

Summary - Real Digitizer

Name	real_digitizer
Worker Type	Application
Version	v1.3
Release Date	February 2018
Component Library	ocpi.assets.dsp_comps
Workers	real_digitizer.rcc
Tested Platforms	linux-x13.3-arm, c7-x86-64, and c6-x86-64

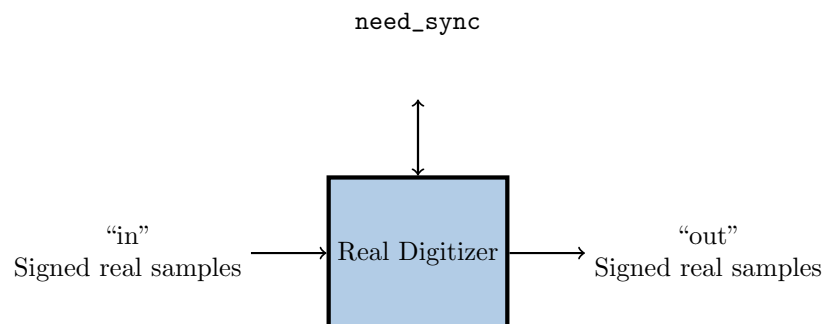
Worker Implementation Details

real_digitizer.rcc

This worker takes single samples and turns them into bits and packs them into a stream of words (16 bits) intended to be written to file. If a positive sample comes in, a 1 is packed into the output word. If a negative sample comes in, a 0 is packed into the output word. All data is discarded before it receives the initialization sequence 0xFACE. After the initialization sequence is received, data then starts to be passed to the output port.

Block Diagrams

Top level



Source Dependencies

real_digitizer.rcc

- ocpiassets/components/dsp_comps/real_digitizer.rcc/real_digitizer.c

Component Spec Properties

Name	Type	SequenceLength	ArrayDimensions	Accessibility	Valid Range	Default	Usage
need_sync	Bool	-	-	Readable,Initial	Standard	True	When set to true the worker will look for the initialization sequence 0xFACE in the data stream before sending data to the next worker. When set to false, all data is passed along.

Worker Properties

real_digitizer.rcc

Control Operations: Start

Component Ports

Name	Producer	Protocol	Optional	Advanced	Usage
in	false	rstream_protocol	false	-	Signed real samples
out	true	rstream_protocol	false	-	Signed real samples

Performance and Resource Utilization

real_digitizer.rcc

Processor Type	Processor Frequency	Run Function Time
TBD	TBD	TBD

Test and Verification

No unit test currently exists for this worker.