**Verification of PI6C557-03A IBIS model**

1. **Introduction: to verify the ibis model, we need to do some simulations for OUTPUT1:**
2. **The frequency of signal is 20MHz, clamp=1:**

vinn inn 0 pulse(0 clamp 0n 0.1n 0.1n 24.9n 50n)

vinp inp 0 pulse(clamp 0 0n 0.1n 0.1n 24.9n 50n)

1. **Without any trace, add 33Ω resistor, 50Ω pull-down resistor and 2pF pulldown capacitance to the OUTPUT:**

PI6C557-03A

**VOUT**

**SCL\_C**

**SDA\_C**

**Input Signals**

**SCL\_C**

**SDA\_C**

**VIN**

**SCL\_C**

**SDA\_C**

IN

**SCL\_C**

**SDA\_C**

**VOUT#**

**SCL\_C**

**SDA\_C**

IN#

**SCL\_C**

**SDA\_C**

**…..**

**SCL\_C**

**SDA\_C**

**R2**

**SCL\_C**

**SDA\_C**

**R2**

**SCL\_C**

**SDA\_C**

**C**

**SCL\_C**

**SDA\_C**

**C**

**SCL\_C**

**SDA\_C**

CLK

**SCL\_C**

**SDA\_C**

CLK#

**SCL\_C**

**SDA\_C**

**R1**

**SCL\_C**

**SDA\_C**

**R1**

**SCL\_C**

**SDA\_C**

1. Simulation **without** package data;
2. Simulation **with** package data.
3. **With 33Ω resistor , 5-inch trace, 50Ω pull-down resistor and 2pF pulldown capacitance to the OUTPUT:**

