

# ESP-32 Compact Personal Alarm

ENV-005A

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## Envlron

Envlron Freeware

Dunedin, New Zealand

## Overview

The ENV-005A Personal Alarm will be a small, subtle alarm system that aims to meet the following specifications from the client:

- Compact
- (Optional) Vibrate when triggered
- LED light when triggered
- Notifies emergency contacts
- (Optional) Sister app for notifications
- (Optional) Uses phones location service
- Capable of handling a minimum of 3 recipients
- (Optional) Battery Indicator
- (Preferred) Button battery
- (Preferred) Semi-Budget
- Not intended for mass-production as of yet – I.E Small release, proof of concept

## Milestones

I.Parts Sourced

An extensive search will be done to ensure cheap, quality, easy to source, and currently available components

## II.Circuit Diagram Creation

The first draft of the non-scaled diagram

## III.PCB Drafting

The first PCB design is drawn up

## IV.Prototyping

Basic prototyping on a breadboard

## V.PCB Prototype

The PCB is printed and put together

## Step II: Ideas come to reality.

We were pleased to make your idea real.

### Parts

The full parts list will be published upon the release of the final product.

### Code

The ENV-005A will be coded with a simple python program where if [PIN] is pulled high, the alarm will activate, vibrating and keeping an LED lit, until the battery is removed. This will be achieved using [Micropython for ESP-32](#). It will have a simple, lightweight main.py file importing [Machine](#) and [UBluetooth BLE](#). An IOS compatible version may be coded and released in the future, due to the problems with no side-loading compatibility on IOS devices. (Apple states this is for the safety of the average user).

The code will be published on Github as part of our *Open Source Agreement*.