

Figure 16-1. 16-bit Timer/Counter block diagram (Note).

## Scheduling an Interrupt Service Routine on Timer3

SEng 5832 minilab

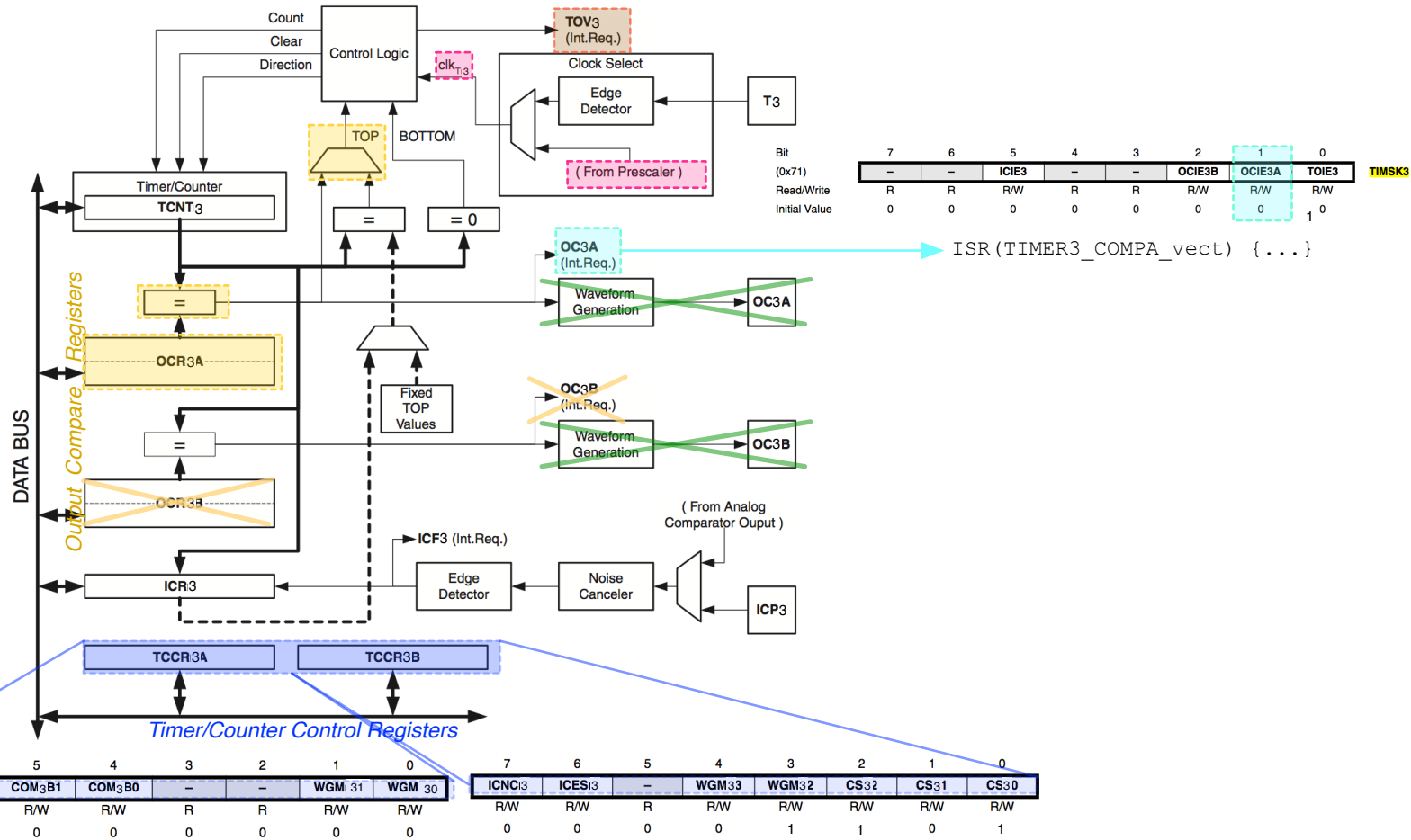


Table 16-2. Compare Output mode, non-PWM.

COMnA1/COMnB1	COMnA0/COMnB0	Description
0	0	Normal port operation, OCnA/OCnB disconnected.
0	1	Toggle OCnA/OCnB on Compare Match.
1	0	Clear OCnA/OCnB on Compare Match (Set output to low level).
1	1	Set OCnA/OCnB on Compare Match (Set output to high level).

Table 16-5. Waveform Generation mode bit description <sup>(1)</sup>.

Mode	WGMn3	WGMn2 (CTCn)	WGMn1 (PWMn1)	WGMn0 (PWMn0)	Timer/Counter mode of operation	TOP	Update of OCR3x at	TOVn flag set on
4	0	1	0	0	CTC	OCR3A	Immediate	MAX

Table 16-6. Clock Select bit description.

CSn2	CSn1	CSn0	Description
0	0	0	No clock source (Timer/Counter stopped).
0	0	1	$clk_{IC}/1$ (No prescaling)
0	1	0	$clk_{IC}/8$ (From prescaler)
0	1	1	$clk_{IC}/64$ (From prescaler)
1	0	0	$clk_{IC}/256$ (From prescaler)
1	0	1	$clk_{IC}/1024$ (From prescaler)