**VOUT**

**SCL\_C**

**SDA\_C**

IN

**SCL\_C**

**SDA\_C**

**Input Signals**

**SCL\_C**

**SDA\_C**

**VIN**

**SCL\_C**

**SDA\_C**

CLK

**SCL\_C**

**SDA\_C**

**…..**

**SCL\_C**

**SDA\_C**

5-inch

PI6C557-03A

**VOUT#**

**SCL\_C**

**SDA\_C**

IN#

**SCL\_C**

**SDA\_C**

CLK#

**SCL\_C**

**SDA\_C**

5-inch

**C**

**SCL\_C**

**SDA\_C**

**C**

**SCL\_C**

**SDA\_C**

**R2**

**SCL\_C**

**SDA\_C**

**R2**

**SCL\_C**

**SDA\_C**

**R1**

**SCL\_C**

**SDA\_C**

**R1**

**SCL\_C**

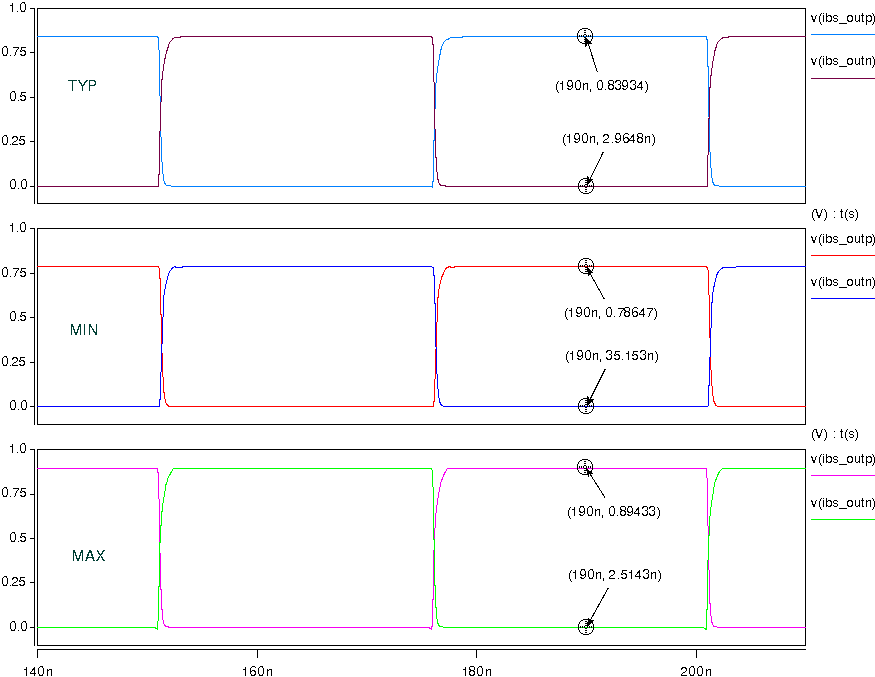
**SDA\_C**

1. Simulation **without** package data;
2. Simulation **with** package data.
3. **The frequency of signal is 100MHz, clamp=1:**

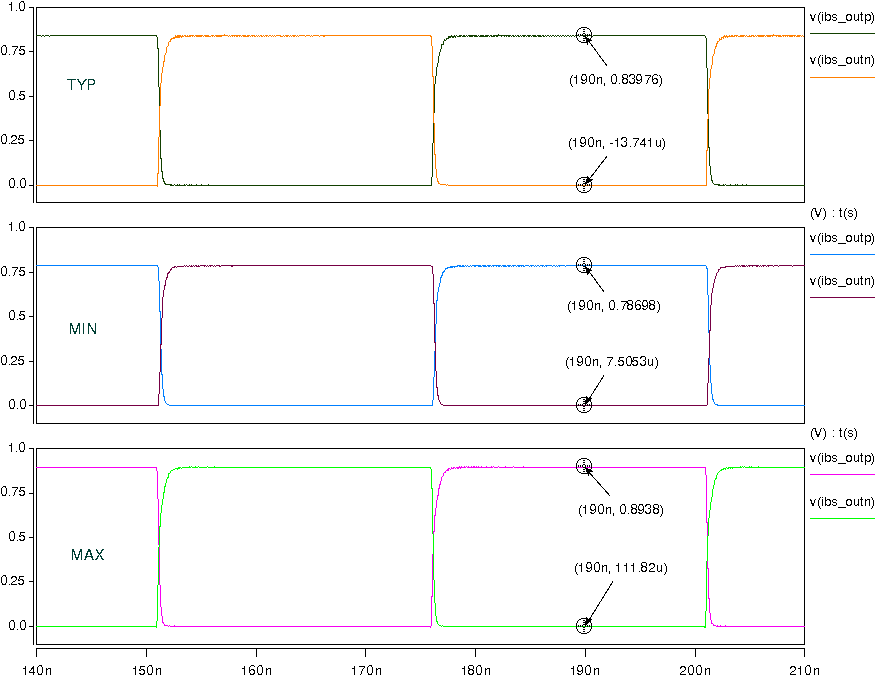
vinn inn 0 pulse(0 clamp 0n 0.1n 0.1n 4.9n 10n)

vinp inp 0 pulse(clamp 0 0n 0.1n 0.1n 4.9n 10n)

