1-Wire Routines

Bit banging 1-Wire

# Reset/Presence

The 1-Wire reset pulse is 480μs long, minimum. This value works with the DS18B20 sensors I have. After the reset pulse, the DS18B20 datasheet says the sensor waits 15μs to 60μs before pulling the line low for somewhere between 60μs and 240μs.

For the device I measured, the DS18B20 sensor waited about 27μs (between 15μs and 60μs) before pulling the line low and holding it there for 116μs (between 60μs and 240μs). So we’ll decide to read the presence pulse at 27+(116/2) = 85μs after the reset pulse ends.

