

Simcenter™ Flotherm™ XT Release Highlights

Software Version 2304
April 2023

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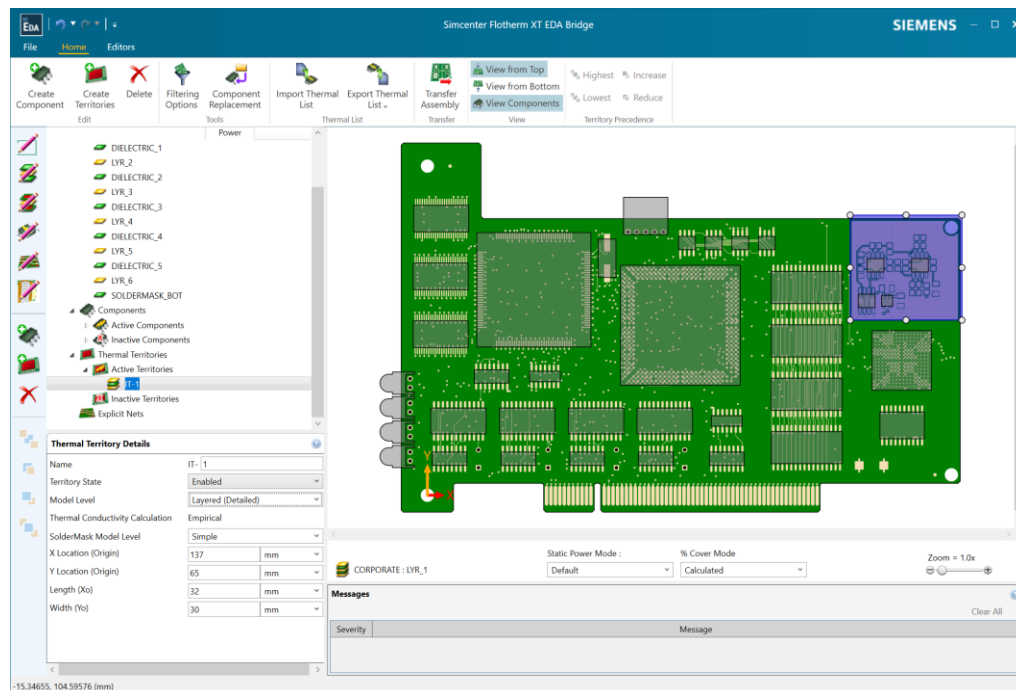
Introduction

This document provides a high-level summary of this release of Simcenter™ Flotherm™ XT 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 – Independent Thermal Territories when processing board in EDA Bridge**
 - Allows the user to define any region of a board to obtain accurate representation of local copper coverage.



- Add thermal territory with no component selected and independent version created.
- Can be moved and resized by dragging with mouse or set up using property sheet.
- Supports Compact, Layered (Detailed) and Explicit modelling levels.

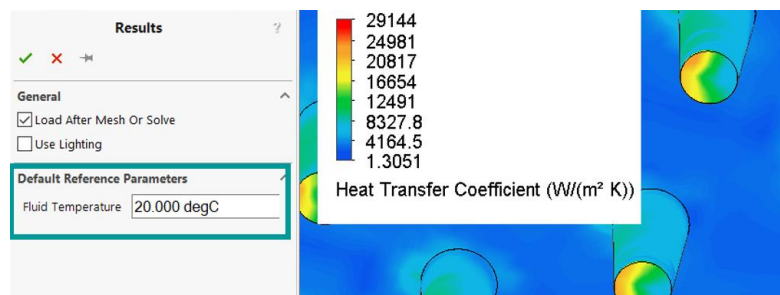
- **Model the Complexity – New Layer Stack-up Editor EDA Bridge.**

- Streamlines the board layer definition.

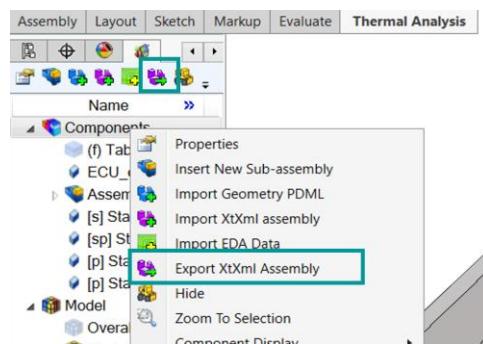
Name	Layer Type	Dielectric Material	Conductor Material	Thickness (mm)	% Cover (Calculated)
SOLDERMASK_TOP	Soldermask	Polyimide		0.05080	0.0
LYR_1	Signal	FR4	Copper	0.01778	14.1
DIELECTRIC_1	Dielectric	FR4	Copper	0.05080	1.2
LYR_2	Signal	FR4	Copper	0.03556	15.7
DIELECTRIC_2	Dielectric	FR4	Copper	0.15240	1.2
LYR_3	Power	FR4	Copper	0.03556	90.5
DIELECTRIC_3	Dielectric	FR4	Copper	0.66040	1.2
LYR_4	Power	FR4	Copper	0.03556	89.8
DIELECTRIC_4	Dielectric	FR4	Copper	0.15240	1.2
LYR_5	Signal	FR4	Copper	0.03556	10.1
DIELECTRIC_5	Dielectric	FR4	Copper	0.05080	1.2
LYR_6	Signal	FR4	Copper	0.01778	9.9
SOLDERMASK_BOT	Soldermask	Polyimide		0.05080	0.0

