new device programmer is designed to provide years of support for thousands of devices, with the use of optional socket cards. Before you get started, take the time to carefully read the following instructions that guide you towards a successful programming operation.

This Quickstart Card applies to the Microsemi Silicon Sculptor 4. Silicon Sculptor 4 is an FPGA programming tool equipped to deliver high data throughput and promote ease of use. It incorporates the industry's widely accepted high-speed USB 2.0 standards bus communication, allowing as many as twelve Silicon Sculptor 4 systems to be connected to a single PC through a series of nested high-speed USB 2.0 hubs. It is a highly reliable programmer for Microsemi's portfolio of FPGAs.

Procedure

Verification of Calibration

Prior to operating the device, please ensure the device is in a working condition. Visit the following website to verify your Silicon Sculptor 4 is calibrated and ready to use: https://goo.gl/8HGpLM.

Setup

1. Download SculptW software from https://www.microsemi.com/product-directory/programming/4979-silicon-sculptor.

2. Follow on-screen instructions to install SculptW software and restart your PC.

3. Provide power to the site by connecting the provided external 24 V switching power supply. The programmer requires the input voltage to be accurate within ±5% to be operational. Confirm that the power supply is rated at least 90 W and 3.75 A. If the accompanying power supply is lost or damaged, contact Microsemi for a replacement. Using an incompatible power supply may cause damage to the programmer.

4. Directly connect the USB cable to type B USB port on back of programmer.

5. Directly connect the USB cable to type A USB port on PC. See the on-screen information to verify the driver installation.

   IMPORTANT!
   The Found New Hardware Wizard launches for each individual programming site. You must repeat a USB driver installation for each programming site. After installing the USB drivers, the PC recognizes that the site(s) are connected at a later time. If a different USB port on the PC is used, the Found New Hardware Wizard launches and installs new USB drivers.

6. After the USB driver installation, click **Finish**.
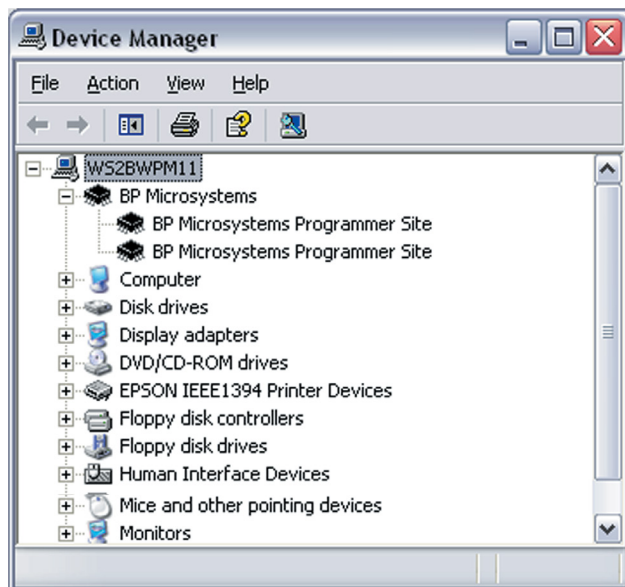
7. Verify that all USB drivers are loaded correctly, recognized by Windows and attached. The programmer sites will be listed in Windows Device Manager. You can open the Device Manager in Windows by accessing Windows Control Panel or with the Windows+Break keyboard combination. Click the Hardware selection. Expand the BPM Microsystems node. There should be a BPM Microsystems programmer site for each programmer site attached and turned on.

8. Insert socket module on the programmer.

CAUTION: USE ESD PREVENTION PROCEDURES WHEN USING THIS EQUIPMENT. SOCKET MODULES AND DEVICES UNDER TEST ARE ESD SUSCEPTIBLE.

9. Launch SculptW software by double-clicking on the SculptW desktop icon or selecting SculptW from the Windows Start menu/Programs list. When running the software for the first time after installation, run the application as administrator.

10. Check the software screen to ensure that the software recognizes the programmer and socket card. Otherwise, you must perform the configure operation. (Programmer, port, and socket card should appear on the status bar of the SculptW software.). Wait for green pass LED to remain on.

Programming a Device

Note: Prior to handling ESD components, attach a grounding strap to your wrist and the antistatic connection on the side of the programmer.

