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1: #include "defs.h"
2: #include "game.h"
3:
4: // UP      PT5
5: // DOWN    PT4
6: // LEFT     PT3
7: // RIGHT    PT2
8: // A       PT1
9: // B       PT0
10:
11: static void (*OC6Func) (void);
12: unsigned static char OC6Enabled;
13: unsigned static short OC6Delay;
14: unsigned static short OC6DelayCount1;
15: unsigned static short OC6DelayCount2;
16: unsigned static short OC6Count;
17:
18: void Key_Init(void) {
19:     asm sei // make atomic
20:     DDRT &= ~0x3F; // PT7,PT6 all rows are output
21:     PERT = 0x3F; // internal pullup on PT3,PT2
22:     TCTL3 = 0x05;
23:     TCTL4 = 0x55; // falling edges IC3,IC2
24:     TIOS = 0xC0;
25:     TIE = 0x3F; // Arm only IC3,IC2
26:     asm cli
27: }
28:
29: void enableOC6(void (*function) (void), unsigned short delay, unsigned short delayCount, unsigned short count) {
30:     TIE |= 0x40;
31:     OC6Enabled = 1;
32:     OC6Func = function;
33:     OC6Delay = delay;
34:     OC6DelayCount1 = delayCount;
35:     OC6DelayCount2 = delayCount;
36:     OC6Count = count;
37:     TFLG1 = 0x40;
38:     TC6 = TCNT + OC6Delay;
39: }
40:
41: void disableOC6(void) {
42:     TIE &= ~0x40;
43:     TFLG1 = 0x40;
44: }
45:
46: void interrupt 8 IC0Han(void) {
47:     TFLG1 = 0x01;
48:     SW_PTP0;
49: }
50:
51: void interrupt 9 IC1Han(void) {
52:     TFLG1 = 0x02;
53:     SW_PTP1;
54: }
55:
56: void interrupt 10 IC2Han(void) {
57:     TFLG1 = 0x04;
58:     SW_PTP2;
59: }
60:
61: void interrupt 11 IC3Han(void) {
62:     TFLG1 = 0x08;
63:     SW_PTP3;
64: }
65:
66: void interrupt 12 IC4Han(void) {
67:     TFLG1 = 0x10;
68:     SW_PTP4;
69: }
70:
71: void interrupt 13 IC5Han(void) {
72:     TFLG1 = 0x20;
73:     SW_PTP5;
74: }
75:
76: void interrupt 14 OC6Han(void) {
77:     TFLG1 = 0x40;

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```
78:  if(!OC6DelayCount2) {
79:      OC6DelayCount2 = OC6DelayCount1;
80:      (*OC6Func)();
81:      OC6Count--;
82:      if(!OC6Count) {
83:          disableOC6();
84:      }
85:  }
86:  else {
87:      OC6DelayCount2--;
88:  }
89:
90:  TC6 = TCNT + OC6Delay;
91: }
```