

## Technical Note

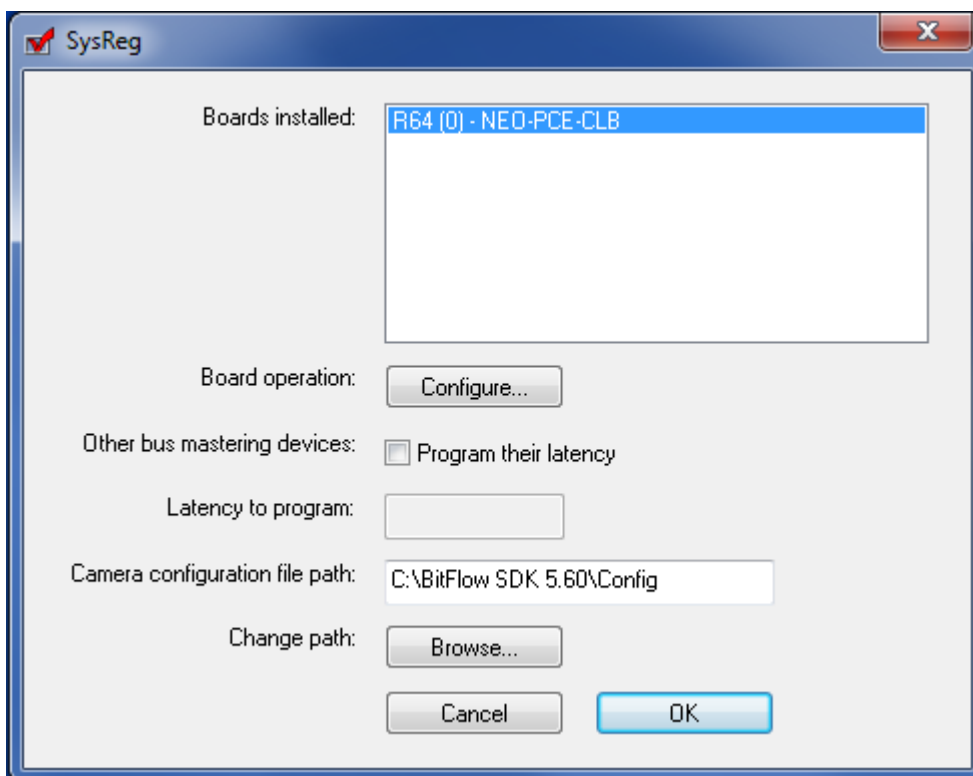
# Benchmark PCIe Bus for use with 3-tap Neo/Zyla Neon/ Karbon Cards

Some PC motherboards will have multiple PCIe slots fitted for a x4 slot, as required with the 3-tap Neon card, (or x16 slot as required for Karbon 10-tap card) but may be internally wired as less (eg x1). When selecting the PCIe slot to use with the Bitflow PCIe framegrabber cards, refer to the PC manual to ensure the best suited slot is used. ie. a x4 slot wired as x4 or x16 slot wired as x16

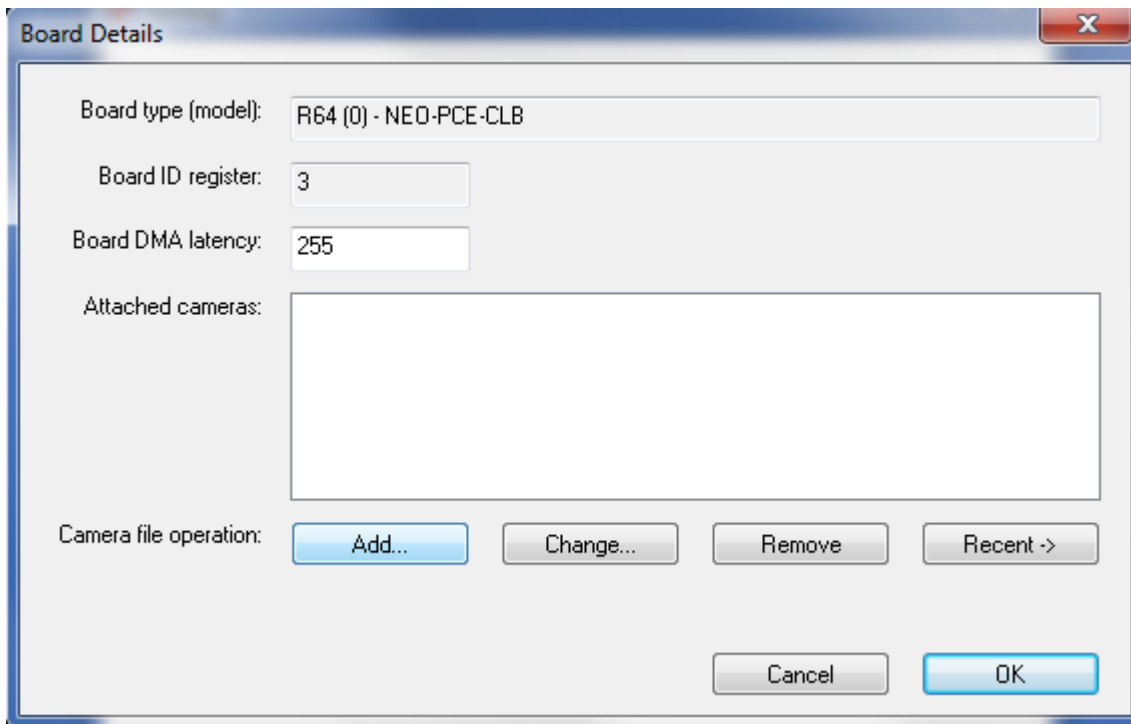
As part of the installation of the Bitflow frame grabber card for Andor 3-tap and 10-tap sCMOS cameras, CiBench is an application tool that can be used to assess the bandwidth for the PCIe slot being used. Below is an outline on how this application can be used.

