MuntsOS Embedded Linux

Application Note #26: Java LED Flash Example

Revision 6
30 January 2026

by Philip Munts
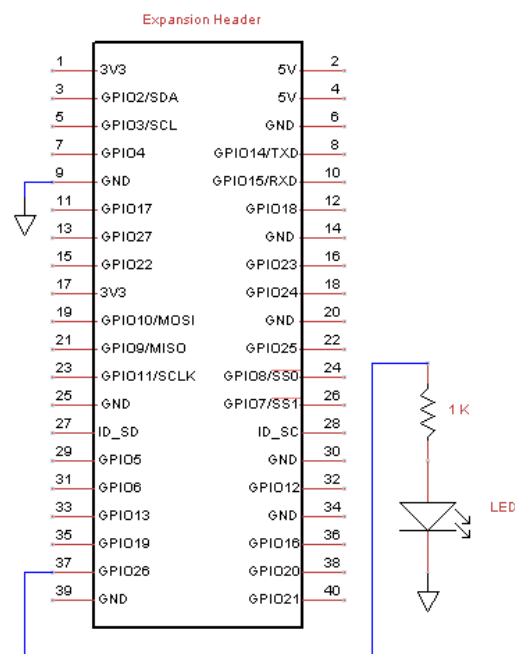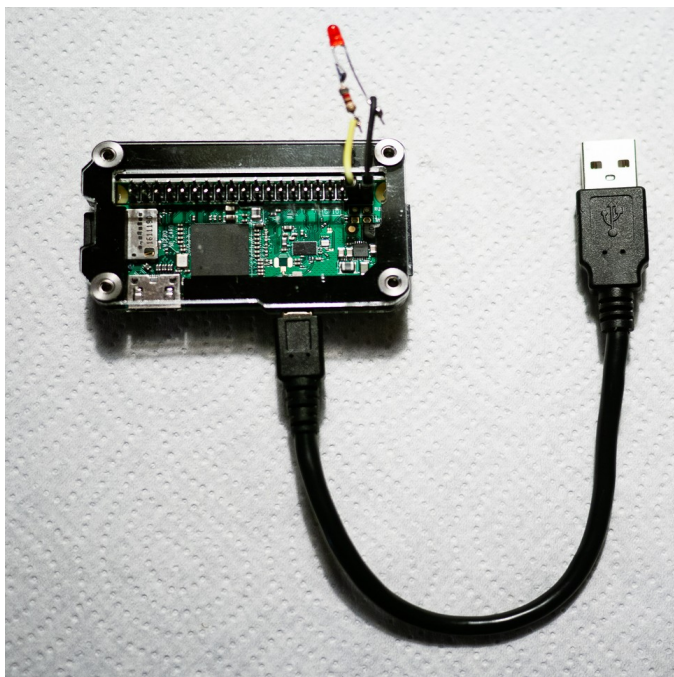***dba* Munts Technologies**
http://tech.munts.com

Introduction

This application note describes how to create, build, and run a Java program to flash an LED on a target computer running *MuntsOS Embedded Linux*.

Prerequisites

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

The Java runtime extension package `java-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 jumber 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.java

```java
import com.munts.interfaces.GPIO.*;
import com.munts.libsimpleio.GPIO.*;
import com.munts.libsimpleio.RaspberryPi;

public class blinky
{
  public static void main(String args[])
    throws InterruptedException
  {
    System.out.println("\nMuntsOS Java LED Test\n");

    // Configure a GPIO output to drive an LED

    Builder b = new Builder(RaspberryPi.GPIO26);
    b.SetDirection(Direction.Output);
    Pin LED = b.Create();

    // Flash the LED forever (until killed)

    System.out.println("Press CONTROL-C to exit.\n");

    for (;;)
    {
      LED.write(!LED.read());
      Thread.sleep(500);
    }
  }
}
```

Exercise

This example exercise demonstrates how to create a Java program project (outside of the *MuntsOS* code tree checkout), compile it, and run it on the test platform hardware.

Step 1: Prepare the **blinky** project:

```
mkdir blinky
cd blinky
wget https://git.munts.com/muntsos/doc/.blinky/Makefile.java
mv Makefile.java Makefile
wget https://git.munts.com/muntsos/doc/.blinky/blinky.java
```

Step 2: Build the **blinky** project:

```
make
```

Step 3: Copy **blinky.jar** to the test platform:

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

Step 4: Run the test program on the test platform:

```
ssh root@snoopy
java -jar ./blinky.jar
```

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