

# V4L2\_PIX\_FMT\_SRGGB10P ('pRAA'), V4L2\_PIX\_FMT\_SGRBG10P ('pgAA'), V4L2\_PIX\_FMT\_SGBRG10P ('pGAA'), V4L2\_PIX\_FMT\_SBGGR10P ('pBAA'),

V4L2\_PIX\_FMT\_SGRBG10P V4L2\_PIX\_FMT\_SGBRG10P V4L2\_PIX\_FMT\_SBGGR10P 10-bit packed Bayer formats

## Description

These four pixel formats are packed raw sRGB / Bayer formats with 10 bits per sample. Every four consecutive samples are packed into 5 bytes. Each of the first 4 bytes contain the 8 high order bits of the pixels, and the 5th byte contains the 2 least significant bits of each pixel, in the same order.

Each n-pixel row contains n/2 green samples and n/2 blue or red samples, with alternating green-red and green-blue rows. They are conventionally described as GRGR... BGBG..., RGRG... GBGB..., etc. Below is an example of a small V4L2\_PIX\_FMT\_SBGGR10P image:

**Byte Order.** Each cell is one byte.

**System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\linux-master\Documentation\userspace-api\media\v4l\linux-master) (Documentation) (userspace-api) (media) (v4l)pixfmt-srggb10p.rst, line 36)**

Unknown directive type "tabularcolumns".

```
.. tabularcolumns:: |p{2.4cm}|p{1.4cm}|p{1.2cm}|p{1.2cm}|p{1.2cm}|p{9.3cm}|
```

**System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\linux-master\Documentation\userspace-api\media\v4l\linux-master) (Documentation) (userspace-api) (media) (v4l)pixfmt-srggb10p.rst, line 38)**

Unknown directive type "flat-table".

```
.. flat-table::
  :header-rows: 0
  :stub-columns: 0
  :widths: 12 8 8 8 8 68

  * - start + 0:
    - B\ :sub:`00high`
    - G\ :sub:`01high`
    - B\ :sub:`02high`
    - G\ :sub:`03high`
    - G\ :sub:`03low` (bits 7--6) B\ :sub:`02low` (bits 5--4)

    G\ :sub:`01low` (bits 3--2) B\ :sub:`00low` (bits 1--0)

  * - start + 5:
    - G\ :sub:`10high`
    - R\ :sub:`11high`
    - G\ :sub:`12high`
    - R\ :sub:`13high`
    - R\ :sub:`13low` (bits 7--6) G\ :sub:`12low` (bits 5--4)

    R\ :sub:`11low` (bits 3--2) G\ :sub:`10low` (bits 1--0)

  * - start + 10:
    - B\ :sub:`20high`
    - G\ :sub:`21high`
    - B\ :sub:`22high`
    - G\ :sub:`23high`
    - G\ :sub:`23low` (bits 7--6) B\ :sub:`22low` (bits 5--4)

    G\ :sub:`21low` (bits 3--2) B\ :sub:`20low` (bits 1--0)

  * - start + 15:
    - G\ :sub:`30high`
    - R\ :sub:`31high`
    - G\ :sub:`32high`
    - R\ :sub:`33high`
    - R\ :sub:`33low` (bits 7--6) G\ :sub:`32low` (bits 5--4)
```

R\ :sub:`31low`\ (bits 3--2) G\ :sub:`30low`\ (bits 1--0)