

Research on the application of microcontrollers with GSM modules

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Abstract: In the modern context, the need to combine microcontrollers and GSM modules to create intelligent automation systems is increasingly growing. This topic focuses on building an automation system using the ATmega328 microcontroller combined with the SIM800L GSM module, aiming to solve the problem of data transmission and remote control. Through theoretical and experimental research, the goal of the topic is to develop a practical application solution that can be used in various fields such as automated agriculture or equipment operation management. The expected results not only help improve work efficiency but also contribute to the development of microcontroller and mobile communication technology.

Keywords: microcontroller, GSM, automation, IoT system, experimental application