

Home | Login | Logout | Access Information | Alerts | Purchase History | Cart | Sitemap | Help

IEEE Xplore
DIGITAL LIBRARY

Welcome Politehnica Timisoara

Celebrating 125 Years
of Engineering the Future

IEEE

AbstractPlus BROWSE SEARCH IEEE XPLORE GUIDE SUPPORT

[View Search Results](#) | [Next Article](#) | [e-mail](#) | [printer friendly](#)

Access this document

Full Text: [PDF](#) (9644 KB)

Download this citation

Choose [Citation & Abstract](#)

Download [ASCII Text](#)

[Download](#)

[» Learn More](#)

Rights and Permissions

[» Learn More](#)

Instrumentation and measurement in Romania

[Cretu, V.-I.](#), [Jurca, T.](#), [Micea, M.V.](#), [Sora, I.](#)
Dept. of Comput. Sci. & Eng., Politehnic Univ. of Timisoara, Romania
This paper appears in: [Instrumentation & Measurement Magazine, IEEE](#)
Publication Date: Sept. 2003
Volume: 6, [Issue: 3](#)
On page(s): 41 - 47
ISSN: 1094-6969
INSPEC Accession Number: 7751284
Digital Object Identifier: 10.1109/MM.2003.1238344
Current Version Published: 2003-10-27

Abstract

This article gives a general overview of instrumentation and measurement in Romania. It describes several practical examples in detail, including a data acquisition card, a flow rate sensor DAQ system, sonar-radar DSP-based applications, electrical machine testing, and power calibrator using direct digital synthesis.

Index Terms

Inspec

Controlled Indexing
[calibration](#) [computerised instrumentation](#) [data acquisition](#) [digital signal processing chips](#) [direct digital synthesis](#) [flow measurement](#) [machine testing](#) [measurement systems](#) [power measurement](#) [sonar](#)

Non-controlled Indexing
[data acquisition card](#) [direct digital synthesis](#) [electrical machine testing](#) [flow rate sensor DAQ system](#) [instrumentation systems](#) [measurement systems](#) [power calibrator](#) [sonar-radar](#) [DSP-based applications](#)

Author Keywords
Not Available

Medical Subject Heading (MeSH Terms)
Not Available

PACS Codes
Not Available

DOE Thesaurus Terms
Not Available

References

- 1 V. Cretu, M. V. Micea, I. Guzun, and V. Guzun, "Aquarius-DSP: From its design to applications integration," *Trans. Automat. Contr. Comput. Sci.*, vol. 44, no. 1, 2, *Periodica Politehnica, Timisoara*, 1999, pp. 51-16.
- 2 A. Baya, L. E. Anton, V. Ancusa, and M.V. Micea, "Real time data acquisition system for a compound straight pipe," *Sci. Tech. Bull. "Politehnica" Univ. of Timisoara, Mechanics*, vol. 44, no. 58, pp. 41-50, 1999. [\[Buy Via Ask*IEEE\]](#)
- 3 M.V. Micea, L. Muntean, and D. Brosteanu, "Simple real-time sonar with the DSP56824," *Motorola, Inc. Appl. Note*, AN2086/D Rev. 0, 6/2001, 2001.
- 4 M. Biriescu, V. Cretu, V. Groza, I. Marzoca, M. Mot, and I. Sora, "Transient regime's recording and processing using a data acquisition and processing system," in *Proc. 8. Kongressmesse fur industrielle Messtechnik* Wiesbaden, Germany, Sept. 1994, pp. 466-472. [\[Buy Via Ask*IEEE\]](#)
- 5 M. Biriescu, V. Cretu, V. Groza, I. Marzoca, M. Mot, and I. Sora, "Determination of torque characteristic of induction machine using a data acquisition and processing system," in *Proc. 9. Kongressmesse fur industrielle Messtechnik* Wiesbaden, Germany, Sept. 1995, pp. 359-363. [\[Buy Via Ask*IEEE\]](#)
- 6 V. Groza, M. Biriescu, V. Cretu, I. Sora, and M. Mot, "Testing of electrical machines in periodical and quasi periodical conditions using a data acquisition and processing system," in *Proc. IMCT'98, IEEE Instrumentation and Measurement Technology Conf.* St. Paul, MN, May 1998, pp. 766-770. [\[Abstract\]](#) | Full Text: [PDF](#) (312KB)
- 7 V. Cretu, I. Sora, and V. Groza, "Designing an integrated measurement environment," in *Proc. IEEE Workshop Emergent Technologies and Virtual Systems for Instrumentation and Measurements* Niagara Falls, Ont., Canada, May 1997, pp. 105-111. [\[Buy Via Ask*IEEE\]](#)
- 8 V. Groza, I. Sora, V. Cretu, E. Petriu, and D. Ionescu, "A software architecture for an integrated measurement environment," in *Proc. ETIMVIS'98, IEEE Int. Workshop Emerging Environment Technologies, Intelligent Measurements and Virtual Systems for Instrumentation and Measurement* St. Paul, MN, 1998, pp. 166-172. [\[Buy Via Ask*IEEE\]](#)
- 9 O. Lang, "A precision power amplifier for power energy calibration applications," *IEEE Trans. Instrum. Meas.*, vol. IM-36, no. 4, pp. 994-1000, Dec. 1987. [\[Buy Via Ask*IEEE\]](#)
- 10 O. Lang, "A wide-band transconductance amplifier for current calibrations," *IEEE Trans. Instrum. and Meas.*, vol. IM-34, no. 4, pp. 639-643, Dec. 1985.

[\[Buy Via Ask*IEEE\]](#)

11 *DSP56000: 24-Bit Digital Signal Processor Family Manual*: Motorola, Inc., DSP56KFAMUM/AD, 1995.

12 L.A. Marzetta, "A High performance phase sensitive detector," *IEEE Trans. Instrum. Meas.*, vol. IM-20, no. 4, Nov. 1971.

[\[Buy Via Ask*IEEE\]](#)

Citing Documents

No citing documents available on IEEE Xplore.

[View Search Results](#) | [Next Article](#)

[Help](#) [Contact Us](#) [Privacy & Security](#) [IEEE.org](#)



© Copyright 2009 IEEE – All Rights Reserved