

Application Note: AN10067

How to use the select statement with a default case

This application note is a short how-to on programming/using the xTIMEcomposer tools. It shows how to use the select statement with a default case.

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 use the select statement with a default case

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. There are however occasions when it is not reasonable to wait on one of the inputs to become ready. In this instance a default case statement can be used to exit the select statement immediately if no inputs are ready.

In this example the select statement is used to wait for either an input on `chn1end_a` or an input on `chn1end_b`. If an input is available from either channel the value of the input is printed. If neither channel has an input ready then the default case is executed.

```
select
{
  case chn1end_a :> int chn1_input_a :
    printstr("Channel Input A Received ");
    printintln(chn1_input_a);
    break;
  case chn1end_b :> int chn1_input_b :
    printstr("Channel Input B Received ");
    printintln(chn1_input_b);
    break;
  default :
    printstrln("Default Case executed");
    break;
}
```

Care should be taken when using a default case statement as it can have the same effect as the processor polling for input. This will ultimately have a drain on the power and waste valuable clock cycles.