

Proposal of Tone Frequency

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Tone Frequency of 49 MHz ?

- Tone frequency of 49 MHz was defined at last meeting (Mar. 98)

Question: Is this frequency a best solution for beta port of all speed ?

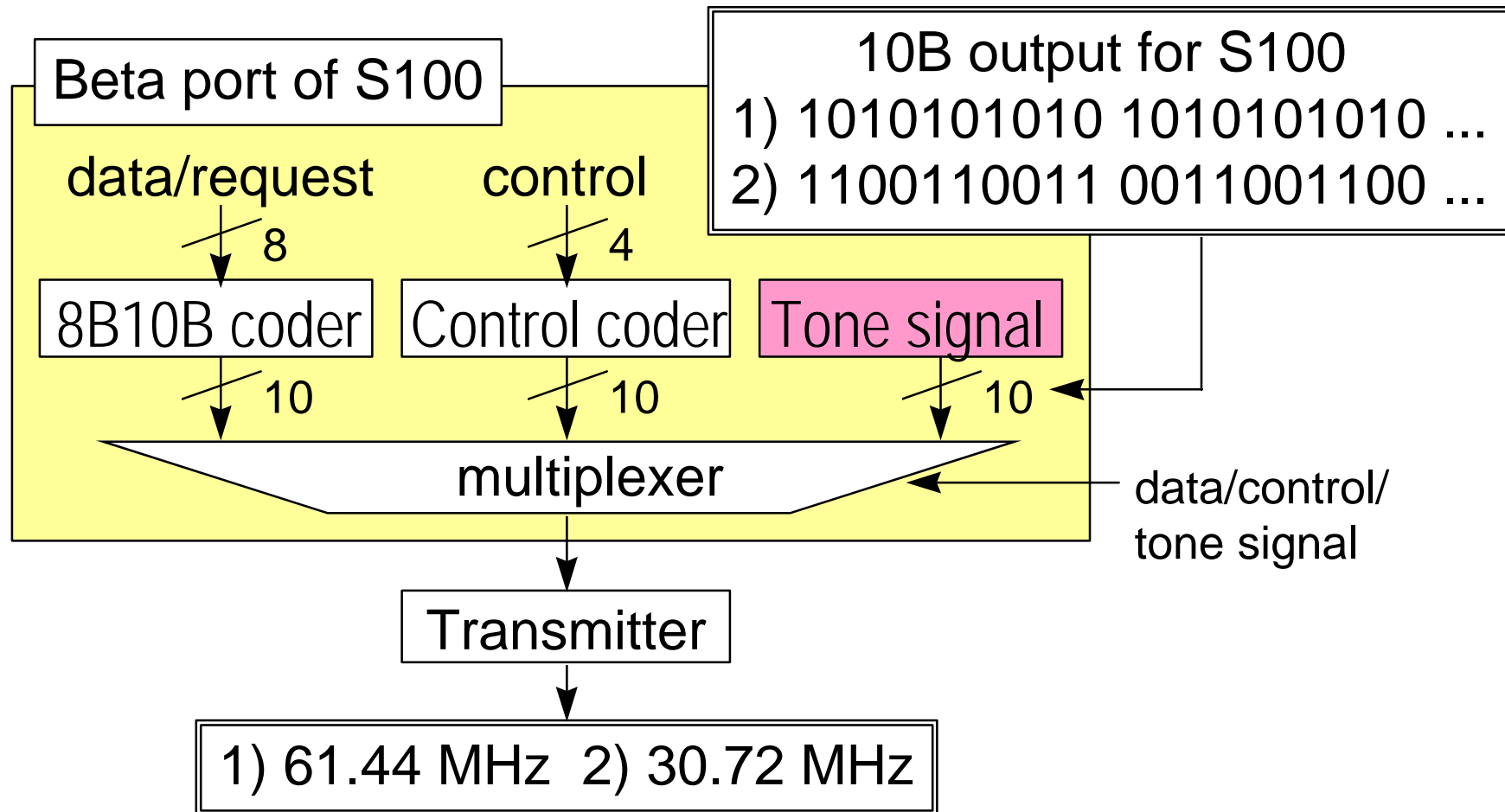
Answer:

Other frequencies are better.

- Beta port of S100 & S200 becomes complex for generating 49MHz tone frequency.

(Additional circuits are needed.)

Best Tone Frequency for Beta Port of All Speed



10B Output Format for Generating Tone Frequency

Speed of beta port	30.72 MHz	49 MHz
S800 (1Gbaud)	32 bits interval $\underbrace{111..11}_{16\text{bits}} \underbrace{000..00}_{16\text{bits}}$	20 bits interval
S100 (125Mbaud)	4 bits interval 1100110011 0011001100	2.5 bits interval <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 10px auto;"> Output circuit becomes complex for generating this frequency </div>

Proposal

Two alternative proposals !

- 1) If we choose a single frequency,
we should specify 61.44MHz or 30.72MHz.
(30.72MHz is better for EMI ?)
- 2) If we define a range of frequency,
we should specify a frequency range of
10MHz - 61.44MHz
(within a transceiver bandwidth)