**Listing 1. Przykładowy program**

extern "C" **{**

#include "OLED.h"

#include <unistd.h>

#include <stdio.h>

#include <string.h>

**}**

#include "GPIOClass.h"

#include <iostream>

using namespace std**;**

void delay**(**int mSec**);**

string val**;**

OledClass OLED**;**

string OffButton **=** "960"**;** // 906+54; Center button, to terminate program

GPIOClass tButton **=** GPIOClass**(**OffButton**);**

int xpos **=** 0**;**

int ypos **=** 0**;**

int xdir **=** 1**;**

int ydir **=** 1**;**

void setup**()**

**{**

OLED**.**begin**();**

//Choosing Fill pattern 0

OLED**.**setFillPattern**(**OLED**.**getStdPattern**(**0**));**

//Turn automatic updating off

OLED**.**setCharUpdate**(**0**);**

tButton**.**export\_gpio**();**

tButton**.**setdir\_gpio**(**"in"**);**

**}**

int main**()**

**{**

setup**();**

**while** **(**1**)**

**{**

OLED**.**clearBuffer**();**

OLED**.**moveTo**(**xpos**,** ypos**);**

OLED**.**drawString**(**"ZedBoard"**);**

OLED**.**updateDisplay**();**

xpos **+=** xdir**;**

ypos **+=** ydir**;**

**if** **(**xpos **>=** 64 **||** xpos **<=** 0**)** xdir **\*=** **-**1**;**

**if** **(**ypos **>=** 24 **||** ypos **<=** 0**)** ydir **\*=** **-**1**;**

delay**(**20**);**

tButton**.**getval\_gpio**(**val**);**

**if** **(**val **==** "1"**)** **break;**

**}**

OLED**.**end**();**

**return** 0**;**

**}**

void delay**(**int mSec**)** **{**

usleep**(**mSec **\*** 1000**);**

**}**