

Application Note: AN10044

# How to use pass-by-reference in XC

This application note is a short how-to on programming/using the xTIMEcomposer tools. It shows how to use pass-by-reference in XC.

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## 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 pass-by-reference in XC

In XC you can pass function parameters “by reference”. Any changes to pass-by-reference parameters will also change the original variable passed in by the calling function.

For example, the following function takes a reference parameter x and adds 10 to it.

```
void add10(int &x)
{
    x += 10;
}
```

This function can then be called and the argument will be updated

```
int y=5;
add10(y);
printf("y=%d\n", y); // This will print out 15
```