

# Video decoding display

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## Video decoding display

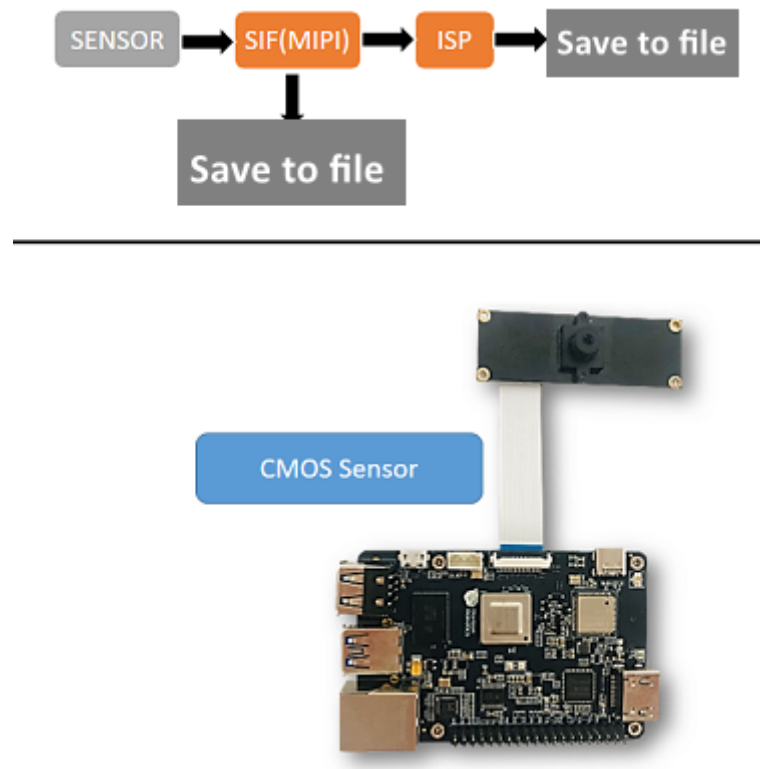
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## 1. Preparation

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This example `decoder2display` implements the decoding of video files and outputs them through the `HDMI` interface. Users can preview the images on the display.

The example flow chart is as follows.



- Connect the board to the monitor via HDMI cable
- Power on the board and log in
- Prepare the video encoding file `test.h264` as input.

## 2. Running method

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The sample code is provided in source code form and needs to be compiled and run using the `make` command.

The steps are as follows.

```
sunrise@ubuntu:~$ cd /app/cdev_demo/decode2display
sunrise@ubuntu:/app/cdev_demo/decode2display$ cp
/app/cdev_demo/vio2encoder/test.h264 .
sunrise@ubuntu:/app/cdev_demo/decode2display$ sudo make
sunrise@ubuntu:/app/cdev_demo/decode2display$ sudo ./decoder2display -w 1920 -h
1080 -i test.h264
```

The following command copies the `test.h264` file saved in [3. Camera image encoding] to the current directory for use.

```
cp /app/cdev_demo/vio2encoder/test.h264 .
```

Parameter Description.

- -h: video file height
- -w: video file width
- -i: video file path

### 3. Result

```
sunrise@ubuntu:/app/cdev_demo/vio2encoder$ cd /app/cdev_demo/decode2display
sunrise@ubuntu:/app/cdev_demo/decode2display$ cp /app/cdev_demo/vio2encoder/test.h264 .
sunrise@ubuntu:/app/cdev_demo/decode2display$ ls
decoder2display decoder2display.c decoder2display.o Makefile stream.h264 test.h264
sunrise@ubuntu:/app/cdev_demo/decode2display$
```

After the program runs correctly, the video screen will be output through the HDMI interface of the development board, and the user can preview the video screen through the monitor.

The running log is as follows.

```
sunrise@ubuntu:/app/cdev_demo/decode2display$ sudo ./decoder2display -w 1920 -h
1080 -i test.h264
disp_w=1024, disp_h=600
[x3_av_open_stream]:[380]:probesize: 5000000
sp_start_decode success!
libiar: hb_disp_set_timing done!
sp_start_display success!
sp_open_vps success!
```

```
sunrise@ubuntu:/app/cdev_demo/decode2display$ sudo ./decoder2display -w 1920 -h 1080 -i test.
h264
disp_w=1920, disp_h=1080
2024/05/27 12:11:43.204 !INFO [x3_av_open_stream][0380]probesize: 5000000
sp_start_decode success!
libiar: hb_disp_set_timing done!
sp_start_display success!
^C
```