C94-M8P

u-blox RTK application board package

Highlights

- Based on u-blox NEO-M8P-2 module
- Application board for professional prototyping
- Easy integration of RTK high accuracy solutions
- Base and rover functionality
- Integrated radio link

C94-M8P application board

Product description

The C94-M8P application board allows efficient integration and evaluation of NEO-M8P, u-blox's M8 high precision positioning module.

The NEO-M8P module series introduces the concept of a "Rover" and a "Base Station", bringing RTK technology to u-blox's product portfolio. By using a data stream from the base station, the rover can output its relative position with stunning cm-level accuracy in clear sky environments.
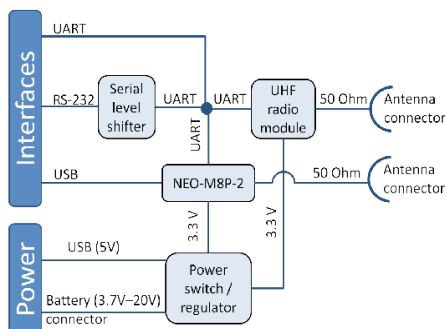
The C94-M8P application board integrates NEO-M8P-2 module with both base station and rover functionality. The C94-M8P includes a UHF radio link, allowing for easy setup and fast prototyping. The board also provides connector pins for u-blox C027 and other application boards, enabling communication alternatives using u-blox cellular and short-range technologies.

Application board package

The application board package includes

- 2 application boards (both with NEO-M8P-2)
- 2 external UHF antennas
- 2 external active GNSS antennas
- 2 antenna ground planes
- 2 micro-USB cables

Block diagram

Features

| Receiver | NEO-M8P-2 GNSS module with support for both active and passive antennas |
| Radio link | UHF operation in the license free bands. See product variants. |

Interfaces

RS232	serial interface to radio module
USB	micro USB port for GNSS data and power supply
UART	pins for UART communication (e.g. C027), 3.3 V
Antennas	SMA connector for GNSS and UHF antennas
Power supply	USB, 5 V Battery (5.05 mm pitch 2-pin), 3.7 V - 20 V
LED	RTK status and Timepulse
Protocols	NMEA, UBX binary, RTCM

Deliverable

C94-M8P board schematic available on request

Supported external communication

| C027-C20/U20/G35 | Application board for cellular communication |

Product variants

The product variants come with UHF operation on license free bands, for specified regions.

C94-M8P-1	China (433 MHz)
C94-M8P-2	USA and Canada (915 MHz)
C94-M8P-3	Europe (433 MHz)
C94-M8P-4	Japan (920 MHz)

Contact us

For contact information, see www.u-blox.com/contact-us.

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