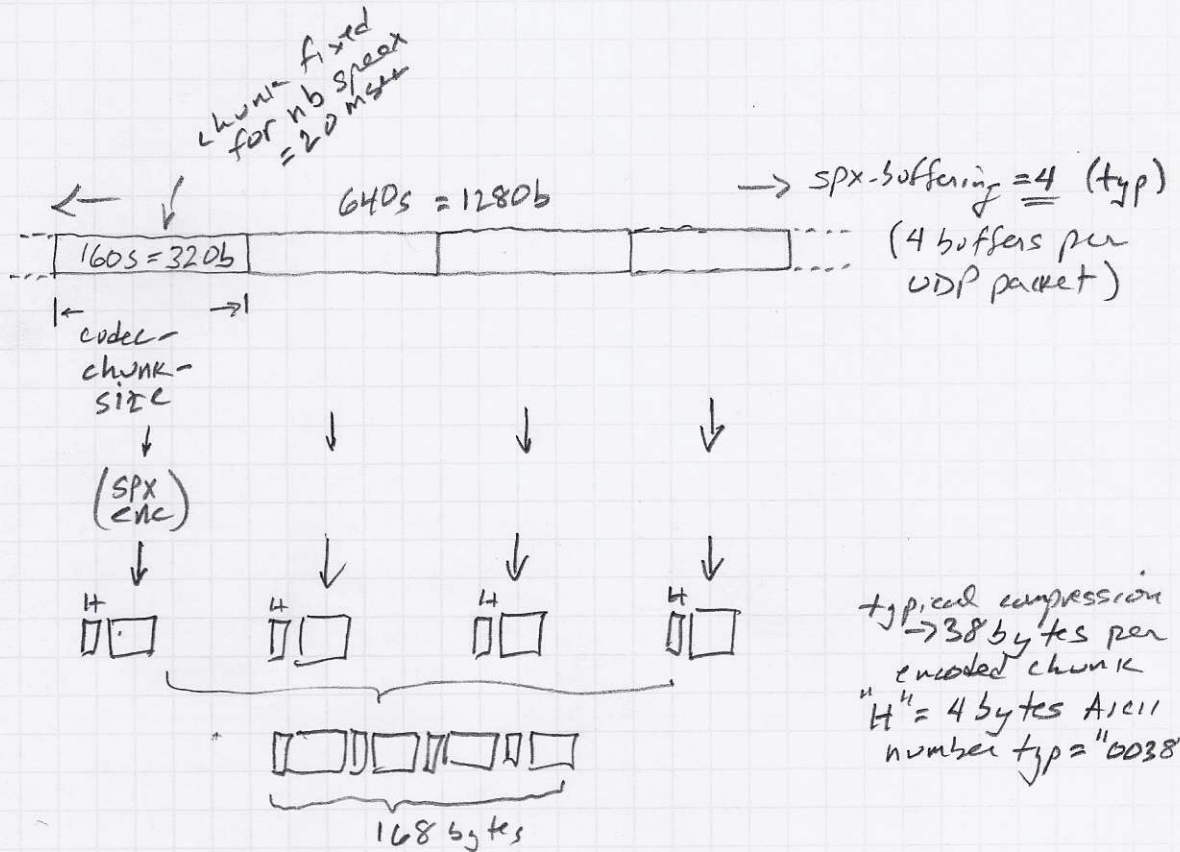


# Transmission scheme for afreev/afxmit

1-31-13

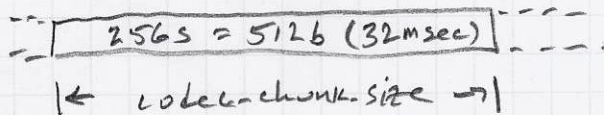
## Speex Mode

incoming  
audio  
16-bit samples  
@ 8 kHz

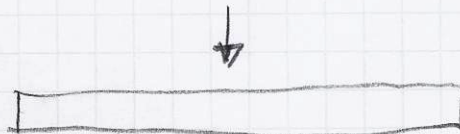


buffer as →  
sent/rcvd  
via UDP  
typ 168 bytes  
typ compression 7.6:1

## Null Codec



UDP  
data 1:1

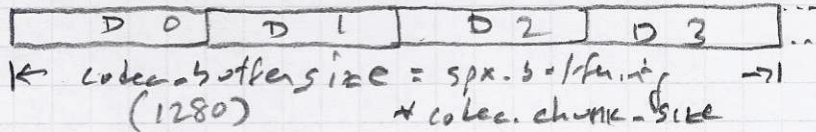


# Speex Decode buffering

1-31-13

output

codec  
chunk size



Speex-buffering = 4  
(typ.)

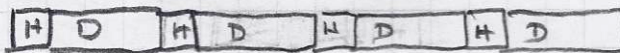
D = 160s = 320b (20ms)

← codec-buffer-size = spx-b-1-frame  
(1280) × codec-chunk-size

recvBuf

decode

input



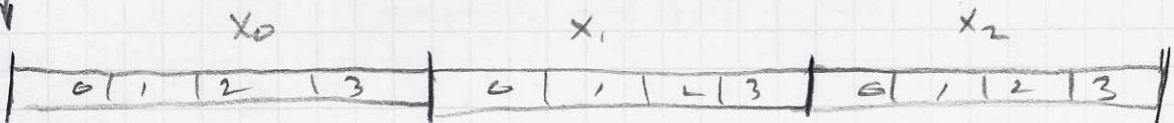
H = 4b "0038" typ.

D = 38b encoded audio

pack for XAudio2

buffering for  
XAudio2  
output  
(WIN)

sendBuf  
325b



XA-MAX-BUFF-CT

= 3 (typ)

~ 60msec latency

Null Codec buffering



256s = 512b = <sup>32</sup>20msec



XA2



768s = 1536b  
= 96msec  
max latency