

```
#define ADC_VREF_TYPE 0x40
```

```
// Read the AD conversion result
```

```
unsigned int read_adc(unsigned char adc_input)
```

```
{
```

```
    ADMUX=adc_input | (ADC_VREF_TYPE & 0xff);
```

```
    // Delay needed for the stabilization of the ADC input voltage
```

```
    delay_us(10);
```

```
    // Start the AD conversion
```

```
    ADCSRA|=0x40;
```

```
    // Wait for the AD conversion to complete
```

```
    while ((ADCSRA & 0x10)==0);
```

```
    ADCSRA|=0x10;
```

```
    return ADCW;
```

```
}
```