



## **NEW! Abc of Power Modules**

### **Functionality, Structure and Handling of a Power Module**

#### **Basics**

This chapter describes the need of a DC/DC voltage converter and its basic functionality. Furthermore, various possibilities for realizing a voltage regulator are presented and the essential advantages of a power module are mentioned.

#### **Circuit Topologies**

Circuit concepts, buck and boost topologies very frequently used with power modules are explained in detail and further circuit topologies are introduced.

#### **Technology, Construction and Regulation Technology**

The mechanical construction of a power module is presented, which has a significant influence on EMC and thermal performance. Furthermore, control methods are explained and circuit design tips are provided in this chapter.

#### **Measuring Methods**

Meaningful measurement results are absolutely necessary to assess a power module. The relevant measurement points and measurement methods are described in this chapter.

#### **Handling**

The aspects of storage and handling of power modules are explained, as well as their manufacturing and soldering processes.

#### **Selection of a Power Module**

Important parameters and criteria for the optimal selection of a power module are presented in this section.

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#### **Chapter extracts**