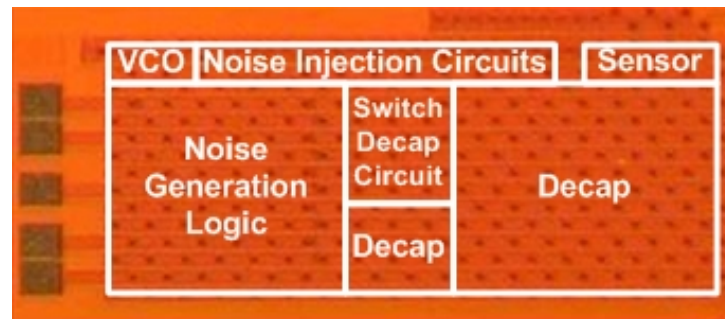
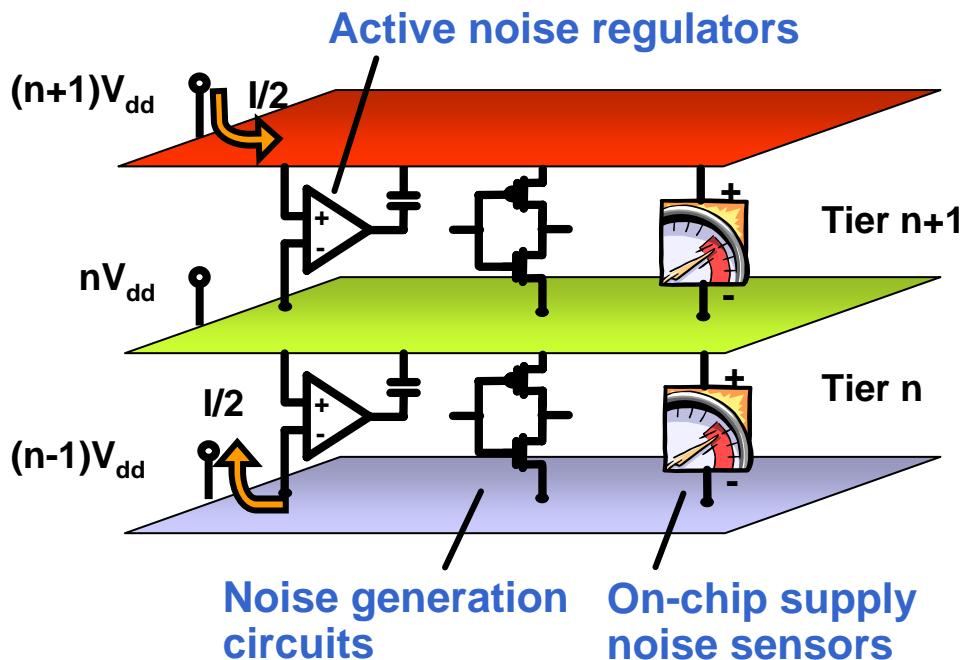


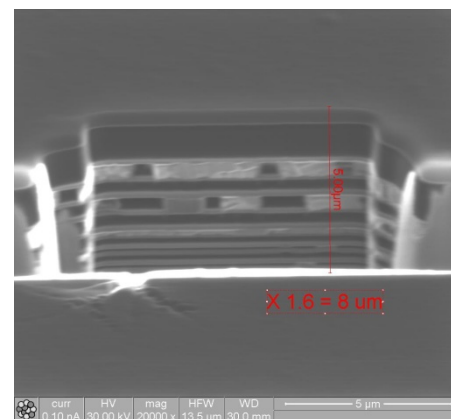
Efficient Power Supply Delivery for Integrated Circuits

Chris Kim (PI), Jie Gu, Electrical & Computer Engineering, University of Minnesota

NNIN Facility utilized: Nanofabrication Center



Die photo of prototype chip



Metal layers of test chip under FIB

● Circuit techniques to study, measure and resolve power delivery challenges in modern integrated circuits

- ◆ J. Gu, H. Eom, and C.H. Kim, "A Switched Decoupling Capacitor Circuit for On-Chip Supply Resonance Damping", VLSI Circuits Symposium, June 2007
- ◆ T. Kim, J. Liu, J. Keane, and C.H. Kim, "A High-Density Subthreshold SRAM with Data-Independent Bitline Leakage and Virtual Ground Replica Scheme", International Solid-State Circuits Conference (ISSCC), Feb 2007