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# gnuradio.zeromq

Blocks for interfacing with ZeroMQ endpoints.

`gnuradio.zeromq.pub_msg_sink(char * address, int timeout=100) → pub_msg_sink_sptr`

Sink the contents of a msg port to a ZMQ PUB socket.

This block acts a message port receiver and writes individual messages to a ZMQ PUB socket. A PUB socket may have subscribers and will pass all incoming messages to each subscriber. Subscribers can be either another gr-zeromq source block or a non-GNU Radio ZMQ socket.

Constructor Specific Documentation:

Return a shared\_ptr to a new instance of zeromq::pub\_msg\_sink.

**Parameters:**

- **address** – ZMQ socket address specifier
- **timeout** – Receive timeout in milliseconds, default is 100ms, 1us increments

`pub_msg_sink_sptr.active_thread_priority(pub_msg_sink_sptr self) → int`

`pub_msg_sink_sptr.declare_sample_delay(pub_msg_sink_sptr self, int which, int delay)`

`declare_sample_delay(pub_msg_sink_sptr self, unsigned int delay)`

`pub_msg_sink_sptr.message_subscribers(pub_msg_sink_sptr self, swig_int_ptr which_port) → swig_int_ptr`

`pub_msg_sink_sptr.min_noutput_items(pub_msg_sink_sptr self) → int`

`pub_msg_sink_sptr.pc_input_buffers_full_avg(pub_msg_sink_sptr self, int which) → float`

`pc_input_buffers_full_avg(pub_msg_sink_sptr self) -> pmt_vector_float`

`pub_msg_sink_sptr.pc_noutput_items_avg(pub_msg_sink_sptr self) → float`

`pub_msg_sink_sptr.pc_nproduced_avg(pub_msg_sink_sptr self) → float`

`pub_msg_sink_sptr.pc_output_buffers_full_avg(pub_msg_sink_sptr self, int which) → float`

`pc_output_buffers_full_avg(pub_msg_sink_sptr self) -> pmt_vector_float`

`pub_msg_sink_sptr.pc_throughput_avg(pub_msg_sink_sptr self) → float`

`pub_msg_sink_sptr.pc_work_time_avg(pub_msg_sink_sptr self) → float`

`pub_msg_sink_sptr.pc_work_time_total(pub_msg_sink_sptr self) → float`

`pub_msg_sink_sptr.sample_delay(pub_msg_sink_sptr self, int which) → unsigned int`

`pub_msg_sink_sptr.set_min_noutput_items(pub_msg_sink_sptr self, int m)`

`pub_msg_sink_sptr.set_thread_priority(pub_msg_sink_sptr self, int priority) → int`

`pub_msg_sink_sptr.thread_priority(pub_msg_sink_sptr self) → int`

`gnuradio.zeromq.pub_sink(size_t itemsize, size_t vlen, char * address, int timeout=100, bool pass_tags=False, int hwm=-1) → pub_sink_sptr`

Sink the contents of a stream to a ZMQ PUB socket.

This block acts a a streaming sink for a GNU Radio flowgraph and writes its contents to a ZMQ PUB socket. A PUB socket may have subscribers and will pass all incoming stream data to each subscriber. Subscribers can be either another gr-zeromq source block or a non-GNU Radio ZMQ socket.

Constructor Specific Documentation:

Return a shared\_ptr to a new instance of zeromq::pub\_sink.

**Parameters:**

- **itemsize** – Size of a stream item in bytes.
- **vlen** – Vector length of the input items. Note that one vector is one item.
- **address** – ZMQ socket address specifier.
- **timeout** – Receive timeout in milliseconds, default is 100ms, 1us increments.
- **pass\_tags** – Whether sink will serialize and pass tags over the link.
- **hwm** – High Watermark to configure the socket to (-1 => zmq's default)

pub\_sink\_sptr.**active\_thread\_priority**(pub\_sink\_sptr self) → int

pub\_sink\_sptr.**declare\_sample\_delay**(pub\_sink\_sptr self, int which, int delay)  
declare\_sample\_delay(pub\_sink\_sptr self, unsigned int delay)

pub\_sink\_sptr.**message\_subscribers**(pub\_sink\_sptr self, swig\_int\_ptr which\_port) → swig\_int\_ptr

