

Lithography Landscape: **E-Beam Lithography Revisited.**

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Greetings!

We think you'll enjoy this article published by Future Fab International, written by David Lam.

A Different Way to Look at EBL

The semiconductor industry often expects a new, "next-generation" technology to solve all the problems, meet all mainstream performance metrics, and replace the old technology instantly and completely when making its debut.

Historically, there were indeed "plug and play" new technologies in front-end processing: proximity printing (replacing contact printing), 4x reduction optics for lithography (replacing 1x), plasma etching (replacing liquid chemical etching), copper interconnect (replacing aluminum), to name just a few.

While technology obsolescence is a fact of life in our industry, some new technologies co-exist with and complement the old rather than replace it right away - or ever....

1D Layout, Complementary Lithography, and CEBL

To enable manufacture of advanced logic devices, mainstream fabs are moving from conventional 2D layout style to the highly regular 1D layout style. The 1-D layout pattern is manufacturable today and extendable into the future. It is the ultimate form of proactive DFM....

Find out more, please visit for a full copy of the article published by Future Fab International:
http://www.future-fab.com/documents.asp?d_ID=4952

About Multibeam Corporation

Headquartered in Santa Clara, California, Multibeam Corporation is a leading developer of multi-column e-beam technologies that add high value to semiconductor lithography by doing away with costly masks. The company's Complementary E-Beam Lithography (CEBL) system augments optical lithography at critical layers by eliminating expensive optical multiple patterning at 20nm processing nodes and beyond. Multibeam's systems can also be cost-efficiently leveraged as primary lithographic tools for low-volume production of ASICs as well as in multi-project wafer programs. Multibeam's patent-protected e-beam technologies encompass deployment of multi-column arrays to perform wafer inspection.

For more information, visit www.multibeamcorp.com.