Electrical & Computer Engineering



POWER/THERMAL-AWARE REAL-TIME COMPUTING

DR. GANG QUAN ASSOCIATE PROFESSOR DEPARTMENT OF ELECTRICAL & COMPUTER ENGINEERING FLORIDA INTERNATIONAL UNIVERSITY Friday, October 5th, 2012 LECTURE: 10:00 AM – 12:00 PM

> ENGINEERING CENTER ROOM EC 1107 10555 WEST FLAGLER STREET MIAMI, FL 33174



Abstract:

According to Borkar et al. from Intel, there are more than 30 billion transistors integrated into a single 300mm² die today, and the number is growing rapidly toward 100B in a matter of a few years. The power consumed by these transistors is also tremendous, projected to reach 300W by the middle of this decade. The exponentially increased power consumption has posted significant challenges not only on how to provide sufficient power source to an electronic system but also on how to dissipate the heat generated by the system. In this presentation, I will present our recent research at the Advanced Real-Time and Computing System Lab (ARCS-Lab) on the power/thermal-aware computing for real-time embedded systems.

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Map: <u>http://campusmaps.fiu.edu/</u> (Other campuses/ - Engineering Center)