

BODYCOM: A NEW WIRELESS TECH

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The idea to get rid of the familiar interface of USB cables looks quite logical and quite tempting due to the general trends in the industrial transformation of conventional wired interfaces. BodyCom technology appears to be one of such innovations.

Company Microchip Technology Inc., one of the world's leading manufacturers of semiconductor chips and microcontrollers, in March 2013 announced the creation of BodyCom technology, which provides the ability to use the human body as a safe and secure channel of communication.

The BodyCom is a short-range wireless communication technology that overcomes the limitations of remote control systems with manual activation. It is used to secure electronic devices and let users gain access to them with just a touch. The system consists of a fixed Base Unit and one or more battery powered wireless Mobile Units made in the form of key fobs. Both units are capacitively coupled with the human body. This means they will not function unless they are both in close proximity to the user's body.

Structure Technology BodyCom v1.0 is a set of hardware solutions and open source software library, which works with all 8 -, 16 - and 32-bit microcontrollers PIC-of Microchip.

The BodyCom system was implemented with the following priorities: very low consumption, especially for the Mobile Unit; fast system response; stable and robust communication with fault detection; limited field of action (as little as a few centimeters) to allow an identification when the touch action takes place from whoever wears the Mobile Unit; low cost and complexity.

While this is still a very new development, it is not yet widely used among people. However, an Italian company is using the technology to ensure that motorcyclists ride with a helmet. The helmet contains a fob, and that conducts the signal through the rider's body, to the handlebars, which then allow the motorcycle to start up.

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