

```

1  //Created by Dingo_aus, 7 January 2009
2  //email: dingo_aus [at] internode <dot> on /dot/ net
3  // From http://www.avrfreaks.net/wiki/index.php/Documentation:Linux/GPIO#gpio_framework
4  //
5  //Created in AVR32 Studio (version 2.0.2) running on Ubuntu 8.04
6  // Modified by Mark A. Yoder, 21-July-2011
7  // Modified by Mark A. Yoder 30-May-2013
8
9  #include <string.h>
10 #include <stdio.h>
11 #include <stdlib.h>
12 #include <unistd.h>
13 #include <fcntl.h>
14 #include "gpio-utils.h"
15
16 int main(int argc, char** argv)
17 {
18     //create a variable to store whether we are sending a '1' or a '0'
19     char set_value[5];
20     //Integer to keep track of whether we want on or off
21     int toggle = 0;
22     int onOffTime; // Time in micro sec to keep the signal on/off
23     int gpio = 60;
24     int gpio_fd;
25
26     if (argc < 2) {
27         printf("Usage: %s <on/off time in us>\n\n", argv[0]);
28         printf("Toggle gpio 60 at the period given\n");
29         exit(-1);
30     }
31
32     onOffTime = atoi(argv[1]);
33
34     printf("*****\n"
35         " * Welcome to PIN Blink program * \n"
36         " * ....blinking gpio 60 * \n"
37         " * ....period of %d us..... * \n"
38         "*****\n", 2*onOffTime);
39
40     //Using sysfs we need to write the gpio number to /sys/class/gpio/export
41     //This will create the folder /sys/class/gpio/gpio60
42     gpio_export(gpio);
43
44     printf("...export file accessed, new pin now accessible\n");
45
46     //SET DIRECTION
47     gpio_set_dir(gpio, "out");
48     printf("...direction set to output\n");
49
50     gpio_fd = gpio_fd_open(gpio, O_RDONLY);
51
52     //Run an infinite loop - will require Ctrl-C to exit this program
53     while(1)
54     {

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55         toggle = !toggle;
56         gpio_set_value(gpio, toggle);
57         //         printf("...value set to %d...\n", toggle);
58
59         //Pause for a while
60         usleep(onOffTime);
61     }
62     gpio_fd_close(gpio_fd);
63     return 0;
64 }
65
66
```