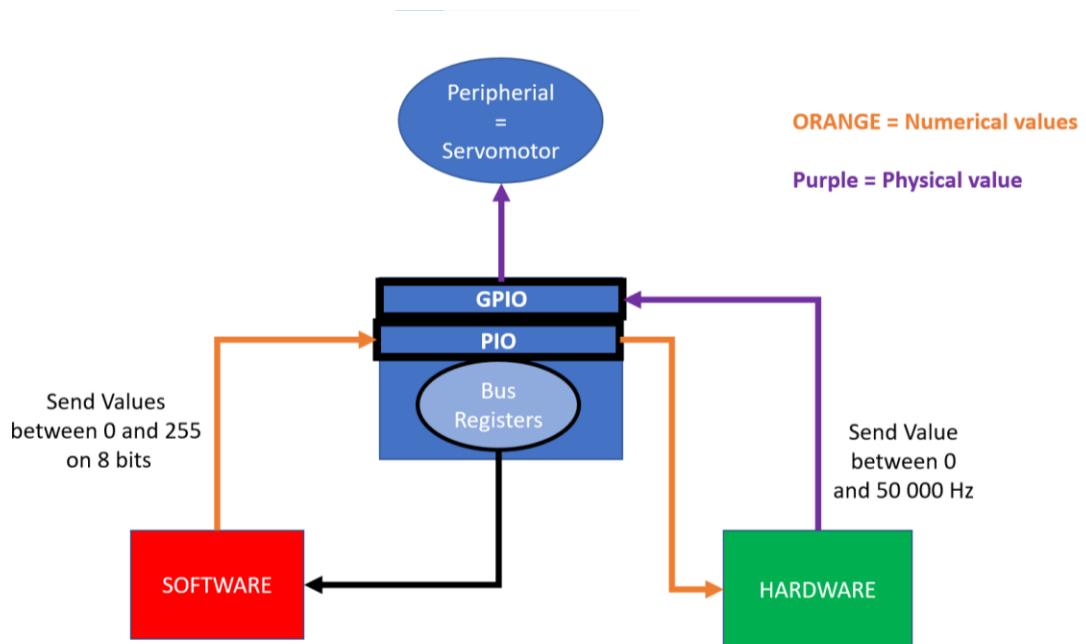# PIO and GPIO – What is that?

We noticed that much people meets difficulties to understand the differences between PIO and GPIO and where it comes into our project (Hardware, Software or Peripherial ?) we realized this little resume to help you if you are part of those people who gets totally lost with this words.

To control the servomotor, we need to convert bits in physical data (which is in our case the rotation angle in degree), for this, we need to pilot the GPIO of the FGPA.

As you can see on the graph above, the PIO (which is the circuit registers) correspond to the output of the processor, this is where we sent values as the master.

The software driver pilots the PIO and the Hardware transforms it in GPIO. The Hardware connect to the PIO and then to the GPIO to discuss.

For our project, only one GPIO is sufficient to connect with the servomotor.