

Disruptive logic architectures and technologies: from device to system level

Gaillardon, Pierre-Emmanuel, author

Deskripsi Lengkap: <https://lib.ui.ac.id/detail?id=20418197&lokasi=lokal>

Abstrak

This book discusses the opportunities offered by disruptive technologies to overcome the economical and physical limits currently faced by the electronics industry. It provides a new methodology for the fast evaluation of an emerging technology from an architectural prospective and discusses the implications from simple circuits to complex architectures. Several technologies are discussed, ranging from 3-D integration of devices (phase change memories, monolithic 3-D, vertical nanowires-based transistors) to dense 2-D arrangements (double-gate carbon nanotubes, sublithographic nanowires, lithographic crossbar arrangements). Novel architectural organizations, as well as the associated tools, are presented in order to explore this freshly opened design space.