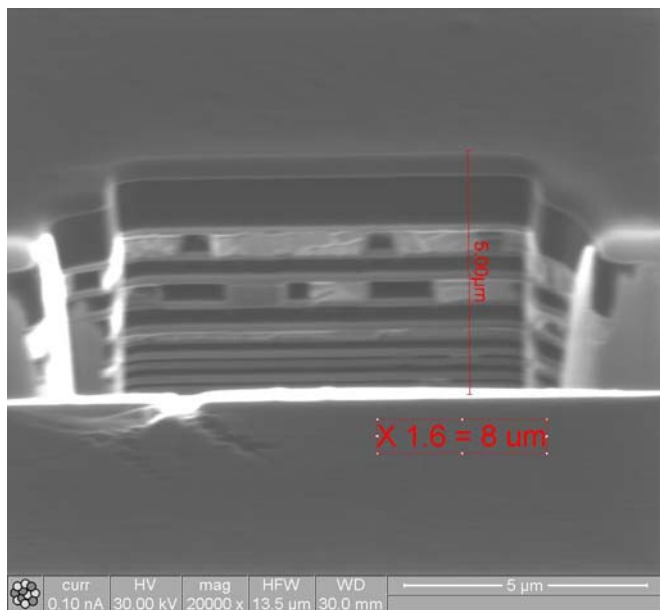


Design of High-Performance Integrated Circuit

Chris Kim (PI), Jie Gu

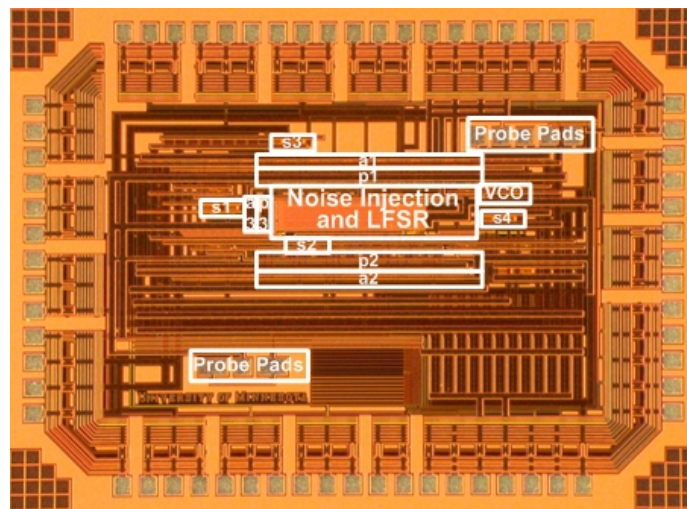
Electrical & Computer Engineering, University of Minnesota

- Design of novel IC circuit for supply noise suppression
 - ◆ Low power IC
 - ◆ PVT variation tolerance
 - ◆ Benefit of significant area saving



(Metal layers of IC chip under FIB)

- Use of FIB machine for wire repairing on IC chip
 - ◆ Cut short-connected wires
 - ◆ Inspect infrastructure of IC chip
- Wire Bonding of IC chip



(Die photo of IC chip)

- Publications
 - ◆ 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