pub\_sink\_sptr.**min\_noutput\_items**(pub\_sink\_sptr self) → int

pub\_sink\_sptr.**pc\_input\_buffers\_full\_avg**(pub\_sink\_sptr self, int which) → float  
pc\_input\_buffers\_full\_avg(pub\_sink\_sptr self) → pmt\_vector\_float

pub\_sink\_sptr.**pc\_noutput\_items\_avg**(pub\_sink\_sptr self) → float

pub\_sink\_sptr.**pc\_nproduced\_avg**(pub\_sink\_sptr self) → float

pub\_sink\_sptr.**pc\_output\_buffers\_full\_avg**(pub\_sink\_sptr self, int which) → float  
pc\_output\_buffers\_full\_avg(pub\_sink\_sptr self) → pmt\_vector\_float

pub\_sink\_sptr.**pc\_throughput\_avg**(pub\_sink\_sptr self) → float

pub\_sink\_sptr.**pc\_work\_time\_avg**(pub\_sink\_sptr self) → float

pub\_sink\_sptr.**pc\_work\_time\_total**(pub\_sink\_sptr self) → float

pub\_sink\_sptr.**sample\_delay**(pub\_sink\_sptr self, int which) → unsigned int

pub\_sink\_sptr.**set\_min\_noutput\_items**(pub\_sink\_sptr self, int m)

pub\_sink\_sptr.**set\_thread\_priority**(pub\_sink\_sptr self, int priority) → int

pub\_sink\_sptr.**thread\_priority**(pub\_sink\_sptr self) → int

gnuradio.zeromq.**pull\_msg\_source**(char \* address, int timeout=100) → pull\_msg\_source\_sptr

Receive messages on ZMQ PULL socket and output async messages.

This block will connect to a ZMQ PUSH socket, then convert received messages to outgoing async messages.

Constructor Specific Documentation:

Return a shared\_ptr to a new instance of gr::zeromq::pull\_msg\_source.

- Parameters:**
- **address** – ZMQ socket address specifier
  - **timeout** – Receive timeout in milliseconds, default is 100ms, 1us increments

```
pull_msg_source_sptr.active_thread_priority(pull_msg_source_sptr self) → int
```

```
pull_msg_source_sptr.declare_sample_delay(pull_msg_source_sptr self, int which, int delay)
```

```
declare_sample_delay(pull_msg_source_sptr self, unsigned int delay)
```

```
pull_msg_source_sptr.message_subscribers(pull_msg_source_sptr self, swig_int_ptr which_port) → swig_int_ptr
```

```
pull_msg_source_sptr.min_noutput_items(pull_msg_source_sptr self) → int
```

```
pull_msg_source_sptr.pc_input_buffers_full_avg(pull_msg_source_sptr self, int which) → float
```

```
pc_input_buffers_full_avg(pull_msg_source_sptr self) -> pmt_vector_float
```

```
pull_msg_source_sptr.pc_noutput_items_avg(pull_msg_source_sptr self) → float
```

```
pull_msg_source_sptr.pc_nproduced_avg(pull_msg_source_sptr self) → float
```

```
pull_msg_source_sptr.pc_output_buffers_full_avg(pull_msg_source_sptr self, int which) → float
```

```
pc_output_buffers_full_avg(pull_msg_source_sptr self) -> pmt_vector_float
```

```
pull_msg_source_sptr.pc_throughput_avg(pull_msg_source_sptr self) → float
```

```
pull_msg_source_sptr.pc_work_time_avg(pull_msg_source_sptr self) → float
```

```
pull_msg_source_sptr.pc_work_time_total(pull_msg_source_sptr self) → float
```

```
pull_msg_source_sptr.sample_delay(pull_msg_source_sptr self, int which) → unsigned int
```

```
pull_msg_source_sptr.set_min_noutput_items(pull_msg_source_sptr self, int m)
```

```
pull_msg_source_sptr.set_thread_priority(pull_msg_source_sptr self, int priority) → int
```

```
pull_msg_source_sptr.thread_priority(pull_msg_source_sptr self) → int
```

```
gnuradio.zeromq.pull_source(size_t itemsize, size_t vlen, char * address, int timeout=100, bool pass_tags=False, int hwm=-1) → pull_source_sptr
```

Receive messages on ZMQ PULL socket and source stream.

This block will connect to a ZMQ PUSH socket, then produce all incoming messages as streaming output.

Constructor Specific Documentation:

Return a shared\_ptr to a new instance of gr::zeromq::pull\_source.

