



Bachelor Thesis

Analysis and Comparison of Cooling Methods for Magnetic Components for High Power Density Electronics

Description

In recent decades, power conversion is demanding for higher efficiency and power density, this is creating heat dissipation issues in magnetic component, which are traditionally bulky. The scope of this thesis work is to analyze and compare the different cooling methods to test the limits of heat dissipation to achieve a high power density with low operating temperature.

Work

- Preparation: literature research, elaboration of possible prototypes
- Execution: Calculation, simulation, design, test setup
- Documentation

Requirement

- General interest in the topic
- Motivation
- Knowledge in power electronics, heat transfer and materials
- English is needed

General conditions

- Location: Office and laboratory at the institute
- Start: immediately possible
- Employment on a marginal basis

Kontakt

Dr. Yann E. Bouvier (Univ.-Prof. Dr. Petar J. Grbović)
Raum: 124a • Technikerstraße 13 • A – 6020 Innsbruck
Mail: yann.bouvier@uibk.ac.at • Tel.: +34 616 43 65 20