

Digital Control Techniques for Power Electronic Devices

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Abstract : The paper discusses the work carried out on the implementation of control techniques like Digital Pulse Width Modulation (PWM) and Digital Pulse Fired control(PFC). These techniques are often used in devices like inverters, battery chargers, DC-to-DC converters can also be implemented on household devices like heaters. The advantage being the control and improved life span of device. In case of batteries using these techniques are known to increase the life span of battery in mobiles and other hand-held devices. 8051 microcontroller is used to implement these methods. Thyristors are used for switching operations.

Keywords : PWM, SVM, PFC, bidirectional inverters, snubber

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