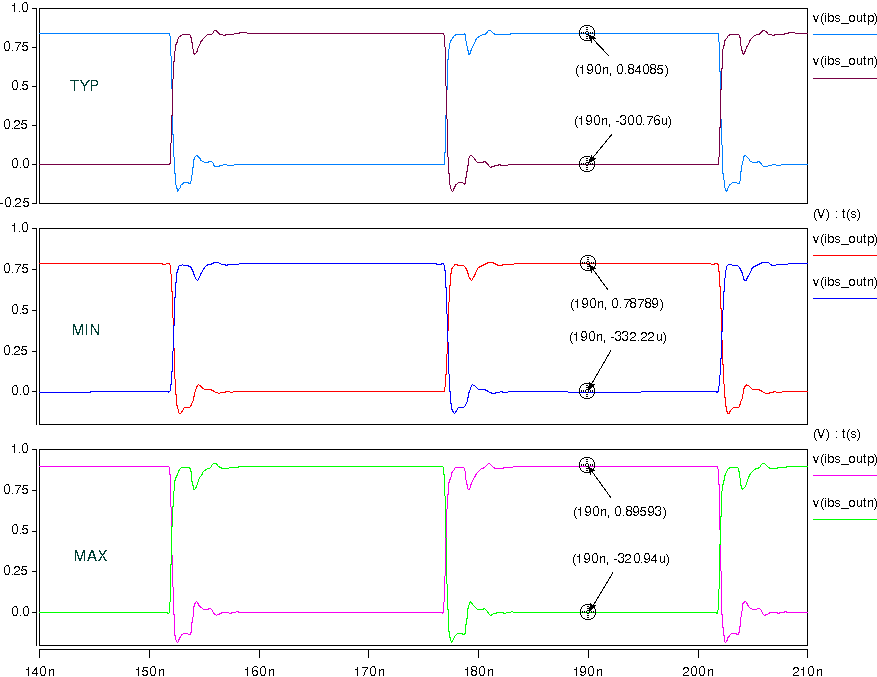
1. **Without any trace, add 33Ω resistor, 50Ω pull-down resistor and 2pF pulldown capacitance to the OUTPUT:**
2. Simulation **without** package data;
3. Simulation **with** package data.
4. **With 33Ω resistor , 5-inch trace, 50Ω pull-down resistor and 2pF pulldown capacitance to the OUTPUT:**
5. Simulation **without** package data;
6. Simulation **with** package data.
7. **Simulation Result:**
8. **20MHz, Without trace:**
9. Simulation **without** package data;



1. Simulation with package data:



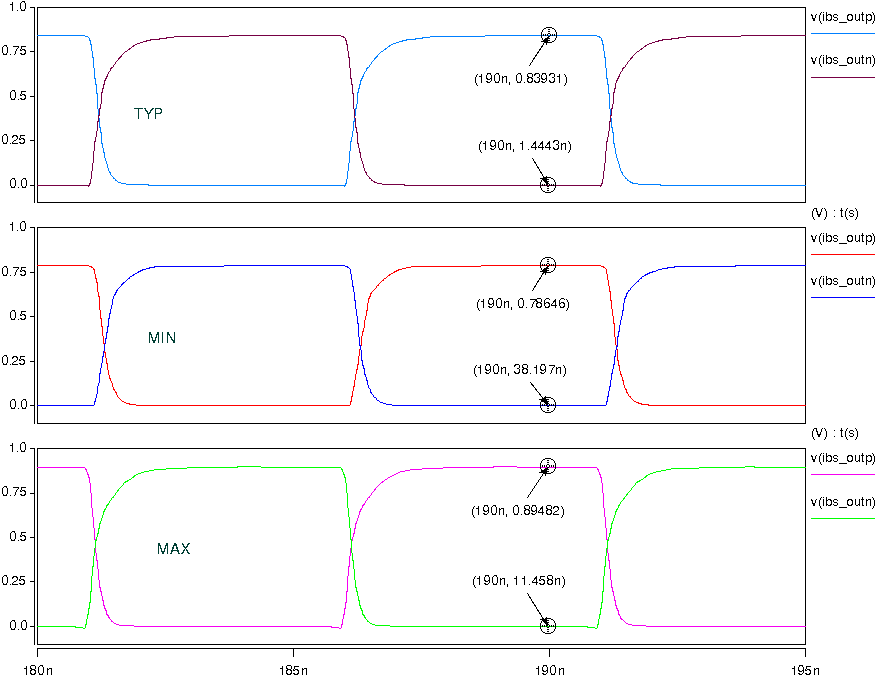
1. **20MHz, With 5-inch trace:**
2. Simulation **without** package data;



