

Research Papers Win Acclaim : ISTFA 2000 Best Paper Award

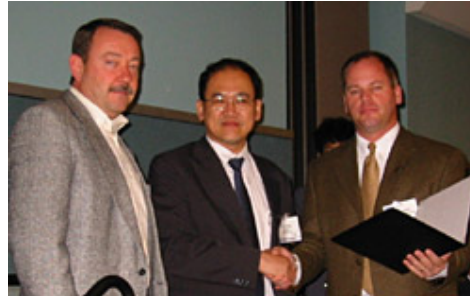
Collaboration Bears Fruit

Researchers from the NUS Engineering Faculty's Centre for Integrated Circuit Failure Analysis and Reliability (CICFAR), Advanced Micro Devices Singapore and Advanced Micro Devices USA received the the Best Paper Award at the 2001 International Symposium on Testing and Failure Analysis (ISTFA 2001) for their paper that was judged the best at the 2000 Symposium.

The paper, entitled "Application of Single Contact Optical Beam Induced Currents (SCOBIC) for Backside Failure Analysis", was the culmination of almost ten years of intensive collaborative research to develop SCOBIC, a new technique to diagnose the "root cause" of failure in large-scale integrated circuits.

The conventional Optical Beam Induced Current (OBIC) technique requires both sides of a junction to be directly connected by two external electrical connections before it can be imaged. Hence, the testing of large-scale integrated circuits is almost impossible. Using a laser-scanning microscope, SCOBIC is able to image both the front and the backside of every junction in a silicon integrated circuit device. This breakthrough is timely as integrated circuits become smaller and denser.

Mr Chin Jian Minn, Mr Muthupalaniappan Palaniappan and Mdm CE Soh of Advanced Micro Devices Singapore, Mr Glen Gilfeather of Advanced Micro Devices USA together with Professor Jacob CH Phang and Professor Daniel SH Chan of CICFAR, co-authored the award-winning paper. It was voted the best ISTFA 2000 paper by the 800 ISTFA 2000 participants. The award was presented at ISTFA 2001 in November 2001.



In unity are rewards -- Mr Glen Gilfeather, Advanced Micro Devices USA (left) and Professor Jacob Phang (Center) receiving the ISTFA 2000 Best Paper Award from Dr Dan Barton, General Chair of ISTFA 2000.