

How to use an ordered select statement

version	1.1.0
scope	Example. This code is provided as example code for a user to base their code on.
description	How to use an ordered select statement
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 select statement waits for one of a set of inputs to become ready, performs the selected input and then executes a corresponding body of code. Each input is preceded by the keyword `case` and its body must be terminated with a `break` or `return` statement. Case statements are not permitted to contain output operations. Selects can also be ordered so that priority is given based on the order of the case statements. This allows code to take a decision over which to execute first when events occur at the same time.

In this example the select statement is used to wait for either an input on `chnlend_a` or an input on `chnlend_b`. When an input is received from either channel the value of the input is printed. Using `#pragma ordered` the order in which events are processed is based on the order of case statements in the select.

```
#pragma ordered
select
{
  case chnlend_a :> chnl_input_a :
    printstr("Channel Input A Received ");
    printintln(chnl_input_a);
    break;
  case chnlend_b :> chnl_input_b :
    printstr("Channel Input B Received ");
    printintln(chnl_input_b);
    break;
}
```