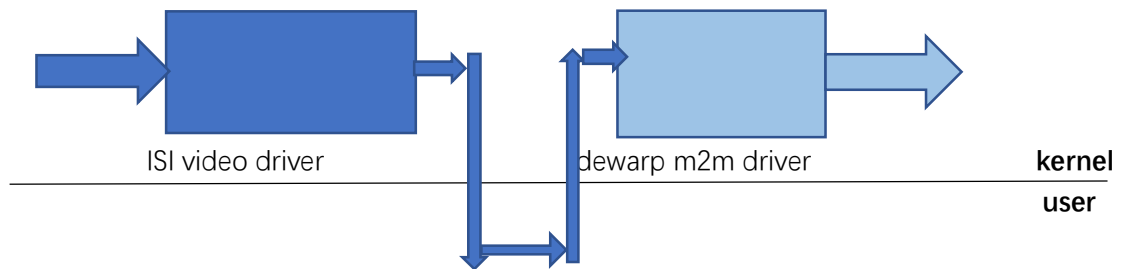
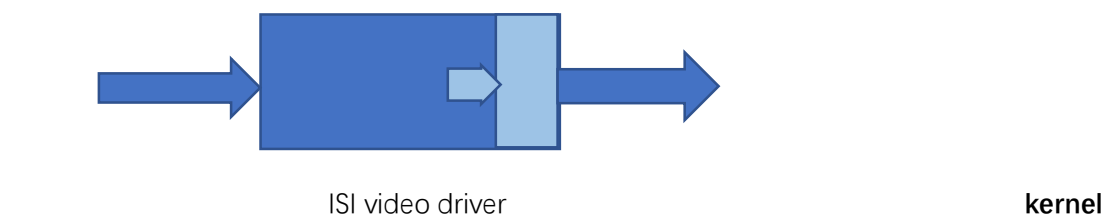


This dewarp function is inside into ISI , it's not a m2m linux driver.

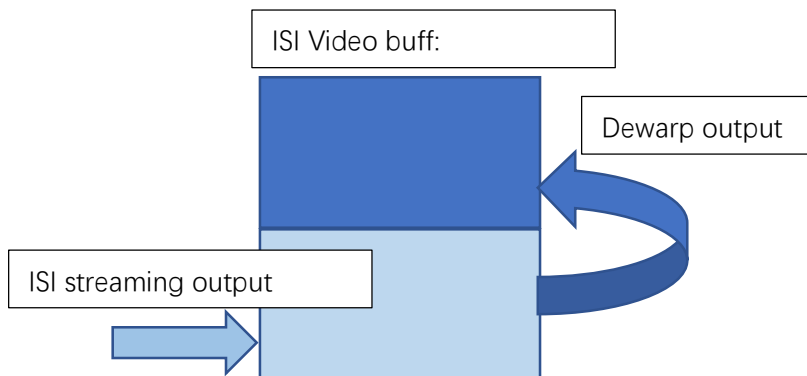
m2m dewarp :



This no m2m dewarp driver:



It double the ISI video buffer size, the bottom half block is used for ISI streaming output, the top half block is used for dewarp output.



Example: YUYV 1080p format data , it's video size should be $1920 \times 1080 \times 2$, in this driver, it will be $1920 \times 1080 \times 4$.

M2M looks a standard driver mode for dewarp module , but this driver may improve the performance when dual sensor input to do dewarp at one hw dewarp module.

Added `#define ISI_NO_STANDALONE_DEWARP` at `imx8-common.h` to build isi with dewarp or not.

There are 2 lut array, one is `dwe_lut_640_480_bypass`, another is `dwe_lut1`.

dwe_lut1 use for 1080p resolution dewarp test
dwe_lut_640_480_bypass for 640x480 resolution bypass test.
these 2 array define at dewarp_lut.c

insmod imx8-media-dev.ko

1080p yuyv dewarp test cmd:

```
gst-launch-1.0 -v v4l2src device=/dev/video3 ! "video/x-raw,framerate=30/1,format=YUY2,width=1920,height=1080" ! queue ! waylandsink window-width=640 window-height=480
```

640x480 yuyv bypass test cmd

```
gst-launch-1.0 -v v4l2src device=/dev/video3 ! "video/x-raw,framerate=30/1,format=YUY2,width=640,height=480" ! queue ! waylandsink
```

dual sensor 1080p dewarp test cmd:

```
gst-launch-1.0 -v v4l2src device=/dev/video3 ! "video/x-raw,framerate=30/1,format=YUY2,width=1920,height=1080" ! queue ! waylandsink window-width=640 window-height=480 & gst-launch-1.0 -v v4l2src device=/dev/video4 ! "video/x-raw,framerate=30/1,format=YUY2,width=1920,height=1080" ! queue ! waylandsink window-width=640 window-height=480
```

patch based on tag: lf-5.15.32-2.0.0-rc2.