

- **Bit 2:0 – CSn2:0: Clock Select**

The three clock select bits select the clock source to be used by the Timer/Counter, see [Figure 17-10](#) and [Figure 17-11](#) on page 152.

Table 17-6. Clock Select Bit Description

CSn2	CSn1	CSn0	Description
0	0	0	No clock source. (Timer/Counter stopped)
0	0	1	$\text{clk}_{I/O}/1$ (No prescaling)
0	1	0	$\text{clk}_{I/O}/8$ (From prescaler)
0	1	1	$\text{clk}_{I/O}/64$ (From prescaler)
1	0	0	$\text{clk}_{I/O}/256$ (From prescaler)
1	0	1	$\text{clk}_{I/O}/1024$ (From prescaler)
1	1	0	External clock source on Tn pin. Clock on falling edge
1	1	1	External clock source on Tn pin. Clock on rising edge

If external pin modes are used for the Timer/Counter, transitions on the Tn pin will clock the counter even if the pin is configured as an output. This feature allows software control of the counting.

17.11.9 TCCR1C – Timer/Counter 1 Control Register C

Bit	7	6	5	4	3	2	1	0	
(0x82)	FOC1A	FOC1B	FOC1C	–	–	–	–	–	TCCR1C
Read/Write	W	W	W	R	R	R	R	R	
Initial Value	0	0	0	0	0	0	0	0	

17.11.10 TCCR3C – Timer/Counter 3 Control Register C

Bit	7	6	5	4	3	2	1	0	
(0x92)	FOC3A	FOC3B	FOC3C	–	–	–	–	–	TCCR3C
Read/Write	W	W	W	R	R	R	R	R	
Initial Value	0	0	0	0	0	0	0	0	

17.11.11 TCCR4C – Timer/Counter 4 Control Register C

Bit	7	6	5	4	3	2	1	0	
(0xA2)	FOC4A	FOC4B	FOC4C	–	–	–	–	–	TCCR4C
Read/Write	W	W	W	R	R	R	R	R	
Initial Value	0	0	0	0	0	0	0	0	

17.11.12 TCCR5C – Timer/Counter 5 Control Register C

Bit	7	6	5	4	3	2	1	0	
(0x122)	FOC5A	FOC5B	FOC5C	–	–	–	–	–	TCCR5C
Read/Write	W	W	W	R	R	R	R	R	
Initial Value	0	0	0	0	0	0	0	0	

- **Bit 7 – FOCnA: Force Output Compare for Channel A**
- **Bit 6 – FOCnB: Force Output Compare for Channel B**
- **Bit 5 – FOCnC: Force Output Compare for Channel C**

The FOCnA/FOCnB/FOCnC bits are only active when the WGMn3:0 bits specifies a non-PWM mode. When writing a logical one to the FOCnA/FOCnB/FOCnC bit, an immediate compare match is forced on the waveform generation unit. The OCnA/OCnB/OCnC output is changed according to its COMnx1:0 bits setting. Note that the