Wideband Amplifiers

by

Peter Starič & Erik Margan

This is a **demo-version** of the e-book, made for advertising purpose.

The content of this book was originally the subject of a short course, held at the Faculty of Electrical Engineering and Computer Science, University of Ljubljana, Slovenia, in spring 1988. Since then, the text has been revised, with some minor errors corrected and figures redrawn, in particular Part 2, where inductive peaking networks are analyzed. Several topics have been updated to reflect the latest developments in the field, mainly in Part 5, dealing with modern high-speed circuits. Also, Part 6, where a number of computer algorithms are developed and Part 7, which contains several algorithm application examples, all written for Matlab™ (The MathWorks, Inc., [http://www.mathworks.com/]) have been revised to conform with the newer version (V.5) of Matlab, but still retaining downward (V.1) compatibility as much as possible.

This is the third version of the text, prepared for electronic distribution in years 1999-2001 , using the Adobe Portable Document Format (PDF), readable by the freely-distributed Acrobat™ Reader program [http://www.adobe.com/products/acrobat/].

The text contains many links (blue underlined text) , to enable easy access to related topics by simply pointing on the link and clicking the left "mouse" button. Returnig to previous position is possible by clicking the right "mouse" button and selecting 'Go Back' from the pop-up menu. See Acrobat Reader Help menu for details.

There are also numerous highlights (green underlined text) relating to the content within the same page. The cross-file links (red underlined text) relate to the content in other parts, contained in different PDF files (with this demo, only a few excerpts from several chapters are given). The Internet and World-Wide-Web links are in violet (dark magenta).

The text was edited using 𝔼𝕏ℙ ™, the Scientific Word Processor (Version 5.0, made by Simon L. Smith ; see the homepage at http://www.expswp.com/).

Most figures were created using Matlab, the Language of Technical Computing, Version 5.3 For Students, from The Mathworks, Inc., (http://www.mathworks.com/). Before importing them into 𝔼𝕏ℙ, the figures were finalized using the Adobe Illustrator, Version 8 (http://www.adobe.com/).

All circuit designs were checked by Micro-CAP ™, the Microcomputer Circuit Analysis Program, V.5, from Spectrum Software, (http://www.spectrum-soft.com/).

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Contents : Blue Links : Detail contents of individual parts
Red Links : Short Demo-Excerpts in separate PDF files

Note : Since this is not a full version, some of the links, pointing to the chapters not included in these demo-excerpts, are not active !

(currently under revision to conform with changes in Part 5)

Authors CV : Peter Starič
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Part 1 : Laplace Transform

Part 2 : Inductive Peaking Circuits

Part 3 : Wideband Amplifier Stages with Semiconductor Devices

Part 4 : Cascading of Amplifier Stages, Selection of Poles

Part 5 : Systems with Feedback and Feedforward Error Correction

Part 6 : Computer Algorithms For System Analysis And Synthesys

Part 7 : Algorithm Application Examples

(currently under revision to conform with changes in Part 5)