1. 10-40 MHz
2. 40 MHz
3. This is similar to interfacing the temperature sensor via the I2C protocol therefore use similar methods to mimic the timing diagram and fetch through the different states

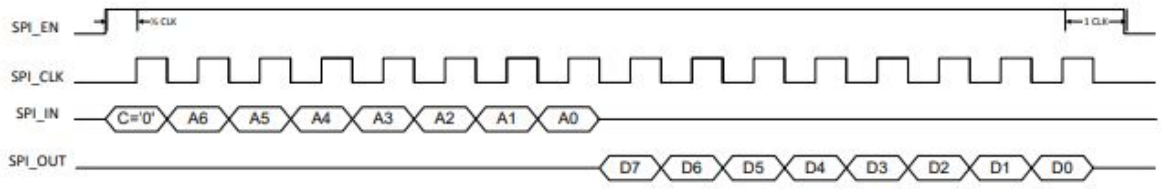

FIGURE 9: SPI READ TIMING

4. Again, this is similar to interfacing the temperature sensor via the I2C protocol. In this case we have to write to the address register with some data depending on what we want to read, similar to I2C. It will again be the same as making a FSM to mimic the timing diagram given on datasheet.

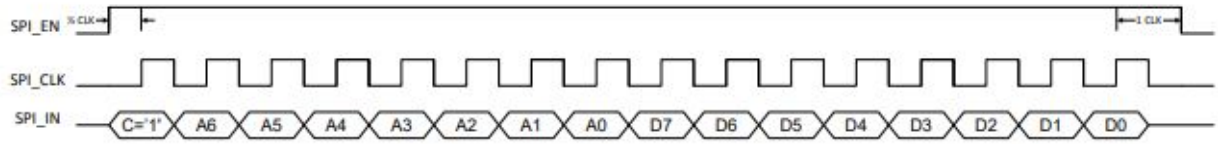

FIGURE 7: SPI WRITE TIMING