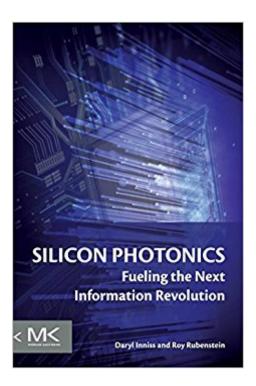


The book was found

Silicon Photonics: Fueling The Next Information Revolution





Synopsis

Silicon photonics uses chip-making techniques to fabricate photonic circuits. The emerging technology is coming to market at a time of momentous change. The need of the Internet content providers to keep scaling their data centers is becoming increasing challenging, the chip industry is facing a future without Mooreâ ™s law, while telcos must contend with a looming capacity crunch due to continual traffic growth. Each of these developments is significant in its own right. Collectively, they require new thinking in the design of chips, optical components, and systems. Such change also signals new business opportunities and disruption. Notwithstanding challenges, silicon photonicsâ ™ emergence is timely because it is the future of several industries. For the optical industry, the technology will allow designs to be tackled in new ways. For the chip industry, silicon photonics will become the way of scaling post-Mooreâ ™s law. New system architectures enabled by silicon photonics will improve large-scale computing and optical communications. Silicon Photonics: Fueling the Next Information Revolution outlines the history and status of silicon photonics. The book discusses the trends driving the datacom and telecom industries, the main but not the only markets for silicon photonics. In particular, developments in optical transport and the data center are discussed as are the challenges. The book details the many roles silicon photonics will play, from wide area networks down to the chip level. Silicon photonics is set to change the optical components and chip industries; this book explains how. Captures the latest research assessing silicon photonics development and prospectsDemonstrates how silicon photonics addresses the challenges of managing bandwidth over distance and within systemsExplores potential applications of SiP, including servers, datacenters, and Internet of Things

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Customer Reviews

This book captures a good mix of technology and business issues. The emergene of Silicon Photonics is potentially an industry-changing event, impacting a wide range of decisions. As such, everyone in the optical communication value chain, from engineers to senior managers, needs to hae an inderstanding of the technology and implications. It is very challenging to provide value in a book to such a diverse audience, but this book is a solid introduction for technologists, managers, and lay-persons. I would recommend this book to anyone with a desire or need to understand Silicon Photonics.

Frankly, there are few resources out there on the subject matter for novices. For a non-technical novice, you will need Google on standby. I think the book does a decent overview of the space and the implications. I think this is a good starting point for people looking to get smart on the space. Maybe edition 2 will have a bigger appendix explaining some of the technology?

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