

# Potential enhancement of signaling of I\_PCM blocks (JCTVC-G118/ M21668)

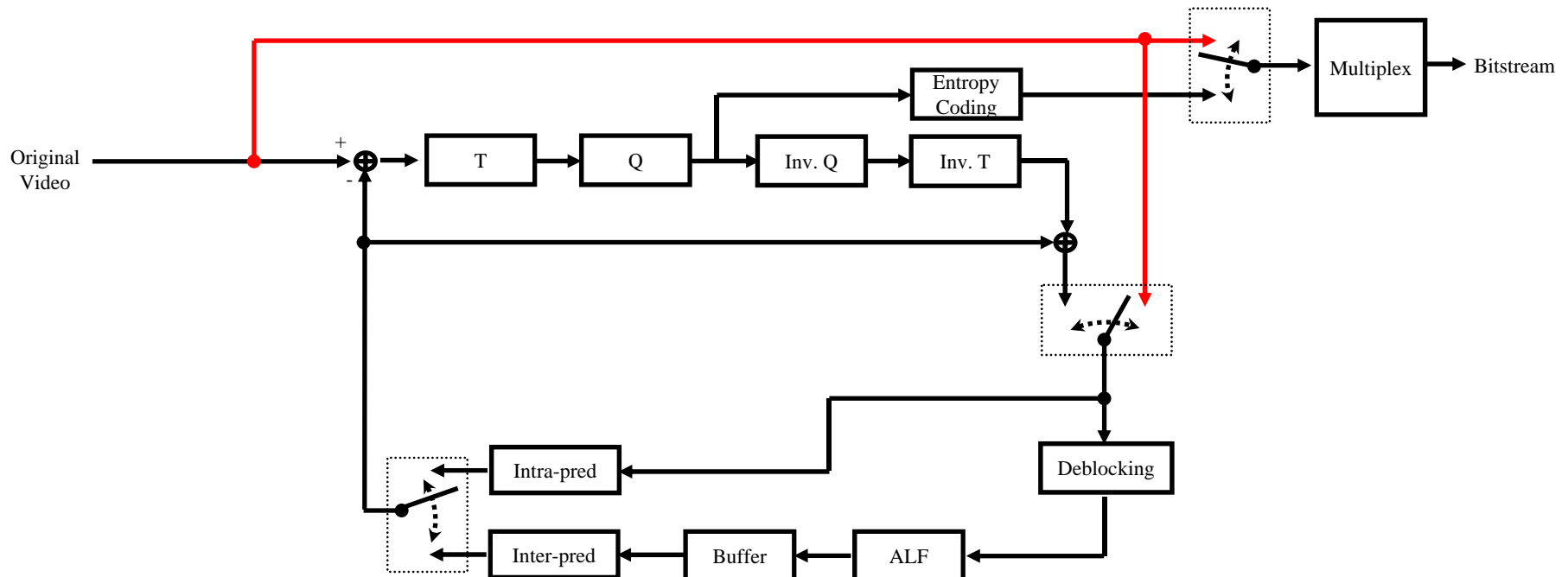
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# Summary

- Review of I\_PCM mode
- Signaling issue of successive I\_PCM blocks
- Burst transmission of successive I\_PCM blocks
- Recommend the study and test of proposal, preferably in context of CE

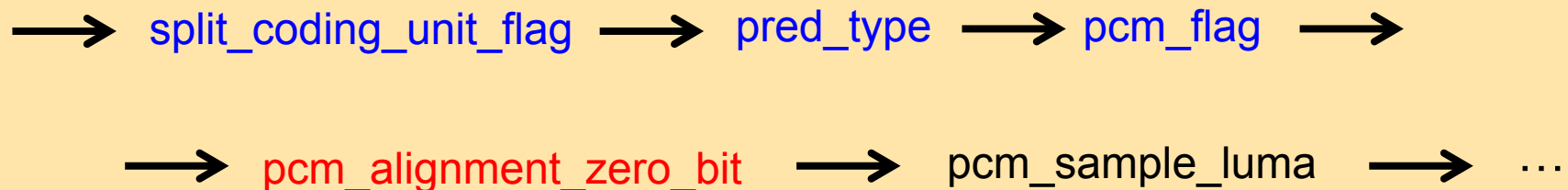
# Review of I\_PCM Mode

- Simple coding means: **No prediction, no transform, and no entropy-coding**
- Allow encoder to adjust the number of bits of CU to a predetermined value or less



