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Advances in Intelligent Systems and Computing

Volume 1089, 2015, Pages 355-358

23rd International Conference on Systems Engineering, ICSEng 2014; Las Vegas, NV; United States; 19 August 2014 through 21 August 2014; Code 107141

Microstrip Spiral Resonator for the UWB Chipless RFID Tag (Conference Paper)

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Abstract

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A resonator type chipless RFID tag comprised of two separate antennas, one transmission line with spiral resonators. The key element of a chipless RFID tag is its passive spiral microstrip resonator circuit which contains the data bits for the tag. To decrease the dimension of resonator in chipless tag is still challenging task. At present rectangular spiral shaped resonator is used in the chipless tag for UWB RFID system. A circular spiral microstrip resonator design is proposed for space reduction in the chipless RFID tag. A comparison has been made between rectangular and circular shaped spiral resonators for 2.5 GHz frequency using CST MWS. The result shows a reduction in area of 9.8 % has been achieved by a microstrip circular spiral resonator. © Springer International Publishing Switzerland 2015.

Author keywords

Chipless tag CST MWS microstrip resonator RFID UWB

Indexed keywords

Engineering controlled terms: Radio frequency identification (RFID) Systems engineering

Chipless tag

CST MWS

Microstrip resonator

Microstrip spiral resonator

Reduction in area

Space reductions

Spiral resonators

UWB

Engineering main heading: Resonators

ISSN: 21945357

ISBN: 978-331908421-3

Source Type: Book series

Original language: English

DOI: 10.1007/978-3-319-08422-0_52

Document Type: Conference Paper

Sponsors: ALDEC, NV Energy, University of Nevada Las Vegas (UNLV)

Publisher: Springer Verlag

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