Open *SysReg* from Windows desktop: *Start >> Bitflow >> SDK5.6 >> SysReg*

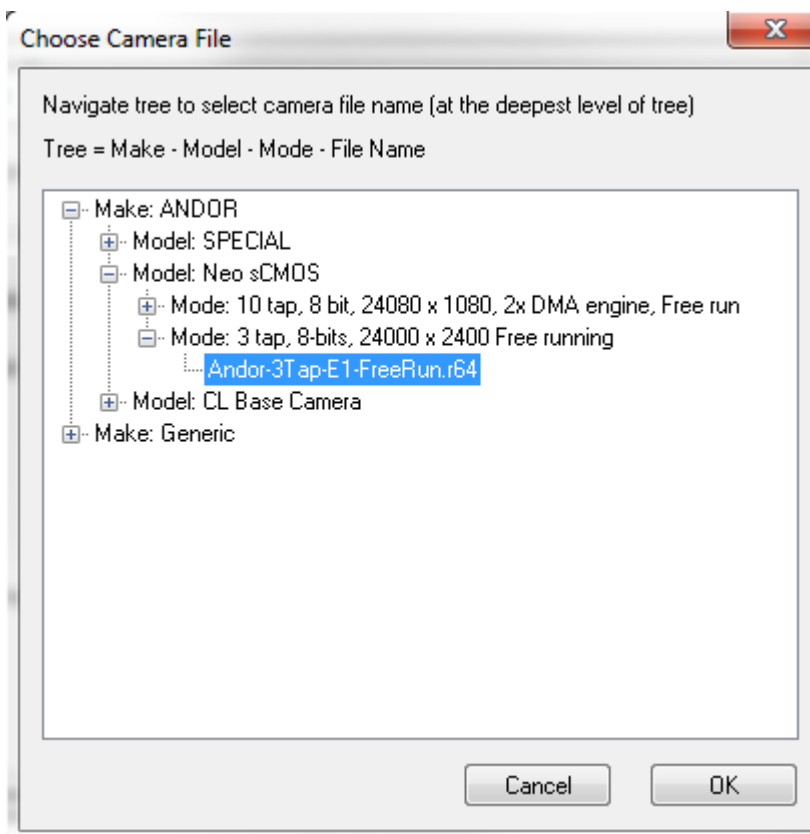
The Neon CLB will be displayed in the dialogue window, Select '*Configure*'



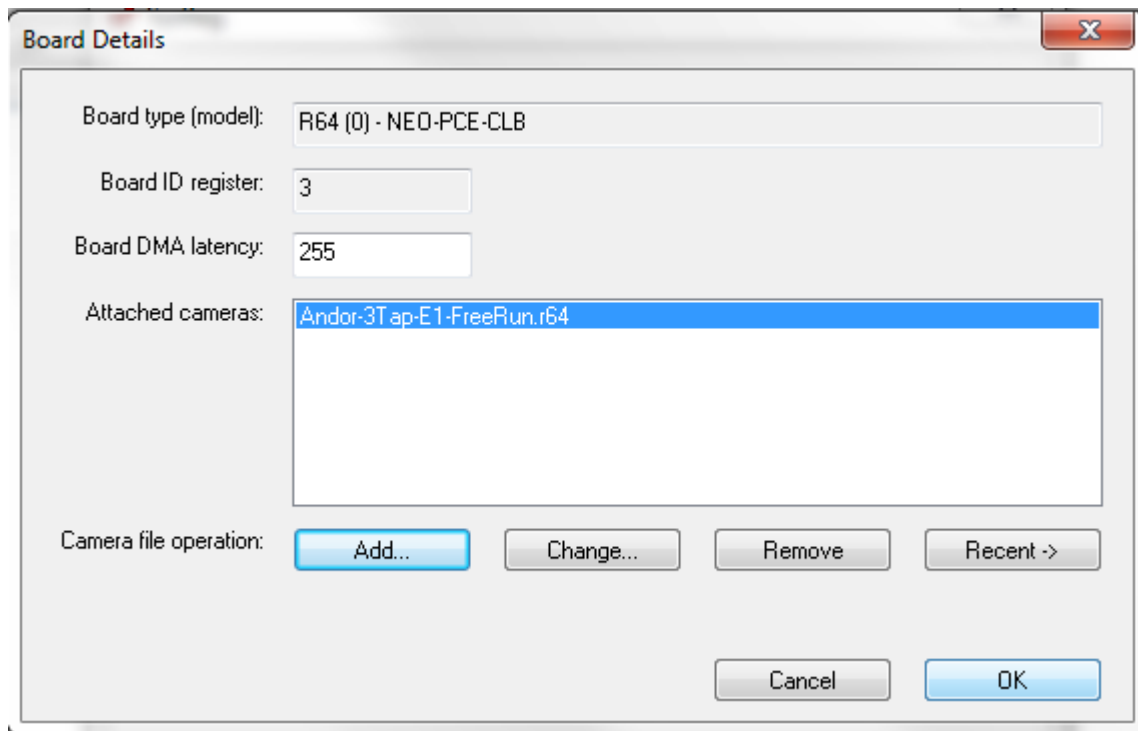
A separate dialogue box will appear. Select 'Add' to load the Andor camera file



