**Led Blinking Program**

**Cd /root/redpitaya/Examples/C/**

#include *<stdio.h>*

#include *<stdlib.h>*

#include *<unistd.h>*

#include *"/opt/redpitaya/include/redpitaya/rp.h"*

int main (int argc, char \*\*argv) {

int unsigned period = 1000000; *// uS*

int unsigned led;

*// index of blinking LED can be provided as an argument*

**if** (argc > 1) {

led = atoi(argv[1]);

*// otherwise LED 0 will blink*

} **else** {

led = 0;

}

printf("Blinking LED[%u]**\n**", led);

led += RP\_LED0;

*// Initialization of API*

**if** (rp\_Init() != RP\_OK) {

fprintf(stderr, "Red Pitaya API init failed!**\n**");

**return** EXIT\_FAILURE;

}

int unsigned retries = 1000;

**while** (retries--){

rp\_DpinSetState(led, RP\_HIGH);

usleep(period/2);

rp\_DpinSetState(led, RP\_LOW);

usleep(period/2);

}

*// Releasing resources*

rp\_Release();

**return** EXIT\_SUCCESS;

}

#include<stdio.h>

int main()

{

printf("\nA sample C program\n\n");

return 0;

}

**Compile the C program**

gcc sampleProgram.c -o sampleProgram

**make sampleprogram.c**

cat /opt/redpitaya/fpga/fpga\_0.94.bit > /dev/xdevcfg

LD\_LIBRARY\_PATH=/opt/redpitaya/lib ./digital\_led\_blink

**Fixing the LD\_LIBRARY\_PATH**

Keep the previous path, don't overwrite it:

**export LD\_LIBRARY\_PATH=$LD\_LIBRARY\_PATH:/your/custom/path/**

You can add it to your ~/.bashrc:

**echo 'export LD\_LIBRARY\_PATH=$LD\_LIBRARY\_PATH:/your/custom/path/' >> ~/.bashrc**