Using BmpConvert16

The following tutorial describes the procedure for using the BmpConvert utility for generating a c hex array compatible with the ST7735R LCD display.

# Procedure

## Step 1

Create (using MS Paint) or download a bitmap (bmp) file with width less than or equal to 128 pixels and height less than or equal 160 pixels. Make sure the file is saved in the 24-bit bmp format (if using MS Paint, you can select this on save). The file should be saved to the project directory. Keep in mind that The filename will be used as the name of the array in C.

## Step 2

Execute BmpConvert16.exe and type the image filename without the extension. The program will create a text file with a similar name. It will contain an array and constant that you can use in your code.

## Step 3

Open the corresponding txt file, select all, copy. In Keil, open the Image.h file paste the contents into the file. You can now use the constant in the header from other parts of your code. For example, if you have implemented the low level LCD drivers, you can draw the image to the LCD display using the ST7735R’s graphics library (also included in the project – ST7735.h).

Ex: ST7735\_DrawBitmap(4, 159, Horse, 120, 160);

The first and second parameter are the x and y coordinates of the image. The third parameter is the bitmap array, and remaining parameters are the width and height of the image.