

Register	Taken into account by hardware	Recommended (safe) update
SEQ[n].PTR	When sending the DMA.SEQ[n].START task	After having received the SEQSTARTED[n] event
SEQ[n].MAXCNT	When sending the DMA.SEQ[n].START task	After having received the SEQSTARTED[n] event
SEQ[0].ENDDELAY	When sending the SEQSTART[0] task Every time a new value from sequence [0] has been loaded from RAM and gets applied to the Wave Counter (indicated by the PWMPERIODEND event)	Before starting sequence [0] through a SEQSTART[0] task When no more value from sequence [0] gets loaded from RAM (indicated by the SEQEND[0] event) At any time during sequence [1] (which starts when the SEQSTARTED[1] event is generated)
SEQ[1].ENDDELAY	When sending the SEQSTART[1] task Every time a new value from sequence [1] has been loaded from RAM and gets applied to the Wave Counter (indicated by the PWMPERIODEND event)	Before starting sequence [1] through a SEQSTART[1] task When no more value from sequence [1] gets loaded from RAM (indicated by the SEQEND[1] event) At any time during sequence [0] (which starts when the SEQSTARTED[0] event is generated)
SEQ[0].REFRESH	When sending the SEQSTART[0] task Every time a new value from sequence [0] has been loaded from RAM and gets applied to the Wave Counter (indicated by the PWMPERIODEND event)	Before starting sequence [0] through a SEQSTART[0] task At any time during sequence [1] (which starts when the SEQSTARTED[1] event is generated)
SEQ[1].REFRESH	When sending the SEQSTART[1] task Every time a new value from sequence [1] has been loaded from RAM and gets applied to the Wave Counter (indicated by the PWMPERIODEND event)	Before starting sequence [1] through a SEQSTART[1] task At any time during sequence [0] (which starts when the SEQSTARTED[0] event is generated)
COUNTERTOP	In DECODER.LOAD=WaveForm: this register is ignored. In all other LOAD modes: at the end of current PWM period (indicated by the PWMPERIODEND event)	Before starting PWM generation through a DMA.SEQ[n].START task After a STOP task has been triggered, and the STOPPED event has been received.
MODE	Immediately	Before starting PWM generation through a DMA.SEQ[n].START task After a STOP task has been triggered, and the STOPPED event has been received.
DECODER	Immediately	Before starting PWM generation through a DMA.SEQ[n].START task After a STOP task has been triggered, and the STOPPED event has been received.
PRESCALER	Immediately	Before starting PWM generation through a DMA.SEQ[n].START task After a STOP task has been triggered, and the STOPPED event has been received.
LOOP	Immediately	Before starting PWM generation through a DMA.SEQ[n].START task After a STOP task has been triggered, and the STOPPED event has been received.
PSEL.OUT[n]	Immediately	Before enabling the PWM instance through the ENABLE register

Table 49: When to safely update PWM registers

Note: SEQ[n].REFRESH and SEQ[n].ENDDELAY are ignored at the end of a complex sequence, indicated by a LOOPSDONE event. The reason for this is that the last value loaded from RAM is maintained until further action from software (restarting a new sequence, or stopping PWM generation).

The following figure shows a more complex example using the register [LOOP](#) on page 444.