

**Application Note: AN10052** 

## How to input data accompanied by a data valid signal

This application note is a short how-to on programming/using the xTIMEcomposer tools. It shows how to input data accompanied by a data valid signal.

## 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 input data accompanied by a data valid signal

A clocked port can interpret a "ready-in" strobe signal that determines the validity of the accompanying data. For example, you can setup a program to only input data from a clocked port only when an associated signal is high.

The following statement configures the input port inP to be sampled only when the value sampled on the port inReady equals 1. The port used as a data valid signal must be 1-bit wide.

configure\_in\_port\_strobed\_slave(inP, inReady, clk);

Data is sampled on the rising edge of the clock whenever the signal on the port inReady is high.

inP :> void;



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