Abstract

This paper presents design and implementation of Real time MATLAB Interface for speed control of induction motor drive using dsPIC 30F4011. In recent years, the field oriented control of induction motor drive is widely used in high performance drive system. It is due to its unique characteristics like high efficiency, good power factor and extremely rugged. This scheme leads to be able to adjust the speed of the motor by control the frequency and amplitude of the stator voltage, the ratio of stator voltage to frequency should be kept constant.

Reference

- W. Leonhard, Control of Electrical Drives, Springer-Verlag Berlin Heidelberg, New York,
Tokyo, 1985.

**Index Terms**

Power Electronics\hspace{2cm} Induction Motors

**Key words**

Fuzzy logic control (FLC)\hspace{2cm} Membership Function

PIC digital signal microcontroller\hspace{2cm} Induction motor
Intelligent Power Module