Display framework issues

With single NullSource link we were able to receive two different frames and pass it to two different algorithm running on two different cores(DSP1 and A15).

Using Alg\_Decision we were able to select one algorithm output and display it on screen.

NullSource (A15) -> Select\_alg

Select\_alg -> Alg\_FrameCopy\_1 (DSP1) -> Merge\_alg

Select\_alg -> Alg\_FrameCopy\_2 (A15) -> Merge\_alg

Merge\_alg -> Sync\_alg -> Alg\_Decision -> Dup\_Output -> Display\_Video

Dup\_Output -> Null (A15)

GrpxSrc -> Display\_Grpx

The above use case works as per our requirement for 1280x800 Resolution.

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Then we introduced VPE in the usecase as below (where input to VPE is of 1280x800 resolution and output from VPE will be 640x400)

Since the VPE is receiving two channel information from NullSource it is able to resize the first channel image properly to 640x400.

whereas the second channel image what we observed is the width of the image is proper(640) however the height of the image is resized

to almost half the height specified (around 200, this we observed visually) i.e 640x200.

NullSource (A15) -> VPE -> Select\_alg

Select\_alg -> Alg\_FrameCopy\_1 (DSP1) -> Merge\_alg

Select\_alg -> Alg\_FrameCopy\_2 (A15) -> Merge\_alg

Merge\_alg -> Sync\_alg -> Alg\_Decision -> Dup\_Output -> Display\_Video

Dup\_Output -> Null (A15)

GrpxSrc -> Display\_Grpx

Below is the configuration done from usecase for VPE

pPrm->enableOut[0] = TRUE;

pPrm->chParams[0].outParams[0].width = SystemUtils\_floor(outWidth,4);

pPrm->chParams[0].outParams[0].height = SystemUtils\_floor(outHeight, 2);

pPrm->chParams[0].outParams[0].numBufsPerCh = 5;

pPrm->chParams[0].scCropCfg.cropStartX = 0;

pPrm->chParams[0].scCropCfg.cropStartY = 0;

pPrm->chParams[0].scCropCfg.cropWidth = srcWidth;

pPrm->chParams[0].scCropCfg.cropHeight = srcHeight;

pPrm->chParams[0].outParams[0].dataFormat = dataFormat;

pPrm->chParams[1].outParams[0].width = SystemUtils\_floor(outWidth,4);

pPrm->chParams[1].outParams[0].height = SystemUtils\_floor(outHeight, 2);

pPrm->chParams[1].outParams[0].numBufsPerCh = 5;

pPrm->chParams[1].scCropCfg.cropStartX = 0;

pPrm->chParams[1].scCropCfg.cropStartY = 0;

pPrm->chParams[1].scCropCfg.cropWidth = srcWidth;

pPrm->chParams[1].scCropCfg.cropHeight = srcHeight;

pPrm->chParams[1].outParams[0].dataFormat = dataFormat;

(outWidth=640,outHeight=400,srcWidth=1280,srcHeight=800,dataFormat=SYSTEM\_DF\_YUV422I\_YUYV)

Below is the output from teraterm when we run the above usecase

[IPU1-0] 29.734673 s: VPE: OUT0: CH 0: Frame 0: 0x8f08b000, 0x8f08b000, 640 x 400

[IPU1-0] 29.734856 s: VPE: OUT0: CH 0: Frame 1: 0x8f108000, 0x8f108000, 640 x 400

[IPU1-0] 29.734978 s: VPE: OUT0: CH 0: Frame 2: 0x8f185000, 0x8f185000, 640 x 400

[IPU1-0] 29.735100 s: VPE: OUT0: CH 0: Frame 3: 0x8f202000, 0x8f202000, 640 x 400

[IPU1-0] 29.735252 s: VPE: OUT0: CH 0: Frame 4: 0x8f27f000, 0x8f27f000, 640 x 400

[IPU1-0] 29.773409 s: VPE: OUT0: CH 1: Frame 0: 0x8f2fc000, 0x8f2fc000, 640 x 400

[IPU1-0] 29.773592 s: VPE: OUT0: CH 1: Frame 1: 0x8f379000, 0x8f379000, 640 x 400

[IPU1-0] 29.773775 s: VPE: OUT0: CH 1: Frame 2: 0x8f3f6000, 0x8f3f6000, 640 x 400

[IPU1-0] 29.773897 s: VPE: OUT0: CH 1: Frame 3: 0x8f473000, 0x8f473000, 640 x 400

[IPU1-0] 29.774019 s: VPE: OUT0: CH 1: Frame 4: 0x8f4f0000, 0x8f4f0000, 640 x 400

So from the logs we could see that both the channels are getting configured properly (640x400 for both the channels) but the resize output is proper for only first channel.

In channel 2 we have to get 640x400 Image however we get 640x200. Any suggestion on what can be the issue?