

Silicon Sculptor v5.22.5 Release Notes

SculptW v5.22.5 is a new general release of the Silicon Sculptor software, supporting both the Silicon Sculptor II and Silicon Sculptor 3 programmers. The Silicon Sculptor 3 programmer is a high-speed USB 2.0-based programmer.

Note: SculptW V5.22.5 is the last software release that supports Silicon Sculptor II programmers.

Software Enhancements:

- Enhanced security programming on the RTSX-SUs family of devices to improve yield
- SPI and JTAG programming on SmartFusion[®]2 and IGLOO[®]2 devices
 - JTAG programming is supported using a STAPL file
 - SPI programming is supported using a DAT file

New Device Support:

- M2S005/T/S/TS-FG484
- M2S010/T/S/TS-FG484
- M2S025/T/S/TS-FG484
- M2S050/T/S/TS-FG484
- M2S050/T/S/TS-FG896
- M2GL005/T/S/TS-FG484
- M2GL010/T/S/TS-FG484
- M2GL025/T/S/TS-FG484
- M2GL050/T/S/TS-FG484
- M2GL050/T/S/TS-FG896

New Socket Module Support:

- SM2S-896FG-MSSOC
- SM2S-484FG-MSSOC
- SMAX-1272LG-AACT

Note:

- All new socket modules are not backward compatible with older revisions of the programming software.
- The difference between SMAX-1272LG-AACT and SMAX-1272LG-ACT is the socket used.
 Since this socket module has a new name, it is not compatible with older versions of the programming software although it is electrically identical to its predecessor.

This release features everything in prior general and special releases, as well as new content.

Should I upgrade?

All customers should upgrade to this release immediately. In general, Microsemi[®] always recommends upgrading to the latest general release version of the Silicon Sculptor software. Upgrading to a special release should only be done if notified by email.

Equivalent multi-site programmer software from BPM Microsystems

Silicon Sculptor v5.22.5 is equivalent in functionality to BPWin v5.39.0 Beta of April 4th or later. The first regularly scheduled BPWin release to support all of the features (device support, enhancements, and bug fixes) of this Silicon Sculptor v5.22.5 release is/will be BPWin v5.39.0.



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Supported Platforms

- Windows 7 Professional
- Windows Vista[®] Business
- Windows XP[®] with SP3 (<u>cumulative</u>)

Note: Silicon Sculptor I and Silicon Sculptor 6X can no longer be used with this version of the software. These obsolete programmers are no longer supported.

Note:

- The SculptW software may operate on other Windows 7 editions. However, Microsemi only guarantees operation on the Professional edition, which is used during software testing.
- The SculptW software may operate on other Vista editions. However, Microsemi only guarantees operation on the Business edition, which is used during software testing.
- Silicon Sculptor II is not supported in Windows Vista and Windows 7 platforms (both 32-bit and 64-bit)
- Administration rights to the local workstation are required both for installation and for at least one launch of SculptW after installation

Minimum System Requirement

- · Pentium III or higher processor
- 1 GMB of available memory
- USB 2.0 port
- 50 MB of available hard disk space
- SVGA 256-color and 800x600 or higher resolution
- For Windows operating systems, you must have Admin rights to the local workstation for installation purposes

Device Support

New Devices

- M2S005/T/S/TS-FG484
- M2S010/T/S/TS-FG484
- M2S025/T/S/TS-FG484
- M2S050/T/S/TS-FG484
- M2S050/T/S/TS-FG896
- M2GL005/T/S/TS-FG484
- M2GL010/T/S/TS-FG484
- M2GL025/T/S/TS-FG484
- M2GL050/T/S/TS-FG484



M2GL050/T/S/TS-FG896

New Adapter Modules

- SM2S-896FG-MSSOC
- SM2S-484FG-MSSOC
- SMAX-1272LG-AACT

Note:

- All new socket modules are not backward compatible with older revisions of the programming software.
- The difference between SMAX-1272LG-AACT and SMAX-1272LG-ACT is the socket used. Since this socket module has a new name, it is not compatible with older versions of the programming software although it is electrically identical to its predecessor.

For a complete list of device support in SculptW v5.22.5, refer to the Current Device List.

Product-specific Silicon Sculptor adapter modules are available. For a complete list, refer to the Silicon Sculptor Adapter Modules page.

