

Software Testing Instructions

Note: Before proceeding with reading and following this document, make sure you have gone through:

1. *Hardware Manual of eYFi-Mega development board*
2. *Software Manual of eYFi-Mega development board*
3. *Hookup guide for Line Follower Array*

These documents are provided in the **Manuals** folder, you can also find them from the **Downloads** page of the website: <https://e-yantra.org/products/eyfi-mega> and <https://e-yantra.org/products/eylfa>.

This file contains instructions for testing the eY-IDE provided to you. Here you will be flashing four different experiments to the eYFi-Mega board using 2 (two) different flashing techniques.

The aim of these tasks is to get you familiar with all the functionality available with eYFi-Mega board and eY-IDE.

Flashing Techniques:

1. Wired
2. Wireless (Over-The-Air)
3. Using File Server (will not be used here, as you have already got familiar with it from the [1. Hardware_Testing_Instructions.pdf](#) document)

Example Experiments:

Table below gives the reference for example files that need to be flashed and its corresponding flashing technique that needs to be used. Example codes are provided in the **Test_Files** folder, you can download the example files from the **Quick Bytes** page of the website: <https://e-yantra.org/products/eyfi-mega>.

Note: (refer the Software Manual of eYFi-Mega development board) for brief explanation on how to use above stated flashing techniques and how to open given examples in eY-IDE.

Sr. No.	Name	Controller	Flashing Technique	Expected Output
1.	1_Digital_Output	ATmega 2560	Wired	RGB LED blinking at a with a delay of 1Sec
2.	5_Analog_Output_PWM	ATmega 2560	Wireless (OTA)	RGB LED will change color from red to green to blue and repeat this cyclically.
3.	Creating blinky program for Wi-Fi status LED with delay of 1 sec from the default skeleton*	ESP32	Wired	Wi-Fi Status LED blinks with a delay of 1 sec
4.	Creating blinky program for Wi-Fi status LED with delay of 500 ms from the default skeleton*	ESP32	Wireless (OTA)	ESP32 Blue Led blinking with a delay of 500 ms

* You have to create a **New Project** in eY-IDE for ESP32. You will get the default skeleton for the blinky program with delay of 1 sec.

Youtube Link: https://youtu.be/4-zG-ulq_ew