Abstract

This paper discusses RFID technology, and shows the implementation of MD5 hash algorithm for RFID tags to protect private data from counterfeiting and copying. Privacy and security of RFID tags are discussed and the implementation of this algorithm is shown. Authors present new technology of reading the data from RFID-cards by using MD5 hash function. The reason of applying this algorithm is trivial: it is fast comparing to other algorithms, and can handle small-fixed size of data, which is stored in low-cost RFID-cards, which means that it has 1 Kb of memory. This work was done as a part of project called "Smart Campus" in Suleyman Demirel University, Almaty, Kazakhstan.

References

An Implementation of MD5 Hash Algorithm for RFID Tags

Pervasive Computing, 2003, pp 201-212.
- NXP official web-site. For additional information, visit http://www.nxp.com.

**Index Terms**

Computer Science  
Algorithms

**Keywords**

RFID technology, counterfeiting, MD5 algorithm, privacy, security