

Digital Control Algorithm for DC-DC Converters

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Abstract

This paper presents a study of dc-dc power converters digital control method. Dc-dc converters are electronic devices used whenever we want to change dc energy from one level to another. They are needed because unlike ac, dc can't simply be stepped up or down using a transformer. In the following, a short description of dc-dc converters is presented without going to deeply into details, then the control methods and an implemented digital control algorithm follow. Experimental results will present the advantages and the disadvantages of the implemented method.