

Reading Assignment: Chapters 1 & 2 in *Schematic Capture with Cadence PSPICE*
by Herniter

Handouts: (also available from the instructor's web page)

- *Sample PSPICE Report*
- PSPICE Example: *DC Circuit - Determining Node Voltages*
(File: DC Circuit.opj)
- PSPICE Example: *DC Circuit - Using voltage and current printers*
(File: DCPrint.opj)
- PSPICE Example: *Analyzing Circuits with Dependent Sources*
(File: DependentSources.opj)
- PSPICE Assignment #1

ORCAD Capture (PSPICE)

- The software is referred to by the generic name PSPICE. It was originally owned by MicroSim and then by ORCAD. It is currently owned by Cadence, but has kept the ORCAD name. The current software is called ORCAD Capture or Cadence Capture.
- These notes are simply highlights of the demonstration to be performed in class. See the examples listed on the previous page for more detailed information. The examples contain numerous comments.
- All PSPICE examples used in TCC engineering courses are available from the instructor's web page (See web page for EGR 271 and then link named ORCAD 9.1 Software and Examples).
- When installing the software, you may be given an option of which features to install. Pick both **Capture** and **PSPICE**.
- When saving files to a floppy disk, be sure to create a folder on the disk to store the project. Without a folder, some of the required files created by ORCAD seem to get lost and you may have trouble re-opening the file.
- Run the software by selecting **Start - Programs – Cadence – ORCAD Capture**

Comparison - Evaluation Version versus Full Version

Evaluation Version

- Limit of 64 nodes
- Limit of 1 page schematic
- Standard libraries for sources and basic components are available
- EVAL library (eval.slb) contains a couple hundred models of components, such as transistors, diodes, 7400 series IC's, etc.
- Cost: Free
- Some advanced features not included (such as printed circuit board layout)

Full Version

- Unlimited number of nodes
- Unlimited number of pages
- Standard libraries for sources and basic components are available
- Libraries for most commercially-available components available (tens of thousands of models).
- Cost: Thousands of dollars (depends on the platform and the types of features needed)