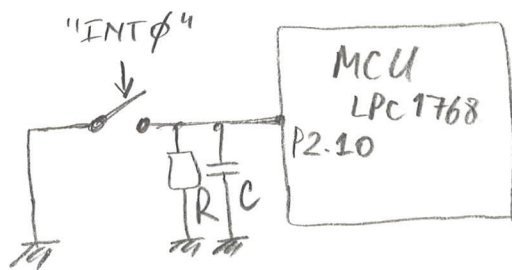


On the external interrupt EINT0

- Assume: I want to toggle an LED each time I push a push-button; how do we do that?
- Using external interrupt EINT0 with the push-button "INT0" on MCB1700 board.



(see schematic diagram of LandTiger2.0, lab#2 files)

Main steps in configuring / programming EINT0

- Pin function selection!
- 1) power-up
 - 2) clock
 - 3) LPC-SC → PINSEL4 |= (1 << 20);
LPC-SC → PINSEL4 &= ~(1 << 21);
- set bits "21:20" = "01"
- See page 110, Table 83 in user manual!
 - 4) NVIC → EnableIRQ (EINT0_IRQn);
- Enable source of interrupts EINT0
- (see manual page Ch. 6)
- (see Appendix of lab # 3)

```
void main() {
    // one time initialization;

    while (1) {
        // ...
    }
}
```

ISR or Handler:

```
void EINT0_IRQHandler(void) {
    // (1) clear interrupt
    LPC-SC → EXTINT = 0x00000001;

    // (2) do some thing
    draw_initially -> penmode(x1, y2);
    // or toggle on LED!
}
```

See manual page 24-25!