

Chip Assembly

Using the
Virtuoso Chip Assembly Router
(vcar)

Yet Another Tool...

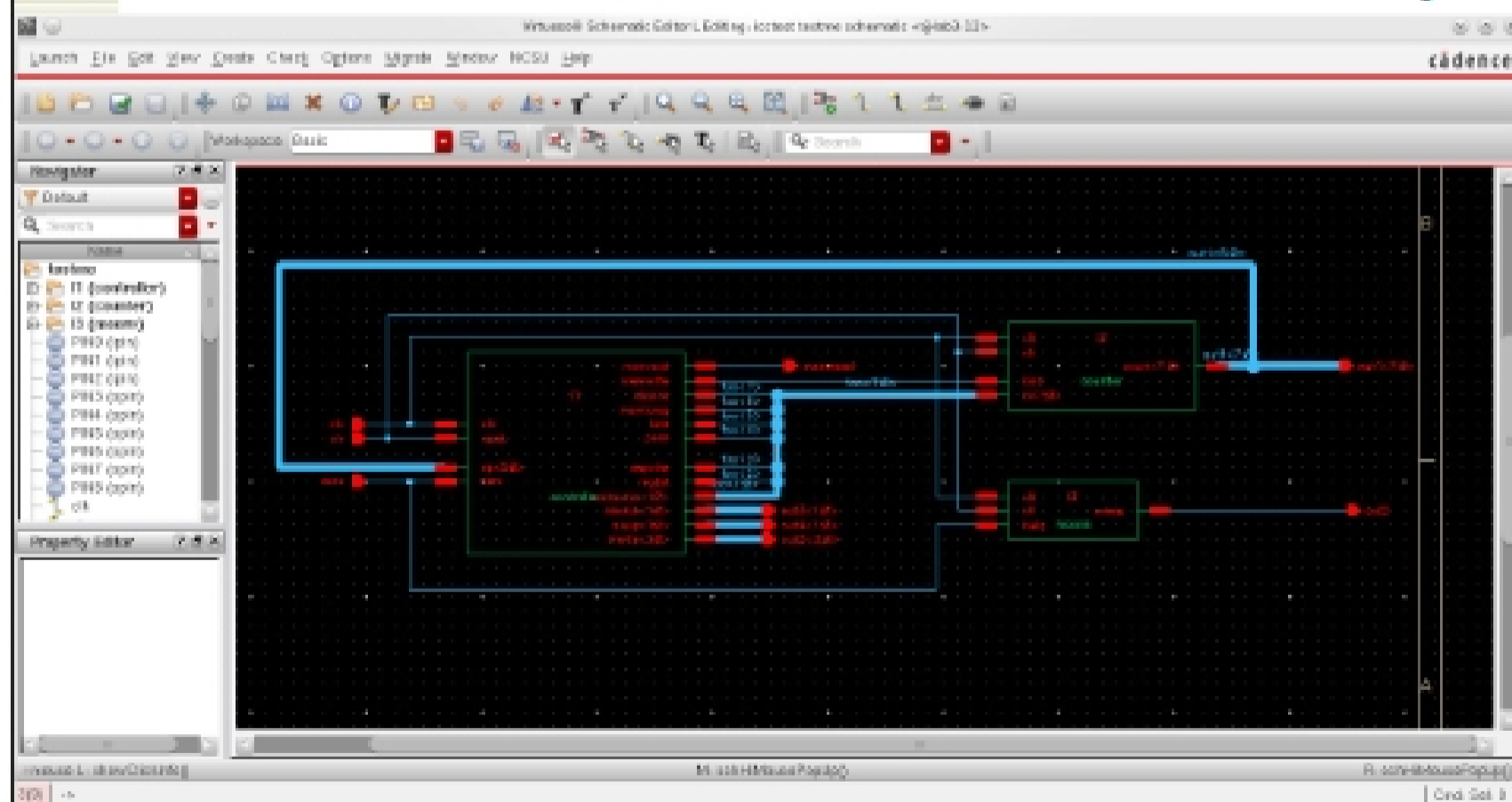
- ◆ This is a tool you can use to connect large blocks that have been designed separately
 - Like placed and routed blocks from SoC, or memories, or custom register files, etc.
- ◆ Also useful for wiring a fully-connected core to the pads
- ◆ Hand-placement, but automated wiring...
- ◆ Chapter 12 in CAD book

