# Unanswered

1. What kind of memory does the FPGA have? How many reads per cycle? How do we use it?
2. What kind of clock period is reasonable? kbps?

# Answered

1. Is SDA/SCL default High?
   1. Yes, Reference the NXP Semiconductors document ([link](https://www.nxp.com/docs/en/user-guide/UM10204.pdf))
2. Can a “slave” initiate data transfer?
   1. No, only a master can initiate communication. For our purposes we are mainly reading data from peripherals (button, switch, slider…). So how do we know when to start reading data? Polling or interrupts.
   2. Stack exchange confirmation ([link](https://electronics.stackexchange.com/questions/307630/slave-wants-to-send-data-to-master-in-i2c))
3. How exactly does a button work?
   1. It is a switch and when the button is pressed, the wires are connected
   2. Arduino Explanation ([link](https://docs.arduino.cc/built-in-examples/digital/Button))
4. Can we use a Tri-State Buffer to manage who is in control of SDA?
   1. Apparently an open drain driver is better
   2. Stack exchange confirmation ([link](https://electronics.stackexchange.com/questions/286741/why-do-i2c-lines-use-open-drain-driver-instead-of-tri-state-drivers))