# How to Test IMX390 Companding mode

<1> isp\v4l2\_dev\inc\acamera\_firmware\_config.h:

#define HOBOT\_NATIVE\_WDR 1

#define SENSOR\_DEFAULT\_PRESET\_MODE 11

<2> mipi\_sif\_isp\_1936x1096\_raw12.json

Copy to

install\test\config\mipi\_sif\_isp\_1936x1096\_raw12.json

<3> script:

ifconfig eth0 down;ifconfig eth0 hw ether 00:01:02:03:04:03; ifconfig eth0 up ; ifconfig eth0 192.168.1.03; sleep 1;mkdir -p /usr/nfslocal && cd /usr && mount 192.168.1.101:/home/fpga/share/nfsroot nfslocal -o nolock;cd /usr/nfslocal/jesse/isp; sh insert.sh;cd /usr/nfslocal/jesse/isp\_andrew/install/test/bin/;export LD\_LIBRARY\_PATH=/usr/nfslocal/jesse/isp\_andrew/install/lib/ && cd /usr/nfslocal/jesse/install/test/bin

./x2a\_vio test\_isp ./../config/mipi\_sif\_isp\_1936x1096\_raw12.json vio.log ./../config/sif\_isp\_empty\_patch.json d 1 1 >/tmp/log

<4> get image:

Install/test/bin/

<5> Sensor: increase vmax of IMX390 to avoid isp\_done fail issue

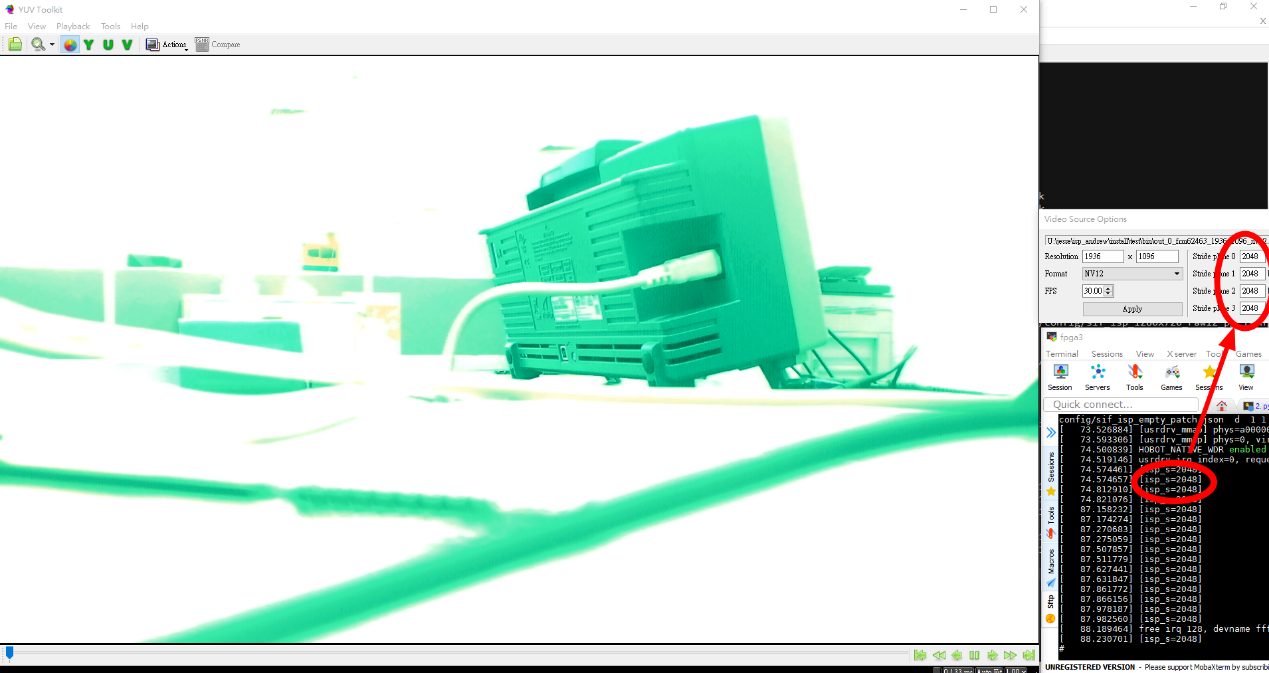
--- IMX390/IMX390\_step3\_390\_4lane\_1920x1080\_raw12\_25fps.txt

+++ IMX390\_vmax/IMX390\_step3\_390\_4lane\_1920x1080\_raw12\_25fps.txt

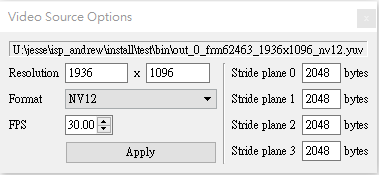
-0x200d,0x11

+0x200d,0x44

<5> show image:



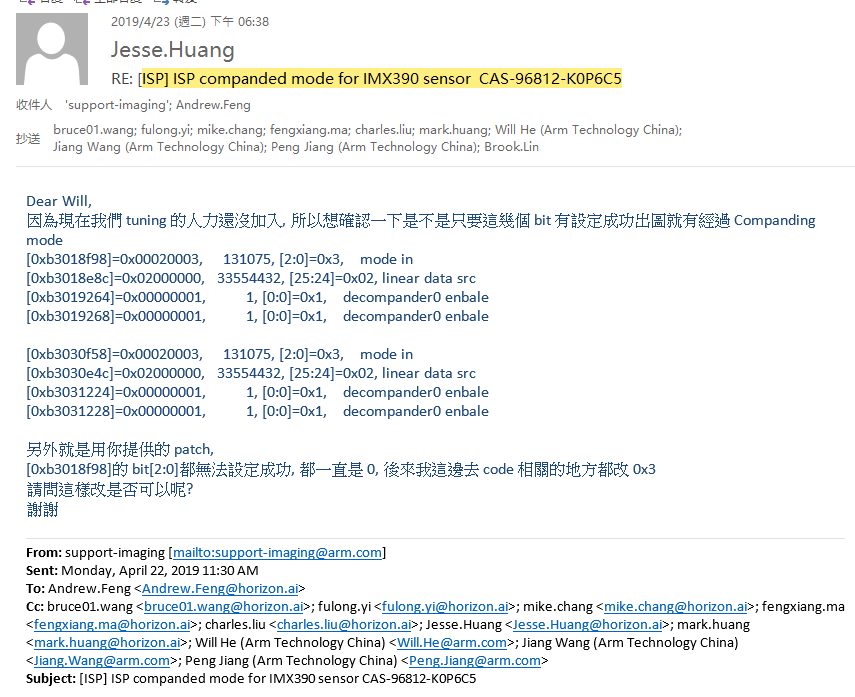
Remember to setting yuvToolkit “video source options” as 2048



Stride size can be found in isp driver log “[isp\_s=2048]”

# Companding mode的判定:

4/23與電話ARM AE: Will確認過這樣設定有打開Companding mode:



Patch 請參考isp\_arm\_native\_wdr.rar

# Changelist:

Bitfile: x2a\_0422\_1852\_isp.bit

Isp driver: 5cb761ac4d2acdaa6db5256fc6fc340f8eea0feb

Testbench: 5a3e6b36426780dae4f97154eafc45cd1dfa57c2