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| Book Name: | [**Engineering Research: Perspectives on Recent Advances**](https://www.bookpi.org/bookstore/product/engineering-research-perspectives-on-recent-advances-vol-1/) |
| Manuscript Number: | **Ms\_BPR\_4984** |
| Title of the Manuscript: | **Using rectangular trace to reduce the crosstalk of the coupled microstrip lines** |
| Type of the Article | **Book Chapter** |

**Special note:**

**A research paper already published in a journal can be published as a Book Chapter in an expanded form with proper copyright approval.**

**Source Article:**

**This chapter is an extended version of the article published by the same author(s) in the following journal.**

**International Journal of Engineering & Technology, 5 (1): 7-10, 2016.**

**Doi: 10.14419/ijet.v5i1.4771**

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| PART 1: Comments | | |
|  | Reviewer’s comment **Artificial Intelligence (AI) generated or assisted review comments are strictly prohibited during peer review.** | Author’s Feedback *(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)* |
| **Please write a few sentences regarding the importance of this manuscript for the scientific community. A minimum of 3-4 sentences may be required for this part.** | This manuscript presents a novel approach to mitigating crosstalk in coupled microstrip lines, a critical issue in high-speed electronic circuits. By proposing the use of a rectangular trace instead of conventional via fences, the study demonstrates an effective reduction in Far-End Crosstalk (FEXT) by 7 dB compared to the 3W rule and by 1 dB compared to via fences. The findings contribute significantly to the field of signal integrity, offering an optimized, cost-effective design for printed circuit boards (PCBs). This work is valuable for researchers and engineers working on high-frequency circuit design, as it provides insights into improving electromagnetic compatibility and overall circuit performance. |  |
| **Is the title of the article suitable?**  **(If not please suggest an alternative title)** | **Yes** |  |
| Is the abstract of the article comprehensive? Do you suggest the addition (or deletion) of some points in this section? Please write your suggestions here. | The abstract provides a good overview of the study, highlighting the problem of crosstalk in microstrip lines and the proposed solution using a rectangular trace. However, there are areas where it could be improved for clarity and comprehensiveness. Here are my suggestions:  Suggestion:  The abstract should be refined for better readability, with a clearer structure: (1) Problem, (2) Objective, (3) Methodology, (4) Key Findings, and (5) Significance of the Study. |  |
| **Is the manuscript scientifically, correct? Please write here.** | The manuscript is scientifically correct, but it could be improved by refining explanations, ensuring clarity in equations, and discussing potential experimental validation. |  |
| **Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.**  **-** | **Recommendation:**   * The current references are relevant but slightly outdated. * Add at least 3-4 recent references (2018-2023) from IEEE and other authoritative sources. * Consider discussing new materials and AI-based approaches for crosstalk reduction. |  |
| Is the language/English quality of the article suitable for scholarly communications? | The manuscript should undergo professional proofreading or language editing to enhance its readability and academic quality. |  |
| Optional/General comments | 1. Clarify why high-speed, compact, and low-voltage electronics impact signal integrity. 2. Providing examples of crosstalk effects on PCB performance. 3. Incorporate additional details on the rectangular trace approach. 4. Expand the future work section to discuss potential challenges. |  |

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| **PART 2:** | | |
|  | Reviewer’s comment | Author’s comment *(if agreed with the reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)* |
| **Are there ethical issues in this manuscript?** |  |  |

**Reviewers:**

**Bijaya Saha, India**