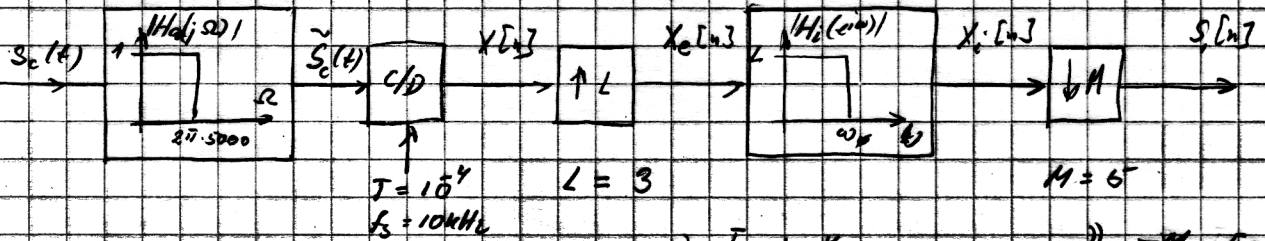


4.37/3. 23 scale 223/110

anti aliasing filter



$$T = \frac{T}{L} = \frac{1}{3} \cdot 10^{-4}$$

$$f_s' = 30 \text{ kHz}$$

$$T'' = T \cdot M = \frac{5}{3} \cdot 10^{-4}$$

$$f_s'' = 6 \text{ kHz}$$

$$\omega = \pi \frac{T}{T}$$

$$\omega_{\text{ny}} = \min\left(\frac{\pi}{L}, \frac{\pi}{M}\right) = \frac{\pi}{M} = \frac{\pi}{5} \Rightarrow \Omega_{\text{ny}} = \omega_{\text{ny}} \frac{L}{T} = \frac{\pi \cdot L}{M \cdot T} = \frac{\pi \cdot 3}{5 \cdot 10^{-4}} = 2\pi \cdot 3000 \text{ s}^{-1}$$