BCD and Binary Bit Toggling Frequency Example

8

Ones

8

Tens

6

Thousands

6

Hundreds

Where X is a sample frequency

0

20

1

21

1

23

0

22

Where X is a sample frequency

**Microphone Architectural Concept**

Nyquist Sampling Rate:

100 kHz

(2 times the bandwidth of 50 kHz)

LED[0] (Output data) is every 10 000 samples to see pulses while LED << 1

Voice/Audio Input

TOP MODULE