Dr. Hiroshi Iwai, Professor Emeritus Institute of Innovative Research Tokyo Institute of Technology, Yokohama, Japan

Title:

End of CMOS miniaturization and technology development after that



Abstract:

Recent smart society has been conducted by the progress of semiconductor technologies, especially by that of CMOS miniaturization. However, it is afraid that the CMOS miniaturization will reach its limit substantially in several years. However, semiconductor technology development will continue in future after that. In this talk, the limit of the CMOS miniaturization is explained and the semiconductor device technology development after reaching the scaling limit is discussed.

Short bio:

Prof. Hiroshi Iwai is a Professor Emeritus, Tokyo Institute of Technology, Yokohama, Japan

He is a semiconductor device engineer who received BE and Ph.D degrees from Univ. of Tokyo. He worked at Toshiba for 26 years from 1973 and at Tokyo Institute of Technology for 20 years since 1999, engaged in the development of high-density memories and logic/RF/photovoltaic/power devices.

Especially, he has contributed to the miniaturization of MOSLSI devices. Also, he has been concentrated to the development of Si and GaN power device technologies for these 10 years.

He is a life fellow of IEEE and served as an IEEE EDS president and a Division I Director, and served as an IEEE EDS Distinguished lecturer for 25 years since 1994.