عنوان مقاله:

Reduce collisions and increase the efficiency of the RFID network system by using Manchester encoding

محل انتشار:

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خلاصه مقاله:

RFID networks represent a system that uses radio waves to transmit information. This network plays a key role in a wide range of applications such as traffic control, transportation, military and medical use. In such networks, data collision is inevitable. The thing that made it difficult and seriously affected the desire to progress in the field of practical applications of radio networks is the problem of collision. Collision as a key problem in the RFID system, can waste energy consumption and bandwidth and leading to an increasing the time requirement for the process of tags identification.In this article, we review some adversaries to consider anti-collision algorithm first of all, and then present a method that use Manchester encoding to reduce collision, which aims to increase the system efficiency, reducing the amount of energy consumption and collision. Finally, evaluate of the proposed algorithm in system efficiency parameters such as the number of collision. The result of the coparison shows that the performance of the .proposed algorithm will reduce energy consumption and increase the system efficiency

کلمات کلیدی:

Data collision, Radio networks, System efficiency, Slot, Manchester encoding