Select the relevant Andor camera file and press *OK*

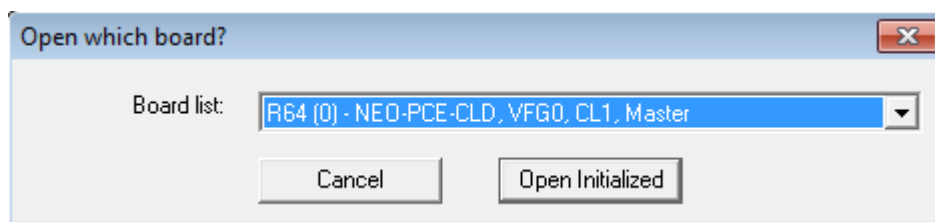


Exit the SysReg windows by pressing OK.

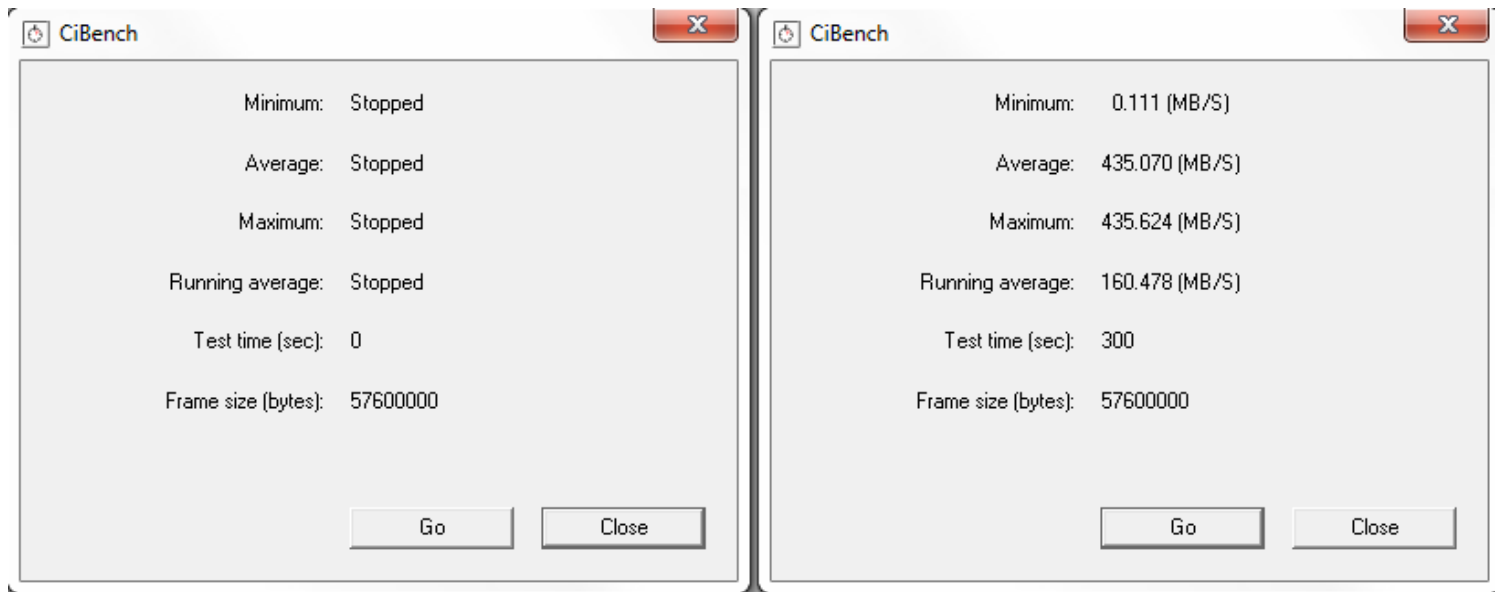


Open the *CiBench* application from Windows desktop: *Start >> Bitflow >> SDK5.6 >> CiBench*

(If prompted) Select 'Open Initialised' for the Neon card



Select 'Go' and run for about 5 minutes.



The Neon 3-tap card requires 255MB/s bandwidth and the Karbon 10-tap card requires 800MB/s to operate reliably. If this is not the case, try a different PCIe slot that meets the required specification and run the application again.