Abstract

This paper presents real time implementation of DSP based Sine PWM control algorithm for 3 phase 4-leg IGBT voltage source inverter. This method is useful to control the speed of Voltage source Inverter fed Induction motor drive. The pulses were generated using DSP controller through MATLAB Simulink – Code Composer Studio environment and that triggers the inverter. Results of input and output of the inverter were captured using Digital Storage Oscilloscope. Simulation study was carried out using PSpice and results verified.

References

  - Student version–Pspice.
  - www.mathworks.com/MATLAB2012B
  - www.ti.com

Index Terms

Computer Science
Applied Sciences
Keywords
Digital Signal Processor (DSP)  Induction Motor  Sine Pulse Width Modulation
(SPWM)  Voltage Source Inverter
Pspice