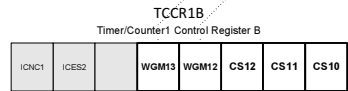
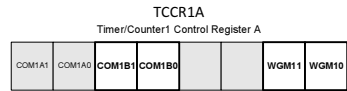
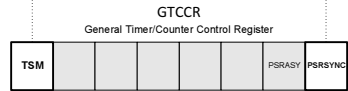
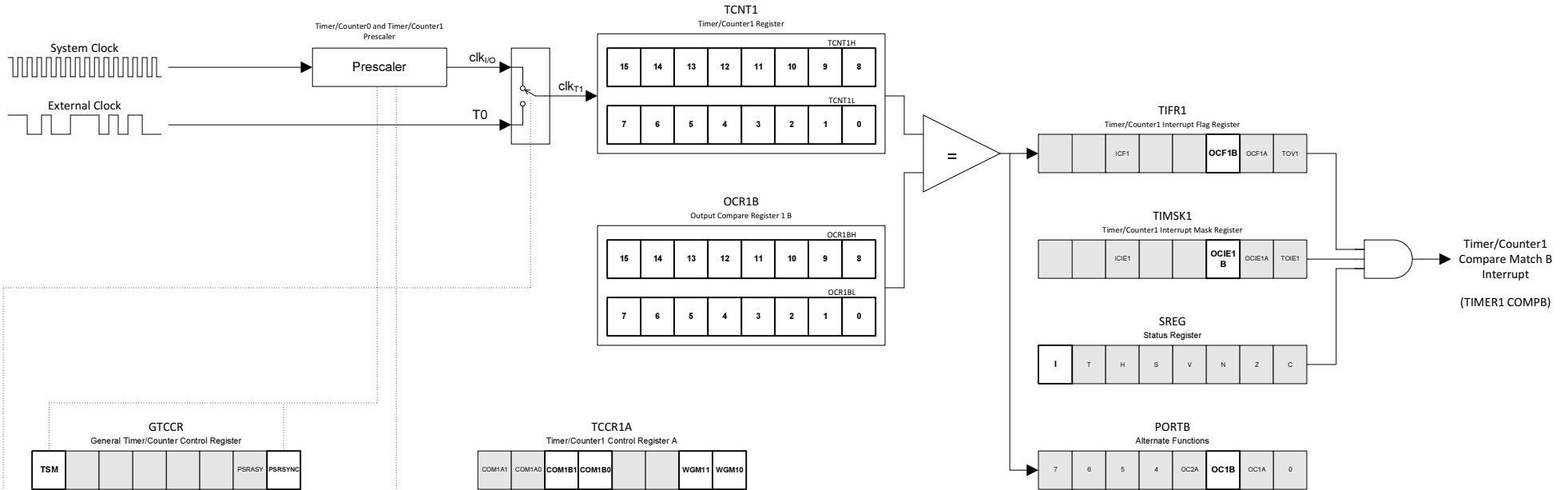


Timer/Counter1 Compare Match B

ATmega48/88/168/328 etc.



CS12	CS11	CS10	Clock Select
0	0	0	Timer/Counter stopped
0	0	1	clk _{IO}
0	1	0	clk _{IO} / 8
0	1	1	clk _{IO} / 64
1	0	0	clk _{IO} / 256
1	0	1	clk _{IO} / 1024
1	1	0	External clock source on T1 pin. Clock on falling edge
1	1	1	External clock source on T1 pin. Clock on rising edge

Compare Output Mode

COM1B1	COM1B0	non-PWM Mode (WGM modes 0, 4, and 12)
0	0	Normal Port Operation, OC1B disconnected
0	1	Toggle OC1B on Compare Match
1	0	Clear OC1B on Compare Match
1	1	Set OC1B on Compare Match

Fast PWM Mode
(WGM modes 5, 6, 7, 14, and 15)

COM1B1	COM1B0	Fast PWM Mode
0	0	Normal Port Operation, OC1B disconnected
0	1	Mode 14 or 15: Toggle OC1B on Compare Match. All other modes: Normal Port Operation, OC1B disconnected
1	0	Clear OC1B on Compare Match, set OC1B at BOTTOM (non-inverting mode)
1	1	Set OC1B on Compare Match, clear OC1B at BOTTOM (inverting mode)

Phase Correct PWM Mode
(WGM modes 1, 2, 3, 8, 9, 10, and 11)

COM1B1	COM1B0	Phase Correct PWM Mode
0	0	Normal Port Operation, OC1B disconnected
0	1	Modes 9 or 11: Toggle OC1B on Compare Match. All other modes: Normal Port Operation, OC1B disconnected
1	0	Clear OC1B on Compare Match when up-counting. Set OC1B on Compare Match when down-counting.
1	1	Set OC1B on Compare Match when up-counting. Clear OC1B on Compare Match when down-counting.

Waveform Generation Mode

Mode	WGM13	WGM12	WGM11	WGM10	Timer / Counter Mode of Operation	TOP	Update of OCR1B at	TOV1 Flag Set on
0	0	0	0	0	Normal	0xFFFF	Immediate	MAX
1	0	0	0	1	PWM, Phase Correct, 8-bit	0x00FF	TOP	BOTTOM
2	0	0	1	0	PWM, Phase Correct, 9-bit	0x01FF	TOP	BOTTOM
3	0	0	1	1	PWM, Phase Correct, 10-bit	0x03FF	TOP	BOTTOM
4	0	1	0	0	CTC	OCR1A	Immediate	MAX
5	0	1	0	1	Fast PWM, 8-bit	0x00FF	BOTTOM	TOP
6	0	1	1	0	Fast PWM, 9-bit	0x01FF	BOTTOM	TOP
7	0	1	1	1	Fast PWM, 10-bit	0x03FF	BOTTOM	TOP
8	1	0	0	0	PWM, Phase and Frequency Correct	ICR1	BOTTOM	MAX
9	1	0	0	1	PWM, Phase and Frequency Correct	OCR1A	BOTTOM	BOTTOM
10	1	0	1	0	PWM, Phase Correct	ICR1	TOP	BOTTOM
11	1	0	1	1	PWM, Phase Correct	OCR1A	TOP	BOTTOM
12	1	1	0	0	CTC	ICR1	Immediate	MAX
13	1	1	0	1	Reserved			
14	1	1	1	0	Fast PWM	ICR1	BOTTOM	TOP
15	1	1	1	1	Fast PWM	OCR1A	BOTTOM	TOP

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