

USING TEXTPAD AND COLOR SYNTAX HIGHLIGHTING

Application Note

v1.1

INTRODUCTION

If you intend to use Textpad to edit and develop *smart*BASIC source code, then the goal of this document includes the following:

- To explain how to configure Textpad's color syntax highlighting for *smart*BASIC code

REQUIREMENTS

- Windows PC (XP or newer) with Textpad version 7.0 or newer installed. You can download a trial version from the following URL: <http://www.textpad.com/download/index.html#downloads>

OVERVIEW

When editing and developing source code for programs most modern text editors can display the code with color syntax highlighting.

The color scheme is based on the underlying syntax of the language for which the code has been written. *smart*BASIC has a BASIC flavour and in addition, for each implementation, there are platform-specific extension functions.

Textpad can be configured using a .syn file which defines the color syntax highlighting for a specifically named programming language. As of September 2013, all BL600 firmware upgrade zip files from Laird contain a file called **smartBASIC(textpad).syn** which can be used to configure Textpad to display *smart*BASIC source code. For example, all *smart*BASIC functions and routines are named in the .syn file so that when writing code, if the color of the function does not change as it is supposed to, it is a good indication that you have misspelled the function.

A typical look and feel of *smart*BASIC source fragment in Textpad when configured appropriately is shown in Figure 1. For example, **UartCloseEx()** is an extension function displayed in a different color from the token **function** which is part of the core language.

```

57  '*****
58  '// Handler definitions
59  '*****
60
61  '-----
62  '// Uart Inactivity timer handler
63  '-----
64  function handlerUartTimer() as integer
65      dim rc
66      '//Close the uart, and set up TX/RX/RTS lines as gpio and for a hi-lo transition
67      '//on the RX line to be detected
68      if UartCloseEx(1) == 0 then
69          rc=GpioSetFunc(21,2,1)  '//TX - set high on default
70          rc=GpioSetFunc(23,2,0)  '//RTS - set low by default
71          rc=GpioSetFunc(22,1,2)  '//RX - Pull high input & irq on hi2lo transition
72          rc=GpioAssignEvent(UART_GPIO_ASSIGN_CHANNEL,22,1)
73          if rc != 0 then
74              print "\nGpioAssignEvent() Failed"
75          endif
76      endif
77  endfunc 1

```

TEXTPAD SETUP

Note: Textpad only has to be configured one time for color syntax highlighting. The configuration remains intact each time Textpad is used.

To configure Textpad for color syntax highlighting, follow these steps:

1. If necessary, install Textpad (version 7.0) and save it in the following folder: **C:\Program Files\Textpad 7**.
2. From the BL600 firmware upgrade zip file, copy the `smartBASIC(Textpad).syn` file to the following folder: **C:\Program Files\Textpad 7\system**.

Note: You must perform this action each time a new firmware zip is released by Laird. Each newly-released firmware may contain new extension functions which will require highlighting.

3. Open Textpad and close all current Textpad documents including the empty document that Textpad initiates.
4. From the menu, select **Configure > Preferences**.
5. From the Preferences dialog box in left side list box, click **Document Classes**.
6. In the User Defined Classes list box, add the word `smartBASIC`.
7. In the far left list box, click the bordered + beside the Document Classes item to expand it and display a sublist.
8. From that sublist, click `smartBASIC`.
9. In the Files in class `smartBASIC` list box, add the following lines:
 - `*.sb`
 - `*.slib`
10. Click the bordered + beside the `smartBASIC` to expand the far left list box and click **Syntax**.
11. Select the **Enable syntax highlighting** checkbox.
12. In the Syntax definition file dropdown box, enter or select the file `smartBASIC(Textpad).syn` from the folder where you saved it in step 2.
13. In the list box select **Colors** and then from the 'Item:' list box select **Keywords 1** or any item that you wish to change the color for and do so using dropdown boxes on the right.
14. Select **OK**.
15. Close and restart Textpad.

Loading a `.sb` or a `.slib` file from the sample apps folder in the firmware zip file should now result in the source code being displayed with color syntax highlighting.

Further Information

Further information relating to `smartBASIC` and the BL600 module can be found at the Laird website at <http://www.lairdtech.com/products/bl600-series>.

REVISION HISTORY

Revision	Date	Description	Approved By
1.0	24 Sep 2013	Initial Release	Jonathan Kaye
1.1	27 Mar 2015	Rebuilt, reorganized. Fixed web link.	Dave Drogowski