

Summary - TX Event Controller

Name	tx_event_ctrlr
Worker Type	Application
Latest OpenCPI Version	v1.5 (released 4/2019)
Component Library	ocpi.assets.util.comps
Workers	tx_event_ctrlr.rcc (version 2)
Tested Platforms	CentOS7

Revision History

Revision	Description of Change	Date
v1.4	Initial release.	9/2018
v1.5	Updated tx_event_ctrlr.rcc to version 2 (OWD change only).	4/2019

Worker Implementation Details

When writing a value to the txen property that is different from its current value, there will be some finite delay before that write action's correspond ZLM is sent to the output port. Because the value read from the txen property is indicative of the *current* state (i.e. the *last* ZLM sent), the readback value of txen may differ from the value previously written until some amount of time has passed. If multiple property writes somehow occur before their corresponding ZLMs can be sent, they are queued for processing. The following table gives an example.

Action	Time
write txen=false	0 sec
txOff ZLM sent	0.1 sec
readback value of txen is false	1 sec
write txen=true	2 sec
readback value of txen is false	2.1 sec
txOn ZLM sent	2.1 sec
readback value of txen is true	2.2 sec
readback value of txen is true	2.4 sec
readback value of txen is true	2.6 sec
readback value of txen is true	2.8 sec

Block Diagrams

```

<!--                                     -->
<!--           txen property             -->
<!--           |                         -->
<!--           |                         -->
<!--       -----V-----              -->
<!--   +       .       +               -->
<!--   |       .       |               -->
<!--   |       .....|--> out port sends ZLMs w/ txOn or txOff opcode -->
<!--   |               |               -->
<!--   +-----+               -->
<!--                                     -->

```

Component Spec Properties

Name	Type	SequenceLength	ArrayDimensions	Accessibility	Valid Range	Default	Usage
txen	Bool	-	-	Writable, Volatile	Standard	-	TX enable.

Worker Properties

tx_event_ctrlr.rcc

Type	Name	Type	SequenceLength	ArrayDimensions	Accessibility	Valid Range	Default	Usage
Property	txen	Bool	-	-	Writable, WriteSync, ReadSync	Standard	-	TX enable.

Component Ports

Name	Producer	Protocol	Optional	Advanced	Usage
out	true	tx_event-prot	false	-	