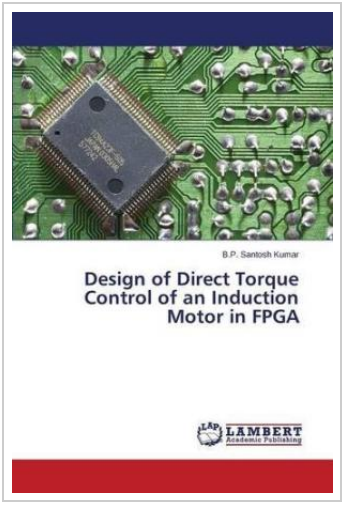

Design of Direct Torque Control of an Induction Motor in FPGA

By Kumar, B.P. Santosh

Condition: New. Publisher/Verlag: LAP Lambert Academic Publishing | Direct torque control or DTC is a very latest ac drive technology which can replace traditional PWM drives of open or closed loop control method. DTC describes the control of torque of a motor directly based on the electromagnetic state of the motor as similar to a dc drive. DTC allows the motor s torque and stator flux to be used as the primary control variables which are obtained directly from the motor by using advanced motor theory. The major problems faced by Direct Torque control of an induction machine are the production of the high torque ripples present in the output of the induction motor. The torque ripple is caused by the use of the three level hysteresis comparator for torque comparison. This ripple can be reduced by using a special controller for torque comparison. By proper selection of the torque controller parameters the torque ripple can be reduced. The objective of the thesis is to model and simulate the direct torque control of the induction motor with this technique using MATLAB simulink package and show its feasibility by comparing it with the available DTC method. The models are developed from...

Reviews

This publication is amazing. This can be for all who statte that there had not been a worth reading through. I realized this publication from my i and dad encouraged this ebook to find out.

-- ***Desmond Schuster II***

The book is simple in read through better to fully grasp. It is rally exciting throgh looking at period of time. I discovered this publication from my i and dad encouraged this book to find out.

-- ***Dr. Dillon Monahan***