

Emerging Interconnect Technologies

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- Scaling limitation of Cu/low-k interconnects
- CNT and graphene
- Optical interconnects
- 3-D integration: bonding/TSV

Krishna Saraswat is Rickey/Nielsen Chair Professor of Electrical Engineering at Stanford University. He received Ph.D. from Stanford University in 1974 and B.E. from BITS, Pilani in 1968. His research interests are in new and innovative materials, structures, and process technology of silicon, germanium and III-V devices and metal and optical interconnects for nanoelectronics, and high efficiency and low cost solar cells. Prof. Saraswat has supervised more than 80 doctoral students, 25 post doctoral scholars and has authored or co-authored 15 patents and over 750 technical papers, of which 10 have received *Best Paper Award*. He is a Life Fellow of the IEEE. He received the Thomas Callinan Award from The Electrochemical Society in 2000, the 2004 IEEE Andrew Grove, Inventor Recognition Award from MARCO/FCRP in 2007, the Technovisionary Award from the India Semiconductor Association in 2007 and the Semiconductor Industry Association Researcher of the Year Award in 2012. He is listed by ISI as one of the 250 Highly Cited Authors in his field.