基于 Linux 操作系统的 USB 设备驱动程序开发及传输实现*

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摘要： 要在 Linux 操作系统下开发一款支持智能设备与主机之间通过 USB 通信的读写控制程序，为了满足控制和通信的需要，要求快速、便捷地开发一款 USB 设备驱动程序以建立主机和智能设备的连接，同时能够保证数据的正确和稳定传输.为解决上述问题，本文实现了一种 Linux 操作系统下，基于 CyAPI 库的 USB 驱动程序开发方法.在智能设备读写控制程序中对所开发的 USB 驱动程序进行了验证，通过调用设备驱动程序直接实现了对 USB 设备的控制和数据传输，同时能够及时正确的收到智能设备的信息反馈，设备驱动程序展现了良好的稳定性.

关键词： 设备驱动程序；Linux；USB；CyAPI

Development and Implementation of Transmission of USB Device Driver Based on Linux Operating System

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Abstract： To develop a read-write control procedures which can support the USB communication between intelligent device and the host under Linux operating system, in order to meet the needs of the control and communicate, under the requirement of developping a USB device driver to establish the connections quickly and conveniently，meanwhile，the transmission between host and intelligent device must be correct and stable.In order to solve the above problems, this paper realizes the development method of USB driver based on CyAPI library under a Linux operating system.In the the development of read-write control procedures of intelligent devices，the USB driver is verified, by calling device driver directly realized the control of the USB device and data transmission, at the same time the information feedback of intelligent device can be received timely and correct, the device driver shows good stability.

Key words： device driver;linux library; USB; CyAPI