

Application Note: AN10058

# How to output on a port

This application note is a short how-to on programming/using the xTIMEcomposer tools. It shows how to output on a port.

---

## 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 output on a port

To output on a port you need to declare a global port variable. No two ports may be initialized with the same port identifier:

```
out port p = XS1_PORT_1A;
```

The value XS1\_PORT\_1A refers to an external pin on the device. It is defined in the header file xs1.h, which must be included to use these port initializers: Port output is done via the <: operator. The following statement outputs the value 1 to port p, causing the port to drive its corresponding pin high:

```
p <: 1;
```

The port continues to drive its pin high until execution of the next statement which outputs the value 0 to port p, causing the port to drive its pin low:

```
p <: 0;
```