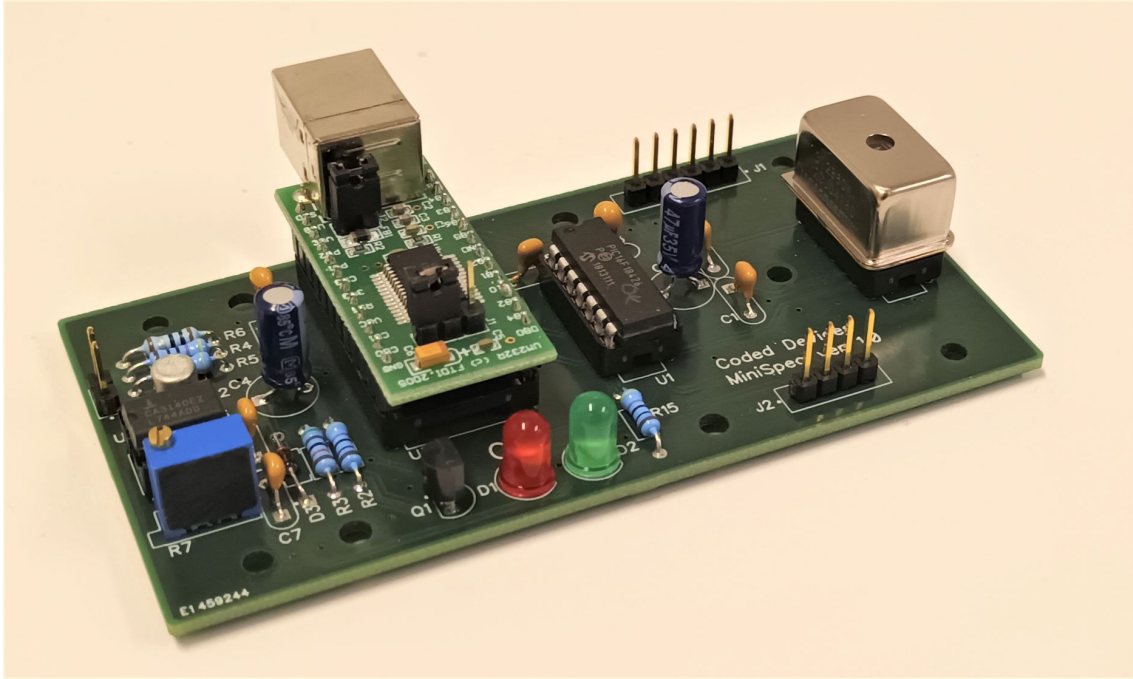


Mini Spectrometer v 1.0

Compact Spectrometer with LED controller



The Mini Spectrometer is a compact spectrometer operating in the visible part of the spectrum. It is based on Hamamatsu Photonics C12880MA spectrometer head.

Unlike most other instruments our spectrometer board is fully customizable. The electronic schematic and source code of the PIC micro controller are freely available with the instrument. The PC app is released under open & free software license (GNU).

Features

- Wavelength range 340 - 850 nm, resolution 15 nm, 288 channels.
- USB bus powered.
- Built-in LED controller for a light source.
- Expansion capabilities: two free I/O pins, ground and voltage output pins.
- Free open software license PC app.



Applications

- Enviromental studies.
- Color determination.
- Astronomy.
- Mineralogy.
- Educational projects.

Accessories

- Sensor head housing with optical fiber. The other end of the fiber can be let free or connected into a test setup or a focusing lens.
- Instrument enclosure.

Tech Specs:

- Optical specs like in Hamamatsu C12880MA datasheet.
- 12-bit ADC resolution.
- Dimensions : 99 x 56 x 26 mm.
- LED controller max current output: 15 mA.
- Operating voltage: 4.75 – 5.25 Vdc (via USB).
- Maximum input current: 215 mA. Current output limited by a 100 mA resettable fuse.

Board dimensions & holes:

