

DC motor speed control using PSOC technology

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Abstract: This topic focuses on researching and implementing a DC motor speed control system based on Programmable System on Chip (PSOC) technology. The context of the topic is defined by the high demand for improving the performance and reliability of electronic systems in the industrial sector. The objective is to build and test intelligent speed control solutions using PSOC, thereby contributing to enhancing automation capabilities in manufacturing plants. The research methodology includes both theoretical aspects of automatic control engineering and direct experimentation on equipment. The significance of the topic lies not only in applying new technology to practice but also in opening up the possibility of developing comprehensive automation systems.

Keywords: DC motor, PSOC, Control engineering, Automation, Electronic technology