- Parameters:**
- **itemsize** – Size of a stream item in bytes.
  - **vlen** – Vector length of the input items. Note that one vector is one item.
  - **address** – ZMQ socket address specifier.
  - **timeout** – Receive timeout in milliseconds, default is 100ms, 1us increments.
  - **pass\_tags** – Whether source will look for and deserialize tags.
  - **hwm** – High Watermark to configure the socket to (-1 => zmq's default)

```

pull_source_sptr.active_thread_priority(pull_source_sptr self) → int

pull_source_sptr.declare_sample_delay(pull_source_sptr self, int which, int delay)
    declare_sample_delay(pull_source_sptr self, unsigned int delay)

pull_source_sptr.message_subscribers(pull_source_sptr self, swig_int_ptr which_port) → swig_int_ptr

pull_source_sptr.min_noutput_items(pull_source_sptr self) → int

pull_source_sptr.pc_input_buffers_full_avg(pull_source_sptr self, int which) → float
    pc_input_buffers_full_avg(pull_source_sptr self) -> pmt_vector_float

pull_source_sptr.pc_noutput_items_avg(pull_source_sptr self) → float

pull_source_sptr.pc_nproduced_avg(pull_source_sptr self) → float

pull_source_sptr.pc_output_buffers_full_avg(pull_source_sptr self, int which) → float
    pc_output_buffers_full_avg(pull_source_sptr self) -> pmt_vector_float

pull_source_sptr.pc_throughput_avg(pull_source_sptr self) → float

pull_source_sptr.pc_work_time_avg(pull_source_sptr self) → float

pull_source_sptr.pc_work_time_total(pull_source_sptr self) → float

pull_source_sptr.sample_delay(pull_source_sptr self, int which) → unsigned int

pull_source_sptr.set_min_noutput_items(pull_source_sptr self, int m)

pull_source_sptr.set_thread_priority(pull_source_sptr self, int priority) → int

pull_source_sptr.thread_priority(pull_source_sptr self) → int

gnuradio.zeromq.push_msg_sink(char * address, int timeout=100) →
push_msg_sink_sptr
    Sink the contents of a msg port to a ZMQ PUSH socket.

This block acts a message port receiver and writes individual messages to a ZMQ PUSH socket. The corresponding receiving ZMQ PULL socket can be either another gr-zeromq source block or a non-GNU Radio ZMQ socket.

Constructor Specific Documentation:

Return a shared_ptr to a new instance of gr::zeromq::push_msg_sink.

Parameters:

- address – ZMQ socket address specifier
- timeout – Receive timeout in milliseconds, default is 100ms, 1us increments


push_msg_sink_sptr.active_thread_priority(push_msg_sink_sptr self) →

```

```

int

push_msg_sink_sptr.declare_sample_delay(push_msg_sink_sptr self, int which,
int delay)
    declare_sample_delay(push_msg_sink_sptr self, unsigned int delay)

push_msg_sink_sptr.message_subscribers(push_msg_sink_sptr self,
swig_int_ptr which_port) → swig_int_ptr

push_msg_sink_sptr.min_noutput_items(push_msg_sink_sptr self) → int

push_msg_sink_sptr.pc_input_buffers_full_avg(push_msg_sink_sptr self, int
which) → float
    pc_input_buffers_full_avg(push_msg_sink_sptr self) -> pmt_vector_float

push_msg_sink_sptr.pc_noutput_items_avg(push_msg_sink_sptr self) → float

push_msg_sink_sptr.pc_nproduced_avg(push_msg_sink_sptr self) → float

push_msg_sink_sptr.pc_output_buffers_full_avg(push_msg_sink_sptr self,
int which) → float
    pc_output_buffers_full_avg(push_msg_sink_sptr self) -> pmt_vector_float

push_msg_sink_sptr.pc_throughput_avg(push_msg_sink_sptr self) → float

push_msg_sink_sptr.pc_work_time_avg(push_msg_sink_sptr self) → float

push_msg_sink_sptr.pc_work_time_total(push_msg_sink_sptr self) → float

push_msg_sink_sptr.sample_delay(push_msg_sink_sptr self, int which) →
unsigned int

push_msg_sink_sptr.set_min_noutput_items(push_msg_sink_sptr self, int m)

push_msg_sink_sptr.set_thread_priority(push_msg_sink_sptr self, int priority)
→ int

push_msg_sink_sptr.thread_priority(push_msg_sink_sptr self) → int

```

`gnuradio.zeromq.push_sink(size_t itemsize, size_t vlen, char * address, int timeout=100, bool pass_tags=False, int hwm=-1) → push_sink_sptr`

Sink the contents of a stream to a ZMQ PUSH socket.

