Visionary-T Mini CX

Single frame / Trigger mode description

3D Compact Systems

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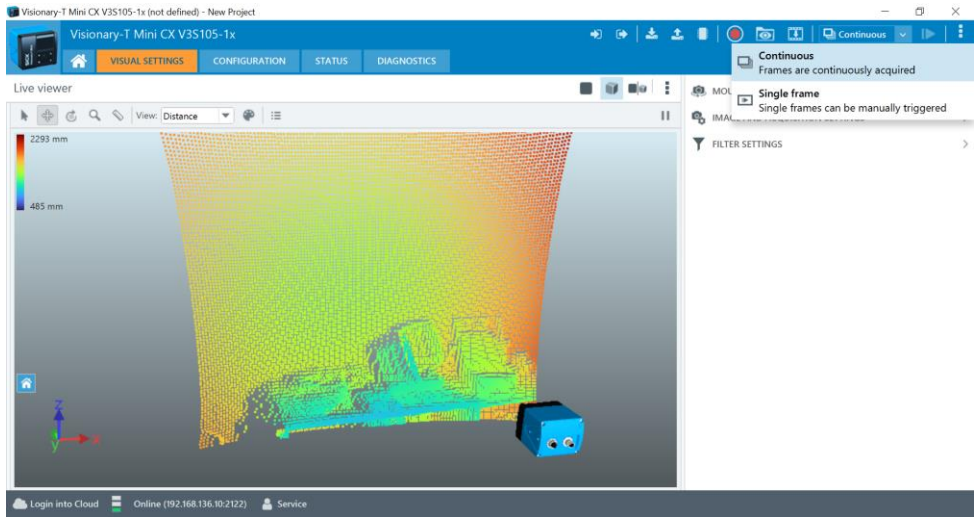
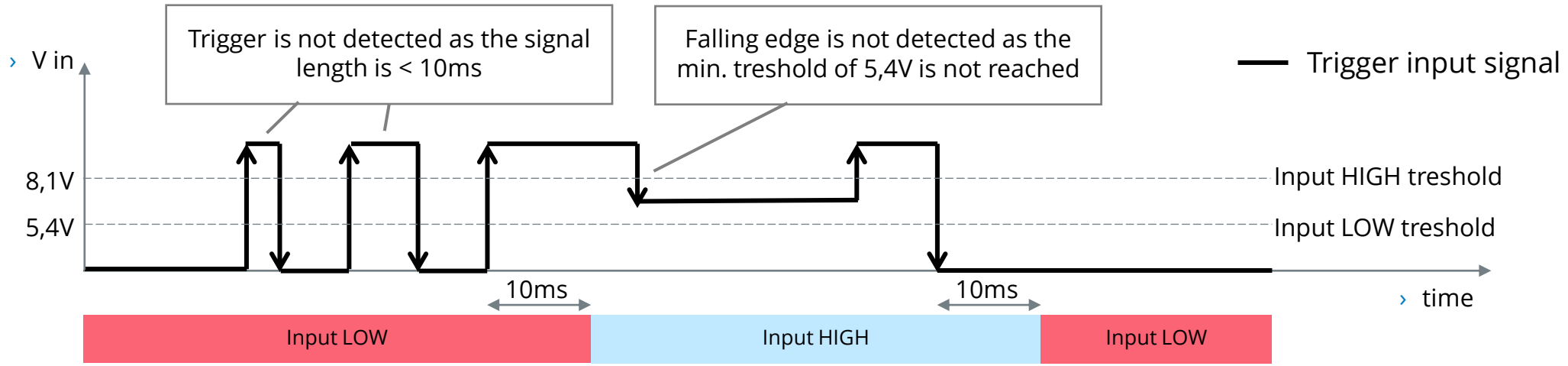
Visionary-T Mini Device Page
OPERATION MODE – SINGLE FRAME

- The Visionary-T Mini CX supports two different image streaming modes
- Set the operating mode to "Single image" to transmit only the next captured image after a trigger signal.
- Please notice:
  As soon as you set the operation mode to “Single frame” the Visionary-T Mini will switch to the standby mode until a first image is requested. This request can be done either by a digital trigger signal, the "Trigger next image" button or an API command. The Visionary-T Mini starts than the internal continuous image capturing in order to guarantee a thermal stable system for calibrated and accurate measurements. However only the triggered frames are being transferred.
  The accuracy of the first triggered image in “Single frame" mode may therefore be out of the specification.



