

Preface to the Third Edition

The world of chip design has changed significantly since the second edition was published three years ago. In that time, silicon technology has gone through two generations, multi-million gate chips have gone from fringe to mainstream, and SoC has gone from the exotic to commonplace.

At the same time, the world of reuse has changed as well, prompting us to develop the third edition. From the perspective of 2002, many of the statements we made in 1999 now seem dated. Upon re-reading the second edition, it was obvious that the *RMM* needed to be updated with the many of the lessons learned in the last few years.

In one sense, though, the biggest change we have made in the *RMM* is also the biggest change we have seen in reuse in the last three years. Basically, we have changed the tense from future to present. Reuse is no longer a proposal; it is a solution practiced today by many, many chip designers. Likewise, the *RMM* is no longer aimed at promoting reuse, but describing changes in methodology for practising it. The *RMM* is now a chronicle of the best practices used by the best teams to develop reusable IP, and to use IP in SoC designs.

Alas, the change of tense was not as trivial a task as it sounds. In order to bring the *RMM* up to date, we have rewritten significant portions of the first eight chapters. Chapter 3 and Chapter 8 in particular have undergone significant revision. Chapter 5 has remained basically the same, with the addition of several important guidelines, and the modification of some existing guidelines to reflect current state-of-the-art.

Chapters 9 through 12 have had more modest updates to reflect current methodology. In particular, a full description of system level design and verification is beyond the

scope of this book. Chapter 13 has been updated to include some comments from the design community on their perspective on reuse and SoC design.

In addition to the change in content, we have made one major editorial change. We have dramatically reduced the number of references to specific tools. Over the brief life of this book, we have found that tool names, tool vendors, and tool capabilities change so quickly that specific references quickly become out of date. Instead, we have focused on design and language issues, referencing the generic capabilities of current tools as appropriate.

We hope that readers will find the third edition a significant improvement over earlier editions.

May 1, 2002

Mike Keating
Mountain View, California

Pierre Bricaud
Sophia Antipolis, France

Reuse Methodology Manual for System-on-a-Chip
Designs

Bricaud, P.

2002, XX, 292 p., Softcover

ISBN: 978-0-387-74098-0