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CLOSED-LOOP CONTROL OF A DC SERVOMOTOR

BY

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Abstract. The closed-loop control with PICDEM MC LV development board is presented (based on dsPIC30F3010 microcontroller family) of a brushed DC servomotor. PICDEM MC LV development board is designed to control (sensored or sensorless) in real-time of DC servomotors (brushed or brushless DC). Servomotor's power supply is provided by a reversible chopper with MOS transistors, included in PICDEM MC LV development board structure. The control program was designed in C programming language and the user graphical interface was realized in LabVIEW graphical programming language.

Key words: closed-loop control; dsPIC30F3010; DC servomotor.