Abstract:

This paper presents the simulation of Application Protocol data Unit (APDU) exchanged between a microcontroller smart card and its reader/terminal, that are made according to the Standard ISO 7816, allowing to get basic understanding of how easy it can be to access smart cards from any reader. Programming APDUs commands and responses are made in assembly language to enable a better understanding of this exchange. Moreover, it saves the memory space in the microcontroller. We used PROTEUS Professional Software V7 to simulate and MPLAB IDE software V.8.56 to code the Microcontrollers in assembly language.