

```

1  #include <process.h>
2  #include <dos.h>
3
4  /*****
5  ** udelay(ticks)
6  **
7  ** Returns after roughly ticks * 0.8381 microseconds (ticks must
8  ** be non-negative and less than 32768 therefore the maximum
9  ** delay is about 27.4 milliseconds).
10 **
11 *****/
12 void us_delay( unsigned usecs )
13 {
14     usecs = ( (long)usecs * 118 ) / 100;
15
16     asm pushf                /* disable interrupts */
17     asm cli
18
19     asm in      al,0x61        /* PORTB */
20     asm and     al,0xFD        /* disable speaker */
21     asm or      al,0x01        /* enable timer 2 gate */
22     asm out     0x61,al
23
24     asm mov     al,0xB0
25     asm out     0x43,al        /* send command */
26     asm in      al,0x61        /* waste some time */
27     asm mov     al,usecs
28     asm out     0x42,al        /* load lo-byte */
29     asm in      al,0x61        /* waste some time */
30     asm mov     al,usecs+1
31     asm out     0x42,al        /* load hi-byte */
32
33     asm popf                /* reenable inetrerrupts (if where before) */
34
35     /*****/
36 mschk:
37     asm mov     al,0x80
38     asm out     0x43,al        /* latch count */
39     asm in      al,0x61        /* waste some time */
40     asm in      al,0x42        /* read latched lo-byte */
41     asm in      al,0x61        /* waste some time */
42     asm in      al,0x42        /* read latched hi-byte */
43     asm shl     al,1
44     asm jnc     mschk          /* wait until count wraps around */
45     /*****/
46
47     asm pushf                /* disable interrupts */
48     asm cli
49
50     asm mov     al,0xB6        /* mode 3, two-byte reload */
51     asm out     0x43,al        /* send command */
52
53     asm in      al,0x61        /* PORTB */
54     asm and     al,0xFC        /* disable speaker */
55     asm out     0x61,al
56
57     asm popf                /* reenable inetrerrupts (if where before) */
58 }
59

```