How to output data accompanied by a data valid signal

version	1.1.1
scope	Example. This code is provided as example code for a user to base their code on.
description	How to output data accompanied by a data valid signal
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.

A clocked port can generate a readyOut strobe signal whenever data is output. The program below causes an output port to drive a data valid signal whenever data is driven on a 4-bit port.

The following statement configures the output port outP to drive the port outR high whenever data is output. The readyOut port must be 1-bit wide.

```
configure_out_port_strobed_master(outP, outR, clk, 0);
```

The port drives two 4-bit values over two clock periods, raising the readyOut signal during this time.

```
outP <: 0x85;
```

It is also possible to implement control flow algorithms that output data using a readyIn strobe signal and input data using a readyOut strobe signal; when both signals are configured, the port implements a symmetric strobe protocol that uses a clock to handshake the communication of the data.