

## Clocking the sis330x module

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The clock source for the sis330x modules is now controlled via the “iosetup.txt” file. This setup file is located in C:\ilc\setup directory. For each module there is a line entry. The value v in the “F=v” field is used to specify the clock source as well the number of adc bits for each module as follows:

v	description
0	internal clock, module is 14 bits
1	external clock, module is 14 bits
2	internal clock, module is 12 bits
3	external clock, module is 12 bits.

At the begin run time, these modules get programmed, which includes selection of the clock source. By default the information from the iosetup.txt file is used. This default can be overridden from the front panel of “sis330xInit.vi” as explained by the comment therein. Note that the state of the “clock” toggle switch reflects the value used to program the sis330x module. The path for “sis330xInit.vi” file is C:\ESADAQ\shared\current\daq\sis330xInit.vi.

Notes:

- Using the values from iosetup.txt file it is possible to set the clock source of each module independently from the others.
- While overriding the values from the iosetup.txt file it is only possible to set all the modules to either internal or external clock.

At begin run time, a comment is written to the data file where the contents of the sis330x module acquire register is written (in hexadecimal), followed by either “(14)” or “(12)” for each module. The acquire register shows which clock source is used while the “(14)” or “(12)” indicates the number of adc bits.