

Venerdì 18 Novembre 2022, ore 11.00-12.30
c/o edificio MO 25, Aula P1.1

Dr.Ing. Roberto Bez, Micron
terrà un seminario dal titolo

“Innovations for boosting semiconductor memories in the Big Data era”

nell’ambito del corso di **Laurea in
Ingegneria Elettronica / Electronic Engineering – Industrial coteaching**
e del **Corso di Dottorato di Ricerca in ICT**

Tutti gli interessati sono invitati a partecipare

Abstract: Semiconductor memories are central for every electronic system. They will be still more fundamental in the Artificial Intelligence era, where ZByte of data will be generated every year. To sustain the semiconductor memory demand continuous innovations in every segment of the technology development will be essential to resolve the scaling challenges. But innovation focused on sustainable product is critical to our future.

Actually, more than 2.5 exabytes of data are created every day, and this trend is accelerating with the pervasion of Internet of Things (IoT). The advent of 5G is bringing new capabilities to mobile devices which expand the need for storage capacities up to 1 terabyte, data transmission speeds of up to 20 Gbps, and bandwidths allowing connections to many devices at once including sensors and other “smart” devices such as autonomous vehicles. We have definitively entered the age of the “Data Driven Economy”. Memory density growth has been a major enabler of this transition. But the access to these vast pools of data is now becoming a constraint, where semiconductor memory will be the key enabler.

Roberto Bez is presently Senior Director of the NVM Strategic Technology and Italy Country Manager in Micron. He started his career in the semiconductor industry in 1987 in the Central R&D of STMicroelectronics. He received the Laurea degree in Physics from the University of Milan, Italy in 1985. He contributed to the development of NOR, NAND and Phase-Change Memory (PCM) memory architectures. In 2008, he became Numonyx Fellow, driving the development of the PCM and other alternative NVM technology. He has been Micron Fellow Process Integration Director in the Process R&D. In 2015 he joined LFoundry as Senior Vice-President of R&D, focused on the technology diversification, with focus on silicon optical sensors and power devices. He has authored or co-authored more than 140 publications and presentations in scientific and technical journals and international conferences and of 60 patents on different microelectronics topics.