## V4L2 PIX FMT INZI ('INZI')

Infrared 10-bit linked with Depth 16-bit images

\* - :cspan:`5` ...

## **Description**

Proprietary multi-planar format used by Intel SR300 Depth cameras, comprise of Infrared image followed by Depth data. The pixel definition is 32-bpp, with the Depth and Infrared Data split into separate continuous planes of identical dimensions.

The first plane - Infrared data - is stored according to <a href="ref":v4L2\_PIX\_FMT\_Y10">ref":v4L2\_PIX\_FMT\_Y10</a> greyscale format. Each pixel is 16-bit cell, with actual data stored in the 10 LSBs with values in range 0 to 1023. The six remaining MSBs are padded with zeros.

```
System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\linux-master\Documentation\userspace-api\media\v41\(linux-master\) (Documentation) (userspace-api) (media) (v41)pixfmt-inzi.rst, line 22); backlink

Unknown interpreted text role "ref".
```

The second plane provides 16-bit per-pixel Depth data arranged in ref. V4L2-PIX-FMT-Z16 < V4L2-PIX-FMT-Z16 in ref. v4L2-P

```
System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\linux-master\Documentation\userspace-api\media\v41\(linux-master\) (Documentation) (userspace-api) (media) (v41)pixfmt-inzi.rst, line 29); backlink

Unknown interpreted text role "ref".
```

Frame Structure. Each cell is a 16-bit word with more significant data stored at higher memory address (byte order is little-endian).

```
System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\linux-master\Documentation\userspace-api\media\v41\(linux-master\) (Documentation) (userspace-api) (media) (v41)pixfmt-inzi.rst, line 42)

Unknown directive type "tabularcolumns".

.. tabularcolumns:: |p{2.5cm}|p{2.5cm}|p{2.5cm}|p{2.5cm}|p{2.5cm}|p{2.5cm}|
```

```
System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\linux-
master\Documentation\userspace-api\media\v41\(linux-master) (Documentation) (userspace-
api) (media) (v41) pixfmt-inzi.rst, line 44)
Unknown directive type "flat-table".
    .. flat-table::
        :header-rows: 0
        :stub-columns: 1
        :widths: 1 1 1 1 1 1
        * - Ir\ :sub:`0,0`
          - Ir\ :sub:`0,1`
          - Ir\ :sub:`0,2`
          - ...
          - ...
          - ...
        * - :cspan:`5` ...
* - :cspan:`5` Infrared Data
* - :cspan:`5` ...
        * - ...
          - ...
          - Ir\ :sub:`n-1,n-3`
          - Ir\ :sub:`n-1,n-2`
          - Ir\ :sub:`n-1,n-1
        * - Depth\ :sub:`0,0`
         - Depth\ :sub:`0,1`
          - Depth\ :sub:`0,2`
          - ...
```

```
* - :cspan:`5` Depth Data
* - :cspan:`5` ...
* - ...
- ...
- ...
- Depth\ :sub:`n-1,n-3`
- Depth\ :sub:`n-1,n-2`
- Depth\ :sub:`n-1,n-1`
```