# **GroupGets C12880MA Breakout Board**





The C12880MA Breakout Board by GroupGets is a simple Arduino compatible breakout board for the Hamamatsu C12880MA MEMs micro-spectrometer. The C12880MA Spectrometer is used to detect wavelengths of light and their intensities. This sensor is the successor to the C12666MA spectrometer and offers a greater spectral range and resolution.

All power and signal pins on the C12880MA Breakout Board have been conveniently broken out so it is easy to connect via jumper or breadboard to any system of your choice. This breakout board features a super bright white LED as well as a low-power Sony SLD3231VF 5.6mm 405nm Violet/Blue 20Mw Laser Diode for illuminating a target to measure fluorescence responses.

#### **FEATURES**

- All required connections broken out to standard 0.1" header.
- Super Bright White LED.
- Through holes for an optional Sony SLD3231VF 5.6mm 405nm Violet/Blue 20Mw Laser Diode.

#### **APPLICATIONS**

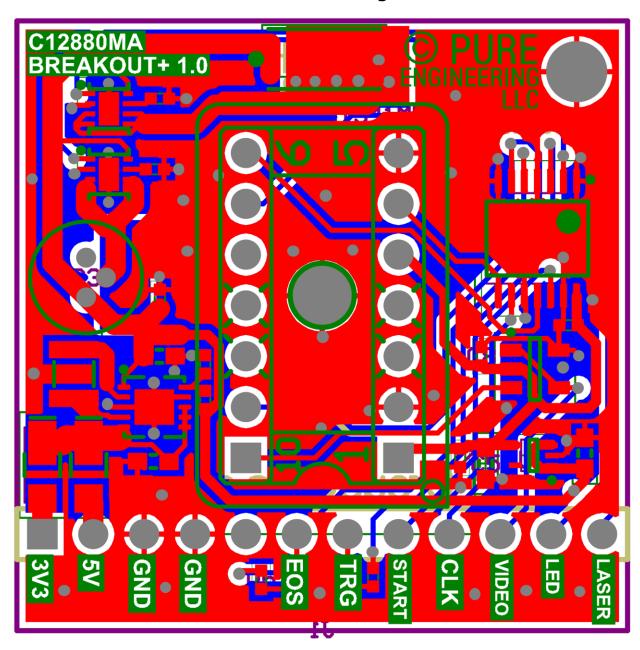
- Spectroscopy
- Color detection
- Biometry
- Food inspection

### **C12880MA Breakout Board Specifications**

Power Input	5V
Wavelength Detection	340 nm - 850 nm
Digital Interface	SPI
Dimensions	25 mm x 24 mm (not including pins)
Temperature Range	+5 to +50 °C
Resolution	288 Pixels
C12880MA Part Number	BO-HAMA-2
Dimensions (mm)	



## C12880MA Breakout Board Interface Diagram





### **Hardware Schematic**

Downloadable .pdf version available:

https://github.com/groupgets/c12880ma/raw/master/hardware/c12880ma breakout full.PDF

