

# PY32L020(TSSOP20)-Start Kit

## User Guide



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## 1. Introduction

The development board uses the PY32L020 as the main controller. The board provides a simple hardware development environment for the Puya chip with 32 bits ARM® Cortex®-M0+ CPU core. The board uses the TYPE C interface for power supply. Peripheral resources such as SWD, Reset , User button key, Reset key, LED, etc. are provided, including expansion pins. This document provides detailed hardware schematics and guidelines for using the associated applications.

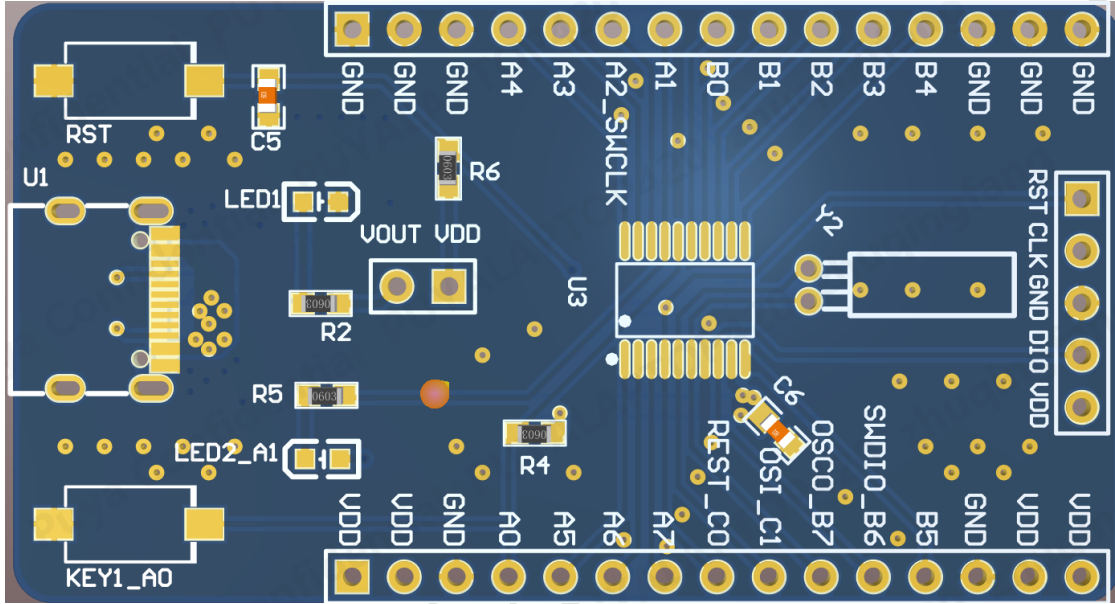


Figure 1-1 PY32L020 Start Kit

## 2. Functional pin assignment

Table 2-1 Pin Assignment

| Function | Pin | Description | Note      |
|----------|-----|-------------|-----------|
| LED      | \   | LED1        | Power LED |
|          | PA1 | LED2        | LED       |
| KEY      | PA0 | KEY1        | User Key  |
|          | PC0 | RST         | Reset Key |

## 3. Getting Started Guide

The development board uses a TYPE C to LDO to provide 3.3 V power. In order to download the program to the development board, a TYPE C cable is required. We need to connect the USB cable, if LED1 is lit, the power supply is connected in the correct way. The routines are provided for the Keil version only.

