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机动车身份信息IC卡读写系统的设计与实现

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摘要: 为了实现对机动车的实时监控,从技术上有效地抑制盗抢车辆等犯罪活动的发生,可将机动车身份信息写入IC卡中,利用专用IC读写器实现身份信息识别,其关键技术之一是IC读写系统的设计.作者在分析读写器系统工作原理的基础上,采用AT89C51和西门子公司生产的逻辑加密芯片SLE4442设计了机动车身份信息读写系统.并对机动车身份信息实时监控进行了描述.机动车身份信息读写系统由硬件、软件2部分组成,硬件部分主要包括键盘输入模块、液晶显示模块、IC卡接口模块、数据输入/输出模块;软件部分由键盘输入驱动程序、显示数据驱动程序和对卡操作程序3部分组成.应用结果表明,机动车身份信息IC卡读写系统具有硬件电路简单、软件调试方便、安全性能可靠的特点.

关键字: 机动车; IC卡; 单片机; 读写器

Design and implement of an IC card read-write system for vehicle identity information

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Abstract: In order to supervise all vehicles on line, and restrain offence of stealing and robbing vehicles effectively, the identity information of a motor vehicle can be written into the IC card that is fixed in the vehicle, and the information can be read through the IC card read-write equipment. In doing so, one of the key technologies is to design an IC card read write system. After analyzing the principle of the system, the authors design the vehicle-identity-information IC card read write system using AT89C51 and SLE4442, and a supervise system of vehicles identity information is described briefly. The IC card read-write system is made up of hardware and software. The hardware includes keyboard input module, LCD display module, IC card interface module, data input/output module, and the software includes three parts of keyboard drivers, data display drivers, card operation program. The application of the system shows that it possesses many merits, such as the simple circuits, easy debugging, and good credibility security.

Key words: motor vehicle; IC card; single chip microcontroller; read-write equipment

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