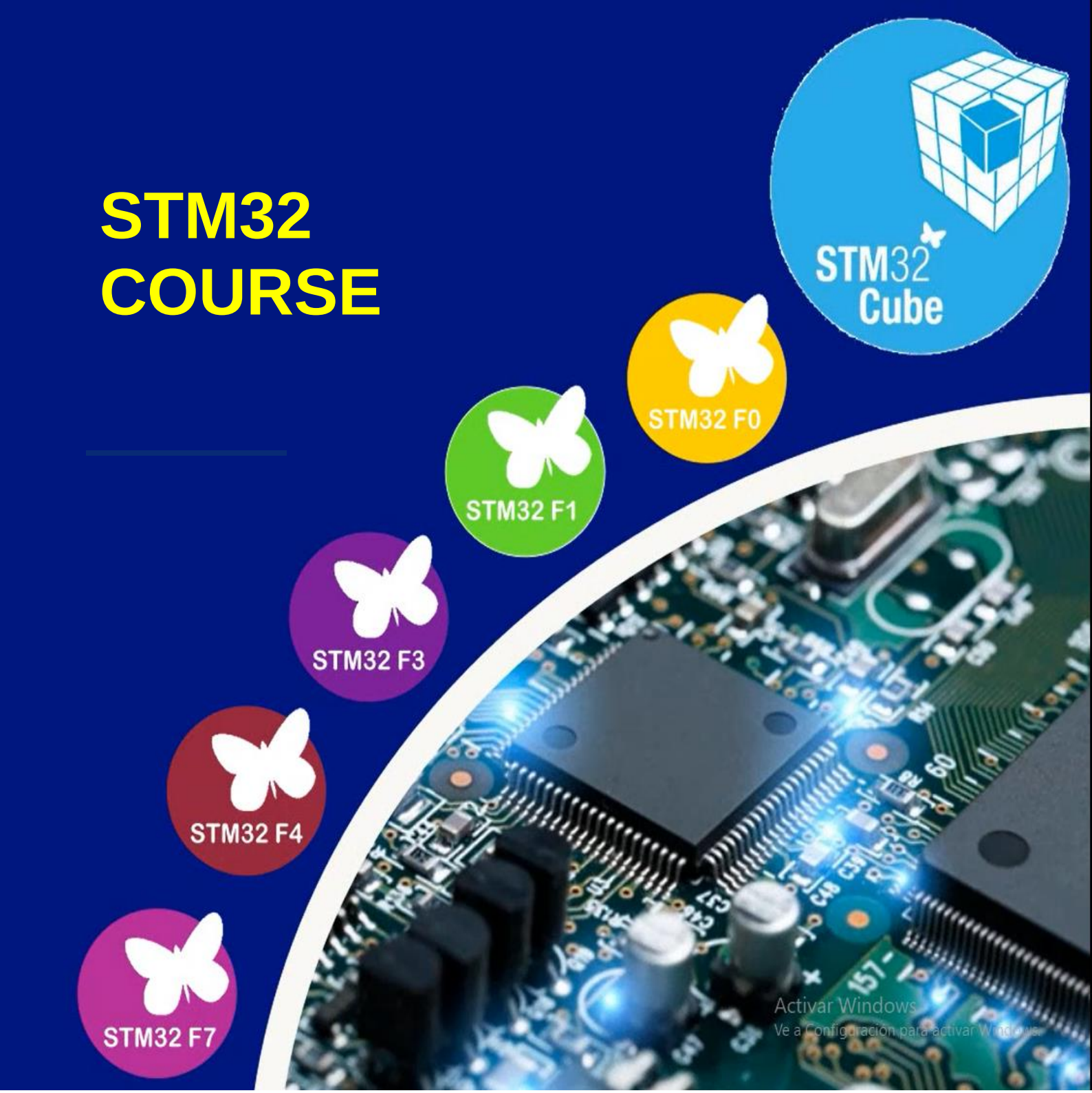
STM32 COURSE



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007 Timer PWM Output

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SECTION 7

007 Timer PWM Output

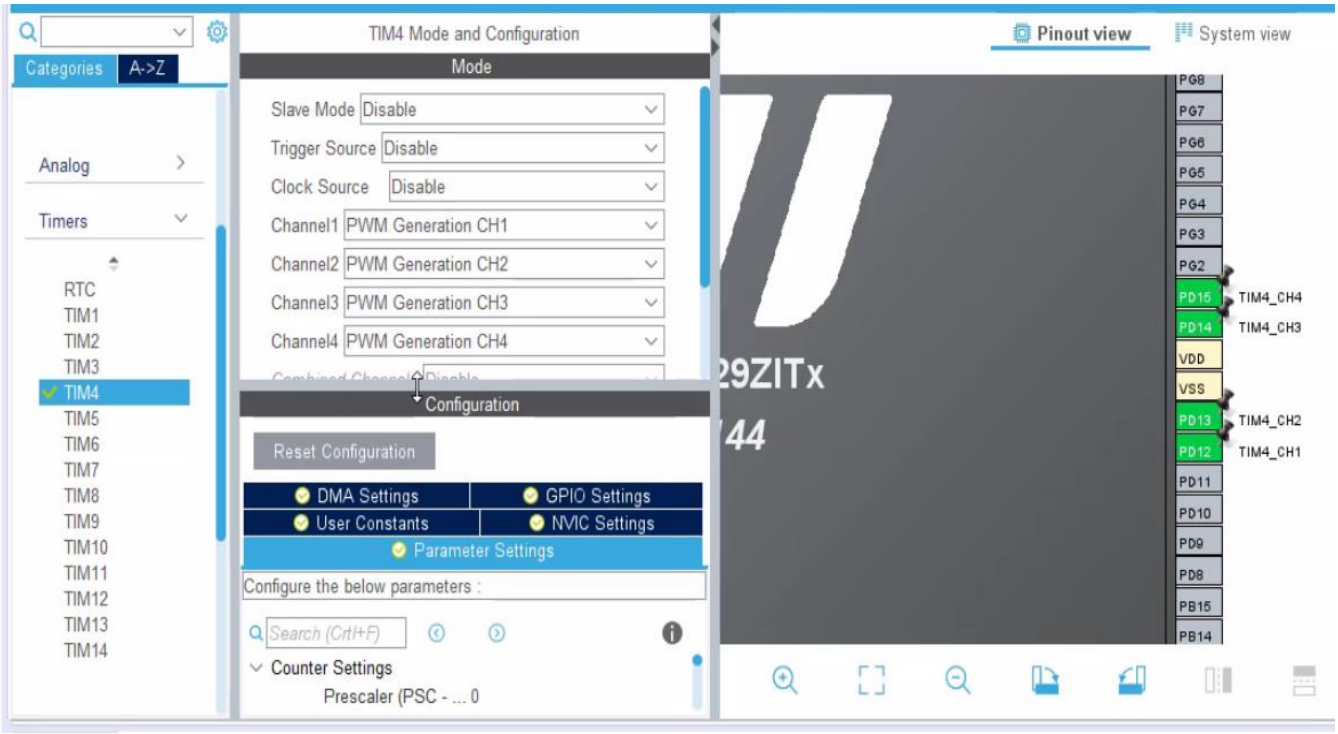
What will we learn?

In this video we will generate a PWM (Pulse Width Modulation) signal with the help of a hardware Timer, we will calculate the frequency at which we need our PWM, we will also remember certain criteria from the previous video.

> ***"We will use HAL Drivers, which will help us greatly to port and recycle code routines from one processor in one Family to another in another Family."***

Key points

TIMER CHANNELS

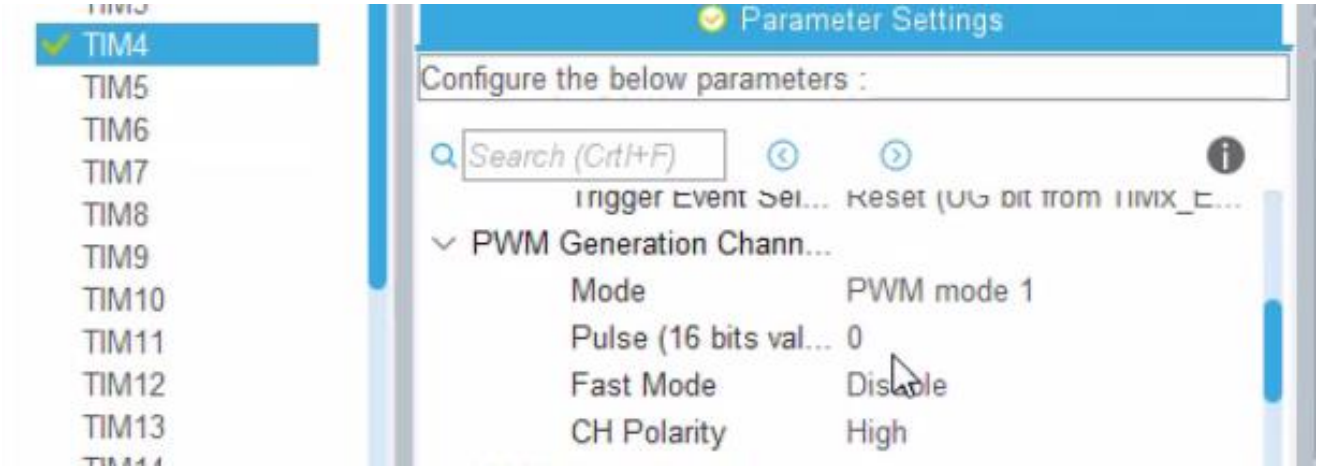


The same timer has the ability to generate a PWM signal at the same frequency through 4 different channels (Not all Timers have 4, some cannot even), that is to say that the pulse width of each channel can be different.

CHANNEL N

We have the option of using the N channels (Negated, Inverted) of the PWM to generate signal, only that this signal would be inverted, that is, when it is high (1 logic ttl of the output) in the normal channel 1 of PWM in the channel N of the same channel we would have the same signal but inverted.

PWM INIT



We have the option that when the Timer parameters are initially configured to generate a PWM signal, it initially has a pre-established Dutty (value for Pulse).

It is advisable to assume a number suitable to our needs for the Period since this would be the value to be modified for varial the dutty of our signal, for example 100 is usually used to make an analogy to a percentage, that is, when the period has 99 (Remember that it is Period - 1) it would be 100% of the dutty.