ATMega8

3 PWM channels

| Timer | | Timer 1 - 16 bit | | | | |
|-------------------|--------------------------------|------------------|--------|--------|--------|-----------|
| | | | | | | |
| Mode of operation | Register | TCCR1B | TCCR1B | TCCR1A | TCCR1A | Value for |
| | Bit | WGM13 | WGM12 | WGM11 | WGM10 | TOP |
| | Disable all channels | 0 | 0 | 0 | 0 | 65535 |
| | 16 bit Phase+Frequency correct | 1 | 0 | 0 | 0 | ICR1 |
| | 8 bit Phase Correct | 0 | 0 | 0 | 1 | 255 |
| | 9 bit Phase Correct | 0 | 0 | 1 | 0 | 511 |
| | 10 bit Phase Correct | 0 | 0 | 1 | 1 | 1023 |
| | 16 bit Phase correct | 1 | 0 | 1 | 0 | ICR1 |
| | 8 bit Fast PWM | 0 | 1 | 0 | 1 | 255 |
| | 9 bit Fast PWM | 0 | 1 | 1 | 0 | 511 |
| | 10 bit Fast PWM | 0 | 1 | 1 | 1 | 1023 |
| | 16 bit Fast PWM | 1 | 1 | 1 | 0 | ICR1 |

| Timer 2 - 8 bit | | | |
|-----------------|-------|-----------|--|
| TCCR2 | TCCR2 | Value for | |
| WGM21 | WGM20 | TOP | |
| 0 | 0 | 255 | |
| | | | |
| 0 | 1 | 255 | |
| | | | |
| | | | |
| | | | |
| 1 | 1 | 255 | |
| | | | |
| | | | |
| | | | |

Pre-scaler

Register Bit

Disable all channels
Clock divided by 1
Clock divided by 8
Clock divided by 32
Clock divided by 64
Clock divided by 128
Clock divided by 256
Clock divided by 1024

| TCCR1B | TCCR1B | TCCR1B |
|--------|--------|--------|
| CS12 | CS11 | CS10 |
| 0 | 0 | 0 |
| 0 | 0 | 1 |
| 0 | 1 | 0 |
| | | |
| 0 | 1 | 1 |
| | | |
| 1 | 0 | 0 |
| 1 | 0 | 1 |
| | | |

| TCCR2 | TCCR2 | TCCR2 |
|-------|-------|-------|
| CS22 | CS21 | CS20 |
| 0 | 0 | 0 |
| 0 | 0 | 1 |
| 0 | 1 | 0 |
| 0 | 1 | 1 |
| 1 | 0 | 0 |
| 1 | 0 | 1 |
| 1 | 1 | 0 |
| 1 | 1 | 1 |
| | | • |

Compare output modes

I/O pin for PWM output

Turn this channel off Non-inverting Inverting

| | Channel A | | Channel B | | |
|-----|-----------|--------|-----------|--------|--|
| | | TCCR1A | | | |
| Bit | COM1A1 | COM1A0 | COM1B1 | COM1B0 | |
| | 0 | 0 | 0 | 0 | |
| | 1 | 0 | 1 | 0 | |
| | 1 | 1 | 1 | 1 | |

Comparator Value

Register OCR1A (16 bit) OCR1B (16 bit)

| OC1A | OC1B |
|------|------|

| The only channel | | | |
|------------------|-------|--|--|
| TCCR2 | TCCR2 | | |
| COM21 | COM20 | | |
| 0 | 0 | | |
| 1 | 0 | | |
| 1 | 1 | | |

OCR2 (8 bit)

OC2