**Verification of PI90LV02 IBIS model**

1. **Introduction:**

To verify the correlation between the ibis model and hspice model, we need to do some simulations:

Output condition according to the datasheet : Add **50Ω** pull-down resistor to the INPUT and **5p** pull-down capacitance to the OUTPUT:



1. The frequency of signal is **100MHz (200Mbps)**.

V\_inp a gnd pulse ( 3 0 0 .1n .1n 4.9n 10n)

V\_inn b gnd pulse ( 0 3 0 .1n .1n 4.9n 10n)

1. The frequency of signal is **333MHz (666Mbps)**.

V\_inp a gnd pulse ( 3 0 0 .05n .05n 1.45n 3n)

V\_inn b gnd pulse ( 0 3 0 .05n .05n 1.45n 3n)

1. **Conclusion:**
2. For OUTPUT, the simulation results of IBIS model can match very well with the HSPICE model at different simulating conditions.

1. **Simulation Result:**

Output condition according to the datasheet :



**Simulation result:**

1. The frequency of signal is **100MHz (200Mbps)**.



1. The frequency of signal is **333MHz (666Mbps)**.

