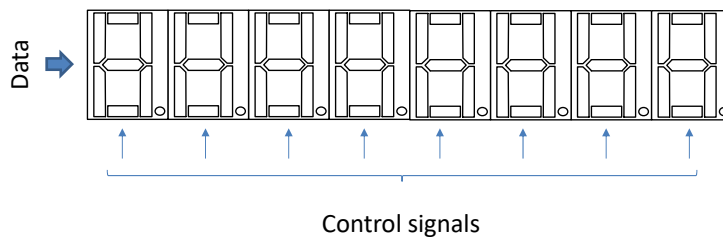


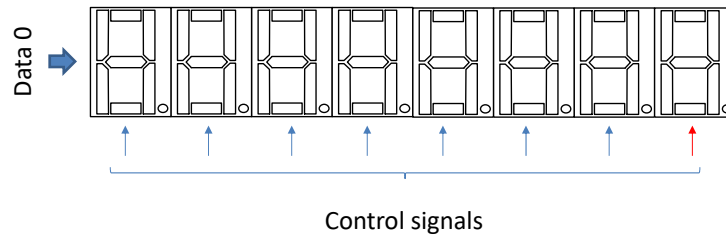
DAT093
Introduction to Electronic System Design
Comments laboratory assignment 4

Sven Knutsson
svenk@chalmers.se
Dept. Of Computer Science and Engineering
Chalmers University of Technology
Gothenburg
Sweden

