

## Making an X Khz square wave with the Mod5213 Core Module timer

On the MOD5213 it is extremely easy within limits.

```
#include <..\MOD5213\system\sim5213.h>
#include <Pins.h>
```

```
/* First set up one of the 4 DTOUT pins. */
Pins21.function( PIN21_DTOUT3 );
```

```
/* Set the extended register to do nothing extra. */
sim.timer3.dtxmr=0;
```

```
/* Now set up a prescale of 0 and count system clock x1. */
+sim.timer3.dtmr=0x02B; /* 0000 0000 00 1 0 1 01 1 */
```

```
/* Finally set the frequency. */
/* The formula is:
f=(CPU_CLOCK/((N+1)*2)
CPU_CLOCK==66355200
*/
```

```
sim.timer3.dtrr=4;
```

```
/* IMPORTANT: If you change the prescaler you may need to reset the timer before it takes
effect.
```

```
sim.timer3.dtmr=0;
sim.timer3.dtmr=0x02B; /* 0000 0000 00 1 0 1 01 1 */
*/
```