Navigate to the folder <localpath>/ amungo_dumper_windows/ for windows environment

<localpath>/ amungo_dumper_ linux / for linux environment

Make sure to have the following files in your current directory

- 1. AmungoFx3Dumper.exe (windows) and AmungoFx3Dumper (linux)
- 2. AmungoltsFx3Firmware.img (16-bit or 8-bit)
- 3. nt1065.hex

If all these files exist, you can log data using one of the following methods:

- 1. The python script **logData.py** (u can either double click it or navigate to the current directory and run **logData.py**). **logData.py** is OS independent.
- 2. U have various command (.cmd) files for windows platform and script(.sh) for linux platform. U can choose one of these files and run them.

If you wish to change the time for data logging you will have to edit them manually by opening .cmd or .sh files.

Troubleshoot:

1. <u>Driver Error:</u> This error occurs if your device is not connected properly or the drivers for Cypress FX3 are not installed properly.

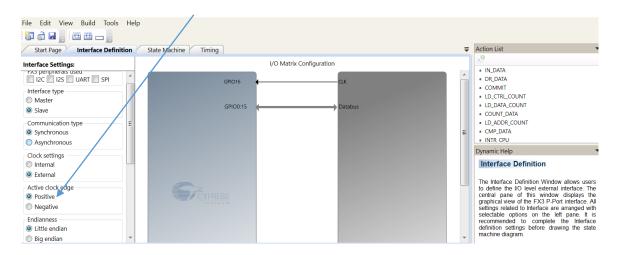
```
Is this correct? [y/n] y
Wait while device is being initing...
Problems with hardware or driver type
Press any key to continue . . .
```

- You can verify the device status in Device manager and update them if required
- 2. <u>Files Corruption Error:</u> This error means that either AmungoFx3Dumper.exe or any of your files got corrupted. This can be found out as: the stars shown below continue to animate and suddenly gets interrupted after you get a beep sound from your computer indicating device disconnection.

In this case, you will have redo the unzipping process from amungo_dumper.zip and copy the script file and other necessary files to your current directory.

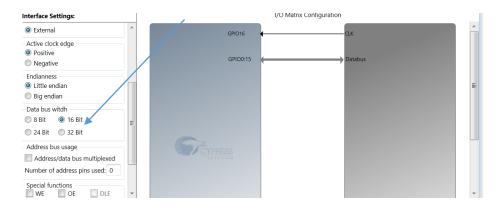
CHANGING CLOCK:

Nagaraj, has rightly pointed out that positive edge used to latch the data could create problems, though we have not observed any so far. Currently the Russian firmware uses posedge clock. This can be changed to negedge in the GPIF 2 designer as shown below:



CHANGING BUS WIDTH:

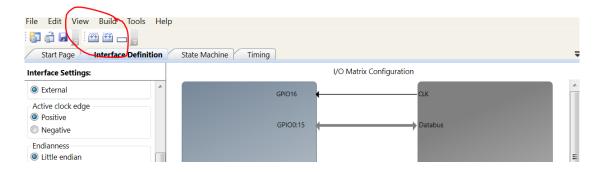
To change the bus width you have to do it from the GPIF 2 designed as shown below:



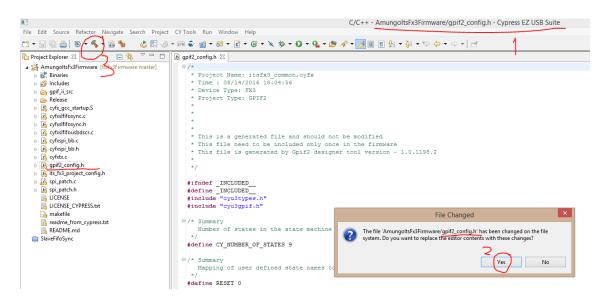
Make sure that it is reflected on the I/O matrix configuration.

RE-Build the gpif2_config.h file:

After changing any of the parameters you need to re build it as shown below:



Then make sure to reload it the CU EZB suite as follows:



IMPORTANT NOTE:

Host application is independent of the bus width. FPGA can also sample the data either in 8-, 16- or 32-bit configuration. Hence, we should be able to use a single 32-bit FX3 firmware for 8-, 16- or 32-bit data collection and the host software can take care of what width it writes to the disk based on what width the user asks. This will make our system independent of data width and only hard disk used for collection matters.