

1-Wire Controller

Real-Time Embedded Systems, George Washington University, Spring 2006

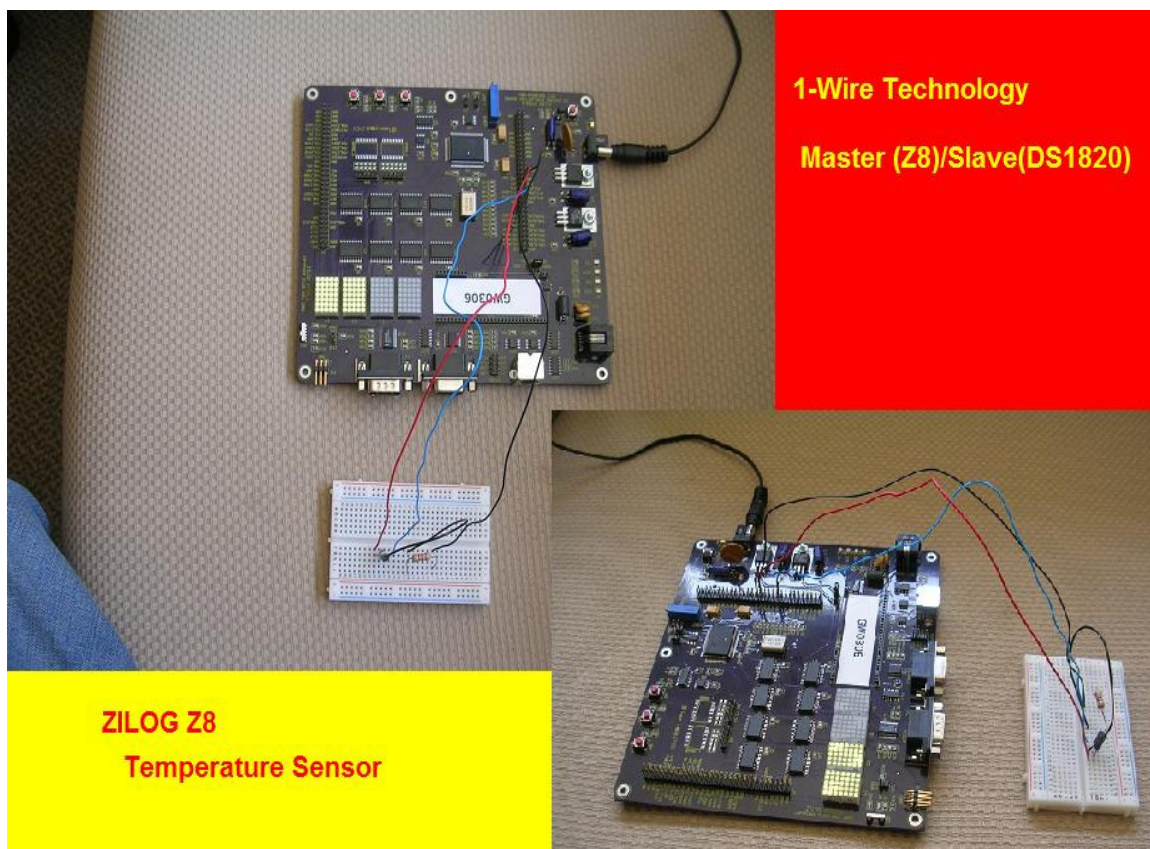
Xavier Miró Bruix

xavier@gwu.edu

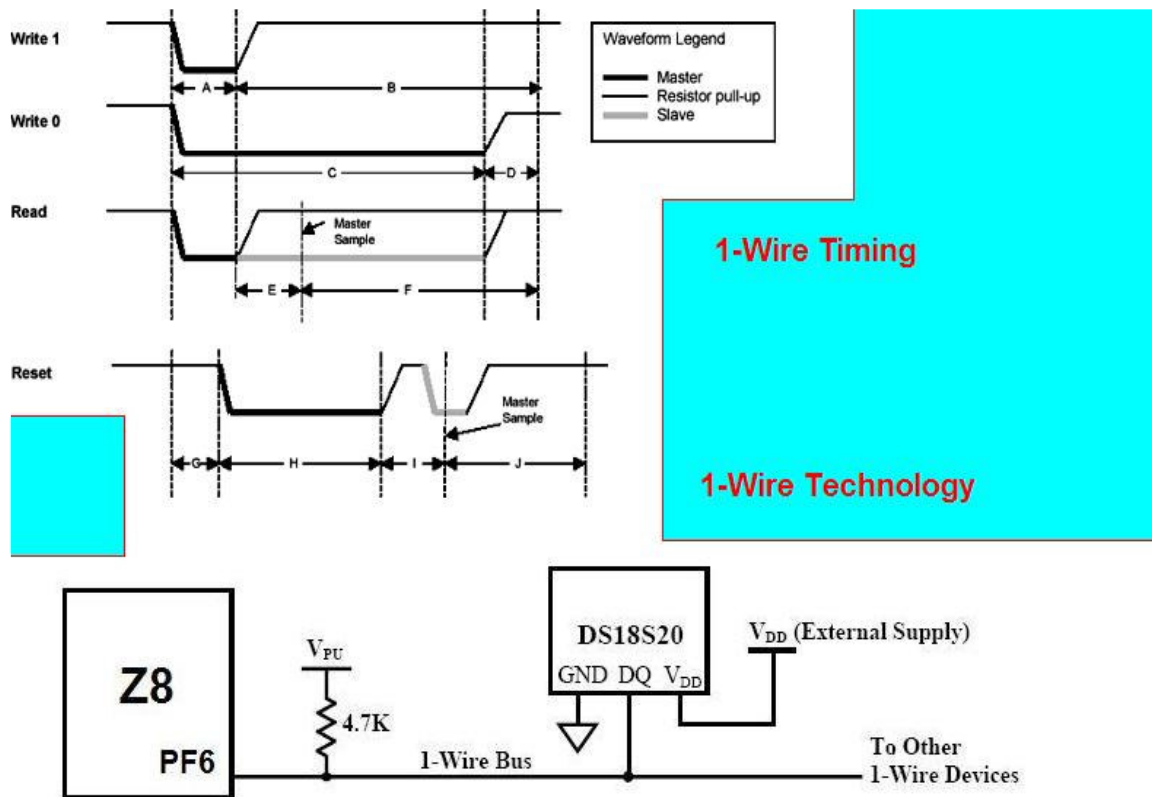
Project Abstract

The purpous of this project was to create a controller for 1-Wire devices. The bus is controlled by master, which in this case is the microcontroller inside Zilog Z8. Data is sent to the devices and retrived from them. The microcontroller will be dealing with temperature sensors. They can all be attached to the bus and offer multiple temperature readings in different places. The sensors DS1820 are ideal for this project.

Final Project



Work in progress/Schematic/Diagram



Lesson Learned

- Timing is not trivial
- Good documentation is essential
- Timing is not trivial (didn't I say it?)
- Z8 programming
- Dealing with sensors