

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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```

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<signature of Ty Coon>, 1 April 1990
Ty Coon, President of Vice

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()`

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 indetermindly 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

queue and into the reply lists of the corresponding handles.

INPUTS

qh - A message queue handle

NOTE

Shouldn't be necessary.