1. Click **Device**.
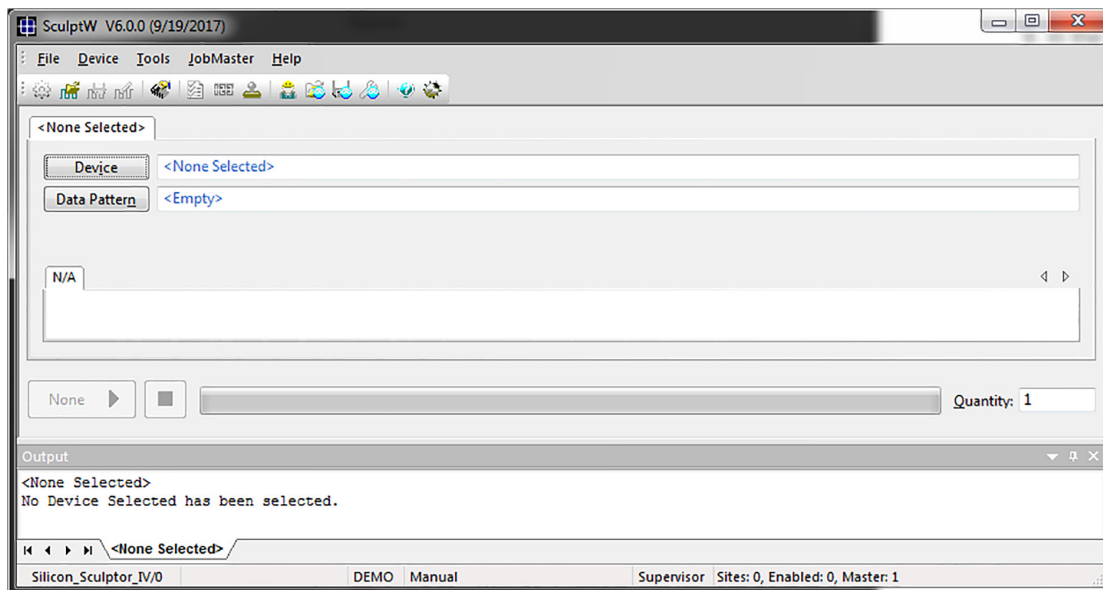
2. Select the device from the list to be programmed.

3. Click **Data Pattern**.

   a. Click **Open** for a file to be loaded.

   b. Click **Browse** to search for a file.

    c.   Select the file to be loaded.

    d.   Choose the appropriate settings.

    e.   Click **OK**.

    f.   Click **OK**.

4.   Under the **Program** tab, choose the appropriate settings for device operations.

5.   Select the number of devices to be programmed under the **Quantity** field.

    a.   Place the first device in the socket on site 1.

    b.   Click **Program**.

    c.   Press the **Start** button if the quantity field is set greater than one.

6.   Insert the device into socket card. Click **OK** to program device.

7.   After the green Pass or red Fail LED is lit, place a device in the site and press the **Start** button on the programmer.
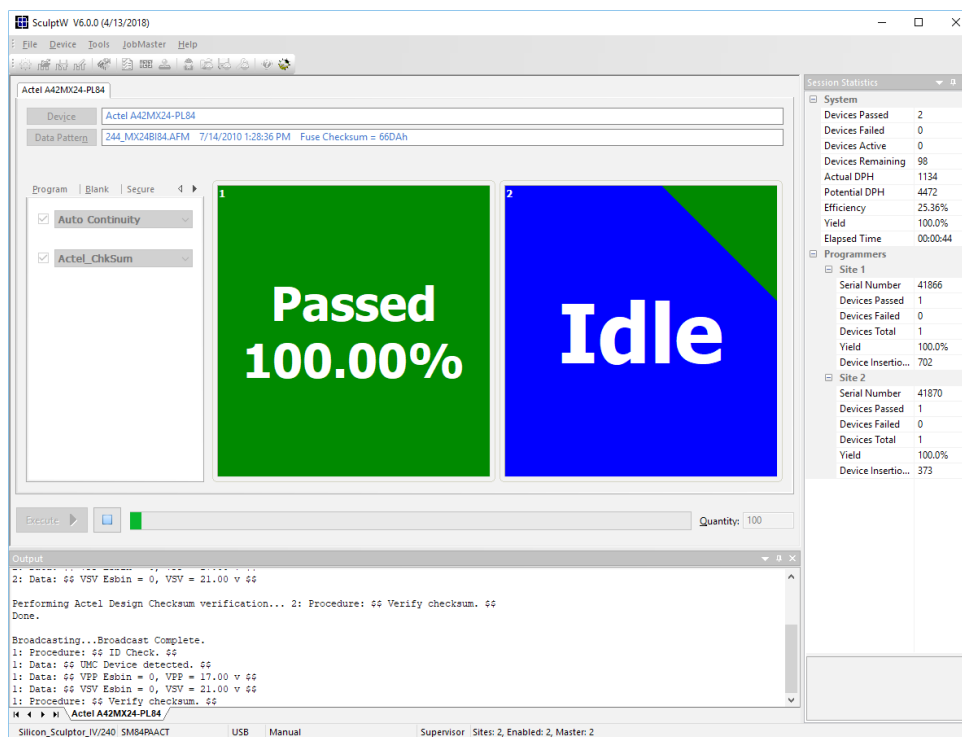
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