

How to enable ASCII tracing when running on the simulator

IN THIS DOCUMENT

- ▶ To enable tracing from within xTIMEcomposer Studio
 - ▶ To enable tracing from the command line
-

version	1.1.0
scope	Example. This code is provided as example code for a user to base their code on.
description	How to enable ASCII tracing when running on the simulator
boards	Unless otherwise specified, this example runs on the SliceKIT Core Board, but can easily be run on any X MOS device by using a different XN file.

The simulator optionally provides a textual instruction trace.

For example, compile the following code:

```
#include <xs1.h>

port p = XS1_PORT_1A;
int main() {
    int x;
    p :> x;
    return 0;
}
```

When enabled, the input from the port 'p' into variable 'x' will produce the corresponding line in the trace file:

```
tile[0]@0- -A-.----000100cc (main + 8) : in r0(0x0), res[r0(0x10200)] @
↳ 2127
```

See the xTIMEcomposer User Guide (Tracing Table (see [XM-000930-PC](#))) for further information on the trace format.

1 To enable tracing from within xTIMEcomposer Studio

The ASCII simulator trace can be enabled via:

Run -> Run Configurations -> Simulator -> Dump simulator trace

This will send the trace directly to the console view.

Note: If required, the trace can be redirected to a file via:

Run -> Run Configurations -> Simulator -> Trace to file

2 To enable tracing from the command line

The ASCII simulator trace can be enabled via the `-t xsim` command line option:

```
xsim -t a.xe
```

If tracing of fetch no-ops (FNOPS) is required, it can be enabled via the `-enable-fnop-tracing xsim` command line option:

```
xsim -t --enable-fnop-tracing a.xe
```

This will insert the lines of the following format into the trace at the relevant locations:

```
tile[0]@0 FNOP @2655
```



Copyright © 2013, All Rights Reserved.

Xmos Ltd. is the owner or licensee of this design, code, or Information (collectively, the "Information") and is providing it to you "AS IS" with no warranty of any kind, express or implied and shall have no liability in relation to its use. Xmos Ltd. makes no representation that the Information, or any particular implementation thereof, is or will be free from any claims of infringement and again, shall have no liability in relation to any such claims.