

## Designing a motor control system effortlessly

The Motor Control Design Suite provides a very quick way of designing a motor drive system from user specifications.

The Motor Control Design Suite includes a number of design templates for induction motors and linear and nonlinear PMSM. The nonlinear PMSM design template, for example, is for a nonlinear PMSM drive system that includes space vector PWM, current control, maximum-torque-per-ampere (MTPA) control, field weakening control, dynamic torque limit control, and speed control. Such a system includes multiple control loops (current loops and speed loop). In addition, the motor parameters are changing as a function of the current.

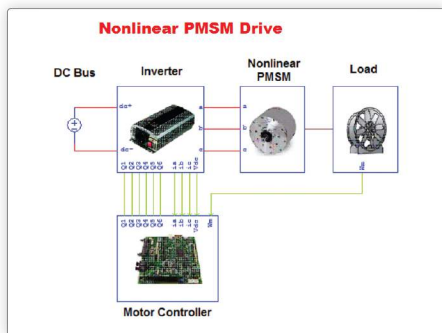
All of these factors combined make it very challenging to design the controllers of the motor drive system.

The task of designing the controllers of the motor drive system is made very easy with the Motor Control Design Suite. Given high-level system input specifications, the Motor Control Design Suite will design all the controllers automatically. In no time, users will have a complete and functional motor drive system that is ready to simulate for further analysis.

The Motor Control Design Suite is an indispensable tool for motor drive system development.

## FEATURES & BENEFITS

- ◆ Design template for linear and nonlinear PMSM with MTPA and field weakening control
- ◆ Design template for induction motor with vector control and field weakening control
- ◆ Designing motor controllers from input specifications in one easy step



Above: Nonlinear PMSM Drive template in Design Suite interface.

Right: Nonlinear PMSM Drive system.

