

```
set(pin_port, pin_out);
output(pin_direction, pin_out);
// changed all "serial" to "pin"
// init A/D
//
ADMUX = (0 << REFS2) | (1 << REFS1) | (0 << REFS0) // 1.1V ref
        | (0 << MUX3) | (1 << MUX2) | (1 << MUX1) | (1 << MUX0); // 20(PB4-PB3)
ADCSRA = (1 << ADEN) // enable
        | (1 << ADPS2) | (1 << ADPS1) | (0 << ADPS0); // prescaler /64
//
// main loop
//
while (1) {
    //
    // send framing
    //
    put_char(&pin_port, pin_out, 1);
    char_delay();
    put_char(&pin_port, pin_out, 2);
    char_delay();
    put_char(&pin_port, pin_out, 3);
    char_delay();
    put_char(&pin_port, pin_out, 4);
    char_delay();
        // initiate conversion
        //
        ADCSRA |= (1 << ADSC);
        //
        // wait for completion
        //
        while (ADCSRA & (1 << ADSC))
            ;
        char hi = ADCH;
        char low = ADCL;
        put_char(&pin_port, pin_out, hi);
        put_char(&pin_port, pin_out, low);
        //changed all "serials" to "pins"
}
}
```