





```
Kneron@ubuntu:~$ cd host_lib/python/
```

Kneron transfer modes:

1. Serial mode -> Transfer frames in serial order then perform object detection

```
Kneron@ubuntu:~/host_lib/python$ python3 main.py -t cam_yolo
Using TensorFlow backend.
adding devices....

start kdp host lib....

Task: cam_yolo
starting ISI mode...

ISI mode succeeded (window = 3)...

image 0 -> 1 object(s)
image 1 -> 1 object(s)
image 2 -> 1 object(s)
image 3 -> 1 object(s)
```

...

```
image 998 -> 0 object(s)

image 999 -> 1 object(s)

Sync inference average estimate runtime is  0.13636447954177858
Average FPS is  7.33328798936695
de init kdp host lib....
```

2. Parallel mode -> Buffer frame then transfer data to inference engine for object recognition

```
Kneron@ubuntu:~/host_lib/python$ python3 main.py -t cam_isi_parallel_yolo
Using TensorFlow backend.
adding devices....

start kdp host lib....

Task: cam_isi_parallel_yolo
starting ISI mode...

ISI mode succeeded (window = 3)...

starting ISI inference ...

Companion image buffer depth = 3
image 1234 -> 1 object(s)
image 1235 -> 1 object(s)
image 1236 -> 1 object(s)

...

image 2232 -> 1 object(s)
image 2233 -> 1 object(s)

Parallel inference average estimate runtime is  0.07845454168319702
Average FPS is  12.746234679925163
de init kdp host lib....
```

3. Pipeline mode -> Buffer frame then captured frame is transferred for object recognition

```
Kneron@ubuntu:~/host_lib/python$ python3 main.py -t cam_isi_yolo
Using TensorFlow backend.
adding devices....

start kdp host lib....

Task: cam_isi_yolo
starting ISI mode...

ISI mode succeeded (window = 3)...

starting ISI inference ...

Companion image buffer depth = 3
image 1234 -> 1 object(s)
image 1235 -> 1 object(s)
image 1236 -> 1 object(s)

...
```

```
image 2232 -> 1 object(s)
```

```
image 2233 -> 1 object(s)
```

```
Pipeline inference average estimate runtime is 0.09482359719276429
```

```
Average FPS is 10.545898168861148
```

```
de init kdp host lib....
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