

1998

Issue of ITRS

~ Discrete Semiconductor/Others ~

The National Technology Roadmap for Semiconductor (NTRS) committee, started by SIA in 1992, became the International Technology Roadmap for Semiconductor (ITRS) committee in 1997 with the participation of semiconductor-related organizations and companies in Europe, Japan, Korea, and Taiwan. (Figure 1) It was intended to make international consensus by forecasting the candidate technologies that the semiconductor industry should develop up to 15 years ahead as a roadmap.

The first ITRS was published in 1998 which was based on the 1997 NTRS revised by an international committee. Thereafter, until 2013, the ITRS was published with full revisions in odd-numbered years and partial revisions in the following even-numbered years. In the 2015 edition, the editorial policy was changed to focus on the application side of VLSI due to the recognition that CMOS technology would reach the limit of the Moore's scaling law in 15 years. The ITRS was terminated with its publication in 2016.

Afterward, a new Roadmap Committee (International Roadmap for Devices and Systems; IRDS) was established in the organization of IEEE to replace from the SIA, which played a central role in the ITRS. The application-driven roadmaps incorporating ICT based on semiconductor technology and innovations in device architecture was being discussed.

The ITRS published from 1998 to 2016 was not only a reference for the progress of the ICT industry based on semiconductor technology, but also a common platform to facilitate communication in the semiconductor-related industry, which was comprised of a heterogeneous and diverse industrial supply chain. In particular, the ITRS played a role of guideline for research and development of semiconductor manufacturing equipment and materials companies.

European Semiconductor Industry Association
Japan Electronics and Information Technology Industries Association
Korean Semiconductor Industry Association
Semiconductor Industry Association
Taiwan Semiconductor Industry Association

Figure 1 ITRS SPONSORS