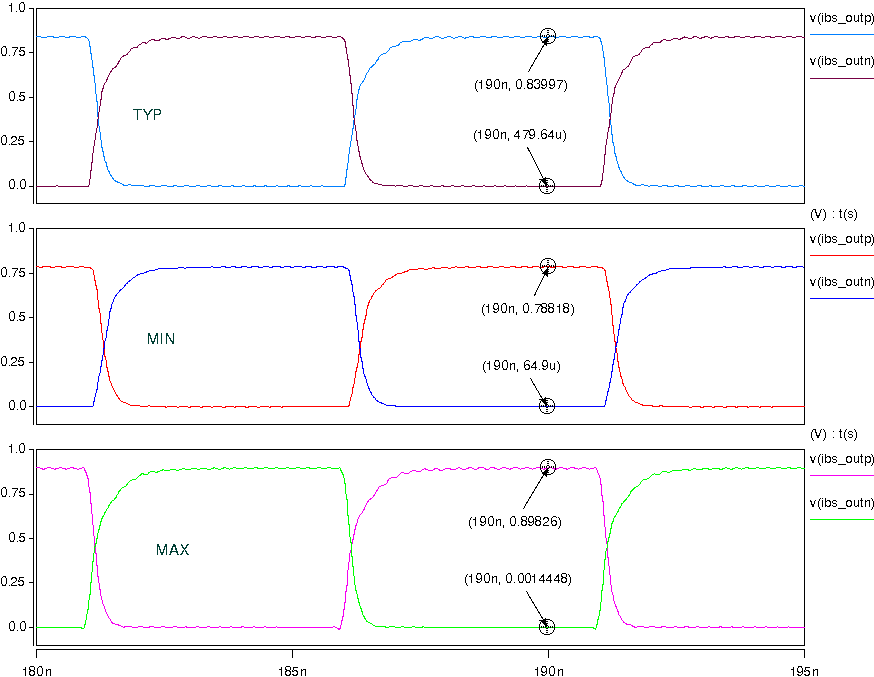
1. Simulation **with** package data:



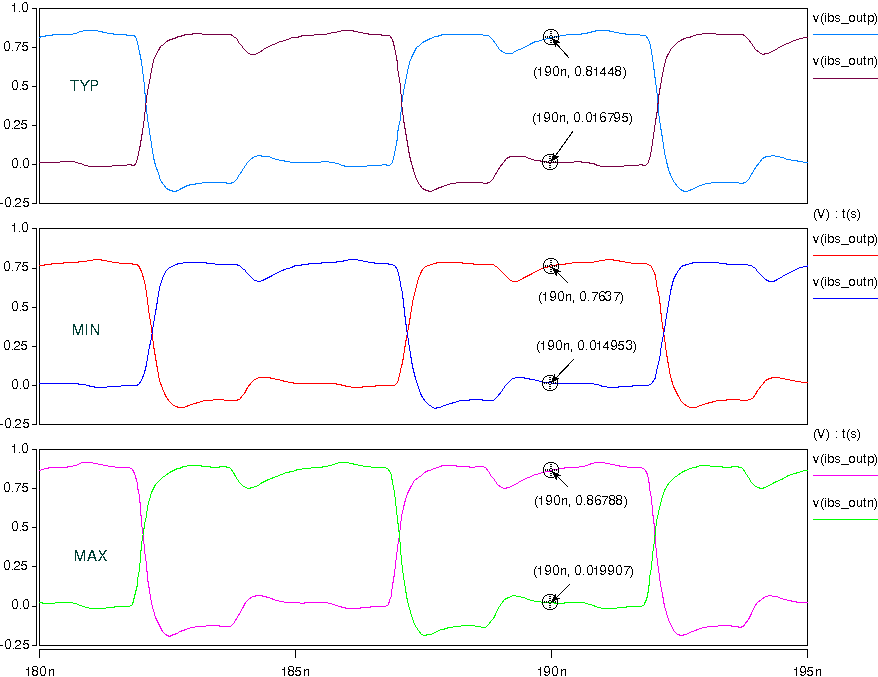
1. **100MHz, Without trace:**
2. Simulation **without** package data;



1. Simulation with package data:



1. **100MHz, With 5-inch trace:**
2. Simulation **without** package data;



1. Simulation **with** package data:

