ST PowerStudio Webinar

The dynamic electro-thermal simulation software dedicated to power devices by ST
• Introduction
• Inside the Simulator
• Documentation and Support
• User Interface
• Download and Installation
The dynamic electro-thermal simulation software dedicated to power devices by ST

- Comprehensive power and thermal analysis, able to predict the performance even for parameters not testable
- Helps to select the proper device fitting the application mission profile
- Shorts the solution design and saves time and resources
- Intuitive and user-friendly interface
- Off-line software allows the simulation everywhere
- Completes ST products awareness
**Introduction**

**Project Overview**

**Scope:**
- Supports SLLIMM & ACEPACK families
- Enables DC/AC 3-phase 2-level application
- Compatible with Windows & MAC OS X
- Freeware software

**Comprehensive Analysis:**
- Static and dynamic load mission profile
- Long mission profile duration of hours
- Several thermal setup
- Deep analysis of junction temperatures

**High Connectivity:**
- Multilanguage (English, Chinese*, Japan*)
- Quick link to st.com doc (product page, DS)
- Output Report
- Online Forum

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**STSW-POWERSTUDIO**

Available on st.com

* Available in the next releases

Inside the Simulator

Input data: electrical and thermal conditions

- Transient Thermal Impedance
- Static and Dynamic Electrical Characterization
- Foster thermal network
- Mathematical models
- Power loss calculation
- Temperature (Tj) calculation

Device data
- Measured data from extended characterization

Device modeling
- Very precise polynomial functions, including temperature dependence

Computation
- Self-heating
- Accurate computation analysis thanks to the self-heating process

Output data:
- Table and charts

ST PowerStudio
- Forum
- Web page / Datasheet
- Report
- User Manual
Additional Visibility

The ST PowerStudio Folder Page can be reached not only from the SLLIMM / ACEPACK Product Pages.
User Interface

Product selection: to select Application, Topology, Family and Device

Mission profile: to choose the static or dynamic load

Thermal setup: to select the input thermal conditions

Gate driving: to set the gate resistances

Input data: to set the electrical and thermal input parameters

Output data: to show the simulation results

Charts: to display the scope views of results

Command buttons: include the main buttons for navigation and support
Download and Installation
Step 1: click on Get Software button on ST PowerStudio Folder Page

Step 2: Accept the License Agreement

License Agreement

**IMPORTANT-READ CAREFULLY:**
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Step 3: Login for Download

Option 1: using your my.st.com account

Option 2: providing your name and e-mail

Accept the Terms & Conditions and stay up to date with us
Your registration has been successfully submitted!

To validate your e-mail and start the download, please click on the link inside the e-mail that has been sent to you. This link will be valid for 24 hours. Please check your spam filters in case you did not receive the e-mail.
Step 4: e-mail Validation

Subject: [BEWARE: NOT FROM ST] Start your software download

Please follow this link to validate your email address and start the download of the requested software:

[Provided URL]

If you have any further issues please send your request to our online support using the subject line: Software download issues.

Thank you.
Step 5: Download and Save the .zip file

GET SOFTWARE

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Software Version</th>
<th>Marketing Status</th>
<th>Supplier</th>
<th>Order from ST</th>
</tr>
</thead>
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<td>1.0.0</td>
<td>Active</td>
<td>ST</td>
<td>Download</td>
</tr>
</tbody>
</table>

Do you want to open or save en.stsw-powerstudio.zip (9.56 MB) from st.com?
Step 6: Unzip and light installation. It does not require administrative privileges.

Note: the .md5crc file ensures that the data within the folder is complete and has not become corrupt.
Step 7: The installation creates a folder called STMicroelectronics\ST PowerStudio in your PC
Software Launching

Step 8: Launch the Software ST PowerStudio
Ask ST PowerStudio through the Forum
Thank you!