

# ioctl VIDIOC\_QUERYBUF

**System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\linux-master\Documentation\userspace-api\media\v4l\linux-master) (Documentation) (userspace-api) (media) (v4l)vidioc-querybuf.rst, line 2)**

Unknown directive type "c.namespace".

```
.. c:namespace:: V4L
```

## Name

VIDIOC\_QUERYBUF - Query the status of a buffer

## Synopsis

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Unknown directive type "c.macro".

```
.. c:macro:: VIDIOC_QUERYBUF
```

```
int ioctl(int fd, VIDIOC_QUERYBUF, struct v4l2_buffer *argp)
```

## Arguments

fd

File descriptor returned by `c:func:open()`.

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argp

Pointer to struct `c:type:v4l2_buffer`.

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## Description

This ioctl is part of the `ref:streaming <mmap>` I/O method. It can be used to query the status of a buffer at any time after buffers have been allocated with the `ref:VIDIOC_REQBUFS` ioctl.

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Applications set the `type` field of a struct `:c:type:'v4l2_buffer'` to the same buffer type as was previously used with struct `:c:type:'v4l2_format'` type and struct `:c:type:'v4l2_requestbuffers'` type, and the `index` field. Valid index numbers range from zero to the number of buffers allocated with `ref:'VIDIOC_REQBUFS'` (struct `:c:type:'v4l2_requestbuffers'` `count`) minus one. The `reserved` and `reserved2` fields must be set to 0. When using the `ref:'multi-planar API <planar-apis>'`, the `m.planes` field must contain a userspace pointer to an array of struct `:c:type:'v4l2_plane'` and the `length` field has to be set to the number of elements in that array. After calling `ref:'VIDIOC_QUERYBUF'` with a pointer to this structure drivers return an error code or fill the rest of the structure.

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In the `flags` field the `V4L2_BUF_FLAG_MAPPED`, `V4L2_BUF_FLAG_PREPARED`, `V4L2_BUF_FLAG_QUEUED` and `V4L2_BUF_FLAG_DONE` flags will be valid. The `memory` field will be set to the current I/O method. For the single-planar API, the `m.offset` contains the offset of the buffer from the start of the device memory, the `length` field its size. For the multi-planar API, fields `m.mem_offset` and `length` in the `m.planes` array elements will be used instead and the `length` field of struct `:c:type:'v4l2_buffer'` is set to the number of filled-in array elements. The driver may or may not set the remaining fields and flags, they are meaningless in this context.

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The struct `:c:type:`v4l2_buffer`` structure is specified in `ref:`buffer``.

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## Return Value

On success 0 is returned, on error -1 and the `errno` variable is set appropriately. The generic error codes are described at the `ref:`Generic Error Codes <gen-errors>`` chapter.

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EINVAL

The `buffer` type is not supported, or the `index` is out of bounds.