

PWM

EXERCISES

ex. 1) Configure the PWM module to generate a 0.1MHz PWM signal on channel 0 with a 25% duty cycle.

```
PWMCLK = 0x00; //Clock A selected as clock source
PWMPRCLK = 0x00; // prescaler for Clock A = 1
PWMPOL=0; // configure PWM starting polarity as 0 (PWMPOL0=0)
PWMPER0 = ; // ??
PWMDTY0= ; // ??
PWMCAE = 0x00; // left aligned for channel 0
PWME=0x01;
```

ex. 2) Configure the PWM module to generate a 0.1MHz PWM signal on channel 1 with a 75% duty cycle.

ex. 3) Synchronize the PWM signals from ex. 1 and 2.

ex. 4) Generate a PWM signal on channel 3, use the potentiometer connected to PAD00 to modify the duty cycle.

ex. 5) Use the input capture functionality to measure the periodicity and the duty cycle of a signal that is generated on the pin associated to PWM0.

ex. 6) Configure the PWM module to:

- generate a 1 kHz PWM signal on channel 0 with a 80% duty cycle, polarity 1, center align
- generate a 1 kHz PWM signal on channel 1 with a 80% duty cycle, polarity 0, left align
- start channel 1 PWM on the rising edge of PWM 0