

How to write to a file during execution

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

The xTIMEcomposer tools can handle system calls on behalf of the target application. This handling is enabled by default.

A file can be opened for writing as follows:

```
int fd = _open("test.txt", O_WRONLY | O_CREAT | O_TRUNC, S_IREAD | S_IWRITE
↳ );
if (fd == -1) {
    printstrln("Error: _open failed");
    exit(1);
}
```

An open file can be written using the `_write` system call

```
if (_write(fd, "hello there!", 13) != 13) {
    printstrln("Error: _write failed");
    exit(1);
}
```

We can then close an open file using the `_close` system call

```
if (_close(fd) != 0) {
    printstrln("Error: _close failed.");
    exit(1);
}
return 0;
}
```

Compile the above code. When the resulting executable is run, a file called `test.txt` containing 'hello world!' is written to the current working directory.

Note: In this case we are using the raw system call functions directory as we are working in XC. However, if working in C then it might be advisable to the the C std library equivalents: *fopen*, *fwrite* and *fclose*.