

MuntsOS Embedded Linux

Application Note #13: Python3 LED Flash Example

**Revision 1
30 January 2024**

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Introduction

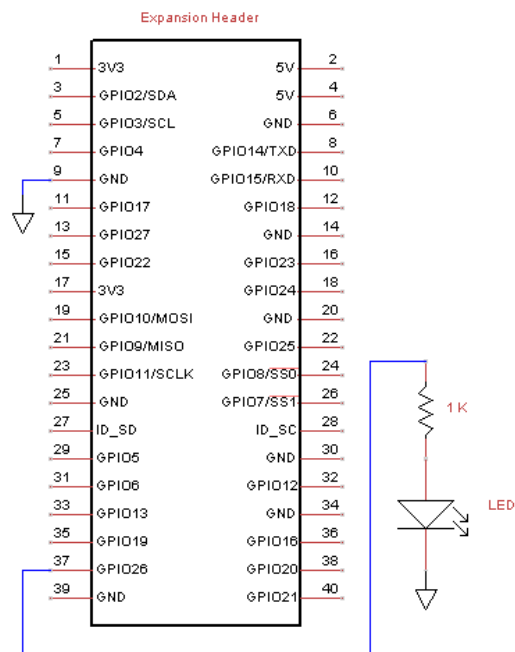
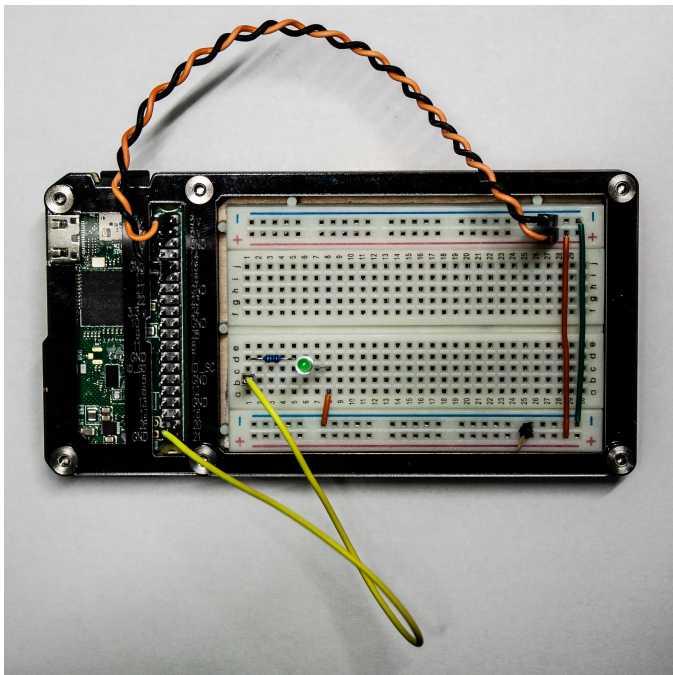
This application note describes how to run a Python3 program to flash an LED on a target computer running **MuntsOS Embedded Linux**, using the Python3 runtime extension.

Prerequisites

MuntsOS Embedded Linux must be installed on the target computer ([AppNote #3](#)).

The Python3 runtime extension `python3-muntsos-aarch64.deb` must be installed on the target computer, by running the `sysconfig` command on the target computer.

Test Platform Hardware



The test platform for the purposes of this application note consists of a [Raspberry Pi Zero 2 Wireless](#) mounted in a [Zebra Zero Plus Breadboard](#) case. The orange and black jumper wires connect +3.3V and GND on the Raspberry Pi expansion header to the breadboard power rails. The yellow jumper connects GPIO26 to a 1K ohm current limiting resistor and an LED.

Test Program Source Code

Available for download at: <http://git.munts.com/muntsos/doc/blinky/blinky.py>

```
#!/usr/bin/python3

from libsimpleio.gpio      import Pin, Direction
from libsimpleio.raspberrypi import GPIO26

import time

print("\nMuntsOS Python3 LED Test\n")

LED = Pin(GPIO26, Direction.Output)

while True:
    LED.state = not LED.state
    time.sleep(0.5)
```

Exercise

This example exercise demonstrates how run `blinky.py` on the test platform hardware.

Step 1: Download the `blinky` program:

```
wget http://git.munts.com/muntsos/doc/.blinky/blinky.py
```

Step 2: Copy the `blinky` program file to the target platform:

```
scp blinky.py root@snoopy:.
```

Step 3: Run the test program on the test platform:

```
ssh root@snoopy
chmod 755 blinky.py
./blinky.py
```

The LED should begin flashing once a second, until you press `CONTROL-C`.