

2007 Symposium on Nano Device Technology

The Symposium on Nano Device Technology 2007 organized by National Nano Device NARL, will provide an open forum for the discussion of recent developments on nano-technology and advanced devices, materials and processes. Scientists, scholars and experts in the fields

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NDL National Nano Device Laboratories
國家奈米元件實驗室



時間: 中華民國96年5月9-15日

地點: 新竹市科學工業園區展業一路26號 奈米電子研究大樓 國際會議廳

奈米元件技術研討會 2007

主題

- 》後矽奈米電子元件技術
- 》奈米生物技術
- 》功能性奈米材料技術
- 》奈米檢測技術
- 》高頻技術及應用
- 》奈米光晶元件技術

Minimizing Crosstalk in High Speed Interconnects Using Measurement-based Modeling

Mike Resso,

Signal integrity Expert, Component Test Division,
Agilent Technologies

ABSTRACT

Today's telecommunications systems are pushed to the limit by demanding video, voice and data requirements. Engineers must utilize advanced design tools to create sophisticated network equipment that can transmit serial channel data at 10 gigabits per second and above. Understanding how to characterize crosstalk within differential channels is crucial to creating high performance devices including backplanes, line cards, memory cards, motherboards, connectors, IC packages, and cables. This paper will discuss a highly accurate test methodology using a multiport vector network analyzer with Physical Layer Test System software to identify crosstalk generating structures. Advanced TCA backplane measurements utilizing a novel 12-port Vector Network Analyzer and the resulting 144 element s-parameter matrix will be discussed.

Mike Resso is a Signal Integrity Applications Expert in the Component Test Division of Agilent Technologies and has over twenty years of experience in the test and measurement industry. His background includes the design and development of electro-optic test instrumentation for aerospace and commercial applications. His most recent activity has focused on the complete multiport characterization of high speed digital interconnects using Time Domain Reflectometry and Vector Network Analysis. He has authored over 25 professional publications and received one US patent. Mike received a Bachelor of Science degree in Electrical and Computer Engineering from University of California.