Abstract

Many applications use dc to dc boost converter. For example, laptop chargers, dc Motor drives and any applications that require high dc voltages [1][5]. The benefit of using this circuit is to minimize from using large numbers of batteries. This circuit produces high output dc voltage. Almost this voltage is greater than or equal input voltage that depend on type of application. The aim of this paper is to make controllers for boost converter in S- domain and Z- Domain by using MATLAB SISTOOL. Also, comparison between two controllers are investigated in this paper.

References

March). Performance analysis of DC to DC boost converter using different control methods. In Electrical, Computer and Communication Technologies (ICECCT), 2015 IEEE International Conference on (pp. 1-5). IEEE.


Index Terms

Computer Science Circuits and Systems

Keywords

Boost Converter, MATLAB SISOTOOL, Controller in S- Domain and Z- Domain.