

IRMCB203

Accelerator Bundled System with Source Code Accelerator™ Sensorless Control System Manual

Features

- Complete bundled system including design platform and source and object code (IRMCS203, IRMCO203 and IRMCV203)
- Sensorless control application for PMAC motor
- Hardware torque/speed control by Verilog code
- 230V/1.0kW output power with IR Plug-N-Drive IGBT module (20A/600V)
- Design Platform with configurable FPGA
- IR2175 high voltage ICs for current sense
- ServoDesigner™ graphical user interface for configuration, control and monitoring

Description

IRMCB203 is the bundled system for high performance sensorless control drive development system. It contains the design platform, complete source code and the ServoDesigner application to assist with FPGA development. The design platform is based on advanced IR's high voltage IC power management component and can deliver continuous 1.0kW output. Complete Verilog library for accurate simulation up to 1.0kW.

Product Summary

Speed operation range (typical)	5 to 100%
High speed operation	100,000rpm (2pole)
Speed accuracy	0.01%
Speed resolution	15bit
PWM carrier frequency	60 kHz max
Sensorless control computation time	10 usec
Continuous output current	3/6 Arms (.5/1kW)
Overload output current	8/16 Arms (.5/1kW)
Maximum modulation index	1.2
Max RS232C speed	57.6 kbps
Optional RS422 communication	1Mbps

ServoDesigner™

