Simcenter™ Flotherm™ Release Highlights

Software Version 2310
October 2023

SIEMENS

About Siemens Digital Industries Software

Siemens Digital Industries Software is a global leader in the growing field of product lifecycle management (PLM), manufacturing operations management (MOM), and electronic design automation (EDA) software, hardware, and services. Siemens works with more than 100,000 customers, leading the digitalization of their planning and manufacturing processes. At Siemens Digital Industries Software, we blur the boundaries between industry domains by integrating the virtual and physical, hardware and software, design and manufacturing worlds. With the rapid pace of innovation, digitalization is no longer tomorrow’s idea. We take what the future promises tomorrow and make it real for our customers today. Where today meets tomorrow. Our culture encourages creativity, welcomes fresh thinking and focuses on growth, so our people, our business, and our customers can achieve their full potential.

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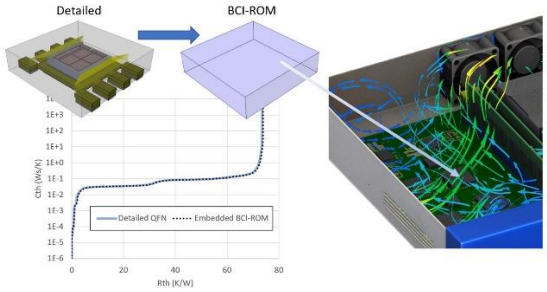
Introduction

This document provides a high-level summary of this release of Simcenter™ Flotherm™ software. It includes a summary of the new features in this release, any authorization code changes required, any major installation changes, and any transitioning issues you should be aware of before installing.

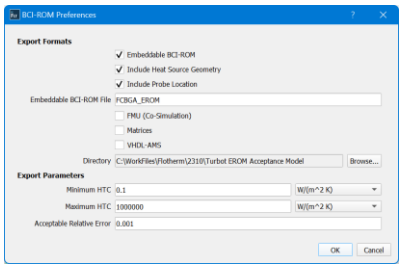
New Features

The following new features are available in this release:

- **Model the Complexity – Embeddable BCI ROM (EROM).**
  - *Embedded BCI-ROMs (EROM) capture the thermal performance of modern semiconductor packages and other electronics modules in a manner that guarantees the protection of intellectual property while maintaining predictive accuracy in any situation.*

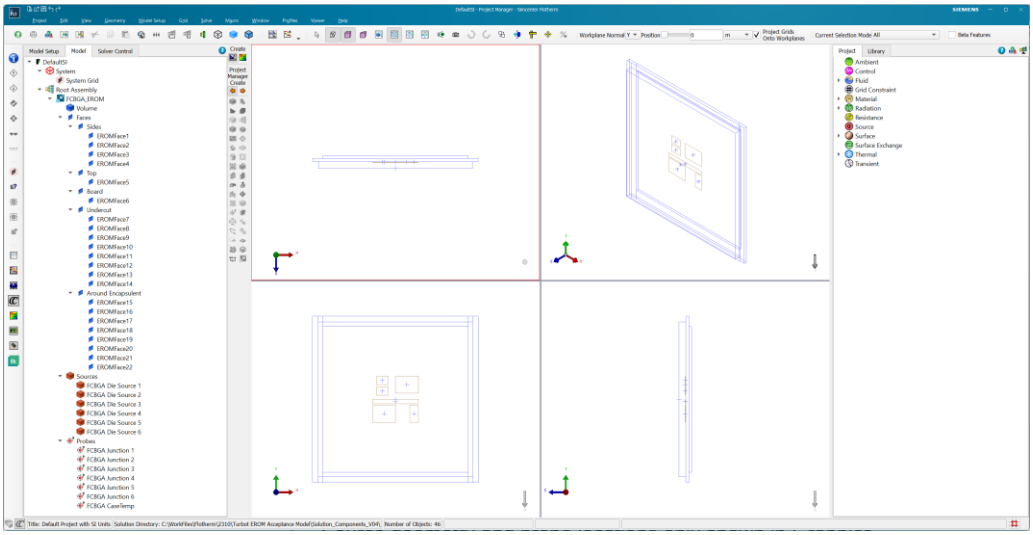


  - Author extracts EROM from detailed model (requires BCI ROM license).
    - For Embeddable BCI ROM Author sets

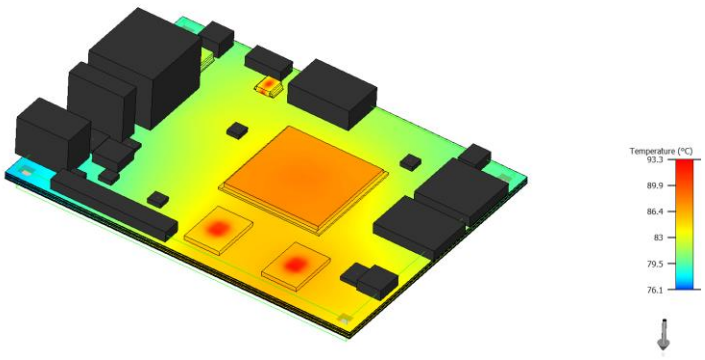


      - Whether the heat source geometry and probe location should be visible to consumer (default not visible).
      - Heat transfer range (common for all types).
      - Tolerance (common for all types).
      - Single file created with extension *.EROM

- Consumer imports Embeddable BCI ROM using new SmartPart ( ).
  - Default name is the name of the *.EROM file.

