VLSI

LAMBDA

e of VLSI Design
Quarter 1981

WITH THIS ISSUE LAMBDA MAGAZINE BECOMES VLSI DESIGN

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VLSI DESIGN was founded to explore, expand, and define the interrelations between very-large-scale integrated circuits (VLSI) and computer architecture, design strategies, costs, and aids, as well as the electronics industry as a whole. VLSI DESIGN is unique in that it is written by and for the participants in this dynamic field. VLSI DESIGN intends to be the communication focus of a new VLSI design community, encourage its development, and help define its directions.

VLSI DESIGN

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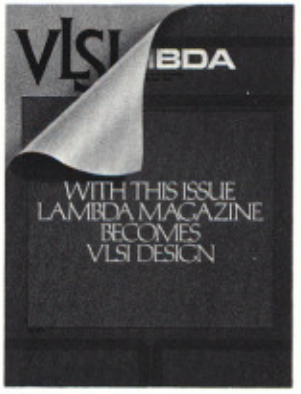
Cover

As LAMBDA Magazine has grown over the past two years, the value of having its name directly reflect its subject matter has become increasingly apparent. We believe the name change will help clarify the editorial goals of the magazine for both current and future readers.



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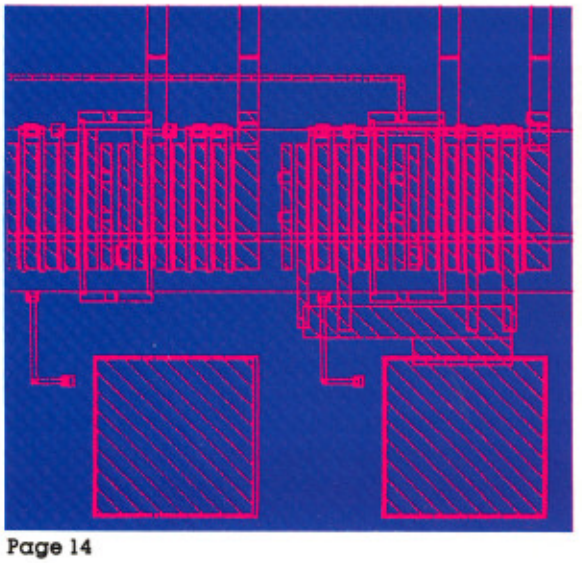

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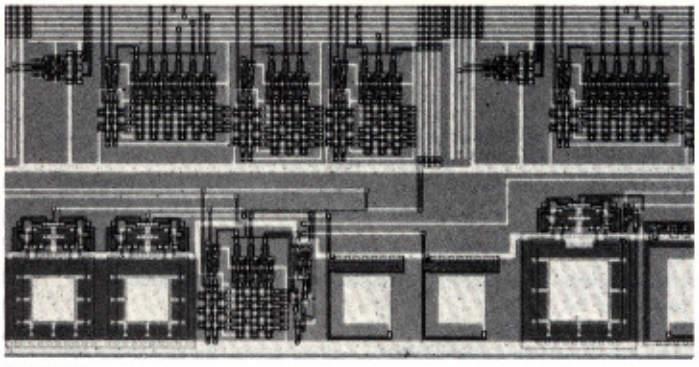

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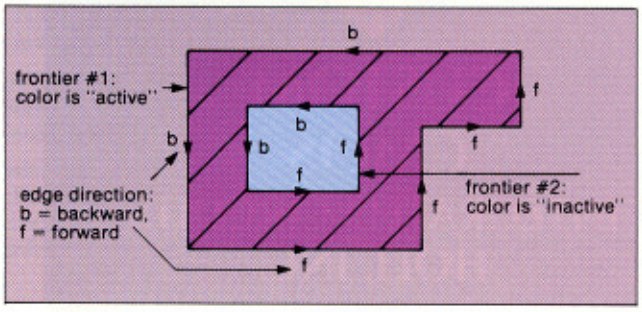

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From the Publisher

A New Name . . .

To better reflect our emphasis on all phases of the LSI/VLSI design process, and to clarify the focus of the magazine for new readers, we have decided to change LAMBDA's name to VLSI DESIGN. We're excited about this change and feel that it will eliminate confusion and uncertainty.

It's been two years since the idea for LAMBDA magazine was conceived. The goals at that time were essentially the same as they are today: To address all the issues relating to LSI/VLSI design from the perspective of the system designer. The important fields that we identified included computer-aided design, VLSI architectures, VLSI design methodologies, the effects of advanced processing techniques on the design problem, the interface between the designer and fabricator, standards for design descriptions, and VLSI training and education.

Although our original emphasis was on full-custom design, it soon became clear that the gate array was becoming an important design medium for the system engineer. Because gate-array designers faced many of the same problems and trade-offs that designers of full-custom circuits faced, we felt it appropriate and necessary to expand the scope of the magazine to include topics relating to gate-array design.

An award . . .

Creating a new magazine for a new field is an exciting and sometimes trying experience. We strive to provide a publication that is a leader in both its technical content and in its layout and design. Reader and advertiser response over the past two years has indicated we are meeting that first goal. Today, we are proud and happy to announce that LAMBDA has won the Western Publishers' Association's 1981 "Maggie" award as Best Electronics and Data Processing Magazine. Winning this award during the first year of publication was most satisfying to those of us who have worked so hard to bring this magazine to life over the past two years.

In this issue . . .

Our feature article this issue describes the gate-array design system developed over the past four years by STC Microtechnology. This is a totally automatic design and layout system that not only places and routes the gate array, but also lets the designer simulate the logical and electrical function of the chip before it is built.

The article by Fuchs and Poulton discusses a prototype chip they have designed for vector-to-raster conversion for three-dimensional graphics displays. Although the chip is a prototype, the unique architecture is expandable and could be the basis of an innovative and exciting component for use in a high-performance graphics subsystem. The article should be an excellent thought-starter for those interested in applying VLSI to graphics display systems.

We're expanding again . . .

We are in the process of expanding our staff to meet the growing needs of the magazine. One of our principal goals is to develop an accurate profile of our readership so that we may address your interests more accurately and completely. Your help in this effort will be most appreciated. As always, your comments on things we are doing, right or wrong, as well as suggestions for future articles, are strongly encouraged.

Douglas G. Fairbairn

—Douglas G. Fairbairn
Publisher