

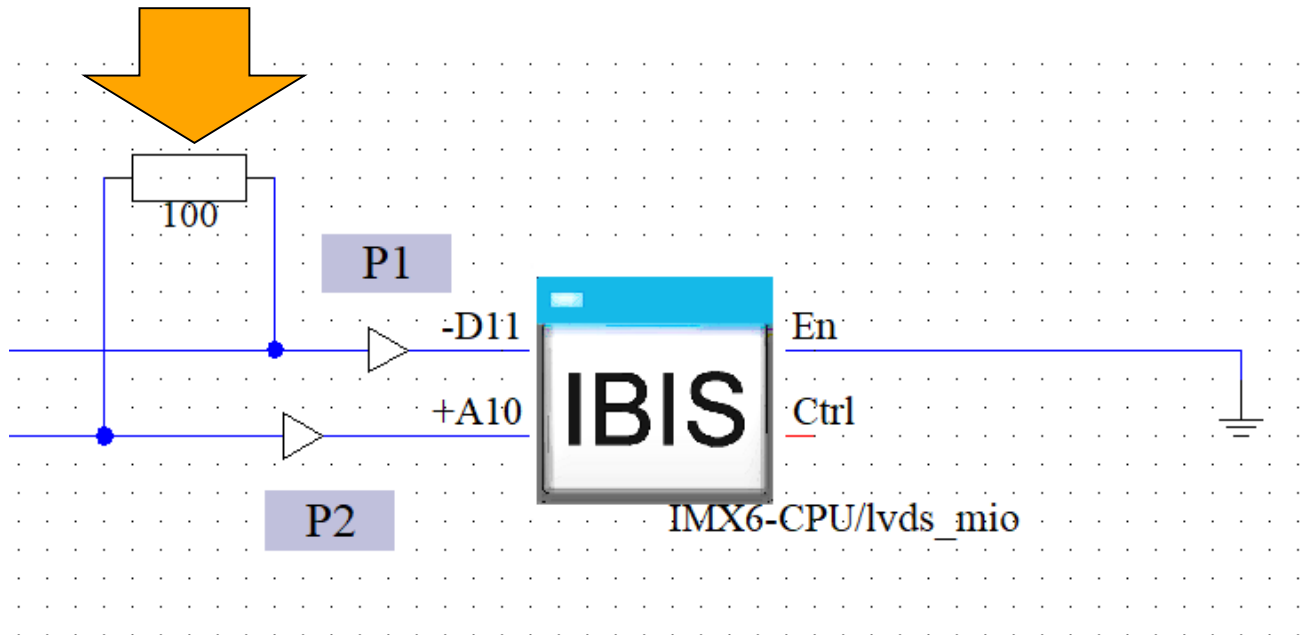
# TIEplus 2019 Subject

## CST notes on simulation approach



- › For IC3000 series pin mapping differential terminations define in IBIS models are not recognized so the termination has to be placed in the simulation project
- › For IC3000\_cst.ibs IBIS file the series pin mapping an R\_series model has been removed

R\_series model defined in the model is manually inserted in the schematic at receiver pins



# TIEplus 2019 Subject

## CST notes on simulation approach



- IC2000 IBIS Power-aware waveforms are not recognized by CST, so an IBIS based SI-PI co-simulation is not possible. In order to overcome this limitation please consider the following steps for transient simulation PI modeling
  - Uncheck the “internal supply” in the IBIS properties – in this way IBIS buffer has to be supplied externally from pins “Supply” and “GND”
  - Use two current controlled currents sources and a current source to approximate the behavior of the IBIS “Composite Current” waveform
  - This procedure will allow to evaluate SI impact on PI, however the vice-versa is not true; since the supply noise impact is minimal in differential configuration this limitation should not be an issue
- For IC2000\_cst\_si.ibs the ISSO\_PU, ISSO\_PD, and Composite current are removed (keywords not recognized by CST)

