

Scilab Manual for  
Basic Analog VLSI lab  
by Dr Sandhya Save  
Electronics Engineering  
University of Mumbai<sup>1</sup>

Solutions provided by  
Dr Dr. Sandhya Save  
Electronics Engineering  
University of Mumbai

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# **Experiment: 1**

## **CMOS Inverter Amplifier**

This code can be downloaded from the website [www.scilab.in](http://www.scilab.in)

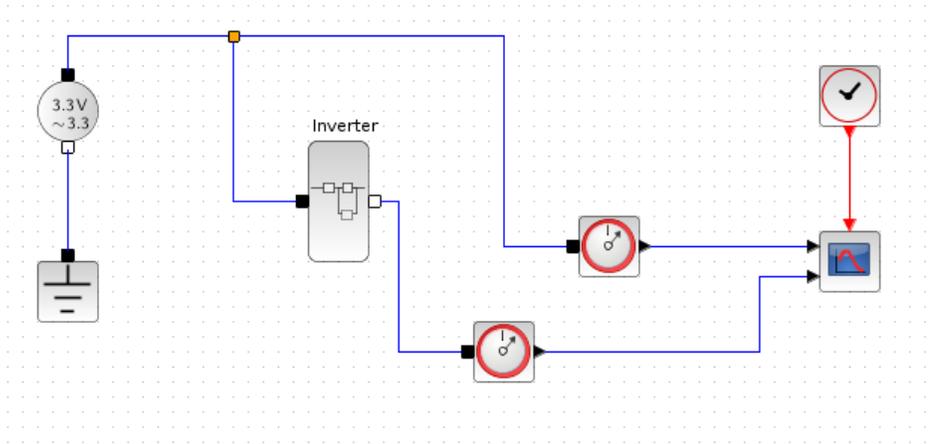


Figure 1.1: CMOS inverter

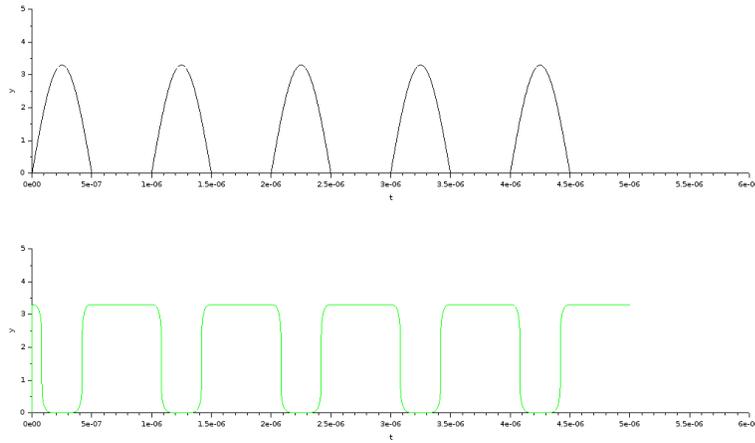


Figure 1.2: CMOS inverter

# Experiment: 2

## CMOS transmission gate

This code can be downloaded from the website [www.scilab.in](http://www.scilab.in)