## 4. Overview of Hardware Design

### 4.1 Power supply

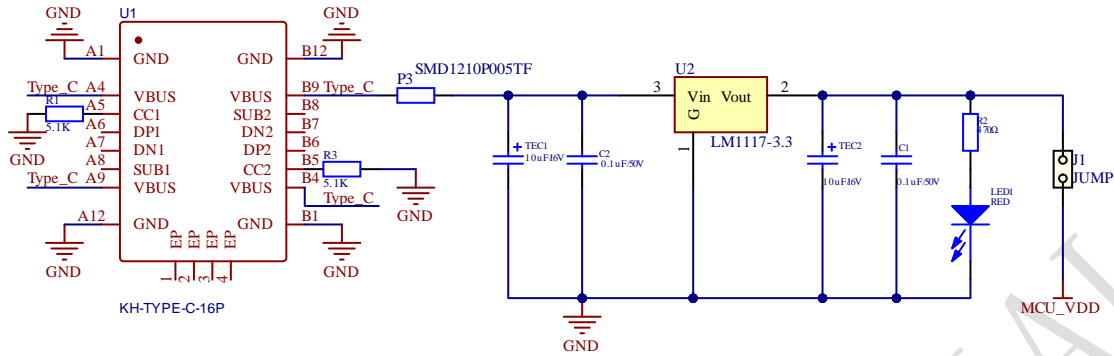


Figure 4-1 Power supply schematic

## 4.2 LED indicator light



Figure 4-2 LED Functional schematic

## 4.3 Keys

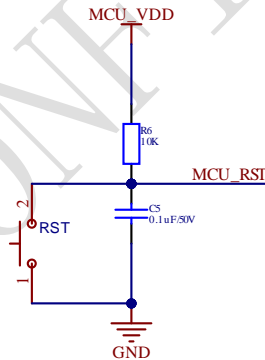


Figure 4-3 Reset key function schematic

# 5. Guide to Using the Example

## 5.1 GPIO Toggle

### 5.1.1 Purpose of the Example

This sample program includes the following functions of the MCU:

- Learn to control LEDs using GPIOs
- Learn to use SysTick to generate time delays

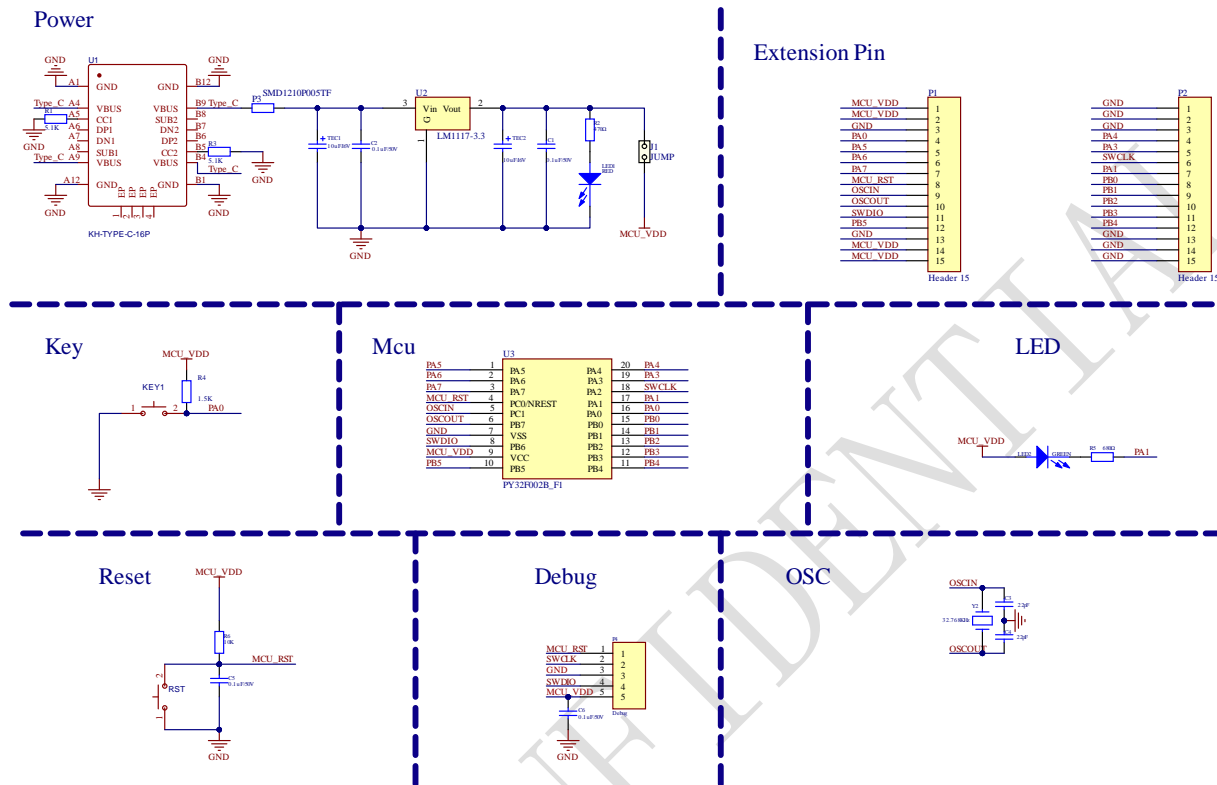
There is one LED on the development board, the LED is controlled by GPIO. This sample program will tell how to light up the LED.

### 5.1.2 Execution Results

Download the program <GPIO\_Toggle> to the development board and you will see the LED blinking.

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## 6. Schematic



## 7. Updated History

| Version | Content             | Date       |
|---------|---------------------|------------|
| V1.0    | Initial version     | 2023/01/15 |
| V1.1    | Updated the picture | 2024/05/16 |
|         |                     |            |



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