NEW ROADMAP FOR MICRO- AND NANOELECTRONICS: WHERE THE SEMICONDUCTOR INDUSTRY IS HEADED OVER THE NEXT 5, 10, 20 YEARS?

Victor Zhirnov

Semiconductor Research Corporation

In the past, the role of strategic planning for semiconductor industry was met by the international technology roadmap for semiconductors (ITRS), serving as a guiding light that provided manufacturers, designers, equipment suppliers, and researchers with direction years in advance. By providing a common framework for coordination across semiconductor industry stakeholder and, technology development efforts were efficient and aligned. However, the dissolution of the ITRS in 2015 left a void, leading to years of disconnected efforts. Recognizing the need for unified guidance, the industry rallied for the creation of a new strategic plan – the microelectronics and advanced packaging technologies (MAPT) roadmap (2023) that was developed through the synergistic efforts of industry, academic and government experts. This comprehensive plan outlines ambitious goals for the industry's future (https://srcmapt.org/).