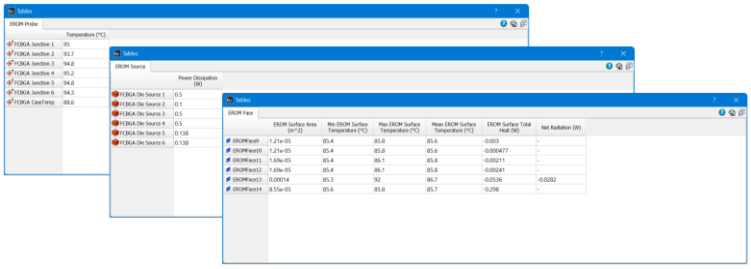


  - Locate as required with outer shape shown in all graphics display areas.
    - Source geometry and probe locations only shown in Graphics display areas if Author activated.
  - Requires consumer to attach source attributes to heat sources.
  - Full heat transfer (conduction, convection, and radiation) supported from surfaces which Author nominated by setting adjacent ambient.
    - Radiation attributes and surface emissivity can be attached by Consumer.
  - EROM supports post-processing:
    - Surface plots.



    - Plane plots intersecting with an EROM will be blank throughout EROM volume.

- Probe temperature tracking during solving.
- Tabular results for probes, sources, and face data.



For a detailed list of new features, refer to your product specific release notes manual or README file, available in the installed software tree or on Support Center.

Licensing

This release uses Mentor Standard Licensing (MSL) for the Siemens Advanced Licensing Technology (SALT) 2.2.0, mgcld/saltd vendor daemon and licenses.

SALT is a new Siemens licensing solution based on FlexNet licensing technology. SALT 2.2.0 requires FLEXnet license server running at version 11.19.0 or higher. If you use server-based licenses, you will need to update the license server accordingly. Download the latest Siemens License Server Installer and licensing documentation from Support Center:

`https://support.sw.siemens.com/en-US/product/1586485382`

If you are currently using the environment variable MGLS_LICENSE_FILE then you need to set a new environment variable SALT_LICENSE_SERVER with the same value. MGLS_LICENSE_FILE can remain set to support older versions.

For more information on SALT and Siemens License Server refer to Knowledge Base article MG612613 “Getting Started with Siemens Advanced Licensing Technology (SALT) and the Siemens License Server (SLS)”, Knowledge Base article MG612618 “Siemens Advanced Licensing Technology (SALT) Migration Guide for Mentor Products” on Support Center and new licensing documentation: *Siemens Digital Industries Software License Server Installation Instructions* and *Siemens Digital Industries Software Licensing Manual for Siemens EDA Products*.

Authorization Codes

No changes to authorization codes are required for this release.

You can download your existing authorization codes from Support Center -> Account Center -> Licenses:

account.sw.siemens.com/licenses

For additional information on licensing, refer to the *Siemens Digital Industries Software Licensing Manual for Mentor Products*.

Product Installation

Simcenter Flotherm 2310 installer no longer provides the option for a Volunteer only installation. To access the Volunteers functionality, install the whole software product.

Product Transition

Starting with Release 2304 there is a new product for MCAD Bridge: 292951 Simcenter Flotherm MCAD Bridge Ap SW replacing all the previous MCAD Bridge products:

239822 Simcenter MCAD Bridge Ap SW
239823 Simcenter MCAD Bridge ProE Rdr Op SW
239824 Simcenter MCAD Bridge SolidW Rdr Op SW
239825 Simcenter MCAD Bridge Catia V5 Rdr Op SW
238139 Simcenter MCAD.Bridge Catia V4 Rdr Op SW

To migrate to the new product, please contact your sales representative.

New Cloud-Based Documentation Access in Simcenter Flotherm 2310 Release

The Simcenter Flotherm 2310 release provides an improved method to access your Siemens Digital Industries Software product documentation. The default option serves your product documentation from Support Center, giving you immediate access to the latest release-specific documentation, enhanced search of HTML and PDF files, and (if you use translated documentation) full multi-language search. This new method also eliminates the requirement to install product documentation as part of the local software installation.

For easy access, we offer an option to view Support Center documentation using a documentation proxy on your network. This documentation proxy removes the need for your users to have a Support Center account or to log into Support Center to view documentation.

We understand that some customers use our products on restricted networks without internet access. You have the option to download the documentation and set up a Siemens

Documentation Server to view the documentation package on your local network.

