

UF6000

Generating signals using SBench

Objective

As the UF6000 and UF6100 range of boards are relatively new, not all of the features to generate analog output signals are yet fully documented in the SBench manual.

The following guide is intended as a step-by-step set-up procedure that will allow you to generate your first signals with the UF6000 or UF6100 board and gain confidence in its use.

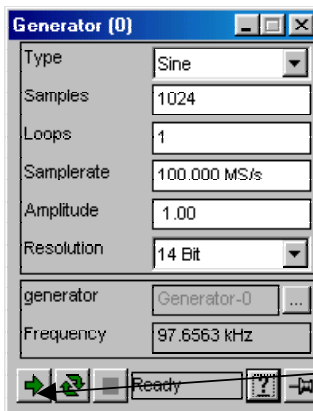
Procedure

We assume that you have installed the SBench program on your PC and that the UF6000 / 6100 board is installed. If these steps have yet to be completed, please refer to the User Manuals for SBench and the UltraFast board.

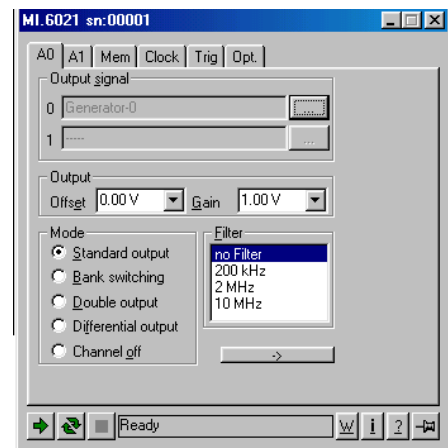
Start the SBench program. Your UltraFast board will automatically be recognized and the program will load. The dialog shown on the right will be displayed. Note that in this example the board number is displayed as MI.6021, this hardware reference for the UF6021 board.

Next we need to generate an example signal. For simple signals we can use the Generator located on the Menu bar under "New" -> "Generator" -> "Generator".

The Generator dialog is displayed:



Set the generator to the signal type, number of samples, loops and so on. It is absolutely necessary to set the correct data format for the board (14 bit). Start the Generator.



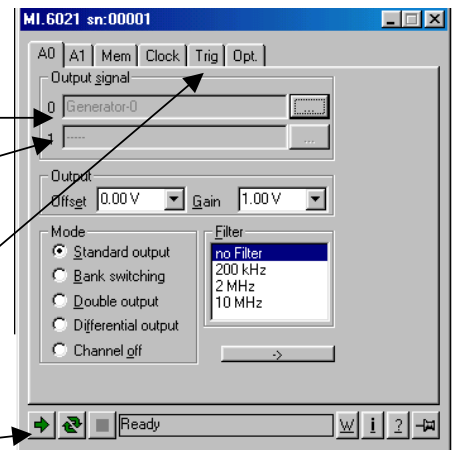
Next we can show the generated signal in a normal time display window.

Select this signal as the output in the MI.60xx hardware window.

Select a generated signal for every output or switch this output off (as shown).

Select the appropriate trigger mode. To output a continuous signal that could be reviewed with an oscilloscope, select the trigger mode to "Continuous Output"

Press the either the Singleshot or Continuous start buttons.



If the window shows "Data lock" there is an empty signal in the output. Check the different channels.

The generated signal should now be seen in the time display. You can also connect an oscilloscope to the output connector to check that the signal is present.