AGENDA (9/16/08)
- REMINDER: WILL HAVE A QUIZ TODAY
- REVIEW FOM/ACTIVE
- LAYOUT → CROSS-SECTION PRACTICE
  - INDIVIDUALS DRAW
  - WHERE ARE THE R & C’S?
  - VOLUNTEER

MAIN GOALS FOR TODAY
- FIRST LESSON OF THE LAYOUT PROGRAM (OPUS)
- TAKE ANY LAYOUT (TOP LEVEL VIEW) AND CONVERT THE LAYOUT INTO A CROSS-SECTION
  - YOU’LL BE QUICKER AT READING/UNDERSTANDING THE FIGURES IN YOUR TEXT BOOK AS WELL
**FOX-ACTIVE**

**DESCRIPTION**
- FIELD OXIDE
- EITHER LOCOS OR STI
  - LOCAL OXIDATION OF SILICON
  - SHALLOW TRENCH ISOLATION
- SET BY
  - DIFF AND TAP, AKA ACTIVE
- FOX = NOT ACTIVE
  - SETS THIN VS. THICK OXIDE

*Figure 4.1* How the active layer specifies where to open holes in the field oxide (FOX).
**DESCRIPTION**

- **ACTIVE** = DIFF.DG + TAP.DG
- **SELECT** = NSDM.DG, PSDM.DG
- **NWELL** = NWELL.DG
- **SELECT** AUTOMATICALLY PLACED
- **DIODE IS DIFF.DG**

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**Figure 4.2** Combinations of active, selects, and n-wells.
Baker Figure:

Bob Peddenpohl, University of Kentucky; Modeling Manager, Cypress Semiconductor
Which Baker Figure is this?
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Bob Peddenpohl, University of Kentucky; Modeling Manager, Cypress Semiconductor
What type of device is this?