Outline

1. Start with a schematic to define connectivity
2. Then generate a layout template into Virtuoso-XL
3. Place blocks by hand and adjust floorplan
4. Wire vdd and gnd by hand
5. Export to vcar for signal routing
6. Import back into Virtuoso for DRC, LVS, GDS

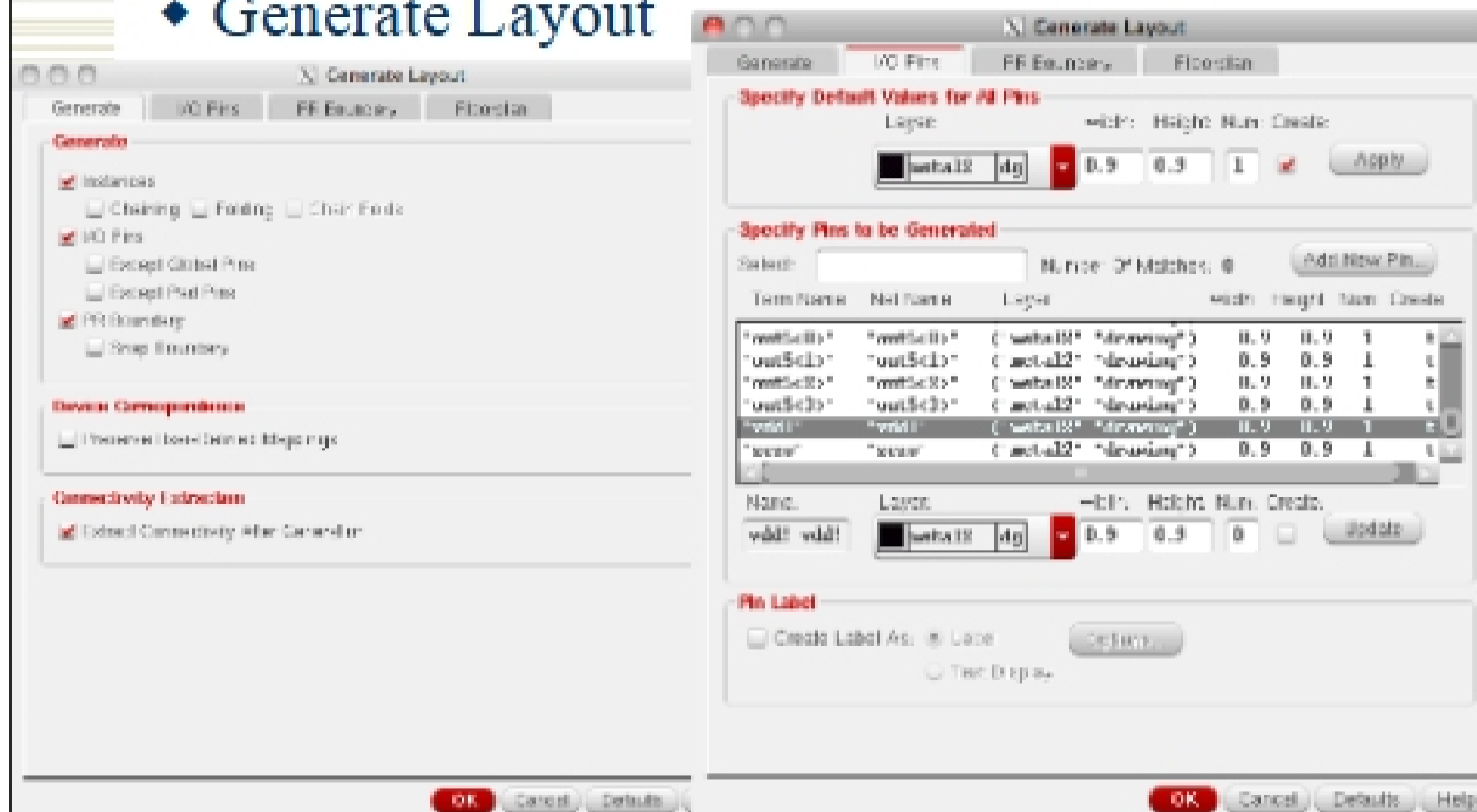
Example

- ◆ Start with schematic that defines connectivity



Generate layout from schematic

◆ Generate Layout



Generate layout from schematic

◆ Generate Layout

