The many revolutions in NAND flash memories: from multi-level cells to 3D and beyond

Abstract: The presentation goes through the major breakthroughs in NAND flash memories including the storage of multi bits in one cell, the migration to 3D and the development of periphery under cells with a focus on challenges to designers. Future perspectives on further scaling and new developments are discussed.

Speaker: Marco Passerini (SK Hynix Italy)

Marco Passerini After earning his PhD in Electronics Engineering degree from University of Pavia in 2004, Marco worked as Analog designer for ATMEL for 4 years in the field of flash memories. In 2008 he joined newly opened Spansion Italy center working on development of first CT (Charge Trap) - NAND. In 2012 the center was acquired by SK Hynix. Currently Marco is Analog Team Leader at SK Hynix Italy working on 238-layers 3D NAND development.