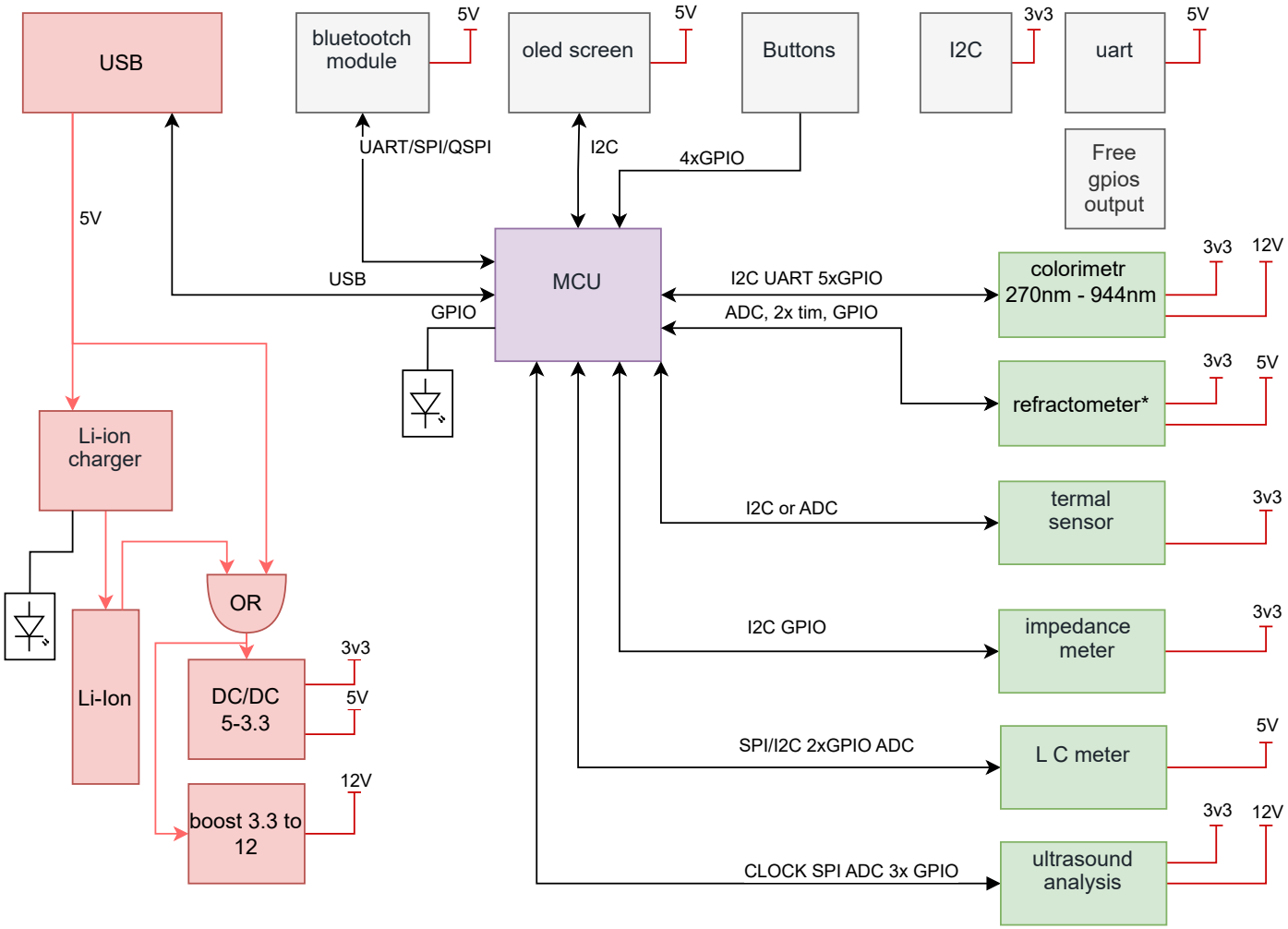
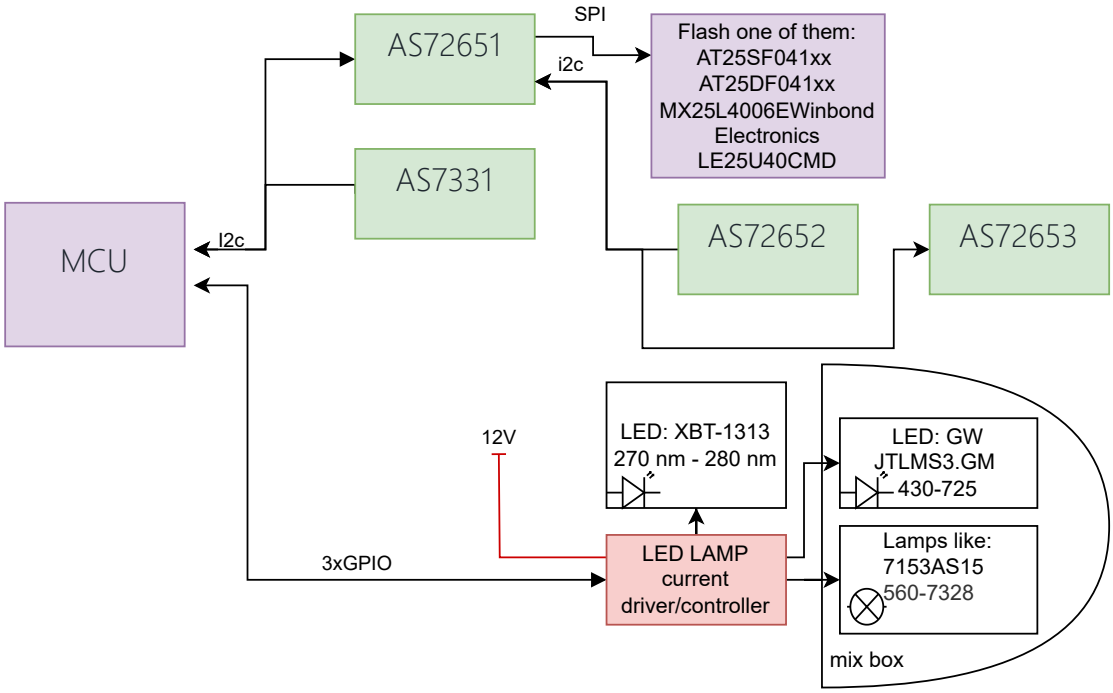
Strange liquid analyzer



