

@ Problem

There is a delay when audio data disappears and reappears after a certain period of time.

Problem only occurs in the HDMI output of Intel iRIS xe graphics models.

(such as NUC PC with i5 or higher or laptop that I tested, etc)

The reason I deduced is to disable audio in the HDMI output. This results in the loss of audio.

When the audio clock appears again, a delay time may occur depending on Rx device.

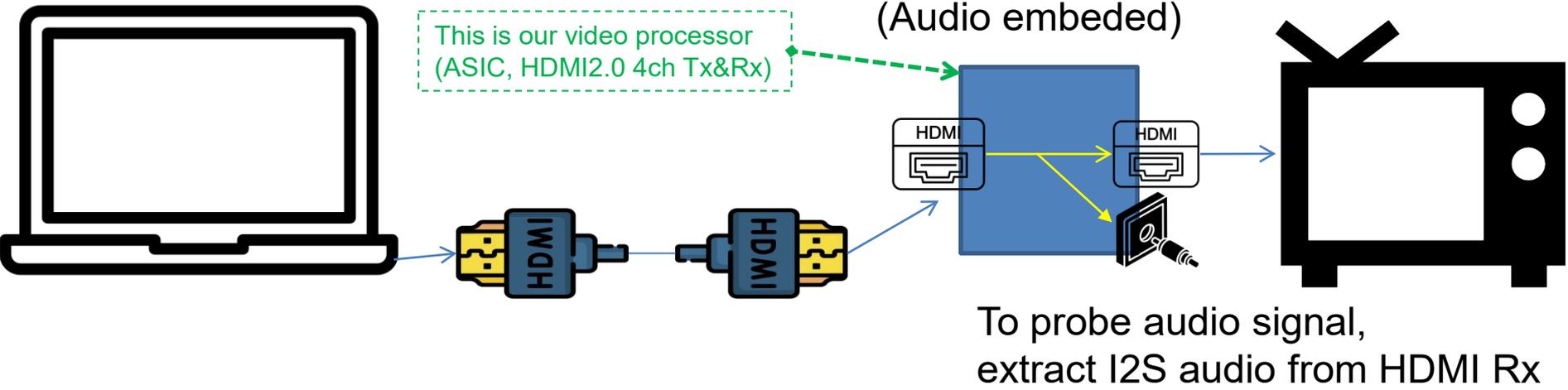
If the delay time exceeds 1 second, listeners will feel it.

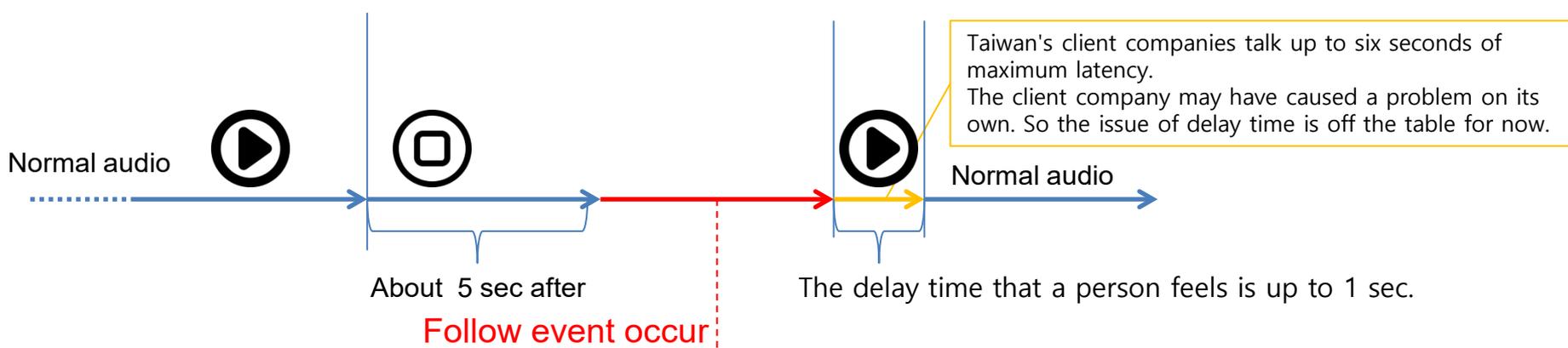
(Our Taiwanese client reported a delay over 1 second)

My question is whether Intel intentionally included the process of monitoring audio data in real time and deciding whether to embed audio in HDMI.

@ Test condition

11th Gen Intel i5-1155G7 2.5Gh
Win10 Pro(21H1)
LG Notebook : Gram 15ZD95P-GX56K





```
[ HRX ] AUD_MONITOR ==> AUD_DISABLE : 996403 ms
[ HTX ] set audio format ( unlock !!!! )
[ HTX ] set audio format ( unlock !!!! )
[ HRX ] AUD_DISABLE ==> AUD_LOCK   : 996496 ms
[ HRX ] AUD_LOCK   ==> AUD_DETECT  : 996556 ms
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1.HDMI Audio disappear

```
[ HRX ] Audio Type : LPCM, 48.0 kHz, 2ch
[ HRX ] AUD_DETECT ==> AUD_MONITOR : 1000823 ms
[ HTX ] set audio format( PCM - 48.0 kHz, 2ch)
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2.HDMI Audio detected for very short Time

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[ HTX ] audio acr : tmds(594.000 Mhz), fs(48000), n(6144), cts(594000), rem(0), mode(COMP H/W)
[ HTX ] CP2.2 disable !!!
[ HTX ] CP1.4 disable !!!
[ HTX ] HDMI Link enable
[ HRX ] AUD_MONITOR ==> AUD_DISABLE : 1000993 ms
[ HTX ] set audio format ( unlock !!!! )
[ HTX ] set audio format ( unlock !!!! )
[ HRX ] AUD_DISABLE ==> AUD_LOCK   : 1001093 ms
[ HRX ] AUD_LOCK   ==> AUD_DETECT  : 1001154 ms
```

3. Audio is completely lost until the audio source is replayed.

(This log is generated by the HRx IP included our chip)