

Dependencies:  
enum  
queue  
time  
numpy  
PyQt5  
DvG\_debug\_functions

DvG\_QDeviceIO.py

<<PyQt5.QtCore.QObject>>

QDeviceIO

<<PyQt5.QtCore.pyqtSignal>>

signal\_DAQ\_updated()  
signal\_DAQ\_suspended()  
signal\_connection\_lost()

dev : {linked I/O device class}

dev.name : str

dev.mutex : PyQt5.QtCore.QMutex()

dev.is\_alive : bool

\_thread\_DAQ : PyQt5.QtCore.QThread()

\_thread\_send : PyQt5.QtCore.QThread()

worker\_DAQ : Worker\_DAQ()

worker\_send : Worker\_send()

DAQ\_update\_counter

DAQ\_not\_alive\_counter

obtained\_DAQ\_update\_interval\_ms

obtained\_DAQ\_rate\_Hz

\_\_init\_\_()

attach\_device(dev)

create\_worker\_DAQ(\*\*kwargs)

create\_worker\_send(\*\*kwargs)

start\_worker\_DAQ()

priority : PyQt5.QtCore.QThread.Priority)

start\_worker\_send()

priority : PyQt5.QtCore.QThread.Priority)

quit\_worker\_DAQ()

quit\_worker\_send()

quit\_all\_workers()

<<object>>

InnerClassDescriptor

cls

outer

\_\_init\_\_(cls)

\_\_get\_\_(instance, outerclass)

@InnerClassDescriptor

<<PyQt5.QtCore.QObject>>

QDeviceIO.Worker\_send

dev : {linked I/O device class}

alt\_process\_jobs\_function : function

update\_counter : int

\_running : bool

\_qwc : PyQt5.QtCore.QWaitCondition()

\_mutex\_wait : PyQt5.QtCore.QMutex()

\_queue : queue.Queue()

\_sentinel

DEBUG : bool

DEBUG\_color

\_\_init\_\_()

alt\_process\_jobs\_function : function,  
DEBUG : bool)

\_do\_work()

\_stop()

add\_to\_queue(instruction, pass\_args)

process\_queue()

queued\_instruction(instruction, pass\_args)

@InnerClassDescriptor

<<PyQt5.QtCore.QObject>>

QDeviceIO.Worker\_DAQ

dev : {linked I/O device class}

function\_to\_run\_each\_update : function

critical\_not\_alive\_count

calc\_DAQ\_rate\_every\_N\_iter

\_trigger\_by : DAQ\_trigger

\_update\_interval\_ms : int

\_timer\_type : PyQt5.QtCore.Qt.TimerType

\_running : bool

\_qwc : PyQt5.QtCore.QWaitCondition()

\_mutex\_wait : PyQt5.QtCore.QMutex()

\_suspend : bool

suspended : bool

\_QET\_DAQ : PyQt5.QtCore.QElapsedTimer()

\_prev\_tick\_DAQ\_update

\_prev\_tick\_DAQ\_rate

DEBUG : bool

DEBUG\_color

\_\_init\_\_()

DAQ\_trigger\_by : DAQ\_trigger,  
DAQ\_function\_to\_run\_each\_update : function,  
DAQ\_update\_interval\_ms,  
DAQ\_timer\_type : PyQt5.QtCore.Qt.TimerType,  
DAQ\_critical\_not\_alive\_count,  
calc\_DAQ\_rate\_every\_N\_iter,  
DEBUG : bool)

\_do\_work()

\_stop()

\_perform\_DAQ()

schedule\_suspend(state : bool)

wake\_up()

@enum.unique

<<enum.IntEnum>>

DAQ\_trigger

INTERNAL\_TIMER

SINGLE\_SHOT\_WAKE\_UP

CONTINUOUS