Design and Implementation of A Driving System for Switch Reluctance Motor SRM (3/4) Using PC

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Abstract

        This paper describes the basic operation of switched reluctance motors (SRMs) and demonstrates how a Atmega 8535, and PC Computer -based SRM drive can be used to achieve a wide variety of control objectives.

        In addition, the paper provides a practical application of current control and variable speed SRM drive system using a shaft position sensor (encoder). The application has complete hardware and software details for developing an SRM drive system using (Atmega 8535).The control system can be used as a baseline design which can be easily modified to accommodate a specific application. Whereas the system can be used to supply a motor with 16 phase. The connection between control system and the PC is done by RS 232.

 Keywords: Atmega 8535, SRM, driving of SRM, SRM and its control.