ATmega48P/88P/168P/328P

trigger signal. If ADEN in ADCSRA is set, this will start a conversion. Switching to Free Running mode (ADTS[2:0]=0) will not cause a trigger event, even if the ADC Interrupt Flag is set.

Table 21-6. ADC Auto Trigger Source Selections

ADTS2	ADTS1	ADTS0	Trigger Source		
0	0	0	Free Running mode		
0	0	1	Analog Comparator		
0	1	0	External Interrupt Request 0		
0	1	1	Timer/Counter0 Compare Match A		
1	0	0	Timer/Counter0 Overflow		
1	0	1	Timer/Counter1 Compare Match B		
1	1	0	Timer/Counter1 Overflow		
1	1	1	Timer/Counter1 Capture Event		

21.9.5 DIDR0 - Digital Input Disable Register 0

Bit	7	6	5	4	3	2	1	0	_
(0x7E)	-	-	ADC5D	ADC4D	ADC3D	ADC2D	ADC1D	ADC0D	DIDR0
Read/Write	R	R	R/W	R/W	R/W	R/W	R/W	R/W	•
Initial Value	0	0	0	0	0	0	0	0	

• Bits 7:6 - Res: Reserved Bits

These bits are reserved for future use. To ensure compatibility with future devices, these bits must be written to zero when DIDR0 is written.

• Bit 5:0 - ADC5D..ADC0D: ADC5..0 Digital Input Disable

When this bit is written logic one, the digital input buffer on the corresponding ADC pin is disabled. The corresponding PIN Register bit will always read as zero when this bit is set. When an analog signal is applied to the ADC5..0 pin and the digital input from this pin is not needed, this bit should be written logic one to reduce power consumption in the digital input buffer.

Note that ADC pins ADC7 and ADC6 do not have digital input buffers, and therefore do not require Digital Input Disable bits.

