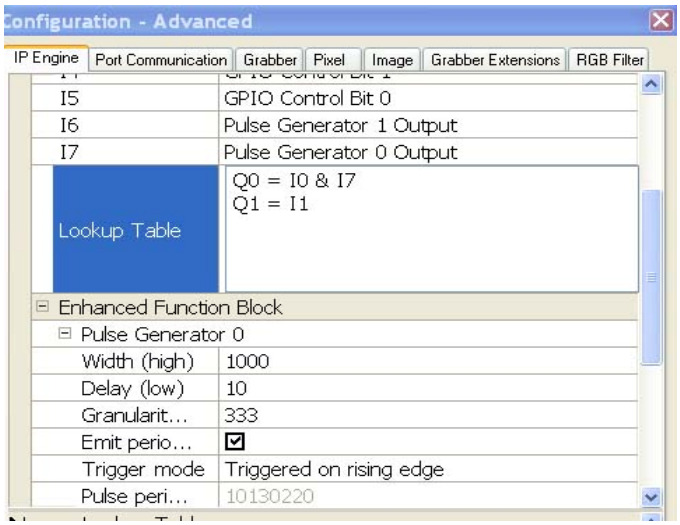
Multiple Image Enable and Time Stamp Reset

PLC programming for multi pulses per Enable

This follows the same method as described in TN-0803.
First, configure camera function to Async mode (57 00 23 00 00 00 01).
Then, set the PLC LUT as shown in the figures below.

Q0 = I0 & I7

If Enable is low active, "I0" is replaced with "!I0".
The internal trigger generator is programmed for Pulse Generator 0 in the Enhanced Function Block.



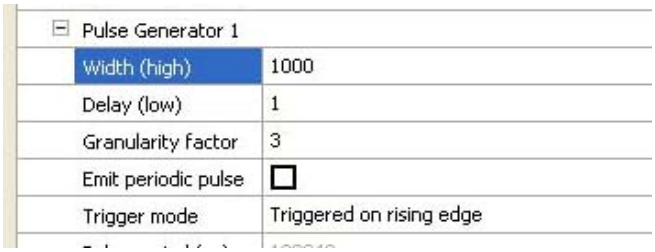
In this example, pulse generator 0 creates a 10ms interval of continuous pulses to trigger the camera and multiple images will be output when the external TTL input "Enable" is maintained high.

Strobe output pulse width control

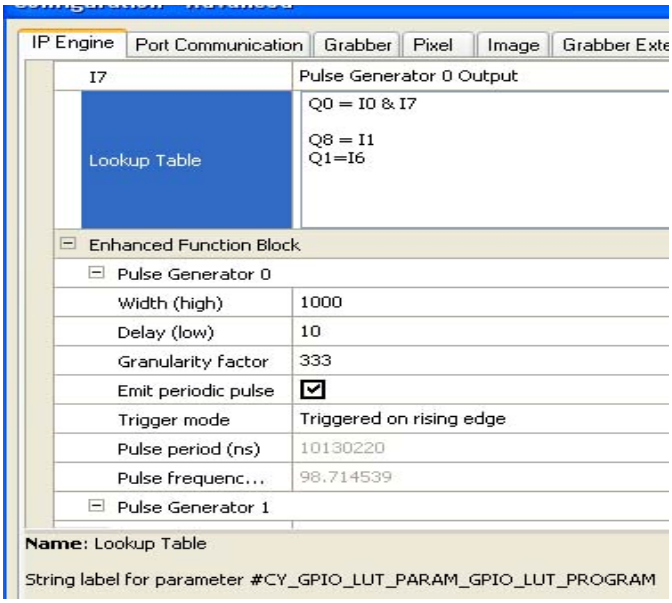
Described here is a method of extending the pulse width of the strobe output. Strobe output is defined as TTL default output (I1). The signal goes to pulse generator 1 to extend the pulse width.
Input of pulse generator 1 is Q8 and output of pulse generator 1 is I6.
Therefore, LUT programming is;

Q8=I1 (internal strobe TTL signal to PG1 input)
Q1=I6 (camera output is from PG1 output)

Pulse Generator 1 is also programmed in the same way as Pulse Generator 0.

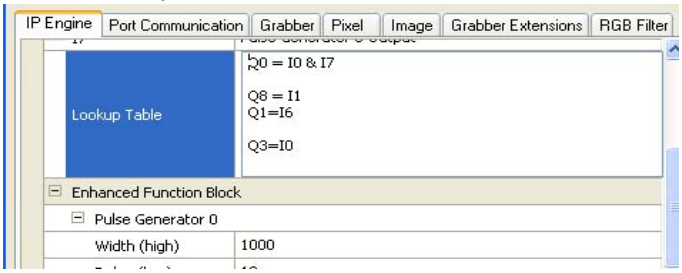


In this example, camera trigger is 10ms interval and strobe pulse is set at 0.1µs granularity. 1000 counts generates a 100 µs pulse width.

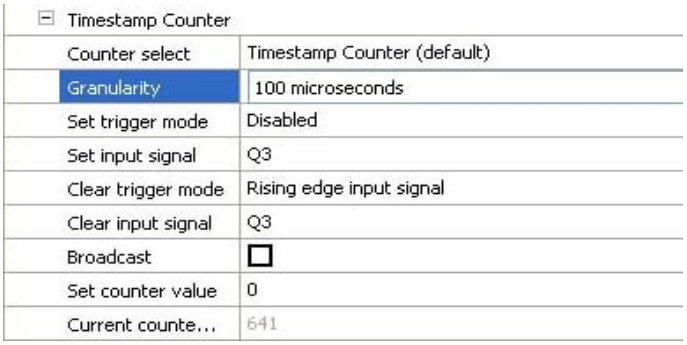


Timestamp Reset and Clear

Let's include one more function:
Timestamp is programmable with Coyote PLC programming. The general "Clear" command is set to the default of Q3. Let's set Q3=I0. I0 rising edge will clear and reset the timestamp counter.



The timestamp counter is also in the Enhanced Function Block.
The granularity selection can give an application specific



timestamp interval.