Colorimetr 270nm - 944nm

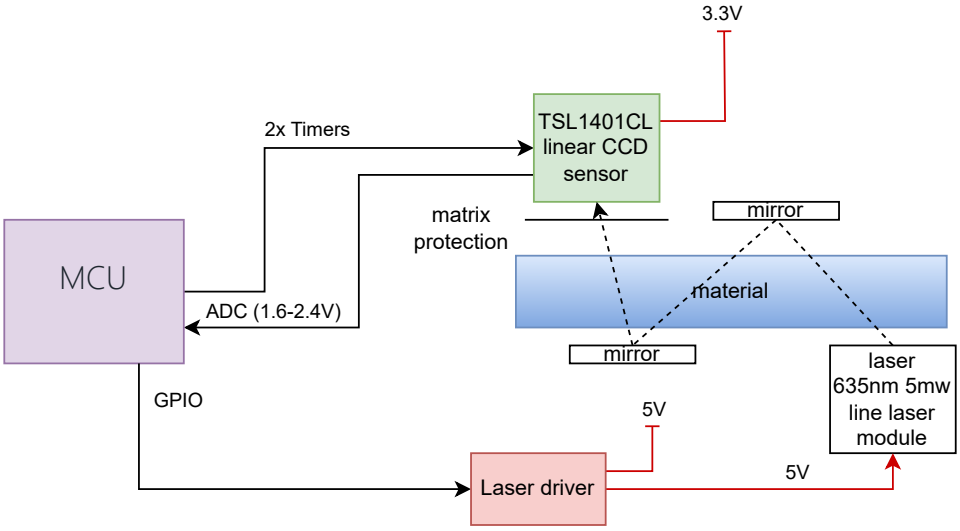


Parametrs

the total level of absorbed/reflected light energy.
The level of absorption / reflection of light in the visible range in increments of 10 nm
The level of absorption of light in the ultraviolet part of the spectrum

