Arduino MKR GPS Shield

The low power Global Navigation Satellite System receiver shield for your georeferenced projects

SKU: ASX00017

Country of origin: IT

Taric: 854231

EECN: EAR-99

HTS: 8542.31.00.01

Overview

The MKR GPS Shield is based on the u-blox SAM-M8Q GNSS (Global Navigation Satellite System) module.

This module is designed to operate with different positioning services concurrently. It receives and processes the signals from GPS, GLONASS and Galileo. It interfaces with Arduino boards either through a serial interface, when used with headers and put on top of a MKR board, or through an I2C interface and a dedicated ESLOV cable supplied as bundle.

Our Arduino_MKRGPS library handles the two different interfaces and offer a consistent set of APIs designed for a full usage of the GPS acquired information

Tech Specs

Connectors	ESLOV
	MKR headers
Input Voltage	3.3V
Operating Voltage	3.3V
Backup battery	CR1216
Communication	Serial1
	I2C / DCC
GNSS receiver	u-blox SAM-M8Q
Length	45 mm

Width	25 mm
Weight	14 gr.

Documentation

OSH: Schematics

The Arduino MKR GPS Sheld is open-source hardware! You can build your own board using the following files:

EAGLE FILES IN .ZIP SCHEMATICS IN .PDF

Please note: Galileo reception is disabled by default, but can be enabled by sending a configuration message (UBXCFG-GNSS) to the receiver. You can find a detailed description of the protocol here.