



## SWOT Analysis of the Technology –Design Ecosystem

Panel Discussion:  
Beyond CMOS:  
from Technology to Applications



# Panelists:

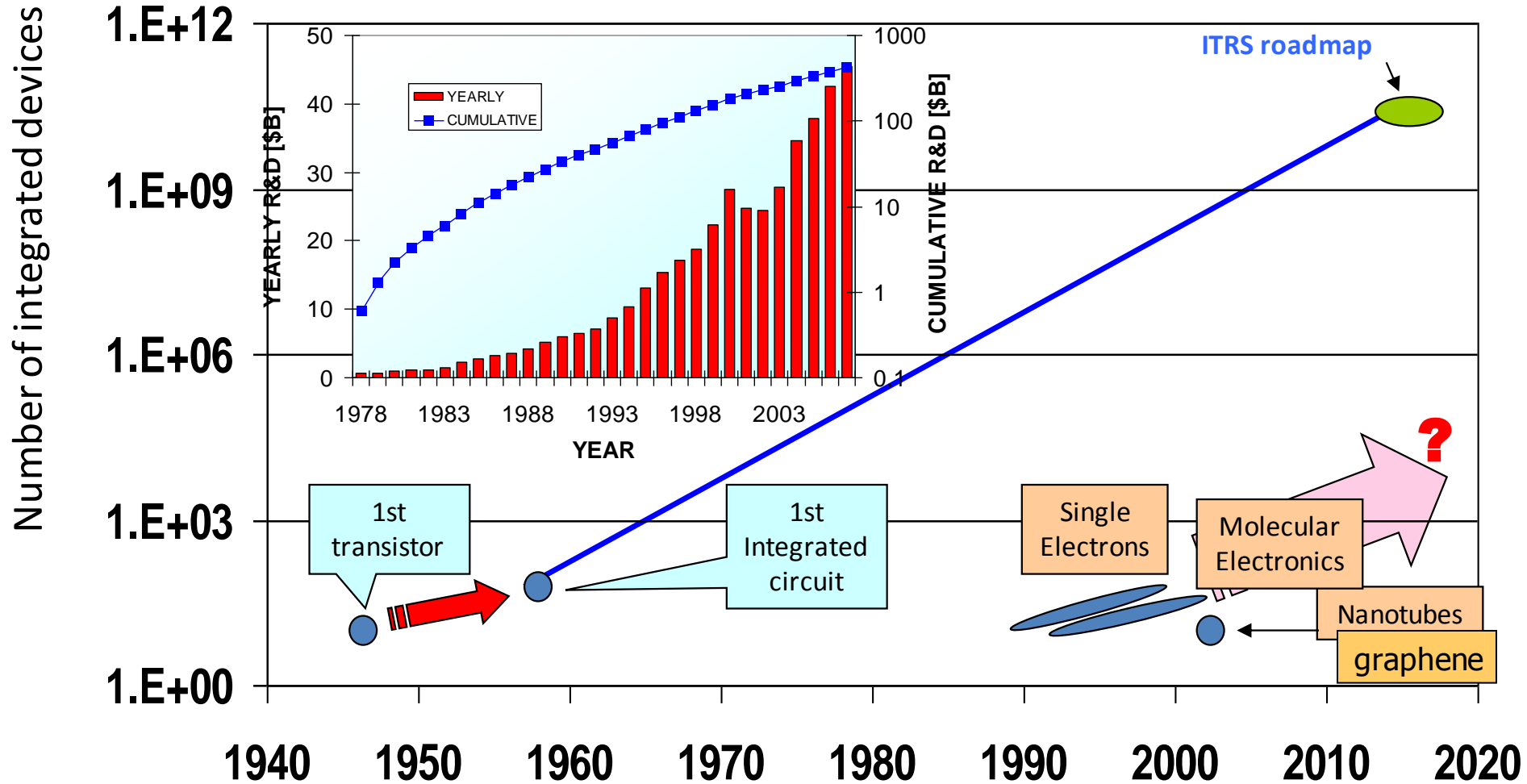
- Prof. Dr. Wolfgang Rosenstiel, edacentrum and University of Tübingen;
- Prof. Dr. Paolo Lugli, Technical University of Munich;
- Prof. Dr. Giovanni de Micheli, École Polytechnique Fédérale de Lausanne;
- Prof. Dr. Sandip Tiwari, Cornell University, Ithaca, N.Y.

