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Mark E. Mason John L. Sturtevant Editors

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## Introduction

It's been an exciting two years for me as Chair of the SPIE conference on Design for Manufacturability through Design-Process Integration (DfM-DPI). I am privileged to work with a program committee comprised of top industry contributors that have become good friends. It's an honor to work alongside of them, and this conference would certainly not exist without their ongoing efforts.

Seven years ago we started this conference based on two ideas. First, it was clear that Design for Manufacturability would be important for the semiconductor industry. Second, we recognized that process engineering (particularly lithography and related disciplines like etch and metrology) would play a key role in defining DfM tools. It's clear now that these assertions were correct.

Now in our seventh year of the DfM-DPI conference, the program committee could not be happier with the quality of work that has been submitted for publication. As usual, various experts from around the world participated representing various segments of the semiconductor industry. We are particularly excited about the quality of student papers this year, and appreciate the strong representation from Europe, Asia, and the Americas.

Our keynote speakers this year were outstanding, as is our tradition. Chris Mack lead the charge, challenging the design community to make better use of available process technology. DfM experts (and program committee members) Luigi Capodeici and Jason Cain presented the industry view of DfM from both the foundry and fabless perspective, respectively. These excellent keynotes were supported by strong technical sessions that were impressive in both their quality and breadth, covering a wide range of topics. Emphasis on double patterning implications was apparent this again year, as you might expect given continued delays and disappointments on the EUV front.

Like last year, a highlight of the event was the joint session with the Optical Lithography conference. Again leveraging the powerful overlap between computational lithography topics like OPC and SMO, two joint sessions were presented featuring papers of mutual interest to both conferences. As in previous years, the crowd was standing-room-only. Special thanks Will Conley and the Optical team for making this happen again this year.

Stated simply, the conference was very successful by any measure. As a personal note, I would like to thank the authors and conference attendees for their active participation: this conference is for you, and you make it happen.

Of course none of this would be possible without the generous support (and patience) of my co-chair (John Sturtevant of Mentor Graphics) and SPIE staff.

Further, I deeply appreciate the efforts of the conference program committee for all their help in putting the program together and chairing sessions.

Next year, our new Chair, John Sturtevant takes the reigns. He is already working hard alongside his new co-chair, Luigi Capodieci, to put together an even better program for 2014.

We cannot wait to see you there.

Mark E. Mason John L. Sturtevant