Pitt, ADCUS, Inc., produce customized active RFID tags

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Result will enable companies to tailor tags for their own purposes

In his keynote address at today's "RFID: Hype, Reality, and Hope" conference, hosted by the Swanson Institute for Technical Excellence in Pitt's School of Engineering, Marlin H. Mickle announced the success of a joint development effort between a team of University of Pittsburgh researchers and ADCUS, Inc., the U.S.-based subsidiary of South Korea's ADChips, to produce customized active radio frequency identification (RFID) tags. The results of the project, now in the final testing stages, will enable companies to affordably customize their own unique RFID tags.

Mickle, who is the Nickolas A. DeCecco Professor in Pitt's Department of Electrical and Computer Engineering, also announced that the Pitt group was beginning another project, funded by the University's Office of Technology Management, to produce "made-to-order" passive RFID tags. Such tags, for the general tagging and tracking market, have been the focus of much recent attention because of their adoption by large companies like Wal-Mart.

"As a result of the combined projects and accompanied generalization, the tools will be available for any RFID manufacturer or user to design and tailor both passive and active RFID tags to cover the complete RFID market," said Mickle.

The Pitt-ADCUS tag generation system will enable smaller companies to

quickly and inexpensively produce executable code, so that ADChips' Extendable Instruction Set Computer microprocessor can be used and tailored for various RFID standards and customized scenarios.

The team of researchers from Pitt's Department of Electrical and Computer Engineering includes, in addition to Mickle, Assistant Professors Alex K. Jones and Raymond R. Hoare and Professor James T. Cain, who is director of Pitt's John A. Swanson Center for Micro and Nano Systems.

Source: University of Pittsburgh