عنوان مقاله:

A nalysis of Switched Inductor Three-level DC/DC Converter

نویسندگان:

E Salary - *Phd, Department of Electrical Engineering, Faculty of Engineering, Azarbaijan Shahid Madani University, Tabriz, Iran*

M. R. Banaei - *Professor, Department of Electrical Engineering, Faculty of Engineering, Azarbaijan Shahid Madani University, Tabriz, Iran*

A Ajami - *Professor, Department of Electrical Engineering, Faculty of Engineering, Azarbaijan Shahid Madani University, Tabriz, Iran*

خلاصه مقاله:

A non-isolated DC/DC converter with high transfer gain is proposed in this paper. The presented converter consists of the switched inductor and three-level converters. The DC/DC power converter is three-level boost converter to convert the output voltage of the DC source into two voltage sources. The main advantages of DC/DC converter are using low voltage semiconductors and high gain voltage. The steady-state operation of the suggested converter is analyzed. A prototype is developed and tested to verify the performance of the proposed converter. To sum up, the MATLAB simulation results and the experimental results have transparently approved high efficiency of proposed converter as well as its feasibility.

کلمات کلیدی:

renewable energy sources, PV-Battery system, non-isolated DC/DC converter, high gain DC/DC converter.

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