# Chair:

- Dr. Livio Baldi, Micron Semiconductors Italia, Agrate Brianza

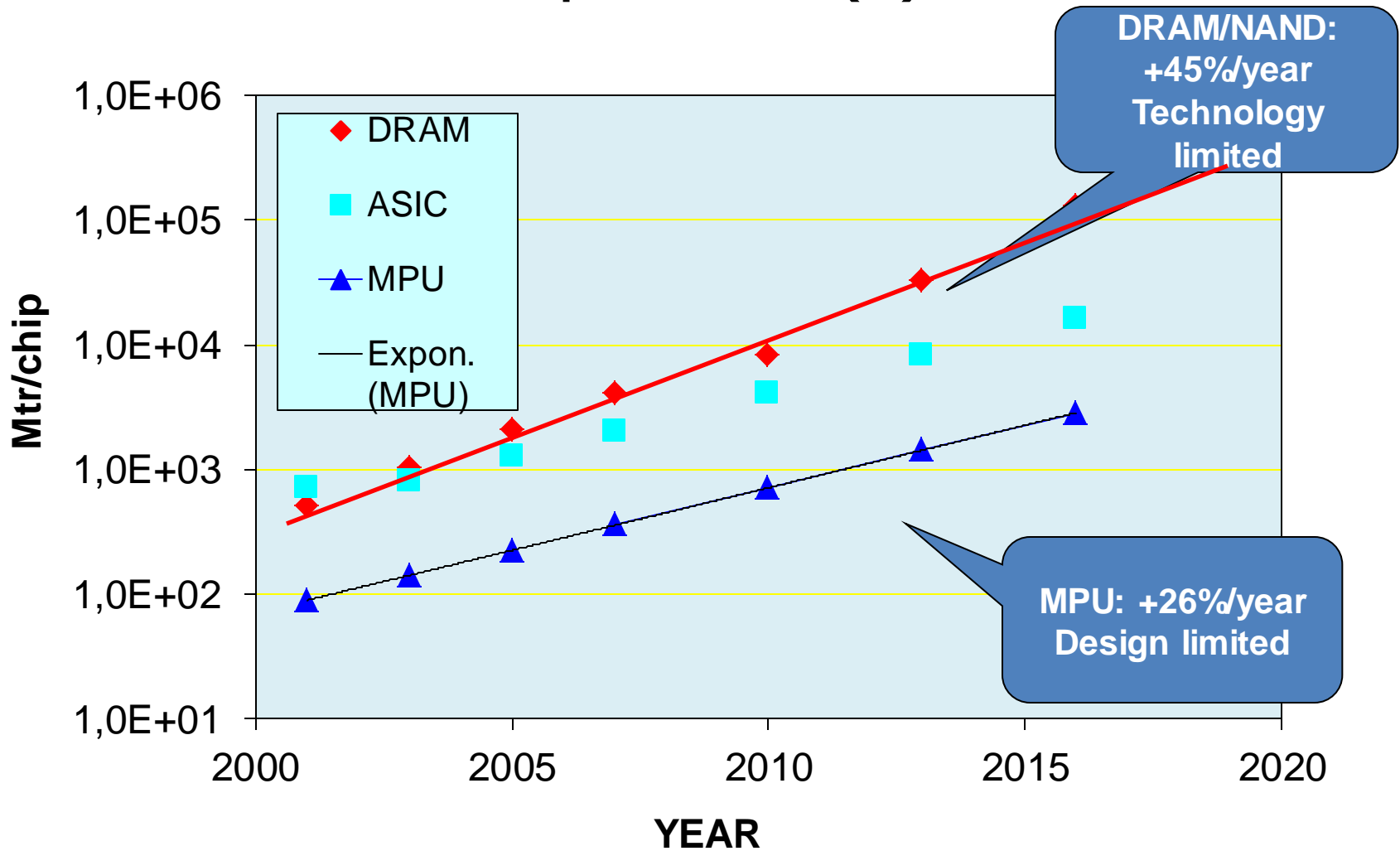


# The problem (1)



50 years and a few hundred billion dollars to go from a few transistors to present complexity. Which application will pay for a new technology?

# The problem (2)



Even now design is a limiting factor in CMOS integration density. What about new technologies?

# Key Questions

- Which types of applications will be the drivers for Beyond CMOS?
- Will they all compete for the same killing application, or will they share the market?
- Will design challenges be different for different applications?
- Can design tools be the discriminating factor for the success of one specific technology?
- Present design tools are a huge legacy: what can trigger the investment needed for new tools?