

3.32 The sample frequency is 44.1 kHz. The resolution is given by the reciprocal of the FFT length. The length is

$$L = 1024 T_{sample} = \frac{1024}{44.1 \cdot 10^3}$$

$$\text{We get } \Delta f = \frac{1}{L} = \frac{44.1 \cdot 10^3}{1024} = 43.07 \text{ Hz}$$