



RED in case of TLV172  
Blue in case of idle Opamp

Above figure is our customer's circuit.

On the datasheet, input impedance is 100Mohm. And then bias current( $I_B$ ) is  $\pm 10\text{pA}$ .

However, on the TINA-TI's simulation, there is voltage drops using TLV172 model. As the result, bias current will be 800uA. Please refer to the file "20171217\_TLV172."

When, we insert 100Mohm Opamp input( $U_2+$  and  $U_3+$ ), there is no voltage drop. So, it seems that we can correct voltage. And then, when we use OPA172 instead of TLV172, there is no voltage drop.

### <Question>

- Is TLV172's TINA-TI model correct?
- Are input impedance 100Mohm and input bias current  $\pm 10\text{pA}$  correct?