

# ioctl VIDIOC\_SUBDEV\_ENUM\_MBUS\_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-subdev-enum-mbus-code.rst`, line 2)

Unknown directive type "c.namespace".

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

## Name

VIDIOC\_SUBDEV\_ENUM\_MBUS\_CODE - Enumerate media bus formats

## Synopsis

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Unknown directive type "c.macro".

```
.. c:macro:: VIDIOC_SUBDEV_ENUM_MBUS_CODE
```

```
int ioctl(int fd, VIDIOC_SUBDEV_ENUM_MBUS_CODE, struct v4l2_subdev_mbus_code_enum * argp)
```

## Arguments

`fd`

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

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`argp`

Pointer to struct `:c:type:`v4l2_subdev_mbus_code_enum``.

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## Description

To enumerate media bus formats available at a given sub-device pad applications initialize the `pad`, which and `index` fields of struct `:c:type:`v4l2_subdev_mbus_code_enum`` and call the `:ref:`VIDIOC_SUBDEV_ENUM_MBUS_CODE`` `ioctl` with a pointer to this structure. Drivers fill the rest of the structure or return an `EINVAL` error code if either the `pad` or `index` are invalid. All media bus formats are enumerable by beginning at index zero and incrementing by one until `EINVAL` is returned.

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Available media bus formats may depend on the current 'try' formats at other pads of the sub-device, as well as on the current active links. See [ref`VIDIOC\\_SUBDEV\\_G\\_FMT`](#) for more information about the try formats.

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Unknown directive type "ctype".

```
.. ctype:: v4l2_subdev_mbus_code_enum
```

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Unknown directive type "tabularcolumns".

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

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Unknown directive type "flat-table".

```
.. flat-table:: struct v4l2_subdev_mbus_code_enum
   :header-rows: 0
   :stub-columns: 0
   :widths:      1 1 2

   * - u32
     - ``pad``
     - Pad number as reported by the media controller API.
   * - u32
     - ``index``
     - Number of the format in the enumeration, set by the application.
   * - u32
     - ``code``
     - The media bus format code, as defined in
       :ref:`v4l2-mbus-format`.
   * - u32
     - ``which``
     - Media bus format codes to be enumerated, from enum
       :ref:`v4l2_subdev_format_whence` <v4l2-subdev-format-whence>.
   * - u32
     - ``flags``
     - See :ref:`v4l2-subdev-mbus-code-flags`
   * - u32
     - ``reserved`` [7]
     - Reserved for future extensions. Applications and drivers must set
       the array to zero.
```

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Unknown directive type "tabularcolumns".

```
.. tabularcolumns:: |p{8.8cm}|p{2.2cm}|p{6.3cm}|
```

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Unknown directive type "flat-table".

```
.. flat-table:: Subdev Media Bus Code Enumerate Flags
   :header-rows: 0
   :stub-columns: 0
   :widths:      1 1 2

   * - V4L2_SUBDEV_MBUS_CODE_CSC_COLORSPACE
     - 0x00000001
     - The driver allows the application to try to change the default colorspace
       encoding. The application can ask to configure the colorspace of the
       subdevice when calling the :ref:`VIDIOC_SUBDEV_S_FMT <VIDIOC_SUBDEV_G_FMT>`
       ioctl with :ref:`V4L2_MBUS_FRAMEFMT_SET_CSC <mbus-framefmt-set-csc>` set.
       See :ref:`v4l2-mbus-format` on how to do this.
   * - V4L2_SUBDEV_MBUS_CODE_CSC_XFER_FUNC
     - 0x00000002
     - The driver allows the application to try to change the default transform function.
       The application can ask to configure the transform function of
       the subdevice when calling the :ref:`VIDIOC_SUBDEV_S_FMT <VIDIOC_SUBDEV_G_FMT>`
       ioctl with :ref:`V4L2_MBUS_FRAMEFMT_SET_CSC <mbus-framefmt-set-csc>` set.
       See :ref:`v4l2-mbus-format` on how to do this.
   * - V4L2_SUBDEV_MBUS_CODE_CSC_YCBCR_ENC
     - 0x00000004
     - The driver allows the application to try to change the default Y'CbCr
       encoding. The application can ask to configure the Y'CbCr encoding of the
       subdevice when calling the :ref:`VIDIOC_SUBDEV_S_FMT <VIDIOC_SUBDEV_G_FMT>`
       ioctl with :ref:`V4L2_MBUS_FRAMEFMT_SET_CSC <mbus-framefmt-set-csc>` set.
       See :ref:`v4l2-mbus-format` on how to do this.
   * - V4L2_SUBDEV_MBUS_CODE_CSC_HSV_ENC
     - 0x00000004
     - The driver allows the application to try to change the default HSV
       encoding. The application can ask to configure the HSV encoding of the
       subdevice when calling the :ref:`VIDIOC_SUBDEV_S_FMT <VIDIOC_SUBDEV_G_FMT>`
       ioctl with :ref:`V4L2_MBUS_FRAMEFMT_SET_CSC <mbus-framefmt-set-csc>` set.
       See :ref:`v4l2-mbus-format` on how to do this.
   * - V4L2_SUBDEV_MBUS_CODE_CSC_QUANTIZATION
     - 0x00000008
     - The driver allows the application to try to change the default
       quantization. The application can ask to configure the quantization of
       the subdevice when calling the :ref:`VIDIOC_SUBDEV_S_FMT <VIDIOC_SUBDEV_G_FMT>`
       ioctl with :ref:`V4L2_MBUS_FRAMEFMT_SET_CSC <mbus-framefmt-set-csc>` set.
       See :ref:`v4l2-mbus-format` on how to do this.
```

## 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 struct `:c:type:`v4l2_subdev_mbus_code_enum`` pad references a non-existing pad, or the `index` field is out of bounds.

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