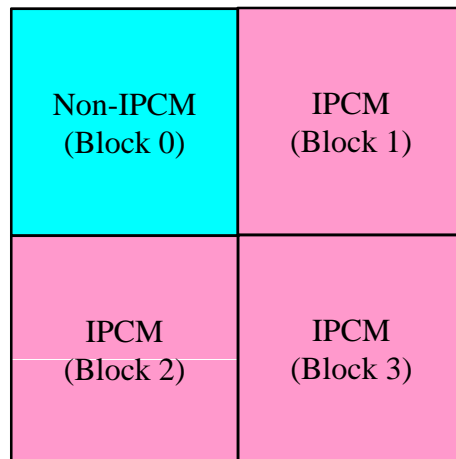
# Signaling of I\_PCM Block

- Presence of pcm\_flag=1 indicates that CU is I\_PCM block.
- pcm\_flag syntax presents after CU/PU header parameters such as split\_coding\_unit\_flag, pred\_type, etc.
- pcm\_alignment\_zero\_bit and PCM sample data follow it.

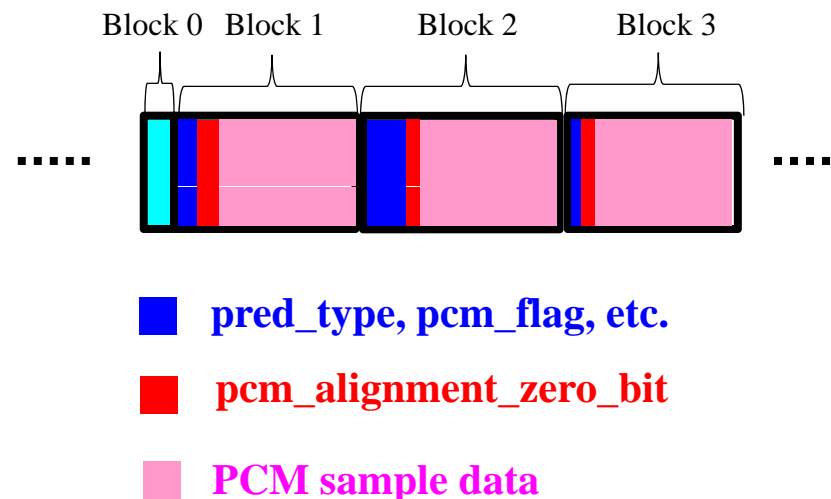


# Signaling Issue of Successive I\_PCM Blocks

- Transmission of PCM sample data of each of successive I\_PCM blocks is terminated.
  - Sub-optimal throughput of transmitting PCM sample data
  - Increase bits of side-information



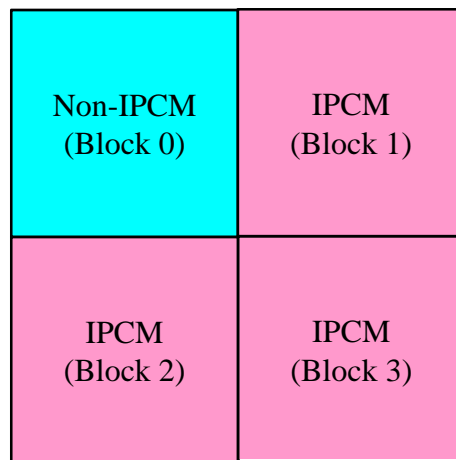
(a)



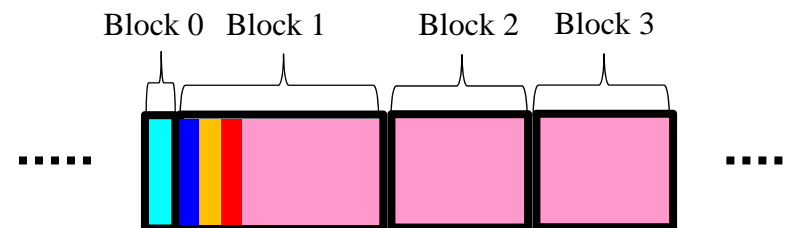
(b) HM bitstream of (a)

# Burst Transmission of Successive I\_PCM Blocks

- Signal the number of subsequently coded I-PCM blocks at the PU header of the first I\_PCM block
- PCM sample data of successive I\_PCM blocks follow the pcm\_alignment\_zero\_bit of the first I\_PCM block.
  - Optimal throughput of transmitting PCM sample data
  - Decrease bits of side-information



(a)



- **pred\_type, pcm\_flag, etc.**
- **subsequent\_pcm\_num**
- **pcm\_alignment\_zero\_bit**
- **PCM sample data**

(b) Proposal's bitstream of (a)

# Conclusions

- Review of I\_PCM mode
- Signaling issue of successive I\_PCM blocks
- Burst transmission of successive I\_PCM for the optimal throughput of transmitting PCM sample data
- Recommend the study and test of proposal, preferably in context of CE

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