U četvrtak, 29.01.2015, u sali 319 Fakulteta tehničkih nauka u Novom Sadu, sa početkom u 13:30 h, održati

On Thursday, January 29, 2015, in Hall 319 of the Faculty of Technical Sciences Novi Sad at 1:30 pm will deliver

PREDAVANJE - LECTURE

HYBRID CONVERTERS FOR LOW-TO-MEDIUM POWER APPLICATIONS

Hibridni pretvarači za napajače malih-do-srednjih snaga

Abstract: A new class of emerging converters for low-power switch-mode power supplies (SMPS) named hybrid mixed-signal controlled converters will be presented. In comparison with the conventional solutions the hybrid topologies have much higher power density, obtained through simultaneous reduction of reactive components and efficiency improvement. The hybrid converters are topologies that combine conventional power processing, based on the inductive converters, with that of switched-capacitor SC circuits having much higher power density. Several hybrid topologies for dc-dc and ac-dc converters will be presented, including multi-output power management architecture (PMA) for portable devices with on-chip integrated inductors and a boost-based non-symmetric multi-level converter having 3 times smaller inductor volume than the conventional solutions.

Katedra za energetsku elektroniku i pretvarači