

Creating a Delay

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Creating a Delay

- To create a delay in our embedded system we will use a special function from the msp library

```
__delay_cycles(int num)          (no spaces)
```

- This causes the processor to do nothing for num clock cycles
- The default frequency for our processor is 3MHz

```
__delay_cycles(3000000)          // delay for 1 sec (3000000 clocks)
```

```
__delay_cycles(3000000/5)        // delay for 200ms
```

```
__delay_cycles(3000000*3)        // delay for 3 sec
```

Creating a Delay

- To make it easy to use other clock speeds

```
#define clk_cnt 3000000
```

```
...
```

```
__delay_cycles(clk_cnt) // delay for 1 sec (3000000 clocks)
```

```
__delay_cycles(clk_cnt/5) // delay for 200ms
```

```
__delay_cycles(clk_cnt*3) // delay for 3 sec
```