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## Performance Measures of an Efficient Compensator Design for a Buck Converter

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**Abstract :** Traditional Ziegler–Nichols method is well known adapted control scheme for feedback control system. However it provides limited control performance with increased controller gain. It is proposed here an efficient compensator based on bode plot and root locus method to improve control performance for a buck converter. This is tested with three different control objectives.

Keywords : PI, PID, Ziegler–Nichols Z-N, Rise time, Settling time, Band width.

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