

IEEE's Hands on Practical Electronics (HOPE)

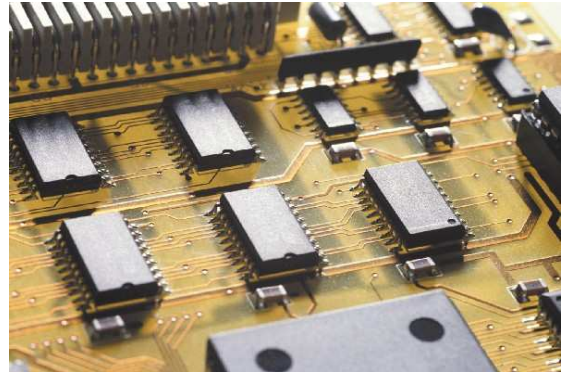
Week 10: Fabrication

Facts:

Circuits today are very small (65 nm gate length).

Smaller is better because:

- Cheaper
- Faster
- Portable
- Consume less energy



Process of making a chip:

1. Make a schematic
2. Make a mask of that schematic
3. Use UV light to etch the circuit on the die
4. Shine ions like Boron, Arsenic or Phosphorous to dope the silicon.
5. Buy a factory
6. Keep it clean
7. Watch the money roll in

There are many design tools that can be used which make it easier to design your circuit.

