Application Note: AN10093

How to use offline xSCOPE on the XMOS simulator

This application note is a short how-to on programming/using the xTIMEcomposer tools. It shows how to use offline xSCOPE on the XMOS simulator.

Required tools and libraries

This application note is based on the following components:

- xTIMEcomposer Tools - Version 14.0.0

Required hardware

Programming how-tos are generally not specific to any particular hardware and can usually run on all XMOS devices. See the contents of the note for full details.

1 How to use offline xSCOPE on the XMOS simulator

Compile the following code:

```
#include <xscope.h>
int main() {
    for (int i = 0; i < 100; ++i) {
        xscope_int(VALUE1, i);
        xscope_int(VALUE2, i * 2);
        xscope_int(VALUE3, i * 3);
    }
    return 0;
}
```

Note: The 3 probes used in the above example are defined in the config.xscope file.

2   To run using the xTIMEcomposer studio

Select *Run -> Run Configurations*, and double click on the *xCORE Application* option. This will create a new Run configuration. In the *Device options* group, check the *simulator* box. Offline xSCOPE can be enabled via the checkbox in the xSCOPE tab. Running this example will produce a file named *xscope.xmt* located at the top level of the project. Double clicking on this file will open it in the *Offline Scope* view.

3 To run from the command line

    xsim a.xe –xscope '-offline xscope.xmt'

Running the above will produce a file named *xscope.xmt* in the current directory. To view the contents of the file, open the xTIMEcomposer studio and select *Tools->XScope*. In the *Offline Scope* view, use the *Load* button in the view toolbar.