

**queue**

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# Chapter 1

## queue

### 1.1 queue.library

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Warranty

Function Reference

### 1.2 Copyright

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the

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That's all there is to it!

## 1.4 Function Reference

`queue.library/QOpen()`

`queue.library/QClose()`

`queue.library/QAddMsg()`

`queue.library/QRemMsg()`

`queue.library/QReplyMsg()`

`queue.library/QFlush()`

## 1.5 SHW Wabnitz

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## 1.6 `queue.library/Qopen()`

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NAME

QOpen

SYNOPSIS

```
qh = QOpen(name, mode, sigbit)
```

```
D0          A0      D0      D1
```

```
QHandle = QOpen(STRPTR name, ULONG mode, ULONG sigbit)
```

FUNCTION

This function opens a message queue either for reading or writing. If you want both you have to open the queue twice.

INPUTS

name - the name of the message queue

mode - QMODE\_SEND or QMODE\_LISTEN

sigbit - A signal allocated by AllocSignal()

RESULT

qh - A handle for the message queue

## 1.7 queue.library/QClose()

NAME

QClose

SYNOPSIS

```
num = QClose(qh)
```

```
D0          A0
```

```
ULONG QClose(QHandle)
```

FUNCTION

Closes a message queue if the calling task has no messages left in the queue. This function can only fail for handles opened with QMODE\_SEND.

INPUTS

qh - The handle of the queue to be closed

RESULT

num - Number of messages still in the queue

## 1.8 queue.library/QAddMsg()

NAME

QAddMsg

SYNOPSIS

---

```
QAddMsg(qh, msg)
        A0 A1
```

```
void QAddMsg(QHandle, QMessage *)
```

#### FUNCTION

Appends a message to a message queue. All tasks listening to the queue are signalled. If nobody is listening the message is placed in the handle's reply list immediately and the current task signals itself ;-)

#### INPUTS

qh - A message queue handle  
msg - A message

## 1.9 queue.library/QRemMsg()

#### NAME

```
QRemMsg
```

#### SYNOPSIS

```
QRemMsg(qh, msg)
        A0 A1
```

```
void QRemMsg(QHandle, QMessage *)
```

#### FUNCTION

Attempts to remove a message from the queue. The removal is delayed until no task refers to the message anymore. This function can be used to implement timeouts.

#### INPUTS

qh - A message queue handle  
msg - A message

#### NOTE

When one or more tasks refer to the message to be removed it is marked as "removed" and cannot be read with QGetMsg() by other tasks.

## 1.10 queue.library/QGetMsg()

#### NAME

```
QGetMsg
```

#### SYNOPSIS

```
msg = QGetMsg(qh)
D0          A0
```

```
QMessage *QGetMsg(QHandle)
```

#### FUNCTIONS

Retrieves the next message in the queue if the handle has been opened with QMODE\_LISTEN or the the next message in the handle's reply list if the handle has been opened with QMODE\_SEND.

#### INPUTS

qh - A message queue handle

#### RESULT

msg - A message or NULL

#### NOTE

All tasks get a chance to read every message in the queue with the possible exception of messages removed with QRemMsg().

## 1.11 queue.library/QReplyMsg()

#### NAME

QReplyMsg

#### SYNOPSIS

QReplyMsg(qh)  
A0

void QReplyMsg(QHandle)

#### FUNCTIONS

This function should be used if the current message is no longer required but the next message cannot be processed immediately.

#### INPUTS

qh - A message queue handle

#### NOTE

QGetMsg() automatically replies the last message. It is not necessary to use QReplyMsg() before QGetMsg(). A task which might block indeterminately should use QReplyMsg() to allow the originator of it's current message to reclaim it.

## 1.12 queue.library/QFlush()

#### NAME

QFlush

#### SYNOPSIS

QFlush(qh)  
A0

QFlush(QHandle)

#### FUNCTIONS

Kicks all removed but not yet dequeued messages out of the

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queue and into the reply lists of the corresponding handles.

INPUTS

qh - A message queue handle

NOTE

Shouldn't be necessary.

---