This block acts a a streaming sink for a GNU Radio flowgraph and writes its contents to a ZMQ PUSH socket. A PUSH socket will round-robin send its messages to each connected ZMQ PULL socket, either another gr-zeromq source block or a regular, non-GNU Radio ZMQ socket.

Constructor Specific Documentation:

Return a shared\_ptr to a new instance of gr::zeromq::push\_sink.

**Parameters:**

- **itemsize** – Size of a stream item in bytes.
- **vlen** – Vector length of the input items. Note that one vector is one item.
- **address** – ZMQ socket address specifier.
- **timeout** – Receive timeout in milliseconds, default is 100ms, 1us increments.
- **pass\_tags** – Whether sink will serialize and pass tags over the link.
- **hwm** – High Watermark to configure the socket to (-1 => zmq's default)

```
push_sink_sptr.active_thread_priority(push_sink_sptr self) → int
```

```

push_sink_sptr.declare_sample_delay(push_sink_sptr self, int which, int delay)
    declare_sample_delay(push_sink_sptr self, unsigned int delay)

push_sink_sptr.message_subscribers(push_sink_sptr self, swig_int_ptr which_port) → swig_int_ptr

push_sink_sptr.min_noutput_items(push_sink_sptr self) → int

push_sink_sptr.pc_input_buffers_full_avg(push_sink_sptr self, int which) → float
    pc_input_buffers_full_avg(push_sink_sptr self) -> pmt_vector_float

push_sink_sptr.pc_noutput_items_avg(push_sink_sptr self) → float

push_sink_sptr.pc_nproduced_avg(push_sink_sptr self) → float

push_sink_sptr.pc_output_buffers_full_avg(push_sink_sptr self, int which) → float
    pc_output_buffers_full_avg(push_sink_sptr self) -> pmt_vector_float

push_sink_sptr.pc_throughput_avg(push_sink_sptr self) → float

push_sink_sptr.pc_work_time_avg(push_sink_sptr self) → float

push_sink_sptr.pc_work_time_total(push_sink_sptr self) → float

push_sink_sptr.sample_delay(push_sink_sptr self, int which) → unsigned int

push_sink_sptr.set_min_noutput_items(push_sink_sptr self, int m)

push_sink_sptr.set_thread_priority(push_sink_sptr self, int priority) → int

push_sink_sptr.thread_priority(push_sink_sptr self) → int

```

gnuradio.zeromq. **rep\_msg\_sink**(char \* address, int timeout=100) → rep\_msg\_sink\_sptr

Sink the contents of a msg port to a ZMQ REP socket.

This block acts a message port receiver and writes individual messages to a ZMQ REP socket. The corresponding receiving ZMQ REQ socket can be either another gr-zeromq source block or a non-GNU Radio ZMQ socket.

Constructor Specific Documentation:

Return a shared\_ptr to a new instance of zeromq::rep\_msg\_sink.

**Parameters:**

- **address** – ZMQ socket address specifier
- **timeout** – Receive timeout in milliseconds, default is 100ms, 1us increments

```

rep_msg_sink_sptr.active_thread_priority(rep_msg_sink_sptr self) → int

rep_msg_sink_sptr.declare_sample_delay(rep_msg_sink_sptr self, int which, int delay)
    declare_sample_delay(rep_msg_sink_sptr self, unsigned int delay)

rep_msg_sink_sptr.message_subscribers(rep_msg_sink_sptr self, swig_int_ptr which_port) → swig_int_ptr

rep_msg_sink_sptr.min_noutput_items(rep_msg_sink_sptr self) → int

rep_msg_sink_sptr.pc_input_buffers_full_avg(rep_msg_sink_sptr self, int which) → float
    pc_input_buffers_full_avg(rep_msg_sink_sptr self) -> pmt_vector_float

```

```

rep_msg_sink_sptr.pc_noutput_items_avg(rep_msg_sink_sptr self) → float
rep_msg_sink_sptr.pc_nproduced_avg(rep_msg_sink_sptr self) → float
rep_msg_sink_sptr.pc_output_buffers_full_avg(rep_msg_sink_sptr self, int which) → float
    pc_output_buffers_full_avg(rep_msg_sink_sptr self) -> pmt_vector_float
rep_msg_sink_sptr.pc_throughput_avg(rep_msg_sink_sptr self) → float
rep_msg_sink_sptr.pc_work_time_avg(rep_msg_sink_sptr self) → float
rep_msg_sink_sptr.pc_work_time_total(rep_msg_sink_sptr self) → float
rep_msg_sink_sptr.sample_delay(rep_msg_sink_sptr self, int which) → unsigned int
rep_msg_sink_sptr.set_min_noutput_items(rep_msg_sink_sptr self, int m)
rep_msg_sink_sptr.set_thread_priority(rep_msg_sink_sptr self, int priority) → int
rep_msg_sink_sptr.thread_priority(rep_msg_sink_sptr self) → int

```

`gnuradio.zeromq.rep_sink(size_t itemsize, size_t vlen, char * address, int timeout=100, bool pass_tags=False, int hwm=-1) → rep_sink_sptr`

Sink the contents of a stream to a ZMQ REP socket.

This block acts a a streaming sink for a GNU Radio flowgraph and writes its contents to a ZMQ REP socket. A REP socket will only send its contents to an attached REQ socket when it requests items.

Constructor Specific Documentation:

Return a shared\_ptr to a new instance of zeromq::rep\_sink.

**Parameters:**

- **itemsize** – Size of a stream item in bytes.
- **vlen** – Vector length of the input items. Note that one vector is one item.
- **address** – ZMQ socket address specifier.
- **timeout** – Receive timeout in milliseconds, default is 100ms, 1us increments.
- **pass\_tags** – Whether sink will serialize and pass tags over the link.
- **hwm** – High Watermark to configure the socket to (-1 => zmq's default)

```

rep_sink_sptr.active_thread_priority(rep_sink_sptr self) → int
rep_sink_sptr.declare_sample_delay(rep_sink_sptr self, int which, int delay)
    declare_sample_delay(rep_sink_sptr self, unsigned int delay)

rep_sink_sptr.message_subscribers(rep_sink_sptr self, swig_int_ptr which_port) → swig_int_ptr
rep_sink_sptr.min_noutput_items(rep_sink_sptr self) → int
rep_sink_sptr.pc_input_buffers_full_avg(rep_sink_sptr self, int which) → float
    pc_input_buffers_full_avg(rep_sink_sptr self) -> pmt_vector_float
rep_sink_sptr.pc_noutput_items_avg(rep_sink_sptr self) → float
rep_sink_sptr.pc_nproduced_avg(rep_sink_sptr self) → float

```

```

rep_sink_sptr.pc_output_buffers_full_avg(rep_sink_sptr self, int which) →
float
    pc_output_buffers_full_avg(rep_sink_sptr self) -> pmt_vector_float

rep_sink_sptr.pc_throughput_avg(rep_sink_sptr self) → float

rep_sink_sptr.pc_work_time_avg(rep_sink_sptr self) → float

rep_sink_sptr.pc_work_time_total(rep_sink_sptr self) → float

rep_sink_sptr.sample_delay(rep_sink_sptr self, int which) → unsigned int

rep_sink_sptr.set_min_noutput_items(rep_sink_sptr self, int m)

rep_sink_sptr.set_thread_priority(rep_sink_sptr self, int priority) → int

rep_sink_sptr.thread_priority(rep_sink_sptr self) → int

gnuradio.zeromq.req_msg_source(char * address, int timeout=100) →
req_msg_source_sptr
    Receive messages on ZMQ REQ socket output async messages.

This block will connect to a ZMQ REP socket, then resend all incoming messages as
asynchronous messages.

Constructor Specific Documentation:

Return a shared_ptr to a new instance of zeromq::req_msg_source.

Parameters:

- address – ZMQ socket address specifier
- timeout – Receive timeout in milliseconds, default is 100ms, 1us
increments



req_msg_source_sptr.active_thread_priority(req_msg_source_sptr self) →
int

req_msg_source_sptr.declare_sample_delay(req_msg_source_sptr self, int
which, int delay)
    declare_sample_delay(req_msg_source_sptr self, unsigned int delay)

req_msg_source_sptr.message_subscribers(req_msg_source_sptr self,
swig_int_ptr which_port) → swig_int_ptr

req_msg_source_sptr.min_noutput_items(req_msg_source_sptr self) → int

req_msg_source_sptr.pc_input_buffers_full_avg(req_msg_source_sptr self,
int which) → float
    pc_input_buffers_full_avg(req_msg_source_sptr self) -> pmt_vector_float

req_msg_source_sptr.pc_noutput_items_avg(req_msg_source_sptr self) →
float

req_msg_source_sptr.pc_nproduced_avg(req_msg_source_sptr self) → float

req_msg_source_sptr.pc_output_buffers_full_avg(req_msg_source_sptr self,
int which) → float
    pc_output_buffers_full_avg(req_msg_source_sptr self) -> pmt_vector_float

req_msg_source_sptr.pc_throughput_avg(req_msg_source_sptr self) → float

req_msg_source_sptr.pc_work_time_avg(req_msg_source_sptr self) → float

req_msg_source_sptr.pc_work_time_total(req_msg_source_sptr self) → float

req_msg_source_sptr.sample_delay(req_msg_source_sptr self, int which) →
float