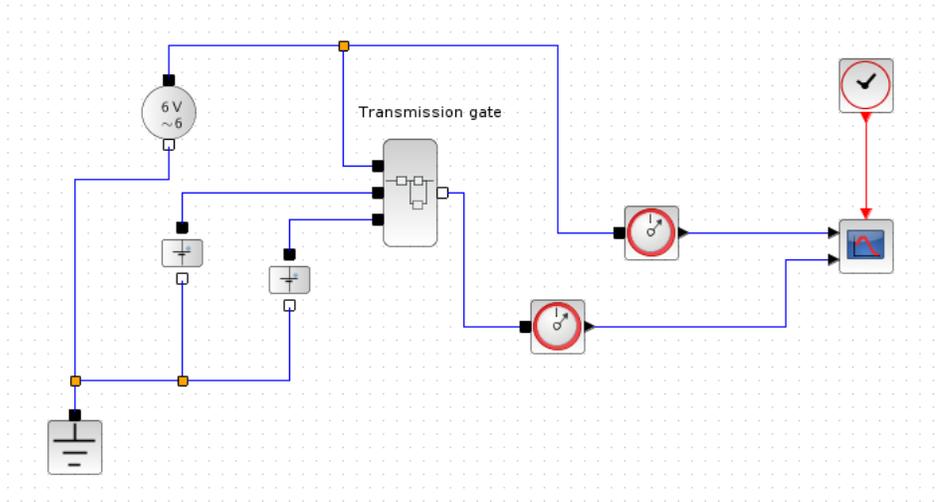


Figure 2.1: CMOS transmission gate

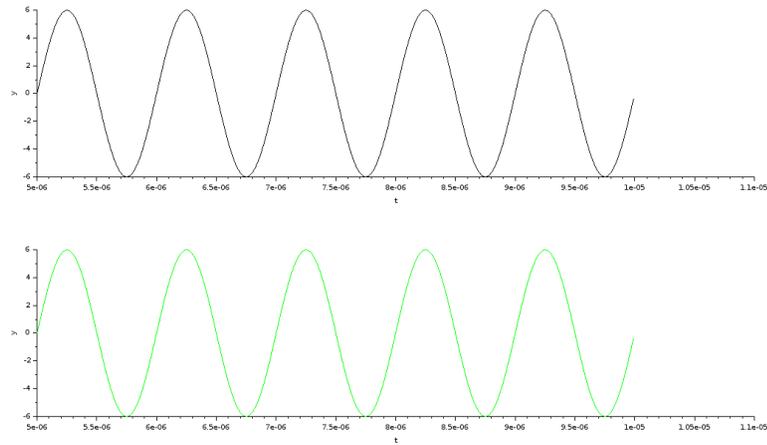


Figure 2.2: CMOS transmission gate

## **Experiment: 3**

### **NMOS current mirror circuit**

This code can be downloaded from the website [www.scilab.in](http://www.scilab.in)

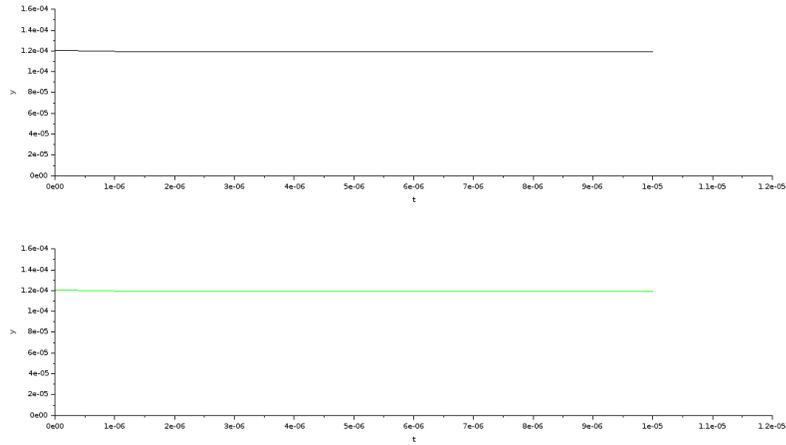


Figure 3.1: Basic current mirror circuit

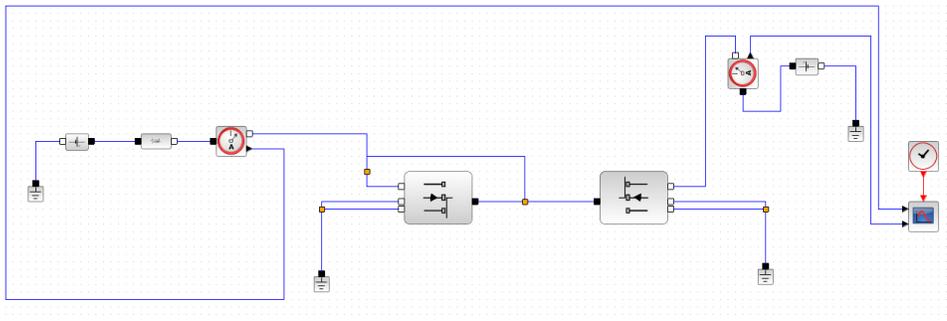


Figure 3.2: Basic current mirror circuit

## **Experiment: 4**

# **NMOS Cascode current mirror circuit**

This code can be downloaded from the website [www.scilab.in](http://www.scilab.in)

