

# **Abstract**

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## **PMSM Position Control with a SUI PID Controller**

This paper introduces the application of a SUI PID controller for permanent magnet (PM) drive systems. The drive system model is developed via FO control. Simulation of the system is carried out to predict the performance at no load and under load. The results and comparisons indicate that application of a SUI PID controller is effective for sensorless PM drive systems.