**Checklist Thermal Simulation**

Please give us answers to the items listed below. You can also add a system or part description in external documents. In this case please add a note or link to these files in the corresponding field and attach the documents to your answer.

Note that your input has influence to the accuracy of the simulation results, so please try to give us as much information as possible about your customer specific parts.

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| --- | --- | --- |
| **What should be the aim of the simulation? Chose the** | | |
|  | System has sufficient cooling for the equipped cards | Klicken Sie hier, um Text einzugeben. |
|  | A defined maximum temperature of part(s) on a board should not be reached | Klicken Sie hier, um Text einzugeben. |
|  | Temperature field for a given configuration should be calculated | Klicken Sie hier, um Text einzugeben. |
|  | Design- or parameter study | Klicken Sie hier, um Text einzugeben. |
|  | Optimization of a given system | Klicken Sie hier, um Text einzugeben. |
|  | Others, please define | Klicken Sie hier, um Text einzugeben. |

**Note:**  
In case of a design- or parameter study or an optimization please specify the parameters or the optimization goal.

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| **Input data:** | | | | | | |
| ***Environment conditions*** | | | | | | |
|  | Temperature (min): | | | | | Klicken Sie hier, um Text einzugeben. |
|  | Temperature (max): | | | | | Klicken Sie hier, um Text einzugeben. |
|  | Environment pressure: | | | | | Klicken Sie hier, um Text einzugeben. |
|  | Maximum location height above zero: | | | | | Klicken Sie hier, um Text einzugeben. |
|  | Additional air flow | | | | | Klicken Sie hier, um Text einzugeben. |
|  |  | Air speed: | | Klicken Sie hier, um Text einzugeben. | | |
|  |  | Direction: | | Klicken Sie hier, um Text einzugeben. | | |
|  |  | Location: | | Klicken Sie hier, um Text einzugeben. | | |
| ***Boundary conditions only for customer specific equipment*** | | | | | | |
| Please insert here technical data or links to data sheets you can provide. Please do this only for customer specific parts or specifications. | | | | | | |
|  | Total electrical power input: | | | | Klicken Sie hier, um Text einzugeben. | |
|  | Power loss of electrical parts: | | | | Klicken Sie hier, um Text einzugeben. | |
|  | Material data for relevant parts: | | | | Klicken Sie hier, um Text einzugeben. | |
|  | Fan data: | | | | Klicken Sie hier, um Text einzugeben. | |
|  | Additional liquid cooling: | | | | Klicken Sie hier, um Text einzugeben. | |
|  | Maximum of allowed temperatures for relevant parts: | | | | Klicken Sie hier, um Text einzugeben. | |
|  | Air flow limitation (i.e limited inlet, surrounding walls etc.) | | | | | |
|  | please specify | | Klicken Sie hier, um Text einzugeben. | | | |
|  | IDF files for boards available: | | | | Klicken Sie hier, um Text einzugeben. | |
|  | STEP files for boards available: | | | | Klicken Sie hier, um Text einzugeben. | |
|  | Slot assingment: | | | | Klicken Sie hier, um Text einzugeben. | |
|  | Other conditions: | | | | Klicken Sie hier, um Text einzugeben. | |

**Note:**If there are no information for customer specific equipment available, we will substitute it by a load board which produces the same power loss for the simulation. The thermal power loss will then be generated by a resistor block, which covers the whole area of the board. On the resistor block a heat sink will be added over its complete surface so that the slot is nearly completely filled.

In case of further questions please give us a contact:

|  |  |
| --- | --- |
| **Contact** |  |
| Last Name , First Name: | Klicken Sie hier, um Text einzugeben. |
| Company: | Klicken Sie hier, um Text einzugeben. |
| Department: | Klicken Sie hier, um Text einzugeben. |
| Adress: | Klicken Sie hier, um Text einzugeben. |
| Phone: | Klicken Sie hier, um Text einzugeben. |
| Mail: | Klicken Sie hier, um Text einzugeben. |
| Order No. or reference: | Klicken Sie hier, um Text einzugeben. |

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| --- |
| **Customer notes:** |
| Klicken Sie hier, um Text einzugeben. |

Add here your remarks regarding the thermal simulation.

In case of questions of filling out this form please contact us.

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Thank you for your effort.

Hartmann Electronic