

# Summary Preparation for RFIC2003 (Title in 18-point Times Roman)

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Microwave Research, City, State/Region, Mail/Zip Code, Country (authors' affiliation(s) listed here in 12 point Times Roman – use a second line if necessary)

**Abstract** — Use 9 point Times Roman Bold for the abstract. Set your line spacing to be 10 points rather than single space. Indent the first line by 0.125 inches and type the word "Abstract" in 9 point Times Roman Bold Italic. This should be followed by two spaces, a long dash (option / shift / minus), two spaces, and then the first word of your abstract. A more professional look will result if all the spaces are set to a font style of regular rather than bold.

## I. INTRODUCTION

The following information is provided to help the prospective contributor prepare a Summary for submission to RFIC2003. A contributor should remember that:

- 1) Deadlines are absolute, don't even ask.
- 2) Summaries may not exceed four pages, including all figures, tables, references, etc. Additionally, there is a size limit on the electronic version of all Summaries. In Adobe Portable Document Format, submissions may not exceed 500 Mbytes.
- 3) Acceptance rates have historically run at slightly over 50%. There is not sufficient room within the Technical Program to accept all submissions.
- 4) Many submitters with previous RFIC experience realize that, if their submission is accepted, they will be required to submit a version of their Summary to be published in the Symposium Digest. As the Digest paper will be similar in length to the Summary, many contributors opt to prepare their Summary in the format required for Digest. This document contains instructions for the proper preparation of such a document.
- 5) Although not required, you are encouraged to employ this format. This document is being made available as a template for your convenience. If you elect not to use this template, please remember that you must still adhere to the general guidelines embodied in this document concerning, but not limited to, font size, margin size, page limits, file size, etc.

## II. OVERVIEW OF THE DIGEST FORMAT

We are requesting that you follow these guidelines as closely as possible so that the Digest has a professional look and resembles the MTT Transactions. All paragraphs of text, including the abstract, figure captions, and references, should be justified at the left and right edges.

For the Title use 18-point Times Roman. Its paragraph description should be set so that the line spacing is single with 6-point spacing before and 6-point spacing after. The font description for the Author List and Authors' Affiliation(s) should be 12-point Times Roman. The paragraph descriptions should be set so that the line spacing is single with 6-point spacings before and after. Use an additional line spacing of 12 points before the beginning of the double column section.

## II. DETAILED TEXT FORMATTING

With 8.5 x 11-inch paper, top and bottom margins are 1.125 inches, and left and right margins are 0.85 inches. Except for Title, Authors and Affiliations, use a double column format. The column width is 3.275 inches and the column spacing is 0.25 inch.

Each major section begins with a Heading in 10 point Times Roman centered within the column and number using Roman numerals (except for ACKNOWLEDGEMENT and REFERENCES) followed by a period, a single space, and the title using an initial capital letter for each word. The remaining letters are in SMALL CAPITALS. The paragraph description of the section heading line should be set for 18 points before, 6 points after, and the line spacing should be set to exactly 12 points. Hyphenation is encouraged throughout.

For the body of your paper, use 10-point Times Roman and set your line spacing at "exactly 12 points" with 0 points before and after. Indent each paragraph by 0.125 inches.

Further details are provided in the remainder of this paper on some specific situations.

TABLE I  
SUMMARY OF TYPOGRAPHICAL SETTINGS

Section	Font Specifics (Times Roman unless specified)			Paragraph Description				
	style	size	special	spacings (in points)			alignment	indent (in inches)
				line	before	after		
Title	plain	18	none	single	6	6	centered	none
Author List	plain	12	none	single	6	6	centered	none
Affiliations	plain	12	none	single	6	6	centered	none
Abstract	bold	9	none	exactly 10	0	0	justified	0.125 1 <sup>st</sup> line
Headings	plain	10	small caps	exactly 12	18	6	centered	none
Subheadings	italic	10	none	exactly 12	6	6	left	none
Body Paragraphs	plain	10	none	exactly 12	0	0	justified	0.125 1 <sup>st</sup> line
Equations	Symbol font for special characters			single	6	6	centered	none
Figures	6 to 9 point sans serif (Helvetica)			single	0	0	centered	none
Figure Captions	plain	9	none	10	0	0	justified	none, tab at 0.5
References	plain	9	none	10	0	0	justified	0.25 hanging

### A. Major Subsections

Denote subsections with left justified 10-point Times Roman Italic. Order them with capitalized alphabetic characters (*A, B, ...*). Follow the letter designation with a period, a single space, and then the subsection title capitalizing the first letter of each word. The paragraph description of the subsection heading is set to "exactly 12-point" line spacing with 6 points before and 6 points after.

### B. Equations

Equations should be centered in the column and numbered sequentially. Place equation numbers to the right of the equation within parenthesis and right justified within its column. An example would be:

$$e = mc^2 \quad (1)$$

When referring to an equation, use the number within parenthesis. Here (1) was used as an example because it was easy to type. If possible, use the Symbol font for all special characters. The paragraph description of the line containing the equation should be set for 6 points before and 6 points after. The paragraph spacing will need to be set to "single" rather than "exactly 12 point" so that the height will autoscale to fit the equation.

