

## ABSTRACT

Fino is a arduino uno based device that has integrated Wi-Fi. At Fino we will use the Wifi chip Esp 8266 that has supported the network 2.4GHz 802.11 b / g antenna on board. Background by the use of a shield which is less effective as a separate boardnya with arduinonya. In earlier research, but there are similar devices using Bluetooth. Where bluino can be reprogrammed via a smartphone or laptop. But at this Fino has not been able to program is limited to Fino can function as a client, Access Point and sends the data to the web server.

Design and manufacture Fino began with the manufacture schematicnya routing using software eagle, PCB design Fino using PCB double layer, using the SMD components, checking lines or troubleshooting, testing on foot i / o her, testing communication Wifi, then analyzes the results of the appliance see aesthetic value so it is worth selling.

Fino can be a device capable of being used in everyday life and also more efficient compared with arduino uno and mini because of fino is integrated with Esp8266 wifi module so that it can to communicate wirelessly. As well as the development of the internet is so rapid Fino is expected to be able to support other devices such as temperature and humidity sensor module to connect to the Internet.

Keywords: Wi-Fi, arduino, Esp 8266