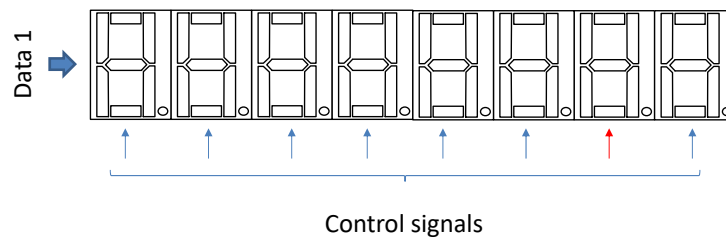
The 7-segment displays



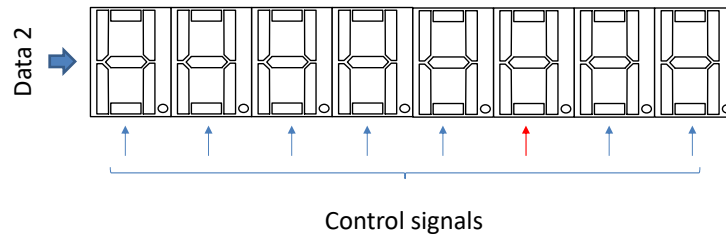
Controlling the 7-segment displays



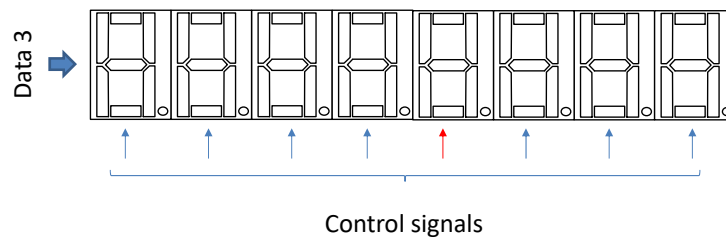
Controlling the 7-segment displays



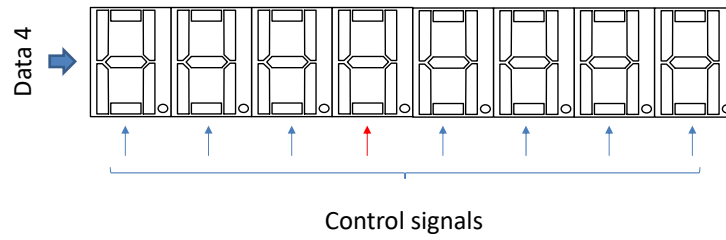
Controlling the 7-segment displays



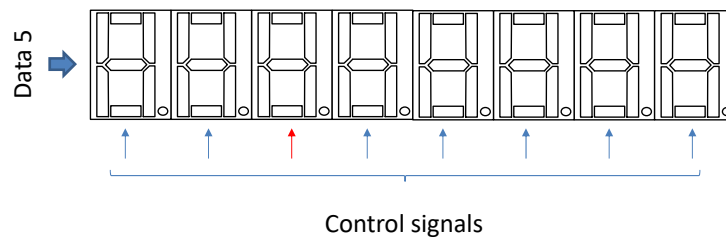
Controlling the 7-segment displays



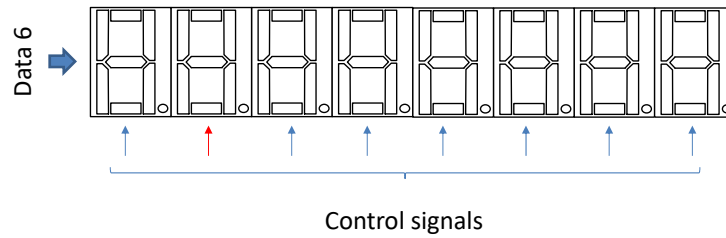
Controlling the 7-segment displays



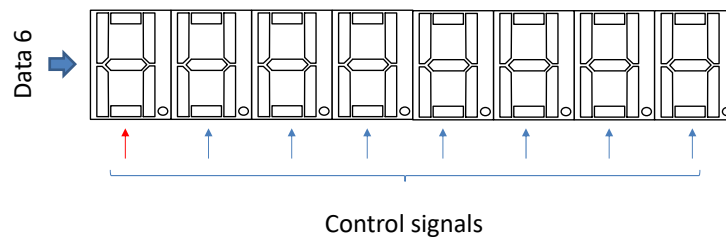
Controlling the 7-segment displays



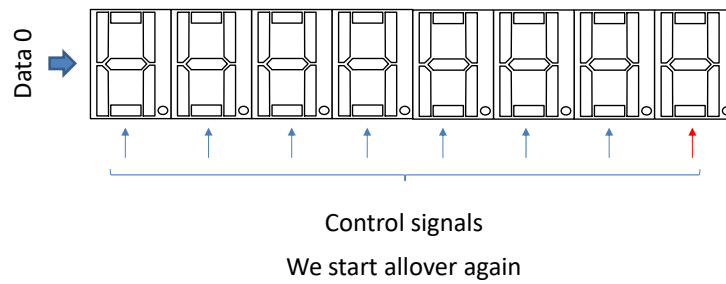
Controlling the 7-segment displays



Controlling the 7-segment displays

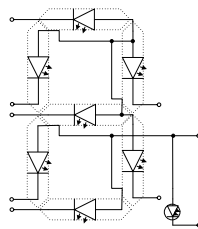


Controlling the 7-segment displays

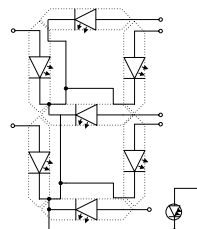


Activating the 7-segment displays

There are two kinds of 7-segment displays



Common anode

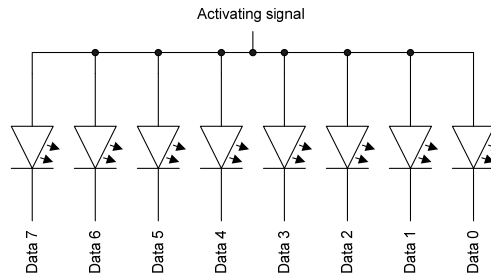


Common cathode

Activating the 7-segment displays

Simplified view of the common anode segment

The activating signal is active high (1)

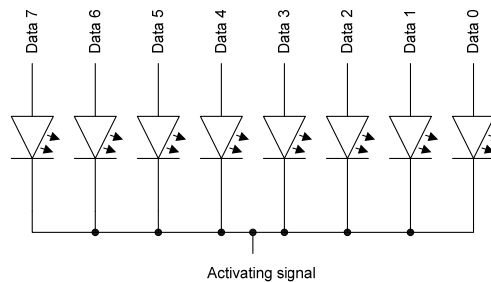


The data signals are active low (0)

Activating the 7-segment displays

Simplified view of the common cathode segment

The data signals are is active high (1)



The activating signal is active low (0)

The 7-segment digits

