

SEMICON® EUROPA

NOV 14-17, 2023 | MUNICH, GERMANY



SOI Industry Consortium

FD-SOI Technology scaling down to 10nm.



O. Faynot
Executive VP and GM of Silicon Division
CEA-Leti, Grenoble, France



Abstract

FD-SOI technologies are now available at 28nm and 22nm, with outstanding RF and low Power Performances, suitable for connectivity, mobile and automotive applications. Technological nodes below 22nm have to be developed to enable better performance and competitiveness. In this talk, we will detail the on-going work towards a 10nm node definition.

Biography

Olivier Faynot received the M.Sc and Ph.D. degrees from the Institut National Polytechnique de Grenoble, France in 1991 and 1995, respectively. His doctoral research was related to the characterization and modeling of deep submicron Fully Depleted SOI devices fabricated on ultrathin SIMOX wafers. He joined LETI (CEA-Grenoble, France) in 1995, working on Partially Depleted and Fully Depleted SOI technologies development in the frame of Industrial Partnerships. From 2008 to 2017, he managed various teams focussed on advanced CMOS, memories and 3D technology integration and was assigned on manufacturing sites to implement FDSOI technologies. During that period, he was engaged in the transfer to production of 28nm and 22nm FDSOI technologies with industrial partners. Those technologies are now available in production. From 2017 to 2019, he managed the Patterning department at CEA-LETI, within the Silicon Technology division. Since 2019, he is managing the whole Silicon Component division at CEA-LETI. He is author and co-author of more than 300 scientific publications in journals and international conferences,

and was successively in the committees of the main international Semiconductors conferences like International Electron Device Meeting (IEDM), the symposium on VLSI Technology, the IEEE International SOI conference, the EUROSOI network, the Solid State Device and Materials (SSDM) conference and the International S3S conference.

He received the 'Général Férié' award in 2012 and the 'Electron d'Or' award with CEA-Leti, ST Microelectronics and SOITEC in 2017.