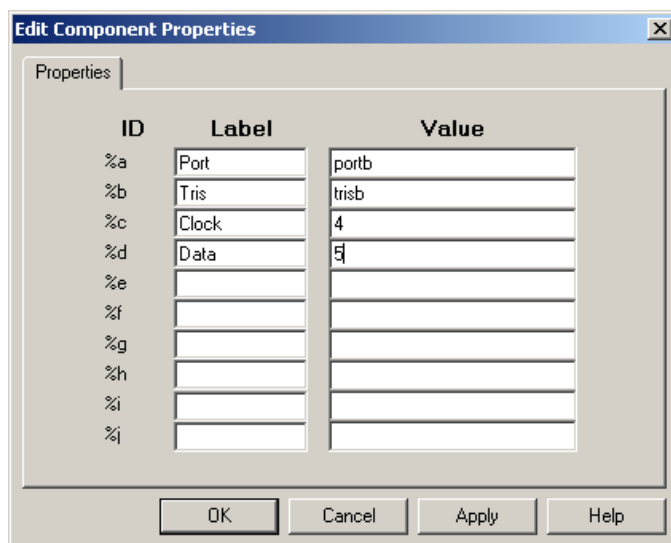## Custom Components For Flowcode

The custom component is not supported and therefore if you wish to use it then you can not expect any help or support from Matrix Multimedia unless there is an actual problem with Flowcode itself.

 The Custom Component Icon

The Custom Component

Custom Component Properties

The Custom component refers to a custom_code.c file that is located in the Flowcode V3/components folder.

To create your own custom component you must follow this process.

At the bottom of the file add your C code functions.

Eg
char add_vars (char a, char b)
{
   return (a+b);
}

Next at the top and bottom of your functions add the following.

```
char add_vars (char a, char b)
{
/*Macro_ add_vars _Start*/
        return (a+b);
/*Macro_ add_vars _End*/
}
```

Next scroll up to near the top of the code file and find the [MacroNames] section.

For the Count value, simply add 1 to the number of functions you are using. (1 is always the GetDefines function that is used by Flowcode)

```
Eg
[MacroNames]
Count=2
1=GetDefines
2= add_vars
```

With the [MacroReturns] section add your return type

```
Eg
[MacroReturns]
1=void
2=char
```

With the [MacroIsPrivate] section add 0

```
Eg
[MacroIsPrivate]
1=1
2=0
```

Then just above the line of ********* add the parameter types.

```
Eg
[MacroParameters_ add_vars]
Count=2
1=a
2=b
```

```
[MacroParamTypes_ add_vars]
1=char
2=char
```

This creates the function in a way that is compatible with Flowcode.

If you wish to include values from Flowcode into your code then you must do the following.

Find the section of Defines.

```
//Common Defines
#define MX_EX1      %a
#define MX_EX2      %b
#define MX_EX3      %c
#define MX_EX4      %d
#define MX_EX5      %e
#define MX_EX6      %f
#define MX_EX7      %g
#define MX_EX8      %h
#define MX_EX9      %i
```

and change to definition name as you wish.

```
Eg
//Common Defines
#define MX_VALUEA       %a
#define MX_EX2      %b
#define MX_EX3      %c
#define MX_EX4      %d
#define MX_EX5      %e
#define MX_EX6      %f
#define MX_EX7      %g
#define MX_EX8      %h
#define MX_EX9      %I
```

Now you can use MX_VALUEA in your code to represent the value passed from Flowcode.

This could be a register name such as portb or it could be a pin number such as 0.

Now you should be able to run Flowcode and by including the custom component into your program you can use hardware macro icons to call your functions like you would with any standard component.

For further help refer to the original custom_code.c file.

More examples of custom code files can be found in the Beta components section of the Download area of the website.