Table 1: Thermal noise of capacitors at 300 K (\sim 27 °C)

| rable 1. Thermal holds of capacitors at 500 H (21 °C) | | | |
|--|---|---|------------------------------|
| Capacitance | $V_{\rm rms} = \sqrt{\frac{k_{\rm B}T}{C}}$ | Noise charge $Q_n = \sqrt{k_{\rm B}TC}$ in coulombs | Noise charge in electrons |
| 1 fF | 2 mV | 2 aC | 13 e ⁻ |
| 10 fF | $640~\mu\mathrm{V}$ | $6~\mathrm{aC}$ | $40 e^{-}$ |
| 100 fF | $200~\mu V$ | 20 aC | $125 e^{-}$ |
| $1000~\mathrm{fF}$ | $64~\mu\mathrm{V}$ | $64~\mathrm{aC}$ | $400 e^-$ |