New Features and Enhancements

 SAR 55615: Enhanced security programming on the RTSX-SUs family of devices to improve vield.

Resolved Issues

None

Known Issues and Workarounds

• **SAR 56097**: Optional verify operation during STAPL programming of M2S/M2GL devices will fail if security programming is enabled.

WORKAROUND: Disable Continuity check and DO_VERIFY procedure prior to programming.

Note: Standalone verify will pass if M2S/M2GL is programmed with security enabled

• **SAR 56244**: When programming M2S and M2GL devices with SPI, using DAT file that has security feature enabled, standalone programming will pass. However, standalone verify will fail.

WORKAROUND: Customers have the option to run standalone verify with JTAG after programming with SPI is completed.

- SAR 37022: Progress bar stops moving for RTAXS/AX. No action is required. Programming continues and returns a message when complete.
- SAR 35484: If AX/RTAX device fails first operation with prebroadcast, it is not clear that the system is expecting another device to be inserted.

WORKAROUND: Cancel programming or insert another device.

- SAR 9255: For the following devices, STAPL files generated from Libero® Integrated Design Environment (IDE) v8.4 will generate a failure.
 - o AFS600
 - o AFS1500
 - o M7AFS600
 - o M1AFS600
 - o M1AFS1500
 - o P1AFS600
 - o P1AFS1500

WORKAROUND: Use a STAPL file generated with Libero IDE v8.4 SP2 or a later version to program the FPGA. If you still need to use a STAPL file from Libero IDE v8.4 to program your FPGA using Silicon Sculptor, please contact Microsemi Tech Support for more information.

Download Software for Windows

• Silicon Sculptor v5.22.5(25.8 MB)



List of Changes

The following table lists important changes that were made in each revision of the document.

| Date | Change | Page |
|--------------------------------|---|------|
| Revision 1 (September 2015) | Added New Adapter Modules Section (SAR 69419) | 3 |
| Revision 0 | Initial release. | NA |
| (April 2014) | | |



Product Support

Microsemi SoC Products Group backs its products with various support services, including Customer Service, Customer Technical Support Center, a website, electronic mail, and worldwide sales offices. This appendix contains information about contacting Microsemi SoC Products Group and using these support services.

Customer Service

Contact Customer Service for non-technical product support, such as product pricing, product upgrades, update information, order status, and authorization.

From North America, call **800.262.1060**From the rest of the world, call **650.318.4460**Fax, from anywhere in the world **650.318.8044**

Customer Technical Support Center

Microsemi SoC Products Group staffs its Customer Technical Support Center with highly skilled engineers who can help answer your hardware, software, and design questions about Microsemi SoC Products. The Customer Technical Support Center spends a great deal of time creating application notes, answers to common design cycle questions, documentation of known issues and various FAQs. So, before you contact us, please visit our online resources. It is very likely we have already answered your questions.

Technical Support

For Microsemi SoC Products Support, visit http://www.microsemi.com/products/fpga-soc/design-support/fpga-soc-support.

Website

You can browse a variety of technical and non-technical information on the Microsemi SoC Products Group home page, at http://www.microsemi.com/soc/.

Contacting the Customer Technical Support Center

Highly skilled engineers staff the Technical Support Center. The Technical Support Center can be contacted by email or through the Microsemi SoC Products Group website.

Email

You can communicate your technical questions to our email address and receive answers back by email, fax, or phone. Also, if you have design problems, you can email your design files to receive assistance. We constantly monitor the email account throughout the day. When sending your request to us, please be sure to include your full name, company name, and your contact information for efficient processing of your request.

The technical support email address is soc_tech@microsemi.com.

My Cases

Microsemi SoC Products Group customers may submit and track technical cases online by going to My Cases.



Outside the U.S.

Customers needing assistance outside the US time zones can either contact technical support via email (soc_tech@microsemi.com) or contact a local sales office. Sales office listings can be found at www.microsemi.com/soc/company/contact/default.aspx

ITAR Technical Support

For technical support on RH and RT FPGAs that are regulated by International Traffic in Arms Regulations (ITAR), contact us via soc_tech_itar@microsemi.com. Alternatively, within My Cases, select **Yes** in the ITAR drop-down list. For a complete list of ITAR-regulated Microsemi FPGAs, visit the ITAR web page.



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