

Prof. Ion Boldea  
IEEE Fellow

April, 2005

Subject: new Book review

Title: "Power-switching converters" - second edition

Authors: Simon Ang and Alejandro Oliva

Publisher: CRC Press, Boca Raton, Florida, 2005, 539pp

Under Power- Switching Converters title the authors of this new and outstanding textbook with monograph virtues cover the various dc-dc power switching supplies that are now widely used as power supplies down to voltages of 1-1.5 Vdc and up to 100Adc; 0.5Vdc at 400A is expected in supplies for some microprocessors in the near future.

This second edition is notably revised and enhanced and is structured into 10 strong chapters that cover:

- introduction to switching converters
- basic switching converter topologies
- resonant converters
- transformerized switching converters
- control schemes of switching converters
- dynamic analysis of switching converters
- interleaved converters
- switched capacitor converters
- simulation of switching converters
- design case studies

Each chapter starts with basic theory and then builds up on it and consolidates it with many solved and proposed numerical examples (problems). The book goes deep in each chapter such that it becomes not only inspiring but ready to use also by the researcher and designer interested in it. But first of all it suits the senior undergrad and fresh grad student interested in power electronics- a very dynamic high tech industry.

Chapters 9 on simulation tools and Chapter 10 on design case studies stand out as up to date and very useful in accommodating the reader with in depth investigation of power switching converters. If we add the availability, on Publisher's site, of additional digital simulation codes we complete the picture of a raw model contemporary textbook.

In view of the above we warmly recommend this very good textbook to all University which offer Power Electronics programs, and to R&D engineers in same field.

Sincerely,  
Ion Boldea.