Abstract

IWBSN (Implantable Wireless Body Sensor Network) becomes nowadays an important area of research in computer science and healthcare application industries for improving the quality of life. Communication with implanted medical devices is considered as a key to effective diagnosis and therapy. These biosensors are implanted inside the patient body to measure body temperature and blood pressure, respiration rate, blood pressure and other physiological parameters. The purpose of this paper is to provide an enhanced version of TBCD communication protocol (Time Based Coded Data) for implantable sensor networks in order to guarantee an ultra-low energy consumption in the very tiny battery of the biosensors, and hence increasing the network lifetime for longer periods of time.

References

- D. Garrison. &quot;Minimizing Thermal Effects of In Vivo Body Sensors», Virginia Polytechnic Institute and State University, College of Engineering, Virginia, USA.

Index Terms

Computer Science

Wireless
**Keywords**

Biomedical  low-power communication  wireless  body sensor networks  implantable sensors  healthcare applications  biosensors