*P1.1.1*

Test Plan *Template*

Version *<1>*

*<18/10/2017>*

VERSION HISTORY

**EmbedIT Template Version:** 09/15/17

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| --- | --- | --- | --- | --- | --- | --- |
| **Version #** | **Implemented**  **By** | **Revision**  **Date** | **Approved**  **By** | **Approval**  **Date** | **Reason** | **Mark** |
| 1 | *Oghenekome Michael* | *10/17/2017* | *<name>* | *<mm/dd/yy>* | Original test plan |  |
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# Introduction

## Purpose of The Test Plan Template Document

The purpose of this test plan document is to test the modularized and non-modularized version of the LED Blink project P1.1.1. Both versions, the modularized and non-modularized(original) versions should rotate the blinking of the LEDs. LED 2 should Blink After LED 1, LED 3 should blink after LED 2 and LED 4 should blink after LED 3 in that order. Then LED 1 blinks again. This cycle should continue for at least 20 seconds. After which the tester can check the project as a success for completing 20 seconds of rotating blinking.

# REFACTORING Testing

## Test Plan and Cases

|  |  |  |  |
| --- | --- | --- | --- |
| **Item to Test** | **Test Description** | **Test Date** | **Responsibility** |
| Modularized and non-Modularized LED Blinking Code | The non-modularized version is run and the LED blinking is timed for 20 seconds. The modularized version is run as well for the same time duration as the first. They should both rotate and blink for at least 20 seconds. | 10/17/2017 | Oghenekome Michael |
|  |  |  |  |

## Test Procedure

|  |  |
| --- | --- |
| Instruction | P/F |
| 1. Extract the folder called v1 from the P1.1.1.zip file, and place the folder v1 and its contents in a directory called OghenekomeMichael\MPLABXProjects \P1\P1.1.1\. |  |
| 1. Extract the folder called v3 from the P1.1.1.zip file, and place the folder v3 and its contents in a directory called OghenekomeMichael\MPLABXProjects\P1\P1.1.1\. |  |
| 1. Start MPLAB X: click on MPLAB X in the taskbar, as explained by Step 1 of [1]. |  |
| 1. Connect the MX7cK board to the PC using the USB cable, as explained by Steps 2-3 of [1], and switch the board to the ON position. |  |
| 1. Open the project called LEDBlinking by selecting File->Open Project, and then browsing to OghenekomeMichael\ MPLABXProjects\P1\P1.1.1\v1, and then selecting the v1 project LEDBlinking. |  |
| 1. Open the project called LEDBlinkingMod by selecting File->Open Project, and then browsing to OghenekomeMichael \MPLABXProjects\P1\P1.1.1\v3, and then selecting the v3 project LEDBlinkingMod. |  |
| 1. Select the LEDBlinking project by clicking on the LEDBlinking project name in the Projects folder of MPLAB X. |  |
| 1. Build the LEDBlinking project by selecting Run->Build Project. You should see the message “BUILD SUCCESSFUL” in the Output window. |  |
| 1. Run the project by selecting Run->Run Project. You should see the message “Programming/Verify complete” in the output window and the LEDs should be rotating. |  |
| 1. Using a timing device with a second’s display, such as watch, time 20 seconds, and record this time. |  |
| 1. Select the LEDBlinkingMod project by clicking on the LEDBlinkingMod project name in the Projects folder of MPLAB X. |  |
| 1. Build the LEDBlinkingMod project by selecting Run->Build Project. You should see the message “BUILD SUCCESSFUL” in the Output window. |  |
| 1. Run the project by selecting Run->Run Project. You should see the message “Programming/Verify complete” in the output window and the LEDs should be rotating. |  |
| 1. Using a timing device with a seconds display, such as watch, time 20 and record this time. |  |

# Approval

The undersigned acknowledge they have reviewed the *P1.1* **Test Plan Template** document and agree with the approach it presents. Any changes to this Requirements Definition will be coordinated with and approved by the undersigned or their designated representatives.

[List the individuals whose signatures are required. Examples of such individuals are the TA, Business Steward, Technical Steward, and Project Manager. Add additional signature lines as necessary.]

|  |  |  |  |
| --- | --- | --- | --- |
| Signature: |  | Date: |  |
| Print Name: |  |  |  |
| Title: |  |  |  |
| Role: |  |  |  |

# References

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| [1] | K. Ferens, "ECE 3740 Systems Engineering Principles 1," 15 September 2001. [Online]. Available: http://ece.eng.umanitoba.ca/undergraduate/ECE3740/. [Accessed 16 September 2017]. |