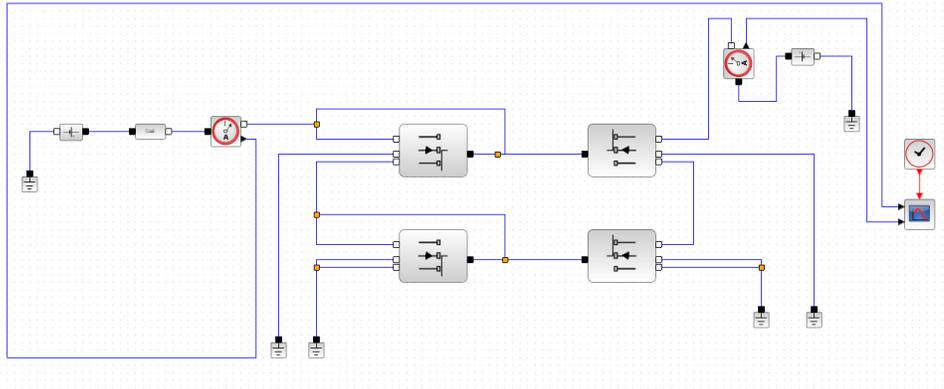


Figure 4.1: Cascode current source

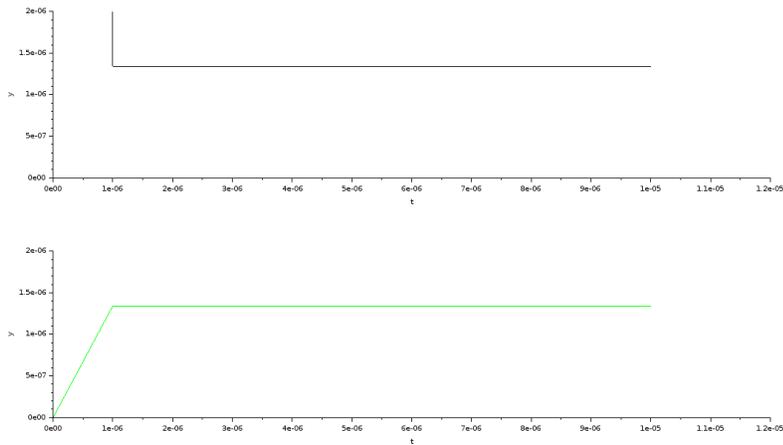


Figure 4.2: Cascode current source

## **Experiment: 5**

### **NMOS Wilson current mirror circuit**

This code can be downloaded from the website [www.scilab.in](http://www.scilab.in)

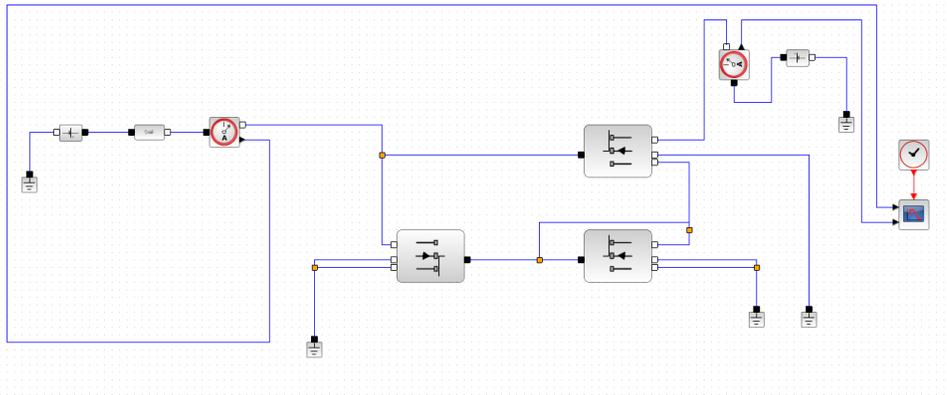


Figure 5.1: Wilson current mirror

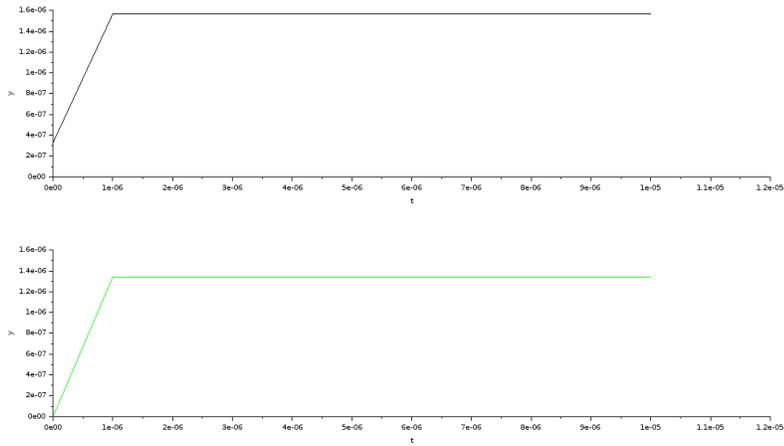


Figure 5.2: Wilson current mirror