Place figure captions directly below each figure. Use 9-point Times Roman with the paragraph spacing set at "exactly 10 points". Set a tab at 0.5 inch. Type "Fig. #." (# is the numeral) then tab over to the 0.5 inch mark before beginning the text of the figure caption.

Within MicroSoft Word there are several options for placing figures within your paper. Often the easiest is to insert them between existing paragraphs allowing the figures to remain in that relative position. The paragraph description where the figure is inserted must be set to "single" spacing rather than "exactly 12 points" in order to allow the line to autoscale in height to display the entire figure. Disadvantages of this approach are that you don't have total flexibility in placing figures, and that the figures will move as text is inserted or deleted in any part of the document before the figure. If you elect to use this approach, it is recommended that you nearly complete the editing of your text before inserting any figures. Remember to allow room for them, however. Then begin inserting figures starting from the beginning of your document.

## III. FIGURES

Figures should utilize as much of the column width as possible in order to maximize legibility. Use a sans serif font, such as Helvetica. Helvetica is larger and easier to read than Times Roman. Using 6- to 9-point Helvetica usually results in a legible figure. When referring to a figure, use the abbreviation Fig. followed by its number.

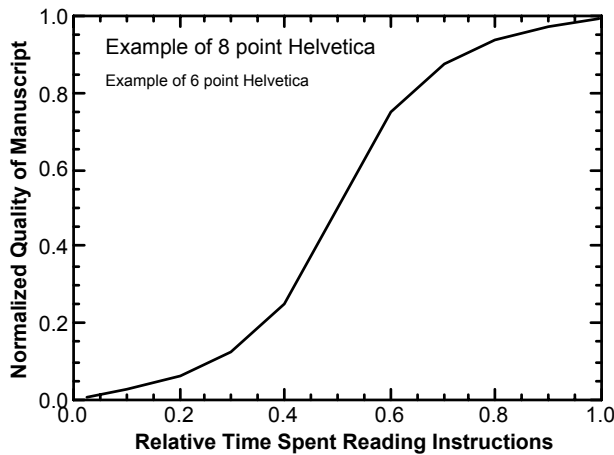


Fig. 1. Estimated relationship between the time an author spends reading these instructions and the quality of the author's digest article.

Fig. 1 was inserted using the approach described above. Notice that before Fig. 1, a single 12-point line is used to separate the preceding text from the figure. In this case, there was no need for a line between the figure caption and the figure because the x-axis label was not at the bottom edge of the image border. After the figure caption, there should be a single 12-point blank line before the text resumes.

More flexibility is obtained in inserting figures if you can place them exactly where you would like them to be on a page. This can be accomplished by inserting the figure, selecting the figure, and then choosing "Format Picture...". Settings which are available allow you to place the figure at an absolute position on a page, specify if the text is supposed to flow around the figure or if the figure should move with the text, etc. If you elect to let the text flow around the figure, then remember that you will have to insert a separate text box for the caption, otherwise the figure caption is likely to become separated from the figure.

Table I was inserted in this fashion using "Insert", "Text Box", creating the text contained in Table I, and then formatting the text box using all the settings available under "Format", "Text Box...". Table I also serves as an illustration of one of the rare instances when the double column format requirement can be violated. Certain figures and tables will require the full page width to display. It is usually best to place these figures and tables at the top or bottom, rather than in the middle, of a page.

#### IV. CITING PREVIOUS WORK

When referencing a journal article [1], a conference digest article [2] or a book [3] place the reference numbers within square brackets. To simultaneously cite these references [1]-[3] use the format just demonstrated. The reference list is the last section and references are listed in the order cited. Use 9 point Times Roman. The paragraph description is set for a line spacing of exactly 10 points with 0 point spacing before and after. A 0.25 hanging indentation should be specified.

Generally speaking, references should be very detailed. For journal articles, list all authors by initials and last name, the title of the paper in quotations (capitalizing only the first letter of the first word unless it would be capitalized in a sentence, i.e. a proper noun), the journal name in italics, the volume number, the issue number, the page numbers, and the date. Use the examples provided [1]-[3] as a guide.

#### V. CONCLUSION

Although reading these instructions may have been an unpleasant experience, following them will improve the quality of the IMS Digest. Table I summarizes much of the detail provided above and illustrates one of the rare instances where the double column format is violated. If you have comments, suggestions, or are willing to volunteer time to improve these instructions, please contact one of the Steering Committee editors

#### ACKNOWLEDGEMENT

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#### REFERENCES

- [1] S. S. Gevorgian, T. Martinsson, P. L. J. Linner, and E. L. Kollberg, "CAD models for multilayered substrate interdigital capacitors," *IEEE Trans. Microwave Theory and Tech.*, vol. MTT-44, no. 6, pp. 896-904, June 1996.
- [2] R. D. Lutz, Y. Hahm, A. Weisshaar, and V. K. Tripathi, "Modeling and analysis of multilevel spiral inductors for RFICs," *1999 IEEE MTT-S Int. Microwave Symp. Dig.*, vol. 1, pp. 43-46, June 1999.
- [3] R. E. Collin, *Foundations for Microwave Engineering*, New York: McGraw-Hill, 1966.