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Proceedings of the 2019 IEEE Regional Symposium on Micro and Nanoelectronics, RSM 2019 August 2019, Article number 8943573, Pages 137-140
2019 IEEE Regional Symposium on Micro and Nanoelectronics, RSM 2019; Genting Highland, Pahang; Malaysia; 21 August 2019 through 23 August 2019; Category numberCFP1968N-USB; Code 156451

An Arduino Microcontroller Based RLC Meter (Conference Paper)

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Abstract

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An RLC meter is a single electronic instrument or device which is capable to measure the Resistance (R), Inductance (L) and Capacitance (C). This instrument has wide applications in electrical and electronics laboratory, industry and engineering research works. Nowadays, a large variety of RLC meter is available. The high precision RLC meter is slow responding, bulky size, higher operational power and expensive. However, many applications do not need very high accuracy measurement, for this reason, this paper has proposed a simple and moderate precision RLC meter based on Arduino microcontroller which would overcome the existing issues. The proposed design has been verified by simulation and experimentally. The results show good compliance with theory and experiment; in addition, it shows moderate accuracy. © 2019 IEEE.

SciVal Topic Prominence ⓘ

Topic: Bridges | Standards | Calculable capacitor

Prominence percentile: 77.031 ⓘ

Author keywords

Arduino digital instruments high precision RLC meter

Indexed keywords

Engineering controlled terms: Digital instruments Electronics industry Microcontrollers

Engineering uncontrolled terms: Arduino Electronics laboratories High-accuracy measurements High-precision Microcontroller - based Operational power Single electronics

Engineering main heading: Nanoelectronics

Funding details

Funding sponsor Funding number Acronym

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ACKNOWLEDGMENT This research has been supported by the Malaysian Ministry of Education through the Fundamental Research Grant Scheme under the project ID: FRGS19-054-0662.

ISBN: 978-172810459-1**Source Type:** Conference Proceeding**Original language:** English**DOI:** 10.1109/RSM46715.2019.8943573**Document Type:** Conference Paper**Publisher:** Institute of Electrical and Electronics Engineers Inc.

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