

## **1 Experiment No. 3**

### **2 Experiment Title**

Design and Analyze 2 Input NAND and AND Gates Using 1-Finger and 2-Finger MOS on MICROWIND 3.0

### **3 Objective**

The main objectives of this report are:

- To design and simulate a CMOS inverter using MICROWIND 3.0.
- To ensure proper compliance with Design Rule Check (DRC) requirements during the design process.
- To design and simulate a tri-state inverter using MICROWIND 3.0
- To analyze the functionality and switching characteristics of both CMOS and tri-state inverters.

### **4 Theory**

### **5 Schematic Layout**

### **6 Specification**

### **7 Output Waveshape**

### **8 Discussion**

Figure 1