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$$D_{1\text{sec}} = D_{V,1s} + D_{A,1s}$$

$$D_{A,1s} = F_c \cdot b/\text{sample} \cdot n^\circ \text{ samples} =$$

$$= 44 \text{ kHz} \cdot 16 \text{ bit/sample} \cdot 4 \text{ samples} =$$

$$= 2816000 \text{ b/s} = 352000 \text{ B/s}$$

$$= 343,75 \text{ kB/s}$$

$$n^\circ \text{ colori} = 3000000 \Rightarrow \text{bpp} = \lceil \log_2 3000000 \rceil = 22 \text{ bit}$$

$$D_{V,1s} = (X \cdot Y \cdot \text{bpp}) \cdot \text{FPS} =$$

$$= 800 \cdot 600 \cdot 22 \cdot 16/s = 168960000 \text{ b/s} \\ = \del{20625} 20625 \text{ kB/s}$$

$$D_{1\text{sec}} = 20868,75 \text{ kB/s}$$

$$T = \frac{D_{\text{chiave}}}{D_{1\text{sec}}} = \frac{512 \text{ MB}}{23,47 \text{ MB/s}} = 25,0 \text{ s}$$