See “Configuring Documentation Access” in the *Simcenter Flotherm 2310 Installation Guide* for instructions to set up the documentation proxy or the documentation server.

Supported Platforms

Supported Operating Systems (Full Software)

- Microsoft Windows 11 Version 21H2, 22H2 (64 Bit Pro and Enterprise).
- Microsoft Windows 10 Versions 21H2 and 22H2 (64 Bit Pro and Enterprise).
- Microsoft Windows Server 2019 Version 1809, (64 Bit Standard Edition).

Supported Operating Systems (Solver Only)

- Linux RHEL 7.8 x64
- Linux RHEL 7.9x64
- Linux RHEL 8.8 x64
- Linux SUSE SLES 12.4 x64

Note that supported operating systems may change. For most up to date information please refer to Support Center documentation.

Localized Languages

- Japanese
- Simplified Chinese

Hardware Requirements

The following minimum hardware is required to run Simcenter Flotherm 2310:

- 64-bit capable AMD processor or an Intel processor with EM64T.
- 2 GB system memory (RAM) minimum, 8 GB recommended.
- Graphics card supporting hardware accelerated OpenGL version 2.0 or later.

Compatible releases

The following releases are compatible with Simcenter Flotherm 2310:

Link to HEEDS.

- HEEDS 2304

Note: To support a particular version of Simcenter Flotherm the portal setting in HEEDS need to be adjusted to use the appropriate Simcenter Flotherm files.

- In HEEDS go to File \ Options \ Analysis Portals.
- Select Simcenter Flotherm.
- Set “Solver Install” to correct location.
    - For Simcenter Flotherm 2310 the default location following installation is: “C:\Program Files\Siemens\SimcenterFlotherm\2310\WinXP\bin\flotherm.bat”

Power Map Import.

- HyperLynx PI V8.2.1 through VX2.11.
    - **Note that VX2.12, VX2.13, and VX2.14 are not supported.**

File Imports and Exports

Supported CAD Files (Via MCAD Bridge)		
Importing CAD Files		
Siemens NX	*.ptr	Up to version 2212
Siemens Solid Edge	*.prt, *.asm	Up to version 2212
Parasolid	*.x_t, *.x_b, *.xmt_txt, *.xmt_bin	Up to version 35.0
JT	*.jt	Version 9.5
PLMXML	*.plmxml	Schema version 6
XTXML	*.xtxmla	Exported from Simcenter Flotherm XT 2304 Exported from Simcenter Flotherm Package Creator up to version 2310
IGES	*.iges	Up to version 5.3
STEP	*.stp	AP203, AP214, AP242
PTC Creo	*.prt.*, *.asm.*	Pro/E 2000i to Creo Parametric 8.0
CATIA V4	*.model, *.exp	Version 4.1.5 to 4.2.5
CATIA V5	*.CATPart, *.CATProduct	Up to V5-6R2021 SP4
SolidWorks	*.sldprt, *.sldasm	Versions 1999 to 2022
ACIS	*.sat, *.sab	Up to version 2021.1.0
Exporting CAD Files		
Parasolid	*.x_t, *.x_b, *.xmt_txt, *.xmt_bin	Version 35.0
JT	*.jt	Version 9.5
PLMXML	*.plmxml	Schema version 6
IGES	*.iges	Version 5.3
STEP	*.stp	AP242
CATIA V4	*.model, *.exp	Version 4.1.9

Supported ECAD Files (Import only via EDA Bridge)		
ODB++ Directory		Versions 7 and 8
ODB++ Archive	*.tar.gz, *.tgz, *.tar	Version 7 and 8
IDF	Board definition *.emn, *.bdf, *.brd, Component definition *.emp, *.idf, *.lib, *.pro	Version 2.0 and 3.0
Allegro (1)	*.floeda	PCB Designer 17.2 or later
APD (1)	*.floeda	Allegro Package Designer 17.2 or later
Boardstation (1)	*.floeda	Boardstation PCB 2005BST and 2006BSXE or later
CR5000 (1)	*.floeda	CR-5000 Board Designer 9.0 or later
Xpedition (1)	*.floeda	Xpedition Enterprise EEVX 1.1 or later

(1) Plugins for EDA software to create *.floeda files available within the installation directory .\SimcenterFlotherm\2310\eda_interfaces.

Support Information

A support contract with Siemens is a valuable investment in your organization's success. With a support contract, you have 24/7 access to the comprehensive and personalized Support Center portal.

Support Center features an extensive knowledge base to quickly troubleshoot issues by product and version. You can also download the latest releases, access the most up-to-date documentation, and submit a support case through a streamlined process.

support.sw.siemens.com/

If your site is under a current support contract but you do not have a Support Center login, register here:

support.sw.siemens.com/register

Simcenter Community

Join Simcenter community of experts to ask questions, solve issues, help others, and submit product ideas.

Simcenter Flotherm (siemens.com)