

How to run an executable using XGDB

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| version | 1.0.1 |
| scope | Example. This code is provided as example code for a user to base their code on. |
| description | How to run an executable using XGDB |
| boards | Unless otherwise specified, this example runs on the SliceKIT Core Board, but can easily be run on any XN device by using a different XN file. |

For example, compile the following *Hello world* code ensuring that debug is enabled (-g):

```
#include <print.h>

int main() {
    printstr("Hello World!\n");
    return 0;
}
```

1 To run using XGDB from xTIMEcomposer Studio

Create a new debug configuration via *Run->Debug Configurations->xCORE Applications*. You must then choose the target, for example, either one of the currently connected development boards or the simulator. Clicking on *Debug* will start XGDB, connect to the selected target and start executing the program.

2 To run using XGDB from the command line

Start XGDB passing the resulting executable as an argument:

```
xgdb a.xe
```

Next you will need to choose the target. The XGDB *connect* command with no arguments will connect a development board, if there is only a single one connected. If there is more than one connected, then the chosen target must be specified.

Alternatively, use `connect -s` to target the simulator. The `run` command will then start execution on the chosen target. For example, executing the above code on a connected development board will result in the following session:

```
> xgdb a.exe
GNU gdb (XGDB) 12.1.0 (build 7669)
Copyright (C) 2007 Free Software Foundation, Inc.

...etc...

(gdb) connect
0x00010000 in _start ()
(gdb) run
Loading image to XCore 0
Loading section .text, size 0x1ec lma 0x10000

...etc...

Start address 0x10000, load size 764
Transfer rate: 149 KB/sec, 63 bytes/write.
Hello World!

Program exited normally.
(gdb)
```



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