```

unsigned int

```
req_msg_source_sptr.set_min_noutput_items(req_msg_source_sptr self, int m)
```

```
req_msg_source_sptr.set_thread_priority(req_msg_source_sptr self, int priority) → int
```

```
req_msg_source_sptr.thread_priority(req_msg_source_sptr self) → int
```

```
gnuradio.zeromq.req_source(size_t itemsize, size_t vlen, char * address, int timeout=100, bool pass_tags=False, int hwm=-1) → req_source_sptr
```

Receive messages on ZMQ REQ socket and source stream.

This block will connect to a ZMQ REP socket, then produce all incoming messages as streaming output.

Constructor Specific Documentation:

Return a shared\_ptr to a new instance of zeromq::req\_source.

- Parameters:**
- **itemsize** – Size of a stream item in bytes.
  - **vlen** – Vector length of the input items. Note that one vector is one item.
  - **address** – ZMQ socket address specifier.
  - **timeout** – Receive timeout in milliseconds, default is 100ms, 1us increments.
  - **pass\_tags** – Whether source will look for and deserialize tags.
  - **hwm** – High Watermark to configure the socket to (-1 => zmq's default)

```
req_source_sptr.active_thread_priority(req_source_sptr self) → int
```

```
req_source_sptr.declare_sample_delay(req_source_sptr self, int which, int delay)
```

```
declare_sample_delay(req_source_sptr self, unsigned int delay)
```

```
req_source_sptr.message_subscribers(req_source_sptr self, swig_int_ptr which_port) → swig_int_ptr
```

```
req_source_sptr.min_noutput_items(req_source_sptr self) → int
```

```
req_source_sptr.pc_input_buffers_full_avg(req_source_sptr self, int which) → float
```

```
pc_input_buffers_full_avg(req_source_sptr self) -> pmt_vector_float
```

```
req_source_sptr.pc_noutput_items_avg(req_source_sptr self) → float
```

```
req_source_sptr.pc_nproduced_avg(req_source_sptr self) → float
```

```
req_source_sptr.pc_output_buffers_full_avg(req_source_sptr self, int which) → float
```

```
pc_output_buffers_full_avg(req_source_sptr self) -> pmt_vector_float
```

```
req_source_sptr.pc_throughput_avg(req_source_sptr self) → float
```

```
req_source_sptr.pc_work_time_avg(req_source_sptr self) → float
```

```
req_source_sptr.pc_work_time_total(req_source_sptr self) → float
```

```
req_source_sptr.sample_delay(req_source_sptr self, int which) → unsigned int
```

```
req_source_sptr.set_min_noutput_items(req_source_sptr self, int m)
```

```
req_source_sptr.set_thread_priority(req_source_sptr self, int priority) → int
```

```

req_source_sptr.thread_priority(req_source_sptr self) → int

gnuradio.zeromq.sub_msg_source(char * address, int timeout=100) →
sub_msg_source_sptr
    Receive messages on ZMQ SUB socket and output async messages.

This block will connect to a ZMQ PUB socket, then convert them to outgoing async
messages

Constructor Specific Documentation:

Return a shared_ptr to a new instance of gr::zeromq::sub_msg_source.

Parameters:

- address – ZMQ socket address specifier
- timeout – Receive timeout in milliseconds, default is 100ms, 1us
increments



sub_msg_source_sptr.active_thread_priority(sub_msg_source_sptr self) →
int

sub_msg_source_sptr.declare_sample_delay(sub_msg_source_sptr self, int
which, int delay)
    declare_sample_delay(sub_msg_source_sptr self, unsigned int delay)

sub_msg_source_sptr.message_subscribers(sub_msg_source_sptr self,
swig_int_ptr which_port) → swig_int_ptr

sub_msg_source_sptr.min_noutput_items(sub_msg_source_sptr self) → int

sub_msg_source_sptr.pc_input_buffers_full_avg(sub_msg_source_sptr self,
int which) → float
    pc_input_buffers_full_avg(sub_msg_source_sptr self) -> pmt_vector_float

sub_msg_source_sptr.pc_noutput_items_avg(sub_msg_source_sptr self) →
float

sub_msg_source_sptr.pc_nproduced_avg(sub_msg_source_sptr self) → float

sub_msg_source_sptr.pc_output_buffers_full_avg(sub_msg_source_sptr self,
int which) → float
    pc_output_buffers_full_avg(sub_msg_source_sptr self) -> pmt_vector_float

sub_msg_source_sptr.pc_throughput_avg(sub_msg_source_sptr self) → float

sub_msg_source_sptr.pc_work_time_avg(sub_msg_source_sptr self) → float

sub_msg_source_sptr.pc_work_time_total(sub_msg_source_sptr self) → float

sub_msg_source_sptr.sample_delay(sub_msg_source_sptr self, int which) →
unsigned int

sub_msg_source_sptr.set_min_noutput_items(sub_msg_source_sptr self, int
m)

sub_msg_source_sptr.set_thread_priority(sub_msg_source_sptr self, int
priority) → int

sub_msg_source_sptr.thread_priority(sub_msg_source_sptr self) → int

gnuradio.zeromq.sub_source(size_t itemsize, size_t vlen, char * address, int
timeout=100, bool pass_tags=False, int hwm=-1) → sub_source_sptr
    Receive messages on ZMQ SUB socket and source stream.

This block will connect to a ZMQ PUB socket, then produce all incoming messages as
streaming output.

