Interrupts from GPIO

Only available on P0 and P2

Set up VIC

GPIO interrupt input to VIC is 17
Set it to IRQ (not FIRQ): VICIntSelect &= ~(1<<17);
Set service routine: VICVectAddr17 = (unsigned int)gpioISR;
Enable it: VICIntEnable |= (1<<17);
(priority left at 15 unless set VICVectCntl17 to some other value)

Set up GPIO

Make it an input: FIOxDIR &= ~(1<<PIN);
Choose rising/falling edge or both: IOx_INT_EN_R |= (1<<PIN);
(and/or IOx_INT_EN_F)
Also need to clear EINT3 (which is shared with gpio interrupt).
```
#define EXTINT (*(volatile unsigned long *)(0xE01FC140))
EXTINT = (1<<3)
```
EXTINT is defined in lpc24xx.h.

(see sect 3.1, "external interrupt inputs", sect 7.4, VIC, "interrupt sources")

On interrupt

Clear the GPIO interrupt: IOx_INT_CLR |= (1<<PIN);
Clear the VIC : VICVectAddr = 0;