

ioctl VIDIOC_DV_TIMINGS_CAP, VIDIOC_SUBDEV_DV_TIMINGS_CAP

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-dv-timings-cap.rst, line 2)

Unknown directive type "c:namespace".

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

Name

VIDIOC_DV_TIMINGS_CAP - VIDIOC_SUBDEV_DV_TIMINGS_CAP - The capabilities of the Digital Video receiver/transmitter

Synopsis

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-dv-timings-cap.rst, line 18)

Unknown directive type "c:macro".

```
.. c:macro:: VIDIOC_DV_TIMINGS_CAP
```

```
int ioctl(int fd, VIDIOC_DV_TIMINGS_CAP, struct v4l2_dv_timings_cap *argp)
```

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-dv-timings-cap.rst, line 22)

Unknown directive type "c:macro".

```
.. c:macro:: VIDIOC_SUBDEV_DV_TIMINGS_CAP
```

```
int ioctl(int fd, VIDIOC_SUBDEV_DV_TIMINGS_CAP, struct v4l2_dv_timings_cap *argp)
```

Arguments

fd

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

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-dv-timings-cap.rst, line 30);
[backlink](#)

Unknown interpreted text role "c:func".

argp

Pointer to struct `c:type:v4l2_dv_timings_cap`.

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-dv-timings-cap.rst, line 33);
[backlink](#)

Unknown interpreted text role "c:type".

Description

To query the capabilities of the DV receiver/transmitter applications initialize the `pad` field to 0, zero the reserved array of struct `c:type:'v4l2_dv_timings_cap'` and call the `VIDIOC_DV_TIMINGS_CAP` ioctl on a video node and the driver will fill in the structure.

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-dv-timings-cap.rst, line 38); [backlink](#)

Unknown interpreted text role "c:type".

Note

Drivers may return different values after switching the video input or output.

When implemented by the driver DV capabilities of subdevices can be queried by calling the `VIDIOC_SUBDEV_DV_TIMINGS_CAP` ioctl directly on a subdevice node. The capabilities are specific to inputs (for DV receivers) or outputs (for DV transmitters), applications must specify the desired pad number in the struct `c:type:'v4l2_dv_timings_cap'` `pad` field and zero the `reserved` array. Attempts to query capabilities on a pad that doesn't support them will return an `EINVAL` error code.

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-dv-timings-cap.rst, line 49); [backlink](#)

Unknown interpreted text role "c:type".

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-dv-timings-cap.rst, line 58)

Unknown directive type "tabularcolumns".

```
.. tabularcolumns:: |p{1.2cm}|p{3.2cm}|p{12.9cm}|
```

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-dv-timings-cap.rst, line 60)

Unknown directive type "c:type".

```
.. c:type:: v4l2_bt_timings_cap
```

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-dv-timings-cap.rst, line 62)

Unknown directive type "flat-table".

```
.. flat-table:: struct v4l2_bt_timings_cap
   :header-rows: 0
   :stub-columns: 0
   :widths:      1 1 2

   * - __u32
     - __min_width`
     - Minimum width of the active video in pixels.
   * - __u32
     - __max_width`
     - Maximum width of the active video in pixels.
   * - __u32
     - __min_height`
     - Minimum height of the active video in lines.
   * - __u32
     - __max_height`
     - Maximum height of the active video in lines.
   * - __u64
     - __min_pixelclock`
     - Minimum pixelclock frequency in Hz.
   * - __u64
```

```

- ``max_pixelclock``
- Maximum pixelclock frequency in Hz.
* - __u32
- ``standards``
- The video standard(s) supported by the hardware. See
:ref:`dv-bt-standards` for a list of standards.
* - __u32
- ``capabilities``
- Several flags giving more information about the capabilities. See
:ref:`dv-bt-cap-capabilities` for a description of the flags.
* - __u32
- ``reserved`` [16]
- Reserved for future extensions.
Drivers must set the array to zero.

```

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\linux-master\Documentation\userspace-api\media\v41\[linux-master] [Documentation] [userspace-api] [media] [v41]vidioc-dv-timings-cap.rst, line 99)

Unknown directive type "tabularcolumns".

```
.. tabularcolumns:: |p{4.4cm}|p{3.6cm}|p{9.3cm}|
```

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\linux-master\Documentation\userspace-api\media\v41\[linux-master] [Documentation] [userspace-api] [media] [v41]vidioc-dv-timings-cap.rst, line 101)

Unknown directive type "c:type".

```
.. c:type:: v4l2_dv_timings_cap
```

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\linux-master\Documentation\userspace-api\media\v41\[linux-master] [Documentation] [userspace-api] [media] [v41]vidioc-dv-timings-cap.rst, line 103)

Unknown directive type "flat-table".

```

.. flat-table:: struct v4l2_dv_timings_cap
   :header-rows: 0
   :stub-columns: 0
   :widths:      1 1 2

   * - __u32
     - ``type``
     - Type of DV timings as listed in :ref:`dv-timing-types`.
   * - __u32
     - ``pad``
     - Pad number as reported by the media controller API. This field is
       only used when operating on a subdevice node. When operating on a
       video node applications must set this field to zero.
   * - __u32
     - ``reserved`` [2]
     - Reserved for future extensions.

     Drivers and applications must set the array to zero.
   * - union {
     - (anonymous)
   * - struct :c:type:`v4l2_bt_timings_cap`
     - ``bt``
     - BT.656/1120 timings capabilities of the hardware.
   * - __u32
     - ``raw_data`` [32]
   * - }

```

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\linux-master\Documentation\userspace-api\media\v41\[linux-master] [Documentation] [userspace-api] [media] [v41]vidioc-dv-timings-cap.rst, line 131)

Unknown directive type "tabularcolumns".

```
.. tabularcolumns:: |p{7.2cm}|p{10.3cm}|
```

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-dv-timings-cap.rst, line 135)

Unknown directive type "flat-table".

```
.. flat-table:: DV BT Timing capabilities
:header-rows: 0
:stub-columns: 0

* - Flag
  - Description
* -
  -
* - ``V4L2_DV_BT_CAP_INTERLACED``
  - Interlaced formats are supported.
* - ``V4L2_DV_BT_CAP_PROGRESSIVE``
  - Progressive formats are supported.
* - ``V4L2_DV_BT_CAP_REDUCED_BLANKING``
  - CVT/GTF specific: the timings can make use of reduced blanking
    (CVT) or the 'Secondary GTF' curve (GTF).
* - ``V4L2_DV_BT_CAP_CUSTOM``
  - Can support non-standard timings, i.e. timings not belonging to
    the standards set in the ``standards`` field.
```

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.

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-dv-timings-cap.rst, line 157); [backlink](#)

Unknown interpreted text role "ref".