

MCEN GRADUATE SEMINAR

Smart phone/Portable Computing System Challenges and Complicating Trends

Jon Anderson

Senior Director

Qualcomm Inc., Boulder, CO

Sept. 25, 2014

3:30-4:45 PM

ECCR1B40



Abstract:

The smart phone industry has essentially placed a high performance desktop computer in the hands of the public. The competitive market in this industry continues to demand new performance and exciting features that present extreme system challenges to the design teams. We will explore how we predict the market for new devices while combating many obstacles that require a marriage of mechanical, electrical and computer science fields to drive a solution. Building a game plan that maximizes performance in the face of severe limitations creates an environment ripe for innovation and disruptive technologies.

Bio:

Jon Anderson started his career as an Electrical Engineer for the USAF, building space experiments for the Phillips Laboratory in Albuquerque, NM. He designed an experiment that flew on the Space Shuttle flight 77 to exercise zero gravity heat pipes. In 1996, Jon joined Qualcomm in Boulder, CO, working on the Globalstar LEO cell phone satellite network. As a physical layer Communication Systems Engineer, he worked on the signal acquisition aspects of the satellite system. Eventually, he worked to help evolve the network from a voice system into a medium data rate transport at the physical layer. Jon started working power and thermal issues in 2006 with the advent of Wideband CDMA and HSDPA (3G). In 2011, he was named to his present position as lead thermal engineer, coordinating and guiding all thermal related activities. Areas under his supervision include pre-silicon architecture, CFD analysis, post-silicon experimental study, algorithmic development, HW and SW development and Customer support engineering. Jon holds a BS and MS in Electrical Engineering from Kansas State University and has 28 issued patents with 48 additional pending.