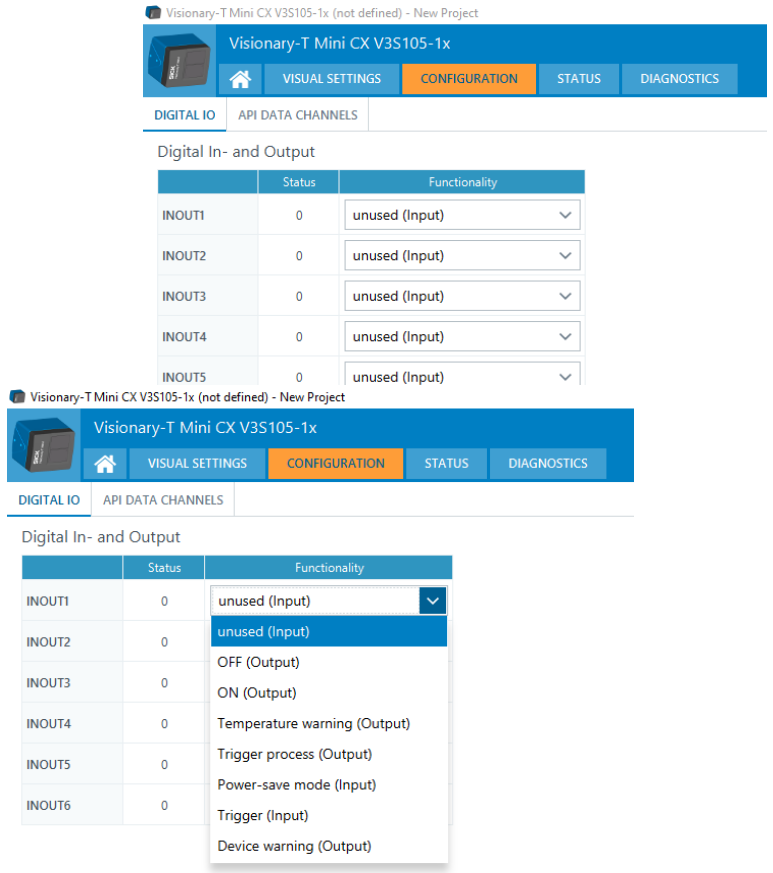
Visionary-T Mini CX
DIGITAL IO – SIGNAL SPECIFICATION

- The HIGH voltage treshold for the digital input during a rising edge is max. 8,1V
- The LOW voltage treshold for the digital input during a falling edge is min. 5,4V
- The minumum duration for a valid digital trigger signal is 10ms otherwise it will not be accepted



