

Using FPGA to Implement the interface Module of Smart Card

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ABSTRACT

The development of IC card technologies has evolved the banking trade into a new era. Comparing with magnetic cards, IC card has several enhanced attributes, including larger memory, higher security, built-in CPU for logic and control, and application for off-line authorization process. In this thesis, we used Altera FPGA chip to implement the interface module of IC card and perform the access protocol of transmission interface between the IC card and card reader. The functions of IC card, such as “ electronic purse ”, “ office access security ”, and “ member manage ” are given to explain our design.

Keywords : IC Card , Information security , Electronic Commerce , Electronic Purse

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