# FPGA\_Inputs Experiment Setup

* Experience gained:
  + In ASCIIConvert TicToc\_ASCII should get value directly from TicToc\_Arr. Using a buffer to store TicToc\_Arr first, will cause the wrong order of the output data. (Do not know the exact reason, but I think it is because of the current execution of the instructions)
* Cautions:
  + After the reset of the FPGA the TX pin is not clear. The setup has to use the first round to clean the TX pin. The results can be recorded starting from the second round.
  + Pay attention to the compiler and optimization of AVRStudio.
  + Pay attention to the time interval, it has to be long enough for the serial communication to be finished before starting the next execution.
* Instruction:
  + Connect the devices
  + Check the fuse of the processor
  + Check the timers of the FPGA and the processor
  + Program the processor
  + Program the FPGA run the experiment for the first round
  + Throw away the results
  + Start recording with putty or any serial port client