Visionary-T Mini CX
CONFIGURATION – DIGITAL IO

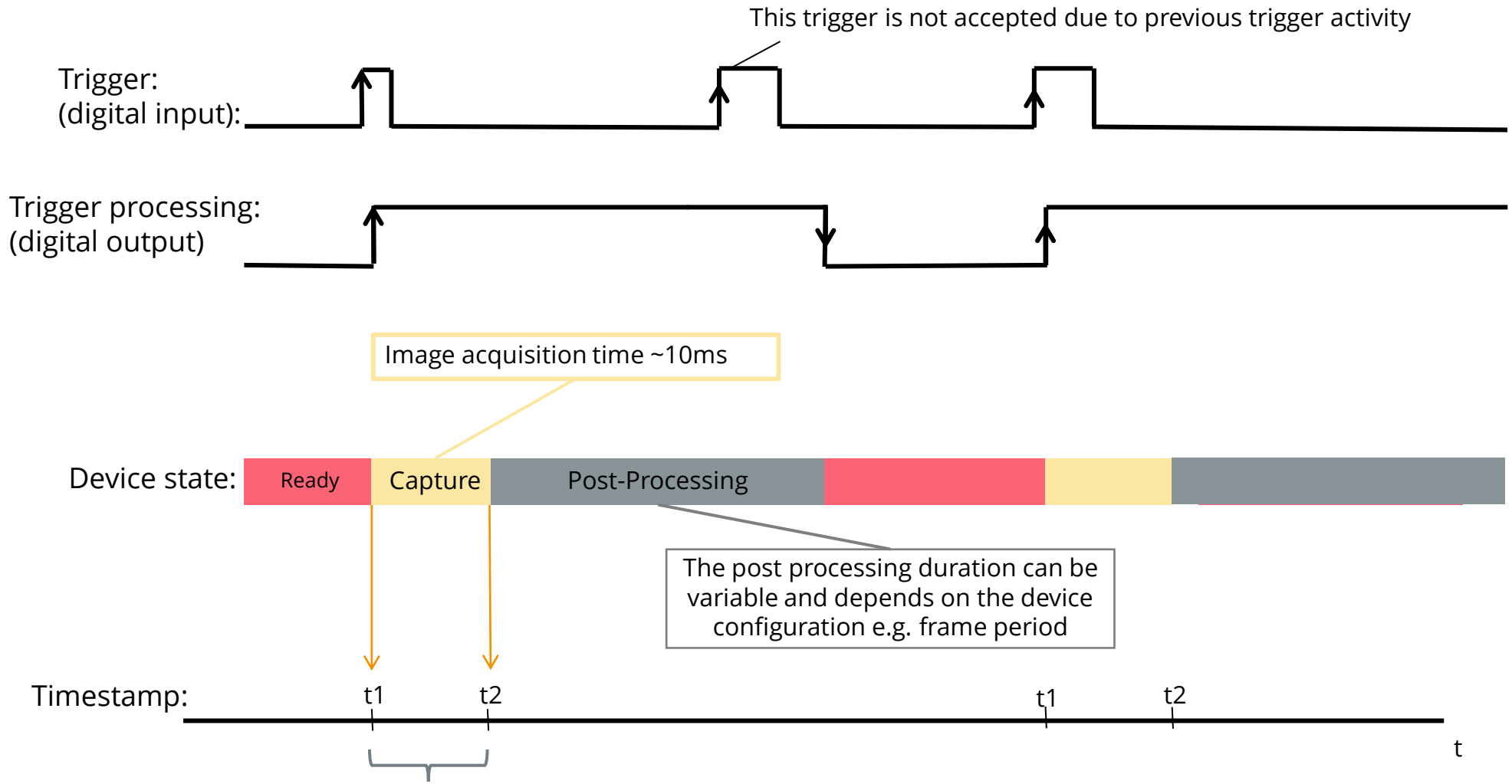
- The Visionary-T Mini offers programmable digital in- and outputs
- You can define one input to trigger the next frame.
  Please keep in mind that this feature works only when the device mode is set to “Single frame” mode.
- Following functions are available:
  - Trigger (Input):
    - Trigger a single frame transfer when the device is in “Single frame” mode
  - Trigger process (Output):
    - Sets the output to high during the processing of the input trigger signal. You can use this signal for synchronization purposes.



Visionary-T Mini CX
CONFIGURATION – DIGITAL IO

- The Visionary-T Mini CX continuously captures data without streaming it out unless a trigger initializes the sending of the next available frame. Hence the delay between the image acquisition and the data reception is not constant
- This can result in a delay that is as long as the time required to capture an image
- The Visionary-T Mini CX will not accept any new trigger during the processing of a previous trigger
- The Visionary-T Mini CX provides a „trigger processing“ output via one defined digital output. This indicator can be used to synchronize the triggering behavior
- The timestamp within the frame is set as the delay between trigger input and frame capture duration. The timestamp can be used to synchronize your timing in case of real time conditions

Trigger mode
VISUALIZATION



Timestamp is provided as delay between trigger input and duration of image capture

Thank you for your attention.

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