

DEEPAK C. SEKAR

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Research: NAND flash memory, Interconnects, CMOS Device Design and Modeling, Power Delivery, 3D Integration,
Interests: Low-Power Digital Circuit and System Design, NOR flash memory, Clock Distribution, VLSI Fabrication, Packaging

Education: **Georgia Institute of Technology, Atlanta, GA** **9/2003 – present**

- PhD in Electrical and Computer Engineering, expected Fall 2007
Minor: Material Science

Dissertation topic:

Optimal Signal, Power, Clock and Thermal Interconnect Networks for 2D and 3D Integrated Circuits

Advisor: Dr James D Meindl

Co-Advisor: Dr Jeffrey A Davis

- MS in Electrical and Computer Engineering, 5/2005
GPA: 3.86/4.0

Indian Institute of Technology (IIT), Madras, India **9/1999-9/2003**

- B Tech in Electrical Engineering
Minor: Material Science

Work: **SanDisk**

Experience **Member of Technical Staff involved in NAND flash memory device research** **8/2006-1/2007**

- Developed compact models for NAND flash memory devices
- Invented several device/circuit concepts that are slated for use in SanDisk's products. Nine patents filed and pending based on work done during this period

IBM Microelectronics

Intern in clock distribution group **5/2004 – 8/2004**

- Designed differential clock distribution schemes
- Developed a new variation aware single ended clock tree methodology

Skills: **Microelectronics Processing and Packaging**

Hands-on: Photolithography, e beam evaporation, PECVD, RIE, DC sputter, CMP, wet/dry oxidation, SEM, flip chip bonder, electromigration testing

Software Tools

C, Cadence Virtuoso, Matlab, SPICE, RAPHAEL, FastHenry, MEDICI, T-Suprem, Sentaurus

Academic: 1. Intel PhD Fellowship 2006-07

- Honors**
2. National Talent Search Scholarship from the Government of India
 3. Ranked first among 25 students specializing in microelectronics at IIT Madras in the class of 2003
 4. State Government Merit Fellowship for undergraduate studies
 5. Ranked 210 among approximately 2,00,000 candidates in the IIT entrance examination in India
 6. Ranked 3 among about 1,000,000 candidates in the Maharashtra State Board in the Class XII public examinations
 7. Ranked first in Mathematics in Maharashtra State in the Class XII public examinations

Publications: Listed on homepage (www.ece.gatech.edu/research/labs/gsigroup/deepak.htm)

Patents: Ten patents pending on NAND flash memory and microprocessor design/technology

References: Available on request