

Description of the OIT result data and parameters

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1. Invoking Result Parameter

Result parameter will be sent after:

- triggers
- Image transfers
- counter value requests ("ShowCounter")

The result parameter have the **CONFIGURATION Id="Result"**.
The number and kinds of result parameter differ in various situations.

2. Result Parameter

There are three kinds of result parameter:

- Result data (*PF.Foundation.Protocol.XML.ElementResult*)
- Shape data (*PF.Foundation.Protocol.XML.ElementShapeBase*)
- Draw data (*PF.Foundation.Protocol.XML.ElementShapeBase*)

Shape data is prepared to be drawn directly into a corresponding image identified by frame counter. They contain geometrical forms (e.g. *ElementShapeRectangle*) or labels (e.g. *ElementShapeText*) and informations about position, size and colour. Draw data is like shape data but image independent and thus without frame counter.

Result data only offers text data and are sent after every trigger.

2.1. Result data

The result data are transmitted by the event *SensorResultDataReceived*. They are accessible in the Eventhandler by the methods *GetResultList* and *GetResultParameter*. The Result Parameter IDs are:

Event	Parameter ID	Value	Description	From Firmware
Trigger	TimeTotal	0..65535ms	Total time from trigger to end of decoding	
	TimeCapture	0..40ms	Capture time	
	TimeDecode	0..65535ms	Time sensor needs only for decoding without capturing	
	ResDecode	string	Decoded string (only available if it is a good image)	
	CounterGood	0...	Number of good reads	
	CounterBad	0...	Number of bad reads	
	CounterBadSuppressed	0...	Number of suppressed codes	
	CounterWeak	0...	Number of good reads where result was weak.	

2.2. Shape Data

The shape data is transmitted by the event *ShapeDataReceived* and *ImageReceived*. They are accessible via the method *GetShapes*. The Shape ParameterIDs are:

Type	Parameter ID	Text	Description	From Firmware
Element-ShapeText	ImageType	Good Error	Type of the image	
	ImageNr	1...	Total number of the image	
	ExposureTime	0...20000ms	Exposuretime where this image was captured	
	Res	string	Decoded string (only available if it is a good image)	

2.3. Draw Data

The draw data is transmitted by the event *SensorDrawDataReceived*.

Type	Parameter ID	Description	From Firmware
Quad	none	Rectangle where OIT founds a cluster. One rectangle is sent for the border line and one which fills the contents of the quadrat.	
Clear	none	Refresh image overlay by clearing all drawn rectangles.	