- Consolidated all layer types into single “Add layers to stackup” icon.
- Multi-selection available for changing material and thickness.
- Single unit selection for all layers.
- **Go Faster – Option to create a New Board Design while using EDA Bridge.**
 - Efficiently set up a new design.
 - File \ New - option provided to save current design.
- **Go Faster – Additional options for efficient processing SmartPCB and HyperLynx® PI.**
 - Switch to turn off auto update for calculation of SmartPCB.
 - Enables work on the SmartPCB set up to progress without the overhead of calculating the internal node arrangement at each step.
 - Option to show / hide net outlines.
 - Useful to show original net outlines when using “averaging” option.
 - Automatic net selection with Co-simulation.
 - When the co-simulation option is selected and a HyperLynx file chosen and nets with DC Drop settings active in the file are automatically selected and moved to the top of the list.

- Read only display for minimum node size shows the smallest possible node size in the network assembly that models the SmartPCB.
 - When using the averaging method with auto update total nodes is unchecked you can use the minimum node size to give an indication of what the total nodes value will be.
- Global goal for Joule heating created.
 - Shows total heat generated via joule heating including that provided via the HyperLynx co-simulation.
- **Go Faster – Reference temperature setting for Heat Transfer Coefficient calculation and display.**
 - It is now possible for the user to set a different reference temperature to the ambient value for post processing calculations.



- **Stay Integrated – Export assembly as XTXML.**
 - Select any assembly and export as XTXML, a man-readable XML file currently used for export of packages from Simcenter Flotherm Package Creator for use in Simcenter Flotherm XT.



- Can be used to transfer full geometry and attribute data between installations of Simcenter Flotherm XT.
- Geometry only can be imported into Simcenter Flotherm 2304 via MCAD Bridge and processed as required before transfer to a project.

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 the Mentor Standard Licensing v2019_3. v2019_3 requires a FLEXnet license server running at version 11.16.4.0 or higher.

If you use server-based licenses, you will need to update the license server accordingly. Download the latest Siemens License Server Installer from Support Center:

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

Please note that the license server is no longer available from the product installation or media.

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

As the license software is no longer provided with the product installer or media any options regarding the license software have been removed from the installation process.

Supported Platforms

Supported Operating Systems (Full Software)

- Microsoft Windows 10 Versions 20H2, 21H1, 21H2 and 22H2 (64 Bit Pro and Enterprise).
- Microsoft Windows 11 Versions 21H2 and 22H2 (64 Bit Pro and Enterprise).
- Microsoft Windows Server 2019 Version 1809 64 Bit Standard Edition.
- Microsoft Windows Server 2016 Version 1607 64 Bit edition.

Supported Operating Systems (Solver Only)

- Linux RHEL 7.3 x64
- Linux RHEL 7.6 x64
- Linux RHEL 7.9 x64
- Linux RHEL 8.4 x64
- Linux SLES 11.4 x64
- Linux SLES 12.5 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 XT 2304:

- 64-bit capable Intel or AMD processor.
- Solid Works certified graphics card – information available from <https://www.solidworks.com/support/hardware-certification/>

Compatible releases

The following software releases are compatible with Simcenter Flotherm XT 2304.

- For full HyperLynx PI co-simulation HyperLynx PI VX 2.11, VX 2.10 and VX 2.8
 - **Note that HyperLynx VX2.12 is not currently supported.**
- For power map import - HyperLynx PI V8.2.1 and newer.
- HEEDS 2210.

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

- In HEEDS go to File \ Options \ Analysis Portals.

- Select Simcenter Flotherm XT.
- Set “Solver Install” to correct location:
 - For Simcenter Flotherm XT 2304 the default location following installation is “C:\Program Files\Siemens\SimcenterFlothermXT\2304.0\FTXT\NGP\bin\NGP_ParametricStudyStarter.exe”

File Imports and Exports

For import / export from / to CAD system or neutral file formats, refer to documentation for Solid Works 2022. Supplied with software (XT Help \ Geometry Help) or online ([Welcome to SOLIDWORKS Online Help - 2022 - SOLIDWORKS Help](#)).

Import *.xtxmla files exported from versions of Simcenter Flotherm Package Creator up to version 2304.

Import *.txmlp and *.txmlp files exported from Simcenter Flotherm XT up to version 2304.

Import *.pdml and *.pack files files exported from versions of Simcenter Flotherm up to 2304. (Note that unsupported features are ignored).

Supported ECAD Files (Import only via EDA Bridge)		
Xpedition Layout or Expedition PCB	*.cce, *.cc	Xpedition Enterprise Flow all versions, Expedition Enterprise 7.9.3 and later
PADS Professional	*.cce	All versions
PADS Standard	*.cce	VX.2
ODB++ Archive	*.tar.gz, *.tgz, *.tar	Version 7 and 8 (8 recommended)
IPC	*.xml	IPC2581 Revision B
IDF	Board definition *.emn, *.bdf, *.brd, *.idb Component definition *.emp, *.idf, *.lib, *.pro, *.idl	Version 2.0 and 3.0
Prostep	*.idx, *.idz, *.xml	Version 3.0

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