Rugged Board

PWM

https://community.ruggedboard.com

PWM in Rugged Board through sysfs

Using pwmchip interface

pwmchip0 is used for PWM interface

```
root@rugged-board-a5d2x-sd1:~# ls /sys/class/pwm/
pwmchip0
root@rugged-board-a5d2x-sd1:~#
```

List of files in pwmchip0

```
root@rugged-board-a5d2x-sd1:~# ls /sys/class/pwm/pwmchip0
device      export      npwm        power       subsystem  uevent      unexport
root@rugged-board-a5d2x-sd1:~#
```

Note: npwm gives number of pwm channels

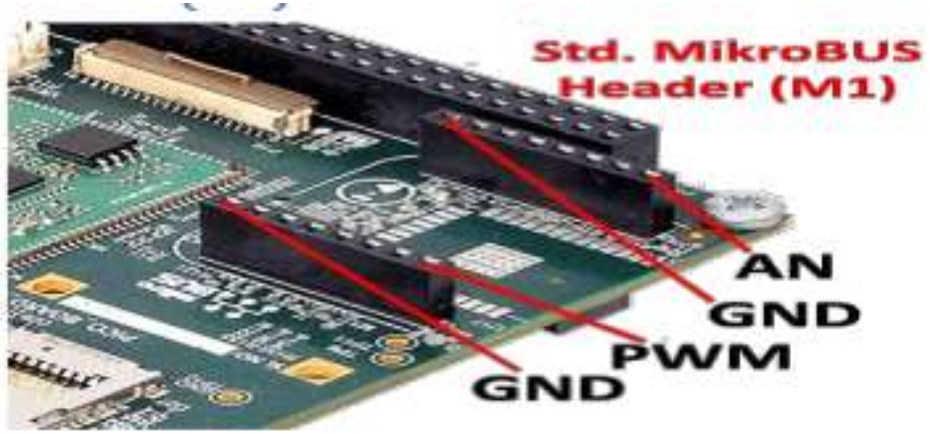
echo x > /sys/class/pwm/pwmchip0/export
where x takes value 0,1,2,3

```
root@rugged-board-a5d2x-sd1:~# cat /sys/class/pwm/pwmchip0/npwm
4
root@rugged-board-a5d2x-sd1:~# ls /sys/class/pwm/pwmchip0/
device      npwm        pwm0        pwm2        subsystem  unexport
export      power       pwm1        pwm3        uevent
root@rugged-board-a5d2x-sd1:~#
```

pwm1 is present in mikro bus we are going to use this for our experiment

RB-PWM

pwm1
- enable
- period
- duty_cycle




```
root@rugged-board-a5d2x-sd1:~# ls /sys/class/pwm/pwmchip0/pwm1
capture     enable      polarity    uevent
duty_cycle  period      power
root@rugged-board-a5d2x-sd1:~#
```

RB-PWM

Step1: export pwm1

```
# cd /sys/class/pwm/pwmchip0/
# echo 1 > export
```

Step2: set period for pwm1

```
# echo 100 > /sys/class/pwm/pwmchip0/pwm1/period
```

Step3: set duty_cycle for pwm1

```
# echo 0.25 > /sys/class/pwm/pwmchip0/pwm1/duty_cycle
```

Step4: enable pwm1

```
# echo 1 > /sys/class/pwm/pwmchip0/pwm1/enable
```

C program to change the brightness of the LED

Open Discussions

Connect-us

Developer Wiki