

Department of Mathematical and Physical Sciences Presents

The 2008 Colloquium

Thursday, Nov 13

5:00-6:00pm

Room: LBV 208

Free and Open to Public

Tongdan Jin, PhD

Department of Math & Physical Sciences

Calibrating Digital Skew—A Step for Making iPod from Beach Sand

Abstract

This presentation introduces a statistical framework for predicting the maximum skew of 1GHz digital signals. Digital skew is defined as the edge time difference between two digital signals. To verify the functional performance of today's VLSI devices used in iPod and laptops, it is imperative to maintain the timing integrity of testing stimulus. Using the conditional probability theory, we propose a statistical model to estimate the skews of large number of digital signals based on the mean and variance of the signal time. The maximum skew window is obtained at the confidence level of 99.7% (or Six Sigma level).

Refreshment Starts at 4:30pm

For additional Information, contact Dr. C. Oshima. (coshima@tamiu.edu)
or (956)326-2413 (office)