

# ioctl MEDIA\_IOC\_DEVICE\_INFO

**System Message: ERROR/3** (D:\onboarding-resources\sample-onboarding-resources\linux-master\Documentation\userspace-api\media\mediactl\[linux-master] [Documentation] [userspace-api] [media] [mediactl]media-ioc-device-info.rst, line 2)

Unknown directive type "c:namespace".

```
.. c:namespace:: MC
```

## Name

MEDIA\_IOC\_DEVICE\_INFO - Query device information

## Synopsis

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Unknown directive type "c:macro".

```
.. c:macro:: MEDIA_IOC_DEVICE_INFO
```

```
int ioctl(int fd, MEDIA_IOC_DEVICE_INFO, struct media_device_info *argp)
```

## Arguments

fd

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

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Unknown interpreted text role "c:func".

argp

Pointer to struct `c:type:media_device_info`.

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Unknown interpreted text role "c:type".

## Description

All media devices must support the `MEDIA_IOC_DEVICE_INFO` ioctl. To query device information, applications call the `ioctl` with a pointer to a struct `c:type:media_device_info`. The driver fills the structure and returns the information to the application. The `ioctl` never fails.

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Unknown interpreted text role "c:type".

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master\Documentation\userspace-api\media\mediactl\[linux-master] [Documentation]  
[userspace-api] [media] [mediactl]media-ioc-device-info.rst, line 40)

Unknown directive type "c:type".

```
.. c:type:: media_device_info
```

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[userspace-api] [media] [mediactl]media-ioc-device-info.rst, line 42)

Unknown directive type "tabularcolumns".

```
.. tabularcolumns:: |p{4.4cm}|p{4.4cm}|p{8.5cm}|
```

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[userspace-api] [media] [mediactl]media-ioc-device-info.rst, line 44)

Unknown directive type "flat-table".

```
.. flat-table:: struct media_device_info
:header-rows: 0
:stub-columns: 0
:widths:      1 1 2

* - char
  - ``driver``\ [16]
  - Name of the driver implementing the media API as a NUL-terminated
    ASCII string. The driver version is stored in the
    ``driver_version`` field.

    Driver specific applications can use this information to verify
    the driver identity. It is also useful to work around known bugs,
    or to identify drivers in error reports.

* - char
  - ``model``\ [32]
  - Device model name as a NUL-terminated UTF-8 string. The device
    version is stored in the ``device_version`` field and is not be
    appended to the model name.

* - char
  - ``serial``\ [40]
  - Serial number as a NUL-terminated ASCII string.

* - char
  - ``bus_info``\ [32]
  - Location of the device in the system as a NUL-terminated ASCII
    string. This includes the bus type name (PCI, USB, ...) and a
    bus-specific identifier.

* - __u32
  - ``media_version``
  - Media API version, formatted with the ``KERNEL_VERSION()`` macro.

* - __u32
  - ``hw_revision``
  - Hardware device revision in a driver-specific format.

* - __u32
  - ``driver_version``
  - Media device driver version, formatted with the
    ``KERNEL_VERSION()`` macro. Together with the ``driver`` field
    this identifies a particular driver.

* - __u32
  - ``reserved``\ [31]
  - Reserved for future extensions. Drivers and applications must set
    this array to zero.
```

The `serial` and `bus_info` fields can be used to distinguish between multiple instances of otherwise identical hardware. The serial number takes precedence when provided and can be assumed to be unique. If the serial number is an empty string, the `bus_info` field can be used instead. The `bus_info` field is guaranteed to be unique, but can vary across reboots or device unplug/replug.

## 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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Unknown interpreted text role "ref".