need to think how to sinhronisate AS72651 and AS7331

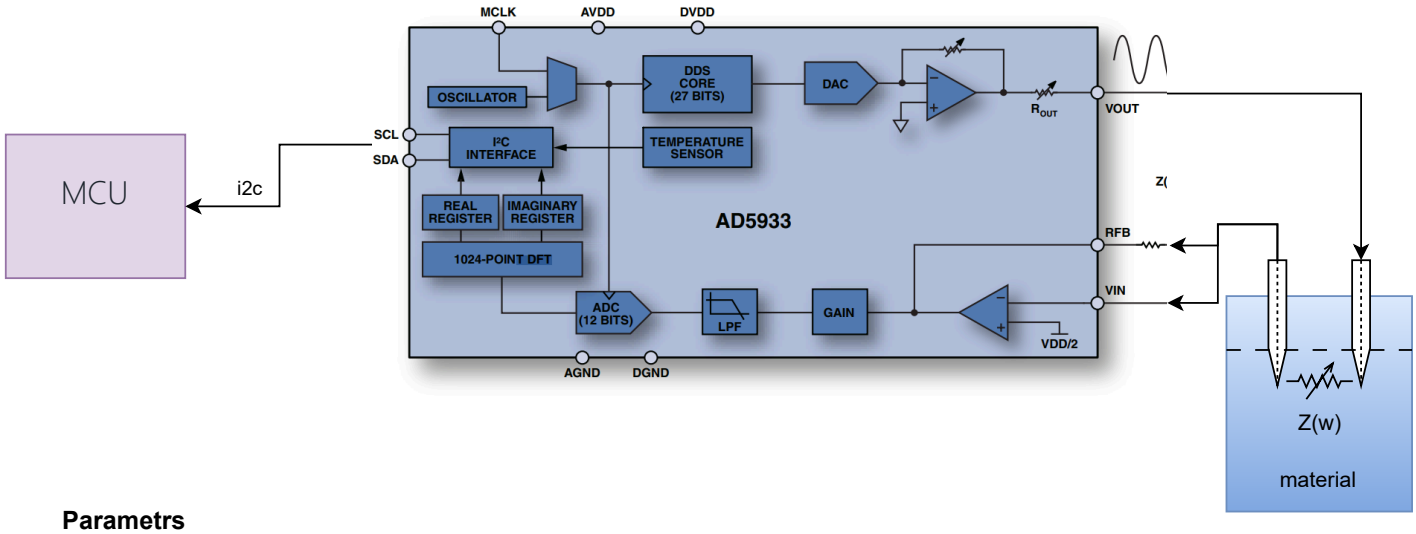
Refractometer



Parametrs

L - the angle of refraction of the beam

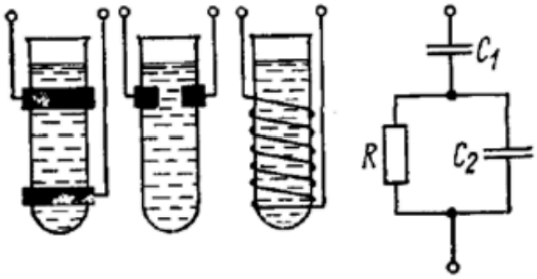
Impedance meter

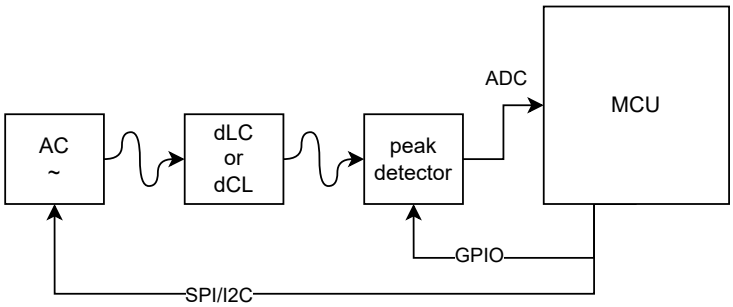


Parametrs

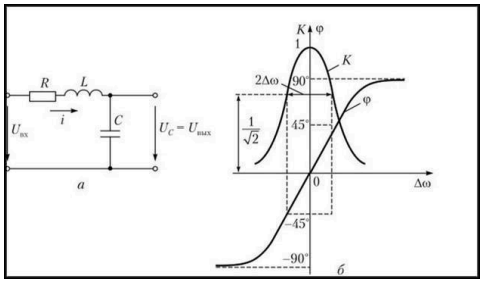
Z(w) fluid impedance at different frequencies

L and C resonant measuring module





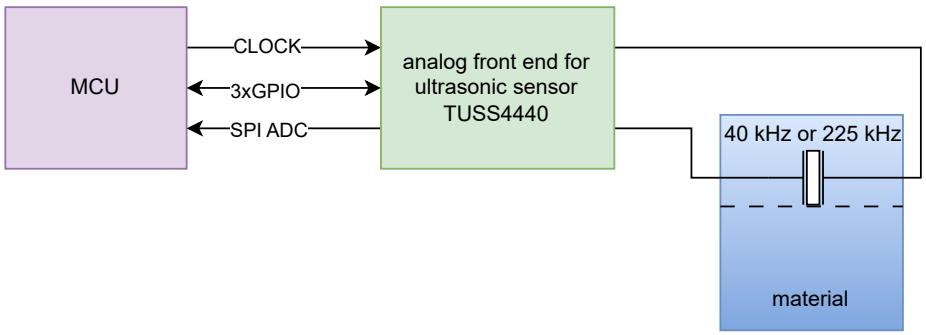
$$L = N^2 \frac{\mu_0 \mu_r \pi r^2}{l} \qquad Q = \frac{\omega_0}{\Delta\omega} = \frac{\pi}{\delta} = \pi N_e,$$



Parametrs

Q factor
ω0 the resonance frequency in radians per second
μr the net magnetic permeability
ε the relative permittivity

Ultrasonic parametrs meter



Parametrs

wave attenuation in the medium

It would be interesting to measure phase shifts and resonances, but this will most likely require a separate emitter and receiver.