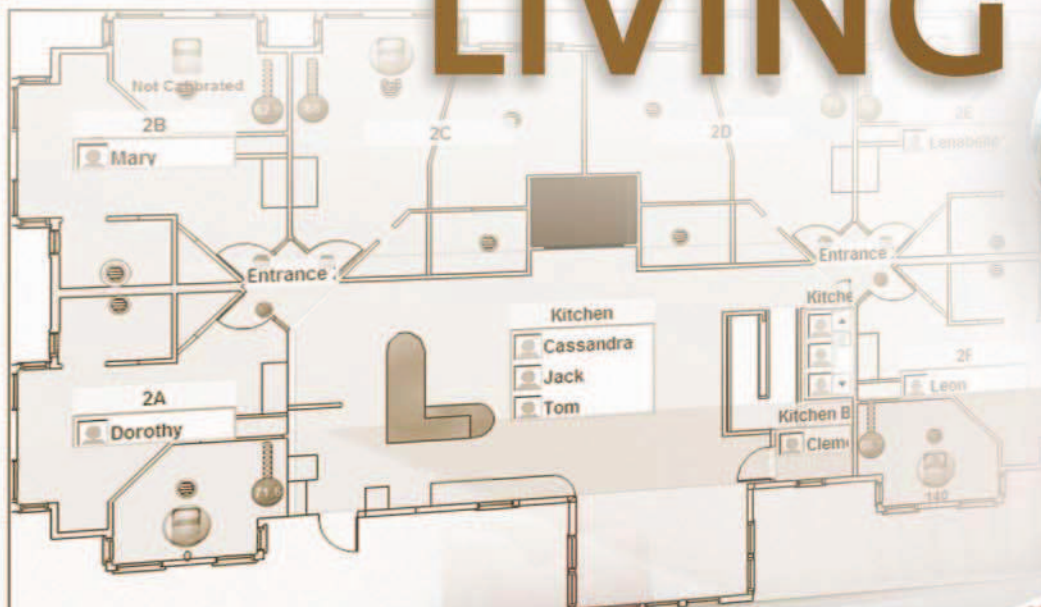


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RFID Transponder Measurement System

CISC Semiconductor to Introduce RFID Tag Measurement & Evaluation Test System Based on National Instruments LabVIEW

RFID Transponder Selection: one of the most critical issues raised by putting an RFID project to work, is to choose a suitable application specific RFID transponder. CISC Semiconductor developed an RFID Measurement & Evaluation Test System (MeETS) based on NI LabVIEW to measure transponder characteristics and performance. MeETS provides tests and evaluation for RFID transponder read range, orientation, performance, and frequency range.

Klagenfurt, AUSTRIA – August 07, 2007.

CISC RFID MeETS (Measurement and Evaluation Test System) supports RFID transponder manufacturers, RFID project leaders, laboratories or end-users by defining the specific transponder characteristics and evaluating the tag performance. The MeETS library is based on NI LabVIEW software and PXI hardware.

CISC is used to providing its RFID engineering understanding to the European EPC Competence Center transponder test laboratory. Based on this, National Instruments asked CISC to use its RFID measurement technique knowledge to design an RFID transponder performance test library using LabVIEW.

"We are pleased to collaborate with CISC Semiconductor" said Sean Thompson, RF and Communications segment Manager at NI. "CISC has used NI measurement tools for a long time now and is very experienced within the field of radio frequency measurement techniques. CISC contributes a valuable library to existing NI measurement tools."

RFID Measurement Technique

By 2010, 33 billion RFID transponders will be manufactured. The RFID industry has grown exponentially since its first year, and is expected to experience continued growth. Currently, there are a number of transponder offers, designs and different manufacturers. The number of RFID applications and usage occasions is expected to increase as well. Certain substances like metals, liquids and plastics reflect, detune or absorb the required electromagnetic field.

To gain the best read rate out of an RFID transponder, there are three essential steps to follow:

- First, the suitable transponder type has to be defined.
- Second, the right positioning or orientation of how to affix the transponder on the object is determined.
- And third, the RFID setup, like the portal, has to work well together.

Two out of these three questions are answered with the CISC RFID MeETS. The measurement system supports RFID transponder orientation definition, transponder evaluation at various frequency ranges (important if a transponder should be read worldwide in an open system) and tests for defining the read range of different transponders.

MeETS Extension Stages

The CISC RFID MeETS is available in three different extension stages:

- The first level includes the CISC RFID MeETS Library for LabVIEW.
- The second level comprises the CISC RFID MeETS configured NI PXI hardware.
- The full system installation of software and hardware is recommended for laboratories and research or test centers.

RFID Transponder ISO and EPCglobal™ Standards

The CISC RFID MeETS is developed according to the recent ISO ratifications and EPCglobal™ recommendations. "Since CISC is not only involved in ISO standardization but also an active member of EPCglobal™, we know exactly where the RFID bottlenecks are and how to find solutions for them," said DI Josef Preishuber-Pflügl, CTO, CISC Semiconductor and ISO Convener of the Performance and Conformance Tests for the RFID Devices Group. "The European EPC Competence Center relies on CISC RFID engineering knowledge and we are very pleased now to offer an RFID measurement test system for all RFID users."

"It is important not to forget all the frequency ranges and different regulations when choosing a certain RFID transponder for worldwide use," said

Dr. Vojtech Derbek, R&D Manager, CISC and co-Chair of EPCglobal™ TLRPP Group.

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Next EURIPIDES Call for Proposals

5th EURIPIDES call:

- **Launch date:**
December 7, 2007
- **Closing date for PO submission:**
January 25, 2008
- **PO evaluation meeting:**
March 3, 2008
- **Closing date for FPP submission:**
April 14, 2008
- **FPP evaluation meeting:**
May 22, 2008
- **FPP labelling meeting:**
May 23, 2008
- **Hearing (if requested by the Council):**
June 20, 2008

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