```

Constructor Specific Documentation:

Return a shared\_ptr to a new instance of gr::zeromq::sub\_source.

**Parameters:**

- **itemsize** – Size of a stream item in bytes.
- **vlen** – Vector length of the input items. Note that one vector is one item.
- **address** – ZMQ socket address specifier.
- **timeout** – Receive timeout in milliseconds, default is 100ms, 1us increments.
- **pass\_tags** – Whether source will look for and deserialize tags.
- **hwm** – High Watermark to configure the socket to (-1 => zmq's default)

```
sub_source_sptr.active_thread_priority(sub_source_sptr self) → int  
  
sub_source_sptr.declare_sample_delay(sub_source_sptr self, int which, int delay)  
    declare_sample_delay(sub_source_sptr self, unsigned int delay)  
  
sub_source_sptr.message_subscribers(sub_source_sptr self, swig_int_ptr which_port) → swig_int_ptr  
  
sub_source_sptr.min_noutput_items(sub_source_sptr self) → int  
  
sub_source_sptr.pc_input_buffers_full_avg(sub_source_sptr self, int which) → float  
    pc_input_buffers_full_avg(sub_source_sptr self) -> pmt_vector_float  
  
sub_source_sptr.pc_noutput_items_avg(sub_source_sptr self) → float  
  
sub_source_sptr.pc_nproduced_avg(sub_source_sptr self) → float  
  
sub_source_sptr.pc_output_buffers_full_avg(sub_source_sptr self, int which) → float  
    pc_output_buffers_full_avg(sub_source_sptr self) -> pmt_vector_float  
  
sub_source_sptr.pc_throughput_avg(sub_source_sptr self) → float  
  
sub_source_sptr.pc_work_time_avg(sub_source_sptr self) → float  
  
sub_source_sptr.pc_work_time_total(sub_source_sptr self) → float  
  
sub_source_sptr.sample_delay(sub_source_sptr self, int which) → unsigned int  
  
sub_source_sptr.set_min_noutput_items(sub_source_sptr self, int m)  
  
sub_source_sptr.set_thread_priority(sub_source_sptr self, int priority) → int  
  
sub_source_sptr.thread_priority(sub_source_sptr self) → int
```