EPOSMote

The EPOSMote project initially aimed at the development of a wireless sensor network module based on the ZigBit platform, and focused on Precision Agriculture applications.

The first version, the EPOSMote I, is based on the MeshNetics ZigBit MNZB-24-B0 module, featuring a 8-bit AVR controller, IEEE 802.15.4 communication capability and a small set of sensors (temperature, humidity, etc).

The second version of the project developed a family of modular motes. Initialy, a revision of the ZigBit-based EPOSMote I was performed to make it pin-compatible with the new version, which uses an ARM7 cpu core with a IEEE 802.15.4 transceiver. The objective of that project was to deliver a hardware platform to allow research on energy harvesting, biointegration, and MEMS-based sensors. For more information on the second version, go to the EPOSMote II wikipage.

A third version of the project, launched in 2015, features a SoC by Texas Instruments model CC2538 that combines a powerful ARM Cortex-M3-based MCU system with up to 32KB on-chip RAM and up to 512KB on-chip flash with a robust IEEE 802.15.4 radio, all in a 8x8mm^2 QFN56 footprint. More information on the new version in EPOSMote III.